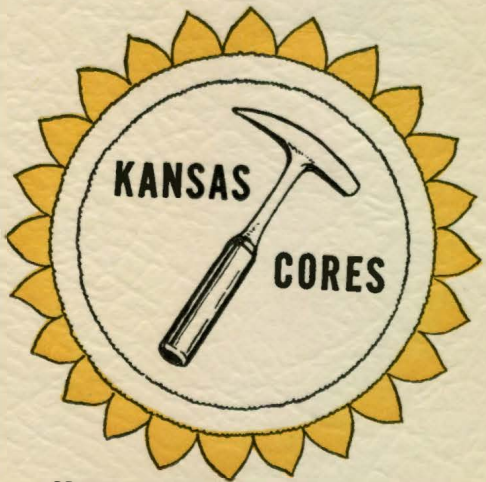
COMPANY	HENRY MARTELL OIL CO.
WELL	BABSON #7
LOCATION	NW NW NW 9-25-11E
COUNTY	GREENWOOD
STATE	KANSAS



PETROLEUM RESERVOIR ENGINEERING

CORE ANALYSIS

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING

WICHITA, KANSAS

COMPANY Hank Martell Oil Co. DATE 11-3-77

WELL Babson #7 ANALYST IS

FIELD ELEVATION

COUNTY Greenwood 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 MILLIDARCYS O—O

400 300 200 100 0

POROSITY—% X—X

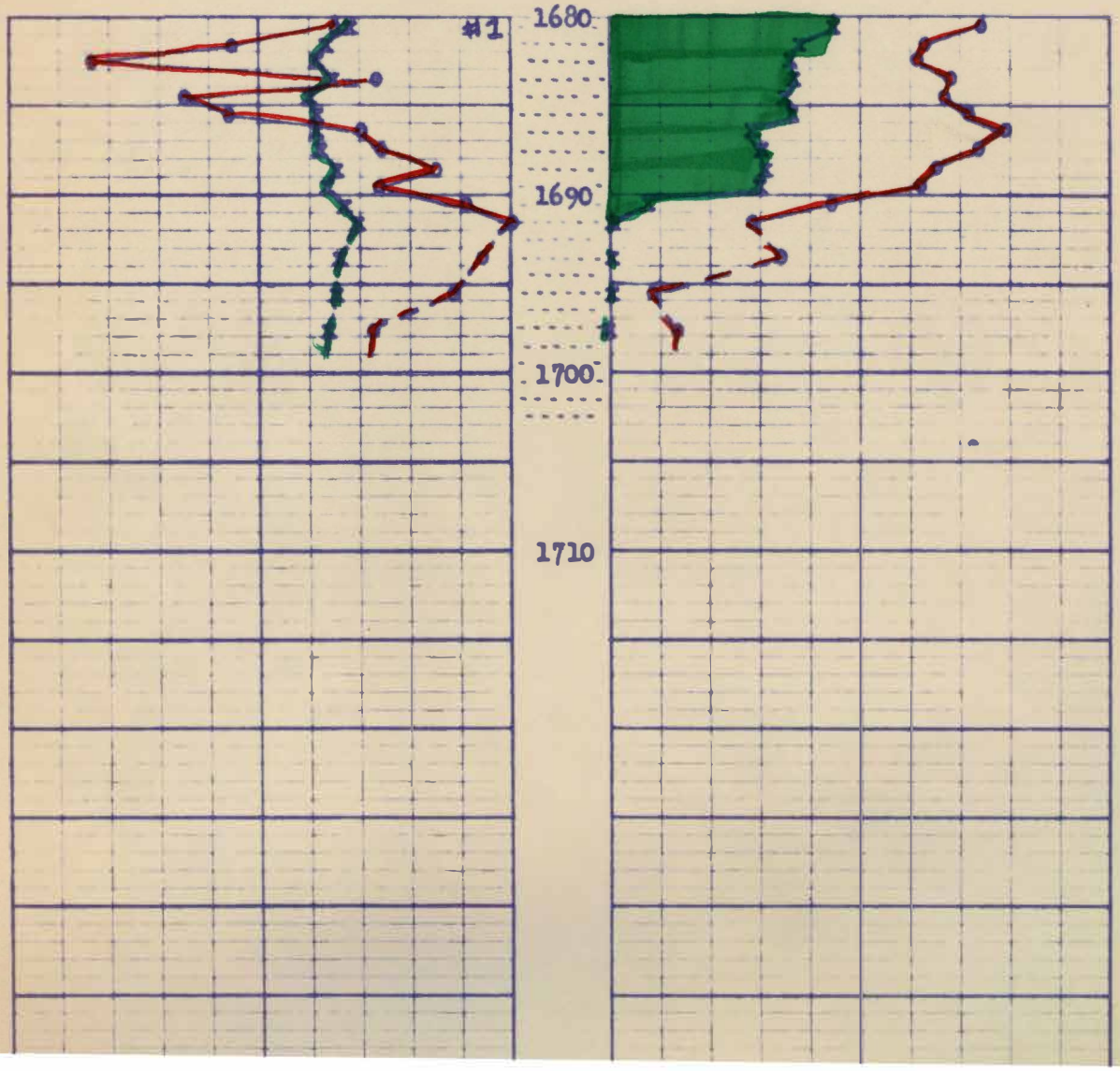
20 10 0

CONNATE WATER % SATURATION

0 90 80 70 60

OIL % PORE SATURATION X—X

0 10 20 30



Kansas Cores
PETROLEUM RESERVOIR ENGINEERING
CORE ANALYSIS
1026 NORTH LIGHTNER
WICHITA, KANSAS 67208

Nov. 3, 1977

Re: CORE ANALYSIS REPORT
Hank Martell Oil Co.
Babcon #7
NW NW NW 9-25-11E
Greenwood County
Kansas

Hank Martell Oil Co.
Hamilton, Kansas
66853

Gentlemen:

The cores from your well, Babcon #7, Greenwood Co., 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.

1680' to 1686' - Oil Productive

This top 6' of the Cattleman sand consisted of a medium grained very soft and friable golden brown clean sand. Good oil saturation was noted. The water percentages are fairly high, probably due to the very high permeability allowing more water into the formation while coring. Very good permeability and porosity was measured. The water contact was found at 1686', where the oil percentages decreased by 20%, with a very permeable water sand below. A commercial well can be expected from this zone, with some water from below being produced with the oil.

Yours very truly,

KANSAS CORES

Ivan L. Stuber

Ivan L. Stuber

Attachments
cc: 5 copies to Hank Martell Oil Co., Hamilton, Ks.

Re: CORE DESCRIPTION
Henry Martell Oil Co.
Babson #7
Greenwood Co., Kansas

CORE #1 1680' to 1703'(?) Cut 23'(?) Rec. 23'

1680--86 Very soft and friable medium grained medium golden brown sand: Good stain and odor

1686--90 Finer grained sand than above, friable, slightly grey-brown with black micaceous shale partings in part: Good stain and odor

1690--91 Very fine grained tight silty grey sand with few streaks sand as above: Trace stain in sand

1691--1703 Medium grained friable light grey sand with some black micaceous shale laminations throughout: No show

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING
WICHITA. KANSAS 67208

WELL Babson #7 COUNTY Greenwood STATE Kansas

COMPANY Hank Martell Oil Co. DATE 11-3-77 FILE No 8-1330

FIELD TYPE CORES Diamond ANALYST IS

ANALYSIS DATA AND INTERPRETATIONS

SAMPLE No	DEPTH	PERMEABILITY MILLIDARCYS HORIZONTAL	PERMEABILITY MILLIDARCYS VERTICAL	POROSITY %	SATURATION WATER % PORE SPACE	SATURATION OIL % PORE SPACE	PROBABLE PRODUCTION	REMARKS
1	1680 81	160	120	15.8	63.3	22.4	Oil	
2	1681 82	280	285	18.9	69.2	18.9	Oil	
3	1682 83	420	330	19.3	69.9	17.7	Oil	
4	1683 84	140	71.5	18.4	66.3	17.9	Oil	
5	1684 85	330	330	20.0	67.0	16.5	Oil	
6	1685 86	290	290	19.4	64.5	17.7	Oil	
7	1686 87	150	140	19.4	60.3	14.6	Water	
8	1687 88	135	100	19.3	63.2	15.1	Water	
9	1688 89	77.3	21.2	17.9	67.6	15.8	Water	
10	1689 90	140	100	18.5	69.2	15.0	Water	
11	1690 91	46.1	1.0	16.9	78.6	3.8	Water	
12	1691 92	0.0	0.0	15.2	86.8	0.0	No Perm	
13	1693 94	31.6	7.0	17.8	83.1	0.0	Water	
14	1695 96	55.2	32.7	17.9	94.9	0.0	Water	
15	1697 98	145	130	18.3	93.4	0.0	Water	

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING
WICHITA. KANSAS

DATA AVERAGES AND OIL RECOVERY FIGURES

DEPTH	1680'-1686'
FEET OF PRODUCTION FORMATION OF SECTION ANALYZED	6
AVERAGE PERMEABILITY IN MILLIDARCYS	270
AVERAGE POROSITY. PER CENT	18.6
AVERAGE TOTAL WATER % OF PORE SPACE	66.7
AVERAGE RESIDUAL OIL % OF PORE SPACE	18.5
AVERAGE CONNATE WATER CALCULATED % OF PORE SPACE	46.7
ESTIMATED FORMATION VOLUME FACTOR — USED IN CALCULATING RECOVERABLE OIL	1.16
PRODUCTIVE CAPACITY — PRODUCTIVE FEET X AVERAGE PERMEABILITY IN MILLIDARCYS	1620
RECOVERABLE OIL BY WATER DRIVE — BBLS. PER ACRE FOOT	298 *
RECOVERABLE OIL BY GAS EXPANSION — BBLS. PER ACRE FOOT	166 **

* 45% of the oil in place

** 25% of the oil in place