SCHLUMBERGER

BOREHOLE COMPENSATED SONIC LOG WITH CALIPER

COMPANY	MURPHY OIL CORP.
WELL	GREMAUD #1
FIELD	WILDCAT
COUNTY	PERRY
STATE	MISSOURI
LOCATION	660'FSL X 1980'FWL
Sec.	22
Twp.	36N
Rge.	12E
Other Services:	L-GR

Permanent Datum: BRADENHEAD FLANGE, Elev. 353.5
Log Measured From K.B., 8.7 Ft. Above Perm. Datum
Drilling Measured From K.B.

Elev.: K.B. 362.1
D.F. -
G.L. 354.1

Date	12-9-67			
Run No.	ONE			
Depth—Driller	2000			
Depth—Logger	2000			
Btm. Log Interval	1997			
Top Log Interval	200			
Casing—Driller	10 3/8 @ 194	@	@	@
Casing—Logger	200			
Bit Size	7 7/8"			
Type Fluid in Hole	AQUAGEL			
Dens. / Visc.	9.2 / 38			
pH / Fluid loss	9.0 / 5.8 ml	ml	ml	ml
Source of Sample	PIT			
R_m @ Meas. Temp.	1.45 @ 70°F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	1.09 @ 75°F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	1.6 @ 75°F	@ °F	@ °F	@ °F
Source: R_{mf} / R_{mc}	M / C			
R_m @ BHT	1.25 @ 82°F	@ °F	@ °F	@ °F
Time Since Circ.	N.A.			
Max. Rec. Temp.	82°F	°F	°F	°F
Equip. / Location	3010 / MT.C.			
Recorded By	NUTT			
Witnessed By	ADAMS			

FOLD HERE The well name, location and borehole reference data were furnished by the customer.

REMARKS

Changes in Mud Type or Additional Samples		
Date / Sample No.		
Depth—Driller		
Type Fluid in Hole		
Dens. / Visc.		
ph / Fluid Loss	ml	ml
Source of Sample		
R_m @ Meas. Temp.	@ °F	@ °F
R_{mf} @ Meas. Temp.	@ °F	@ °F
R_{mc} @ Meas. Temp.	@ °F	@ °F
Source: R_{mf} / R_{mc}		
R_m @ BHT	@ °F	@ °F
R_{mf} @ BHT	@ °F	@ °F
R_{mc} @ BHT	@ °F	@ °F

Scale Changes			
Type Log	Depth	Scale Up Hole	Scale Down Hole

Equipment Data			
Run No.	Tool Type	Tool Position	Other

C.D.: S.O.: CENTRALIZED
Equip. Used: CART. No. SLC-A 148
PANEL No. SLP-C 302
SONDE No. SLS-D 256

$$\text{Velocity (feet per second)} = \frac{1{,}000{,}000}{\text{Interval Transit Time (microseconds per foot)}}$$

12-09-67 MO 08452 2

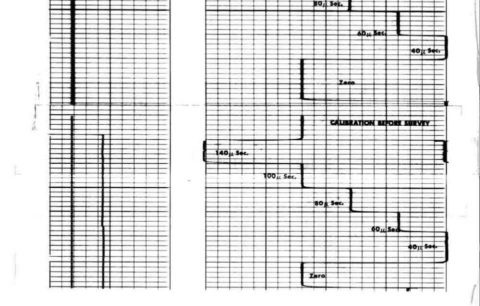
CALIPER HOLE DIAM. IN INCHES — 6 11 16

DEPTHS

INTERVAL TRANSIT TIME MICROSECONDS PER FOOT — T 2 R1 2 R2 — 140 90 40

DETAIL LOG

COMPANY MURPHY OIL CORP.
WELL GREMAUD #1
FIELD WILDCAT
COUNTY PERRY STATE MISSOURI

SWSC FR 1997
SWSC TD 2000
DRLR TD 2000
Elev: KB 362.1
DF -
GL 354.1

CALIBRATION DATA