

HALLIBURTON

QUAD COMBO
HR/BCS/SDL/DSN

5"-100'

COMPANY NORTHWEST NATURAL GAS
WELL IW 23ACH-3-65
FIELD MIST (FLORA POOL STORAGE)
COUNTY COLUMBIA STATE OR

COMPANY NORTHWEST NATURAL GAS
WELL IW 23ACH-3-65
FIELD MIST (FLORA POOL STORAGE)
COUNTY COLUMBIA STATE OR

API No. 36-008-00366
Location 2942.2' N 96.25' 22" W
1568.2' N 08.29' 38" E
FROM THE SOUTHEAST 1/4
OF SECTION 9, T8N
R. 12E, S. 12E
T8N R. 12E S. 12E
Sec. 3 T8N R. 12E S. 12E

Other Services
EMIT-B

Permanent Datum GL Elev. 1089.3'
Log measured from KB Elev. 140' above perm. datum
Drilling measured from KB Elev. KB D.F. GL 1089.3'

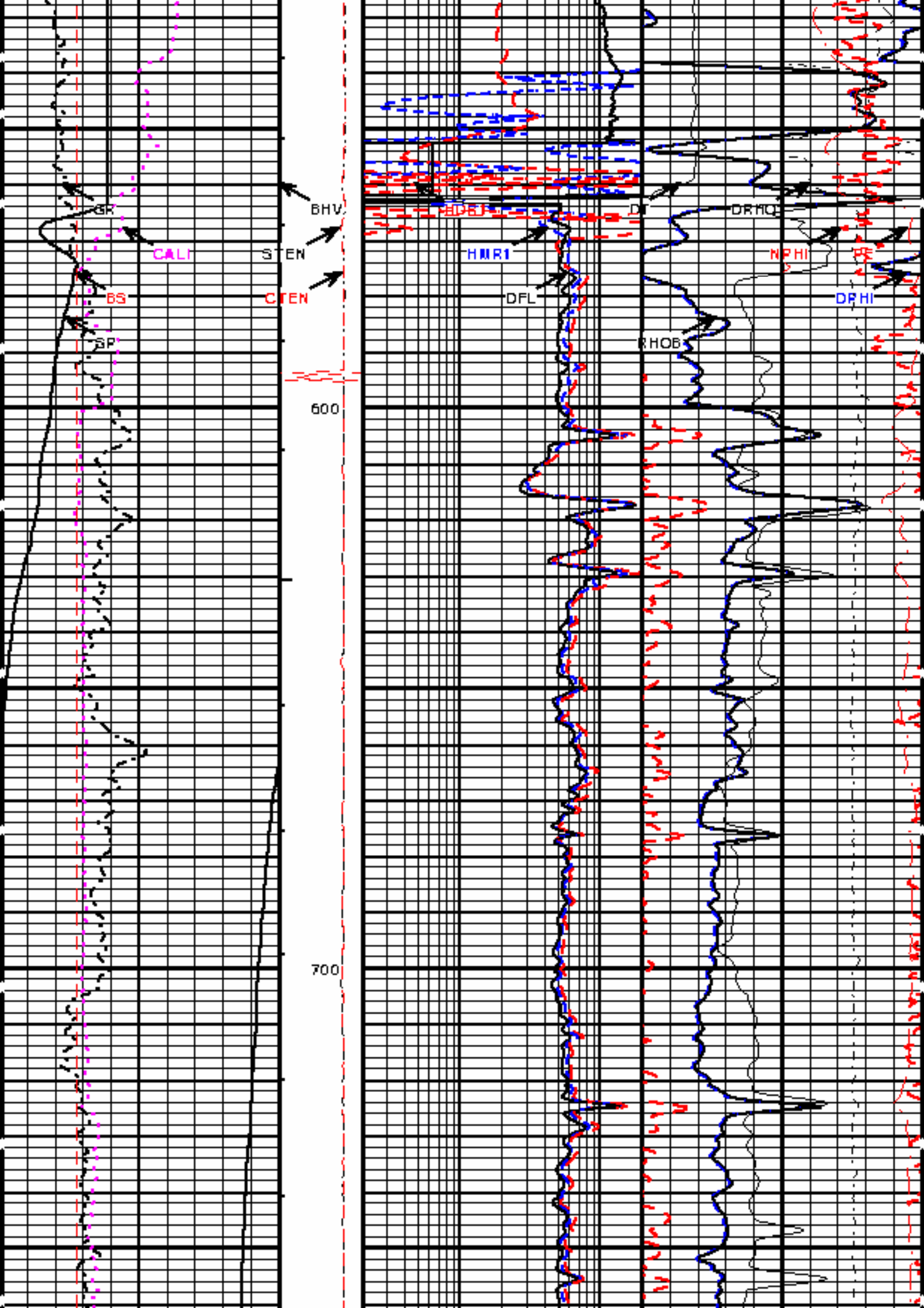
Date	MAY-20-2007		
Run No.	ONE		
Depth - Driller	2618'		
Depth - Logger	2618'		
Bottom - Logged Interval	2618'		
Top - Logged Interval	688'		
Casing - Driller	13.975" @ 688'		
Casing - Logger	585'		
Bit Size	8750"		
Type Fluid in Hole	GEL		
Dens. / Visc.	8.0 / 7.4		
Ph. / Fluid Loss	8.0 / 7.4		
Source of Sample	ROWLINE		
Rm @ Meas. Temp.	2.820 @ 64 F		
Rmf @ Meas. Temp.	2.220 @ 62 F		
Rmc @ Meas. Temp.	1.250 @ 68 F		
Source Rmf / Rmc	MEAS / MEAS		
Rm @ BHT	1.806 @ 98 F		
Rmf @ BHT	1.457 @ 98 F		
Rmc @ BHT	0.786 @ 98 F		
Time Since Circ.	06-20 0900		
Time on Bottom	06-21 0845		
Whe. Pac. Temp.	98 F @ TD		
Equip. / Location	4898 / WFLD		
Recorded By	G. ROUSSEAU		
Witnessed By	J. NEYER		

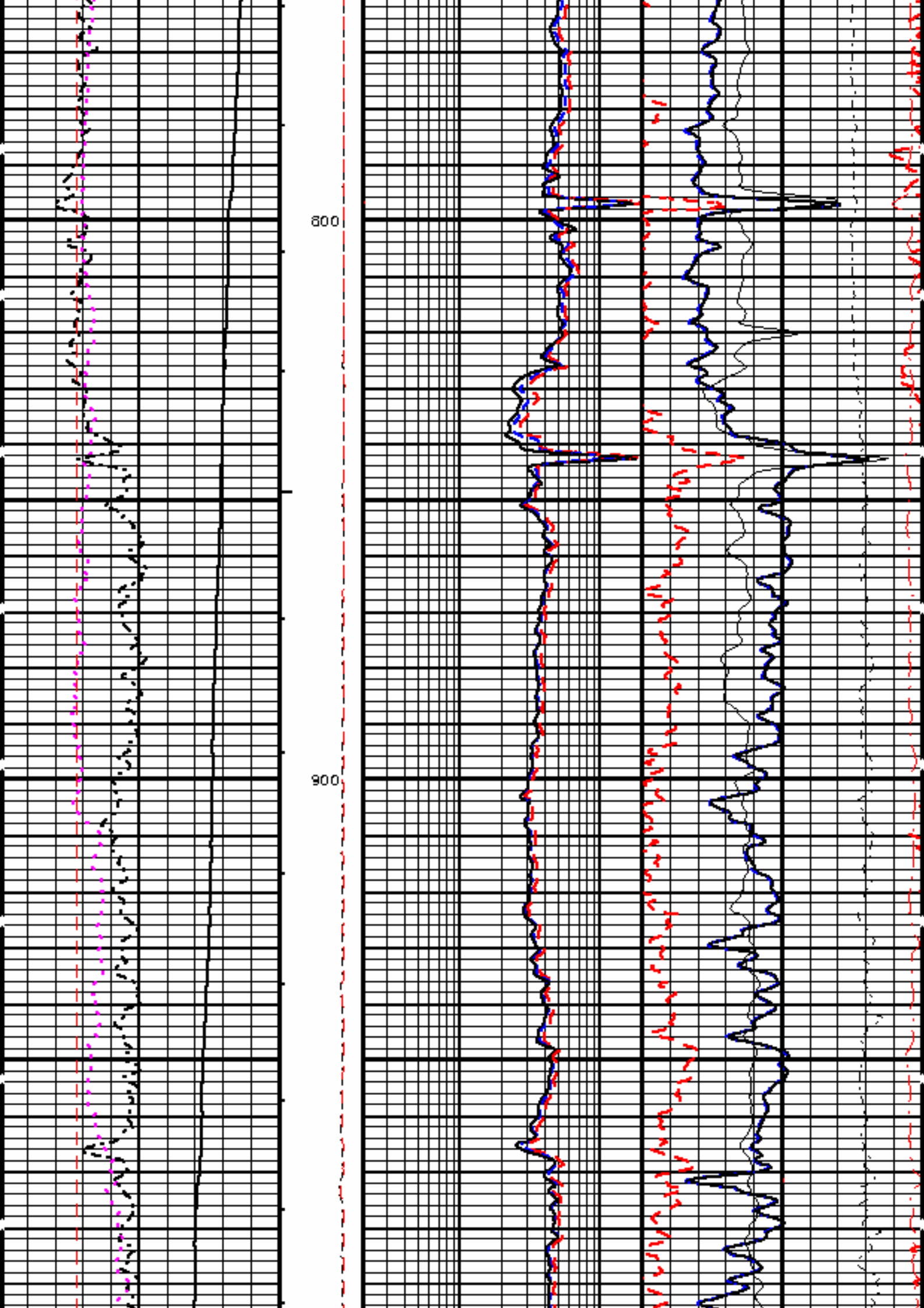
Service Ticket No.: 5118244 API Serial No.: 36-008-00366 PGM Version:

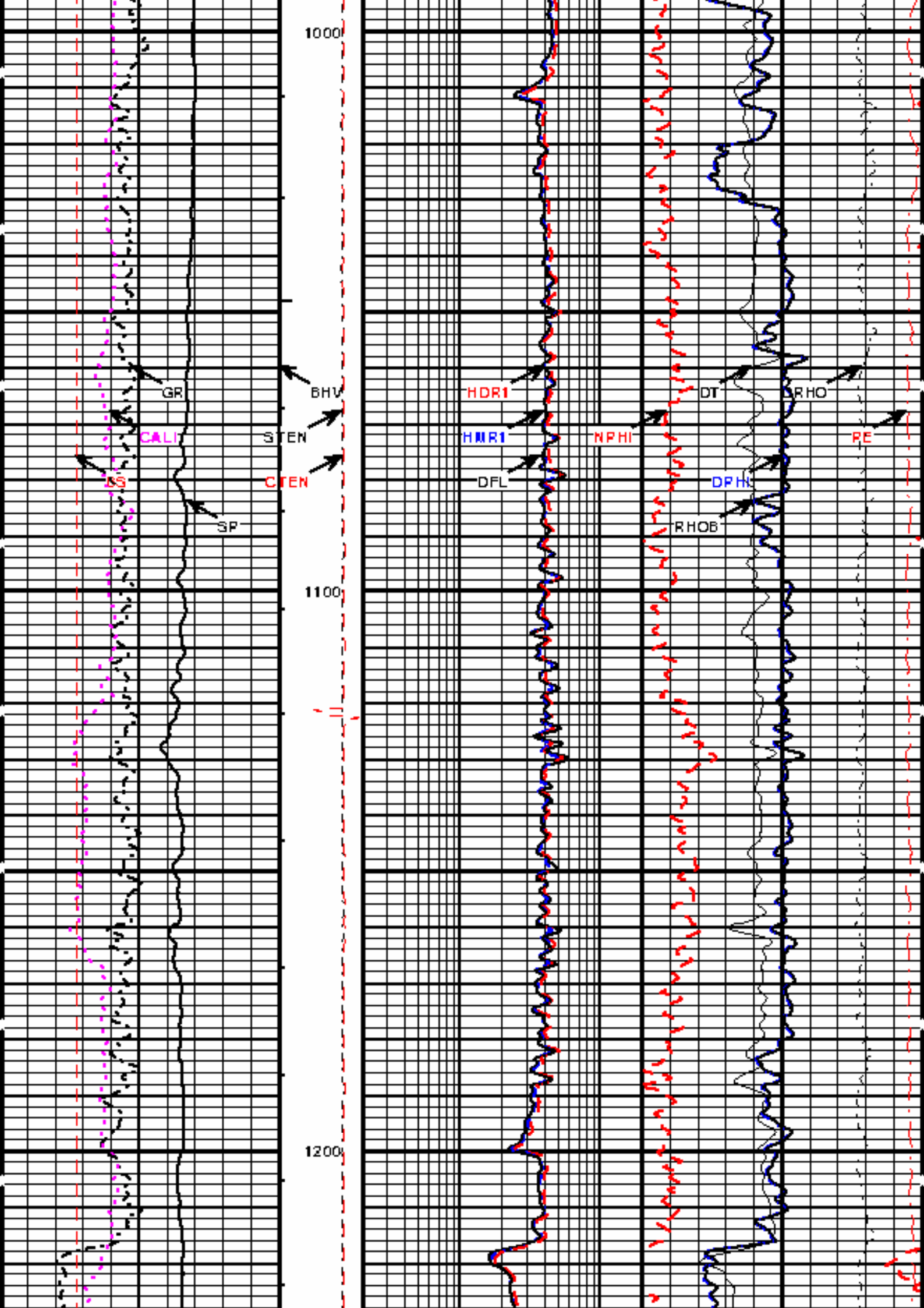
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLES				RESISTIVITY SCALE CHANGES			
Date / Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole	
Depth - Driller							
Type Fluid							
In Hole							
Dens. / Visc.							
Ph. / Fluid Loss							
Source of Sample							
RESISTIVITY EQUIPMENT DATA							
Rm @ Meas. Temp.	2.820 @ 64 F		Run No.	Tool Type & No.	Pad Type	Tool Pos.	Other
Rmf @ Meas. Temp.	2.220 @ 62 F		ONE	HRIT #211_132	NA	1.50" SO	NA
Rmc @ Meas. Temp.	1.250 @ 68 F						
Source Rmf / Rmc	MEAS / MEAS						
Rm @ BHT	1.806 @ 98 F						
Rmf @ BHT	1.457 @ 98 F						
Rmc @ BHT	0.786 @ 98 F						

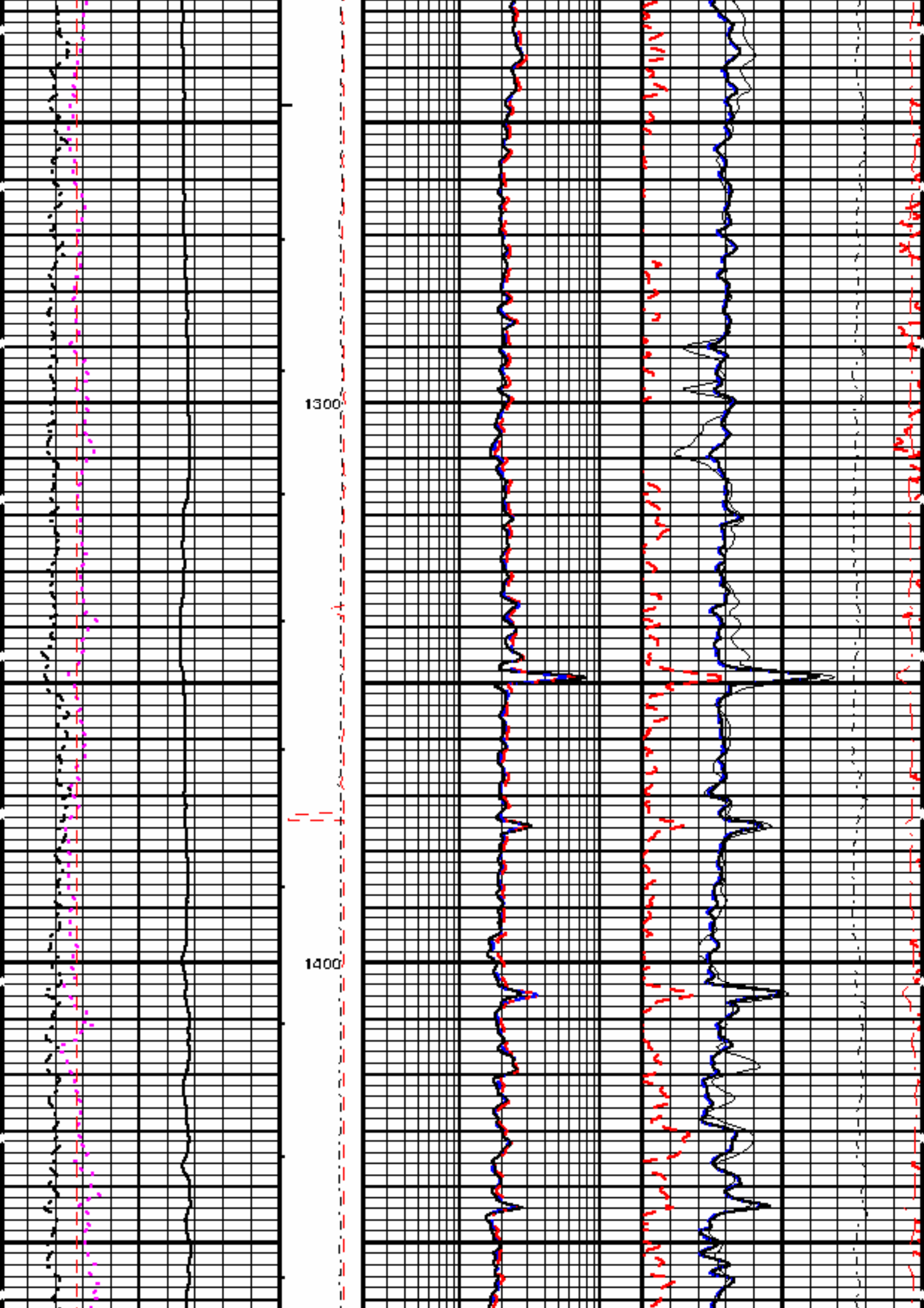
EQUIPMENT DATA							
GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.	ONE	Run No.	ONE	Run No.	ONE
Serial No.	A-180	Serial No.	4601 254	Serial No.	1714M74-1	Serial No.	D6
Model No.	NGRT	Model No.	305B BCS	Model No.	SDLT-DA	Model No.	DSNT-X
Diameter	3.636"	No. of Cent.	TWO	Diameter	6.800"	Diameter	3.625"
Detector Model No.	432	Spacing	2 FEET	Log Type	GAM-GAM	Log Type	NELJ-NELJ
Type	SCINT.			Source Type	C8-137	Source Type	AME41BE
Length	4.03'	LSA [Y / N]	NO	Serial No.	2694GW	Serial No.	DSN-307
Distance to Source	11.0'	PWDA [Y / N]	NO	Strength	1.5 CI	Strength	15.0 CI

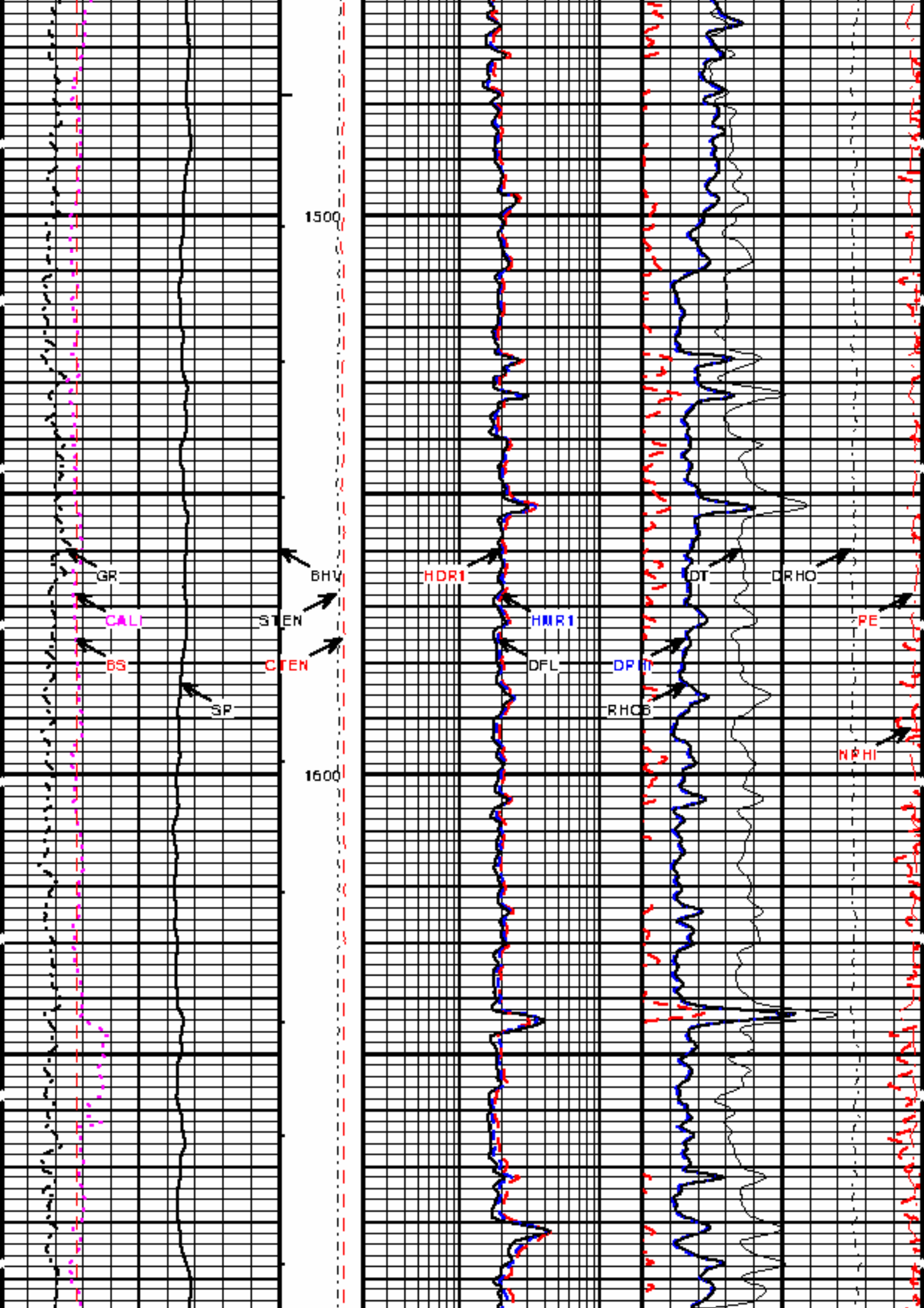
LOGGING DATA														
GENERAL			GAMMA		ACOUSTIC			DENSITY			NEUTRON			
Run	Depth		Speed	Scale		Scale			Scale					
No.	From	To	Ft / Min	L	R	L	R	Matrix	L	R	Matrix	L	R	Matrix
ONE	9516'	585'	25	0	160	160	60	65.5	1.65	2.65	2.65	90	0	SAND

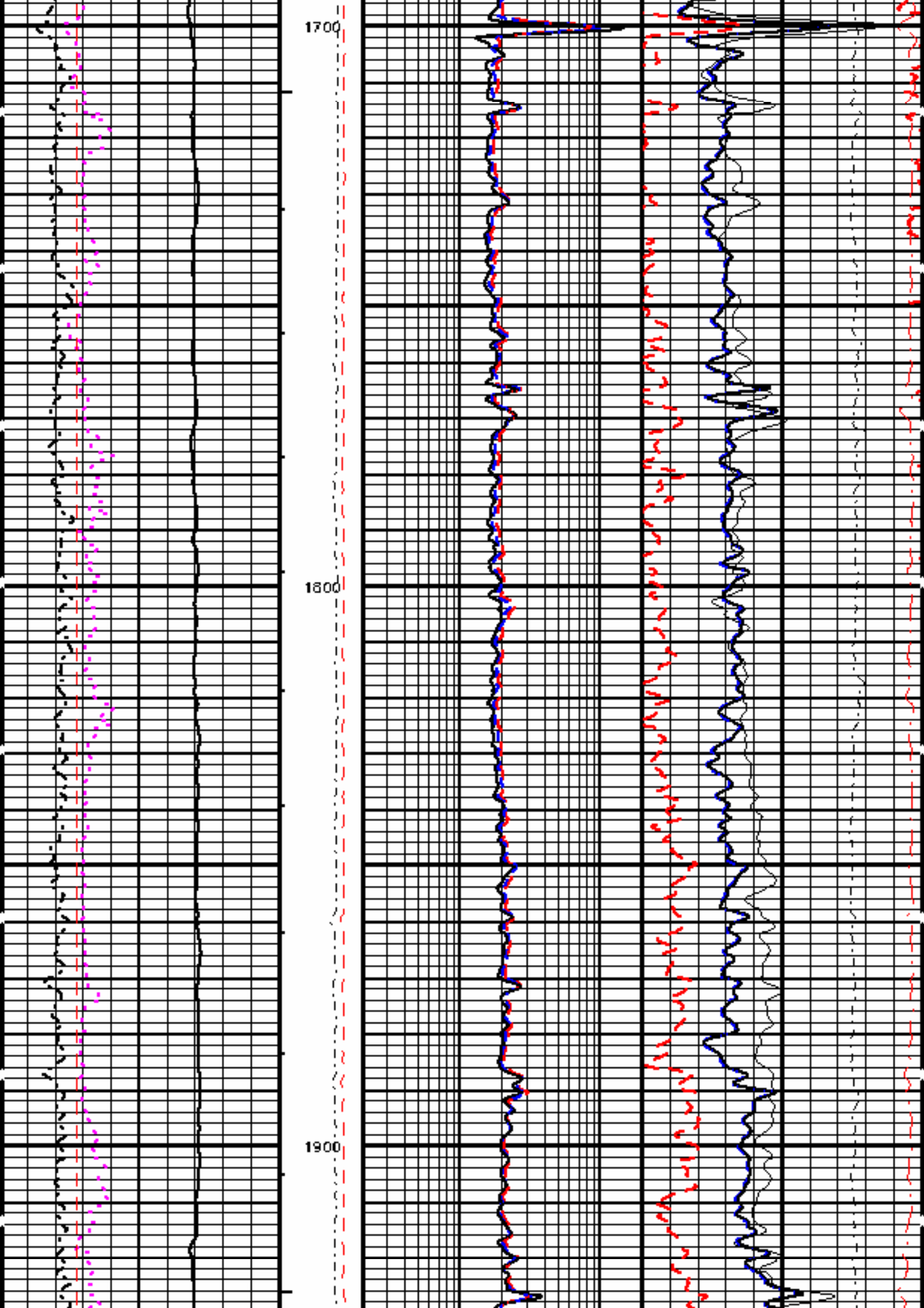


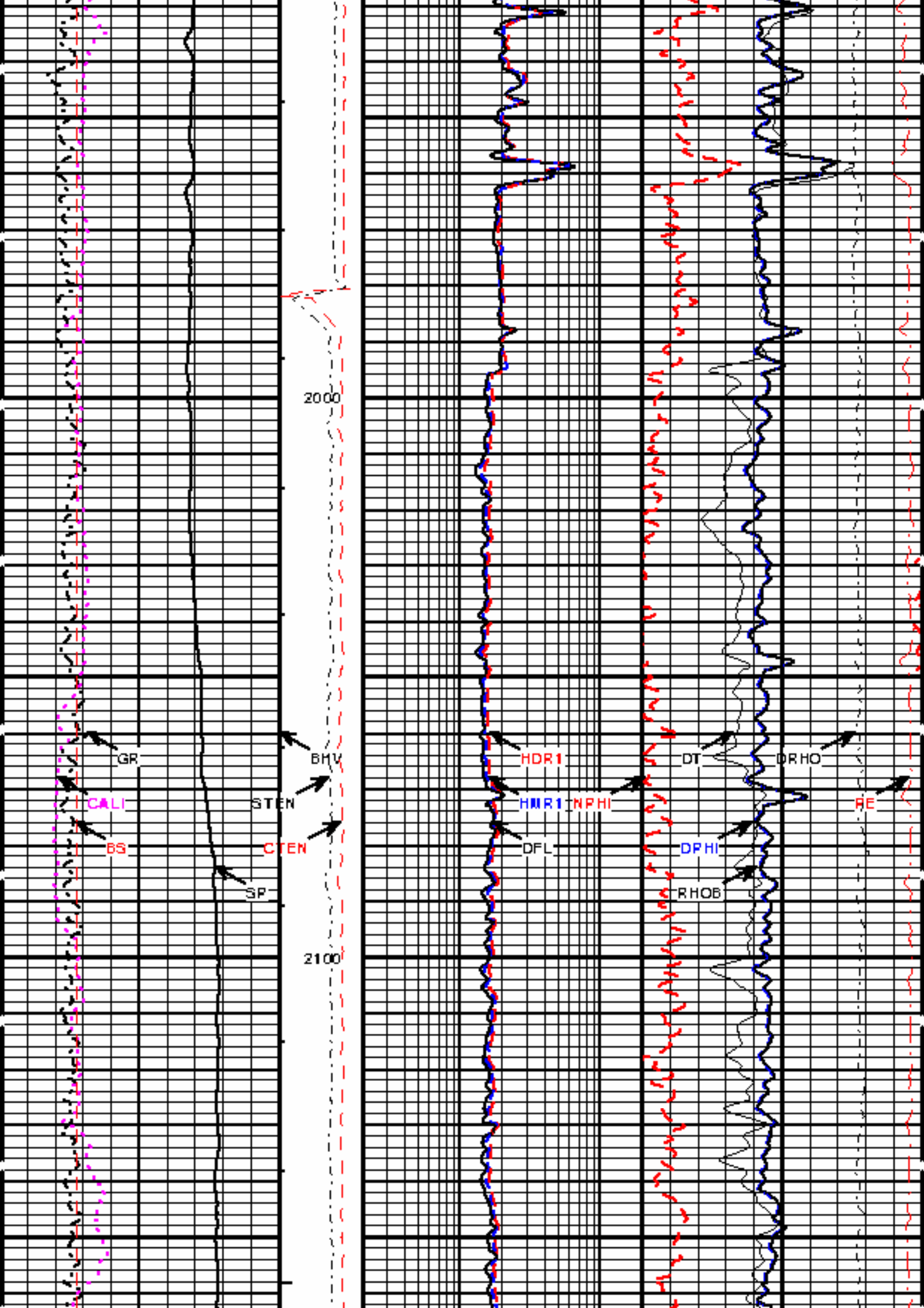


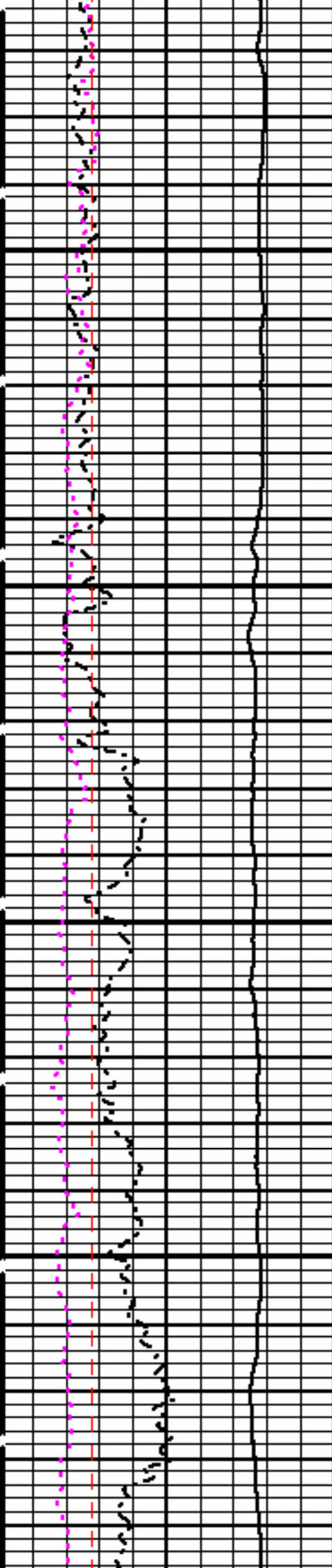




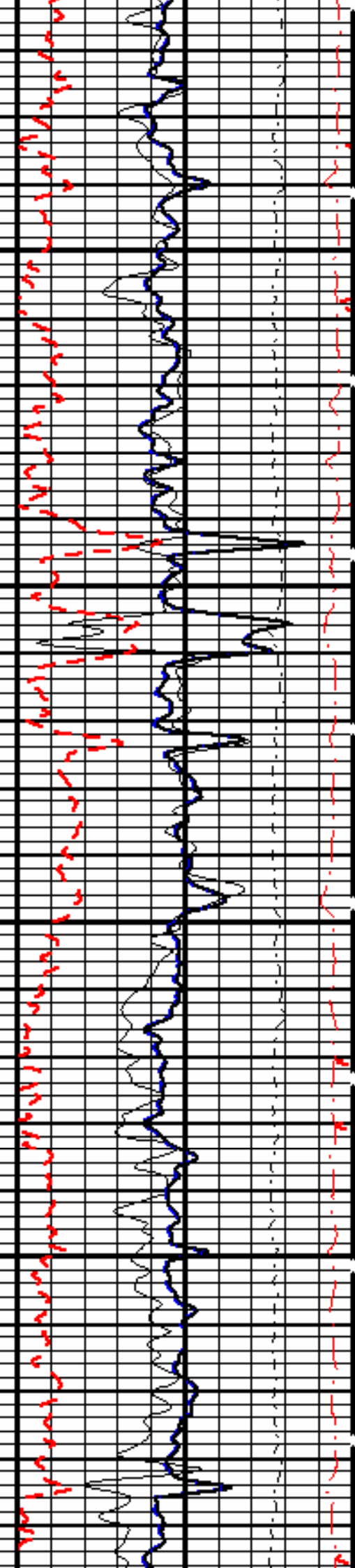
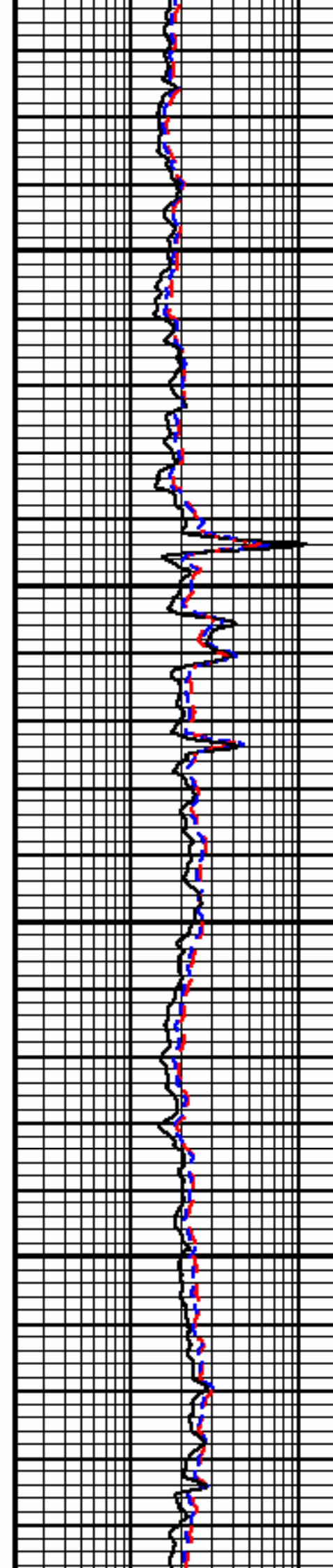


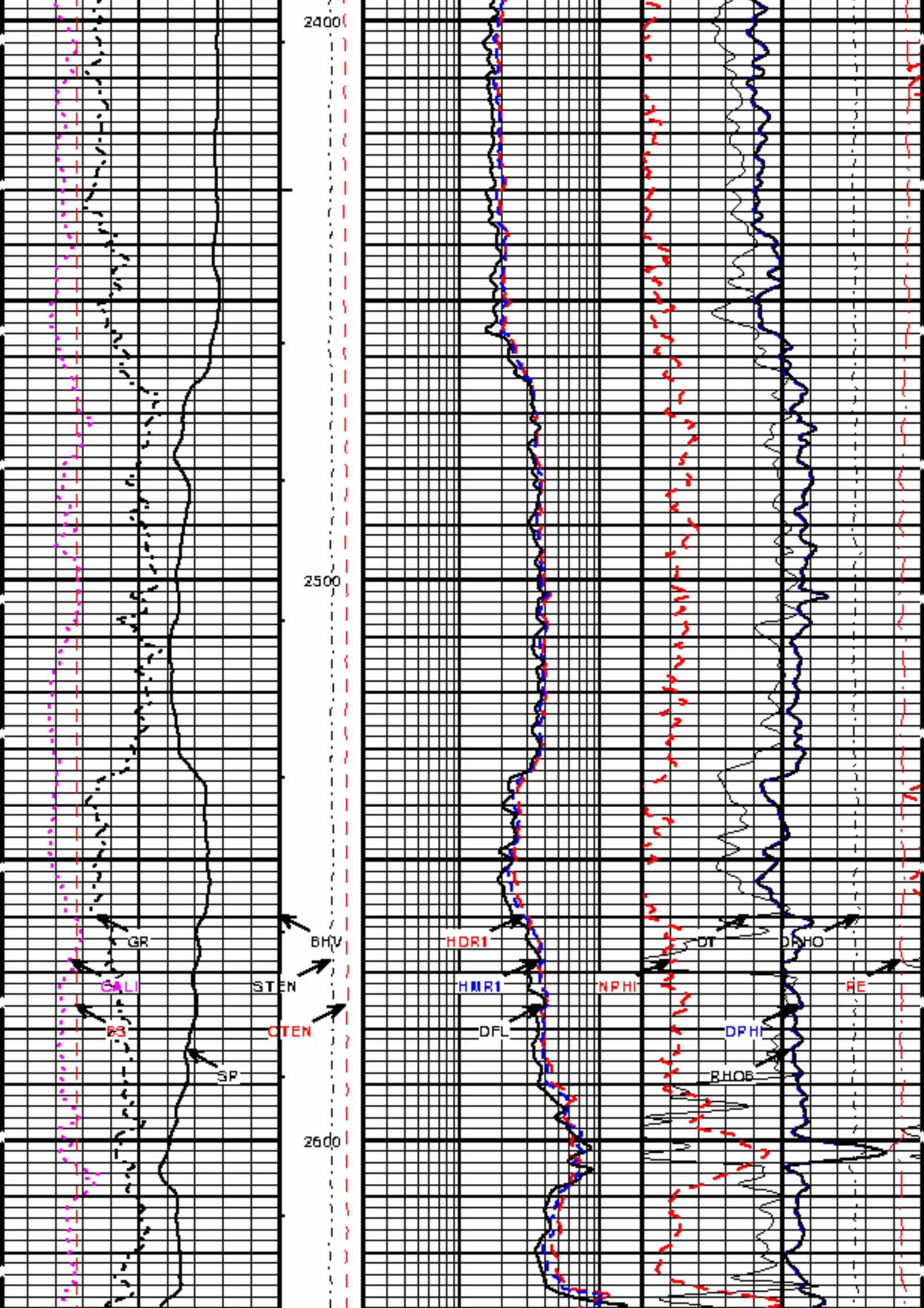


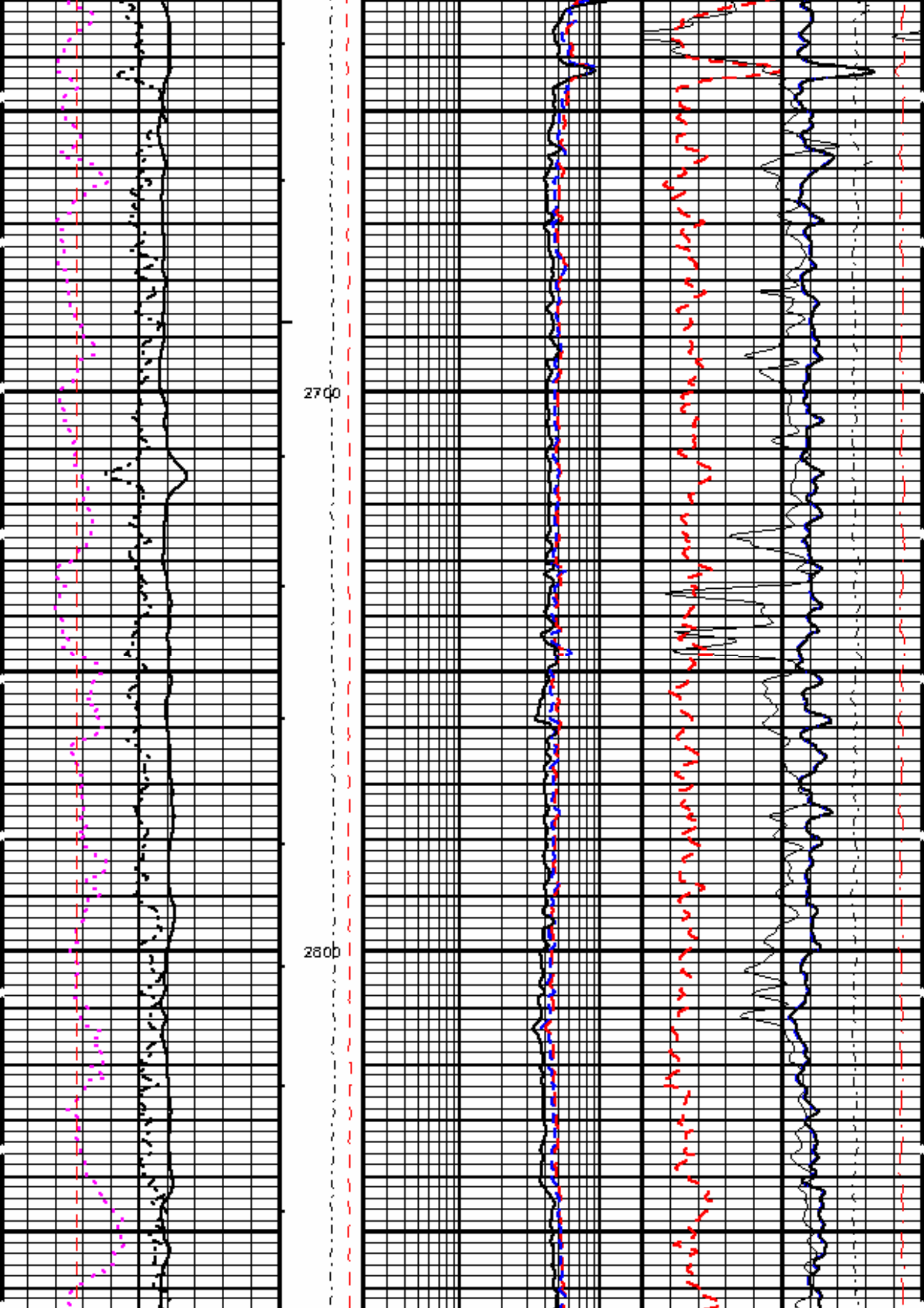


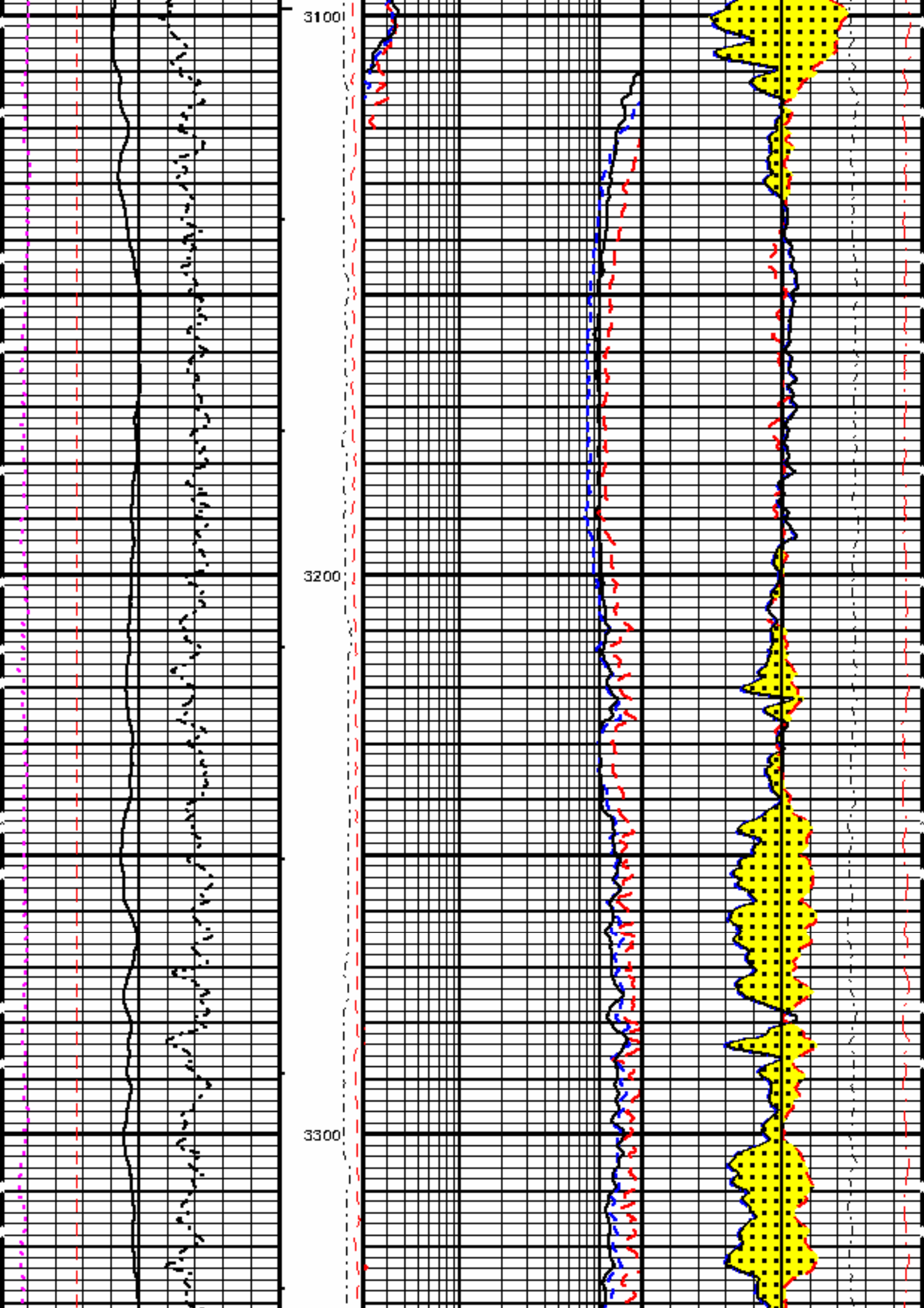


2200
2300









INCH	16	10500500	0.2	OHMM	20	60.	%	0
GR		BHV		HDR1			DT	
API	150	0 100	0.2	OHMM	20	175	US/F	75
		FT3						

HALLIBURTON
 Version No: | hc:3.0
 Data File: FF_TP_MER2.cls
 Format File: 5.TIF.spc
 Plot Time: 2007-05-21 07:26:12
 Database Time: 05:30:42
 Top Depth: 470.01
 Bottom Depth: 3516.76

COMPANY NORTHWEST NATURAL GAS
 WELL W 23ACH-3-65
 FIELD MIST (FLORA POOL STORAGE)
 COUNTY COLUMBIA STATE OR

HALLIBURTON
 QUAD COMBO
 HRI/BCS/SDL/DSN
 5"=100'