

Schlumberger

Company: **Vecta Oil & Gas Ltd**

Well: **Little Bear 44-28**

Field: **Wildcat**

County: **Cheyenne**

State: **Colorado**

Well: **Little Bear 44-28**
Field: **Wildcat**
County: **Cheyenne**
State: **Colorado**

Field: **Wildcat**
County: **Cheyenne**
State: **Colorado**

County: **Cheyenne** State: **Colorado**

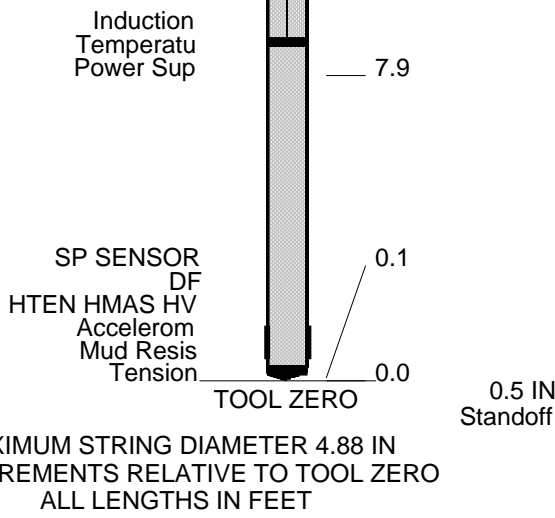
1

[illegible]

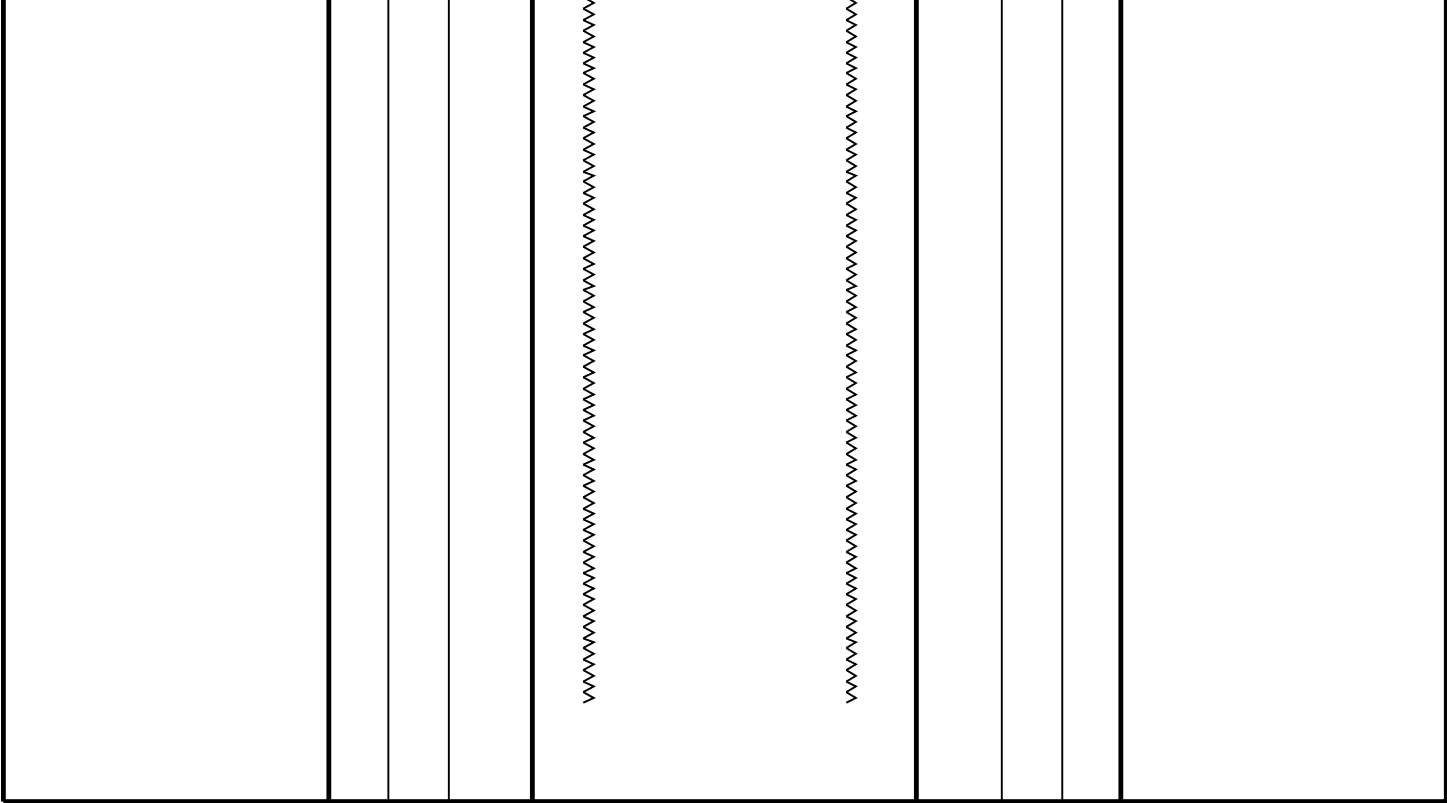
Logging Date					
Run Number					
Depth Driller					
Schlumberger Depth					
Bottom Log Interval					
Top Log Interval					
Casing Driller Size @ Depth	@				
Casing Schlumberger					
Bit Size					
Type Fluid In Hole					
Density	Viscosity				
Fluid Loss	PH				
Source Of Sample					
RM @ Measured Temperature	@				
RMF @ Measured Temperature	@				
RMC @ Measured Temperature	@				
Source RMF	RMC				
RM @ MRT	RMF @ MRT	@		@	
Maximum Recorded Temperatures					
Circulation Stopped	Time				
Logger On Bottom	Time				
Unit Number	Location				
Recorded By					
Witnessed By					

All prints done using Limestone (2.71 g/cc) matrix

AIT-M
AMIS-A 39
AMRM-A



Production String	(in)			(ft)	Well Schematic	(ft)	(in)			Casing String
	OD	ID	MD				MD	OD	ID	
						0.0	8.625			Casing String
						453.0	8.625			Casing Shoe
						453.0	7.875			Borehole Segment



All Depths are Driller's
Depths

Schlumberger

RESISTIVITY LINEAR 2" = 100'

MAXIS Field Log

Input DLIS Files

DEFAULT	MERGE_AIT_026L	FN:1	PRODUCER	10-Apr-2012 16:37	5709.5 FT	328.0 FT
---------	----------------	------	----------	-------------------	-----------	----------

Output DLIS Files

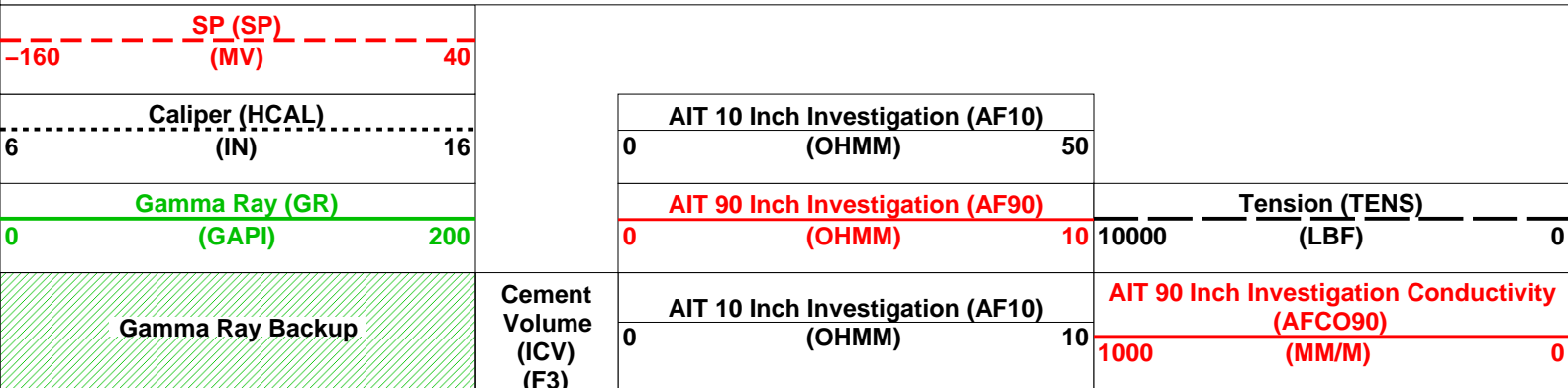
DEFAULT	AIT_TLD_MCFL_CNL_032PUP	FN:28	PRODUCER	10-Apr-2012 16:52	5709.5 FT	328.5 FT
---------	-------------------------	-------	----------	-------------------	-----------	----------

Integrated Hole/Cement Volume Summary

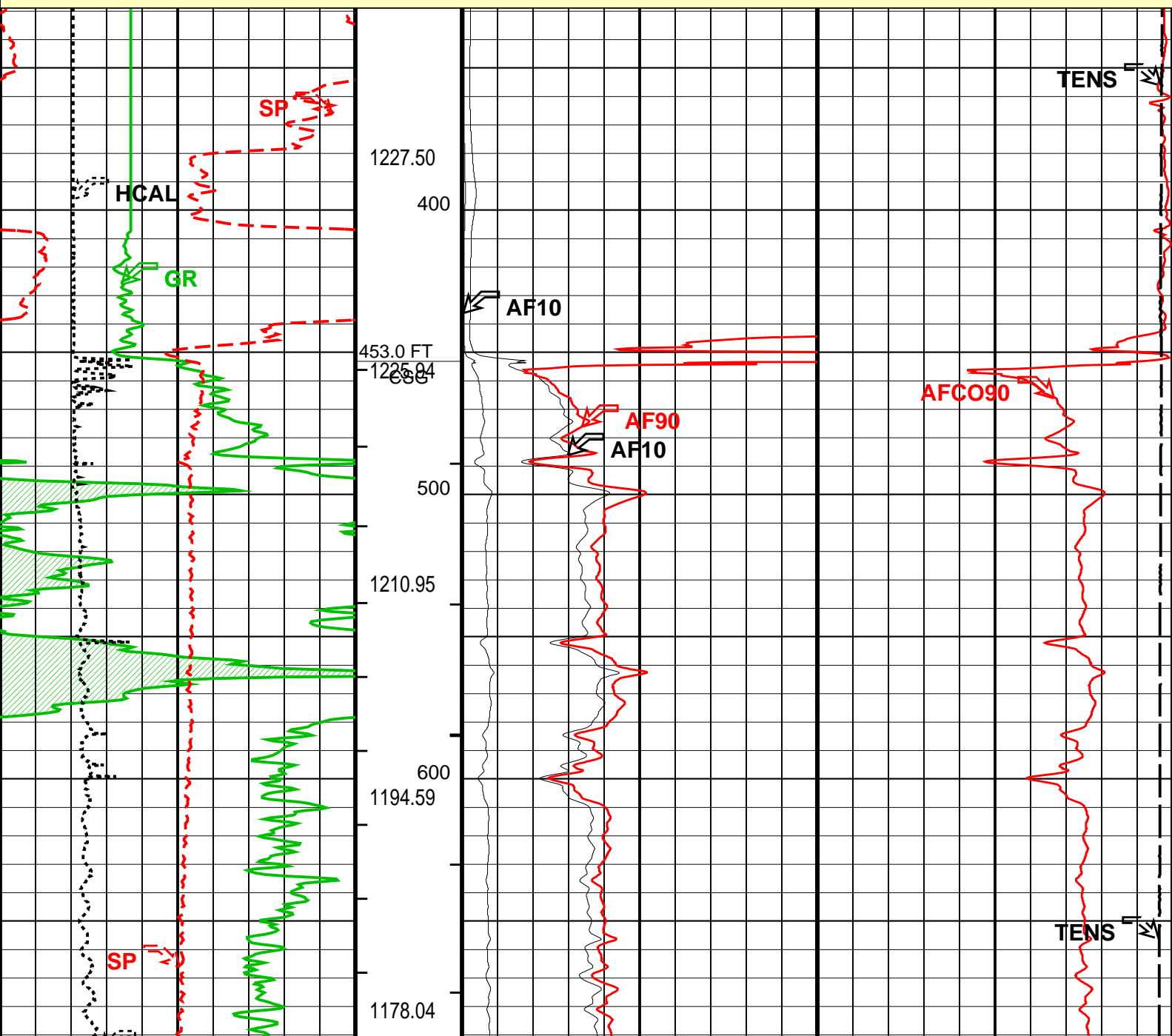
Hole Volume = 2091.40 F3
Cement Volume = 1227.50 F3 (assuming 5.50 IN casing O.D.)
Computed from 5689.0 FT to 453.0 FT using data channel(s) HCAL

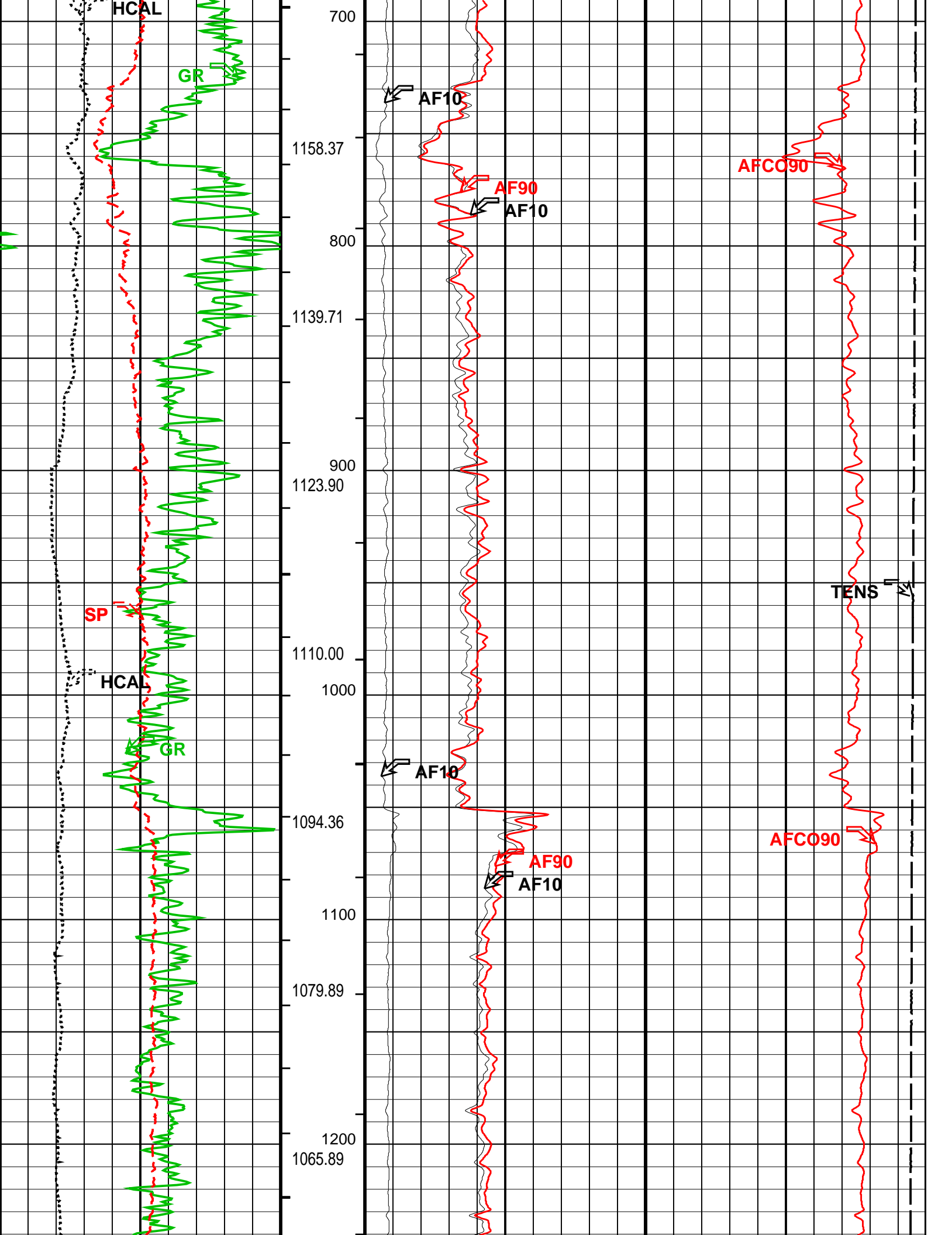
PIP SUMMARY

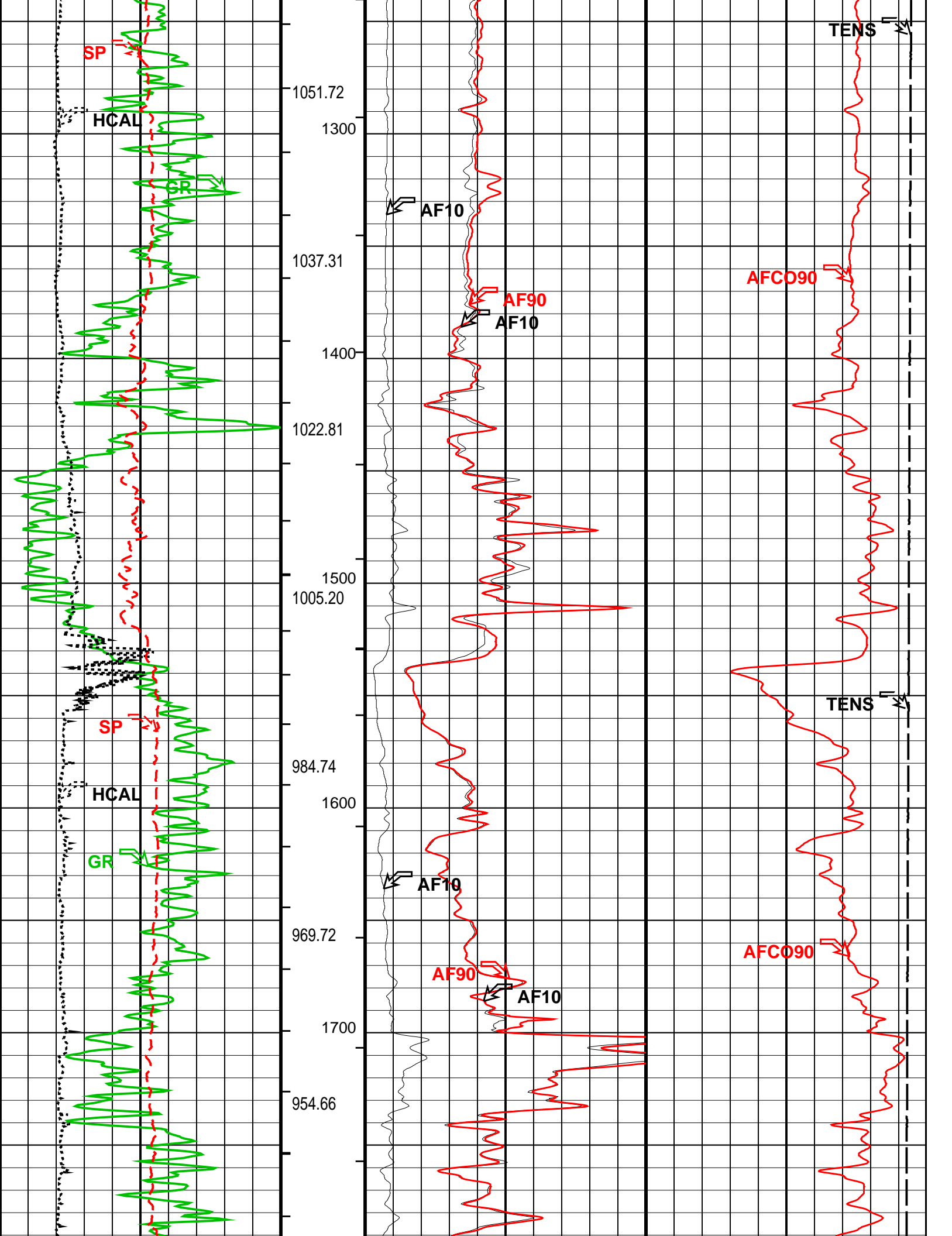
- Integrated Cement Volume Major Pip Every 100 F3
- Integrated Cement Volume Minor Pip Every 10 F3
- Integrated Hole Volume Major Pip Every 100 F3
- Integrated Hole Volume Minor Pip Every 10 F3

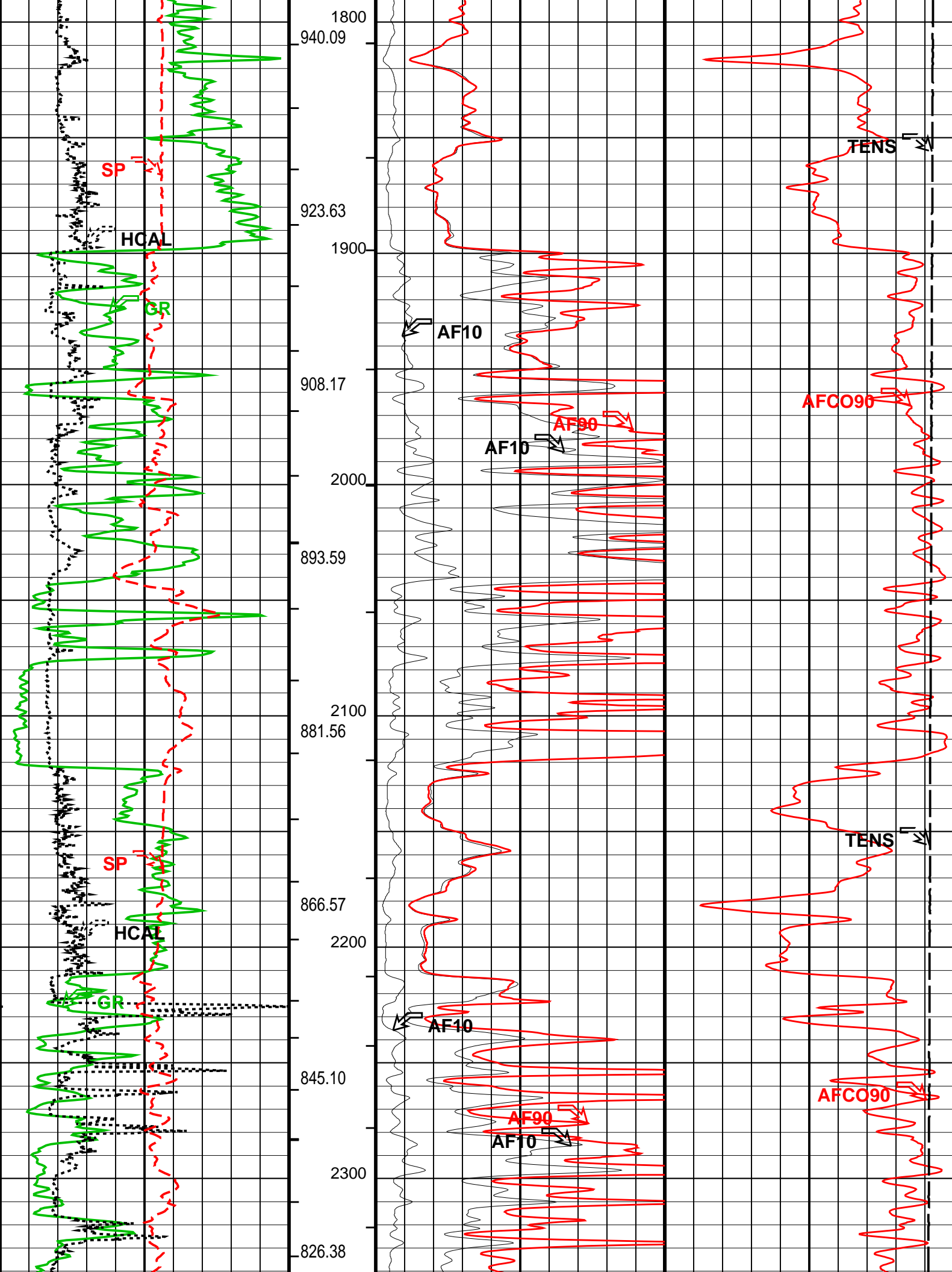


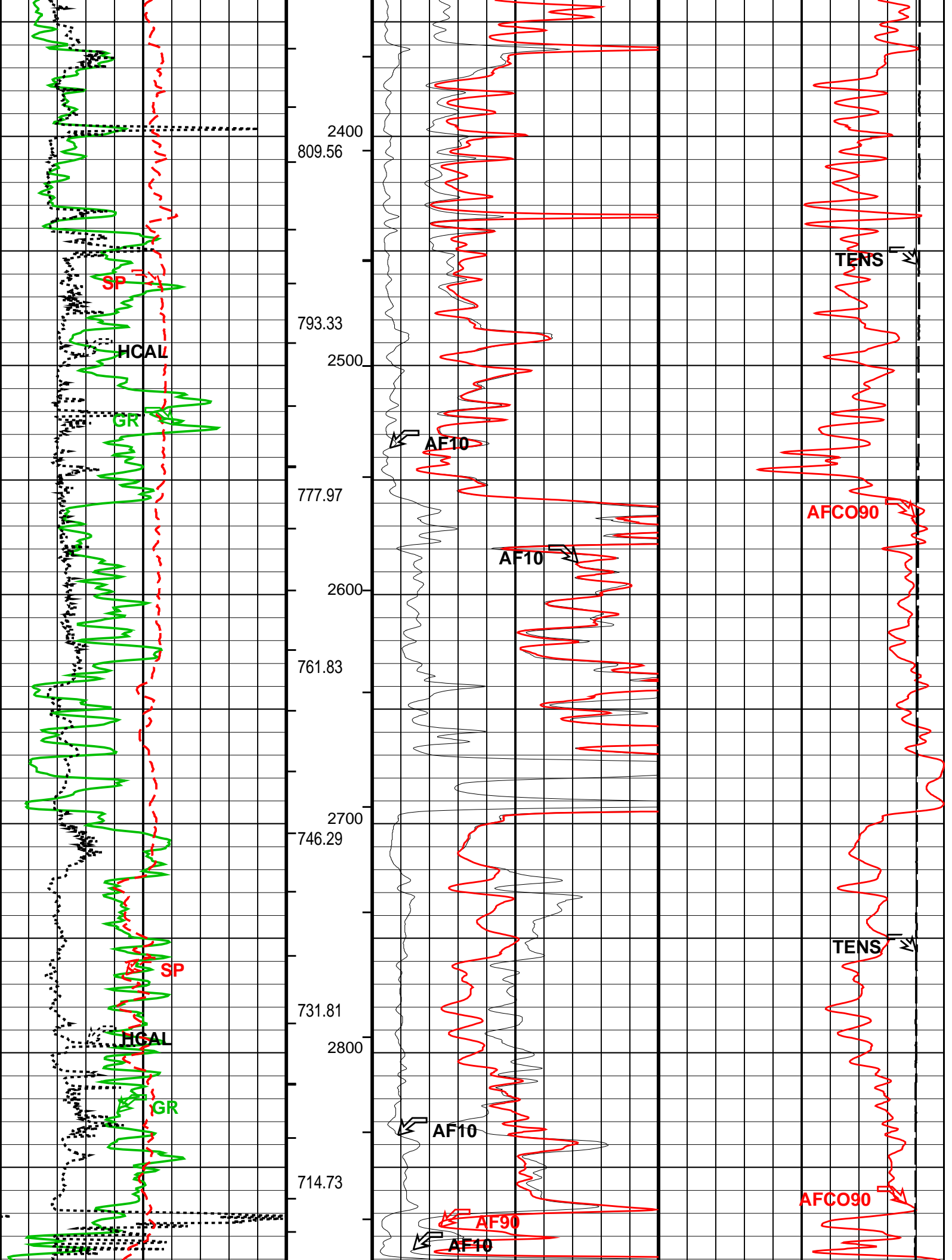
MAIN PASS: *** PLATFORM EXPRESS – ARRAY INDUCTION ***

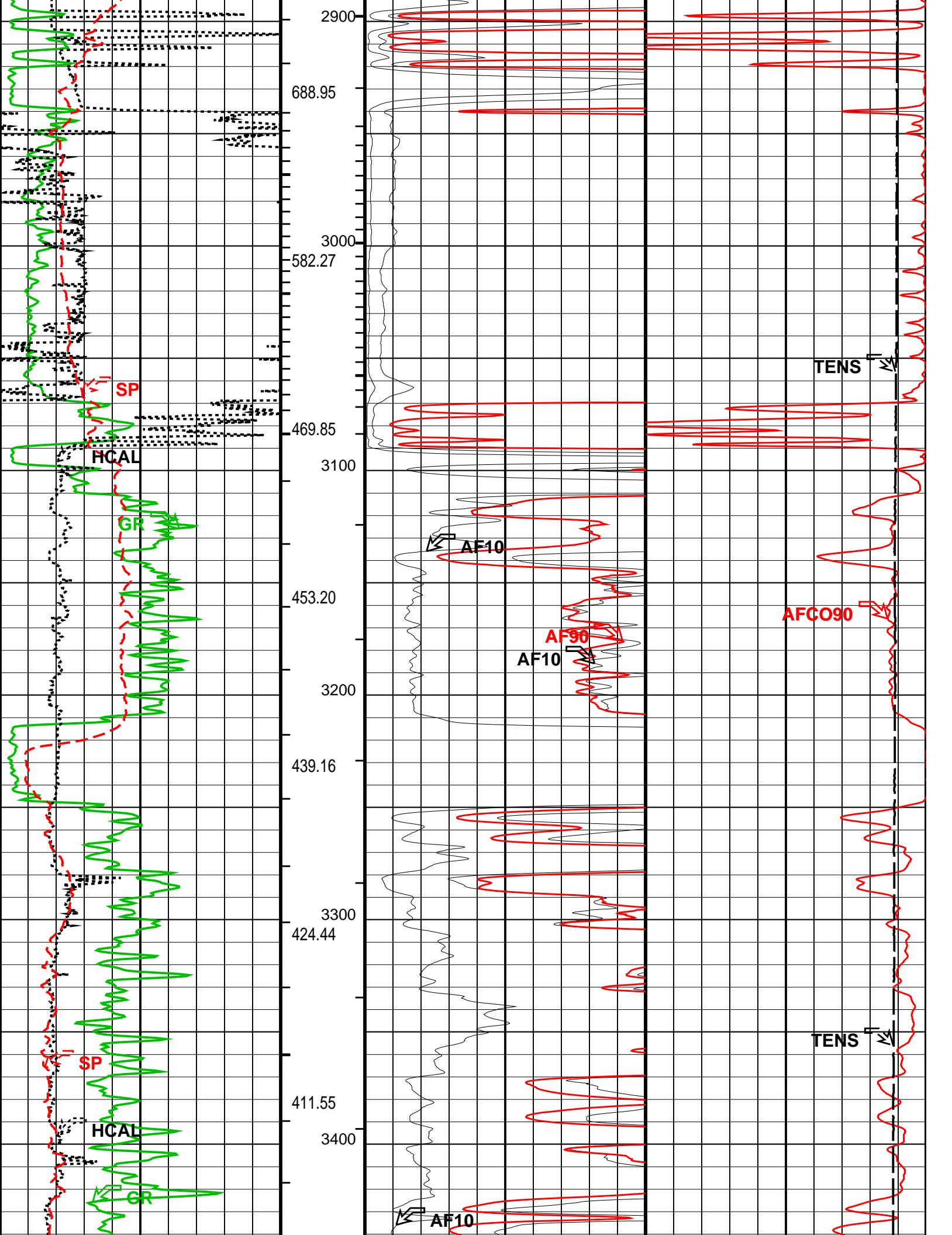


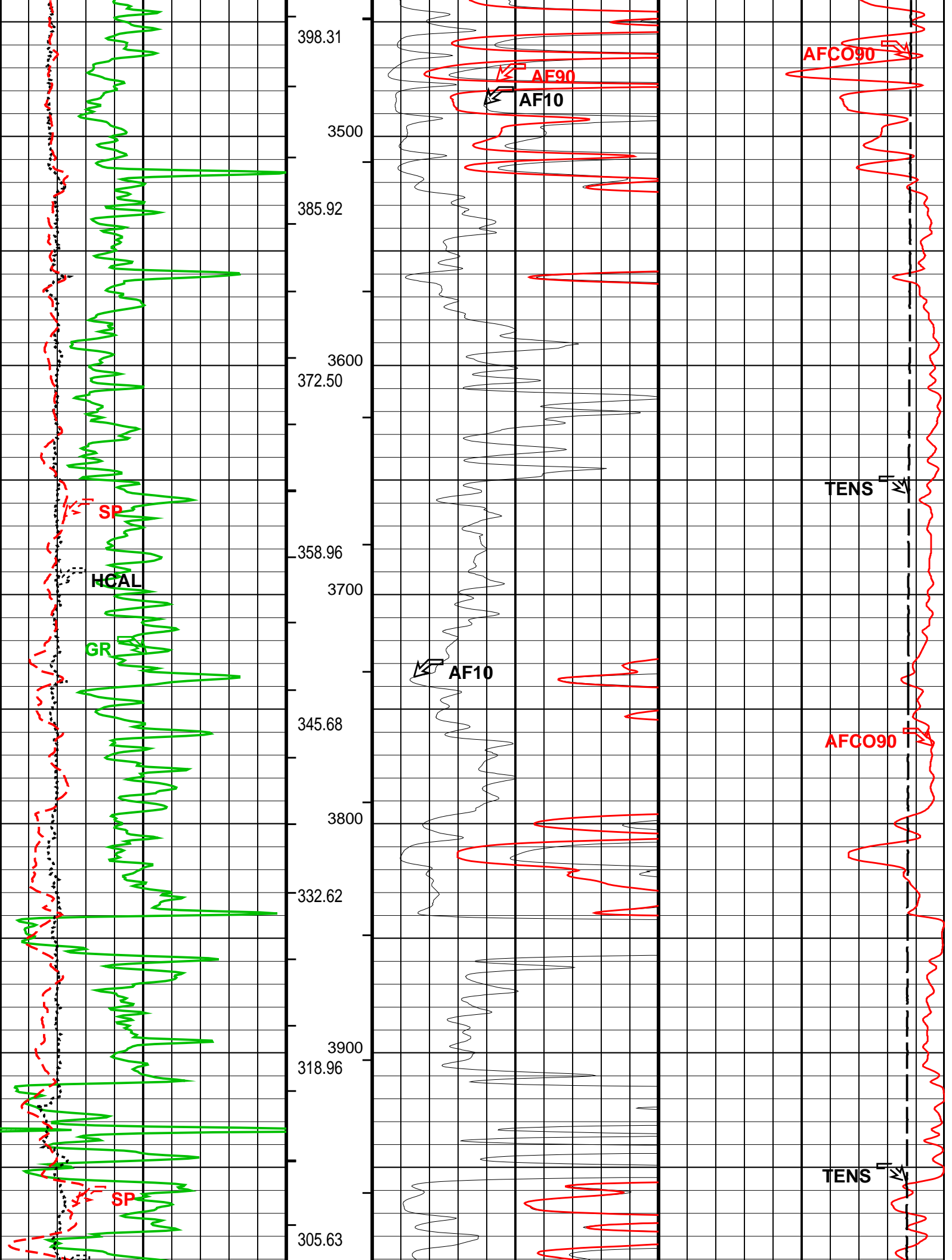


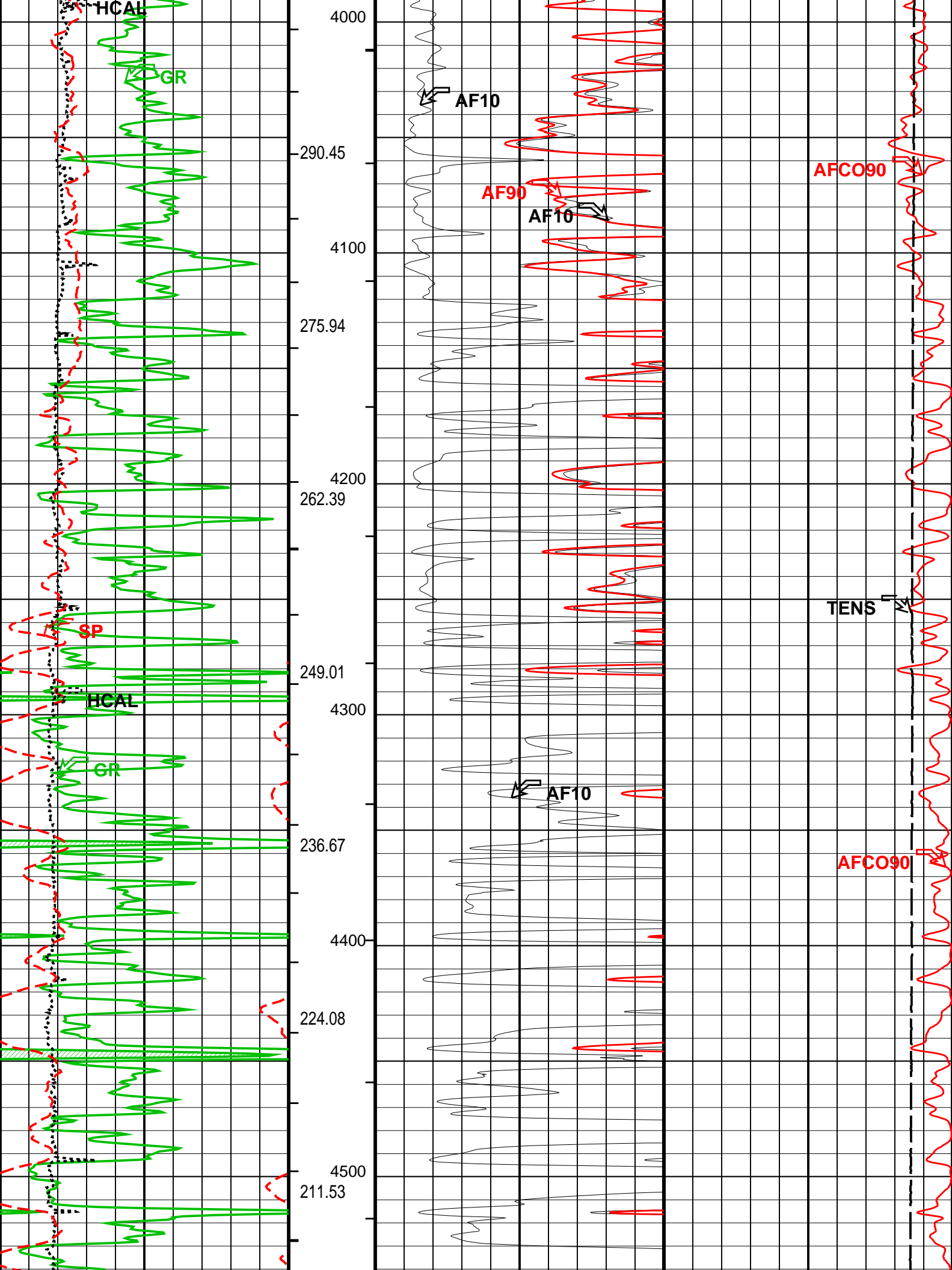


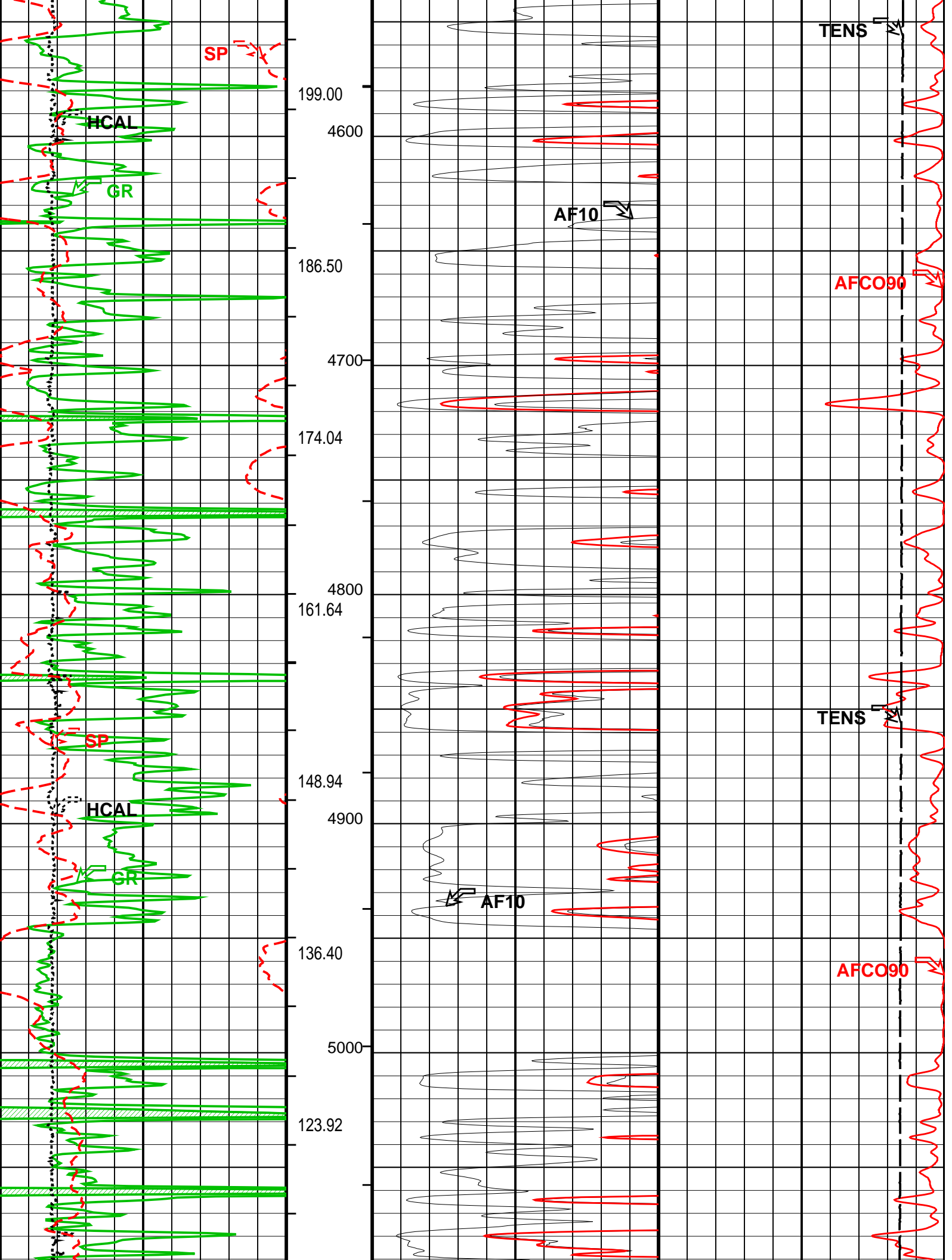


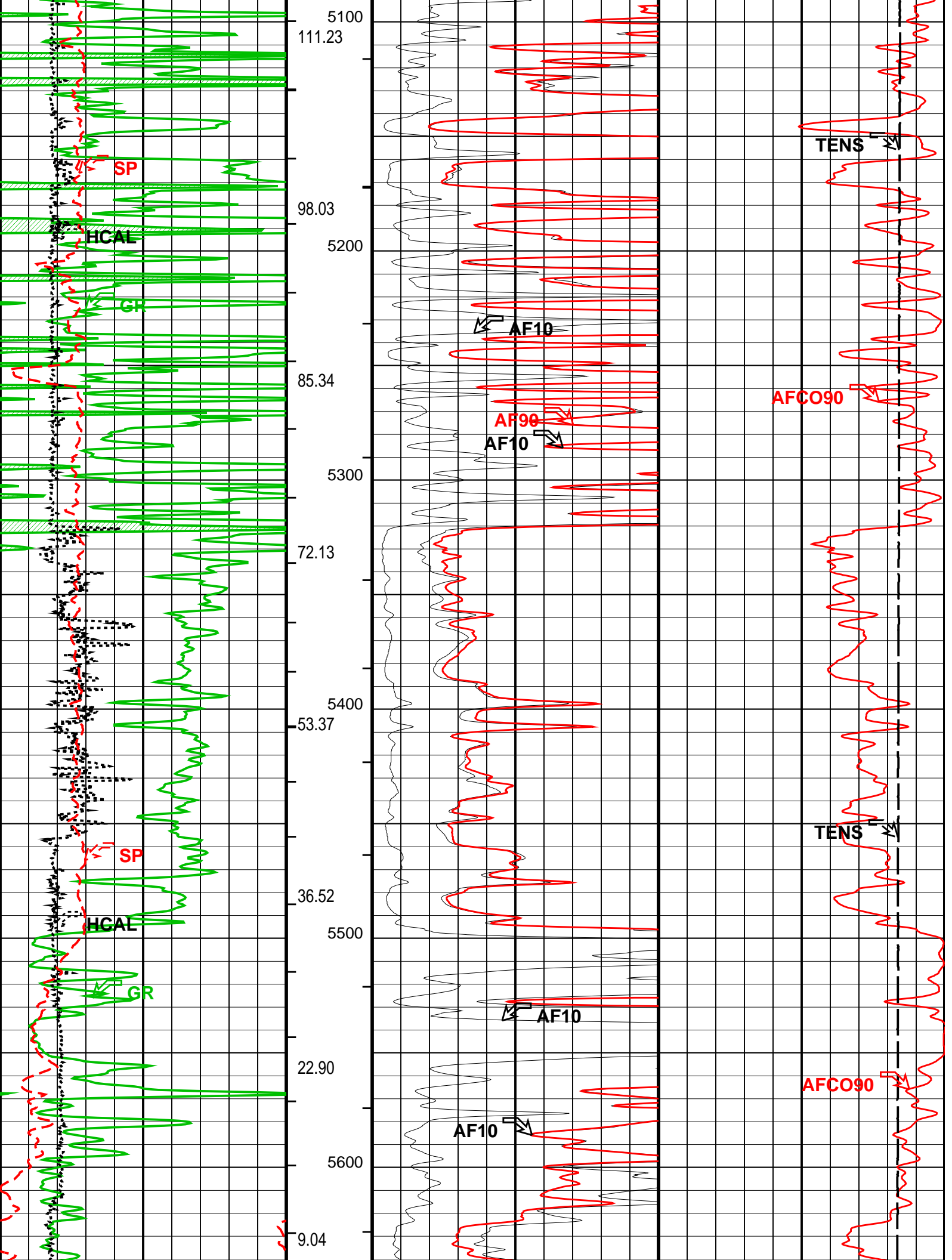


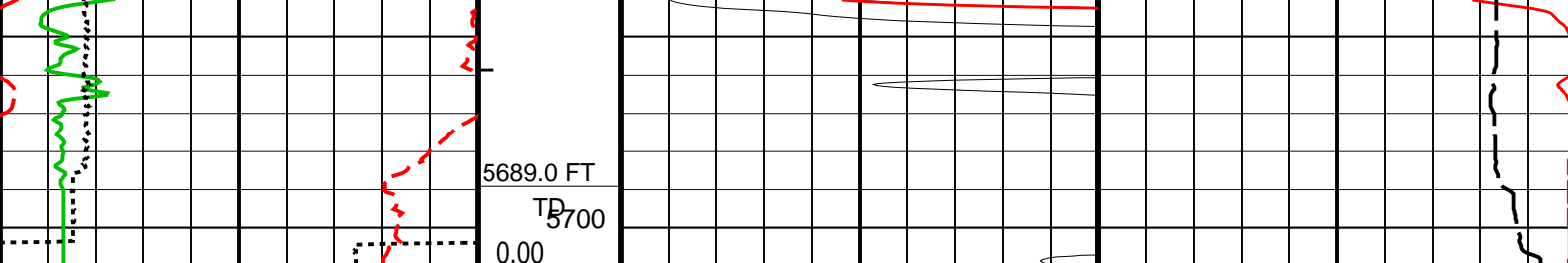












MAIN PASS: *** PLATFORM EXPRESS – ARRAY INDUCTION ***

Gamma Ray Backup	Cement Volume (ICV) (F3)	AIT 10 Inch Investigation (AF10)		AIT 90 Inch Investigation Conductivity (AFCO90)	
		0	10	1000	0
Gamma Ray (GR) (GAPI)	200	AIT 90 Inch Investigation (AF90) (OHMM)		Tension (TENS) (LBF)	
Caliper (HCAL) (IN)	16	0	10	10000	0
SP (SP) (MV)	40	AIT 10 Inch Investigation (AF10) (OHMM)			
-160		0	50		

PIP SUMMARY


- Integrated Cement Volume Major Pip Every 100 F3
- Integrated Cement Volume Minor Pip Every 10 F3
- Integrated Hole Volume Major Pip Every 100 F3
- Integrated Hole Volume Minor Pip Every 10 F3

Parameters

DLIS Name	Description	Value
AIT-M: Array Induction Tool – M		
ABHM	Array Induction Borehole Correction Mode	2_ComputeStandoff
ABHV	Array Induction Borehole Correction Code Version Number	900
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	223
ACDE	Array Induction Casing Detection Enable	No
ACEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered
ACSED	Array Induction Casing Shoe Estimated Depth	-50000 FT
AETP	Array Induction Enable Sonde Error Temp&Pres Corr	Yes
AFRSV	Array Induction Response Set Version for Four ft Resolution	41.70.24.20
AIGS	Array Induction Select Akima Interpolation Gating	On
AMRF	Array Induction Mud Resistivity Factor	1
AORSV	Array Induction Response Set Version for One ft Resolution	41.70.24.20
ARFV	Array Induction Radial Profiling Code Version Number	701
ARPV	Array Induction Radial Parametrization Code Version Number	232
ASTA	Array Induction Tool Standoff	0.625 IN
ATRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20
ATSE	Array Induction Temperature Selection(Sonde Error Correction)	Internal
AULV	Array Induction User Level Control	Normal
AZRSV	Array Induction Response Set Version for Z Resolution	00.10.25.00
BHT	Bottom Hole Temperature (used in calculations)	143 DEGF
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.01 DF/F
GRSE	Generalized Mud Resistivity Selection	AITM_RESIST
GTSE	Generalized Temperature Selection	HSTS_HTEM
SHT	Surface Hole Temperature	68 DEGF
SPNV	SP Next Value	0 MV
HILTH-FTB: High resolution Integrated Logging Tool-DTS		
BHT	Bottom Hole Temperature (used in calculations)	143 DEGF
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.01 DF/F
GRSE	Generalized Mud Resistivity Selection	AITM_RESIST
GTSE	Generalized Temperature Selection	HSTS_HTEM
SHT	Surface Hole Temperature	68 DEGF
FEQL: Formation Evaluation Quick Look		
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1

HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	143	DEGF
FCD	Future Casing (Outer) Diameter	5.5	IN
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITM_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
HVCS	Integrated Hole Volume Caliper Selection	AUTOMATIC	
SHT	Surface Hole Temperature	68	DEGF
PERT: Preliminary Evaluation – Real Time			
BHT	Bottom Hole Temperature (used in calculations)	143	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITM_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
System and Miscellaneous			
BS	Bit Size	7.875	IN
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	0.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
FLEV	Fluid Level	300.00	FT
MST	Mud Sample Temperature	75.00	DEGF
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	5689	FT

Format: ERES_S2		Vertical Scale: 2" per 100'		Graphics File Created: 10-Apr-2012 16:52		
OP System Version: 18C0-147						
AIT-M	18C0-147	HILTH-FTB		18C0-147		
DTC-H	18C0-147					
Input DLIS Files						
DEFAULT	MERGE_AIT_026L	FN:1	PRODUCER	10-Apr-2012 16:37	5709.5 FT	328.0 FT
Output DLIS Files						
DEFAULT	AIT_TLD_MCFL_CNL_032PUP	FN:28	PRODUCER	10-Apr-2012 16:52		



MAIN RESISTIVITY LOG 5" = 100'

MAXIS Field Log

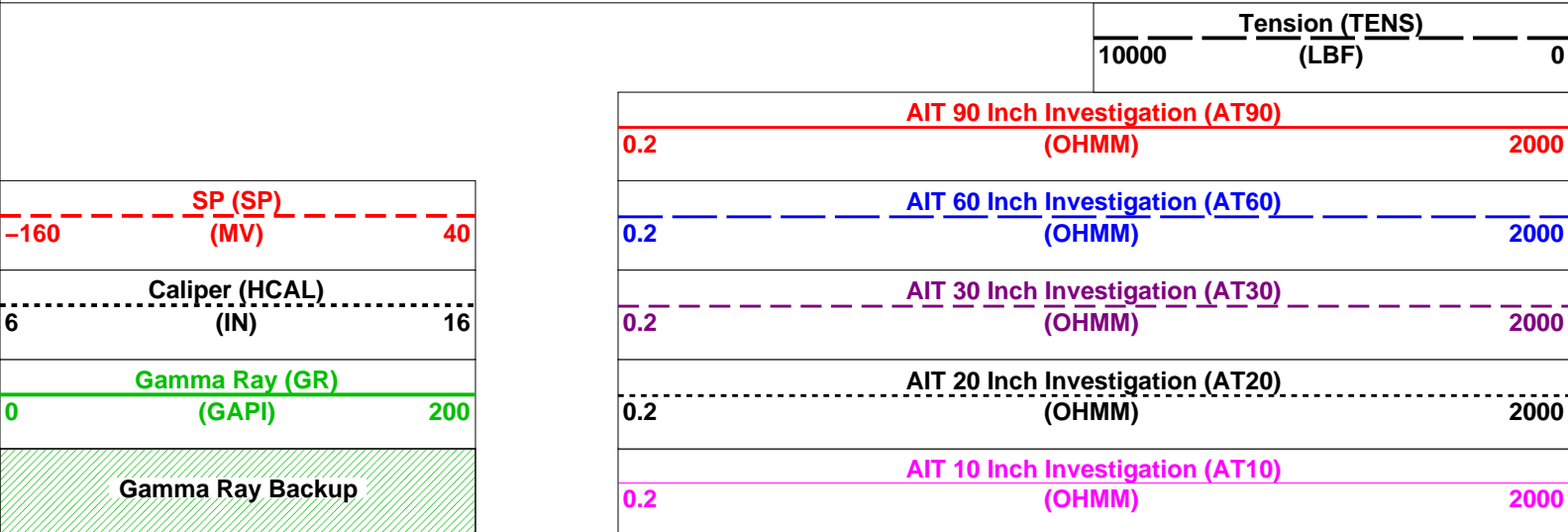
Input DLIS Files					
DEFAULT	MERGE_AIT_026L	FN:1	PRODUCER	10–Apr–2012 16:37	5709.5 FT 328.0 FT
Output DLIS Files					
DEFAULT	AIT_TLD_MCFL_CNL_032PUP	FN:28	PRODUCER	10–Apr–2012 16:52	5709.5 FT 328.5 FT
Integrated Hole/Cement Volume Summary					
Hole Volume = 2091.40 F3					
Cement Volume = 1227.50 F3 (assuming 5.50 IN casing O.D.)					
Computed from 5689.0 FT to 453.0 FT using data channel(s) HCAL					

AIT-M	18C0-147	HILTH-FTB	18C0-147
DTC-H	18C0-147		

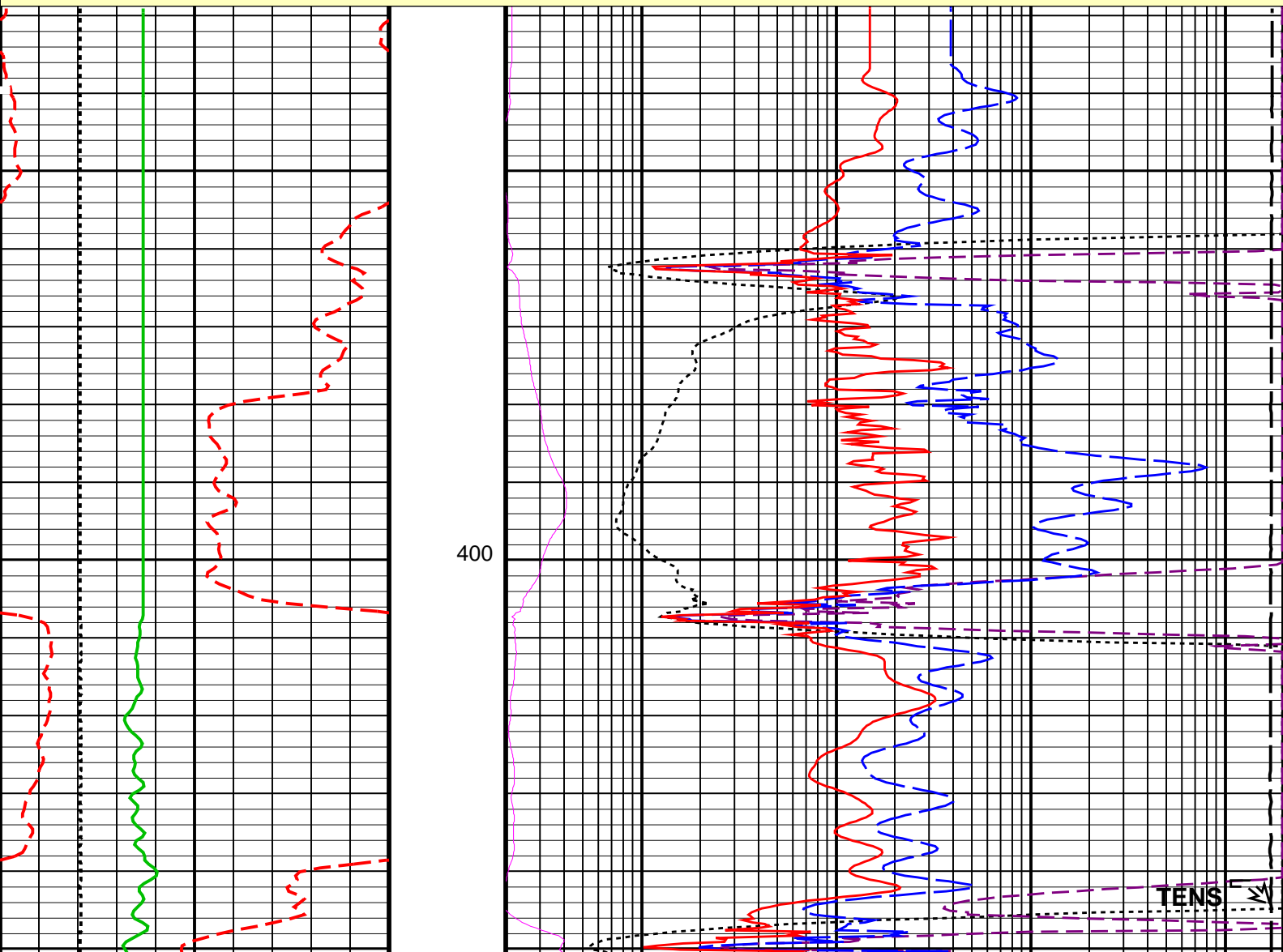
PIP SUMMARY

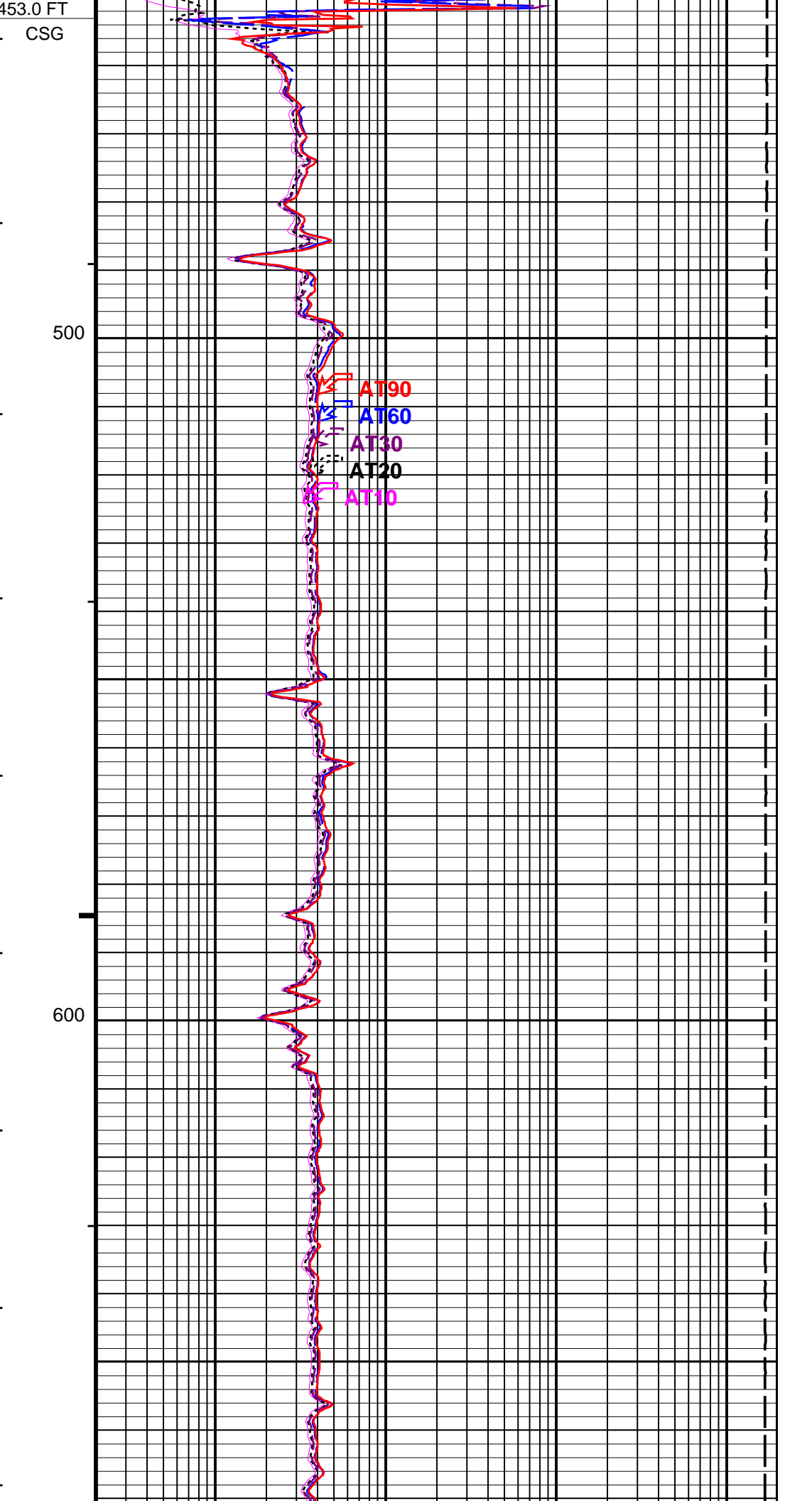
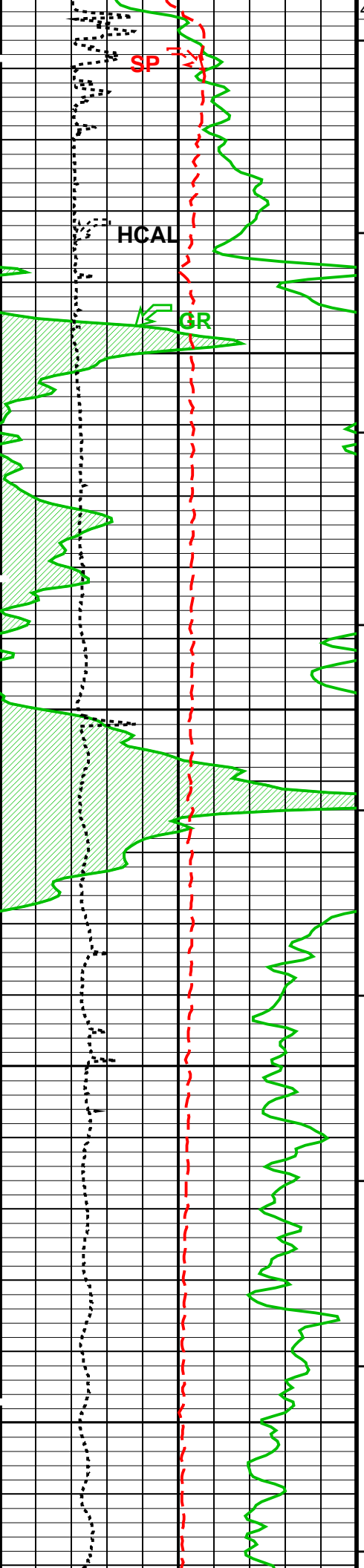
- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
 - └ Integrated Cement Volume Minor Pip Every 10 F3
 - └ Integrated Cement Volume Major Pip Every 100 F3

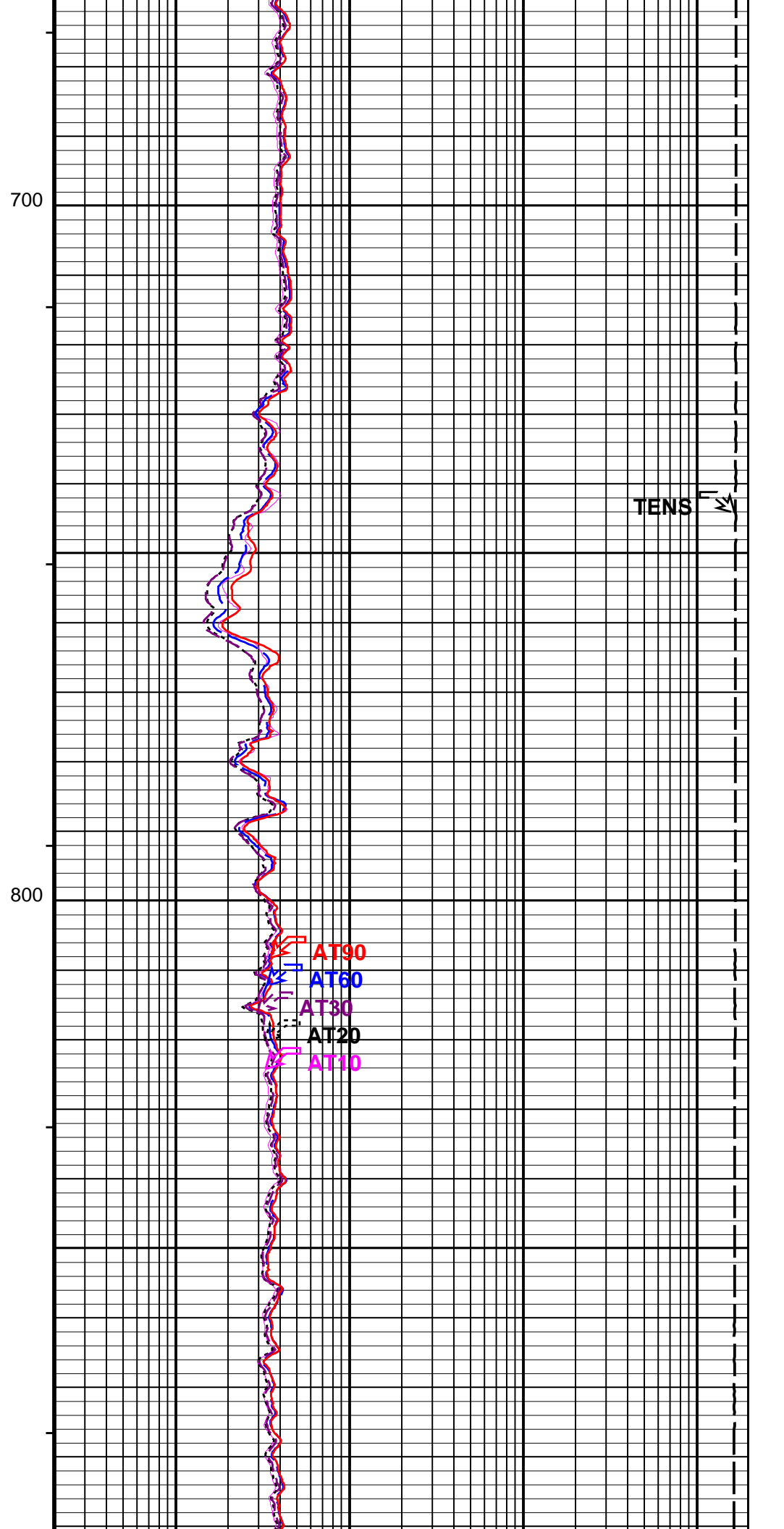
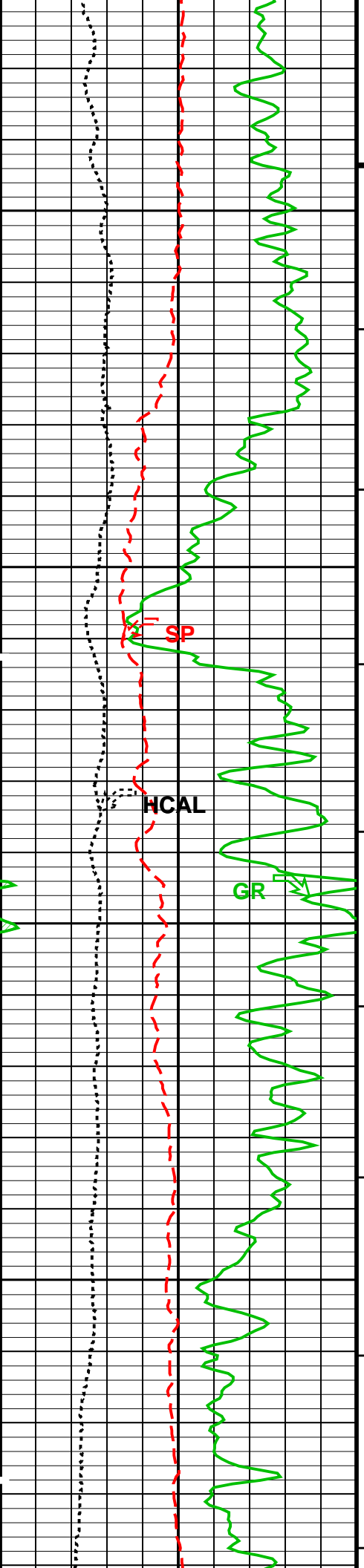
Time Mark Every 60 S

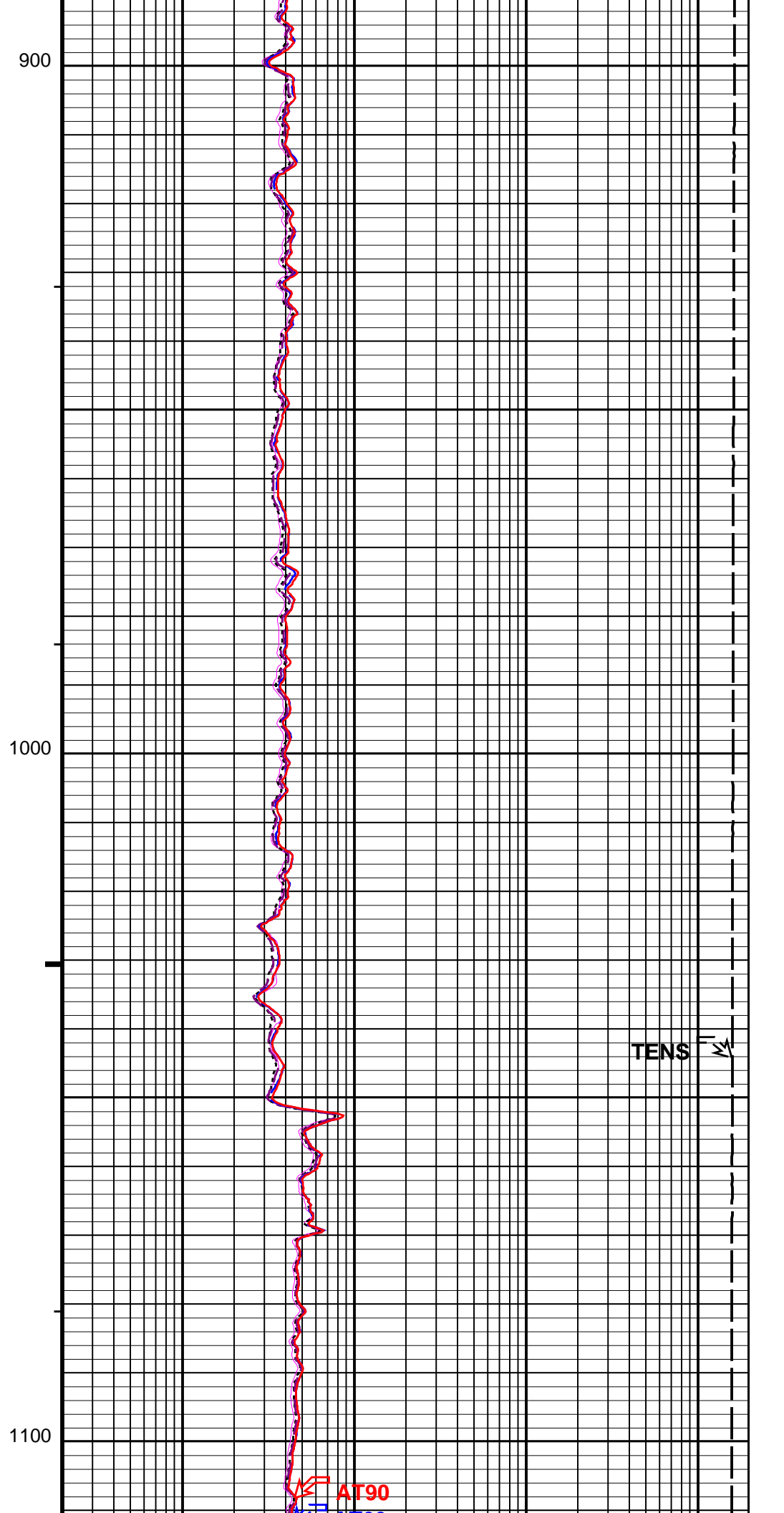
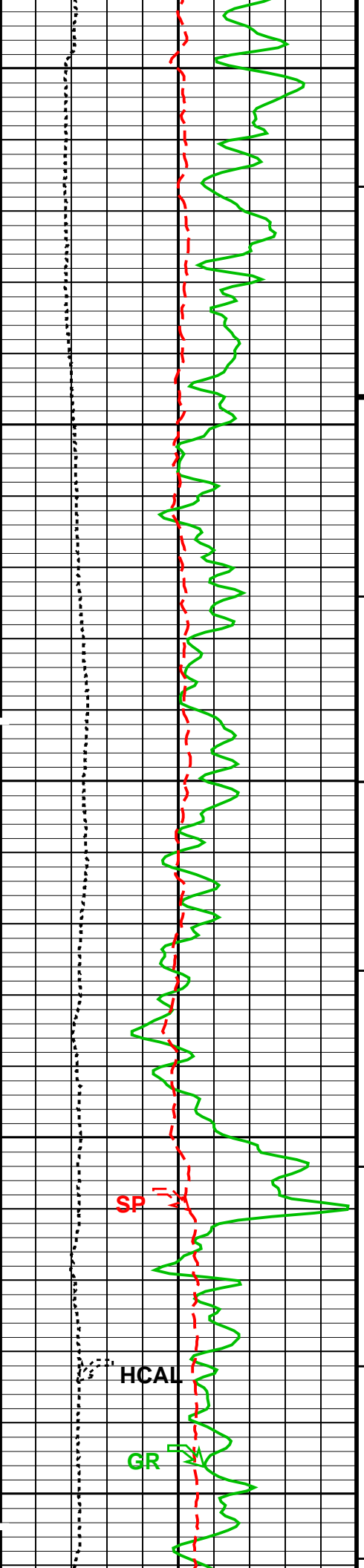


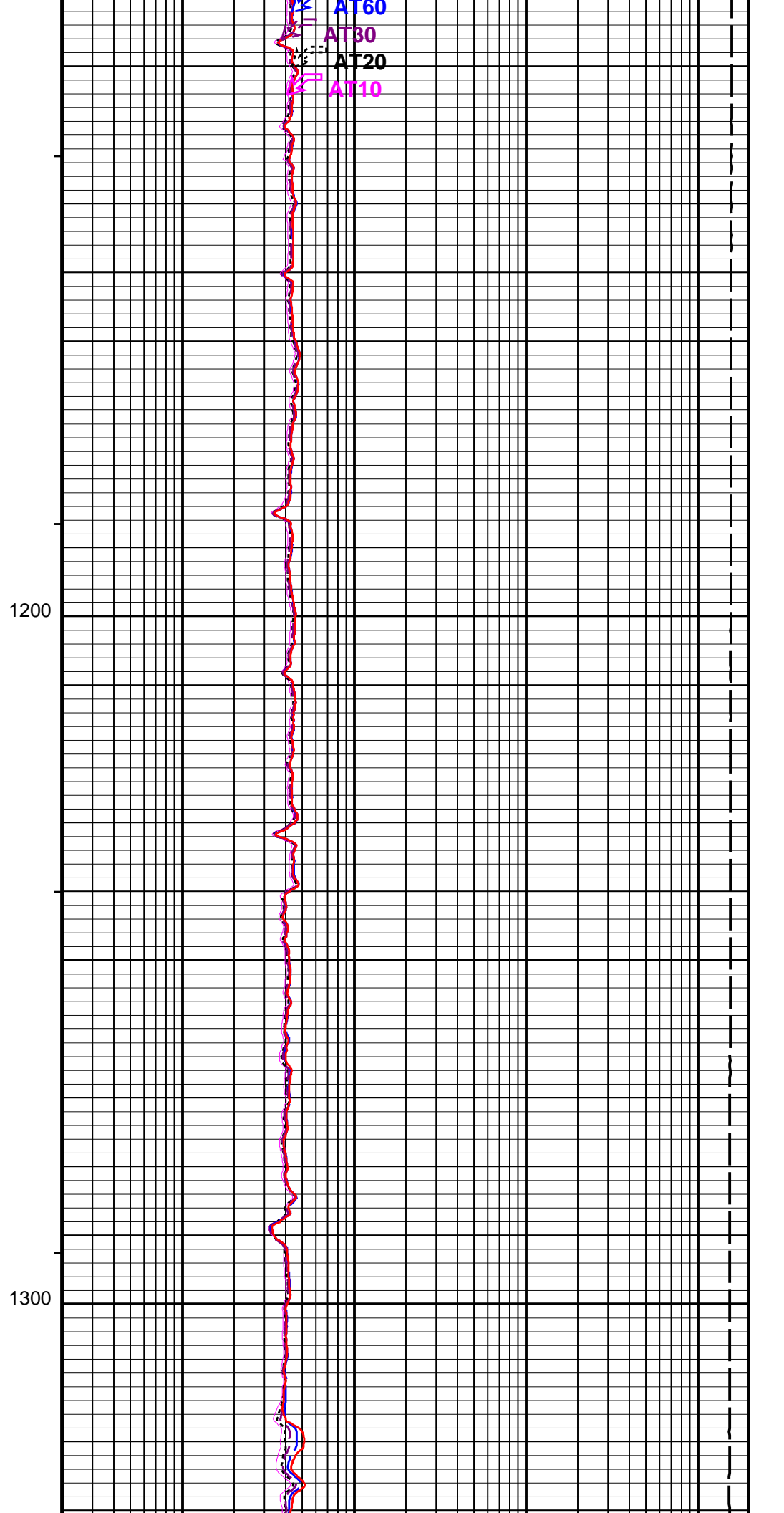
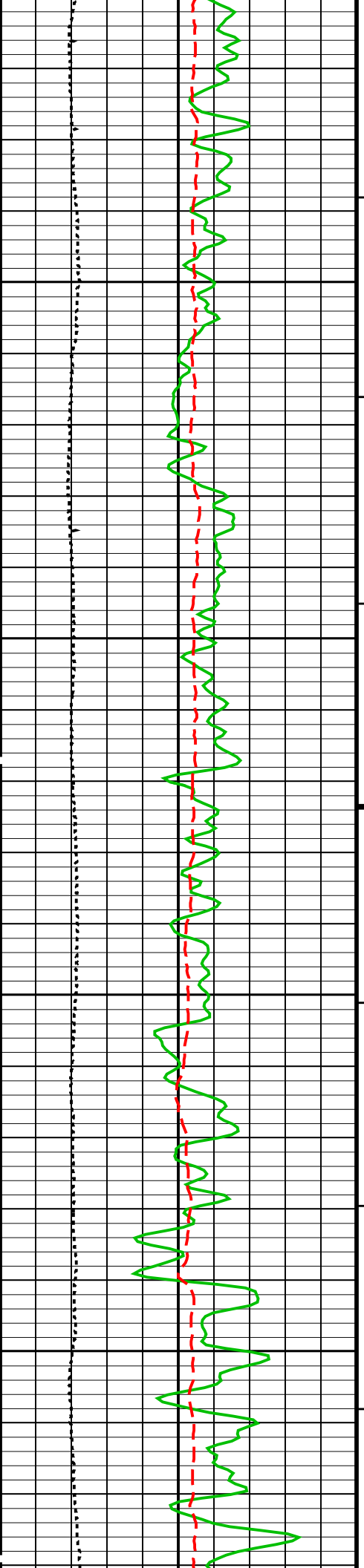
MAIN PASS: *** PLATFORM EXPRESS – ARRAY INDUCTION ***

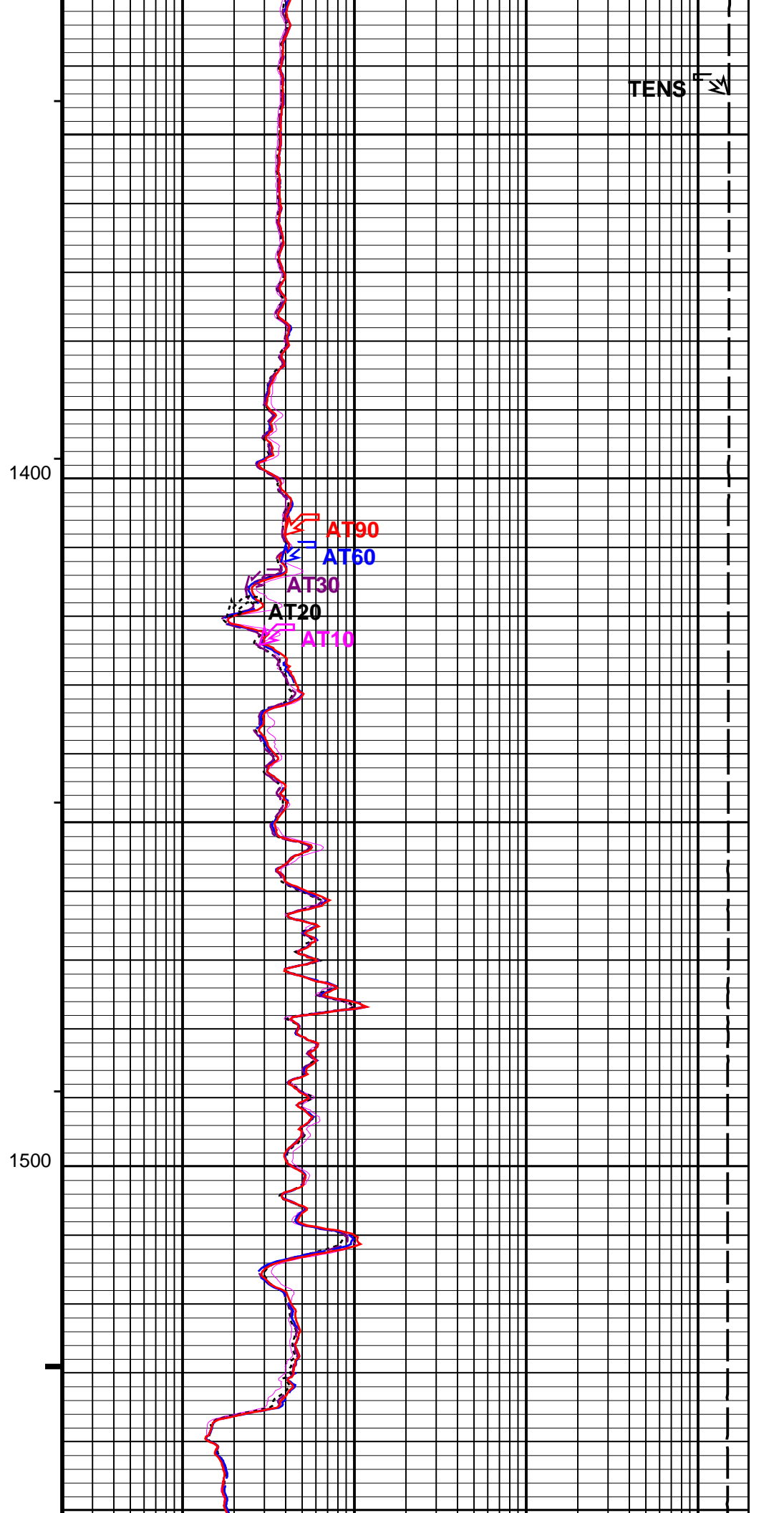
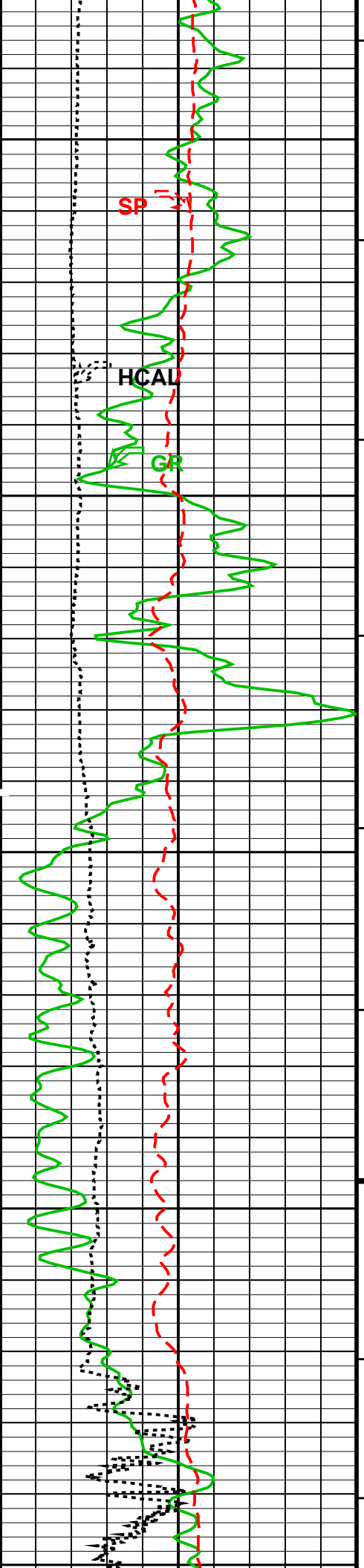


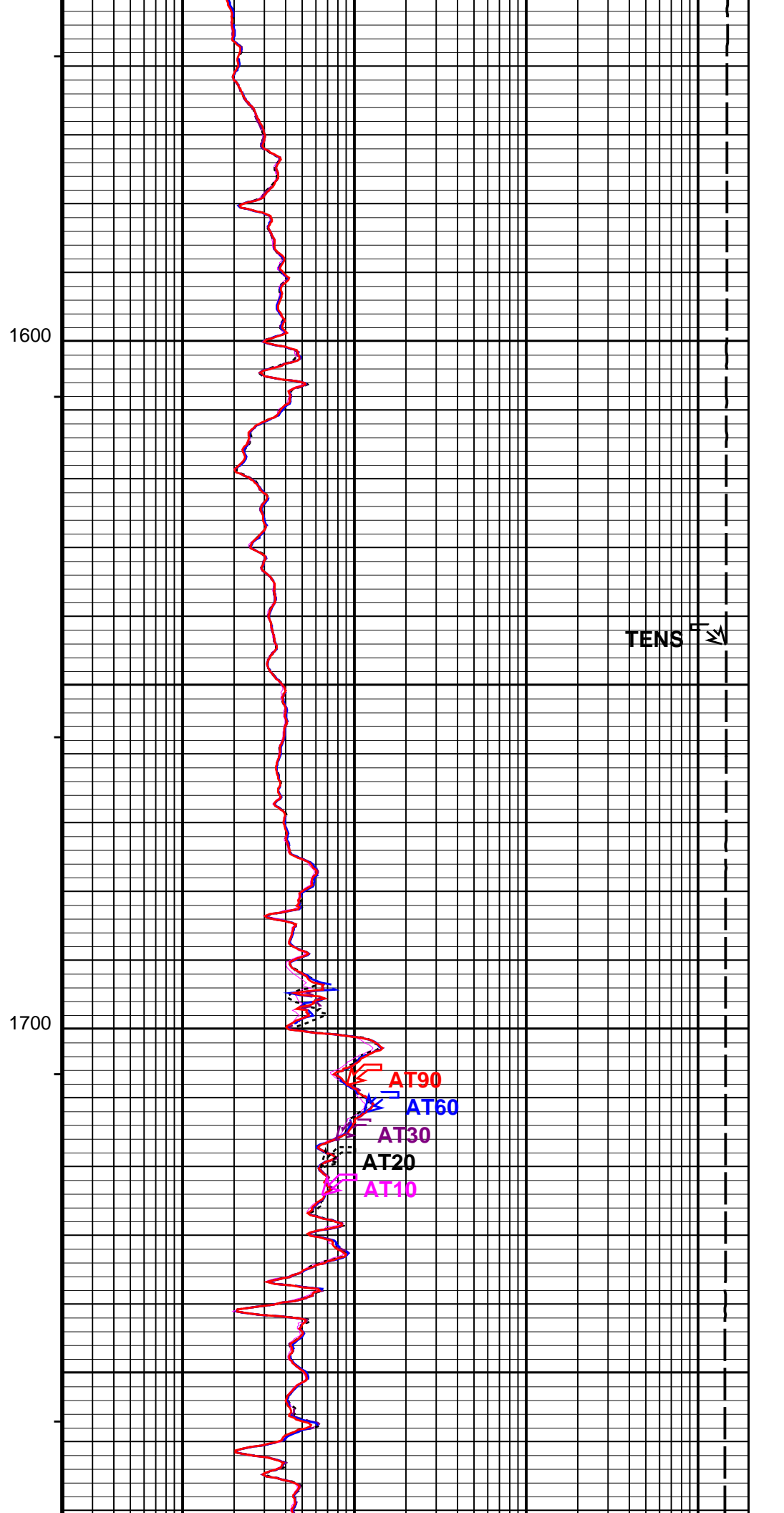
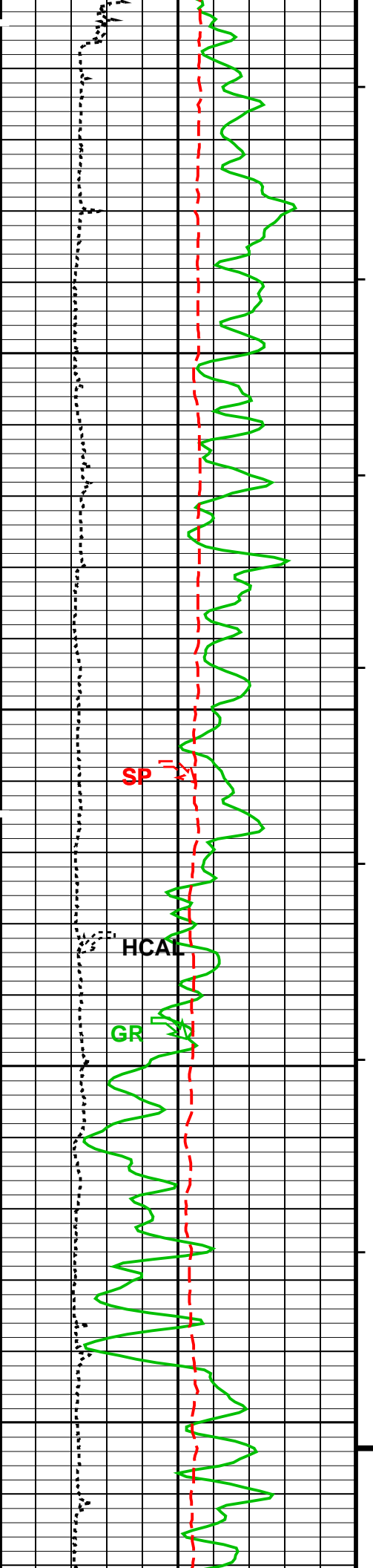


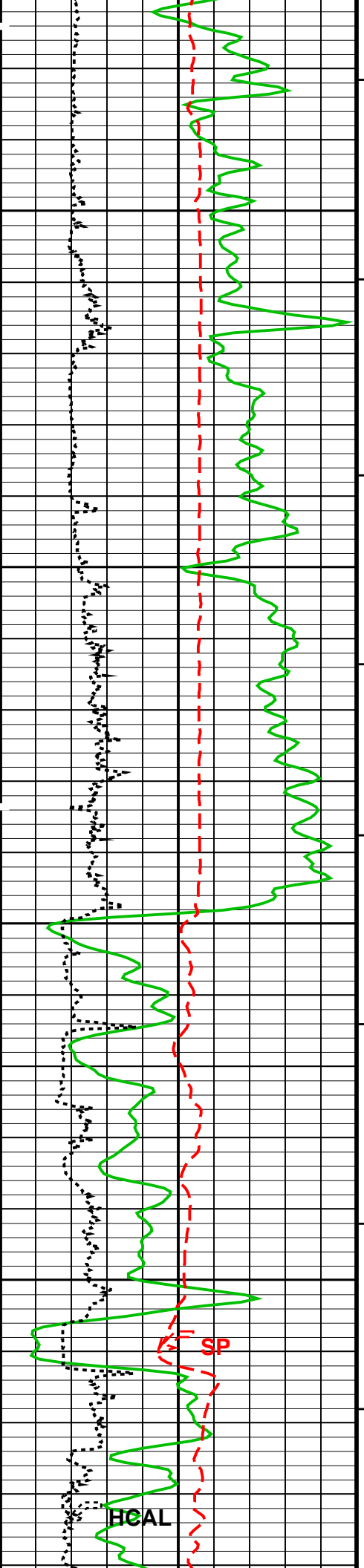






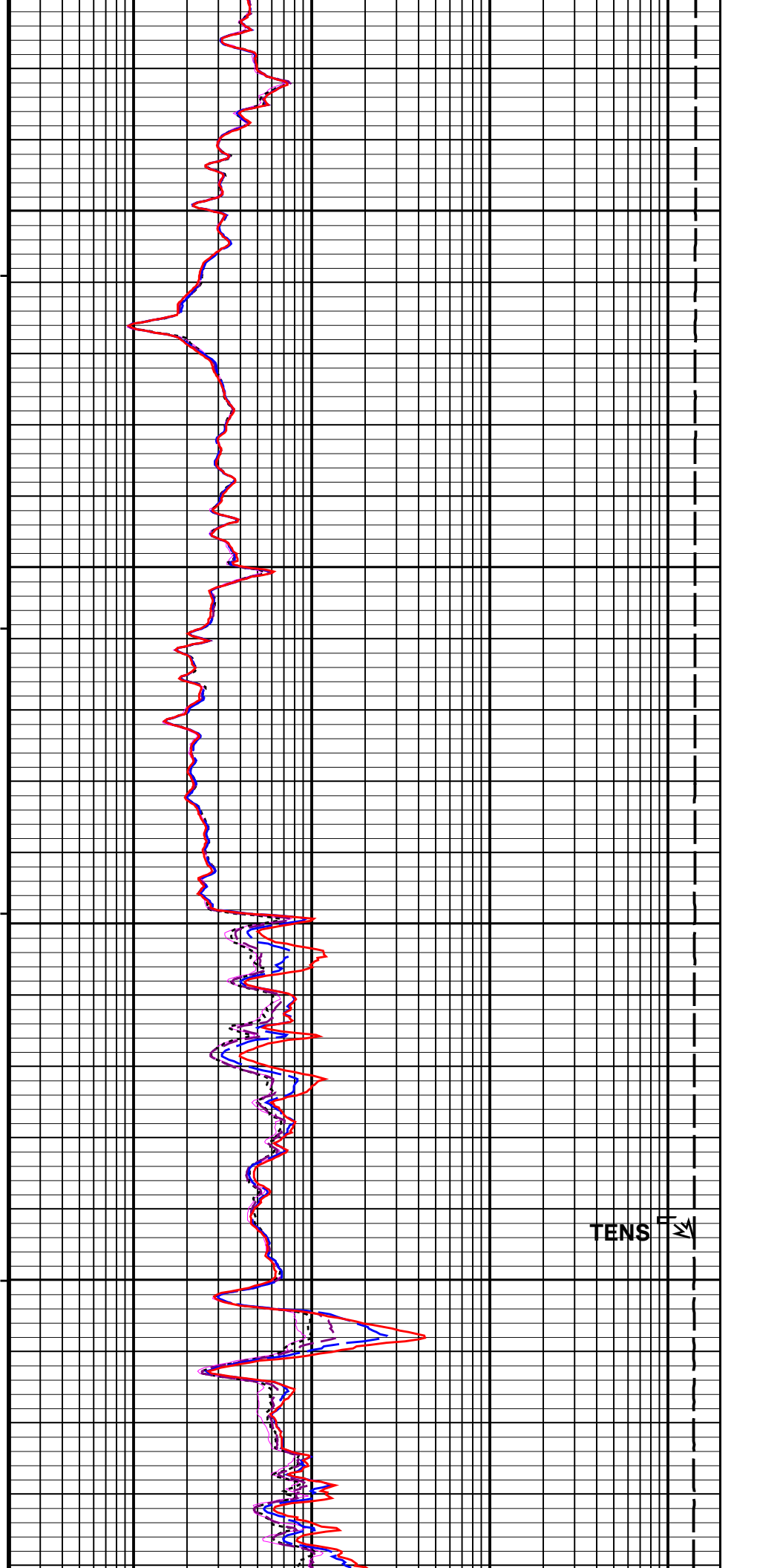




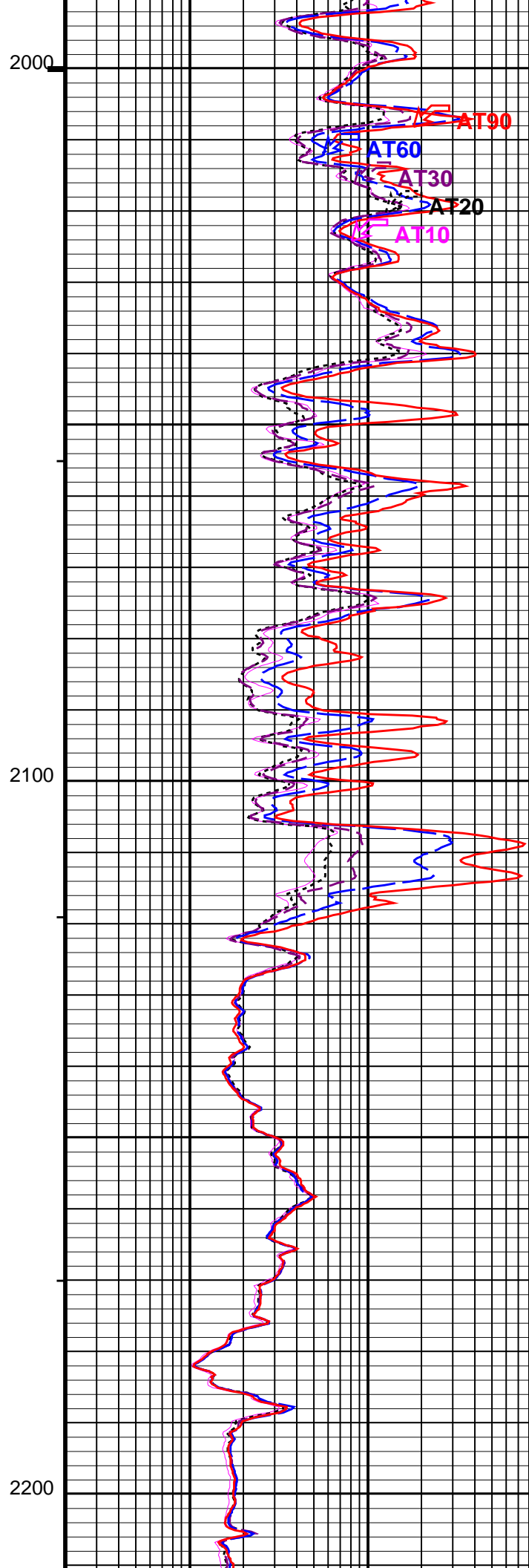
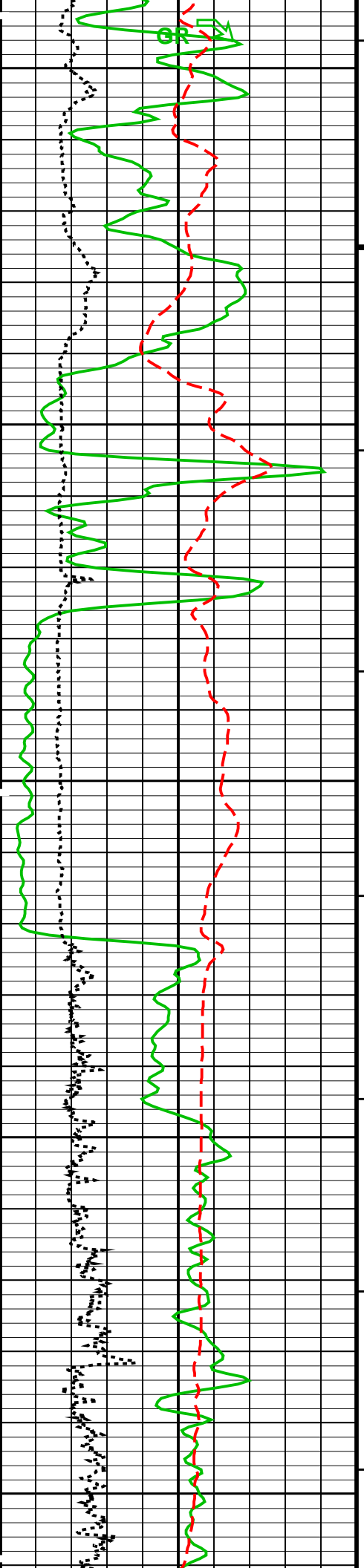


1800

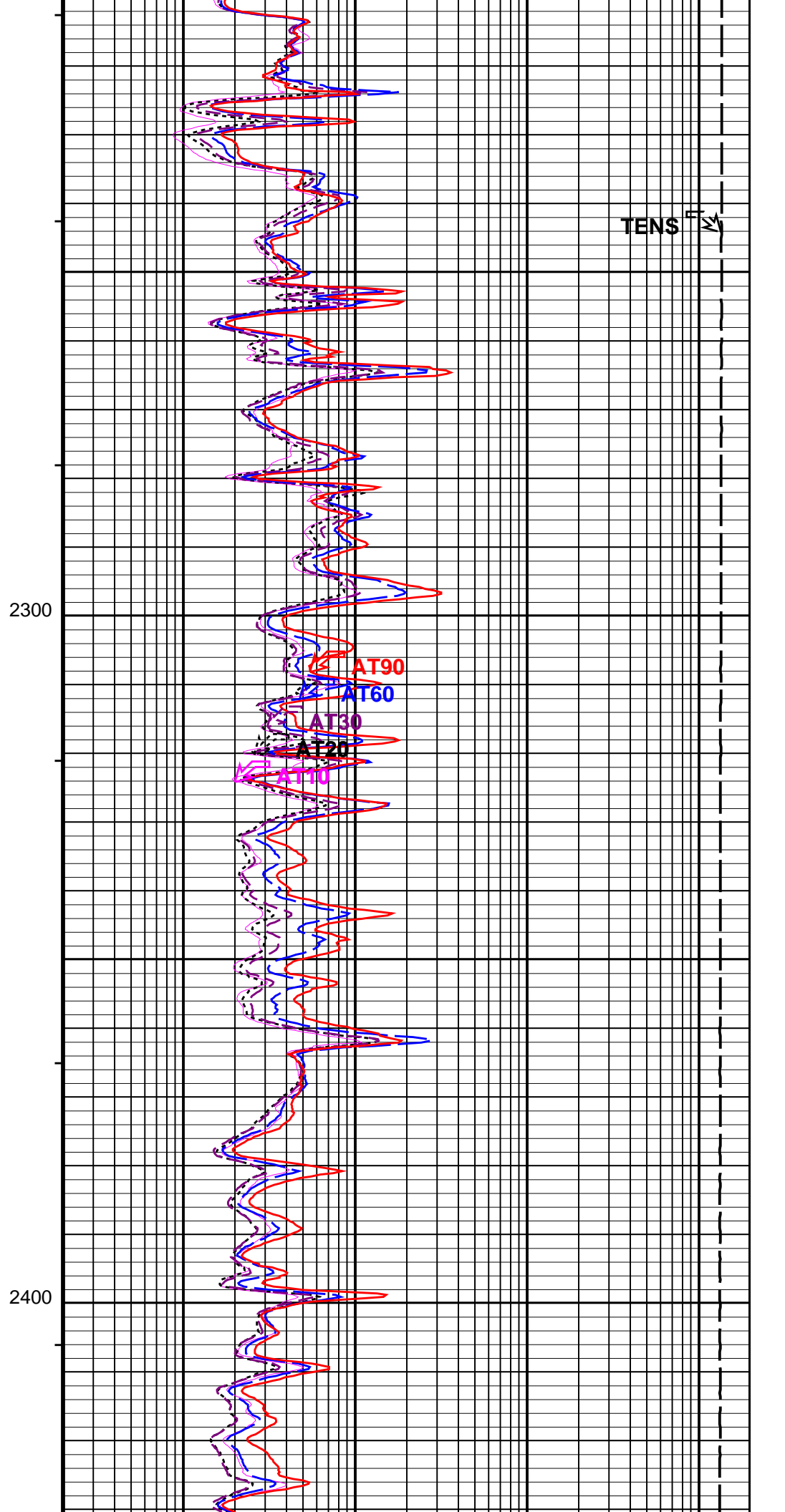
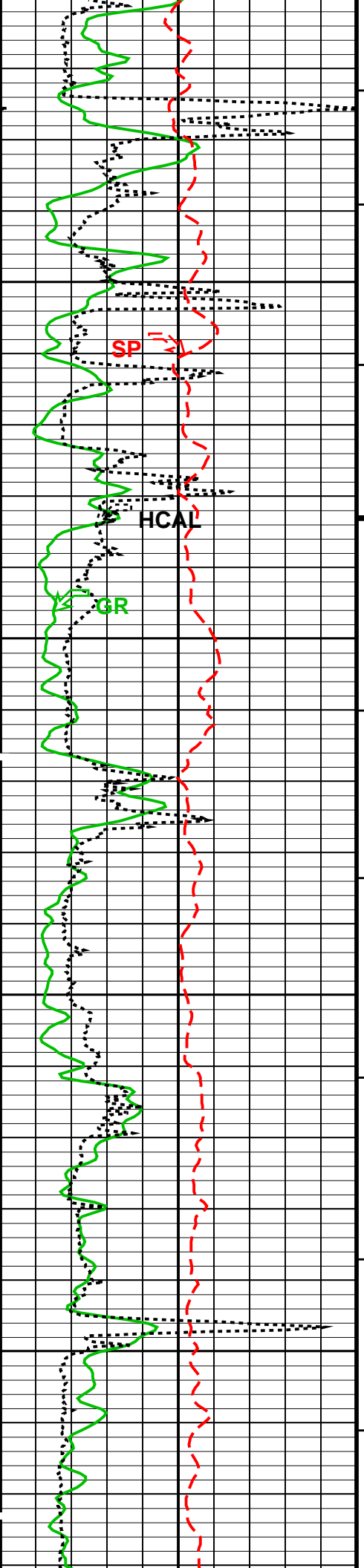
1900

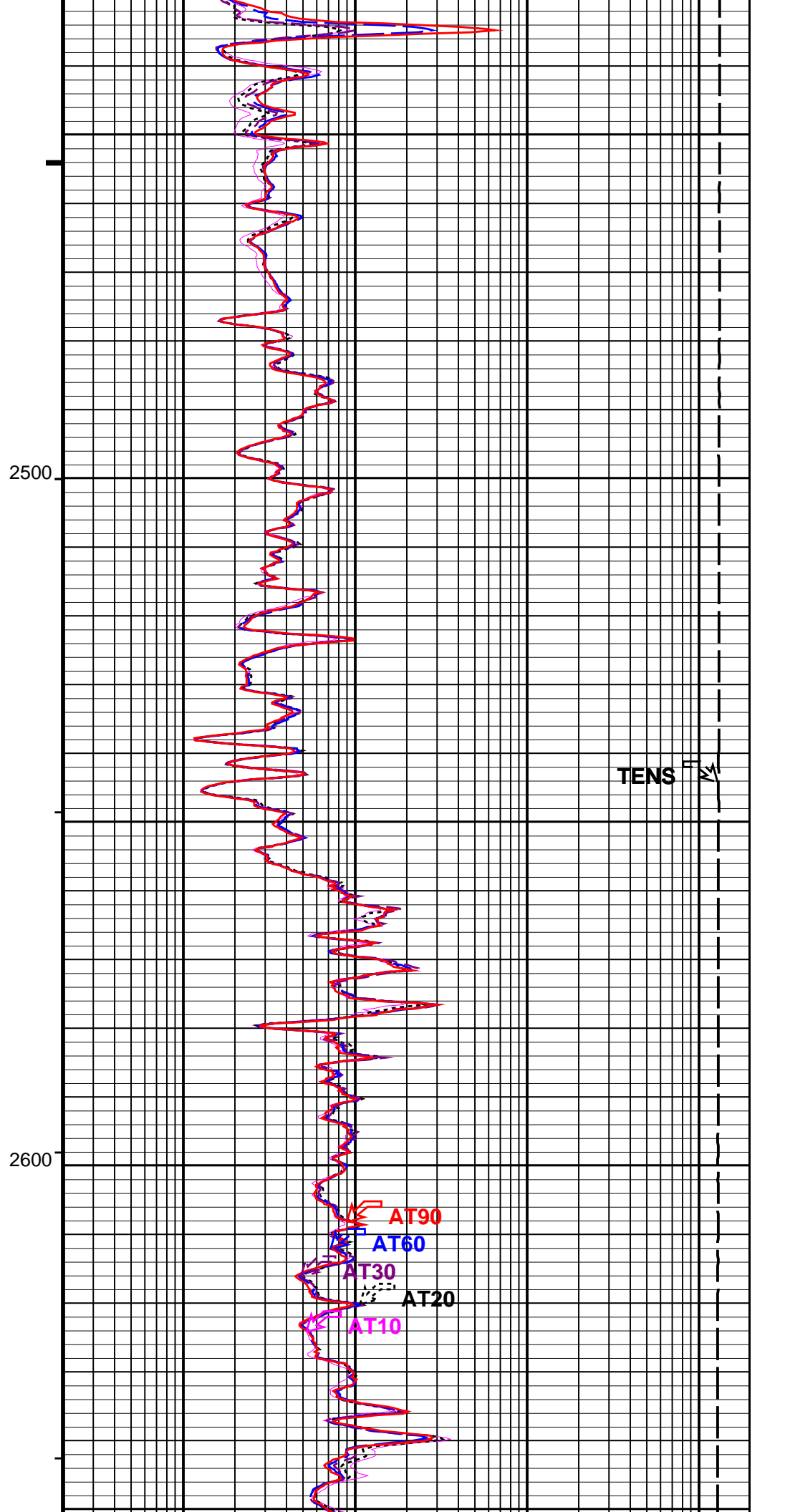
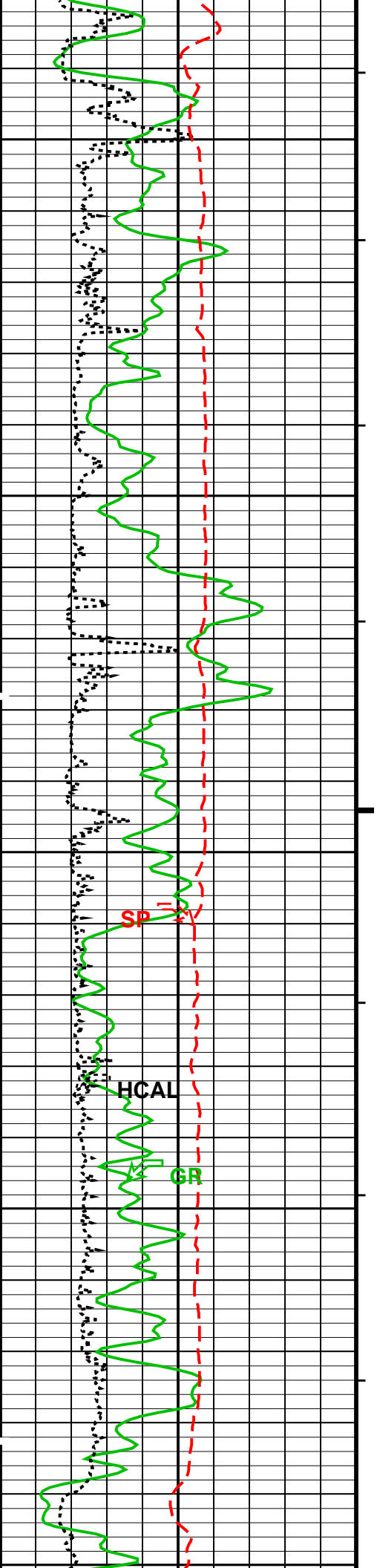


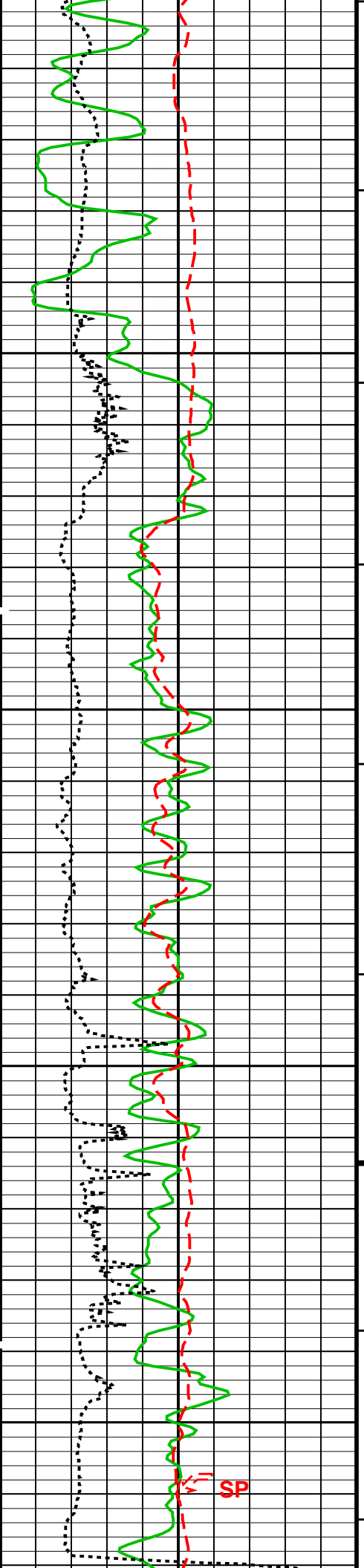
TENS



2200

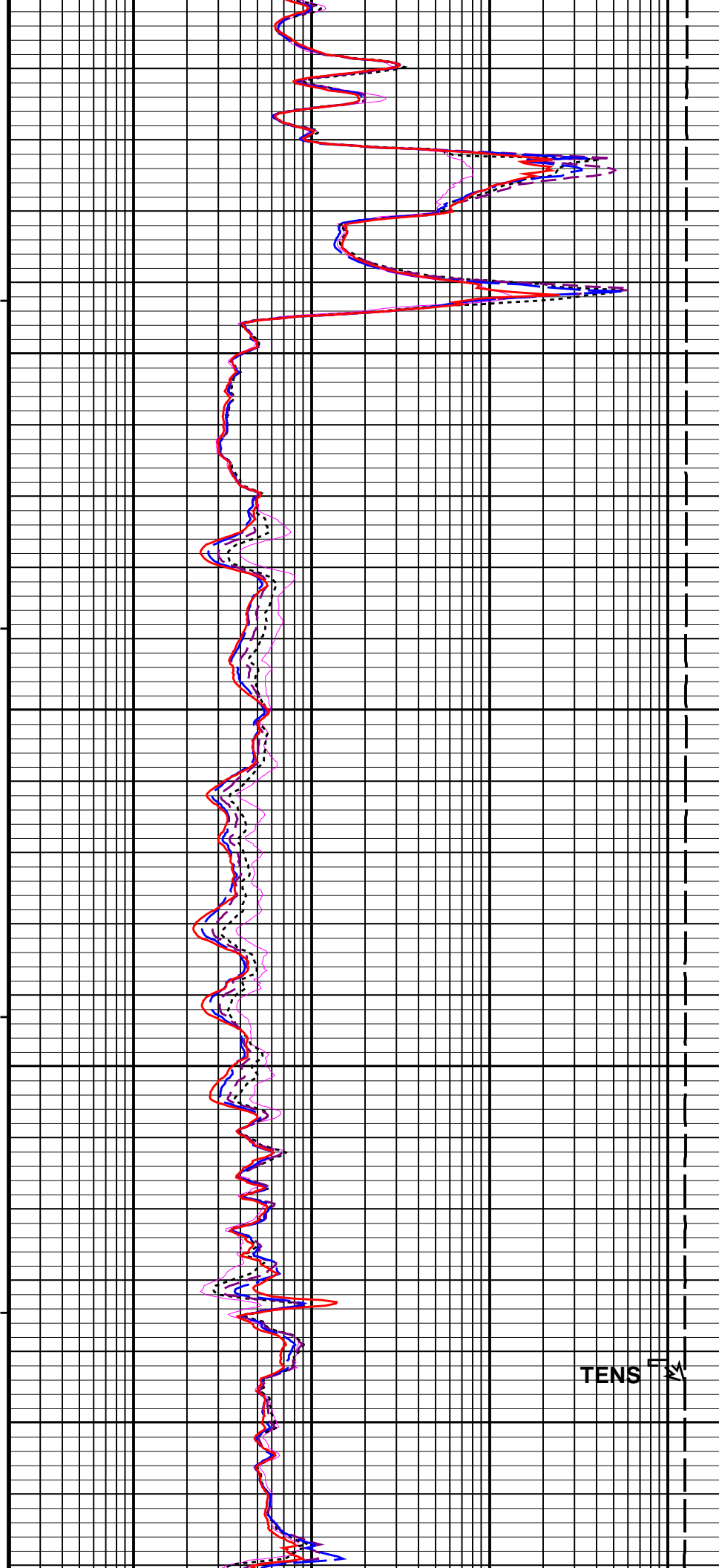




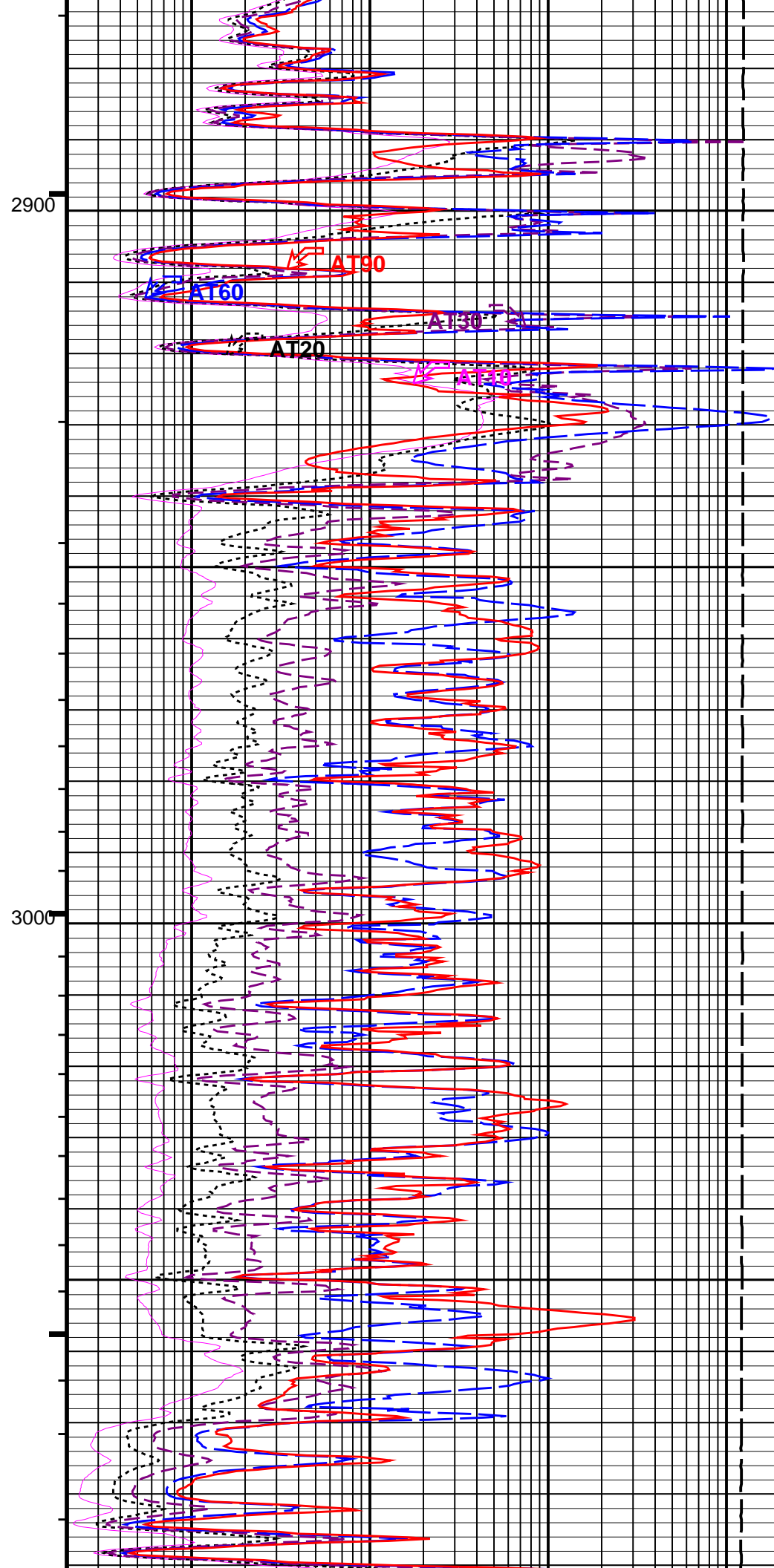
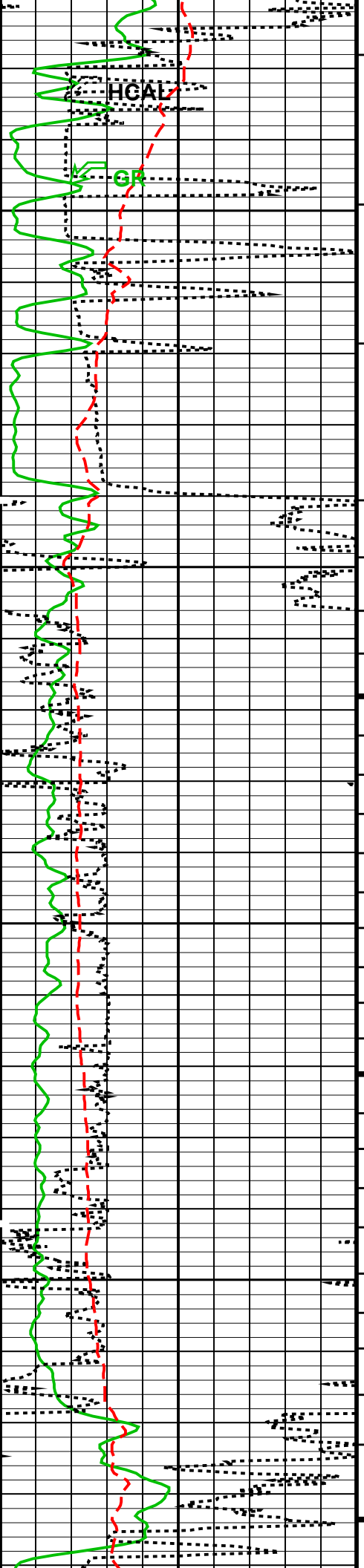


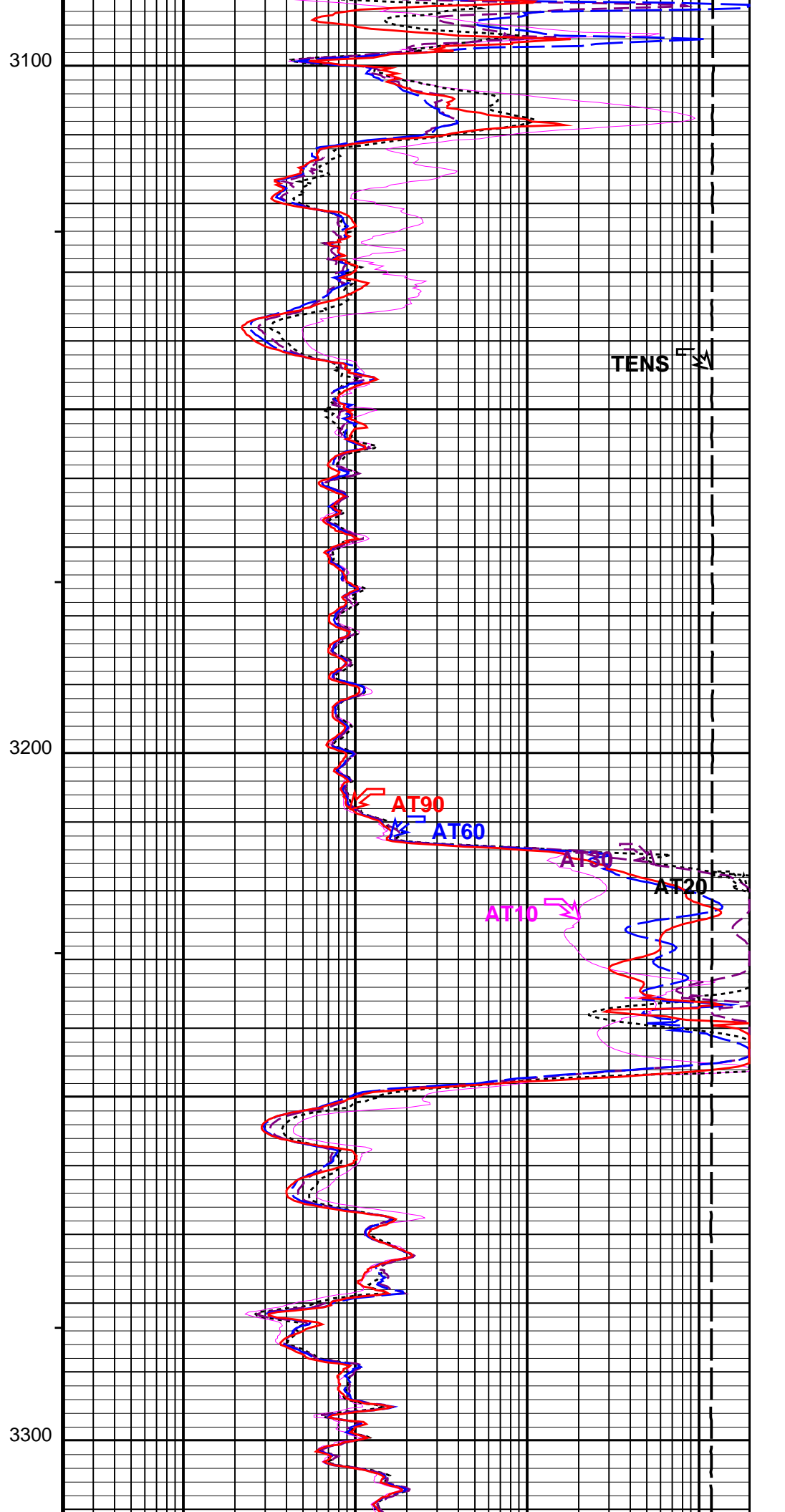
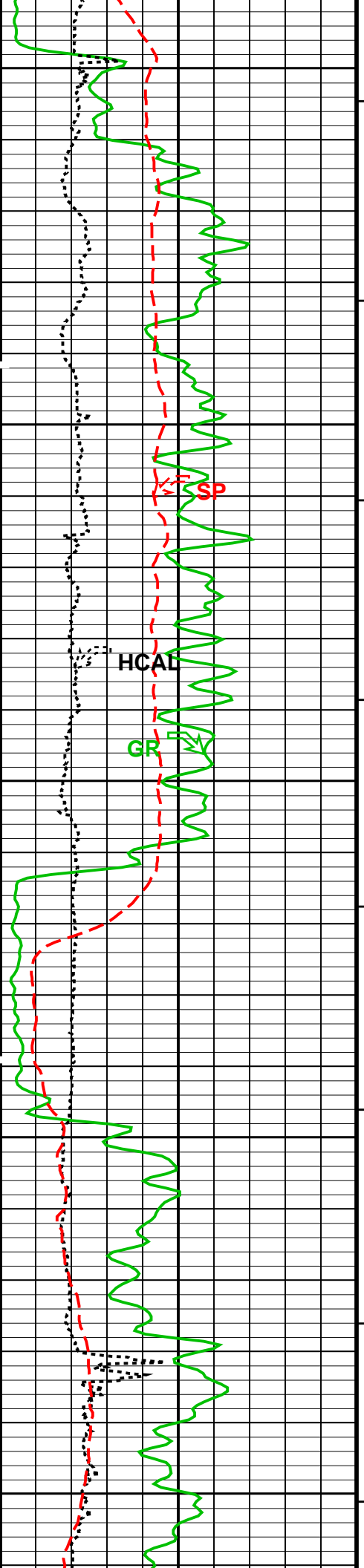
2700

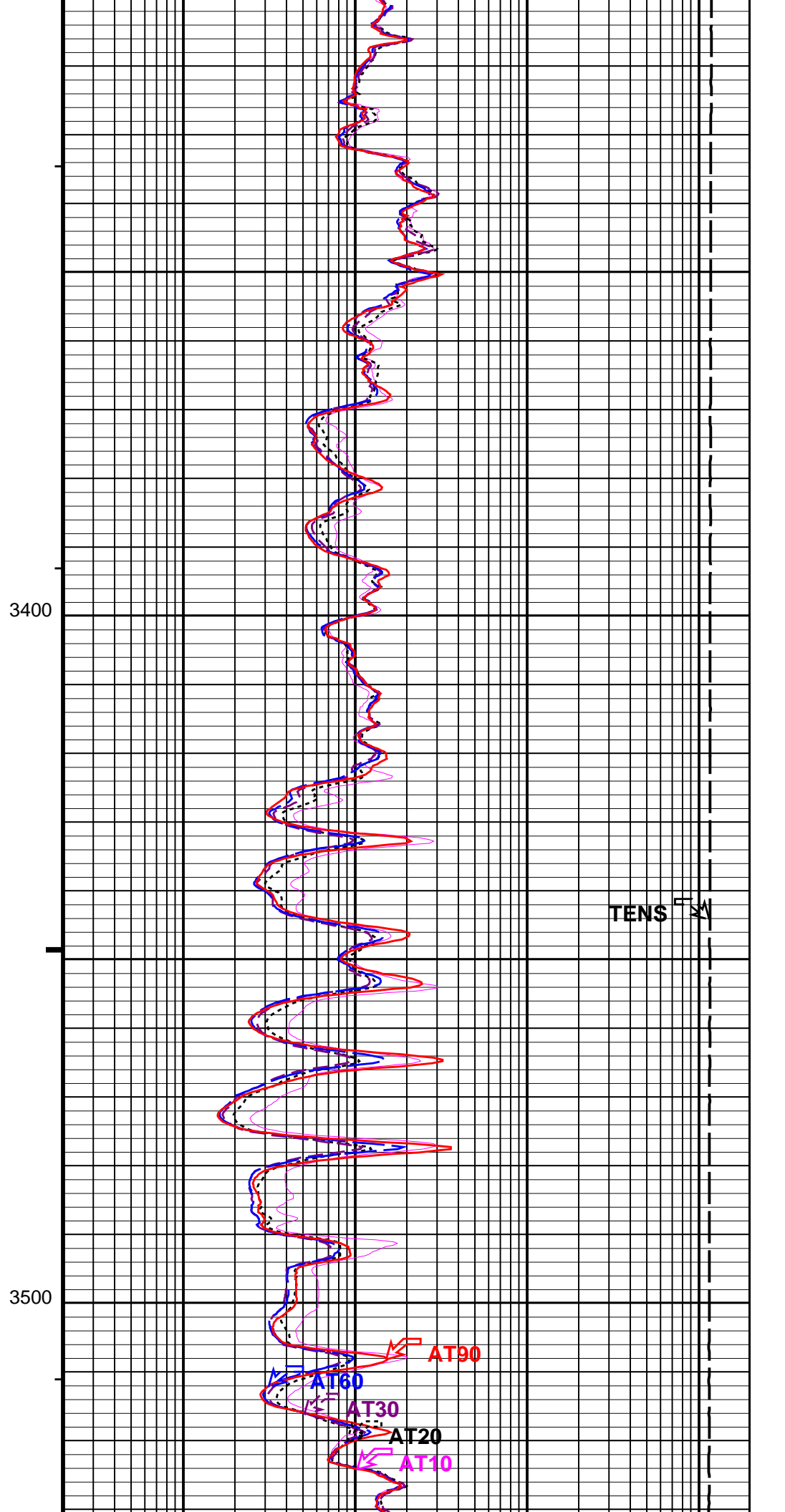
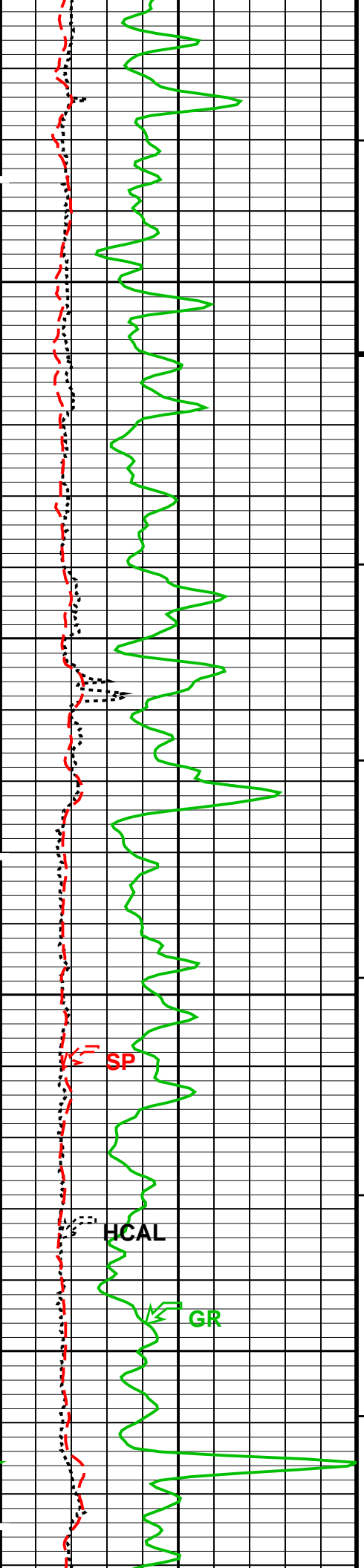
2800

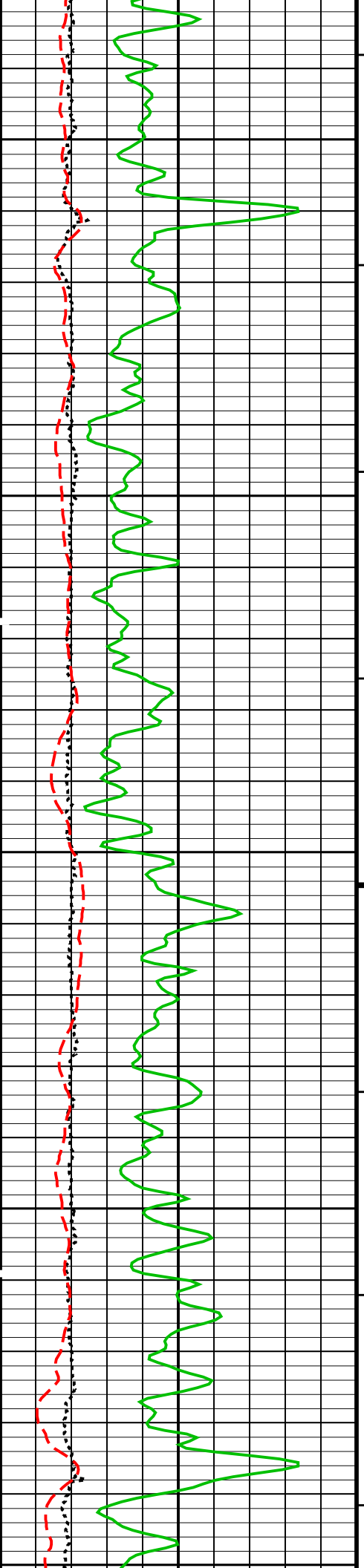


TENS



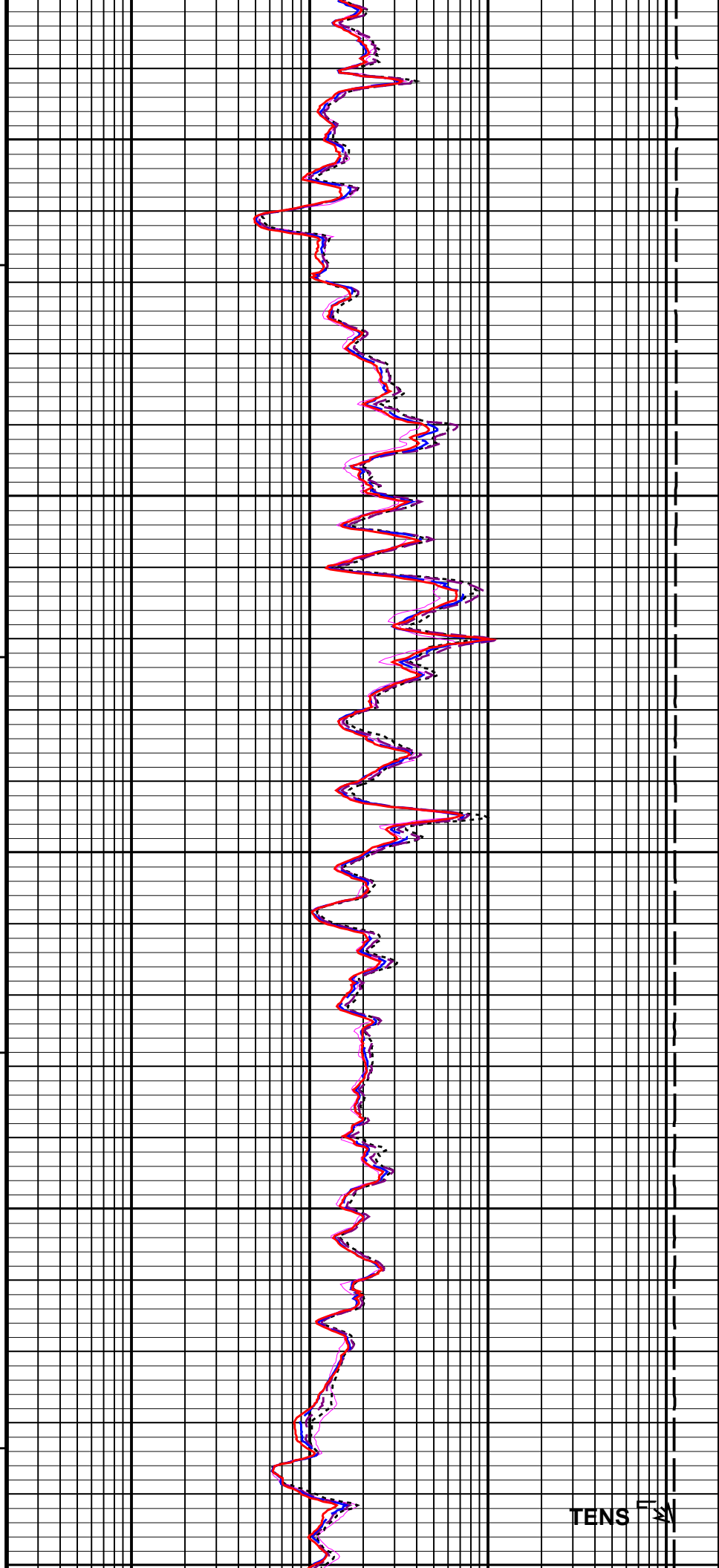




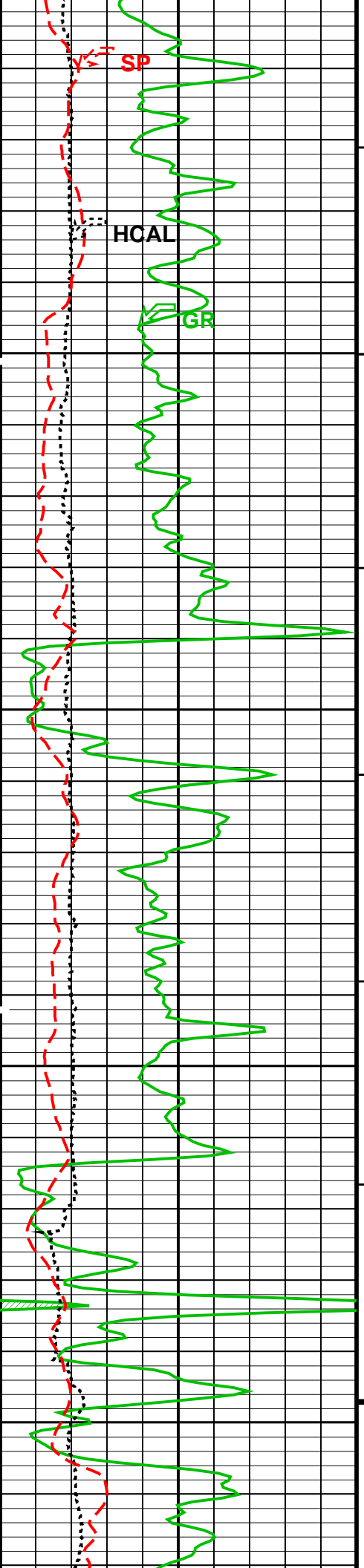


3600

3700

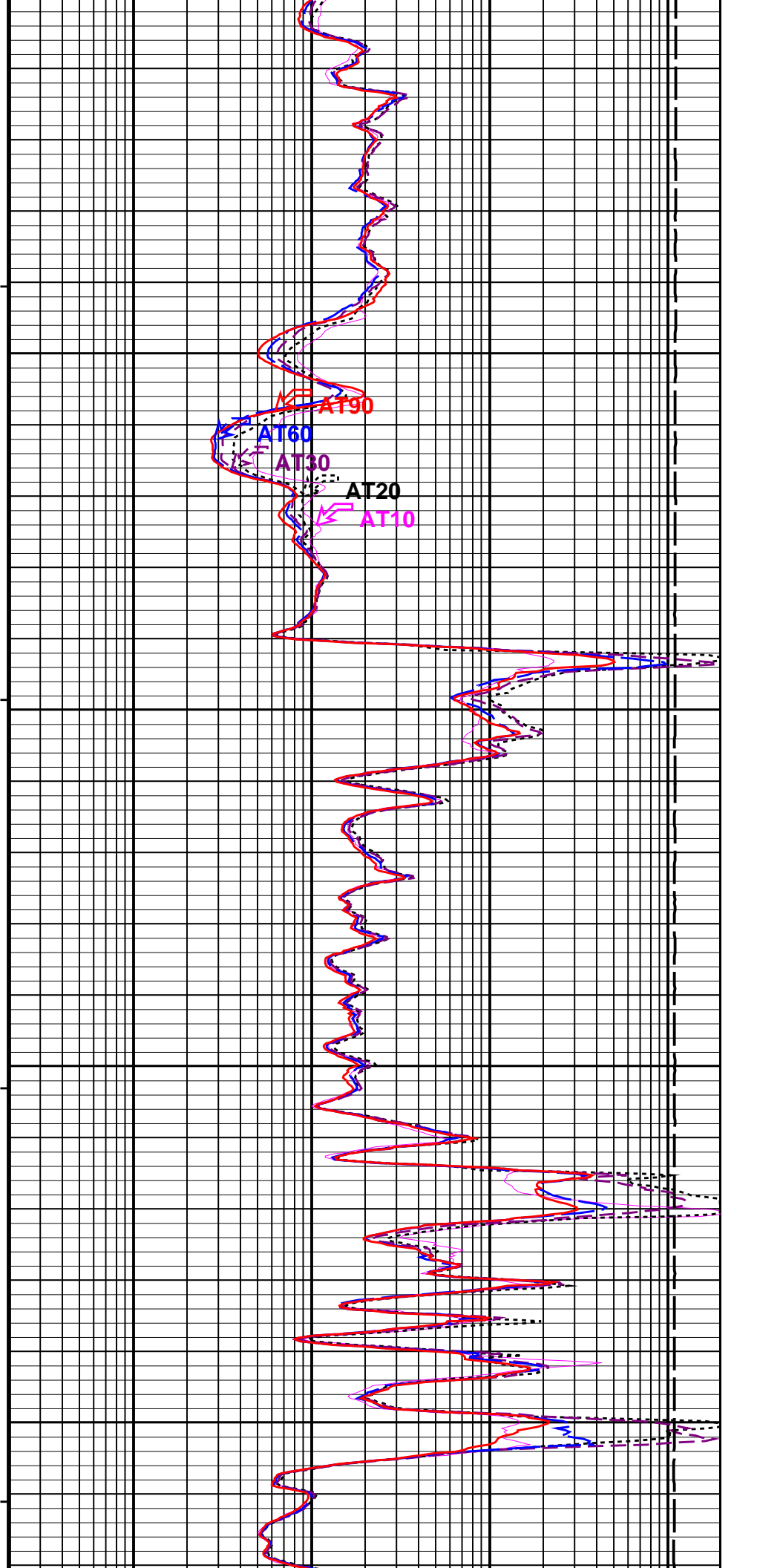


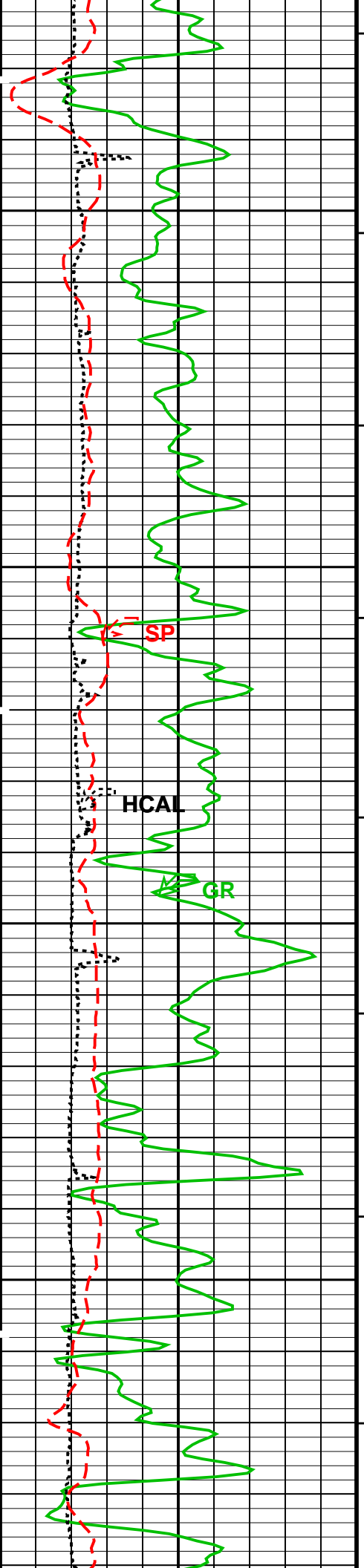
TENS F21



3800

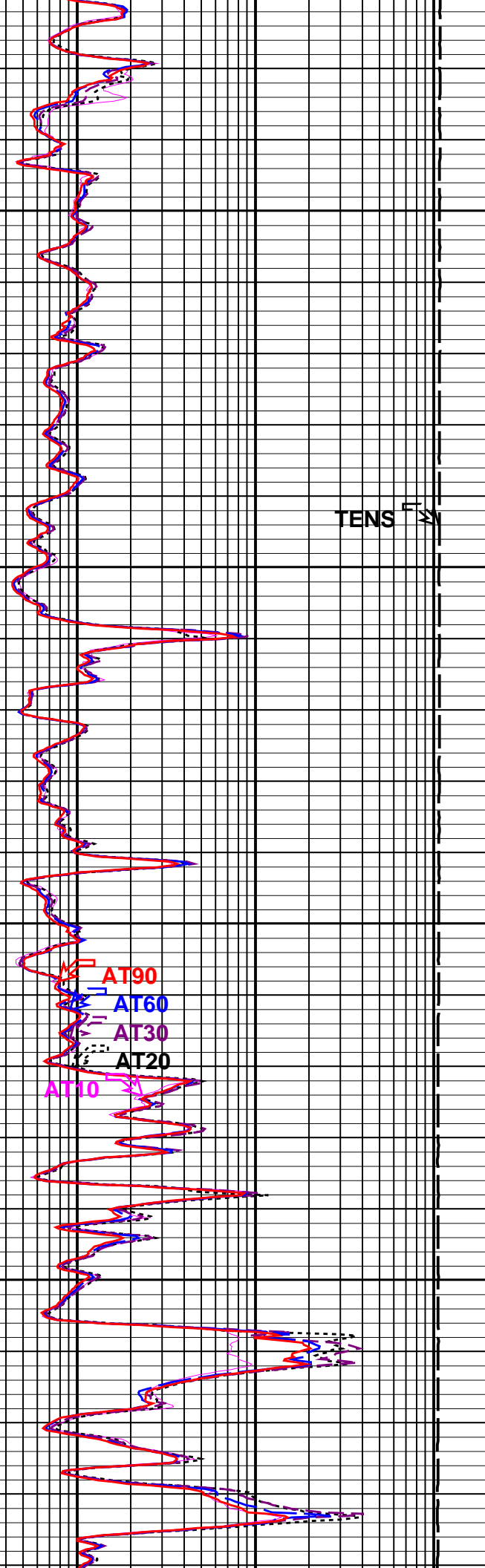
3900





4000

4100



TENS

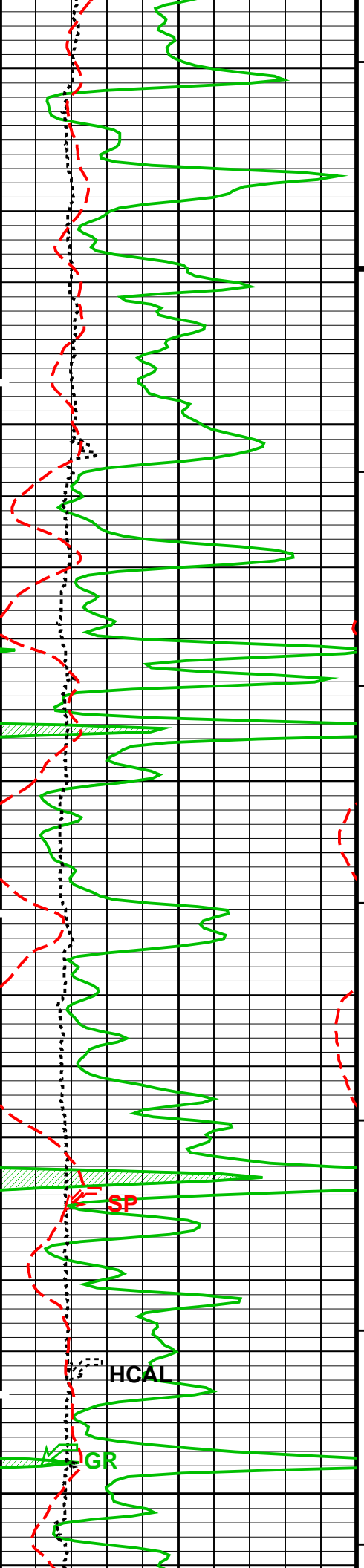
AT90

AT60

AT30

AT20

AT10



4200

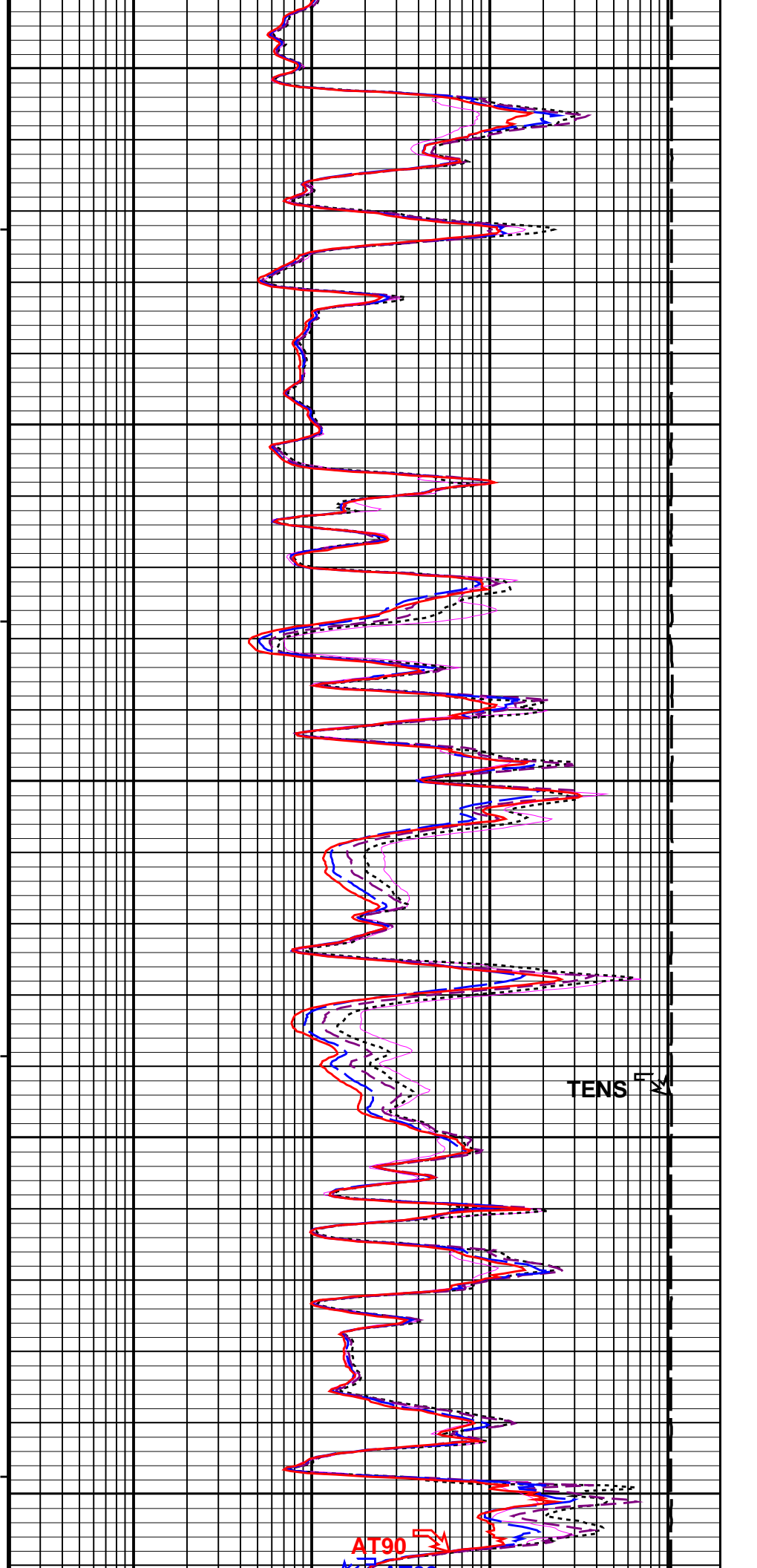
4300

4400

HCAL

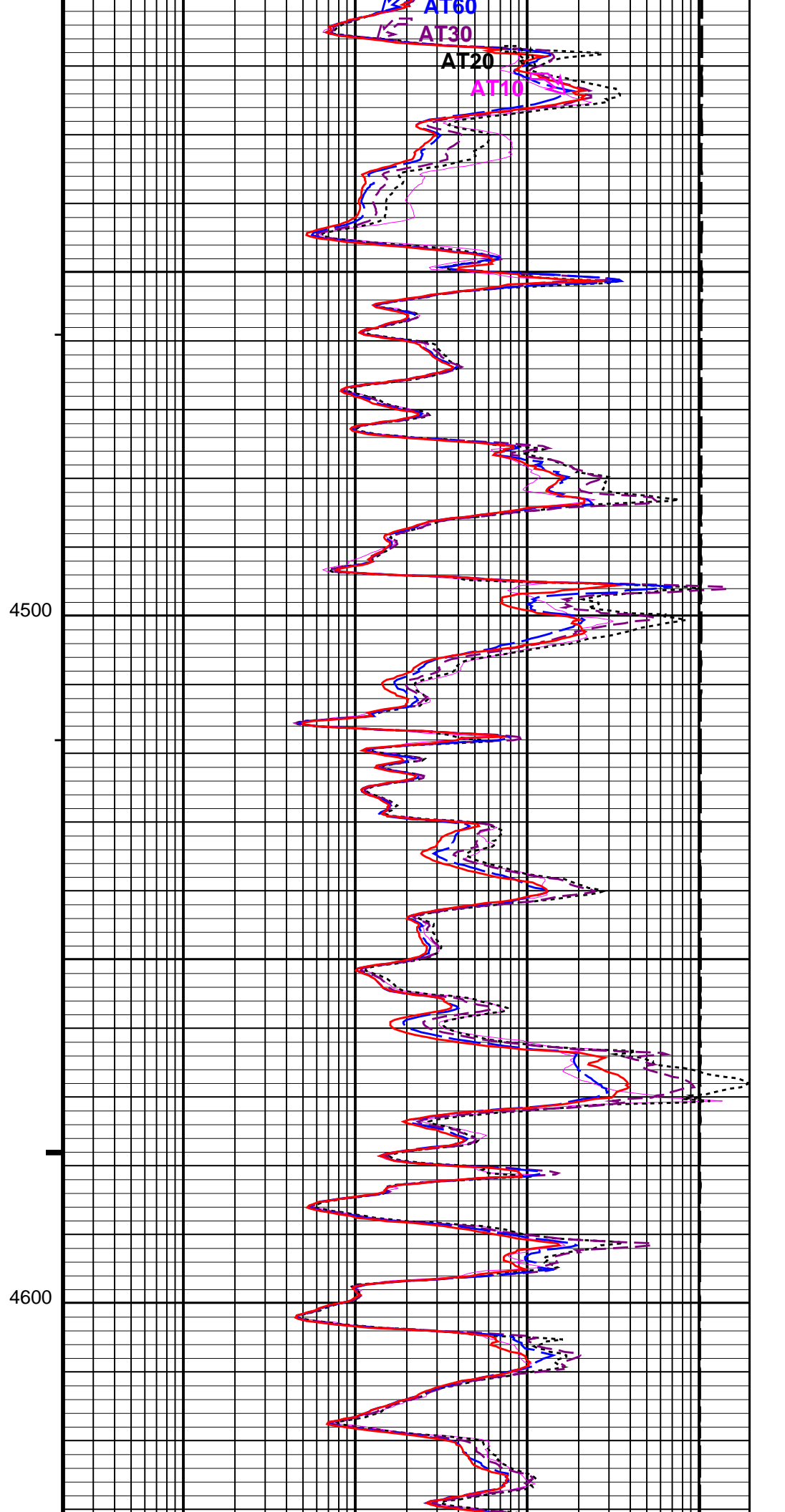
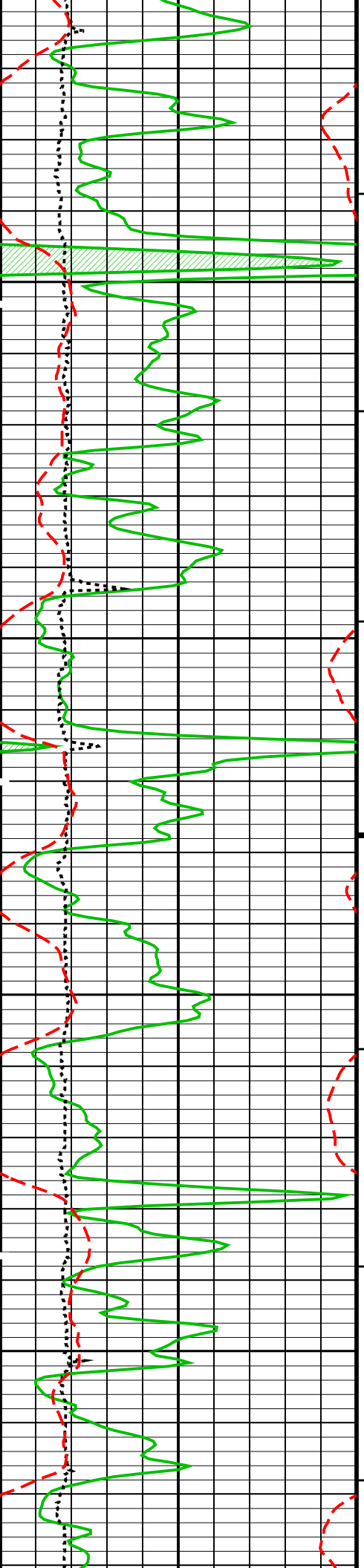
GR

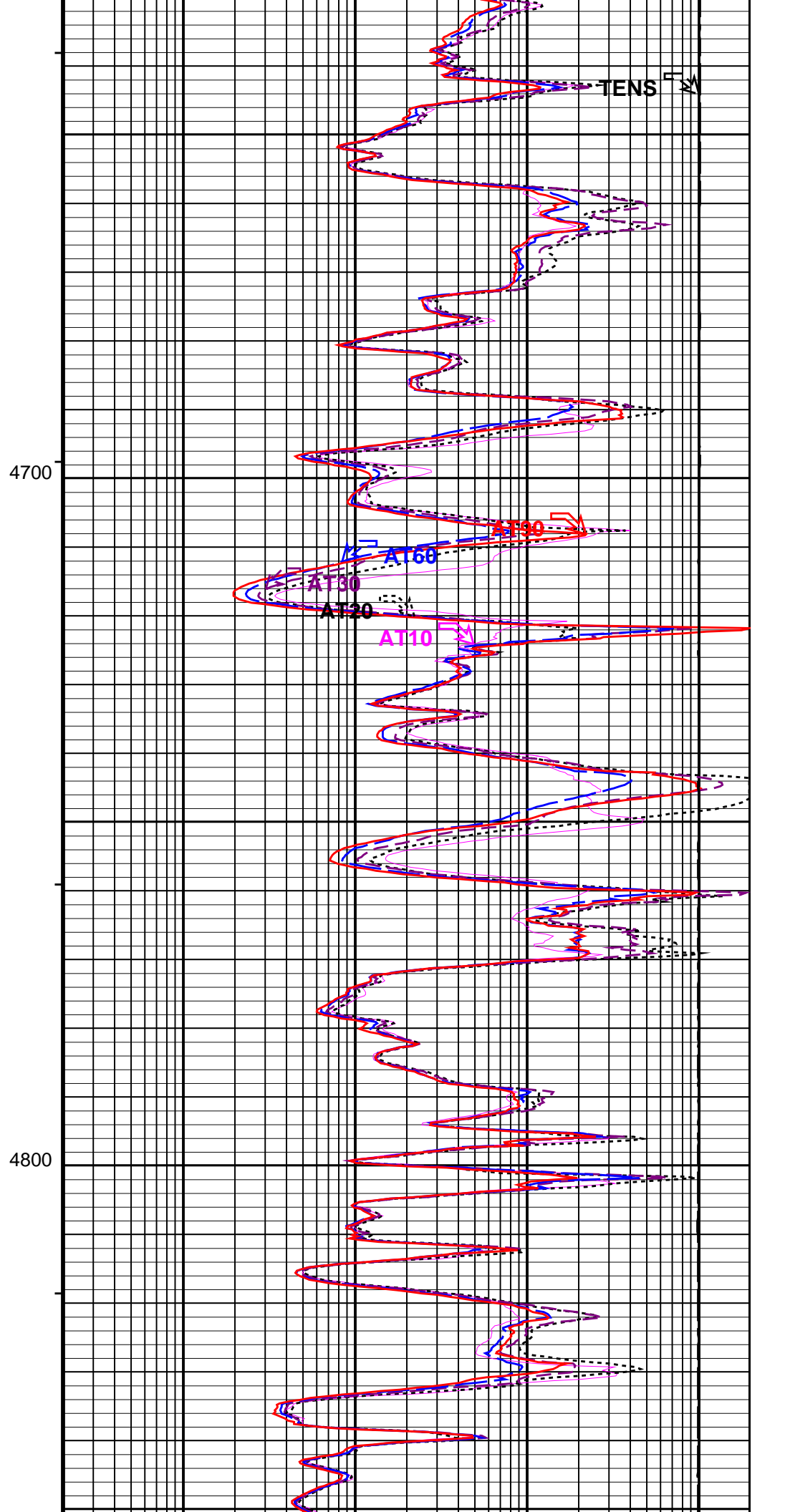
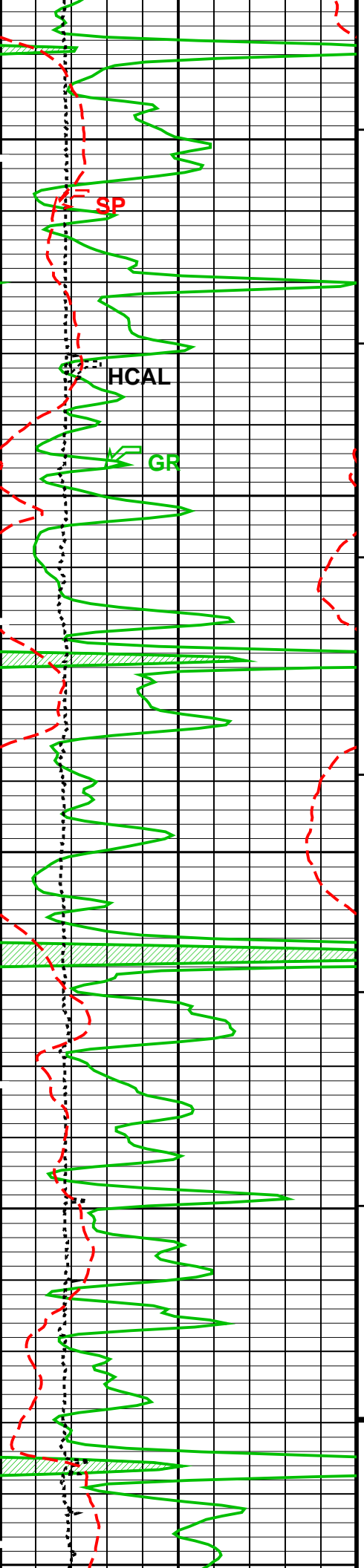
SP

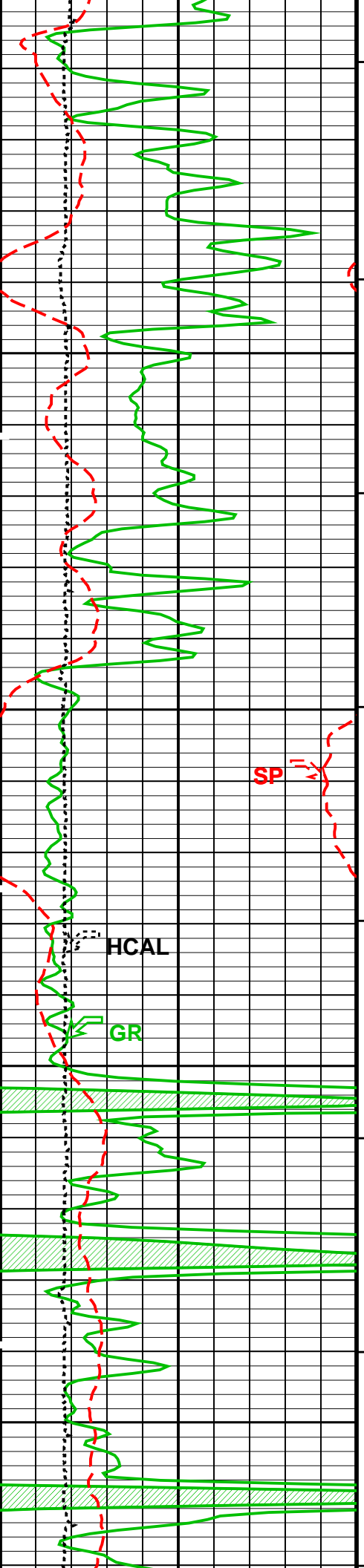


TENS

AT90







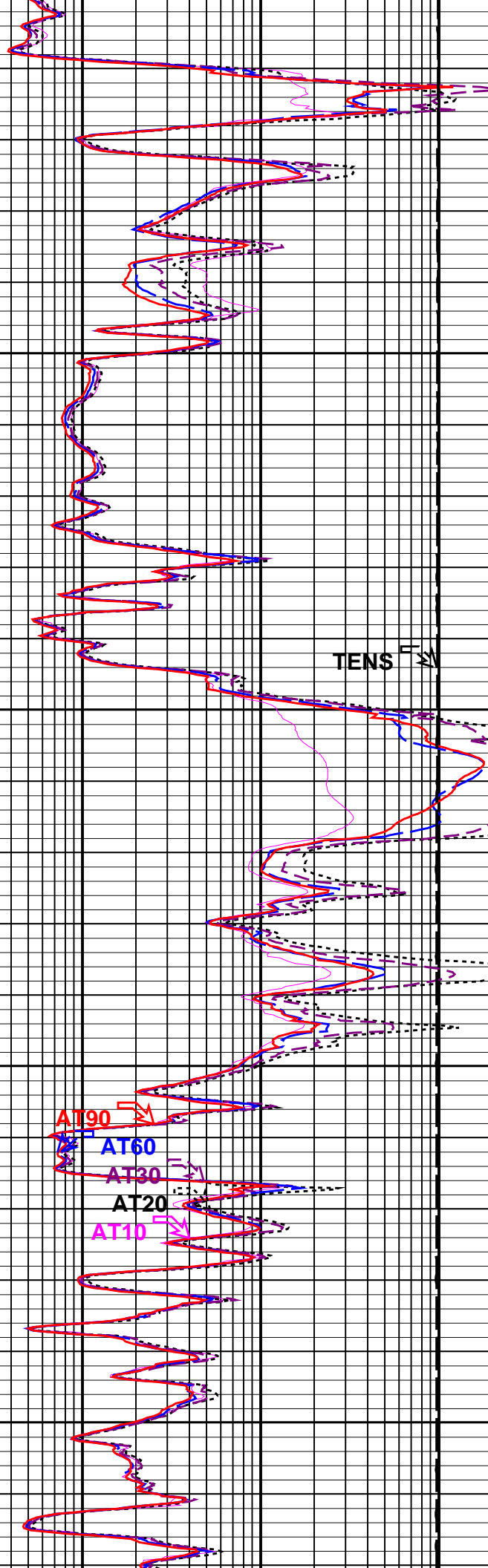
4900

5000

HCAL

GR

SP



TENS

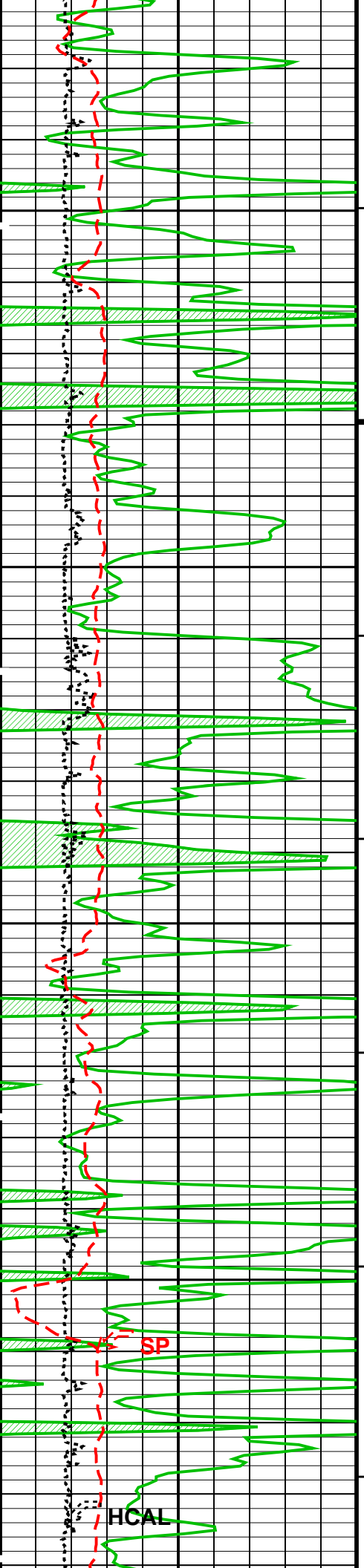
AT90

AT60

AT30

AT20

AT10

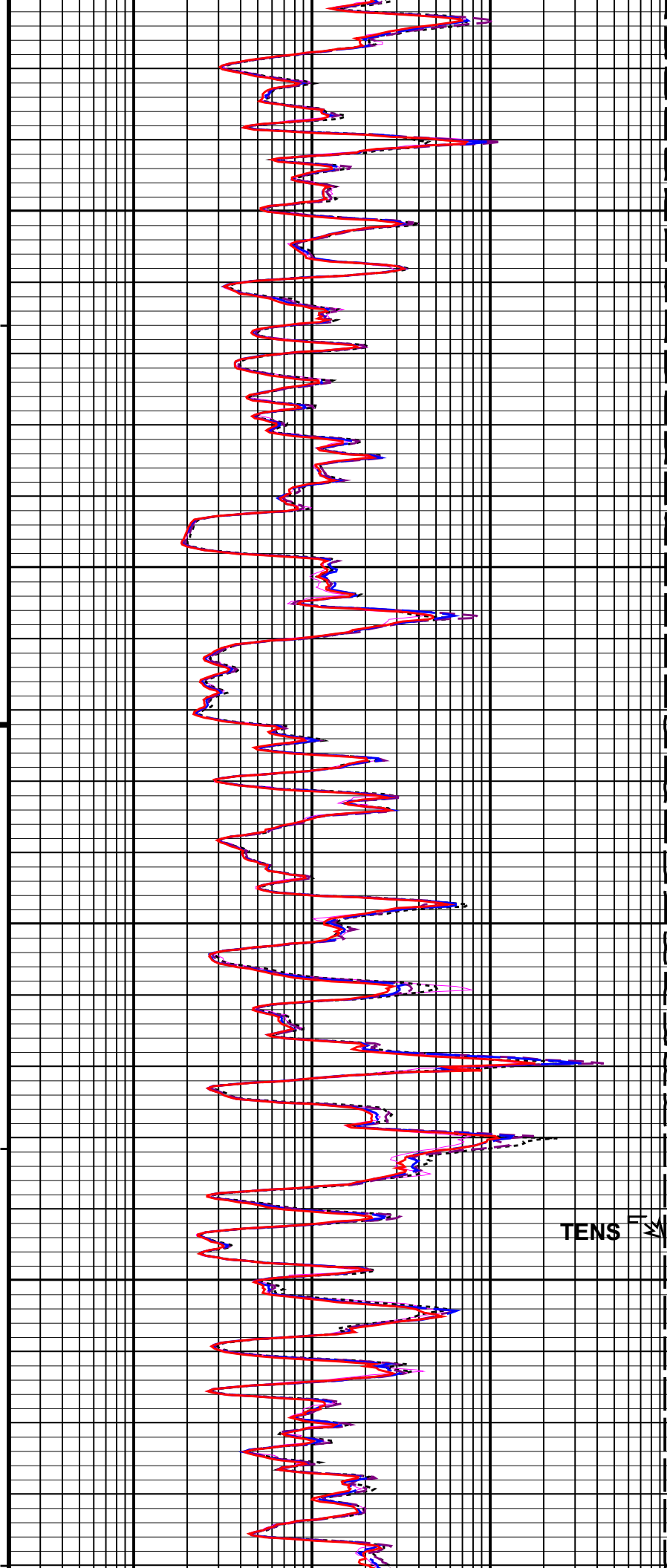


5100

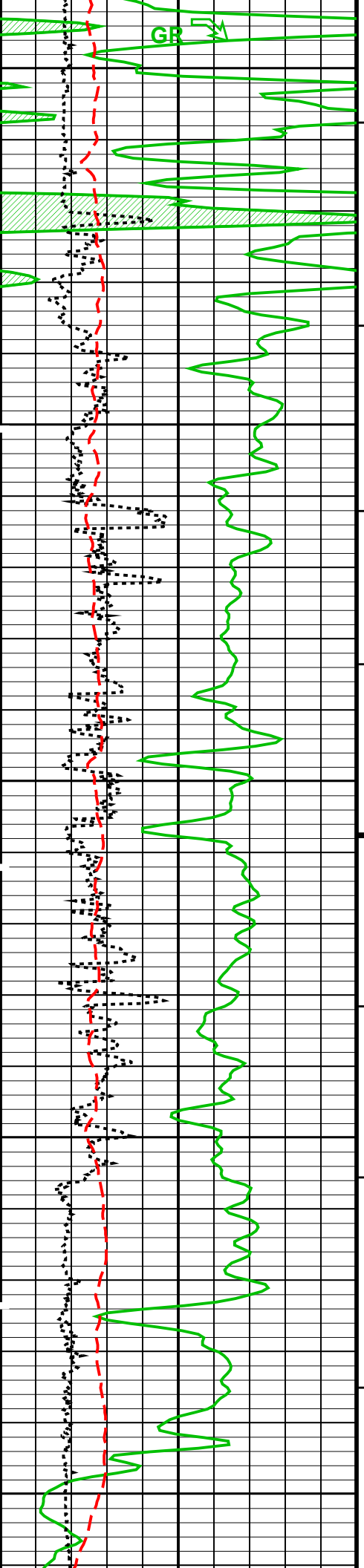
5200

HCAL

SP



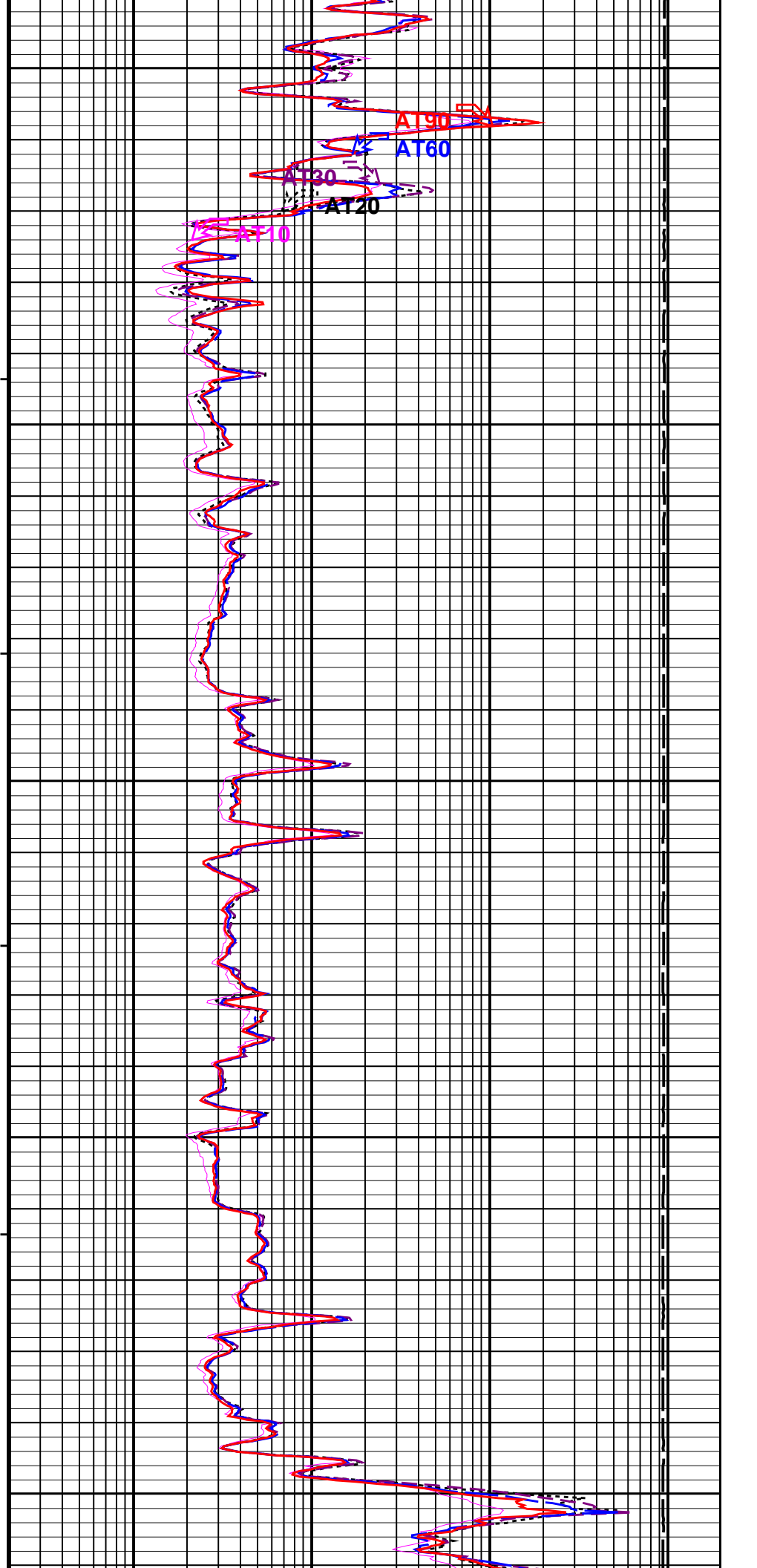
TENS \rightarrow

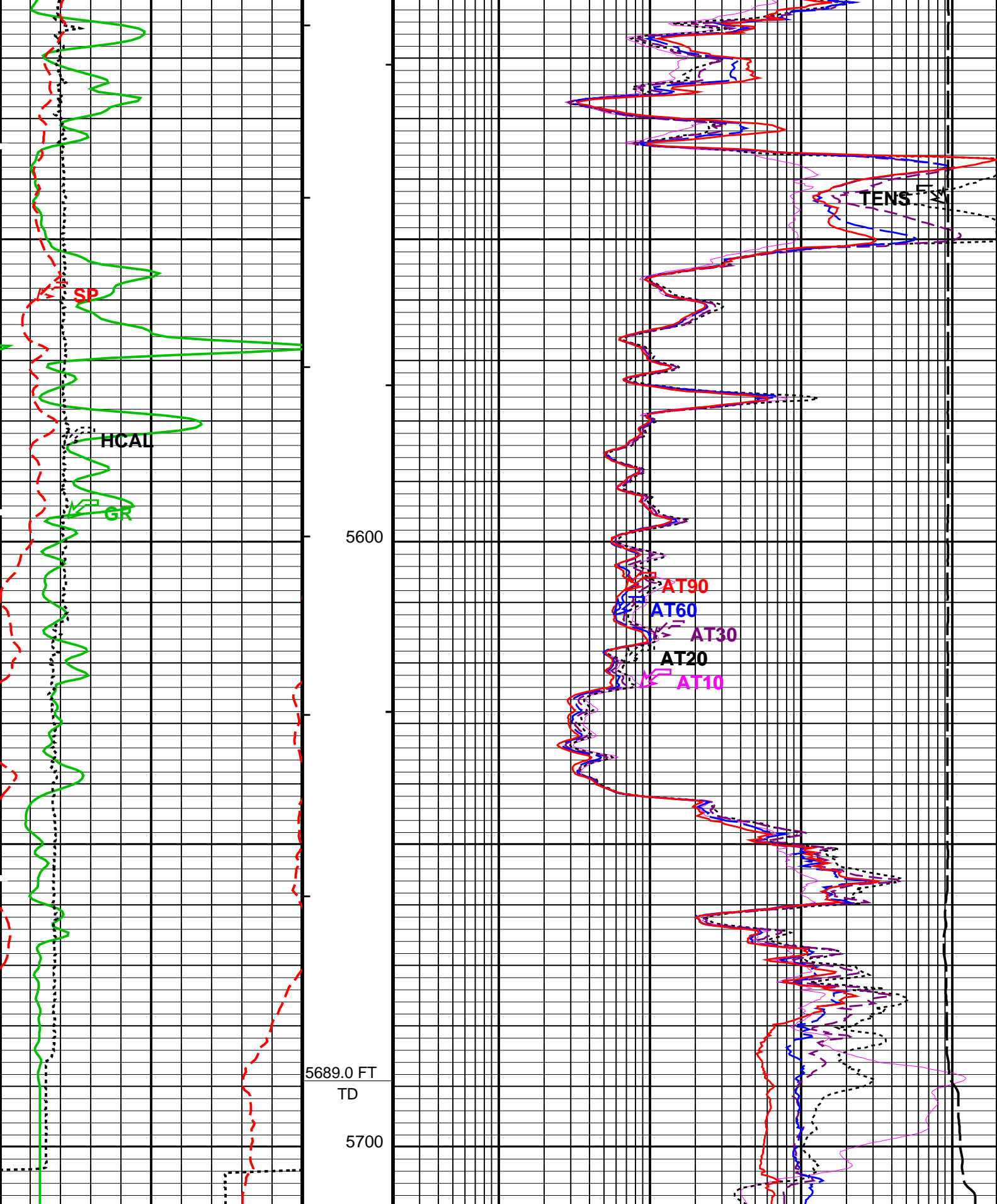


5300

5400

5500





MAIN PASS: *** PLATFORM EXPRESS – ARRAY INDUCTION ***

Gamma Ray Backup

Gamma Ray (GR)

0.2

AIT 10 Inch Investigation (AT10)
(OHMM)

2000

AIT 20 Inch Investigation (AT20)

(GAPI) 2000		0.2	(OHMM)	2000
Caliper (HCAL)		AIT 30 Inch Investigation (AT30)		
6	(IN)	16	0.2	(OHMM) 2000
SP (SP)		AIT 60 Inch Investigation (AT60)		
-160	(MV)	40	0.2	(OHMM) 2000
		AIT 90 Inch Investigation (AT90)		
			0.2	(OHMM) 2000
			Tension (TENS)	
			10000	(LBF) 0

PIP SUMMARY

- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
 - └ Integrated Cement Volume Minor Pip Every 10 F3
 - └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
AIT-M: Array Induction Tool - M			
ABHM	Array Induction Borehole Correction Mode	2_ComputeStandoff	
ABHV	Array Induction Borehole Correction Code Version Number	900	
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four	
ABLV	Array Induction Basic Logs Code Version Number	223	
ACDE	Array Induction Casing Detection Enable	No	
ACEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered	
ACSED	Array Induction Casing Shoe Estimated Depth	-50000	FT
AETP	Array Induction Enable Sonde Error Temp&Pres Corr	Yes	
AFRSV	Array Induction Response Set Version for Four ft Resolution	41.70.24.20	
AIGS	Array Induction Select Akima Interpolation Gating	On	
AMRF	Array Induction Mud Resistivity Factor	1	
AORSV	Array Induction Response Set Version for One ft Resolution	41.70.24.20	
ARFV	Array Induction Radial Profiling Code Version Number	701	
ARPV	Array Induction Radial Parametrization Code Version Number	232	
ASTA	Array Induction Tool Standoff	0.625	IN
ATRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20	
ATSE	Array Induction Temperature Selection(Sonde Error Correction)	Internal	
AULV	Array Induction User Level Control	Normal	
AZRSV	Array Induction Response Set Version for Z Resolution	00.10.25.00	
BHT	Bottom Hole Temperature (used in calculations)	143	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITM_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
SPNV	SP Next Value	0	MV
HILTH-FTB: High resolution Integrated Logging Tool-DTS			
BHT	Bottom Hole Temperature (used in calculations)	143	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITM_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
FEQL: Formation Evaluation Quick Look			
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	143	DEGF
FCD	Future Casing (Outer) Diameter	5.5	IN
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITM_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
HVCS	Integrated Hole Volume Caliper Selection	AUTOMATIC	
SHT	Surface Hole Temperature	68	DEGF
PERT: Preliminary Evaluation - Real Time			
BHT	Bottom Hole Temperature (used in calculations)	143	DEGF

FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITM_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
System and Miscellaneous			
BS	Bit Size	7.875	IN
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	0.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
FLEV	Fluid Level	300.00	FT
MST	Mud Sample Temperature	75.00	DEGF
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	5689	FT

Format: GRES Vertical Scale: 5" per 100' Graphics File Created: 10-Apr-2012 16:52

OP System Version: 18C0-147

AIT-M	18C0-147	HILTH-FTB	18C0-147
DTC-H	18C0-147		

Input DLIS Files

DEFAULT	MERGE_AIT_026L	FN:1	PRODUCER	10-Apr-2012 16:37	5709.5 FT	328.0 FT
---------	----------------	------	----------	-------------------	-----------	----------

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_032PUP	FN:28	PRODUCER	10-Apr-2012 16:52
---------	-------------------------	-------	----------	-------------------

Schlumberger

REPEAT ANALYSIS

MAXIS Field Log

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_030PUP	FN:26	PRODUCER	10-Apr-2012 16:49	5718.0 FT	5218.5 FT
DEFAULT	MERGE_AIT_026L	FN:1	PRODUCER	10-Apr-2012 16:37	5709.5 FT	328.0 FT

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_032PUP	FN:28	PRODUCER	10-Apr-2012 16:52
---------	-------------------------	-------	----------	-------------------

OP System Version: 18C0-147

AIT-M	18C0-147	HILTH-FTB	18C0-147
DTC-H	18C0-147		

PIP SUMMARY

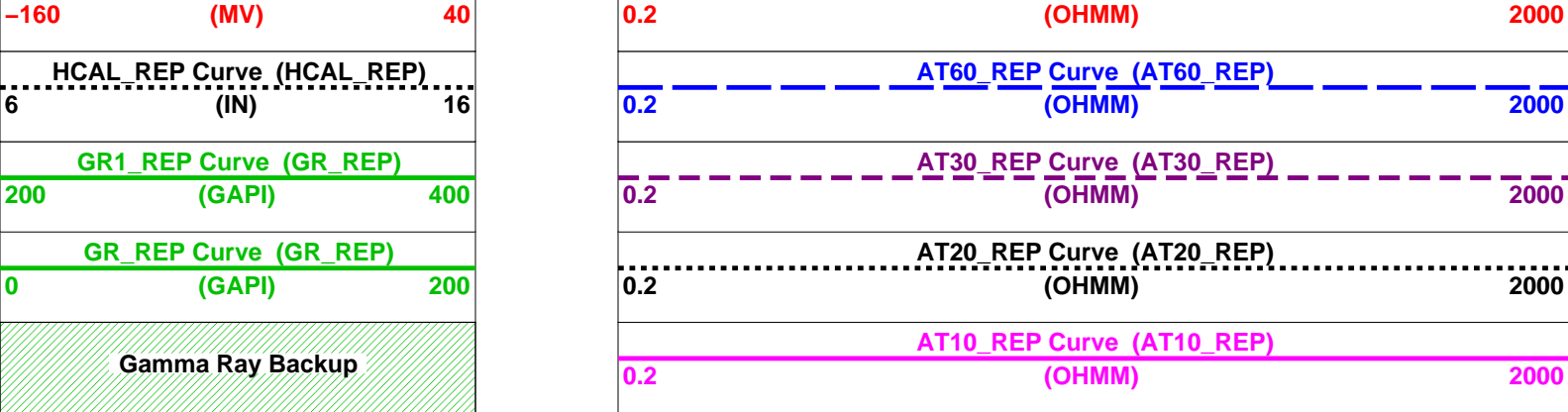
- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
 - └ Integrated Cement Volume Minor Pip Every 10 F3
 - └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

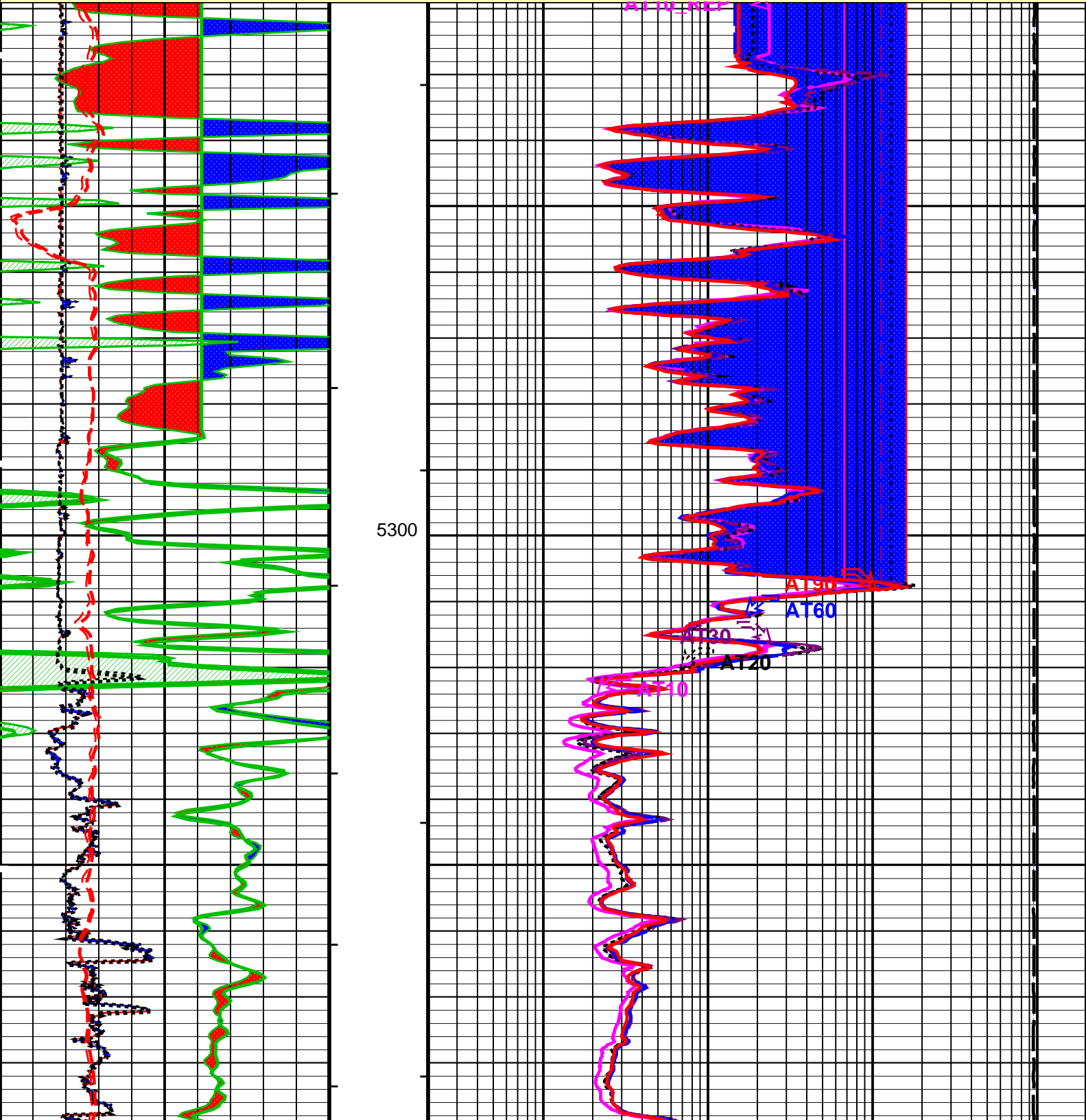
TENS_REP Curve (TENS_REP)	
10000 (LBF)	0

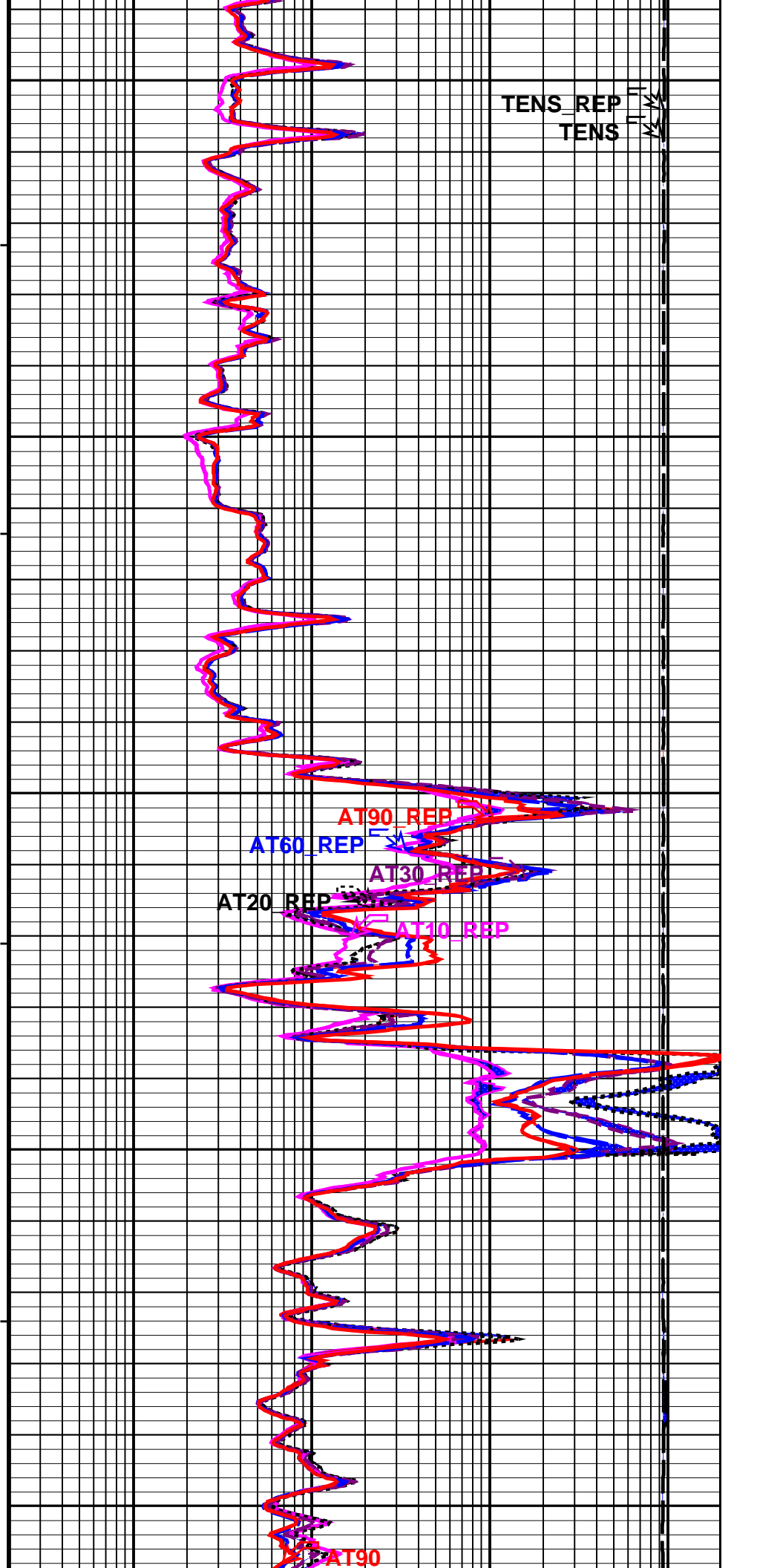
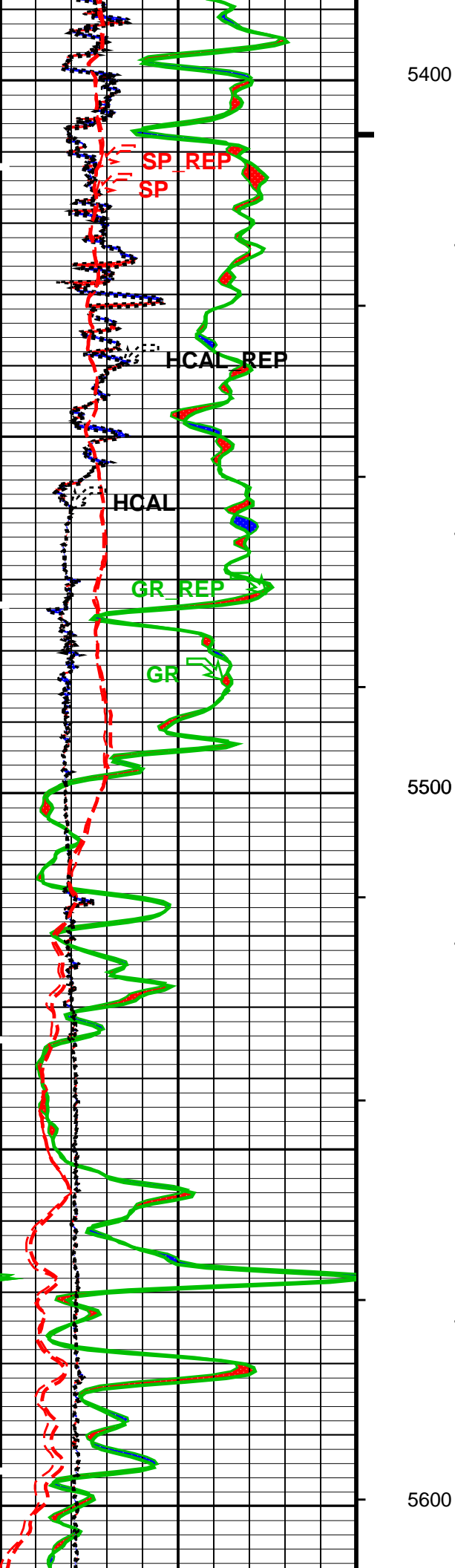
SP_REP Curve (SP_REP)

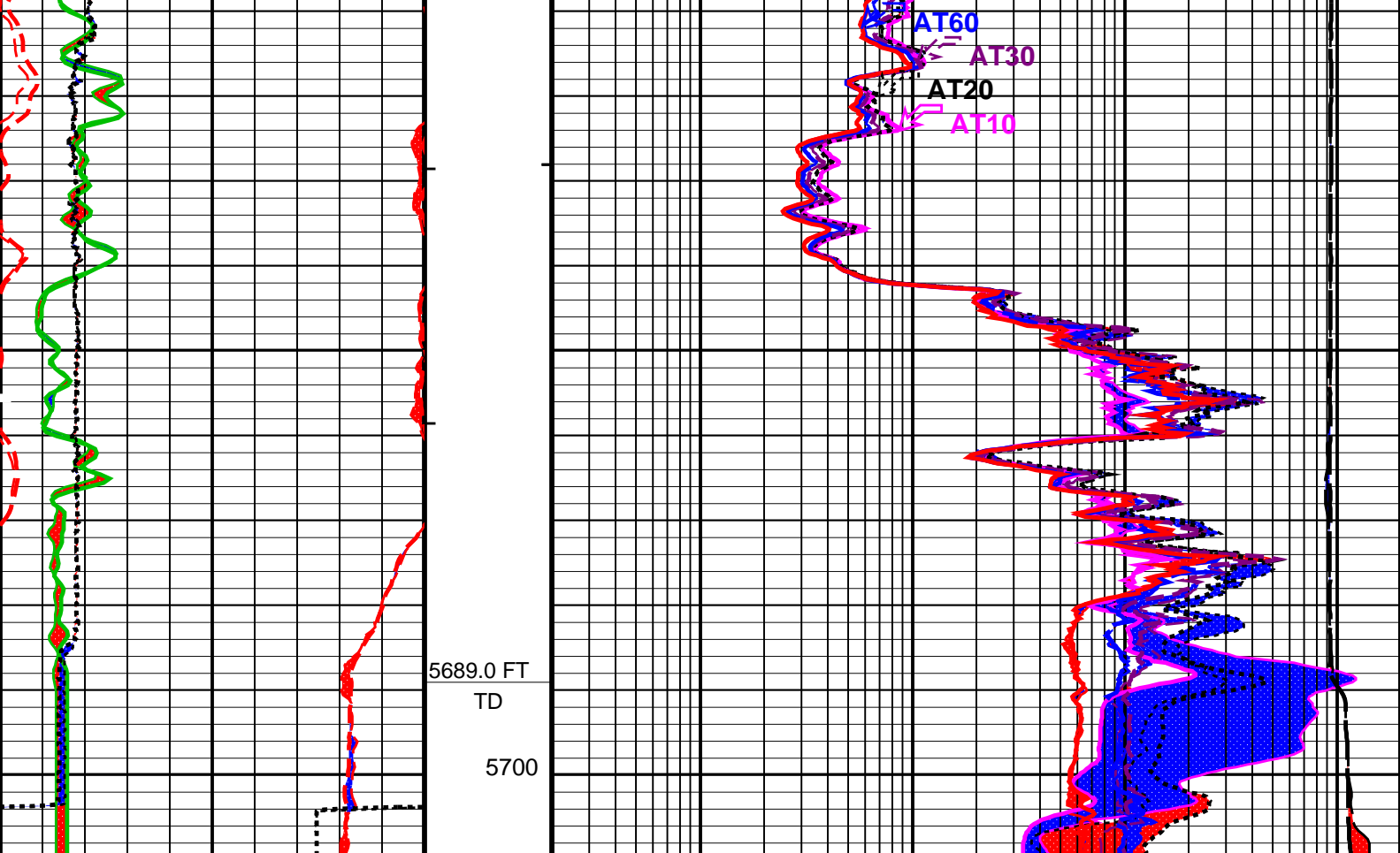
AT90_REP Curve (AT90_REP)



MAIN PASS: *** PLATFORM EXPRESS – ARRAY INDUCTION ***







MAIN PASS: *** PLATFORM EXPRESS – ARRAY INDUCTION ***

Gamma Ray Backup		
GR_REP Curve (GR_REP)		
(GAPI)		
0		200
GR1_REP Curve (GR_REP)		
(GAPI)		
200		400
HCAL_REP Curve (HCAL_REP)		
(IN)		
6		16
SP_REP Curve (SP_REP)		
(MV)		
-160		40

0.2	AT10_REP Curve (AT10_REP)	2000
	(OHMM)	
0.2	AT20_REP Curve (AT20_REP)	2000
	(OHMM)	
0.2	AT30_REP Curve (AT30_REP)	2000
	(OHMM)	
0.2	AT60_REP Curve (AT60_REP)	2000
	(OHMM)	
0.2	AT90_REP Curve (AT90_REP)	2000
	(OHMM)	

	TENS_REP Curve (TENS_REP)	0
10000	(LBF)	

PIP SUMMARY

- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
 - └ Integrated Cement Volume Minor Pip Every 10 F3
 - └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
AIT-M: Array Induction Tool – M		
ABHM	Array Induction Borehole Correction Mode	2_ComputeStandoff
ABHV	Array Induction Borehole Correction Code Version Number	900
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	223
ACDE	Array Induction Casing Detection Enable	No
ACEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered
ACSED	Array Induction Casing Shoe Estimated Depth	-50000 FT

AETP	Array Enable Sonde Error Temp&Pres Corr	Yes	
AFRSV	Array Induction Response Set Version for Four ft Resolution	41.70.24.20	
AIGS	Array Induction Select Akima Interpolation Gating	On	
AMRF	Array Induction Mud Resistivity Factor	1	
AORSV	Array Induction Response Set Version for One ft Resolution	41.70.24.20	
ARFV	Array Induction Radial Profiling Code Version Number	701	
ARPV	Array Induction Radial Parametrization Code Version Number	232	
ASTA	Array Induction Tool Standoff	0.625	IN
ATRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20	
ATSE	Array Induction Temperature Selection(Sonde Error Correction)	Internal	
AULV	Array Induction User Level Control	Normal	
AZRSV	Array Induction Response Set Version for Z Resolution	00.10.25.00	
BHT	Bottom Hole Temperature (used in calculations)	143	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITM_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
SPNV	SP Next Value	0	MV
HILTH-FTB: High resolution Integrated Logging Tool-DTS			
BHT	Bottom Hole Temperature (used in calculations)	143	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITM_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
FEQL: Formation Evaluation Quick Look			
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	143	DEGF
FCD	Future Casing (Outer) Diameter	5.5	IN
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITM_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
HVCS	Integrated Hole Volume Caliper Selection	AUTOMATIC	
SHT	Surface Hole Temperature	68	DEGF
PERT: Preliminary Evaluation - Real Time			
BHT	Bottom Hole Temperature (used in calculations)	143	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITM_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	68	DEGF
System and Miscellaneous			
BS	Bit Size	7.875	IN
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	0.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
FLEV	Fluid Level	300.00	FT
MST	Mud Sample Temperature	75.00	DEGF
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	5689	FT

Format: GRES_REP Vertical Scale: 5" per 100' Graphics File Created: 10-Apr-2012 16:52

OP System Version: 18C0-147

AIT-M	18C0-147	HILTH-FTB	18C0-147
DTC-H	18C0-147		

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_030PUP	FN:26	PRODUCER	10-Apr-2012 16:49	5718.0 FT	5218.5 FT
DEFAULT	MERGE_AIT_026L	FN:1	PRODUCER	10-Apr-2012 16:37	5709.5 FT	328.0 FT

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_032PUP	FN:28	PRODUCER	10-Apr-2012 16:52
---------	-------------------------	-------	----------	-------------------

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
-------------	---------	--------	--------	-------	--------	-------	-------

Array Induction Tool – M Wellsite Calibration – Electronics Calibration Check – Thru Cal Mag. & Phase

Master: 26-Jan-2012 16:11 Before: 10-Apr-2012 6:39

Thru Cal Magnitude – 0	0	0.6131	0.6134	N/A	N/A	N/A	V
Thru Cal Magnitude – 1	0	1.256	1.257	N/A	N/A	N/A	V
Thru Cal Magnitude – 2	0	0.6230	0.6234	N/A	N/A	N/A	V
Thru Cal Magnitude – 3	0	0.7038	0.7042	N/A	N/A	N/A	V
Thru Cal Magnitude – 4	0	1.315	1.316	N/A	N/A	N/A	V
Thru Cal Magnitude – 5	0	1.911	1.912	N/A	N/A	N/A	V
Thru Cal Magnitude – 6	0	1.906	1.908	N/A	N/A	N/A	V
Thru Cal Magnitude – 7	0	1.361	1.362	N/A	N/A	N/A	V
Thru Cal Phase – 0	0	183.8	183.7	N/A	N/A	N/A	DEG
Thru Cal Phase – 1	0	182.7	182.6	N/A	N/A	N/A	DEG
Thru Cal Phase – 2	0	179.0	178.9	N/A	N/A	N/A	DEG
Thru Cal Phase – 3	0	178.2	178.1	N/A	N/A	N/A	DEG
Thru Cal Phase – 4	0	172.0	171.9	N/A	N/A	N/A	DEG
Thru Cal Phase – 5	0	170.3	170.2	N/A	N/A	N/A	DEG
Thru Cal Phase – 6	0	170.3	170.2	N/A	N/A	N/A	DEG
Thru Cal Phase – 7	0	169.6	169.5	N/A	N/A	N/A	DEG

Array Induction Tool – M Wellsite Calibration – Electronics Calibration Check – Auxiliary

Master: 26-Jan-2012 16:11 Before: 10-Apr-2012 6:39

Array Induction SPA Plus	991.0	991.5	991.6	N/A	N/A	N/A	MV
Array Induction SPA Zero	0	-0.2500	-0.2198	N/A	N/A	N/A	MV
Array Induction Temperature PI	0.9170	0.9184	0.9184	N/A	N/A	N/A	V
Array Induction Temperature Ze	0	-0.0002500	-0.0002217	N/A	N/A	N/A	V

Array Induction Tool – M Wellsite Calibration – Test Loop Gain Correction

Master: 26-Jan-2012 16:11

Test Loop Gain Correctio – 0	0	1.014	N/A	N/A	N/A	N/A	V
Test Loop Gain Correctio – 1	0	1.016	N/A	N/A	N/A	N/A	V
Test Loop Gain Correctio – 2	0	1.014	N/A	N/A	N/A	N/A	V
Test Loop Gain Correctio – 3	0	1.012	N/A	N/A	N/A	N/A	V
Test Loop Gain Correctio – 4	0	0.9946	N/A	N/A	N/A	N/A	V
Test Loop Gain Correctio – 5	0	0.9890	N/A	N/A	N/A	N/A	V
Test Loop Gain Correctio – 6	0	0.9984	N/A	N/A	N/A	N/A	V
Test Loop Gain Correctio – 7	0	1.006	N/A	N/A	N/A	N/A	V
Test Loop Gain Correctio – 0	0	0.4704	N/A	N/A	N/A	N/A	DEG
Test Loop Gain Correctio – 1	0	0.6871	N/A	N/A	N/A	N/A	DEG
Test Loop Gain Correctio – 2	0	0.1215	N/A	N/A	N/A	N/A	DEG
Test Loop Gain Correctio – 3	0	-0.06941	N/A	N/A	N/A	N/A	DEG
Test Loop Gain Correctio – 4	0	0.1235	N/A	N/A	N/A	N/A	DEG
Test Loop Gain Correctio – 5	0	-0.1023	N/A	N/A	N/A	N/A	DEG
Test Loop Gain Correctio – 6	0	0.2848	N/A	N/A	N/A	N/A	DEG
Test Loop Gain Correctio – 7	0	-0.005901	N/A	N/A	N/A	N/A	DEG

Array Induction Tool – M Wellsite Calibration – Sonde Error Correction

Master: 26-Jan-2012 16:11

R Sonde Error Correction – 0	0	-93.39	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 1	0	158.2	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 2	0	116.5	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 3	0	63.04	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 4	0	27.36	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 5	0	13.24	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 6	0	9.876	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 7	0	-1.618	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 0	0	-7.309	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 1	0	-334.4	N/A	N/A	N/A	N/A	MM/M

X Sonde Error Correction – 2	0	10.73	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 3	0	–58.01	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 4	0	–12.80	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 5	0	–17.35	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 6	0	–3.765	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 7	0	4.594	N/A	N/A	N/A	N/A	MM/M

Array Induction Tool – M Wellsite Calibration – Mud Gain Correction

Master: 26–Jan–2012 16:11

Coarse – Mag, Real, Imag – 0	0	0.8718	N/A	N/A	N/A	N/A
Coarse – Mag, Real, Imag – 1	0	0.8718	N/A	N/A	N/A	N/A
Coarse – Mag, Real, Imag – 2	0	0.8718	N/A	N/A	N/A	N/A
Fine – Mag, Real, Imag – 0	0	0.8719	N/A	N/A	N/A	N/A
Fine – Mag, Real, Imag – 1	0	0.8719	N/A	N/A	N/A	N/A
Fine – Mag, Real, Imag – 2	0	0.8719	N/A	N/A	N/A	N/A

Enhanced DTS Cartridge Wellsite Calibration – EDTC Accelerometer Calibration

Before: 10–Apr–2012 12:15

EDTC Z–Axis Acceleration	32.19	N/A	32.00	N/A	N/A	N/A	F/S2
--------------------------	-------	-----	-------	-----	-----	-----	------

Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration

Before: 10–Apr–2012 12:12

Gamma Ray (Jig – Bkg)	136.3	N/A	136.3	N/A	N/A	12.40	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	N/A	N/A	15.00	GAPI

Array Induction Tool – M / Equipment Identification

Primary Equipment:

Rm/SP Bottom Nose

Array Induction Sonde

AMRM – A

AMIS – A

39

Auxiliary Equipment:

Array Induction Tool – M Wellsite Calibration							
Electronics Calibration Check – Thru Cal Mag. & Phase							
Idx	Phase	Value	Thru Cal Magnitude V	Nominal	Value	Thru Cal Phase DEG	Nominal
0	Master	0.6131		0.6100	183.8		197.0
	Before	0.6134			183.7		
1	Master	1.256		1.270	182.7		196.0
	Before	1.257			182.6		
2	Master	0.6230		0.6200	179.0		192.0
	Before	0.6234			178.9		
3	Master	0.7038		0.7000	178.2		191.0
	Before	0.7042			178.1		
4	Master	1.315		1.340	172.0		185.0
	Before	1.316			171.9		
5	Master	1.911		1.960	170.3		182.0
	Before	1.912			170.2		
6	Master	1.906		1.960	170.3		181.0
	Before	1.908			170.2		
7	Master	1.361		1.410	169.6		175.0
	Before	1.362			169.5		
		60.00 % (Minimum)	140.0 % (Maximum)		Nom –60.00 (Minimum)	Nom + 60.00 (Maximum)	
Master: 26–Jan–2012 16:11				Before: 10–Apr–2012 6:39			





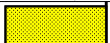
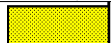
Array Induction Tool – M Wellsite Calibration					
Electronics Calibration Check – Auxiliary					
Phase	Array Induction SPA Plus MV	Value	Phase	Array Induction SPA Zero MV	Value
Master		991.5	Master		–0.2500

Before		991.6	Before		-0.2198
941.0 (Minimum)	991.0 (Nominal)	1040 (Maximum)	-50.00 (Minimum)	0 (Nominal)	50.00 (Maximum)
Phase Array Induction Temperature Plus V	Value		Phase Array Induction Temperature Zero V	Value	
Master		0.9184	Master		-0.0002500
Before		0.9184	Before		-0.0002217
0.8710 (Minimum)	0.9170 (Nominal)	0.9630 (Maximum)	-0.05000 (Minimum)	0 (Nominal)	0.05000 (Maximum)
Master: 26-Jan-2012 16:11			Before: 10-Apr-2012 6:39		


Array Induction Tool – M Wellsite Calibration						
Test Loop Gain Correction						
Idx	Value	Test Loop Gain Correction Magnitude V	Value	Test Loop Gain Correction Phase DEG		
0	1.014		0.4704			
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
1	1.016		0.6871			
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
2	1.014		0.1215			
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
3	1.012		-0.06941			
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
4	0.9946		0.1235			
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
5	0.9890		-0.1023			
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
6	0.9984		0.2848			
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
7	1.006		-0.005901			
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
Master: 26-Jan-2012 16:11						




Array Induction Tool – M Wellsite Calibration						
Sonde Error Correction						
Idx	Value	R Sonde Error Correction MM/M	Value	X Sonde Error Correction MM/M		
0	-93.39		-7.309			
		-231.0 (Minimum) -56.00 (Nominal) 119.0 (Maximum)		-2250 (Minimum) 0 (Nominal) 2250 (Maximum)		
1	158.2		-334.4			
		114.0 (Minimum) 159.0 (Nominal) 204.0 (Maximum)		-625.0 (Minimum) 0 (Nominal) 625.0 (Maximum)		
2	116.5		10.73			
		66.00 (Minimum) 111.0 (Nominal) 156.0 (Maximum)		-350.0 (Minimum) 0 (Nominal) 350.0 (Maximum)		
3	63.04		-58.01			
		39.00 (Minimum) 64.00 (Nominal) 89.30 (Maximum)		-250.0 (Minimum) 0 (Nominal) 250.0 (Maximum)		
4	27.36		-12.80			
		15.00 (Minimum) 25.00 (Nominal) 35.00 (Maximum)		-63.00 (Minimum) 0 (Nominal) 63.00 (Maximum)		
5	13.24		-17.35			
		4.000 (Minimum) 14.00 (Nominal) 24.00 (Maximum)		-50.00 (Minimum) 0 (Nominal) 50.00 (Maximum)		
6	9.876		-3.765			
		5.000 (Minimum) 10.00 (Nominal) 15.00 (Maximum)		-30.00 (Minimum) 0 (Nominal) 30.00 (Maximum)		
7	-1.618		4.594			
		-5.000 (Minimum) 0 (Nominal) 5.000 (Maximum)		-30.00 (Minimum) 0 (Nominal) 30.00 (Maximum)		

(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)
Master: 26-Jan-2012 16:11					

Array Induction Tool – M Wellsite Calibration						
Mud Gain Correction						
Idx	Value	Coarse – Mag, Real, Imag			Value	Fine – Mag, Real, Imag
0	0.8718				0.8719	
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	0.8000 (Minimum)	1.000 (Nominal) 1.200 (Maximum)
1	0.8718				0.8719	
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	0.8000 (Minimum)	1.000 (Nominal) 1.200 (Maximum)
2	0.8718				0.8719	
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	0.8000 (Minimum)	1.000 (Nominal) 1.200 (Maximum)
Master: 26-Jan-2012 16:11						

Enhanced DTS Cartridge / Equipment Identification	
Primary Equipment:	
EDTC Gamma Ray Detector	EDTG – A/B
Enhanced DTS Cartridge	EDTC – B
Auxiliary Equipment:	
EDTC Housing	EDTH – B

Enhanced DTS Cartridge Wellsite Calibration		
EDTC Accelerometer Calibration		
Phase	EDTC Z-Axis Acceleration F/S2	Value
Before		32.00
	31.53 (Minimum)	32.19 (Nominal) 32.84 (Maximum)
Before: 10-Apr-2012 12:15		

Enhanced DTS Cartridge Wellsite Calibration											
Detector Calibration											
Phase	Gamma Ray Background	GAPI	Value	Phase	Gamma Ray (Jig – Bkg)	GAPI	Value	Phase	Gamma Ray (Calibrated)	GAPI	Value
Before			59.61	Before			136.3	Before			165.0
	0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)		124.0 (Minimum)	136.3 (Nominal)	148.7 (Maximum)		150.0 (Minimum)	165.0 (Nominal)	180.0 (Maximum)
Before: 10-Apr-2012 12:12											

Company:	Vecta Oil & Gas Ltd	
Well:	Little Bear 44–28	
Field:	Wildcat	
County:	Cheyenne	
State:	Colorado	
Platform Express Array Induction Linear Correlation		