

Company: Vecta Oil & Gas LTD

Well: Crestone

Field: Wildcat

County: Cheyenne

State: Colorado

Platform Express

Triple Combo

Linear

County: Cheyenne

Field: Wildcat

Location: NWSE Sec 17, Twn 14s, Rng 47w

Well: Crestone

Company: Vecta Oil & Gas LTD

Location:

NWSE Sec 17, Twn 14s, Rng 47w

SHL: 2156' FSL, 2099' FEL

Lat 38.828900, Long -102.692470

Elev.:

K.B. 4265.00 ft

G.L. 4255.00 ft

D.F. 4264.00 ft

Permanent Datum:

Ground Level

Elev.: 4255.00 f

Log Measured From:

Kelly Bushing

10.00 ft

above Perm.Datum

Drilling Measured From:

Kelly Bushing

API Serial No.

Section: 17

Township: 14S

Range: 47W

05-017-07717-0000

Logging Date	03-Nov-2012				
Run Number	Run 1				
Depth Driller	5468.00 ft				
Schlumberger Depth	5464.00 ft				
Bottom Log Interval	5456.00 ft				
Top Log Interval	432.00 ft				
Casing Driller Size @ Depth	8.625 in @ 434.00 ft				
Casing Schlumberger	432 ft				
Bit Size	7.875 in				
Type Fluid In Hole	Chemical Gel				
D M C	Density	Viscosity	69 s		
	Fluid Loss	PH			
	Source of Sample				
RM @ Meas Temp	1.1 ohm.m @ 68 degF				
RMF @ Meas Temp	1.82 ohm.m @ 86 degF				
RMC @ Meas Temp	1.65 ohm.m @ 86 degF				
Source RMF	RMC		Calculated		
RM @ BHT	RMF @ BHT	0.53 @ 148	1.09 @ 148		
Max Recorded Temperatures					
Circulation Stopped		Time	10:30:00		
Logger on Bottom		Time	17:30:21		
Unit Number	Location:	2135	Fort Morgan		
Recorded By	Megan Leone				
Witnessed By	Ryan Scribner				

Disclaimer

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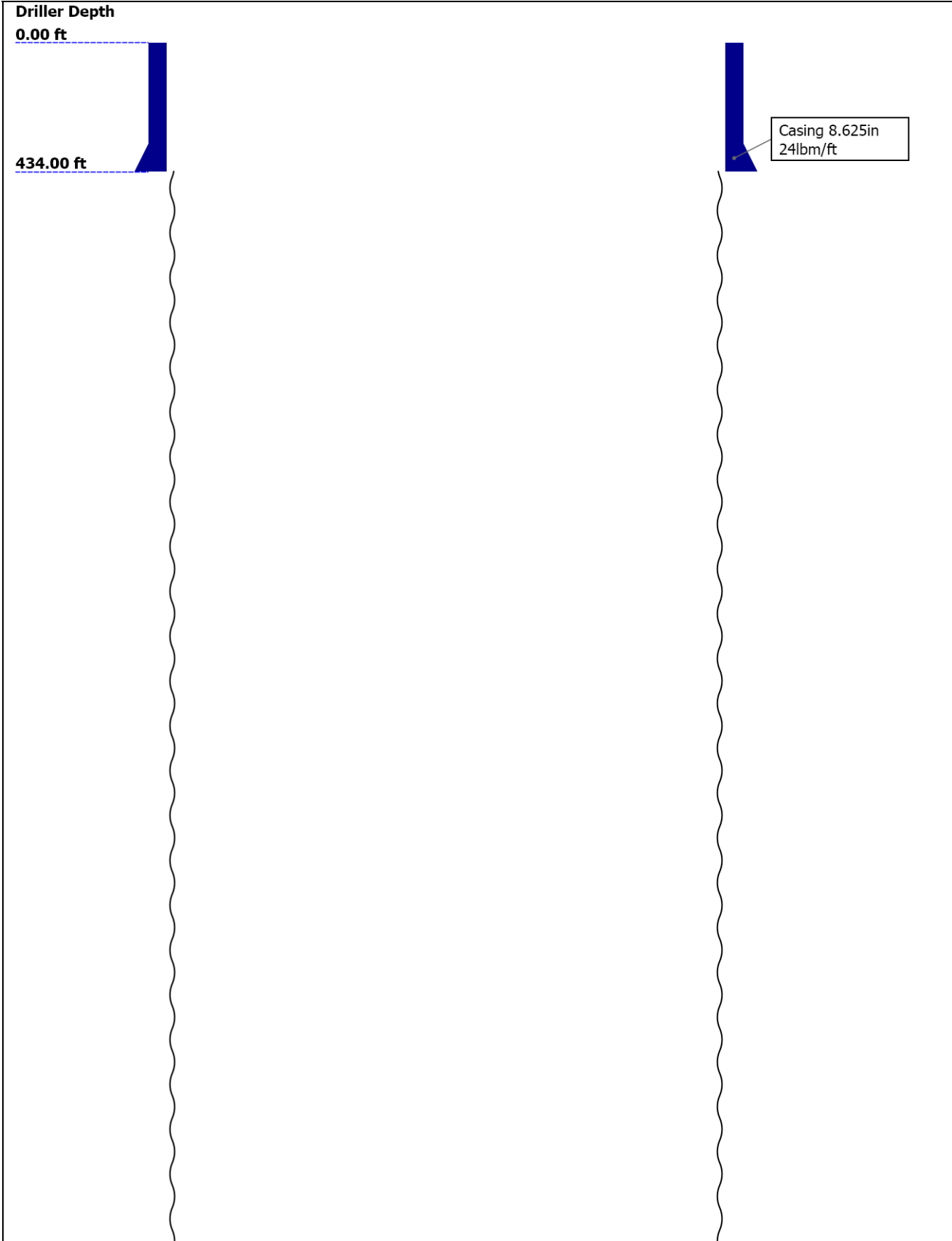
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Well Sketch



5468.00 ft

Open Hole 7.875in

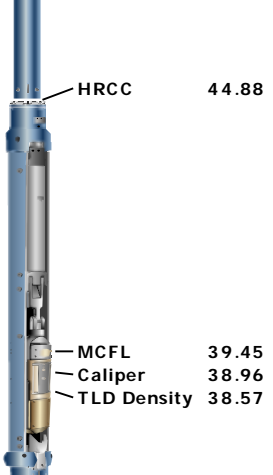
Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	7.875					
Top Driller (ft)	434					
Top Logger (ft)	432					
Bottom Driller (ft)	5468					
Bottom Logger (ft)	5464					
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)	432					

Remarks and Equipment Summary

Run 1: Toolstring				Run 1: Remarks	
Equip name	Length	MP name	Offset	This is the first run in hole	
LEH-QT	64.21			Toolstring run as per tool sketch	
LEH-QT				Limestone Matrix 2.71 g/cc	
DT C-H	61.29			Operators: Ian Derry and Troy Ocanas	
ECH-KC		CTEM	60.39		
DTC-H		HV	0.00		
		TelStatus	58.29		
		ToolStatus	58.29		
HGNS-H	58.29	Temperature	58.26		
HGNH:3823					
NPV-N		GR	57.55		
NSR-F:5215					
HACCZ-H:5736					
HMCA-H					
HGNS-H					
		CNL Porosity	51.21		
		HMCA	48.88		
		HGNS	48.88		
		Accelerometer	0.00		
HDRS-H	48.88				
ECH-MEB					
HRCC-H					
HRMS-H					

Long Spacing:28
732
Short Spacing:27
634
GSR-J:5240
Backscatter
GPV-Q
HRGD-H:3816



HRCC 44.88

MCFL 39.45

Caliper 38.96

TLD Density 38.57

DSL~~T~~-H:8318 36.64

ECH-KH

DSL~~C~~-H:8318

SLS-E:165

CBL 3ft 24.17

Upper-Near 24.17

VDL 5ft 23.17

Upper-Far 23.17

Delta-T 21.79

Lower-Far 20.42

Lower-Near 19.42

AIT-H:392 16.00

AHIS:392

AHRM:392

SLS-E 16.00

Induction 7.91

Power Supply 7.91

Temperature 7.91

			
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Depth Summary

Depth Control Parameters		Run 1	
Conveyance Type		Wireline	
Log Sequence		This is the first run in the hole	
Stretch Correction (ft)		4.00	
Rig Type		Land	
Depth Remark Parameters		Run 1	
Depth Remark 1		All Schlumberger depth control procedures followed	
Depth Remark 2		IDW primary depth control device. Z-chart secondary depth control device	
Depth Measuring Device		Run 1	
Type		IDW-B	
Wheel Correction 1		1	
Wheel Correction 2		0	
Tension Device		Run 1	
Type		CMTD-B/A	
Calibration Points		0	
Logging Cable		Run 1	
Type		7-46NT-XS	
Logging Cable Length (ft)		24000.00	

Run 1

5" Triple Combo

Integration Summary

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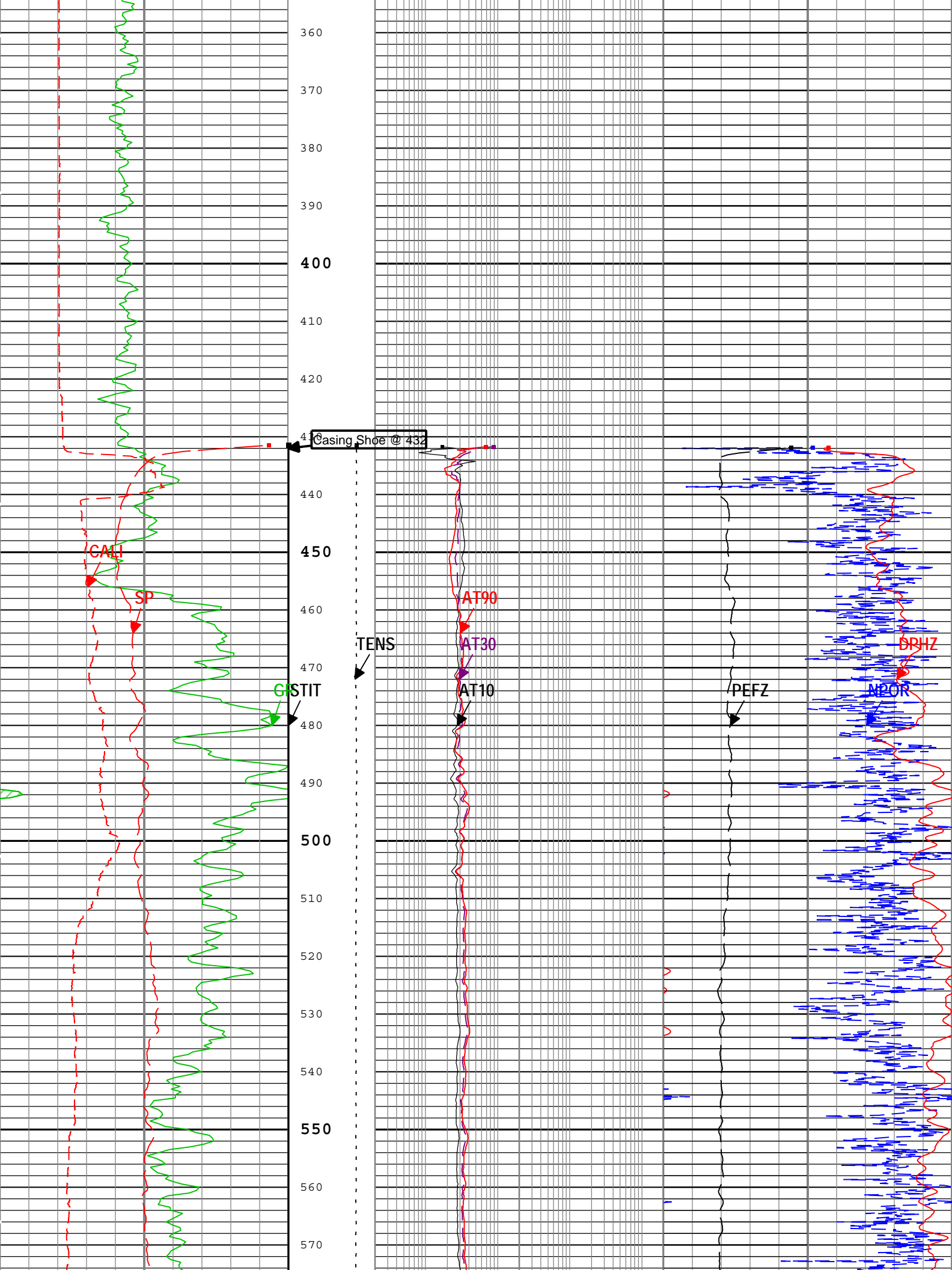
Software Version

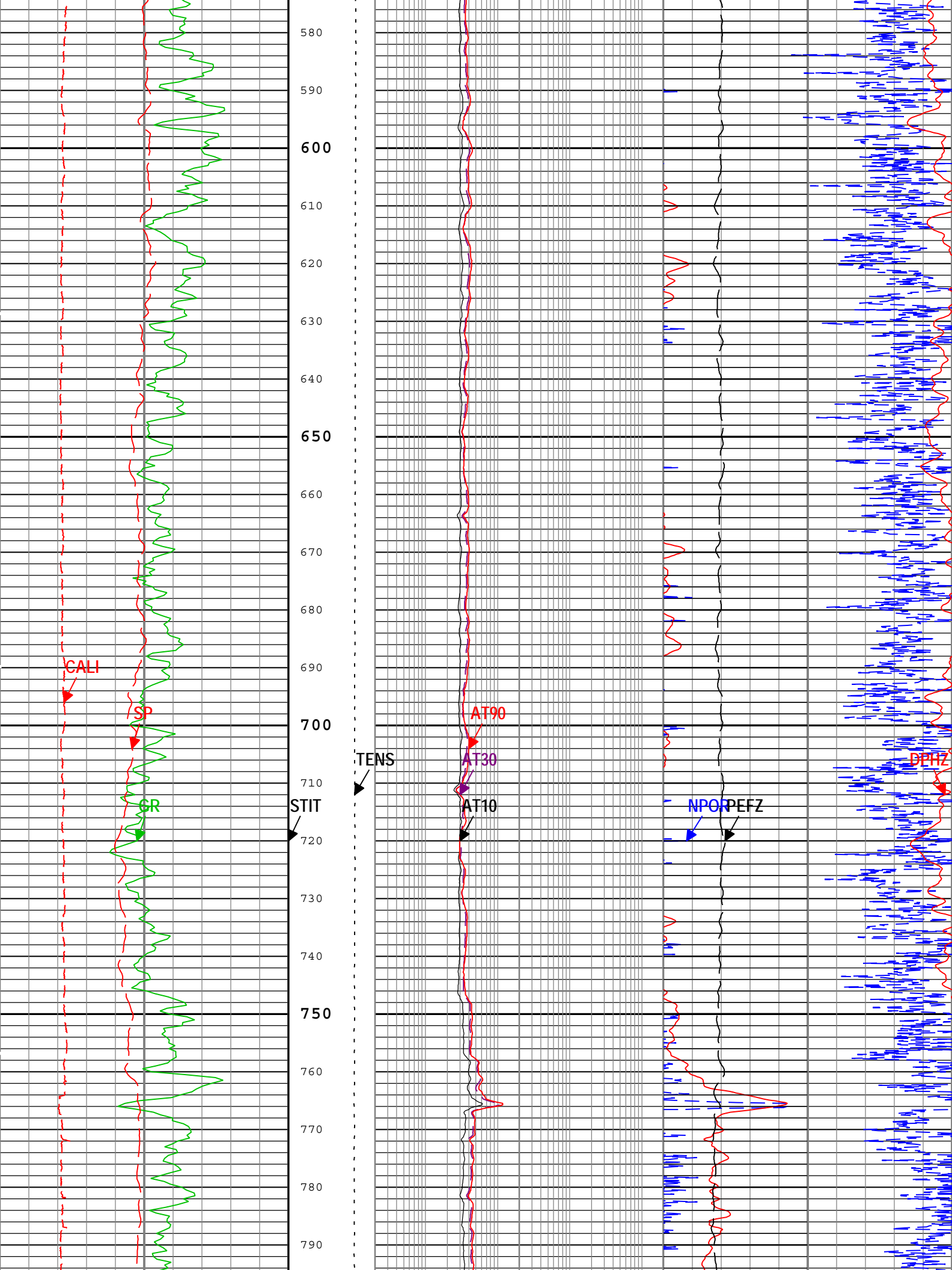
Acquisition System		Version	
MaxWell		3.1.9755.0	
Application Patch		SP-20120723-3.1.9755.1112	
		EXP_APL-MASTAXIS-3.1.9755.1221	
Computation	Description	Version	
HENVIR	Computation Ensemble for the HGNS Neutron environmental corrections	3.1.9755.0	
DepthCorrection	DepthCorrection	3.1.9755.0	
Tool Elements	Description	Software Version	Firmware Version
HRCC-H	HILT High-Resolution Control Cartridge, 150 degC	3.1.9755.0	2.0
HGNS-H	HILT Gamma-Ray and Neutron Sonde, 150 degC	3.1.9755.0	2.0
AHIS	Array Induction Sonde - H	3.1.9755.1112	
HRGD-H	HILT Resistivity Gamma-Ray Density Device, 150 degC	3.1.9755.0	3.0

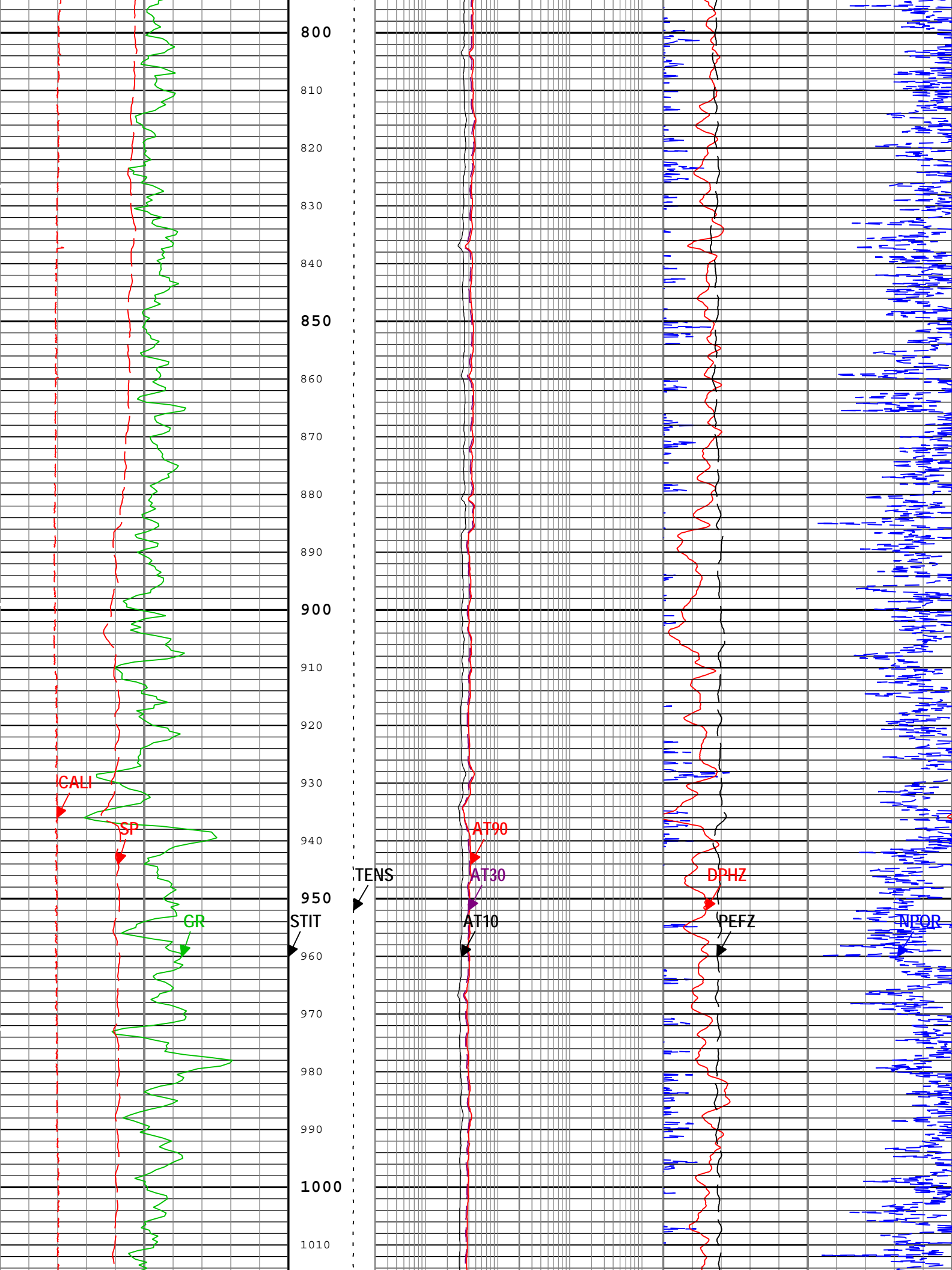
Pass Summary

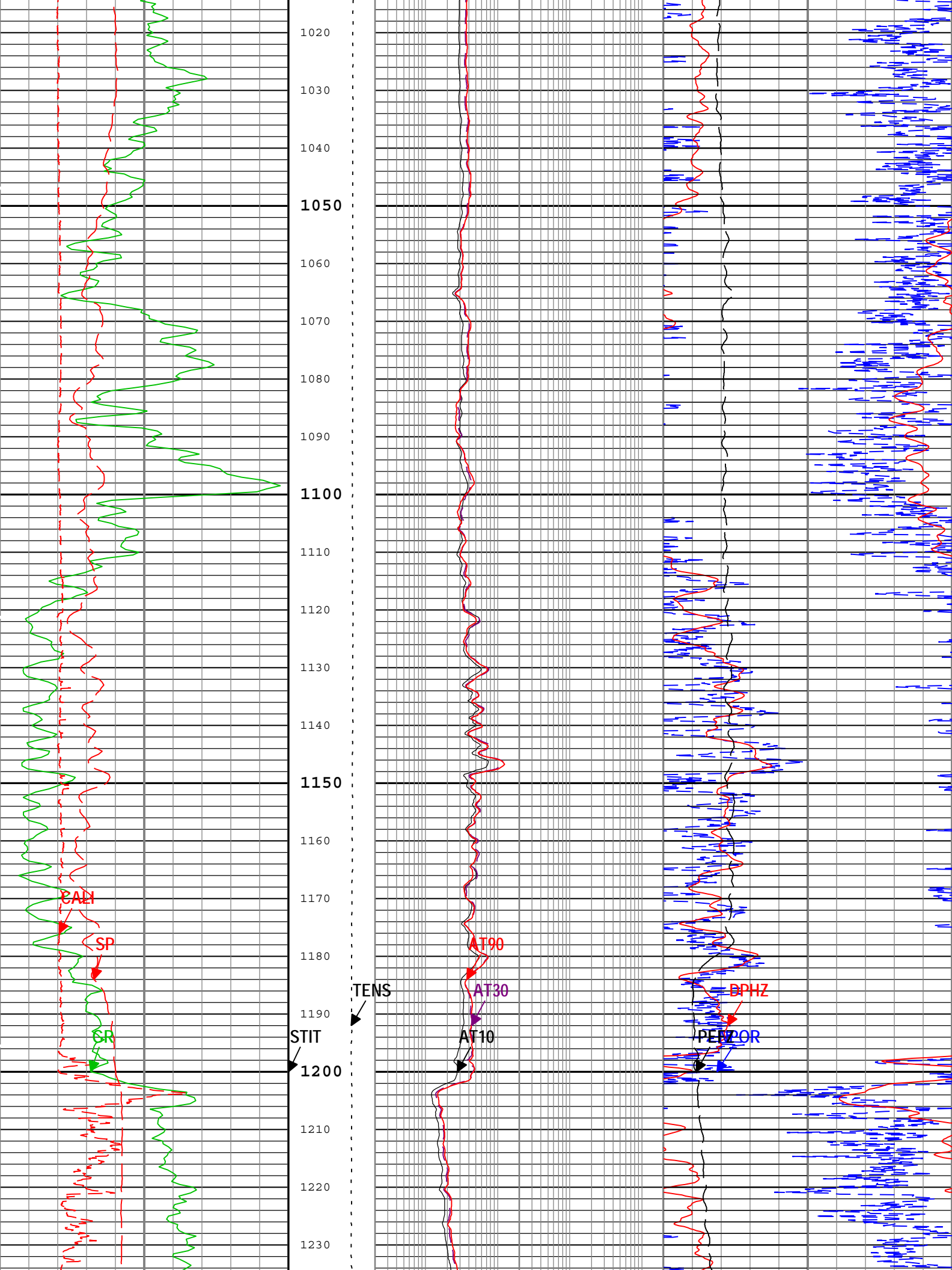
Run	Pass Objective	Direction	Top	Bottom	Start	Stop	Depth	Include
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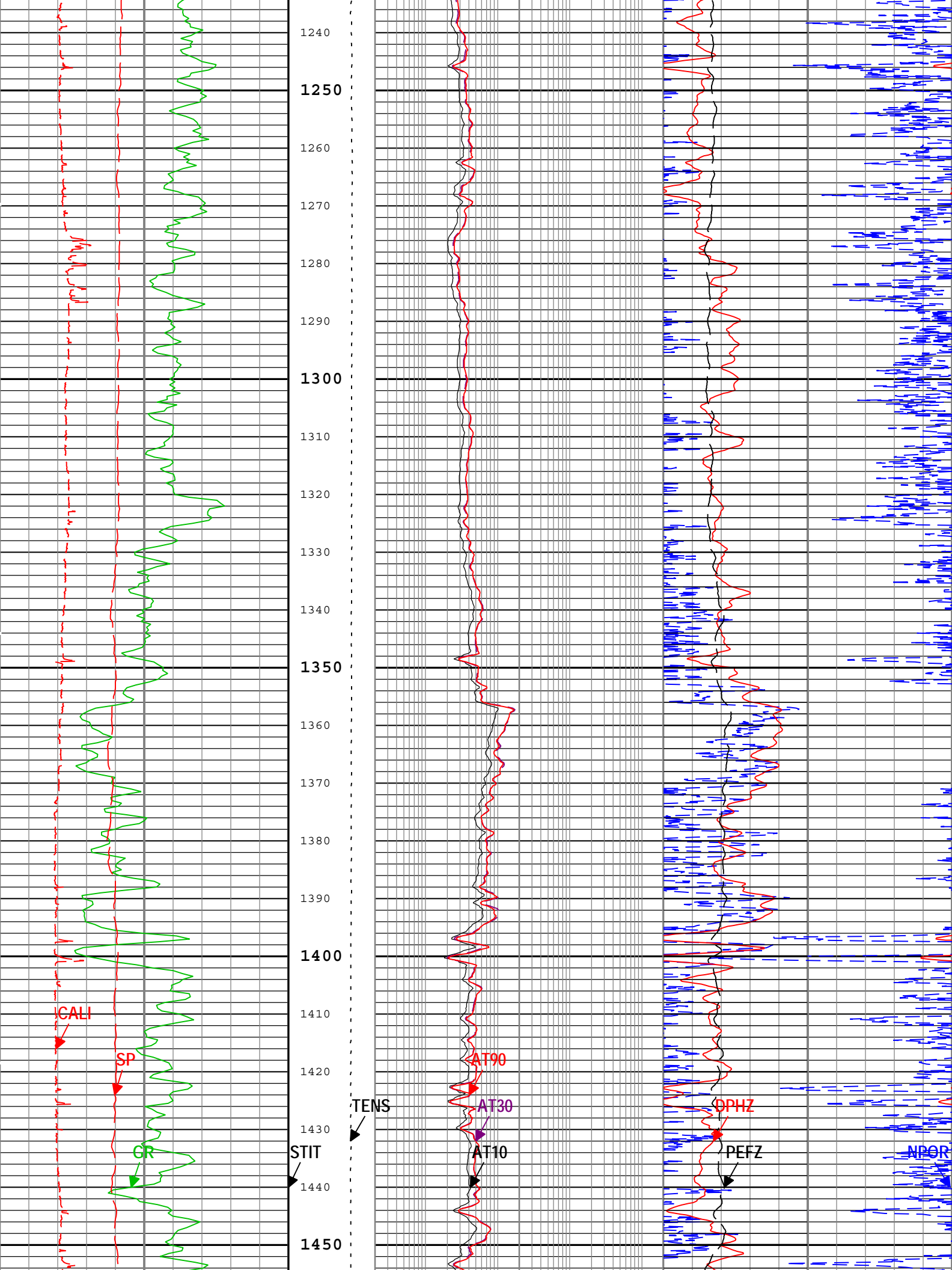
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Depth Shift	Include Parallel Data
Run 1	Log[3]:Up	Up	349.28 ft	5480.21 ft	03-Nov-2012 5:57:47 PM	03-Nov-2012 7:44:15 PM	0.00 ft	
All depths are referenced to toolstring zero								
Log	Run 1: Log[3]:Up							
Description: HGNS standard resolution 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: 03-Nov-2012 19:59:50								
Channel	Source	Sampling						
AT10	AIT-H:AHIS:AHIS	3in						
AT30	AIT-H:AHIS:AHIS	3in						
AT90	AIT-H:AHIS:AHIS	3in						
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	2in						
PEFZ	HDRS-H:HRMS-H:HRGD-H	2in						
SP	AIT-H:AHIS:AHIS	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-H		
						0	10	
			Array Induction Two Foot Resistivity A10 (AT10) AIT-H			Gas Effect		
Gamma Ray Back up			0.2	ohm.m	2000	NPOR Backup		
Gamma Ray (GR) HGNS-H			Array Induction Two Foot Resistivity A30 (AT30) AIT-H			Enhanced Thermal Neutron Porosity in Selected Lithology (NPOR) HGNS-H		
0	gAPI		200				0.3	-0.1
Spontaneous Potential (SP) AIT-H			0.2	ohm.m	2000	ft3/ft3		
0	mV		200	Array Induction Two Foot Resistivity A90 (AT90) AIT-H			Standard Resolution Density Porosity (DPHZ) HDRS-H	
Caliper (CALI) HDRS-H			0.2	ohm.m	2000	0.3	ft3/ft3	-0.1
6	in		16					
			300					
			310					
			320					
			330					
			340					
			350					

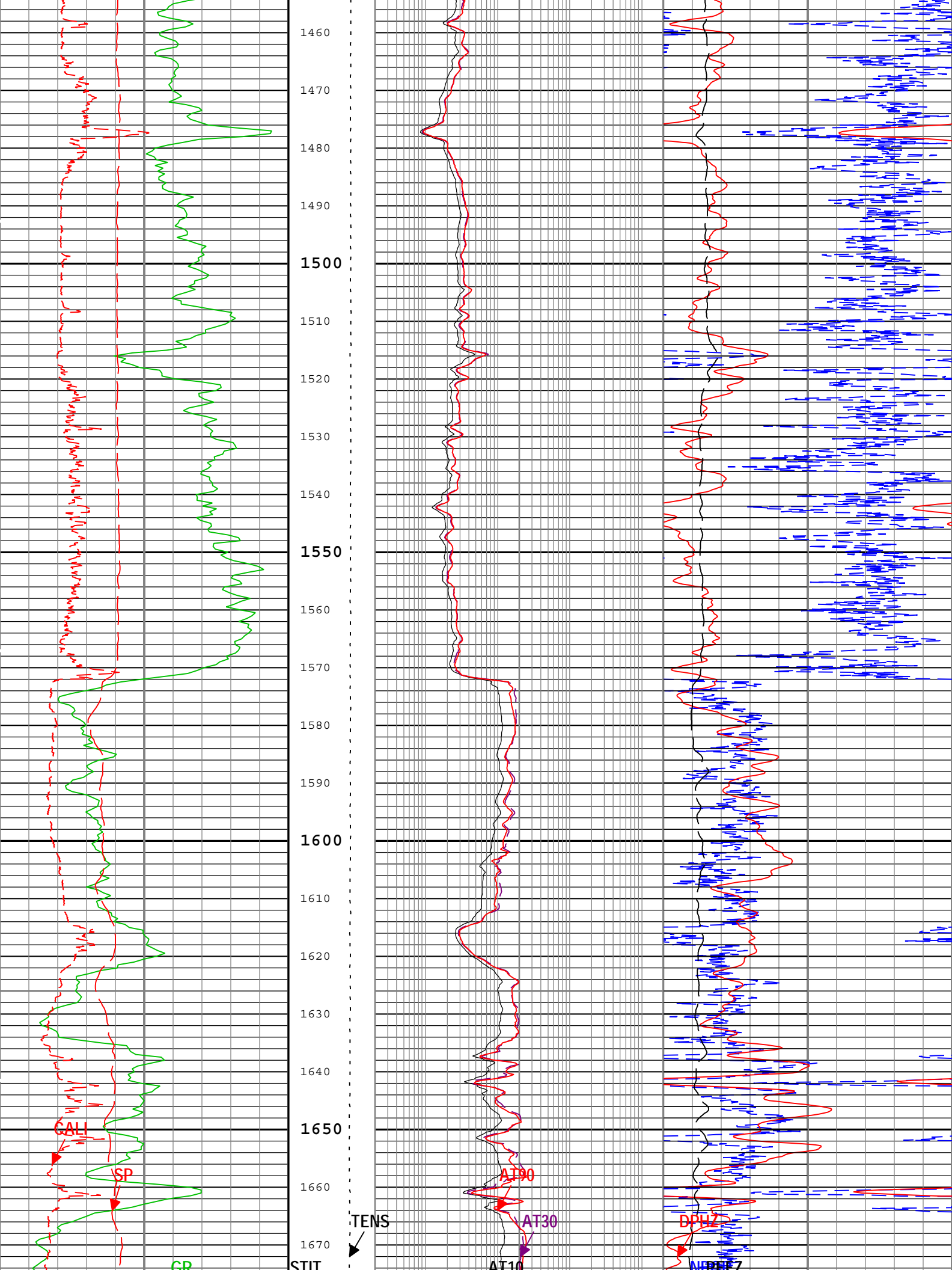


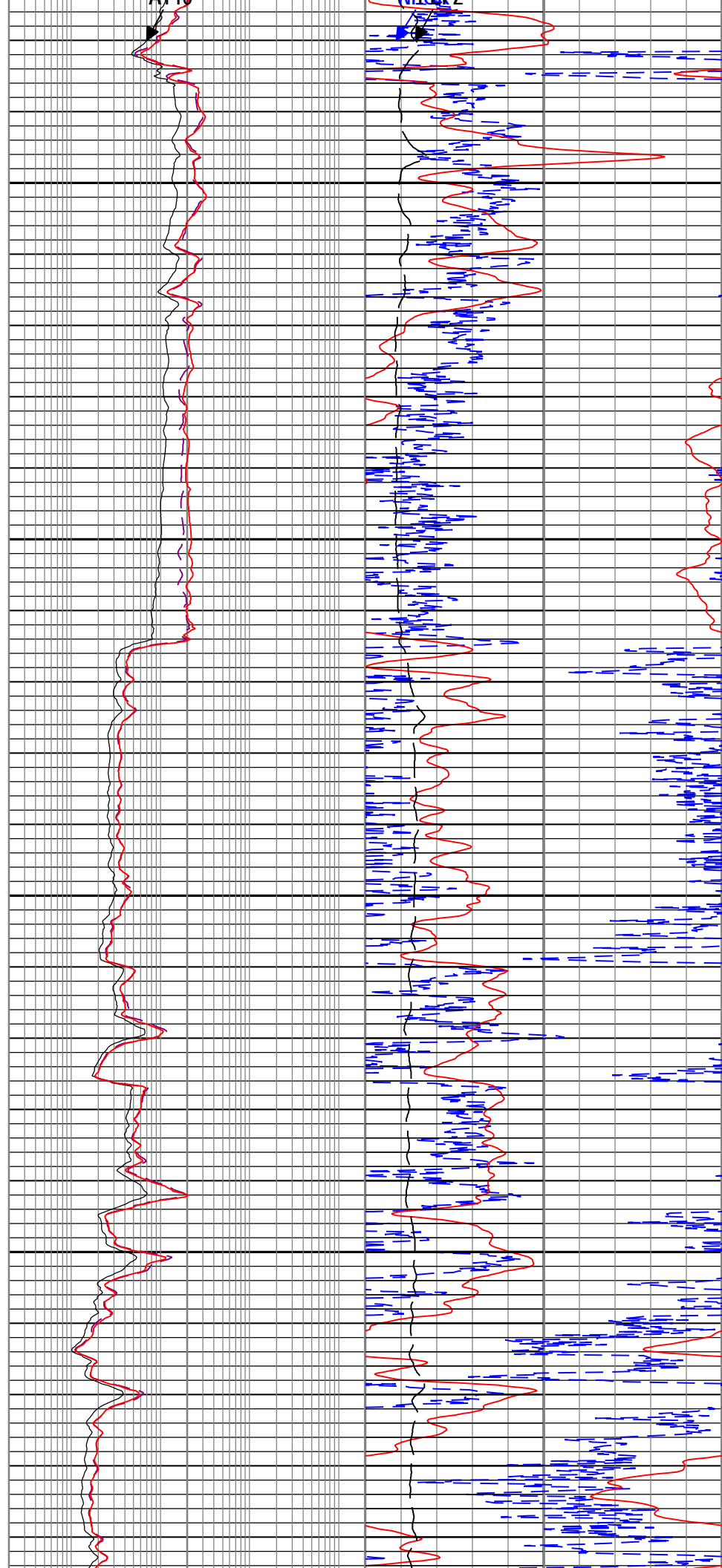
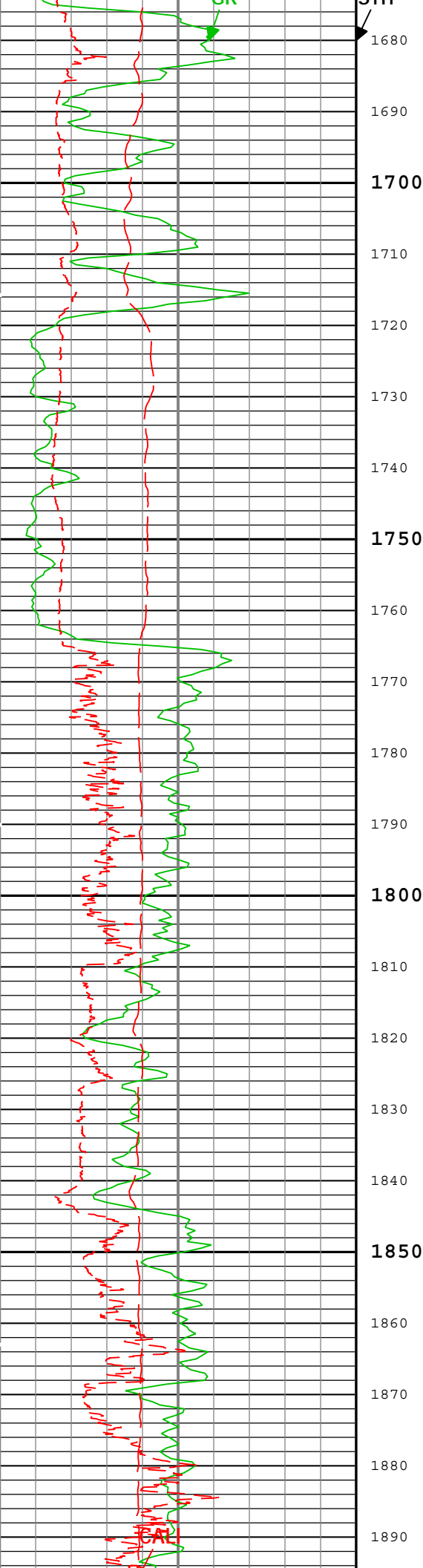


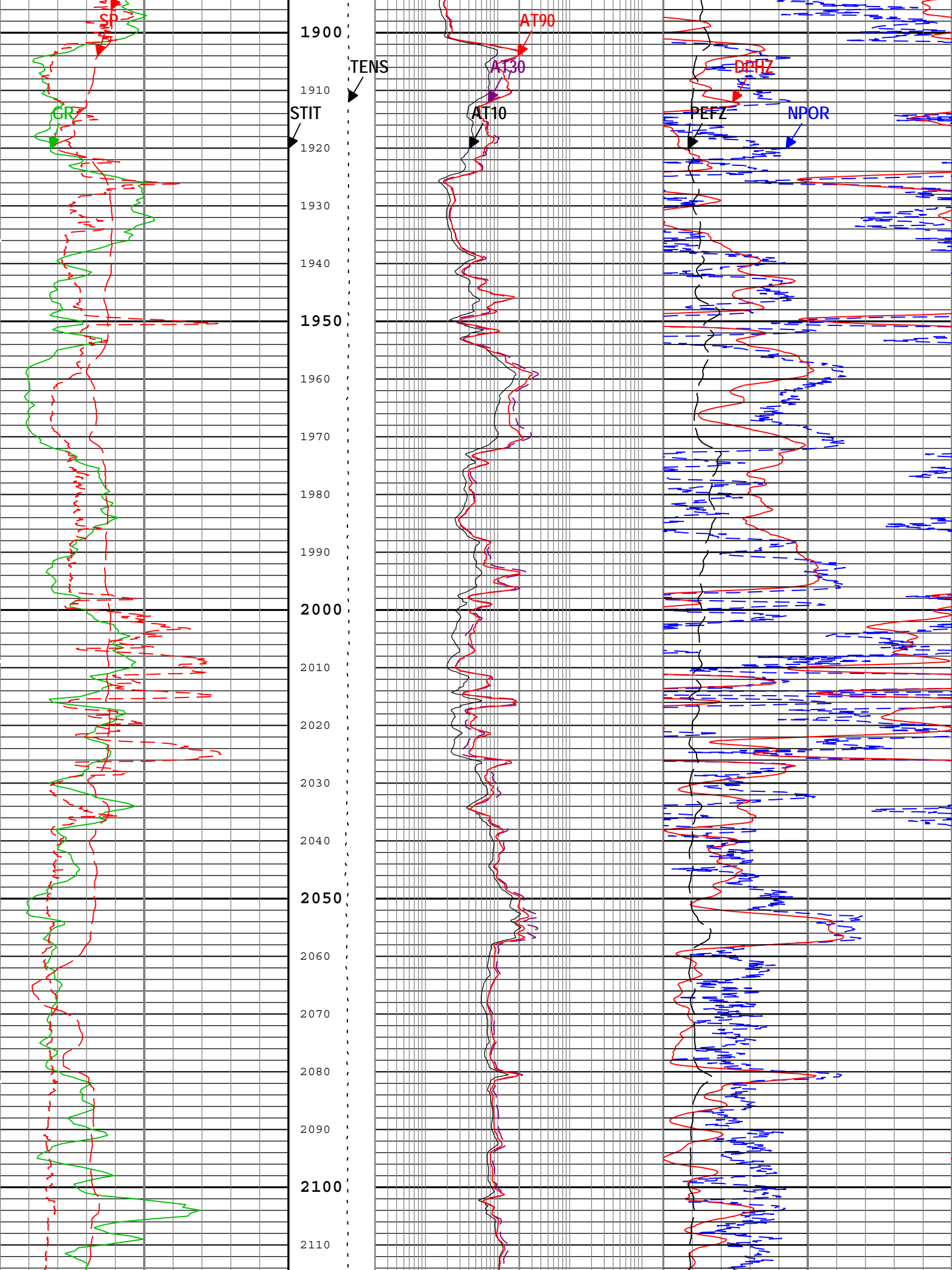


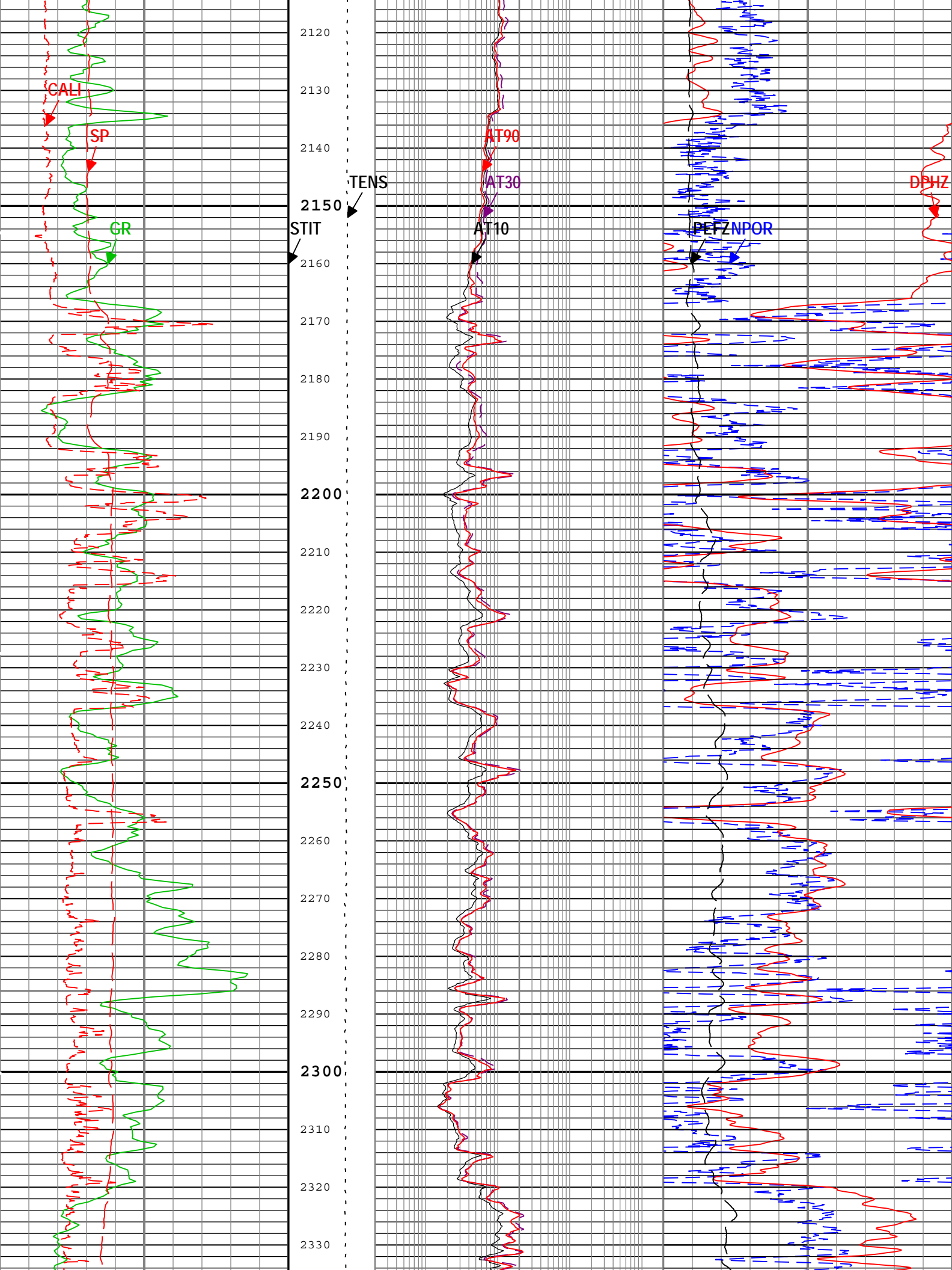


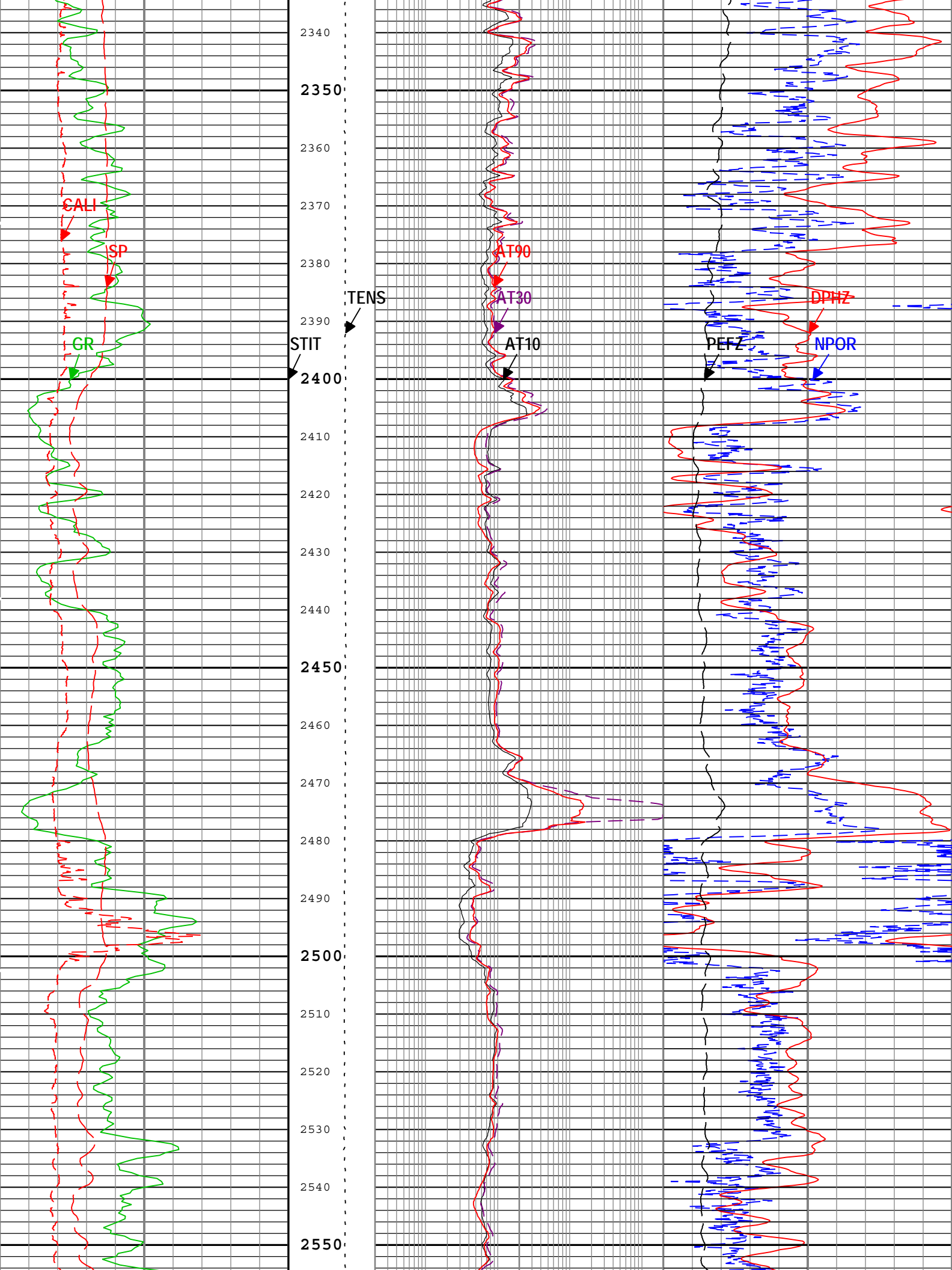


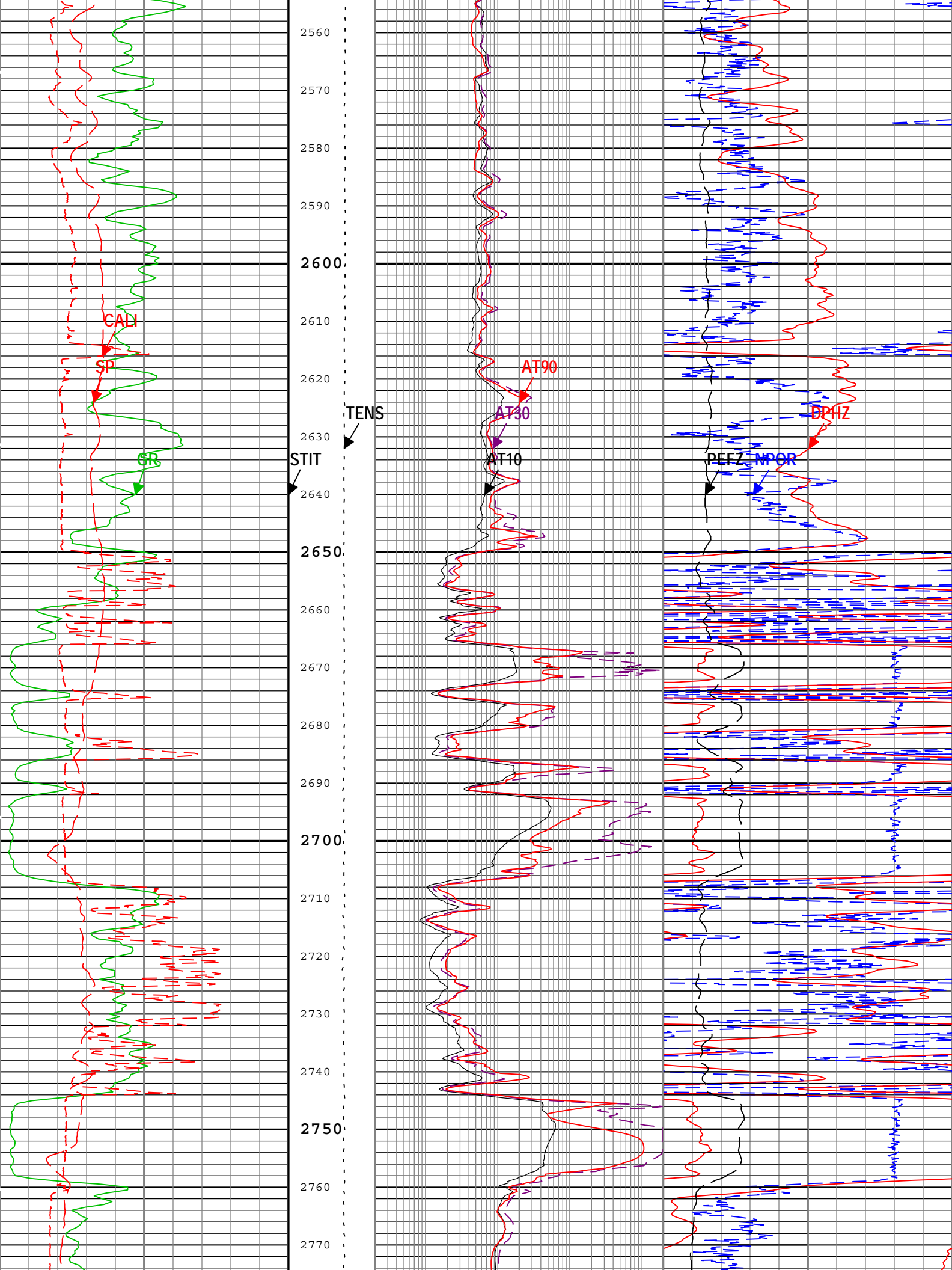


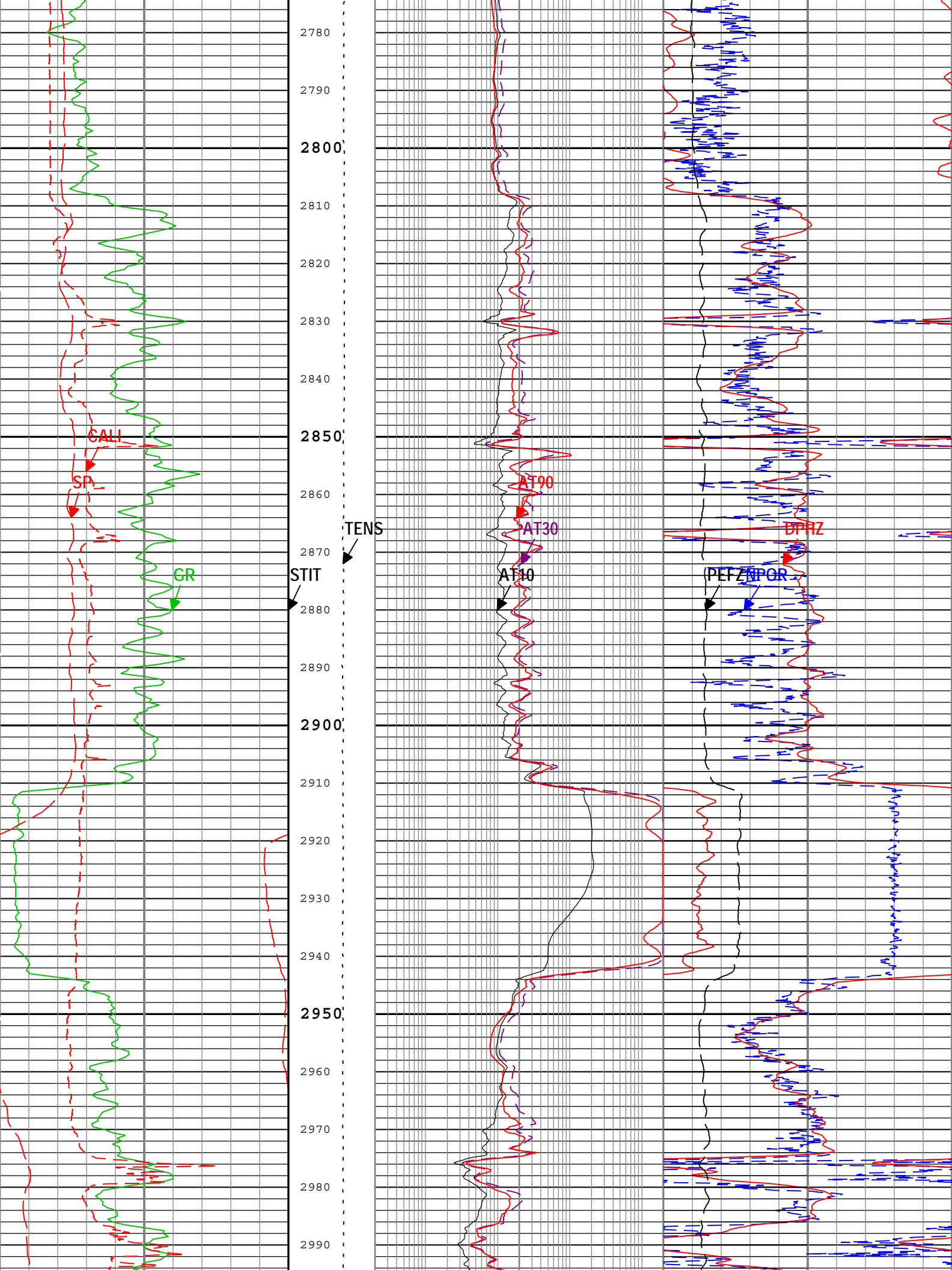


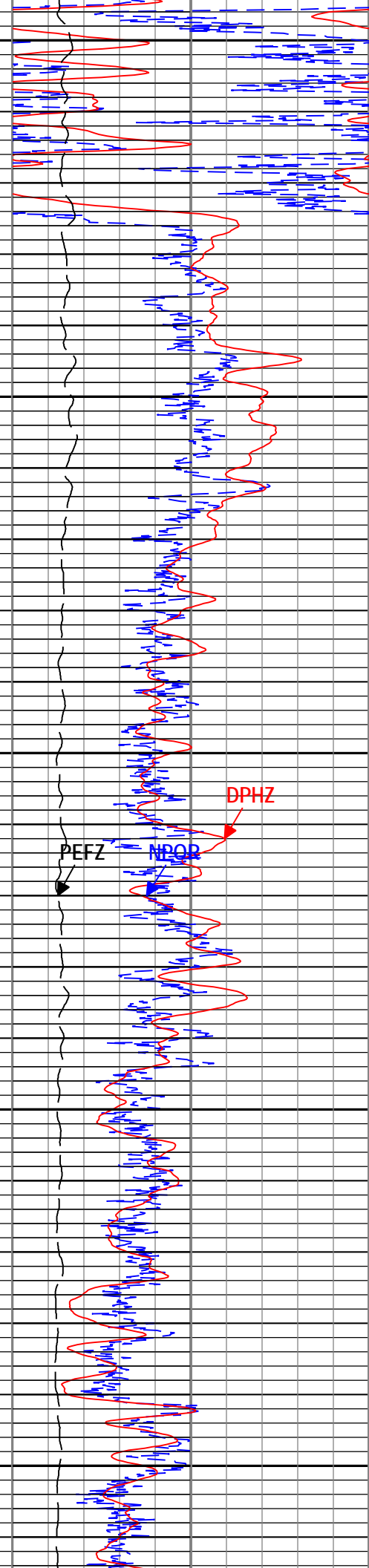
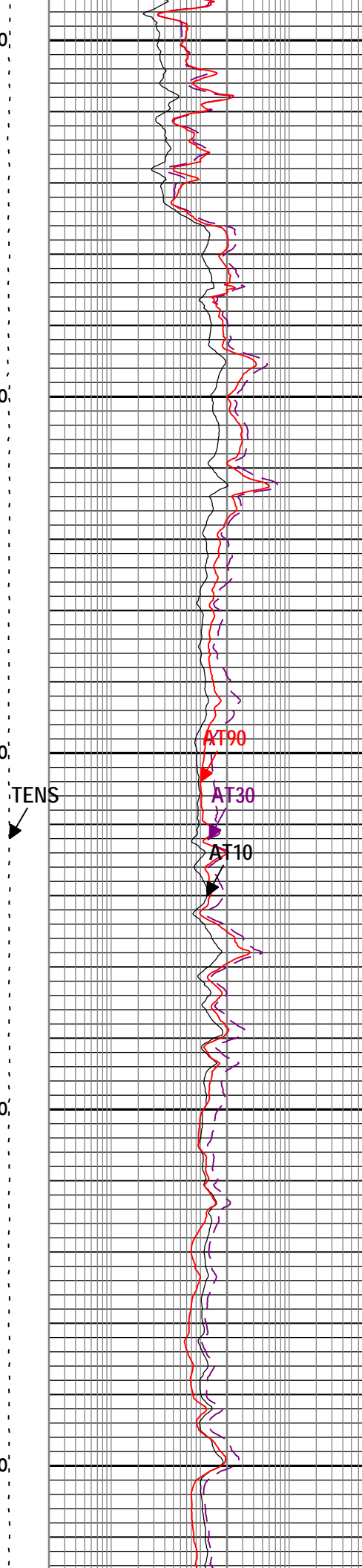
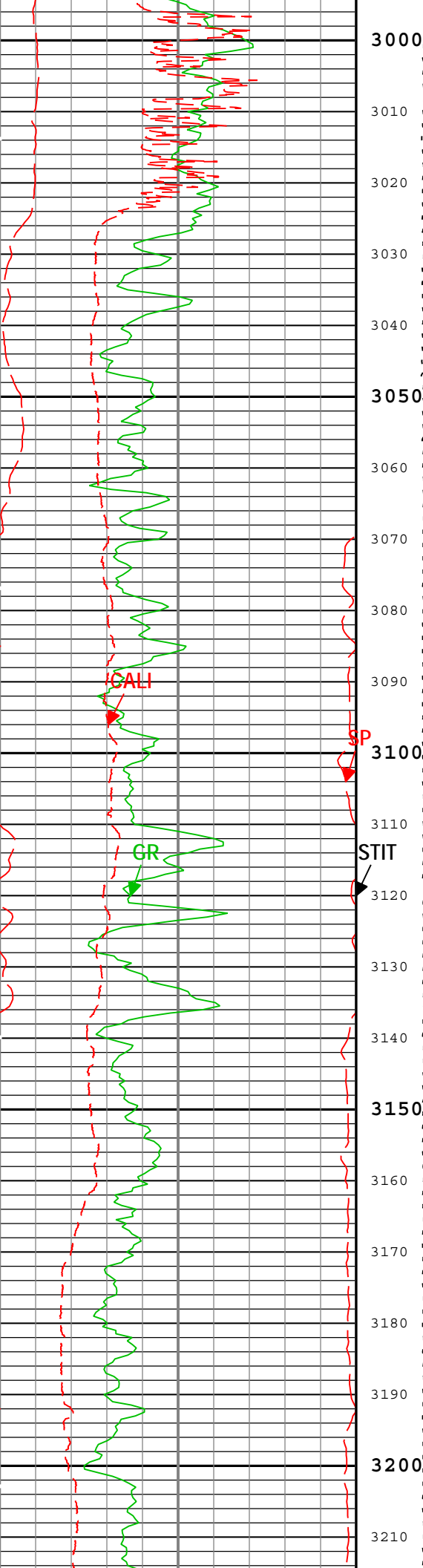


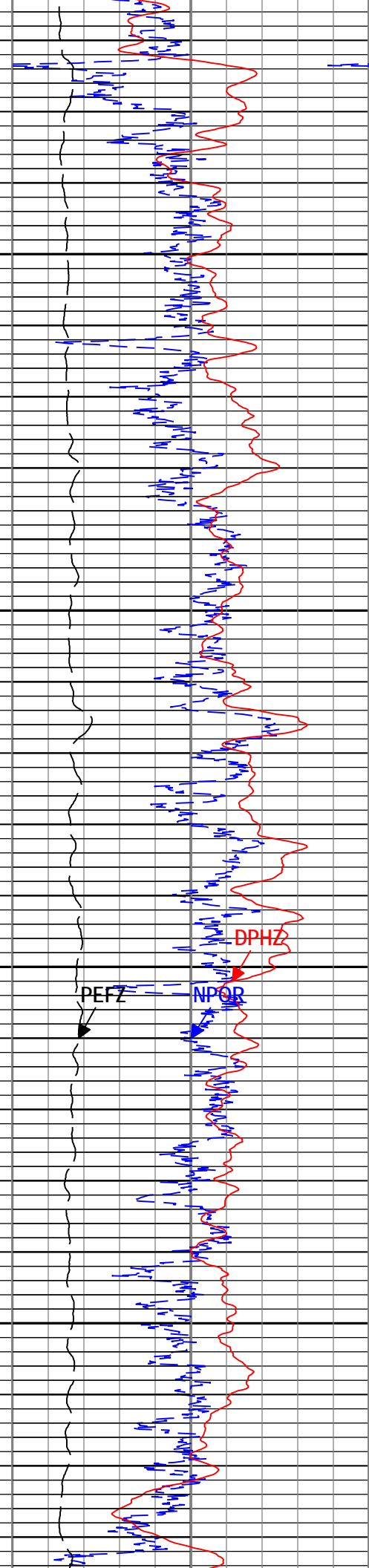
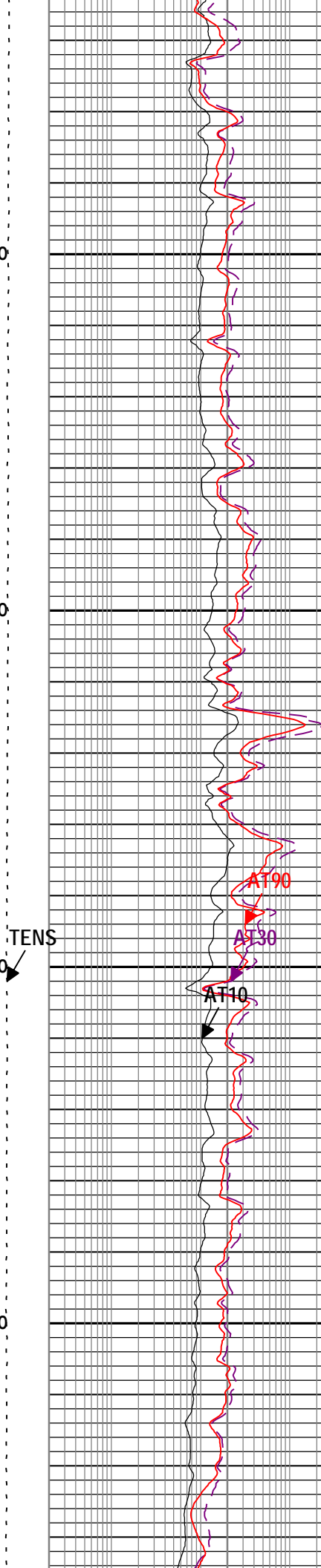
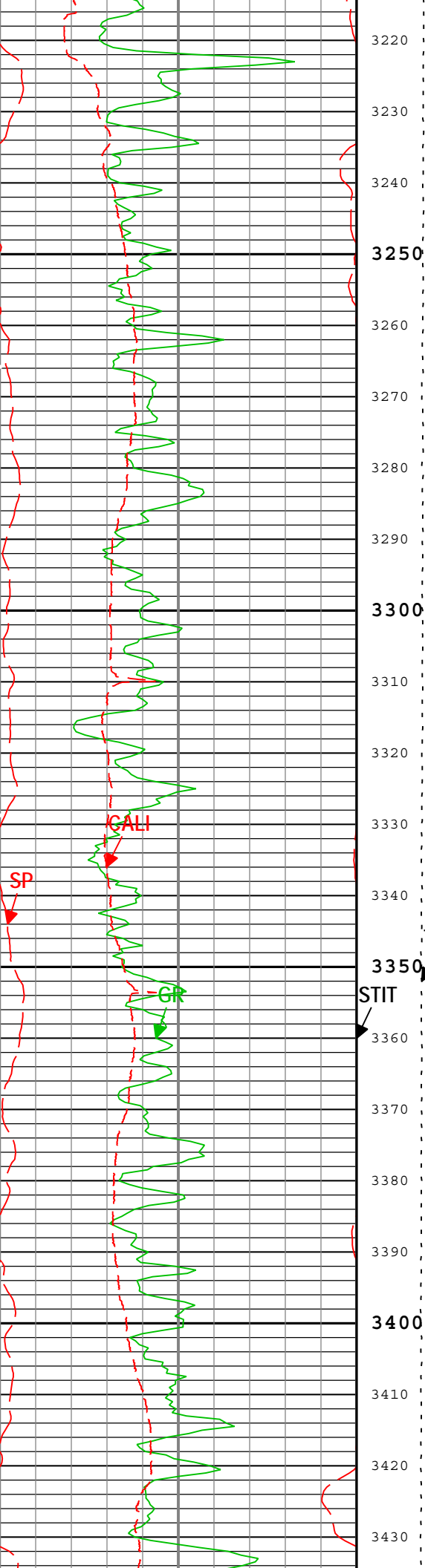


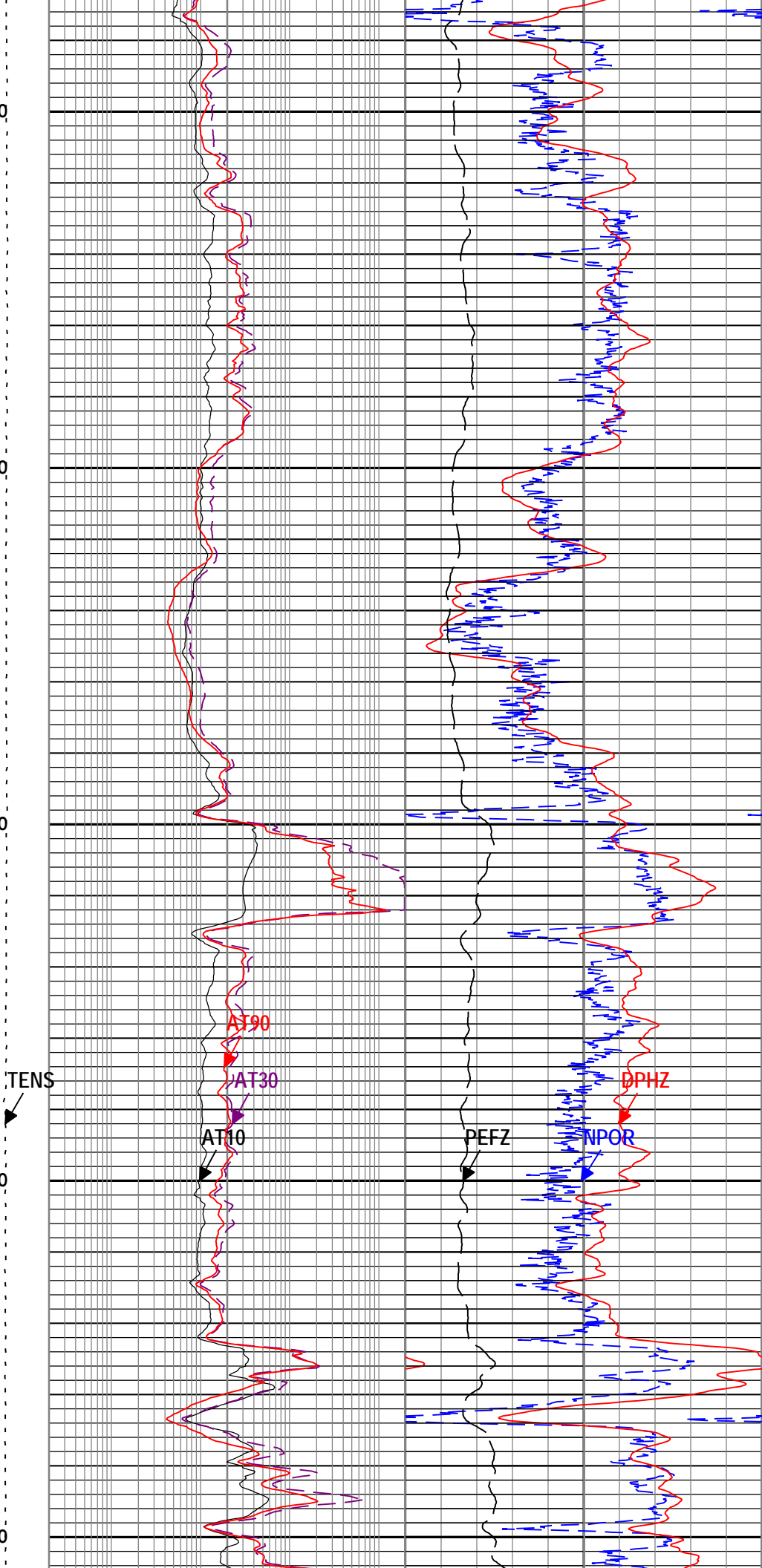
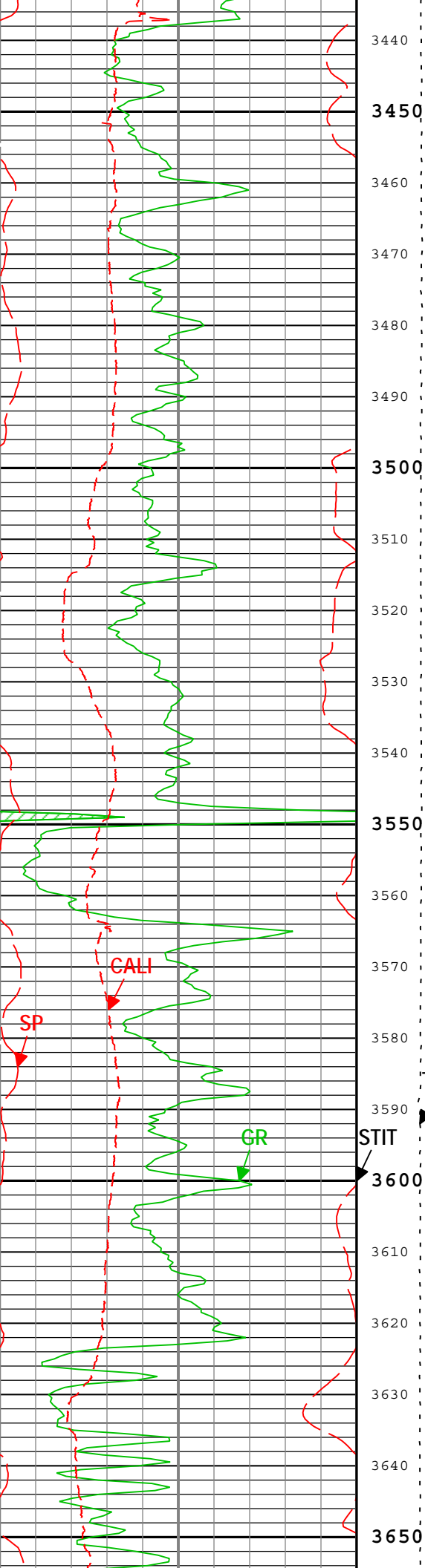


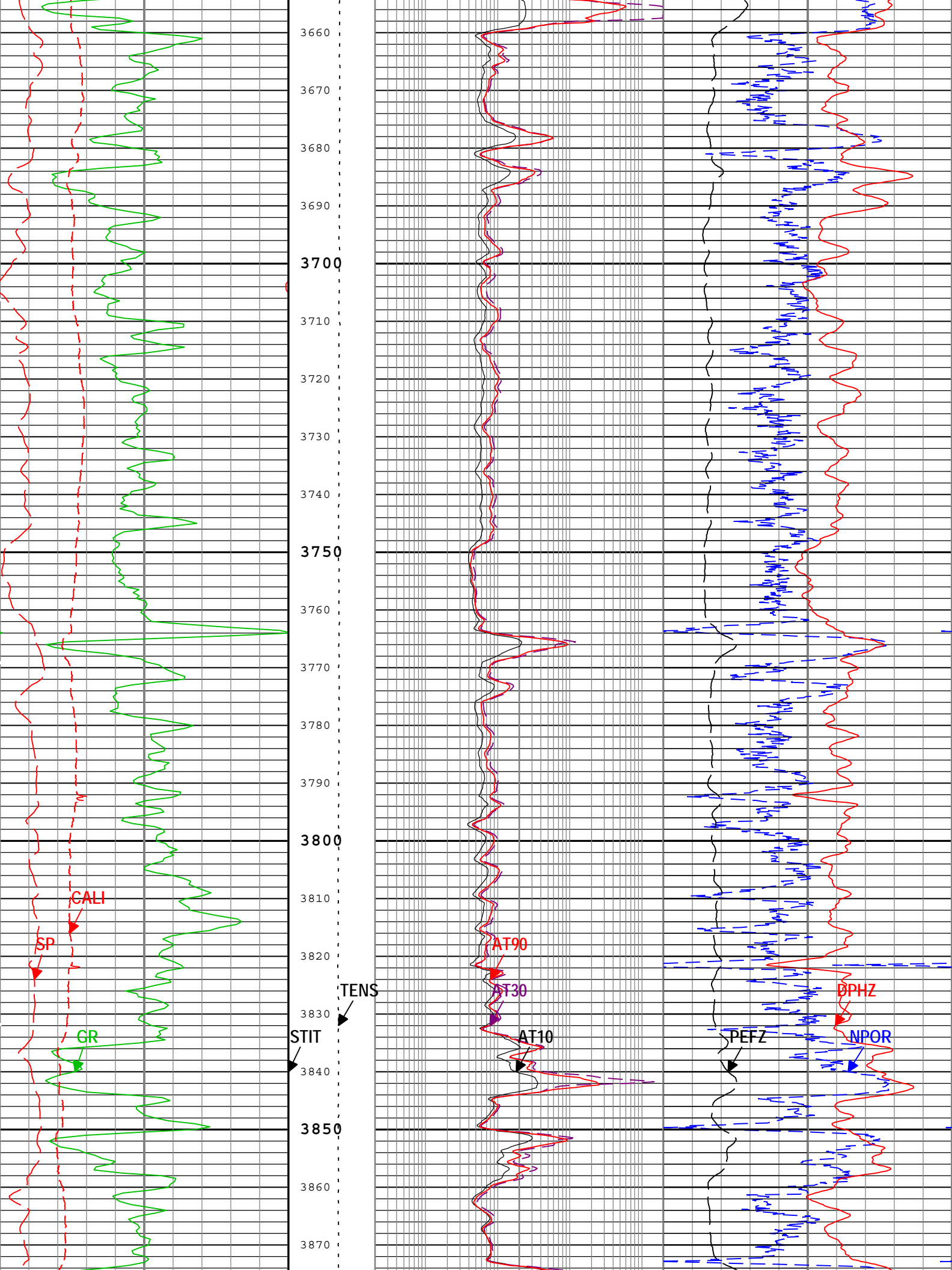


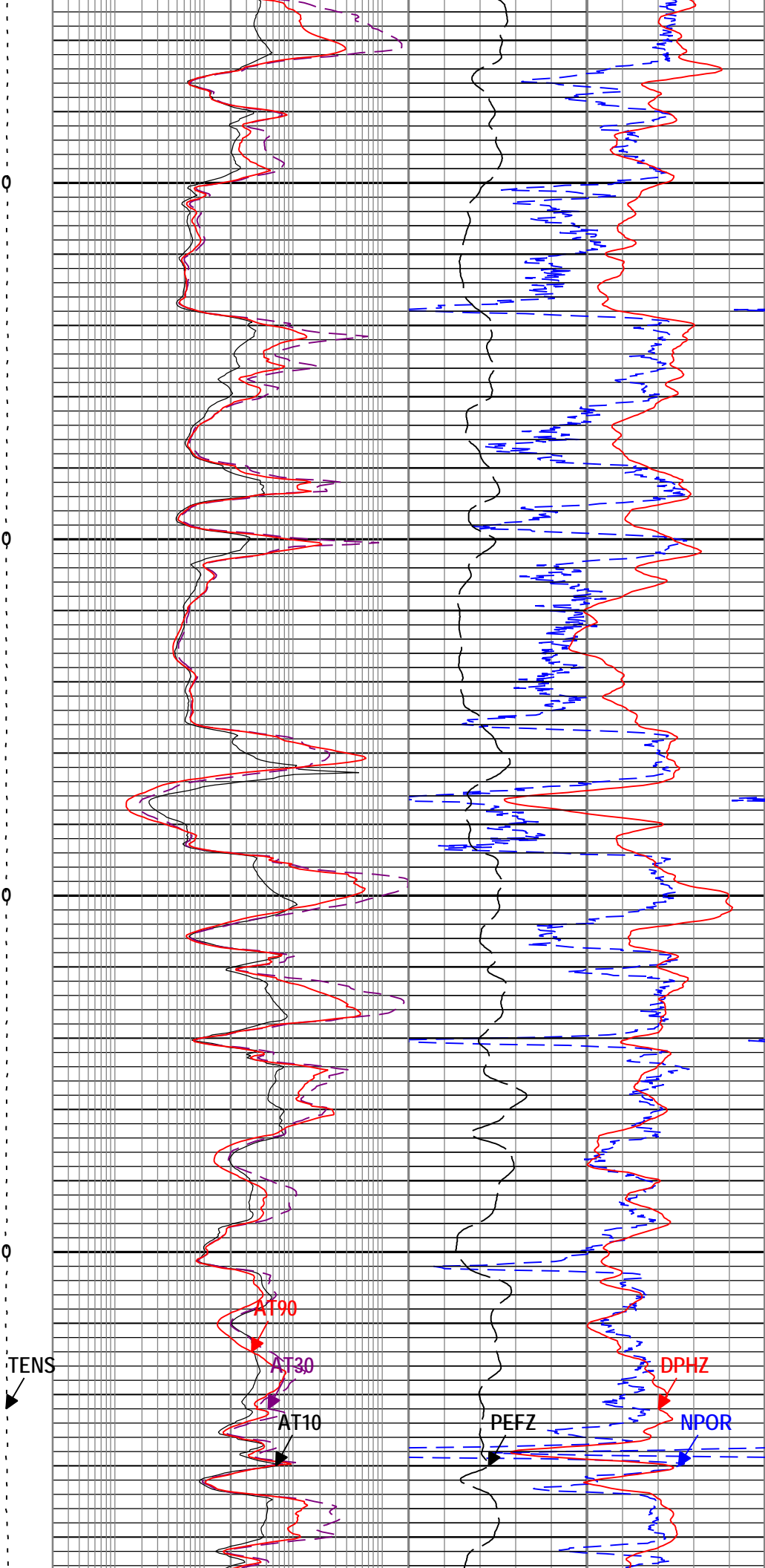
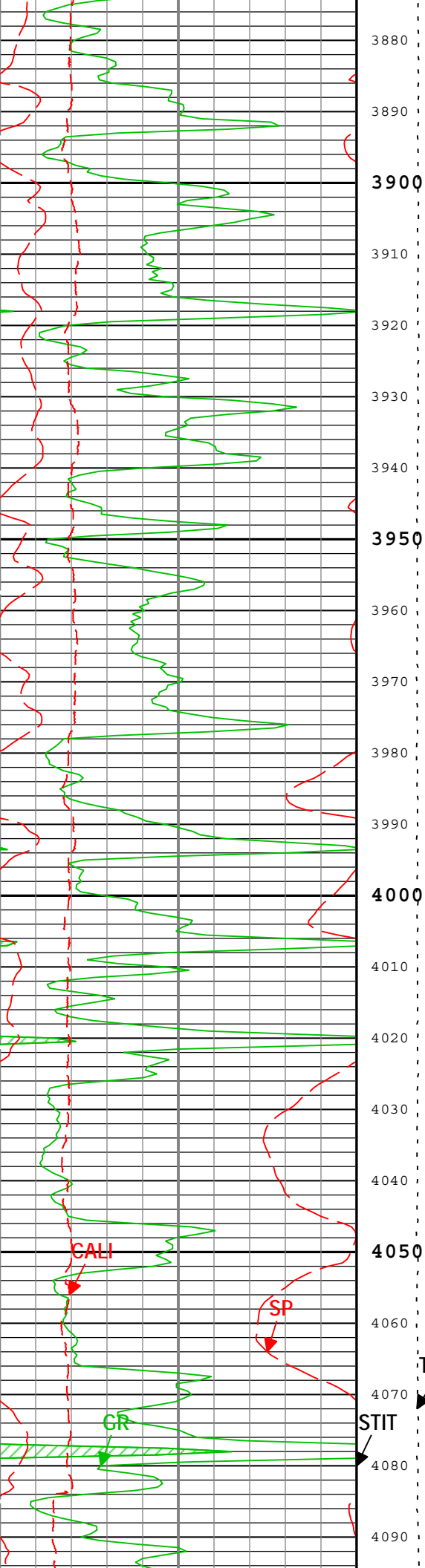


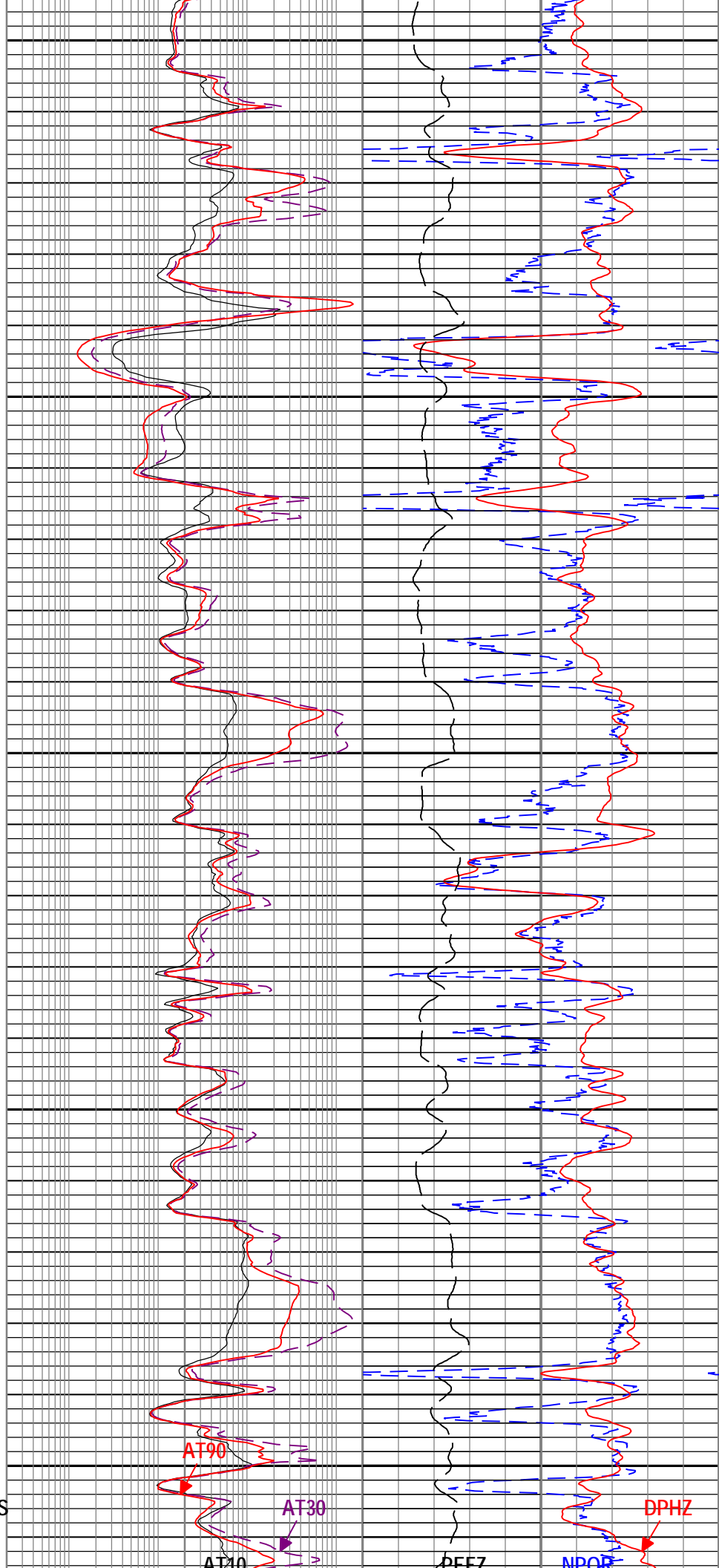
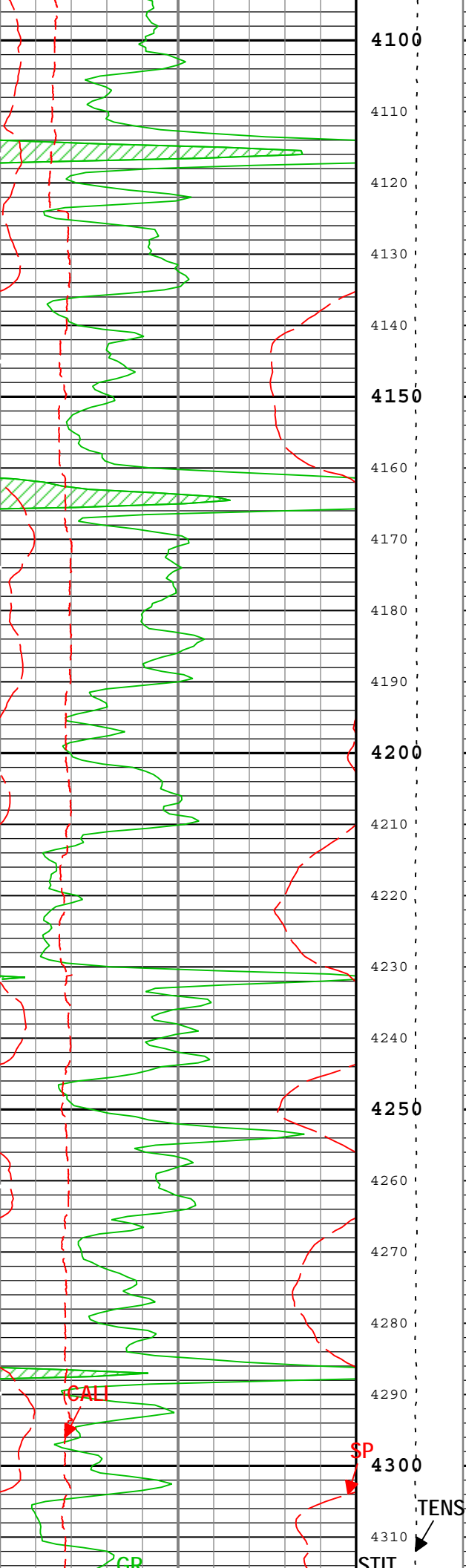


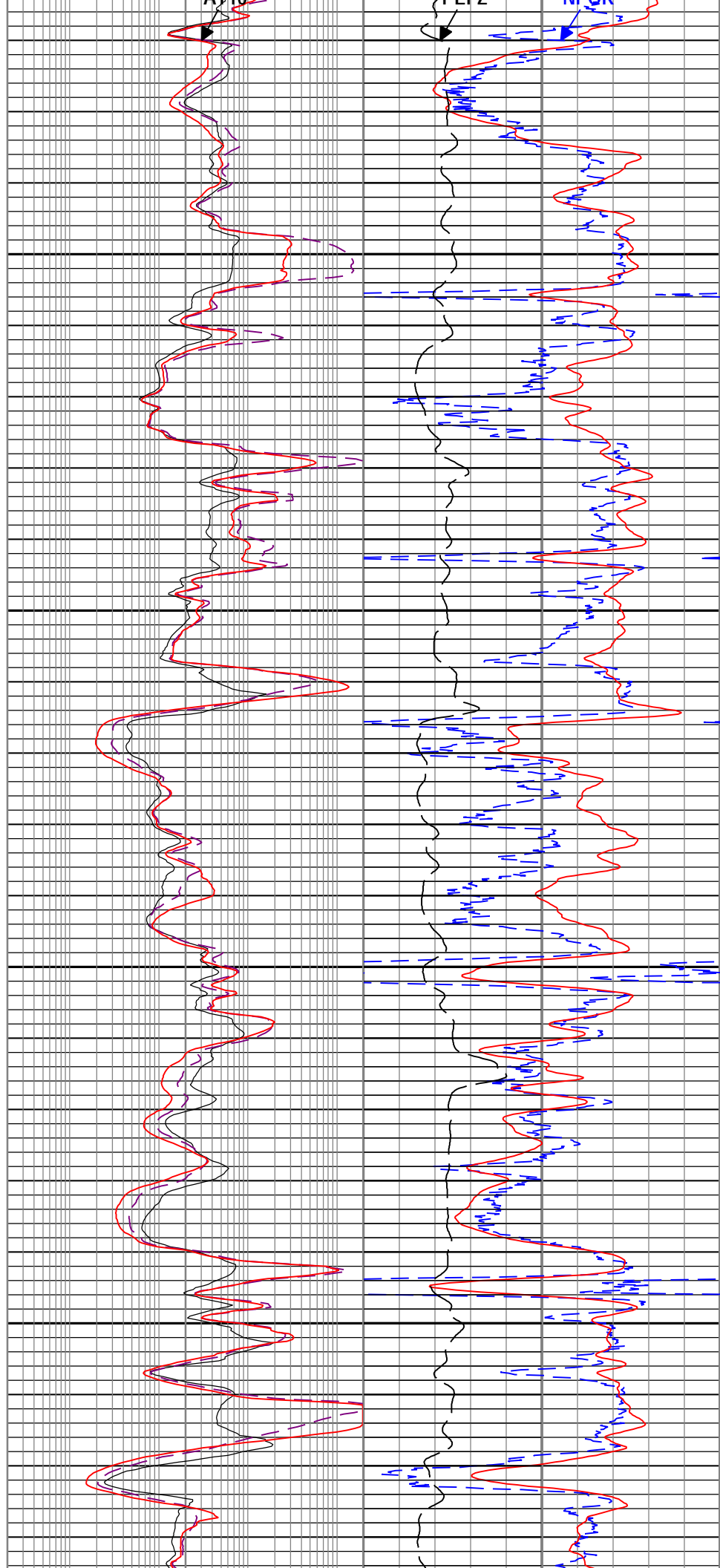
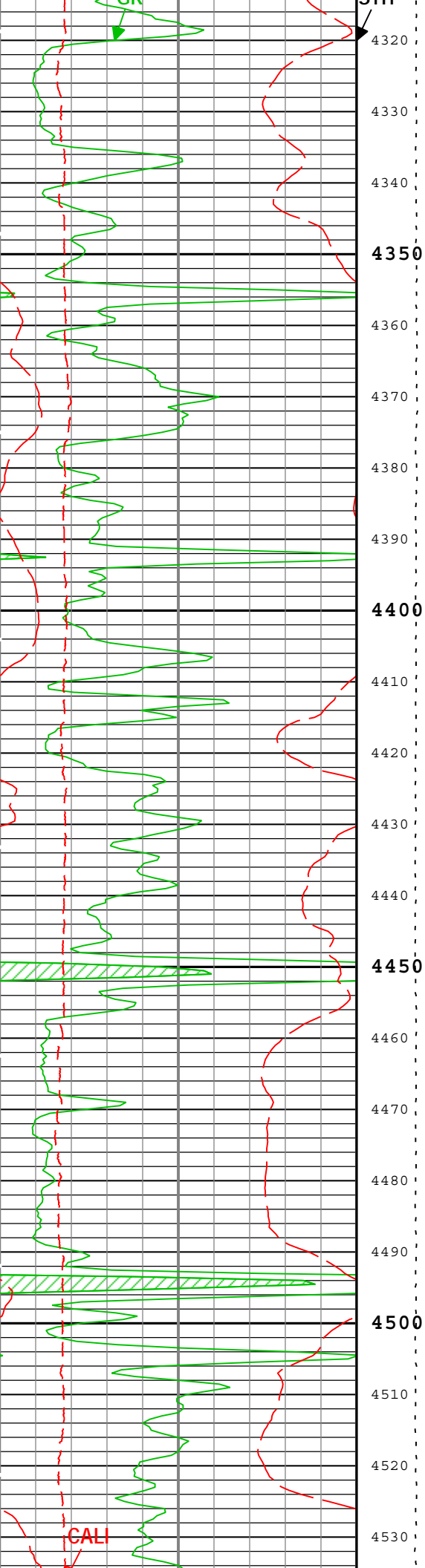


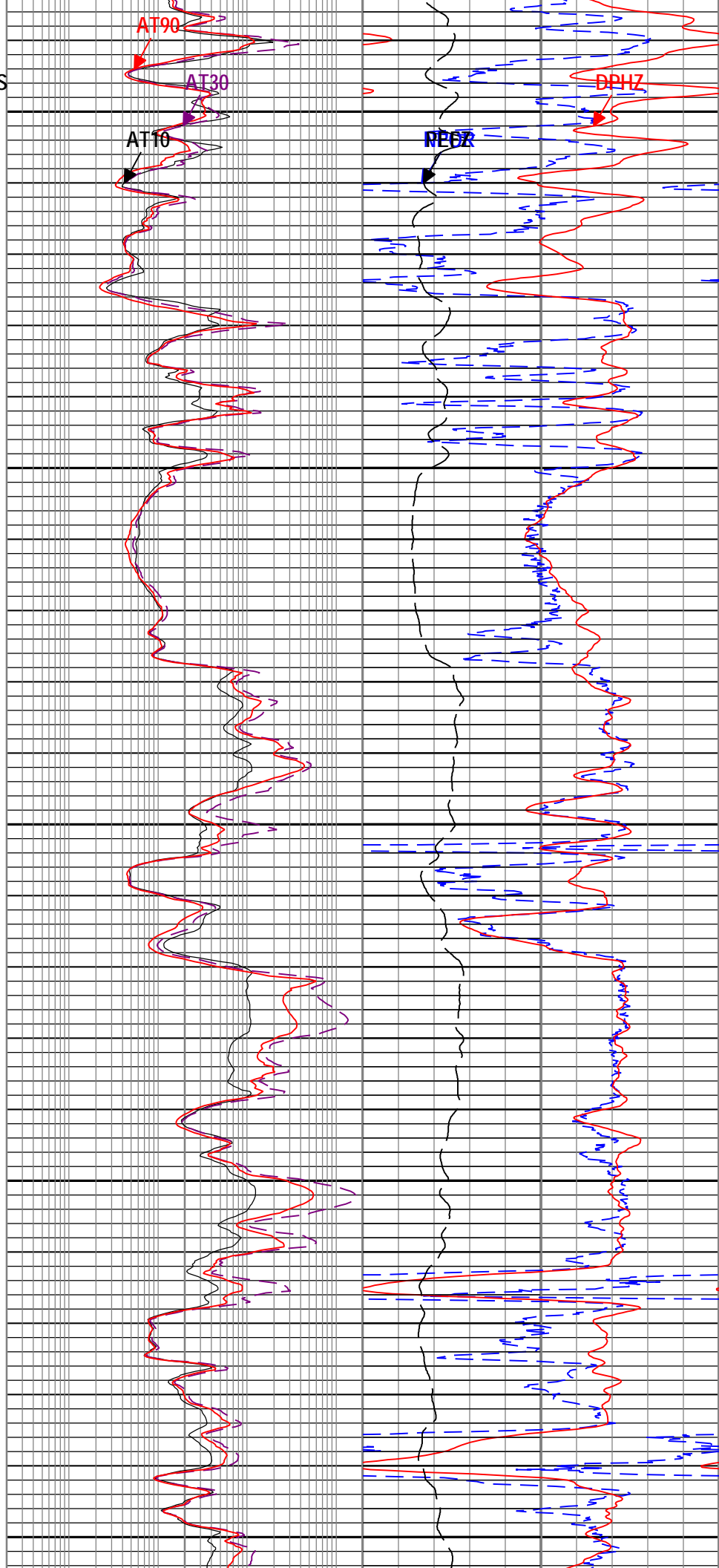
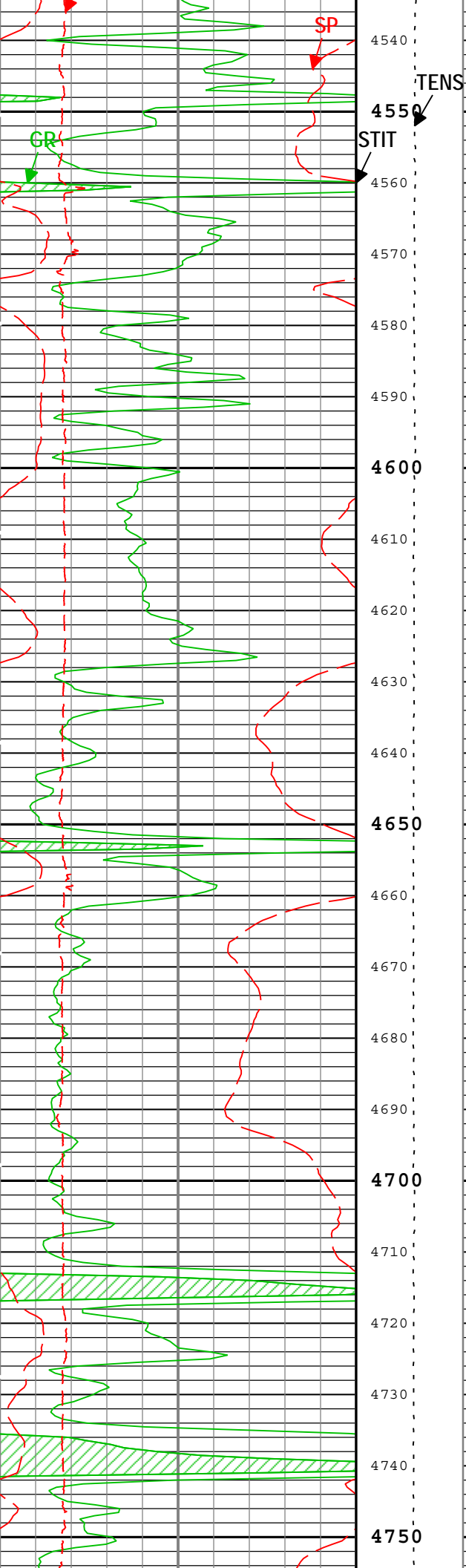


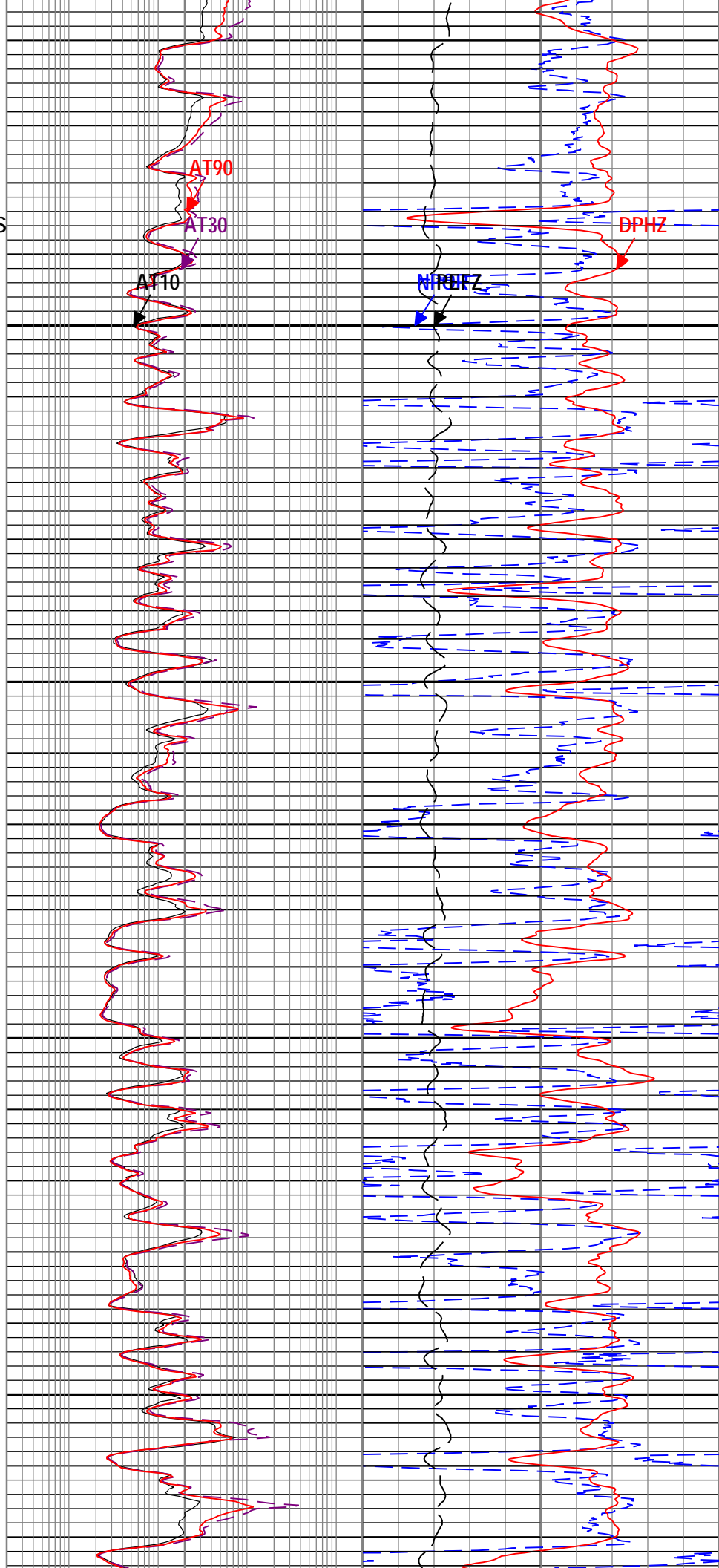
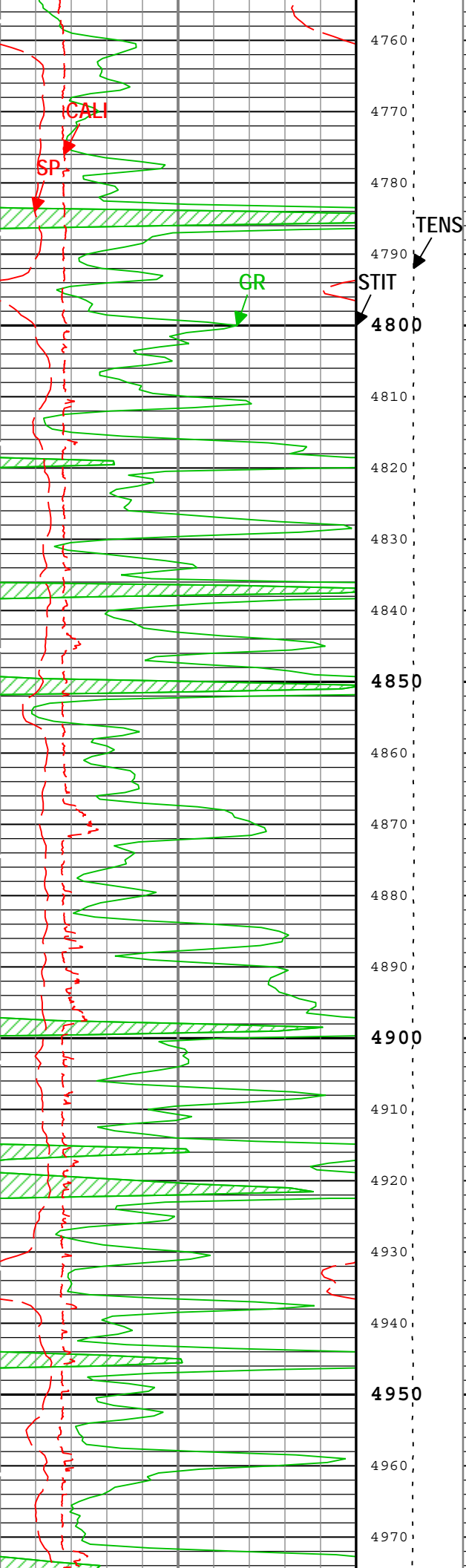


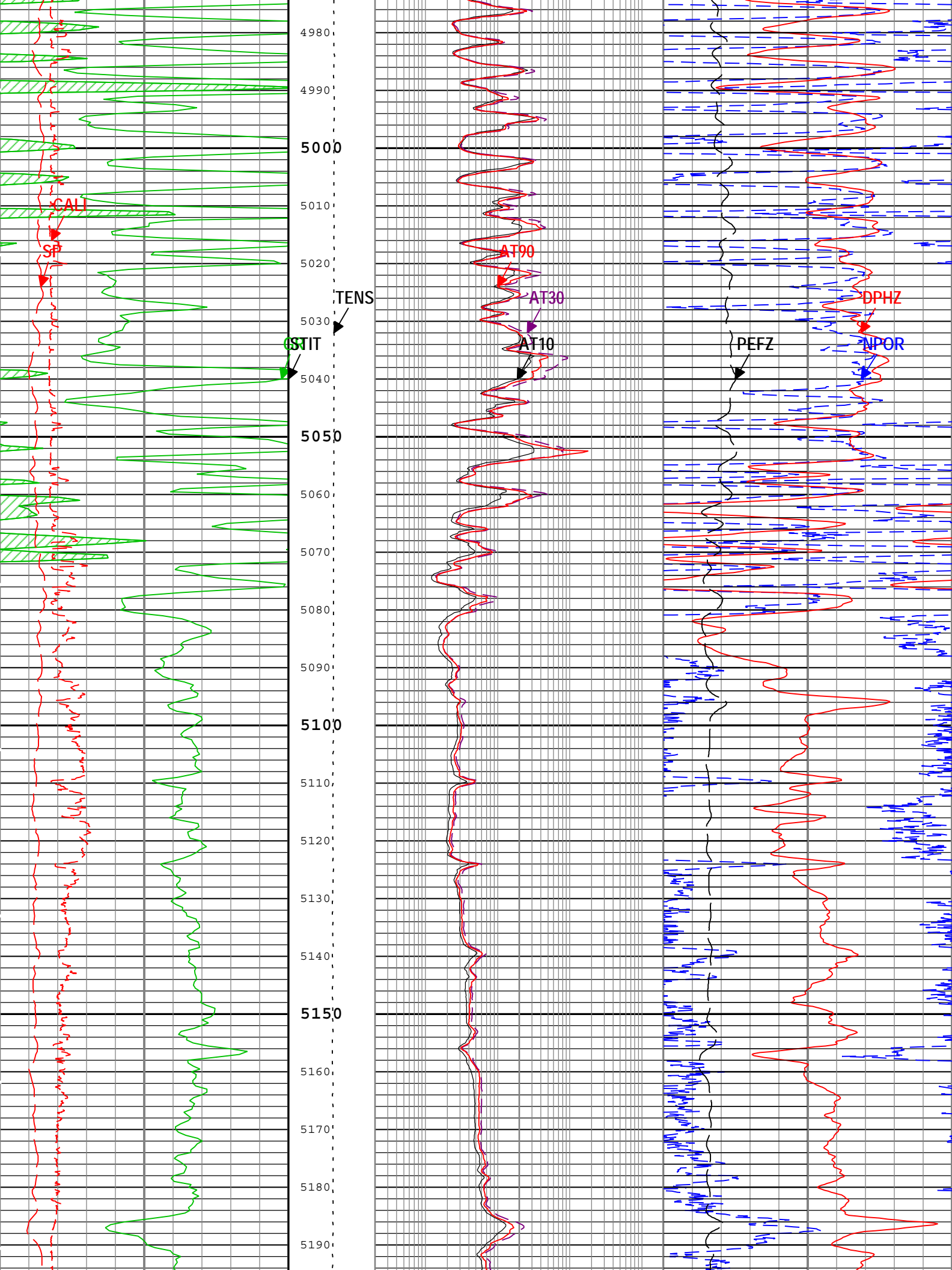


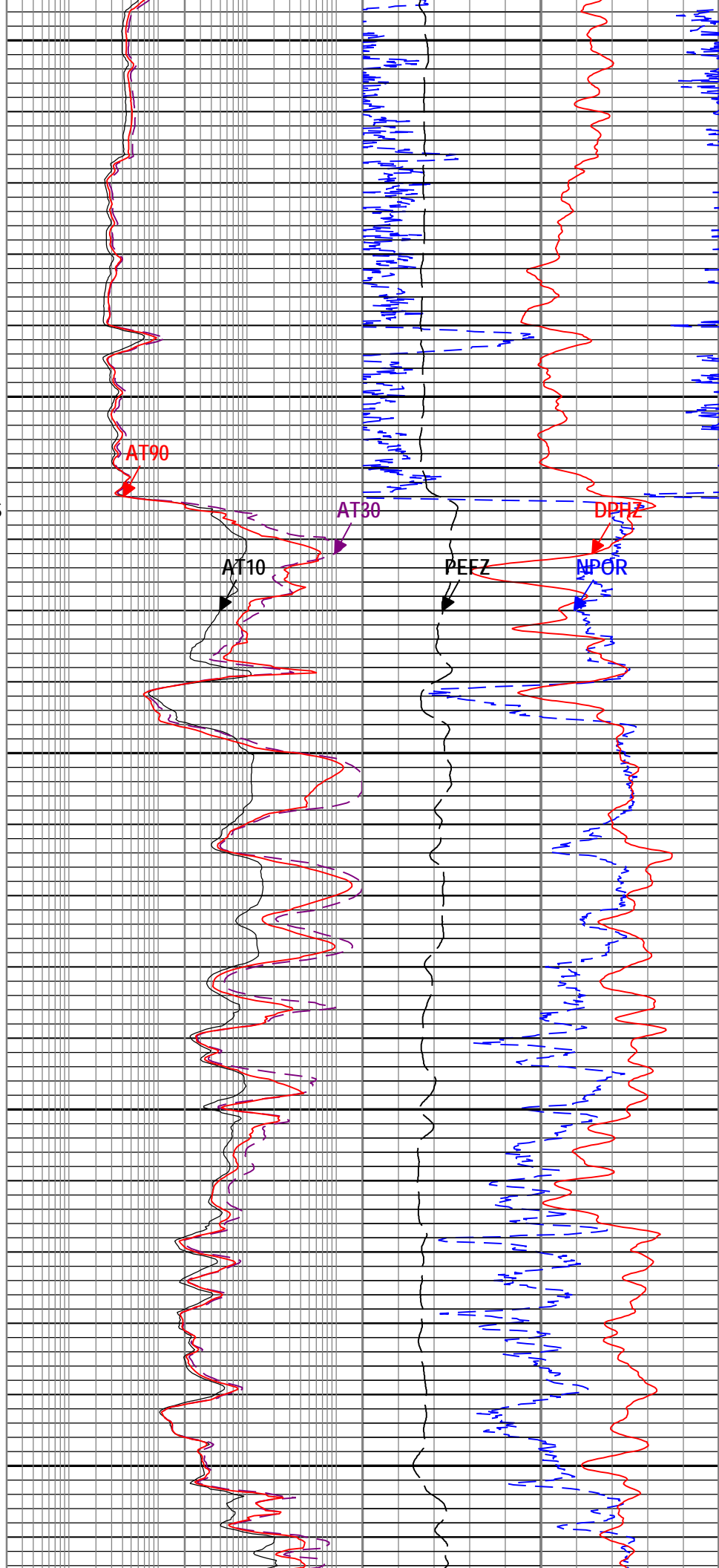
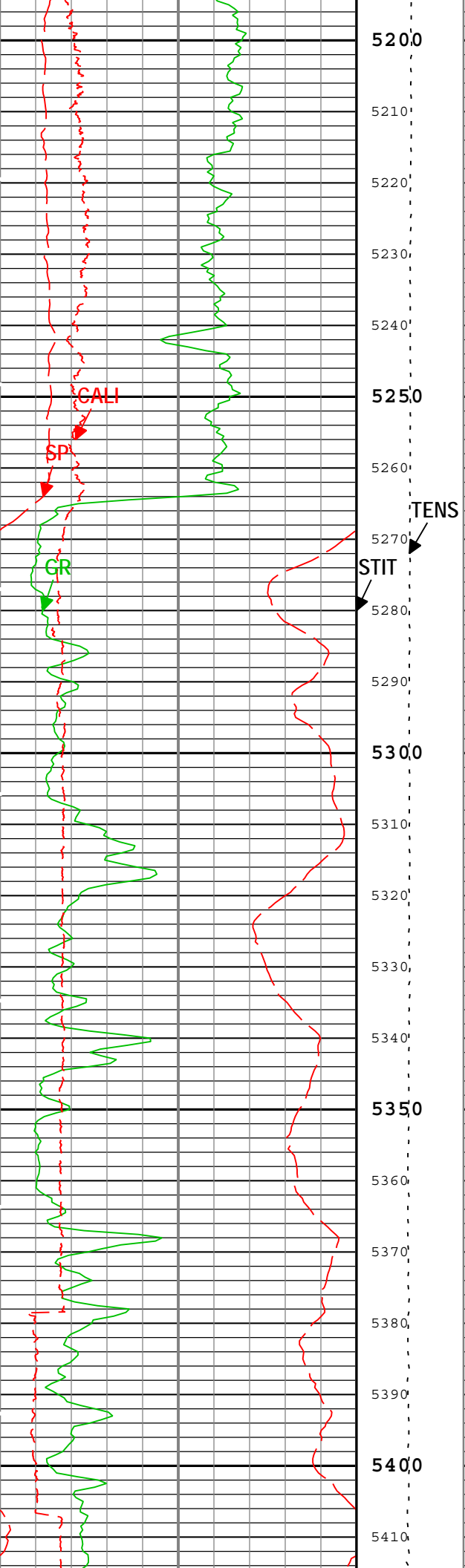


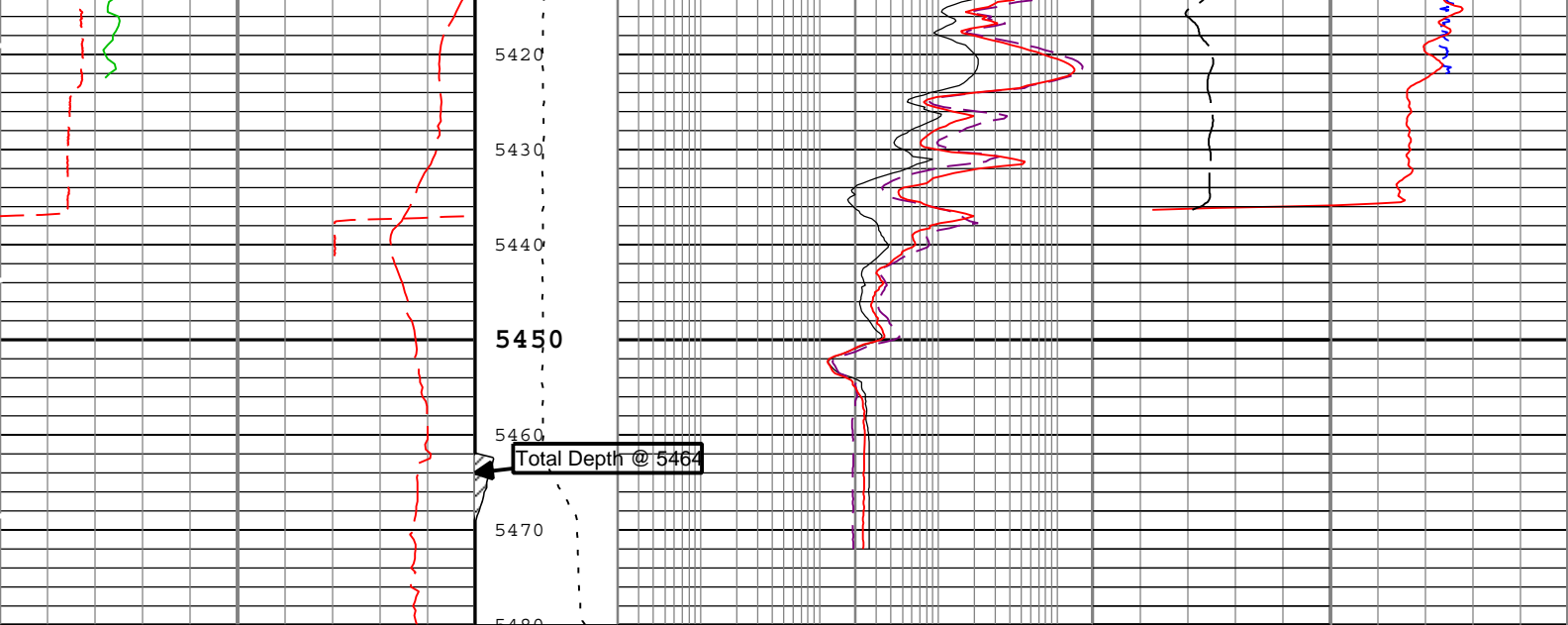












Gamma Ray Back up			Stuck Tool Indicator, Total (STIT)	Array Induction Two Foot Resistivity A10 (AT10) AIT-H			Gas Effect		
Gamma Ray (GR) HGNS-H				0.2	ohm.m		2000	NPOR Backup	
0	gAPI		200	0	ft	50	Enhanced Thermal Neutron Porosity in Selected Lithology (NPOR) HGNS-H		
Spontaneous Potential (SP) AIT-H			Cable Tension (TENS)	Array Induction Two Foot Resistivity A30 (AT30) AIT-H			0.3		
0	mV			200	0.2	ohm.m		2000	ft3/ft3
Caliper (CALI) HDRS-H			6000 lbf	Array Induction Two Foot Resistivity A90 (AT90) AIT-H			Standard Resolution Density Porosity (DPHZ) HDRS-H		
6	in			16	0.2	ohm.m		2000	ft3/ft3
							Standard Resolution Formation Photoelectric Factor (PEFZ) HDRS-H		
							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: 03-Nov-2012 19:59:50

Channel Processing 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	No	
ASTA	Array Induction Tool Standoff	AIT-H	0.6	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	5536.59	ppm
CALI_SHIFT	CALI Supplementary Offset	HDRS-H	0	in
CBLO	Casing Bottom (Logger)	WLSESSION	432	ft
CDEN	Cement Density	HGNS-H	2	g/cm3
DFD	Drilling Fluid Density	Borehole	9.3	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DFT_WATER	Drilling Fluid Water Type	Borehole	Chemical Gel	
DHC	Density Hole Correction	HDRS-H	Bit Size	

	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-H	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	86	degF
NPRM	HRDD Nuclear Processing Mode	HDRS-H	High Resolution	
RMFS	Resistivity of Mud Filtrate Sample	Borehole	1.83	ohm.m
SOCO	Standoff Correction Option	HGNS-H	Yes	
SPDR	SP Drift Per Foot	AIT-H	0	mV/ft
TD	Total Measured Depth	Borehole	5464	ft

Depth Zone Parameters			
Parameter	Value	Start (ft)	Stop (ft)
BS	0	292	432
BS	7.875	432	5480
All depth are actual.			

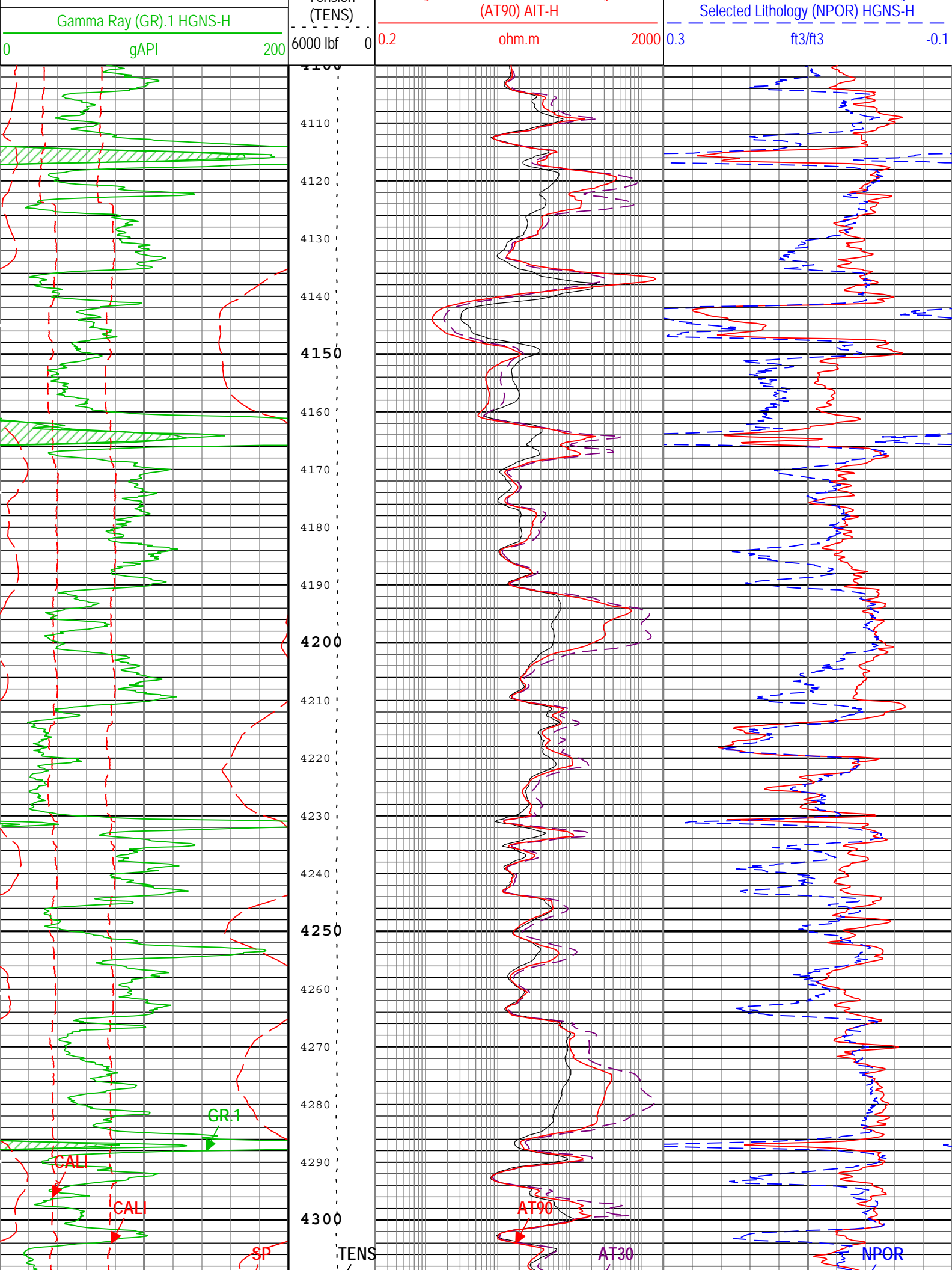
Tool Control Parameters				
Parameter	Description	Tool	Value	Unit
HMCA_BRD_TYPE	HMCA Board Type	HGNS-H	1	
HRGD_BRD_TYPE	HRGD Board Type	HDRS-H	WITH_HET	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	1800	ft/h
Run 1				

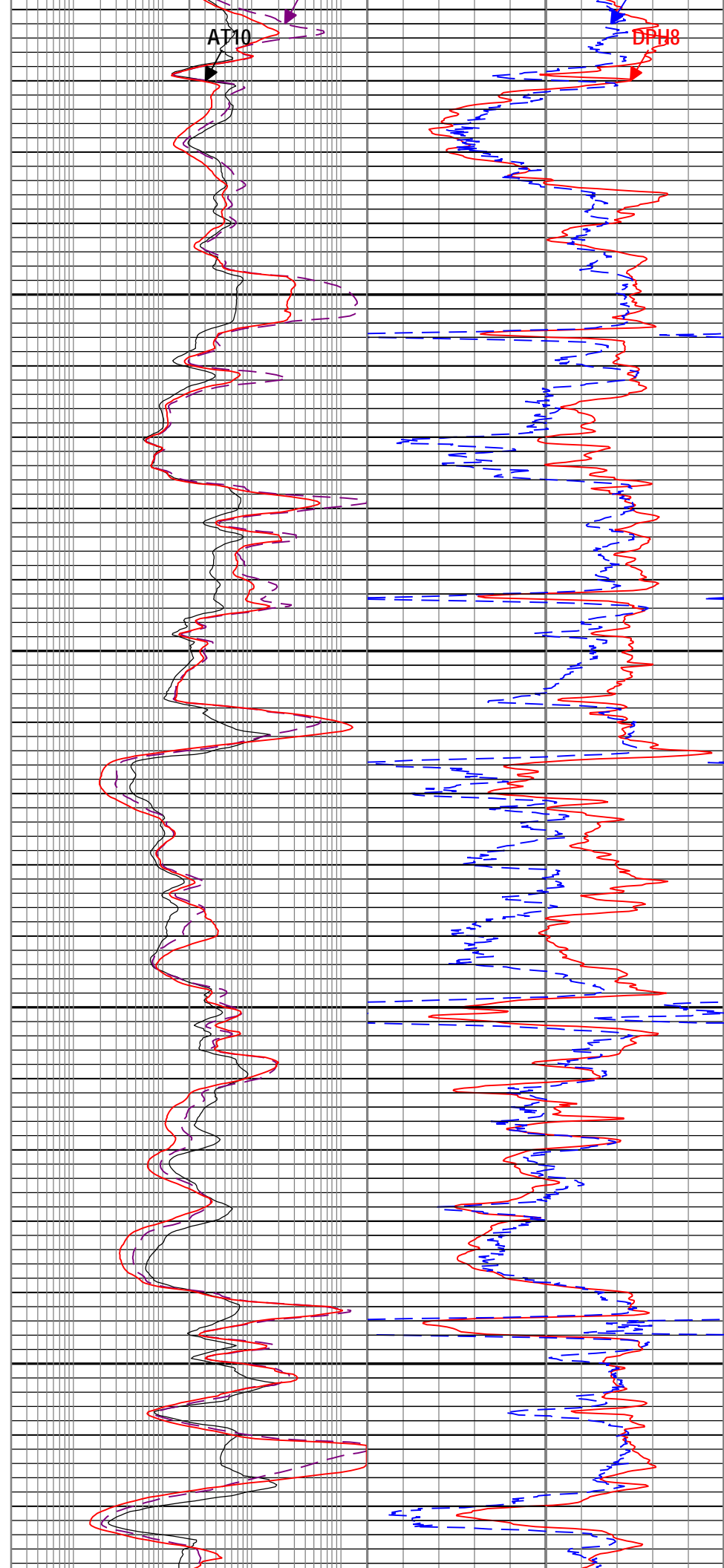
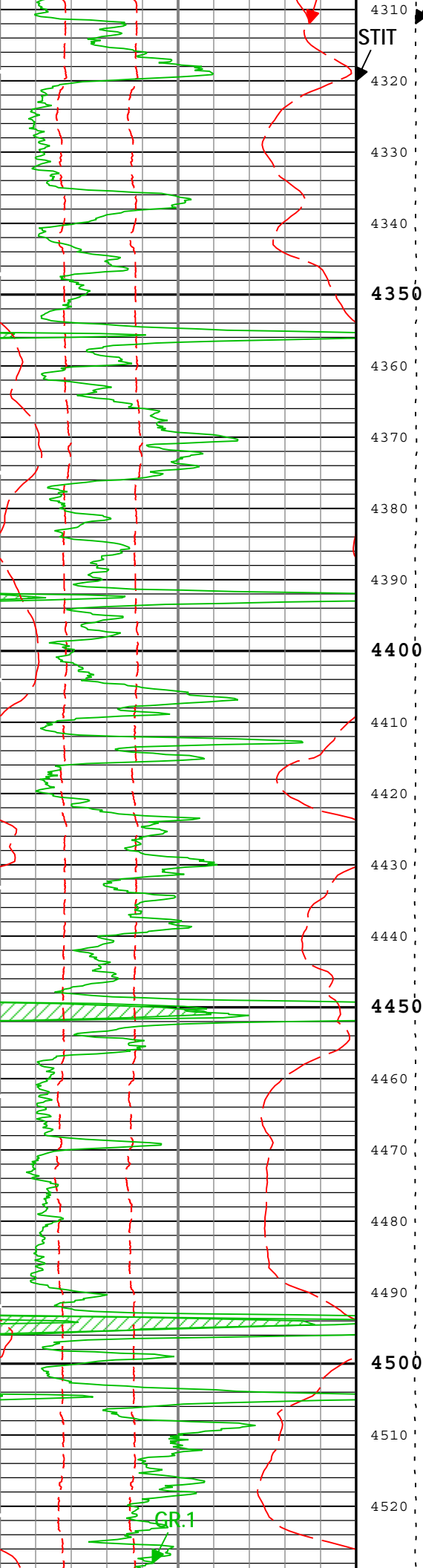
Integration Summary									
Output Channel(s)		Output Description		Input Parameter		Output Value		Unit	
Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Depth Shift	Include Parallel Data	
Run 1	Log[3]:Up	Up	349.28 ft	5480.21 ft	03-Nov-2012 5:57:47 PM	03-Nov-2012 7:44:15 PM	0.00 ft		
All depths are referenced to toolstring zero									
Log	Run 1: Log[3]:Up								

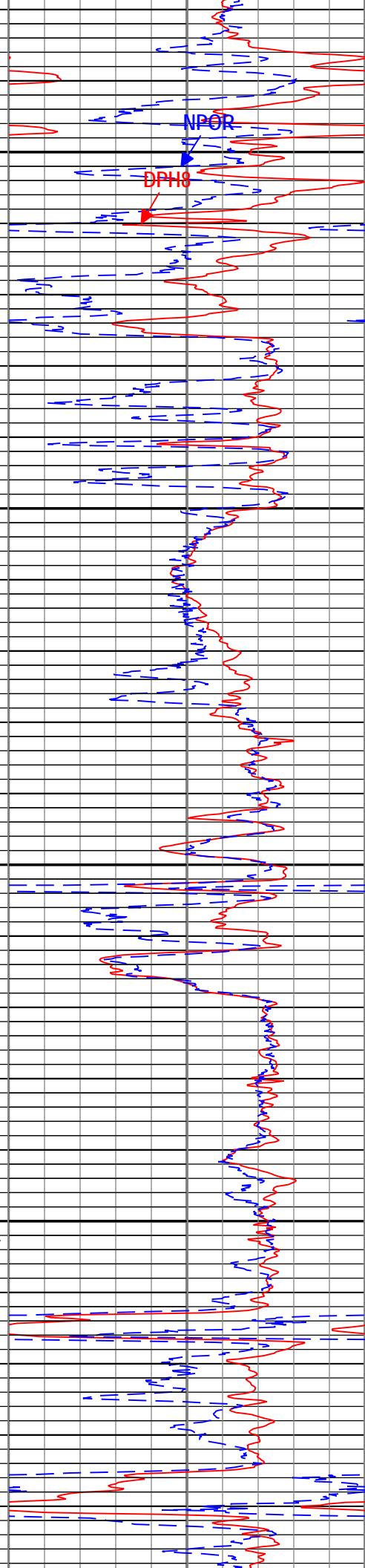
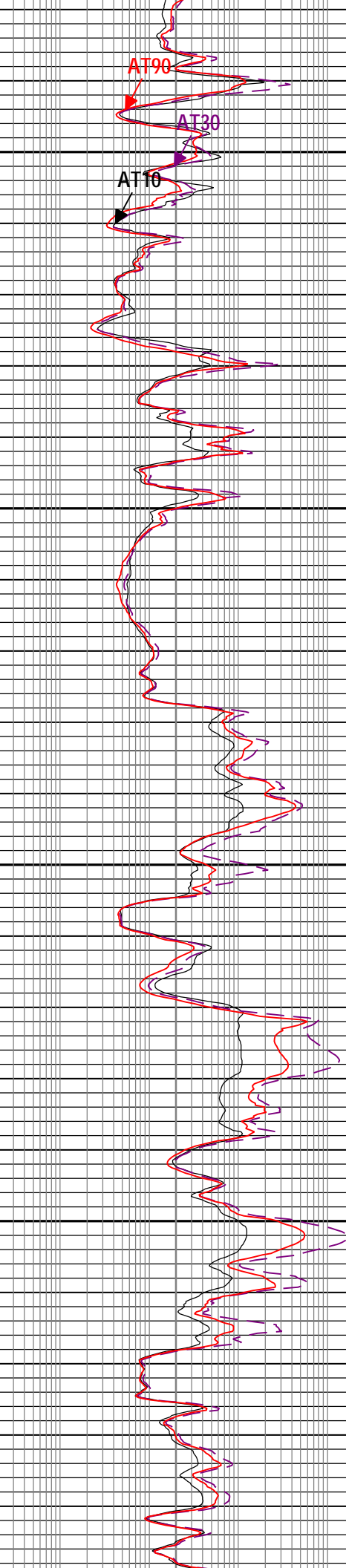
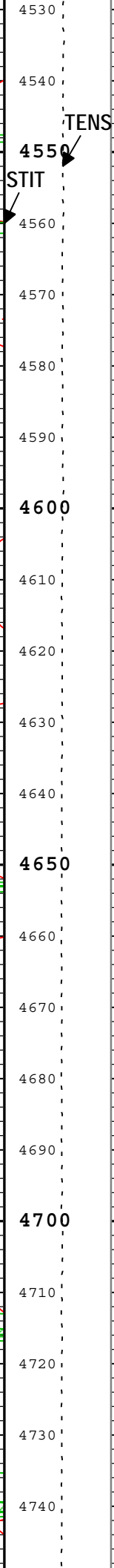
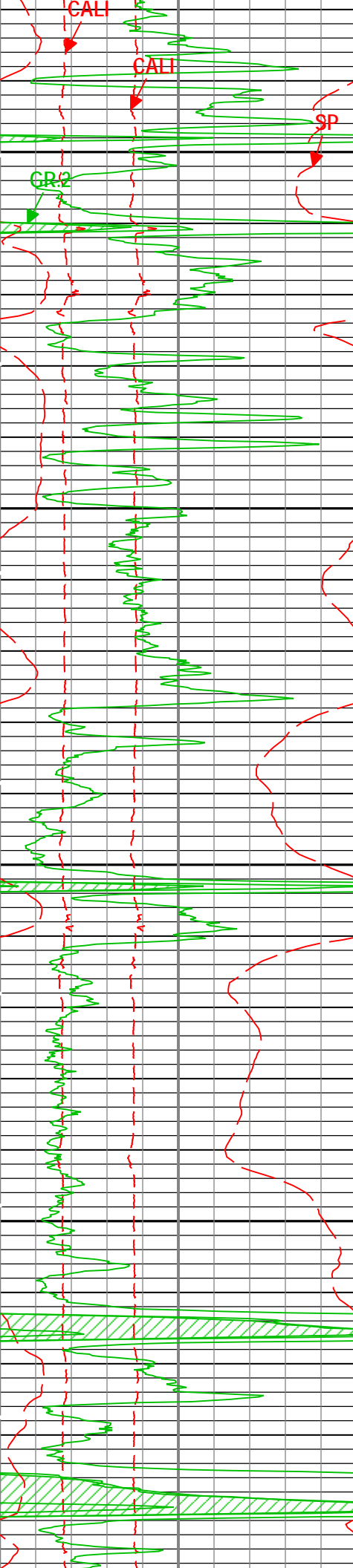
Description: HGNS standard resolution porosities for Platform Express Format: Log (HiRes EMD 5in Triple Combo) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 03-Nov-2012 19:59:53

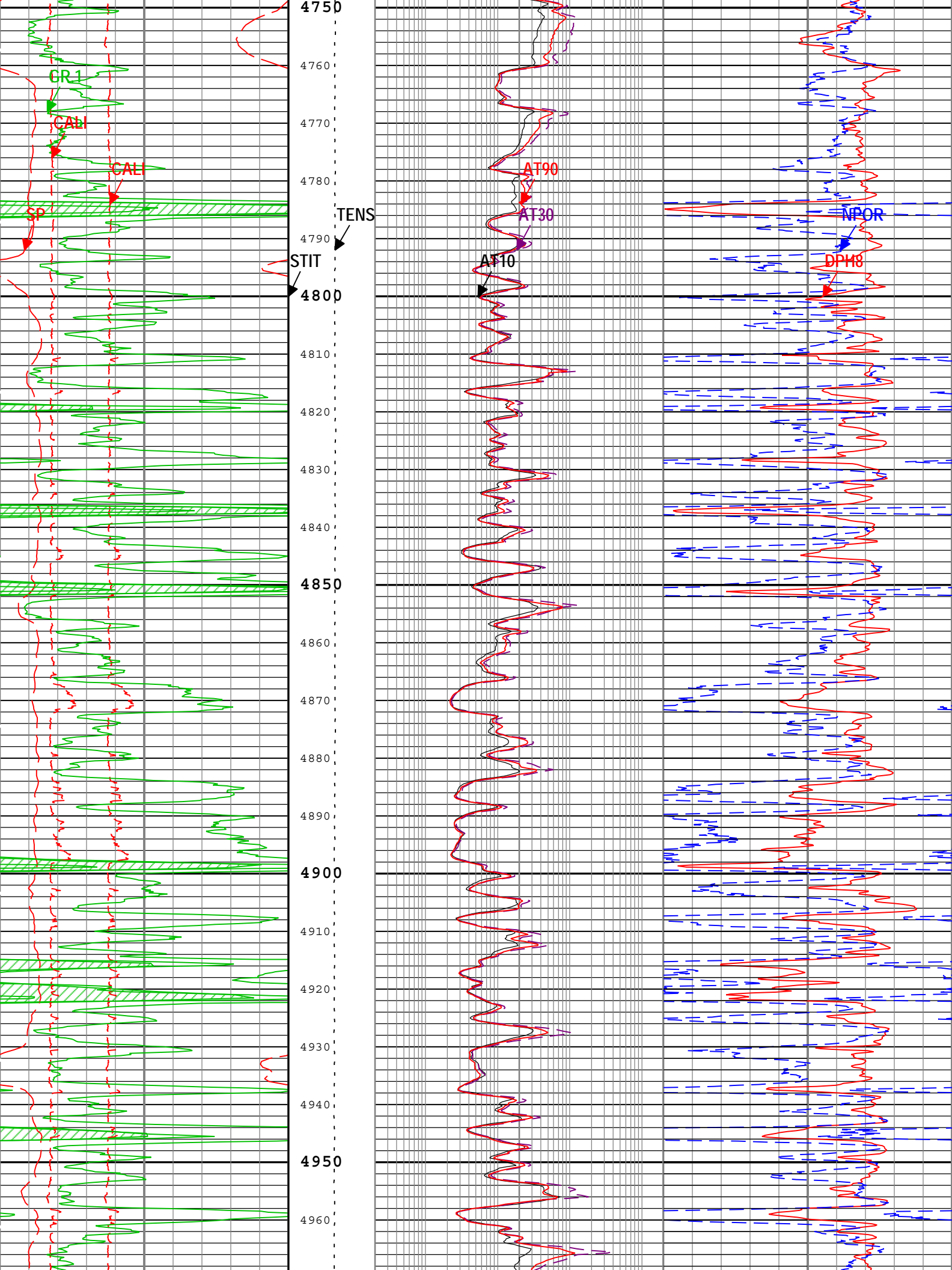
TIME_1900 - Time Marked every 60.00 (s)

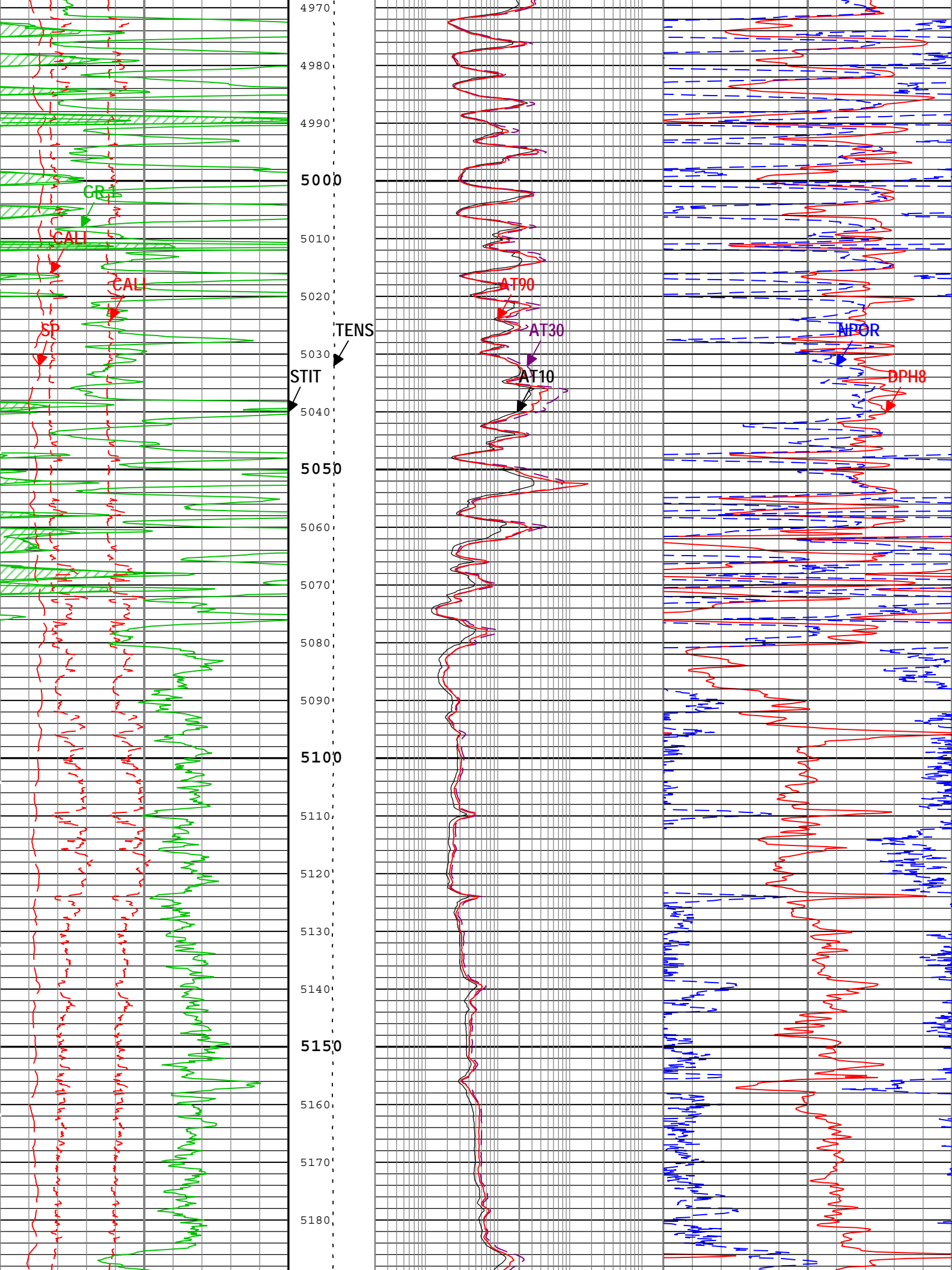
Gamma Ray Back up		Array Induction Two Foot Resistivity A10 (AT10) AIT-H		Gas Effect	
Spontaneous Potential (SP) AIT-H		0.2 ohm.m 2000		NPOR Backup	
0	mV 200	Stuck Tool Indicator, Total (STIT)	Array Induction Two Foot Resistivity A30 (AT30) AIT-H		High Resolution Density Porosity (DPH8) HDRS-H
4	in 14		0.2 ohm.m 2000		ft3/ft3 -0.1
6	in 16	Cable Tension	Array Induction Two Foot Resistivity A90		Enhanced Thermal Neutron Porosity in

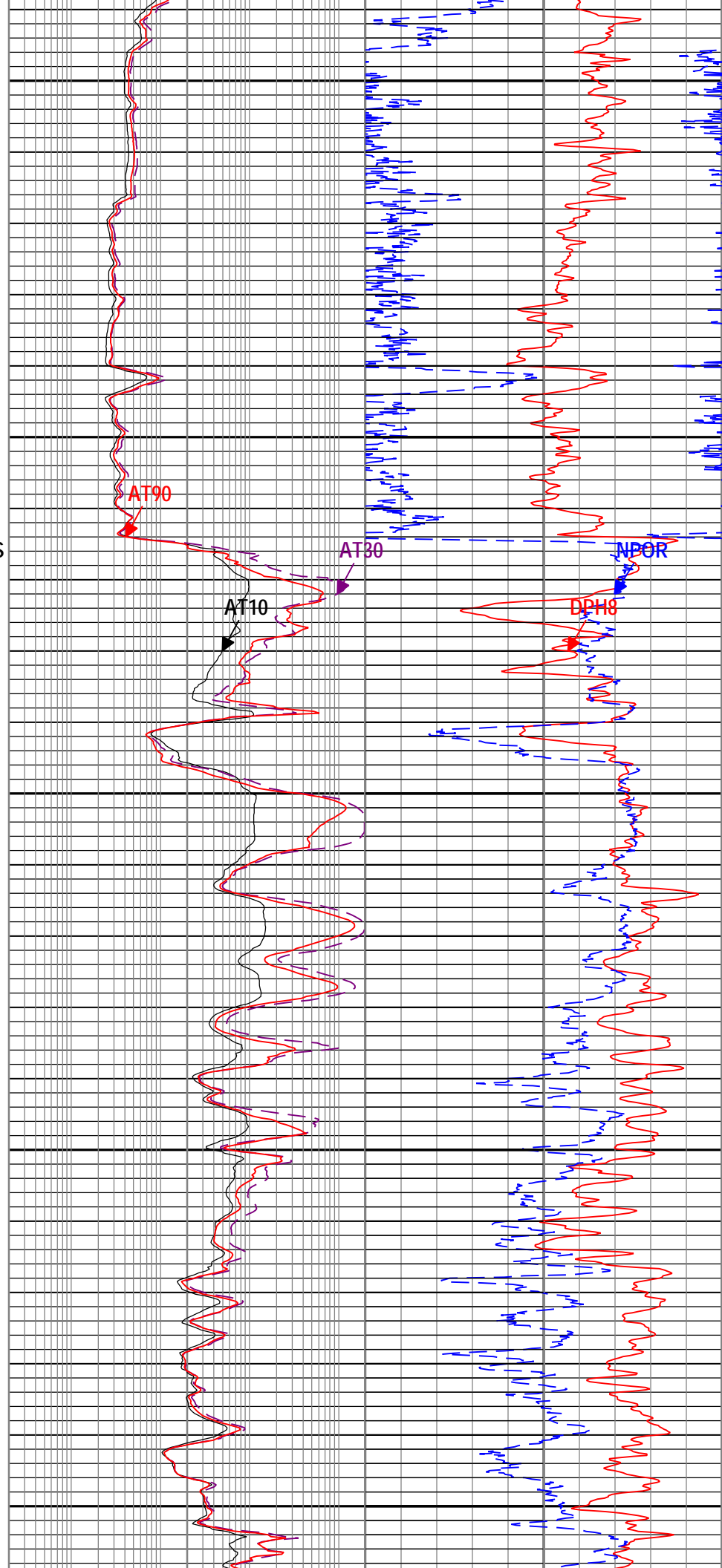
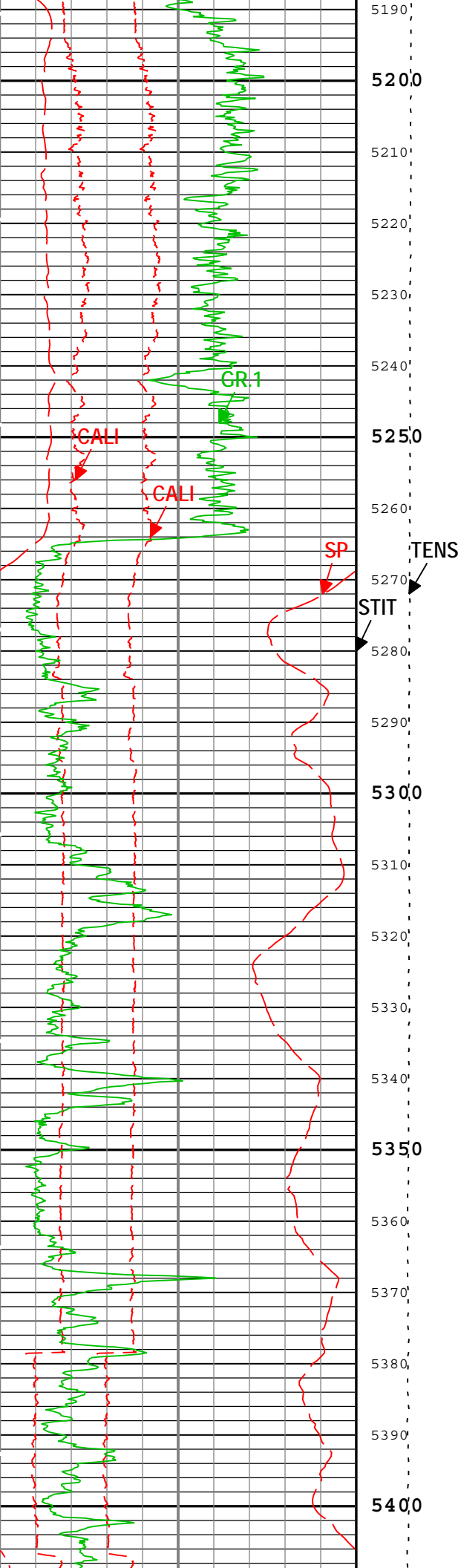


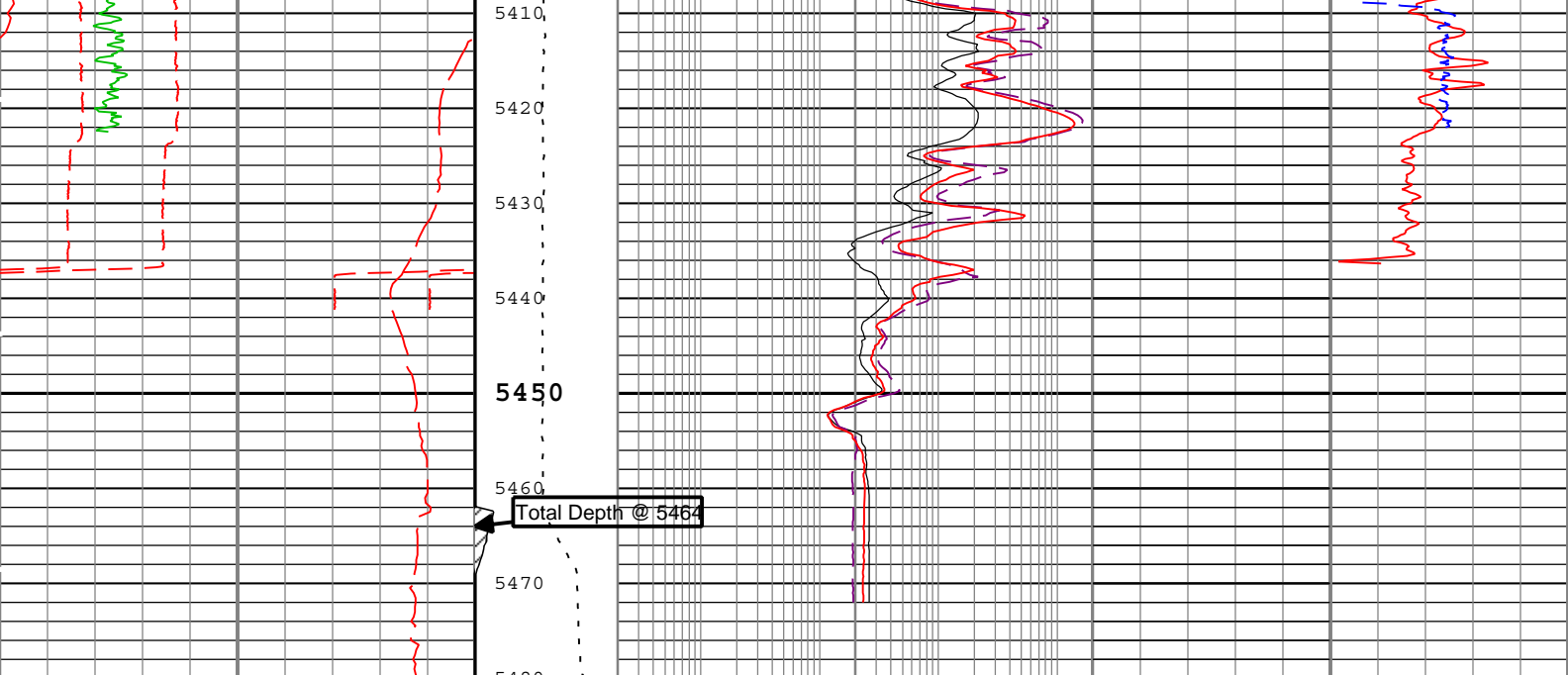












Gamma Ray Back up			Stuck Tool Indicator, Total (STIT)	Array Induction Two Foot Resistivity A10 (AT10) AIT-H			Gas Effect					
Spontaneous Potential (SP) AIT-H				0.2	ohm.m		2000	NPOR Backup				
0	mV		200	0	ft	50	High Resolution Density Porosity (DPH8) HDRS-H					
4	Caliper (CALI) HDRS-H		14	Cable Tension (TENS)	Array Induction Two Foot Resistivity A30 (AT30) AIT-H			0.3				
6	in		16		0.2	ohm.m		2000	ft3/ft3			
6	Caliper (CALI) HDRS-H		16	6000 lbf	0	Array Induction Two Foot Resistivity A90 (AT90) AIT-H			Enhanced Thermal Neutron Porosity in Selected Lithology (NPOR) HGNS-H			
0	Gamma Ray (GR).1 HGNS-H		200			0.2	ohm.m		2000	0.3	ft3/ft3	
0	gAPI		200								-0.1	

TIME_1900 - Time Marked every 60.00 (s)

Description: HGNS standard resolution porosities for Platform Express Format: Log (HiRes EMD 5in Triple Combo) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 03-Nov-2012 19:59:53

Channel Processing 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	No	
ASTA	Array Induction Tool Standoff	AIT-H	0.6	in
BARI	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	7.875	in
BSAL	Borehole Salinity	Borehole	5536.59	ppm
CALI_SHIFT	CALI Supplementary Offset	HDRS-H	0	in
CBLO	Casing Bottom (Logger)	WLSESSION	432	ft
CDEN	Cement Density	HGNS-H	2	g/cm3
DFD	Drilling Fluid Density	Borehole	9.3	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DFT_WATER	Drilling Fluid Water Type	Borehole	Chemical Gel	
DHC	Density Hole Correction	HDRS-H	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-H	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	86	degF
NPRM	HRDD Nuclear Processing Mode	HDRS-H	High Resolution	
RMFS	Resistivity of Mud Filtrate Sample	Borehole	1.83	ohm.m
SOCO	Standoff Correction Option	HGNS-H	Yes	
SPDR	SP Drift Per Foot	AIT-H	0	mV/ft
TD	Total Measured Depth	Borehole	5464	ft

Tool Control Parameters

Parameter	Description	Tool	Value	Unit
HMCA_BRD_TYPE	HMCA Board Type	HGNS-H	1	
HRGD_BRD_TYPE	HRGD Board Type	HDRS-H	WITH_HET	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	1800	ft/h

Calibration Report

AIT-H (Array Induction Tool - H) Calibration - Run 1				
Primary Equipment :				
Array Induction Sonde - H		AHIS	392	
Auxiliary Equipment :				
AITH Rm/SP Bottom Nose		AHRM	392	

AIT Sonde Calibration - Test Loop Gain								
Master (EEPROM):		16:00:26 25-Oct-2012						
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
Test Loop Gain - 0		Master	1.000	0.950	1.011	1.050		
Test Loop Phase - 0	deg	Master	0	-3.000	0.278	3.000		
Test Loop Gain - 1		Master	1.000	0.950	1.011	1.050		
Test Loop Phase - 1	deg	Master	0	-3.000	0.501	3.000		
Test Loop Gain - 2		Master	1.000	0.950	1.020	1.050		
Test Loop Phase - 2	deg	Master	0	-3.000	0.020	3.000		
Test Loop Gain - 3		Master	1.000	0.950	1.010	1.050		
Test Loop Phase - 3	deg	Master	0	-3.000	0.015	3.000		
Test Loop Gain - 4		Master	1.000	0.950	0.997	1.050		
Test Loop Phase - 4	deg	Master	0	-3.000	-0.018	3.000		
Test Loop Gain - 5		Master	1.000	0.950	0.990	1.050		
Test Loop Phase - 5	deg	Master	0	-3.000	-0.170	3.000		
Test Loop Gain - 6		Master	1.000	0.950	1.000	1.050		
Test Loop Phase - 6	deg	Master	0	-3.000	0.148	3.000		
Test Loop Gain - 7		Master	1.000	0.950	0.995	1.050		
Test Loop Phase - 7	deg	Master	0	-3.000	-0.296	3.000		

AIT Sonde Calibration - Sonde Error Correction								
Master (EEPROM):		16:00:26 25-Oct-2012						
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
Sonde Error Correction Real - 0	mS/m	Master	-----	-231.000	-81.800	119.000		
Sonde Error Correction Quad - 0		Master	-----	-2250.000	-332.860	2250.000		
Sonde Error Correction Real - 1	mS/m	Master	-----	114.000	188.030	204.000		
Sonde Error Correction Quad - 1		Master	-----	-625.000	-104.997	625.000		
Sonde Error Correction Real - 2	mS/m	Master	-----	66.000	107.809	156.000		
Sonde Error Correction Quad - 2		Master	-----	-350.000	-112.075	350.000		
Sonde Error Correction Real - 3	mS/m	Master	-----	39.000	64.783	89.000		
Sonde Error Correction Quad - 3		Master	-----	-250.000	37.536	250.000		
Sonde Error Correction Real - 4	mS/m	Master	-----	15.000	25.356	35.000		
Sonde Error Correction Quad - 4		Master	-----	-63.000	-42.081	63.000		

Sonde Error Correction Real - 5	mS/m	Master	-----	4.000	13.811	24.000	
Sonde Error Correction Quad - 5		Master	-----	-50.000	4.249	50.000	
Sonde Error Correction Real - 6	mS/m	Master	-----	5.000	10.072	15.000	
Sonde Error Correction Quad - 6		Master	-----	-30.000	-4.592	30.000	
Sonde Error Correction Real - 7	mS/m	Master	-----	-5.000	-0.281	5.000	
Sonde Error Correction Quad - 7		Master	-----	-30.000	-5.939	30.000	

AIT Mud Calibration - Mud Calibration Gain

Master (EEPROM): 16:00:26 25-Oct-2012

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Coarse Gain		Master	1.000	0.800	1.099	1.200	
Fine Gain		Master	1.000	0.800	1.100	1.200	

AIT Electronics Check - Thru Calibration Check

Master (EEPROM): 16:00:26 25-Oct-2012 Before (Measured): 16:25:44 01-Nov-2012 After: Expired by 1 days

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Thru Cal Mag - 0	V	Master	-----	0.363	0.618	0.847	
		Before	-----	0.363	0.618	0.847	
		After	-----	-----	-----	-----	
		Before-Master	-----	-----	0.000	-----	
		After-Before	-----	-----	-----	-----	
Thru Cal Phase - 0	deg	Master	-----	11.000	73.112	131.000	
		Before	-----	11.000	73.068	131.000	
		After	-----	-----	-----	-----	
		Before-Master	-----	-----	-0.044	-----	
		After-Before	-----	-----	-----	-----	
Thru Cal Mag - 1	V	Master	-----	0.762	1.263	1.778	
		Before	-----	0.762	1.263	1.778	
		After	-----	-----	-----	-----	
		Before-Master	-----	-----	0.000	-----	
		After-Before	-----	-----	-----	-----	
Thru Cal Phase - 1	deg	Master	-----	10.000	72.006	130.000	
		Before	-----	10.000	71.958	130.000	
		After	-----	-----	-----	-----	
		Before-Master	-----	-----	-0.048	-----	
		After-Before	-----	-----	-----	-----	
Thru Cal Mag - 2	V	Master	-----	0.374	0.630	0.872	
		Before	-----	0.374	0.630	0.872	
		After	-----	-----	-----	-----	
		Before-Master	-----	-----	0.000	-----	
		After-Before	-----	-----	-----	-----	
Thru Cal Phase - 2	deg	Master	-----	6.000	68.269	126.000	
		Before	-----	6.000	68.220	126.000	
		After	-----	-----	-----	-----	
		Before-Master	-----	-----	-0.049	-----	
		After-Before	-----	-----	-----	-----	
Thru Cal Mag - 3	V	Master	-----	0.422	0.712	0.986	
		Before	-----	0.422	0.712	0.986	
		After	-----	-----	-----	-----	
		Before-Master	-----	-----	0.000	-----	
		After-Before	-----	-----	-----	-----	
Thru Cal Phase - 3	deg	Master	-----	5.000	67.481	125.000	
		Before	-----	5.000	67.429	125.000	
		After	-----	-----	-----	-----	
		Before-Master	-----	-----	-0.052	-----	
		After-Before	-----	-----	-----	-----	
Thru Cal Mag - 4	V	Master	-----	0.802	1.327	1.872	
		Before	-----	0.802	1.327	1.872	
		After	-----	-----	-----	-----	
		Before-Master	-----	-----	0.000	-----	
		After-Before	-----	-----	-----	-----	
Thru Cal Phase - 4	deg	Master	-----	-1.000	61.213	119.000	
		Before	-----	-1.000	61.154	119.000	
		After	-----	-----	-----	-----	
		Before-Master	-----	-----	-0.059	-----	
		After-Before	-----	-----	-----	-----	
Thru Cal Mag - 5	V	Master	-----	1.173	1.933	2.737	
		Before	-----	1.173	1.933	2.737	

		Before	-----	-----	1.173	1.933	2.737	<div><div></div></div>
		After	-----	-----	-----	-----	-----	<div><div></div></div>
		Before-Master	-----	-----	0.000	-----	-----	<div><div></div></div>
		After-Before	-----	-----	-----	-----	-----	<div><div></div></div>
Thru Cal Phase - 5	deg	Master	-----	-3.000	59.316	117.000	117.000	<div><div></div></div>
		Before	-----	-3.000	59.251	117.000	117.000	<div><div></div></div>
		After	-----	-----	-----	-----	-----	<div><div></div></div>
		Before-Master	-----	-----	-0.065	-----	-----	<div><div></div></div>
		After-Before	-----	-----	-----	-----	-----	<div><div></div></div>
Thru Cal Mag - 6	V	Master	-----	1.173	1.932	2.737	2.737	<div><div></div></div>
		Before	-----	1.173	1.932	2.737	2.737	<div><div></div></div>
		After	-----	-----	-----	-----	-----	<div><div></div></div>
		Before-Master	-----	-----	0.000	-----	-----	<div><div></div></div>
		After-Before	-----	-----	-----	-----	-----	<div><div></div></div>
Thru Cal Phase - 6	deg	Master	-----	-3.000	59.327	117.000	117.000	<div><div></div></div>
		Before	-----	-3.000	59.264	117.000	117.000	<div><div></div></div>
		After	-----	-----	-----	-----	-----	<div><div></div></div>
		Before-Master	-----	-----	-0.063	-----	-----	<div><div></div></div>
		After-Before	-----	-----	-----	-----	-----	<div><div></div></div>
Thru Cal Mag - 7	V	Master	-----	0.849	1.381	1.981	1.981	<div><div></div></div>
		Before	-----	0.849	1.380	1.981	1.981	<div><div></div></div>
		After	-----	-----	-----	-----	-----	<div><div></div></div>
		Before-Master	-----	-----	-0.001	-----	-----	<div><div></div></div>
		After-Before	-----	-----	-----	-----	-----	<div><div></div></div>
Thru Cal Phase - 7	deg	Master	-----	-7.000	55.850	113.000	113.000	<div><div></div></div>
		Before	-----	-7.000	55.732	113.000	113.000	<div><div></div></div>
		After	-----	-----	-----	-----	-----	<div><div></div></div>
		Before-Master	-----	-----	-0.118	-----	-----	<div><div></div></div>
		After-Before	-----	-----	-----	-----	-----	<div><div></div></div>
SPA Zero	mV	Master		-50.000	-0.201	50.000	50.000	<div><div></div></div>
		Before		-50.000	-0.217	50.000	50.000	<div><div></div></div>
		After	-----	-----	-----	-----	-----	<div><div></div></div>
		Before-Master	-----	-----	-0.016	-----	-----	<div><div></div></div>
		After-Before	-----	-----	-----	-----	-----	<div><div></div></div>
SPA Plus	mV	Master		941.000	991.790	1040.000	1040.000	<div><div></div></div>
		Before		941.000	992.062	1040.000	1040.000	<div><div></div></div>
		After	-----	-----	-----	-----	-----	<div><div></div></div>
		Before-Master	-----	-----	0.272	-----	-----	<div><div></div></div>
		After-Before	-----	-----	-----	-----	-----	<div><div></div></div>
Temperature Zero	V	Master		-0.050	0.000	0.050	0.050	<div><div></div></div>
		Before		-0.050	0.000	0.050	0.050	<div><div></div></div>
		After	-----	-----	-----	-----	-----	<div><div></div></div>
		Before-Master	-----	-----	0.000	-----	-----	<div><div></div></div>
		After-Before	-----	-----	-----	-----	-----	<div><div></div></div>
Temperature Plus	V	Master		0.870	0.919	0.960	0.960	<div><div></div></div>
		Before		0.870	0.919	0.960	0.960	<div><div></div></div>
		After	-----	-----	-----	-----	-----	<div><div></div></div>
		Before-Master	-----	-----	0.000	-----	-----	<div><div></div></div>
		After-Before	-----	-----	-----	-----	-----	<div><div></div></div>

DSLT-H (Digitizing Sonic Logging Tool - H) Calibration - Run 1							
Primary Equipment :							
Sonic Logging Sonde E supports 3'-5'BHC DT and CBL/VDL				SLS-E	165		
CBL Normalization - CBL Accumulations							
Master:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div><div></div></div>
Upper Far Amplitude - 0		Master	----	----	----	----	<div><div></div><div></div></div>
Upper Near Raw Amplitude - 0	mV	Master	----	----	----	----	<div><div></div><div></div></div>
Lower Far Amplitude - 0		Master	----	----	----	----	<div><div></div><div></div></div>
Lower Near Raw Amplitude - 0	mV	Master	----	----	----	----	<div><div></div><div></div></div>
CBL Normalization - CBL/VDL Coefficients							
Master:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div><div></div></div>
CBL Correction Factor for UT		Master	3.500	2.700	NOT DONE	4.300	<div><div></div><div></div><div></div></div>
CBL Correction Factor for LT		Master	2.500	1.700	NOT DONE	4.300	<div><div></div><div></div><div></div></div>

VDL Ratio between UT and LT for CBLB Mode		Master	1.000		NOT DONE		
CBL Free Pipe Adjustment - Free Pipe Measurement							
Before:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
CBL Amplitude - 0	mV	Before	----	----	----	----	
CBL Reference Amplitude (CBRA) - 0	mV	Before	----	----	----	----	
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-H (HILT Density and Rxo Sonde, 150 degC) Calibration - Run 1							
Primary Equipment :							
	HILT High-Resolution Control Cartridge, 150 degC		HRCC-H				
	HILT Resistivity Gamma-Ray Density Device, 150 degC		HRGD-H		3816		
Auxiliary Equipment :							
	HRDD Backscatter Detector		Backscatter				
	HRDD Long Spacing Detector		Long Spacing		28732		
	HRDD Short Spacing Detector		Short Spacing		27634		
	Cesium 137 Gamma-Ray Logging Source		GSR-J		5240		
	HILT High-Resolution Control Cartridge, 150 degC		HRCC-H				
	HILT High-Resolution Mechanical Sonde, 150 degC		HRMS-H				
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):		16:23:18 01-Nov-2012 Expired by 1 days					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Small Ring	in	Before	8.00	6.00	8.74	10.00	
Large Ring	in	Before	12.00	9.00	13.10	15.00	
HDRS Density Calibration - Inversion Results							
Master (EEPROM):		12:02:16 27-Oct-2012					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Rho Aluminum	g/cm3	Master	2.596	2.586	2.599	2.606	
Rho Magnesium	g/cm3	Master	1.686	1.676	1.685	1.696	
Pe Aluminum		Master	2.570	2.470	2.534	2.670	
Pe Magnesium		Master	2.650	2.550	2.642	2.750	
HDRS Density Calibration - Deviation Summary							
Master (EEPROM):		12:02:16 27-Oct-2012					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Average Deviation	%	Master	0	-0.6000	0.5313	0.6000	
BS Max Deviation	%	Master	0	-1.6000	1.0019	1.6000	
SS Average Deviation	%	Master	0	-1.0000	0.3341	1.0000	
SS Max Deviation	%	Master	0	-2.5000	1.1387	2.5000	
LS Average Deviation	%	Master	0	-1.5000	0.7415	1.5000	
LS Max Deviation	%	Master	0	-3.5000	2.3181	3.5000	
HDRS Density Calibration - Background Summary							
Master (EEPROM):		12:02:16 27-Oct-2012		Before (Measured):		16:24:27 01-Nov-2012 Expired by 1 days	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Window Ratio		Master	1.0000		0.7507		
		Before	0.7507	0.7131	0.7495	0.7882	
		Before-Master	----	----	-0.0012	----	
BS Window Sum	1/s	Master	1		26052		
		Before	26052	24749	26225	27355	
		Before-Master	----	----	173	----	

SS Window Ratio		Master Before Before-Master	1.0000 0.4792 -----	0.4552 -----	0.4792 0.4825 0.0033	0.5031 -----	
SS Window Sum	1/s	Master Before Before-Master	1 10312 -----	9797 -----	10312 10298 -14	10828 -----	
LS Window Ratio		Master Before Before-Master	1.0000 0.3034 -----	0.2882 -----	0.3034 0.3033 -0.0001	0.3186 -----	
LS Window Sum	1/s	Master Before Before-Master	1 1214 -----	1153 -----	1214 1201 -13	1275 -----	

HDRS Density Calibration - Photo-multiplier High Voltages

Master (EEPROM): 12:02:16 27-Oct-2012		Before (Measured):		16:24:27 01-Nov-2012 Expired by 1 days			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS PM High Voltage	V	Master		1000	1580	2400	
		Before		1000	1584	2400	
		Before-Master	-----	-100	4	100	
SS PM High Voltage	V	Master		1000	1401	2400	
		Before		1000	1407	2400	
		Before-Master	-----	-100	6	100	
LS PM High Voltage	V	Master		1000	1216	2400	
		Before		1000	1225	2400	
		Before-Master	-----	-100	9	100	

HDRS Density Calibration - Crystal Quality Resolutions

Master (EEPROM): 12:02:16 27-Oct-2012		Before (Measured):		16:24:27 01-Nov-2012 Expired by 1 days			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Crystal Resolution	%	Master		5.00	11.79	25.00	
		Before		5.00	11.88	25.00	
		Before-Master	-----	-1.00	0.09	1.00	
SS Crystal Resolution	%	Master		5.00	9.89	20.00	
		Before		5.00	10.02	20.00	
		Before-Master	-----	-1.00	0.13	1.00	
LS Crystal Resolution	%	Master		5.00	8.16	20.00	
		Before		5.00	8.23	20.00	
		Before-Master	-----	-1.00	0.07	1.00	

HDRS MCFL Calibration - MCFL Accumulations

Before (Measured):		16:25:07 01-Nov-2012 Expired by 1 days					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Main Resistivity	ohm.m	Before	3875	3565	3877	4185	
Deep Resistivity	ohm.m	Before	3830	3524	3826	4136	
Shallow Resistivity	ohm.m	Before	3830	3524	3829	4136	

HGNS-H (HILT Gamma-Ray and Neutron Sonde, 150 degC) Calibration - Run 1

Primary Equipment :			
HILT Gamma-Ray and Neutron Sonde, 150 degC		HGNS-H	
Auxiliary Equipment :			
HGNS Accelerometer, 150 degC		HACCZ-H	5736
AmBe Neutron Logging Source		NSR-F	5215
Calibration Parameter :			
Water Temperature			
Housing Size			
JIG-BKG (Jig minus background reference)		165	

HGNS Accelerometer Calibration - Accelerometer Accumulations

Before (Measured):		17:09:28 03-Nov-2012					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
AZ Vertical Measurement	ft/s2	Before	32.2	31.5	32.1	32.8	

HGNS Accelerometer EEPROM - Accelerometer EEPROM Read

Master (EEPROM):		00:00:00 15 Mar 2006					
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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	----	----	8084.000	----		
Accelerometer Coefficients - 1		Master	----	----	-8.467	----		
Accelerometer Coefficients - 2		Master	----	----	0.009	----		
Accelerometer Coefficients - 3		Master	----	----	0.000	----		
Accelerometer Coefficients - 4		Master	----	----	2.722	----		
Accelerometer Coefficients - 5		Master	----	----	0.000	----		
Accelerometer Coefficients - 6		Master	----	----	0.000	----		
Accelerometer Coefficients - 7		Master	----	----	0.000	----		
Accelerometer Coefficients - 8		Master	----	----	298.700	----		
Accelerometer Coefficients - 9		Master	----	----	0.995	----		

HGNS Neutron Calibration - HGNS Neutron Accumulations

Master (EEPROM):		10:52:24 11-Oct-2012		Before (Measured):		16:23:03 01-Nov-2012 Expired by 1 days		After:	
Measurement		Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div></div>	
Near Zero Measurement		1/s	Master	0	5.0	25.2	40.0	<div></div>	
			Before	0	5.0	25.2	40.0	<div></div>	
			After	----	----	----	----	<div></div>	
			Before-Master	----	-3.8	0.0	3.8	<div></div>	
			After-Before	----	----	----	----	<div></div>	
Far Zero Measurement		1/s	Master	0	5.0	28.4	40.0	<div></div>	
			Before	0	5.0	27.8	40.0	<div></div>	
			After	----	----	----	----	<div></div>	
			Before-Master	----	-4.3	-0.6	4.3	<div></div>	
			After-Before	----	----	----	----	<div></div>	
Near Plus Measurement - 0		1/s	Master	6031.0	4700.0	5278.0	6900.0	<div></div>	
			Before	----	----	----	----	<div></div>	
			After	----	----	----	----	<div></div>	
			Before-Master	----	----	----	----	<div></div>	
			After-Before	----	----	----	----	<div></div>	
Far Plus Measurement - 0		1/s	Master	2793.0	1900.0	2189.0	2900.0	<div></div>	
			Before	----	----	----	----	<div></div>	
			After	----	----	----	----	<div></div>	
			Before-Master	----	----	----	----	<div></div>	
			After-Before	----	----	----	----	<div></div>	
Near Corrected Plus Measurement - 0		1/s	Master		4700.0	5228.0	6900.0	<div></div>	
			Before	----	----	----	----	<div></div>	
			After	----	----	----	----	<div></div>	
			Before-Master	----	----	----	----	<div></div>	
			After-Before	----	----	----	----	<div></div>	
Far Corrected Plus Measurement - 0		1/s	Master		1900.0	2143.0	2900.0	<div></div>	
			Before	----	----	----	----	<div></div>	
			After	----	----	----	----	<div></div>	
			Before-Master	----	----	----	----	<div></div>	
			After-Before	----	----	----	----	<div></div>	

HGNS Gamma-Ray Calibration - Gamma-Ray Accumulations

Before (Measured):		16:23:53 01-Nov-2012		Expired by 1 days		After:	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div></div>
RGR Zero Measurement	gAPI	Before	30.0	0	76.9	120.0	<div><div></div></div>
		After	----	----	----	----	<div><div></div></div>
		After-Before	----	----	----	----	<div><div></div></div>
RGR Plus Measurement	gAPI	Before	185.4	157.1	177.6	206.3	<div><div></div></div>
		After	----	----	NOT DONE	----	<div><div></div></div>
		After-Before	----	----	----	----	<div><div></div></div>
GR Calibration Gain		Before	0.89	0.80	0.93	1.05	<div><div></div></div>
		After	----	----	----	----	<div><div></div></div>
		After-Before	----	----	----	----	<div><div></div></div>

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

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

Field: Wildcat

County: Cheyenne

State: Colorado

Platform Express

Triple Combo

Linear