DUAL INDUCTION - LATEROLOG

Schlumberger

CONFIDENTIAL

COMPANY	TEXACO, INC
WELL	KENNETH BOWLIN #1
FIELD	WILDCAT
COUNTY	ANDREW CO.
STATE	MO
Location	1334? FSL & 660 FWL
Other Services	FDC-GR
Sec.	8
Twp.	59N
Rge.	34W
Permanent Datum	GROUND
Elev.	1053
Log Measured From	KB, 5 Ft. Above Perm. Datum
Drilling Measured From	KB
Elev.: K.B.	1058
D.F.	—
G.L.	1053

Date	1-5-73
Run No.	ONE
Depth—Driller	1498
Depth—Logger	1503
Btm. Log Interval	1497
Top Log Interval	130
Casing—Driller	8 5/8 @ 130
Casing—Logger	130
Bit Size	6 3/4
Type Fluid in Hole	FLOW
Dens. / Visc.	9.4 / 35
pH / Fluid Loss	/ ml
Source of Sample	CIRC
Rm @ Meas. Temp.	4.1 @ 63 °F
Rmf @ Meas. Temp.	3.0 @ 64 °F
Rmc @ Meas. Temp.	—
Source: Rmf / Rmc	M / —
Rm @ BHT	2.88 @ 90 °F
Time Since Circ.	—
Max. Rec. Temp.	90 °F
Equip. / Location	4311 / WARREN
Recorded By	McGINNESS
Witnessed By	MR. ...

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

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		
Rm @ Meas. Temp.	@ °F	@ °F
Rmf @ Meas. Temp.	@ °F	@ °F
Rmc @ Meas. Temp.	@ °F	@ °F
Source: Rmf / Rmc		
Rm @ BHT	2.88 @ 90 °F	@ °F
Rmf @ BHT	2.35 @ 90 °F	@ °F
Rmc @ BHT	@ °F	@ °F

SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole
SP	REPEAT	15 MV	
"	MAIN LOG	10 MV	

EQUIPMENT DATA

Run No.	ONE
Panel No.	CB-204
Cart. No.	B-154
Sonde No.	DB-48
Mem. Panel No.	B-118
G.R. Cart. No.	—
G.R. Panel No.	—
TTR No.	—
Cent. Device	NOT USED
Stand off - Inches	ZERO
Time Const. - Sec.	—
Speed - F.P.M.	75

REMARKS

Service Order No. - 85728

API Serial No. -

☐ Surface determined sonde errors used.

☐ Sonde error corrected for ___ inch borehole signal at R_m = ___

☒ Induction zero set in hole at depth of 1490 feet.

CALIBRATION DATA

CALIBRATION	BACKGND. CPS.	SOURCE CPS.	GALV. INCR DIVISION	SENS. TAP (FOR CAL.)	SENS. TAP (RECORD)	TIME CONST.
GAMMA RAY						

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 any of our officers, agents or employees. These interpretations are also subject to Clause 7 of our General Terms and Conditions as set out in our current Price Schedule.

SPONTANEOUS POTENTIAL MILLIVOLTS	DEPTHS	RESISTIVITY OHMS. M²/M
10 −|—|+		DEEP INDUCTION LOG 0.2 1.0 10 100 1000 2000
		MEDIUM INDUCTION LOG 0.2 1.0 10 100 1000 2000
RXO/RT INCREASING		LATEROLOG — 8 0.2 1.0 10 100 1000 2000

Log Analysis

SCHLUMBERGER

COMPANY: Texaco, Inc.	COUNTY: Andrew	WELL: Kenneth Bowlin #1	STATE: Mo	

Miss SP = −40 mv

Rmf/Rwe = 3.6

Rmf @ BHT = 2.33

Rmfe = 1.98

Rwe = .55

Rw ≈ .6

DEPTH	Rw	Rt	ρ_g	% POROSITY	% WATER	REMARKS
1214-98	.06	15	2.68	22	83	WET
1227-...	"	12	"	20	97	"
...	"	21	"	10	100+	"
...						
1364-84	"	23	"	8/12	100+	"
1455-73	"	23	"	16	91	"

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DATE	LOCATION	ENGINEER
1-3-73	Warren	McGinness