

5. M.L. Brown

C SE 31-21S-33W

#5 R. Crist

Mississippian 4685-4735

Core Available In: 15 three-foot boxes

Condition: Whole Core

Coverage: Incomplete

Available Footage (By Box):

4685-89½ Incomplete

4689½-92½

4692½-95½

4695½-98½

4698½-4702½ Incomplete

4702½-4706 Incomplete

4706-4709½ Incomplete

4709½-13 Incomplete

4713-17 Incomplete

4717-20½ Incomplete

4720½-23½ Incomplete

4723½-26½

4726-29½

4729½-32

4732-35

NOTES: 21 samples (for ϕ , k, Sro, Srw) taken from 4685'-4735'; samples probably account for part of missing intervals.

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING

WICHITA, KANSAS

COMPANY Maurice L. Brown

DATE 11-15-74

WELL R. Crist #5 CSE 31-21-33 W

ANALYST IS

FIELD _____

COUNTY Finney

STATE Kansas

ELEVATION KB 2900'

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 0—0

1200 800 400 200 0

POROSITY—% X—X

CORING TIME

20 10 0

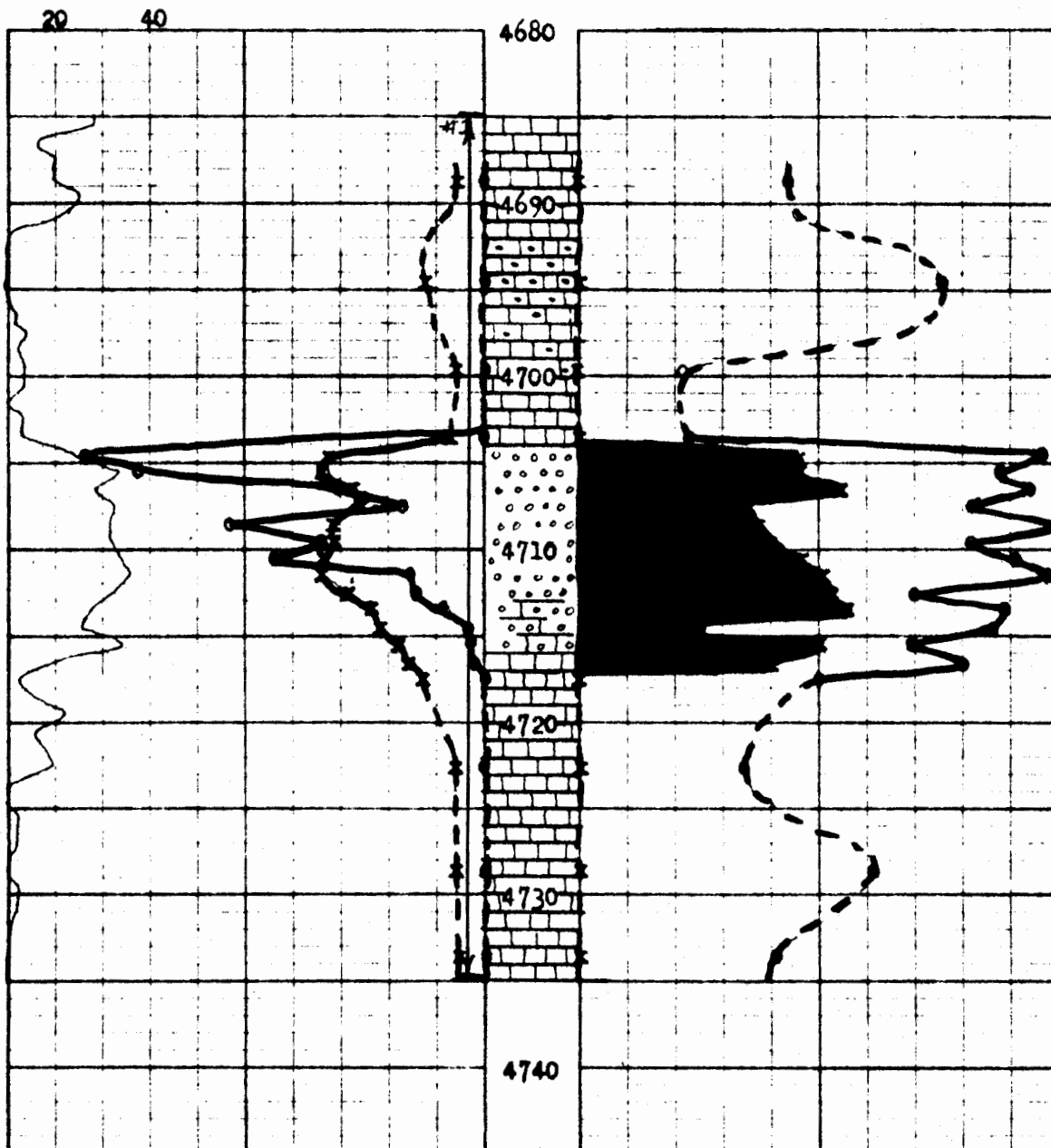
MIN/FT

CONNATE WATER % SATURATION

60 50 40 30

OIL % PORE SATURATION X—X

10 20 30



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CORE ANALYSIS

Nov. 15, 1974

1026 NORTH LIGHTNER
WICHITA, KANSAS 67208

Re: CORE ANALYSIS REPORT

Maurice L. Brown
R. Crist #5
Finney County
Kansas

Maurice L. Brown
Vickers-KSB Bldg.
Wichita, Kansas

Gentlemen:

The cores from your well, R. Crist #5, Finney 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.

4704' to 4717' - Oil Productive

This zone in the Mississippian was composed of medium to large oolites at the top, grading downward to finely oolitic, with some vertical fracturing toward the bottom. Very good oil saturation was noted, with lower than average water percentages. Good permeabilities and porosities were measured, decreasing downward. A good, commercial well can be expected from this section.

Yours very truly,

KANSAS CORES

Ivan L. Stuber
Ivan L. Stuber

Attachments

cc: 6 copies to Maurice L. Brown, Wichita, Kansas

Re: CORE DESCRIPTION
Maurice L. Brown
R. Crist #5
Finney Co., Kans.

<u>CORE #1</u>	<u>4685' to 4735'</u>	<u>Cut 50'</u>	<u>Rec. 50'</u>
4685--92	Hard medium to dark grey very fine crystalline to dense limestone: No show		
4692--96	Soft light greenish-grey slightly sandy limestone: No show		
4696--4700	Hard light tan-grey very finely crystalline limestone, trace sandy in part: No show		
4700--04	Hard medium tannish-brown medium crystalline to dense limestone: No show		
4704--13	Soft medium to large oolitic dark brown limestone, oolites becoming smaller downward, traces chalk in part, few dense blue-grey limestone inclusions in part: Good stain and odor		
4713--16	Finely oolitic medium brown limestone, vertically fractured, with numerous inclusions & streaks of dense to fine crystalline barren limestone, some vertical fractures filled with dense limestone: Good slightly streaked stain, good odor		
4716--17	Harder oolitic limestone with some barren light grey oolitic limestone, more dense limestone streaks: Streaked stain		
4717--23	Hard dense to fine crystalline light grey limestone, some vertical fracturing: No show		
4723--35	Hard dirty grey-tan fine crystalline slightly shaley looking limestone: No show		

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING
WICHITA, KANSAS 67208

WELL: **R. Crist #5** COUNTY: **Finney** STATE: **Kansas**
 COMPANY: **Maurice L. Brown** DATE: **11-15-74** FILE NO: **5-1230**
 FIELD: 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	4688 89	0.0	0.0	3.4	48.8	0.0	No Perm	
2	4694 95	0.0	0.0	5.9	32.2	0.0	No Perm	
3	4699 4700	0.0	0.0	3.3	59.6	0.0	No Perm	
4	4703 04	0.0	0.0	3.8	58.9	0.0	No Perm	
5	4704 05	1,280	1,200	16.1	21.3	22.9	Oil	
6	4705 06	1,020	710	16.2	26.1	23.0	Oil	
7	4706 07	300	300	14.8	23.4	26.8	Oil	
8	4707 08	180	150	13.0	29.1	17.5	Oil	
9	4708 09	620	570	15.4	19.2	18.4	Oil	
10	4709 10	325	310	15.6	29.4	20.1	Oil	
11	4710 11	480	620	16.3	24.7	23.2	Oil	
12	4711 12	165	315	16.5	20.9	25.4	Oil	
13	4712 13	150	150	14.4	35.0	26.3	Oil	
14	4713 14	93.8	77.5	11.4	25.4	27.7	Oil	Vertically fractured
15	4714 15	43.0	27.1	10.7	27.0	12.3	Oil	Vertically fractured
16	4715 16	23.6	11.2	9.0	35.4	25.1	Oil	Vertically fractured
17	4716 17	10.2	5.6	8.0	30.0	20.0	Oil	
18	4717 18	0.0	0.0	6.6	45.0	0.0	No Perm	
19	4722 23	0.0	0.0	3.3	53.1	0.0	No Perm	Vertically fractured
20	4728 29	0.0	0.0	3.5	39.7	0.0	No Perm	
21	4733 34	0.0	0.0	3.2	49.8	0.0	No Perm	

Kansas Cores

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WICHITA, KANSAS

DATA AVERAGES AND OIL RECOVERY FIGURES

DEPTH	4704'-4717'		
FEET OF PRODUCTION FORMATION OF SECTION ANALYZED	13		
AVERAGE PERMEABILITY IN MILLIDARCYS	361		
AVERAGE POROSITY, PER CENT	13.6		
AVERAGE TOTAL WATER % OF PORE SPACE	26.7		
AVERAGE RESIDUAL OIL % OF PORE SPACE	22.2		
AVERAGE CONNATE WATER CALCULATED % OF PORE SPACE	21.3		
ESTIMATED FORMATION VOLUME FACTOR USED IN CALCULATING RECOVERABLE OIL	1.20		
PRODUCTIVE CAPACITY - PRODUCTIVE FEET X AVERAGE PERMEABILITY IN MILLIDARCYS	4,691		
RECOVERABLE OIL BY WATER FIVE BBLS. PER ACRE FOOT	311 *		
RECOVERABLE OIL BY GAS EXPANSION BBLS. PER ACRE FOOT	173 **		

* 45% of the oil in place

** 25% of the oil in place