

Case No.

454

Application, Transcript,
Small Exhibits, Etc.

CASE 454: Humble Oil & Refg. Co. dual com-
pletion State's Well No. 12, NE NE 2-22S-
37E (Drinkard Pool)

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. 456
ORDER NO. R-250

THE APPLICATION OF HUMBLE OIL AND
REFINING COMPANY FOR AN ORDER
GRANTING PERMISSION TO DUALY
COMPLETE AND PRODUCE ITS STATE "S"
WELL NO. 12, LOCATED IN THE NE/4 NE/4,
SECTION 2, TOWNSHIP 22 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 ¹⁵/₁₆ 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 State "S", Well No. 12, NE/4 NE/4, Section 2, Township 22 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 6427'-6530', having drilled through the Blinebry gas zone 5515'-5650'.

(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 dualy complete and produce its State "S", Well No. 12, NE/4 NE/4, Section 2, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner that gas from the Blinebry 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
Edwin L. Mechem, Chairman

E. S. Walker
E. S. Walker, Member

R. R. Spurrier
R. R. Spurrier, Secretary

CASE 456

HUMBLE NEW MEXICO STATE S-12, DRINKARD POOL, LEA COUNTY, NEW MEXICO

Case 456 is concerned with the application dated November 7, 1952, of Humble Oil & Refining Company to dually complete their New Mexico State S-12, located in the Drinkard Pool, Lea County, New Mexico.

This well is located in the NE/4 of NE/4 of Section 2, T-22-S, R-37-E. Its location with reference to other wells on the same lease and to wells of operators who offset this lease is shown on the Plat, Exhibit A.

It was completed November 28, 1946 at a total depth of 6540 feet. It is currently produced through casing perforations 6427 to 6447, 6460 to 6490, 6500 to 6510 and 6522 to 6530 feet. Our geological information indicates that the Drinkard Pool produces from the lower Clear Fork formation. Exhibit B is a schematic diagram of current completion status of this well.

It is proposed to dually complete this well in such a way as to continue to produce oil from the Drinkard pool through tubing and to produce gas from the Blineby pay through the tubing-casing annulus. Our geological information indicates that the Blineby pay occurs in the upper Clear Fork formation. To accomplish this purpose, the 5 1/2-inch casing will be perforated within the approximate interval from 5515 to 5530 feet. A production type packer will be set at approximately 5700 feet and between the Blineby and Drinkard perforated interval. A schematic diagram of the proposed dual completion is shown in Exhibit C.

Exhibit D is a radioactive log of Humble's New Mexico State S-12.

We offer Exhibits A, B, C, and D, for identification as Exhibits in this case.

It is my opinion that the proposed dual completion is mechanically feasible and practical with conventional equipment designed for this purpose.

It is my opinion that the granting of this application for dual completion with oil from the Drinkard and gas from the Blineby is in the interest of conservation and protection of correlative rights.

The applicant is acquainted with and will comply with all rules and regulations of the New Mexico Conservation Commission relative to maintaining separation of production from the two-pay horizons.

A market arrangement has been made to sell this gas.

Midland, Texas
November 7, 1952

File: 6-1
Re: Application to Dually Com-
plete Humble New Mexico
State S-12, Drinkard Pool,
Lea County, New Mexico

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

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

- (a) Humble Oil & Refining Company New Mexico State S-12, located in the NE/4 of NE/4, Section 2, T22S, R37E, Lea County, was completed November 28, 1946 at a total depth of 6540 feet. The 5-1/2-inch OD production casing was set and cemented at 6536 feet.
- (b) Exhibit A, attached, shows 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 producing from the Drinkard pay through casing perforations from 6427 to 6447 feet, 6460 to 6490 feet, 6500 to 6510 feet and 6522 to 6530 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 produce oil from the Drinkard pay through the tubing and gas from the Blinbry formation through the tubing-casing annulus in the following manner:
 - (1) Perforate the 5-1/2-inch casing within the approximate interval between 5515 and 5650 feet opposite the Blinbry gas pay.
 - (2) Set a production type packer below the above perforations at approximately 5700 feet to separate the two producing zones.

The manner and method of the dual completion is shown in the schematic diagram as Exhibit C.

- (e) Granting of this application for permission to produce the subject well as a dual completion as proposed is in the interest of conservation and protection of correlative rights.
- (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.

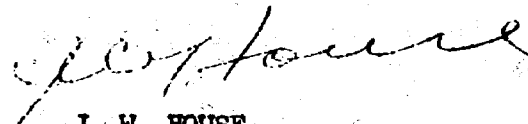
Oil Conservation Commission
State of New Mexico
November 7, 1952
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- (g) The manner and method of the proposed dual completion is mechanically feasible and practical.

Therefore, Humble Oil and 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 their application.

Respectfully Submitted,

HUMBLE OIL & REFINING COMPANY



J. W. HOUSE
Division Superintendent

JEG/jl

- Encl. Exhibit A - Plot showing all wells on Humble New Mexico State S-12 lease and offset leases.
Exhibit B - Schematic Diagram of Current Completion, Humble New Mexico State S-12.
Exhibit C - Schematic Diagram of Proposed Dual Completion, Humble New Mexico State S-12.
Exhibit D - Radioactive Log of Humble New Mexico State S-12.

EXHIBIT B: SCHEMATIC DIAGRAM OF CURRENT COMPLETION STATUS - HUMBLE NEW MEXICO STATE S-12

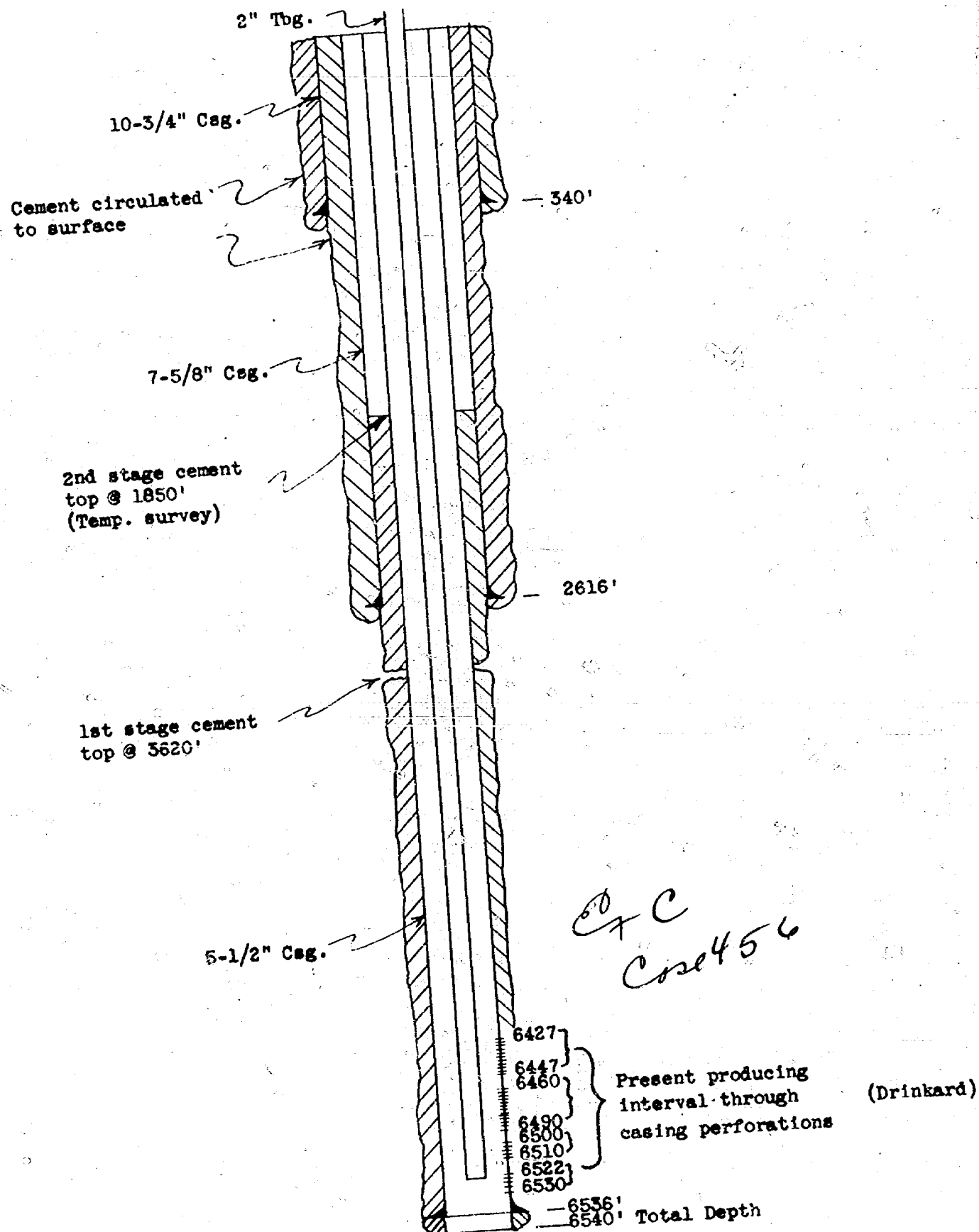
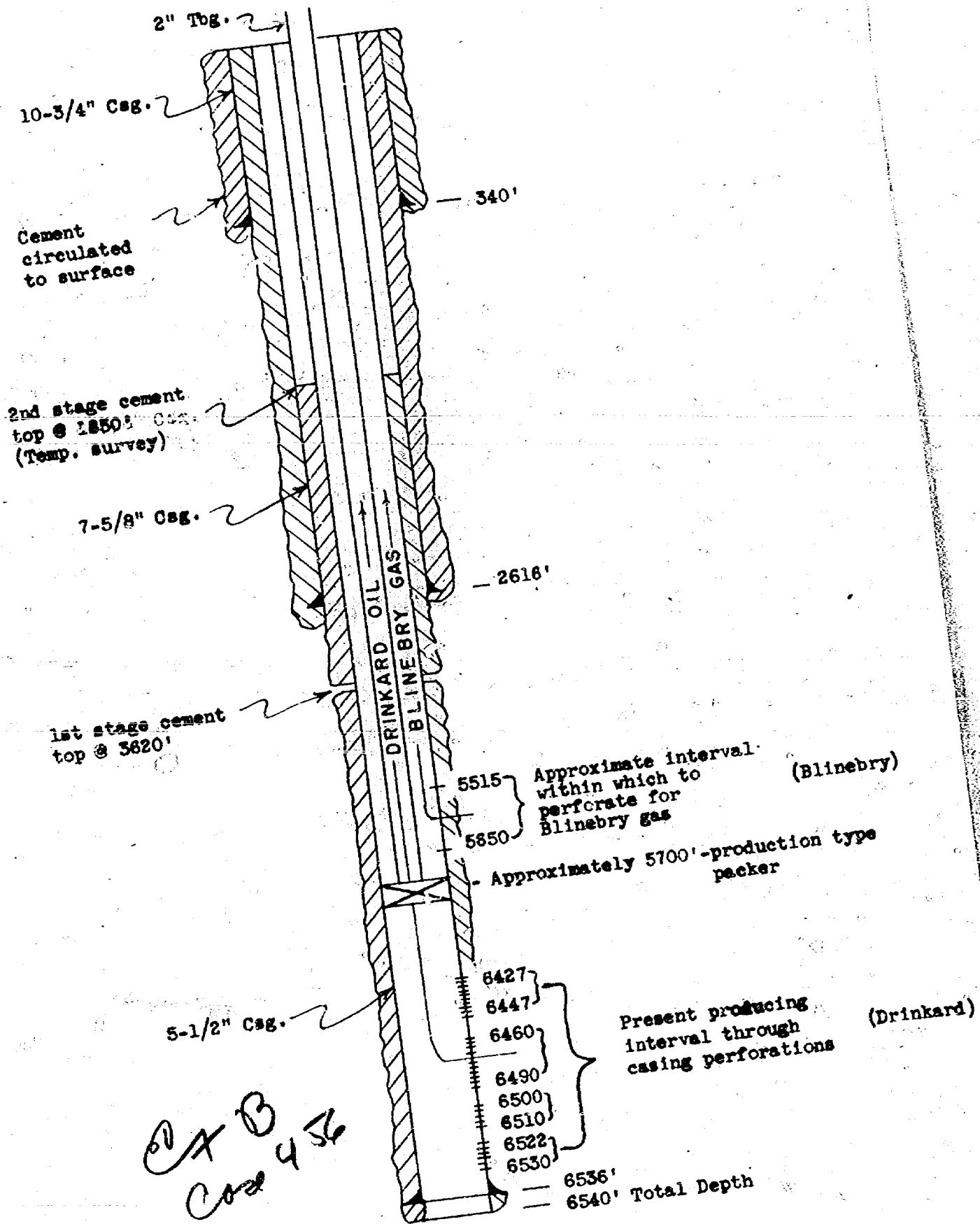
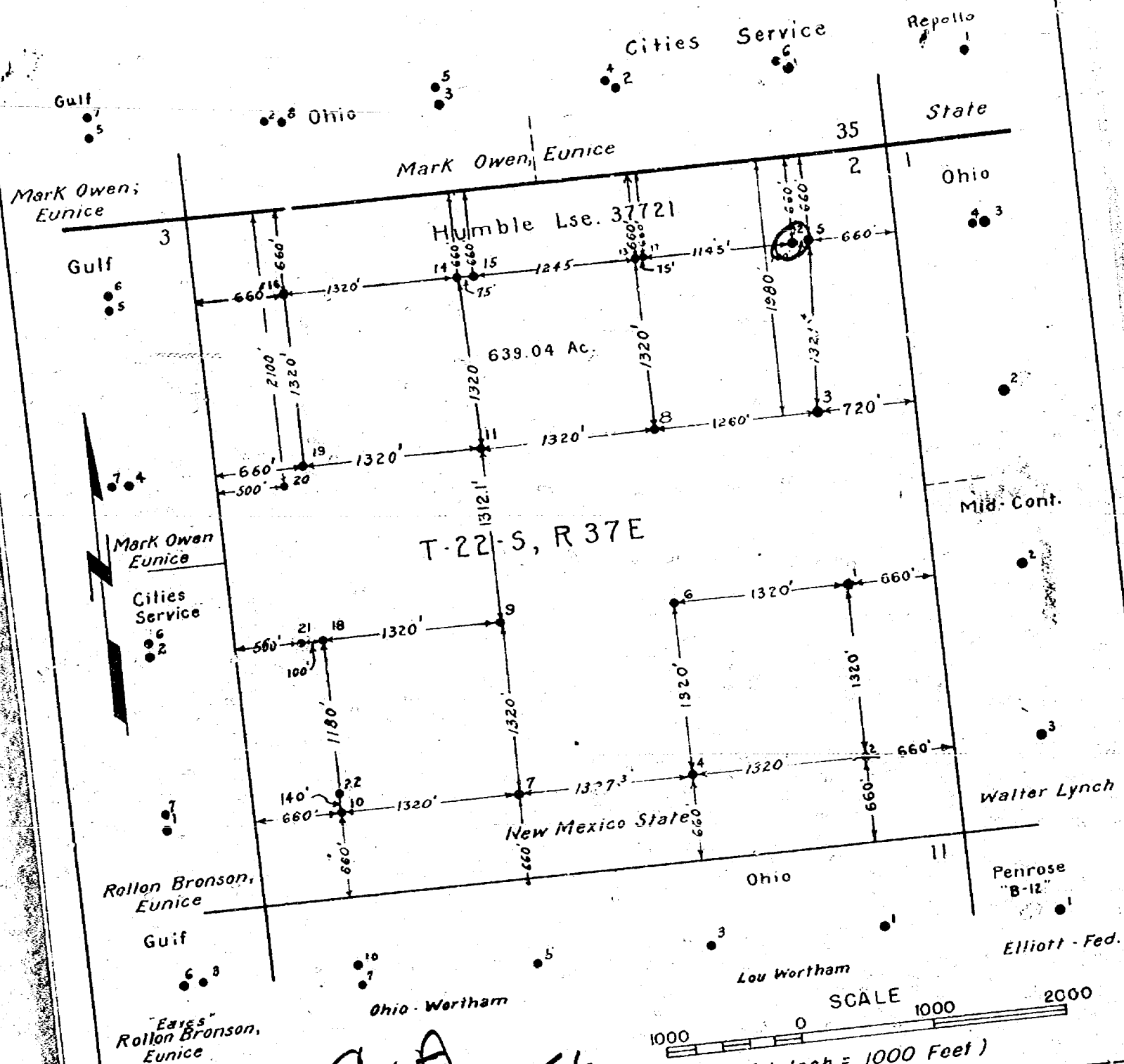


EXHIBIT C: SCHEMATIC DIAGRAM OF PROPOSED DUAL COMPLETION - HUMBLE NEW MEXICO STATE S-12





Case 456

Note: The area shown hereon is a portion of Lease No. 37721 which covers 6023.83 acres, except Parker Drilling Co. owning rights to 4250' depth on SW/4 of SW/4 of Sec. 2, T22S, R37E, LeaCo, NM.

Humble New Mexico State "S" Lease No. 37721 Sec. 2, T-22-S, R-37-E		FILE NO. WT-A-417
HUMBLE OIL & REFINING COMPANY CIVIL ENGINEERING DEPARTMENT MIDLAND, TEXAS		
DRAWN C. Watson	SCALE 1" = 1000'	
CHECKED	DATE 10-8-95	
APPR.	REVISED 4-8-50	