Schlumberger

DUAL SPACING THERMAL NEUTRON DECAY TIME

COUNTY COLUMBIA
FIELD MIST NEHALEM BASIN
LOCATION 3-6N-5W
WELL COLUMBIA COUNTY 33-3
COMPANY REICHHOLD ENERGY

COMPANY REICHHOLD ENERGY CORPORATION

WELL COLUMBIA COUNTY 33-3

FIELD MIST NEHALEM BASIN

COUNTY COLUMBIA **STATE** OREGON

LOCATION 1699'N & 385'1 FROM
CORNER OF:

API SERIAL NO	SEC.	TWP	RANGE
	3	6N	5W

Other Services:

Permanent Datum: GL ; Elev.: 1039
Log Measured From KB 10 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 1049
D.F. -
G.L. 1039

Date	6-9-82			
Run No.	THREE			
Depth—Driller	2749			
Depth—Logger (Schl.)	2566			
Btm. Log Interval	2560			
Top Log Interval	1000			
Type fluid in hole	GAS			
Salinity ppm Na Cl.	-			
Density	-			
Fluid level	-			
Max. rec. temp., deg F.	-			
Operating rig time	-			
Truck no. / D Truck no.	5774 / 4612			
Location	BKS CH			
Recorded by	MOFFETT			
Witnessed by	STINSON			

SCANNED

RUN	BORE-HOLE RECORD			CASING & TUBING RECORD				
No.	Bit	From	To	Size	Wgt.	Remarks	From	To
				2-3/8	4.7		SURF	2419
				4-1/2	10.5		SURF	2749
				7	20		SURF	407

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

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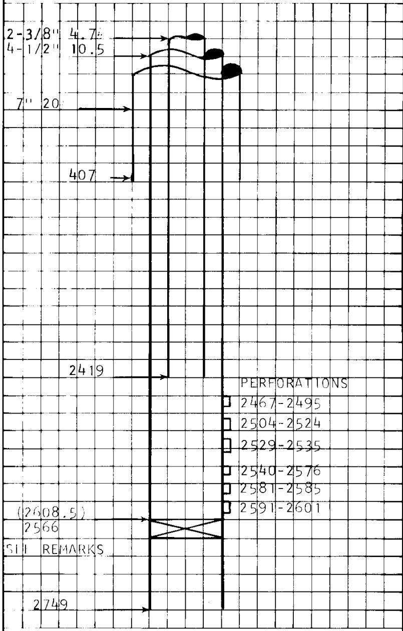
Log depths of these records relate to:
Schlumberger line measurements ☐
Correlated by Radioactivity Log measurements ☒

WELL SKETCH



Indicate: Hole deviation in production zone. Open hole diameter Diameter and weight of casing and tubing Position, nature and date of perforations (bullets, SC, capsules etc.) Depth of all plugs and packers Annulus fluid type.

EQUIPMENT DATA

Run No.	THREE		
Logging Unit	5774		
Location	4405		
TNP-	LA-57		
CAL-	QB-363		
TNC-	KA-405		
TNC-	KB-406		
TND-	KC-408		
TNG-	-		
SGT-	SHH-CA-479		

Time			
Run No.	THREE		
Service Order No.	183753		
Fluid Type in Tbg-Csg Annulus	-		
Annulus Fluid Salinity, ppm Na. Cl	-		
Estimated Cement Top	-		
Source of Cement Top	-		
Sigma (Produced water)	-		
Source of Sigma $_w$	-		
Csg Collars Recorded	23 ft. DEEP	ft.	ft.
Perforations			

REMARKS:

THRU-TUBING BRIDGE PLUG MAY HAVE MOVED
UP-HOLE. ORIGINAL SETTING DEPTH 2608.5

CALIBRATION DATA

TYPE LOG					
Run No.			THREE		
GR		BKG. CPS	70		
		Source CPS	-		
		Tc	-		
TDT NEAR (N3)		BKG. CPS	0		
		Source CPS	520		
TDT FAR (F3)		BKG. CPS	0		
		Source CPS	630		

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 our General Terms and Conditions as set out in our current Price Schedule.

RUN NUMBER ⟶	THREE									
PASS NUMBER ⟶	ONE									
DATE	6-9-82									
WELL CONDITION	SHUT									
OIL RATE (SURF)	-									
GAS RATE	-									
WATER RATE	-									
WELLHEAD PRESSURE	-									
BOTTOM LOGGED INTERVAL	2560									
TOP LOGGED INTERVAL	1000									
SPEED	900/1800									
TIME CONSTANT	4/2									

BACKGROUND FAR cps

0 1000

GAMMA RAY API UNITS

0 150

0.1 QUALITY 1.1

DEPTH

NEUTRON CAPTURE CROSS SECTION Σ, capture units ($cu = 10^{-3} cm^2/cm^3$)

60 30 0

RATIO

6 1

Casing Collars

Recorded collars

Memorized collars, corrected depth

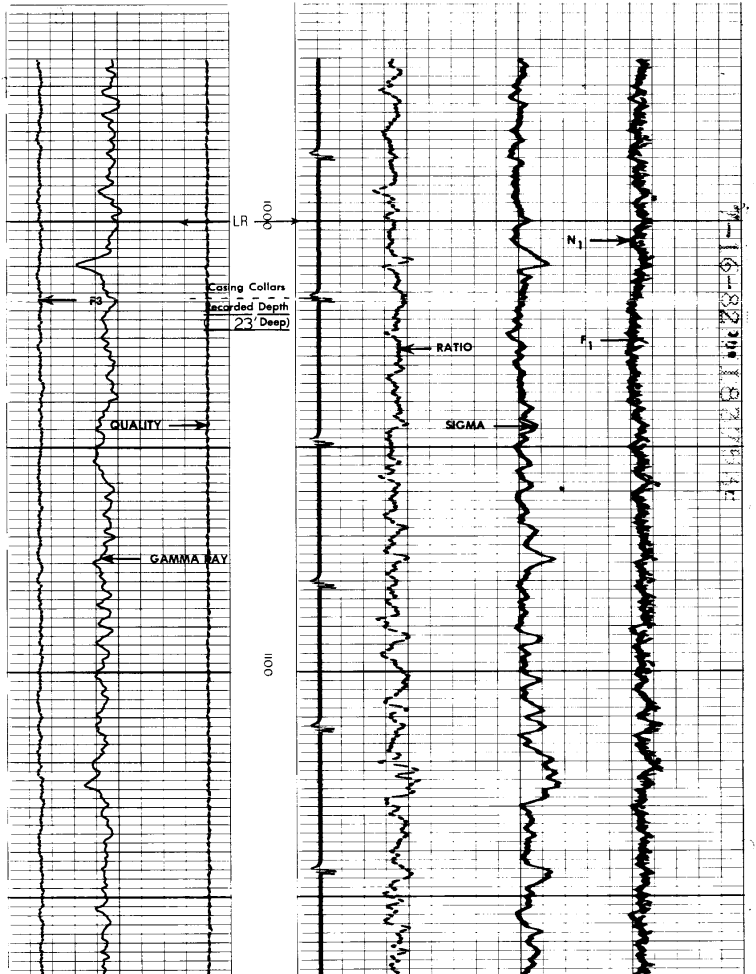
Recorded collars

FAR cps

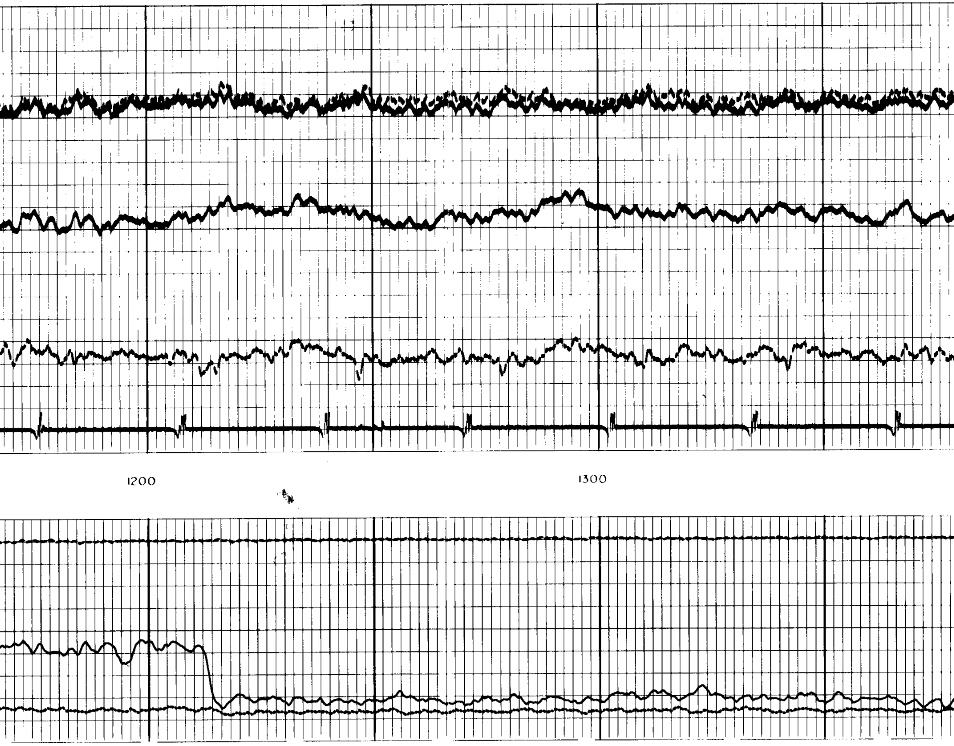
1000 0

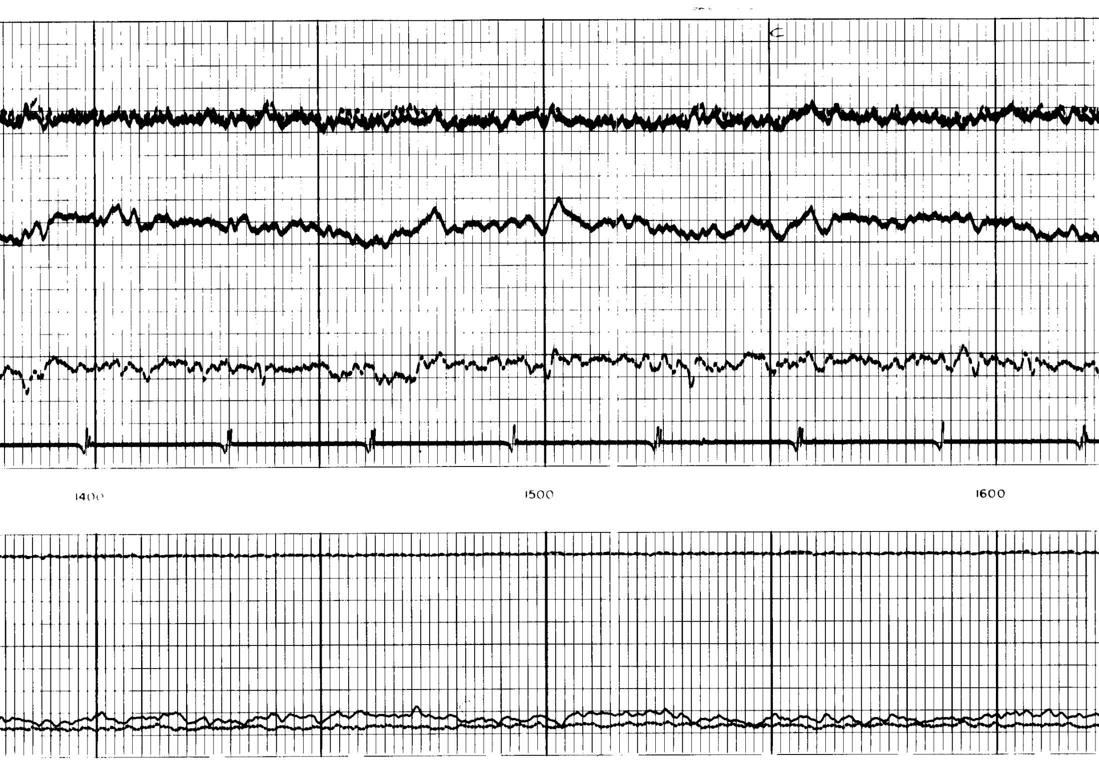
NEAR cps

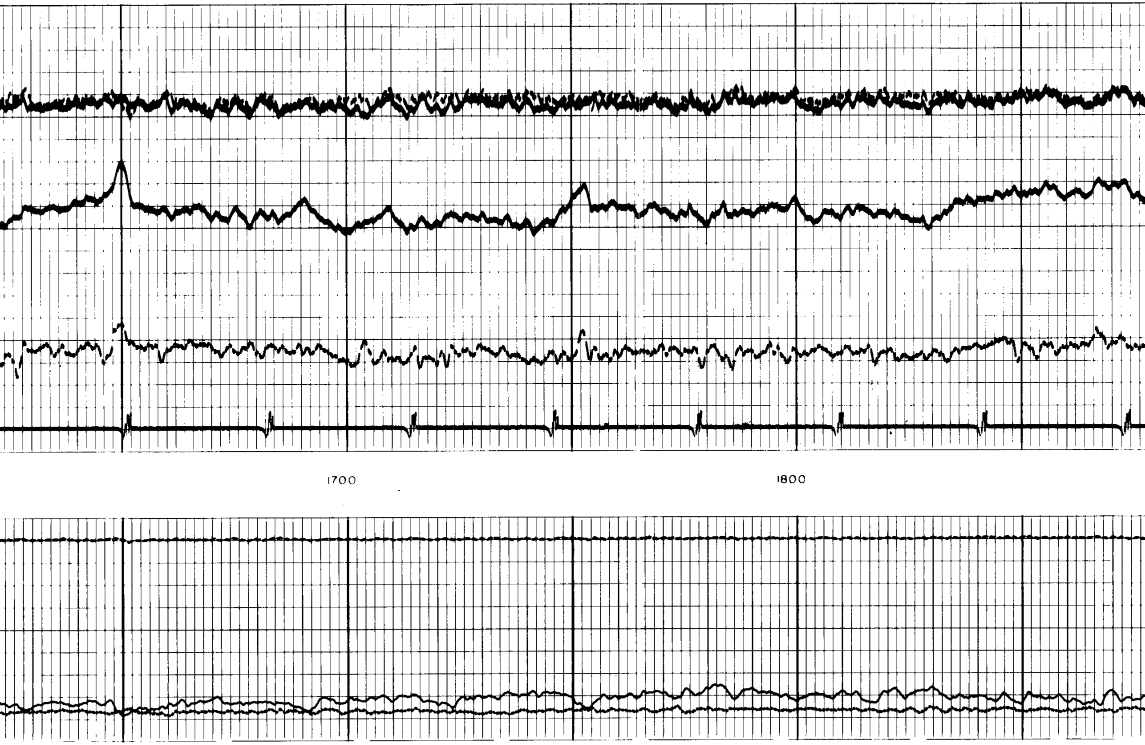
6000 0

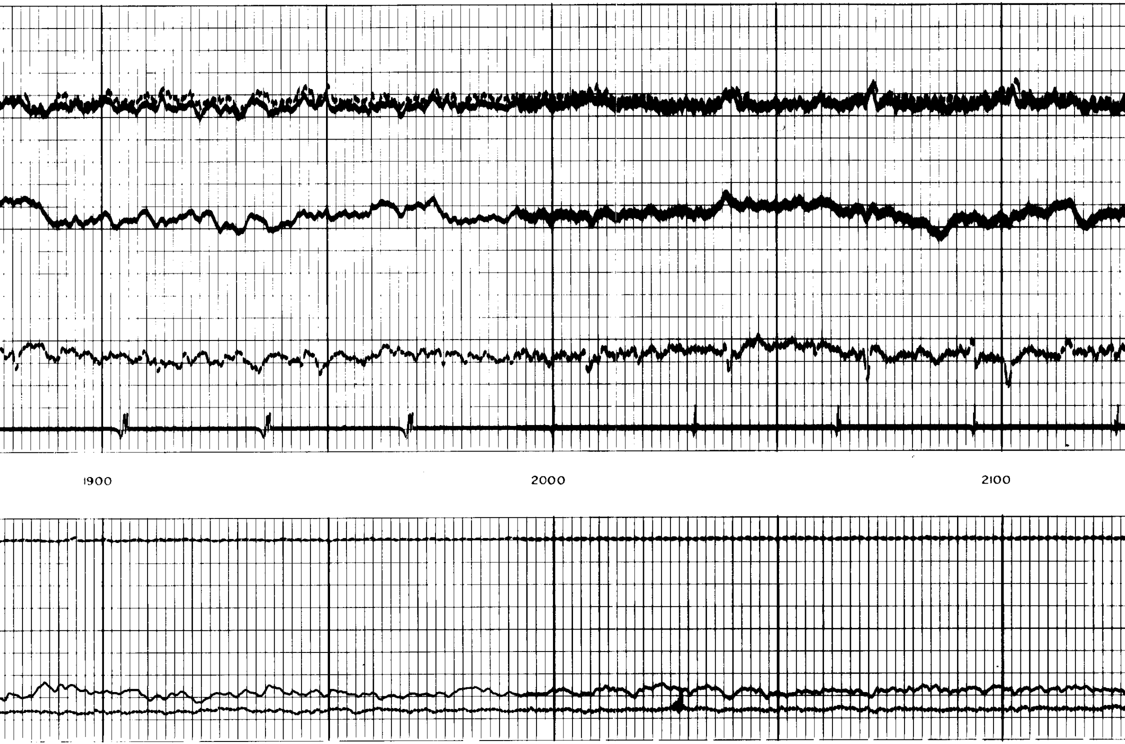


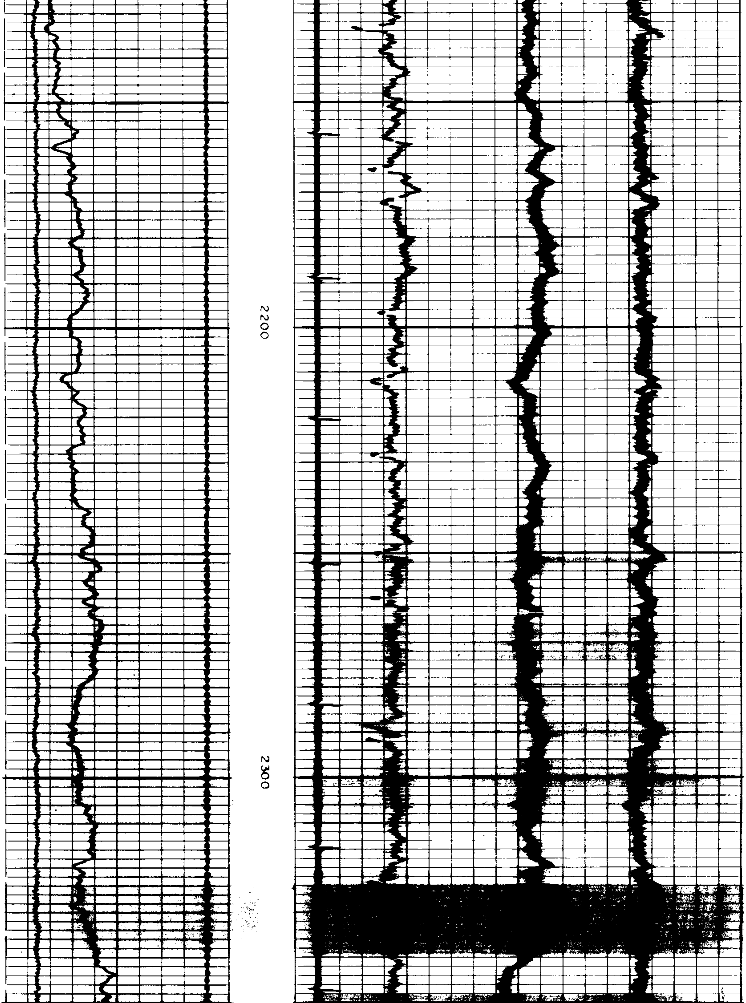
KODAK SAFETY FILM

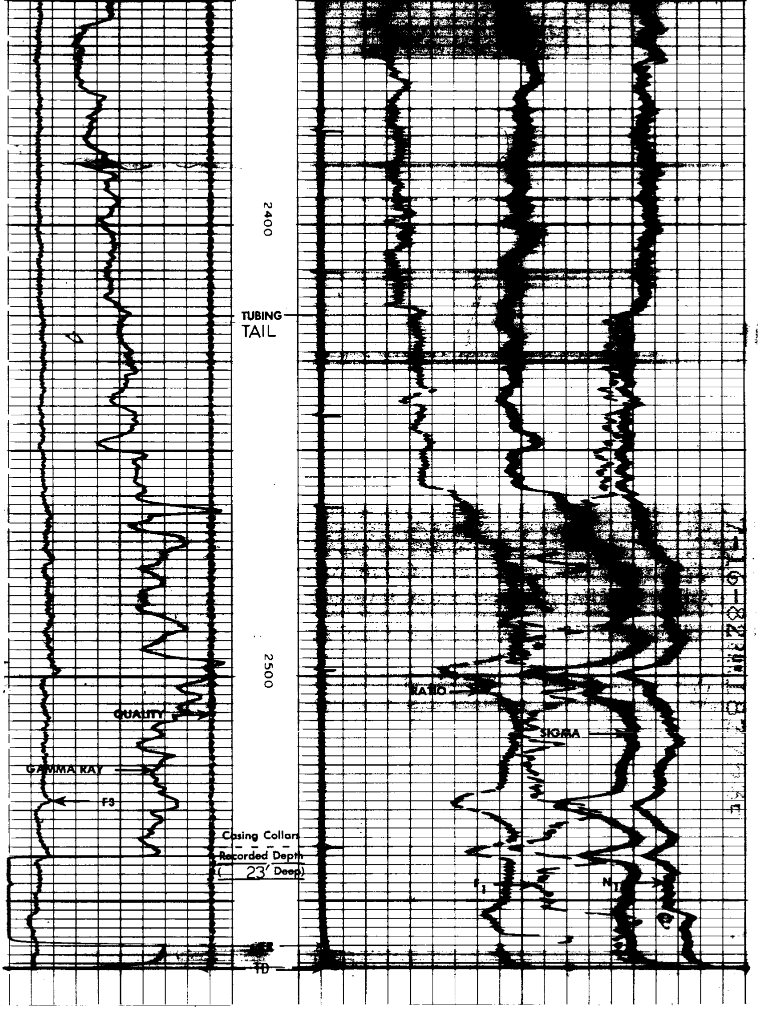






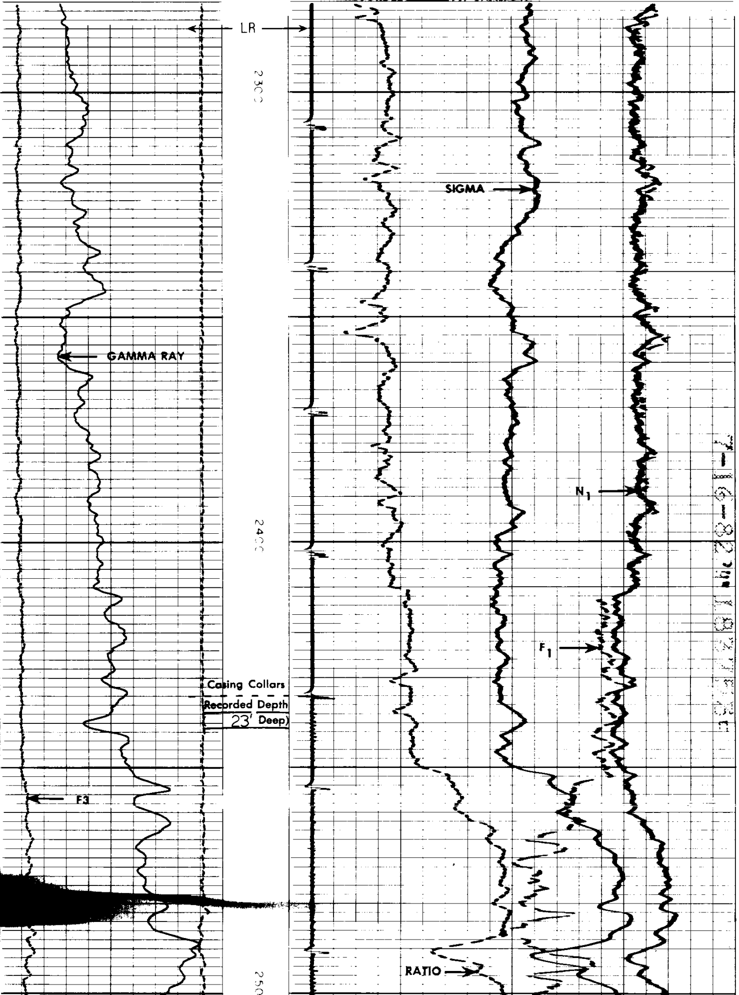


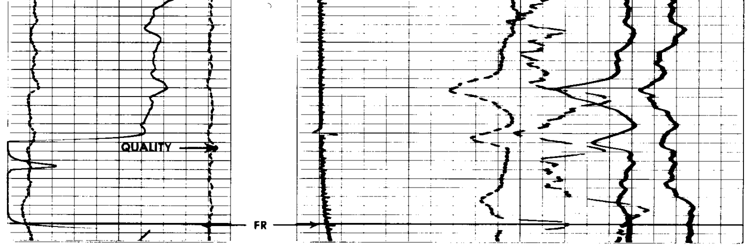


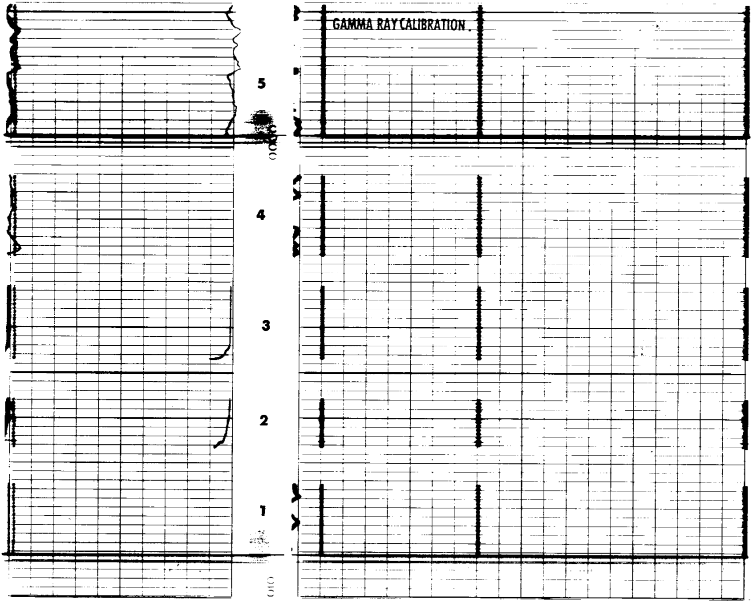


REPEAT SECTION

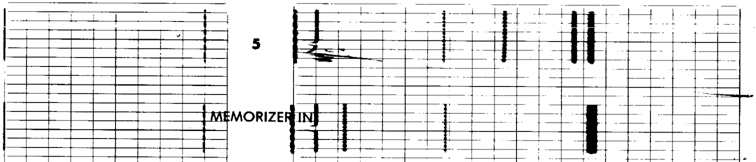
RECORDED 8 FT. SHALLOW

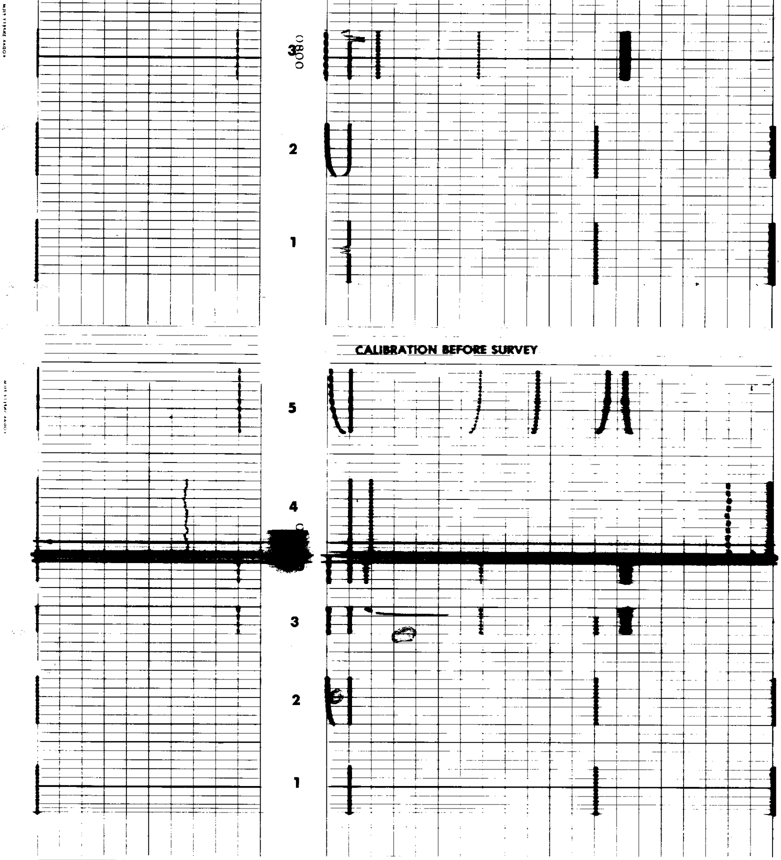






CALIBRATION AFTER SURVEY





DUAL SPACING TDT CALIBRATION

STEP		Σ	τ	RATIO	N_1	F_1	F_3
1.	ZERO	0	100	0	0	0	0
2.	CALIBRATION (1)	60	100	0	0	0	0
3.	CALIBRATION (2)	20	300	5 ± .5	4000	2000	2000 ± 200 (uncalibrated)
3.	ADJUST RATIO MEMORY SENSITIVITY	20	300	SAME VALUE READ ABOVE	4000	2000	2000 ± 200
4.	RATIO CALIBRATION SOURCE IN PLACE	—	—	5	—	—	—
5.	PANEL TEST	22.7	200	1.0 - 1.5	4000	2000	2000 ± 200

GAMMA RAY CALIBRATION

1. ZERO
2. RECORDER SENSITIVITY
3. MEMORY SENSITIVITY
4. BACKGROUND CANCEL
5. CALIBRATE - SOURCE IN PLACE