a/f CER 24-18-64

HALLIBURTON LOGGING SERVICES, INC.

FINAL PRINT

ACOUSTIC VELOCITY
GAMMA RAY
LOG

5" = 100'

COMPANY ____________
WELL ____________
FIELD ____________
COUNTY ________ ST __

COMPANY ARCO OIL AND GAS COMPANY

WELL LUNGREN CREEK NO.24-18-64 CER

FIELD MIST

COUNTY COLUMBIA STATE OR

API NO. N/A
LOCATION : WM B
1135.70 FEET NORTH AND
2181.19 FEET EAST FROM THE
SOUTHWEST CORNER OF:
SEC. 18 TWP 6N RGE 4W

OTHER SERVICES
DIG
DSN/SDL

PERMANENT DATUM G.L. ELEV. 636.1
LOG MEASURED FROM K.B 11.5FT.ABOVE PERM.DATUM
DRILLING MEASURED FROM KELLY BUSHING

ELEV.:K.B. 647.6
D.F. ------
G.L. 636.1

DATE	09/19/89			
RUN NO.	ONE			
DEPTH-DRILLER	1810			
DEPTH- LOGGER	1808			
BTM. LOG INTER.	1805			
TOP LOG INTER.	456			
CASING-DRILLER	8 5/8@460	@	@	@
CASING- LOGGER	456			
BIT SIZE	6 1/4			
TYPE FLUID IN HOLE	POLYMER	LS,ND		
DENS. ; VISC	10.0 ;46	;	;	;
PH ; FLUID LOSS	7.5 ;6.0	;	;	;
SOURCE OF SAMPLE	CIRCULATED			
RM @ MEAS. TEMP.	2.8 @75	@	@	@
RMF @ MEAS. TEMP.	2.9 @75	@	@	@
RMC @ MEAS. TEMP.	3.0 @64	@	@	@
SOURCE RMF ; RMC	MEAS.;MEAS.	;	;	;
RM @ BHT	1.93 @112	@	@	@
TIME SINCE CIRC.	2.5 HOURS			
TIME ON BOTTOM	9:20 AM			
MAX. REC. TEMP.	112 @BHT	@	@	@
EQUIP. ; LOCATION	2890 ;WDLND	;	;	;
RECORDED BY	B.JOHNSON			
WITNESSED BY	JIM EASTES			

Fold Here

Service Ticket No.: 12306 API Serial No.: N/A PGM Version: 1.31 PC

Change in Mud Type or Additional Samples		
Date/Sample No.	09/19/89:ONE	/ / :
Depth-Driller		
Type Fluid in Hole		
Dens. : Visc.	:	:
pH. : Fluid Loss	:	:
Source of Sample		
Rm @ Meas.Temp.	@	@
Rmf @ Meas.Temp.	@	@
Rmc @ Meas.Temp.	@	@
Source: Rmf:Rmc	:	:
Rm @ BHT	1.93 @112	@
Rmf @ BHT	2.00 @112	@
Rmc @ BHT	1.79 @112	@

RESISTIVITY SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole

RESISTIVITY EQUIPMENT DATA

Run No	Tool Type & No	Pad Type	Tool Pos.	Other
ONE	DUAL W109432	N/A	1.5"S.O.	M412
ONE	SGRD W108932	N/A	1.5"S.O.	M416

EQUIPMENT DATA

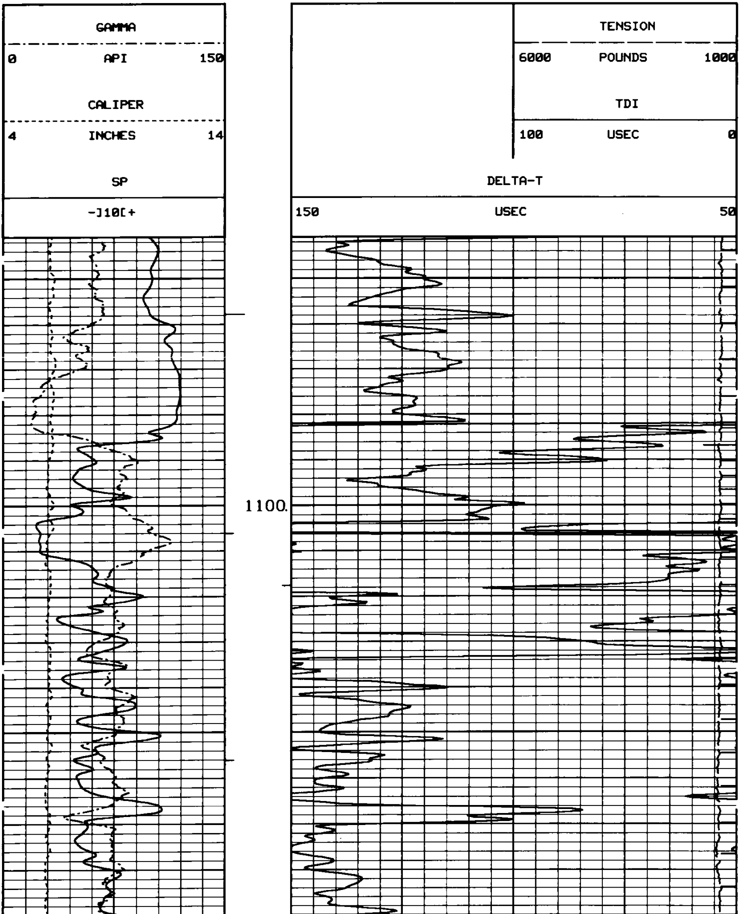
GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.	ONE	Run No.	ONE	Run No.	ONE
Serial No.	W108581	Serial No.	W112458	Serial No.	W109740	Serial No.	W108749
Model No.	432	Model No.	305	Model No.	465	Model No.	434
Diameter	3 5/8	No.of Cent.	FOUR	Diameter	4 1/2	Diameter	3 5/8
Detector Model No.	N/A	Spacing	1 FOOT	Log Type	GAMMA	Log Type	NEUTRON
Type	SCINT.			Source Type	CS137	Source Type	AM241BE
Length	4 IN.	LSA	Y	Serial No.	118	Serial No.	66
Distance To Source	N/A	FWDA	N	Strength	1.5 CU.	Strength	19.5 CU

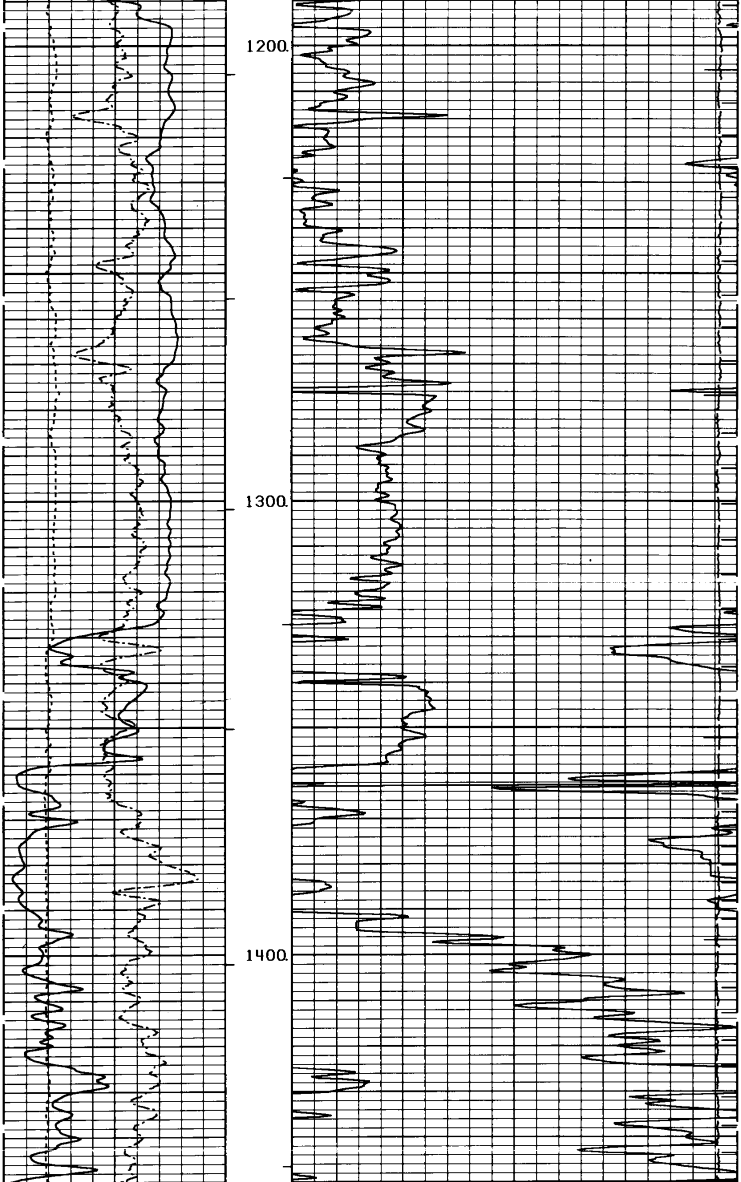
LOGGING DATA

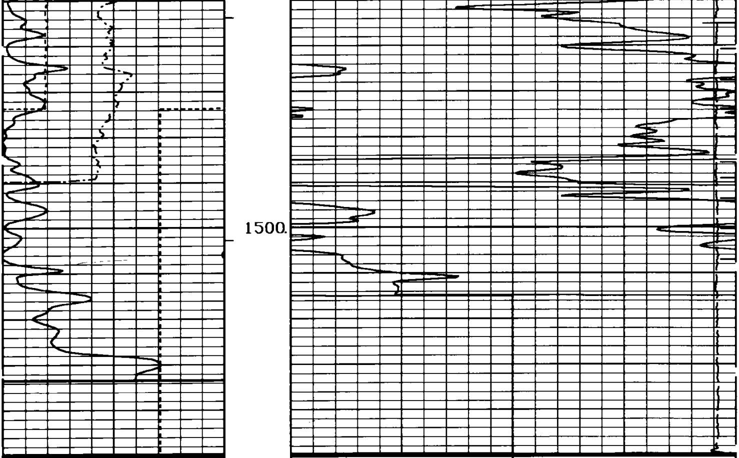
GENERAL				GAMMA		ACOUSTIC			DENSITY			NEUTRON		
Run	Depth		Speed	Scale		Scale			Scale			Scale		
No.	From	To	Ft/Min	L	R	L	R	Matrix	L	R	Matrix	L	R	Matrix
ONE	1808	456	30	0	50	150	50	57	1.65	2.65	2.65	60PU	0PU	SAND
					API		US/FT			G/CC				

Remarks: ANNULAR HOLE VOLUME CALCULATED USING 4 1/2 INCH CASING.
UPPER REPEAT RUN OVER INTERVAL FROM 1550 TO 1050 TO SHOW POOR SONIC RESPONSE
DUE TO BOREHOLE CONDITIONS.
CREW ON LOCATION: J.JOHNSON, R.JEFFERY
THANK YOU FOR USING HALLIBURTON LOGGING SERVICES!

Halliburton Logging Services, Inc. does not guarantee the accuracy of any interpretation of log data, conversion of log data to physical rock parameters or recommendations which may be given by HLS personnel or which may appear on the log or in any other form. Any user of such data, interpretations, conversions or recommendations agrees that HLS is not responsible except where due to gross negligence or wilful misconduct, for any loss, damages, or expenses resulting from the use thereof.







GAMMA

0 API 150

CALIPER

4 INCHES 14

SP

-]10[+

TENSION

6000 POUNDS 1000

TDI

100 USEC 0

DELTA-T

150 USEC 50

GAMMA

0 API 150

CALIPER

4 INCHES 14

SP

-]10[+

TENSION

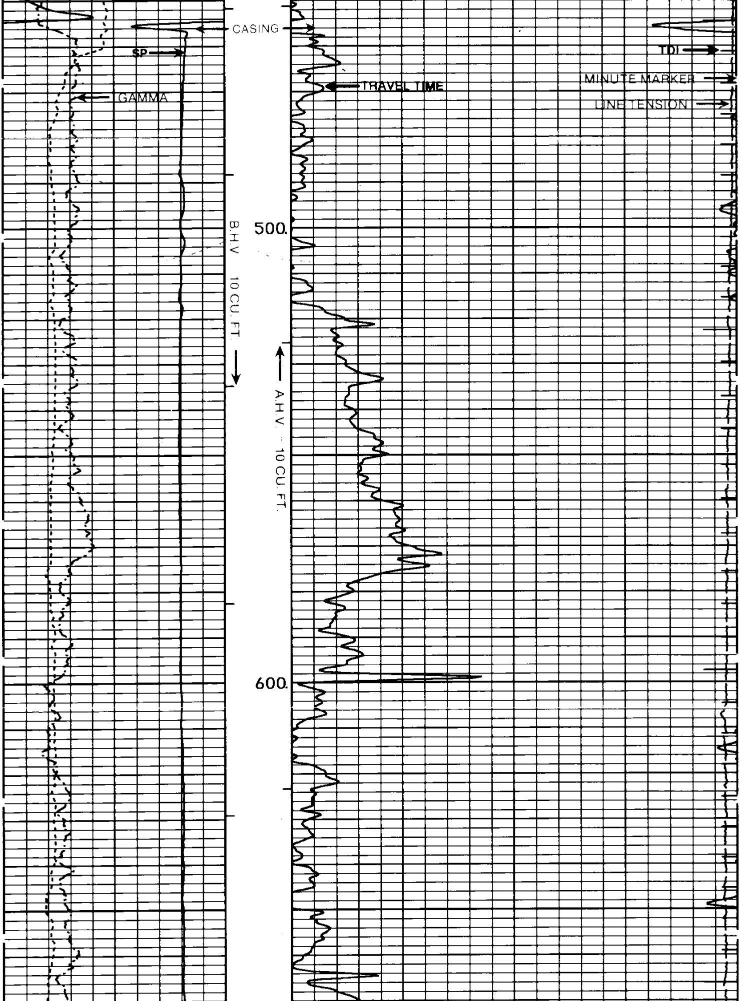
6000 POUNDS 1000

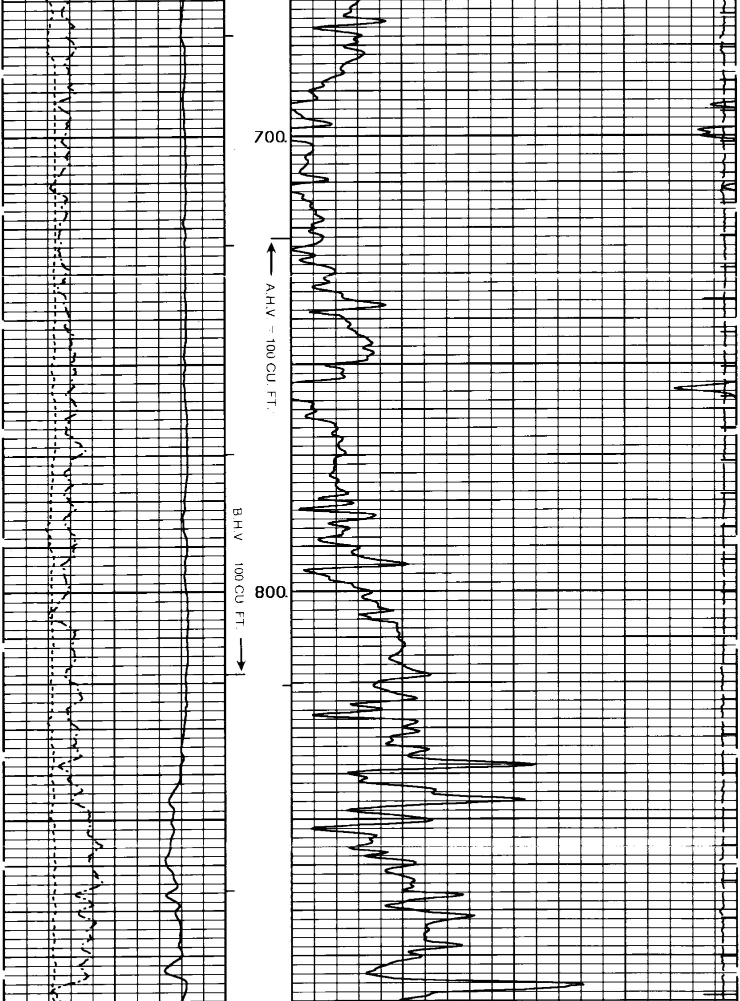
TDI

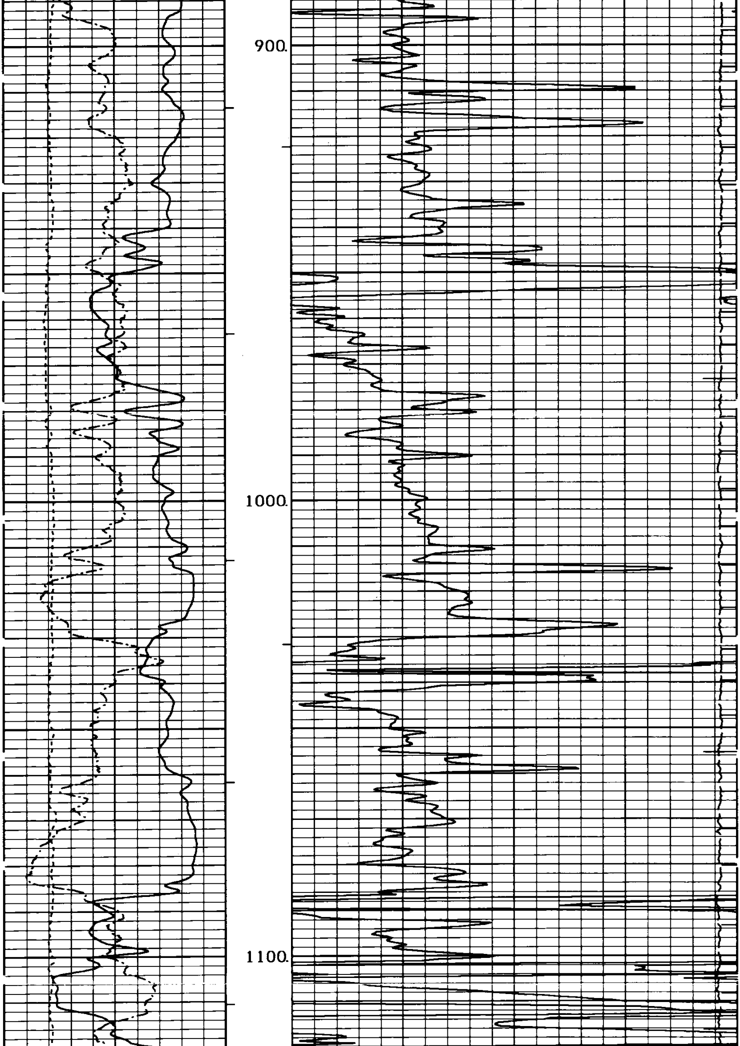
100 USEC 0

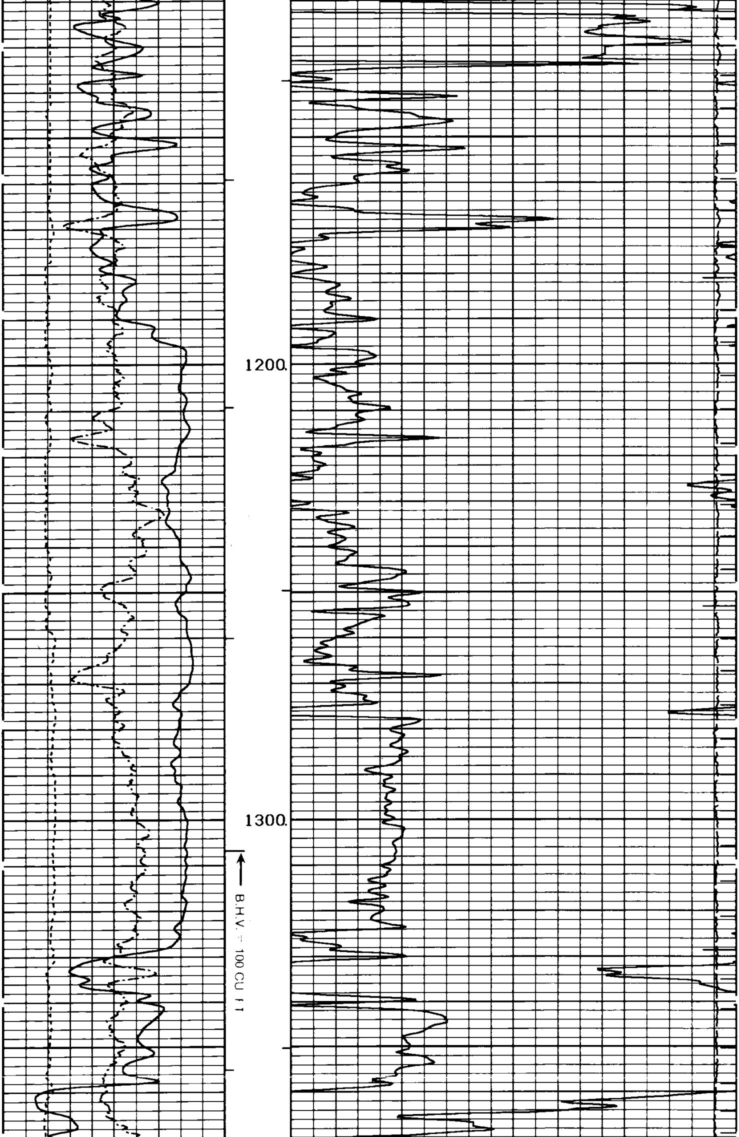
DELTA-T

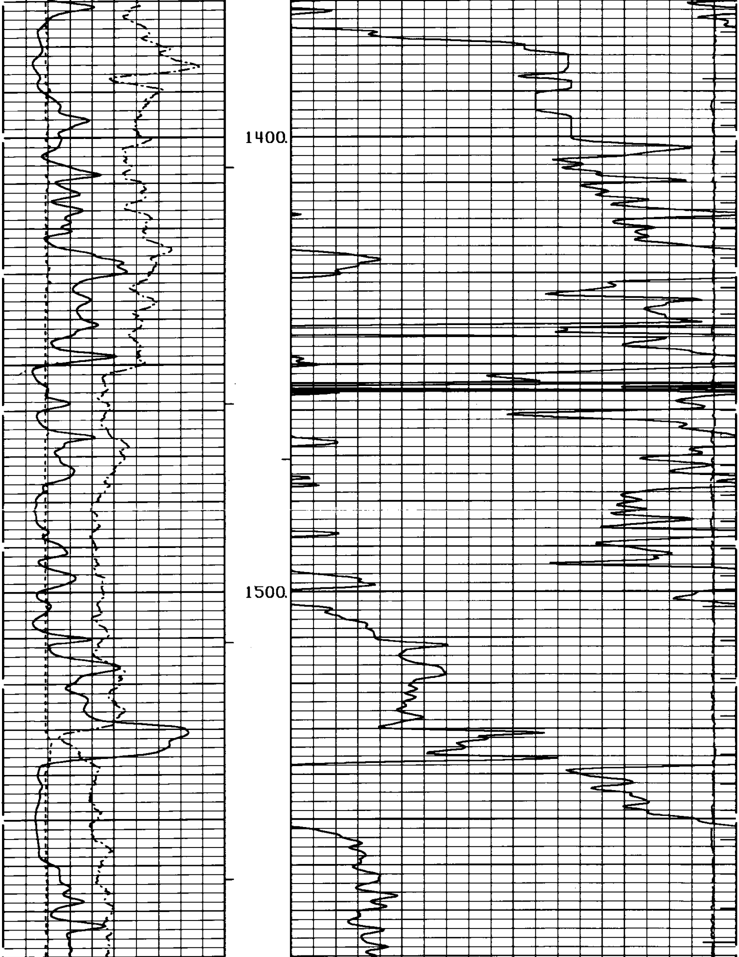
150 USEC 50

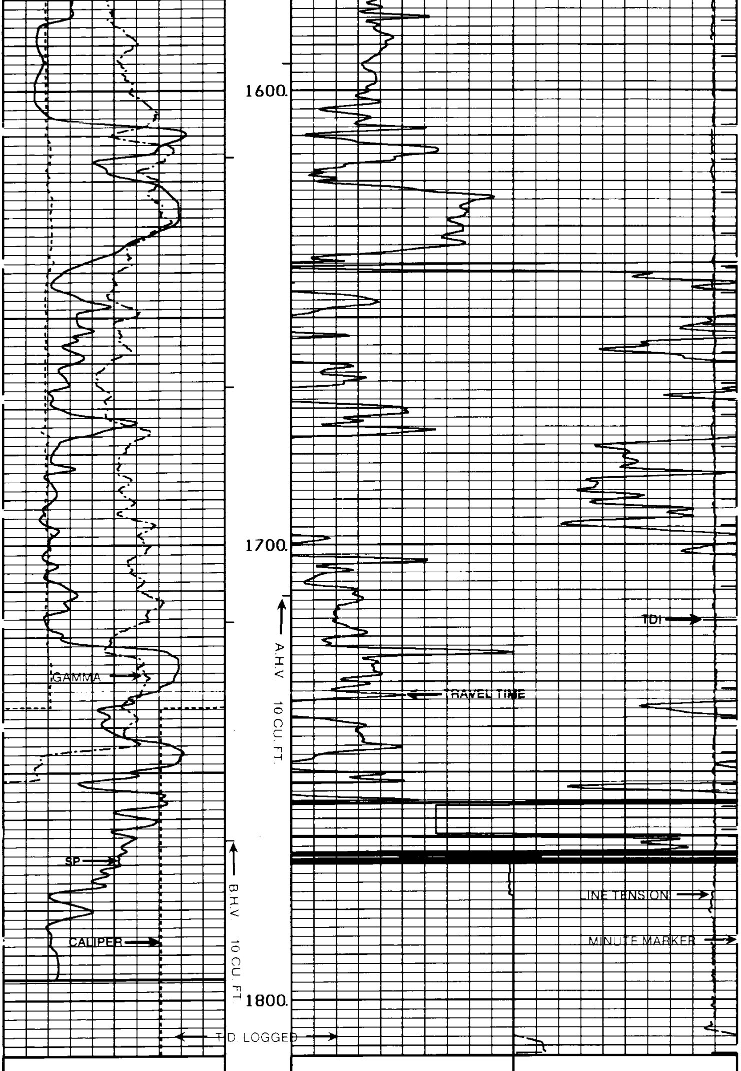


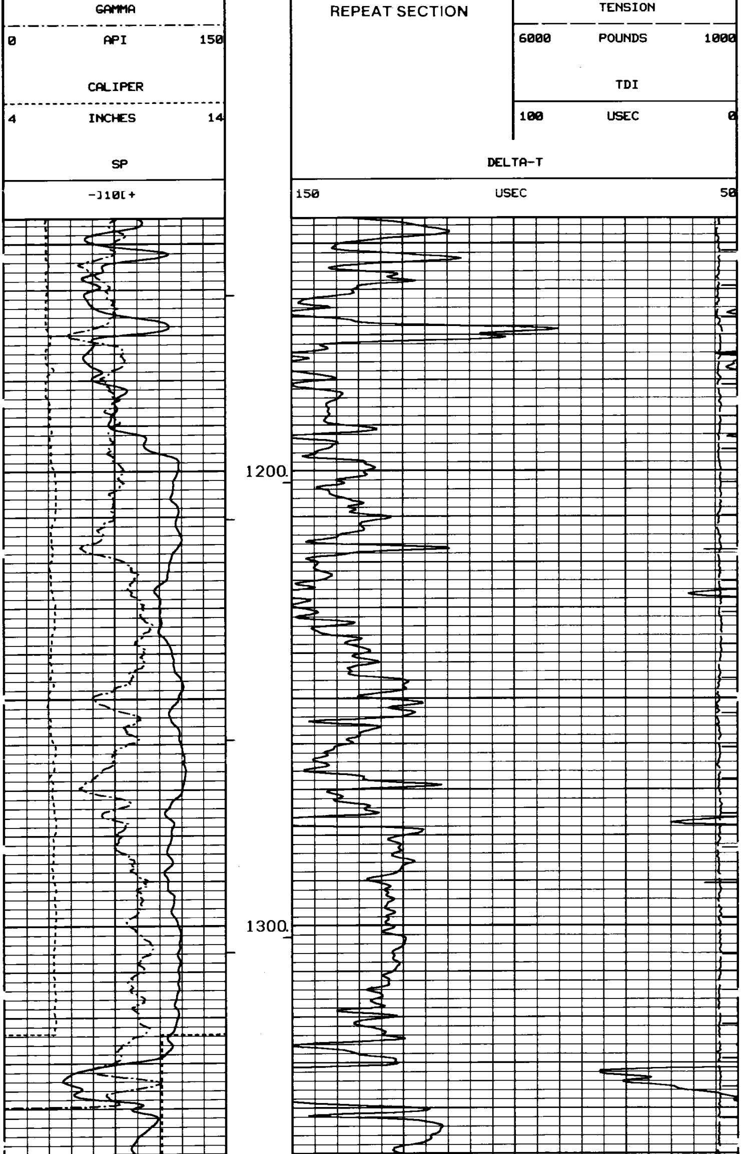


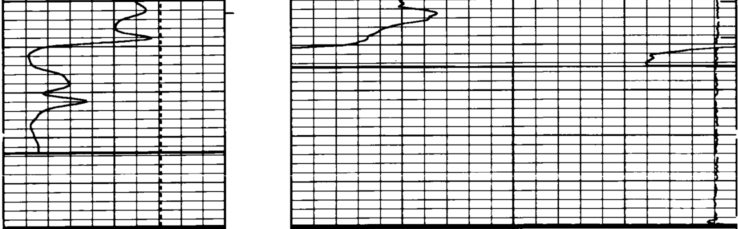












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