

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING

CORE ANALYSIS

Sept. 11, 1982

1026 NORTH LIGHTNER
WICHITA, KANSAS 67208

Re: CORE ANALYSIS REPORT
Murfin Drilling Co.
Kincaid #1-24
C E/2 NW NW 24-3-27W
Decatur County, Kansas

Murfin Drilling Company
Suite 617
Union Center Bldg.
Wichita, Kansas 67202

Gentlemen:

The cores from the captioned well 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.

3568' to 3585' - Oil Productive

This section of the Lansing formation consisted for the most part of a maroon and grey-green shale with streaks of porous oolitic limestone toward the top and fossiliferous limestone with dense grey limestone inclusions at the bottom. Good oil saturation with low water percentages was noted in all streaks of porosity. Very good permeabilities and average porosity was measured. A good, commercial well can be expected from this section.

Yours very truly,

KANSAS CORES

Ivan L. Stuber
Ivan L. Stuber

Attachments

cc: 3 copies to Murfin Drlg. Co., Wichita, Ks.

Re: CORE DESCRIPTION
Murfin Drlg. Co.
Kincaid #1-24
Decater Co., Ks.

CORE #1

3562' to 3603'

Cut 41'

Rec. 32'

3562--68	Mareen and grey shale
3568--70	Hard finely oolitic limestone, trace fossiliferous limestone: Good stain and odor
3570--81	Mareen, grey and grey-green shale
3581--82	Finely oolitic limestone: Good stain and odor
3582--83	Mareen and grey-green shale
3583--85	Fossiliferous limestone with numerous inclusions of dense grey limestone, traces small white chert inclusions: Good slightly streaked stain, good odor, bleeding much oil
3585--94	Shale as above with few scattered streaks and inclusions of dark grey fresh chert, some chert bands: No show
3594--3603	No recovery

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WICHITA, KANSAS 67208

WELL Kincaid #1-24 COUNTY Decatur STATE Kansas
 COMPANY Murfin Drlg. Co. DATE 9-11-82 FILE NO. S-1567
 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	3568 69	1,750	1,600 ^{1.09}	19.6	31.3	19.4	Oil	
2	3569 70	425	470 ^{1.10}	16.3	31.2	24.4	Oil	
3	3581 82	170	155 ^{1.10}	14.0	24.9	33.2	Oil	
4	3583 84	190	145 ^{1.21}	14.9	24.6	18.5	Oil	
5	3584 85	70.1	68.9 ^{1.19}	11.1	37.0	32.6	Oil	

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DATA AVERAGES AND OIL RECOVERY FIGURES

DEPTH	3568'-3585'			
FEET OF PRODUCTION FORMATION OF SECTION ANALYZED	5			
AVERAGE PERMEABILITY IN MILLIDARCYS	521			
AVERAGE POROSITY, PER CENT	15.2			
AVERAGE TOTAL WATER % OF PORE SPACE	29.8			
AVERAGE RESIDUAL OIL % OF PORE SPACE	25.6			
AVERAGE CONNATE WATER CALCULATED % OF PORE SPACE	23.8			
ESTIMATED FORMATION VOLUME FACTOR - USED IN CALCULATING RECOVERABLE OIL	1.18			
PRODUCTIVE CAPACITY - PRODUCTIVE FEET X AVERAGE PERMEABILITY IN MILLIDARCYS	2,605			
RECOVERABLE OIL BY WATER DRIVE - BBLs. PER ACRE FOOT	343 *			
RECOVERABLE OIL BY GAS EXPANSION - BBLs. PER ACRE FOOT	190 **			

* 45% of the oil in place

** 25% of the oil in place

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COMPANY Murfin Drilling Company DATE 9-11-82
 WELL Kincaid #1-24 ANALYST IS
 FIELD _____ ELEVATION _____
 COUNTY Decatur STATE Kansas GR _____ KB _____


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 

2000 1000 500 250 0

CONNATE WATER % SATURATION

 0 60 50 40 30

POROSITY-% 

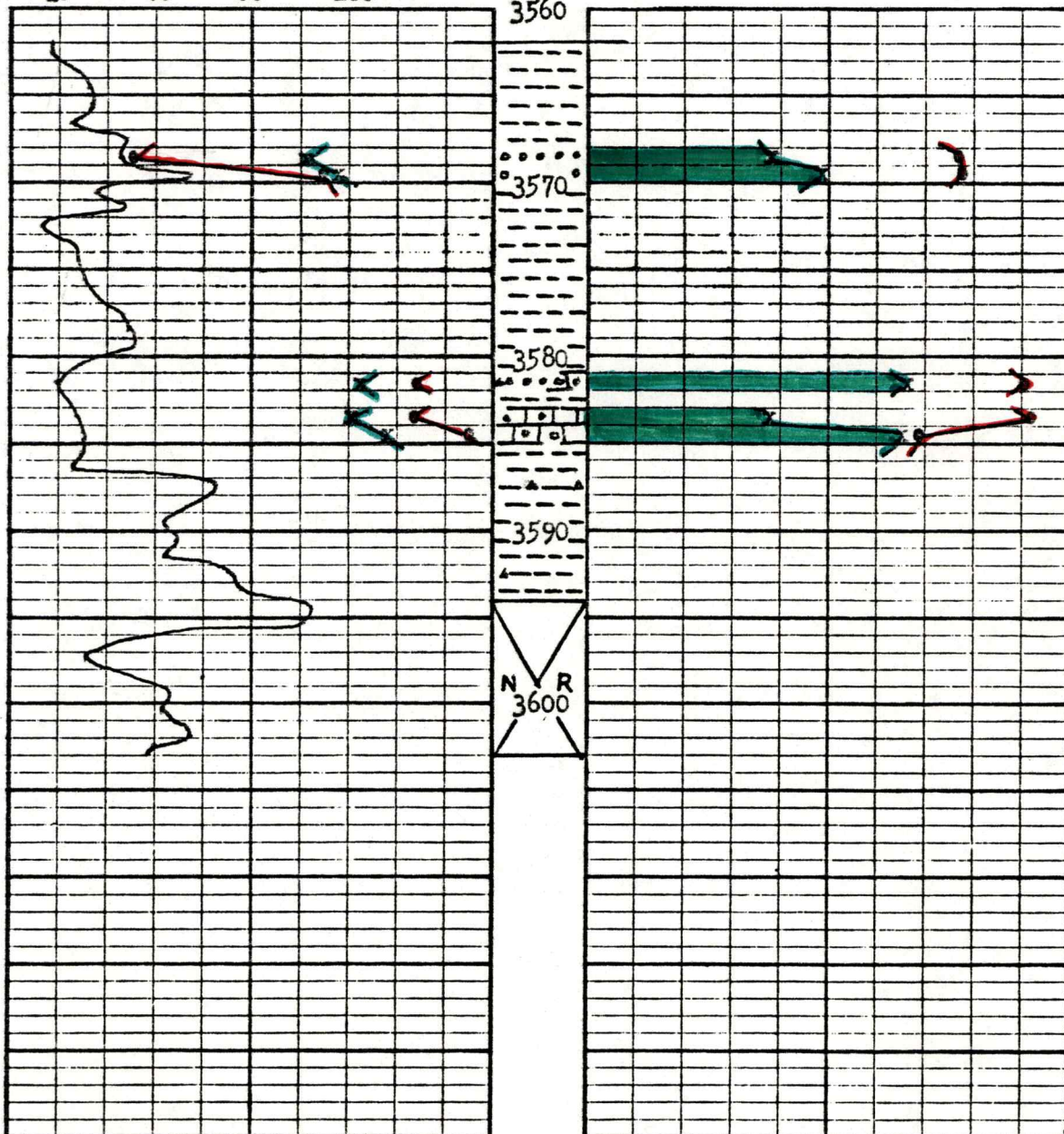
CORING TIME 20 10 0

OIL % PORE SATURATION 

0 10 20 30

MIN/FT

20 40 80 160



MURFING DRILLING CO. #1-24 KINCAID

