CASE 4471: Application of H. L. BROWN, Jr. FOR AN UNORTHODOX GAS WELL LOCATION, EDDY COUNTY, N.M.

Case. Number.
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Application, Transcripts.

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
December 2, 1970
EXAMINER HEARING

IN THE MATTER OF:

Application of H. L. Brown, Jr. for an unorthodox gas well location, Eddy County, New Mexico.

Case No. 4471

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING



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WITNESS PAGE

HIGDON GASTON

Direct Examination by Mr. Morris

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EXHIBITS

H. L. Brown's Exhibits 1 through 4

Admitted 12

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

MR. NUTTER: Case 4471.

MR. HATCH: Application of H. L. Brown, Jr. for an unorthodox gas well location, Eddy County, New Mexico.

MR. MORRIS: Mr. Examiner, I am Richard Morris of the firm of Montogomery, Federici, Andrews, Hannahs and Morris, Santa Fe, appearing on behalf of the Applicant, H. L. Brown, Jr. We will have one witness, Mr. Higdon Gaston and I ask he be sworn at this time.

(Witness sworn.)

HIGDON GASTON

called as a wittess, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. MORRIS:

- Q Mr. Gaston, please state your name and where you reside.
 - I am Higdon Gaston, Jr. I am from Midland, Texas. A.
 - Q By whom are you employed and in what capacity?
 - A I am employed by H. L. Brown, Jr. as a geologist.
- Q Would you briefly review for the Examiner your education and experience in the Petroleum Industry?
- I graduated from Texas Technological College in 1951 with a Bachelor of Science Degree in Geology. I worked

for Phillips Petroleum Company for approximately five years as a geologist in both exploration and developement and I worked for Great Western Drilling Company for approximately 14½ years as District Geologist and have been employed by H. L. Brown, Jr. since the middle of May of this year.

- What was your experience with Great Western?
- Primarily the Permian Basin.
- Are you familiar with the Application of H. L. Brown, Jr. in this case?
 - A Yes.

MR. MORRIS: Mr. Examiner, are the witness! qualifications acceptable?

MR. NUTTER: Yes, they are.

- (By Mr. Morris) What is it that is sought by the Application in this case?
- We are seeking authority to drill an undesignated morrow test at an unorthodox location, the proposed location being 660 from the South and 1980 feet from the East line of Section 19, Township 19 South, Range 30 East, Eddy County, New Mexico.
- Will you please refer to Exhibit 1, being the land plat in this area and point out the proposed location and the other information shown on this Exhibit?

660 from the South line, 1980 from the East line of Section 19 is in the East half of this Section, the East half of that Section being one lease. The area north and west of the orange-dashed line is an area potash leases and potash operation currently being conducted by Southwest Potash Corporation. The cross-hatched lines in red designates an area both potash leases and potash mining being conducted by Potash Company of America. The heavy-dashed line is the outline of the oil potash area set out by the New Mexico Oil Conservation Commission Order No. R-111A. MR. NUTTER: Which way is it?

The proposed location as previously stated is

To the East and to the North. The proposed location is just outside of that R-111A Order.

(By Mr. Morris) Now, you stated that the proposed location is for an undesignated morrow well. Are there any other wells that have been drilled to this particular reservoir?

Not in the immediate area. There is one well that has been drilled approximately a mile and a half to the west from the Southeast, Southeast quarter of Section 26, 1929. That log has not been released. Another test that has been drilled to that zone is approximately four

SPECIALIZING IN

miles to the North in the Southwest quarter of the Southwest quarter of Section 1, Township 19 South, 29 East. and Hilliard No. 1 (A) Leonard Stake was not found productive in this zone. Q

What was the discovery well for this particular reservoir?

The discovery is the H. L. Brown, Jr. No. 1 Yates Federal located 1980 feet from the South and East line of Section 30, 19 South, 30 East. Q

Which would be an immediate South?

Α Yes.

Immediately South of your proposed location? Q A

That's correct.

So other than the discovery well in this field, the only other well in the area that has penetrated to the morrow has been the Ashman and Hilliard Well you refer to in Section 1? A

That's right.

Q Have you had negotiations with either of the potash companies that are operating in this area concerning the drilling of additional wells in this area and have you discussed with them the possible proposed locations?

Yes, I have discussed this with both

- Generally, what was the attitude of these two potash companies with respect to further drilling?
- They want you to stay as far away from their mining operations and their lease lines as possible. They, so to speak, demand that you stay at least a half mile away from their lease lines and in conversation with Southwest Potash Corporation they very definitely want us to stay as far south of their operations in Sections 17 and 18 as we possibly can.
- Q Now, did you specifically discuss with Southwest Postash Corporation the location of a well in Section 19?
 - Α Yes, I did.
- Q And what response did you get from Southwest with respect to that proposal?
- They requested that we try to get approval for location at this location we are asking for because of their test hole No. 41 as shown there in Section 19 of this Exhibit which they say does have some mineralization.
- Did Southwest Potash Corporation indicate to you they would object to a standard location in the East half of Section 19?
 - A Yes, they did.

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Brown, Jr. "In reply to Mr. H. H. Gaston's inquiry concerning a well location in Section 19, Township 19 South, Range 30 East, Southwest Potash Corporation would prefer selection of the Southern most location, specifically 660 feet from the South line and 1980 feet from the East line. Our reason are twofold: A., This location would be furthermost from our present mine openings and projections and B., This location would be furthermost from the section would be furthermost from our potash test hole No. 41 drilled in Section 19 and mineralized to some extent. Very truly yours, R. E. Kirby."

- Q It is your desire to cooperate with Southwest Potash Corporation to the fullest possible extent?
 - A Yes, it is very definitely.
- Q Do you feel that it would be to your best interest to maintain good relations with Southwest Potash Corporation in connection with your future operations in this area?
 - A Yes.
- Q Will you please refer to Exhibit 3, being the geological plat and would you please explain the information

shown on this Exhibit and what control points you had to work from in preparing it?

This is a contour map contoured on the lower morrow sand. You have two control points, the H. L. Brown Jr. No. 1 Yates Federal in Section 30, 19 South, 30 East, the discovery well and the Ashman and Hilliard No. 1A Leonard Stake in Section 1, 19 South, 29 East which is approximately four and a half miles to the North. From this data the zone is present in both of the wells and from this data, geologically speaking, it shows normal Southeast Regional depth with not enough control to show any local structure which would be meither advantageous nor detrimental at this proposed location.

And does the right-hand side of this Exhibit show the log section in the producing area of your well in Section 30?

Yes, it's the gamma ray sonic log detailed portion of the productive zone in the morrow section showing the three perforated intervals.

Would you refer to Exhibit No. 4 and review the well data on your Yates Federal No. 1 Well that is reflected on that Exhibit?

This is H. L. Brown, Jr. No. 1 Yates Federal Α

which is 1980 feet from the South line and 1980 feet from the East line of Section 30, Township 19 South, Range 30 East, Eddy County, New Mexico. It was completed October 16, 1970. The total depth of the well is 12,115 feet. The producing interval is from the morrow sand, the top of the perforated interval 11,874 feet and the base of the perforated interval is 11,977 feet. It was potentialled for an absolute open-flow of 4607 MCF gas per day and it is currently shutin.

- Now, your perforated interval is shown more particularly on your log section back on Exhibit 3?
 - Yes, there are three zones of perforations there. A
- On the basis of information presently available to you, is there any way that you could tell at this time the extent of this reservoir?
- No, there is not. With it being productive in the Brown No. 1 Yates Federal and non-productive in the Ashman and Hilliard Well in Section 1, we would have no way of knowing the true aerial extent of the reservoir.
- Q How many feet of net pay do you estimate you have in your well in Section 30?
 - By log we have 19 feet of net producing zone. Α
 - Q Do you have any reason to believe one way or the

PECIALIZING IN; DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

other that the well at the proposed location in Section 19 would experience more or less of a pay zone?

- We have no reason to think that it would be more. We have no reason to think it would be less at this time.
- Do you have reason to believe that your proposed location in Section 19 would give you a better pay zone than a standard location in Section 19?
- No, very definitely not, simply for the reason that we do not know the aerial extent of the reservoir from this one well.
- Would you be gaining structural advantage at the proposed location compared to a standard location at Section 19?
- No, not local structural advantage. There is no local structure. The only advantage we would be gaining would be from regional dip.
- Based on these considerations, Mr. Gaston, in your opinion would approval of the unorthodox location violate correlative rights or in any way cause waste?
 - No, I see no way that it would.
- To make it clear for the record, a standard location in the East half of Section 19 would be 1980 from the South line of the Section?

- A That is correct.
- Q You've unorthodox in the sense that you have moved down to a 660 from the South line?
 - A That's correct.

MR. MORRIS: Mr. Examiner, at this time I would like to offer into evidence H. L. Brown, Jr.'s Exhibits 1 through 4.

MR. NUTTER: Mr. Brown's Exhibits 1 through 4 will be admitted into evidence.

(Whereupon, Exhibits 1 through 4 were admitted in evidence.)

MR. MORRIS: That is all I have on Direct.

MR. NUTTER: I think you have covered it pretty well. Any questions of Mr. Gaston? If not, he may be excused. Do you have anything further, Mr. Morris?

MR. MORRIS: No.

MR. NUTTER: Does anyone have anything to offer in Case 4471? If not, the Case will be taken under advisement.

STATE OF NEW MEXICO COUNTY OF BERNALILLO ;

I, SOVEIDA GONZALES, Court Reporter, in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before by me and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

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OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2008 - SANTA FE 67801 GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER ALEX J. ARMIJO MEMBER

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

December 8, 1970

Mr. Richard S. Morris Montgomery, Federici, Andrews, Hannahs & Morris Attorneys at Law Santa Fe, New Mexico	Res	Case No. 4471 Order No. R-4078 Applicant: H. L. Brown, Jr.			
Dear Sir:					
Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.					
4	A. L. PORTER, Jr. Secretary-Director				
ALP/ir					
Copy of order also sent to:					
Hobbs OCC X Artesia OCC X Astec OCC					

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. 4471 Order No. R-4078

APPLICATION OF H. L. BROWN, Jr., 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 December 2, 1970, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 8th day of December, 1970, 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, H. L. Brown, Jr., seeks authority to drill a gas well to the Morrow formation in an undesignated Morrow gas pool at an unorthodox gas well location 660 feet from the South line and 1980 feet from the East line of Section 19, Township 19 South, Range 30 East, NMPM, Eddy County, New Mexico; that the E/2 of said Section 19 would be dedicated to said well.
- (3) That the applicant seeks to locate the above-described well at a location as far removed from the oil-potash area as is feasible in order to not interfere with operations on adjoining potash leases.
- (4) That the evidence indicates that the entire E/2 of said Section 19 is productive of gas from the Morrow formation.

-2-CASE No. 4471 Order No. R-4078

- (5) That the entire E/2 of said Section 19 can be efficiently and economically drained and developed by the subject well.
- (6) That approval of the subject application will afford the applicant the opportunity to produce 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 the applicant, H. L. Brown, Jr., is hereby granted an exception to the well location requirements of Rule 104 C II of the Commission Rules and Regulations and is hereby authorized to drill a gas well to the Morrow formation in an undesignated Morrow gas pool at an unorthodox gas well location 660 feet from the South line and 1980 feet from the East line of Section 19, Township 19 South, Range 30 East, NMPM, Eddy County, New Mexico, to be dedicated to a standard unit comprising the E/2 of said Section 19.
- (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

DAVID F. CARGO, Chaile

ALEX J. ARMIJO, Member

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

DOCKET; EXAMINER HEARING - WEDNESDAY - DECEMBER 2, 1970

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:

- CASE 4436: (Continued from the October 14, 1970, Examiner Hearing) Application of El Paso Natural Gas Company for the amendment of the General Rules and Regulations governing the prorated gas pools of New Mexico and the amendment of the Special Rules and Regulations governing the Tapacito-Pictured Cliffs and Basin-Dakota Gas Pools located in Rio Arriba, San Juan, and Sandoval Counties, New Mexico. Applicant, in the above-styled cause, seeks the amendment of the General Rules and Regulations governing the prorated gas pools of Northwest and Southeast New Mexico and the Special Rules and Regulations governing the Tapacito-Pictured Cliffs and Basin-Dakota Gas Pools located in Rio Arriba, San Juan, and Sandoval Counties, to permit substantial changes in the method of classifying marginal wells, and the assignment of allowable to marginal wells governed by the aforesaid rules and regulations, as well as a substantial change in the balancing of production procedure required by said rules. Copies of the proposed amendments will be circulated by way of the Commission's general mailing list and will be available upon request made to the Commission at its Santa Fe office.
- CASE 4465: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the revision of Rule 1216 of the Commission Rules and Regulations to permit matters involving the limiting of total production of gas from a gas pool to be heard before an examiner.
- CASE 4466: Application of Reserve Oil and Gas Company for a non-standard gas proration unit and dual dedication of acreage, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas proration unit comprising the NW/4 of Section 17, Township 25 South, Range 37 East, Jalmat Gas Pool, Lea County, New Mexico, to be dually dedicated to its Woolworth "B" Well No. 1, a gas well, located 330 feet from the North line and 990 feet from the West line of said Section 17, and to Jalmat oil wells in said quarter section.
- CASE 4467: Application of Gulf Oil Corporation for commingling of production,
 Lea County, New Mexico. Applicant, in the above-styled cause, seeks
 an exception to Rules 303 and 309 of the Commission Rules and
 Regulations to commingle, prior to measurement, production from the
 Hobbs (Grayburg-San Andres) and Hobbs-Blinebry Pools on its W. D.
 Grimes NCT-B Lease in Section 33, Township 18 South, Range 38 East,
 Lea County, New Mexico. Applicant further seeks authority to commingle,
 prior to measurement, the aforesaid production with the Hobbs
 (Grayburg-San Andres) production from its W. D. Grimes NCT-A Lease
 in Section 32, said Township and Range. Allocation of production to
 each lease and pool would be on the basis of well tests.

- CASE 4468: Application of Continental Oil Company for a dual completion and water injection, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Langlie Jack Unit Well No. 16 located in Unit M, Section 21, Township 24 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of gas from the Jalmat Gas Pool and the injection of water into the Langlie-Mattix Pool for secondary recovery purposes through parallel strings of tubing.
- CASE 4469: Application of Anadarko Production Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Teas Yates Unit Area comprising 1200 acres, more or less, of Federal lands in Township 20 South, Ranges 33 and 34 East, Lea County, New Mexico.
- CASE 4470: Application of Anadarko Production Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its Teas Yates Unit Area, Teas Yates-Seven Rivers Pool, Lea County, New Mexico, by the injection of water through ten wells into the Yates formation.
- CASE 4471: Application of H. L. Brown, Jr. for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill an undesignated Morrow test well at an unorthodox gas well location 660 feet from the South line and 1980 feet from the East line of Section 19, Township 19 South, Range 30 East, Eddy County, New Mexico. The E/2 of said Section 19 would be dedicated to said well.

RED HILLS AREA

YATES FEDERAL #1

WELL DATA

LOCATION:

1980' FSL & 1980' FEL SECTION 30, T 19 S, R 30 E EDDY COUNTY, NEW MEXICO

COMPLETION DATE:

OCTOBER 16, 1970

TOTAL DEPTH:

12,115'

PRODUCING INTERVAL:

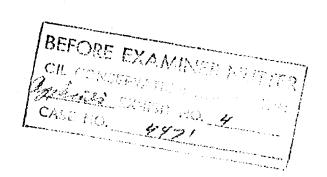
MORROW SAND 11,874' - 11,977'

POTENTIAL:

ABSOLUTE OPEN FLOW - 4607 MCF PER DAY

WELL STATUS:

SHUT IN



H. C. Brenn Ja whoetholigh garried in Elley Co proposes to ariel 12,200 morrows tok 100 660 ! FSL 1980 1866 19- 7195-16301 will delicate 1/2 of Section webser of 5/2 (Brown arous W/2 But moverships and FO deal is completely defferents) wants to dried in Which Ourstrad describer in N/V of See 19 and locales were moved in for South and par villa

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