COUNTY SANDOVAL
FIELD REDONDO CREEK
LOCATION 1495'FNL, 1280'FWL
WELL BACA20-REDRILL-1
COMPANY UNION GEOTHERMAL

Schlumberger

FRACTURE IDENTIFICATION LOG

WITH CORRELATION LOG

COMPANY UNION GEOTHERMAL COMPANY
OF NEW MEXICO
WELL BACA 20-REDRILL-1
FIELD REDONDO CREEK
COUNTY SANDOVAL **STATE** NEW MEXICO

LOCATION	1495'FNL 1280'FWL		Other Services: I-GR BHC
API SERIAL NO.	SEC. 12	TWP 19N	RANGE 3E

Permanent Datum: GL ; Elev.: 9065
Log Measured From KB 24 Ft. Above Perm. Datum
Drilling Measured From KB

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

Date	9-16-81			
Run No.	THREE			
Depth—Driller	5812			
Depth—Logger (Schl.)	5845			
Btm. Log Interval	5842			
Top Log Interval	2481			
Casing—Driller	9-5/8 @2505	@	@	@
Casing—Logger	2506			
Bit Size	8-3/4			
Type Fluid in Hole	WATER			
Dens. | Visc.	---- | ---			
pH | Fluid Loss	---- | --- ml	ml	ml	ml
Source of Sample	PIT			
Rm @ Meas. Temp.	.99 @146 F	@ °F	@ °F	@ F
Rmf @ Meas. Temp.	.99 @146 °F	@ °F	@ °F	@ F
Rmc @ Meas. Temp.	---- @---- F	@ F	@ °F	@ °F
Source: Rmf | Rmc	---- | ---			
Rm @ BHT	0.68 @214 F	@ F	@ °F	@ F
TIME Circulation Stopped	N/A - PUMPING FLUID			
TIME Logger on Bottom	1530			
Max. Rec. Temp.	---- °F	CSTDOE °F	°F	F
Equip. | Location	8206 | FARM			
Recorded By	MCBRIDE			
Witnessed By Mr.	BODELL			

FOLD HERE

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

REMARKS: Service Order No. 227768 Magnetic Declination N 12 E

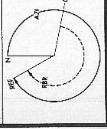
Run No.	1 hi temp	2	3	4	ROLL NO.	INTERVAL
Tool Type	HDT-F					
HDP	1813					
IDW MTU	902 | 2785					
DPI						
HDM						
HDE						
HDS						
Adapter Head						
UG | CG | SAH						
5" Film | 10" Film | 60" Record						
Analog | Digital						
TIME Circulation Stopped	N/A PUMPING FLUID					
TIME Schl. on Bottom	9-16 - 1530					

TOOL AZIMUTH AND HOLE DIRECTION CALCULATION

(DHD) HIGH SIDE OF TOOL — Direction from center of tool to upper side of tool.
(N) NORTH — Direction from center of tool to Magnetic North.
(REF) REFERENCE ELECTRODE — Direction from center of tool to #1 electrode.

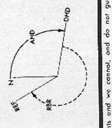
DEFINITIONS

(AZI) AZIMUTH OF REFERENCE ELECTRODE — Clockwise angle from N to REF.
(RBR) RELATIVE BEARING — Clockwise angle from DHD to REF.
(AHD) AZIMUTH OF HOLE DEV. (TOOL AXIS) — Clockwise angle from N to DHD.



LOW ANGLE UNIT ☐

EXAMPLE
HDM - Low Angle Unit (0-36°)
AZI (solid curve) = 330°
RBR (dotted curve) = 230°
AHD = AZI − RBR = 330° − 230° = 100°



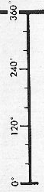
HIGH ANGLE UNIT ☒

EXAMPLE
HDM - High Angle Unit (0-72°)
AHD (solid curve) = 100°
RBR (dotted curve) = 230°
AZI = AHD + RBR = 100° + 230° = 330°

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

ORIENTATION & CORRELATION

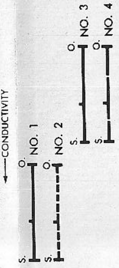
AZIMUTH

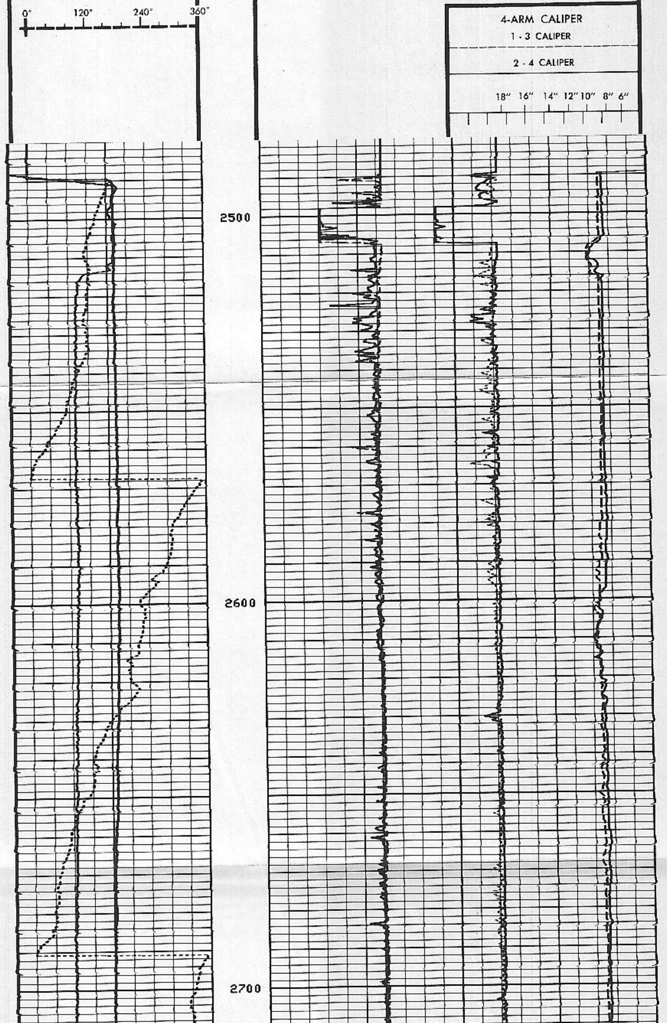


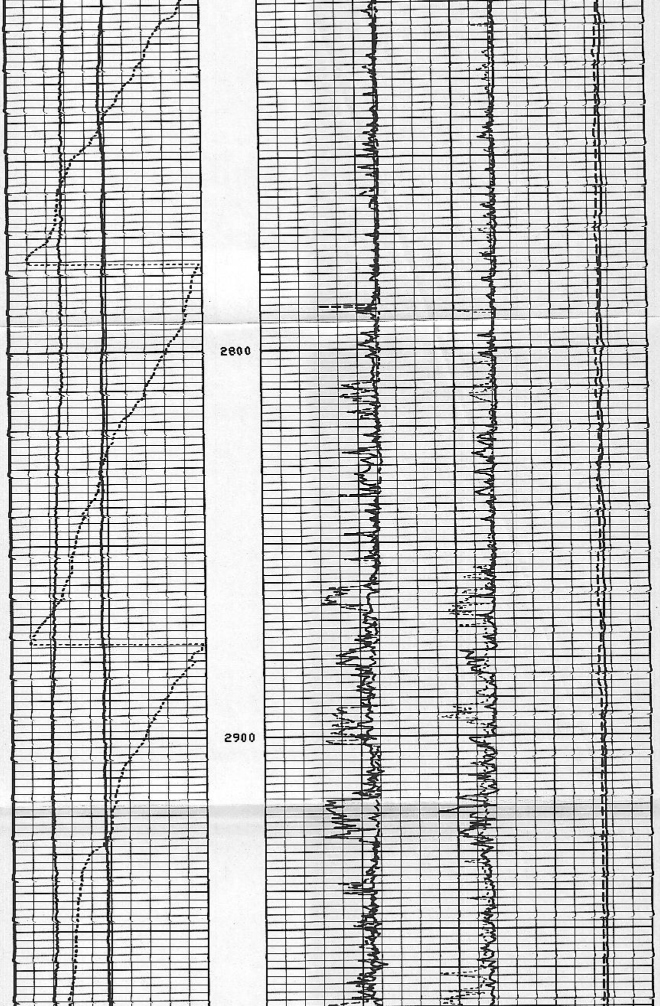
RELATIVE BEARING

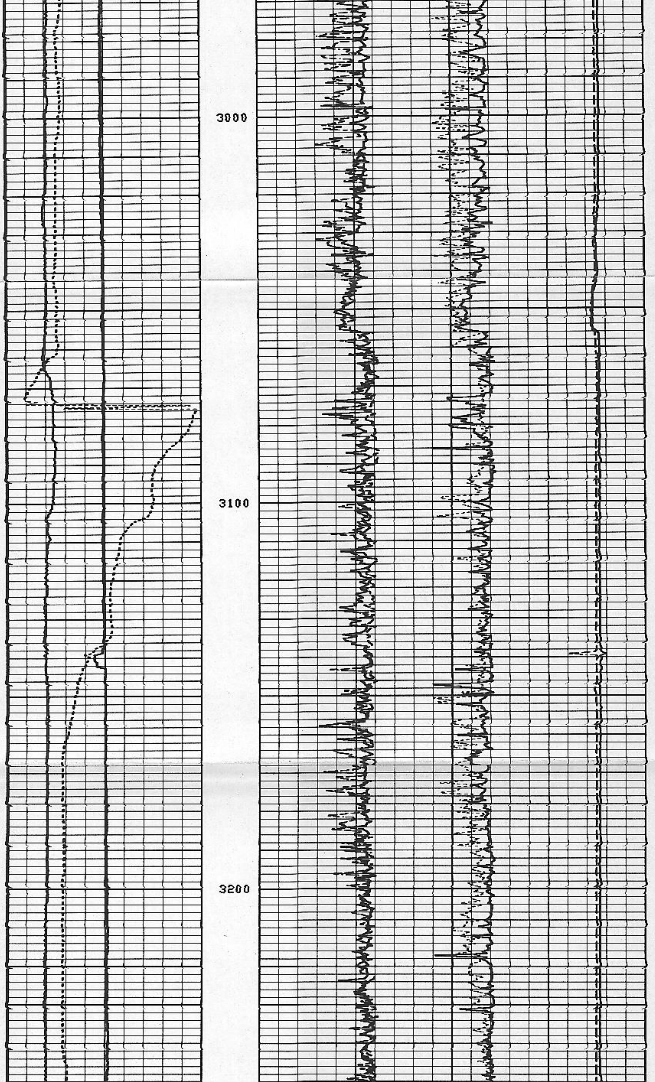
DEPTHS

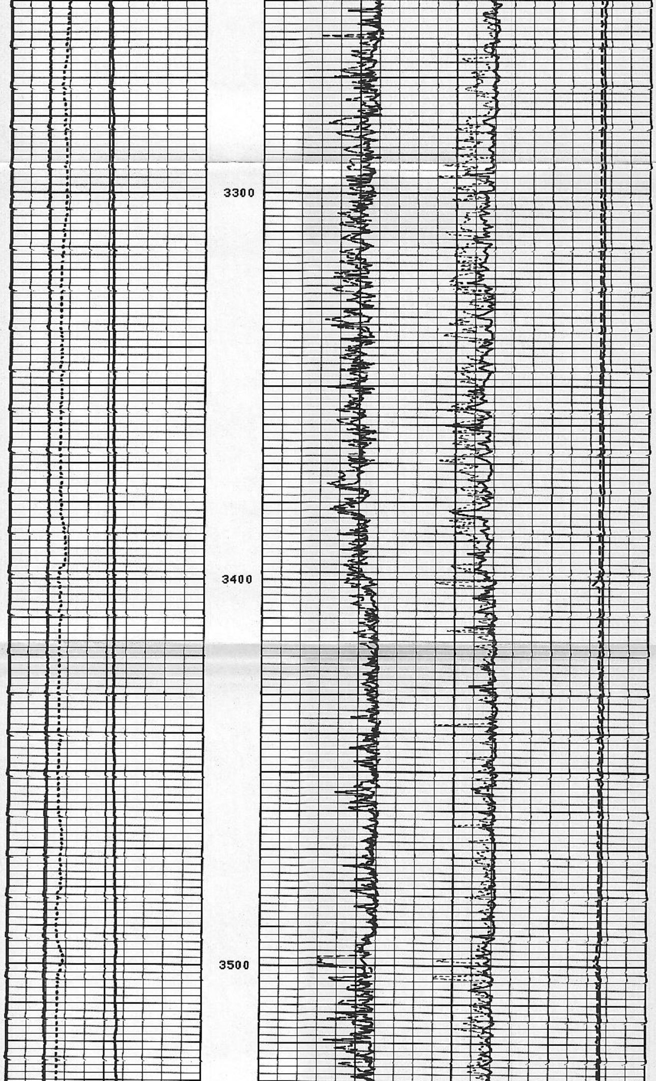
FRACTURE IDENTIFICATION CURVES

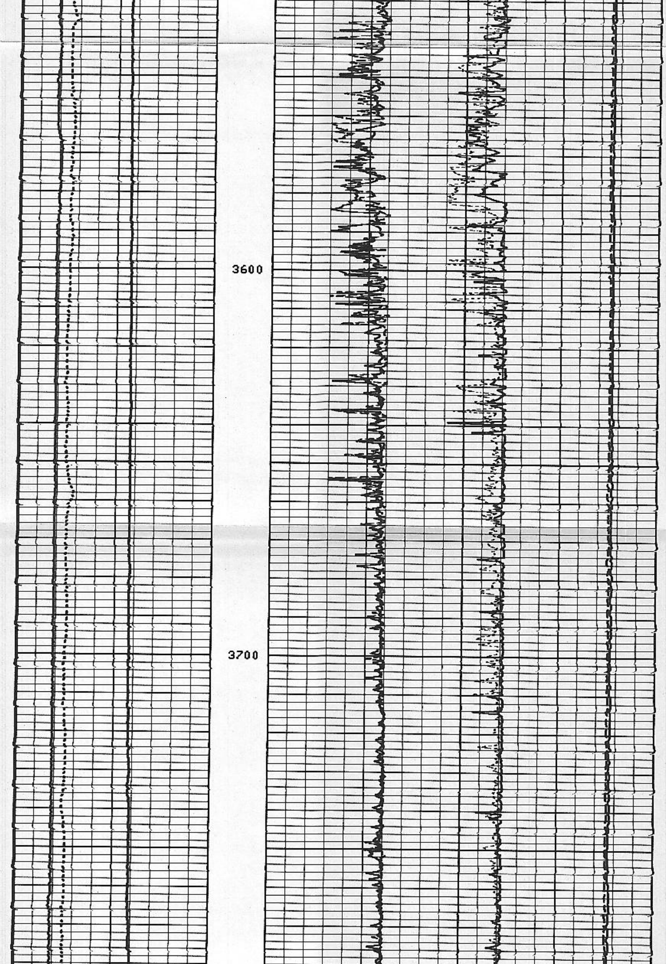


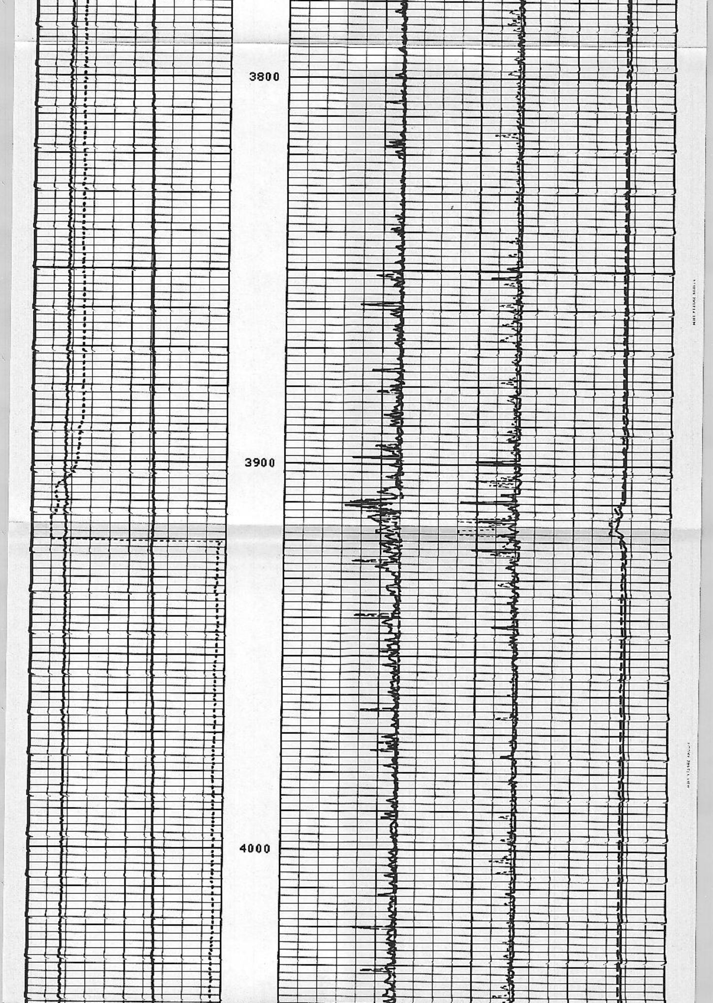


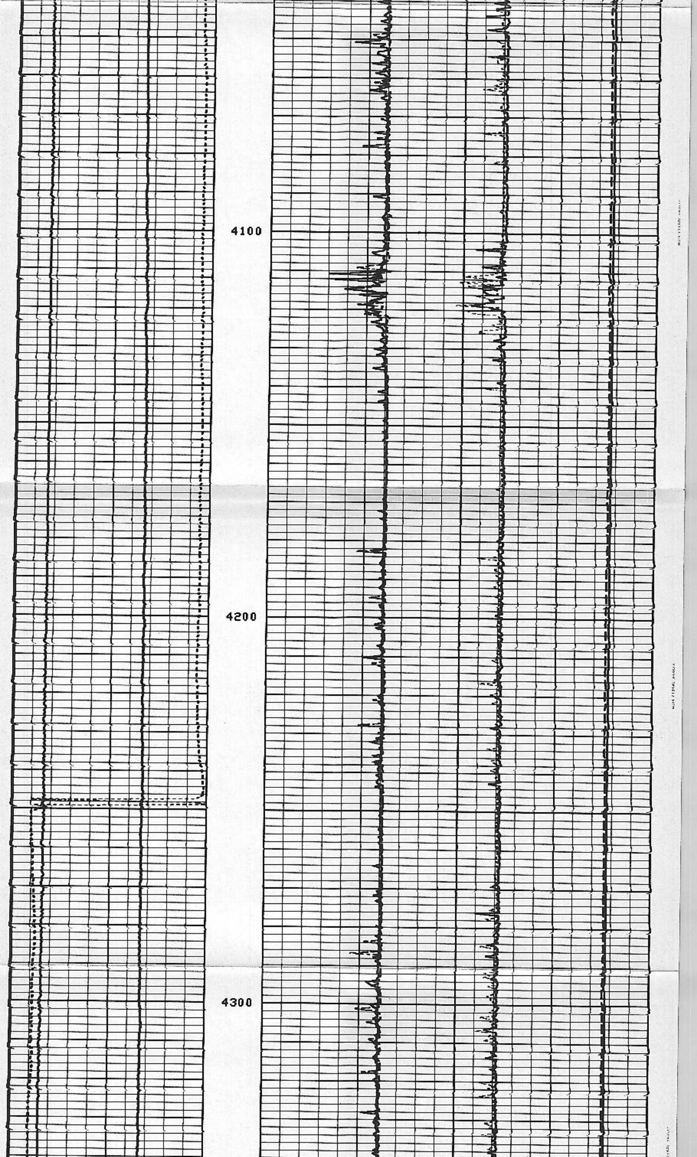


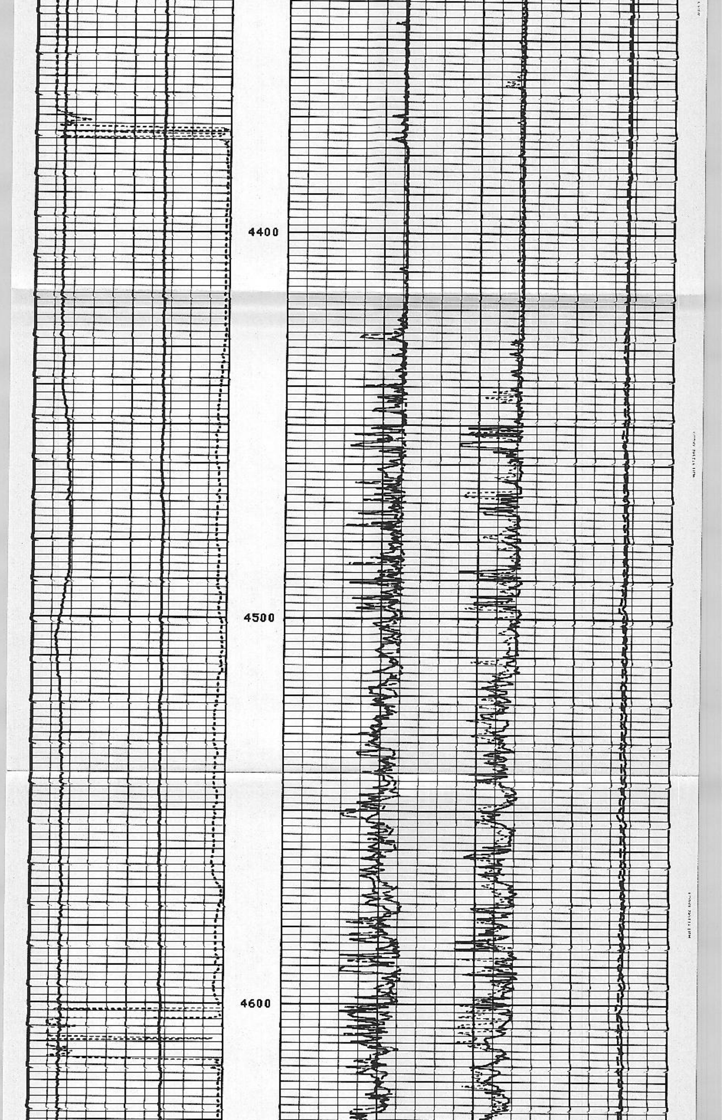


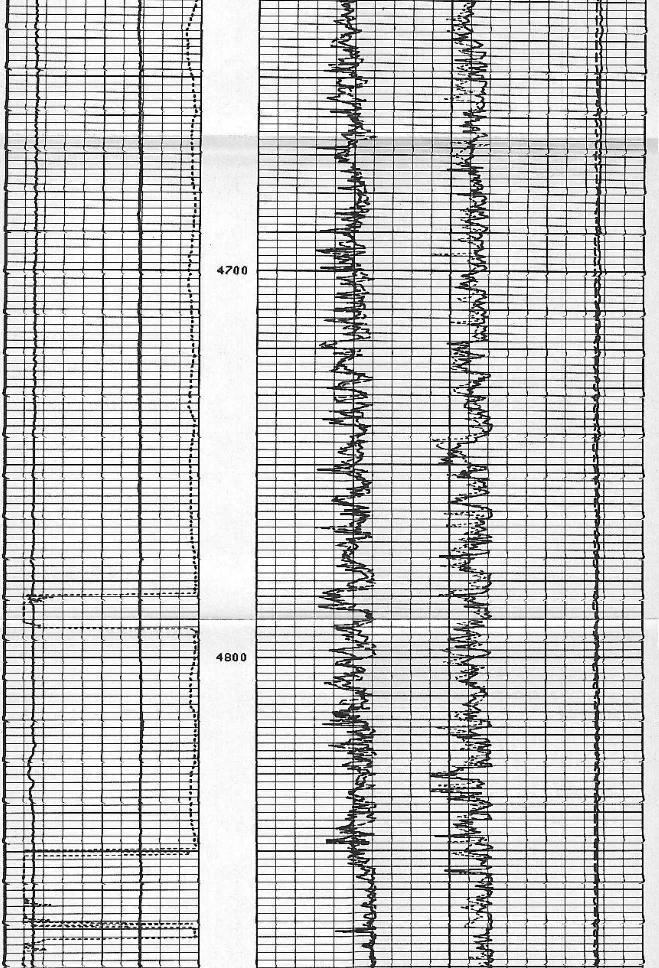


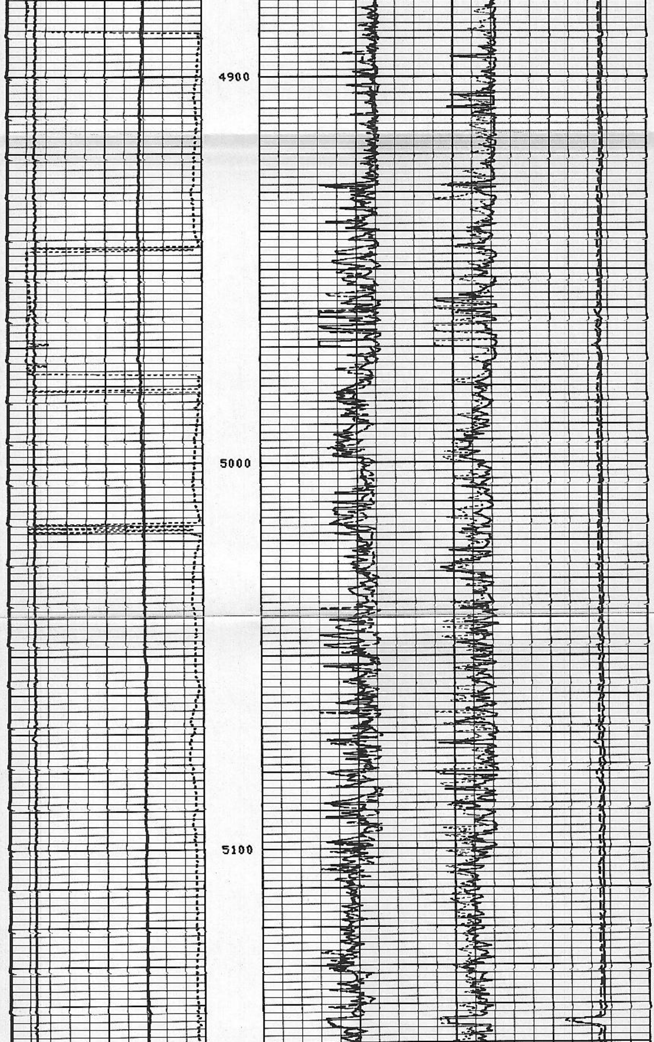


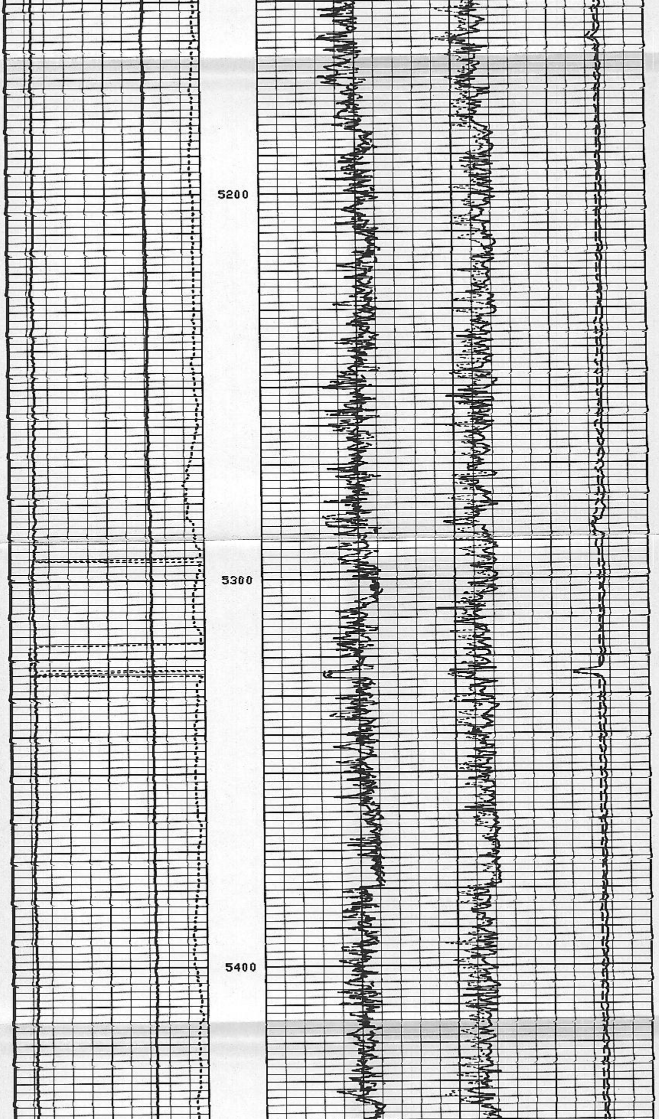


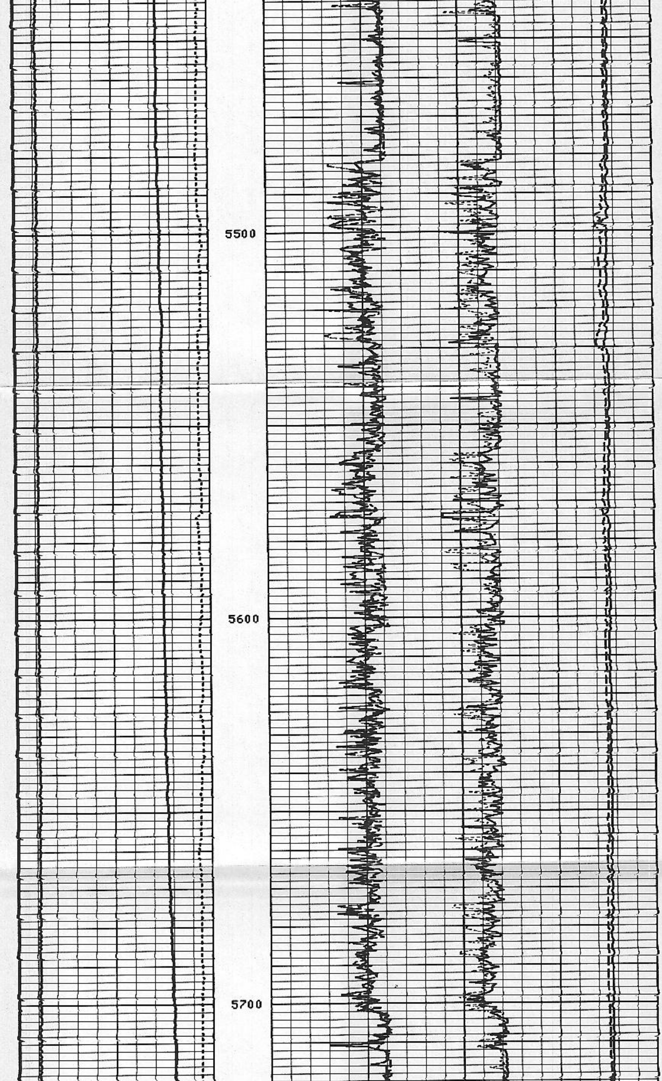


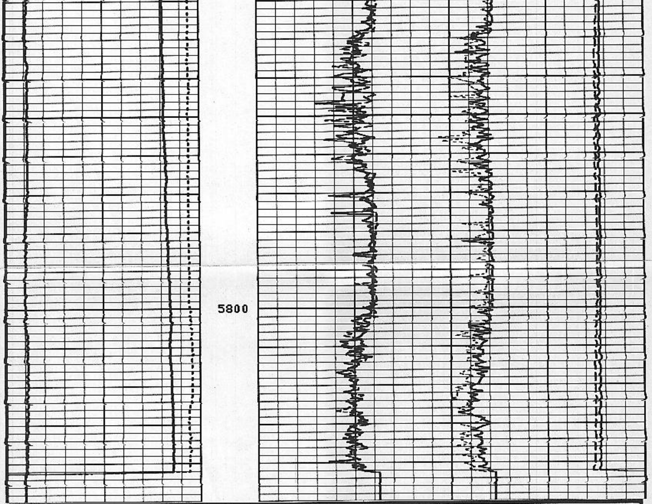












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