CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

REPLY TO
707 MID-CONTINENT BLDG.
TULSA, OKLAHOMA

April 4, 1960

Kewanee Oil Company
P. O. Box 2093
Wichita, Kansas

Attention: Mr. H. S. Erskine

Subject: Core Analysis
Red No. 3 Well
Hallet Field
Hodgeman County, Kansas
CLI File No. CP-1-3821-WC/CP-10-514-T

Gentlemen:

Diamond coring equipment and water base mud were used to core the Mississippi Dolomite formation from 4610 feet to 4660 feet in the subject well. An engineer of Core Laboratories, Inc. selected and quick-froze samples of the recovered formation and shipped them to our Oklahoma City laboratory for whole core analysis.

The results of this analysis are presented in tabular form on the accompanying page of this report along with a lithological description of the samples submitted.

Thank you for this opportunity to be of service.

Sincerely yours,

Core Laboratories, Inc.

J. G. Evertson, Jr.

J. G. Evertson, Jr. pc
District Manager

JGE:PC:pc
enc.
cc: 4 to addressee
2 to Production Department
2 to Exploration Department
4 to Mr. Everett O'Connell

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

CORE ANALYSIS RESULTS

CP-10-514-TMI

Company KEWANEE OIL COMPANY | Formation MISSISSIPPI DOLOMITE | File CP-1-3821-WC
Well RED NO. 3 | Core Type DIAMOND | Date Report 4-4-60
Field HALLET | Drilling Fluid WATER BASE MUD | Analysts NEEB
County HODGEMAN State KANSAS Elev. 2520' GL Location SEC 22-22S-25W

Lithological Abbreviations

SAND-SD, SHALE-SH, LIME-LM | DOLOMITE-DOL, CHERT-CH, GYPSUM-GYP | ANHYDRITE-ANHY, CONGLOMERATE-CONG, FOSSILIFEROUS-FOSS | SANDY-SDY, SHALY-SHY, LIMY-LMY | FINE-FN, MEDIUM-MED, COARSE-CSE | CRYSTALLINE-XLN, GRAIN-GRN, GRANULAR-GRNL | BROWN-BRN, GRAY-GY, VUGGY-VGY | FRACTURED-FRAC, LAMINATION-LAM, STYLOLITIC-STY | SLIGHTLY-SL/, VERY-V/, WITH-W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS MAX.	PERMEABILITY MILLIDARCYS 90°	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE: OIL	RESIDUAL SATURATION PER CENT PORE: TOTAL WATER	SAMPLE DESCRIPTION AND REMARKS
	4610.0-10.9						Lm
1	4610.9-12.8	<0.1	<0.1	12.8	21.0	67.3	Lm, few pp & small vugs, sl/foss
2	4612.8-13.6	19	11	17.5	28.4	53.0	Lm, few pp & small vugs
	4613.6-18.0						Lm
3	4618.0-20.0	<0.1	<0.1	11.3	17.0	69.4	Lm, few pp vugs, few cht nod
4	20.0-20.6	<0.1	<0.1	6.8	3.8	92.4	Lm, few pp vugs, few cht nod, dense
5	4620.6-22.0	<0.1	<0.1	16.0	13.5	60.8	Lm, few pp vugs
	4622.0-23.0						Lm
6	4623.0-24.6	<0.1	<0.1	14.7	11.8	72.9	Dol, few pp, lge, sm vugs, cht nod, sl/sty
7	4624.6-26.5	<0.1	<0.1	12.9	12.0	78.4	Dol, few pp, lge, sm vugs, cht nod, sl/VF
	4626.5-28.5						Lm
	4628.5-31.5						Sh
	4631.5-42.0						Lm
8	4642.0-43.9	<0.1	<0.1	4.4	0.0	90.1	Lm, few pp vugs, sl/vert frac
9	4643.9-45.5	<0.1	<0.1	5.5	1.8	90.9	Lm, few pp vugs
	4645.5-48.5						Lm
10	4648.5-50.3	<0.1	<0.1	4.5	4.0	85.9	Lm, few pp vugs, sty, sl/vert frac
11	4650.3-51.5	0.1	<0.1	15.1	14.3	74.1	Lm, pp & few sm vugs, vert frac
	4651.5-52.3						Lm
12	4652.3-53.0	<0.1	<0.1	9.9	0.0	90.1	Lm, few pp vugs, dense
	4653.0-53.3						Lm, v/shy, dense
13	4653.3-55.3	<0.1	<0.1	9.4	15.3	72.9	Lm, pp vugs, sl/vert frac
	4655.3-58.0						Lm
14	4658.0-60.0	<0.1	<0.1	8.0	0.6	88.9	Lm, pp vugs

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