

**Schlumberger**

Company: **Whiting Oil and Gas Corporation**

Well: **Wildhorse 16-13L**

Field: **Wildcat**

County: **Weld**

State: **Colorado**

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County: Weld							
Field: Wildcat							
Location: NWSW Sec. 16, T9N, R59W							
Well: Wildhorse 16-13L							
Company: Whiting Oil and Gas Corporation							
<div> <div>Platform Express</div> <div>Triple Combo</div> </div>							
<table border="1"> <thead> <tr> <th colspan="2">LOCATION</th> </tr> </thead> <tbody> <tr> <td>           NWSW Sec. 16, T9N, R59W            SHL: 1954' FSL X 613' FWL         </td> <td>           Elev.: K.B. 5072.30 ft            G.L. 5055.00 ft            D.F. 5071.30 ft         </td> </tr> <tr> <td>           Permanent Datum: _____            Log Measured From: <u>Kelly Bushing</u>            Drilling Measured From: <u>Kelly Bushing</u> </td> <td>           Elev.: 5055.00 ft            17.30 ft above Perm. Datum         </td> </tr> </tbody> </table>		LOCATION		NWSW Sec. 16, T9N, R59W SHL: 1954' FSL X 613' FWL	Elev.: K.B. 5072.30 ft G.L. 5055.00 ft D.F. 5071.30 ft	Permanent Datum: _____ Log Measured From: <u>Kelly Bushing</u> Drilling Measured From: <u>Kelly Bushing</u>	Elev.: 5055.00 ft 17.30 ft above Perm. Datum
LOCATION							
NWSW Sec. 16, T9N, R59W SHL: 1954' FSL X 613' FWL	Elev.: K.B. 5072.30 ft G.L. 5055.00 ft D.F. 5071.30 ft						
Permanent Datum: _____ Log Measured From: <u>Kelly Bushing</u> Drilling Measured From: <u>Kelly Bushing</u>	Elev.: 5055.00 ft 17.30 ft above Perm. Datum						
API Serial No. 05-123-37374-000C	Section 16 Township 9N Range 59W						

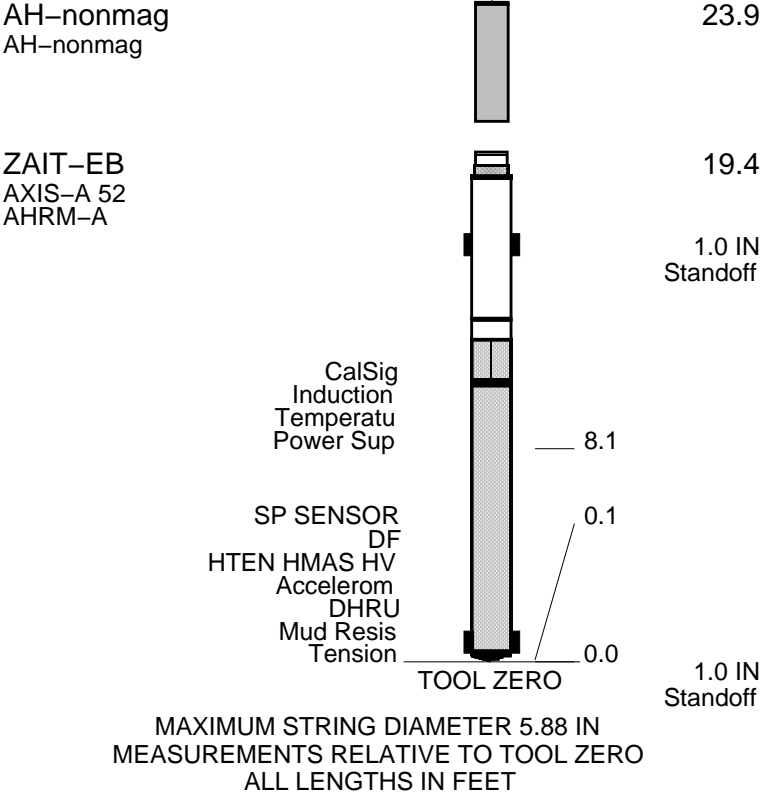
[illegible]

Logging Date	2-Jul-2013				
Run Number	1				
Depth Driller	10060 ft				
Schlumberger Depth	10050 ft				
Bottom Log Interval	10042 ft				
Top Log Interval	1607 ft				
Casing Driller Size @ Depth	9.625 in @ 1608 ft			@	
Casing Schlumberger	1607 ft				
Bit Size	8.750 in				
Type Fluid In Hole	Water Based Mud				
Density	Viscosity	9.1 lbm/gal		45 s	
Fluid Loss	PH	4.8 cm3		9	
Source Of Sample	Flowline				
RM @ Measured Temperature	1.150 ohm.m		@ 130 degF	@	
RMF @ Measured Temperature	0.920 ohm.m		@ 130 degF	@	
RMC @ Measured Temperature	1.380 ohm.m		@ 130 degF	@	
Source RMF	RMC	Mud Press	Mud Press		
RM @ MRT	RMF @ MRT	0.679 @ 225 degF	0.543 @ 225 degF	@	@
Maximum Recorded Temperatures	225 degF				
Circulation Stopped	Time	2-Jul-2013	9:00		
Logger On Bottom	Time	2-Jul-2013	19:55		
Unit Number	Location	2135	Ft. Morgan, CO		
Recorded By	Tim Hoffman				
Witnessed By	Chris Blodgett				

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

OTHER SERVICES1	OTHER SERVICES2
OS1: MSIP	OS1:
OS2: FMI	OS2:
OS3: RT Scanner	OS3:
OS4: CMR	OS4:
OS5: ECS	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
This is the first run in hole	
Toolstring run as per tool sketch	
Matrix: Limestone (2.71 g/cc)	

Rig: Cade 21					
Crew: Alonzo Carrera, David Marquez					
RUN 1			RUN 2		
SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:			SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
CCN1-00014 19C2-270 200 ft					
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP
EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		
SURFACE EQUIPMENT WITM (DTS)-A					
GSR-U/Y NCT-B CNB-AB NCS-VB					
DOWNHOLE EQUIPMENT					
<div>LEH-QT LEH-QT</div> <div>DTC-H ECH-KC DTCH0-A</div> <div>HILTH-FTB HGNSD-H HMCA-H HGNH NLS-KL NSR-F 2554 HACCZ-H 6991 HCNT-H HGR HRCC-H HRMS-H HRGD-H GLS-VJ 5240 MCFL Device-H HILT Nucl. LS-H 28910 HILT Nucl. SS-H 42767 HILT Nucl. BS-H 42767 BOW-SPR NPV-N</div> <div>CTEM TelStatus ToolStatu HGNS HTEM HMCA</div> <div>HGNS Gamm</div> <div>HGNS Neut HGNS Neut</div> <div>HGNS sens</div> <div>MCFL HILT cali HRDD-LS HRDD-SS HRDD-BS</div> <div>59.5</div> <div>55.6</div> <div>53.5</div> <div>53.5</div> <div>52.8</div> <div>47.0</div> <div>46.5</div> <div>44.1</div> <div>40.1</div> <div>34.7</div> <div>34.2</div> <div>33.8</div> <div>31.9</div> <div>29.9</div> <div>27.9</div>					



Schlumberger

MAIN TRIPLE COMBO 5" = 100'

MAXIS Field Log

Company: Whiting Oil and Gas Corporation Well: Wildhorse 16-13L

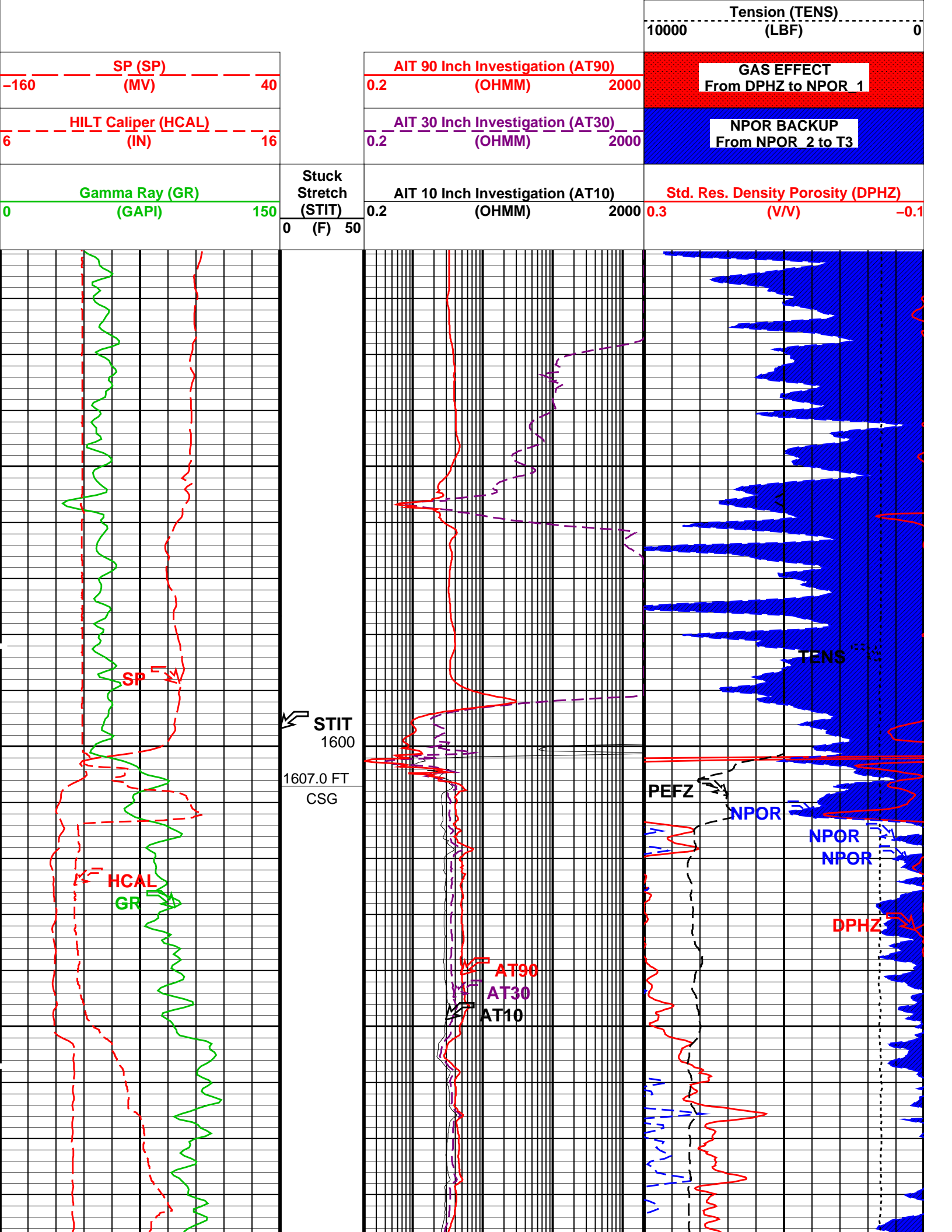
Input DLIS Files						
DEFAULT	AIT_IS_TLD_MCFL_CNL_012LUP	FN:11	PRODUCER	02-Jul-2013 19:58	10062.0 FT	1511.0 FT
Output DLIS Files						
DEFAULT	AIT_IS_TLD_MCFL_CNL_024PUP	FN:25	PRODUCER	02-Jul-2013 23:19	10062.0 FT	1511.0 FT
CUSTOMER	AIT_IS_TLD_MCFL_CNL_024PUC	FN:26	CUSTOMER	02-Jul-2013 23:19	10062.0 FT	1511.0 FT

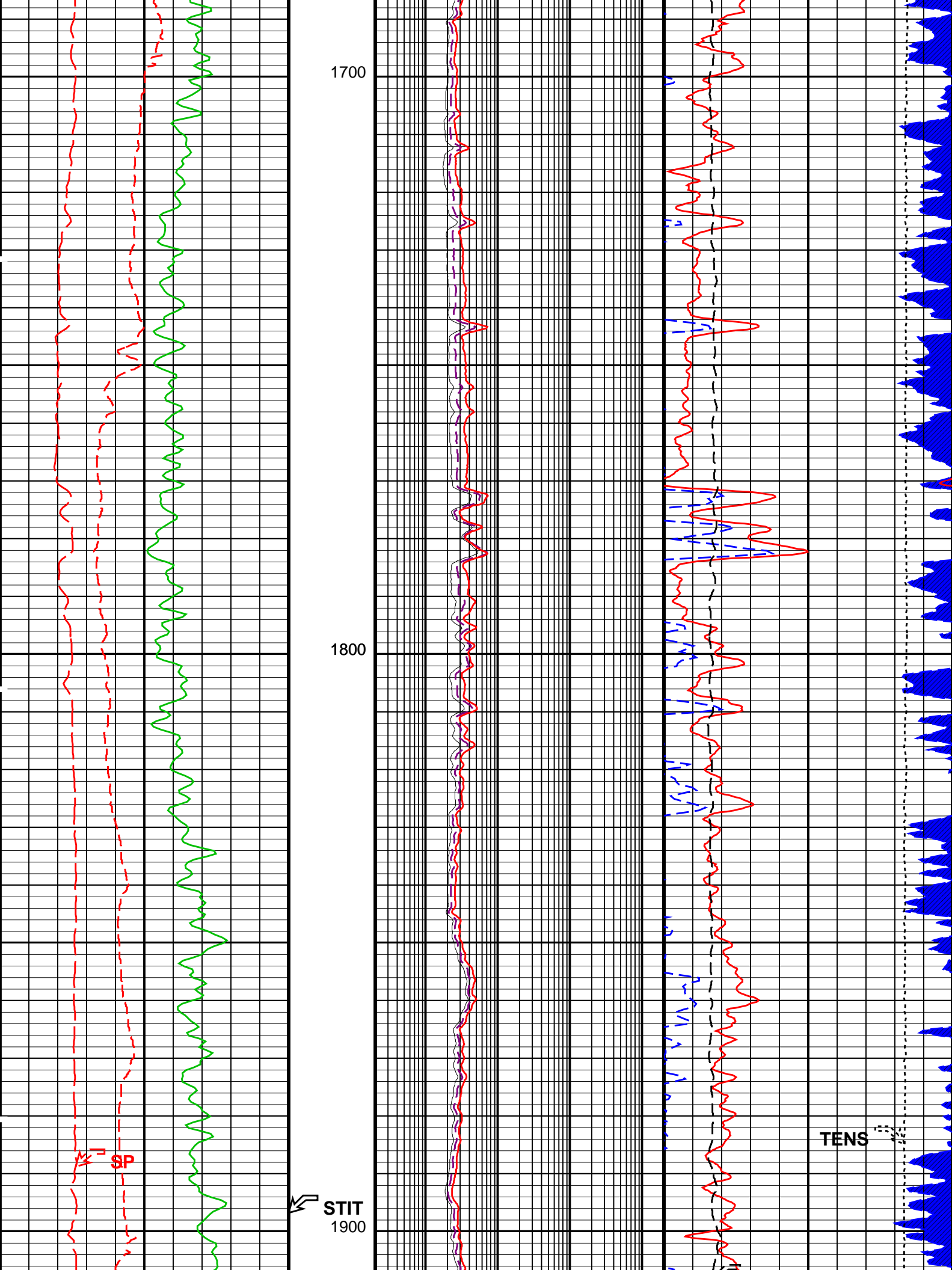
OP System Version: 19C2-270						
ZAIT-EB	19C2-270		GPIT-F	19C2-270		
HILTH-FTB	19C2-270		DTC-H	19C2-270		

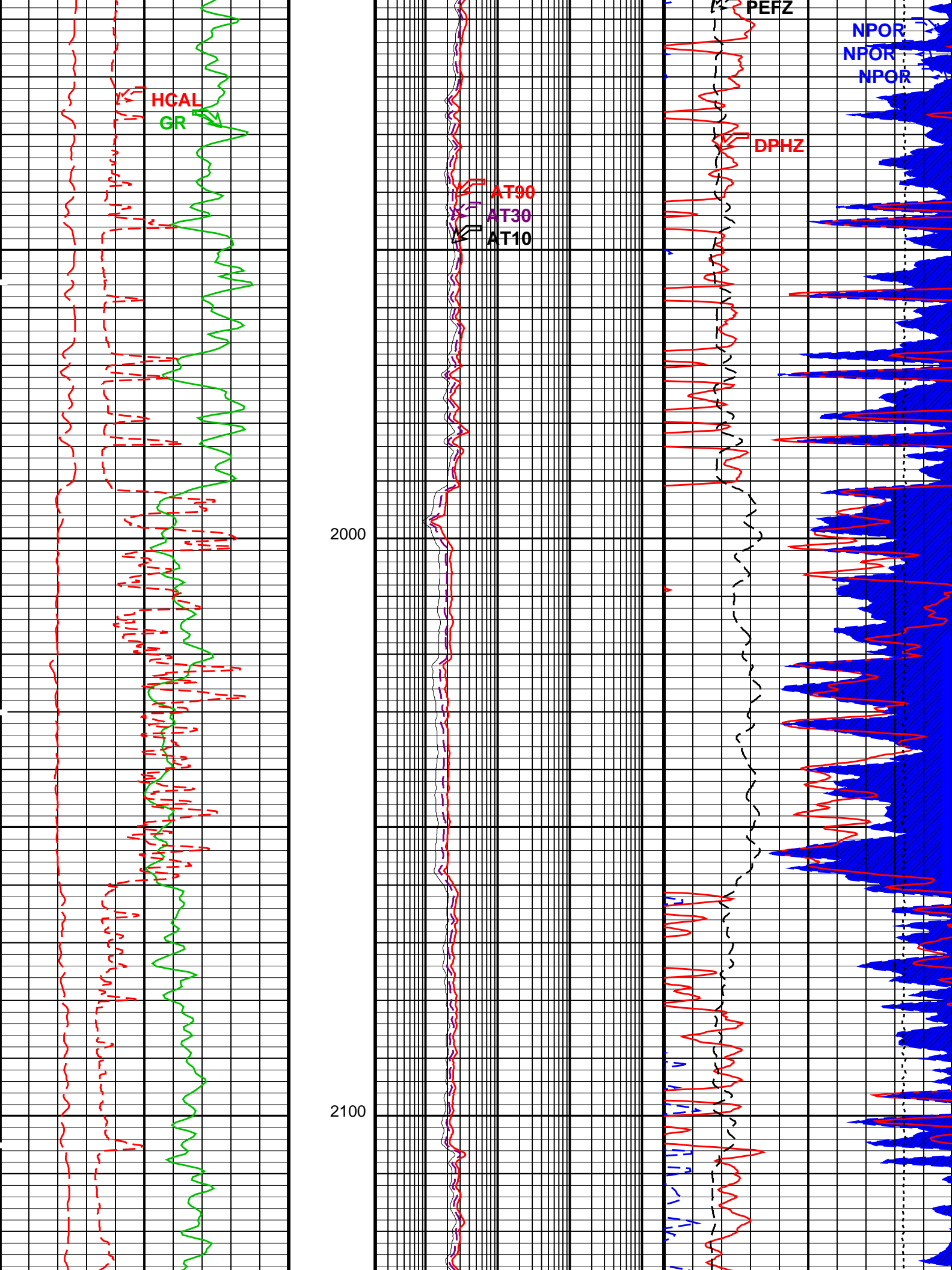
PIP SUMMARY

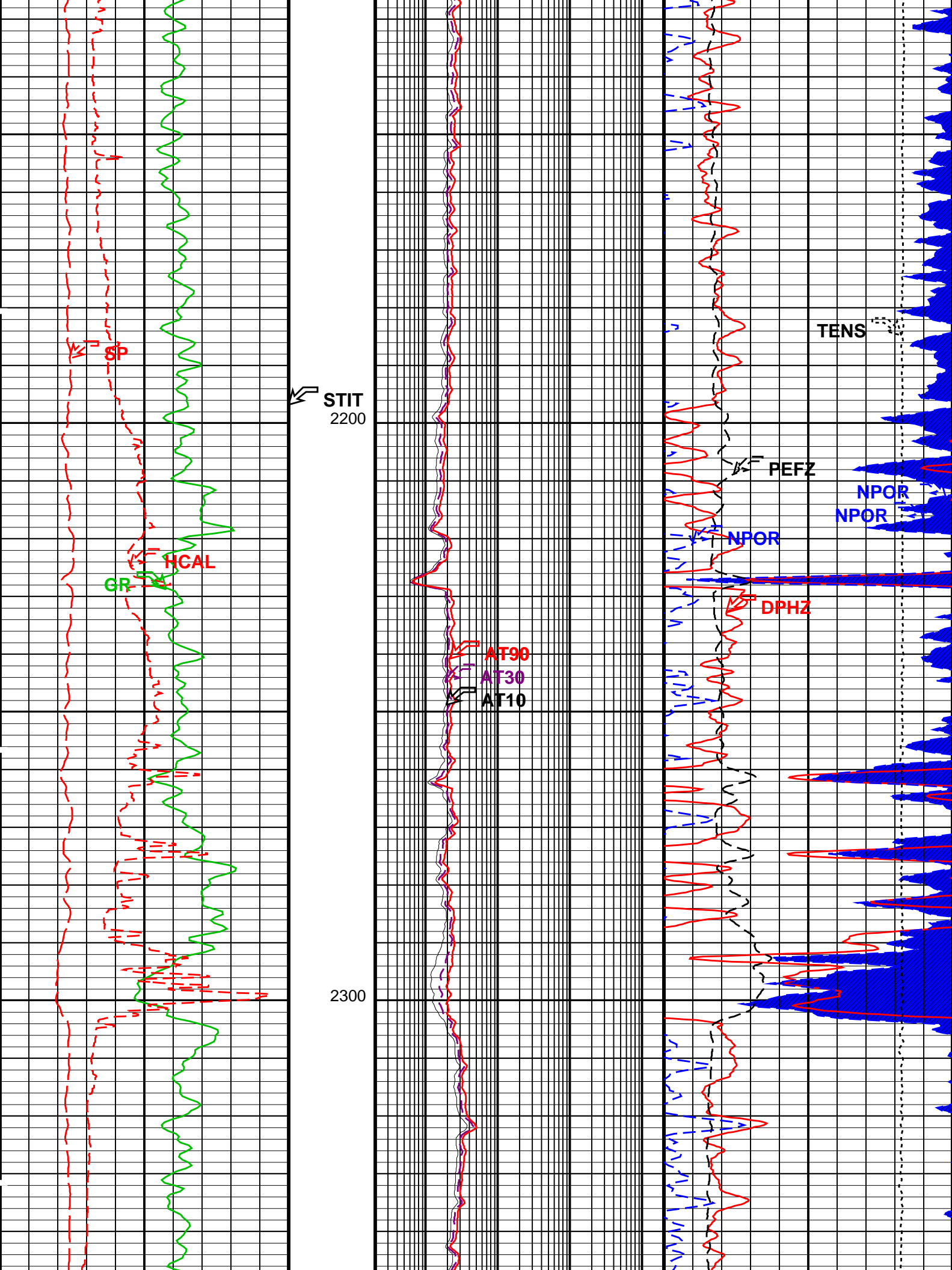
Time Mark Every 60 S

Std. Res. Formation Pe (PEFZ)	
0	10
Alpha Processed Neutron Porosity (NPOR)	
0.3	-0.1

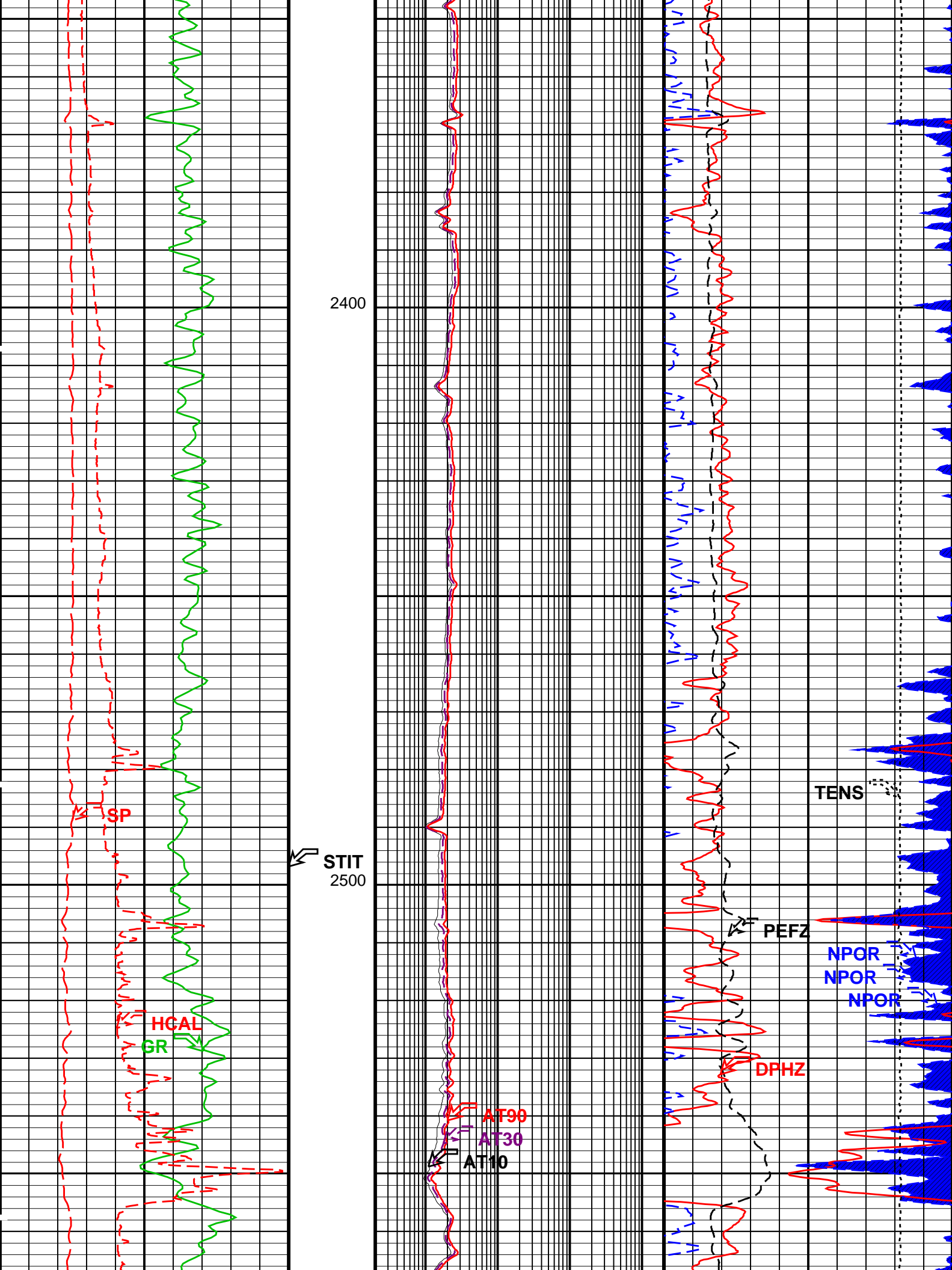


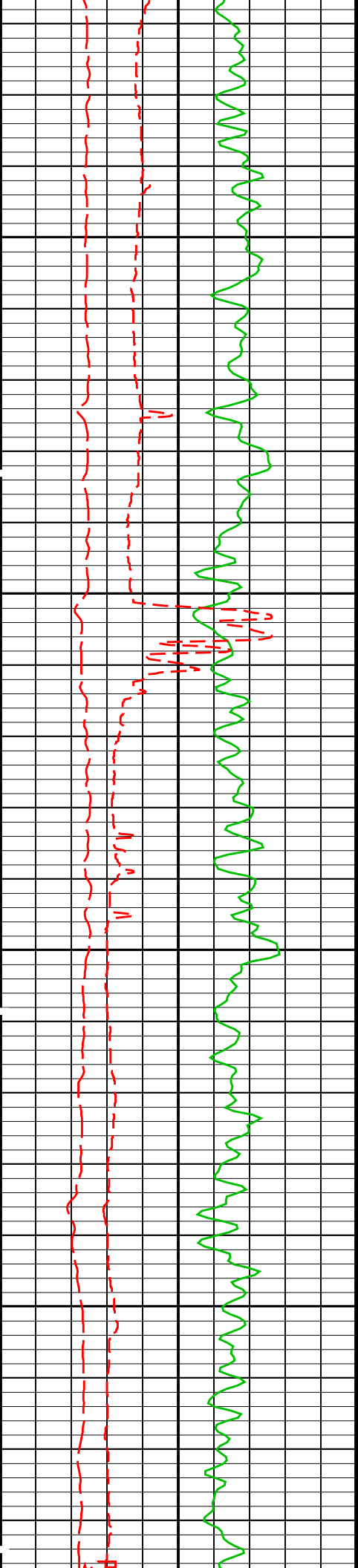






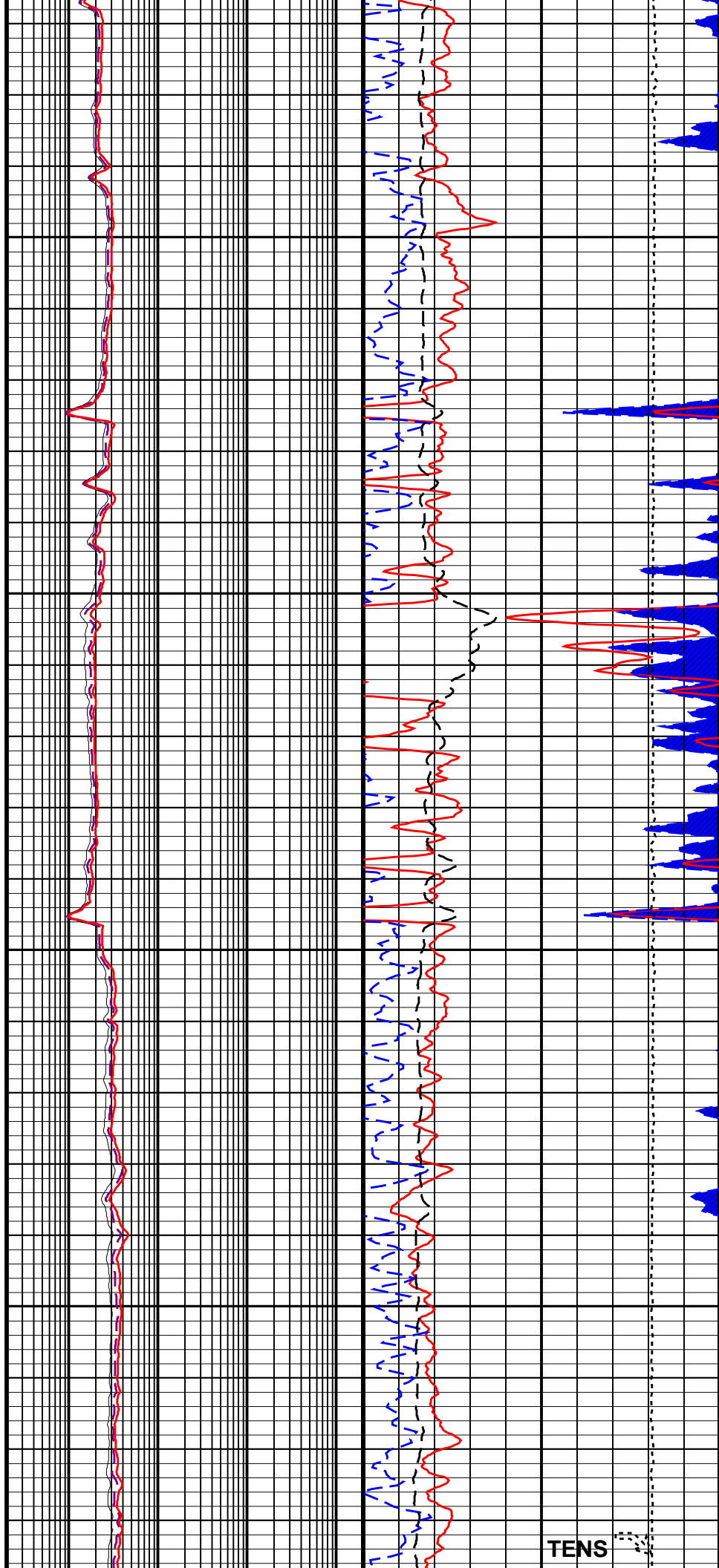


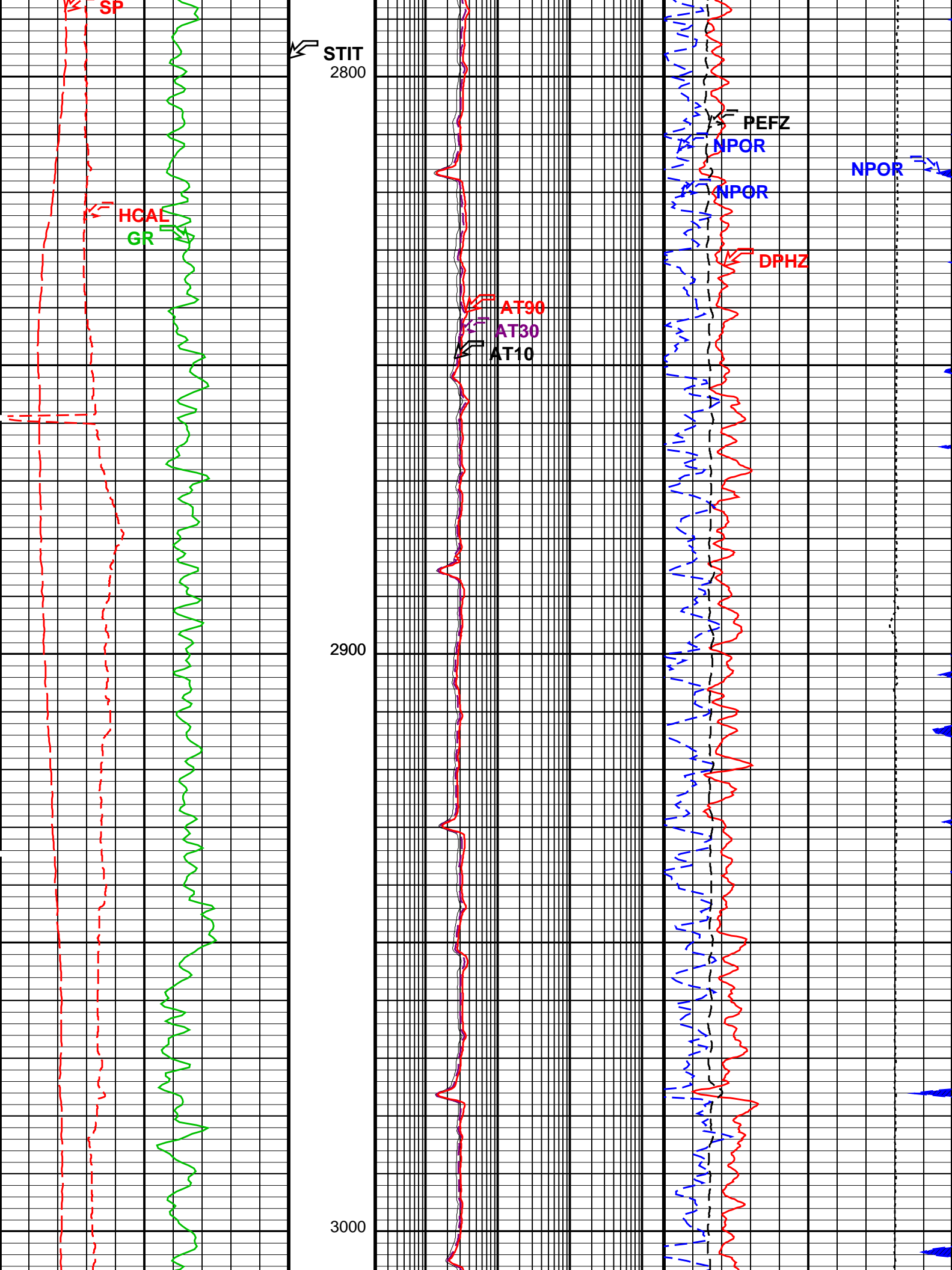


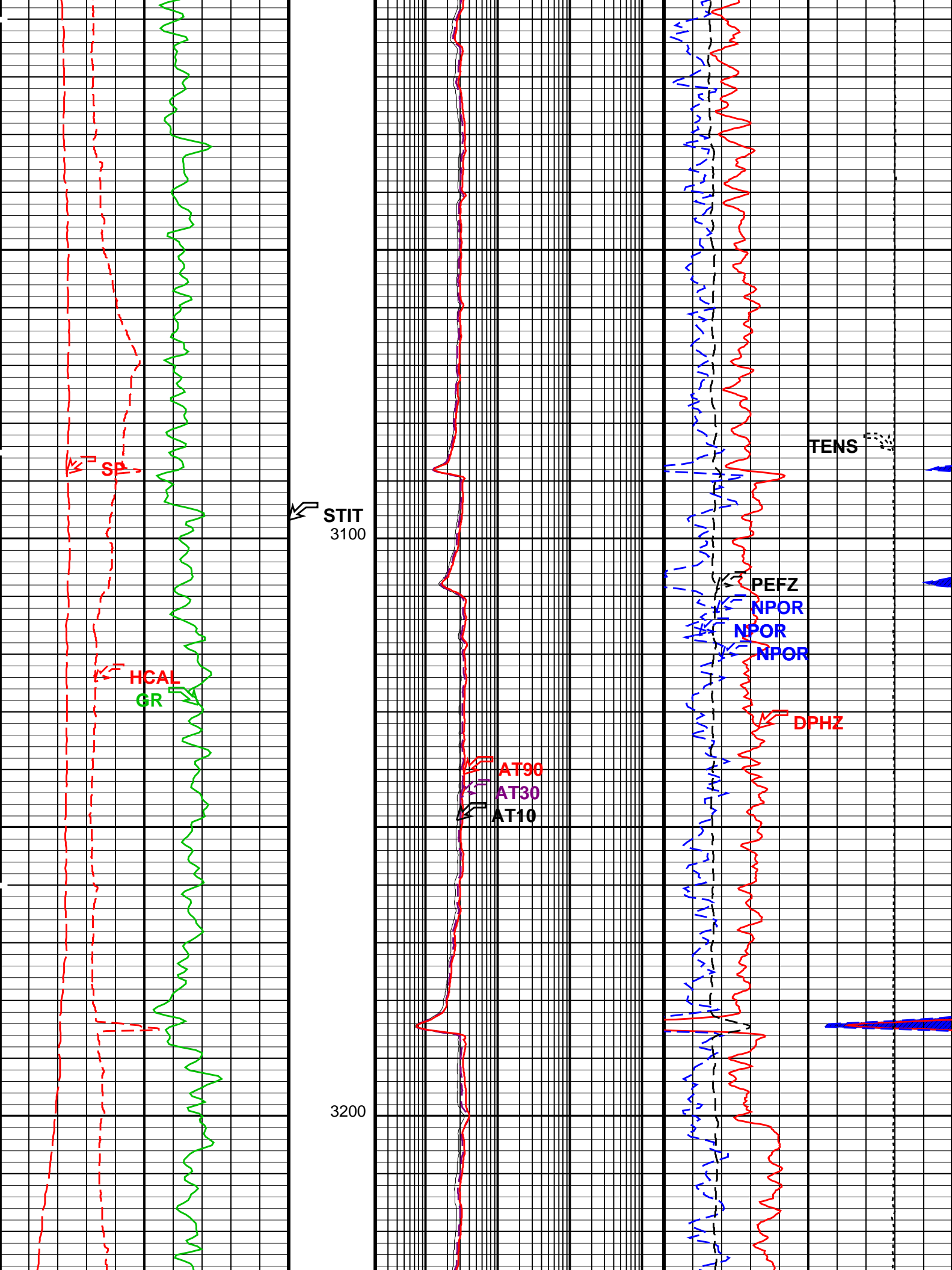


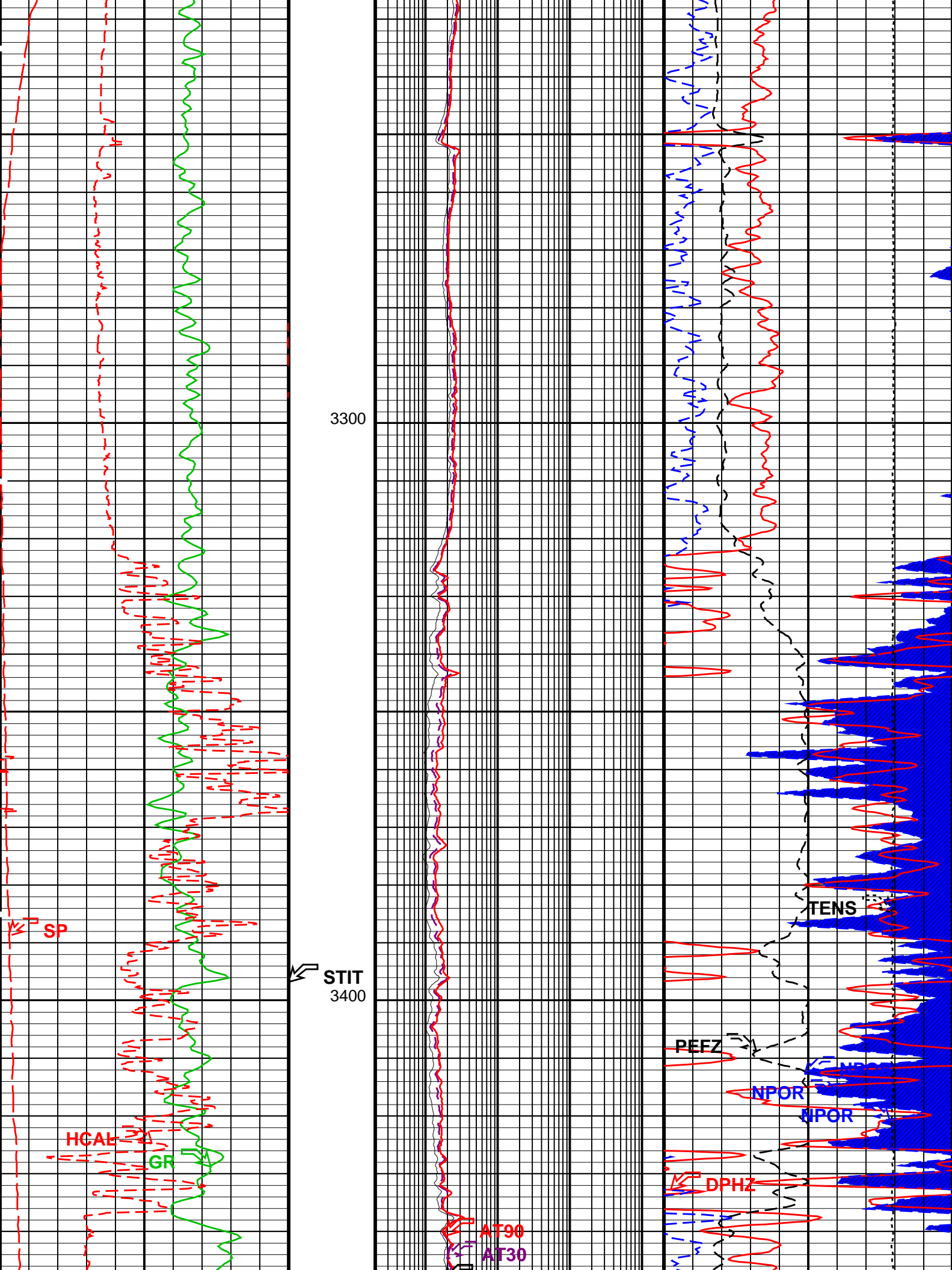
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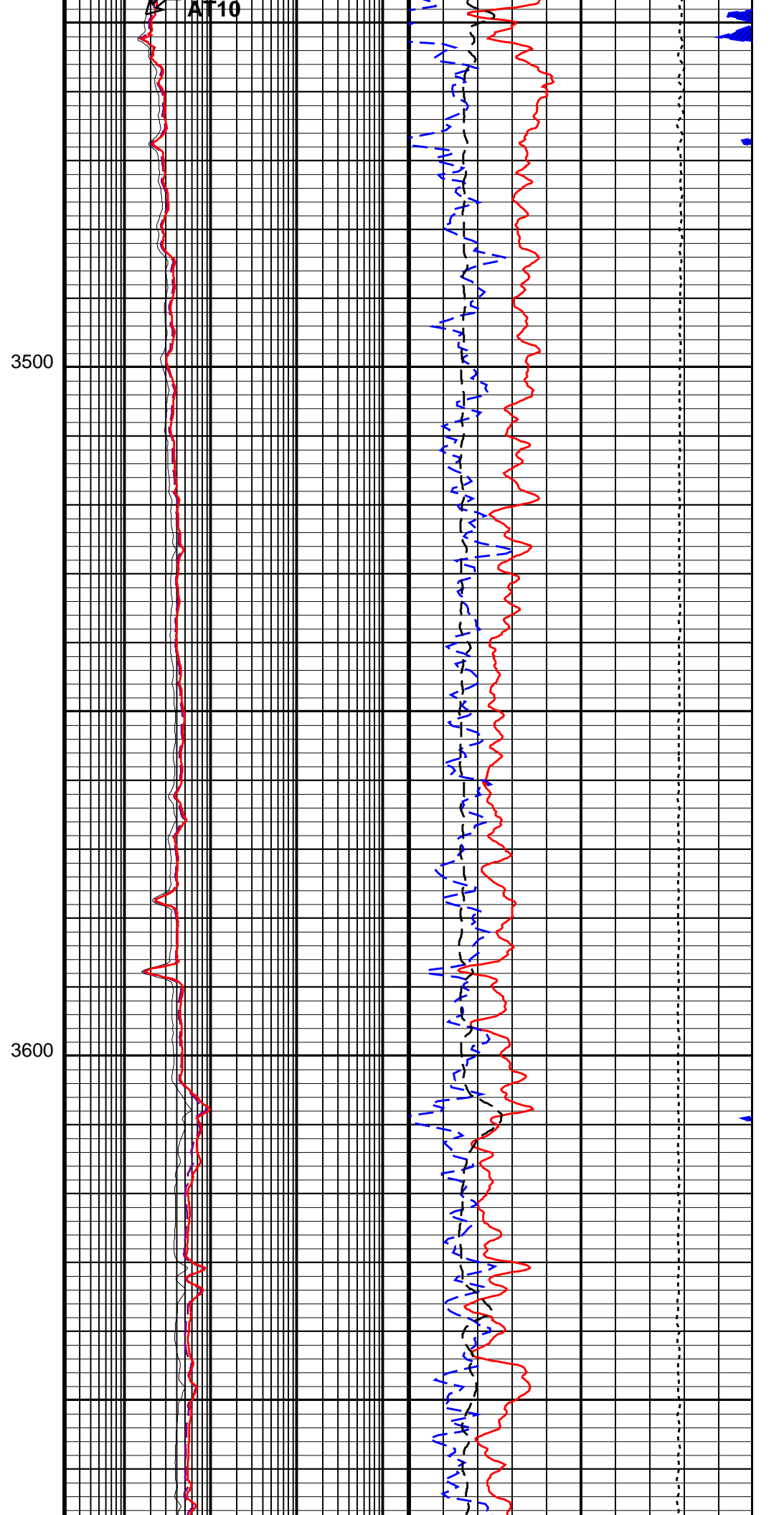
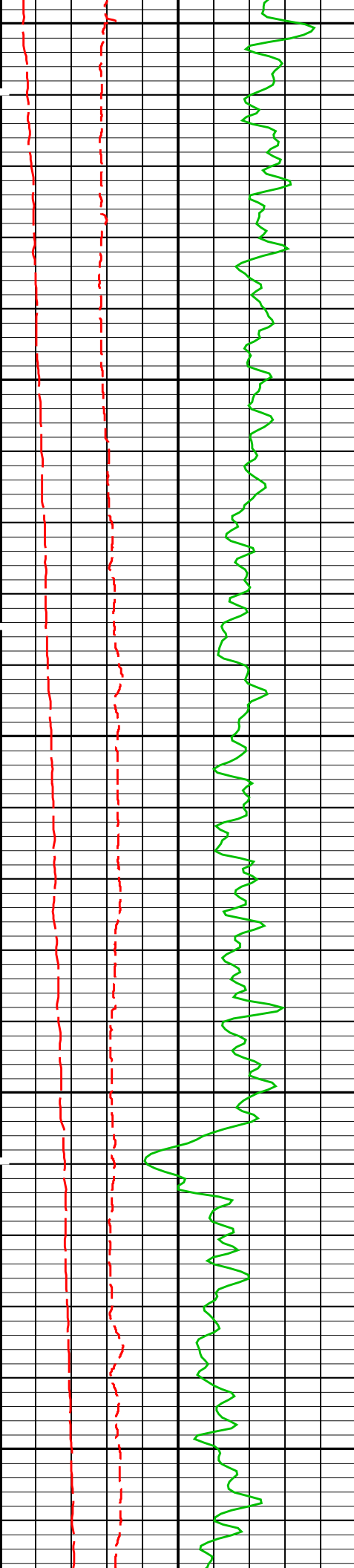
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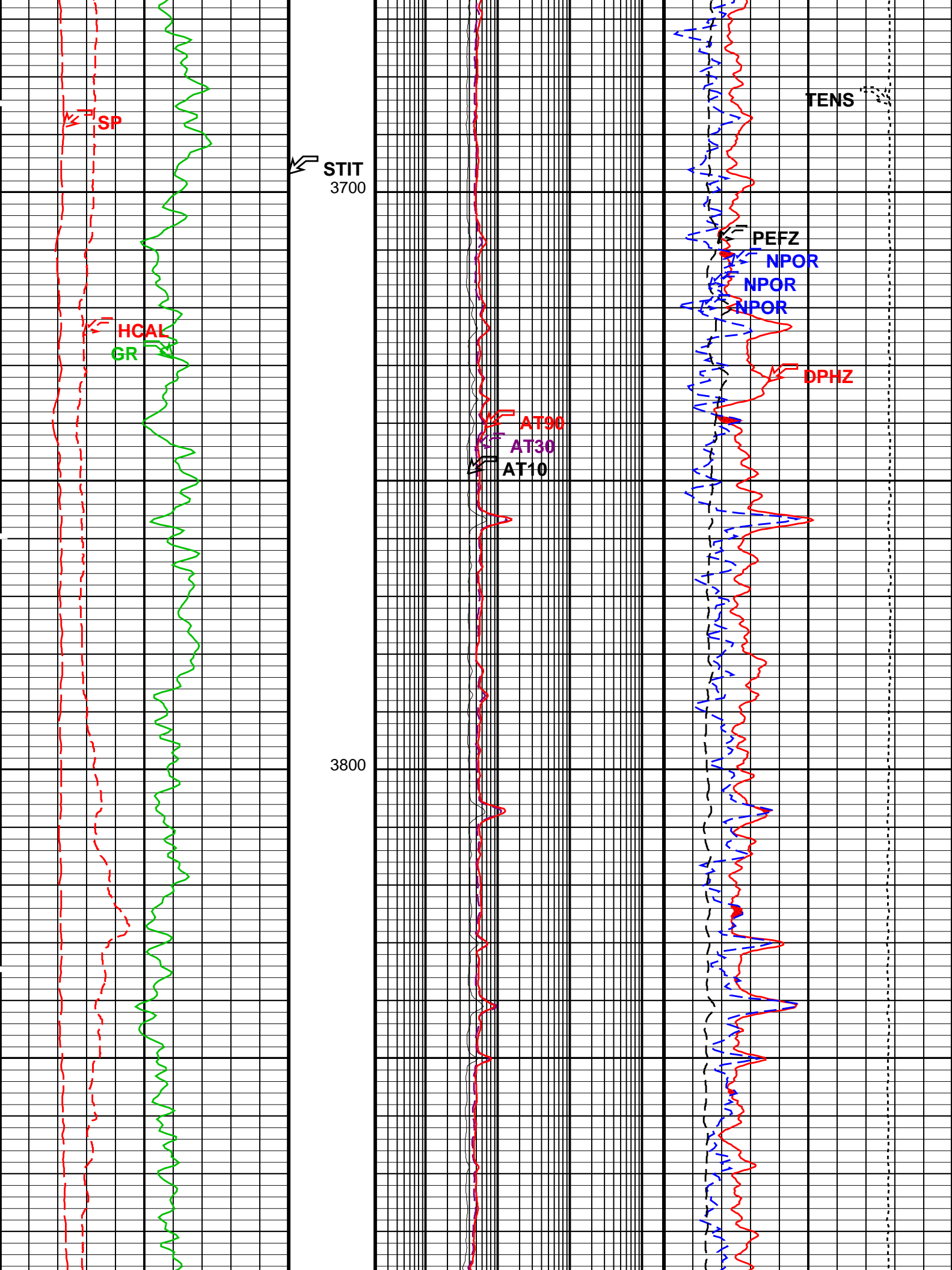


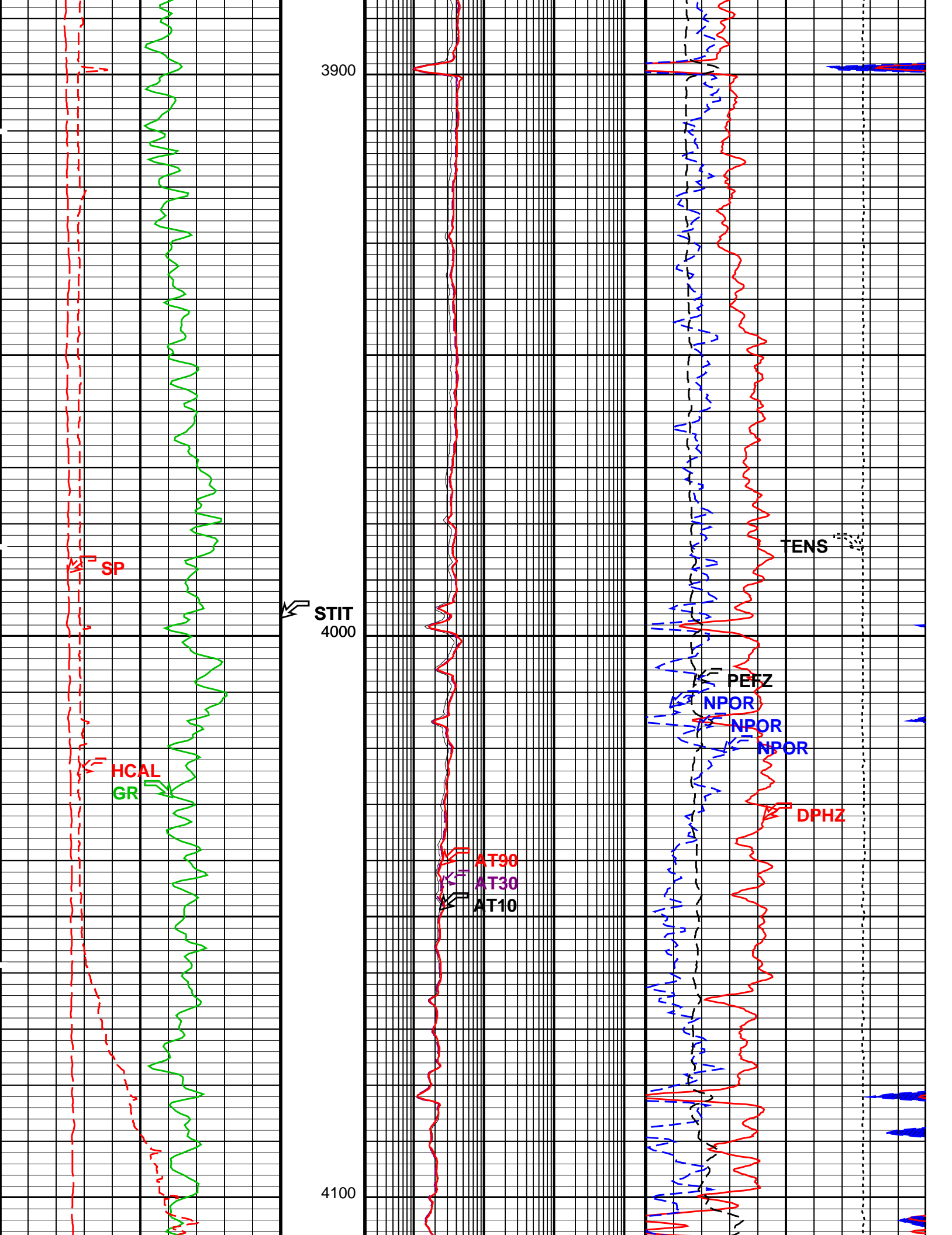




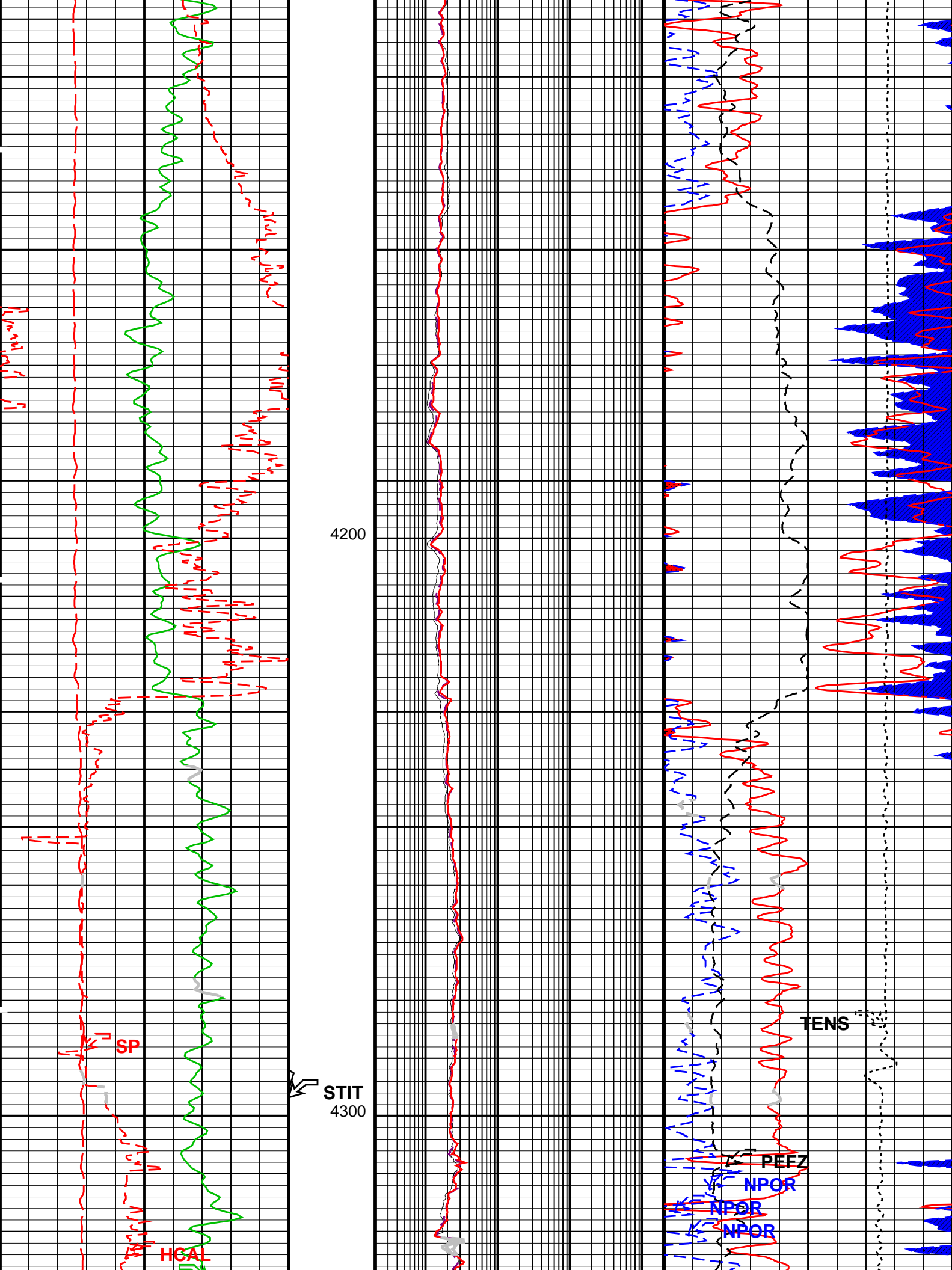


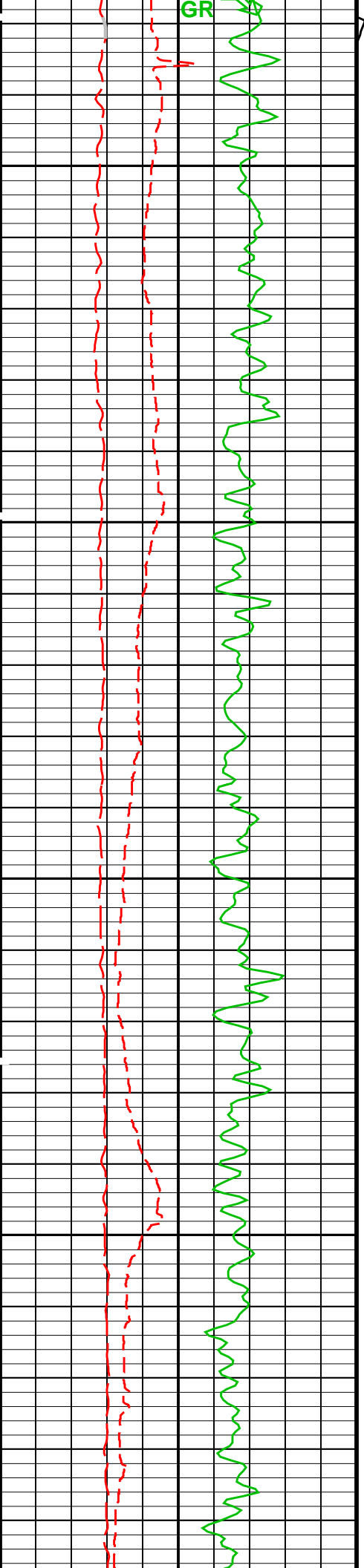






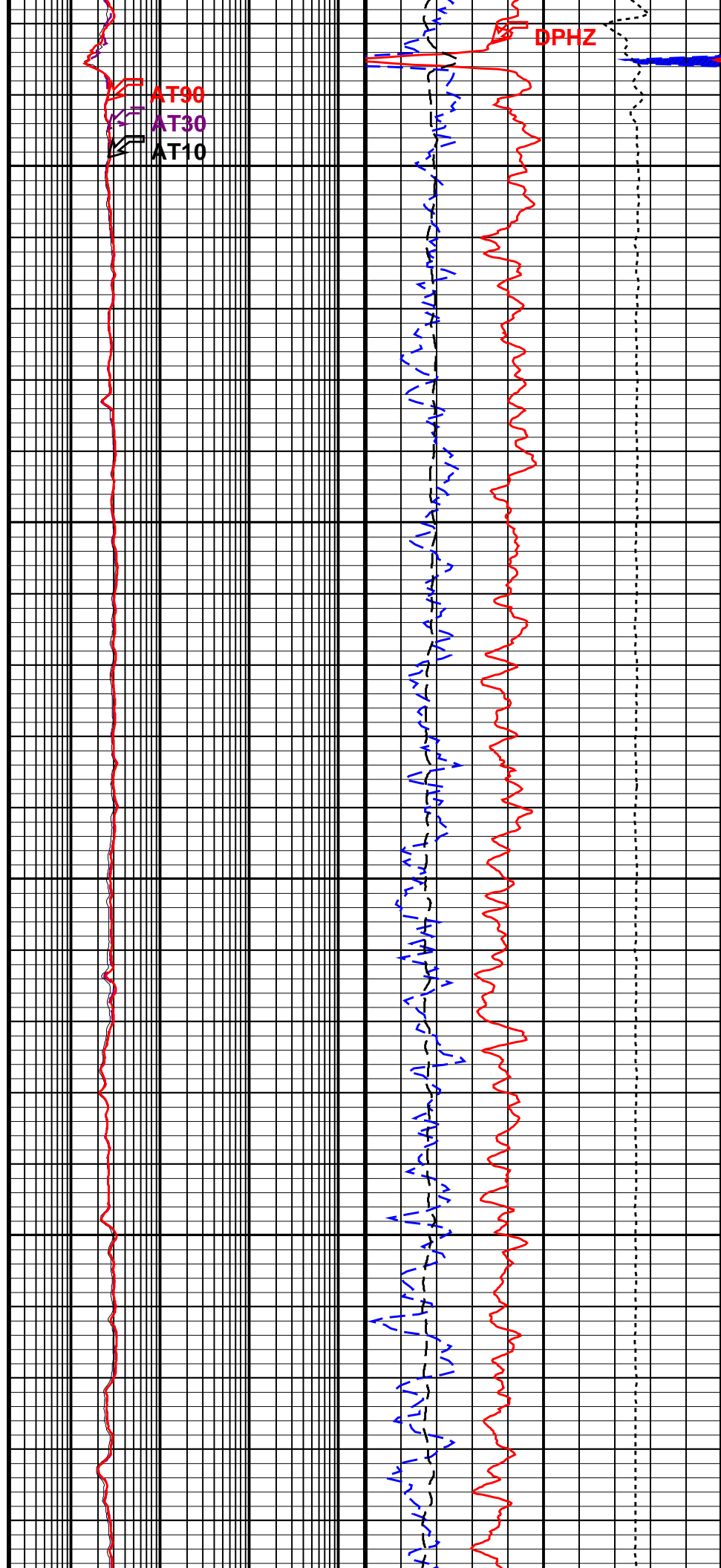


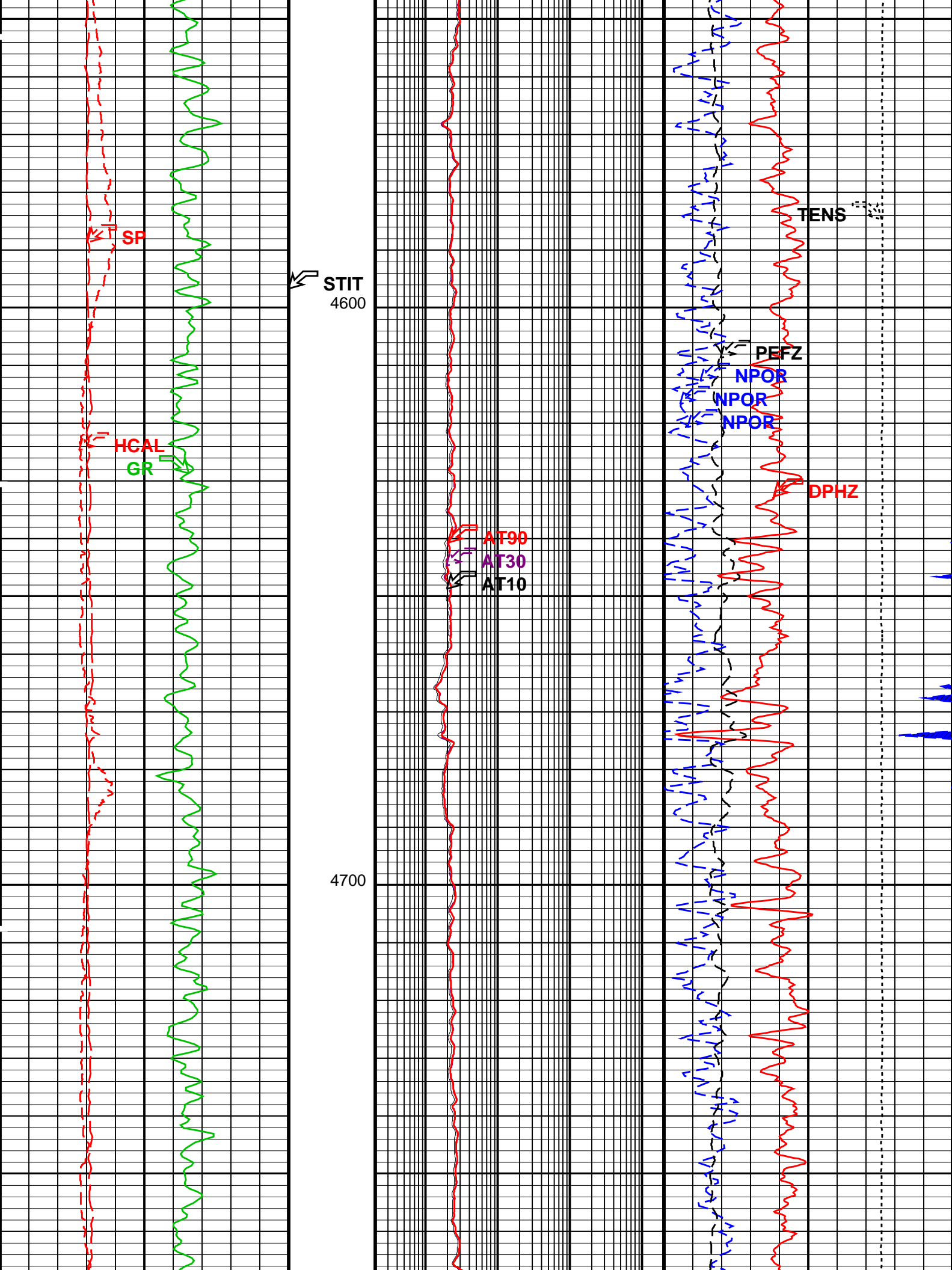


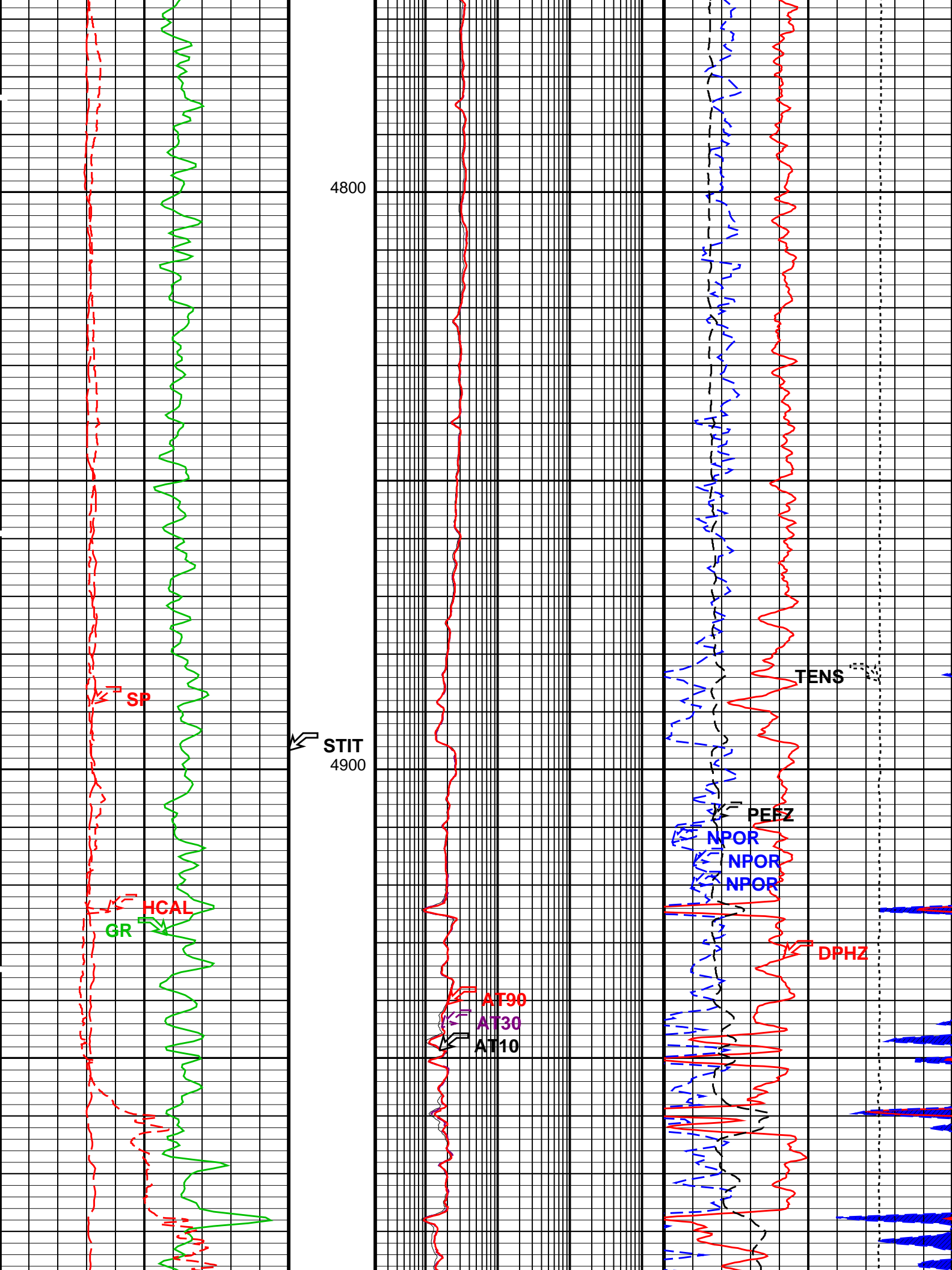


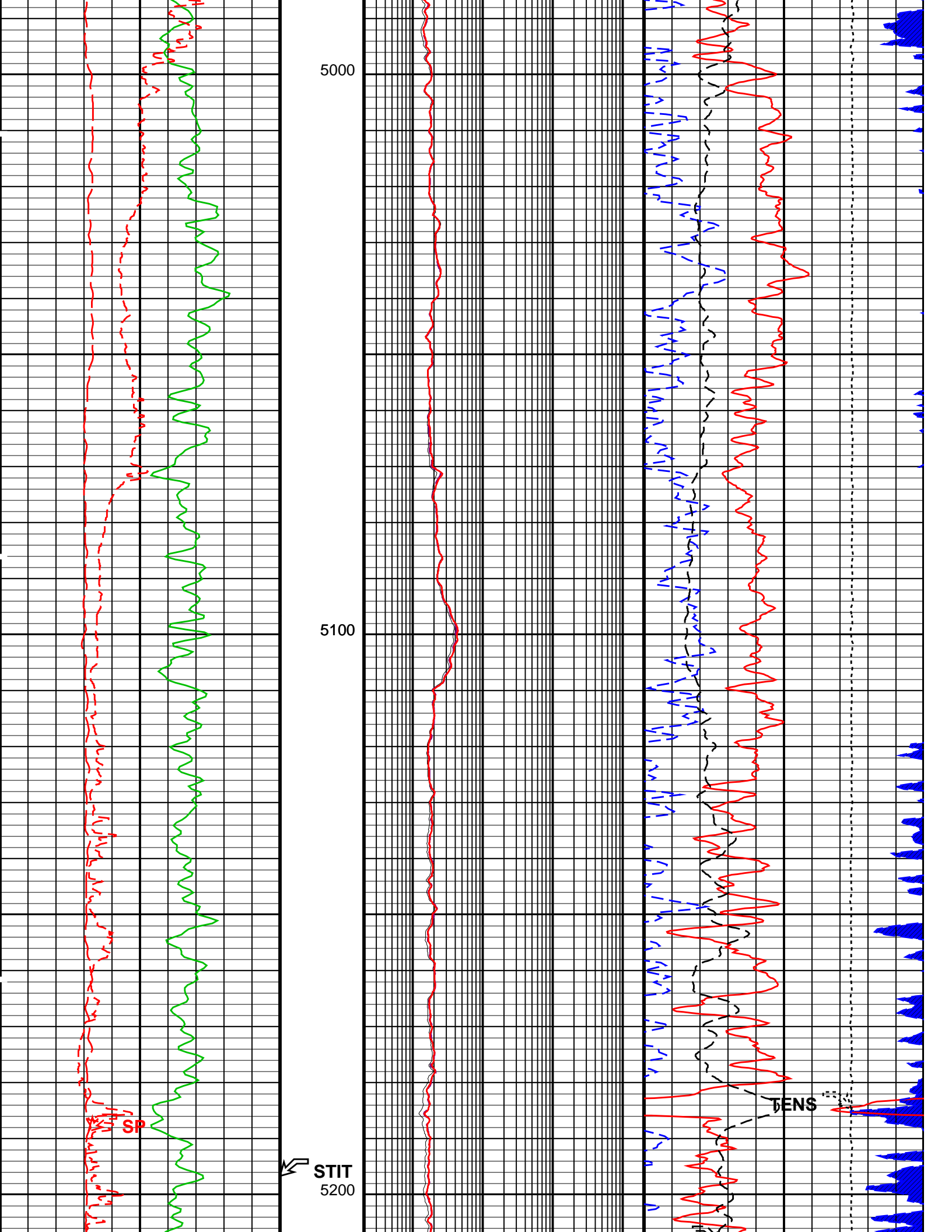
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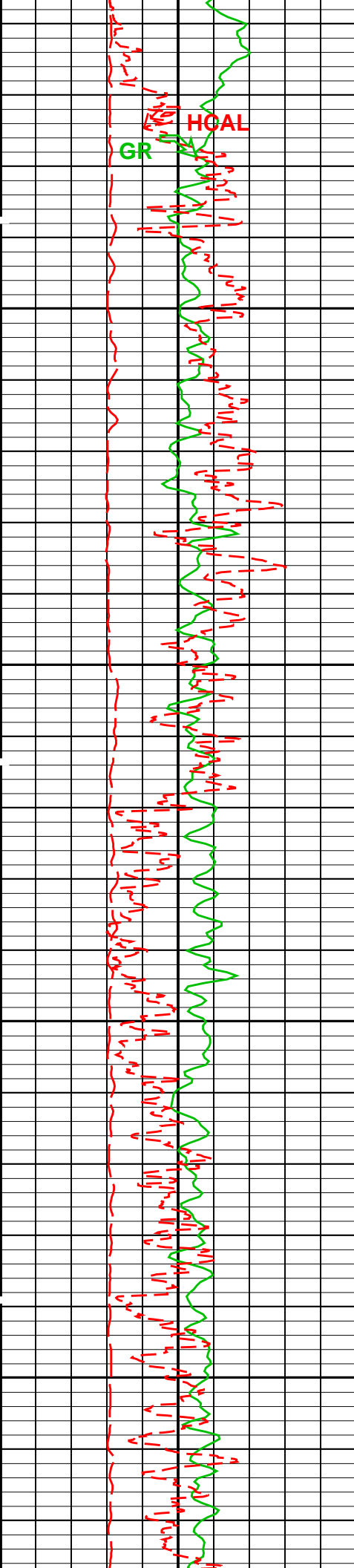
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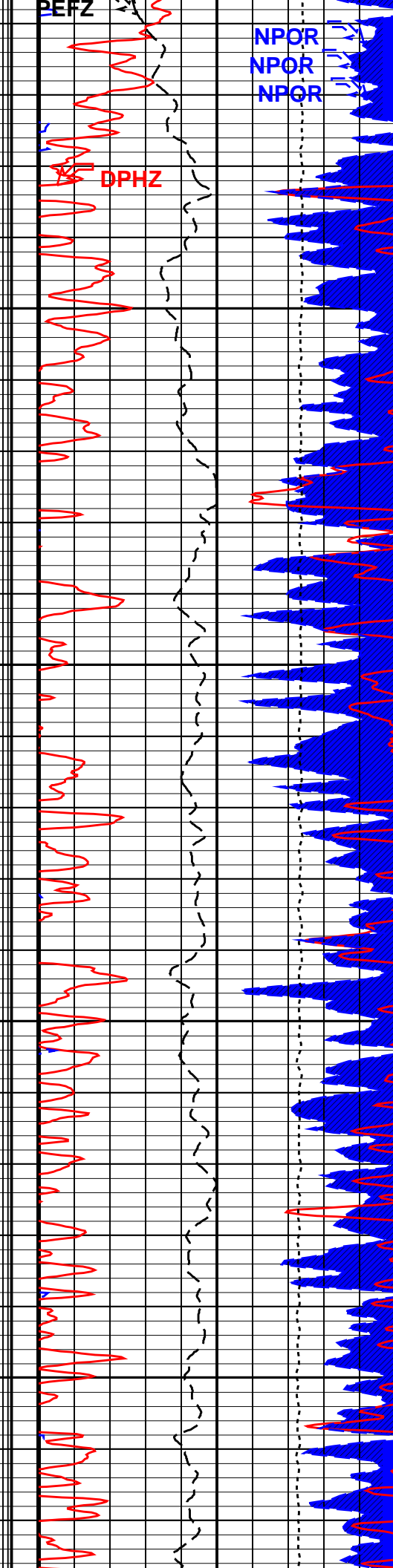
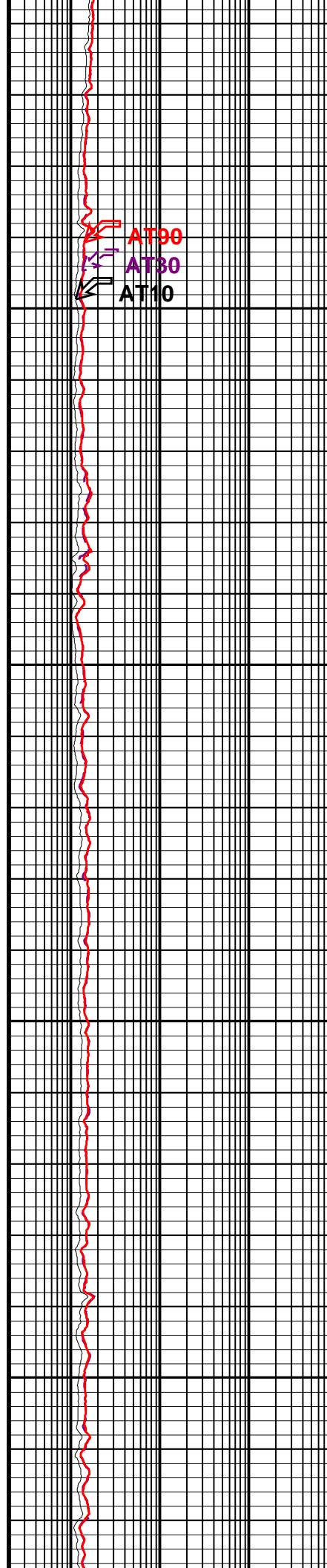


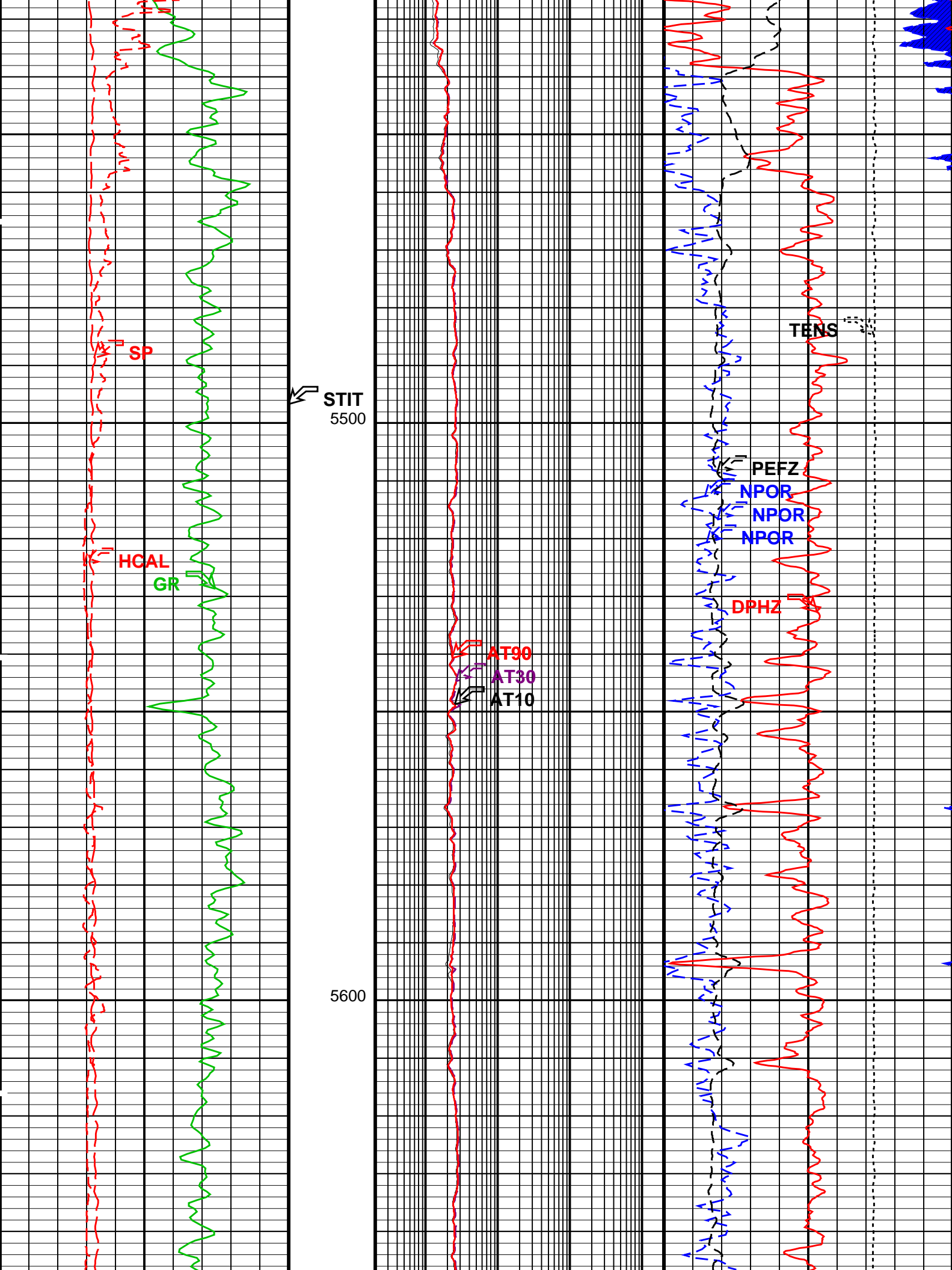


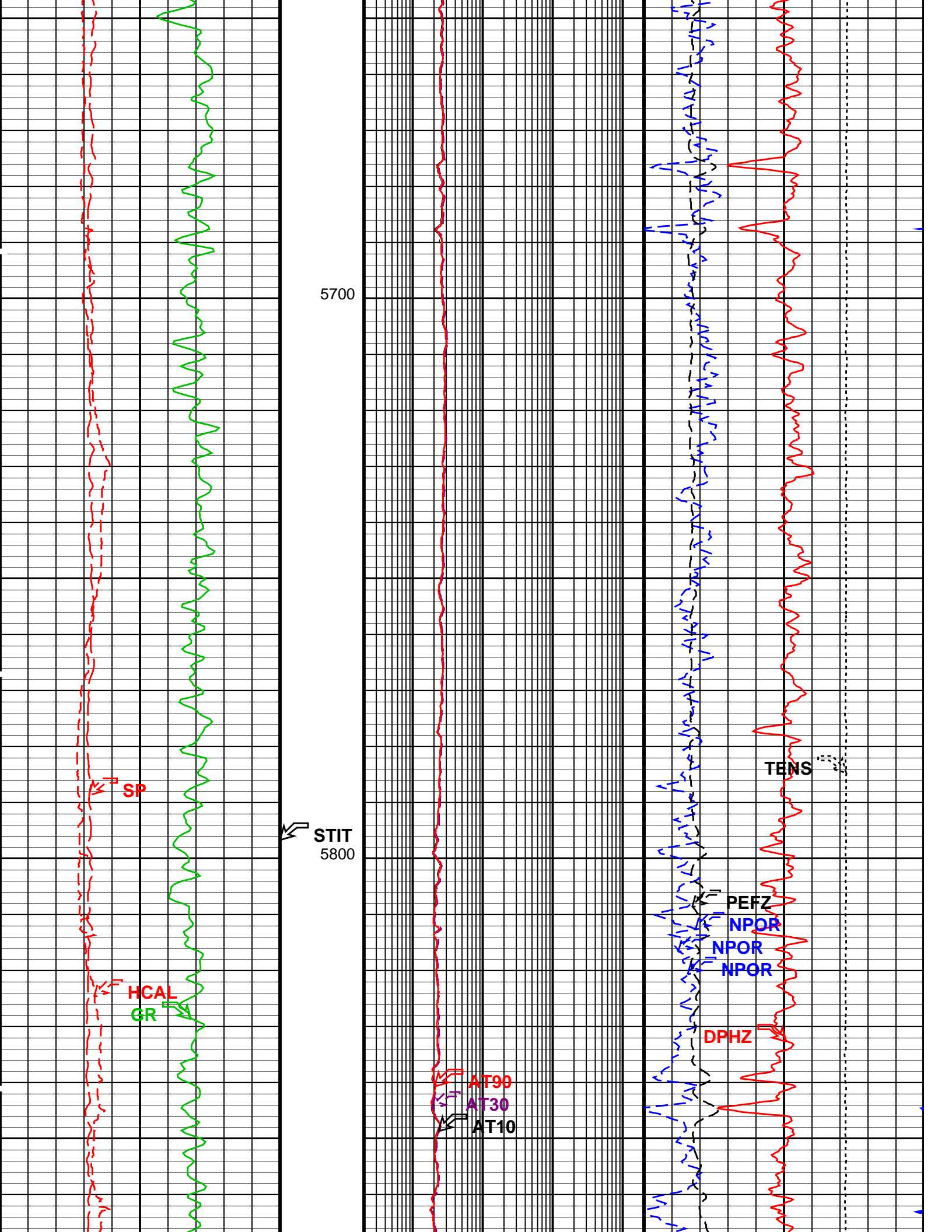


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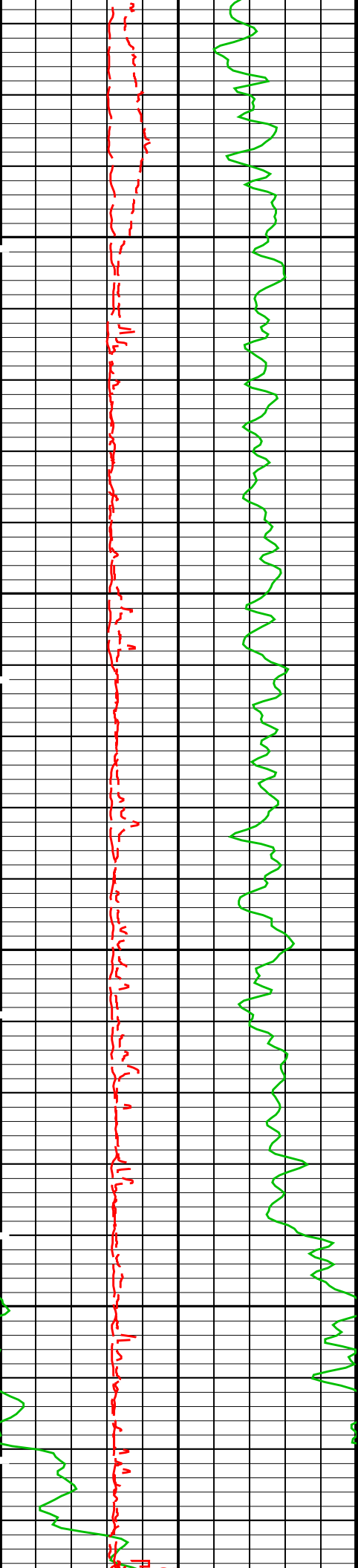
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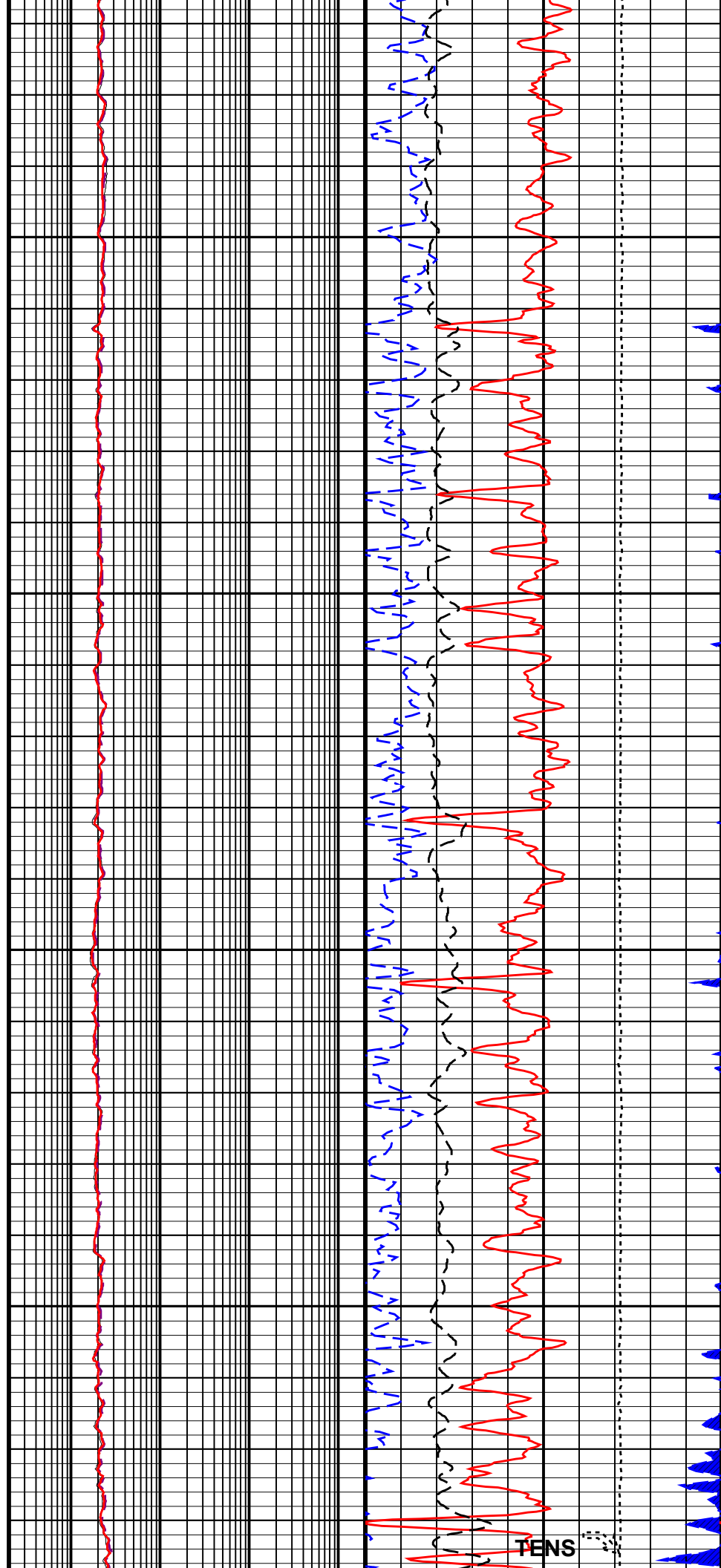




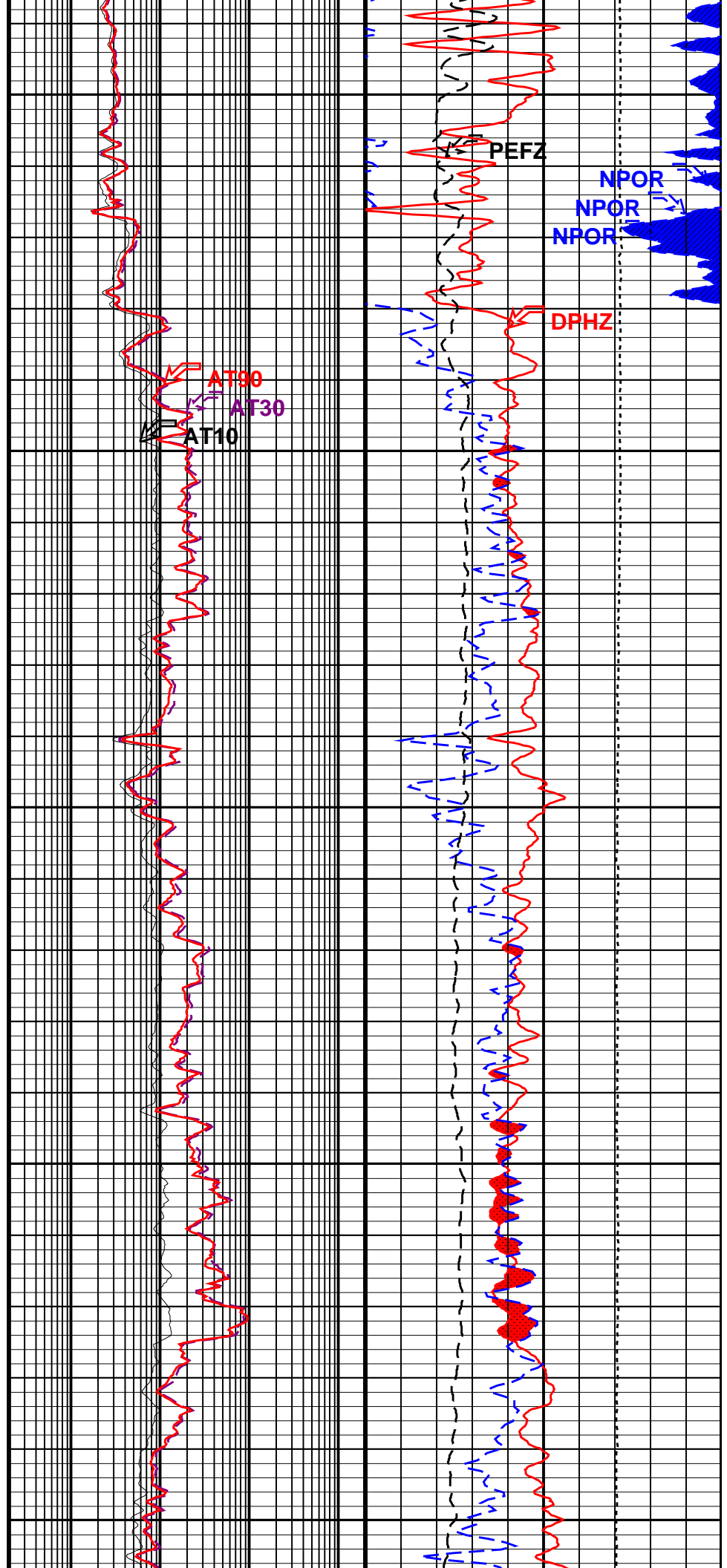
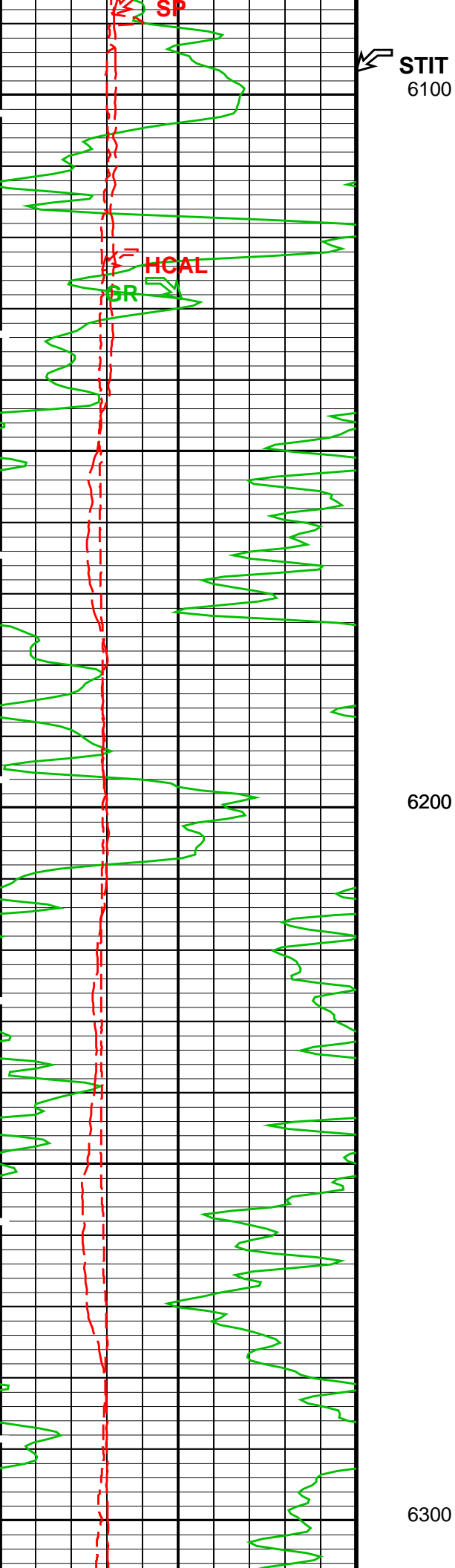


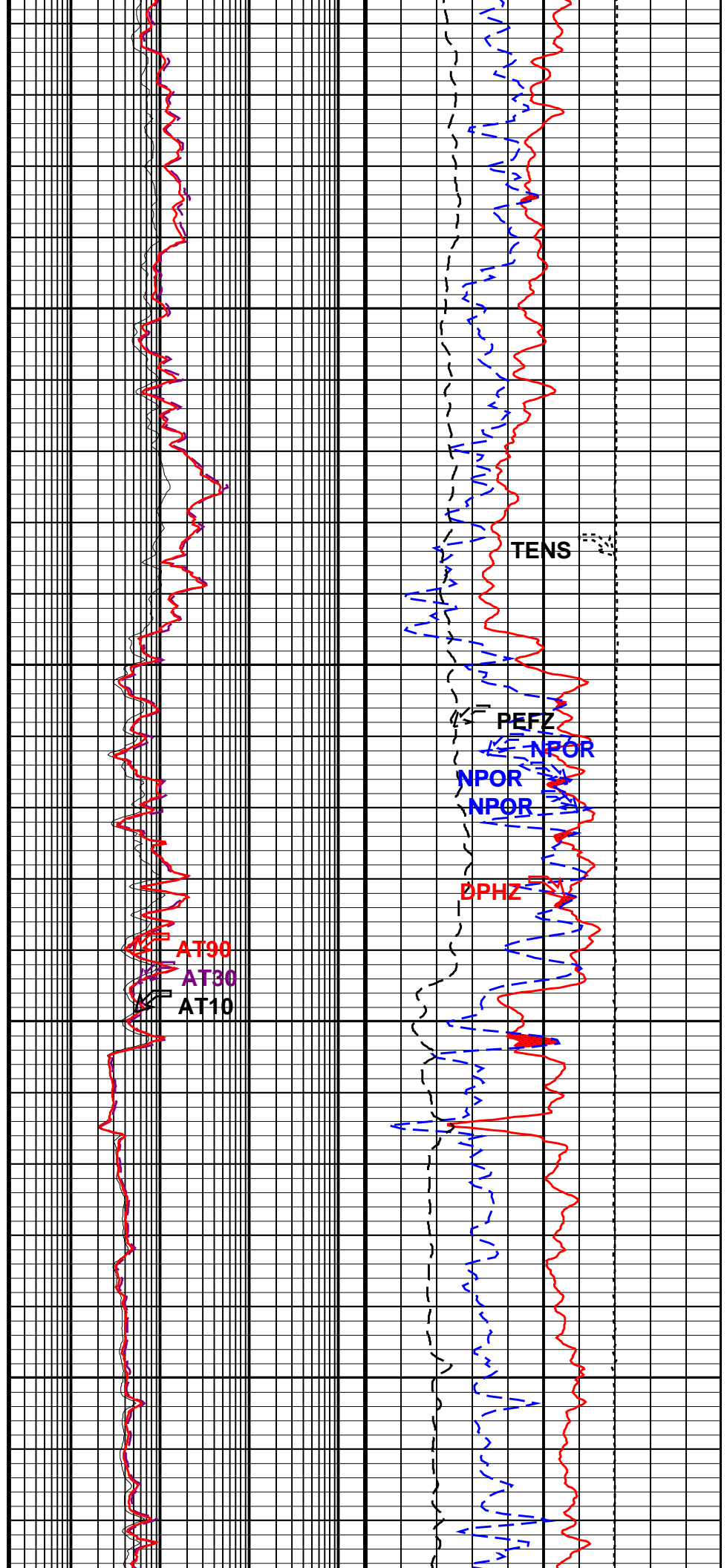
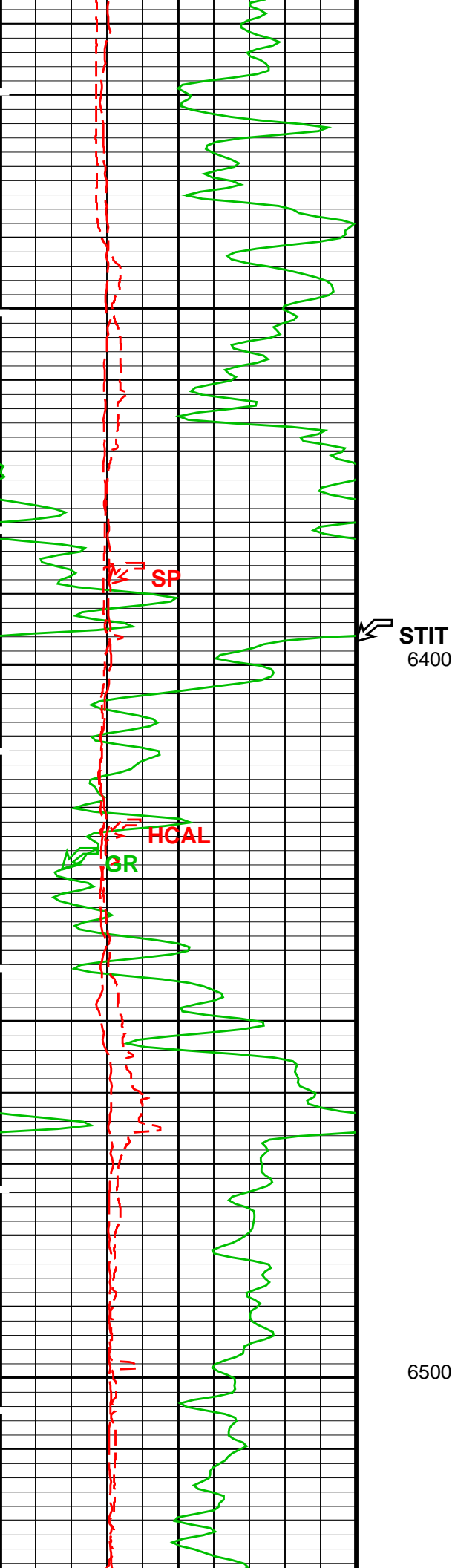
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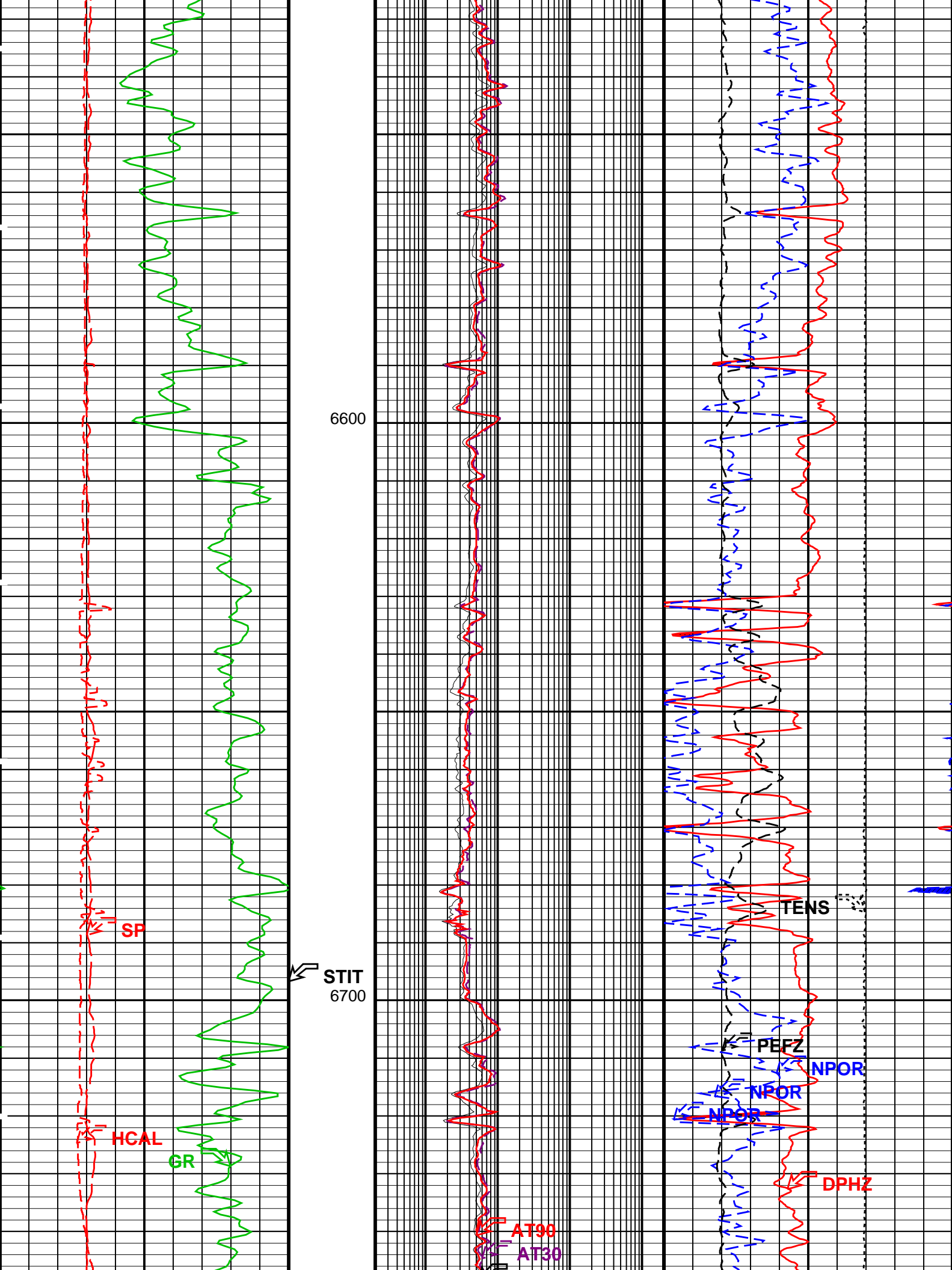
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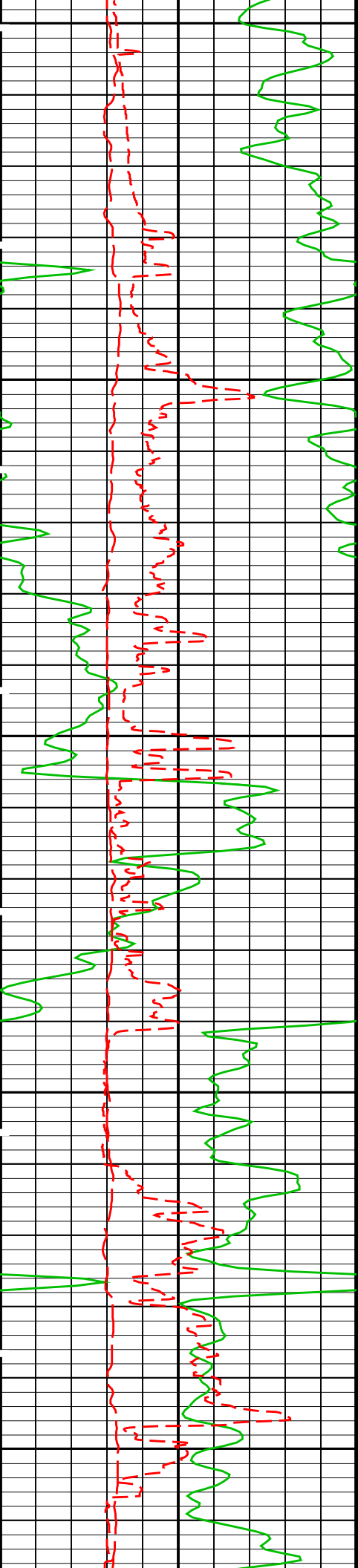


TENS



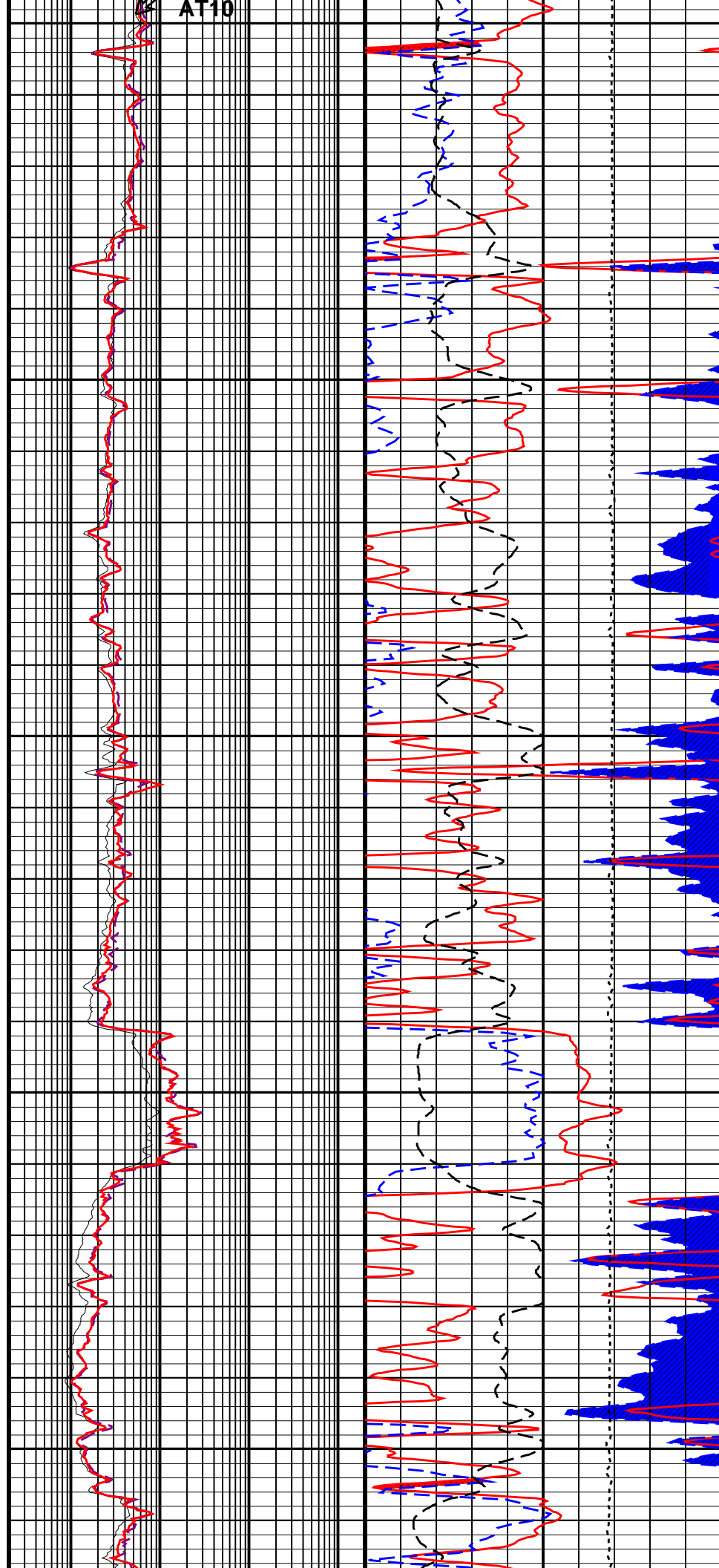




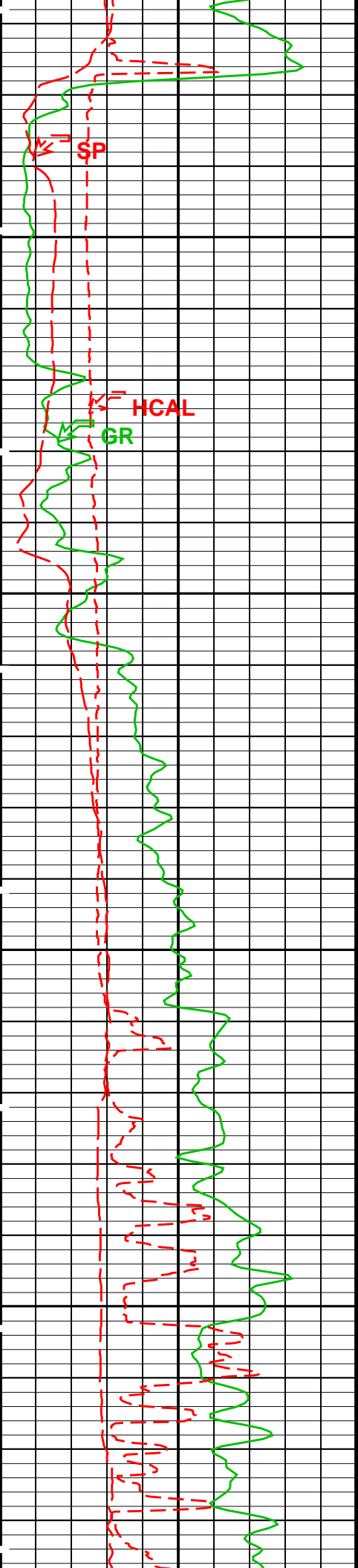


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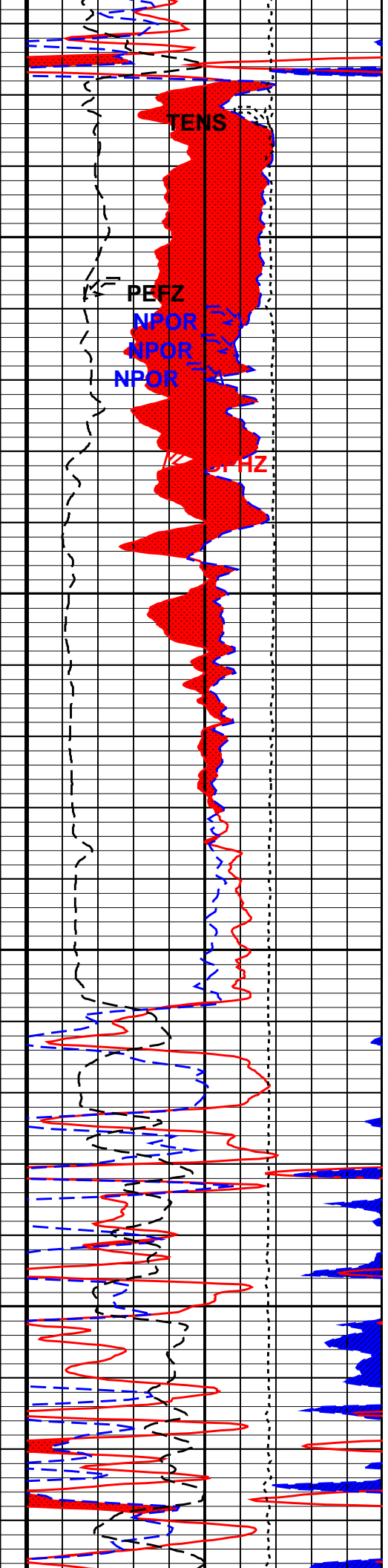
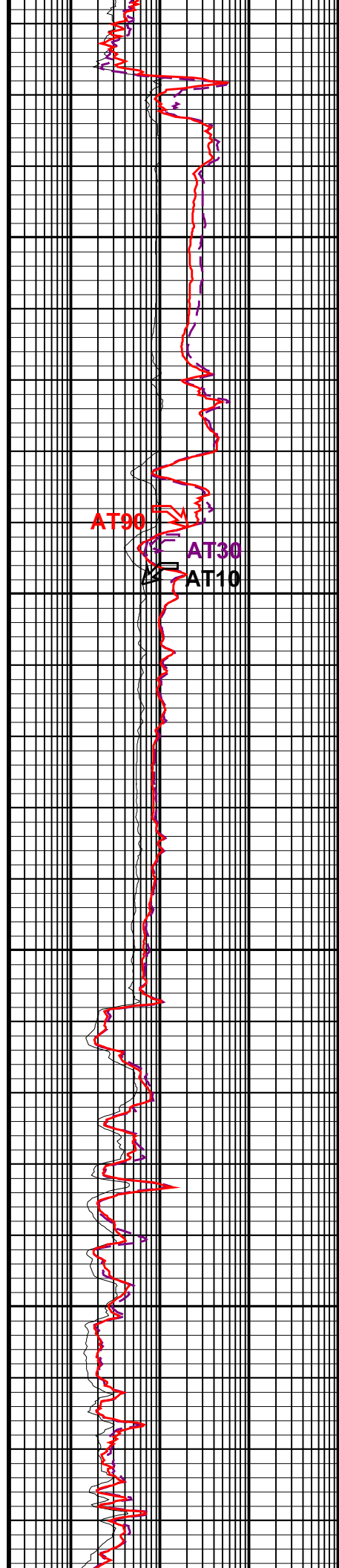


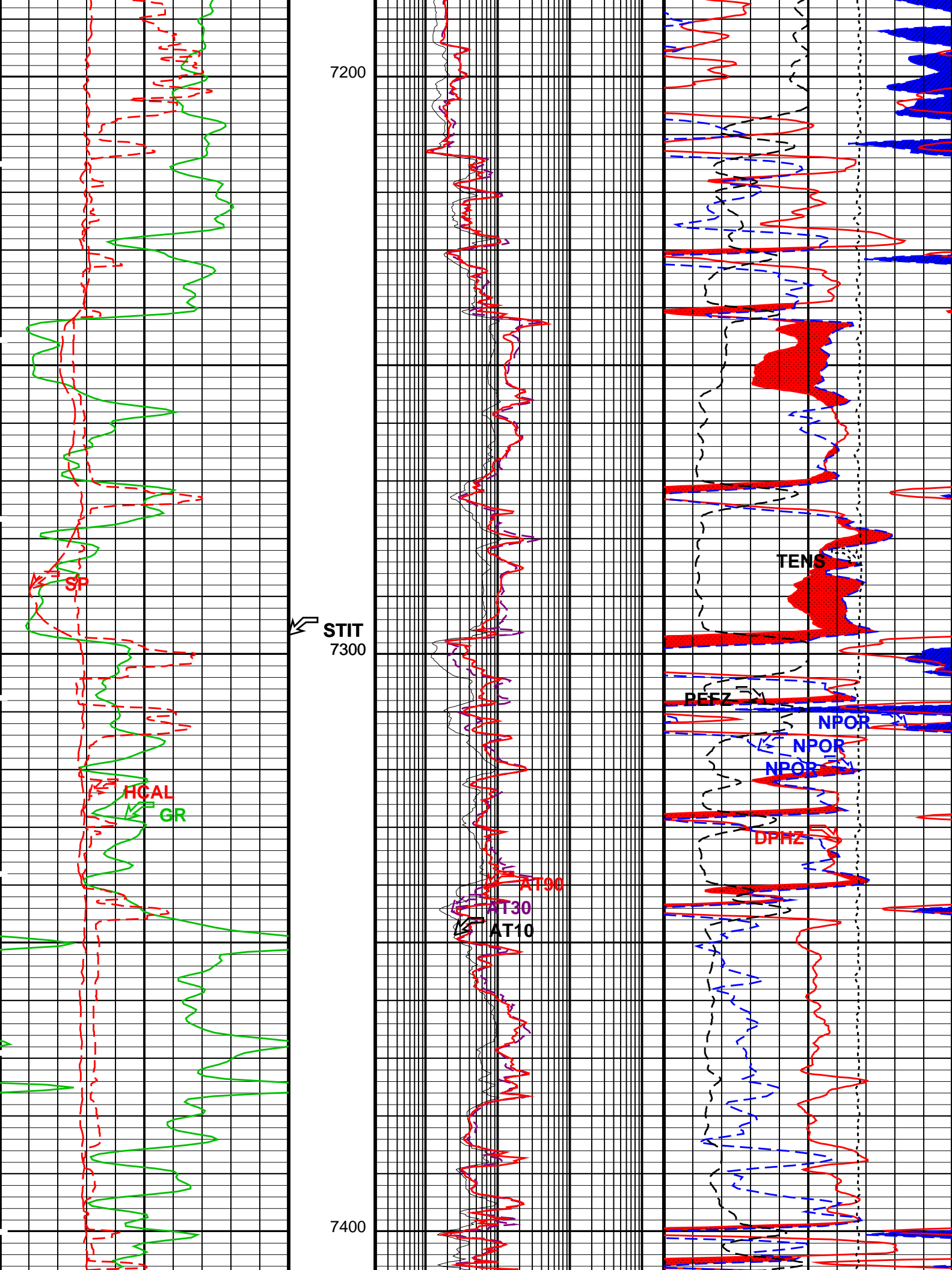
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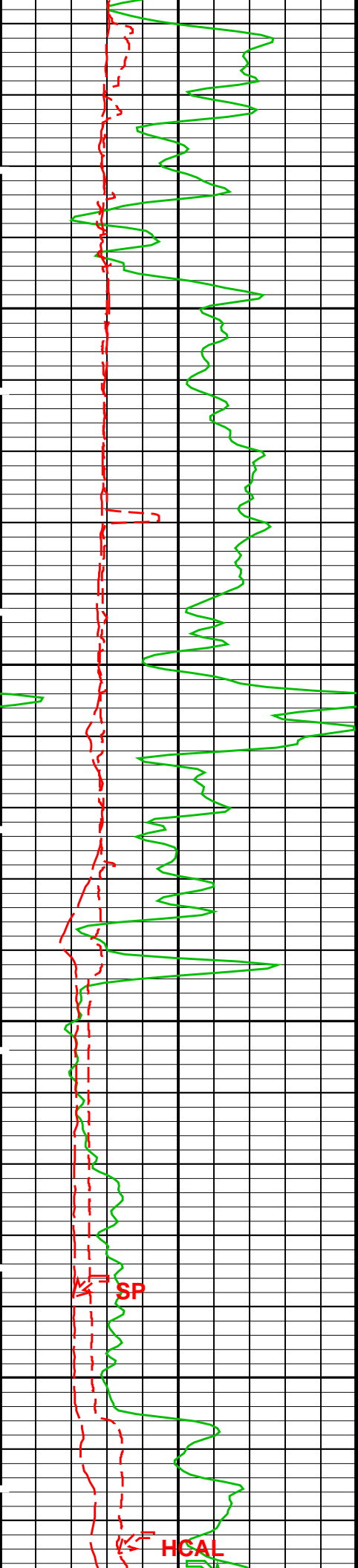


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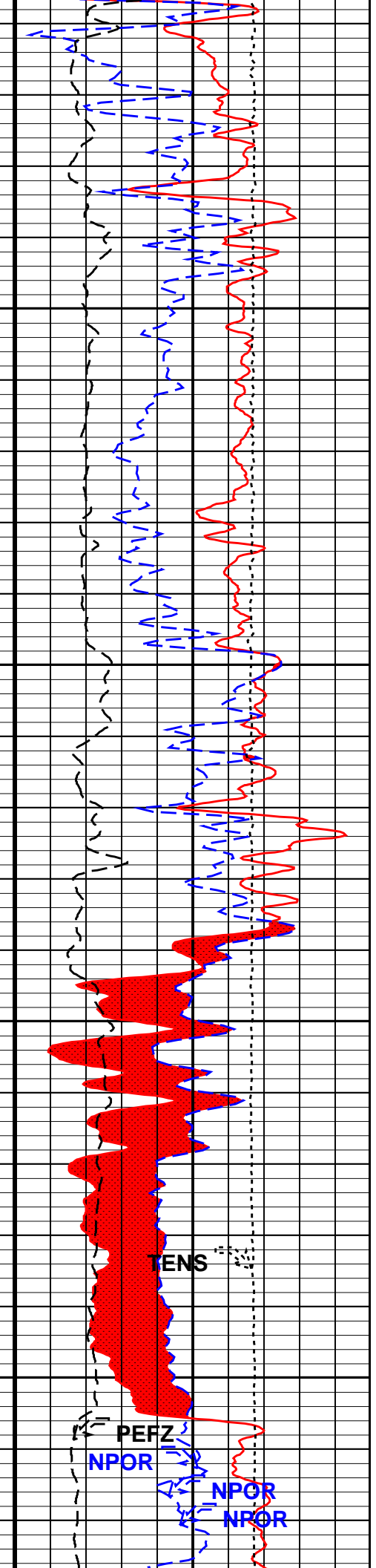
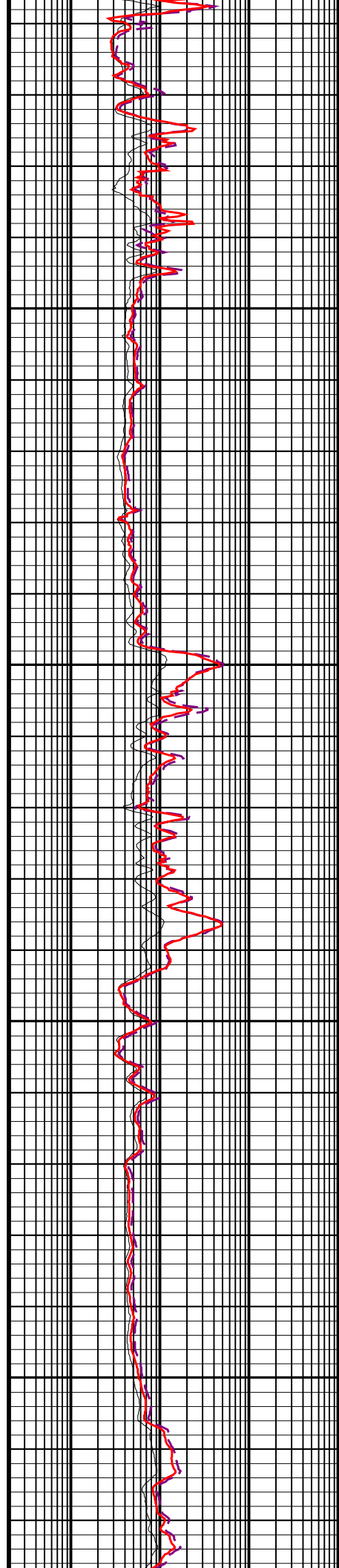




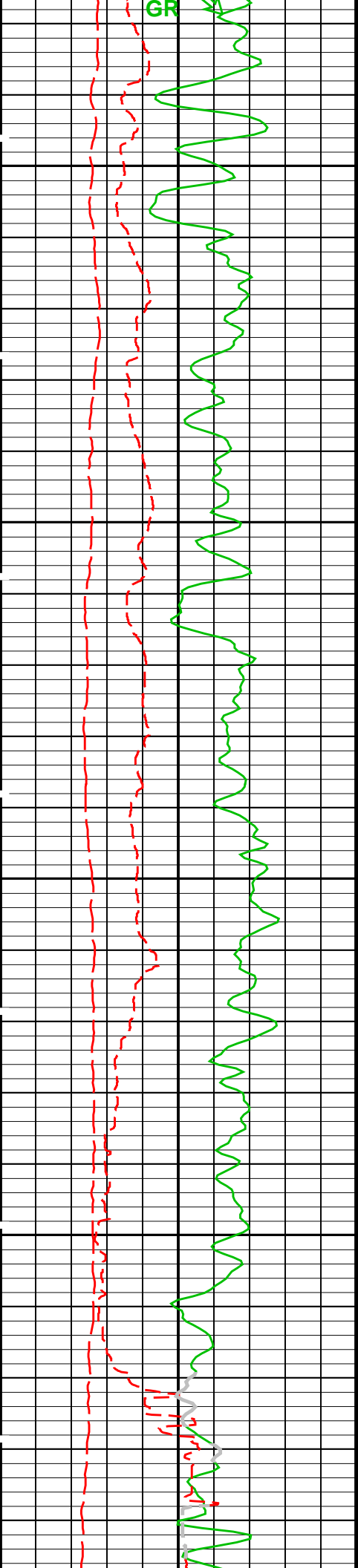


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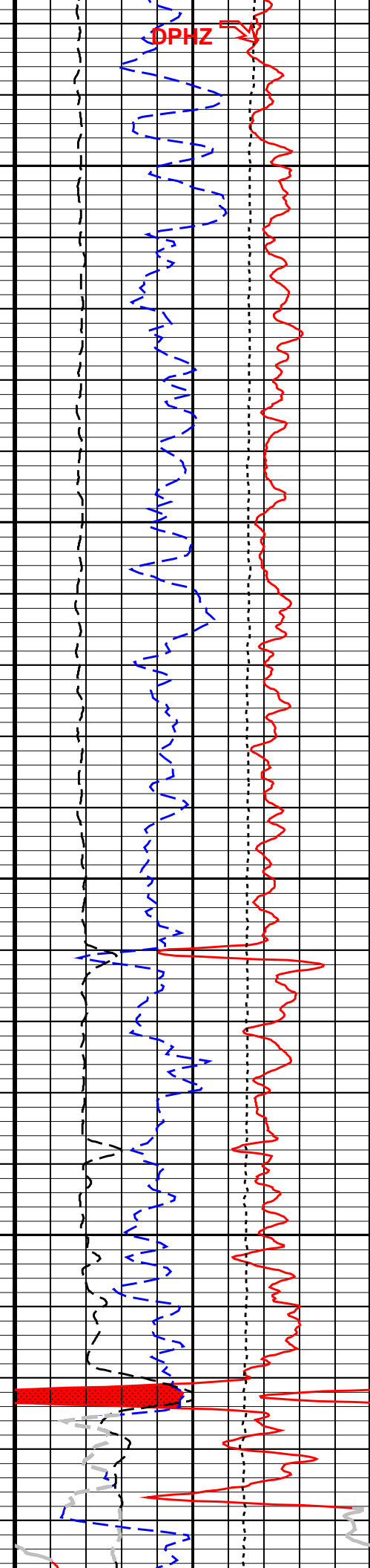
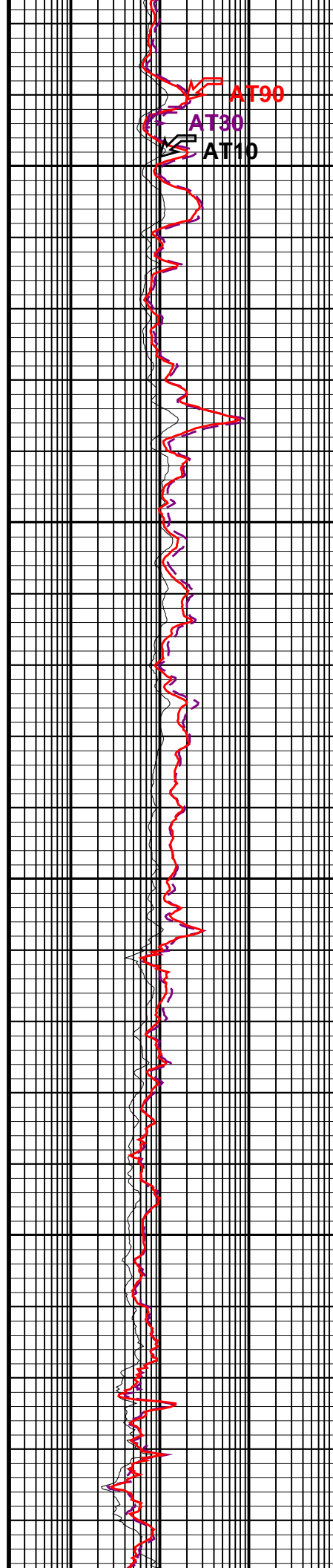


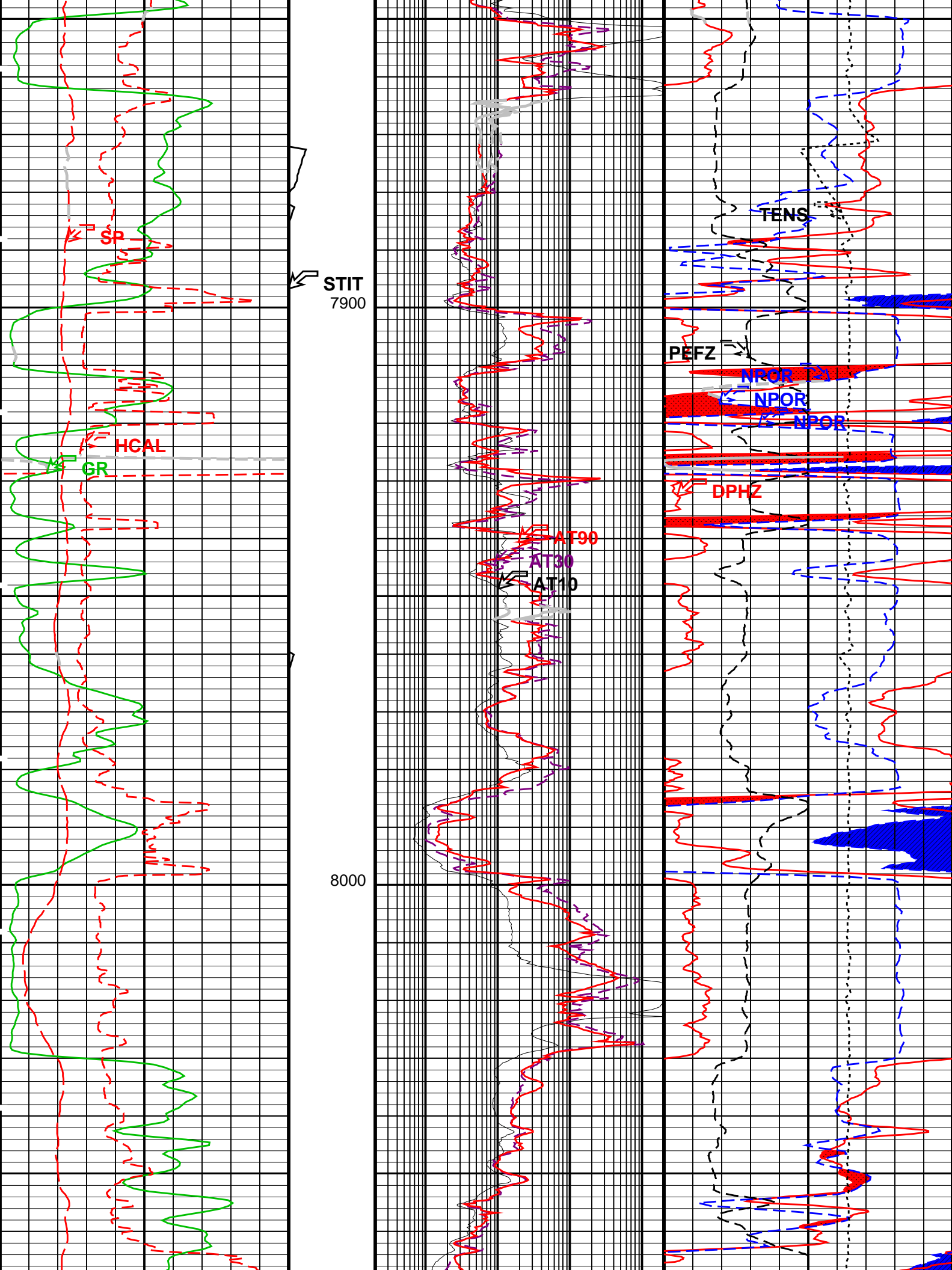


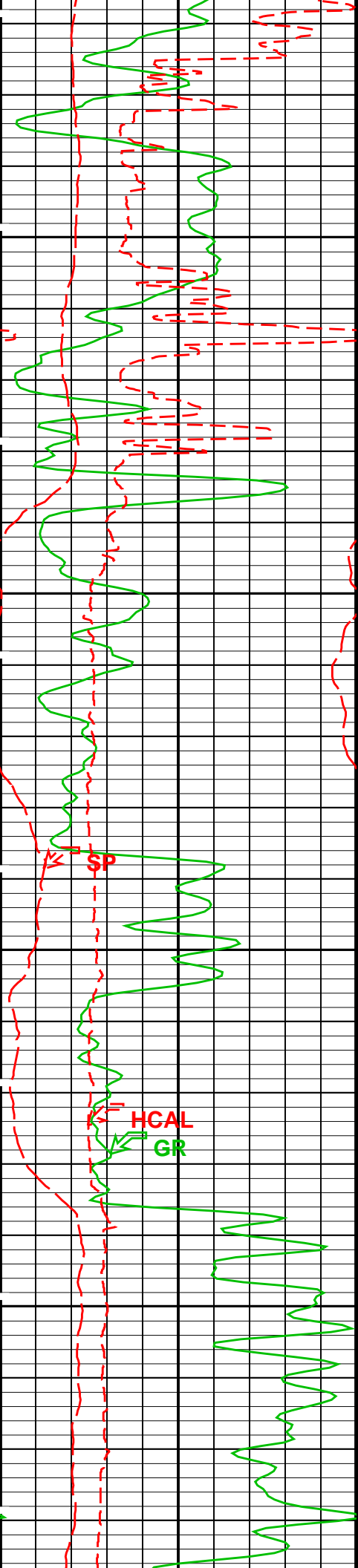


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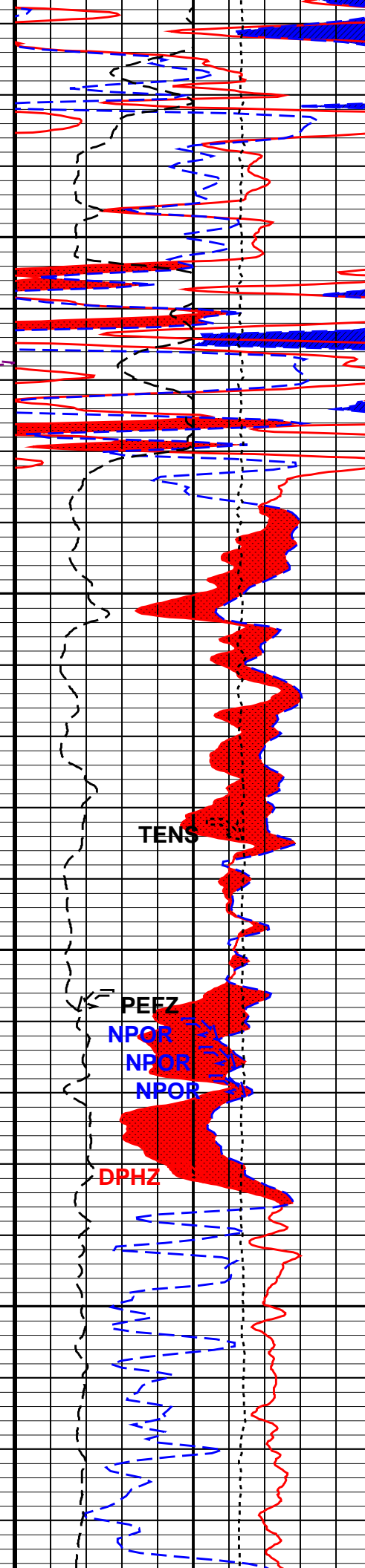
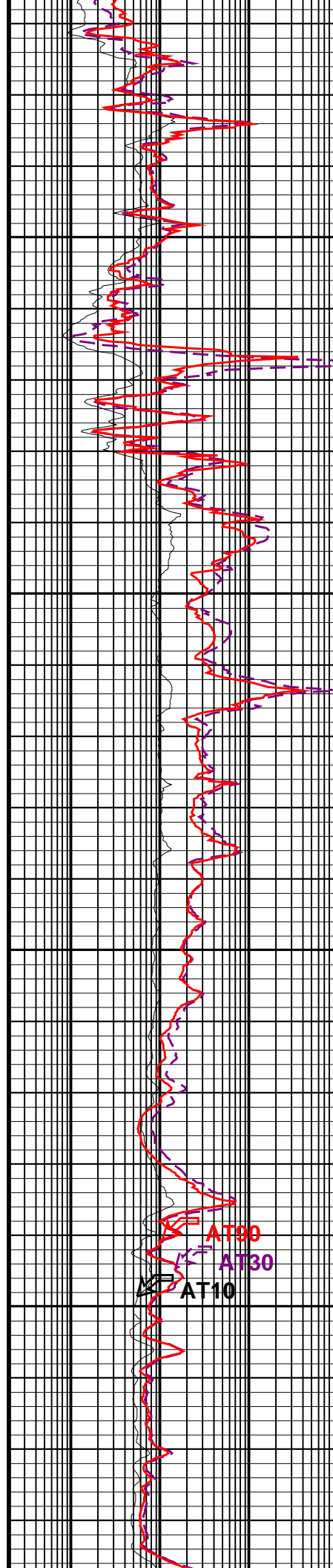


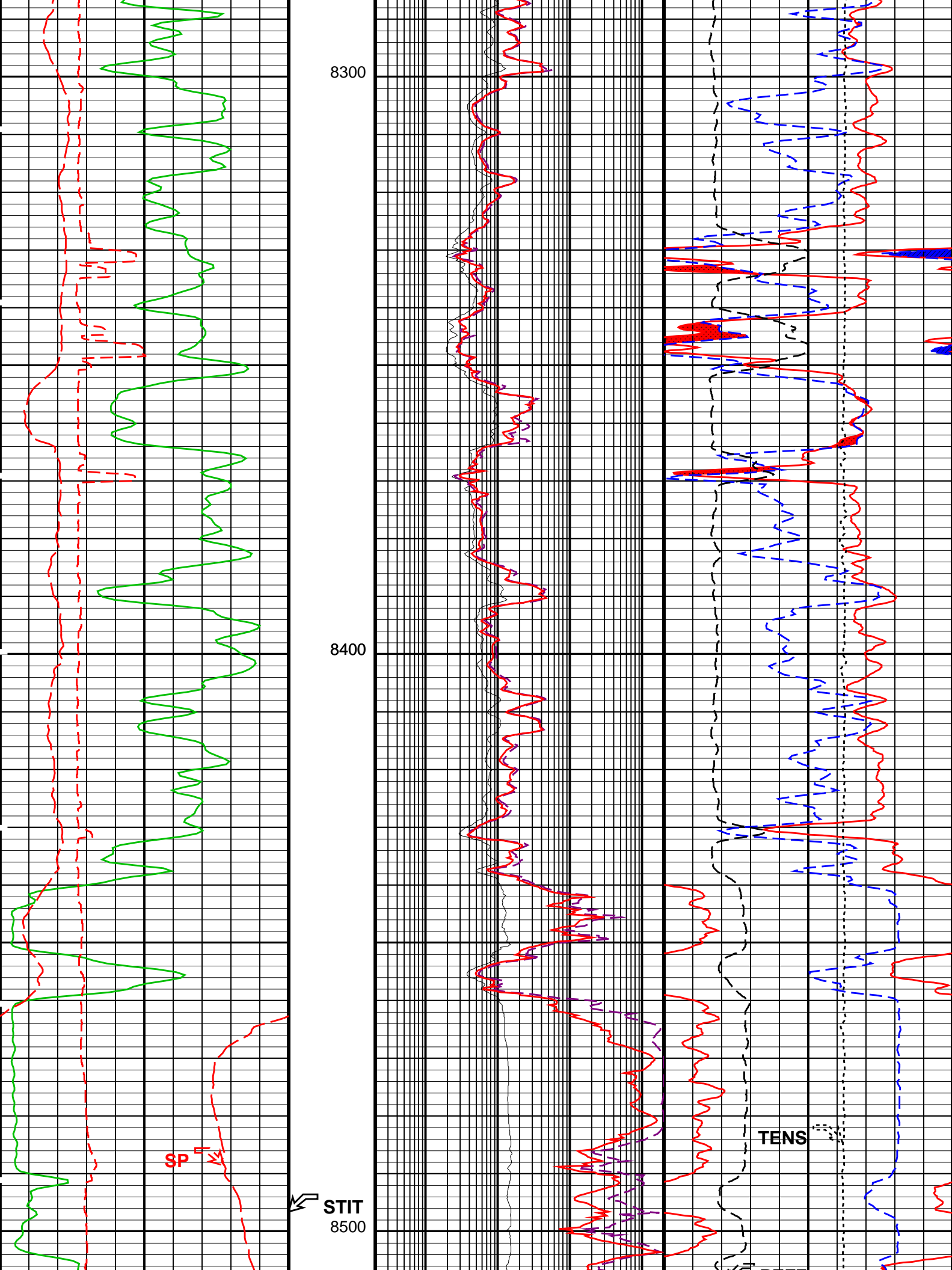


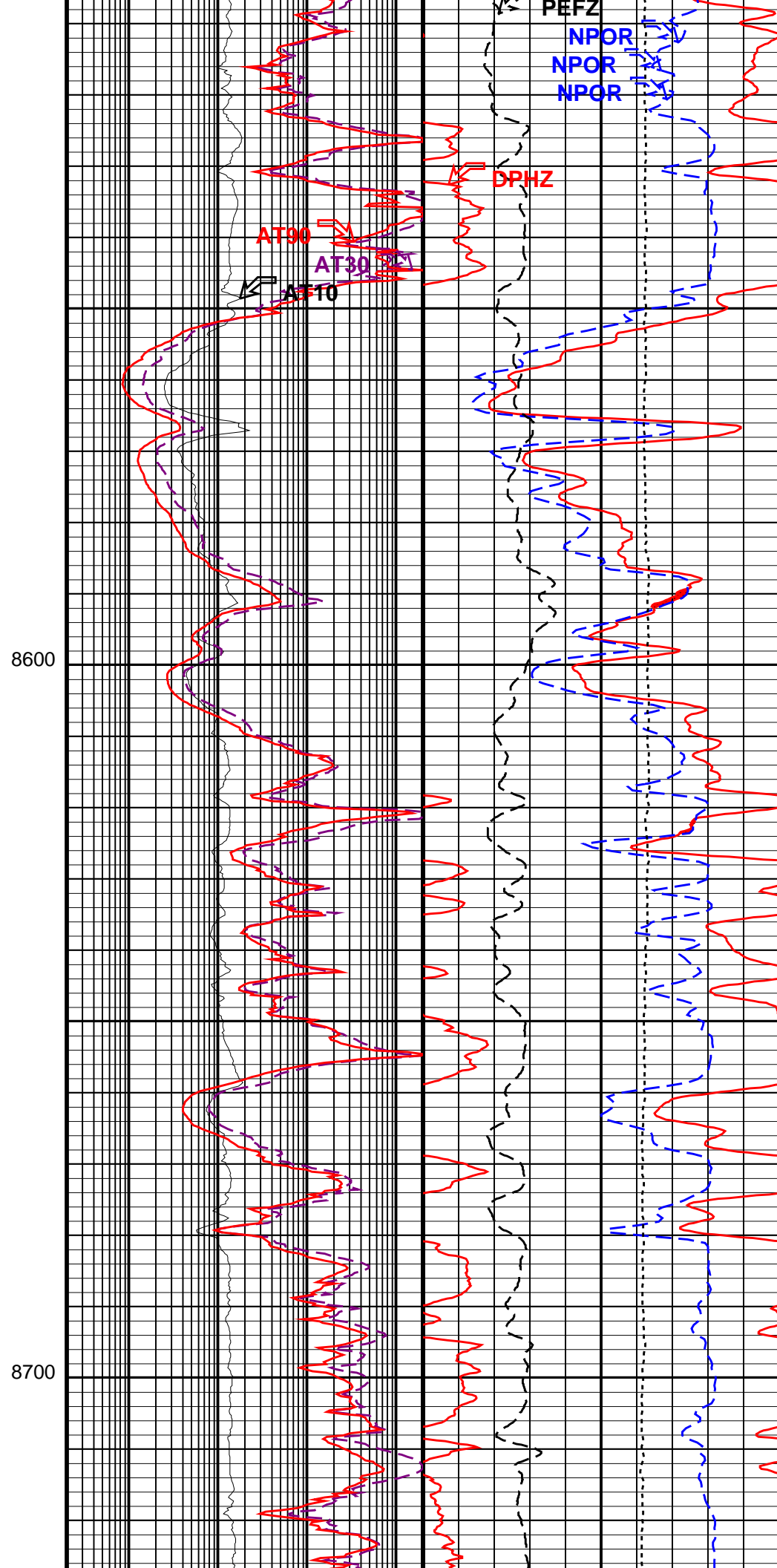
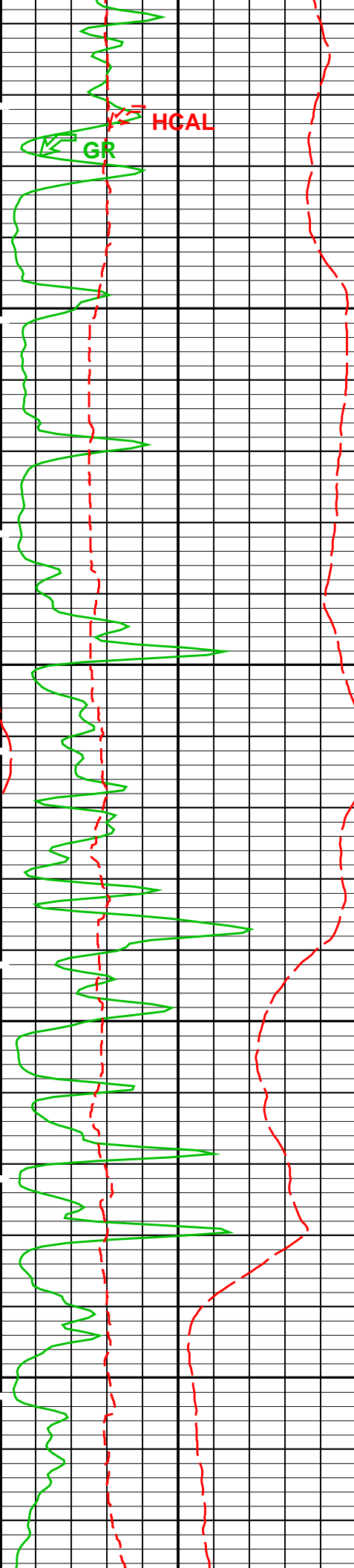


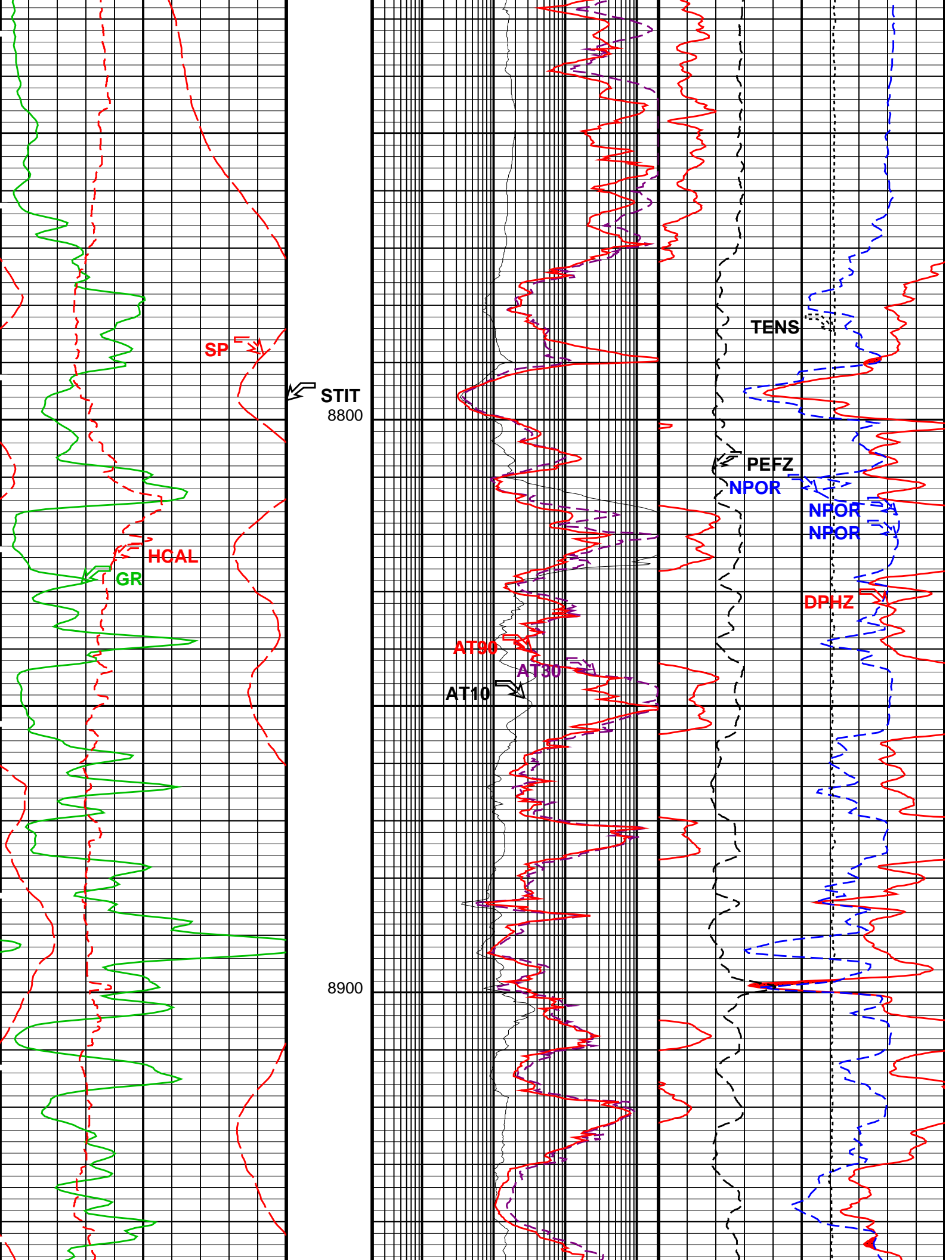
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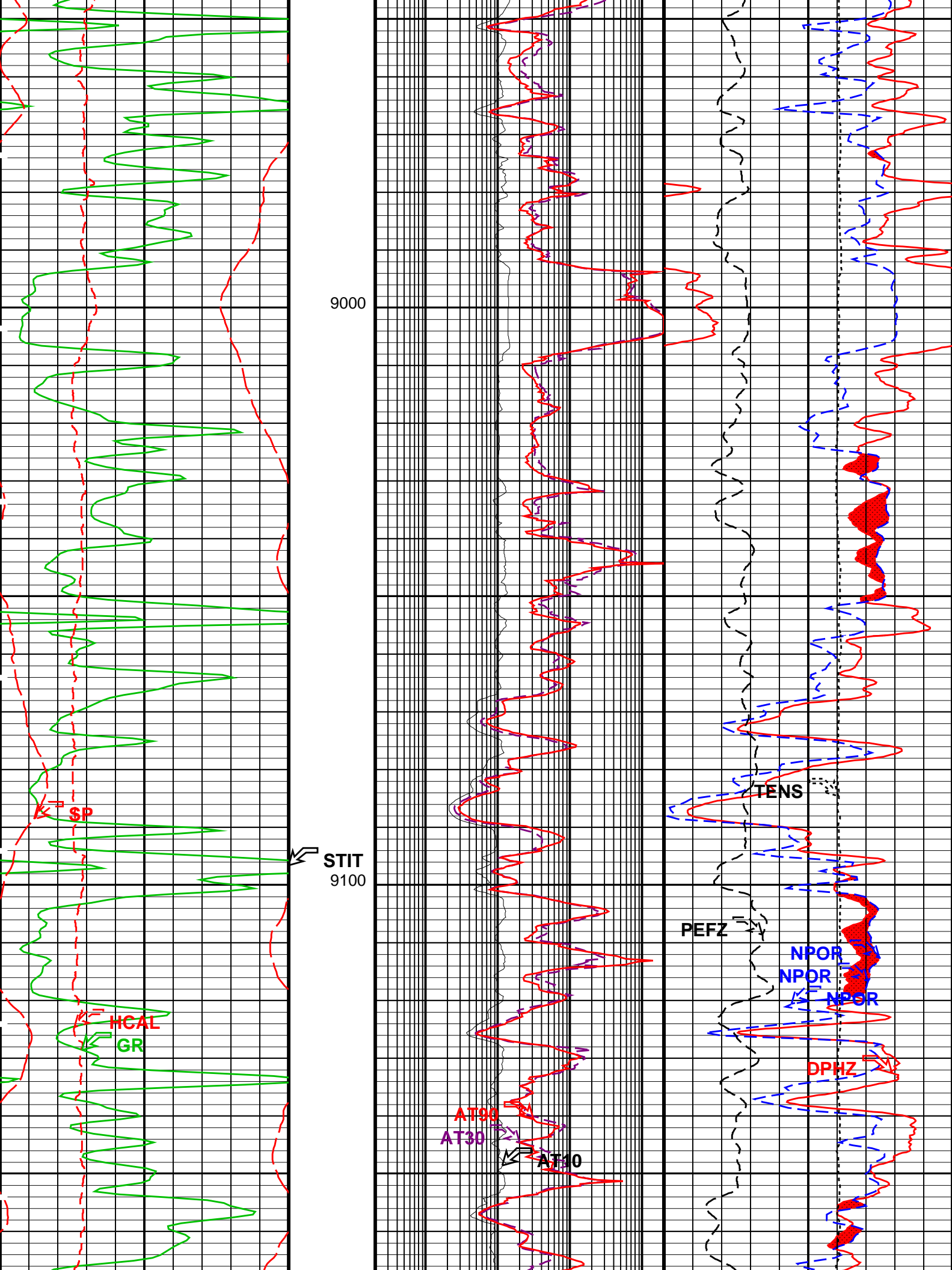
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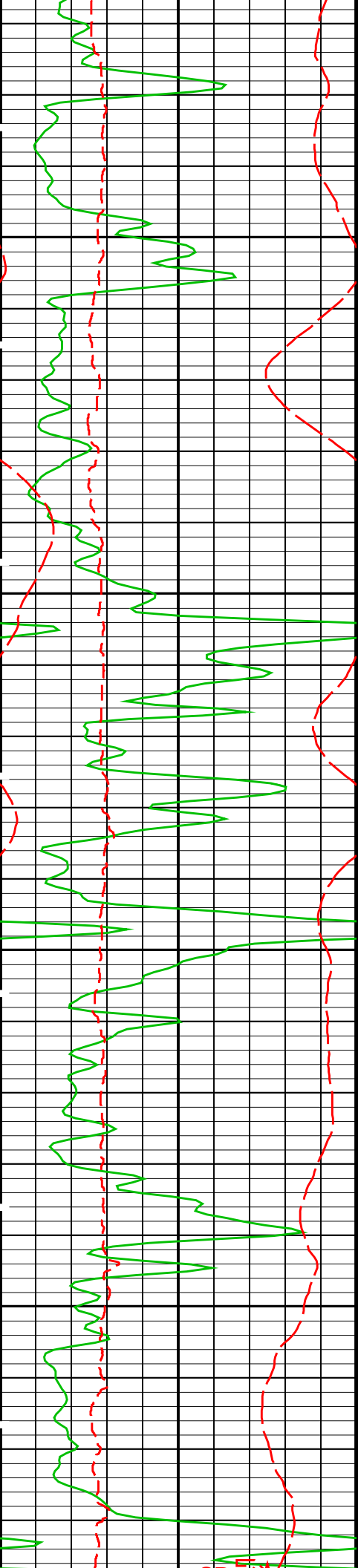






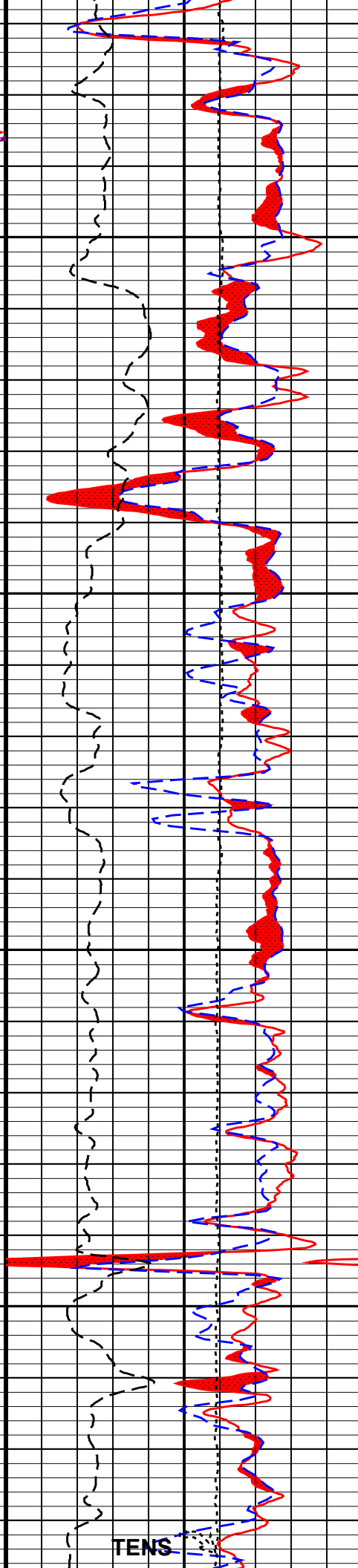
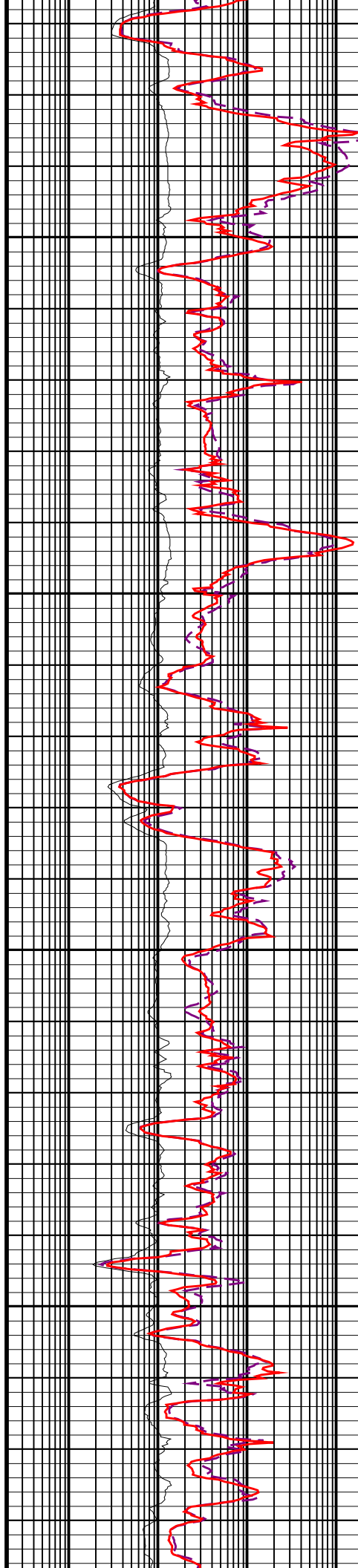




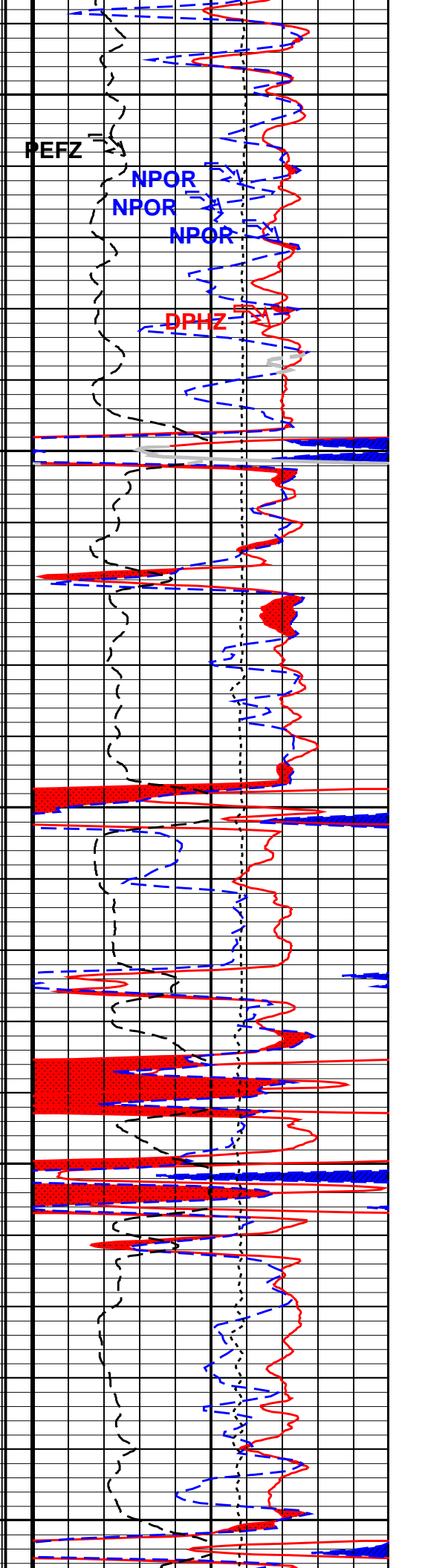
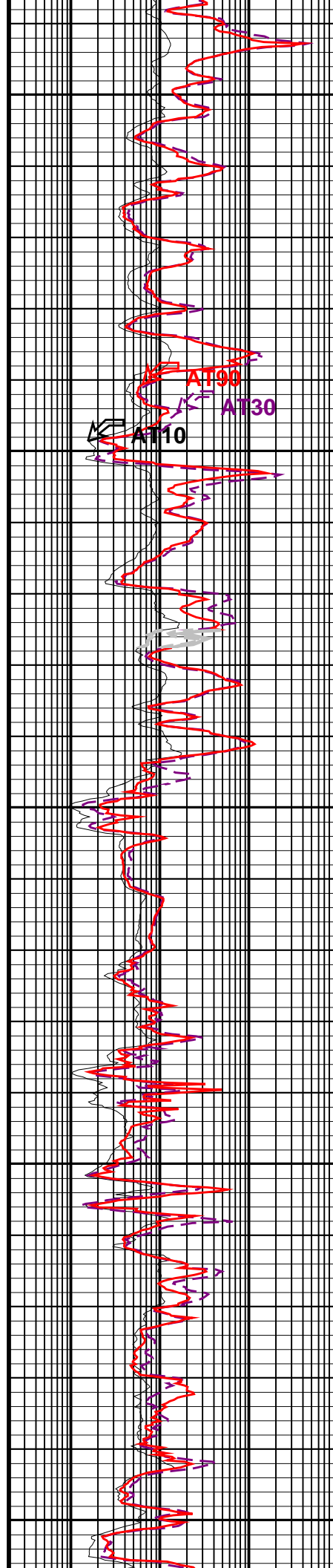
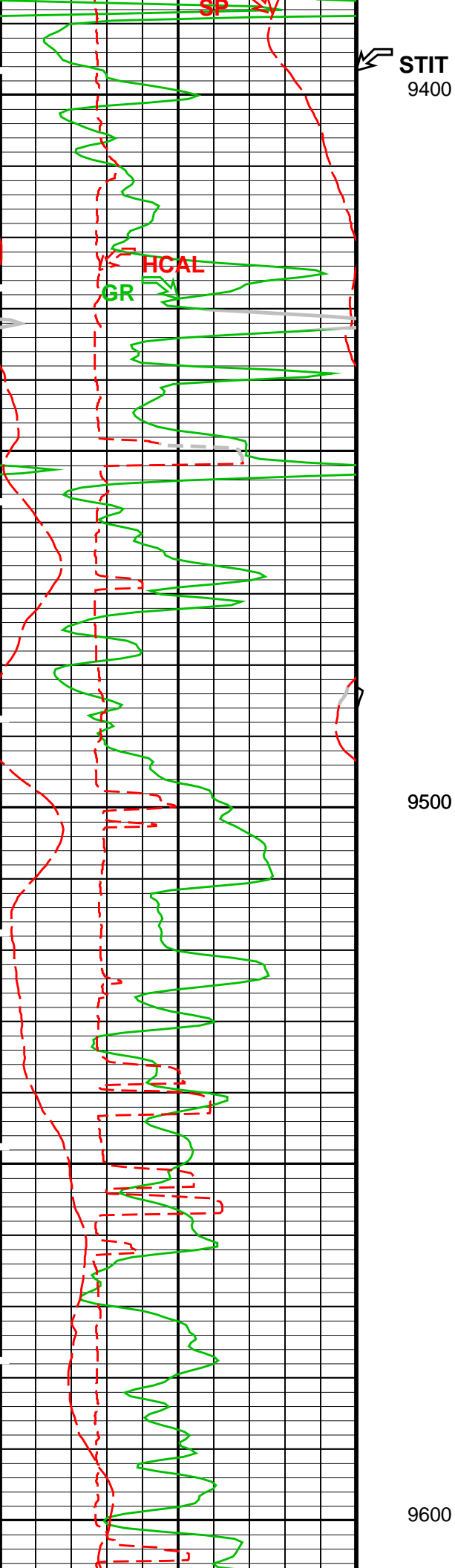


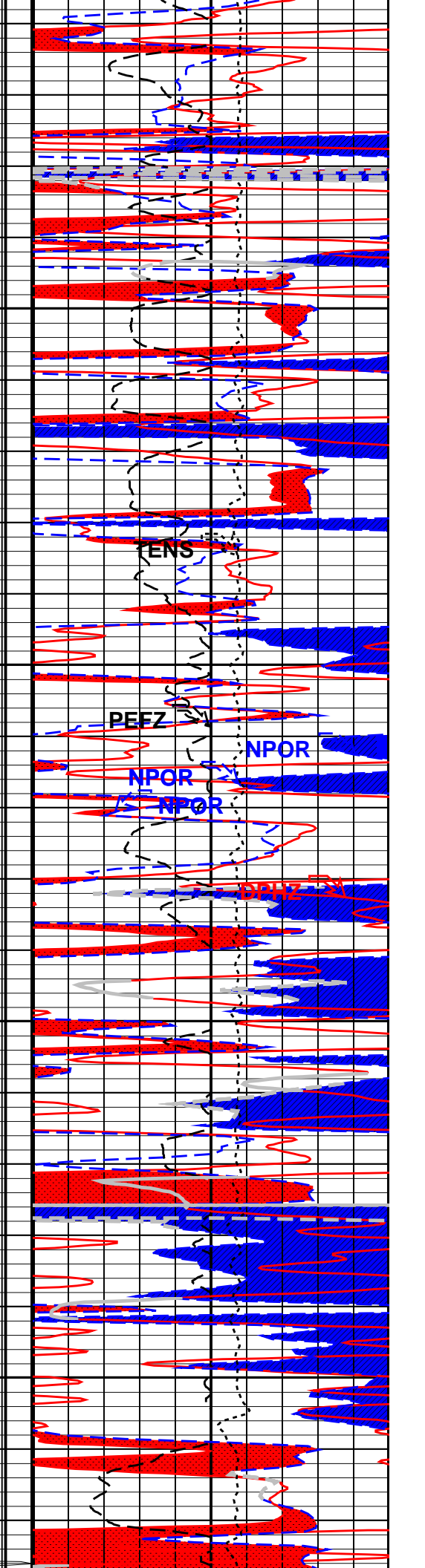
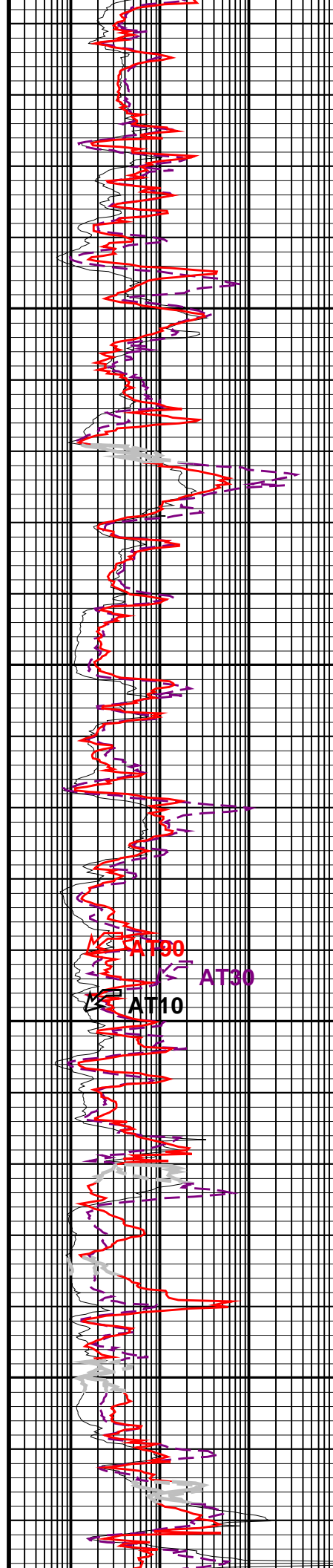
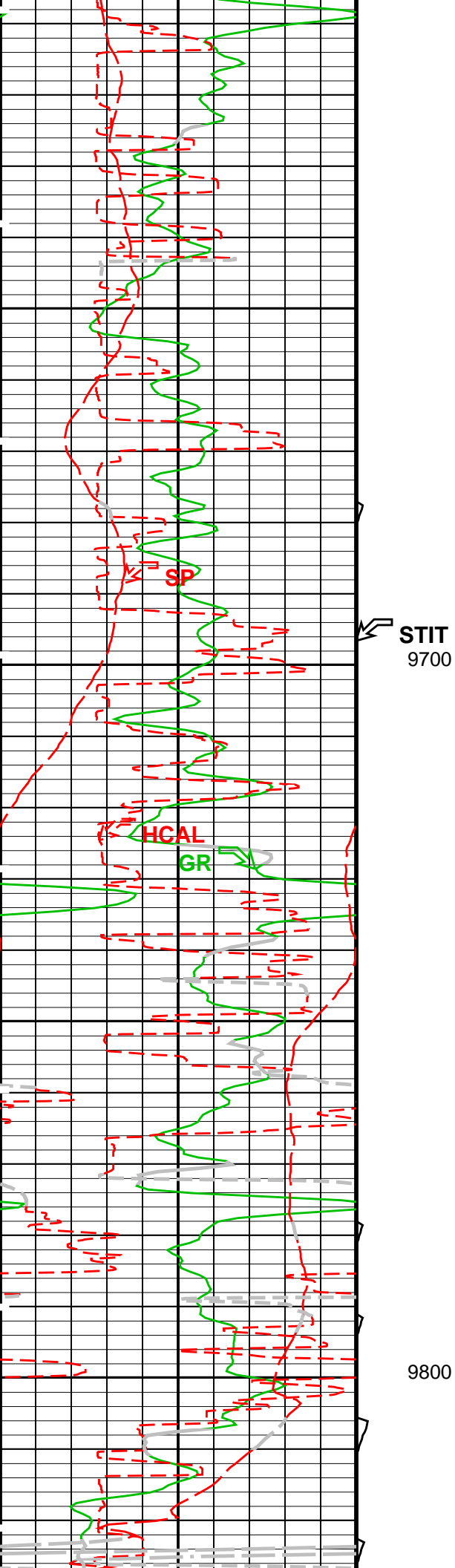
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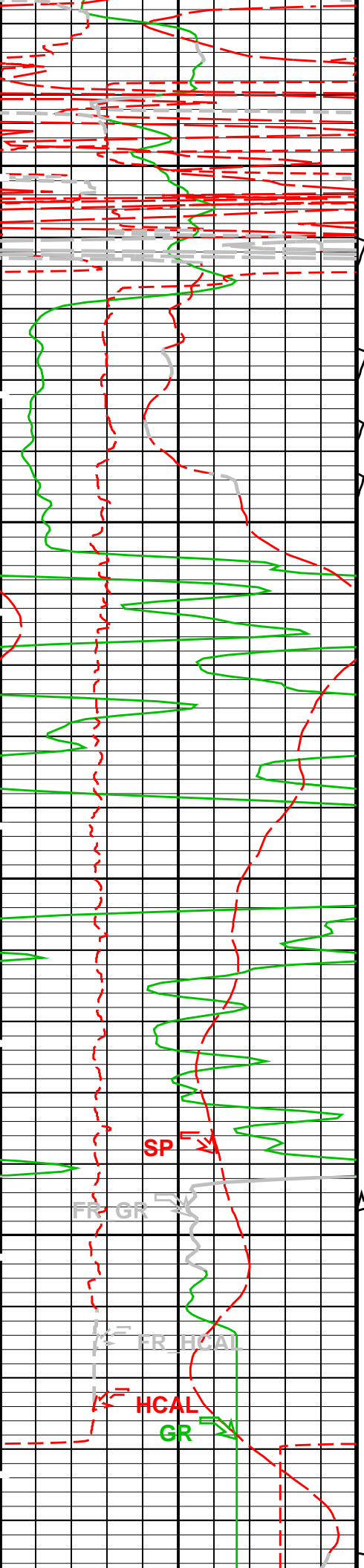
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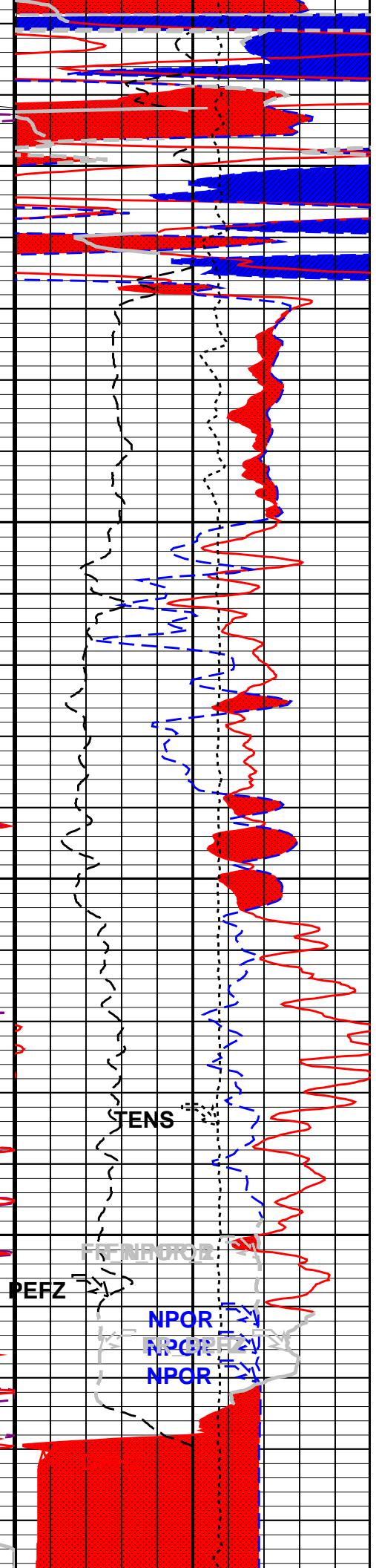
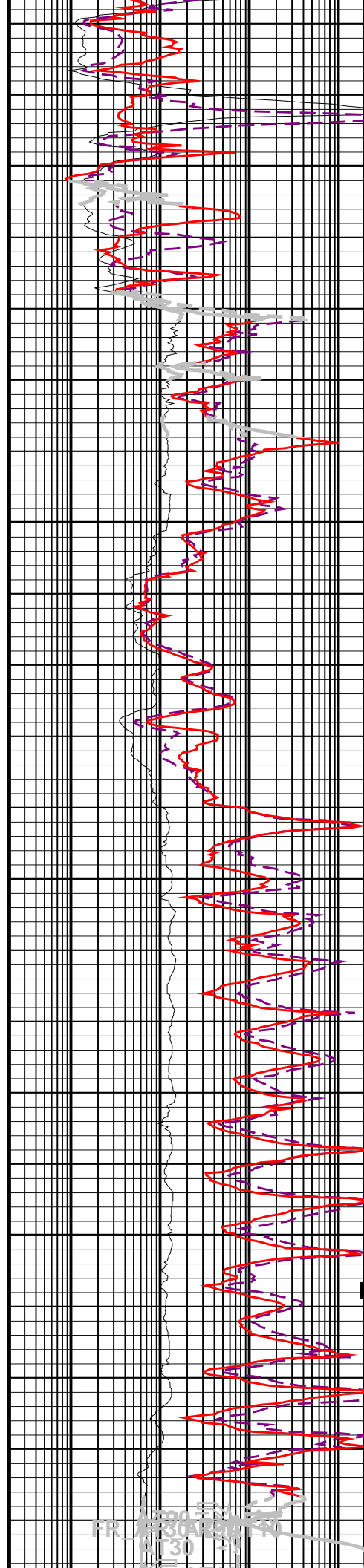






9900

STIT  
10000



Gamma Ray (GR) (GAPI)		Stuck Stretch (STIT)	AIT 10 Inch Investigation (AT10)		Std. Res. Density Porosity (DPHZ)	
0	150	0 (F) 50	0.2	(OHMM) 2000	0.3	(V/V) -0.1
HILT Caliper (HCAL) (IN)			AIT 30 Inch Investigation (AT30) (OHMM) 2000		NPOR BACKUP From NPOR_2 to T3	
6	16		AIT 90 Inch Investigation (AT90) (OHMM) 2000		GAS EFFECT From DPHZ to NPOR_1	
SP (SP) (MV)					Tension (TENS) (LBF)	
-160	40				10000	0
					Alpha Processed Neutron Porosity (NPOR) (V/V)	
					0.3	-0.1
					Std. Res. Formation Pe (PEFZ) (----) 10	
					0	

#### PIP SUMMARY

Time Mark Every 60 S

### Parameters

DLIS Name	Description	Value	
ZAIT-EB: 3-D Array Induction Tool – ZAIT-E			
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four	
ABLV	Array Induction Basic Logs Code Version Number	223	
ACDE	Array Induction Casing Detection Enable	No	
ACSED	Array Induction Casing Shoe Estimated Depth	-50000	FT
AFRSV	Array Induction Response Set Version for Four ft Resolution	41.70.24.20	
AORSV	Array Induction Response Set Version for One ft Resolution	41.70.24.20	
ARFV	Array Induction Radial Profiling Code Version Number	701	
ARPV	Array Induction Radial Parametrization Code Version Number	232	
ATRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	225	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GRGD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	ZAIT_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
SPNV	SP Next Value	0	MV
TRI1DV	3D 1D Code Version Number	315	
TRIBHM	3D Induction Borehole Correction Mode	1_ComputeStandoff	
TRIBHV	Array Induction Borehole Correction Code Version Number	168	
TRIRSV	3D Induction Response Set Version	00.10.24.00	
TRIIRT	3D Rotation Selector	NorTH	
TRISTA	3D Tool Standoff	1	IN
HILTH-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)	225	DEGF
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DHC	Density Hole Correction	BS	
FD	Fluid Density	1	G/C3
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
FSAL	Formation Salinity	-50000	PPM
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	DEG

GDEV	Average Angular Deviation of Borehole from Normal	0.01	DEG
GGRD	Geothermal Gradient		DF/F
GRSE	Generalized Mud Resistivity Selection	ZAITS_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
HSCO	Hole Size Correction Option	YES	
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
MWCO	Mud Weight Correction Option	NO	
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	StdRes	
NSAR	HRDD Depth Sampling Rate	1	IN
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	68	DEGF
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	YES	
DIR: Directional Survey Computation			
SPVD	TVD of Starting Point	0	FT
TIMD	Along-hole depth of Tie-in Point	0	FT
TIVD	TVD of Tie-in Point	0	FT
FEQL: Formation Evaluation Quick Look			
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	225	DEGF
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	ZAITS_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
PERT: Preliminary Evaluation - Real Time			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	225	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	ZAITS_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth - Driller	10060.00	FT
TDL	Total Depth - Logger	10050.00	FT
RWA: Apparent Water Resistivity			
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
System and Miscellaneous			
BS	Bit Size	8.750	IN
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	9.625	IN
CWEI	Casing Weight	36.00	LB/F
DFD	Drilling Fluid Density	9.10	LB/G
DO	Depth Offset for Playback	0.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
FLEV	Fluid Level	200.00	FT
MST	Mud Sample Temperature	130.00	DEGF
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	0.9200	OHMM
TD	Total Depth	10050	FT

Format: COMBO      Vertical Scale: 5" per 100'      Graphics File Created: 02-Jul-2013 23:19

## OP System Version: 19C2-270

ZAITS-EB	19C2-270	GPIT-F	19C2-270
HILTH-FTB	19C2-270	DTC-H	19C2-270

## Input DLIS Files

DEFAULT	AIT_IS_TLD_MCFL_CNL_012LUP	FN:11	PRODUCER	02-Jul-2013 19:58	10062.0 FT	1511.0 FT
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## Output DLIS Files

# Output DLIS Files

DEFAULT	AIT_IS_TLD_MCFL_CNL_024PUP	FN:25	PRODUCER	02-Jul-2013 23:19
CUSTOMER	AIT_IS_TLD_MCFL_CNL_024PUC	FN:26	CUSTOMER	02-Jul-2013 23:19

**Schlumberger**

## REPEAT ANALYSIS

MAXIS Field Log

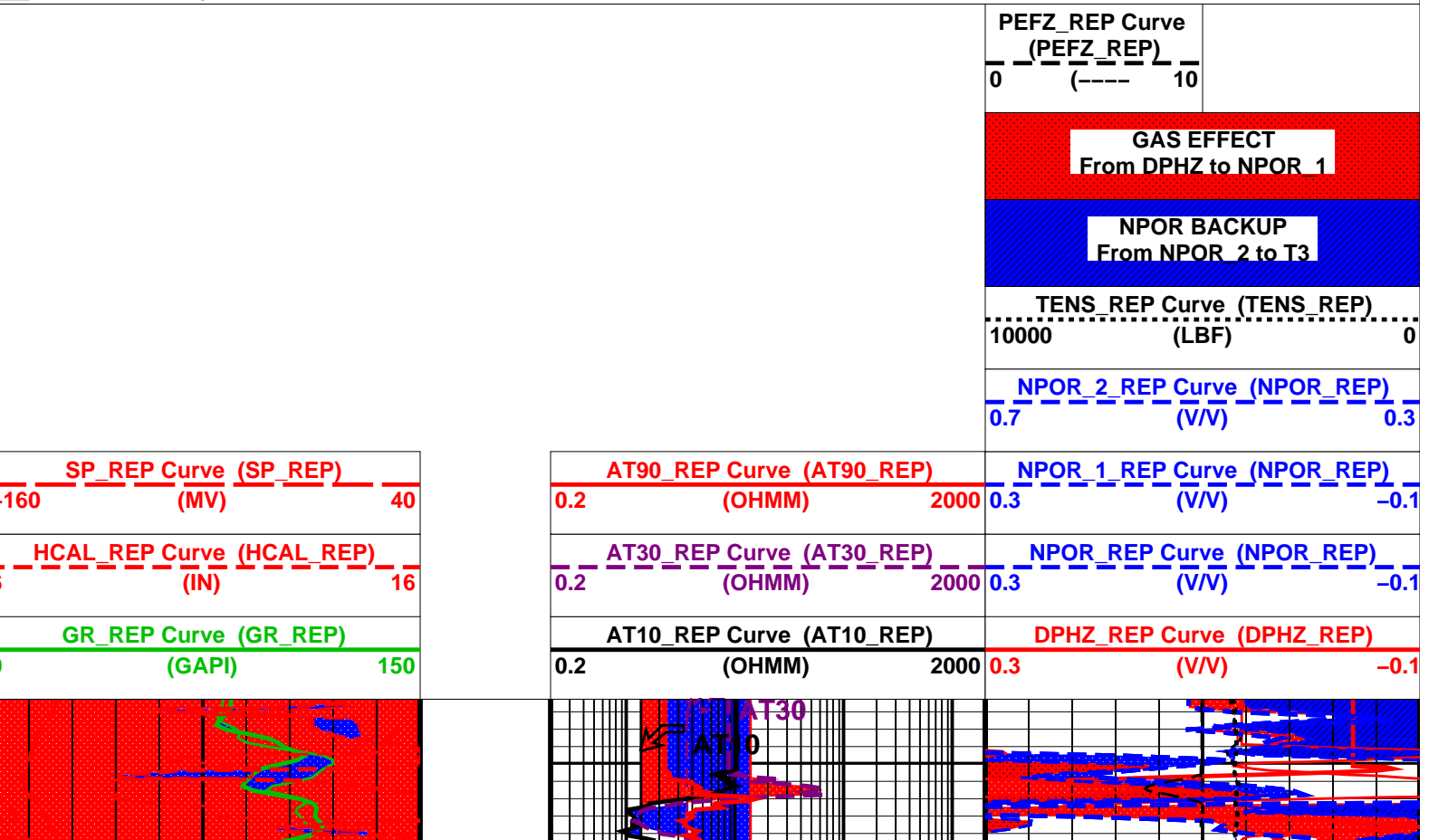
Company: Whiting Oil and Gas Corporation	Well: Wildhorse 16-13L
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Input DLIS Files						
DEFAULT	AIT_IS_TLD_MCFL_CNL_012LUP	FN:11	PRODUCER	02-Jul-2013 19:58	10062.0 FT	1511.0 FT
DEFAULT	AIT_IS_TLD_MCFL_CNL_023PUP	FN:23	PRODUCER	02-Jul-2013 23:18	10069.5 FT	9742.5 FT

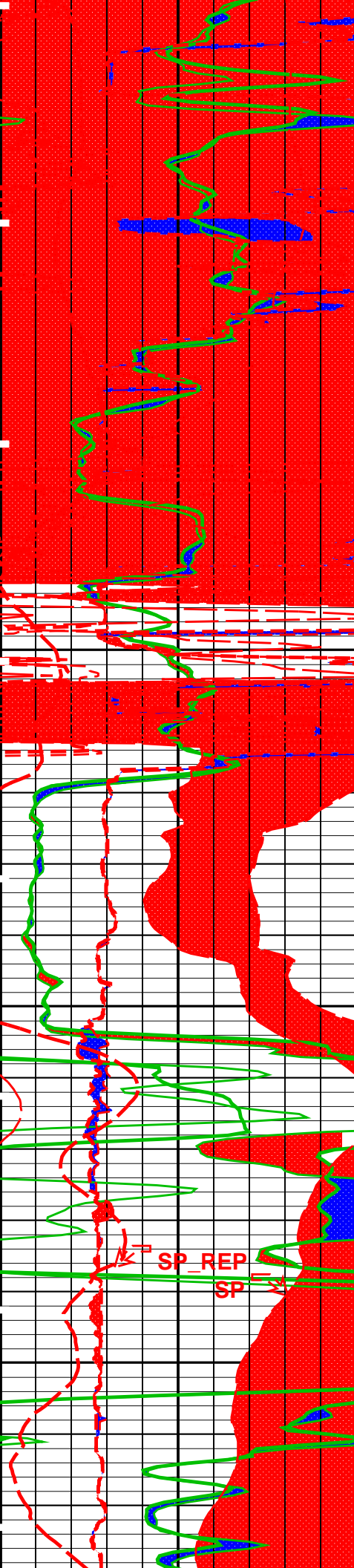
Output DLIS Files						
DEFAULT	AIT_IS_TLD_MCFL_CNL_024PUP	FN:25	PRODUCER	02-Jul-2013 23:19		
CUSTOMER	AIT_IS_TLD_MCFL_CNL_024PUC	FN:26	CUSTOMER	02-Jul-2013 23:19		

OP System Version: 19C2-270						
ZAITH-EB	19C2-270		GPIT-F	19C2-270		
HILTH-FTB	19C2-270		DTC-H	19C2-270		

PIP SUMMARY						
Time Mark Every 60 S						

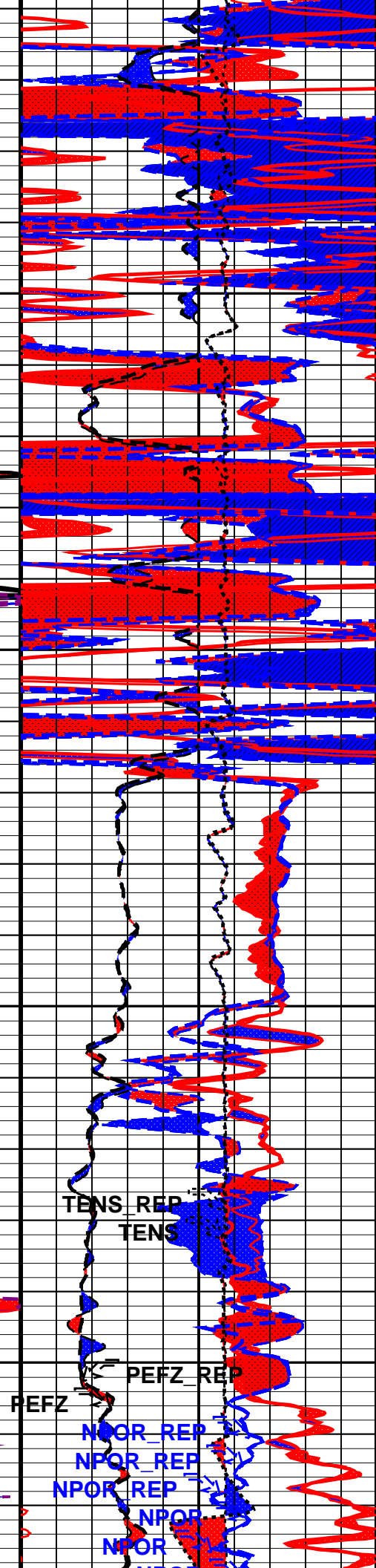
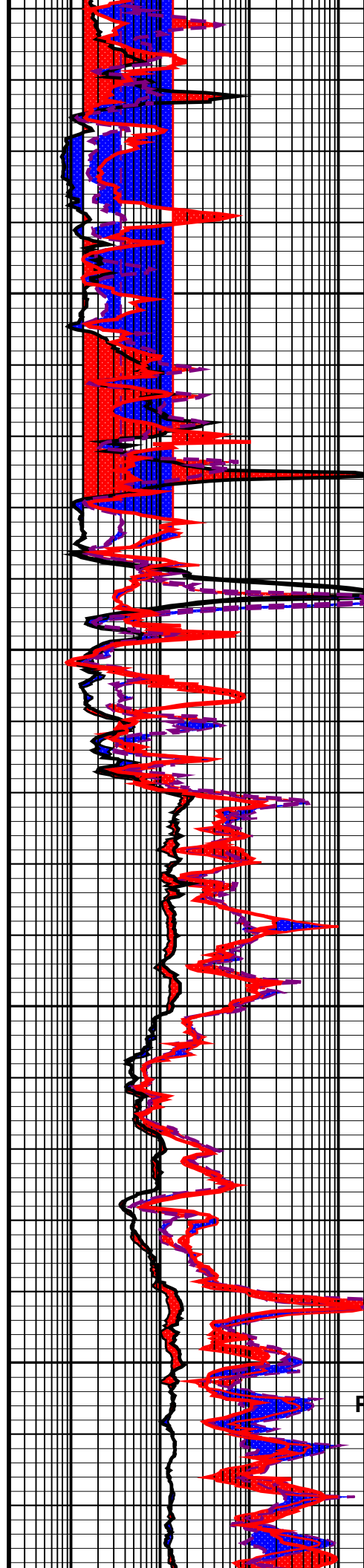






9800

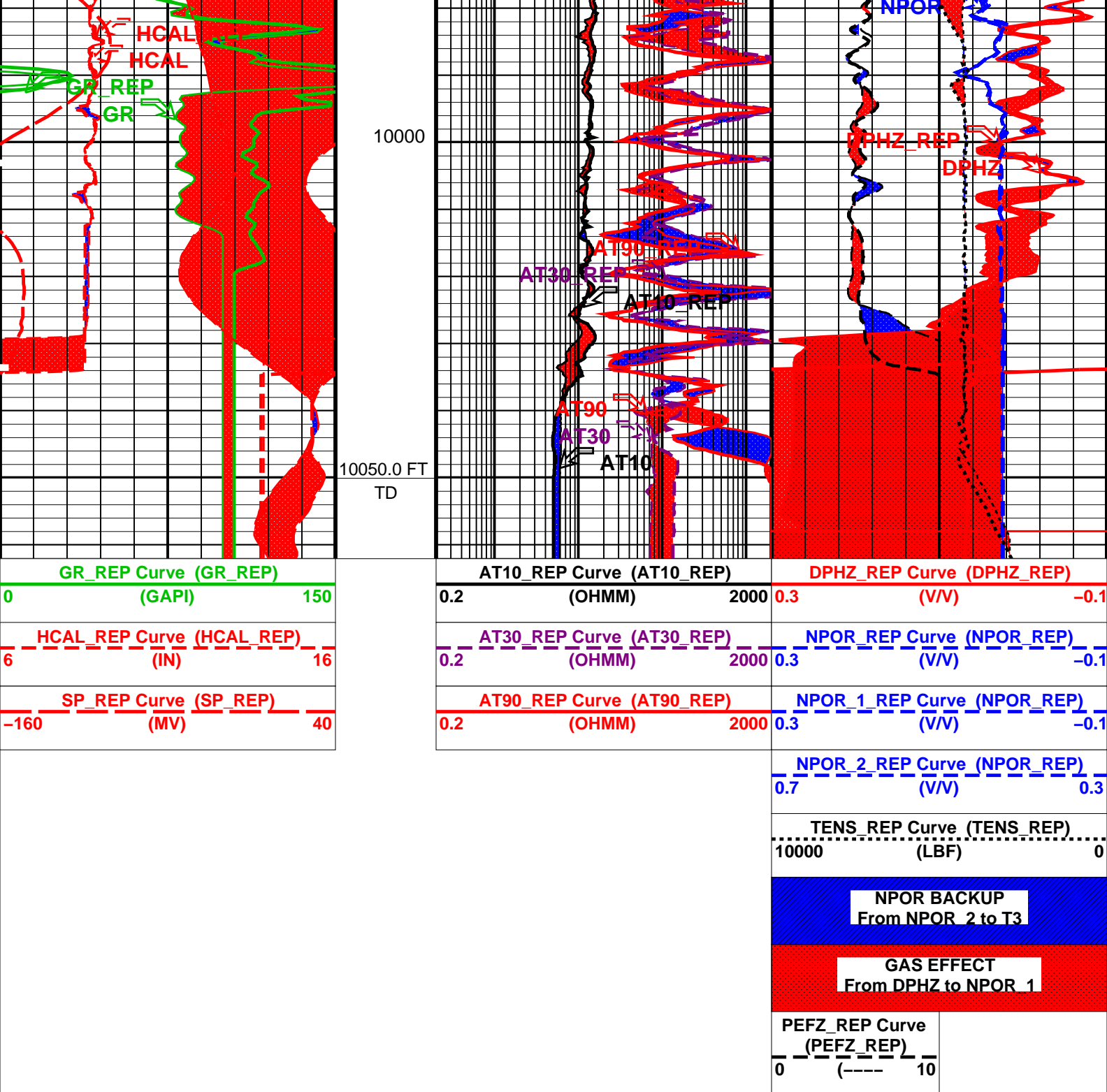
9900



TENS REP  
TENS

PEFZ REP  
PEFZ

NOOR REP  
NPOR REP  
NPOR REP  
NPOR  
NPOR



#### PIP SUMMARY

Time Mark Every 60 S

### Parameters

DLIS Name	Description	Value
ZAIT-EB: 3-D Array Induction Tool - ZAIT-E		
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	223
ACDE	Array Induction Casing Detection Enable	No
ACSED	Array Induction Casing Shoe Estimated Depth	-50000 FT
AFRSV	Array Induction Response Set Version for Four ft Resolution	41.70.24.20
AORSV	Array Induction Response Set Version for One ft Resolution	41.70.24.20
ARFV	Array Induction Radial Profiling Code Version Number	701
ARPV	Array Induction Radial Parametrization Code Version Number	232
ATRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	225 DEGF
FEXP	Form Factor Exponent	2



FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	ZAITS_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
SPNV	SP Next Value	0	MV
TRI1DV	3D 1D Code Version Number	315	
TRIBHM	3D Induction Borehole Correction Mode	1_ComputeStandoff	
TRIBHV	Array Induction Borehole Correction Code Version Number	168	
TRIRSV	3D Induction Response Set Version	00.10.24.00	
TRIRT	3D Rotation Selector	NorTH	
TRISTA	3D Tool Standoff	1	IN
HILTH-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)	225	DEGF
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DHC	Density Hole Correction	BS	
FD	Fluid Density	1	G/C3
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
FSAL	Formation Salinity	-50000	PPM
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	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	ZAITS_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
HSCO	Hole Size Correction Option	YES	
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
MWCO	Mud Weight Correction Option	NO	
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	StdRes	
NSAR	HRDD Depth Sampling Rate	1	IN
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	68	DEGF
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	YES	
DIR: Directional Survey Computation			
SPVD	TVD of Starting Point	0	FT
TIMD	Along-hole depth of Tie-in Point	0	FT
TIVD	TVD of Tie-in Point	0	FT
FEQL: Formation Evaluation Quick Look			
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	225	DEGF
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	ZAITS_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
PERT: Preliminary Evaluation - Real Time			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	225	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	ZAITS_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
STI: Stuck Tool Indicator			
TDL	Total Depth - Logger	10050.00	FT
RWA: Apparent Water Resistivity			
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
System and Miscellaneous			
RS	Bit Size	8 750	IN

BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	9.625	IN
CWEI	Casing Weight	36.00	LB/F
DFD	Drilling Fluid Density	9.10	LB/G
DO	Depth Offset for Playback	0.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
FLEV	Fluid Level	200.00	FT
MST	Mud Sample Temperature	130.00	DEGF
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	0.9200	OHMM
TD	Total Depth	10050	FT

Format: COMBO\_REP      Vertical Scale: 5" per 100'      Graphics File Created: 02-Jul-2013 23:19

## OP System Version: 19C2-270

ZAIT-EB	19C2-270	GPIT-F	19C2-270
HILTH-FTB	19C2-270	DTC-H	19C2-270

### Input DLIS Files

DEFAULT	AIT_IS_TLD_MCFL_CNL_012LUP	FN:11	PRODUCER	02-Jul-2013 19:58	10062.0 FT	1511.0 FT
DEFAULT	AIT_IS_TLD_MCFL_CNL_023PUP	FN:23	PRODUCER	02-Jul-2013 23:18	10069.5 FT	9742.5 FT

### Output DLIS Files

DEFAULT	AIT_IS_TLD_MCFL_CNL_024PUP	FN:25	PRODUCER	02-Jul-2013 23:19
CUSTOMER	AIT_IS_TLD_MCFL_CNL_024PUC	FN:26	CUSTOMER	02-Jul-2013 23:19



## BEFORE CALIBRATIONS

MAXIS Field Log

### Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
3-D Array Induction Tool – ZAIT-EB Wellsite Calibration – Electronics Calibration Check – Thru Cal Mag. & Phase							
Master: 17-Jul-2012 17:34    Before: 2-Jul-2013 10:17							
Thru Cal Magnitude – 0	0	1.484	1.490	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 1	0	1.499	1.502	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 2	0	1.453	1.453	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 3	0	3.417	3.433	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 4	0	3.451	3.461	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 5	0	3.345	3.349	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 6	0	2.740	2.753	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 7	0	2.768	2.776	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 8	0	2.683	2.685	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 9	0	1.903	1.907	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 10	0	1.904	1.919	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 11	0	1.886	1.899	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 12	0	3.577	3.593	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 13	0	3.612	3.623	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 14	0	3.501	3.504	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 15	0	3.051	3.057	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 16	0	3.052	3.077	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 17	0	3.024	3.045	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 18	0	0.9467	0.9512	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 19	0	0.9554	0.9584	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 20	0	0.9259	0.9270	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 21	0	4.055	4.063	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 22	0	4.056	4.060	N/A	N/A	N/A	MM/M

Thru Cal Magnitude - 22	0	4.036	4.090	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 23	0	4.019	4.047	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 24	0	1.375	1.383	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 25	0	1.388	1.393	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 26	0	1.345	1.348	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 27	0	4.055	4.063	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 28	0	4.056	4.090	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 29	0	4.019	4.047	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 30	0	1.375	1.383	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 31	0	1.388	1.393	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 32	0	1.345	1.348	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 33	0	1.176	1.178	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 34	0	1.175	1.185	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 35	0	1.164	1.172	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 36	0	1.631	1.638	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 37	0	1.646	1.651	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 38	0	1.595	1.597	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 39	0	1.412	1.415	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 40	0	1.411	1.423	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 41	0	1.398	1.408	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 42	0	2.353	2.365	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 43	0	2.375	2.383	N/A	N/A	N/A	MM/M
Thru Cal Magnitude - 44	0	2.302	2.305	N/A	N/A	N/A	MM/M
Thru Cal Phase - 0	0	11.77	14.70	N/A	N/A	N/A	DEG
Thru Cal Phase - 1	0	10.92	13.01	N/A	N/A	N/A	DEG
Thru Cal Phase - 2	0	0.9479	3.005	N/A	N/A	N/A	DEG
Thru Cal Phase - 3	0	7.740	10.47	N/A	N/A	N/A	DEG
Thru Cal Phase - 4	0	6.902	8.792	N/A	N/A	N/A	DEG
Thru Cal Phase - 5	0	-3.072	-1.214	N/A	N/A	N/A	DEG
Thru Cal Phase - 6	0	12.23	15.26	N/A	N/A	N/A	DEG
Thru Cal Phase - 7	0	11.38	13.58	N/A	N/A	N/A	DEG
Thru Cal Phase - 8	0	1.382	3.547	N/A	N/A	N/A	DEG
Thru Cal Phase - 9	0	4.955	5.868	N/A	N/A	N/A	DEG
Thru Cal Phase - 10	0	3.432	4.653	N/A	N/A	N/A	DEG
Thru Cal Phase - 11	0	1.881	3.333	N/A	N/A	N/A	DEG
Thru Cal Phase - 12	0	11.80	14.70	N/A	N/A	N/A	DEG
Thru Cal Phase - 13	0	10.94	13.05	N/A	N/A	N/A	DEG
Thru Cal Phase - 14	0	0.9918	3.047	N/A	N/A	N/A	DEG
Thru Cal Phase - 15	0	4.963	5.865	N/A	N/A	N/A	DEG
Thru Cal Phase - 16	0	3.453	4.664	N/A	N/A	N/A	DEG
Thru Cal Phase - 17	0	1.901	3.343	N/A	N/A	N/A	DEG
Thru Cal Phase - 18	0	11.73	14.68	N/A	N/A	N/A	DEG
Thru Cal Phase - 19	0	10.89	13.02	N/A	N/A	N/A	DEG
Thru Cal Phase - 20	0	0.9383	3.020	N/A	N/A	N/A	DEG
Thru Cal Phase - 21	0	2.954	3.793	N/A	N/A	N/A	DEG
Thru Cal Phase - 22	0	1.440	2.586	N/A	N/A	N/A	DEG
Thru Cal Phase - 23	0	-0.1098	1.269	N/A	N/A	N/A	DEG
Thru Cal Phase - 24	0	7.739	10.44	N/A	N/A	N/A	DEG
Thru Cal Phase - 25	0	6.899	8.807	N/A	N/A	N/A	DEG
Thru Cal Phase - 26	0	-3.054	-1.203	N/A	N/A	N/A	DEG
Thru Cal Phase - 27	0	2.946	3.780	N/A	N/A	N/A	DEG
Thru Cal Phase - 28	0	1.436	2.579	N/A	N/A	N/A	DEG
Thru Cal Phase - 29	0	-0.1156	1.258	N/A	N/A	N/A	DEG
Thru Cal Phase - 30	0	7.731	10.46	N/A	N/A	N/A	DEG
Thru Cal Phase - 31	0	6.901	8.806	N/A	N/A	N/A	DEG
Thru Cal Phase - 32	0	-3.060	-1.205	N/A	N/A	N/A	DEG
Thru Cal Phase - 33	0	5.438	6.434	N/A	N/A	N/A	DEG
Thru Cal Phase - 34	0	3.941	5.236	N/A	N/A	N/A	DEG
Thru Cal Phase - 35	0	2.370	3.907	N/A	N/A	N/A	DEG
Thru Cal Phase - 36	0	12.25	15.25	N/A	N/A	N/A	DEG
Thru Cal Phase - 37	0	11.41	13.62	N/A	N/A	N/A	DEG
Thru Cal Phase - 38	0	1.459	3.614	N/A	N/A	N/A	DEG
Thru Cal Phase - 39	0	5.416	6.412	N/A	N/A	N/A	DEG
Thru Cal Phase - 40	0	3.920	5.223	N/A	N/A	N/A	DEG
Thru Cal Phase - 41	0	2.363	3.896	N/A	N/A	N/A	DEG
Thru Cal Phase - 42	0	12.20	15.25	N/A	N/A	N/A	DEG
Thru Cal Phase - 43	0	11.37	13.60	N/A	N/A	N/A	DEG
Thru Cal Phase - 44	0	1.404	3.579	N/A	N/A	N/A	DEG

### 3-D Array Induction Tool - ZAIT-EB Wellsite Calibration - Electronics Calibration Check - Auxilliary

Master: 17-Jul-2012 17:34 Before: 2-Jul-2013 10:17

Array Induction SPA Plus	0.8360	0.8425	0.8425	N/A	N/A	N/A	V
Array Induction SPA Zero	0	-0.0008885	-0.0008893	N/A	N/A	N/A	V
Array Induction Temperature PI	0.9798	0.9891	0.9893	N/A	N/A	N/A	V
Array Induction Temperature Ze	0	-0.001770	-0.001760	N/A	N/A	N/A	V
Array Induction CalSig Plus	5.000	5.013	5.013	N/A	N/A	N/A	V
Array Induction CalSig Zero	0	-0.01264	-0.01272	N/A	N/A	N/A	V
Array Induction Volt Plus	5.000	5.013	5.013	N/A	N/A	N/A	V
Array Induction Volt Zero	0	-0.01264	-0.01272	N/A	N/A	N/A	V

### 3-D Array Induction Tool - ZAIT-EB Wellsite Calibration - Field Check Sonde Error

Master: 17-Jul-2012 17:34

R Sonde Error Check – 0	0	0.8768	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 1	0	–8.460	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 2	0	–0.2346	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 3	0	0.1586	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 4	0	–2.006	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 5	0	–0.1444	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 6	0	0.09356	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 7	0	–0.7344	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 8	0	0.02038	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 9	0	–0.2112	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 10	0	0.06952	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 11	0	0.1413	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 12	0	–0.1485	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 13	0	–0.2748	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 14	0	–1.459	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 15	0	0.1561	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 16	0	0.3288	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 17	0	0.01729	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 18	0	0.009476	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 19	0	0.07878	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 20	0	–0.05011	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 21	0	–0.00004578	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 22	0	–0.01636	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 23	0	–0.4070	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 24	0	–0.06665	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 25	0	0.009807	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 26	0	–0.0003009	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 27	0	0.2296	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 28	0	0.1653	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 29	0	0.1038	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 30	0	–0.03671	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 31	0	0.2608	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 32	0	–0.8507	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 33	0	–0.3072	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 34	0	0.1051	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 35	0	0.06393	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 36	0	0.06533	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 37	0	0.07103	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 38	0	–0.06642	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 39	0	0.06441	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 40	0	–0.1331	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 41	0	–0.1926	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 42	0	–0.08327	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 43	0	–0.03356	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 44	0	0.01292	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 45	0	0.1815	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 46	0	–0.03699	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 47	0	0.3481	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 48	0	0.02344	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 49	0	–0.2052	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 50	0	–0.3714	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 51	0	0.04171	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 52	0	–0.02857	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 53	0	–0.008003	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 54	0	–0.04964	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 55	0	0.001317	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 56	0	0.004580	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 57	0	–0.007983	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 58	0	–0.03270	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 59	0	–0.007650	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 60	0	–0.02358	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 61	0	–0.003514	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 62	0	0.02410	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 63	0	0.06746	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 64	0	0.01019	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 65	0	–0.2117	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 66	0	0.05021	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 67	0	–0.4624	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 68	0	–0.1547	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 69	0	–0.1594	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 70	0	0.1116	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 71	0	–0.03944	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 72	0	0.04089	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 73	0	–0.01481	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 74	0	–0.0006365	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 75	0	0.01118	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 76	0	–0.004654	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 77	0	–0.1062	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 78	0	–0.01381	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 79	0	–0.1139	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 80	0	0.02617	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 81	0	0.2852	N/A	N/A	N/A	N/A	MM/M

R Sonde Error Check – 81	0	0.2853	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 82	0	0.1240	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 83	0	0.1245	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 84	0	0.05487	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 85	0	–0.07480	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 86	0	–0.4918	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 87	0	0.2648	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 88	0	–0.06360	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 89	0	–0.06884	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 90	0	0.03490	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 91	0	–0.01005	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 92	0	0.05603	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 93	0	–0.03578	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 94	0	0.07159	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 95	0	–0.2276	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 96	0	–0.03868	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 97	0	–0.01046	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 98	0	–0.001964	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 99	0	–0.01048	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 100	0	0.3691	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 101	0	0.2172	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 102	0	0.1826	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 103	0	0.5148	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 104	0	0.2807	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 105	0	0.04119	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 106	0	–0.1157	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 107	0	0.3458	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 108	0	0.04482	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 109	0	–0.01942	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 110	0	–0.03776	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 111	0	–0.01619	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 112	0	–0.01419	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 113	0	0.04691	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 114	0	–0.03978	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 115	0	–0.07626	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 116	0	–0.001239	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 0	0	3.648	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 1	0	–0.9678	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 2	0	–0.1396	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 3	0	–0.5683	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 4	0	0.2455	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 5	0	0.1829	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 6	0	–0.06827	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 7	0	–0.05511	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 8	0	0.01085	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 9	0	–0.4440	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 10	0	0.1240	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 11	0	1.072	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 12	0	–0.3848	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 13	0	–0.3294	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 14	0	–0.05670	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 15	0	1.247	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 16	0	–2.885	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 17	0	0.01416	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 18	0	–0.3017	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 19	0	–0.06738	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 20	0	0.3876	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 21	0	–0.2283	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 22	0	–0.1021	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 23	0	–0.1892	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 24	0	0.7020	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 25	0	–1.372	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 26	0	–0.04074	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 27	0	0.1987	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 28	0	0.2310	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 29	0	0.6383	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 30	0	–0.1242	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 31	0	–7.783	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 32	0	0.7845	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 33	0	3.155	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 34	0	–0.6987	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 35	0	–0.09846	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 36	0	0.1699	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 37	0	0.09726	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 38	0	0.3790	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 39	0	–0.1294	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 40	0	0.06270	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 41	0	0.2822	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 42	0	1.536	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 43	0	–0.3995	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 44	0	–0.07822	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 45	0	0.6924	N/A	N/A	N/A	N/A	MM/M

X Sonde Error Check – 46	0	0.4965	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 47	0	–0.1383	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 48	0	–0.1485	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 49	0	0.8258	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 50	0	0.3601	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 51	0	0.8813	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 52	0	–0.5822	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 53	0	–0.2641	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 54	0	0.1011	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 55	0	0.02788	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 56	0	–0.006073	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 57	0	–0.09327	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 58	0	0.06207	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 59	0	0.2796	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 60	0	0.4424	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 61	0	–0.2170	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 62	0	–0.06397	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 63	0	–0.01039	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 64	0	–0.1392	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 65	0	–0.2752	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 66	0	–0.05826	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 67	0	–0.04993	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 68	0	0.7906	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 69	0	1.136	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 70	0	0.3809	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 71	0	–0.02920	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 72	0	0.1115	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 73	0	0.02747	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 74	0	–0.2118	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 75	0	–0.07761	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 76	0	–0.01807	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 77	0	0.3138	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 78	0	0.5158	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 79	0	0.1849	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 80	0	0.009218	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 81	0	–0.009415	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 82	0	0.02902	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 83	0	0.1291	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 84	0	0.06401	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 85	0	0.7413	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 86	0	0.07848	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 87	0	3.524	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 88	0	0.4426	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 89	0	0.1112	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 90	0	–0.05607	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 91	0	–0.02539	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 92	0	–0.1392	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 93	0	–0.005074	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 94	0	–0.1803	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 95	0	0.1059	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 96	0	–0.1494	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 97	0	0.07344	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 98	0	–0.02630	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 99	0	–0.2696	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 100	0	0.2863	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 101	0	–0.4351	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 102	0	–0.2593	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 103	0	–0.1073	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 104	0	0.1513	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 105	0	0.2367	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 106	0	0.2122	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 107	0	–0.2288	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 108	0	–0.02660	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 109	0	–0.03287	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 110	0	–0.1143	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 111	0	–0.02131	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 112	0	0.1427	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 113	0	0.1387	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 114	0	0.08228	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 115	0	0.1218	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 116	0	0.01759	N/A	N/A	N/A	N/A	MM/M

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Stab Measurement Summary  
Before: 2–Jul–2013 10:18

BS Window Ratio	0.7389	N/A	0.7373	N/A	N/A	N/A	
BS Window Sum	25840	N/A	25940	N/A	N/A	N/A	CPS
SS Window Ratio	0.4833	N/A	0.4838	N/A	N/A	N/A	
SS Window Sum	11530	N/A	11500	N/A	N/A	N/A	CPS
LS Window Ratio	0.3002	N/A	0.3017	N/A	N/A	N/A	
LS Window Sum	1345	N/A	1342	N/A	N/A	N/A	CPS

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Photo-multiplier High Voltages Calibrations							
Before: 2–Jul–2013 10:18							
BS PM High Voltage (Command)	1315	N/A	1312	N/A	N/A	N/A	V
SS PM High Voltage (Command)	1905	N/A	1907	N/A	N/A	N/A	V
LS PM High Voltage (Command)	1302	N/A	1308	N/A	N/A	N/A	V
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Crystal Quality Resolutions Calibration							
Before: 2–Jul–2013 10:18							
BS Crystal Resolution	11.93	N/A	11.92	N/A	N/A	N/A	%
SS Crystal Resolution	10.34	N/A	10.35	N/A	N/A	N/A	%
LS Crystal Resolution	8.558	N/A	8.539	N/A	N/A	N/A	%
High resolution Integrated Logging Tool–DTS Wellsite Calibration – MCFL Calibration							
Before: 2–Jul–2013 10:11							
Raw B0 Resistivity	3875	N/A	3854	N/A	N/A	N/A	OHMM
Raw B1 Resistivity	3830	N/A	3789	N/A	N/A	N/A	OHMM
Raw B2 Resistivity	3830	N/A	3809	N/A	N/A	N/A	OHMM
High resolution Integrated Logging Tool–DTS Wellsite Calibration – HILT Caliper Calibration							
Before: 2–Jul–2013 10:05							
HILT Caliper Zero Measurement	8.000	N/A	8.314	N/A	N/A	N/A	IN
HILT Caliper Plus Measurement	12.00	N/A	12.49	N/A	N/A	N/A	IN
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Detector Calibration							
Before: 2–Jul–2013 10:05							
Gamma Ray Background	30.00	N/A	90.48	N/A	N/A	N/A	GAPI
Gamma Ray (Jig – Bkgd)	165.0	N/A	169.8	N/A	N/A	15.00	GAPI
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Zero Measurement							
Master: 17–May–2013 14:28 Before: 2–Jul–2013 10:06							
CNTC Background	27.37	27.37	27.45	N/A	N/A	4.106	CPS
CFTC Background	27.33	27.33	27.94	N/A	N/A	4.100	CPS
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Ratio Measurement							
Master: 17–May–2013 14:28							
Thermal Near Corr. (Tank)	5800	5686	N/A	N/A	N/A	N/A	CPS
Thermal Far Corr. (Tank)	2400	2326	N/A	N/A	N/A	N/A	CPS
CNTC/CFTC (Tank)	2.159	2.445	N/A	N/A	N/A	N/A	
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Accelerometer Calibration							
Before: 2–Jul–2013 18:57							
Z–Axis Acceleration	32.19	N/A	32.09	N/A	N/A	N/A	F/S2
The GLS–VJ source activity is acceptable.							
The HGNS Neutron Master Calibration was done with the following parameters :							
NCT–B Water Temperature	120.0	DEGF.					
Thermal Housing Size	3.373	IN.					
NSR–F serial number	2554						

### 3–D Array Induction Tool – ZAIT–EB / Equipment Identification

#### Primary Equipment:

Rm/SP Bottom Nose

3–D Array Induction Sonde

AHRM – A

AXIS – A

















































































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#### Auxiliary Equipment:

3–D Array Induction Tool – ZAIT–EB Wellsite Calibration								
Electronics Calibration Check – Thru Cal Mag. & Phase								
Idx	Phase	Value	Thru Cal Magnitude MM/M	Nominal	Value	Thru Cal Phase DEG	Nominal	
0	Master	1.484		1.456	11.77		0	
	Before	1.490			14.70			
1	Master	1.499		1.456	10.92		0	
	Before	1.502			13.01			
2	Master	1.453		1.456	0.9479		0	
	Before	1.453			2.005			



























3	Before	1.433			3.003		
	Master	3.417			7.740		
4	Before	3.433			10.47		0
	Master	3.451			6.902		
5	Before	3.461			8.792		0
	Master	3.345			-3.072		
6	Before	3.349			-1.214		0
	Master	2.740			12.23		
7	Before	2.753			15.26		0
	Master	2.768			11.38		
8	Before	2.776			13.58		0
	Master	2.683			1.382		
9	Before	2.685			3.547		0
	Master	1.903			4.955		
10	Before	1.907			5.868		0
	Master	1.904			3.432		
11	Before	1.919			4.653		0
	Master	1.886			1.881		
12	Before	1.899			3.333		0
	Master	3.577			11.80		
13	Before	3.593			14.70		0
	Master	3.612			10.94		
14	Before	3.623			13.05		0
	Master	3.501			0.9918		
15	Before	3.504			3.047		0
	Master	3.051			4.963		
16	Before	3.057			5.865		0
	Master	3.052			3.453		
17	Before	3.077			4.664		0
	Master	3.024			1.901		
18	Before	3.045			3.343		0
	Master	0.9467			11.73		
19	Before	0.9512			14.68		0
	Master	0.9554			10.89		
20	Before	0.9584			13.02		0
	Master	0.9259			0.9383		
21	Before	0.9270			3.020		0
	Master	4.055			2.954		
22	Before	4.063			3.793		0
	Master	4.056			1.440		
23	Before	4.090			2.586		0
	Master	4.019			-0.1098		
24	Before	4.047			1.269		0
	Master	1.375			7.739		
	Before	1.383			10.44		0
	Master	1.362			10.44		



























































































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	Master	1.388			8.807		
26	Before	1.393		1.362	-3.054		0
	Master	1.345			-1.203		
27	Before	1.348		4.081	2.946		0
	Master	4.055			3.780		
28	Before	4.063		4.081	1.436		0
	Master	4.056			2.579		
29	Before	4.090		4.081	-0.1156		0
	Master	4.019			1.258		
30	Before	4.047		1.362	7.731		0
	Master	1.375			10.46		
31	Before	1.383		1.362	6.901		0
	Master	1.388			8.806		
32	Before	1.393		1.362	-3.060		0
	Master	1.345			-1.205		
33	Before	1.348		1.220	5.438		0
	Master	1.176			6.434		
34	Before	1.178		1.220	3.941		0
	Master	1.175			5.236		
35	Before	1.185		1.220	2.370		0
	Master	1.164			3.907		
36	Before	1.172		1.635	12.25		0
	Master	1.631			15.25		
37	Before	1.638		1.635	11.41		0
	Master	1.646			13.62		
38	Before	1.651		1.635	1.459		0
	Master	1.595			3.614		
39	Before	1.597		1.464	5.416		0
	Master	1.412			6.412		
40	Before	1.415		1.464	3.920		0
	Master	1.411			5.223		
41	Before	1.423		1.464	2.363		0
	Master	1.398			3.896		
42	Before	1.408		2.353	12.20		0
	Master	2.353			15.25		
43	Before	2.365		2.353	11.37		0
	Master	2.375			13.60		
44	Before	2.383		2.353	1.404		0
	Master	2.302			3.579		
		50.00 % (Minimum)	(Nominal)	150.0 % (Maximum)	Nom -85.00 (Minimum)	Nom + 85.00 (Maximum)	
Master: 17-Jul-2012 17:34					Before: 2-Jul-2013 10:17		













































Phase	Array Induction SPA Plus V			Value	Phase	Array Induction SPA Zero V			Value	
Master				0.8425	Master				-0.0008885	
Before				0.8425	Before				-0.0008893	
0.7570 (Minimum)				0.8360 (Nominal)	-0.05000 (Minimum)				0 (Nominal)	0.05000 (Maximum)
Phase	Array Induction Temperature Plus V			Value	Phase	Array Induction Temperature Zero V			Value	
Master				0.9891	Master				-0.001770	
Before				0.9893	Before				-0.001760	
0.8800 (Minimum)				0.9798 (Nominal)	-0.05000 (Minimum)				0 (Nominal)	0.05000 (Maximum)
Phase	Array Induction CalSig Plus V			Value	Phase	Array Induction CalSig Zero V			Value	
Master				5.013	Master				-0.01264	
Before				5.013	Before				-0.01272	
4.500 (Minimum)				5.000 (Nominal)	-0.05000 (Minimum)				0 (Nominal)	0.05000 (Maximum)
Phase	Array Induction Volt Plus V			Value	Phase	Array Induction Volt Zero V			Value	
Master				5.013	Master				-0.01264	
Before				5.013	Before				-0.01272	
4.500 (Minimum)				5.000 (Nominal)	-0.05000 (Minimum)				0 (Nominal)	0.05000 (Maximum)
Master: 17-Jul-2012 17:34					Before: 2-Jul-2013 10:17					













































Master: 17-Jul-2012 17:34 Before: 2-Jul-2013 10:17

































3-D Array Induction Tool – ZAIT-EB Wellsite Calibration								
Field Check Sonde Error								
Idx	Value	R Sonde Error Check MM/M			Value	X Sonde Error Check MM/M		
0	0.8768				3.648			
		-1422 (Minimum)	0 (Nominal)	1422 (Maximum)		-33900 (Minimum)	0 (Nominal)	33900 (Maximum)
1	-8.460				-0.9678			
		-1422 (Minimum)	0 (Nominal)	1422 (Maximum)		-33900 (Minimum)	0 (Nominal)	33900 (Maximum)
2	-0.2346				-0.1396			
		-58.96 (Minimum)	0 (Nominal)	58.96 (Maximum)		-512.8 (Minimum)	0 (Nominal)	512.8 (Maximum)
3	0.1586				-0.5683			
		-278.1 (Minimum)	0 (Nominal)	278.1 (Maximum)		-14230 (Minimum)	0 (Nominal)	14230 (Maximum)
4	-2.006				0.2455			
		-278.1 (Minimum)	0 (Nominal)	278.1 (Maximum)		-14230 (Minimum)	0 (Nominal)	14230 (Maximum)
5	-0.1444				0.1829			
		-22.33 (Minimum)	0 (Nominal)	22.33 (Maximum)		-215.0 (Minimum)	0 (Nominal)	215.0 (Maximum)
6	0.09356				-0.06827			
		-93.73 (Minimum)	0 (Nominal)	93.73 (Maximum)		-5616 (Minimum)	0 (Nominal)	5616 (Maximum)
7	-0.7344				-0.05511			
		-93.73 (Minimum)	0 (Nominal)	93.73 (Maximum)		-5616 (Minimum)	0 (Nominal)	5616 (Maximum)
8	0.02038				0.01085			
		-12.70 (Minimum)	0 (Nominal)	12.70 (Maximum)		-58.98 (Minimum)	0 (Nominal)	58.98 (Maximum)
9	-0.2112				-0.4440			
		-38.43 (Minimum)	0 (Nominal)	38.43 (Maximum)		-525.3 (Minimum)	0 (Nominal)	525.3 (Maximum)
10	0.06952				0.1240			
		-322.0 (Minimum)	0 (Nominal)	322.0 (Maximum)		-10300 (Minimum)	0 (Nominal)	10300 (Maximum)
11	0.1413				1.072			
		-183.7 (Minimum)	0 (Nominal)	183.7 (Maximum)		-7941 (Minimum)	0 (Nominal)	7941 (Maximum)
12	-0.1485				-0.3848			
		-322.0 (Minimum)	0 (Nominal)	322.0 (Maximum)		-10300 (Minimum)	0 (Nominal)	10300 (Maximum)

	(Minimum)	(Nominal)	(Maximum)		(Minimum)	(Nominal)	(Maximum)
13	−0.2748			−0.3294			
	−38.43 (Minimum)	0 (Nominal)	38.43 (Maximum)	−525.3 (Minimum)	0 (Nominal)	525.3 (Maximum)	
14	−1.459			−0.05670			
	−183.7 (Minimum)	0 (Nominal)	183.7 (Maximum)	−7941 (Minimum)	0 (Nominal)	7941 (Maximum)	
15	0.1561			1.247			
	−131.2 (Minimum)	0 (Nominal)	131.2 (Maximum)	−10320 (Minimum)	0 (Nominal)	10320 (Maximum)	
16	0.3288			−2.885			
	−131.2 (Minimum)	0 (Nominal)	131.2 (Maximum)	−10320 (Minimum)	0 (Nominal)	10320 (Maximum)	
17	0.01729			0.01416			
	−10.52 (Minimum)	0 (Nominal)	10.52 (Maximum)	−106.6 (Minimum)	0 (Nominal)	106.6 (Maximum)	
18	0.009476			−0.3017			
	−38.65 (Minimum)	0 (Nominal)	38.65 (Maximum)	−259.4 (Minimum)	0 (Nominal)	259.4 (Maximum)	
19	0.07878			−0.06738			
	−120.8 (Minimum)	0 (Nominal)	120.8 (Maximum)	−5071 (Minimum)	0 (Nominal)	5071 (Maximum)	
20	−0.05011			0.3876			
	−56.45 (Minimum)	0 (Nominal)	56.45 (Maximum)	−3970 (Minimum)	0 (Nominal)	3970 (Maximum)	
21	−4.578E−00			−0.2283			
	−120.8 (Minimum)	0 (Nominal)	120.8 (Maximum)	−5071 (Minimum)	0 (Nominal)	5071 (Maximum)	
22	−0.01636			−0.1021			
	−38.65 (Minimum)	0 (Nominal)	38.65 (Maximum)	−259.4 (Minimum)	0 (Nominal)	259.4 (Maximum)	
23	−0.4070			−0.1892			
	−56.45 (Minimum)	0 (Nominal)	56.45 (Maximum)	−3970 (Minimum)	0 (Nominal)	3970 (Maximum)	
24	−0.06665			0.7020			
	−71.00 (Minimum)	0 (Nominal)	71.00 (Maximum)	−5119 (Minimum)	0 (Nominal)	5119 (Maximum)	
25	0.009807			−1.372			
	−71.00 (Minimum)	0 (Nominal)	71.00 (Maximum)	−5119 (Minimum)	0 (Nominal)	5119 (Maximum)	
26	−0.0003009			−0.04074			
	−4.790 (Minimum)	0 (Nominal)	4.790 (Maximum)	−55.66 (Minimum)	0 (Nominal)	55.66 (Maximum)	
27	0.2296			0.1987			
	−30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)	−352.9 (Minimum)	0 (Nominal)	352.9 (Maximum)	
28	0.1653			0.2310			
	−159.9 (Minimum)	0 (Nominal)	159.9 (Maximum)	−6825 (Minimum)	0 (Nominal)	6825 (Maximum)	
29	0.1038			0.6383			
	−69.24 (Minimum)	0 (Nominal)	69.24 (Maximum)	−2661 (Minimum)	0 (Nominal)	2661 (Maximum)	
30	−0.03671			−0.1242			
	−159.9 (Minimum)	0 (Nominal)	159.9 (Maximum)	−6825 (Minimum)	0 (Nominal)	6825 (Maximum)	
31	0.2608			−7.783			
	−30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)	−352.9 (Minimum)	0 (Nominal)	352.9 (Maximum)	
32	−0.8507			0.7845			
	−69.24 (Minimum)	0 (Nominal)	69.24 (Maximum)	−2661 (Minimum)	0 (Nominal)	2661 (Maximum)	
33	−0.3072			3.155			
	−58.94 (Minimum)	0 (Nominal)	58.94 (Maximum)	−2491 (Minimum)	0 (Nominal)	2491 (Maximum)	
34	0.1051			−0.6987			
	−58.94	0	58.94	−2491	0	2491	

		(Minimum)	(Nominal)	(Maximum)		(Minimum)	(Nominal)	(Maximum)
35	0.06393				-0.09846			
		-8.280 (Minimum)	0 (Nominal)	8.280 (Maximum)		-9138 (Minimum)	0 (Nominal)	9138 (Maximum)
36	0.06533				0.1699			
		-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)		-175.1 (Minimum)	0 (Nominal)	175.1 (Maximum)
37	0.07103				0.09726			
		-50.66 (Minimum)	0 (Nominal)	50.66 (Maximum)		-3387 (Minimum)	0 (Nominal)	3387 (Maximum)
38	-0.06642				0.3790			
		-22.87 (Minimum)	0 (Nominal)	22.87 (Maximum)		-1332 (Minimum)	0 (Nominal)	1332 (Maximum)
39	0.06441				-0.1294			
		-50.66 (Minimum)	0 (Nominal)	50.66 (Maximum)		-3387 (Minimum)	0 (Nominal)	3387 (Maximum)
40	-0.1331				0.06270			
		-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)		-175.1 (Minimum)	0 (Nominal)	175.1 (Maximum)
41	-0.1926				0.2822			
		-22.87 (Minimum)	0 (Nominal)	22.87 (Maximum)		-1332 (Minimum)	0 (Nominal)	1332 (Maximum)
42	-0.08327				1.536			
		-46.71 (Minimum)	0 (Nominal)	46.71 (Maximum)		-1250 (Minimum)	0 (Nominal)	1250 (Maximum)
43	-0.03356				-0.3995			
		-46.71 (Minimum)	0 (Nominal)	46.71 (Maximum)		-1250 (Minimum)	0 (Nominal)	1250 (Maximum)
44	0.01292				-0.07822			
		-3.760 (Minimum)	0 (Nominal)	3.760 (Maximum)		-25.88 (Minimum)	0 (Nominal)	25.88 (Maximum)
45	0.1815				0.6924			
		-17.30 (Minimum)	0 (Nominal)	17.30 (Maximum)		-176.4 (Minimum)	0 (Nominal)	176.4 (Maximum)
46	-0.03699				0.4965			
		-124.2 (Minimum)	0 (Nominal)	124.2 (Maximum)		-4734 (Minimum)	0 (Nominal)	4734 (Maximum)
47	0.3481				-0.1383			
		-40.71 (Minimum)	0 (Nominal)	40.71 (Maximum)		-1318 (Minimum)	0 (Nominal)	1318 (Maximum)
48	0.02344				-0.1485			
		-124.2 (Minimum)	0 (Nominal)	124.2 (Maximum)		-4734 (Minimum)	0 (Nominal)	4734 (Maximum)
49	-0.2052				0.8258			
		-17.30 (Minimum)	0 (Nominal)	17.30 (Maximum)		-176.4 (Minimum)	0 (Nominal)	176.4 (Maximum)
50	-0.3714				0.3601			
		-40.71 (Minimum)	0 (Nominal)	40.71 (Maximum)		-1318 (Minimum)	0 (Nominal)	1318 (Maximum)
51	0.04171				0.8813			
		-21.65 (Minimum)	0 (Nominal)	21.65 (Maximum)		-1487 (Minimum)	0 (Nominal)	1487 (Maximum)
52	-0.02857				-0.5822			
		-21.65 (Minimum)	0 (Nominal)	21.65 (Maximum)		-1487 (Minimum)	0 (Nominal)	1487 (Maximum)
53	-0.008003				-0.2641			
		-6.870 (Minimum)	0 (Nominal)	6.870 (Maximum)		-22.76 (Minimum)	0 (Nominal)	22.76 (Maximum)
54	-0.04964				0.1011			
		-14.16 (Minimum)	0 (Nominal)	14.16 (Maximum)		-88.85 (Minimum)	0 (Nominal)	88.85 (Maximum)
55	0.001317				0.02788			
		-19.50 (Minimum)	0 (Nominal)	19.50 (Maximum)		-2368 (Minimum)	0 (Nominal)	2368 (Maximum)
56	0.004580				-0.006073			
		-17.07 (Minimum)	0 (Nominal)	17.07 (Maximum)		-662.0 (Minimum)	0 (Nominal)	662.0 (Maximum)

	(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)
57	−0.007983			−0.09327		
	−19.50 (Minimum)	0 (Nominal)	19.50 (Maximum)	−2368 (Minimum)	0 (Nominal)	2368 (Maximum)
58	−0.03270			0.06207		
	−14.16 (Minimum)	0 (Nominal)	14.16 (Maximum)	−88.85 (Minimum)	0 (Nominal)	88.85 (Maximum)
59	−0.007650			0.2796		
	−17.07 (Minimum)	0 (Nominal)	17.07 (Maximum)	−662.0 (Minimum)	0 (Nominal)	662.0 (Maximum)
60	−0.02358			0.4424		
	−11.09 (Minimum)	0 (Nominal)	11.09 (Maximum)	−742.3 (Minimum)	0 (Nominal)	742.3 (Maximum)
61	−0.003514			−0.2170		
	−11.09 (Minimum)	0 (Nominal)	11.09 (Maximum)	−742.3 (Minimum)	0 (Nominal)	742.3 (Maximum)
62	0.02410			−0.06397		
	−3.800 (Minimum)	0 (Nominal)	3.800 (Maximum)	−13.37 (Minimum)	0 (Nominal)	13.37 (Maximum)
63	0.06746			−0.01039		
	−12.07 (Minimum)	0 (Nominal)	12.07 (Maximum)	−90.68 (Minimum)	0 (Nominal)	90.68 (Maximum)
64	0.01019			−0.1392		
	−43.67 (Minimum)	0 (Nominal)	43.67 (Maximum)	−1646 (Minimum)	0 (Nominal)	1646 (Maximum)
65	−0.2117			−0.2752		
	−24.50 (Minimum)	0 (Nominal)	24.50 (Maximum)	−477.7 (Minimum)	0 (Nominal)	477.7 (Maximum)
66	0.05021			−0.05826		
	−43.67 (Minimum)	0 (Nominal)	43.67 (Maximum)	−1646 (Minimum)	0 (Nominal)	1646 (Maximum)
67	−0.4624			−0.04993		
	−12.07 (Minimum)	0 (Nominal)	12.07 (Maximum)	−90.68 (Minimum)	0 (Nominal)	90.68 (Maximum)
68	−0.1547			0.7906		
	−24.50 (Minimum)	0 (Nominal)	24.50 (Maximum)	−477.7 (Minimum)	0 (Nominal)	477.7 (Maximum)
69	−0.1594			1.136		
	−12.43 (Minimum)	0 (Nominal)	12.43 (Maximum)	−622.5 (Minimum)	0 (Nominal)	622.5 (Maximum)
70	0.1116			0.3809		
	−12.43 (Minimum)	0 (Nominal)	12.43 (Maximum)	−622.5 (Minimum)	0 (Nominal)	622.5 (Maximum)
71	−0.03944			−0.02920		
	−3.560 (Minimum)	0 (Nominal)	3.560 (Maximum)	−10.29 (Minimum)	0 (Nominal)	10.29 (Maximum)
72	0.04089			0.1115		
	−8.900 (Minimum)	0 (Nominal)	8.900 (Maximum)	−50.09 (Minimum)	0 (Nominal)	50.09 (Maximum)
73	−0.01481			0.02747		
	−8.150 (Minimum)	0 (Nominal)	8.150 (Maximum)	−815.4 (Minimum)	0 (Nominal)	815.4 (Maximum)
74	−0.0006365			−0.2118		
	−12.27 (Minimum)	0 (Nominal)	12.27 (Maximum)	−242.1 (Minimum)	0 (Nominal)	242.1 (Maximum)
75	0.01118			−0.07761		
	−8.150 (Minimum)	0 (Nominal)	8.150 (Maximum)	−815.4 (Minimum)	0 (Nominal)	815.4 (Maximum)
76	−0.004654			−0.01807		
	−8.900 (Minimum)	0 (Nominal)	8.900 (Maximum)	−50.09 (Minimum)	0 (Nominal)	50.09 (Maximum)
77	−0.1062			0.3138		
	−12.27 (Minimum)	0 (Nominal)	12.27 (Maximum)	−242.1 (Minimum)	0 (Nominal)	242.1 (Maximum)
78	−0.01381			0.5158		
	−6.910 (Minimum)	0 (Nominal)	6.910 (Maximum)	−309.5 (Minimum)	0 (Nominal)	309.5 (Maximum)

79	(Minimum) −0.1139	(Nominal) 	(Maximum) 0	(Minimum) 0.1849	(Nominal) 	(Maximum) 0
	−6.910 (Minimum)	0 (Nominal)	6.910 (Maximum)	−309.5 (Minimum)	0 (Nominal)	309.5 (Maximum)
80	0.02617		0	0.009218		0
	−2.270 (Minimum)	0 (Nominal)	2.270 (Maximum)	−5.950 (Minimum)	0 (Nominal)	5.950 (Maximum)
81	0.2853		0	−0.009415		0
	−14.82 (Minimum)	0 (Nominal)	14.82 (Maximum)	−41.94 (Minimum)	0 (Nominal)	41.94 (Maximum)
82	0.1240		0	0.02902		0
	−26.75 (Minimum)	0 (Nominal)	26.75 (Maximum)	−1114 (Minimum)	0 (Nominal)	1114 (Maximum)
83	0.1245		0	0.1291		0
	−22.91 (Minimum)	0 (Nominal)	22.91 (Maximum)	−425.6 (Minimum)	0 (Nominal)	425.6 (Maximum)
84	0.05487		0	0.06401		0
	−26.75 (Minimum)	0 (Nominal)	26.75 (Maximum)	−1114 (Minimum)	0 (Nominal)	1114 (Maximum)
85	−0.07480		0	0.7413		0
	−14.82 (Minimum)	0 (Nominal)	14.82 (Maximum)	−41.94 (Minimum)	0 (Nominal)	41.94 (Maximum)
86	−0.4918		0	0.07848		0
	−22.91 (Minimum)	0 (Nominal)	22.91 (Maximum)	−425.6 (Minimum)	0 (Nominal)	425.6 (Maximum)
87	0.2648		0	3.524		0
	−17.62 (Minimum)	0 (Nominal)	17.62 (Maximum)	−619.3 (Minimum)	0 (Nominal)	619.3 (Maximum)
88	−0.06360		0	0.4426		0
	−17.62 (Minimum)	0 (Nominal)	17.62 (Maximum)	−619.3 (Minimum)	0 (Nominal)	619.3 (Maximum)
89	−0.06884		0	0.1112		0
	−3.910 (Minimum)	0 (Nominal)	3.910 (Maximum)	−9.470 (Minimum)	0 (Nominal)	9.470 (Maximum)
90	0.03490		0	−0.05607		0
	−11.24 (Minimum)	0 (Nominal)	11.24 (Maximum)	−18.45 (Minimum)	0 (Nominal)	18.45 (Maximum)
91	−0.01005		0	−0.02539		0
	−6.130 (Minimum)	0 (Nominal)	6.130 (Maximum)	−563.2 (Minimum)	0 (Nominal)	563.2 (Maximum)
92	0.05603		0	−0.1392		0
	−13.75 (Minimum)	0 (Nominal)	13.75 (Maximum)	−215.6 (Minimum)	0 (Nominal)	215.6 (Maximum)
93	−0.03578		0	−0.005074		0
	−6.130 (Minimum)	0 (Nominal)	6.130 (Maximum)	−563.2 (Minimum)	0 (Nominal)	563.2 (Maximum)
94	0.07159		0	−0.1803		0
	−11.24 (Minimum)	0 (Nominal)	11.24 (Maximum)	−18.45 (Minimum)	0 (Nominal)	18.45 (Maximum)
95	−0.2276		0	0.1059		0
	−13.75 (Minimum)	0 (Nominal)	13.75 (Maximum)	−215.6 (Minimum)	0 (Nominal)	215.6 (Maximum)
96	−0.03868		0	−0.1494		0
	−9.770 (Minimum)	0 (Nominal)	9.770 (Maximum)	−316.9 (Minimum)	0 (Nominal)	316.9 (Maximum)
97	−0.01046		0	0.07344		0
	−9.770 (Minimum)	0 (Nominal)	9.770 (Maximum)	−316.9 (Minimum)	0 (Nominal)	316.9 (Maximum)
98	−0.001964		0	−0.02630		0
	−2.110 (Minimum)	0 (Nominal)	2.110 (Maximum)	−7.370 (Minimum)	0 (Nominal)	7.370 (Maximum)
99	−0.01048		0	−0.2696		0
	−15.93 (Minimum)	0 (Nominal)	15.93 (Maximum)	−35.54 (Minimum)	0 (Nominal)	35.54 (Maximum)
100	0.3691		0	0.2863		0
	−22.00 (Minimum)	0 (Nominal)	22.00 (Maximum)	−562.7 (Minimum)	0 (Nominal)	562.7 (Maximum)

	(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)
101	0.2172			-0.4351		
	-29.21 (Minimum)	0 (Nominal)	29.21 (Maximum)	-209.9 (Minimum)	0 (Nominal)	209.9 (Maximum)
102	0.1826			-0.2593		
	-22.00 (Minimum)	0 (Nominal)	22.00 (Maximum)	-562.7 (Minimum)	0 (Nominal)	562.7 (Maximum)
103	0.5148			-0.1073		
	-15.93 (Minimum)	0 (Nominal)	15.93 (Maximum)	-35.54 (Minimum)	0 (Nominal)	35.54 (Maximum)
104	0.2807			0.1513		
	-29.21 (Minimum)	0 (Nominal)	29.21 (Maximum)	-209.9 (Minimum)	0 (Nominal)	209.9 (Maximum)
105	0.04119			0.2367		
	-23.81 (Minimum)	0 (Nominal)	23.81 (Maximum)	-232.8 (Minimum)	0 (Nominal)	232.8 (Maximum)
106	-0.1157			0.2122		
	-23.81 (Minimum)	0 (Nominal)	23.81 (Maximum)	-232.8 (Minimum)	0 (Nominal)	232.8 (Maximum)
107	0.3458			-0.2288		
	-10.69 (Minimum)	0 (Nominal)	10.69 (Maximum)	-19.32 (Minimum)	0 (Nominal)	19.32 (Maximum)
108	0.04482			-0.02660		
	-9.300 (Minimum)	0 (Nominal)	9.300 (Maximum)	-21.95 (Minimum)	0 (Nominal)	21.95 (Maximum)
109	-0.01942			-0.03287		
	-8.990 (Minimum)	0 (Nominal)	8.990 (Maximum)	-293.9 (Minimum)	0 (Nominal)	293.9 (Maximum)
110	-0.03776			-0.1143		
	-16.85 (Minimum)	0 (Nominal)	16.85 (Maximum)	-94.98 (Minimum)	0 (Nominal)	94.98 (Maximum)
111	-0.01619			-0.02131		
	-8.990 (Minimum)	0 (Nominal)	8.990 (Maximum)	-293.9 (Minimum)	0 (Nominal)	293.9 (Maximum)
112	-0.01419			0.1427		
	-9.300 (Minimum)	0 (Nominal)	9.300 (Maximum)	-21.95 (Minimum)	0 (Nominal)	21.95 (Maximum)
113	0.04691			0.1387		
	-16.85 (Minimum)	0 (Nominal)	16.85 (Maximum)	-94.98 (Minimum)	0 (Nominal)	94.98 (Maximum)
114	-0.03978			0.08228		
	-14.21 (Minimum)	0 (Nominal)	14.21 (Maximum)	-112.1 (Minimum)	0 (Nominal)	112.1 (Maximum)
115	-0.07626			0.1218		
	-14.21 (Minimum)	0 (Nominal)	14.21 (Maximum)	-112.1 (Minimum)	0 (Nominal)	112.1 (Maximum)
116	-0.001239			0.01759		
	-1.760 (Minimum)	0 (Nominal)	1.760 (Maximum)	-10.88 (Minimum)	0 (Nominal)	10.88 (Maximum)

Master: 17-Jul-2012 17:34

### General Purpose Inclinator / Equipment Identification

Primary Equipment:  
GPIT Cartridge – F

GPIC – F

Auxiliary Equipment:  
GPIT Housing – F

GPIH – B

### High resolution Integrated Logging Tool-DTS / Equipment Identification

Primary Equipment:  
HILT high-Resolution Mechanical Sonde  
HILT Rxo Gamma-ray Device  
HILT Micro Cylindrically Focused Log Dev

HRMS – H  
HRGD – H  
MCFL – H







GR Logging Source  
HILT High Res. Control Cartridge  
HILT Gamma-Ray Neutron Sonde-DTS  
HGNS Gamma-Ray Device  
HGNS Neutron Detector with Alpha Source




GLS - VJ  
HRCC - H  
HGNS - H  
HGR -  
HCNT - H




5240




Auxiliary Equipment:  
Neutron Calibration Tank  
Gamma Source Radioactive  
HGNS Housing



NCT - B  
GSR - U/Y  
HGNH -

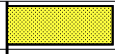

High resolution Integrated Logging Tool–DTS Wellsite Calibration														
Stab Measurement Summary														
Phase	BS Window Ratio			Value	Phase	SS Window Ratio			Value	Phase	LS Window Ratio			Value
Before				0.7373	Before				0.4838	Before				0.3017
	0.7020 (Minimum)	0.7389 (Nominal)	0.7759 (Maximum)		0.4591 (Minimum)	0.4833 (Nominal)	0.5074 (Maximum)			0.2852 (Minimum)	0.3002 (Nominal)	0.3152 (Maximum)		
Phase	BS Window Sum CPS			Value	Phase	SS Window Sum CPS			Value	Phase	LS Window Sum CPS			Value
Before				25940	Before				11500	Before				1342
	24550 (Minimum)	25840 (Nominal)	27130 (Maximum)		10950 (Minimum)	11530 (Nominal)	12110 (Maximum)			1277 (Minimum)	1345 (Nominal)	1412 (Maximum)		
Before: 2-Jul-2013 10:18														



High resolution Integrated Logging Tool–DTS Wellsite Calibration											
Photo-multiplier High Voltages Calibrations											
Phase	BS PM High Voltage (Command) V		Value	Phase	SS PM High Voltage (Command) V		Value	Phase	LS PM High Voltage (Command) V		Value
Before			1312	Before			1907	Before			1308
	1215 (Minimum)	1315 (Nominal)	1415 (Maximum)		1805 (Minimum)	1905 (Nominal)	2005 (Maximum)		1202 (Minimum)	1302 (Nominal)	1402 (Maximum)
Before: 2-Jul-2013 10:18											

High resolution Integrated Logging Tool-DTS Wellsite Calibration											
Crystal Quality Resolutions Calibration											
Phase	BS Crystal Resolution %		Value	Phase	SS Crystal Resolution %		Value	Phase	LS Crystal Resolution %		Value
Before			11.92	Before			10.35	Before			8.539
	10.93 (Minimum)	11.93 (Nominal)	12.93 (Maximum)		9.339 (Minimum)	10.34 (Nominal)	11.34 (Maximum)		7.558 (Minimum)	8.558 (Nominal)	9.558 (Maximum)
Before: 2-Jul-2013 10:18											





High resolution Integrated Logging Tool–DTS Wellsite Calibration														
MCFL Calibration														
Phase	Raw B0 Resistivity OHMM			Value	Phase	Raw B1 Resistivity OHMM			Value	Phase	Raw B2 Resistivity OHMM			Value
Before				3854	Before				3789	Before				3809
	3565 (Minimum)	3875 (Nominal)	4185 (Maximum)		3524 (Minimum)	3830 (Nominal)	4136 (Maximum)			3524 (Minimum)	3830 (Nominal)	4136 (Maximum)		
Before: 2-Jul-2013 10:11														

High resolution Integrated Logging Tool-DTS Wellsite Calibration							
HILT Caliper Calibration							
Phase	HILT Caliper Zero Measurement IN		Value	Phase	HILT Caliper Plus Measurement IN		Value
Before			8.314	Before			12.49
6.000 (Minimum)		8.000 (Nominal)	10.00 (Maximum)	9.000 (Minimum)		12.00 (Nominal)	15.00 (Maximum)
Before: 2-Jul-2013 10:05							


High resolution Integrated Logging Tool-DTS Wellsite Calibration							
Detector Calibration							
Phase	Gamma Ray Background GAPI		Value	Phase	Gamma Ray (Jig – Bkgd) GAPI		Value
Before			90.48	Before			169.8
	0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)		157.1 (Minimum)	165.0 (Nominal)	206.3 (Maximum)
Before: 2-Jul-2013 10:05							

High resolution Integrated Logging Tool-DTS Wellsite Calibration							
Zero Measurement							
Phase	CNTC Background CPS		Value	Phase	CFTC Background CPS		Value
							



Master		27.37	Master		27.33
Before		27.45	Before		27.94
5.000 (Minimum)	27.37 (Nominal)	40.00 (Maximum)	5.000 (Minimum)	27.33 (Nominal)	40.00 (Maximum)
Master: 17-May-2013 14:28			Before: 2-Jul-2013 10:06		

High resolution Integrated Logging Tool-DTS Wellsite Calibration											
Ratio Measurement											
Phase	Thermal Near Corr. (Tank) CPS		Value	Phase	Thermal Far Corr. (Tank) CPS		Value	Phase	CNTC/CFTC (Tank)		Value
Master	<div><div></div></div>		5686	Master	<div><div></div></div>		2326	Master	<div><div></div></div>		2.445
	4700 (Minimum)	5800 (Nominal)	6900 (Maximum)		1900 (Minimum)	2400 (Nominal)	2900 (Maximum)		2.120 (Minimum)	2.159 (Nominal)	2.540 (Maximum)
Master: 17-May-2013 14:28											

High resolution Integrated Logging Tool-DTS Wellsite Calibration		
Accelerometer Calibration		
Phase	Z-Axis Acceleration F/S2	Value
Before		32.09
31.53 (Minimum)	32.19 (Nominal)	32.84 (Maximum)
Before: 2-Jul-2013 18:57		

DTS Telemetry Tool / Equipment Identification		
Primary Equipment:		
DTC-H Auxiliary Cartridge		DTCH - A
DTC-H Telemetry Cartridge		DTCH - A
Auxiliary Equipment:		
DTCH Telemetry Cartridge Housing		ECH - KC

Company: **Whiting Oil and Gas Corporation**

**Schlumberger**

Well: **Wildhorse 16-13L**

Field: **Wildcat**

County: **Weld**

State: **Colorado**

Platform Express  
Triple Combo