

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING

CORE ANALYSIS

Jan. 16, 1966

1026 NORTH LIGHTNER
WICHITA, KANSAS 67208

Re: CORE ANALYSIS REPORT
Beardmore Drilling Co.
Bates #1
Sumner County
Kansas

BEARDMORE DRILLING CO.
One-Twenty Building
Wichita, Kansas

Gentlemen:

The cores from your well, Bates #1, Sumner 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.

3736' to 3743' - Oil Productive

This section in the Mississippian was composed of a fairly soft, finely crystalline, slightly sacresic brown dolomite. Good porosities were measured, along with fair permeabilities. The water percentages are well in line for water free production. The oil percentages are slightly lower than average, and indicate a higher than average gas-oil ratio. This zone is considered to be oil productive.

Yours very truly,

KANSAS CORES

Ivan L. Stuber
Ivan L. Stuber

Attachments

cc: 8 copies to Beardmore Drilg. Co., Wichita, Kansas

Re: CORE DESCRIPTION
Beardmore Drilling Co.
Bates #1
Sumner County, Kansas

CORE #1

3730' to 3740'

Cut 10'

Rec. 10'

- 3730--36 Hard slightly conglomeritic dark grey shale with 50%
light grey-white to mottled grey chert: No show
- 3736--39 Soft brown finely crystalline to slightly sucrosic
dolomite: Good stain and odor
- 3739--40 Same as above with some clear to slightly yellow
calcite laminations and inclusions: Good stain
and odor

CORE #2

3740' to 3743'

Cut 3'

Rec. 3'

- 3740--43 Fairly soft brown finely crystalline to slightly
sucrosic dolomite: Good stain and odor

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WICHITA, KANSAS 67208

WELL Bates #1 COUNTY Sumner STATE Kansas
COMPANY Beardmore Drilling DATE 1-16-66 FILE NO. S-644
FIELD Wet. 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	3736 37	4.8	2.1	13.9	45.1	13.0	Oil	
2	3737 38	28.8	22.0	17.1	37.1	12.4	Oil	
3	3738 39	31.7	31.7	19.0	33.2	12.1	Oil	
4	3739 40	13.1	9.2	19.6	38.0	12.6	Oil	
5	3740 41	32.2	24.6	19.3	39.0	15.1	Oil	
6	3741 42	55.5	37.6	18.8	34.6	10.9	Oil	
7	3742 43	24.3	18.0	16.8	37.8	13.8	Oil	

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WICHITA, KANSAS

DATA AVERAGES AND OIL RECOVERY FIGURES

DEPTH	3736'-3743'			
FEET OF PRODUCTION FORMATION OF SECTION ANALYZED	7			
AVERAGE PERMEABILITY IN MILLIDARCYS	27.2			
AVERAGE POROSITY, PER CENT	17.8			
AVERAGE TOTAL WATER % OF PORE SPACE	37.8			
AVERAGE RESIDUAL OIL % OF PORE SPACE	12.8			
AVERAGE CONNATE WATER CALCULATED % OF PORE SPACE	30.2			
ESTIMATED FORMATION VOLUME FACTOR - USED IN CALCULATING RECOVERABLE OIL	1.24			
PRODUCTIVE CAPACITY - PRODUCTIVE FEET X AVERAGE PERMEABILITY IN MILLIDARCYS	190			
RECOVERABLE OIL BY WATER DRIVE - BBLs. PER ACRE FOOT	591			
RECOVERABLE OIL BY GAS EXPANSION - BBLs. PER ACRE FOOT	355*			

*From original bottom hole pressure to zero

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PETROLEUM RESERVOIR ENGINEERING WICHITA, KANSAS

COMPANY Beardmore Drilling DATE 1-16-66
WELL Bates #1 ANALYST IS
FIELD Wildcat
COUNTY Sumner 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 

400 300 200 100 0

POROSITY-% 

20 10 0

CONNATE WATER % SATURATION

0 70 60 50 40 

OIL % PORE SATURATION 

0 10 20

