

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING
WICHITA, KANSAS

COMPANY Mull Drlg. & Walters Drlg. DATE 4-26-65

WELL Bissitt #A-1 ANALYST IS

FIELD _____

T. 27 R. 20W Sec. 29

COUNTY Kiowa 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

CONNATE WATER % SATURATION

200 150 100 50 0

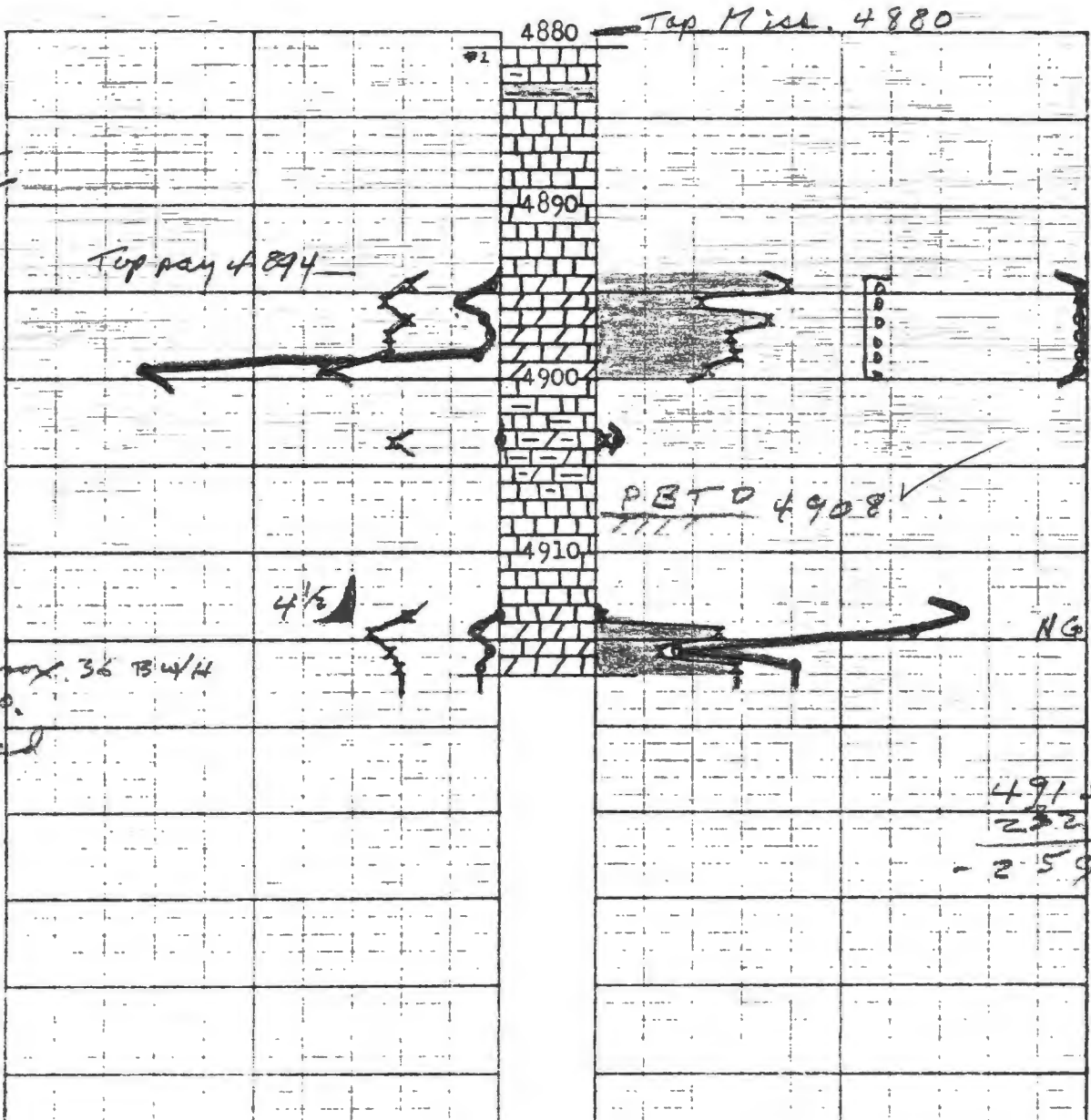
0 80 70 60 50

POROSITY-% X-X

OIL % PORE SATURATION X-X

20 10 0

0 10 20



*4894
322
2572*

*4900
2322
2578*

*250 fluid
Swab approx 36 TBW/H
w/ S.S.P.
squeezed*

*6 1/2' NC
from 13L
core down*

NG 0/5 -259

*4915
2322
2593*

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING

CORE ANALYSIS

Apr. 26, 1965

1026 NORTH LIGHTNER
WICHITA, KANSAS 67208

Re: CORE ANALYSIS REPORT
Mull Drlg. & Walters Drlg.
Bissitt #A-1.
Kiowa County, Kansas

Mull Drilling Co.
Wichita Plaza Bldg.
Wichita, Kansas

Gentlemen:

The cores from your well Bissitt #A-1, Kiowa 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.

4894' to 4900' - Oil Productive

This section in the Mississippian was composed of a brown dolomitic limestone with fairly low permeabilities and porosities. The water percentages were extremely low, and good oil percentages were measured throughout. A commercial well can be expected from this zone after a successful acid treatment.

4914' to 4917' - Oil Productive

Good oil saturation, slightly streaked, was found here, with low permeabilities and porosities. Good oil percentages were measured, but the waters were affected by the chalky to calcitic matrix. While the zone is considered to be oil productive, it will not be of much benefit unless more pay is found below.

Yours very truly,

KANSAS CORES

Ivan L. Stuber
Ivan L. Stuber

Attachments

cc: 8 copies to Mull Drilling Co., Wichita, Kansas
1 copy to KANSAS CORES, Wichita, Kansas

Re: CORE DESCRIPTION
Mull Drlg. & Walters Drlg.
Bissitt #A-1
Kiowa County, Kansas

CORE #1

4881' to 4917'

Cut 36'

Rec. 36'

- 2' Hard coarsely crystalline light grey limestone with few dark green shale streaks: No show
- 1' Maroon shale
- 10' Hard grey crystalline limestone, few stylolytes: No show
- 5' Hard brown crystalline slightly dolomitic limestone, few streaks grey limestone top 1', few vugs third foot: Good stain and odor
- 1' Soft fine to medium vugular dark brown to grey-black dolomite: Good stain and odor
- 3' Grey limestone, trace green shale
- 3' Vertically bedded grey limestone, soft green shale, and shaley dolomite: Trace oil in dolomite
- 7' Hard coarsely crystalline grey limestone, trace shale top 1', few stylolytes: No show
- 1' Grey limestone, trace slightly dolomitic limestone: Trace spotted staining
- 1' Hard slightly dolomitic limestone with numerous barren hard globules of calcite: Good stain in dolomite
- 1' Soft light grey finely crystalline to slightly chalky limestone: Poor streaked stain
- 1' Hard brown dolomitic limestone with some calcite, clear to grey, patches: Good stain in dolomite, some barren patches in calcite matrix

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PETROLEUM RESERVOIR ENGINEERING
WICHITA, KANSAS 67208

WELL Bissitt #A-1 COUNTY Kiowa STATE Kansas
 COMPANY Mull Drilling & Walters Drlg. DATE 4-26-65 FILE NO. S-599
 FIELD _____ TYPE CORES Diamond ANALYST IS

KB elev. 2322

ANALYSIS DATA AND INTERPRETATIONS

SAMPLE No.	DEPTH	PERMEABILITY MILLIDARCS		POROSITY %	SATURATION WATER % PORE SPACE	SATURATION OIL % PORE SPACE	PROBABLE PRODUCTION	REMARKS
		HORIZONTAL	VERTICAL					
1	4894	2.3	0.8	9.2	39.0	19.6	Oil	
	95							
2	4895	20.1	6.2	11.9	23.0	10.6	Oil	
	96							
3	4896	10.9	1.8	9.4	24.8	17.8	Oil	No Gas
	97							
4	4897	6.4	8.2	11.8	25.1	13.7	Oil	
	98							
5	4898	12.1	9.6	11.5	24.6	13.9	Oil	
	99							
6	4899	180	46.0	18.3	18.8	11.5	Oil	
	4900							
	Tot. Avg	<u>231.8</u>	<u>72.6</u>	<u>72.1</u>	<u>155.3</u>	<u>87.1</u>		4900 2322 -2578
		<u>38.6</u>	<u>12.1</u>	<u>12.02</u>	<u>25.9</u>	<u>14.1</u>		
7	4903	0.0	0.0	11.0	96.1	0.4	No Perm	
	04							
8	4913	0.0	0.0	9.7	52.7	0.5	No Perm	
	14							
9	4914	13.7	10.2	13.7	58.0	12.4	Oil	Water w/ S.S.O.
	15							
10	4915	5.1	4.6	11.9	88.2	6.3	Oil	
	16							
11	4916	10.9	5.0	10.6	69.8	14.4	Oil	Pipe @ 2914' - cleaned out to 2917' - prod @ wtr on test after 250 Gal MC
	17							

14.52

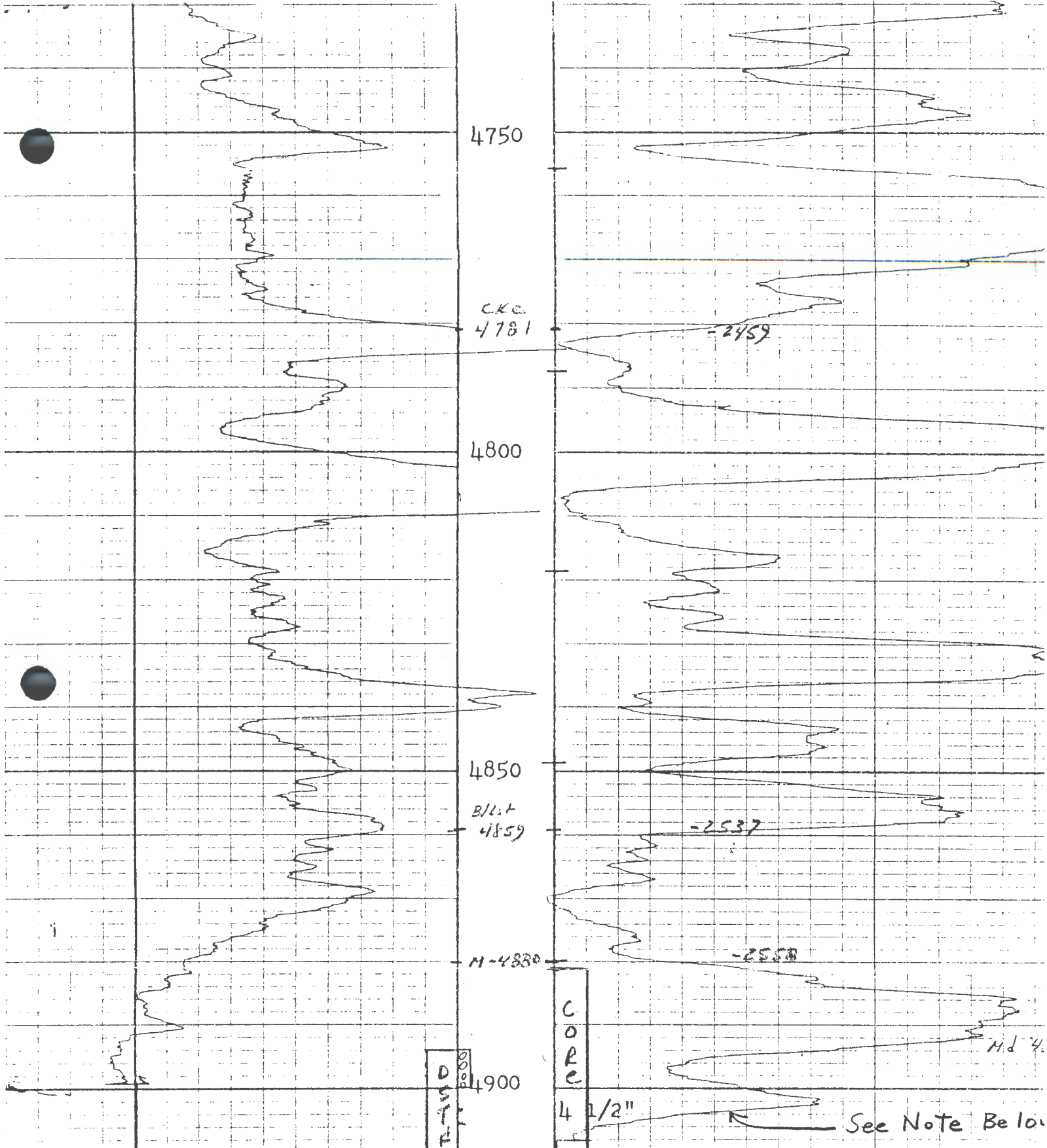
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WICHITA, KANSAS

DATA AVERAGES AND OIL RECOVERY FIGURES

	4894'-4900'	4914'-4917'		
DEPTH	4894'-4900'	4914'-4917'		
FEET OF PRODUCTION FORMATION OF SECTION ANALYZED	6	3		
AVERAGE PERMEABILITY IN MILLIDARCYS	38.6 ✓	9.9		
AVERAGE POROSITY, PER CENT	12.0 ✓	12.1		
AVERAGE TOTAL WATER % OF PORE SPACE	25.9 ✓	72.0		
AVERAGE RESIDUAL OIL % OF PORE SPACE	14.5 ✓	11.0		
AVERAGE CONNATE WATER CALCULATED % OF PORE SPACE	20.7	57.6		
ESTIMATED FORMATION VOLUME FACTOR - USED IN CALCULATING RECOVERABLE OIL	1.30	1.130		
PRODUCTIVE CAPACITY - PRODUCTIVE FEET X AVERAGE PERMEABILITY IN MILLIDARCYS	232	29.7		
RECOVERABLE OIL BY WATER DRIVE - BBLs. PER ACRE FOOT	433	203		
RECOVERABLE OIL BY GAS EXPANSION - BBLs. PER ACRE FOOT	260*	122*		

*From original bottom hole pressure to zero



CO. BOTTOM 4908'
 McC. BOTTOM 4909'

MULL DRILLING COMPANY
 BISSETT #1A
 KIOWA COUNTY, KANSAS

TD 4917'

2595'

4 1/2" @ 4914'

C
O
R
E

4 1/2"

1

See Note Below

Core 4881-4917 (36' Fld)

DST NO. 1 4894-4917

2 hrs 10 M.D.

324' Muddy to Clean O.

30' Muddy, Wtr.