

CORE LABORATORIES, INC.

BEFORE EXAMINER NO.

Petroleum Reservoir Engineering
DALLAS, TEXAS

OIL CONSERVATION COMM.

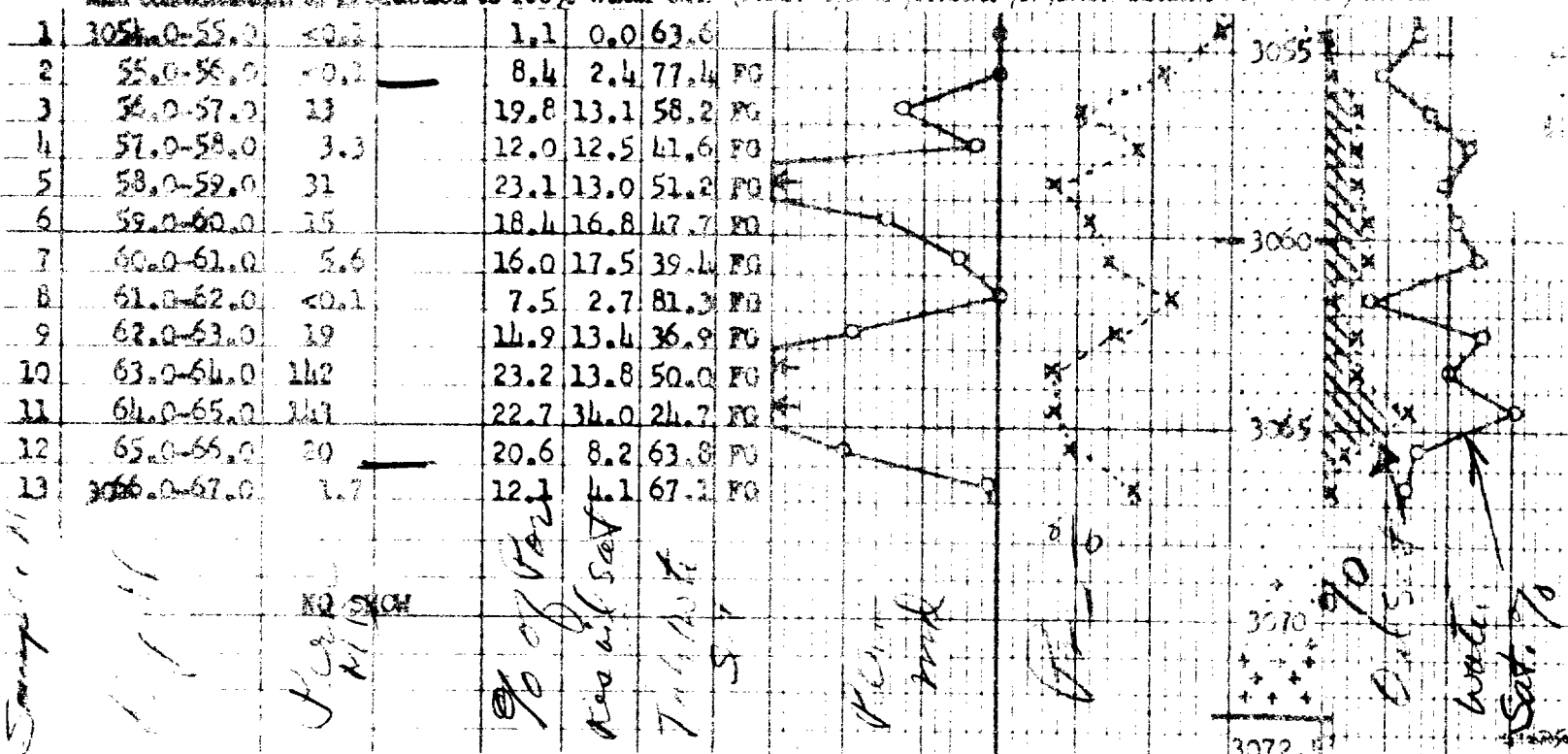
EXHIBIT NO. 3
CASE NO. 1962Page 1 of 1 File WP-3-1446
Well Tidewater State No. 1

CORE SUMMARY AND CALCULATED RECOVERABLE OIL

FORMATION NAME AND DEPTH INTERVAL: Queen 3054.0 - 3067.0

FEET OF CORE RECOVERED FROM ABOVE INTERVAL	13.0	AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE	46.1
FEET OF CORE INCLUDED IN AVERAGE	10.0	AVERAGE CONNATE WATER SATURATION: PER CENT OF PORE SPACE	35
AVERAGE PERMEABILITY: MILLIDARCY	39	OIL GRAVITY: γ_{API}	32
PRODUCTIVE CAPACITY: MILLIDARCY-FEET	390	ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	230
AVERAGE POROSITY: PER CENT	18.3	ORIGINAL FORMATION VOLUME FACTOR: BARRELS SATURATED OIL PER BARREL STOCK-TANK OIL	1.14
AVERAGE RESIDUAL OIL SATURATION: PER CENT OF PORE SPACE	14.6	CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT	810

Calculated maximum solution gas drive recovery is 173 barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is 604 barrels per acre-foot, assuming full maintenance of original reservoir pressure, 100% areal and vertical coverage, and continuation of production to 100% water cut. (Please refer to footnotes for further discussion of recovery estimates.)



These recovery estimates represent theoretical maximum values for solution gas drive and water drive. They assume that production is started at original reservoir pressure; i.e., no account is taken of production to date or of prior drainage to other areas. The effects of factors tending to reduce actual ultimate recovery, such as economic limits on oil production rates, gas-oil ratios, or water-oil ratios, have not been taken into account. Neither have factors been considered which may result in actual recovery intermediate between solution gas and complete water drive recoveries, such as gas cap expansion, gravity drainage, or partial water drive. Detailed predictions of ultimate oil recovery to specific abandonment conditions may be made in an engineering study in which consideration is given to overall reservoir characteristics and economic factors.

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and authorized use, they are made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions are corrected, but no responsibility is assumed for errors or omissions not detected). Officers and employees assume no responsibility or representation as to the accuracy, completeness, or reliability of the data or other material well or sand in connection with which such report is used or relied upon.

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