

Input DLIS Files

DEFAULT Splice_TLD_MCFL_CNL_029CUP FN:1 PRODUCER 14-Mar-2008 10:19 907.1 M 55.4 M

Output DLIS Files

DEFAULT TLD_MCFL_CNL_HRLA_030PUP FN:48 PRODUCER 14-Mar-2008 10:29 907.1 M 269.9 M
 REDUCED_DLIS TLD_MCFL_CNL_HRLA_030PUP FN:49 PRODUCER 14-Mar-2008 10:29 907.1 M 269.9 M

Integrated Hole/Cement Volume Summary

Hole Volume = 77.68 M3

Cement Volume = 48.29 M3 (assuming 9.63 IN casing O.D.)

Computed from 899.9 M to 274.0 M using data channel(s) CRD1_PPC1 CRD2_PPC1 CRD3_PPC1 CRD4_PPC1

OP System Version: 15C0-309

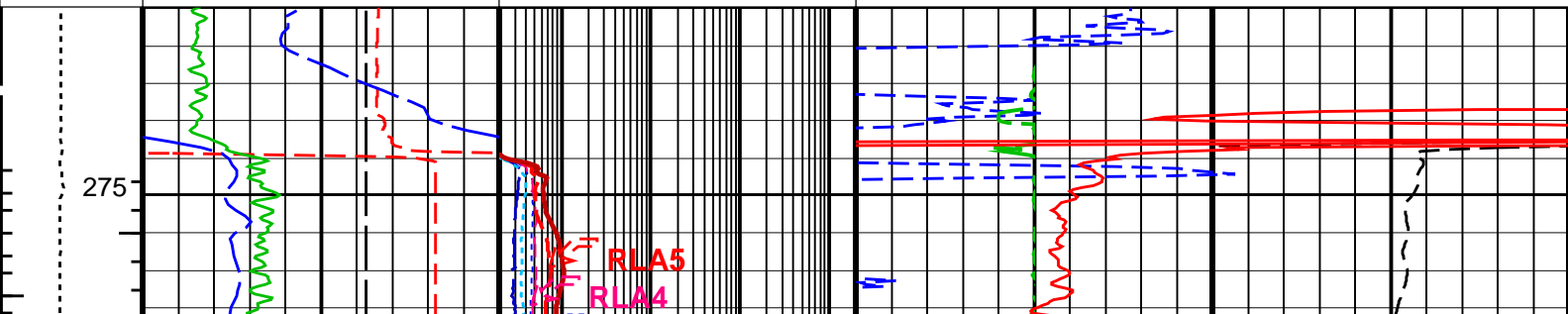
MCM

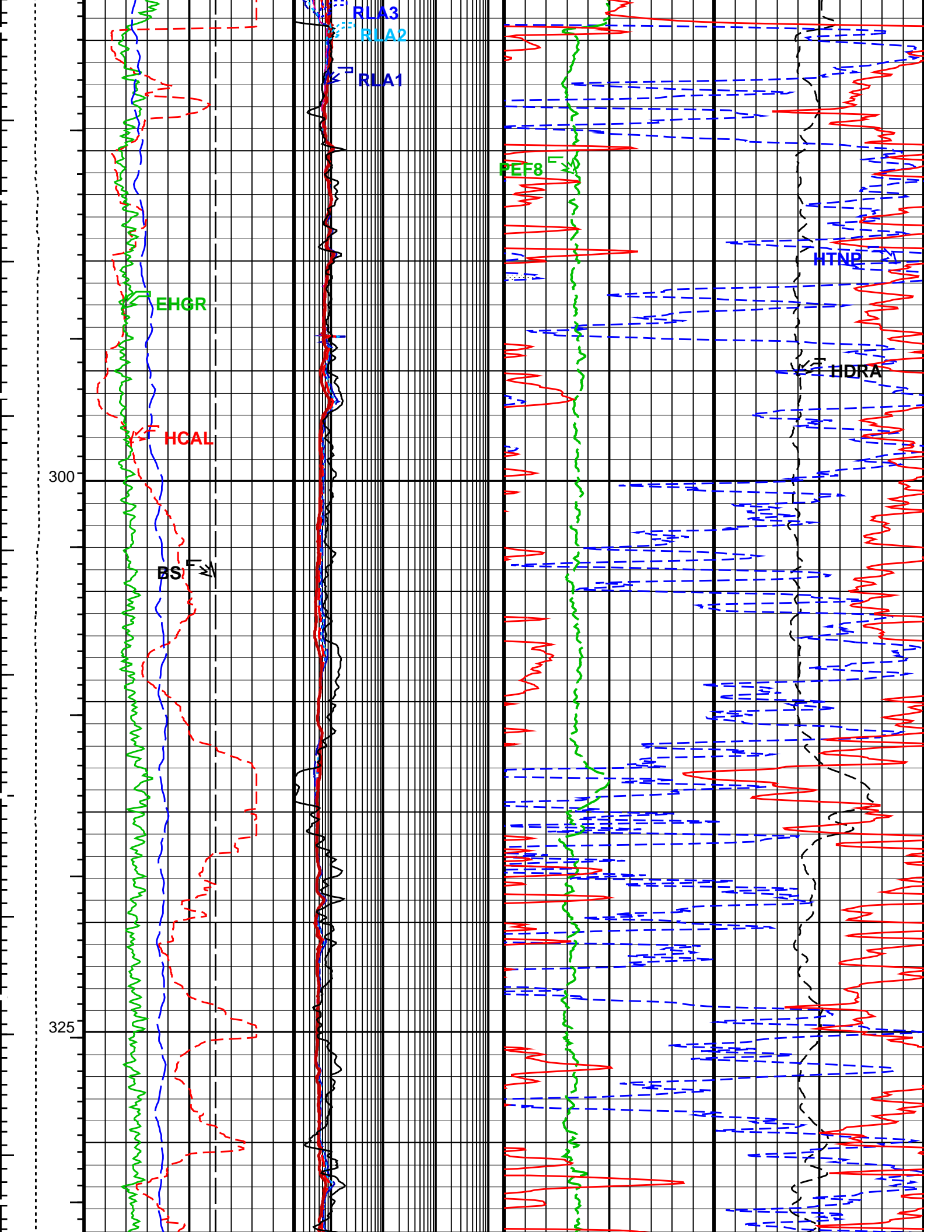
HILTB-FTB	SRPC-3546-Q1_2008_OP15	HRLT-B	SRPC-3546-Q1_2008_OP15
PPC1-B	SRPC-3546-Q1_2008_OP15	MAXS-B	SKK-3442-MAST
MAPC-B	SKK-3442-MAST	EDTC-B	SKK-3493-EDTCB
BSP-AH-169	SRPC-3546-Q1_2008_OP15		

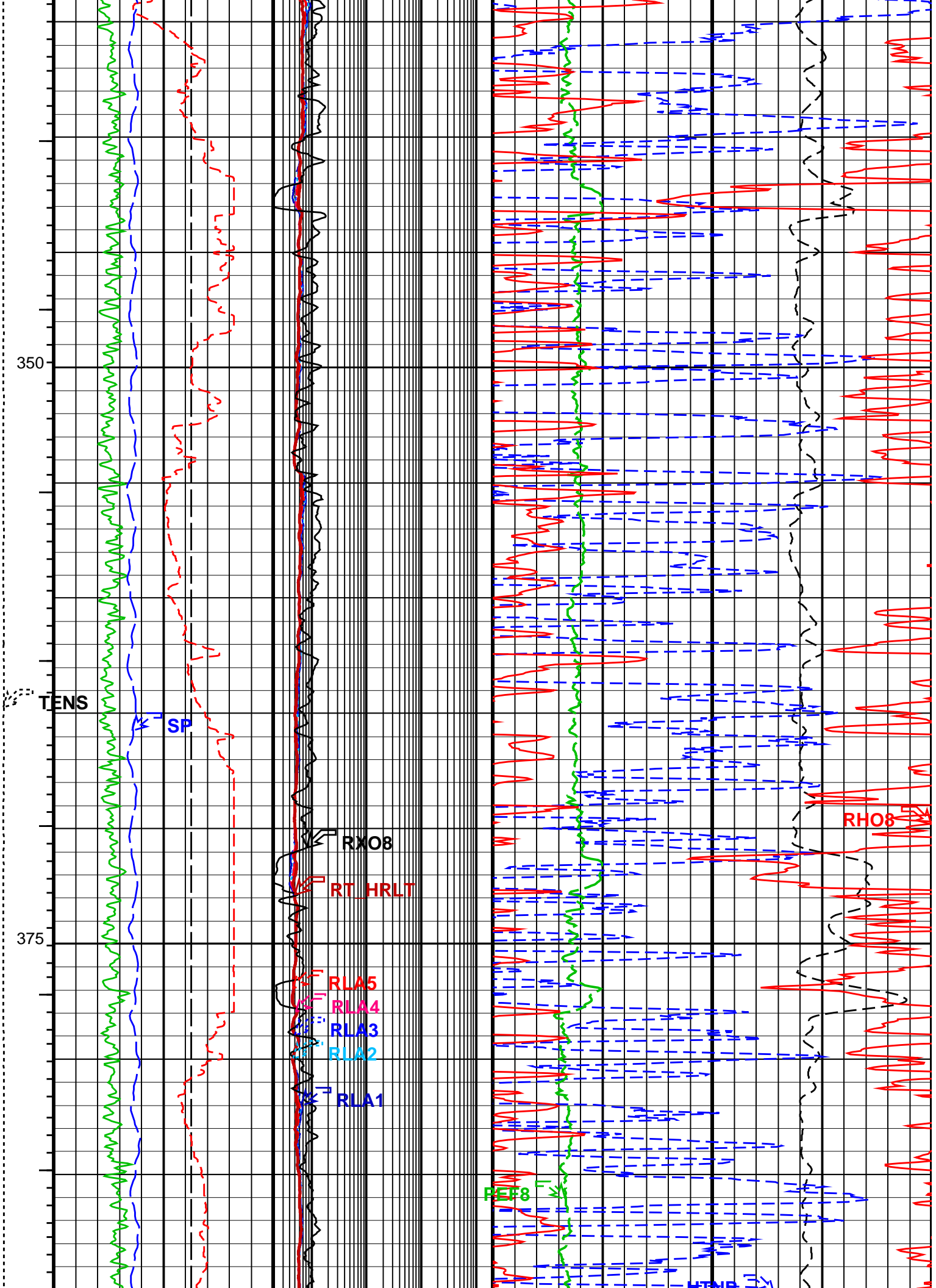
PIP SUMMARY

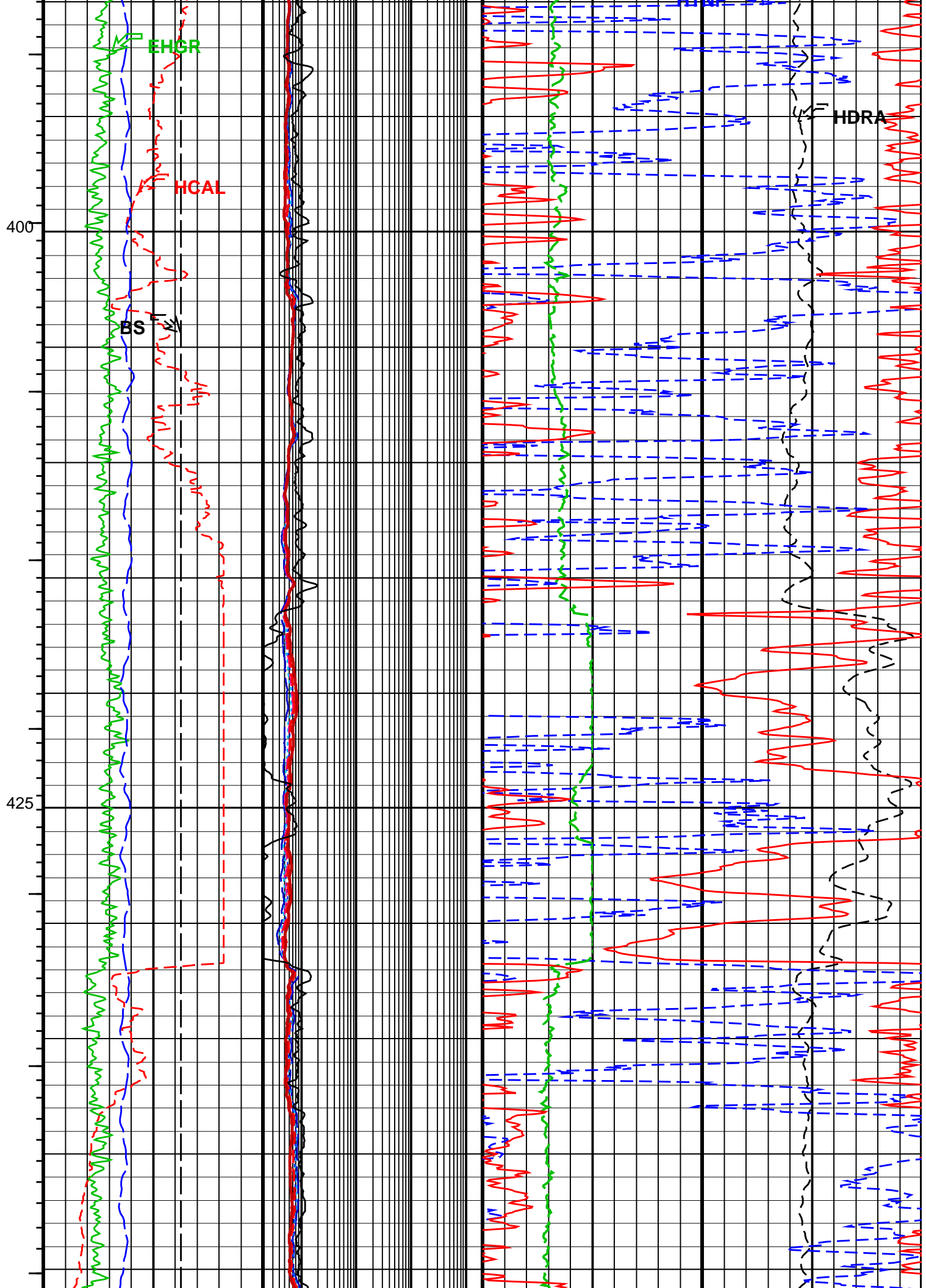
- └ Integrated Hole Volume Minor Pip Every 0.1 M3
- └ Integrated Hole Volume Major Pip Every 1 M3
 - └ Integrated Cement Volume Minor Pip Every 0.1 M3
 - └ Integrated Cement Volume Major Pip Every 1 M3
- Time Mark Every 60 S

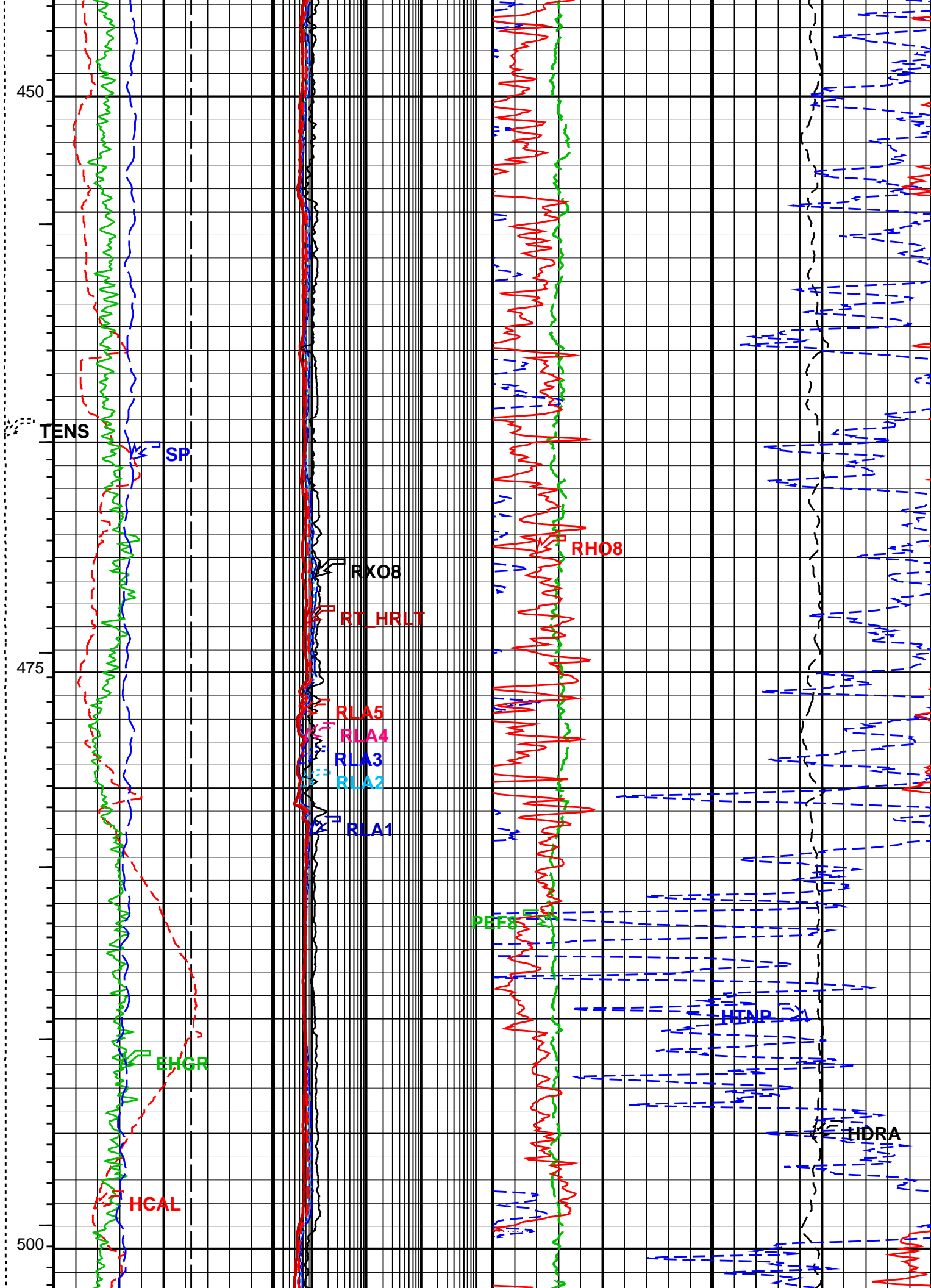
		HRLT True Resistivity (RT_HRLT)			
		0.2	(OHMM)	2000	
		H. Res. Invaded Zone Resistivity (RXO8)			
		0.2	(OHMM)	2000	
Area From HCAL to BS		HRLT Resistivity 5 (RLA5)			
		0.2	(OHMM)	2000	
SP (SP)	SP (MV)	HRLT Resistivity 4 (RLA4)		H. Res. Formation Density (RHO8)	
-80	20	0.2	(OHMM)	2000	1.95 (G/C3) 2.95
Gamma Ray (EHGR)	Gamma Ray (GAPI)	HRLT Resistivity 3 (RLA3)		H. Res. Formation Pe (PEF8)	Density Correction (HDRA)
0	200	0.2	(OHMM)	2000	-0.25 (G/C3) 0.25
				0 (---- 10)	
HILT Caliper (HCAL)	HILT Caliper (IN)	HRLT Resistivity 2 (RLA2)		Sand From RHO8 to HTNP	
6	16	0.2	(OHMM)	2000	
Tension (TENS) (LBF)	Bit Size (BS) (IN)	HRLT Resistivity 1 (RLA1)		HiRes TNPH (HTNP) (V/V)	
0 5000	6 16	0.2	(OHMM)	2000	0.45 (V/V) -0.15

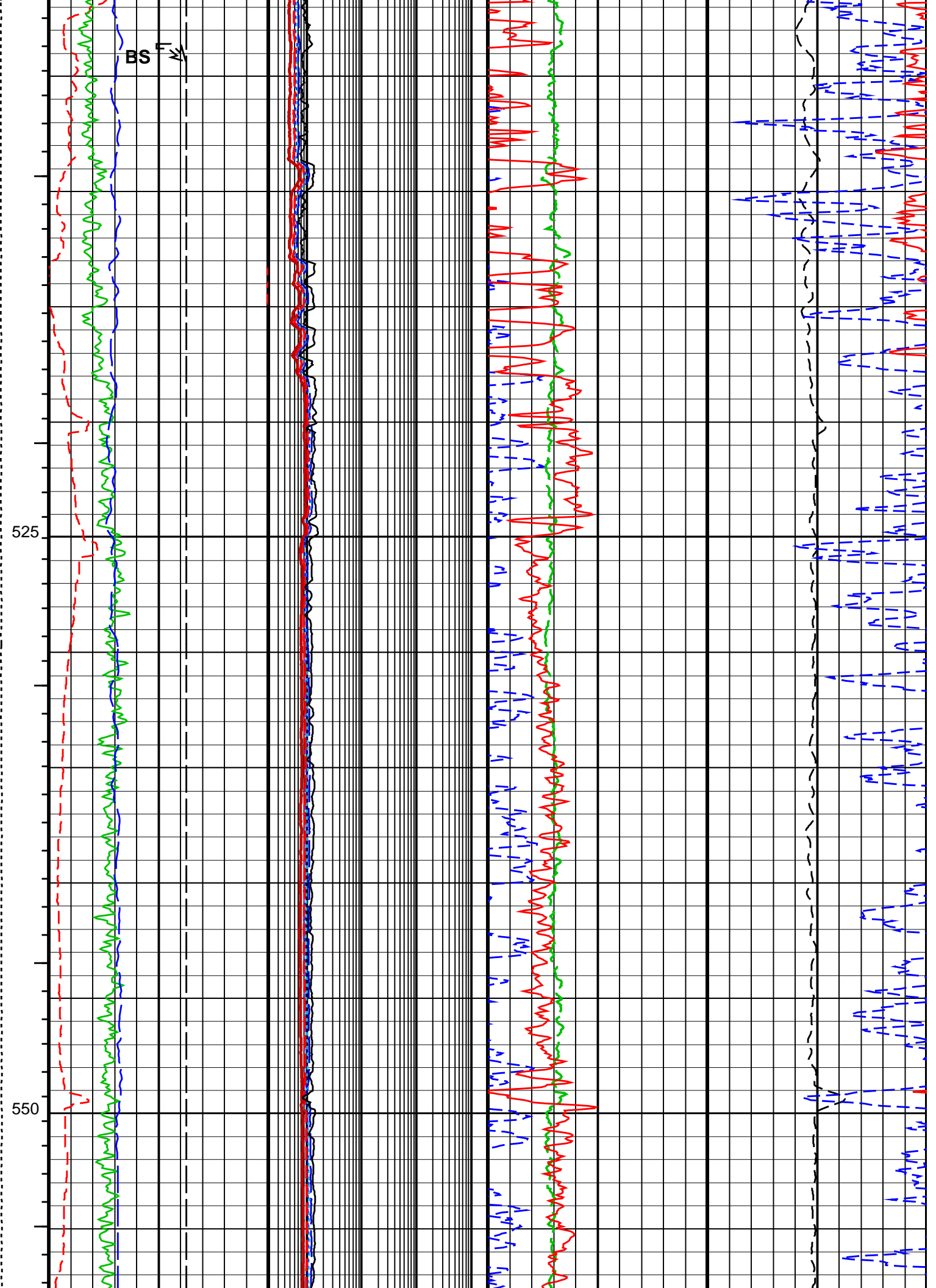


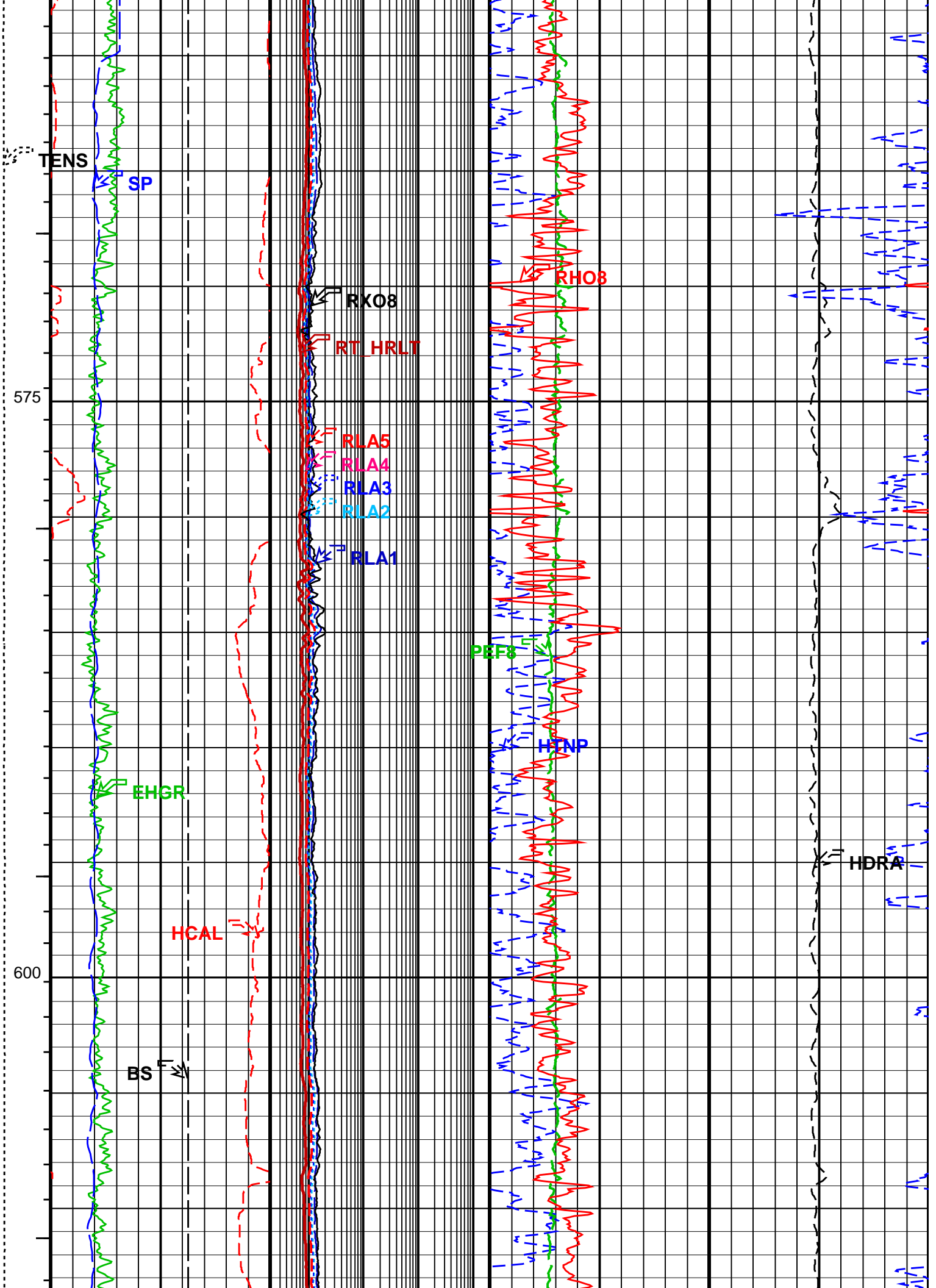


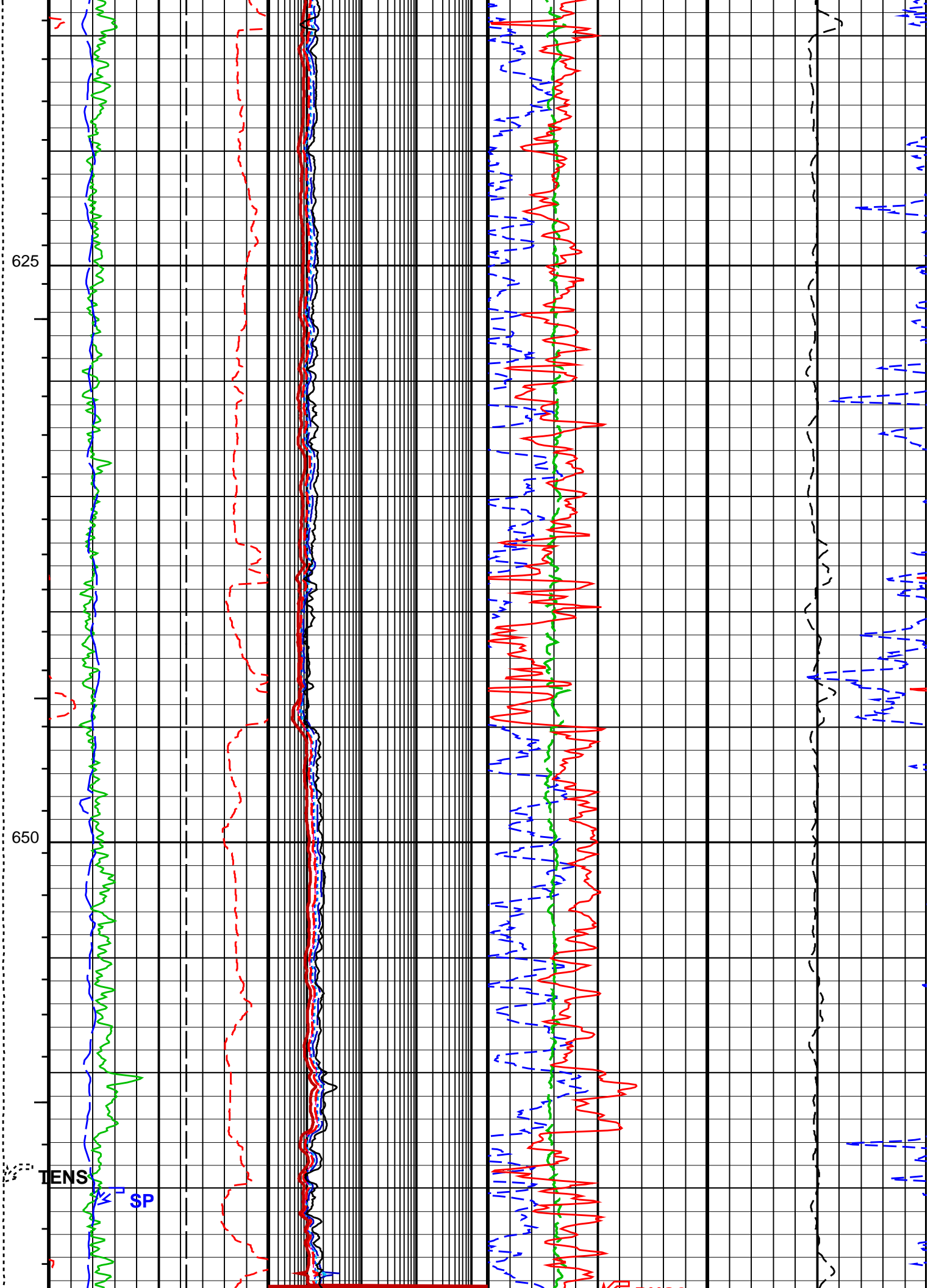


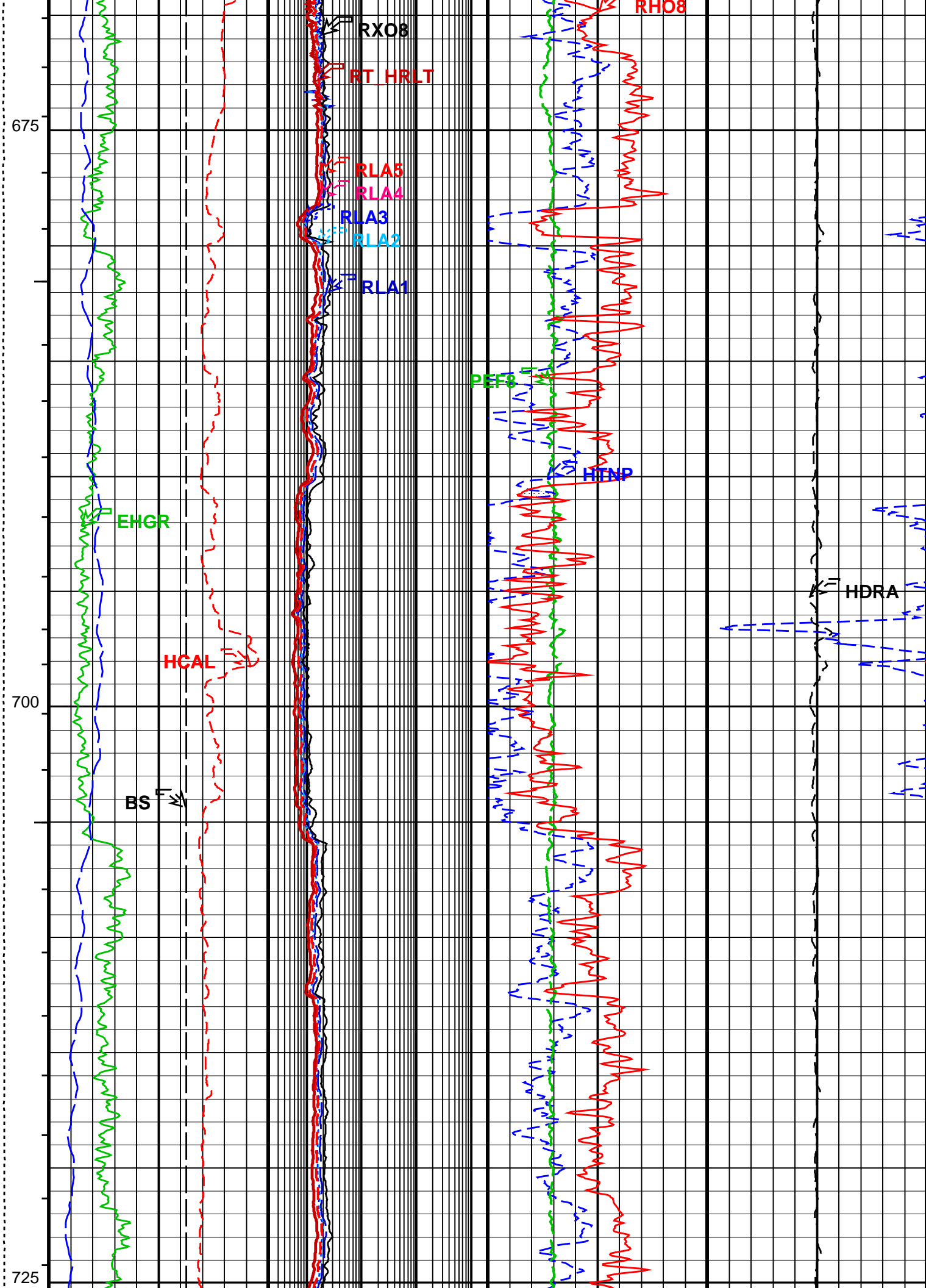


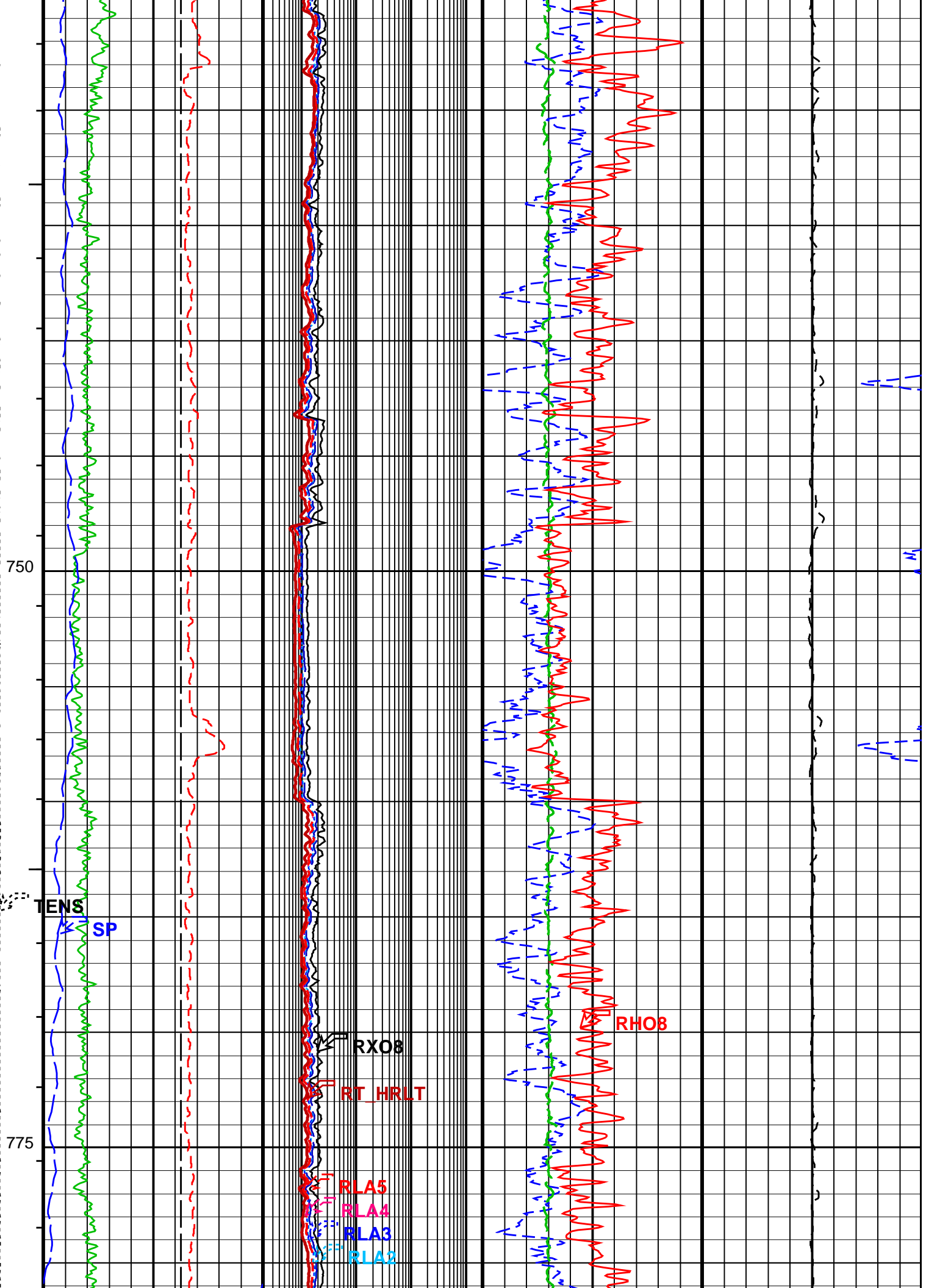


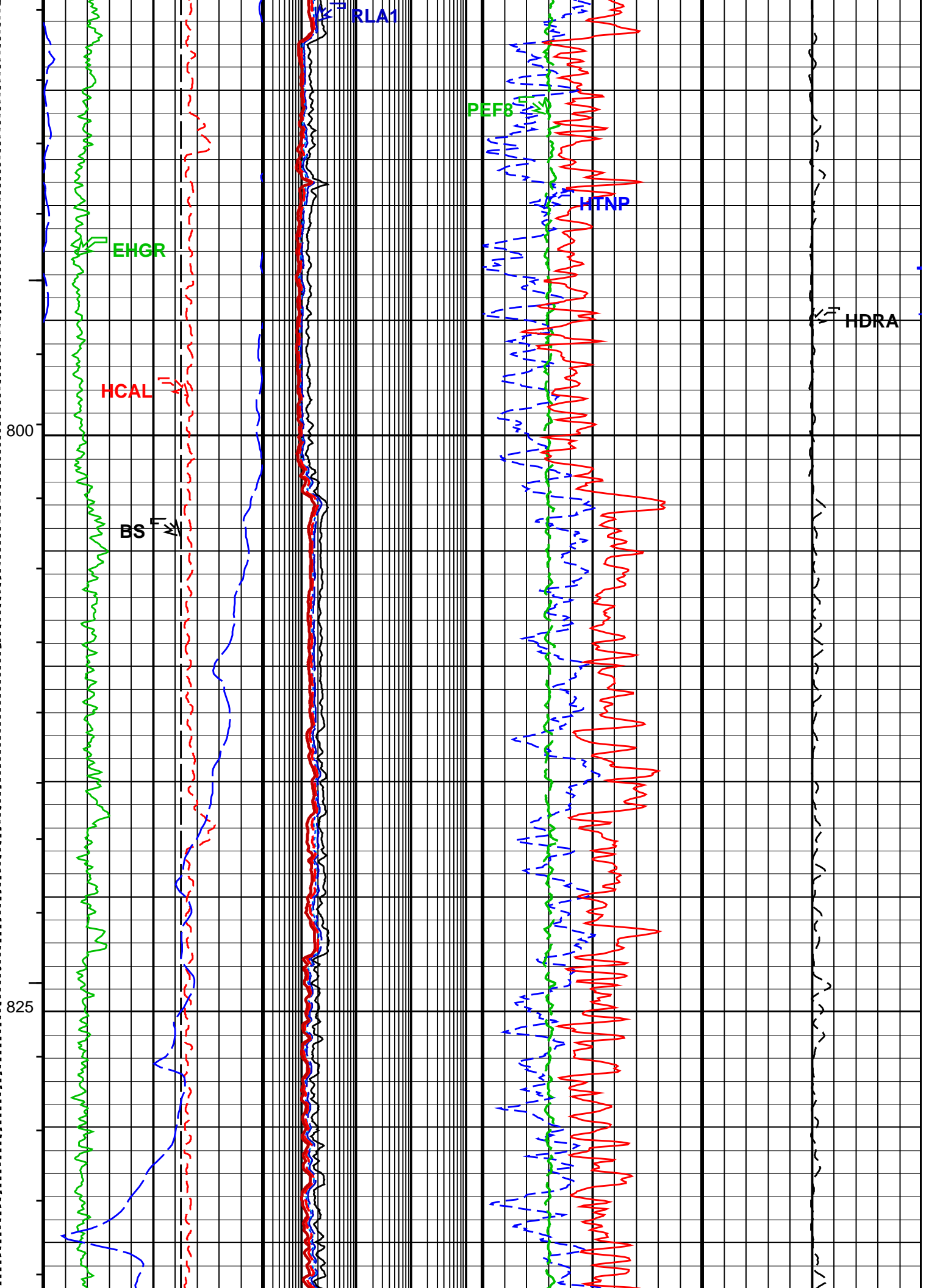


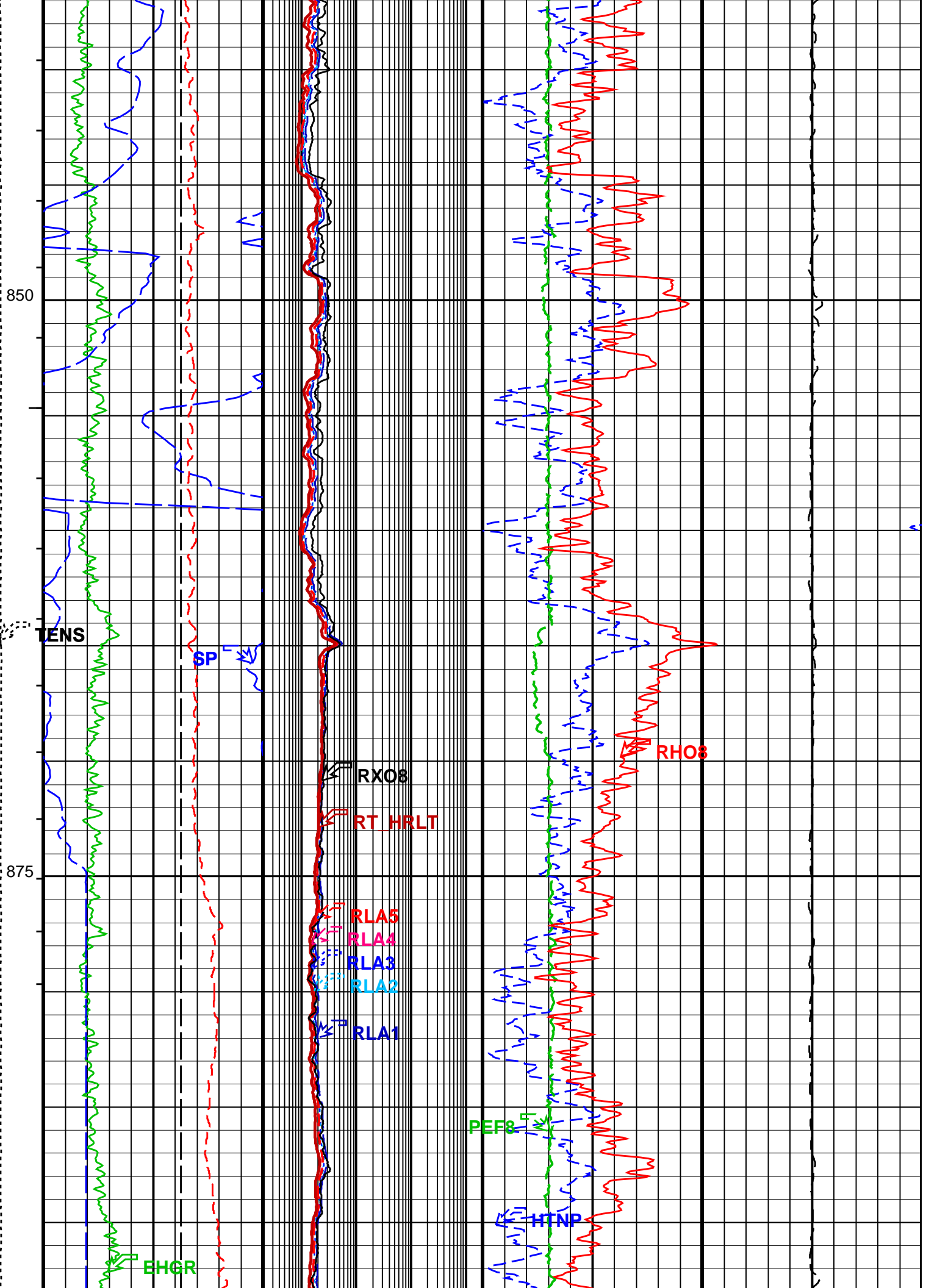


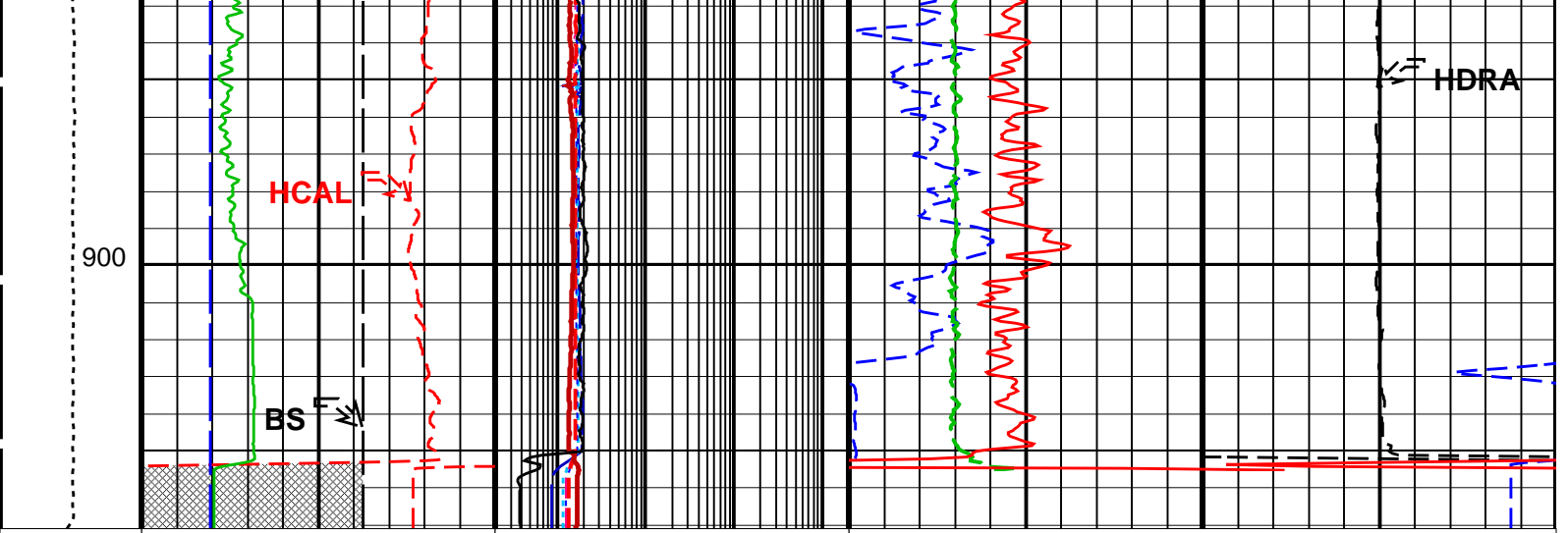












Tension (TENS) (LBF)	6	16	0.2	2000	0.45	-0.15
Bit Size (BS) (IN)	6		HRLT Resistivity 1 (RLA1) (OHMM)		HiRes TNPH (HTNP) (V/V)	
HILT Caliper (HCAL) (IN)	6	16	0.2	2000	Sand From RHO8 to HTNP	
Gamma Ray (EHGR) (GAPI)	0	200	0.2	2000	H. Res. Formation Pe (PEF8) 0 (---- 10)	Density Correction (HDRA) -0.25 (G/C3) 0.25
SP (SP) (MV)	-80	20	0.2	2000	H. Res. Formation Density (RHO8) 1.95 (G/C3) 2.95	
Area From HCAL to BS			HRLT Resistivity 5 (RLA5) (OHMM) 0.2 2000			
			H. Res. Invaded Zone Resistivity (RXO8) 0.2 (OHMM) 2000			
			HRLT True Resistivity (RT_HRLT) 0.2 (OHMM) 2000			

PIP SUMMARY

- └ Integrated Hole Volume Minor Pip Every 0.1 M3
- └ Integrated Hole Volume Major Pip Every 1 M3
 - └ Integrated Cement Volume Minor Pip Every 0.1 M3
 - └ Integrated Cement Volume Major Pip Every 1 M3
- ▣ Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HILTB-FTB: High resolution Integrated Logging Tool-DTS		
BHFL	Borehole Fluid Type	WATER
BHFL_TLD	HILT Nuclear Mud Base	WATER
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	31 DEGC
BSCO	Borehole Salinity Correction Option	YES
CCCO	Casing & Cement Thickness Correction Option	NO
DHC	Density Hole Correction	BS
DPPM	Density Porosity Processing Mode	HIRS
EXSICL	External Shale Indicator Clean Value	20
EXSISH	External Shale Indicator Shale Value	150
FD	Fluid Density	1 G/C3
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
FPHI	Form Factor Porosity Source	DPHZ
FSAL	Formation Salinity	-50000 PPM
FSCO	Formation Salinity Correction Option	YES
CSLE	Germany Coal-like Formation Option	NO

GCLF	Germany Coal-like Formation Option		
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
HACPP	Accelerometer PROM Presence	PRESENT_FILE	
HART	Accelerometer Reference Temperature	20	DEGC
HDCOD	HILT Density Coal detection	2	G/C3
HDSAD	HILT Density Salt detection	2.1	G/C3
HILT_GAS_DENSITY	HILT Gas Downhole Density	0	G/C3
HILT_GAS_OPTION	HILT Gas Computation Option	OFF	
HNCOD	HILT Neutron Coal detection	45	PU
HNSAD	HILT Neutron Salt detection	5	PU
HPHIECUT	HILT effective Porosity Cutoff	5	PU
HSCO	Hole Size Correction Option	YES	
HSIS	HILT Shale Indicator Selection	GR	
HSSO	HRDD Nuclear Source Strength Option	NORMAL	
HSWCUT	HILT Water Saturation from AITH cutoff	50	%
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	YES	
MCOR	Mud Correction	NATU	
MDEN	Matrix Density	2.71	G/C3
MHC0	MCFL B0 Contrast Correction Coefficient	2.2e-005	OHMS
MHC1	MCFL B1 Contrast Correction Coefficient	3.2e-005	OHMS
MHCC	MCFL High Contrast Correction Switch	NO	
MPOF	MCFL Processing Operation Mode	ON	
MWCO	Mud Weight Correction Option	YES	
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	HiRes	
NSAR	HRDD Depth Sampling Rate	1	IN
PEA_FILTER	PEA Filter	NO_FILTER	
PEFC_FILTER	PEFC Filter	NO_FILTER	
PHIMAX	HILT max porosity	35	PU
PTCO	Pressure/Temperature Correction Option	YES	
SDAT	Standoff Data Source	SOCN	
SEXP_HILT	HILT Saturation Exponent	2	
SHT	Surface Hole Temperature	23.661	DEGC
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	NO	
HRLT-B: High Resolution Laterolog Array - E			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	31	DEGC
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE	
CALTEMP	HRLTB Calibration Temperature	38.0354	DEGC
FREQ0	HRLT Frequency Index for Mode 0	32	
FREQ1	HRLT Frequency Index for Mode 1	128	
FREQ2	HRLT Frequency Index for Mode 2	104	
FREQ3	HRLT Frequency Index for Mode 3	86	
FREQ4	HRLT Frequency Index for Mode 4	56	
FREQ5	HRLT Frequency Index for Mode 5	44	
FREQ6	HRLT Frequency Index for Mode 6	116	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
ISSBAR	Barite Mud Switch	NOBARITE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
LOOPCOEF_S	HRLT Loop Coefficient for Shallow Modes	LOW	
LOOPMOD0	HRLT Mode 0 Loop Mode	AUTO	
LOOPMOD1	HRLT Mode 1 Loop Mode	AUTO	
LOOPMOD2	HRLT Mode 2 Loop Mode	AUTO	
LOOPMOD3	HRLT Mode 3 Loop Mode	AUTO	
LOOPMOD4	HRLT Mode 4 Loop Mode	AUTO	
LOOPMOD5	HRLT Mode 5 Loop Mode	AUTO	
LOOPMOD6	HRLT Mode 6 Loop Mode	AUTO	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
PROCMFL	Inversion Selection	ON	
PROCMFL	Inversion Micro-Resistivity Selection	NO_EXTERNAL_RXO	
PROCMFO	Mechanical Standoff Fin Size	2.5	IN
PROCRM	Processing Mud Resistivity Select	HRLT_Compute	
PROCSO	Sonde Position	Eccentered	
SHT	Surface Hole Temperature	23.661	DEGC
PPC1-B: Powered Positioning Deveice/Caliper 1			
CLBD_PPC	PPC1 Caliper Type	CAL_STD	
PWEL_PPC	PPC Calibration data selection	ROM	
SWEL_PPC	PPC Primary Tool for WellCAD	NONE	
WRDR_PPC	PPC Secondary Tool for WellCAD (45 Degrees Rotation PPC Tool)	NONE	
	PPC Rotation Direction for Secondary Tool	NONE	
MAXS-B: Multimode Array Sonic Xmitter Sonde			
FIRING_TABLE	MAST Firing Table	** V **	
TX_AMP	Transmitter Amplitude Factor	** V **	

U_CE_CBLG7	CBL Gate Width 7 for Cement Evaluation	80	US
U_CE_CBLG8	CBL Gate Width 8 for Cement Evaluation	80	US
U_CE_NMSG7	Near Minimum Sliding Gate 7 for Cement Evaluation	220	US
U_CE_NMSG8	Near Minimum Sliding Gate 8 for Cement Evaluation	220	US
U_CE_SGDT7	Sliding Gate Delta-T 7 for Cement Evaluation	57	US/F
U_CE_SGDT8	Sliding Gate Delta-T 8 for Cement Evaluation	57	US/F
MAPC-B: Multimode Array Sonic Power Cartridge			
AZIM_SELECT	Azimuth Selection	P1AZ	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	31	DEGC
BS	Bit Size	12.250	IN
CDTS	C-Delta-T Shale	100	US/F
CE_DCBLSEL	DCBL Selection for Cement Evaluation	3.5FT	
CE_VDLGRA	VDL Manual Gain Rate Array for Cement Evaluation	** V **	
CE_VDLSEL	VDL Selection for Cement Evaluation	MU 5FT	
CE_VDL_MODE	DCBL/VDL Mode for Cement Evaluation	STANDARD	
CE_VFILSWA	VDL Filter Switch Array for Cement Evaluation	** V **	
CRVIN_MF	Alteration Detection Input Number for Monopole Far	DISALLOW	
CRVIN_ML	Alteration Detection Input Number for Monopole Lower	DISALLOW	
CRVIN_MU	Alteration Detection Input Number for Monopole Upper	DISALLOW	
DCRMVL	DC Offset Removal Option	DC_MULTIPLE	
DLHS	Hole Diameter Source for SOBS Channel	AUTO	
DTCO_SELECT	Delta-T Compressional Selection for DSTC	MF	
DTF	Delta-T Fluid	204.5	US/F
DTM	Delta-T Matrix	56	US/F
DTSH_SELECT	Delta-T Shear Selection for DSTC	XD	
DWF7_SPEC	Channel/Station/Azimuth for VDL (DWF7) of Measurement 7	WFA7/9/1	
DWF8_SPEC	Channel/Station/Azimuth for VDL (DWF8) of Measurement 8	WFA8/5/1	
FIRING_TABLE	MAST Firing Table	** V **	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
IMG_DTCO_SEL_MAST	Imaging Input DT Compressional Selection	CONSTANT_DTCO	
IMG_EST_DTCO_MAST	Imaging Estimated DT Compressional	120	US/F
IMG_RBS	Imaging Relative Bearing Selection	RB1	
ISSBAR	Barite Mud Switch	NOBARITE	
ITTS	Integrated Transit Time Source	DTCO	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
NRSA	Number of Receivers in Sub-Array	** V **	
RBC	Relative Bearing Correction Allow/Disallow	DISALLOW	
ROTIN_XD	Alford Rotation X Dipole Measurement Number	DISALLOW	
ROTIN_YD	Alford Rotation Y Dipole Measurement Number	DISALLOW	
ROTWINDOW_CTRL	Alford Rotation Window Control	ON	
ROT_AI	Dipole Waveform Rotation Averaging Depth Interval	0	M
ROT_FIL LENG	Alford Rotation Filter Length	0	
ROT_TWD	Alford Rotation Window Time Width	0	US
ROT_TWO	Alford Rotation Window Time Offset	0	US
ROT_XFH	Alford Rotation Filter High Cutoff	0	HZ
ROT_XFL	Alford Rotation Filter Low Cutoff	0	HZ
SHT	Surface Hole Temperature	23.661	DEGC
SPFS	Sonic Porosity Formula	RAYMER_HUNT	
SPSO	Sonic Porosity Source	DTCO	
STCAL	STC Algorithm	** V **	
STCSEL1	Station Selection for STC for Measurement 1	** V **	
STCSEL2	Station Selection for STC for Measurement 2	** V **	
STCSEL3	Station Selection for STC for Measurement 3	** V **	
STCSEL4	Station Selection for STC for Measurement 4	** V **	
STCSEL5	Station Selection for STC for Measurement 5	** V **	
STCSEL6	Station Selection for STC for Measurement 6	** V **	
STCSEL_FAST	Station Selection for STC for DT_FAST	** V **	
STCSEL_SLOW	Station Selection for STC for DT_SLOW	** V **	
TRMIN	Alteration Detection Minimum Transmitter Receiver Spacing for Processing	3.0	FT
TX_AMP	Transmitter Amplitude Factor	** V **	
U_CE_CBLG7	CBL Gate Width 7 for Cement Evaluation	80	US
U_CE_CBLG8	CBL Gate Width 8 for Cement Evaluation	80	US
U_CE_NMSG7	Near Minimum Sliding Gate 7 for Cement Evaluation	220	US
U_CE_NMSG8	Near Minimum Sliding Gate 8 for Cement Evaluation	220	US
U_CE_SGDT7	Sliding Gate Delta-T 7 for Cement Evaluation	57	US/F
U_CE_SGDT8	Sliding Gate Delta-T 8 for Cement Evaluation	57	US/F
U_SLL1_MAST	MAST DSTC Slowness Lower Limit 1	40	US/F
U_SLL2_MAST	MAST DSTC Slowness Lower Limit 2	40	US/F
U_SLL3_MAST	MAST DSTC Slowness Lower Limit 3	40	US/F
U_SLL4_MAST	MAST DSTC Slowness Lower Limit 4	0	US/F
U_SLL5_MAST	MAST DSTC Slowness Lower Limit 5	112	US/F
U_SLL6_MAST	MAST DSTC Slowness Lower Limit 6	112	US/F
U_SLL_FAST_MAST	MAST DSTC Slowness Lower Limit Fast	0	US/F
U_SLL_SLOW_MAST	MAST DSTC Slowness Lower Limit Slow	0	US/F
U_SUL1_MAST	MAST DSTC Slowness Upper Limit 1	240	US/F
U_SUL2_MAST	MAST DSTC Slowness Upper Limit 2	240	US/F
U_SUL3_MAST	MAST DSTC Slowness Upper Limit 3	240	US/F
U_SUL4_MAST	MAST DSTC Slowness Upper Limit 4	0	US/F
U_SUL5_MAST	MAST DSTC Slowness Upper Limit 5	772	US/F

U_SUL6_MAST	MAST DSTC Slowness Upper Limit 6	772	US/F
U_SUL_FAST_MAST	MAST DSTC Slowness Upper Limit Fast	0	US/F
U_SUL_SLOW_MAST	MAST DSTC Slowness Upper Limit Slow	0	US/F
EDTC-B: Enhanced DTS Cartridge			
BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	31	DEGC
BSCO	Borehole Salinity Correction Option	YES	
CCCO	Casing & Cement Thickness Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
FSCO	Formation Salinity Correction Option	YES	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
HSCO	Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
ISSBAR_EDTC	Nuclear Mud Type	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	YES	
MCOR	Mud Correction	NATU	
MWCO	Mud Weight Correction Option	YES	
PTCO	Pressure/Temperature Correction Option	YES	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	23.661	DEGC
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	NO	
TPOS_EDTC	EDTC Tool Centered/Eccentered	Eccentered	
BSP-AH-169: Bridle SP			
SPNV	SP Next Value	0	MV
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	31	DEGC
FCD	Future Casing (Outer) Diameter	9.625	IN
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
HVCS	Integrated Hole Volume Caliper Selection	PPC1_Calipers	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	23.661	DEGC
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	0.762	M
TDD	Total Depth - Driller	907.00	M
TDL	Total Depth - Logger	907.00	M
System and Miscellaneous			
ALTDPCCHAN	Name of alternate depth channel	MeasuredDepth	
BSAL	Borehole Salinity	62700.00	PPM
CSIZ	Current Casing Size	13.375	IN
CWEI	Casing Weight	54.50	LB/F
DFD	Drilling Fluid Density	1.15	G/C3
DO	Depth Offset for Playback	0.0	M
FLEV	Fluid Level	0.00	M
MST	Mud Sample Temperature	21.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	0.1301	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	900	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: APACHE_HIGHRES_D200 Vertical Scale: 1:200 Graphics File Created: 14-Mar-2008 10:29

OP System Version: 15C0-309

MCM

HILTB-FTB	SRPC-3546-Q1_2008_OP15	HRLT-B	SRPC-3546-Q1_2008_OP15
PPC1-B	SRPC-3546-Q1_2008_OP15	MAXS-B	SKK-3442-MAST
MAPC-B	SKK-3442-MAST	EDTC-B	SKK-3493-EDTCB
BSP-AH-169	SRPC-3546-Q1_2008_OP15		

Input DLIS Files

DEFAULT	Splice_TLD_MCFL_CNL_029CUP	FN:1	PRODUCER	14-Mar-2008 10:19	907.1 M	55.4 M
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Output DLIS Files

DEFAULT	TLD MCFL CNL HRLA 030PUP	FN:48	PRODUCER	14-Mar-2008 10:29		
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