



Composite Log

Company				Taos Resources Operating Company			
Well				West Maddix Unit # 14			
Field				Maddix			
County				Cowley			
State				Kansas			
Location:		165' FNL & 330' FWL		API # : 15-035-24547		Other Services	
SEC 14		TWP 33S		RGE 5E			
Permanent Datum		G.L.		Elevation 1244 ft.		K.B. 1254 ft.	
Log Measured From		K.B.		10 ft. above perm. datum		D.F. 1253 ft.	
Drilling Measured From		K.B.				G.L. 1244 ft.	
Date		11-Dec-2013					
Run Number		One					
Depth Driller		3650'					
Depth Logger		3653'					
Bottom Logged Interval		3652'					
Top Log Interval		250'					
Casing Driller		8.625" @ 264'		@		@	
Casing Logger		266'					
Bit Size		7.875"		@		@	
Type Fluid in Hole		WBM					
Density / Viscosity		9.8 / 40					
pH / Fluid Loss		10 / 8					
Source of Sample		Mud Pit					
Rim @ Meas. Temp		1.1 @ 86 °F		@		@	
Rmf @ Meas. Temp		0.88 @ 86 °F		@		@	
Rmc @ Meas. Temp		1.38 @ 86 °F		@		@	
Source of Rmf / Rmc		Calculated		@		@	
Rim @ BHT		0.85 @ 115 °F		@		@	
Time Circulation Stopped		5:30					
Time Logger on Bottom		9:45					
Maximum Recorded Temperature		115 °F					
Equipment Number		10001					
Location		OKC					
Recorded By		B. Oetting					
Witnessed By		S. Ball					

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Equipment and Log Data															
Service Order: 23276															
Gamma			Density			Neutron			Sonic			IAT			
Run No.		One	Run No.		One	Run No.		One	Run No.		One	Run No.		One	
Serial No.		047	Serial No.		110	Serial No.		071	Serial No.		36	Serial No.		106	
O.D.		3.375 in.	Source No.		50129B	Source No.		80244B	Centralizers		2	Standoffs		2 @ 0.75"	
			O.D.		4.5 in.	O.D.		3.375 in.	O.D.		3.375 in.	O.D		3.875 in.	
Logging Pass Data															
General			Gamma		Density			Neutron			Sonic			IAT	
			Scales		Scales			Scales			Scales			Scales	
Run	Depths		Left	Right	Left	Right	Matrix	Left	Right	Matrix	Left	Right	Matrix	Left	Right
One	TD	CSG	0	150	30	-10	2.71 g/cc	30	-10	Lime	30	-10	47.6 usec/ft	012	2000
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.															

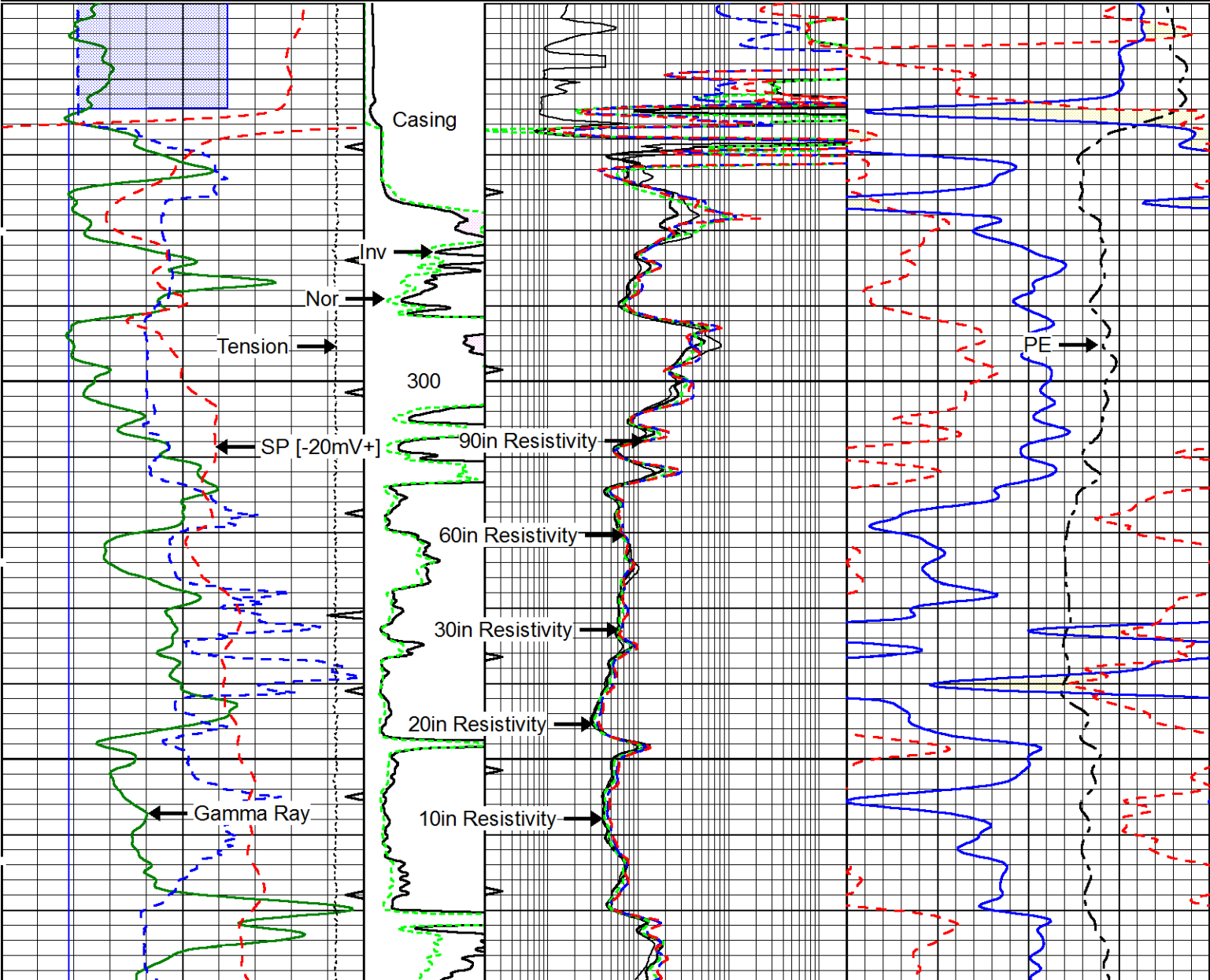
Comments
First run in hole Tools ran as per tool string diagram AHV calculated for 5.5 in production casing Chlorides Concentration = 1000 ppm LCM Reported at 2 lb/bbl

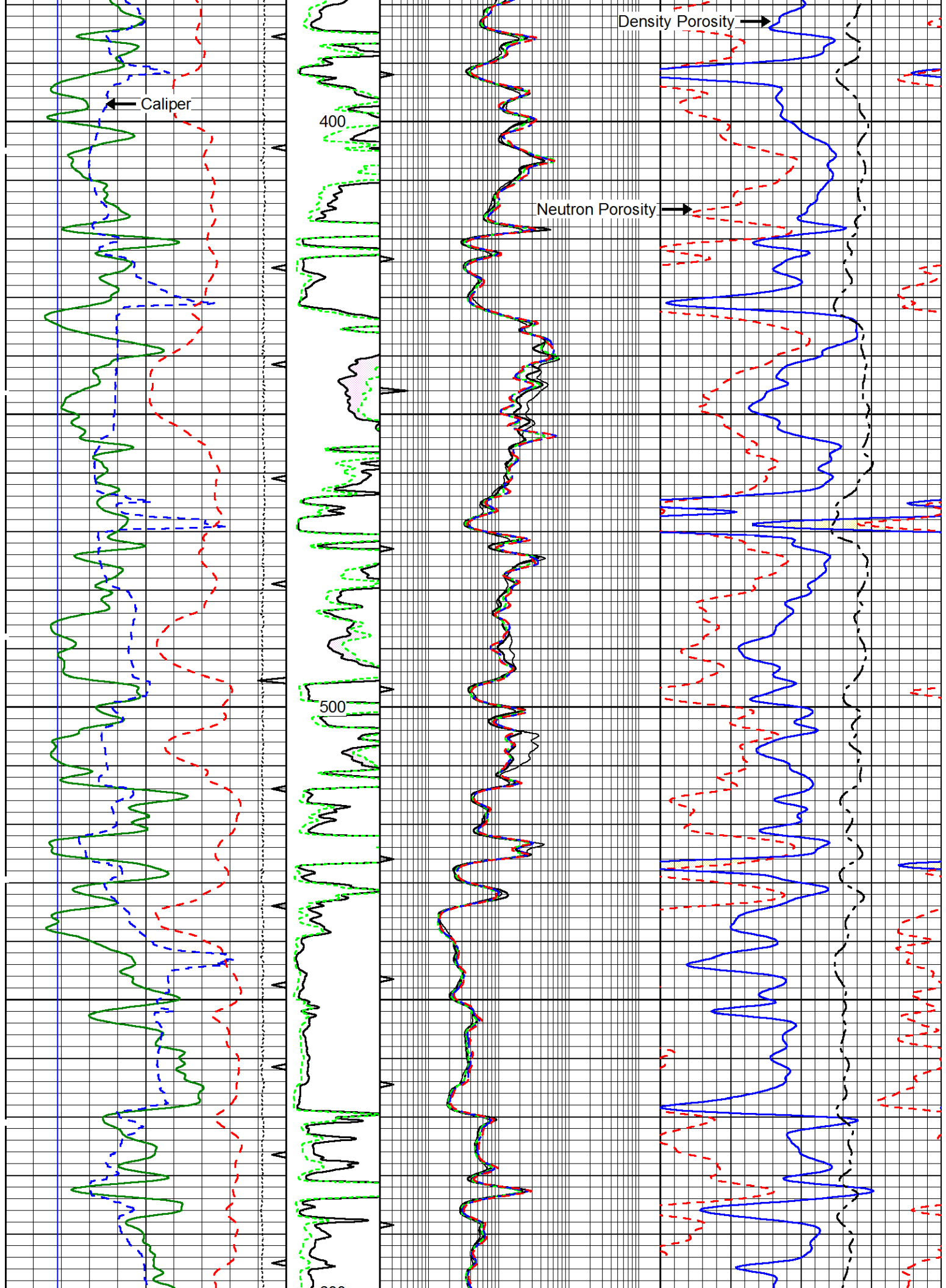
Sp spiked at 3264' on repeat due to plugging in the Sp fish

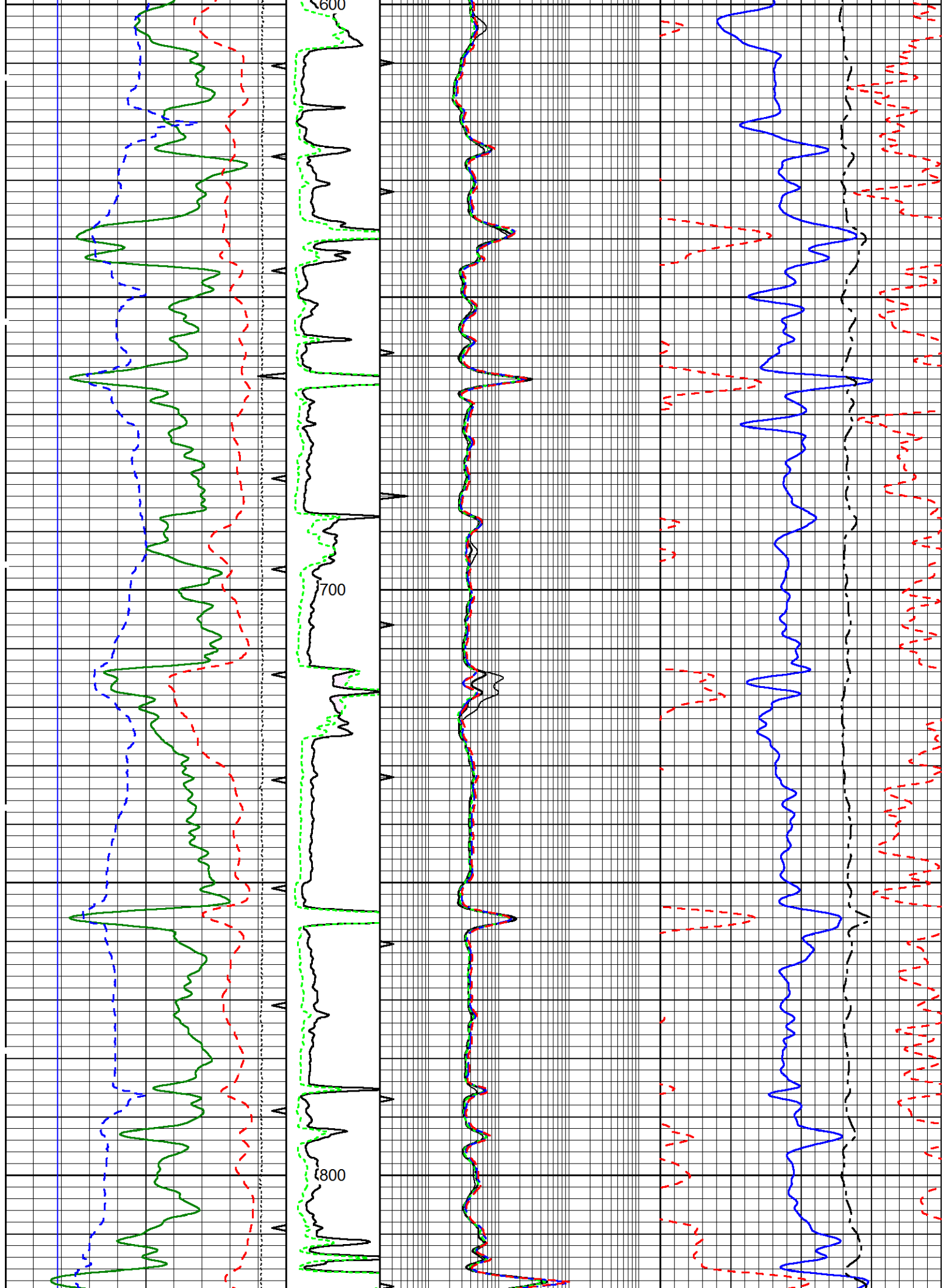
YOUR CREW TODAY: J. Brewer, D. Eastep
THANK YOU FOR CHOOSING ALLIED WIRELINE. OKLAHOMA CITY, OK. (405) 445-7135.

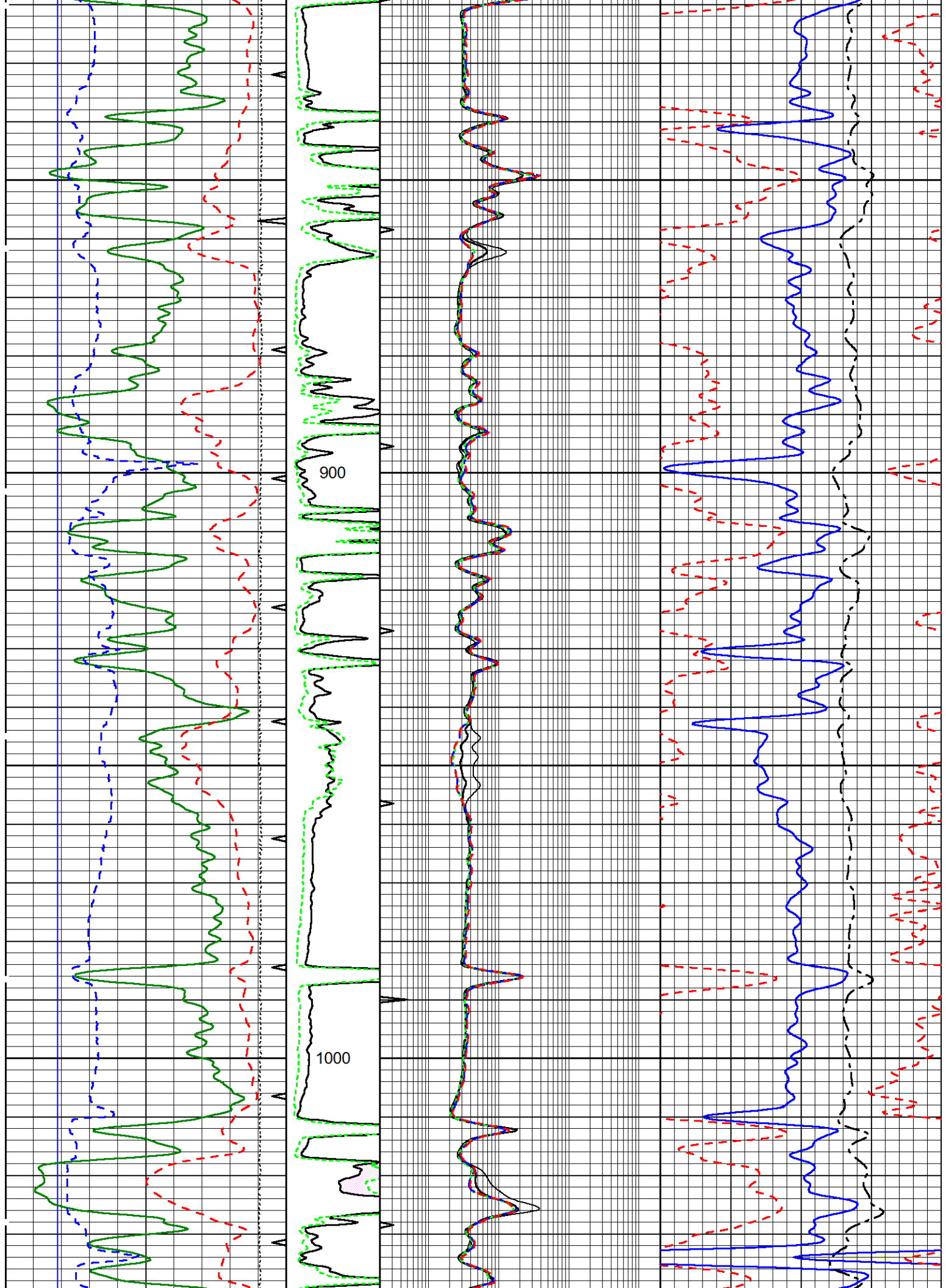
Database File:		taos_wmu_14.db	
Dataset Pathname:		mergLAS	
Presentation Format:		a3com_t	
Dataset Creation:		Thu Dec 12 12:41:09 2013	
Charted by:		Depth in Feet scaled 1:240	

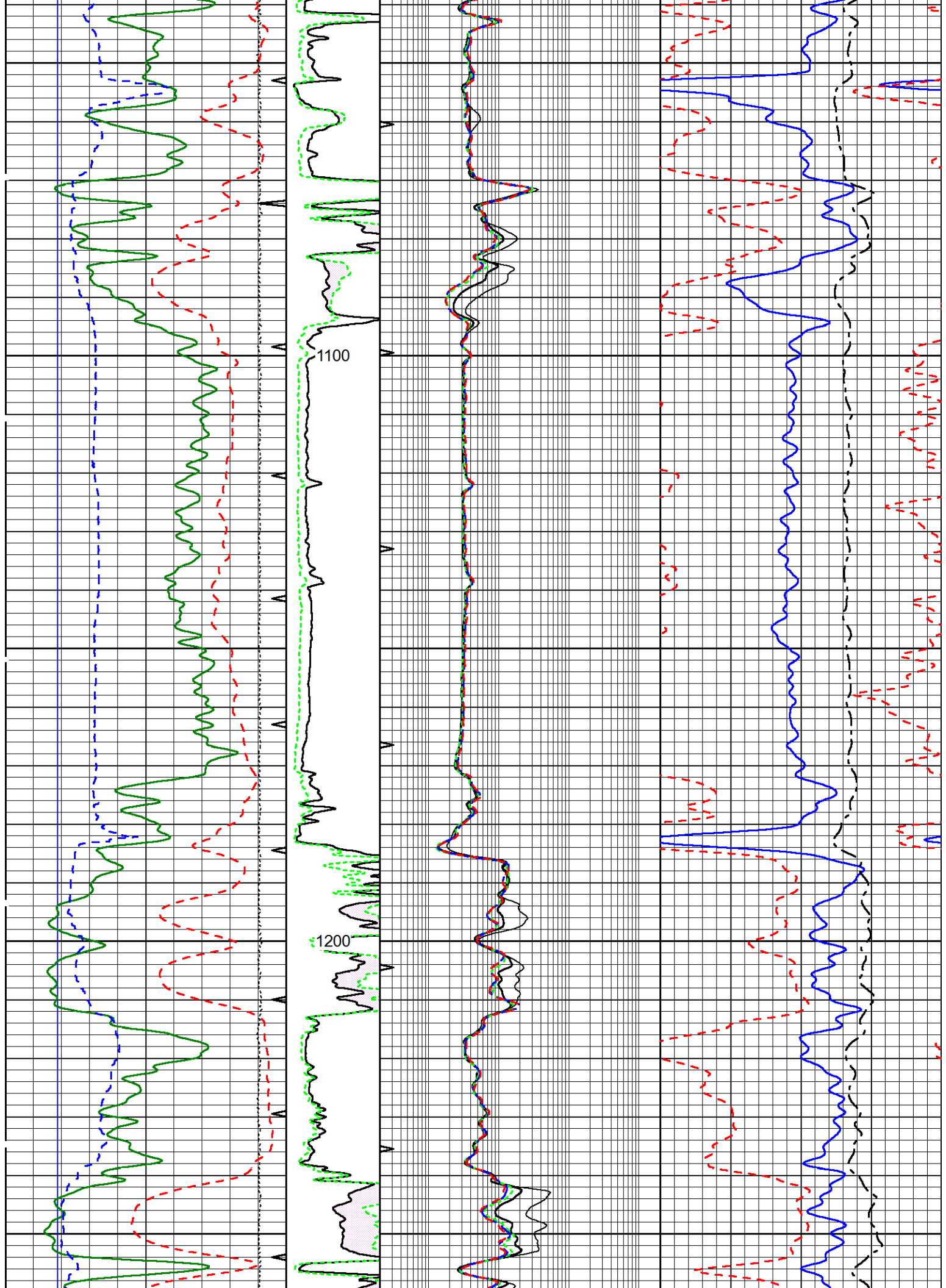
6	Bitsize (in)	16	Inv	0.2	10in Resistivity (Ohm-m)	2000	30	Neutron Porosity (pu)	-10
0	GR (GAPI)	150	(Ohm-m)	0.2	20in Resistivity (Ohm-m)	2000	30	Density Porosity (pu)	-10
6	Caliper (in)	16	0	20	0.2	30in Resistivity (Ohm-m)	2000		0
	SP [-20mV+]		Nor	0.2	60in Resistivity (Ohm-m)	2000		PE	10
	Tension		(Ohm-m)	0.2	90in Resistivity (Ohm-m)	2000			
	10000 (lb)	0	0	20					

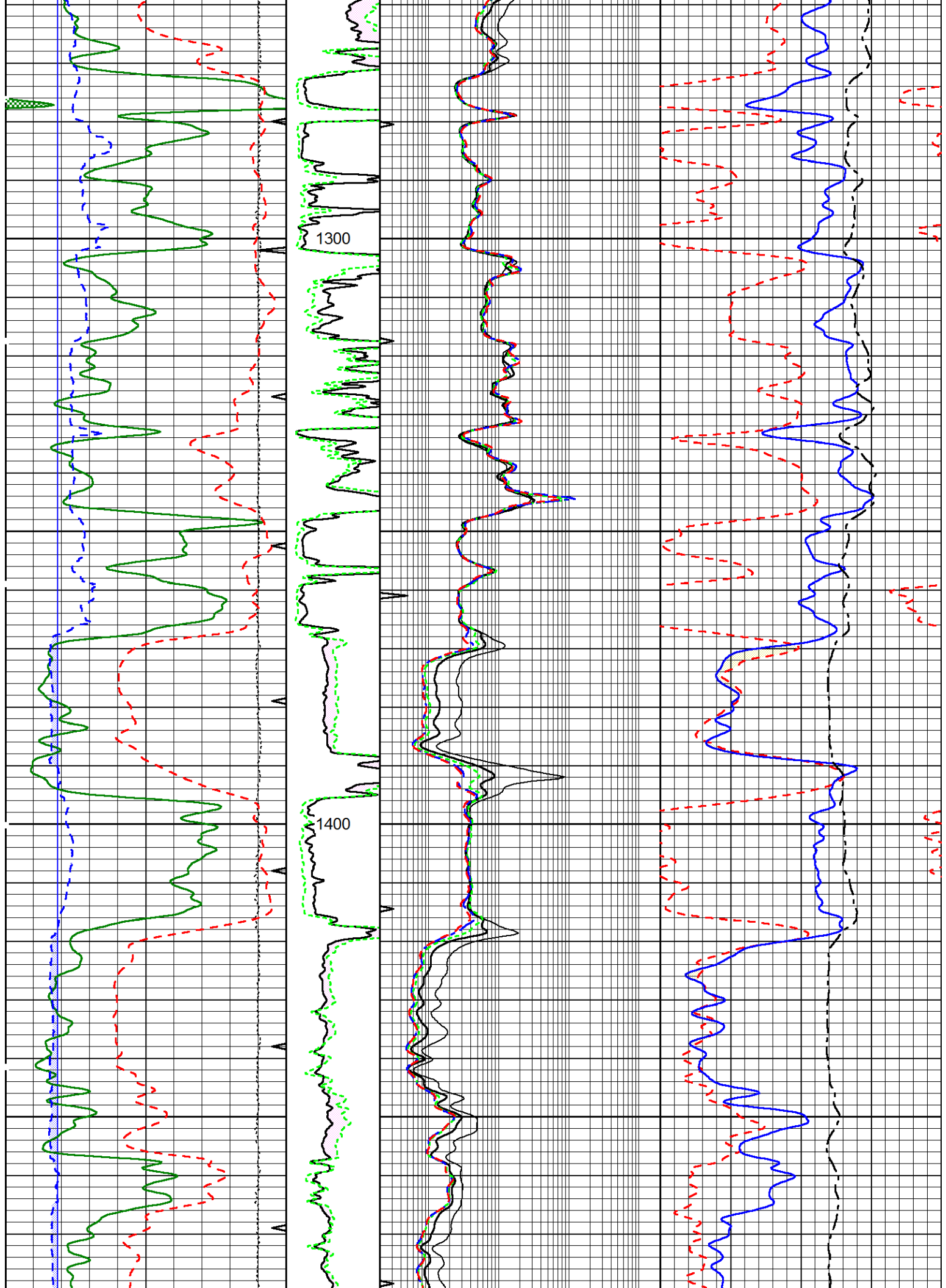


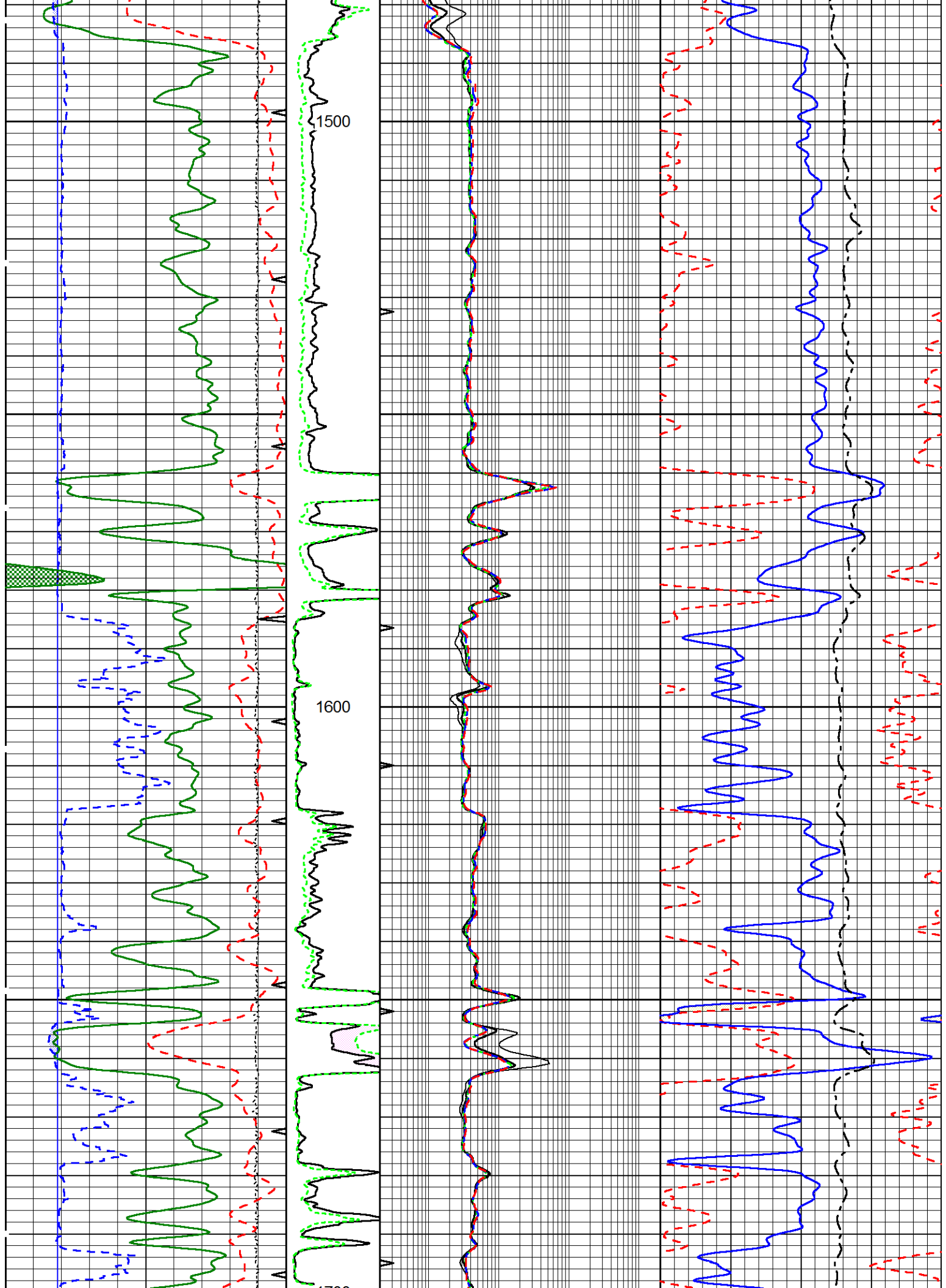


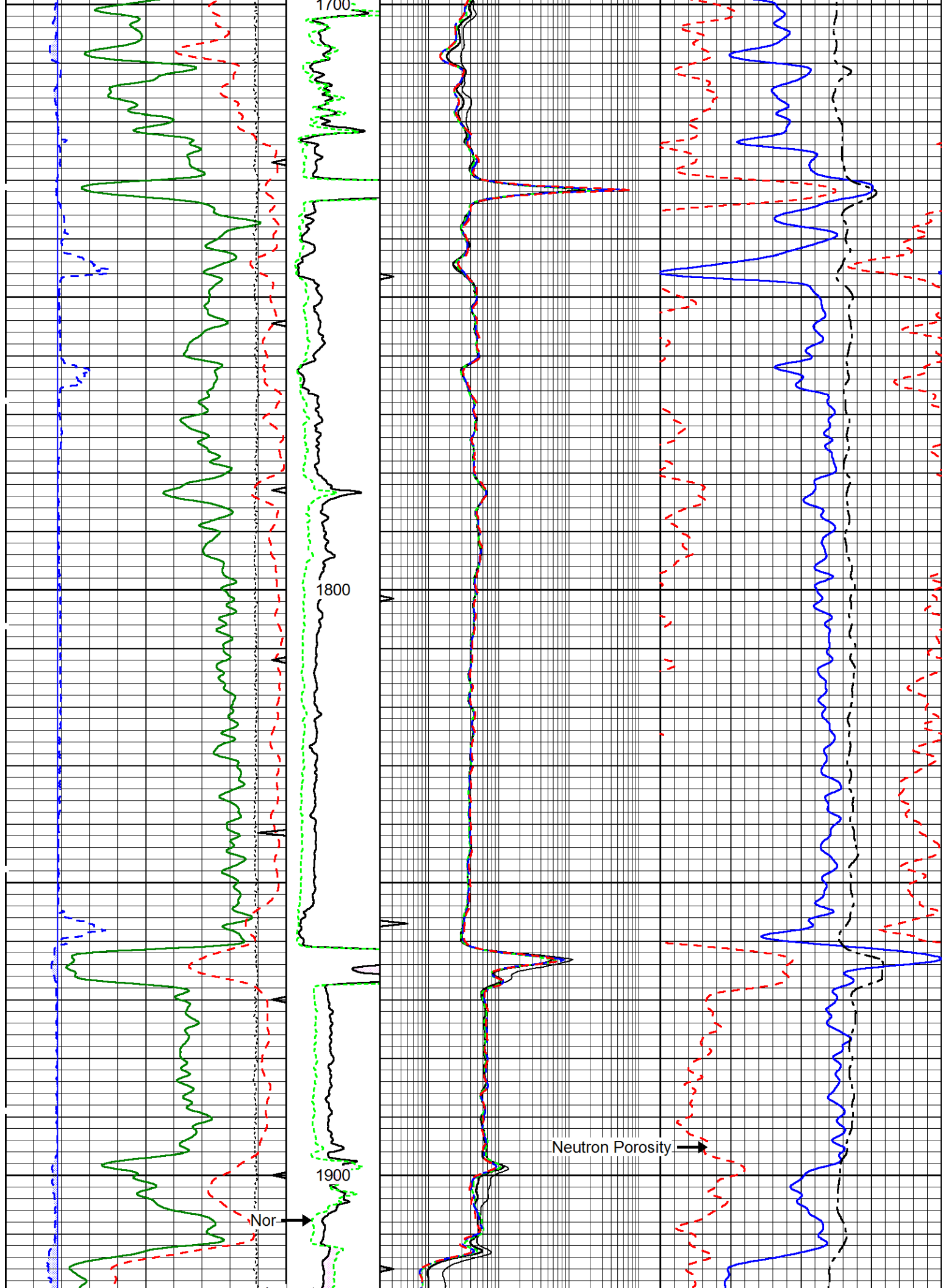


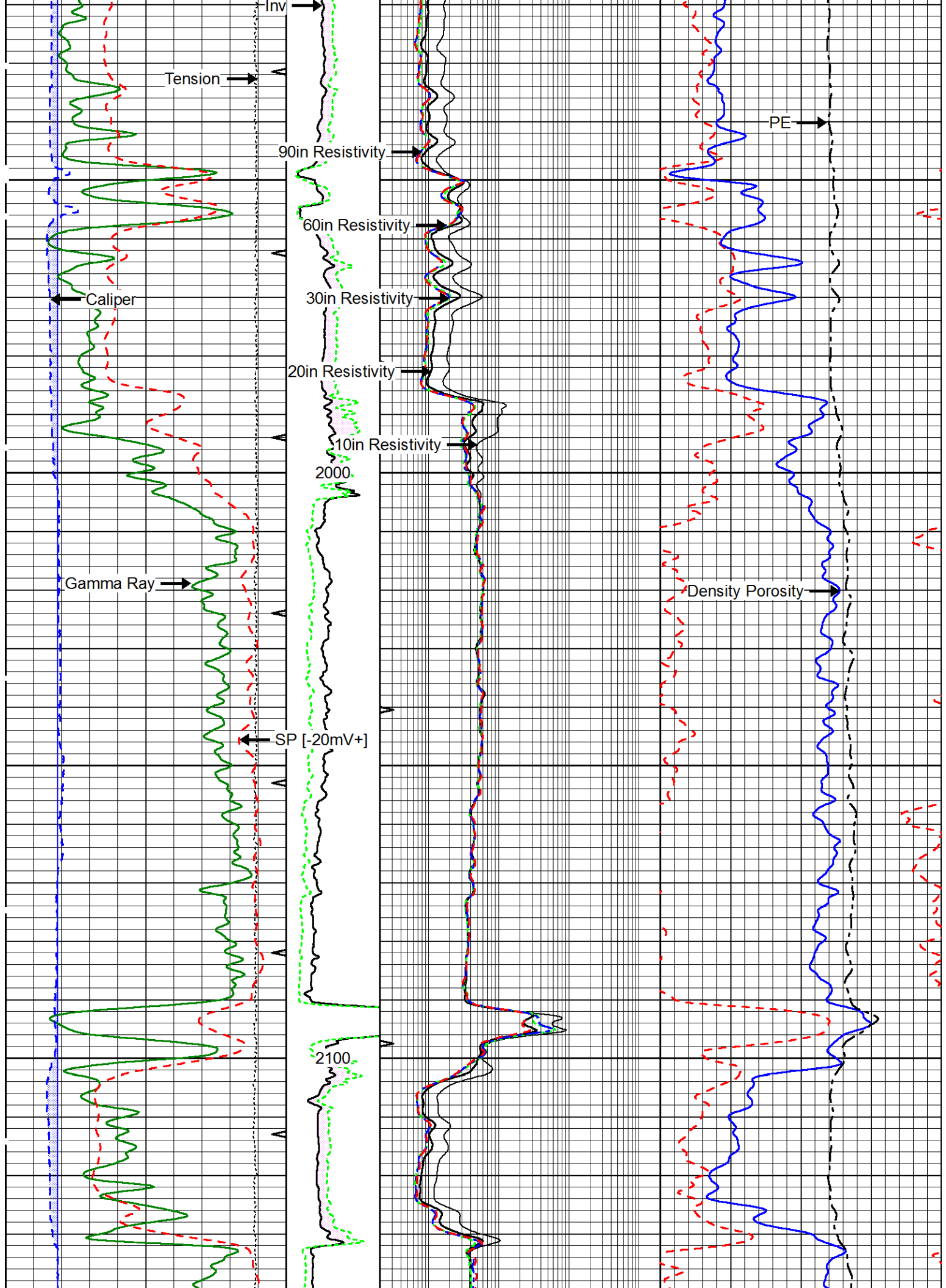


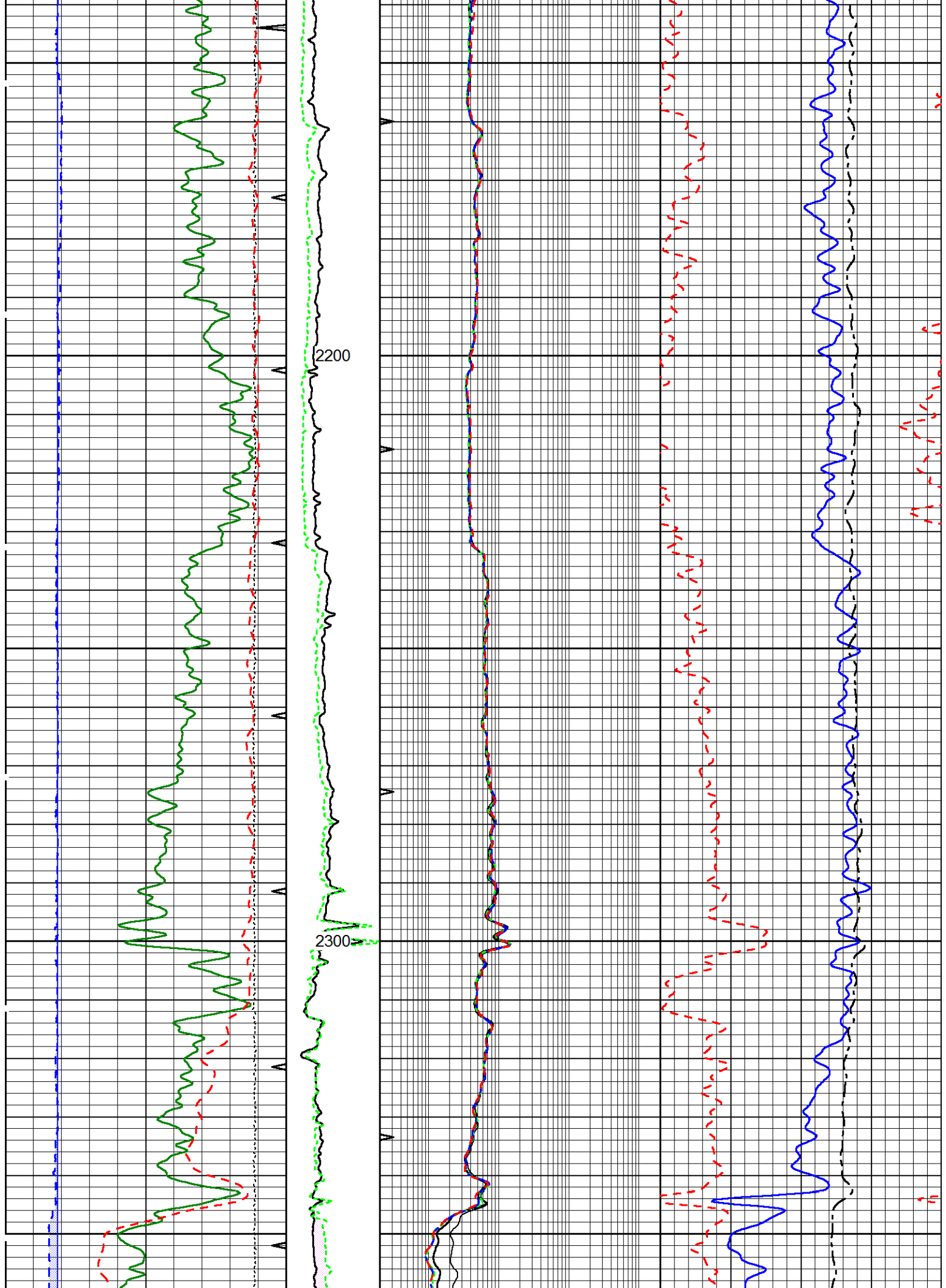


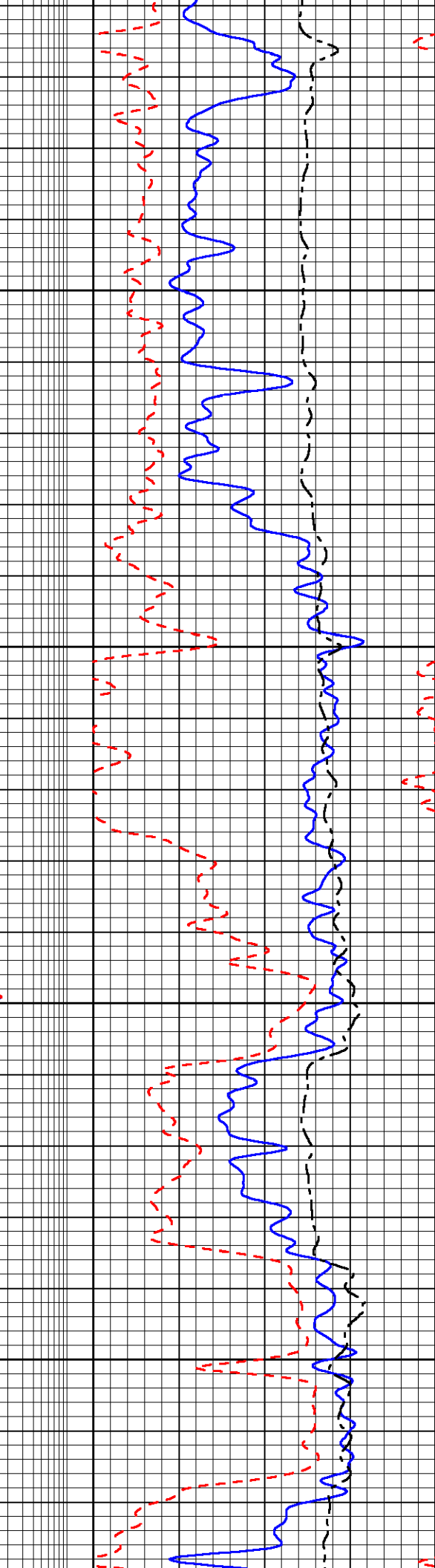
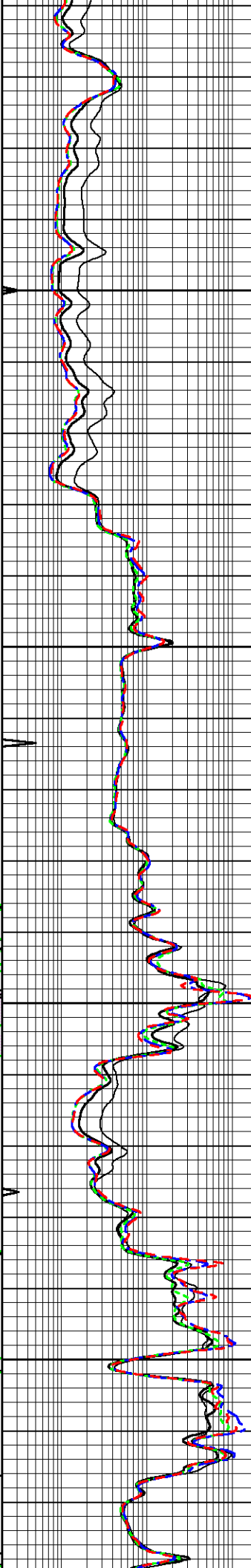
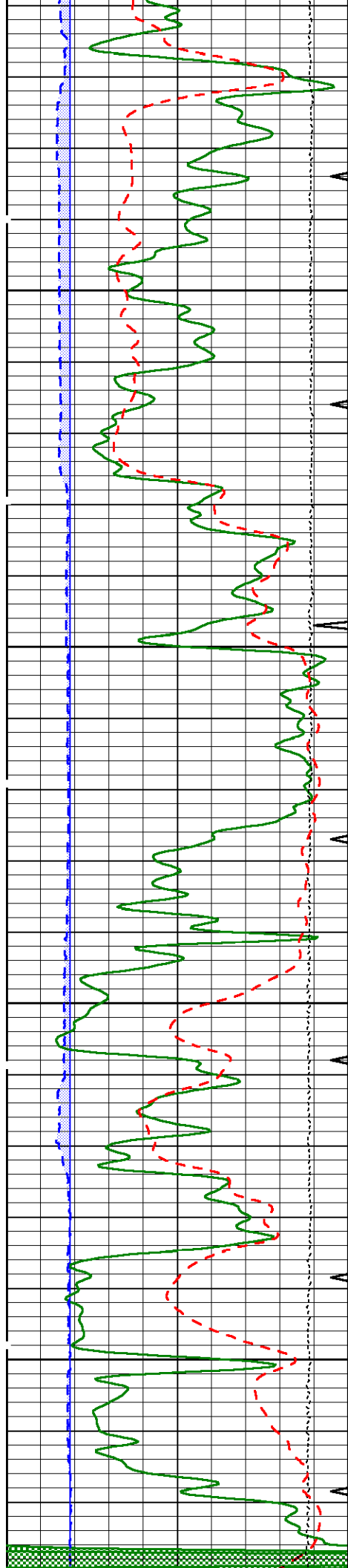


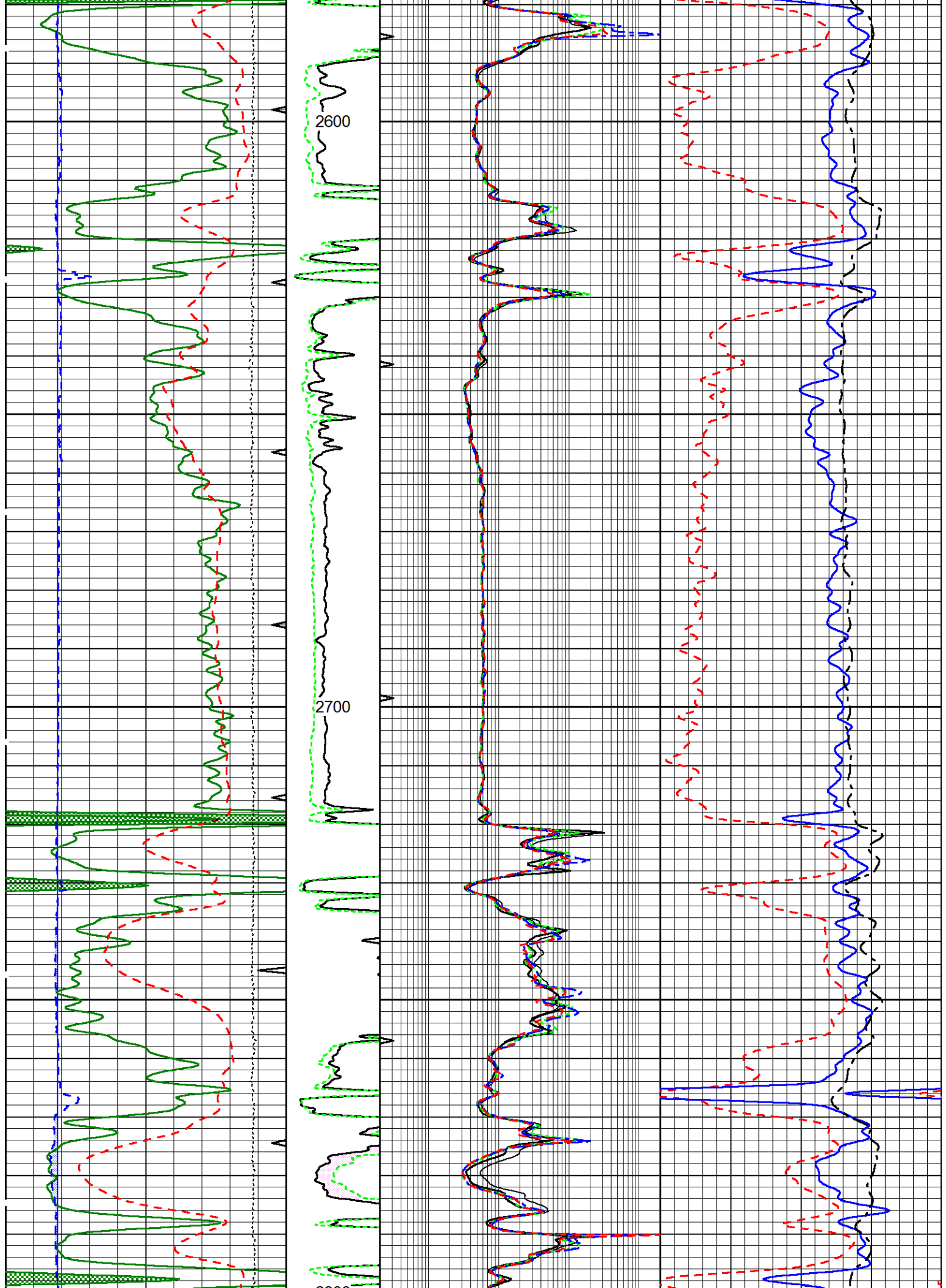


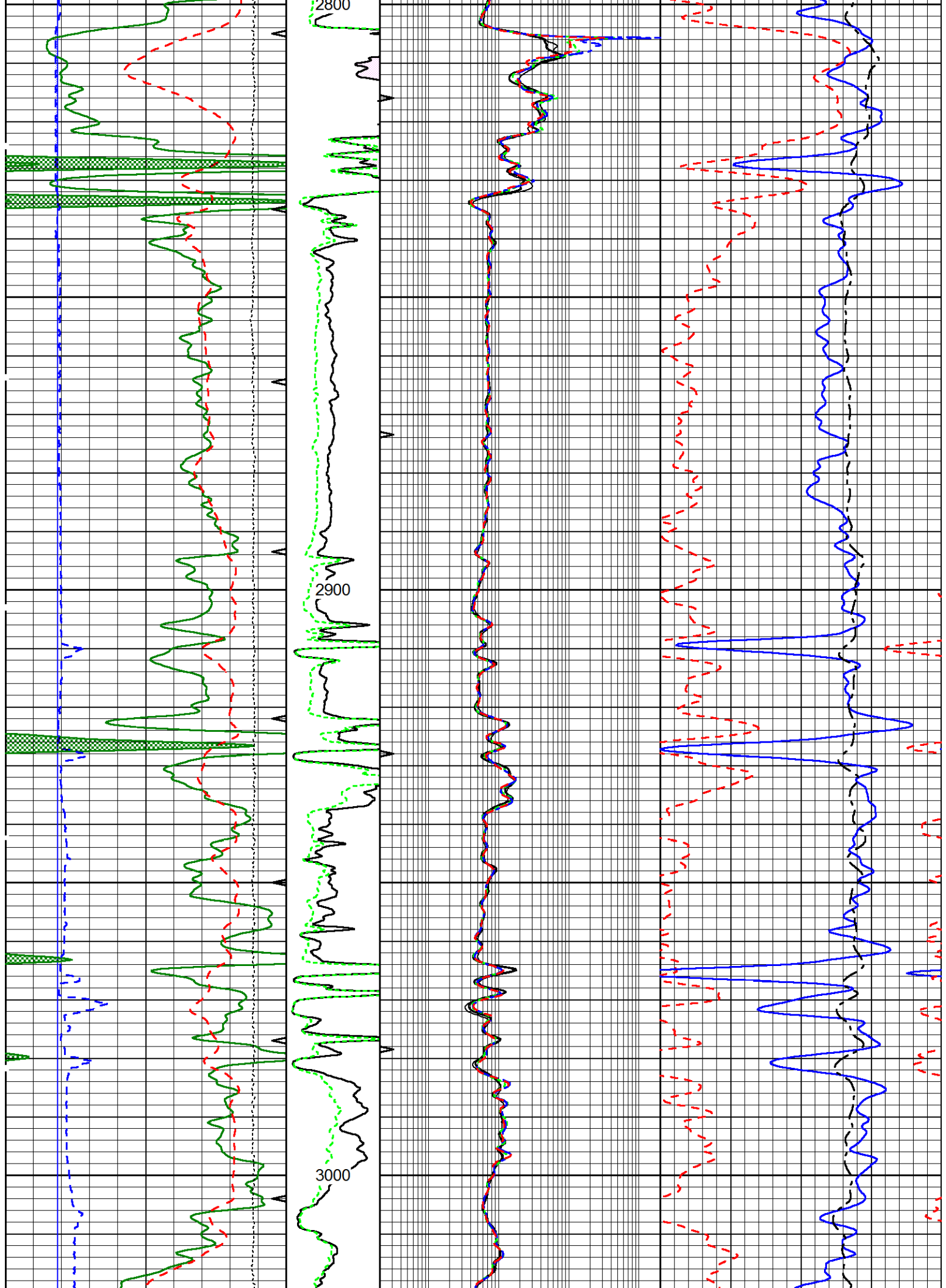


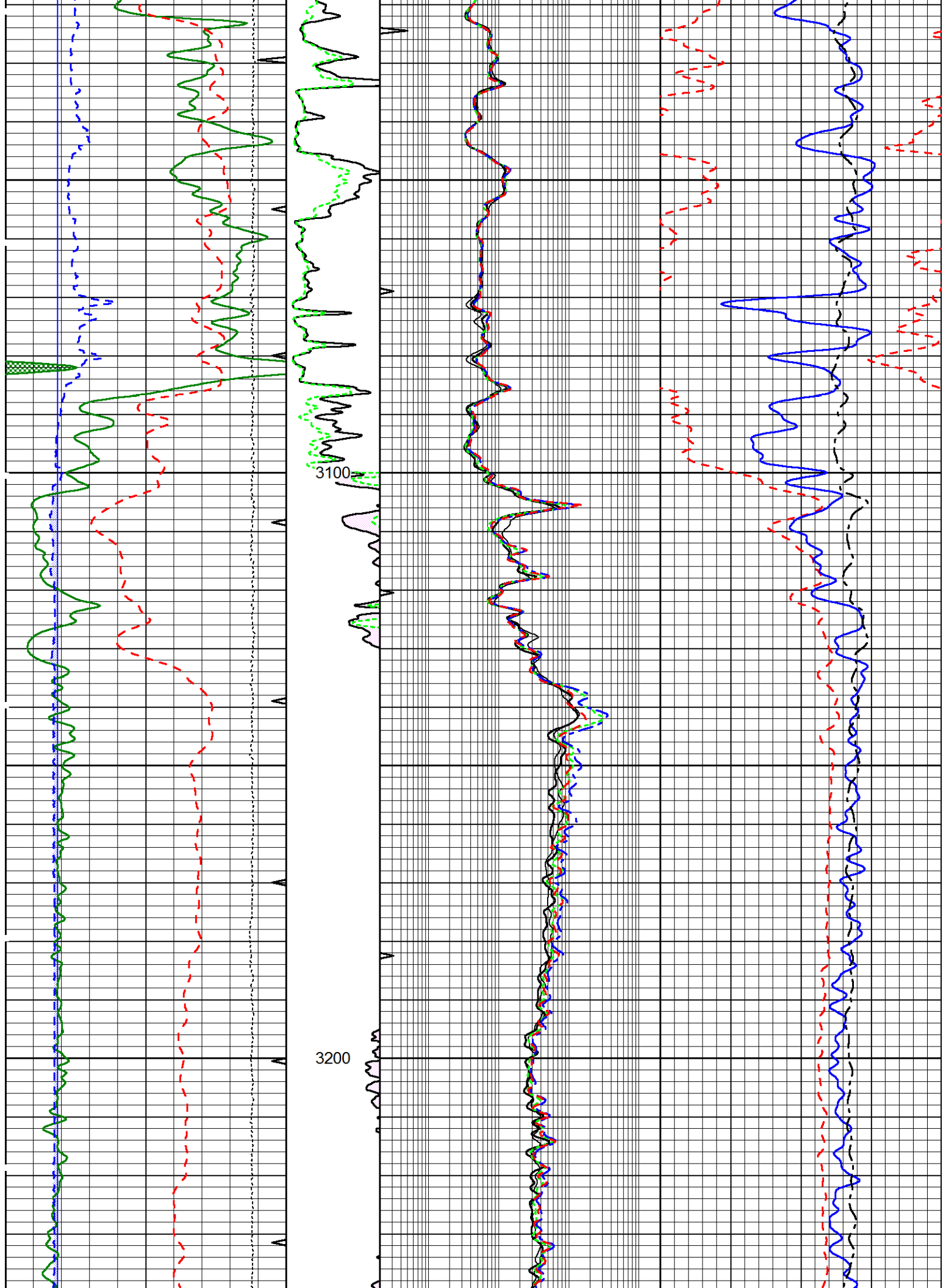


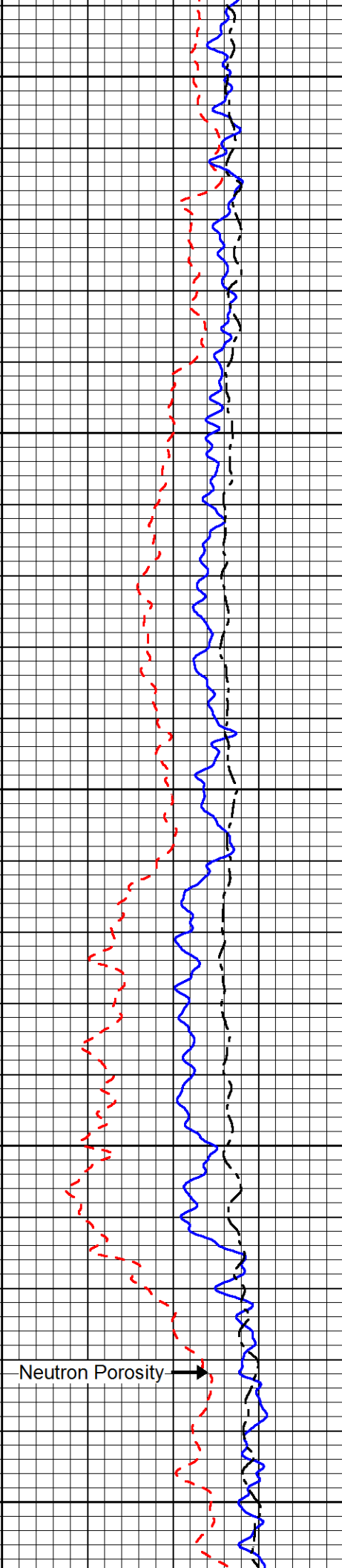
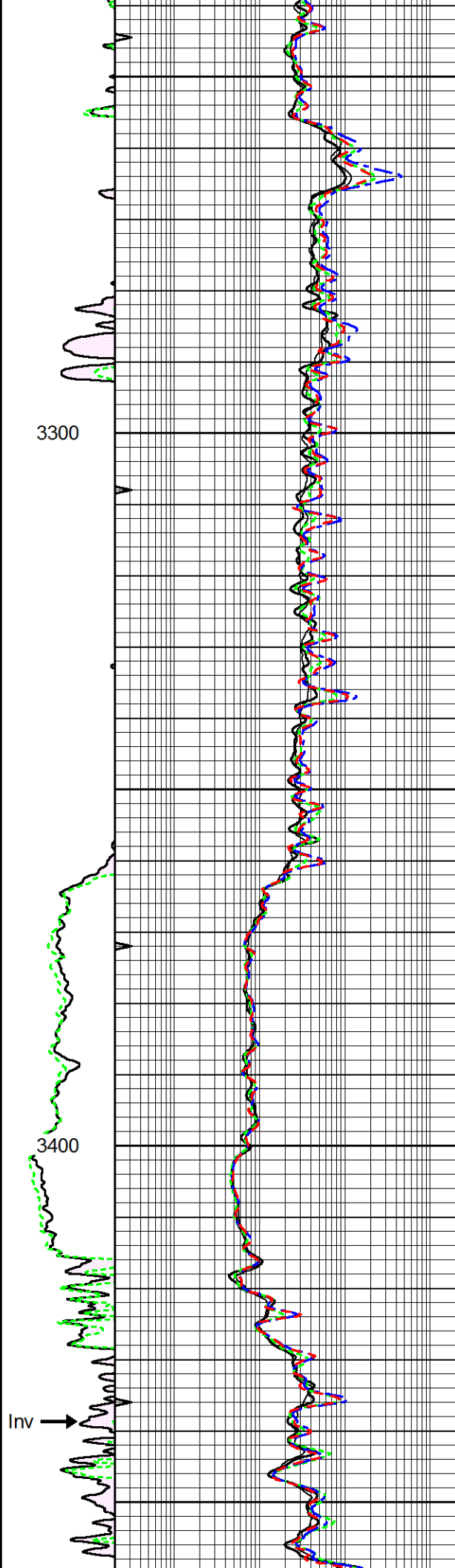
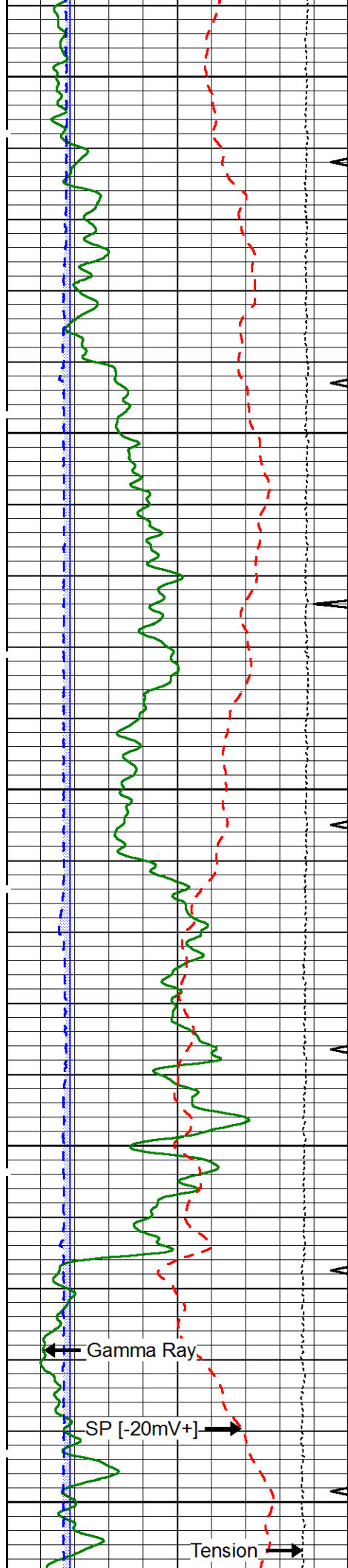


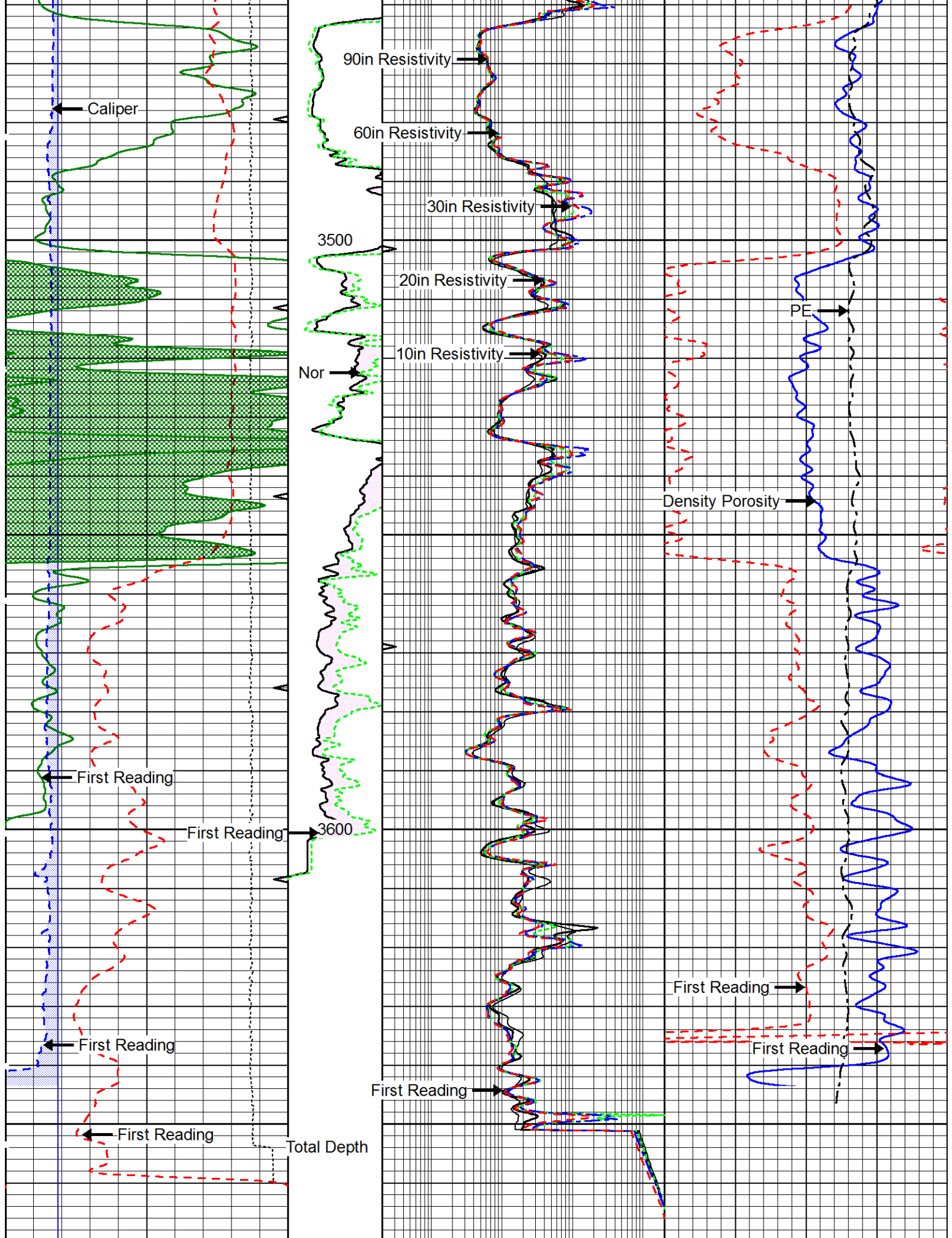












6	Bitsize (in)	16	Inv	0.2	10in Resistivity (Ohm-m)	2000	30	Neutron Porosity (pu)	-10
0	GR (GAPI)	150	(Ohm-m)	0.2	20in Resistivity (Ohm-m)	2000	30	Density Porosity (pu)	-10

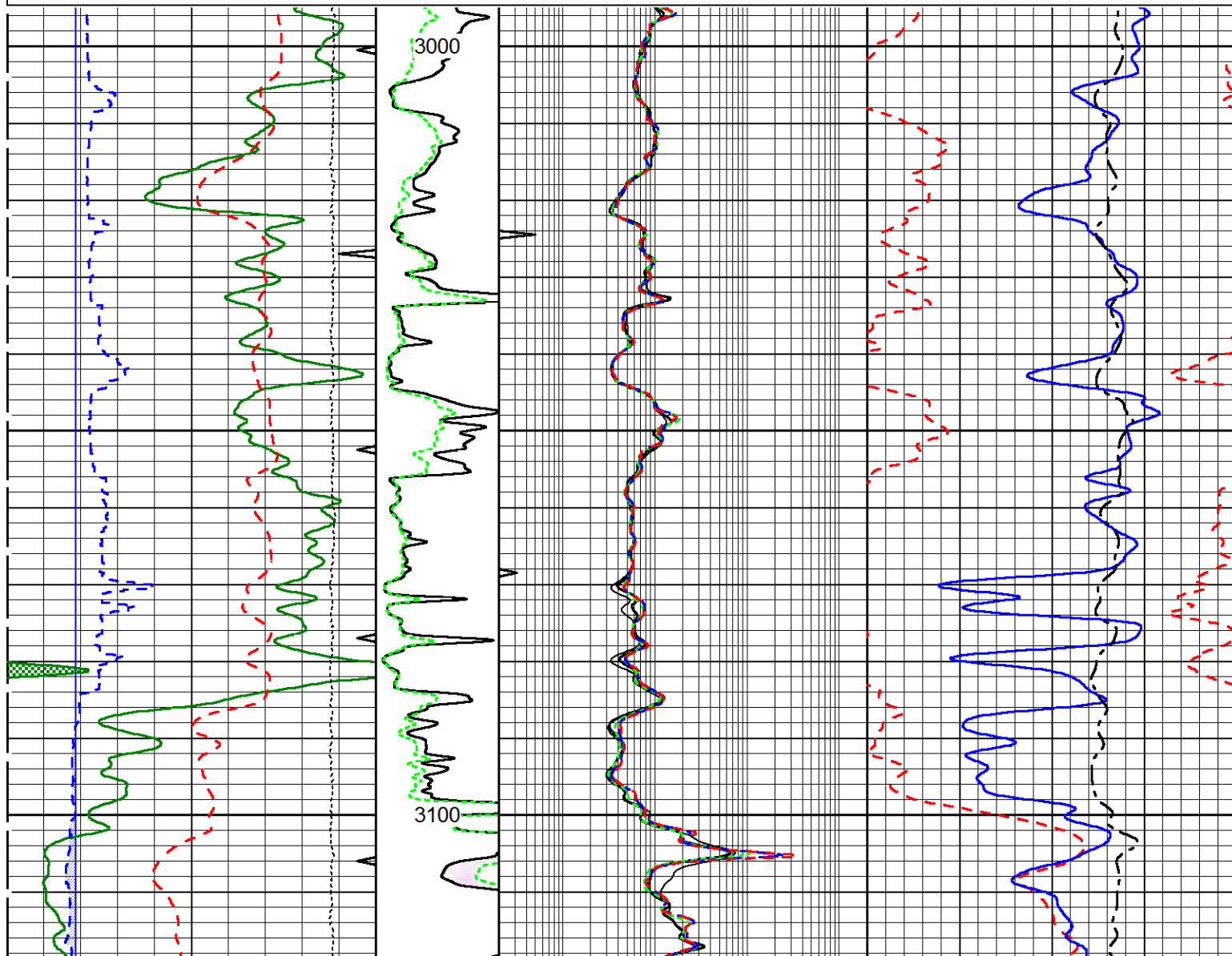
6	Caliper (in)	16	0	20	0.2	30in Resistivity (Ohm-m)	2000	0	PE	10
	SP [-20mV+]				0.2	60in Resistivity (Ohm-m)	2000			
	Tension				0.2	90in Resistivity (Ohm-m)	2000			
	10000 (lb)	0	0	20						

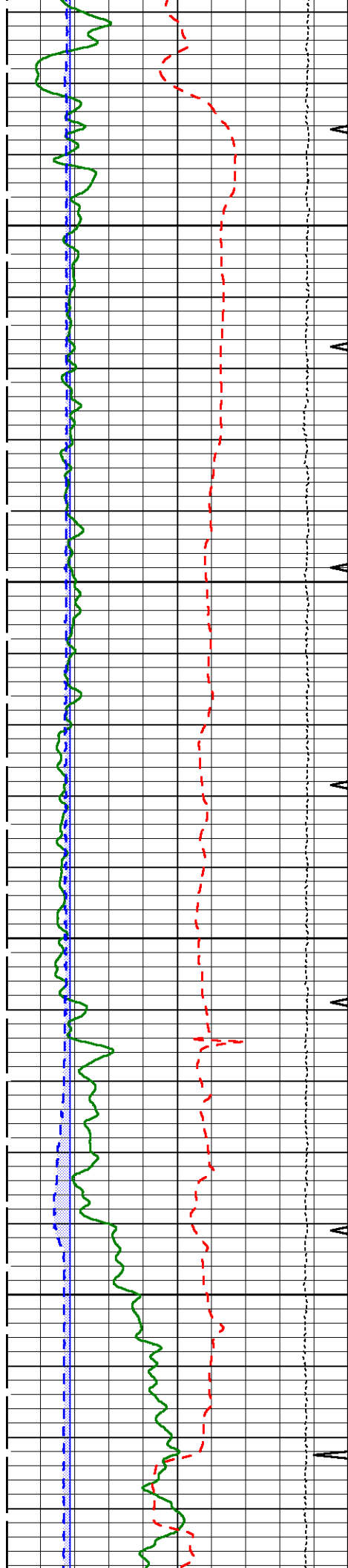


Repeat Pass

Database File:	taos_wmu_14.db
Dataset Pathname:	Pass2.6
Presentation Format:	a3ctrep
Dataset Creation:	Thu Dec 12 11:31:32 2013 by Calc Sondex V7.05
Charted by:	Depth in Feet scaled 1:240

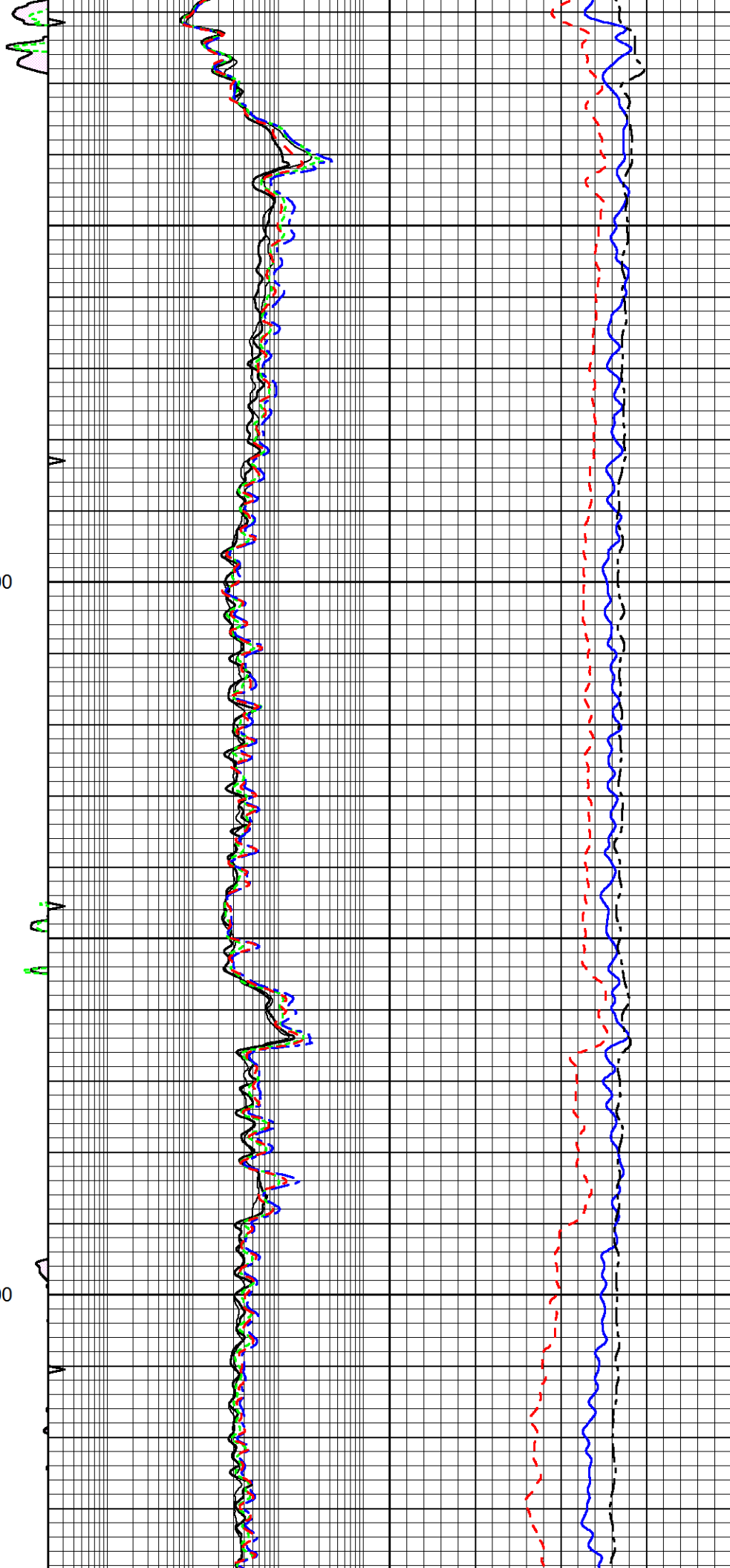
6	Bitsize (in)		16	Inv	0.2	10in Resistivity (Ohm-m)	2000	30	Neutron Porosity (pu)		-10		
0	GR (GAPI)		150		(Ohm-m)	0.2	20in Resistivity (Ohm-m)	2000	30	Density Porosity (pu)		-10	
6	Caliper (in)		16	0	20	0.2	30in Resistivity (Ohm-m)	2000	0			PE	10
SP [-20mV+]			Nor		0.2	60in Resistivity (Ohm-m)	2000						
Tension		(Ohm-m)			0.2	90in Resistivity (Ohm-m)	2000						
			10000 (lb)		0	0	20						

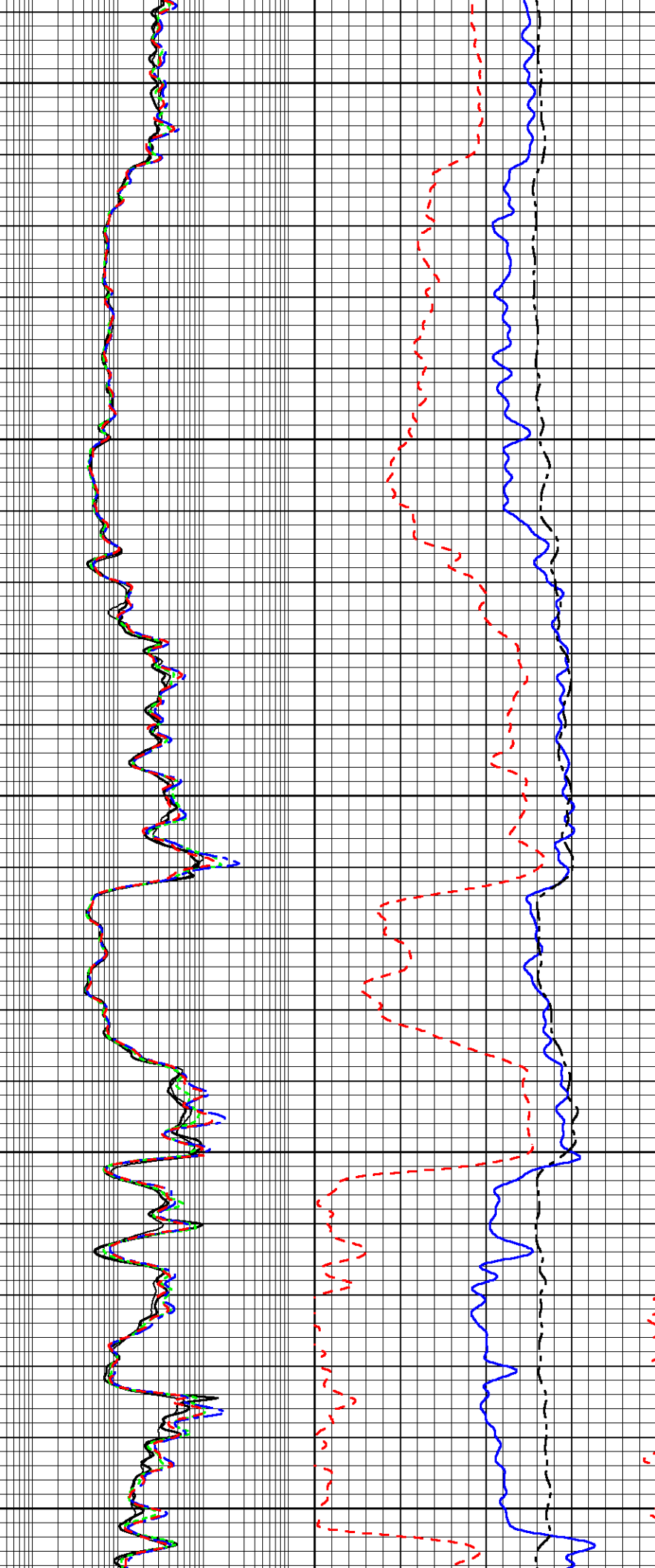
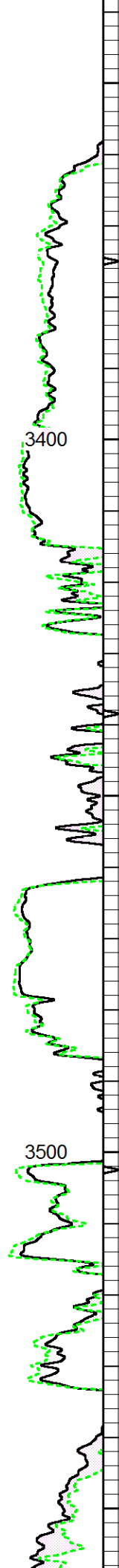
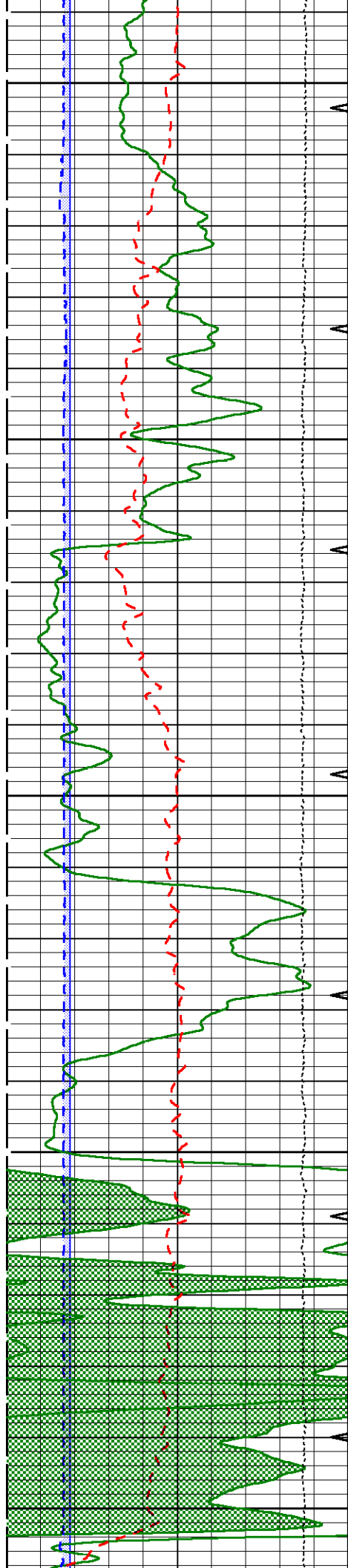


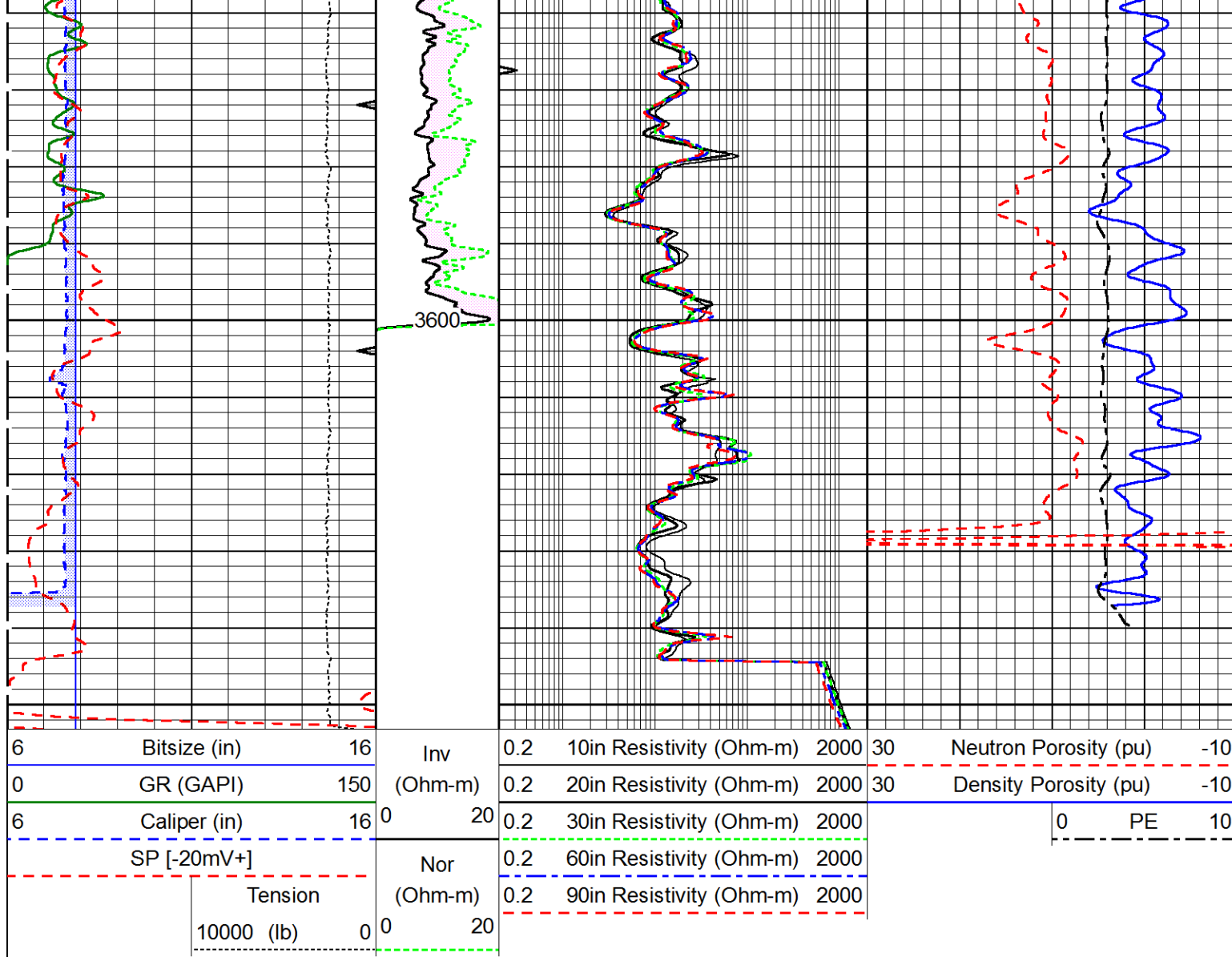


3200

3300



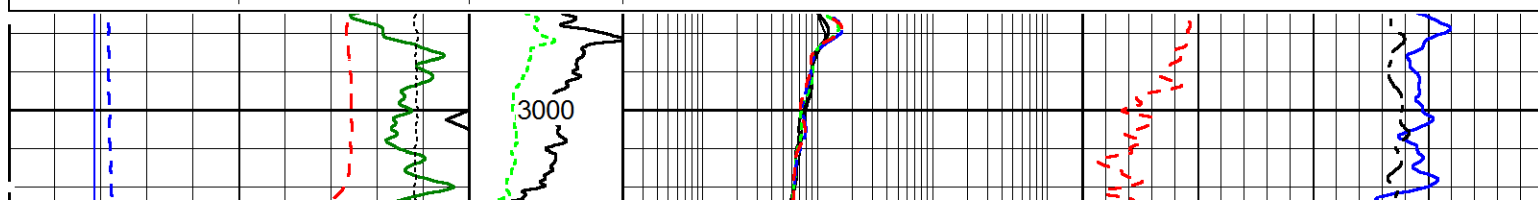


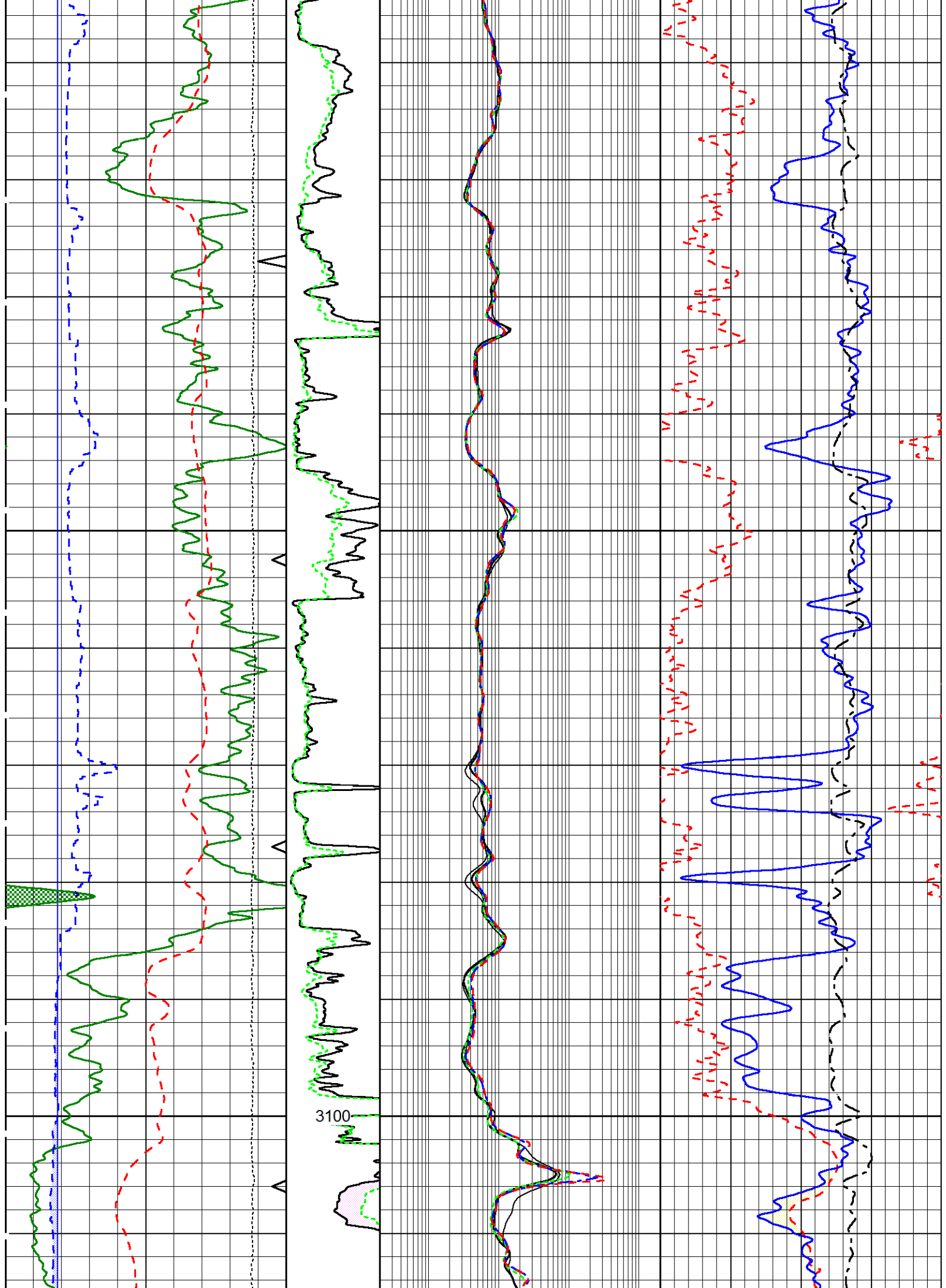


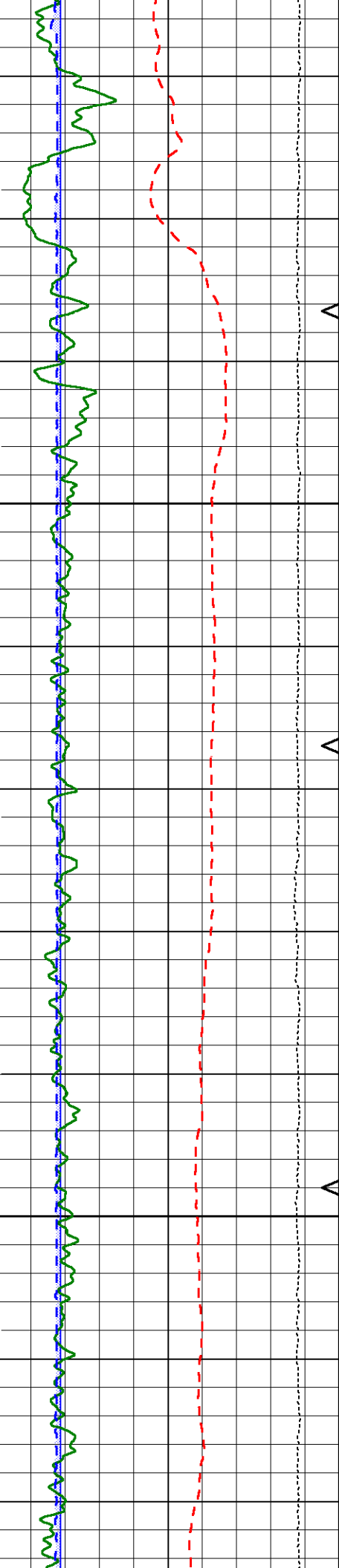
Hi Res Pass

Database File: taos_wmu_14.db
 Dataset Pathname: pass2.3
 Presentation Format: a3ctrep
 Dataset Creation: Thu Dec 12 09:30:28 2013 by Calc Sondex V7.05
 Charted by: Depth in Feet scaled 1:120

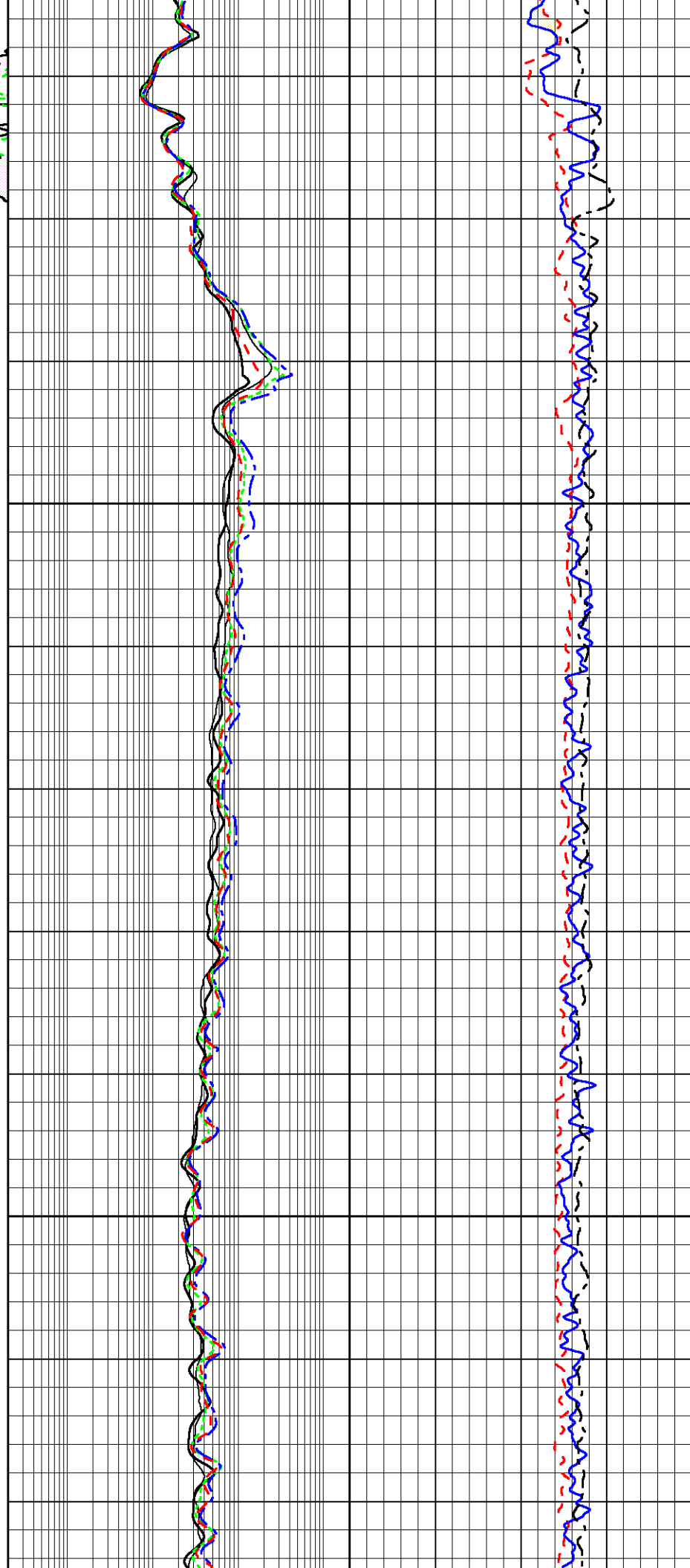
6	Bitsize (in)	16	Inv	0.2	10in Resistivity (Ohm-m)	2000	30	Neutron Porosity (pu)	-10
0	GR (GAPI)	150	(Ohm-m)	0.2	20in Resistivity (Ohm-m)	2000	30	Density Porosity (pu)	-10
6	Caliper (in)	16	0	20	0.2	30in Resistivity (Ohm-m)	2000	0	PE
	SP [-20mV+]		Nor	0.2	60in Resistivity (Ohm-m)	2000			
	Tension		(Ohm-m)	0.2	90in Resistivity (Ohm-m)	2000			
	10000 (lb)	0	0	20					



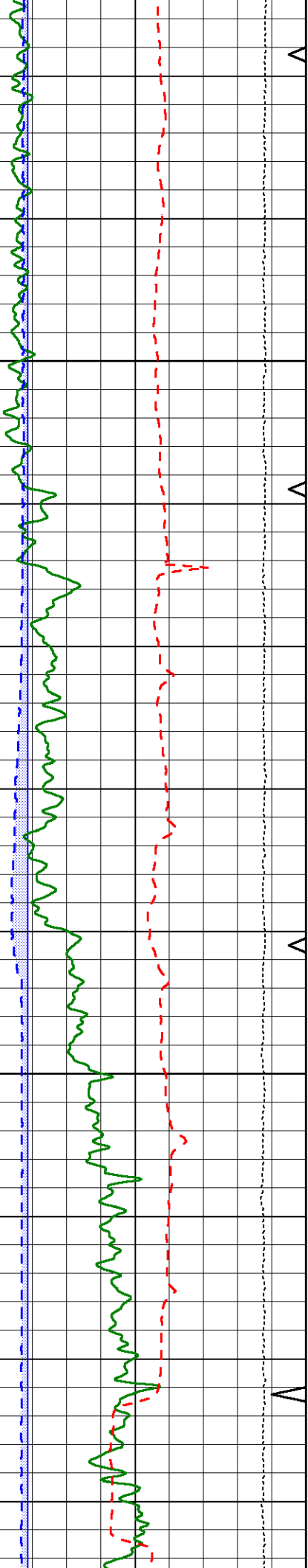
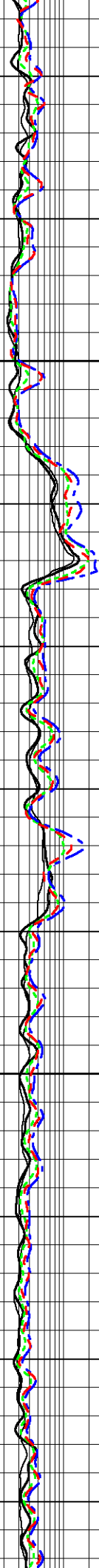
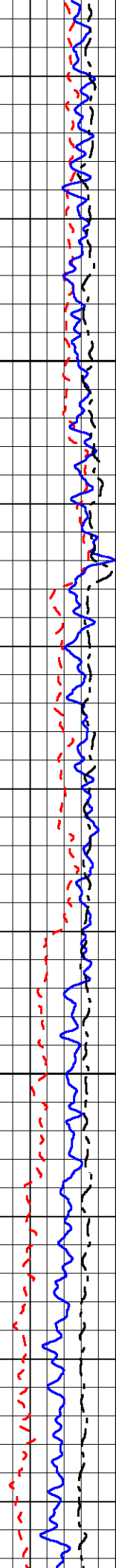


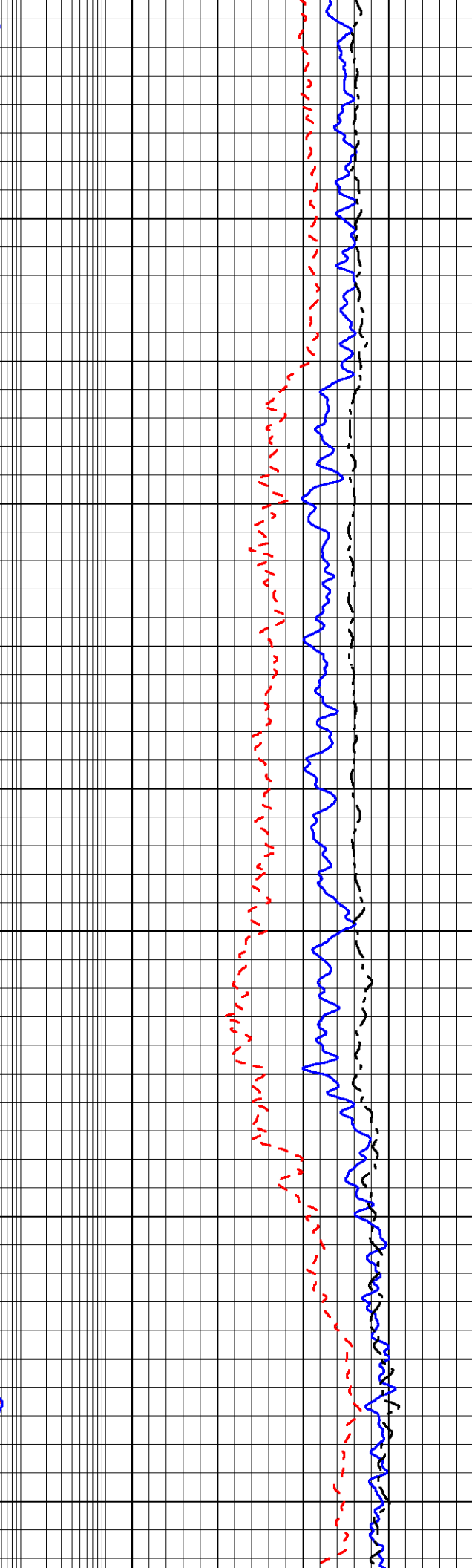
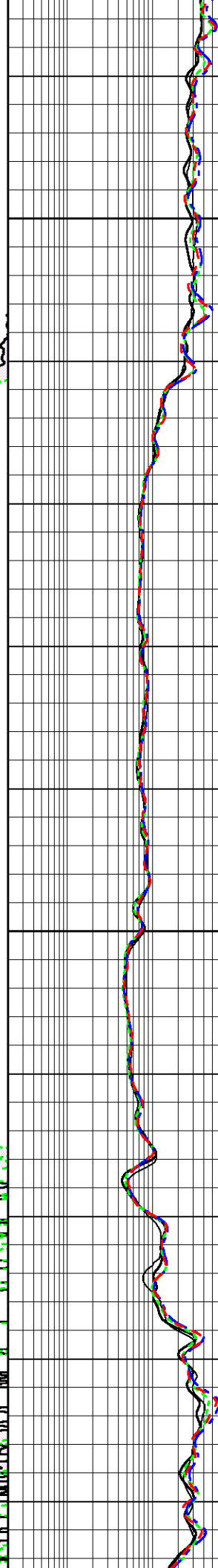
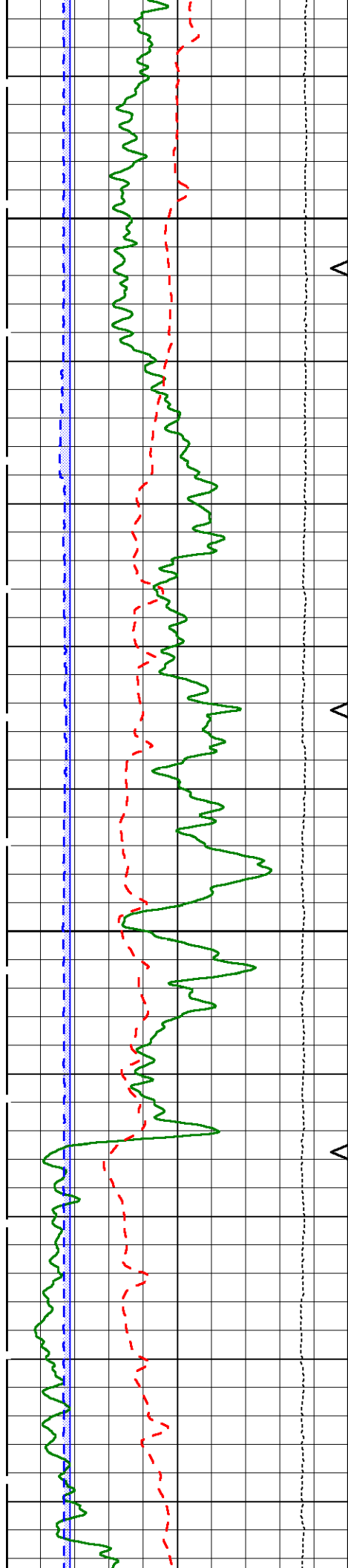


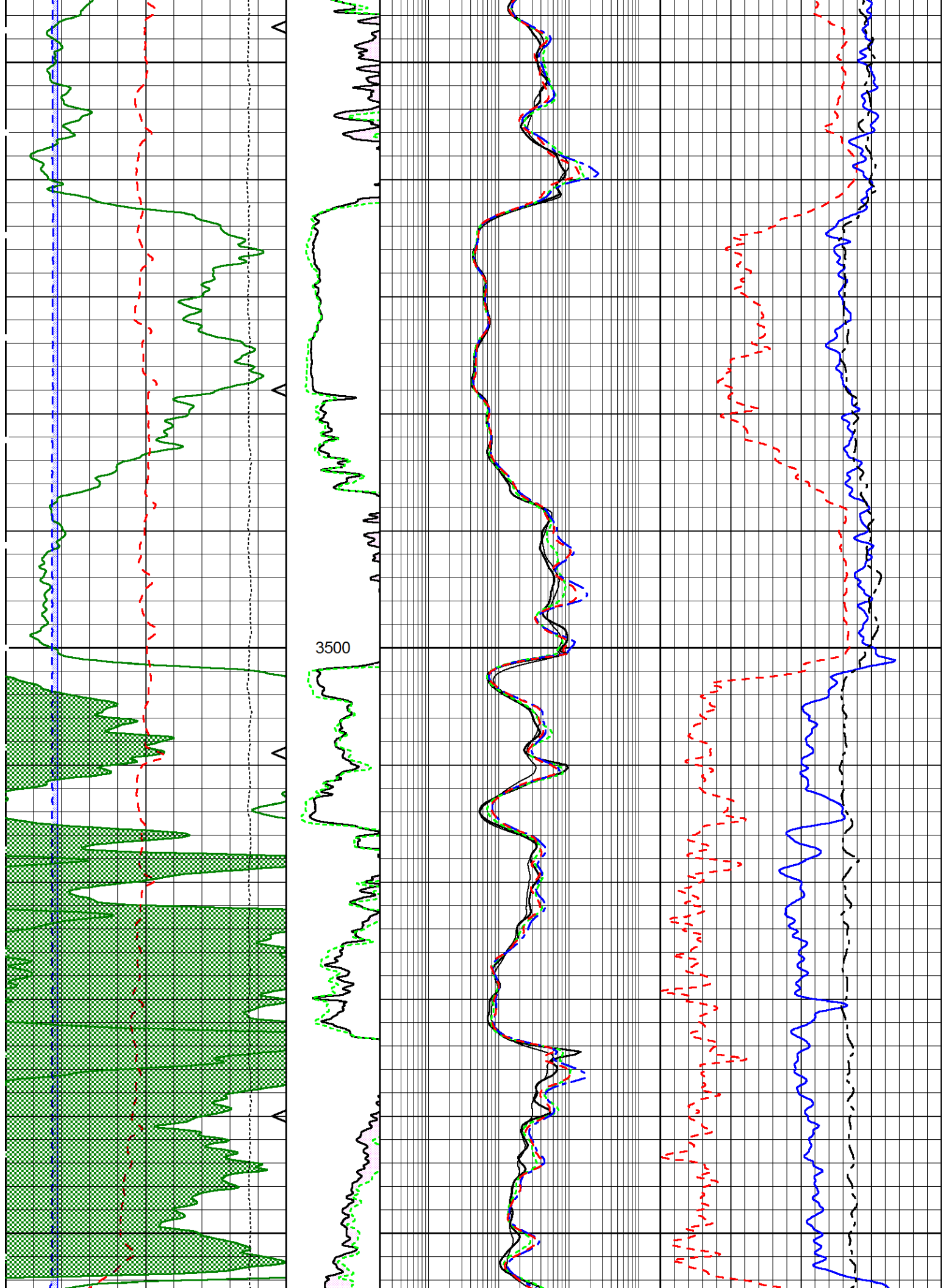
3200

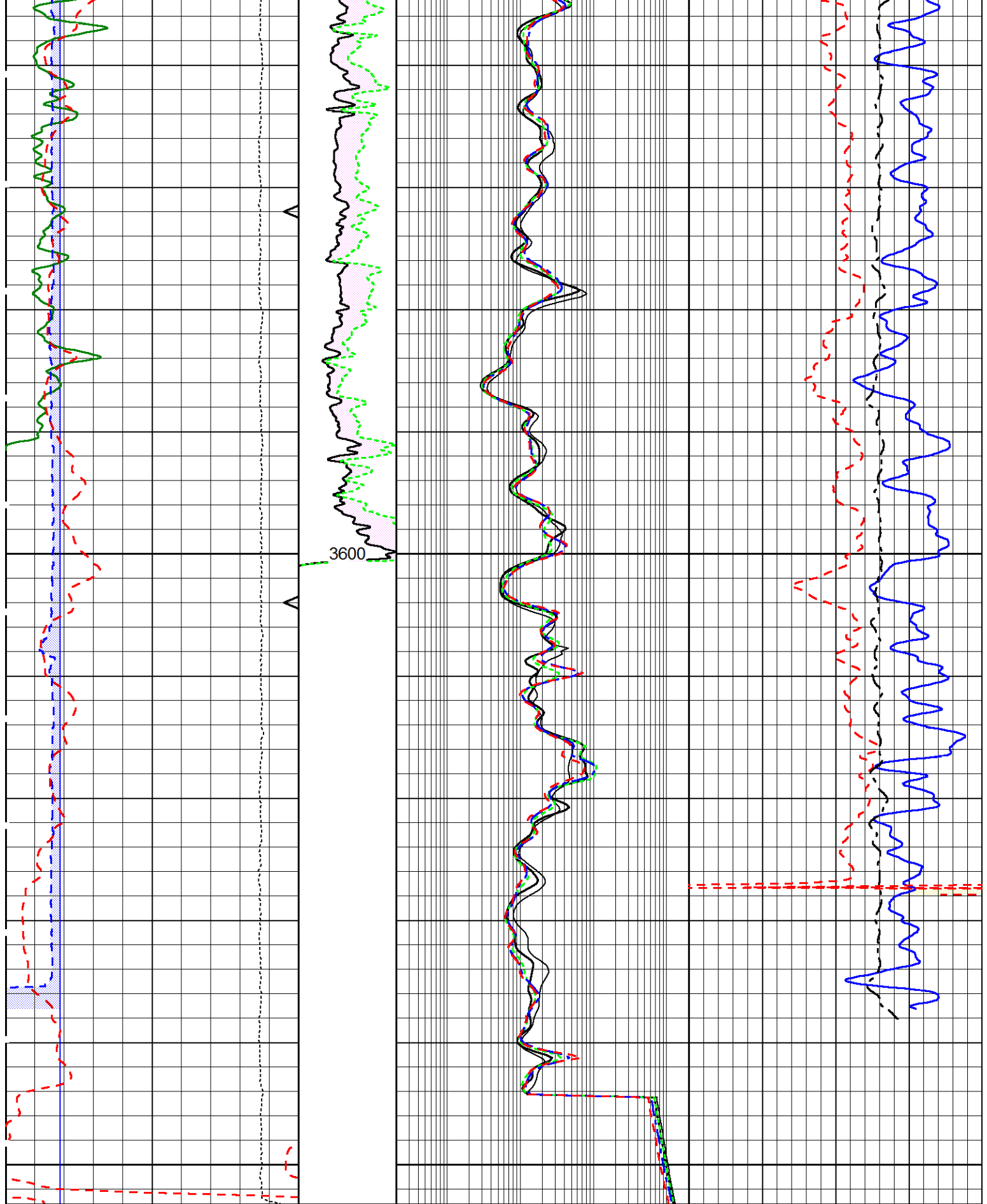


3300









6	Bitsize (in)	16	Inv	0.2	10in Resistivity (Ohm-m)	2000	30	Neutron Porosity (pu)	-10
0	GR (GAPI)	150	(Ohm-m)	0.2	20in Resistivity (Ohm-m)	2000	30	Density Porosity (pu)	-10
6	Caliper (in)	16	0	20	0.2	30in Resistivity (Ohm-m)	2000		0
	SP [-20mV+]		Nor	0.2	60in Resistivity (Ohm-m)	2000		PE	10
	Tension		(Ohm-m)	0.2	90in Resistivity (Ohm-m)	2000			

10000 (lb)	0	0	20
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Log Variables

Database: C:\Warrior\Data\taos_wmu_14.db
Dataset: field/well/run1/pass2.1

Top - 264.00 ft

MAXAMPL mV 0	MINAMPL mV 1	MINATTN db/ft 0.8	COMPACT 1	SVFLUID usec/ft 189	SVMATRIX usec/ft 47.6	FRMSALIN kppm 0	MUDSALIN kppm 0
DEVI ° 0	SRFTEMP degF 68	SO in 0.25	DE-CENT Yes	CASED? Yes	CASEWGHT lb/ft 24	NPORSEL Limestone	AIR_HOLE? No
MudWgt lb/gal 9.8	FLUIDDEN g/cc 1	MATRXDEN g/cc 2.71	SPSHIFT mV -60	CASEOD in 8.625	PERFS 0	TDEPTH ft 3650	BOTTEMP degF 109
BOREID in 12.25							

264.00 ft - Bottom

MAXAMPL mV 0	MINAMPL mV 1	MINATTN db/ft 0.8	COMPACT 1	SVFLUID usec/ft 189	SVMATRIX usec/ft 47.6	FRMSALIN kppm 0	MUDSALIN kppm 0
DEVI ° 0	SRFTEMP degF 68	SO in 0.25	DE-CENT Yes	CASED? No	CASEWGHT lb/ft 11.5	NPORSEL Limestone	AIR_HOLE? No
MudWgt lb/gal 9.8	FLUIDDEN g/cc 1	MATRXDEN g/cc 2.71	SPSHIFT mV -60	CASEOD in 5.5	PERFS 0	TDEPTH ft 3650	BOTTEMP degF 109
BOREID in 7.875							

Calibration Report

Database File: taos_wmu_14.db
Dataset Pathname: pass2.1
Dataset Creation: Wed Dec 11 15:37:15 2013 by Calc Sondex V7.03

Induction Array Tool Calibration Report

Serial Number: B10106
Tool Model: 002

Master Calibration Performed: Mon Aug 12 20:54:21 2013
Temperature: 89.9 degF

Sonde Error:

Array	1	2	3	4	5	6	7	
Real	193.4	-12.4	-40.1	-12.6	-0.5	3.9	7.3	mmho/m
Imaginary	-63.1	-108.2	-25.6	3.9	-2.7	-18.9	-0.8	mmho/m

Loop Gain:

Array	1	2	3	4	5	6	7	
Loop (real)	537.7	678.5	1295.3	1394.1	1144.8	712.8	404.8	mmho/m
Loop (imaginary)	73.3	92.5	389.8	419.5	344.5	214.5	121.8	mmho/m
Real	748.6	708.0	1259.2	1374.9	1164.3	742.3	429.7	mmho/m
Imaginary	8.6	-15.9	353.1	414.3	343.9	201.5	127.0	mmho/m
Gain (real)	0.968	0.942	0.997	1.005	0.983	0.965	0.958	
Gain (imaginary)	1.022	1.003	1.029	1.022	0.994	0.973	0.954	
Before Survey Verification Performed: Thu Sep 12 10:59:56 2013 88.0 degF 85.0 degF 87.4 degF								
Array	1	2	3	4	5	6	7	
TxIR	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	
TxIX	0.0	0.0	0.2	0.2	0.2	0.2	0.2	
Tx Magnitude	0.0	0.0	0.2	0.2	0.2	0.2	0.2	
Gain	120.5	153.6	154.4	154.7	153.6	162.1	169.0	
RxCR	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	
RxCX	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
RxC Magnitude	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Tool Module Parameters Software Version: 1.9.3.0 Borehole Size Source: CALI Mud Resistivity Source: MUDRES Mud Resistivity At Surface: N/A Mud Resistivity Surface Temperature: N/A Borehole Corrections: Automatic Minimum Standoff: 0.4 in								
Litho Density Tool Calibration Report								
Serial Number:				B10110S50129B				
Tool Model:				002				
Caliper Calibration Performed:				Mon Dec 02 15:58:29 2013				
	Diameter			Reading				
Small Ring:	6.000	in		1355.000	cps			
Large Ring:	13.000	in		2038.800	cps			
Gain:	0.0102							
Offset:	-8.3710							
Master Calibration Performed:				Mon Dec 02 15:28:12 2013				
Source Number:				50129B				
Medium:				Water				
Al Block Density:				2.6022 g/cc				
	Background		Al Block	Al Block + Fe				
SS1	793.4		5242.2	4358.8	cps			
SS2	2209.5		32853.5	27663.6	cps			
SSTOTAL	5210.5		53015.8	44250.1	cps			
LITH	105.6		578.4	341.2	cps			
LL	207.0		921.4	806.0	cps			
LU	594.8		1202.4	1107.8	cps			
LS	801.8		2123.8	1913.8	cps			
LSTOTAL	1511.2		5231.0	4217.6	cps			
SSHV	1568.1		1570.4	1571.0	V			
LSHV	1507.6		1508.2	1508.3	V			
SSFE	0.003		0.001	-0.005				

SSFF	-0.006	-0.003	0.003
Before Survey Verification Performed:		Wed Dec 11 00:32:09 2013	
After Survey Verification Performed:			
	Master Background	Before Survey Background	After Survey Background
SS1	793.4	787.0	cps
SS2	2209.5	2203.3	cps
SSTOTAL	5210.5	5188.1	cps
LITH	105.6	106.8	cps
LL	207.0	204.6	cps
LU	594.8	598.1	cps
LS	801.8	802.7	cps
LSTOTAL	1511.2	1517.5	cps
SSHV	1568.1	1565.7	V
LSHV	1507.6	1504.1	V
SSFF	0.003	0.029	
LSFF	-0.006	0.009	

Tool Module Parameters	
Software Version:	2.5.1.0
Borehole Size Source:	CALI
Pad Type:	2

Compensated Neutron Tool Calibration Report

Serial Number:	C10071
Tool Model:	009

Master Calibration Performed:		Tue Nov 12 13:18:53 2013	
Source Number:		80244B	
Short Spacing Counts:	6501.15	cps	
Long Spacing Counts:	227.83	cps	
High Voltage:	1363.75	V	
Target Ratio:	27.2000		
Ratio:	28.5352		
K-Factor:	0.9532		

Before Survey Verification Performed:		Wed Dec 11 00:35:01 2013	
After Survey Verification Performed:			
Verifier Number:		6689	
Verifier Values	Master Cal	Before Survey	After Survey
Short Spacing Counts:	272.19	265.55	cps
Long Spacing Counts:	222.73	220.23	cps
High Voltage:	1363.75	1363.90	V
Ratio:	1.2220	1.2058	

Tool Module Parameters	
Software Version:	1.5.0.0
Borehole Size Source:	CALI
Clip Crossplot Porosity:	YES

Micro Electric Log Calibration Report

Serial Number:	000002
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Caliper Calibration Performed:

Thu Nov 07 23:01:33 2013

	Pad Arm			Backup Arm		
	Radius		Reading	Radius		Reading
Small Jig:	3.000	in	1341.100	3.000	in	1355.100
Large Jig:	8.000	in	1468.800	8.000	in	1470.800
Gain:	0.0392			0.0432		
Offset:	-48.0098			-56.5609		

Pad Calibration

	Inverse	Normal
Gain:	1.0000	1.0000
Offset:	0.0000	0.0000

Tool Module Parameters

Software Version: 1.1.0.0

Gamma Ray Calibration Report

Serial Number:	C10047
Tool Model:	001

Performed: Mon Dec 02 13:35:35 2013

Calibrator Value: 147.0 GAPI

Background Reading: 76.5 cps

Calibrator Reading: 523.2 cps

Sensitivity: 0.3291 GAPI/cps

Borehole Fluid Resistivity Calibration Report

Serial Number:	P003
Tool Model:	002

Master Calibration Performed: Mon Sep 19 10:59:23 2011

Resistivity Polynomial Equation:

$$0.0136x^3 - 0.0315x^2 + 0.6797x - 0.0602$$

Temperature Calibration:

Reference		Reading	
78.80	degF	558.20	bits
212.00	degF	700.00	bits

Head Tension Unit Calibration Report

Serial Number:	00001
Tool Model:	011

Performed: Mon Mar 04 10:52:43 2013

Point #	Reference		Reading	
1	-19894.000	lb	8957.860	cps
2	-15010.000	lb	13965.100	cps
3	-9998.000	lb	19079.100	cps
4	-5007.000	lb	24133.000	cps
5	-1009.000	lb	28232.100	cps
6	1017.000	lb	30185.400	cps
7	5040.000	lb	34439.700	cps
8	9970.000	lb	39346.900	cps

	9	14955.000	lb	44466.000	cps
	10	19770.000	lb	49397.800	cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)	
HTEN	68.72		CHD-001 (000004) Cable Head	2.19	3.38	35.00	
			XTU-008 (C10067) Crossover Ultrawire Toolbus to Ultralink	2.08	3.38	47.00	
			HTU-011 (00001) Head Tension Unit	2.18	3.38	55.00	
BFR	65.08		BFR-002 (P003)	4.39	3.38	94.00	
GR	62.30		GRT-001 (C10047) Gamma Ray Tool	3.22	3.38	69.00	
MEL	52.31		MEL-001 (000002) Micro Electric Log	9.17	3.38	190.00	
WVFUTRF	44.32		MAS-001SS (C10038SS) Multi Array Sonic Tool (SS)	14.28	3.38	242.00	
WVFUTRN	43.32						
WVFLTRF	43.32						
WVFLTRN	42.32						
CNLSC CNSSC	26.08 25.58		CEN-001 (000025) Inline OH Springbow Centraliser	4.27	3.38	66.00	
			KJT-001 (000001) Knuckle Joint	2.86	3.38	72.00	
			CNL-009 (C10071) Compensated Neutron Logging Tool	5.27	3.38	125.00	
			LDT	15.92	LDT-002 (B10110S50129B) Litho Density Tool	9.75	4.50
IAT	8.74		IAT-002 (B10106) Induction Array Tool	13.42	3.88	200.00	
SP	0.93	BN-SOFF (000001) Bottom Nose Standoff	0.67	6.88	6.00		

Dataset:	taos_wmu_14.db: field/well/run1/pass2.1
Total Length:	73.75 ft
Total Weight:	1511.00 lb
O.D.	6.88 in