COMPANY	TEICHGRABER OIL OPERATIONS
WELL	BABSON #12
LOCATION	1540' FNL, 920' FWL SE/4 Sect. 9-25-11E
COUNTY	GREENWOOD
STATE	KANSAS

KANSAS CORES

PETROLEUM RESERVOIR ENGINEERING

CORE ANALYSIS

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING

WICHITA, KANSAS

COMPANY Teichgraber Oil Operations — DATE 3-13-82

WELL Babsen #12 — 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

600 400 200 0

POROSITY—% X—X

CORING TIME 20 10 0

MIN/FT

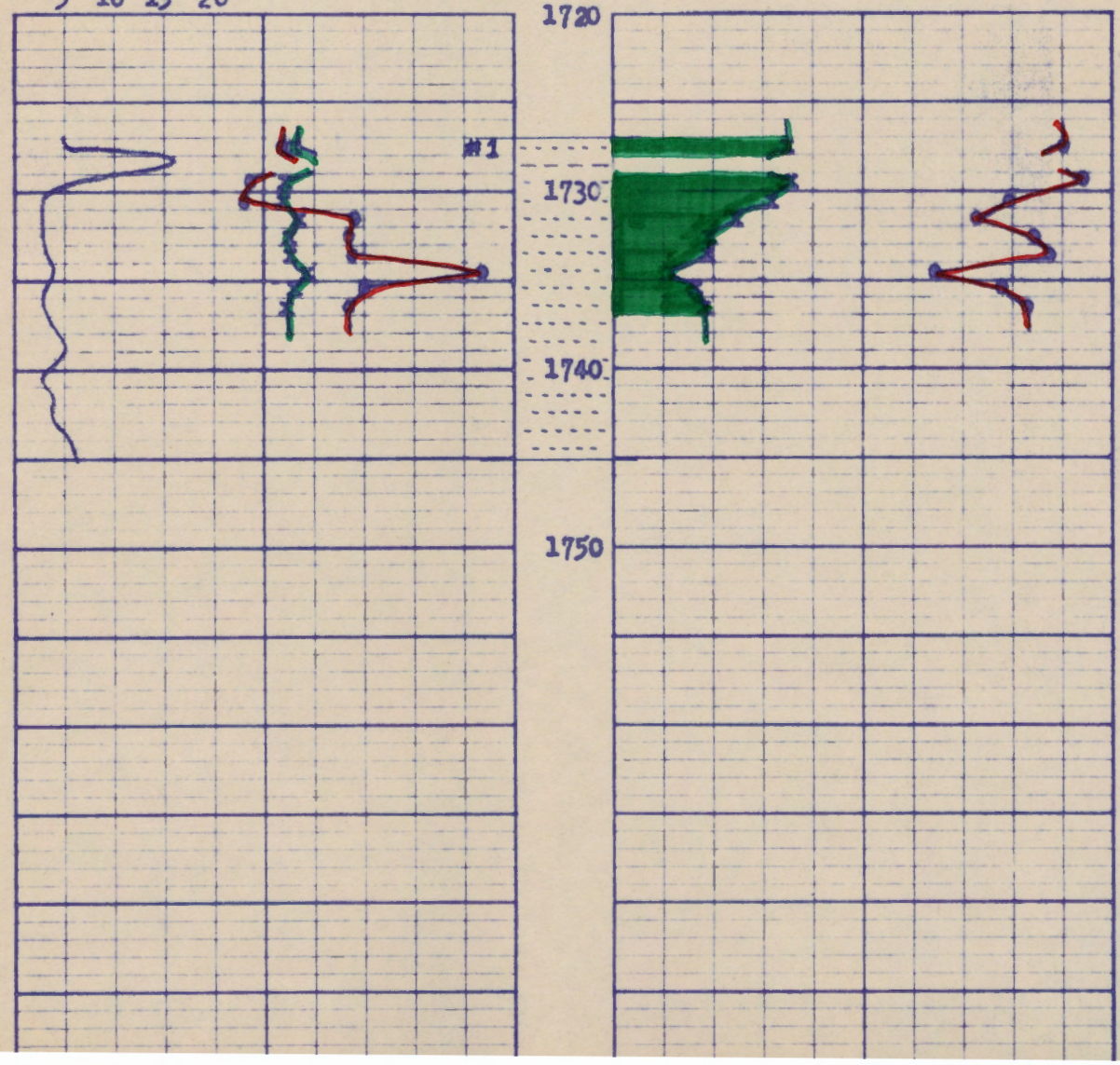
5 10 15 20

CONNATE WATER % SATURATION

0 80 70 60 50

OIL % PORE SATURATION X—X

0 10 20 30



Kansas Cores
PETROLEUM RESERVOIR ENGINEERING
CORE ANALYSIS
1026 NORTH LIGHTNER
WICHITA, KANSAS 67206

Mar. 13, 1982

Re: CORE ANALYSIS REPORT
Teichgraber Oil Operations
Babsen #12
1540' FNL, 920' FWL SE/4
Section 9-25-11E
Greenwood County, Kansas

Teichgraber Oil Operations
Box 645
El Dorado, Kansas 67042

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.

1727' to 1731' - Oil Productive

This top part of the Cattleman sand consisted of a very friable medium to large grained brown clean sand with very good permeabilities and porosities. Good oil saturation was measured, and the waters are in line for oil production. The water contact was found at 1731', where the oil percentages dropped by 50%, and a very permeable water sand was found below. It is expected that some oil will be produced from this zone, along with water from below.

Yours very truly,

KANSAS CORES

Ivan L. Stuber

Ivan L. Stuber

Attachments
cc: 4 copies to Teichgraber Oil Operations, El Dorado, Ks.

Re: CORE DESCRIPTION
Teichgraber Oil Oper.
Babson #12
Greenwood Co., Kansas

CORE #1 1727' to 1745' Cut 18' Rec. 18'

1727--28 Coarse grained very friable medium grey-brown clean sand: Good stain and oder

1728--29 Shale

1729--31 Medium grained brown very soft and friable clean sand: Good stain and oder

1731--32 Same with few thin streaks grey-green barren sand, traces black micaceous shale partings: Good streaked stain, good oder

1732--34 Clean medium grained grey-brown friable sand: Fair stain and oder

1734--35 Same sand with much soft grey-green silt and shaley sand: Poor streaked stain, poor oder

1735--36 Laminated grey and brown friable sand: Streaked stain, poor oder

1736--45 Clean grey-brown medium grained soft friable sand: Fair stain and poor oder throughout

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING
WICHITA, KANSAS 67208

WELL Babson #12 COUNTY Greenwood STATE Kansas

COMPANY Teichgraber Oil Operations DATE 3-13-82 FILE No. S-1560

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	1727 28	460	325	22.2	44.9	17.3	Oil	
2	1729 30	520	470	23.1	43.8	17.8	Oil	
3	1730 31	535	470	22.8	50.9	15.2	Oil	
4	1731 32	310	140	21.8	54.1	11.7	Water	
5	1732 33	330	300	22.4	48.2	9.6	Water	
6	1733 34	310	300	22.4	46.4	9.6	Water	
7	1734 35	71.5	60.3	21.0	58.3	5.7	Water	
8	1735 36	300	295	22.2	51.0	8.3	Water	
9	1736 37	330	330	22.9	48.9	9.4	Water	

Kansas Cores

PETROLEUM RESERVOIR ENGINEERING
WICHITA, KANSAS

DATA AVERAGES AND OIL RECOVERY FIGURES

DEPTH	1727'-1731'
FEET OF PRODUCTION FORMATION OF SECTION ANALYZED	3
AVERAGE PERMEABILITY IN MILLIDARCYS	505
AVERAGE POROSITY, PER CENT	22.7
AVERAGE TOTAL WATER % OF PORE SPACE	46.5
AVERAGE RESIDUAL OIL % OF PORE SPACE	16.8
AVERAGE CONNATE WATER CALCULATED % OF PORE SPACE	37.2
ESTIMATED FORMATION VOLUME FACTOR -- USED IN CALCULATING RECOVERABLE OIL	1.18
PRODUCTIVE CAPACITY -- PRODUCTIVE FEET X AVERAGE PERMEABILITY IN MILLIDARCYS	1,515
RECOVERABLE OIL BY WATER DRIVE -- BBLS. PER ACRE FOOT	422 *
RECOVERABLE OIL BY GAS EXPANSION -- BBLS. PER ACRE FOOT	234 **

* 45% of the oil in place

** 25% of the oil in place

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