

Company: Duncan Oil Inc

Well: BK 1

Field: Wildcat

County: Washington

State: Colorado

Platform Express

Combo Print

AIT-TLD-CNL-GR

County: Washington

Field: Wildcat

Location: SWNE Sec 34 Town 3S Rng 53W

Well: BK 1

Company: Duncan Oil Inc

Location: SWNE Sec 34 Town 3S Rng 53W
SHL: 2503' FNL & 1500' FEL
Lat/Long: 39.747670/-103.298150

Elev.: K.B. 4971.00 ft
G.L. 4960.00 ft
D.F. 4971.00 ft

Permanent Datum: _____ Mean Sea Level _____ Elev.: 0.00 ft _____

Log Measured From: Kelly Bushing 4971.00 ft above Perm.Datum

Drilling Measured From: Kelly Bushing

API Serial No. 05-121-11050 Section: 34 Township: 3S Range: 53W

Logging Date 06-Oct-2015

Run Number	ONE		
Depth Driller	8073.00 ft		
Schlumberger Depth	8071.00 ft		
Bottom Log Interval	8062.00 ft		
Top Log Interval	385.00 ft		
Casing Driller Size @ Depth	8.625 in @ 385.00 ft		
Casing Schlumberger	385 ft		
Bit Size	7.875 in		
Type Fluid In Hole	Water		
Density	9.4 lbm/gal	53 s	
Fluid Loss	5.2 cm3	9	
MUD	Source of Sample	Active Tank	
RM @ Meas Temp	0.2 ohm.m @ 68 degF		
RMF @ Meas Temp	0.15 ohm.m @ 68 degF		
RMC @ Meas Temp			
Source RMF	RMC	Pressed	
RM @ BHT	0.08 @ 174 0.06 @ 174		
Max Recorded Temperatures	174 degF		
Circulation Stopped	05-Oct-2015 17:30:00		
Logger on Bottom	06-Oct-2015 09:07:00		
Unit Number	9108	Fort Morgan, CO	
Recorded By	Evan Meadows		
Witnessed By	Tom Thomas		

Disclaimer

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Contents

1. Header	
2. Disclaimer	
3. Contents	
4. Well Sketch	
5. Borehole Size/Casing/Tubing Record	
6. Operational Run Summary	
7. Borehole Fluids	
8. Remarks and Equipment Summary	
9. Depth Summary	
10. Survey Record	
11. ONE Main Pass - Triple Combo	
11.1 Integration Summary	
11.2 Software Version	
11.3 Composite Summary	
11.4 Log (Combo_Fax)	
11.5 Parameter Listing	
12. Calibration Report	

Well Sketch

Driller Depth

0.00 ft

385.00 ft

Casing 8.625in
24lbm/ft



Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	7.875					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	8073					
Bottom Logger (ft)	8071					
Casing						
Size (in)	8.625					
Weight (lbm/ft)	24					
Inner Diameter (in)	8.097					
Grade	N/A					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	385					
Bottom Logger (ft)	385					

Operational Run Summary

Parameter (unit)	ONE					
Date Log Started	06-Oct-2015					
Time Log Started	08:25:18					
Date Log Finished	06-Oct-2015					
Time Log Finished	11:24:00					
Top Log Interval (ft)						
Bottom Log Interval (ft)						
Total Depth (ft)	8071.00					
Max Hole Deviation (deg)						
Azimuth of Max Deviation (deg)						
Bit Size (in)	7.875					
Logging Unit Number	9108					
Logging Unit Location	Fort Morgan, CO					
Recorded By	Evan Meadows					

Witnessed By	Tom Thomas					
Service Order Number						

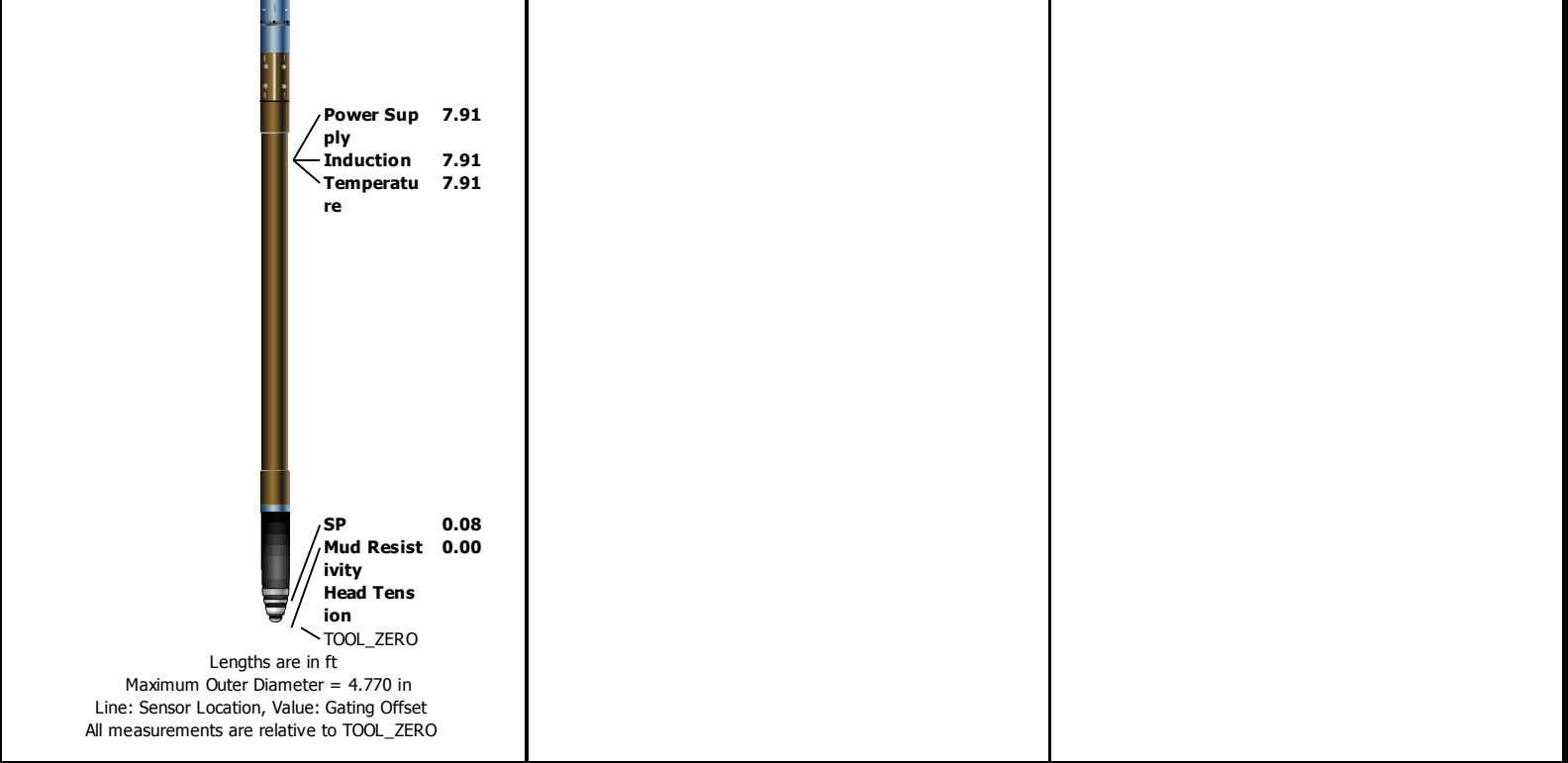
Borehole Fluids

Parameter(unit)	ONE					
Fluid Type	Water					
Max Recorded Temperatures (degF)	174					
Source of Sample	Active Tank					
Salinity (ppm)	1800					
Density (lbm/gal)	9.4					
Funnel Viscosity (s)	53					
Fluid Loss (cm3)	5.2					
PH	9					
Date/Time Circulation Stopped	05-Oct-2015 17:30:00					
Date Logger on Bottom	06-Oct-2015					
Time Logger on Bottom	09:07:00					
Source RMF						
RMC	Pressed					
RM @ Meas Temp (ohm.m@degF)	0.2 @ 68					
RMF @ Meas Temp (ohm.m@degF)	0.15 @ 68					
RMC @ Meas Temp (ohm.m@degF)						
RM @ BHT (ohm.m@degF)	0.08 @ 174					
RMF @ BHT (ohm.m@degF)	0.06 @ 174					
RMC @ BHT (ohm.m@degF)	NaN @ 174					
Total Solid (%)	8					
High Gravity Solids (%)						

Remarks and Equipment Summary

ONE: Toolstring				ONE: Remarks
Equip name LEH-QT LEH-QT	Length 70.61	MP name	Offset	1. THIS IS THE FIRST RUN IN THE WELL
				2. TOOL RAN AS PER TOOL SKETCH
				3. MATRIX: LIMESTONE MDEN: 2.71 G/ML
DTC-H ECH-KC DTC-H	67.69	CTEM HV	66.79 0.00	4. NEUTRON CORRECTIONS: HOLE SIZE (BS), PRESSURE/TEMPERATURE, STANDOFF (0.125")
		TelStatus ToolStatus Temperatu re	64.69 64.69 64.67	5. TD: 8,071' CS: 385'
HGNS-H HGNH NPV-N NSR-F:5069 HACCZ-H:426 9 HMCA-H HGNS-H	64.69	GR	63.95	6. CALIPER READS 8.097" IN CASING AFTER
		CNL Porosity HMCA HGNS Accelerom	57.62 55.28 55.28 0.00	

Instrument	Altitude (km)
HDRS-H	55.28
ECH-MEB	
HRCC-H	
HRMS-H	
GPV-Q	
Long Spacing	
:28736	
Short Spacing	
HRGD-H:3933	
Backscatter	
GSR-J:5471	
Adaptor_Head	43.04
HRCC	51.28
MCFL	45.85
Caliper	45.37
TLD Density	44.98
AH-184	39.04
MAST-B:8075	37.04
ECH-SF:8157	
MAPC-BA:8159	
MAMS-BA:8075	
MAMS	21.6
AIT-M:181	16.00
AMIS:181	
AMRM:181	



Depth Summary			
ONE			
Depth Measuring Device			
Type	IDW-B		
Serial Number			
Calibration Date			
Calibrator Serial Number			
Calibration Cable Type			
Wheel Correction 1	0		
Wheel Correction 2	0		
Tension Device			
Type	CMTD-B/A		
Serial Number			
Calibration Date			
Calibrator Serial Number			
Number of Calibration Points	0		
Logging Cable			
Type	7-46A-XS		
Serial Number			
Length	15000.00 ft		
Conveyance Type	Wireline		
Rig Type	Triple		
ONE:Depth Control Parameters		Depth Control Remarks	
Log Sequence	First Log In the Well	1. ALL SCHLUMBERGER DEPTH CONTROL PROCEDURES WERE FOLLOWED DURING LOGGING OPERATIONS	
Rig Up Length At Surface		2. IDW USED AS PRIMARY DEPTH CONTROL MEASURE	
Rig Up Length At Bottom		3. Z CHART USED AS SECONDARY DEPTH CONTROL MEASURE	
Rig Up Length Correction		4. TD: 8,071' CS: 385'	

Stretch Correction	6.20 ft	5. STRETCH CORRECTION: 6.2'
Tool Zero Check At Surface		

Survey Record	
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Survey Calculation

Method :	Minimum Radius of Curvature	DLS Method :	Lubinski
North Reference :	True North	Total Correction Formula :	Magnetic Dec

Rig Location

Latitude : 39.747670 degrees Longitude : -103.29815 degrees

Tie In Point

Measured Depth:	0.00 ft	Inclination:	0.00 deg	Azimuth:	0.00 deg
True Vertical Depth:	0.00 ft	North Displacement:	0.00 ft	East Displacement:	0.00 ft

Survey Quality Index

28 : Tie-In Point

Survey Correction Index

0 : No correction

Survey Description Index

0 : Not Flagged Survey

Seq	MD (ft)	Incl (deg)	Azim (deg)	Course (ft)	TVD (ft)	V Sec (ft)	N/ -S (ft)	E/ -W (ft)	Closure (ft)	at Azim (deg)	DLS deg/100ft	Tool Type	QI	CI	DI
1	0.00	0.00	0.00	----	0.00	0.00	0.00	0.00	0.00	90.00	0.00	TIP	28	0	0

ONE

Main Pass - Triple Combo

Software Version	
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Acquisition System	Version
Maxwell 2016	6.0.52439.3100

Pass Summary	
1	100%
2	100%
3	100%
4	100%
5	100%
6	100%
7	100%
8	100%
9	100%
10	100%
11	100%
12	100%
13	100%
14	100%
15	100%
16	100%
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93	100%
94	100%
95	100%
96	100%
97	100%
98	100%
99	100%
100	100%

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Main[2]:Up	Up	69.59 ft	8075.06 ft	06-Oct-2015 9:07:23 AM	06-Oct-2015 11:23:37 AM	ON	6.21 ft	No

All depths are referenced to toolstring zero

Log

Company:Duncan Oil Inc

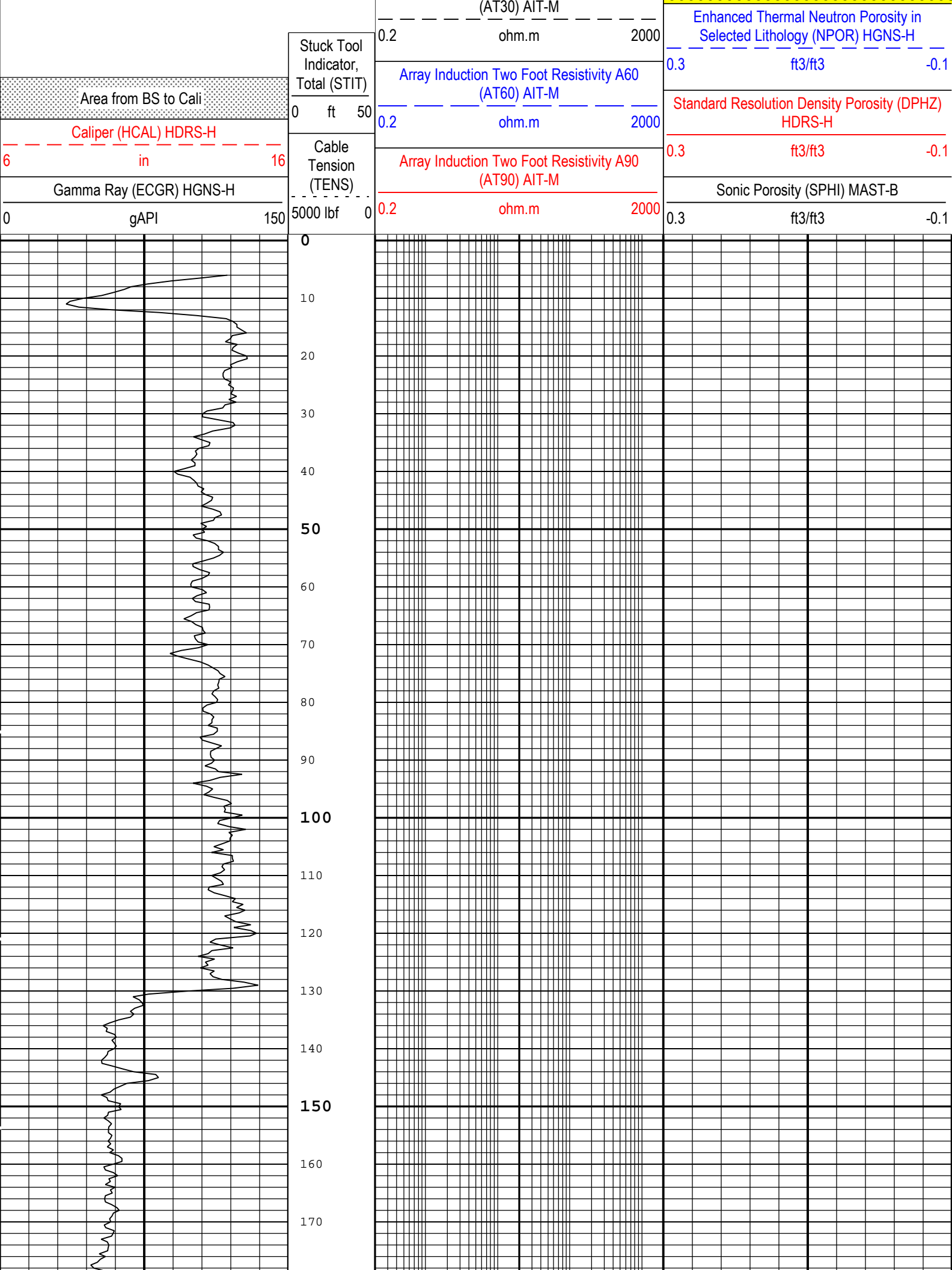
Well:BK 1

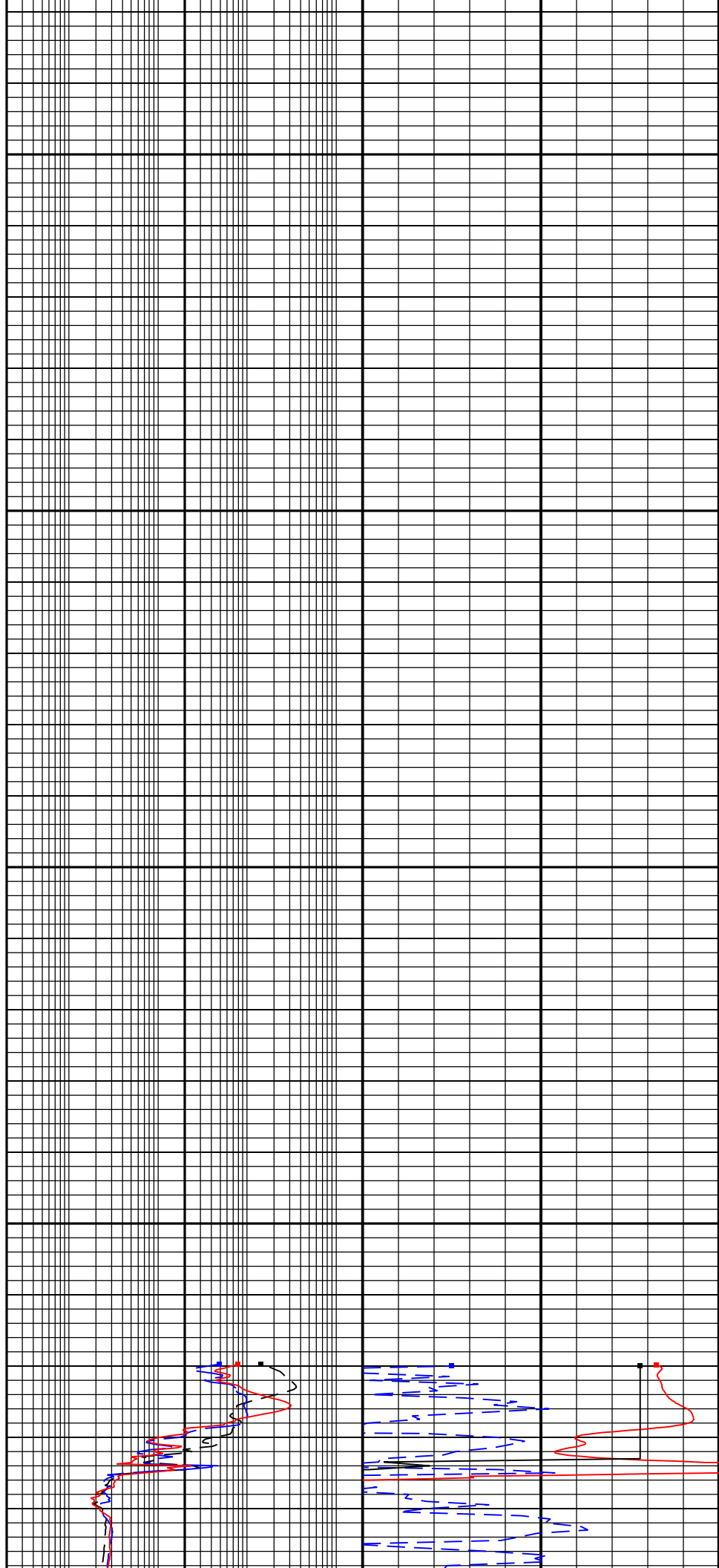
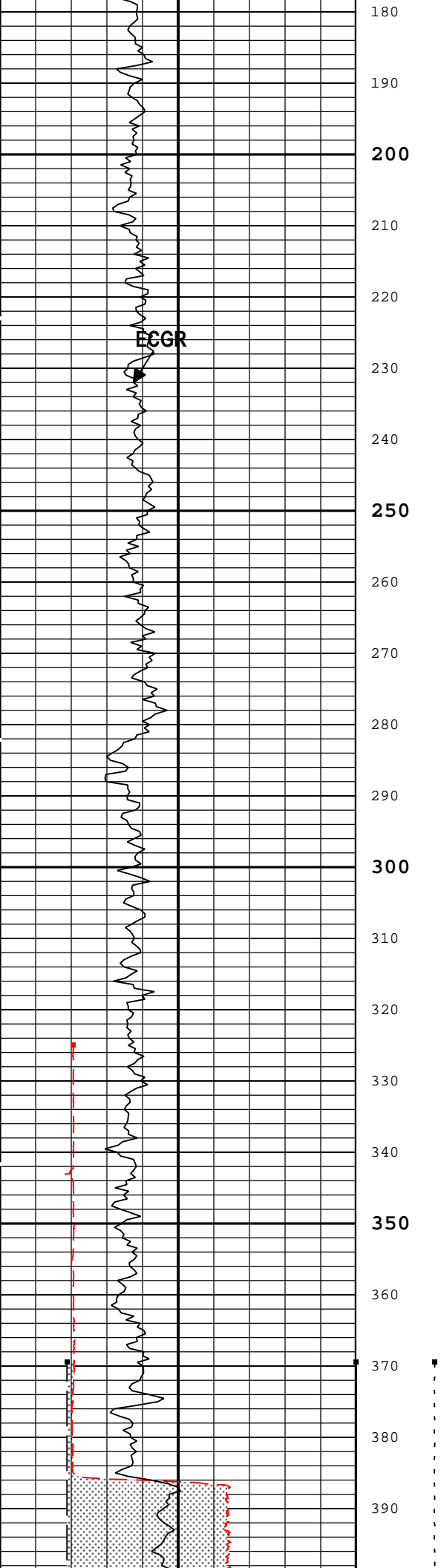
ONE: Main[2]:Up:S008

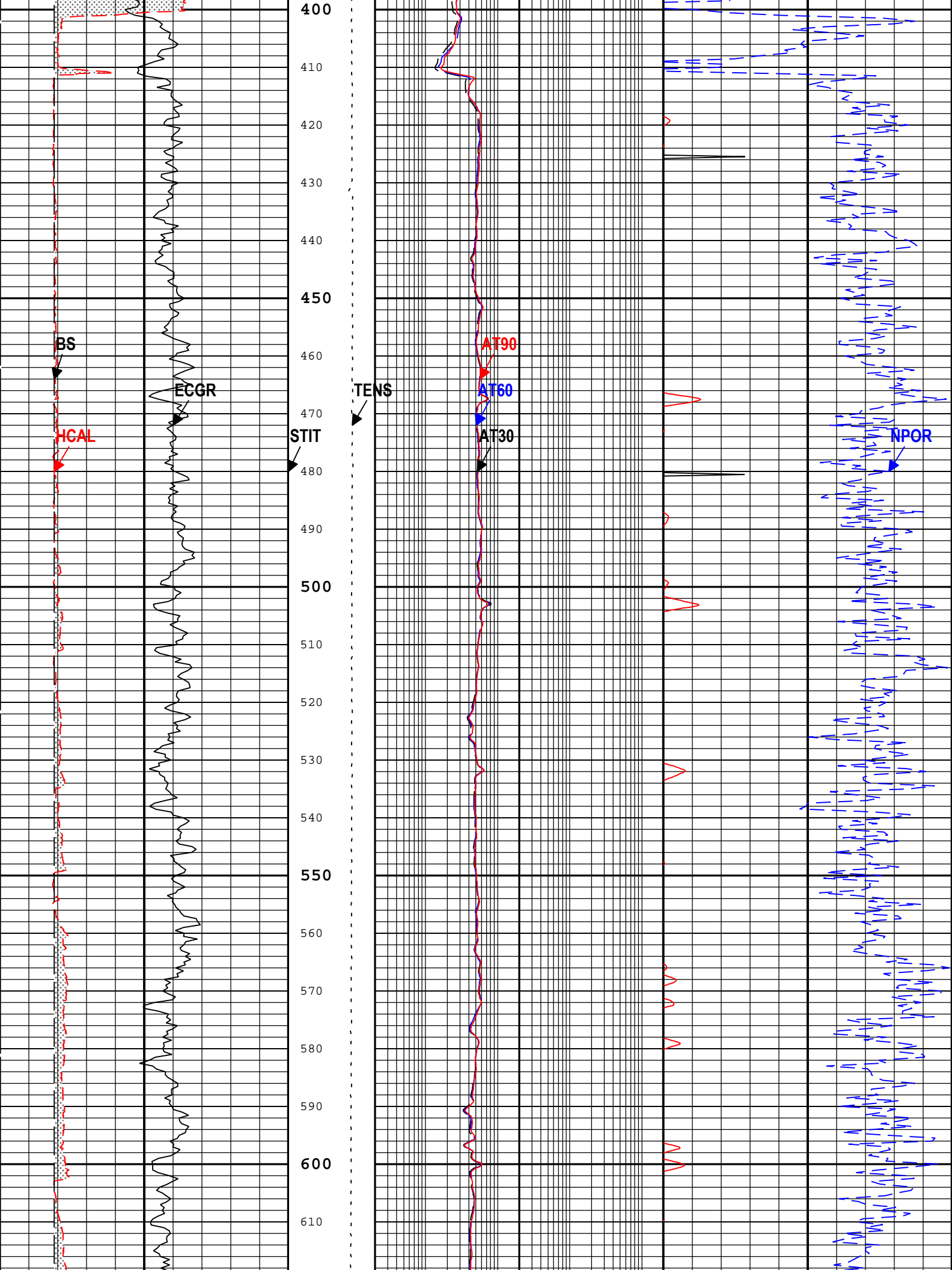
Description:	Format: Log (Combo_Fax)	Index Scale: 5 in per 100 ft	Index Unit: ft	Index Type: Measured Depth	Creation Date: 06-Oct-2015 12:50:05
Channel	Source	Sampling			
AT30	AIT-M:AMIS:AMIS	3in			
AT60	AIT-M:AMIS:AMIS	3in			
AT90	AIT-M:AMIS:AMIS	3in			
BS	Borehole	6in			
CALI	HDRS-H:HRCC-H:HRCC-H	1in			
DPHZ	HDRS-H:HRMS-H:HRGD-H	2in			
GR	HGNS-H:HGNS-H:HGNS-H	6in			
NPOR	HGNS-H:HGNS-H:HGNS-H	6in			
SPHI	MAST-B:MAMS-B:MAMS-BA	6in			
STIT	DepthCorrection	6in			
TENS	WLWorkflow	6in			
TIME_1900	WLWorkflow	0.1in			

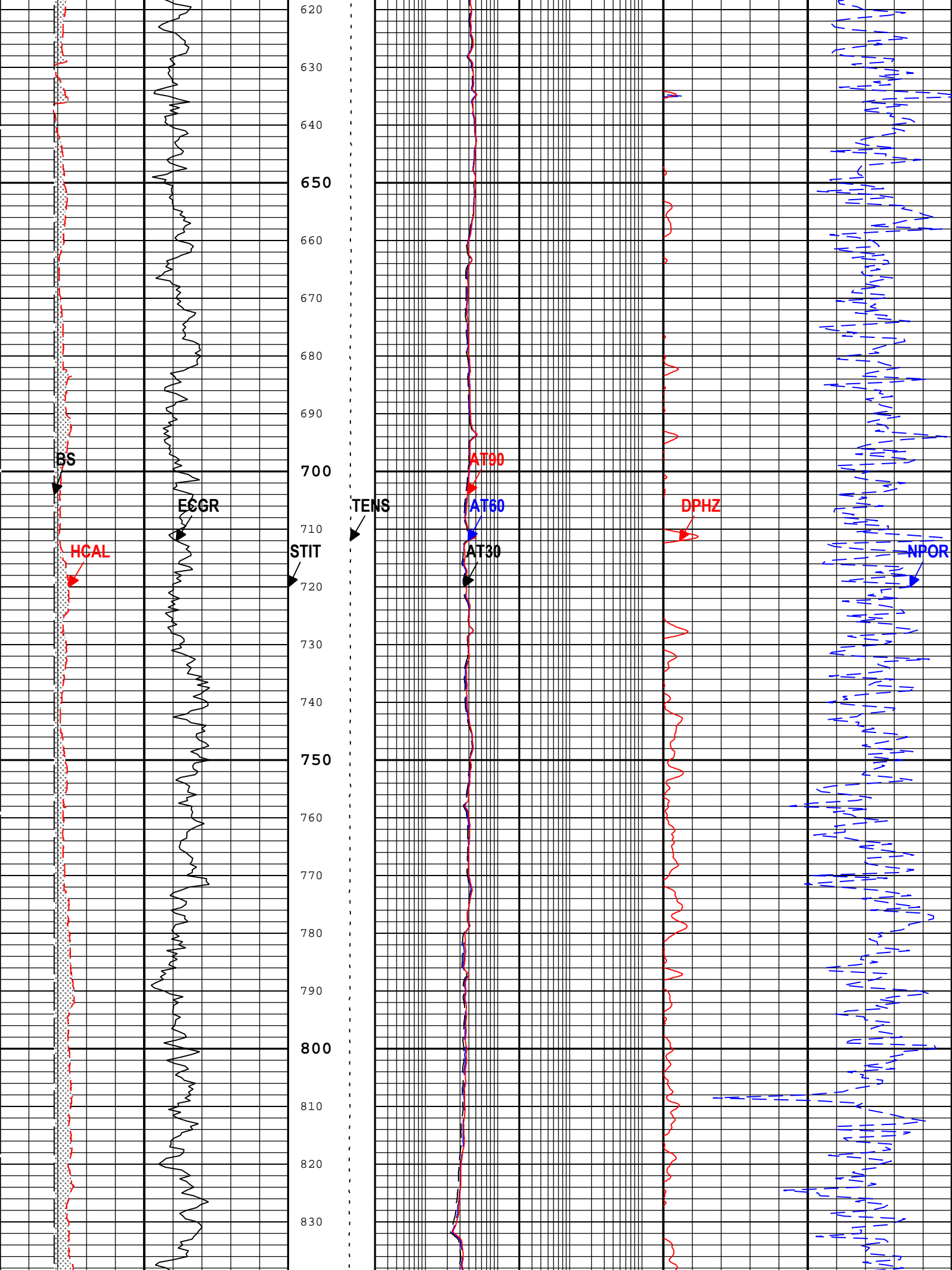
TIME_1900 - Time Marked every 60.00 (s)

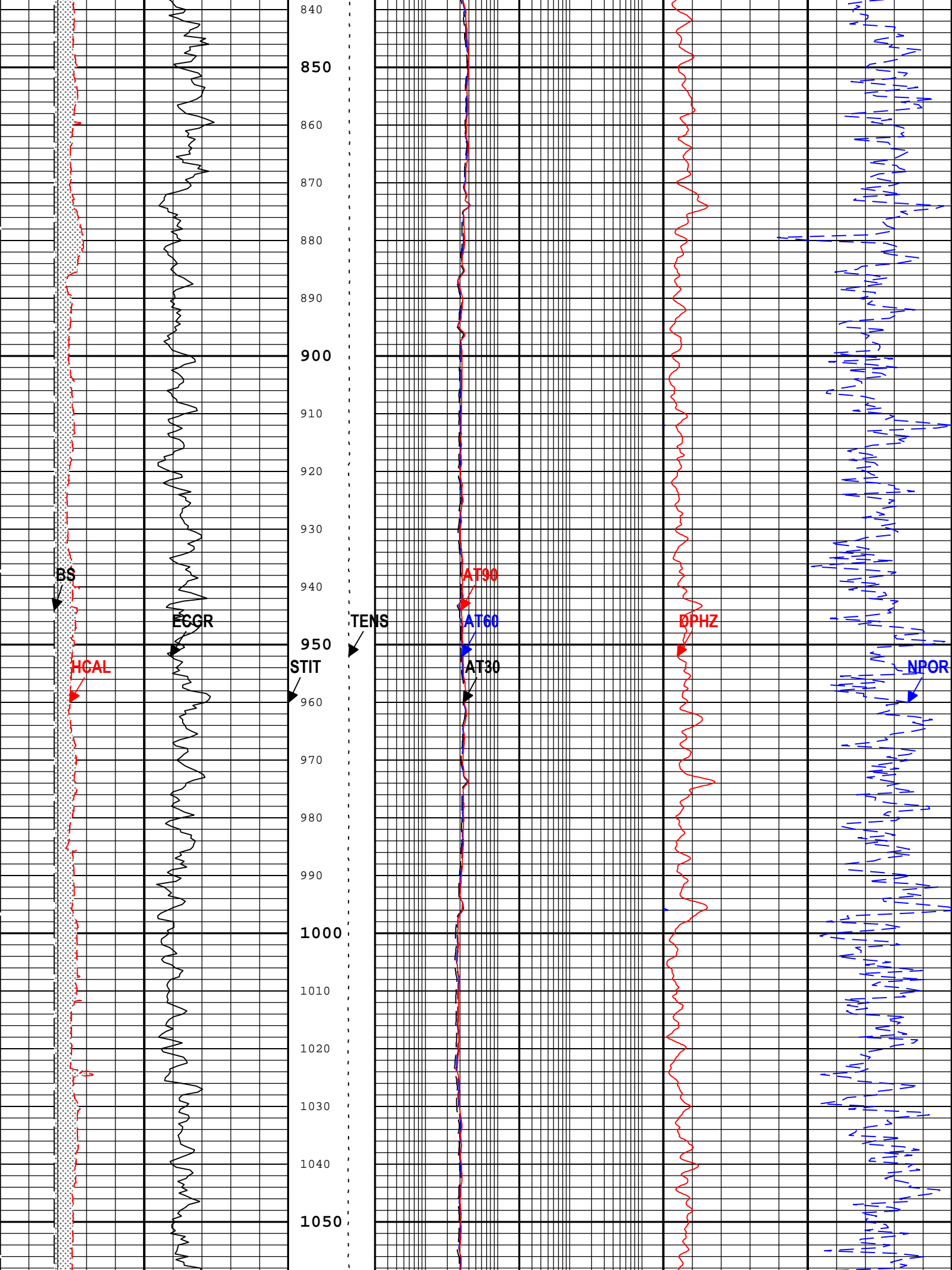
Array Induction Two Foot Resistivity A30	Crossover
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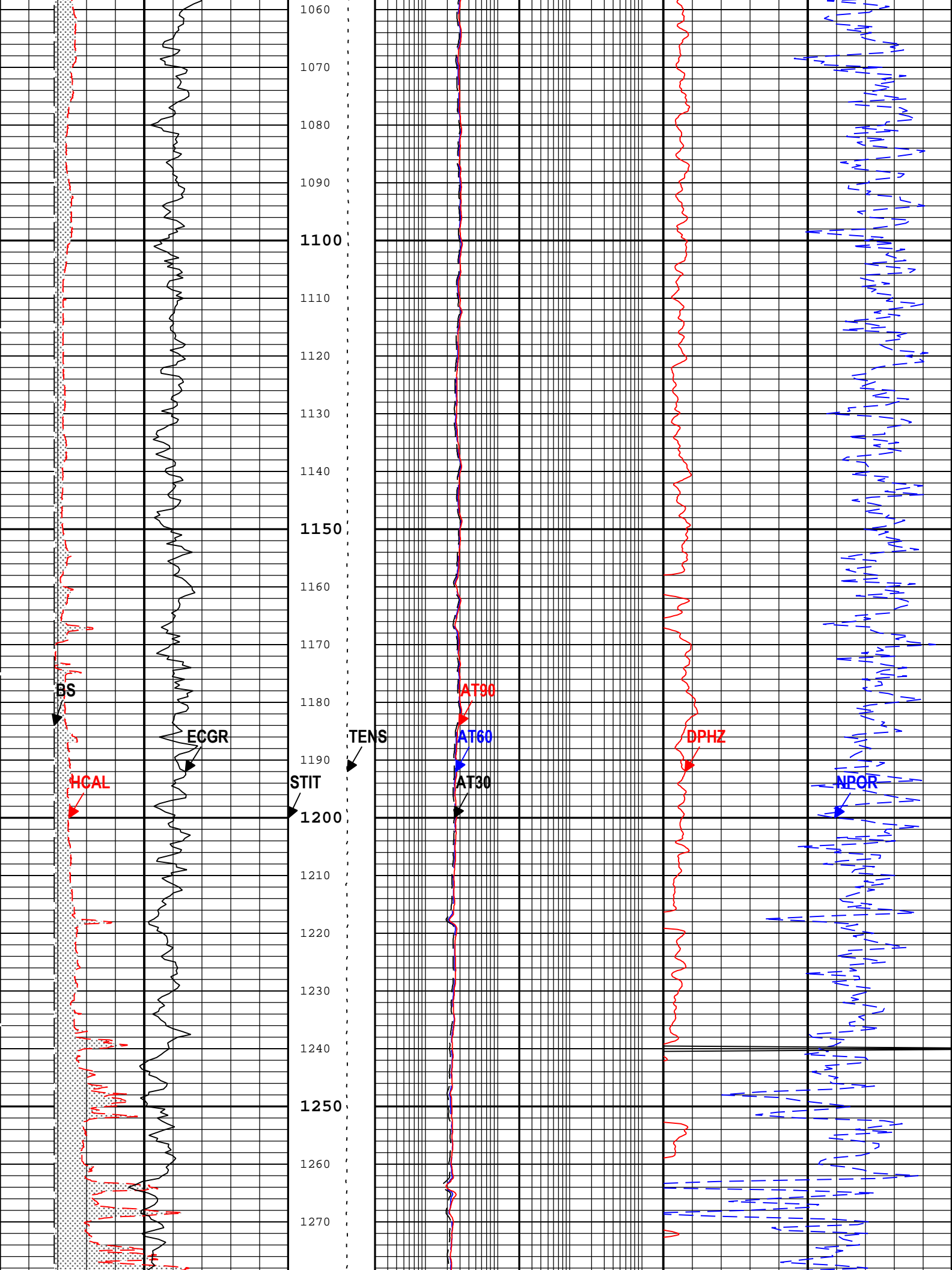


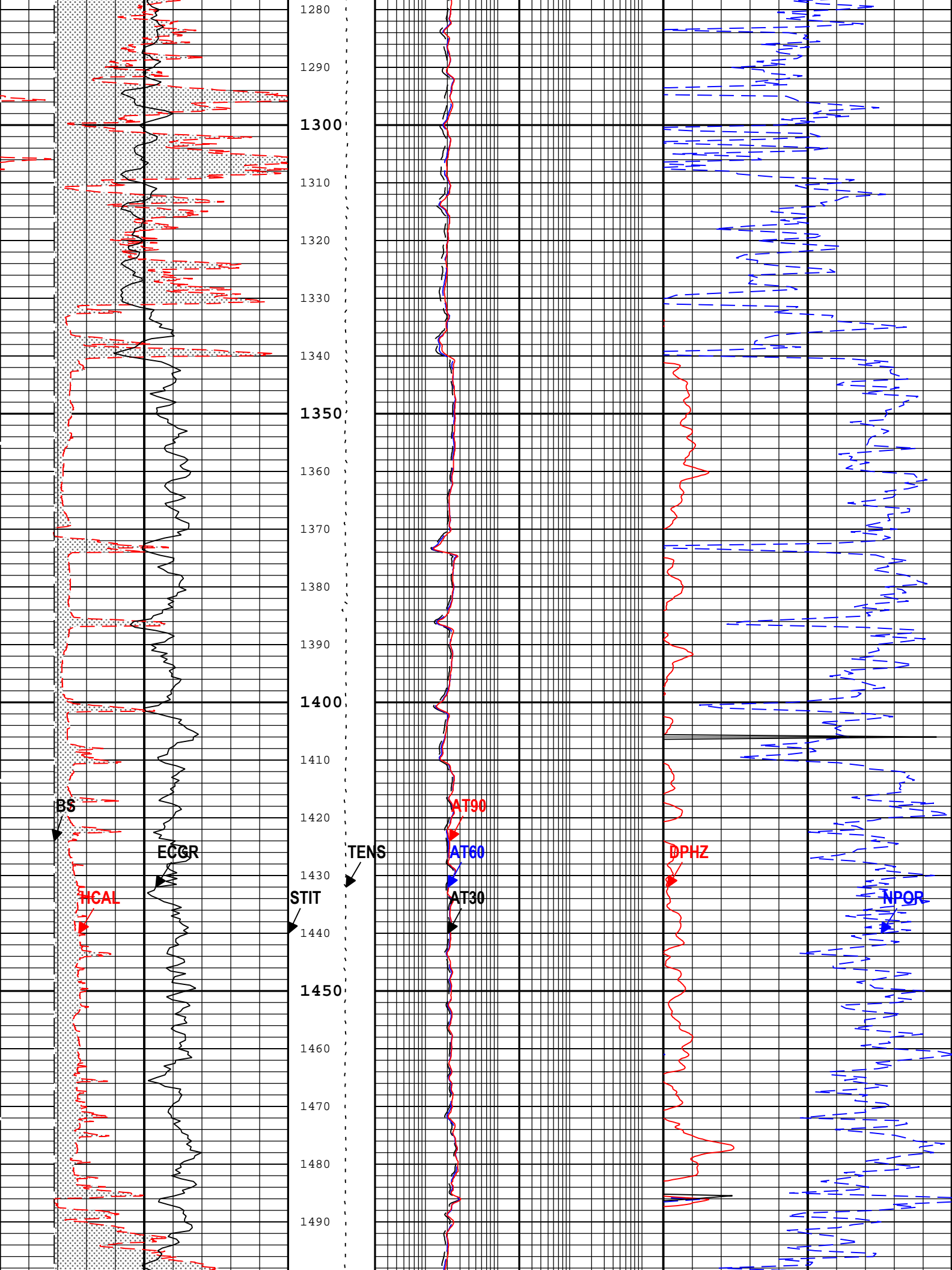


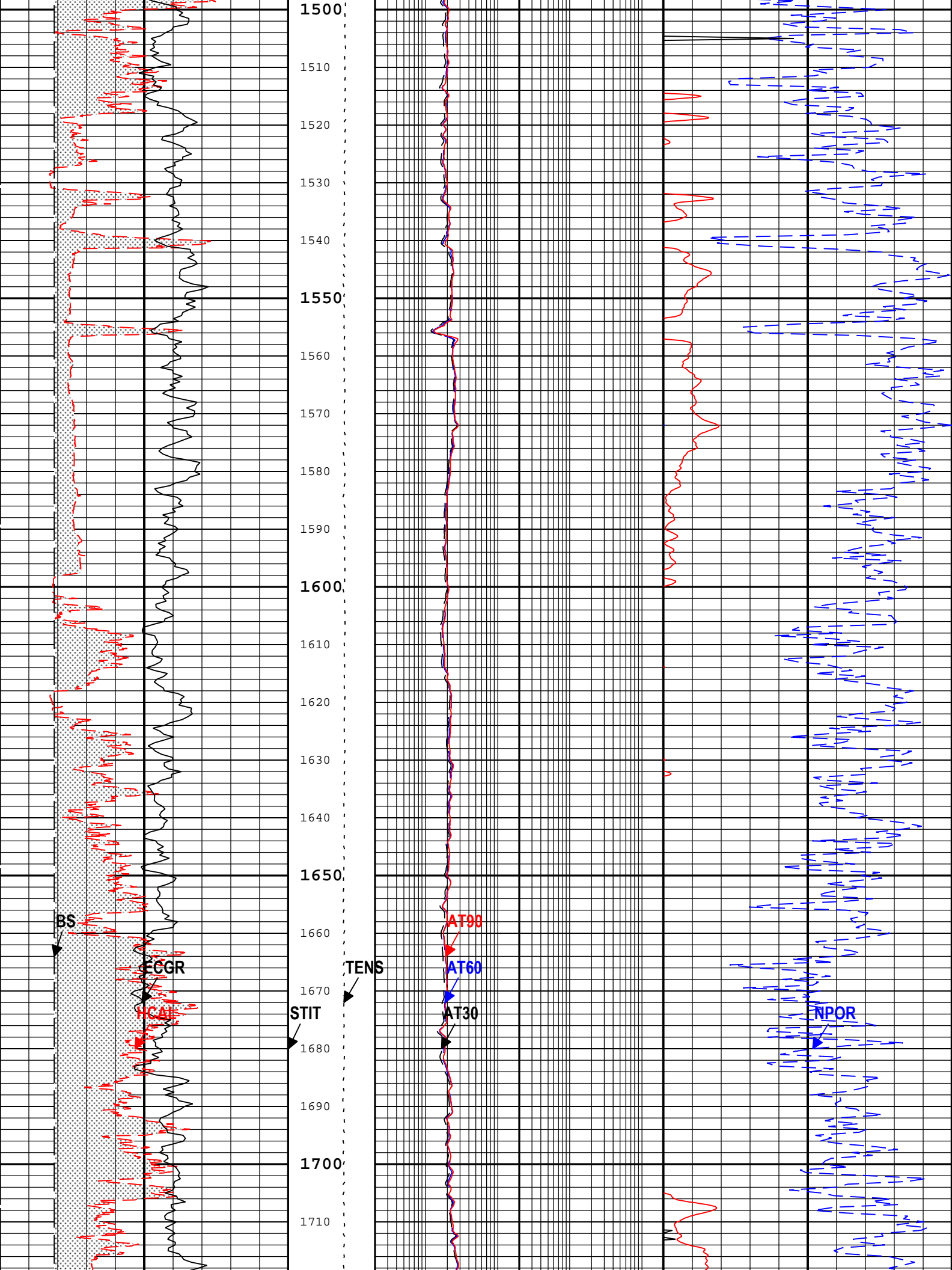


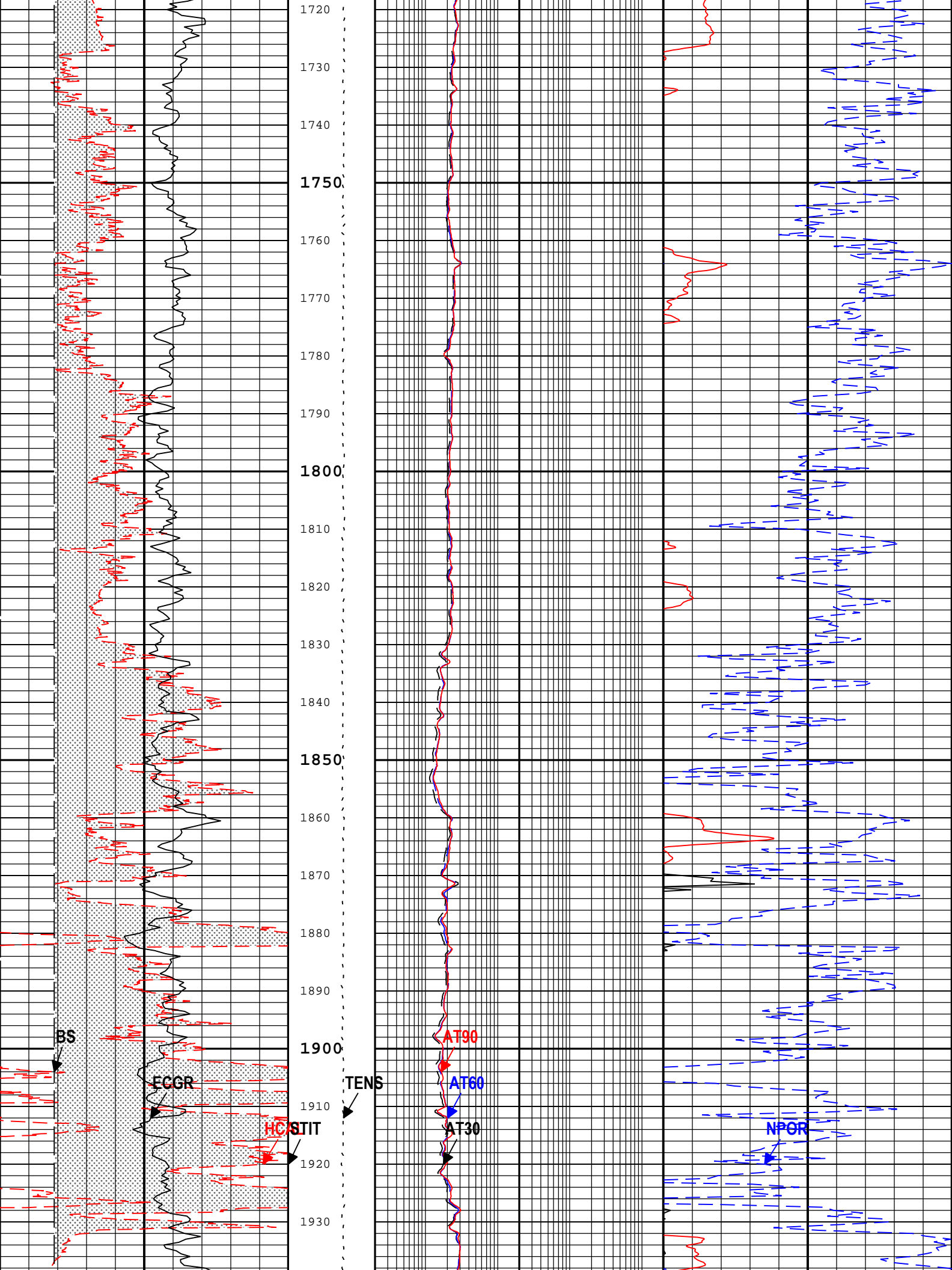


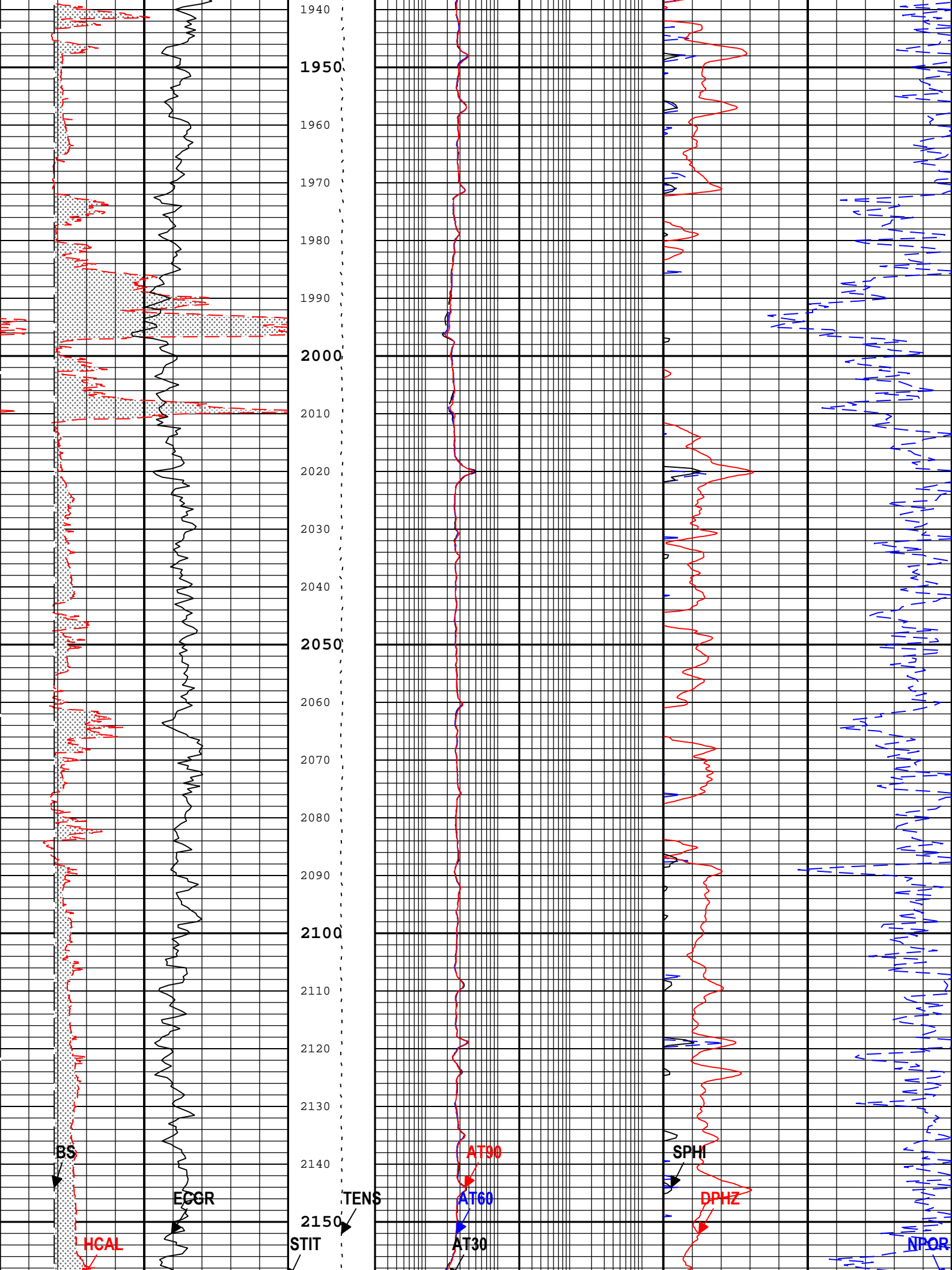


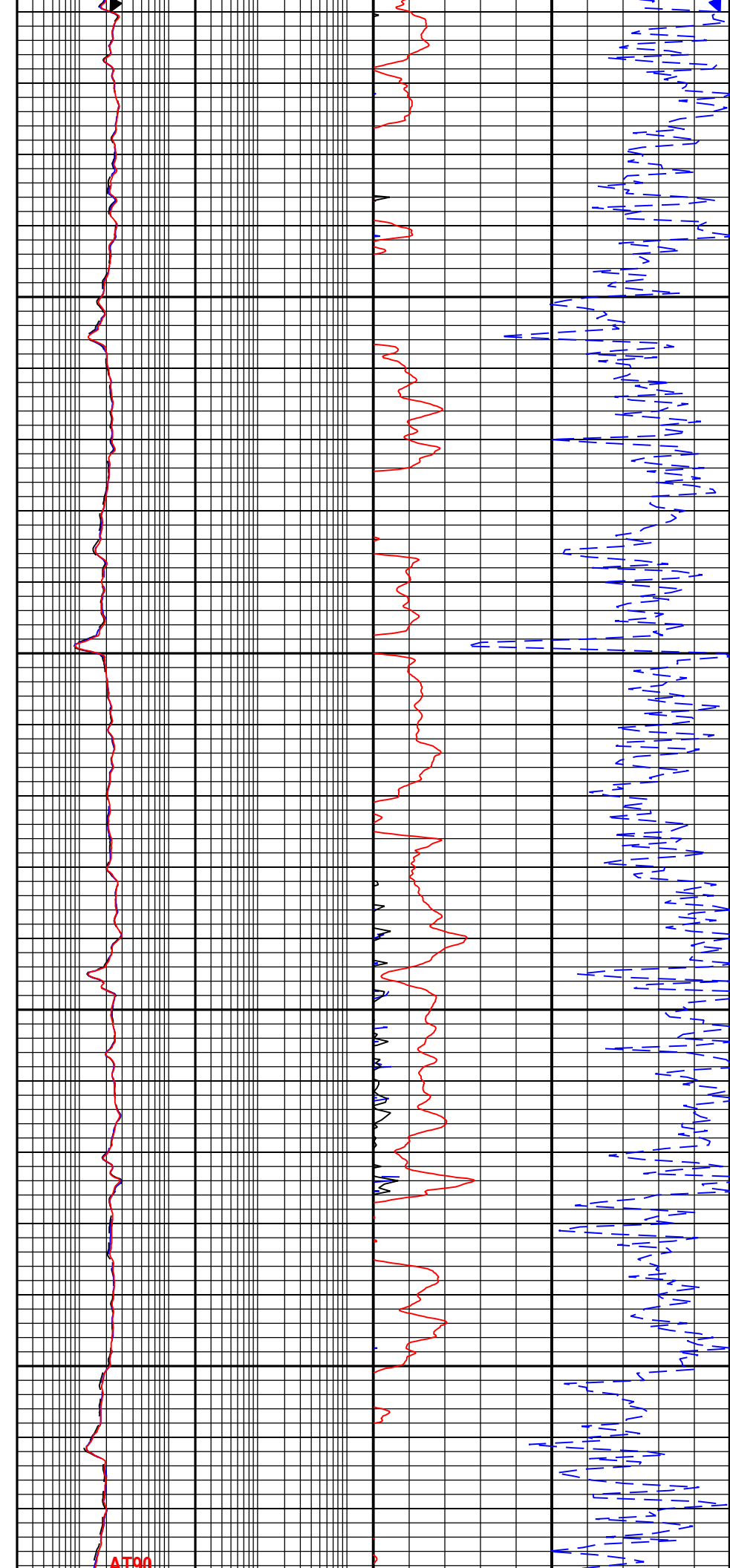
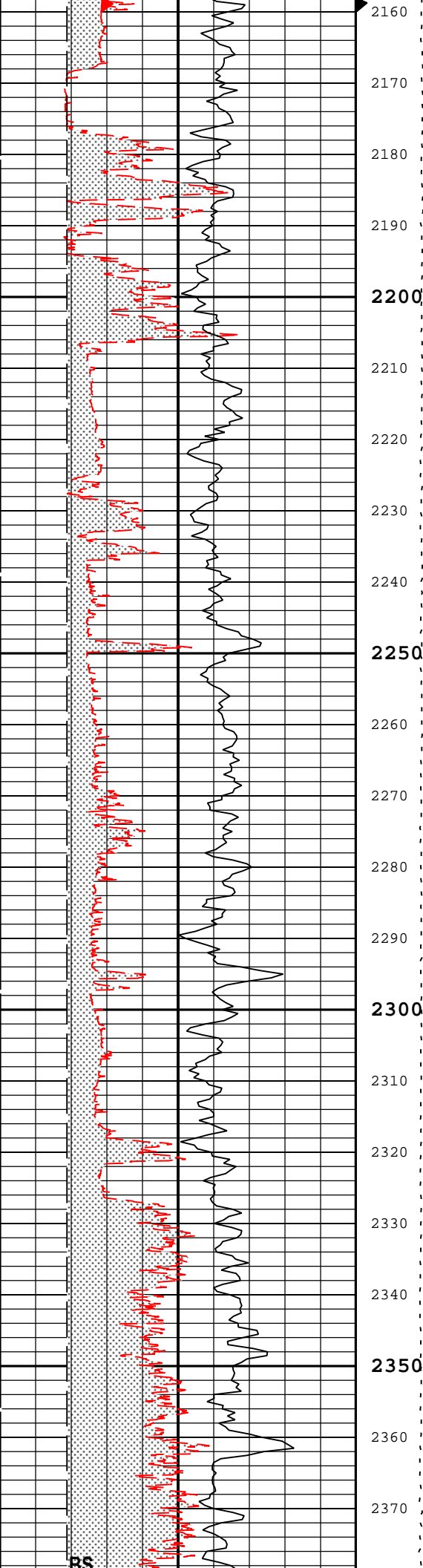


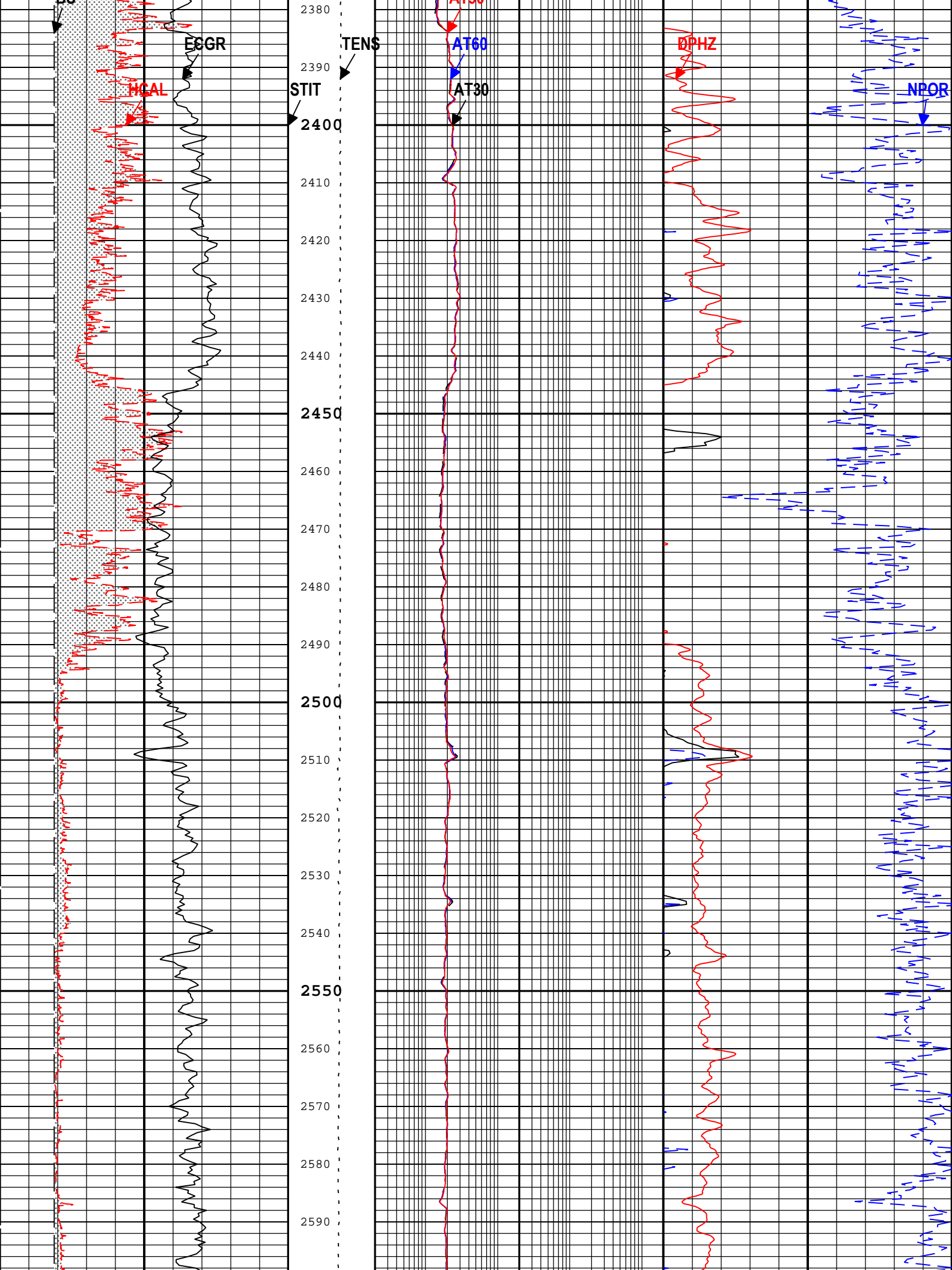


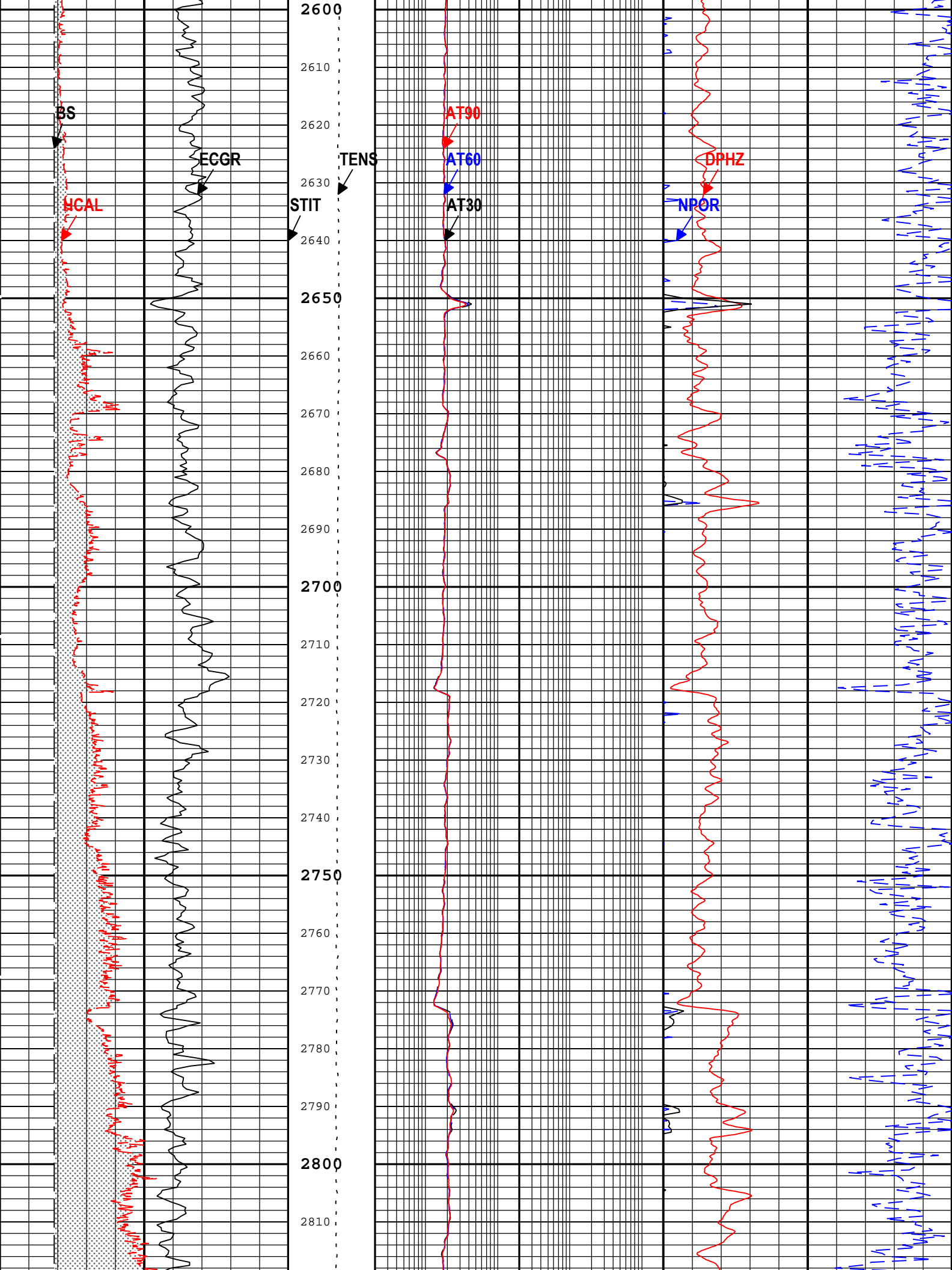


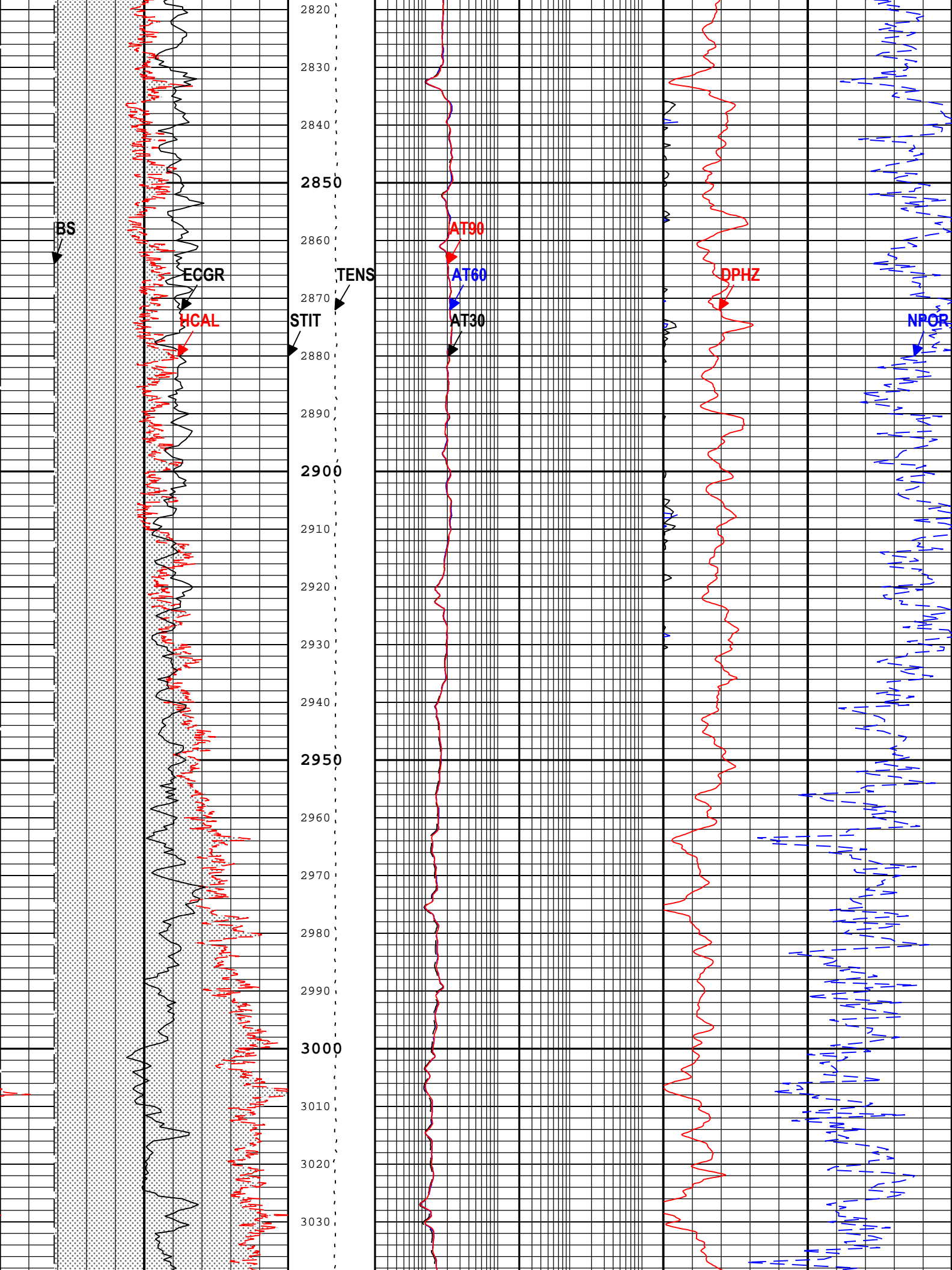


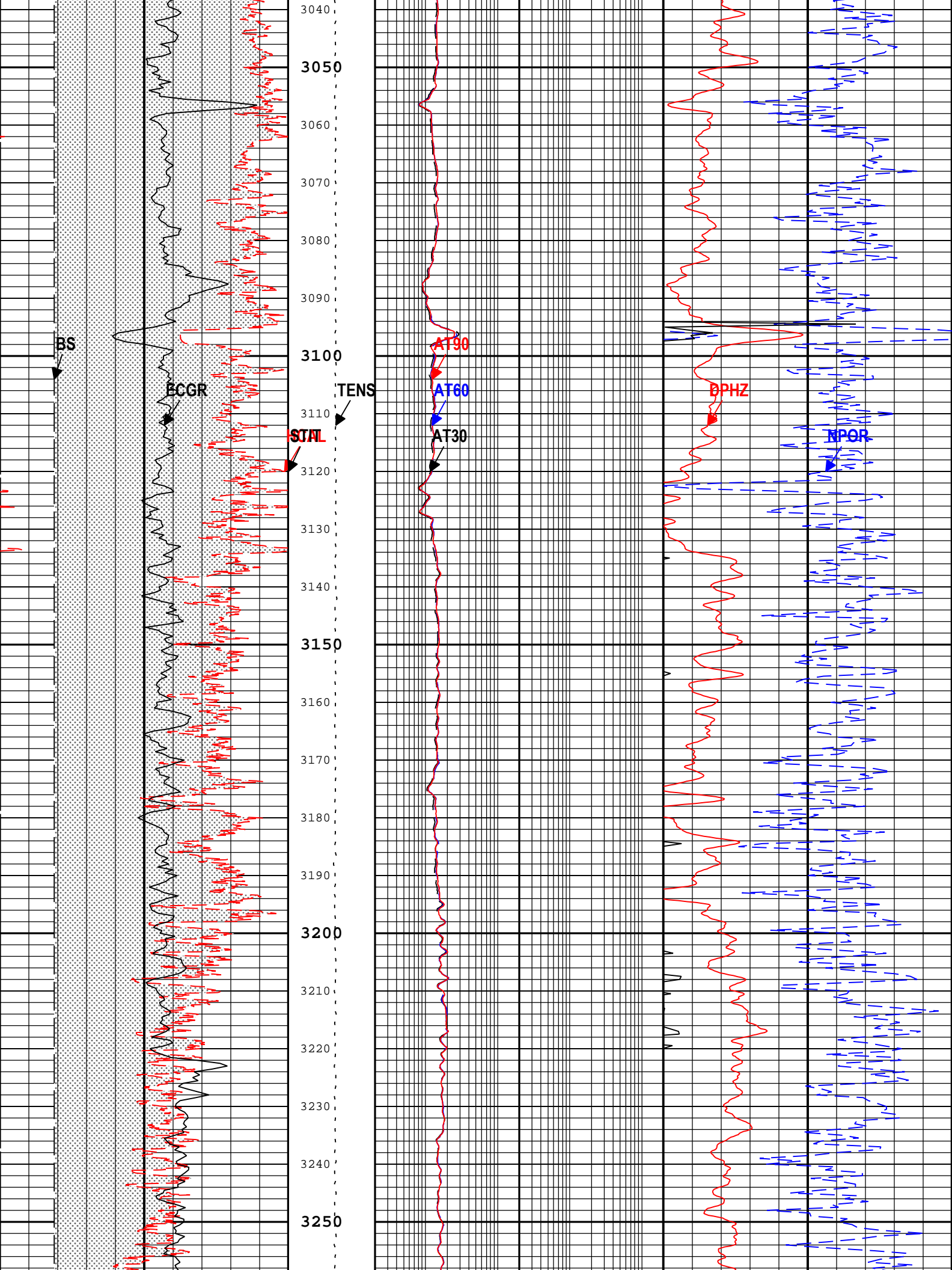


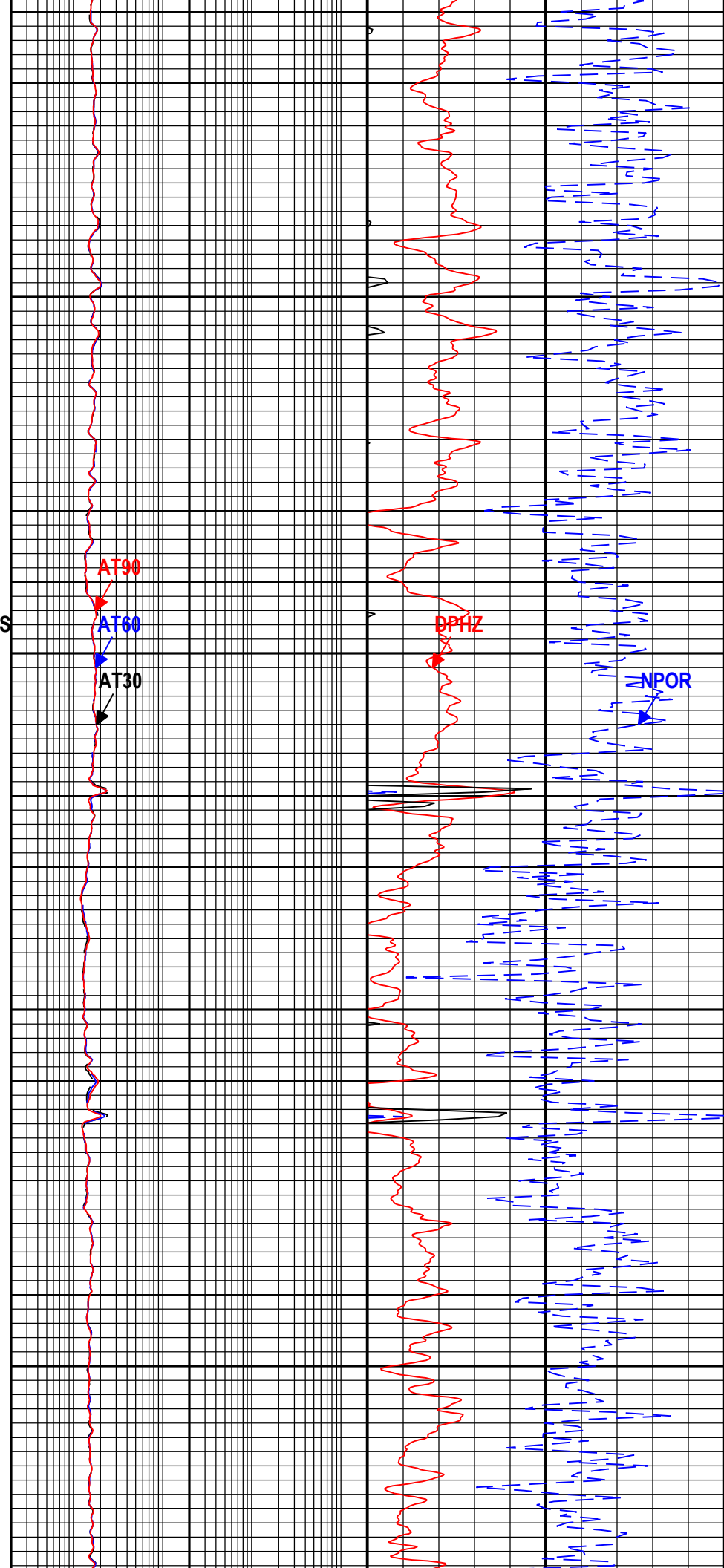
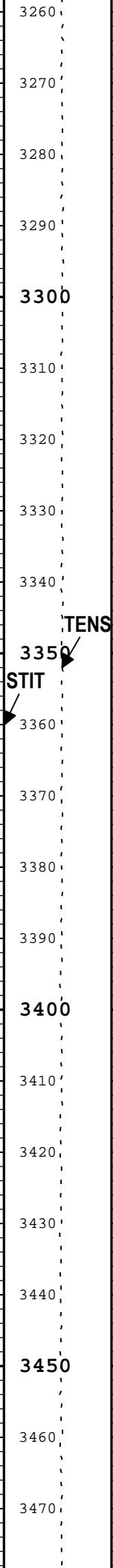
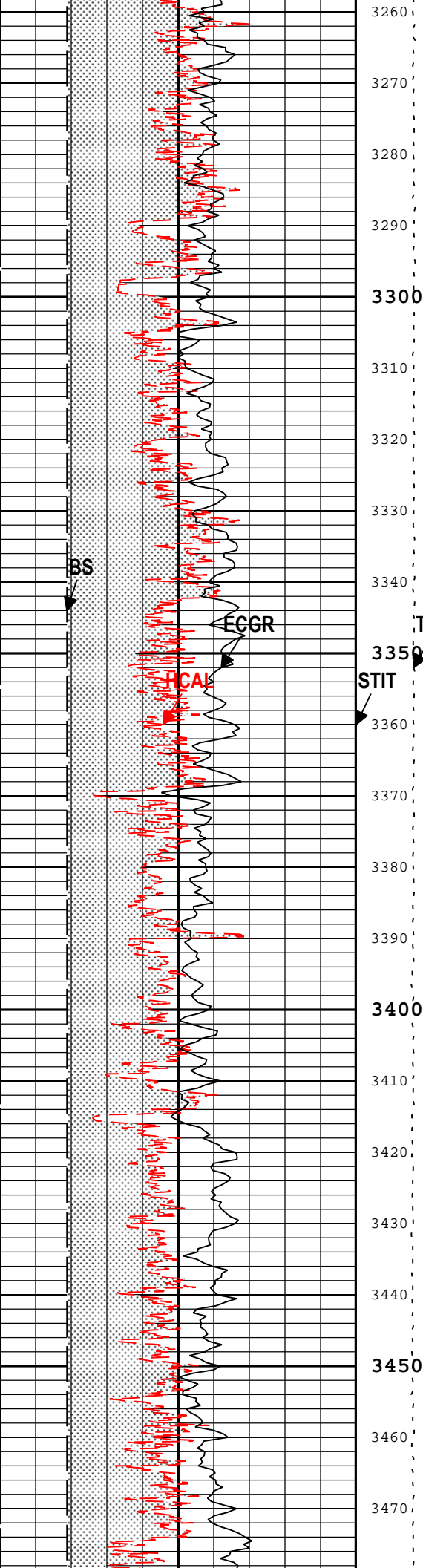


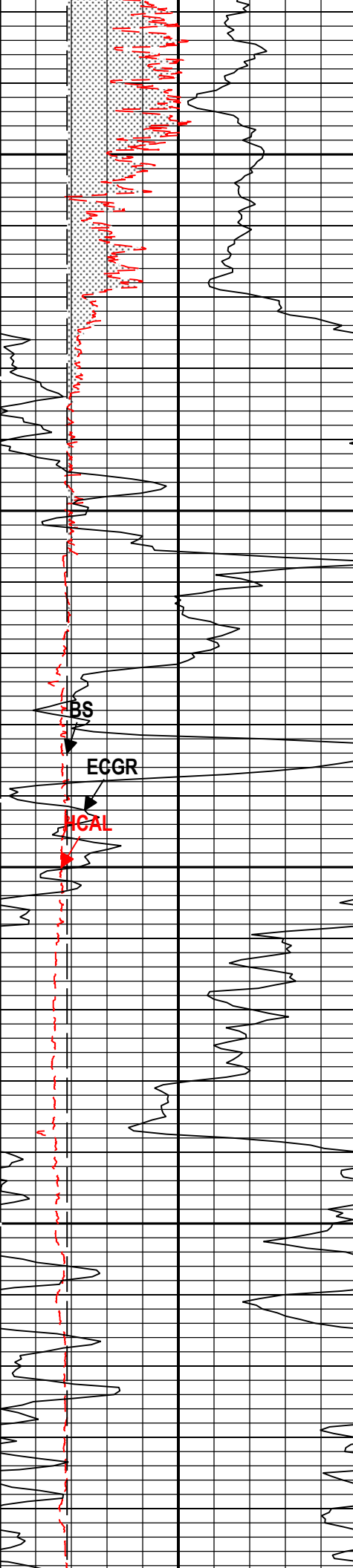




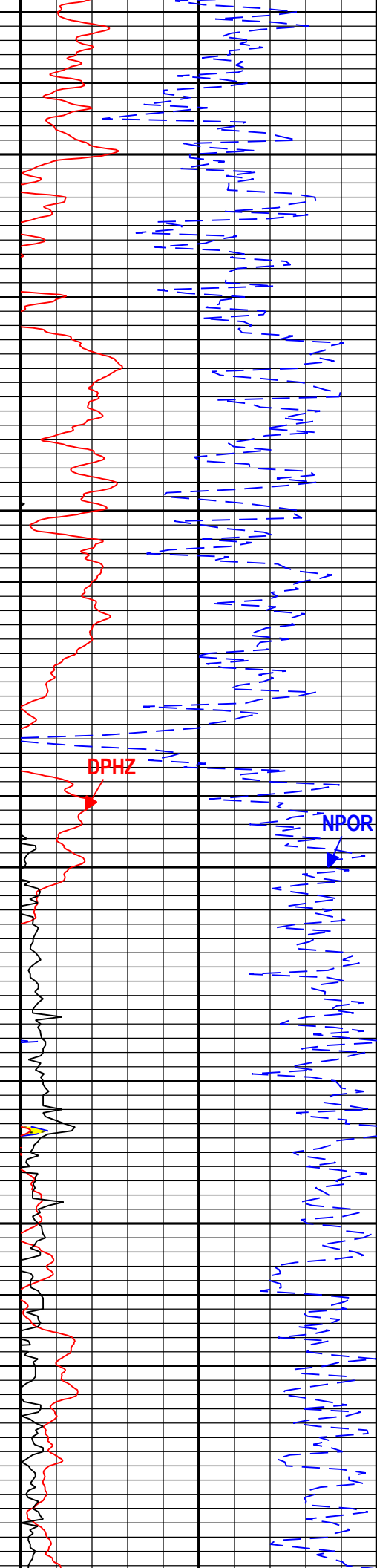
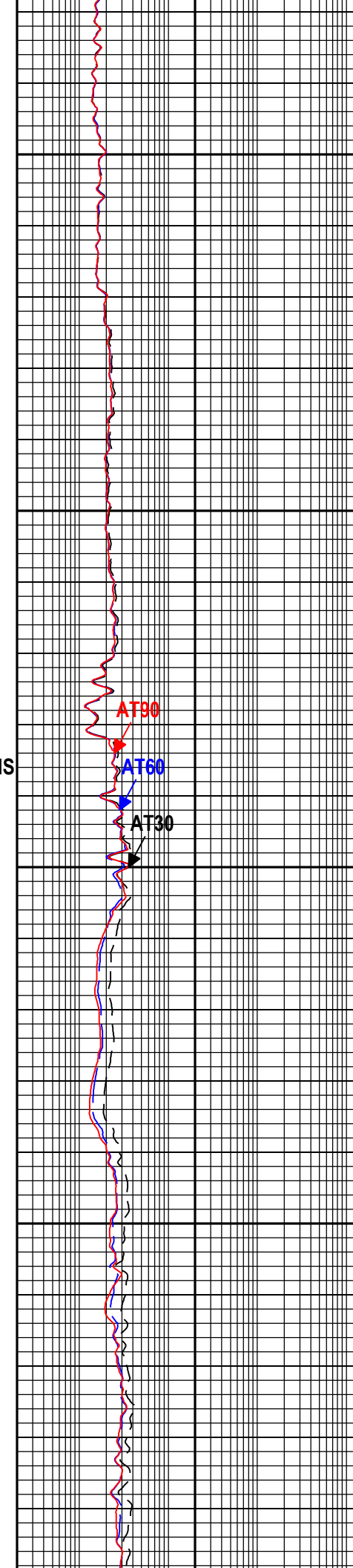


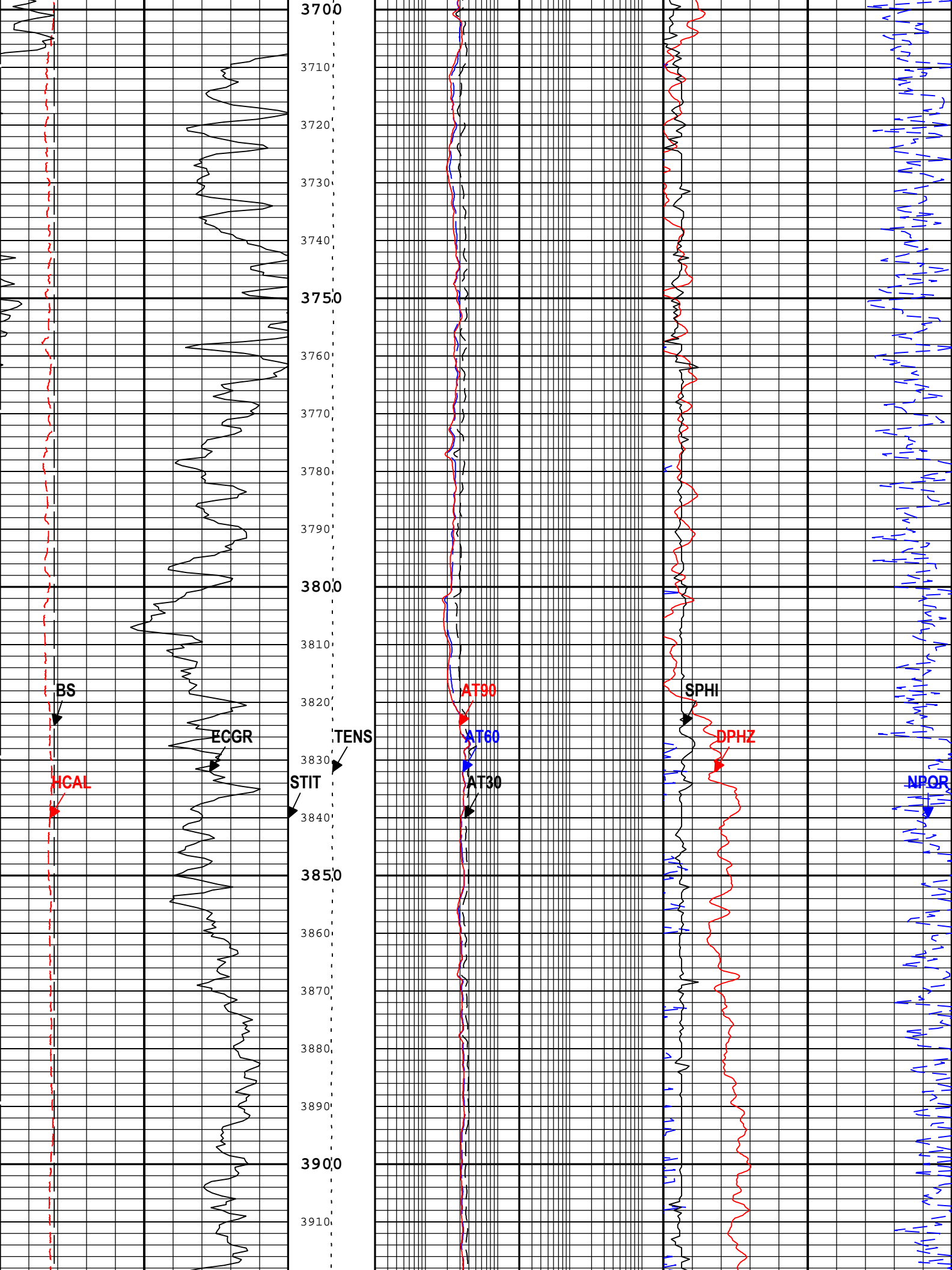


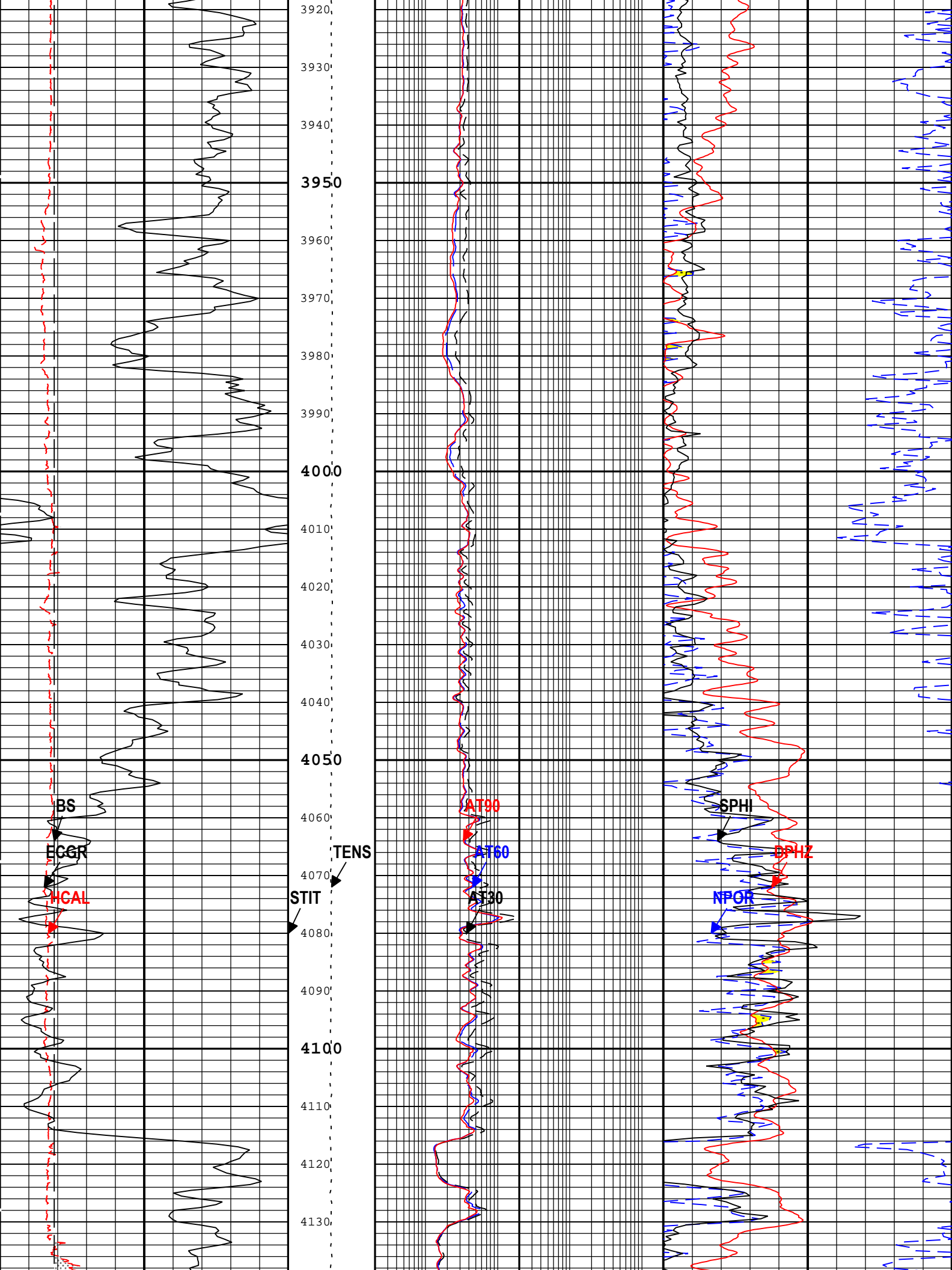


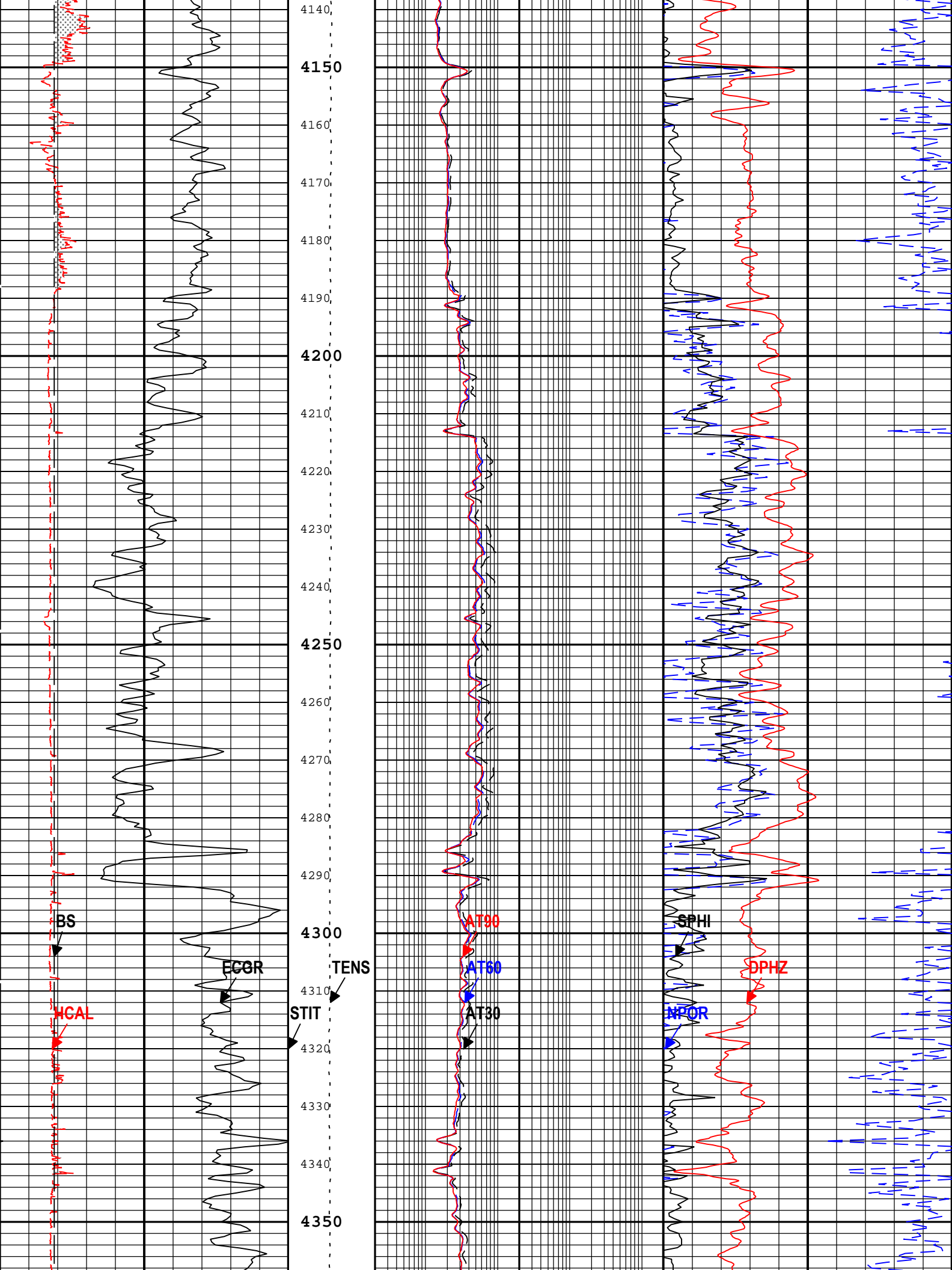


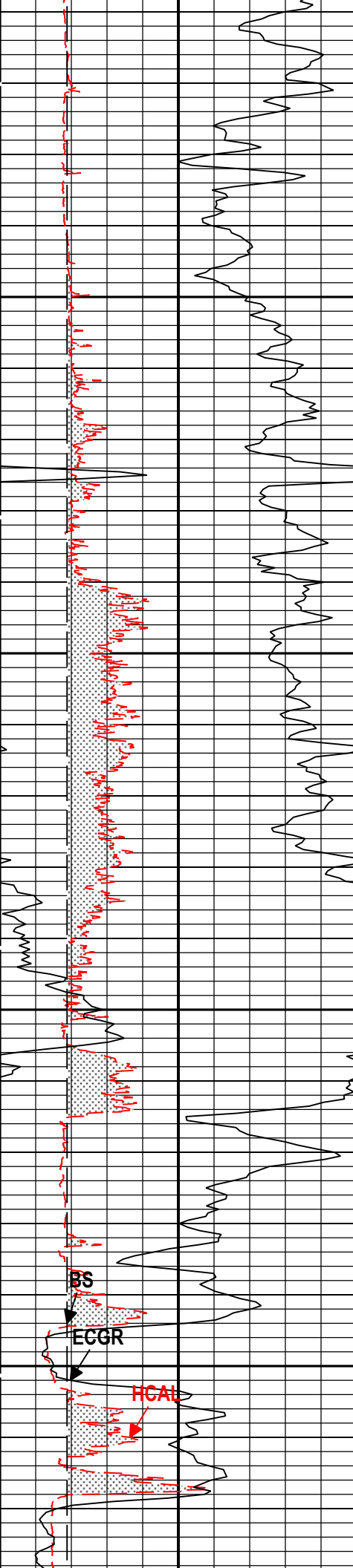
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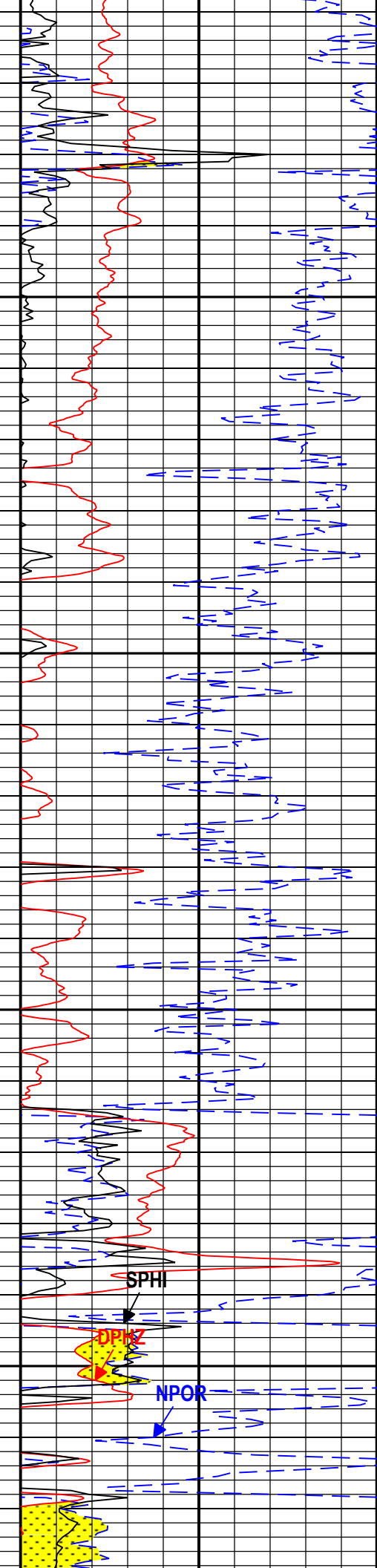
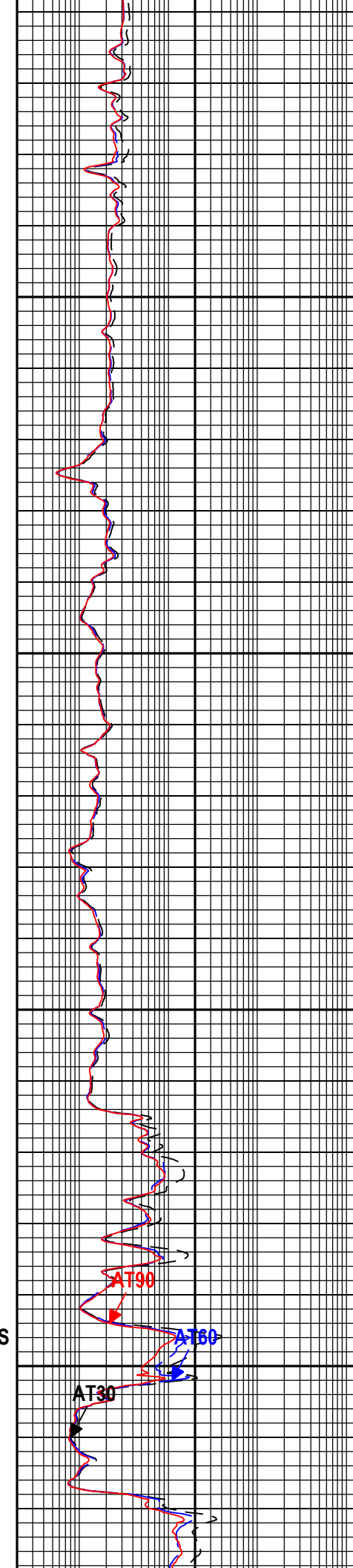


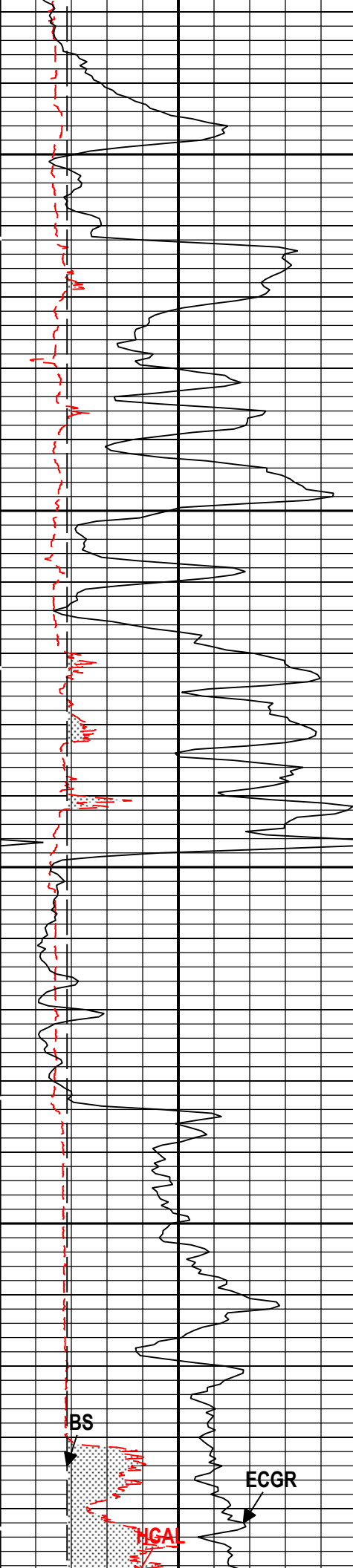




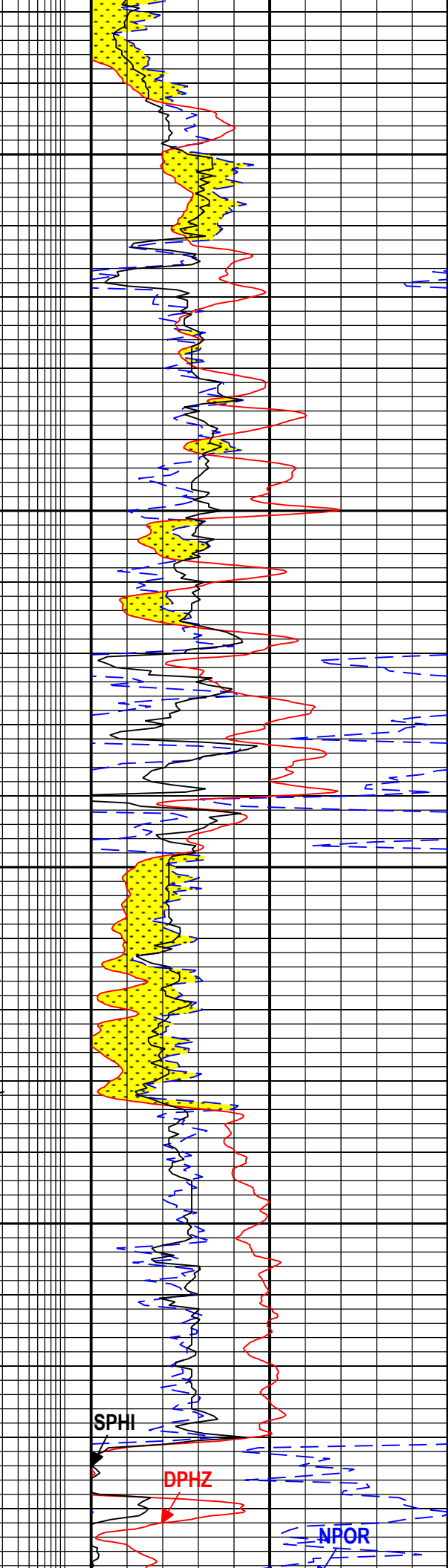
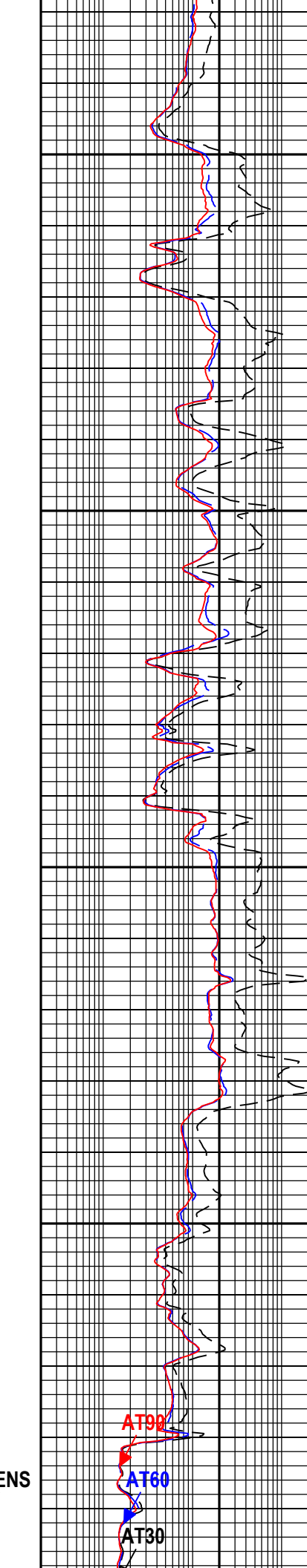


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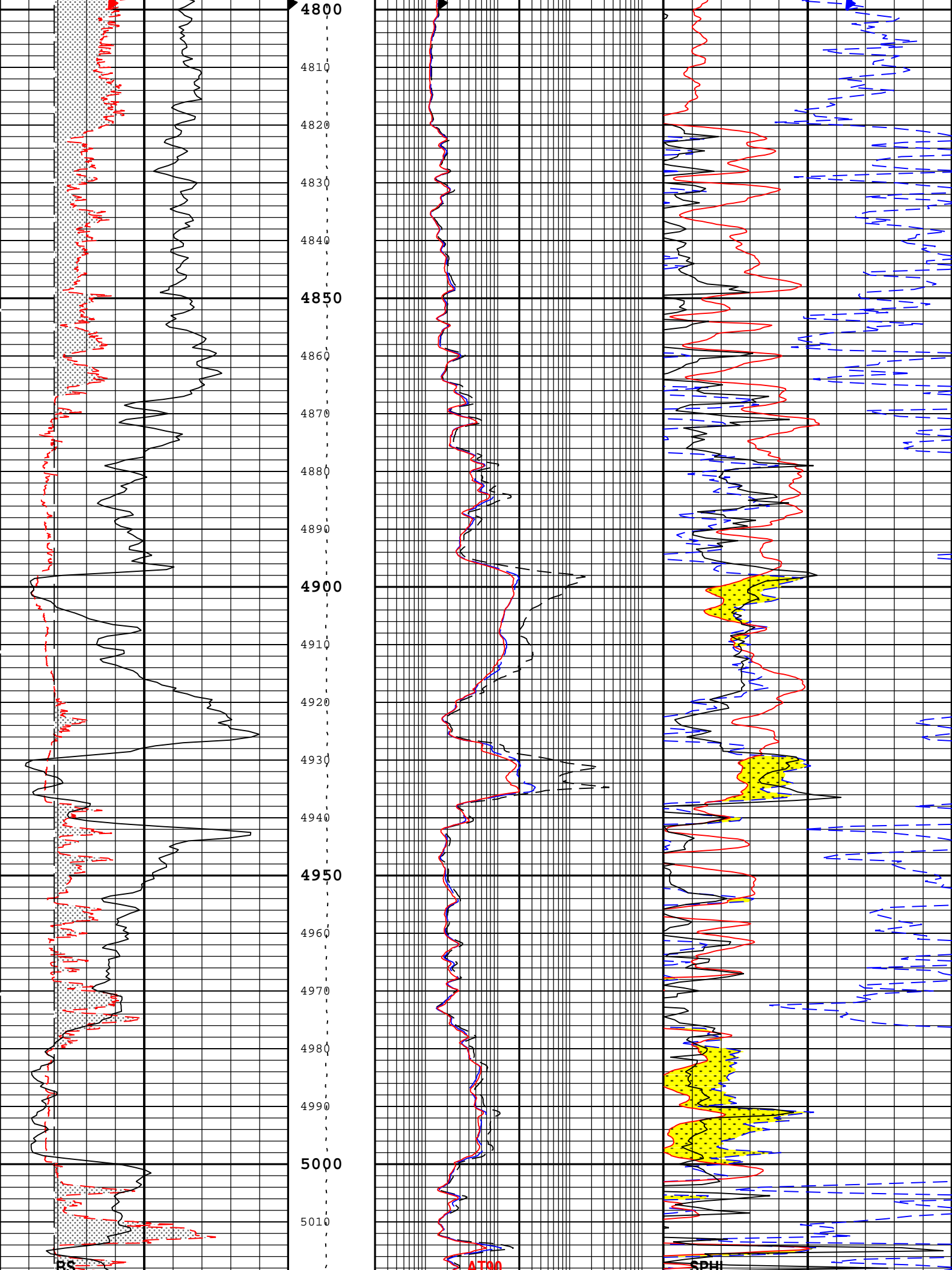


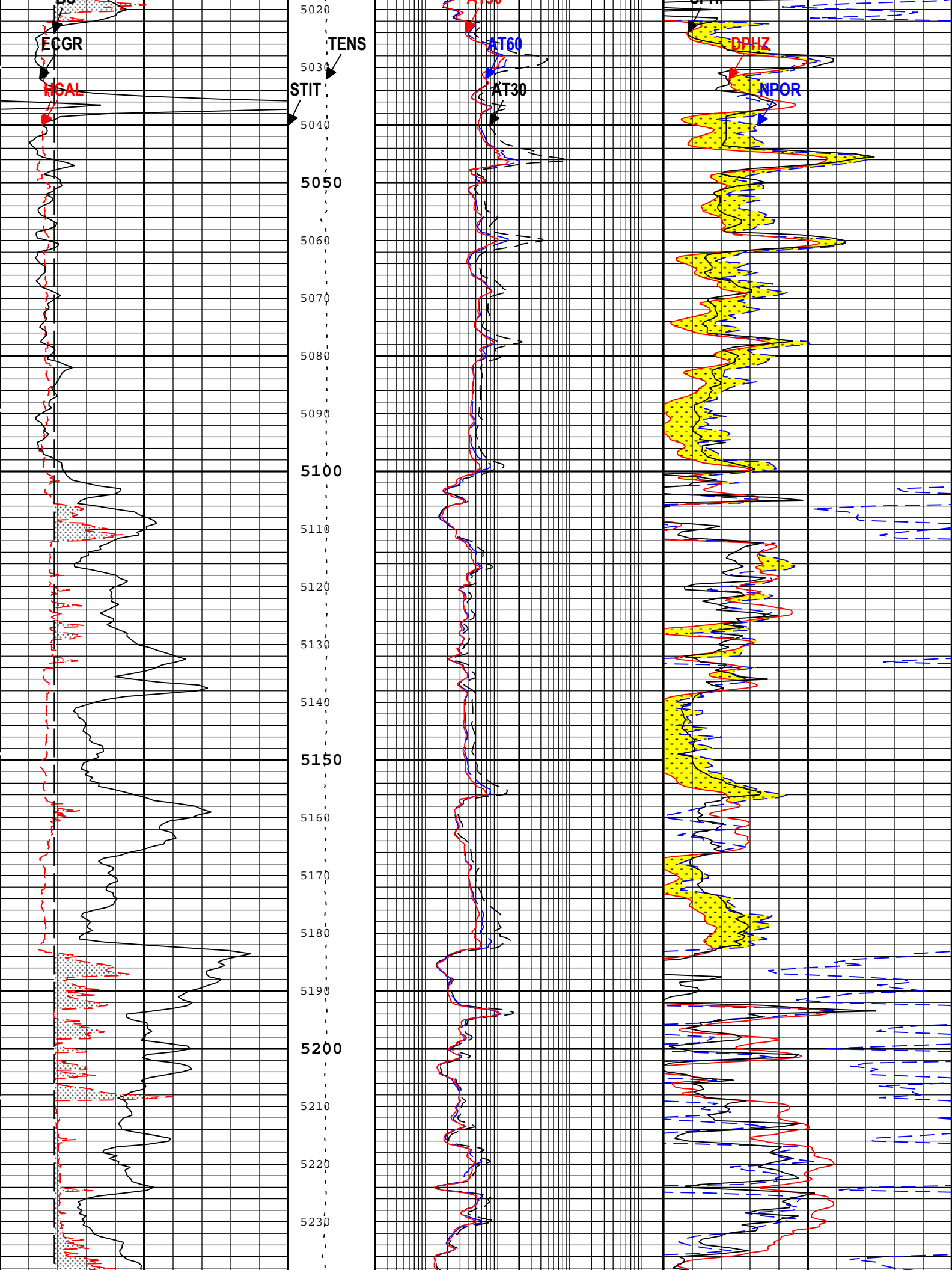


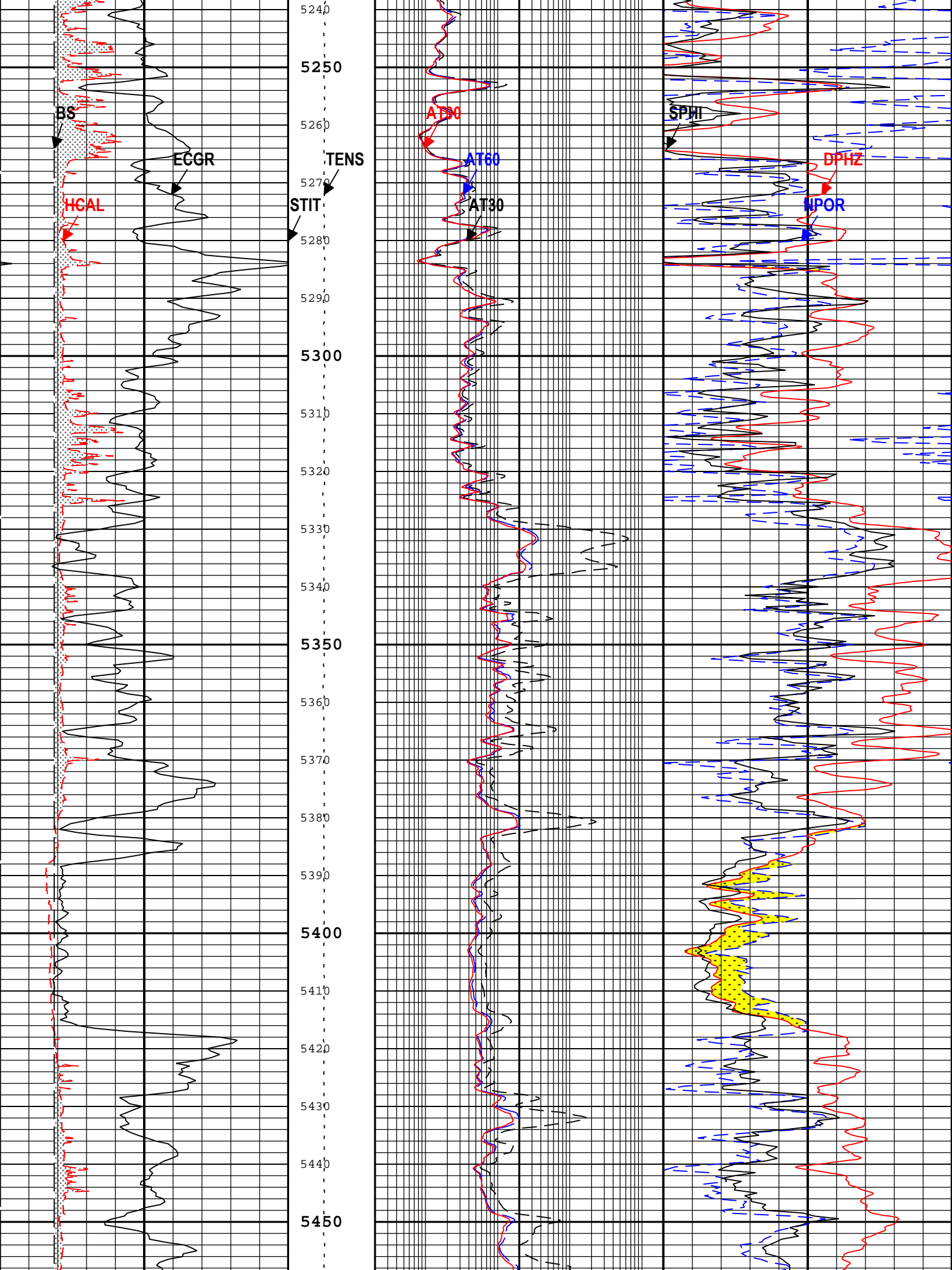
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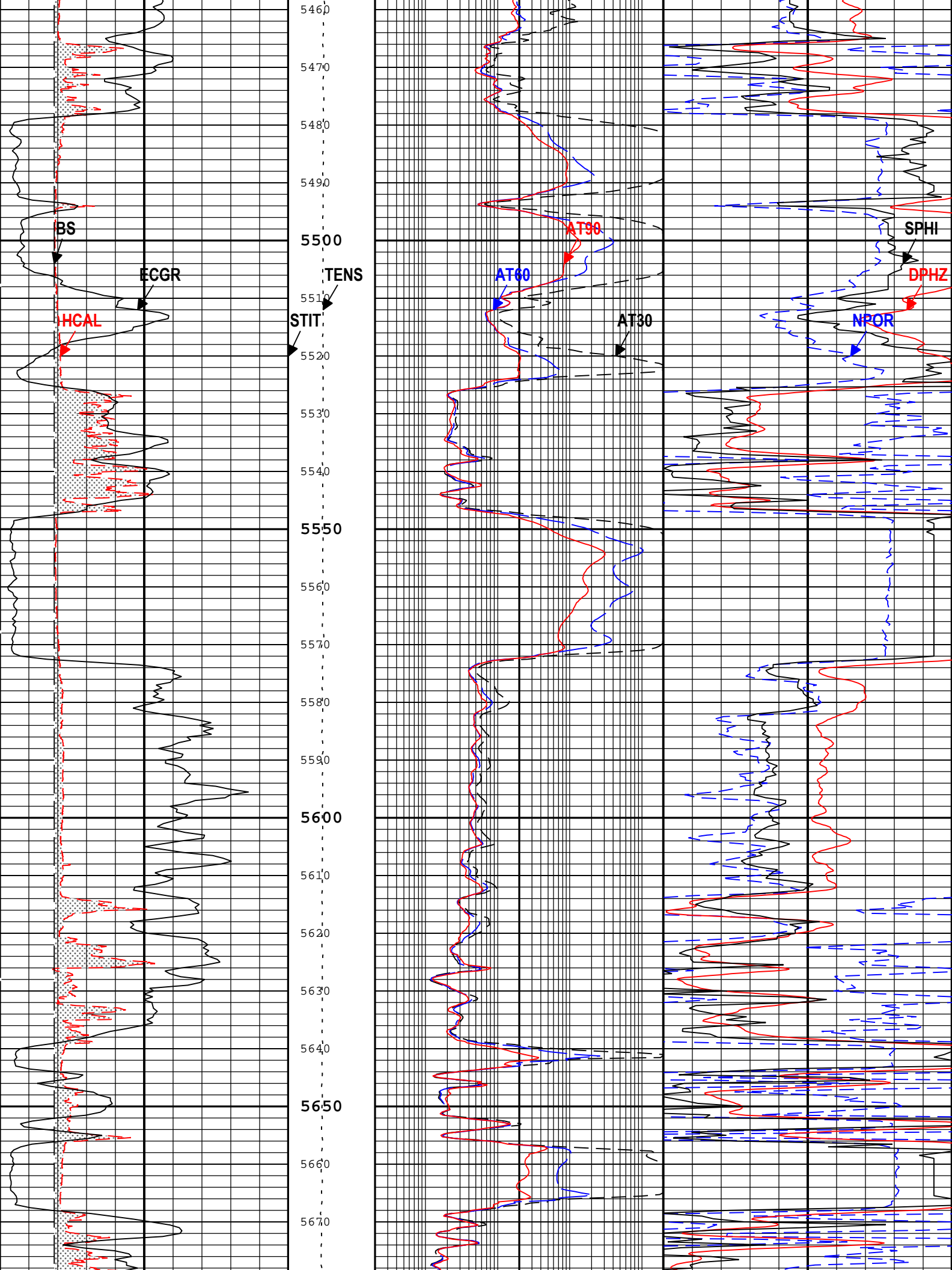


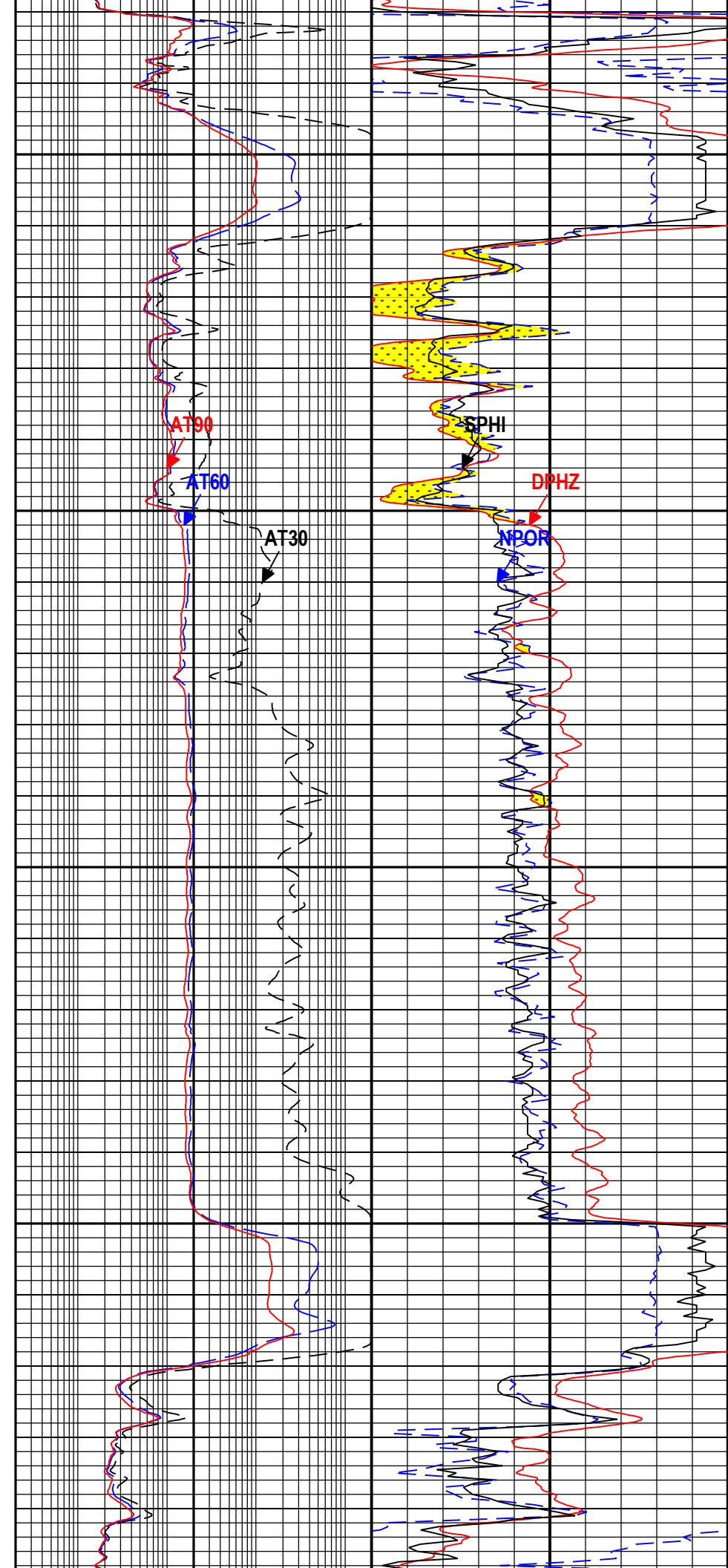
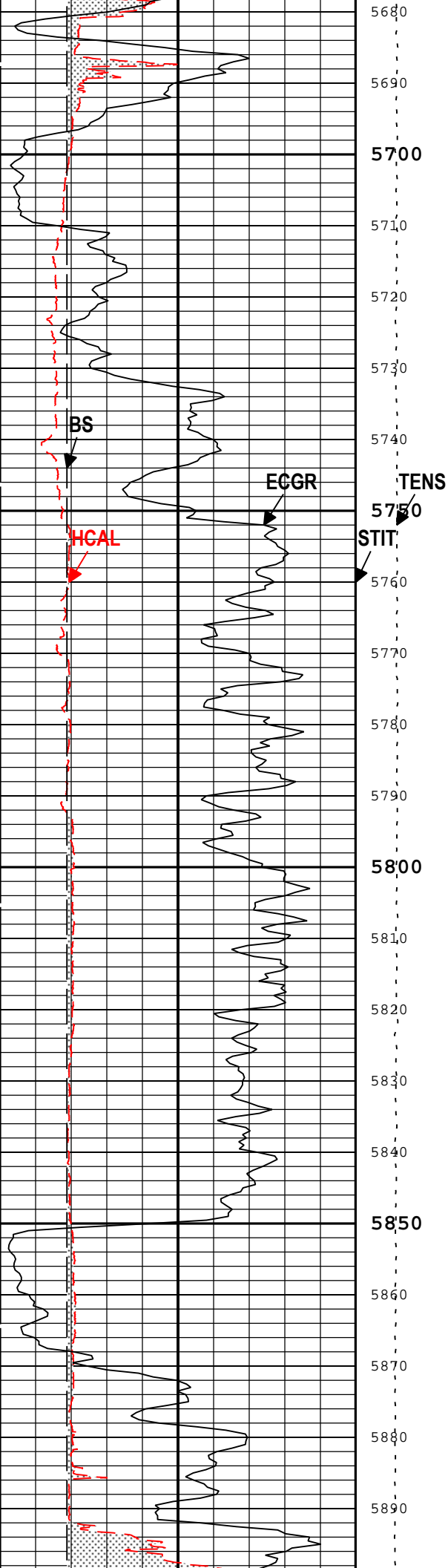
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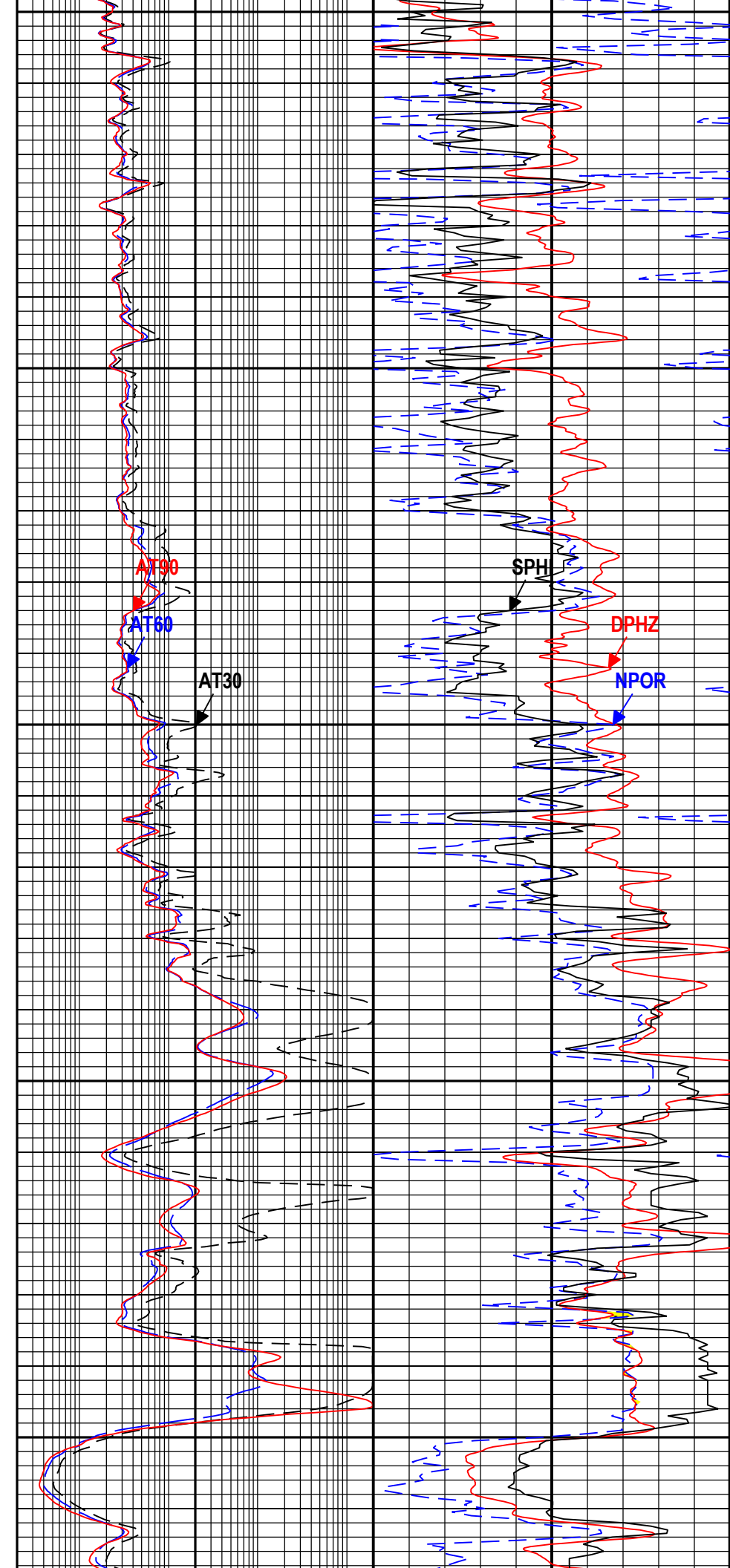
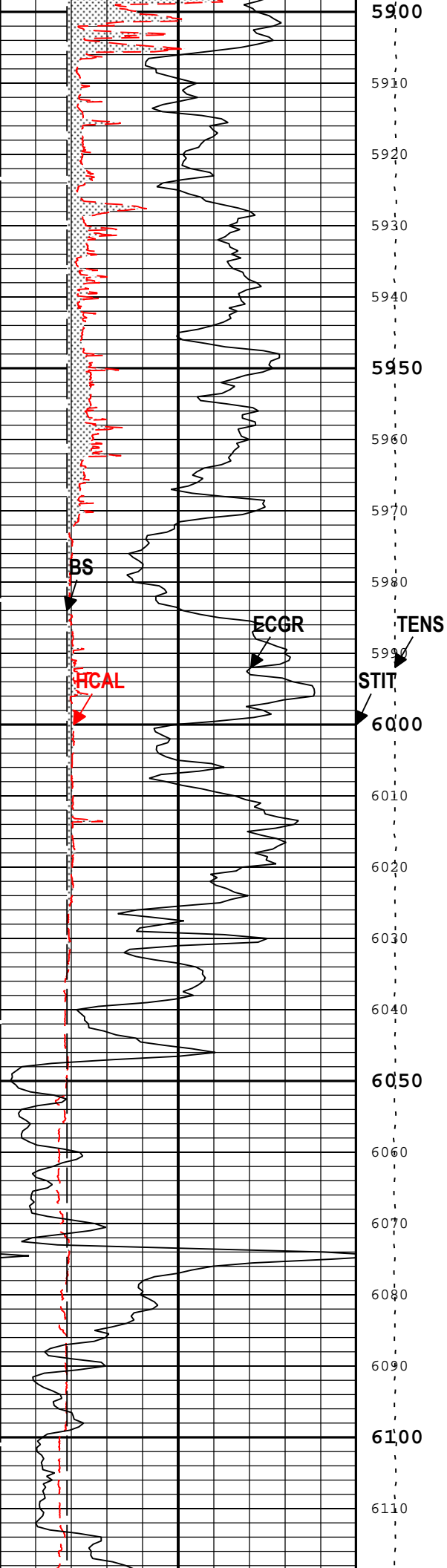


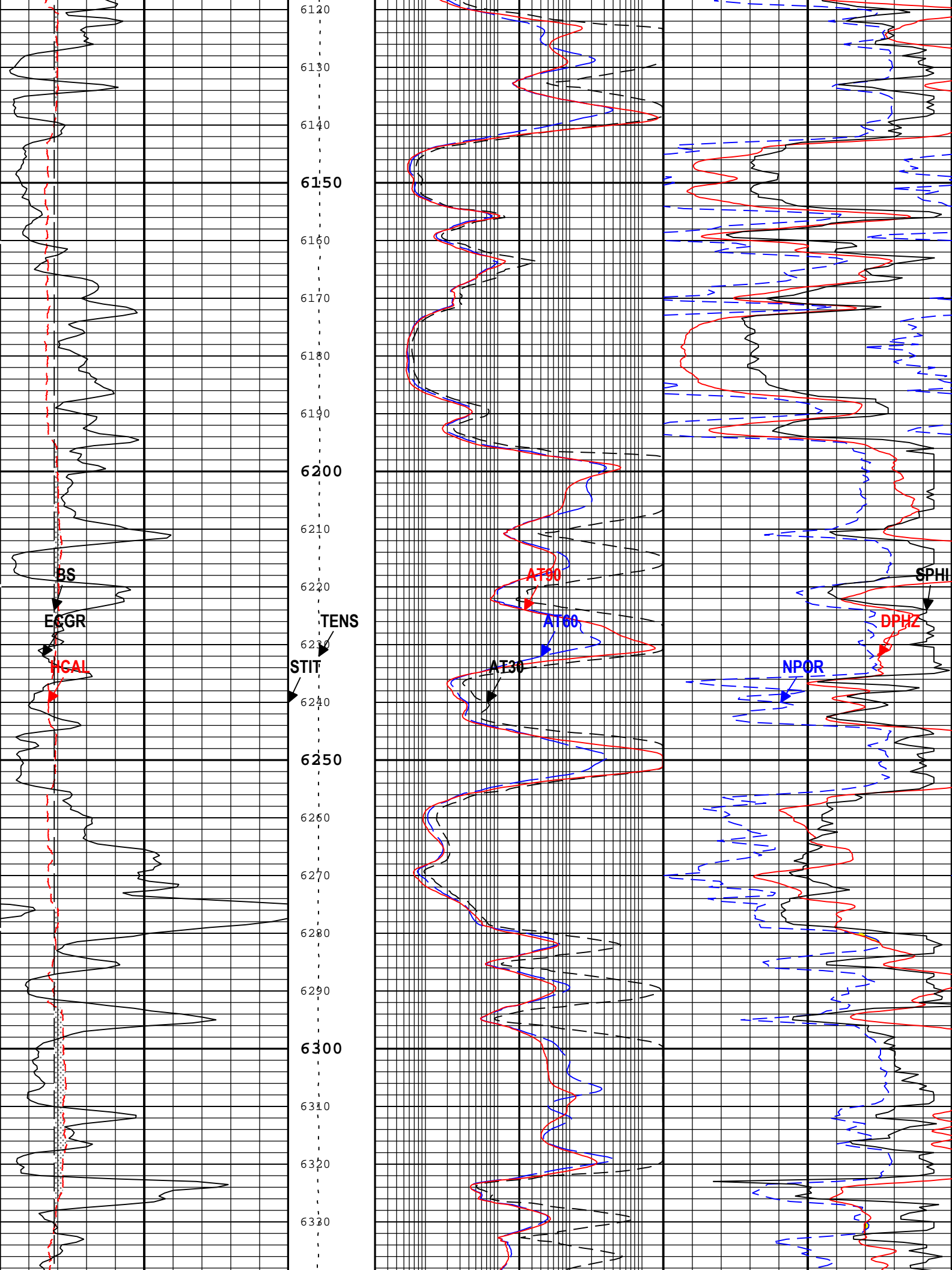


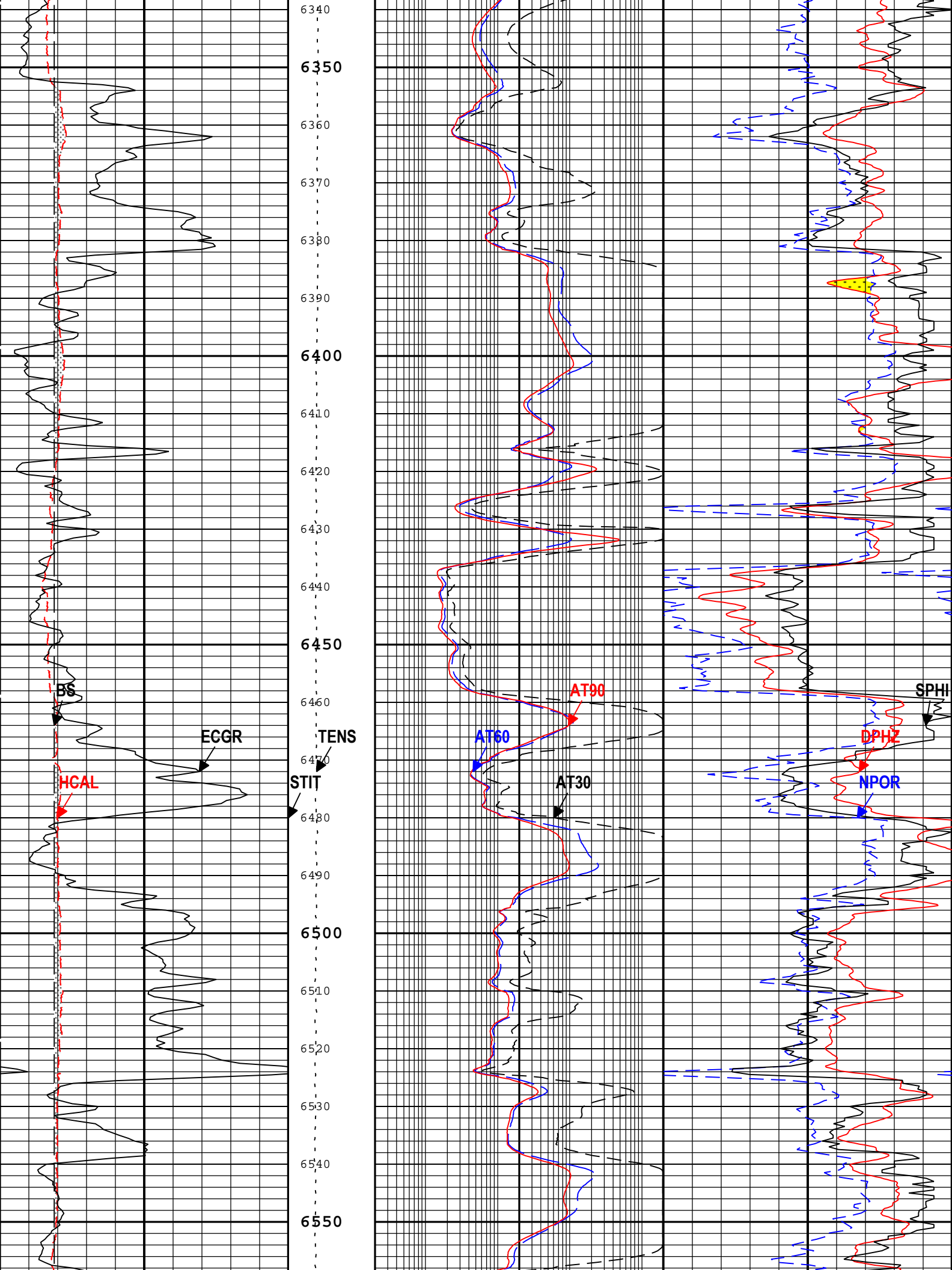


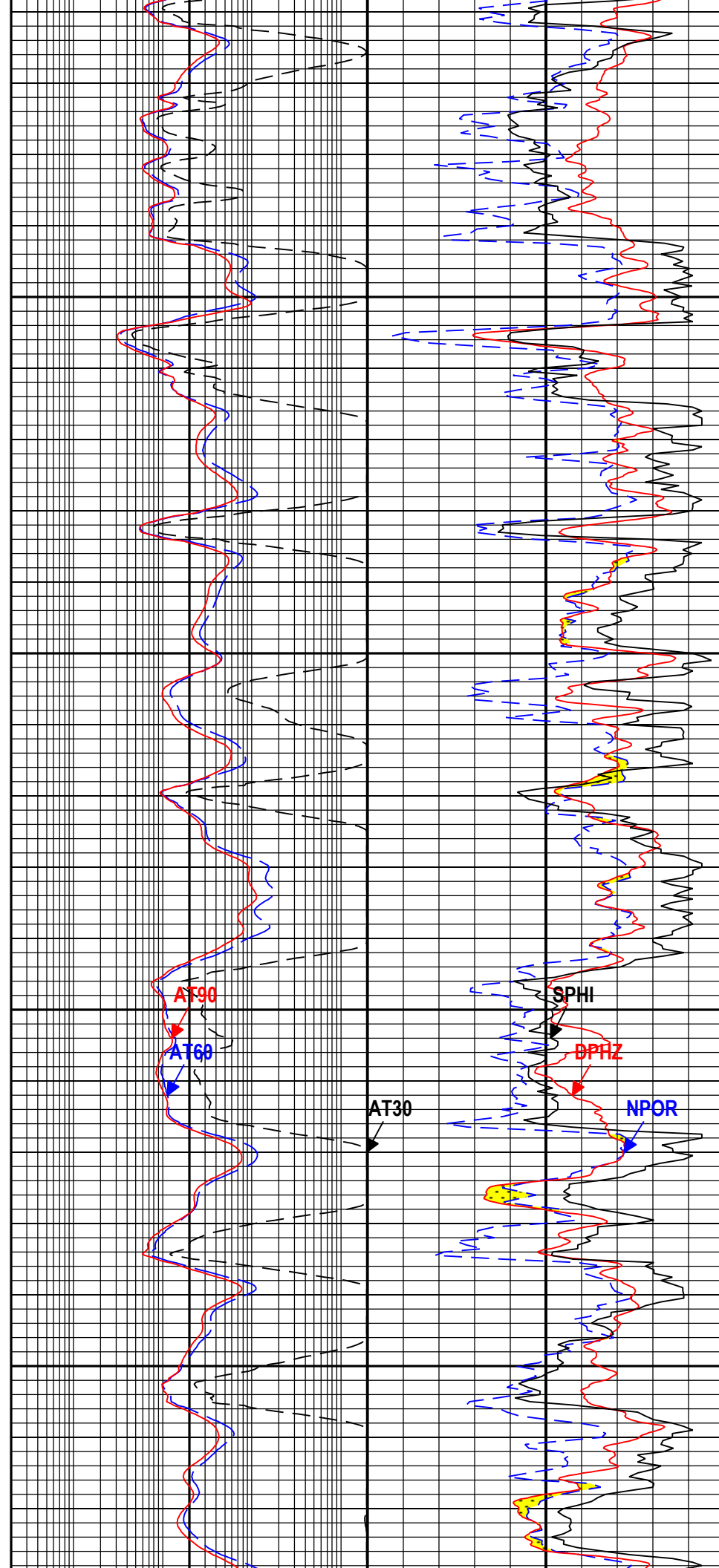
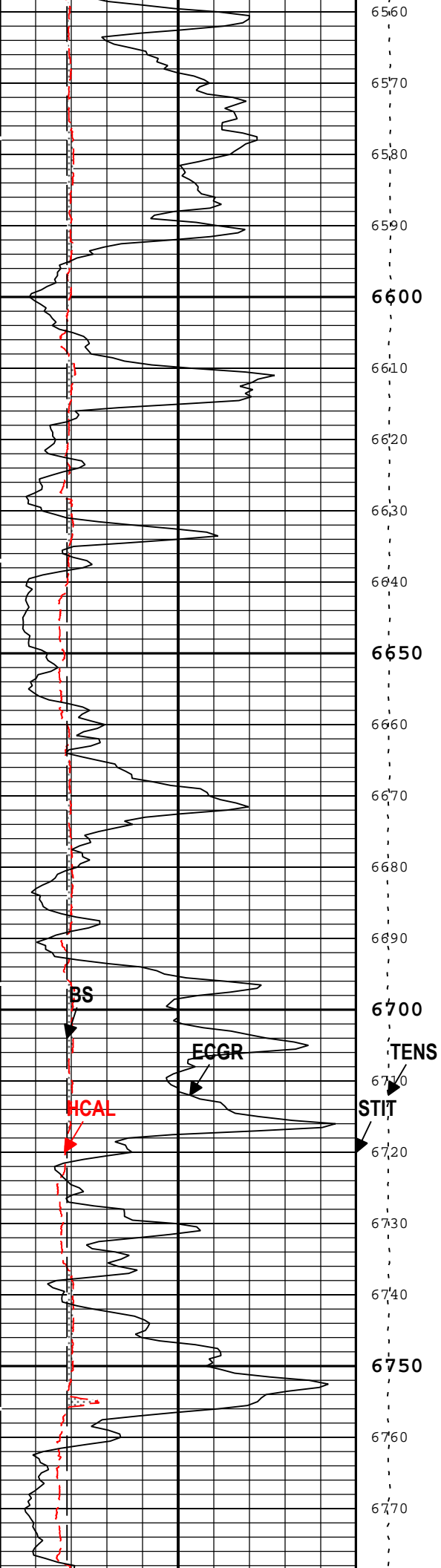


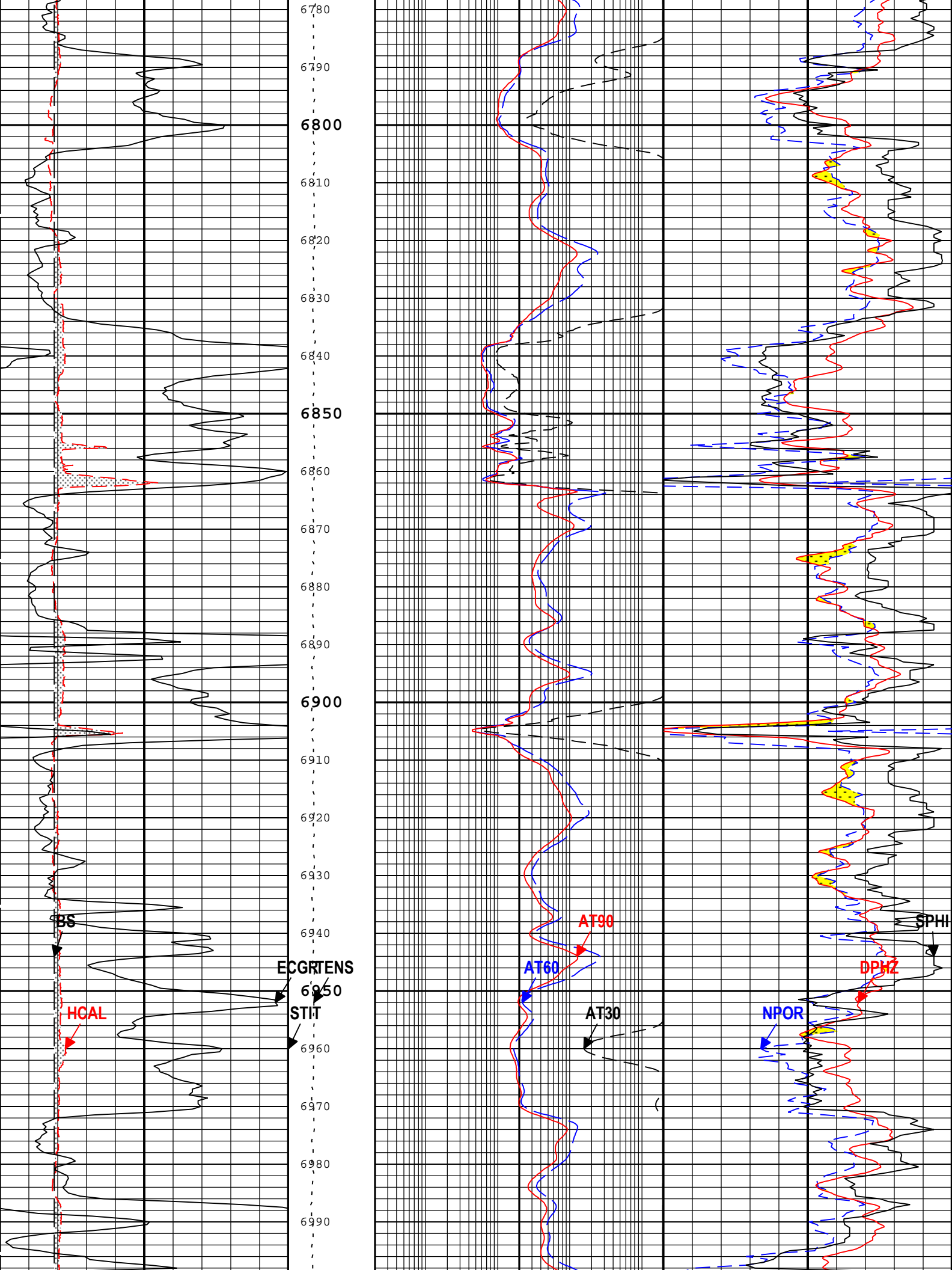


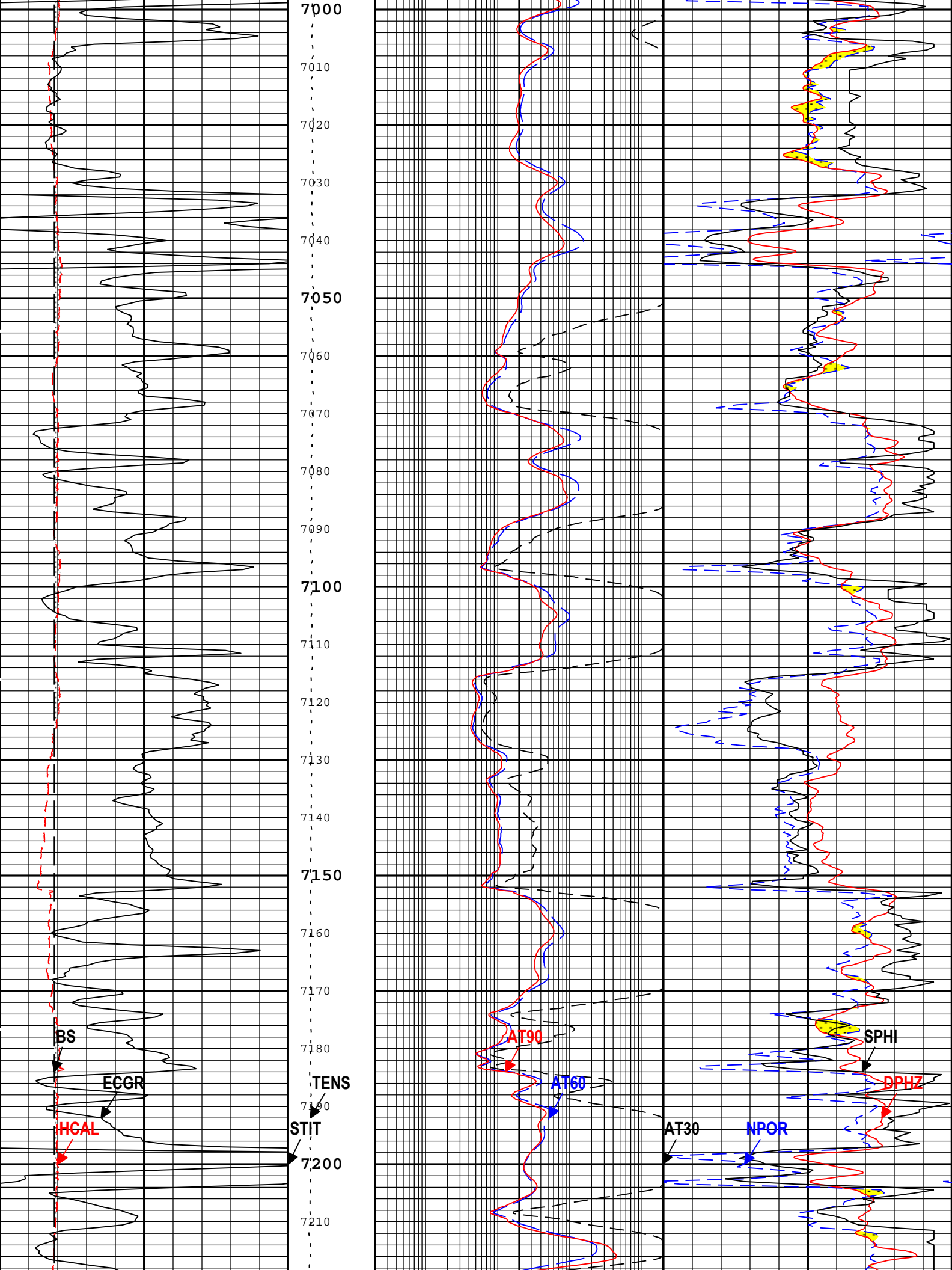


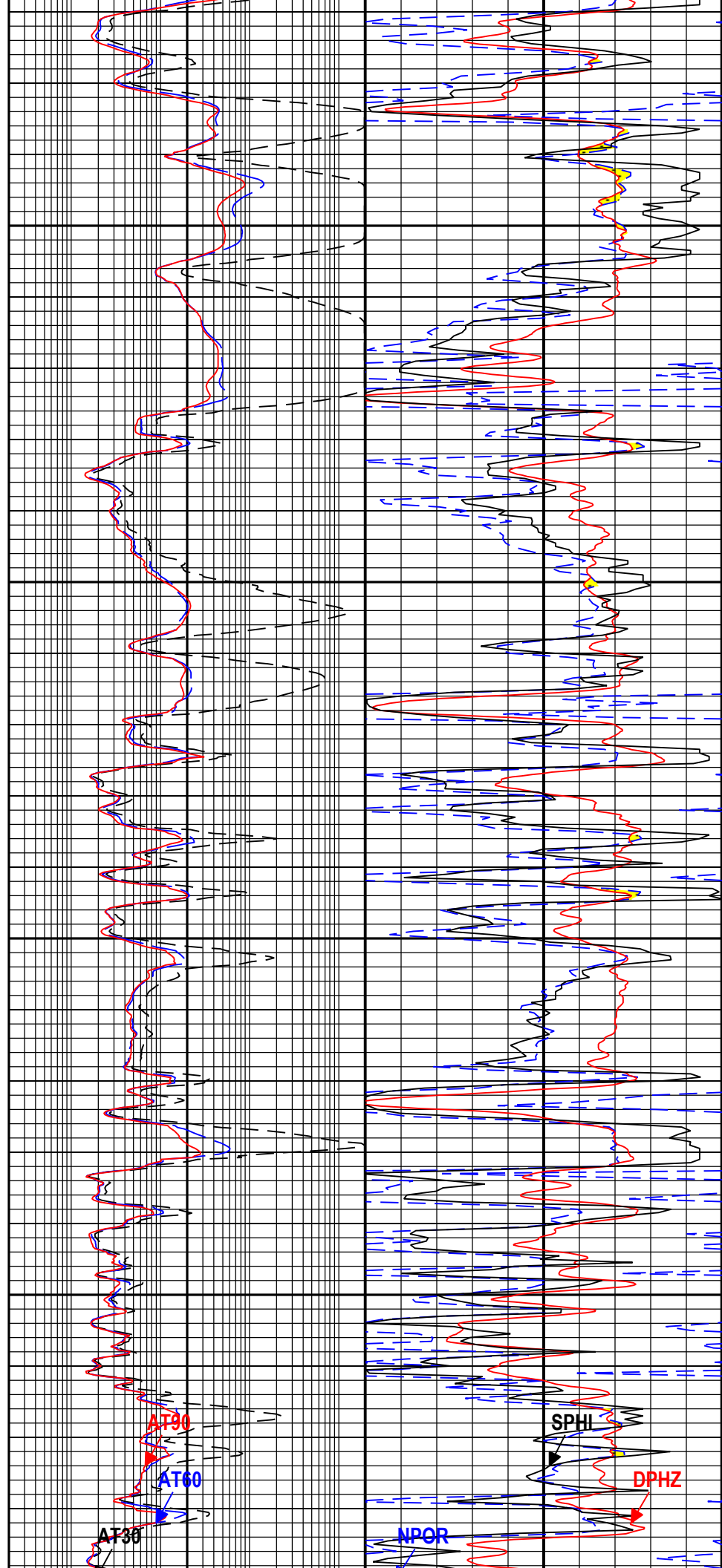
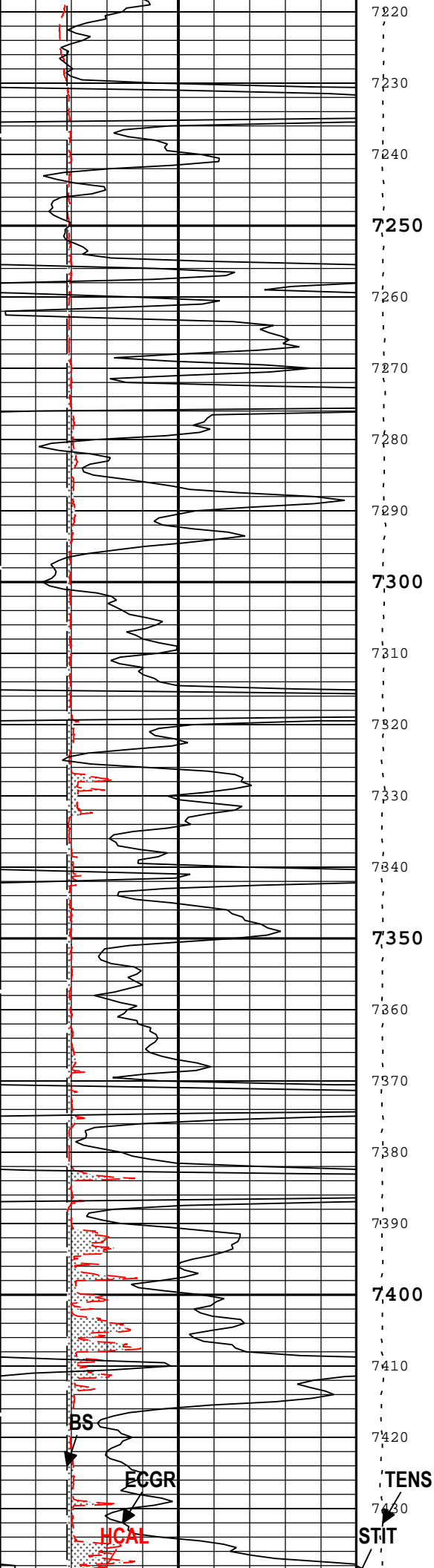


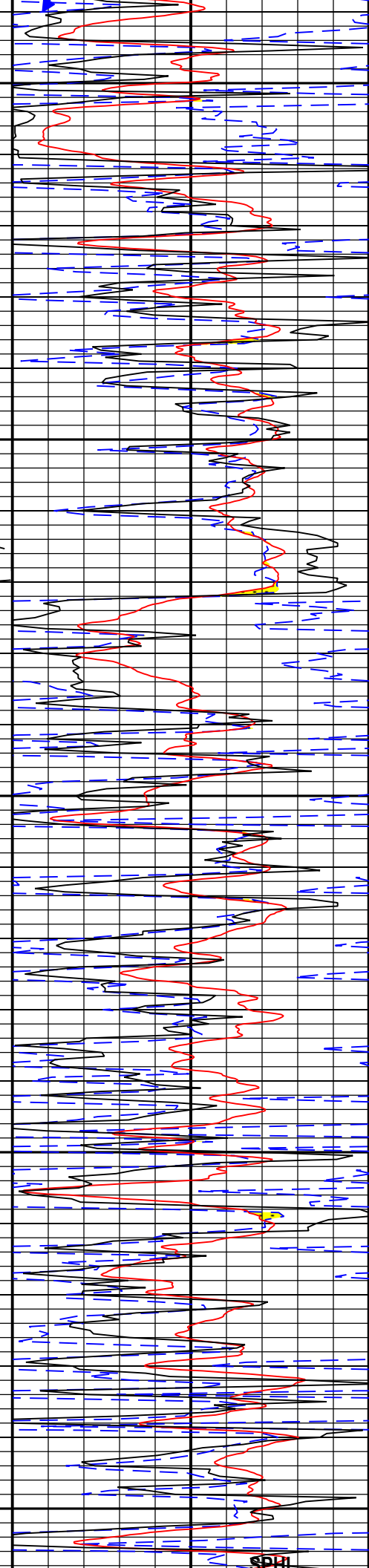
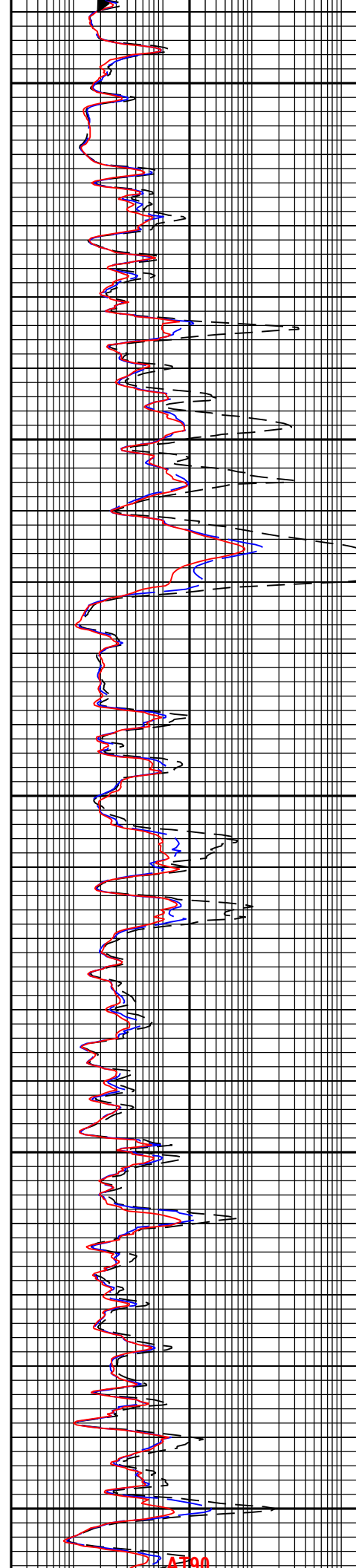
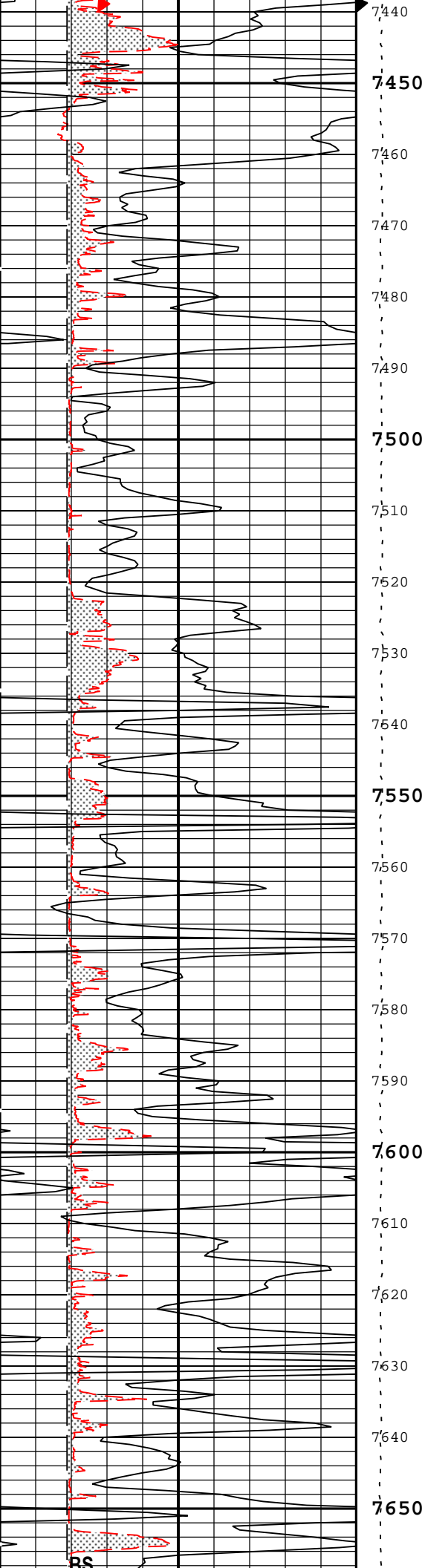


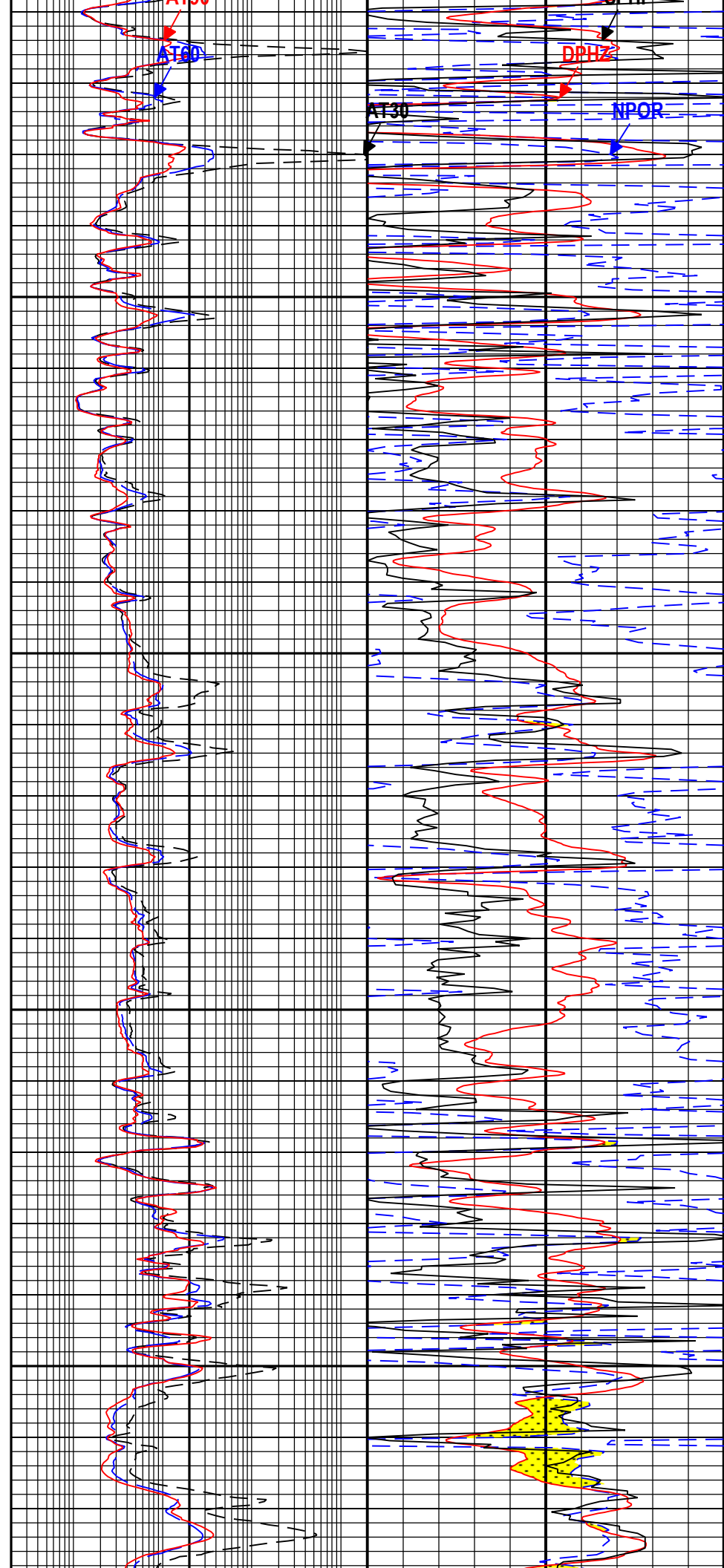
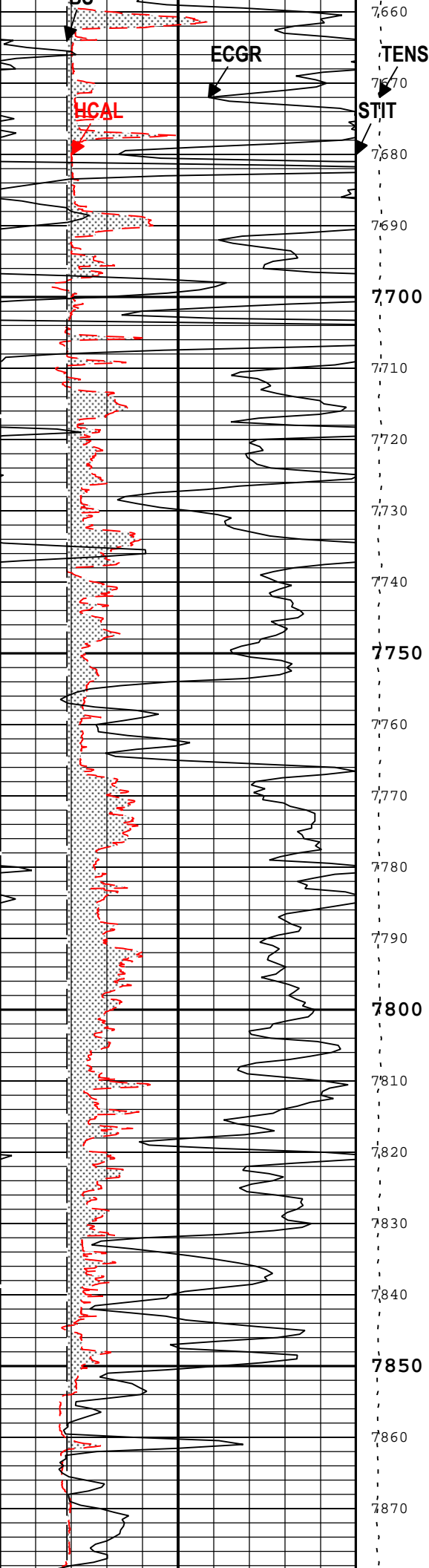


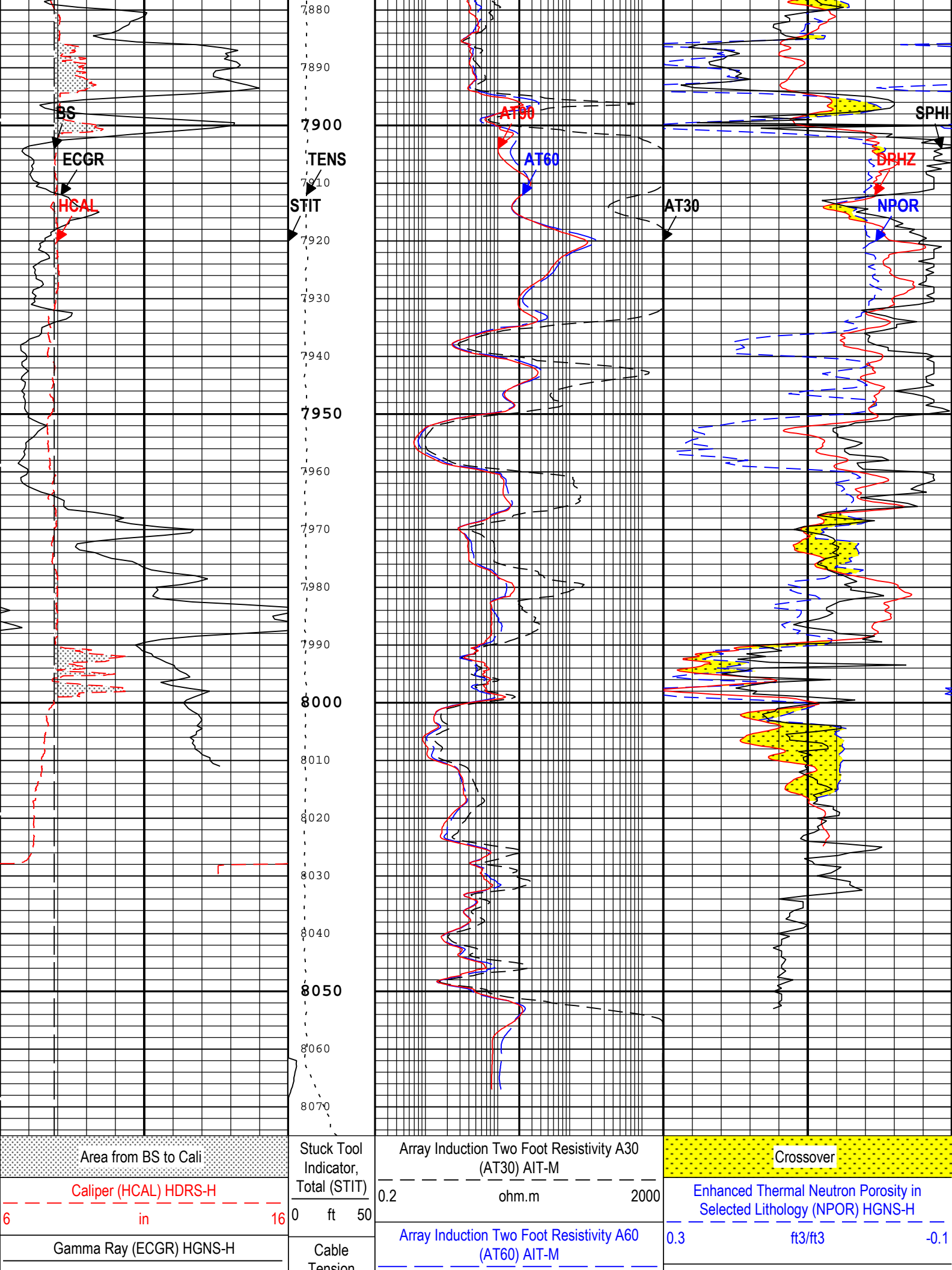












0	gAPI	150	Tension (TENS)	5000 lbf	0	0.2	ohm.m	2000	Standard Resolution Density Porosity (DPHZ)		
						HDRS-H					
						Array Induction Two Foot Resistivity A90 (AT90) AIT-M			0.3	ft3/ft3	-0.1
						Sonic Porosity (SPHI) MAST-B					
						0.2	ohm.m	2000	0.3	ft3/ft3	-0.1
TIME_1900 - Time Marked every 60.00 (s)											
Description: Format: Log (Combo_Fax) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 06-Oct-2015 12:50:05											
Channel Processing Parameters											
ONE: Parameters											
Parameter		Description				Tool		Value		Unit	
AAPL		Array Induction Answer Product Level(Depth Log/View only)				AIT-M		Radial			
ABHM		Array Induction Borehole Correction Mode				AIT-M		Compute Standoff			
ACEN		Array Induction Tool Centering Flag (in Borehole)				AIT-M		Eccentered			
AMRF		Array Induction Mud Resistivity Factor				AIT-M		1			
ASTA		Array Induction Tool Standoff				AIT-M		1.7		in	
ATSE		Array Induction Temperature Selection(Sonde Error Correction)				AIT-M		Internal			
ISSBAR		Barite Mud Presence Flag				Borehole		No			
BHCCTL		Borehole Compensated Processing Control Flag				MAST-B		On			
BHCSEL_ML		BHC (Borehole Compensation) Receiver Selection for Monopole Lower Transmitter				MAST-B		[Off, Off, Off, Off, Off, On, On, On, On, Off, Off, Off, Off]			
BHCSEL_MU		BHC (Borehole Compensation) Receiver Selection for Monopole Upper Transmitter				MAST-B		[Off, Off, Off, Off, Off, On, On, On, On, Off, Off, Off, Off]			
BHS		Borehole Status (Open or Cased Hole)				Borehole		Open			
BHT		Bottom Hole Temperature				Borehole		174		degF	
BS		Bit Size				WLSESSION		7.875		in	
BSAL		Borehole Salinity				Borehole		1800		ppm	
BSCO		Borehole Salinity Correction Option				HGNS-H		No			
CALI_SHIFT		CALI Supplementary Offset				HDRS-H		0.668		in	
CBLO		Casing Bottom (Logger)				WLSESSION		385		ft	
CCCO		Casing & Cement Thickness Correction Option				HGNS-H		No			
CDEN		Cement Density				HGNS-H		2		g/cm3	
CDTS		Correction for Delta-T Shale, Empirical				Borehole		100		us/ft	
DC_MODE		Depth Correction Mode				DepthCorrection		Real-time			
DCRMVL		DC removal option				MAST-B		On			
DET_STOP_MLM_M		Detection Stop Time for Monopole Lower Transmitter Mid Frequency Firing Monopole Component				MAST-B		583.33		us	
DET_STOP_MUM_M		Detection Stop Time for Monopole Upper Transmitter Mid Frequency Firing Monopole Component				MAST-B		583.33		us	
DET_STRT_MLM_M		Detection Start Time for Monopole Lower Transmitter Mid Frequency Firing Monopole Component				MAST-B		106.67		us	
DET_STRT_MUM_M		Detection Start Time for Monopole Upper Transmitter Mid Frequency Firing Monopole Component				MAST-B		106.67		us	
DFD		Drilling Fluid Density				Borehole		9.4		lbm/gal	
DFT		Drilling Fluid Type				Borehole		Water			
DHC		Density Hole Correction				HDRS-H		Bit Size			
DT_MAX_MLM_M		Detection Maximum slowness for Monopole Lower Transmitter Mid Frequency Firing Monopole Component				MAST-B		130		us/ft	
DT_MAX_MUM_M		Detection Maximum slowness for Monopole Upper Transmitter Mid Frequency Firing Monopole Component				MAST-B		130		us/ft	
DT_MIN_MLM_M		Detection Minimum Slowness for Monopole Lower Transmitter Mid Frequency Firing Monopole Component				MAST-B		40		us/ft	
DT_MIN_MUM_M		Detection Minimum Slowness for Monopole Upper Transmitter Mid Frequency Firing Monopole Component				MAST-B		40		us/ft	
DTCO_SELECT		Compressional Slowness Selection for Slowness-Time Coherence				MAST-B		MF			
DTF		Delta-T Fluid				Borehole		189		us/ft	
DTM		Delta-T Matrix				Borehole		56		us/ft	

DTSH_SELECT	Shear Slowness Selection for Slowness-Time Coherence	MAST-B	90D	
EDF	Elevation of Derrick Floor Above Permanent Datum	WLSESSION	4971	ft
EPD	Elevation of Permanent Datum (PDAT) above Mean Sea Level	WLSESSION	0	ft
FD	Fluid Density	Borehole	1	g/cm3
FMDCTL_MLM_M	First Motion Detection Processing Control Flag for Monopole Lower Transmitter Mid Frequency Firing Monopole Component	MAST-B	On	
FMDCTL_MUM_M	First Motion Detection Processing Control Flag for Monopole Upper Transmitter Mid Frequency Firing Monopole Component	MAST-B	On	
FMDRS_MLM_M	First Motion Detection Receiver Selection for Monopole Lower Transmitter Mid Frequency Firing Monopole Component	MAST-B	[1, 1, 1, 1, 1, 1, 1, 1, 1, 0, 0, 0]	
FMDRS_MUM_M	First Motion Detection Receiver Selection for Monopole Upper Transmitter Mid Frequency Firing Monopole Component	MAST-B	[0, 0, 0, 0, 1, 1, 1, 1, 1, 1, 1, 1]	
FSAL	Formation Salinity	Borehole	0	ppm
FSCO	Formation Salinity Correction Option	HGNS-H	No	
GCLF	Coal-Like Formation	HDRS-H	No	
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	BS	
GGRD	Geothermal Gradient	Borehole	1	0.01 degF/ft
GR_MULTIPLIER	Gamma Ray Multiplier	HGNS-H	1	
GRSE	Generalized Mud Resistivity Selection, from Measured or Computed Mud Resistivity	Borehole	REMS	
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	GTEM_LINEST	
HSCO	Hole Size Correction Option	HGNS-H	Yes	
ITTS	Integrated Transit Time Source	MAST-B	DTCO	
MATR	Rock Matrix for Neutron Porosity Corrections	Borehole	LIMESTONE	
MCCO	Mud Cake Correction Option	HGNS-H	No	
MDEN	Matrix Density for Density Porosity	Borehole	2.71	g/cm3
MFST	Mud Filtrate Sample Temperature	Borehole	68	degF
MODALCTL_MLM	Modal Decomposition Processing Control Flag for Monopole Lower Transmitter Mid Frequency Firing	MAST-B	On	
MODALCTL_MUM	Modal Decomposition Processing Control Flag for Monopole Upper Transmitter Mid Frequency Firing	MAST-B	On	
MST	Mud Sample Temperature	Borehole	68	degF
MWCO	Mud Weight Correction Option	HGNS-H	No	
NACO	Neutron Activation Correction	HDRS-H	Off	
NPRM	HRDD Nuclear Processing Mode	HDRS-H	Standard Resolution	
NTCO	HRDD Nuclear Temperature Correction Option	HDRS-H	On	
PBHCCTL	Pseudo Borehole Compensated Processing Control Flag	MAST-B	Off	
PDAT	Permanent Datum	WLSESSION	MSL	
PTCO	Pressure Temperature Correction Option	HGNS-H	Yes	
RMFS	Resistivity of Mud Filtrate Sample	Borehole	0.15	ohm.m
RMS	Resistivity of Mud Sample	Borehole	0.2	ohm.m
SFTY	Slowness Formation Type (Fast, Intermediate, Slow, etc.)	Borehole	Intermediate	
SHT	Surface Hole Temperature	Borehole	68	degF
SOCN	Standoff Distance	HGNS-H	0.125	in
SOCO	Standoff Correction Option	HGNS-H	Yes	
SPFS	Sonic Porosity Formula	Borehole	Raymer-Hunt	
SPSO	Sonic Porosity Source	MAST-B	DTCO	
SSCCTL_MLM	Sensor Sensitivity Correction Processing Control Flag for Monopole Lower Transmitter Mid Frequency Firing	MAST-B	On	
SSCCTL_MUM	Sensor Sensitivity Correction Processing Control Flag for Monopole Upper Transmitter Mid Frequency Firing	MAST-B	On	
TD	Total Measured Depth	Borehole	8071	ft
TKORHOCTL	TKO_RHO Processing Control Flag	MAST-B	On	
HISC	Tool Position: Centered or Eccentered	HGNS-H	Eccentered	

Tool Control Parameters

ONE: Parameters

Parameter	Description	Tool	Value	Unit
DIGDEL	Waveform Digitizing Delay	MAST-B	[0, 0]	us
DIGDT	Sonic Waveform Digitizing Slowness	MAST-B	[0, 0]	us/ft
DIGTIME	Digitizing Time	MAST-B	[2550, 2550]	us
HRGD_BOARD_TYPE	HRGD Board Type	HDRS-H	WITH_HET	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	3600	ft/h
MSMT_LIST	Measurement List	MAST-B	[MUM, MLM]	
NDTC	Nuclear Dead Time Correction	HDRS-H	On	
NPUC	Nuclear Pile-Up Correction	HDRS-H	On	
RXDO	Receiver Depth Offset	MAST-B	[36, 30, 24, 18, 12, 6, 0, -6, -12, -18, -24, -30, -36]	in
RXRB	Receiver Relative Bearing	MAST-B	[0, 45, 90, 135, 180, 225, 270, 315]	deg
RXSEL	Receiver Station Select	MAST-B	[[Off, On], [Off, On], [Off, On], [Off, On], [On, On], [On, On], [On, On], [On, On], [On, Off], [On, Off], [On, Off], [On, Off]]	
SAMINT	Sonic Waveform Sampling Interval	MAST-B	[10, 10]	
SNSRSEL	Sensor Element Select	MAST-B	[[On, On], [Off, Off], [On, On], [Off, Off], [On, On], [Off, Off], [On, On], [Off, Off]]	
STSO_HRDD	Temperature Source for the Density Algorithm	HDRS-H	HET data channel	
TXDO	Transmitter Depth Offset	MAST-B	[-48, 48, 165.36, 138.36, 150.36]	in

Calibration Report

AIT-M (Array Induction Tool - M) Calibration - Run ONE

Primary Equipment :			
File code for AIT-MA Sonde Tool Element	AMIS	181	
Auxiliary Equipment :			
AITM Rm/SP Bottom Nose	AMRM	181	

AIT Sonde Calibration - Test Loop Gain

Master (EEPROM):		15:07:52 30-Sep-2015					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Test Loop Gain - 0		Master	1.000	0.950	1.017	1.050	
Test Loop Phase - 0	deg	Master	0	-3.000	-2.160	3.000	
Test Loop Gain - 1		Master	1.000	0.950	1.015	1.050	
Test Loop Phase - 1	deg	Master	0	-3.000	1.266	3.000	
Test Loop Gain - 2		Master	1.000	0.950	1.016	1.050	
Test Loop Phase - 2	deg	Master	0	-3.000	-0.015	3.000	
Test Loop Gain - 3		Master	1.000	0.950	1.016	1.050	
Test Loop Phase - 3	deg	Master	0	-3.000	0.082	3.000	
Test Loop Gain - 4		Master	1.000	0.950	0.996	1.050	
Test Loop Phase - 4	deg	Master	0	-3.000	0.186	3.000	
Test Loop Gain - 5		Master	1.000	0.950	0.992	1.050	
Test Loop Phase - 5	deg	Master	0	-3.000	-0.156	3.000	
Test Loop Gain - 6		Master	1.000	0.950	0.998	1.050	
Test Loop Phase - 6	deg	Master	0	-3.000	0.133	3.000	
Test Loop Gain - 7		Master	1.000	0.950	1.011	1.050	
Test Loop Phase - 7	deg	Master	0	-3.000	-0.144	3.000	

AIT Sonde Calibration - Sonde Error Correction

Master (EEPROM):		15:07:52 30-Sep-2015					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Sonde Error Correction Real - 0	mS/m	Master	-----	-231.000	-93.747	119.000	
Sonde Error Correction Quad - 0		Master	-----	-2250.000	115.227	2250.000	
Sonde Error Correction Real - 1	mS/m	Master	-----	114.000	163.272	204.000	

Sonde Error Correction Quad - 1		Master	-----	-625.000	-131.052	625.000	
Sonde Error Correction Real - 2	mS/m	Master	-----	66.000	114.886	156.000	
Sonde Error Correction Quad - 2		Master	-----	-350.000	-126.619	350.000	
Sonde Error Correction Real - 3	mS/m	Master	-----	39.000	51.775	89.000	
Sonde Error Correction Quad - 3		Master	-----	-250.000	-9.469	250.000	
Sonde Error Correction Real - 4	mS/m	Master	-----	15.000	25.720	35.000	
Sonde Error Correction Quad - 4		Master	-----	-63.000	-12.224	63.000	
Sonde Error Correction Real - 5	mS/m	Master	-----	4.000	11.202	24.000	
Sonde Error Correction Quad - 5		Master	-----	-50.000	17.824	50.000	
Sonde Error Correction Real - 6	mS/m	Master	-----	5.000	10.363	15.000	
Sonde Error Correction Quad - 6		Master	-----	-30.000	1.773	30.000	
Sonde Error Correction Real - 7	mS/m	Master	-----	-5.000	-1.186	5.000	
Sonde Error Correction Quad - 7		Master	-----	-30.000	-0.058	30.000	

AIT Mud Calibration - Mud Calibration Gain

Master (EEPROM): 15:07:52 30-Sep-2015

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Coarse Gain		Master	1.000	0.800	1.093	1.200	
Fine Gain		Master	1.000	0.800	1.092	1.200	

AIT Electronics Check - Thru Calibration Check

Master (EEPROM): 15:07:52 30-Sep-2015

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Thru Cal Mag - 0	V	Master	-----	0.366	0.575	0.854	
Thru Cal Phase - 0	deg	Master	-----	137.000	-170.211	-103.000	
Thru Cal Mag - 1	V	Master	-----	0.762	1.178	1.778	
Thru Cal Phase - 1	deg	Master	-----	136.000	-171.319	-104.000	
Thru Cal Mag - 2	V	Master	-----	0.372	0.584	0.868	
Thru Cal Phase - 2	deg	Master	-----	132.000	-174.964	-108.000	
Thru Cal Mag - 3	V	Master	-----	0.420	0.660	0.980	
Thru Cal Phase - 3	deg	Master	-----	131.000	-175.742	-109.000	
Thru Cal Mag - 4	V	Master	-----	0.804	1.233	1.876	
Thru Cal Phase - 4	deg	Master	-----	125.000	177.969	-115.000	
Thru Cal Mag - 5	V	Master	-----	1.176	1.795	2.744	
Thru Cal Phase - 5	deg	Master	-----	122.000	176.302	-118.000	
Thru Cal Mag - 6	V	Master	-----	1.176	1.794	2.744	
Thru Cal Phase - 6	deg	Master	-----	121.000	176.308	-119.000	
Thru Cal Mag - 7	V	Master	-----	0.846	1.293	1.974	
Thru Cal Phase - 7	deg	Master	-----	115.000	175.455	-125.000	
SPA Zero	mV	Master		-50.000	0.177	50.000	
SPA Plus	mV	Master		941.000	992.778	1040.000	
Temperature Zero	V	Master		-0.050	0.000	0.050	
Temperature Plus	V	Master		0.870	0.920	0.960	

MAST-B (Multimode Array Sonic Service Tool) Calibration - Run ONE

Primary Equipment :

MAMS-BA

MAMS-BA

8075

MAST Master Characterization Coefficients - Characterization Coefficients Summary

Master (EEPROM): 18:45:00 01-Oct-2013 Expired by 644 days

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Sensor Sensitivity Correction Factor Minimum		Master	1.000	0.500	0.946	1.700	
Sensor Sensitivity Correction Factor Maximum		Master	1.000	0.500	1.078	1.700	
Sensor Time Delay Factor Minimum	us	Master	0	-2.000	-0.881	2.000	
Sensor Time Delay Factor Maximum	us	Master	0	-2.000	1.213	2.000	
Sensor Sensitivity Correction Factor Low Frequency to High Frequency Ratio Minimum		Master	1.000	0.900	0.916	1.700	
Sensor Sensitivity Correction Factor Low Frequency to High Frequency Ratio Maximum		Master	1.000	0.900	1.096	1.700	

Characterization Coefficients

CALI_SSCF (Master)		Sensor Sensitivity Correction Factor						
Minimum/Nominal/Maximum		0.500/1.000/1.700						Unit
	RB1	RB2	RB3	RB4	RB5	RB6	RB7	RB8
SO1	0.999	0.984	0.987	0.998	0.991	1.028	0.985	0.960
SO2	1.008	0.987	1.019	1.044	1.013	0.993	0.957	1.009
SO3	1.009	1.006	0.982	1.030	1.004	0.957	0.961	0.949
SO4	0.985	1.026	1.026	1.016	1.024	0.985	0.957	0.948
SO5	0.997	1.027	1.024	1.024	0.975	0.971	0.954	0.979
SO6	0.999	1.018	1.011	1.012	1.011	1.007	0.980	1.013
SO7	0.984	1.017	1.029	1.039	1.037	0.974	0.991	0.974
SO8	0.978	1.036	1.022	1.034	1.001	0.990	1.004	0.963
SO9	1.003	0.989	1.008	0.990	0.999	0.986	0.991	0.962
SO10	0.960	0.988	0.976	1.078	1.022	1.018	1.023	0.946
SO11	0.982	0.999	1.016	1.004	1.011	0.948	0.956	0.975
SO12	0.981	1.003	1.014	1.048	1.006	0.965	0.999	0.985
SO13	1.018	1.003	1.028	1.027	1.013	0.999	1.000	0.981

CALI_STDF (Master)		Sensor Time Delay Factor						
Minimum/Nominal/Maximum		-2.000/0/2.000						Unit us
	RB1	RB2	RB3	RB4	RB5	RB6	RB7	RB8
SO1	-0.195	-0.063	0.111	0.213	0.172	0.063	-0.130	-0.148
SO2	-0.211	-0.250	0.071	0.192	0.135	0.101	-0.071	-0.440
SO3	-0.288	-0.102	0.307	0.512	0.442	0.058	-0.058	-0.294
SO4	-0.282	-0.379	0.142	0.507	0.156	0.064	0.368	-0.144
SO5	-0.566	-0.299	-0.061	0.194	0.270	-0.024	0.035	0.028
SO6	-0.354	-0.351	-0.020	0.432	0.190	0.813	0.154	-0.161
SO7	-0.259	-0.202	-0.144	0.256	0.479	0.829	0.061	-0.288
SO8	-0.549	-0.415	0.156	-0.077	0.426	0.051	0.019	-0.073
SO9	-0.156	-0.049	0.258	0.378	0.075	-0.156	-0.014	-0.281
SO10	-0.132	-0.212	0.034	0.057	0.101	0.093	0.032	-0.076
SO11	-0.359	0.064	0.100	0.234	0.523	-0.064	-0.206	-0.110
SO12	-0.242	-0.104	0.276	0.055	-0.101	-0.055	0.528	1.213
SO13	-0.617	0.272	0.415	0.257	0.295	-0.257	-0.607	-0.881

CALI_SSCR (Master)		Sensor Sensitivity Correction Factor Low Frequency to High Frequency Ratio						
Minimum/Nominal/Maximum		0.900/1.000/1.700						Unit
	RB1	RB2	RB3	RB4	RB5	RB6	RB7	RB8
SO1	1.057	1.038	1.005	1.000	0.995	0.987	0.986	1.034
SO2	1.033	1.022	1.005	1.005	0.979	0.966	0.971	1.006
SO3	0.995	1.090	1.036	0.957	0.922	0.974	0.974	0.949
SO4	1.062	1.036	0.998	0.987	0.984	0.974	0.986	1.023
SO5	1.096	1.043	1.024	1.002	0.984	0.957	1.001	1.051
SO6	1.049	1.014	1.001	0.966	0.965	0.968	0.970	1.019
SO7	0.954	0.989	1.022	1.039	1.037	1.024	0.990	0.952
SO8	0.973	0.991	1.023	1.042	1.072	1.035	0.980	0.944
SO9	0.974	0.997	1.037	1.054	1.044	0.996	0.955	0.929
SO10	0.967	0.982	1.035	1.063	1.058	1.012	0.982	0.949

SO11	0.934	1.003	1.040	1.032	1.017	1.016	0.970	0.916	
SO12	0.962	0.997	1.062	1.048	1.023	1.016	0.994	0.984	
SO13	0.952	0.991	1.057	1.045	1.042	0.995	0.987	0.940	
CALI_SSCTF (Master) Sensor Sensitivity Correction Transmitter Failure Flag									
Minimum/Nominal/Maximum							0/0/0		Unit
Monopole Upper Transmitter					0				
Monopole Lower Transmitter					0				
CALI_SSCHF (Master) Sensor Sensitivity Correction High Frequency Diagnostic Failure Flag									
Minimum/Nominal/Maximum							0/0/0		Unit
	RB1	RB2	RB3	RB4	RB5	RB6	RB7	RB8	
SO1	0	0	0	0	0	0	0	0	
SO2	0	0	0	0	0	0	0	0	
SO3	0	0	0	0	0	0	0	0	
SO4	0	0	0	0	0	0	0	0	
SO5	0	0	0	0	0	0	0	0	
SO6	0	0	0	0	0	0	0	0	
SO7	0	0	0	0	0	0	0	0	
SO8	0	0	0	0	0	0	0	0	
SO9	0	0	0	0	0	0	0	0	
SO10	0	0	0	0	0	0	0	0	
SO11	0	0	0	0	0	0	0	0	
SO12	0	0	0	0	0	0	0	0	
SO13	0	0	0	0	0	0	0	0	
CALI_SSCLF (Master) Sensor Sensitivity Correction Low Frequency Diagnostic Failure Flag									
Minimum/Nominal/Maximum							0/0/0		Unit
	RB1	RB2	RB3	RB4	RB5	RB6	RB7	RB8	
SO1	0	0	0	0	0	0	0	0	
SO2	0	0	0	0	0	0	0	0	
SO3	0	0	0	0	0	0	0	0	
SO4	0	0	0	0	0	0	0	0	
SO5	0	0	0	0	0	0	0	0	
SO6	0	0	0	0	0	0	0	0	
SO7	0	0	0	0	0	0	0	0	
SO8	0	0	0	0	0	0	0	0	
SO9	0	0	0	0	0	0	0	0	
SO10	0	0	0	0	0	0	0	0	
SO11	0	0	0	0	0	0	0	0	
SO12	0	0	0	0	0	0	0	0	
SO13	0	0	0	0	0	0	0	0	
CALI_SSCHA (Master) Sensor Sensitivity Correction High Frequency Normalized Amplitudes									
Minimum/Nominal/Maximum							----/1.000/----		Unit
	RB1	RB2	RB3	RB4	RB5	RB6	RB7	RB8	
SO1	0.990	1.005	1.002	0.991	0.998	0.962	1.004	1.031	
SO2	1.001	1.022	0.990	0.966	0.996	1.016	1.054	0.999	
SO3	0.984	0.987	1.011	0.964	0.989	1.037	1.033	1.047	
SO4	1.015	0.975	0.975	0.985	0.977	1.016	1.046	1.055	

Minimum/Nominal/Maximum								Unit	us
	RB1	RB2	RB3	RB4	RB5	RB6	RB7	RB8	
SO1	150.666	150.767	150.566	150.666	150.510	149.761	150.263	150.990	
SO2	180.617	180.748	180.548	180.219	180.345	180.393	180.519	180.624	
SO3	208.496	209.067	208.352	209.298	206.945	208.035	207.737	207.876	
SO4	236.750	237.125	236.635	235.904	236.492	236.597	235.659	236.523	
SO5	266.852	266.491	266.439	266.022	265.814	266.346	266.002	265.833	
SO6	295.539	295.902	295.504	294.898	295.273	294.087	294.972	295.472	
SO7	323.472	323.711	323.638	323.151	322.725	321.965	323.279	323.666	
SO8	353.823	353.774	352.667	353.111	352.257	352.916	353.020	352.846	
SO9	381.941	381.716	381.383	381.186	381.837	382.192	381.982	382.261	
SO10	411.800	412.082	411.644	411.670	411.636	411.470	411.578	411.703	
SO11	441.515	441.092	441.056	440.923	440.634	441.221	441.363	441.266	
SO12	470.303	470.165	469.785	470.006	470.162	470.116	469.533	468.847	
SO13	499.442	498.552	498.410	498.567	498.530	499.082	499.432	499.706	

Minimum/Nominal/Maximum								Unit	
	RB1	RB2	RB3	RB4	RB5	RB6	RB7	RB8	
SO1	4853.119	4924.710	4912.444	4858.871	4889.808	4714.450	4922.774	5051.636	
SO2	5045.157	5149.583	4990.194	4871.563	5020.813	5119.463	5313.749	5037.139	
SO3	5287.833	5302.994	5433.686	5176.329	5310.688	5571.589	5549.999	5622.337	
SO4	5624.173	5413.661	5411.666	5527.577	5441.848	5636.934	5842.312	5872.279	
SO5	5788.751	5655.148	5652.258	5681.797	5966.925	5974.112	6077.190	5947.544	
SO6	6107.326	5968.101	6023.423	6056.200	6030.177	6113.867	6227.435	6002.623	
SO7	6597.355	6372.560	6305.465	6242.458	6242.453	6713.046	6535.623	6643.384	
SO8	6838.963	6488.900	6625.150	6519.823	6795.124	6858.826	6731.167	7029.828	
SO9	7085.596	7219.283	7077.258	7219.848	7096.783	7224.500	7184.715	7381.029	
SO10	7741.659	7503.189	7573.977	6837.227	7218.457	7307.484	7284.769	7888.403	
SO11	7970.040	7837.718	7582.756	7657.566	7605.077	8153.438	8138.366	8065.485	
SO12	8420.625	8088.298	7801.284	7360.106	7636.366	8253.396	8242.049	8587.939	
SO13	7921.893	7928.883	7295.137	6925.896	7098.138	7386.022	7741.010	8038.728	

Minimum/Nominal/Maximum								Unit	
	RB1	RB2	RB3	RB4	RB5	RB6	RB7	RB8	
SO1	7784.195	8174.038	7887.834	7337.262	7524.383	7564.900	7908.047	8020.891	
SO2	7737.512	7826.556	7535.887	7288.364	7545.744	7735.434	8071.286	7680.260	
SO3	6787.618	6922.229	6978.596	6715.412	6438.903	6997.104	6924.625	7072.640	
SO4	7030.901	6733.188	6737.133	6733.086	6730.799	7019.663	7180.385	7274.375	
SO5	6686.533	6444.532	6489.677	6450.559	6784.025	6830.008	6949.764	6750.114	
SO6	6314.964	6221.629	6255.555	6204.897	6250.386	6216.313	6442.018	6247.413	
SO7	6036.695	5856.145	5781.354	5726.457	5746.798	6055.060	6009.270	6122.937	
SO8	5901.958	5552.873	5577.974	5545.666	5669.521	5745.372	5692.719	5922.637	
SO9	5423.623	5481.205	5380.229	5470.179	5459.590	5514.438	5480.492	5663.717	
SO10	5427.188	5296.587	5378.219	4879.724	5142.187	5115.975	5079.639	5484.988	
SO11	5058.181	4972.884	4886.795	4947.585	4912.829	5238.024	5192.061	5093.542	
	4826.440	4728.560	4677.001	4525.525	4715.660	4016.387	4748.700	4814.051	

SO12	4836.440	4726.560	4677.091	4525.535	4715.669	4916.387	4748.799	4814.051
SO13	4447.619	4516.861	4406.873	4409.625	4469.287	4534.643	4528.258	4616.790
CALI_AMPMUL (Master) Sensor Sensitivity First Break Amplitude from Monopole Upper Transmitter Low Frequency Firing								
Minimum/Nominal/Maximum -50000.000/0/50000.000							Unit	
	RB1	RB2	RB3	RB4	RB5	RB6	RB7	RB8
SO1	-4160.754	-3979.388	-3637.779	-3512.115	-3600.096	-3508.888	-3812.458	-4278.166
SO2	-5313.874	-5238.303	-4929.395	-4747.651	-4942.087	-5088.681	-5291.274	-5095.556
SO3	-7126.739	-7264.913	-7013.809	-6521.816	-6718.549	-6992.842	-7084.032	-7122.116
SO4	-7159.687	-6838.335	-6981.436	-7093.320	-6998.604	-7297.006	-7463.930	-7253.367
SO5	-8255.652	-8160.471	-8683.326	-8570.374	-8976.024	-8704.947	-9118.712	-8548.476
SO6	-8966.141	-8799.707	-9131.033	-9195.248	-9222.716	-9183.672	-9054.123	-8775.055
SO7	-12587.270	-12637.420	-12907.530	-12984.750	-12984.460	-13656.010	-12972.530	-12697.180
SO8	-12572.330	-12103.490	-12649.410	-12749.330	-13541.990	-13220.060	-12343.520	-12396.610
SO9	-13418.710	-13933.550	-14211.240	-14714.510	-14434.710	-13963.910	-13310.080	-13337.540
SO10	-14538.200	-14353.740	-15320.470	-14241.270	-14943.910	-14349.860	-13850.370	-14474.520
SO11	-18711.450	-19761.250	-20127.300	-20224.310	-19796.660	-21082.440	-19947.710	-18481.580
SO12	-17516.910	-17745.590	-18688.640	-17840.790	-18148.080	-18793.910	-17765.530	-17823.370
SO13	-19240.460	-20342.040	-21168.840	-20950.060	-21161.340	-20509.110	-20308.260	-19725.580
CALI_AMPMUL (Master) Sensor Sensitivity First Break Amplitude from Monopole Upper Transmitter Low Frequency Firing								
Minimum/Nominal/Maximum -50000.000/0/50000.000							Unit	
	RB1	RB2	RB3	RB4	RB5	RB6	RB7	RB8
SO1	-25645.740	-25536.660	-24666.830	-24283.720	-24315.850	-23245.170	-24247.720	-26092.970
SO2	-22645.080	-22870.870	-21795.740	-21278.050	-21367.520	-21491.870	-22428.720	-22020.850
SO3	-16333.360	-17939.540	-17470.100	-15377.680	-15203.030	-16848.510	-16784.060	-16562.710
SO4	-13897.690	-13013.010	-12533.340	-12524.550	-12384.340	-12751.250	-13278.970	-13902.790
SO5	-12179.810	-11244.100	-11078.550	-10833.400	-11178.170	-10909.710	-11616.210	-11892.350
SO6	-13369.240	-12677.350	-12609.730	-12153.940	-12160.010	-12244.840	-12605.720	-12807.190
SO7	-10702.390	-9989.101	-9499.549	-9352.105	-9218.663	-9841.935	-9675.545	-10334.480
SO8	-9082.130	-8628.236	-8712.243	-8252.144	-8396.715	-8712.523	-8670.417	-9022.473
SO9	-7625.785	-8031.072	-7963.358	-7846.614	-7373.584	-7571.259	-7605.628	-7781.584
SO10	-8828.550	-8683.118	-9041.745	-8068.875	-8689.428	-8396.218	-8175.714	-8666.803
SO11	-6180.554	-6149.550	-6378.698	-6718.831	-6568.194	-6683.696	-6329.596	-6096.533
SO12	-6389.044	-6261.180	-6620.121	-6567.637	-6843.471	-6614.354	-6171.413	-6316.070
SO13	-5279.658	-5594.735	-5936.063	-6142.349	-6237.082	-6049.613	-5415.070	-5239.465

HDRS-H (HILT Density and Rxo Sonde, 150 degC) Calibration - Run ONE

Primary Equipment :

HILT High-Resolution Control Cartridge, 150 degC	HRCC-H	
HILT Resistivity Gamma-Ray Density Device, 150 degC	HRGD-H	3933

Auxiliary Equipment :

HRDD Backscatter Detector	Backscatter	
HRDD Long Spacing Detector	Long Spacing	28736
HRDD Short Spacing Detector	Short Spacing	
Cesium 137 Gamma-Ray Logging Source	GSR-J	5471
HILT High-Resolution Control Cartridge, 150 degC	HRCC-H	

Calibration Parameter :

Small Ring Size

Large Ring Size

HDRS Density Calibration - Inversion Results

Master (EEPROM): 16:13:32 24-Sep-2015

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
Rho Aluminum	g/cm3	Master	2.596	2.586	2.594	2.606		
Rho Magnesium	g/cm3	Master	1.686	1.676	1.690	1.696		
Pe Aluminum		Master	2.570	2.470	2.512	2.670		
Pe Magnesium		Master	2.650	2.550	2.637	2.750		

HDRS Density Calibration - Deviation Summary

Master (EEPROM): 16:13:32 24-Sep-2015

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
BS Average Deviation	%	Master	0	-0.6000	0.2062	0.6000		
BS Max Deviation	%	Master	0	-1.6000	0.4510	1.6000		
SS Average Deviation	%	Master	0	-1.0000	0.3966	1.0000		
SS Max Deviation	%	Master	0	-2.5000	0.8911	2.5000		
LS Average Deviation	%	Master	0	-1.5000	1.1853	1.5000		
LS Max Deviation	%	Master	0	-3.5000	2.7355	3.5000		

HDRS Density Calibration - Background Summary

Master (EEPROM): 16:13:32 24-Sep-2015

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
BS Window Ratio		Master	1.0000		0.7498			
BS Window Sum	1/s	Master	1		22859			
SS Window Ratio		Master	1.0000		0.4882			
SS Window Sum	1/s	Master	1		10721			
LS Window Ratio		Master	1.0000		0.3020			
LS Window Sum	1/s	Master	1		1169			

HDRS Density Calibration - Photo-multiplier High Voltages

Master (EEPROM): 16:13:32 24-Sep-2015

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
BS PM High Voltage	V	Master		1000	1654	2400		
SS PM High Voltage	V	Master		1000	1499	2400		
LS PM High Voltage	V	Master		1000	1283	2400		

HDRS Density Calibration - Crystal Quality Resolutions

Master (EEPROM): 16:13:32 24-Sep-2015

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
BS Crystal Resolution	%	Master		5.00	11.05	25.00		
SS Crystal Resolution	%	Master		5.00	9.70	20.00		
LS Crystal Resolution	%	Master		5.00	8.43	20.00		

HGNS-H (HILT Gamma-Ray and Neutron Sonde, 150 degC) Calibration - Run ONE

Primary Equipment :

HILT Gamma-Ray and Neutron Sonde, 150 degC

HGNS-H

Auxiliary Equipment :

HGNS Accelerometer, 150 degC

HACCZ-H

4269

AmBe Neutron Logging Source

NSR-F

5069

Calibration Parameter :

Water Temperature (Calibration Tank Water Temperature)

71.0

Housing Size (Thermal Housing Size)

3.37

JIG-BKG

HGNS Accelerometer EEPROM - Accelerometer EEPROM Read

Master (EEPROM): 00:00:00 15-Aug-2005

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
Accelerometer Manufacturer		Master			QAT_160			
Accelerometer Reference Temperature	degF	Master		30.2	77.0	122.0		
Accelerometer Coefficients - 0		Master	-----	-----	336.900	-----		
Accelerometer Coefficients - 1		Master	-----	-----	37.580	-----		
Accelerometer Coefficients - 2		Master	-----	-----	-0.019	-----		
Accelerometer Coefficients - 3		Master	-----	-----	0.000	-----		
Accelerometer Coefficients - 4		Master	-----	-----	2.730	-----		
Accelerometer Coefficients - 5		Master	-----	-----	0.000	-----		
Accelerometer Coefficients - 6		Master	-----	-----	0.000	-----		
Accelerometer Coefficients - 7		Master	-----	-----	0.000	-----		
Accelerometer Coefficients - 8		Master	-----	-----	299.000	-----		
Accelerometer Coefficients - 9		Master	-----	-----	1.007	-----		

HGNS Neutron Calibration - HGNS Neutron Accumulations

Master (EEPROM): 13:38:16 08-Jul-2015

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
Near Zero Measurement	1/s	Master	0	5.0	27.2	40.0		
Far Zero Measurement	1/s	Master	0	5.0	26.0	40.0		
Near Plus Measurement	1/s	Master	6031.0	4700.0	4650.0	6900.0		
Far Plus Measurement	1/s	Master	2793.0	1900.0	1984.0	2900.0		
Near Corrected Plus Measurement	1/s	Master		4700.0	4620.0	6900.0		
Far Corrected Plus Measurement	1/s	Master		1900.0	1955.0	2900.0		

Company:	Duncan Oil Inc	Schlumberger
Well:	BK 1	
Field:	Wildcat	
County:	Washington	
State:	Colorado	
Platform Express		
Combo Print		
AIT-TLD-CNL-GR		