

## CORE ANALYSIS RESULTS

Company TENNECO OIL COMPANY Formation MIDDLE BARTLESVILLE File CP-10-1646  
Well MORRISON "B" NO. 5 Core Type DIAMOND Date Report 11-27-67  
Field LA HARPE Drilling Fluid WATER BASE MUD Analysts HUNT  
County ALLEN State KANSAS Elev. 1041' GL Location 1460' FNL & 1400' FEL NW 1/4 SEC. 22-25S-19

### 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 - S VERY - V/ WITH - W/
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SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		PERM. MAX.	PERM. 90°		OIL	TOTAL WATER	

### CONVENTIONAL ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM. MAX.	PERM. 90°	POROSITY PER CENT	OIL	TOTAL WATER	SAMPLE DESCRIPTION AND REMARKS
1	834.0-35.0	0.7		14.0	18.6	65.0	Sd, silty, hvy sh lams
2	35.0-36.0	2.1		16.8	21.4	51.2	Sd, silty, sh lams
3	36.0-37.0	4.9		16.7	25.2	40.1	Sd, silty, sh lams
4	37.0-38.0	5.0		19.4	28.4	36.6	Sd, silty, sh lams
5	38.0-39.0	3.2		16.4	19.5	51.2	Sd, silty, hvy sh lams
6	39.0-40.0	29		20.0	29.6	34.0	Sd, silty
7	40.0-41.0	2.8		18.3	21.8	44.7	Sd, silty, hvy sh lams
8	41.0-42.0	11		18.9	26.5	38.6	Sd, silty
9	842.0-43.0	10		17.9	22.3	43.0	Sd, silty, sh lams
	843.0-45.0						Sh, silty, sl/sdy
10	845.0-46.0	1.5		18.3	21.8	45.3	Sd, silty, dns stks
11	846.0-47.0	5.9		17.5	32.0	29.1	Sd, silty, dns stks
	847.0-48.0						Sh, silty, sd stks
12	848.0-49.0	12		19.8	27.8	34.3	Sd, silty, dns stks
13	49.0-50.0	1.5		17.1	25.1	42.7	Sd, silty, dns stks
14	50.0-51.0	16		19.7	31.5	30.0	Sd, silty, dns stks
15	51.0-52.0	5.8		14.6	23.2	53.4	Sd, silty, hvy sh lams
16	52.0-53.0	38		20.0	30.5	30.5	Sd, silty
17	53.0-54.0	6.2		19.1	27.8	38.2	Sd, silty
18	54.0-55.0	12		19.4	28.4	35.6	Sd, silty
19	55.0-56.0	18		19.0	30.5	34.2	Sd, silty
20	56.0-57.0	23		20.1	33.3	27.9	Sd, silty
21	57.0-58.0	63		20.2	31.2	30.2	Sd, silty
22	58.0-59.0	44		19.8	34.9	30.3	
23	59.0-60.0	116		19.6	33.2	31.7	Sd, silty
24	60.0-61.0	33		22.0	32.7	28.7	Sd, silty
25	61.0-62.0	105		22.0	37.7	34.6	Sd, silty
26	862.0-63.0	34		22.1	51.1	32.7	Sd, silty
	863.0-67.0						Lm, silty, shy
	867.0-71.0						Lm, silty, shy, sl/sdy
27	871.0-72.0	1.6		15.1	37.0	43.0	Sd, lmy, shy, silty
	872.0-73.0						Lm, silty, shy, sl/sdy
28	873.0-74.0	1.3		19.7	29.4	43.2	Sd, silty, shy, lmy
29	874.0-75.0	0.6		21.5	38.1	38.1	Sd, silty, shy, lmy, vert frac

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## CORE ANALYSIS RESULTS

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY'S MAX.	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
30	875.0-75.5	6.9	17.1	39.2	46.2	Sd, silty, shy, lmy, vert frac
	875.5-81.0					Lm, silty, shy
	881.0-85.0					Sh, silty, sd lams
	885.0-86.0					Lost core
31	886.0-87.0	34	20.3	44.3	33.5	Sd, few thin sh lams, gilsonite
32	87.0-88.0	30	18.9	52.4	28.6	Sd, gilsonite
33	88.0-89.0	31	20.5	55.5	31.2	Sd, gilsonite
34	89.0-90.0	107	22.4	51.7	31.7	Sd, gilsonite
35	90.0-91.0	60	22.4	46.3	35.2	Sd, gilsonite
36	91.0-92.0	161	23.1	51.5	32.5	Sd, gilsonite
37	92.0-93.0	16	19.6	51.0	30.1	Sd, gilsonite
38	93.0-94.0	80	20.5	49.2	30.7	Sd, gilsonite
39	94.0-95.0	27	21.3	52.6	30.5	Sd, gilsonite
40	895.0-96.0	17	21.0	53.3	31.9	Sd, gilsonite
	896.0-910.0					Sh, silty

THIS IS THE FINAL REPORT.

COMPANY TENNECO OIL COMPANY FIELD LA HARPE FILE CP-10-1646  
 WELL MORRISON "B" NO. 5 COUNTY ALLEN DATE 11-27-67  
 LOCATION 1460' FNL & 1400' FEL NW 1/4 STATE KANSAS ELEV. 1041' GL  
 SECTION 22-25S-19E

# CORE-GAMMA CORRELATION

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VERTICAL SCALE: 5" = 100'

## CORE-GAMMA SURFACE LOG

(PATENT APPLIED FOR)

GAMMA RAY

RADIATION INCREASE →

## COREGRAPH

TOTAL WATER

PERCENT TOTAL WATER  
80 60 40 20 0

PERMEABILITY

MILLIDARCYs

100 50 10 5 1

POROSITY

PERCENT

20 10

OIL SATURATION

PERCENT PORE SPACE

0 20 40 60 80

