

CASE 4606: Application of BLACK
RIVER CORP. FOR AN UNORTHODOX
WELL LOCATION, EDDY COUNTY, N.M.

ok

Case Number

46006

Application

Transcripts

Small Exhibits

ETC.

1 MR. NUTTER: Call Case No. 4606.

2 MR. HATCH: Case 4606. Application of Black River
3 Corporation for an unorthodox well location, Eddy County,
4 New Mexico.

5 MR. HINKLE: Clarence Hinkle, Hinkle, Bondurant,
6 Cox and Eaton, Roswell, appearing on behalf of Black River
7 Corporation. We have one witness, Mr. West, and five exhibits.

8 (Witness sworn)

9 (Whereupon, Applicant's Exhibits 1 through 5 were
10 marked for identification.)

11 GORDON WEST

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

14 DIRECT EXAMINATION

15 BY MR. HINKLE:

16 Q State your name, your residence, and by whom you are
17 employed.

18 A Gordon West, Midland, Texas, President of W and H
19 Production Drilling Company, representing Black River
20 Corporation.

21 Q What is your relationship with the Black River Corporation?

22 A We are operating this property for Black River Corporation.

23 Q In New Mexico?

24 A Yes.

25 Q All their property is in New Mexico?

- 1 A Yes.
- 2 Q And you are familiar with the application filed by Black
- 3 River in this case?
- 4 A Yes, sir.
- 5 Q Did your company file this on behalf of Black River?
- 6 A Yes, sir.
- 7 Q What is Black River seeking to accomplish by the
- 8 application?
- 9 A An unorthodox well located in Eddy County, New Mexico.
- 10 Q Have you prepared or has there been prepared under your
- 11 direction certain exhibits for introduction in the case?
- 12 A Yes, sir.
- 13 Q Refer to the Exhibit No. 1 and explain what this is and
- 14 what it shows.
- 15 A Exhibit 1 shows a City-Federal No. 2, Section 34, in Eddy
- 16 County, 2310 from the east line and 2310 from the south
- 17 line.
- 18 This well was drilled for Devonian oil test.
- 19 Q Does this also show the ownership of the acreage
- 20 surrounding the well?
- 21 A Yes, sir.
- 22 Q And also the location of the No. 1 well?
- 23 A Yes, sir.
- 24 Q Is the No. 1 well completed in the Morrow formation?
- 25 A Yes, sir.

dearnley-meier reporting service, inc.

- 1 Q As a gas well?
- 2 A As a gas well.
- 3 Q And refer to Exhibit No. 2 and explain what this is and
- 4 what it shows.
- 5 A This shows the completion data, setting of the casing,
- 6 cementing, and the total depth and plug-back.
- 7 Q What was the total depth of the well?
- 8 A Total depth was --
- 9 Q 7975?
- 10 A 7975, yes.
- 11 Q And it was plugged back to where?
- 12 A Plugged back to the Morrow, which is a --
- 13 Q 7050?
- 14 A -- 7050.
- 15 Q Now, this is the well completion report filed with the
- 16 U. S. G. S.?
- 17 A Yes, sir.
- 18 Q Refer to Exhibit 3 and explain what this is.
- 19 A These are the drill-stem tests from 1 through 5.
- 20 Q Now, this shows that you tested the Delaware sand, the
- 21 Straun, the Morrow, and the Devonian.
- 22 A The Delaware and Straun, Morrow, Devonian, and Fusselin.
- 23 Q Does it show any production or shows in Delaware sand?
- 24 A No, sir.
- 25 Q What about the Straun?

- 1 A None in the Straun.
- 2 Q What does it show for the Morrow?
- 3 A The Morrow did test a gas, good gas show, good gas well.
- 4 Q What about the Devonian?
- 5 A Devonian, no production there.
- 6 Q The Fusselin?
- 7 A The Fusselin, none.
- 8 Q Now, refer to Exhibits 4 and 5 and explain what these show.
- 9 A This is a back pressure test for the gas curves supporting
- 10 this testimony, the open-flow.
- 11 Q What does this show the potential of Well No. 2 to be?
- 12 A Thirteen million.
- 13 Q What was the potential of the first well, No. 1?
- 14 A Forty-one million.
- 15 Q Is this well structurally lower or higher than the No. 1?
- 16 A It is lower.
- 17 Q Now, why was this well located where it was? Was it a
- 18 well projected originally to the Devonian formation?
- 19 A Yes, sir. The Devonian particularly to the Devonian.
- 20 Q And you anticipated you might claim oil production in the
- 21 Devonian?
- 22 A Yes, sir.
- 23 Q Found it to be dry and plugged it back through the Morrow?
- 24 A Yes, sir.
- 25 Q Have you contacted the off-set owners in connection with

1 this application or do you know their attitude or --

2 A Yes, sir, we have. I believe City Service has sent the
3 Commission a wire, did they not, supporting this?

4 MR. HATCH: Yes. Commission has received a wire
5 from City Service supporting the application.

6 Q Now, referring back to Exhibit No. 1, what acreage does
7 the Black River Corporation own in this area?

8 A Well, this is Section 33, 35, and partial of 4, 3 and 2.

9 Q In the next township below?

10 A Yes, sir.

11 Q Now, except that one strip of the Humble?

12 A Humble, right.

13 Q Now, City Service owns the area to the north, the three
14 sections --

15 A Yes, sir.

16 Q -- which would be the direct and diagonal off-sets to the
17 north?

18 A Yes, sir.

19 Q And City Service has no objection to the application?

20 A No, sir.

21 Q In your opinion will the approval of this well as an
22 unorthodox location for gas well tend to violate correlative
23 rights in any way?

24 A No, sir.

25 MR. HINKLE: We would like to offer in evidence

dearnley-meier reporting services

1 Exhibits 1 through 5.

2 MR. NUTTER: Applicant's Exhibits 1 through 5 will
3 be admitted in evidence.

4 MR. HINKLE: That's all of the direct.

5 CROSS-EXAMINATION

6 BY MR. NUTTER:

7 Q Mr. West, what acreage is dedicated to the well No. 1?

8 A Well No. 1? Do you know I don't have that data with me.
9 I don't have that acreage of the No. 1.

10 Q Well, what is the dedication to your well No. 2, the east
11 half of the section?

12 A Yes, sir.

13 Q So I presume, then, that the west half of the section
14 would be dedicated to the No. 1?

15 A West half, right, yes.

16 Q So that takes care of all of the acreage in this section,
17 then?

18 A Yes, sir.

19 MR. NUTTER: Are there any further questions of Mr.
20 West? He may be excused.

21 (Witness excused)

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

24 MR. HINKLE: That's all.

25 MR. NUTTER: Does anyone have anything they wish to

1 offer in Case 4606?

2 MR. HINKLE: There is a telegram, I believe, from
3 City Service.

4 MR. HATCH: Commission has received a telegram from
5 City Service --

6 MR. HINKLE: Showing no objection?

7 MR. HATCH: -- showing no objection.

8 MR. NUTTER: If there is nothing further in Case
9 No. 4606 we will take that case under advisement.

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I N D E X

WITNESS

PAGE

GORDON WEST

Direct Examination by Mr. Hinkle

2

Cross-Examination by Mr. Nutter

7

E X H I B I T S

MARKED

PAGE

Applicant's Exhibits 1 through 5

2

OFFERED IN EVIDENCE

PAGE

Applicant's Exhibits 1 through 5

7

1 STATE OF NEW MEXICO)
2 COUNTY OF BERNALILLO)

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

8
9
10
11 Linda Malone
12 Court Reporter
13
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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. 4606
25 heard by me on 10/13/74.
_____, Secretary
New Mexico Oil Conservation Commission

AREA CODE 915
694-6608
563-1343



W & H Production-Drilling, Inc.

Drilling and Completion Consultants

September 14, 1971

ROUTE 2
5000 W. INDUSTRIAL
MIDLAND, TEXAS
79701

RECEIVED

SEP 15 1971

OIL CONSERVATION COMM.
SANTA FE

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

Re: Black River Corporation's
Cities-Federal Well No. 2
J - Sec. 34, T25S, R24E
Eddy County, New Mexico

Gentlemen:

W & H Production-Drilling, Inc. acting as consultants to Black River Corporation respectfully request that a hearing be held for the purpose of approving the above referenced well as an unorthodox gas well location in as much as the well is physically located 2310 feet from the south and east lines of the section.

Yours very truly,

W & H PRODUCTION-DRILLING, INC.

J. T. Berry
J. T. Berry

Vice President Engineering

JTB:lv

either 5/2

Dedicated acreage

formation completed in

= narrow well =

EX-101 10-1-71

blakee?



OIL CONSERVATION COMMISSION

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

**GOVERNOR
BRUCE KING
CHAIRMAN
LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER
STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR**

October 22, 1971

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

Re: Case No. 4606
Order No. R-4211
Applicant:
Black River Corporation

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

ALP/ir

Copy of order also sent to:

Hobbs OCC _____ **x** _____
 Artesia OCC _____
 Aztec OCC _____ **x** _____

Other _____

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. 4606
Order No. R-4211

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

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 13, 1971, at Roswell, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 21st day of October, 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 its Cities-Federal Well No. 2, located 2310 feet from the South line and 2310 feet from the East 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.
- (4) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable

-2-

CASE NO. 4606
Order No. R-4211

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. 2 in an undesignated Morrow gas pool at a point 2310 feet from the South line and 2310 feet from the East 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.

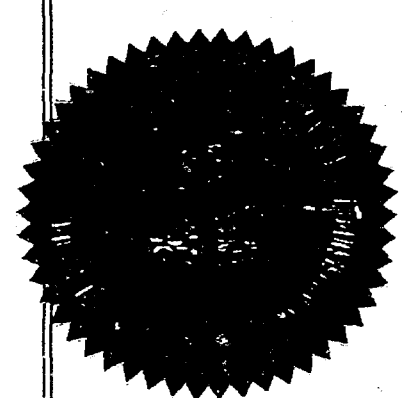
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

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/



Telegram

KA011 NSC072

1971 OCT 11 AM 9 44

(1020)

NS MDA017 RS PDF=MIDLAND TEX 11 1017A CDT=RECEIVED
NEW MEX OIL CONSERVATION COMM,

DAN NUTTER= SANTA FE NMEX=

OCT 12 1971

OIL CONSERVATION COMM.
SANTA FE

WITH REFERENCE TO CASE #4606 CITIES SERVICE OIL CO.
RECOMMENDS APPROVAL OF THE UNORTHODOX GAS WELL LOCATION
REQUESTED BY THE BLACK RIVER CORPORATION FOR THEIR
#2 CITIES FEDERAL 2310 FEET FROM SOUTH AND EAST
LINES SECTION 24 T-25-S, R-24-E EDDY COUNTY NEW MEXICO
AND APPROVAL OF THE PROPOSED PRORATION UNIT COMPRISED
OF THE E/2 OF SECTION 34=

E F MOTTER CITIES SVC OIL CO REGIONAL ENGINEER.=

Docket No. 22-71

DOCKET: REGULAR HEARING - WEDNESDAY - OCTOBER 13, 1971

OIL CONSERVATION COMMISSION - 9 A.M. - ROSWELL INN, 1815 NORTH MAIN,
ROSWELL, NEW MEXICO

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

CASE 4575: (De Novo)

Application of Anadarko Production Company for the amendment of the special pool rules for an existing pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of the special rules and regulations governing the South Eunice-San Andres Pool to provide for the classification of oil and gas wells, spacing and well location requirements, and an allocation formula for withdrawals by oil and gas wells.

Upon application of Anadarko Production Company, this case will be heard De Novo under the provisions of Rule 1220.

CASE 4557: (De Novo)

Application of Continental Oil Company for transfer of allowable, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to transfer allowable across boundaries of the participating area and the leases outside said area, but within the Maljamar Co-operative Area, MCA Unit Area, Maljamar Grayburg-San Andres Pool, Lea County, New Mexico.

Upon application of Continental Oil Company, this case will be heard De Novo under the provisions of Rule 1220.

THE FOLLOWING CASES WILL BE HEARD BEFORE DANIEL S. NUTTER, EXAMINER, OR ELVIS A. UTZ, ALTERNATE EXAMINER, ALSO AT THE
ROSWELL INN:

- CASE 4605: Application of Elk Oil Company for special pool rules and a non-standard gas proration unit, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Round Tank-Queen Pool,

(Case 4605 continued)

including provisions for the classification of oil and gas wells, spacing and well location requirements for oil and gas wells, and a limiting gas-oil ratio of 6,000 to 1. Applicant further seeks approval of a 120-acre non-standard gas proration unit comprising the W/2 SW/4 and SE/4 SW/4 of Section 30, Township 15 South, Range 29 East, Chaves County, New Mexico, to be dedicated to its JW Well No. 2 located in Unit L of said Section 30.

CASE 4606: Application of Black River Corporation for an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location for its Cities-Federal Well No. 2 located 2310 feet from the South and East lines of Section 34, Township 25 South, Range 24 East, undesignated Morrow gas pool, Eddy County, New Mexico, with the E/2 of said Section 34 to be dedicated to the well.

CASE 4448: (Reopened)

In the matter of Case 4448 being reopened pursuant to the provisions of Order No. R-4060, which order established 160-acre spacing units and an 80-acre proportional factor of 4.00 for the West Mescalero-Pennsylvanian Pool, Lea County, New Mexico, for a period of one year. All interested persons may appear and show cause why said pool should not be developed on less than 160-acre spacing units and why the 80-acre proportional factor of 4.00 assigned to the pool should or should not be retained.

CASE 4607: Application of Penroc Oil Corporation for a waterflood expansion and amendment of Order No. R-3494, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks to expand its Phillips Artesia Waterflood Project, Artesia Pool, by an additional injection well to be located 2645 feet from the South line and 1325 feet from the East line of Section 27, Township 17 South, Range 28 East, Eddy County, New Mexico. Applicant further seeks the amendment of Order No. R-3494 to permit administrative approval for additional

(Case 4607 continued)

injection wells in said project without a showing of well response.

CASE 4608: Application of Jack L. McClellan for the creation of a new pool and special pool rules, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of oil from the Siluro-Devonian formation for his Bar-J Federal Well No. 1 located in Unit E of Section 15, Township 6 South, Range 27 East, Chaves County, New Mexico, and the assignment of approximately 32,300 barrels of discovery allowable to said well. Applicant further seeks the promulgation of special rules for said pool including a provision for 80-acre spacing and proration units.

CASE 4609: Application of Jack L. McClellan for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Sulimar-Queen Unit Area comprising 1520 acres, more or less, of Federal lands in Sections 13, 23, 24, 25, and 26 of Township 15 South, Range 29 East and Sections 18 and 19 of Township 15 South, Range 30 East, Chaves County, New Mexico.

CASE 4610: Application of Jack L. McClellan for a waterflood project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Sulimar-Queen Pool by the injection of water through various wells located in Sections 13, 23, 24, 25, and 26 of Township 15 South, Range 29 East and Sections 18 and 19 of Township 15 South, Range 30 East, Chaves County, New Mexico.

CASE 4611: Southeastern New Mexico nomenclature case calling for an order for the extension of certain pools in Lea, Chaves and Roosevelt Counties, New Mexico.

(a) Extend the Allison-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 36 EAST, NMPM
SECTION 3: N/2 SE/4

(Case 4611 continued)

(b) Extend the Bluitt-San Andres Associated Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 38 EAST, NMPM
SECTION 16: S/2

(c) Extend the Vest Ranch-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 30 EAST, NMPM
SECTION 28: SE/4

(d) Extend the Wantz-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM
SECTION 12: NE/4

CASE 4539: (Continued from the September 1, 1971 Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Doanbuy Lease & Company, Inc., and all other interested persons to appear and show cause why its following described wells in Section 27, Township 14 South, Range 33 East, Saunders Pool, Lea County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 4593: (Continued from the September 15, 1971 Examiner Hearing)

Application of Continental Oil Company for an exception to Order No. R-3221, as amended, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, to dispose of water produced by wells located on its W. R. Means lease comprising the S/2 and NW/4 of Section 28, and E/2 and E/2 W/2 of Section 29, Township 14 South, Range 30 East, Vest Ranch-Queen Pool, Chaves County, New Mexico, in unlined surface pits.

Form 9-330
(Rev. 5-65)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> Other _____		5. LEASE DESIGNATION AND SERIAL NO. NM-0472258	
b. 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. RESVR. <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 2310 F S & E Lines of Section 34 At top prod. interval reported below At total depth Same		9. WELL NO. 2	
14. PERMIT NO. Orig. Amended Permit 8/31/71		10. FIELD AND POOL, OR WILDCAT Wildcat	
DATE ISSUED		11. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA Sec. 34, T25S, R24E	
15. DATE SPUNDED July 25, 1971		12. COUNTY OR PARISH Eddy	
16. DATE T.D. REACHED Sept. 2, 1971		13. STATE New Mexico	
17. DATE COMPL. (Ready to prod.) Sept. 10, 1971		18. ELEVATIONS (DF, RKB, RT, OR, ETC.)* 3705 GR., 3721 KB	
19. ELEV. CASINGHEAD 3705		20. TOTAL DEPTH, MD & TVD 7975	
21. PLUG BACK T.D., MD & TVD 7050		22. IF MULTIPLE COMPL., HOW MANY*	
23. INTERVALS DRILLED BY Rotary		24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 6858 - 6861; 6874-6890 Morrow	
25. TYPE ELECTRIC AND OTHER LOGS RUN BHCS - GR, DIL, DM, ML		26. WAS DIRECTIONAL SURVEY MADE No	
27. WAS WELL CORED No		CASING RECORD (Report all strings set in well)	

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 2
CASE NO. 4606

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-R355.6.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> Other _____		5. LEASE DESIGNATION AND SERIAL NO. NM-0472258	
b. 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. RESVR. <input type="checkbox"/> Other _____		6. IF INDIAN, ALLOTTEE OR TRIBAL 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 2310 F S & E Lines of Section 34 At top prod. interval reported below At total depth Same		9. WELL NO. 2	
14. PERMIT NO. Orig. Amended Permit 8/31/71		10. FIELD AND POOL, OR WILDCAT Wildcat	
DATE ISSUED		11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Sec. 34, T25S, R24E	
15. DATE SPUNDED July 25, 1971		12. COUNTY OR PARISH Eddy	
16. DATE T.D. REACHED Sept. 2, 1971		13. STATE New Mexico	
17. DATE COMPL. (Ready to prod.) Sept. 10, 1971		14. ELEVATIONS (OF, RKB, RT, OR, ETC.)* 3705 GR., 3721 KB	
18. ELEV. CASINGHEAD 3705		19. ELEV. CASINGHEAD 3705	
20. TOTAL DEPTH, MD & TVD 7975		21. PLUG, BACK T.D., MD & TVD 7050	
22. IF MULTIPLE COMPL., HOW MANY*		23. INTERVALS DRILLED BY Rotary	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 6858 - 6861; 6874-6890 Morrow		25. WAS DIRECTIONAL SURVEY MADE No	
26. TYPE ELECTRIC AND OTHER LOGS RUN BHCS - GR, DIL, DM, ML		27. WAS WELL CORED No	
28. CASING RECORD (Report all strings set in well)			
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE
8-5/8	24	830	11
5-1/2"	14 & 15.5	7120	7-7/8
CEMENTING RECORD		AMOUNT PULLED	
350		None	
200		None	
29. LINER RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*
30. TUBING RECORD		PACKER SET (MD)	
SIZE	DEPTH SET (MD)	6805	
2-7/8	6805	6805	
31. PERFORATION RECORD (Interval, size and number) 6858 - 6861 - 0.41 -6 Holes 6874 - 6890 - 0.41 -32 holes			
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED	
None			
33. PRODUCTION			
DATE FIRST PRODUCTION Sept. 8, 1971		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flow	
WELL STATUS (Producing or shut-in) Shut-in			
DATE OF TEST 9/8/71	HOURS TESTED 3:30 Total 1:00 @ this rate	CHOKE SIZE 31-1/2	PROD'N. FOR TEST PERIOD OIL—BBL. 369 GAS—MCF. 8,844 WATER—BBL. - OIL GRAVITY-API (CORR.) -
FLOW, TUBING PRESS. 1230	CASINO PRESSURE Pkr	CALCULATED 24-HOUR RATE -	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Vented and flared during test			
35. LIST OF ATTACHMENTS DSI Summary			
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records			
SIGNED J. D. Berry		TITLE Agent	
DATE 9/13/71			

*(See instructions and Spaces for Additional Data on Reverse Side)

EXHIBIT 4 2

DST Summary

DST #1 2395' - 2450' Delaware Sand

Tool opened for a 15 minute first flow with a fair blow of air, decreasing in 12 minutes. Closed tool for 60 minute first closed in pressure. Reopened tool for 61 minute second flow with fair blow of air, decreasing to weak blow in 15 minutes, died in 30 minutes. Closed tool for 89 minute second closed in pressure.

First Flow: Initial - 551, Final - 713, Closed in - 1025

Second Flow: Initial - 823, Final - 980, Closed in - 1016

DST #2 5903' - 5958' Strawn

Tool opened for a 14 minute first flow with a strong blow. Gas to surface in 4 minutes. Opened choke on 24/64" in 5 minutes, opened choke to 32/64" in 10 minutes. Closed tool for 92 minute first closed in pressure. Reopened tool for 183 minute second flow with a strong blow, increasing for 30 minutes, then decreasing. Closed tool for 181 minute second closed in pressure.

First Flow: Initial - 456, Final - 642, Closed in - 2267

Second Flow: Initial - 413, Final - 209, Closed in - 561

DST #3 6839' - 6925' Morrow

Tool opened for 12 minute first flow with a good blow with gas to the surface in 3 minutes on 1/4" choke, 600 PSI. Closed tool for 87 minute first closed in pressure. Tool reopened for 61 minute second flow. surface PSI 1225 on 5/8" choke at the end of the test. Closed tool for 180 minute second closed in pressure.

First Flow: 1576 Initial, Final - 2549, Closed in - 3030

Second Flow: Initial - 1857, Final - 2234, Closed in - 3024

DST #4 7678' - 7758' Devonian

Tool opened for a 11 minute first flow with a very weak blow. Closed tool for 59 minute first closed in pressure. Reopened tool for 59 minute second flow with no blow at 12:55, very weak blow at 1:00, no blow at 1:30. Closed tool for 91 minute second closed in pressure.

First Flow: Initial - 61, Final - 96, Closed in - 3251

Second Flow: Initial - 107, Final - 228, Closed in - 3230

DST #5 7866' - 7975' Fusselman

Opened tool for 12 minute first flow with a strong blow, 10 psi in 10 minutes. Closed tool for 58 minute first closed in pressure. Reopened tool for 59 minute second flow with a strong blow, decreasing after 10 minutes, dead in 16 minutes. Closed tool for 93 minute second closed in pressure.

First Flow: Initial - 1511, Final - 3007, Closed in - 3366

Second Flow: Initial - 2986, Final - 3364, Closed in - 3364

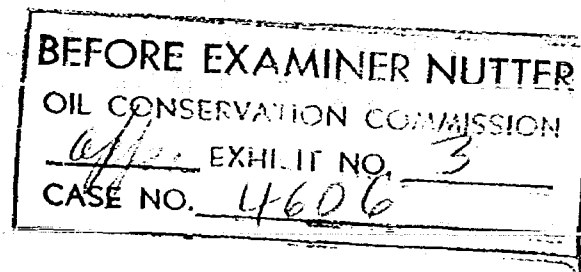


EXHIBIT 74

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

For 12-122
Revised 9-1-65

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special						Test Date 9/10/1971			
Company Black River Corporation						Connection None			
Pool Wildcat						Formation Morrow			
Completion Date 9/8/1971		Total Depth 7975		Plug Back TD 7050		Elevation 3721 KB		Farm or Lease Name Cities-Federal	
Cas. Size 5-1/2	Wt. 14 & 15.5	a	Set At 7120	Perforations: From 6858 To 6890		Well No. 2			
Tap. Size 2-7/8	Wt. 6.5	d	Set At 6805	Perforations: From To		Unit J		Soc. 34	Twp. 25S
Type Well - Single - Ardenhead - G.O. or G.O. Multiple Single						Packer Set At 6805		County Eddy	
Producing thru Tubing		Reservoir Temp. °F 148 @ 6874		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 6874	d 6874	C _g 0.570	% CO ₂ 0.60	% N ₂ 0.26	% H ₂ S	Prover	Motor Run 4"	Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
1							2579		Pkr	
2	4	x	2.50	285	14	86	2342	98		
3	4	x	2.50	590	21	79	2003	98		
4	4	x	2.50	590	29	75	1781	98		
5	4	x	2.50	590	56	85	1230	98		

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	32.64	64.6	298.2	0.9759	1.325	1.019	2778
2	32.64	112.6	603.2	0.9822	1.325	1.041	4979
3	32.64	132.3	603.2	0.9859	1.325	1.043	5884
4	32.64	183.8	603.2	0.9768	1.325	1.139	8844

NO.	P _i	Temp. °R	T _i	Z	Gas Liquid Hydrocarbon Ratio	Dry	Mcfd/bbl.
1	.442	546	1.57	0.964	A.P.I. Gravity of Liquid Hydrocarbons		Deg.
2	.894	539	1.55	0.922	Specific Gravity Separator Gas		XXXXXXX
3	.894	535	1.54	0.920	Specific Gravity Flowing Fluid		XXXXX
4	.894	545	1.57	0.926	Critical Pressure 675 P.S.I.A.		P.S.I.A.
					Critical Temperature 348 R		R

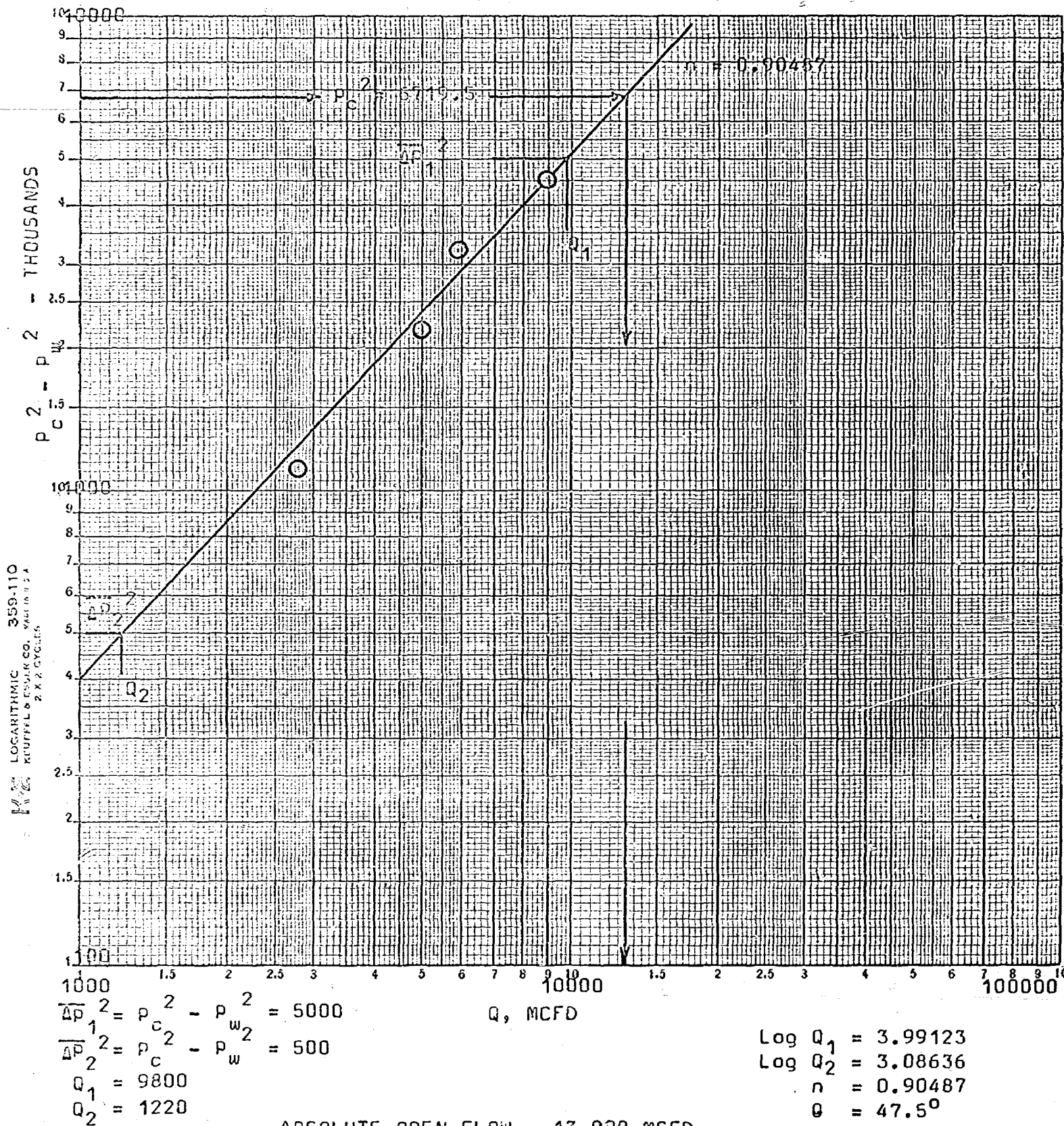
NO.	P _i	P _w	P _w ²	P _i ² - P _w ²	(1) $\frac{P_c^2}{P_i^2 - P_w^2} = 1.342$	(2) $\left[\frac{P_c^2}{P_i^2 - P_w^2} \right]^n = 1.304$
1	5546.9	2366.6	5600.8	1118.7		
2	4065.1	2134.9	4557.8	2161.7		
3	3219.2	1867.1	3486.1	3233.4		
4	1545.5	1467.2	2152.7	4566.8		

AOF = Q $\left[\frac{P_c^2}{P_i^2 - P_w^2} \right]^n = 12,800$			
Absolute Open Flow		13,000	Mcf @ 15.025
Angle of Slope @		47.5	Slope, n .905

Remarks:			
Approved By Commission:	Conducted By:	Calculated By:	Checked By:

EXHIBIT 8-3

COMPANY	Black River Corporation
WELL	Cities - Federal No. 2
LOCATION	J - Sec. 34 T25S R24E
COUNTY	Eddy
DATE	September 10, 1971



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:

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

CASE No. 4606

Order No. R-4211

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 13, 1971,
at ~~Santa Fe~~ Roswell, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this day of October, 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 its Cities-Federal
Well No. 2, located 2310 feet from the South line and 2310 feet
from the East line of Section 34, Township 25 South, Range 24-
East, NMPM, undesignated Morrow gas pool, Eddy County, New Mexico.

-2-

Case No. 4606

Order No. R-

(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.

(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. 2 in an undesignated Morrow gas pool at a point 2310 feet from the South line and 2310 feet from the East 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.