# CORE ANALYSIS REPORT

FOR

TRIPLE I ENERGY CORPORATION
BURRIS A-11-W WELL
MIAMI COUNTY, KANSAS

CORE LAB

MAY 25, 1983

TRIPLE I ENERGY CORPORATION
6600 COLLEGE BOULEVARD
SUITE 310
OVERLAND PARK, KANSAS 66211

ATTN: MR. STEVE ALLEE

SUBJECT: CORE ANALYSIS DATA
BURRIS A-11-W WELL
MIAMI COUNTY, KANSAS
CLI FILE NO. 3406-02264

GENTLEMEN:

DIAMOND CORES WERE TAKEN IN THE SUBJECT WELL AND LATER TRANSPORTED TO OUR CHANUTE LABORATORY FOR ANALYTICAL PURPOSE. THE MEASURED DATA FOLLOWS ON THE ACCOMPANYING PAGES OF THIS REPORT.

THE ACCOMPANYING COREGRAPH PRESENTS THE SURFACE CORE GAMMA LOG AND BINOMIALLY AVERAGED CORE ANALYSIS DATA IN GRAPHICAL FORM TO AID CORRELATION WITH DOWNHOLE ELECTRICAL SURVEYS.

PRODUCTIVITY INDICATED FROM THE RESIDUAL FLUID SATURATION DATA IN THE INTERVAL ANALYZED BETWEEN 467 AND 482 FEET WOULD LIKELY BE OIL AFTER FORMATION TREATMENT.

ZONAL AVERAGES ALONG WITH ESTIMATES OF RECOVERABLE OIL (WHERE APPLICABLE) ARE PRESENTED ON THE CORE SUMMARY PAGE OF THIS REPORT.

SECONDARY RECOVERY FROM A PRUDENT WATER FLOOD PROGRAM MAY APPROXIMATE PRIMARY RECOVERY BARRELS PER ACRE FOOT.

WE ARE PLEASED TO HAVE BEEN OF SERVICE AND TRUST THESE DATA WILL AID THE PRELIMINARY EVALUATION OF THIS WELL.

VERY TRULY YOURS

CORE LABORATORIES, INC.

J. Michael Edwards

J. MICHAEL EDWARDS
DISTRICT MANAGER

5 CC - ADDRESSEE

# CORE LABORATORIES, INC.

*Petroleum Reservoir Engineering*

DALLAS, TEXAS

TRIPLE I ENERGY CORPORATION
BURRIS A-11-W WELL
LOUISBURG FIELD
MIAMI COUNTY, KANSAS

DATE: 5/24/83
FORMATION: PERU
DRLG. FLUID: AIR
LOCATION: 330'NSL 990'EWL; SW 1/4; SEC. 12-17S-24E

FILE NO: 3406-02264
ENGINEER: PRITCHARD
ELEVATION:

## CONVENTIONAL PLUG ANALYSIS

| SMP. NO. | DEPTH | PERM. TO AIR MD. PLUG | POROSITY PERCENT | FLUID SATS. OIL | FLUID SATS. WTR. | STB/ AC.FT. | DESCRIPTION |
|---|---|---|---|---|---|---|---|
| | 466.0-67.0 | | | | | | SH,SD LAM |
| 1 | 467.0-68.0 | 78.0 | 21.2 | 41.6 | 46.1 | 854 | SD,SH LAM,LMY,MIC |
| 2 | 468.0-69.0 | 69.0 | 23.9 | 35.6 | 44.1 | 997 | SD,SH LAM,LMY,MIC |
| 3 | 469.0-70.0 | 183.0 | 22.9 | 33.6 | 48.9 | 872 | SD,LMY,MIC |
| 4 | 470.0-71.0 | 66.0 | 26.2 | 35.6 | 48.6 | 1005 | SD,SL/SHY,LMY,MIC |
| 5 | 471.0-72.0 | 108.0 | 24.1 | 32.5 | 46.4 | 966 | SD,SH LAM,LMY,MIC |
| 6 | 472.0-73.0 | 181.0 | 24.2 | 35.2 | 47.6 | 944 | SD,SHY,LMY,MIC |
| 7 | 473.0-74.0 | 176.0 | 23.6 | 38.0 | 38.0 | 1091 | SD,SHY,SL/CAL,MIC |
| 8 | 474.0-75.0 | 333.0 | 20.9 | 44.3 | 38.8 | 954 | SD,SHY,SL/LMY,MIC |
| 9 | 475.0-76.0 | 27.0 | 15.4 | 41.0 | 37.9 | 713 | SD,SLTY,SHY,LMY,MIC |
| 10 | 476.0-77.0 | 13.0 | 15.3 | 37.3 | 40.4 | 678 | SD,SLTY,SHY,LMY,MIC |
| 11 | 477.0-78.0 | 109.0 | 25.1 | 36.5 | 49.9 | 938 | SD,SHY,LMY,MIC |
| 12 | 478.0-79.0 | 127.0 | 24.3 | 38.2 | 51.2 | 886 | SD,SHY,CAL,MIC |
| 13 | 479.0-80.0 | 35.0 | 25.8 | 33.7 | 54.4 | 876 | SD,SHY,CAL,MIC |
| 14 | 480.0-81.0 | 80.0 | 25.0 | 34.2 | 49.0 | 949 | SD,SLTY,SHY,CAL,MIC |
| 15 | 481.0-82.0 | 85.0 | 24.5 | 33.0 | 55.0 | 823 | SD,SH INCL,LMY,MIC |

Company TRIPLE I ENERGY CORPORATION

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Well BURRIS A-11-W

CLI File 3406-02264

## CORE SUMMARY AND CALCULATED RECOVERABLE OIL

| FORMATION NAME | | PERU |
|---|---|---|
| DEPTH INTERVAL | | 467 - 482 |
| FEET OF CORE RECOVERED FROM ABOVE INTERVAL | | 15 |
| FEET OF CORE INCLUDED IN AVERAGES | | 15 |
| AVERAGE PERMEABILITY: MILLIDARCYS | | 111 |
| PRODUCTIVE CAPACITY: MILLIDARCY-FEET | | 1665 |
| AVERAGE POROSITY: PER CENT | | 22.8 |
| AVERAGE RESIDUAL OIL SATURATION: PER CENT OF PORE SPACE | | 36.7 |
| AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE | | 46.4 |
| AVERAGE CONNATE WATER SATURATION: PER CENT OF PORE SPACE | (e) | 45.0 |
| OIL GRAVITY: °API | (e) | 28° |
| ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL | | |
| ORIGINAL FORMATION VOLUME FACTOR: BARRELS SATURATED OIL PER BARREL STOCK-TANK OIL | | 1.04 |
| CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT | | 935 |

Calculated maximum solution gas drive recovery is 112 barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. These recovery estimates represent theoretical maximum values for solution gas drive and do not take into account any prior production or drainage to other areas. The difference between the calculated stock-tank oil in place and the solution gas drive recovery estimates, which are barrels per acre-foot, represent that portion of the reservoir oil which is available for possible secondary recovery techniques. Estimates of additional recoverable oil by secondary or enhanced methods would necessitate a complete engineering study of the subject reservoir.

(c) calculated (e) estimated (m) measured

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

# LITHOLOGICAL ABBREVIATIONS

sand - sd
sandy - sdy
shale - sh
shaley - shy
lime - lm
limey - lmy
fine - fn
medium - md
coarse - cs
grain - gr
slightly - sl/
very - v/
with - w/
silty - slty
vuggy - vgy
brown - brn
dark - dk

laminated - lam
pyrite - pyr
gilcinite - gil
lignite - lig
dolomite - dol
chert - ch
cementations - cmt
calcareous - cal
mica or micaceous - mic
inclusions - incl
pin point porosity - pp
fossiliferous - foss
conglomerate - cong

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

MPANY TRIPLE I ENERGY CORPORATION — FILE NO. 3406-02264

LL BURRIS A-11-W — DATE 5/25/83

LD LOUISBURG — FORMATION PERU — ELEV.

UNTY MIAMI — STATE KANSAS — DRLG. FLD. AIR — CORES

CATION 330'NSL 990'EWL; SW 1/4; SEC. 12-17S-24E

# CORRELATION COREGRAPH



*VERTICAL SCALE: 5" = 100'*

**Gamma Ray**
RADIATION INCREASE →

**Permeability**
MILLIDARCIES
1000 100 10 1

Depth Feet
450
466
482
500
550

**Porosity**
PERCENT
30 20 10 0

**Total Water**
PERCENT PORE SPACE
100 80 60 40 20 0

**Oil Saturation**
PERCENT PORE SPACE
0 20 40 60 80 100