GL04139

L.H. Tisd

Schlumberger

SIMULTANEOUS

COMPENSATED NEUTRON-FORMATION DENSITY

COUNTY SANDOVAL, N.M.
FIELD REDONDO CREEK
LOCATION
WELL BACA 12 REDRILL #1
COMPANY UNION GEOTHERMAL

COMPANY UNION GEOTHERMAL OF NEW MEXICO

API #300-439-0041

WELL BACA #20 REDRILL #1

FIELD REDONDO CREEK

COUNTY SANDOVAL STATE NEW MEXICO

LOCATION 3495' FNL & 1280' FWL
PROJECTED LOCATION
NE-SW-NW

API SERIAL NO.	SEC.	TWP.	RANGE
	12	19-N	3-E

Other Services:

Permanent Datum: G.L. ; Elev.: 9065
Log Measured From K.B. , 24 Ft. Above Perm. Datum
Drilling Measured From K.B.

Elev.: K.B. 9089
D.F. 9088
G.L. 9065

Date	8-13-80			
Run No.	THREE			
Depth—Driller	5500			
Depth—Logger	5520			
Btm. Log Interval	5494			
Top Log Interval	2646			
Casing—Driller	9 5/8@2505	@	@	@
Casing · Logger	2505			
Bit Size	8 3/4			
Type Fluid in Hole	AIR/WATER			
Dens. | Visc.				
pH | Fluid Loss	ml	ml	ml	ml
Source of Sample				
R_m @ Meas. Temp.	@ °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	@ °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	@ °F	@ °F	@ °F	@ °F
Source: R_{mf} | R_{mc}				
R_m @ BHT	@ °F	@ °F	@ °F	@ °F
TIME Circulation Stopped				
TIME Logger on Bottom				
Max. Rec. Temp.	°F	°F	°F	°F
Equip. | Location	8171 | FARM			
Recorded By	CANADY			
Witnessed by	DENTON			

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

Reproduced By
Petroleum Information
CORPORATION
Midland, Texas 79701

REFERENCE D 2304D

15 COMPLETION RECORD

SPUD DATE

COMP DATE

DST RECORD

API NO. 30-439-90041

CASING RECORD

PERFORATING RECORD

ACID. FRAC SHOT

I P

GOR GR

T P C P

REMARKS:

REPRODUCTION FOR RESALE PROHIBITED

RUN NO.		ONE			
Service Order No.		112697			
Fluid Level		FULL			
Salinity, PPM CL.					
Speed - F.P.M.		60			
EQUIPMENT DATA					
Dens. Panel		42			
Dens. Cart		50			
Dens. Skid.		62			
Dens. Sonde		50			
Dens. Source		5650			
Dens. Calibrator		139-62			
Neut. Panel		42			
Neut. Cart.		41			
Neut. Source					
Neut. Calibrator		66			
GR Cart.		DTTC			
Memorizer Panel		509			
Tape Recorder (TTR)		103			
Depth Encoder (DRE)		10W			
Pressure Wheel (CPW)					
Centralizers, Enter Spring, Standoffs, In-line, or None	Type	SPRING			
	No.	2			
	S. O. — Inches				
CALIBRATION DATA					
GR	BKG. CPS	76			
	Source CPS	172			

Type Log	Depth		

REMARKS:

NO REPEAT - CABLE FAILED DUE
TO TEMPERATURE.

FROM THE FIRST READING TO 3800
THE TOOL WAS MOVED AT 7000'/HR
TO LIMIT TOOL HEATING. LOGGING
BEGINS AT RECOMMENDED SPEEDS
AT 3800 TO TD. TOOL LOGGED
GOING IN.

GR	Sens. - Cal	153				
	T. C. - Cal	2				
CNL	Short Spacing - Before Log	RATIO				
	Long Spacing - Before Log	4.09				
	Short Spacing - After Log	RATIO				
	Long Spacing - After Log	4.09				
FDC	P¹ — Before Log	1039				
	P* — Before Log	464				
	P¹ — After Log	1039				
	P* — After Log	464				

LOGGING DATA

DEPTH		CNP			FDC				GR			
Top	Bottom	Porosity Scale	Matrix	Auto Corr. or Hole Size Setting	Porosity Scale	Grain Density	Liquid Density	Hole Fluid	Sens. Logged	T. C.	Zero. Div. Left	Scale Per 100 Div.
TD	LR	30 -10	LIME	AUTO	30 -10	2.71	1.0	1.10	153	2	0	200

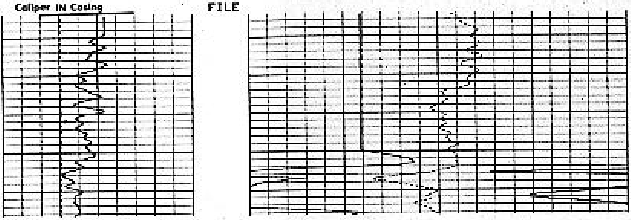
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

PARAMETERS

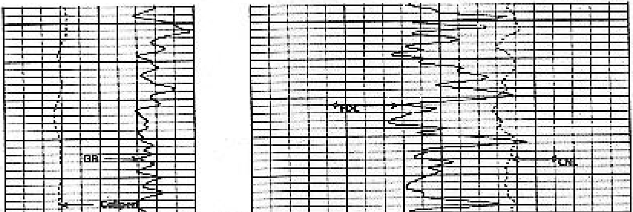
NAME	UNIT	VALUE	NAME	UNIT	VALUE	NAME	UNIT	VALUE
DO		0.0	BHS		OPEN	FPHI		PHIX
BHF		WATE	MDEN	G/C3	2.710			
FD	G/C3	1.000	MATR		LIME	HC		CALI
BS	INCH	8.750						

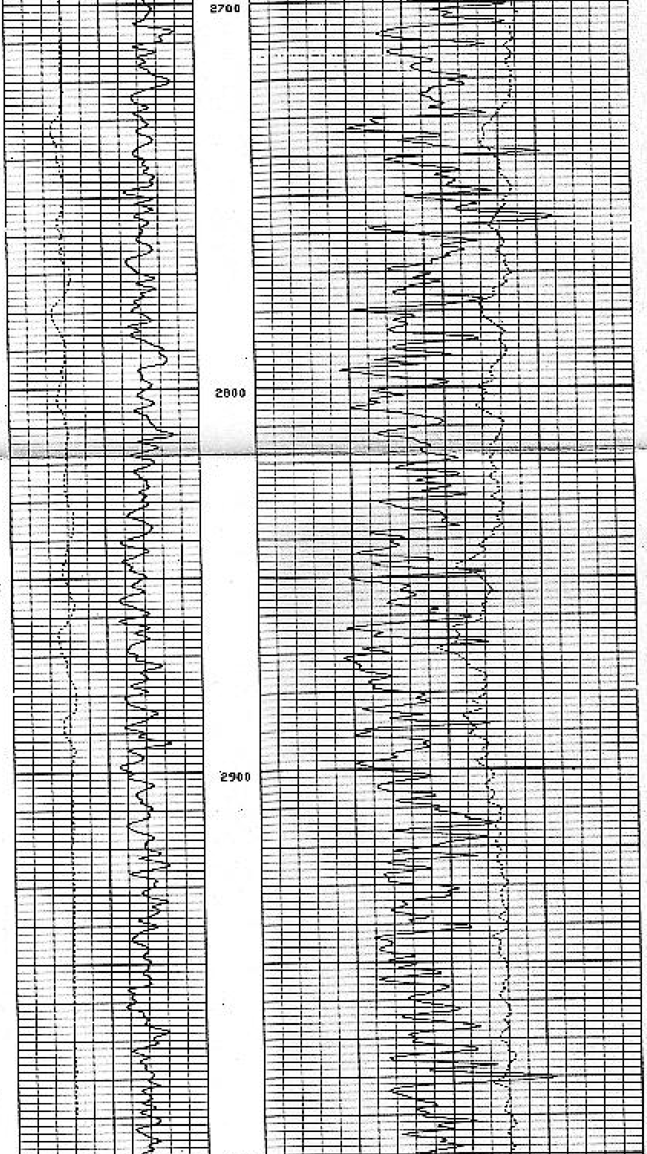
GR (GAPI)			NPHI( )	
0.0	200.0		0.3000	-0.100
CALI(IN)			DPHI( )	
6.000	16.00		0.3000	-0.100

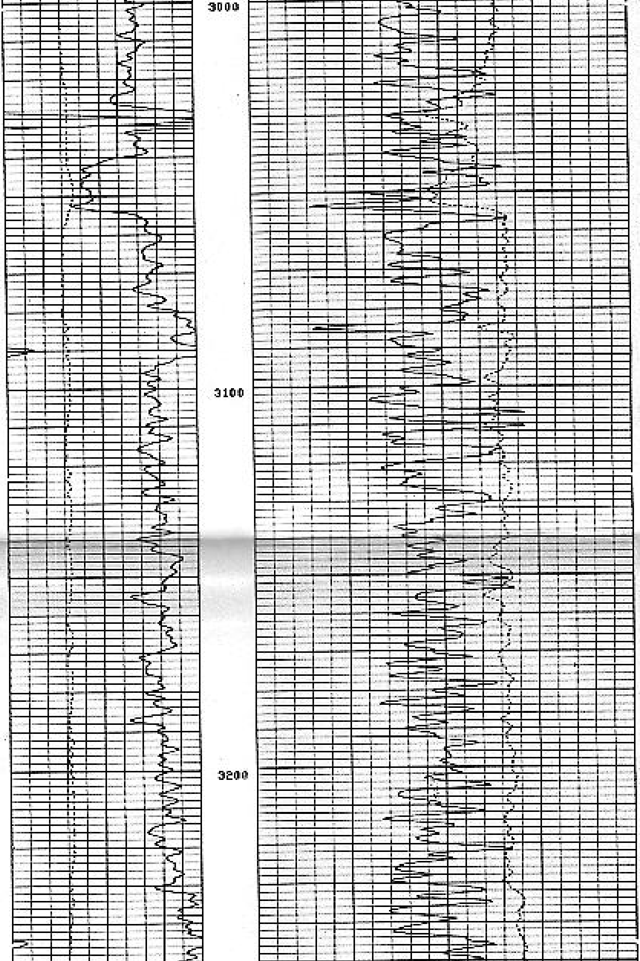
2

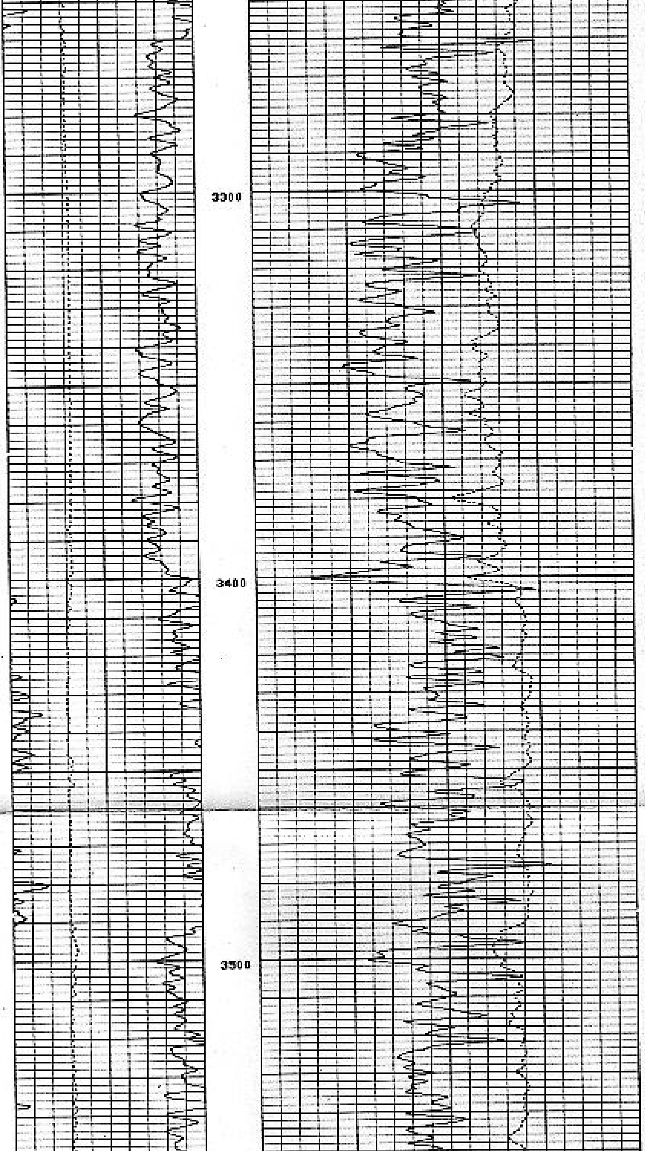


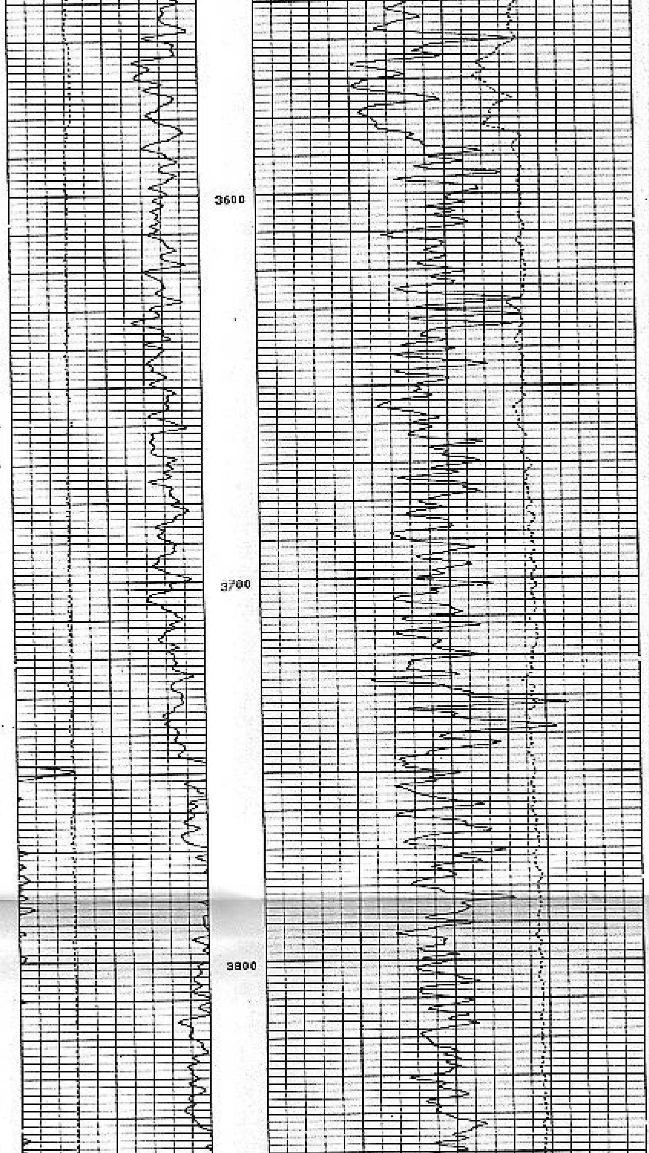
SEE REMARKS

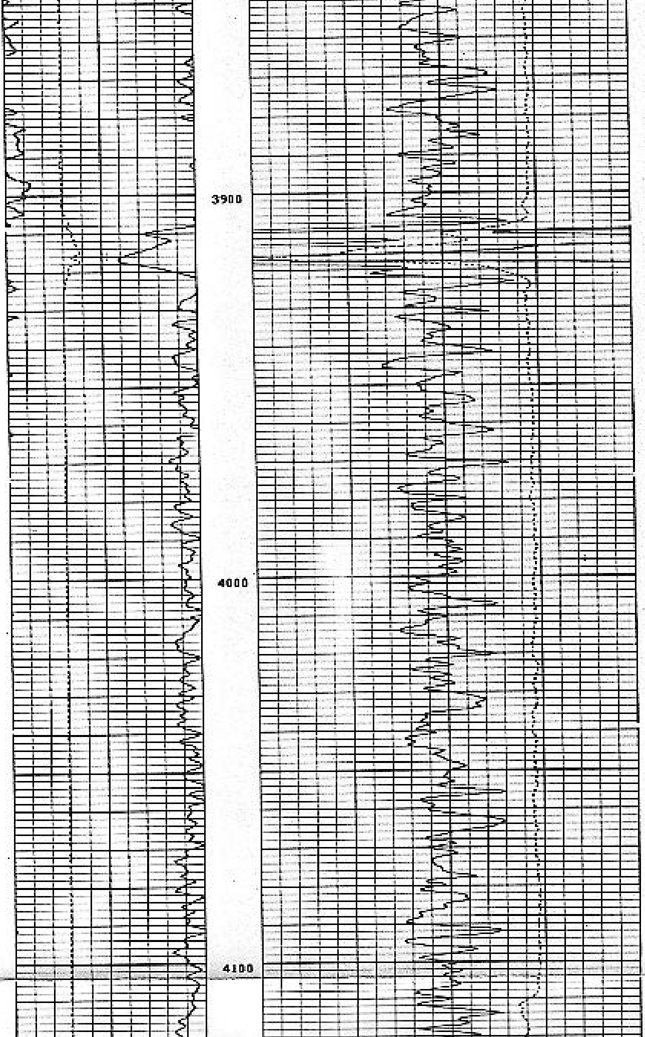


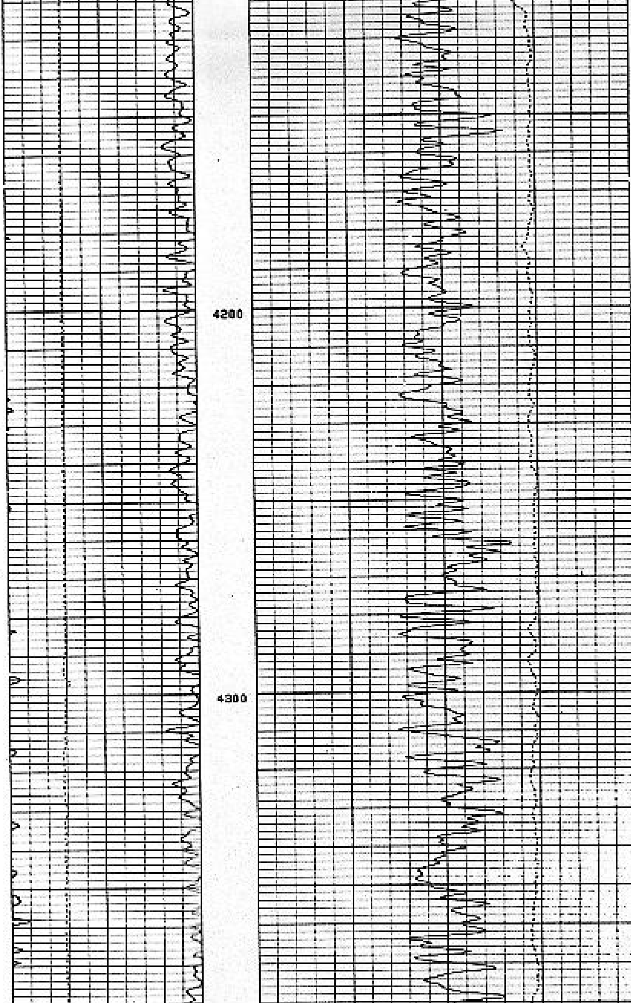


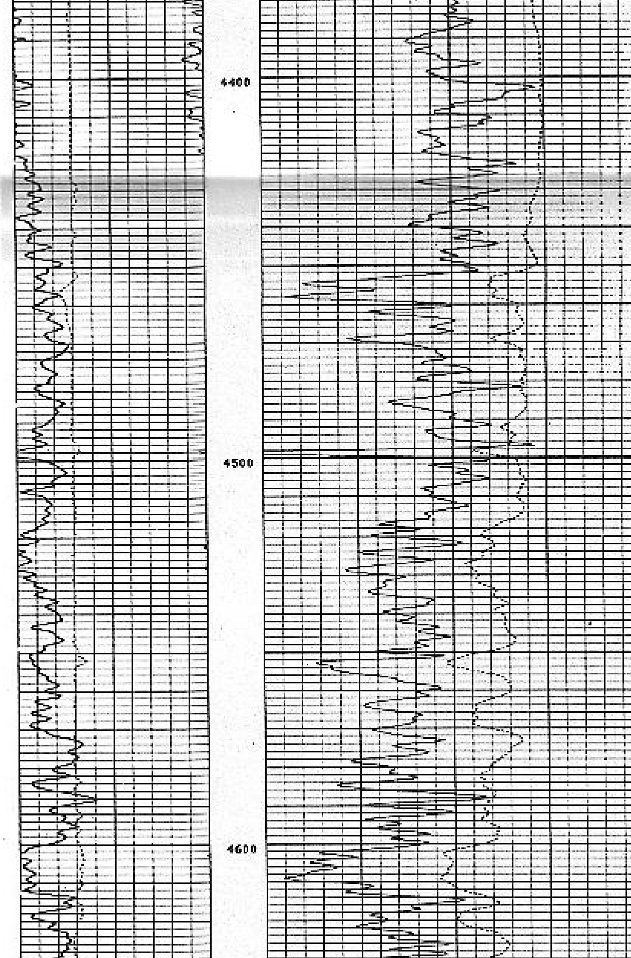


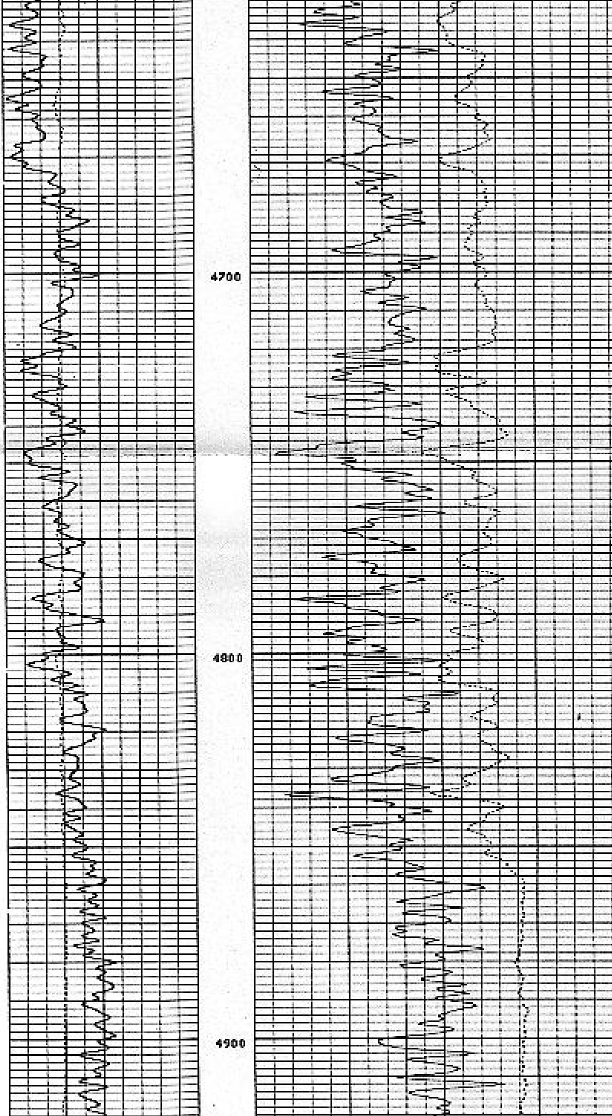


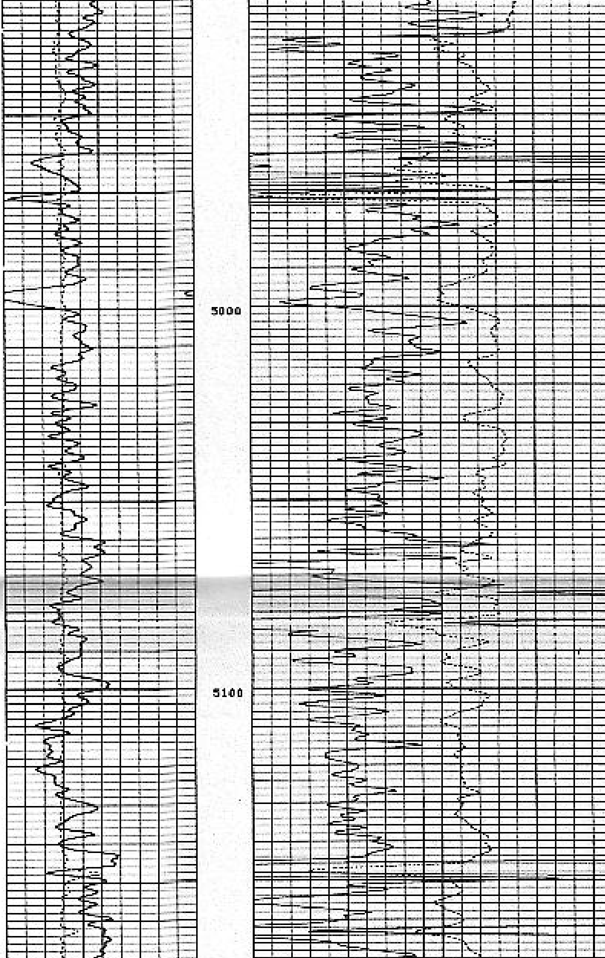


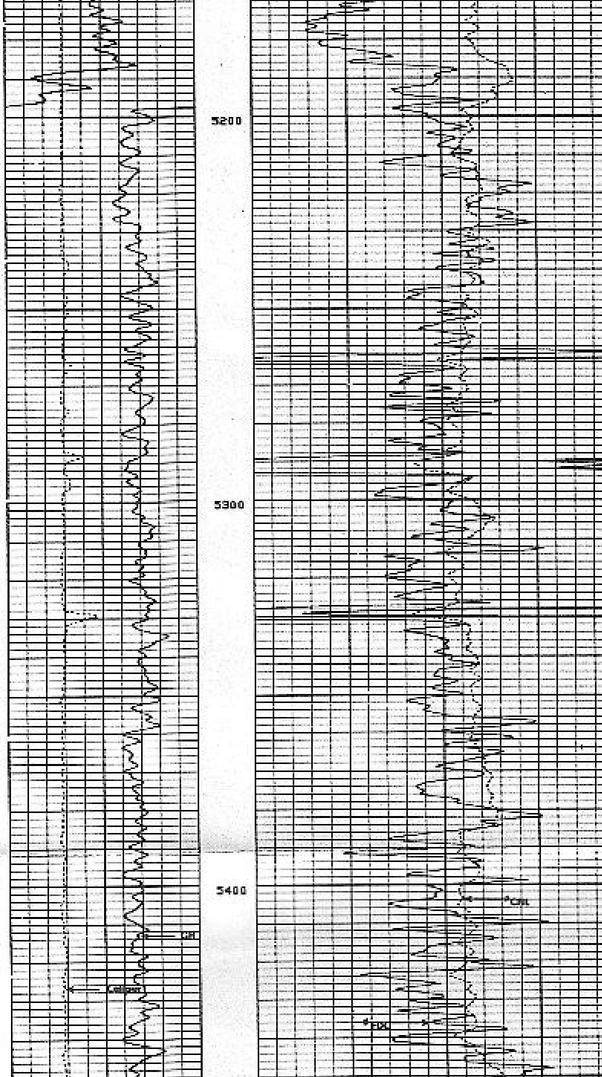


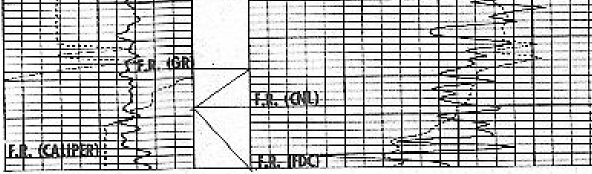












2

FILE

GR (GAPI)
0.0 200.0
CALI(IN)
6.000 16.00

NPHI( )
0.3000 -0
DPHI( )
0.3000 -0

TIMEOUT
UT

NAME	UNIT	VALUE	NAME	UNIT	VALUE	NAME	UNIT	VALUE
DO		0.0	BHS		OPEN	FPHI		PHIX
BHF		WATE	MDEN	G/C3	2.710			
FD	G/C3	1.000	MATR		LIME	HC		CALI
BS	INCH	8.750						

PARAMETERS

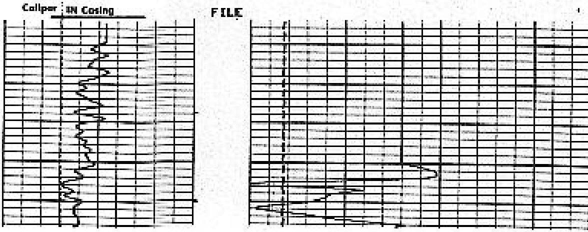
NAME	UNIT	VALUE	NAME	UNIT	VALUE	NAME	UNIT	VALUE
DO		0.0	BHS		OPEN	FPHI		PHIX
BHF		WATE	MDEN	G/C3	2.710			
FD	G/C3	1.000	MATR		LIME	HC		CALI
BS	INCH	8.750						

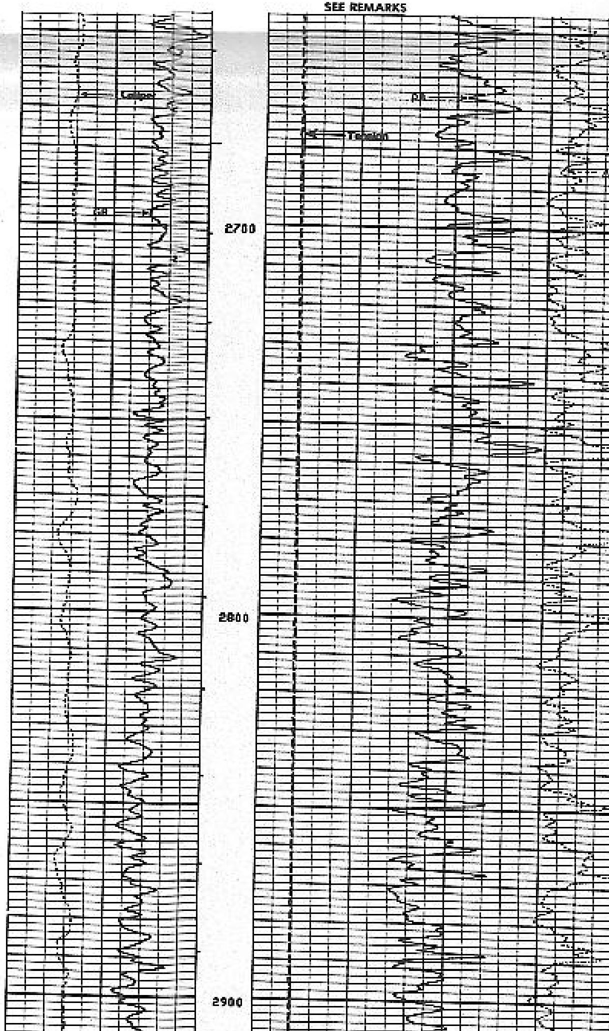
GR (GAPI)
0.0 200.0
CALI(IN)
6.000 16.00

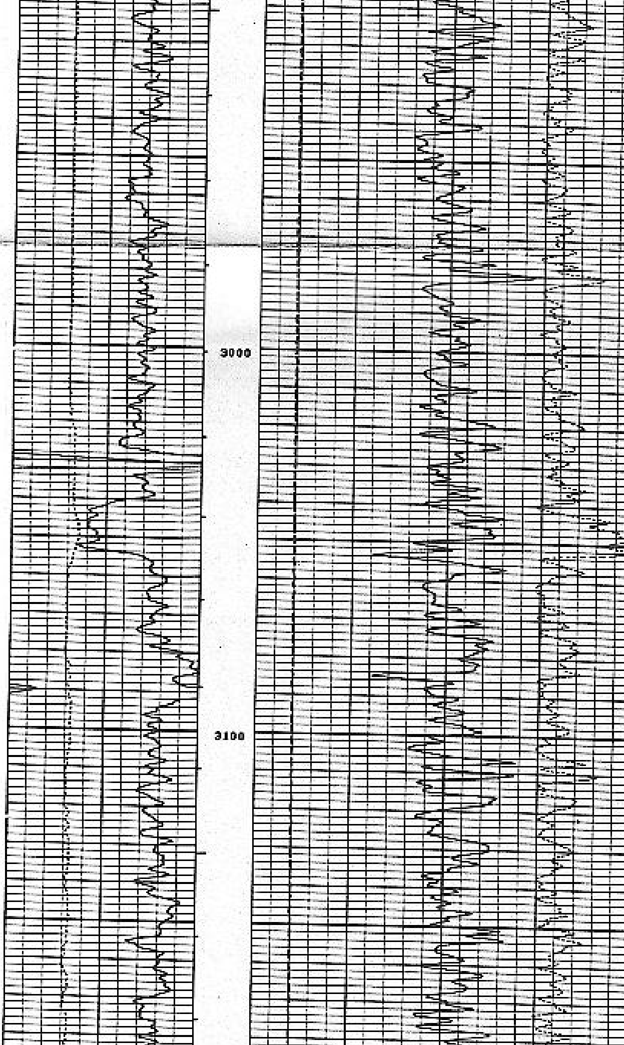
RHOB(G/C3)
2.000 3
TENS(LB)
0.0 5000.
DRHO(G/C3)
-0.250 0.

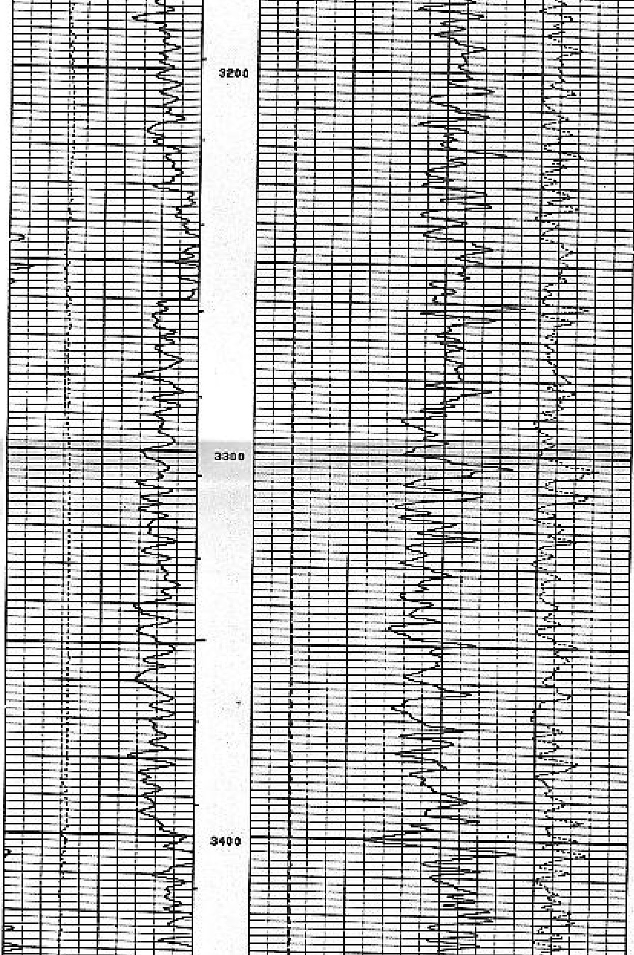
e

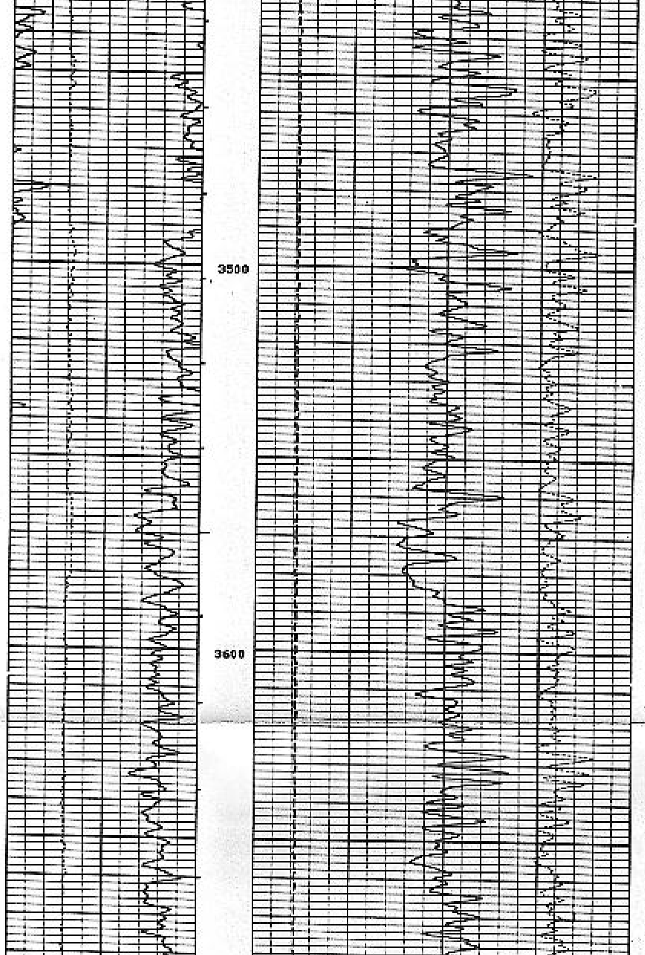
FILE

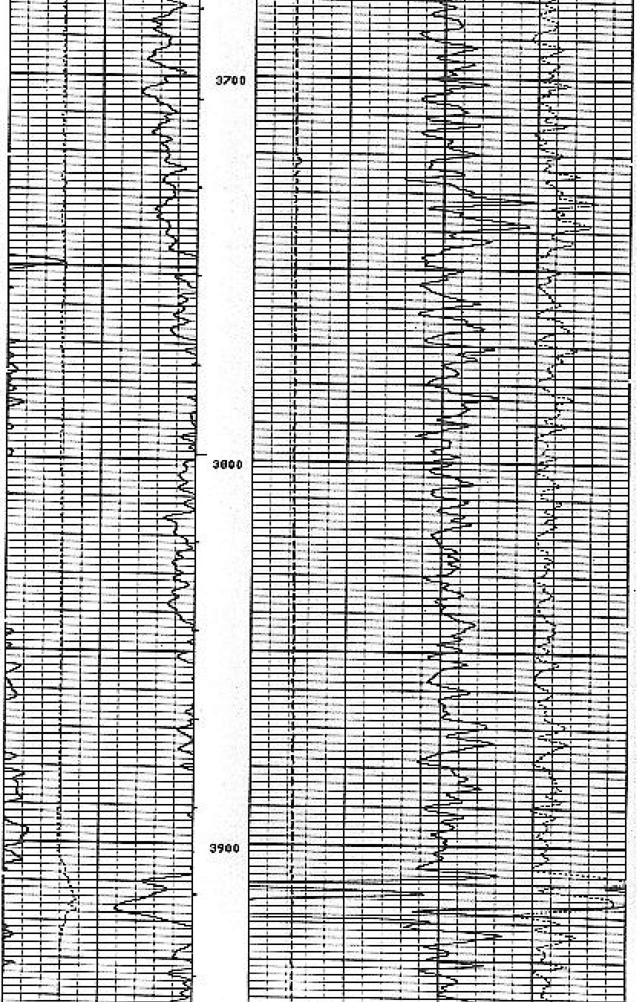


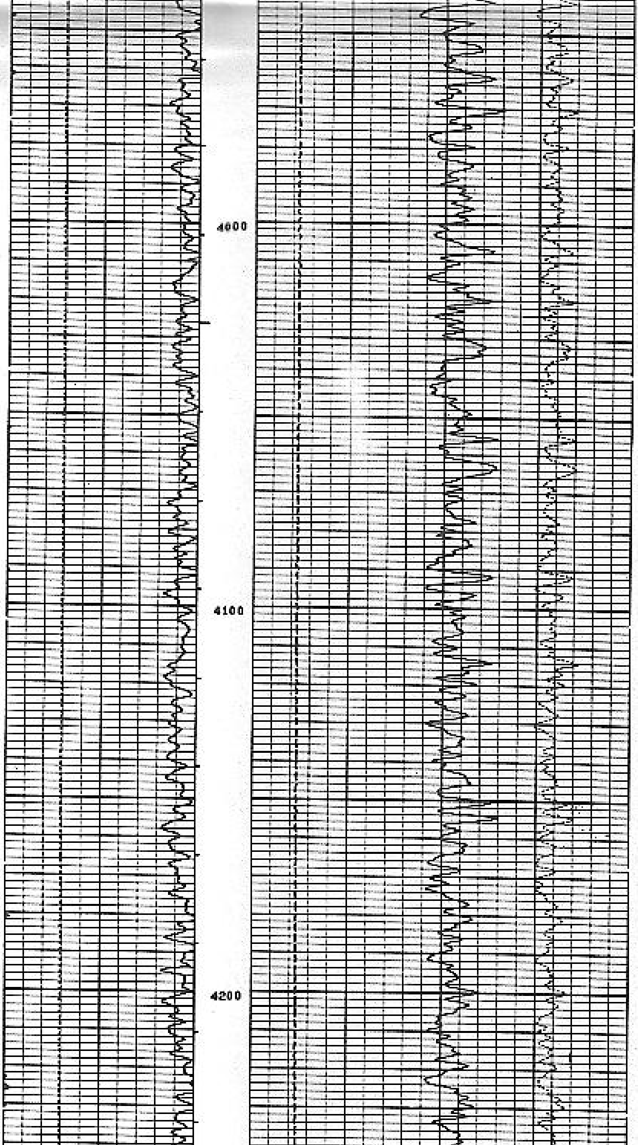


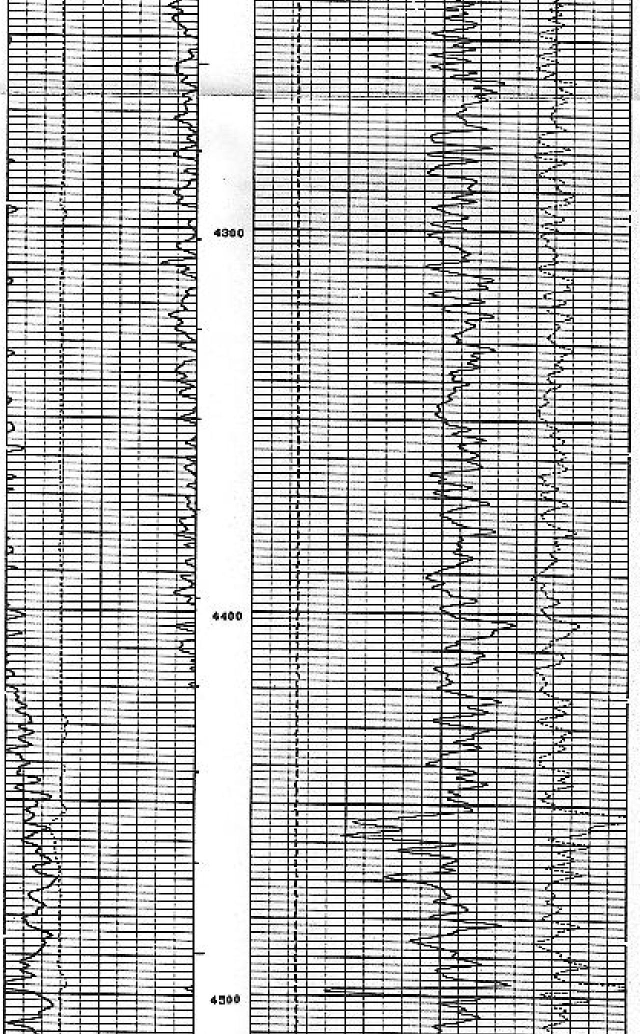


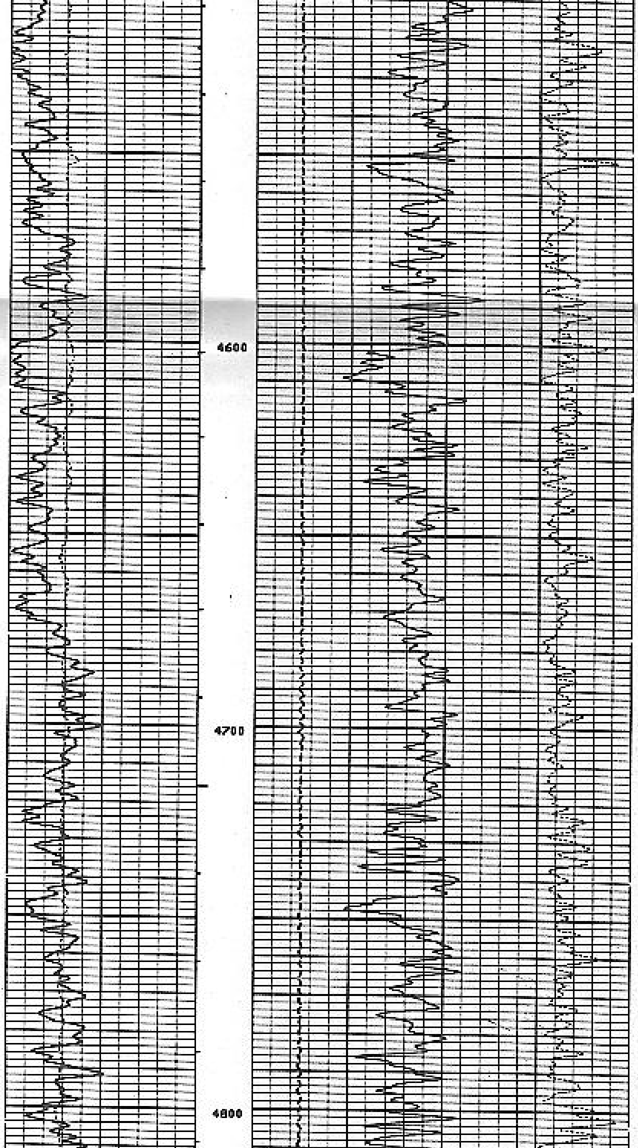


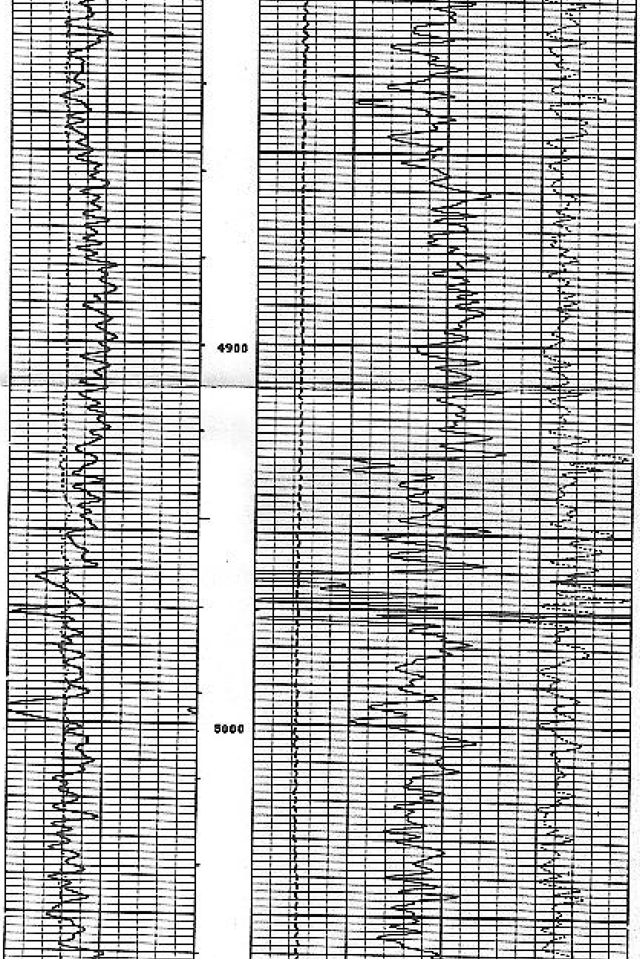


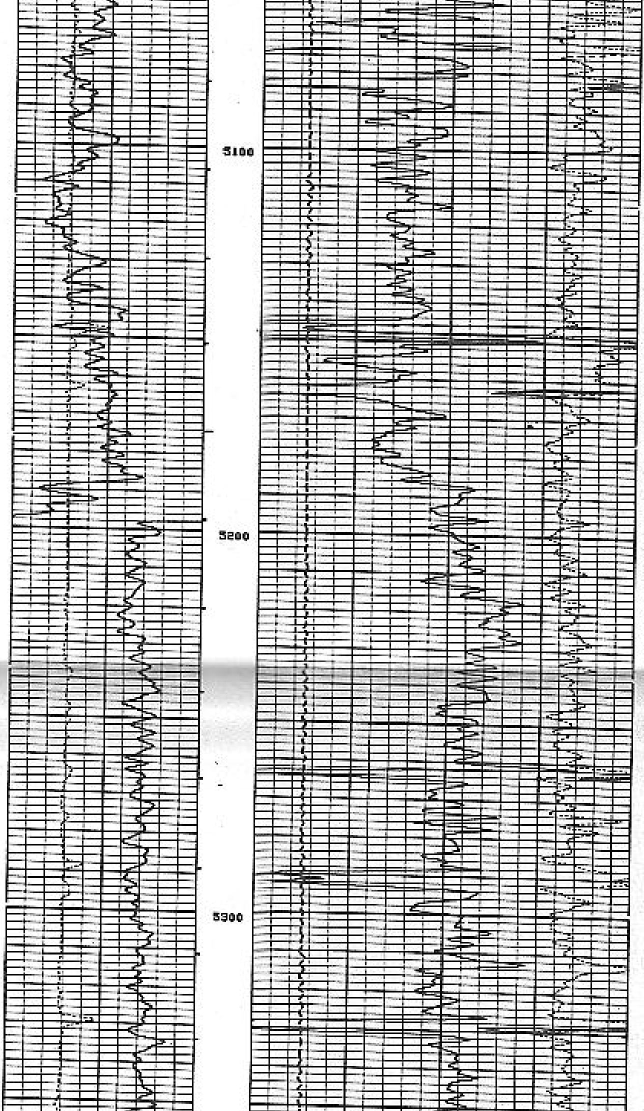


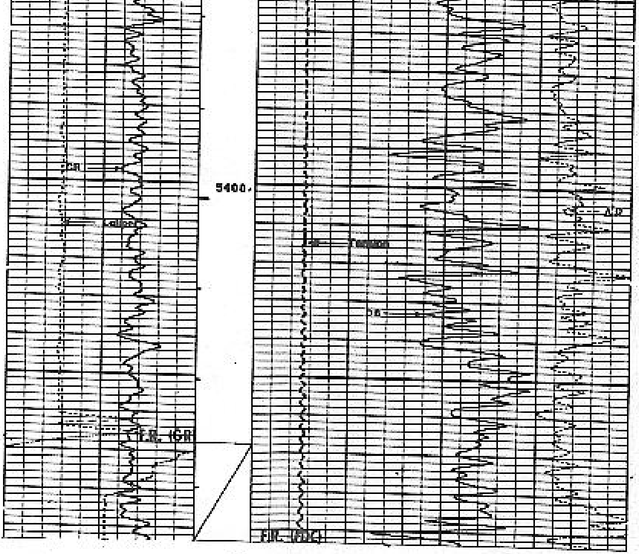












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                              2

                            FILE

 GR   (GAPI)                              RHOB(G/C3)
0.0                 200.0   2.000
      CALI(IN   )                                                3.000
6.000               16.00          TENS(LB   )        DRHO(G/C3)
                            0.0              5000. -0.250             0.2500

 TIMEOUT
UT

   NAME  UNIT  VALUE         NAME  UNIT  VALUE         NAME  UNIT  VALUE

   DO          0.0           DHS         OPEN          FPHI        PHIX
   DHF         WATE          MDEN  G/C3  2.710
   FD    G/C3  1.000         MATR        LIME          HC          CALI
   BS    INCH  8.750

                BEFORE SURVEY CALIBRATION SUMMARY

      PERFORMED:      80/08/12
      PROGRAM FILE: HEL      (VERSION    18.2    80/ 4/29)

    ATTC                DETECTOR CALIBRATION SUMMARY

                  MEASURED
                 BKGD    JIG        CALIBRATED          UNITS
        GR        76     172           153              GAPI

    CNTD                DETECTOR CALIBRATION SUMMARY

                                            TOOL
                    TANK    CALIBRATED     CHECK

      NRAT          4.09       4.57         1.5
```

FGTC

DETECTOR CALIBRATION SUMMARY

	BLOCK	JIG	CALIBRATED	UNITS
FFDC	1039.	2220.	1300.	CPS
NFDC	464.	470.0	400.0	CPS

ECDC

CALIPER CALIBRATION SUMMARY

	MEASURED		CALIBRATED		
	SMALL	LARGE	SMALL	LARGE	UNITS
CALI	8.5	12.0	8.0	12.0	IN

FILE

4

COMPANY UNION GEOTHERMAL OF NEW MEXICO

WELL BACA 12 REDRILL #1

FIELD REDONDO CREEK

COUNTY SANDOVAL STATE NEW MEXICO

SCHL FR 5494 -

SCHL. TD 5520

DRLR TD 5500

Elev.

KB 9089

DF 9088

GL 9065