

CASE NO. 29

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

THE PETITION OF C. N. BASSETT FOR BASSETT & BIRNEY ET AL, A MINING CO-PARTNERSHIP, FOR A WELL LOCATION IN THE NW CORNER OF THE NE $\frac{1}{4}$  OF THE SE $\frac{1}{4}$ , SECTION 11, TOWNSHIP 18S, RANGE 29E, N.M.P.M., EDDY COUNTY, CLOSER TO THE BOUNDARY LINE OF SAID 40-ACRE TRACT THAN IS PERMITTED BY THE PRESENT RULES AND REGULATIONS OF THE OIL CONSERVATION COMMISSION, WHICH SAID LOCATION IS 50 FEET EAST OF THE WEST LINE AND 330 FEET SOUTH OF THE NORTH LINE OF SAID 40-ACRE TRACT.

Pursuant to order of the Commission, duly made and entered, setting September 25, 1941, at two o'clock in the afternoon, for hearing in the above entitled matter, said hearing was convened at two o'clock, P. M., of September 25, 1941, at La Fonda, Santa Fe, New Mexico, immediately after the hearing in Case No. 30, the Commission sitting as follows:

HON. JOHN E. MILES, Governor of New Mexico, Chairman  
HON. JOHN M. KELLY, State Geologist, Secretary  
HON. H. R. ROGERS, Commissioner of Public Lands, Member  
HON. CARL B. LIVINGSTON, Chief Clerk and Legal Advisor.

APPEARANCES:

Lloyd L. Gray	Gulf Oil Corp.	Tulsa, Okla.
Ira Van Tuyl	" " "	Hobbs, N.M.
D. R. McKeithan	Phillips Pet. Co.	Bartlesville, Okla.
C. A. Daniels	" " "	Amarillo, Tex.
K. F. Quail	Bassett & Birney	Artesia, N.M.
Martin Yates III	" " "	" " "
E. M. Perry	" " "	" " "
Roy Langston	Oil Conservation Com.	Artesia, N.M.
Roy Yarbrough	" " "	
Hugh L. Sawyers	N.M. Oil & Gas Assn.	Las Cruces, N.M.
Glenn Staley	Proration Office	Hobbs, N.M.
S. R. Saunders	Gulf Refining Co.	Tulsa, Okla.
W. H. Duly	" Oil Corp.	Hobbs, N.M.
D. M. Hawkins	Phillips Pet. Co.	Odessa, Tex.
Don L. Dickason	Great Western Producers	Albuquerque, N.M.
R. O. <i>De Woody</i>	" " "	Lubbock, Tex.
William A. Sloan	" " "	Albuquerque, N.M.
O. D. Crites	Shell Oil Co.	Houston, Tex.
H. B. Hurley	Continental Oil Co.	Ft. Worth, Tex.
E. P. Keeler	" " "	Hobbs, N.M.
G. L. Tate	Magnolia Pet. Co.	Dallas, Tex.
S. P. Hannifin	" " "	Roswell, N.M.
Howard Jennings	" " "	" " "
H. J. Kenler	Shell Oil Co.	Midland, Tex.
G. H. Cord	Stanolind Oil & Gas Co.	Ft. Worth, Tex.
J. O. Seth	" " " " "	Santa Fe, N.M.
Edgar Kraus	Atlantic Rfg. Co.	Carlsbad, N.M.
A. E. Willig	The Texas Co.	Ft. Worth, Tex.

The hearing was called to order by Governor Miles, who requested Mr. Livingston to read the call of the hearing, as follows:

"The Oil Conservation Commission, by law invested with jurisdiction as the oil and gas regulatory body of the State of New Mexico, hereby gives notice of the following public hearing to be held at the Capitol, Santa Fe, New Mexico.

Case No. 29

The petition of C. N. Bassett for Bassett & Birney et al, a mining co-partnership, for a well location in the NW corner of the NE $\frac{1}{4}$  of the SE $\frac{1}{4}$ , Section 11, Township 18S, Range 29E, N.M.P.M., Eddy County, closer to the boundary line of said 40-acre tract than is permitted by the present rules and regulations of the Oil Conservation Commission, which said location is 50 feet east of the west line and 330 feet south of the north line of said 40-acre tract. This case is set for 2 o'clock P.M., September 25, 1941.

Any person having any interest in the subject of said hearing shall be entitled to be heard.

The foregoing Notice of Publication was made pursuant to the direction of the Commission at its Executive Meeting August 25, 1941.

Given under the seal of said Commission at Santa Fe, New Mexico, on August 26, 1941.

OIL CONSERVATION COMMISSION

BY (SGD) John M. Kelly  
Secretary."

BY MR. LIVINGSTON: The Commission is now ready to proceed on this case.

BY MR. KEITH F. QUAIL: If the Commission please, this petition asks for nothing more than making this location closer to the boundary line of this forty-acre tract in Section 11, Township 18 S., Range 29 E., a portion of the Loco Hills area. This forty-acre tract is the NE $\frac{1}{4}$  of the SE $\frac{1}{4}$  of said Section 11. We are asking that we be authorized to locate this well 330 feet from this line (indicating on black board map) and 50 feet out from this line, instead of the usual 330 feet location from each line.

MARTIN YATES, III,

being called as a witness on behalf of the petitioners,  
and being first duly sworn, was examined by Mr. Quail,  
and testified as follows:

DIRECT EXAMINATION

Q State your name, please.

A Martin Yates, III.

Q Are you a partner of the mining partnership known as  
Bassett & Birney?

A I am.

Q What is the business of that partnership?

A The business of the partnership is producing oil.

Q This black board map shows the location of a well in the  
SW $\frac{1}{2}$  of the NW $\frac{1}{4}$  of Sec. 12, Twp. 18 S., Range 29 E. I will  
ask you to state what you know about that well?

A That well was drilled sometime last year by the Dixon-Yates  
Oil Company, to a depth of 2705 feet. That well encountered  
salt water in the Loco Hills production zone, and was  
subsequently plugged and abandoned.

Q This map also shows a well in the SE $\frac{1}{4}$ NE $\frac{1}{4}$  of Sec. 11, Twp.  
18 S., R. 29 E. I will ask you to state what you know about  
that well?

A That is a producing oil well, drilled by Aston & Fair, and  
is producing from the loco Hills horizon.

Q What is the depth of that well?

A 2668 feet.

Q Here is another well located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$  of Sec. 11, Twp.  
18 S., Range 29 E. Tell what you know of that well.

A That well is also owned by Aston & Fair, and is a producing --  
BY GOVERNOR MILES: That is in the SW $\frac{1}{4}$  NE $\frac{1}{4}$ .

A The SW $\frac{1}{4}$  NE $\frac{1}{4}$ . That well was drilled to a total depth of  
2653 feet.

Q The map shows a location in the NWP SE $\frac{1}{4}$  of Sec. 11, Twp.  
18 S., Range 29 E. Tell the Commission what you know in  
regard to that well.

Q

A That well was drilled by Bassett & Birney, et al, and it is a gas well. It encountered the top of the gas sand at 2610 feet, and was drilled to a total depth of 2650 feet, with a capacity of 7,000,000 cubic feet, gas.

Q Bassett & Birney drilled that well?

A Yes, sir, and produced a gasser out of the Loco Hills oil strata.

Q On what is commonly known as an institutional state lease?

A It is.

Q This partnership alleges it desires to make a location at approximately this point (indicating on black board). Will you state to the Commission why you wish to make a location there?

A The well on the SW $\frac{1}{4}$ NW $\frac{1}{4}$  of Sec. 12 is a water well, which encountered salt water in the oil producing strata. That well is approximately -- a little over a quarter of a mile from our proposed location, and a quarter of a mile from the Bassett & Birney well in the NW $\frac{1}{4}$ SE $\frac{1}{4}$ . The Continental and Yates drilled a water well in the NWPSW $\frac{1}{4}$ , which is a quarter of a mile west of our gas well. We feel the regional dip in that area is to the east. If we made this quarter of a mile location we would be in danger of encountering water instead of oil in the Loco Hills strata.

Q Have you had a survey made?

A Yes, we had a geochemical survey made of the area around the gas well, our proposed location, and the other well offsets, by the Geochemical Service Corporation, of Tulsa, Oklahoma, and by that survey we were advised to drill a well as close as we could to the gas well.

Q I hand you this instrument, and ask you what it is?

A This is the geochemical soil analysis made by the Geochemical Service Corporation of Tulsa.

Q This is the report to which you referred, is it?

A That is right.

BY MR. QUAIL: It is offered in evidence.

(Marked "B. & B. Ex. No. 1).

BASSETT & BIRNEY EXHIBIT NO. 1

"July 26, 1941

Bassett & Birney  
c/o Harvey E. Yates  
Artesia, New Mexico

Gentlemen:

Herewith is a reconnaissance geochemical map and report covering portions of Sections 11 and 12-T18S-R29E-Loco Hills Area-Eddy County, New Mexico.

We trust this report meets your approval and serves the purpose for which it is intended.

Very truly yours,

GEOCHEMICAL SERVICE CORPORATION

(SGD) John W. Merritt

President

(John W. Merritt)  
JWM/bc

RECONNAISSANCE

GEOCHEMICAL REPORT

FOR

BASSETT & BIRNEY

PORTIONS OF SECTIONS 11 AND 12-T18S-R29E

LOCO HILLS AREA, EDDY COUNTY, NEW MEXICO

GEOCHEMICAL SERVICE CORPORATION

Tulsa

Oklahoma

July 26, 1941

RECONNAISSANCE GEOCHEMICAL REPORT

FOR

BASSETT & BIRNEY

PURPOSE OF THE REPORT

Twelve soil samples covering the area between two oil wells, a gas well and a dry hole in Sections 11 and 12-T18S-R29E, Eddy County, New Mexico were sent to Geochemical Service Corporation in order to determine what locations might be made for local sand production in the N/2 of the SE/4 of Section 11. Sufficient samples, to advise regarding the entire 80 acres were not taken, but those sent enable us to advise regarding three or four possible locations.

### METHODS OF WORK

In geochemical (soil analysis) mapping, it has been observed that hydrocarbon values are found high at the margin of production in such a way as to form a band of high values sometimes called a halo surrounding the producing area. Sometimes production will reach into this band and sometimes it will stop just short of it. The halo band may be wide or it may be narrow, depending upon the nature of the production. Sometimes the band may be less than 500 feet wide; at other times it may reach one-fourth, one-half mile or more in width. In order to obtain a clear picture of a producing area, obviously the work should be carried on in detail until the entire area is surrounded and mapped.

The values over production as well as the values in a dry spot are lower than those within the halo band so that without the halo pattern it is difficult to distinguish between dry and producing areas unless other information is available to tell which side of a fractional halo band is the productive side. Fortunately, in this case the record of wells gives us that information.

### RESULTS OF ANALYSES

The attached chemomap shows the hydrocarbon values in PPB (parts per billion) together with the location of each of the analyses. It will be observed that the dry hole has a value of one and the samples taken at the oil and gas wells range in value from one to seven. Two high value points were found. In the northeast corner of the SE/4 of Section 11 a value of 150 PPB occurs and northwest of it a value of 22 PPB is found. These two points would appear to be on a halo band which must separate production to the west from the dry hole in Section 12. This halo band is sketched in between the wells in Section 11 and the dry hole in Section 1w, but no sample was taken at that point to substantiate this interpretation.

RECOMMENDATIONS

It would appear from the present work that the northeast corner location of the N/2 of the SE/4 of Section 11 would lie in the halo band and should be an unfavorable location for an oil or gas well. The location west of that would be marginal but probably should produce. The location west of the latter should be a productive location. The location with the value of seven in the southwest corner of the NE/4 of the SE/4 of Section 11 should produce though it is not certain which direction the halo band takes from the point at which we register 150 PPB.

Respectfully submitted,

GEOCHEMICAL SERVICE CORPORATION

(John W. Merritt)

(SGD) John W. Merritt

bc  
7/26/41

President"

(Map attached to original exhibit)

- Q Will you indicate on the map just exactly what that report shows with reference to the halo which runs through that area?
- A That runs something like this (illustrating); that is the halo area.
- Q This is the area in which you are advised to drill?
- A That is right.
- Q The report recommends you put that as far away as possible from this halo?
- A That is right.
- Q It is true that the only tract affected by this location is this tract owned by the Bassett & Birney partnership?
- A That is right.
- Q Did you contact any of the offset owners?
- A The Dixon Oil Company and Aston & Fair, who own all the offsets to this particular well.
- Q Did they have any objection to this well?
- A They did not.
- Q Did they execute any instrument?

A Dixon & Yates and Aston & Fair executed waivers.

BY MR. QUAIL: We realize these operators would not be affected, but as a matter of courtesy we did obtain waivers, and we would like to introduce them in evidence.

Q I hand you an instrument, and ask you to state what it is.

A That is the waiver executed by Aston & Fair

BY MR. QUAIL: If there is no objection, we will introduce that in evidence. (Marked B . & B. Ex. No. 2)

BASSETT & BIRNEY EXHIBIT NO. 2

"BEFORE THE OIL CONSERVATION  
COMMISSION OF THE STATE  
OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF BASSETT & BIRNEY  
ET AL, A MINING PARTNERSHIP, FOR A CLOSER SPACING  
PERMIT THAN IS AT PRESENT PERMITTED BY THE RULES OF  
THE COMMISSION.

WAIVER AND ANSWER

TO THE HONORABLE OIL CONSERVATION COMMISSION, STATE OF  
NEW MEXICO:

Comes now Bert Aston and R. W. Fair and hereby accept service of a copy of the Petition of Bassett & Birney et al, a mining partnership, in this cause and do further enter their general appearance herein.

The said Bert Aston and R. W. Fair further state that they do hereby give their consent and do expressly waive any objection to the location requested in the Petition of the said Bassett & Birney et al, a mining partnership, filed in this cause, and do hereby expressly consent to the entrance of the order requested by said petitioner at a hearing held at any time without further notice.

(Sgd) Bert Aston

(Sgd) R. W. Fair

STATE OF NEW MEXICO    |  
                          | : ss  
COUNTY OF EDDY        |

Bert Aston, being first duly sworn, deposes and says: That he has read the foregoing Waiver and Answer; that he knows the contents thereof; and that the statements contained therein are true and correct.

(Sgd) Bert Aston

ILLEGIBLE

Subscribed and sworn to before me this 10 day of  
September, A. D. 1941.

(Sgd) Chas. A. Aston  
(SEAL) Notary Public  
My commission expires: 11-27-43"

STATE OF TEXAS    ( )  
                          :  
COUNTY OF        ( )

R. W. Fair, being first duly sworn, deposes and says:  
that he has read the foregoing Waiver and Answer; that he  
knows the contents thereof; and that the statements contain-  
ed therein are true and correct.

(Sgd) R. W. Fair

Subscribed and sworn to before me this \_\_\_\_ day of  
September, A. D., 1941.

(Sgd) Sam Bright  
(SEAL) Notary Public  
My commission Expires: May 3, 1943."

Q Look at this instrument and state what it is.

A This is the waiver executed by Dixon & Yates Oil Company.

BY MR. QUAIL: If there is no objection, we desire to introduce  
this waiver in evidence. (Marked B. & B. Ex. No. 3)

BASSETT & BIRNEY EXHIBIT NO. 3

"BEFORE THE OIL CONSERVATION  
COMMISSION OF THE STATE  
OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF BASSETT &  
BIRNEY ET AL, A MINING PARTNERSHIP, FOR A CLOSER  
SPACING PERMIT THAN IS AT PRESENT PERMITTED BY  
THE RULES OF THE COMMISSION

WAIVER AND ANSWER

TO THE HONORABLE OIL CONSERVATION COMMISSION, STATE OF NEW  
MEXICO:

Comes now Martin Yates, Jr., Mary E. Yates, Ira C.  
Dixon, William Dooley and Martin Yates, III, composing a  
partnership doing business under the name of Dixon & Yates  
Oil Company, and hereby accept service of a copy of the  
Petition of Bassett & Birney et al, a mining partnership,  
in this cause and do further enter their general appearance  
therein.

The said Martin Yates, Jr., Mary E. Yates, Ira C.  
Dixon, William Dooley and Martin Yates, III, composing a  
partnership doing business under the name of Dixon & Yates  
Oil Company, further state that they do hereby give their

consent and do expressly waive any objection to the location requested in the Petition of the said Bassett & Birney et al, a mining partnership, filed in this cause, and do hereby expressly consent to the entrance of the order requested by said petitioner at a hearing held at any time without further notice.

(Sgd) Martin Yates, Jr.

(Sgd) Mary E. Yates

(Sgd) Ira Dixon

(Sgd) William Dooley

(Sgd) Martin Yates III

STATE OF NEW MEXICO §  
:  
COUNTY OF EDDY §

Martin Yates, Jr., Mary E. Yates, Ira C. Dixon, William Dooley and Martin Yates, III, composing a partnership doing business under the name of Dixon & Yates Oil Company, being first duly sworn, depose and say: That they have read the foregoing Waiver and Answer; that they know the contents thereof; and that the statements therein contained are true and correct.

(Sgd) Martin Yates, Jr.

(Sgd) Mary E. Yates

(Sgd) Ira C. Dixon

(Sgd) William Dooley

(Sgd) Martin Yates III

Subscribed and sworn to before me this 8th day of September, A. D. 1941.

(Sgd) Beth King  
Notary Public

(SEAL)  
My commission expires: Jan. 10, 1942."

Q One more question: This tract upon which you propose to make this location is an institutional state lease?

A It is.

Q If you do bring in a well, the state will receive its 1/8th royalty?

BY MR. KELLY: Are all of these forty acre tracts on the same lease?

A I am not sure about that, but they are all on the same basic lease.

BY MR. KELLY: Does anybody have any objection to this location?

(No answer)

Witness dismissed.

BY MR. QUAIL: The report I introduced in evidence, when the Commission has read it, we would like to have it returned.

BY MR. KELLY: It will have to be photostatted and be put in the record, then you can have it.

The Commission acts favorably on the request, and you will received a signed order before you leave.

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C E R T I F I C A T E

I hereby certify that the foregoing and attached ten pages of typewritten matter are a true, correct and complete transcript of the shorthand notes taken by me, and the exhibits offered in evidence, with the exception of the map attached to original B. & B. Exhibit No. 1, in Case No. 29, before the Oil Conservation Commission of New Mexico on the 25th day of September, 1941, and by me extended into typewriting.

Witness my hand this 29th day of September, 1941.

*Esther Barton*