

Company: Ominex Petroleum Inc.

Well: Gueck 10-19-7-44

Field: Holyoke South

County: Weld State: Colorado

Platform Express

Triple Combo

Linear

County: Weld  
Field: Holyoke South  
Location: NWSE: Sec. 19, T7N, R44W  
Well: Gueck 10-19-7-44  
Company: Ominex Petroleum Inc.

Location:			
NWSE: Sec. 19, T7N, R44W SHL: 2000' FSL & 2251' FEL Lat/Long: 40.562070/-102.310140		Elev.: K.B. 3753.00 ft G.L. 3747.00 ft D.F. 3752.50 ft	
Permanent Datum:		Ground Level	Elev.: 3747.00 f
Log Measured From:		Kelly Bushing	6.00 ft above Perm. Datum
Drilling Measured From:		Kelly Bushing	
API Serial No.	Section:	Township:	Range:
05-095-06468-0000	19	7N	44W

Logging Date 24-Nov-2014

Run Number ONE

Depth Driller 2726.00 ft

Schlumberger Depth 2726.00 ft

Bottom Log Interval 2727.50 ft

Top Log Interval 498.00 ft

Casing Fluid Type WBM

Salinity 13300 ppm

Density 8.8 lbm/gal

Fluid Level 8.00 ft

BIT/CASING/TUBING STRING

Bit Size 6.25 in

From 0.00 ft

To 2726.00 ft

Casing/Tubing Size 7 in

Weight 17 lbm/ft

Grade N/A

From 0.00 ft

To 498.00 ft

Max Recorded Temperatures 98.75 degF

Logger on Bottom 24-Nov-2014 01:00:00

Unit Number 3022 Location: Fort Morgan, CO

Recorded By Nolan Welsh

Witnessed By Paul Dekaye

## 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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12.1 Integration Summary

12.2 Software Version

12.3 Composite Summary

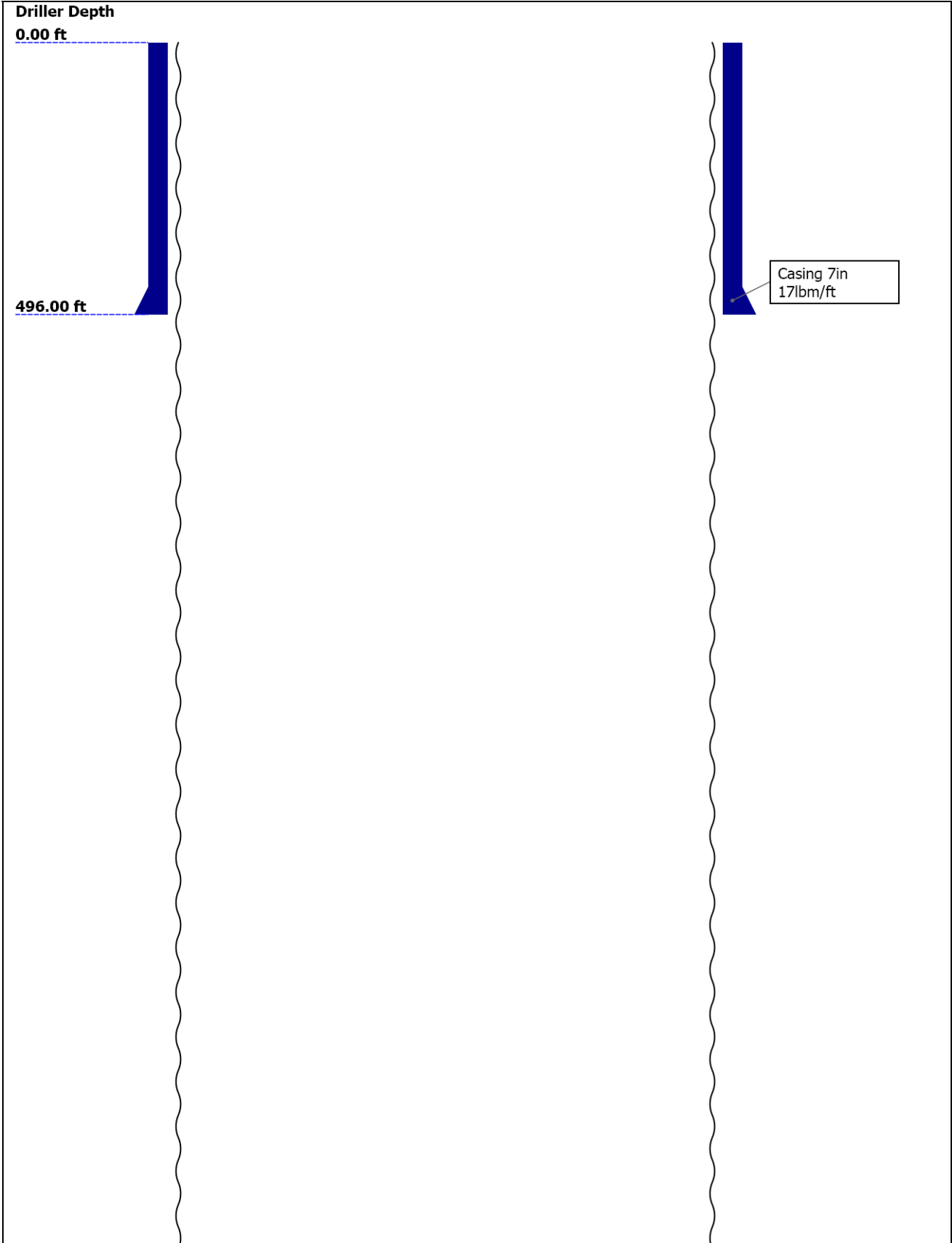
12.4 Log ( EMD 2in Induction )

12.5 Parameter Listing

13. ONE 5" Triple Combo Linear

13.1 Integration Summary

Well Sketch



2726.00 ft

Open Hole 6.25in

Borehole Size/Casing/Tubing Record

Bit						
Bit Size ( in )	6.25					
Top Driller ( ft )	0					
Top Logger ( ft )	0					
Bottom Driller ( ft )	2726					
Bottom Logger ( ft )	2726					
Casing						
Size ( in )	7					
Weight ( lbm/ft )	17					
Inner Diameter ( in )	6.538					
Grade	N/A					
Top Driller ( ft )	0					
Top Logger ( ft )	0					
Bottom Driller ( ft )	496					
Bottom Logger ( ft )	498					

Operational Run Summary

Parameter ( unit )	ONE					
Date Log Started	24-Nov-2014					
Time Log Started	13:45:13					
Date Log Finished	24-Nov-2014					
Time Log Finished	15:07:08					
Top Log Interval ( ft )	498.00					
Bottom Log Interval ( ft )	2727.50					
Total Depth ( ft )	2727.50					
Max Hole Deviation ( deg )	0.00					
Azimuth of Max Deviation ( deg )	0.00					
Bit Size ( in )	6.250					
Logging Unit Number	3022					
Logging Unit Location	Fort Morgan, CO					
Recorded By	Nolan Welsh					
Witnessed By	Paul Dekaye					
Service Order Number	CXPX-00065					

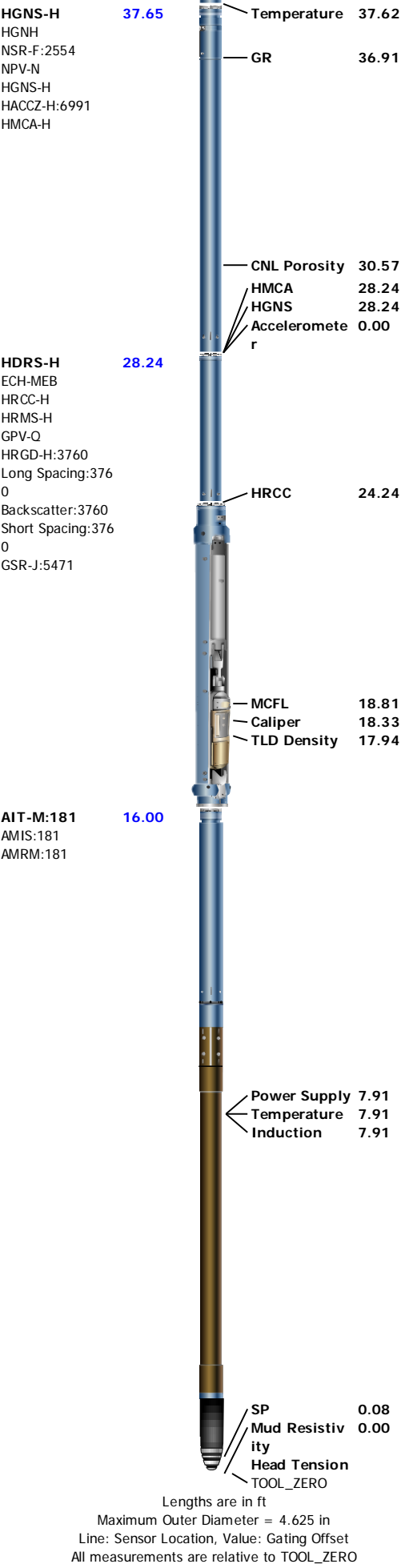
Borehole Fluids

Parameter( unit )	ONE					
Fluid Type	Water					
Fluid Name	WBM					
Max Recorded Temperatures ( degF )	98.75					
Source of Sample	Active Tank					
Salinity ( ppm )	13300					
Density ( lbm/gal )	8.8					
Funnel Viscosity ( s )	30					
Fluid Loss ( cm3 )	4.4					
PH	8					
Date/Time Circulation Stopped	24-Nov-2014 10:00:00					
Date Logger on Bottom	24-Nov-2014					
Time Logger on Bottom	01:00:00					
Source RMF	Calculated					
RMC	Calculated					
RM @ Meas Temp ( ohm.m@degF )	0.22 @ 73					
RMF @ Meas Temp ( ohm.m@degF )	0.16 @ 75					
RMC @ Meas Temp ( ohm.m@degF )	0.32 @ 75					
RM @ BHT ( ohm.m@degF )	0.17 @ 98.75					
RMF @ BHT ( ohm.m@degF )	0.12 @ 98.75					
RMC @ BHT ( ohm.m@degF )	0.25 @ 98.75					
Total Solid ( % )						
High Gravity Solids ( % )						

Remarks and Equipment Summary

ONE: Toolstring				ONE: Remarks
Equip name	Length	MP name	Offset	Toolstring run as per tool sketch.
LEH-QT	56.07			Matrix: Limestone MDEN:2.71 g/cm3
LEH-QT				Rig: Excell #2
DTC-H	53.15			Crew: Ian Derry, Jay Musgrave, Mike Sullivan
ECH-KC		CTEM	52.25	
DTC-H		HV	0.00	
		ToolStatus	50.15	
		TelStatus	50.15	
Weight[2]	50.15			
GPIT-F	45.65			
GPIH-B		GPIT-F Incl	44.23	
DHRU-F		ometer		
GPIC-F				
		GPIT	0.00	
Weight[1]	41.65			





## Depth Summary

		ONE													
Depth Measuring Device															
Type				IDW-B											
Serial Number				5896											
Calibration Date				13-AUG-2014											
Calibrator Serial Number															
Calibration Cable Type				7-39PLXS											
Wheel Correction 1				-3											
Wheel Correction 2				-2											
Tension Device															
Type				CMTD-B/A											
Serial Number				1109											
Calibration Date				18-NOV-2014											
Calibrator Serial Number				441345A											
Number of Calibration Points				10											
Calibration Root Mean Square Error				36											
Calibration Peak Error				69											
Logging Cable															
Type				7-39P-LXS											
Serial Number															
Length				17750.00 ft											
Conveyance Type				Wireline											
Rig Type				Land											
ONE:Depth Control Parameters								Depth Control Remarks							
Log Sequence				First Log In the Well				All Schlumberger depth procedures followed.							
Rig Up Length At Surface								IDW used as primary depth control.							
Rig Up Length At Bottom								Z-Chart used as secondary depth control.							
Rig Up Length Correction															
Stretch Correction															
Tool Zero Check At Surface															
Survey Record															
Survey Calculation															
Method :				Minimum Radius of Curvature				DLS Method :				Lubinski			
North Reference :				True North				Total Correction Formula :				Magnetic Dec			
Rig Location															
Latitude :				40° 33' 43.452" N				Longitude :				102° 18' 36.504" W			
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															
9 : Manual				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
2	26.00	0.39	140.49	26.00	26.00	-0.07	-0.07	0.06	0.10	140.49	1.52	GPIT-F	9	0	0
3	56.00	0.51	145.54	30.00	56.00	-0.26	-0.26	0.20	0.33	142.55	0.39	GPIT-F	9	0	0
4	86.00	0.64	189.46	30.00	86.00	-0.53	-0.53	0.25	0.59	155.24	1.48	GPIT-F	9	0	0
5	116.00	0.60	187.62	30.00	116.00	-0.85	-0.85	0.20	0.89	166.95	0.15	GPIT-F	9	0	0
6	146.00	0.32	245.90	30.00	145.99	-1.04	-1.04	0.10	1.05	174.48	1.69	GPIT-F	9	0	0
7	176.00	0.32	269.92	30.00	175.99	-1.07	-1.07	-0.06	1.08	183.14	0.44	GPIT-F	9	0	0
8	206.00	0.48	242.45	30.00	205.99	-1.13	-1.13	-0.25	1.15	192.62	0.82	GPIT-F	9	0	0

	236.00	0.82	214.96	30.00	235.99	-1.37	-1.37	-0.49	1.44	199.67	1.51	GPIT-F	9	0	0
10	266.00	0.80	224.23	30.00	265.99	-1.69	-1.69	-0.76	1.87	204.12	0.44	GPIT-F	9	0	0
11	296.00	0.84	211.12	30.00	295.99	-2.03	-2.03	-1.02	2.26	206.61	0.64	GPIT-F	9	0	0
12	326.00	0.81	184.15	30.00	325.98	-2.43	-2.43	-1.15	2.69	205.26	1.28	GPIT-F	9	0	0
13	356.00	0.89	211.24	30.00	355.98	-2.84	-2.84	-1.28	3.12	204.31	1.35	GPIT-F	9	0	0
14	386.00	0.91	240.47	30.00	385.98	-3.16	-3.16	-1.61	3.54	207.03	1.51	GPIT-F	9	0	0
15	416.00	0.90	267.57	30.00	415.97	-3.28	-3.28	-2.05	3.87	212.02	1.41	GPIT-F	9	0	0
16	446.00	1.03	234.99	30.00	445.97	-3.45	-3.45	-2.51	4.27	216.05	1.86	GPIT-F	9	0	0
17	476.00	1.01	259.18	30.00	475.96	-3.65	-3.65	-2.99	4.72	219.31	1.43	GPIT-F	9	0	0
18	506.00	1.08	117.73	30.00	505.96	-3.83	-3.83	-3.00	4.86	218.03	6.58	GPIT-F	9	0	0
19	536.00	1.08	121.37	30.00	535.96	-4.11	-4.11	-2.51	4.82	211.36	0.23	GPIT-F	9	0	0
20	566.00	0.98	118.75	30.00	565.95	-4.38	-4.38	-2.04	4.82	204.97	0.38	GPIT-F	9	0	0
21	596.00	0.87	119.71	30.00	595.95	-4.62	-4.62	-1.62	4.89	199.31	0.35	GPIT-F	9	0	0
22	626.00	0.81	118.24	30.00	625.94	-4.83	-4.83	-1.23	4.99	194.31	0.21	GPIT-F	9	0	0
23	656.00	0.73	122.68	30.00	655.94	-5.04	-5.04	-0.88	5.12	189.96	0.33	GPIT-F	9	0	0
24	686.00	0.67	123.81	30.00	685.94	-5.24	-5.24	-0.58	5.28	186.29	0.23	GPIT-F	9	0	0
25	716.00	0.69	108.80	30.00	715.94	-5.39	-5.39	-0.26	5.41	182.78	0.60	GPIT-F	9	0	0
26	746.00	0.69	111.17	30.00	745.94	-5.52	-5.52	0.08	5.51	179.20	0.10	GPIT-F	9	0	0
27	776.00	0.58	110.39	30.00	775.93	-5.63	-5.63	0.39	5.64	176.07	0.36	GPIT-F	9	0	0
28	806.00	0.70	112.53	30.00	805.93	-5.76	-5.76	0.70	5.81	173.08	0.41	GPIT-F	9	0	0
29	836.00	0.54	114.13	30.00	835.93	-5.88	-5.88	1.00	5.97	170.39	0.56	GPIT-F	9	0	0
30	866.00	0.67	112.68	30.00	865.93	-6.01	-6.01	1.29	6.14	167.91	0.47	GPIT-F	9	0	0
31	896.00	0.83	112.86	30.00	895.93	-6.16	-6.16	1.65	6.36	165.00	0.52	GPIT-F	9	0	0
32	926.00	0.80	113.70	30.00	925.92	-6.33	-6.33	2.04	6.66	162.12	0.11	GPIT-F	9	0	0
33	956.00	0.56	117.38	30.00	955.92	-6.48	-6.48	2.36	6.89	159.96	0.81	GPIT-F	9	0	0
34	986.00	0.71	120.24	30.00	985.92	-6.64	-6.64	2.66	7.15	158.22	0.50	GPIT-F	9	0	0
35	1016.00	0.70	117.36	30.00	1015.92	-6.82	-6.82	2.98	7.45	156.41	0.12	GPIT-F	9	0	0
36	1046.00	0.79	119.07	30.00	1045.91	-7.01	-7.01	3.32	7.74	154.63	0.28	GPIT-F	9	0	0
37	1076.00	0.73	113.41	30.00	1075.91	-7.18	-7.18	3.68	8.07	152.88	0.31	GPIT-F	9	0	0
38	1106.00	1.01	119.20	30.00	1105.91	-7.39	-7.39	4.09	8.43	151.06	0.98	GPIT-F	9	0	0
39	1136.00	0.78	116.49	30.00	1135.90	-7.61	-7.61	4.50	8.83	149.40	0.78	GPIT-F	9	0	0
40	1166.00	0.70	122.51	30.00	1165.90	-7.80	-7.80	4.84	9.19	148.19	0.36	GPIT-F	9	0	0
41	1196.00	0.60	127.92	30.00	1195.90	-7.99	-7.99	5.12	9.48	147.37	0.40	GPIT-F	9	0	0
42	1226.00	0.69	130.47	30.00	1225.90	-8.21	-8.21	5.38	9.81	146.76	0.30	GPIT-F	9	0	0
43	1256.00	0.79	131.13	30.00	1255.90	-8.46	-8.46	5.67	10.17	146.17	0.35	GPIT-F	9	0	0
44	1286.00	0.65	140.45	30.00	1285.89	-8.73	-8.73	5.93	10.56	145.78	0.61	GPIT-F	9	0	0
45	1316.00	0.77	143.67	30.00	1315.89	-9.02	-9.02	6.16	10.93	145.66	0.41	GPIT-F	9	0	0
46	1346.00	0.86	138.77	30.00	1345.89	-9.35	-9.35	6.43	11.35	145.49	0.40	GPIT-F	9	0	0
47	1376.00	0.91	139.96	30.00	1375.88	-9.70	-9.70	6.73	11.81	145.25	0.16	GPIT-F	9	0	0
48	1406.00	1.02	140.66	30.00	1405.88	-10.09	-10.09	7.05	12.30	145.05	0.38	GPIT-F	9	0	0
49	1436.00	1.10	151.48	30.00	1435.87	-10.55	-10.55	7.36	12.86	145.10	0.72	GPIT-F	9	0	0
50	1466.00	1.30	147.52	30.00	1465.87	-11.09	-11.09	7.68	13.48	145.30	0.71	GPIT-F	9	0	0
51	1496.00	1.56	147.52	30.00	1495.86	-11.72	-11.72	8.08	14.24	145.42	0.85	GPIT-F	9	0	0
52	1526.00	1.87	146.38	30.00	1525.85	-12.47	-12.47	8.57	15.12	145.50	1.05	GPIT-F	9	0	0
53	1556.00	2.20	144.33	30.00	1555.83	-13.35	-13.35	9.18	16.21	145.49	1.13	GPIT-F	9	0	0
54	1586.00	2.20	146.40	30.00	1585.80	-14.30	-14.30	9.83	17.36	145.48	0.26	GPIT-F	9	0	0
55	1616.00	2.41	145.32	30.00	1615.78	-15.29	-15.29	10.51	18.57	145.50	0.70	GPIT-F	9	0	0
56	1646.00	2.33	150.36	30.00	1645.75	-16.34	-16.34	11.17	19.78	145.65	0.73	GPIT-F	9	0	0
57	1676.00	2.37	151.95	30.00	1675.73	-17.42	-17.42	11.76	21.03	145.97	0.25	GPIT-F	9	0	0
58	1706.00	2.38	153.39	30.00	1705.70	-18.53	-18.53	12.34	22.24	146.34	0.20	GPIT-F	9	0	0
59	1736.00	2.47	151.35	30.00	1735.68	-19.65	-19.65	12.93	23.52	146.67	0.42	GPIT-F	9	0	0
60	1766.00	2.54	151.39	30.00	1765.65	-20.80	-20.80	13.55	24.84	146.92	0.22	GPIT-F	9	0	0
61	1796.00	2.60	149.18	30.00	1795.62	-21.97	-21.97	14.22	26.18	147.09	0.39	GPIT-F	9	0	0
62	1826.00	2.58	147.75	30.00	1825.59	-23.13	-23.13	14.93	27.53	147.16	0.23	GPIT-F	9	0	0





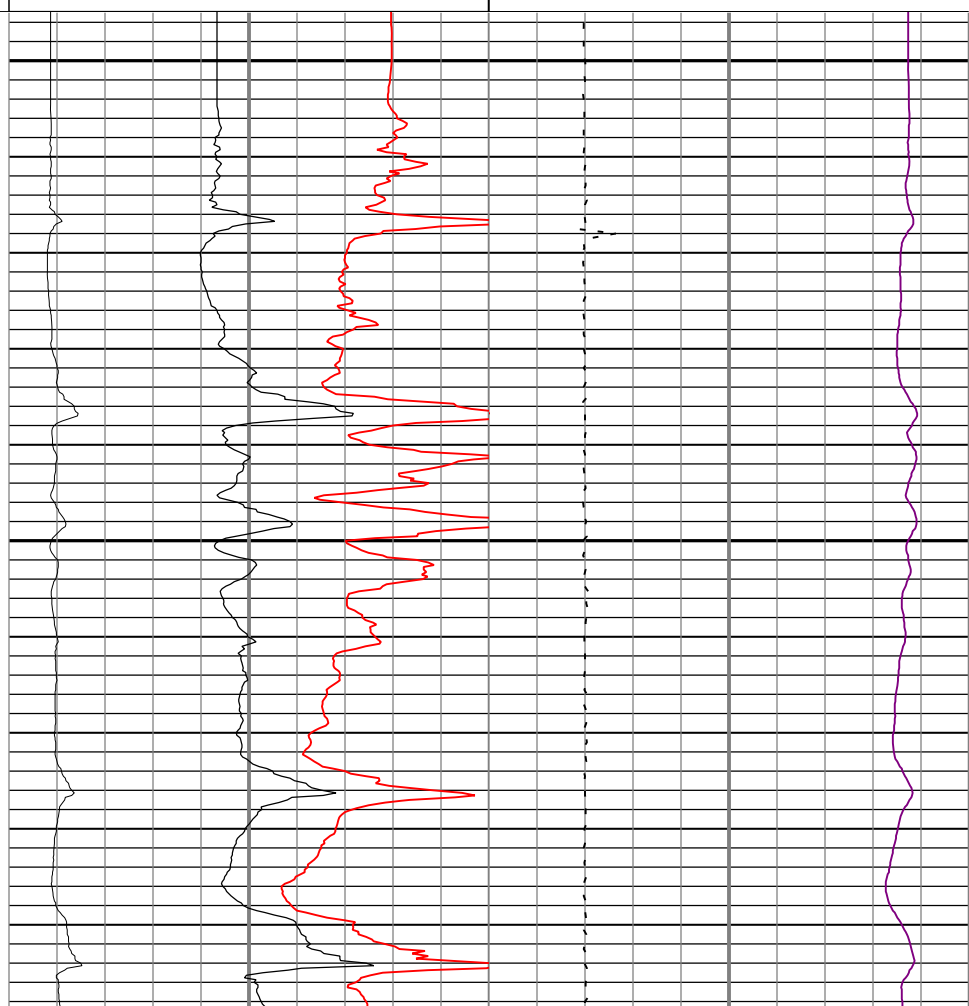
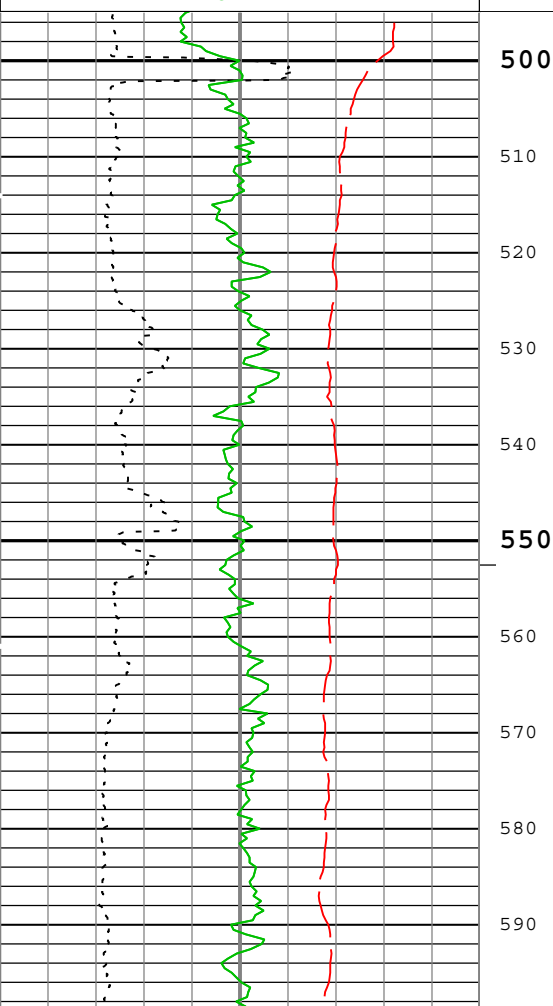
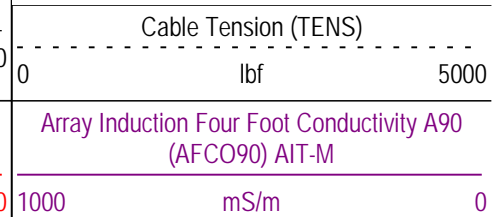
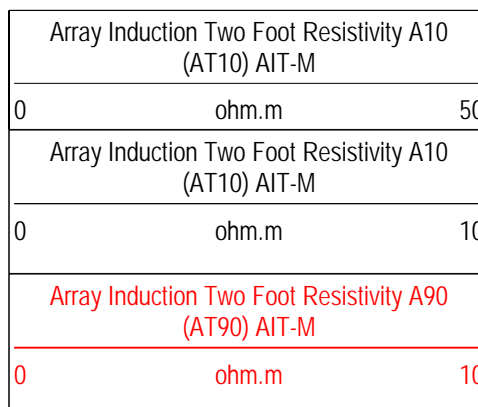
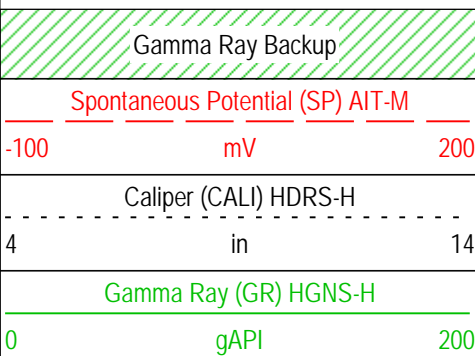
Description: AIT Basic Log Two	Format: Log ( EMD 1in Induction )	Index Scale: 5 in per 100 ft	Index Unit: ft	Index Type: Measured Depth	Creation
Date: 24-Nov-2014 20:39:02					

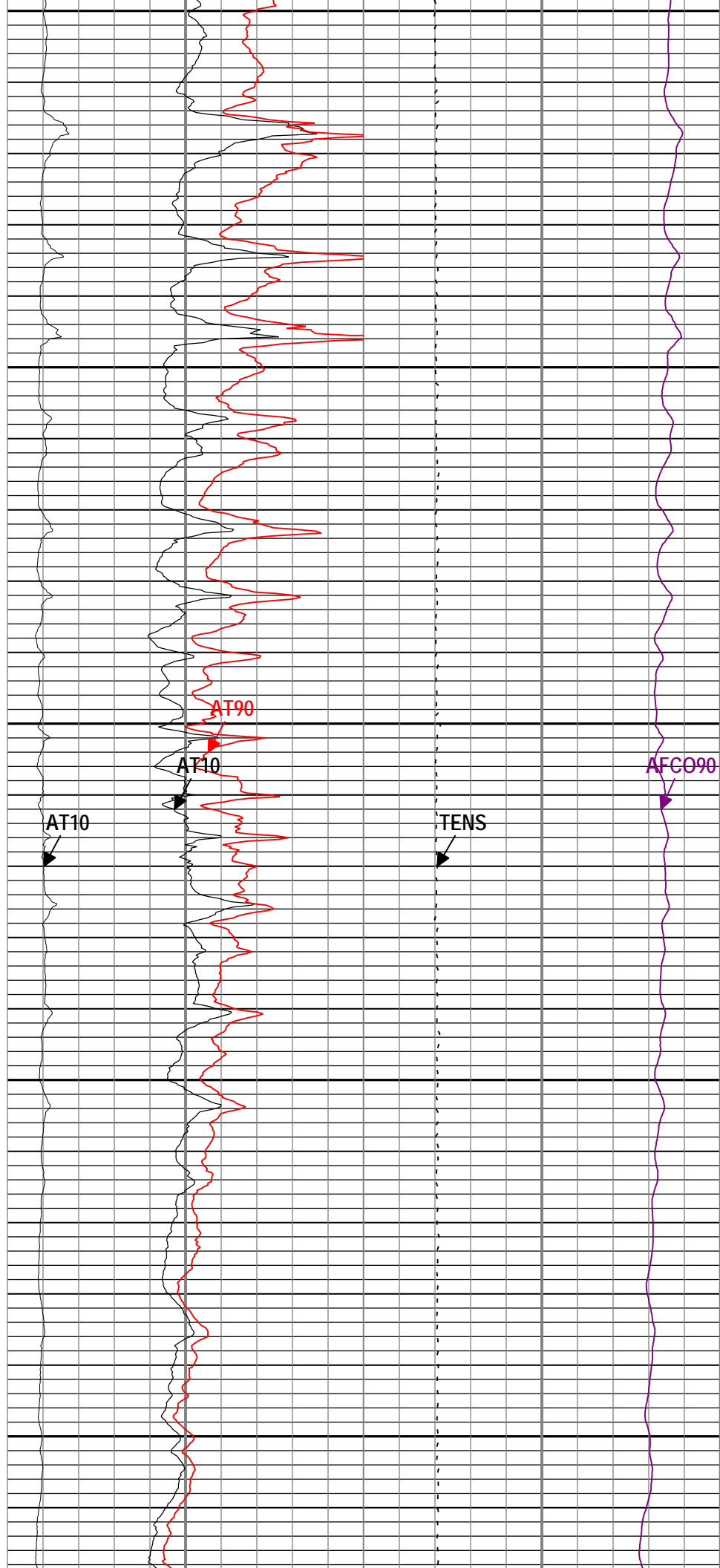
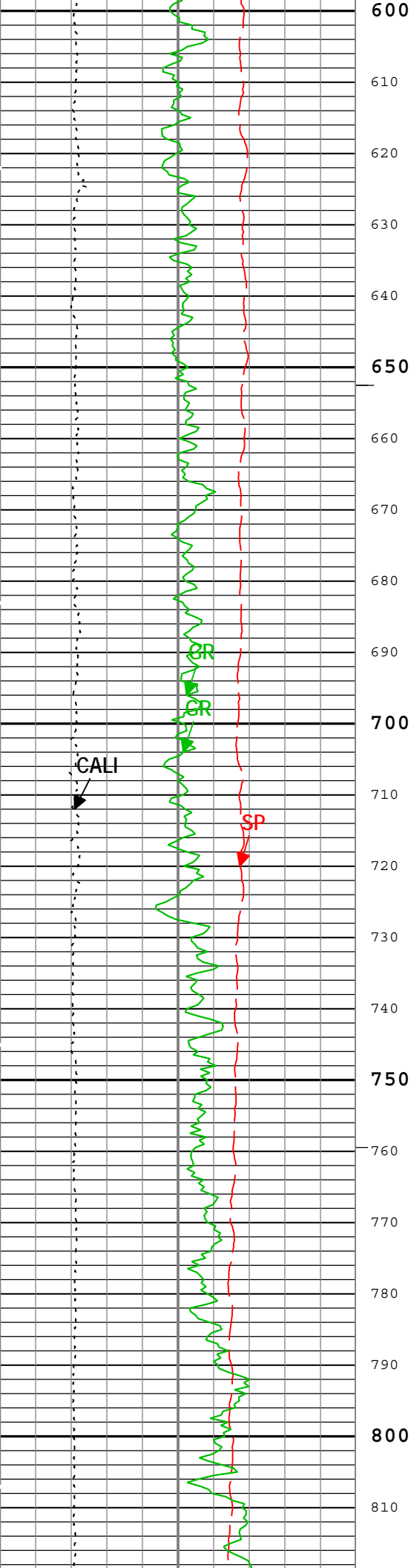
Channel	Source	Sampling
AFCO90	AIT-M:AMIS:AMIS	3in
AT10	AIT-M:AMIS:AMIS	3in
AT90	AIT-M:AMIS:AMIS	3in
CALI	HDRS-H:HRCC-H:HRCC-H	1in
GR	HGNS-H:HGNS-H:HGNS-H	6in
ICV	Borehole	6in
SP	AIT-M:AMIS:AMIS	6in
TENS	WLWorkflow	6in
TIME_1900	WLWorkflow	0.1in

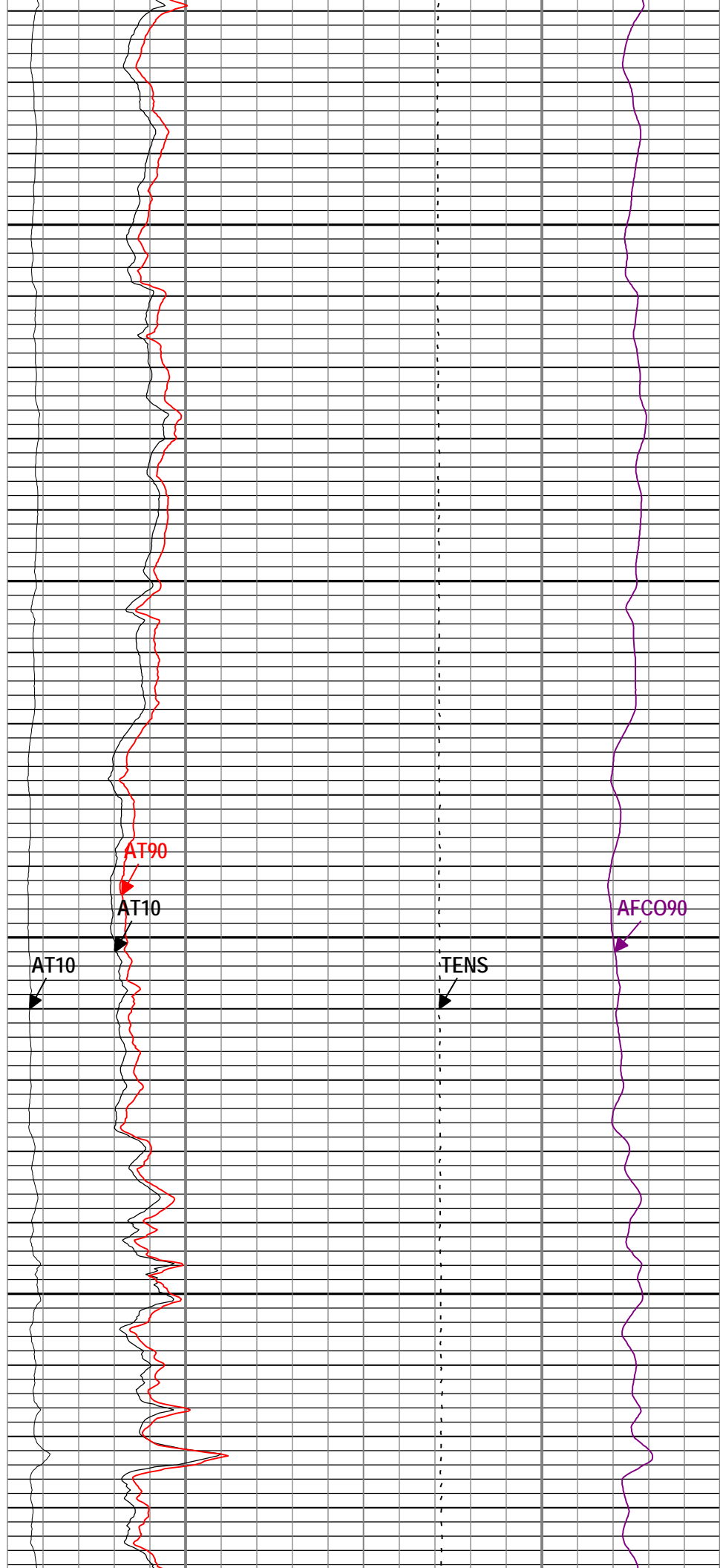
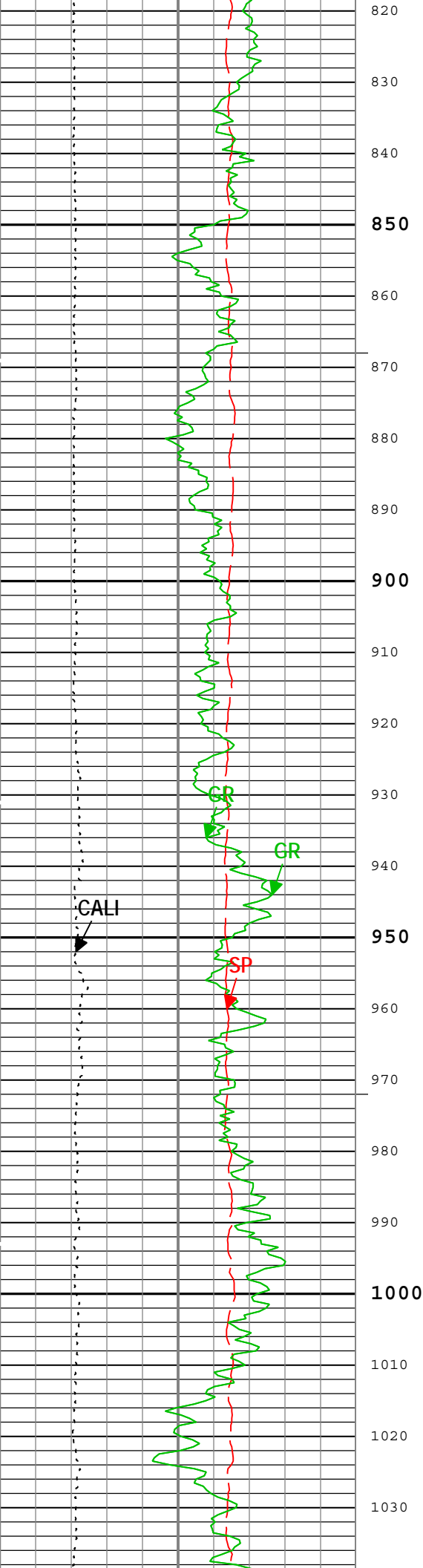
TIME\_1900 - Time Marked every 60.00 (s)

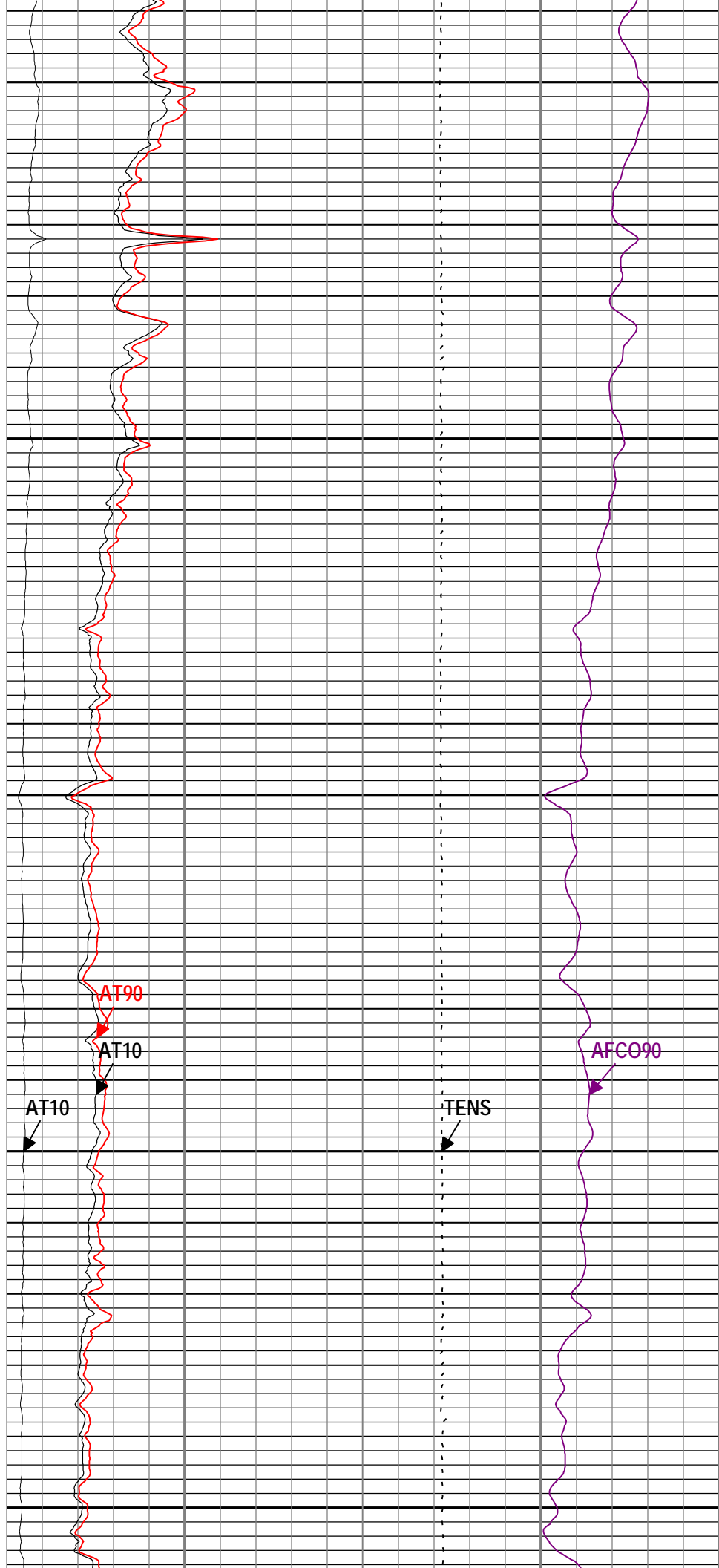
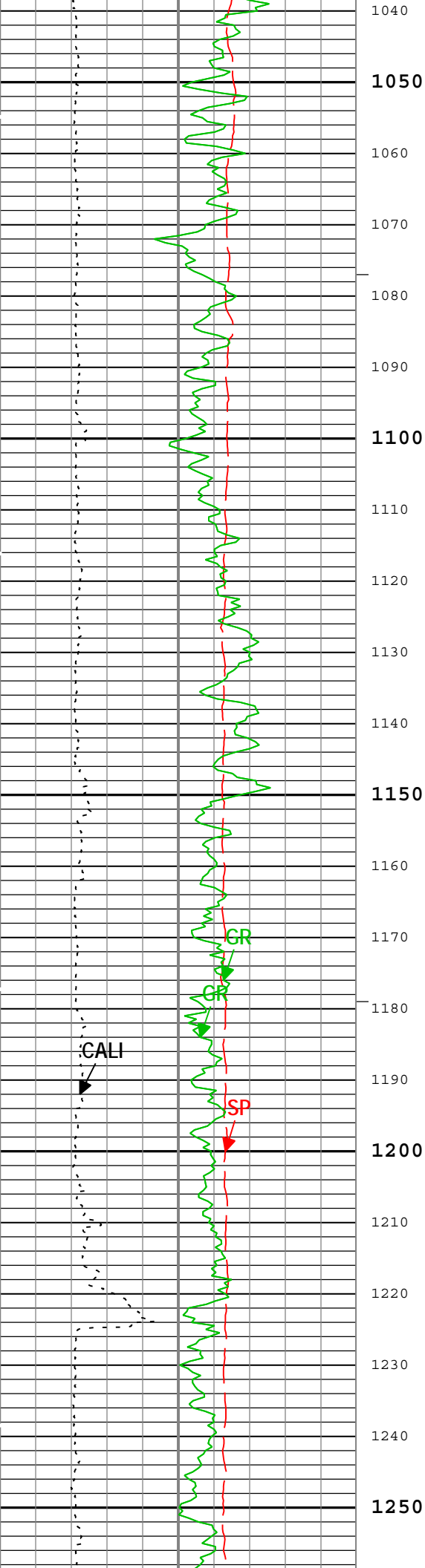
└ ICV - Integrated Cement Volume every 10.00 (ft3)

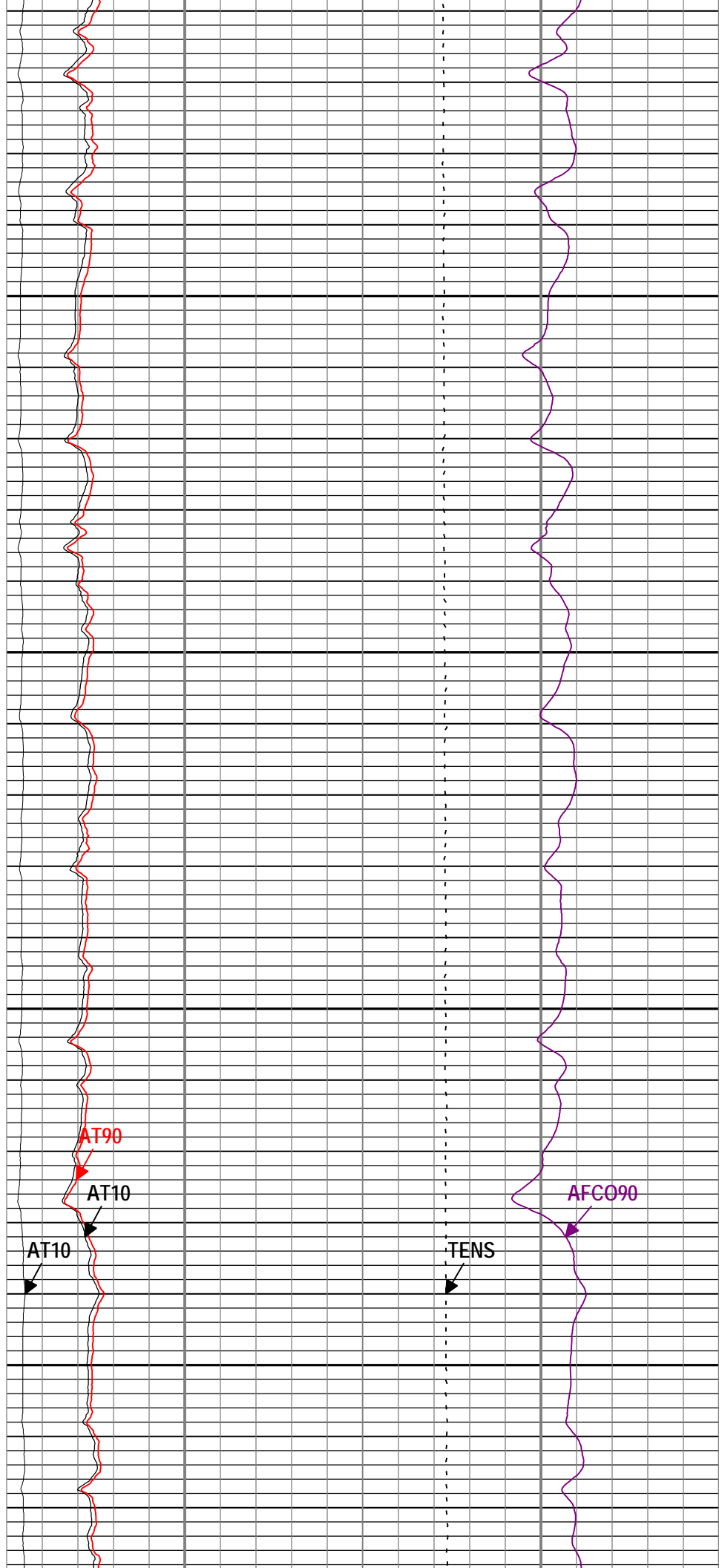
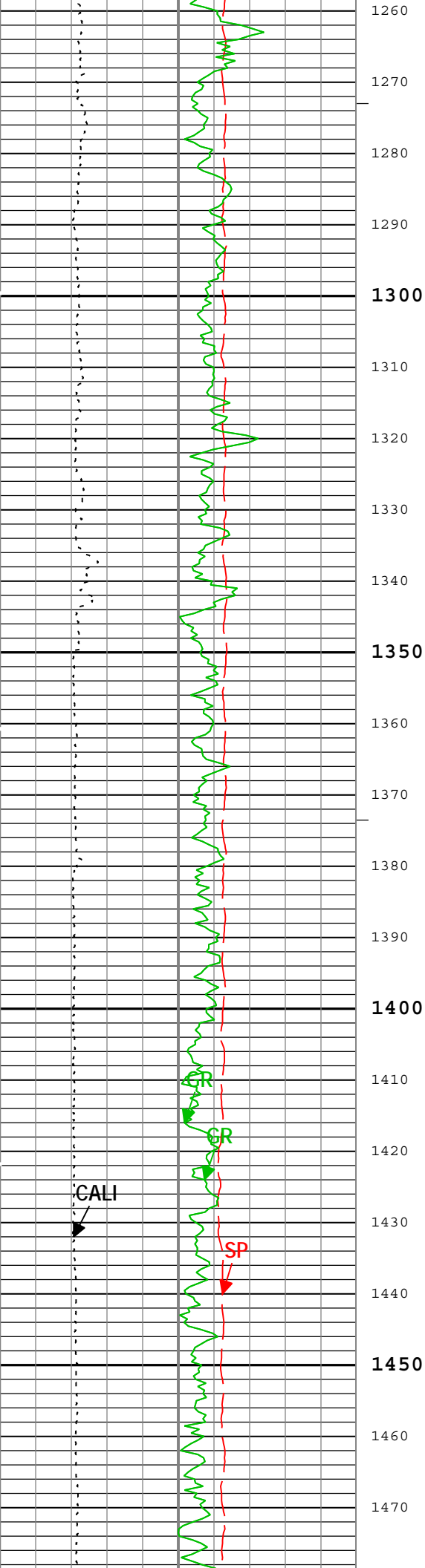
— ICV - Integrated Cement Volume every 100.00 (ft3)

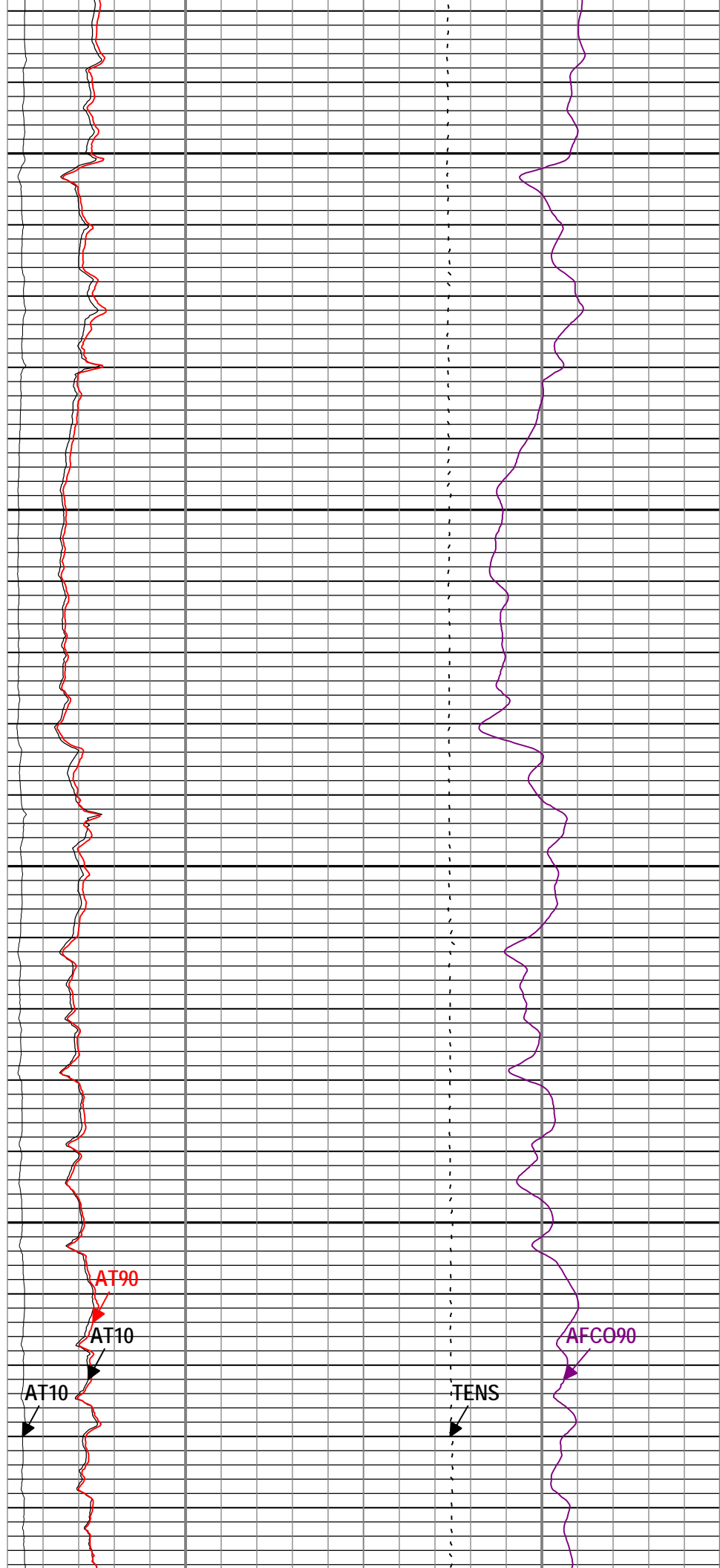
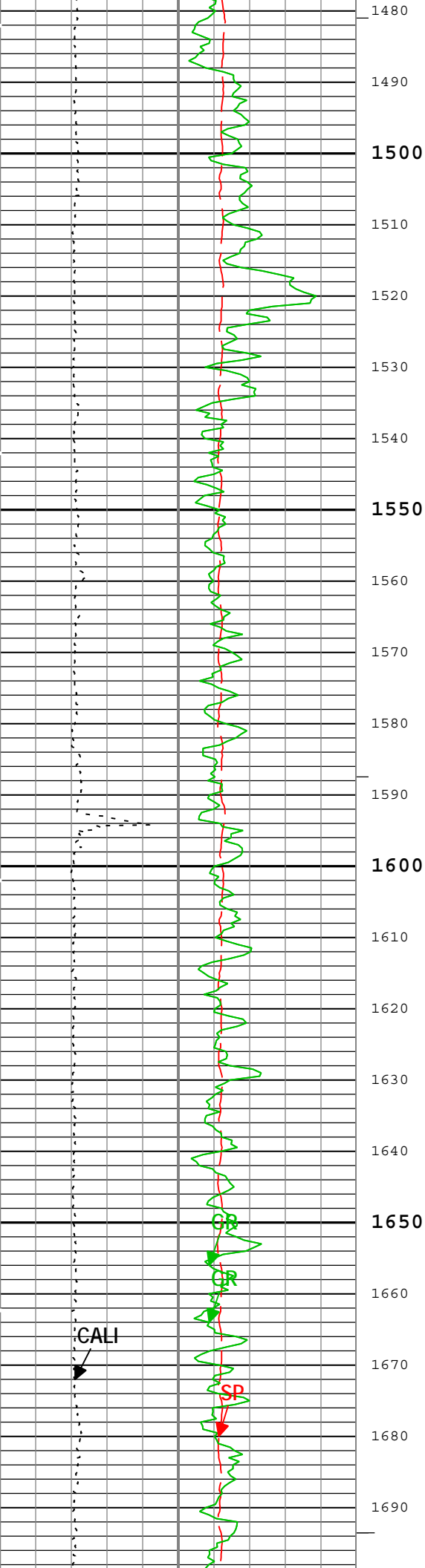


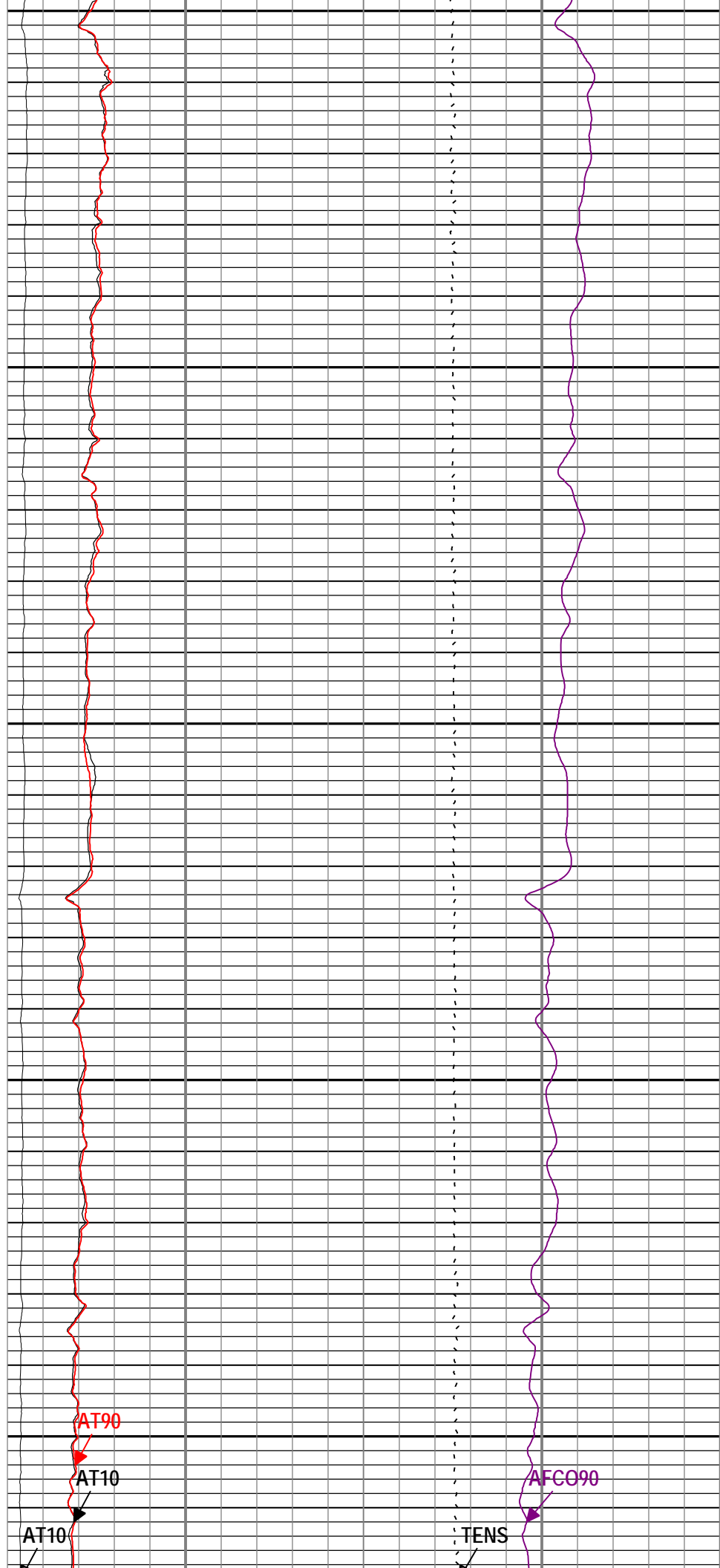
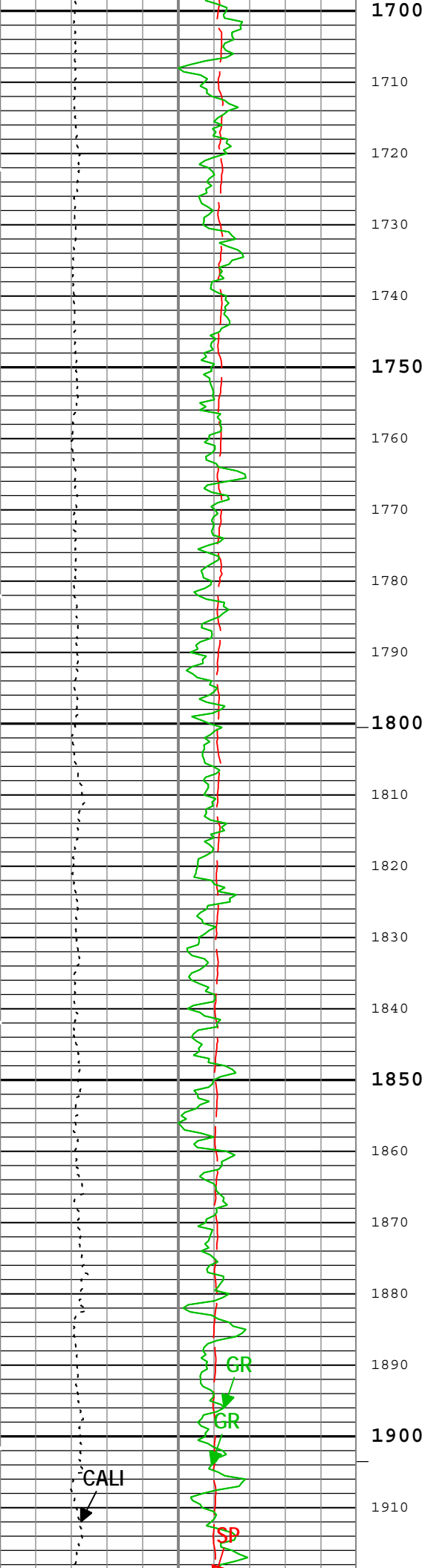


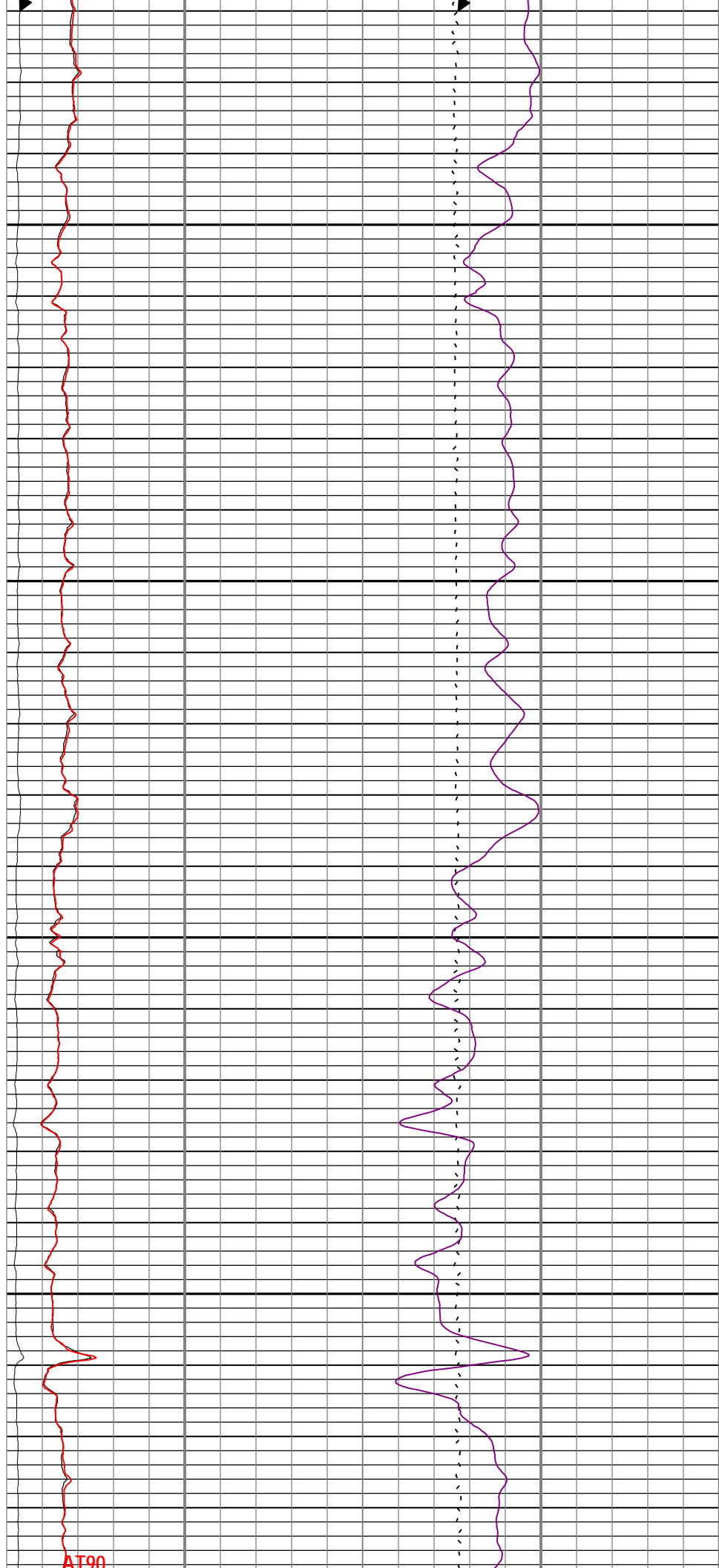
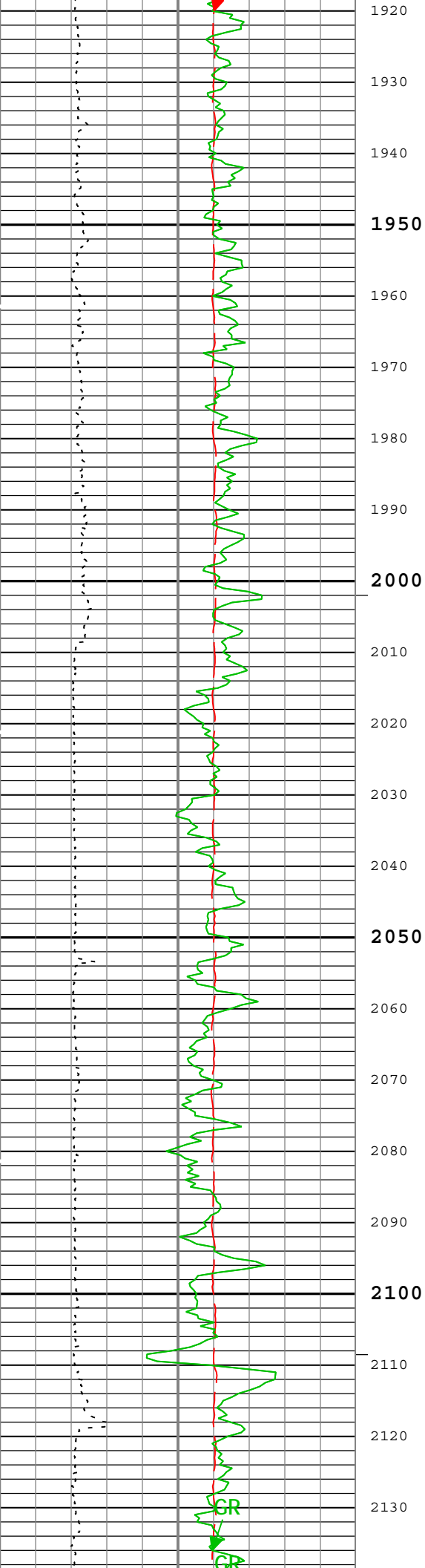




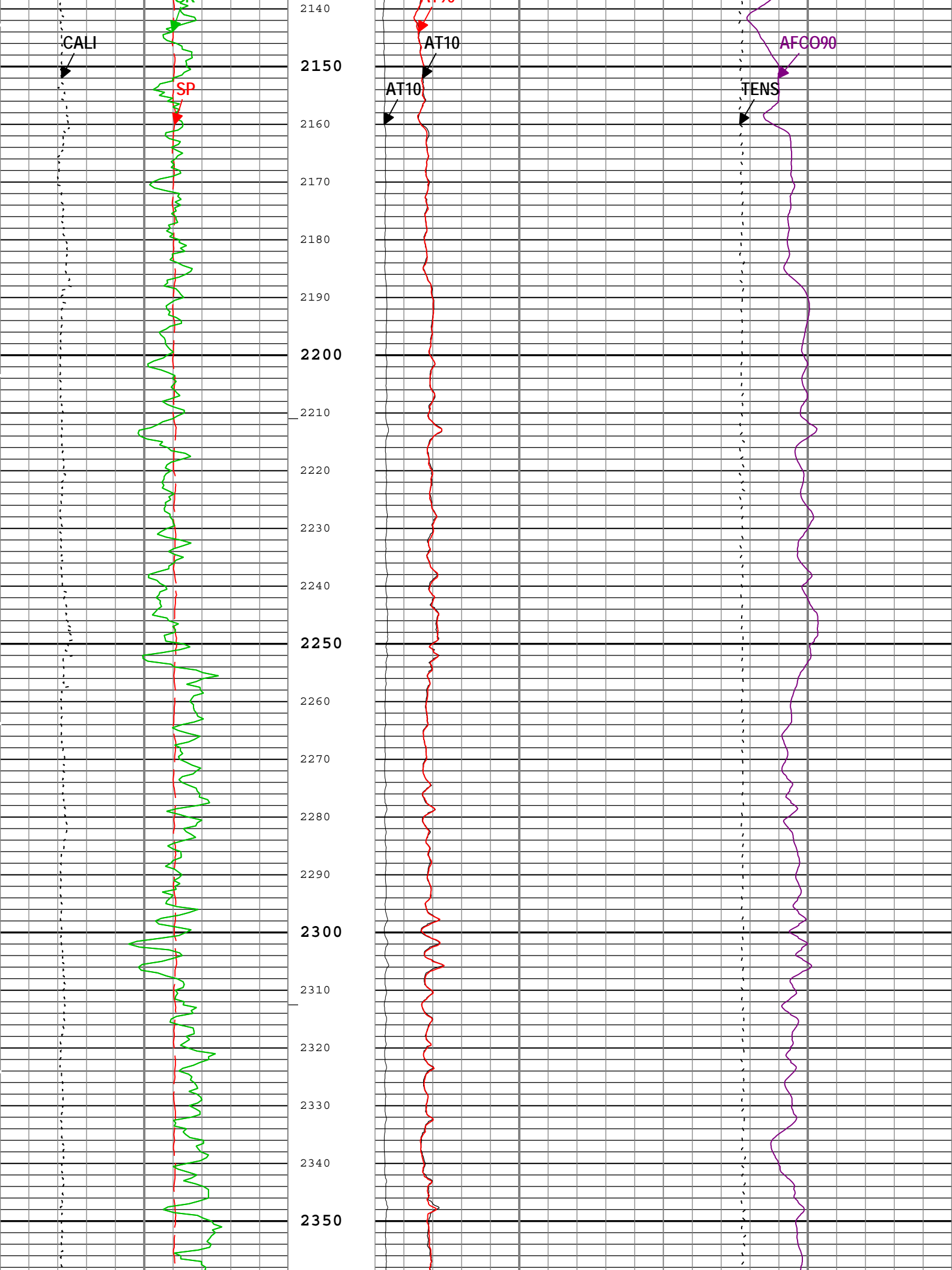


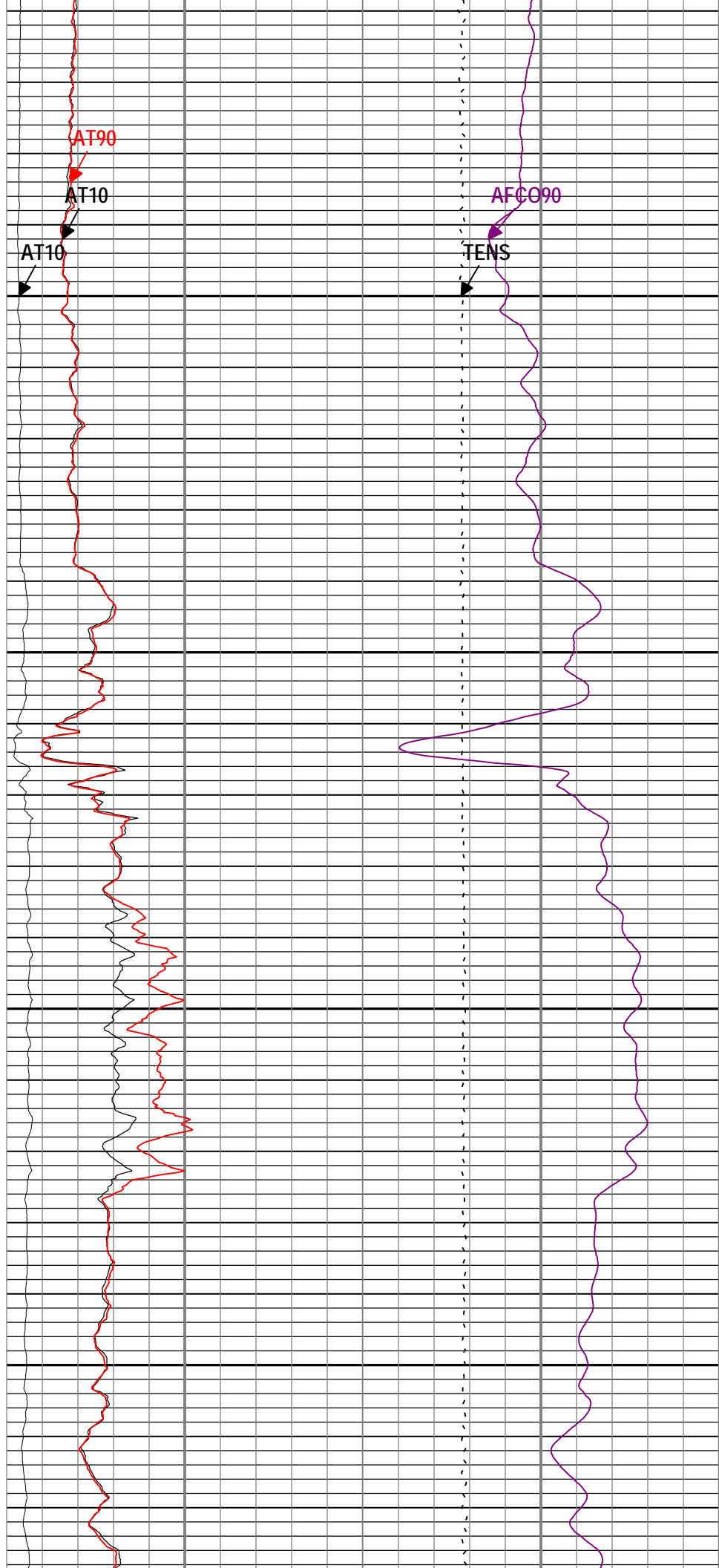
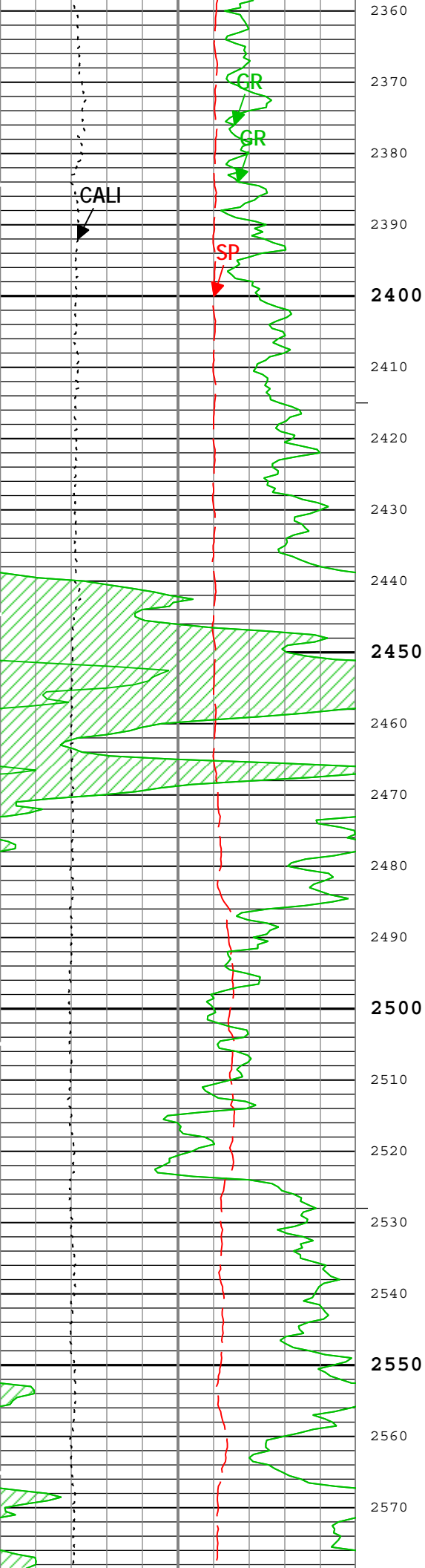


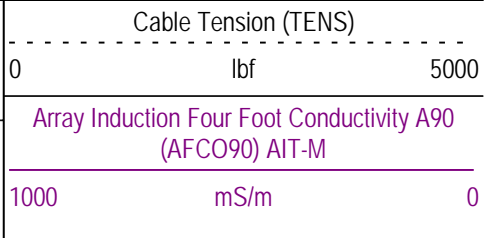
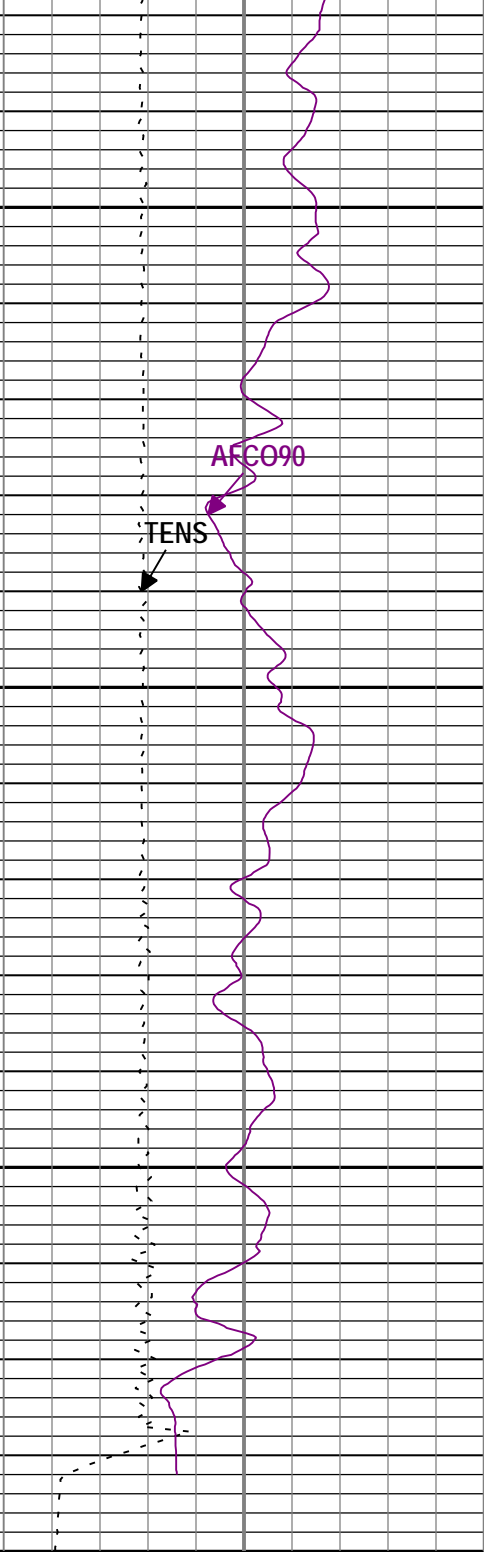
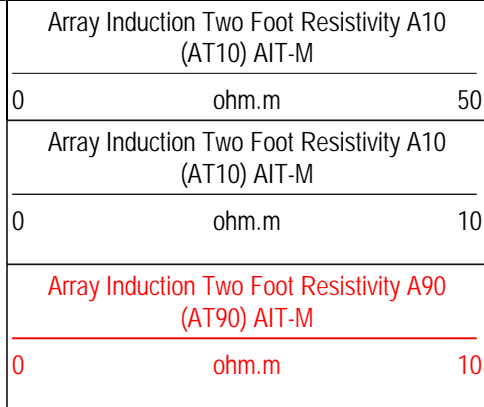
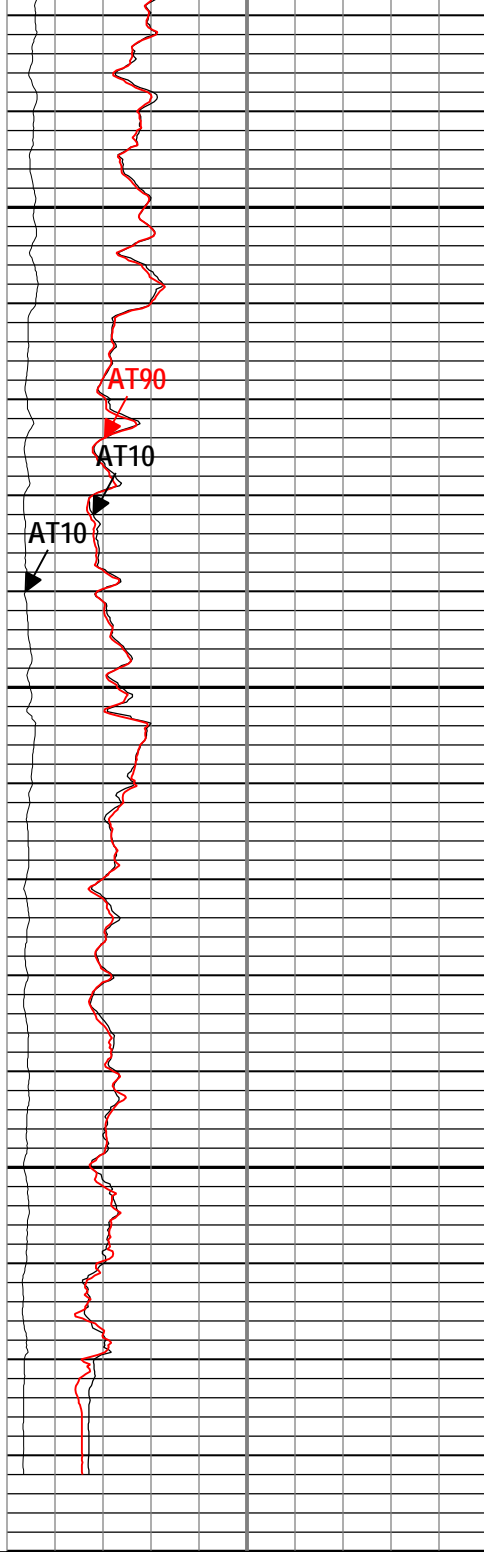
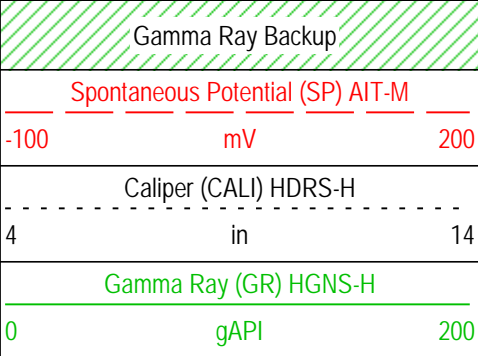
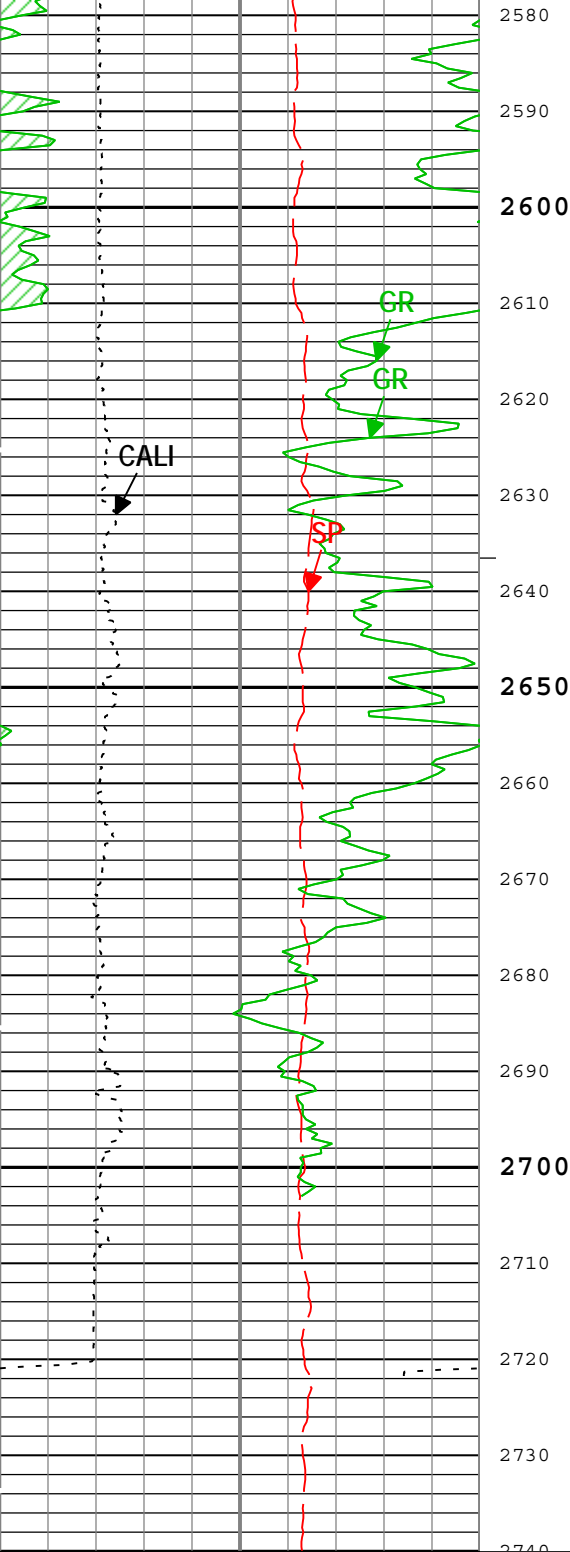












ICV - Integrated Cement Volume every 100.00 (ft3)

ICV - Integrated Cement Volume every 10.00 (ft3)

TIME\_1900 - Time Marked every 60.00 (s)

Channel Processing Parameters				
Parameter	Description	Tool	Value	Unit
ABHM	Array Induction Borehole Correction Mode	AIT-M	Compute Standoff	
ACDE	Array Induction Casing Detection Enable	AIT-M	Yes	
ASTA	Array Induction Tool Standoff	AIT-M	0.125	in
BARI	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	6.25	in
CALI_SHIFT	CALI Supplementary Offset	HDRS-H	0	in
CBLO	Casing Bottom (Logger)	WLSESSION	498	ft
CDEN	Cement Density	HGNS-H	2	g/cm3
CSODDRL	Casing Outer Diameter - Zoned along driller depths	WLSESSION	7	in
DFD	Drilling Fluid Density	Borehole	8.8	lbm/gal
FCD	Future Casing (Outer) Diameter	WLSESSION	4.5	in
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	
SPDR	SP Drift Per Foot	AIT-M	0	mV/ft

Tool Control Parameters				
Parameter	Description	Tool	Value	Unit
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	3600	ft/h

ONE				
2" Induction				

Integration Summary				
Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
ICV	Integrated Cement Volume	GCSE_UP_PASS, FCD	217.72	ft3

Software Version	
Acquisition System	Version
MaxWell	4.0.9163.3000
Application Patch	Patch-SP-10767_26570-4.0.9163.3001

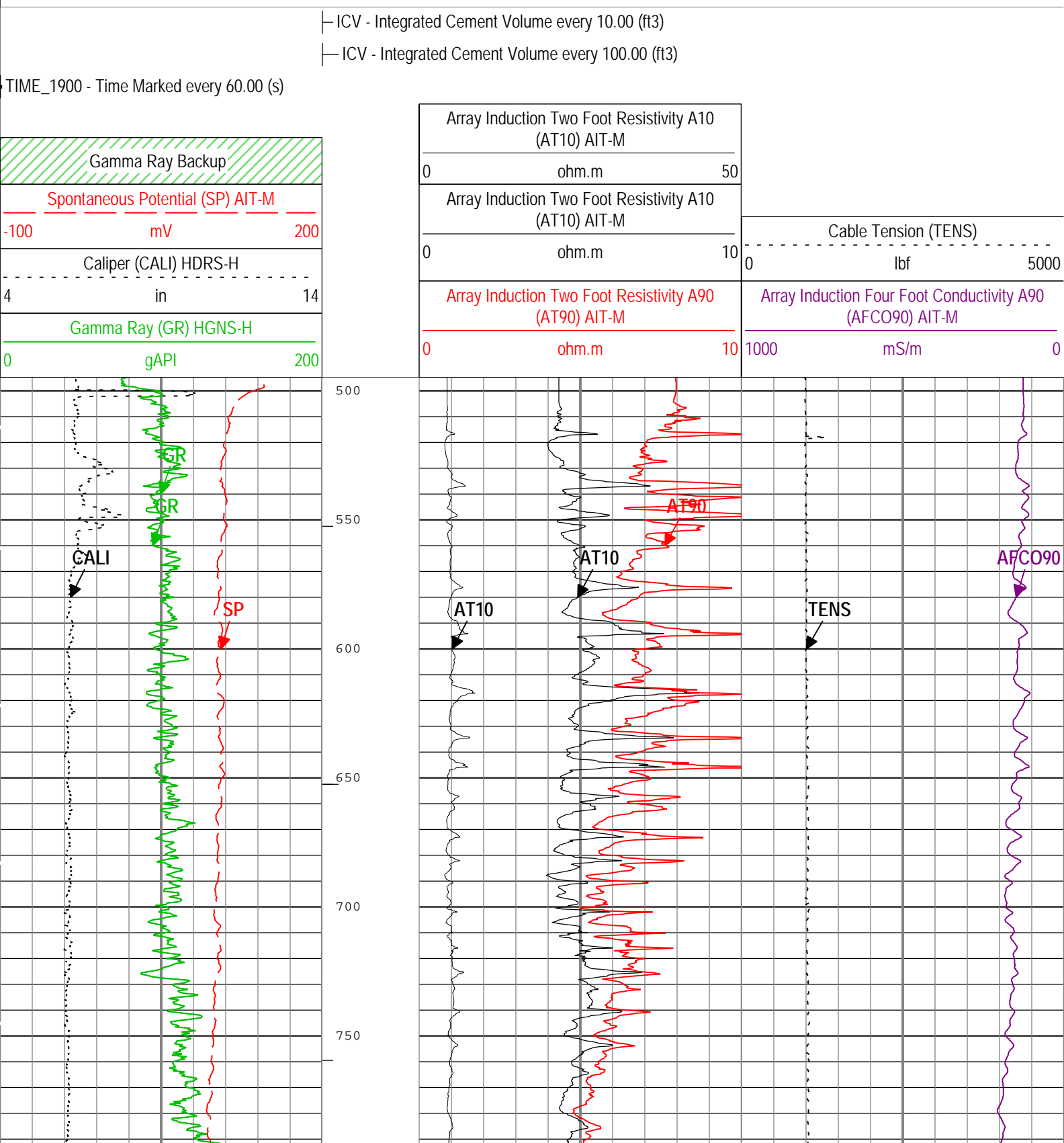
Computation	Description		Version
Borehole	Borehole Ensemble provides common Borehole Parameters and Channels		4.0.9469.3000
Tool Elements	Description	Software Version	Firmware Version
HRCC-H	HILT High-Resolution Control Cartridge, 150 degC	4.0.9575.3000	2.0
HGNS-H	HILT Gamma-Ray and Neutron Sonde, 150 degC	4.0.9575.3000	2.0
AMIS	Array Induction Sonde - M	4.0.9535.3000	1

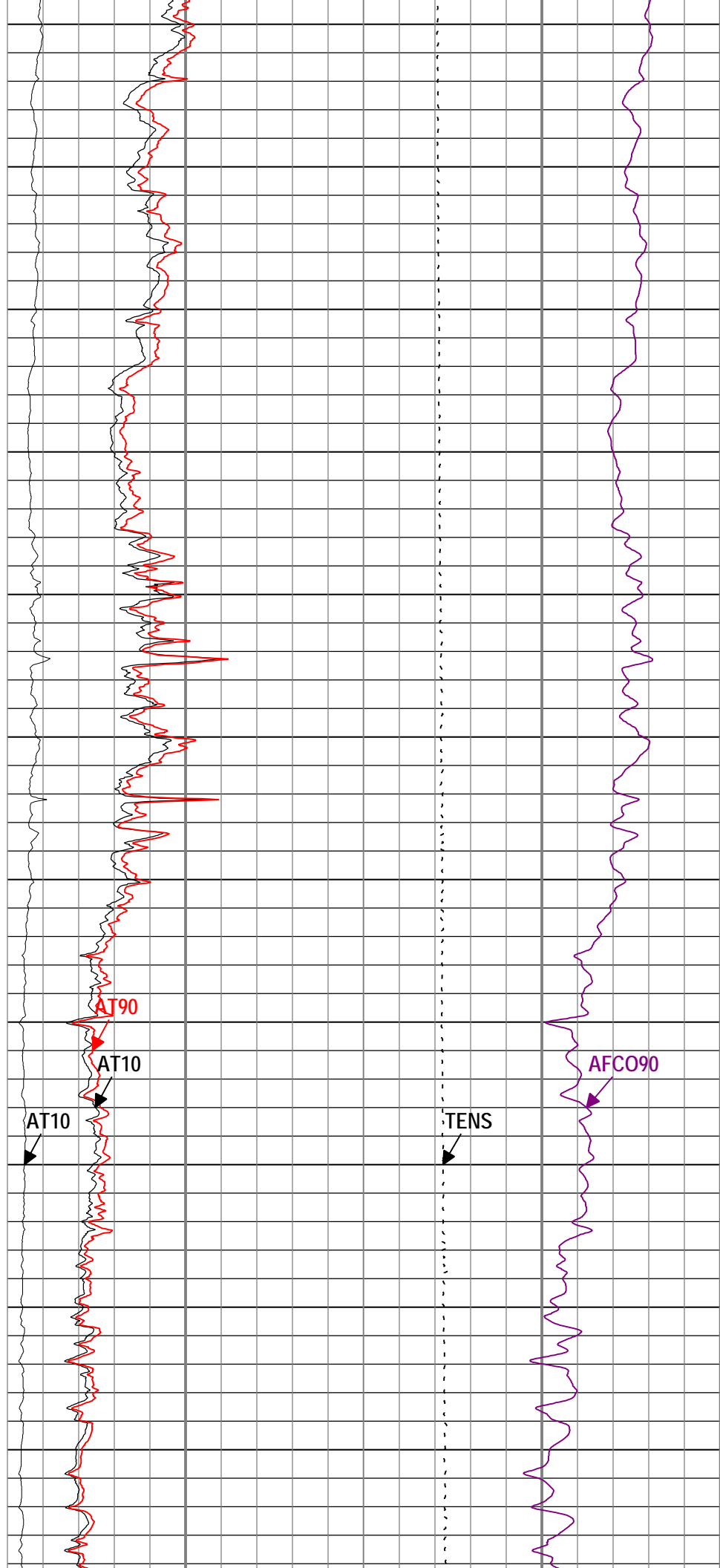
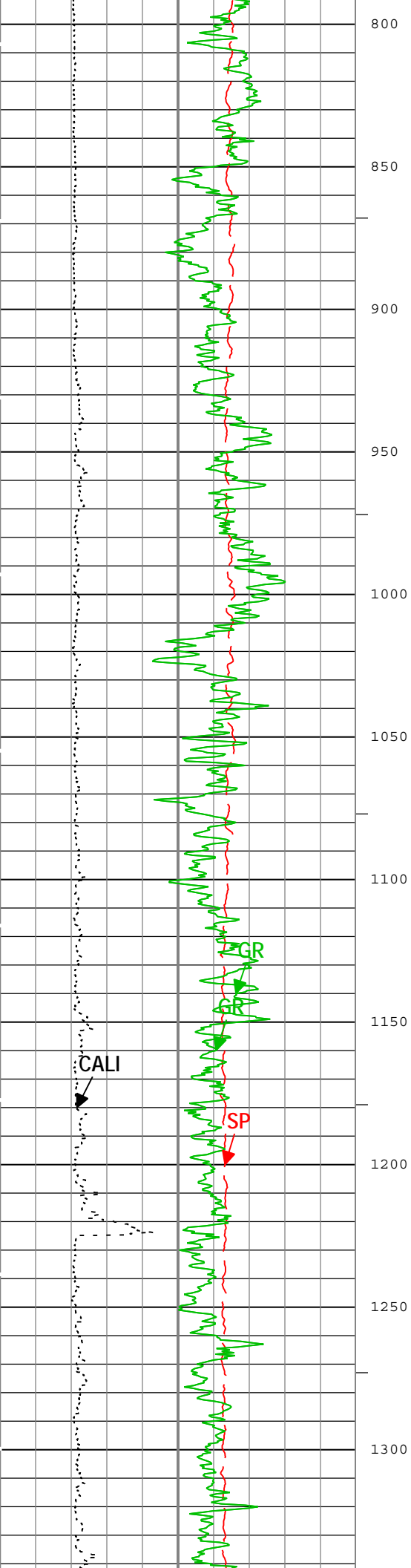
Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Main[4]:Up	Up	49.99 ft	2740.13 ft	24-Nov-2014 2:18:51 PM	24-Nov-2014 3:07:02 PM	ON	0.00 ft	Yes

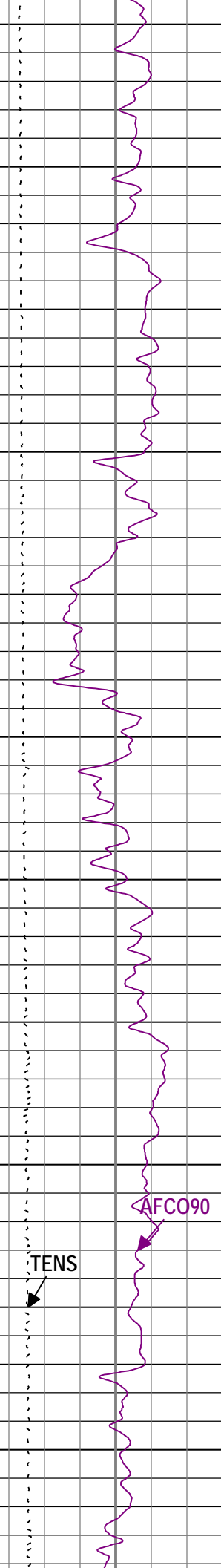
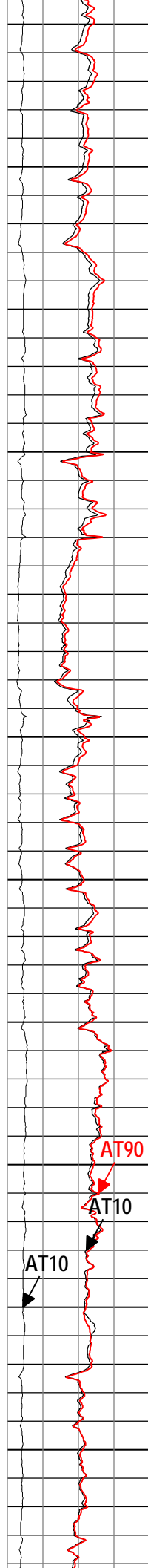
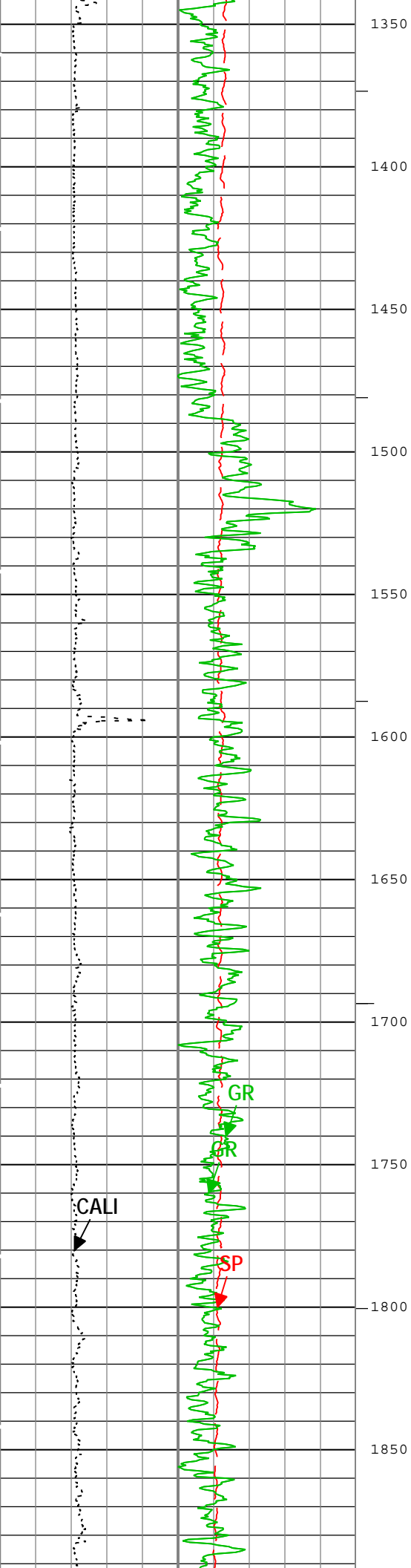
All depths are referenced to toolstring zero

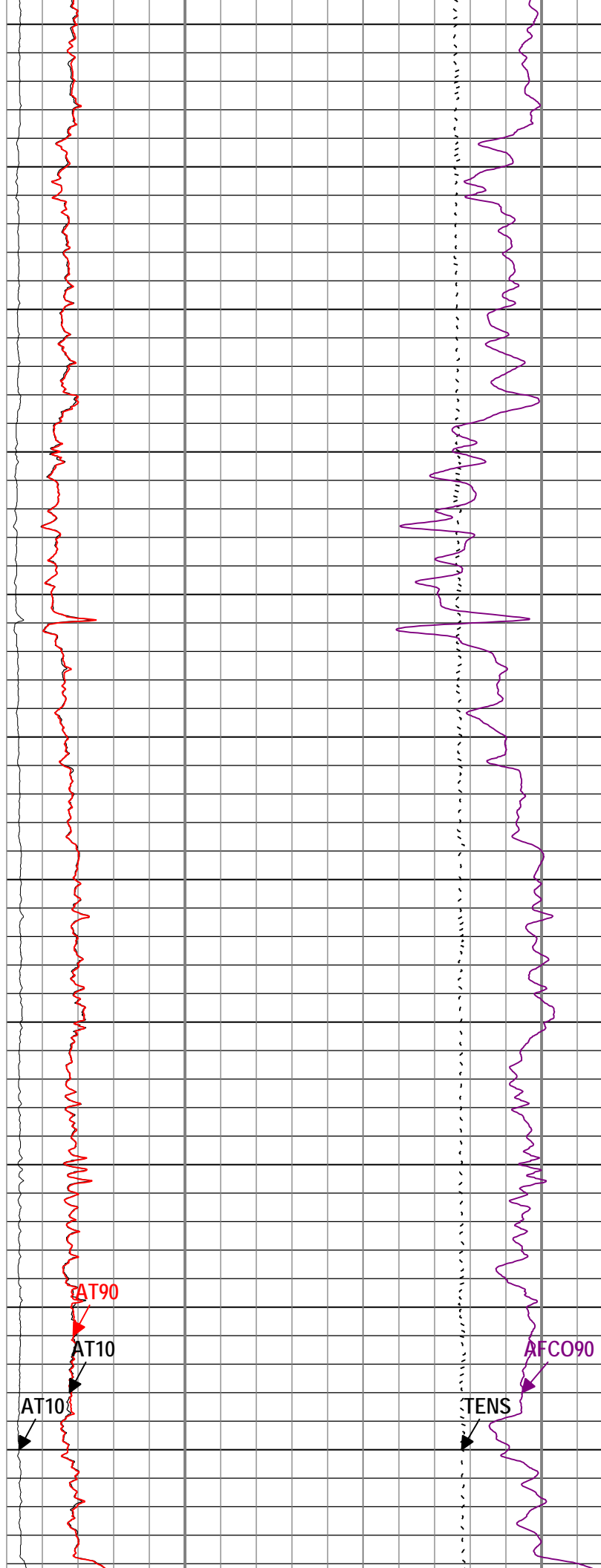
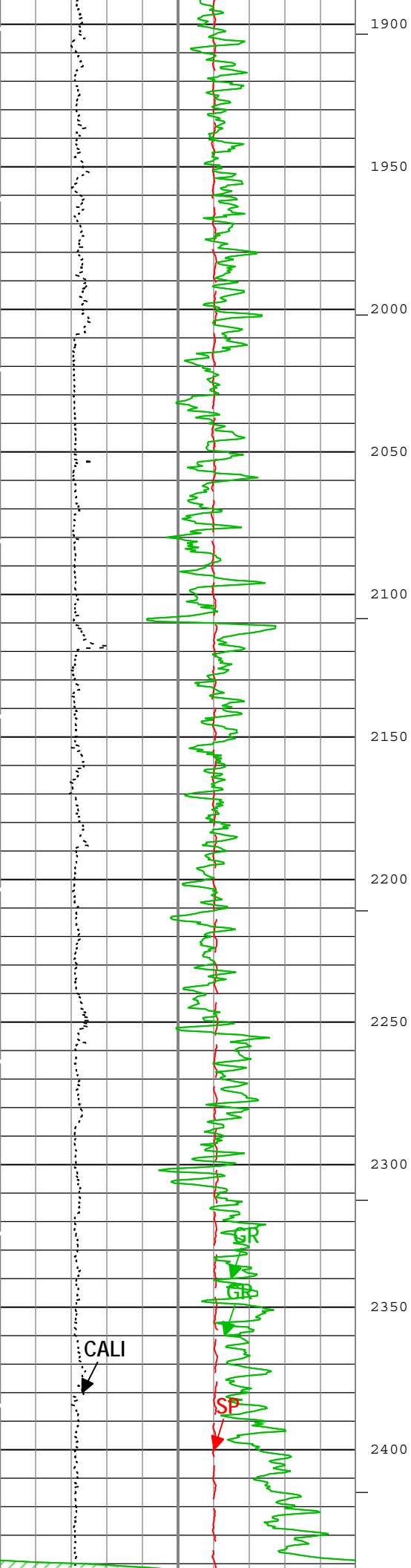
Log	Company:Omimex Petroleum Inc.	Well:Gueck 10-19-7-44
		ONE: Main[4]:Up:S010

Channel	Source	Sampling
AFCO90	AIT-M:AMIS:AMIS	3in
AT10	AIT-M:AMIS:AMIS	3in
AT90	AIT-M:AMIS:AMIS	3in
CALI	HDRS-H:HRCC-H:HRCC-H	1in
GR	HGNS-H:HGNS-H:HGNS-H	6in
ICV	Borehole	6in
SP	AIT-M:AMIS:AMIS	6in
TENS	WLWorkflow	6in
TIME_1900	WLWorkflow	0.1in

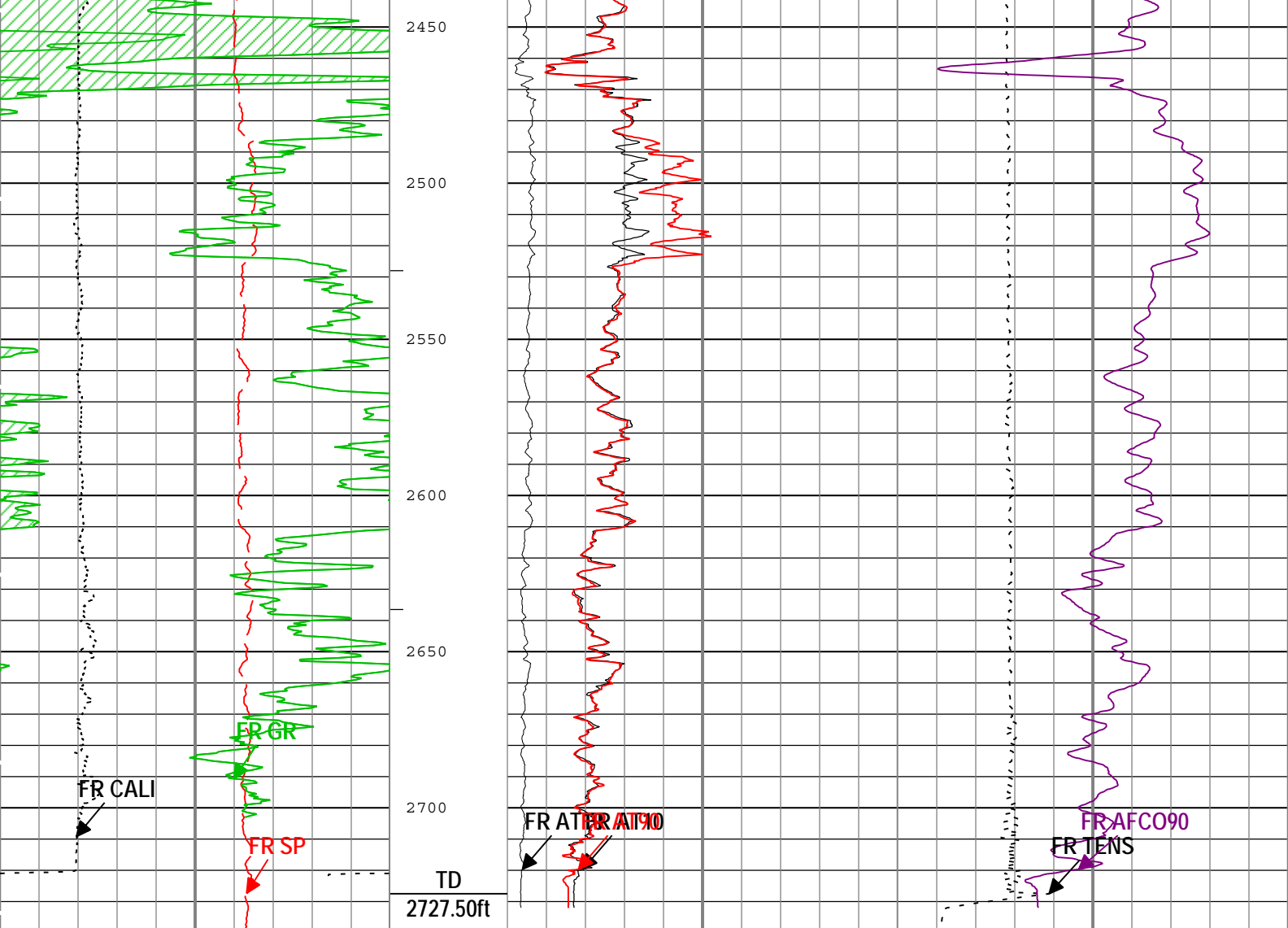












Gamma Ray Backup		
Spontaneous Potential (SP) AIT-M		
-100	mV	200
Caliper (CALI) HDRS-H		
4	in	14
Gamma Ray (GR) HGNS-H		
0	gAPI	200

Array Induction Two Foot Resistivity A10 (AT10) AIT-M		
0	ohm.m	50
Array Induction Two Foot Resistivity A10 (AT10) AIT-M		
0	ohm.m	10
Array Induction Two Foot Resistivity A90 (AT90) AIT-M		
0	ohm.m	10

Cable Tension (TENS)		
0	lbf	5000
Array Induction Four Foot Conductivity A90 (AFCO90) AIT-M		
1000	mS/m	0

TIME\_1900 - Time Marked every 60.00 (s)

ICV - Integrated Cement Volume every 100.00 (ft3)

ICV - Integrated Cement Volume every 10.00 (ft3)

Description: AIT Basic Log Two Format: Log ( EMD 2in Induction ) Index Scale: 2 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 24-Nov-2014 20:39:03

Channel Processing Parameters				
Parameter	Description	Tool	Value	Unit
ABHM	Array Induction Borehole Correction Mode	AIT-M	Compute Standoff	
ACDE	Array Induction Casing Detection Enable	AIT-M	Yes	
ASTA	Array Induction Tool Standoff	AIT-M	0.125	in
BARI	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	6.25	in

CALI_SHIFT	CALI Supplementary Offset	HDRS-H	0	in
CBLO	Casing Bottom (Logger)	WLSESSION	498	ft
CDEN	Cement Density	HGNS-H	2	g/cm3
CSODDRL	Casing Outer Diameter - Zoned along driller depths	WLSESSION	7	in
DFD	Drilling Fluid Density	Borehole	8.8	lbm/gal
FCD	Future Casing (Outer) Diameter	WLSESSION	4.5	in
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	
SPDR	SP Drift Per Foot	AIT-M	0	mV/ft

Tool Control Parameters				
Parameter	Description	Tool	Value	Unit
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	3600	ft/h
ONE				
5" Triple Combo Linear				

Software Version			
Acquisition System		Version	
MaxWell		4.0.9163.3000	
Application Patch		Patch-SP-10767_26570-4.0.9163.3001	
Computation	Description	Version	
HENVIR	Computation Ensemble for the HGNS Neutron environmental corrections	4.0.9469.3000	
DepthCorrection	DepthCorrection	4.0.9469.3000	
Tool Elements	Description	Software Version	Firmware Version
HRCC-H	HILT High-Resolution Control Cartridge, 150 degC	4.0.9575.3000	2.0
HRGD-H	HILT Resistivity Gamma-Ray Density Device, 150 degC	4.0.9575.3000	3.0
HGNS-H	HILT Gamma-Ray and Neutron Sonde, 150 degC	4.0.9575.3000	2.0
AMIS	Array Induction Sonde - M	4.0.9535.3000	1

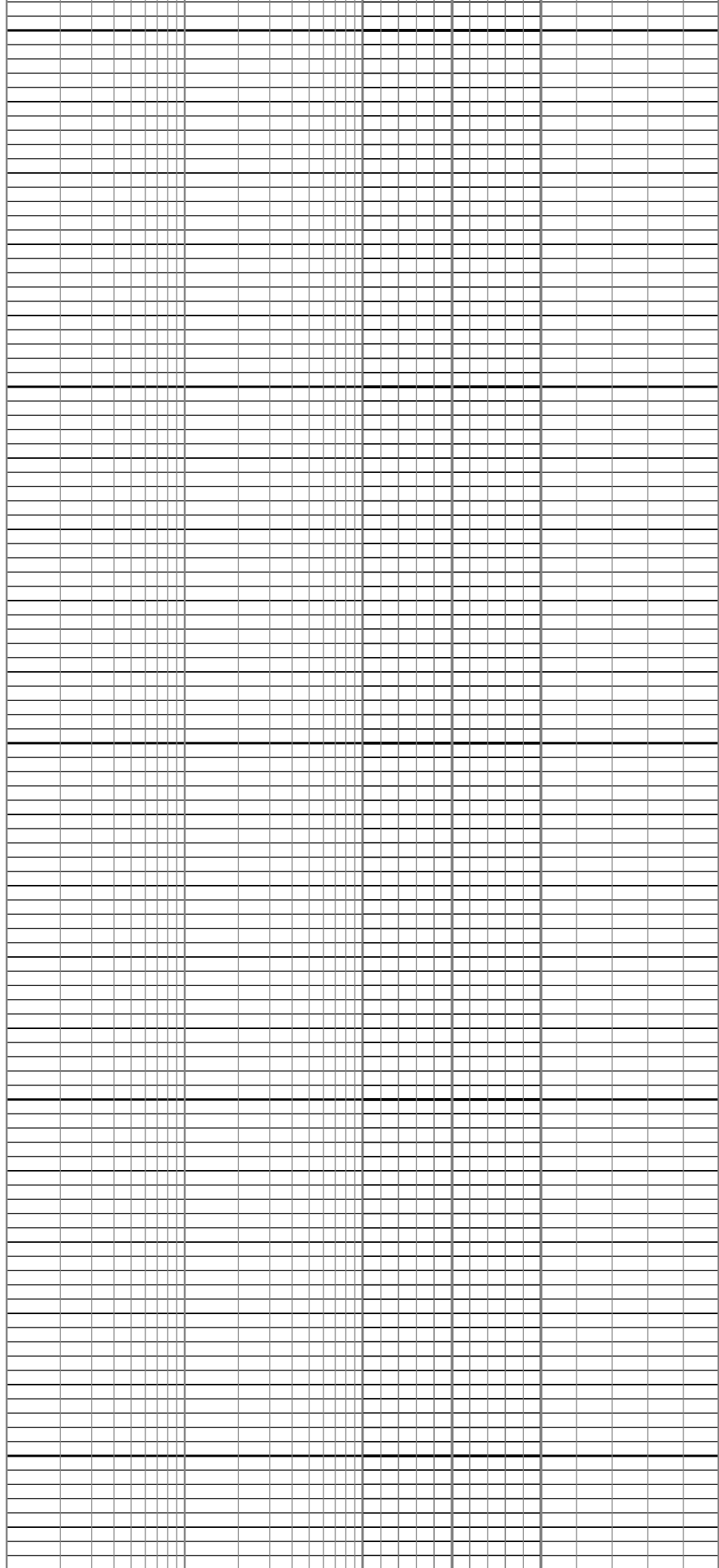
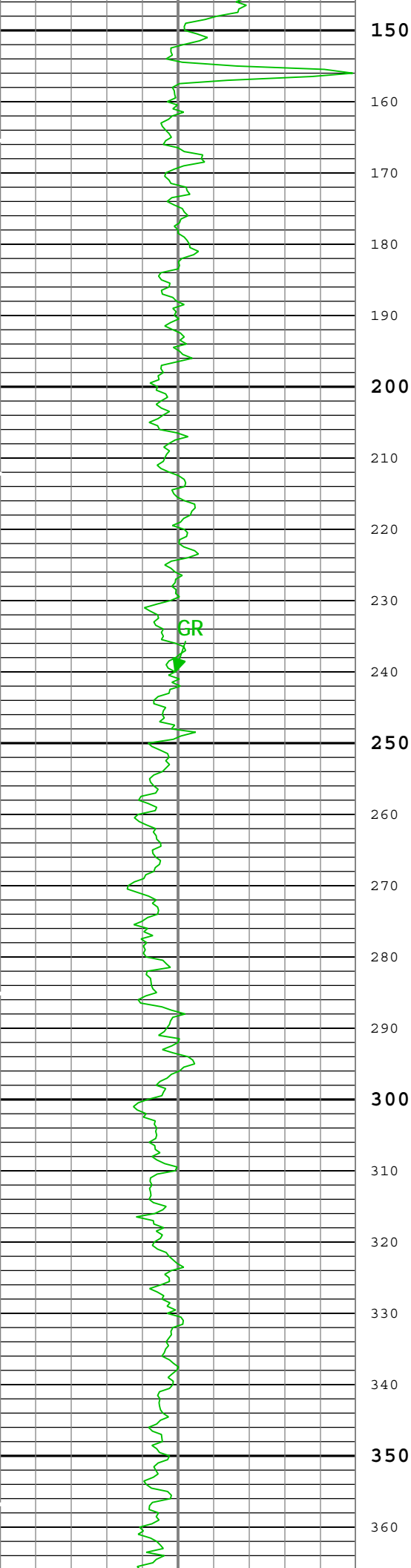
Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Main[4]:Up	Up	49.99 ft	2740.13 ft	24-Nov-2014 2:18:51 PM	24-Nov-2014 3:07:02 PM	ON	0.00 ft	Yes
All depths are referenced to toolstring zero									

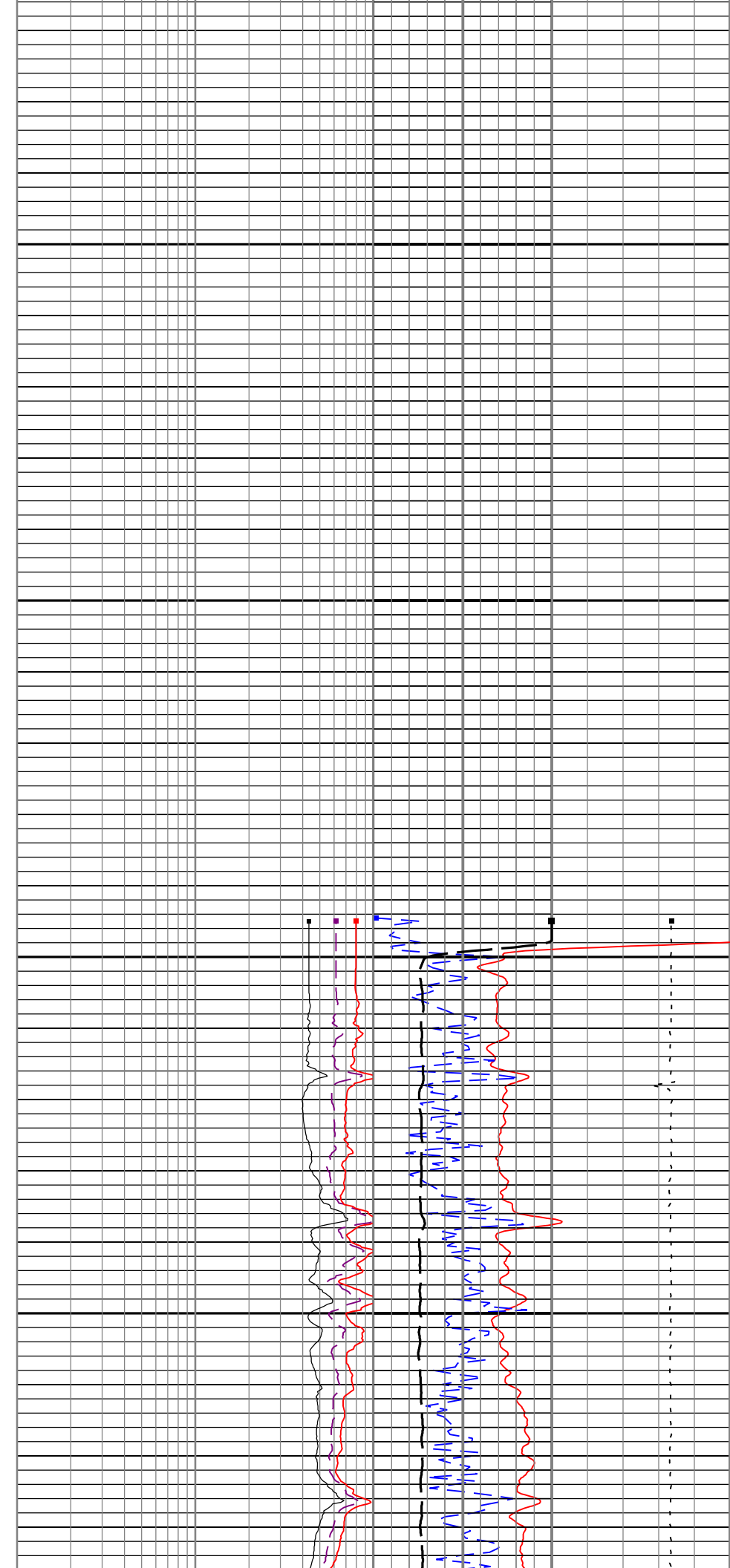
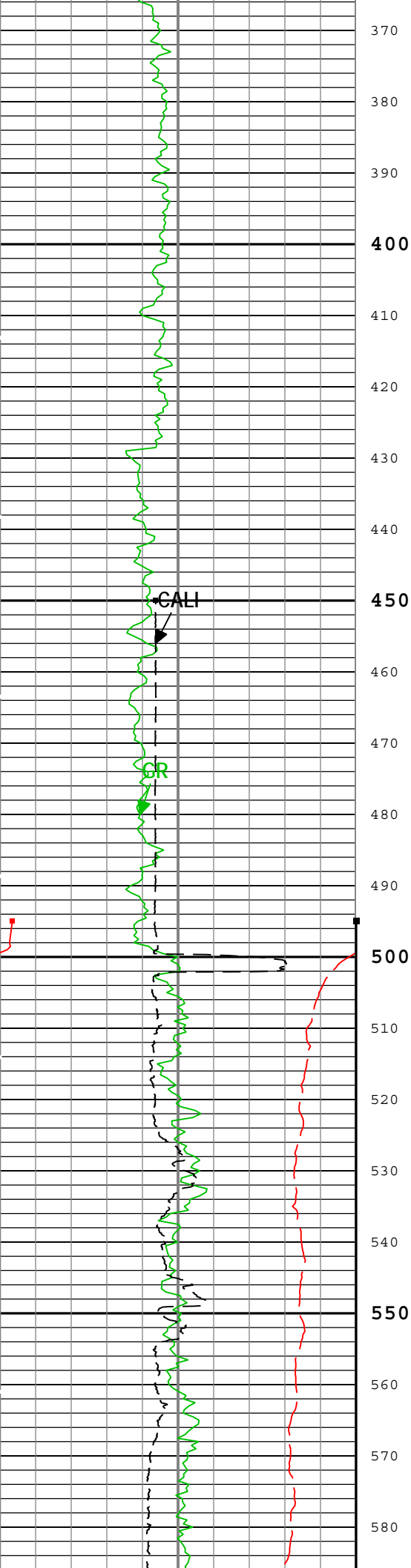
Log	Company:Omimex Petroleum Inc.      Well:Gueck 10-19-7-44 ONE: Main[4]:Up:S010
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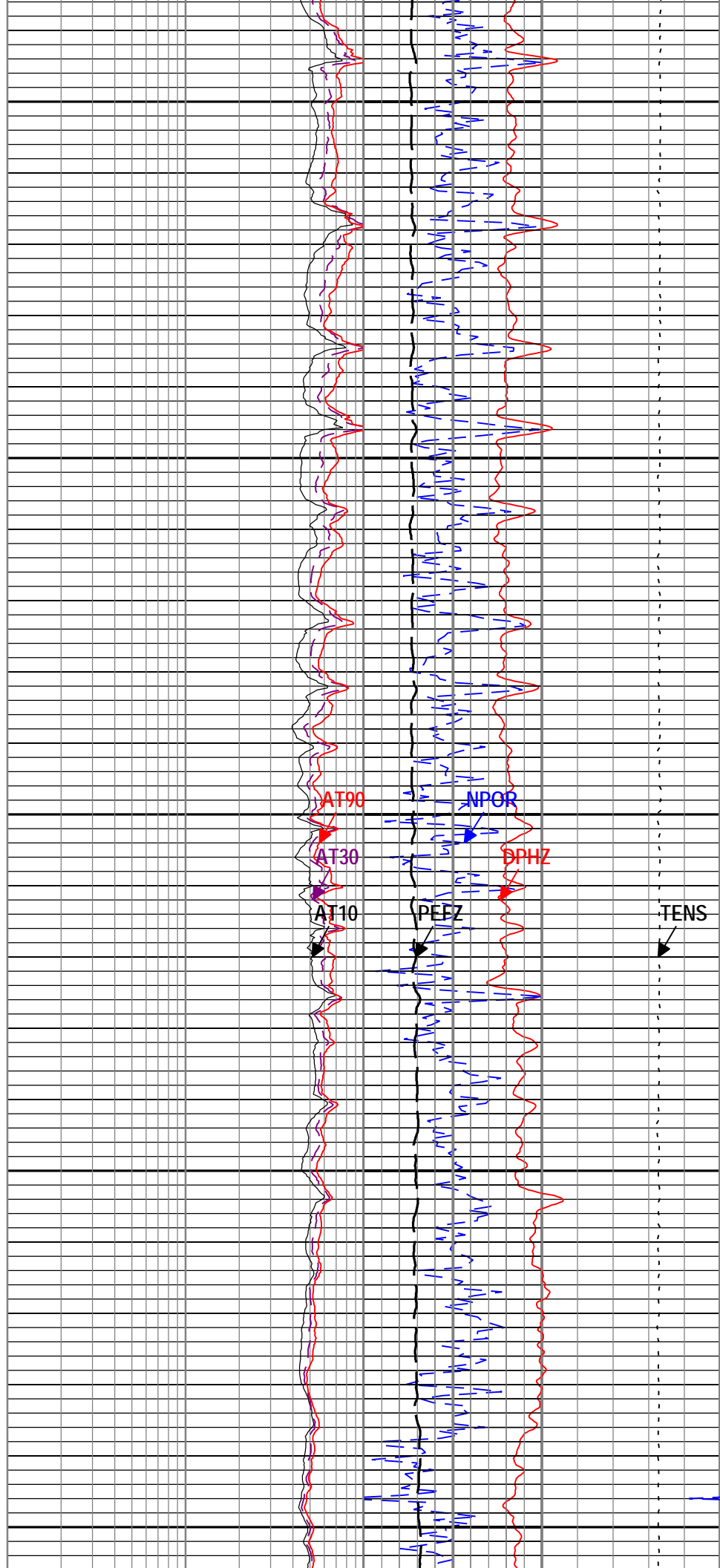
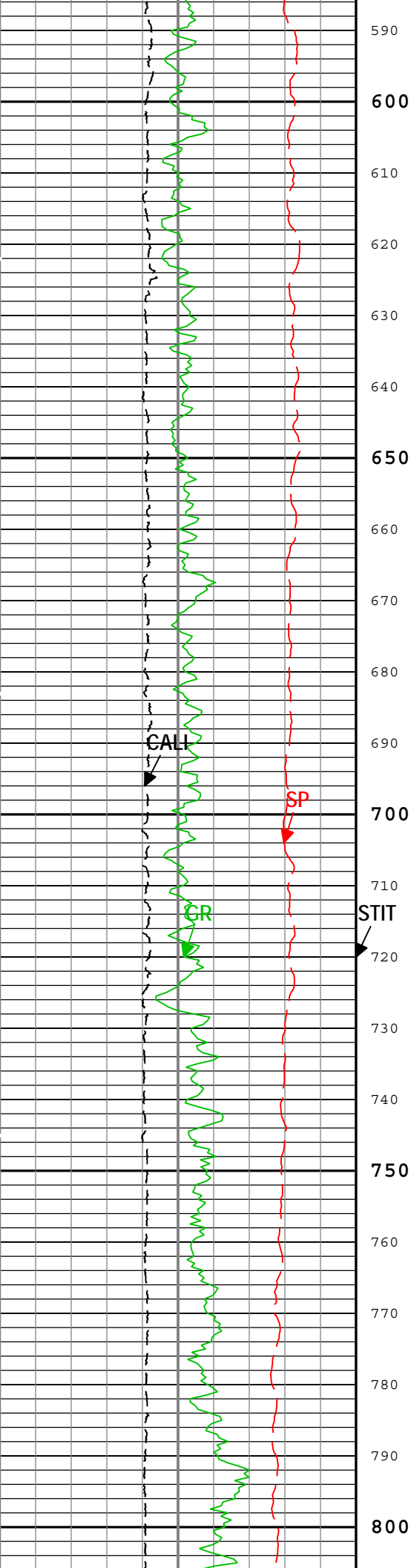
Description: HGNS standard resolution porosities for Platform Express    Format: Log ( EMD 5in Triple Combo Linear )    Index Scale: 5 in per 100 ft    Index Unit: ft    Index Type: Measured Depth    Creation Date: 24-Nov-2014 20:39:05

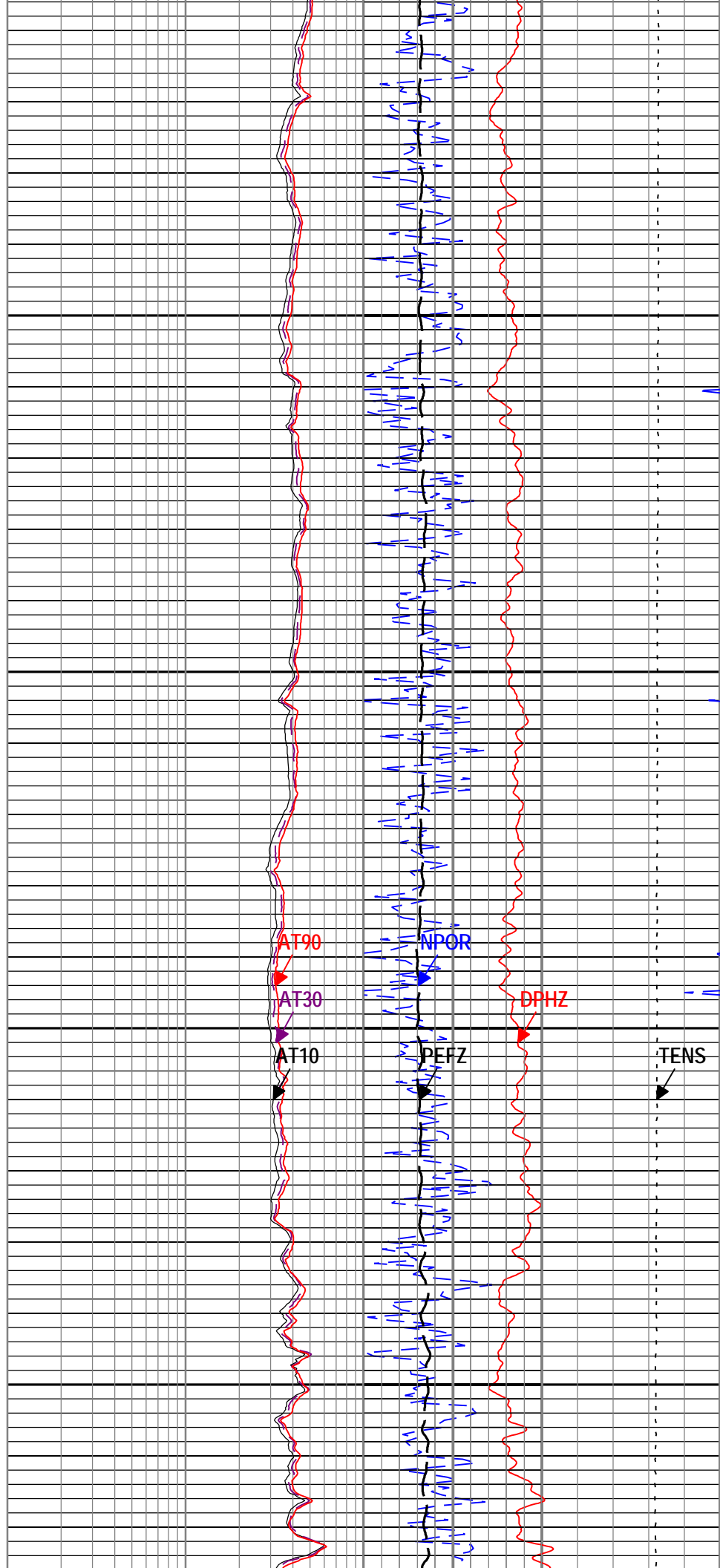
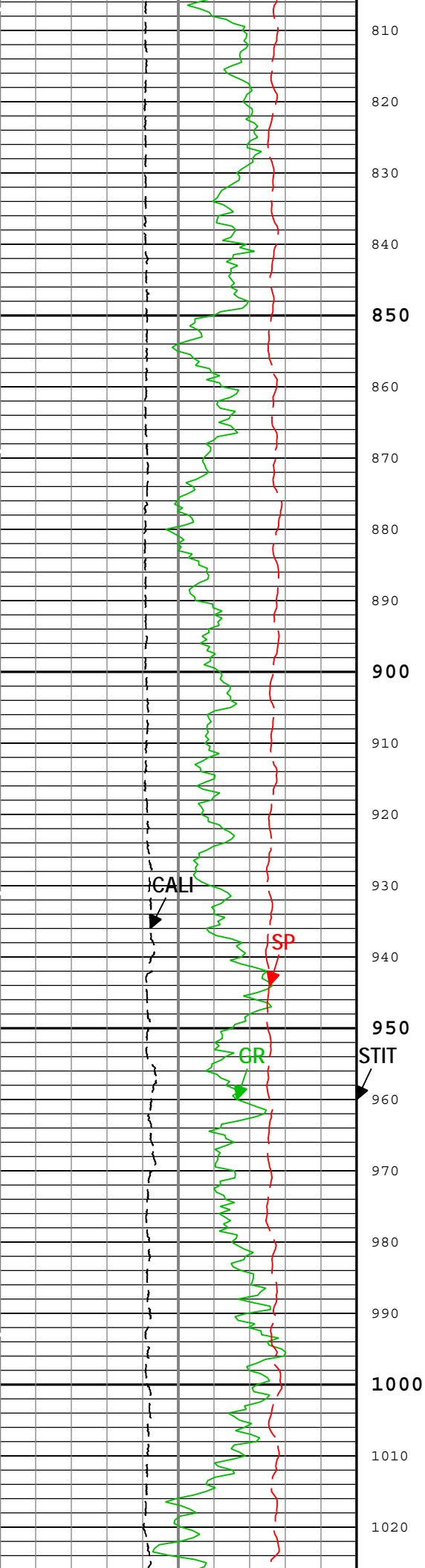
Channel	Source	Sampling
AT10	AIT-M:AMIS:AMIS	3in
AT30	AIT-M:AMIS:AMIS	3in
AT90	AIT-M:AMIS:AMIS	3in
CALI	HDRS-H:HRCC-H:HRCC-H	1in
DPHZ	HDRS-H:HRMS-H:HRGD-H	2in
GR	HGNS-H:HGNS-H:HGNS-H	6in
NPOR	HGNS-H:HGNS-H:HGNS-H	6in
PEFZ	HDRS-H:HRMS-H:HRGD-H	2in
SP	AIT-M:AMIS:AMIS	6in
STIT	DepthCorrection	6in
TEMP	TEMP[1]:5	6in

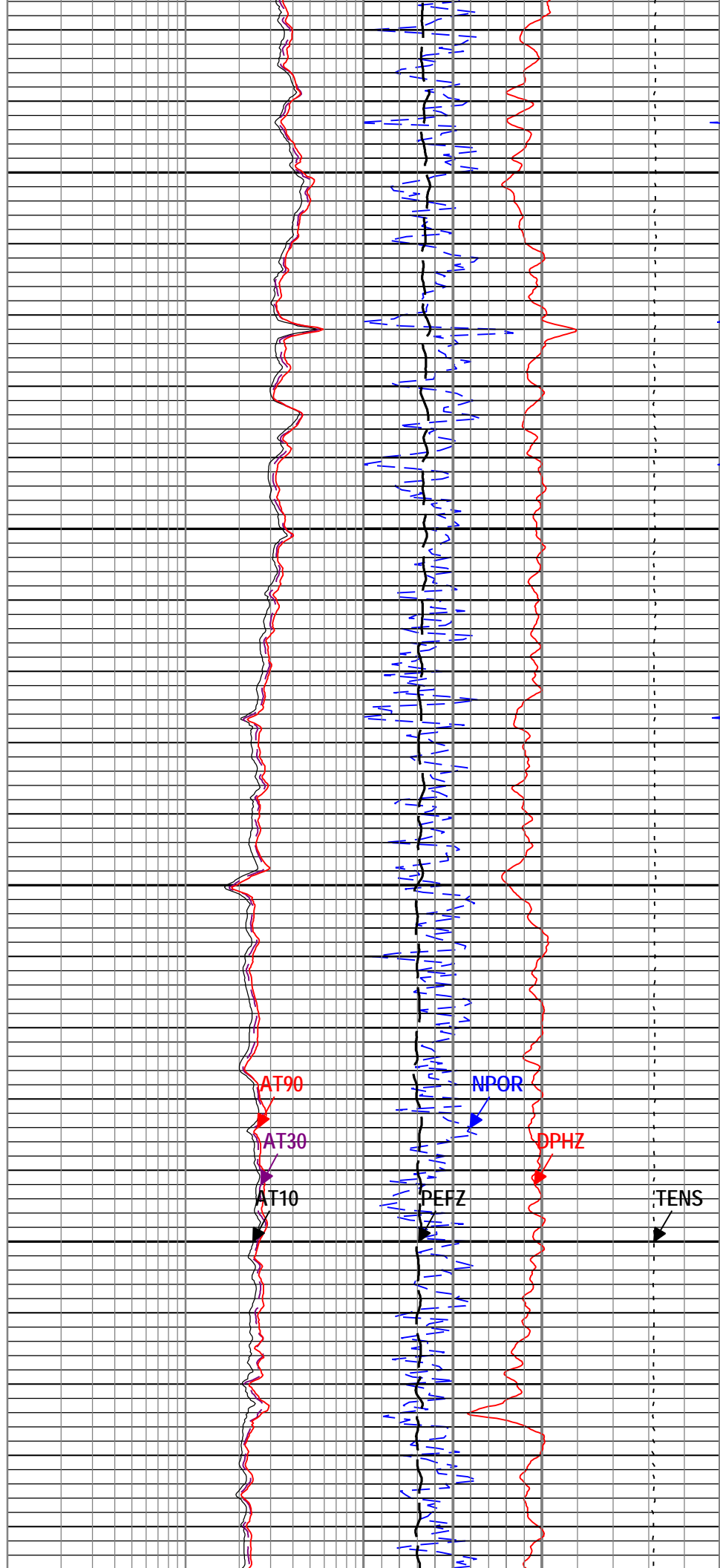
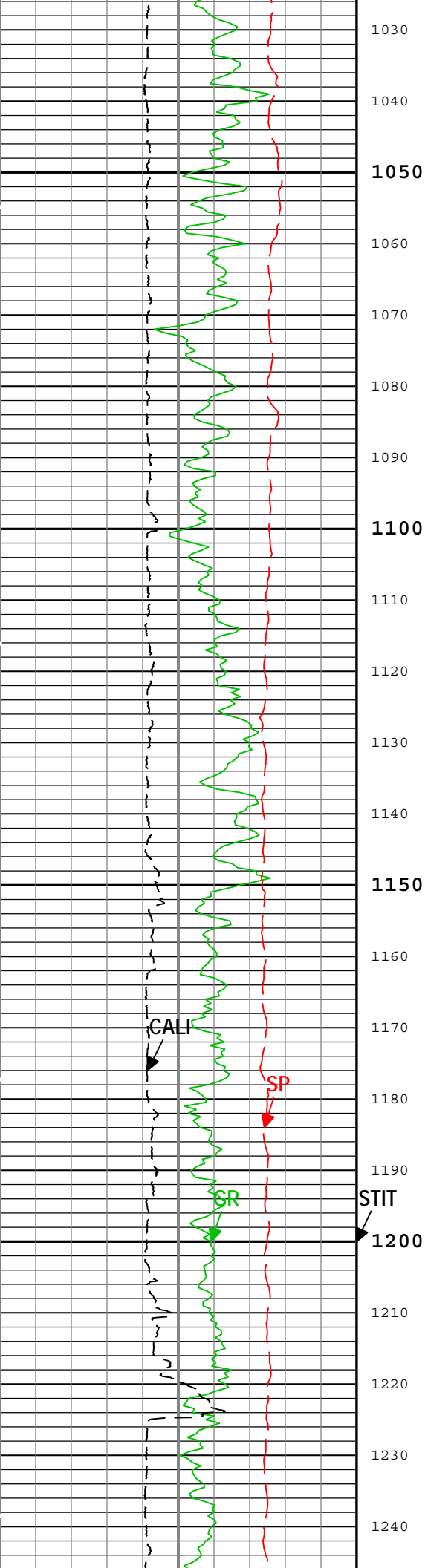




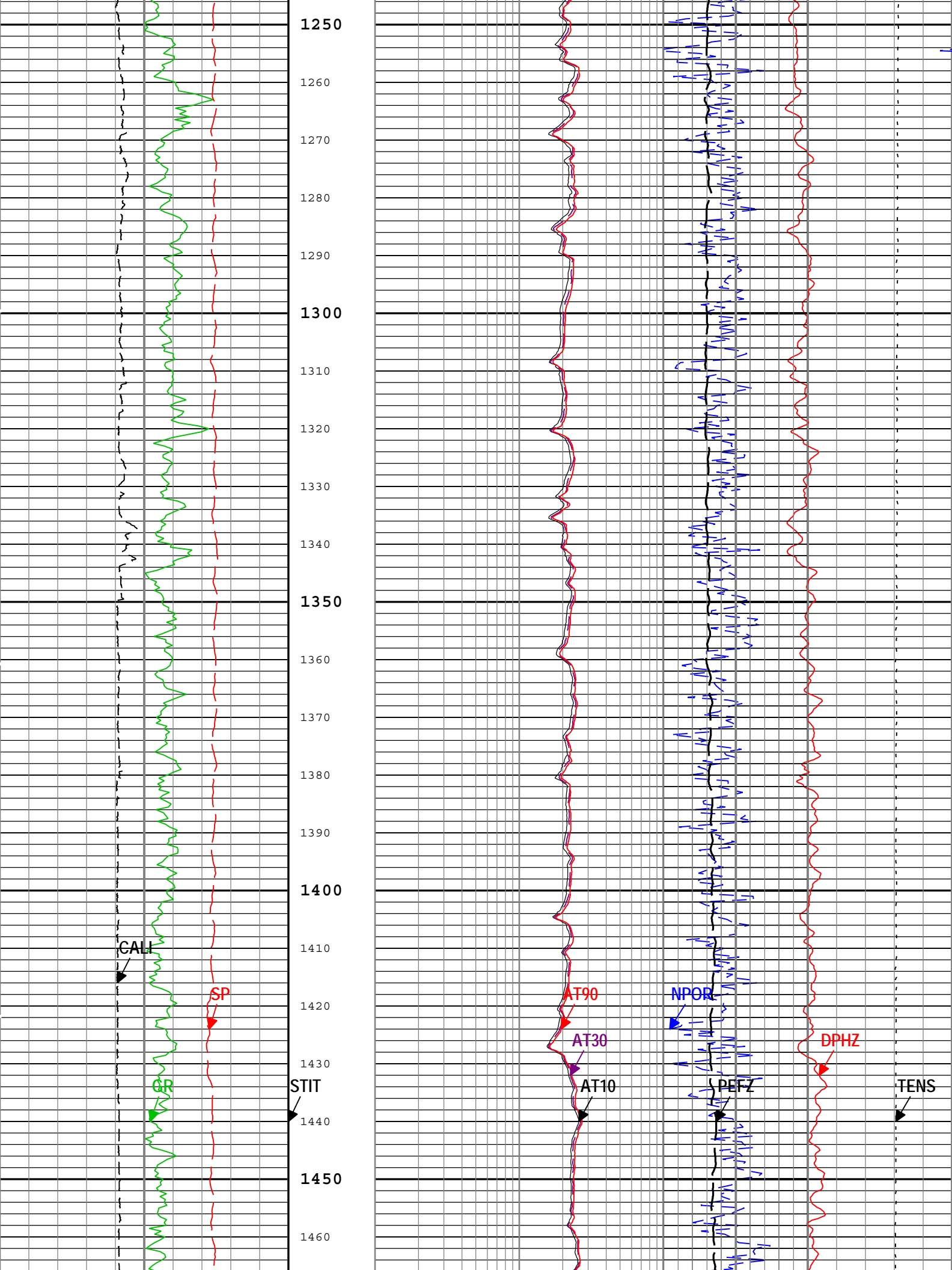


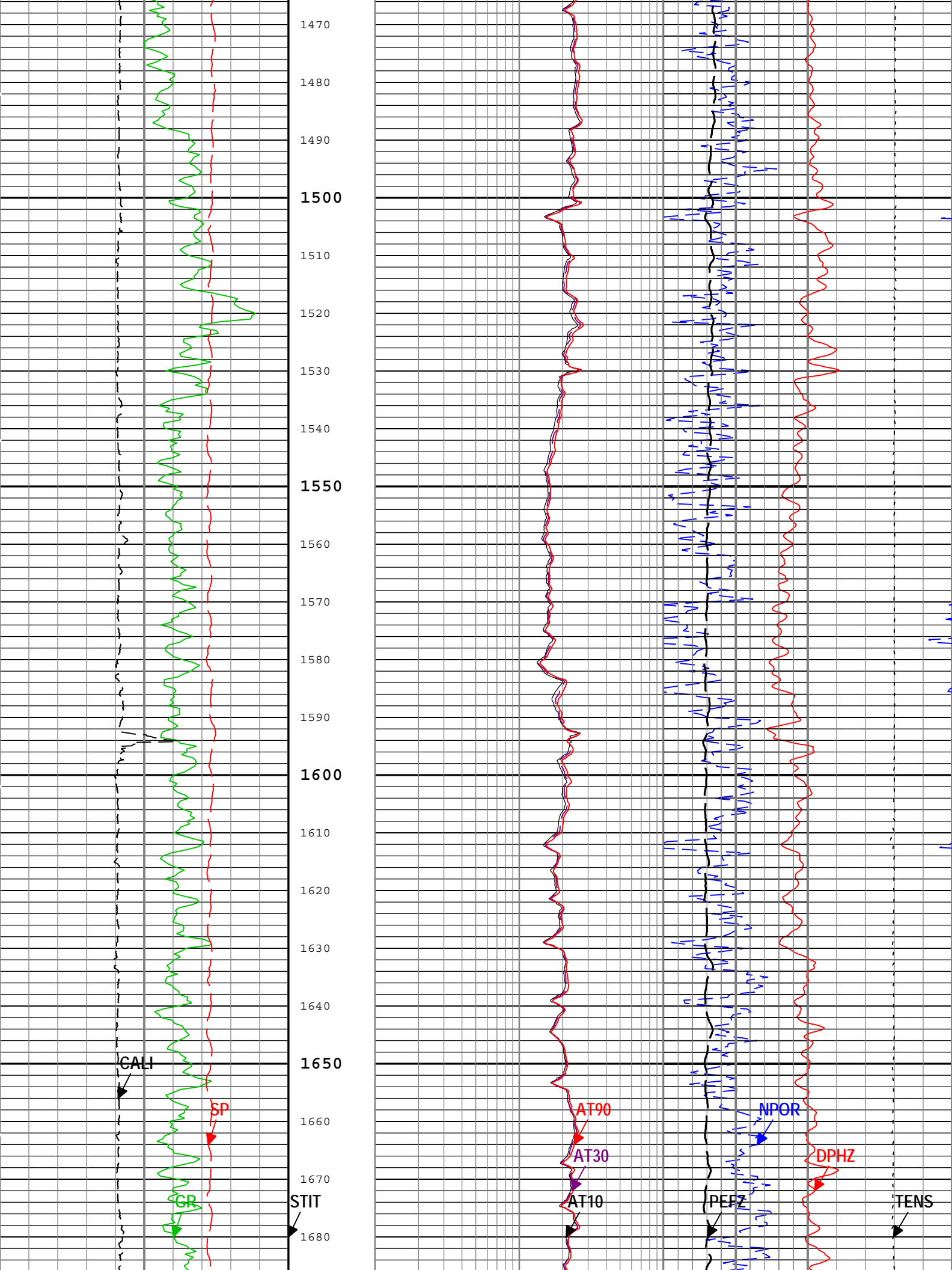


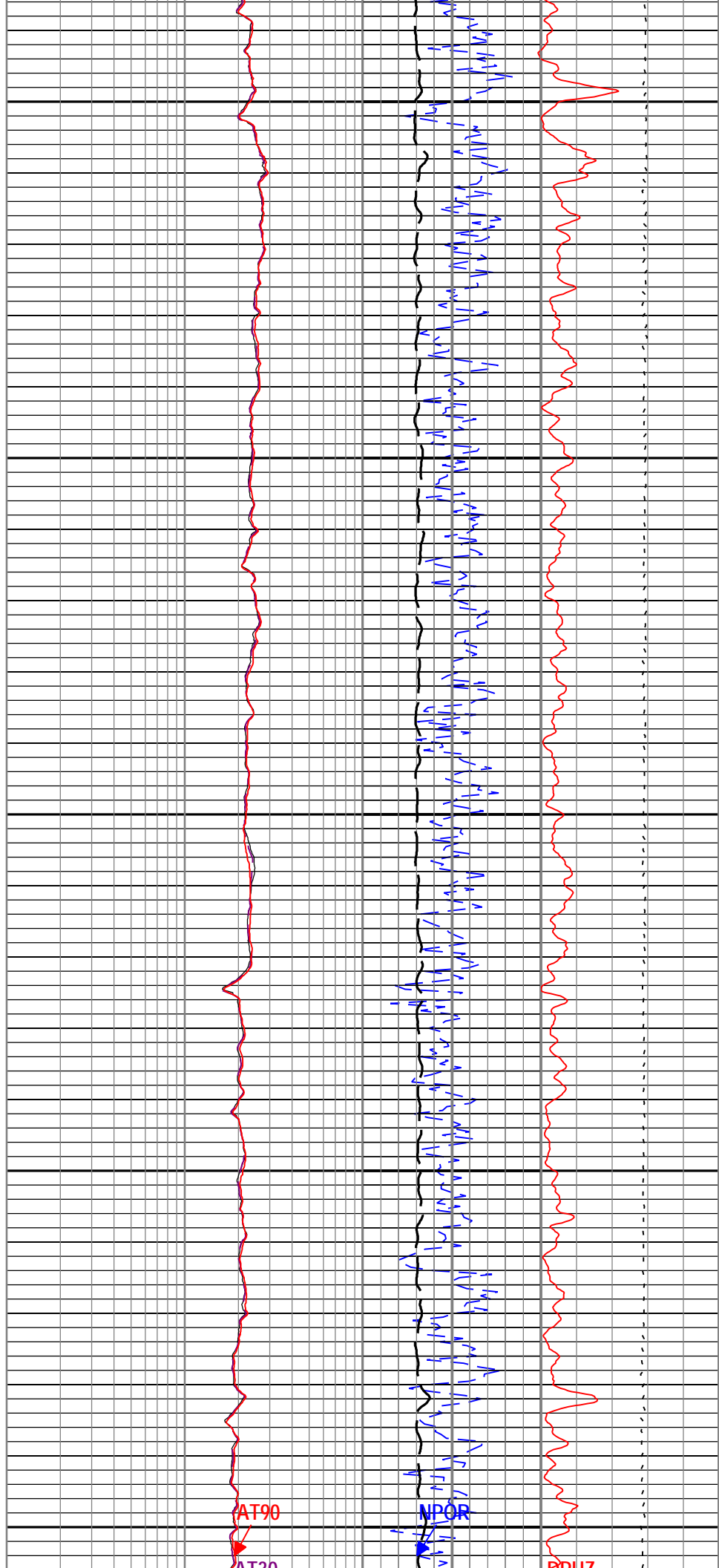
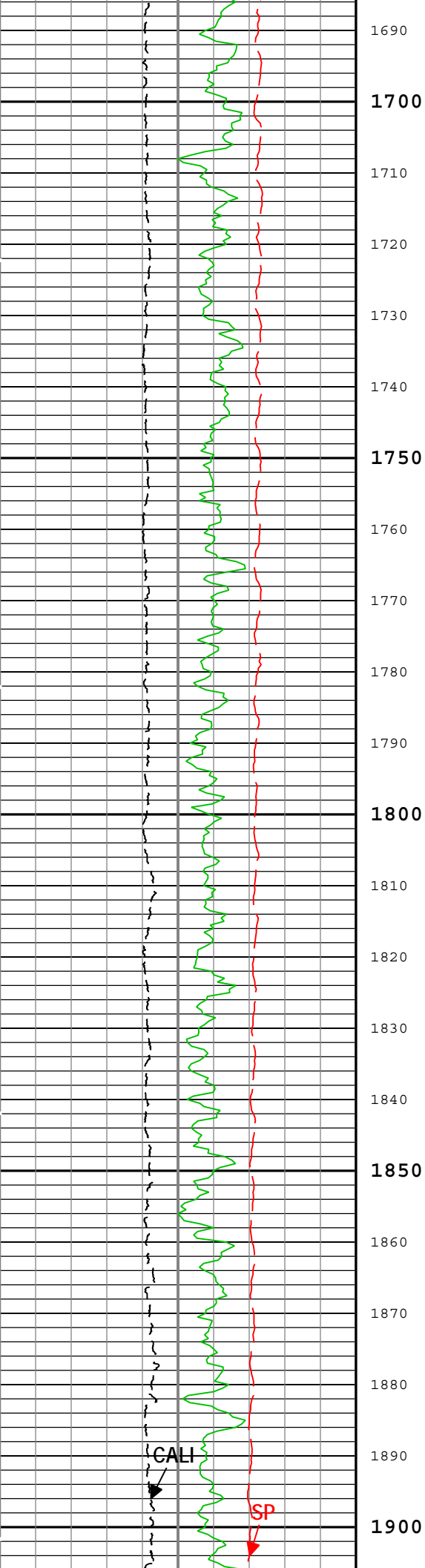


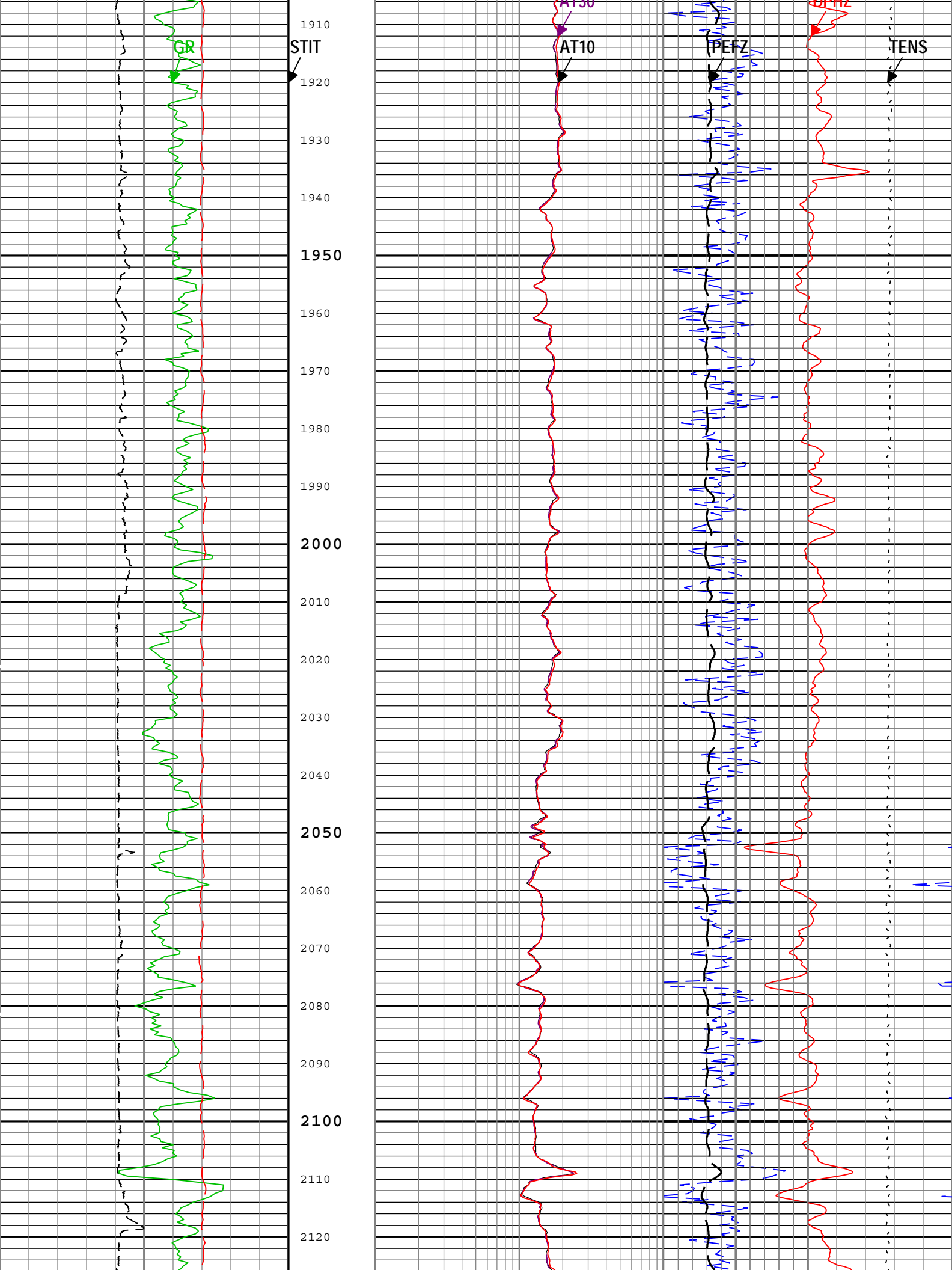


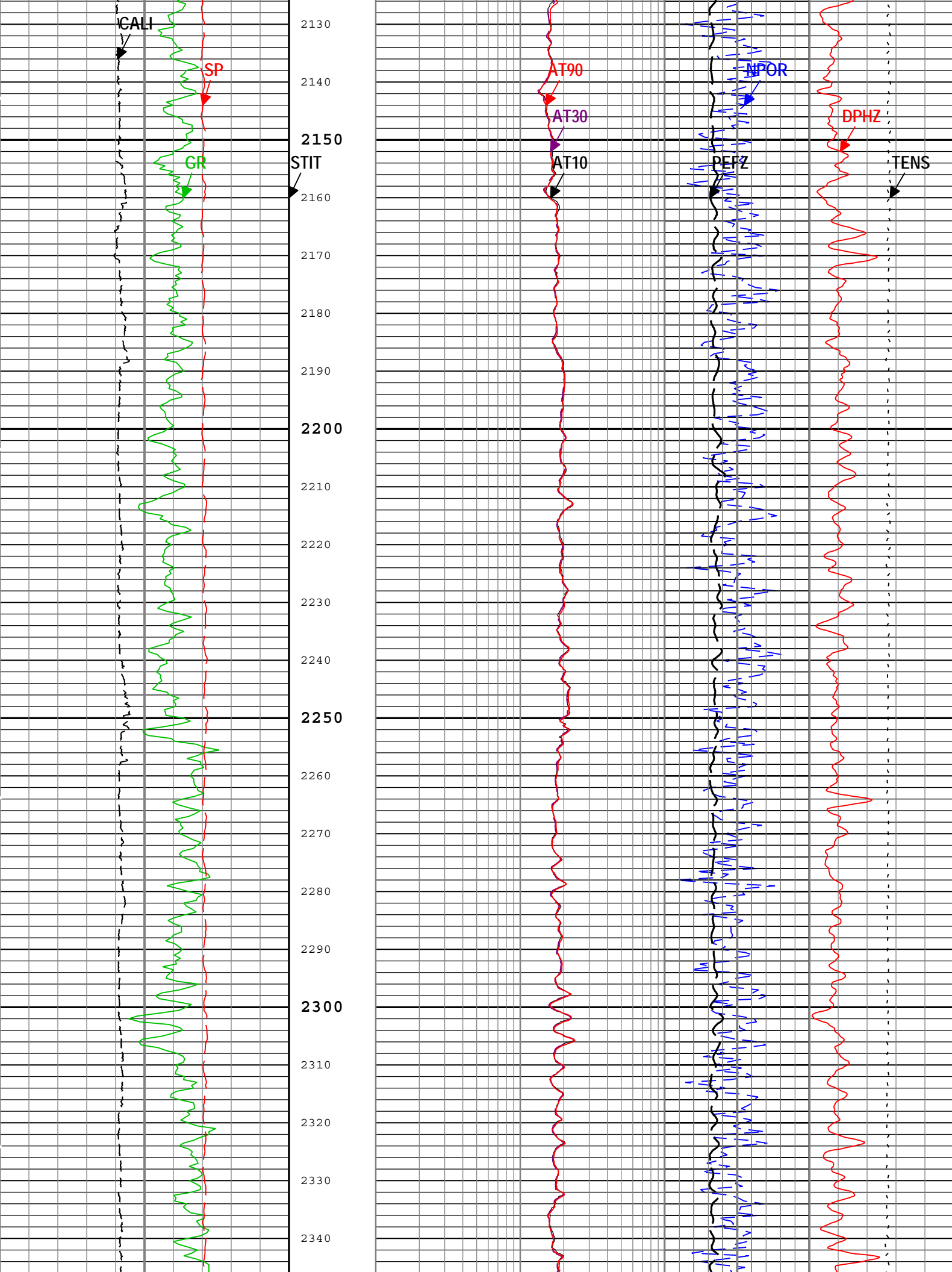


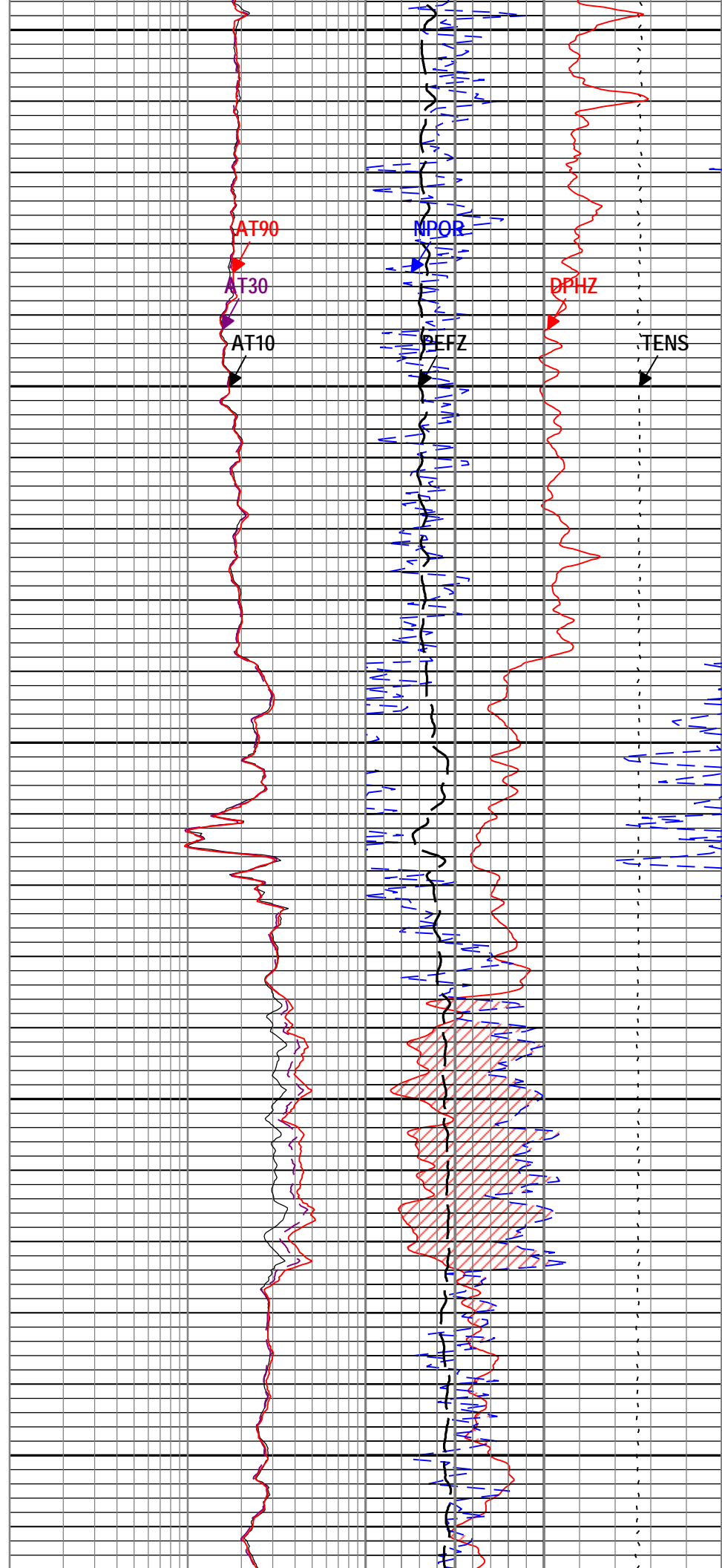
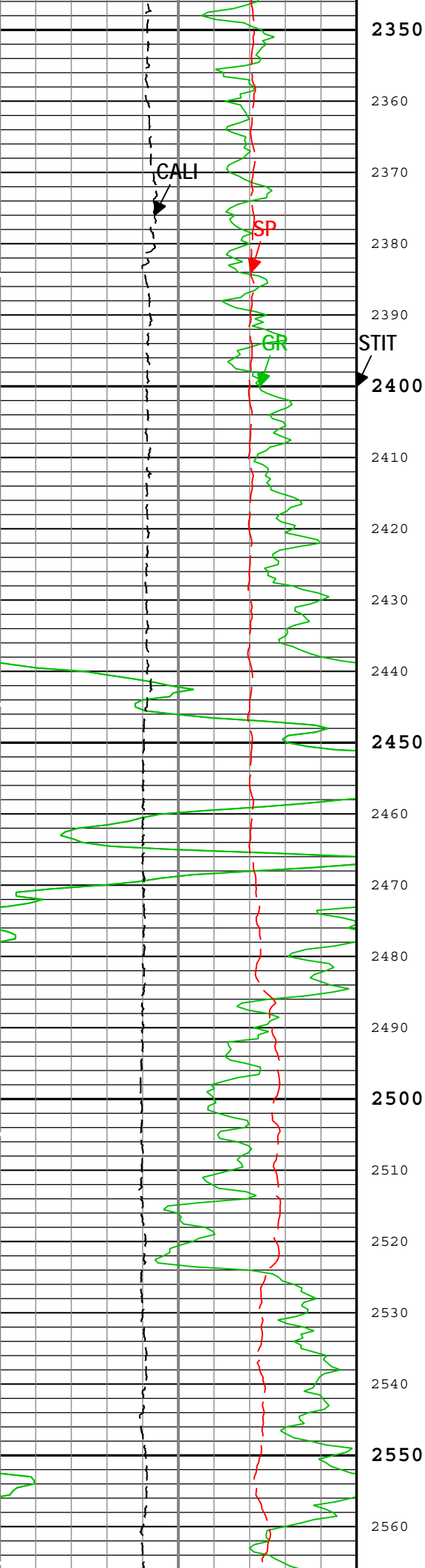


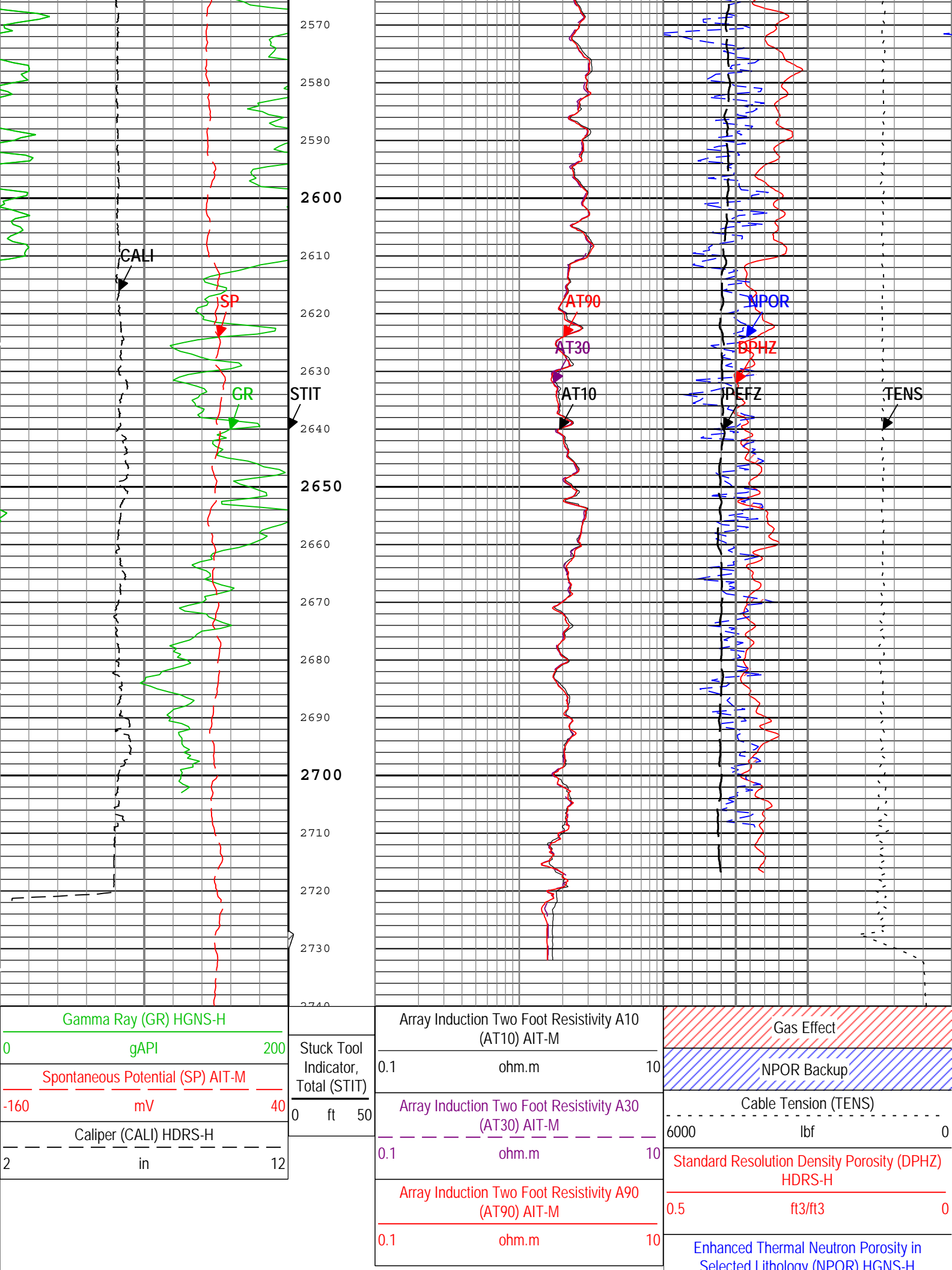








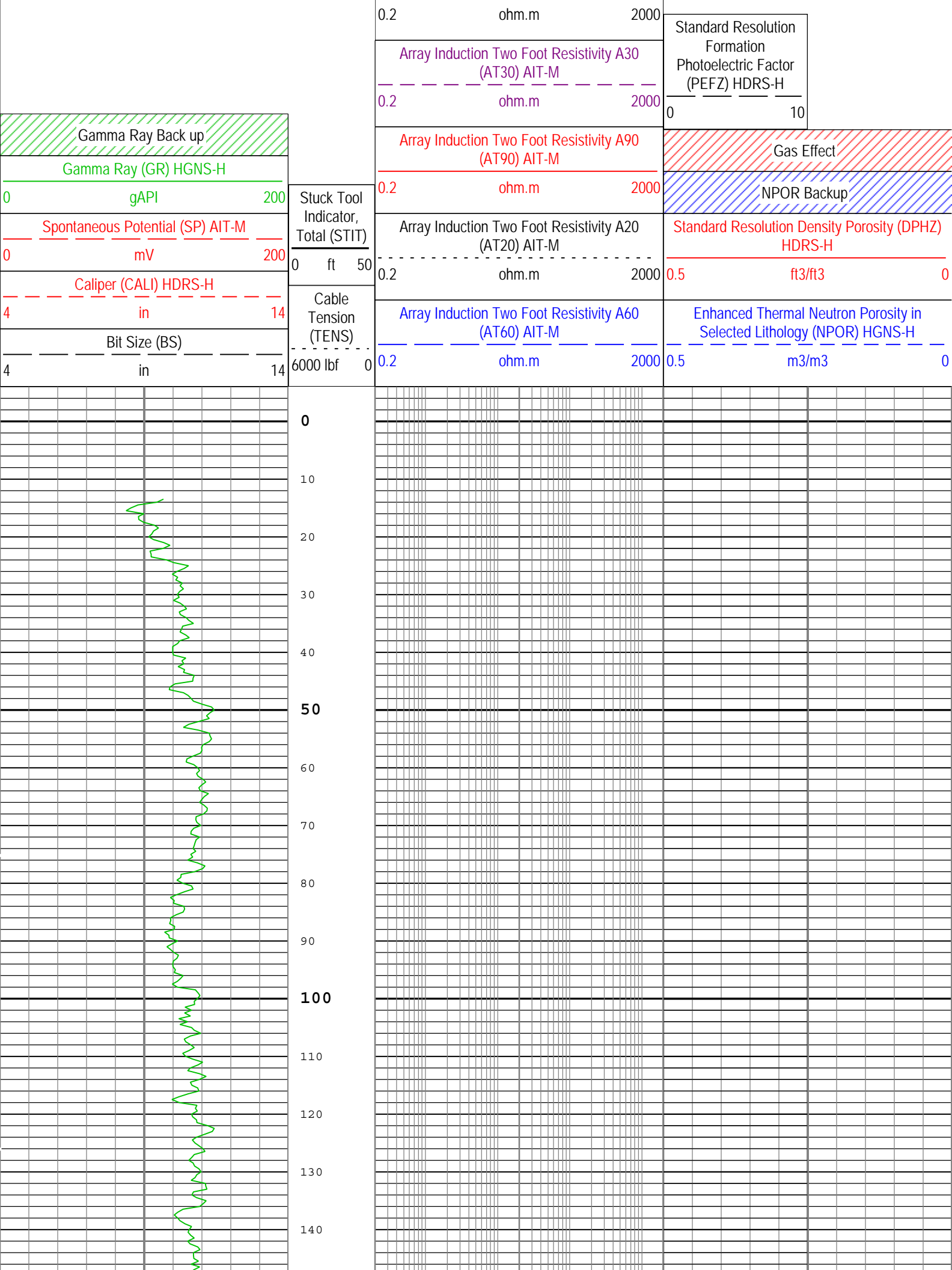


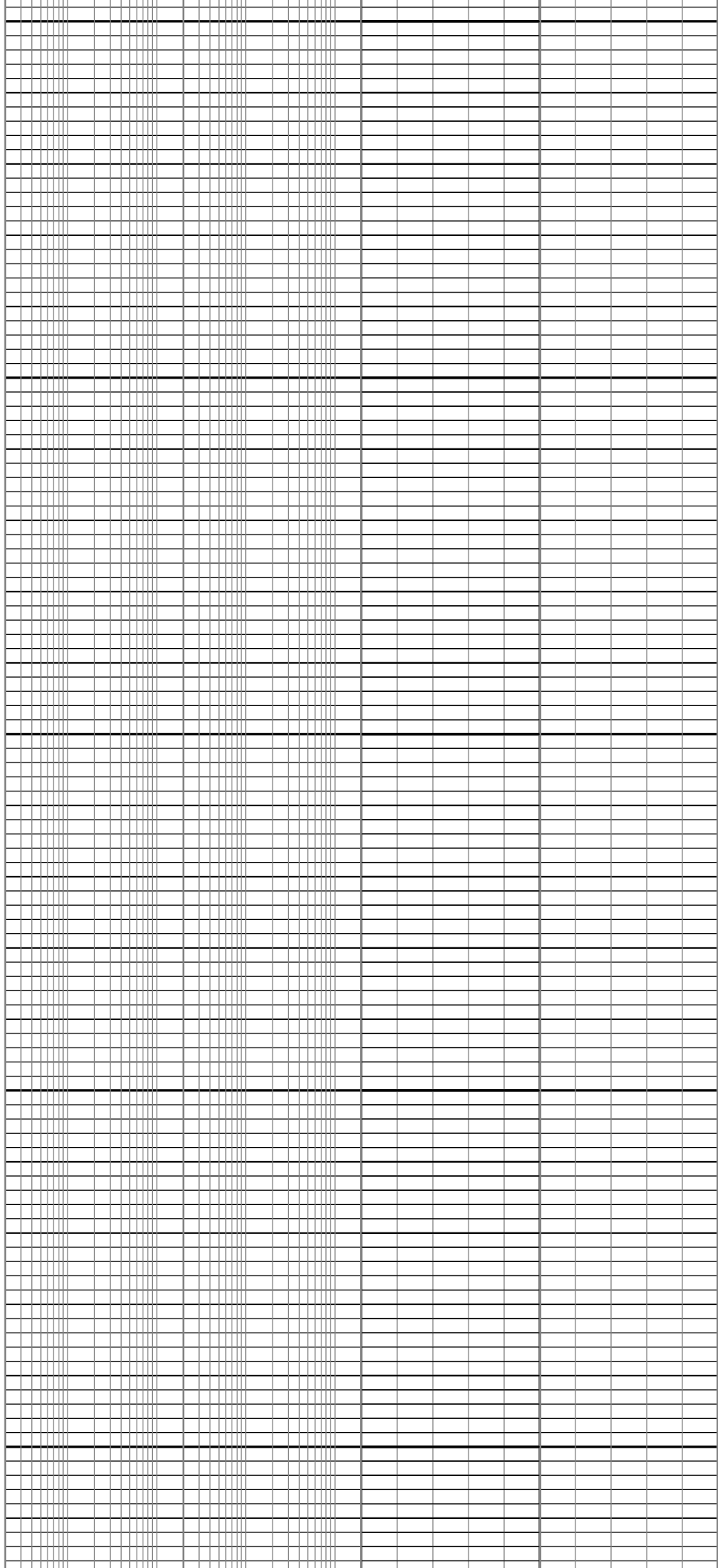
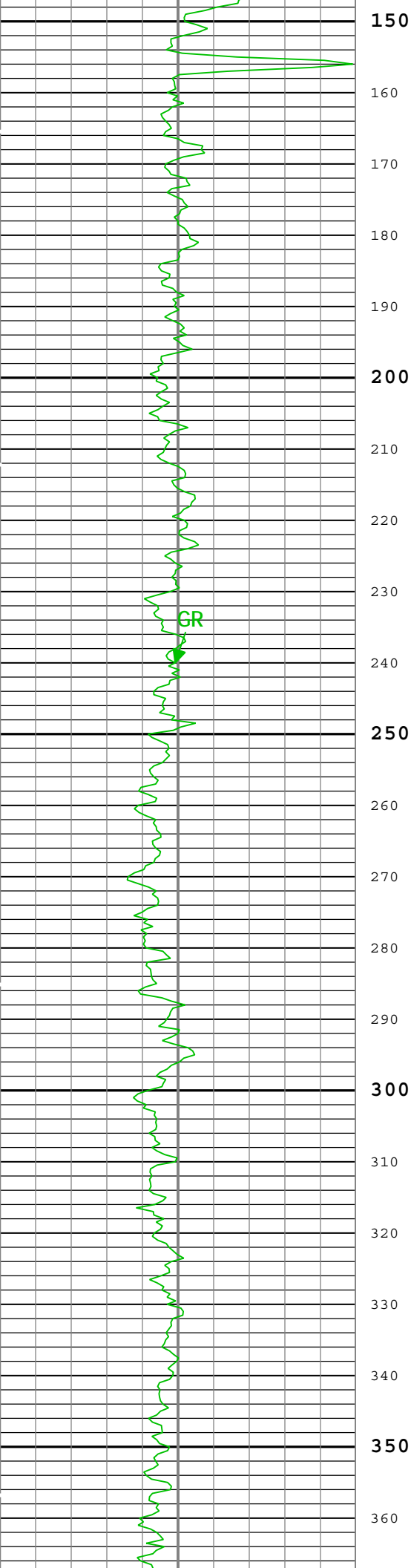


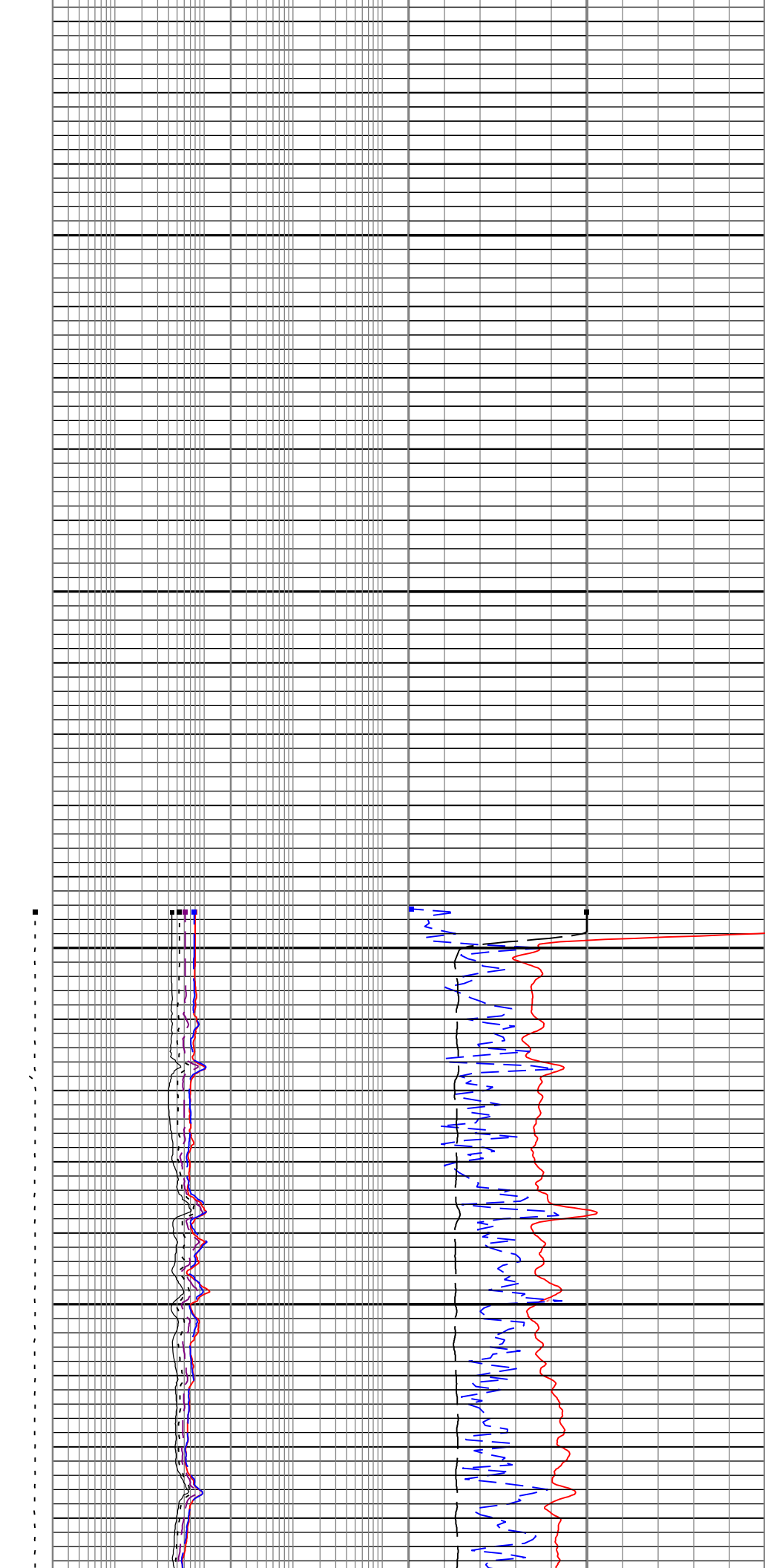
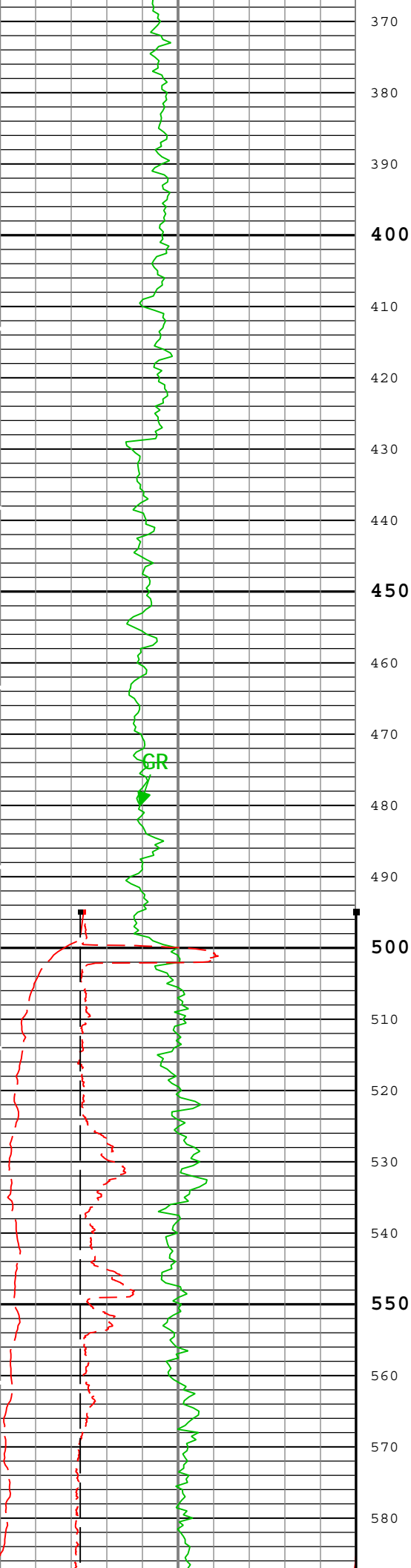


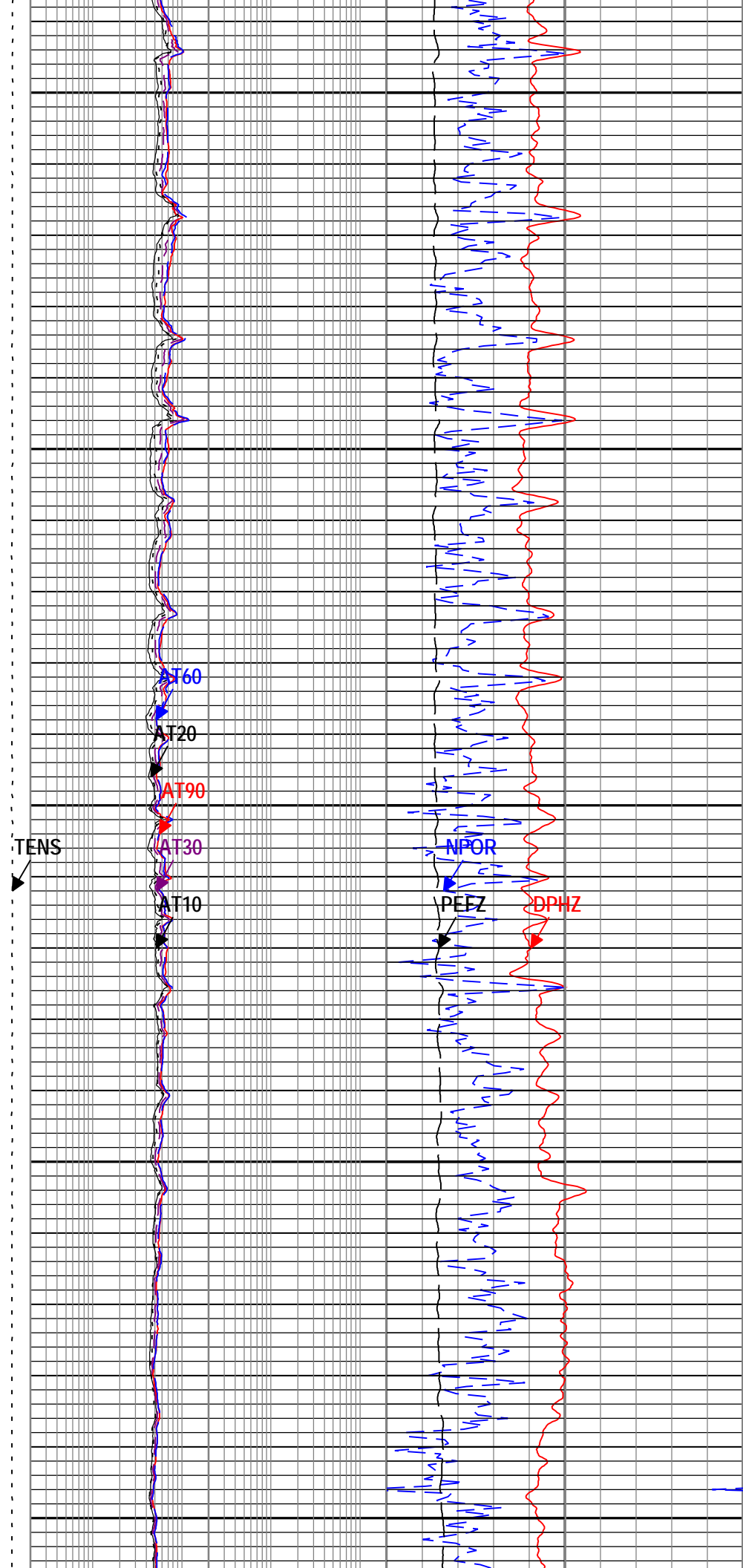
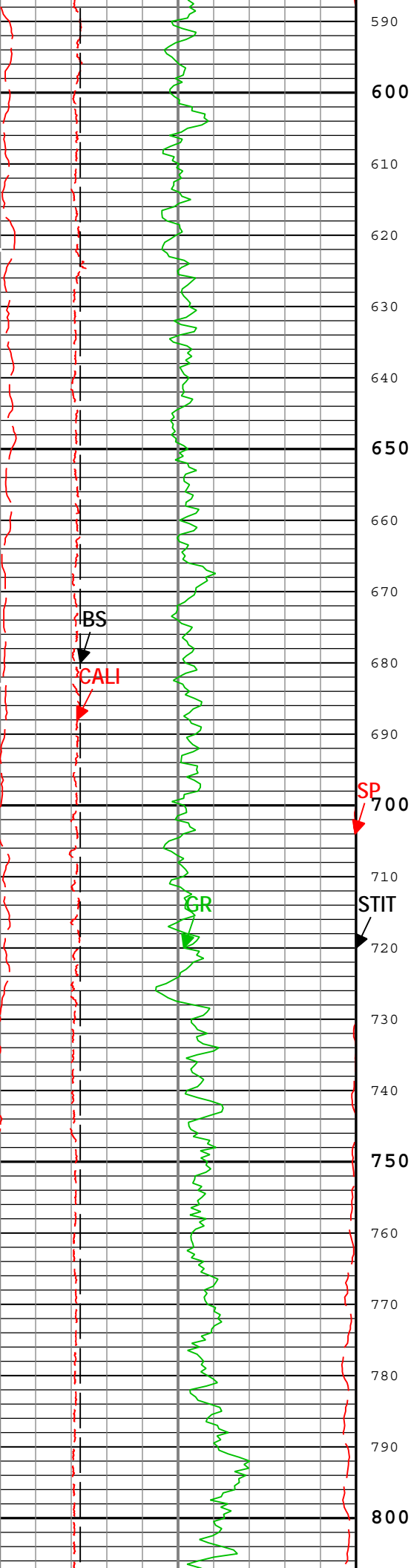


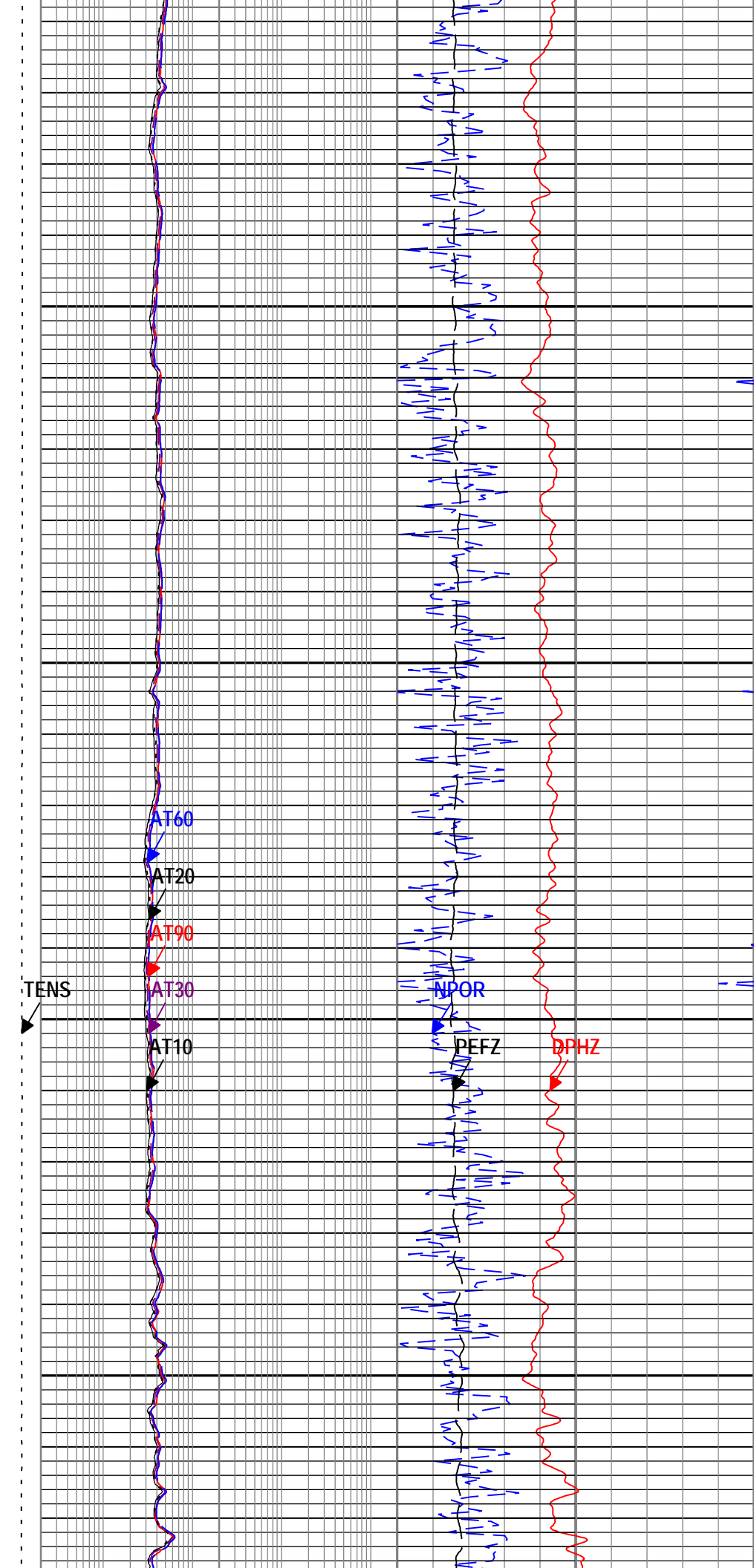
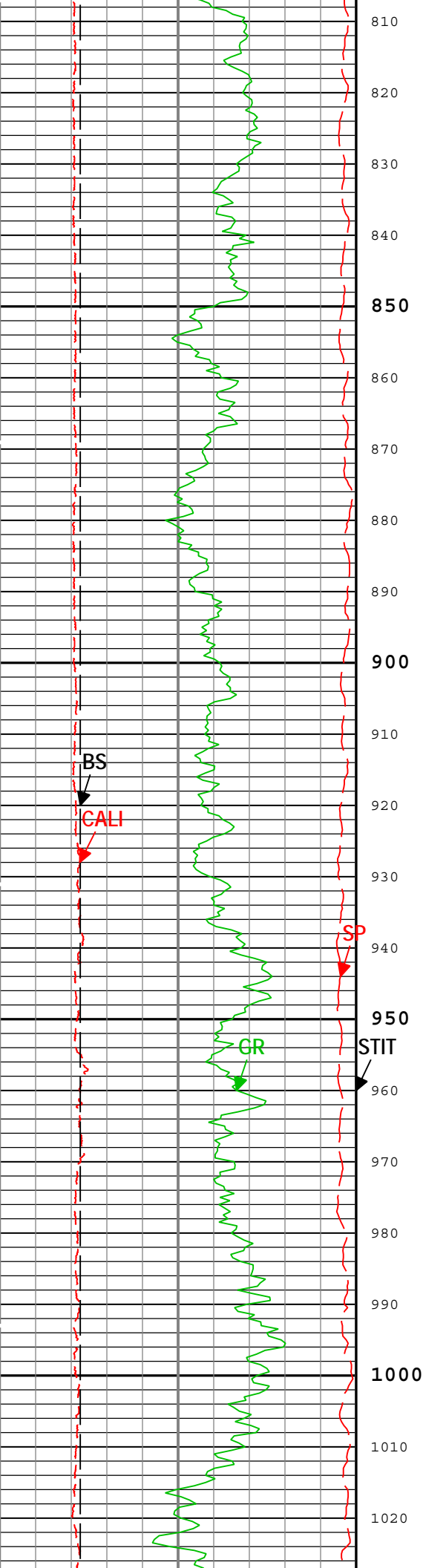
Log									
Description: HGNS standard resolution porosities for Platform Express    Format: Log ( EMD 5in Triple Combo Linear RA )    Index Scale: 5 in per 100 ft    Index Unit: ft    Index Type: Measured Depth    Creation Date: 24-Nov-2014 20:39:06									
Description: HGNS standard resolution porosities for Platform Express    Format: Log ( EMD 5in Triple Combo Linear RA )    Index Scale: 5 in per 100 ft    Index Unit: ft    Index Type: Measured Depth    Creation Date: 24-Nov-2014 20:39:06									
ONE									
5" Triple Combo									
Software Version									
Acquisition System						Version			
MaxWell						4.0.9163.3000			
Application Patch						Patch-SP-10767_26570-4.0.9163.3001			
Computation		Description					Version		
Borehole		Borehole Ensemble provides common Borehole Parameters and Channels					4.0.9469.3000		
HENVIR		Computation Ensemble for the HGNS Neutron environmental corrections					4.0.9469.3000		
DepthCorrection		DepthCorrection					4.0.9469.3000		
Tool Elements		Description			Software Version			Firmware Version	
HRCC-H		HILT High-Resolution Control Cartridge, 150 degC			4.0.9575.3000			2.0	
HGNS-H		HILT Gamma-Ray and Neutron Sonde, 150 degC			4.0.9575.3000			2.0	
HRGD-H		HILT Resistivity Gamma-Ray Density Device, 150 degC			4.0.9575.3000			3.0	
AMIS		Array Induction Sonde - M			4.0.9535.3000			1	
Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Main[4]:Up	Up	49.99 ft	2740.13 ft	24-Nov-2014 2:18:51 PM	24-Nov-2014 3:07:02 PM	ON	0.00 ft	Yes
All depths are referenced to toolstring zero									
Log		Company:Omimex Petroleum Inc.				Well:Gueck 10-19-7-44			
						ONE: Main[4]:Up:S010			
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: 24-Nov-2014 20:39:07									
Channel	Source	Sampling							
AT10	AIT-M:AMIS:AMIS	3in							
AT20	AIT-M:AMIS:AMIS	3in							
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							
PEFZ	HDRS-H:HRMS-H:HRGD-H	2in							
SP	AIT-M:AMIS:AMIS	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 A10 (AT10) AIT-M									

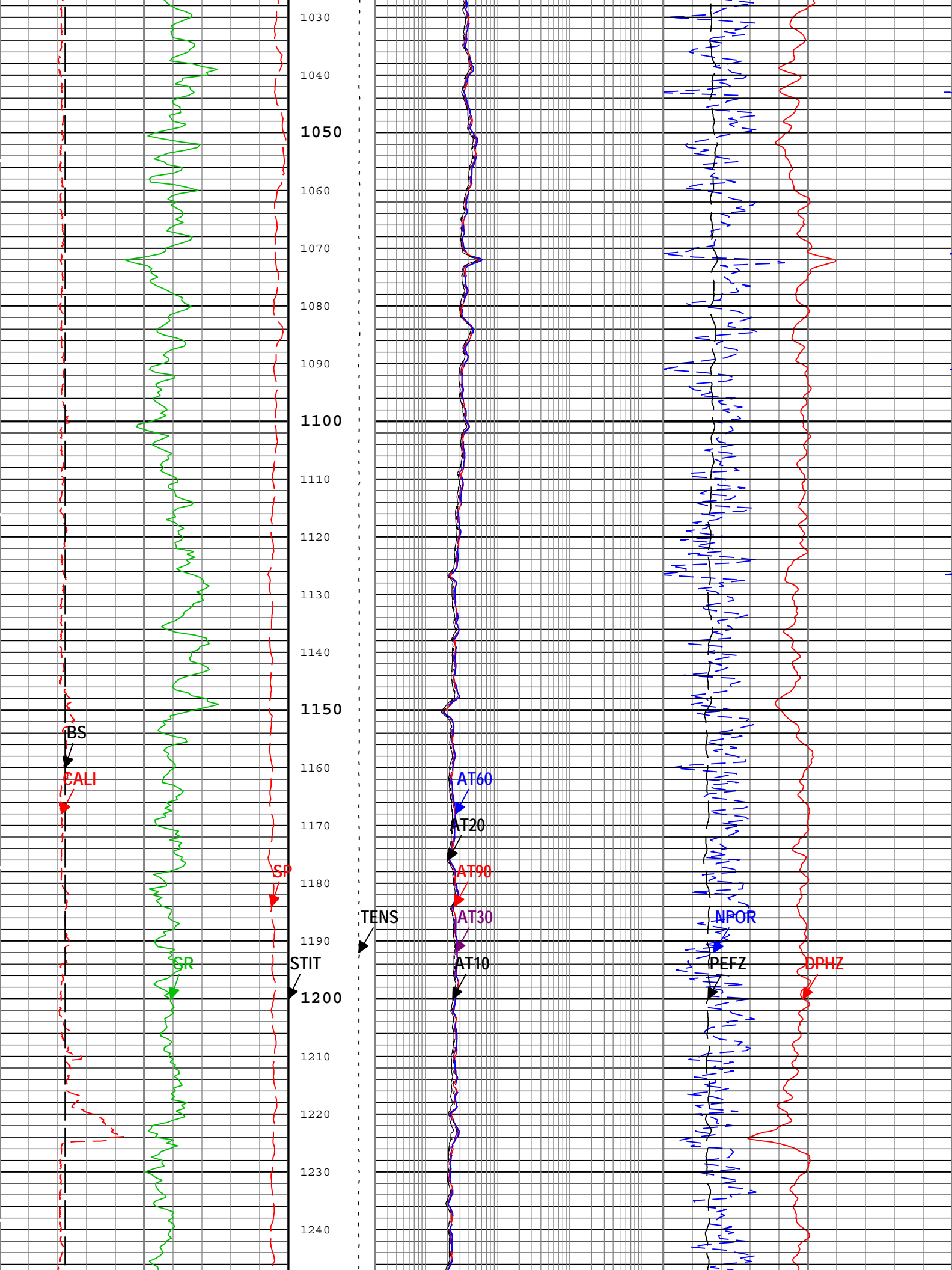


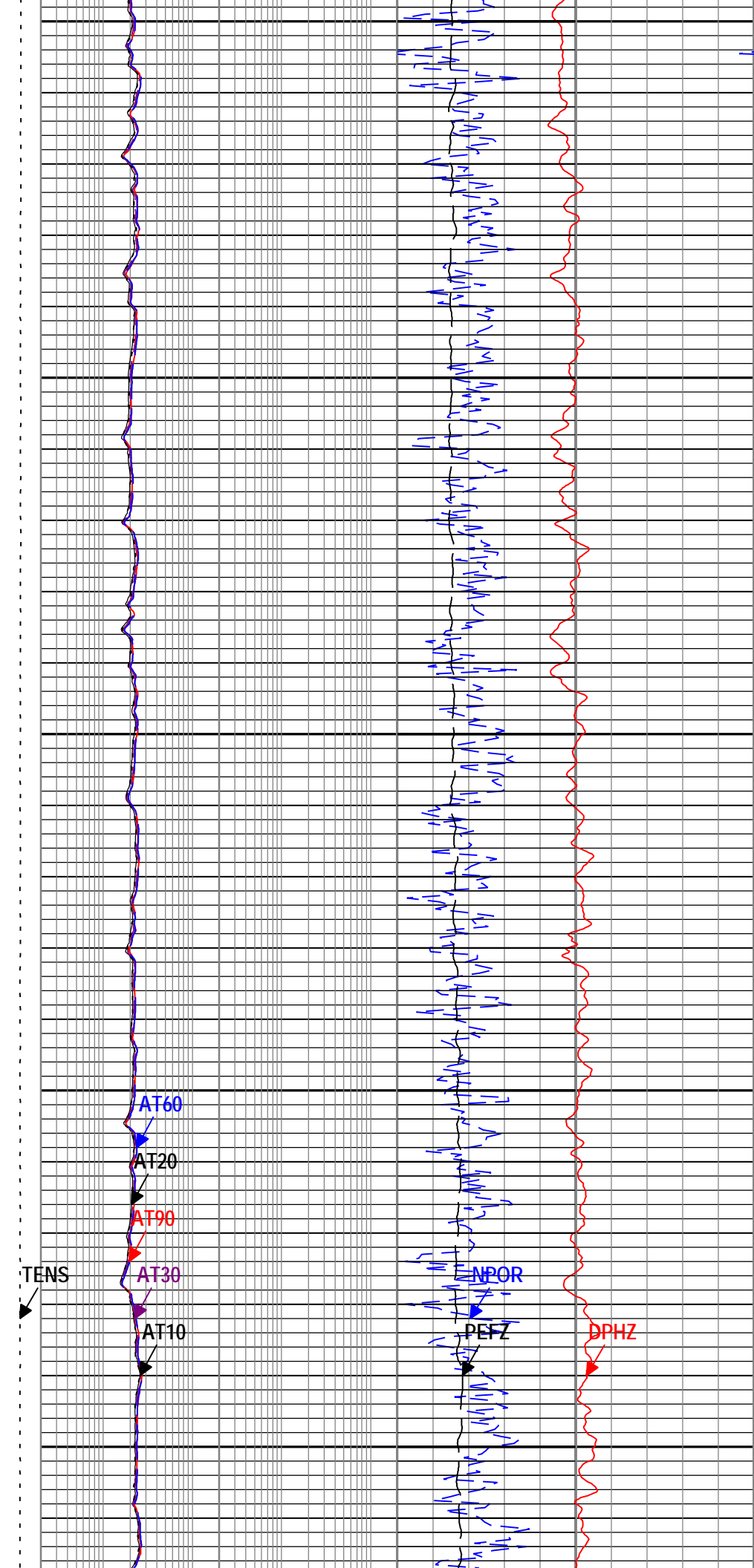
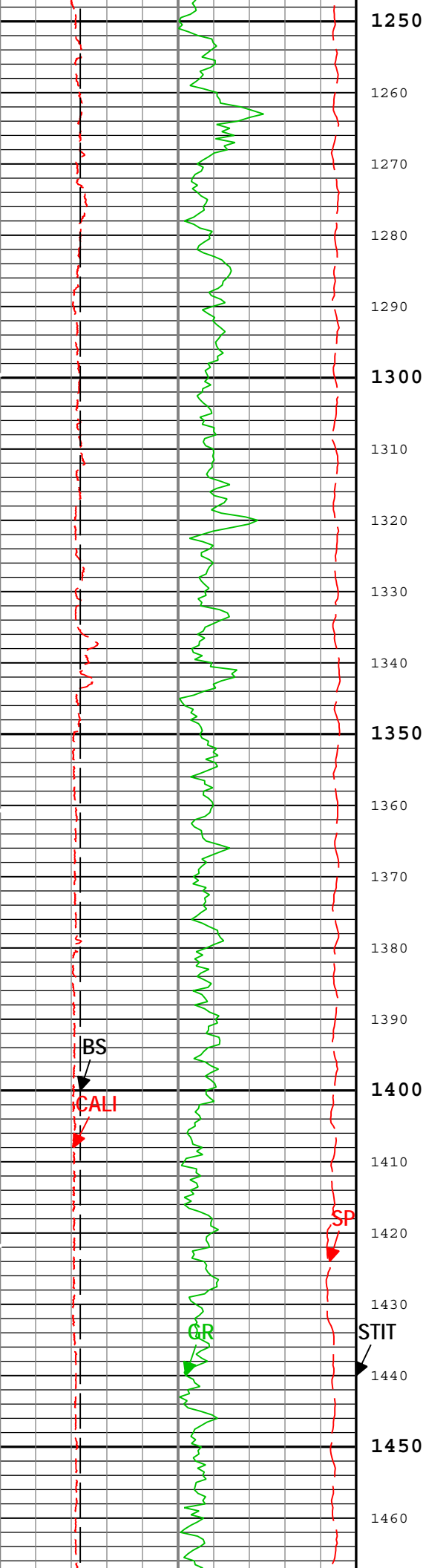




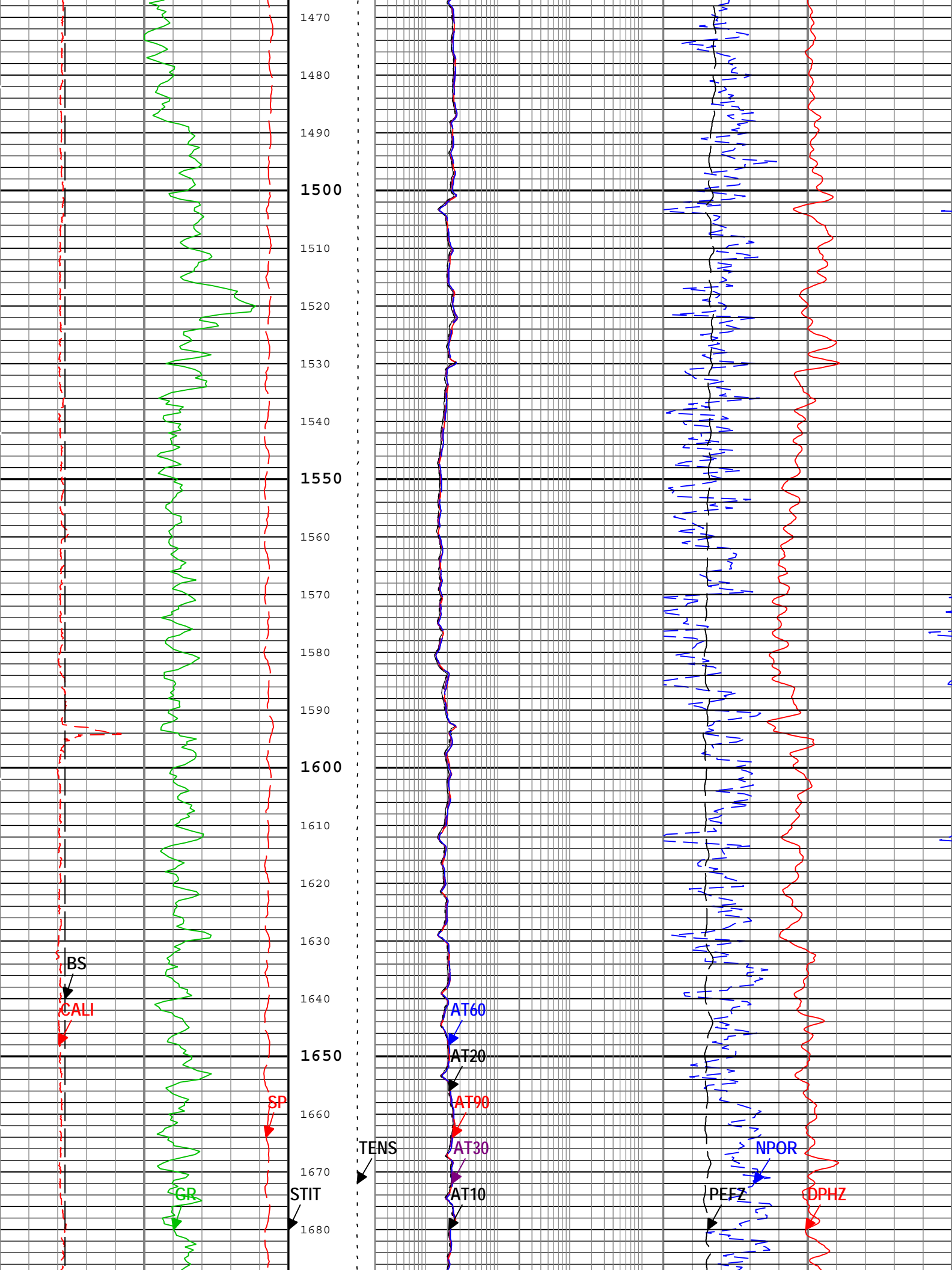


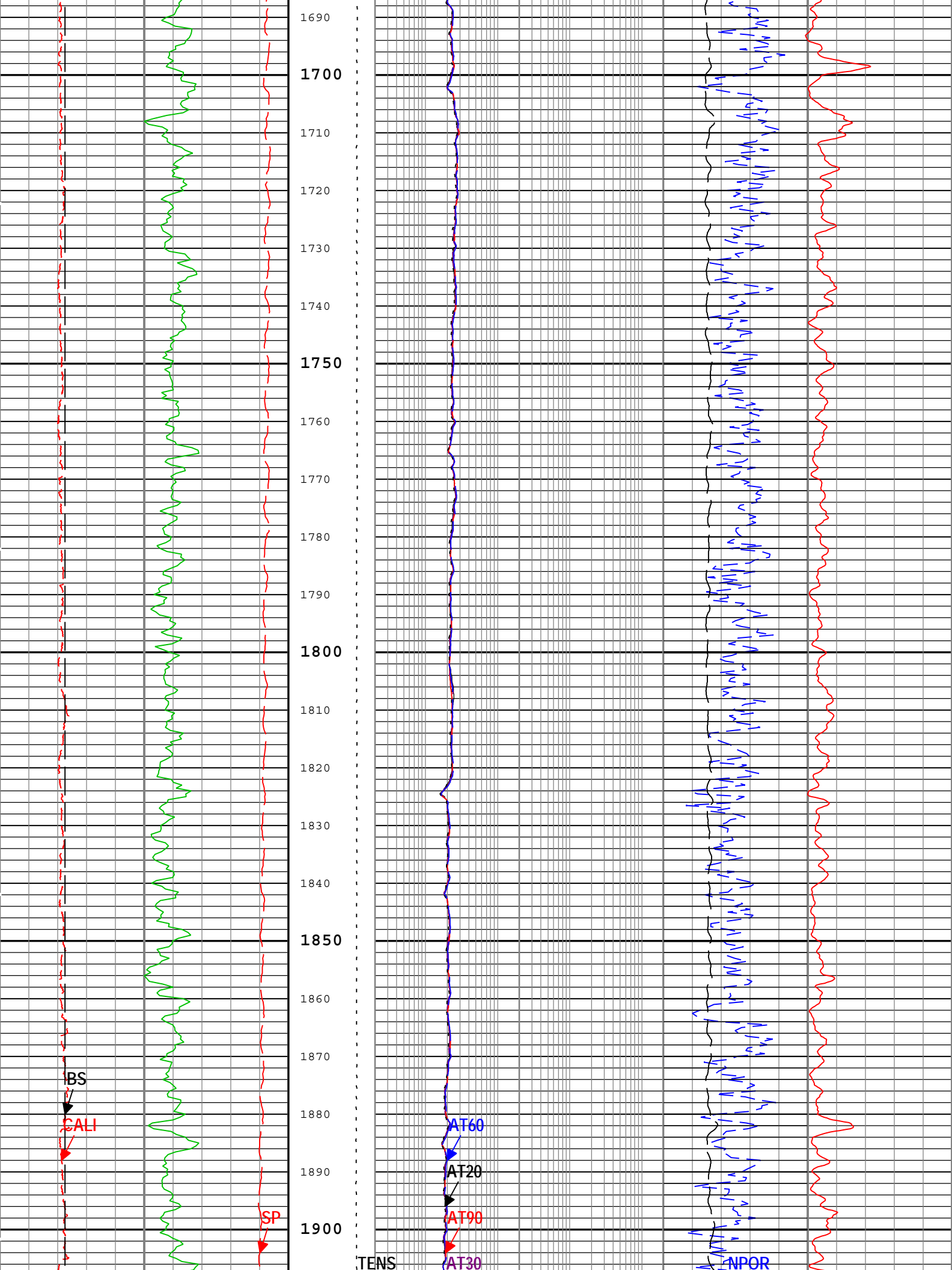


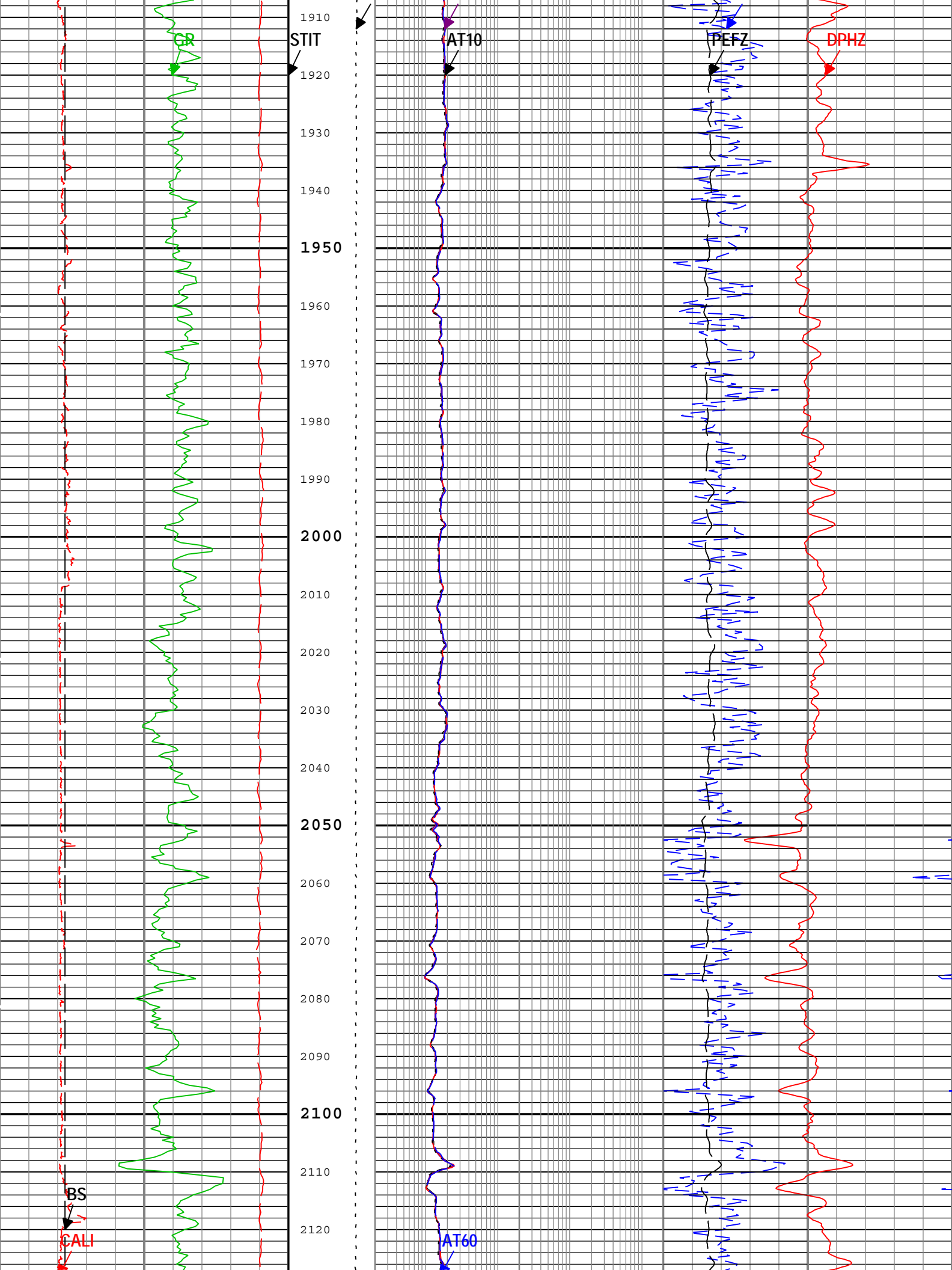


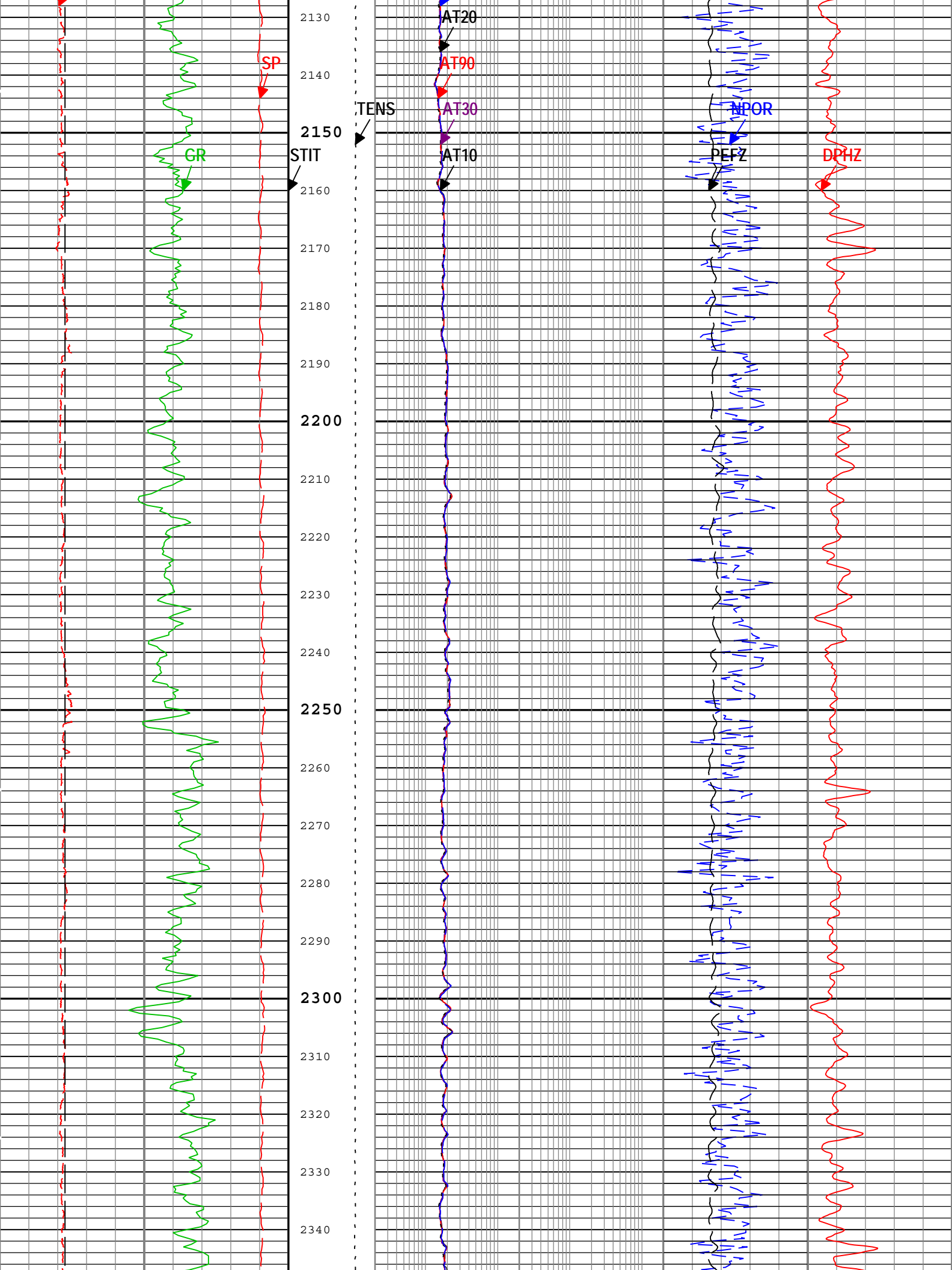


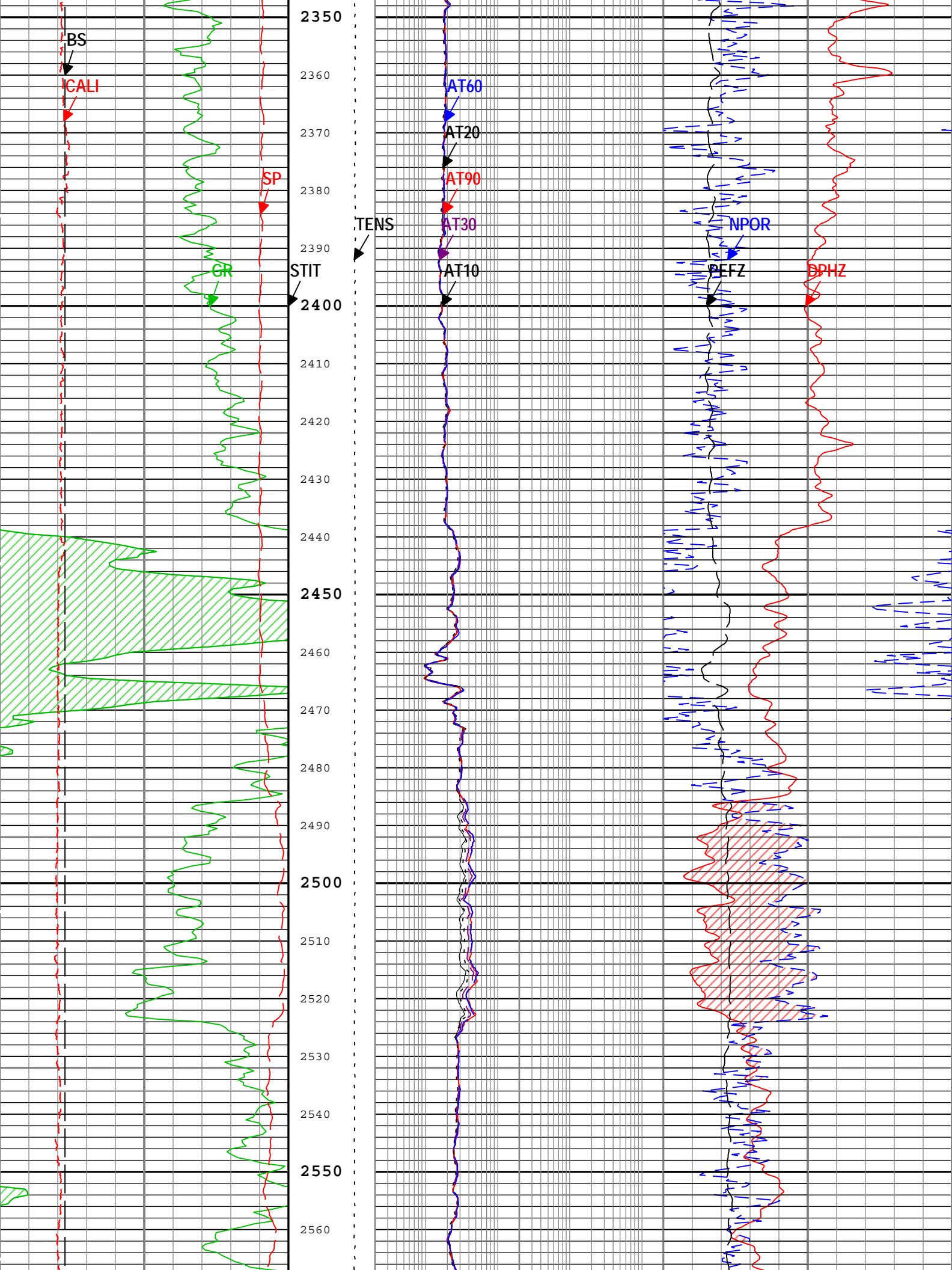


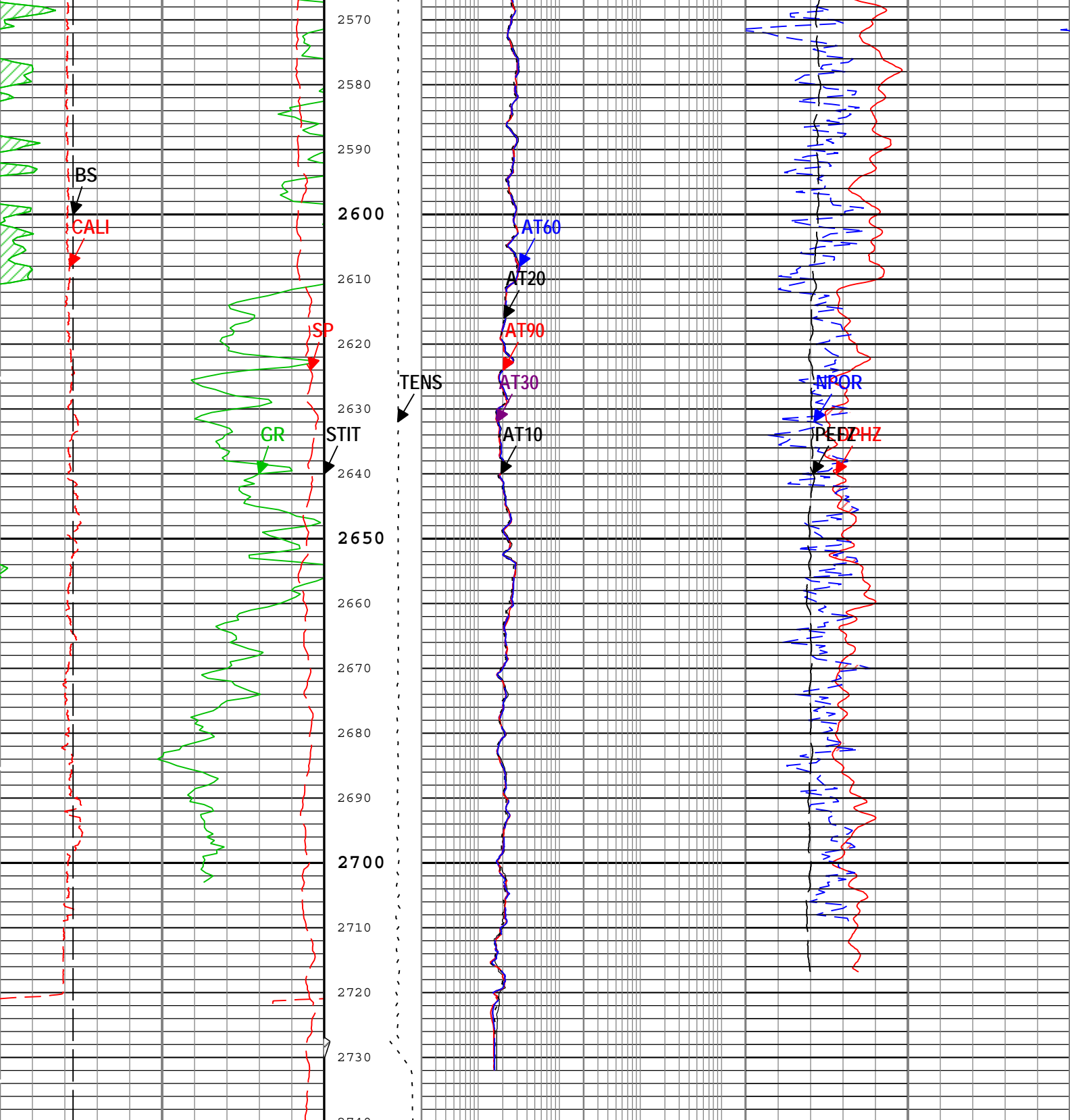












Gamma Ray Back up			Stuck Tool Indicator, Total (STIT)	Array Induction Two Foot Resistivity A10 (AT10) AIT-M			Gas Effect				
Gamma Ray (GR) HGNS-H				0.2	ohm.m		2000	NPOR Backup			
0	gAPI		200	0	ft		50				
Spontaneous Potential (SP) AIT-M			Cable Tension (TENS)	Array Induction Two Foot Resistivity A30 (AT30) AIT-M			Standard Resolution Density Porosity (DPHZ) HDRS-H				
0	mV			200	0.2	ohm.m		2000	0.5	ft3/ft3	
Caliper (CALI) HDRS-H			6000 lbf	Array Induction Two Foot Resistivity A90 (AT90) AIT-M			Enhanced Thermal Neutron Porosity in Selected Lithology (NPOR) HGNS-H				
4	in			14	0.2	ohm.m		2000	0.5	m3/m3	
Bit Size (BS)				Array Induction Two Foot Resistivity A30 (AT30) AIT-M			Standard Resolution Density Porosity (DPHZ) HDRS-H				
4	in			14	0.2	ohm.m		2000	0.5	m3/m3	

		Array Induction Two Foot Resistivity A20 (AT20) AIT-M		Standard Resolution Formation Photoelectric Factor (PEFZ) HDRS-H	
0.2		ohm.m		2000	
		Array Induction Two Foot Resistivity A60 (AT60) AIT-M		010	
0.2		ohm.m		2000	

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: 24-Nov-2014 20:39:07

Channel Processing Parameters				
Parameter	Description	Tool	Value	Unit
ABHM	Array Induction Borehole Correction Mode	AIT-M	Compute Standoff	
ACDE	Array Induction Casing Detection Enable	AIT-M	Yes	
ASTA	Array Induction Tool Standoff	AIT-M	0.125	in
BARI	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BHT	Bottom Hole Temperature	Borehole	98.75	degF
BS	Bit Size	WLSESSION	6.25	in
BSAL	Borehole Salinity	Borehole	13300	ppm
CALI_SHIFT	CALI Supplementary Offset	HDRS-H	0	in
CBLO	Casing Bottom (Logger)	WLSESSION	498	ft
CDEN	Cement Density	HGNS-H	2	g/cm3
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	8.8	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DFT_WATER	Drilling Fluid Water Type	Borehole	WBM	
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	75	degF
RMFS	Resistivity of Mud Filtrate Sample	Borehole	0.16	ohm.m
SPDR	SP Drift Per Foot	AIT-M	0	mV/ft
TD	Total Measured Depth	Borehole	2727.5	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	3600	ft/h

ONE

5" Triple Combo RA

## Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Repeat[3]:Up	Up	2367.79 ft	2743.97 ft	24-Nov-2014 2:07:38 PM	24-Nov-2014 2:14:20 PM	ON	0.00 ft	Yes
ONE	Main[4]:Up	Up	49.99 ft	2740.13 ft	24-Nov-2014 2:18:51 PM	24-Nov-2014 3:07:02 PM	ON	0.00 ft	Yes

All depths are referenced to toolstring zero

## Log

Company: Omimex Petroleum Inc.

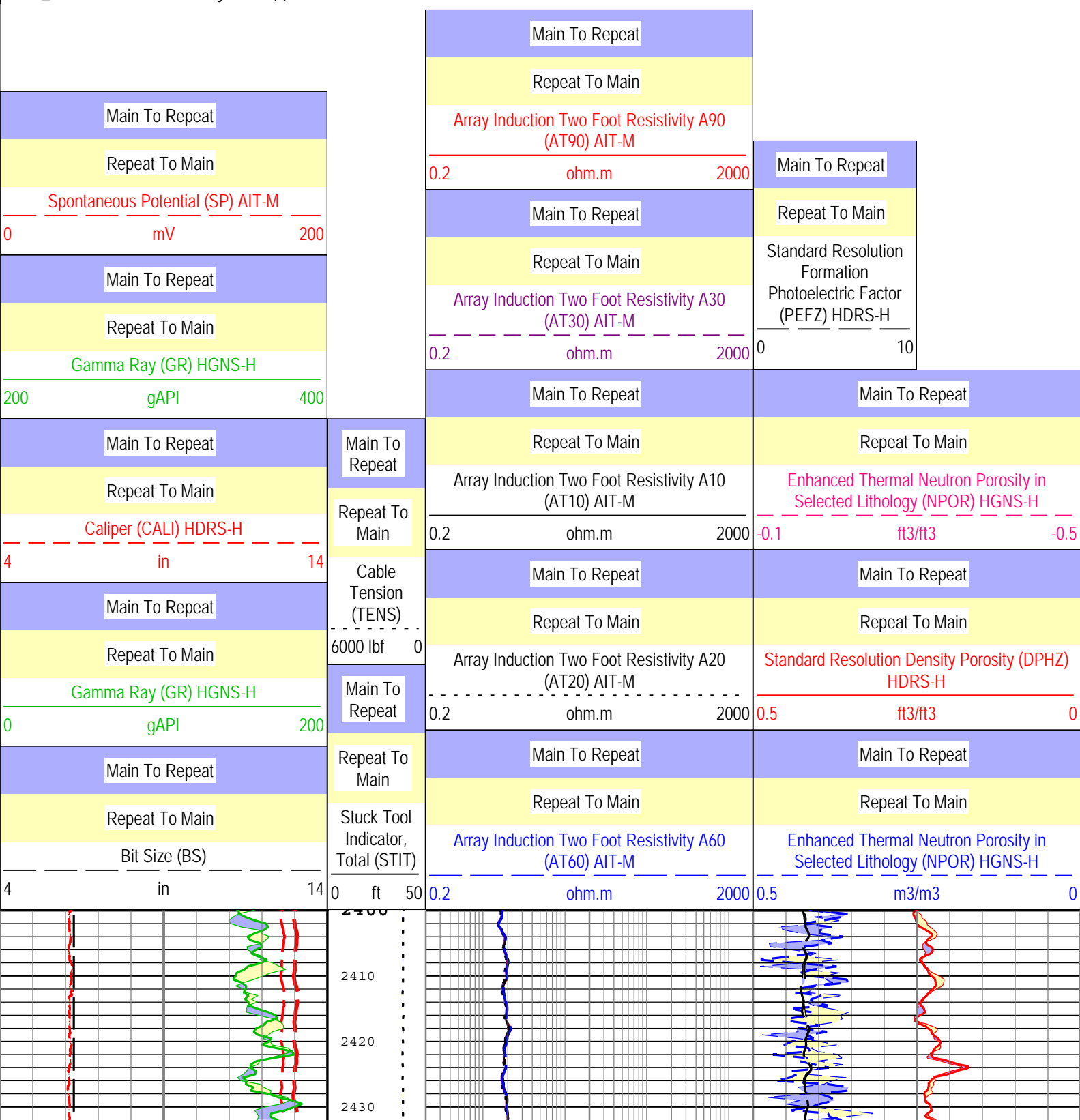
Well:Gueck 10-19-7-44

ONE: Repeat[3]:Up:S010

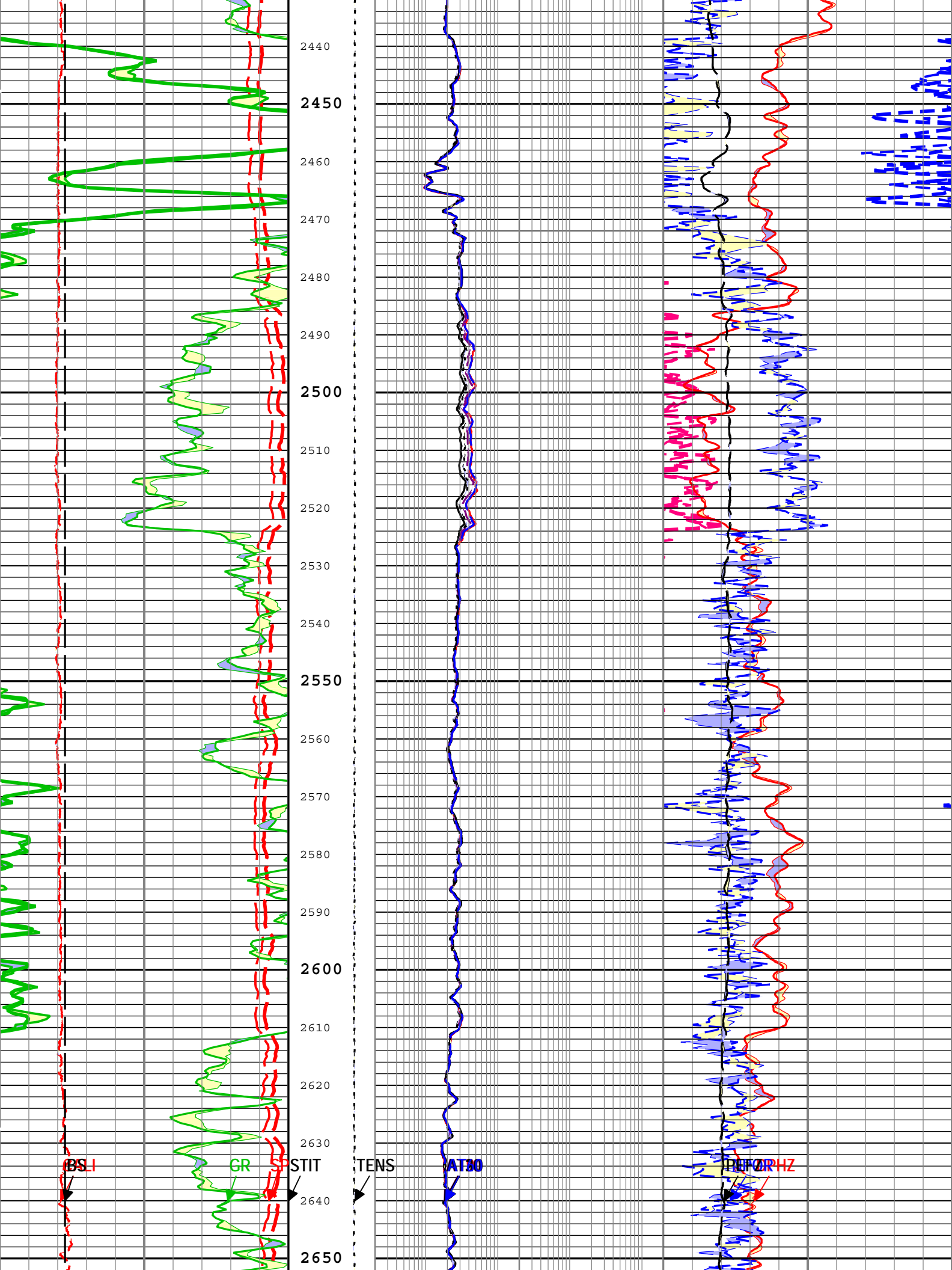
Description: HGNS standard resolution porosities for Platform Express    Format: Log ( EMD 5in Triple Combo RA )    Index Scale: 5 in per 100 ft    Index Unit: ft

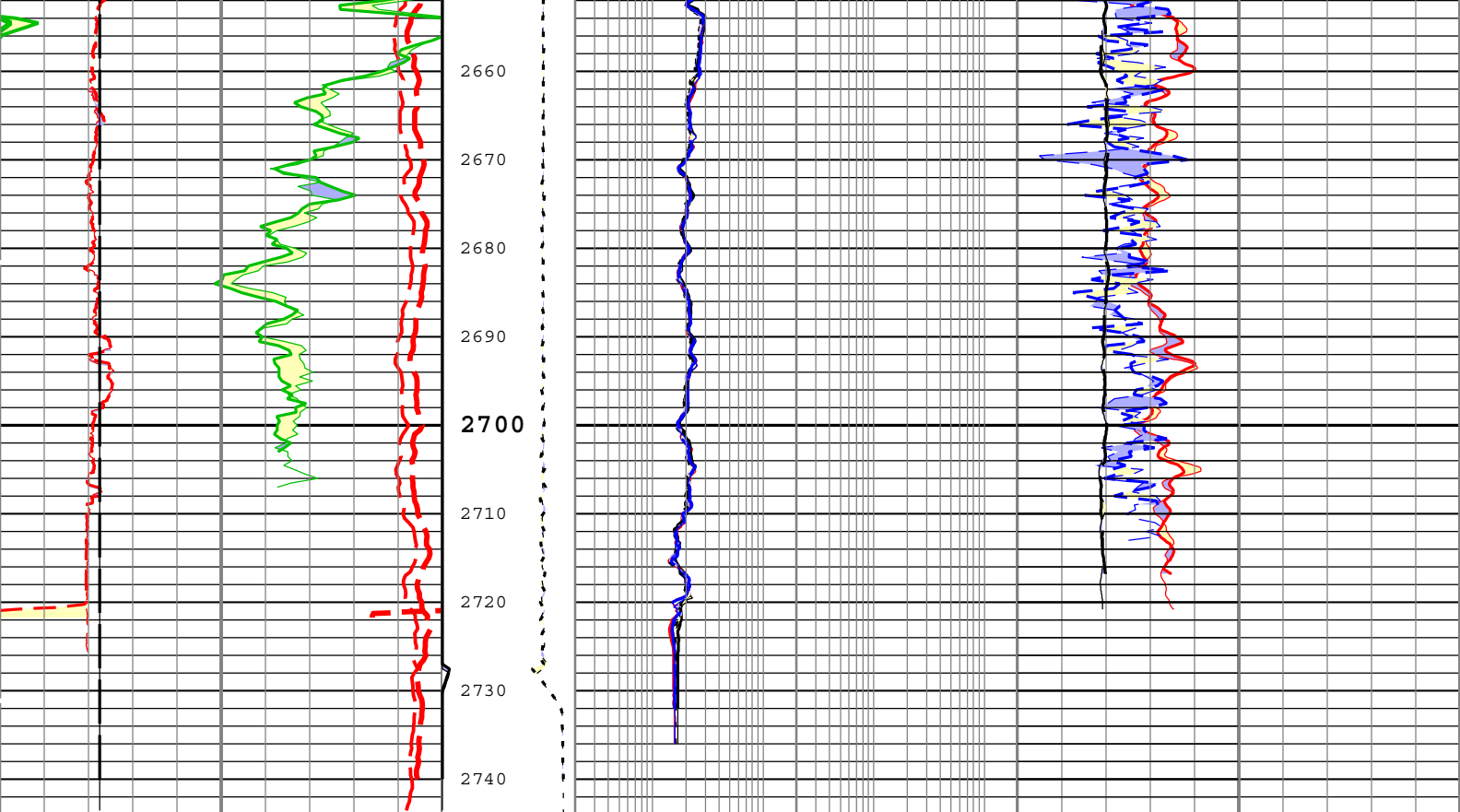
Index Type: Measured Depth      Creation Date: 24-Nov-2014 20:39:09

TIME\_1900 - Time Marked every 60.00 (s)









Main To Repeat		Main To Repeat	Main To Repeat
Repeat To Main		Repeat To Main	Repeat To Main
Spontaneous Potential (SP) AIT-M		Array Induction Two Foot Resistivity A90 (AT90) AIT-M	Enhanced Thermal Neutron Porosity in Selected Lithology (NPOR) HGNS-H
0	200	0.2	-0.1
mV		ohm.m	
200		2000	
ft3/ft3		-0.5	
Main To Repeat		Main To Repeat	
Repeat To Main		Repeat To Main	
Gamma Ray (GR) HGNS-H		Array Induction Two Foot Resistivity A30 (AT30) AIT-M	
200	400	0.2	0.5
gAPI		ohm.m	
400		2000	
ft3/ft3		0	
Main To Repeat		Main To Repeat	
Repeat To Main		Repeat To Main	
Caliper (CALI) HDRS-H		Array Induction Two Foot Resistivity A10 (AT10) AIT-M	
4	14	0.2	0.5
in		ohm.m	
4		2000	
m3/m3		0	
Main To Repeat		Main To Repeat	
Repeat To Main		Repeat To Main	
Gamma Ray (GR) HGNS-H		Array Induction Two Foot Resistivity A20 (AT20) AIT-M	
0	200	0.2	0
gAPI		ohm.m	
200		2000	
m3/m3		10	
Main To Repeat		Main To Repeat	
Repeat To Main		Repeat To Main	
Bit Size (BS)		Standard Resolution Formation Photoelectric Factor (PEFZ) HDRS-H	
4	14	0	
in		10	
		Array Induction Two Foot Resistivity A60	

TIME\_1900 - Time Marked every 60.00 (s)

Description: HGNS standard resolution porosities for Platform Express    Format: Log ( EMD 5in Triple Combo RA )    Index Scale: 5 in per 100 ft    Index Unit: ft  
Index Type: Measured Depth    Creation Date: 24-Nov-2014 20:39:09

# 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 :			
File code for AIT Bottom Nose Tool Element	AMRM	181	

## AIT Sonde Calibration - Test Loop Gain

Master (EEPROM):		23:01:59 22-Sep-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Test Loop Gain - 0		Master	1.000	0.950	1.041	1.050	
Test Loop Phase - 0	deg	Master	0	-3.000	1.805	3.000	
Test Loop Gain - 1		Master	1.000	0.950	1.017	1.050	
Test Loop Phase - 1	deg	Master	0	-3.000	0.902	3.000	
Test Loop Gain - 2		Master	1.000	0.950	1.017	1.050	
Test Loop Phase - 2	deg	Master	0	-3.000	0.392	3.000	
Test Loop Gain - 3		Master	1.000	0.950	1.016	1.050	
Test Loop Phase - 3	deg	Master	0	-3.000	0.089	3.000	
Test Loop Gain - 4		Master	1.000	0.950	1.009	1.050	
Test Loop Phase - 4	deg	Master	0	-3.000	0.141	3.000	
Test Loop Gain - 5		Master	1.000	0.950	0.991	1.050	
Test Loop Phase - 5	deg	Master	0	-3.000	-0.110	3.000	
Test Loop Gain - 6		Master	1.000	0.950	0.998	1.050	
Test Loop Phase - 6	deg	Master	0	-3.000	0.235	3.000	
Test Loop Gain - 7		Master	1.000	0.950	1.010	1.050	
Test Loop Phase - 7	deg	Master	0	-3.000	-0.080	3.000	

## AIT Sonde Calibration - Sonde Error Correction

Master (EEPROM):		23:01:59 22-Sep-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Sonde Error Correction Real - 0	mS/m	Master	-----	-231.000	-113.093	119.000	
Sonde Error Correction Quad - 0		Master	-----	-2250.000	114.931	2250.000	
Sonde Error Correction Real - 1	mS/m	Master	-----	114.000	157.599	204.000	
Sonde Error Correction Quad - 1		Master	-----	-625.000	-170.942	625.000	
Sonde Error Correction Real - 2	mS/m	Master	-----	66.000	115.105	156.000	
Sonde Error Correction Quad - 2		Master	-----	-350.000	-99.364	350.000	
Sonde Error Correction Real - 3	mS/m	Master	-----	39.000	49.447	89.000	
Sonde Error Correction Quad - 3		Master	-----	-250.000	2.279	250.000	
Sonde Error Correction Real - 4	mS/m	Master	-----	15.000	26.217	35.000	
Sonde Error Correction Quad - 4		Master	-----	-63.000	-3.708	63.000	
Sonde Error Correction Real - 5	mS/m	Master	-----	4.000	10.870	24.000	
Sonde Error Correction Quad - 5		Master	-----	-50.000	21.802	50.000	
Sonde Error Correction Real - 6	mS/m	Master	-----	5.000	9.914	15.000	
Sonde Error Correction Quad - 6		Master	-----	-30.000	2.857	30.000	
Sonde Error Correction Real - 7	mS/m	Master	-----	-5.000	-1.286	5.000	
Sonde Error Correction Quad - 7		Master	-----	-30.000	1.530	30.000	

## AIT Mud Calibration - Mud Calibration Gain

Master (EEPROM):		23:01:59 22-Sep-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Coarse Gain		Master	1.000	0.800	0.847	1.200	
Fine Gain		Master	1.000	0.800	0.846	1.200	

## AIT Electronics Check - Thru Calibration Check

Master (EEPROM):		23:01:59 22-Sep-2014		Before (Measured):		07:26:57 24-Nov-2014	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Thru Cal Mag - 0	V	Master	-----	0.366	0.575	0.854	
		Before	-----	0.366	0.575	0.854	

		Before-Master	-----	-----	0.000	-----	
Thru Cal Phase - 0	deg	Master	-----	137.000	-169.442	-103.000	
		Before	-----	137.000	-168.102	-103.000	
		Before-Master	-----	-----	1.340	-----	
Thru Cal Mag - 1	V	Master	-----	0.762	1.178	1.778	
		Before	-----	0.762	1.178	1.778	
		Before-Master	-----	-----	0.000	-----	
Thru Cal Phase - 1	deg	Master	-----	136.000	-170.544	-104.000	
		Before	-----	136.000	-169.200	-104.000	
		Before-Master	-----	-----	1.344	-----	
Thru Cal Mag - 2	V	Master	-----	0.372	0.584	0.868	
		Before	-----	0.372	0.585	0.868	
		Before-Master	-----	-----	0.001	-----	
Thru Cal Phase - 2	deg	Master	-----	132.000	-174.186	-108.000	
		Before	-----	132.000	-172.843	-108.000	
		Before-Master	-----	-----	1.343	-----	
Thru Cal Mag - 3	V	Master	-----	0.420	0.660	0.980	
		Before	-----	0.420	0.660	0.980	
		Before-Master	-----	-----	0.000	-----	
Thru Cal Phase - 3	deg	Master	-----	131.000	-174.965	-109.000	
		Before	-----	131.000	-173.618	-109.000	
		Before-Master	-----	-----	1.347	-----	
Thru Cal Mag - 4	V	Master	-----	0.804	1.233	1.876	
		Before	-----	0.804	1.233	1.876	
		Before-Master	-----	-----	0.000	-----	
Thru Cal Phase - 4	deg	Master	-----	125.000	178.761	-115.000	
		Before	-----	125.000	-179.880	-115.000	
		Before-Master	-----	-----	-358.641	-----	
Thru Cal Mag - 5	V	Master	-----	1.176	1.795	2.744	
		Before	-----	1.176	1.795	2.744	
		Before-Master	-----	-----	0.000	-----	
Thru Cal Phase - 5	deg	Master	-----	122.000	177.104	-118.000	
		Before	-----	122.000	178.470	-118.000	
		Before-Master	-----	-----	1.366	-----	
Thru Cal Mag - 6	V	Master	-----	1.176	1.794	2.744	
		Before	-----	1.176	1.794	2.744	
		Before-Master	-----	-----	0.000	-----	
Thru Cal Phase - 6	deg	Master	-----	121.000	177.111	-119.000	
		Before	-----	121.000	178.479	-119.000	
		Before-Master	-----	-----	1.368	-----	
Thru Cal Mag - 7	V	Master	-----	0.846	1.294	1.974	
		Before	-----	0.846	1.294	1.974	
		Before-Master	-----	-----	0.000	-----	
Thru Cal Phase - 7	deg	Master	-----	115.000	176.348	-125.000	
		Before	-----	115.000	177.802	-125.000	
		Before-Master	-----	-----	1.454	-----	
SPA Zero	mV	Master		-50.000	0.145	50.000	
		Before		-50.000	0.126	50.000	
		Before-Master	-----	-----	-0.019	-----	
SPA Plus	mV	Master		941.000	992.483	1040.000	
		Before		941.000	992.251	1040.000	
		Before-Master	-----	-----	-0.232	-----	
Temperature Zero	V	Master		-0.050	0.000	0.050	
		Before		-0.050	0.000	0.050	
		Before-Master	-----	-----	0.000	-----	
Temperature Plus	V	Master		0.870	0.919	0.960	
		Before		0.870	0.919	0.960	
		Before-Master	-----	-----	0.000	-----	

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	3760
Auxiliary Equipment :			
HRDD Backscatter Detector		Backscatter	3760

HRDD Long Spacing Detector	Long Spacing	3760
HRDD Short Spacing Detector	Short Spacing	3760
Cesium 137 Gamma-Ray Logging Source	GSR-J	5471
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): 07:31:18 24-Nov-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Small Ring	in	Before	8.00	6.00	8.32	10.00	
Large Ring	in	Before	12.00	9.00	12.21	15.00	

HDRS Density Calibration - Inversion Results

Master (EEPROM): 16:02:40 31-Oct-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Rho Aluminum	g/cm3	Master	2.596	2.586	2.593	2.606	
Rho Magnesium	g/cm3	Master	1.686	1.676	1.688	1.696	
Pe Aluminum		Master	2.570	2.470	2.536	2.670	
Pe Magnesium		Master	2.650	2.550	2.622	2.750	

HDRS Density Calibration - Deviation Summary

Master (EEPROM): 16:02:40 31-Oct-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Average Deviation	%	Master	0	-0.6000	0.4294	0.6000	
BS Max Deviation	%	Master	0	-1.6000	1.0294	1.6000	
SS Average Deviation	%	Master	0	-1.0000	0.3695	1.0000	
SS Max Deviation	%	Master	0	-2.5000	0.8960	2.5000	
LS Average Deviation	%	Master	0	-1.5000	1.1732	1.5000	
LS Max Deviation	%	Master	0	-3.5000	3.1972	3.5000	

HDRS Density Calibration - Background Summary

Master (EEPROM): 16:02:40 31-Oct-2014 Before (Measured): 07:29:54 24-Nov-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Window Ratio		Master	1.0000		0.7358		
		Before	0.7358	0.6990	0.7393	0.7726	
		Before-Master	-----	-----	0.0035	-----	
BS Window Sum	1/s	Master	1		23801		
		Before	23801	22611	23805	24992	
		Before-Master	-----	-----	4	-----	
SS Window Ratio		Master	1.0000		0.4842		
		Before	0.4842	0.4600	0.4864	0.5085	
		Before-Master	-----	-----	0.0022	-----	
SS Window Sum	1/s	Master	1		9726		
		Before	9726	9240	9686	10212	
		Before-Master	-----	-----	-40	-----	
LS Window Ratio		Master	1.0000		0.3001		
		Before	0.3001	0.2851	0.3024	0.3151	
		Before-Master	-----	-----	0.0023	-----	
LS Window Sum	1/s	Master	1		1172		
		Before	1172	1113	1165	1230	
		Before-Master	-----	-----	-7	-----	

HDRS Density Calibration - Photo-multiplier High Voltages

Master (EEPROM): 16:02:40 31-Oct-2014 Before (Measured): 07:29:54 24-Nov-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS PM High Voltage	V	Master		1000	1357	2400	
		Before		1000	1392	2400	
		Before-Master	-----	-100	35	100	
SS PM High Voltage	V	Master		1000	1636	2400	
		Before		1000	1690	2400	
		Before-Master	-----	-100	54	100	
LS PM High Voltage	V	Master		1000	1201	2400	
		Before		1000	1200	2400	
		Before-Master	-----	-100	1	100	

		Before		1000	1200	2400	
		Before-Master	-----	-100	-1	100	

## HDRS Density Calibration - Crystal Quality Resolutions

Master (EEPROM):		16:02:40 31-Oct-2014		Before (Measured):		07:29:54 24-Nov-2014	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Crystal Resolution	%	Master		5.00	10.62	25.00	
		Before		5.00	10.64	25.00	
		Before-Master	-----	-1.00	0.02	1.00	
SS Crystal Resolution	%	Master		5.00	9.50	20.00	
		Before		5.00	9.88	20.00	
		Before-Master	-----	-1.00	0.38	1.00	
LS Crystal Resolution	%	Master		5.00	8.46	20.00	
		Before		5.00	8.47	20.00	
		Before-Master	-----	-1.00	0.01	1.00	

## HDRS MCFL Calibration - MCFL Accumulations

Before (Measured):		07:25:00 24-Nov-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Main Resistivity	ohm.m	Before	3875	3565	3861	4185	
Deep Resistivity	ohm.m	Before	3830	3524	3805	4136	
Shallow Resistivity	ohm.m	Before	3830	3524	3818	4136	

## 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	6991
AmBe Neutron Logging Source		NSR-F	2554
Calibration Parameter :			
Water Temperature			
Housing Size			
JIG-BKG (Jig minus background reference)		165	

## HGNS Accelerometer Calibration - Accelerometer Accumulations

Before (Measured):		13:46:21 24-Nov-2014					
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-May-2007					
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	-----	-----	-4298.000	-----	
Accelerometer Coefficients - 1		Master	-----	-----	50.180	-----	
Accelerometer Coefficients - 2		Master	-----	-----	-0.002	-----	
Accelerometer Coefficients - 3		Master	-----	-----	0.000	-----	
Accelerometer Coefficients - 4		Master	-----	-----	2.754	-----	
Accelerometer Coefficients - 5		Master	-----	-----	0.000	-----	
Accelerometer Coefficients - 6		Master	-----	-----	0.000	-----	
Accelerometer Coefficients - 7		Master	-----	-----	0.000	-----	
Accelerometer Coefficients - 8		Master	-----	-----	300.500	-----	
Accelerometer Coefficients - 9		Master	-----	-----	0.994	-----	

## HGNS Neutron Calibration - HGNS Neutron Accumulations

Master (EEPROM):		16:20:48 22-Oct-2014		Before (Measured):		07:32:36 24-Nov-2014	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Near Zero Measurement	1/s	Master	0	5.0	28.0	40.0	
		Before	0	5.0	27.6	40.0	
		Before-Master	-----	-4.2	-0.4	4.2	
Far Zero Measurement	1/s	Master	0	5.0	27.3	40.0	
		Before	0	5.0	29.1	40.0	

		Before-Master	----	-4.1	1.8	4.1	
Near Plus Measurement	1/s	Master Before Before-Master	6031.0 ----- -----	4700.0 ----- -----	5698.0 ----- -----	6900.0 ----- -----	
Far Plus Measurement	1/s	Master Before Before-Master	2793.0 ----- -----	1900.0 ----- -----	2348.0 ----- -----	2900.0 ----- -----	
Near Corrected Plus Measurement	1/s	Master Before Before-Master	 ----- -----	4700.0 ----- -----	5673.0 ----- -----	6900.0 ----- -----	
Far Corrected Plus Measurement	1/s	Master Before Before-Master	 ----- -----	1900.0 ----- -----	2321.0 ----- -----	2900.0 ----- -----	

HGNS Gamma-Ray Calibration - Gamma-Ray Accumulations							
Before (Measured):		07:32:27 24-Nov-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
RGR Zero Measurement	gAPI	Before	30.0	0	74.0	120.0	
RGR Plus Measurement	gAPI	Before	185.4	157.1	161.7	206.3	
GR Calibration Gain		Before	0.89	0.80	1.02	1.05	

GPIT-F (General-Purpose Inclinometer Tool) Calibration - Run ONE							
Primary Equipment :							
DHRU-F				DHRU-F			

### Signals and Temperature Correction for Accelerometers

Master (EEPROM):			00:00:00 25-Mar-2007		
GPITF_ACCX_MODEL      GPIT-F Accelero X Model					
		Racx**0		Racx**1	
Temp**0		0.01004		0.0006686	
Temp**1		-0.0002973		-7.547E-08	
Temp**2		7.824E-06		5.155E-10	
Temp**3		-3.246E-08		-3.304E-12	
GPITF_ACCY_MODEL      GPIT-F Accelero Y Model					
		Racy**0		Racy**1	
Temp**0		0.02525		-0.0006675	
Temp**1		0.0001103		7.694E-08	
Temp**2		-6.932E-06		-5.726E-10	
Temp**3		2.529E-08		3.514E-12	
GPITF_ACCZ_MODEL      GPIT-F Accelero Z Model					
		Racz**0		Racz**1	
Temp**0		0.0332		0.0006767	
Temp**1		-0.0003086		-8.402E-08	
Temp**2		5.16E-06		5.923E-10	
Temp**3		-2.277E-08		-3.469E-12	

### Perpendicular Correction for Accelerometers

Master (EEPROM):			00:00:00 25-Mar-2007				
GPITF_ACC_AXIS_MODE L (Master)			GPIT-F Accelero Axis Model				
	Data**0	Data**1	Data**2	Data**3	Data**4	Data**5	Data**6
Temp**0	0.001837	-0.0004671	-0.0008078	-3.386E-05	-1.416E-05	0.0004458	0
Temp**1	-2.085E-06	-6.004E-06	6.579E-06	-9.407E-07	1.657E-06	1.694E-06	0

## Signals and Temperature Correction for Magnetometer

Master (EEPROM): 00:00:00 25-Mar-2007

GPITF\_MAGX\_MODEL GPIT-F Magneto X Model  
(Master)

	Rmagx**0	Rmagx**1
Temp**0	181.8	4.865
Temp**1	-3.717	-0.0002706
Temp**2	0.05241	4.475E-06
Temp**3	-0.000188	-1.877E-08

GPITF\_MAGY\_MODEL GPIT-F Magneto Y Model  
(Master)

	Rmagy**0	Rmagy**1
Temp**0	-84.65	-4.938
Temp**1	-0.4524	0.0004073
Temp**2	0.01529	-5.572E-06
Temp**3	-5.748E-05	2.272E-08

GPITF\_MAGZ\_MODEL GPIT-F Magneto Z Model  
(Master)

	Rmagz**0	Rmagz**1
Temp**0	-79.15	4.879
Temp**1	0.5691	-0.0003812
Temp**2	-0.02047	5.573E-06
Temp**3	6.838E-05	-2.26E-08

## Perpendicular Correction for Magnetometer

Master (EEPROM): 00:00:00 25-Mar-2007

GPITF\_MAG\_AXIS\_MODE GPIT-F Magneto Axis Model  
L (Master)

	Data**0	Data**1	Data**2	Data**3	Data**4	Data**5	Data**6
Temp**0	-0.0006571	0.003886	0.001791	0.005535	7.441E-05	-0.005725	0
Temp**1	-3.933E-06	-3.186E-06	5.509E-06	4.485E-07	-2.703E-06	1.894E-07	0

Master (EEPROM): 00:00:00 23-Mar-2007

GPITF\_ELEC\_COEFF1 GPIT-F Electronic Coeff 1  
(Master)

	Data**0	Data**1
Temp**0	-0.8952	249.9
Temp**1	0.01395	0.008198
Temp**2	1.39E-05	-0.0002052
Temp**3	-1.841E-06	1.995E-06
Temp**4	9.326E-09	-7.143E-09

GPITF\_ELEC\_COEFF2 GPIT-F Electronic Coeff 2  
(Master)

	Data**0	Data**1
Temp**0	-0.5616	250
Temp**1	0.028	0.007144
Temp**2	-0.0002619	-0.0001819
Temp**3	4.204E-07	1.851E-06
Temp**4	1.833E-09	-6.841E-09



GPITF_ELEC_COEFF3      GPIT-F Electronic Coeff 3 (Master)		
	Data**0	Data**1
Temp**0	-3.372	249.8
Temp**1	0.02644	0.01735
Temp**2	-0.0001189	-0.0003523
Temp**3	-5.303E-07	3.076E-06
Temp**4	4.865E-09	-1E-08

Master (EEPROM):              00:00:00 23-Mar-2007		
GPITF_ELEC_COEFF4      GPIT-F Electronic Coeff 4 (Master)		
	Data**0	Data**1
Temp**0	-0.4945	0.128
Temp**1	0.02399	4.302E-06
Temp**2	-0.000384	-1.071E-07
Temp**3	3.061E-06	1.025E-09
Temp**4	-8.516E-09	-3.602E-12
GPITF_ELEC_COEFF5      GPIT-F Electronic Coeff 5 (Master)		
	Data**0	Data**1
Temp**0	-0.4945	0.128
Temp**1	0.02399	4.302E-06
Temp**2	-0.000384	-1.071E-07
Temp**3	3.061E-06	1.025E-09
Temp**4	-8.516E-09	-3.602E-12
GPITF_ELEC_COEFF6      GPIT-F Electronic Coeff 6 (Master)		
	Data**0	Data**1
Temp**0	-0.4945	0.128
Temp**1	0.02399	4.302E-06
Temp**2	-0.000384	-1.071E-07
Temp**3	3.061E-06	1.025E-09
Temp**4	-8.516E-09	-3.602E-12

Company:	Omimex Petroleum Inc.	<b>Schlumberger</b>
Well:	Gueck 10-19-7-44	
Field:	Holyoke South	
County:	Weld	
State:	Colorado	
Platform Express		
Triple Combo		
Linear		