600444

# ENERGY RESOURCES, INC.

Pecola, Kansas 66071
P. O. Box 467
913-294-5060

Lawrence, Kansas 66044
1203 Iowa
913-841-8686

FILING NO. _____

COMPANY CARMEL ENERGY INC.

WELL #1-30 [redacted]

FIELD WAYNE MITCHELL LEASE [redacted]

COUNTY VERNON - MISSOURI

LOCATION: 430.0 FSL 1309.0 FWL

SEC 21 TWP 35N RGE 33W

OTHER SERVICES:

PERMANENT DATUM: G.L. ELEV. 810.0

LOG MEASURED FROM G.L. FT. ABOVE PERM. DATUM

DRILLING MEASURED FROM G.L.

ELEV.: K.B. _____ D.F. _____ G.L. 810.0

| | | |
|---|---|---|
| DATE | 10-28-80 | 10-28-80 |
| RUN NO. | 1 NW | 1 NW |
| TYPE LOG | GAMMA RAY | NEUTRON |
| DEPTH—DRILLER | 191.6 | 191.6 |
| DEPTH—LOGGER | 186.1 | 190.6 |
| BOTTOM LOGGED INTERVAL | 0.0 | 4.5 |
| TOP LOGGED INTERVAL | WATER | WATER |
| TYPE FLUID IN HOLE | | |
| SALINITY, PPM CL | | |
| DENSITY | FULL | FULL |
| LEVEL | PRAFT | PRAFT |
| MAX. REC. TEMP., DEG F. | | |
| OPERATING RIG TIME | | |
| RECORDED BY | | |
| WITNESSED BY | | |

BORE-HOLE RECORD

| RUN NO. | BIT | FROM | TO |
|---|---|---|---|
| | | | |

CASING RECORD

| SIZE | WGT. | FROM | TO |
|---|---|---|---|
| 6/H | | 0 | T.D. |

OCT 31 1980
MO. OIL & GAS COUNCIL

BOLD ARROW

THIS HEADING AND LOG CONFORMS TO API RP 33

## EQUIPMENT DATA

| GAMMA RAY | | | NEUTRON | | |
|---|---|---|---|---|---|
| RUN NO. | 1 NW | | RUN NO. | 1 NW | |
| TOOL MODEL NO. | 705 | | LOG TYPE | NEUTRON | |
| DIAMETER | 1 11/16" | | TOOL MODEL NO. | 705 | |
| DETECTOR MODEL NO. | 705-GE | | DIAMETER | 1 11/16" | |
| TYPE | GEIGER | | DETECTOR MODEL NO. | 705 HE-3 | |
| LENGTH | 1 3/8" x | 18" | TYPE | HE | |
| DISTANCE TO N. SOURCE | 4.5 | | LENGTH | 1" x 6" | |
| | | | SOURCE MODEL NO. | 71-1 | |
| GENERAL | | | SERIAL NO. | 71-1-335 G | |
| HOIST TRUCK NO. | 0020 | | SPACING | 13" | |
| INSTRUMENT TRUCK NO. | 0020 | | TYPE | AMBE-241 | |
| TOOL SERIAL NO. | 0002 | | STRENGTH | 3 CI | |

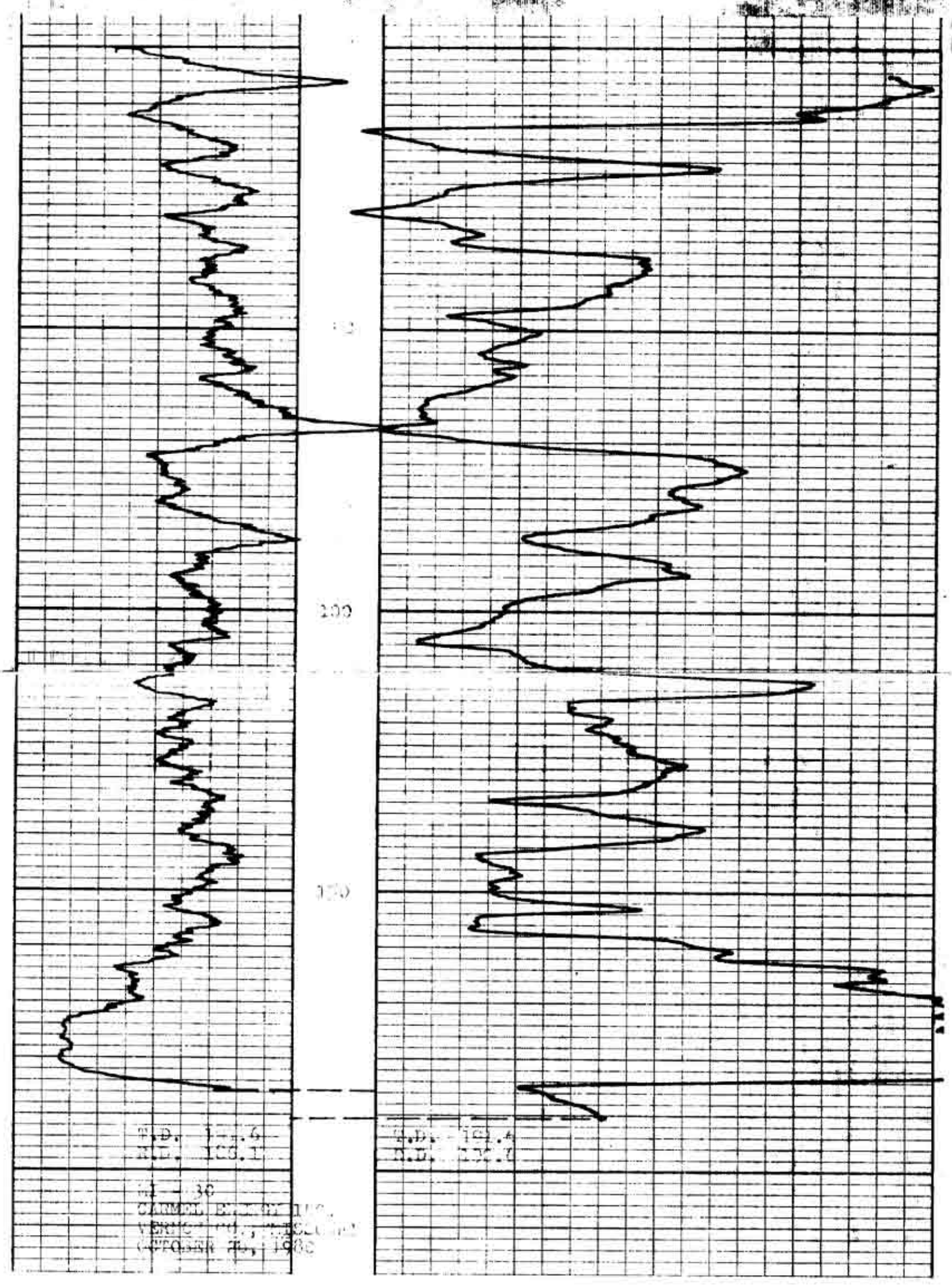
## LOGGING DATA

| GENERAL | | | | GAMMA RAY | | | | NEUTRON | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| RUN NO | DEPTHS FROM | DEPTHS TO | SPEED FT/MIN. | T.C. SEC. | SENS. SETTINGS | ZERO DIV. L OR R | API G.R. UNITS PER LOG DIV. | T.C. SEC. | SENS. SETTINGS | ZERO DIV. L OR R | API N. UNITS PER LOG DIV. |
| 1 | 0 | T.D. | 20 | 4.0 | 100/075 | 0 | 10 | 4.0 | 500/100 | 8 L | 20 |

REFERENCE LITERATURE: OPEN HOLE - NOT CEMENTED

REMARKS: DRILLING CONTRACTOR: LAYNE-WESTERN COMPANY

NSCO 16240

GAMMA RAY DEPTH NEUTRON

CASING COLLARS