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CORE ANALYSIS REPORT

FOR

AMERADA PETROLEUM CORPORATION

JICARILLA APACHE NO. E-1 WELL

WILDCAT

RIO ARRIBA COUNTY, NEW MEXICO

LOCATION: SEC. 30-T24N-R4W

CORE

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

October 5, 1955

REPLY TO
1020 PATTERSON BLDG.
DENVER, COLORADO

Amerada Petroleum Corporation
Box 2040
Tulsa 2, Oklahoma

Attention: Mr. J. O. Hathaway

Subject: Core Analysis
Jicarilla Apache No. E-1 Well
Wildcat
Rio Arriba County, New Mexico
Location: Sec. 30-24N-4W

Gentlemen:

Diamond coring equipment and water base mud were used to core the Pictured Cliffs formation from 2469 to 2529 feet. Engineers of Core Laboratories, Inc. selected and quick-froze samples for analysis, and transported these samples to the Farmington laboratory. Results of the analysis are presented in this report.

Pictured Cliffs formation between 2469 and 2529 feet is interpreted to be essentially gas productive where permeable. The samples indicated in the probable production column on the Coregraph by an asterisk have higher than normal water saturations. Average core analysis values are given on page one for the 15 feet of formation interpreted to be gas productive on the Coregraph. The average permeability for these 15 feet is 0.5 millidarcy, and the productive capacity is 7.5 millidarcy-feet. A commercial producer will be dependent upon the success of a formation fracturing treatment.

Thank you for the opportunity to make this analysis for you.

Very truly yours,

Core Laboratories, Inc.

J D Harris (PE)

J. D. Harris,
District Manager

JDH:PE:ma

FM F-11A

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS

File RP-3-201 FC
Well Jicarilla Apache No. E-1

CORE SUMMARY AND CALCULATED RECOVERABLE OIL

CORE SUMMARY

FORMATION NAME	Pictured Cliffs			
DEPTH, FEET	2471.0-2502.0			
% CORE RECOVERY	100			
FEET OF PERMEABLE, PRODUCTIVE FORMATION RECOVERED	15.0			
AVERAGE PERMEABILITY MILLIDARCYS	0.50			
CAPACITY — AVERAGE PERMEABILITY × FEET PRODUCTIVE FORMATION	7.5			
AVERAGE POROSITY, PERCENT	16.9			
AVERAGE RESIDUAL OIL SATURATION, % PORE SPACE	0.0			
GRAVITY OF OIL, °A.P.I.				
AVERAGE TOTAL WATER SATURATION, % PORE SPACE	52.2			
AVERAGE CALCULATED CONNATE WATER SATURATION, % PORE SPACE	48			
SOLUTION GAS-OIL RATIO, CUBIC FEET PER BARREL (1)				
FORMATION VOLUME FACTOR—VOLUME THAT ONE BARREL OF STOCK TANK OIL OCCUPIES IN RESERVOIR (1)				

CALCULATED RECOVERABLE OIL

Prediction dependent upon complete isolation of each division. Structural position of well, total permeable thickness of oil zone and drainage area of well should be considered.

BY NATURAL OR GAS EXPANSION, BBLS. PER ACRE FOOT (2)	(4)			
INCREASE DUE TO WATER DRIVE, BBLS. PER ACRE FOOT	(4)			
TOTAL AFTER COMPLETE WATER DRIVE, BBLS. PER ACRE FOOT (3)	(4)			

Core Laboratories, Inc.

J. D. Harris (PE)

NOTE:

(*) REFER TO ATTACHED LETTER.

(1) REDUCTION IN PRESSURE FROM SATURATION PRESSURE TO ATMOSPHERIC PRESSURE.

(2) AFTER REDUCTION FROM ORIGINAL RESERVOIR PRESSURE TO ZERO POUNDS PER SQUARE INCH.

(3) RESERVOIR PRESSURE MAINTAINED BY WATER DRIVE AT OR ABOVE ORIGINAL SATURATION PRESSURE.

(4) NO ESTIMATE FOR GAS PHASE RESERVOIRS.

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