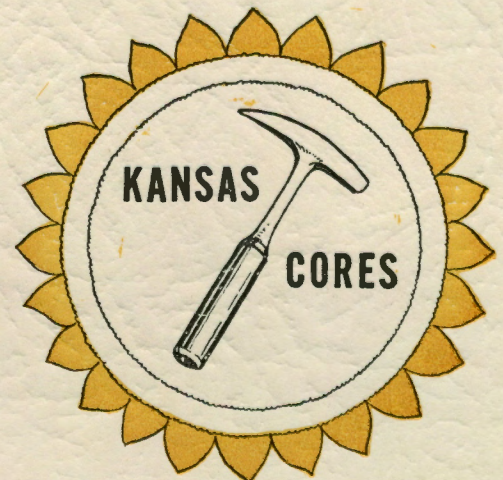


COMPANY EUREKA DRILLING
WELL BABSON #3
LOCATION SE NW SE 8-25-11E
COUNTY GREENWOOD
STATE KANSAS



PETROLEUM RESERVOIR ENGINEERING
CORE ANALYSIS

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING WICHITA, KANSAS

COMPANY Eureka Drilling DATE 2-2-70
 WELL Babson #3 ANALYST IS
 FIELD _____
 COUNTY Greenwood 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 MILLIDARCY'S —○

200 150 100 50 0

POROSITY - % —X

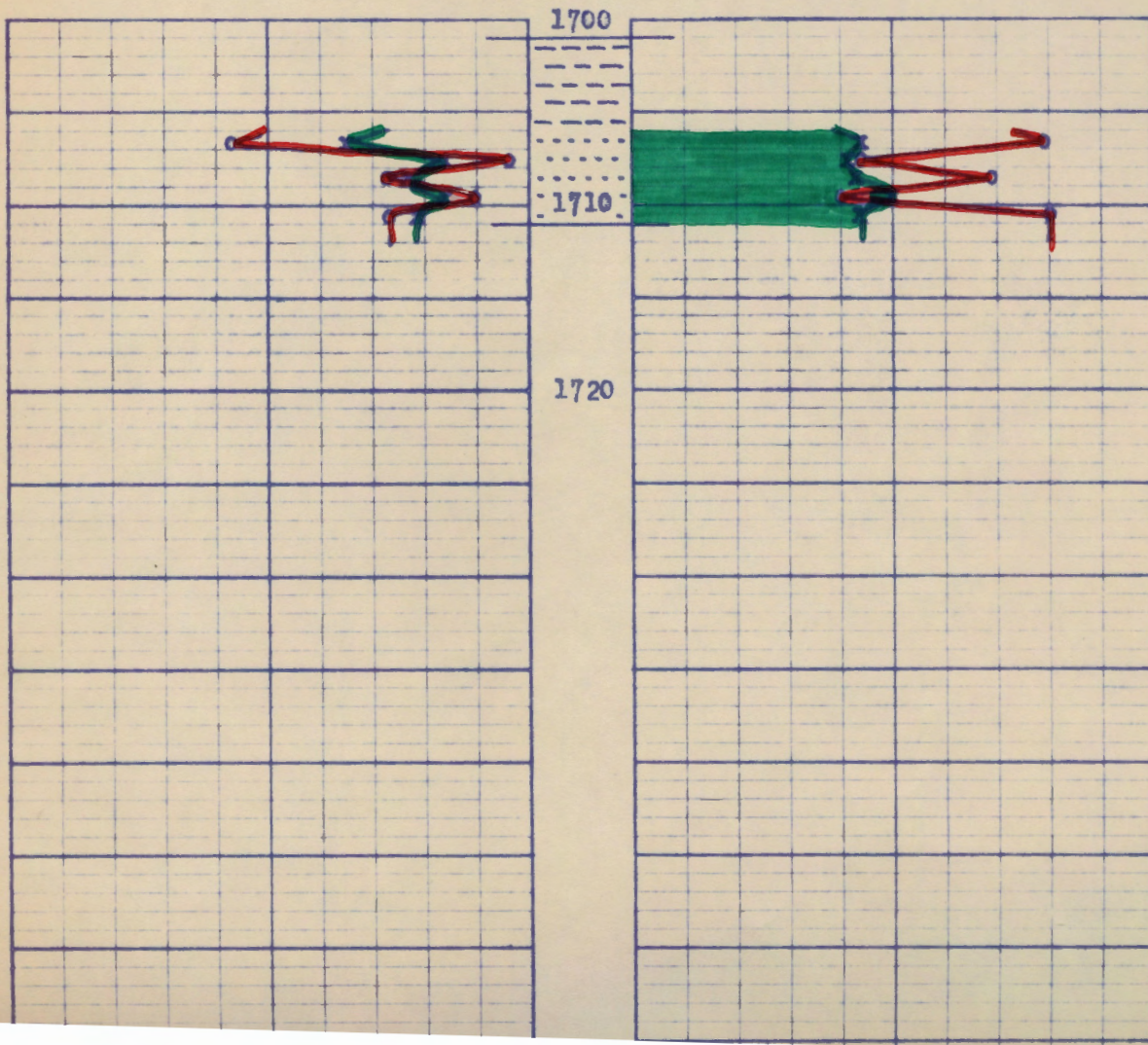
20 10 0

CONNATE WATER % SATURATION —○

0 70 60 50 40

OIL % PORE SATURATION —X

0 10 20



Kansas Cores

PETROLEUM RESERVOIR ENGINEERING

CORE ANALYSIS

Mar. 2, 1970

1026 NORTH LIGHTNER
WICHITA, KANSAS 67208

Re: CORE ANALYSIS REPORT
Eureka Drilling Company
Babson #3
Greenwood County
Kansas

Eureka Drilling Company
Box 157
Hamilton, Kansas

Gentlemen:

The cores from your well, Babson #3, Greenwood 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.

1706' to 1711' - Oil Productive

This section of the Bartlesville was composed of a typical sand for the field in the top 1½', with good porosity and permeability, but the rest of the sand consisted of a hard very quartzitic sand with low and streaked permeabilities and very low porosities. Good oil saturation was measured throughout, and the water percentages, while very erratic, are in line for oil production. It is expected that the production will be limited from this zone due to the lower permeabilities and thinness of the zone, but this section is considered to be oil productive.

Yours very truly,

KANSAS CORES

Ivan L. Stuber
Ivan L. Stuber

Attachments

cc: 5 copies to Eureka Drlg. Co., Hamilton, Kansas

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING
WICHITA, KANSAS 67208

WELL Babson #3 COUNTY Greenwood STATE Kansas
COMPANY Eureka Drilling DATE 2-2-70 FILE No. S-979
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	1706 07	145	110	17.5	40.7	21.4	011	
2	1707 08	10.6	7.1	8.5	58.5	20.3	011	
3	1708 09	70.2	58.4	11.4	45.5	21.0	011	
4	1709 10	27.5	8.0	8.3	60.0	25.0	011	
5	1710 11	68.2	47.3	10.9	40.0	21.6	011	

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING
WICHITA, KANSAS

DATA AVERAGES AND OIL RECOVERY FIGURES

DEPTH	1706'-1711'			
FEET OF PRODUCTION FORMATION OF SECTION ANALYZED	5			
AVERAGE PERMEABILITY IN MILLIDARCYS	64.3			
AVERAGE POROSITY, PER CENT	11.3			
AVERAGE TOTAL WATER % OF PORE SPACE	48.9			
AVERAGE RESIDUAL OIL % OF PORE SPACE	21.9			
AVERAGE CONNATE WATER CALCULATED % OF PORE SPACE	39.1			
ESTIMATED FORMATION VOLUME FACTOR - USED IN CALCULATING RECOVERABLE OIL	1.20			
PRODUCTIVE CAPACITY - PRODUCTIVE FEET X AVERAGE PERMEABILITY IN MILLIDARCYS	322			
RECOVERABLE OIL BY WATER DRIVE - BBLs. PER ACRE FOOT	201 *			
RECOVERABLE OIL BY GAS EXPANSION - BBLs. PER ACRE FOOT	112 **			

* 45% of the oil in place

** 25% of the oil in place