

Schlumberger

Company: **3D Oil Limited**

Well: **West Seahorse 3**

Field: **West Seahorse**

Rig: **West Triton**

Country: **Australia**

Well:	West Seahorse 3
Field:	West Seahorse
Rig:	West Triton
	Country: Australia

[illegible][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			
Fluid Loss			
Source Of Sample			
RM @ Measured Temperature		@	
RMF @ Measured Temperature		@	
RMF @ Measured Temperature		@	
Source RMF			
RM @ MRT		@	
RMF @ MRT			@
Maximum Recorded Temperatures			
Circulation Stopped			
Logger On Bottom			
Unit Number			
Recorded By			
Witnessed By			

OTHER SERVICES1
OS1: MDT-GR
OS2: MSCT-GR
OS3:
OS4:
OS5:
REMARKS: RUN NUMBER 1
Tool String run as per tool sketch with 7 x 1.5" standoffs and a bowspring.
Maximum recorded temperature was 68 degC sourced from HGNS sensor.
Neutron porosity corrected for hole size and mud weight.
Density corrected for bit size.
Logs were recorded on 2 separate DLIS files because of software problem during logging. 1st pass from 1778.4m to 1513.2m MDRT,
2nd pass from 1562m to 100m MDRT. DLIS files from both passes were spliced @ 1513m MDRT.

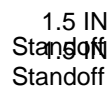
Tool stood up @ 1775.5m MDRT, several attempts to pass were unsuccessful. Did not tag TD. Logged up main pass from HUD.
No thermometers available to run on tool, so no confirmation of BHT available.
GR logged through casing to Mudline.
The use of 1.5" Standoff instead of the recommended 2.5" for this hole size resulted in Unreliable RLA1, RLA2 curves, and hence they were not presented.
Mud properties taken from Daily Mud Report #11 for 4-May-2008:
Chlorides = 36,000 mg/l; KCl = 7.5 (% by weight).
Barite = 2.2 (% by vol); K+ ion = 40,000 mg/l.
Density log spiking evident at 1577-80m, 1671-73m, 1716-18m, 1725-27m, possibly due to hole conditions.
Spiking is not evident on the repeat section.

RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION:			PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		

SURFACE EQUIPMENT	
GSR-J 6750	WITM (DTS)-A
NCT-B	
CNB-AB	
NCS-YC 5375	

DOWNHOLE EQUIPMENT	
LEH-QT	23.08
LEH-QT 1181	
BSP	SP SPARC 21.78
22.19	
AH-369	CTEM 21.07
	21.78
DTC-H	HGNS HTEM 20.43
	21.35
ECH-KC 10020	HMCA 20.43
DTCH0-A	TelStatus
	ToolStatu
HILTB-FTB	HGNS Gamm 20.21
	20.43
HGNSD-B 856	
HMCA	
HGNH-H 3915	
NLS-KL	HGNS Neut 18.43
NSR-F 5224	HGNS Neut 18.28
HACCZ 379	
HCNT	HGNS sens 17.56
HGR	
HRCC-B 868	
HRMS-B 788	
HRGD-BC 1806	HRCC cart 16.34
GLS-J 5334	
MCFL Device	MCFL 14.69
HILT Nucl. LS 28356	HILT cali 14.54
HILT Nucl. SS 14120	HRDD-LS
HILT Nucl. BS 26468	HRDD-SS
BOW-SPR	HRDD-BS 14.42
NPV-MF 5224	
AH-107	13.83
AH-107	
HRLT-B	13.22
HRUH-B 1741	1.5 IN
HRUC-B 1780	Standoff
HRLS-B 1745	1.5 IN
HRLH-B 1792	Standoff
HRLC-B 1745	
AH-270 1792	
High Res.	9.64



1.5 IN
Standoff

USF
LSF USN
LSN

1.5 IN
Standoff
1.5 IN
Standoff

0.00

0.14

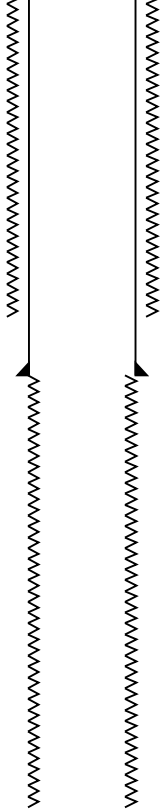
TOOL ZERO

MAXIMUM STRING DIAMETER 6.63 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Rig Name: West Triton
Reference Datum: Mean Sea Level
Elevation: 38.0 m

Production String		Well Schematic		Casing String	
	(in) OD	(m) ID		(m) MD	(in) OD
<p>Kelly Bushing Elevation</p> <p>Mean Sea Level</p>		38.0		39.0	
		0.0		122.0	13.375

All depths are
driller's depths



1117.0	13.375
1117.0	
1810.0	12.250

Casing Shoe Borehole Segment
Borehole Segment Bottom



Standard Resolution Pass
1:500

MAXIS Field Log

Company: 3D Oil Limited	Well: West Seahorse 3
-------------------------	-----------------------

Input DLIS Files

DEFAULT	SONIC_HRLA_TLD_MCFL_020PUP FN:19	PRODUCER	19-Jun-2008 16:03	1778.4 M	102.6 M
---------	----------------------------------	----------	-------------------	----------	---------

Output DLIS Files

DEFAULT	SONIC_HRLA_TLD_MCFL_025PUP FN:24	PRODUCER	19-Jun-2008 20:56	1652.8 M	103.0 M
---------	----------------------------------	----------	-------------------	----------	---------

Indexed to True Vertical Depth in this Playback

Integrated Hole/Cement Volume Summary

Hole Volume = 56.92 M3
Cement Volume = 26.64 M3 (assuming 9.63 IN casing O.D.)
Computed from 1761.0 M to 1116.0 M using data channel(s) HCAL

OP System Version: 15C0-309

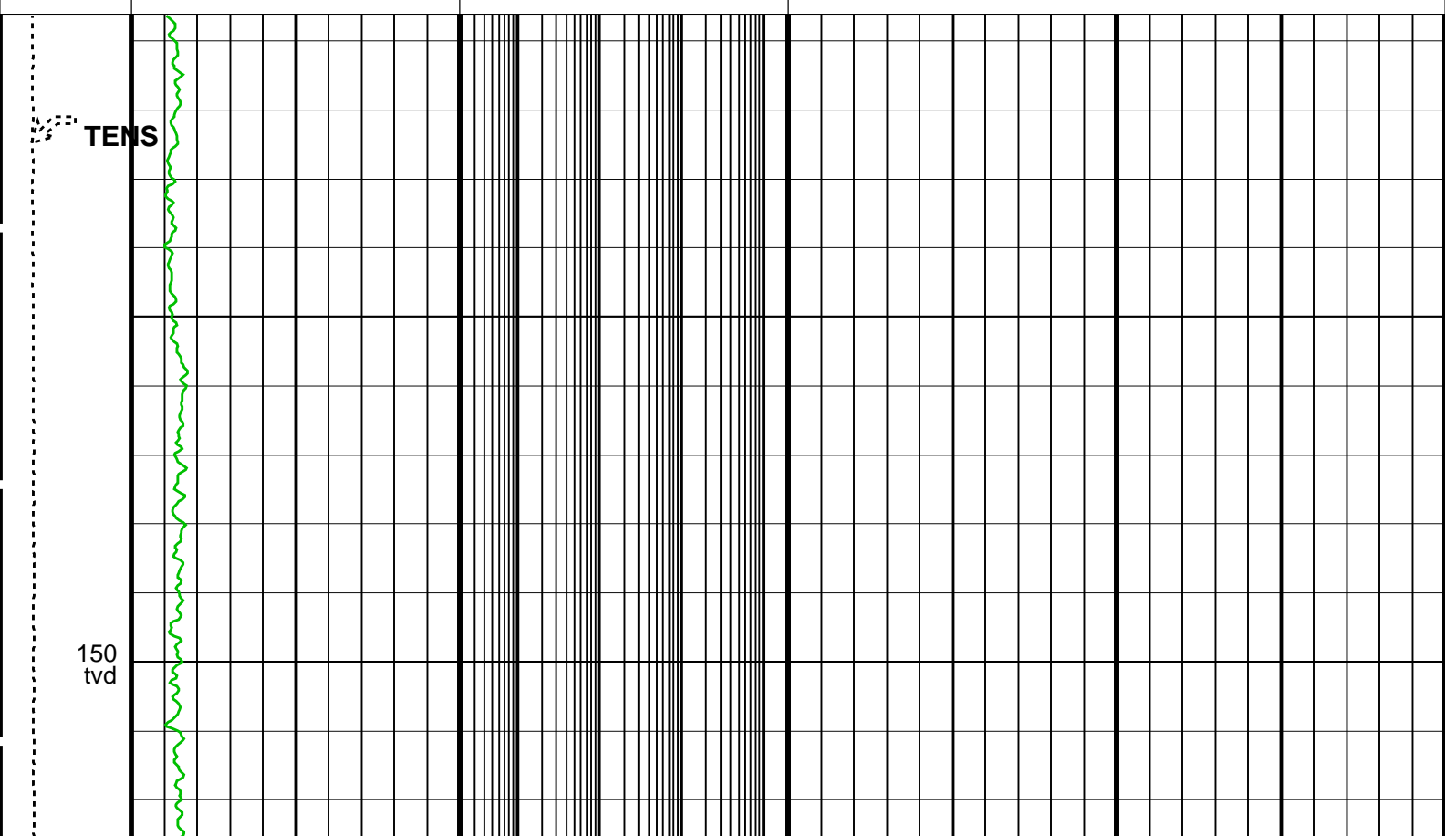
MCM

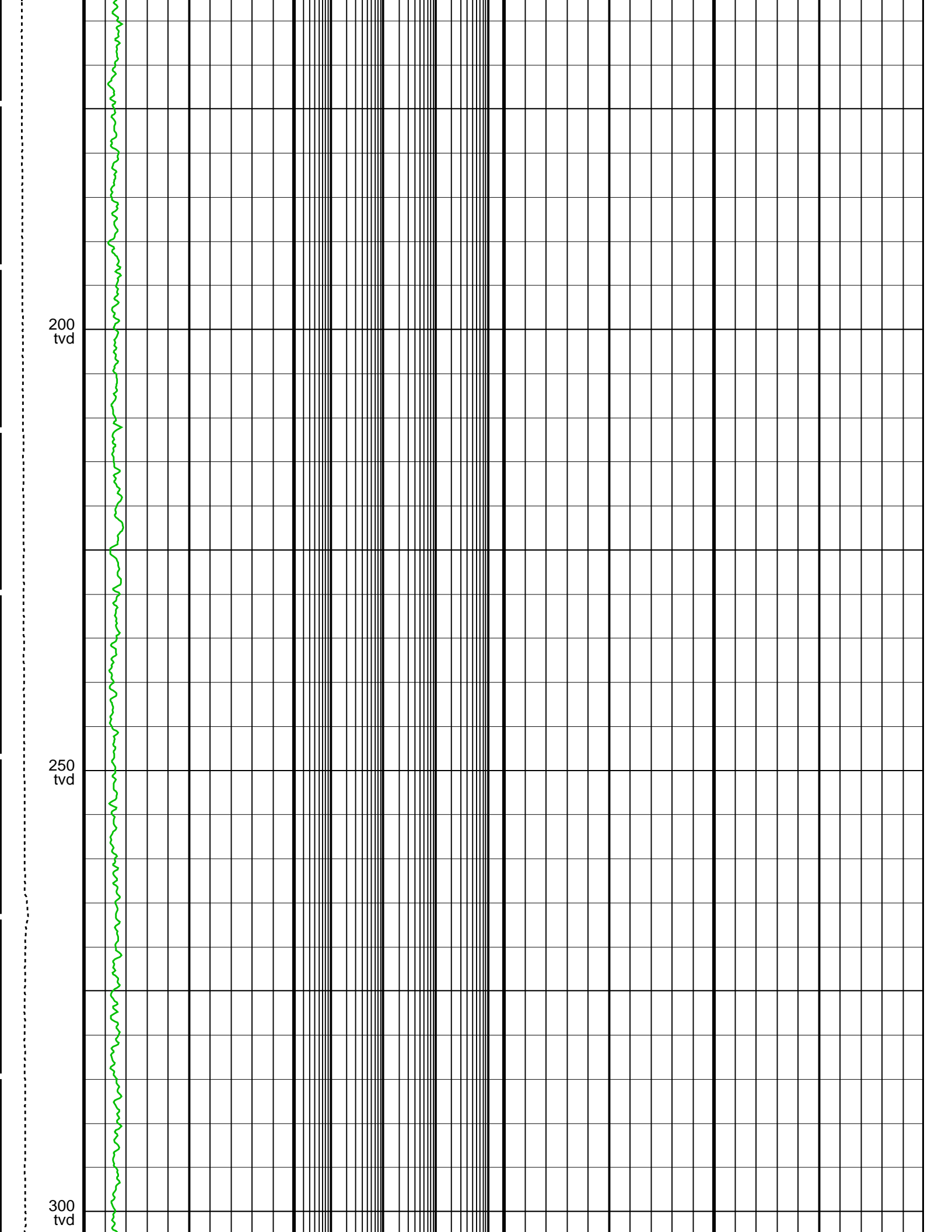
DSLT-FTB	SRPC-3546-Q1_2008_OP15	HRLT-B	SRPC-3546-Q1_2008_OP15
HILTB-FTB	SRPC-3546-Q1_2008_OP15	DTC-H	SRPC-3546-Q1_2008_OP15
BSP	SRPC-3546-Q1_2008_OP15		

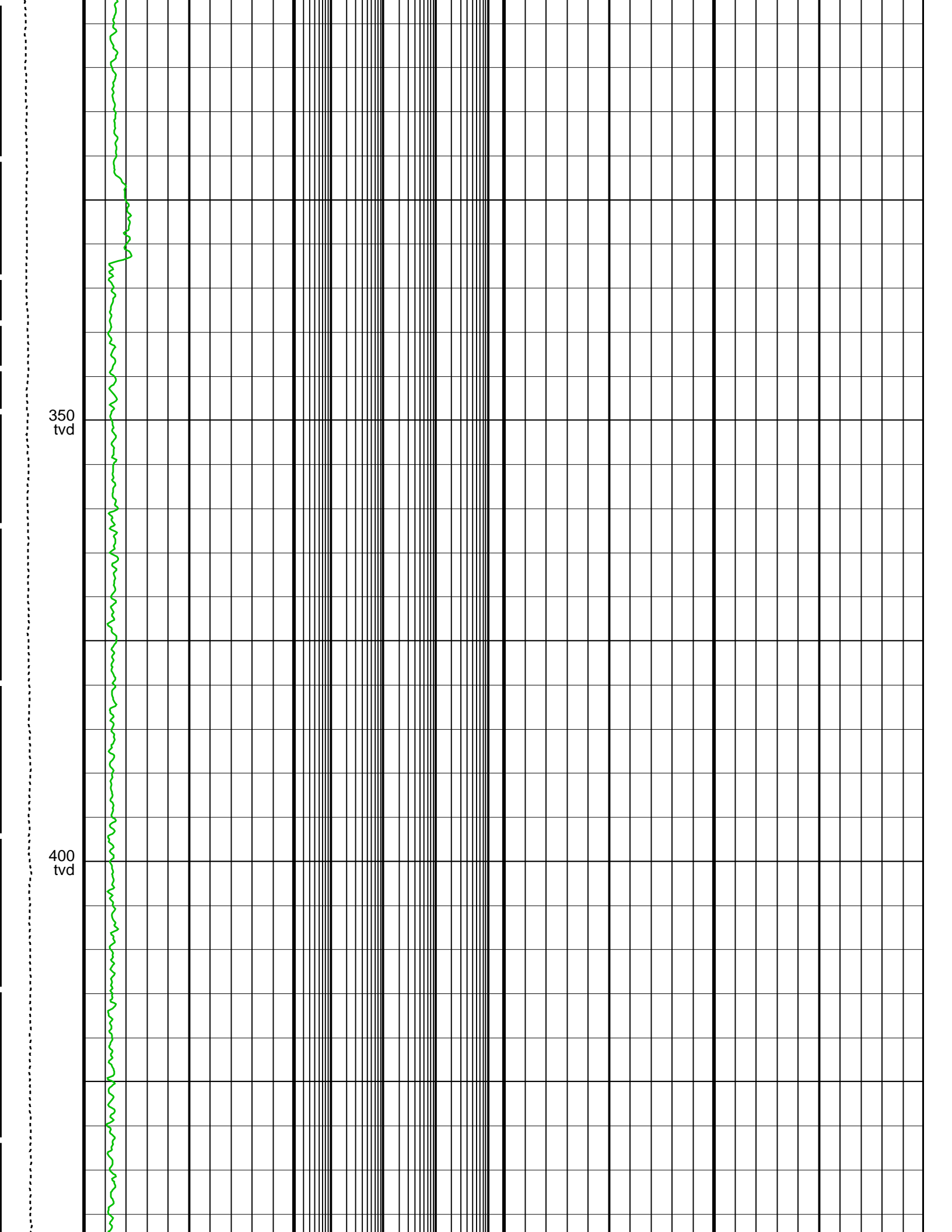
PIP SUMMARY

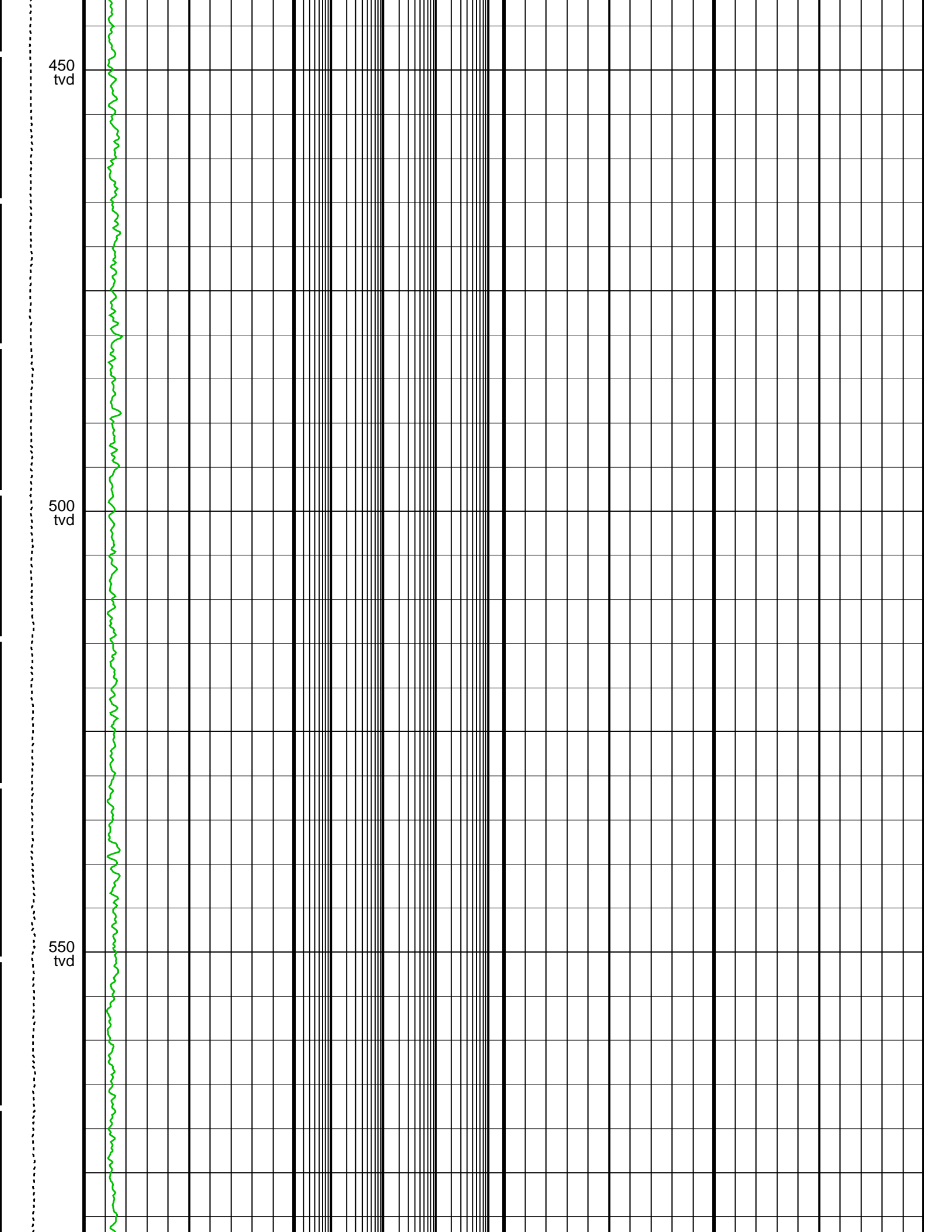
- └ Integrated Hole Volume Minor Pip Every 0.1 M3
- └ Integrated Hole Volume Major Pip Every 1 M3
 - └ Integrated Cement Volume Minor Pip Every 0.1 M3
 - └ Integrated Cement Volume Major Pip Every 1 M3
- Time Mark Every 60 S

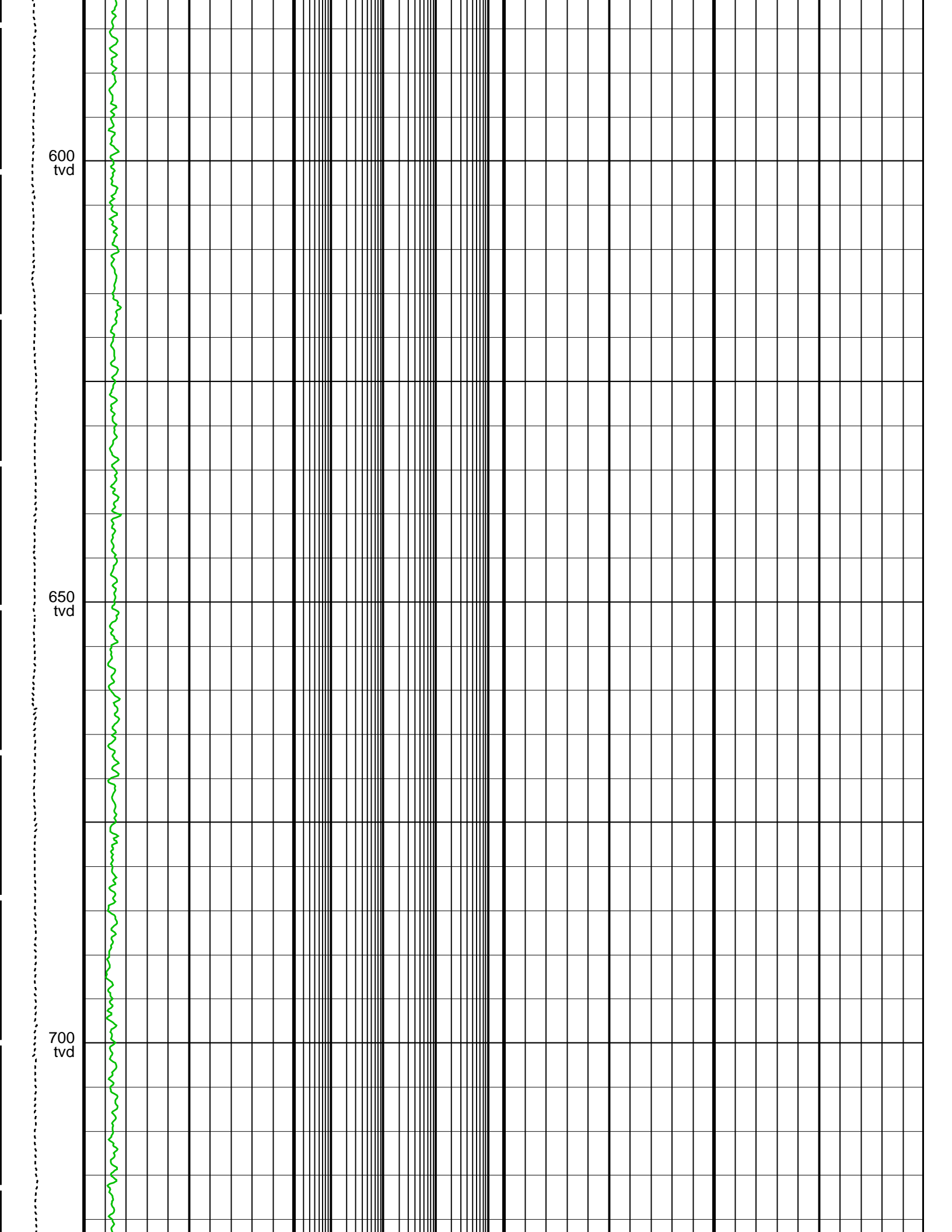
		HRLT True Resistivity (RT_ HRLT)			
		0.2	(OHMM)	2000	
		Std. Res. Invaded Zone Resistivity (RXOZ)			
		0.2	(OHMM)	2000	
Area From HCAL to BS		HRLT Resistivity 5 (RLA5)		Env.Corr.Thermal Neutron Porosity (TNPH)	
		0.2	(OHMM)	2000	0.45 (V/V) -0.15
SP (SP) (MV)		HRLT Resistivity 4 (RLA4)		Std. Res. Formation Density (RHOZ)	
-80 20		0.2	(OHMM)	2000	1.95 (G/C3) 2.95
Gamma Ray (ECGR) (GAPI)		HRLT Resistivity 3 (RLA3)		Std. Res. Formation Pe (PEFZ)	Density Correction (HDRA)
0 200		0.2	(OHMM)	2000	0 (-10) -0.25 (G/C3) 0.25
HILT Caliper (HCAL) (IN)		HRLT Resistivity 2 (RLA2)		Sand From RHOZ to TNPH	
6 16		0.2	(OHMM)	2000	
Tension (TENS) (LBF)	Bit Size (BS) (IN)	HRLT Resistivity 1 (RLA1)		Delta-T (DT)	
6 5000	6 16	0.2	(OHMM)	2000	140 (US/F) 40

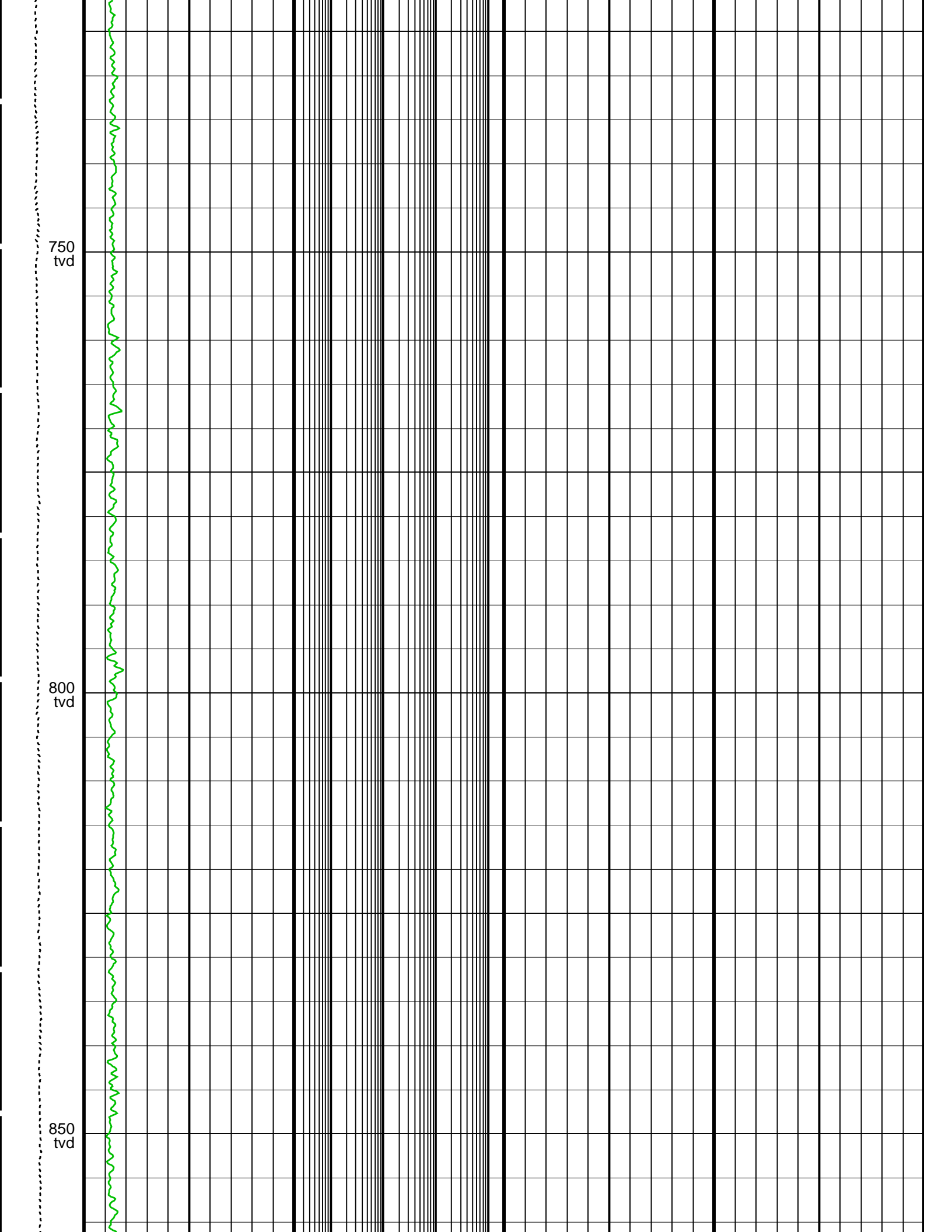


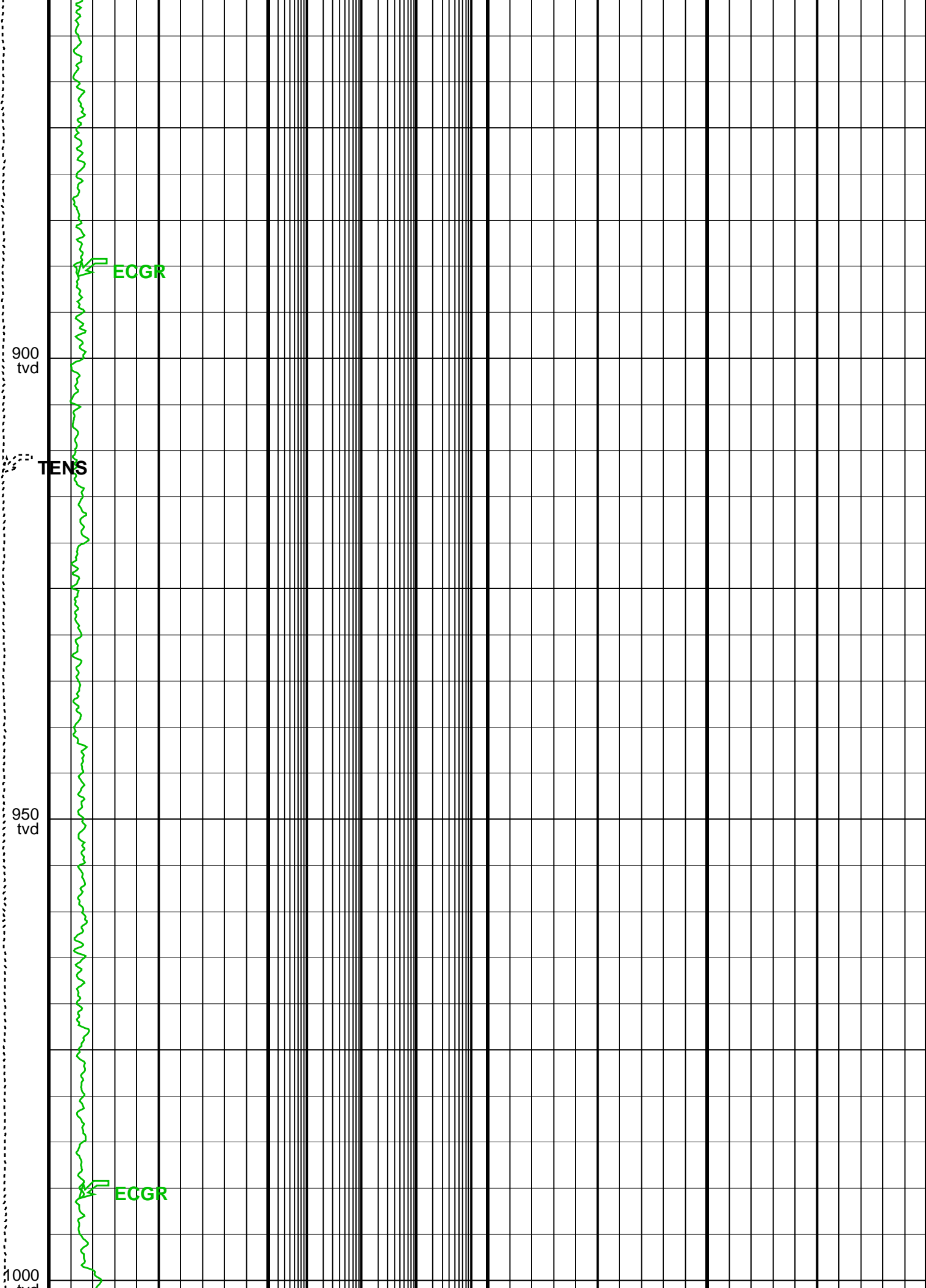


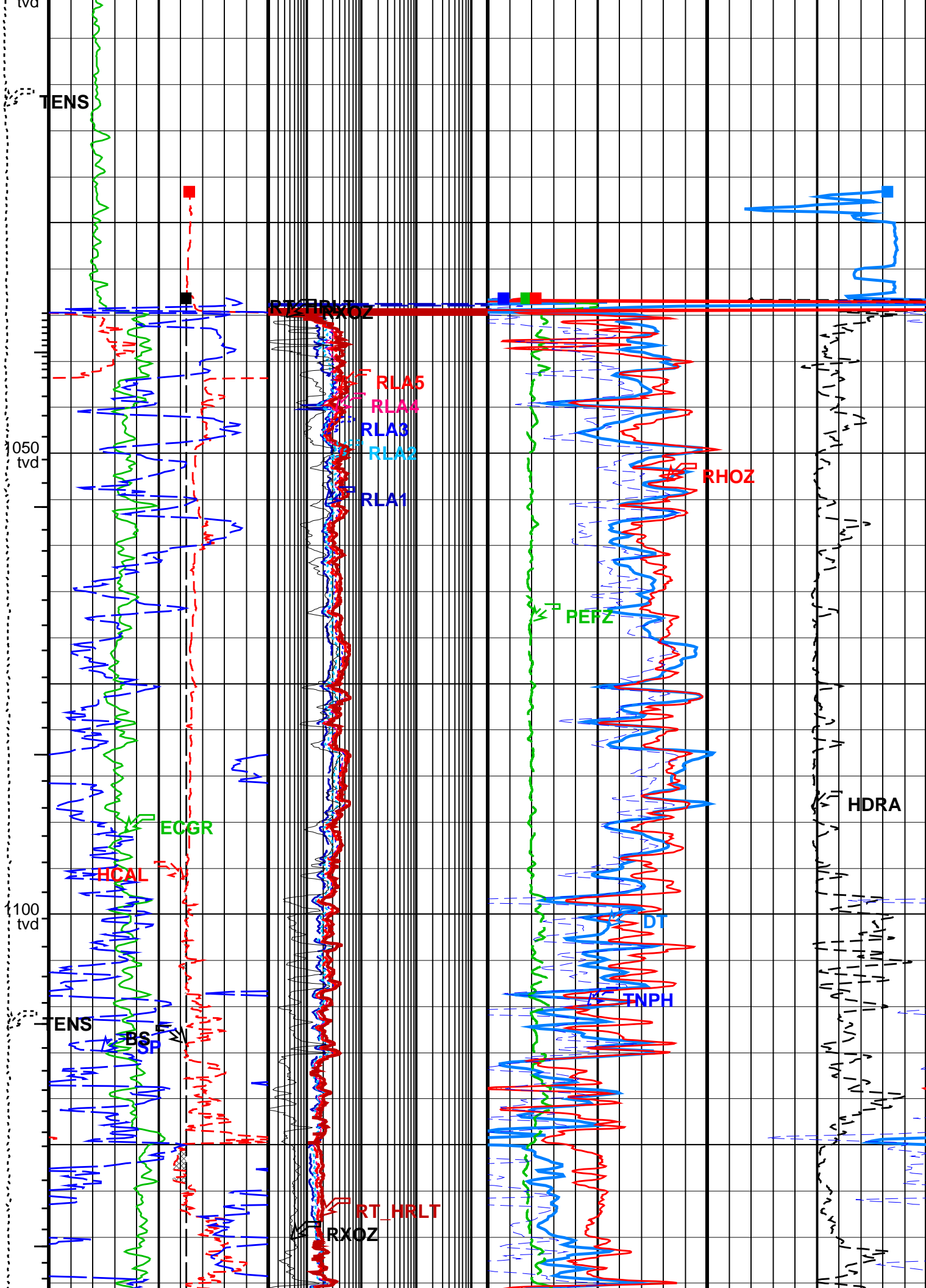


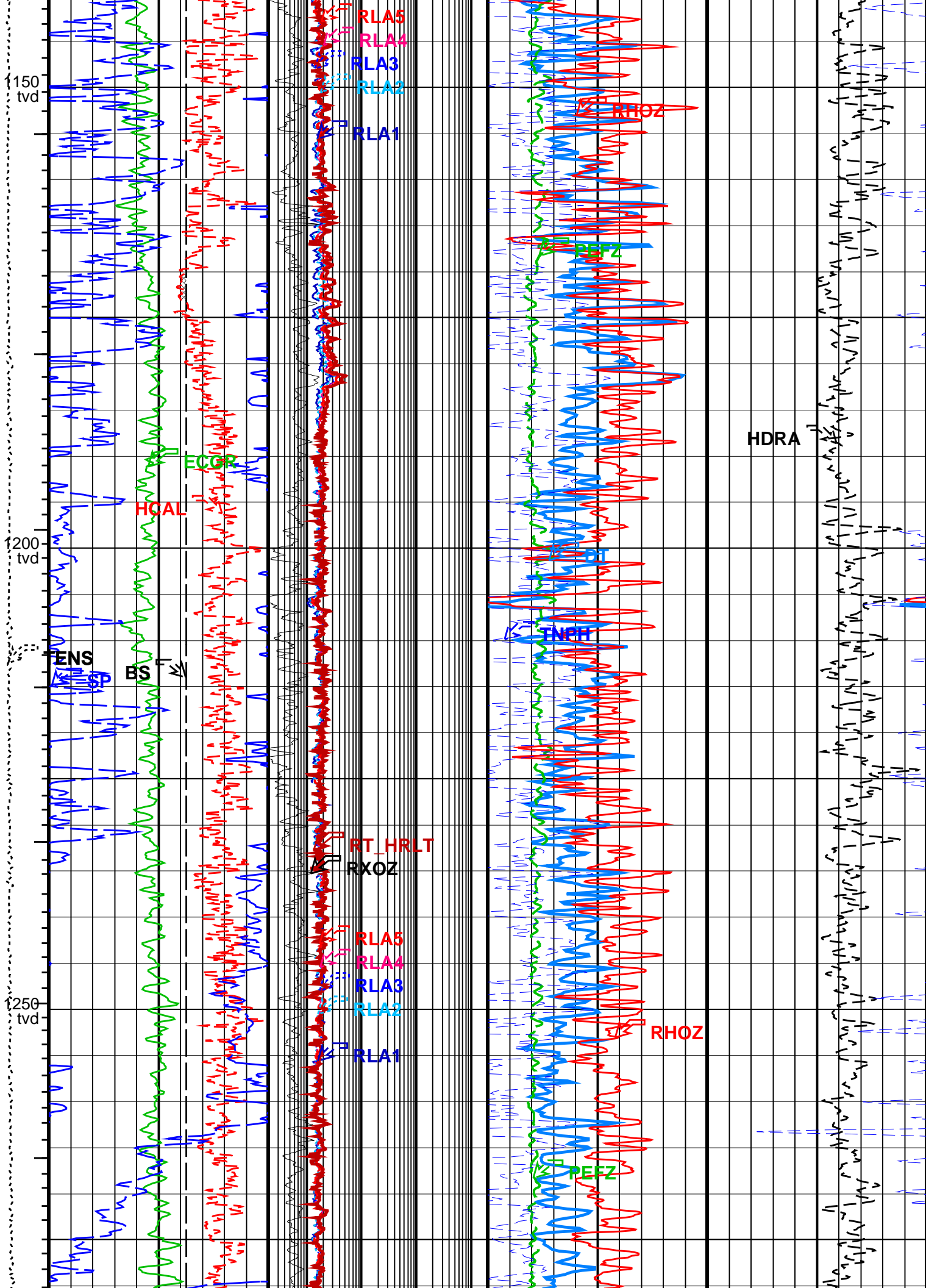


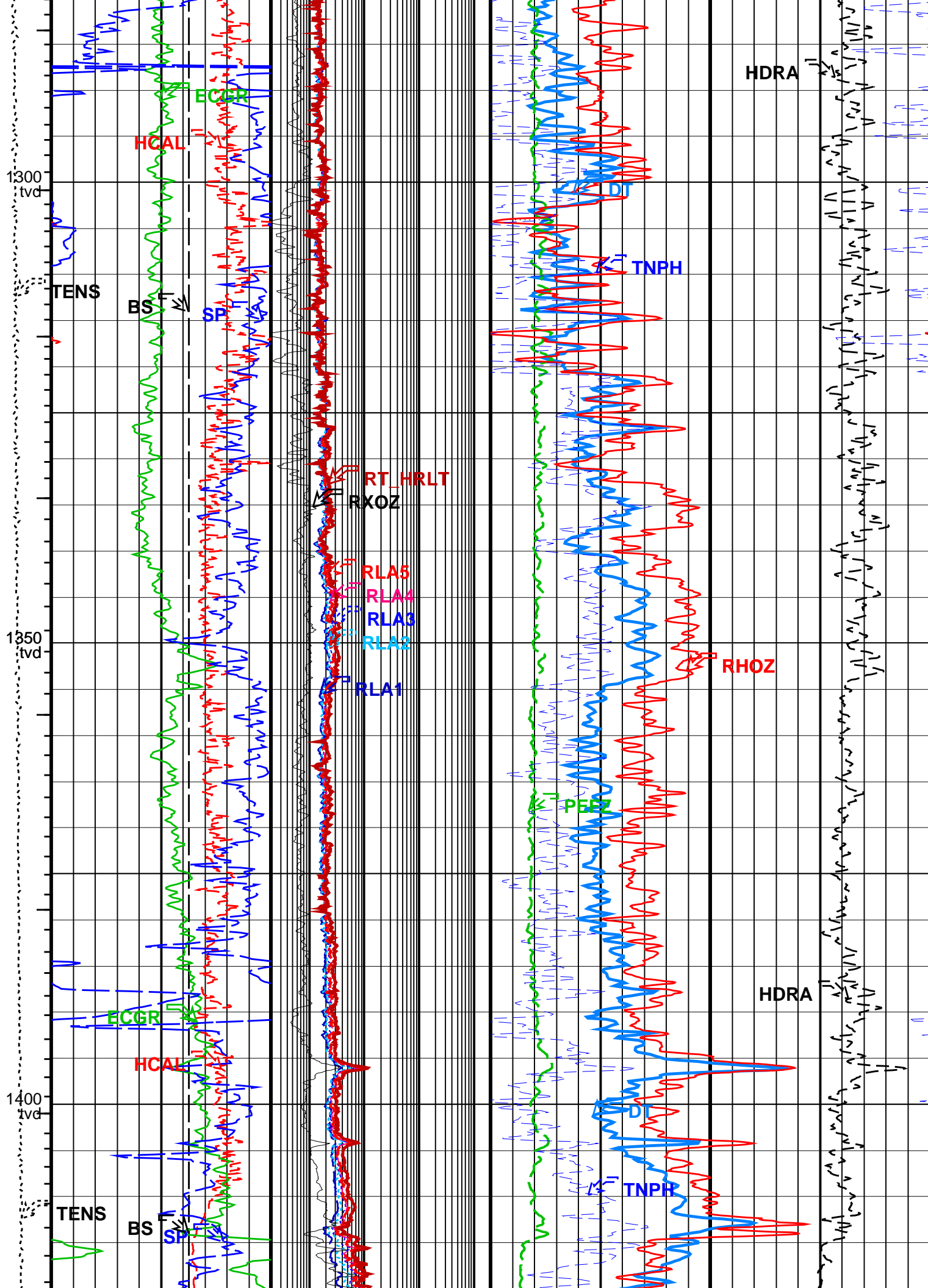


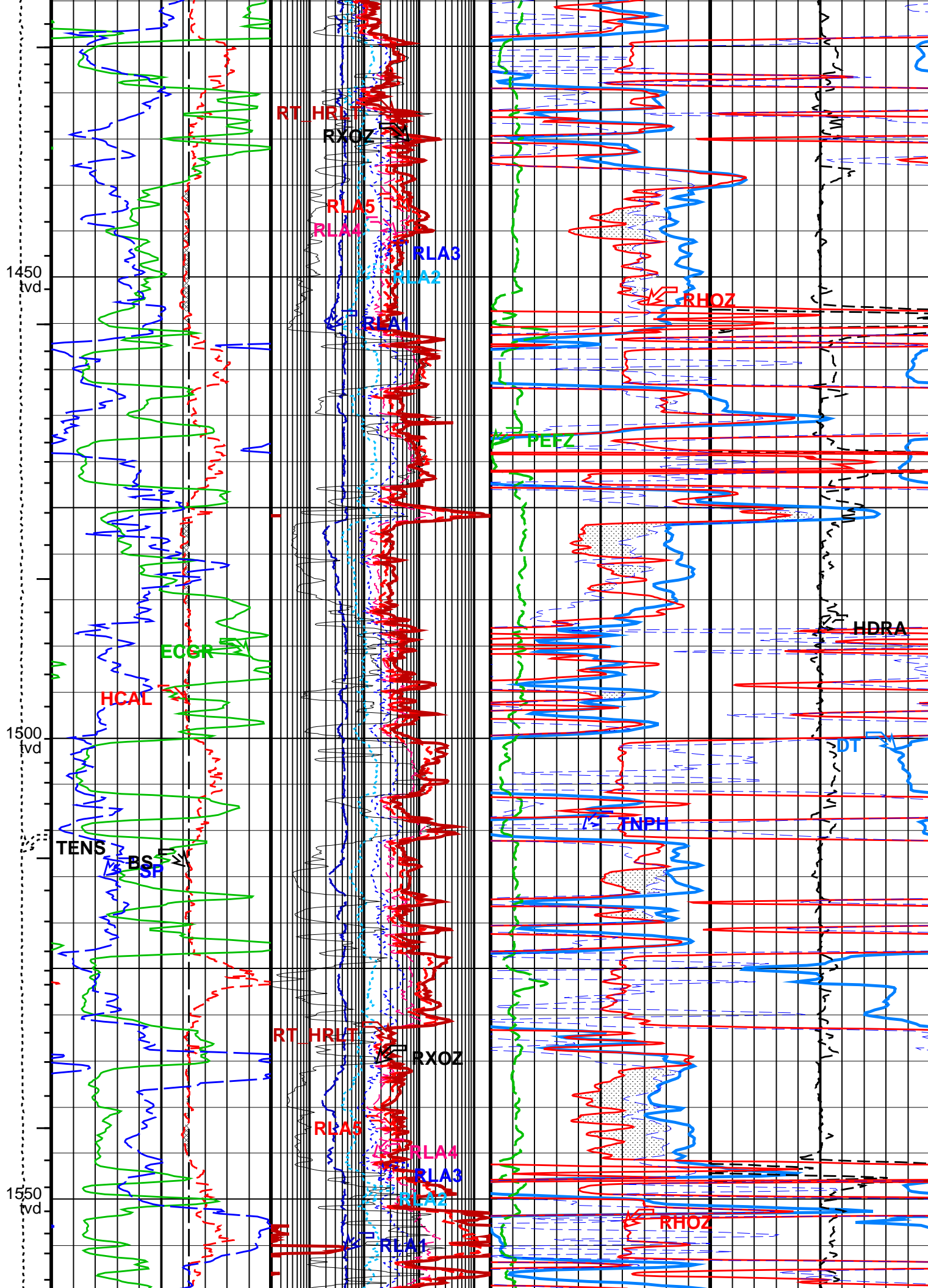


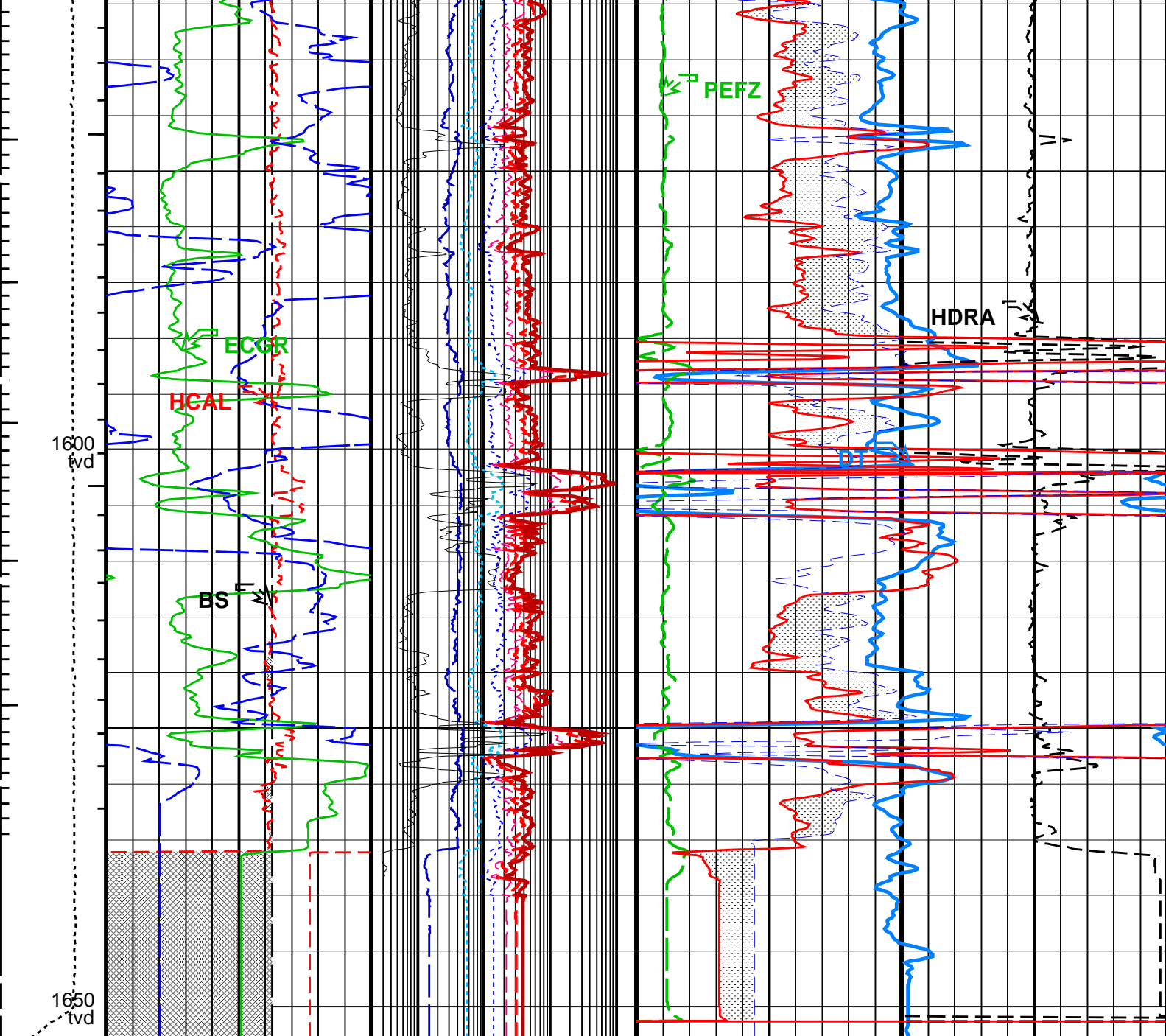












Tension (TENS) (LBF)	Bit Size (BS) (IN)	HRLT Resistivity 1 (RLA1) (OHMM)	Delta-T (DT) (US/F)
0	6	0.2	140
5000	16	2000	40
HILT Caliper (HCAL) (IN)		HRLT Resistivity 2 (RLA2) (OHMM)	Sand From RHOZ to TNPH
6	16	0.2	
2000		2000	
Gamma Ray (ECGR) (GAPI)	HRLT Resistivity 3 (RLA3) (OHMM)	Std. Res. Formation Pe (PEFZ) (----)	Density Correction (HDRA) (G/C3)
0	0.2	0	-0.25
200	2000	10	0.25
SP (SP) (MV)	HRLT Resistivity 4 (RLA4) (OHMM)	Std. Res. Formation Density (RHOZ) (G/C3)	
-80	0.2	1.95	2.95
20	2000		
Area From HCAL to BS	HRLT Resistivity 5 (RLA5) (OHMM)	Env. Corr. Thermal Neutron Porosity (TNPH) (V/V)	
	0.2	0.45	-0.15
	2000		
	Std. Res. Invaded Zone Resistivity (RXOZ) (OHMM)		
	0.2		
	2000		
	HRLT True Resistivity (RT)		

	HRLT True Resistivity (RT)	
	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
DSLT-FTB: Digitizing		
	Sonic Logging Tool	DSLC_FTB
	Telemetry Mode	SDDB
	DSLT Firing Mode	0
DDEL	Digitizing Delay	US
DIVL	DSLT Depth Sampling Interval	20
DRCS	DSLT DLIS Recording Size	180
DSIN	Digitizing Sample Interval	10
DTFS	DSLC Telemetry Frame Size	396
DWCO	Digitizing Word Count	180
GAI	Manual Gain	40
MAHTR	Manual High Threshold Reference	120
MGAI	Maximum Gain	60
MNHTR	Minimum High Threshold Reference	100
NMSG	Near Minimum Sliding Gate	140
NMXG	Near Maximum Sliding Gate	1060
RATE	Firing Rate	R15
SFAF	Sonic Formation Attenuation Factor	10
SGCL	Sliding Gate Closing Delta-T	140
SGDT	Sliding Gate Delta-T	40
SGW	Sliding Gate Width	110
SLEV	Signal Level for AGC	5000
WMOD	Waveform Firing Mode	FULL
HRLT-B: High Resolution Laterolog Array - E		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	68
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0
GRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
KFAC_HRLT	HRLT K Factor Option	SONDE
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE
PROGINV	Inversion Selection	ON
PROCMFL	Inversion Micro-Resistivity Selection	RXOZ
PROCMSO	Mechanical Standoff Fin Size	1.5
PROCRM	Processing Mud Resistivity Select	External_GRSE
PROCSP0	Sonde Position	Eccentered
SHT	Surface Hole Temperature	35
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)	68
BSCO	Borehole Salinity Correction Option	NO
CCCO	Casing & Cement Thickness Correction Option	NO
DHC	Density Hole Correction	BS
FSAL	Formation Salinity	-50000
FSCO	Formation Salinity Correction Option	NO
GCLF	Germany Coal-like Formation Option	NO
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0
GRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
HSCO	Hole Size Correction Option	YES
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE
MCCO	Mud Cake Correction Option	NO
MCOR	Mud Correction	BARI
MPOF	MCFL Processing Operation Mode	ON
MWCO	Mud Weight Correction Option	YES
NAAC	HRDD APS Activation Correction	OFF
NMT	HILT Nuclear Mud Type	BARITE
NPRM	HRDD Processing Mode	StdRes
NSAR	HRDD Depth Sampling Rate	1
PTCO	Pressure/Temperature Correction Option	NO
SDAT	Standoff Data Source	SOCN
SHT	Surface Hole Temperature	35
SSON	SSON	2.125

SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	NO	
BSP	BSP: Bridle SP		
SPNV	SP Next Value	0	MV
DIR	Directional Survey Computation		
SPVD	TVD of Starting Point	0	M
TIMD	Along-hole depth of Tie-in Point	1094.42	M
TIVD	TVD of Tie-in Point	1014.85	M
HOLEV	Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	68	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	LINEAR_ESTIMATE	
HVCS	Integrated Hole Volume Caliper Selection	HCAL	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	35	DEGC
STI	Stuck Tool Indicator		
TDL	Total Depth – Logger	1775.50	M
System and Miscellaneous			
ALTDPCCHAN	Name of alternate depth channel	TrueVerticalDepth	
BS	Bit Size	12.250	IN
BSAL	Borehole Salinity	51637.00	PPM
DO	Depth Offset for Playback	0.0	M
PBVSADP	Use alternate depth channel for playback	YES	
PP	Playback Processing	OFF	
TD	Total Depth	1761	M

Format: SON_RES_DENS_NEU_GR_SP_D500 Vertical Scale: 1:500 Graphics File Created: 19-Jun-2008 20:56

OP System Version: 15C0-309

MCM

DSLT-FTB	SRPC-3546-Q1_2008_OP15	HRLT-B	SRPC-3546-Q1_2008_OP15
HILTB-FTB	SRPC-3546-Q1_2008_OP15	DTC-H	SRPC-3546-Q1_2008_OP15
BSP	SRPC-3546-Q1_2008_OP15		

True Vertical Depth Log

Indexed to True Vertical Depth in this Playback

Input DLIS Files

DEFAULT	SONIC_HRLA_TLD_MCFL_020PUP FN:19	PRODUCER	19-Jun-2008 16:03	1778.4 M	102.6 M
---------	----------------------------------	----------	-------------------	----------	---------

Output DLIS Files

DEFAULT	SONIC_HRLA_TLD_MCFL_025PUP FN:24	PRODUCER	19-Jun-2008 20:56
---------	----------------------------------	----------	-------------------

Company: **3D Oil Limited**

Schlumberger

Well: **West Seahorse 3**

Field: **West Seahorse**

Rig: **West Triton**

Country: **Australia**

BHC-HRLA-PEX-G
Sonic-Resistivity-Density-Neutron-G
Suite 1 Run 1 – Scale 1:500 (TVD)