

CASE 4771: Application of BLACK
RIVER CORP. FOR A NON-STANDARD
GAS UNIT, EDDY COUNTY.

For Nov. 21st.

Hansen

Case Number
4771

Application

Transcripts

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
CONFERENCE ROOM, STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO

November 21, 1972

DE NOVO HEARING

IN THE MATTER OF:

Application of Black River
Corporation for a non-standard
gas unit, Eddy County, New Mexico.

Case No. 4771

IN THE MATTER OF:

Application of Black River
Corporation for compulsory pooling,
Eddy County, New Mexico.

Case No. 4772

IN THE MATTER OF:

Application of Michael P. Grace and
Corinne Grace for compulsory pooling
and a non-standard unit, Eddy
County, New Mexico.

Case No. 4766

BEFORE: State Geologist, A. L. Porter, Jr.,
Secretary-Director

Land Commissioner, Alex Armijo,
Member

TRANSCRIPT OF HEARING

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1 MR. PORTER: Before we get into the Rutter and
2 Wilbanks cases, which are Cases 4763, 4764, and 4765,
3 perhaps we should determine what disposition we should make
4 of Cases 4771, 4772, and 4766.

5 Mr. Cooley, three of these applications were
6 De Novo by Michael P. Grace and Corinne Grace.

7 MR. COOLEY: Mr. Commissioner, time and dryholes
8 seem to have resolved the differences that existed between
9 the contesting parties in those cases. It has been
10 informally understood between the parties that should Mr.
11 Grace, after reviewing further the geology of the area,
12 desires to drill a well in the west half of Section 4,
13 Black River Corporation still holds the lease interests
14 and will farm out those interests to Mr. Grace.

15 MR. HINKLE: That's correct.

16 MR. PORTER: So that could be worked out by a
17 voluntary agreement?

18 MR. COOLEY: Yes, sir. At this time, we ask that
19 the request for De Novo hearings in those cases be dismissed.

20 MR. PORTER: Cases 4771, 4772, and 4766, if there
21 is no objection, will be dismissed.

22 (No response)

23 MR. PORTER: Cases 4771, 4772, and 4766 will be
24 dismissed.

25

1 STATE OF NEW MEXICO)
 2 COUNTY OF BERNALILLO) SS
 3

4 I, RICHARD E. McCORMICK, a Certified Shorthand
 5 Reporter, in and for the County of Bernalillo, State of
 6 New Mexico, do hereby certify that the foregoing and attached
 7 Transcript of Hearing before the New Mexico Oil Conservation
 8 Commission was reported by me; and that the same is a true
 9 and correct record of the said proceedings to the best of
 10 my knowledge, skill and ability.
 11

12 *Richard E. McCormick*
 13 CERTIFIED SHORTHAND REPORTER
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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
CONFERENCE HALL, STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
August 9, 1972

EXAMINER HEARING

IN THE MATTER OF:

Application of Black River Corporation
for a non-standard gas unit, Eddy
County, New Mexico.

CASE NO. 4771

a n d

Application of Black River Corporation
for compulsory pooling, Eddy County,
New Mexico.

CASE NO. 4772

a n d

Application of Michael P. Grace and
Corinne Grace for compulsory pooling
and a non-standard proration unit,
Eddy County, New Mexico.

CASE NO. 4766

BEFORE: Daniel S. Nutter
Examiner

TRANSCRIPT OF HEARING

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1 MR. NUTTER: The next case we will call will
2 be consolidated Cases 4771, 4772 and 4766. We have already
3 heard the testimony in Cases 4771 and 4772 presented by
4 Black River Corporation, I believe it is. I call for
5 appearances now at this time in the three consolidated cases.

6 MR. COOLEY: William J. Cooley of Burr and Cooley,
7 Farmington, New Mexico, appearing on behalf of the Applicant
8 Mr. and Mrs. Grace in Case Number 4766.

9 MR. HINKLE: Clarence Hinkle of Hinkle, Bondurant,
10 Cox & Eaton appearing on behalf of Black River Corporation.

11 MR. NUTTER: Did you want to present any further
12 testimony or evidence?

13 MR. HINKLE: I don't know. After we hear their
14 testimony, we might.

15 MR. NUTTER: Are you ready to proceed with your
16 portion of the case, Mr. Cooley?

17 MR. COOLEY: We have one witness, Mr. Steinhorst.

18 RICHARD STEINHORST,
19 having already been duly sworn according to law, testified as
20 follows:

21 DIRECT EXAMINATION

22 BY MR. COOLEY:

23 Q State you full name for the record, please, and
24 spelling thereof?

25 A Richard Steinhorst, S-t-e-i-n-h-o-r-s-t.

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- 1 Q Mr. Steinhorst, how are you employed and where do you
2 reside?
3 A I reside in LaFayette, Louisiana, and I'm employed
4 as consultant petroleum engineer by the Grace interests.
5 Q Mr. Steinhorst, have you particularly been retained by
6 Mr. and Mrs. Grace with respect to their interests in
7 the Washington Ranch Morrow area in Eddy County, New
8 Mexico?
9 A I have been.
10 Q And are you aware that the Graces own an interest on
11 the leasehold interest in the best half of Section 4?
12 A I do.
13 Q What is that interest?
14 A It's the NW of the NW of Section 4, which is better
15 than 40 acres.
16 Q Are you familiar with the leasehold ownership and the
17 balance of that half Section?
18 A I believe I am, yes.
19 Q And is it correct that the balance of the Section is
20 operated by Black River Corporation as working in or
21 operated for the various companies?
22 A That's my understanding.
23 Q And with respect to royalty ownership, the Grace
24 lease is a State of New Mexico lease, is it not?
25 A That's correct.

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- 1 Q And all of the Black River leases are federal oil and
2 gas leases with the exception of the SE of the SW, is
3 that correct?
- 4 A That's correct.
- 5 Q Are you familiar, generally speaking, with the producing
6 characteristics of the Morrow sand in Eddy County,
7 New Mexico?
- 8 A I am.
- 9 Q Is there any particular characteristic of the Morrow
10 sand with respect to the effect thereon by any type
11 of fluids?
- 12 A Yes, the Morrow is very sensitive to any fluids, foreign
13 fluids particularly.
- 14 Q What deleterious effect do those fluids have on the
15 formation?
- 16 A It has a swelling effect on the Bentonite which tends
17 to eliminate or reduce and almost eliminate the
18 permeability of the formation.
- 19 Q Now, is there a varying degree of sensitivity to
20 given liquids, in your opinion?
- 21 A Yes, there is.
- 22 Q What is the most damaging, in your opinion?
- 23 A Probably a dirty fresh water would be the most
24 damaging. The least damaging would probably be properly
25 treated and prepared potassium chloride water.

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1 Q Of your own personal knowledge, have Mr. and Mrs. Grace
2 had any experience with respect to drilling and
3 producing from the Morrow sand in Eddy County, New
4 Mexico?

5 A Yes, they have.

6 Q Would you describe that experience, please?

7 A Well, they've drilled wells up in the South Carlsbad
8 area and Mr. Grace has been very curious about what has
9 transpired in the Morrow in the area, and in the general
10 area, and what effects different methods of completion,
11 different fluids that have been used in the process of
12 drilling the wells. And he's worked very hard and
13 very diligently to develop fluids which would minimize
14 the deleterious effect of fluids on the Morrow
15 formation.

16 Q Mr. Grace has not drilled any wells in the Washington
17 Ranch Morrow gas pool, has he, to this date?

18 A Not at this time.

19 Q But he has drilled Morrow wells in the South Carlsbad
20 area?

21 A That's correct.

22 Q Now, in your opinion, is there any particular difference
23 between the Morrow formation in those two areas in
24 the way it should be handled, drilled or otherwise?

25 A Not any material difference. Morrow is Morrow.

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1 Q Now, with respect to the Morrow formation, what
2 particular processes has Mr. Grace developed and
3 utilized in drilling and producing the Morrow wells
4 that he has drilled?

5 A Well, he's paid very strict attention to the character
6 of the fluids that have been used in the drilling of
7 the Morrow section and he's been rather successful in
8 the last two or three wells he's drilled in that
9 formation. In the process of completing, he's tried
10 to dry the formation up as much as possible and give
11 it the best chance to produce.

12 Q What particular fluids has Mr. Grace utilized in these
13 wells?

14 A He's used a brine, mud if you want to call it that which
15 is basically potassium chloride, and other chemicals
16 which don't have too much effect on Morrow formation
17 and which give them a fairly clean completion.

18 Q In your opinion, does use of the brine mud as opposed
19 to the fresh water mud that is utilized by Black River,
20 is there any difference?

21 A I think so, yes.

22 Q Would you describe that difference, please?

23 A Well, I think the brine has, in the P.H. that has
24 been used, the brine fluids have minimized the
25 swelling effects and it has also lent itself to making

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1 it easier to dry the formation and clean it up faster.

2 Q Well, now, you mentioned P.H., Mr. Steinhorst. First
3 of all, what is it, and then, what bearing does it have
4 upon damage to the formation?

5 A Well, your P.H. is a measurer of acids, or alkalinity
6 of fluids, or of anything as far as that's concerned.
7 And it seems like that if you get too acidy a P.H.
8 or you let your P.H. stray too far from slightly
9 alkaline, why you get an adverse effect in your fluids
10 which reacts some way with the Morrow.

11 Q Then, by adjusting the P.H. to a slightly alkaline
12 consistency, in your opinion, you have the least possible
13 damage to the Morrow formation?

14 A Well, they've been very careful recently in controlling
15 the P.H. and it seems to have had a very beneficial
16 effect on the results of the well.

17 Q Now, this is the P.H. of your mud that you are using,
18 is that correct?

19 A Right.

20 Q And does Mr. Grace direct that this be continually
21 tested?

22 A Yes.

23 Q Is that constant?

24 A This is very, very -- he keeps right on top of it.

25 Q Now, what experience has Mr. Grace had with respect to

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1 the type of perforating equipment that the Black
2 River witnesses have testified that they used?

3 A Well, he used this quite some time ago.

4 Q What equipment is this, to begin with?

5 A I believe it's called the Vangun and it's run on the
6 tubing and detonated by means of dropping a bar and --

7 Q Is it left in a hole?

8 A It's left in the hole and when the gun goes off, why,
9 then the formation can enter the tubing and the tubing
10 is run dry so that you've got maximum differential
11 across the threshold of the formation to help clean
12 it out and help clear any water or any foreign material
13 out of it. He has used this in the past.

14 Q What experience has he had with respect to this
15 particular mechanism?

16 A Well, the experience has not been too good. First of
17 all, the gun doesn't always go off and had to be pulled
18 back out of the hole two or three times. Then, secondly,
19 is the fact that even though it partially went
20 off, it never completely went off, and the
21 third thing is the fact that it is somewhat difficult
22 to exactly space this gun across the producing
23 intervals.

24 Q Well, in order to determine whether this Vangun
25 operated as designed, it's necessary to pull the tubing,

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- 1 is it not?
- 2 A That's the only final criteria as to whether it's
- 3 really worked or not.
- 4 Q And, in your opinion, it can act in varying degrees
- 5 of accuracy?
- 6 A Right, it is not a positive tool.
- 7 Q Do you recommend it's use?
- 8 A In the proper places, yes.
- 9 Q Would you recommend its use in the drilling of the
- 10 well proposed to be drilled by Mr. Grace in the W/2
- 11 of Section 4?
- 12 A Possibly.
- 13 Q Has Mr. Grace used alternative methods of perforating
- 14 tubes that you feel are equal to or superior to the
- 15 Vangun?
- 16 A Yes.
- 17 Q Would you describe those, please?
- 18 A Well, what Mr. Grace has done is completely void the
- 19 hole of fluids and gone in with conventional perforating
- 20 equipment and perforated with the maximum differential
- 21 and had very good success in getting his Morrow wells
- 22 to produce well and clean up quickly.
- 23 Q Now, have any particular methods been utilized by
- 24 Mr. Grace in order to dry out the Morrow formation
- 25 from whatever wetness is caused by the brine mud?

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- 1 A Well, yes. That was his completion process. He
2 has voided by the use of oxygen, all of the fluid that
3 can be blown out of the well in the region, so you
4 had no fluid in the well except what was behind the
5 pipe.
- 6 Q In other words, the use of oxygen to blow out the
7 fluid has a good effect?
- 8 A The result has been that it indicates a very good
9 method of completing Morrow wells.
- 10 Q Realizing that every location is not identical and
11 cannot be tested one against the other, but is there
12 any comparison that you can draw between the success
13 of the wells that Mr. Grace has drilled and with the
14 methods that you have just described as to those of
15 his offset operators in the South Carlsbad area?
- 16 A Well, I think probably going into Mr. Grace's wells
17 themselves, his early wells, he had considerable
18 difficulty with. In the latter wells, which he has
19 used this current method on, they have been better wells
20 in that they've shown better than his first completions.
21 And he developed this as a result of some of the
22 problems that these first completions had.
- 23 Q As a Morrow operator, he learned from experience?
- 24 A That's correct.
- 25 Q Do you have personal knowledge as to whether Mr. Grace

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1 made requests for voluntary communitization or
2 pooling of the W/2 of Section 4?

3 A Yes.

4 Q I hand you a telegram, or a configuration of a
5 telegram made June 26, 1972, and ask you if that is
6 the notice to which you refer?

7 A That is the notice to which I refer.

8 Q Now, would you read that, please?

9 A This is to Black River Corporation, Commercial Bank
10 Tower, Midland, Texas. "You are hereby requested to
11 join voluntary communitization of the following areas
12 in Township 26 South, Range 24 East, adjacent to or in
13 the Washington Ranch Morrow Gas Pool in Eddy County,
14 specific to this case: The W/2 of Section 4 for a
15 well to be drilled 1,980 from the north line and
16 660 feet from the east line, the above reference well
17 to be built sufficient to test the Morrow formation."
18 Signed: Michael P. Grace.

19 Q Was a similar telegram also sent to Arapaho?

20 A It was.

21 Q And the State of New Mexico and the United States
22 Geological Survey have both indicated that they
23 approved communitization of this area in the event the
24 Oil Conservation Commission forced pools in the W/2
25 of the pool; have they not?

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- 1 A That's my understanding.
- 2 Q Did you receive any response at all, or did Mr. Grace
- 3 receive any response at all, to the telegram that was
- 4 sent?
- 5 A The only response he was sent was from Black River
- 6 Corporation. However, he said that they also wish to
- 7 be the unit operator.
- 8 Q In the event the Oil Commission selects Mr. and Mrs.
- 9 Grace as the operator of that well, do you have any
- 10 knowledge as to whether they are ready to immediately
- 11 proceed in the drilling of the well on that acreage?
- 12 A I believe that they would already be drilling if they
- 13 could.
- 14 Q Then, it is your understanding that they would
- 15 immediately be ready to drill a well?
- 16 A That's correct.
- 17 Q Upon authority to do so?
- 18 A That's correct.
- 19 Q What is your opinion with respect to the probability
- 20 of the W/2 of 4 being commercially productive?
- 21 A I believe that there is enough evidence in the field
- 22 to indicate that a well at this particular location
- 23 will probably be commercially productive.
- 24 Q In both the upper and the lower zones, or do you
- 25 have any opinion as to the lower zone?

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- 1 A Now, looking at the logs, I'd say both the upper and
2 lower. I'd say the lower is subject to argument, but
3 I'd say that there's a good possibility that both
4 are productive.
- 5 Q Then, I take it you do not consider this to be a
6 maximum risk well?
- 7 A No.
- 8 Q In view of this, do you have any recommendation as to
9 what risk factor the Oil Commission should apply in
10 the event any of the parties do not desire to participate
11 in the drilling of the well?
- 12 A I would say 30 percent.
- 13 Q Is it your opinion that the W/2 of Section 4 should
14 definitely be pooled in order to prevent waste and
15 protect correlative rights?
- 16 A It is.
- 17 Q Then, in summation, the only real conflict in this
18 and the consolidated cases is the question as to who
19 should be the operator, is that correct?
- 20 A In my opinion, yes.
- 21 Q In your opinion, is Mr. Grace equally, if not better,
22 qualified to drill the proposed well?
- 23 A Certainly equally qualified.
- 24 Q Even over the other applicant?
- 25 A Certainly equally qualified.

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- 1 Q Have you prepared an estimate of the cost of the well
2 proposed to be drilled in the W/2 of Section 4 in the
3 event Mr. Grace is designated as the operator?
4 A I have.
5 Q I hand you what's been marked as Exhibit 1 and ask
6 you if that's your cost estimate to which you refer?
7 A It is.
8 Q Would you explain it briefly without going into detail?
9 A Well, it's an estimate of the cost of drilling the
10 well, and this well would be a little bit deeper than
11 the other wells, and in that, the costs have been set
12 out. Therefore, these costs are a little bit greater.
13 It also sets out the additional cost in the event that
14 a dual completion is made.
15 Q Are you talking about what type of dual completion?
16 A This would be in the way it's set up. This is set up
17 to be a two tubing string dual.
18 Q Between what formations?
19 A The upper and the lower Morrow.
20 Q Assuming that this Commission should, at some later
21 date, separate those two zones?
22 A That's correct.
23 Q And make them into two separate pools?
24 A That's correct.
25 Q Is there any difference of depth of the proposed well

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1 as opposed to the depth of the wells drilled in, say,
2 the E/2 of 4 and the W/2 of 3?

3 A Yes, it would be deeper.

4 Q How much deeper?

5 A Some two to three hundred feet.

6 Q Approximately how much additional cost do you feel it
7 would result as between the other wells and this well,
8 as a result of the additional depth?

9 A I would say six to eight thousand dollars, assuming
10 completion on a single completion.

11 Q That chart was prepared by you, was it not?

12 A Yes, sir.

13 MR. COOLEY: Mr. Examiner, we offer into evidence
14 Exhibit Number 1 in Case 4766.

15 MR. NUTTER: Exhibit Number 1 in Case 4766 will
16 be admitted in evidence.

17 (Whereupon, Applicant's Exhibit Number 1 was
18 marked and entered into evidence.)

19 MR. COOLEY: There are no further questions on
20 Direct, Mr. Examiner.

21 * * * * *

22 CROSS-EXAMINATION

23 BY MR. NUTTER:

24 Q Mr. Steinhorst, in the telegram that you read, what
25 was the location of the well?

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1 A 1980 feet from the north line and 660 feet from the
2 east line.

3 Q I thought you said east, and I believe it would have
4 to be the west line, so that's probably an error.

5 We're talking about the W/2.

6 A Well, this is the way the telegram read.

7 Q But they are talking about a --

8 A Well, I see what you are talking about, the W/2 of
9 Section 4, so it's the east line of the W/2.

10 MR. COOLEY: In other words, when this thing
11 was written, we were talking about the W/2 of Section 4.

12 MR. NUTTER: Are there any questions of
13 Mr. Steinhorst?

14 MR. HINKLE: I have a few, I think.

15 * * * * *

16 CROSS-EXAMINATION

17 BY MR. HINKLE:

18 Q Do the Graces have a field office in the Washington
19 Ranch area?

20 A No, they have a field office in the Carlsbad area.

21 Q How far is it down there?

22 A About 16 miles.

23 Q How much?

24 A 16 to 25 miles.

25 Q I don't know whether this has any connection or not,

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1 but in previous cases, I think, you testified as to
2 the kind of organization that Mrs. Grace has.

3 A That's correct.

4 Q No, ^W it's not clear to me whether this Application is
5 for both of the Graces, Mr. & Mrs. Grace, to be the
6 operator, or whether it's for Mr. Grace or Mrs. Grace.

7 Who is to be the operator?

8 A I understand it to be Mrs. Grace.

9 Q Mrs. Grace?

10 A Well, they are co-operators. It's just a matter of
11 who is designated.

12 Q Well, is the Application filed by Mrs. Grace or by
13 both of them?

14 A It was filed by both of them.

15 MR. COOLEY: Case 4766 is the Application of
16 Michael P. Grace and Corinne Grace for --

17 MR. PORTER: I think that Mr. Hinkle is asking
18 for a copy of the Application itself.

19 MR. NUTTER: Is this the Application? Yes, I
20 think it is.

21 MR. HINKLE: Well, here it's by Michael P. Grace
22 and Corinne Grace.

23 Q (By Mr. Hinkle) Well, which one are you requesting be
24 designated as the operator, or both?

25 A Both.

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- 1 Q Both of them as operator?
- 2 A Yes.
- 3 Q Do both Mr. and Mrs. Grace operate their wells in
- 4 the South Carlsbad area?
- 5 A I think from a standpoint -- I mean, when I work, I
- 6 work for both of them. I take orders from both
- 7 people.
- 8 Q Is it usually customary for two individuals to be
- 9 operators in a case like this?
- 10 A It doesn't change anything. We work for a lot of
- 11 people.
- 12 Q Well, the responsibility has to be placed on someone.
- 13 This would be a dual responsibility, which I don't
- 14 think would be desirable.
- 15 A Well, you put desirability on a corporation and it's
- 16 really only a name.
- 17 Q So, you are actually requesting that both be the
- 18 operator?
- 19 A I'm not requesting. They have made the request, Mr.
- 20 Hinkle.
- 21 Q But that is the Application?
- 22 A That's the Application.
- 23 Q Now, you've testified to technical ways of completing
- 24 the wells in the Morrow formation. Are you proposing
- 25 that if the Graces are appointed as operators in this

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1 case, that these new methods that you have testified
2 to, be used in completion of the well in the W/2
3 of 4?

4 A I would say the method that appears to be best at the
5 time the wells are completed, depending upon how they
6 act when they are drilled and tested, would be used.

7 Q And notwithstanding the other methods that have been
8 used by Black River in completing all of the other
9 wells in the Washington Morrow Pool?

10 A There's always something new under the sun, and old
11 tried and true are not always the best.

12 Q Then, you are proposing that a new experiment be taken
13 here for the one well in the Washington Morrow Pool?

14 A Not necessarily. I'm not saying that, and I said that
15 there is a possibility that a Vangun would be used,
16 but I think it would have to be considered at the time
17 that the well was drilled and it was ready for
18 completion as to which method would be the best.

19 MR. HINKLE: I think that's all. We would like
20 to put Mr. Aycock on the stand. He has testified previously
21 in these cases.

22 MR. COOLEY: Before we proceed with rebuttal
23 testimony, Mr. Examiner, in order to lay any fears about
24 dual responsibility and one saying the other is responsible,
25 we would restrict our Application to Michael P. Grace, II, as

1 the sole operator.

2 MR. NUTTER: All right, sir. Now, Mr. Steinhorst,
3 I'd like for you to explain a couple items here on your
4 Exhibit.

5 * * * * *

6 CROSS-EXAMINATION

7 BY MR. NUTTER:

8 Q Now, the total cost here in the first column, \$154,725,
9 that's a single completion?

10 A Yes.

11 Q And then this other \$182,725, is as a dual completion?

12 A That is right. This is a little bit confusing, this
13 form. That is actually the total of your sub-surface
14 equipment carried down into your bottom column.

15 Q So these are your estimates of the well's cost?

16 A Yes.

17 Q Now, you have recommended a 30 percent risk factor
18 for nonparticipating parties. Do you have any
19 estimate as to what the combined fixed rate overhead
20 charge would be on this?

21 A Yes, \$135 a month.

22 MR. NUTTER: Are there any further questions
23 of Mr. Steinhorst?

24 MR. COOLEY: Yes, I have one.

25 * * * * *

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REDIRECT EXAMINATION

1
2 Q Mr. Steinhorst, Mr. Hinkle referred to the methods
3 that Mr. Grace used as being a new and untried
4 experiment. Do you consider them such, after the
5 experience that he has had with these methods?

6 A I don't consider any method that's been tried
7 anywhere as being new and untried. If it has been
8 used before, it's as applicable in one place as
9 another providing the well conditions are such that
10 you've got a similarity.

11 Q And you do expect that similarity, do you not?

12 A I would expect that similarity, yes.

13 Q And do you expect that, in fact, do you know of your
14 own knowledge that the Morrow formation is water
15 sensitive in both the South Carlsbad and the Washington
16 Ranch areas?

17 A Everywhere I know, the Morrow formation is water
18 sensitive.

19 Q And it is your opinion, is it not, that the brine
20 based mud is less damaging to the Morrow formation
21 than is fresh water mud?

22 A It's been the experience.

23 Q Well, is that your opinion?

24 A Well, that's my opinion that it is less damaging.

25 MR. COOLEY: No further questions.

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1 MR. NUTTER: Are there any other questions of
2 the witness?

3 (No response.)

4 MR. NUTTER: The witness may be excused.

5 (Witness excused.)

6 MR. HINKLE: I'd like to have Mr. Aycock sworn
7 in.

8 WILLIAM AYCOCK,

9 was called as a witness and, after being duly sworn according
10 to law, testified as follows:

11 DIRECT EXAMINATION

12 BY MR. HINKLE:

13 Q Mr. Aycock, you previously testified in these cases,
14 have you not?

15 A That's true, Mr. Hinkle.

16 Q I believe when you previously testified, you indicated
17 that if Black River should be appointed as operator,
18 that they might like to wait a little while to see
19 how the well in the E/2 of 4 performed before starting
20 the well in the W/2 of 4, is that correct?

21 A That's correct.

22 Q Since that time, has Black River management had a
23 meeting and discussed this matter, and are you
24 authorized to make any statement with respect to the
25 time that the well is to be commenced?

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1 A Yes, sir, I am. They are ready to commence, the reason
2 being that at the previous time we did not know how
3 long it might be before we would have orders in
4 Section 3, and although that is not directly applicable
5 here, we had one overriding royalty owner who was
6 resisting voluntary communitization in the E/2 of
7 3. I mean, in the E/2 of 4. And it appeared that
8 overall problems of getting agreement would be
9 intensified by his failure to agree. Now that the
10 Commission has given orders, this gentleman has agreed
11 to voluntarily communitize and it would allow us to
12 get the wells on production so that we are not looking
13 at some open ended period of time before we can begin
14 operations. The only time problem would be how soon a
15 rig can be made available and we would estimate within
16 40 to 60 days at the outside that a rig could be made
17 available.

18 Q Since giving your previous testimony, have you received
19 any communications from any work interest or royalty
20 owners?

21 A I have, and if Mr. Nutter will bear with me, during
22 my prior testimony, we have had 100 percent of everybody
23 that's involved, as far as royalty and working interests,
24 with the exception of the Graces, who have agreed to volun-
25 tary communitization with Black River Corporation as the

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1 operator. But in addition to this, some of the royalty
2 owners have written back with a stress to their desire
3 to have Black River Corporation designated as the
4 operator.

5 I placed into evidence before, the letters from
6 Southwestern Oil Corporation; Max Coll, who has an over-
7 riding interest, has sent back the letter which was
8 addressed to everybody in the same way, it's a very
9 general letter and it's available for looking at if
10 they want, "Okay by me. You should be the operator.
11 Max Coll." Then, in addition, Arteria Lumber Company,
12 who has an interest, has given us a letter in which
13 there are actually two letters, one that agrees with
14 the voluntary communitization and the second one
15 stresses a desire to have Black River Corporation made
16 the operator. It's a very short letter. It's addressed
17 to Black River Corporation and it states, "Gentlemen,
18 The Arteria Lumber Company strongly approves Black
19 River Corporation to pool and communitize the W/2 of
20 Section 4, Township 26 South, Range 26 East, Eddy
21 County, New Mexico. This firm has been very successful
22 in drilling and completing gas wells in the Washington
23 Ranch Morrow gas field. Thus, we would oppose any other
24 firm or individual in operating the above described well.
25 Max Coll."

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1 MR. HINKLE: I think the Commission has received
2 the communication that has been shown to both attorneys.
3 It's not really relevant to anything that's taken place. I
4 would be glad to read it into the record, if the attorneys
5 request.

6 That's all.

7 MR. NUTTER: Were you planning to offer those
8 letters in evidence or as Exhibits or are you just making
9 reference to them?

10 MR. HINKLE: We will place them in evidence,
11 if you so desire.

12 MR. NUTTER: Well, if you'd like to put them in
13 your case file. The Central Southwest letter has already
14 been placed in your file, but I think you've got a couple
15 that haven't.

16 MR. HINKLE: We'd like to offer into evidence
17 Exhibits 8, 9, and 10.

18 MR. NUTTER: Black River's Exhibits 8, 9, and 10,
19 for cases 4771, 4772, will be admitted into evidence.

20 (Whereupon, Applicant's Exhibits 8, 9, and 10 were
21 received and marked into evidence.)

22 MR. HINKLE: I believe that's all we have.

23 MR. NUTTER: Are there any questions of Mr. Aycock?

24 MR. COOLEY: No questions.

25 MR. NUTTER: He may be excused.

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1 (Witness excused.)

2 MR. NUTTER: Do you have anything, Mr. Hinkle?

3 MR. HINKLE: No.

4 MR. COOLEY: Yes, Mr. Nutter, I would like for
5 the Examiner to read into the record the dates that the two
6 conflicting Applications for forced pooling were received
7 by the Oil Conservation Commission.

8 MR. NUTTER: Well, the date here on this letter,
9 the Grace Application, is being corrected, it was originally
10 for the N/2 of Section 4 and that's been stricken and changed
11 to the W/2 of Section 4 of 26, 24, hereby requesting a hearing
12 to force pool this area. The date received by the
13 Commission on June 22nd and the Application of Black River
14 for the forced pooling was received by the Commission on
15 July 11th, both in 1972.

16 Do you have anything further?

17 (No response.)

18 MR. NUTTER: If there's nothing further in Cases
19 4771, 4772 and 4766, we'll take the cases under advisement and
20 the hearing is adjourned.
21
22
23
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25

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1 STATE OF NEW MEXICO)
2) ss
3 COUNTY OF BERNALILLO)

4 I, JOHN DE LA ROSA, a Court Reporter, in and for the
5 County of Bernalillo, State of New Mexico, do hereby certify
6 that the foregoing and attached Transcript of Hearing
7 before the New Mexico Oil Conservation Commission was
8 reported by me; and that the same is a true and correct record
9 of the said proceedings to the best of my knowledge, skill
10 and ability.

11 *John De La Rosa*
12 COURT REPORTER
13
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22 I do hereby certify that the foregoing is
23 a true and correct record of the proceedings in
24 the hearing of Case No. 47714722
25 on 8-9-72, 1972 4766

[Signature]
New Mexico Oil Conservation Commission

I N D E XWITNESS:PAGERICHARD STEINHORST

Direct Examination by Mr. Cooley 3

Cross-Examination by Mr. Nutter 16

Cross-Examination by Mr. Hinkle 17

Recross-Examination by Mr. Nutter 21

Redirect Examination by Mr. Cooley 22

WILLIAM AYCOCK

Direct Examination by Mr. Hinkle 23

E X H I B I T SAPPLICANT'SOFFEREDADMITTED

Michael P. Grace, II:

Exhibit Number 1 15 16

Black River Corporation:

Exhibit Number 8 26 26

Exhibit Number 9 26 26

Exhibit Number 10 26 26

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
CONFERENCE HALL, STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
July 26, 1972

EXAMINER HEARING

IN THE MATTER OF:

Application of Black River Corporation
for a nonstandard gas unit, Eddy County,
New Mexico.

CASE NO. 4771

a n d

a n d

Application of Black River Corporation
for compulsory pooling, Eddy County,
New Mexico.

CASE NO. 4772

a n d

a n d

Application of Michael B. Grace and
Corinne Grace for compulsory pooling
in a nonstandard proration unit.

CASE NO. 4766

BEFORE: Daniel S. Nutter
Examiner

TRANSCRIPT OF HEARING

dearnley, meier & mc cormick

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MR. NUTTER: Call Case 4771.

MR. HATCH: Case 4771: Application of Black River Corporation for a nonstandard gas unit, Eddy County, New Mexico.

MR. HINKLE: If you will also call Case 4772.

MR. HATCH: Case 4772: Application of Black River Corporation for compulsory pooling, Eddy County, New Mexico.

MR. HINKLE: Clarence Hinkle, appearing on behalf of Black River Corporation.

We would like to have Cases 4771 and 4772 consolidated for the purposes of the hearing because they are similar and involve the same subject matter.

MR. NUTTER: For the purpose of the hearing we will consolidate Cases 4771 and 4772.

MR. HINKLE: Now, at the hearing on July the 12th there was a case and I do not have the number, that appeared --

MR. HATCH: 4760.

MR. HINKLE: -- of Mr. and Mrs. Grace also for forced pooling and nonstandard units for the W 1/2 of Section 4, Township 26, South, Range 24 East and it was stipulated and agreed at that time that that case would also be consolidated with these cases for purposes of the hearings today.

MR. NUTTER: All right, sir. We will now call Case Number 4766.

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1 MR. HATCH: Case Number 4766: Application of
2 Michael B. Grace and Corinne Grace for compulsory pooling
3 in a nonstandard proration unit.

4 MR. COOLEY: William J. Cooley, Burr and Cooley,
5 Farmington, New Mexico, appearing on behalf of the Applicants.
6 We concur in the consolidation of the three cases for
7 purposes of the hearing. However, at this time, we would
8 move that that portion of the testimony which we will put
9 on on behalf of Mr. and Mrs. Grace in 4766, be continued to
10 the next scheduled Examiner's Hearing.

11 MR. NUTTER: It is your motion, Mr. Cooley, that
12 the portion of the consolidated being Case No. 4766 be
13 continued to the next Examiner Hearing; is that correct?

14 MR. COOLEY: Yes, Mr. Examiner.

15 MR. HINKLE: We object to the continuance or
16 further continuance because we think this should be decided.
17 It was stipulated at the last hearing that we would not
18 produce the gas well which has already been drilled on the
19 E/2 of 3 which offsets this location to be drilled until
20 this hearing. Now, that well, as well as the one on the
21 W/2 of Section 3, are all hooked up and ready to produce.
22 All they have got to do is turn on the valve and it is my
23 understanding that USGS is concerned about the fact that
24 they are not on production because they do involve Federal
25 acreage and I talked to Carl about it and he seemed to be

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1 concerned about the continuing -- that is -- not producing the
2 wells any additional time so I would like to have it understood
3 that this is the end of the stipulation and that we can go
4 ahead and produce the wells in Section 3.

5 MR. NUTTER: Now, Case 4763, Mr. Hinkle, related
6 to the E/2 of Section 3 and Case 4764 related to the W/2 of
7 Section 3.

8 MR. HINKLE: That is right.

9 MR. NUTTER: Case 4765 related to the W/2 of
10 Section 3.

11 Mr. Hatch, has an order been entered in any of
12 those cases as yet?

13 MR. HATCH: I don't believe an order has been
14 issued in any of those cases.

15 MR. NUTTER: But the wells in the E/2 and W/2 are
16 both connected and ready to produce?

17 MR. HINKLE: They are both completed and connected
18 and all we have got to do, as I understand it, is turn a
19 valve and start production.

20 MR. NUTTER: Mr. Cooley, what is your comment
21 with respect to the stipulation that was made at the last
22 hearing that the wells wouldn't be produced until this
23 hearing today?

24 MR. COOLEY: I don't know whether this Examiner
25 was present at the time 4766 was called at the previous

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1 Examiner Hearing. We desired to proceed with that case at
2 that time and had all of our witnesses and people here
3 available to do so but, at Mr. Hinkle's request, or his
4 motion, our case was continued until such time, to this
5 hearing and we are now indisposed as Mr. Hinkle was two
6 weeks ago and we feel that the same ground rules should
7 apply.

8 MR. NUTTER: Which case related to the E/2 of
9 Section 4?

10 MR. COOLEY: There is no case.

11 MR. HINKLE: It has been completed. The well
12 has been completed and it is under voluntary communitization,
13 as I understand it.

14 MR. NUTTER: If there is no case related to it,
15 you have no objection to that well being produced?

16 MR. COOLEY: The point that was brought out with
17 respect to all of these four locations was that with the
18 one communication that apparently exists in those pools,
19 there is grave likelihood of drainage and it was agreed and
20 stipulated that we would agree to the continuance to today
21 of Case 4766 and that the well belonging to the Applicant
22 Black River in the E/2 of Section 4 which is not the
23 subject of any case would not be produced until such time as
24 there was a final decision as a result of the Examiner's
25 Hearing on the two Applications for forced pooling of the W/2.

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1 The concern was expressed by both Black River
2 and Mr. & Mrs. Grace of the possibility of drainage in
3 various areas of this pool. I would be inclined to accede
4 to their wishes and desires with respect to it and I am
5 certainly not controverting what Mr. Hinkle has said, but
6 Mr. Traywick was here two weeks ago with the hearing and
7 had no objection to the continuance. Whether he would now
8 have an objection to a continuance until the 9th, I don't
9 know, but if the Examiner would wish to contact Mr. Traywick
10 as an arbiter of this particular point, we would accede to
11 his decision on it.

12 MR. NUTTER: Has a nonstandard unit been approved
13 for the E/2 of Section 4?

14 MR. HINKLE: It has been voluntarily approved.

15 MR. NUTTER: Has the Commission approved a
16 nonstandard unit?

17 MR. HINKLE: It has not been approved.

18 MR. NUTTER: I think we will go ahead and continue
19 Case Number 4766 and I think the E/2 of Section 4 has nothing
20 to do with this case at this time and there is no proration
21 unit approved for it, as of now, but I think when you get
22 your proration unit, there is no stipulation, so I think it
23 is up to you if you produce the well and if you get a
24 proration unit approved.

25 MR. COOLEY: Is the size of the proration unit

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1 involved such that it will require a hearing?

2 MR. NUTTER: Not a hearing. I think it would
3 be eligible for administrative approval.

4 MR. COOLEY: What are the present limits?

5 MR. NUTTER: There is no limits, Mr. Cooley.
6 When it is a result of a correction in the surveying, and
7 this is what is involved in this area, these are oversize
8 sections and approval of the nonstandard unit administratively
9 requires notification to offset operators and in the event of
10 an objection, it has to go to hearing.

11 MR. HATCH: Pardon me, Mr. Examiner. I am not
12 quite sure that it requires notification in this case to off-
13 set operators.

14 MR. NUTTER: Maybe it doesn't. When it is a
15 result of correction in surveys --

16 MR. HATCH: I will let the attorney read it
17 himself.

18 MR. HINKLE: Can we decide this later?

19 MR. COOLEY: We have had a stipulation with
20 respect to these two cases, Mr. Examiner, and I am not sure
21 I understand your decision with respect to it.

22 MR. NUTTER: I think the stipulation was that
23 you stipulated that the well would not be produced to a
24 continuance to today's hearing and there is no stipulation,
25 as I can see, for any further shut-in on the well.

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1 MR. HINKLE: We do not stipulate that we will
2 not produce it. If we can get a nonstandard approved
3 administratively, we will produce. If we can't, we will just
4 have to have a hearing. So, I don't see any use of arguing
5 about this now.

6 MR. NUTTER: I think, in view of the statement
7 that I made awhile ago, which was in error, I think I will
8 read this portion of the rule for approval of nonstandard
9 units into the record.

10 This is a portion of Rule 104-D-2: "Any completed
11 gas well which does not have the required amount of acreage
12 dedicated to it for the pool or formation in which it is
13 completed may not be produced until a standard unit for the
14 well has been formed and dedicated or until a nonstandard
15 unit has been approved. The Secretary-director of the
16 Commission may grant an administrative approval to a non-
17 standard gas unit without notice and hearing when an
18 application has been filed for a nonstandard unit and the
19 unorthodox size and shape of the unit is necessitated by a
20 variation in the legal subdivision of the U.S. Public Land
21 Surveys or the following facts exist and the following
22 provisions are complied with: (a) The nonstandard unit
23 consists of quarter sections or lots that are continuous by
24 a common bordering side; (b) the nonstandard unit lies wholly
25 within a single governmental quarter section, if the well is

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1 completed in a pool or formation for which 160 acres is
2 the standard unit size or wholly within a single governmental
3 half section if the well is completed in a pool or formation
4 for which 320 acres is the standard unit size; (c) the
5 applicant presents written consent in the form of waivers
6 from all offset operators and from all operators owning
7 interests in the quarter section for 160 acre pools or
8 formations or the half section for 320 acre pools or
9 formations in which the nonstandard unit is situated and which
10 acreage is not included in said nonstandard unit; (d) in
11 lieu of paragraph (c) of this Rule, the applicant may furnish
12 proof of the fact that all of the aforesaid operators were
13 notified by registered or certified mail of his intent to
14 form such nonstandard units. The Secretary-director may
15 approve the application if no such operator has entered an
16 objection to the formation of such nonstandard units within
17 30 days after the Secretary-director has received the
18 application.

19 MR. HINKLE: We have one witness we would like
20 to have sworn.

21 (Whereupon, William B. Aycock was sworn.)

22 WILLIAM B. AYCOCK,
23 was called as a witness and, having been duly sworn by law,
24 testified as follows:
25

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DIRECT EXAMINATION

BY MR. HINKLE:

Q State your name and residence.

A William B. Aycock. I live in Midland, Texas, and
I am a consulting engineer.

Q Have you previously testified before the Oil
Conservation Commission?

A Yes, sir, I have.

Q Your qualifications as a petroleum engineer are a
matter of record with the Commission?

A Yes, sir, they are.

Q Have you made a study of the Washington Ranch-Morrow
Gas Pool and the immediate area surrounding it?

A Yes, sir, I have.

Q Have all the wells been drilled in that area?

A Yes, sir.

MR. HINKLE: Are his qualifications acceptable?

MR. NUTTER: Yes, sir.

Q (By Mr. Hinkle) Are you familiar with the Applications
of Black River Corporation in Cases 4771 and 4772?

A Yes, sir, I am.

Q What is Black River seeking to accomplish?

A Well, in Case 4771, Black River desires the establishment
of a nonstandard gas unit in comprising 402.22 acres in
the W/2 of Section 4, Township 26 South, Range 24 East,

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1 in Eddy County, New Mexico.

2 In Case 4772 Black River Corporation desires an
3 order for compulsory pooling at the acreage that lies
4 within this said W/2 of Section 4. The Black River
5 would further request the approval of a well location
6 to be located at approximately the center of lot 5 or
7 the SW/4 of the NE/4 -- I mean, the SE/4 of the NW/4
8 of Section 4.

9 Q Have you prepared or has there been prepared under
10 your direction certain Exhibits for introduction in
11 this Case?

12 A Yes, sir.

13 Q These are Exhibits 1 through 6?

14 A Yes, sir.

15 Q Refer to Exhibit 1 and explain what this is and what
16 it shows.

17 A Exhibit 1 is a current land map of the Washington
18 Ranch area in which the current pool boundaries
19 comprising the E/2 of Section 33 and all of Section 34
20 of 25 South, 24 East, are shown in green and the
21 acreage for which the request is being made for the
22 nonstandard proration unit in the W/2 of Section 4
23 in 26 South, 24 East, is shown in yellow.

24 Also shown are all the current leaseholds and
25 mineral interests.

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- 1 Q Refer to Exhibit 2 and explain what this is and
2 explain what this is and what it shows.
- 3 A Exhibit 2 is a structure map on the bottom of the
4 lower Morrow sand in the Washington Ranch area and
5 in which the traces of cross-sections which will
6 subsequently be presented as Exhibits to this
7 Commission are located and in which all of the wells
8 are indicated and the proration units are not indicated,
9 but they are at the locations of the wells or at the
10 approximate two locations which is called for by the
11 plats that are on file with this Commission.
- 12 Q What is this contoured on?
- 13 A This is the bottom of the lower Morrow reservoir which
14 is the main reservoir in the Washington Range field.
- 15 Q I will refer you to Exhibit 3. Explain that.
- 16 A Exhibit 3 is a cross-section A, A' which runs from
17 the north end of Washington Ranch area over to the SE
18 side of the Washington Ranch area and which, in the
19 datum represented by the map shown -- the previous
20 figure is indicated as bottom of the lower Morrow
21 sand.
- 22 Q I think this figure shows the regular development of
23 the reservoir and the main reservoir.
- 24 A It appears on all logs and is immediately recognizable.
25 It shows, very graphically, the structural configuration.

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1 This is a true cross-section. In other words, the
2 vertical scale is exaggerated but it shows the
3 proximity of the wells horizontally and vertically
4 proportionately.

5 Q Refer to Exhibit 4 and explain that.

6 A Exhibit 4 is a cross-section B, B', which is an east-
7 west cross-section that was indicated on the structure
8 map of Exhibit 2 and it shows the same thing.

9 The well in the E/2 of Section 4 is the third
10 well from the right-hand side of cross-section B, B'
11 and I think it is very consequential to note the
12 extremely high rate of dip between this location
13 and the dry hole over in Section 5.

14 Q This is between the two holes?

15 A The well in Section 4 and 5 are approximately a mile
16 apart. They are a little bit more than that, but
17 they are approximately a mile apart.

18 Q Exhibit 5 is --

19 A Exhibit 5 is a survey plat which shows the surveyed
20 size of all the subdivisions in Section 4, and as
21 is indicated at the bottom, the W/2 of Section 4
22 comprises 402.22 acres. The well that is in the E/2
23 of Section 4 is shown at its proper location and
24 though we have not indicated it, you would note that
25 a location at the approximate center of lot 5 would be

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1 about 2640 feet, I think. It will be a little bit
2 more. It will be close to 3000 feet from the north
3 line and 2640 from the west line, approximately.

4 Q Are you familiar with both the lease ownership and
5 the overriding royalty and oil-mineral ownership in
6 the W/2 of Section 4?

7 A Yes, sir, I am.

8 Q Have you or has Black River contacted all owners or
9 made an effort to get them to pool their interests
10 and form the nonstandard unit consisting of the W/2
11 of 4?

12 A Yes, sir, they have been contacted.

13 Q What about the working interest owners? Have they
14 all consented?

15 A Yes, they have all consented to the formation of a
16 nonstandard unit as well as the designation with the
17 exception of Michael P. Grace.

18 Q It is actually 50.25 acres?

19 A Without exception, all of the working interests have
20 agreed to the establishment of the nonstandard
21 proration unit and the designation of Black River
22 Corporation as the operator.

23 Q Did you get any response from contact with Michael
24 P. Grace.

25 A No, sir.

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- 1 Q What about the owners of the royalty and override
2 royalty interests?
- 3 A They have all been contacted.
- 4 Q Have you had any that have not agreed to come in?
- 5 A No, sir. They have all agreed and in fact, there
6 have been, in at least one case, there has been an
7 expressed desire for the designation of Black River
8 Corporation as an operator from one of the overriding
9 royalty owners.
- 10 Q Which one was that?
- 11 A Central Southwestern Oil Corporation.
- 12 Q Did you receive a letter from Central Southwestern?
- 13 A Yes, sir, dated July 24, 1972, signed by Mr. Thomas
14 Allen, President, "Gentlemen, this is to notify you
15 that Central Southwestern Oil Corporation does
16 voluntarily approve the pooling and communitization
17 of the W/2 of Section 4, Township 26 South, Range 24
18 East, Eddy County, New Mexico. We believe that
19 Black River Corporation should operate the unit and
20 do approve Black River as operator. It is completely
21 unreasonable to suggest that Michael P. Grace and
22 Corinne Grace should operate the unit and we are
23 strongly opposed to their being designated as operators.
24 We believe the entire W/2 of the Section should be
25 included in the unit and nothing more or less than the

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1 W/2 would be completely satisfactory. Yours truly,
2 Central Southwest."

3 Q I believe you said that all the working interest
4 except Michael Grace have approved the formation?

5 A Yes, sir.

6 Q Has all the working interest owners except Michael
7 Grace indicated who they would like to have as
8 operator?

9 A Yes, sir, they have.

10 Q Who have they indicated?

11 A Black River Corporation. The only working interest
12 owner other than Black River and Michael P. Grace that
13 are involved in this acreage is Arapahoe Gas Limited
14 and we have received an approval letter by Mr. Warren
15 Taylor, President, dated the 18th of July approving
16 Black River's proposal to all interest owners of which
17 I have a copy.

18 Q Now, refer to Exhibit 6 and explain what this is and
19 what it shows.

20 A Exhibit 6 is a summary of the individual well data
21 for the completed wells for Black River Corporations
22 completed wells in the Washington Ranch field and which
23 are shown all the pertinent information including
24 completion intervals, date of C form 122, test shut-
25 in, well pressure, any drill shut-in bottom hole

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1 pressure and the absolute open flow and the date of
2 first gas delivery for all the wells.

3 Q Would Black River like to be the operator of the
4 unit?

5 A Definitely.

6 Q What experience has Black River had in connection with
7 operations in this area?

8 A Well, I hope those of you, like Mr. Hatch, you have
9 heard this testimony before, I hope you will bear
10 with me. I don't believe the Examiner was present
11 at the last -- the Washington Ranch discovery was
12 a Black River Corporation prospect and the discovery
13 well and most of the development, all except for City
14 Service, I believe the wells in the north end of the
15 field, have been drilled and completed by Black River
16 Corporation. I would also like to mention that there
17 was an article in the May 15, 1972, Oil and Gas
18 Journal that was commentary on the unique completion
19 procedures that had been worked out by Black River
20 Corporation and applied to the Morrow formation in
21 the Washington Ranch field.

22 Q Is the article you refer to Exhibit 7?

23 A Yes, sir.

24 Q Give briefly the contents of this article.

25 A Well, this is written by Mr. John L. Kennedy who is

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1 drilling editor of Oil and Gas Journal. Of course,
2 this is, I guess, the most widely read of all the
3 periodicals that deals strictly with the oil industry.
4 It has to do with what the drilling completion procedures
5 are and points out this is a unique application in
6 this area and certainly in the Permian Basin. To my
7 knowledge wells have all been completed natural and
8 Black River has succeeded in getting natural completion
9 that exhibit no indication of any reservoir damage
10 whatsoever and this is caused by several things.

11 One, they have a special rig system worked out
12 where low solid and low water loss, and it prevents
13 invasion of formation by fluids that are compatible
14 with it. They make a special effort to get the pipe
15 of the bottom cemented as quickly from the time the
16 pay is perforated so it is possible to prevent exposure.

17 They cover it with cement sufficient to cover the
18 formation and prevent communications but not to a
19 degree that would break the formation down.

20 Q Do you have any estimate as to the cost of drilling
21 and completing the well in the W/2 of the Morrow?

22 A Yes, sir, I do. I estimate a completed well would
23 cost approximately \$140,000 with contingencies.

24 Q What will Black River do -- a turn key job?

25 A It has been the practice of Black River to include

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1 most of the items that would normally be included
2 in a turn key bid from a reputable contractor, yes,
3 sir. This way they know exactly what it is going to
4 cost them before they drill the wall for those portions
5 that have the highest degree of risk involved.

6 Q What is the attitude of Black River with respect to
7 the interest of Michael Grace and Mrs. Grace?

8 A Well, if the Commission sees fit to designate Black
9 River Corporation as the operator, Black River would
10 prefer to see the Graces join in drilling a well on
11 an actual cost basis if the Graces desire.

12 Q And pay their way?

13 A And pay their way. If the Graces desire to go
14 nonconcent and not pay their way and have payments
15 made out of production attributable to their interest,
16 then Black River believes that a 50 percent risk factor
17 is not unreasonable for this location.

18 Q You so request?

19 A Yes, sir.

20 Q What is your estimate of the cost of supervision and
21 operating the well?

22 A \$135.00 a month.

23 Q Is that usual and customary charges in this area?

24 A Yes, sir, and it is Black River's further -- it is
25 their custom in this area where there are already

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1 operators producing wells.

2 Q On all other wells?

3 A Yes, sir.

4 Q In your opinion if this application is granted, will
5 it be in the interest of protection of correlative
6 rights?

7 A Yes, sir, it will. I think it would be advantageous
8 to everyone involved to have development of this
9 field carried on as orderly and rapidly as possible.

10 Q And be in the interest and preservation and prevention
11 of waste?

12 A Yes.

13 MR. HINKLE: We would like to offer Exhibits 1
14 through 7.

15 MR. NUTTER: Applicant's Exhibits 1 through 7
16 will be received in evidence.

17 (Whereupon, Applicant's Exhibits 1 through 7 were
18 marked and received in evidence.)

19 MR. HINKLE: That is all on Direct.

20 * * * * *

21 CROSS-EXAMINATION

22 BY MR. NUTTER:

23 Q Mr. Aycock, you estimate your well costs to be \$140,000.
24 Is that an average of these 20 jobs you have had on
25 the pool to date?

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- 1 A Yes, sir. If you want to know an actual average,
2 it is about \$137,800 is what they have been running
3 but this has a little contingency build into it.
- 4 Q It would be subject to actual cost on the well when
5 completed?
- 6 A Yes, sir, that's correct.
- 7 Q Now, you are requesting a 50 percent risk factor and
8 50 percent of the maximum which the Commission is
9 authorized by statute to impose upon a forced pooling
10 case. Do you think this is the maximum risk that we
11 could have?
- 12 A Probably not, no sir, because if you will note from
13 the cross-section, B, B', we are looking at an un-
14 favorable structural location. It will be among the
15 lowest wells drilled in the field to date. If
16 structural projection is correct, the position seems
17 to be related to reservoir quality as reflected by
18 deliverability.
- 19 Q If we take your cross-section B, B', we find that
20 going one mile from the producing wells to the dry
21 hole we have a drop of approximately 445 feet.
- 22 A Yes, sir.
- 23 Q Now, where on this 445 foot drop would you place the
24 location of the well?
- 25 A We will be at about minus 3450, in that vicinity, which

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1 will put us equivalent to your J. M. Hubert well
2 Section 11 which, to my knowledge, has not been
3 officially completed. I don't believe the forms have
4 yet been submitted.

5 Q That is the well across Section A, A'?

6 A Yes, sir.

7 Q Well, on the extreme right is lower than that. It
8 is a production well, is it not?

9 A Yes, sir, but the Hubert Corporation well is completed
10 in the upper Morrow and the other one is completed in
11 the lower Morrow.

12 I think it is apparent at this location and due
13 to the fact that both of the wells are in Section 3 as
14 well as the well in the E/2 of Section 4, are duals,
15 that we would hope that some of the risk would be taken
16 out by the fact that we do have two shots rather than
17 one.

18 Q So you do have the upper Morrow in this Number 1 well?

19 A Yes, sir.

20 Q You expect you probably have upper Morrow?

21 A In fact, my personal opinion is that the lower Morrow
22 has only about a 50 percent chance of being commercially
23 productive, but the reason for drilling the well with
24 high assurance that you get something is that the
25 upper Morrow is present and will probably produce at

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1 this location.

2 Q On this \$135 a month operating cost, what are you
3 including?

4 A This is all the normal overhead and direct field
5 supervision costs.

6 Q This would be your combined fixed rate as described
7 in the accounting table?

8 A Yes, sir, the satisfaction of all the State of New
9 Mexico proration requirements as to the submittal
10 forms and this sort of thing.

11 Q Your direct well operating costs and work overs and
12 so forth will be separate from that?

13 A That will fall under joint operating agreement that
14 would be directly attributable and chargeable separately
15 on an actual cost basis on whatever the work or any
16 work that might be required and what it would actually
17 cost.

18 Q So this \$135 is combined fixed rates only?

19 A Yes, sir.

20 MR. NUTTER: Are there any further questions of
21 the witness:

22 * * * * *

23 CROSS-EXAMINATION

24 BY MR. COOLEY:

25 Q Mr. Aycock, earlier in your Direct Testimony I believe

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1 you testified with respect to the experience of
2 Black River that they had completed all the wells in
3 the pool with the exception of whom?

4 A City Service wells to the north.

5 Q Then you later referred to a Hubert well.

6 A Yes, sir. I pointed out, Mr. Cooley -- I don't believe
7 officially it is completed yet since forms haven't
8 been submitted and it is apparent that it will probably
9 be a commercial well. J. M. Hubert Corporation is not
10 releasing any information. Stan Cromwell, who is their
11 District Manager, told me that he was not in a
12 position to release any information at this time. We
13 were successful in getting a copy of the log from
14 them. That's all.

15 Q Are you familiar with the method of completion of
16 drilling that was used by Mr. Hubert in the well?

17 A Not other than the fact that they had some severe
18 equipment difficulties when they attempted to complete
19 the well. They ran a string of secondhand tubing in
20 the well and it was filled with rust and before they
21 got through, they had all the rust at the bottom
22 and they had to drag the tubing out and lay it down
23 and clean it out, is my understanding.

24 Q Mr. Hubert was successful in obtaining a commercial
25 well in your opinion?

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- 1 A Oh, yes.
- 2 Q You don't mean to imply that Black River is the only
- 3 company in the business that could successfully drill
- 4 and complete a well in this pool, do you?
- 5 A No. I think the fact that in general Black River's
- 6 experience has been exceptionally better than City
- 7 Service on the basis of the preliminary deliverability
- 8 tests that have been submitted, it indicates that there
- 9 is no more than just chance to what has taken place
- 10 out there so far.
- 11 Q Would you attribute the difference between Black
- 12 River and City Service wells solely to methodology?
- 13 A Partially.
- 14 Q What is the other part?
- 15 A Partially -- I don't think there is a well located
- 16 structurally in general --
- 17 Q Generally speaking, lower?
- 18 A Yes.
- 19 Q In your opinion that is a crucial factor?
- 20 A I think it has been indicated to be here. There is
- 21 no question about it.
- 22 Q What City Service practices are you aware of that you
- 23 consider were erroneous?
- 24 A I am not aware that they made any special efforts
- 25 along the lines that I outlined for Black River as far

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1 as low exposure time and as near as possible
2 compatibly employed, and I am not positive -- I do
3 not know exactly the way they have perforated well,
4 but it is apparent that they have not made special
5 efforts along the lines that I outlined like Black
6 River Corporation has.

7 Q What makes that apparent to you, I mean? It is not to
8 me.

9 A Well, if you will bear with me, Mr. Cooley, I think
10 I have the scout tickets and we can get them out and
11 go over how many sacks of cement they cemented them
12 with and so forth.

13 Q Rather than going through completion, can you single
14 out what they did wrong?

15 A I don't think, as an example, here is the City
16 Service Government Number 3 which is located in Section
17 27. If you will refer to the Exhibit 1 that we
18 presented, it is the well that is in the N/2 of the E/2
19 of Section 27 and instead of perforating in the way
20 that Black River has, they have got shots scattered all
21 up and down the hole here and I do not have their
22 operations reports, but it would appear from the way
23 the well was perforated that in all probability it
24 was perforated with a fire gun under a typical
25 procedure where you go in either in a balanced

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1 condition or with a formation pressure slightly
2 unbalanced and perforate each individual perforation
3 and you raise the gun and have to zero it in with
4 depth and correlate it properly each time and then you
5 shoot it and this is an example of what Black River
6 Corporation does not do. I think I have the City
7 Service Government in view located here and you have
8 got a similar type situation there.

9 It made a much better well than the M-2 whether
10 or not it is as good a well.

11 Q I think you meant the M-3?

12 A As the M-3. Whether or not it is as good a well, I
13 am not prepared to say, because I have not made a
14 detailed analysis of the deliverability tests to
15 determine whether or not there is apparent damage.
16 If, of course, as you know or as is apparent, sometimes
17 if the well is good enough, it still looks good regard-
18 less of what the outcome of it is.

19 On the other hand, City Service had a well in
20 here for many years prior to the time that Black River --
21 the 1-M located in the SE of the SE of the 28 and
22 neither were they able to make commercial completion
23 before nor have been able to since the time that they
24 initially started working on this well. I don't have
25 any other completion tickets on any other wells. I do

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1 not have the 1-M. I don't have the original ticket
2 with me. All I have is the final completion ticket
3 on the well.

4 Q Insofar as the prospects of making a commercial well
5 in at least the upper Morrow, you feel it is relatively
6 a low risk venture; is that correct?

7 A Considering we have an edge location there, Mr.
8 Cooley, yes, sir.

9 Q In light of this factor, that this is a relatively
10 low risk in your opinion and in light of the fact that
11 the maximum amount of the risk factor that can be
12 allowed by statute is 50 percent, would you alter your
13 recommendation with respect to the risk factor now?

14 A No, sir, I wouldn't. The number 1-BR in the E/2 of
15 5 gave every indication that it was a commercial well
16 at the time and, in fact, a very reputable service
17 company had their expert analyze the drill stem test
18 that was taken in the pay zone and he concluded there
19 was an insignificant possibility of it being anything
20 but a commercial well and we know what the result has
21 been, so I would have to conclude that there is a
22 significant risk at this location.

23 Q But not a maximum risk?

24 A Well, I don't know how you define a maximum risk. I
25 would define it for this field as a maximum risk because

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1 I don't think at this time we have any indication that
2 any locations lower than where the proposal is to drill
3 this well have any chance of producing gas.

4 Maybe subsequently we will develop that. I am
5 not prepared to say, but right now I don't think we do.

6 Q Mr. Aycock, are you familiar with the operational
7 experience that Mr. Michael P. Grace, II, has had in
8 the general area of Eddy County?

9 A No, sir, I am not familiar with it at all.

10 Q You obviously, then, would have no comment?

11 A I would have none whatsoever.

12 Q When you spoke in terms of those things that led
13 Black River to come into the area, who was the
14 individual, or if there was more than one, who were
15 the individuals who made a decision on behalf of
16 Black River?

17 A Well, there were a combination of people. I can't
18 give you the exact people. Obviously since Forest
19 Miller is the geologist, the geological concept was
20 his. As far as who made the actual decision to go
21 forward with the thing and on what basis, I have no
22 personal knowledge and cannot say. I personally do
23 know Mr. Miller was responsible for the geological
24 concept because I have talked to him personally.

25 Q Did Mr. Forest Miller, at any time work for City

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1 Services in connection with the drilling of their
2 wells?

3 A Not to my knowledge.

4 Q Have you personally been in attendance at the drilling
5 and completion of the wells?

6 A Not every one, but I have been on location and
7 inspected. I spent a day out there in which I looked
8 at each individual -- there were enough wells going
9 on that I could look at each individual operation and
10 go over it with them, yes.

11 Q You do feel consulting --

12 A I was out there on the ground with John Berry and
13 Forest Miller, yes, sir. I made a special trip out
14 there for that purpose.

15 Q What I was trying to get at is, was it you personally
16 who developed these new concepts or what individual?

17 A Well, which concept are we talking about, the low
18 exposure time or the mud fluids or the perforation?

19 Q You have listed a number of what you consider to be
20 unusual methods or specialized methods adapted by
21 Black River in this area. I am curious as to who
22 those individuals are that developed them?

23 A Well, Mr. John Berry and Mr. Forest Berry were
24 responsible between them for the development of the
25 procedures that are in effect out there at the present

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1 time.

2 Q Is Mr. Forest Miller a full time employee of Black
3 River Corporation?

4 A He is not a full time employee. He is employed as a
5 consultant for the drilling and completion of all the
6 wells in the field out there.

7 Q Mr. Berry is also a consultant?

8 A That's correct.

9 Q You are a consultant?

10 A That's correct.

11 Q So the three people that were active and responsible
12 for the methods being used were all consultants rather
13 than full time employees?

14 A That's correct.

15 MR. COOLEY: No further questions.

16 * * * * *

17 REDIRECT EXAMINATION

18 BY MR. HINKLE:

19 Q You understand that Mr. & Mrs. Grace have pending
20 their application to force pool the W/2 of the 4
21 and also a nonstandard unit?

22 A Yes, sir.

23 Q I believe your testimony has shown that everyone
24 who is included in the working interest or royalty
25 overriding interest and all mineral owners have

dearnley, meier & mc cormick

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1 approved this unit for the W/2 of 4, so doesn't it
2 resolve down to just who is going to be the operator,
3 whether it is Grace or Black River in this case?

4 A Well, I would assume so, yes, sir. I can't see any
5 other problem here at all as long as the Commission has
6 already stated that the nonstandard proration unit
7 in this case being due to a factor discovered in the
8 rules is something that can be taken care of.

9 I would say that the only problem here is going
10 to be who is the operator of the well.

11 MR. HINKLE: That's all.

12 * * * * *

13 RE CROSS-EXAMINATION

14 BY MR. NUTTER:

15 Q Mr. Aycock, this article from the Oil and Gas Journal
16 describes this perforating technique. Which was the
17 first that you used this technique on in the pool?

18 A It was used on the discovery well which is the City
19 Federal Number 1 which is the one that is located in
20 the W/2 of Section 34.

21 Q How many wells have you used it on since then?

22 A Every one of them. Seven, I believe.

23 Q Referring to Exhibit Number 6, refer to that, and
24 identify which wells you used that on then. You said
25 the City Federal 1?

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1 A Yes, sir.

2 Q Federal 2 and Federal 3 --

3 A Well, I was wrong. There is seven of them and three
4 of those are duals and it was used in every case on
5 both singles and duals.

6 Q So every well on Exhibit 6?

7 A Yes, sir.

8 Q The same procedures have been used basically?

9 A The only variation would be naturally that perforations
10 have to be spotted to conform with where the best
11 development sections of the reservoir are located in
12 each individual wellbore.

13 Q I see.

14 MR. NUTTER: Are there any further questions
15 of Mr. Aycock?

16 * * * * *

17 CROSS-EXAMINATION

18 BY MR. HATCH:

19 Q Mr. Aycock, in the discussion of your well location
20 in the W/2 of Section 3, it is only identified as the
21 approximate center of lot 5. Do you have a footage
22 location of what the approximate center would be?

23 A Well, I can get you one, Mr. Hatch, if you will give
24 me a few minutes to dig out a scale. 900 feet from the
25 west and 2500 feet from the north line.

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1 Q Mr. Aycock, would that leave as much as 660 feet from
2 your well location to the nearest side boundary of your
3 recommended proration unit? That is, your half section
4 line there to the east?

5 A Yes, sir. It would leave just slightly over that
6 unless my plat is wrong.

7 Q When do you plan to drill your well if Black River
8 were named the operator?

9 A It would be preferable, Mr. Hatch, to have a little
10 experience with production on the well in the E/2
11 before the well in the W/2 is commenced in order to
12 reduce the risk and I think we would propose to have
13 60 to 90 days experience after the well in the E/2 is
14 put on a continued production at least before commencing
15 the well in the W/2.

16 MR. HATCH: That's all.

17 MR. NUTTER: Are there any further questions of
18 Mr. Aycock?

19 MR. COOLEY: In light of the last question and
20 the last answer, if you please, Mr. Examiner.

21 * * * * *

22 RECROSS-EXAMINATION

23 BY MR. COOLEY:

24 Q To reduce the risk, was that your reason for drilling?

25 A Yes, sir, I think so.

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- 1 Q Would you explain that answer? There is nothing that
2 can be done on the E/2 to reduce the risk of the W/2.
- 3 A If there should happen to be that the reservoir is
4 very limited that the performance on the E/2 will
5 probably demonstrate that within a reasonable time. It
6 is not an absolute risk production, but it is a further
7 factor that would reduce the risk, I believe.
- 8 Q If I understand, then what you are saying, then, is
9 that if the performance of the well on the E/2 of
10 Section 4 were disappointing to a certain degree, that
11 it might change your mind entirely as to whether you
12 wish to drill the well in the W/2.
- 13 A I can't envision at the current time that it would
14 completely necessitate a reevaluation of the plans,
15 Mr. Cooley, although in theory this is certainly
16 possible.
- 17 Q That has to be what you are talking about. You want
18 to watch the well in the E/2 so you can decide whether
19 to drill?
- 20 A There are a couple of things you have to consider. One
21 is whether the reserves are adequate to sustain the
22 investment required and what is going to be the
23 sustained deliverability of the well. I think more
24 of a concern than the reserve would be -- my feeling
25 is that if you are able to get a commercial completion

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1 out there now knowing what we know about the field
2 and its size, that the chances of having noncommercially
3 small reserves are not very high, but I think there
4 is a more significant chance than that of having
5 deliverability that would cause the intestment to
6 be less than attractive at the current time.

7 Q Very long pay on the thing?

8 A Right. I think this is the data that we would hope to
9 get from a limited period of sustained production from
10 the well in the E/2.

11 Q Then if the deliverability or any addition or reserves
12 of that which you ascertain from a period of production
13 in the E/2 of Section 4, that could conceivably, in
14 your mind, as you testified here today, dictate the
15 whole concept of drilling a well on the W/2?

16 A Conceivably, if the performance is completely
17 unexpected, yes, sir, I think that is true. Black
18 River Corporation is a reasonable and prudent operator
19 like anyone else and has no desire to drill unnecessary
20 wells for any reason and if it does not appear that
21 there is an incentive -- a commercial incentive -- to
22 do it, I wouldn't envision that Black River would want
23 to do it under any circumstances. As I say, I don't
24 feel the probability of that is high. Certainly in
25 any case where drilling an edge well, there is a

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1 multitude of unexpected things that can happen.

2 Q Can you unequivocally state to the Examiner that
3 Black River under any circumstances is going to
4 proceed to drill the well in the W/2?

5 A I am sorry, Mr. Cooley, I don't understand the nature
6 of your question. Are you saying that it is possible
7 that Black River will not?

8 Q It is possible you will not drill the well?

9 A I think in the vicinity of a five to ten percent
10 possibility that that could happen, that's correct.

11 MR. COOLEY: No further questions.

12 * * * * *

13 RECROSS-EXAMINATION

14 BY MR. NUTTER:

15 Q Mr. Aycock, on your Exhibit 6, you identified four
16 wells as being connected. How about the City
17 Service wells? Are they connected also?

18 A Mr. Examiner, I have no personal knowledge of what
19 City Service's disposition is, at this time.

20 Q But none of the wells in the Township 26 or 24 are
21 connected, as yet?

22 A No, sir. Well, let's put it this way. I think they
23 are connected but they have not yet been produced.

24 MR. NUTTER: Any further questions of the witness?

25 (No response.)

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MR. NUTTER: You may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything to offer in
this case, Mr. Cooley?

MR. COOLEY: No, Mr. Examiner.

MR. NUTTER: Do you have anything further,
Mr. Hinkle?

MR. HINKLE: That's all.

MR. NUTTER: Does anyone have anything to offer
in Cases 4771 and 4772, and also Case 4766?

(No response.)

MR. NUTTER: We will not continue the three cases
to the Examiner Hearing scheduled to be at this same place
at 9:00 o'clock a.m., August 9, 1972.

dearnley, meier & mc cormick

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1 STATE OF NEW MEXICO)
2) ss
3 COUNTY OF BERNALILLO)

4 I, MARCIA J. HUGHES, a Court Reporter, in and for the
5 County of Bernalillo, State of New Mexico, do hereby certify
6 that the foregoing and attached Transcript of Hearing
7 before the New Mexico Oil Conservation Commission was
8 reported by me; and that the same is a true and correct
9 record of the proceedings to the best of my knowledge, skill
10 and ability.

11 M. J. Hughes
12 COURT REPORTER

21 I do hereby certify that the foregoing is
22 a true and correct copy of the transcript in
23 case No. 4771-72 & 4786
24 dated by me on July 26, 1972.
25 [Signature] Examiner
New Mexico Oil Conservation Commission

dearnley, meier & mc cormick

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1216 FIRST NATIONAL BANK BLDG. EAST, ALBUQUERQUE, NEW MEXICO 87108I N D E XWITNESS:PAGEWILLIAM B. AYCOCK

Direct Examination by Mr. Hinkle	11
Cross-Examination by Mr. Nutter	21
Cross-Examination by Mr. Cooley	24
Redirect Examination by Mr. Hinkle	32
Recross-Examination by Mr. Nutter	33
Cross-Examination by Mr. Hatch	34
Recross-Examination by Mr. Cooley	35
Recross-Examination by Mr. Nutter	38

E X H I B I T SAPPLICANT'SOFFEREDADMITTED

Black River Corporation

Exhibit Number 1	12	21
Exhibit Number 2	13	21
Exhibit Number 3	13	21
Exhibit Number 4	14	21
Exhibit Number 5	14	21
Exhibit Number 6	17	21
Exhibit Number 7	18	21

(Case 4765 continued from page 1)

mineral interests underlying the W/2 of Section 3, Township 26 South, Range 24 East, adjacent to the Washington Ranch-Morrow Gas Pool, Eddy County, New Mexico, comprising, approximately, a 407.20-acre non-standard proration unit. Said acreage to be dedicated to a well located 1980 feet from the North line and 1980 feet from the West line of said Section 3.

Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

Upon application of Rutter and Wilbanks Corporation this case will be heard De Novo under the provisions of Rule 1220.

CASE 4771: (De Novo)

Application of Black River Corporation for a non-standard gas unit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 402.22-acre, more or less, non-standard gas unit adjacent to the Washington Ranch-Morrow Gas Pool, comprising the W/2 of Section 4, Township 26 South, Range 24 East, Eddy County, New Mexico, to be dedicated to a well to be located at an unorthodox location 1985 feet from the North line and 2087 feet from the West line of said Section 4.

Upon application of Michael P. Grace II and Corinne Grace this case will be heard De Novo under the provisions of Rule 1220.

CASE 4772: (De Novo)

Application of Black River Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all leasehold, mineral, and royalty interests underlying the W/2 of Section 4, Township 26 South, Range 24 East, adjacent to the Washington Ranch-Morrow Gas Pool, Eddy County, New Mexico, comprising a 402.22-acre, more or less, non-standard gas unit. Said acreage to be dedicated to a well to be located at an unorthodox location 1985 feet from the North line and 2087 feet from the West line of said Section 4.

Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

Upon application of Michael P. Grace II and Corinne C. Grace this case will be heard De Novo under the provisions of Rule 1220.



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2080 SANTA FE
87501

GOVERNOR
BRUCE KING
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

TO: ALL INTERESTED PARTIES

FROM: A. L. PORTER, Jr., SECRETARY-DIRECTOR

Due to prior commitments by members of the Commission, we will be unable to have a quorum present for the hearing which has been scheduled for November 15, 1972. Cases 4763, 4764, and 4765, all pertaining to Section 3, Township 26 South, Range 24 East, Eddy County, New Mexico, and scheduled for Hearing De Novo at the request of Rutter and Wilbanks, and Case 4796, pertaining to capacity allowable for the Grace City of Carlsbad No. 1, will therefore be continued to 9:00 o'clock a.m., November 21, 1972, in the Land Office Conference Room.

Cases 4766, 4771, and 4772, all pertaining to the W/2 of Section 4, Township 26 South, Range 24 East, will also be advertised for Hearing De Novo on that same date at the request of Michael P. and Corinne Grace.

October 24, 1972

W & H Production-Drilling, Inc.

October 15, 1972

*Change location in
ad for case 4771 +
4772
de novo*

State of New Mexico
Oil Conservation Commission
State Land Office Building
Santa Fe, New Mexico 87501

Re: Black River Corporation
BR-Federal 4 Well No. 2
Unit F, Sec. 4, T26S, R24E
Eddy County, New Mexico
Forced Pooling Order R-4410


Gentlemen:

The above referenced well was forced pooled on order R-4410 at a location 2500 feet from the North line and 1900 feet from the West line of Section 4.

Due to the topography at the approved location it was necessary to move the location to 1985 feet from the North line and 2087 feet from the West line of Section 4.

It is respectfully requested that a hearing be called for approval of the new location. Since there is scheduled a de novo hearing of Cases No. 4766, 4771 and 4772 on November 15, 1972 concerning the West half of Section 4, it is also requested that the above request be heard concurrently.

Yours very truly,


J. V. Berry, Agent for
Black River Corporation

JTB:lv

bcc: Black River Corporation
Midland, Texas



RECORDED SERVICE

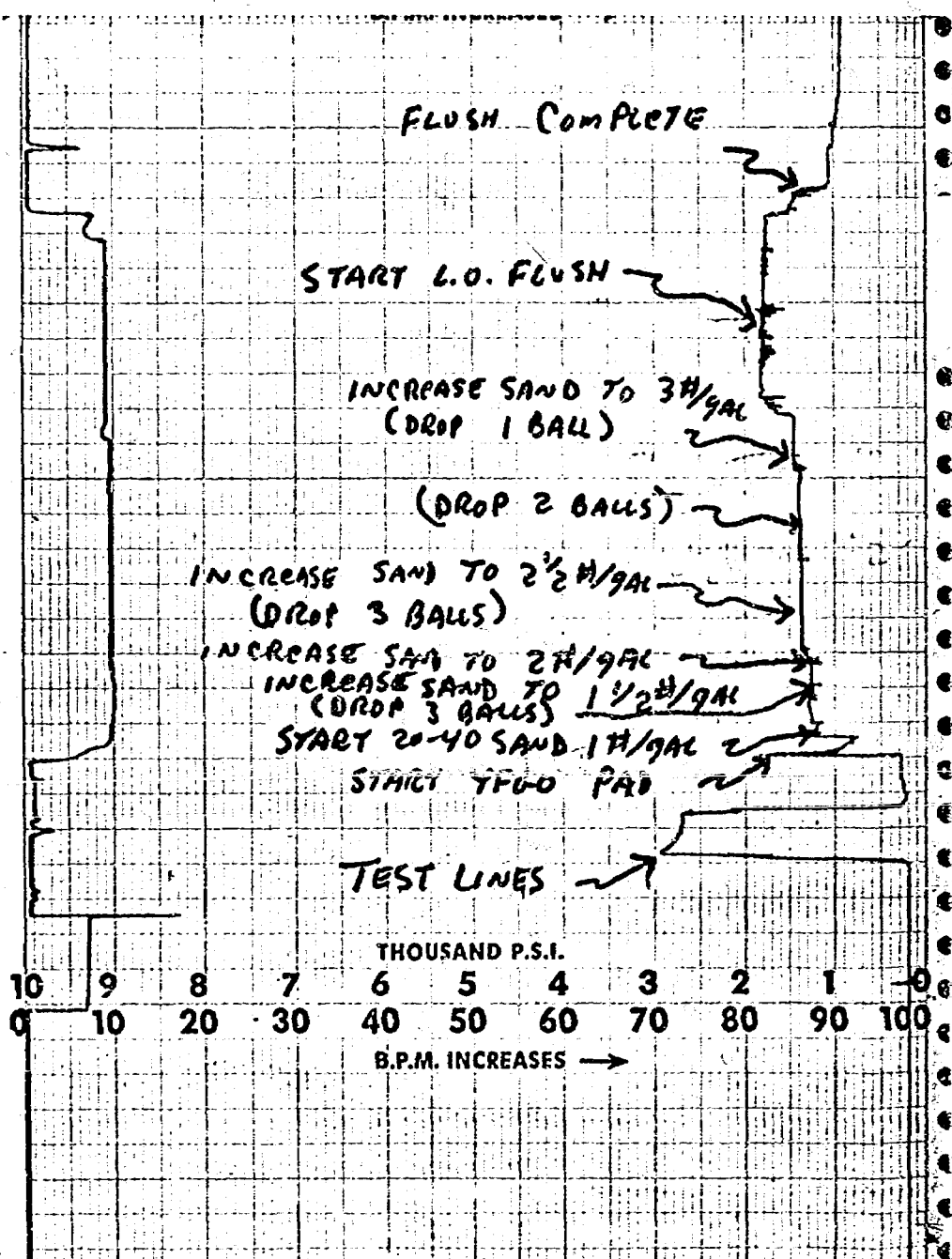
TREATMENT NO. 05-13-5630

TYPE OF SERVICE ACIDIZE & FRACTURE DATE 10-2-72

OWNER BLACK RIVER CORPORATION	WELL NAME AND NUMBER CITIES "3" FEDERAL #4
OWNER'S REPRESENTATIVE FORREST MILLER	SERVICE ENGINEER J.A. CORSORO

REMARKS: FRACTURE: USING 5000 GAL YFGD + 11,000 H
20-40 SAND + 250 GAL XFG3 ACID + 9 BALL SEALERS -
DOWN 2 3/8" TBG AND 4 1/2" 9.5# CASING

BZSO



(10-2-72)
WILL NOT BREAK ...
SHOT DOWN FOR
THE DAY

THOUSAND P.S.I.
10 9 8 7 6 5 4 3 2 1 0
0 10 20 30 40 50 60 70 80 90 100
B.P.M. INCREASES →

START L.O. TO
PRESSURE FORMATION

(Case 4782 continued from page 4)

authority to institute a waterflood project in the Robinson-Jackson Unit Area, Grayburg-Jackson Pool, Eddy County, New Mexico, by the injection of water through thirteen wells located in Sections 27, 34, and 35 of Township 17 South, Range 29 East, Eddy County, New Mexico.

CASE 4771: Application of Black River Corporation for a non-standard gas unit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 402.22-acre, more or less, non-standard gas unit adjacent to the Washington Ranch-Morrow Gas Pool, comprising the W/2 of Section 4, Township 26 South, Range 24 East, Eddy County, New Mexico, to be dedicated to a well to be located in the approximate center of Lot 5 (SE/4 NW/4) of said Section 4.

CASE 4772: Application of Black River Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all leasehold, mineral, and royalty interests underlying the W/2 of Section 4, Township 26 South, Range 24 East, adjacent to the Washington Ranch-Morrow Gas Pool, Eddy County, New Mexico, comprising a 402.22-acre, more or less, non-standard gas unit. Said acreage to be dedicated to a well to be located in the approximate center of Lot 5 (SE/4 NW/4) of said Section 4.

Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4784: Southeastern New Mexico nomenclature case calling for an order for the creation and extension of certain pools in Lea, Roosevelt and Chaves Counties, New Mexico.

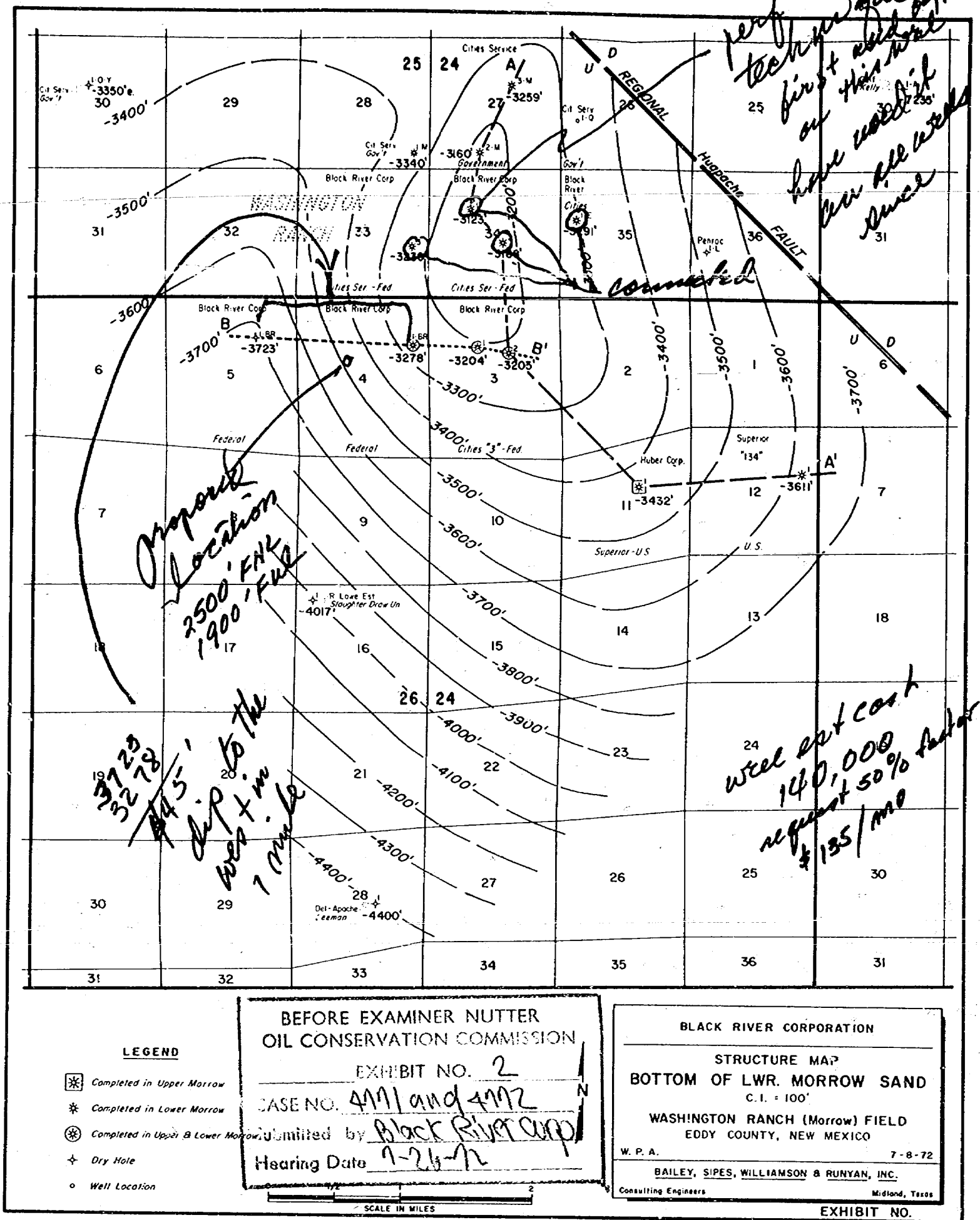
(a) Create a new pool in Lea County, New Mexico, classified as a gas pool for Fusselman production and designated as the Crosby-Fusselman Gas Pool. The discovery well is Union Texas Petroleum Corporation Crosby Deep No. 1 located in Unit N of Section 28, Township 25 South, Range 37 East, NMPM. Said pool described as:

TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPM
SECTION 28: S/2

(b) Create a new pool in Lea County, New Mexico, classified as a gas pool for San Andres production and designated as the North Eunice-San Andres Gas Pool. The discovery well is Sohio Petroleum Company, Alves "A" No. 2 located in Unit M of Section 8, Township 21 South, Range 37 East, NMPM.

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM
SECTION 8: SW/4

(c) Create a new pool in Roosevelt County, New Mexico, classified



2500 NL

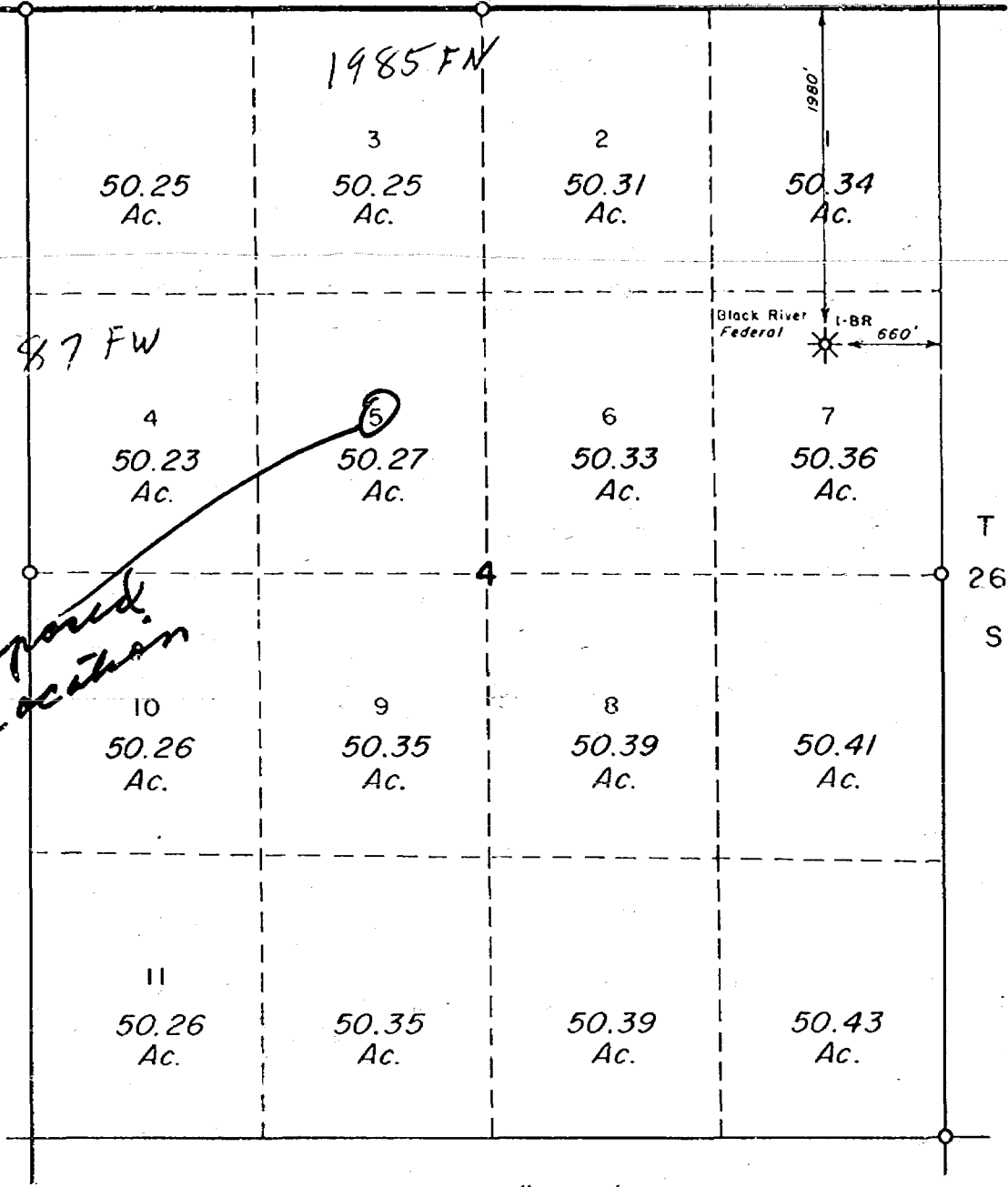
R 24 E

1900 WL

1985 FN

2087 FW

Proposed
Location



SCALE: 1"=1,000'

ACREAGE

E/2 : 402.96 Ac.
W/2 : 402.22 Ac.
Total : 805.18 Ac.

○ - USGLO Brass Cap Monumentation

CREDITS: U. S. Dept. Int.
Gen. Land Off.
AND: John W. West, P.E. & L.S.
N.M. No. 676

BLACK RIVER CORPORATION	
SURVEY PLAT	
SUBDIVISIONS OF SECTION 4	
T-26-S R-24-E	
WASHINGTON RANCH (Morrow) FIELD	
EDDY COUNTY, NEW MEXICO	
W. P. A.	7-26-72
BAILEY, SIPES, WILLIAMSON & RUNYAN, INC.	
Consulting Engineers	Midland, Texas

EXHIBIT NO. 6
SUMMARY OF INDIVIDUAL WELL DATA
BLACK RIVER CORPORATION
WASHINGTON RANCH (MORROW) FIELD
EDDY COUNTY, NEW MEXICO

Operator, Lease & Well No.	Unit	Sec.	TWP	Rge.	TD & PSTD	Completion Interval	Completion Date	NMOCC C-122 Test Date	Shutin Wellhead Pressure, Psia	DST Shutin BHP	AOFP:MCFD @15.025 Psia	Date of First Gas Del.
Black River Corporation -												
Cities Federal 1	F	34	25S	24E	7045 - 7000	6795 - 6844	6-06-71	6-08-71	2581	3004	41,500	1-31-72
Cities Federal 2	J	34	25S	24E	7975 - 7050	6858 - 6890	9-08-71	9-10-71	2579	3030	13,000	1-31-72
Cities Federal 3	I	33	25S	24E	7070 - 7037	6921 - 6968	2-17-72	2-17-72	2462	-	7,077	3-23-72
Cities Federal "E" 1		35	25S	24E	7066 - 7011	6923 - 6970	3-13-72	3-13-72	2395	2939	1,556	5-05-72
Cities 3 Federal 1-C	F	3	26S	24E	7050 - 7012	6842 - 6854	4-06-72	4-12-72	2530	3026	4,245	SI - WOPL
1-T	F	3	26S	24E	7050 - 7012	6913 - 6944	4-06-72	4-11-72	2497	-	11,158	SI - WOPL
Cities 3 Federal 2-C	G	3	26S	24E	7030 - 7003	6840 - 6852	5-17-72	5-22-72	2560	2991	1,964	SI - WOPL
2-T	G	3	26S	24E	7030 - 7003	6907 - 6930	5-17-72	5-23-72	2460	2905	11,008	SI - WOPL
BR-Federal "4" 1-C	H	4	26S	24E	7125 - 7075	6953 - 6964	6-11-72	-	2430	3002	8,549	SI - WOPL
1-T	H	4	26S	24E	7125 - 7075	7024 - 7039	6-11-72	-	2410	2863	5,199	SI - WOPL

BAILEY, SIPES, WILLIAMSON & RUNYAN, INC.
1100 V & J TOWER MIDLAND, TEXAS 79701
WM. P. AYCOCK, P. E./kp 7-10-72

EXHIBIT NO. 6

mark indicates wells which used perf technique described in O & G J.

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION

EXHIBIT NO. 6

NO. 4111 and 4112
submitted by Black River Corp
Hearing Date 7-26-72

Completion technique protects Morrow sand

JOHN L. KENNEDY
Drilling Editor

A NEW completion technique, aimed at reducing damage to the Morrow sand, has been used on several wells recently in Eddy Co., N.M.

Five wells have been completed using a percussion-detonating perforating device run on the lower end of the tubing string.

The first well in this area to use this method was Black River Corp.'s gas producer about 10 miles southwest of White's City, N.M., in 34-25s-24e. It potentialed at 41.5 MMcf/d after being perforated over two intervals 6,795-6,806 ft and 6,814-6,844 ft—with the percussion-detonating gun hookup.

Productivity of the Morrow can be adversely affected by drilling water and water invasion resulting from high hydrostatic heads imposed on the formation during drilling. The new completion technique, coupled with the use of a low-water-loss mud for drilling through the Morrow, will reduce the danger of formation damage.

John Berry, engineering vice-president for W & H Production-Drilling Inc., Midland, Tex., says use of the technique is spreading after early jobs showed good results. W & H, a consulting firm, supervised the drilling of the Black River wells.

How it's done. Morrow wells in this area are about 6,800 ft deep and are normally drilled with a low-solids, low-water-loss, freshwater mud. Maximum mud weights are in the 8.6-9.0 lb/gal range.

A typical casing program, Fig. 1, consists of 12 3/4-in. set at about 375 ft; approximately 1,000 ft of 8 5/8-in. then 4 1/2-in. casing set at TD. The 12 3/4-in. and 8 5/8-in. strings are cemented to surface and cement around the 4 1/2-in. is brought back to a height adequate to protect the producing formation.

Tubing string in a typical completion is 2 1/2-in. nominal; tolerances are close when this tubing is run inside the 4 1/2-in. casing since the tubing coupling is 3.668 in. OD. The ID of the 4 1/2-in. string is only 4.052 in.

The gun arrangement, originally devised by perforating engineer Roy Vann, is based on making up a perforating device on the bottom of the tubing in the pattern indicated by a study of open-hole logs. Vann's Vann Tool Co. calls the technique a "tubing conveyed permanent completion tool." Trademarked "Vanntage," it is offered through Perfojet Services in Midland, and Artesia, N.M.

One joint of tubing is installed on top of the gun with a perforated nipple immediately on top of this joint, Fig. 2.

Next a packer and profile nipple, with blanking plug installed, and an "on-off" assembly is added to the string before it is run in the hole. After the tubing is run, it is picked up and spaced as accurately as possible using pipe measurement. Then in order to have the charges exactly adjacent to the zones to be perforated, a gamma-ray logging tool is run through tubing.

Data from this logging run are correlated with open-hole logs and a final adjustment of tubing is made before the packer is set.

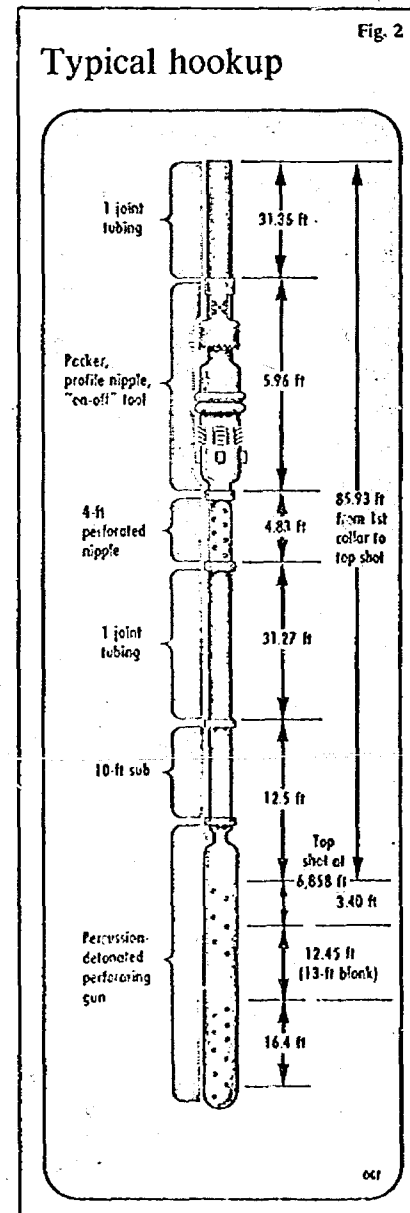
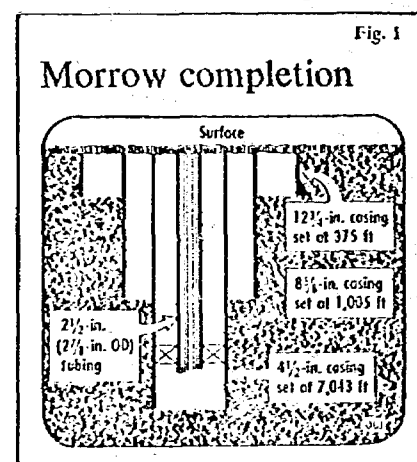
A wire line is then used to equalize and pull the blanking plug. At this time, only about 40-50 ft of fluid remains in the tubing. This is fluid that was compressed below the packer when it was set.

The wellhead is flanged up after the packer is set and before the blanking plug is equalized and pulled. Then when a line is hooked up to a test

separator or pit, the well is ready to perforate.

The perforating gun is detonated either by dropping a bar down the tubing or striking the head of the gun section with a bar on a wire line. A dropped detonating bar can be left in the hole with no adverse effect on producing operations, and the detonating bar on a wire line can be removed from the well through the lubricator.

If it is necessary to pull tubing for a





UPPER PART of bottom-hole assembly contains packer, profile nipple with blanking plug installed, and an "on-off" assembly. Fig. 3.

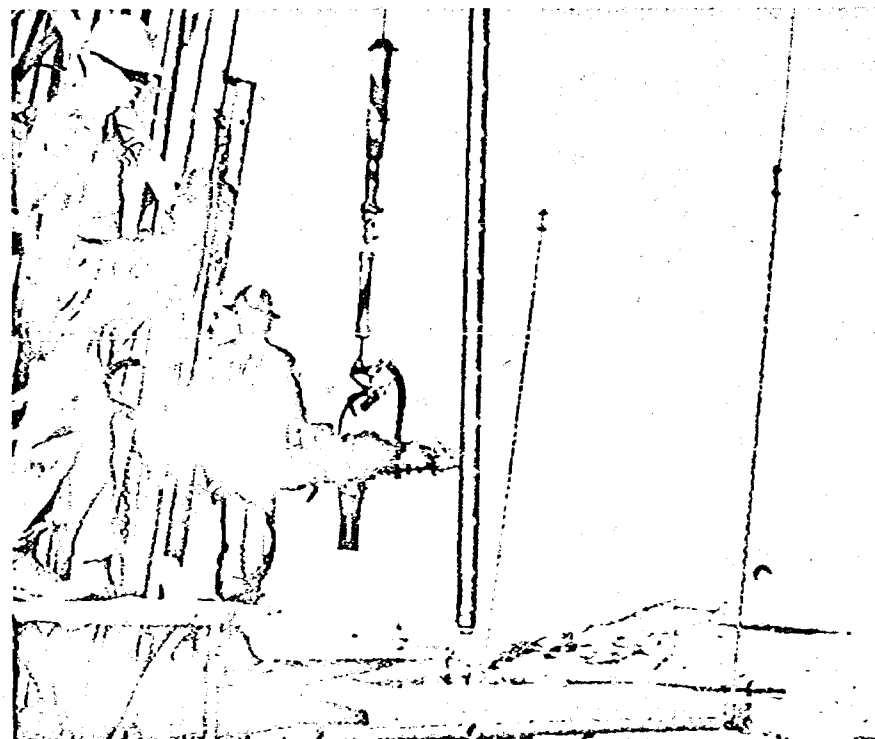
well-workover operation, the blanking plug is set, and the tubing released at the on-off tool.

All that remains now is to potential the well. According to Berry, an early well completed with this technique came back fast. Within about 75 sec after the bar was dropped—about the time needed to close the master valve, install a bonnet, needle valve, and gauge; and reopen the master valve—there was 500 psi on the tubing. This immediately increased to 2,200 psi and the well flowed at a rate of 4 MMcf/d.

The perforating gun is a regular 3½-in. casing gun, and shooting patterns can be arranged in the same way as with conventional perforating guns. If more than one gun is needed to cover a wide perforating interval, additional sections can be connected with 1-in. tubing.

Acknowledgment

The help of John Berry, W & H Production-Drilling Inc., Midland, in preparing this article is appreciated.



WITH PERFORATOR on bottom, and remaining on bottom permanently, charges are detonated by dropping a bar down tubing string. Fig. 4.

Gas-process plant costs

W. L. NELSON
Technical Editor and
Petroleum Consultant

THE COST of the auxiliary refinery processes by which gases are handled in refineries have long been confusing because of the many variables involved. The gases are available at various pressures and often must be compressed for absorption or gas fractionation, and the heaviest liquid is stabilized. The investments for such operations are shown in Curves 1 and 2 of Figs. 1 or 2.

In addition, the hydrocarbons such as propane, isobutane, butane, isopentane, etc., may be separated from each other by fractionation and these operations, along with absorption, stripping, and stabilization lead to the investments of Curves 4 and 5 of Fig. 1.

Refinery gases also contain hydrogen sulfide which usually must be removed. Accordingly, Curves 5 through 12 involve the desulfurization of gases containing either 5 or 30% of hydrogen sulfide.

Finally Curves 9 through 12 also include the cost of sulfur plants for recovering the sulfur contained in sulfide-rich bases. Also, a curve for hydrogen recovery alone is shown on Fig. 1, taken from Productivity Costimating No. 64 (OGJ, Apr. 10, 1972), "Plants for hydrogen manufacturing."

All of these processings (Curves 1-12 of Figs. 1 and 2) are organized or identified in Table 1.

Investment costs were assembled from "What's the cost of refinery gas-

Correction

In the footnote for Column No. 4 in Table 1 of Productivity Costimating No. 64, "Productivity in construction and design of tanks remains constant. . .," April 10, 1972, p. 122, should read "Dividing Col. 3 by Col. 6," rather than "Dividing Col. 3 by Col. 8."

Also, the material/labor split is 30/70 as stated in the footnote for Column 3. Unfortunately, page 123 states in error that the split is 70/30.

CENTRAL SOUTHWEST OIL CORPORATION

Post Office Box 2107
ROSWELL, NEW MEXICO 88201

July 24, 1972

Black River Corporation
620 Commercial Bank Tower
Midland, Texas 79701

Re: W 1/2 of Section 4, T. 26 S. - R. 24 E.
Eddy County, New Mexico

Gentlemen:

This is to notify you that Central Southwest Oil Corporation does voluntarily approve the pooling on communitization of the West Half of Section 4, Township 26 South - Range 24 East, Eddy County, New Mexico.

We believe that Black River Corporation should operate the unit, and do approve Black River as operator. It is completely unreasonable to suggest that Michael P. Grace and Corinne Grace should operate the unit, and we are strongly opposed to their being designated as operators.

We believe the entire west half of the section should be included in the unit, and nothing more or less than the west half would be completely satisfactory.

Yours truly,

CENTRAL SOUTHWEST OIL CORPORATION



THOMAS ALLEN
President

TA:bl

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
EXHIBIT NO.	47714772
CASE NO.	Ex #1 8
DATE	
Hearing Date	

BLACK RIVER CORPORATION

620 COMMERCIAL BANK TOWER
MIDLAND, TEXAS 79701

915 682-5267

July 14, 1972

Re: W/2 of Section 4, T-26-S, R-24-E
Eddy County, New Mexico

TO ALL INTEREST OWNERS:

Black River Corporation is requesting your voluntary approval to pool and communitize the West Half of Section 4, Township 26 South, Range 24 East, Eddy County, New Mexico, with Black River Corporation as operator for the unit.

Application for compulsory pooling with reference to this area is scheduled for hearing on the July 26, 1972 docket of the Oil Conservation Commission, Santa Fe, New Mexico. Also, application by Michael P. Grace and Corinne Grace, as operators, for forced pooling underlying the captioned land will be heard.

Your reply and consideration in this voluntary communitization request by Black River will be appreciated. For your convenience, we have enclosed a self addressed envelope.

Very truly yours,

BLACK RIVER CORPORATION
Tommy Phipps
Tommy Phipps
Executive Vice President

BEFORE EXAMINER UTZ OIL CONSERVATION COMMISSION EXHIBIT NO. 7 4771 & 4772
--

TP:mc

OK BY ME.
YOU SHOULD BE
OPERATOR!
MAX. COLL

PLEASE SEND ME INFORMATION RE: SCHILLINGER CLAIM
OF OVERRIDE YOU TOLD ME OF. THANKS.

JERRY BUTTS
MANAGER

T. C. STROMBERG
PRESIDENT

THE ARTESIA LUMBER COMPANY

P. O. DRAWER 1325
Artesia, New Mexico 88210

18 July 1972

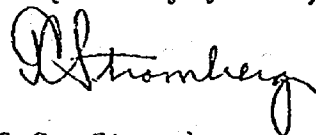
Re: W/2 of Section 4, T-26-S,
R-24-E, Eddy County, N.M.

Black River Corporation
620 Commercial Bank Tower
Midland, Texas

Gentleman:

The Artesia Lumber Company strongly approves Black River Corporation to pool and communitize the W/2 of Section 4, T-26-S, R-24-E, Eddy County, New Mexico. This firm has been very successful in drilling and completing gas wells in ^{the} Washington Ranch-Morrow Gas Field thus we would oppose any other firm or individual operating the above described half section.

Very truly yours,



T.C. Stromberg

TCS:M

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
OFF	EXHIBIT NO. 10
4771 & 4772	
Date	



BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASES NOS. 4766, 4771 and 4772
Order No. R-4410

CONSOLIDATED CASES:

APPLICATION OF MICHAEL P. GRACE AND
CORINNE GRACE FOR COMPULSORY POOLING
AND A NON-STANDARD PRORATION UNIT,
EDDY COUNTY, NEW MEXICO.

APPLICATION OF BLACK RIVER CORPORATION
FOR A NON-STANDARD GAS UNIT, EDDY
COUNTY, NEW MEXICO.

APPLICATION OF BLACK RIVER CORPORATION
FOR COMPULSORY POOLING, EDDY COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 26, 1972,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 10th day of October, 1972, the Commission,
a quorum being present, 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 Commission has jurisdiction of this cause and the
subject matter thereof.

(2) That the applicant, Black River Corporation, seeks
an order pooling all mineral interests in the Washington Ranch-
Morrow Gas Pool underlying the W/2 of Section 4, Township 26
South, Range 24 East, NMPM, Eddy County, New Mexico, to form a
402.22-acre non-standard gas proration unit to be dedicated to
a well to be located 2500 feet from the North line and 1900
feet from the West line of said Section 4.

(3) That the applicant has the right to drill and proposes
to drill the above-described well to the Morrow formation in
the Washington Ranch-Morrow Gas Pool.

(4) That the applicant, Michael P. Grace II, seeks an order pooling all mineral interests in the Washington Ranch-Morrow Gas Pool underlying the W/2 of Section 4, Township 26 South, Range 24 East, NMPM, Eddy County, New Mexico, to form a 402.22-acre non-standard gas proration unit to be dedicated to a well to be located 1980 feet from the North line and 1980 feet from the West line of said Section 4.

(5) That the applicant, Michael P. Grace II has the right to drill in the NW/4 NW/4 of said Section 4 and proposes to drill a well in the SE/4 NW/4 of said Section 4.

(6) That both applicants, Black River Corporation and Michael P. Grace II, seek to be named operator of the unit to be pooled.

(7) That Cases Nos. 4766, 4771 and 4772 were consolidated as the cases involve the same lands and issues.

(8) That the evidence indicates that the entire W/2 of the above-described Section 4 can reasonably be presumed productive of gas in the Washington Ranch-Morrow Gas Pool.

(9) That the entire W/2 of the above-described Section 4 can be efficiently and economically drained and developed by a well located in the SE/4 NW/4 of said Section 4.

(10) That there are interest owners in the proposed non-standard proration unit who have not agreed to pool their interests.

(11) That to avoid the drilling of unnecessary wells, to protect correlative rights, and to afford to the owner of each interest in said non-standard unit the opportunity to recover or receive without unnecessary expense his just and fair share of the gas in said pool, all mineral interests in the Washington Ranch-Morrow Gas Pool underlying the W/2 of Section 4, Township 26 South, Range 24 East, NMPM, Eddy County, New Mexico, should be pooled to form a 402.22-acre non-standard gas proration unit to be dedicated to a well to be located in the SE/4 NW/4 of said Section 4.

(12) That Black River Corporation should be designated the operator of the subject well and unit.

(13) That any non-consenting working interest owner should be afforded the opportunity to pay his share of estimated well costs in lieu of paying his share of reasonable well costs out of production.

(14) That any non-consenting working interest owner that does not pay his share of estimated well costs should have withheld from production his share of the reasonable well costs

plus an additional 40% thereof as a reasonable charge for the risk involved in drilling of the well.

(15) That any non-consenting interest owner should be afforded the opportunity to object to the actual well costs but that said actual well costs should be adopted as the reasonable well costs in the absence of such objection.

(16) That following determination of reasonable well costs, any non-consenting working interest owner that has paid his share of estimated costs should pay to the operator any amount that reasonable well costs exceed estimated well costs and should receive from the operator any amount that paid estimated well costs exceed reasonable well costs.

(17) That \$135.00 per month should be fixed as a reasonable charge for supervision (combined fixed rates) for the subject well; that the operator should be authorized to withhold from production the proportionate share of such supervision charge attributable to each non-consenting working interest, and in addition thereto, the operator is hereby authorized to withhold from production the proportionate share of actual expenditures required for operating the subject well, not in excess of what are reasonable, attributable to each non-consenting working interest.

(18) That all proceeds from production from the subject well which are not disbursed for any reason should be placed in escrow to be paid to the true owner thereof upon demand and proof of ownership.

IT IS THEREFORE ORDERED:

(1) That all mineral interest, whatever they may be, in the Washington Ranch-Morrow Gas Pool underlying the W/2 of Section 4, Township 26 South, Range 24 East, NMPM, Eddy County, New Mexico, are hereby pooled to form a 402.22-acre non-standard gas proration unit to be dedicated to Black River Corporation's well to be located 2500 feet from the North line and 1900 feet from the West line of said Section 4.

(2) That Black River Corporation is hereby designated the operator of the subject well and unit.

(3) That the operator shall furnish the Commission and each known working interest owner in the subject unit an itemized schedule of estimated well costs within 60 days following the date of this order.

(4) That within 60 days from the date the schedule of estimated well costs is furnished to him, any non-consenting working interest owner shall have the right to pay his share

CASES NOS. 4766, 4771 and 4772
Order No. R-4410

of estimated well costs to the operator in lieu of paying his share of reasonable well costs out of production, and that any such owner who pays his share of estimated well costs as provided above shall remain liable for operating costs but shall not be liable for risk charges.

(5) That the operator shall furnish the Commission and each known working interest owner in the subject unit an itemized schedule of actual well costs within 60 days following completion of the well; that if no objection to the actual well costs is received by the Commission and the Commission has not objected within 60 days following receipt of said schedule, the actual well costs shall be the reasonable well costs; provided however, that if there is an objection to actual well costs within said 60-day period, the Commission will determine reasonable well costs after public notice and hearing.

(6) That within 60 days following determination of reasonable well costs, any non-consenting working interest owner that has paid his share of estimated costs in advance as provided above shall pay to the operator his pro rata share of the amount that reasonable well costs exceed estimated well costs and shall receive from the operator his pro rata share of the amount that estimated well costs exceed reasonable well costs.

(7) That the operator is hereby authorized to withhold the following costs and charges from production:

- (A) The pro rata share of reasonable well costs attributable to each non-consenting working interest owner who has not paid his share of said estimated well costs within 60 days from the date the schedule of estimated well costs is furnished to him.
- (B) As a charge for the risk involved in the drilling of the well, 40% of the pro rata share of reasonable well costs attributable to each non-consenting working interest owner who has not paid his share of estimated well costs within 60 days from the date the schedule of estimated well costs is furnished to him.

(8) That the operator shall distribute said costs and charges withheld from production to the parties who advanced the well costs.

(9) That \$135.00 per month is hereby fixed as a reasonable charge for supervision (combined fixed rates) for the subject well; that the operator is hereby authorized to withhold from

-5-

CASES NOS. 4766, 4771 and 4772
Order No. R-4410

production the proportionate share of such supervision charge attributable to each non-consenting working interest, and in addition thereto, the operator is hereby authorized to withhold from production the proportionate share of actual expenditures required for operating the subject well, not in excess of what are reasonable, attributable to each non-consenting working interest.

(10) That any unsevered mineral interest shall be considered a seven-eighths (7/8) working interest and a one-eighth (1/8) royalty interest for the purpose of allocating costs and charges under the terms of this order.

(11) That any well costs or charges which are to be paid out of production shall be withheld only from the working interests' share of production, and no costs or charges shall be withheld from production attributable to royalty interests.

(12) That all proceeds from production from the subject well which are not disbursed for any reason shall be placed in escrow in Eddy County, New Mexico, to be paid to the true owner thereof upon demand and proof of ownership; that the operator shall notify the Commission of the name and address of said escrow agent within 90 days from the date of this order.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

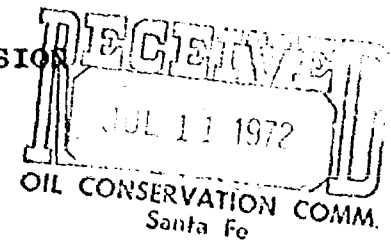
A. L. PORTER, Jr., Member & Secretary

S E A L

dr/

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO



APPLICATION OF BLACK RIVER CORPORATION
FOR COMPULSORY POOLING AND NON-STANDARD
SPACING AND PRORATION UNIT, EDDY COUNTY,
NEW MEXICO. APPLICANT SEEKS AN ORDER
POOLING ALL MINERAL INTERESTS IN THE
MORROW FORMATION UNDERLYING THE W $\frac{1}{4}$
SECTION 4, TOWNSHIP 26 SOUTH, RANGE
24 EAST ADJACENT TO THE WASHINGTON
RANCH-MORROW GAS POOL, EDDY COUNTY,
COMPRISING 402.22 ACRES AS A NON-
STANDARD SPACING AND PRORATION UNIT,
SAID W $\frac{1}{4}$ SECTION 4 TO BE DEDICATED TO
A WELL TO BE LOCATED IN THE APPROXIMATE
CENTER OF LOT 5 (SE $\frac{1}{4}$ NW $\frac{1}{4}$) SAID SECTION 4.

Case 4772

RM

Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Comes Black River Corporation, acting by and through the undersigned attorneys, and hereby makes application for compulsory pooling and a non-standard spacing and proration unit, Eddy County, New Mexico. Applicant seeks an order pooling all mineral interests in the Morrow formation underlying the W $\frac{1}{4}$ Section 4, Township 26 South, Range 24 East adjacent to the Washington Ranch-Morrow Gas Pool, Eddy County, comprising 402.22 acres as a non-standard spacing and proration unit, said W $\frac{1}{4}$ Section 4 to be dedicated to a well to be located in the approximate center of Lot 5 (SE $\frac{1}{4}$ NW $\frac{1}{4}$) said Section 4, and in support thereof respectfully shows:

1. There is attached hereto, made a part hereof, and for purposes of identification marked Exhibit "A", a plat showing the gas wells which have been completed in the Morrow formation in the Washington Ranch-Morrow Gas Pool and in the vicinity thereof. The plat also shows the proposed non-standard spacing and proration unit comprising the W $\frac{1}{4}$ Section 4, together with the proposed well location and the ownership of all acreage therein and in the vicinity thereof.

2. Section 4 is an irregular sections. On the official survey thereof the following subdivisions are designated as lots and contain the indicated number of acres:

DOCKET MAILED DOCKET MAILED

Date 11-10-72 Date 7-14-72

NE $\frac{1}{4}$ NW $\frac{1}{4}$ - Lot 3	50.25 acres
SW $\frac{1}{4}$ NW $\frac{1}{4}$ - Lot 4	50.23 acres
SE $\frac{1}{4}$ NW $\frac{1}{4}$ - Lot 5	50.27 acres
NE $\frac{1}{4}$ SW $\frac{1}{4}$ - Lot 9	50.35 acres
NW $\frac{1}{4}$ SW $\frac{1}{4}$ - lot 10	50.26 acres
SW $\frac{1}{4}$ SW $\frac{1}{4}$ - Lot 11	50.26 acres

The NW $\frac{1}{4}$ NW $\frac{1}{4}$ has not been designated as a lot and the acreage is not shown on the official survey, however, the same has been surveyed and is believed to contain 50.25 acres. The SE $\frac{1}{4}$ SW $\frac{1}{4}$ has not been designated as a lot on the official survey and the amount of acreage contained therein is not shown; however, it has been surveyed and is believed to contain 50.35 acres. The entire W $\frac{1}{2}$ of said section is believed to contain 402.22 acres.

3. Applicant is the owner of the oil and gas leases covering all of the W $\frac{1}{2}$ Section 4 except the NW $\frac{1}{4}$ NW $\frac{1}{4}$ containing 50.25 acres and the lease covering this acreage is believed to be owned by Michael P. Grace and wife, Corinne Grace. Applicant proposes to drill a well for the production of gas from the Washington Ranch-Morrow Gas Pool, said well to be located in the approximate center of Lot 5 (SE $\frac{1}{4}$ NW $\frac{1}{4}$) said section. Applicant has been unable to agree with Michael P. Grace and his wife on the pooling of their interests in connection with the drilling of said well and desires that all non-consenting mineral, royalty and overriding royalty owners' interests be pooled as provided by Section 65-3-14 New Mexico Statutes 1953 Annotated for the purpose of drilling and producing said well and inconnection therewith that provision be made for the payment of the cost of drilling said well, as well as a charge for the risk involved, the designation of applicant as operator and for the allocation of actual operating costs and the establishment of charges for supervision of said well, and that all of the W $\frac{1}{2}$ of said section be designated as a non-standard spacing and proration unit to be dedicated to said well in the event said well is completed as a well capable of producing gas in paying quantities.

4. Applicant believes that the pooling of said interests and the designation of the W $\frac{1}{2}$ of Section 4 as a non-standard spacing and proration unit will avoid the drilling of unnecessary wells and will tend to protect correlative rights and prevent waste.

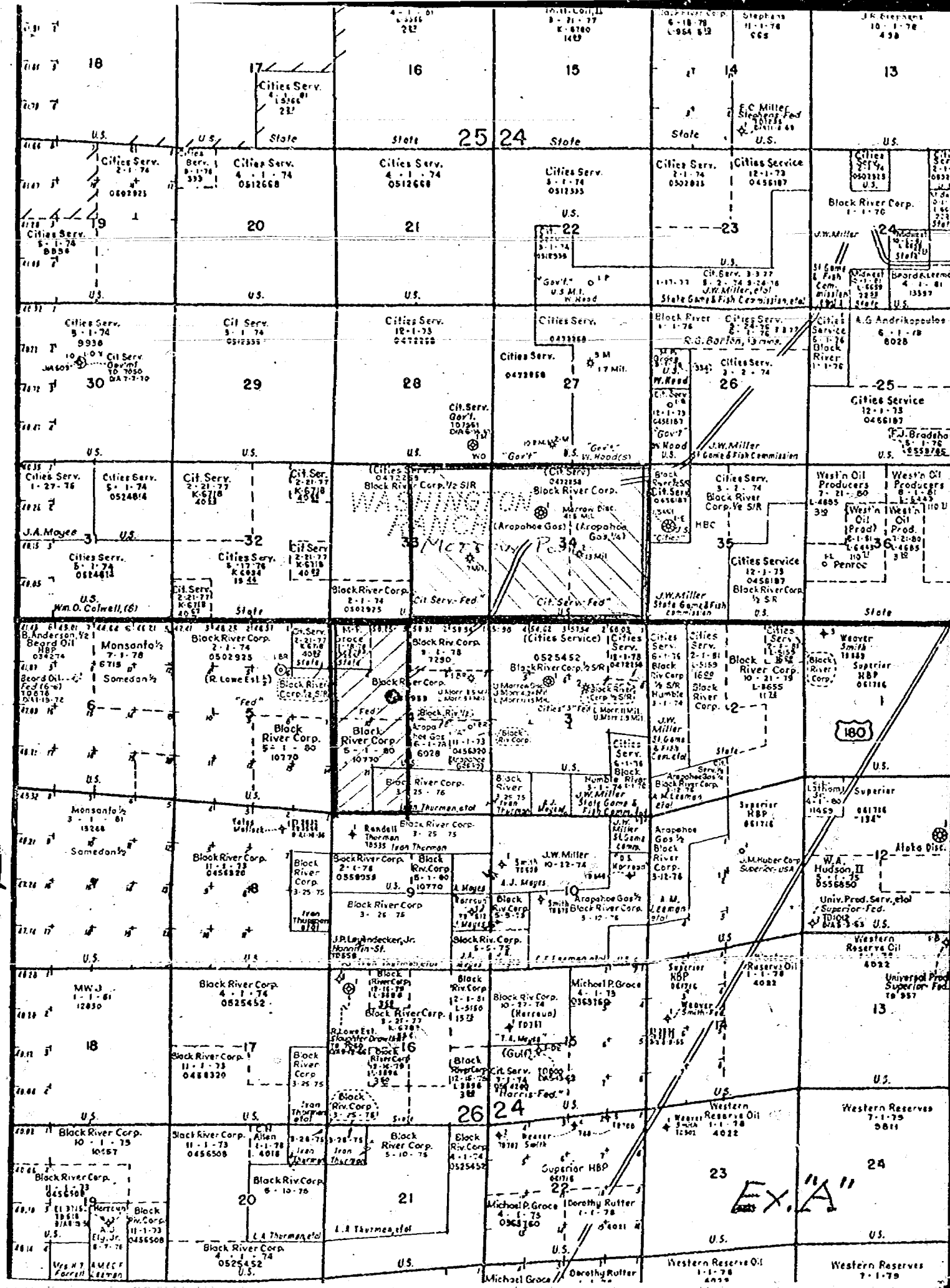
5. Applicant requests that this matter be set down for hearing at the examiner's hearing on July 26, 1972.

BLACK RIVER CORPORATION

By



HINKLE, BONDURANT, COX & EATON
Attorneys for Applicant
P.O. Box 10
Roswell, New Mexico 88201



Page 4777

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTERS OF:

THE APPLICATION OF MICHAEL P.
GRACE and CORINNE GRACE FOR
COMPULSORY POOLING AND A NON-
STANDARD PRORATION UNIT, EDDY
COUNTY, NEW MEXICO.

NO. 4766

THE APPLICATION OF BLACK RIVER
CORPORATION FOR A NON-STANDARD
GAS UNIT, EDDY COUNTY, NEW MEXICO.

NO. 4771

THE APPLICATION OF BLACK RIVER
CORPORATION FOR COMPULSORY POOLING,
EDDY COUNTY, NEW MEXICO.

NO. 4772

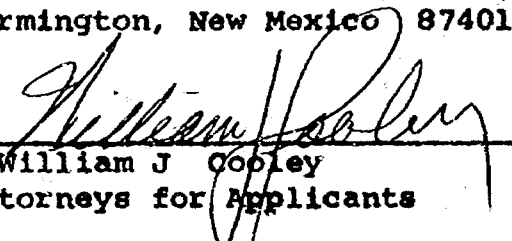
R-4410

APPLICATION FOR DE NOVO HEARING

COME NOW Michael P. Grace II and Corinne Grace, and respect-
fully make application for a hearing de novo in the above styled
and numbered cases.

WHEREFORE, Applicants respectfully request the Commission to
grant a hearing de novo in the above styled and numbered cases.

BUKR & COOLEY
152 Petroleum Center Building
Farmington, New Mexico 87401

By 
William J Cooley
Attorneys for Applicants

DOCKET MAILED

11-10-72

Application of Black River Corporation for a non-standard gas unit consisting of the W $\frac{1}{2}$ Section 4, Township 26 South, Range 24 East, N.M.P.M. Eddy County containing 402.22 acres, more or less, to be dedicated to a well to be located in the approximate center of Lot 5 (SE $\frac{1}{4}$ NW $\frac{1}{4}$) said Section 4.

Application of Black River Corporation for compulsory pooling, Eddy County, New Mexico. Applicant seeks an order pooling all leasehold, mineral and royalty interests in and to the W $\frac{1}{2}$ Section 4, Township 26 South, Range 24 East, N.M.P.M. to be dedicated to a well to be located in the approximate center of Lot 5 (SE $\frac{1}{4}$ NW $\frac{1}{4}$) said Section 4. Also to be considered will be the cost of drilling said well, a charge for the risk involved, provision for the allocation of actual operating costs and establishment of charges for supervision of said well.

I would like to get these
cases on the next examine hearing
Clarence Hinkle

July 26th

DOCKET MADE

Date 7-27-1922

Clarence Hinkle

Docket to Mr. Hinkle