

CASE 345: Cone, Varkham & Redfern applica-  
tion for dual completion Eubanks No. 2 well  
NW SW 14-21S-37E  
(Oil - gas)

Case No.

345

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Application, Transcript,  
Small Exhibits, Etc.

OIL CONSERVATION COMMISSION

P. O. BOX 871  
SANTA FE, NEW MEXICO

April 23, 1952

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P  
Y

CONE, MARKHAM AND REDFERN  
First National Building  
Lubbock, Texas

Gentlemen:

We attach for your records signed copies of orders as follows:

Order R-137 in Case 344  
Order R-138 in Case 345

These were signed by the Commission on April 11, 1952.

Very truly yours,

W. B. Macey  
Chief Engineer

WBM:mr

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. 345  
ORDER NO. R-138

THE MATTER OF THE APPLICATION OF  
CONE, MARKHAM AND REDFERN FOR AN  
ORDER GRANTING PERMISSION TO DUALY  
COMPLETE AND PRODUCE THEIR EUBANKS  
NO. 2 WELL, DRINKARD POOL, LOCATED  
IN NW/4 SW/4 SECTION 14, TOWNSHIP 21 S,  
RANGE 37 E, NMPM, LEA COUNTY, NEW  
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on March 20, 1952, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this <sup>24</sup>// day of April, 1952, the Commission, a quorum being present, having considered the records and the testimony adduced, and being fully advised in the premises,

FINDS:

(1) That due notice having been given as required by law, the Commission has jurisdiction of this case and the persons and subject matter thereof.

(2) That applicant's Eubanks No. 2 well, Nw SW 14-21S-37E, NMPM, was completed in May 1949, as an oil well in the Drinkard pay, bottomed at 6622 feet, and produced from the 6567-6622 interval, having drilled through the Tubb gas zone, 6100-6230.

(3) That although recent experiments tend to show that mechanical packers and other devices are ordinarily available for successful dual or multiple completions of oil and gas wells, the Commission is unconvinced of the soundness of such dual-multiple completions as a general practice in New Mexico without specific controls over each such project.

IT IS THEREFORE ORDERED:

That the applicant herein, Cone, Markham and Redfern, be and it hereby is authorized to dually complete and produce its Eubanks No. 2 well, located in NW/4 SW/4 Section 14, Township 21 S, Range 37 E, NMPM, Lea County, New Mexico, in such a manner that gas from the Tubb formation may be produced through the annular space between the casing and tubing, and oil from the Drinkard formation through the tubing by proper perforations and packer installations.

Case No. 345  
Order No. R-138

PROVIDED, HOWEVER, That subject well shall be completed, and thereafter produced, in such a manner that there will be no commingling within the well bore, either within or outside the casing, of gas, oil and gas, or oil produced from either or both of the separate strata, and,

PROVIDED FURTHER, That said subject well for dual completion and production shall be equipped in such a way that reservoir pressures may be determined separately for each of the two specified strata, and further, be equipped with all necessary connections required to permit recording meters to be installed and used at any time, as may be required by the Commission or its representatives, in order that natural gas, oil, or oil and gas from each separate stratum may be accurately measured and the gas-oil ratio thereof determined, and,

PROVIDED FURTHER, That the operator applicant shall make any and all tests, including segregation tests, but not excluding other tests and/or determinations at any convenient time and in such manner as deemed necessary by the Commission; the original and all subsequent tests shall be witnessed by representatives of the Commission and by representatives of offset operators, if any there be, at their election, and the results of each test properly attested to by the applicant herein and all witnesses, and shall be filed with the Commission within ten (10) days after the completion of such test, and,

PROVIDED FURTHER, That upon the actual dual completion of such subject well, applicant shall submit to the Commission a diagrammatic sketch of the mechanical installation which was actually used to complete and produce the seal between the strata, and a special report of production, gas/oil ratio and reservoir pressure determination of each producing zone or stratum immediately following completion.

IT IS FURTHER ORDERED, That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after proper notice and hearing, the Commission may terminate the authority hereby granted and require applicant or its successors and assignees to limit its activities to regular single-zone production in the interests of conservation.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION



EDWIN L. MECHEM, Chairman



GUY SHEPARD, Member



R. R. SPURRIER, Secretary

S E A L

January 28, 1952

IN THE MATTER OF THE APPLICATION  
OF MARKHAM-CONE AND REDFERN FOR  
AN ORDER GRANTING PERMISSION TO  
DUALY COMPLETE AND PRODUCE THEIR  
EUBANKS NO. 2 WELL, DRINKARD POOL,  
LOCATED IN NW/4 SW/4 SECTION 14,  
TOWNSHIP 21 SOUTH, RANGE 37 EAST,  
NMPM, LEA COUNTY, NEW MEXICO

APPLICATION

COMES NOW, Markham-Cone and Redfern, individuals, operating in the State of New Mexico from a field office in Hobbs, New Mexico, and respectfully represent to the OIL CONSERVATION COMMISSION of the State of New Mexico; that they have completed their Eubanks No. 2 well, located in the center of the NW/4 SW/4 Section 14, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico; that the aforesaid well presently is producing from the Drinkard formation from the open hole interval 6567 feet to total depth 6622 feet; and, that the well is equipped with 5 $\frac{1}{2}$ -inch casing cemented at 6567 feet and with 2-inch tubing hung at 6562 feet.

Applicants further represent that a high pressure gas zone exists in the Tubb zone of the middle Clear Fork at an approximate depth of 6100 feet in Eubanks No. 2 as evidenced by the following; (1) a drill stem test in Shell Oil Company State No. 4 in the SE/4 NE/4 Section 15, Township 21 South, Range 37 East which yielded a gas flow at the rate of 1,600 MCF per day from the interval 6071 to 6318 feet; and, (2) a drill stem test in Ohio Oil Company Warlick "C" No. 8 in the NE/4 SE/4 Section 15, Township 21 South, Range 37 East, which yielded a gas flow at the rate of 412 MCF per day from the interval 6099 to 6250 feet.

Applicants further represent that it is practical and economically feasible to dualy complete their Eubanks No. 2 to produce oil from the Drinkard formation through the tubing and gas from the Tubb zone through the tubing-casing annulus with proper packer and wellhead connections.

WHEREFORE, applicants respectfully request that permission be granted to recomplete said well so as to produce oil from the Drinkard formation and gas from the Tubb zone of the middle Clear Fork.

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Continued: Application of Markham-Cone and Redfern  
for permission to dually complete their  
Eubanks No. 2, Drinkard Pool

Attached hereto are (1) a plat showing the  
location of the well proposed for dual completion with  
respect to other wells in the vicinity, and (2) a dia-  
gram showing the electrical log characteristics of the  
Tubb and Drinkard pays and the proposed method of dual com-  
pletion. Copies of this application together with plat  
and diagram have been furnished to all offset operators.

DONE at Hobbs, New Mexico on this the 28th  
day of January, 1952.

Respectfully submitted,

Markham-Cone and Redfern

By: L. O. Storm  
L. O. Storm, Agent

Attachments (2)

Copies with attachments to:

New Mexico Oil Conservation Commission  
Hobbs, New Mexico

C. G. Staley  
Hobbs, New Mexico

The Ohio Oil Company  
Hobbs, New Mexico

Argo Oil Corporation  
Midland, Texas

Shell Oil Company  
Hobbs, New Mexico

Gulf Oil Corporation  
Hobbs, New Mexico

Sinclair Oil and Gas Co.  
Midland, Texas

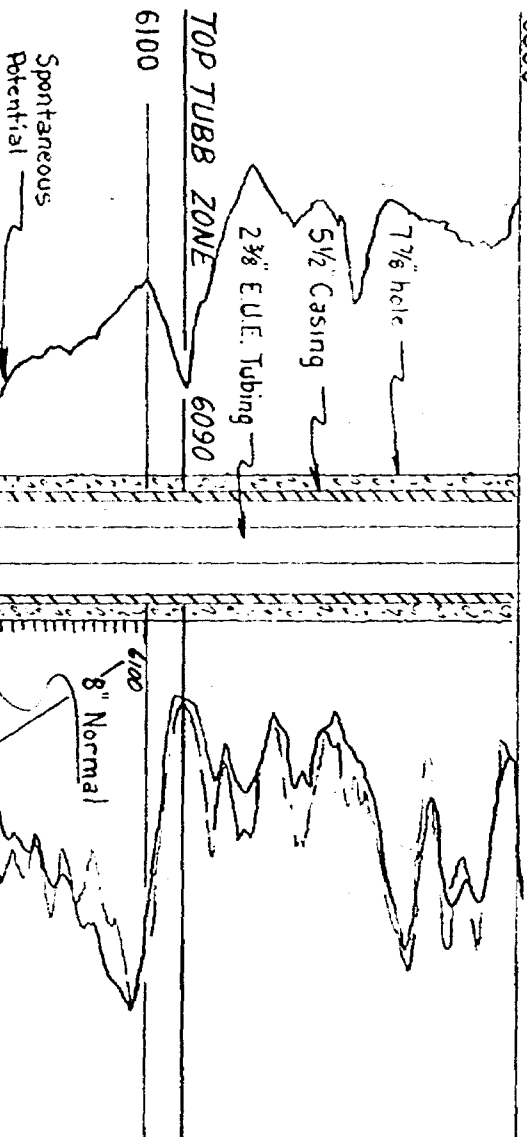
E. F. Moran, Inc.  
Hobbs, New Mexico

Tide Water Associated Oil Co.  
Midland, Texas

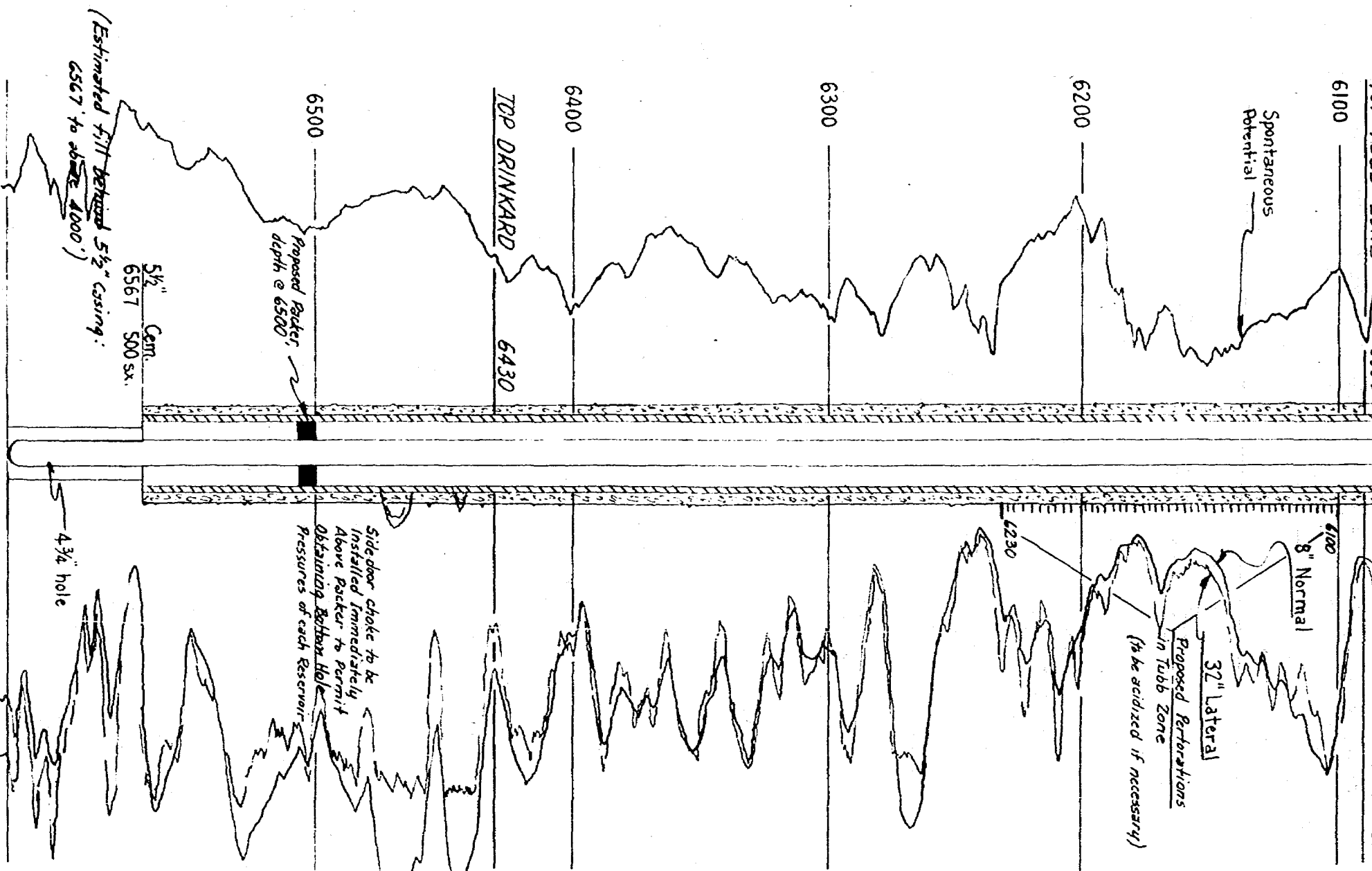
Markham, Cone & Redfern  
Eubanks No. 2  
1980 FSL & 660 FWL  
Sec. 14, T-21-S, R-37-E, N.M.P.M.

Plat show proposed method of Dual Completion  
In Drinkard Oil & Tubb Gas Reservoirs.

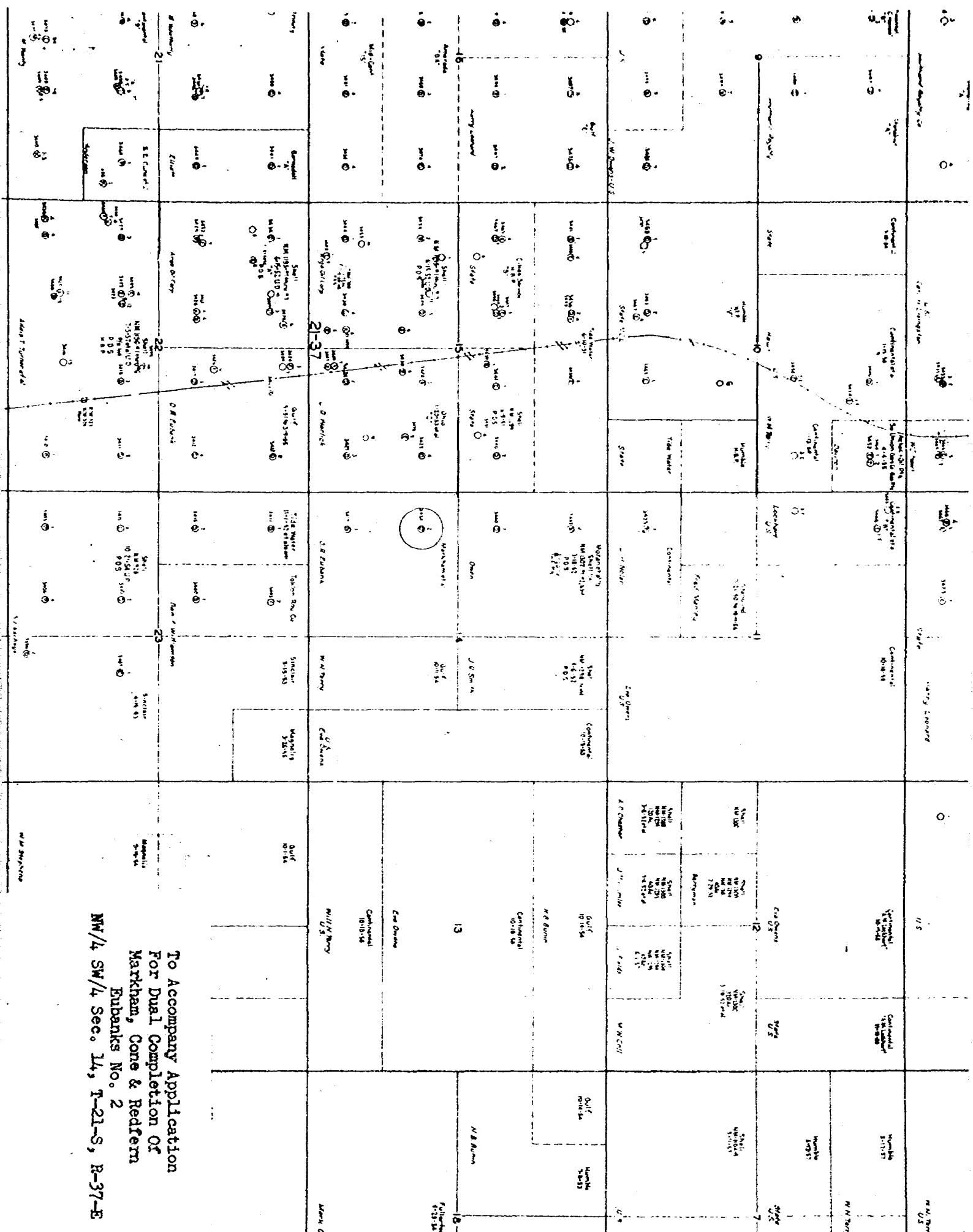
6000 Elev. 3422 D.F.







Note: This Well Has Been Producing From  
 Drinkard Oil Reservoir Since May 1949



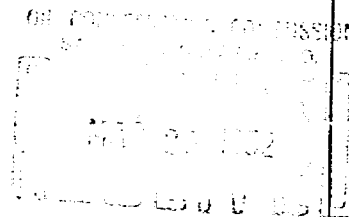
To Accompany Application  
For Dual Completion Of  
Martham, Cone & Redfern  
Eubanks No. 2  
NW/4 SW/4 Sec. 14, T-21-S, R-37-E

BEFORE THE  
OIL CONSERVATION COMMISSION  
STATE OF NEW MEXICO

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In the Matter of the appli-  
cation of Cone, Markham &  
Redfern for dual completion  
of Eubanks No. 2 well, NWSW  
Sec. 14-21S-37E.

No. 345

TRANSCRIPT OF HEARING  
March 20, 1952



E. E. GREESON  
ADA DEARNLEY  
COURT REPORTERS  
BOX 1302  
PHONES 5-9422 AND 5-9546  
ALBUQUERQUE, NEW MEXICO

(Mr. Graham reads the notice of publication.)

(Mr. L. O. Storm sworn.)

MR. STORM: In this application, Cone, Markham & Redfern request of the Commission permission to dually complete their Eubanks No. 2 well, located on the same lease as the No. 1, but No. 2 to be dually completed as a Drinkard oil well and Tubb gas well. As in the case of the No. 1, we filed with the Commission plats giving the geographic position of the well and our schematic diagram showing electric log characteristics of the pay zones, and casing information, and dual completion packer information, as well as the zone to be perforated. The mechanics of completion and of testing for adequate segregation we anticipate will be almost identical as in the case of dually completing well No. 1. I might point out that the Cone, Markham & Redfern lease comprises approximately 160 acres, and we anticipate opening only one gas zone in each well to give 160-acre spacing for the Blinebry and 160-acre spacing for the Tubb.

Any questions?

MR. SPURRIER: Does anyone have a question of the witness.

MR. MACEY: You are going to install the same type of packer?

MR. STORM: We anticipate the same type of equipment.

MR. SPURRIER: Any further questions?

MR. GRAHAM: The testimony you gave in the prior case as

to the generalities would obtain in this case also?

MR. STORM: Yes, sir.

MR. SPURRIER: If there are no further questions -- Mr. Blymn.

MR. BLYMN: That side-door choke you expect to put in there. You normally expect to produce that with a blind bean, I presume?

MR. STORM: Yes, sir.

MR. BLYMN: And in the event it is necessary to lift the Drinkard oil, to lift this Drinkard with this Blinebry or Tubb gas?

MR. STORM: That is possible. We aren't yet faced with that.

MR. BLYMN: But that was the purpose of the side-door choke?

MR. STORM: No, sir. We consider both Tubb and Blinebry as producable accumulations. It is a little doubtful if they are economic from the standpoint of drilling individual holes to exploit them. That is the reason we ask for the dual completions.

MR. BLYMN: But what is the reason for the side-door choke?

MR. STORM: To permit obtaining individual zone pressures.

MR. SPURRIER: For testing purposes in other words?

MR. STORM: Yes, sir. To aid in determining if there is communication across the packer assembly in the hole

MR. BLYMN: You need a blind bean in there for that purpose?

MR. STORM: For production purposes. But if you wanted to obtain bottomhole pressure of the upper zone on dual completion, you would pull the blind bean and install a bean table on the bottom, and exclude the Drinkard zone, and exclude the upper zone, in the case of well No. 1 the Blinebry, and the Tubb in case of No. 2. The side-door choke assembly is always necessary to assist in completion of the well to flush your fluids out of the hole that are used to keep the well under control while the packer equipment is being installed. After the well is swabbed in, then the blind bean is installed to obtain segregation in the well bore between the two pays.

MR. BLYMN: Thank you.

MR. SPURRIER: Any further questions of the witness? If not, the witness may be excused, and the case will be taken under advisement.

STATE OF NEW MEXICO  
COUNTY OF BERNALILLO

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I HEREBY CERTIFY That the foregoing transcript is a true record of the matters therein contained.

DONE at Albuquerque, N. M., March 20, 1952.

E. G. Julian  
Notary Public

My Commission Expires: 8-4-52