

**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*

DALLAS, TEXAS

PHILLIPS PETROLEUM COMPANY  
 PHILLIPS STATE-E NO. 15  
 VACUUM FIELD  
 LEA COUNTY, NEW MEXICO

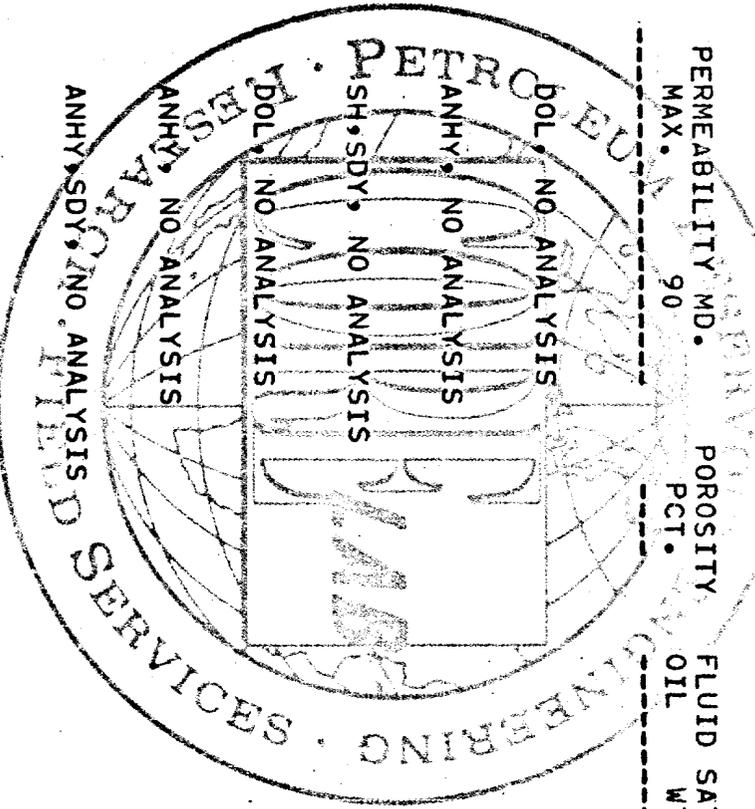
DATE: 9-1-72  
 FORMATION: GRAYBURG  
 DRG. FLUID: WATER BASE MUD  
 LOCATION: 1980 FSL 660 FWL SEC 14-T17S-R33E

FILE NO. 623-3483  
 ENGINEER: BOONE  
 ELEVATION: 4170 DF

-----  
 CORE ANALYSIS RESULTS  
 -----

CONVENTIONAL (PLUG) ANALYSIS  
 -----

SMP. NO.	DEPTH	PERMEABILITY MD.		POROSITY PCT.	FLUID OIL	SATS. WTR.	DESCRIPTION
		MAX.	90				
4310.0-13.0		DOL, NO ANALYSIS					
4313.0-16.0		ANHY, NO ANALYSIS					
4316.0-18.0		SH, SDY, NO ANALYSIS					
4318.0-24.0		DOL, NO ANALYSIS					
4324.0-28.0		ANHY, NO ANALYSIS					
4328.0-40.0		ANHY, SDY, NO ANALYSIS					
4340.0-44.0		ANHY, NO ANALYSIS					
4344.0-47.0		DOL, NO ANALYSIS					
4347.0-49.0		ANHY, NO ANALYSIS					



These analyses, opinions of **PHILLIPS** based on observations and analysis of the sample submitted to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted), but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

RECEIVED

MAY 20 1972

OIL CONSERVATION COMM.  
HOODS, W. M.

**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*

DALLAS, TEXAS

PHILLIPS PETROLEUM COMPANY  
 PHILLIPS STATE- E NO. 15

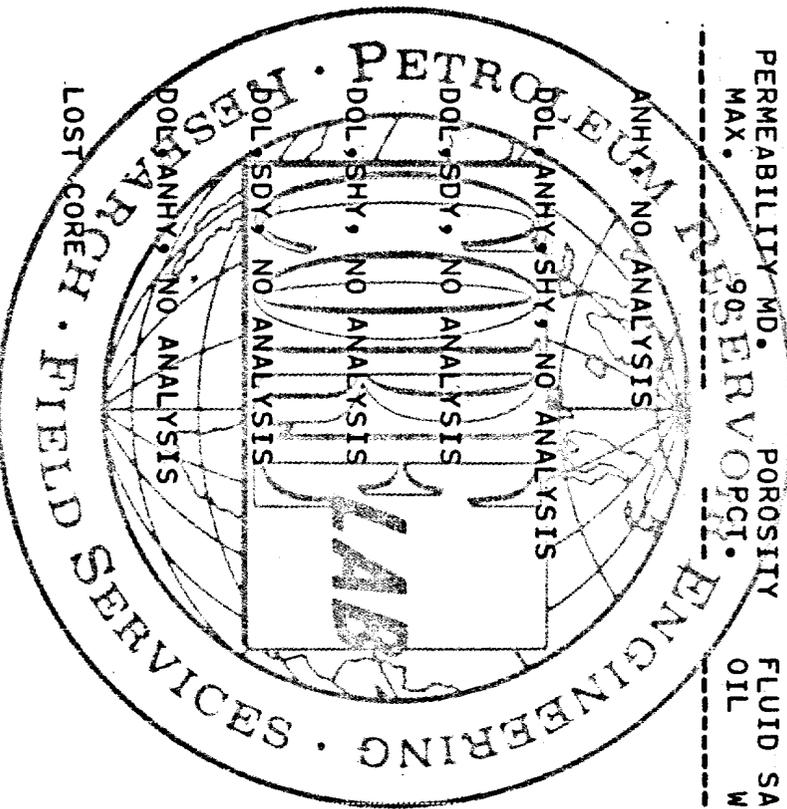
DATE: 9-1-72  
 FORMATION: GRAYBURG

FILE NO. 623-3483  
 ENGINEER: BOONE

CORE ANALYSIS RESULTS

CONVENTIONAL (PLUG) ANALYSIS

SMP NO.	DEPTH	PERMEABILITY MD. MAX.	90% SERV. PCT.	POROSITY	FLUID OIL	SATS. WTR.	DESCRIPTION
	4358.0-60.0	ANHY, NO ANALYSIS					
	4360.0-73.0	DOL, ANHY, SHY, NO ANALYSIS					
	4373.0-75.0	DOL, SDY, NO ANALYSIS					
	4375.0-78.0	DOL, SHY, NO ANALYSIS					
	4378.0-87.0	DOL, SDY, NO ANALYSIS					
	4387.0-02.0	DOL, ANHY, NO ANALYSIS					
	4302.0-06.0	LOST CORE					
	4406.0-09.0	DOL, SDY, NO ANALYSIS					
	4409.0-12.0	SD, DOL, NO ANALYSIS					
	4412.0-13.0	DOL, SDY, NO ANALYSIS					
1	4413.0-14.0	<0.1	2.9	6.9	72.5		DOL, SDY



These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

**RECEIVED**

NOV 20 1972

OIL CONSERVATION COMM.  
HOUSTON, TEXAS

PHILLIPS PETROLEUM COMPANY  
 PHILLIPS STATE-E NO. 15

CORE LABORATORIES, INC.  
 Petroleum Reservoir Engineering

DALLAS, TEXAS  
 DATE: 9-1-72  
 FORMATION: GRAYBURG

FILE NO. 623-3483  
 ENGINEER: BOONE

CONVENTIONAL (PLUG) ANALYSIS  
 CORE ANALYSIS RESULTS

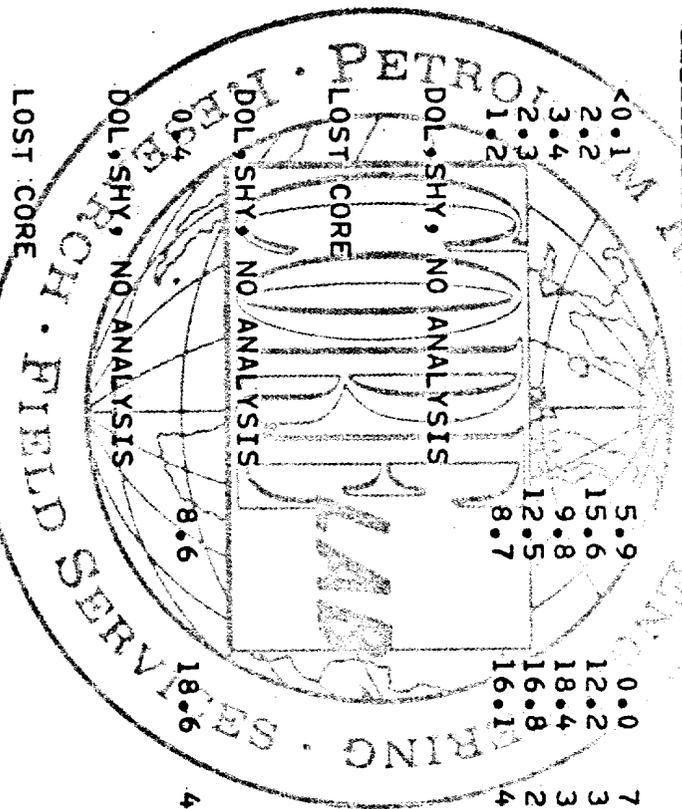
SMP. NO.	DEPTH	PERMEABILITY MD. MAX.	90 PER V. PCT.	POROSITY	FLUID SATS. OIL	WTR.	DESCRIPTION
----------	-------	-----------------------	----------------	----------	-----------------	------	-------------

2	4414.0-15.0	<0.1	5.9	0.0	79.7		SD
3	4415.0-16.0	2.2	15.6	12.2	39.2		SD
4	4416.0-17.0	3.4	9.8	18.4	39.8		SD
5	4417.0-18.0	2.3	12.5	16.8	24.8		SD
6	4418.0-19.0	1.2	8.7	16.1	44.8		SD

4419.0-31.0  
 4431.0-32.0  
 4432.0-69.0  
 4469.0-70.0  
 4470.0-76.0

DOL, SHY, NO ANALYSIS  
 DOL, SHY, NO ANALYSIS  
 DOL, SHY, NO ANALYSIS  
 DOL, SHY, NO ANALYSIS  
 DOL, SHY, NO ANALYSIS

SD, DOL



4476.0-84.0  
 4484.0-09.0  
 4509.0-14.0  
 4514.0-22.0

LOST CORE  
 DOL, SHY, NO ANALYSIS  
 DOL, SDY, SHY, NO ANALYSIS  
 DOL, SHY, NO ANALYSIS

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

**RECEIVED**

NOV 20 1972

OIL CONSERVATION COMM.  
HOBBS, N. M.

**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*

DALLAS, TEXAS

DATE: 9-1-72  
 FORMATION: GRAYBURG

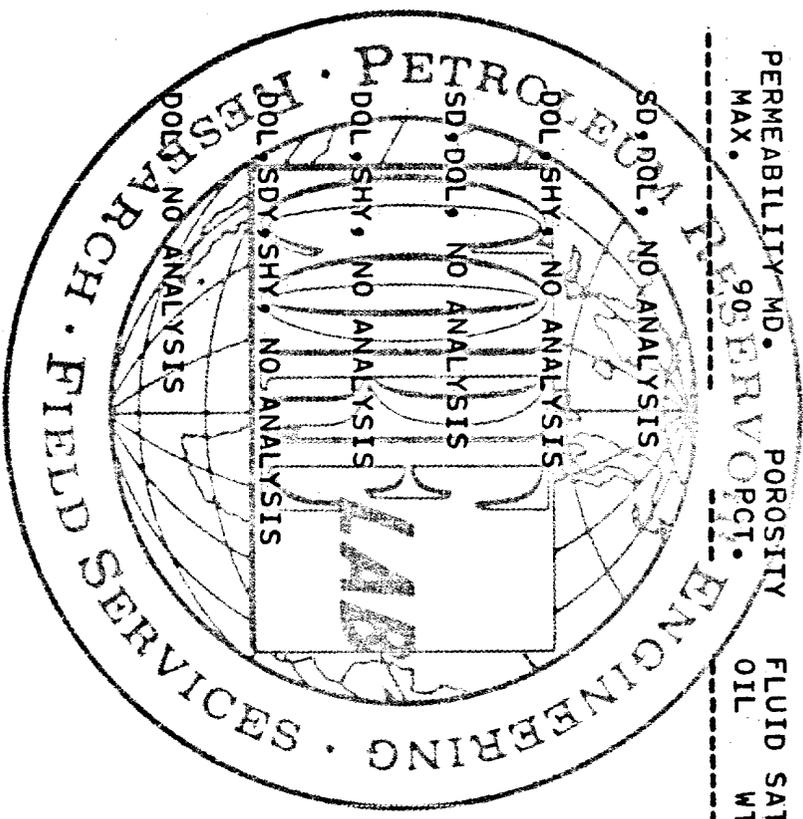
FILE NO. 623-3483  
 ENGINEER: BOONE

PHILLIPS PETROLEUM COMPANY  
 PHILLIPS STATE-E NO. 15

CORE ANALYSIS RESULTS

CONVENTIONAL (PLUG) ANALYSIS

SMP. NO.	DEPTH	PERMEABILITY MD. MAX.	90° RESERVOIR V. O.P.C.T.	POROSITY	FLUID SATS. OIL	WTR.	DESCRIPTION
	4522.0-25.0	SD, DOL, NO ANALYSIS					
	4525.0-37.0	DOL, SHY, NO ANALYSIS					
	4537.0-38.0	SD, DOL, NO ANALYSIS					
	4538.0-39.0	DOL, SHY, NO ANALYSIS					
	4539.0-44.0	DOL, SDY, SHY, NO ANALYSIS					
	4544.0-60.0	DOL, NO ANALYSIS					



These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted), but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representation, as to the productivity, proper operations, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

**RECEIVED**

NOV 21 1972

OIL CONSERVATION COMM.  
HOBBS, N. M.



**CORE LABORATORIES, INC.**

*Petroleum Reservoir Engineering*

COMPANY PHILLIPS PETROLEUM COMPANY FIELD VACUUM FILE WP-3-3483  
 WELL PHILLIPS STATE-E NO. 15 COUNTY LEA DATE 9-1-72  
 LOCATION 1980 FS & 660 FWL STATE NEW MEXICO ELEV. 4170' DF  
SEC 14-T17S-R33E

# CORE-GAMMA CORRELATION

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted), but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representation as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

VERTICAL SCALE: 5" = 100'

**CORE-GAMMA SURFACE LOG**

**COREGRAPH**

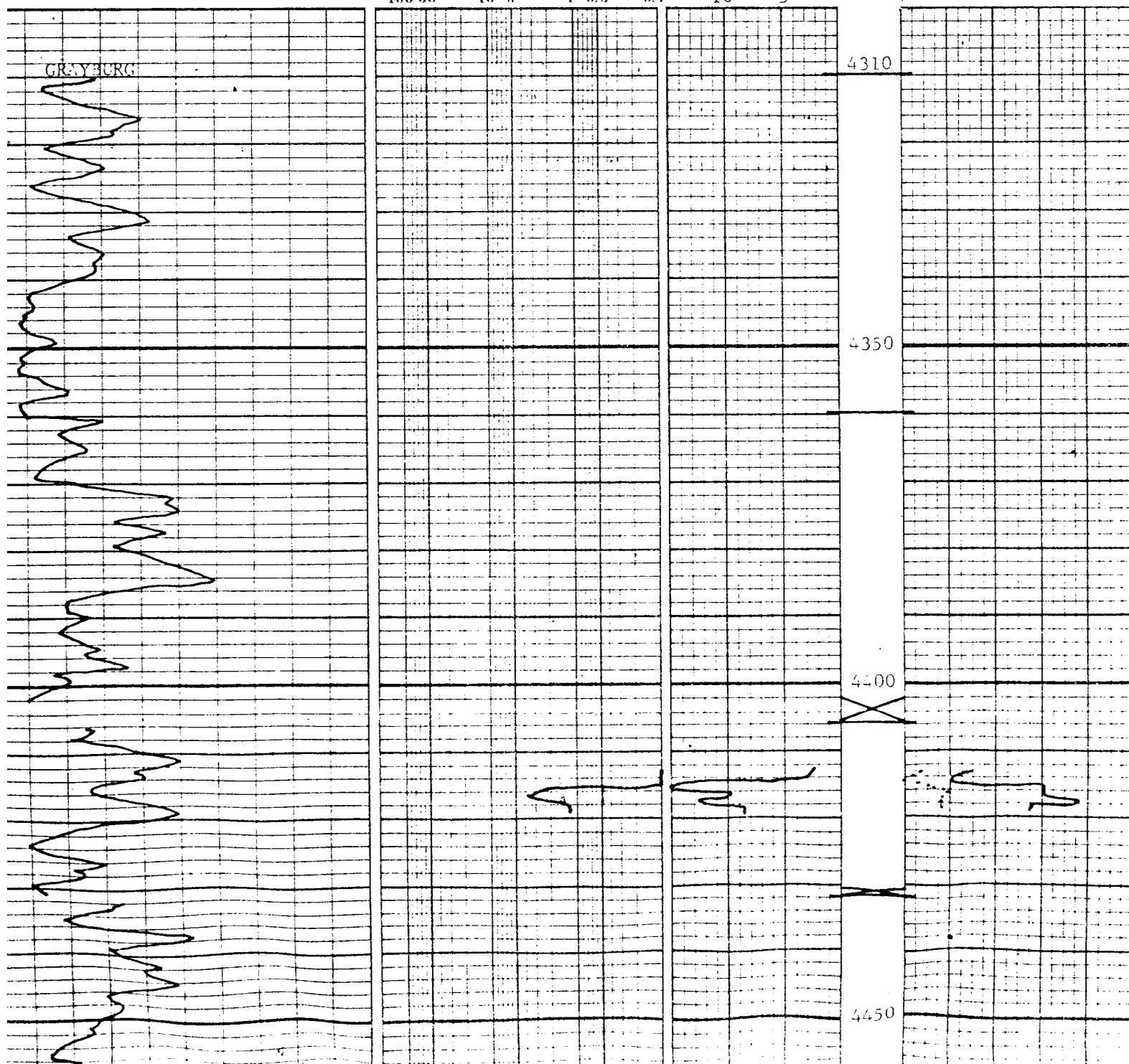
**GAMMA RAY**  
RADIATION INCREASE →

**TOTAL WATER** ———  
PERCENT TOTAL WATER  
80 60 40 20 0

**PERMEABILITY** ———  
MILLIDARCYs  
100 50 10 5 1 0.5 0.1

**POROSITY** ———  
PERCENT  
10 5

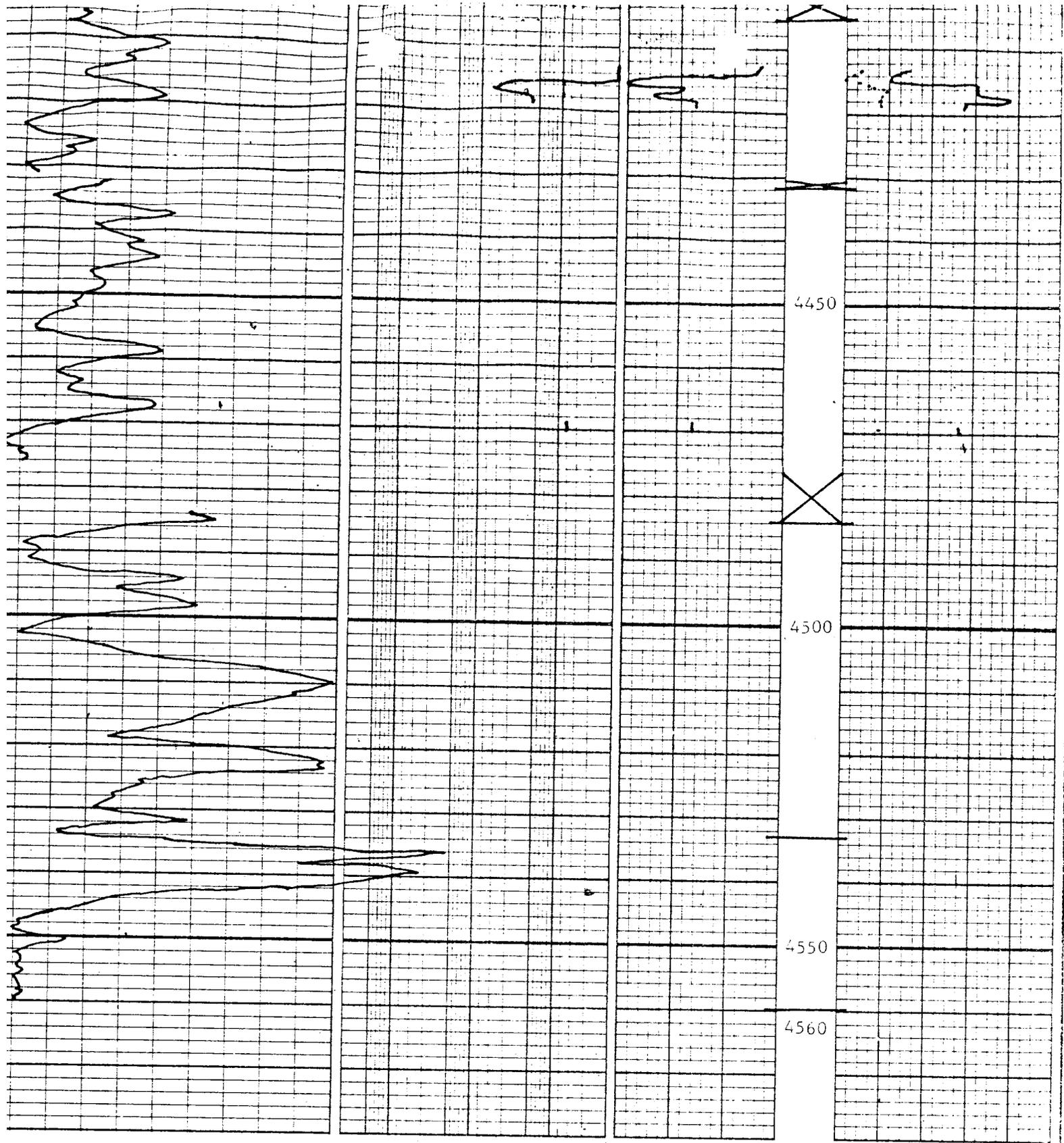
**OIL SATURATION** - - - - -  
PERCENT PORE SPACE  
0 20 40 60 80



RECEIVED

1 2 1972

OIL CONSERVATION BOARD  
FEDERAL RESERVE



I

II

4450

4500

4550

4560

X