CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

Page 1 of 1 File WP-3-1945 Well Indian Basin No. 1

CORE SUMMARY AND CALCULATED RECOVERABLE OIL

FORMATION NAME AND DEPTH INTERVAL: Pennsylvanian 7610.0-7635.0				
FEET OF CORE RECOVERED FR ABOVE INTERVAL	OM	25. 0	AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE	48.7
FEET OF CORE INCLUDED IN AVERAGES		14.4	AVERAGE CONNATE WATER SATURATION: (C)	48.7
AVERAGE PERMEABILITY: MILLIDARCYS	Max. 90 ⁰	0.6	OIL GRAVITY: *API	
PRODUCTIVE CAPACITY: MILLIDARCY-FEET	Max. 90 ⁰	8, 6 4, 3	ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	
AVERAGE PORCEITY: PER CENT		5.0	DRIGINAL FORMATION VOLUME FACTOR: BARRELS BATURATED OIL PER BARREL STOCK-TANK OIL	
AVERAGE RESIDUAL OIL SATURATION: PER CENT OF PORE SPACE 1.4		1.4	CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT	

Calculated maximum solution gas drive recovery is barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is 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.)

FORMATION NAME AND DEPTH INTERVAL: Pennsylvanian 9200.0-9204.5				
FEET OF CORE RECOVERED FR ABOVE INTERVAL	ROM	4.5	AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE	19.3
FEET OF CORE Included in Averages		4.5	AVERAGE CONNATE WATER SATURATION: PER CENT OF PORE SPACE (C)	19.3
AVERAGE PERMEABILITY: MILLIDARCYS	Max. 900	2.5	DIL GRAVITY: *API	
PRODUCTIVE CAPACITY: Millidarcy-feet	Max. 900	11 9.9	ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	
AVERAGE POROSITY: PER CENT 6.6		6.6	ORIGINAL FORMATION VOLUME FACTOR: BARRELS SATURATED DIL PER BARREL STOCK-TANK DIL	
AVERAGE REBIDUAL CIL SATURATION: PER CENT OF PORE SPACE 2. 2		2. 2	CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT	

Calculated maximum solution gas drive recovery is barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is 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 analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc., and its officers and employees assume no responsibility and make no warranty or representation as to the productivity, proper operation, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

⁽c) Calculated (e) Estimated (m) Measured (*) Refer to attached letter.

These recovery estimates represent theoretical maximum values for solution gas 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, bave 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.

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CORE LABORATORIES, INC. Petroleum Reservoir Engineering DALLAS, TEXAS

January 4, 1963

P. O. BOX 4337 MIDLAND, TEXAS

Mr. Ralph Lowe Box 832 Midland, Texas

Subject: Core Analysis

Indian Basin No. 1-A Well Eddy County, New Mexico Location: Sec. 22-T21S-R23E

Dear Sir:

Canyon formation analyzed between 7374.0 and 7660.4 feet is interpreted to be gas productive where permeable. The productive capacity is considered adequate for satisfactory production rates without formation treatment. Average core analysis values are presented on page one of this report.

From 7660.4 to 7675.6 feet, Canyon formation exhibits high total water saturations and is interpreted to be both water and gas productive.

Strawn sand analyzed from 8667 to 8678 feet is considered to be gas productive where permeable; however, due to low permeability, a completion attempt is not recommended. Average core analysis values also are presented for the interval on page one.

Permeable Morrow formation analyzed at intervals between 9132.0 and 9324.7 feet is interpreted to be gas productive with adequate productive capacity for satisfactory rates of production without formation treatment. A summary of average core analysis values is presented on page two.

Due to lower residual oil and high total water saturations, the interval from 9324.7 to 9360.0 feet is interpreted to be water productive where permeable.

Mr. Ralph Lowe Indian Basin No. 1-A Well

We appreciate this opportunity to be of service.

Very truly yours,

Core Laboratories, Inc.

R. S. Bynum, Jr.,

Division Manager

RSB:JR:dc

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering
DALLAS, TEXAS

Page 1 of 2 File WP-3-2023 Well Indian Basin No. 1-A

CORE SUMMARY AND CALCULATED RECOVERABLE OIL

FORMATION NAME AND DEPTH INTERVAL: Canyon 7374. 0-7660. 4				
FEET OF CORE RECOVERED FROM ABOVE INTERVAL		273.9	AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE	35.4
FEET OF CORE INCLUDED IN AVERAGES		181.4	AVERAGE CONNATE WATER SATURATION: (C)	35.4
AVERAGE PERMEABILITY: MILLIDARCYS	Max. 90 ⁰	44 13	DIL GRAVITY: *API	
PRODUCTIVE CAPACITY: MILLIDARCY-FEET	Max. 90°	7982 2358	DRIGINAL BOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	
/ ·		3. 7	DRIGINAL FORMATION VOLUME FACTOR: BARRELS SATURATED OIL PER BARREL STOCK-TANK DIL	
AVERAGE RESIDUAL OIL SATURATION: 4.8		4.8	CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT	

Calculated maximum solution gas drive recovery is barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is 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.)

FORMATION NAME AND DEPTH INTERVAL: Strawn 8667. 0-8678. 0				
FEET OF CORE RECOVERED FI ABOVE INTERVAL	ROM	11.0	AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE	54.4
FEET OF CORE Included in Averages		6.2	AVERAGE CONNATE WATER SATURATION: PER CENT OF PORE SPACE (C)	54.4
AVERAGE PERMEABILITY: MILLIDARCYS	Max. 900	0.2	DIL GRAVITY: *API	
PRODUCTIVE CAPACITY: Millidarcy-Feet	Мах. 90 ⁰	1.2	ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	
AVERAGE PURDSITY: PER CENT 8.5		8.5	DRIGINAL FORMATION VOLUME FACTOR: BARRELB SATURATED DIL PER BARREL STOCK-TANK DIL	
AVERAGE REBIDUAL OIL SATURATION: PER CENT OF PORE SPACE 2.2		2.2	CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT	

Calculated maximum solution gas drive recovery is barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is 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.)

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⁽c) Calculated (e) Estimated (m) Measured (*) Refer to attached letter.

These recovery estimates represent theoretical maximum values for solution gas 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.

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Petroleum Reservoir Engineering
DALLAS, TEXAS

Page 2 of 2 File WP-3-2023 Well Indian Basin No. 1-A

CORE SUMMARY AND CALCULATED RECOVERABLE DIL

FORMATION NAME AND DEPTH INTERVAL: Morrow 9132.0-9324.7				
FEET OF CORE RECOVERED FR ABOVE INTERVAL	IOM .	187.9	AVERAGE TOTAL WATER BATURATION: PER CENT OF PORE SPACE	48.5
FEET OF CORE INCLUDED IN AVERAGES		18.0	AVERAGE CONNATE WATER SATURATION: (C)	48.5
AVERAGE PERMEABILITY: MILLIDARCYS	Мах. 90 ⁰	12 11	GIL GRAVITY: *API	
PRODUCTIVE CAPACITY: MILLIDARCY-FEET	Max. 900	216 198	ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	
AVERAGE POROBITY: PER CENT 10. 8		10.8	ORIGINAL FORMATION VOLUME FACTOR: BARRELS BATURATED OIL PER BARREL STOCK-TANK DIL	
AVERAGE RESIDUAL GIL SATURATION: 3.9		3.9	CALCULATED ORIGINAL STOCK-TANK DIL IN PLACE: BARRELS PER ACRE-FOOT	

Calculated maximum solution gas drive recovery is barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is 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.)

FORMATION NAME AND DEPTH INTERVAL:

FEET OF CORE RECOVERED FROM	AVERAGE TOTAL WATER SATURATION:
ABOVE INTERVAL	PER CENT OF PORE SPACE
PEET OF CORE	AVERAGE CONNATE WATER SATURATION:
INCLUDED IN AVERAGES	PER CENT OF PORE SPACE
AVERAGE PERMEABILITY: MILLIDARCYS	DIL GRAVITY: *API
PRODUCTIVE CAPACITY:	ORIGINAL SOLUTION GAS-OIL RATIO:
MILLIDARCY-FEET	CUBIC FEET PER BARREL
AVERAGE POROSITY: PER CENT	ORIGINAL FORMATION VOLUME FACTOR: BARRELB SATURATED DIL PER BARREL BTOCK-TANK DIL
AVERAGE RESIDUAL DIL SATURATION:	CALCULATED DRIGINAL STOCK-TANK DIL IN PLACE:
PER CENT OF PORE SPACE	BARRELS PER ACRE-FOOT

Calculated maximum solution gas drive recovery is barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is 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.)

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