

Company: Vecta Oil & Gas LTD

Well: Maroon 24-20

Field: Wildcat

County: Cheyenne State: Colorado

Platform Express			
Triple Combo			
Standard Resolution			
Location:			
SE/SW Sec. 20, Twn 14 S, Rng 47 W		Elev. K.B. 4253.00 ft	
SHL: 888' FSL & 1,499' FWL		G.L. 4242.00 ft	
D.F. 4252.00 ft			
Permanent Datum:		Ground Level	
Log Measured From:		Kelly Bushing	
Drilling Measured From:		Kelly Bushing	
API Serial No.		Section: 20	
05-017-07718-0000		Township: 47 W	
		Range: 47 W	

Logging Date	19-Nov-2012				
Run Number	Run-1				
Depth Driller	5445.00 ft				
Schlumberger Depth	5442.00 ft				
Bottom Log Interval	5442.00 ft				
Top Log Interval	431.00 ft				
Casing Driller Size @ Depth	8.625 in @ 434.00 ft				
Casing Schlumberger	431 ft				
Bit Size	7.875 in				
Type Fluid In Hole	Gel Chemical				
MUD	Density	Viscosity	58 s		
	Fluid Loss	PH	9		
	Source of Sample				
RM @ Meas Temp	2.59 ohm.m @ 51.6 degF				
RMF @ Meas Temp	1.94 ohm.m @ 51.6 degF				
RMC @ Meas Temp	3.24 ohm.m @ 51.6 degF				
Source RMF	RMC	Calculated			
RM @ BHT	RMF @ BHT	0.81 @ 180	0.61 @ 180		
Max Recorded Temperatures					
Circulation Stopped	Time	14:00:00			
Logger on Bottom	Time				
Unit Number	Location:	2135	Fort Morgan, CO		
Recorded By	Stan Thompson				
Witnessed By	Larry Schneider & Ryan				

Disclaimer

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

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Well Sketch

Driller Depth
0.00 ft

434.00 ft

Casing 8.625in
24lbm/ft

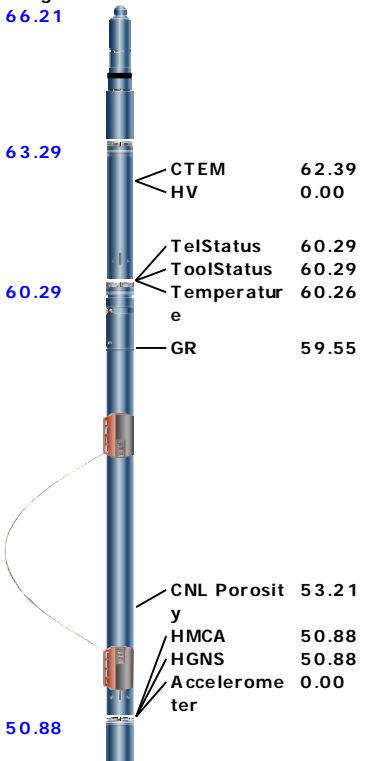
5445.00 ft

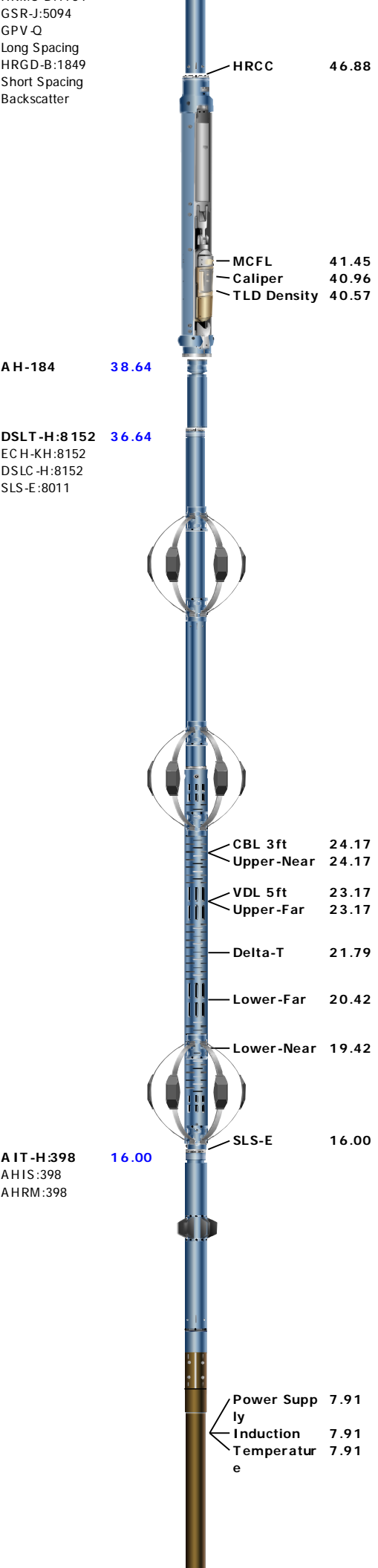
Open Hole 7.875in

Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	7.875					
Top Driller (ft)	434					
Top Logger (ft)	434					
Bottom Driller (ft)	5445					
Bottom Logger (ft)	5442					
Casing						
Size (in)	8.625					
Weight (lbm/ft)	24					
Inner Diameter (in)	8.099					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	434					
Bottom Logger (ft)	431					

Remarks and Equipment Summary

Run-1: Toolstring				Run-1: Remarks	
<div><div>Equip name</div><div>LEH-QT</div><div>LEH-QT</div></div> <div><div>Length</div><div>66.21</div></div> <div><div>MP name</div><div></div></div> <div><div>Offset</div><div></div></div> <div></div>	Toolstring run as per tool sketch.				
	High-res data acquisition from TD-3,900'				
	Matrix was set to Limestone: 2.71 g/cc				
	Crew: Ed Ponce & Matt Rocha				
<div><div>DTC-H:9236</div><div>ECH-KC:10316</div><div>DTC-H:9236</div></div> <div><div>Length</div><div>63.29</div></div> <div><div>MP name</div><div>CTEM</div></div> <div><div>Offset</div><div>62.39</div></div> <div><div>MP name</div><div>HV</div></div> <div><div>Offset</div><div>0.00</div></div> <div><div>HGNS-B:1927</div><div>HGNH:3878</div><div>NPV-N</div><div>NSR-F:5069</div><div>HACCZ-B:749</div><div>HMCA-B</div><div>HGNS-B:1927</div></div> <div><div>Length</div><div>60.29</div></div> <div><div>MP name</div><div>TelStatus</div></div> <div><div>Offset</div><div>60.29</div></div> <div><div>MP name</div><div>ToolStatus</div></div> <div><div>Offset</div><div>60.29</div></div> <div><div>MP name</div><div>Temperature</div></div> <div><div>Offset</div><div>60.26</div></div> <div><div>MP name</div><div>GR</div></div> <div><div>Offset</div><div>59.55</div></div> <div><div>HDRS-B:1754</div><div>ECH-MEB:1922</div><div>HRCC-B:791</div><div>HRMS-B:1754</div></div> <div><div>Length</div><div>50.88</div></div> <div><div>MP name</div><div>CNL Porosity</div></div> <div><div>Offset</div><div>53.21</div></div> <div><div>MP name</div><div>HMCA</div></div> <div><div>Offset</div><div>50.88</div></div> <div><div>MP name</div><div>HGNS</div></div> <div><div>Offset</div><div>50.88</div></div> <div><div>MP name</div><div>Accelerometer</div></div> <div><div>Offset</div><div>0.00</div></div>					





SP 0.08
Mud Resistivity 0.00
Head Tension
TOOL_ZERO

Lengths are in ft

Maximum Outer Diameter = 5.000 in

Line: Sensor Location, Value: Gating Offset

All measurements are relative to TOOL_ZERO

Depth Summary

Depth Control Parameters	Run-1		
Conveyance Type	Wireline		
Log Sequence	1		
Depth Remark Parameters	Run-1		
Depth Remark 1	All Schlumberger depth procedures followed.		
Depth Remark 2	IDW used as primary depth device, Z-chart used as secondary depth reference.		
Depth Measuring Device	Run-1		
Type	IDW-JA		
Serial Number	6515A		
Calibration Date	23-Oct-2012		
Calibrator Serial Number	1324		
Calibration Cable Type	7-46P LXS		
Wheel Correction 1	-7		
Wheel Correction 2	-5		
Tension Device	Run-1		
Type	CMTD-B/A		
Serial Number	1919		
Calibration Date	10-Nov-2012		
Calibrator Serial Number	78135		
Calibration Points	10		
Calibration RMS	6		
Calibration Peak Error	11		
Logging Cable	Run-1		
Type	7-46P-XS		
Serial Number	U7110		
Logging Cable Length (ft)	23450.00		

Composite 1

5" Triple Combo

Integration Summary

Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
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Software Version

Acquisition System	Version
MaxWell	3.1.9755.0
Application Patch	SP-20120723-3.1.9755.1112
	EXP APL-MASTAXIS-3.1.9755.1221

Computation	Description	Version	
HENVIR	Computation Ensemble for the HGNS Neutron environmental corrections	3.1.9755.0	
DepthCorrection	DepthCorrection	3.1.9755.0	
Tool Elements	Description	Software Version	Firmware Version
HRGD-B	HILT Resistivity Gamma-Ray Density Device, 125 degC	3.1.9755.0	3.0
AHIS	Array Induction Sonde - H	3.1.9755.1112	
HGNS-B	HILT Gamma-Ray and Neutron Sonde, 125 degC	3.1.9755.0	2.0
HRCC-B	HILT High-Resolution Control Cartridge, 125 degC	3.1.9755.0	2.0

Composite Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Depth Shift	Include Parallel Data
Run-1	Log[3]:Up	Up	2330.23 ft	5462.23 ft	19-Nov-2012 9:11:52 PM	19-Nov-2012 10:30:49 PM	0.00 ft	
Run-1	Log[4]:Up	Up	323.00 ft	2404.61 ft	19-Nov-2012 11:00:30 PM	19-Nov-2012 11:31:37 PM	0.00 ft	

All depths are referenced to toolstring zero

Log

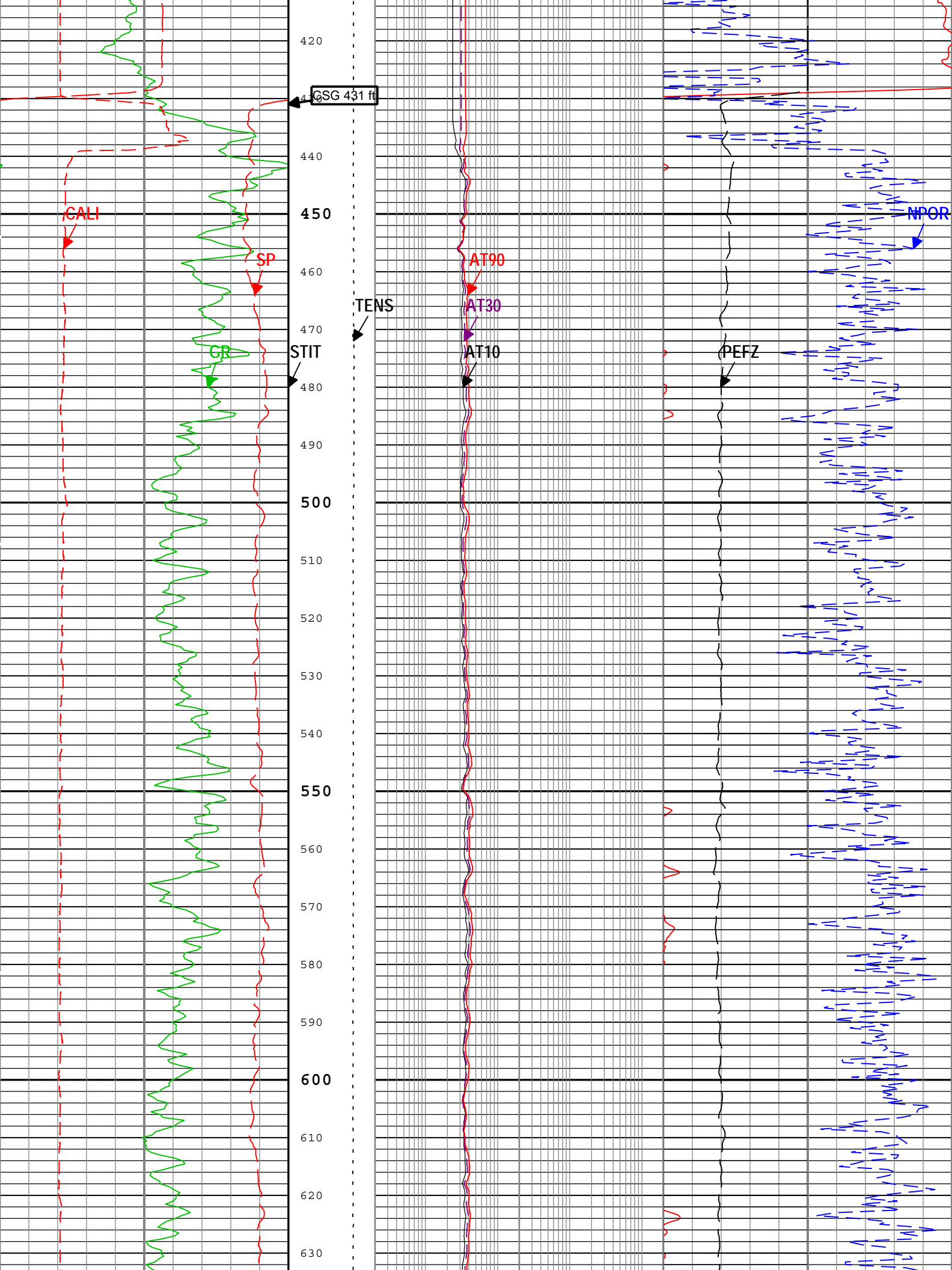
Composite 1

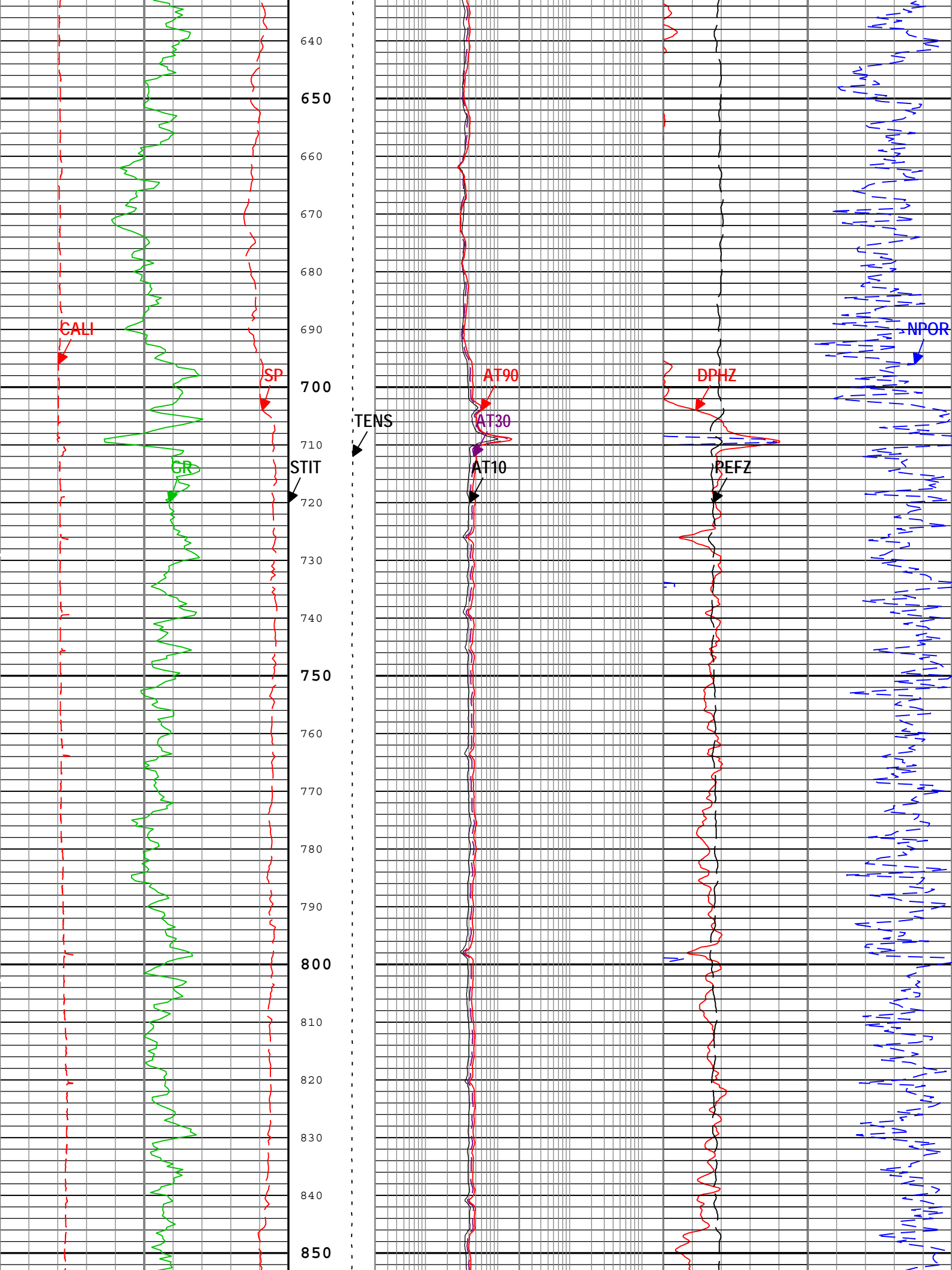
Description: HGNS standard resolution porosities for Platform Express Format: Log (EMD 5in Triple Combo) Index Scale: 5 in per 100 ft Index Unit: ft
Index Type: Measured Depth Creation Date: 19-Nov-2012 23:41:06

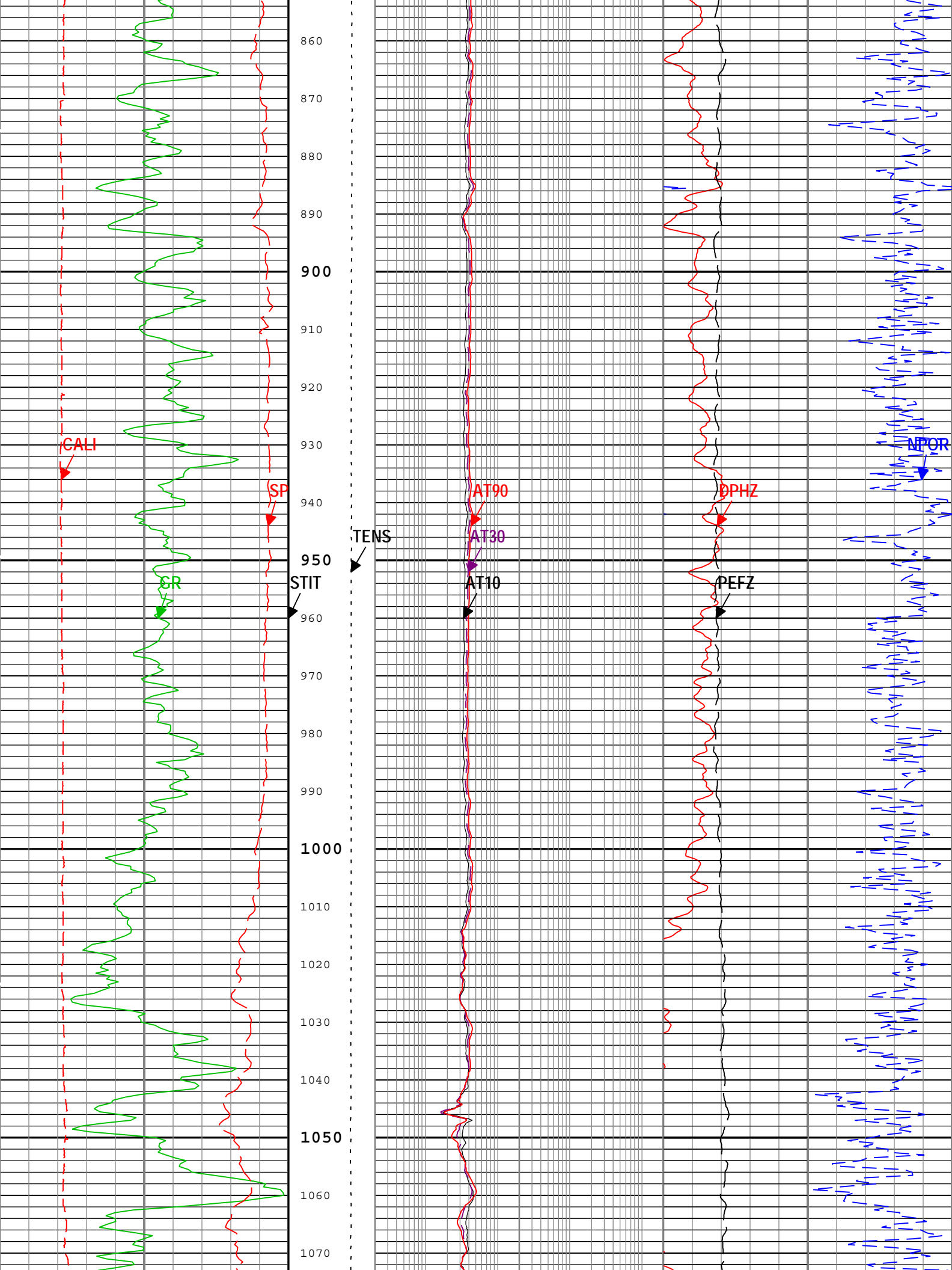
Channel	Source	Sampling
AT10	AIT_SpliceGroup[1]:AHIS[1]:AHIS[1]	3in
AT30	AIT_SpliceGroup[1]:AHIS[1]:AHIS[1]	3in
AT90	AIT_SpliceGroup[1]:AHIS[1]:AHIS[1]	3in
CALI	HDRS[1]:HRCC-B[1]:HRCC-B[1]	1in
DPHZ	HDRS[1]:HRMS-B[1]:HRGD-B[1]	2in
GR	HGNS[1]:HGNS-B[1]:HGNS-B[1]	6in
NPOR	HGNS[1]:HGNS-B[1]:HGNS-B[1]	6in
PEFZ	HDRS[1]:HRMS-B[1]:HRGD-B[1]	2in
SP	AIT_SpliceGroup[1]:AHIS[1]:AHIS[1]	6in
STIT	DepthCorrection	6in
TENS	WLWorkflow	6in
TIME_1900	WLWorkflow	0.1in

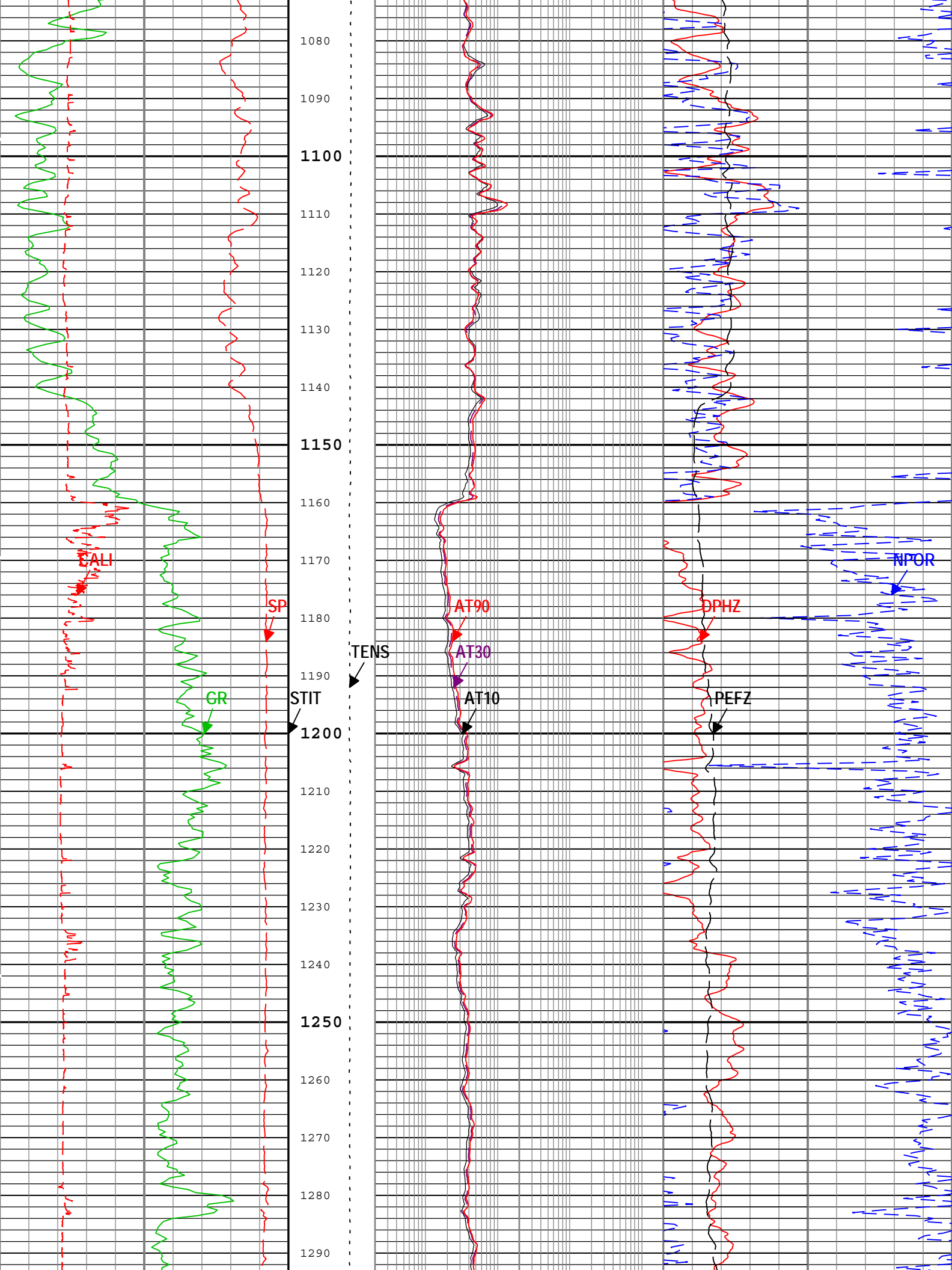
TIME_1900 - Time Marked every 60.00 (s)

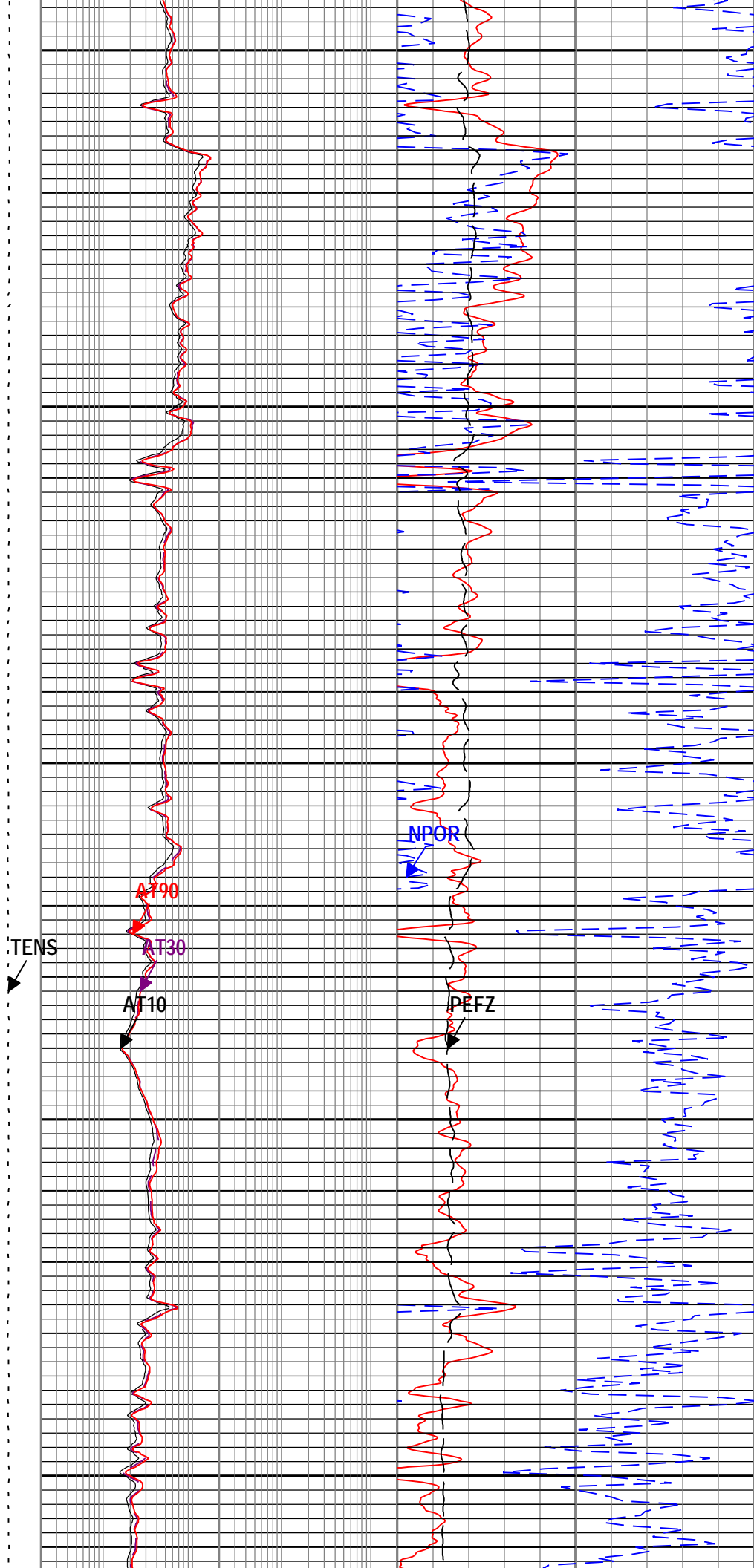
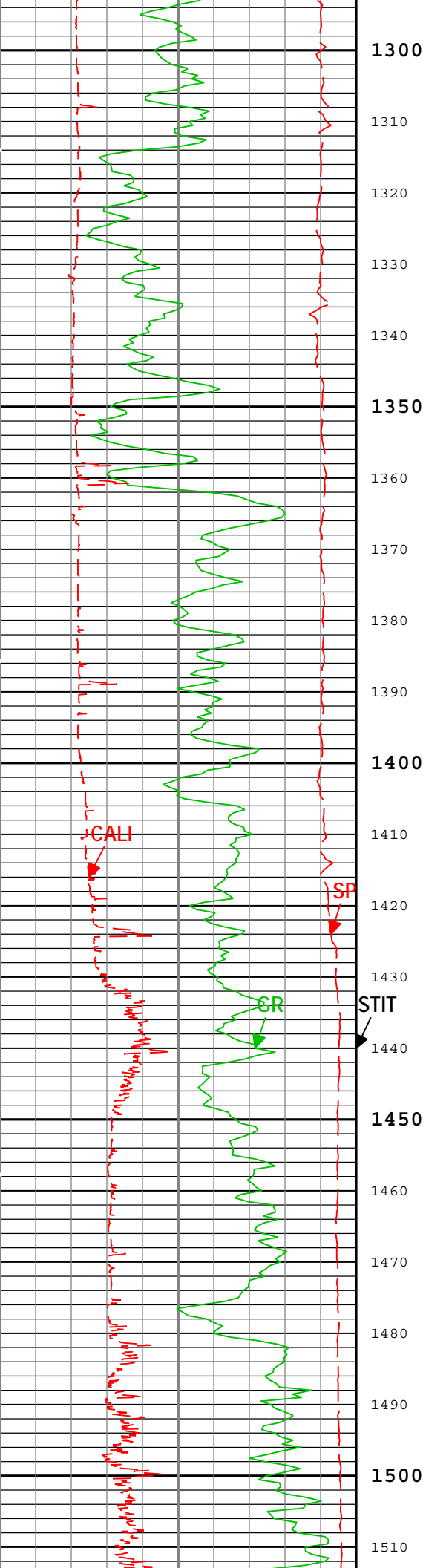
			Standard Resolution Formation Photoelectric Factor (PEFZ) HDRS[1]		0 10	
Gamma Ray Back up			Array Induction Two Foot Resistivity A10 (AT10) AIT_SpliceGroup[1]		Gas Effect	
Gamma Ray (GR) HGNS[1]			0.2 ohm.m 2000		NPOR Backup	
0 gAPI 200			Array Induction Two Foot Resistivity A30 (AT30) AIT_SpliceGroup[1]		Standard Resolution Density Porosity (DPHZ) HDRS[1]	
Spontaneous Potential (SP) AIT_SpliceGroup[1]			0.2 ohm.m 2000		0.3 ft3/ft3 -0.7	
0 mV 200			Array Induction Two Foot Resistivity A90 (AT90) AIT_SpliceGroup[1]		Enhanced Thermal Neutron Porosity in Selected Lithology (NPOR) HGNS[1]	
Caliper (CALI) HDRS[1]			0.2 ohm.m 2000		0.3 ft3/ft3 -0.7	
6 in 16						
Stuck Tool Indicator, Total (STIT)						
0 ft 50						
Cable Tension (TENS)						
6000 lbf 0						
410						

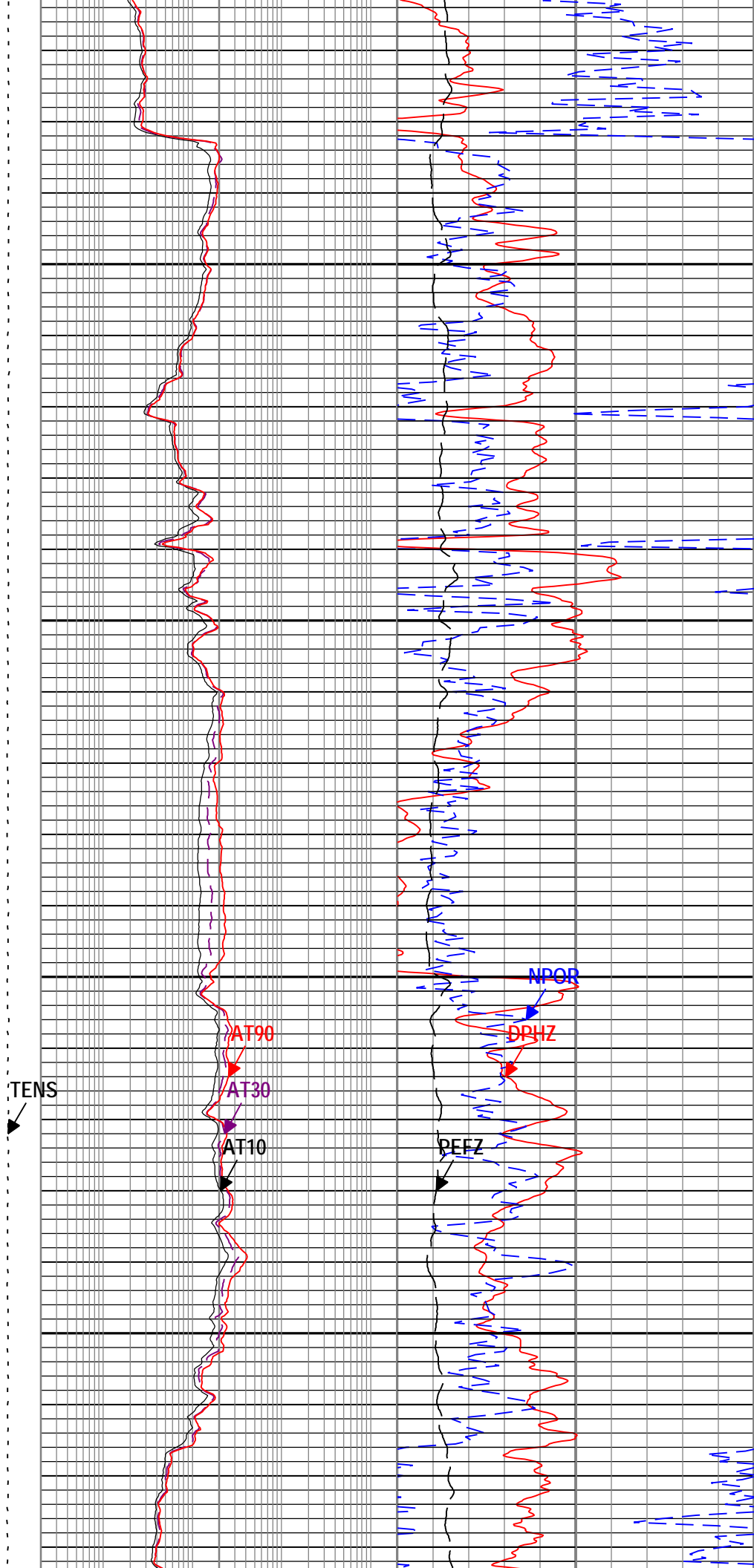
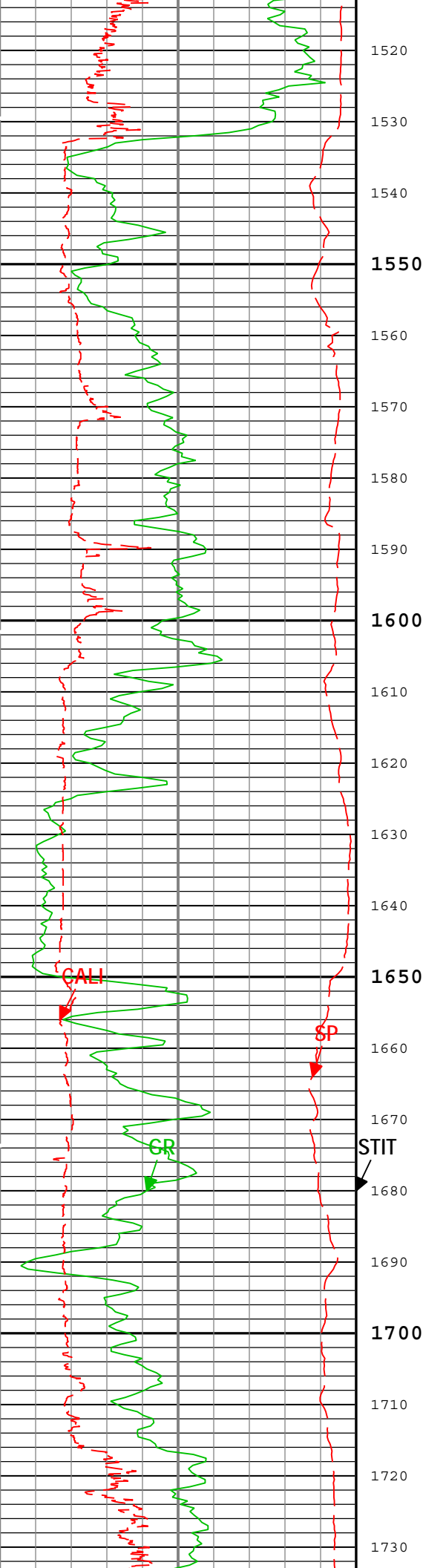


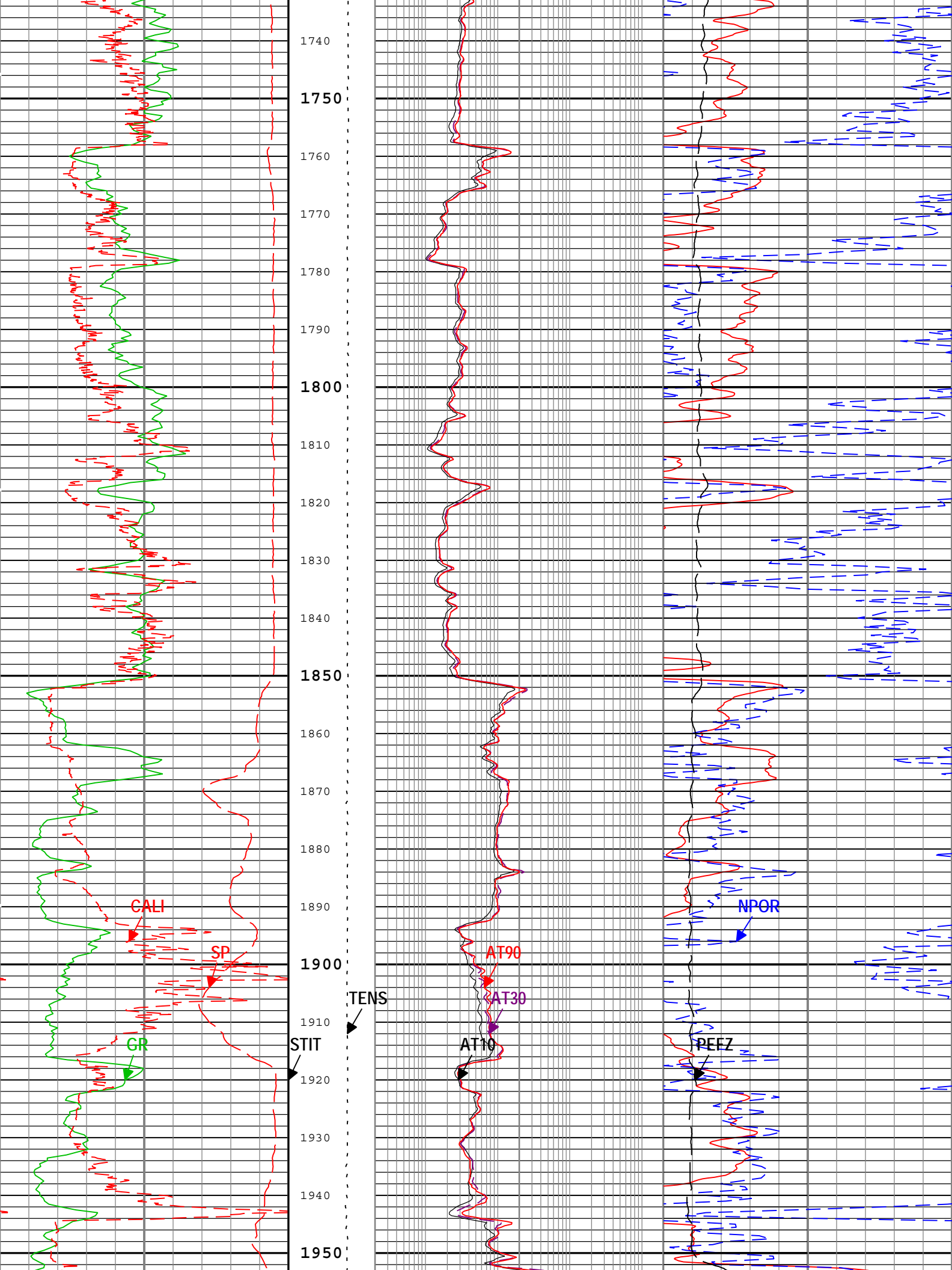


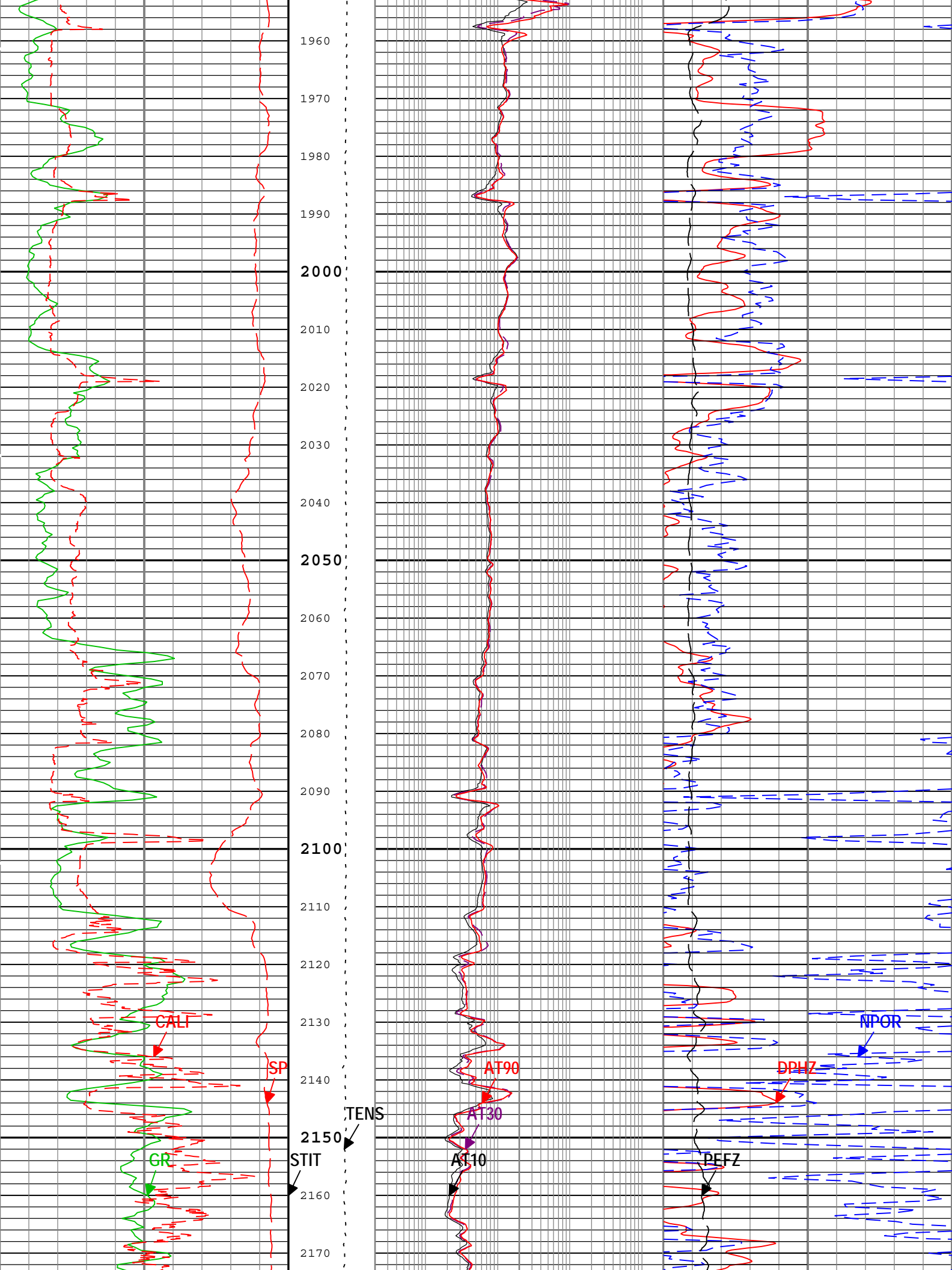


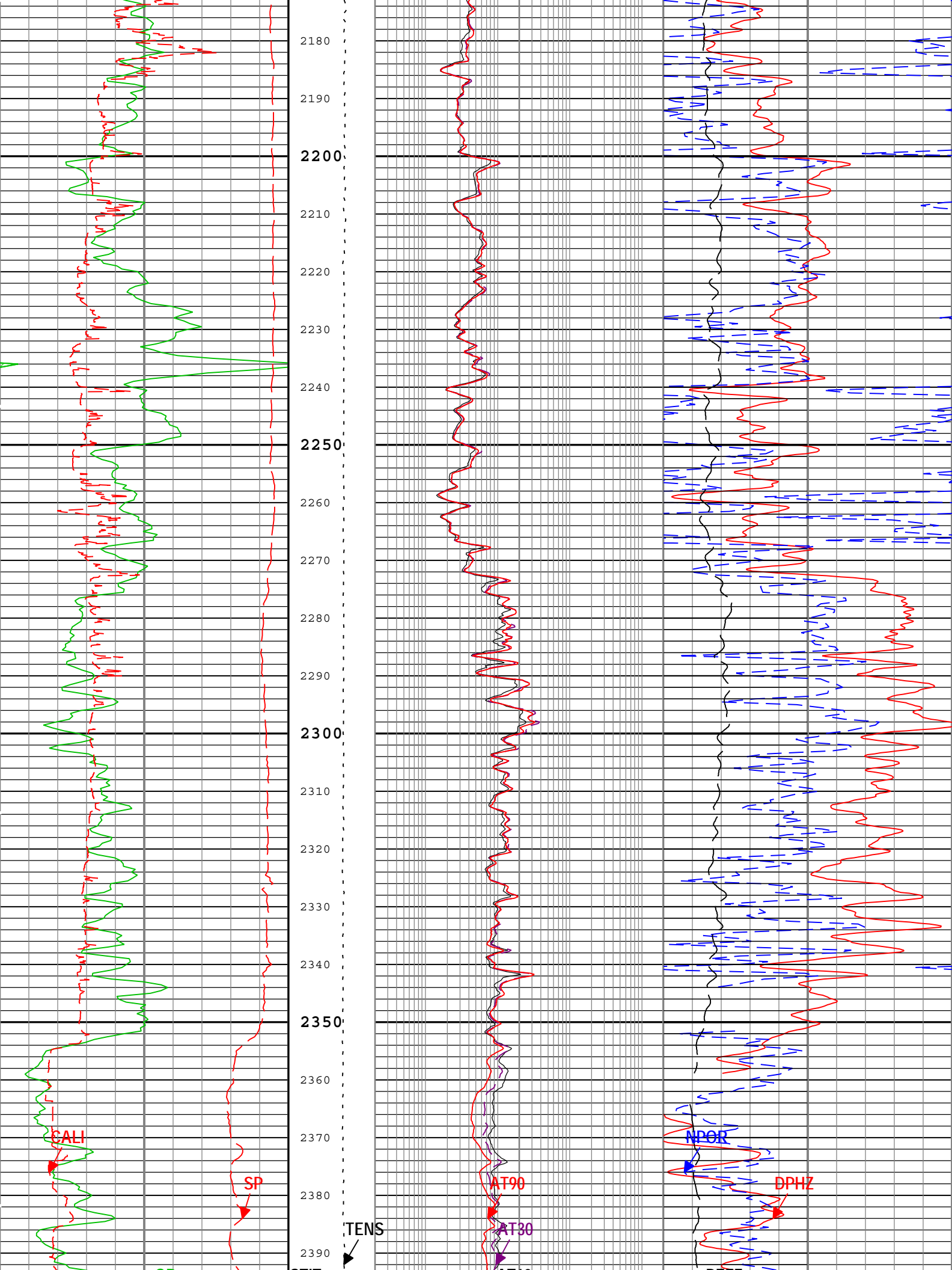


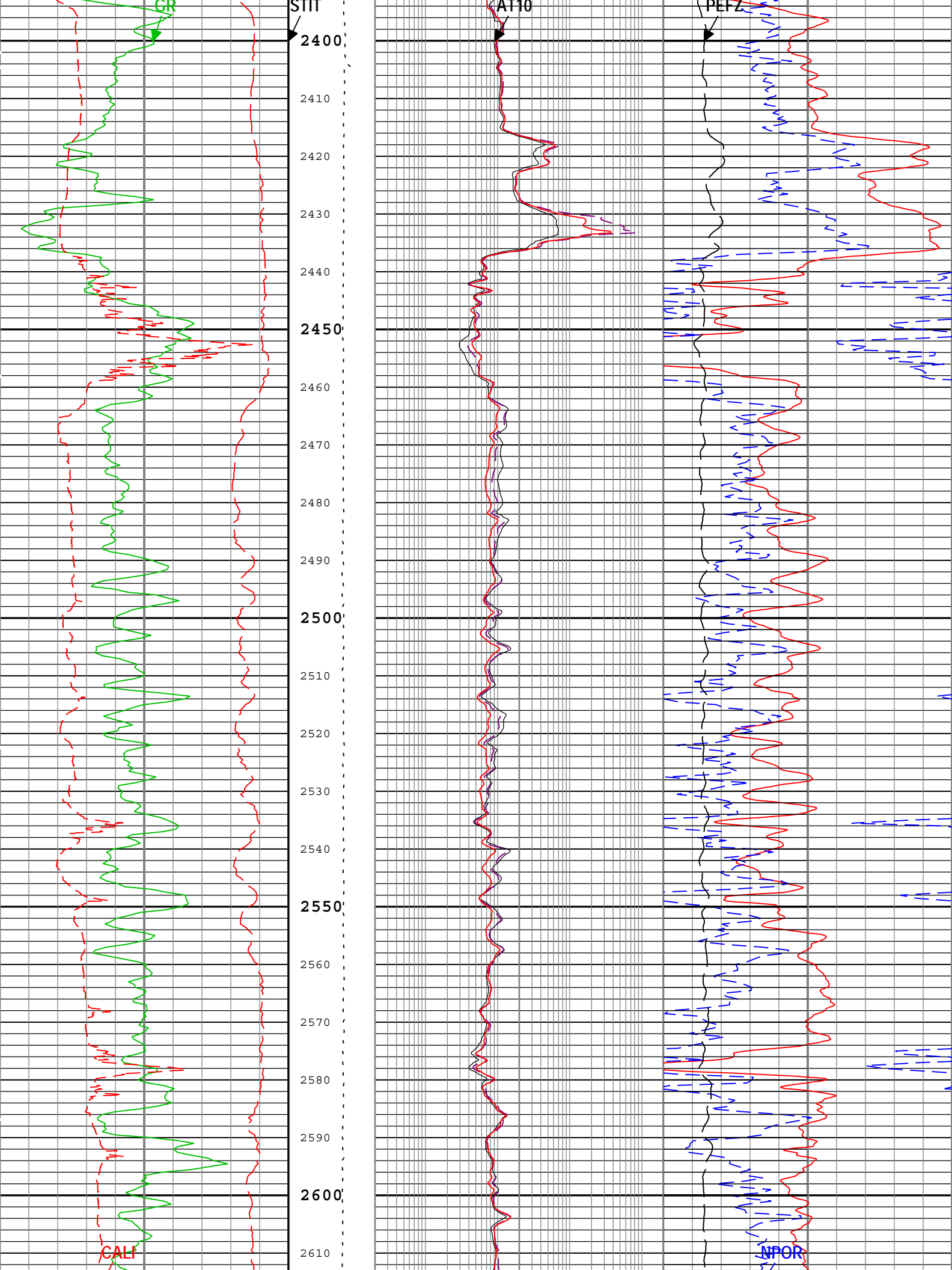


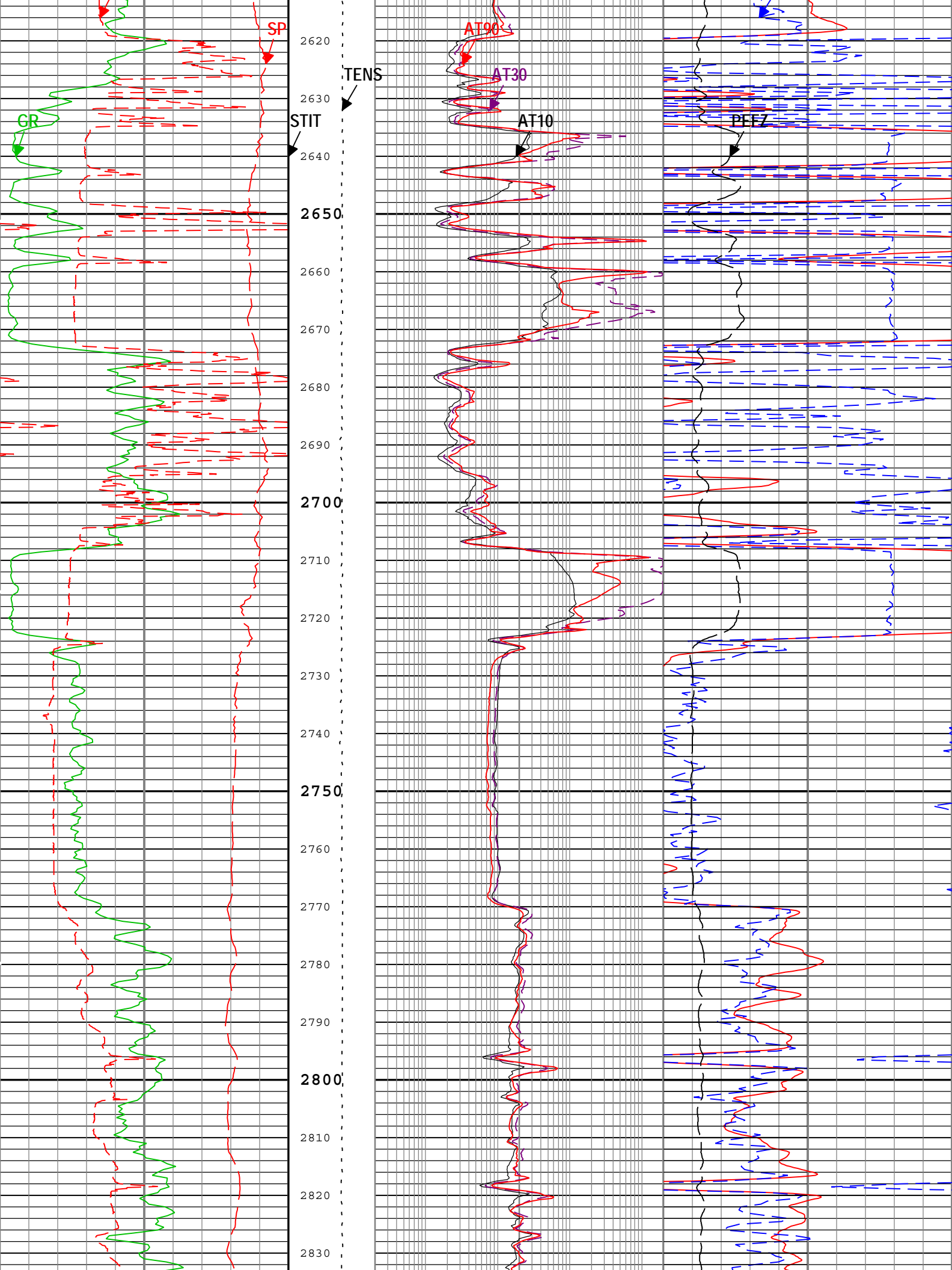


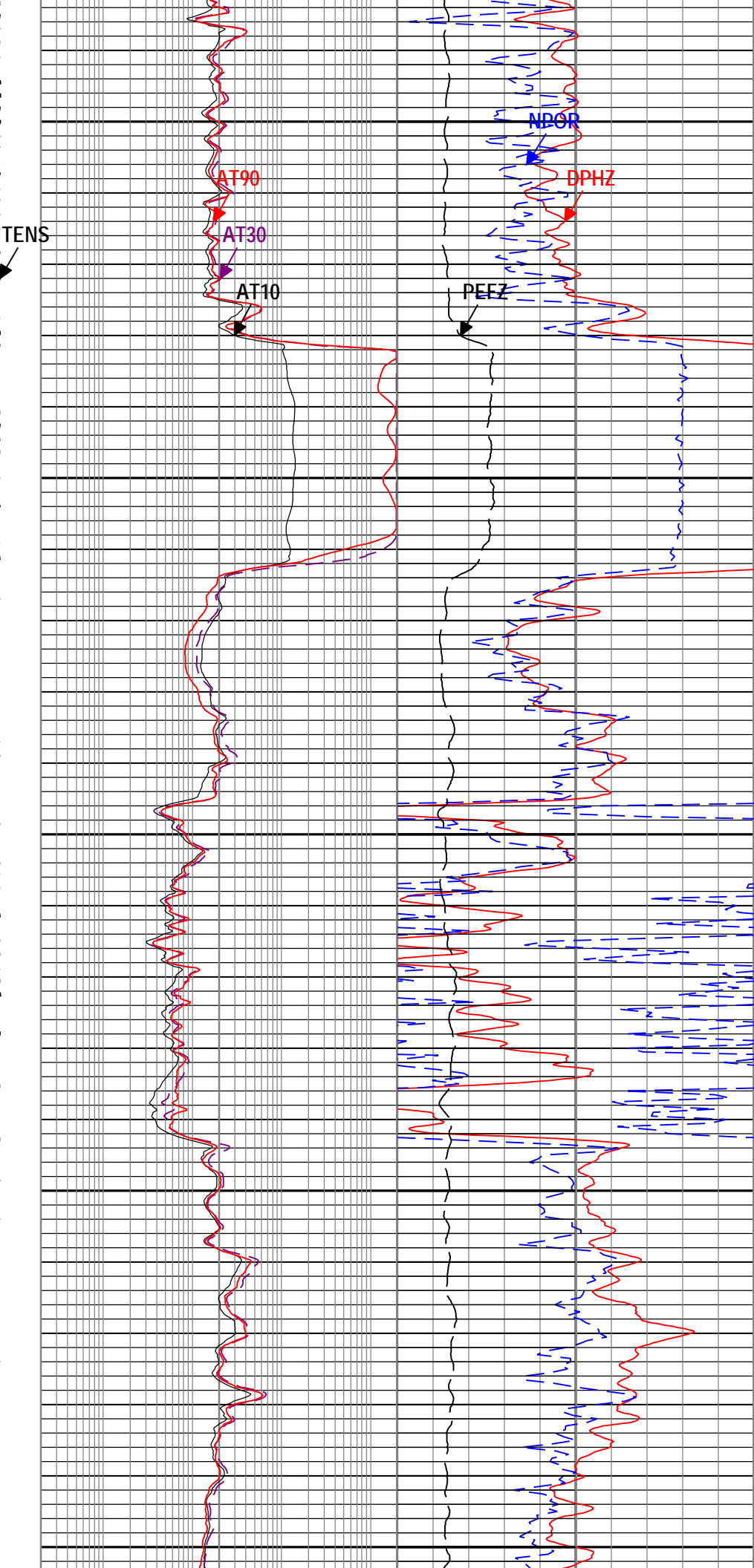
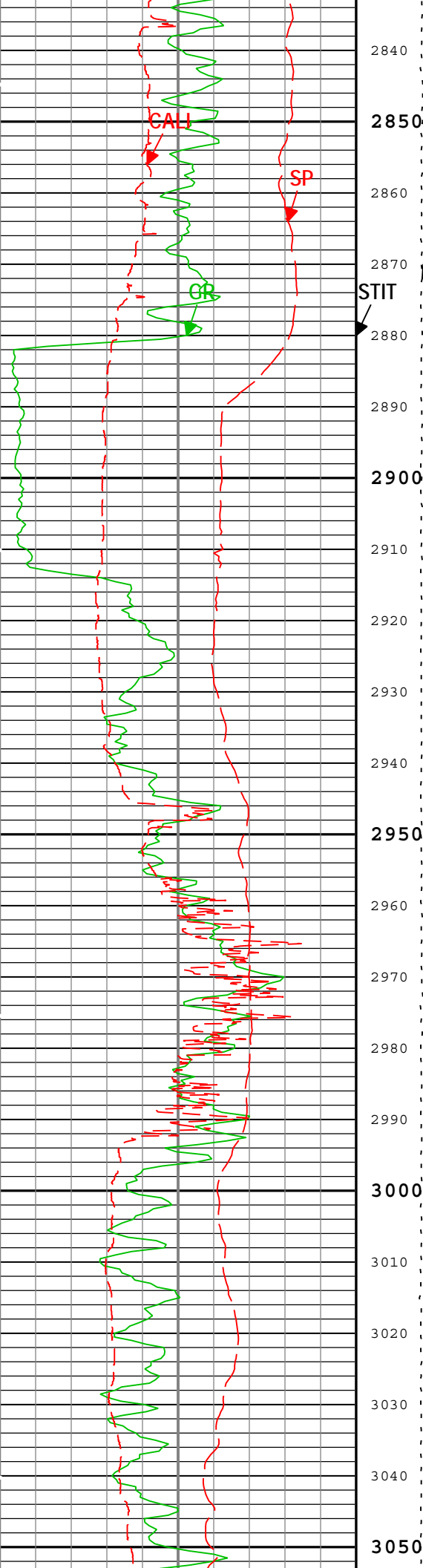


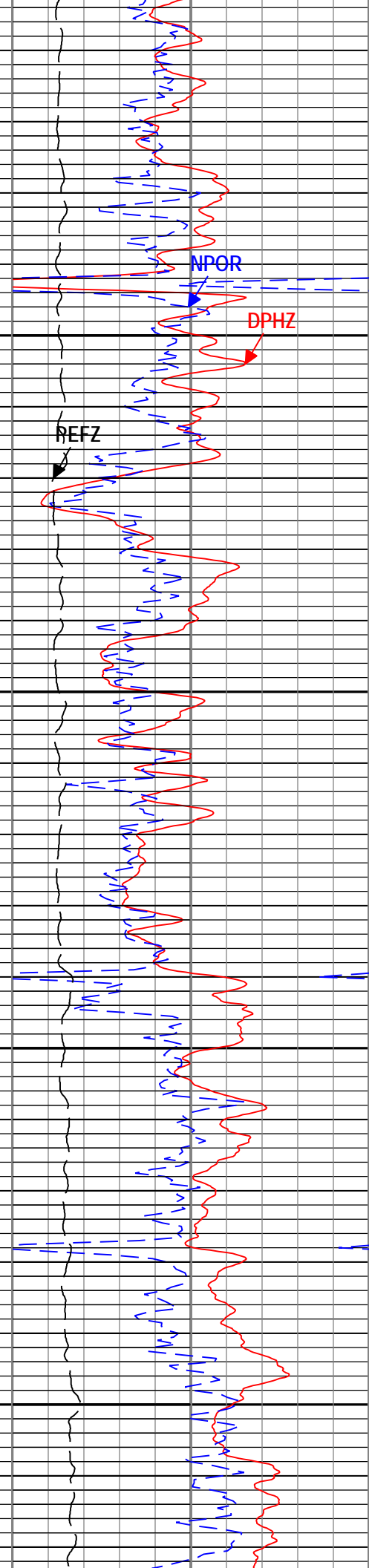
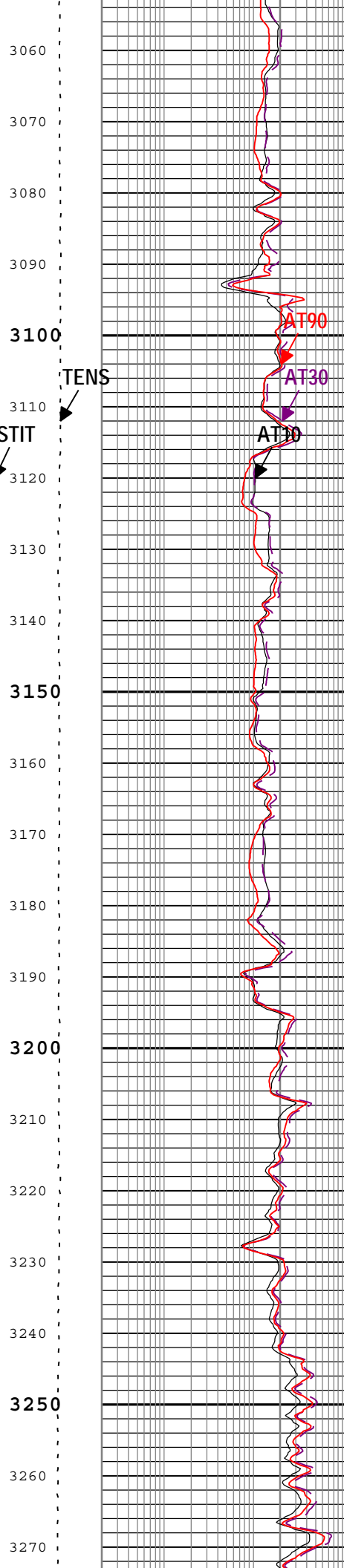
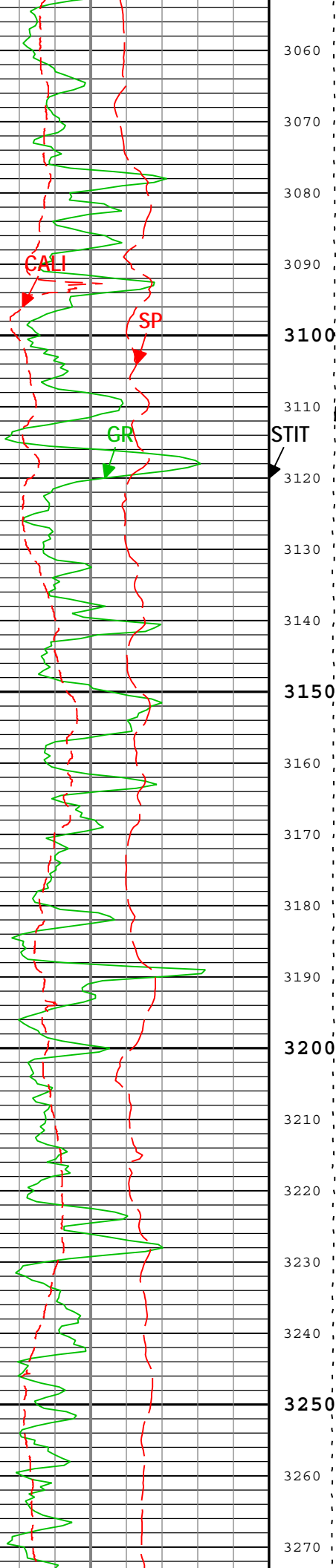


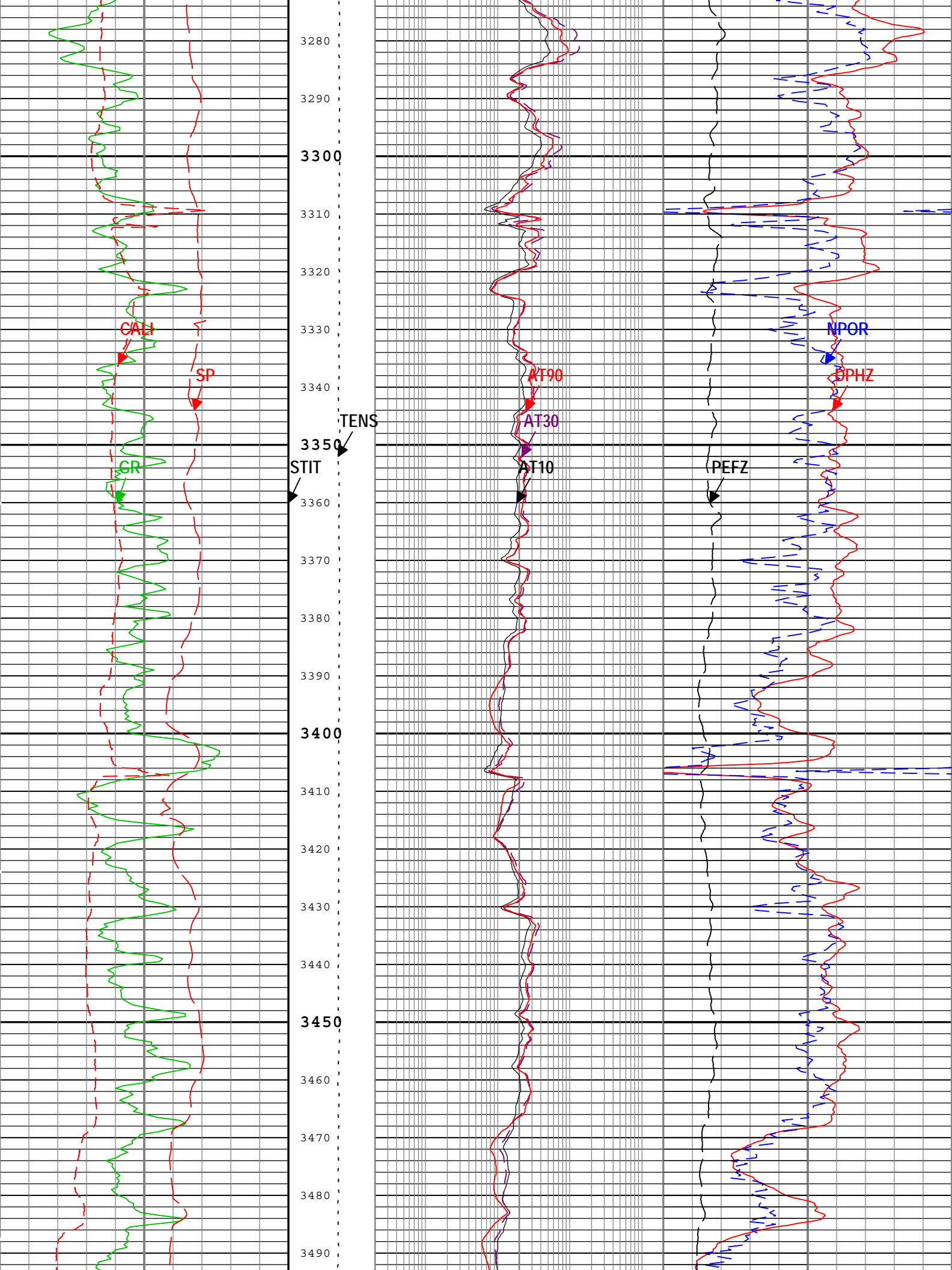


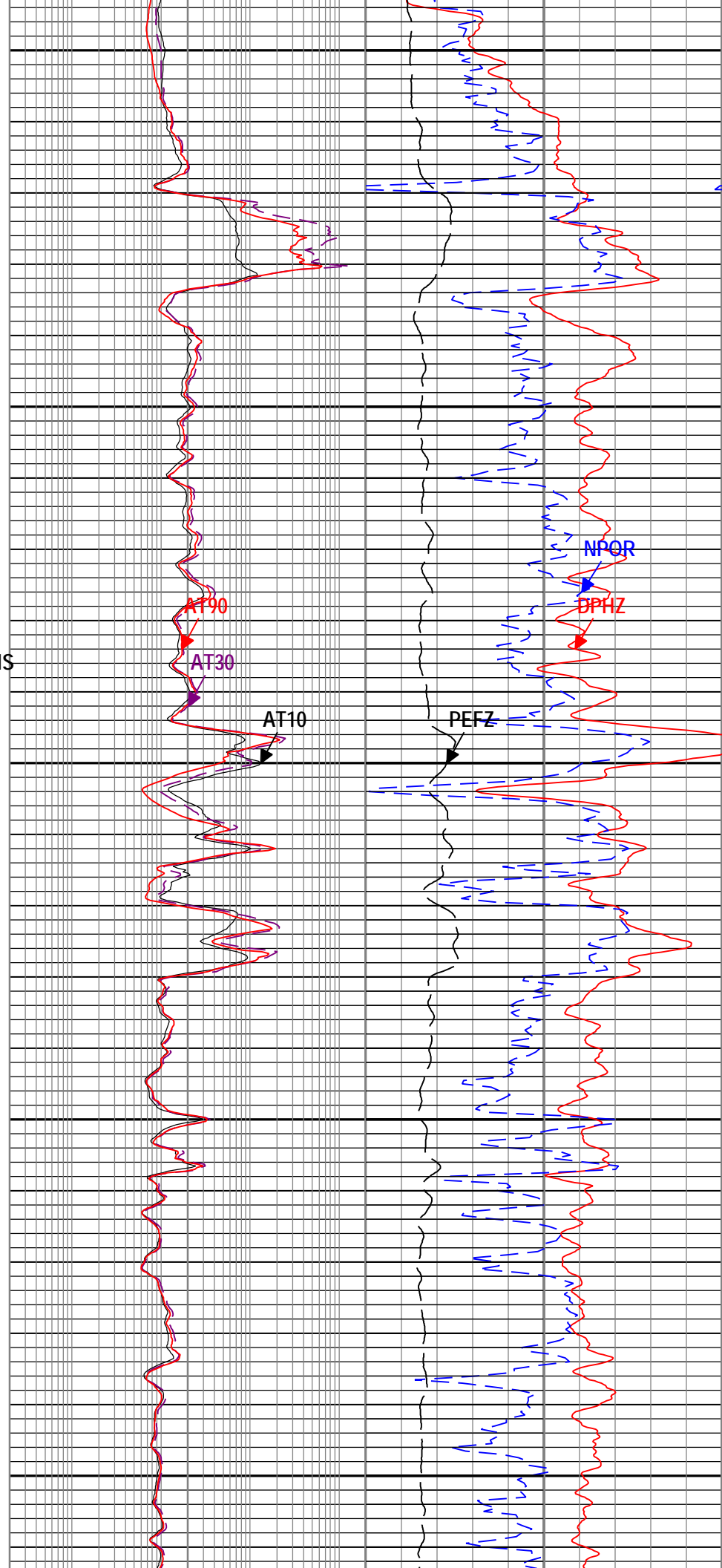
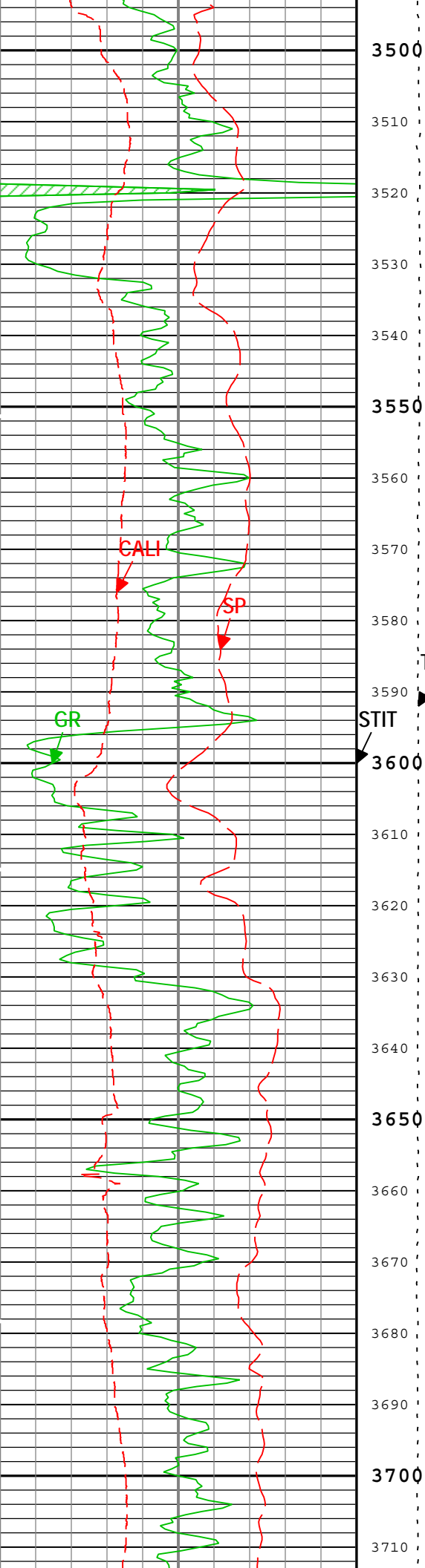


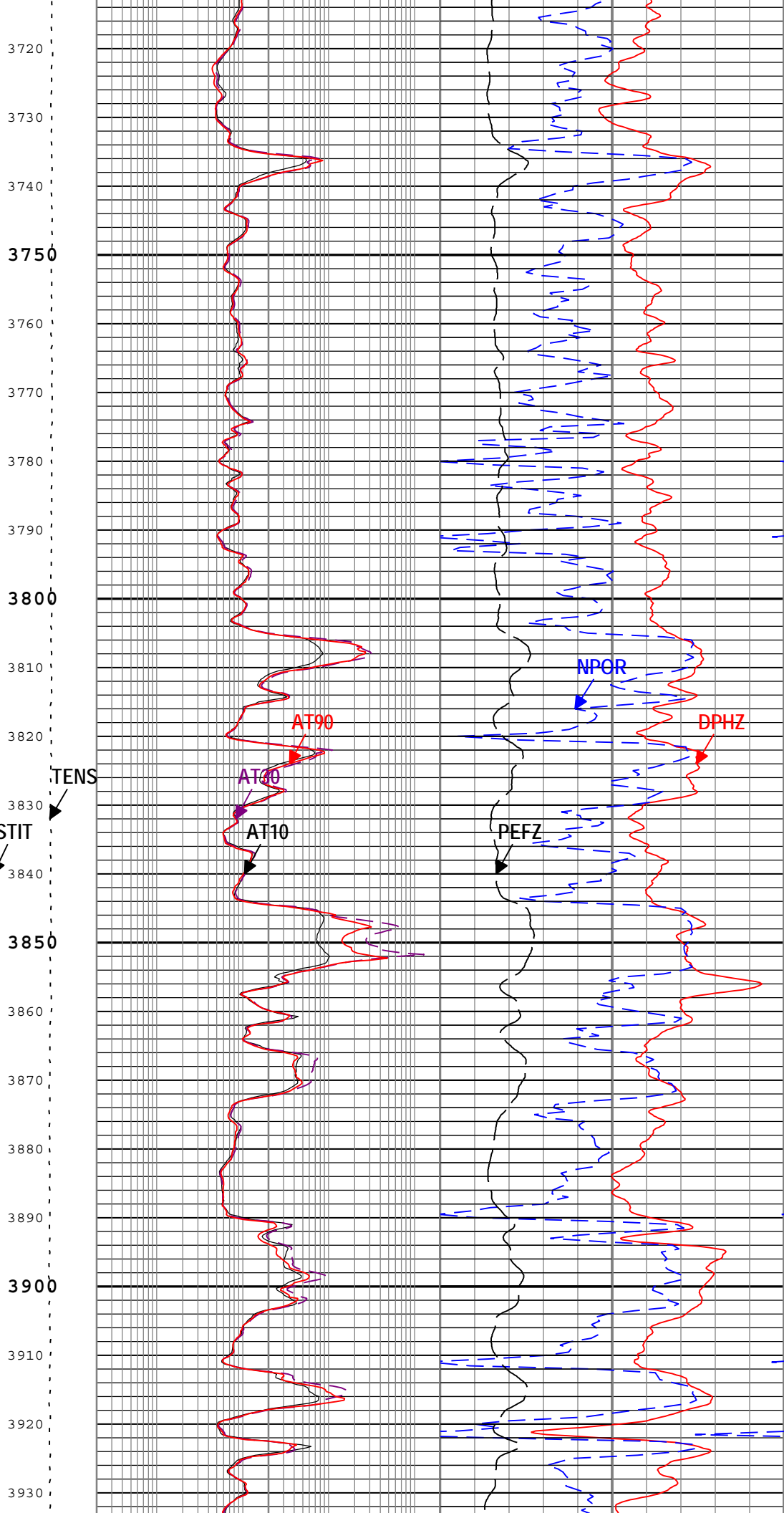
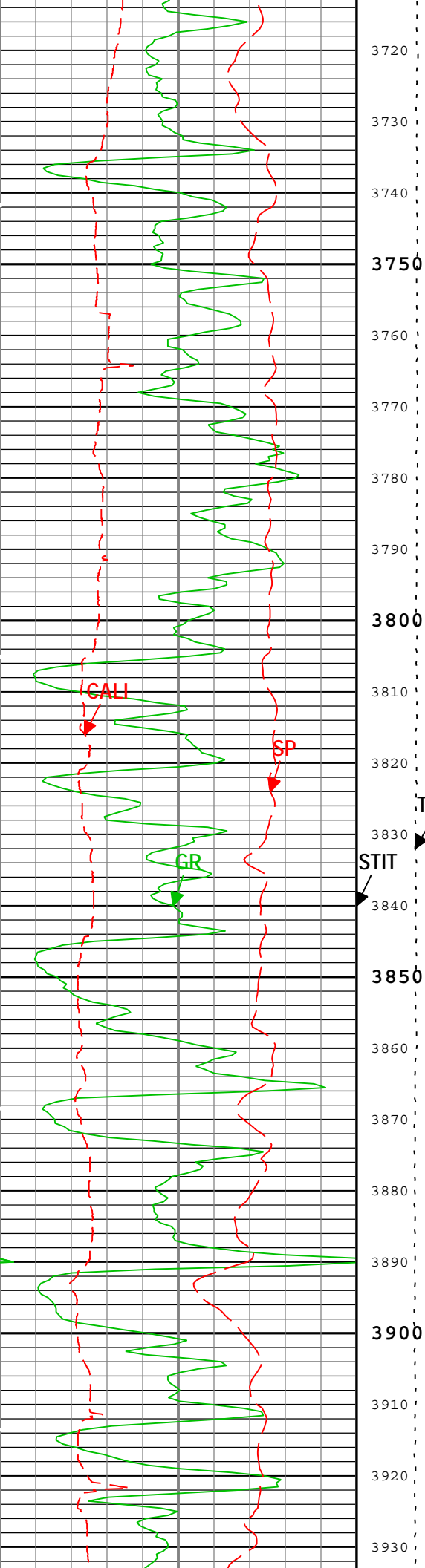


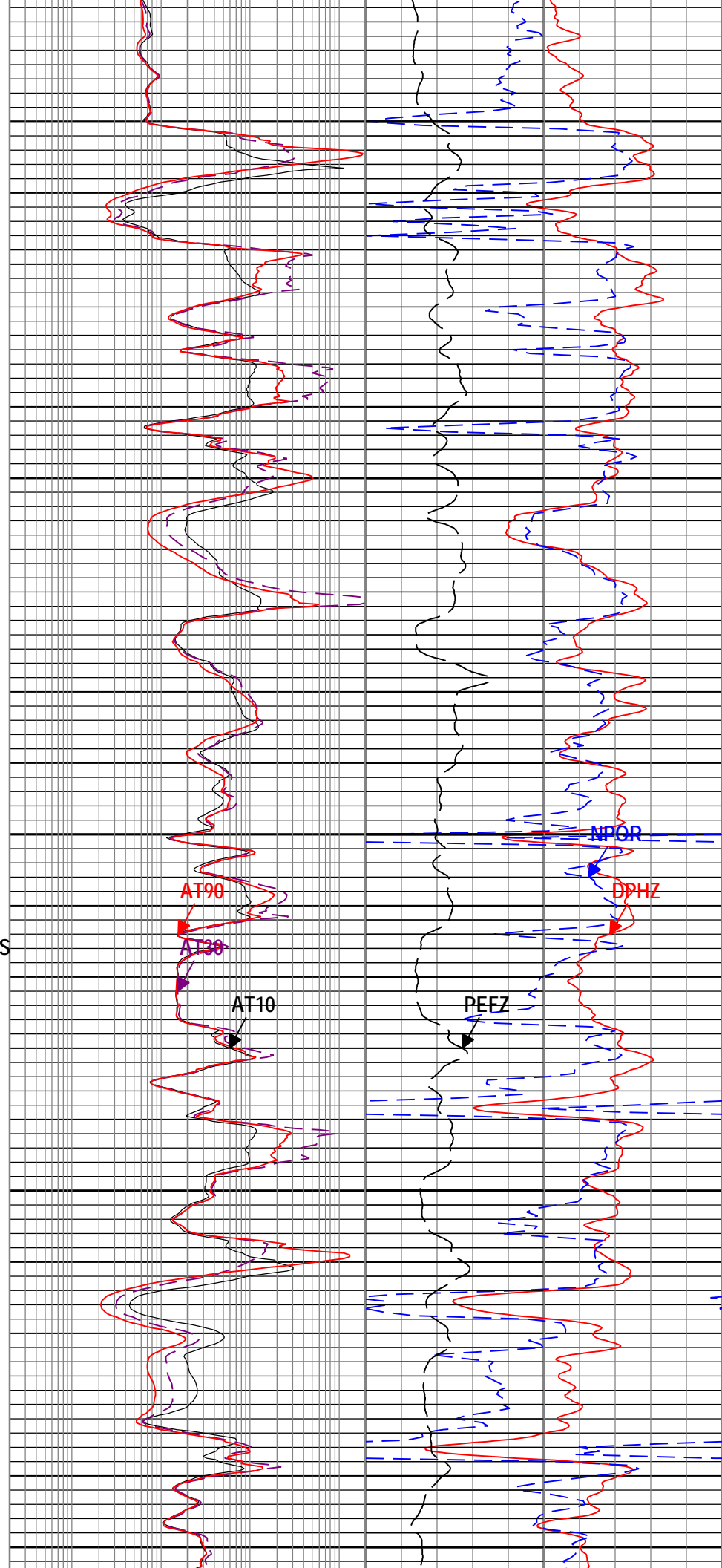
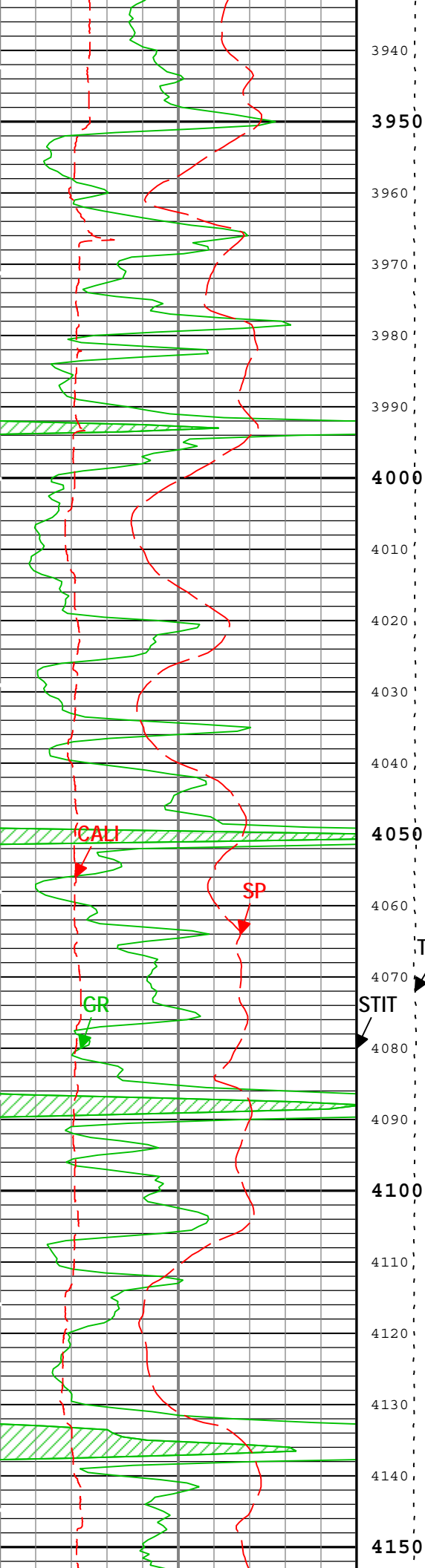


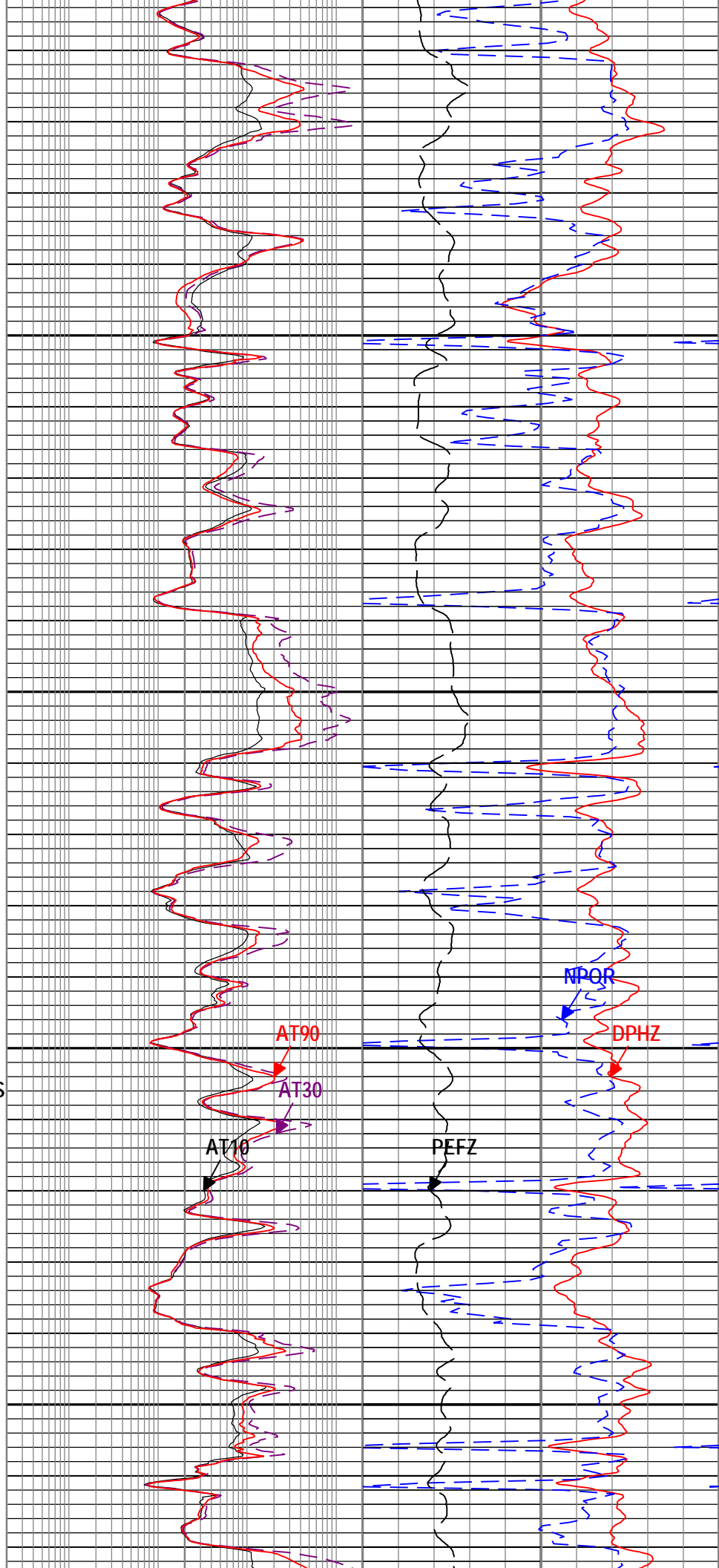
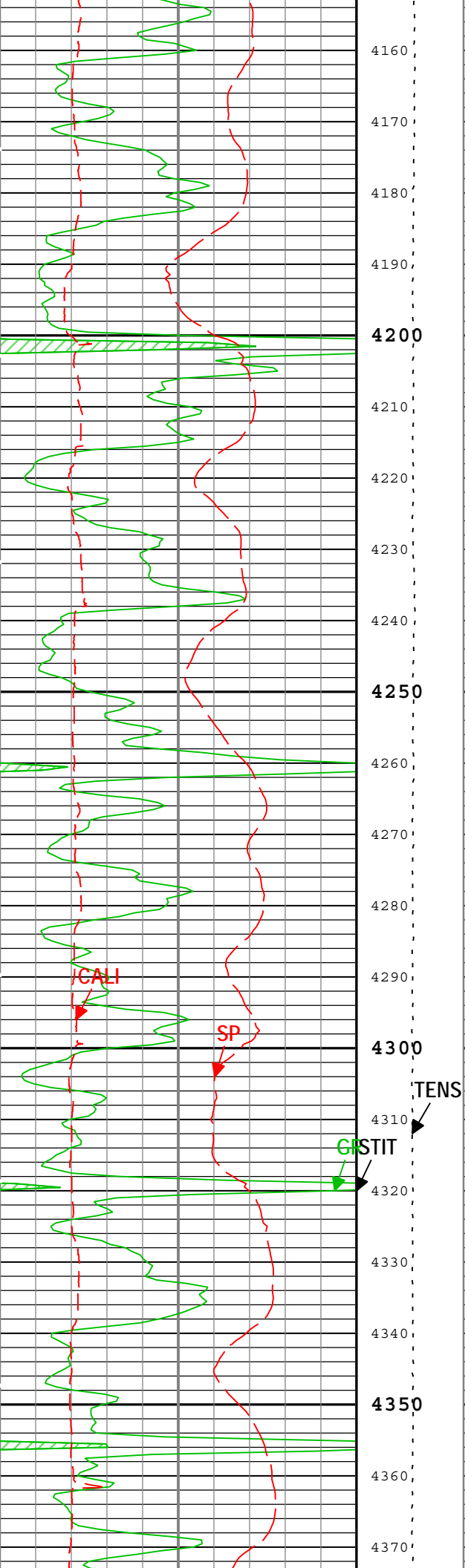


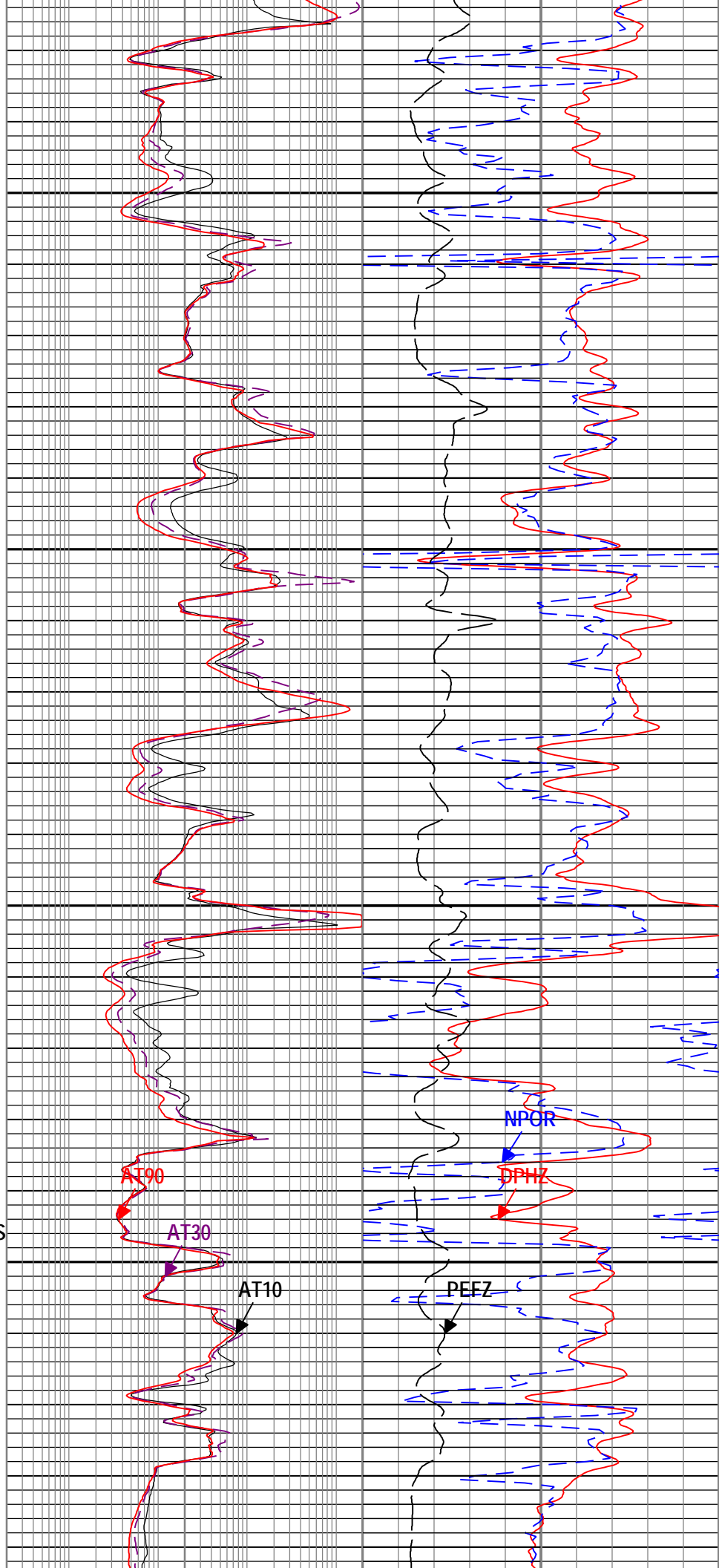
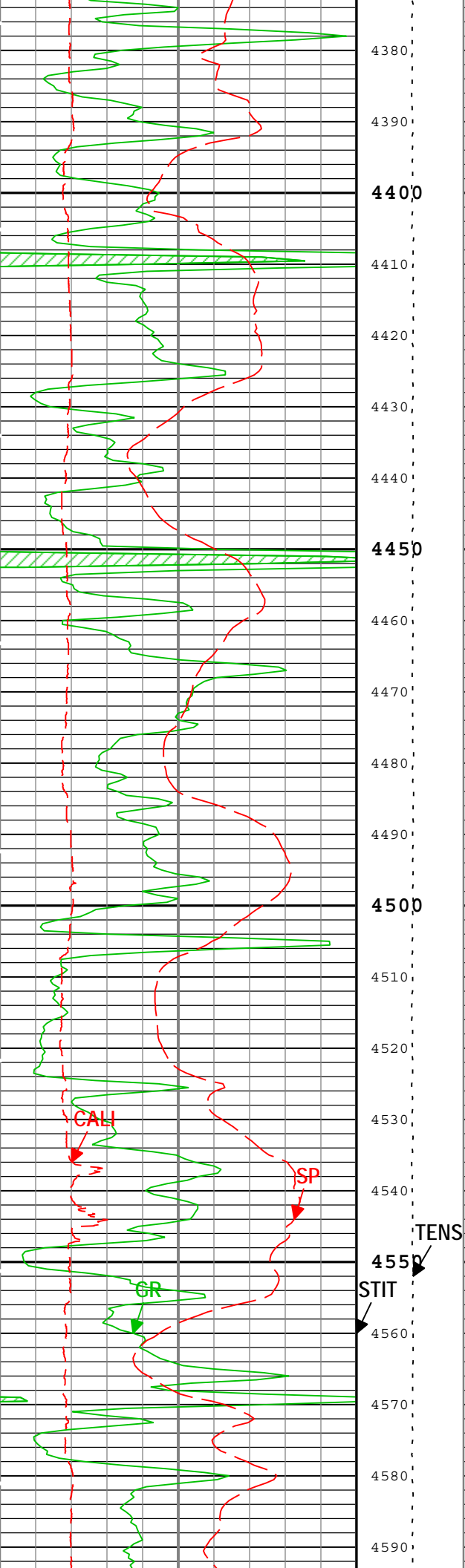


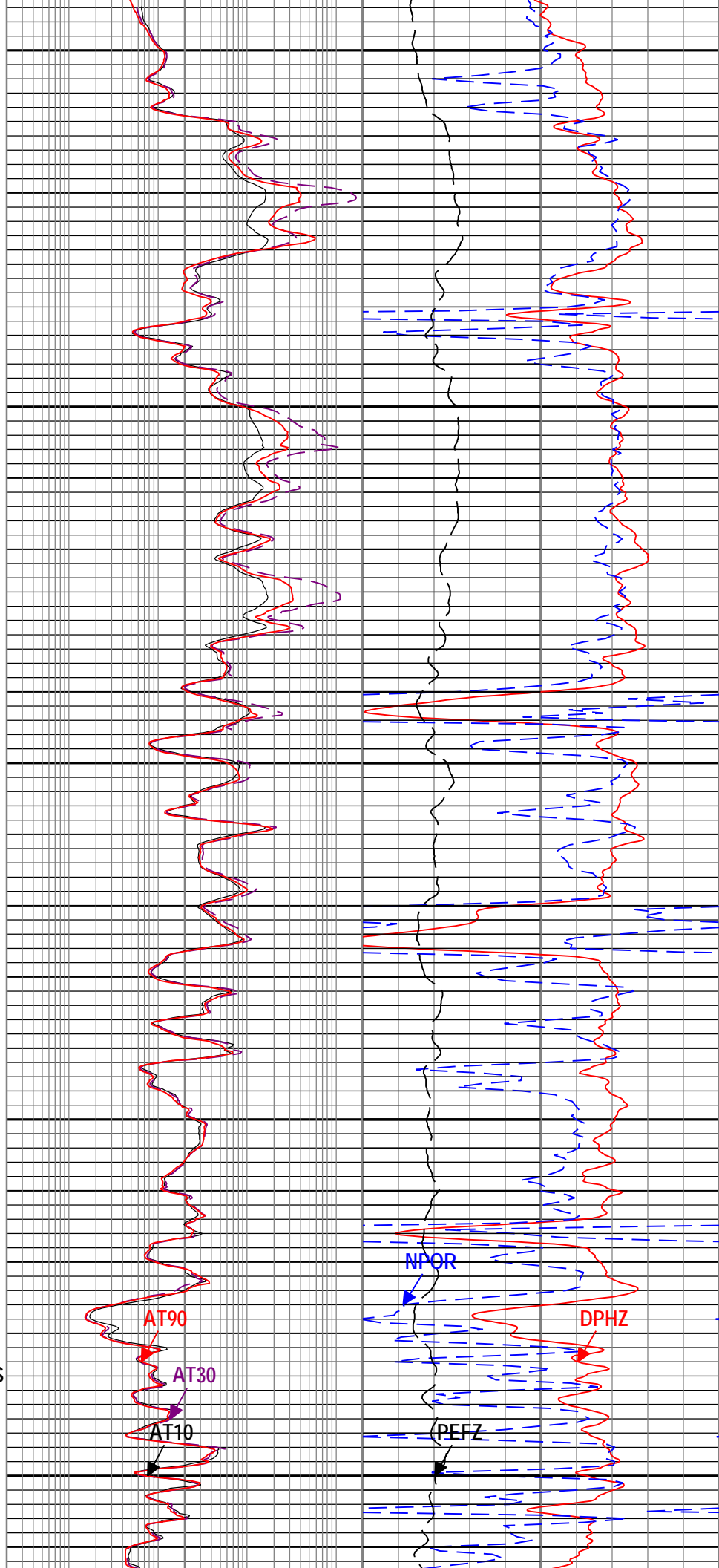
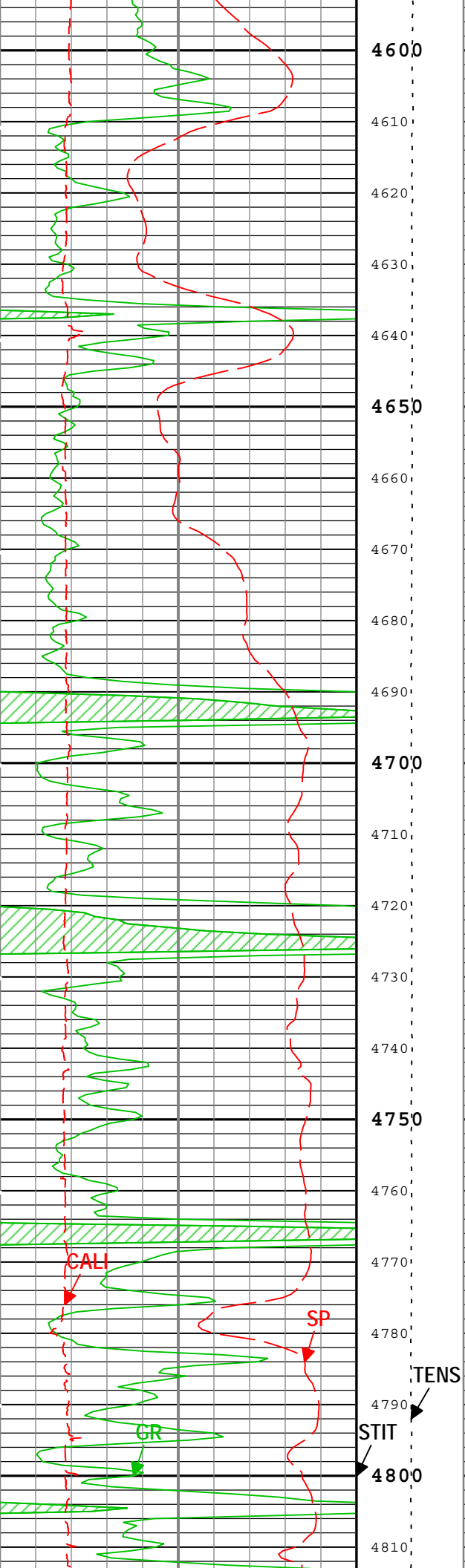


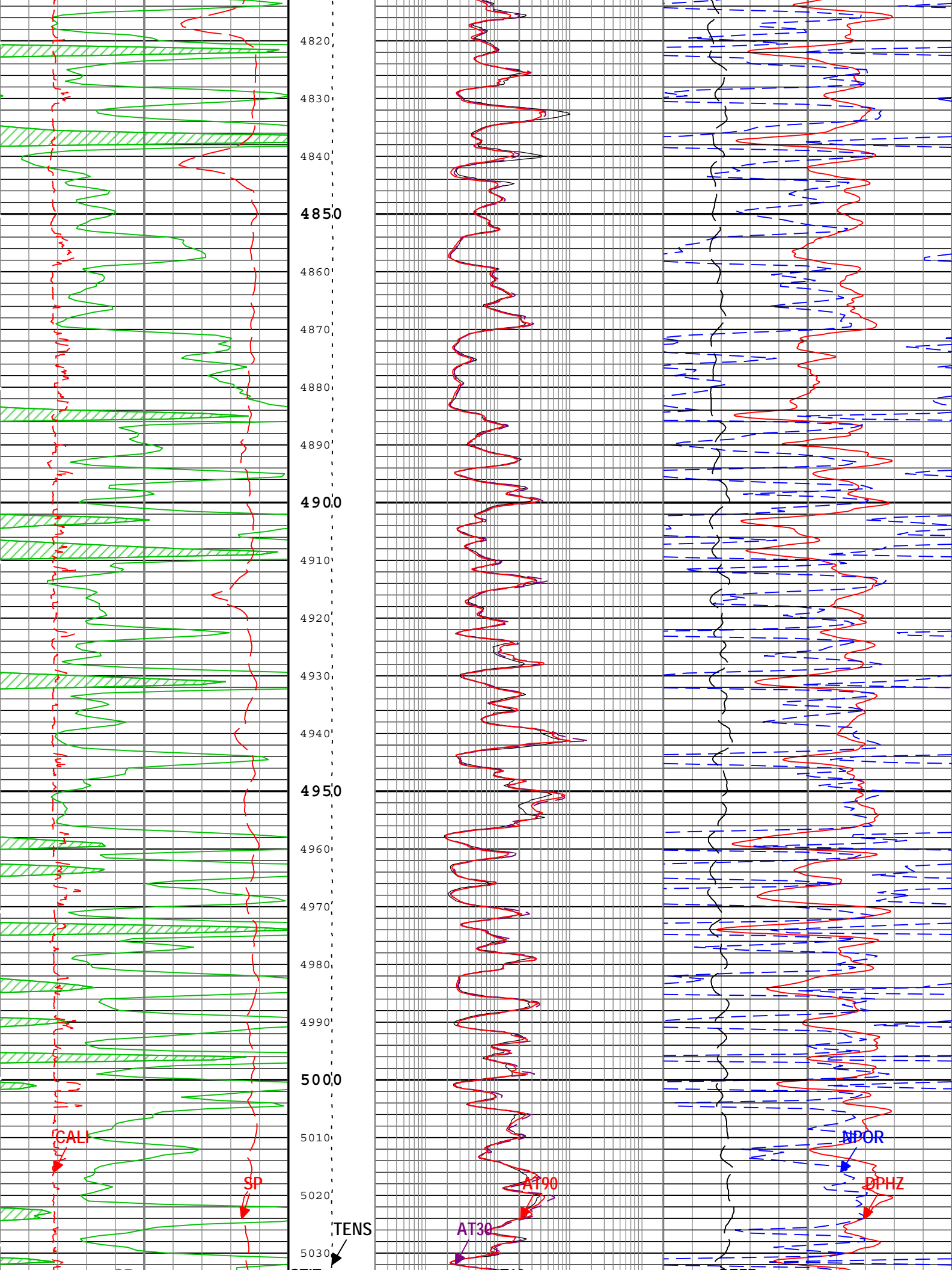


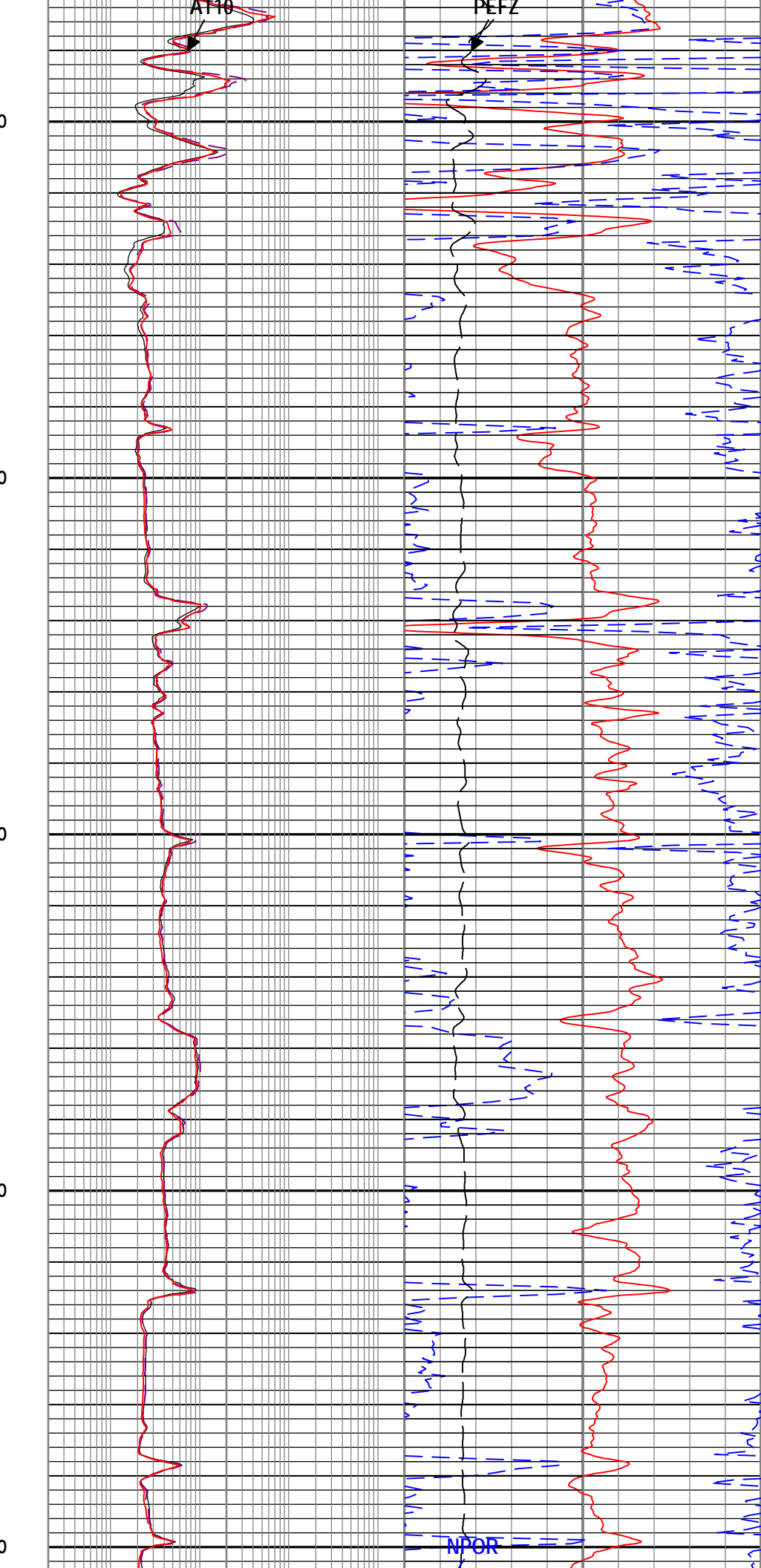
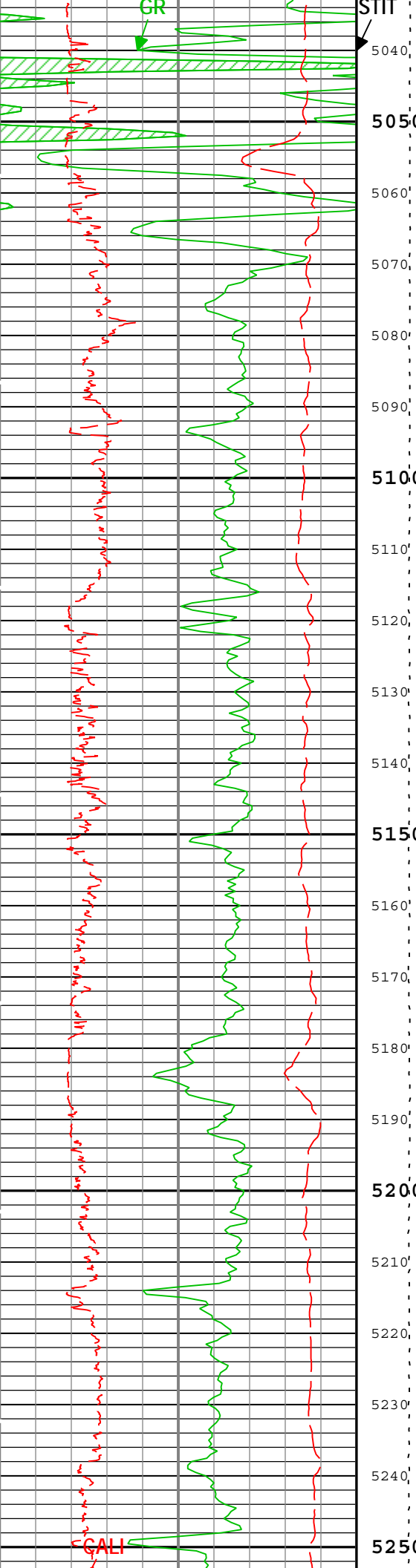


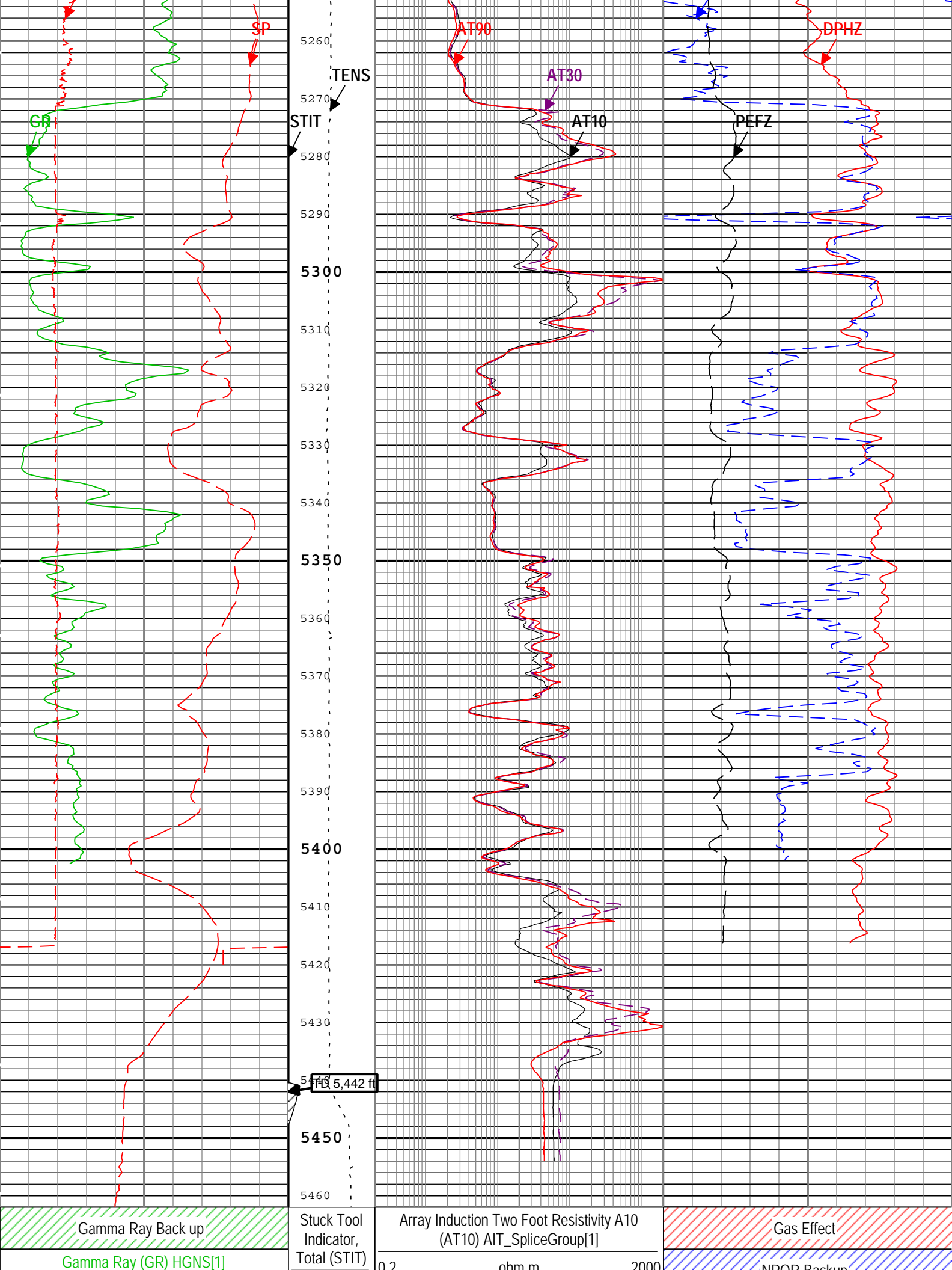












gAPI			0	ft	50	0.2	ohm.m	2000	NPOR Backup		
Spontaneous Potential (SP) AIT_SpliceGroup[1]			0	Cable Tension (TENS)	6000 lbf	Array Induction Two Foot Resistivity A30 (AT30) AIT_SpliceGroup[1]			Standard Resolution Density Porosity (DPHZ) HDRS[1]		
mV						0.2	ohm.m	2000	0.3	ft3/ft3	-0.1
Caliper (CALI) HDRS[1]						Array Induction Two Foot Resistivity A90 (AT90) AIT_SpliceGroup[1]			Enhanced Thermal Neutron Porosity in Selected Lithology (NPOR) HGNS[1]		
in			6			0.2	ohm.m	2000	0.3	ft3/ft3	-0.1
								Standard Resolution Formation Photoelectric Factor (PEFZ) HDRS[1]			
								0		10	

TIME_1900 - Time Marked every 60.00 (s)

Description: HGNS standard resolution porosities for Platform Express Format: Log (EMD 5in Triple Combo) Index Scale: 5 in per 100 ft Index Unit: ft
Index Type: Measured Depth Creation Date: 23-Nov-2012 23:41:06

Channel Processing Parameters				
Run-1: Parameters				
Parameter	Description	Tool	Value	Unit
ABHM	Array Induction Borehole Correction Mode	AIT-H	Compute Standoff	
ABLM	Array Induction Basic Logs Mode	AIT-H	Normal	
ACDE	Array Induction Casing Detection Enable	AIT-H	Yes	
ASTA	Array Induction Tool Standoff	AIT-H	0.625	in
BARI	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	Depth Zoned	in
BSAL	Borehole Salinity	Borehole	2837.71	ppm
CALI_SHIFT	CALI Supplementary Offset	HDRS-B	0.109	in
CBLO	Casing Bottom (Logger)	WLSESSION	431	ft
CDEN	Cement Density	HGNS-B	2	g/cm3
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	9.2	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DFT_WATER	Drilling Fluid Water Type	Borehole	Gel Chemical	
DHC	Density Hole Correction	HDRS-B	Bit Size	
FD	Fluid Density	Borehole	1	g/cm3
FSAL	Formation Salinity	Borehole	0	ppm
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	CALI	
GRSE	Generalized Mud Resistivity Selection, from Measured or Computed Mud Resistivity	Borehole	AMF	
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	CTEM	
HSCO	Hole Size Correction Option	HGNS-B	Yes	
MATR	Rock Matrix for Neutron Porosity Corrections	Borehole	LIMESTONE	
MDEN	Matrix Density for Density Porosity	Borehole	2.71	g/cm3
MFST	Mud Filtrate Sample Temperature	Borehole	51.6	degF
NPRM	HRDD Nuclear Processing Mode	HDRS-B	High Resolution	
RMFS	Resistivity of Mud Filtrate Sample	Borehole	1.94	ohm.m
SOCO	Standoff Correction Option	HGNS-B	Yes	
SPDR	SP Drift Per Foot	AIT-H	0	mV/ft
TD	Total Measured Depth	Borehole	5442	ft

Run-1Depth Zoned Parameters

Parameter	Value	Start (ft)	Stop (ft)
BS	0	400	434
BS	7.875	434	5462
All depth are actual.			

Tool Control Parameters

Run-1: Parameters

Parameter	Description	Tool	Value	Unit
HMCA_BRD_TYPE	HMCA Board Type	HGNS-B	0	
HRGD_BRD_TYPE	HRGD Board Type	HDRS-B	WITHOUT_HET	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	1800	ft/h
STSO_HRDD	Temperature Source for the Density Algorithm	HDRS-B	Decaytime algorithm	

Calibration Report

AIT-H (Array Induction Tool - H) Calibration - Run Run-1

Primary Equipment :	Array Induction Sonde - H	AHIS	398
Auxiliary Equipment :	AITH Rm/SP Bottom Nose	AHRM	398

AIT Sonde Calibration - Test Loop Gain

Master (EEPROM):	10:54:27 13-Sep-2012						
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Test Loop Gain - 0		Master	1.000	0.950	1.018	1.050	
Test Loop Phase - 0	deg	Master	0	-3.000	0.588	3.000	
Test Loop Gain - 1		Master	1.000	0.950	1.019	1.050	
Test Loop Phase - 1	deg	Master	0	-3.000	0.646	3.000	
Test Loop Gain - 2		Master	1.000	0.950	1.020	1.050	
Test Loop Phase - 2	deg	Master	0	-3.000	-0.013	3.000	
Test Loop Gain - 3		Master	1.000	0.950	1.018	1.050	
Test Loop Phase - 3	deg	Master	0	-3.000	0.040	3.000	
Test Loop Gain - 4		Master	1.000	0.950	0.999	1.050	
Test Loop Phase - 4	deg	Master	0	-3.000	-0.034	3.000	
Test Loop Gain - 5		Master	1.000	0.950	0.992	1.050	
Test Loop Phase - 5	deg	Master	0	-3.000	-0.222	3.000	
Test Loop Gain - 6		Master	1.000	0.950	1.000	1.050	
Test Loop Phase - 6	deg	Master	0	-3.000	0.151	3.000	
Test Loop Gain - 7		Master	1.000	0.950	1.015	1.050	
Test Loop Phase - 7	deg	Master	0	-3.000	-0.171	3.000	

AIT Sonde Calibration - Sonde Error Correction

Master (EEPROM):	10:54:27 13-Sep-2012						
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Sonde Error Correction Real - 0	mS/m	Master	-----	-231.000	-83.485	119.000	
Sonde Error Correction Quad - 0		Master	-----	-2250.000	113.456	2250.000	
Sonde Error Correction Real - 1	mS/m	Master	-----	114.000	170.122	204.000	
Sonde Error Correction Quad - 1		Master	-----	-625.000	141.828	625.000	
Sonde Error Correction Real - 2	mS/m	Master	-----	66.000	113.188	156.000	
Sonde Error Correction Quad - 2		Master	-----	-350.000	31.028	350.000	
Sonde Error Correction Real - 3	mS/m	Master	-----	39.000	59.559	89.000	
Sonde Error Correction Quad - 3		Master	-----	-250.000	44.859	250.000	
Sonde Error Correction Real - 4	mS/m	Master	-----	15.000	23.005	35.000	
Sonde Error Correction Quad - 4		Master	-----	-63.000	-11.754	63.000	
Sonde Error Correction Real - 5	mS/m	Master	-----	4.000	14.030	24.000	
Sonde Error Correction Quad - 5		Master	-----	-50.000	2.131	50.000	
Sonde Error Correction Real - 6	mS/m	Master	-----	5.000	9.683	15.000	
Sonde Error Correction Quad - 6		Master	-----	-30.000	4.940	30.000	
Sonde Error Correction Real - 7	mS/m	Master	-----	-5.000	-1.093	5.000	
Sonde Error Correction Quad - 7		Master	-----	-30.000	3.075	30.000	

AIT Mud Calibration - Mud Calibration Gain

Master (EEPROM):		10:54:27 13-Sep-2012					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Coarse Gain		Master	1.000	0.800	0.821	1.200	
Fine Gain		Master	1.000	0.800	0.823	1.200	

AIT Electronics Check - Thru Calibration Check

Master (EEPROM):	10:54:27 13-Sep-2012	Before (Measured):		10:57:04 19-Nov-2012	After:		
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Thru Cal Mag - 0	V	Master	----	0.363	0.627	0.847	
		Before	----	0.363	0.627	0.847	
		After	----	----	----	----	
		Before-Master	----	----	0.000	----	
		After-Before	----	----	----	----	
Thru Cal Phase - 0	deg	Master	----	11.000	74.608	131.000	
		Before	----	11.000	74.841	131.000	
		After	----	----	----	----	
		Before-Master	----	----	0.233	----	
		After-Before	----	----	----	----	
Thru Cal Mag - 1	V	Master	----	0.762	1.285	1.778	
		Before	----	0.762	1.285	1.778	
		After	----	----	----	----	
		Before-Master	----	----	0.000	----	
		After-Before	----	----	----	----	
Thru Cal Phase - 1	deg	Master	----	10.000	73.598	130.000	
		Before	----	10.000	73.830	130.000	
		After	----	----	----	----	
		Before-Master	----	----	0.232	----	
		After-Before	----	----	----	----	
Thru Cal Mag - 2	V	Master	----	0.374	0.637	0.872	
		Before	----	0.374	0.636	0.872	
		After	----	----	----	----	
		Before-Master	----	----	-0.001	----	
		After-Before	----	----	----	----	
Thru Cal Phase - 2	deg	Master	----	6.000	69.416	126.000	
		Before	----	6.000	69.655	126.000	
		After	----	----	----	----	
		Before-Master	----	----	0.239	----	
		After-Before	----	----	----	----	
Thru Cal Mag - 3	V	Master	----	0.422	0.723	0.986	
		Before	----	0.422	0.723	0.986	
		After	----	----	----	----	
		Before-Master	----	----	0.000	----	
		After-Before	----	----	----	----	
Thru Cal Phase - 3	deg	Master	----	5.000	68.514	125.000	
		Before	----	5.000	68.754	125.000	
		After	----	----	----	----	
		Before-Master	----	----	0.240	----	
		After-Before	----	----	----	----	
Thru Cal Mag - 4	V	Master	----	0.802	1.349	1.872	
		Before	----	0.802	1.348	1.872	
		After	----	----	----	----	
		Before-Master	----	----	-0.001	----	
		After-Before	----	----	----	----	
Thru Cal Phase - 4	deg	Master	----	-1.000	61.558	119.000	
		Before	----	-1.000	61.810	119.000	
		After	----	----	----	----	
		Before-Master	----	----	0.252	----	
		After-Before	----	----	----	----	
Thru Cal Mag - 5	V	Master	----	1.173	1.947	2.737	
		Before	----	1.173	1.946	2.737	
		After	----	----	----	----	
		Before-Master	----	----	-0.001	----	
		After-Before	----	----	----	----	
Thru Cal Phase - 5	deg	Master	----	-3.000	59.409	117.000	
		Before	----	-3.000	59.659	117.000	
		After	----	----	----	----	
		Before-Master	----	----	0.250	----	
		After-Before	----	----	----	----	

		Before-Master After-Before	----- -----	----- -----	0.230 -----	----- -----	<div><div></div></div>
Thru Cal Mag - 6	V	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	1.173 1.173 ----- ----- -----	1.943 1.942 ----- -0.001 -----	2.737 2.737 ----- ----- -----	<div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div>
Thru Cal Phase - 6	deg	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	-3.000 -3.000 ----- ----- -----	59.473 59.723 ----- 0.250 -----	117.000 117.000 ----- ----- -----	<div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div>
Thru Cal Mag - 7	V	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	0.849 0.849 ----- ----- -----	1.382 1.381 ----- -0.001 -----	1.981 1.981 ----- ----- -----	<div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div>
Thru Cal Phase - 7	deg	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	-7.000 -7.000 ----- ----- -----	53.953 54.249 ----- 0.296 -----	113.000 113.000 ----- ----- -----	<div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div>
SPA Zero	mV	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	-50.000 -50.000 ----- ----- -----	-0.053 -0.061 ----- -0.008 -----	50.000 50.000 ----- ----- -----	<div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div>
SPA Plus	mV	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	941.000 941.000 ----- ----- -----	993.658 993.363 ----- -0.295 -----	1040.000 1040.000 ----- ----- -----	<div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div>
Temperature Zero	V	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	-0.050 -0.050 ----- ----- -----	0.000 0.000 ----- 0.000 -----	0.050 0.050 ----- ----- -----	<div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div>
Temperature Plus	V	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	0.870 0.870 ----- ----- -----	0.920 0.920 ----- 0.000 -----	0.960 0.960 ----- ----- -----	<div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div>

DSLT-H (Digitizing Sonic Logging Tool - H) Calibration - Run Run-1

Primary Equipment :	Sonic Logging Sonde E supports 3'-5'BHC DT and CBL/VDL	SLS-E	8011
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CBL Normalization - CBL Accumulations

Master:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div></div>
Upper Far Amplitude - 0		Master	-----	-----	-----	-----	<div><div></div></div>
Upper Near Raw Amplitude - 0	mV	Master	-----	-----	-----	-----	<div><div></div></div>
Lower Far Amplitude - 0		Master	-----	-----	-----	-----	<div><div></div></div>
Lower Near Raw Amplitude - 0	mV	Master	-----	-----	-----	-----	<div><div></div></div>

CBL Normalization - CBL/VDL Coefficients

Master:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div></div>
CBL Correction Factor for UT		Master	3.500	2.700	NOT DONE	4.300	<div><div></div></div>
CBL Correction Factor for LT		Master	2.500	1.700	NOT DONE	4.300	<div><div></div></div>
VDL Ratio between UT and LT for CBLB Mode		Master	1.000		NOT DONE		<div><div></div></div>

CBL Free Pipe Adjustment - Free Pipe Measurement

Before:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div></div>
CBL Amplitude - 0	mV	Before	-----	-----	-----	-----	<div><div></div></div>
CBL Reference Amplitude (CBRA) - 0	mV	Before	-----	-----	-----	-----	<div><div></div></div>

Measurement Depth - 0		ft	Before	----	----	----	----		
CBL Free Pipe Adjustment - CBL Amplitude Coefficient									
Before:									
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit			
CBL Adjustment Factor		Before	1.000	0.200	NOT DONE	5.000			
Depth of Before Calibration	ft	Before			NOT DONE				
HDRS-B (HILT Density and Rxo Sonde, 125 degC) Calibration - Run Run-1									
Primary Equipment :									
	HILT High-Resolution Control Cartridge, 125 degC		HRCC-B		791				
	HILT Resistivity Gamma-Ray Density Device, 125 degC		HRGD-B		1849				
Auxiliary Equipment :									
	HRDD Backscatter Detector		Backscatter						
	HRDD Long Spacing Detector		Long Spacing						
	HRDD Short Spacing Detector		Short Spacing						
	Cesium 137 Gamma-Ray Logging Source		GSR-J		5094				
	HILT High-Resolution Control Cartridge, 125 degC		HRCC-B		791				
	HILT High-Resolution Mechanical Sonde, 125 degC		HRMS-B		1754				
Calibration Parameter :									
	Small Ring Size (Caliper Calibration Small Ring)		8.00						
	Large Ring Size (Caliper Calibration Large Ring)		12.00						
HDRS Caliper Calibration - Caliper Accumulations									
Before (Measured):		11:01:07 19-Nov-2012							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit			
Small Ring	in	Before	8.00	6.00	8.02	10.00			
Large Ring	in	Before	12.00	9.00	12.20	15.00			
HDRS Density Calibration - Inversion Results									
Master (EEPROM):		15:32:56 16-Nov-2012							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit			
Rho Aluminum	g/cm3	Master	2.596	2.586	2.600	2.606			
Rho Magnesium	g/cm3	Master	1.686	1.676	1.686	1.696			
Pe Aluminum		Master	2.570	2.470	2.563	2.670			
Pe Magnesium		Master	2.650	2.550	2.632	2.750			
HDRS Density Calibration - Deviation Summary									
Master (EEPROM):		15:32:56 16-Nov-2012							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit			
BS Average Deviation	%	Master	0	-0.6000	0.4813	0.6000			
BS Max Deviation	%	Master	0	-1.6000	1.0620	1.6000			
SS Average Deviation	%	Master	0	-1.0000	0.3288	1.0000			
SS Max Deviation	%	Master	0	-2.5000	1.5436	2.5000			
LS Average Deviation	%	Master	0	-1.5000	0.5170	1.5000			
LS Max Deviation	%	Master	0	-3.5000	1.2479	3.5000			
HDRS Density Calibration - Background Summary									
Master (EEPROM):		15:32:56 16-Nov-2012		Before (Measured):		11:04:03 19-Nov-2012			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit			
BS Window Ratio		Master	1.0000	0.6998	0.7367	0.7735			
		Before	0.7367		0.7377				
		Before-Master	----		0.0010				
BS Window Sum	1/s	Master	1	9080	9557	10035			
		Before	9557		9556				
		Before-Master	----		-1				
SS Window Ratio		Master	1.0000	0.4696	0.4943	0.5190			
		Before	0.4943		0.4948				
		Before-Master	----		0.0005				
SS Window Sum	1/s	Master	1	8717	9176	9635			
		Before	9176		9196				
		Before-Master	----		20				
LS Window Ratio		Master	1.0000		0.2976				

		Before	0.2976	0.2828	0.2997	0.3125	
		Before-Master	-----	-----	0.0021	-----	
LS Window Sum	1/s	Master	1		1073		
		Before	1073	1020	1072	1127	
		Before-Master	-----	-----	-1	-----	

HDRS Density Calibration - Photo-multiplier High Voltages

Master (EEPROM):		15:32:56 16-Nov-2012		Before (Measured):		11:04:03 19-Nov-2012	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS PM High Voltage	V	Master		1000	1627	2400	
		Before		1000	1622	2400	
		Before-Master	-----	-100	-5	100	
SS PM High Voltage	V	Master		1000	1690	2400	
		Before		1000	1695	2400	
		Before-Master	-----	-100	5	100	
LS PM High Voltage	V	Master		1000	1588	2400	
		Before		1000	1579	2400	
		Before-Master	-----	-100	-9	100	

HDRS Density Calibration - Crystal Quality Resolutions

Master (EEPROM):		15:32:56 16-Nov-2012		Before (Measured):		11:04:03 19-Nov-2012	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Crystal Resolution	%	Master		5.00	11.80	25.00	
		Before		5.00	11.79	25.00	
		Before-Master	-----	-1.00	-0.01	1.00	
SS Crystal Resolution	%	Master		5.00	10.12	20.00	
		Before		5.00	10.21	20.00	
		Before-Master	-----	-1.00	0.09	1.00	
LS Crystal Resolution	%	Master		5.00	9.55	20.00	
		Before		5.00	9.64	20.00	
		Before-Master	-----	-1.00	0.09	1.00	

HDRS MCFL Calibration - MCFL Accumulations

Before (Measured):		11:04:17 19-Nov-2012					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Main Resistivity	ohm.m	Before	3875	3565	3831	4185	
Deep Resistivity	ohm.m	Before	3830	3524	3794	4136	
Shallow Resistivity	ohm.m	Before	3830	3524	3822	4136	

HGNS-B (HILT Gamma-Ray and Neutron Sonde, 125 degC) Calibration - Run Run-1

Primary Equipment :						
	HILT Gamma-Ray and Neutron Sonde, 125 degC		HGNS-B		1927	
Auxiliary Equipment :						
	HGNS Accelerometer, 125 degC		HACCZ-B		749	
	AmBe Neutron Logging Source		NSR-F		5069	
Calibration Parameter :						
	Water Temperature					
	Housing Size					
	JIG-BKG (Jig minus background reference)		165			

HGNS Accelerometer Calibration - Accelerometer Accumulations

Before (Measured):		20:12:05 19-Nov-2012					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
AZ Vertical Measurement	ft/s2	Before	32.2	31.5	32.2	32.8	

HGNS Accelerometer EEPROM - Accelerometer EEPROM Read

Master (EEPROM):		00:00:00 15-Mar-2001					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Accelerometer Manufacturer		Master			Sunstrand		
Accelerometer Reference Temperature	degF	Master		30.2	68.0	122.0	
Accelerometer Coefficients - 0		Master	-----	-----	-5693.000	-----	
Accelerometer Coefficients - 1		Master	-----	-----	20.390	-----	
Accelerometer Coefficients - 2		Master	-----	-----	-0.031	-----	

Accelerometer Coefficients - 3		Master	----	----	0.000	----	
Accelerometer Coefficients - 4		Master	----	----	2.141	----	
Accelerometer Coefficients - 5		Master	----	----	0.000	----	
Accelerometer Coefficients - 6		Master	----	----	0.000	----	
Accelerometer Coefficients - 7		Master	----	----	0.000	----	
Accelerometer Coefficients - 8		Master	----	----	295.800	----	
Accelerometer Coefficients - 9		Master	----	----	1.031	----	

HGNS Neutron Calibration - HGNS Neutron Accumulations

Master (EEPROM): 12:04:40 16-Nov-2012 Before (Measured): 10:57:38 19-Nov-2012 After:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Near Zero Measurement	1/s	Master	0	5.0	27.1	40.0	
		Before	0	5.0	26.6	40.0	
		After	----	----	----	----	
		Before-Master	----	-4.1	-0.5	4.1	
		After-Before	----	----	----	----	
Far Zero Measurement	1/s	Master	0	5.0	26.8	40.0	
		Before	0	5.0	27.4	40.0	
		After	----	----	----	----	
		Before-Master	----	-4.0	0.6	4.0	
		After-Before	----	----	----	----	
Near Plus Measurement - 0	1/s	Master	6031.0	4700.0	4898.0	6900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Far Plus Measurement - 0	1/s	Master	2793.0	1900.0	2070.0	2900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Near Corrected Plus Measurement - 0	1/s	Master		4700.0	4970.0	6900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Far Corrected Plus Measurement - 0	1/s	Master		1900.0	2107.0	2900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	

HGNS Gamma-Ray Calibration - Gamma-Ray Accumulations

Before (Measured): 11:02:29 19-Nov-2012 After:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
RGR Zero Measurement	gAPI	Before	30.0	0	73.3	120.0	
		After	----	----	----	----	
		After-Before	----	----	----	----	
RGR Plus Measurement	gAPI	Before	185.4	157.1	170.6	206.3	
		After	----	----	NOT DONE	----	
		After-Before	----	----	----	----	
GR Calibration Gain		Before	0.89	0.80	0.97	1.05	
		After	----	----	----	----	
		After-Before	----	----	----	----	

LEH-QT (Logging Equipment Head - QT, 3-3/8 inch 31 pin HPHT with Tension Sensor) Calibration - Run Run-1

Primary Equipment :
Logging Equipment Head - QT, 3-3/8 inch 31 pin HPHT with Tension Sensor LEH-QT

HTEN Master Calibration - HTEN Master Calibration

Master:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
HTEN Shop Gain		Master	1.000	0.800	NOT DONE	4.500	
HTEN Shop Offset	lbf	Master	0	-1000.000	NOT DONE	1000.000	

HTEN Before Calibration - HTEN Before Calibration

Before:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
RHTE Zero Measurement - 0	lbf	Before	----	----	----	----	
RHTE Plus Measurement - 0	lbf	Before	----	----	----	----	
HTEN Gain - 0		Before	----	----	----	----	
HTEN Offset - 0	lbf	Before	----	----	----	----	

Company:	Vecta Oil & Gas LTD	Schlumberger
Well:	Maroon 24-20	
Field:	Wildcat	
County:	Cheyenne	
State:	Colorado	

Platform Express
Triple Combo
Standard Resolution