

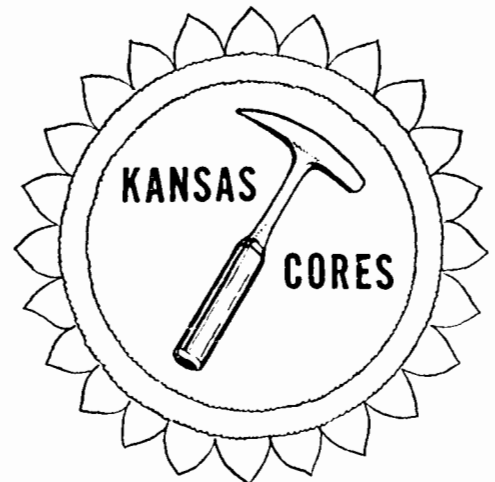
**COMPANY** LEE PHILLIPS OIL & E.H. ADAIR OIL

**WELL** LADD #8

**LOCATION** NW 1/4 NE 19-25-9E

**COUNTY** GREENWOOD

**STATE** KANSAS



PETROLEUM RESERVOIR ENGINEERING  
CORE ANALYSIS

# Kansas Cores

## PETROLEUM RESERVOIR ENGINEERING WICHITA, KANSAS

COMPANY Log Phillips Oil & E.H. Adair Oil      DATE 11-10-65  
 WELL Ladd #8      ANALYST IS  
 FIELD \_\_\_\_\_  
 COUNTY Greenwood      STATE Kansas

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 MILLIDARCY'S  $\bigcirc$ — $\bigcirc$

200    150    100    50    0

POROSITY—%    X—X

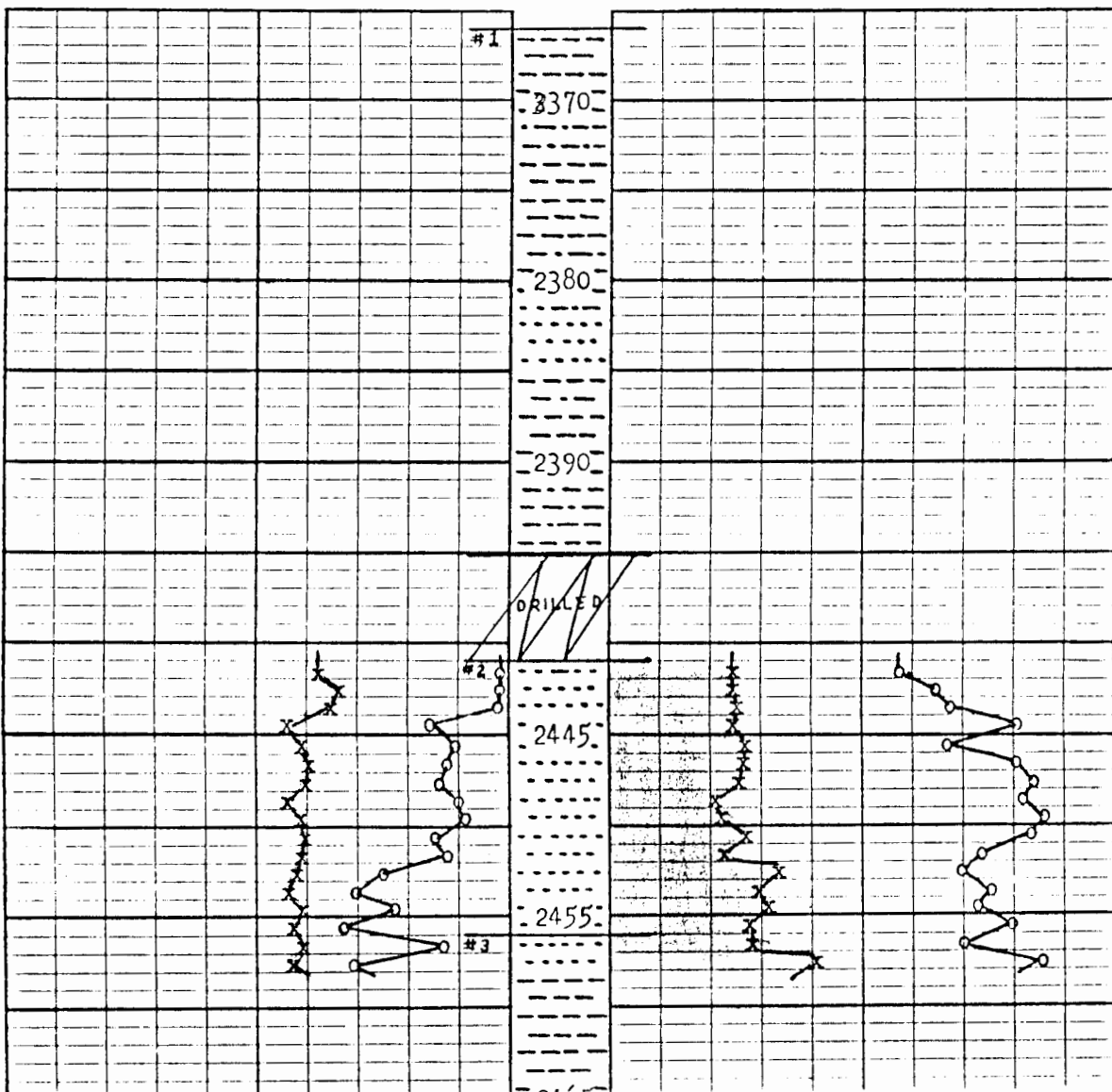
20    10    0

CONNATE WATER % SATURATION

0    70    60    50    40  $\bigcirc$ — $\bigcirc$

OIL % PORE SATURATION X—X

0    10    20



# Kansas Cores

PETROLEUM RESERVOIR ENGINEERING

CORE ANALYSIS

Nov. 10, 1965

1026 NORTH LIGHTNER  
WICHITA, KANSAS 67208

Re: CORE ANALYSIS REPORT  
Lee Phillips Oil & E.H. Adair Oil  
Ladd #8  
Greenwood County  
Kansas

Lee Phillips Oil Co.  
Wichita Plaza Bldg.  
Wichita, Kansas

Gentlemen:

The cores from your well, Ladd #8, Greenwood County, 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.

## 2441' to 2458' - Oil Productive

The samples taken from this section of Bartlesville consisted of a fine to medium grained light brown friable sand. Good oil saturation was measured throughout, along with low water percentages. The permeabilities were higher than average as well as the porosities. Higher than average reserves are calculated for this section. A good, commercial well can be expected from this zone.

Yours very truly,

KANSAS CORES

*Ivan L. Stuber*  
Ivan L. Stuber

### Attachments

cc: 3 copies to Lee Phillips Oil Co., Wichita, Ks.  
3 copies to E.H. Adair Oil Co., Wichita, Ks.

Re: CORE DESCRIPTION  
Lee Phillips & Adair Oil  
Ladd #8  
Greenwood County, Kansas

CORE #1

2366' to 2395'

Cut 29'

Rec. 29'

2366--70 Soft grey shale with few silty shale streaks: No show  
2370--73 Soft grey dirty shaley carbonaceous sand with shale streaks: No show  
2373--76 Rotten grey-black shale  
2376--78 Hard grey shale  
2378--80 Hard greys shale with few streaks silty sand: No show  
2380--82 Micaceous and carbonaceous silty sand with shale streaks: No show  
2382--85 Fine grained tight carbonaceous silty sand: Trace bleeding oil  
2385--95 Grey shale with few thin silty sand laminations: No show

CORE #2

2441' to 2456'

Cut 15'

Rec. 15'

2441--42 Fine grained slightly silty greenish-brown friable sand with few thin grey shale streaks: Good stain and odor  
2442--44 Fine grained greenish-brown friable sand: Good stain and odor  
2444--52 Soft fine to medium grained light brown friable sand: Good stain and odor  
2452--56 Soft medium grained friable brown sand: Good stain and odor

CORE #3

2456' to 2470'

Cut 14'

Rec. 13'

2456--58 Soft medium grained friable brown sand: Good stain and odor  
2458--65 Hard black shale  
2465--69 Hard grey-black shale with some grey silty shale toward bottom  
2469--70 No recovery

# Kansas Cores

PETROLEUM RESERVOIR ENGINEERING  
WICHITA, KANSAS 67208

WELL Ladd #8 COUNTY Greenwood STATE Kansas  
 COMPANY Lee Phillips Oil & Adair Oil DATE 11-10-65 FILE No. S-629  
 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	2441	4.6	1.8	19.1	51.6	11.9	Oil	
	42							
2	2442	4.3	3.7	17.2	47.8	12.3	Oil	
	43							
3	2443	5.7	3.9	17.9	46.2	12.4	Oil	
	44							
4	2444	40.5	31.6	22.0	39.6	12.2	Oil	
	45							
5	2445	26.9	24.9	20.6	47.3	13.2	Oil	
	46							
6	2446	32.2	26.8	20.1	39.9	13.6	Oil	
	47							
7	2447	35.8	31.2	20.1	38.7	12.5	Oil	
	48							
8	2448	25.8	18.7	22.6	39.3	10.1	Oil	
	49							
9	2449	22.5	18.9	20.8	37.6	11.0	Oil	
	50							
10	2450	39.3	30.6	20.7	38.5	13.5	Oil	
	51							
11	2451	33.7	22.6	20.8	43.7	11.2	Oil	
	52							
12	2452	64.6	59.4	21.0	45.1	16.4	Oil	
	53							
13	2453	77.1	58.5	21.7	42.6	14.5	Oil	
	54							
14	2454	57.8	51.3	20.4	43.5	15.7	Oil	
	55							
15	2455	82.2	32.0	21.0	40.0	14.1	Oil	
	56							
16	2456	32.6	18.9	20.6	45.0	14.3	Oil	
	57							
17	2457	77.2	53.7	21.2	37.0	20.6	Oil	
	58							

PETROLEUM RESERVOIR ENGINEERING  
WICHITA, KANSAS

Ladd #8  
19-2558E

DATA AVERAGES AND OIL RECOVERY FIGURES

DEPTH	2441'-2458'			
FEET OF PRODUCTION FORMATION OF SECTION ANALYZED	17			
AVERAGE PERMEABILITY IN MILLIDARCYS	37.2			
AVERAGE POROSITY, PER CENT	20.5			
AVERAGE TOTAL WATER % OF PORE SPACE	42.6			
AVERAGE RESIDUAL OIL % OF PORE SPACE	13.4			
AVERAGE CONNATE WATER CALCULATED % OF PORE SPACE	34.1			
ESTIMATED FORMATION VOLUME FACTOR — USED IN CALCULATING RECOVERABLE OIL	1.20			
PRODUCTIVE CAPACITY — PRODUCTIVE FEET X AVERAGE PERMEABILITY IN MILLIDARCYS	633			
RECOVERABLE OIL BY WATER DRIVE — BBLs. PER ACRE FOOT	660			
RECOVERABLE OIL BY GAS EXPANSION — BBLs. PER ACRE FOOT	396*			

\*From original bottom hole pressure to zero