

Company: Esso Australia Pty. Ltd.

Well: A7

Field: Tuna

Rig 22 / Prod 2

Country: Australia

RST-C Sigma Survey
2809m to 2100m MDKB
Reservoir Saturation Log

Field: Tuna
Location: Gippsland
Well: A7
Company: Esso Australia Pty. Ltd.

LOCATION		
Gippsland	Elev.: K.B. 32.1 m	
Basin	G.L. -59 m	
Bas Strait	D.F. 32.1 m	
Permanent Datum:	Mean Sea Level	Elev.: 0 m
Log Measured From:	Kelly Bushing	32.1 m above Perm. Datum
Drilling Measured From:	Kelly Bushing	
State: Victoria	Max. Well Deviation 57 deg	Longitude 148°25' 05.29"E Latitude 38°10' 16.00"S

Logging Date	11-Apr-2006		
Run Number	2		
Depth Driller	2825 m		
Schlumberger Depth	2809 m		
Bottom Log Interval	2804 m		
Top Log Interval	2090 m		
Casing Fluid Type	Sea Water		
Salinity	120000 ppm		
Density	1 g/cm3		
Fluid Level	0 m		
BIT/CASING/TUBING STRING			
Bit Size	8.500 in		
From	1897 m		
To	2968.1 m		
Casing/Tubing Size	4.500 in		
Weight	12.6 lbm/ft		
Grade	L-80		
From	1750 m		
To	2825 m		
Maximum Recorded Temperatures	102 degC		
Logger On Bottom	11-Apr-2006	7:24	
Unit Number	3827	AUSL	
Recorded By	S. Potisuwan, O. Tahmistic		
Witnessed By	Don Broonfield, Jimmy Dean		

PVT DATA

Oil Density	Run 1	Run 2	Run 3
Water Salinity	120000 ppm		
Gas Gravity			
Bo			
Bw			
1/Bg			
Bubble Point Pressure			
Bubble Point Temperature			
Solution GOR			
Maximum Deviation	57 deg		
CEMENTING DATA			
Primary/Squeeze	Primary		
Casing String No			
Lead Cement Type			
Volume			
Density			
Water Loss			
Additives			
Tail Cement Type			
Volume			
Density			
Water Loss			
Additives			
Expected Cement Top			
Logging Date			
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Fluid Type			
Salinity			
Density			
Fluid Level			
BIT/CASING/TUBING STRING			
Bit Size			
From			
To			
Casing/Tubing Size			
Weight			
Grade			
From			
To			
Maximum Recorded Temperatures			
Logger On Bottom			
Unit Number			
Recorded By			
Witnessed By			

DEPTH SUMMARY LISTING

Date Created: 16-APR-2006 22:08:05

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-E	Type:	CMTD-B/A	Type:	2-32ZT
Serial Number:	727	Serial Number:	1711	Serial Number:	4202
Calibration Date:	23-Mar-2006	Calibration Date:	24-Feb-2006	Length:	6274.92 M
Calibrator Serial Number:	9	Calibrator Serial Number:	1173	Conveyance Method: Wireline Rig Type: Offshore_Fixed	
Calibration Cable Type:	2-32ZT	Calibration Gain:	0.98		
Wheel Correction 1:	-1	Calibration Offset:	307.00		
Wheel Correction 2:	-2				

Depth Control Parameters

Log Sequence:	Subsequent Log In the Well
Reference Log Name:	TUNA A7 Petrophysical Analysis
Reference Log Run Number:	
Reference Log Date:	

Depth Control Remarks

1. All Schlumberger Depth Control Policies followed.
2. Gamma Ray response used for correlation.
3. Correlated to reference log provided by Esso.
4. IDW used as Primary Depth Control.
5. Z-Chart used as Secondary Depth Control.
6.

DISCLAIMER

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OTHER SERVICES1	OTHER SERVICES2
OS1: Drift Run	OS1:
OS2: 2-7/8" PURE HSD	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
Log objectives: Conduct one GR and two RST-A Sigma surveys over the interval HUD to 2100m MDKB.	
Correlated to "TUNA A7 Petrophysical Analysis". (Note: logs correlate to depth between 2700m and 2800m MDKB only)	
THP: 15 psi THT: 68 degF; BHP: 2992.5 psi BHT: 216 degF	
Pressure and temperature data gathered from PBMS sensors.	
Tool string as per enclosed sketch.	
Well sketch copied from Workover Program (10-Feb-2006)	
Hong up depth - 2800m MDKB	

STOP

RSC-A Far	4.32
RSC-A PNG	
RSC-A Nea	
PSY-A PNG	4.16

RSX-A PNG

4.10



AH-BNS

Tension HV
TOOL ZERO 0.00

0.08

MAXIMUM STRING DIAMETER 1.72 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Client: Esso Australia Pty. Ltd.

Well: A7

Field: Tuna

State: Victoria

Country: Australia

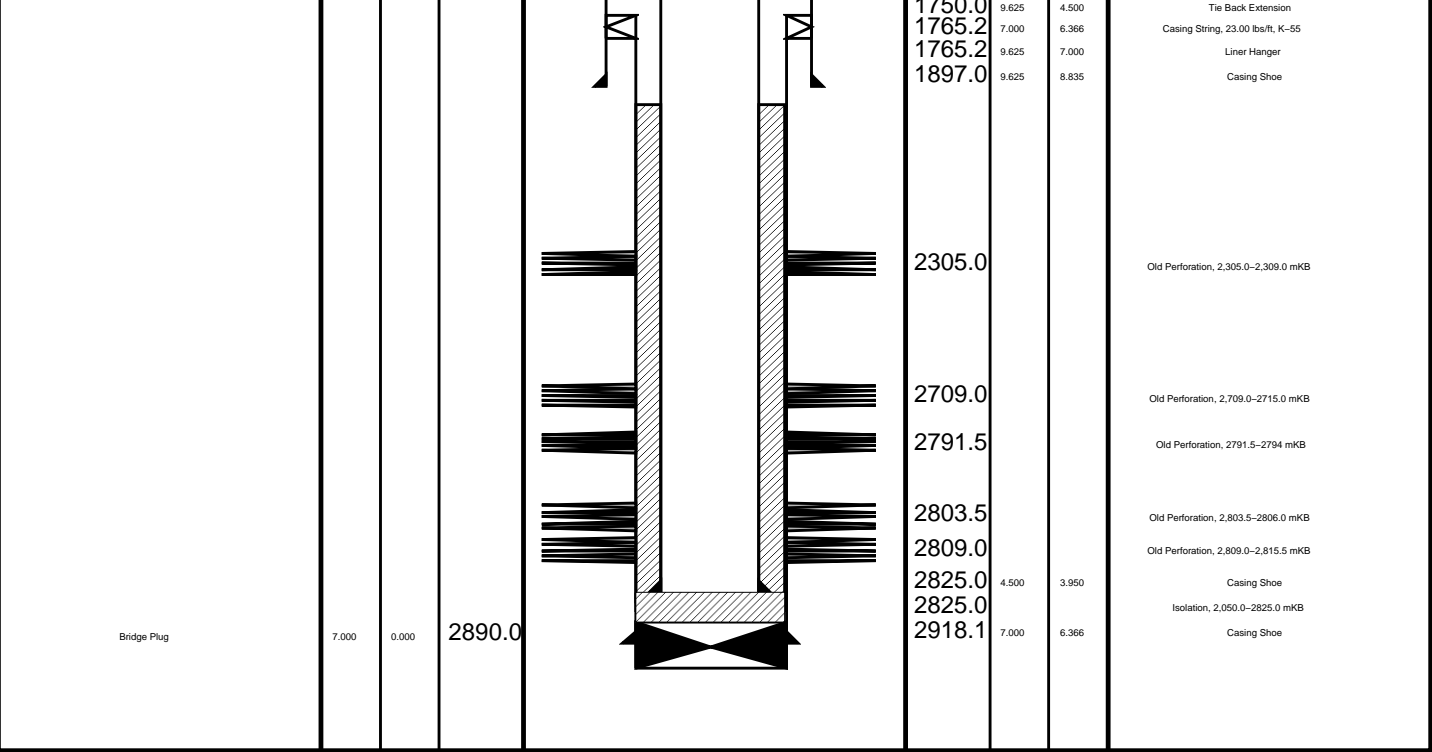
Rig Name: Rig 22

Reference Datum: Kelly Bushing

Elevation: 32.9 m

7/4/2006

Production String	(m)			Well Schematic	(in)			Casing String
	OD	ID	MD		MD	OD	ID	
					14.4	9.625	8.835	Casing String, 40.00 lbs/ft, K-55
					14.8	13.375	12.615	Casing String, 54.50 lbs/ft, K-55
					735.5	13.375	12.615	Casing Shoe
					1750.0	4.500	3.950	Casing String, 12.6 lbs/ft, L-80
					1750.0			



Job Event Summary

MAXIS Field Log

Schlumberger Job Event Summary

Time	Elapsed Time	Depth (M)	File
Rig Up Started 10–Apr–2006 23:30 Finish drift run with Dummy Gun.			
Descent 1: RSTC/PSPT			
Begin Descent 11–Apr–2006 0:05 Run in hole with RST tool.			
Log Pass (up)	11–Apr–2006 1:42	000:49 2815.3 – 2085.9	RST_PSP_014LUP
Baseline Pass (minitron off)			
Log Pass (up)	11–Apr–2006 4:27	002:38 2811.8 – 2076.6	RST_PSP_016LUP
Sigma 1			
Log Pass (up)	11–Apr–2006 7:24	002:37 2814.4 – 2080.7	RST_PSP_017LUP
Sigma 2			
Rig Down Completed 11–Apr–2006 11:15 Finish RST; start 2–7/8" PURE HSD.			



RST Sigma Pass 2 2809m – 2100m MDKB

MAXIS Field Log

Company: Esso Australia Pty. Ltd.

Well: A7

Input DLIS Files

DEFAULT	RST_PSP_017LUP	FN:19	PRODUCER	16-Apr-2006 21:46	2814.4 M	2080.7 M
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Output DLIS Files

DEFAULT	RST_PSP_015PUP	FN:19	PRODUCER	17-Apr-2006 01:12	2815.7 M	2082.5 M
CLIENT	RST_PSP_015PUC	FN:20	CUSTOMER	17-Apr-2006 01:12	2815.7 M	2082.5 M

OP System Version: 14C0-302

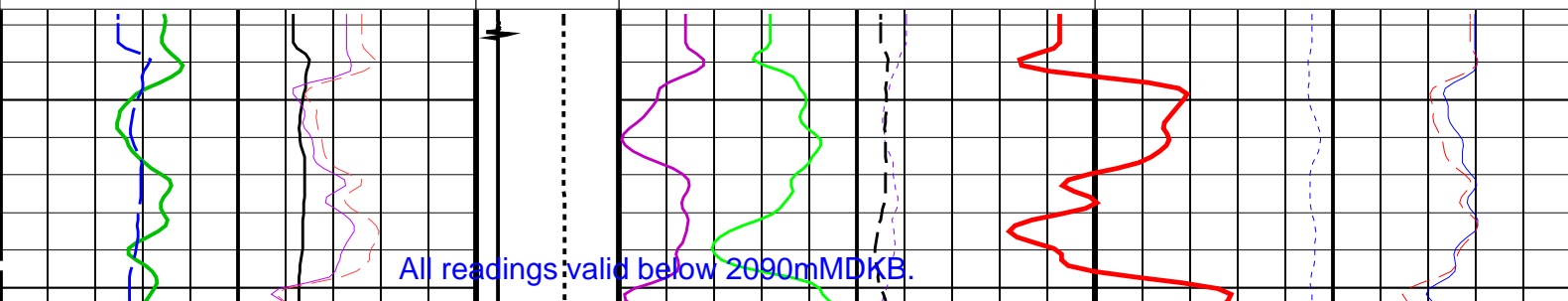
MCM

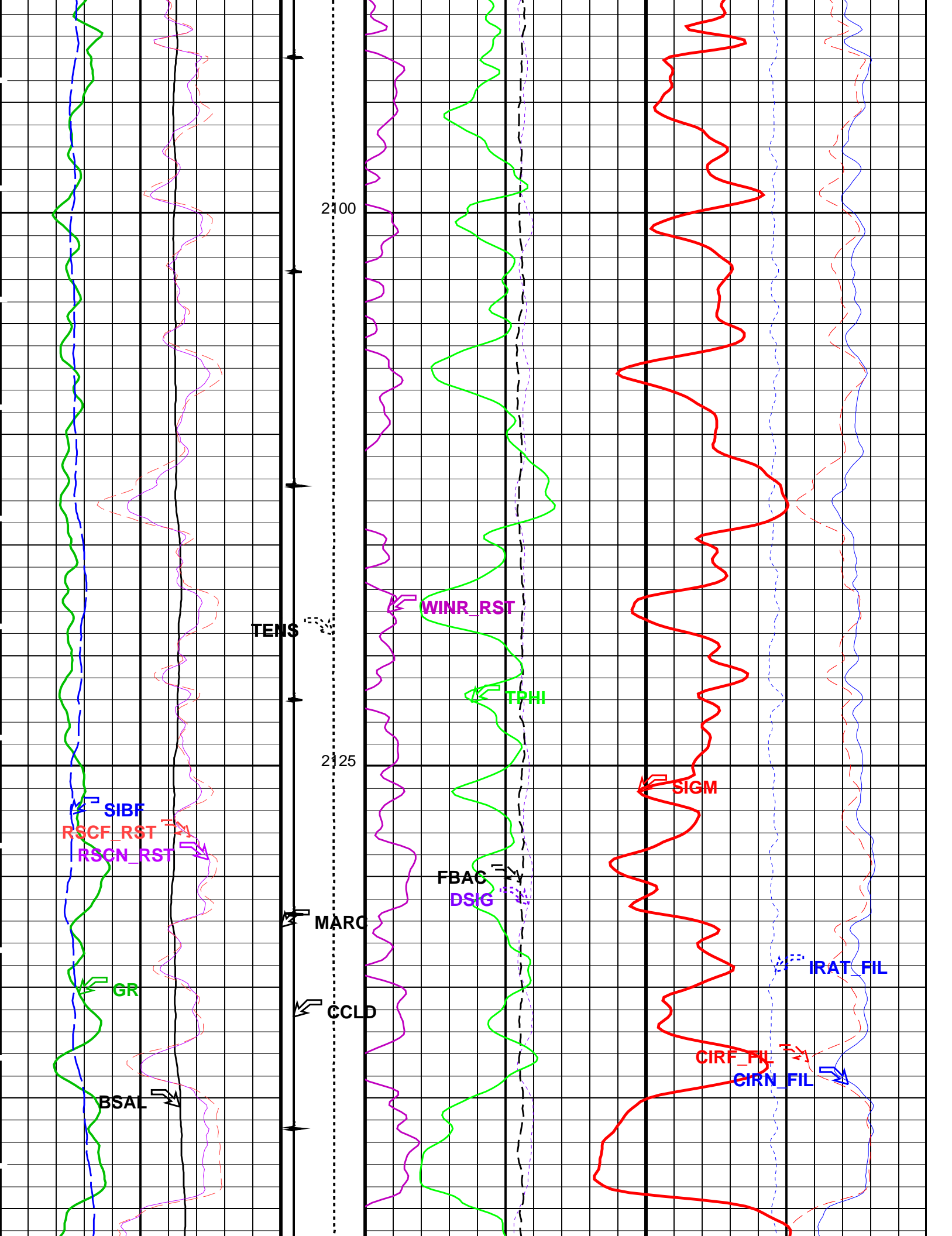
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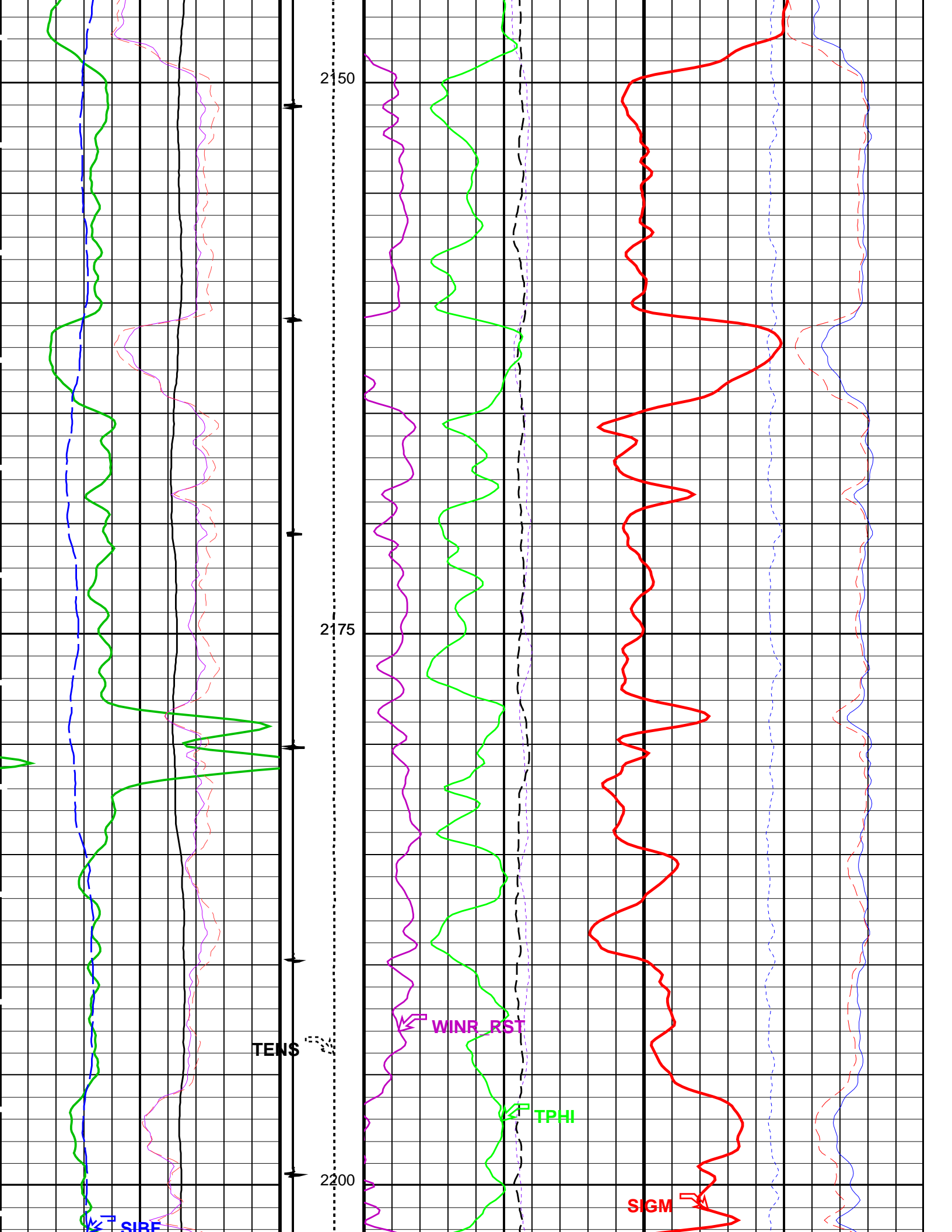
PIP SUMMARY

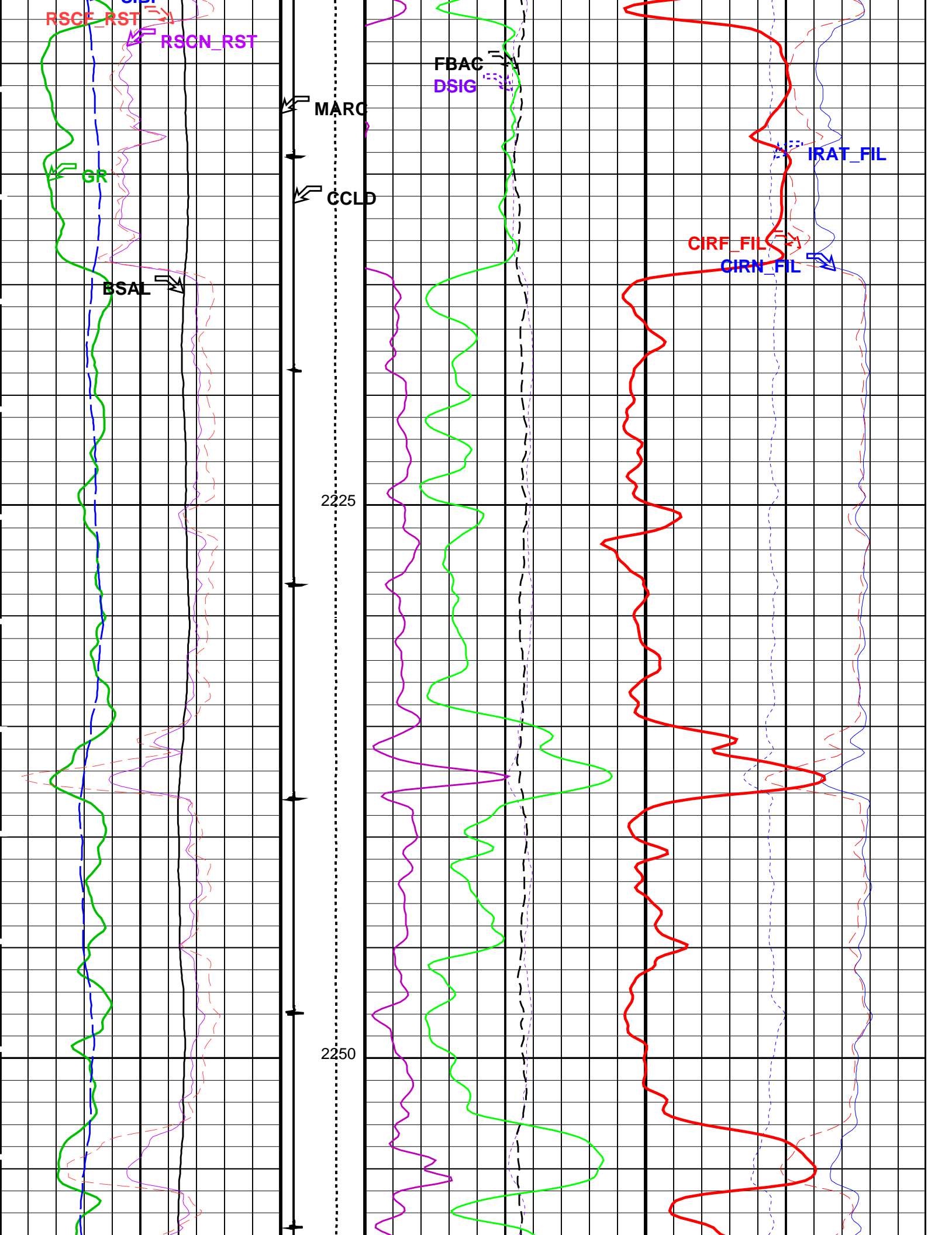
Time Mark Every 60 S

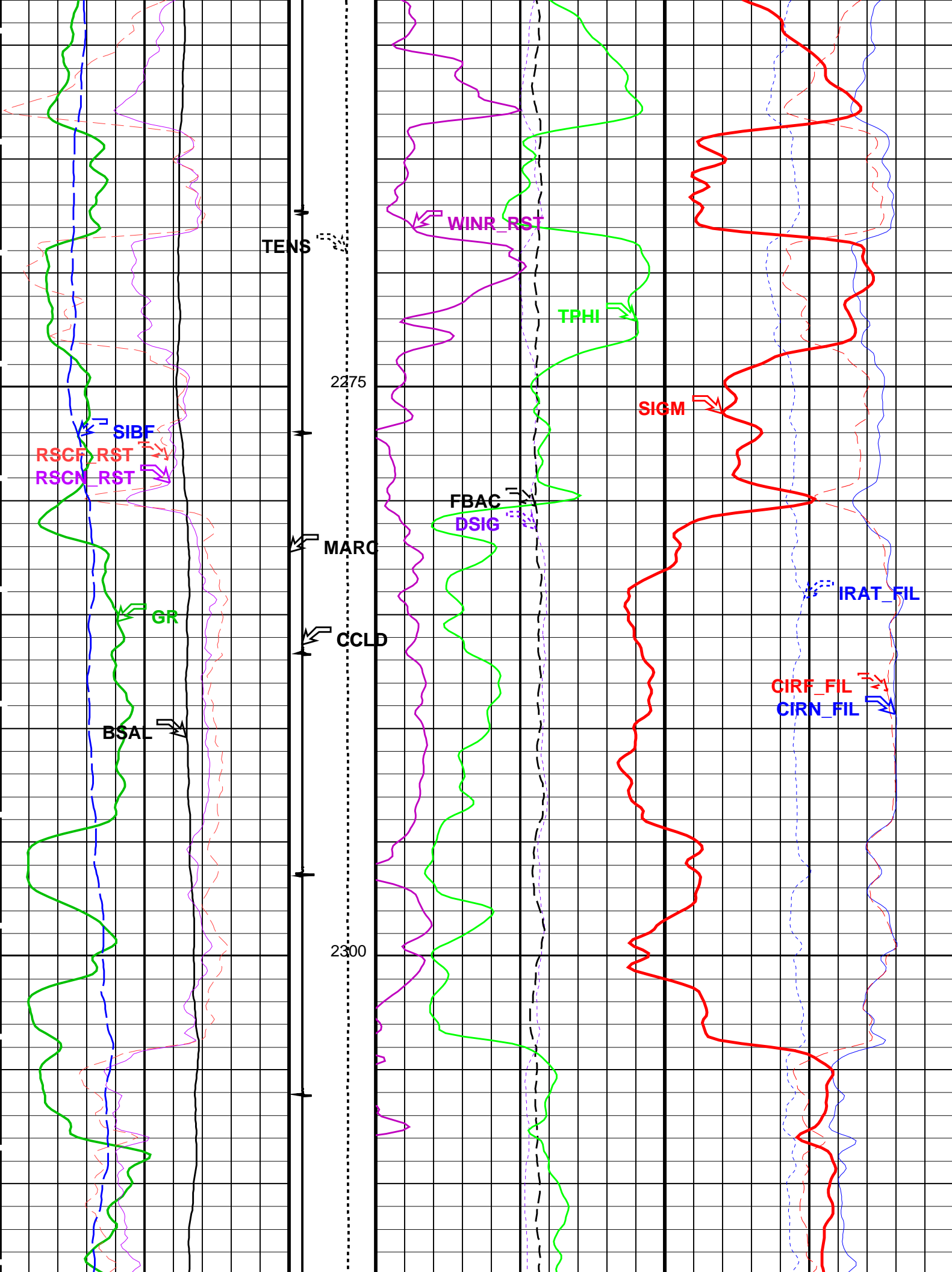
RST Far Effective Capture CR (RSCF_RST) 45 (----) 0		RST Weighted Inelastic Ratio (WINR_RST) -0.1 (----) 0.4	
		RST Porosity (TPHI) (V/V) 0.6 0	RST Inelastic Ratio (IRAT_FIL) 0.75 (----) 0
Gamma Ray (GR) (GAPI) 0 200	Minitron Arc Detection (MARC) 0 (----) 5	RST Sigma (SIGM) (CU) 60 0	
RST Sigma Borehole Fluid (SIBF) (CU) 100 0	Discriminated CCL (CCLD) (V) 3 -17	MCS Far Background (filtered) (FBAC) (CPS) 0 5000	RST Capture to Inelastic Ratio Far (CIRF_FIL) 5 (----) 0
RST Borehole Salinity (BSAL) (PPK) 450 -50	Tension (TENS) (LBF) 0 2000	RST Sigma Difference (DSIG) (CU) -30 30	RST Capture to Inelastic Ratio Near (CIRN_FIL) 2.5 (----) 0

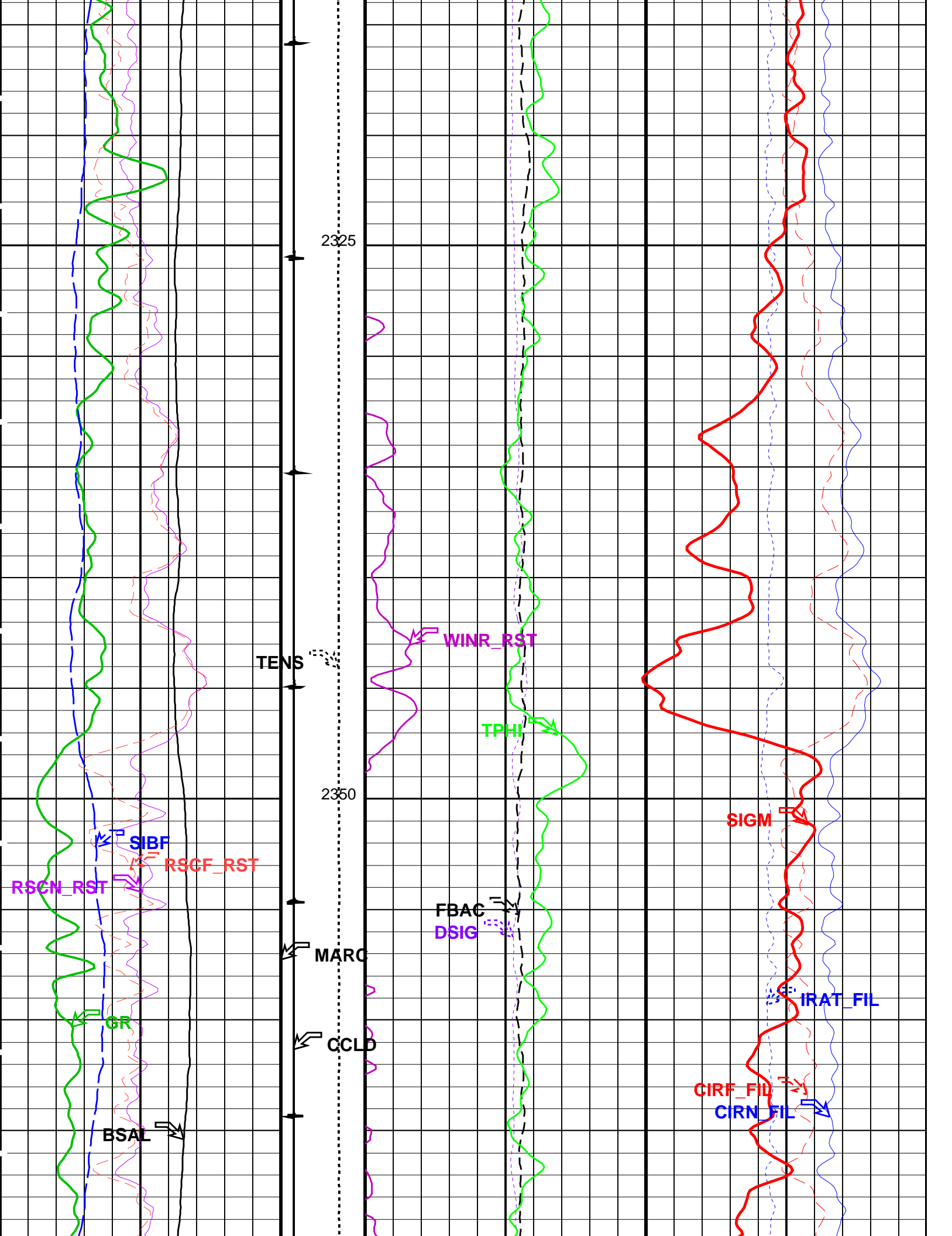


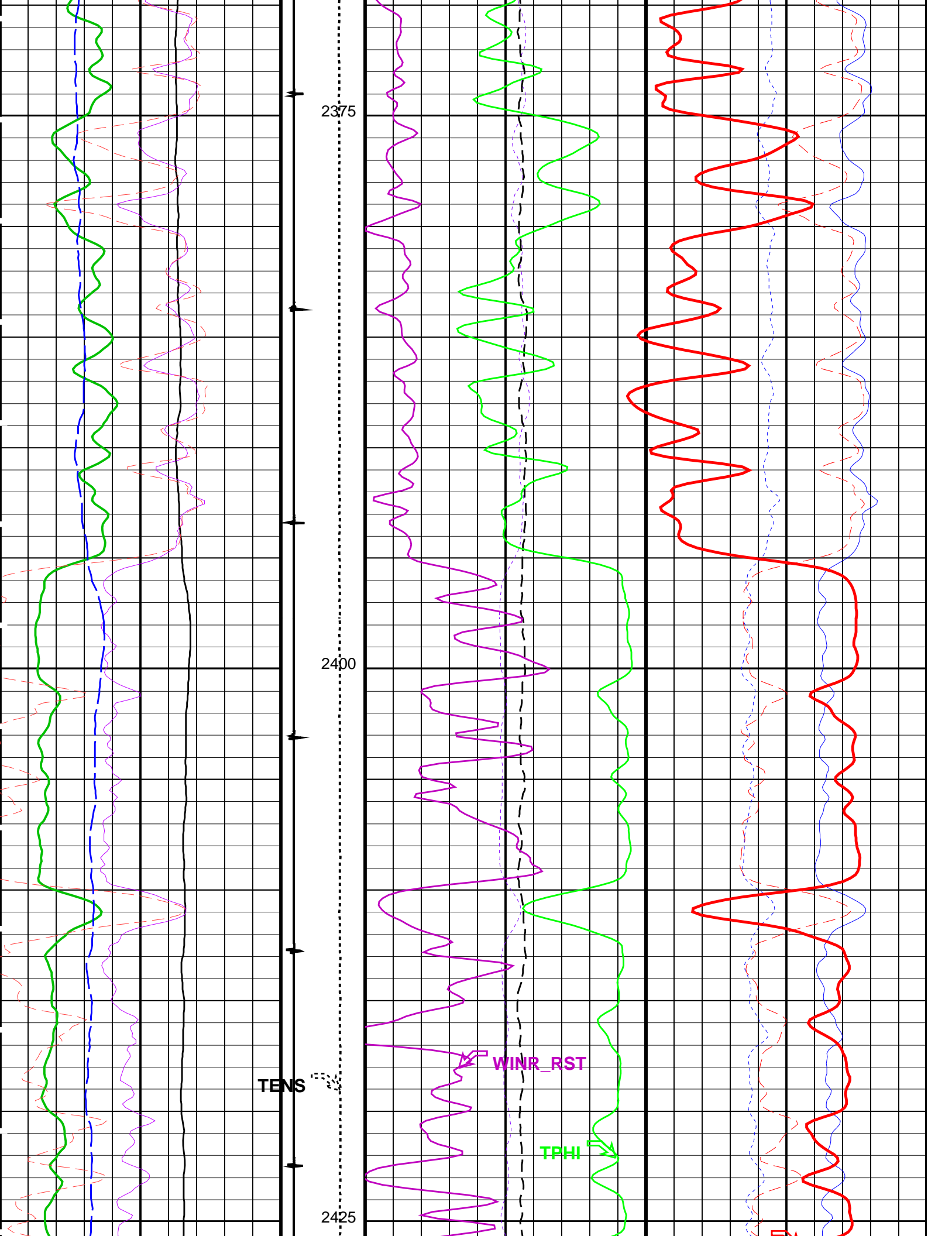


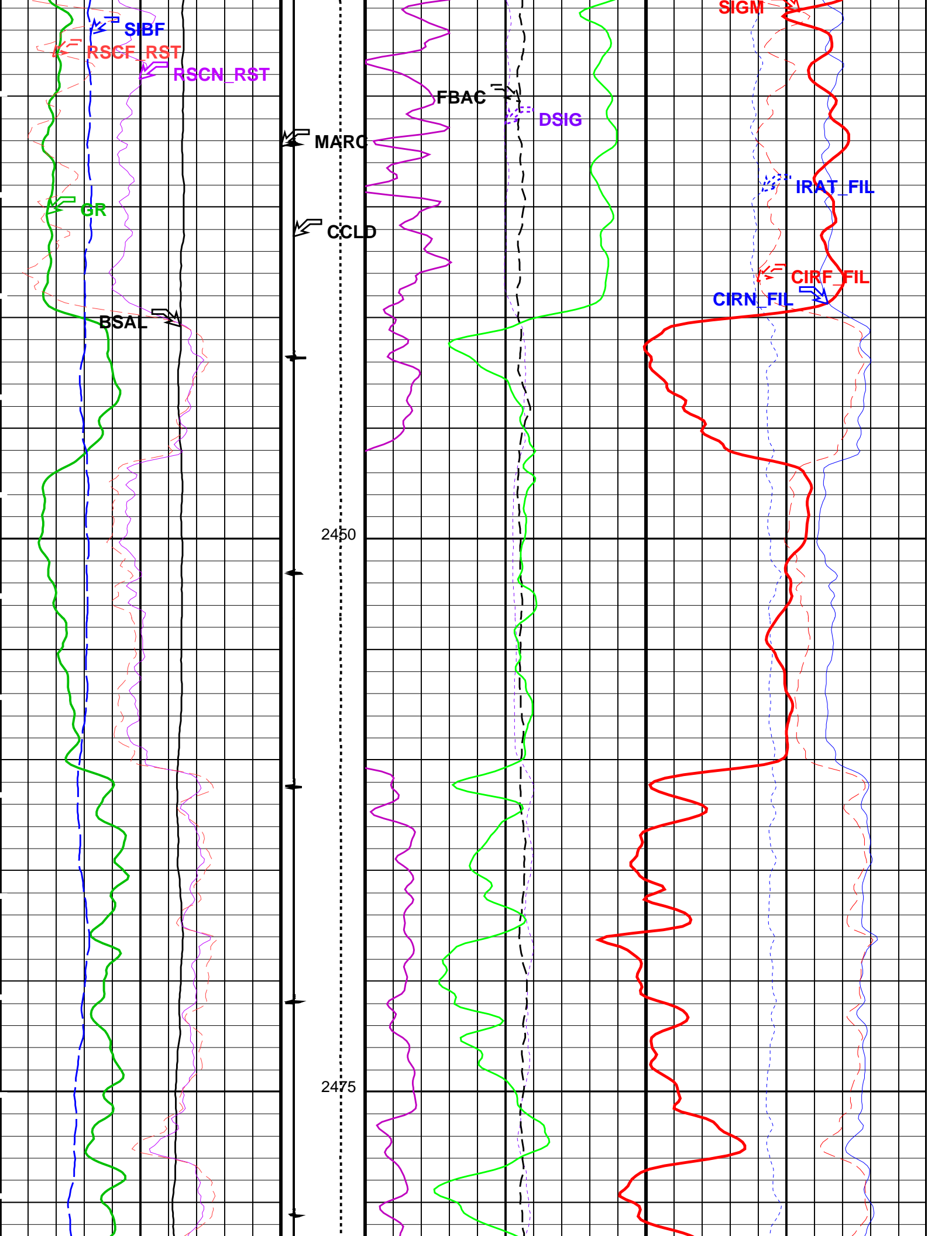


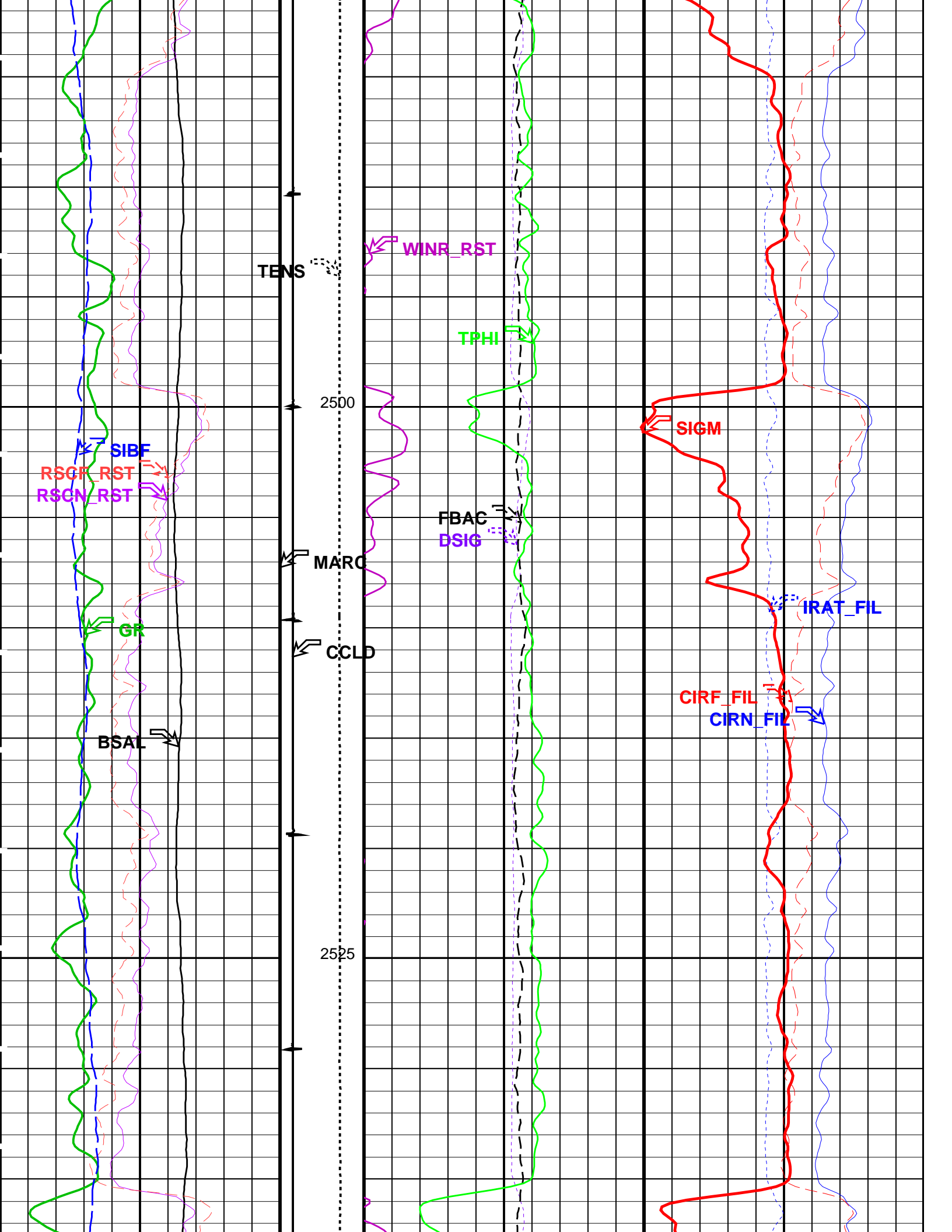


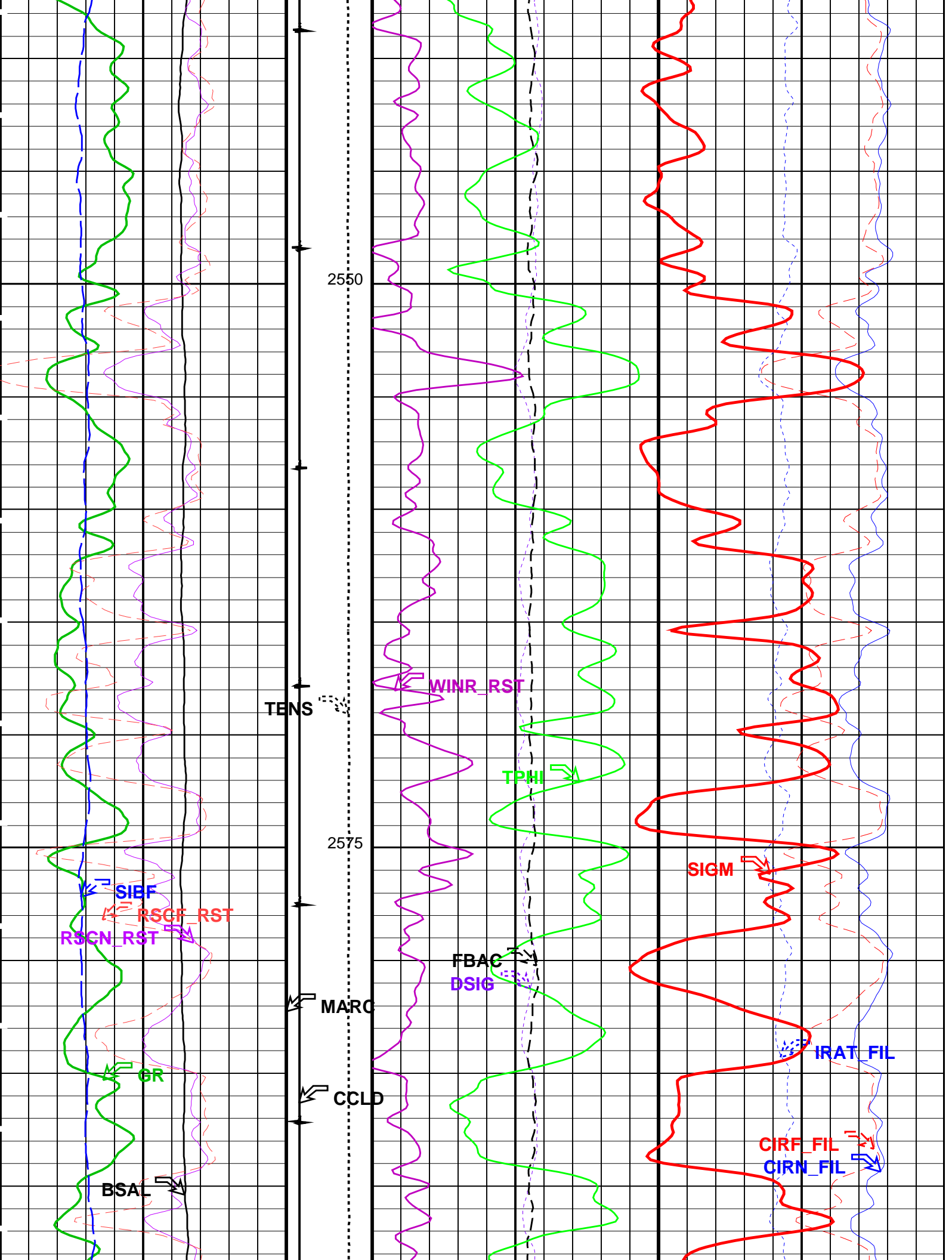


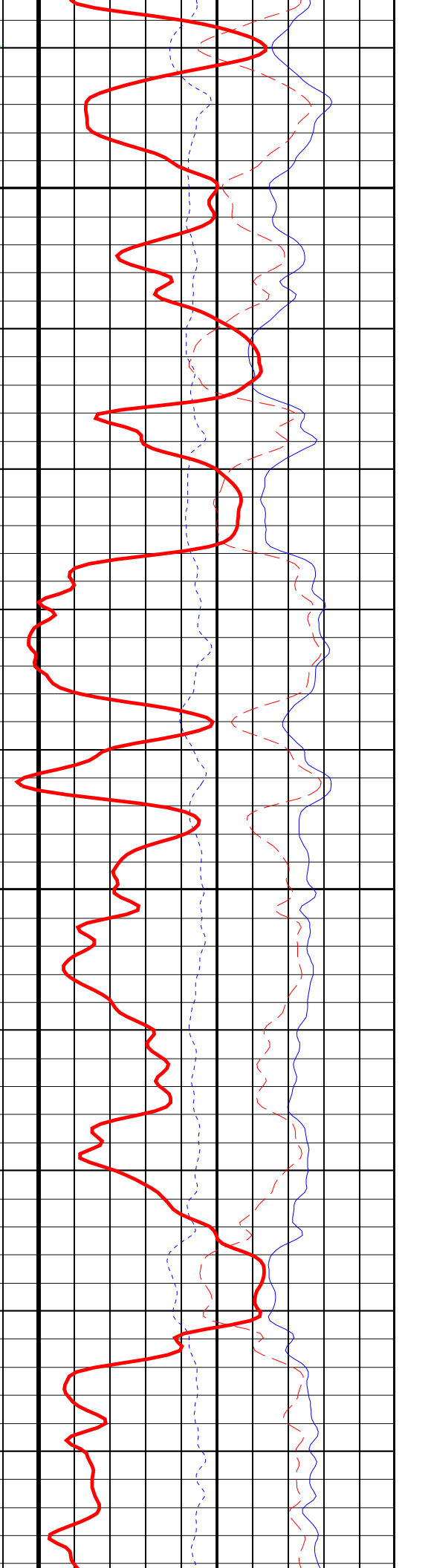
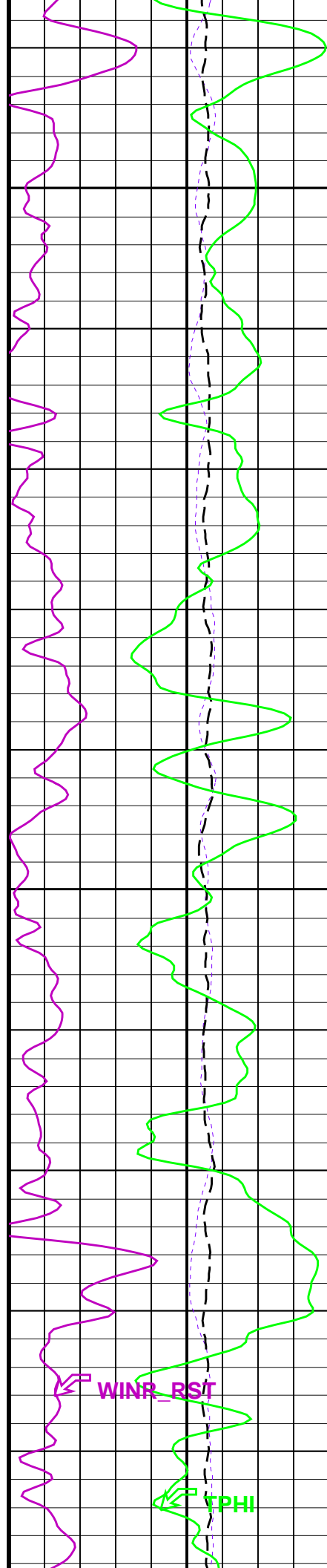
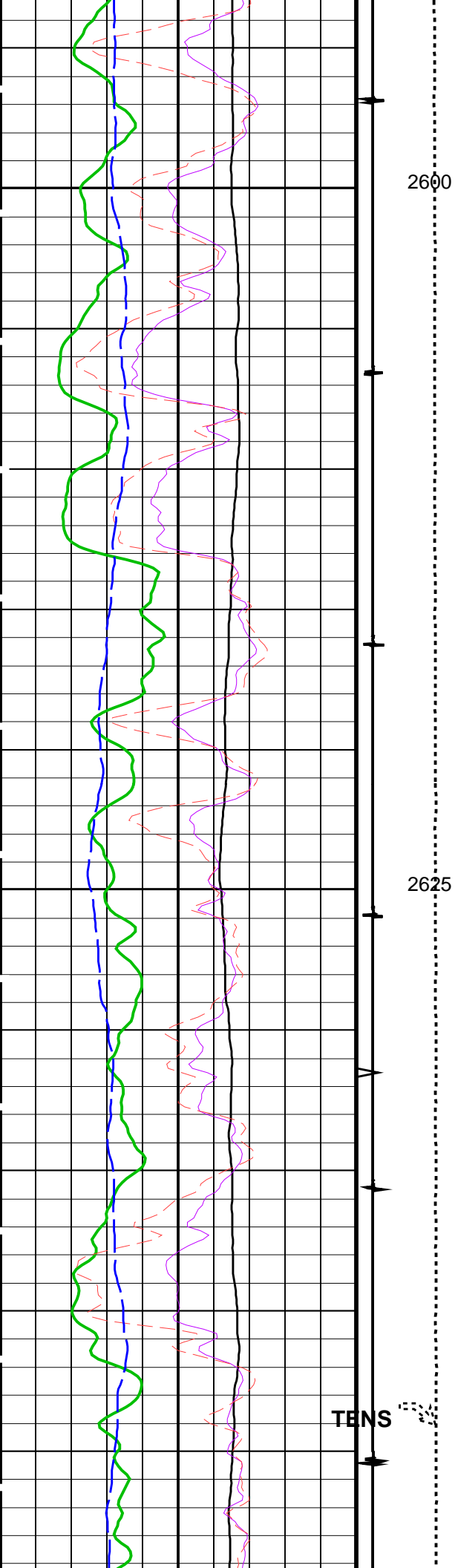


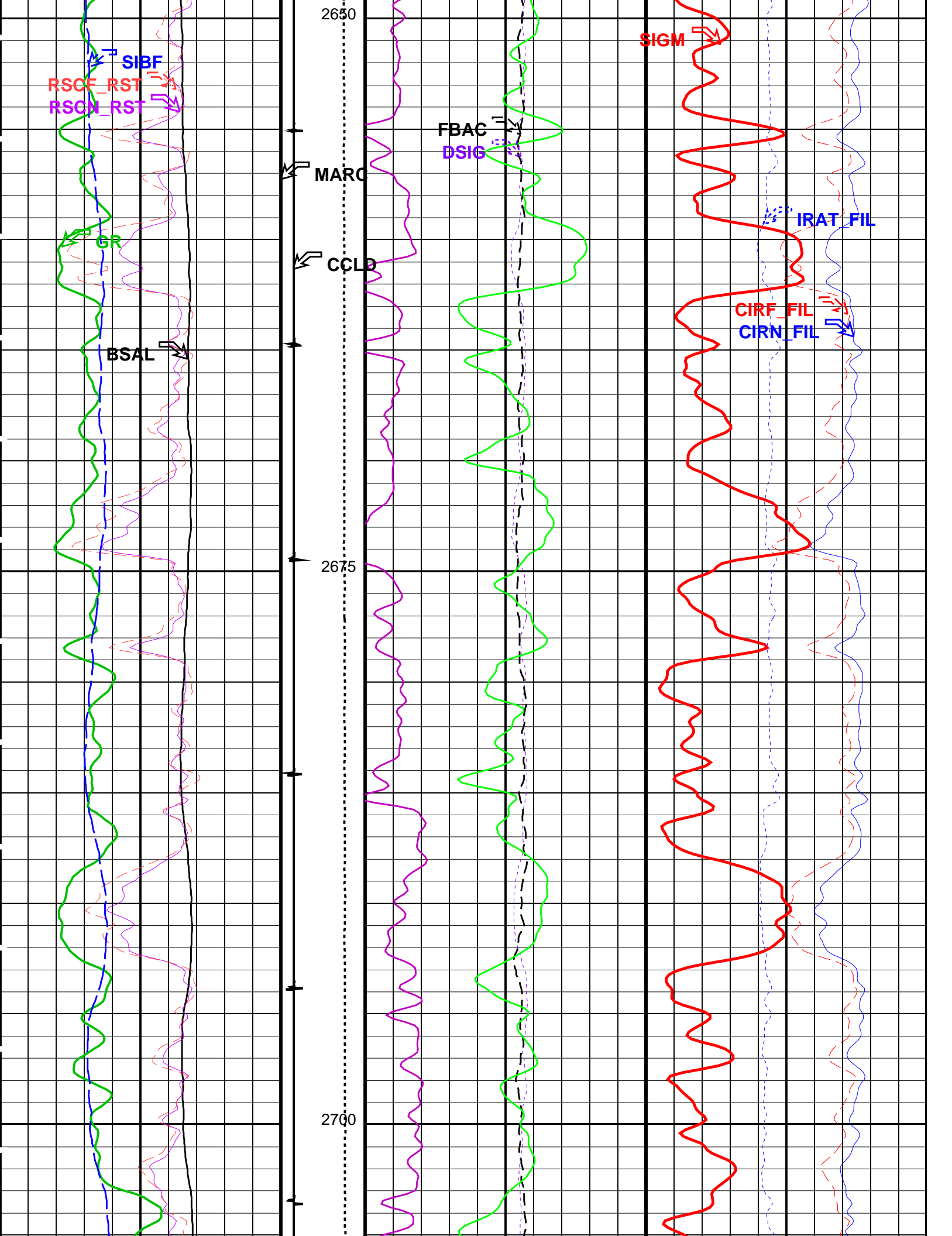


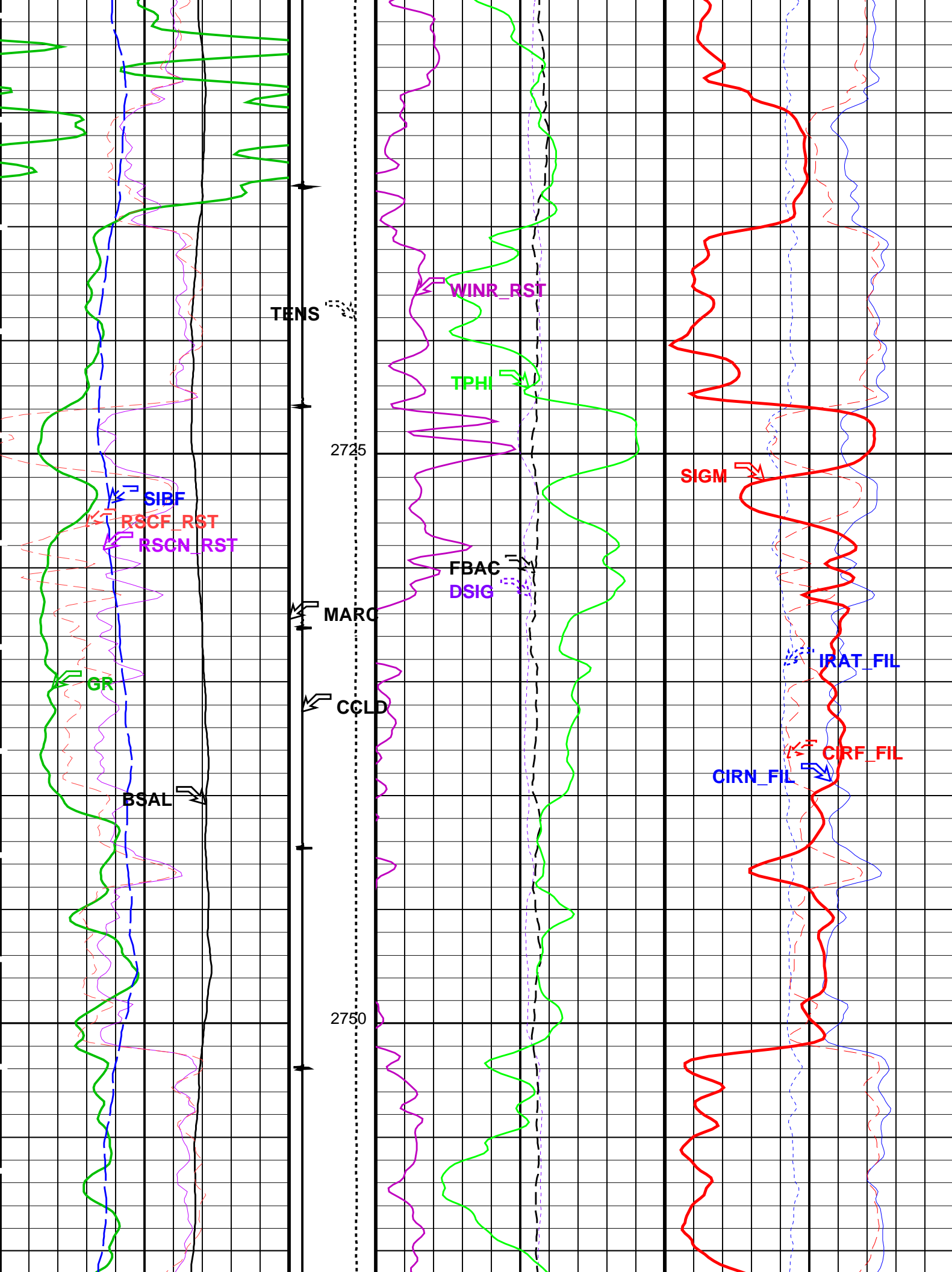


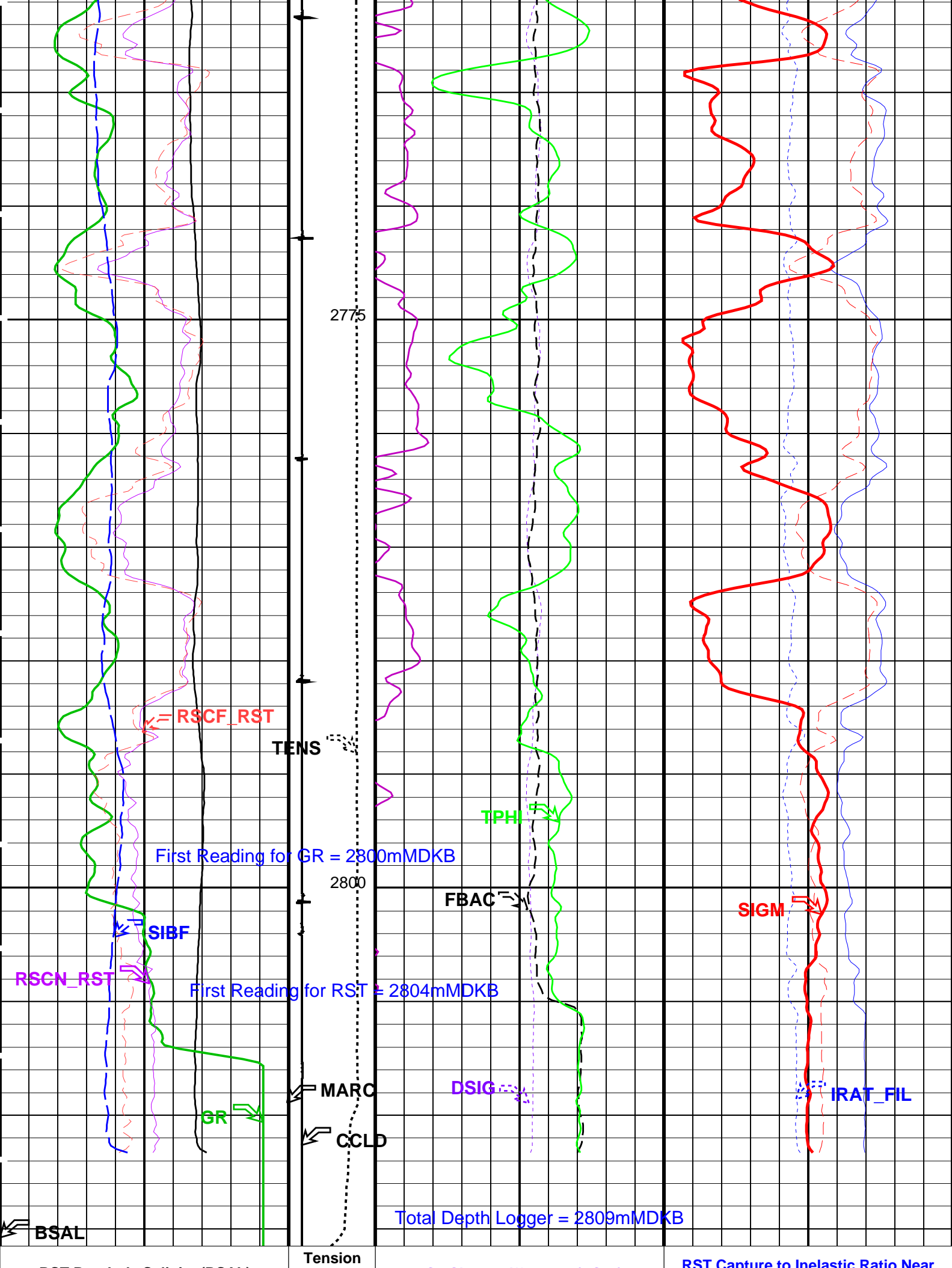












RST Borehole Salinity (BSAL) 450 (PPK) -50	(TENS) (LBF) 0 2000	RST Sigma Difference (DSIG) -30 (CU) 30	RST Capture to Inelastic Ratio Far (CIRN_FIL) 2.5 (----) 0
RST Sigma Borehole Fluid (SIBF) 100 (CU) 0	Discriminat ed CCL (CCLD) 3 (V) -17	MCS Far Background (filtered) (FBAC) 0 (CPS) 5000	RST Capture to Inelastic Ratio Far (CIRF_FIL) 5 (----) 0
Gamma Ray (GR) 0 (GAPI) 200	Minitron Arc Detection (MARC) 0 (----) 5	RST Sigma (SIGM) 60 (CU) 0	
RST Near Effective Capture CR (RSCN_ RST) 45 (----) 0		RST Porosity (TPHI) 0.6 (V/V) 0	RST Inelastic Ratio (IRAT_FIL) 0.75 (----) 0
RST Far Effective Capture CR (RSCF_ RST) 45 (----) 0		RST Weighted Inelastic Ratio (WINR_RST) -0.1 (----) 0.4	

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
RST-C: Reservoir Saturation Pro Tool C			
AIRB	RST Air Borehole	No	
BHS	Borehole Status	CASED	
BSALOPT	RST Borehole Salinity Option	Unknown	
BSFL	RST Borehole Salinity Filter Length	51	
DFPC	RST Depth Filter Processing Constant	One	
DFPC_TDTL	RST Depth Filter Processing Constant (TDT-like)	Two	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
NORM_IRAT_RST	RST Normalized Inelastic Ratio	0.48	
NORM_SIGM_RST	RST Normalized Sigma	30	CU
RGAI	Near/Far Gain Calibration Ratio	1	
SMBMO	RST Sigma Mode Background (Minitron Off)	No	
TIER_SIGM	RST Sigma Acquisition Mode	0_RST_Sigma	
PSPT-A/B: Production Services Logging Platform			
BHS	Borehole Status	CASED	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
System and Miscellaneous			
BS	Bit Size	8.500	IN
BSAL	Borehole Salinity	120000.00	PPM
CSIZ	Current Casing Size	4.500	IN
CWEI	Casing Weight	12.60	LB/F
DO	Depth Offset for Playback	1.3	M
DORL	Depth Offset for Repeat Analysis	0.0	M
PP	Playback Processing	NORMAL	

Format: RST_SIG_ANSW

Vertical Scale: 1:200

Graphics File Created: 17-Apr-2006 01:12

OP System Version: 14C0-302

MCM

RST-C PTC-3043-NUCL PSPT-A/B 14C0-302

Input DLIS Files

DEFAULT	RST_PSP_017LUP	FN:19	PRODUCER	16-Apr-2006 21:46	2814.4 M	2080.7 M
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Output DLIS Files

DEFAULT	RST_PSP_015PUP	FN:19	PRODUCER	17-Apr-2006 01:12
CLIENT	RST_PSP_015PUC	FN:20	CUSTOMER	17-Apr-2006 01:12

MAXIS Field Log

Company: Esso Australia Pty. Ltd.

Well: A7

Input DLIS Files

DEFAULT	RST_PSP_017LUP	FN:19	PRODUCER	16-Apr-2006 21:46	2814.4 M	2080.7 M
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Output DLIS Files

DEFAULT	RST_PSP_015PUP	FN:19	PRODUCER	17-Apr-2006 01:12	2815.7 M	2082.5 M
CLIENT	RST_PSP_015PUC	FN:20	CUSTOMER	17-Apr-2006 01:12	2815.7 M	2082.5 M

OP System Version: 14C0-302

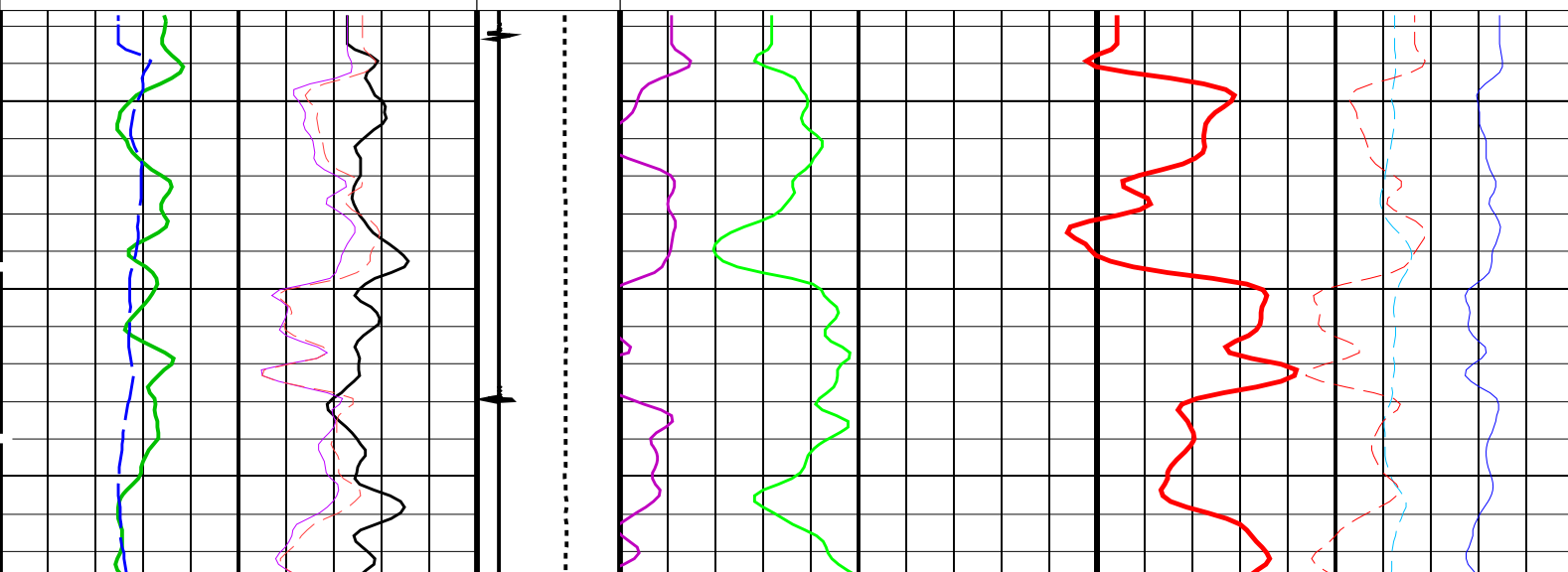
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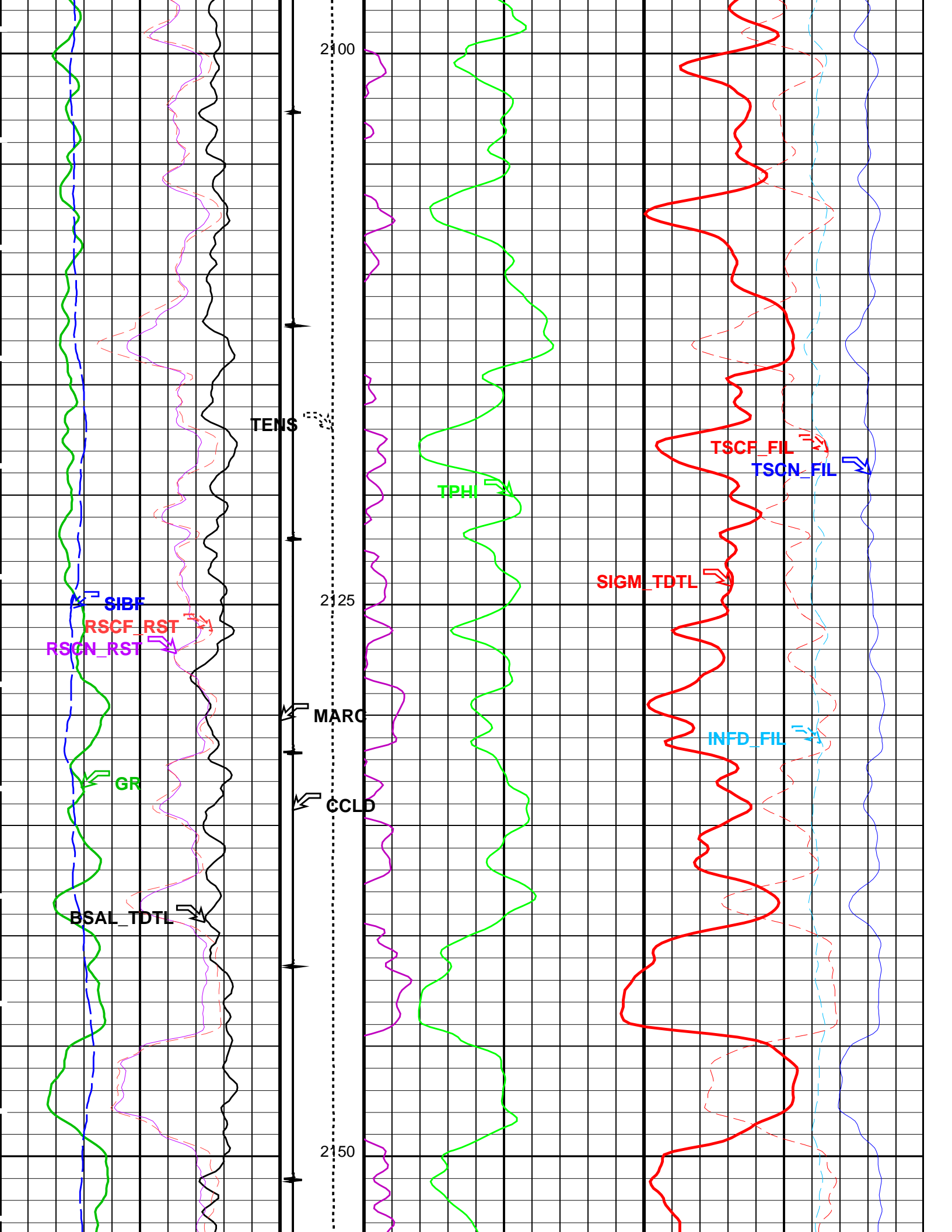
RST-C	PTC-3043-NUCL	PSPT-A/B	14C0-302
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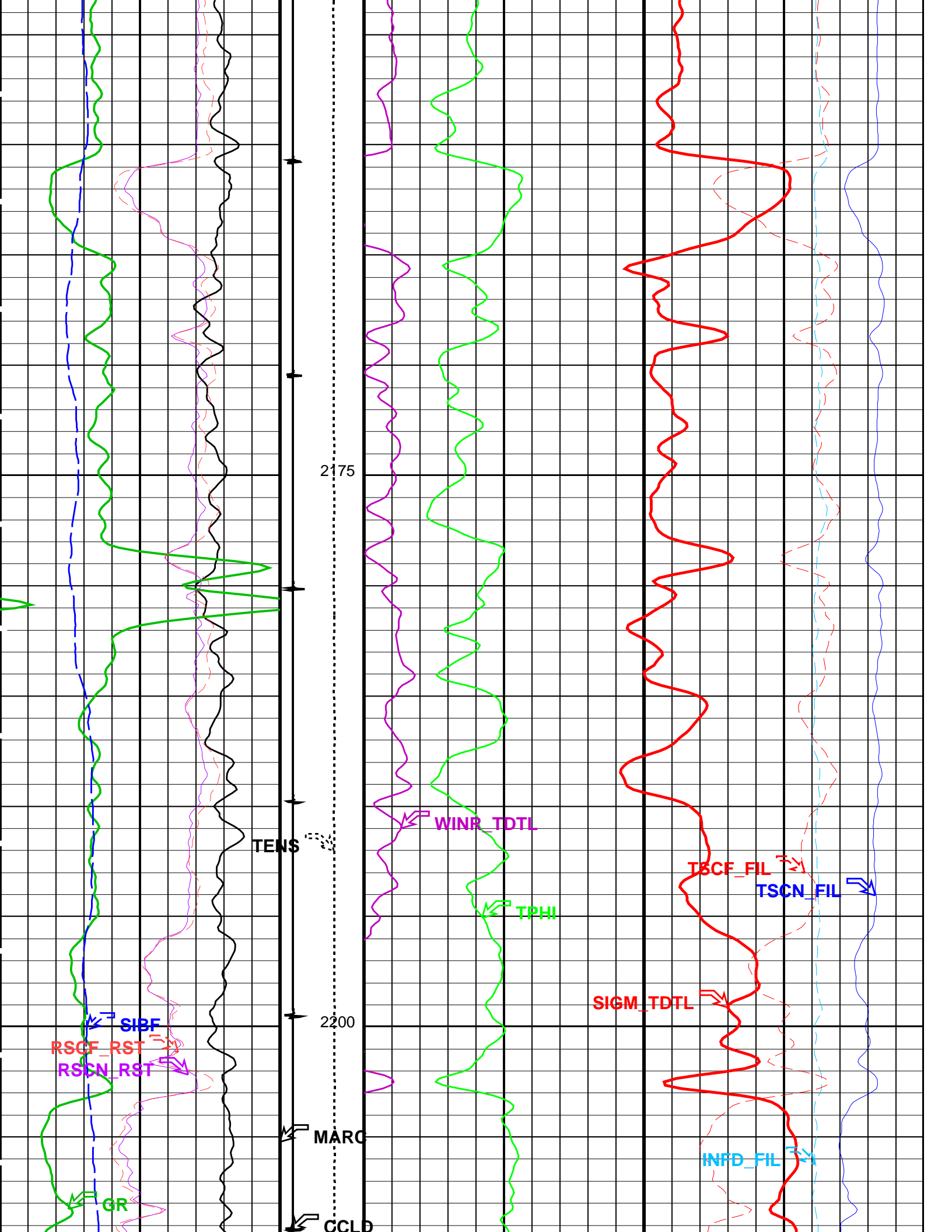
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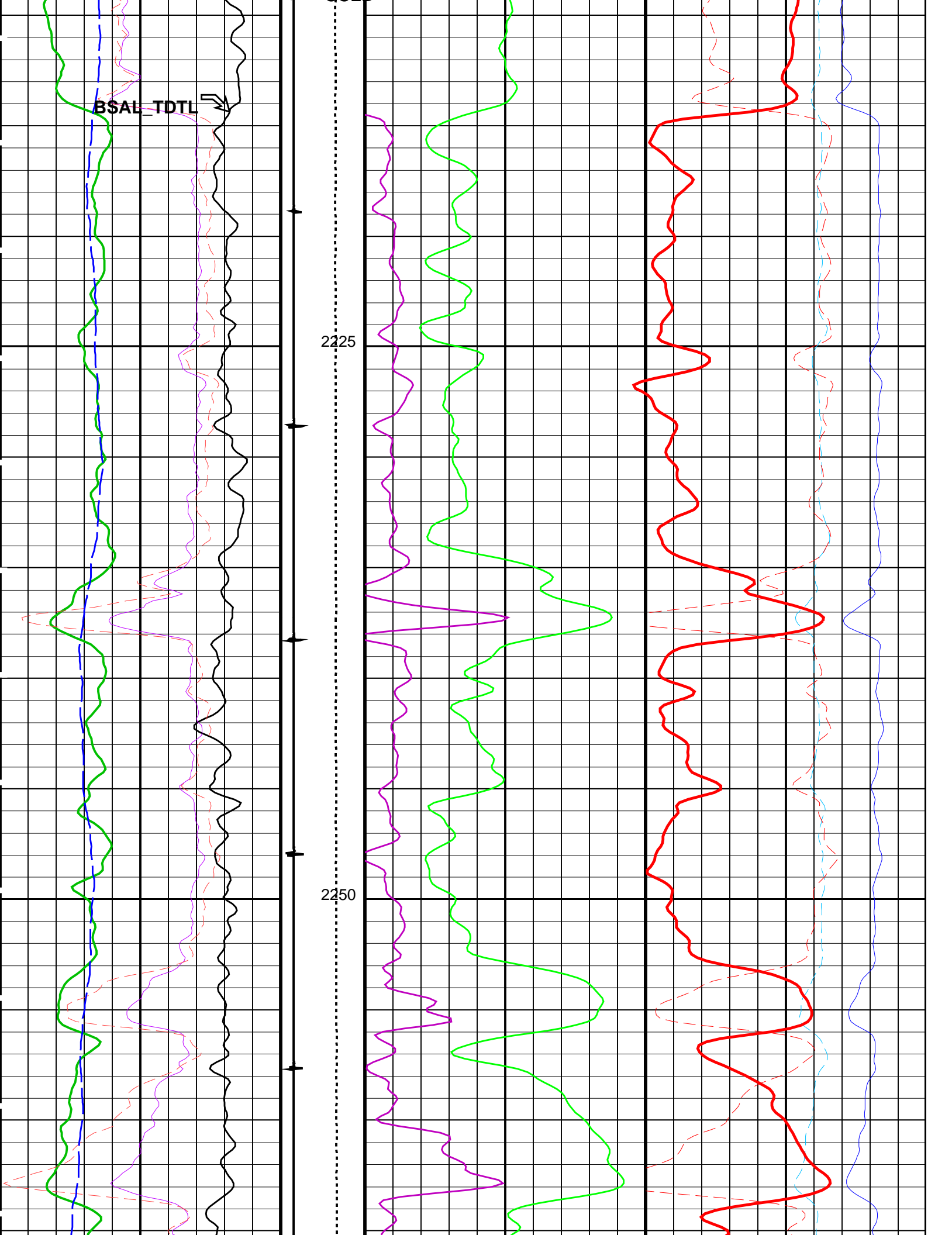
Time Mark Every 60 S

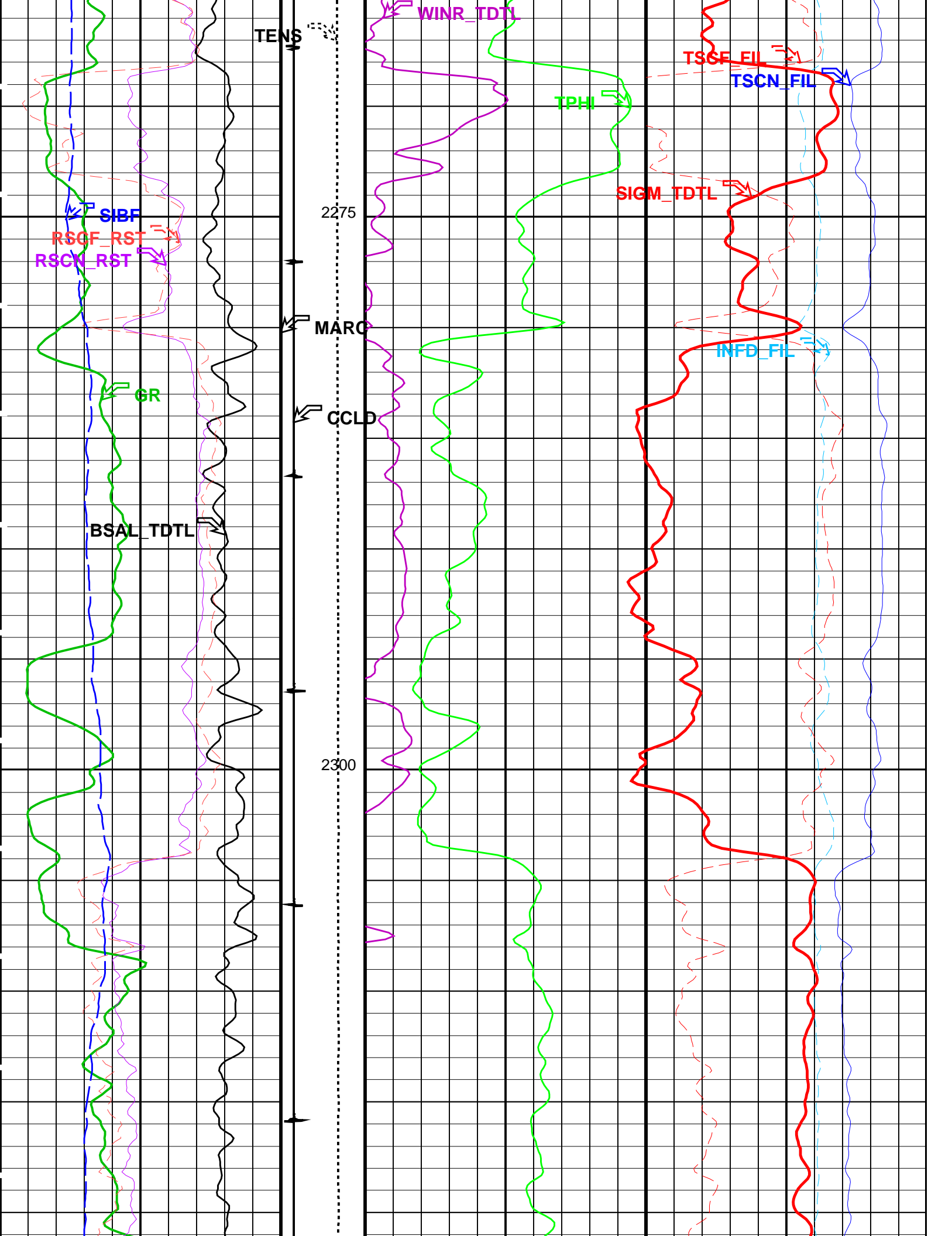
RST Borehole Salinity (TDT-like) (BSAL_TDTL)		Tot Sel CR Far (TSCF_FIL)	
450	(PPK) -50	12000	(CPS) 0
RST Far Effective Capture CR (RSCF_RST)		Tot Sel CR Near (TSCN_FIL)	
45	(----) 0	30000	(CPS) 0
RST Near Effective Capture CR (RSCN_RST)	Minitron Arc Detection (MARC)	RST Weighted Inelastic Ratio (TDT-like) (WINR_TDTL)	
45	(----) 0	-0.1 (----) 0.4	
	0 (----) 5		
Gamma Ray (GR)	Discriminated CCL (CCLD)	RST Porosity (TPHI)	Inelastic CR Far (INFD_FIL)
0	(GAPI) 200	0.6 (V/V)	0 10000 (CPS) 0
	3 (V) -17		
RST Sigma Borehole Fluid (SIBF)	Tension (TENS)	RST Sigma (TDT-like) (SIGM_TDTL)	
100	(CU) 0	60 (CU) 0	
	0 2000		

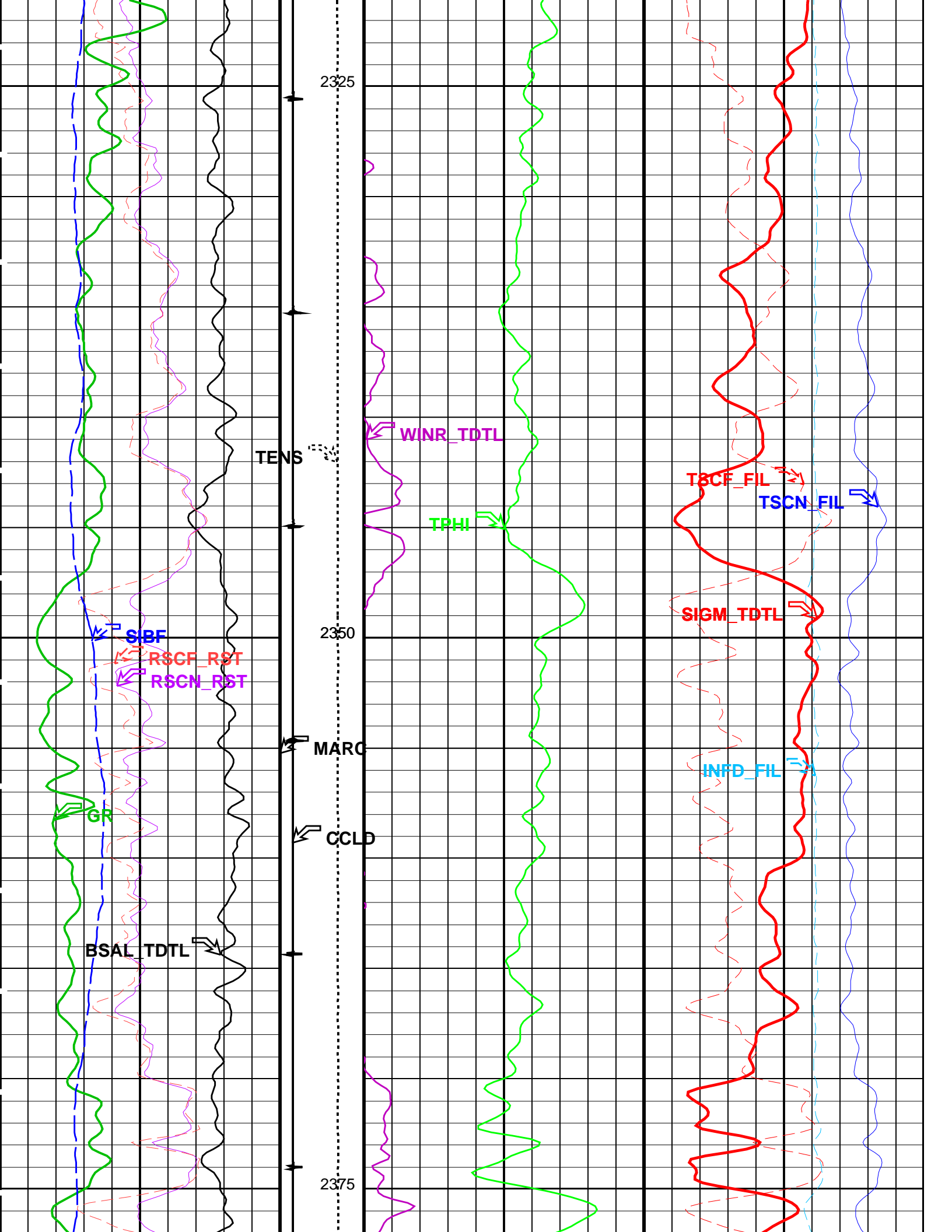


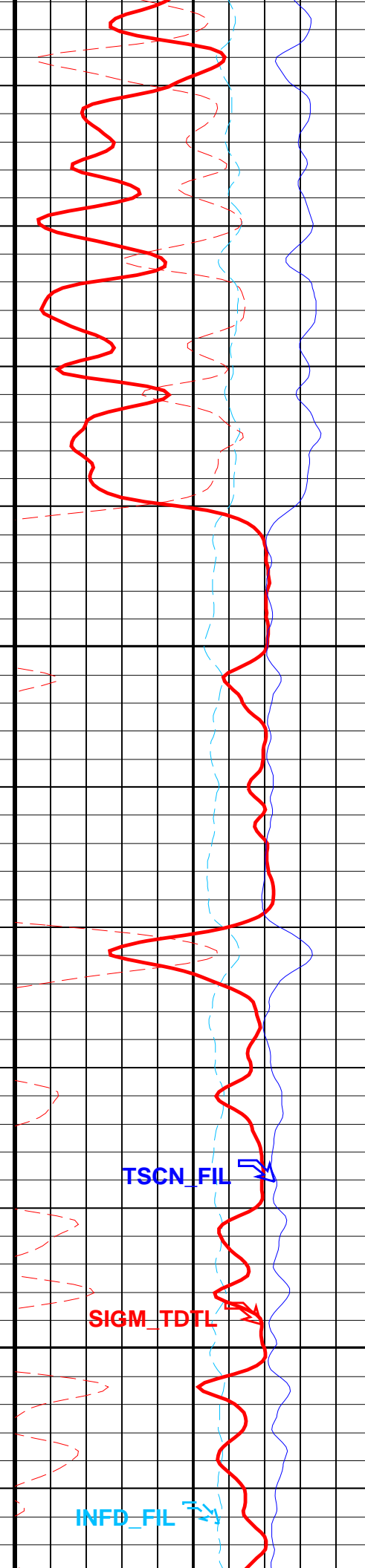
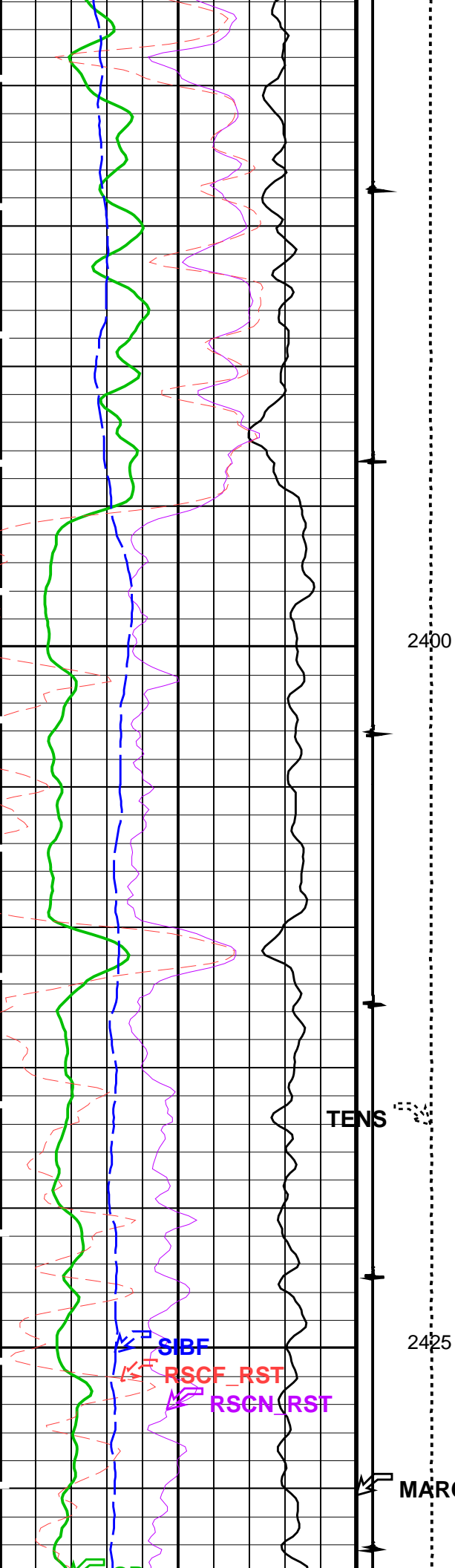


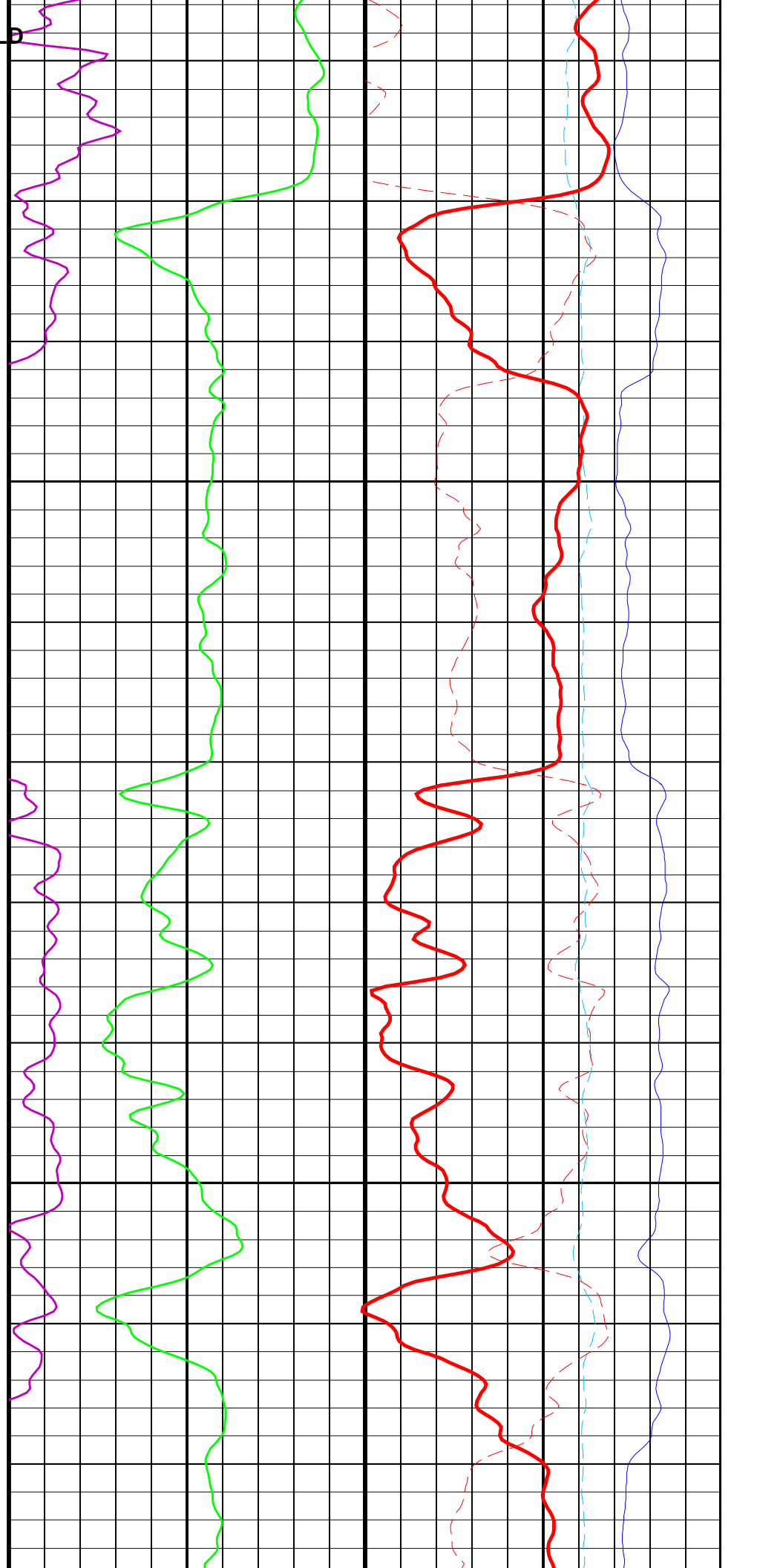
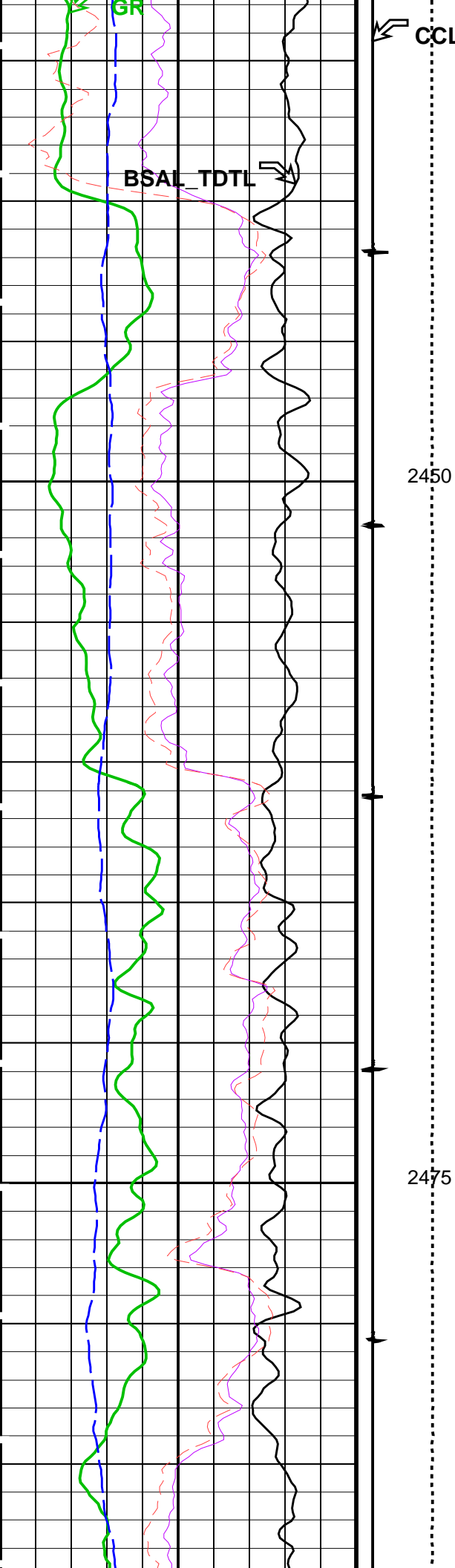


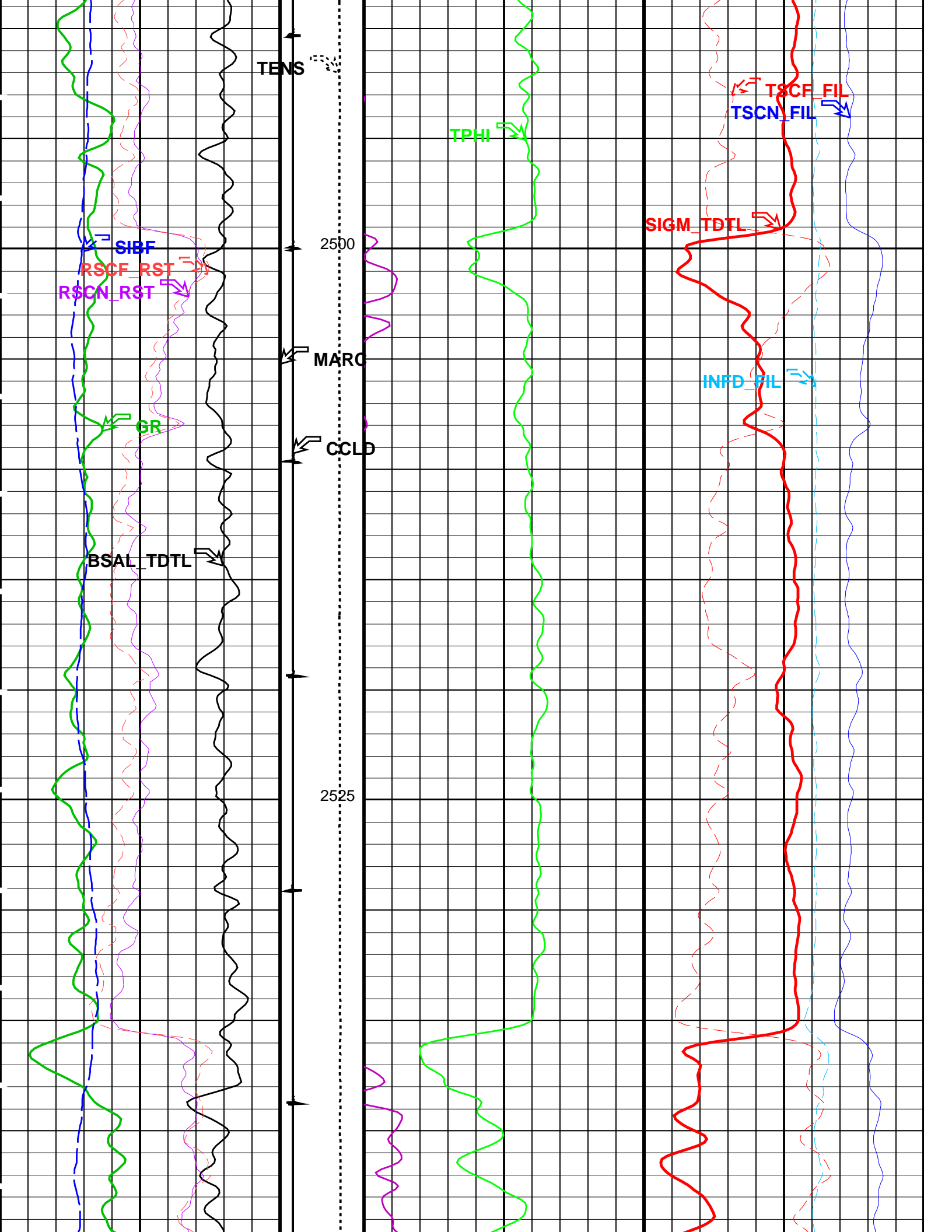


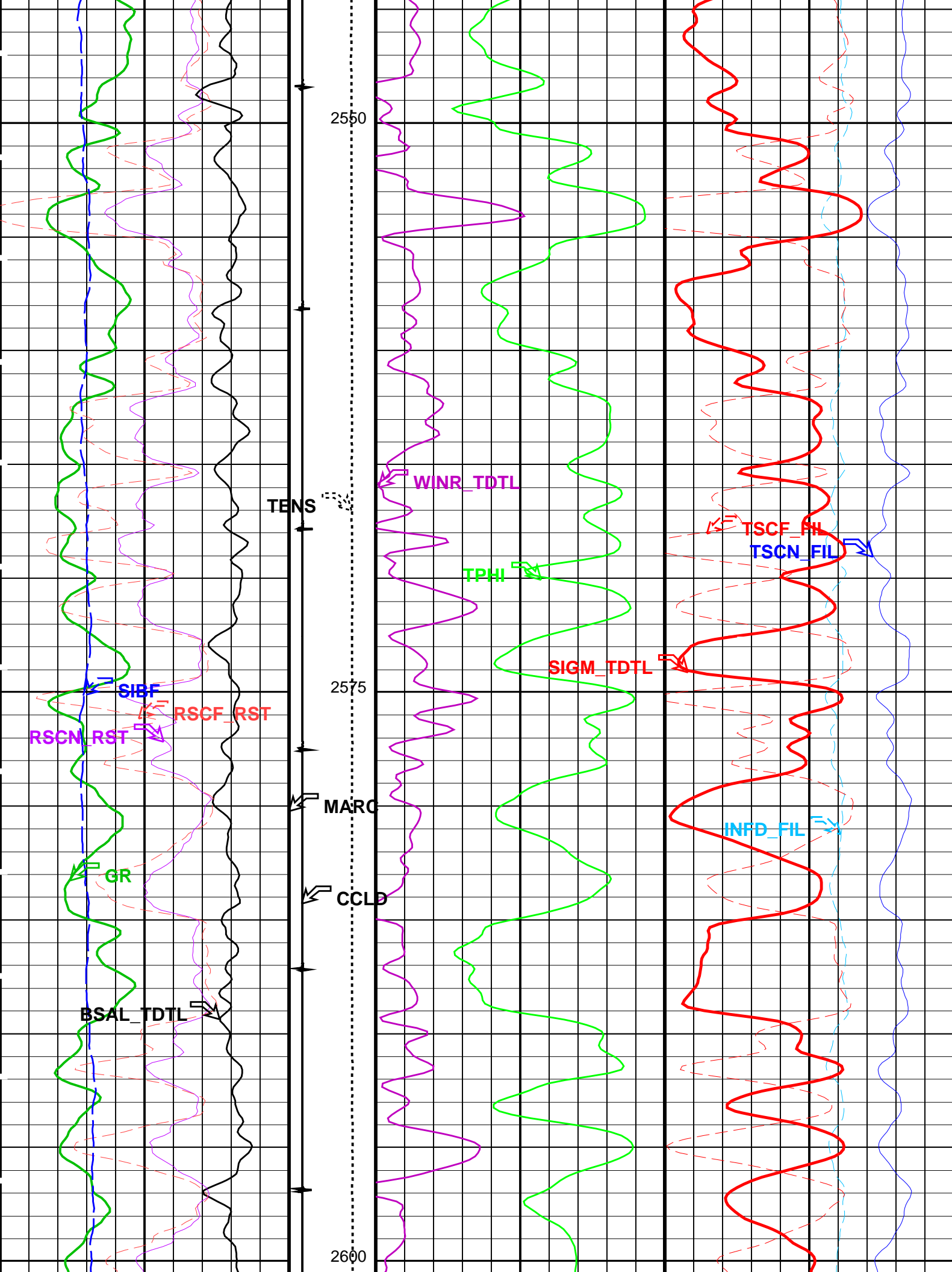


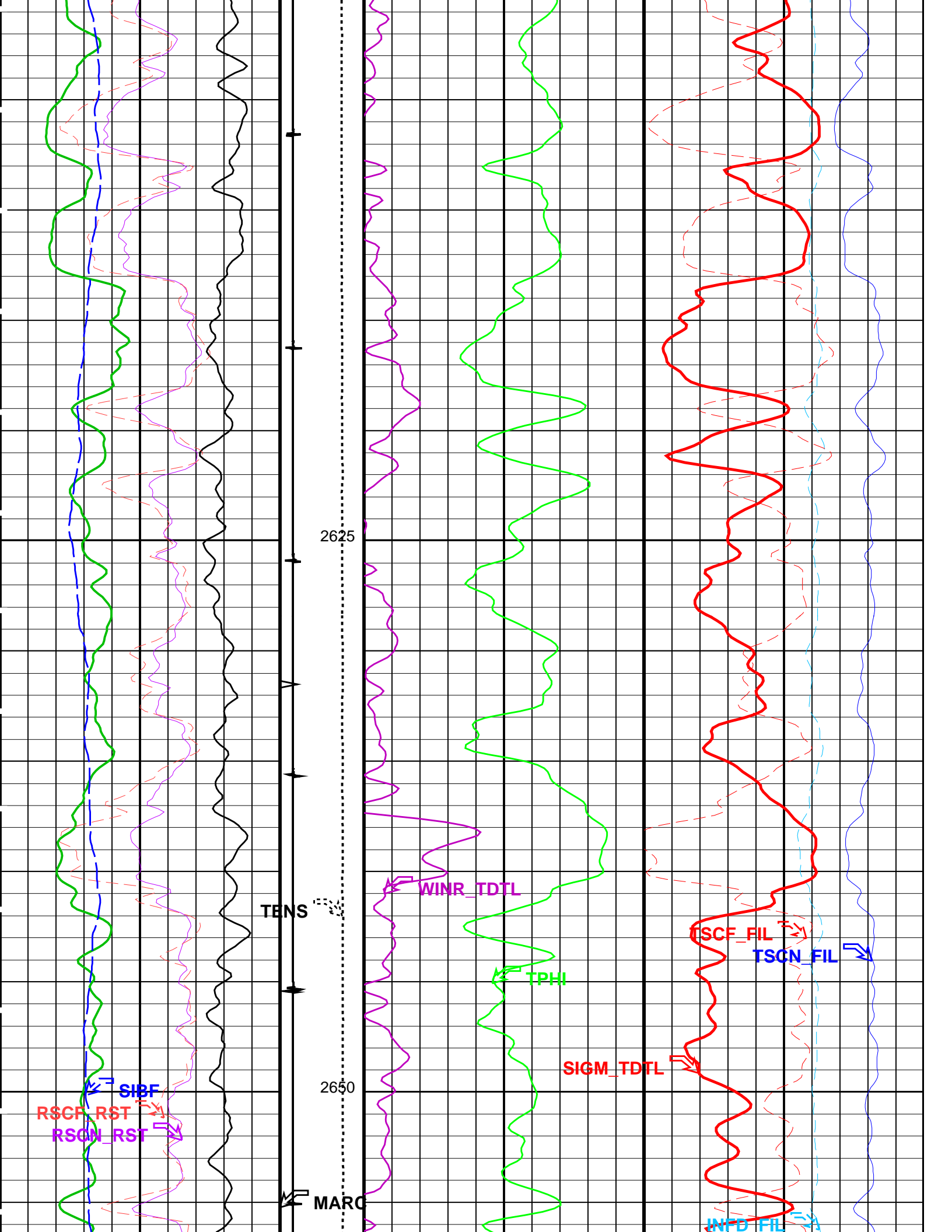


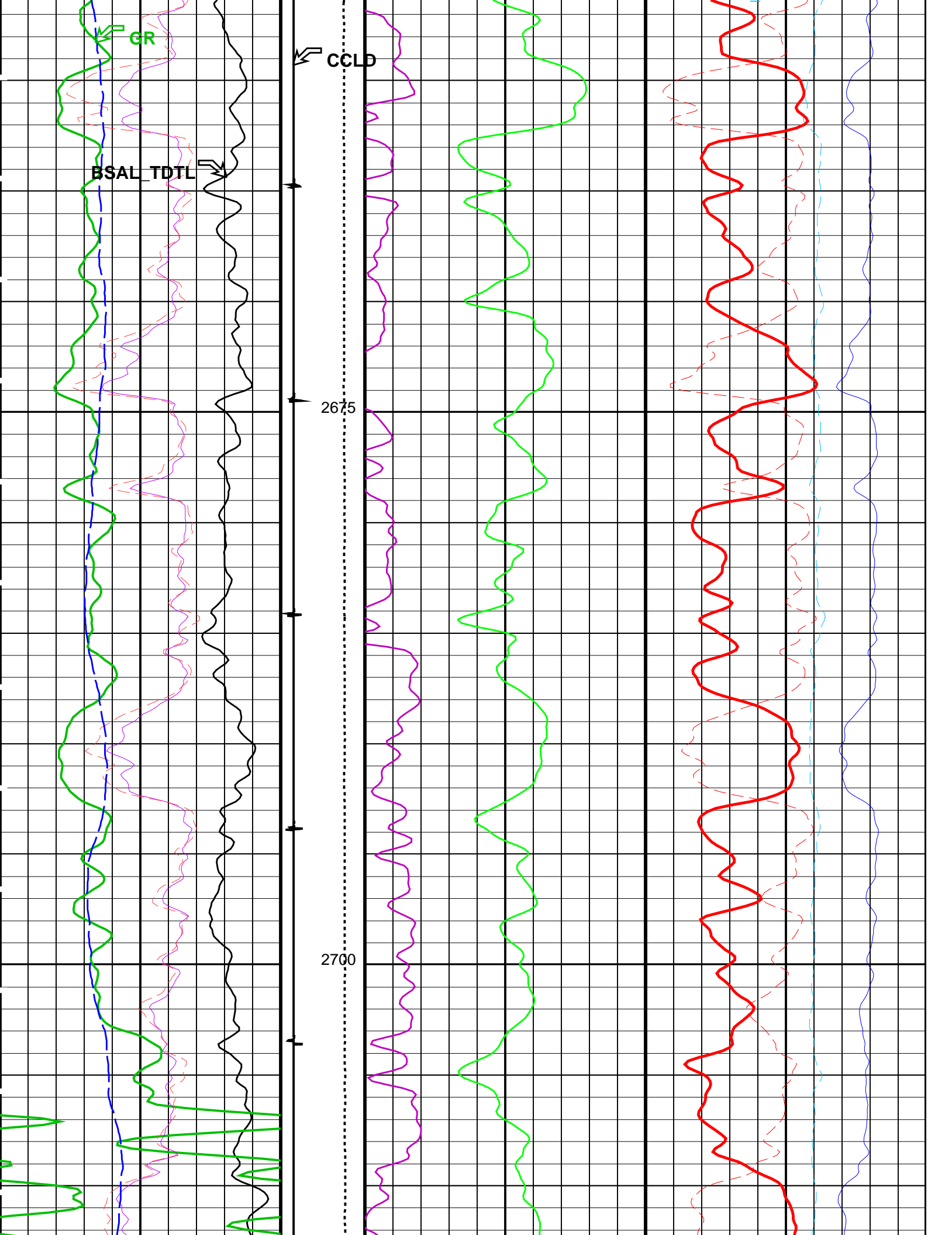


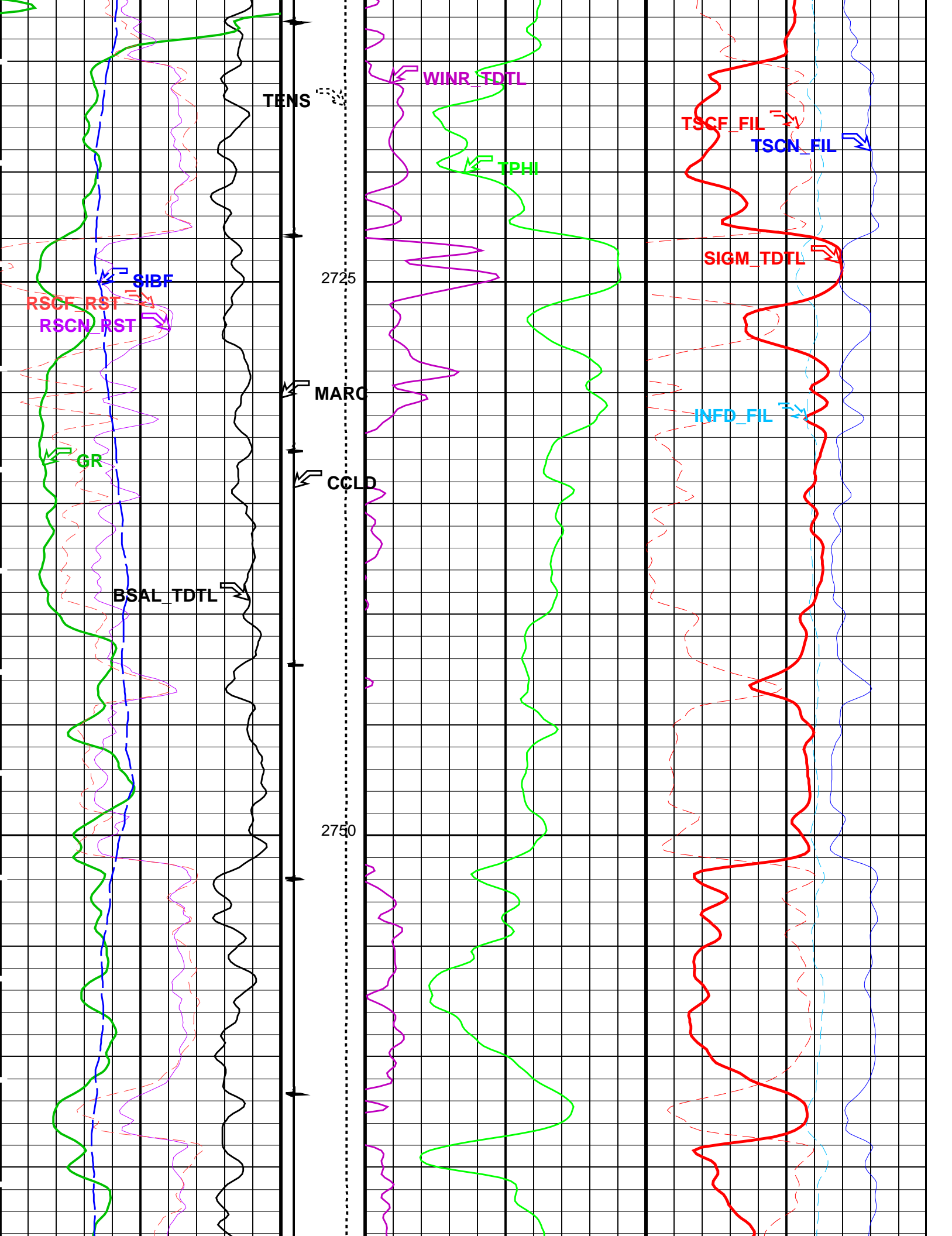


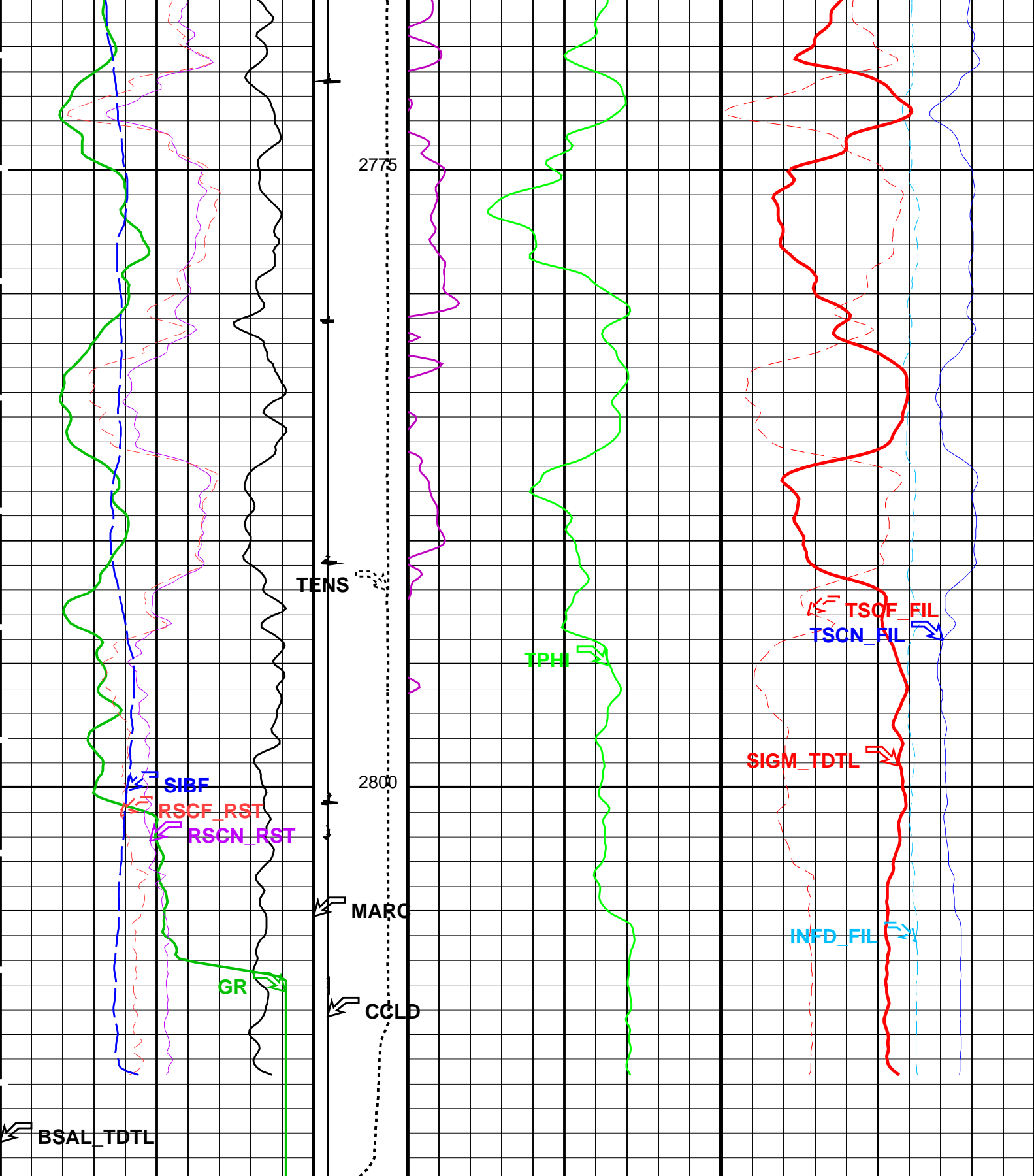












<div>RST Sigma Borehole Fluid (SIBF)</div> <div>100 (CU) 0</div>	<div>Tension (TENS) (LBF)</div> <div>0 2000</div>	<div>RST Sigma (TDT-like) (SIGM_TDTL)</div> <div>60 (CU) 0</div>
<div>Gamma Ray (GR)</div> <div>0 (GAPI) 200</div>	<div>Discriminat ed CCL (CCLD)</div> <div>3 (V) -17</div>	<div>RST Porosity (TPHI)</div> <div>0.6 (V/V) 0</div>
	<div>Minitron</div>	<div>Inelastic CR Far (INFD_FIL)</div> <div>10000 (CPS) 0</div>

RST Near Effective Capture CR (RSCN_RST)	Arc Detection (MARC)	RST Weighted Inelastic Ratio (TDT-like) (WINR_TDTL)	
45 (-----) 0	0 (----- 5	-0.1 (-----	0.4
RST Far Effective Capture CR (RSCF_RST)			Tot Sel CR Near (TSCN_FIL)
45 (-----) 0			30000 (CPS) 0
RST Borehole Salinity (TDT-like) (BSAL_TDTL)			Tot Sel CR Far (TSCF_FIL)
450 (PPK) -50			12000 (CPS) 0


PIP SUMMARY			
Time Mark Every 60 S			

Parameters			
DLIS Name	Description	Value	
RST–C: Reservoir Saturation Pro Tool C			
AIRB	RST Air Borehole	No	
BHS	Borehole Status	CASED	
BSALOPT	RST Borehole Salinity Option	Unknown	
BSFL	RST Borehole Salinity Filter Length	51	
DFPC	RST Depth Filter Processing Constant	One	
DFPC_TDTL	RST Depth Filter Processing Constant (TDT–like)	Two	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
NORM_IRAT_RST	RST Normalized Inelastic Ratio	0.48	
NORM_SIGM_RST	RST Normalized Sigma	30	CU
RGAI	Near/Far Gain Calibration Ratio	1	
SMBMO	RST Sigma Mode Background (Minitron Off)	No	
TIER_SIGM	RST Sigma Acquisition Mode	0_RST_Sigma	
PSPT–A/B: Production Services Logging Platform			
BHS	Borehole Status	CASED	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
System and Miscellaneous			
BS	Bit Size	8.500	IN
BSAL	Borehole Salinity	120000.00	PPM
CSIZ	Current Casing Size	4.500	IN
CWEI	Casing Weight	12.60	LB/F
DO	Depth Offset for Playback	1.3	M
DORL	Depth Offset for Repeat Analysis	0.0	M
PP	Playback Processing	NORMAL	

Format: RST_TDTL_ANSW	Vertical Scale: 1:200	Graphics File Created: 17-Apr-2006 01:12
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OP System Version: 14C0-302			
MCM			
RST-C	PTC-3043-NUCL	PSPT-A/B	14C0-302

Input DLIS Files						
DEFAULT	RST_PSP_017LUP	FN:19	PRODUCER	16-Apr-2006 21:46	2814.4 M	2080.7 M
Output DLIS Files						
DEFAULT	RST_PSP_015PUP	FN:19	PRODUCER	17-Apr-2006 01:12		
CLIENT	RST_PSP_015PUC	FN:20	CUSTOMER	17-Apr-2006 01:12		

		<div>RST Sigma Pass 1</div> <div>2809m – 2100m MDKB</div>
MAXIS Field Log		

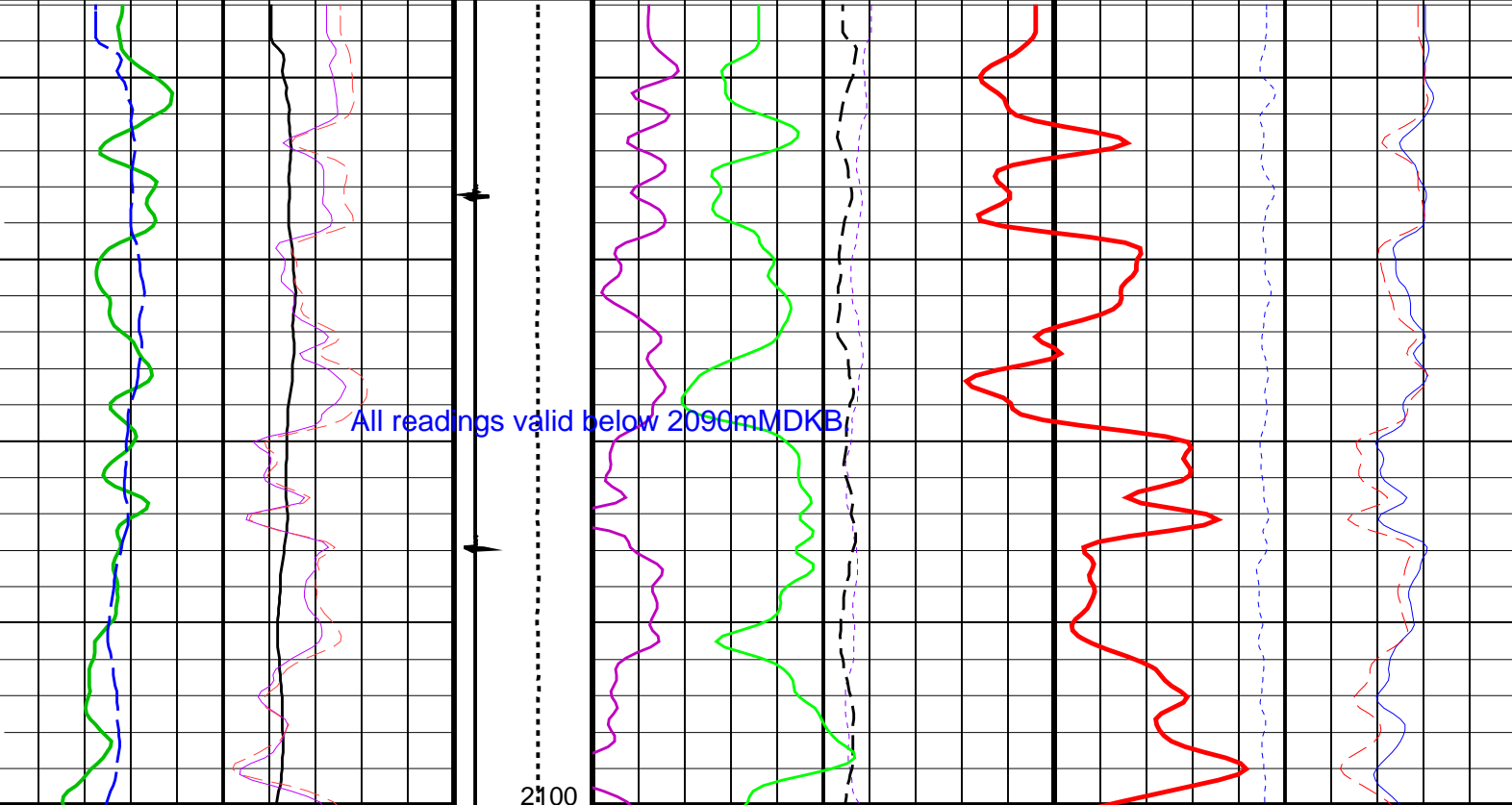
Input DLIS Files						
DEFAULT	RST_PSP_016LUP	FN:17	PRODUCER	16-Apr-2006 21:46	2811.8 M	2076.6 M
Output DLIS Files						
DEFAULT	RST_PSP_014PUP	FN:17	PRODUCER	17-Apr-2006 01:07	2812.5 M	2077.8 M
CLIENT	RST_PSP_014PUC	FN:18	CUSTOMER	17-Apr-2006 01:07	2812.5 M	2077.8 M

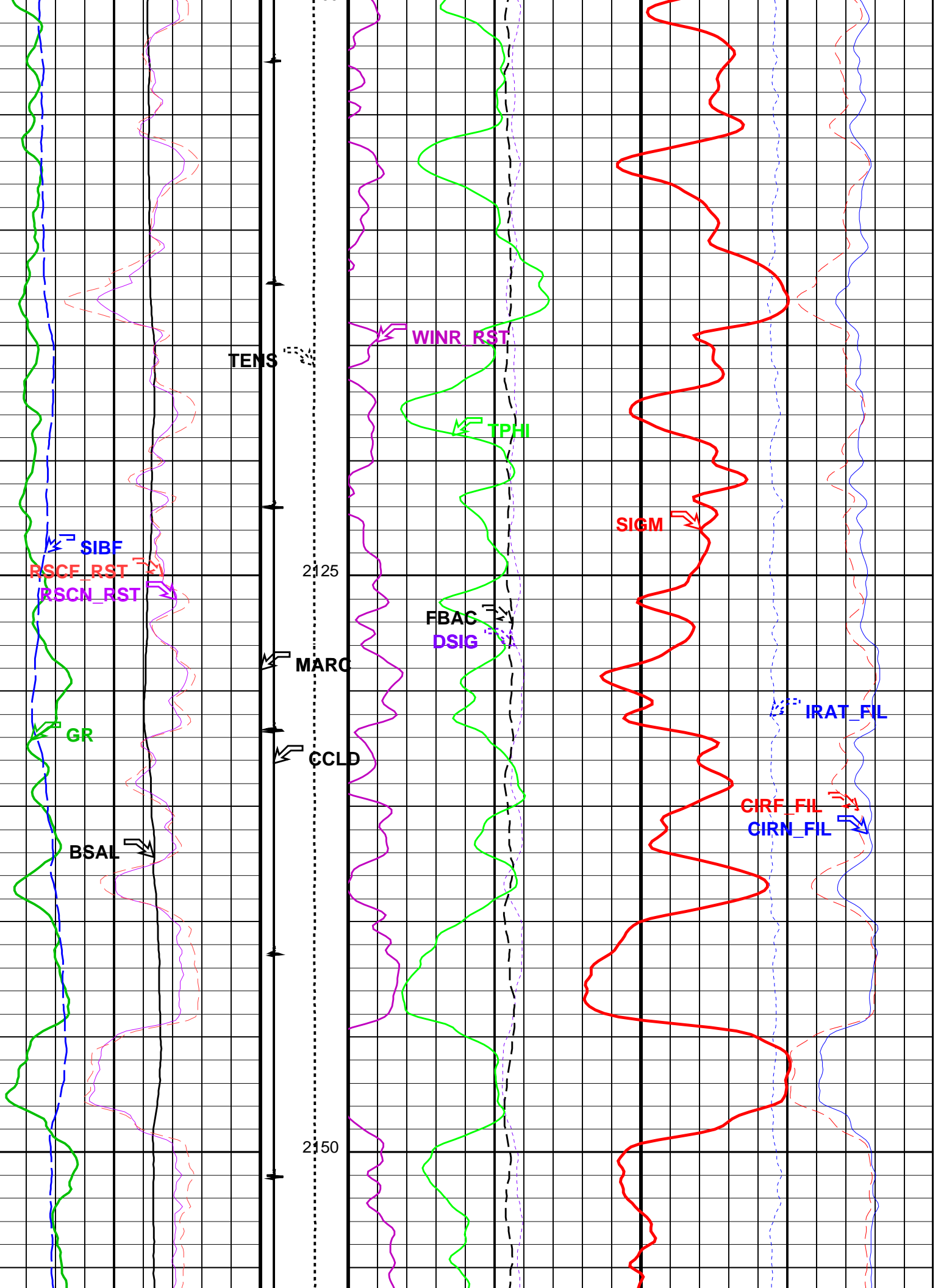
OP System Version: 14C0-302						
MCM						
RST-C	PTC-3043-NUCL	PSPT-A/B		14C0-302		

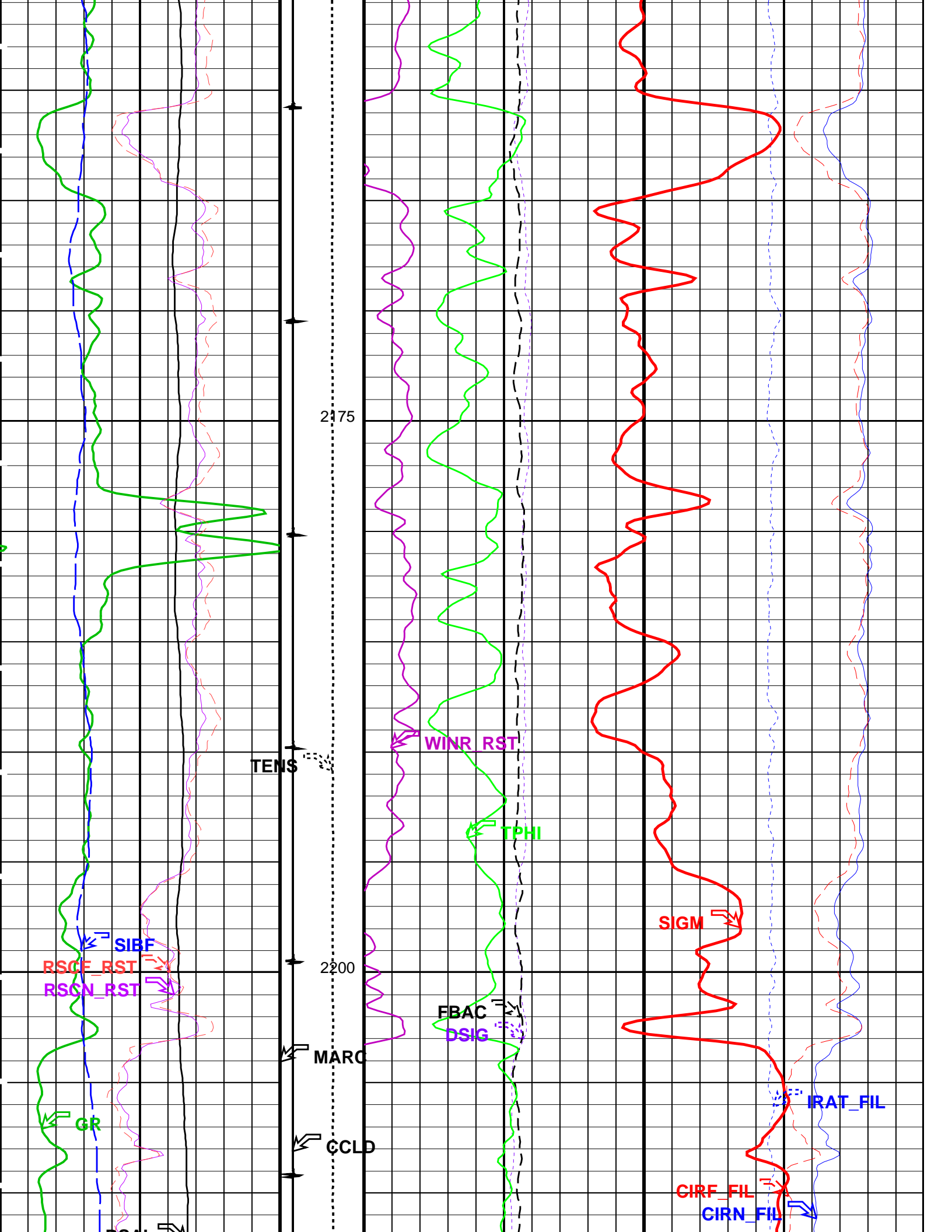
PIP SUMMARY

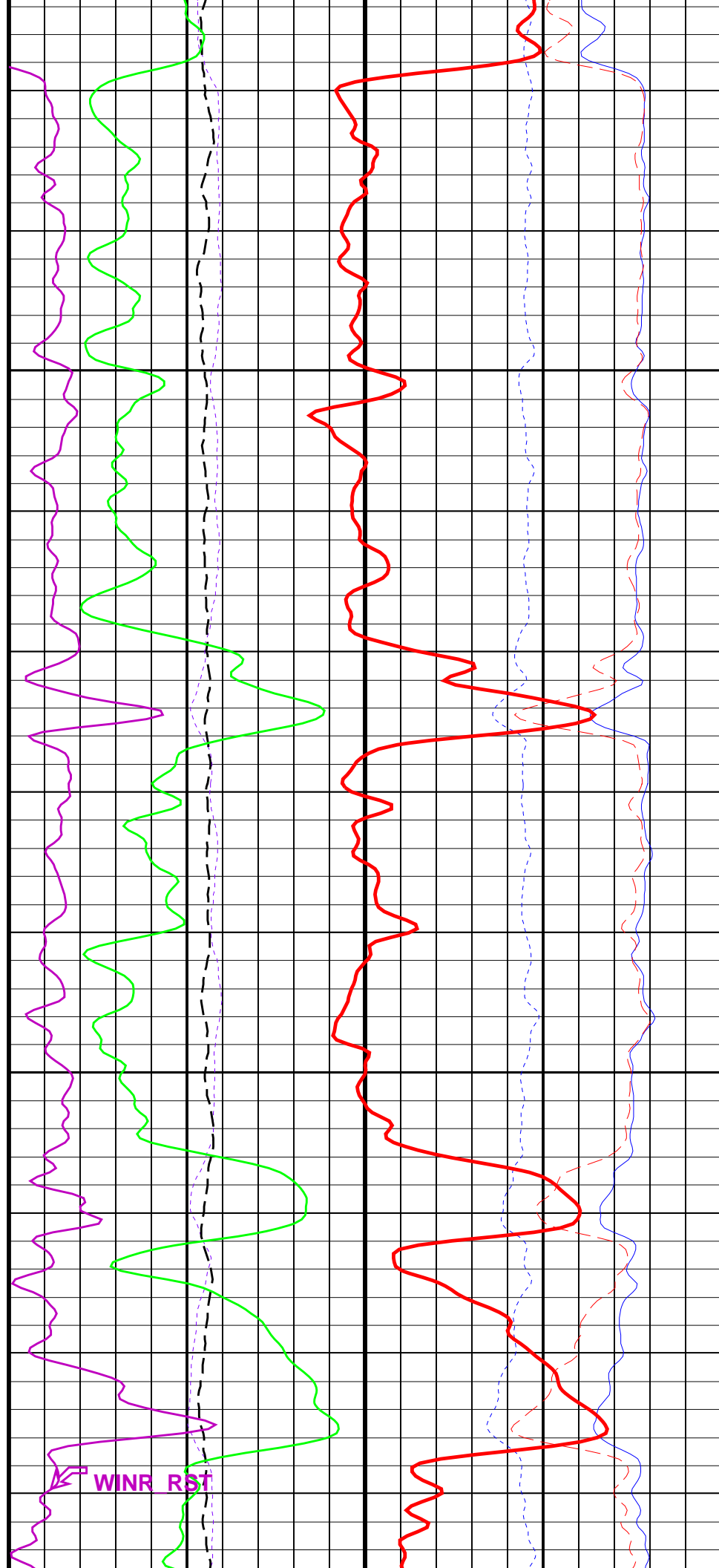
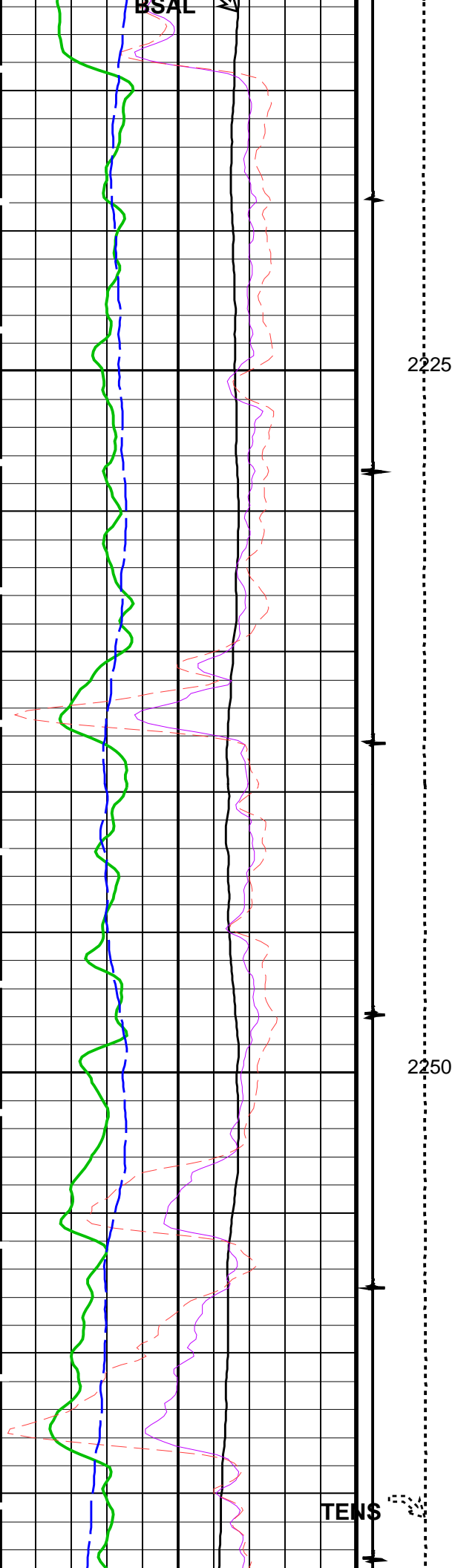
Time Mark Every 60 S

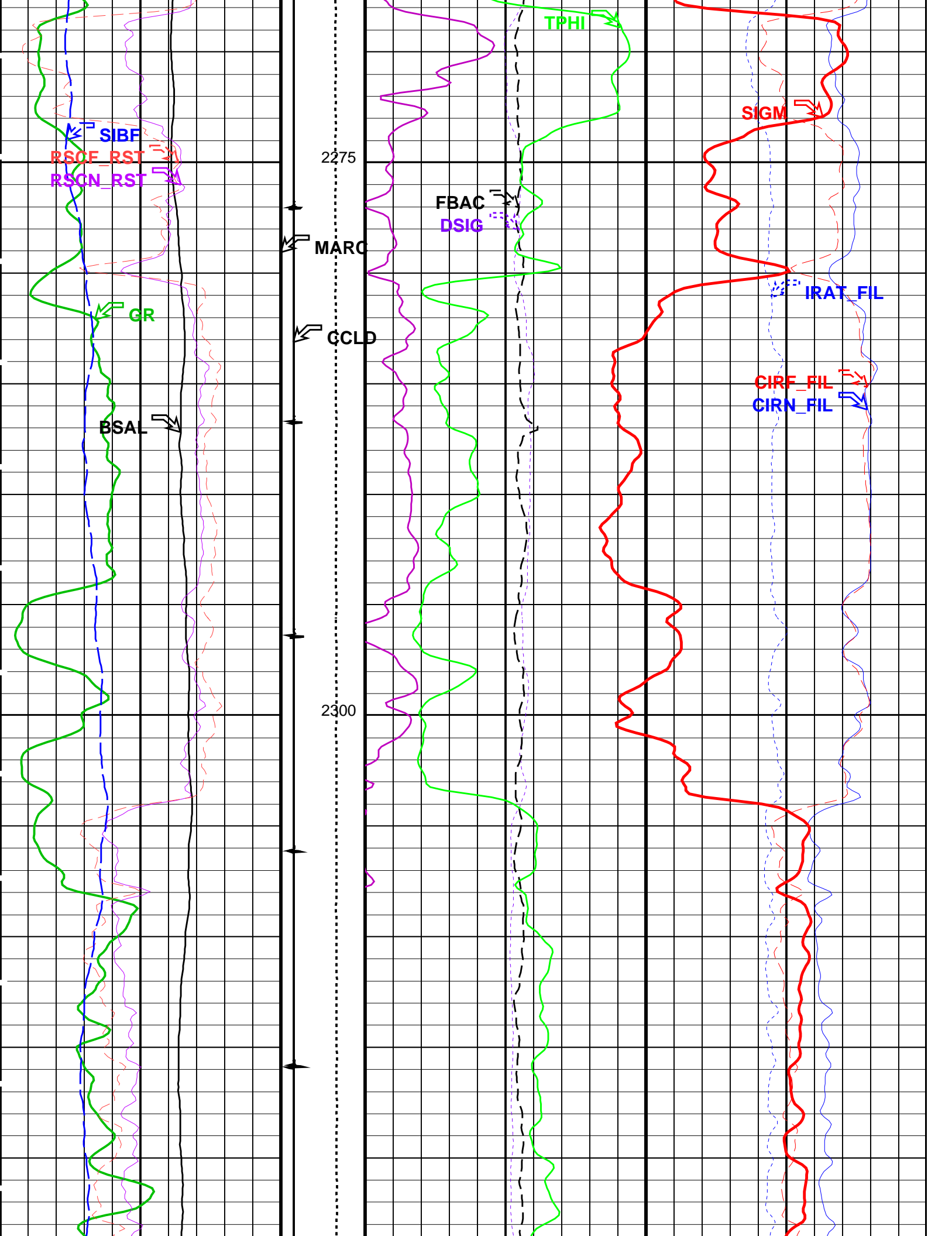
RST Far Effective Capture CR (RSCF_RST) 45 (----) 0		RST Weighted Inelastic Ratio (WINR_RST) -0.1 (----) 0.4	
		RST Porosity (TPHI) (V/V) 0.6 0	RST Inelastic Ratio (IRAT_FIL) 0.75 (----) 0
RST Near Effective Capture CR (RSCN_RST) 45 (----) 0	Minitron Arc Detection (MARC) 0 (----) 5	RST Sigma (SIGM) (CU) 60 0	
		RST Sigma Borehole Fluid (SIBF) (CU) 100 0	RST Capture to Inelastic Ratio Far (CIRF_FIL) 5 (----) 0
Gamma Ray (GR) (GAPI) 0 200	Discriminated CCL (CCLD) (V) 3 -17	MCS Far Background (filtered) (FBAC) (CPS) 0 5000	RST Capture to Inelastic Ratio Near (CIRN_FIL) 2.5 (----) 0
		RST Sigma Difference (DSIG) (CU) -30 30	
RST Borehole Salinity (BSAL) (PPK) 450 -50	Tension (TENS) (LBF) 0 2000		

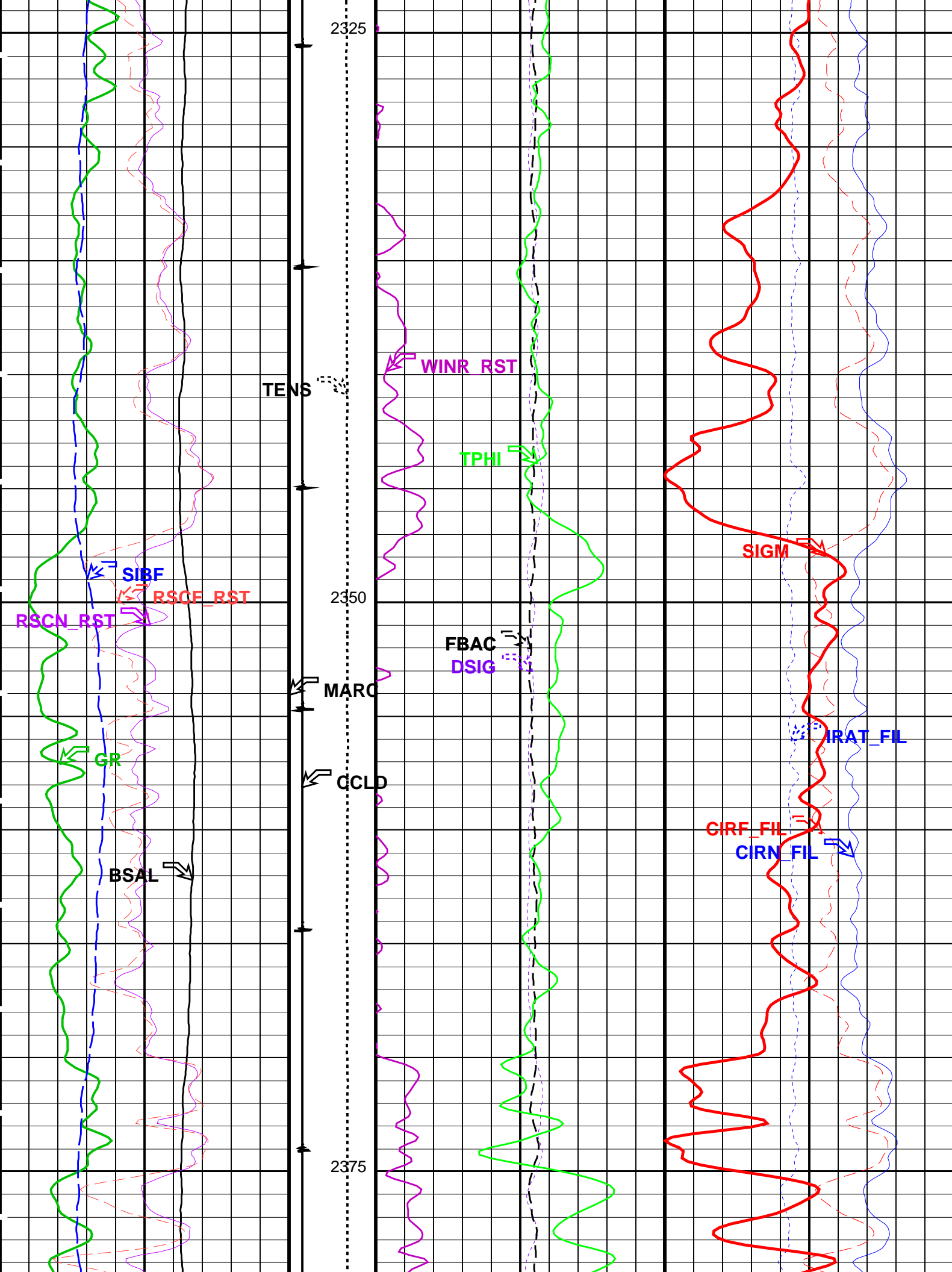


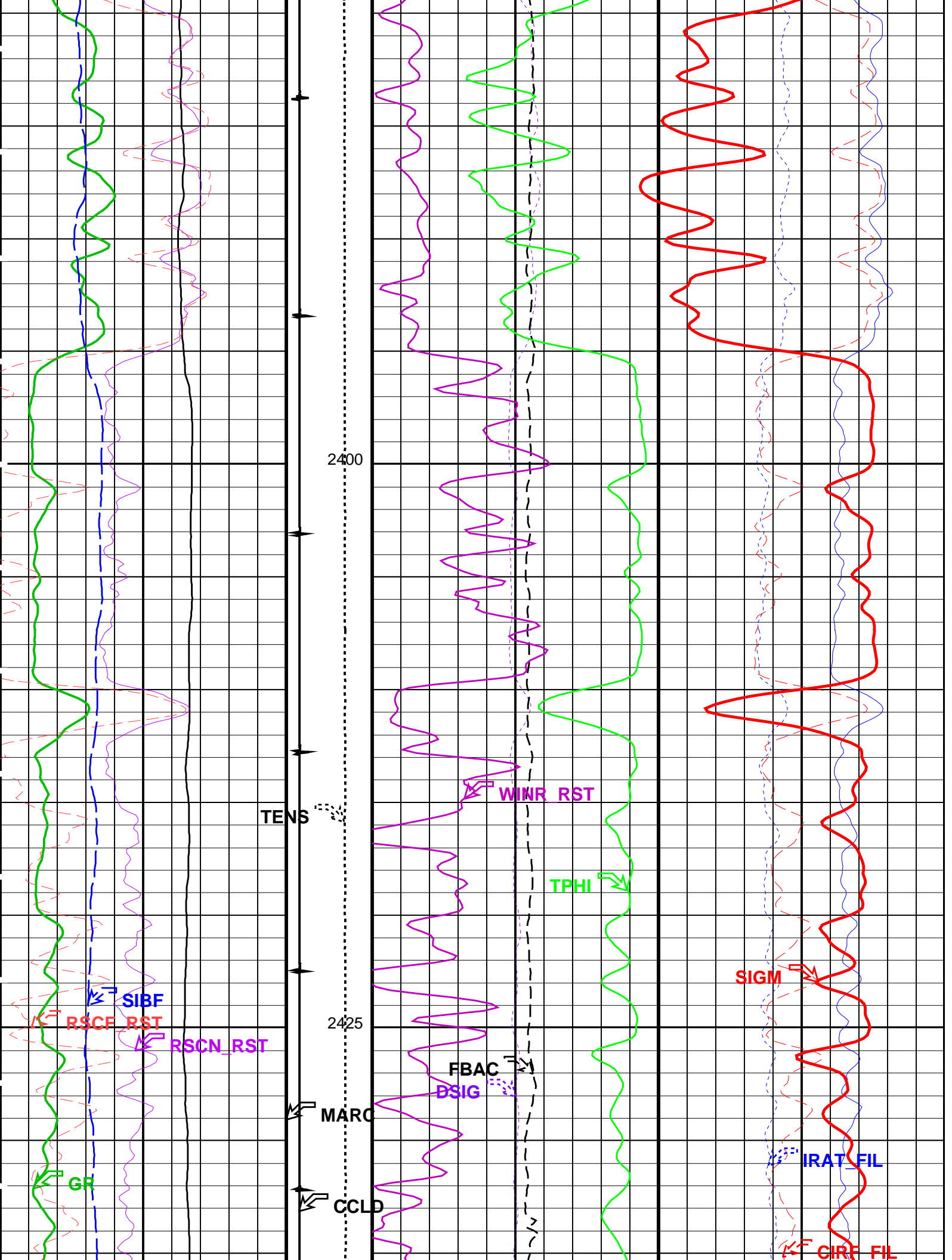


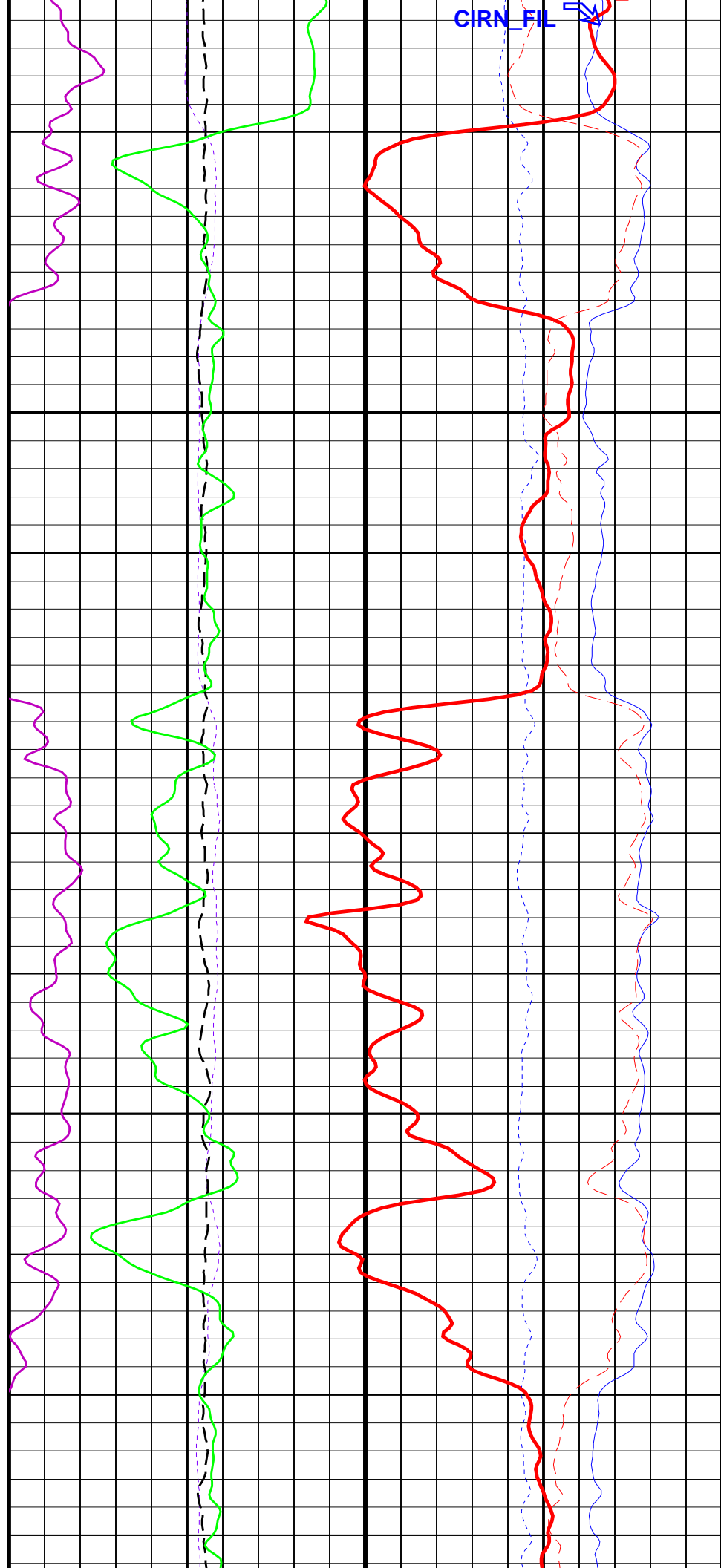
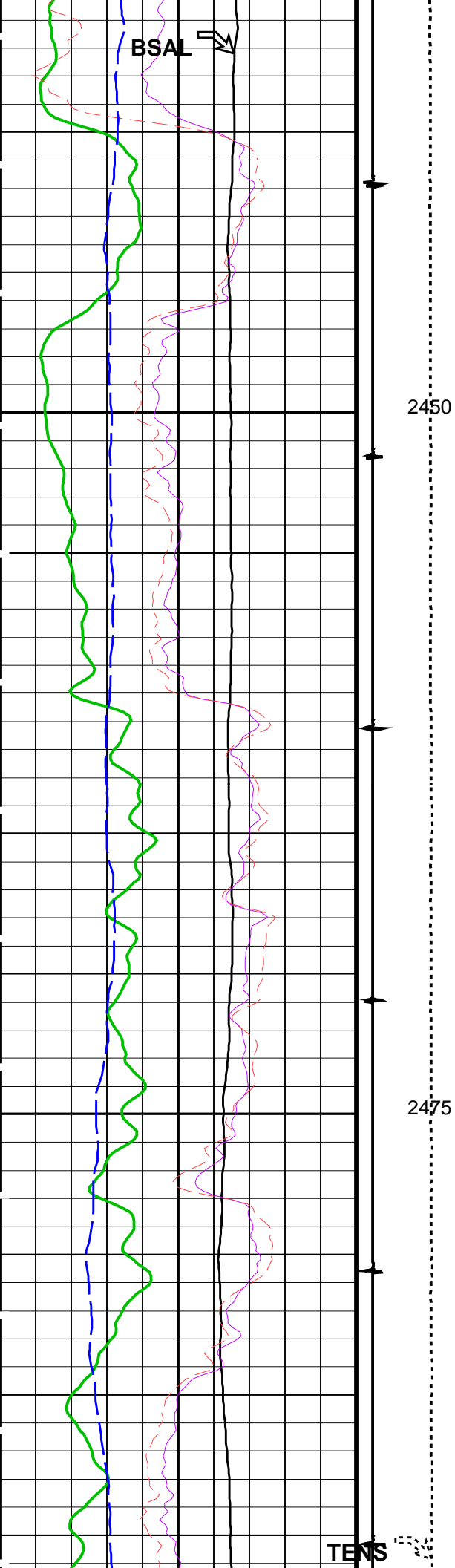


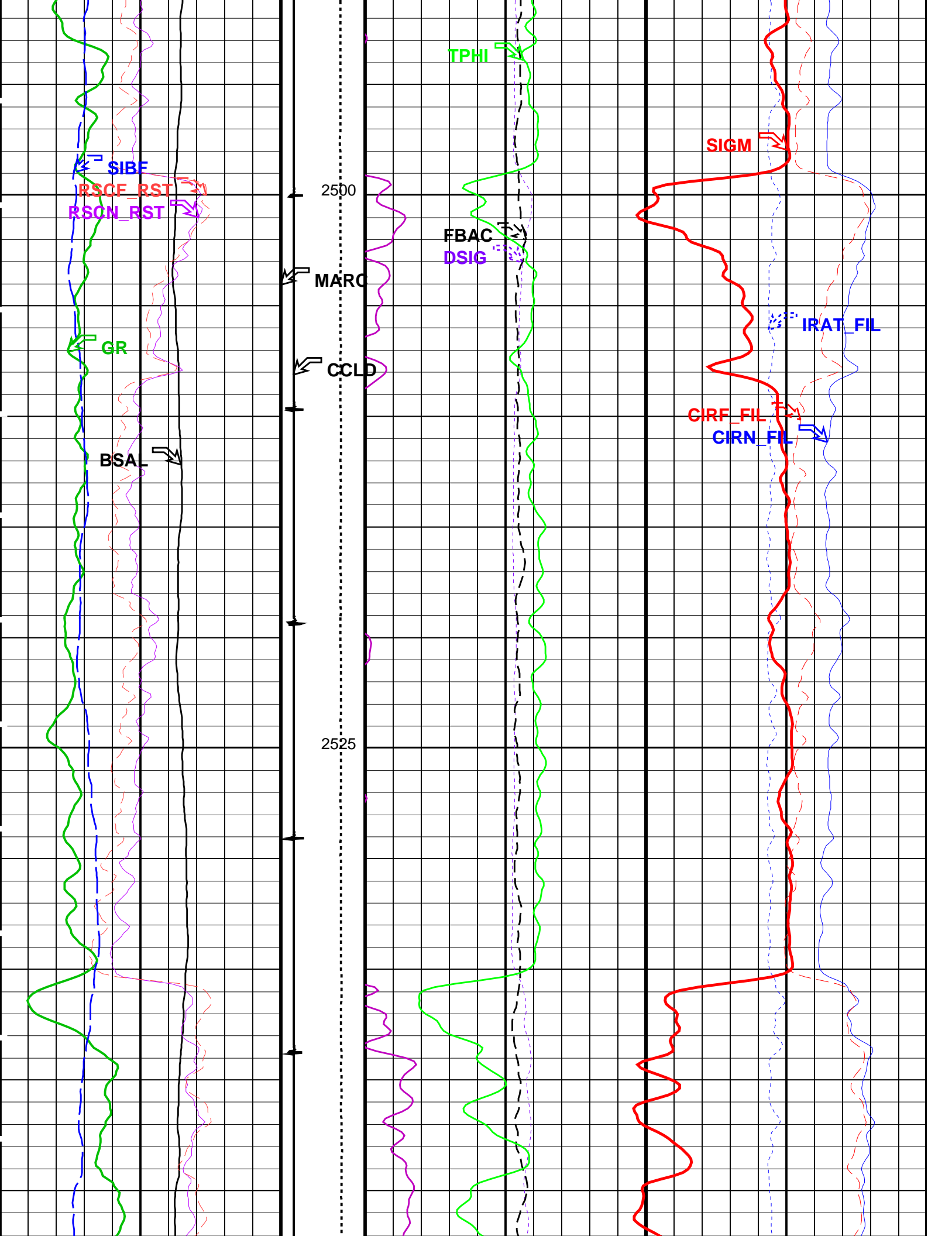


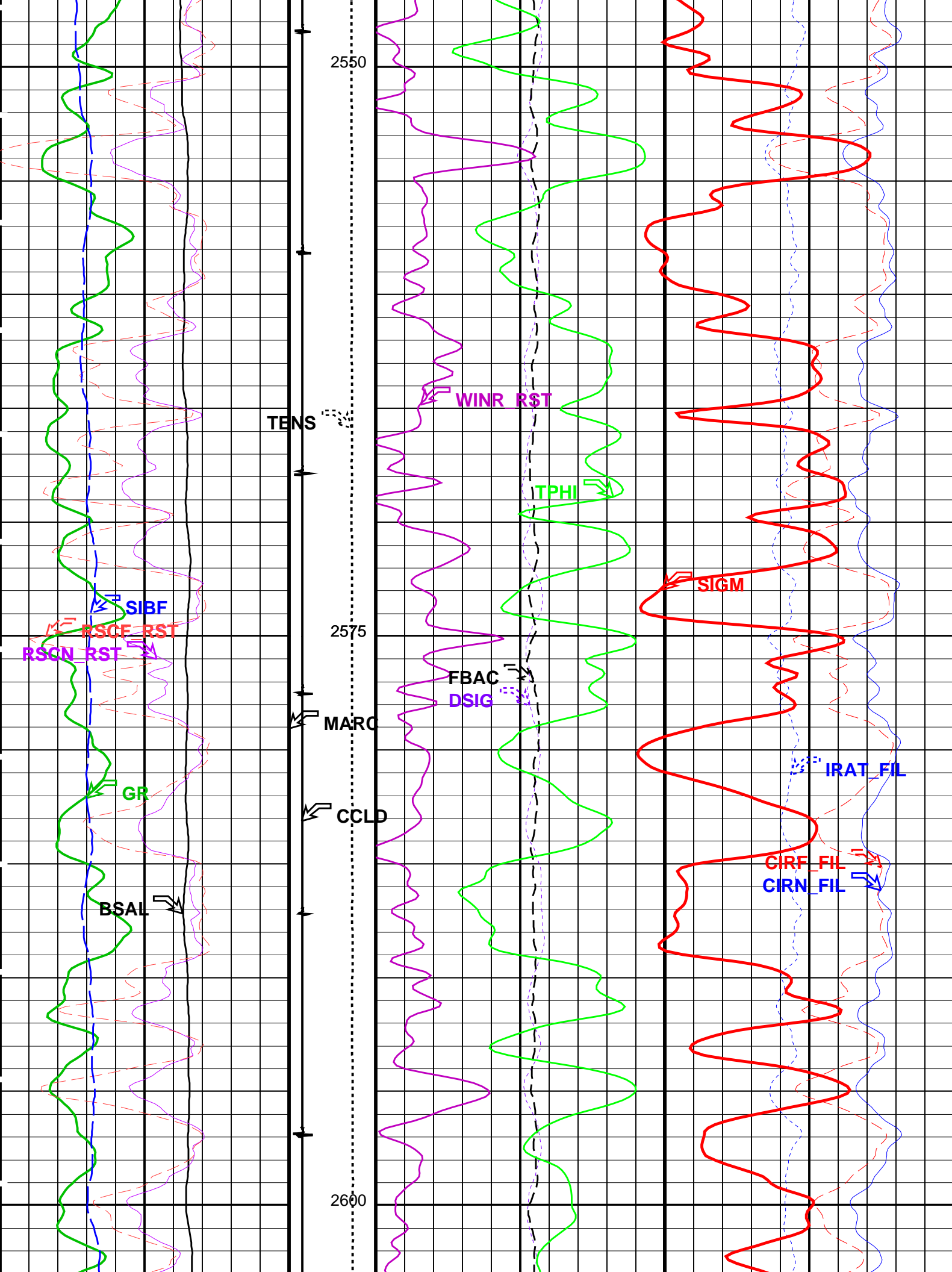


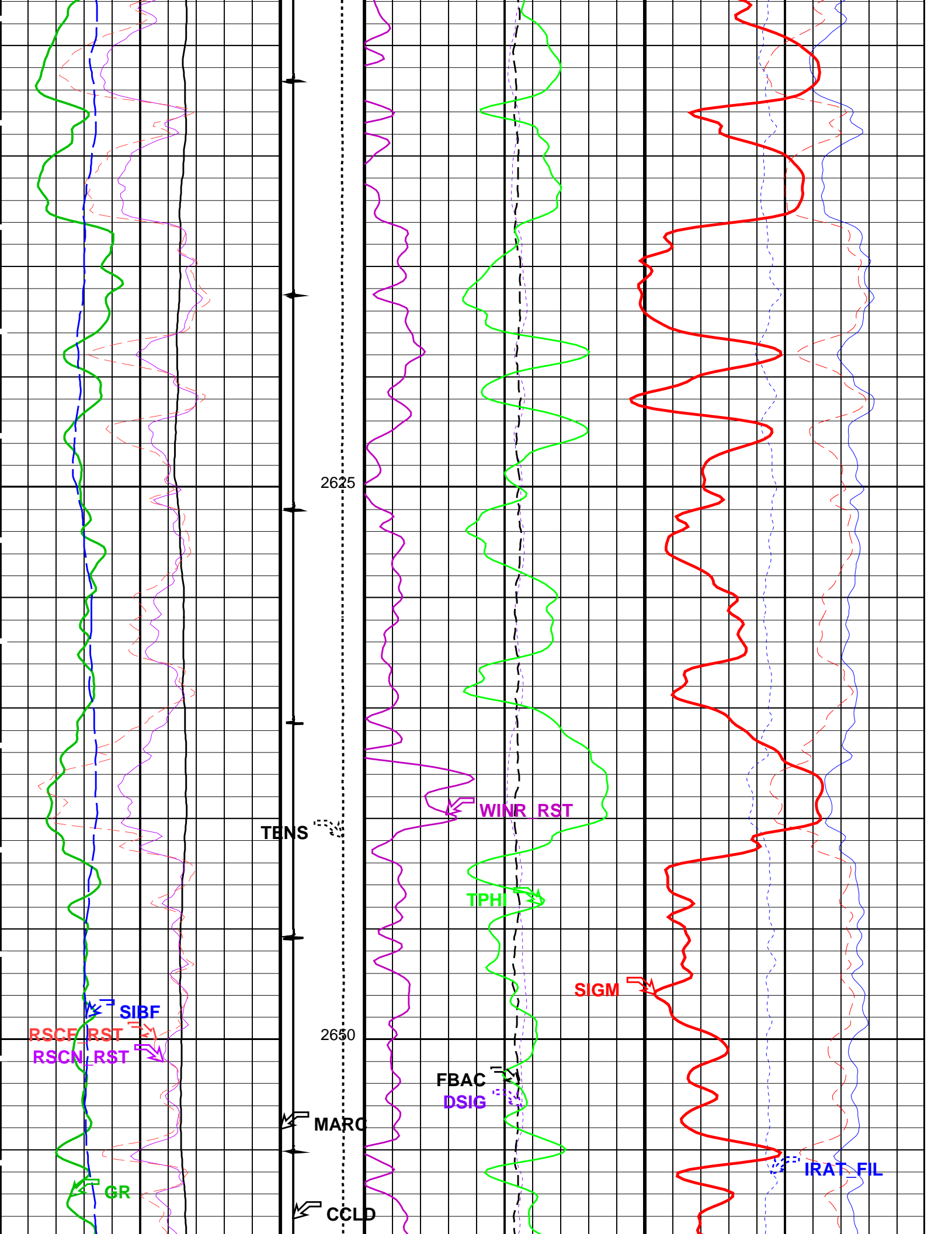


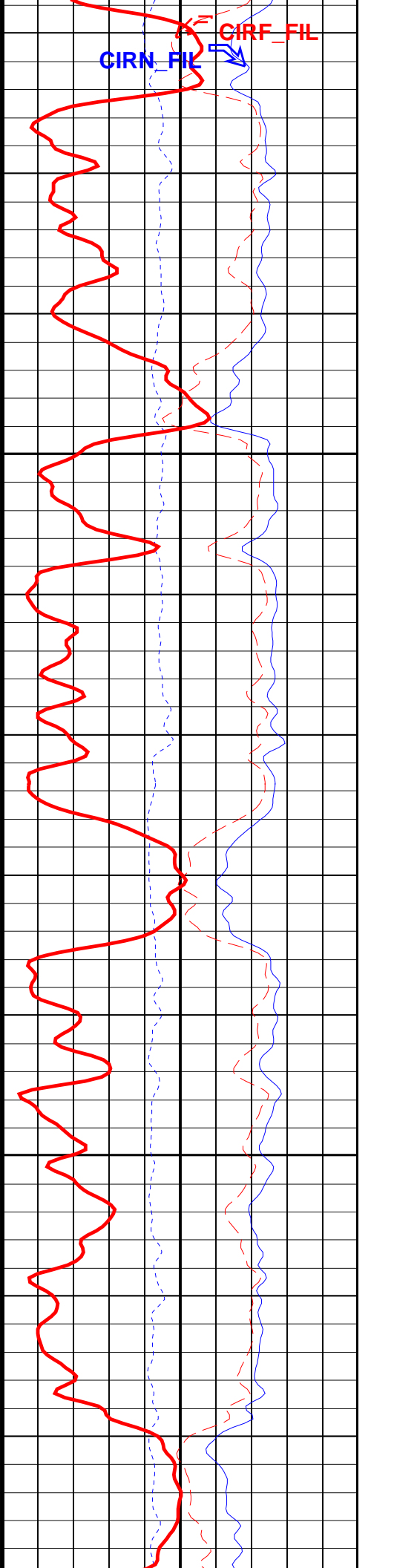
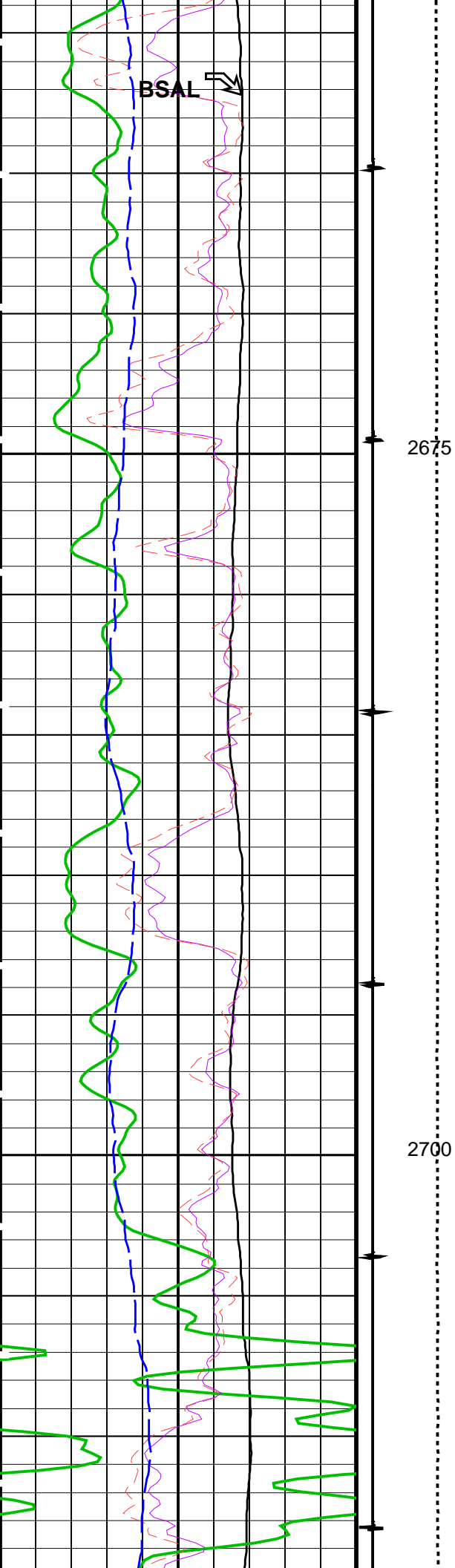


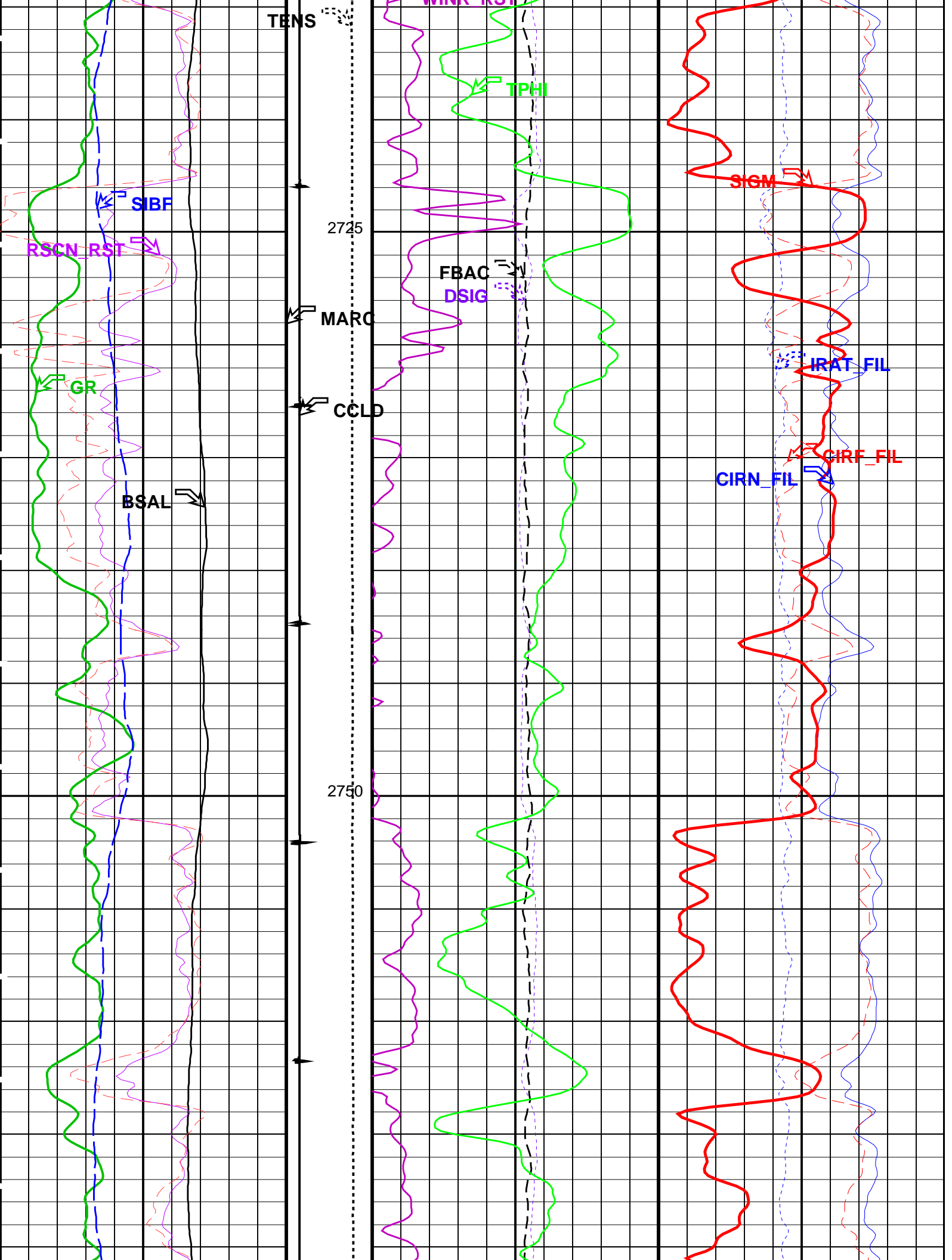


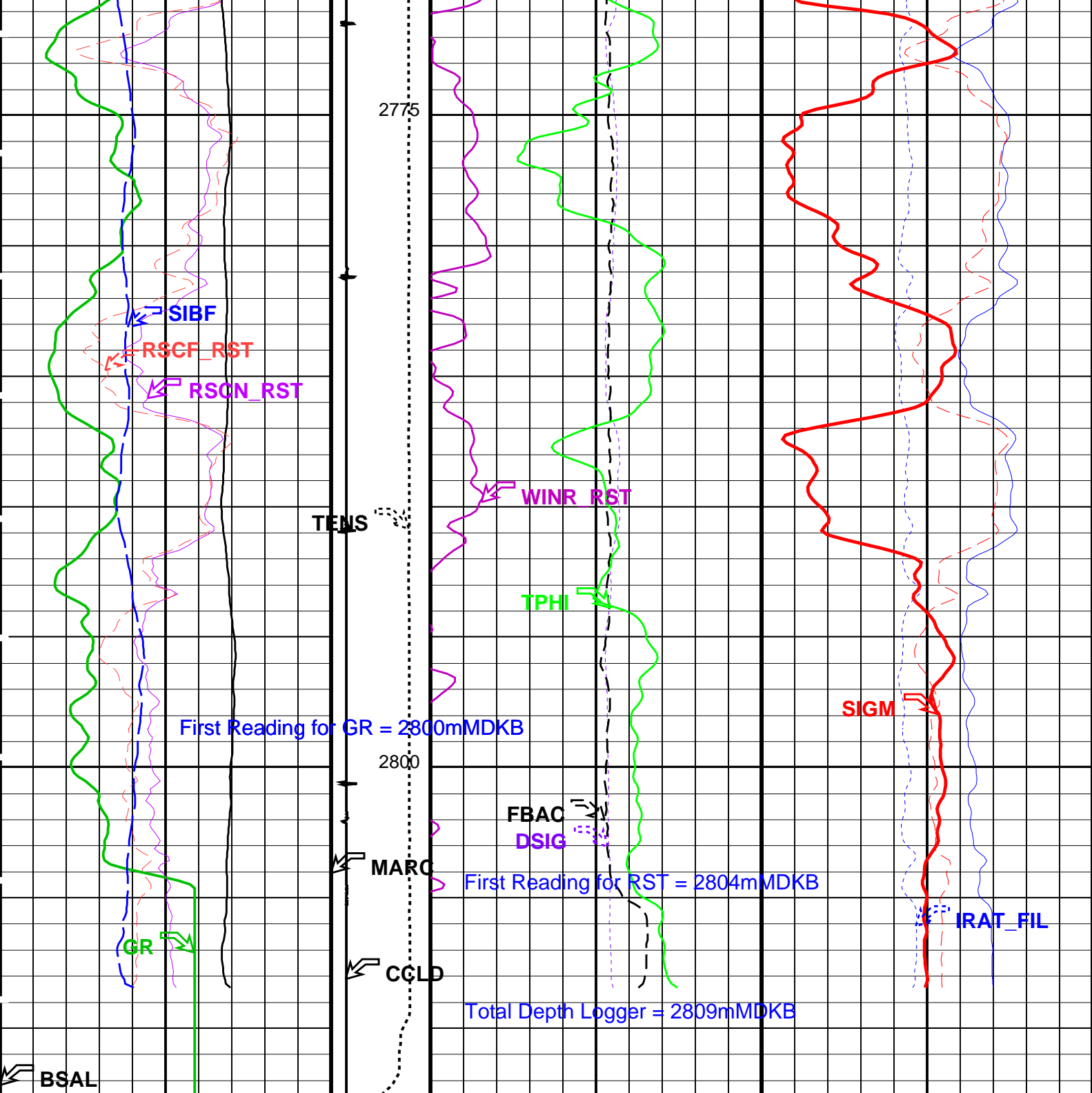












RST Borehole Salinity (BSAL)		Tension (TENS) (LBF)	RST Sigma Difference (DSIG)		RST Capture to Inelastic Ratio Near (CIRN_FIL)	
450	(PPK)		-50	-30 (CU) 30	2.5	(----) 0
RST Sigma Borehole Fluid (SIBF)		Discriminat ed CCL (CCLD) (V)	MCS Far Background (filtered) (FBAC)		RST Capture to Inelastic Ratio Far (CIRF_FIL)	
100	(CU)		0	(CPS) 5000	5	(-----) 0
Gamma Ray (GR)		Minitron Arc Detection (MARC)	RST Sigma (SIGM)			
0	(GAPI)		200	60	(CU)	0
RST Near Effective Capture CR (RSCN_RST)			RST Porosity (TPHI)		RST Inelastic Ratio (IRAT_FIL)	
			0.6 (V/V)		0.75 (-----)	

Input DLIS Files						
DEFAULT	RST_PSP_016LUP	FN:17	PRODUCER	16-Apr-2006 21:46	2811.8 M	2076.6 M

Output DLIS Files						
DEFAULT	RST_PSP_016LUP	FN:17	PRODUCER	16-Apr-2006 21:46	2811.8 M	2076.6 M

OP System Version: 14C0-302

MCM

RST-C

PTC-3043-NUCL

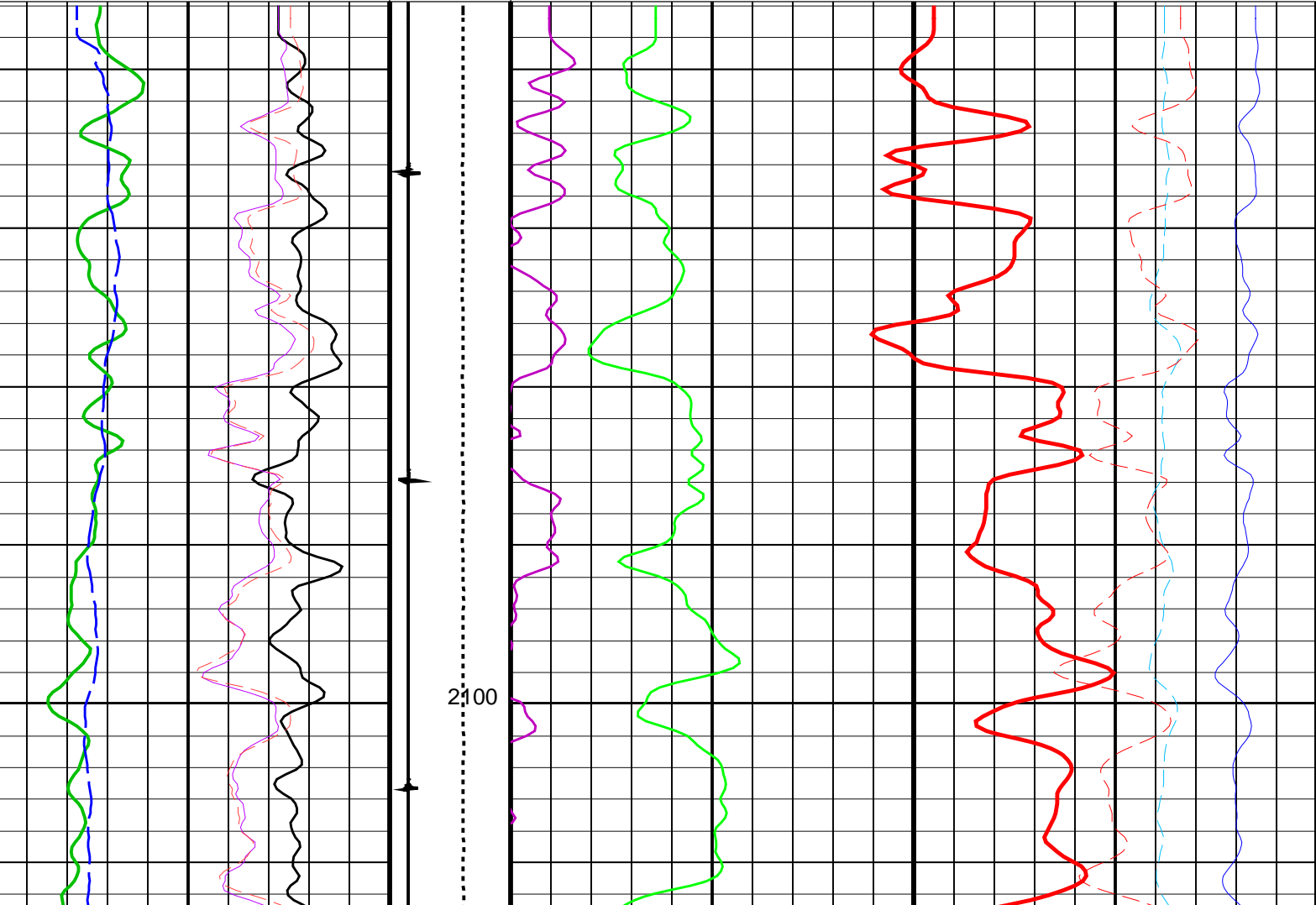
PSPT-A/B

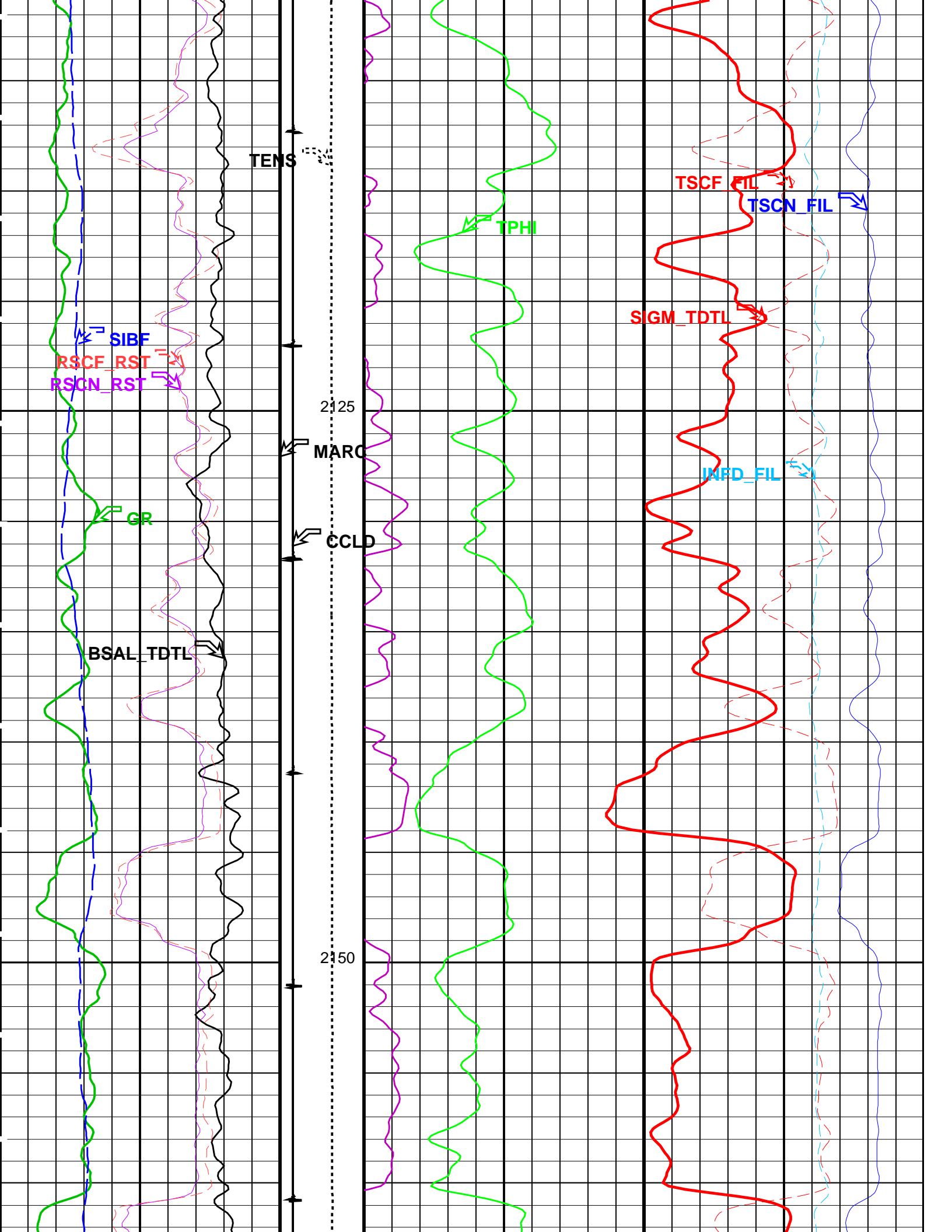
14C0-302

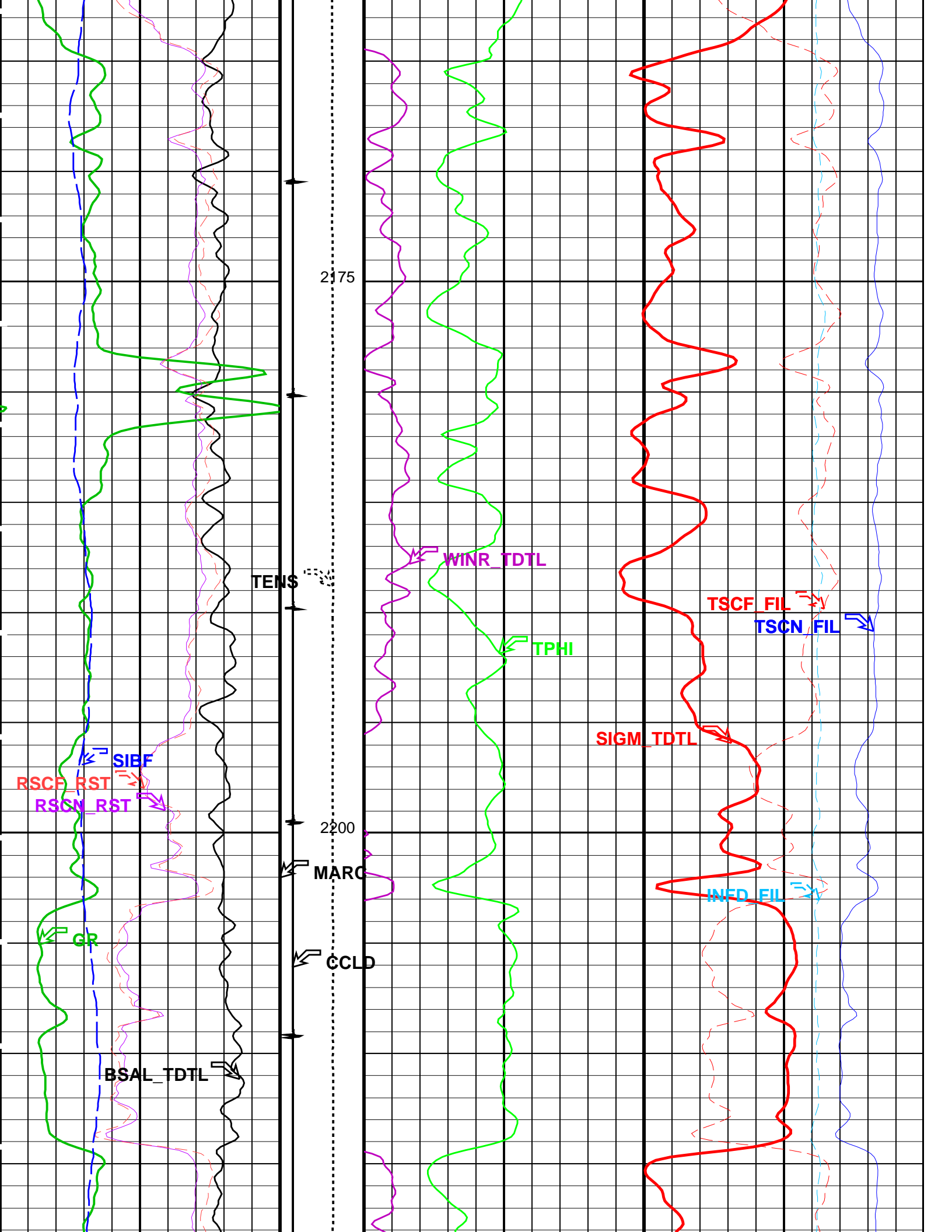
PIP SUMMARY

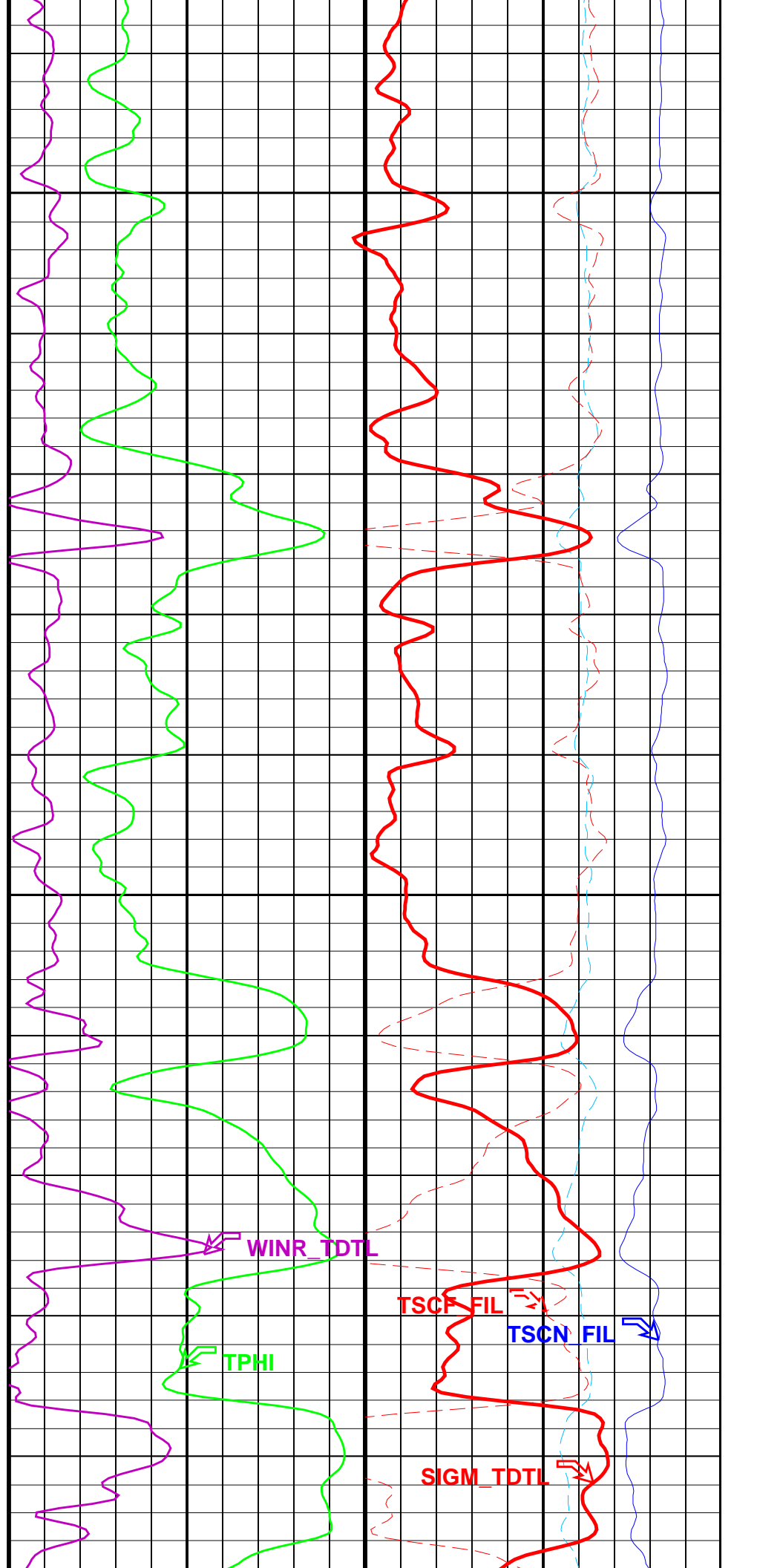
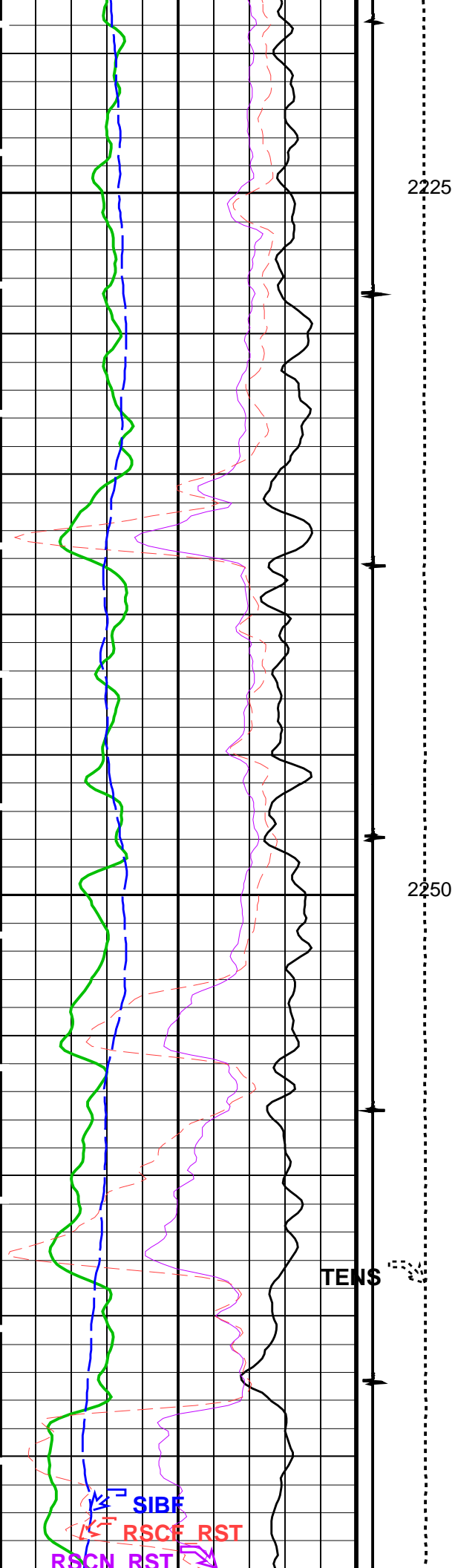
Time Mark Every 60 S

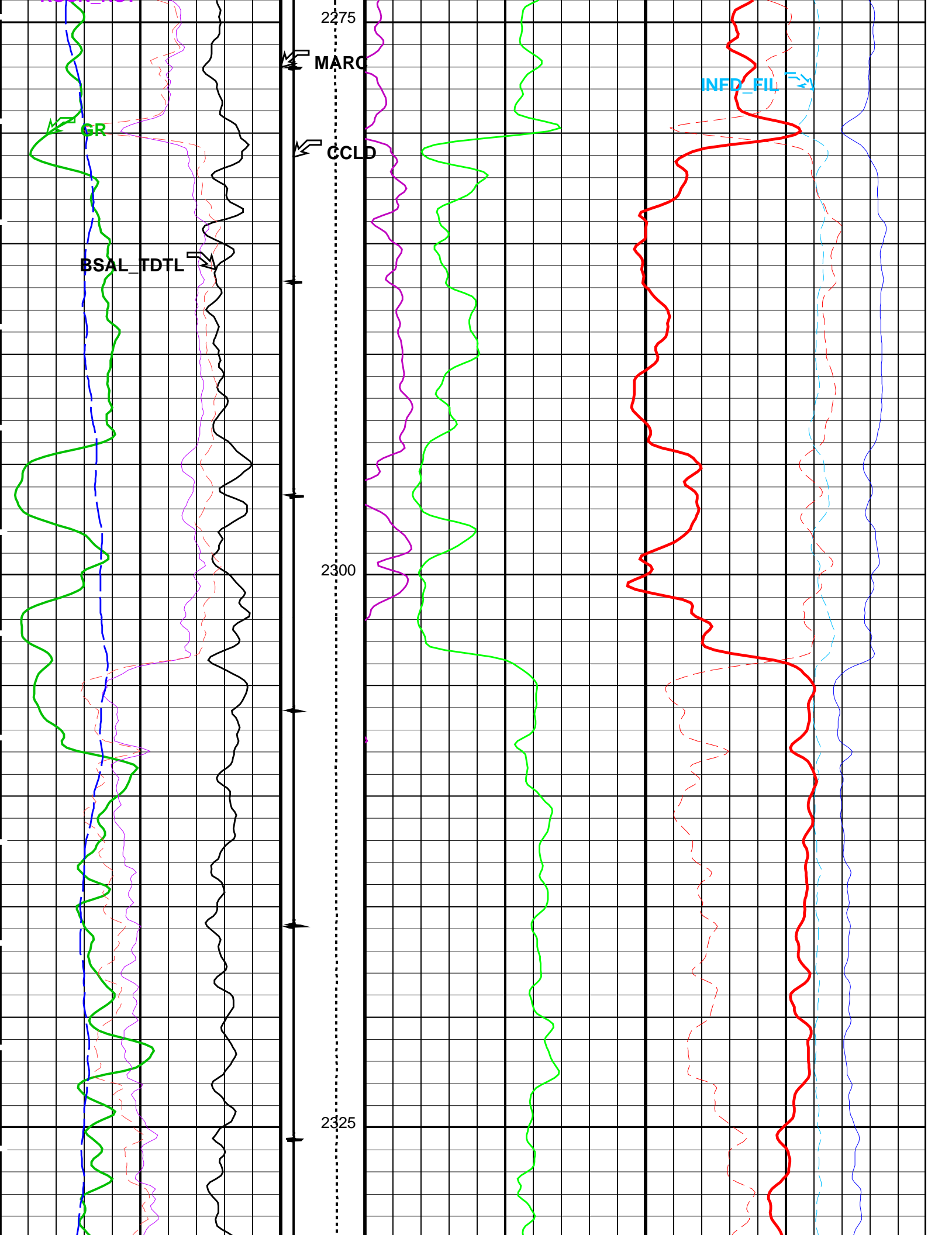
RST Borehole Salinity (TDT-like) (BSAL_TDTL)		Tot Sel CR Far (TSCF_FIL)	
450	(PPK)	-50	12000 (CPS) 0
RST Far Effective Capture CR (RSCF_RST)		Tot Sel CR Near (TSCN_FIL)	
45	(----	0	30000 (CPS) 0
RST Near Effective Capture CR (RSCN_RST)		RST Weighted Inelastic Ratio (TDT-like) (WINR_TDTL)	
45	(----	0	-0.1 (----) 0.4
		Minitron Arc Detection (MARC)	
		0 (---- 5	
Gamma Ray (GR)		RST Porosity (TPHI)	
0	(GAPI)	200	0.6 (V/V) 0 10000 Inelastic CR Far (INFD_FIL) (CPS) 0
		Discriminat ed CCL (CCLD)	
		3 (V) -17	
RST Sigma Borehole Fluid (SIBF)		RST Sigma (TDT-like) (SIGM_TDTL)	
100	(CU)	0	60 (CU) 0
		Tension (TENS) (LBF)	
		0 2000	

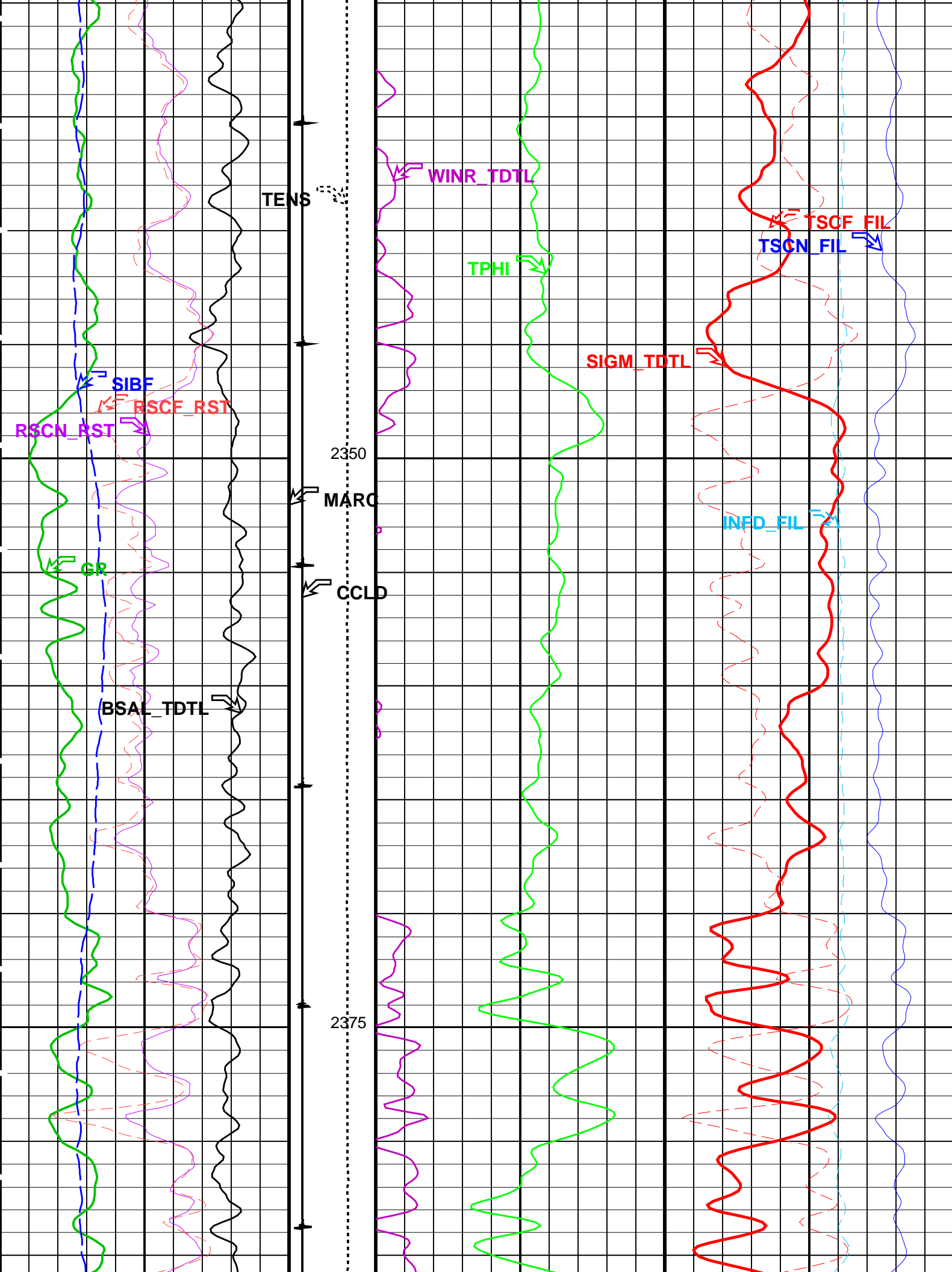


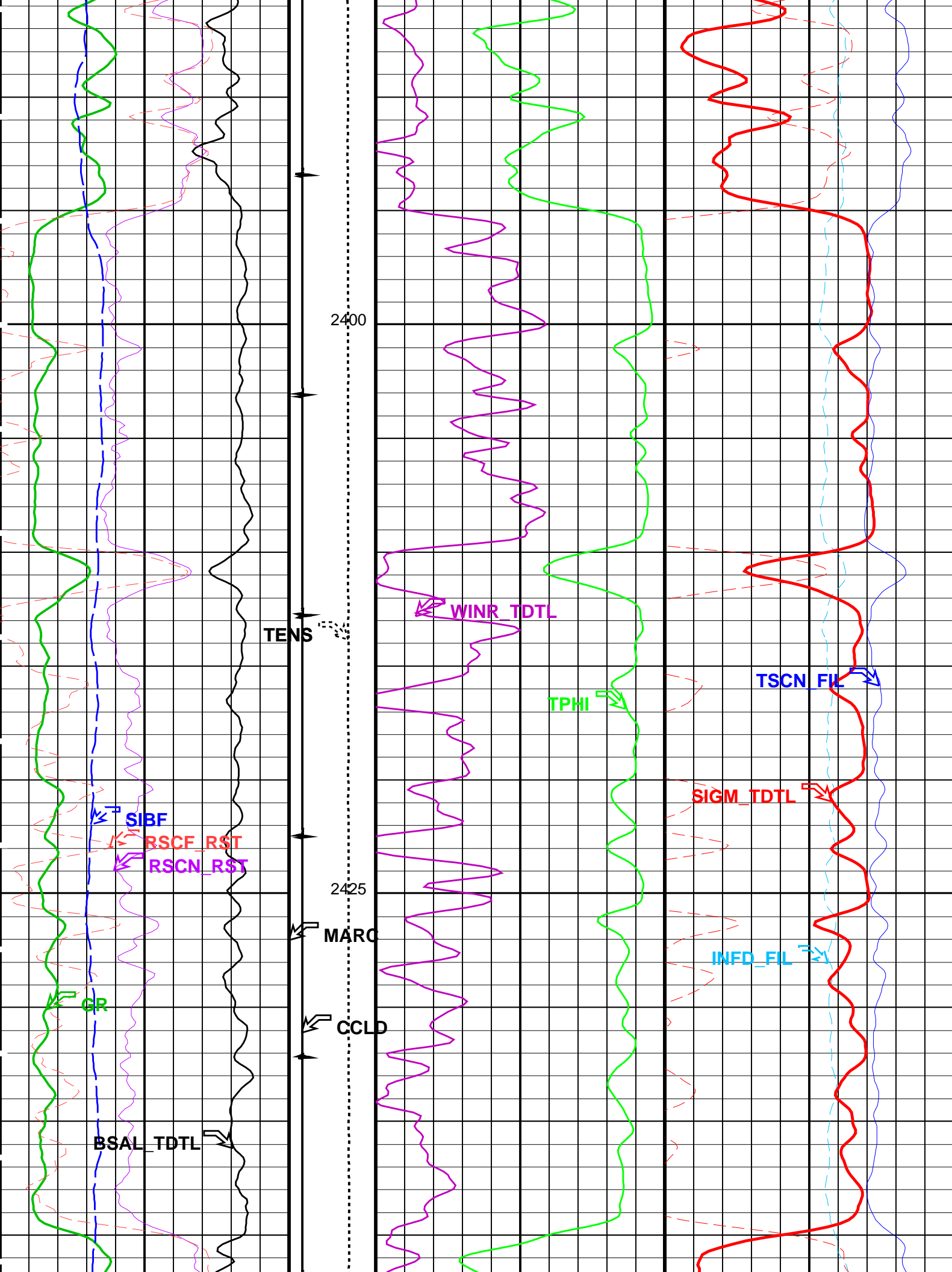


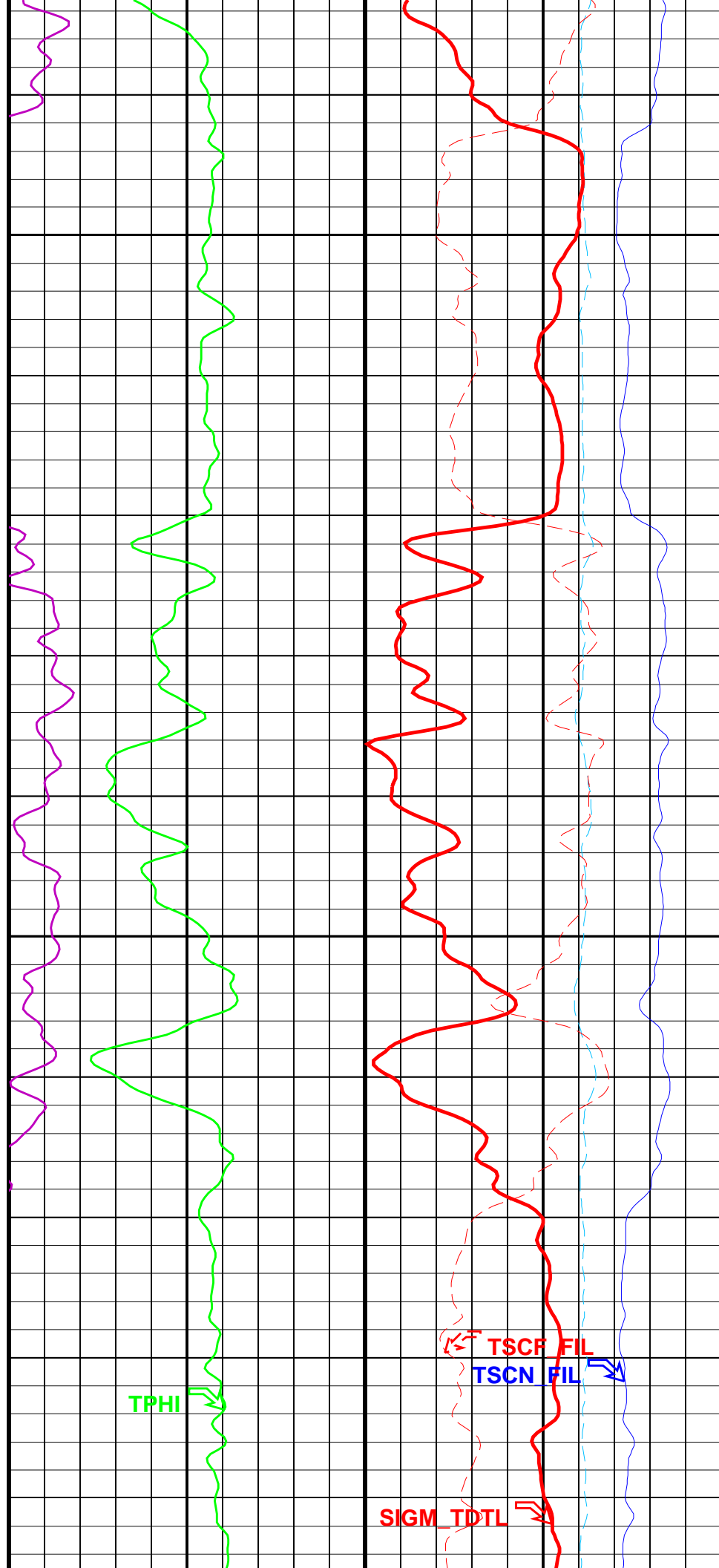
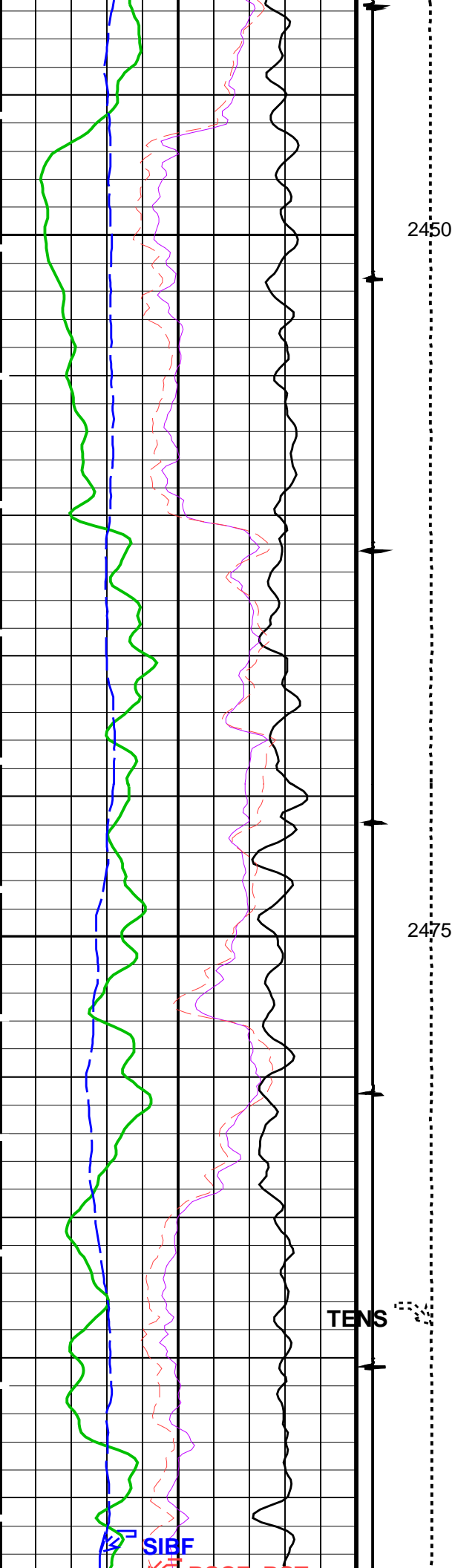


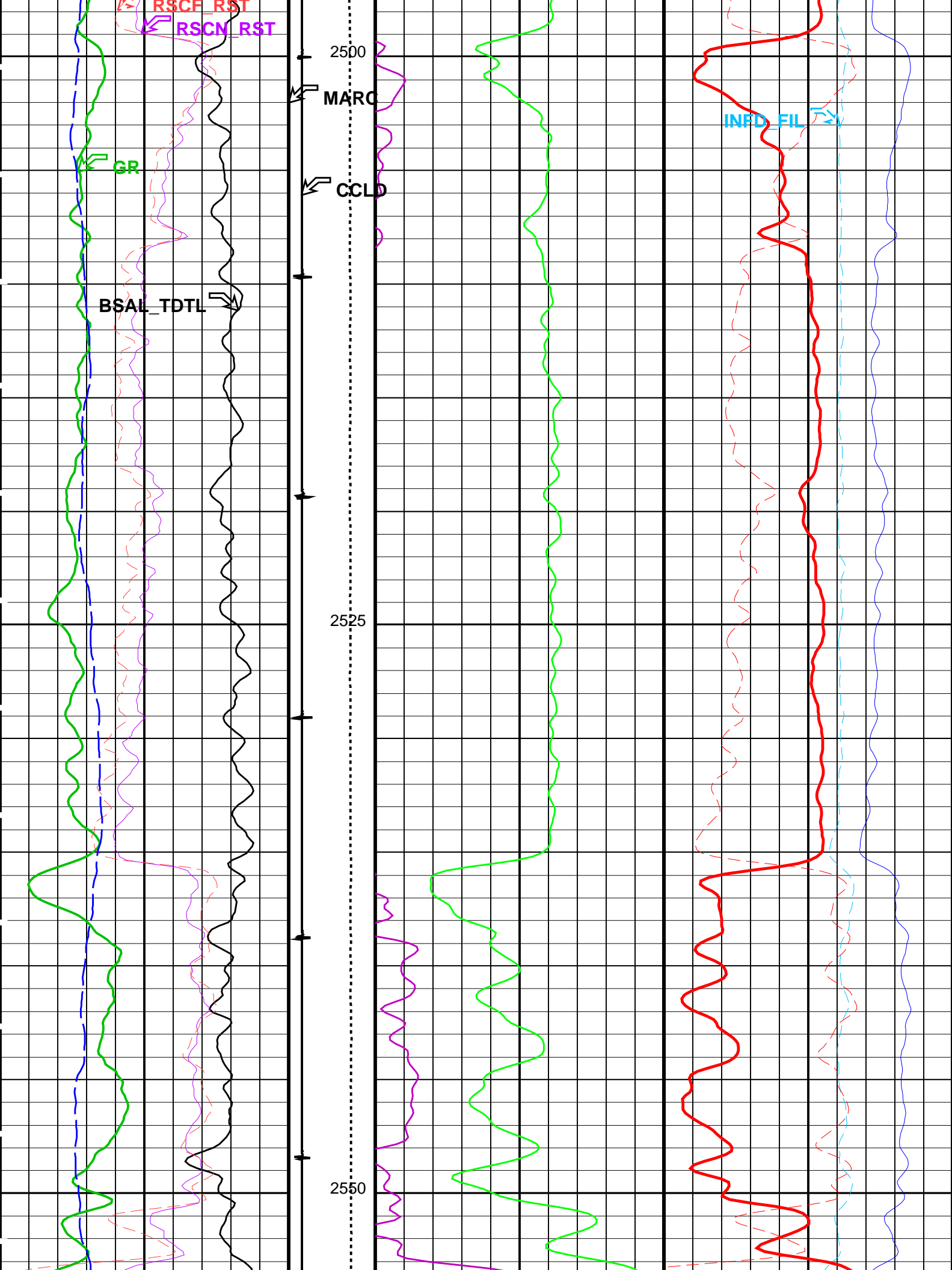


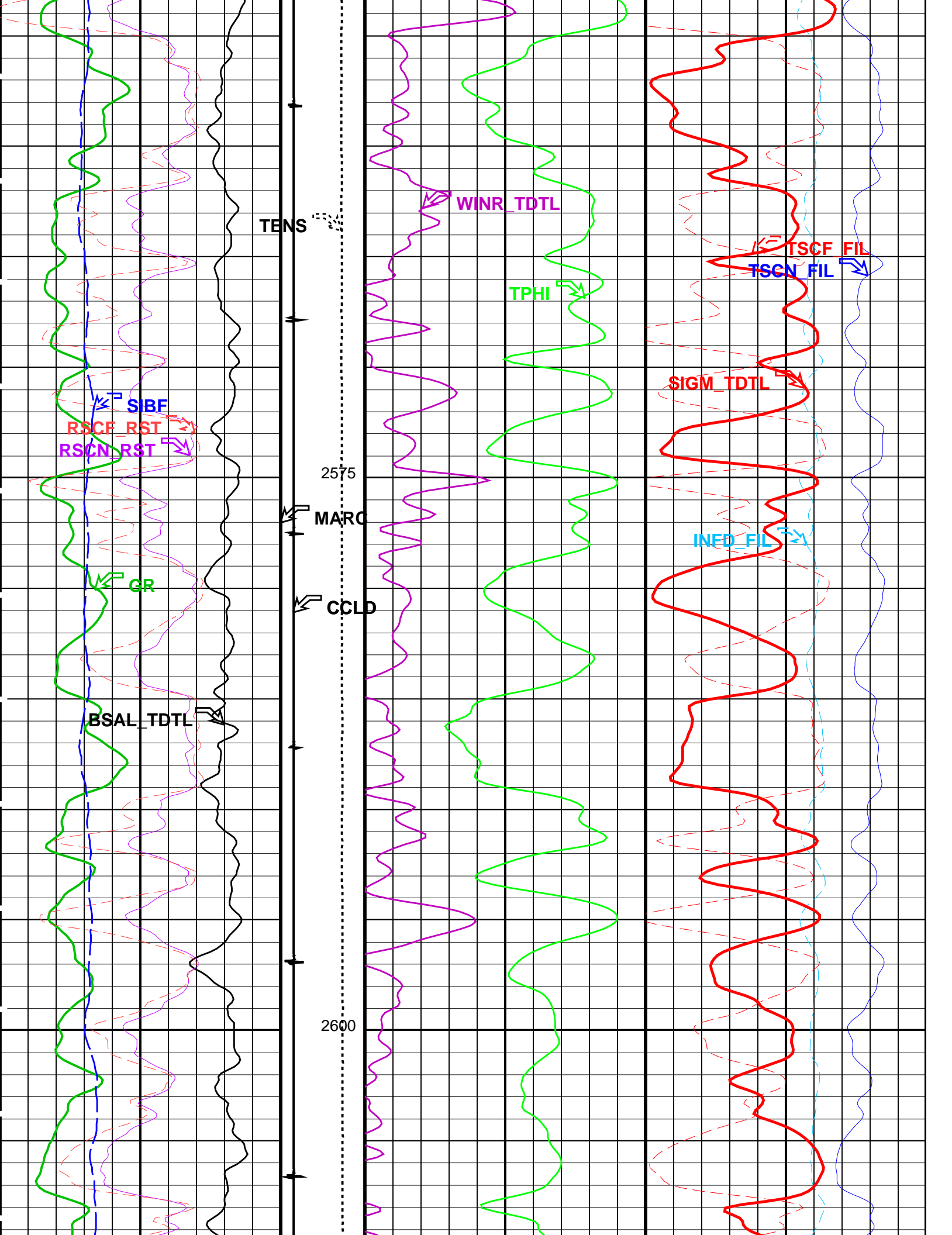


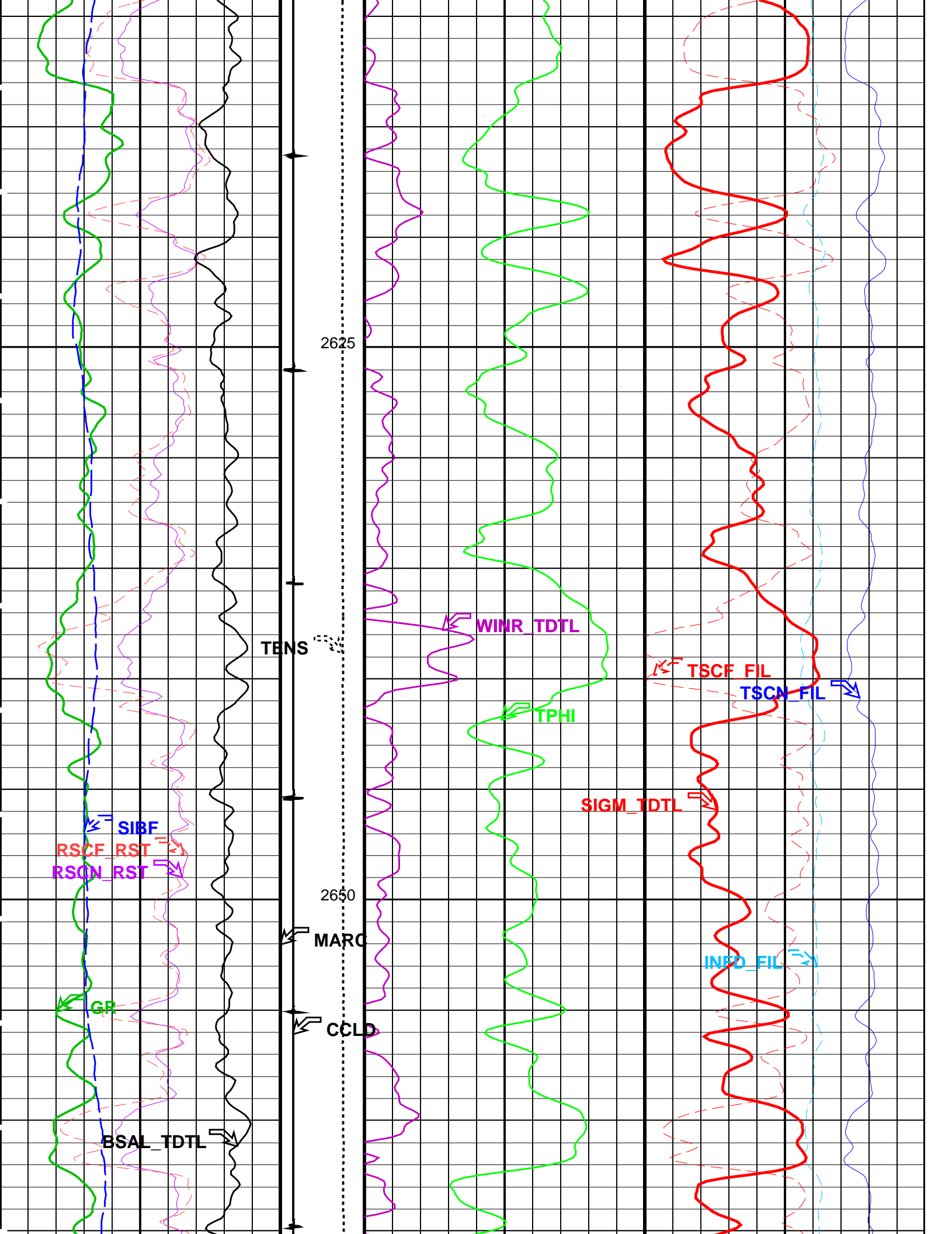


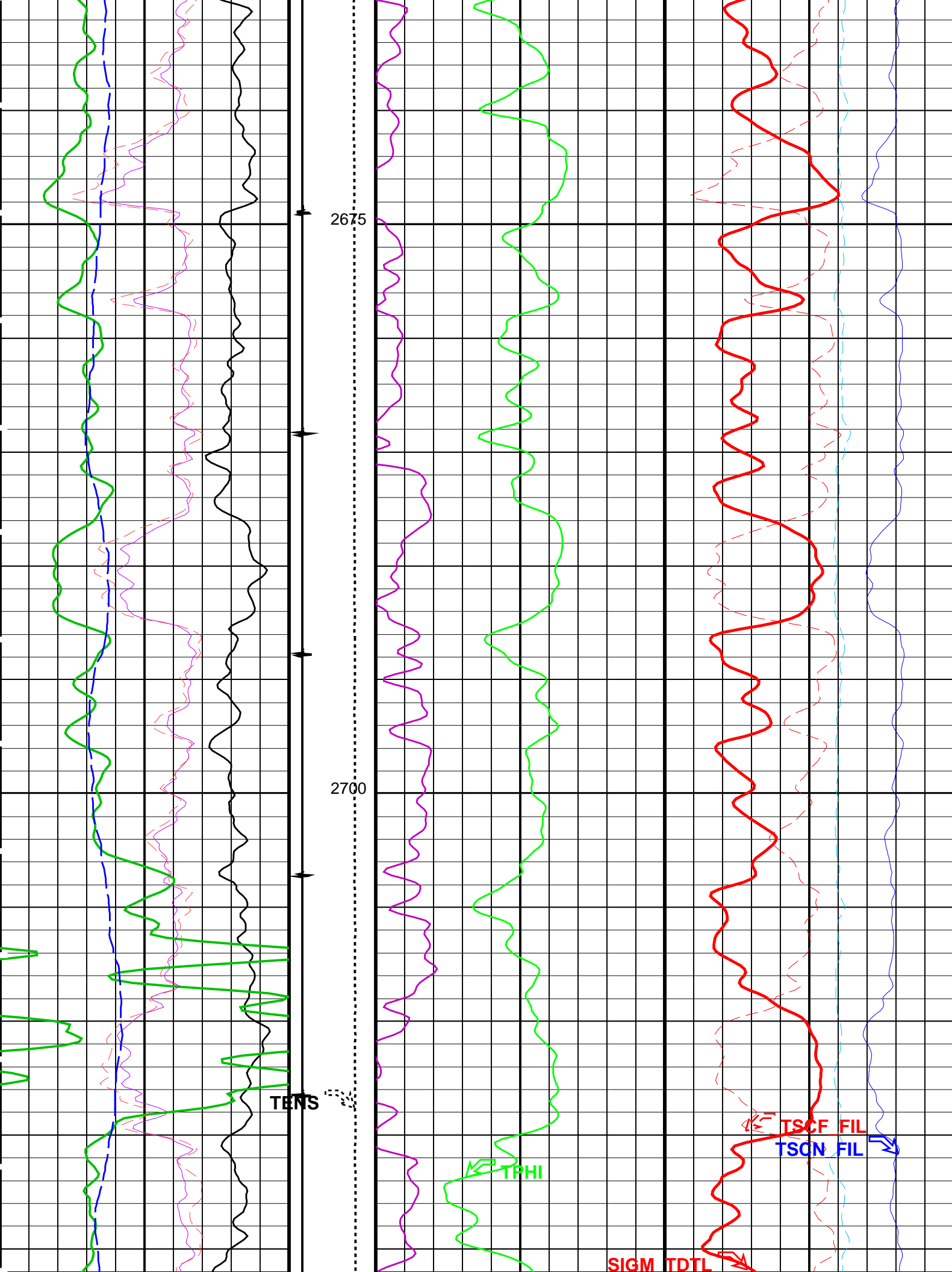


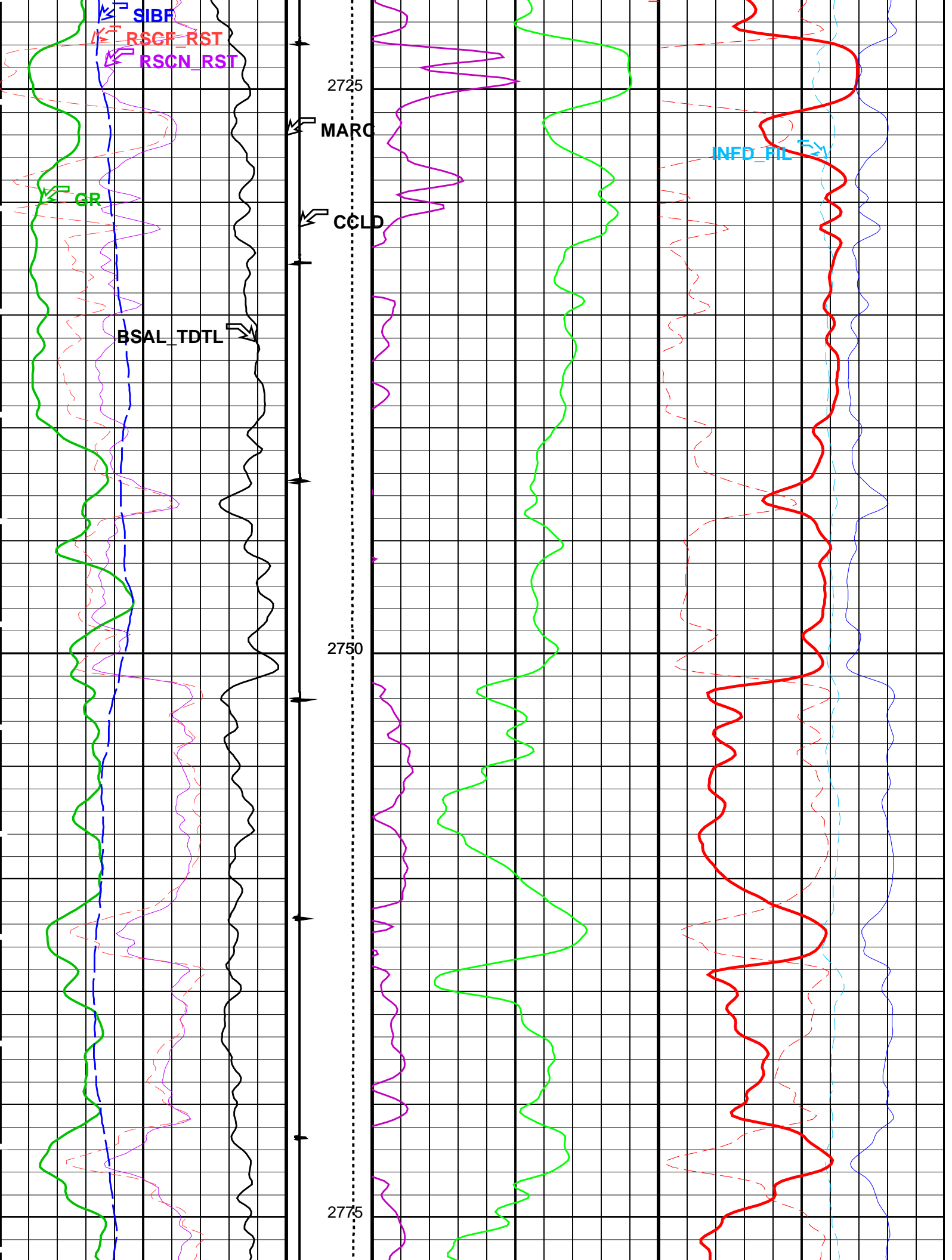


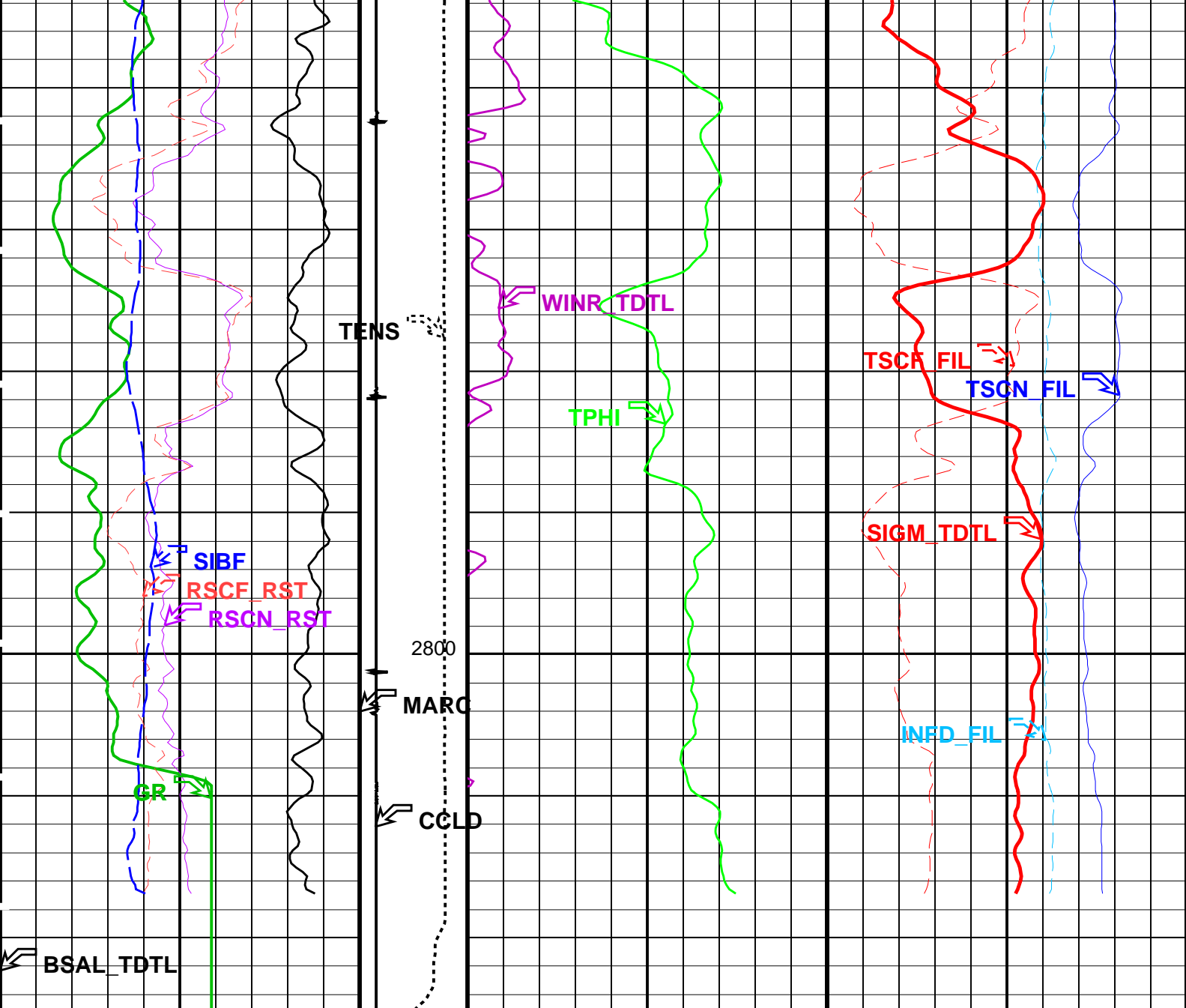












<div><div>RST Sigma Borehole Fluid (SIBF)</div><div>100(CU)0</div></div>	<div><div>Tension (TENS)</div><div>(LBF)</div><div>02000</div></div>	<div><div>RST Sigma (TDT-like) (SIGM_TDTL)</div><div>60(CU)0</div></div>	
<div><div>Gamma Ray (GR)</div><div>0(GAPI)200</div></div>	<div><div>Discriminat ed CCL (CCLD)</div><div>3(V) -17</div></div>	<div><div>RST Porosity (TPHI)</div><div>0.6(V/V)0</div></div>	<div><div>Inelastic CR Far (INFD_FIL)</div><div>10000(CPS)0</div></div>
<div><div>RST Near Effective Capture CR (RSCN_RST)</div><div>45(----)0</div></div>	<div><div>Minitron Arc Detection (MARC)</div><div>0(---- 5</div></div>	<div><div>RST Weighted Inelastic Ratio (TDT-like) (WINR_TDTL)</div><div>-0.1(----)0.4</div></div>	
<div><div>RST Far Effective Capture CR (RSCF_RST)</div><div>45(----)0</div></div>		<div><div>Tot Sel CR Near (TSCN_FIL)</div><div>30000(CPS)0</div></div>	
<div><div>RST Borehole Salinity (TDT-like) (BSAL_TDTL)</div><div>450(PPK)-50</div></div>		<div><div>Tot Sel CR Far (TSCF_FIL)</div><div>12000(CPS)0</div></div>	

PIP SUMMARY


Parameters			
DLIS Name	Description	Value	
RST-C: Reservoir Saturation Pro Tool C			
AIRB	RST Air Borehole	No	
BHS	Borehole Status	CASED	
BSALOPT	RST Borehole Salinity Option	Unknown	
BSFL	RST Borehole Salinity Filter Length	51	
DFPC	RST Depth Filter Processing Constant	One	
DFPC_TDTL	RST Depth Filter Processing Constant (TDT-like)	Two	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
NORM_IRAT_RST	RST Normalized Inelastic Ratio	0.48	
NORM_SIGM_RST	RST Normalized Sigma	30	CU
RGAI	Near/Far Gain Calibration Ratio	1	
SMBMO	RST Sigma Mode Background (Minitron Off)	No	
TIER_SIGM	RST Sigma Acquisition Mode	0_RST_Sigma	
PSPT-A/B: Production Services Logging Platform			
BHS	Borehole Status	CASED	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
System and Miscellaneous			
BS	Bit Size	8.500	IN
BSAL	Borehole Salinity	120000.00	PPM
CSIZ	Current Casing Size	4.500	IN
CWEI	Casing Weight	12.60	LB/F
DO	Depth Offset for Playback	0.8	M
PP	Playback Processing	NORMAL	

Format: RST_TDTL_ANSW

Vertical Scale: 1:200

Graphics File Created: 17-Apr-2006 01:07

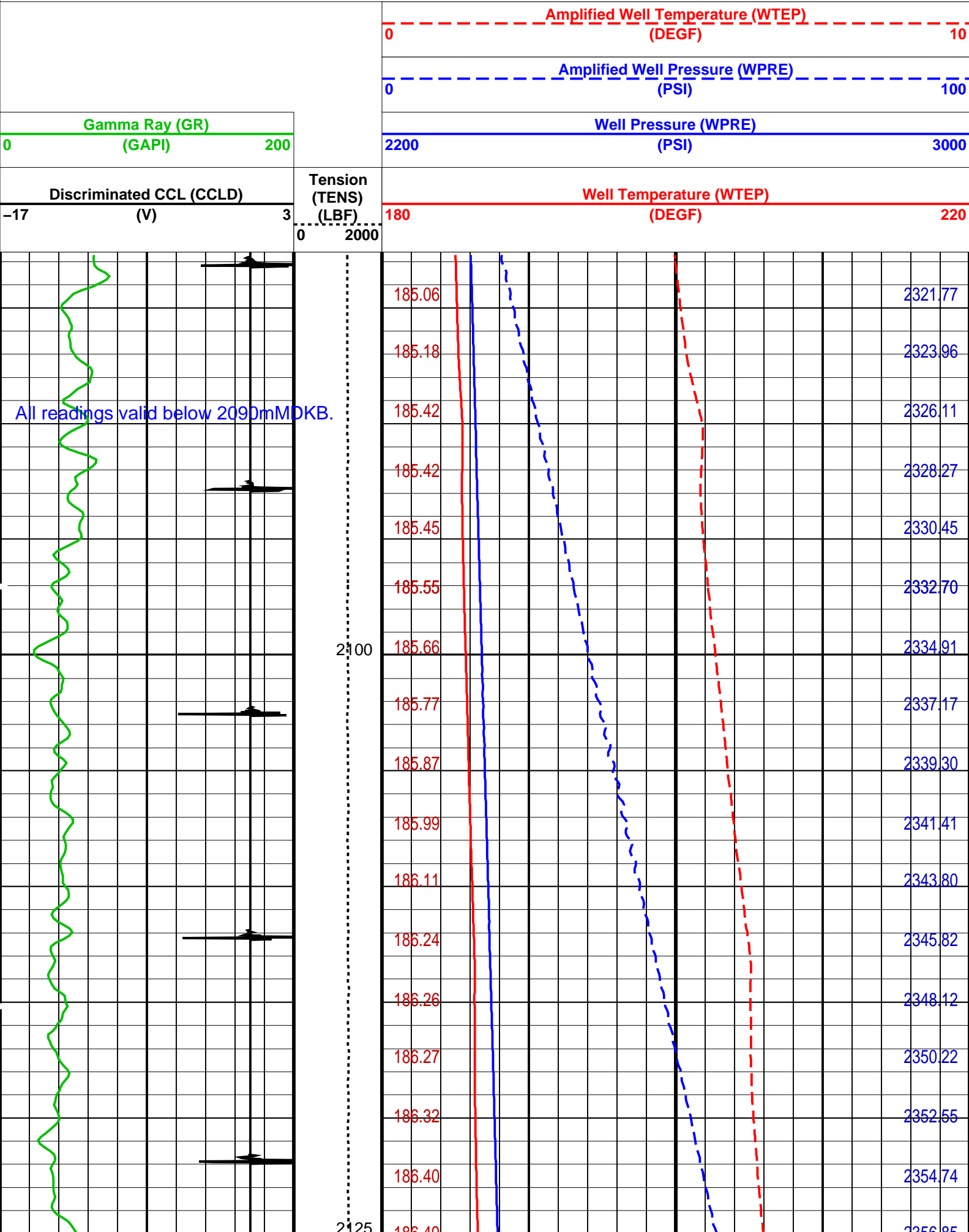
OP System Version: 14C0-302			
MCM			
RST-C	PTC-3043-NUCL	PSPT-A/B	14C0-302
Input DLIS Files			
DEFAULT	RST_PSP_016LUP	FN:17 PRODUCER	16-Apr-2006 21:46 2811.8 M 2076.6 M
Output DLIS Files			
DEFAULT	RST_PSP_014PUP	FN:17 PRODUCER	17-Apr-2006 01:07
CLIENT	RST_PSP_014PUC	FN:18 CUSTOMER	17-Apr-2006 01:07

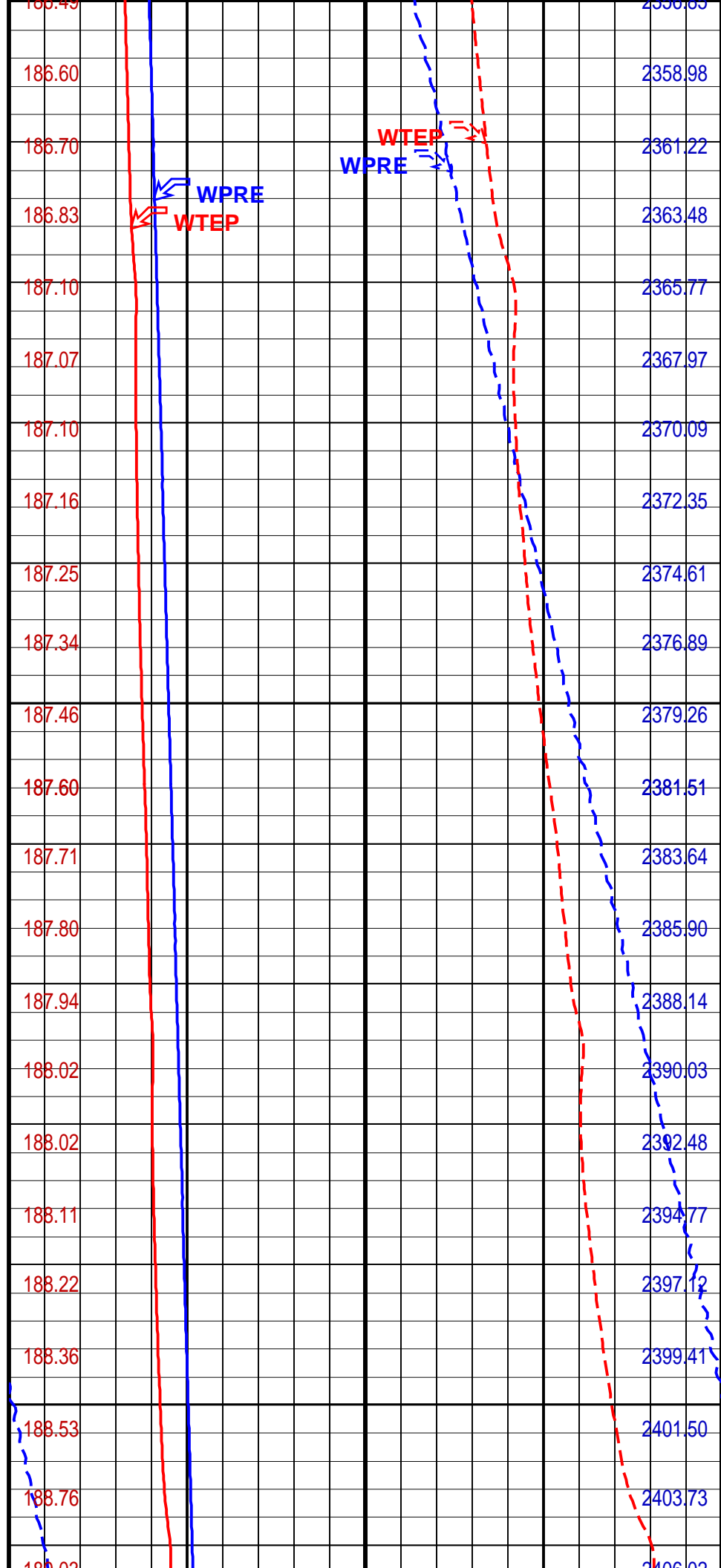
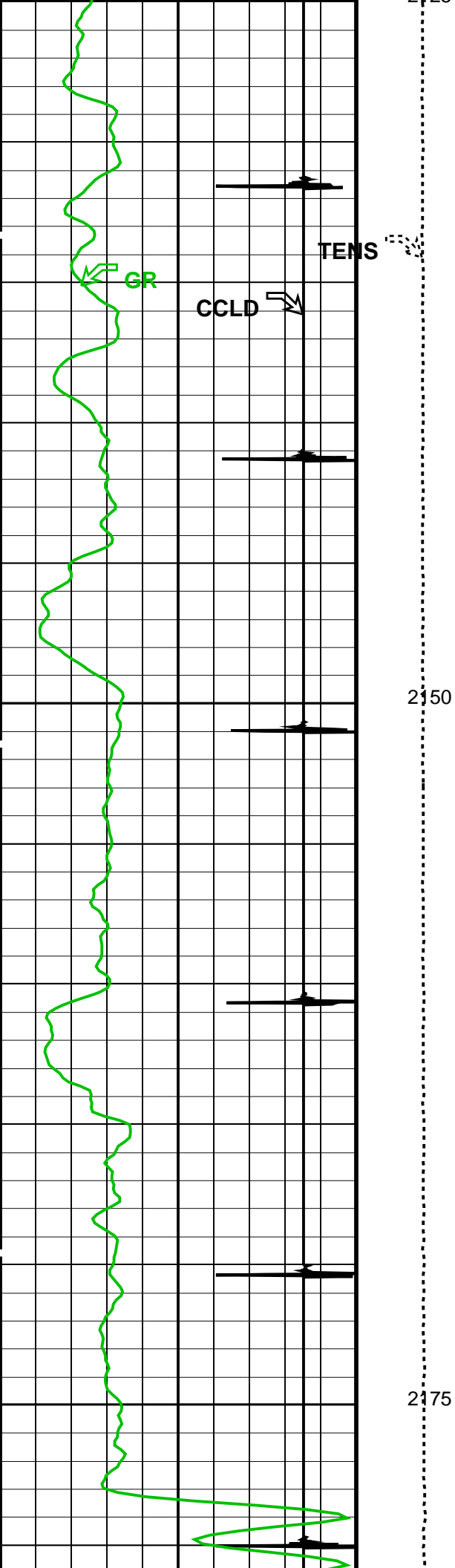
		<div>Baseline Pass</div> <div>2809m – 2100m MDKB</div>
		MAXIS Field Log

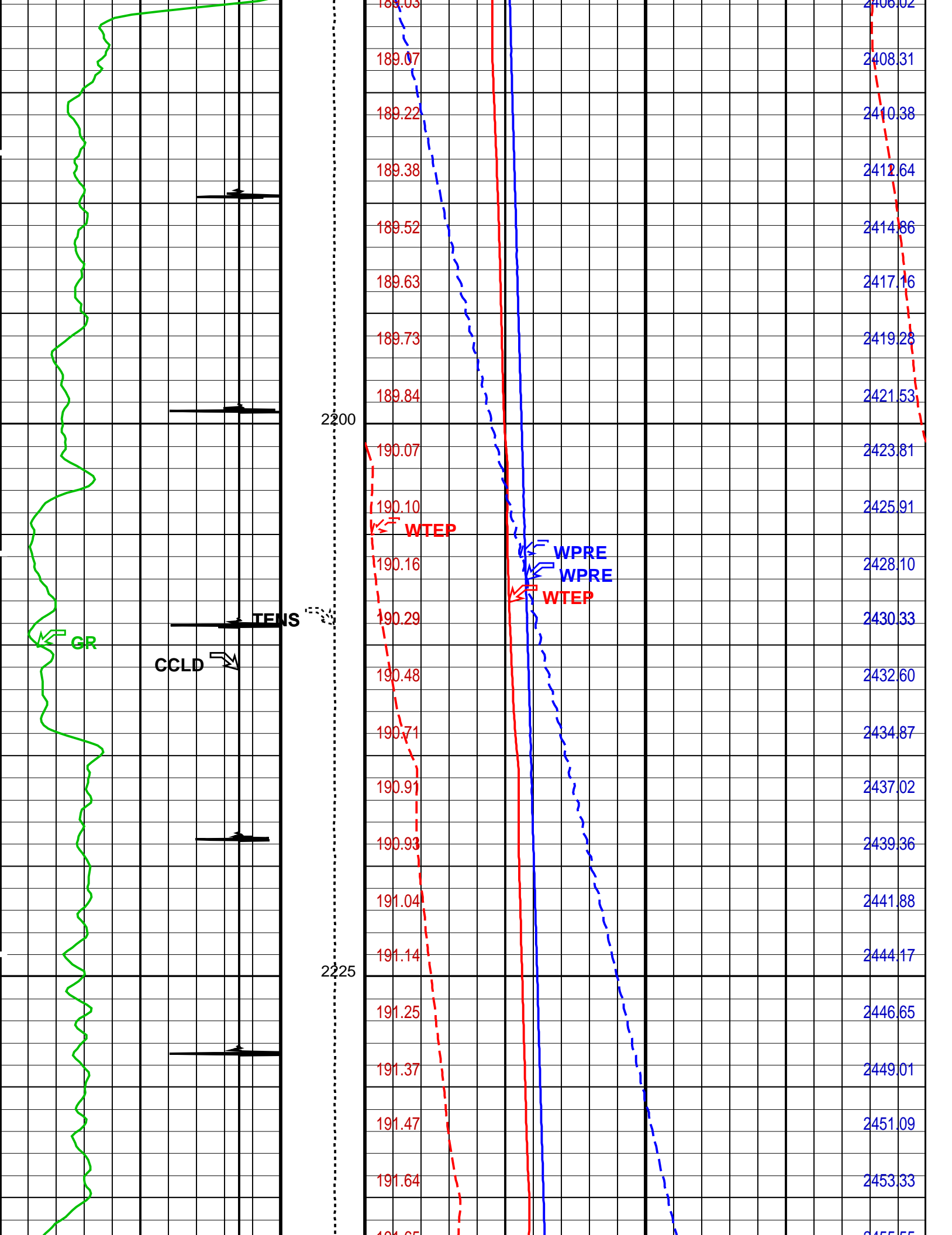
Company: Esso Australia Pty. Ltd.				Well: A7
Input DLIS Files				
DEFAULT	RST_PSP_014LUP	FN:13 PRODUCER	16-Apr-2006 21:45 2815.3 M	2085.9 M
Output DLIS Files				
DEFAULT	RST_PSP_012PUP	FN:13 PRODUCER	17-Apr-2006 01:00 2811.5 M	2082.6 M
CLIENT	RST_PSP_012PUC	FN:14 CUSTOMER	17-Apr-2006 01:00 2811.5 M	2082.6 M
OP System Version: 14C0-302				
MCM				
RST-C	PTC-3043-NUCL	PSPT-A/B	14C0-302	

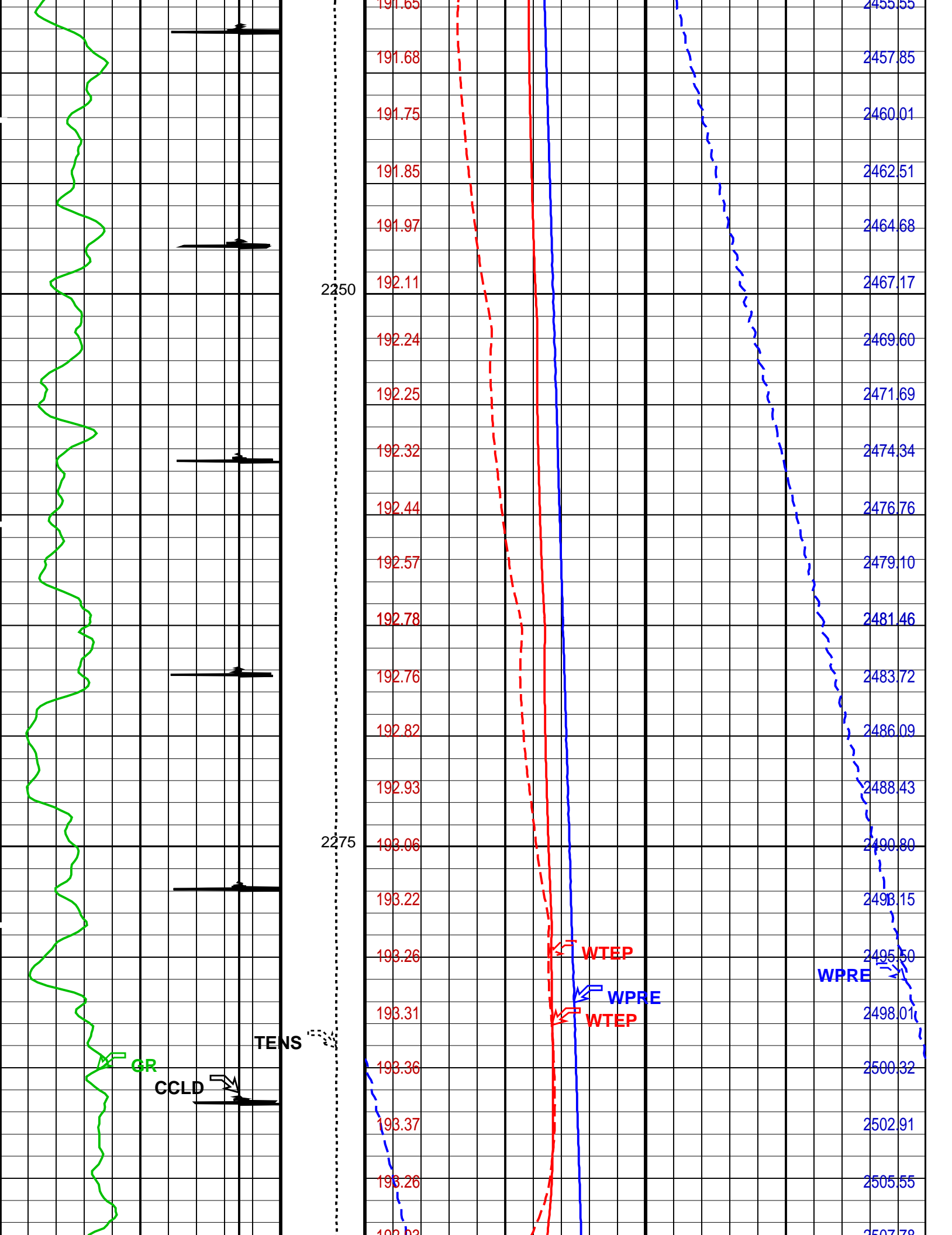
PIP SUMMARY

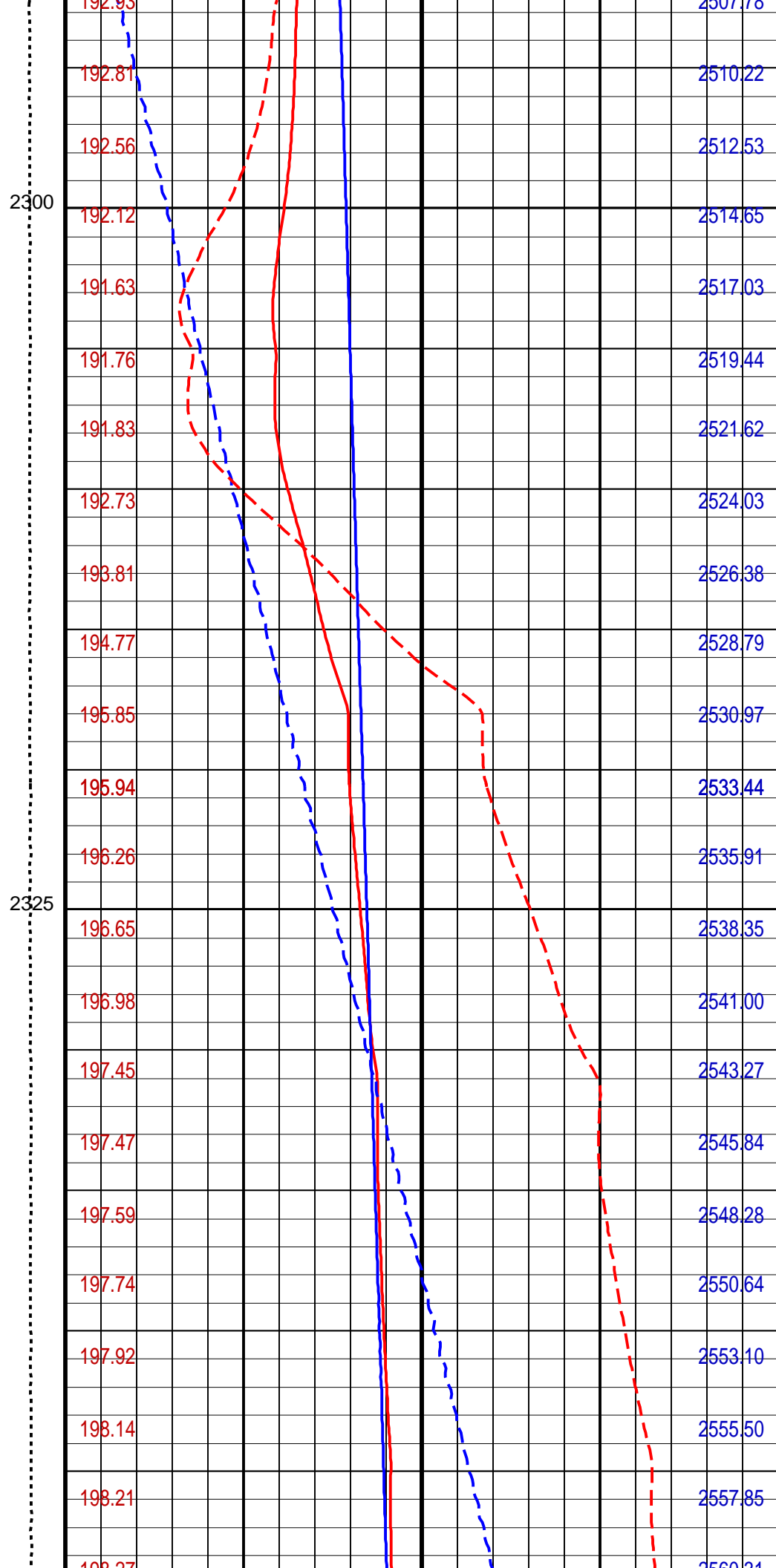
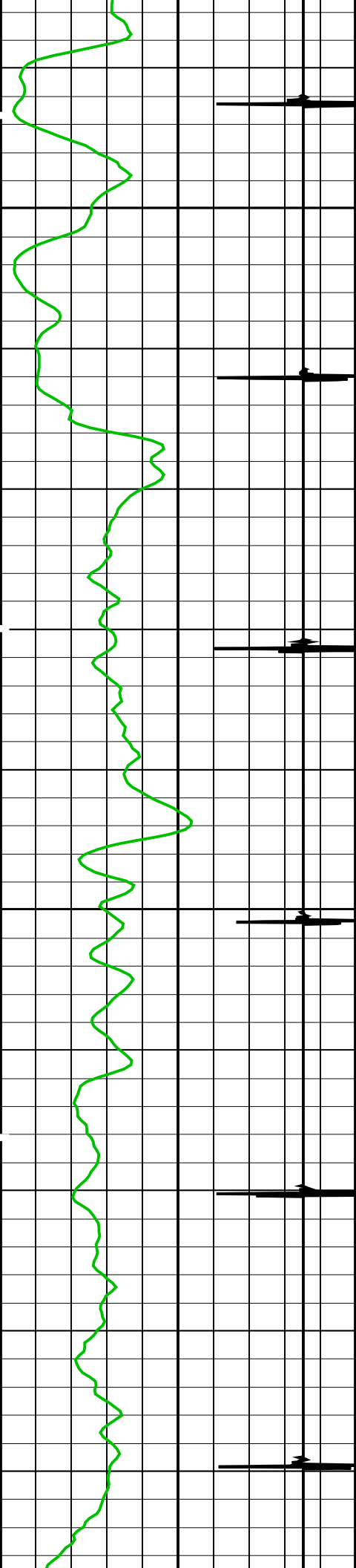
Time Mark Every 60 S

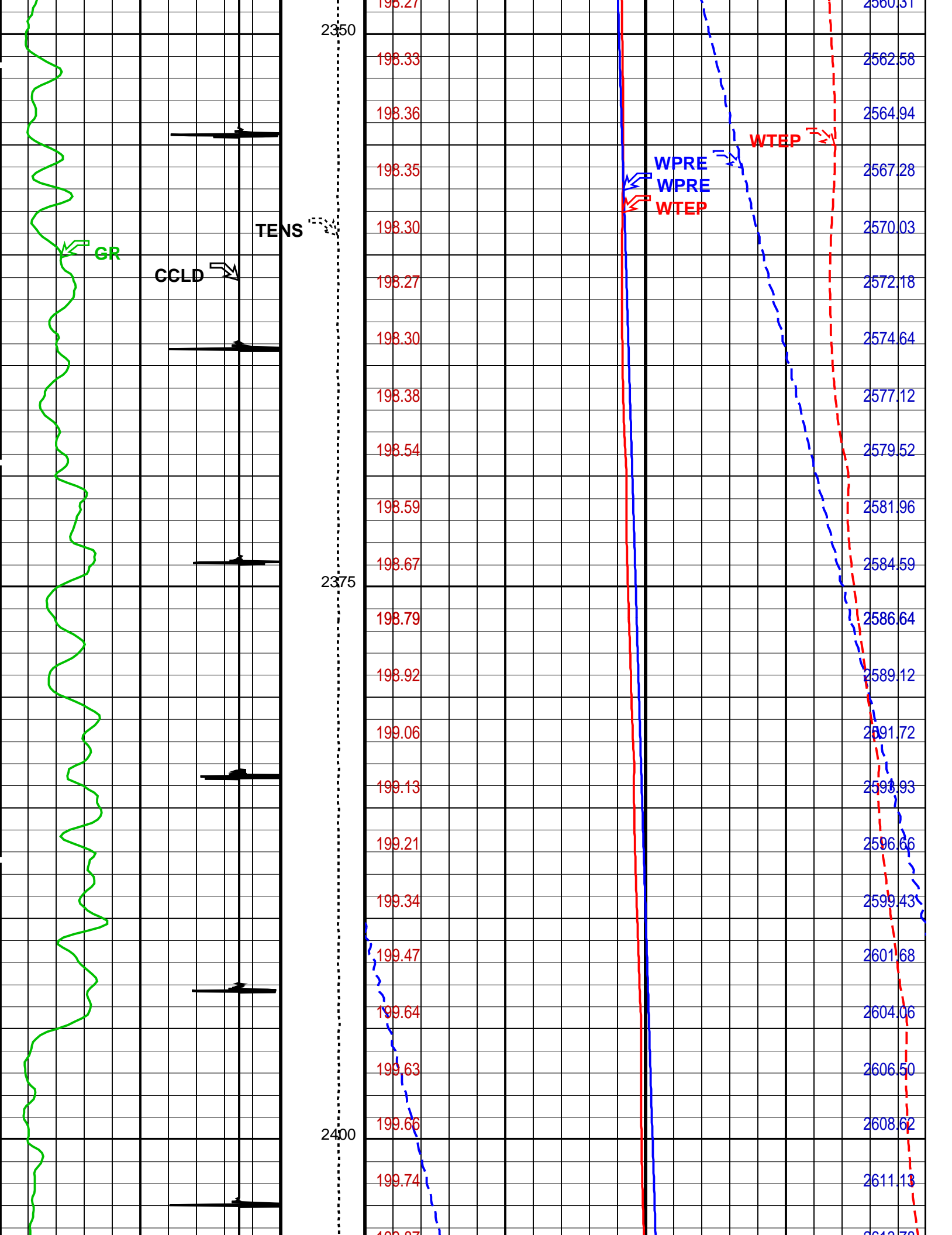


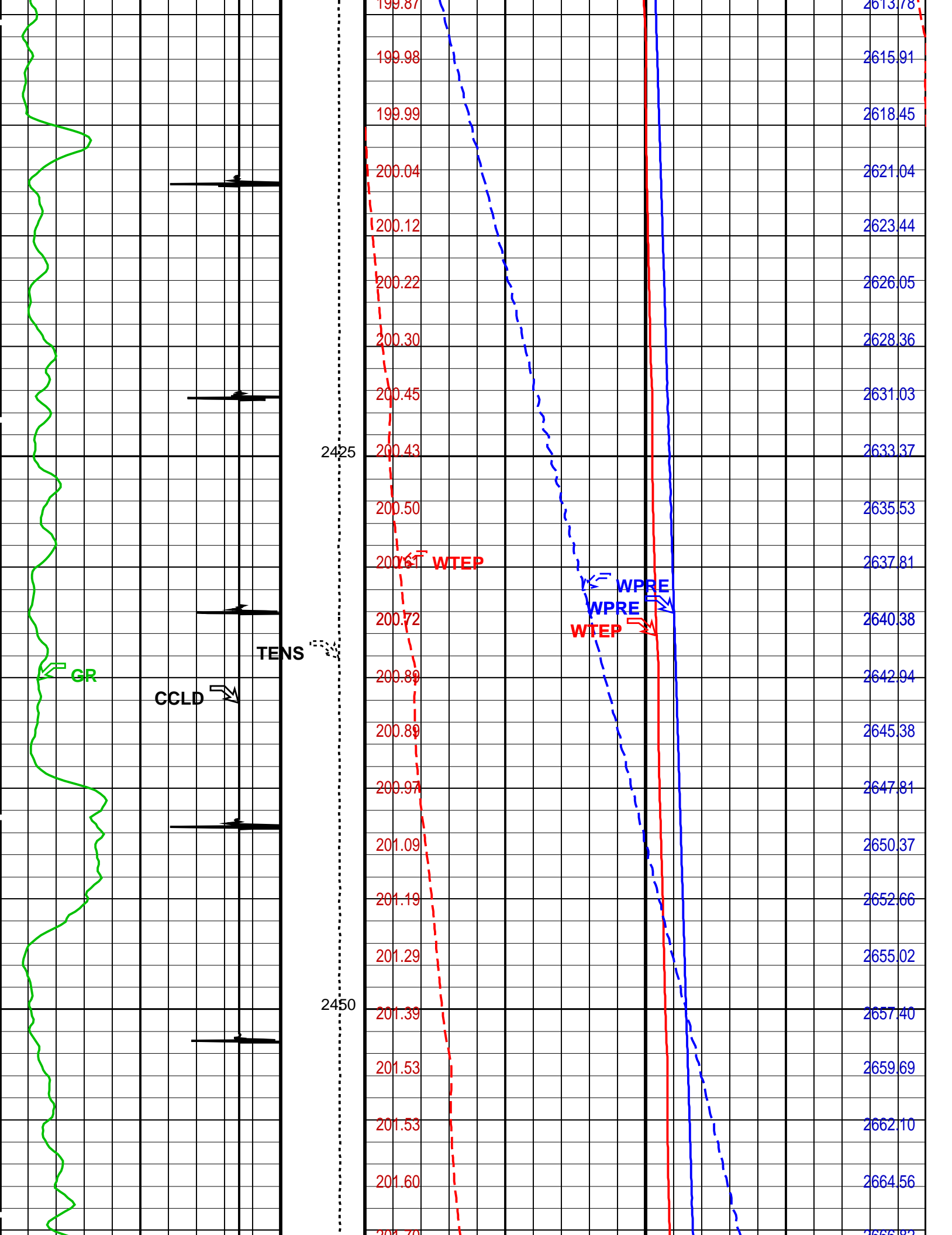


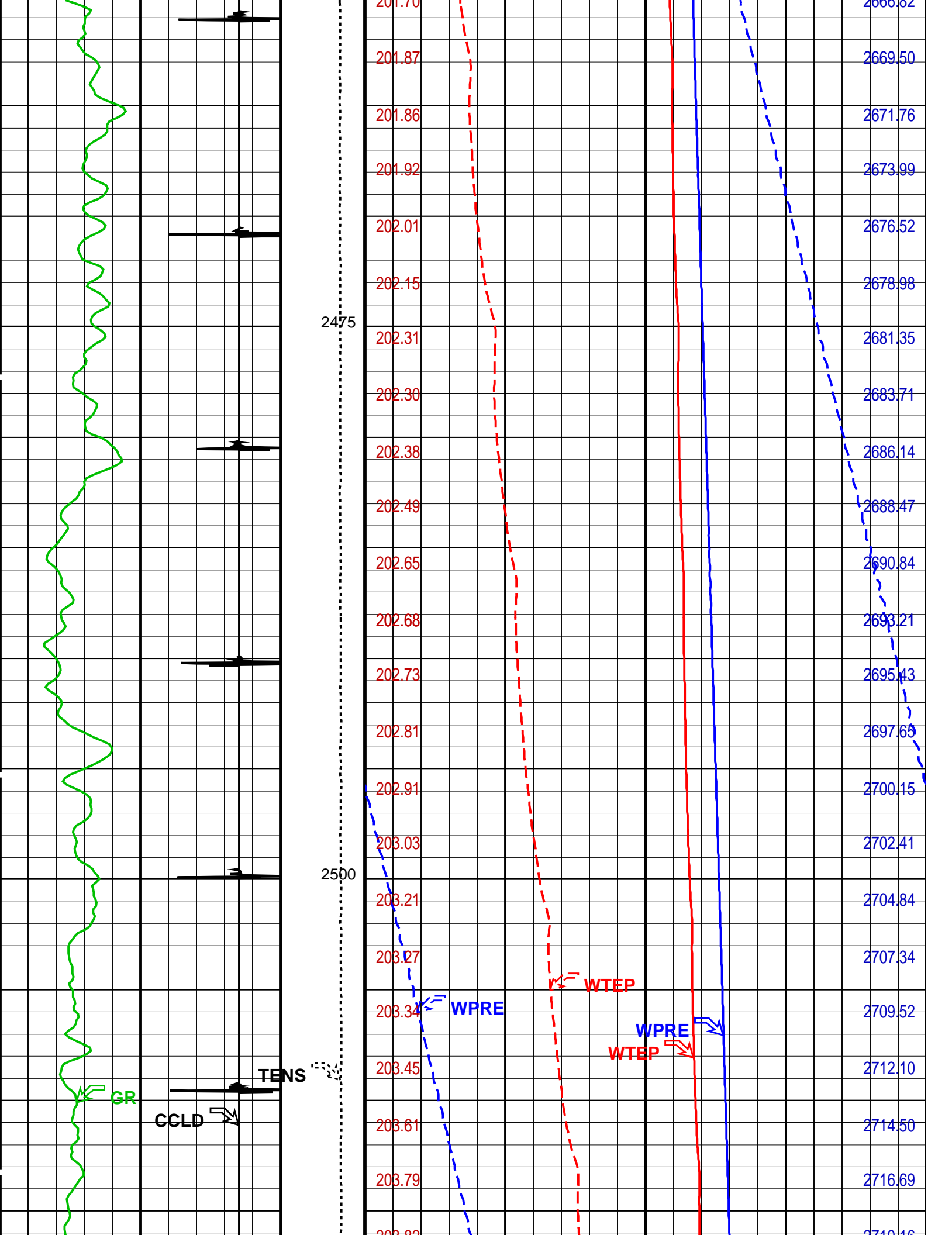


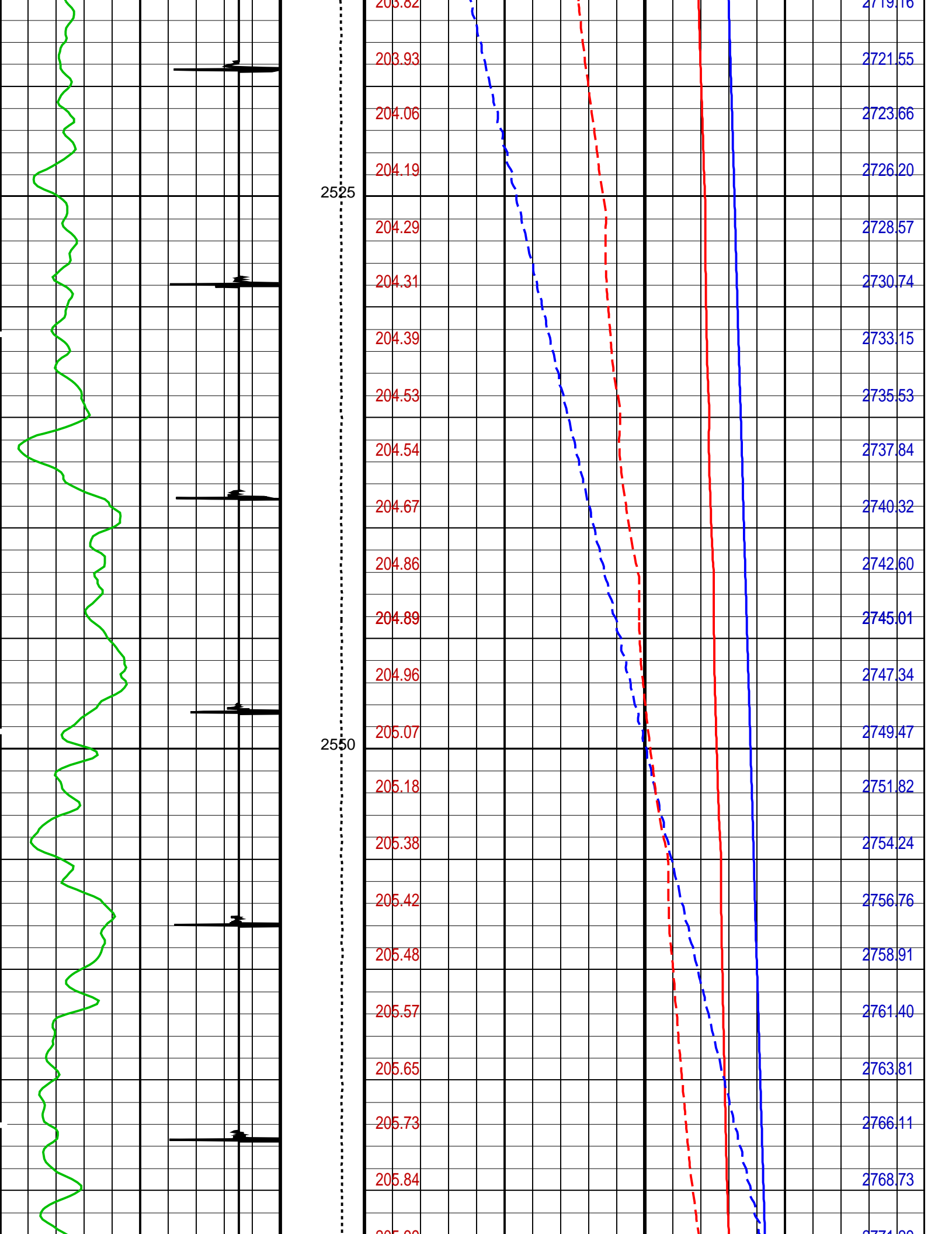


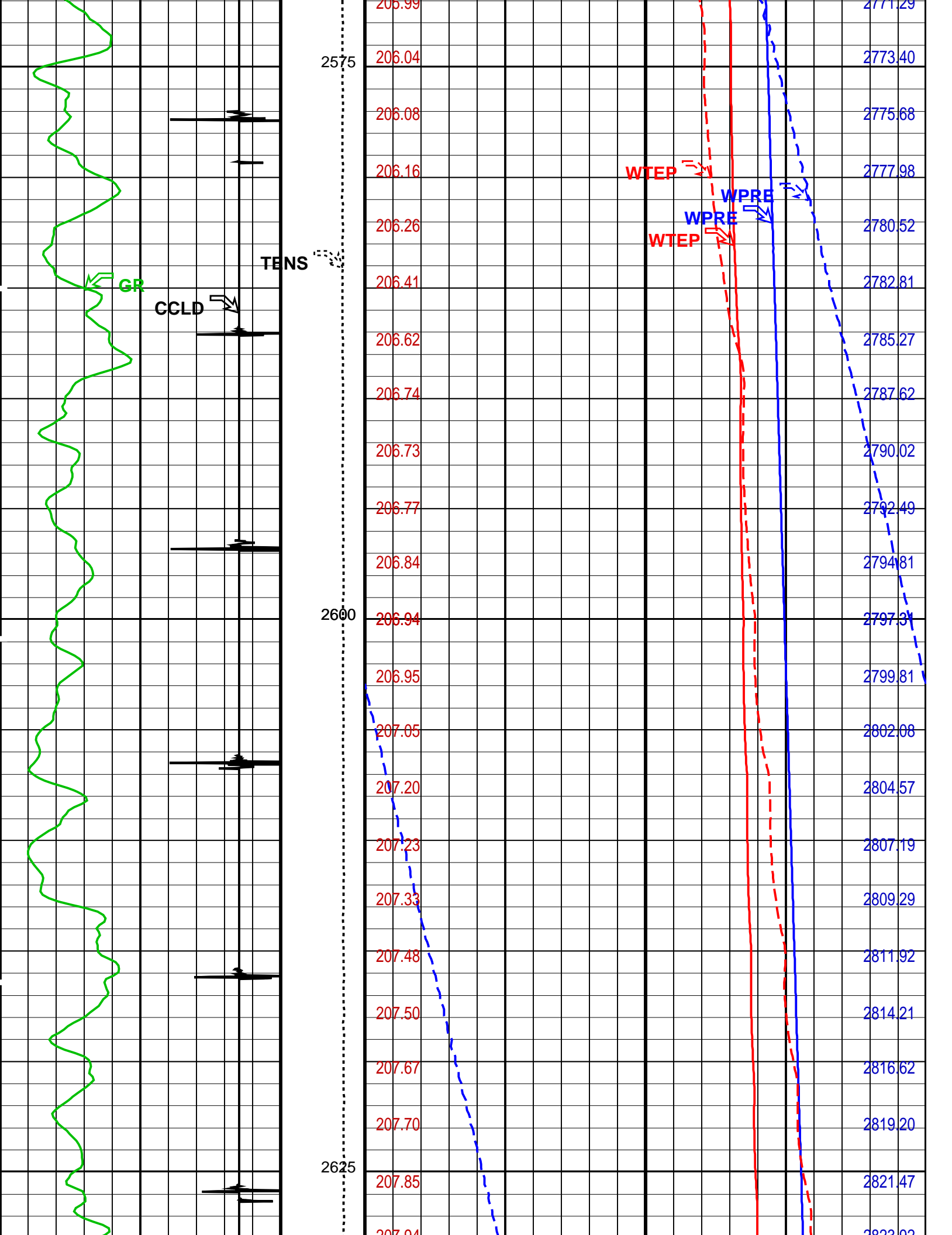


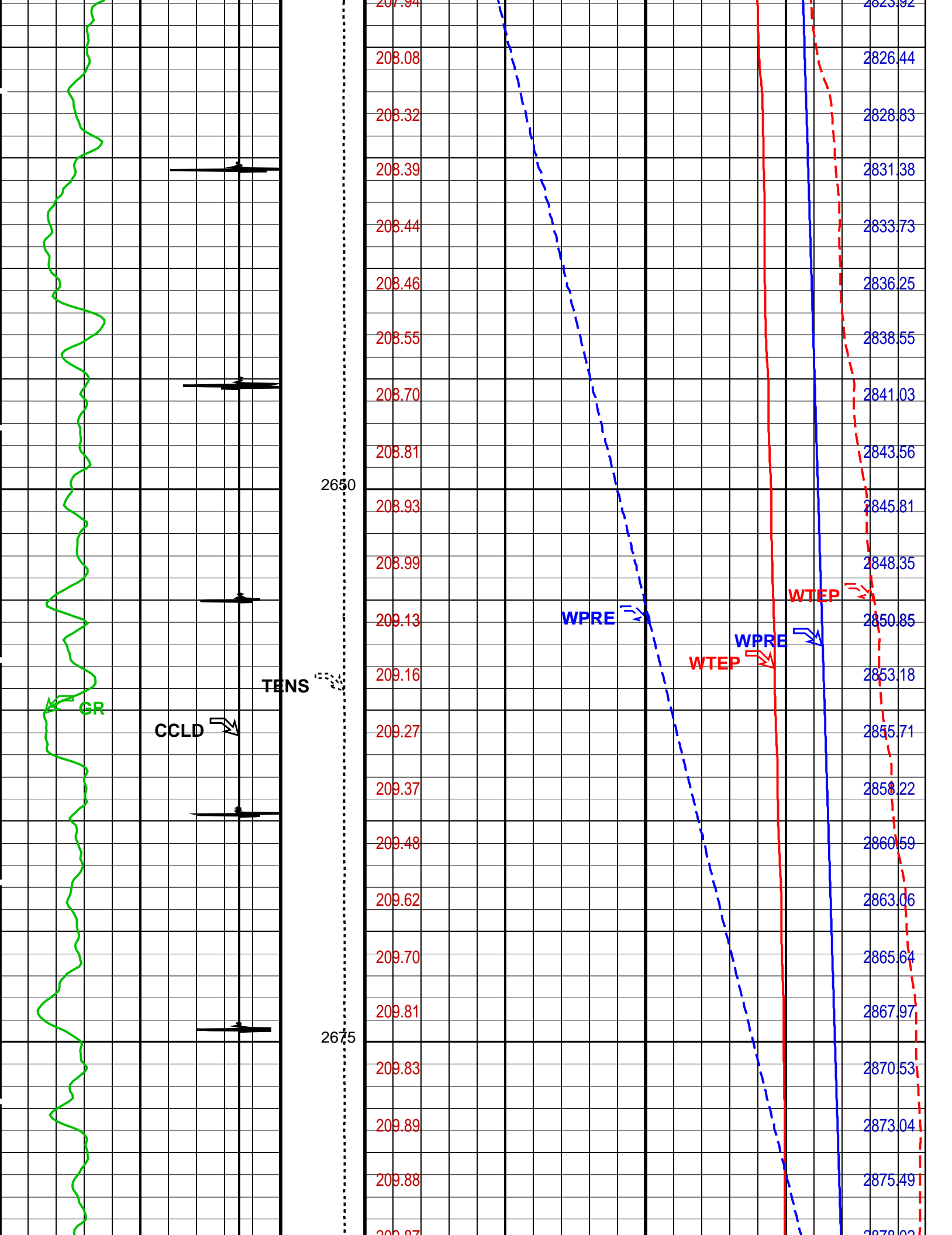


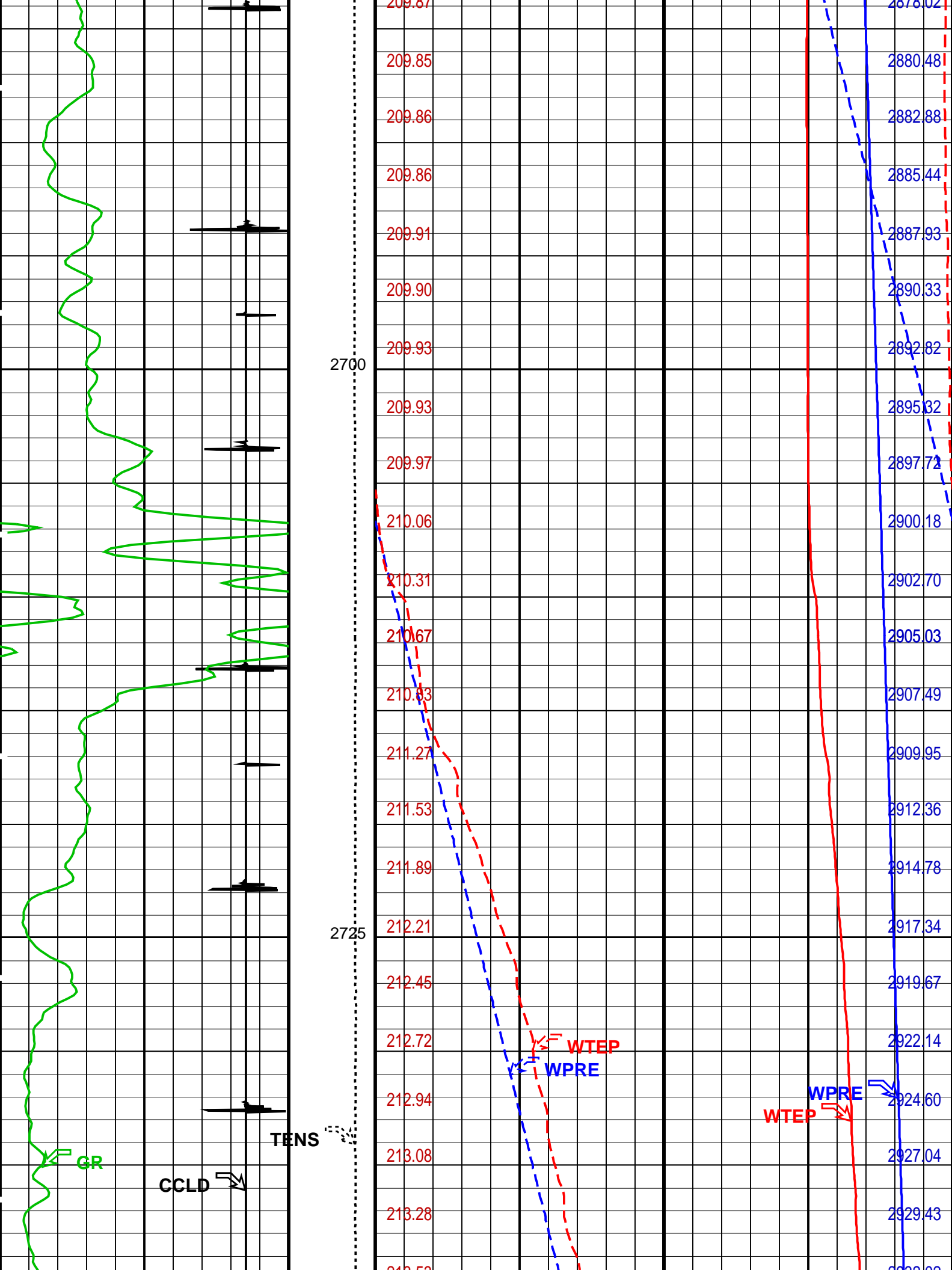


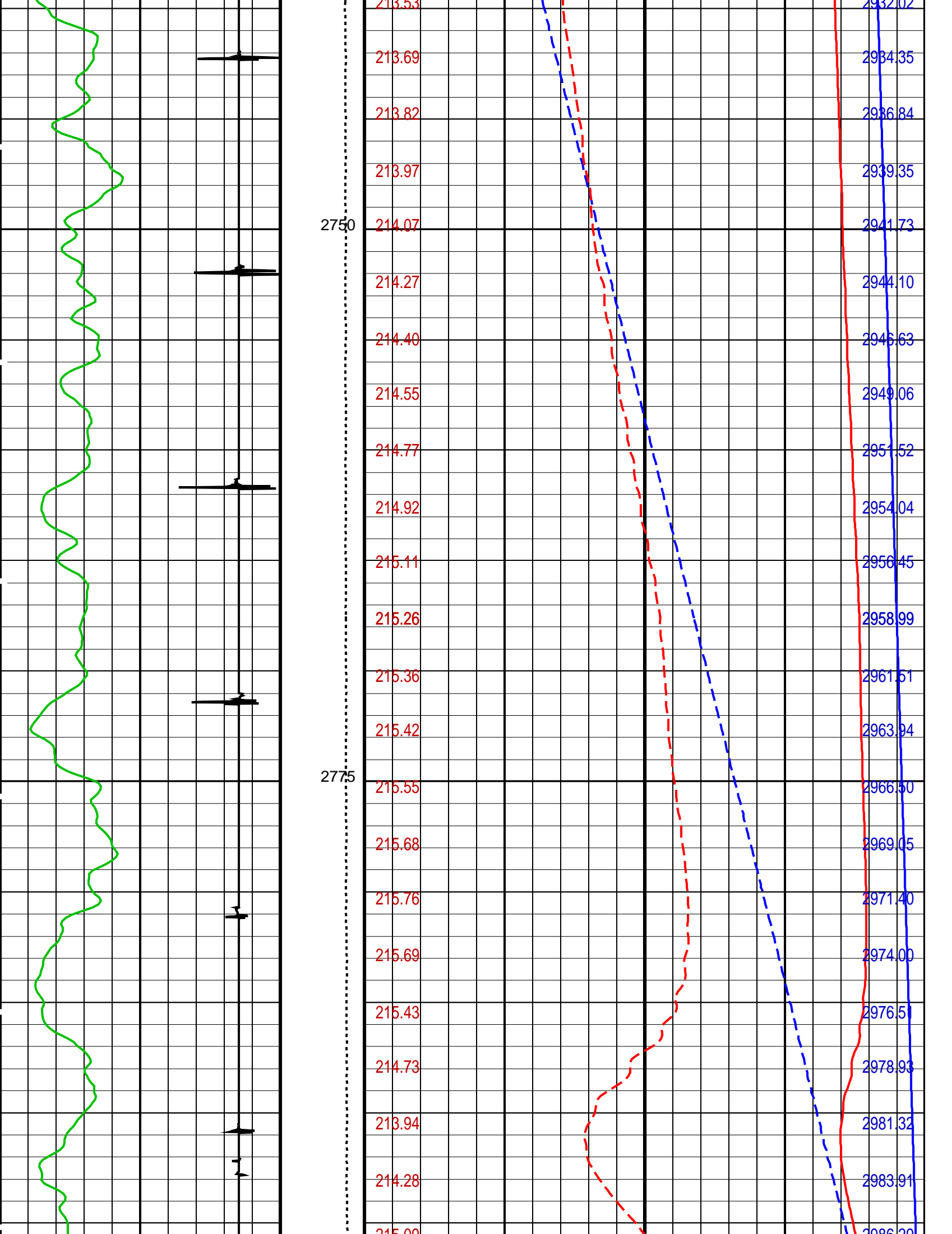


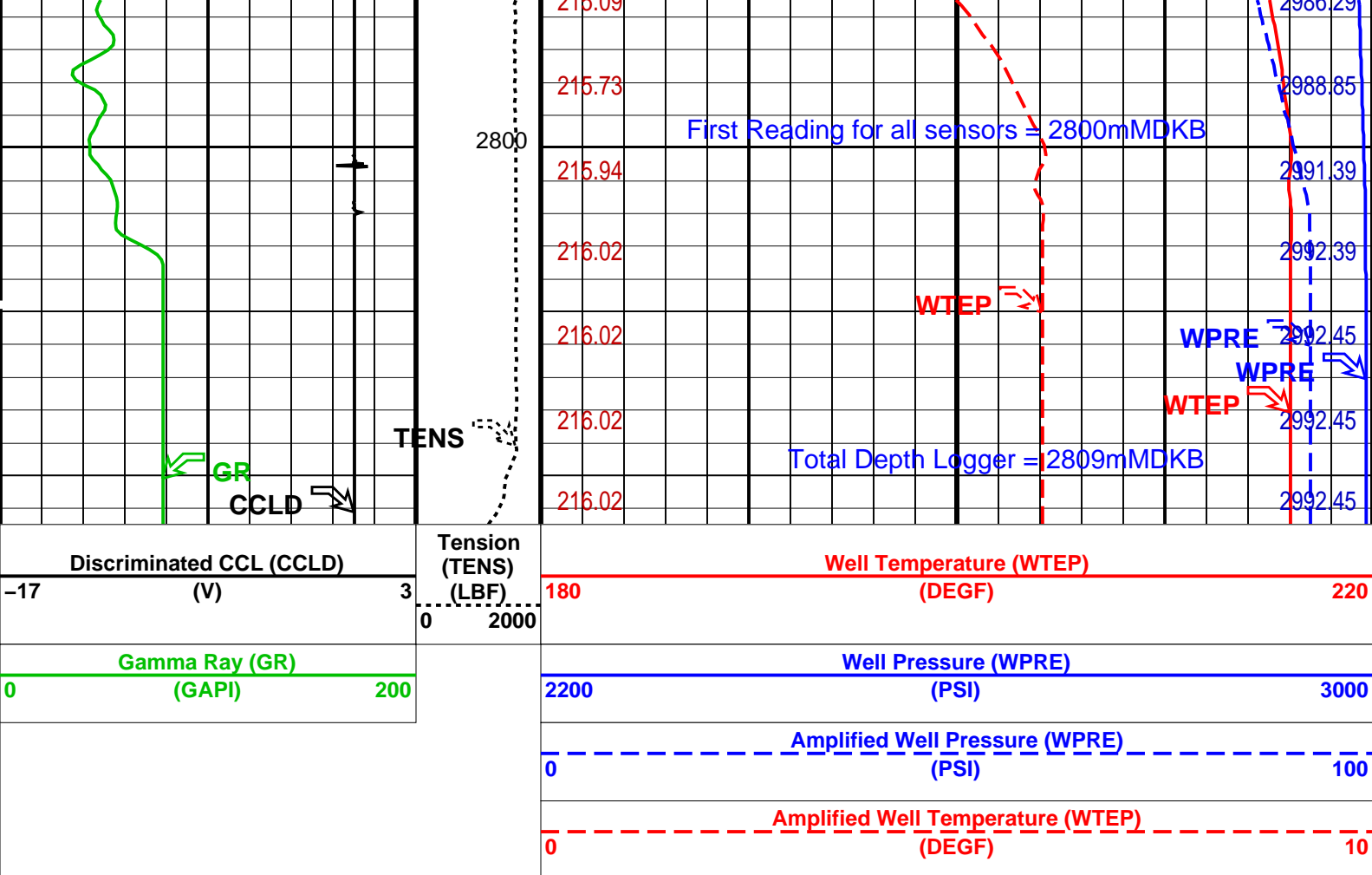












PIP SUMMARY

Time Mark Every 60 S

Format: CORRELATION Vertical Scale: 1:200 Graphics File Created: 17-Apr-2006 01:00

OP System Version: 14C0-302

MCM

RST-C PTC-3043-NUCL PSPT-A/B 14C0-302

Parameters		
DLIS Name	Description	Value
DO	System and Miscellaneous	
PP	Depth Offset for Playback	-3.8 M
	Playback Processing	NORMAL

Input DLIS Files						
DEFAULT	RST_PSP_014LUP	FN:13	PRODUCER	16-Apr-2006 21:45	2815.3 M	2085.9 M
Output DLIS Files						
DEFAULT	RST_PSP_012PUP	FN:13	PRODUCER	17-Apr-2006 01:00		
CLIENT	RST_PSP_012PUC	FN:14	CUSTOMER	17-Apr-2006 01:00		



PBMS Coefficients

Client: Esso Australia Pty. Ltd.
Field: Tuna
Well: A7
Run date: 11-Apr-2006

Tool: PSP
Sub Type: PBMS
Sensor: GR

PBMS Gamma Ray

Sonde Serial NB RESISTORS FOR GR SENSOR N.33384, TOOL PBMS-BA1747. SENSOR S/N:
Sensor Serial NB 33384
Calib Date ddmmyy 270901
Matrix Size 12
Coeff CRC AF18

GR HV Rt

Rt**0

Rt**1

Rt**0

+.171000000000e+04

+.332000000000e+04

Client: Esso Australia Pty. Ltd.
Field: Tuna
Well: A7
Run date: 11-Apr-2006

Tool: PSP
Sub Type: PBMS
Sensor: WellTemp RTD

PBMS RTD Well Thermometer

Sonde Serial NB 0000A-00001
Sensor Serial NB 1747
Calib Date ddmmyy 110102
Matrix Size 16
Coeff CRC A4DD

WTemp Coeff

Tt**0

Tt**1

Tt**2

Tt**0

-.777298048254E+03

+.569642900617E+03

-.182480948210E+03

Tt**3

Tt**4

Tt**5

Tt**0

+.321784598980E+02

−.208928728839E+01

0.0

Client: Esso Australia Pty. Ltd.

Field: Tuna

Well: A7

Run date: 11−Apr−2006

Tool:

PSP

Sub Type:

PBMS

Sensor:

CQG

PBMS Quartz Gauge type F

Sonde Serial NB

COEFFICIENTS FOR CQG PBMS−B.1747 S/N:

Sensor Serial NB

1747

Calib Date ddmmyy

110102

Matrix Size

66

Coeff CRC

434C

Pres Coeff

Fb**0

Fb**1

Fb**2

Fc**0

+.647764750671E+04

+.119896464745E−01

−.353936954700E−06

Fc**1

−.102239101327E+01

−.123785731671E−04

−.973372887630E−10

Fc**2

+.951672344840E−06

+.449174438598E−10

+.113063327459E−14

Fc**3

+.291157488579E−11

+.249439751628E−15

0.0

Fc**4

0.0

0.0

0.0

Fc**5

0.0

0.0

0.0

Fb**3

Fb**4

Fb**5

Fc**0

−.773897409502E−10

−.148024407711E−14

−.270868963806E−19

Fc**1

−.366028930670E−15

+.549586893354E−19

0.0

Fc**2

0.0

0.0

0.0

Fc**3

0.0

0.0

0.0

Fc**4

0.0

0.0

0.0

Fc**5

0.0

0.0

0.0

PBMS Quartz Gauge type F

Sonde Serial NB :
Sensor Serial NB 1747
Calib Date ddmmyy 110102
Matrix Size 66
Coeff CRC A056

Temp Coeff

	Fc**0	Fc**1	Fc**2
Fb**0	+.111796853507E+03	-.322308147288E-03	+.742558022583E-08
Fb**1	-.601645685634E-02	+.179010045148E-07	-.313627690596E-13
Fb**2	-.314252314375E-07	+.341662245729E-12	-.892113641465E-18
Fb**3	-.386018687543E-12	+.134415616267E-16	0.0
Fb**4	0.0	0.0	0.0
Fb**5	0.0	0.0	0.0

	Fc**3	Fc**4	Fc**5
Fb**0	+.103641486045E-12	-.343818493373E-17	-.814551998440E-21
Fb**1	+.982950949630E-17	+.381959156185E-20	0.0
Fb**2	0.0	0.0	0.0
Fb**3	0.0	0.0	0.0
Fb**4	0.0	0.0	0.0
Fb**5	0.0	0.0	0.0

PBMS Quartz Gauge type F

Sonde Serial NB :
Sensor Serial NB 1747
Calib Date ddmmyy 110102
Matrix Size 16
Coeff CRC BA5A

Clock Freq Coeff

	(Fb'-Fc')**0	(Fb'-Fc')**1	(Fb'-Fc')**2
(Fb'-Fc')**0	+.310460984349E+05	+.108821475826E-02	+.971482753796E-06

	(Fb'-Fc')**3	(Fb'-Fc')**4	(Fb'-Fc')**5
(Fb'-Fc')**0	-.557631270135E-10	-.141336694344E-14	+.327835070494E-19

PBMS Quartz Gauge type F

Sonde Serial NB :
Sensor Serial NB 1747
Calib Date ddmmyy 110102
Matrix Size 16

Clock Temp Coeff

	$(Fb'-Fc')^{**0}$	$(Fb'-Fc')^{**1}$	$(Fb'-Fc')^{**2}$
$(Fb'-Fc')^{**0}$	+1.122634058782E+03	-.558504621580E-02	-.310953610161E-07
	$(Fb'-Fc')^{**3}$	$(Fb'-Fc')^{**4}$	$(Fb'-Fc')^{**5}$
$(Fb'-Fc')^{**0}$	+.594304409353E-12	-.470611628850E-16	+.135247971718E-20

Company: **Esso Australia Pty. Ltd.****Schlumberger**Well: **A7**Field: **Tuna**Rig: **Rig 22 / Prod 2**Country: **Australia**

RST-C Sigma Survey
2809m to 2100m MDKB
Reservoir Saturation Log