

Case No.

451

Application, Transcript,  
Small Exhibits, Etc.

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. 451  
ORDER NO. R-245

THE APPLICATION OF HUMBLE OIL  
AND REFINING COMPANY FOR AN  
ORDER GRANTING PERMISSION TO  
DUALLY COMPLETE AND PRODUCE  
ITS F. F. HARDISON "B", WELL NO. 6,  
LOCATED IN THE NW/4 SE/4 SECTION 27,  
TOWNSHIP 21 SOUTH, RANGE 37 EAST,  
NMPM, LEA COUNTY, NEW MEXICO,  
IN THE DRINKARD POOL.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a. m. on December 16, 1952, at Santa Fe, New Mexico, before the Oil Conservation Commission, hereinafter referred to as the "Commission".

NOW, on this <sup>1</sup>/<sub>5</sub> day of January, 1953, 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 the case and the persons and subject matter thereof.

(2) That Applicant's F. F. Hardison "B" Well No. 6, NW/4 SE/4, Section 27, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, was completed in November, 1946, as an oil well producing from the Drinkard formation through casing perforations 6440'-6573', having drilled through the Blinbry gas zone 5485'-5650', and that the well is presently producing from perforations 6517'-6573', the upper perforations 6440'-6495', having been isolated by the use of a packer.

(3) That although recent experiments tend to show that mechanical packers and other devices are ordinarily available for successful dual/multiple completions of oil - gas wells, the Commission is unconvinced of the soundness as a waste-prevention practice, 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, Humble Oil and Refining Company, be, and it hereby is authorized to dually complete and produce its F. F. Hardison "B", Well No. 6, NW/4 SE/4 Section 27, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner that gas from the Blinbry formation may be produced through the annular space between the casing and the tubing and oil from the Drinkard formation through the tubing by proper perforations and the installation of a proper packer or packers.

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,

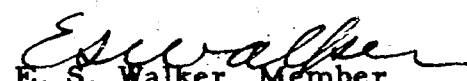
PROVIDED FURTHER, That upon the actual dual completion of such subject well, applicant shall submit to the Commission a diagrammatic sketch of the mechanical installation which was actually used to complete and produce the seal between the strata, and a special report of production, gas/oil ratio and 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 assigns 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

  
E. S. Walker, Member

  
R. R. Spurrier, Secretary

Midland, Texas  
November 6, 1952

Ex 1  
Case 451

Case 451

File: 6-1  
Re: Application to Dually Com-  
plete Humble F. F. Hardison  
B-6, Drinkard Pool, Lea  
County, New Mexico

Oil Conservation Commission  
State of New Mexico  
Santa Fe, New Mexico

Gentlemen:

By means of this application, Humble Oil & Refining Company wishes to state the following:

- (a) Humble Oil & Refining Company F. F. Hardison B-6, located in NW/4 of SE/4, Section 27, T21S, R37E, Lea County, was completed November 23, 1946 at a total depth of 6580 feet. The 5-1/2-inch OD production string of casing was set at 6579 feet.
- (b) Exhibit A, attached, is a plat showing the location of subject well, other wells on the subject lease and all offset wells.
- (c) The subject well was completed as an oil well from the Drinkard pay producing through casing perforations from 6517 to 6573 feet. Exhibit B, attached, is a schematic diagram of the current completion status of the subject well.
- (d) The applicant proposes to dually complete the well to continue to produce oil from the Drinkard pay through the tubing and gas from the Blinebry pay through the tubing-casing annulus in the following manner.
  - (1) Squeeze off or otherwise repair the present casing perforations from 6440 to 6468 and 6486 to 6495 feet.
  - (2) Perforate the 5-1/2-inch casing within the approximate interval of 5485 to 5650 feet opposite the Blinebry pay.
  - (3) Set a production type packer below the above casing perforations at approximately 5700 feet to separate the two pay zones.

The manner and method of the dual completion is shown in Exhibit C, attached.

- (e) Granting of this application for permission to produce the well as a dual completion with oil from the Drinkard and gas from the Blinebry is in the interest of conservation and protection of correlative rights.

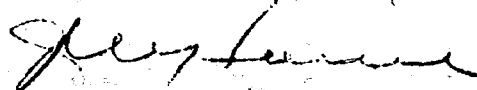
Oil Conservation Commission  
State of New Mexico  
November 6, 1952  
Page 2

- (f) The applicant will comply with all rules and regulations of the New Mexico Oil Conservation Commission to maintain separation of production from the two pay zones.
- (g) The manner and method of the proposed dual completion is mechanically feasible and practical.

Therefore, Humble Oil & Refining Company requests that the New Mexico Oil Conservation Commission set a certain day upon which this application may be heard and after said hearing to grant permission in order that the applicant may dually complete the subject well as proposed in this application.

Respectfully Submitted,

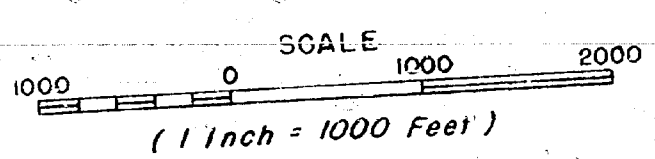
HUMBLE OIL & REFINING COMPANY



J. W. HOUSE  
Division Superintendent

JEG/jl

- Encl. Exhibit A - Plat showing the location of subject well, other wells on the lease and all offset wells.
- Exhibit B - Schematic Diagram of the Current Completion of Humble New Mexico F. F. Hardison B-6.
- Exhibit C - Schematic Diagram showing manner and method of proposed dual completion of subject well.
- Exhibit D - Radioactive Log of Humble New Mexico F. F. Hardison B-6.



Stanford  
 O. A. 3-8  
 Case 451  
 Mark Owen

Mark Owen

F.F. HARDISON et al "B" Lse. No. 52267  
 S.E. 1/4 SEC. 27 & N.E. 1/4 SEC. 34 T21S-R37E LEA CO., N.M.

HUMBLE OIL & REFINING COMPANY  
 CIVIL ENGINEERING DEPARTMENT  
 MIDLAND, TEXAS

DRAWN <u>D.L. MCKIBBIN</u>	SCALE <u>1" = 1000'</u>	FILE NO. <b>WT-A 436</b>
CHECKED _____	DATE <u>1-3-46</u>	
APPR. _____	REVISED <u>12-3-48 D.L.M.</u>	

EXHIBIT B - SCHEMATIC DIAGRAM OF CURRENT  
COMPLETION STATUS - HUMBLE F.F. HARDISON B-6

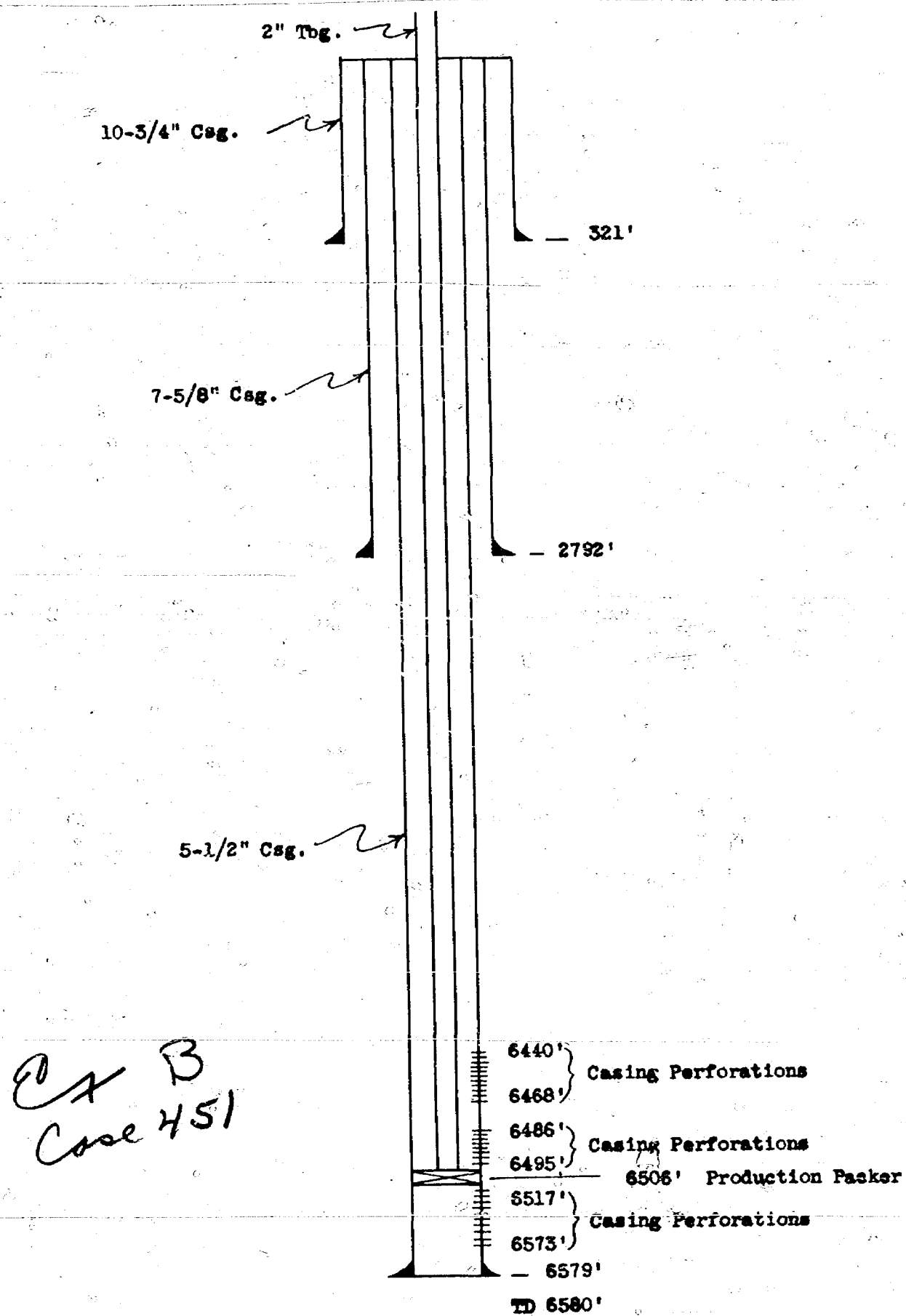


EXHIBIT C: SCHEMATIC DIAGRAM OF PROPOSED  
DUAL COMPLETION - HUMBLE - F. F. HARDISON B-6

