600295

ENERGY RESOURCES, INC.

Paola, Kansas 66071
P. O. Box 487
913-294-5190

Lawrence, Kansas 66044
1203 Iowa
913 841 8886

RELEASED

FILING NO _____

COMPANY CARMEL ENERGY INC.

WELL WH-64

FIELD CHARLES WHITEFORD LEASE

COUNTY VERNON - MISSOURI

LOCATION: 2068.0 FNL 1464.0 FWL

SEC 28 TWP 35N RGE 33W

OTHER SERVICES

PERMANENT DATUM G.L. ELEV 819.9
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. 819.9

DATE	12-19-80	12-19-80
RUN NO	1 NW	1 NW
TYPE LOG	GAMMA RAY	NEUTRON
DEPTH—DRILLER		
DEPTH—LOGGER	174.3	174.3
BOTTOM LOGGED INTERVAL	168.8	173.3
TOP LOGGED INTERVAL	0.0	4.5
TYPE FLUID IN HOLE	WATER	WATER
SALINITY, PPM CL		
DENSITY		
LEVEL	FULL	FULL
MAX REC. TEMP. DEG F		
OPERATING RIG TIME		
RECORDED BY	MORGAN	MORGAN
WITNESSED BY		MO. OIL & GAS COUNCIL

DEC 2 1980

BORE-HOLE RECORD

RUN NO	BIT	FROM	TO

CASING RECORD

SIZE	WGT	FROM	TO
OPEN HOLE			

EQUIPMENT DATA

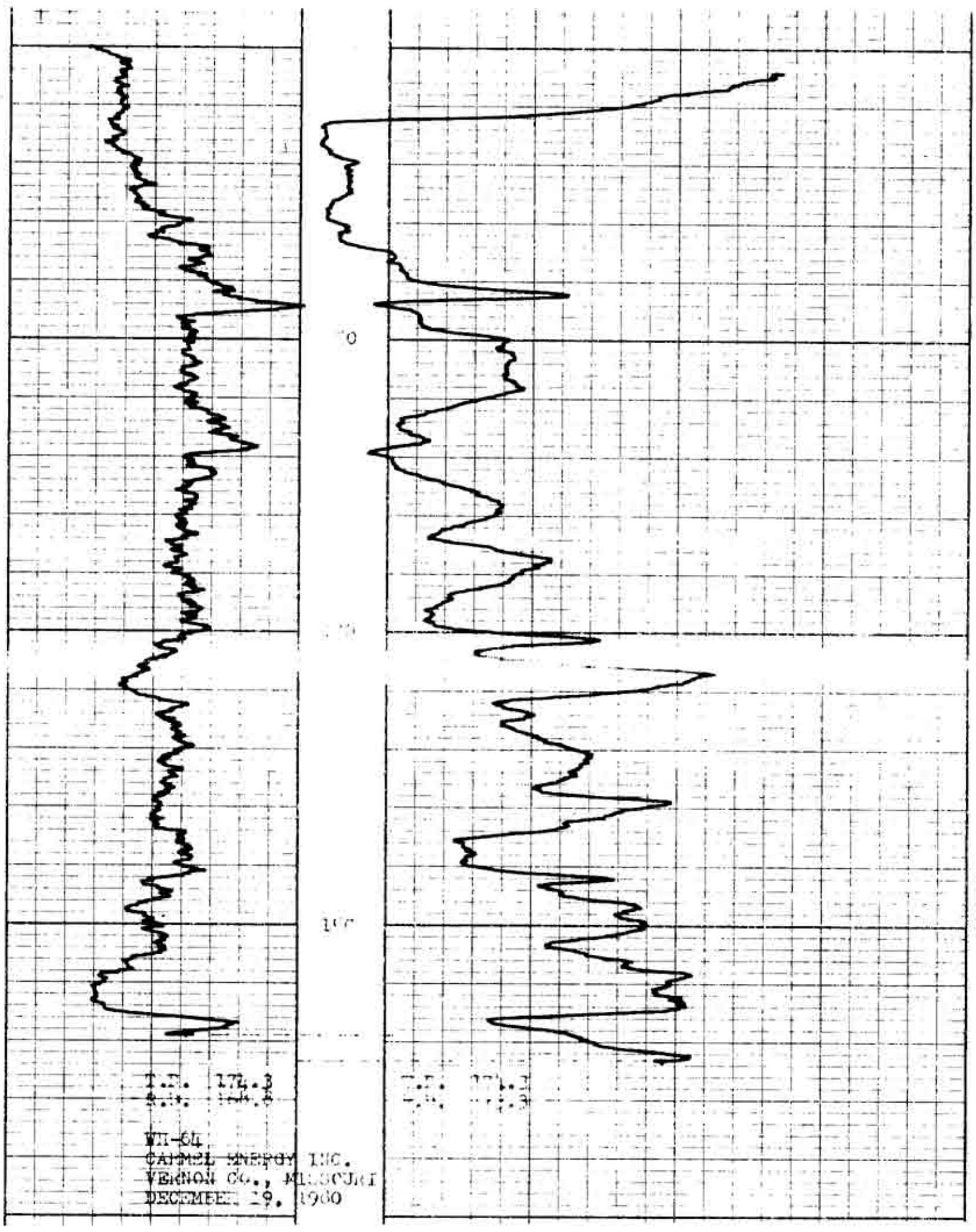
GAMMA RAY		NEUTRON	
RUN NO	1 NW	RUN NO	1 NW
TOOL MODEL NO	705	LOG TYPE	NEU/NEU
DIAMETER	1 11/16"	TOOL MODEL NO	705
DETECTOR MODEL NO	705-GE	DIAMETER	1 11/16"
TYPE	GEIGER	DETECTOR MODEL NO	705 HE-3
LENGTH	1 3/8" x 18"	TYPE	HE
DISTANCE TO N SOURCE	4.5	LENGTH	1" x 6"
		SOURCE MODEL NO	71-1
GENERAL		SERIAL 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 R	10	4.0	500/100	5 L	20

REFERENCE LITERATURE OPEN HOLE

REMARKS DRILLING CONTRACTOR: LAYNE-WESTERN COMPANY

GAMMA RAY DEPTH NEUTRON

CASING COLLARS