602055

Permit #20001

MIDWEST SURVEYS
GAMMA RAY SPACED
DENSITY AND CALIPER
NOV 21 1983
MO. OIL & GAS COUNCIL

FILING NO.

Company OPERATING ENGINEERS UNION LOCAL 101
Well NO. 1
Field TRAINING SITE LEASE
County JACKSON State MO
Location SW4 NW4 SW4 NE4

Sec. 23 Twp. 49N Rge. 33W
Permanent Datum G.L.
Log Measured From G.L.
Drilling Measured From G.L.

Elev. G.L. 0.0 K.B. NA D.F. NA

Date 4/27/83
Run No. 1
Depth-Driller 679.0
Depth-Logger 674.0
Top Logged Interval 50.0
Type Fluid in Hole WATER-GEL
Salinity, PPM Cl NA
Fluid Level FULL
Max. Rec. Temp. NA
Estimated Cement Top NA
Equipment-Location NA
Recorded By ALAN BREEKER
Witnessed By NA

Bit	Size	From	To
1	6 1/2"	0.0	T.D.

Casing Record	Size	Wgt.	From	To
1	6 5/8"	0.0	50.0	

Borehole Record	Size	From	To
1	6 1/2"	50.0	679.0

Stuck Pipe	NA
Equipment Failure	NA
Logger at Bottom	NA
Max. Rec. Temp.	NA
Equipment Location	NA
Recorded By	NA
Witnessed By	NA

Run No.	Logging Unit	Location	Gamma Ray Tool No.	Tool No.	Dual Spaced Density Source No.	Source Type	Source Storage
1	107	PAOLA	NA	CS-1542	NTR-572	CS- 137	LEAD

CALIBRATION DATA

Run No.	Density High CPS	Density Low CPS	Dual Spaced Density LCR	Dual Spaced Density LucDn	Dual Spaced Density HCR	Dual Spaced Density Aluminum	Dual Spaced Density HCR	Caliper L Ring	Caliper S Ring	Density Aluminum	Density Lucite
1	5000	500	1500	LCR 6750	HCR 100	LCR 3300	HCR	7"	4.5	2.62	1.38

LOGGING DATA

Run No.	General Depth From	General Depth To	General Speed Ft. Min.	TC	Dual Spaced Density API Per Log Div. High	Dual Spaced Density API Per Log Div. Low	Dual Spaced Density Matrix Density	Fluid Density	Salinity PPM NaCl
1	50.0	674.0	25	0.5	250	25	2.65	1.0	NA

REMARKS:

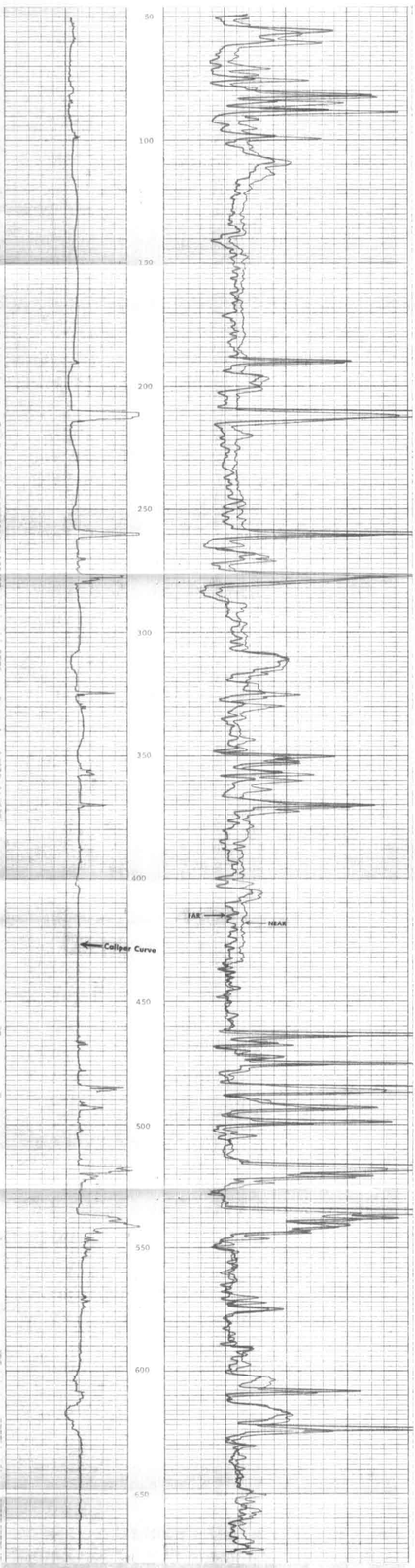
NOTICE: All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by one of our officers, agents or employees. These interpretations are also subject to our General Terms and Conditions set out in our current Price Schedule.
MIDWEST SURVEYS

GAMMA RAY
CPS
0 CPS COUNTS/DIV. 0 CPS

DEPTHS

BULK DENSITY
GRAMS/CC
LOW DENSITY 0 — 500
HIGH DENSITY 2.00 — 3.50

CALIPER
HOLE SIZE - INCHES
0" — 10"



COMPANY Operating Engineers Union Local 101
WELL No. 1
LEASE Training Site
COUNTY Jackson Co., MO
DATE April 27, 1983

DRILLERS T.D. 701.0
LOGGERS T.D. 679.0
LOGGERS R.D. 674.0