

Case Number

4566

Application

Transcripts

Small Exhibits

ETC.

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COURT CONVENTIONS

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 14, 1971

EXAMINER HEARING

IN THE MATTER OF:)

Application of W & H Production-)
Drilling, Inc. for an unorthodox)
gas well location, Eddy County,)
New Mexico.)

Case No. 4566

BEFORE: DANIEL S. NUTTER, EXAMINER

TRANSCRIPT OF HEARING

1 MR. NUTTER: Now we will just go ahead and
2 proceed with Case Number 4566.

3 MR. HATCH: Case 4566. Application of W & H
4 Production-Drilling, Inc. for an unorthodox gas well
5 location, Eddy County, New Mexico.

6 MR. BERRY: I am John T. Berry with W & H
7 Production-Drilling Company.

8 MR. HATCH: John T. Berry?

9 MR. BERRY: Yes, sir.

10 MR. HATCH: This is an incorporation?

11 MR. BERRY: Yes, sir. We are incorporated, and
12 we are representing Black River Corporation, who is the
13 operator of the well.

14 MR. HATCH: You don't have an attorney or
15 anything?

16 MR. BERRY: No, sir, we do not.

17 MR. HATCH: Mr. Berry, what is your position
18 with W & H Production?

19 MR. BERRY: I am vice-president of the
20 engineering.

21 MR. HATCH: Now, I should warn you before we
22 take this that it is the Attorney General's opinion that
23 corporations must be represented at these hearings by an
24 attorney.

25 MR. BERRY: Forgive me. I was not aware of that.

1 MR. NUTTER: They are representing another
2 corporation, too.

3 MR. HATCH: And you are representing another
4 corporation in this. Who is the actual operator?

5 MR. BERRY: Black River Corporation, sir.

6 MR. HATCH: And they will be the operator? And
7 what is the interest of W & H Production Drilling, Inc.?

8 MR. BERRY: We are consultants, sir.

9 MR. HATCH: Consultant?

10 MR. BERRY: Yes, sir.

11 MR. HATCH: The Examiner has expressed the opinion
12 he would much rather have an attorney here.

13 MR. BERRY: Would it be possible for me to secure
14 an attorney this morning and --

15 MR. NUTTER: There are a couple of them running
16 around in the hall. I am not recruiting for them, but --

17 MR. HATCH: I think it would be best, because
18 we have here two corporations involved.

19 MR. BERRY: Yes, sir.

20 MR. NUTTER: One corporation representing another
21 corporation. That is really sticky.

22 MR. HATCH: So why don't we skip this while you
23 see if you can contact somebody.

24 MR. NUTTER: Let's take a fifteen minute recess.

25 (Whereupon, a recess was held.)

1 MR. NUTTER: The hearing will come to order,
2 please. We'll proceed now with Case Number 4566.

3 MR. HATCH: If the Examiner please, Mr. Clarence
4 Hinkle has asked that he be entered as making an appearance
5 in this case in association with Mr. Jack Letts.

6 MR. NUTTER: Would you proceed, Mr. Letts?

7 MR. LETTS: Do you wish to swear him?

8 (Witness sworn)

9 JOHN T. BERRY

10 having been first duly sworn according to law, testified
11 upon his oath as follows:

12 DIRECT EXAMINATION

13 BY MR. LETTS:

14 Q Will you state your name, please?

15 A John T. Berry.

16 Q And your association?

17 A I am vice-president of the engineering with W & H
18 Production Drilling, Incorporated, Midland, Texas.

19 Q And this is what type firm?

20 A We are basically a consulting engineering firm.

21 Q And in this case you are consulting for what firm,
22 please?

23 A The Black River Corporation.

24 Q And Black River Corporation, will you tell us a
25 little about that?

1 A Black River Corporation is a recently formed
2 organization, and as such, they have no engineering
3 staff at all, and this is how we have been engaged
4 in doing work for them.

5 Q And Black River Corporation is involved in this
6 application through what means? How do they happen
7 to be involved in this?

8 A Black River Corporation is the operator of the well
9 in question.

10 Q And they do not own the lease? How did they happen
11 to be drilling this well?

12 A Well, the lease on which the well was drilled was
13 obtained by Black River through a farmout agreement
14 with City Service Oil Company.

15 Q And Black River drilled the well --

16 A Yes, sir.

17 Q -- on a farmout? And now the well is owned how?

18 A Well, the well is now owned fifty percent by City
19 Service Oil Company and fifty percent by Black River
20 Corporation.

21 Q I hand you an exhibit marked 1 which states the facts
22 involved and the reasons why Black River Corporation,
23 through W & H Production Drilling, are asking for an
24 unorthodox gas well location.

25 Mr. Berry, would you like to state the facts?

1 A Yes, sir. When the well was originally contemplated
2 to be drilled in, 1980 location was considered to be
3 the proper point to drill, and upon having the
4 location surveyed in 1980 foot locations, spotted in
5 a small alfalfa field, which, if you would look at
6 this plat, you can see a road going northeast-
7 southwest through Section 34 of Township 25 South,
8 Range 24 East.

9 And I am not exactly sure that this road is
10 depicted exactly right, but this little valley
11 through here, small tracts of land, five to ten
12 acres in size, have been cleared of rock and are now
13 being farmed by the people living in the area.

14 This 1980 location spotted in an alfalfa field,
15 and in consideration of Mr. Ballard, the local farmer,
16 the 1650 foot location was drilled, which would have
17 been a normal oil well location, which was our
18 original intent, to drill a Wildcat Devonian oil well.

19 In the course of drilling this well, we got to
20 the Morrow formation, and either the weight of mud
21 we had at the time -- well attempted to unload, but
22 the weight was gradually increased to such a point
23 that we had a balanced situation.

24 But a drill stem test was made in the Morrow in
25 which we had a very positive test of some 20.6 million

1 rate flow.

2 And due to the historic fact that Morrow is most
3 of the time permanently damaged by water, the decision
4 was made to TD the well through the Morrow and attempt
5 completion at that point, which we completed the well
6 in the potential for forty-one and a half million
7 cubic feet of gas per day.

8 Q In other words, you would have drilled the normal oil
9 location of 1980 except for the fact that it fell in
10 an alfalfa field, and you moved it to avoid damage to
11 the field.

12 A That is the only reason that it was moved to the 1650
13 location, yes, sir.

14 Q And it was intended as a Devonian test. I think your
15 application stated a Devonian test, right?

16 A Yes, sir. We originally intended to drill to the
17 Devonian for an oil test.

18 Q Have there been any encouragements in the Morrow
19 around this location?

20 A Well, not really. City Service drilled a dry hole in
21 the Section 28, which is a northwest from our
22 Section 34.

23 Q That bottomed in what formation?

24 A That bottomed in the Morrow.

25 Q In the Morrow?

1 A No. I beg your pardon. That bottomed in the
2 Devonian.

3 Q Devonian?

4 A Yes, sir.

5 Q And went through the Morrow, and they didn't try to
6 complete in the Morrow?

7 A No, sir. They were low in the Morrow, and it so
8 happened that the structure in our City's federal
9 well is some 214 feet higher in the Morrow than was
10 City Service Government in Section 28.

11 Q I assume that since you were drilling with fairly
12 heavy mud that you had no intention of testing the
13 Morrow as you went down. Is that true?

14 A Well, I'm sure that it would have been tested and
15 probably would have been planned to have been tested,
16 had they had any indication that it would have been
17 productive, yes, sir.

18 Q But the first realization that you had that there was --
19 that you had a potential gas reservoir was when the
20 well attempted to blow out?

21 A Yes, sir, that's right.

22 MR. LETTS: Do you have any questions?

23 MR. HATCH: I would like to -- I think probably
24 we need to do some amending. Perhaps I misunderstood the
25 letter.

1 We show this as the application of W & H
2 Production Drilling, Inc., for unorthodox gas well
3 location, and if I understand correctly, now, it is
4 really the application of Black River Corporation. It
5 is the operator.

6 THE WITNESS: Yes. Black River is the
7 operator.

8 MR. HATCH: And probably any order issued of this
9 really should, I think, be in the name of Black River
10 Corporation.

11 MR. LETTS: I believe so. I wonder now if it
12 shouldn't be in the name of Black River and City Service,
13 since City Service now has a half interest in the well; is
14 that right?

15 THE WITNESS: Well, they are a half interest
16 owner.

17 MR. NUTTER: Well, normally, we only mention
18 the operator.

19 MR. HATCH: The operator. And Black River is the
20 operator?

21 THE WITNESS: Yes, sir. Black River is the
22 operator.

23 MR. NUTTER: And the application was by W & H
24 Production on behalf of Black River Corporation?

25 THE WITNESS: Black River Corporation, yes.

1 MR. NUTTER: That will be fine. And the well
2 was projected as an oil well?

3 THE WITNESS: Yes.

4 MR. NUTTER: And it inadvertently recovered gas?
5 Now, this is a real good gas well, is it not?

6 THE WITNESS: Yes, sir.

7 MR. NUTTER: Has it been connected yet?

8 THE WITNESS: No. It hasn't. They are in the
9 process of negotiating a gas contract now.

10 MR. NUTTER: Are there any further questions of
11 Mr. Berry? He may be excused.

12 (Witness excused)

13 MR. NUTTER: Do you have anything further, Mr.
14 Hatch?

15 MR. HATCH: No, sir.

16 MR. NUTTER: Does anyone have anything they wish
17 to offer in Case Number 4566? We will take the case under
18 advisement.

19 MR. HATCH: I believe the Examiner, I think, had
20 a telephone call. For the record, City Service did call
21 yesterday.

22 They said on account of the Western Union strike
23 they were unable to send a telegram, but a letter was
24 following, and they do concur in the application.

25 MR. NUTTER: Very good. Thank you. If there is

dearnley-meier reporting service, inc.

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nothing further in this case, we will take the case
under advisement.

dearnley-meier reporting service, inc.

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I N D E X

WITNESS

PAGE

JOHN T. BERRY

Direct Examination by Mr. Letts

4

E X H I B I T S

Applicant's Exhibit Number One

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

4 I, LINDA MALONE, Court Reporter, do hereby certify that
5 the foregoing and attached Transcript of Hearing before the
6 New Mexico Oil Conservation Commission was reported by me;
7 and that the same is a true and correct record of the said
8 proceedings, to the best of my knowledge, skill and
9 ability.

10 Linda Malone
11 Court Reporter

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22 I do hereby certify that the foregoing is
23 a complete record of the proceedings in
24 the hearing of Case No. 4-76
25 heard by me on 7/14/71, 19 71.
_____, Examiner
New Mexico Oil Conservation Commission



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

July 20, 1971

GOVERNOR
BRUCE KING
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

Re: Case No. 4566

Order No. R-4173

Applicant:

Black River Corporation

Mr. Clarence Hinkle
Hinkle, Bondurant, Cox & Eaton
Attorneys at Law
Post Office Box 10
Roswell, New Mexico 88201

Dear Sir:

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

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director *ss*

ALP/ir

Copy of order also sent to:

Hobbs OCC x

Artesia OCC x

Aztec OCC

Other Mr. J. K. Letts, Patterson Building, 555 17th Street,
Denver, Colorado 80202

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:

CASE NO. 4566
Order No. R-4173

APPLICATION OF BLACK RIVER
CORPORATION FOR AN UNORTHODOX
GAS WELL LOCATION, EDDY COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 14, 1971, at Santa Fe, New Mexico, before Examiner Daniel S. Mutter.

NOW, on this 19th day of July, 1971, 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 exception to Rule 104 of the Commission Rules and Regulations for approval of an unorthodox gas well location for the Black River Corporation Cities-Federal Well No. 1, located 1650 feet from the North line and 1650 feet from the West line of Section 34, Township 25 South, Range 24 East, NMPM, undesignated Morrow gas pool, Eddy County, New Mexico.

(3) That the subject well was projected as a wildcat oil well at a standard location to test the Devonian formation but was productive of gas from the Morrow formation.

-2-

CASE NO. 4566

Order No. R-4173

(4) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject undesignated Morrow gas pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

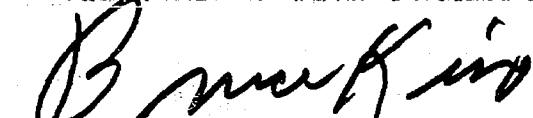
IT IS THEREFORE ORDERED:

(1) That an unorthodox gas well location is hereby approved for the Black River Corporation's Cities-Federal Well No. 1 in an undesignated Morrow gas pool at a point 1650 feet from the North line and 1650 feet from the West line of Section 34, Township 25 South, Range 24 East, NMPM, Eddy County, New Mexico, as an exception to Rule 104 of the Commission Rules and Regulations.


(2) 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/

AREA CODE 915
694-6608
563-1343



W & H Production-Drilling, Inc.

Drilling and Completion Consultants

ROUTE 2
5000 W. INDUSTRIAL
MIDLAND, TEXAS
79701

June 22, 1971

Case 4566

RECEIVED

JUN 23 1971

D. C. C.
ARTESIA, OFFICE

JUN 24 AM 8 30

State of New Mexico
Oil Conservation Commission
District II
Drawer DD
Artesia, New Mexico 88210

Re: Black River Corporation
Cities-Federal Well No. 1
F-Sec. 34, T25S, R24E
Eddy County, New Mexico

Gentlemen:

In as much as the above referenced well is located 1650 feet from the north and west lines of Section 34, T25S, R24E, and has been completed as a Morrow gas well, it is respectfully requested that a hearing be held for the purpose of approving the subject well as an unorthodox gas well location.

Yours very truly,

W & H PRODUCTION-DRILLING, INC.

J. T. Berry
J. T. Berry
Vice President Engineering

JTB:lv

DOCKET MAILED

Date 7-27-71

CITIES SERVICE OIL COMPANY

71 JUL 15 PM 1 09



Box 4906
Midland, Texas 79701
Telephone: 915 684-7131

July 14, 1971

New Mexico Oil & Gas Commission
P. O. Box 871
Santa Fe, New Mexico 87501

Attention: Mr. Daniel Nutter

Gentlemen:

As per our conversation of July 13, 1971, we recommend approval of the W & H Production Drilling, Inc's., Cities Service Federal Well No. 1 unorthodox gas well location 650' FN & WL, Section 34, 25S, Range 24E.

Yours very truly,

E. F. Motter
Region Engineer
Southwestern Region
Production Division

EFM:dlp

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 14, 1971

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner,
or Elvis A. Utz, Alternate Examiner:

- ALLOWABLE: (1) Consideration of the allowable production of gas for August, 1971, from fifteen prorated pools in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.
- (2) Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba, and Sandoval Counties, for August, 1971.

CASE 4565: Application of Tom L. Ingram to directionally drill, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to directionally drill his State M Well No. 1, having a surface location 330 feet from the South line and 1650 feet from the East line of Section 18, Township 17 South, Range 36 East, Vacuum-Abo Reef Pool, Lea County, New Mexico. Applicant proposes to plug the well back to approximately 7200 feet and whipstock the well to a bottom-hole location northwest of the surface location and no nearer than 330 feet to the boundary of the dedicated proration unit.

CASE 4566: Application of W & H Production-Drilling, Inc. for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to Rule 104 of the Commission Rules and Regulations, approval of an unorthodox gas well location for the Black River Corporation Cities-Federal Well No. 1, located 1650 feet from the North and West lines of Section 34, Township 25 South, Range 24 East, undesignated Morrow gas pool, Eddy County, New Mexico.

CASE 4568: Application of W. W. West for a unit agreement, Otero County, New Mexico. Applicant, in the above-styled cause, seeks approval of the West Dog Canyon Unit Area comprising 37,782 acres, more or less, of Federal, State and fee lands in Townships 25 and 26 South, Ranges 19 and 20 East, Otero County, New Mexico.

Examiner Hearing
July 14, 1971
-2-

Docket No. 14-71

CASE 4569: Application of Barber Oil, Inc., for an unorthodox oil well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a producing oil well at an unorthodox location 1326 feet from the South line and 5 feet from the West line of Section 13, Township 20 South, Range 28 East, as an infill well in its waterflood project in the Russell (Yates) Pool, Eddy County, New Mexico.

CASE 4567: Southeastern New Mexico nomenclature case calling for an order for the creation, extension and contraction of certain pools in Lea, Chaves, Eddy and Roosevelt Counties, New Mexico.

(a) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Sand Dunes-Morrow Gas Pool. The discovery well is the Texas American Oil Corporation Todd 36 State No. 1 located in Unit F of Section 36, Township 23 South, Range 31 East, NMPM. Said pool would comprise:

TOWNSHIP 23 SOUTH, RANGE 31 EAST, NMPM
SECTION 36: W/2

(b) Contract the Red Lake Pool in Eddy County, New Mexico, by the deletion of the following described area:

TOWNSHIP 18 SOUTH, RANGE 27 EAST, NMPM
SECTION 18: SW/4 NW/4

(c) Extend the Atoka-San Andres Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 27 EAST, NMPM
SECTION 18: SW/4 NW/4

(d) Extend the Buffalo Valley-Pennsylvanian Gas Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 27 EAST, NMPM
SECTION 12: E/2

Examiner Hearing

July 14, 1971

-3-

Docket No. 14-71

(Case 4567 continued)

(e) Extend the Eagle Creek-San Andres Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 25 EAST, NMPM

SECTION 14: SE/4 NW/4

SECTION 22: W/2 NE/4

SECTION 23: W/2 SW/4

SECTION 26: N/2 NW/4

SECTION 27: NE/4 NE/4

(f) Extend the Southwest Gladiola-Devonian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 12 SOUTH, RANGE 37 EAST, NMPM

SECTION 26: N/2

(g) Extend the Haystack-Cisco Gas Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 6 SOUTH, RANGE 27 EAST, NMPM

SECTION 28: All

(h) Extend the Vada-Pennsylvanian Pool in Lea and Roosevelt Counties, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 35 EAST, NMPM

SECTION 32: SW/4

TOWNSHIP 9 SOUTH, RANGE 34 EAST, NMPM

SECTION 3: SE/4

CASE 4560: (Continued from the June 30, 1971, Examiner Hearing

Application of Rijan Oil Company, Inc. for a pressure maintenance project, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pilot pressure maintenance project in the Slick Rock-Dakota Pool by the injection of water into the Dakota formation through its Rijan Wells Nos. 10, 12, and 14 located, respectively, in Units F, L, and K of Section 31, Township 30 North, Range 16 West, San Juan County, New Mexico.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION
EXAMINER HEARING

Docket No. 14-71

Case 4566

July 14, 1971



Case 4566

Application of W & H Production-Drilling, Inc. for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above styled cause, seeks as an exception to Rule 104 of the Commission Rules and Regulations, approval of an unorthodox gas well location for the Black River Corporation Cities-Federal Well No. 1, located 1650 feet from the North and West lines of Section 34, Township 25 South, Range 24 East, undesignated Morrow gas pool, Eddy County, New Mexico.

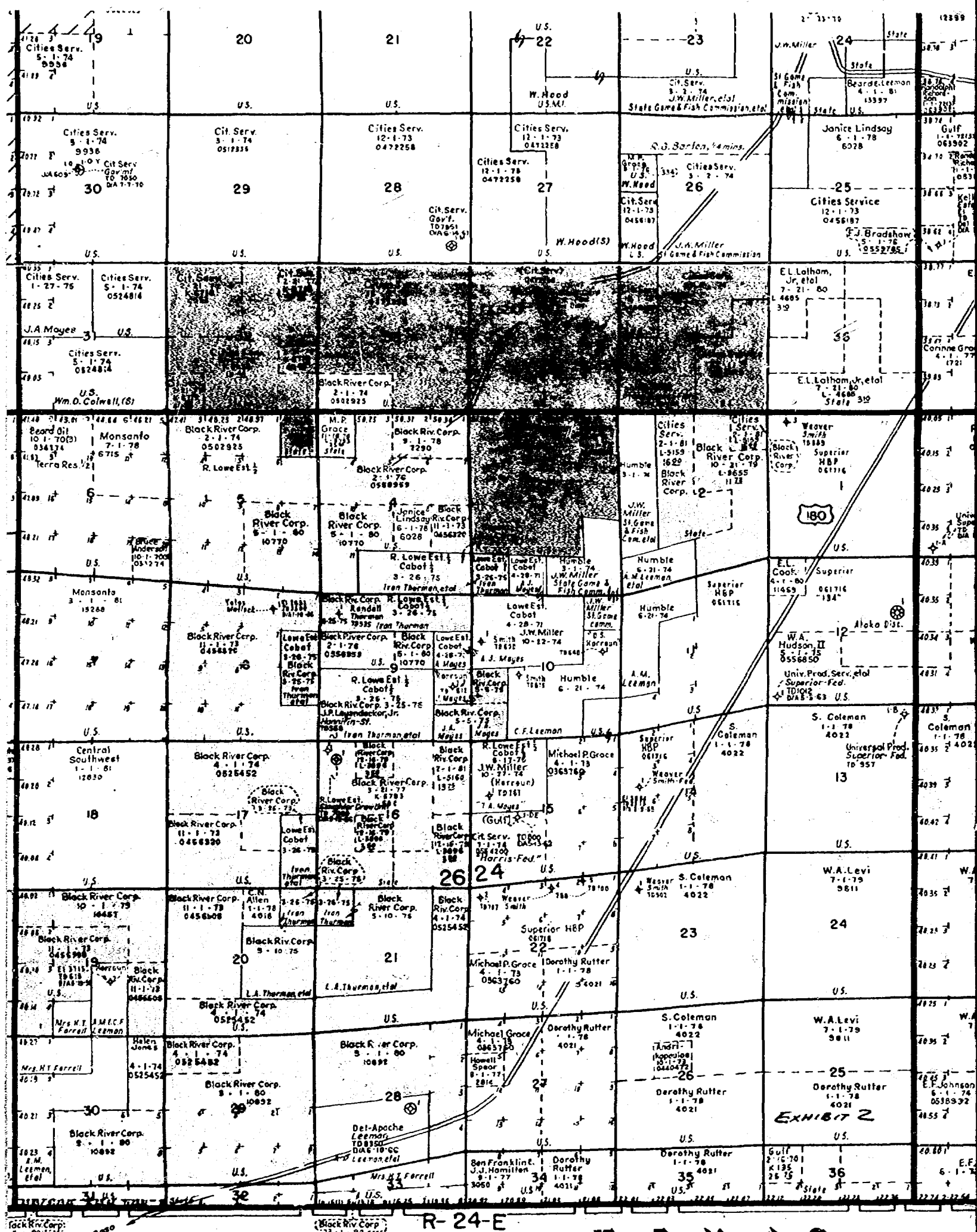


STATEMENT OF FACTS

1. Subject well originally intended to be staked 1980 feet from North and West Lines of Section.
2. The 1980 foot location was located in Alfalfa field and in consideration of Mr. Ballard's farming efforts, the 1650 foot location was drilled.
3. Numerous small fields 5 to 10 acres in size along valley have been cleared of rocks to plant crops and farm.
4. Well application filed as a Wildcat Devonian oil well test. Drill stem test in Morrow proved to be so positive, decision made to T. D. at that point and attempt completion.



EXHIBIT 1



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

(OTHER INFORMATION ON
reverse side)

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL
OIL WELL ☒ GAS WELL ☐ OTHER ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR
Black River Corporation

3. ADDRESS OF OPERATOR
620 Commercial Bank Tower, Midland, Texas 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surface 1650 Feet FN & WL, Sec. 34, T25S, R24E
At proposed prod. zone Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
10 Miles Southwest of White City

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any)
1650

16. NO. OF ACRES IN LEASE
40

17. NO. OF ACRES ASSIGNED TO THIS WELL
40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
3250

19. PROPOSED DEPTH
8000 Devonian

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3715' Estimated ground - To be corrected

22. APPROX. DATE WORK WILL START*
April 15, 1971

6. LEASE DESIGNATION AND SERIAL NO.
NM 0472258

8. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Cities-Federal

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA
Sec. 34, T25S, R24E

12. COUNTY OR PARISH
Eddy

13. STATE
New Mexico

PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|----------------|-----------------|---------------|--------------------|
| 15 | 11-3/4 | 42 | 350 | 300 sx. |
| 10-5/8 | 8-5/8 | 24 | 1000 | 350 sx. |

After setting the 11-3/4 inch casing and circulating cement to surface, W.O.C. 24 hours, then drill thru possible lost circulation zone to 1000 feet (after which no lost circulation is anticipated). Set 8-5/8 casing at 1000 feet and if necessary stage cement to surface. W.O.C. 24 hours. 1000 foot depth should be 400 feet into Delaware. Drill to T.D. of 8000 for Devonian Test. Production casing string to be determined at time T.D. is reached.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED John G. Davis TITLE Agent DATE 4/6/71

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY:

EXHIBIT 4

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

Form approved,
Budget Bureau No. 42-10365.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

| | | | | | |
|--|--|--|--|---|------------------------------|
| 1. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> Other _____ | | 5. TYPE OF COMPLETION: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESERV. <input type="checkbox"/> Other _____ | | 6. IF INDIAN ALLOTTEE OR TRIBE NAME _____ | |
| 2. NAME OF OPERATOR Black River Corporation | | | | 7. UNIT AGREEMENT NAME _____ | |
| 3. ADDRESS OF OPERATOR 620 Commercial Bank Tower, Midland, Texas 79701 | | | | 8. FARM OR LEASE NAME Cities-Federal | |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 1650' FN & WL At top prod. interval reported below 1650' FN & WL At total depth 1650' FN & WL | | | | 9. WELL NO. 1 | |
| 14. PERMIT NO. NM-0472258 | | | | 10. FIELD AND POOL, OR WILDCAT Wildcat | |
| DATE ISSUED 4/7/1971 | | | | 11. SEC. T. R. M. OR BLOCK AND SURVEY OR AREA 34 - 25 - 24 | |
| 15. DATE SPUNDED 5/7/1971 | | 16. DATE T.D. REACHED 6/1/1971 | | 12. COUNTY OR PARISH Eddy | |
| 17. DATE COMPL. (Ready to prod.) 6/6/1971 | | 18. ELEVATIONS (DF, RHD, RT, OR, ETC.)* 3741 RKB | | 13. STATE New Mexico | |
| 19. ELV. CASINGHEAD 3725 | | 20. TOTAL DEPTH, MD & TVD 7045 | | 21. PLUG, BACK T.D., MD & TVD 7000 | |
| 22. IF MULTIPLE COMPL., HOW MANY* - | | 23. INTERVALS DRILLED BY Rotary Tools Yes | | 24. WAS DIRECTIONAL SURVEY MADE No | |
| 25. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 6795-6806; 6814-6844 - Morrow | | | | 26. WAS WELL CORED No | |
| 27. TYPE ELECTRIC AND OTHER LOGS RUN LHC-GR, DIL, DM, ML | | | | 28. WAS WELL CORED No | |
| CASING RECORD (Report all strings set in well) | | | | | |
| CASING SIZE | WEIGHT, LB./FT. | DEPTH SET (MD) | HOLE SIZE | CEMENTING RECORD | AMOUNT PULLED |
| 12-3/4 | 33 | 375 | 15 | 275 sx Class C | None |
| 8-5/8 | 24 | 1005 | 11 | 350 sx lightweight + 150sx Class C | None |
| 4-1/2 | 10.5 | 7043 | 7-7/8 | 450 sx "C" Class C | None |
| Top Cement 5220' | | | | | |
| LINER RECORD | | | TUBING RECORD | | |
| SIZE | TOP (MD) | BOTTOM (MD) | SACKS CEMENT* | SCREEN (MD) | PACKER SET (MD) |
| | | | | 2-7/8 | 6750 |
| 31. PERFORATION RECORD (Interval, size and number) | | | 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. | | |
| 6795-6806 - 0.41" - 22 holes | | | DEPTH INTERVAL (MD) | | |
| 6814-6844 - 0.41" - 60 holes | | | AMOUNT AND KIND OF MATERIAL USED | | |
| | | | None | | |
| | | | | | |
| | | | | | |
| PRODUCTION | | | | | |
| DATE FIRST PRODUCTION 6/4/71 | | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flow | | WELL STATUS (Producing or shut-in) Shut-in | |
| DATE OF TEST 6/8/71 | HOURS TESTED 3:45 Total 1:15 @ this rate | CHOKE SIZE 35/64 | PROD'N. FOR TEST PERIOD → | OIL—BBL. None | GAS—MCF. 557.544 |
| WATER—BBL. 0 | GAS-OIL RATIO - | FLOW, TUBING PRESS. 2050.2 | CASING PRESSURE Pkr | CALCULATED 24-HOUR RATE → | OIL GRAVITY-API (CORR.) - |
| 33. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Vented & Flared During Test | | | | TEST WITNESSED BY Mr. Charles Saunders | |
| 34. LIST OF ATTACHMENTS | | | | | |
| 35. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records | | | | | |
| SIGNED J. T. Perry | | TITLE Agent | | DATE 6/10/1971 | |

Form 9-330

37. Summary of Porous Zones:

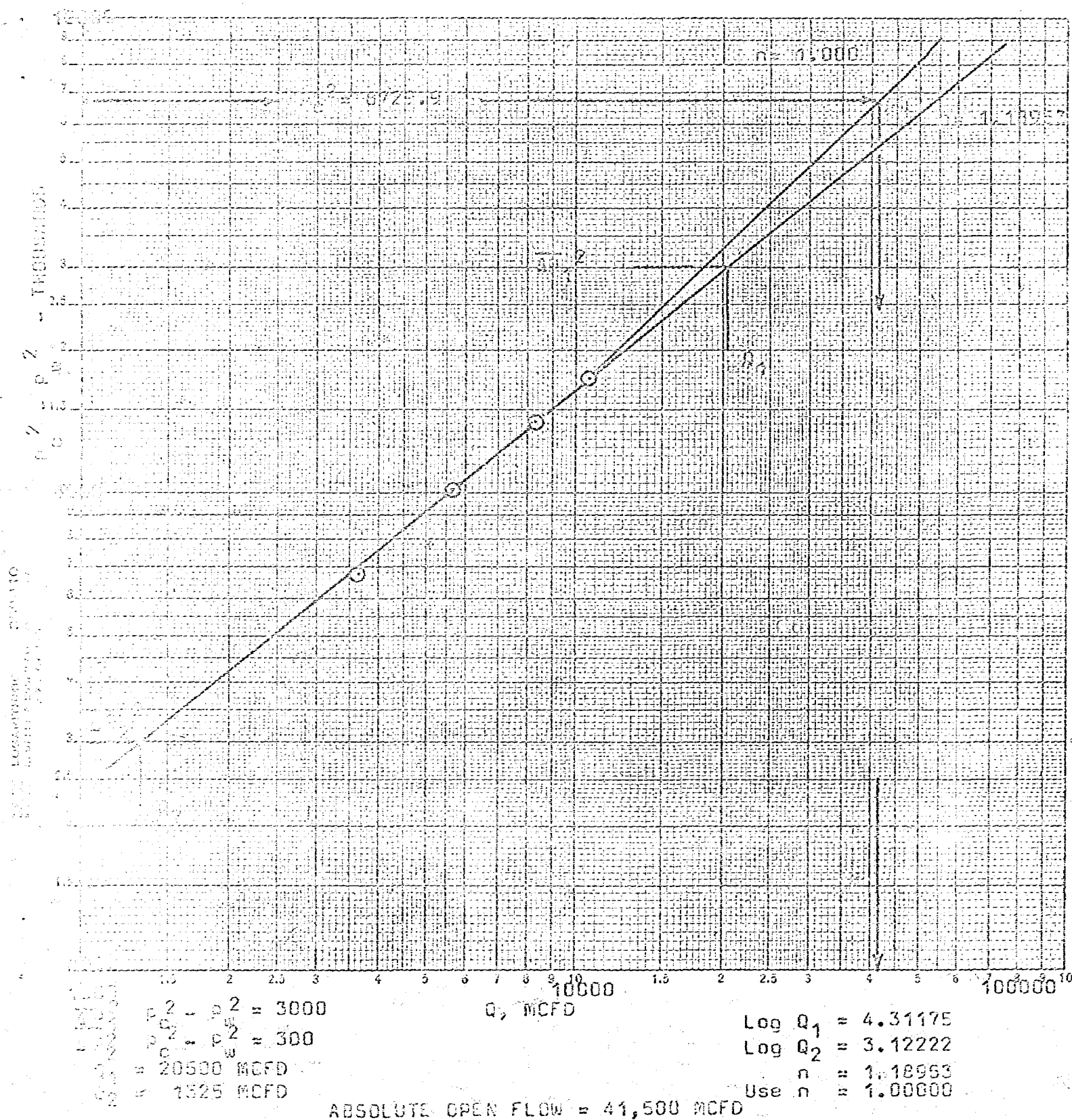
| <u>Formation</u> | <u>Top</u> | <u>Bottom</u> | <u>Description, Contents, Etc.</u> |
|------------------|------------|---------------|--|
| Delaware Sand | 1456 | 1546 | DST #1 15 min pre flow. 1-1/2 hr. flow GTS - 17 mins. psi 1/4" chk. 0-5 min. Slight blow throughout test. Rec. 120' GCDM, 210' gas & sulphur water cut d.m. 1 hr. ISIP: 543, IFP: 94, FFP: 188, FSIP: 564, I Hyd: 689, F. Hyd: 668. |
| Bone Spring | 3566 | 3633 | DST #2 10 min. pre flow, weak blow throughout. 1 hr. main flow - weak blow - dead 8 mins. No GTS, Rec: 180' Drilling fluid. 1 hr. ISIP: 126, IFP: 63, FFP: 84, 90 min. FSIP: 105, I. Hyd: 1570, F. Hyd. 1560. |
| Penn Lime | 5700 | 5811 | DST #3 TO 2:10 p.m. w/good blow. GTS 2:20 p.m. (10 min) Flowed 1-1/2 hrs. 250 psi, 3/4" choke 3.75 MMCF IFP: 1123 psi, FFP: 1629 psi, ISIP: 2482 psi 190 min., FSIP: 2136 psi/120 min, Hyd: 2540- 2528 psi. Rev. out 3 bbls. water. Rec. 90' water. |
| Morrow Sand | 6791 | 6860 | DST #4 I. Hyd. 3187, F. Hyd. 3176. 10 min IFP: 1995, FFP: 2354, 2 hr. Main Flow IFP: 2312, FFP: 2556. 1 hr. 50 min ISIP: 2995, 3 hr. FSIP: 3006 Flowed 20600 MCFD, 1425 psi - 3/4" choke. |

41-1

EXHIBIT C

WELL
LOCATION
County
DATE

Wells - Federal No. 1
S - Sec. 34 Twp. 25S Rge 24E
Sogy
5 - 8 - 71



Case 4566

1.

Cities Serv. approves:

W & H Prod Drly Inc

Cities Serv Fed Well No 1

unorthodox gas well loc.

650' ~~FF~~ FNL FWC

34 255 24E

E. F. Motter Midland

called - Western Union
on strike

will mail written
confirmation

DRAFT

GMH/dr

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:

CASE No. 4566

Order No. R- 4173

Black River Corp.

APPLICATION OF ~~W & H PRODUCTION~~
~~DRILLING, INC.~~ FOR AN UNORTHODOX
GAS WELL LOCATION, EDDY COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 14, 1971,
at Santa Fe, New Mexico, before Examiner DANIEL S. Nutter.

NOW, on this day of July, 1971, 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*
~~W & H Production Drilling, Inc.~~, seeks
an exception to Rule 104 of the Commission Rules and Regulations
for approval of an unorthodox gas well location for the Black
River Corporation Cities-Federal Well No. 1, located 1650 feet
from the North line and 1650 feet from the West line of Section 34,
Township 25 South, Range 24 East, NMPM, undesignated Morrow gas
pool, Eddy County, New Mexico.

-2-

CASE NO. 4566

Order No. R-

(3) That the subject well was projected as a ^{new} ~~Wildcat~~ oil well at a standard location to test the Devonian formation but was productive of gas from the Morrow formation.

(4) That approval of the subject application will afford the applicant the opportunity to produce ^{its} ~~his~~ just and equitable share of the gas in the subject undesignated Morrow gas pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That an unorthodox gas well location is hereby approved for the Black River Corporation's Cities-Federal Well No. 1 in an undesignated Morrow gas pool at a point 1650 feet from the North line and 1650 feet from the West line of Section 34, Township 25 South, Range 24 East, NMPM, Eddy County, New Mexico, as an exception to Rule 104 of the Commission Rules and Regulations.

(2) 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 herein-
above designated.

CASE 4569: Application of BARBER
OIL FOR AN UNORTHODOX OIL WELL
LOCATION, EDDY COUNTY, N. MEX.