

HALLIBURTON

SPECTRAL DENSITY DUAL SPACED NEUTRON ARRAY COMPENSATED TRUE RESISTIVITY

COMPANY	BRIDGE ENERGY INC		
WELL	SCHWARZ 1-10		
FIELD	WILDCAT		
COUNTY	PAYETTE		
STATE	ID		
COMPANY	BRIDGE ENERGY INC	WELL	SCHWARZ 1-10
FIELD	WILDCAT	COUNTY	PAYETTE
STATE	ID	STATE	ID
API No.	1107520008	Other Services:	RWCH BSAT
Location	SURFACE HOLE LOCATION: 623' FNL & 1183' FEL		
Sect.	8	Twp.	10S
Rge.			2W
Elev.	2495.2 ft	Elev.:	K.B. 2507.0 ft
		D.F.	2506.0 ft
		G.L.	2495.2 ft

Permanent Datum	GL		
Log measured from	KB		12.0 ft above perm. Datum
Drilling measured from	KB		
Date	07-May-10		
Run No.	ONE		

Depth - Driller	2606.00 ft		
Depth - Logger	2602.0 ft		
Bottom - Logged Interval	2600.0 ft		
Top - Logged Interval	0.0 ft		
Casing - Driller	9.625 in	@	564.0 ft
Casing - Logger	562.0 ft		
Bit Size	8.750 in	@	
Type Fluid in Hole	WBM		
Density	10.2 ppg	44.00	s/qt
PH	8.50 pH	6.6	cp/m
Source of Sample	MUD TANK		
Rm @ Meas. Temperature	3.650 ohmm	@	59.00 degF
Rmf @ Meas. Temperature	3.44 ohmm	@	73.30 degF
Rmc @ Meas. Temperature	3.200 ohmm	@	74.70 degF
Source Rmf	MEAS.		MEAS.
Rm @ BHT	1.79 ohmm	@	127.0 degF
Time Since Circulation	13.5 hr		
Time on Bottom	07-May-10 11:01		
Max. Rec. Temperature	127.0 degF	@	2602.0 ft
Equipment	11170614		ROCK SPRING
Recorded By	D. CULVER		
Witnessed By	JEFF KIRN		

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Service Ticket No.: 7355557 API Serial No.: 1107520008 PGM Version: WL INSITE R3.0.3 (Build 5)

CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE				RESISTIVITY SCALE CHANGES			
Date	Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole
Type Fluid in Hole							
Density	Viscosity						
Ph	Fluid Loss						
Source of Sample				RESISTIVITY EQUIPMENT DATA			
Rm @ Meas. Temp	@	@		Run No.	Tool Type & No.	Pad Type	Tool Pos.
Rmf @ Meas. Temp.	@	@		ONE	ACRT-	N/A	1.5" S.O.
Rmc @ Meas. Temp.	@	@			E104-S103		
Source Rmf	Rmc						
Rm @ BHT	@	@					
Rmf @ BHT	@	@					
Rmc @ BHT	@	@					

EQUIPMENT DATA							
GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.	ONE	Run No.	ONE	Run No.	ONE
Serial No.	11215095	Serial No.	10939067	Serial No.	11014271	Serial No.	10860047
Model No.	GTET	Model No.	BSAT	Model No.	SDLT-I	Model No.	DSNT-I
Diameter	3.625"	No. of Cent.	2	Diameter	4.5"	Diameter	3.625"
Detector Model No.	102-A	Spacing	0.5'	Log Type	GAM-GAM	Log Type	THERM-THERM
Type	SCINT			Source Type	Cs137	Source Type	Am241Be
Length	8"	LSA [Y/N]	N	Serial No.	5235GW	Serial No.	08-018
Distance to Source	10'	FWDA [Y/N]	N	Strength	1.5 Ci	Strength	15 Ci

LOGGING DATA

GENERAL GAMMA ACOUSTIC DENSITY NEUTRON

Run	GENERAL		Speed ft/min	GAMMA		ACOUSTIC		Matrix	DENSITY		NEUTRON			
	Depth			Scale		Scale			Scale		Matrix			
	No.	From		To	L	R	L		R	L	R	L	R	
ONE	562'	0'	REC	0	200						40%	0%	SAND	
ONE	2602'	562'	REC	0	200	40%	0%	55.5 usec/ft	40%	0%	2.68 g/cc	40%	0%	SAND

DIRECTIONAL INFORMATION

Maximum Deviation	@	KOP	@
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Remarks: RWCH-GTET-DSNT-SDLT-FLEX-BSAT-ACRT WERE RAN IN COMBINATION

ANNULAR HOLE VOLUME CALCULATED FOR 5.5" CASING

BOREHOLE RUGOSITY, TENSION PULLS AND WASHOUTS MAY EFFECT LOG QUALITY

LATITUDE: N 44 deg 03' 0.85468"

LONGITUDE: W 116 deg 33' 25.66391"

TODAY'S CREW: C. RINESS, B. PECK, T. BOWEN & A. MILLER RIG: ENSIGN 516

*** THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES, ROCK SPRINGS, WY (301) 352-8600 ***

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PARAMETERS REPORT

Depth (ft)	Tool Name	Mnemonic	Description	Value	Units
TOP					
	SHARED	BS	Bit Size	8.750	in
	SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	MDWT	Borehole Fluid Weight	10.200	ppg
	SHARED	OBM	Oil Based Mud System?	No	
	SHARED	RMUD	Mud Resistivity	2.000	ohmm
	SHARED	TRM	Temperature of Mud	75.0	degF
	SHARED	CSD	Logging Interval is Cased?	No	
	SHARED	ICOD	AHV Casing OD	5.500	in
	SHARED	ST	Surface Temperature	75.0	degF
	SHARED	TD	Total Well Depth	2606.00	ft
	SHARED	BHT	Bottom Hole Temperature	200.0	degF
	SHARED	SVTM	Navigation and Survey Master Tool	NONE	
	SHARED	AZTM	High Res Z Accelerometer Master Tool	GTET	
	SHARED	TEMM	Temperature Master Tool	NONE	
	SHARED	BHSM	Borehole Size Master Tool	NONE	
	Rwa / CrossPlot	XPOK	Process Crossplot?	Yes	
	Rwa / CrossPlot	FCHO	Select Source of F	Automatic	
	Rwa / CrossPlot	AFAC	Archie A factor	0.6200	
	Rwa / CrossPlot	MFAC	Archie M factor	2.1500	
	Rwa / CrossPlot	RMFR	Rmf Reference	0.10	ohmm
	Rwa /	TMER	Rmf Ref Temp	75.00	degF

CrossPlot	RWA	Resistivity of Formation Water	0.05	ohmm
Rwa / CrossPlot	ADP	Use Air Porosity to calculate CrossplotPhi	No	
GTET	GROK	Process Gamma Ray?	Yes	
GTET	GRSO	Gamma Tool Standoff	0.000	in
GTET	GEOK	Process Gamma Ray EVR?	No	
GTET	POTA	Potassium	0.00	%
GTET	MDTP	Mud Type	Natural	
GTET	TPOS	Tool Position	Standoff	
DSNT	DNOK	Process DSN?	Yes	
DSNT	DEOK	Process DSN EVR?	No	
DSNT	NLIT	Neutron Lithology	Sandstone	
DSNT	DNSO	DSN Standoff - 0.25 in (6.35 mm) Recommended	0.250	in
DSNT	DNTP	Temperature Correction Type	None	
DSNT	DPRS	DSN Pressure Correction Type	None	
DSNT	SHCO	View More Correction Options	No	
DSNT	UTVD	Use TVD for Gradient Corrections?	No	
DSNT	LHWT	Logging Horizontal Water Tank?	No	
SDLT	DNOK	Process Density?	Yes	
SDLT	DNOK	Process Density EVR?	No	
SDLT	AD	Is Hole Air Drilled?	No	
SDLT	CB	Logging Calibration Blocks?	No	
SDLT	SPVT	SDLT Pad Temperature Valid?	Yes	
SDLT	DTWN	Disable temperature warning	No	
SDLT	MDTP	Weighted Mud Correction Type?	Barite	
SDLT	DMA	Formation Density Matrix	2.680	g/cc
SDLT	DFL	Formation Density Fluid	1.000	g/cc
SDLT	CLOK	Process Caliper Outputs?	Yes	
SDLT	MLOK	Process MicroLog Outputs?	Yes	
BSAT	MBOK	Compute BCAS Results?	Yes	
BSAT	FLLO	Semblance Filter Low Pass Value?	5000	Hz
BSAT	FLHI	Semblance Filter High Pass Value?	27000	Hz
BSAT	DTFL	Delta -T Fluid	189.00	uspf
BSAT	DTMT	Delta -T Matrix Type	Sandstone 55.5	
BSAT	DTSH	Delta -T Shale	100.00	uspf
BSAT	SPEQ	Acoustic Porosity Equation	Wylie	
ACRt	RTOK	Process ACRt?	Yes	
ACRt	MNSO	Minimum Tool Standoff	1.50	in
ACRt	TCS1	Temperature Correction Source	FP Lwr & FP Upr	
ACRt	TPOS	Tool Position	Free Hanging	
ACRt	RMOP	Rmud Source	Mud Cell	
ACRt	RMIN	Minimum Resistivity for MAP	0.20	ohmm
ACRt	RMIN	Maximum Resistivity for MAP	200.00	ohmm
ACRt	THQY	Threshold Quality	0.50	

BOTTOM

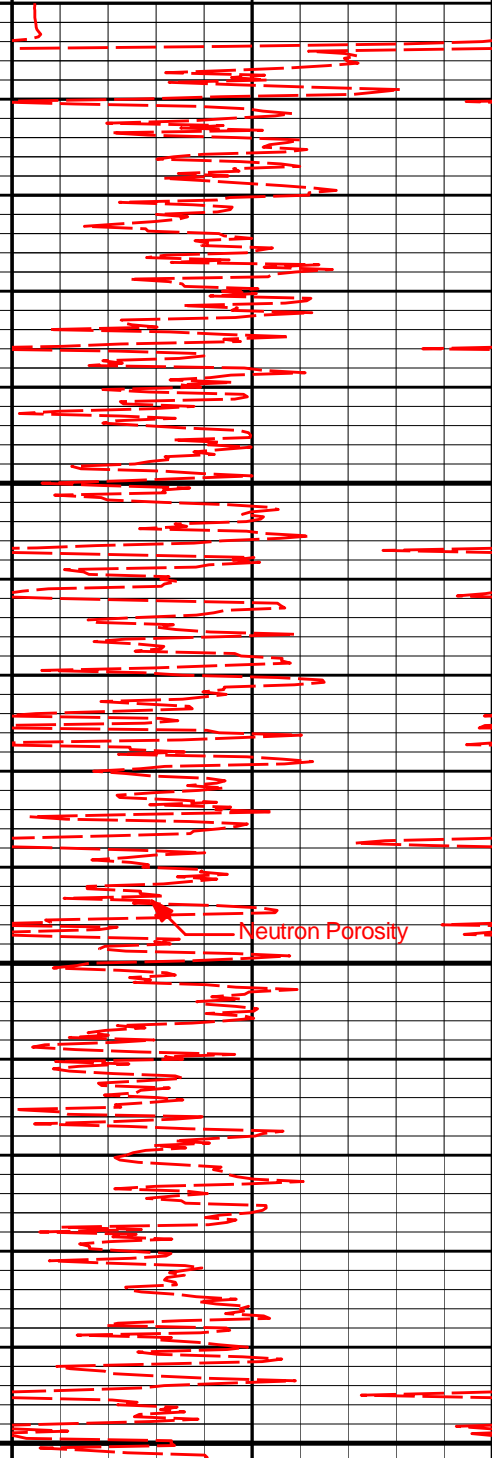
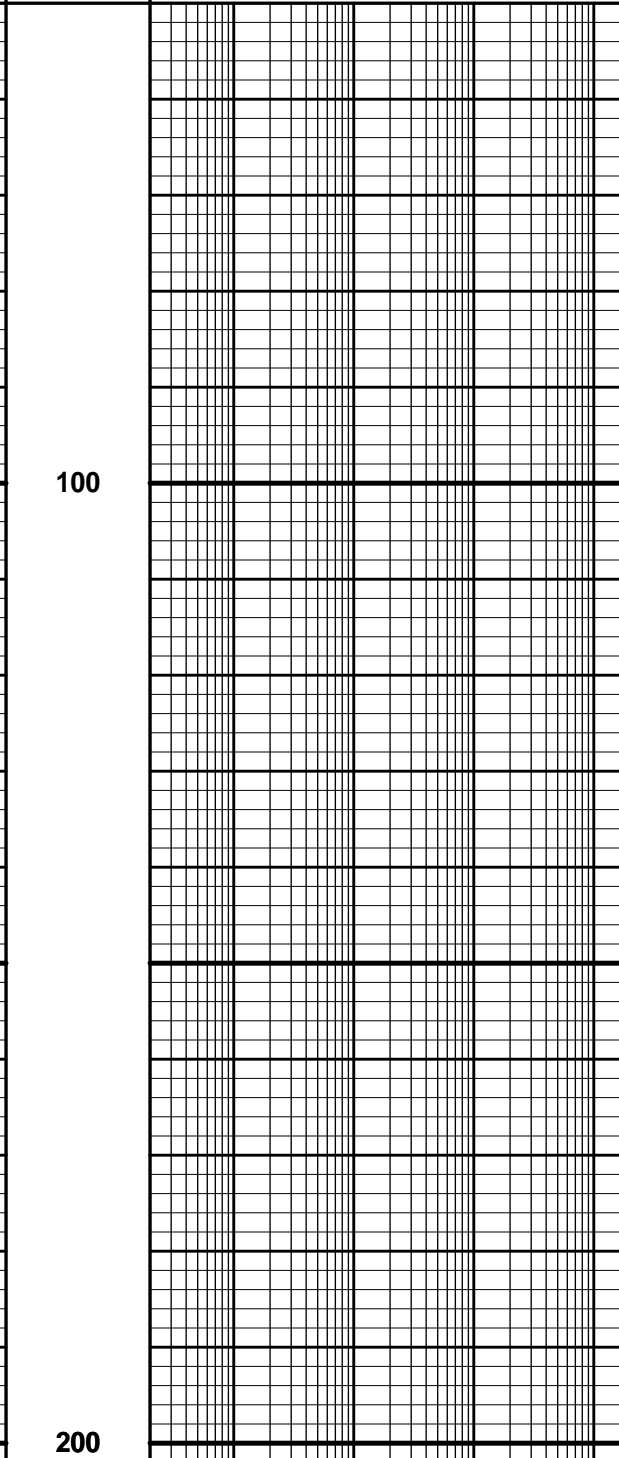
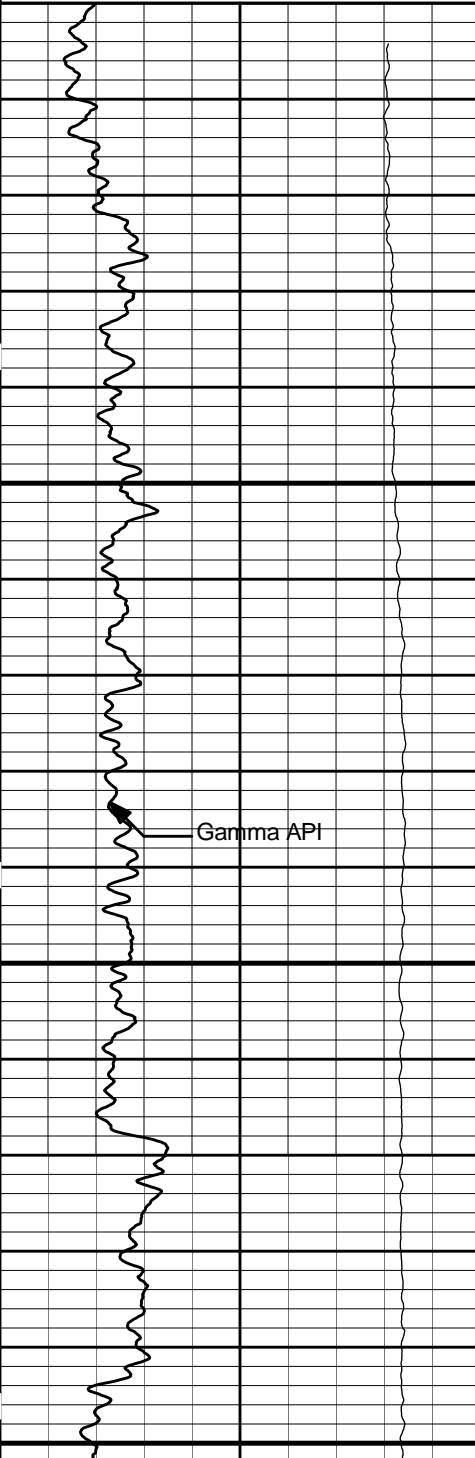
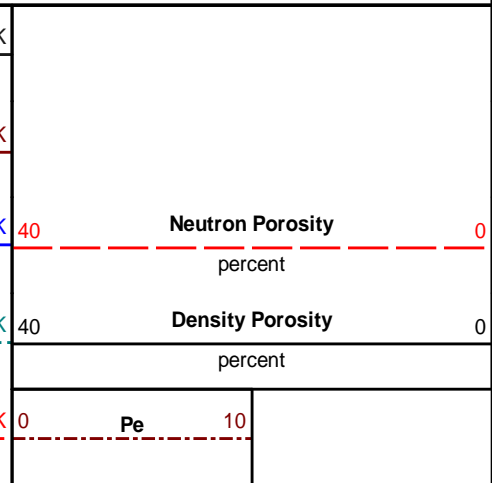
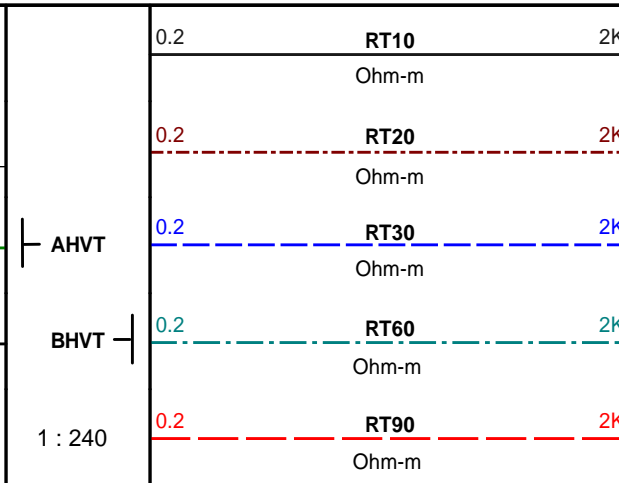
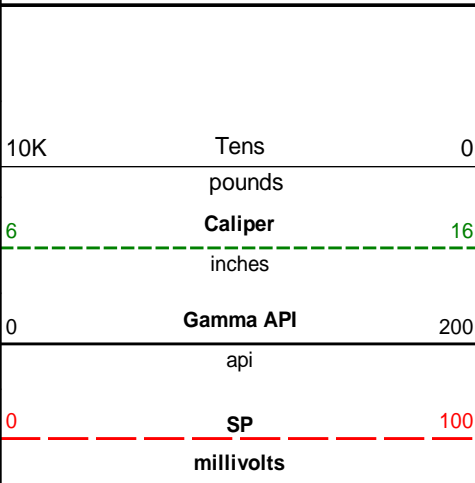
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Date: 07-May-10 18:09:18

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Plot Time: 07-May-10 18:53:35
 Plot Range: 50 ft to 2604.92 ft
 Data: B_SCHWARX_1_10\Well Based\MAIN*
 Plot File: \COMPIQ_COMPOSITE_ACRT_5IN_RM

MAIN PASS 5" = 100'



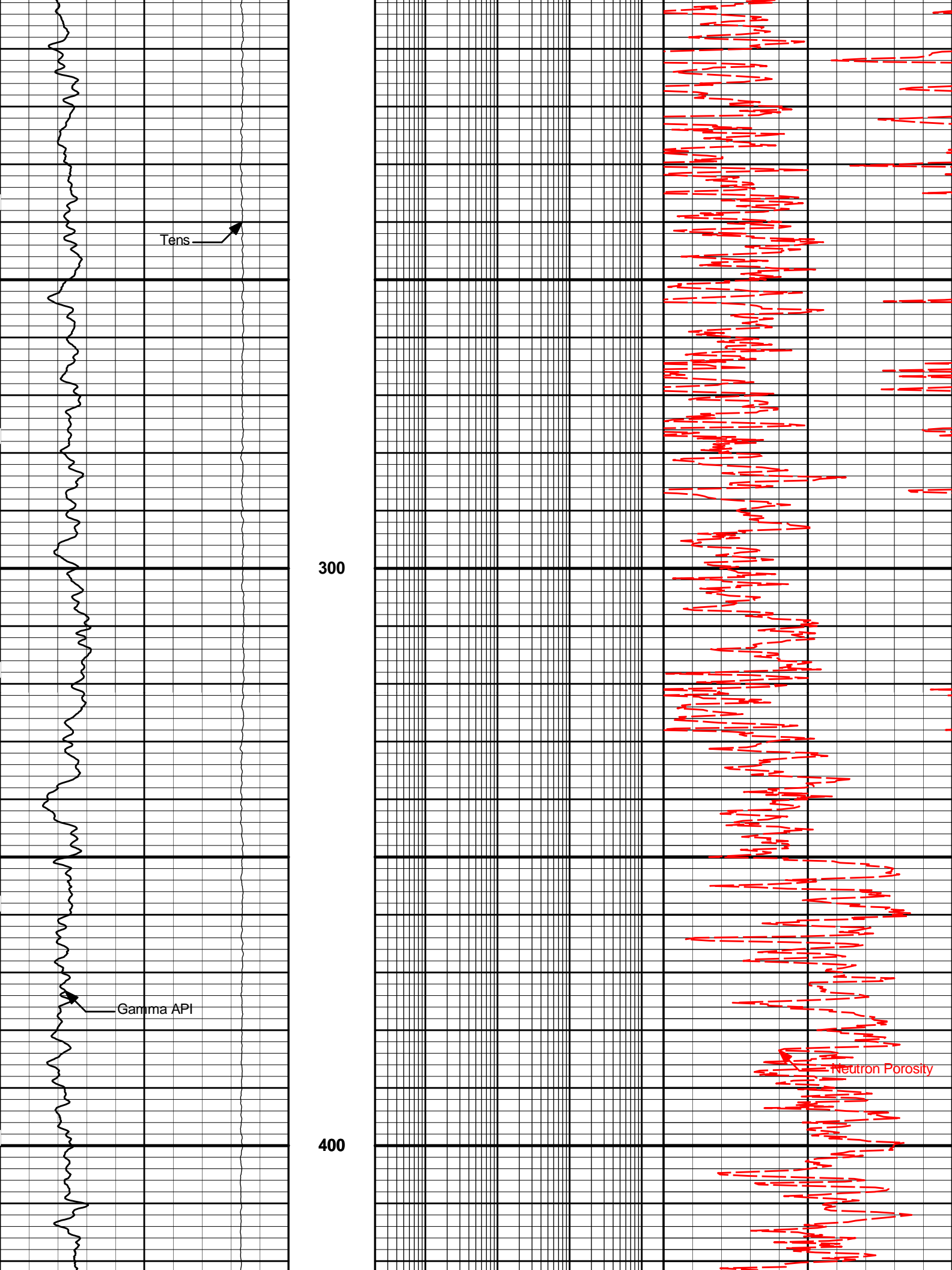
AHVT
BHVT
1 : 240

100

200

Gamma API

Neutron Porosity



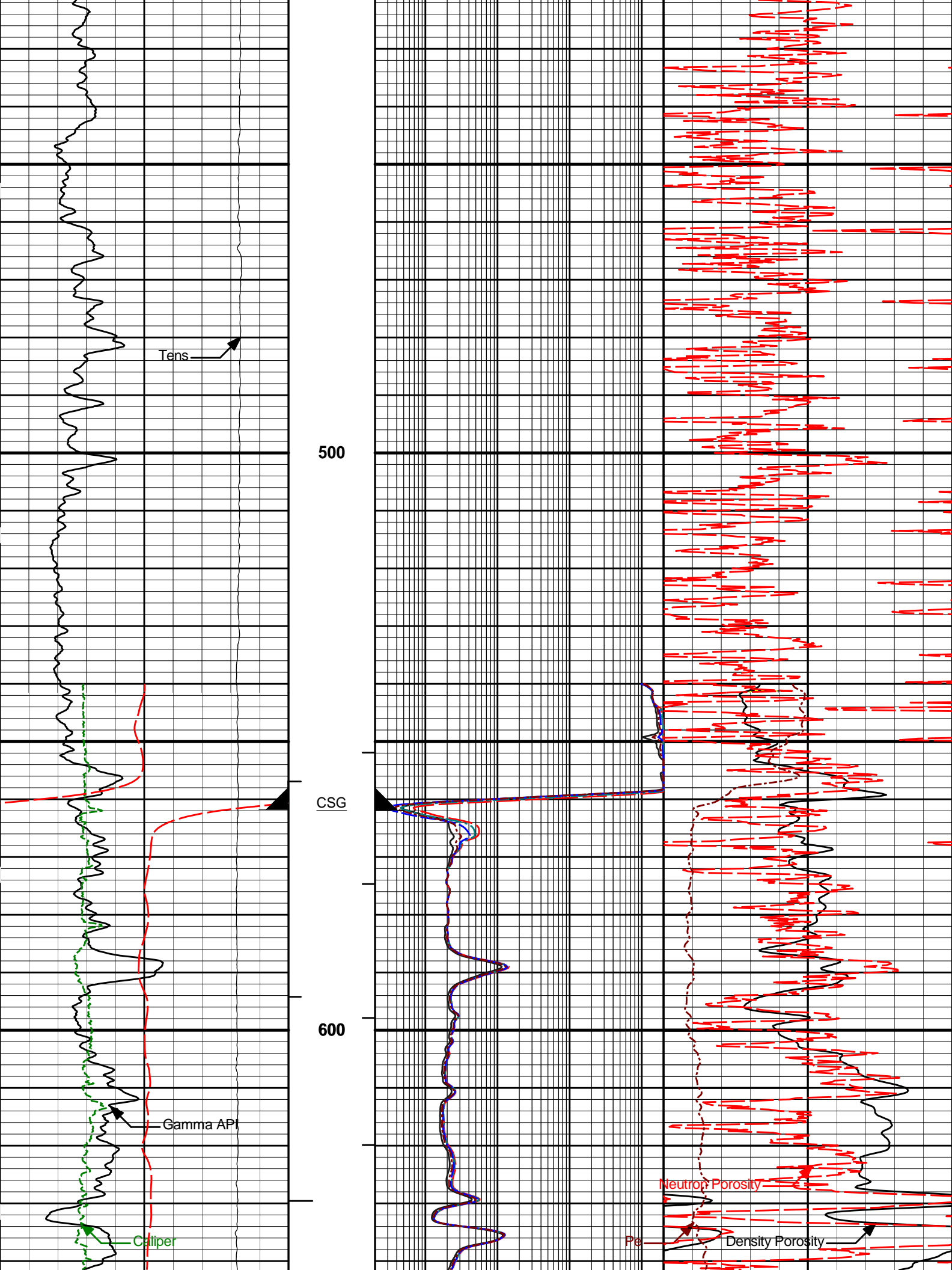
Tens

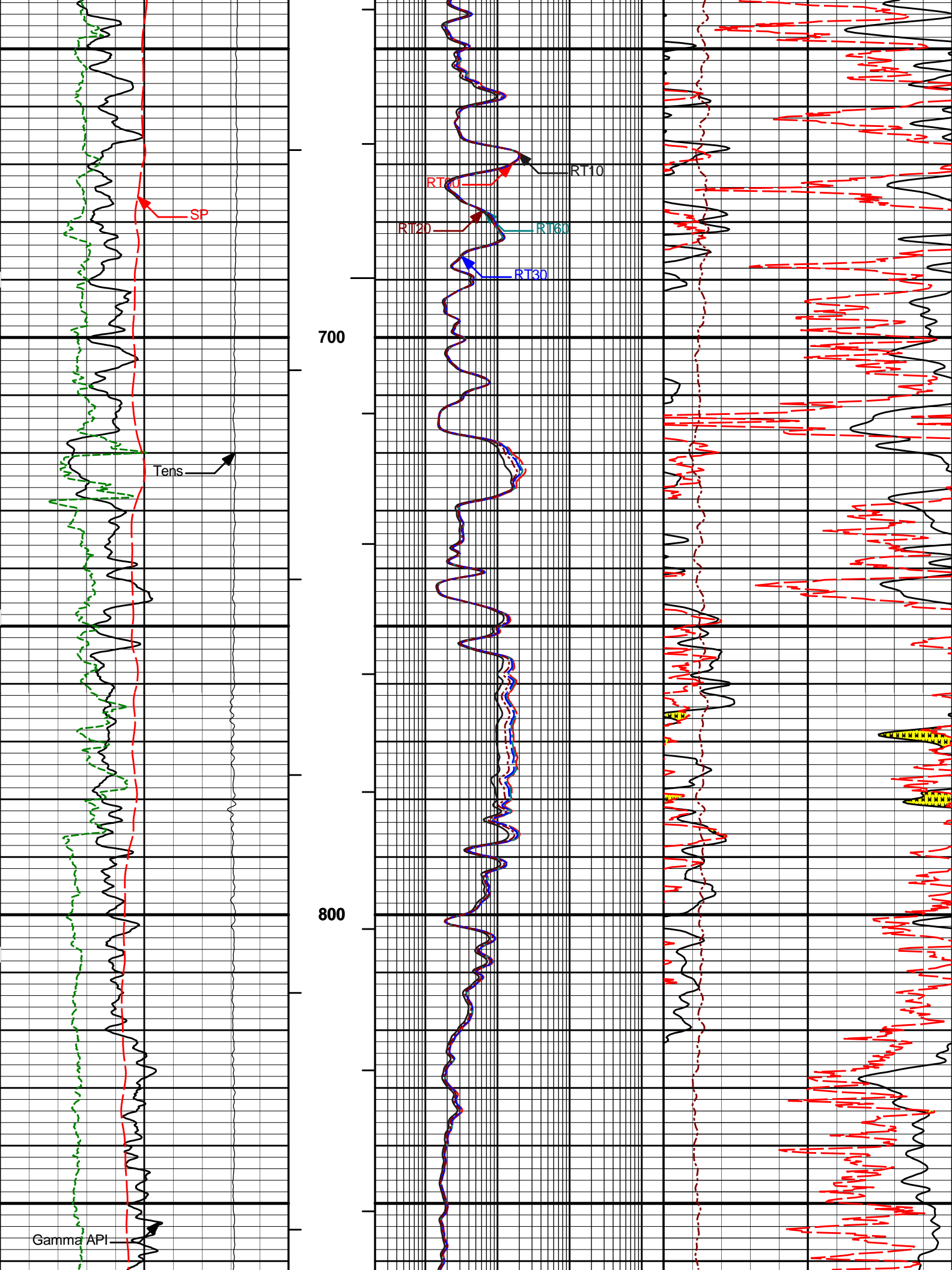
Gamma API

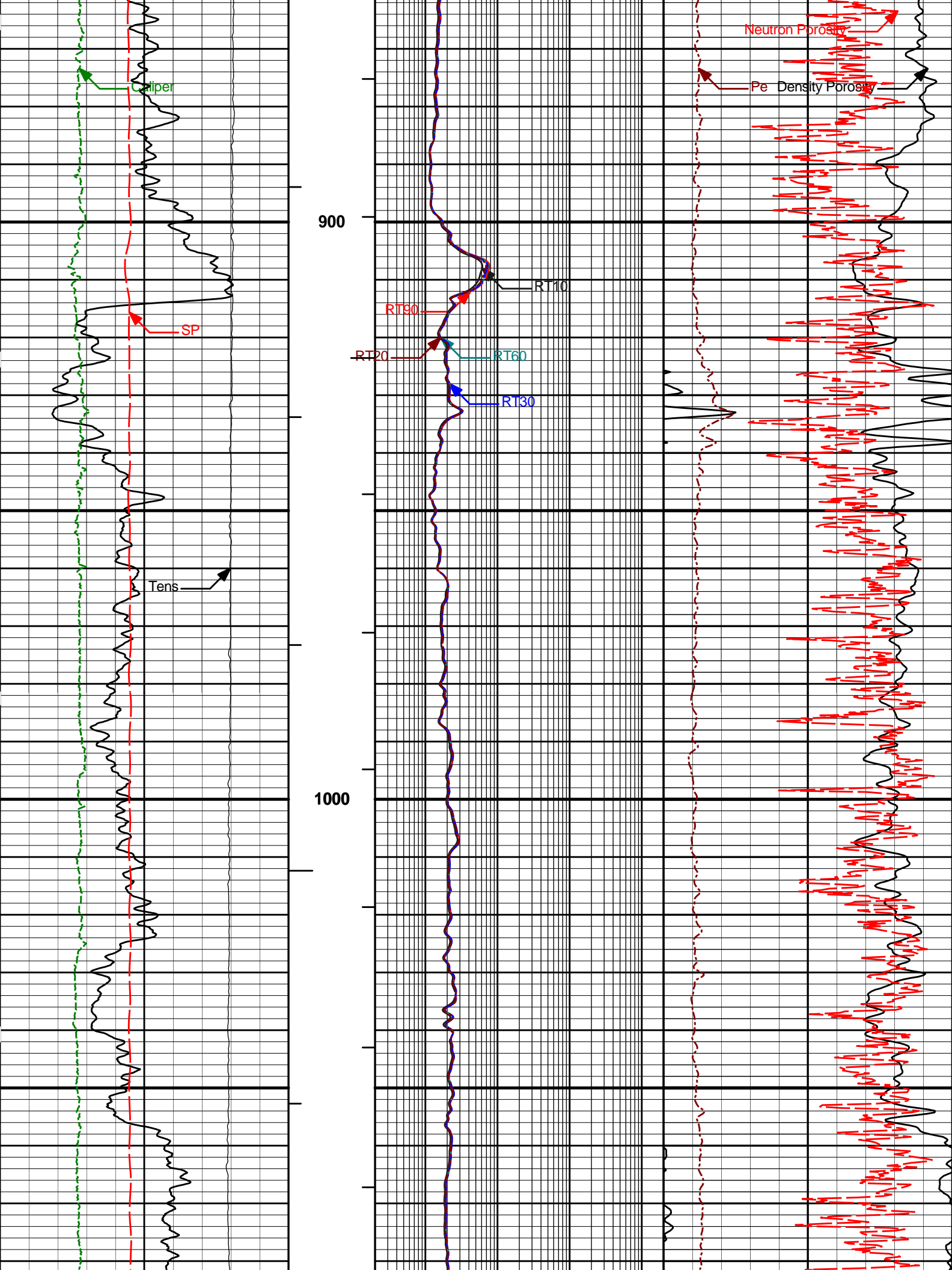
Neutron Porosity

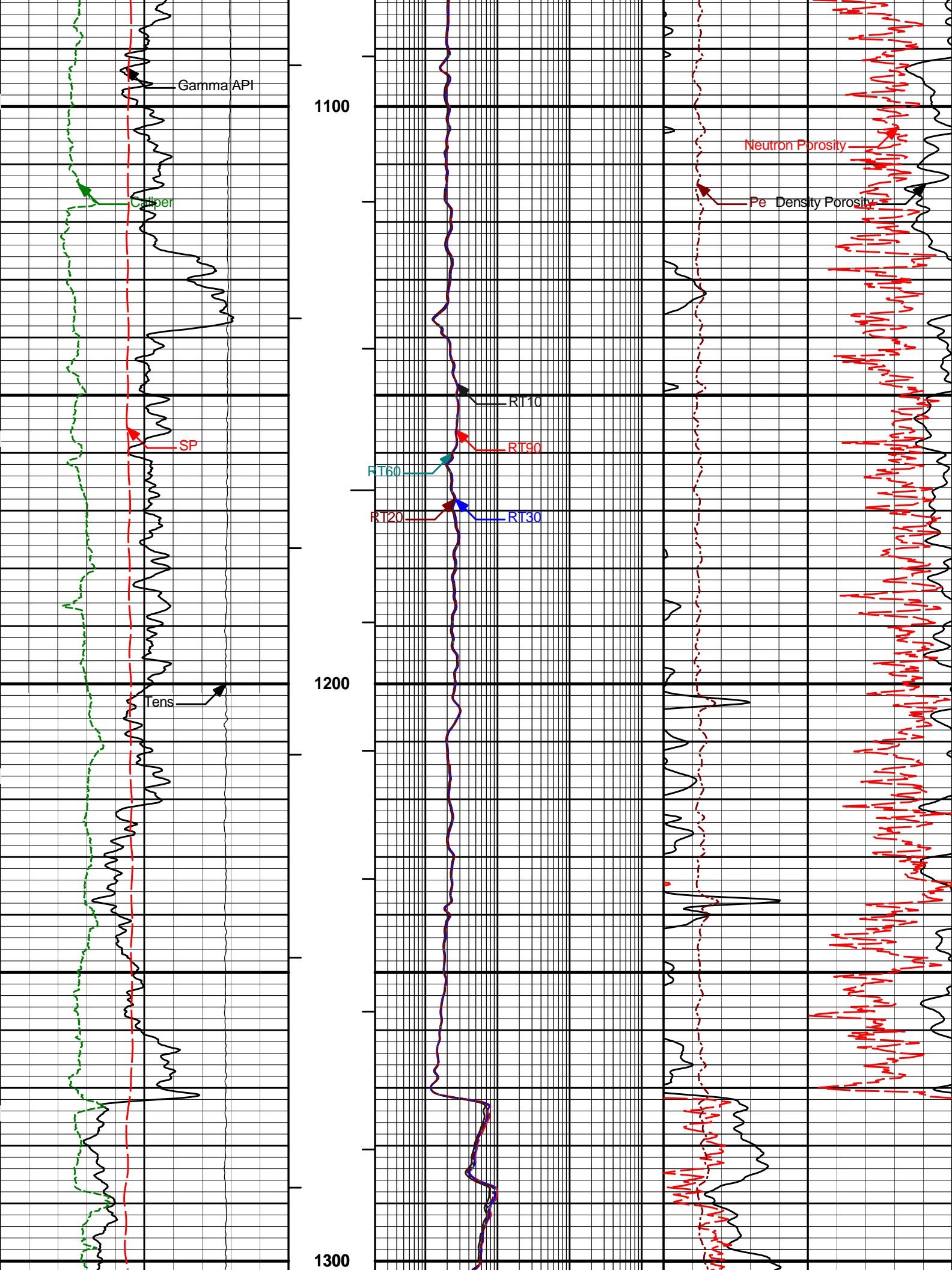
300

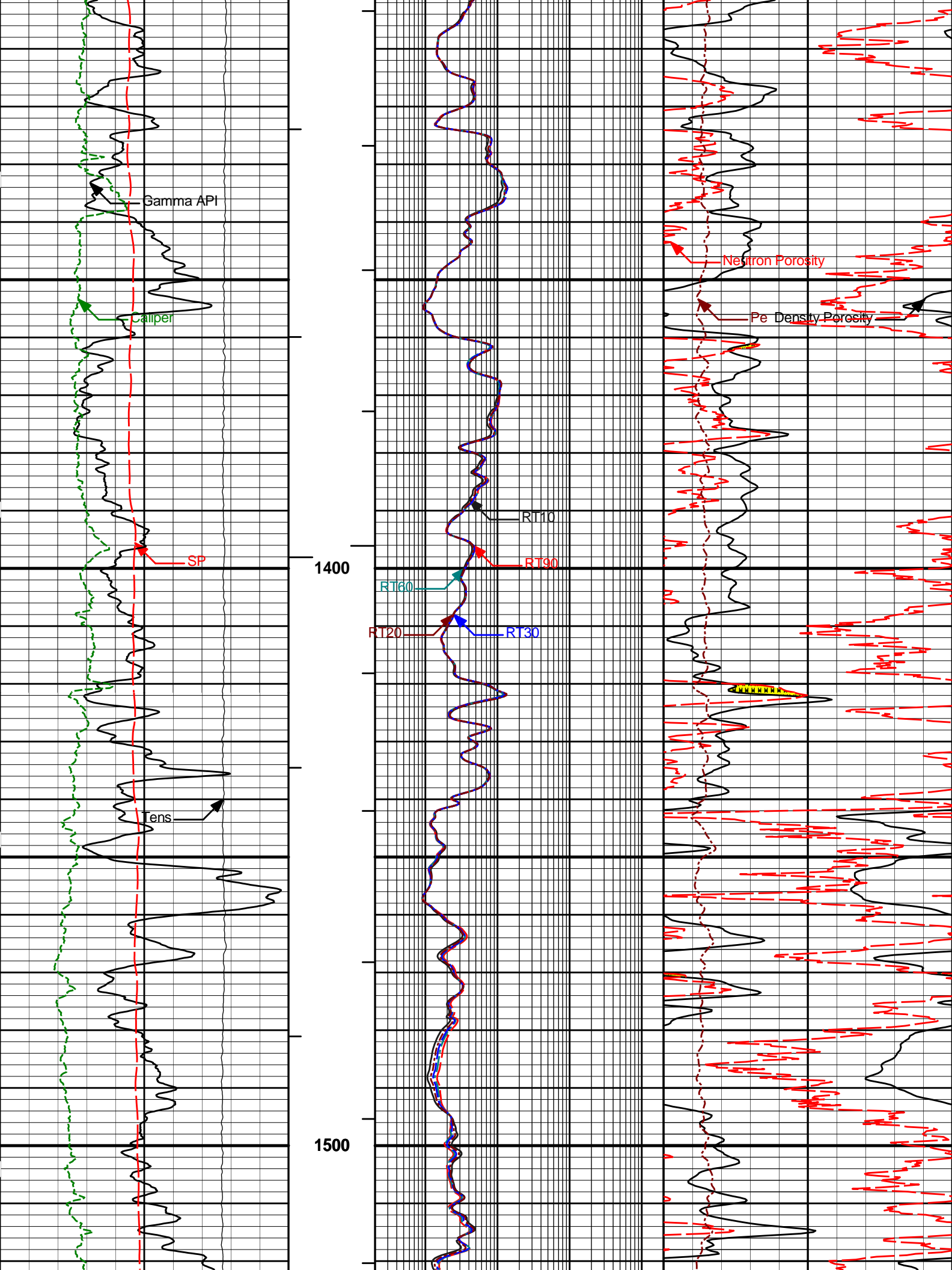
400

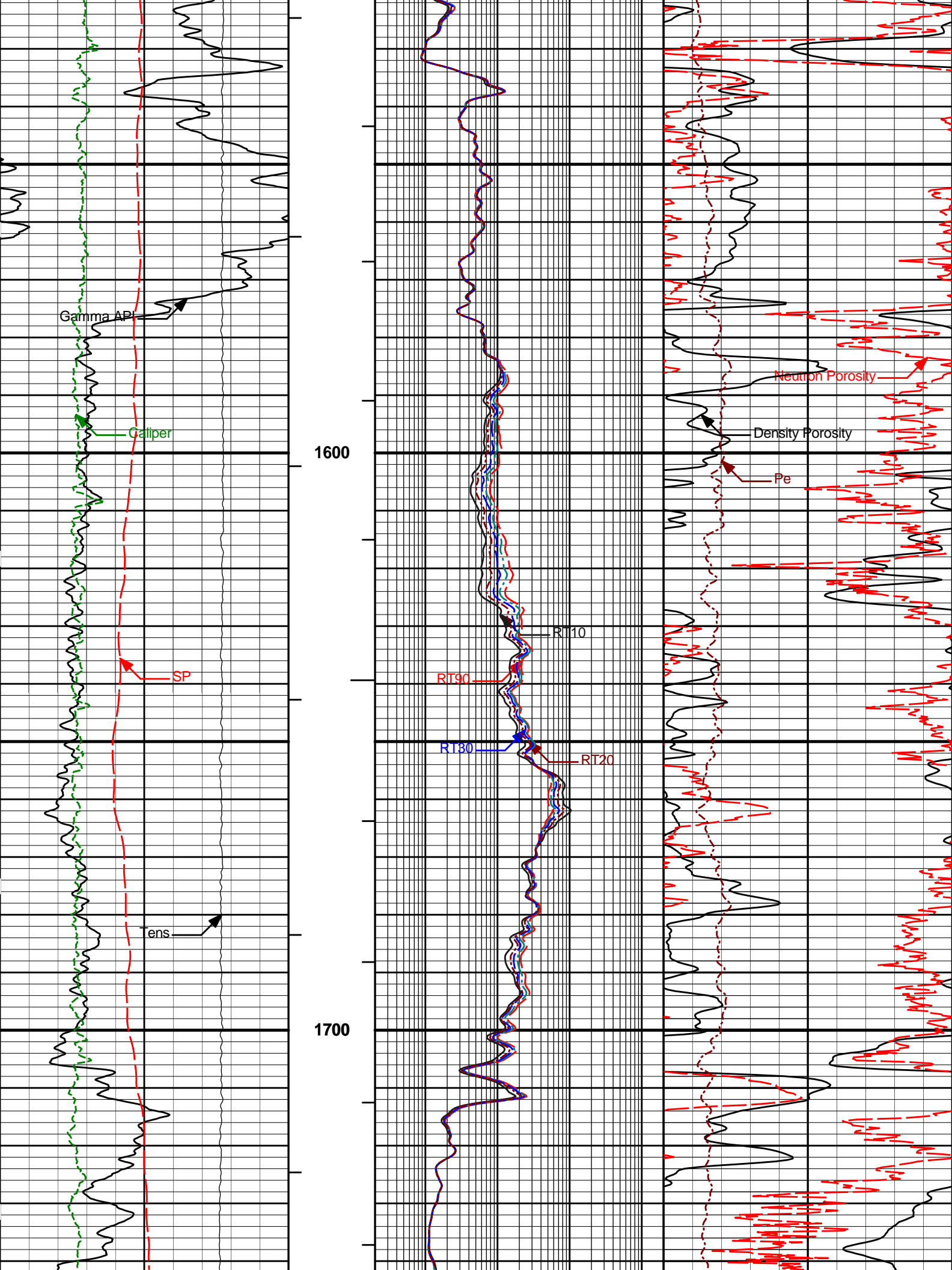


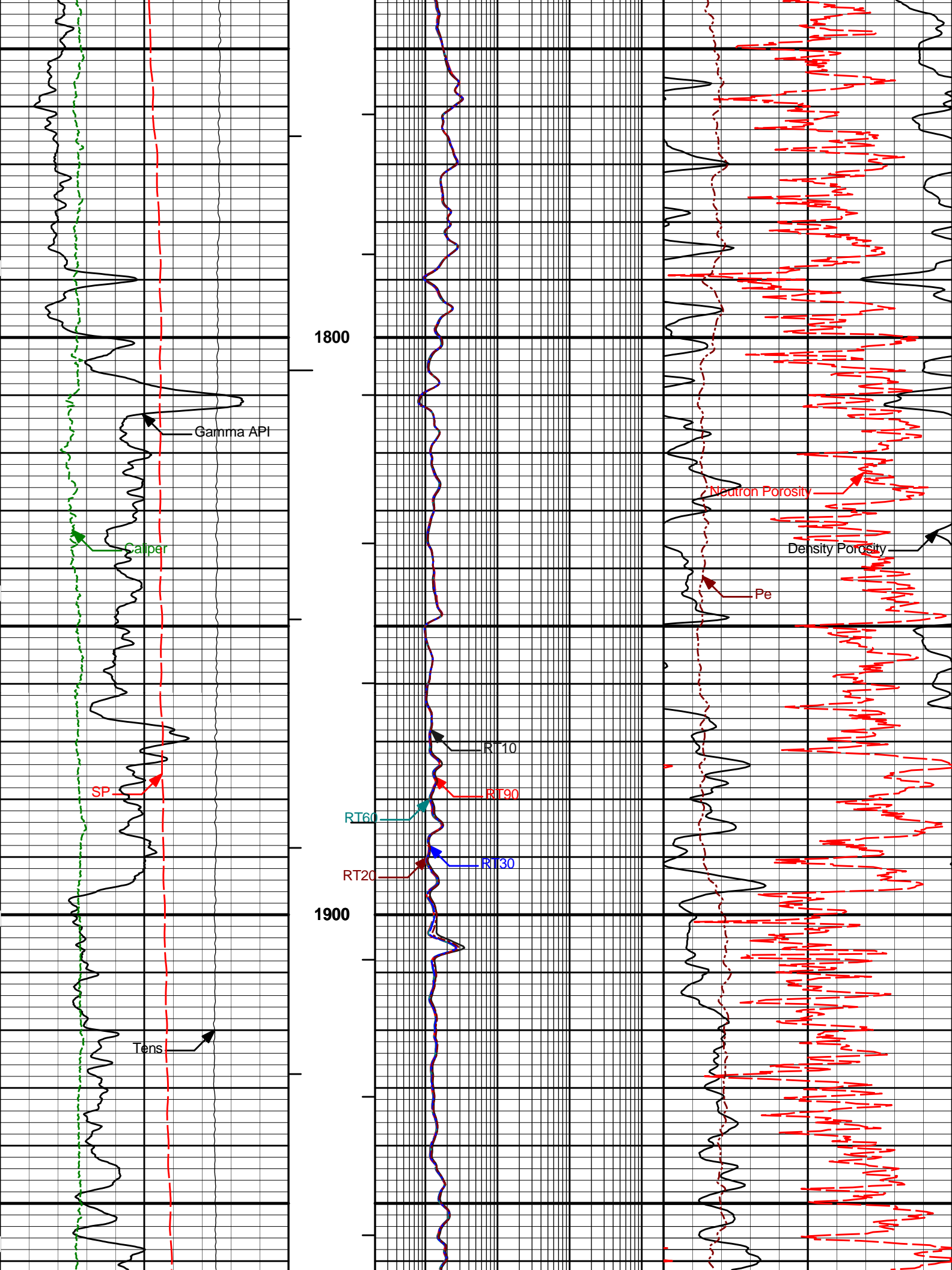


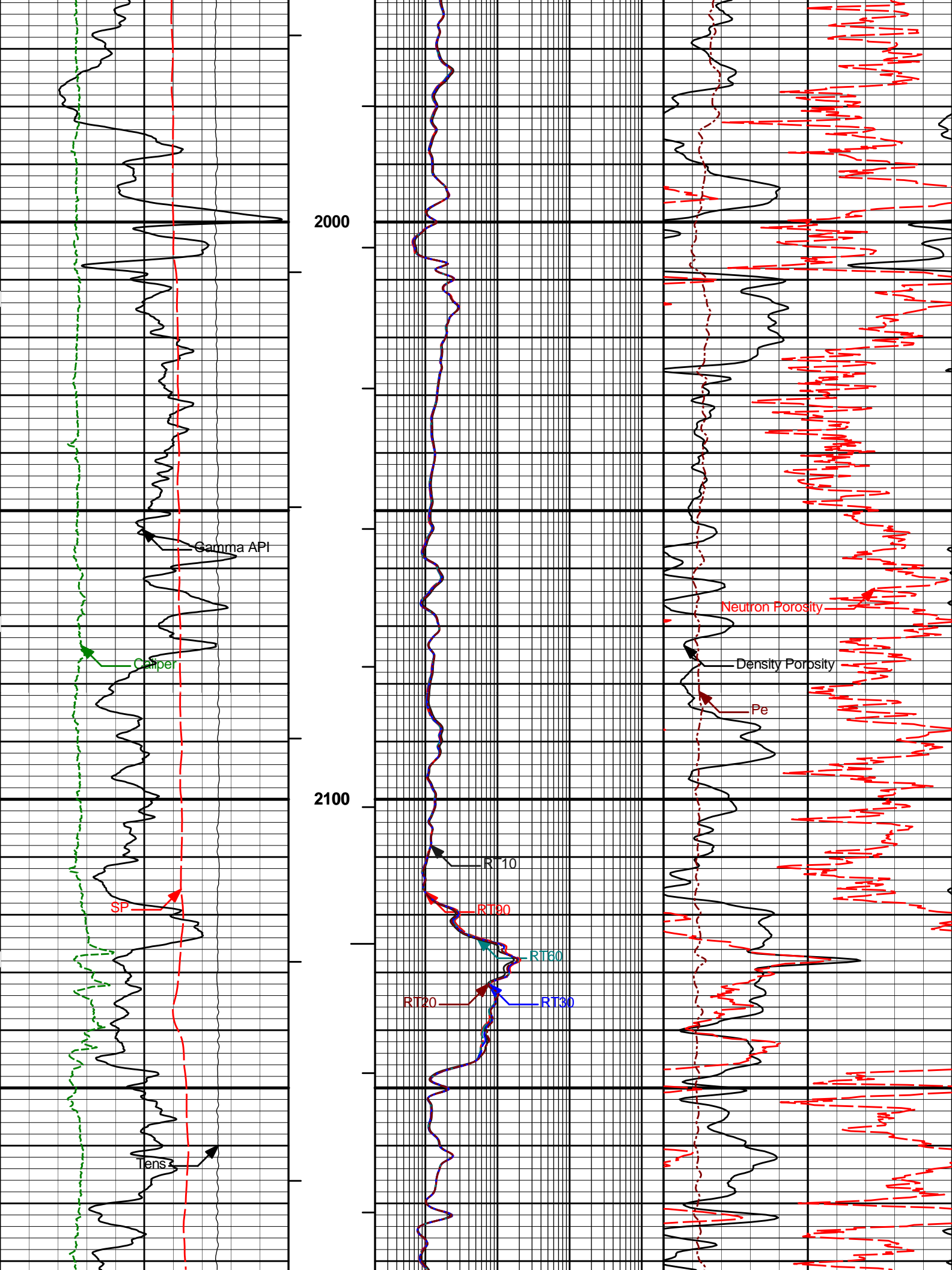


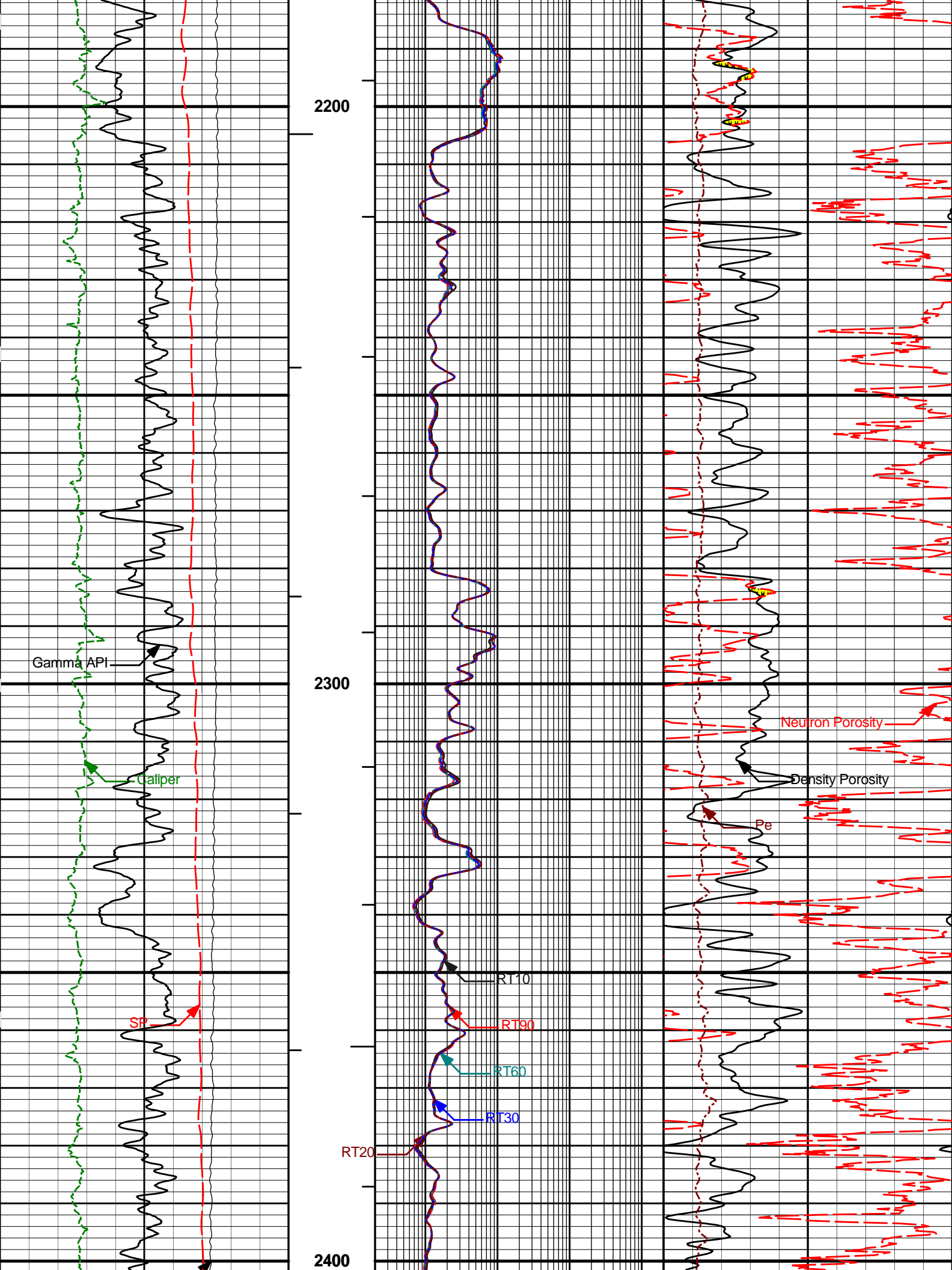


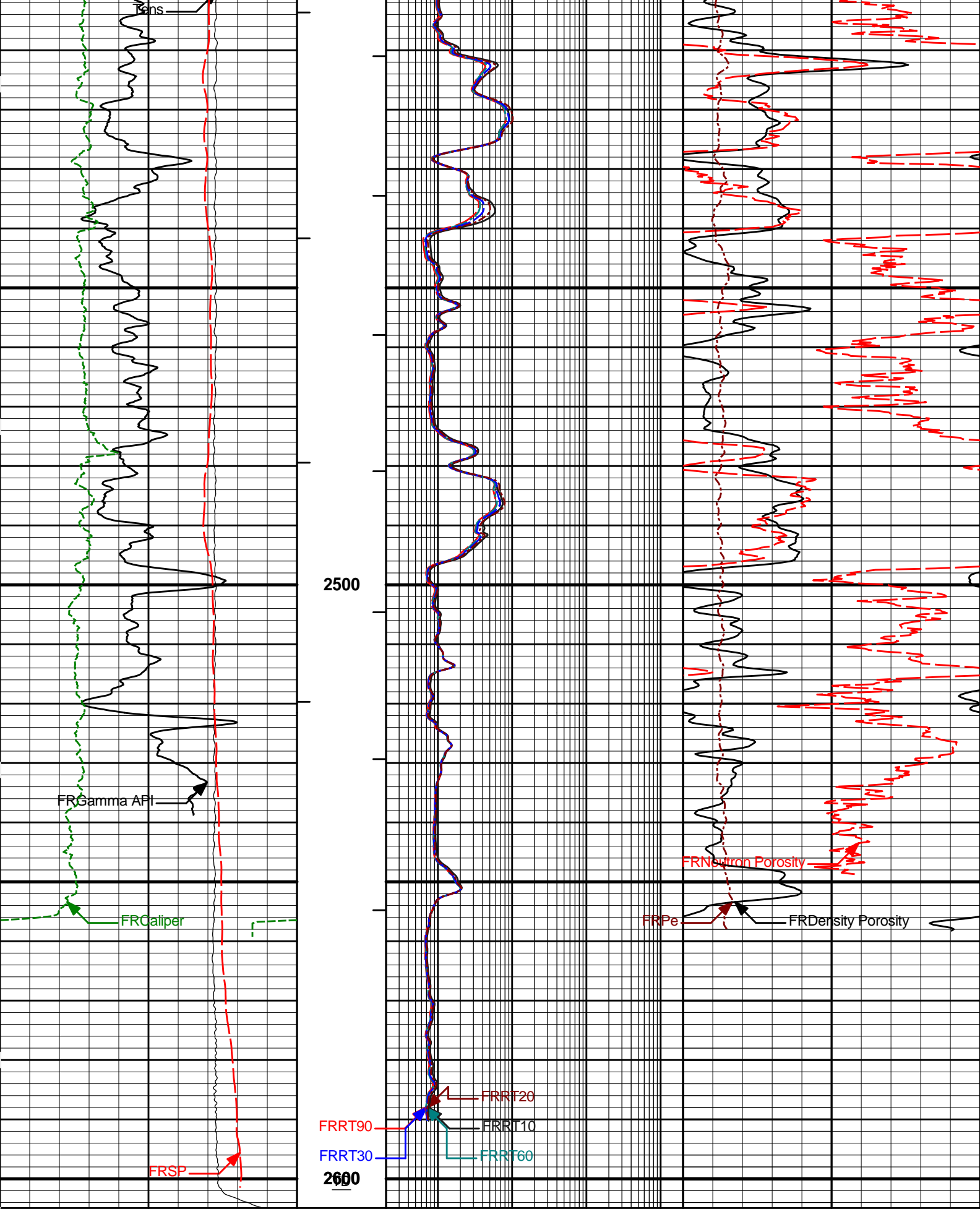












2500

2600

FRGamma API

FRCaliper

FRSP

FRRT20

FRRT10

FRRT90

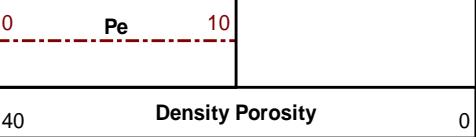
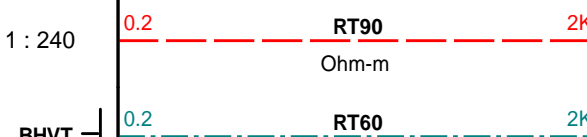
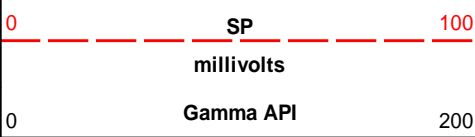
FRRT30

FRRT60

FRNeutron Porosity

FRPe

FRDensity Porosity



6	Caliper inches	16	AHVT	0.2	RT30 Ohm-m	2K	40	Neutron Porosity percent	0
10K	Tens pounds	0		0.2	RT20 Ohm-m	2K			
				0.2	RT10 Ohm-m	2K			

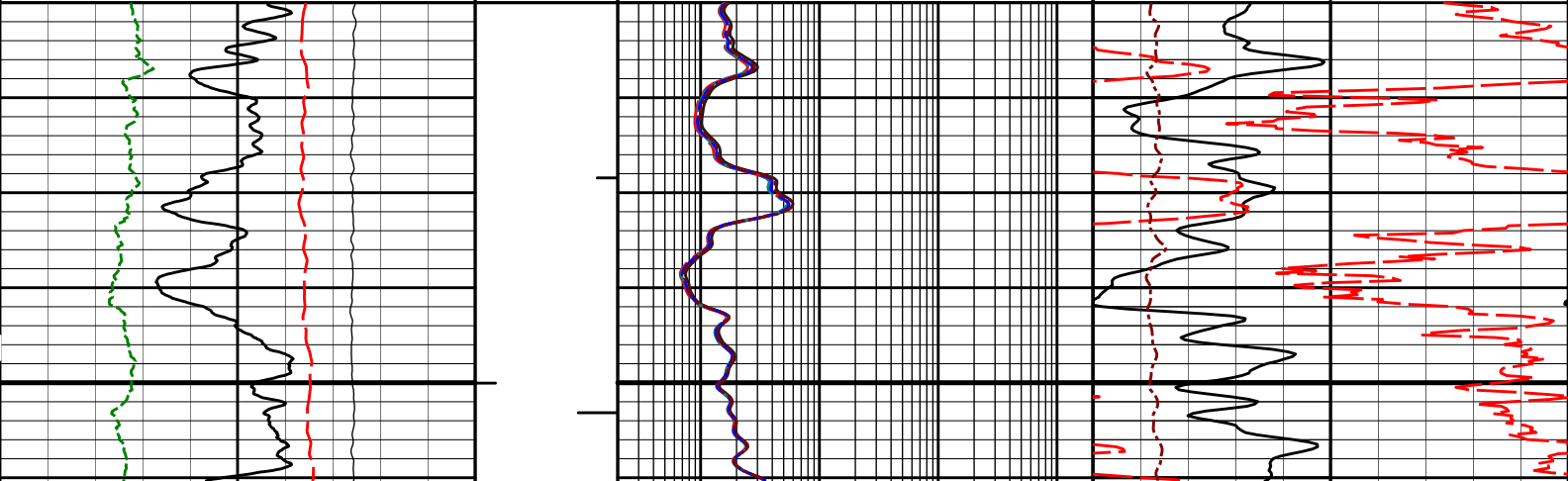
HALLIBURTON Plot Time: 07-May-10 18:53:51
 Plot Range: 50 ft to 2604.92 ft
 Data: B_SCHWARX_1_10Well Based\MAIN*
 Plot File: \\COMPIQ_COMPOSITE_ACRT_5IN_RM

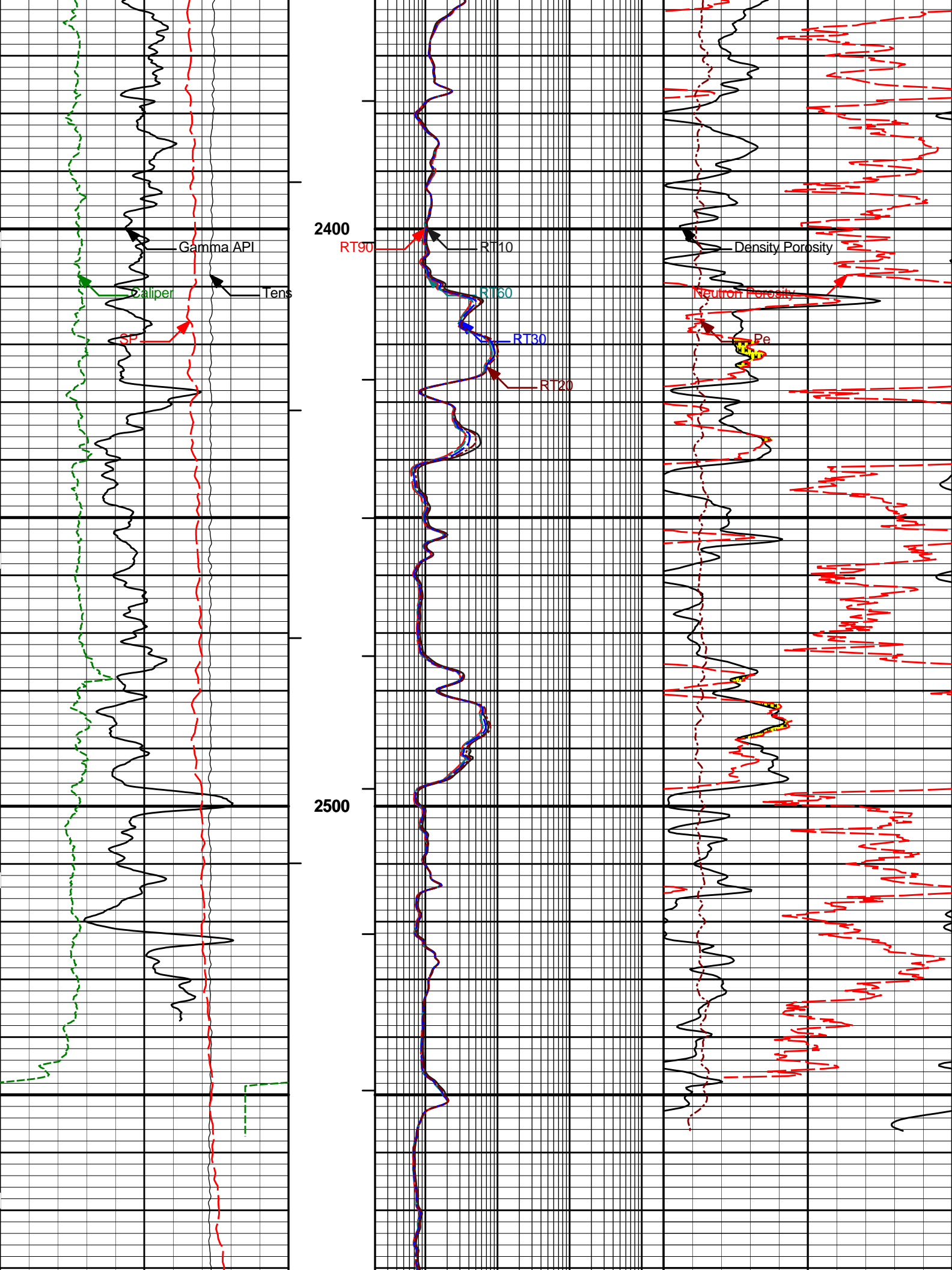
MAIN PASS 5" = 100'

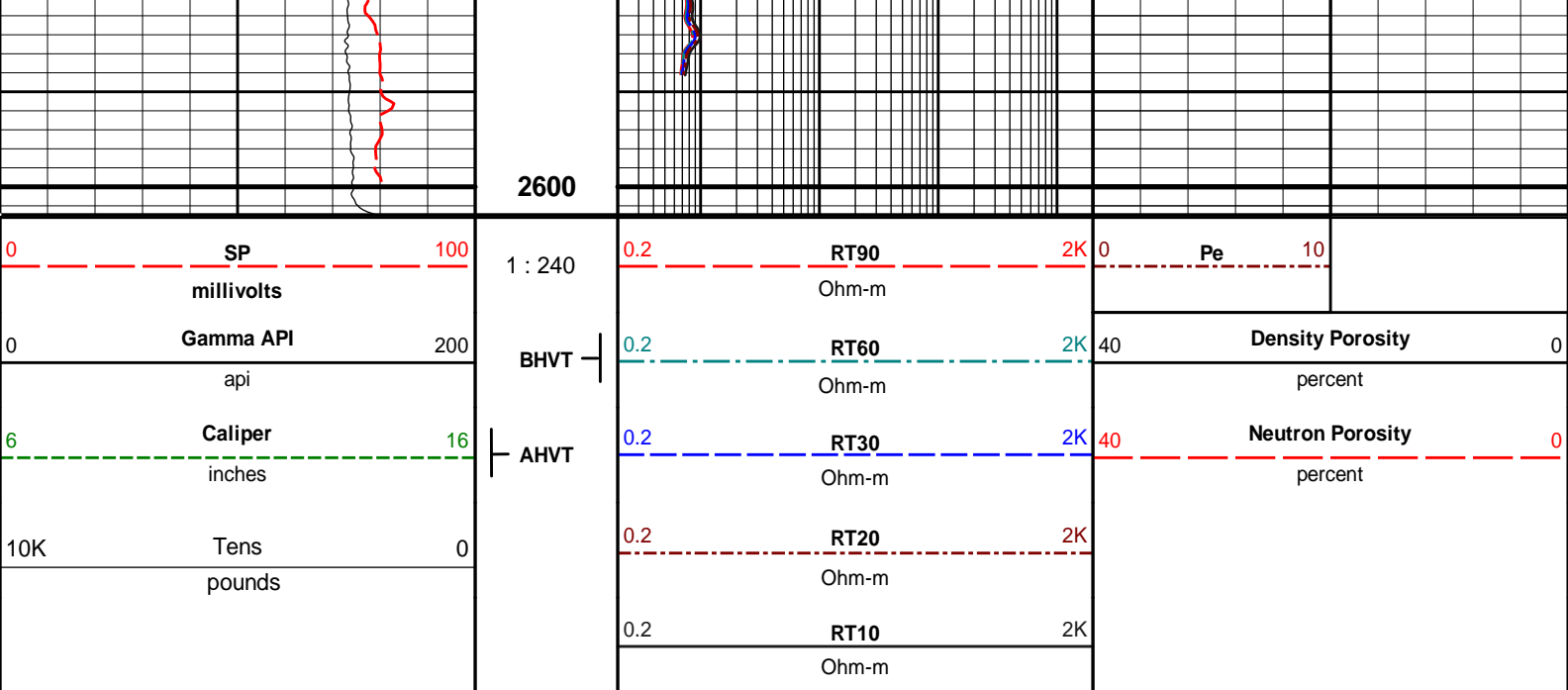
HALLIBURTON Plot Time: 07-May-10 18:53:51
 Plot Range: 2310 ft to 2602.92 ft
 Data: B_SCHWARX_1_10Well Based\REPEAT*
 Plot File: \\COMPIQ_COMPOSITE_ACRT_5IN_RM_RPT

MAIN PASS 5" = 100'

10K	Tens pounds	0	AHVT	0.2	RT10 Ohm-m	2K	40	Neutron Porosity percent	0	
6	Caliper inches	16		0.2	RT20 Ohm-m	2K				
0	Gamma API api	200		BHVT	0.2	RT60 Ohm-m		2K	40	Density Porosity percent
0	SP millivolts	100	1 : 240	0.2	RT90 Ohm-m	2K	0	Pe	10	







HALLIBURTON

Plot Time: 07-May-10 18:53:55
 Plot Range: 2310 ft to 2602.92 ft
 Data: B_SCHWARX_1_10\Well Based\REPEAT\
 Plot File: \\COMPIQ_COMPOSITE_ACRT_5IN_RM_RPT

MAIN PASS 5" = 100'

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name: GTET - 11215095 Reference Calibration Date: 02-Apr-10 10:05:47
 Engineer: D. CULVER Calibration Date: 23-Apr-10 14:19:05
 Software Version: WL INSITE R3.0.3 (Build 5) Calibration Version: 1

Calibrator Source S/N: TB-270
 Calibrator API Reference: 259.00 api

Measurement	Measured	Calibrated	Units
Background	40.7	40.4	api
Background + Calibrator	306.3	303.9	api
Calibrator	263.2	263.5	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name: GTET - 11215095 Reference Calibration Date: 23-Apr-10 14:19:05
 Engineer: D. CULVER Calibration Date: 07-May-10 09:09:58
 Software Version: WL INSITE R3.0.3 (Build 5) Calibration Version: 1

Calibrator Source S/N: TB-270
 Calibrator API Reference: 259.00 api

Field Verification	Shop	Field	Units
Background	40.4	34.1	api
Background + Calibrator	303.9	300.2	api

Calibrator

263.5

266.1

api

Shop	Field	Difference	Tolerance
263.5	266.1	-2.6	+/- 9.00

NATURAL GAMMA RAY TOOL POST CALIBRATION

Tool Name: GTET - 11215095

Reference Calibration Date: 07-May-10 09:09:58

Engineer: D. CULVER

Calibration Date: 07-May-10 18:45:52

Software Version: WL INSITE R3.0.3 (Build 5)

Calibration Version: 1

Calibrator Source S/N: TB-270

Calibrator API Reference:259.00 api

Post Verification	Field	Post	Units
Background	34.1	38.5	api
Background + Calibrator	300.2	295.9	api
Calibrator	266.1	257.3	api

Shop	Field	Post	Difference	Tolerance
263.5	266.1	257.3	8.8	+/- 9.00

DUAL SPACED NEUTRON SHOP CALIBRATION

Tool Name: DSNT - 10860047

Reference Calibration Date: 11-Jan-10 16:55:26

Engineer: C. BLUE

Calibration Date: 11-Jan-10 17:08:24

Software Version: WL INSITE R2.4 (Build 20)

Calibration Version: 1

Logging Source S/N: DSN 434

Tank Serial Number: 11068236

Reference value assigned to Tank: 53.720

Snow Block S/N: BRIGHTON SNOW BLOCK

Calibration Tank Water Temperature: 68 degF

Min. Tool Housing Outside Diameter: 3.625 in

CALIBRATION CONSTANTS

Measurement	Prev. Value	New Value	Control Limit On New Value
Gain:	0.974	0.971	0.900 - 1.100

WATER TANK SUMMARY (Horizontal Water Tank)

Measurement	Current Reading (Previous Coef.)	Calibrated (New Coef.)	Change	Control Limit On Change
Porosity (dec):	0.2232	0.2224	0.0008	+/- 0.0020
Calibrated Ratio:	10.14	10.11	0.027	+/- 0.050

VERIFIER

Measurement	Value	Control Limit
Snow-Block Porosity (dec):	0.0739	0.02000 - 0.09000

PASS/FAIL SUMMARY

Background Check:	Passed
Gain-Range Check:	Passed
Snow-Block Check:	Passed

DUAL SPACED NEUTRON FIELD CALIBRATION

Tool Name: DSNT - 10860047

Reference Calibration Date: 11-Jan-10 17:08:24

Engineer: D. CULVER

Calibration Date: 07-May-10 09:13:31

Software Version: WL INSITE R3.0.3 (Build 5)

Calibration Version: 1

Logging Source S/N: DSN 434

Snow Block S/N: BRIGHTON SNOW BLOCK

NEUTRON FIELD-CHECK SUMMARY

	Shop	Field	Difference	Control Limit On Change
Snow-Block Porosity (decp):	0.0739	0.0609	-0.0130	+/- 0.0150

PASS/FAIL SUMMARY

Block Change Check:	Passed
Snow Block Stat Check:	Passed
Temperature Check:	Passed

DUAL SPACED NEUTRON POST CALIBRATION

Tool Name: DSNT - 10860047

Reference Calibration Date: 07-May-10 09:13:31

Engineer: D. CULVER

Calibration Date: 07-May-10 18:47:30

Software Version: WL INSITE R3.0.3 (Build 5)

Calibration Version: 1

Logging Source S/N: DSN 434

Snow Block S/N: BRIGHTON SNOW BLOCK

NEUTRON POST-CHECK SUMMARY

	Field Value	Post Value	Difference	Control Limit On Change
Snow-Block Porosity (decp):	0.0609	0.0680	0.0071	+/- 0.0150

PASS/FAIL SUMMARY

Block Change Check:	Passed
Snow Block Stat Check:	Passed
Temperature Check:	Passed

SPECTRAL DENSITY SHOP CALIBRATION

Tool Name: SDLT - 11014271

Reference Calibration Date: 06-Apr-10 00:43:50

Engineer: D. CULVER

Calibration Date: 23-Apr-10 12:06:45

Software Version: WL INSITE R3.0.3 (Build 5)

Calibration Version: 1

Logging Source S/N: 5235GW

Aluminum Block S/N: 63069

Density: 2.588g/cc

Pe: 3.160

Magnesium Block S/N: 63376

Density: 1.687g/cc

Pe: 2.594

DENSITY CALIBRATION SUMMARY

Measurement	Previous Value	New Value	Control Limit
Near Bar Gain	1.0364	1.0307	0.90 - 1.10
Near Dens Gain	0.9877	0.9873	0.90 - 1.10
Near Peak Gain	0.9982	0.9887	0.90 - 1.10
Near Lith Gain	0.9851	0.9677	0.90 - 1.10
Far Bar Gain	1.0072	1.0063	0.90 - 1.10
Far Dens Gain	0.9962	0.9938	0.90 - 1.10
Far Peak Gain	0.9918	0.9905	0.90 - 1.10
Far Lith Gain	0.9789	0.9736	0.90 - 1.10
<hr/>			
Near Bar Offset	-0.3406	-0.2883	NONE
Near Dens Offset	0.1227	0.1255	NONE
Near Peak Offset	0.0164	0.0921	NONE
Near Lith Offset	0.0948	0.2393	NONE

Far Bar Offset	-0.1554	-0.1451	NONE
Far Dens Offset	-0.0557	-0.0288	NONE
Far Peak Offset	-0.0189	-0.0017	NONE
Far Lith Offset	0.0415	0.0930	NONE
Near Bar Background	957.82	956.99	700 - 1450
Near Dens Background	314.59	316.14	230 - 480
Near Peak Background	136.54	136.19	100 - 210
Near Lith Background	167.44	166.98	125 - 260
Far Bar Background	541.15	541.17	450 - 900
Far Dens Background	213.67	214.26	175 - 345
Far Peak Background	80.26	81.36	70 - 140
Far Lith Background	86.89	88.06	75 - 145

CALIBRATION BLOCK SUMMARY				
Measurement	Current Reading (Previous Coef)	Calibrated (New Coef)	Change	Control Limit On Change
MAGNESIUM				
Density (g/cc)	1.692	1.688	-0.004	+/- 0.015
Pe	2.549	2.587	0.038	+/- 0.150
ALUMINUM				
Density (g/cc)	2.592	2.588	-0.004	+/- 0.01500
Pe	3.140	3.152	0.012	+/- 0.150

TOOL SUMMARY				
Measurement	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits
QUALITY				
Background	-0.0010	+/- 0.0110	-0.0028	+/- 0.0140
Magnesium Block	-0.0008	+/- 0.0110	-0.0018	+/- 0.0140
Aluminum Block	-0.0001	+/- 0.0110	0.0006	+/- 0.0140
Resolution	9.06	6.00 - 11.50	9.95	6.00 - 11.50
Internal Verifier(B+D+P+L)	1576	1200 - 2700	925	800 - 1700

PASS/FAIL SUMMARY	
Background Quality Check:	Passed
Background Range Check:	Passed
Background Resolution Check:	Passed
Background Verification Check:	Passed
Magnesium Quality Check:	Passed
Aluminum Quality Check:	Passed
Gains Check:	Passed
Changes in Calibration Blocks:	Passed

SPECTRAL DENSITY FIELD CHECK			
Tool Name:	SDLT - 11014271	Reference Calibration Date:	23-Apr-10 12:06:45
Engineer:	D. CULVER	Calibration Date:	07-May-10 09:10:56
Software Version:	WL INSITE R3.0.3 (Build 5)	Calibration Version:	1

Pad Temperature: 40.3 degF

DENSITY FIELD CALIBRATION SUMMARY				
Measurement	Shop	Field	Change	Control Limit +/-

Near (B+D+P+L) cps	1576.292	1566.821	-9.471	15.973
Far (B+D+P+L) cps	924.847	921.873	-2.974	16.469
Near Resolution	9.06	9.48	0.420	0.50
Far Resolution	9.95	10.47	0.520	1.00

PASS/FAIL SUMMARY

Bkg Quality Check:	Passed
Bkg Resolution Check:	Passed
Bkg Verification Check:	Passed

SPECTRAL DENSITY POST CHECK

Tool Name: SDLT - 11014271	Reference Calibration Date: 07-May-10 09:10:56
Engineer: D. CULVER	Calibration Date: 07-May-10 18:45:55
Software Version: WL INSITE R3.0.3 (Build 5)	Calibration Version: 1

Pad Temperature: 78.8 degF

DENSITY POST CALIBRATION SUMMARY

Measurement	Field	Post	Change	Control Limit +/-
Near (B+D+P+L) cps	1566.821	1577.055	10.234	15.973
Far (B+D+P+L) cps	921.873	932.818	10.945	16.469
Near Resolution	9.48	9.14	-0.340	0.50
Far Resolution	10.47	10.31	-0.160	1.00

PASS/FAIL SUMMARY

Bkg Quality Check:	Passed
Bkg Resolution Check:	Passed
Bkg Verification Check:	Passed

DENSITY CALIPER SHOP CALIBRATION

Tool Name: SDLT - 11014271	Reference Calibration Date: 06-Apr-10 00:58:45
Engineer: D. CULVER	Calibration Date: 23-Apr-10 13:39:33
Software Version: WL INSITE R3.0.3 (Build 5)	Calibration Version: 1

CALIBRATION COEFFICIENTS

Measurement	Previous Value	New Value	Control Limit On New Value
Pad Offset	-2655.70	-2796.73	-7000.00 - -1000.00
Pad Gain	0.0003745	0.0003781	0.000200 - 0.000600
Arm Offset	-3575.88	-3409.59	-5000.00 - 3000.00
Arm Gain	0.0005619	0.0005594	0.000300 - 0.000700
Arm Power	-0.000005574	-0.000005356	-0.000010 - 0.000010

The ring diameter is computed from: $DIAMETER = PAD\ EXTENSION + ARM\ EXTENSION + TOOL\ DIAMETER$

Tool Diameter: 4.50 in

CALIBRATION RINGS

Measurement	Current Reading (Previous Coeff.)	Calibrated (New Coeff.)	Change	Control Limit On New Value
PAD EXTENSION:				
Small Ring (in)	2.03	2.00	-0.03	+/- 0.20
Medium Ring (in)	3.77	3.75	-0.02	+/- 0.20
RING DIAMETER:				
Small Ring (in)	6.47	6.50	0.03	+/- 0.20
Medium Ring (in)	8.23	8.25	0.02	+/- 0.20
Large Ring (in)	14.97	15.00	0.03	+/- 0.20

PASS/FAIL SUMMARY

Calibration-Coefficients Range Check: Passed

Ring-Measurement Check: Passed

PASS/FAIL SUMMARY

Calibration-Coefficients Range Check: Passed

SDLT CALIPER FIELD CALIBRATION

Tool Name: SDLT - 11014271

Reference Calibration Date: 23-Apr-10 13:39:33

Engineer: D. CULVER

Calibration Date: 07-May-10 09:21:04

Software Version: WL INSITE R3.0.3 (Build 5)

Calibration Version: 1

MEASURED CALIPER VALUES

Measurement	Shop	Field	Change	Control Limit On New Value
Pad Extension	3.75	3.73	-0.02	+/- 0.10
Ring Diameter	8.25	8.32	0.07	+/- 0.15

PASS/FAIL SUMMARY

Pad Extension Check: Passed

Diameter Check: Passed

SDLT CALIPER POST CALIBRATION

Tool Name: SDLT - 11014271

Reference Calibration Date: 07-May-10 09:21:04

Engineer: D. CULVER

Calibration Date: 07-May-10 18:50:21

Software Version: WL INSITE R3.0.3 (Build 5)

Calibration Version: 1

MEASURED CALIPER VALUES

Measurement	Field	Post	Change	Control Limit On New Value
Pad Extension	3.73	3.71	-0.02	+/- 0.10
Ring Diameter	8.32	8.27	-0.04	+/- 0.15

PASS/FAIL SUMMARY

Pad Extension Check: Passed

Diameter Check: Passed

ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION

Tool Name: ACRt - E104_S103

Reference Calibration Date: 11-Apr-10 11:56:37

Engineer: D. CULVER

Calibration Date: 05-May-10 10:15:02

Software Version: WL INSITE R3.0.3 (Build 5)

Calibration Version: 1

TYPICAL GAIN RANGE

Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	0.95	1.0027	1.05	0.95	1.0057	1.05	0.95	1.0023	1.05
A2 (50")	0.95	1.0058	1.05	0.95	1.0097	1.05	0.95	1.0082	1.05
A3 (29")	0.95	1.0041	1.05	0.95	1.0080	1.05	0.95	1.0044	1.05
A4 (17")	0.95	0.9989	1.05	0.95	1.0000	1.05	0.95	1.0000	1.05
A5 (10")	N/A	N/A	N/A	0.95	0.9885	1.05	0.95	0.9870	1.05
A6 (6")	N/A	N/A	N/A	0.95	0.9829	1.05	0.95	0.9808	1.05

TYPICAL SONDE OFFSET RANGE

Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	-5	-0.301	2	-6	-3.714	-2	-8	-4.929	-2

A2 (50")	-7	-2.089	-2	-6	-3.592	-2	-7	-4.503	-2
A3 (29")	-27	-11.110	-9	-9	-3.403	-3	-7	-2.901	-1
A4 (17")	-180	-98.624	-60	-45	-32.412	-15	-39	-26.305	-13
A5 (10")	N/A	N/A	N/A	-150	-74.726	-50	-80	-37.578	-10
A6 (6")	N/A	N/A	N/A	175	269.040	525	90	138.809	270

TRANSMITTER CURRENT GAIN			
Signal	Lower	R	Upper
12K	0.6	0.8862	1.3
36K	1.0	1.8983	2.0
72K	1.0	1.1261	2.0

R-MUD VERIFICATION			
Signal	Lower (ohm-m)	Measured (ohm-m)	Upper (ohm-m)
Mud Cell	0.95	0.997	1.05

CALIBRATION SUMMARY

Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11215095						
Gamma Ray Calibrator	263.5	266.1	257.3	8.8	+/- 9.00	api
DSNT-10860047						
Snow-Block Porosity	0.0739	0.0609	0.0680	-0.0071	+/- 0.0150	decp
SDLT-11014271						
Near(B+D+P+L)	1576.292	1566.821	1577.055	-10.234	+/-15.973	cps
Far(B+D+P+L)	924.847	921.873	932.818	-10.945	+/-16.469	cps
Pad Extension	3.75	3.73	3.71	0.02	+/-0.10	in
Ring Diameter	8.25	8.32	8.27	0.050	+/-0.15	in
ACRt-E104_S103						
Mud Cell	0.997	-----	-----	0.000	-----	ohm-m

Data: B_SCHWARX_1_10\0002 QUAD\IDLE Date: 07-May-10 18:51:00

HALLIBURTON

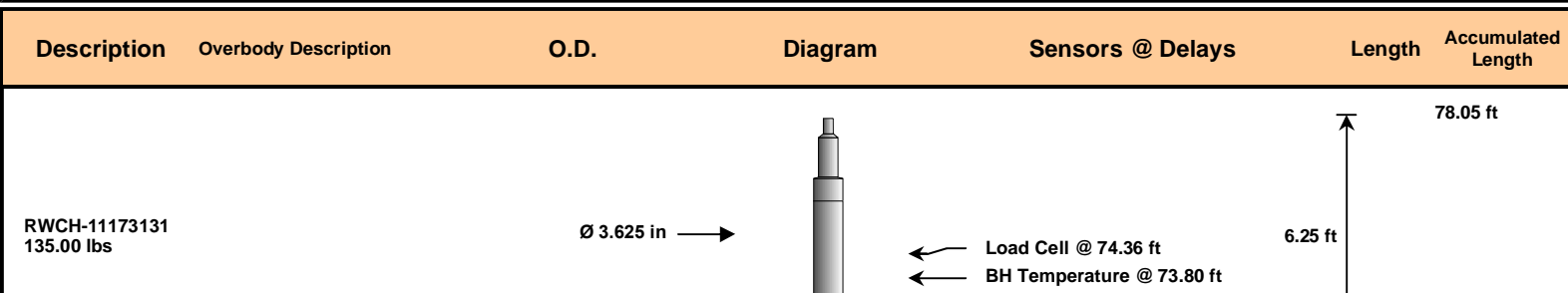
CUSTOMER EVENT LOG

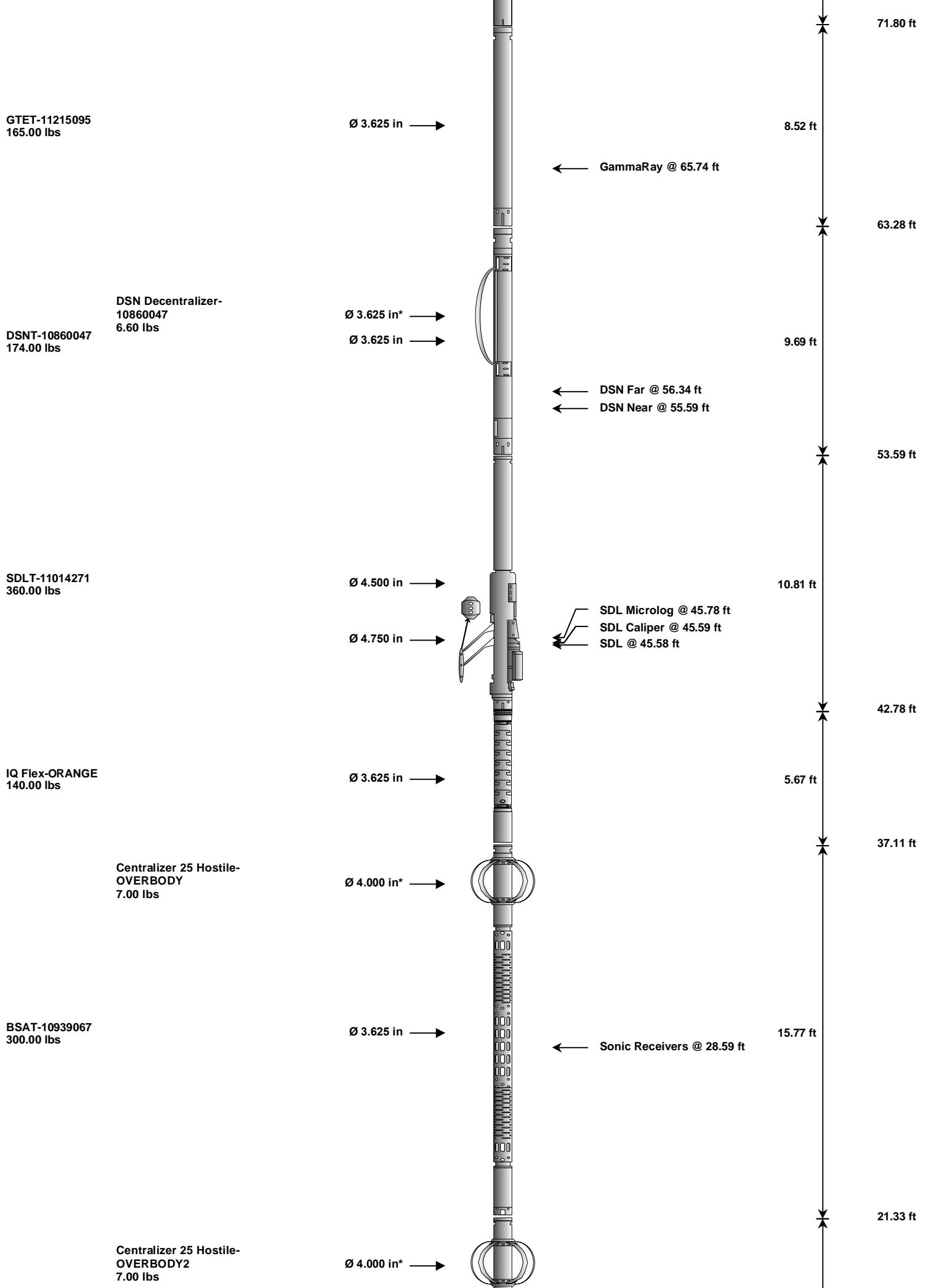
Event Type	Time & Date	Depth (ft)	Event Description
	07-May-10 17:03:08	2.75	Logging 001 07-May-10 17:03 Dn @2.8f
	07-May-10 17:21:19	2501.27	Halting 001 07-May-10 17:03 Dn @2.8f
	07-May-10 17:23:35	2604.25	Logging 002 07-May-10 17:23 Up @2604.3f
	07-May-10 17:30:51	2221.82	Halting 002 07-May-10 17:23 Up @2604.3f
	07-May-10 17:33:57	2605.75	Logging 003 07-May-10 17:33 Up @2605.8f
	07-May-10 18:21:02	54.27	Halting 003 07-May-10 17:33 Up @2605.8f

Data: B_SCHWARX_1_10\0002 QUAD\HALLIBUR-1A34A9 Date: 07-May-10 18:23:50

HALLIBURTON

TOOL STRING DIAGRAM REPORT





Regal Standoff 6_75-
STANDOFF
20.00 lbs

Ø 6.750 in* →

← Mud Resistivity @ 14.94 ft

ACRt-E104_S103
250.00 lbs

Ø 3.625 in →

← ACRt @ 10.96 ft

19.25 ft

SP Ring-1
0.00 lbs

Ø 3.625 in* →

← SP @ 3.36 ft

Hole Finder-
HOLE_FINDER
50.00 lbs

Ø 2.800 in
Ø 3.625 in →

2.08 ft

2.08 ft
0.00 ft



Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)
RWCH	Releasable Wireline Cable Head	11173131	135.00	6.25	71.80	300.00
GTET	Gamma Telemetry Tool	11215095	165.00	8.52	63.28	60.00
DSNT	Dual Spaced Neutron	10860047	174.00	9.69	53.59	60.00
DCNT	DSN Decentralizer	10860047	6.60	5.13	* 56.92	300.00
SDLT	Spectral Density Tool	11014271	360.00	10.81	42.78	60.00
IQF	IQ Flex tool	ORANGE	140.00	5.67	37.11	300.00
BCAS	Borehole Sonic Array Tool	10939067	300.00	15.77	21.33	60.00
OBCEN	Centralizer - 25 in. Hostile Overbody	OVERBODY	7.00	2.08	* 34.49	300.00
ACRt	Array Compensated True Resistivity	E104_S103	250.00	19.25	2.08	300.00
SP	SP Ring	1	0.00	0.25	* 3.36	300.00
RSOF	Regal Standoff 6.75"	STANDOFF	20.00	0.52	* 15.43	300.00
OBCEN	Centralizer - 25 in. Hostile Overbody	OVERBODY2	7.00	2.08	* 18.31	300.00
HFND	Hole Finder	HOLE_FINDER	50.00	2.08	0.00	300.00
Total			1,614.60	78.05		

* Not included in Total Length and Length Accumulation.

Data: B_SCHWARX_1_10\0002 QUAD\IDLE Date: 07-May-10 18:08:34

COMPANY	BRIDGE ENERGY INC		
WELL	SCHWARZ 1-10		
FIELD	WILDCAT		
COUNTY	PAYETTE	STATE	ID
HALLIBURTON		SPECTRAL DENSITY DUAL SPACED NEUTRON ARRAY COMPENSATED TRUE RESISTIVITY	