

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

January 2, 1956

REPLY TO
710 NORTH BROADWAY
OKLAHOMA CITY, OKLAHOMA

The South Texas Development Company
715 Bank of Commerce Building
Houston, Texas

Attention: Mr. C. S. Atchison

Subject: Core Analysis
Muhlenbruch No. 2 Well
Wildcat
Sumner County, Kansas

Gentlemen:


Diamond coring equipment and water base mud were used to core the interval from 4382 to 4393 feet in the subject well. Engineers of Core Laboratories, Inc. selected and quick-froze samples of recovered formation as directed by representatives of The South Texas Development Company, and transported these samples to the Arkansas City laboratory for analysis. The results are presented in this report.

Simpson sand from 4388 to 4393 feet is characterized throughout by low residual oil and high total water saturations, and is interpreted to be water productive. The permeability and porosity of the formation in the interval are quite low, and it is doubtful that significant volumes of any type of fluid would be produced from the zone.

Thank you for the opportunity to be of service to you.

Very truly yours,

Core Laboratories, Inc.


J. W. Barbour, Jr.,
District Manager

JWB:TLK:jp

Distribution of Final Reports

2 Copies	The South Texas Development Company 715 Bank of Commerce Building Houston, Texas Attention: Mr. C. S. Atchison
1 Copy	The Home-Stake Oil & Gas Company 507 Philtower Building Tulsa, Oklahoma Attention: Mr. C. C. King
1 Copy	The South Texas Development Company Box 388 Sterling, Colorado Attention: Mr. Doyle Bryant
1 Copy	Beardmore Drilling Company, Inc. 827 Beacon Building Wichita, Kansas Attention: Mr. R. V. Gutru
1 Copy	Aitken & Link 525 Petroleum Building Wichita, Kansas Attention: Mr. George Link



CORE LABORATORIES, INC.

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COMPANY	THE SOUTH TEXAS DEVELOPMENT CO.	DATE ON	12/22/56	FILE NO.	CP-3-723 FC
WELL	MUHLENBRUCH NO. 2	DATE OFF	12/23/56	ENGRS.	RUSSELL
FIELD	WILDCAT	FORMATION	SIMPSON	ELEV.	1230' KB
COUNTY	SUMNER	STATE	KANSAS	DRLG. FLD.	WATER BASE MUD
				CORES	DIAMOND
LOCATION	SE NE SW SEC 5-33S-3W	REMARKS	SAMPLED BY CLI ENGINEER AS DIRECTED BY		

SAND

SHALE

LIMESTONE

DOLOMITE

CONGLOMERATE 

CHERT
VERTICAL
FRACTURES

These analyses, opinions or interpretations are based on observations and material 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). Core Laboratories, Inc. and its officers and employees assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

TABULAR DATA and INTERPRETATION

[illegible]

COMPLETION COREGRAPH

PERMEABILITY
MILLIDARCS

TOTAL WATER 

PERCENT PORE SPACE

40 30 20 10 0

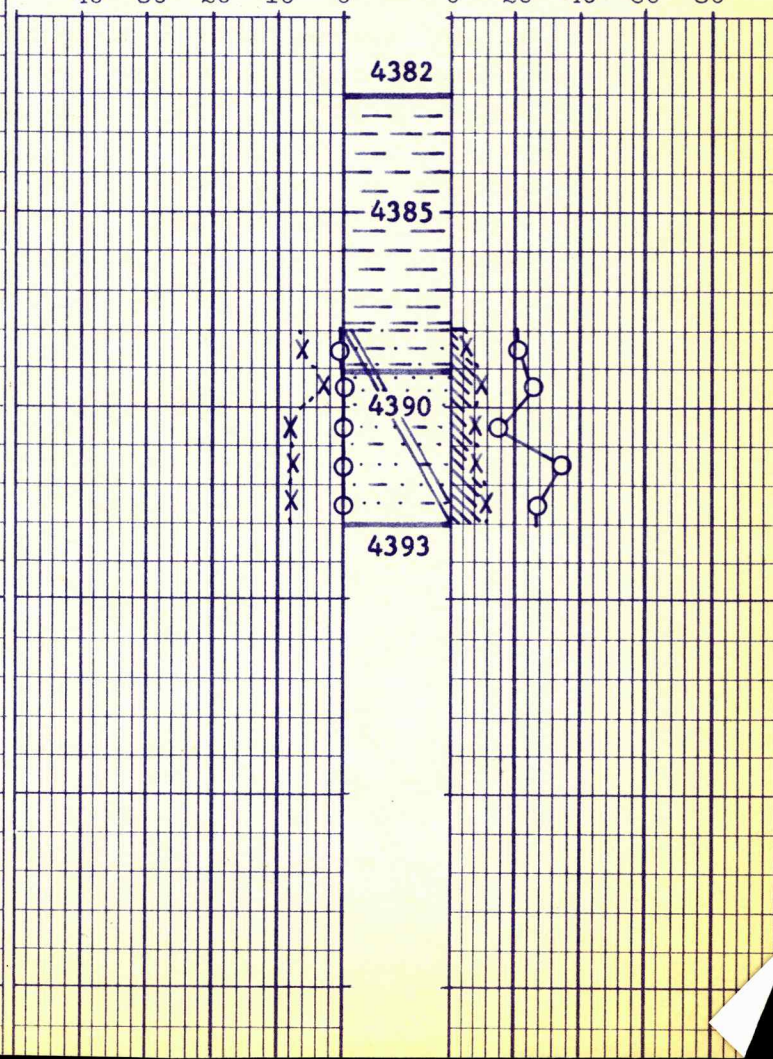
80 60 40 20 0

POROSITY X---X
PERCENT

OIL SATURATION X---X
PERCENT PORE SPACE

40 30 20 10 0

0 20 40 60 80



5-335-3W

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

Company SOUTH TEXAS DEVELOPMENT CO. Formation SIMPSON Page 1 of 1
Well MUHLNBRUCH NO.2 Cores DIAMOND File CP3-723FC
Field WILDCAT Drilling Fluid WATER BASE MUD Date Report 12/23/56
County SUMNER State KANSAS Elevation 1230' KB Analysts RUSSELL
Location SE NE SW SEC 5-33S-3W Remarks SERVICE NO 4

CORE ANALYSIS RESULTS

(Figures in parentheses refer to footnote remarks)

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYs	POROSITY PERCENT	RESIDUAL SATURATION		PROBABLE PRODUCTION	REMARKS
				OIL % VOLUME	TOTAL WATER % PORE		
1	4388.5	0.3	6.6	4.6	78.8		
2	89.5	0.1	3.1	9.7	74.2		
3	90.5	<0.1	7.5	8.0	85.3		
4	91.5	0.1	7.7	7.8	66.2		
5	4392.5	<0.1	8.1	11.1	72.9		

OWLL

PRELIMINARY REPORT FROM
CORE LABORATORIES, INC.
ARKANSAS CITY, KANSAS

PHONE 1822

NOTE:

*) REFER TO ATTACHED LETTER.

u) INCOMPLETE CORE RECOVERY—INTERPRETATION RESERVED.

(2) OFF LOCATION ANALYSES—NO INTERPRETATION OF RESULTS.

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