

Company: Beach Petroleum Ltd

Well: Bodalla South 18

Field: Bodalla South

Rig: Hunt Rig 2

Country: Australia

**HALS-BHC-PEX-GR-5
Resistivity-Sonic-Density-Neutron-GR-5
Scale 1:500**

LOCATION		Elev.:	R.T.	153.8 m
Bodalla Sth 3D Survey		G.L.	150 m	
InLine: 425 Xline: 187				
Permanent Datum:	AHD	Elev.:	0 m	
Log Measured From:	RT	153.8 m above Perm. Datum		
Drilling Measured From:	RT			
State: QLD.	Max. Well Deviation	Longitude	Latitude	
	5.25 deg	143.25° 10.11" E	26.26° 39.50" S	

Rig: Hunt Rig 2
 Field: Bodalla South
 Location: Bodalla Sth 3D Survey
 Well: Bodalla South 18
 Company: Beach Petroleum Ltd

Logging Date	10-Aug-2007		
Run Number	1		
Depth Driller	1524 m		
Schlumberger Depth	1523 m		
Bottom Log Interval	1520.71 m		
Top Log Interval	25 m		
Casing Driller Size @ Depth	9.625 in @ 198.8 m		
Casing Schlumberger	199 m		
Bit Size	8.500 in		
Type Fluid In Hole	KCl Polymer		
Density	9.6 lbm/gal	41 s	
Fluid Loss	6.8 cm3	9	
Source Of Sample	Pit		
RM @ Measured Temperature	0.240 ohm.m	@ 25 degC	@
RMF @ Measured Temperature	0.194 ohm.m	@ 25 degC	@
RMC @ Measured Temperature	0.255 ohm.m	@ 25 degC	@
Source RMF	Press	Press	
RM @ MRT	0.102 @ 88	0.083 @ 88	@
Maximum Recorded Temperatures	88 degC	88	
Circulation Stopped	10-Aug-2007	Time	4:10
Logger On Bottom	10-Aug-2007	Time	11:20
Unit Number	3061	AUMB	
Recorded By	Jose Flavio/ Sarah Corbett		
Witnessed By	Mr. Peter Morris		

	Run 1	Run 2	R
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			
Fluid Loss			
Source Of Sample			
RM @ Measured Temperature			@
RMF @ Measured Temperature			@
RMC @ Measured Temperature			@
Source RMF			
RM @ MRT		@	@
Maximum Recorded Temperatures			
Circulation Stopped			
Logger On Bottom			
Unit Number			
Recorded By			
Witnessed By			

DEPTH SUMMARY LISTING

Date Created: 10-AUG-2007 15:17:42

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B	Type: CMTD-B/A	Type: 7-42V-XS
Serial Number: 4898	Serial Number: 2007	Serial Number: 6155
Calibration Date: 01-July-2007	Calibration Date: 03-August-2007	Length: 4700.02 M
Calibrator Serial Number: 1009	Calibrator Serial Number: 1050	Conveyance Method: Wireline Rig Type: LAND
Calibration Cable Type: 7-42V-XS	Calibration Gain: 0.98	
Wheel Correction 1: -5	Calibration Offset: -634.00	
Wheel Correction 2: -2		

Depth Control Parameters

Log Sequence: First Log In the Well
Rig Up Length At Surface: 58.39 M
Rig Up Length At Bottom: 58.16 M
Rig Up Length Correction: 0.23 M
Stretch Correction: 0.30 M
Tool Zero Check At Surface: 0.70 M

Depth Control Remarks

1. First log in well.
2. All Schlumberger depth control porcedures followed.
3. IDW used as primary depth control, Z-chart as secondary depth control.
- 4.
- 5.
- 6.

DISCLAIMER

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OTHER SERVICES1	OTHER SERVICES2
OS1:	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
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Tool String run as per tool sketch with 5x1.5" satndoffs.

Tight spots found at 1430m and 1460m during logging down.

Repeat section and high resolution data recorded from TD to 1270m as per client request.

The tool got stuck at 1430m during logging up, caliper was closed to get free.

The TD was tagged just one time as per client agreement.

Standard resolution data recorded from 1425m to casing shoe.

Neutron and density curves presented from 1425m to 1060m as per client request.
 Resistivity and sonic curves presented from 1425m to casing shoe.
 Maximum recorded temperature was 88 degC from thermometers in LEH-QT.
 Maximum deviation was 5.25 degrees provided by the client.
 Neutron porosity corrected for hole size, borehole salinity, formation salinity, pressure, temperature and mud weight.
 Density corrected for bit size.

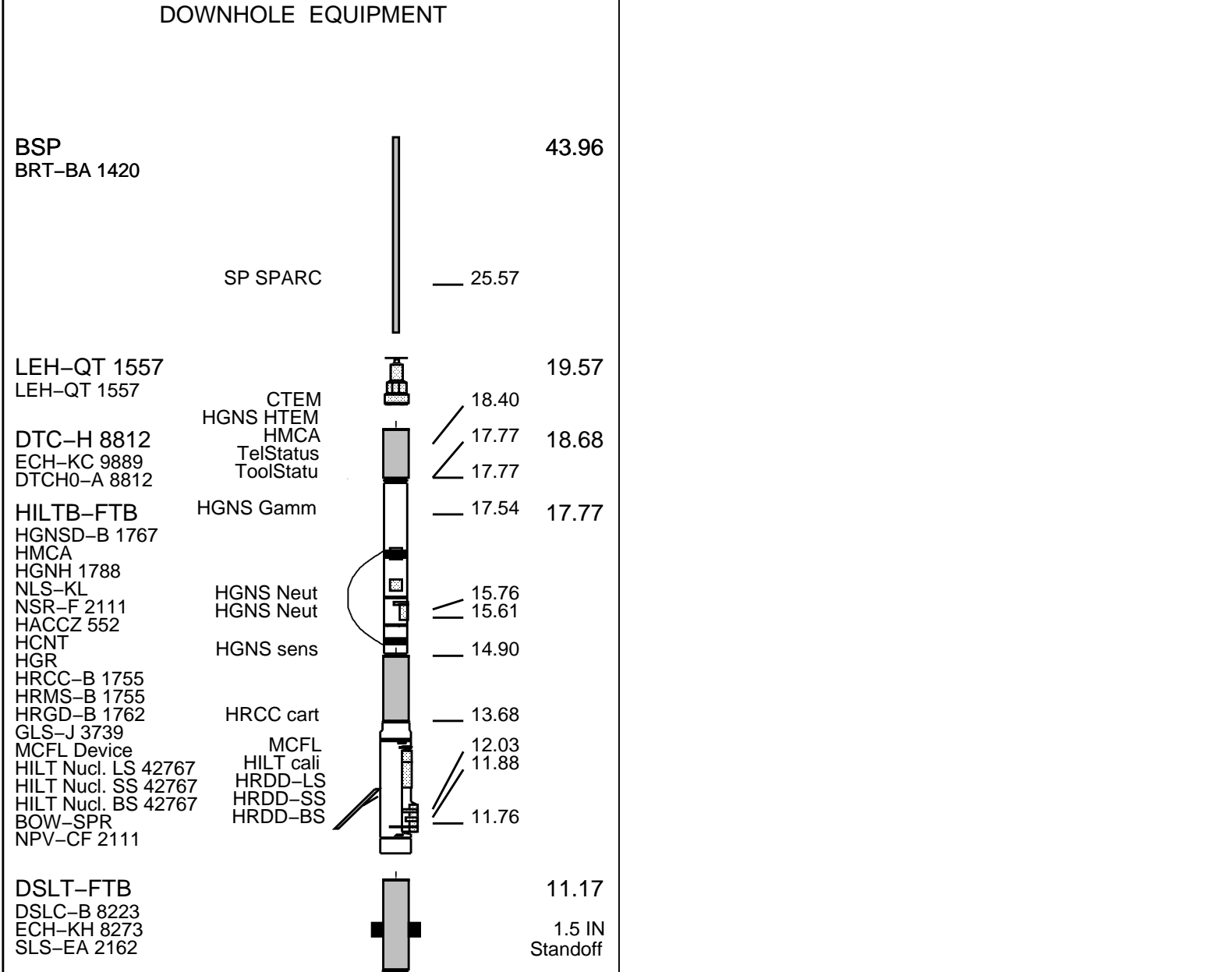
Mud properties from mud report dated 10-August-2007
 Chlorides = 23,000 mg/L
 KCL = 4(%by Wt.)

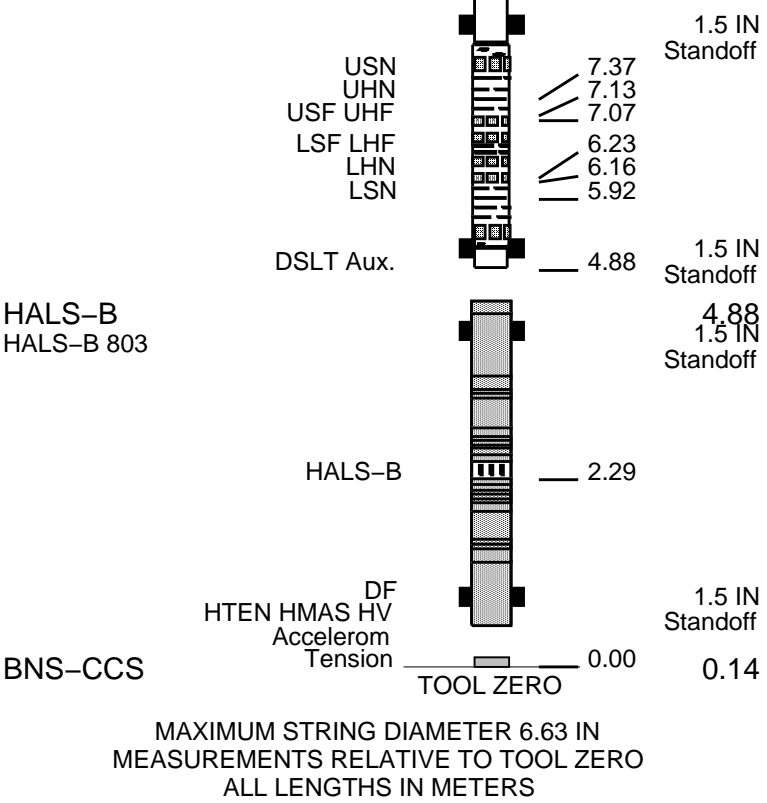
RUN 1			RUN 2		
SERVICE ORDER #:		AUSL07356902	SERVICE ORDER #:		
PROGRAM VERSION:		15C0-309	PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1	RUN 2
SURFACE EQUIPMENT	
LCM-AA 1858 GSR-U 2001 NCT-B 2032 CNB-AB 1412	NCS-YC 4889 WITM (DTS)-A 929

DOWNHOLE EQUIPMENT



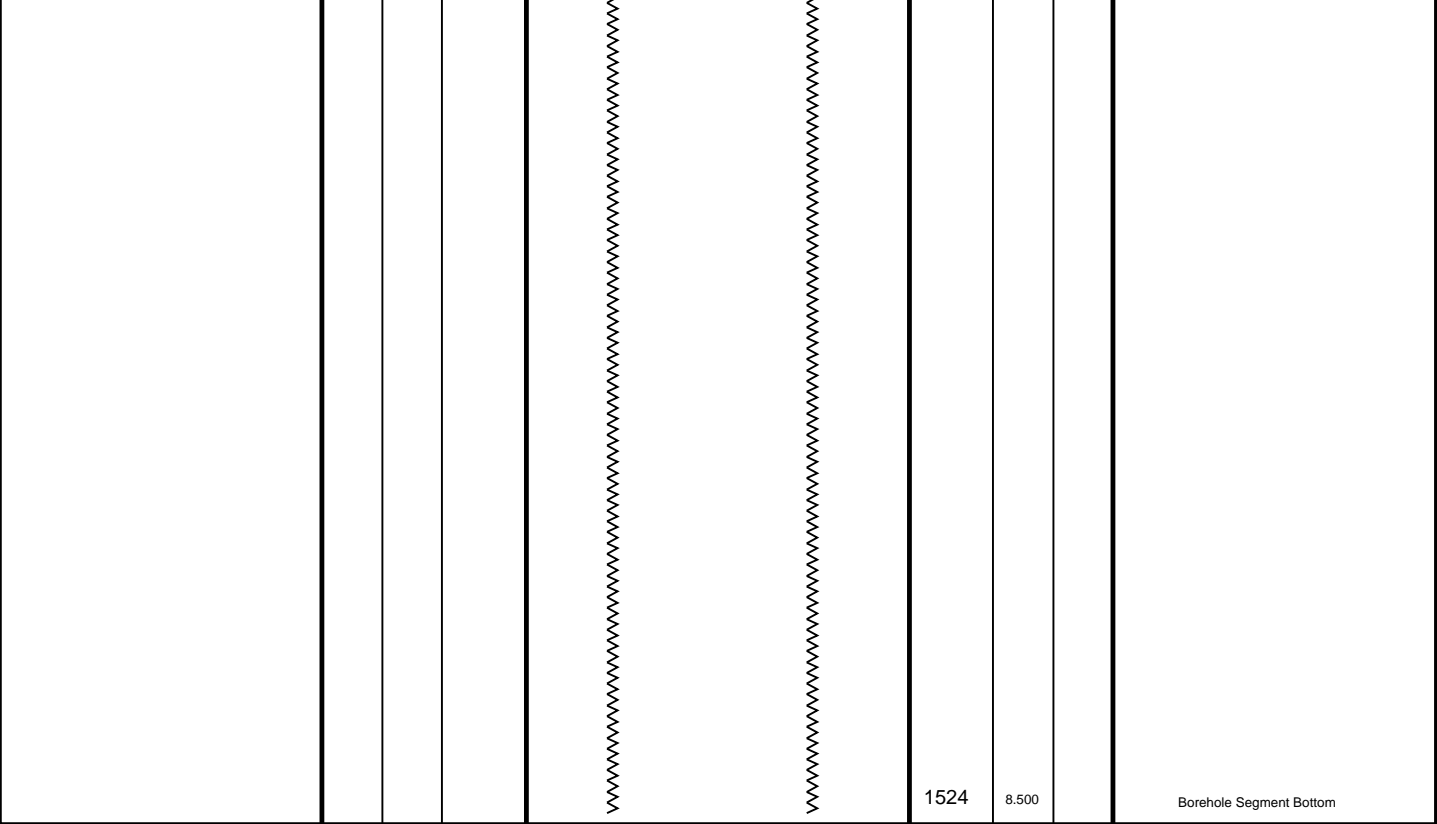


Client: Beach Petroleum
Well: Bodalla South 18
Field: Bodalla South
State: QLD.
Country: Australia

Drawing Date: 8/10/2007
API #:

Rig Name: Hunt Rig 2
Reference Datum: RT
Elevation: 153.8 m

Production String	(in)			Well Schematic	(m)			Casing String
	OD	ID	MD		MD	OD	ID	
					0.0	12.250	9.625	Casing String Borehole Segment
					198.8	9.625		Casing Shoe Borehole Segment
					198.8	8.500		



All depths are driller's depths.



**Resistivity–Sonic–Density–Porosity
Standard Resolution, 1:500 Scale**

MAXIS Field Log

Company: Beach Petroleum Ltd Well: Bodalla South 18

Input DLIS Files

DEFAULT	HALS_SONIC_TLD_MCFL_012LUP FN:16	PRODUCER	10–Aug–2007 12:22	1425.5 M	23.5 M
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Output DLIS Files

DEFAULT	HALS_SONIC_TLD_MCFL_022PUP FN:32	PRODUCER	10–Aug–2007 17:16	1425.5 M	23.9 M
RTB	HALS_SONIC_TLD_MCFL_022PUP FN:33	PRODUCER	10–Aug–2007 17:16	1425.5 M	23.9 M

Integrated Hole/Cement Volume Summary

Hole Volume = 47.46 M3
 Cement Volume = 17.00 M3 (assuming 7.00 IN casing O.D.)
 Computed from 1425.5 M to 199.0 M using data channel(s) HCAL

OP System Version: 15C0-309

MCM

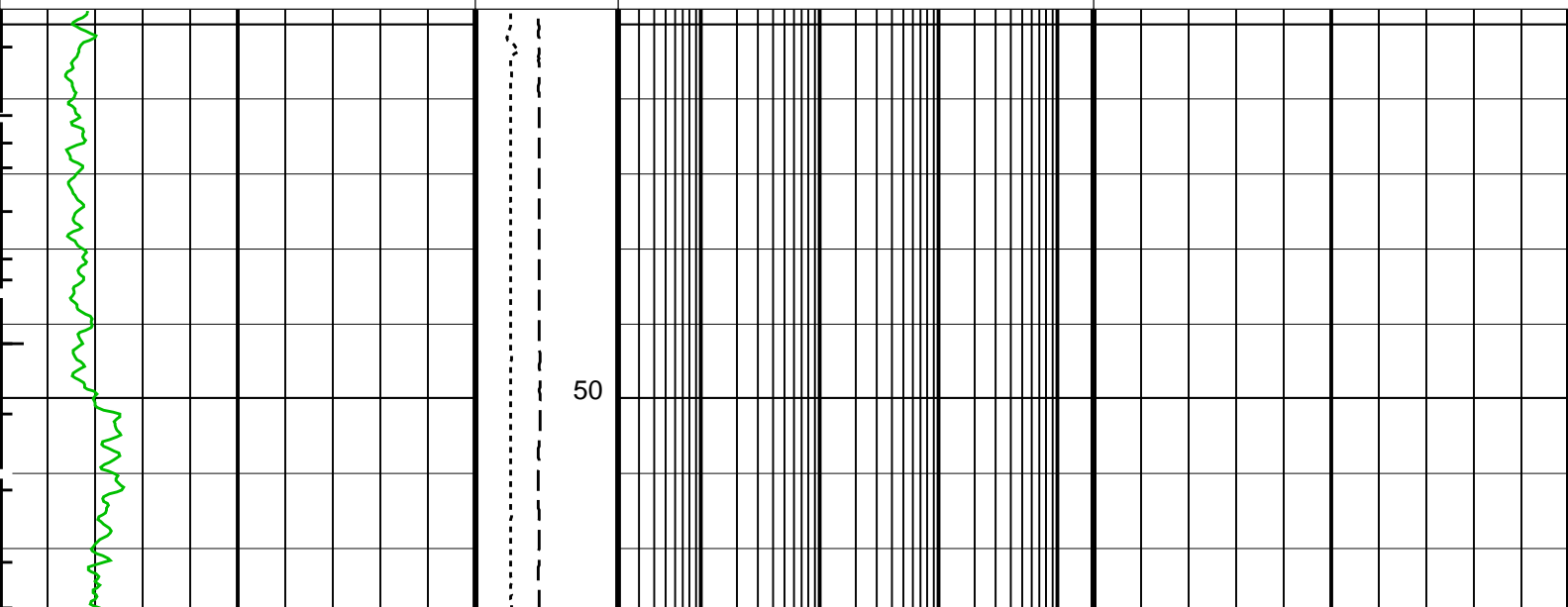
HALS-B	SRPC-3292-Q1_2007	DSLTL-FTB	15C0-309
HILTB-FTB	SRPC-3292-Q1_2007	DTC-H	15C0-309
BSP	15C0-309		

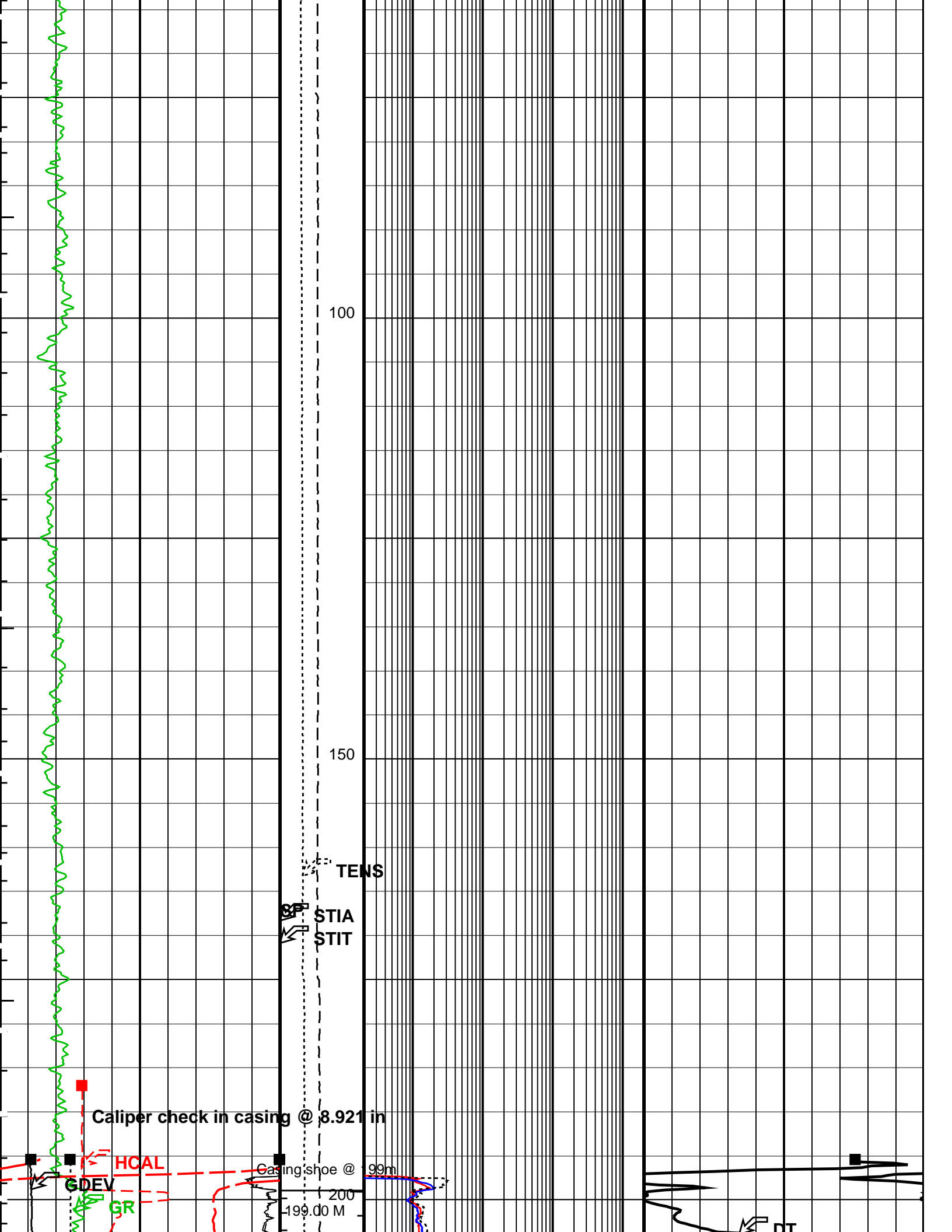
PIP SUMMARY

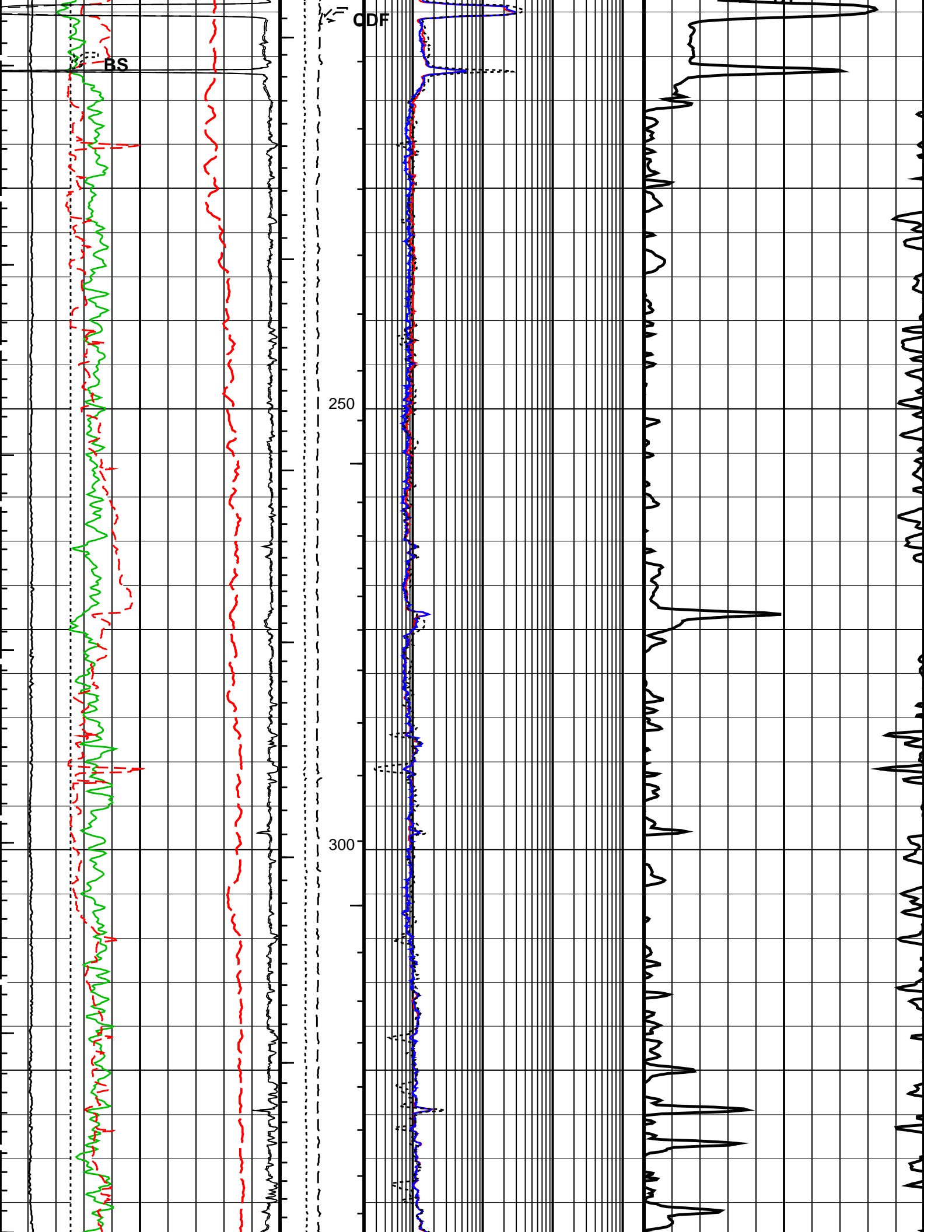
- ┆ Integrated Hole Volume Minor Pip Every 0.1 M3
- ┆ Integrated Hole Volume Major Pip Every 1 M3
 - ┆ Integrated Cement Volume Minor Pip Every 0.1 M3
 - ┆ Integrated Cement Volume Major Pip Every 1 M3

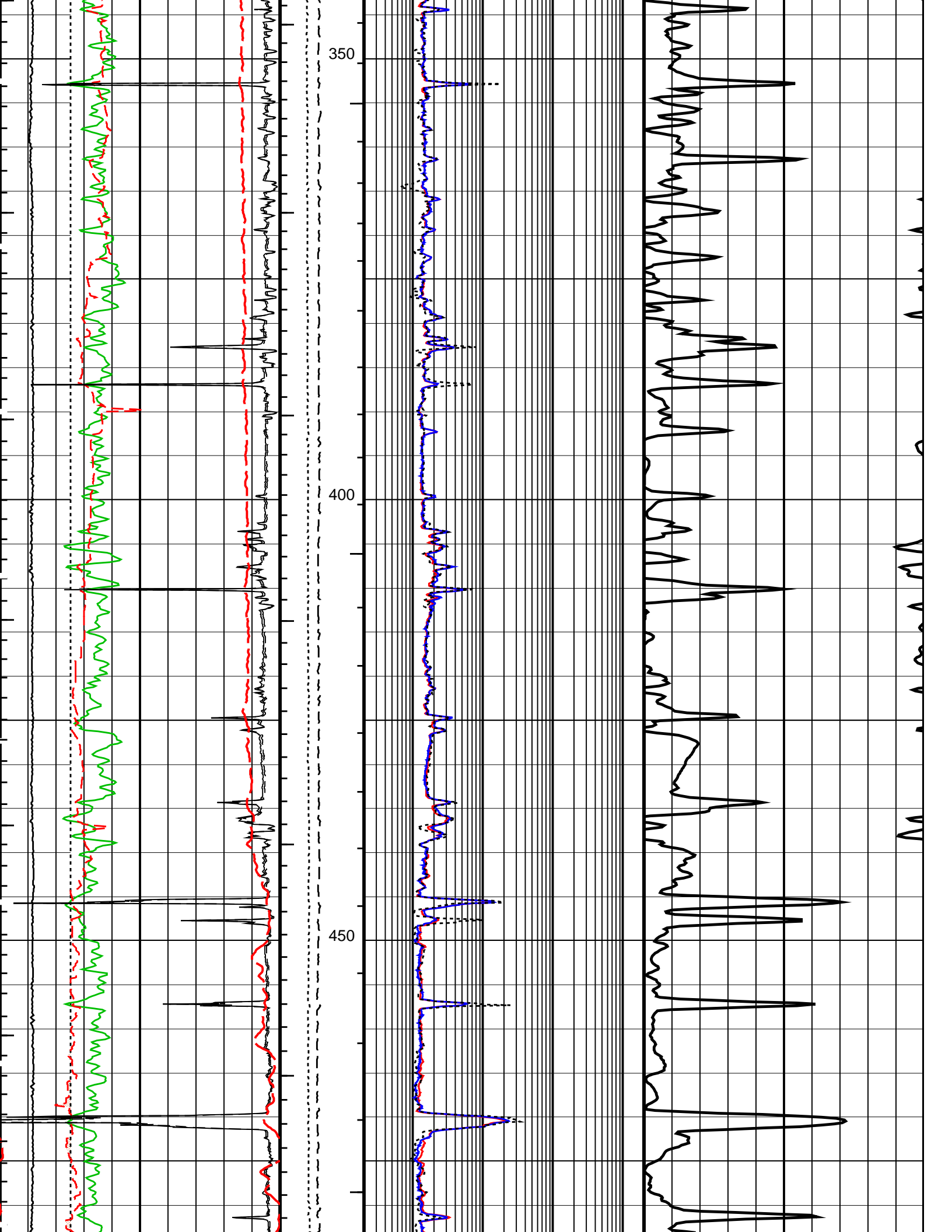
- ┆ Integrated Transit Time Minor Pip Every 1 MS
- ┆ Integrated Transit Time Major Pip Every 10 MS
- Time Mark Every 60 S

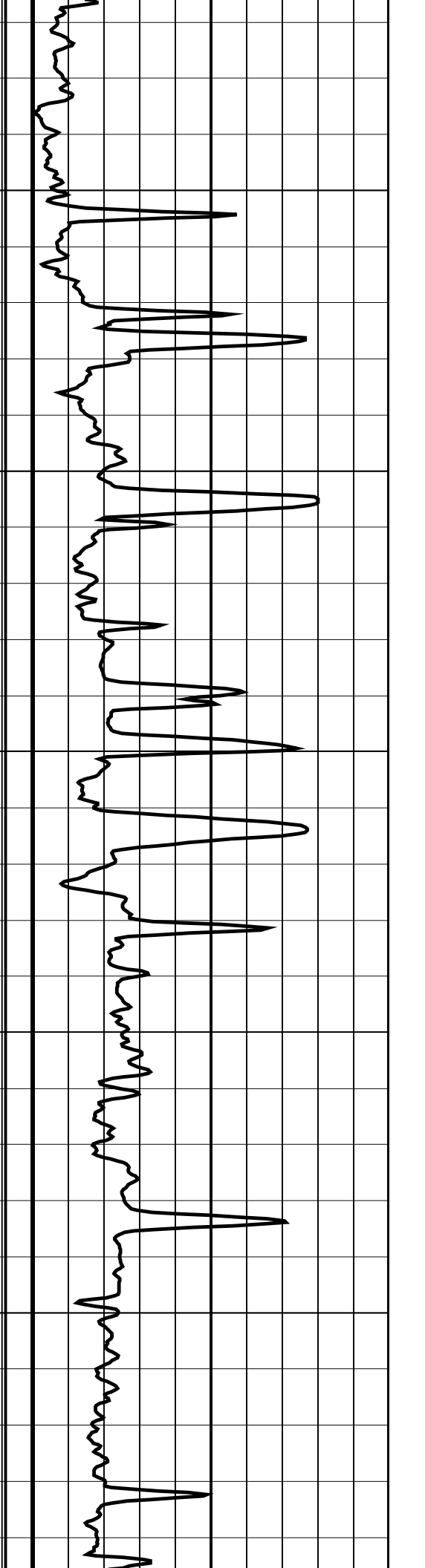
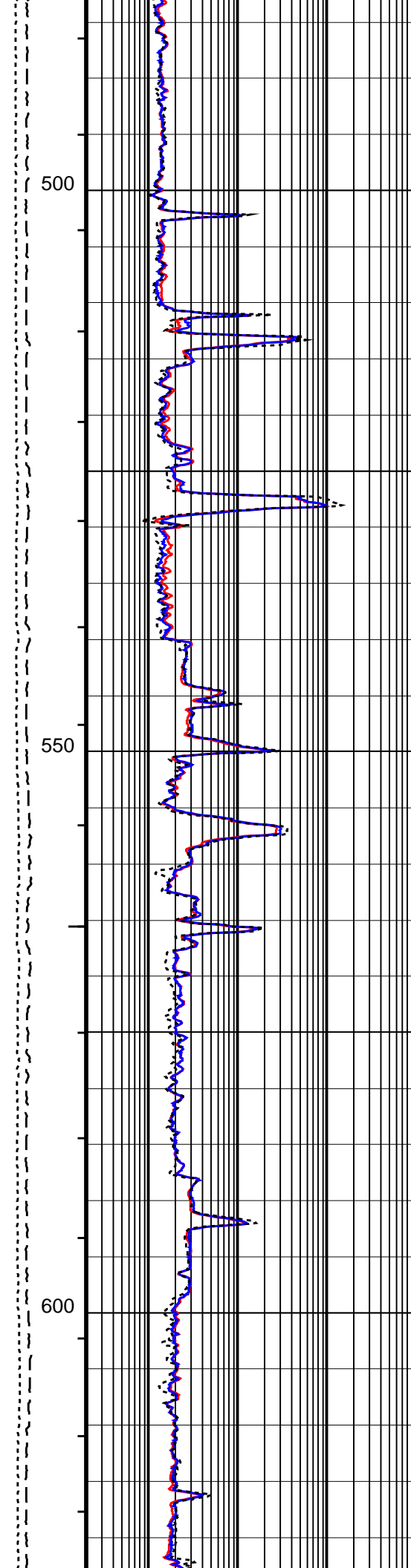
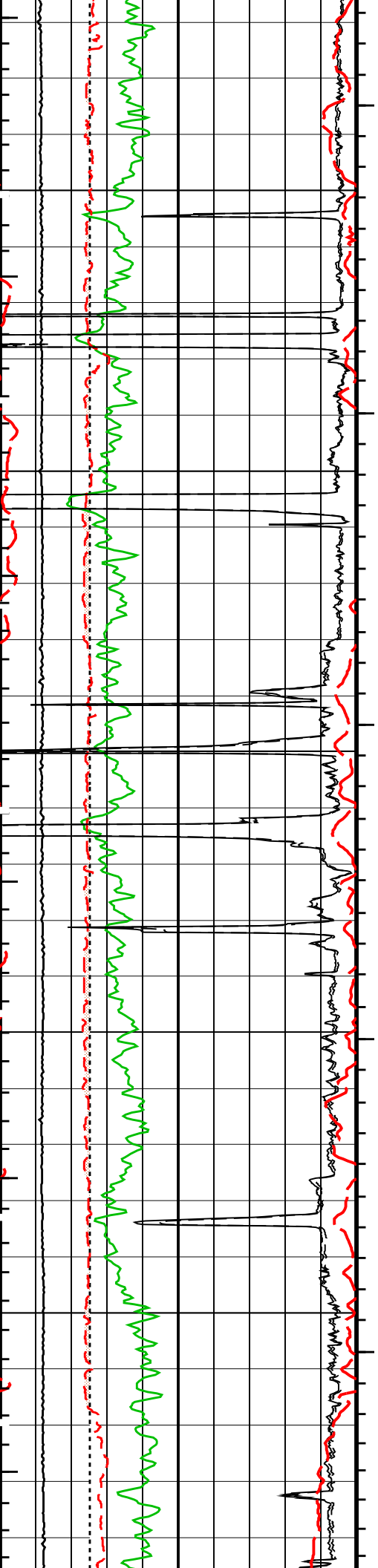
Washout From BS to HCAL			
Mudcake From HCAL to BS			
SP (SP) (MV)	-50	50	
HILT Caliper (HCAL) (IN)	6	16	
HGNS Deviation (GDEV) (DEG)	-10	90	
Gamma Ray (GR) (GAPI)	0	200	
Bit Size (BS) (IN)	6	16	
Computed Micro Normal (HMNO) (OHMM)	20	0	
Computed Micro Inverse (HMIN) (OHMM)	20	0	
Calibrated Downhole Force (CDF) (LBF)	0	2000	
Tension (TENS) (LBF)	0	4000	
Std. Res. Invaded Zone Resistivity (RXOZ) (OHMM)	0.2	2000	
Laterolog Shallow Resistivity (HLLS) (OHMM)	0.2	2000	
Laterolog Deep Resistivity (HLLD) (OHMM)	0.2	2000	
Env.Corr.Thermal Neutron Porosity (TNPH) (V/V)	0.45	-0.15	
Density/Porosity Cross Over From RHOZ to TNPH			
Std. Res. Formation Density (RHOZ) (G/C3)	1.95	2.95	
Density Correction (HDRA) (G/C3)	-0.25	0.25	
Std. Res. Formation Pe (PEFZ) (----)	0	10	
Delta-T (DT) (US/F)	140	40	

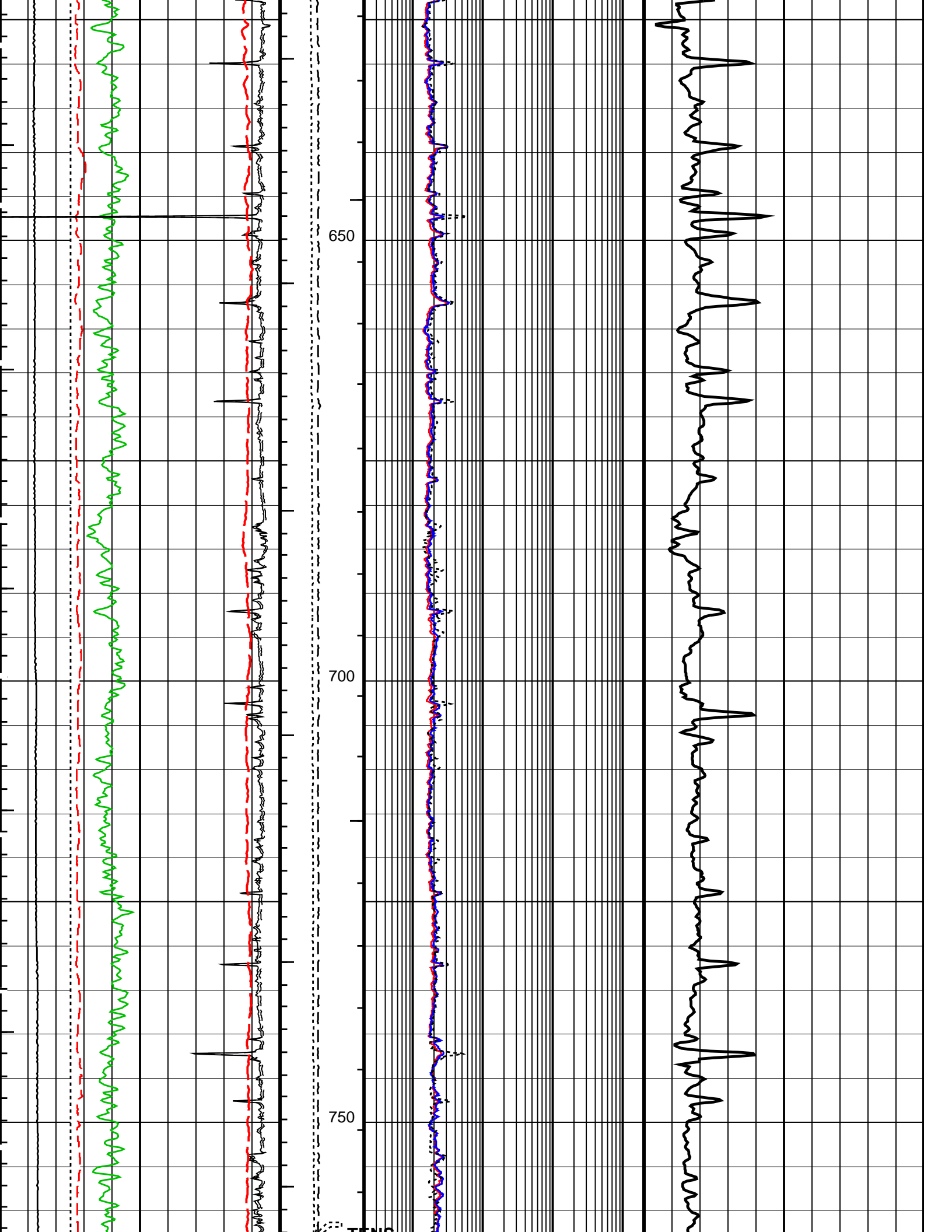


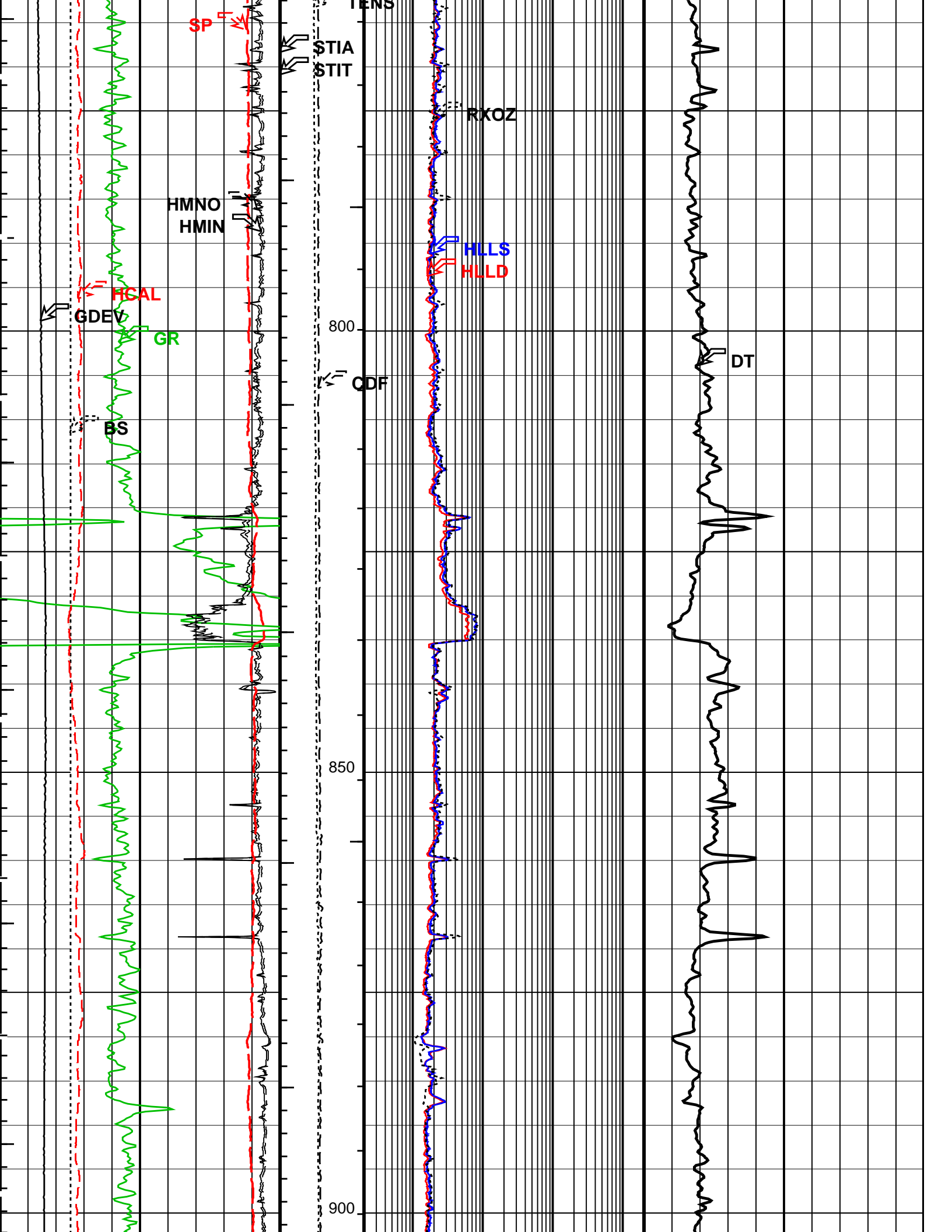


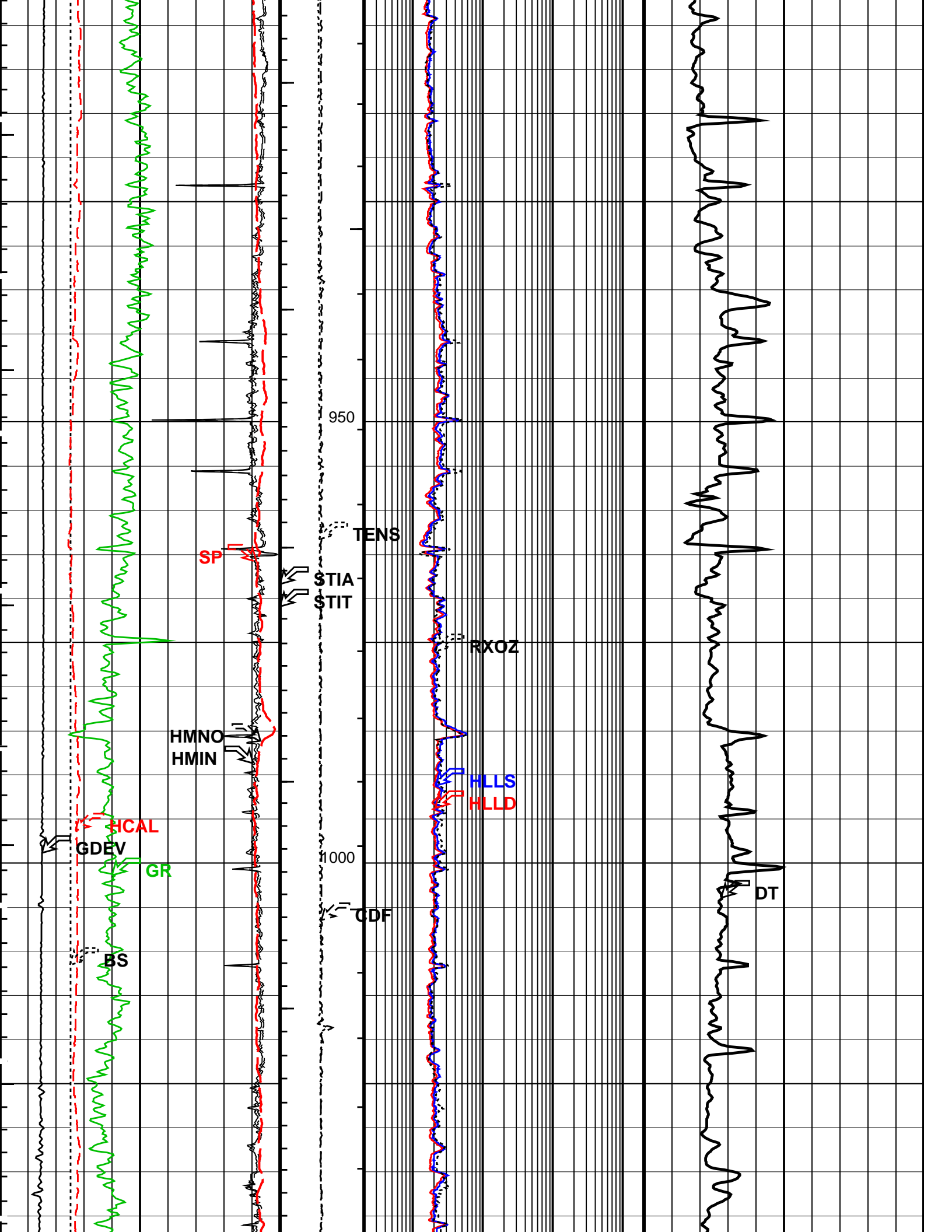


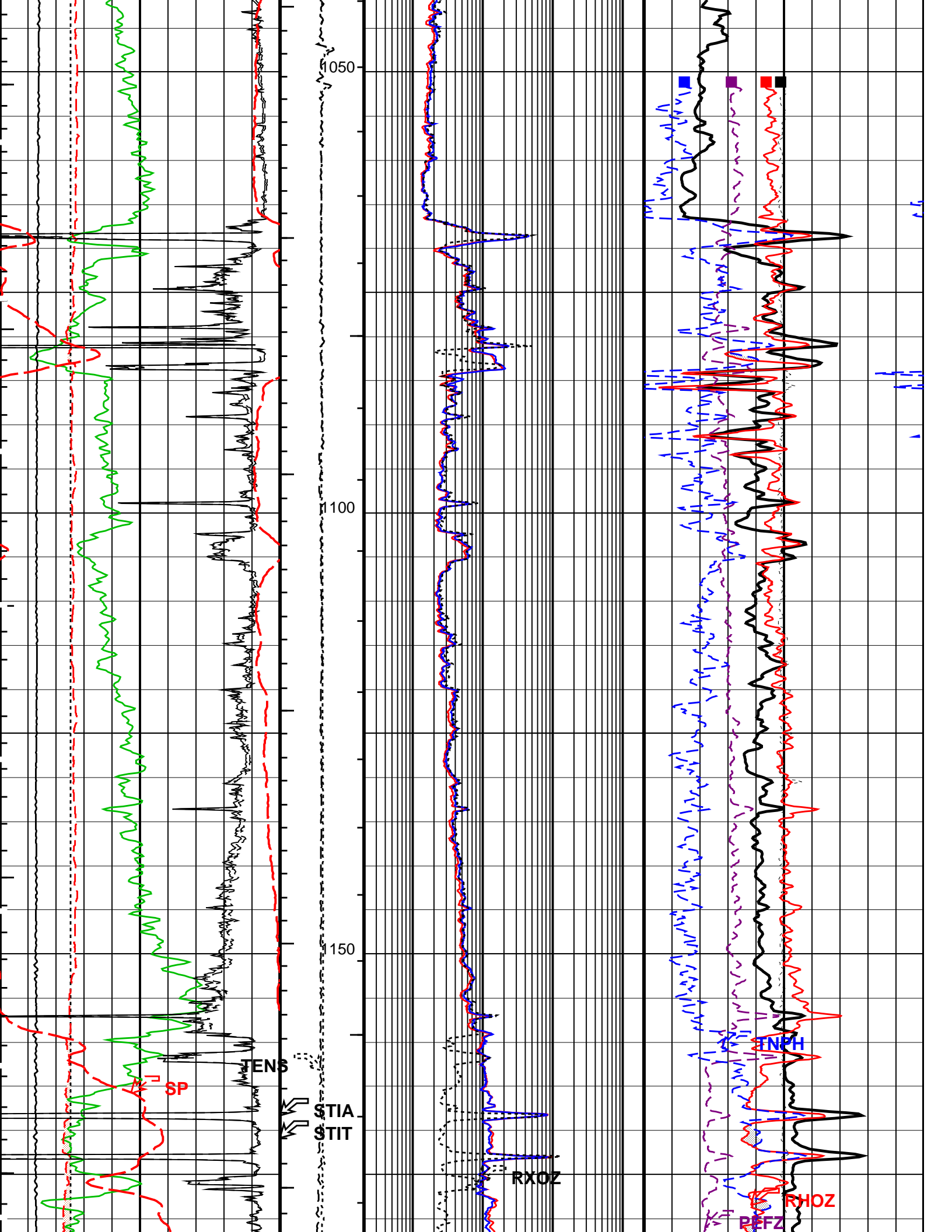


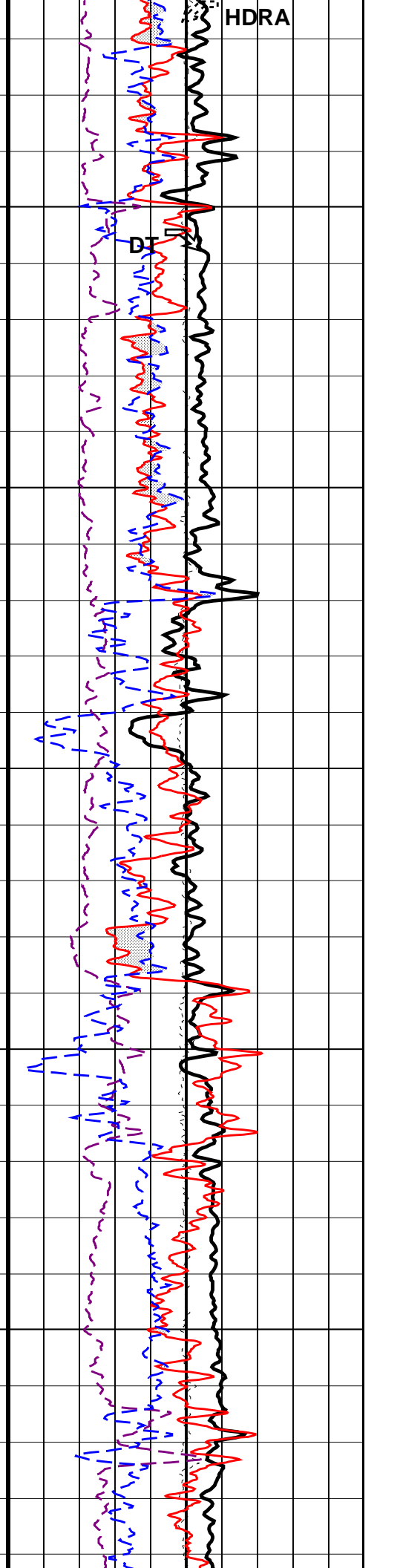
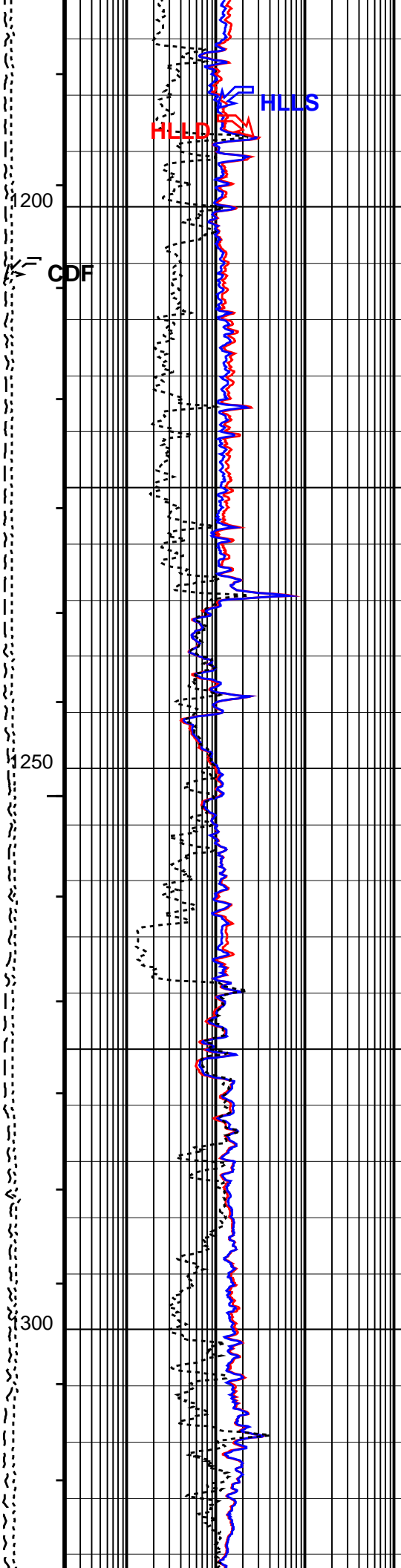
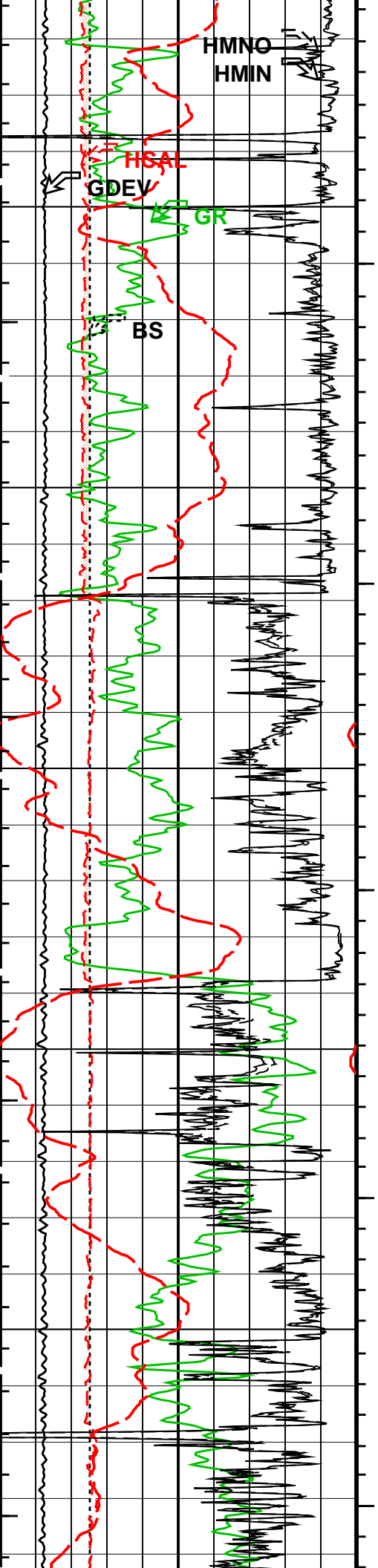


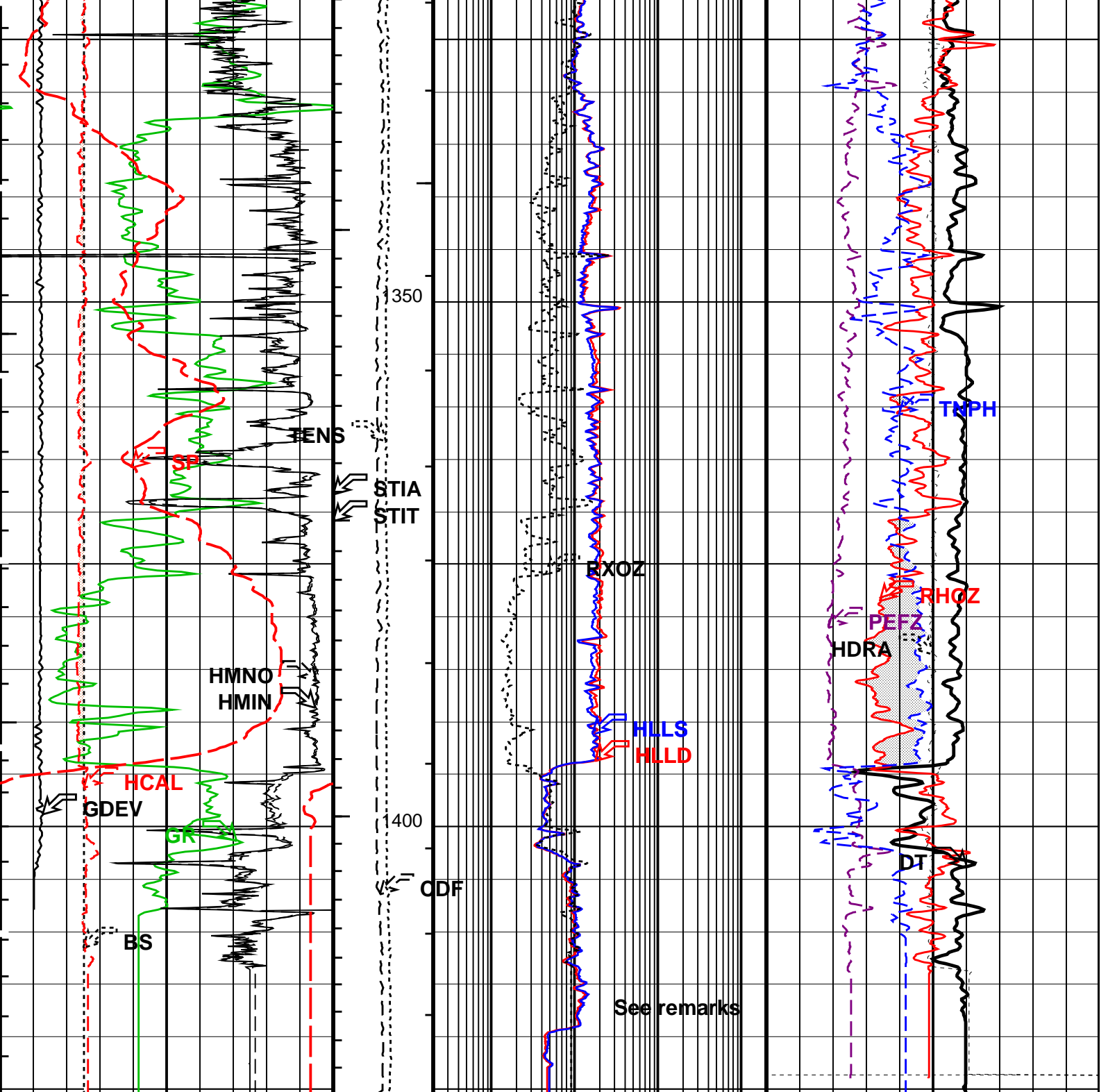












<p>Computed Micro Inverse (HMIN) (OHMM)</p> <p>20 0</p>	<p>Tension (TENS) (LBF)</p> <p>0 4000</p>	<p>Laterolog Deep Resistivity (HLLD) (OHMM)</p> <p>0.2 2000</p>	<p>Delta-T (DT) (US/F)</p> <p>140 40</p>
<p>Computed Micro Normal (HMNO) (OHMM)</p> <p>20 0</p>	<p>Calibrated Downhole Force (CDF) (LBF)</p> <p>0 2000</p>	<p>Laterolog Shallow Resistivity (HLLS) (OHMM)</p> <p>0.2 2000</p>	<p>Density Correction (HDRA) (G/C3)</p> <p>-0.25 0.25</p>
<p>Bit Size (BS) (IN)</p> <p>6 16</p>		<p>Std. Res. Invaded Zone Resistivity (RXOZ) (OHMM)</p> <p>0.2 2000</p>	<p>Std. Res. Formation Pe (PEFZ) (----)</p> <p>0 10</p>
<p>Gamma Ray (GR) (GAPI)</p> <p>0 200</p>			<p>Std. Res. Formation Density (RHOZ) (G/C3)</p> <p>1.95 2.95</p>

HGNS Deviation (GDEV)		
-10	(DEG)	90
HILT Caliper (HCAL)		
6	(IN)	16
SP (SP)		
-50	(MV)	50
Mudcake From HCAL to BS		
Washout From BS to HCAL		

Density/Porosity Cross Over From RHOZ to TNPH		
Env.Corr.Thermal Neutron Porosity		
0.45	(TNPH) (V/V)	-0.15

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
- └ Integrated Transit Time Minor Pip Every 1 MS
- └ Integrated Transit Time Major Pip Every 10 MS
- Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HALS-B: HILT Azimuthal Laterolog Sonde B		
A2EX	HALS Type of Image	Conductivities
AGOS	HALS-B A2 Extended (Groningen effect)	OFF
ARIP_LTS	HALS-GPIT OFFSET	-90 IN
ARIP_SHOULDER	HALS Long Tool String Correction	OFF
BHCC	HALS Shoulder Correction	OFF
BHS	HALS Borehole Correction	OFF
BHT	Borehole Status	OPEN
DHOP	Bottom Hole Temperature (used in calculations)	88 DEGC
	Diameter & Eccentering used in HALS Borehole Corrections	Caliper_Eccentered
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRCC	HALS Groningen Correction	OFF
GRCE	Generalized Mud Resistivity Selection	HALS_RESIST
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
HLAC	HALS-B Loop A Coefficient	LOW
HLMO	HALS Logging Mode	STAN
HMSO	HALS Mechanical Standoff	1.5 IN
HRUN	HALS-B Record Uncalibrated Channels	NO
IMOS	HALS Image Orientation	OFF
ISSBAR	Barite Mud Switch	NOBARITE
LIMP	HALS Left Image Processing	DeepRaw
LOP1	HALS-B Mode 1 Loop Mode	OFF
LOP2	HALS-B Mode 2 Loop Mode	OFF
LOP3	HALS-B Mode 3 Loop Mode	OFF
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE
RIMP	HALS Right Image Processing	ShallowRaw
RTCOMP	HALS Rt Computation	Hals_LowRes
RTRE	HALS Resistivity Threshold	100000 OHMM
SHT	Surface Hole Temperature	28.8 DEGC
SPCO	HALS-B Special Power Connection	OFF
TCOR	HALS TLC Correction	OFF
UNSPK	HALS Despiking Filter Option	OFF
UNSPK_THOLD	HALS Despiking Filter Threshold (in %)	20 %
UNSPK_WINDOW	HALS Despiking Filter Window (inches)	6 IN
DSLTL-FTB: Digitizing Sonic Logging Tool		
	DSLTL Firing Mode	BHC
	Telemetry Mode	DSLCL_FTBL
AGC	Automatic Gain Control Status	ON
AMSG	Auxiliary Minimum Sliding Gate	140 US
CBAF	CBL Adjustment Factor	1
CBLG	CBL Gate Width	45 US
CDTS	C-Delta-T Shale	100 US/F
DDEL	Digitizing Delay	0 US
DEFE	Delta-T Detection	E2
DFAD	Digital First Arrival Detection Switch	HOE
DIVL	DSLTL Depth Sampling Interval	20

DRCS	DSLT DLIS Recording Size	10	
DSIN	Digitizing Sample Interval	10	
DTCM	Delta-T Computation Mode	FULL	
DTF	Delta-T Fluid	189	US/F
DTFS	DSLCL Telemetry Frame Size	336	
DTM	Delta-T Matrix	56	US/F
DWCO	Digitizing Word Count	150	
GAI	Manual Gain	40	
HRSP	High Resolution Spacing	5.118	IN
ITTS	Integrated Transit Time Source	DT	
LTUT	Lower to Upper Transmitter Spacing Ratio	1	
MAHTR	Manual High Threshold Reference	120	
MGAI	Maximum Gain	60	
MIGA	Minimum Gain	1	
MNHTR	Minimum High Threshold Reference	100	
MODE	Sonic Firing Mode	BHC	
NMSG	Near Minimum Sliding Gate	140	US
NMXG	Near Maximum Sliding Gate	970	US
NUMP	Number of Detection Passes	2	
RATE	Firing Rate	R15	
RDFA	Reset DFAD	OFF	
SDTH	Switch Down Threshold	20000	
SFAF	Sonic Formation Attenuation Factor	10	DB/M
SGAD	Sliding Gate Status	ON	
SGAI	Selectable Acquisition Gain	AUTO	
SGCL	Sliding Gate Closing Delta-T	140	US/F
SGCW	Sliding Gate Closing Width	25	US
SGDT	Sliding Gate Delta-T	40	US/F
SGW	Sliding Gate Width	110	US
SLEV	Signal Level for AGC	5000	
SPFS	Sonic Porosity Formula	RAYMER_HUNT	
SPSO	Sonic Porosity Source	DT	
SUTH	Switch Up Threshold	1000	
VDLG	VDL Manual Gain	40	
WAGC	Waveform AGC Allow/Disallow	OFF	
WGAI	Waveform Manual Gain	20	
WGDT	Waveform Gain Delta-T	240	US/F
WGIN	Waveform Gain Interval	2540	US
WMOD	Waveform Firing Mode	FULL	
	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)	88	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	
GCLF	Germany Coal-like Formation Option	NO	
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	HALS_RESIST	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
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	NO	
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	

MWCO	Mud Weight Correction Option	YES	
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	StdRes	
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	28.8	DEGC
SOCN	Standoff Distance	0	IN
SOCO	Standoff Correction Option	NO	
BSP: Bridle SP			
SPNV	SP Next Value	0	MV
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	88	DEGC
FCD	Future Casing (Outer) Diameter	7	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	HALS_RESIST	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HVCS	Integrated Hole Volume Caliper Selection	HCAL	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	28.8	DEGC
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	0.762	M
TDD	Total Depth - Driller	1524.00	M
TDL	Total Depth - Logger	1523.00	M
System and Miscellaneous			
ALTDPCCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	8.500	IN
BSAL	Borehole Salinity	28000.00	PPM
CSIZ	Current Casing Size	9.625	IN
CWEI	Casing Weight	36.00	LB/F
DFD	Drilling Fluid Density	9.60	LB/G
DO	Depth Offset for Playback	0.0	M
FLEV	Fluid Level	-50000.00	M
MST	Mud Sample Temperature	25.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	0.1943	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	1523	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: Beach_StdRes_hals_pex_sonic_500 Vertical Scale: 1:500 Graphics File Created: 10-Aug-2007 17:16

OP System Version: 15C0-309

MCM

HALS-B	SRPC-3292-Q1_2007	DSL-FTB	15C0-309
HILTB-FTB	SRPC-3292-Q1_2007	DTC-H	15C0-309
BSP	15C0-309		

Input DLIS Files

DEFAULT	HALS_SONIC_TLD_MCFL_012LUP	FN:16	PRODUCER	10-Aug-2007 12:22	1425.5 M	23.5 M
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Output DLIS Files

DEFAULT	HALS_SONIC_TLD_MCFL_022PUP	FN:32	PRODUCER	10-Aug-2007 17:16		
RTB	HALS_SONIC_TLD_MCFL_022PUP	FN:33	PRODUCER	10-Aug-2007 17:16		

Company: **Beach Petroleum Ltd**

Schlumberger

Well: **Bodalla South 18**

Field: **Bodalla South**

Rig: **Hunt Rig 2**

Country: **Australia**

HALS-BHC-PEX-GR-ε

Resistivity-Sonic-Density-Neutron-GR-ε

Scale 1:500