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# CONTINENTAL OIL COMPANY

REPORT NO. 96-54

PONCA CITY, OKLAHOMA  
APRIL 2, 1954

## CORE ANALYSIS REPORT

CONTINENTAL OIL COMPANY  
A. W. SHONYO NO. 14 WELL  
NORTH EDWARDS FIELD  
ELLSWORTH COUNTY, KANSAS

THE SUBJECT WELL IS LOCATED IN SEC. 9, T17S, R8W. REFERENCE ELEVATION IS ROTARY BUSHING AT 1650 FEET.

FLOOD POT TESTS WERE MADE ON THE PERMEABLE CORED SECTIONS OF SAND AT THIS WELL, AS NOTED UNDER TABULATED RESULTS.

AVERAGE VALUES FOR THE CORED SECTION OF PAY SAND ARE SUMMARIZED AS FOLLOWS:

NET PAY (CORED SECTION ONLY)	5 FEET
IRREDUCIBLE WATER SATURATION	35 %
INITIAL OIL SATURATION (100 - SIWS)	65 %
RESIDUAL OIL AFTER FLOODING	21 %
EFFECTIVE POROSITY	16 %
PERMEABILITY TO AIR	47 MD.
TOTAL RECOVERABLE OIL, BBLS/ACRE/FT. (PRIMARY + SECONDARY)	364 BBLS

THE ABOVE RECOVERABLE OIL ASSUMES A FORMATION VOLUME FACTOR OF 1.20 AND AN 80% RECOVERY EFFICIENCY.



F. R. CONLEY  
SENIOR RESEARCH ENGINEER  
PRODUCTION RESEARCH DIVISION  
DEVELOPMENT AND RESEARCH DEPARTMENT

FRC-VH

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# CONTINENTAL OIL COMPANY

## CORE ANALYSIS REPORT

### CORE SUMMARY

REPORT No. 96-54

OPERATOR <u>CONTINENTAL OIL COMPANY</u>	REPORT DATE <u>4-2-54</u> LABORATORY No. <u>BLZ</u>
WELL <u>A. W. SHONYO No. 14</u>	PRELIMINARY REPORT TO <u>G. C. SAWYER</u>
FIELD <u>NORTH EDWARDS</u>	ON <u>2-18-54</u>
COUNTY <u>ELLSWORTH</u> STATE <u>KANSAS</u>	REFERENCE ELEVATION <u>1650' RB</u>
LOCATION <u>SEC. 9. T17S. R8W</u>	

#### CORE RECORDS

DATE CORED		2-11-54					
CORE NO.		1					
TYPE OF CORE		DIAMOND					
FORMATION		SIMPSON					
INTERVAL CORED: FROM	FEET	3123					
TO	FEET	3143					
RECOVERED	FEET	20					
ANALYZED	FEET	9					
TYPE DRILLING MUD		STARCH					
WEIGHT	#/ GAL.	10.3					
VISCOSITY	MARSH SEC.	39					
WATER LOSS	CC/ 30 MIN.	5.8					
PH		6					
CHLORIDES	PPM	15.2					
REPORTED OIL GRAVITY	°API	40					

#### AVERAGES (PERMEABLE FOOTAGE ONLY)

FORMATION		SIMPSON					
INTERVAL AVGD.: FROM	FEET	3138					
TO	FEET	3142					
PRODUCTIVE (2)	FEET						
NON-PRODUCTIVE	FEET						
CORE LOSS	FEET						
PROBABLE PRODUCTION							
POROSITY	%	16.1					
PERMEABILITY - HORZ.	MD.	47					
SATURATION:							
RESIDUAL OIL	% PORE SP.	23					
RESIDUAL WATER	% PORE SP.	48					
VACANT	% PORE SP.	29					
I.W.S. (3)	% PORE SP.	35*					

\* TEST DATA ONLY

#### WELL COMPLETION DATA

COMPLETED AT PB 3177' FROM TD 3210'. 5 1/2" CASING AT 3203'.  
PERFORATED 3139'-3158' AND 3170'-3174'. FRACTURED WITH 4000  
GAL. OIL AND 6000# SAND. IP PUMPING 179 BARRELS.

(DRILLING WIRE 3-9-54)

# CONTINENTAL OIL COMPANY

## CORE ANALYSIS REPORT

### RESULTS OF LABORATORY TESTS

OPERATOR CONTINENTAL OIL COMPANY WELL A. W. SHONYO No. 14

LABORATORY No. BLZ

SAMPLE NO.	DEPTH FEET	POROSITY %	PERMEABILITY TO AIR MILLIDARCS (1)		SATURATION % PORE SPACE				ACID SOL. %		RESIDUAL OIL AFTER WATER FLOODING % PORE SPACE
			HORIZONTAL	VERTICAL	OIL	WATER	VACANT	I.W.S. (2)			
SIMPSON SAND											
1	3134	3.4	-.2		3	62	35		42		
2	3135	2.9	-.2		10	81	9		41		
3	3136	2.1	-.2		14	86	0		78		
4	3137	3.3	-.2		25	62	13		83		
5	3138	19.3	167		33	36	31	15*	43		23
6	3139	15.3	31		24	45	31	38*	41		21
7	3140	15.1	7.2		18	48	34	39*	49		19
8	3141	13.4	7.7		18	60	22	49*	55		23
9	3142	17.0	23		23	53	14	34*	32		20

- (1) "-" INDICATES 'LESS THAN'  
 (2) PROBABLE PRODUCTION IF COMPLETELY ISOLATED  
 (3) IRREDUCIBLE INTERSTITIAL WATER SATURATION. VALUES MARKED BY AN ASTERISK (\*) ARE LABORATORY DETERMINATIONS.  
 (4) EQUIVALENT SODIUM CHLORIDE.

- (D) DISINTEGRATED  
 (NF) NO FLOW  
 (NCF) NO COMMERCIAL FLOW  
 (NS) NO SAMPLE OR NO SEALED SAMPLE  
 (NA) NO ANALYSIS