

6. M.L. Brown

C SW SE 31-21S-33W

#6 R. Crist

Mississippian: 4690-4704; 4713-4740

Core Available In: 12 Three-Foot Boxes

Condition: Whole Core

Coverage: Incomplete

Available Footage (By Box):

4690-93

4693-94 Missing

4713-16 Incomplete (with 4703-04)

4694-96

4716-19

4696-99

4719-22½ Incomplete

4699-4703½ Incomplete

4722-26 Incomplete

4703-04 Incomplete (with 4713-16)

4726-29

4729-32

4732-35

4735-40 Incomplete

Same box

NOTES: 6 samples (for ϕ , k, Srw, Sro) taken from 4690'-4704',

6 samples taken from 4713'-4740'; samples probably account
for part of missing intervals.

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PETROLEUM RESERVOIR ENGINEERING WICHITA, KANSAS

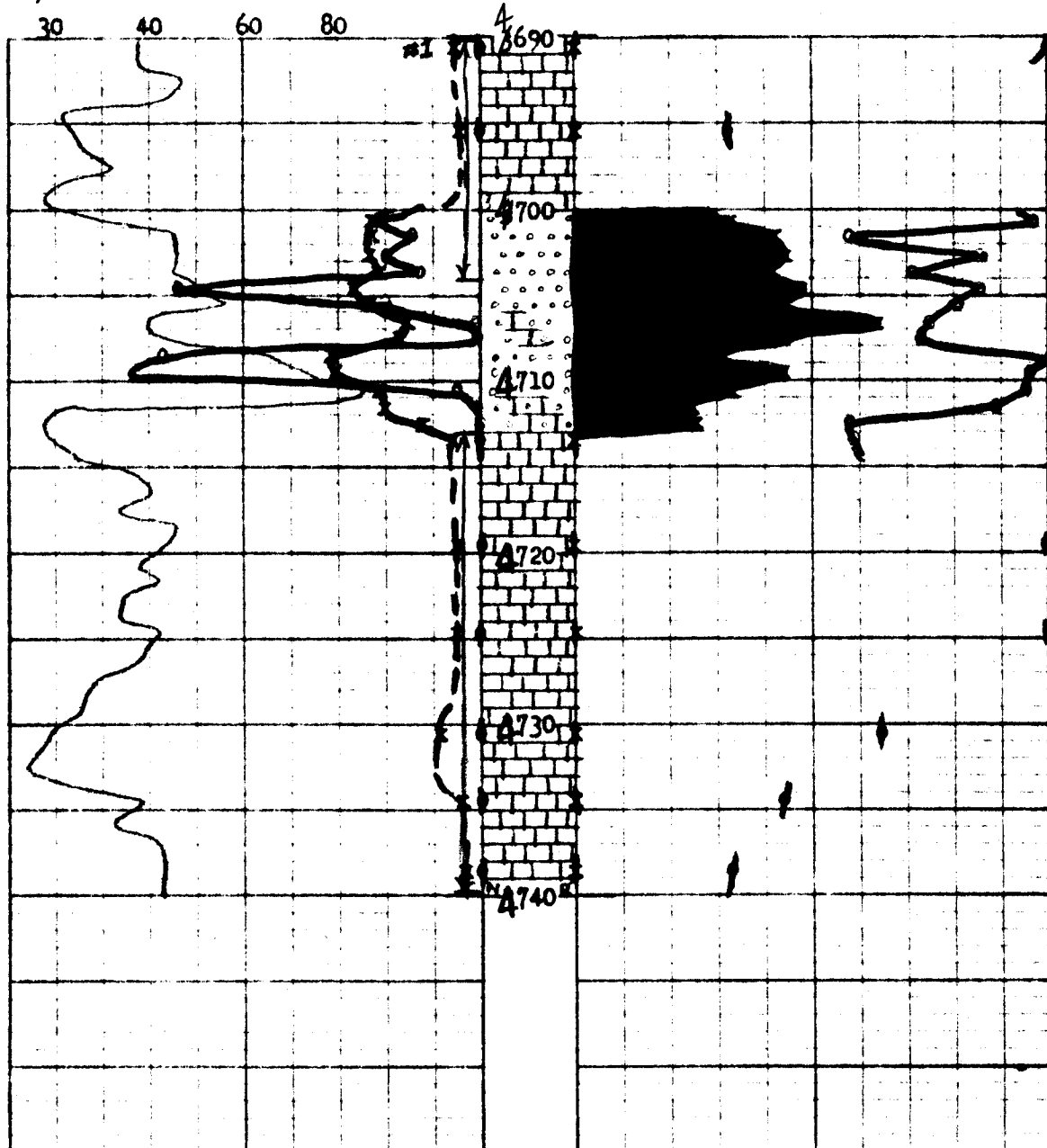
COMPANY **Maurice L. Brown** DATE **2-15-75**
WELL **R. Crist #6 CSWSE 31-21-33 W** ANALYST **IS**
FIELD **Danmo**
COUNTY **Finney** STATE **Kansas** Elevation **Gr. 2895'**

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 $\bigcirc \longrightarrow$
800 400 200 100 0 0 60 50 40 30
POROSITY % $\times \longrightarrow$
CORING TIME 20 10 0 0 10 20 30
MIN/FT

CONNATE WATER % SATURATION

OIL % PORE SATURATION $\times \longrightarrow$



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CORE ANALYSIS

Feb. 15, 1975

1026 NORTH LIGHTNER
WICHITA, KANSAS 67208

Re: CORE ANALYSIS REPORT

Maurice L. Brown

R. Crist #6

Finney County

Kansas

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

Gentlemen:

The cores from your well, R. Crist #6, 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.

4700'-to 4706' - Oil Productive

This zone in the Mississippian formation consisted of a finely oolitic limestone with fair permeabilities and lower than average porosities. Good oil saturation was noted, and the water percentages are well in line for water free production. A commercial well can be expected from this section.

4708' to 4711' - Oil Productive

This zone was separated from that above by 2' of a dense and tight oolitic zone. Better permeabilities and higher porosities were measured in this zone. The oils were erratic, and the waters were considerably lower than above. Although the zone is considered to be oil productive, experience has shown that this type analysis can indicate that the zone can become water productive very shortly.

Yours very truly,

KANSAS CORES

Ivan L. Stuber
Ivan L. Stuber

Attachments

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

Re: CORE DESCRIPTION
Maurice L. Brown
R. Crist #6
Finney Co., Kans.

CORE #1

4690' to 4740'

Cut 50'

Rec. 49'

- 4690--92 Hard dark tan dense to trace very fine crystalline limestone, trace fresh black chert top: No show
- 4692--4700 $\frac{1}{2}$ Hard dense medium grey limestone: No show
- 4700 $\frac{1}{2}$ --04 Soft finely oolitic dark brown limestone with traces small mica inclusions throughout: Good stain and odor
- 4704--05 Dark brown large oolitic limestone, traces micral as above: Good stain and odor
- 4705--06 Finely oolitic dark brown limestone: Good stain and odor
- 4706--08 Hard tight very finely oolitic to some dense dark brown limestone: Good slightly streaked stain
- 4708--10 Dark brown large oolitic limestone, trace mica: Good stain & odor
- 4710--11 Fine to medium oolitic medium brown limestone: Good stain & odor
- 4711--13 Hard very finely oolitic to numerous dense light grey limestone inclusions & streaks: Streaked bleeding oil
- 4713--18 Soft light grey-tan dense to traces crystalline limestone: No show
- 4718--27 Hard medium tan-brown dense limestone: No show
- 4727--34 Hard light-medium tan-brown slightly crystalline limestone: No show
- 4734--37 Medium brown mottled looking slightly shaley limestone with numerous large clear quartz ? crystals scattered throughout: No show
- 4737--39 Very dense medium tan slightly shaley limestone with few laminations of black carbonaceous material: No show
- 4739--40 No recovery

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PETROLEUM RESERVOIR ENGINEERING
WICHITA, KANSAS 67208

WELL R. Crist #6 COUNTY Finney STATE Kansas
COMPANY Maurice L. Brown DATE 2-15-75 FILE NO. S-1239
FIELD Damme 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	4690 91	0.0	0.0	2.7	14.4	0.0	No Perm	
2	4695 96	0.0	0.0	2.4	54.4	0.0	No Perm	
3	4700 01	130	120	11.5	21.2	16.1	Oil	
4	4701 02	77.4	55.2	11.4	41.0	20.5	Oil	
5	4702 03	100	120	11.8	27.0	21.2	Oil	
6	4703 04	62.6	26.7	10.3	34.6	20.7	Oil	
7	4704 05	480	480	13.8	27.2	24.0	Oil	
8	4705 06	100	105	11.5	29.6	21.8	Oil	
9	4706 07	2.1	0.8	8.0	33.1	31.2	Low Perm	
10	4707 08	3.0	2.1	9.2	33.9	20.9	Low Perm	
11	4708 09	560	520	15.5	19.8	15.5	Oil	
12	4709 10	680	645	15.1	22.1	21.7	Oil	
13	4710 11	26.0	24.7	10.4	22.8	16.0	Oil	
14	4711 12	4.3	2.6	10.0	26.0	11.8	Low Perm	
15	4712 13	0.0	0.0	6.1	41.2	12.3	No Perm	
16	4713 14	0.0	0.0	3.4	40.8	0.0	No Perm	
17	4719 20	0.0	0.0	2.7	13.7	0.0	No Perm	
18	4724 25	0.0	0.0	2.8	14.6	0.0	No Perm	
19	4724 31	0.0	0.0	4.5	38.5	0.0	No Perm	
20	4724 35	0.0	0.0	2.1	48.6	0.0	No Perm	
21	4738 39	0.0	0.0	2.0	53.9	0.0	No Perm	

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WICHITA, KANSAS

DATA AVERAGES AND OIL RECOVERY FIGURES

DEPTH	4700'-4713'			
FEET OF PRODUCTION FORMATION OF SECTION ANALYZED	9			
AVERAGE PERMEABILITY IN MILLIDARCYS	246			
AVERAGE POROSITY, PER CENT	12.4			
AVERAGE TOTAL WATER % OF PORE SPACE	27.3			
AVERAGE RESIDUAL OIL % OF PORE SPACE	19.7			
AVERAGE CONNATE WATER CALCULATED % OF PORE SPACE	21.8			
ESTIMATED FORMATION VOLUME FACTOR -- USED IN CALCULATING RECOVERABLE OIL	1.20			
PRODUCTIVE CAPACITY -- PRODUCTIVE FEET X AVERAGE PERMEABILITY IN MILLIDARCYS	2,216			
RECOVERABLE OIL BY WATER DRIVE -- BBLs. PER ACRE FOOT	282 *			
RECOVERABLE OIL BY GAS EXPANSION -- BBLs. PER ACRE FOOT	157 **			

* 45% of the oil in place

** 25% of the oil in place