

HALLIBURTON

SPECTRAL DENSITY
DUAL SPACED NEUTRON
ARRAY COMPENSATED
TRUE RESISTIVITY

COMPANY		NOBLE ENERGY INC	
WELL		RH FARMS I133-25D	
FIELD		WATTENBERG	
COUNTY		WELD	
STATE		CO	
Permanent Datum		GL	
Log measured from		KB	
Drilling measured from		KB	
Date		29-Dec-11	
Run No.		ONE	
Depth - Driller		7595.00 ft	
Depth - Logger		7581.0 ft	
Bottom - Logged Interval		7572 ft	
Top - Logged Interval		CSG	
Casing - Driller		8.625 in @ 1034.0 ft	
Casing - Logger		1041.0 ft	
Bit Size		7.875 in @	
Type Fluid in Hole		WATER BASED MUD	
Density		9.3 ppq 35.00 s/qt	
PH		9.50 pH 8.8 cp/m	
Source of Sample		MUD CELL	
Rm @ Meas. Temperature		1.300 ohmm @ 76.20 degF	
Rmf @ Meas. Temperature		1.14 ohmm @ 75.00 degF	
Rmc @ Meas. Temperature		1.159 ohmm @ 75.00 degF	
Source Rmf		CHART	
Rm @ BHT		0.48 ohmm @ 218.0 degF	
Time Since Circulation		6.0 hr	
Time on Bottom		29-Dec-11 21:16	
Max. Rec. Temperature		218.0 degF @ 7581.0 ft	
Equipment		11454566 BRIGHTON	
Recorded By		C. BLUE	
Witnessed By		M. MCCLELLAND	

COMPANY	NOBLE ENERGY INC
WELL	RH FARMS I133-25D
FIELD	WATTENBERG
COUNTY	WELD
STATE	CO
API No.	05123345740000
Location	SHL: 689' FSL & 678' FWL SWSW BHL: 1320' FSL & 1254' FWL LAT: 40.52574° LONG: -104.7915°
Other Services:	RWCH GTET CSNG
Sect.	33
Twp.	7N
Rge.	66W
Elev.	4865.0 ft
D.F.	4879.0 ft
G.L.	4865.0 ft

Fold here

Service Ticket No.: N/A		API Serial No.: 05123345740000		PGM Version: WL INSITE R3.4.2 (Build 2)			
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE				RESISTIVITY SCALE CHANGES			
Date	Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth-Driller							
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 758-352	N/A	1.5" S.O.
Rmc @ Meas. Temp.	@	@					
Source Rmf	Rmc						
Rm @ BHT	@	@					
Rmf @ BHT	@	@					
Rmc @ BHT	@	@					
EQUIPMENT DATA							
GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.		Run No.	ONE	Run No.	ONE
Serial No.	11277436	Serial No.		Serial No.	M335_P470	Serial No.	11277440
Model No.	GTET	Model No.		Model No.	SDLT	Model No.	DSNT
Diameter	3.625"	No. of Cent.		Diameter	4.5"	Diameter	3.625'
Detector Model No.	102A	Spacing		Log Type	GAM/GAM	Log Type	THERM/THERM
Type	SCINT			Source Type	Cs137	Source Type	Am241Be
Length	8"	LSA [Y/N]		Serial No.	2770 GW	Serial No.	DSN 434
Distance to Source	10'	FWDA [Y/N]		Strength	1.5 Ci	Strength	15 Ci
LOGGING DATA							
GENERAL		GAMMA		ACOUSTIC		DENSITY	
						NEUTRON	

GENERAL			GAMMA		ACOUSTIC		DENSITY		NEUTRON							
Run	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix	Scale		Matrix		
No.	From	To	ft/min	L	R	L	R		L	R		L	R			
ONE	TD	7447	REC	0	250				20%	0%	2.68 g/cc	20%	0%	SAND		
ONE	7447	7134	REC	0	250				20%	0%	2.71 g/cc	20%	0%	LIME		
ONE	7134	CSG	REC	0	250				20%	0%	2.68 g/cc	20%	0%	SAND		
DIRECTIONAL INFORMATION																
Maximum Deviation									@	KOP						@
Remarks:																
RWCH/GTET/CSNG/DSNT/SDLT/ACRT RAN IN COMBINATION																
ANNULAR HOLE VOLUME CALCULATED FOR 4.5 INCH PRODUCTION CASING																
TENSION PULLS, WASHOUTS, AND BOREHOLE RUGOSITY AFFECT TOOL RESPONSE																
CREW: M. BURNETT, B. GODFREY, S. KEENER																
RIG: SAXON 143																
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES -- BRIGHTON, CO -- (303) 720-4348																
HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.																
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PARAMETERS REPORT

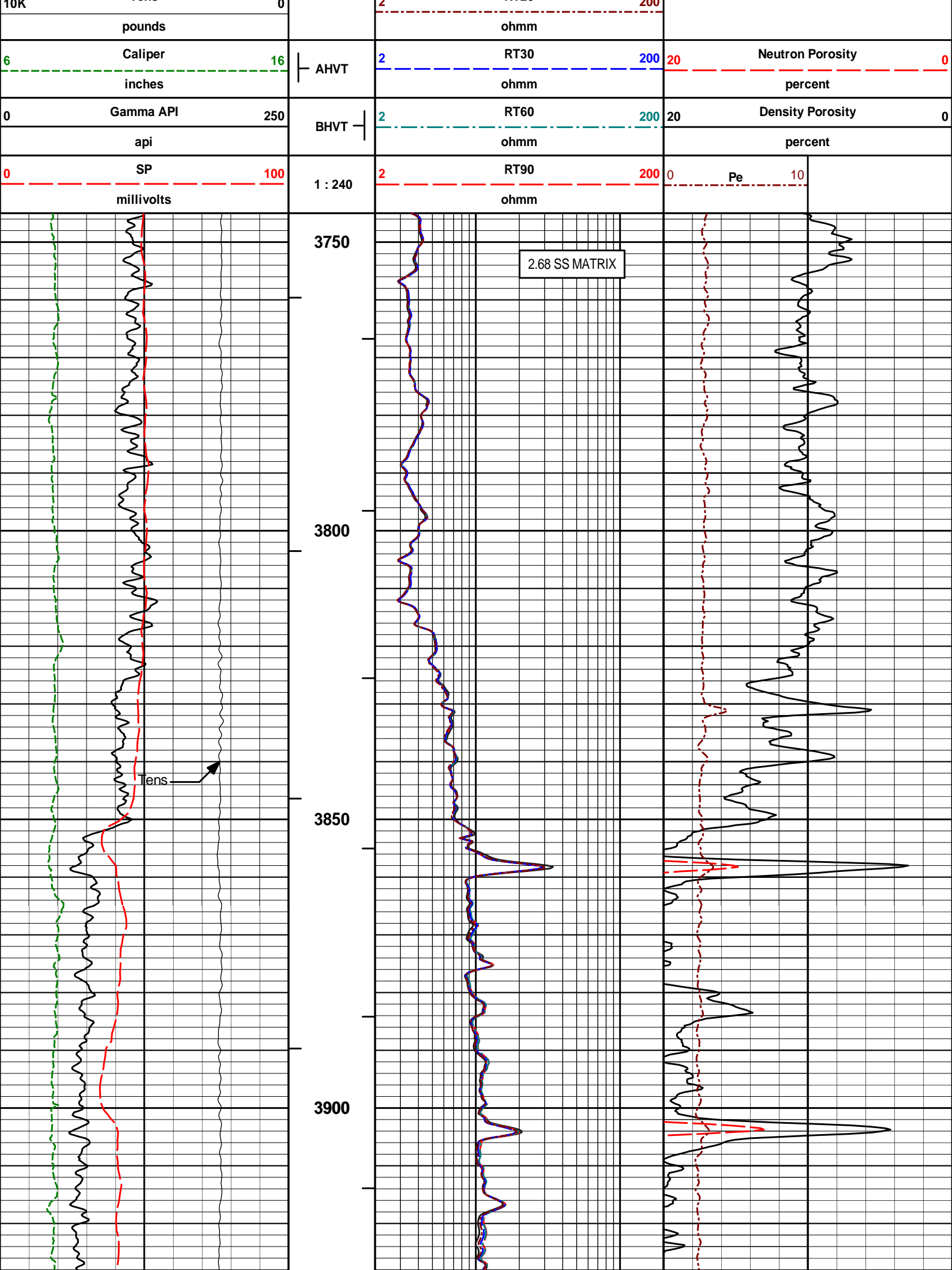
Depth (ft)	Tool Name	Description	Value	Units
TOP				
	DSNT	Neutron Lithology	Sandstone	
	SDLT Pad	Formation Density Matrix	2.680	g/cc
7134.00				
	DSNT	Neutron Lithology	Limestone	
	SDLT Pad	Formation Density Matrix	2.710	g/cc
7447.00				
	SHARED	Bit Size	7.875	in
	SHARED	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	Mud Base	Water	
	SHARED	Borehole Fluid Weight	9.300	ppg
	SHARED	Weighting Agent	Barite	
	SHARED	Borehole salinity	0.00	ppm
	SHARED	Formation Salinity NaCl	0.00	ppm
	SHARED	Percent K in Mud by Weight?	0.00	%
	SHARED	Mud Resistivity	1.300	ohmm
	SHARED	Temperature of Mud	76.2	degF
	SHARED	Logging Interval is Cased?	No	
	SHARED	AHV Casing OD	4.500	in
	SHARED	Surface Temperature	60.0	degF
	SHARED	Total Well Depth	7581.00	ft
	SHARED	Bottom Hole Temperature	218.0	degF
	SHARED	Navigation and Survey Master Tool	NONE	
	SHARED	High Res Z Accelerometer Master Tool	GTET	

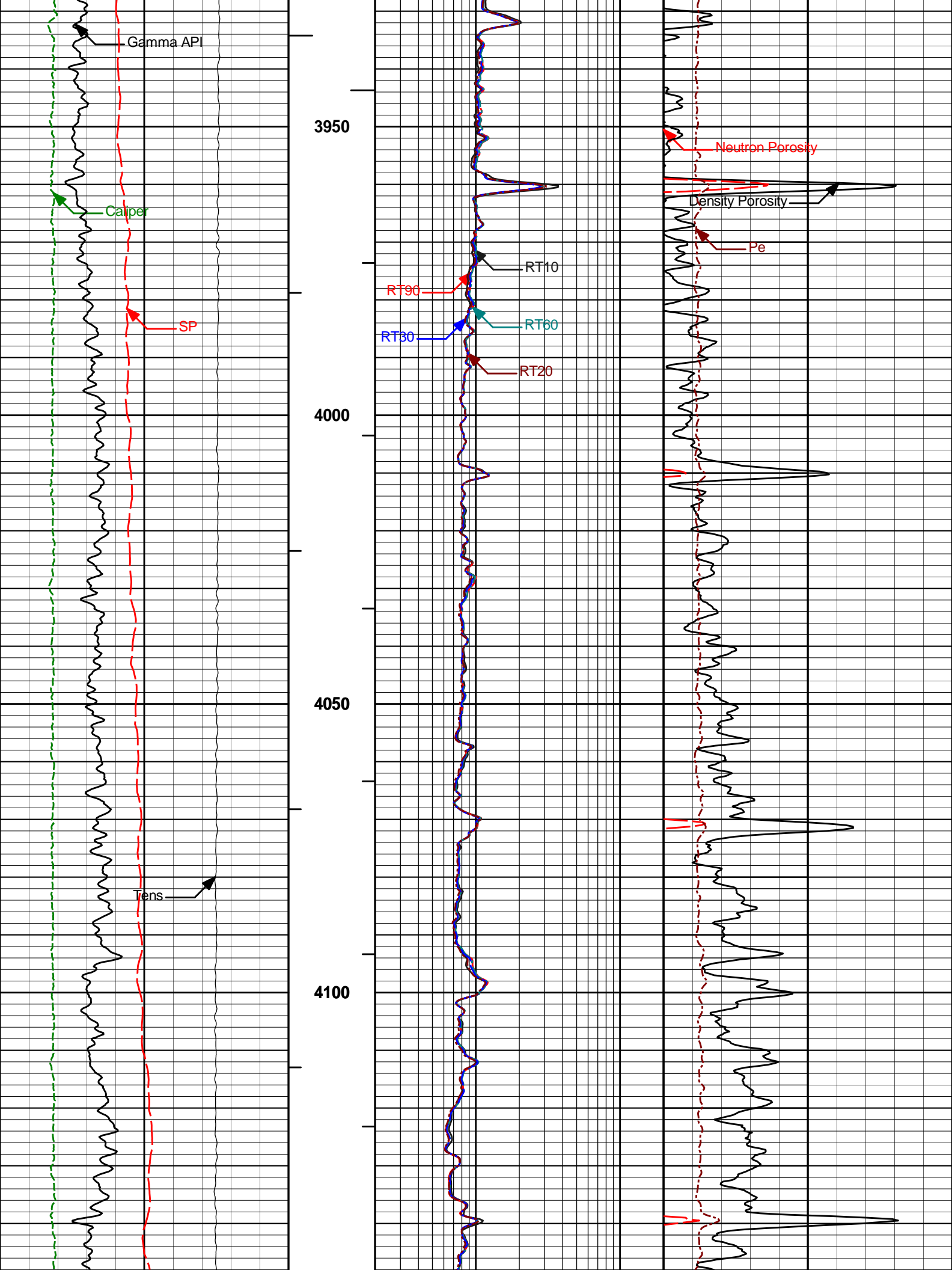
SHARED	Temperature Master Tool	NONE	
SHARED	Borehole Size Master Tool	NONE	
GTET	Process Gamma Ray?	Yes	
GTET	Gamma Tool Standoff	0.000	in
GTET	Process Gamma Ray EVR?	No	
GTET	Tool Position for Gamma Ray Tools.	Eccentered	
CSNG	Process CSNG Data?	Yes	
CSNG	Is Tool Centralized?	No	
CSNG	Gamma Enviromental Corrections?	Yes	
CSNG	Barite Correction Factor	1.00	
CSNG	Use Fixed Gain	No	
CSNG	Use Fixed Offset	No	
CSNG	Use Fixed Resolution Degradation Factor	No	
DSNT	Process DSN?	Yes	
DSNT	Process DSN EVR?	No	
DSNT	Neutron Lithology	Sandstone	
DSNT	DSN Standoff - 0.25 in (6.35 mm) Recommended	0.000	in
DSNT	Temperature Correction Type	None	
DSNT	DSN Pressure Correction Type	None	
DSNT	View More Correction Options	No	
DSNT	Use TVD for Gradient Corrections?	No	
DSNT	Logging Horizontal Water Tank?	No	
SDLT	Process Caliper Outputs?	Yes	
SDLT Pad	Process Density?	Yes	
SDLT Pad	Process Density EVR?	No	
SDLT Pad	Logging Calibration Blocks?	No	
SDLT Pad	SDLT Pad Temperature Valid?	Yes	
SDLT Pad	Disable temperature warning	No	
SDLT Pad	Formation Density Matrix	2.680	g/cc
SDLT Pad	Formation Density Fluid	1.000	g/cc
ACRt Sonde	Process ACRt?	Yes	
ACRt Sonde	Minimum Tool Standoff	1.50	in
ACRt Sonde	Temperature Correction Source	FP Lwr & FP Up	
ACRt Sonde	Tool Position	Free Hanging	
ACRt Sonde	Rmud Source	Mud Cell	
ACRt Sonde	Minimum Resistivity for MAP	0.20	ohmm
ACRt Sonde	Maximum Resistivity for MAP	200.00	ohmm
ACRt Sonde	Threshold Quality	0.50	
BOTTOM			
Data: RH_FAR_I133_25D\0001 TEST\002.01 29-Dec-11 22:07 Up			Date: 29-Dec-11 22:07:58

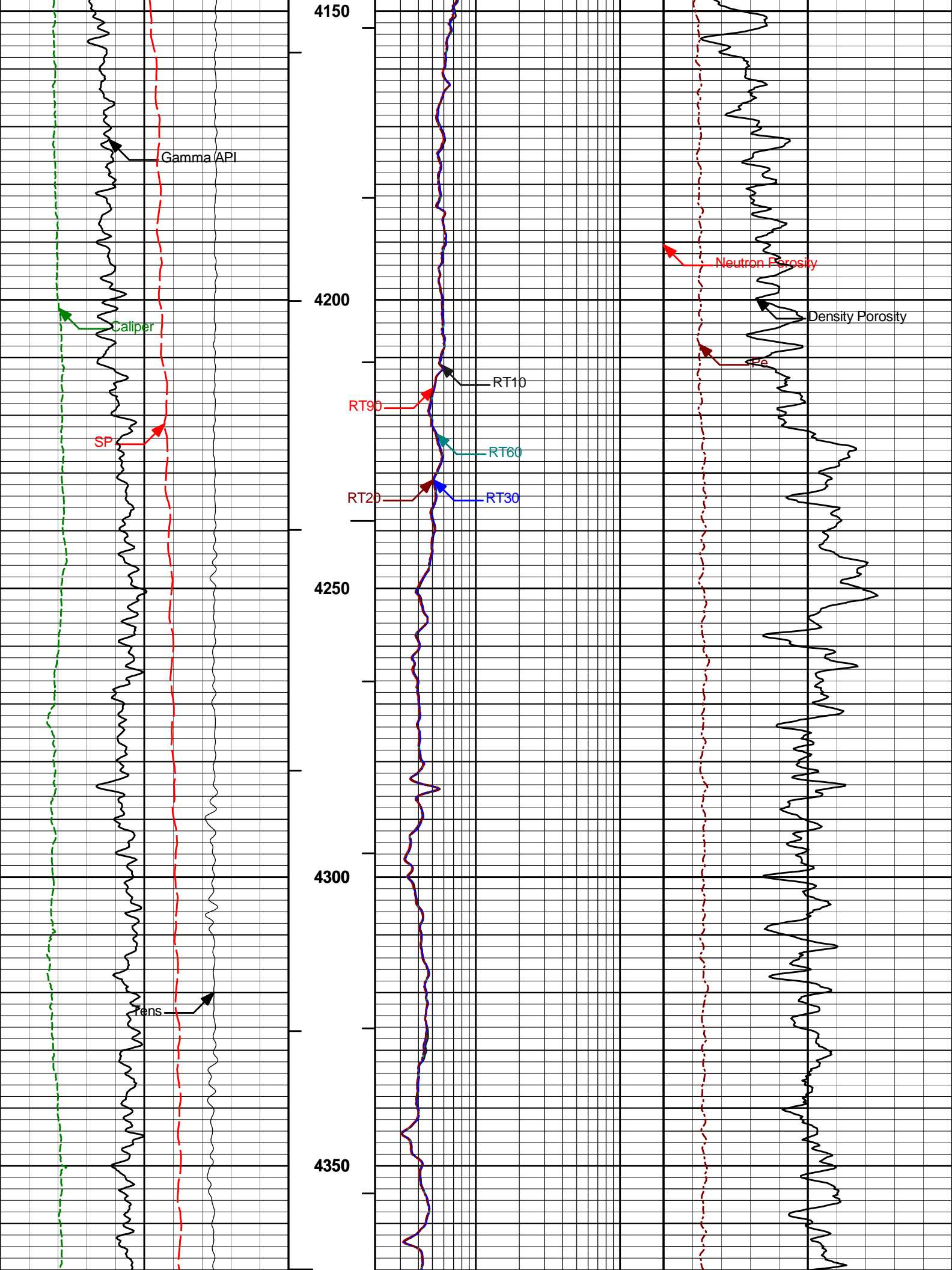
HALLIBURTON	Plot Time: 29-Dec-11 23:01:05 Plot Range: 3745 ft to 5155 ft Data: RH_FAR_I133_25D\Well Based\MAIN\ Plot File: \COMP\SUSX-PARK
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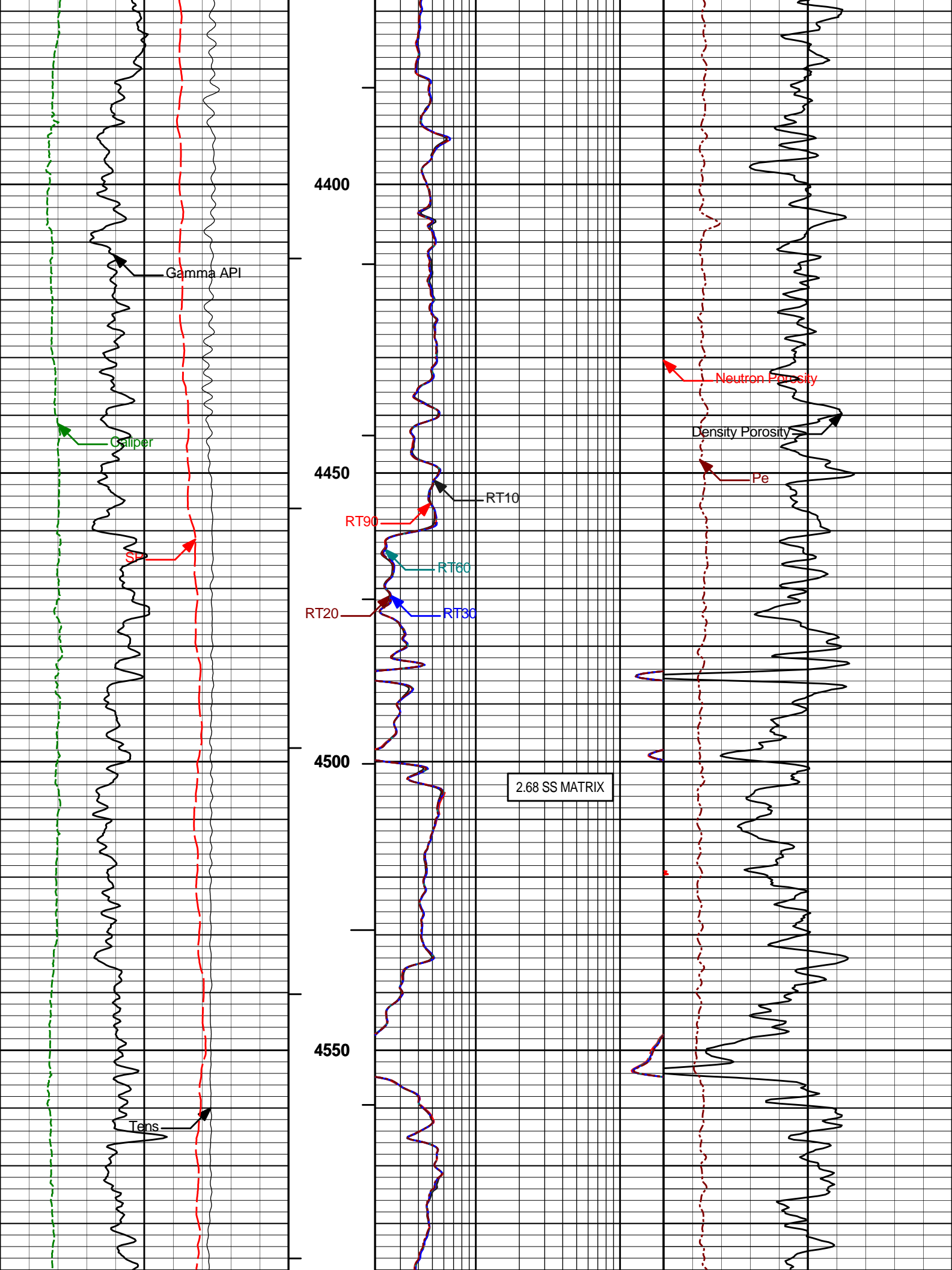
MAIN PASS 5" = 100'			
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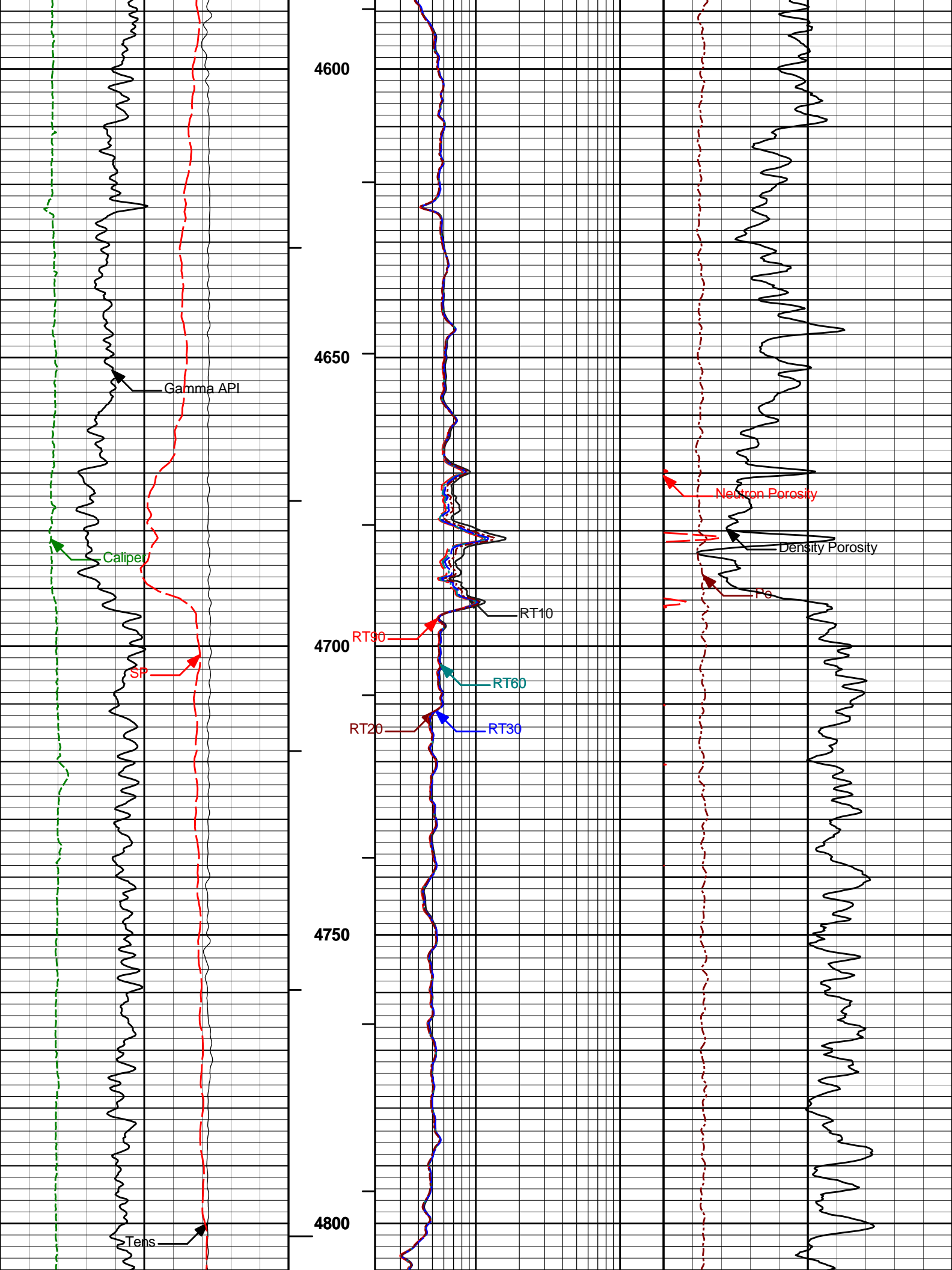
	2	RT10	200	
		ohmm		
		RT20	200	

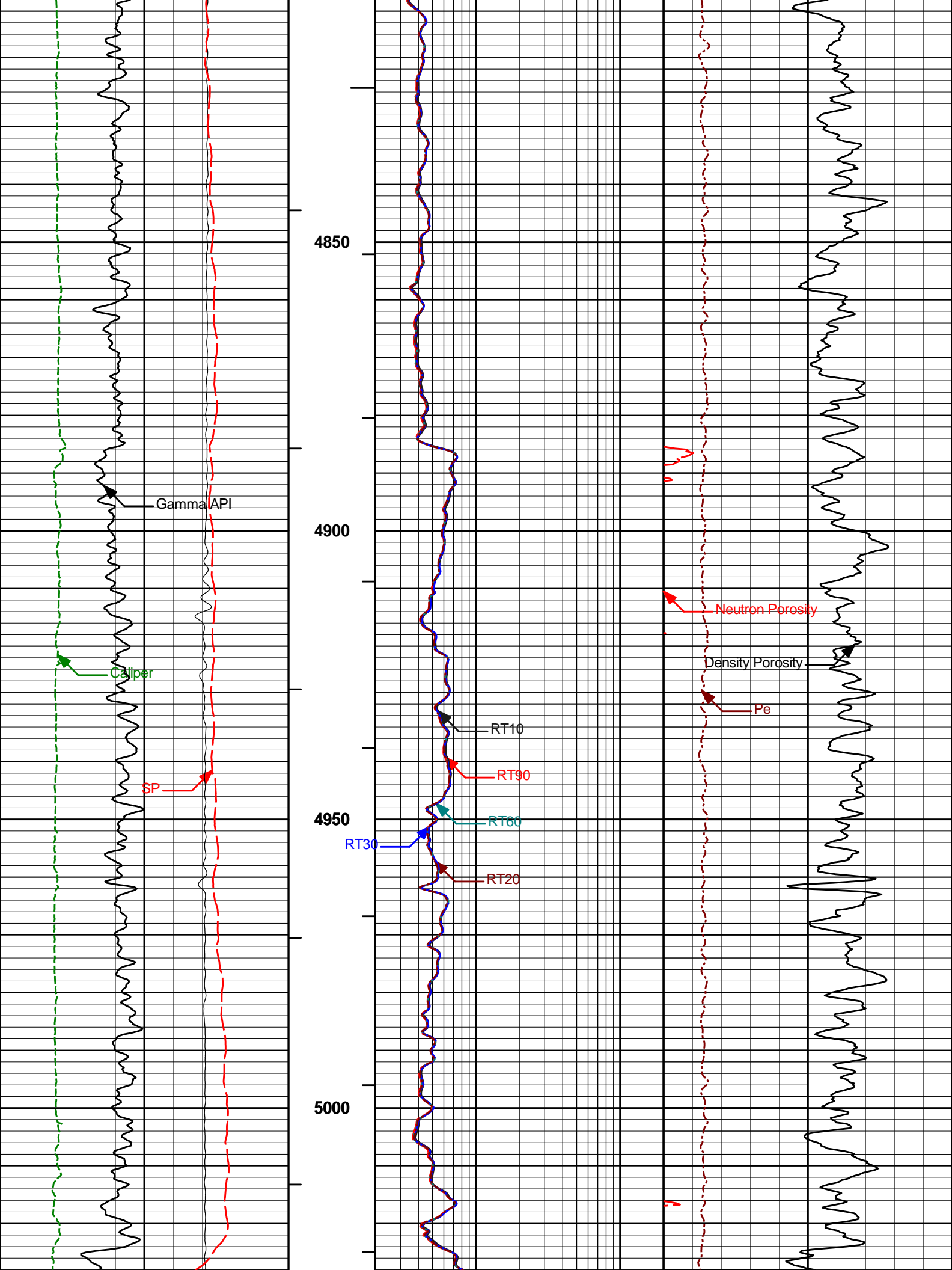


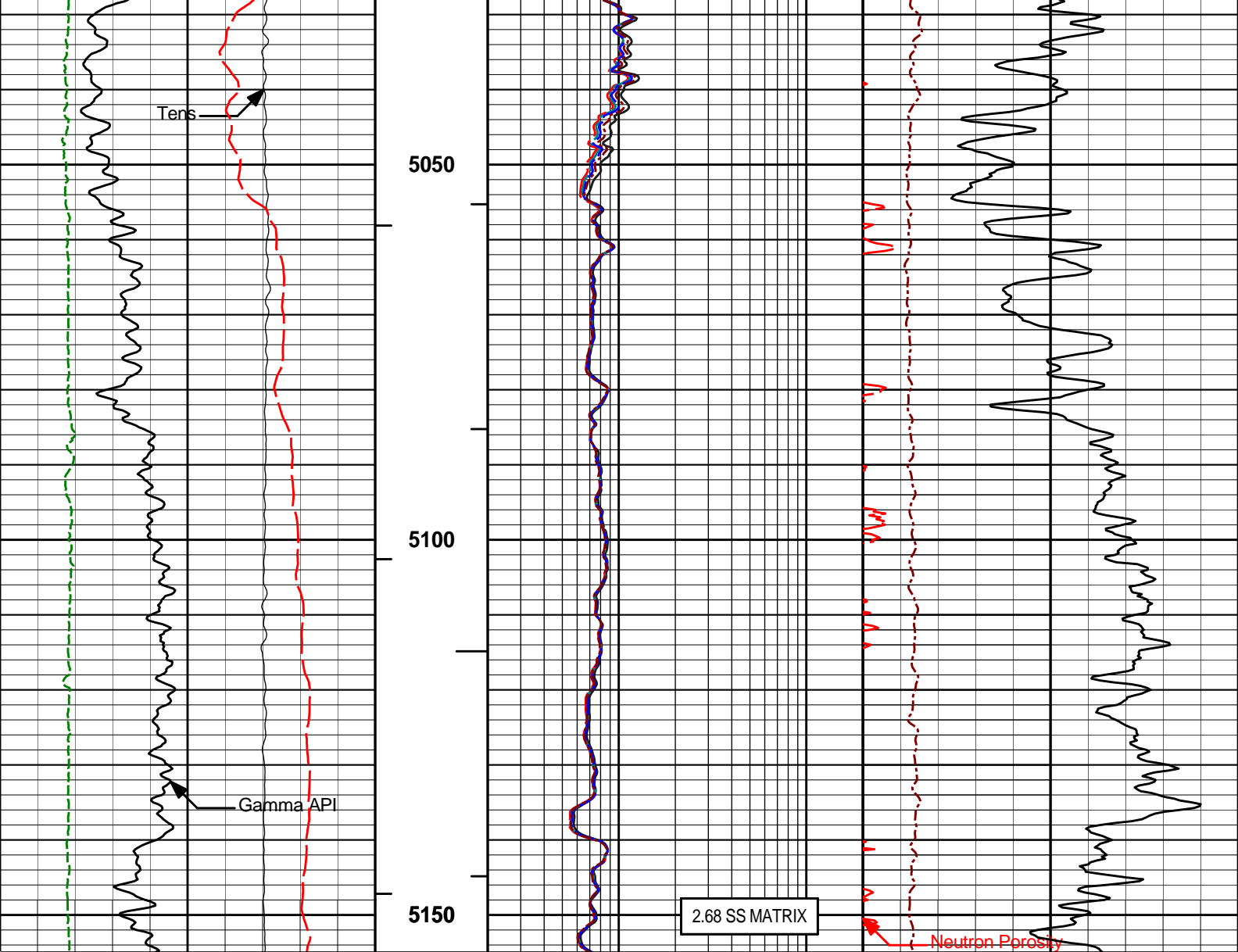












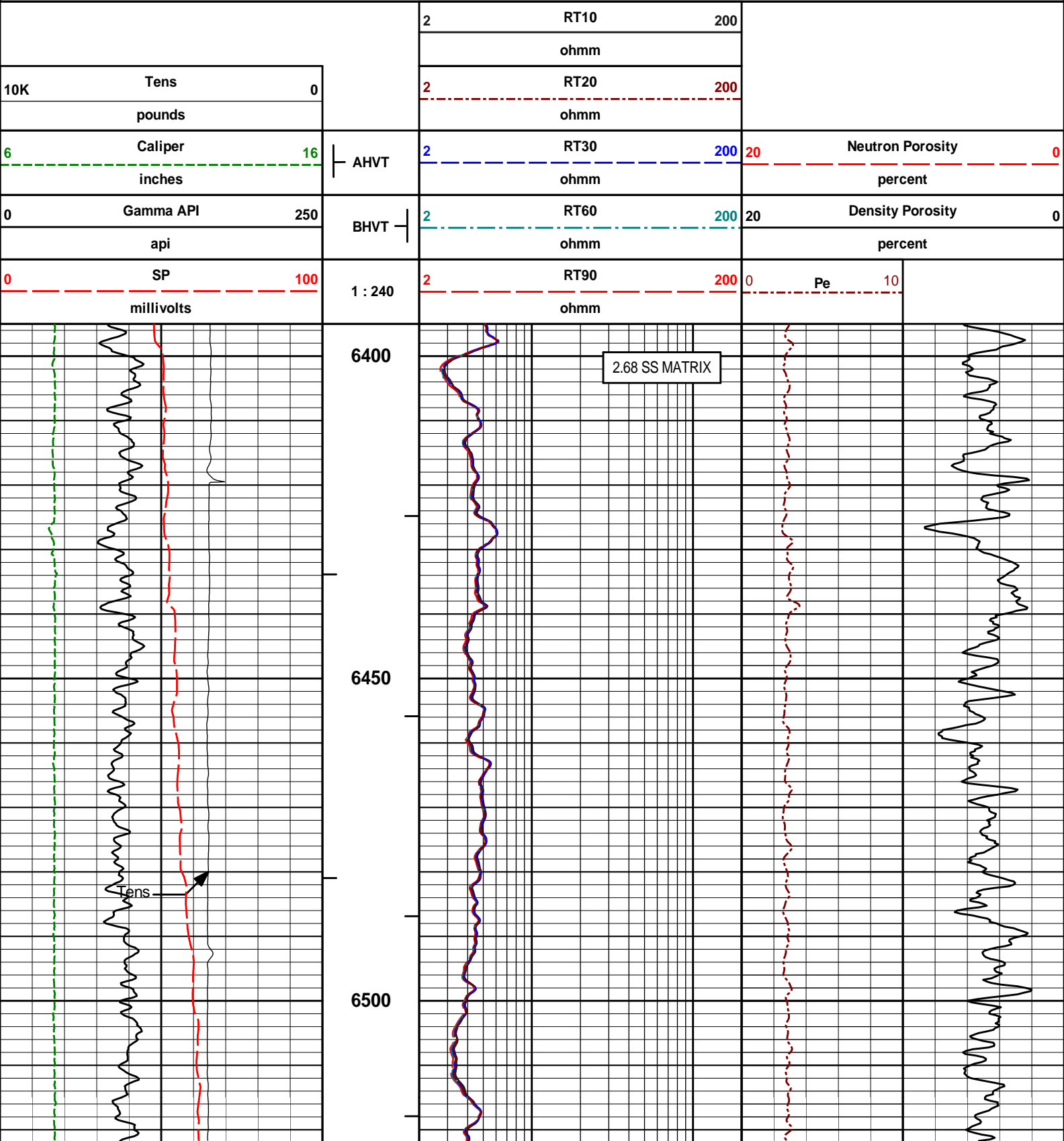
0	SP	100	1 : 240	2	RT90	200	0	Pe	10
	millivolts				ohmm				
0	Gamma API	250	BHVT	2	RT60	200	20	Density Porosity	0
	api				ohmm			percent	
6	Caliper	16	AHVT	2	RT30	200	20	Neutron Porosity	0
	inches				ohmm			percent	
10K	Tens	0		2	RT20	200			
	pounds				ohmm				
				2	RT10	200			
					ohmm				

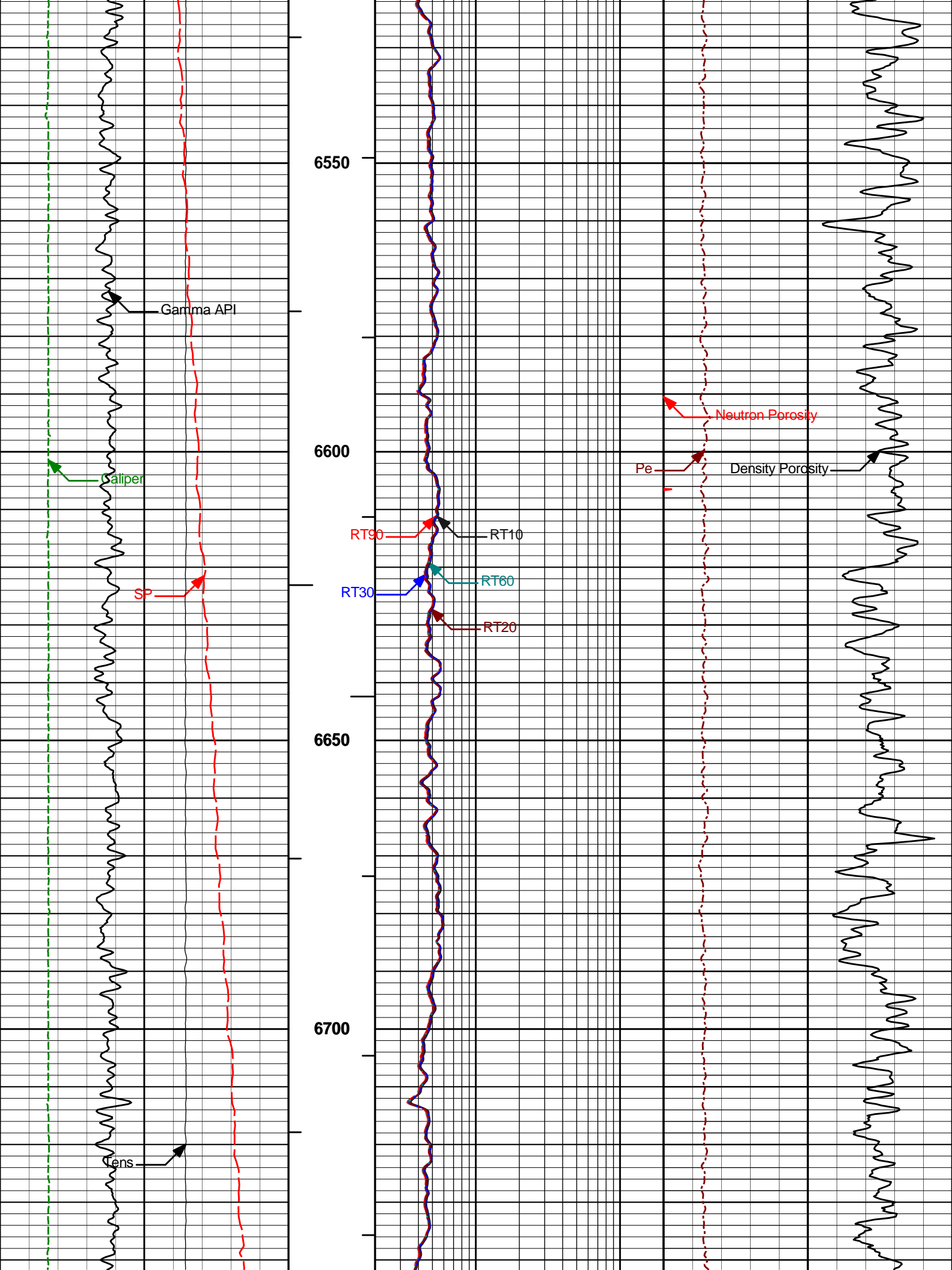
HALLIBURTON

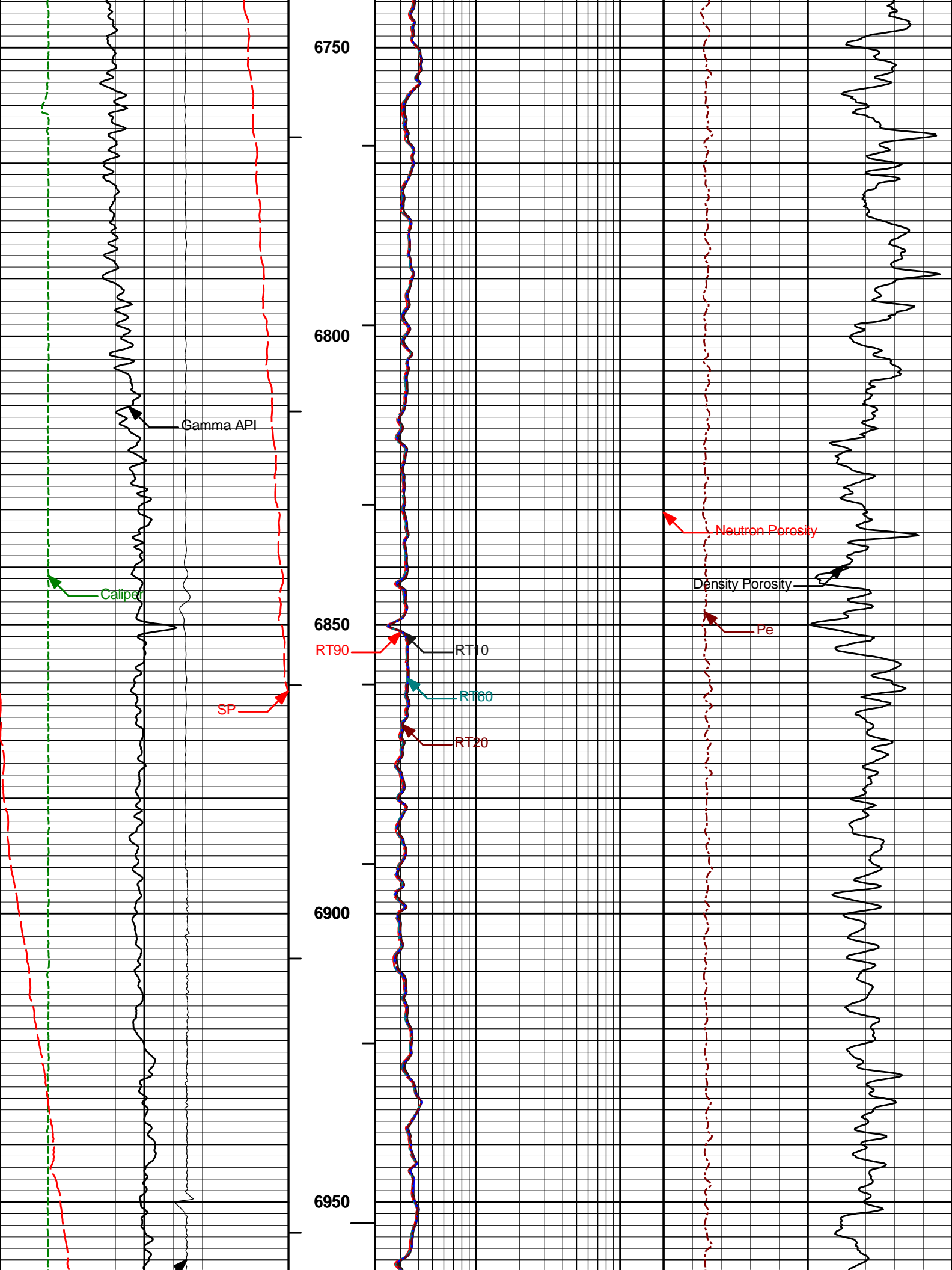
Plot Time: 29-Dec-11 23:01:08
 Plot Range: 3745 ft to 5155 ft
 Data: RH_FAR_I133_25D\Well Based\MAIN*
 Plot File: \\COMP\SUSX-PARK

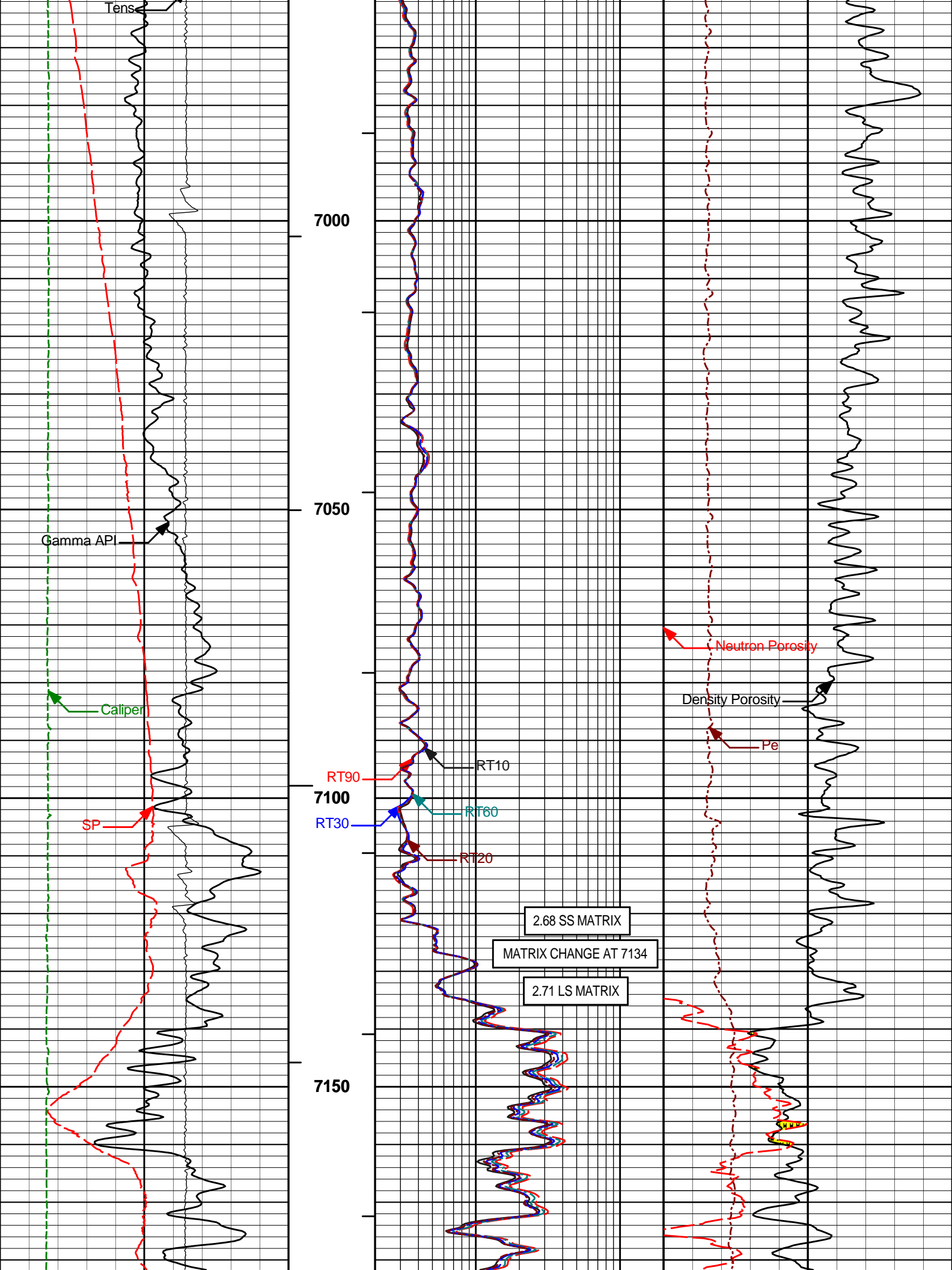
MAIN PASS 5" = 100'

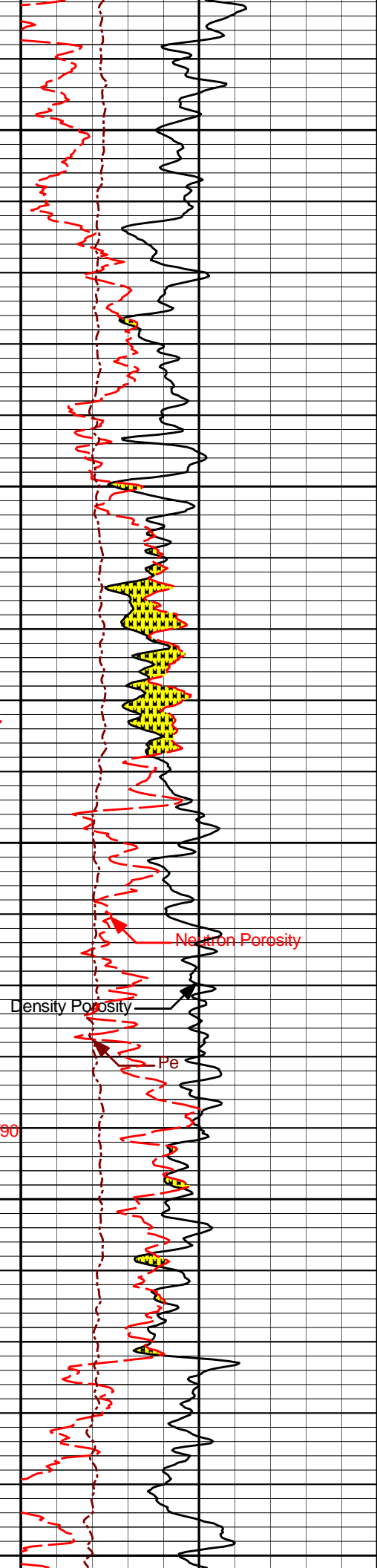
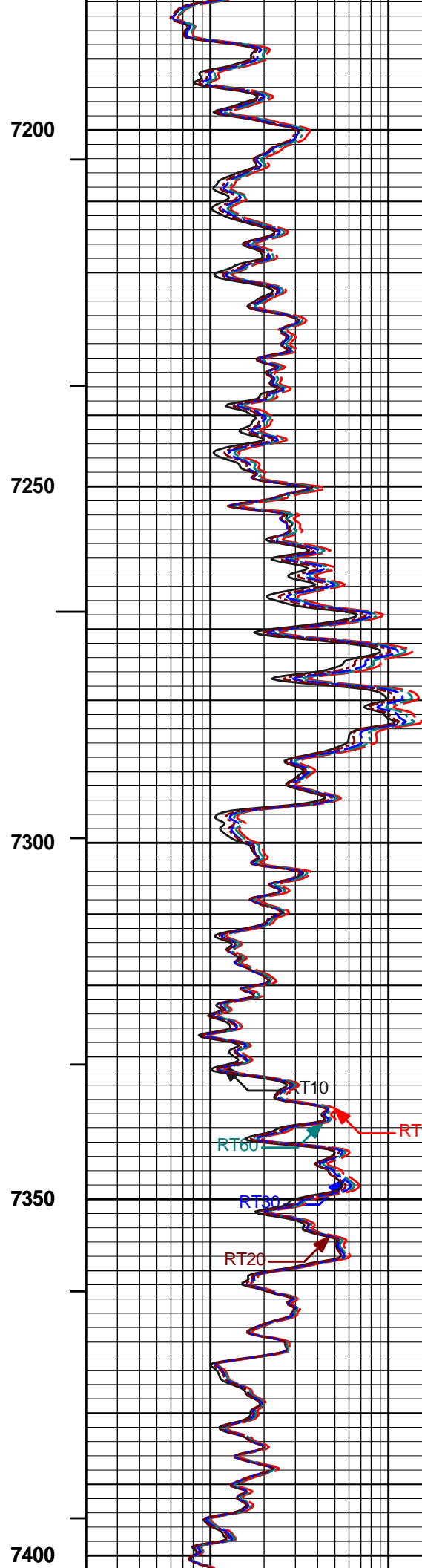
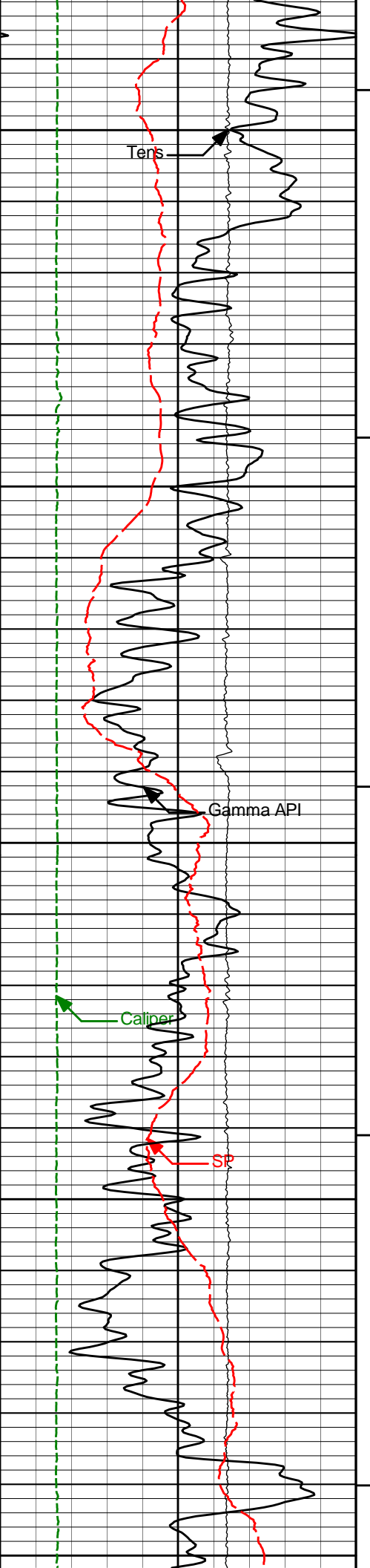
MAIN PASS 5" = 100'

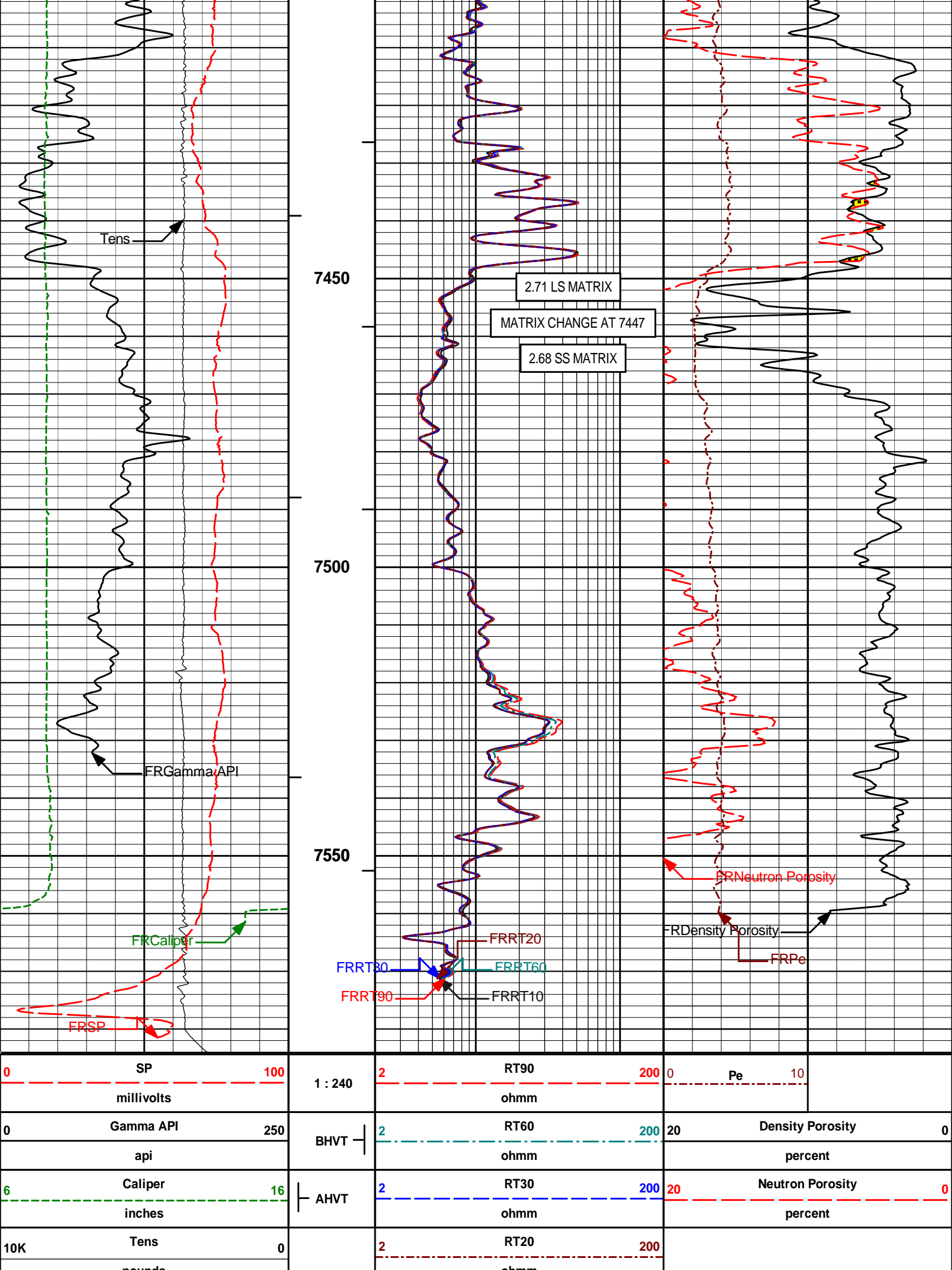












	pounds		2	RT10	200	ohmm																																					
<div>HALLIBURTON</div> <div>Plot Time: 29-Dec-11 23:01:11 Plot Range: 6395 ft to 7584.08 ft Data: RH_FAR_I133_25D\Well Based\MAIN* Plot File: \\COMP\TD-NIO</div>																																											
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<div>HALLIBURTON</div> <div>CALIBRATION REPORT</div>																																											
<div>NATURAL GAMMA RAY TOOL SHOP CALIBRATION</div> <div><div>Tool Name:GTET - 11277436_BLACK</div><div>Reference Calibration Date:08-Nov-11 13:06:24</div><div>Engineer:R. TWEETEN</div><div>Calibration Date:10-Dec-11 12:42:41</div><div>Software Version:WL INSITE R3.4.2 (Build 2)</div><div>Calibration Version:1</div></div> <div>Calibrator Source S/N: TB-289 Calibrator API Reference:243.00 api Equivalent Calibrator API Reference:247.3 api</div> <table><thead><tr><th>Measurement</th><th>Measured</th><th>Calibrated</th><th>Units</th></tr></thead><tbody><tr><td>Background</td><td>72.9</td><td>74.1</td><td>api</td></tr><tr><td>Background + Calibrator</td><td>316.4</td><td>321.4</td><td>api</td></tr><tr><td>Calibrator</td><td>243.4</td><td>247.3</td><td>api</td></tr></tbody></table>							Measurement	Measured	Calibrated	Units	Background	72.9	74.1	api	Background + Calibrator	316.4	321.4	api	Calibrator	243.4	247.3	api																					
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<div>CSNG-FS SHOP CALIBRATION</div> <div><div>Tool Name:CSNG - 10965402</div><div>Reference Calibration Date:08-Nov-11 14:10:02</div><div>Engineer:R. TWEETEN</div><div>Calibration Date:16-Dec-11 08:56:34</div><div>Software Version:WL INSITE R3.4.2 (Build 2)</div><div>Calibration Version:1</div><div>Source SN:TB-289</div></div> <table><thead><tr><th>TITANIUM CASE</th><th>Measured</th><th>Calibrated</th><th>Units</th></tr></thead><tbody><tr><td>60 KEV Peak Channel #</td><td>48.0</td><td>48.0</td><td>Channel #</td></tr><tr><td>239 KEV Peak Channel #</td><td>22.8</td><td>23.0</td><td>Channel #</td></tr><tr><td>583 KEV Peak Channel #</td><td>51.4</td><td>51.7</td><td>Channel #</td></tr><tr><td>2614 KEV Peak Channel #</td><td>211.5</td><td>212.1</td><td>Channel #</td></tr><tr><td>Calibrate Temperature</td><td>82.9</td><td>64.9</td><td>degF</td></tr></tbody></table> <table><thead><tr><th>Pass/Fail Summary</th><th>Centroid</th></tr></thead><tbody><tr><td>239 KEV Peak</td><td>Passed</td></tr><tr><td>583 KEV Peak</td><td>Passed</td></tr><tr><td>2614 KEV Peak</td><td>Passed</td></tr></tbody></table> <div>Blanket Reference Value: 243.00 API Calibrator Value: 276.0 API</div> <table><thead><tr><th>Counts</th><th>Units</th><th>Measured</th><th>Calibrated</th><th>Units</th></tr></thead></table>							TITANIUM CASE	Measured	Calibrated	Units	60 KEV Peak Channel #	48.0	48.0	Channel #	239 KEV Peak Channel #	22.8	23.0	Channel #	583 KEV Peak Channel #	51.4	51.7	Channel #	2614 KEV Peak Channel #	211.5	212.1	Channel #	Calibrate Temperature	82.9	64.9	degF	Pass/Fail Summary	Centroid	239 KEV Peak	Passed	583 KEV Peak	Passed	2614 KEV Peak	Passed	Counts	Units	Measured	Calibrated	Units
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Thorium Blanket	1824.7	CPS	329.6	338.7	API
Background	337.7	CPS	53.6	62.7	API
Gamma Ray Gain: 0.93					
Expected Gain Range: 0.85 - 1.15					
Gamma Gain Check: Passed					

DUAL SPACED NEUTRON SHOP CALIBRATION

Tool Name:	DSNT - 11277440_RED	Reference Calibration Date:	01-Dec-11 10:46:11
Engineer:	R. TWEETEN	Calibration Date:	01-Dec-11 11:07:29
Software Version:	WL INSITE R3.4.2 (Build 2)	Calibration Version:	1

Logging Source S/N: DSN434
Tank Serial Number: 11068236
Reference value assigned to Tank: 53.720
Snow Block S/N: BRIGHTON
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:	1.005	1.004	0.900 - 1.100

WATER TANK SUMMARY (Horizontal Water Tank)				
Measurement	Current Reading (Previous Coef.)	Calibrated (New Coef.)	Change	Control Limit On Change
Porosity (decp):	0.2227	0.2224	0.0003	+/- 0.0020
Calibrated Ratio:	10.12	10.11	0.011	+/- 0.050

VERIFIER		
Measurement	Value	Control Limit
Snow-Block Porosity (decp):	0.0826	0.02000 - 0.09000

PASS/FAIL SUMMARY	
Background Check:	Passed
Gain-Range Check:	Passed
Snow-Block Check:	Passed

DENSITY CALIPER SHOP CALIBRATION

Tool Name:	SDLT - M335_P470_BLACK	Reference Calibration Date:	11-Dec-11 13:56:41
Engineer:	R. TWEETEN	Calibration Date:	11-Dec-11 14:04:36
Software Version:	WL INSITE R3.4.2 (Build 2)	Calibration Version:	1

CALIBRATION COEFFICIENTS			
Measurement	Previous Value	New Value	Control Limit On New Value
Pad Offset	-3444.37	-3352.91	-7000.00 - -1000.00
Pad Gain	0.0003910	0.0003872	0.000200 - 0.000600
Arm Offset	-4160.69	-4206.13	-5000.00 - 3000.00
Arm Gain	0.0005558	0.0005565	0.000300 - 0.000700
Arm Power	-0.000005030	-0.000004966	-0.000010 - 0.000010

The ring diameter is computed from: DIAMETER = PAD EXTENSION + ARM EXTENSION + TOOL DIAMETER
Tool Diameter: 4.50 in

CALIBRATION RINGS			
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CALIBRATION RINGS					
Measurement	Current Reading (Previous Coeff.)	Calibrated (New Coeff.)	Change	Control Limit On New Value	
PAD EXTENSION:					
Small Ring (in)	1.98	2.00	0.02	+/- 0.20	
Medium Ring (in)	3.75	3.75	0.00	+/- 0.20	
RING DIAMETER:					
Small Ring (in)	6.49	6.50	0.01	+/- 0.20	
Medium Ring (in)	8.23	8.25	0.02	+/- 0.20	
Large Ring (in)	14.96	15.00	0.04	+/- 0.20	
PASS/FAIL SUMMARY					
Calibration-Coefficients Range Check:			Passed		
Ring-Measurement Check:			Passed		
PASS/FAIL SUMMARY					
Calibration-Coefficients Range Check:			Passed		

ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION					
Tool Name:	ACRt Sonde - E6758-S4352_BLK			Reference Calibration Date:	30-Mar-11 17:55:22
Engineer:	F. LODER			Calibration Date:	25-Aug-11 15:55:48
Software Version:	WL INSITE R3.4.2 (Build 2)			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	0.9901	1.05	0.95	0.9958	1.05	0.95	0.9928	1.05
A2 (50")	0.95	0.9949	1.05	0.95	1.0010	1.05	0.95	1.0001	1.05
A3 (29")	0.95	0.9960	1.05	0.95	0.9995	1.05	0.95	0.9971	1.05
A4 (17")	0.95	1.0044	1.05	0.95	1.0055	1.05	0.95	1.0047	1.05
A5 (10")	N/A	N/A	N/A	0.95	0.9980	1.05	0.95	0.9966	1.05
A6 (6")	N/A	N/A	N/A	0.95	0.9787	1.05	0.95	0.9757	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	-1.494	2	-6	-3.982	-2	-8	-4.283	-2
A2 (50")	-7	-3.247	-1	-6	-3.938	-2	-7	-4.224	-2
A3 (29")	-27	-13.938	-9	-9	-3.943	-3	-7	-2.988	-1
A4 (17")	-180	-98.155	-60	-45	-31.951	-15	-39	-25.455	-13
A5 (10")	N/A	N/A	N/A	-150	-92.229	-50	-80	-45.352	-10
A6 (6")	N/A	N/A	N/A	175	299.783	525	90	150.888	270

TRANSMITTER CURRENT GAIN					R-MUD VERIFICATION			
Signal	Lower	R	Upper		Signal	Lower (ohm-m)	Measured (ohm-m)	Upper (ohm-m)
12K	0.6	0.9246	1.3		Mud Cell	0.95	1.009	1.05
36K	1.0	1.8754	2.0					
72K	1.0	1.1579	2.0					

SPECTRAL DENSITY SHOP CALIBRATION					
Tool Name:	SDLT Pad - M335_P470_BLACK			Reference Calibration Date:	08-Nov-11 13:37:53
Engineer:	R. TWEETEN			Calibration Date:	11-Dec-11 13:28:20
Software Version:	WL INSITE R3.4.2 (Build 2)			Calibration Version:	1

Logging Source S/N: 2770GW

Logging Source C/N: 2110307

Aluminum Block S/N: 63066

Density: 2.602g/cc

Pe: 3.100

Magnesium Block S/N: 12345

Density: 1.690g/cc

Pe: 2.650

DENSITY CALIBRATION SUMMARY			
Measurement	Previous Value	New Value	Control Limit
Near Bar Gain	1.0862	1.0836	0.90 - 1.10
Near Dens Gain	1.0467	1.0367	0.90 - 1.10
Near Peak Gain	1.0177	1.0329	0.90 - 1.10
Near Lith Gain	0.9729	0.9778	0.90 - 1.10
Far Bar Gain	1.0203	1.0141	0.90 - 1.10
Far Dens Gain	1.0052	0.9996	0.90 - 1.10
Far Peak Gain	0.9985	0.9936	0.90 - 1.10
Far Lith Gain	0.9674	0.9677	0.90 - 1.10
Near Bar Offset	-0.5413	-0.5096	NONE
Near Dens Offset	-0.1421	-0.0476	NONE
Near Peak Offset	0.1151	-0.0007	NONE
Near Lith Offset	0.4614	0.4479	NONE
Far Bar Offset	0.0377	0.0923	NONE
Far Dens Offset	0.1472	0.1995	NONE
Far Peak Offset	0.1890	0.2380	NONE
Far Lith Offset	0.4001	0.4085	NONE
Near Bar Background	1046.79	1050.36	700 - 1450
Near Dens Background	345.57	344.83	230 - 480
Near Peak Background	152.19	150.25	100 - 210
Near Lith Background	183.15	182.31	125 - 260
Far Bar Background	545.59	547.54	450 - 900
Far Dens Background	214.11	213.77	175 - 345
Far Peak Background	83.42	82.59	70 - 140
Far Lith Background	87.41	86.89	75 - 145

CALIBRATION BLOCK SUMMARY				
Measurement	Current Reading (Previous Coef)	Calibrated (New Coef)	Change	Control Limit On Change
MAGNESIUM				
Density (g/cc)	1.683	1.690	0.007	+/- 0.015
Pe	2.728	2.592	-0.136	+/- 0.150
ALUMINUM				
Density (g/cc)	2.600	2.602	0.002	+/- 0.01500
Pe	3.163	3.050	-0.113	+/- 0.150

TOOL SUMMARY				
Measurement	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits
QUALITY				
Background	0.0006	+/- 0.0110	-0.0008	+/- 0.0140
Magnesium Block	-0.0012	+/- 0.0110	-0.0001	+/- 0.0140
Aluminum Block	-0.0004	+/- 0.0110	0.0008	+/- 0.0140
Resolution	9.07	6.00 - 11.50	9.83	6.00 - 11.50
Internal Verifier(B+D+P+L)	1728	1200 - 2700	931	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

CALIBRATION SUMMARY



Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11277436_BLACK						
Gamma Ray Calibrator	247.3	-----	-----	0.0	+/- 9.00	api
CSNG-10965402						
60 KEV Peak Channel #	48.0	-----	-----	0.0	-----	Channel #
239 KEV Peak Channel #	23.0	-----	-----	0.0	-----	Channel #
583 KEV Peak Channel #	51.7	-----	-----	0.0	-----	Channel #
2614 KEV Peak Channel #	212.1	-----	-----	0.0	-----	Channel #
DSNT-11277440_RED						
Snow-Block Porosity	0.0826	-----	-----	0.0000	+/- -.--	decp
SDLT-M335_P470_BLACK						
Pad Extension	3.75	-----	-----	0.00	+/-0.20	in
Ring Diameter	8.25	-----	-----	0.00	+/-0.20	in
ACRt Sonde-E6758-S4352_BLK						
Mud Cell	1.009	-----	-----	0.000	-----	ohm-m
SDLT Pad-M335_P470_BLACK						
Near(B+D+P+L)	1727.751	-----	-----	0.000	+/-14.575	cps
Far(B+D+P+L)	930.797	-----	-----	0.000	+/-14.964	cps

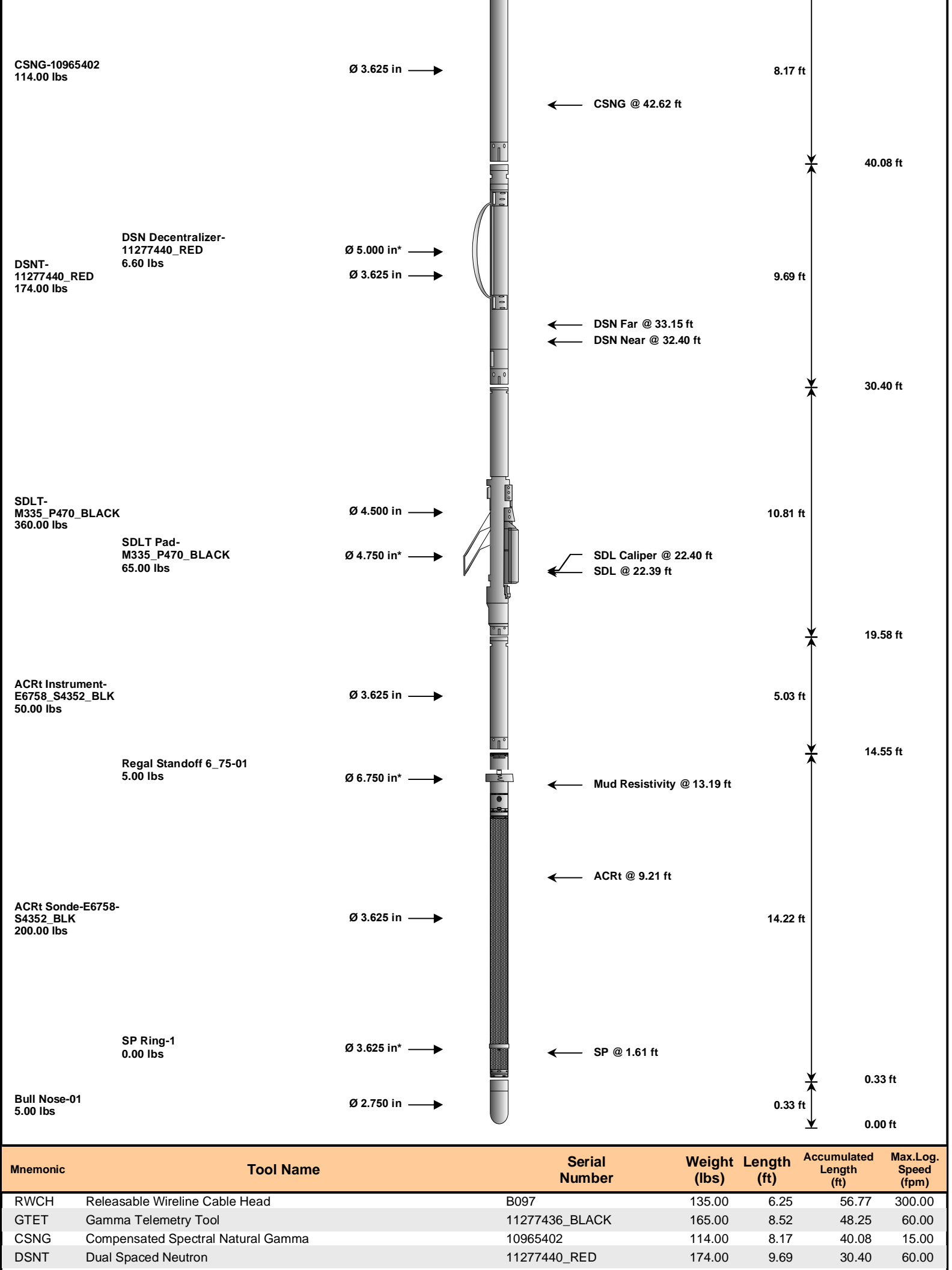
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HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
RWCH-B097 135.00 lbs		Ø 3.625 in →		← Load Cell @ 59.34 ft ← BH Temperature @ 58.77 ft	6.25 ft	63.02 ft
					56.77 ft	56.77 ft
GTET-11277436_BLACK 165.00 lbs		Ø 3.625 in →		← GammaRay @ 50.71 ft	8.52 ft	48.25 ft



DCNT	DSN Decentralizer	11277440_RED	6.60	5.13	*	33.73	300.00
SDLT	Spectral Density Tool	M335_P470_BLACK	360.00	10.81		19.58	60.00
SDLP	Density Insite Pad	M335_P470_BLACK	65.00	2.55	*	21.79	60.00
ACRt	Array Compensated True Resistivity Instrument Section	E6758_S4352_BLK	50.00	5.03		14.55	300.00
ACRt	Array Compensated True Resistivity	E6758-S4352_BLK	200.00	14.22		0.33	300.00
SP	SP Ring	1	0.00	0.25	*	1.61	300.00
RSOF	Regal Standoff 6.75in	01	5.00	0.52	*	13.24	300.00
BLNS	Bull Nose	01	5.00	0.33		0.00	300.00
Total			1,279.60	63.02			
* Not included in Total Length and Length Accumulation.							
Data: RH_FAR_II33_25D\0001 TESTIDLE							
Date: 29-Dec-11 19:49:34							

COMPANY	NOBLE ENERGY INC					
WELL	RH FARMS II33-25D					
FIELD	WATTENBERG					
COUNTY	WELD	STATE	CO			
HALLIBURTON			SPECTRAL DENSITY DUAL SPACED NEUTRON ARRAY COMPENSATED TRUE RESISTIVITY			