G00524

ENERGY RESOURCES, INC.

Paola, Kansas 66071
P. O. Box 487
913-294-5050

Lawrence, Kansas 66044
1203 Iowa
913-841-8886

RELEASED

FILING NO.

COMPANY CARMEL ENERGY INC.

WELL NO. WH-67

FIELD CHARLES WHITEFORD LEASE

COUNTY VERNON - MISSOURI

LOCATION: 2337.0 FNL 374.0 FWL

SEC 28 TWP 35N RGE 33W

OTHER SERVICES:

PERMANENT DATUM: G.L. ELEV. 825.1

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

DRILLING MEASURED FROM G.L.

ELEV.: K.B. N.A. D.F. N.A. G.L. 825.1

DATE	12-16-80	12-16-80
RUN NO.	1 NW	1 NW
TYPE LOG	GAMMA RAY	NEUTRON
DEPTH—DRILLER		
DEPTH—LOGGER	197.0	197.0
BOTTOM LOGGED INTERVAL	191.5	196.0
TOP LOGGED INTERVAL	0.0	4.5
TYPE FLUID IN HOLE	WATER	WATER
SALINITY, PPM CL.		
DENSITY		
LEVEL	15.0	15.0
MAX. REC. TEMP., DEG. F.		
OPERATING RIG TIME		
RECORDED BY	PRATT	PRATT
WITNESSED BY	HEITZ	HEITZ

DEC 22 1980 MO. OIL & GAS COUNCIL

RUN NO.	BORE-HOLE RECORD BIT	FROM	TO	CASING RECORD SIZE	WGT	FROM	TO
				OPEN HOLE			

EQUIPMENT DATA

	GAMMA RAY	NEUTRON
RUN NO.	1 NW	1 NW
LOG TYPE		NEU/NEU
TOOL MODEL NO.	705	705
DIAMETER	1 11/16"	1 11/16"
DETECTOR MODEL NO.	705-GE	705 HE-3
TYPE	GEIGER	HE
LENGTH	2 3/8" x 18"	1" x 6"
DISTANCE TO N. SOURCE	4.5	21-1
LENGTH		21-1-335 G
SOURCE MODEL NO.		13"
SERIAL NO.		AMBE-241
SPACING		3 CI
TYPE		
STRENGTH		

GENERAL

HOIST TRUCK NO.	0020
INSTRUMENT TRUCK NO.	0020
TOOL SERIAL NO.	0002

LOGGING DATA

GENERAL

RUN NO.	DEPTHS FROM	TO	SPEED FT./MIN.	T.C. SEC.	SENS. SETTINGS
1	0	T.D. 20	4.0		100/075

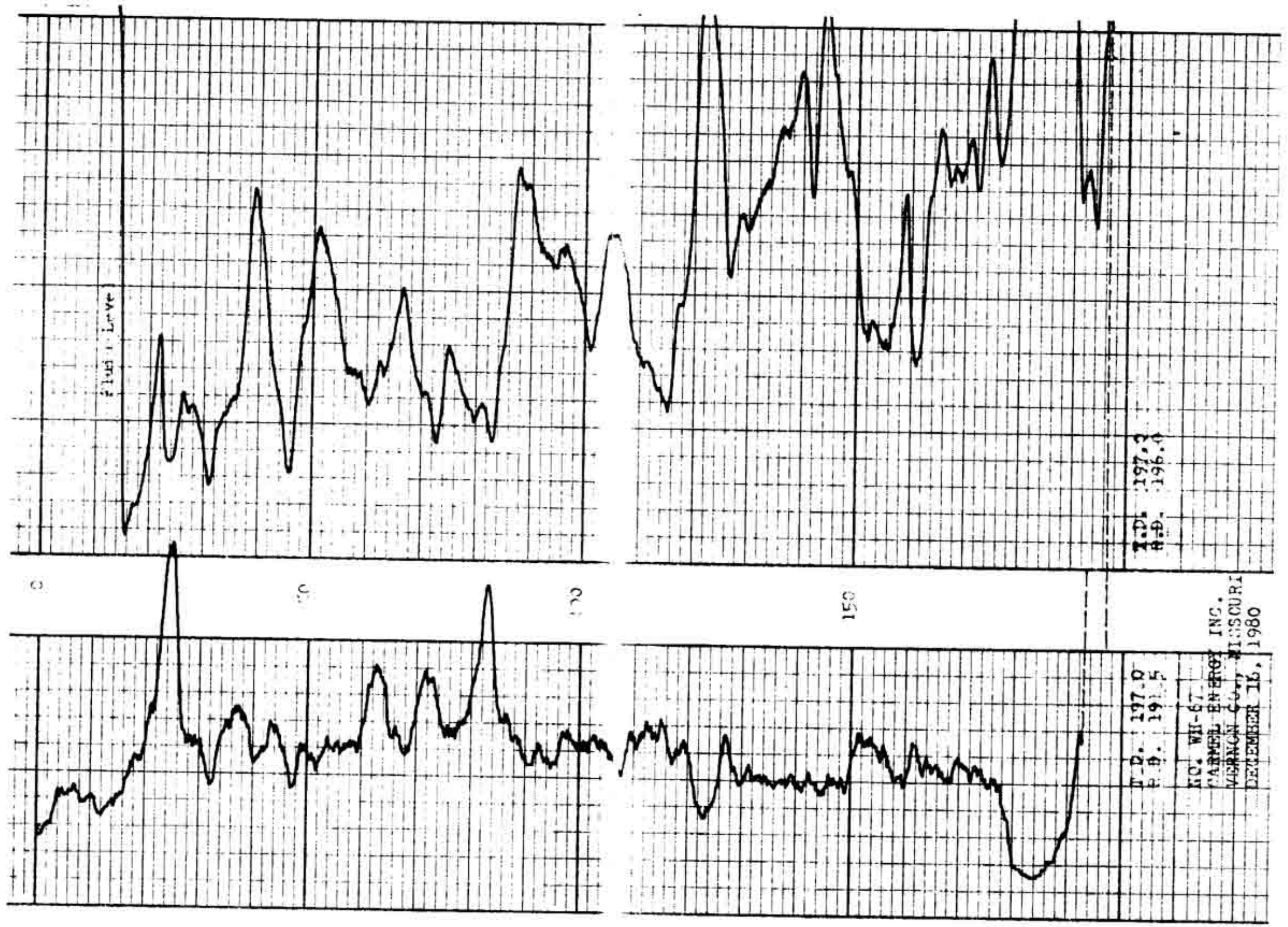
GAMMA RAY

ZERO DIV. LOG R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV. LOG R	API N. UNITS PER LOG DIV.
2 R	10	4.0	500/100	5 I	20

NEUTRON

REFERENCE LITERATURE: OPEN HOLE - NOT CEMENTED

REMARKS: DRILLING CONTRACTOR: LAYNE-WESTERN COMPANY

GAMMA RAY DEPTH NEUTRON

CASING COLLARS