

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING
WICHITA, KANSAS

COMPANY Walters Drilling DATE 12-29-62
WELL Elmore #1 ANALYST IS
FIELD Dickman
COUNTY Ness STATE Kansas

The analyses and interpretations are based on material brought to Kansas Cores by the client, and such data and interpretations are accessible only to that company which the client represents. Kansas Cores makes no warranty and makes no guarantee for the interpretations and opinions of the data. Our opinions of an analysis are placed at the discretion of the operator.

PERMEABILITY MILLIDARCYS $\bigcirc$ — $\bigcirc$

400 300 200 100 0

POROSITY—% $\times$ — $\times$

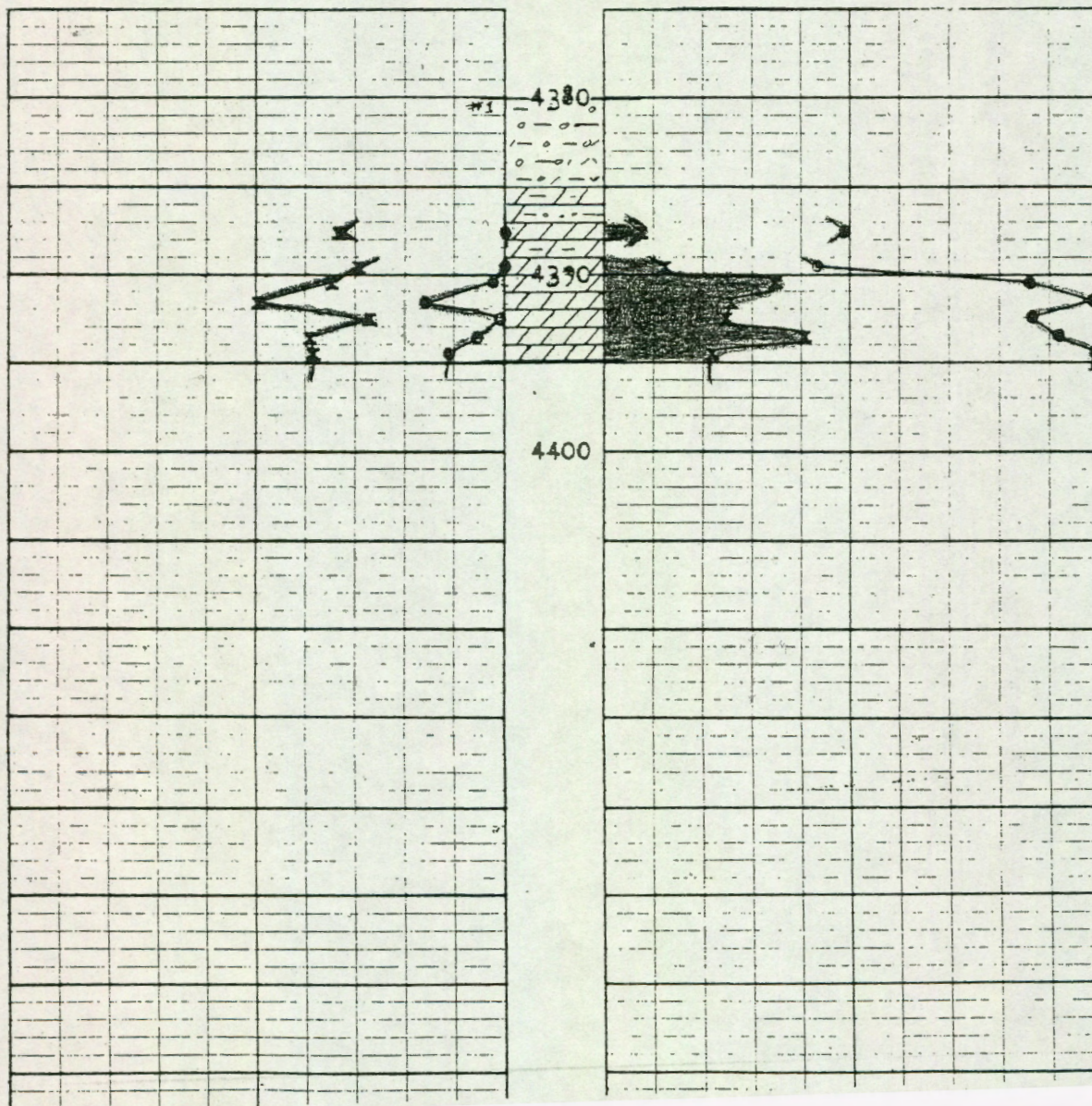
20 10 0

CONNATE WATER % SATURATION

0 60 50 40 30 $\bigcirc$ — $\bigcirc$

OIL % PORE SATURATION $\times$ — $\times$

0 10 20



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CORE ANALYSIS

Dec. 29, 1962

1026 NORTH LIGHTNER
WICHITA, KANSAS

Re: CORE ANALYSIS REPORT
Walters Drilling Co.
Elmore #1
Meas County, Kansas

Walters Drilling Co.
510 Orpheum Building
Wichita, Kansas

Gentlemen:

The cores from your well, Elmore #1, Meas County, Kansas have been analysed for permeability, porosity, and residual saturation of oil and water. The data will be found tabulated on the following pages and indicated on the coregraph. The data averages and recovery figures will be found at the end of this report.

The following is a short discussion of the section cored and analysed.

4390' to 4395' - Oil Productive

This section of the Mississippian formation was composed of a hard brown dolomite with some green dense dolomite throughout. The porosities and permeabilities are rather streaked but good, and the water and oil percentages are well in line for water free production. With the addition of the productive zone assumed to be immediately below, this can be expected to be a commercial well.

Yours very truly,

KANSAS CORES

Ivan L. Stuber
Ivan L. Stuber

Attachments

cc: 5 copies to Walters Drlg. Co., Wichita, Kansas
1 copy to KANSAS CORES, Wichita, Kansas

Re: CORE DESCRIPTION
Walters Drlg. Co.
Elmore #1
Ness County, Kans.

CORE #1

4380' to 4395'

Cut 15'

Rec. 15'

- 5' Shaley conglomerite, trace chert and limestone:
No stain or odor
- 1' Hard dense green cherty dolomite with some chert
streaks: Trace bleeding in streaks, slight odor
- 1' Conglomerite
- 1' Hard green cherty and siliceous dolomite with few
vugs: Oil in vugs, rest no show
- 2' Hard dense grey-green dolomite and siliceous dolomite,
some green shale: Some streaked staining
- 1' Soft brown dolomite, slightly cherty, few green
dense dolomite streaks: Good stain and odor
- 1' Soft brown finely sugresic dolomite: Good stain & odor
- 3' Hard brown finely sugresic to siliceous dolomite, some
streaks and inclusions of green dense and siliceous
dolomite with no stain: Good stain and odor

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WICHITA, KANSAS

WELL Elmore #1 COUNTY Now STATE Kansas
COMPANY Walters Drilling DATE 12-29-62 FILE NO. S-521
FIELD Diakman TYPE CORES Diamond ANALYST IS

ANALYSIS DATA AND INTERPRETATIONS

SAMPLE NO.	DEPTH	PERMEABILITY MILLIDARCYS		POROSITY %	SATURATION WATER % PORE SPACE	SATURATION OIL % PORE SPACE	PROBABLE PRODUCTION	REMARKS
		HORIZONTAL	VERTICAL					
1	4387 88	0.0	0.0	16.9	45.9	3.1	No Perm	
2	4389 90	0.0	0.0	14.7	48.1	6.2	No Perm	
3	4390 91	7.6	3.8	17.9	27.7	16.3	Oil	
4	4391 92	105	83.5	24.8	20.6	12.1	Oil	
5	4392 93	2.1	1.0	14.1	27.4	11.9	Oil	
6	4393 94	37.0	9.8	19.5	24.1	20.2	Oil	
7	4394 95	57.2	31.6	19.2	19.3	10.5	Oil	

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WICHITA, KANSAS

DATA AVERAGES AND OIL RECOVERY FIGURES

DEPTH	4390'-4395'			
THICKNESS OF PRODUCTION FORMATION SECTION ANALYZED	5'			
AVERAGE PERMEABILITY IN MILLIDARCYS	41.8			
AVERAGE POROSITY, PER CENT	19.1			
AVERAGE TOTAL WATER % OF PORE SPACE	24.4			
AVERAGE RESIDUAL OIL % OF PORE SPACE	14.2			
AVERAGE CONNATE WATER CALCULATED % OF PORE SPACE	23.2			
ESTIMATED FORMATION VOLUME FACTOR - USED IN CALCULATING COVERABLE OIL	1.20			
PRODUCIVE CAPACITY - PRODUCIVE FEET X AVERAGE PERMEABILITY IN MILLIDARCYS	209			
COVERABLE OIL BY WATER DISPLACEMENT - BBLs. PER ACRE FOOT	738			
COVERABLE OIL BY GAS EXOLUTION - BBLs. PER ACRE FOOT	443*			

*From original bottom hole pressure to zero