Permit # 2-0-3-4

ENERGY RESOURCES, INC.

Phone Area Code 316
Box 1132
Coffeyville, Kansas 67337
Phone 251-4800

FILING No.

COMPANY: Tenneco Oil Co.

WELL: E-4

FIELD: ASTON LEASE

COUNTY: CASS, MISSOURI

LOCATION: 80' FSL & 892' FEL

SEC. 4 TWP. 46 RGE. 33

PERMANENT DATUM: GL
LOG MEASURED FROM: GL
DRILLING MEASURED FROM: GL

ELEV.: K.B. N/A
D.F. N/A
G.L. N/A

DATE: 1-13-82
TIME: 1:30 PM

RECEIVED
APR 12 1982
MO. OIL & GAS COUNCIL

OPER. WITNESS: CCC

FOLD HERE — 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 | NEU/NEU |
| DIAMETER | 1 11/16" | TOOL MODEL NO. | 705 |
| DETECTOR MODEL NO. | 705-GE | DIAMETER | 1 11/16" |
| TYPE | GEIGER | DETECTOR MODEL NO. | 705 HR-3 |
| LENGTH | 1 3/8x18" | TYPE | HR |
| DISTANCE TO N. SOURCE | 4.5 | LENGTH | 1" x 6" |
| | | SOURCE MODEL NO. | 21-1 |
| | | SERIAL NO. | 71-1-366B |
| | | SPACING | 13" |
| | | TYPE | AMSR-241 |
| | | STRENGTH | 3 CI |

| GENERAL | |
|---|---|
| HOIST TRUCK NO. | 0020 |
| INSTRUMENT TRUCK NO. | 0020 |
| TOOL SERIAL NO. | 0002 |

## LOGGING DATA

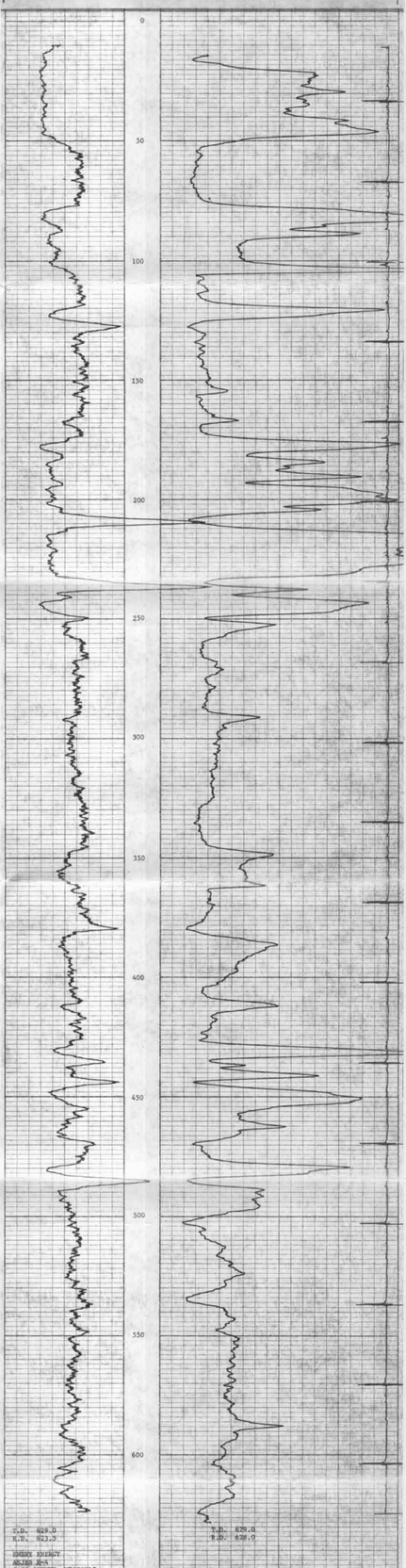
| RUN NO. | GENERAL DEPTH FROM | TO | SPEED FT./MIN. | T.C. SEC. | GAMMA RAY SENS. SETTINGS | ZERO DIV. I. OR E | API G.R. UNITS PER LOG DIV. | T.C. SEC. | NEUTRON SENS. SETTINGS | ZERO DIV. I. OR E | API N. UNITS PER LOG DIV. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0 | T.D. | 20 | 3.0 | 100/060 | 2-R | 10 | 3.0 | 500/100 | 0 | 20 |

REFERENCE LITERATURE: 2 3/8" - CEMENTED

REMARKS: DRILLING CONTRACTOR: H & N DRILLING

GAMMA RAY — DEPTH — NEUTRON

CASING COLLARS




T.D. 629.0
K.B. 623.0

T.D. 629.0
K.B. 628.0

ENERGY ENERGY
ASTON E-4
CASS COUNTY, MISSOURI
NOVEMBER 30, 1981

## BOREHOLE RECORD

| RUN NO. | BIT NO. | FROM | TO | BIT SIZE | TYPE FLUID IN HOLE | DENSITY | VISC. | PH | FLUID LOSS | SOURCE OF SAMPLE | RM @ MEAS. TEMP. | RMF @ MEAS. TEMP. | RMC @ MEAS. TEMP. | RM @ BHT | TIME CIRC. STOPPED | TIME LOGGER ON BOTTOM | MAX. REC. TEMP. | EQUIP. LOCATION | RECORDED BY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 0.0 | T.D. | 2 7/8 | WATER | | | | | PULL. | | | | | | | | NORMAN | NORMAN |

## CASING RECORD

| SIZE | WGT. | FROM | TO |
|---|---|---|---|
| 2 7/8 | | 0.0 | T.D. |