

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING

CORE ANALYSIS

June 30, 1967

1026 NORTH LIGHTNER
WICHITA, KANSAS 67208

Re: CORE ANALYSIS REPORT
Beardmore Drilling Co.
Riner #A-2
Sumner County
Kansas

Beardmore Drilling Co.
One-Twenty Building
Wichita, Kansas

Gentlemen:

The cores from your well, Riner #A-2, 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.

3738' to 3750' - Oil Productive

The Mississippian found at this depth was composed of a light brown dolomitic limestone for the top 4', and a fairly hard dirty dark brown slightly earthy to very finely sucresic dolomite at the bottom. Average oil saturation for the field was measured, along with water percentages in line for oil production. The permeabilities were rather low and erratic, but good porosities were noted. A commercial well can be expected from this zone after increasing the permeabilities with acid.

Yours very truly,

KANSAS CORES

Ivan L. Stuber
Ivan L. Stuber

Attachments

cc: 6 copies to Beardmore Drlg. Co., Wichita, Kansas

Re: CORE DESCRIPTION
Beardmore Drlg. Co.
Riner #A-2
Sumner County
Kansas

CORE #1

3738' to 3750'

Cut 12'

Res. 12'

3738--42 Fairly hard light brown very finely crystalline dolomitic limestone, becoming more dolomitic downward: Good stain and odor

3742--50 Hard dark grey-brown dirty looking dolomite, finely sucrosic in part to some dense and slightly earthy, few calcite inclusions, trace scattered dark grey chert: Good stain and odor, bleeding salt water at 3745', 3748', and 3750'

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING
WICHITA, KANSAS 67208

WELL Riner #A-2 COUNTY Sumner STATE Kansas
 COMPANY Beardmore Drilling DATE 6-30-67 FILE No. 8-748
 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	3738	1.2	0.0	11.4	50.4	12.0	Oil	<i>Bled salt w/str.</i>
	39							
2	3739	13.6	5.3	13.2	57.6	11.1	Oil	
	40							
3	3740	9.8	7.2	15.2	47.0	11.4	Oil	
	41							
4	3741	23.1	20.6	16.4	40.1	11.0	Oil	
	42							
5	3742	10.1	2.4	19.8	47.4	12.7	Oil	
	43							
6	3743	4.2	0.8	16.9	52.5	12.2	Oil	
	44							
7	3744	22.0	9.7	18.0	54.7	14.8	Oil	
	45							
8	3745	5.4	2.2	18.2	31.8	11.3	Oil	<i>Bled salt H₂O</i>
	46							
9	3746	5.3	2.3	18.5	37.9	11.1	Oil	
	47							
10	3747	24.6	9.8	18.8	37.4	10.8	Oil	
	48							
11	3748	5.2	4.5	19.3	43.7	9.5	Oil	<i>Bled salt H₂O</i>
	49							
12	3749	10.1	3.3	15.4	55.1	13.7	Oil	<i>Bled salt H₂O</i>
	50							
					<u>46</u>			

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING
WICHITA, KANSAS

DATA AVERAGES AND OIL RECOVERY FIGURES

DEPTH	3738'-3750'			
FEET OF PRODUCTION FORMATION OF SECTION ANALYZED	12			
AVERAGE PERMEABILITY IN MILLIDARCYS	11.2			
AVERAGE POROSITY, PER CENT	16.9			
AVERAGE TOTAL WATER % OF PORE SPACE	46.3			
AVERAGE RESIDUAL OIL % OF PORE SPACE	11.9			
AVERAGE CONNATE WATER CALCULATED % OF PORE SPACE	37.0			
ESTIMATED FORMATION VOLUME FACTOR - USED IN CALCULATING RECOVERABLE OIL	1.20			
PRODUCTIVE CAPACITY - PRODUCTIVE FEET X AVERAGE PERMEABILITY IN MILLIDARCYS	135			
RECOVERABLE OIL BY WATER DRIVE - BBLs. PER ACRE FOOT	310 *			
RECOVERABLE OIL BY GAS EXPANSION - BBLs. PER ACRE FOOT	172 **			

* 45% of the oil in place

** 25% of the oil in place

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING WICHITA, KANSAS

COMPANY Beardmore Drilling DATE 6-30-67
WELL Riner #A-2 ANALYST IS
FIELD _____
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 MILLIDARCY'S $\circ \rightarrow \circ$

200 150 100 50 0

POROSITY-% $\times \leftarrow \times$
20 10 0

CONNATE WATER % SATURATION

0 70 60 50 40 $\circ \leftarrow \circ$

OIL % PORE SATURATION $\times \leftarrow \times$
10 20

