60029 3

ENERGY RESOURCES, INC.

Paola Kansas 66071
P O Box 467
913 294 5050

Lawrence Kansas 66044
1203 Iowa
913 841 8886

RELEASED

FILING NO

COMPANY CARMEL ENERGY INC.

WELL WH-53

FIELD CHARLES WHITEFORD LEASE

COUNTY VERNON - MISSOURI

LOCATION: 1798.0 FNL 375.0 FWL

SEC 28 TWP 35N RGE 33W

OTHER SERVICES

PERMANENT DATUM G.L. ELEV 829.4
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. 829.4

DATE	12-19-80	12-19-80
RUN NO	1 NW	1 NW
TYPE LOG	GAMMA RAY	NEUTRON
DEPTH-DRILLER		
DEPTH LOGGER	200.1	200.1
BOTTOM LOGGED INTERVAL	194.6	199.1
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		

DEC 24 1980
MO. OIL & GAS COUNCIL

BORE-HOLE RECORD

RUN NO	BIT	FROM	TO

CASING RECORD

SIZE	WGT	FROM	TO
OPEN	HOLE		

EQUIPMENT DATA

GAMMA RAY

RUN NO	1 NW	
TOOL MODEL NO	705	
DIAMETER	1 11/16"	
DETECTOR MODEL NO	705-GR	
TYPE	GEIGER	
LENGTH	1 3/8" x 18"	
DISTANCE TO N SOURCE	4.5	

GENERAL

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

NEUTRON

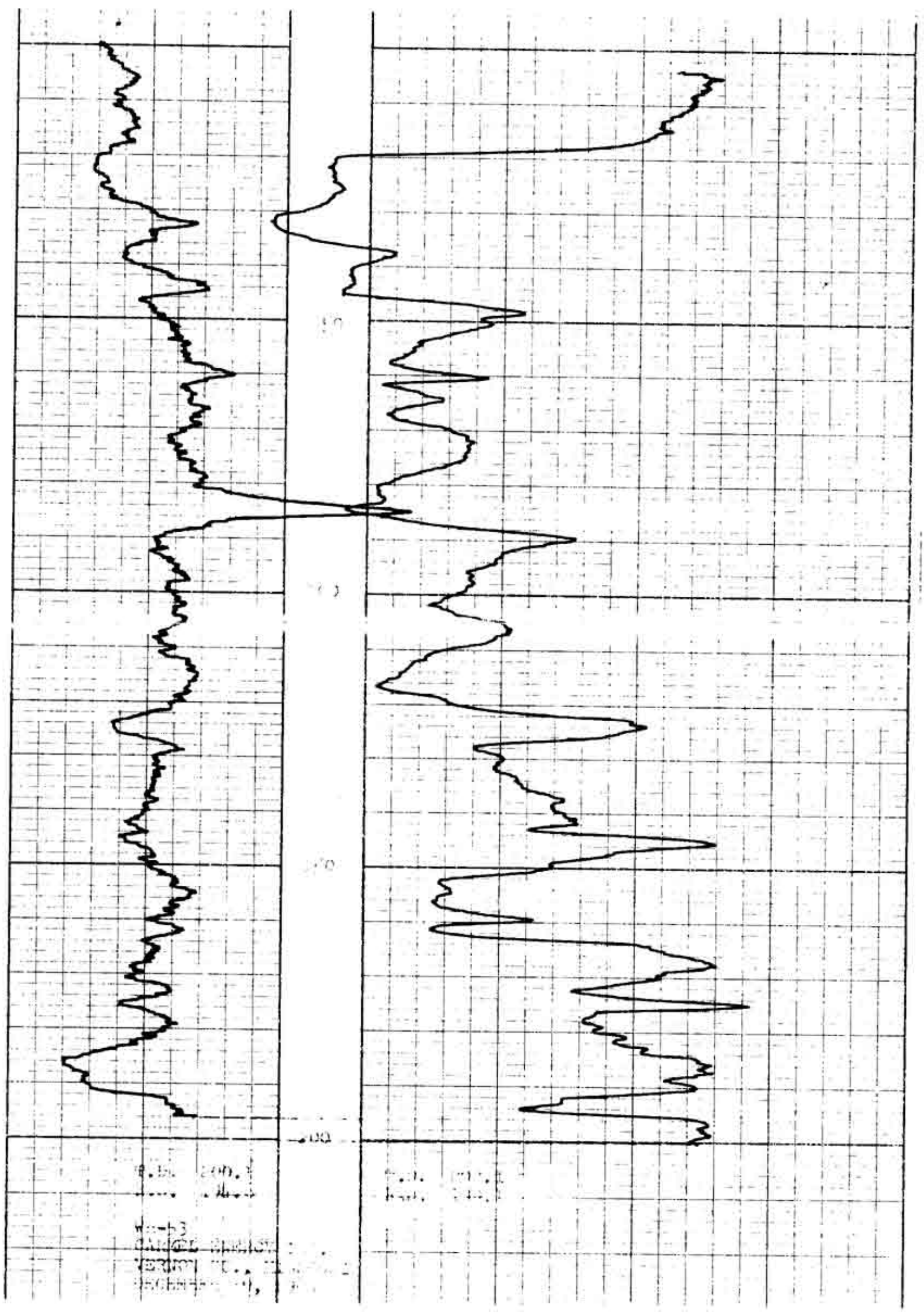
RUN NO	1 NW	
LOG TYPE	NEU/NEU	
TOOL MODEL NO	705	
DIAMETER	1 11/16"	
DETECTOR MODEL NO	705 HE-1	
TYPE	HE	
LENGTH	1" x 6"	
SOURCE MODEL NO	71-1	
SERIAL NO	71-1-335 G	
SPACING	13"	
TYPE	AMBE-241	
STRENGTH	3 CI	

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