Weatherford®

CML IMPULSE SHUTTLE
COMPENSATED PHOTO-DENSITY
COMPENSATED NEUTRON LOG

COMPANY	SANDRIDGE EXPLORATION & PRODUCTIO
WELL	SALLY 3420 1-12H
FIELD	COLLIER FLATS
PROVINCE/COUNTY	COMANCHE
COUNTRY/STATE	USA / KANSAS
LOCATION	200' FNL & 660' FWL

40 Years of Wireline 1970 2010

SEC	TWP	RGE	Other Services
12	34S	20W	MAI

API Number 15-033-21647-01
Permit Number

Permanent Datum G.L., Elevation 1788 feet
Log Measured From KB
Drilling Measured From K.B.

Elevations:	feet
KB	1808.00
DF	1808.00
GL	1788.00

Date	09-AUG-2012			
Run Number	ONE			
Depth Driller	12182.00	feet		
Depth Logger	12164.00	feet		
First Reading	12130.00	feet		
Last Reading	5100.00	feet		
Casing Driller	5620.00	feet		
Casing Logger	5620.00	feet		
Bit Size	6.125	inches		
Hole Fluid Type	WATER			
Density / Viscosity	8.50 lb/USg	29.00 CP		
PH / Fluid Loss	9.50	60.00 ml/30Min		
Sample Source	FLOWLINE			
Rm @ Measured Temp	1.85 @ 75.0	ohm-m		
Rmf @ Measured Temp	1.48 @ 75.0	ohm-m		
Rmc @ Measured Temp	2.22 @ 75.0	ohm-m		
Source Rmf / Rmc	CALC	CALC		
Rm @ BHT	1.0 @138.0	ohm-m		
Time Since Circulation	0 HOURS			
Max Recorded Temp	138.00	deg F		
Equipment Name	COMPACT			
Equipment / Base	18064	OKC		
Recorded By	C. GRIFFIN			
Witnessed By	K. GENTRY			
S.O.#/ AFE	3536655/DC12233			

BOREHOLE RECORD

Last Edited: 09-AUG-2012 06:29

Bit Size inches	Depth From feet	Depth To feet
6.125	5620.00	12182.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
INTERMED	7.000	0.00	5620.00	26.00

REMARKS

WLS SOFTWARE VERSION 13.02. USED.
TOOLS RUN ON DRILLPIPE USING COMPACT WELL SHUTTLE DEPLOYMENT TECHNIQUE.

DEPTH MEASURED USING ADVANTAGE RIG DEPTH CORRECTED TO PIPE TALLY.

TOOLS DEPLOYED WITH MULE SHOE SITTING AT 12078 FT.
AFTER DEPLOYMENT LOGGING TOOL WAS AT 12164 FT.

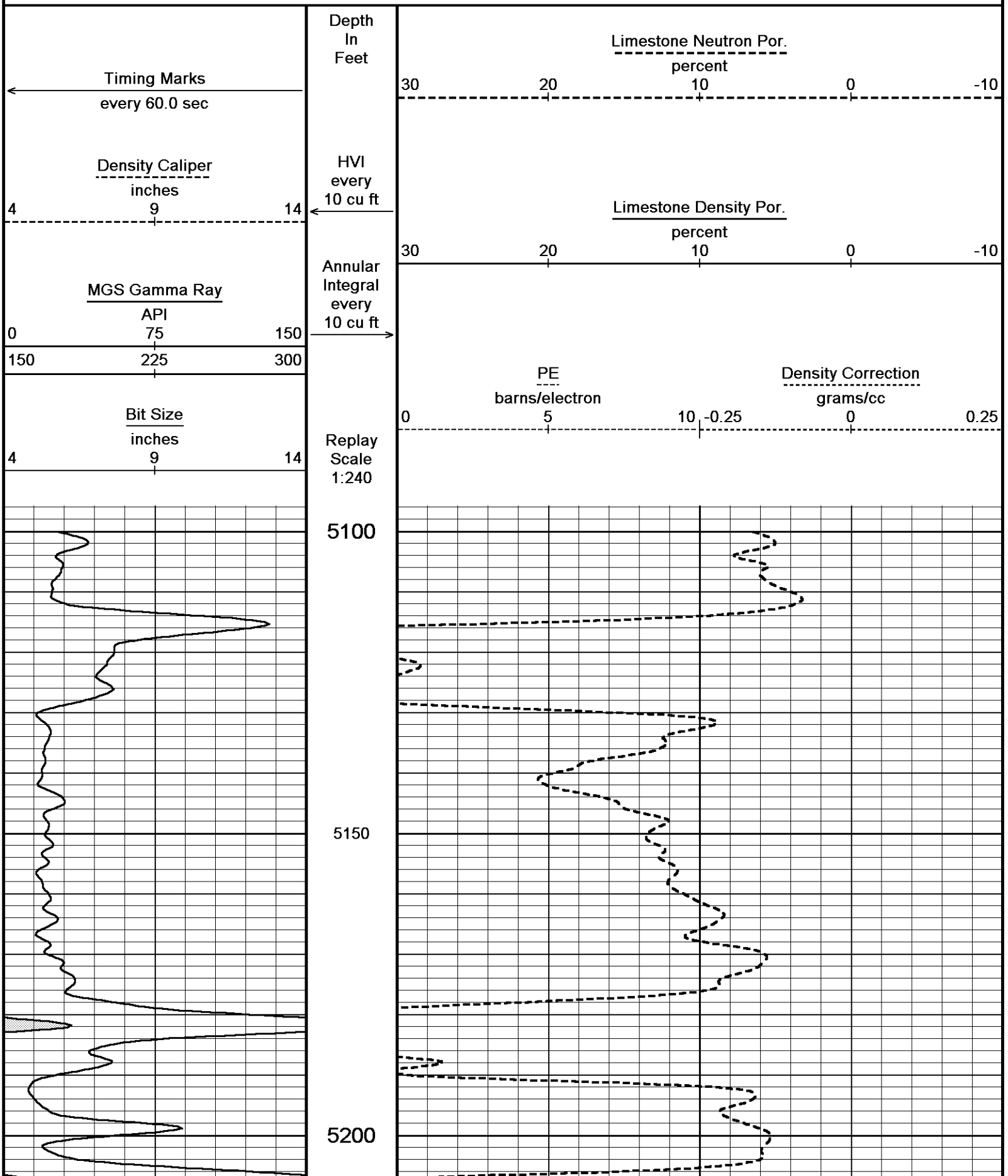
4.5 " PRODUCTION CASING USED TO CALCULATE ANNULAR HOLE VOLUMES.

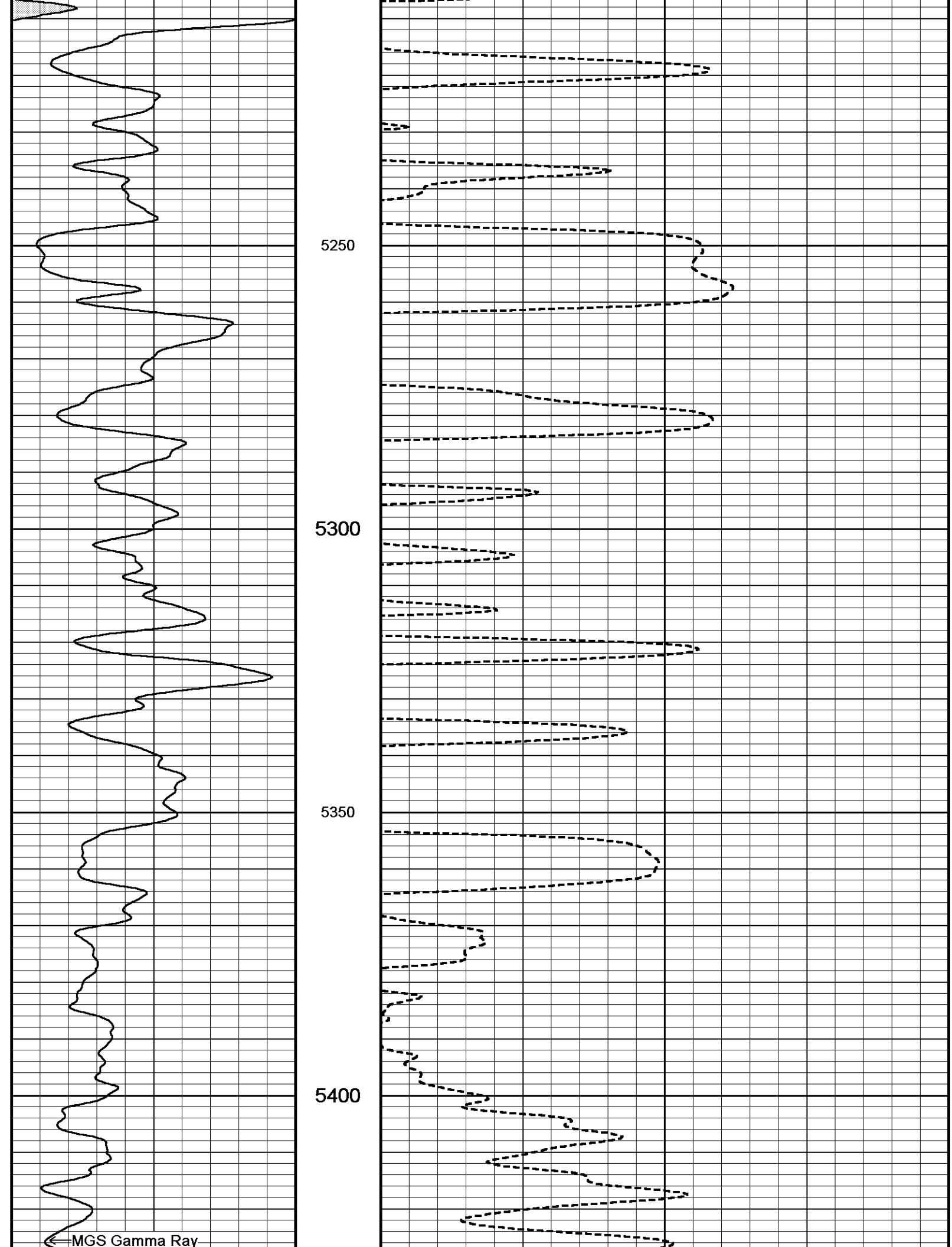
OPERATORS: R. ROLLANS, C. HAWKINS
S.O. # 3536655
RIG: LARIAT 38

employees. These interpretations are also subject to our general terms and conditions in our price schedule.

5 INCH MAIN PASS DSC

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 10-AUG-2012 01:09
Filename: C:\Data\Sandridge\Sandridge Sally 3420 1-12H\MMS167 Depthlog.dta
Recorded on 10-AUG-2012 00:29
System Versions: Processed with 12.02.4401 Plotted with 12.02.4401

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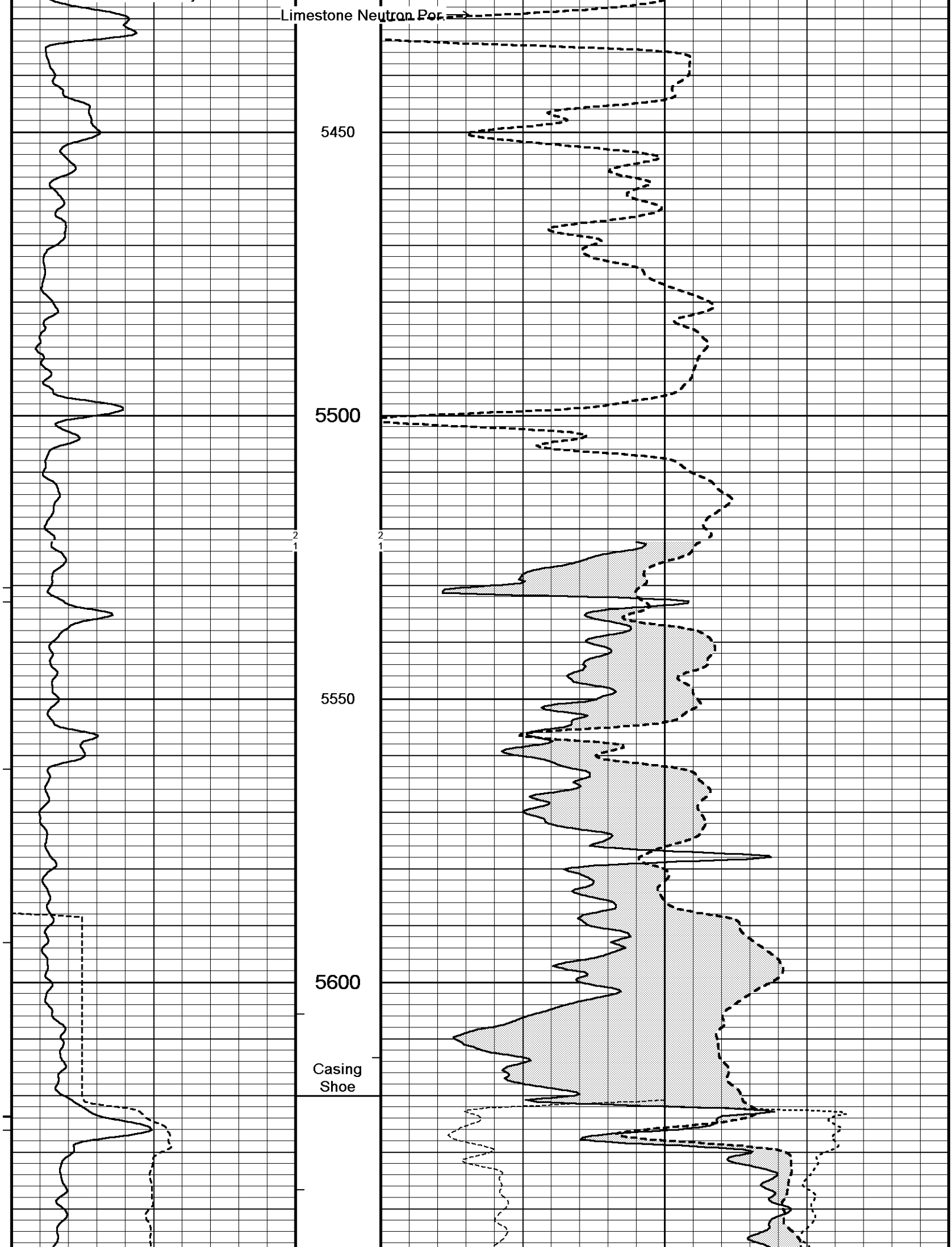
5300
5350
5400
MGS Gamma Ray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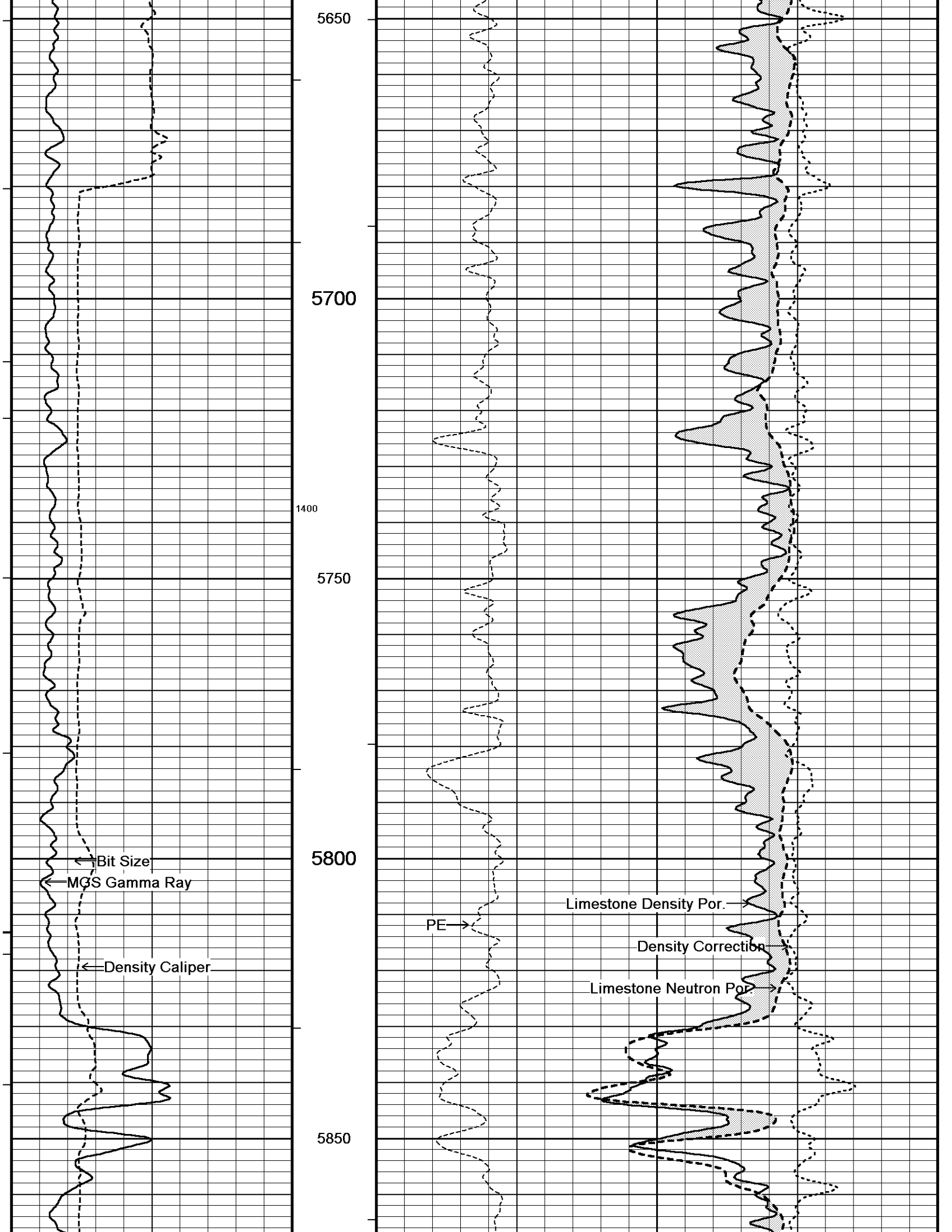
5500
5550
5600
Casing
Shoe
2
1
2
1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1400
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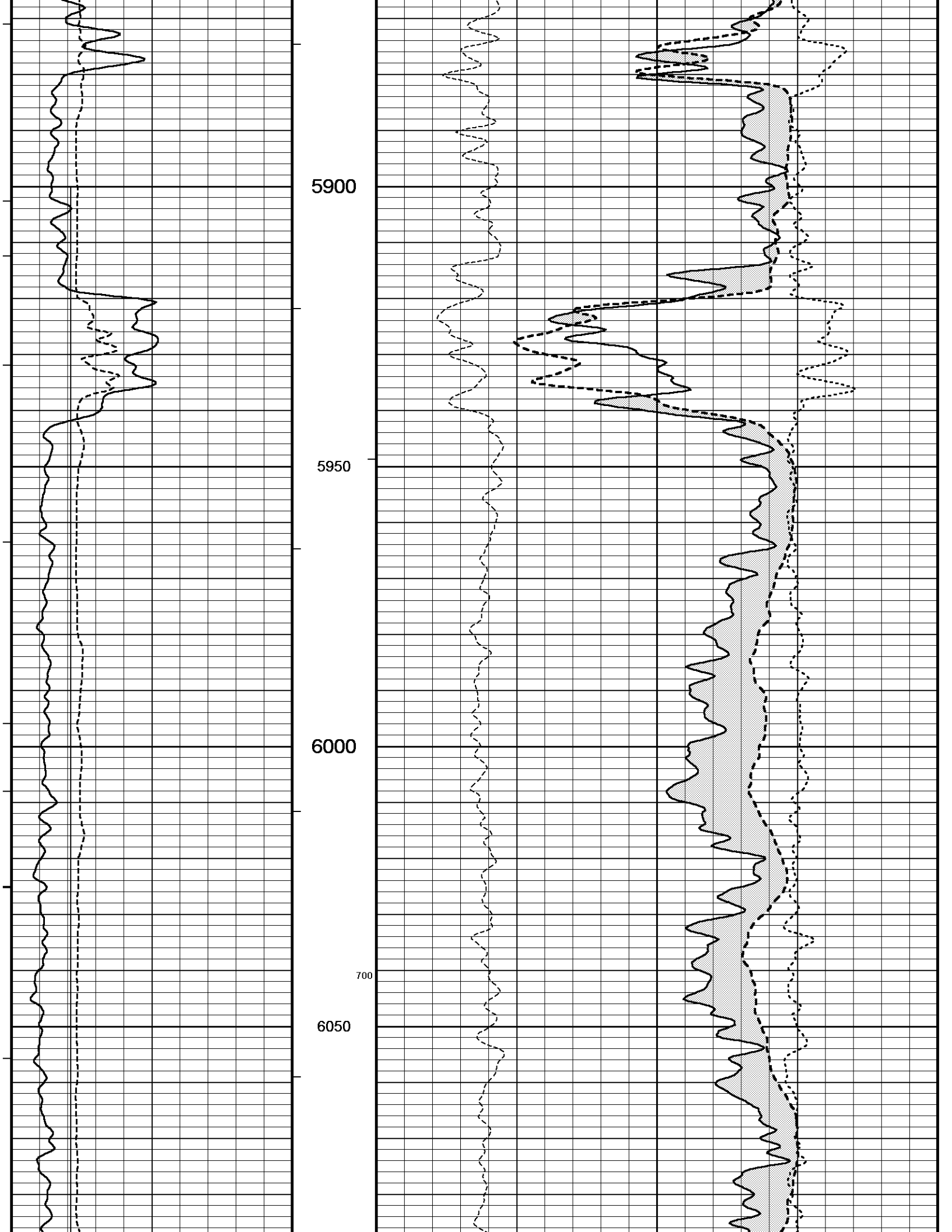
MGS Gamma Ray
Density Caliper
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.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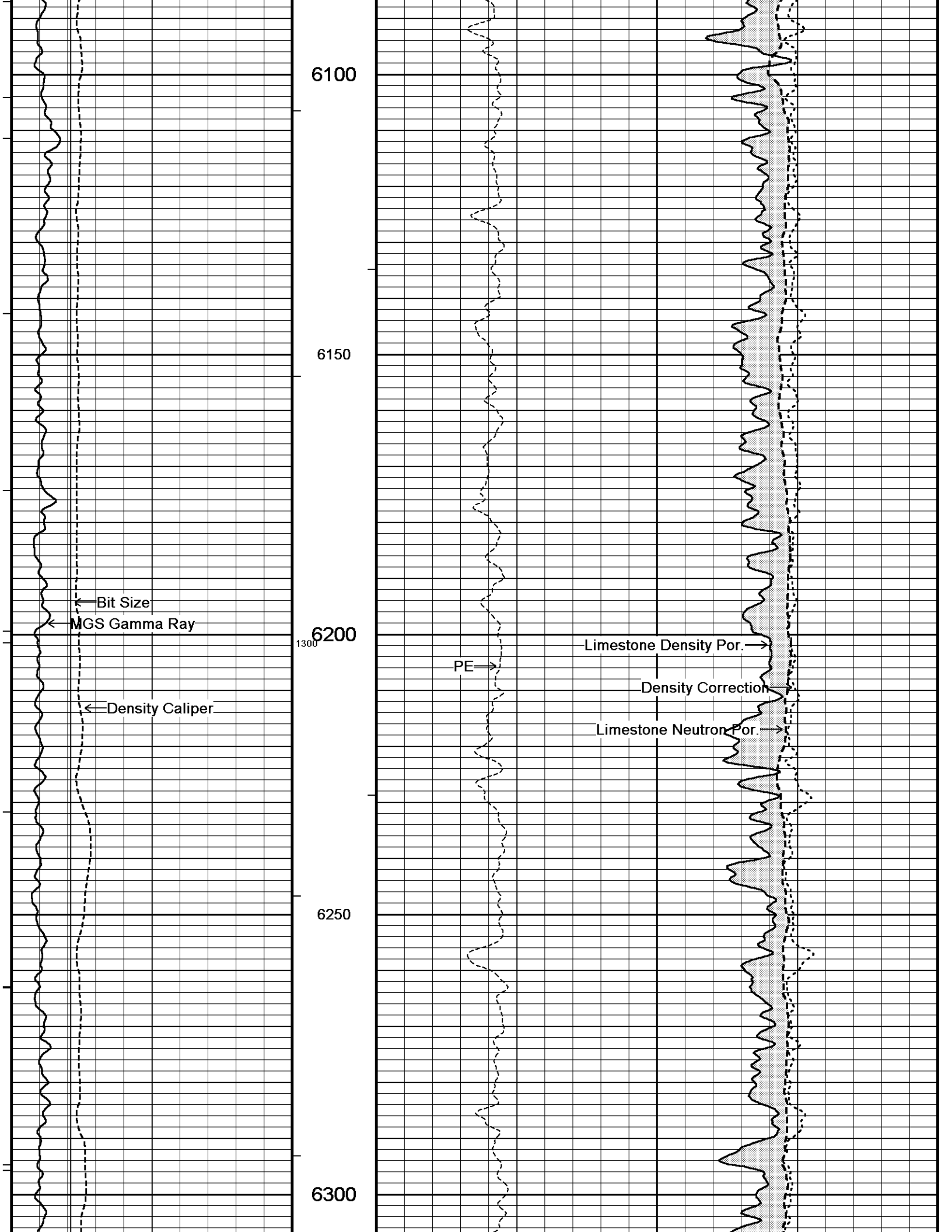
700
6050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6150
6200
6250
6300
1300
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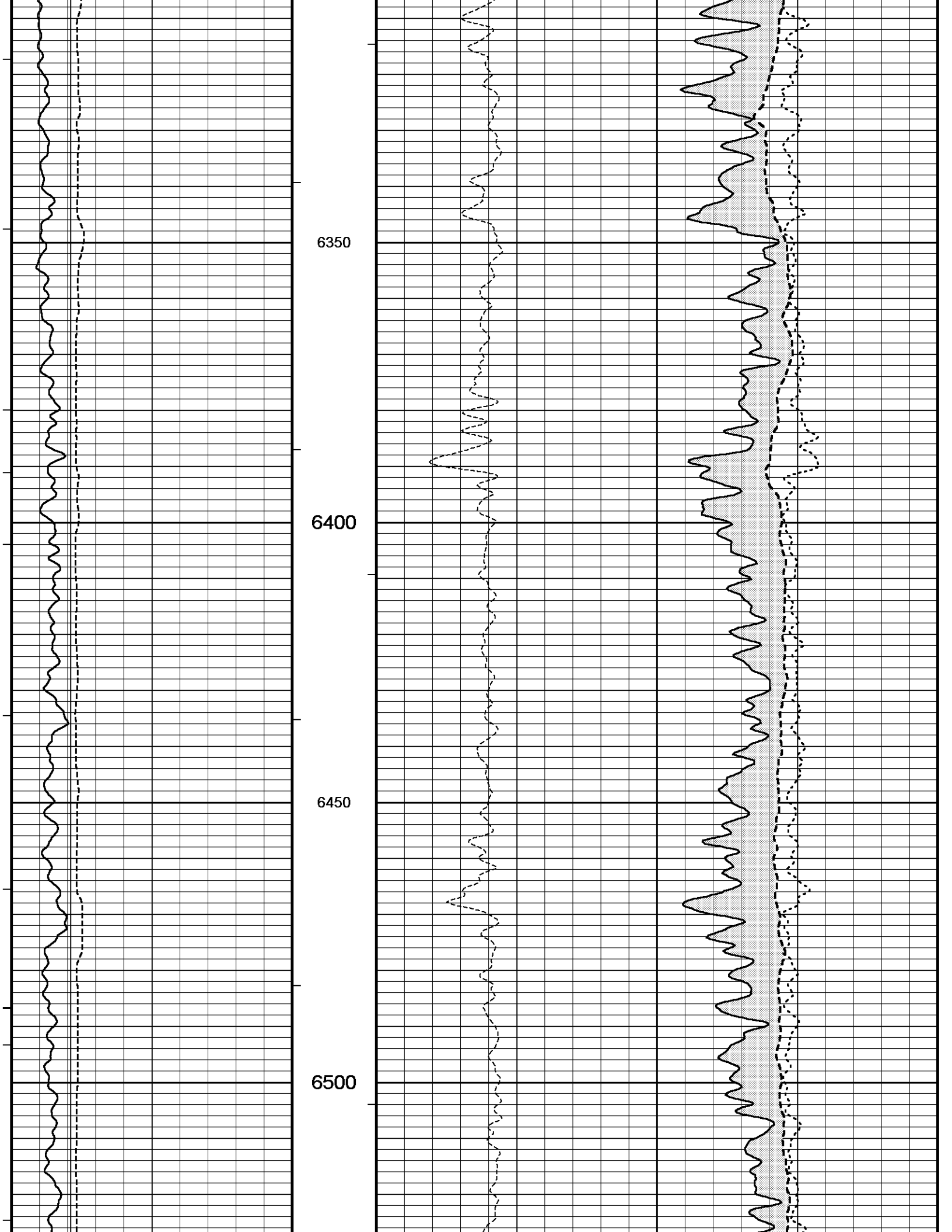
MGS Gamma Ray
Density Caliper
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.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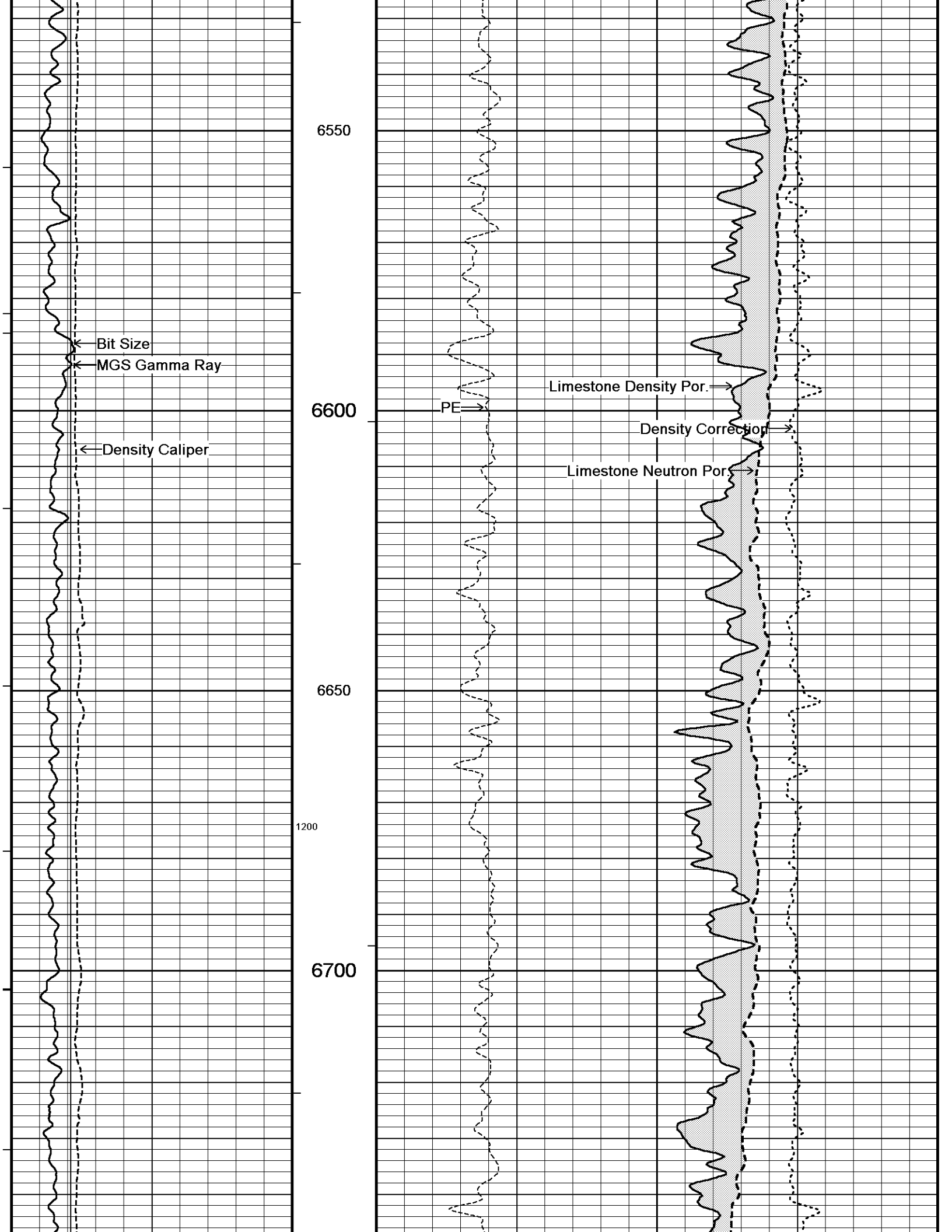
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6650
1200
6700
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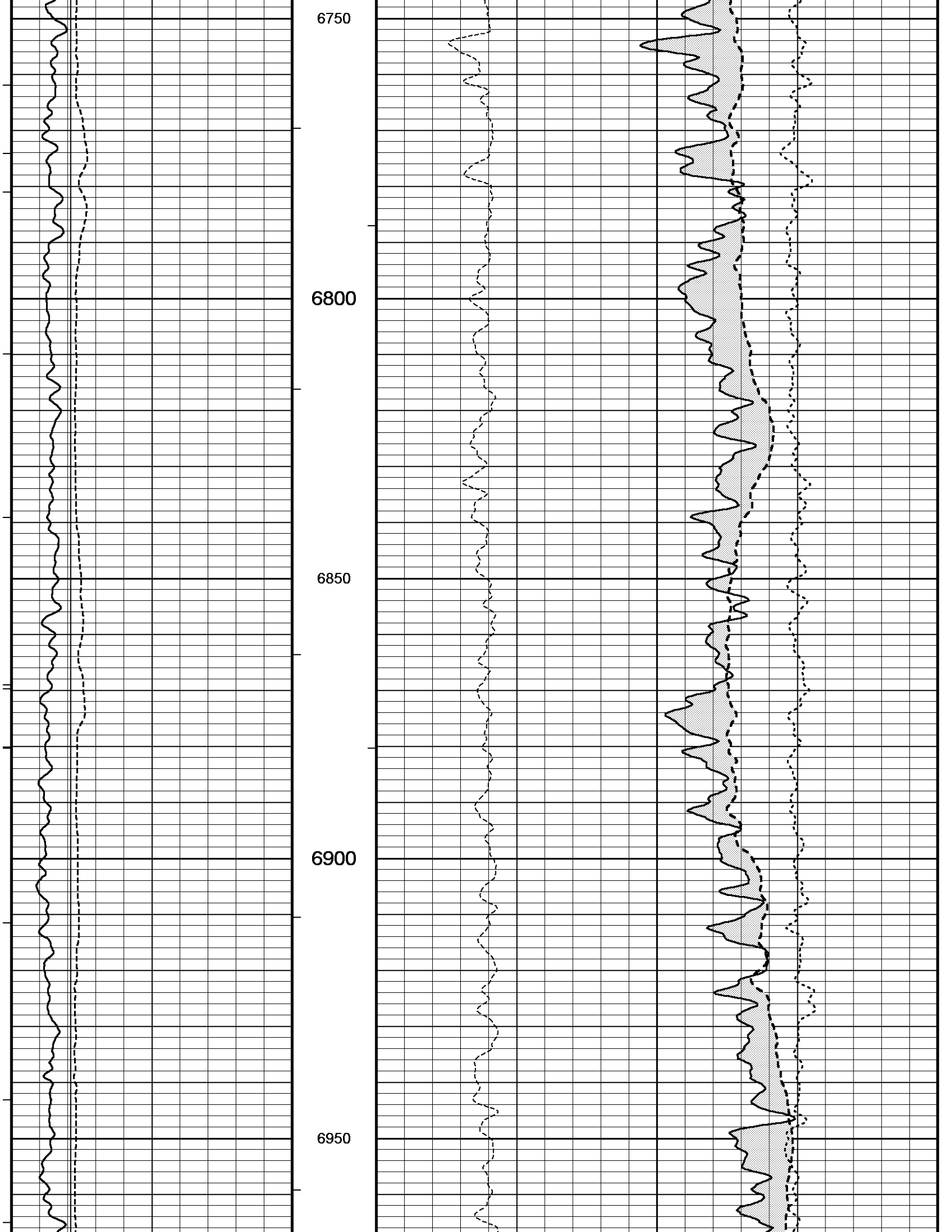
MGS Gamma Ray
Density Caliper
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.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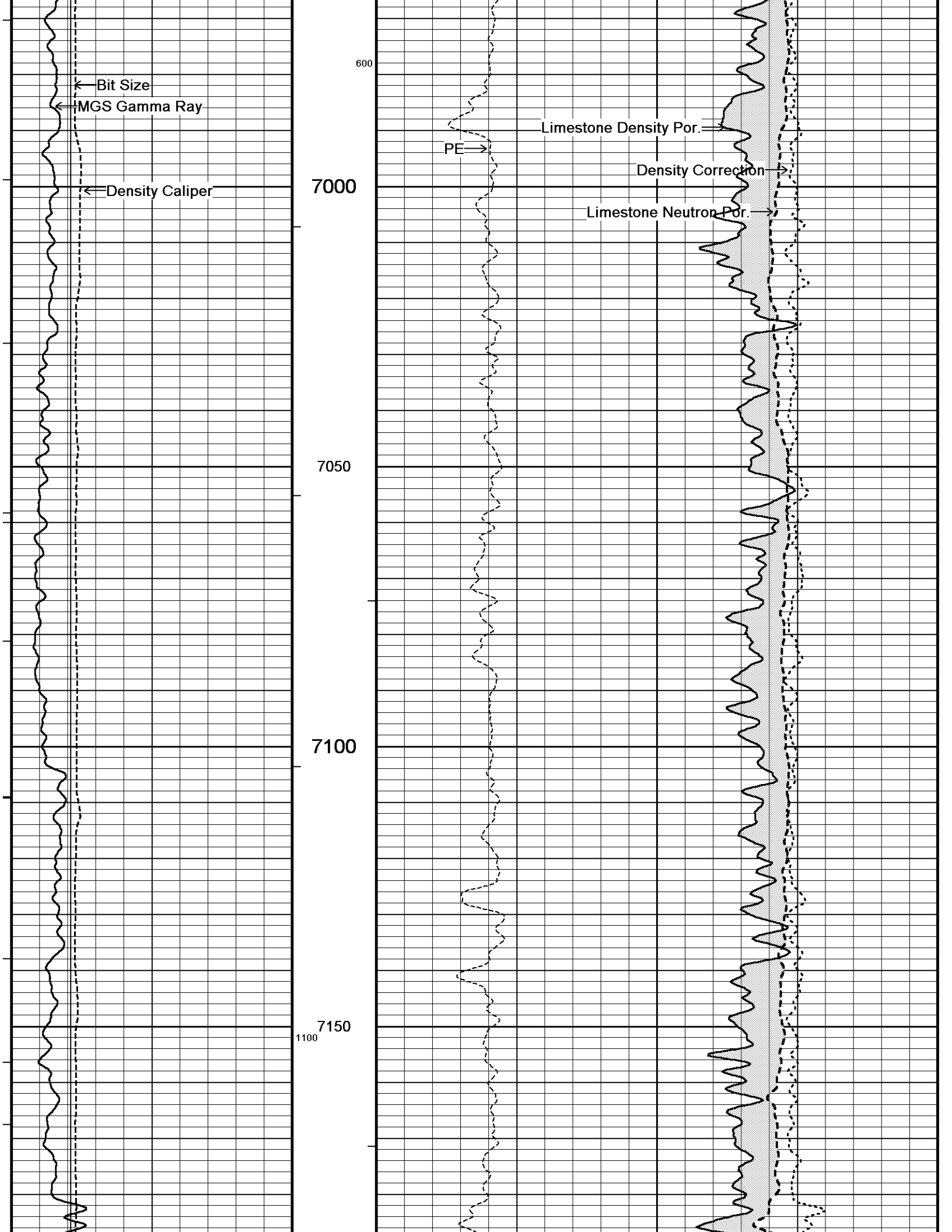
6950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Density Correction
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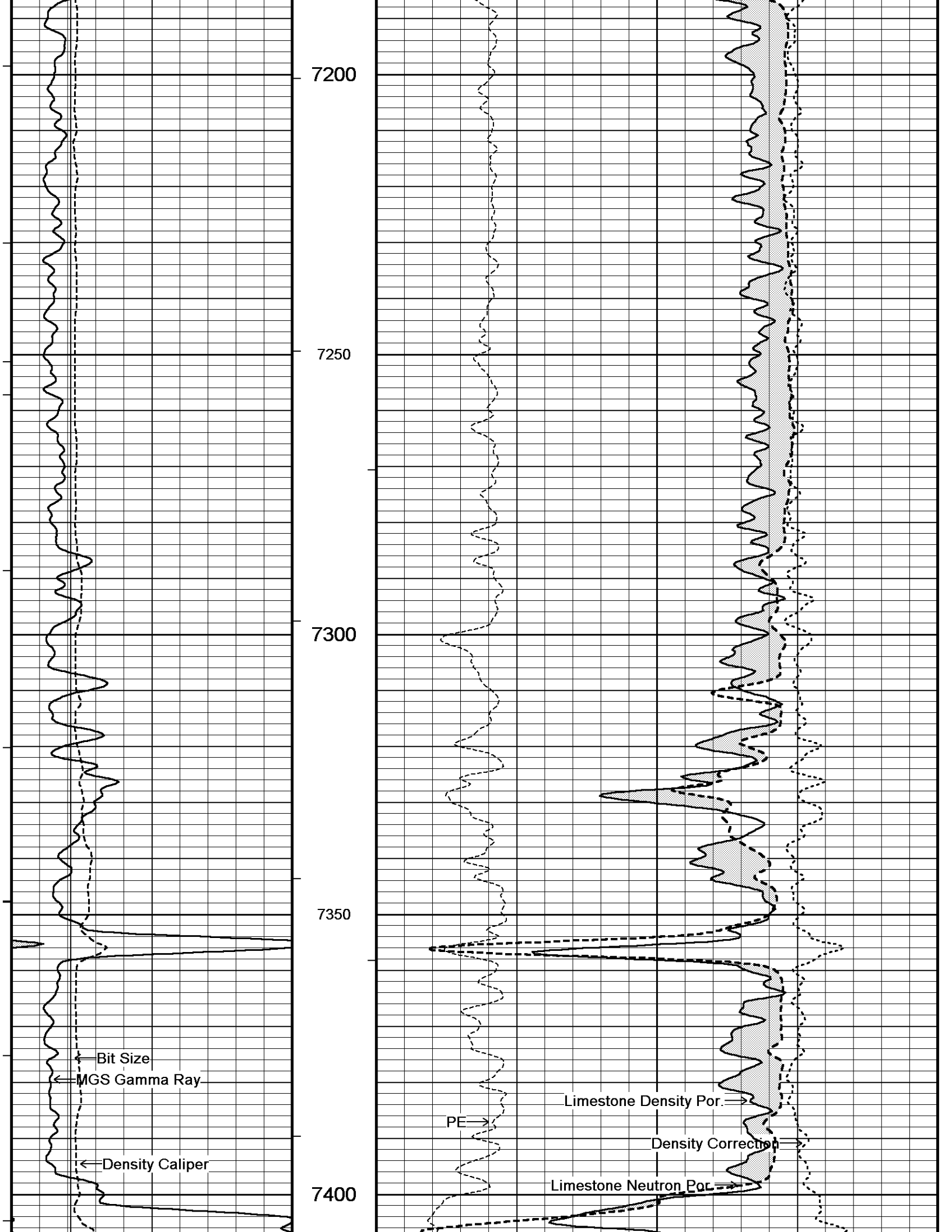
7050
7100
7150
1100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7350
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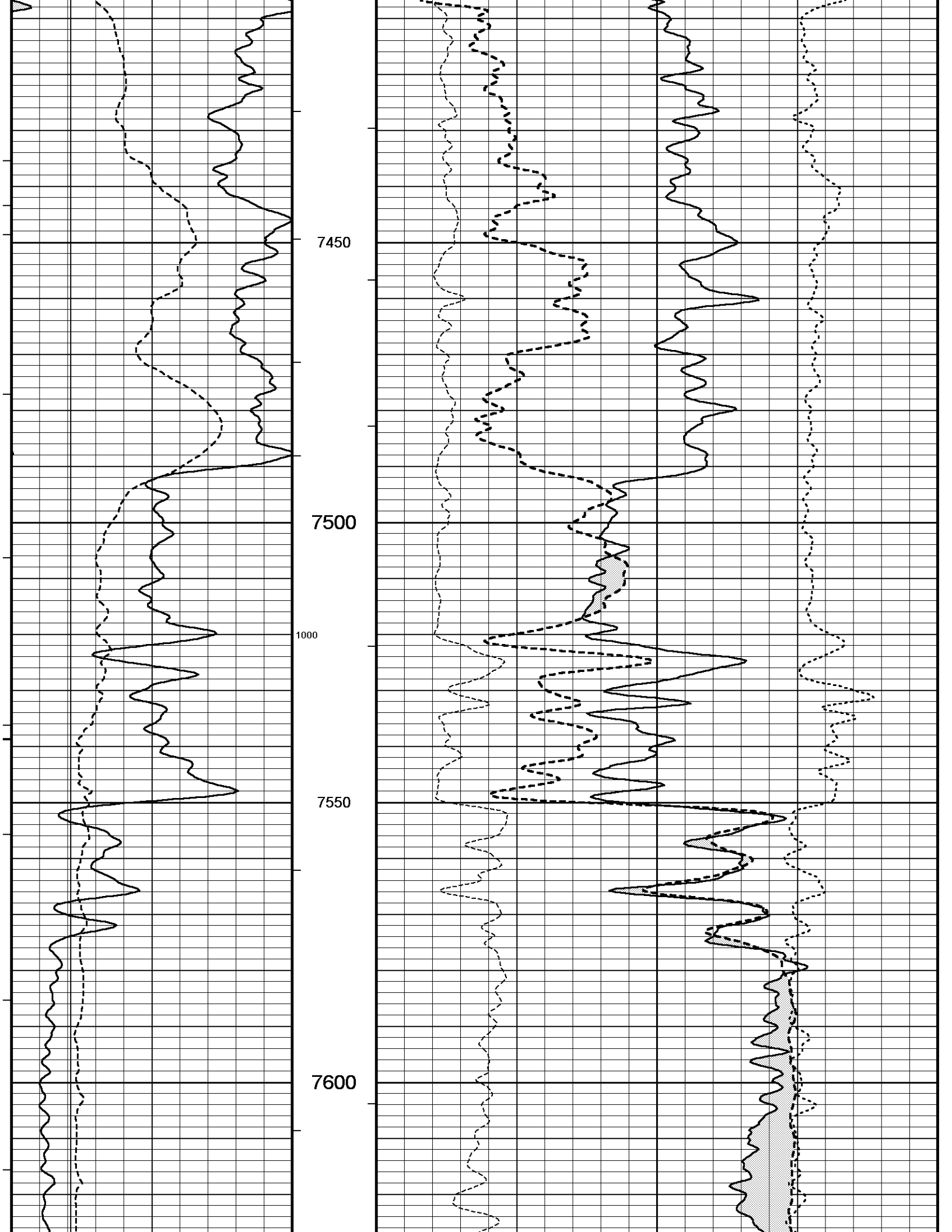
Density Caliper
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.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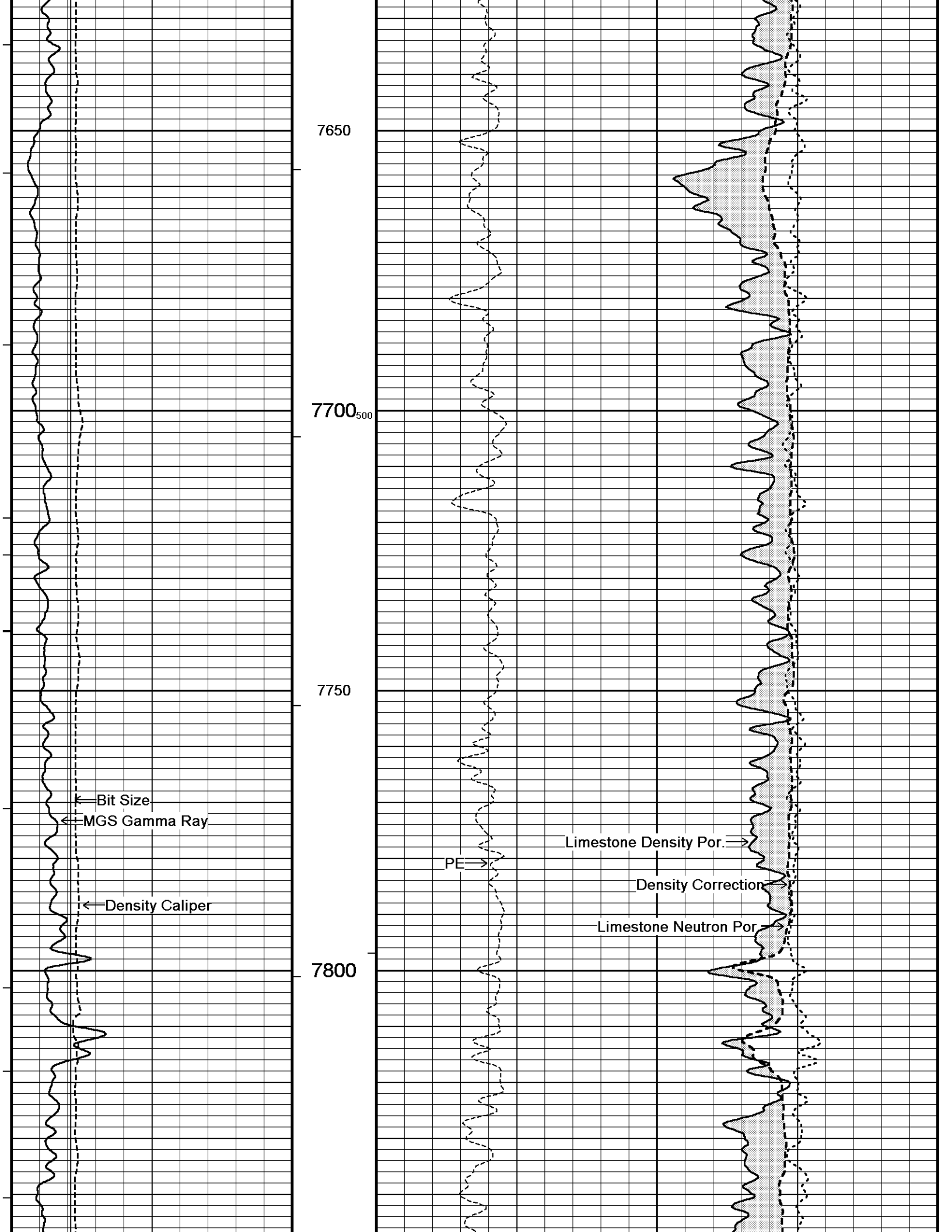
7550
7600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Density Caliper
PE
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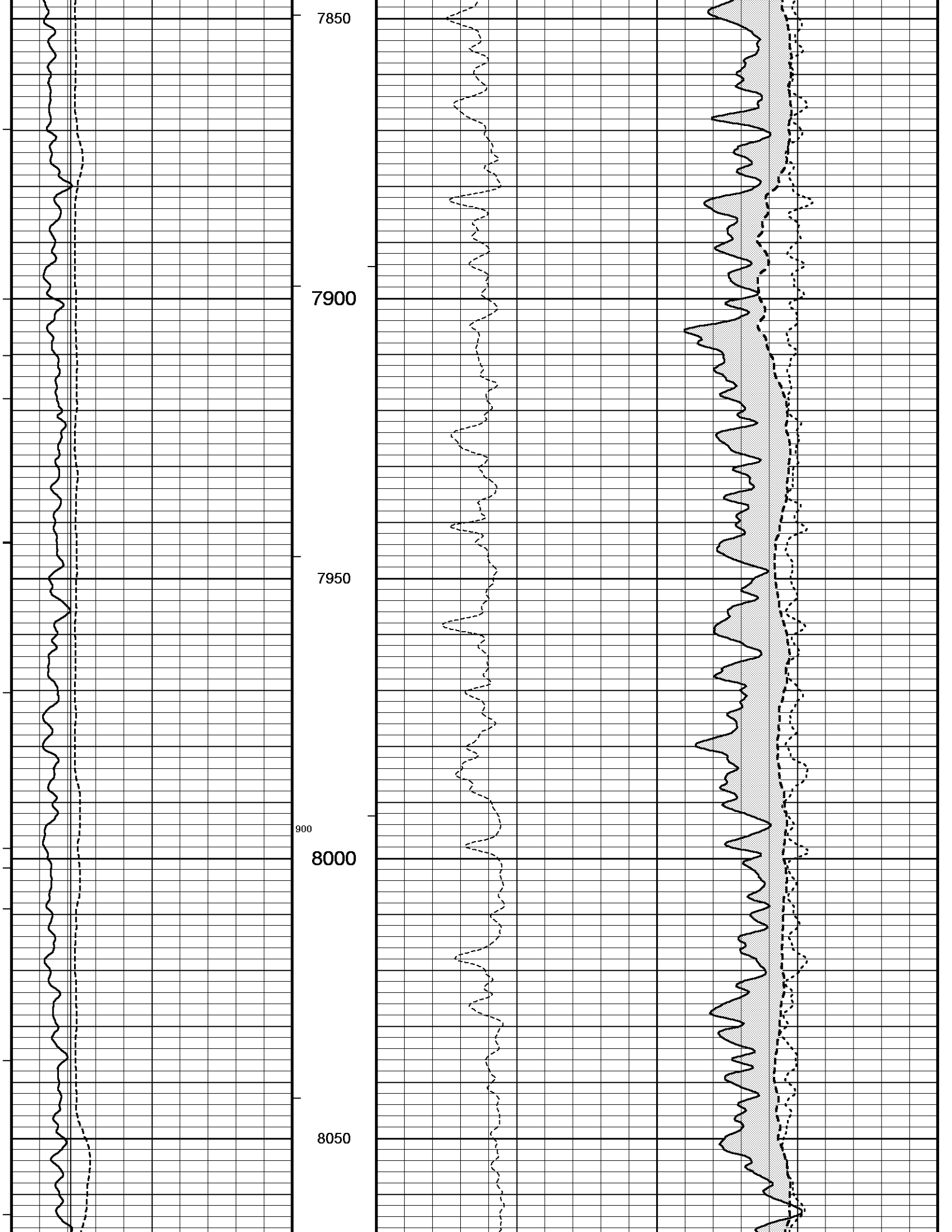
Density Correction
Limestone Neutron Por.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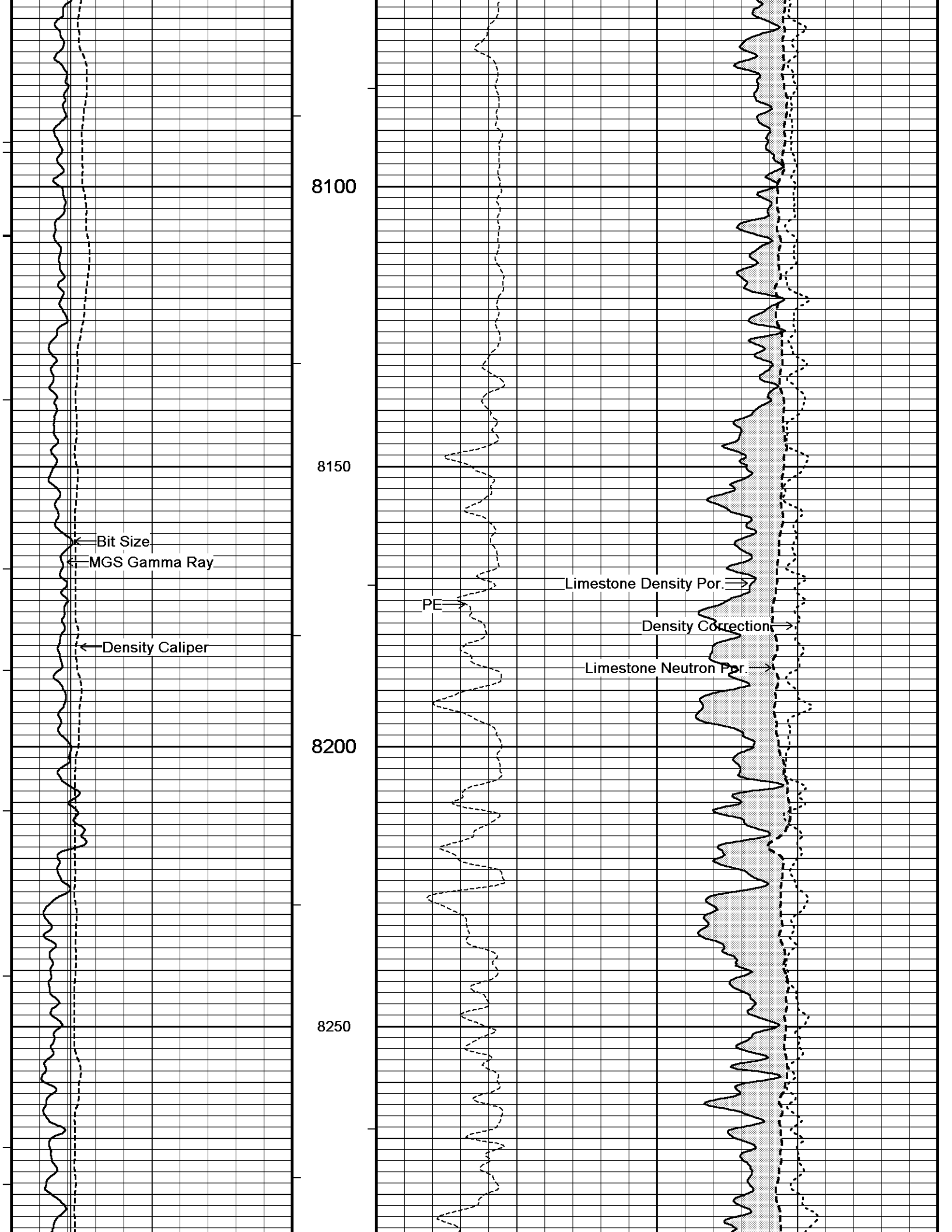
7900
7950
900
8000
8050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8150
8200
8250
Bit Size
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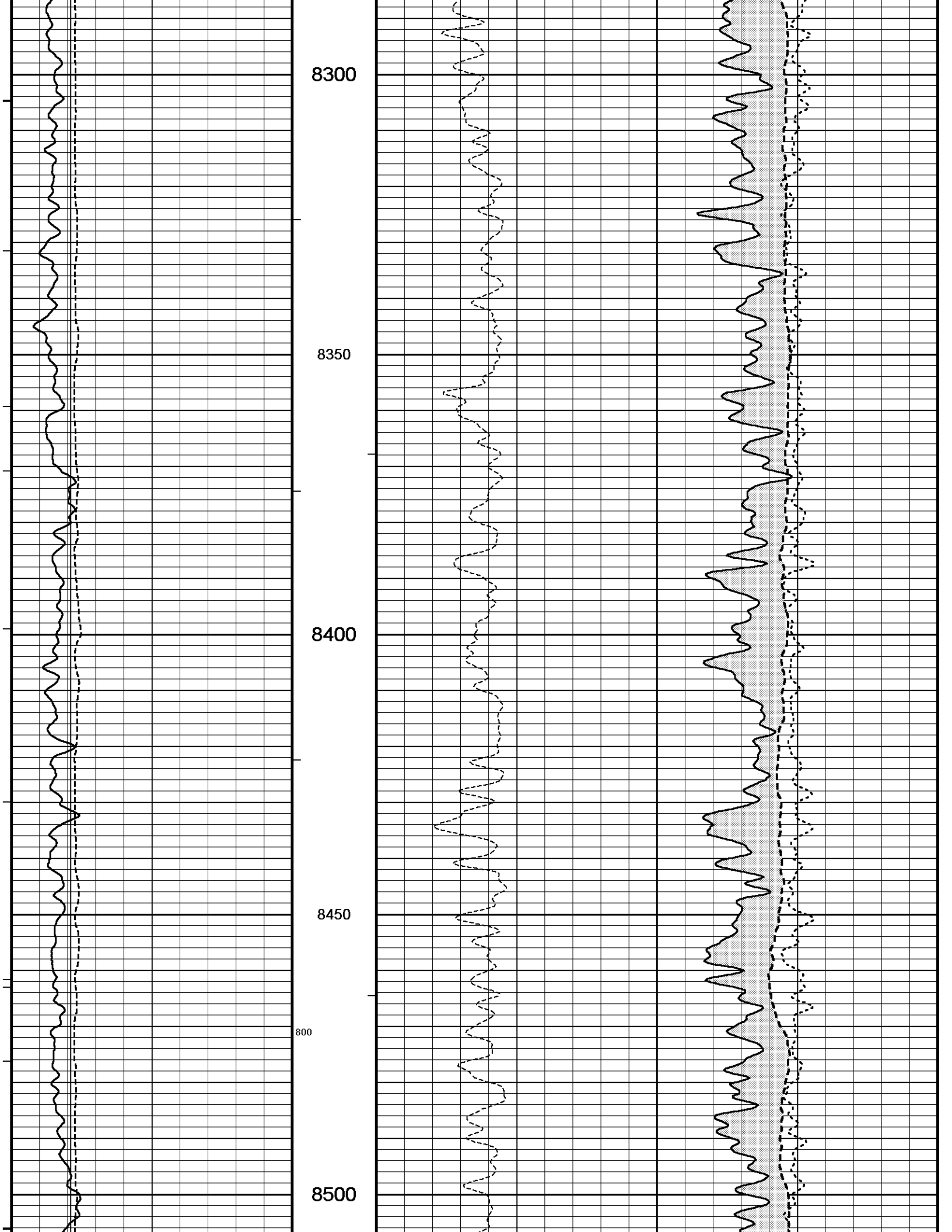
Density Caliper
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.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8400
8450
800
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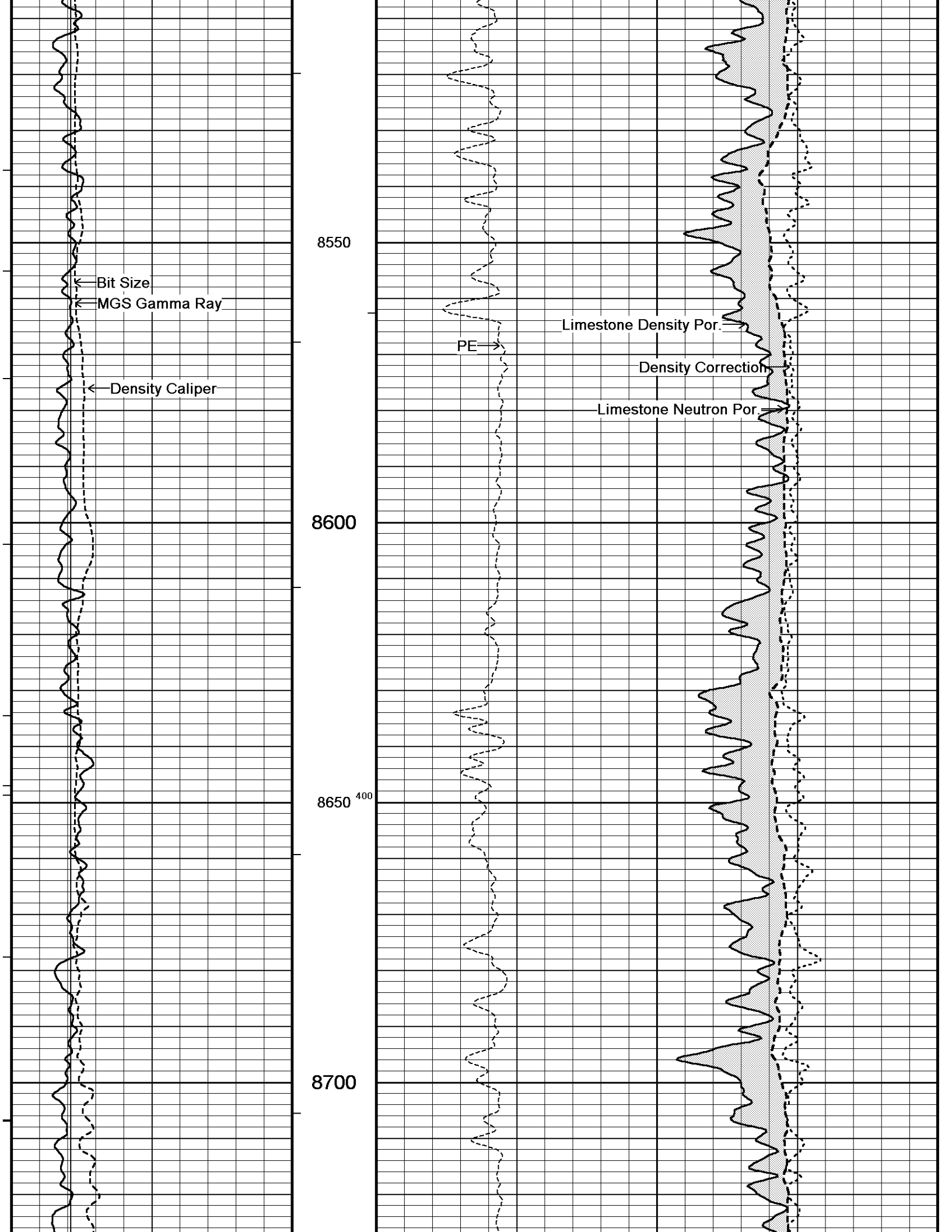
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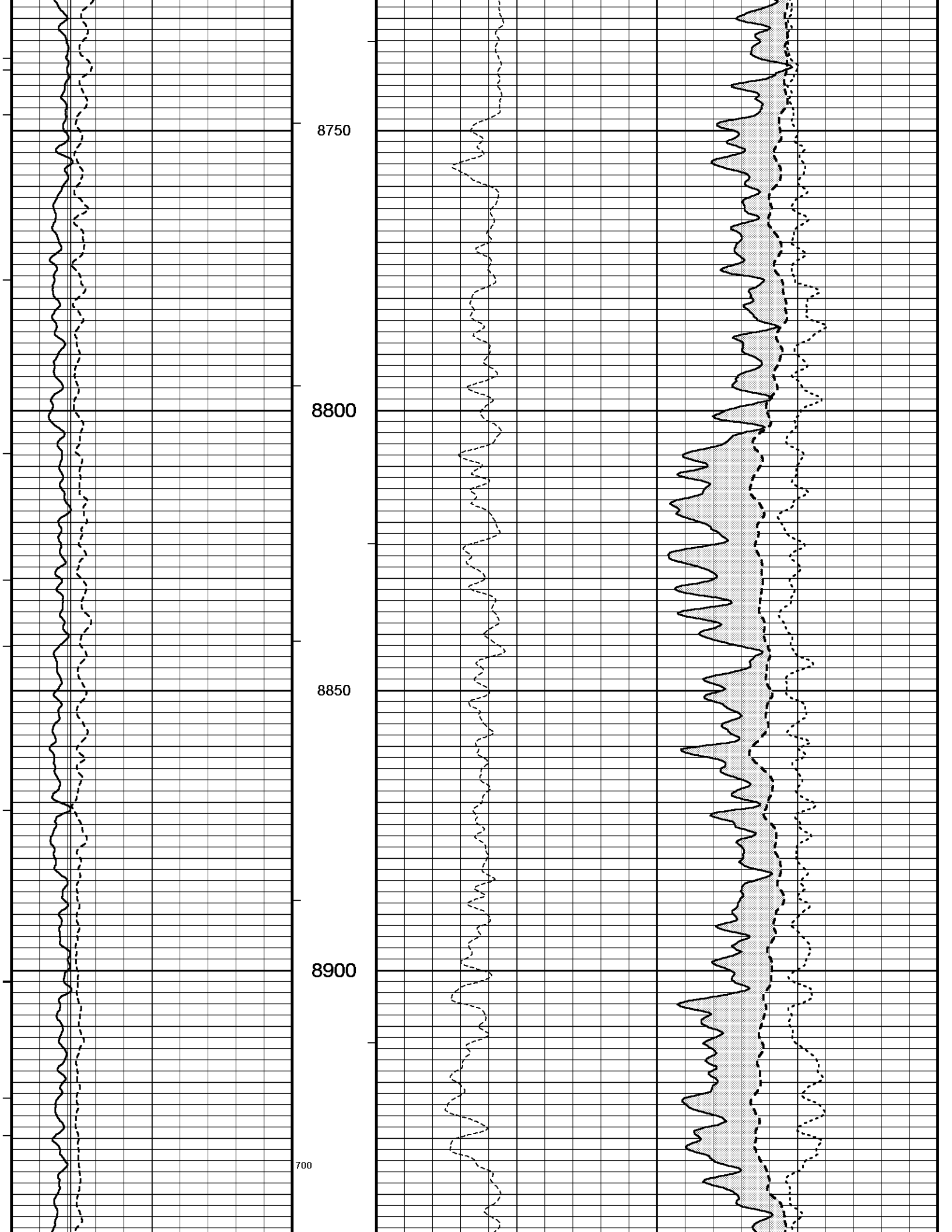
Density Caliper
8550
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.
8600
8650
400
8700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8850
8900
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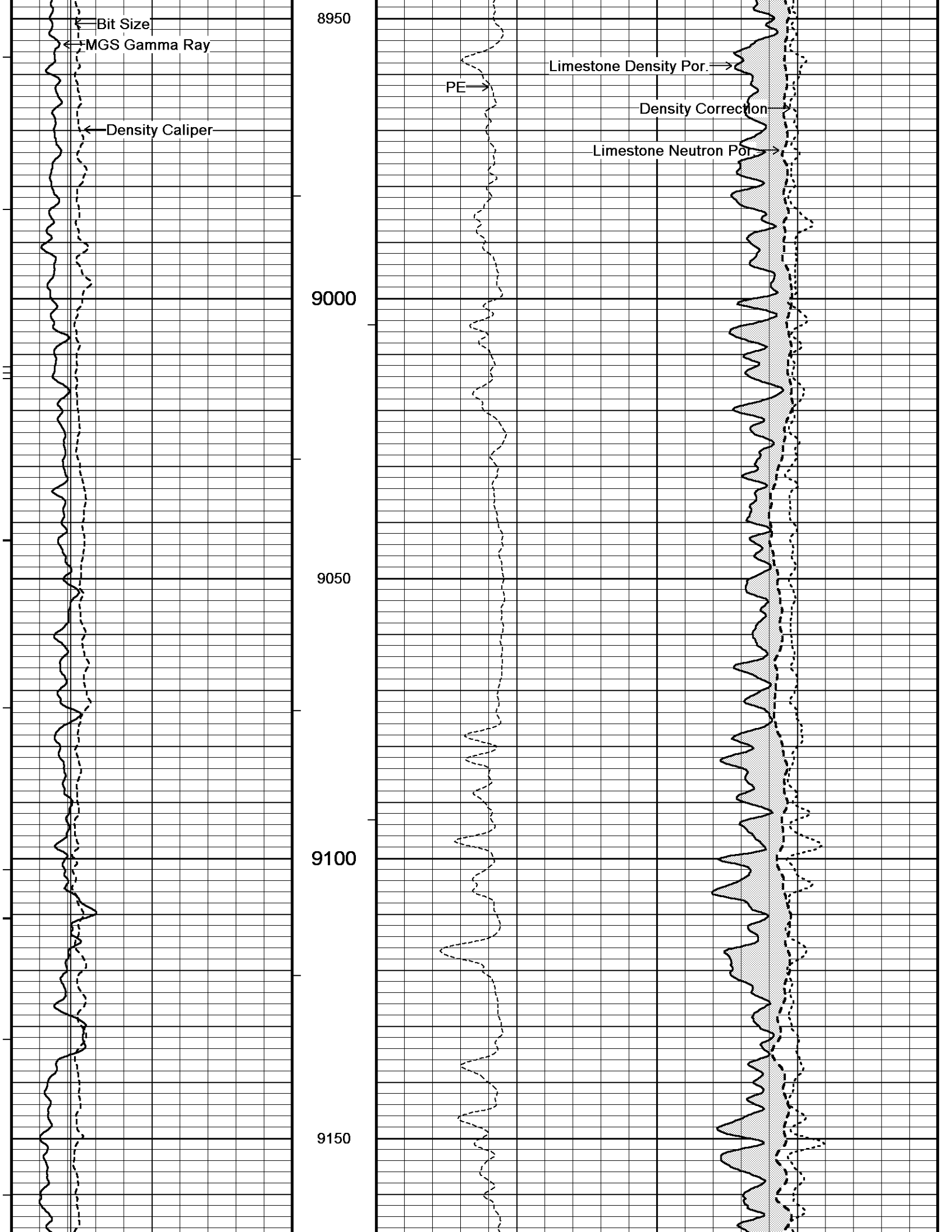
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Density Caliper
8950
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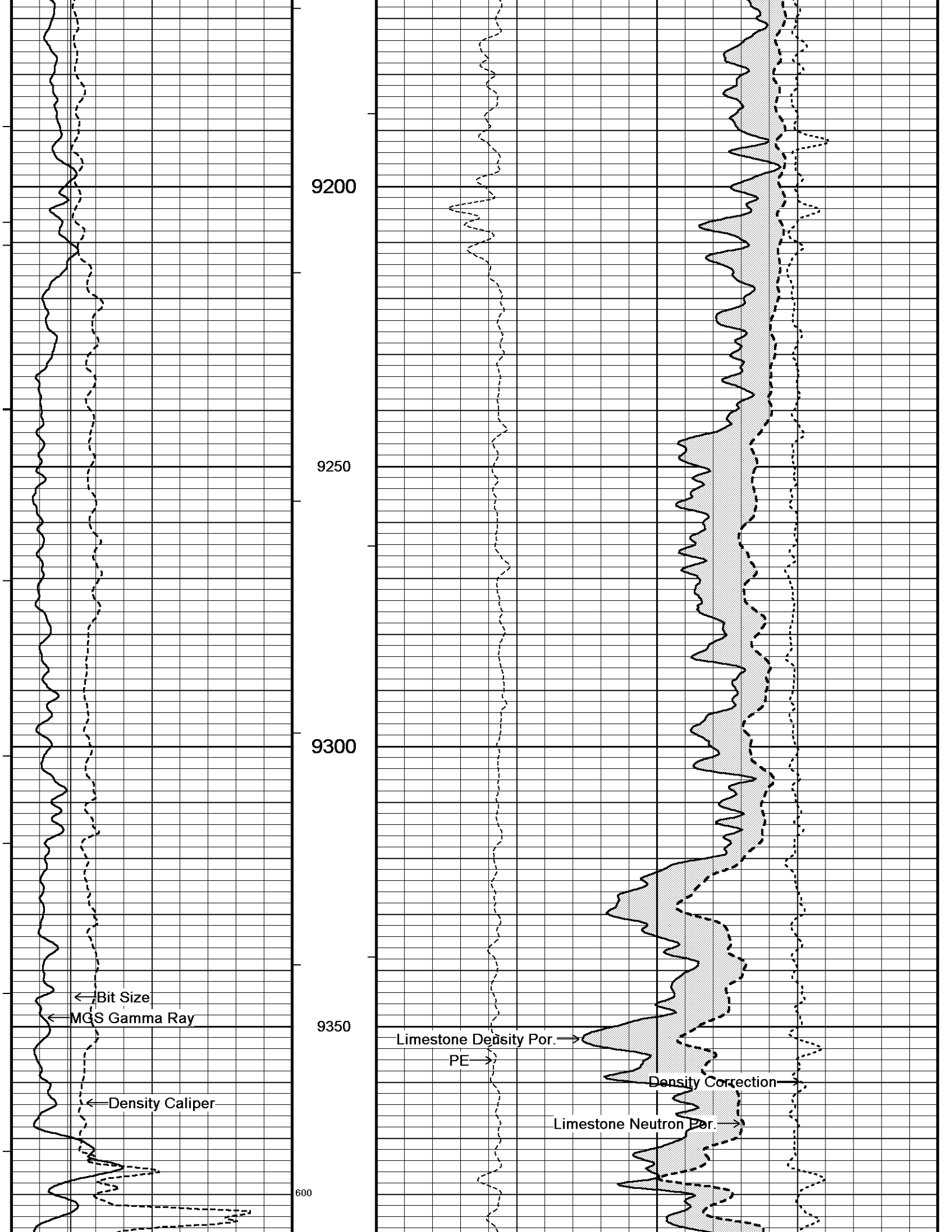
9050
9100
9150
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.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9250
9300
9350
600
Bit Size
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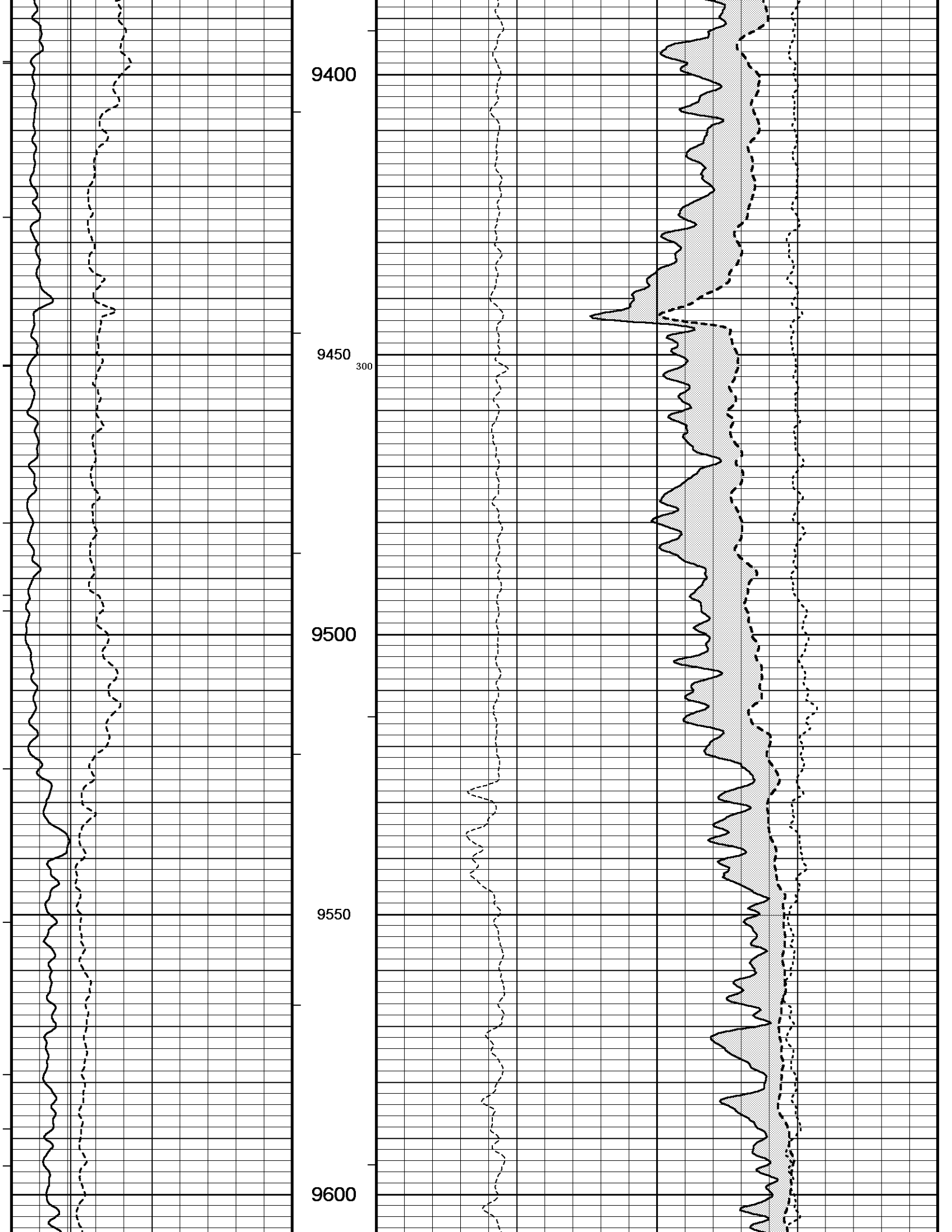
Density Caliper
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.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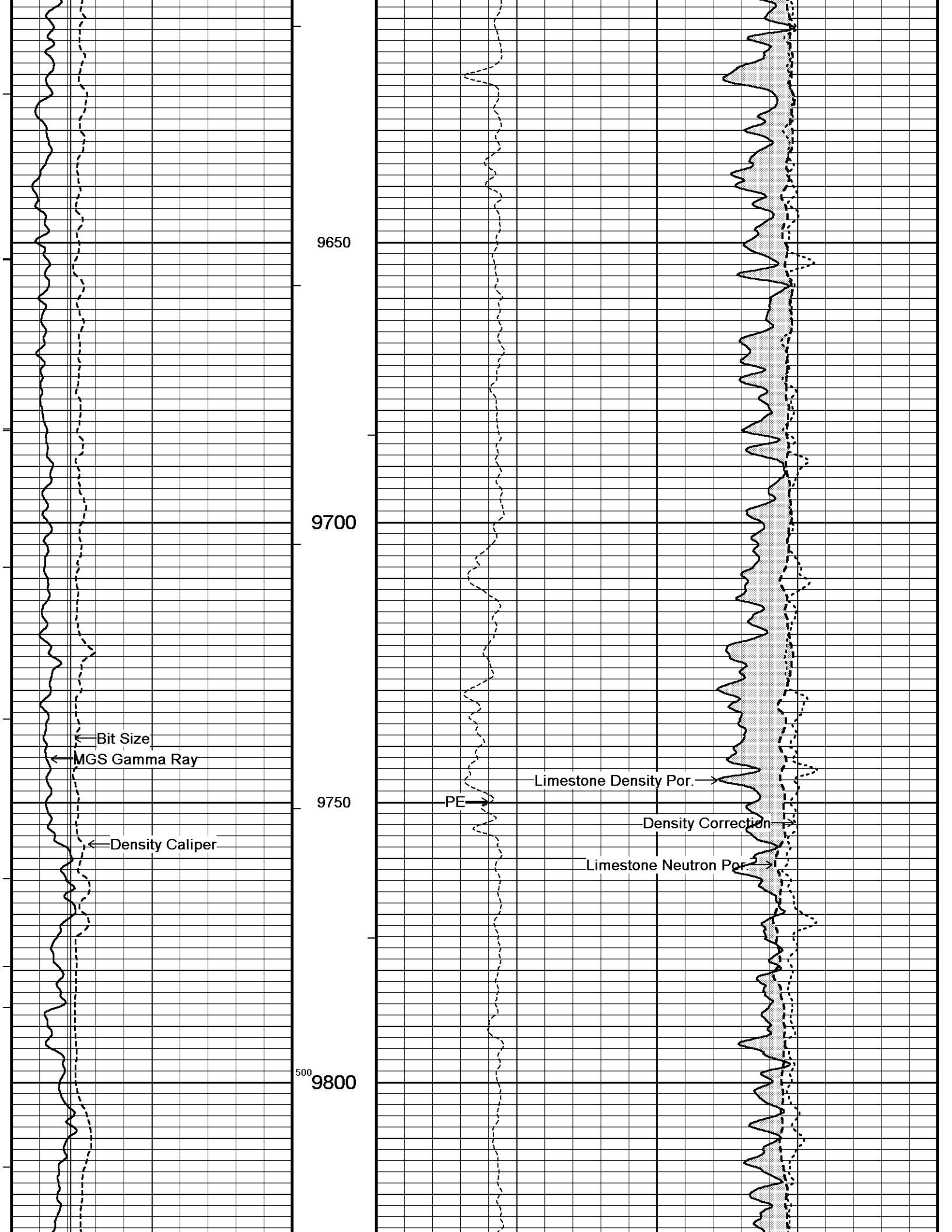
9450
300
9500
9550
9600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9700
9750
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Density Caliper
PE
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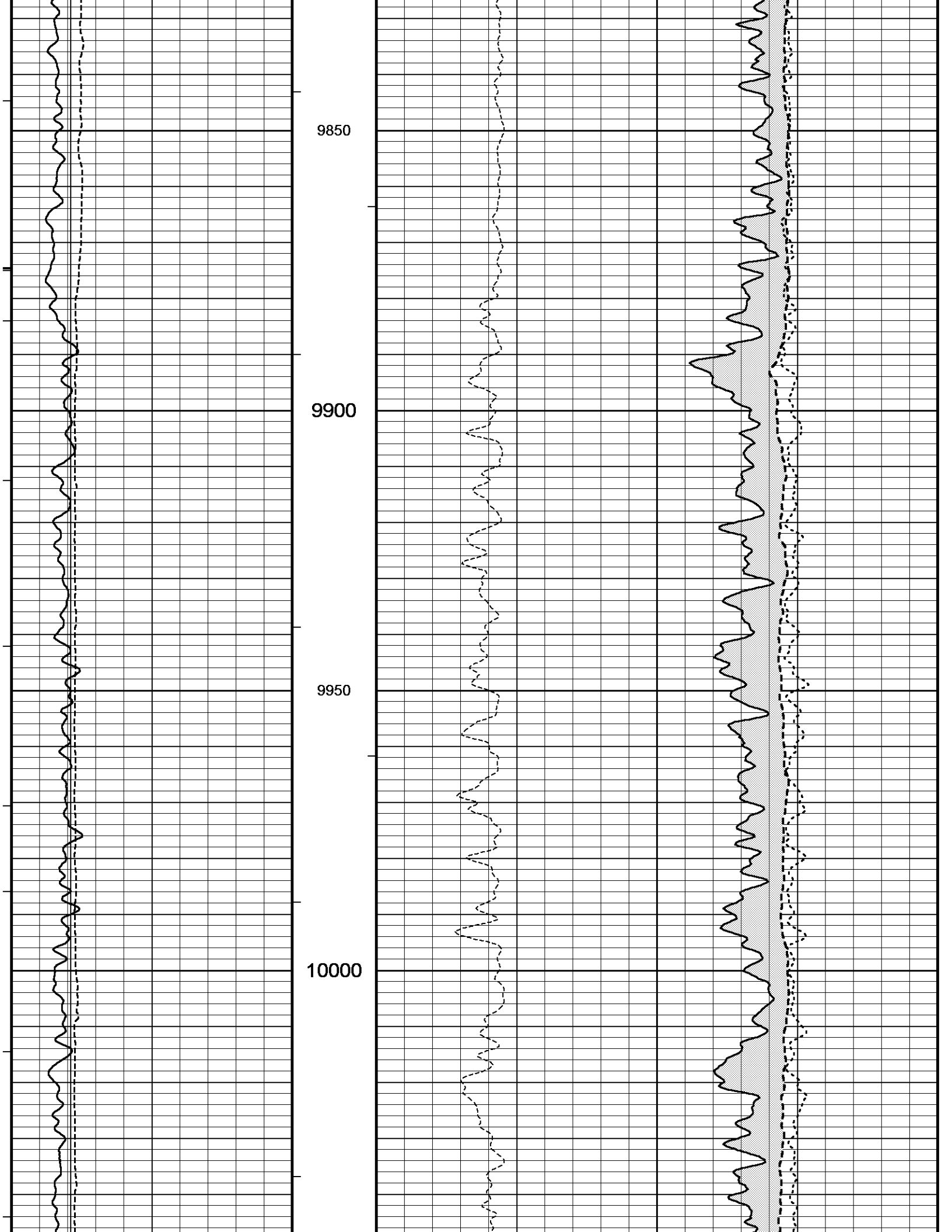
Density Correction
Limestone Neutron Por.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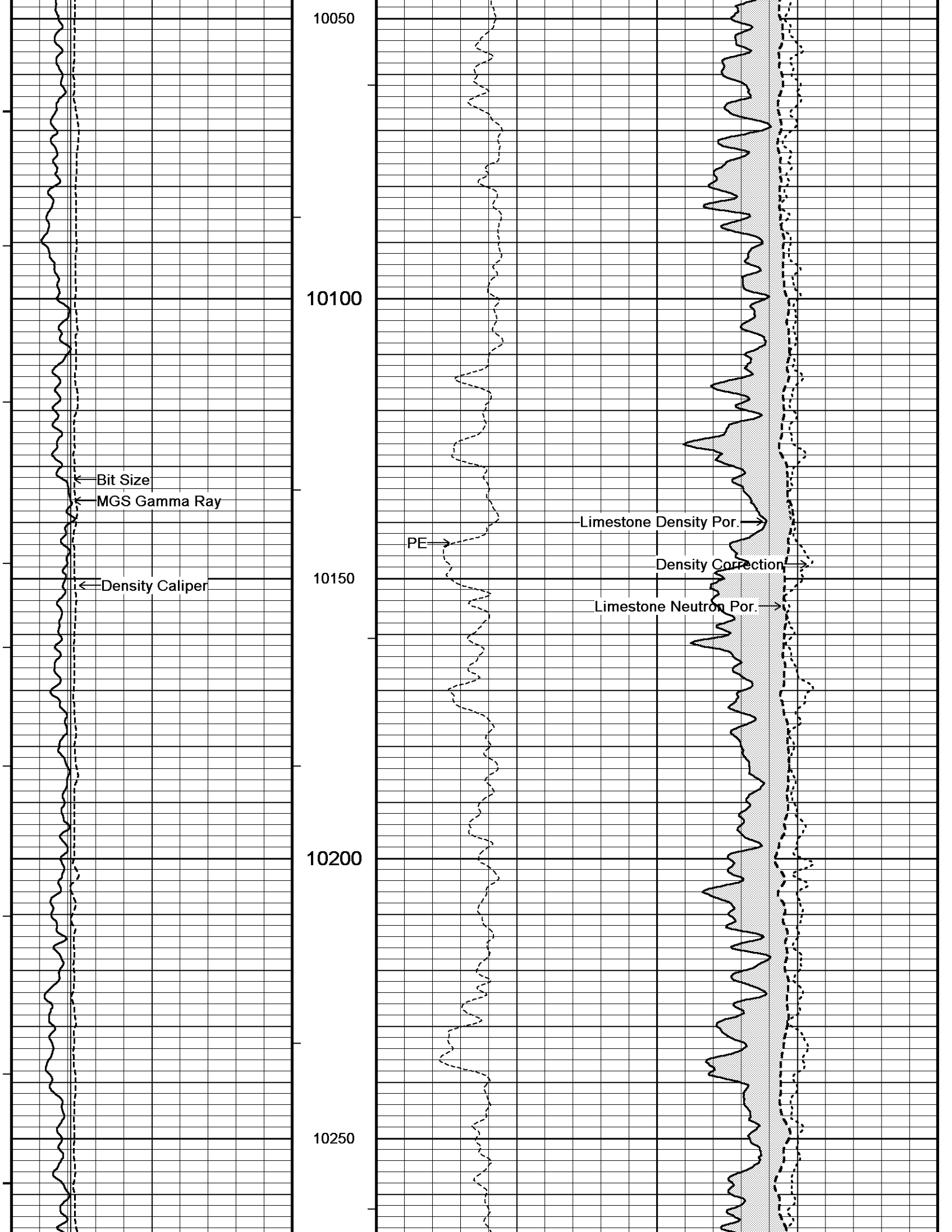
9950
10000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10100
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10200
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Density Correction
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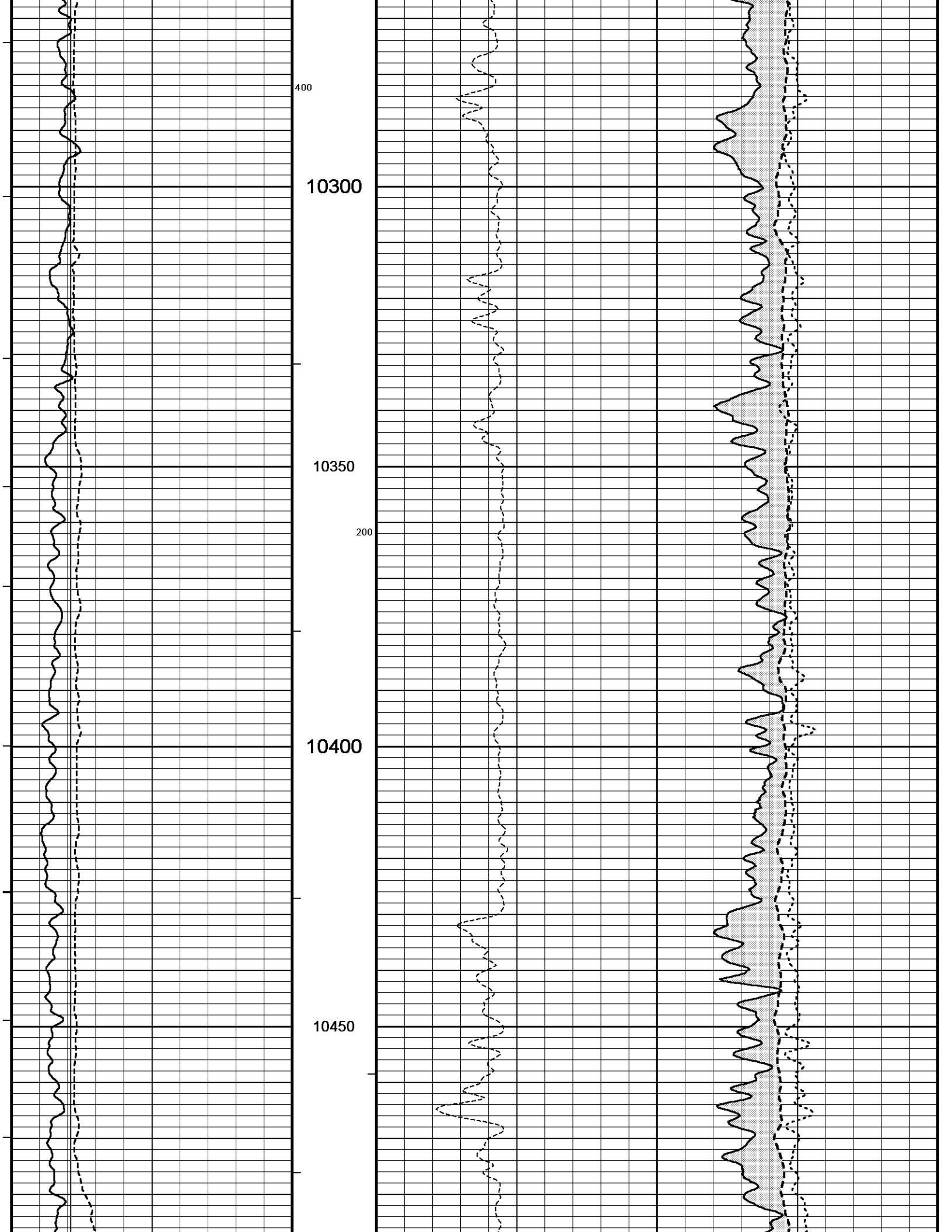
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10350
200
10400
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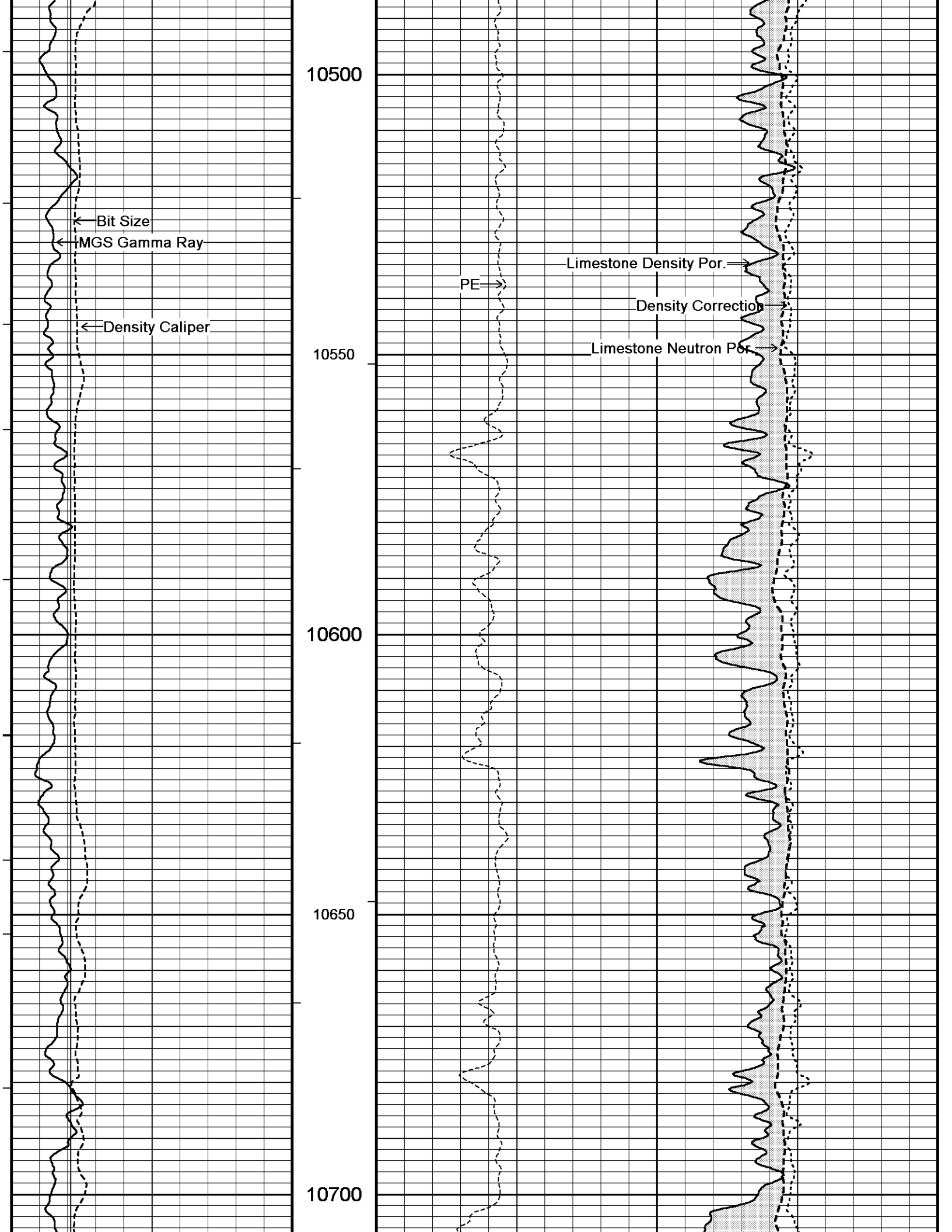
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Density Correction
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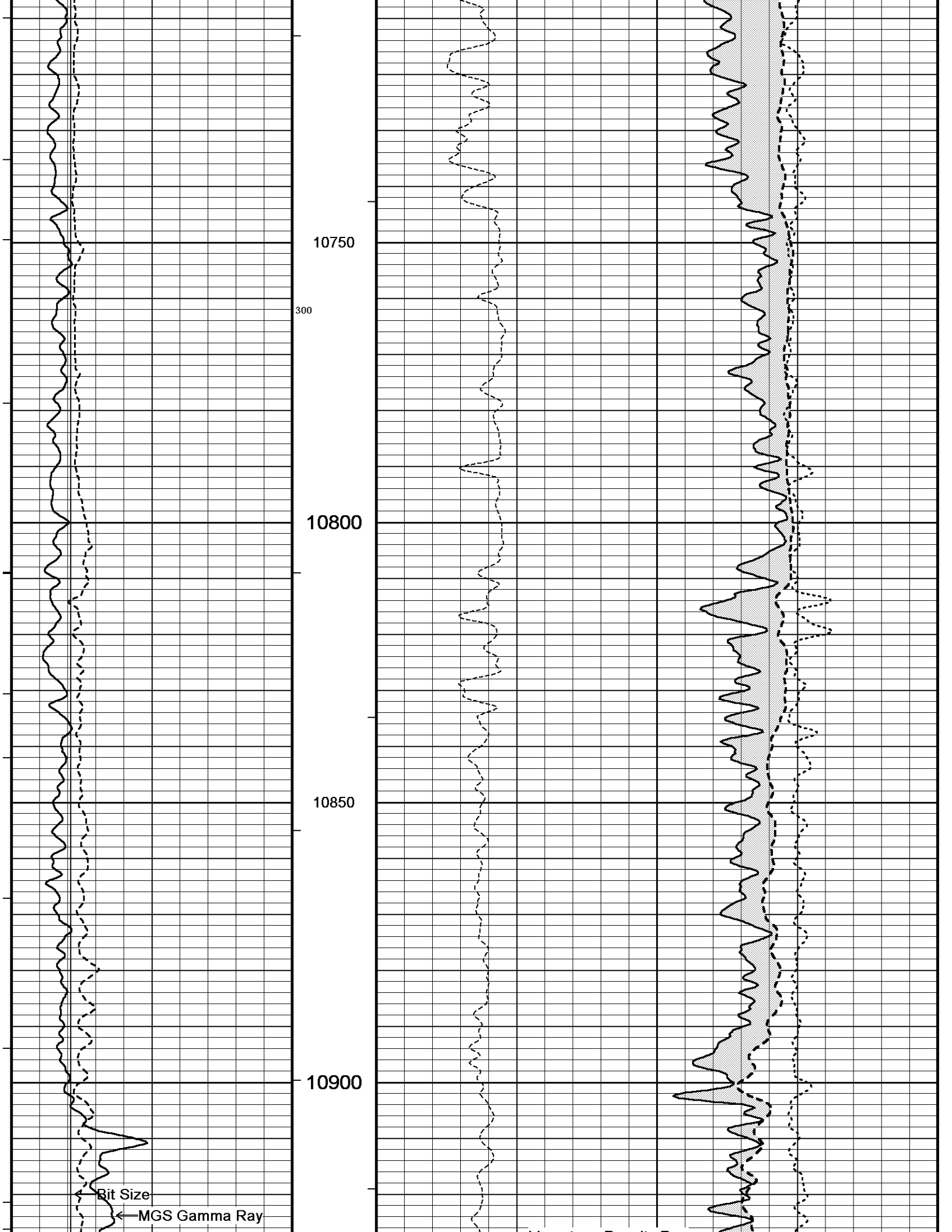
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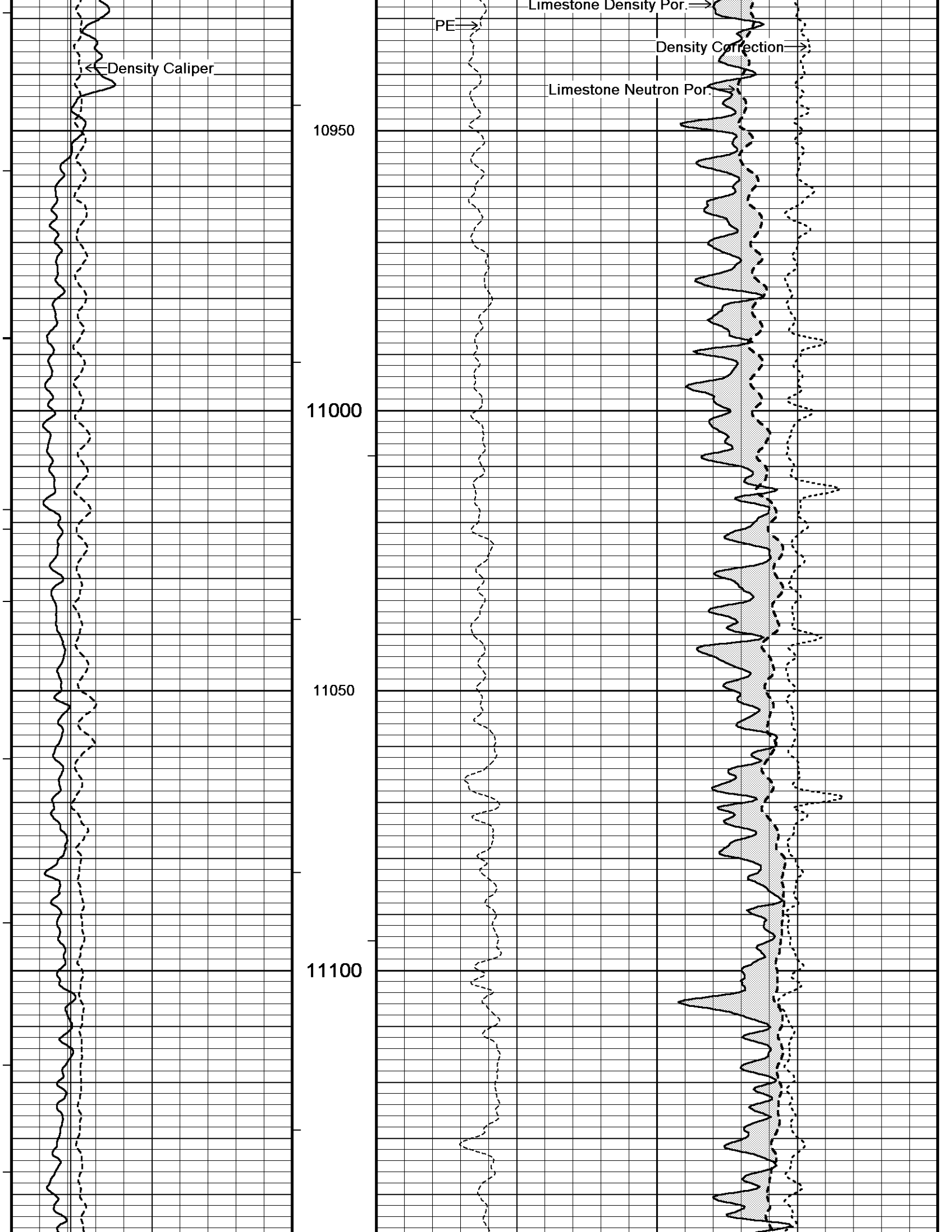
300
10800
10850
10900
Bit Size
MGS Gamma Ray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Density Correction
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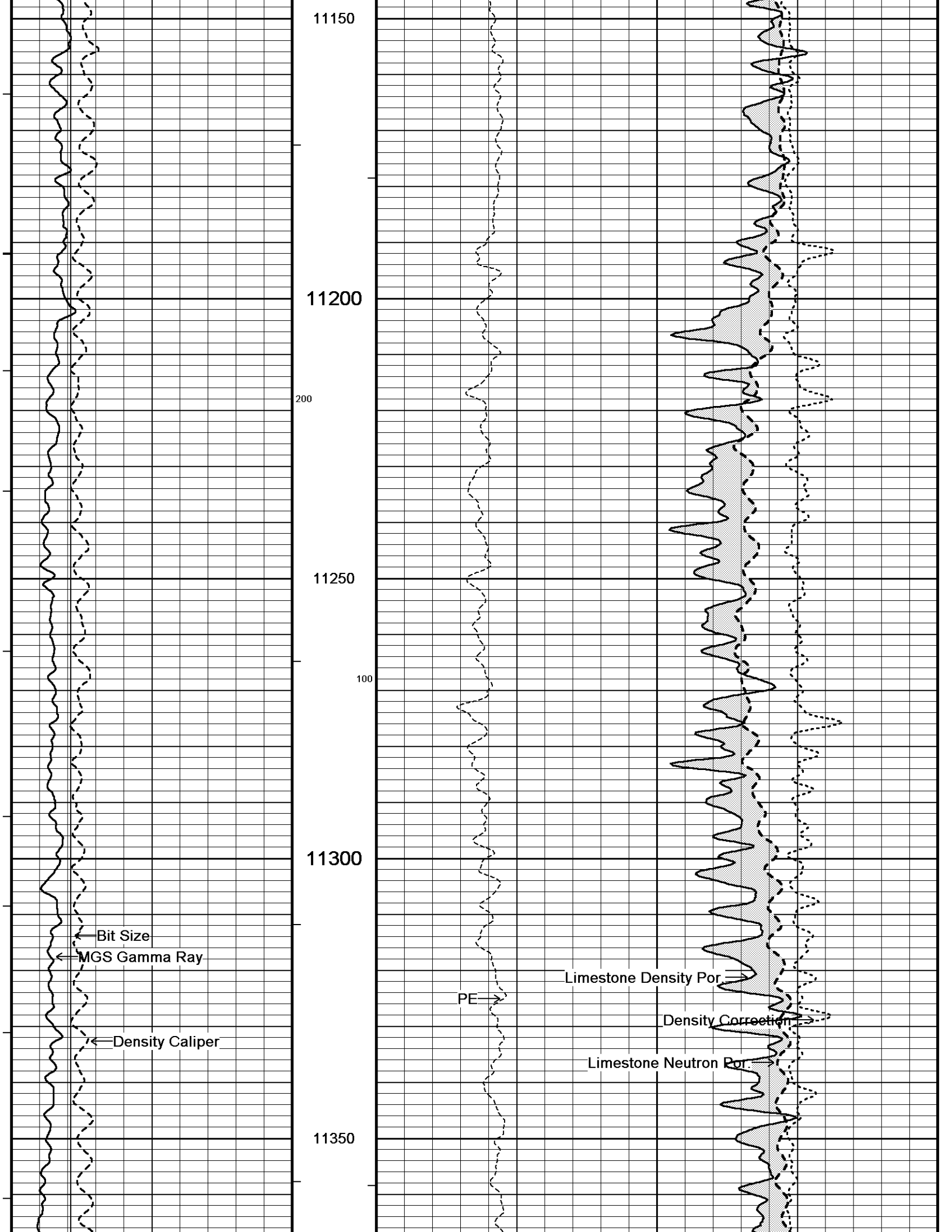
11000
11050
11100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200
11250
100
11300
11350
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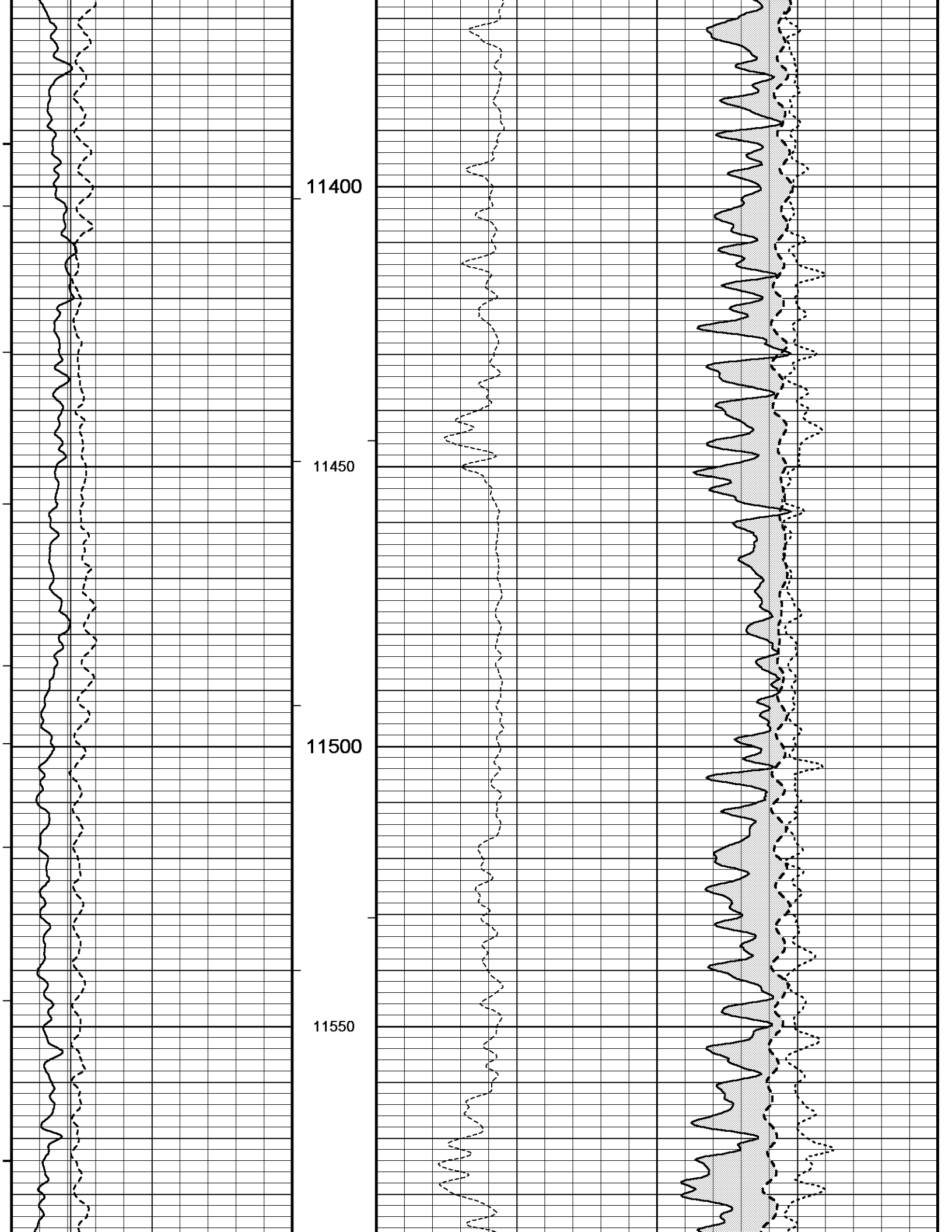
Density Caliper
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.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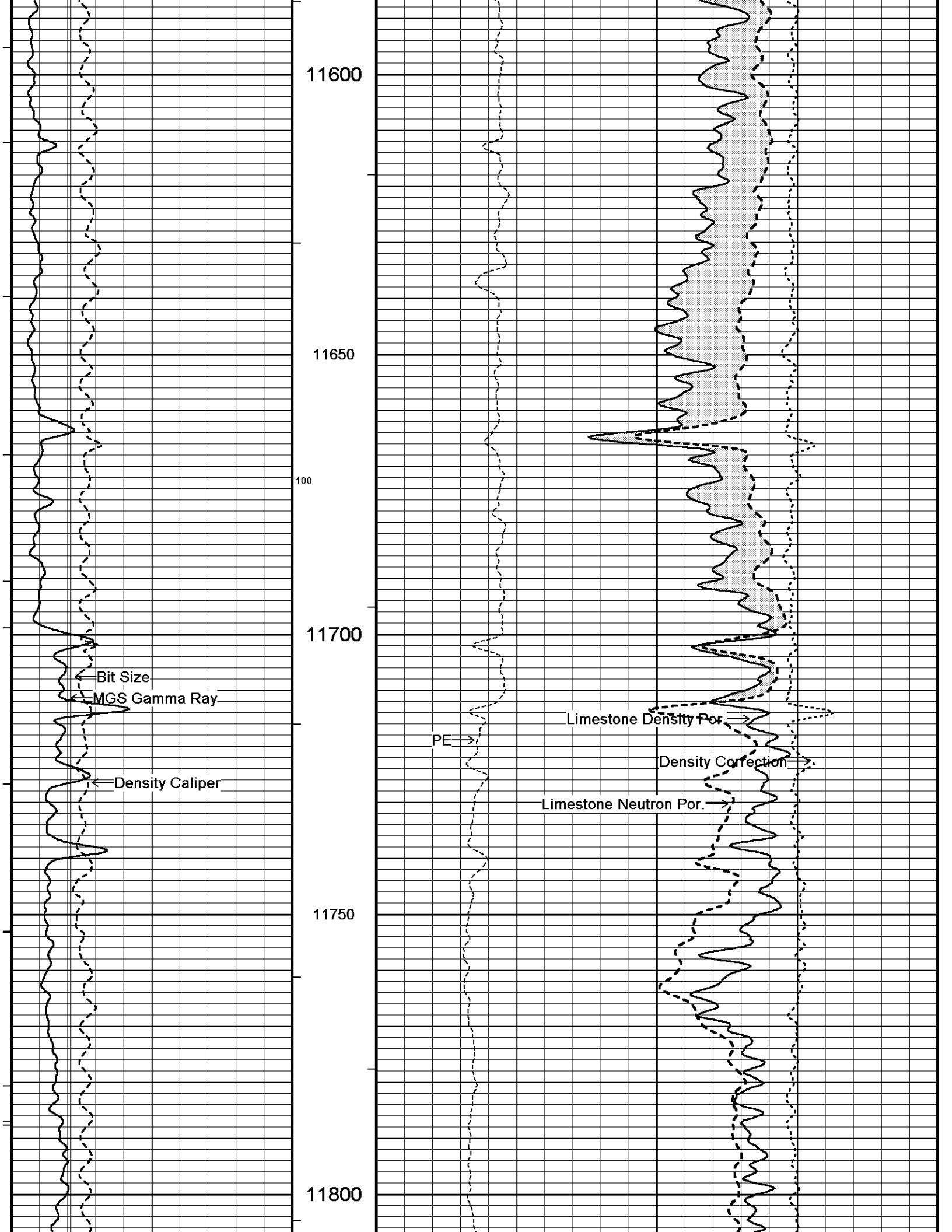
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Density Correction
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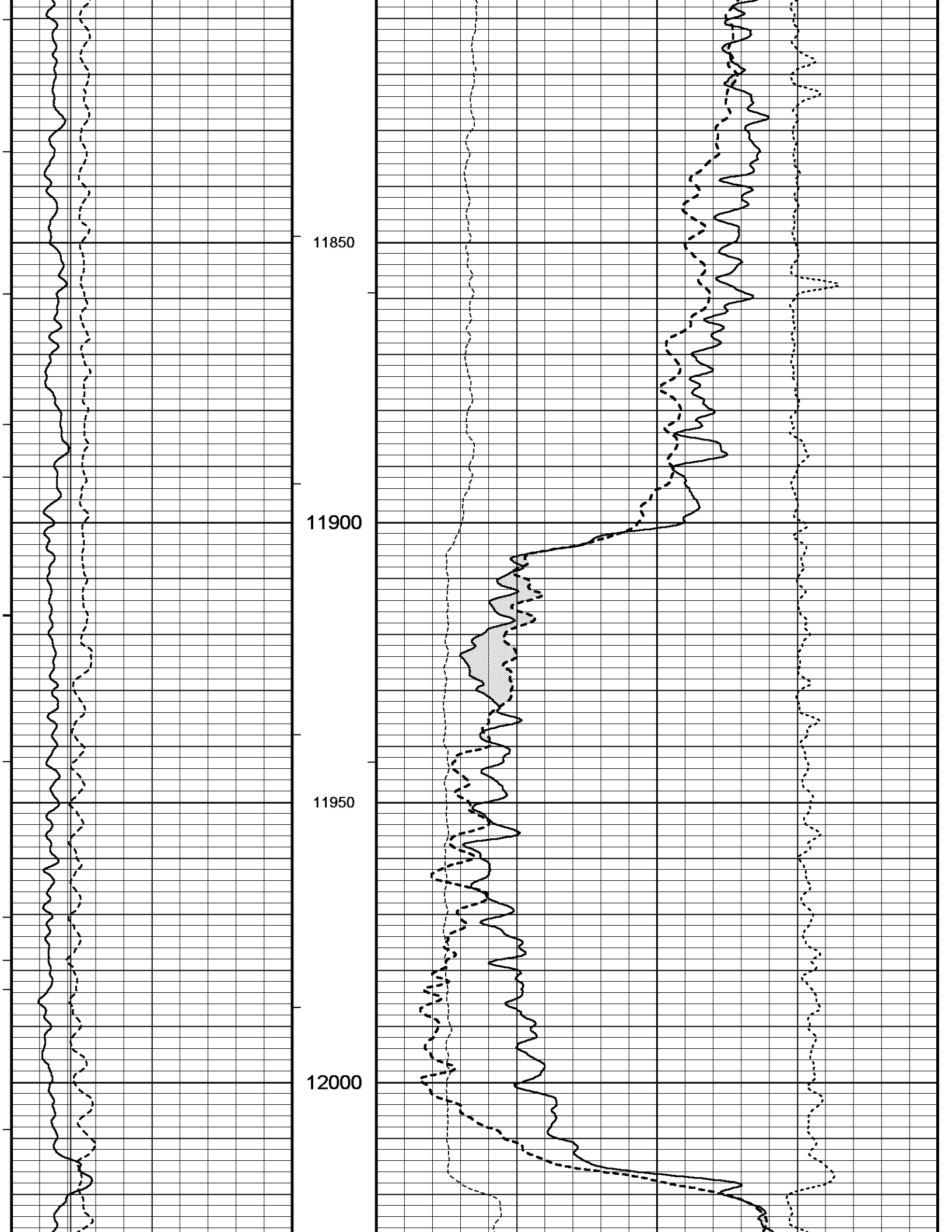
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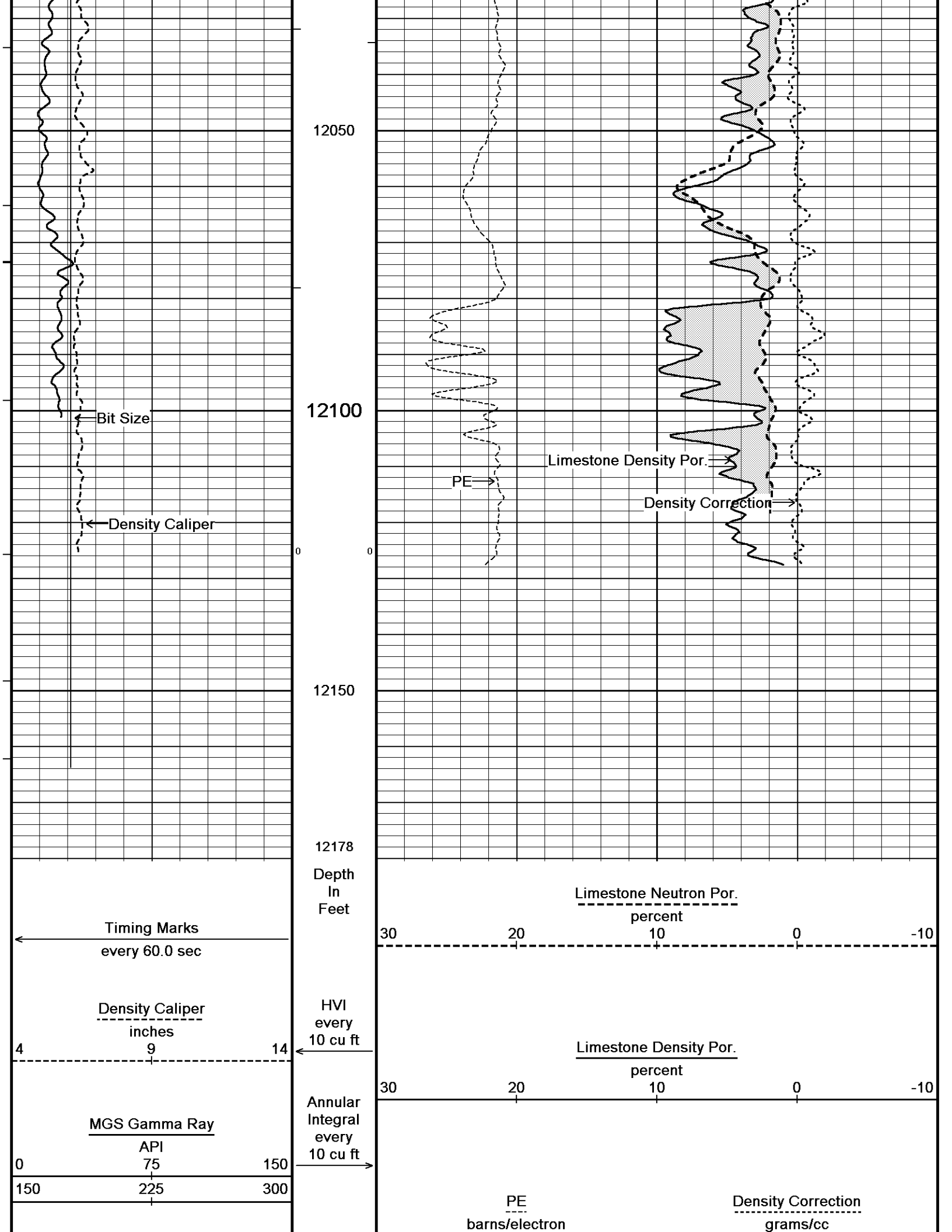
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12150
12178
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Density Caliper
PE
Limestone Density Por.
Density Correction
0
0
Depth
In
Feet
Limestone Neutron Por.
percent
30
20
10
0
-10
Timing Marks
every 60.0 sec
Density Caliper
inches
4
9
14
HVI
every
10 cu ft
Limestone Density Por.
percent
30
20
10
0
-10
MGS Gamma Ray
API
0
75
150
Annular
Integral
every
10 cu ft
150
225
300
PE
barns/electron
Density Correction
grams/cc

Bit Size
inches
4 9 14

Replay
Scale
1:240

0 5 10 -0.25 0 0.25

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 10-AUG-2012 01:09
Filename: C:\Data\Sandridge\Sandridge Sally 3420 1-12H\MMS167 Depthlog.dta
Recorded on 10-AUG-2012 00:29
System Versions: Processed with 12.02.4401 Plotted with 12.02.4401

5 INCH MAIN PASS DSC

5 INCH BULK DENSITY DSC

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 10-AUG-2012 01:09
Filename: C:\Data\Sandridge\Sandridge Sally 3420 1-12H\MMS167 Depthlog.dta
Recorded on 10-AUG-2012 00:29
System Versions: Processed with 12.02.4401 Plotted with 12.02.4401

Timing Marks
every 60.0 sec

Depth
In
Feet

Compensated Density
grams/cc
2 2.25 2.50 2.75 3

Density Caliper
inches
4 9 14

HVI
every
10 cu ft

Limestone Density Por.
percent
30 20 10 0 -10

MGS Gamma Ray
API
0 75 150
150 225 300

Annular
Integral
every
10 cu ft

PE
barns/electron
0 5 10

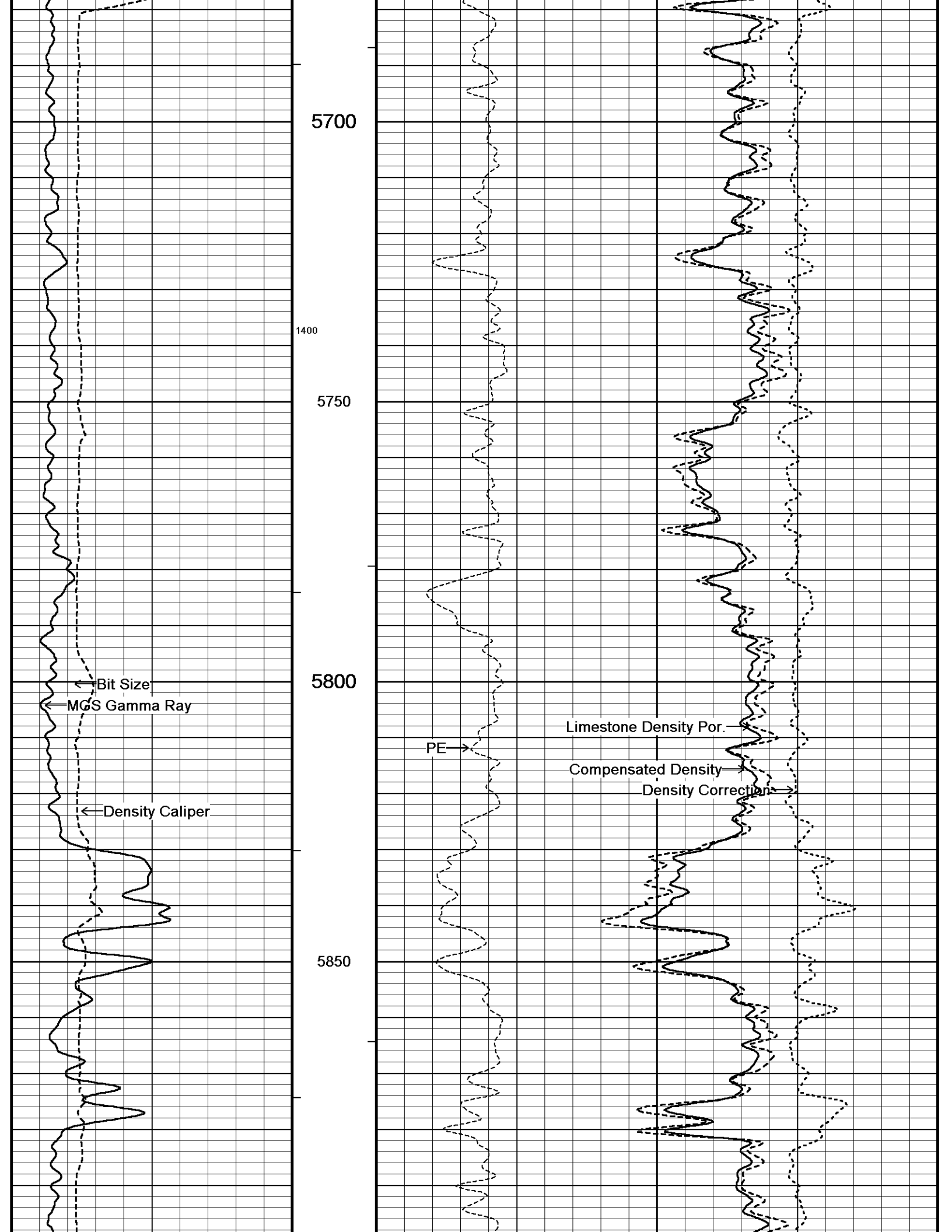
Density Correction
grams/cc
-0.25 0 0.25

Bit Size
inches
4 9 14

Replay
Scale
1:240

5600

5650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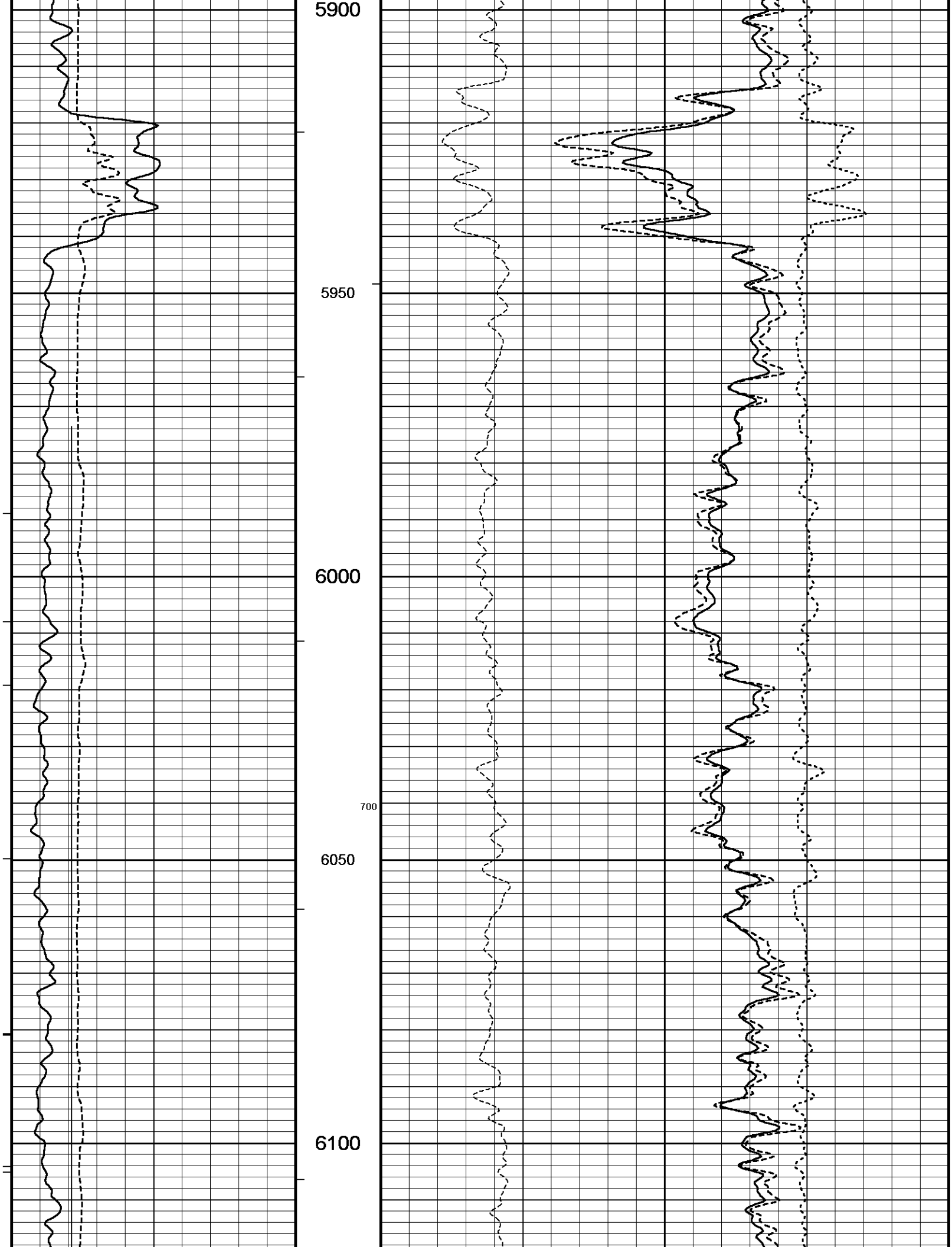
5750
5800
5850
Bit Size
MGS Gamma Ray
Density Caliper
PE
Limestone Density Por.
Compensated Density
Density Correction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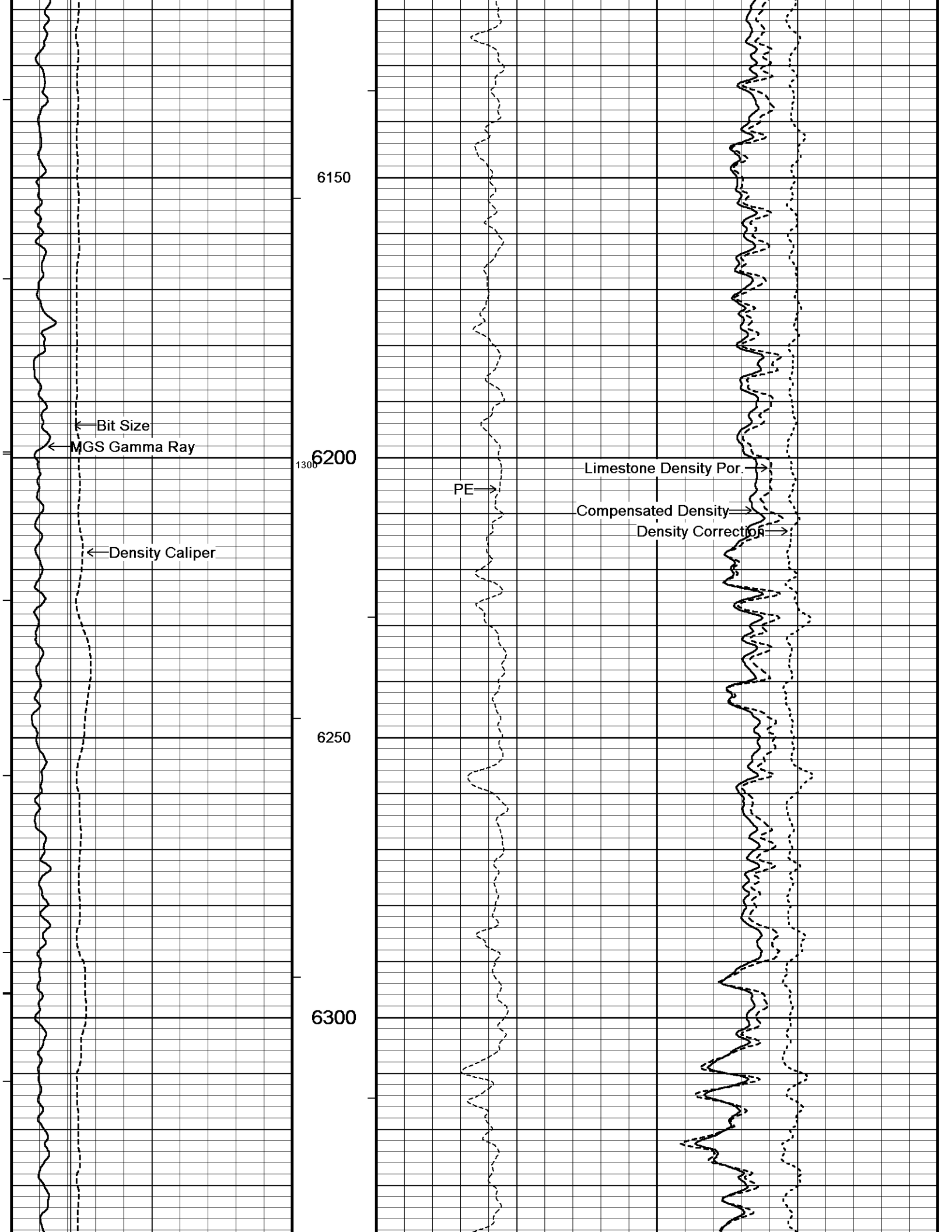
5950
6000
700
6050
6100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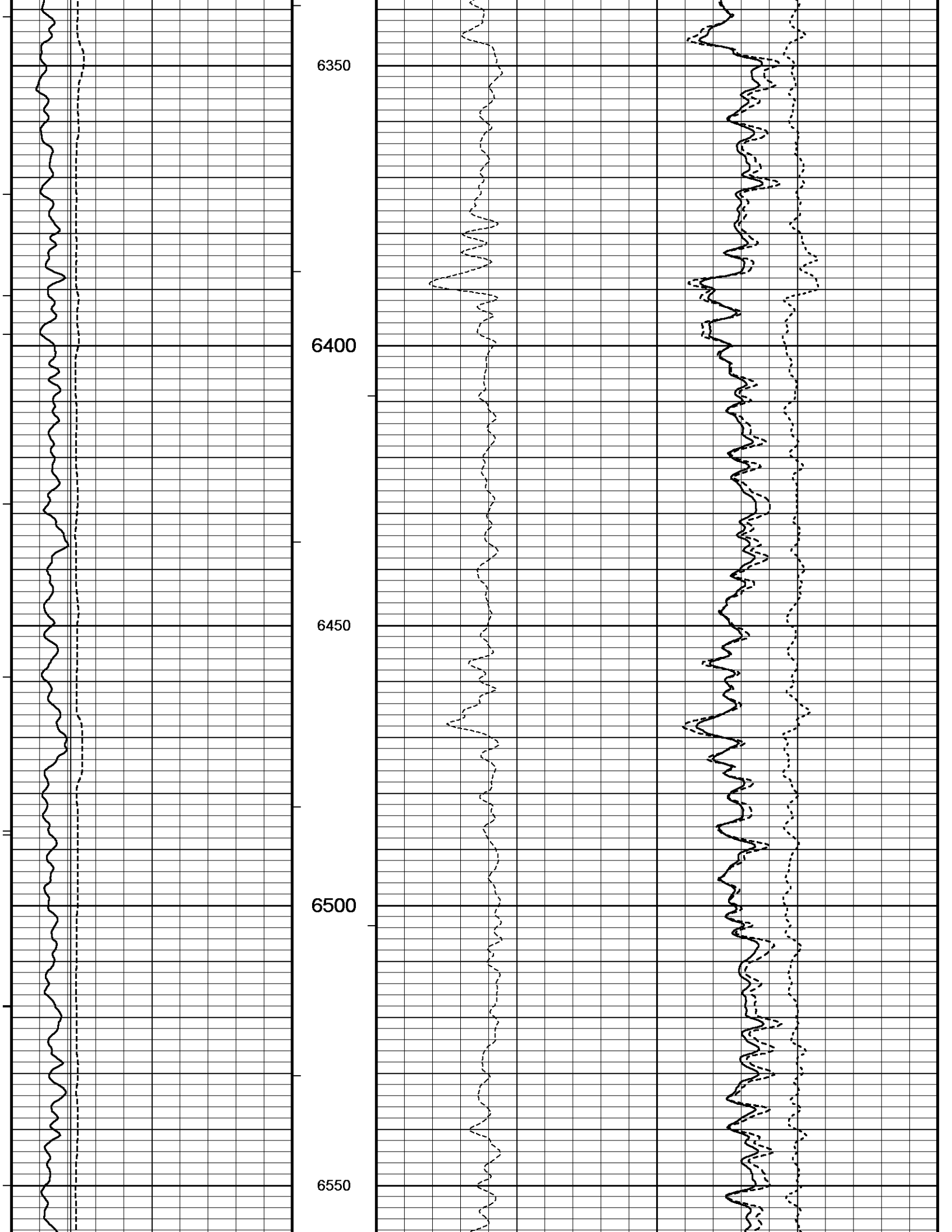
6200
6250
6300
1300
Bit Size
MGS Gamma Ray
Density Caliper
PE
Limestone Density Por.
Compensated Density
Density Correction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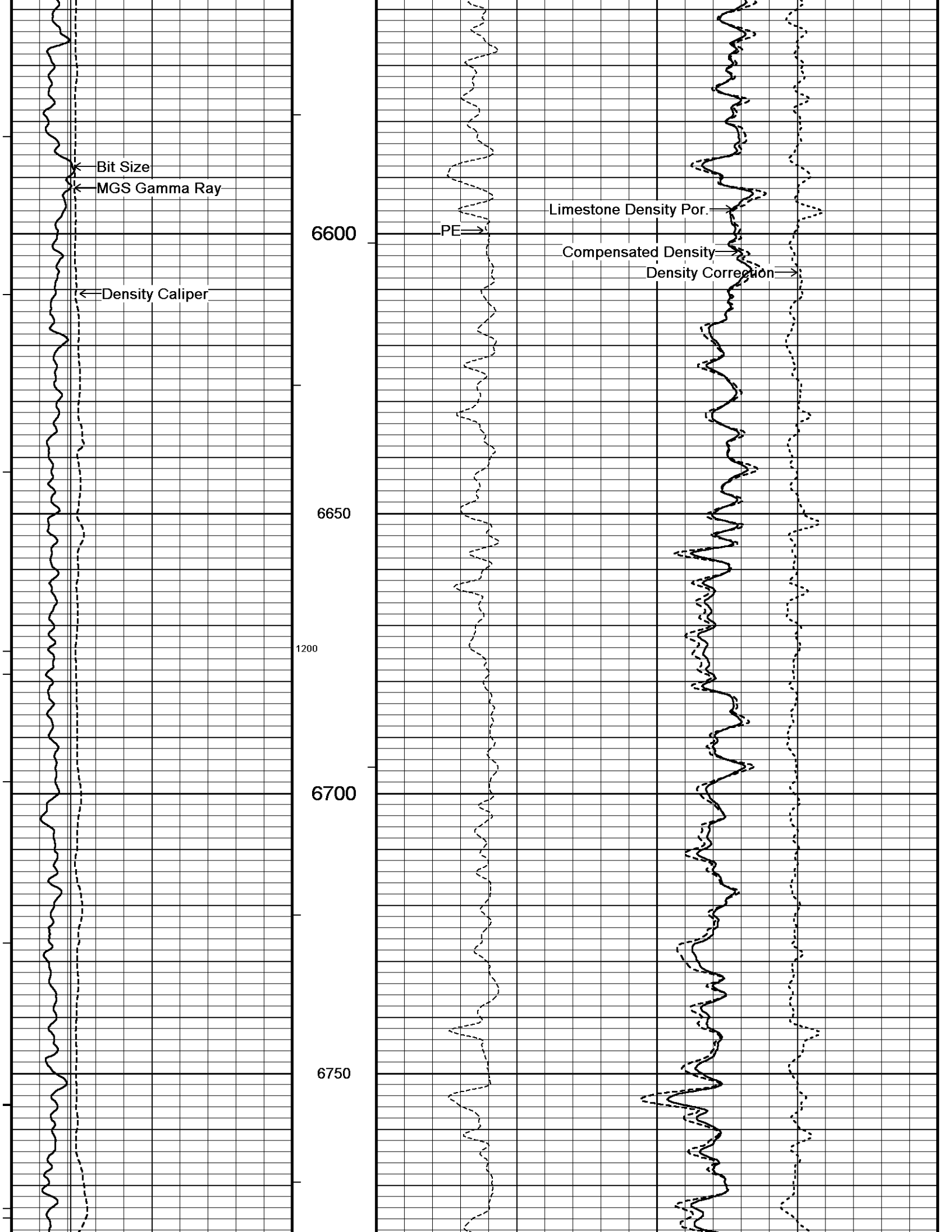
6400
6450
6500
6550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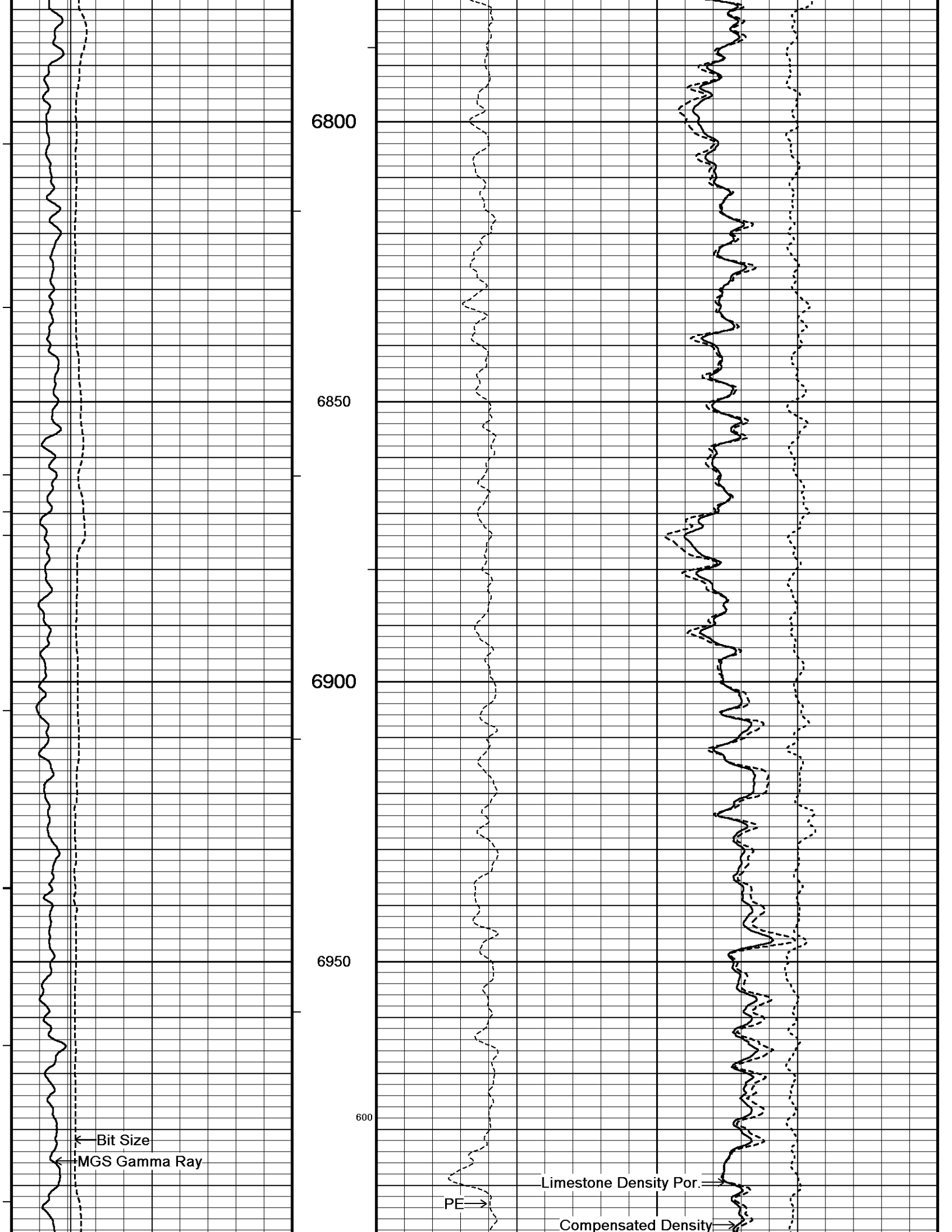
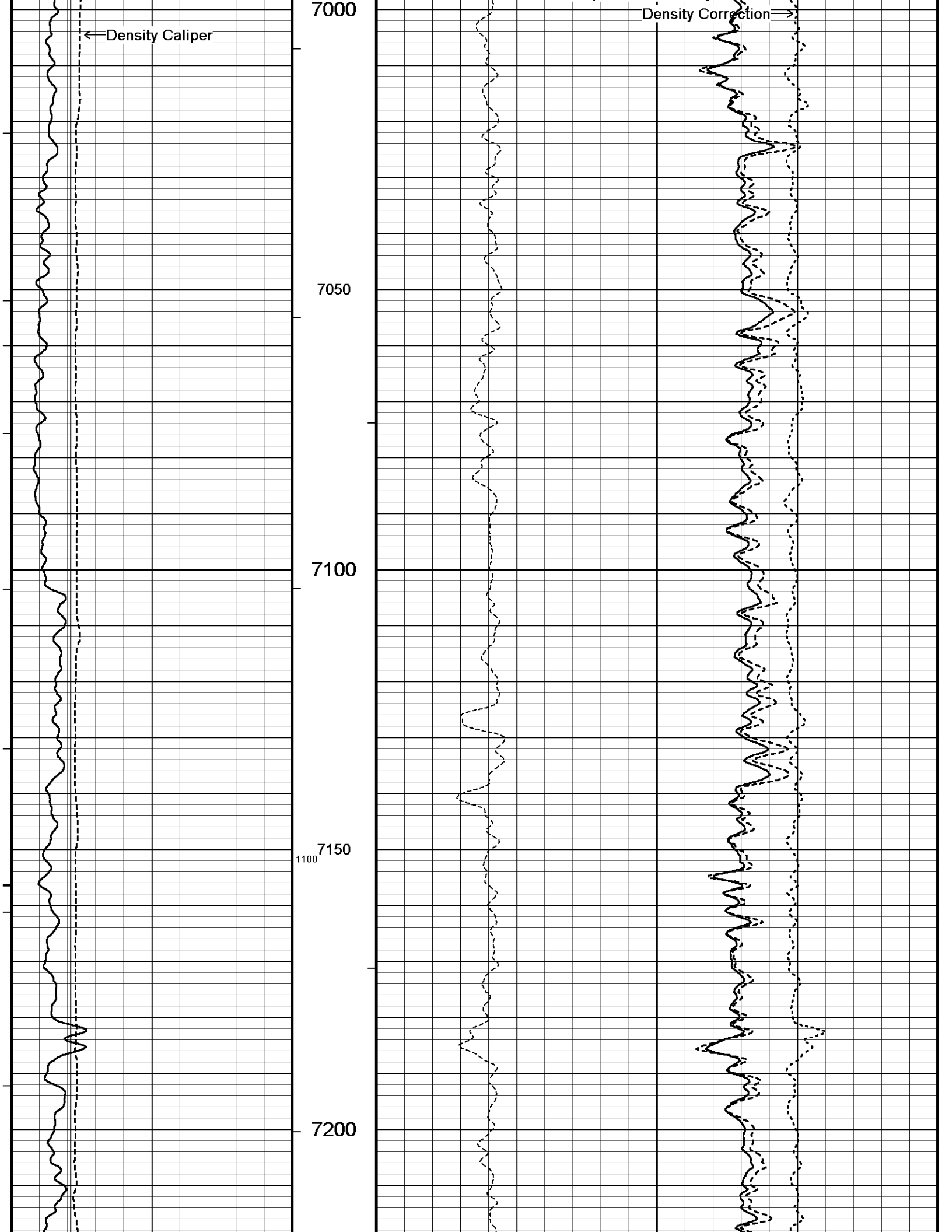
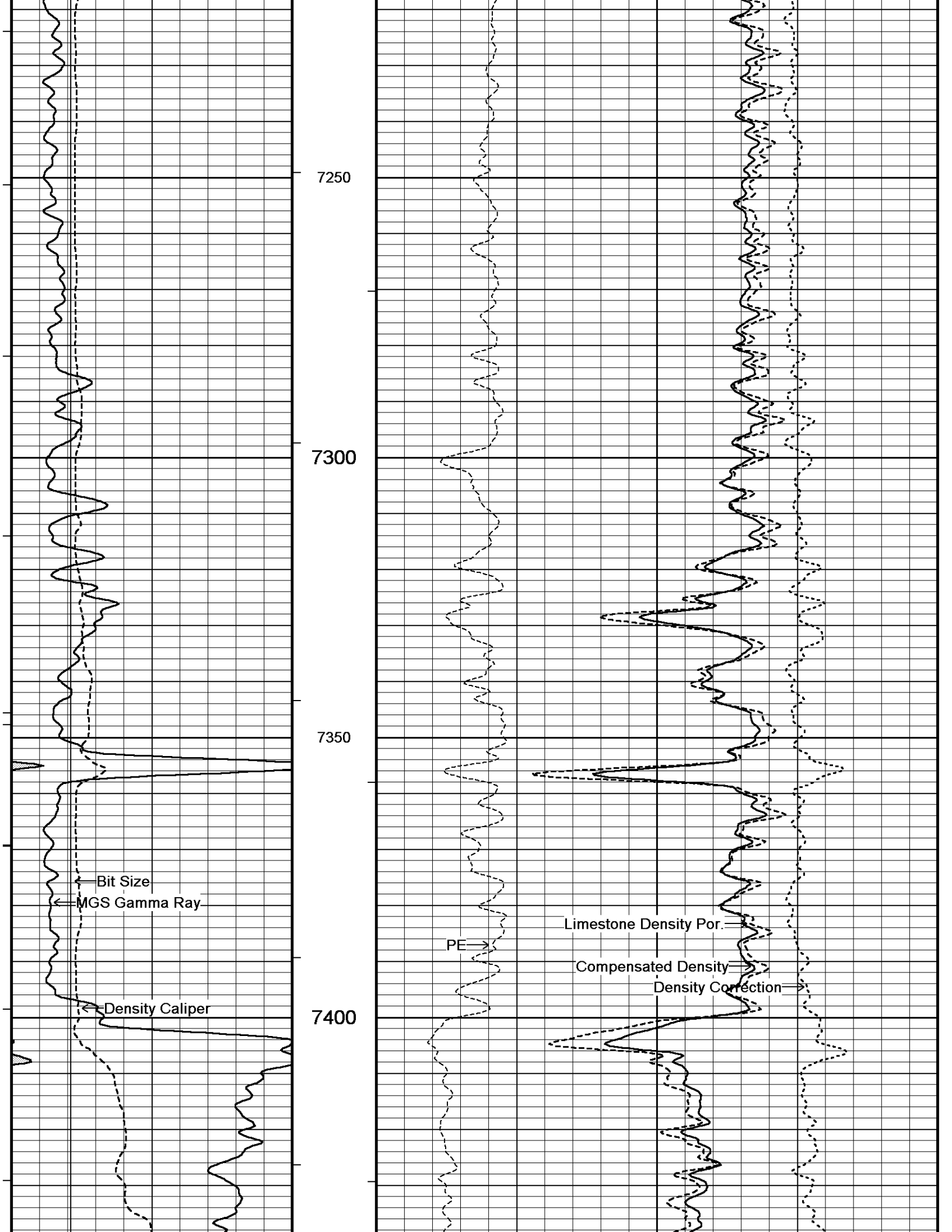
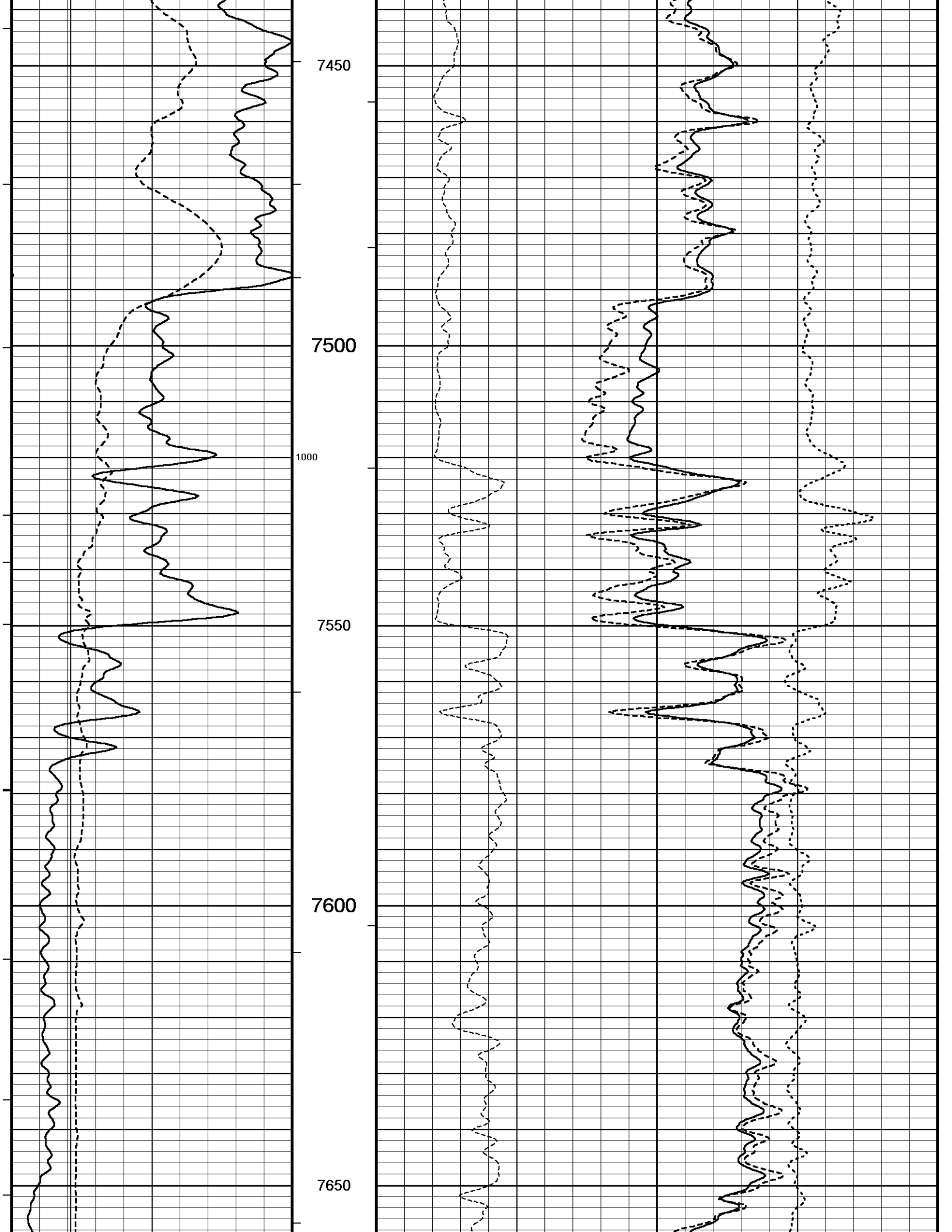
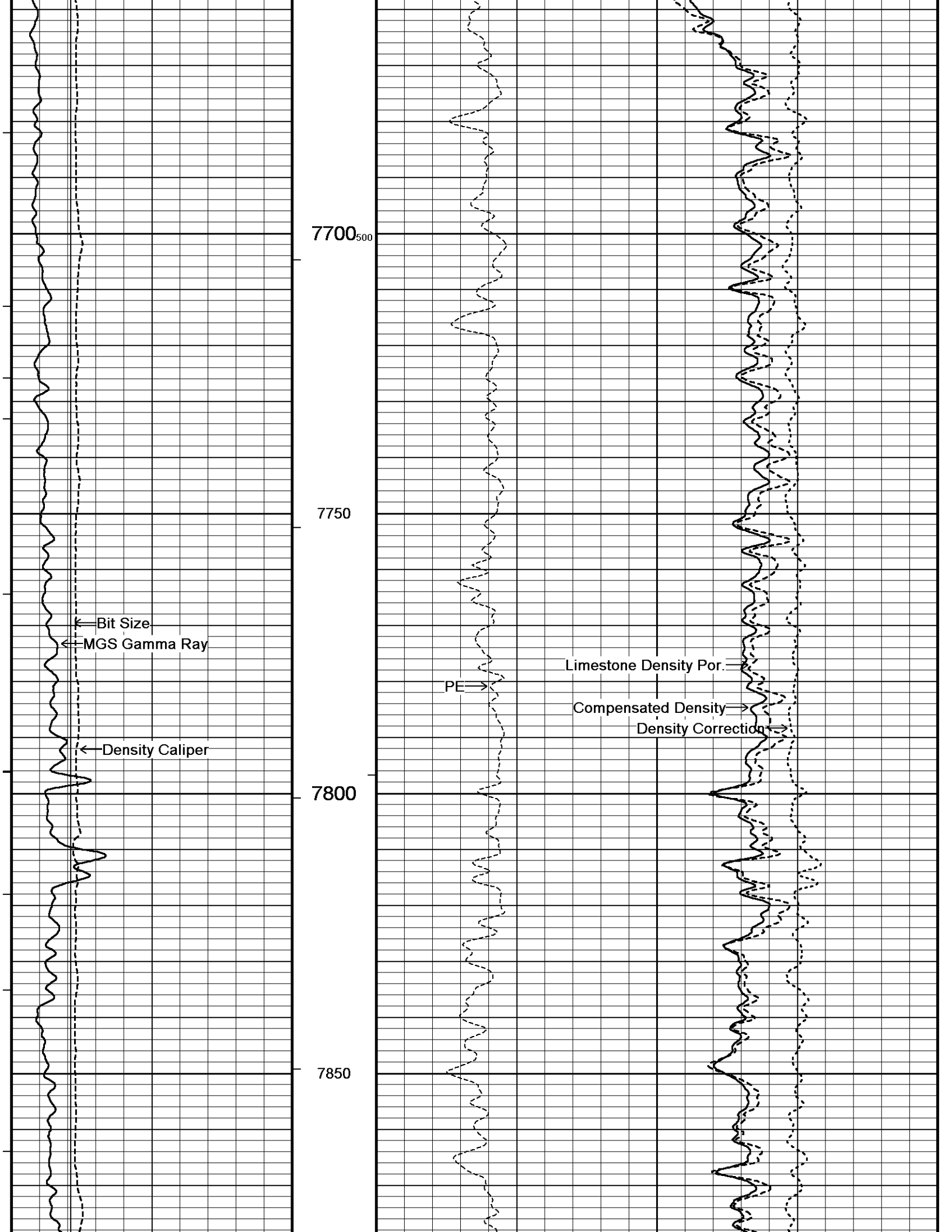
Density Caliper
6600
6650
1200
6700
6750
PE
Limestone Density Por.
Compensated Density
Density Correction

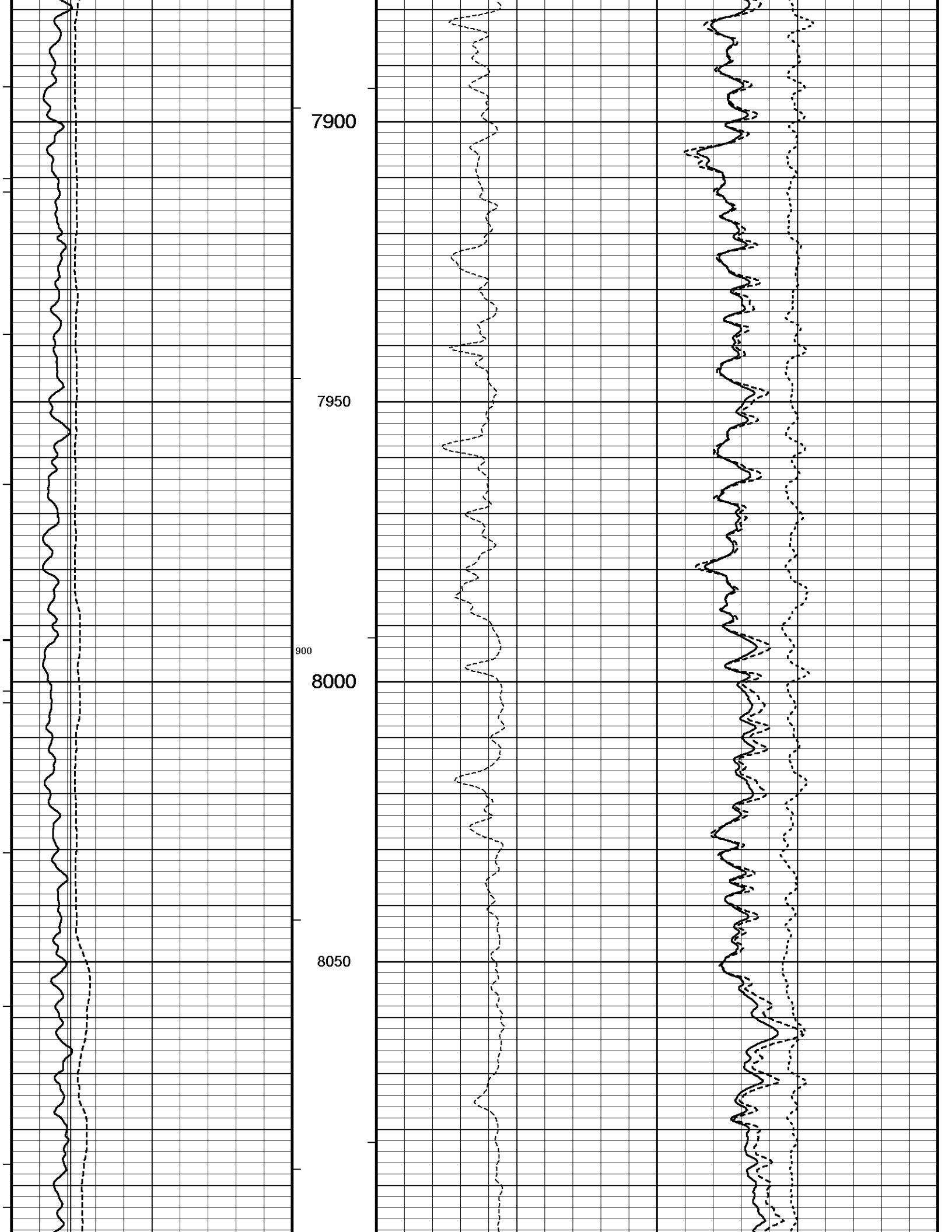

6800
6850
6900
6950
600
Bit Size
MGS Gamma Ray
PE
Limestone Density Por.
Compensated Density

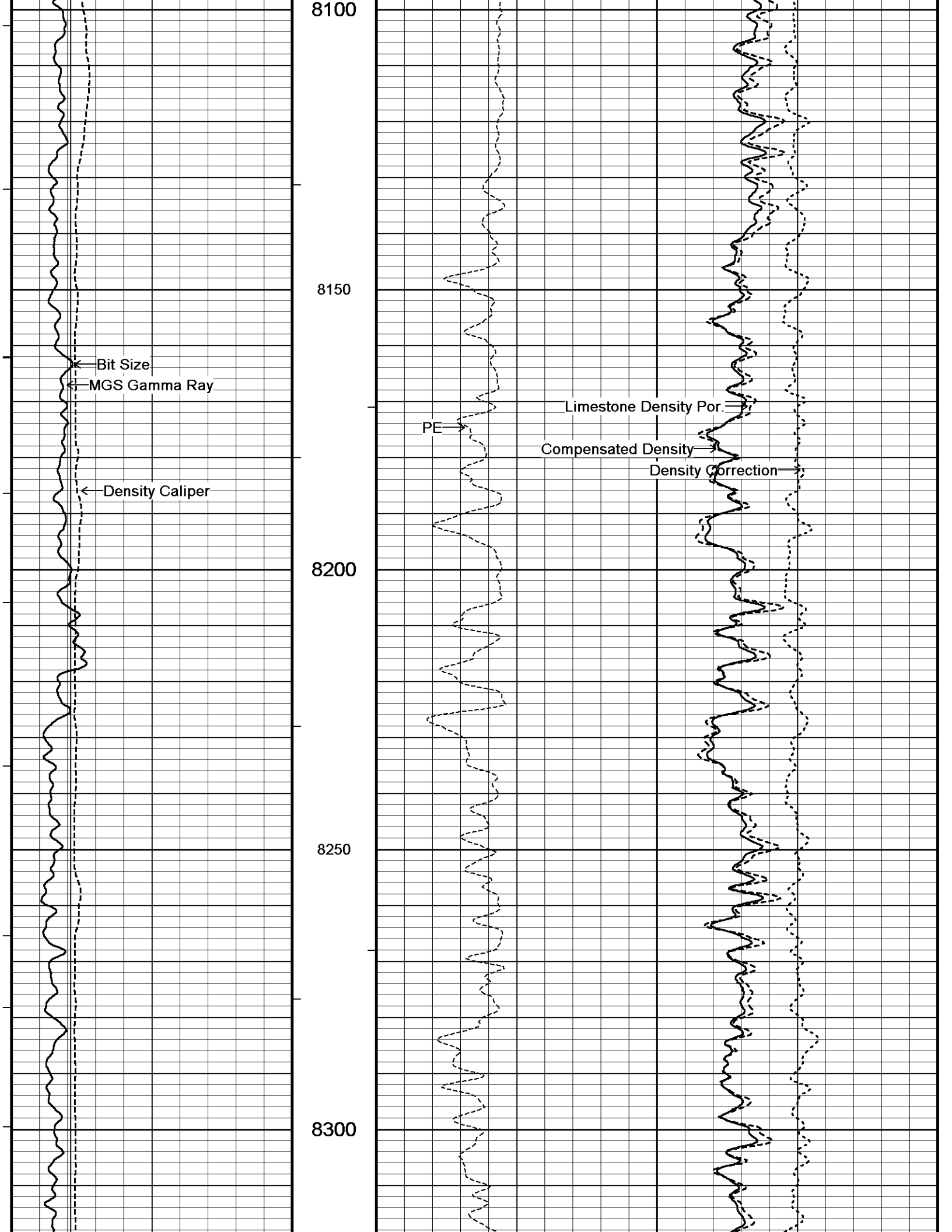

Density Caliper
Density Correction
7000
7050
7100
7150
1100
7200

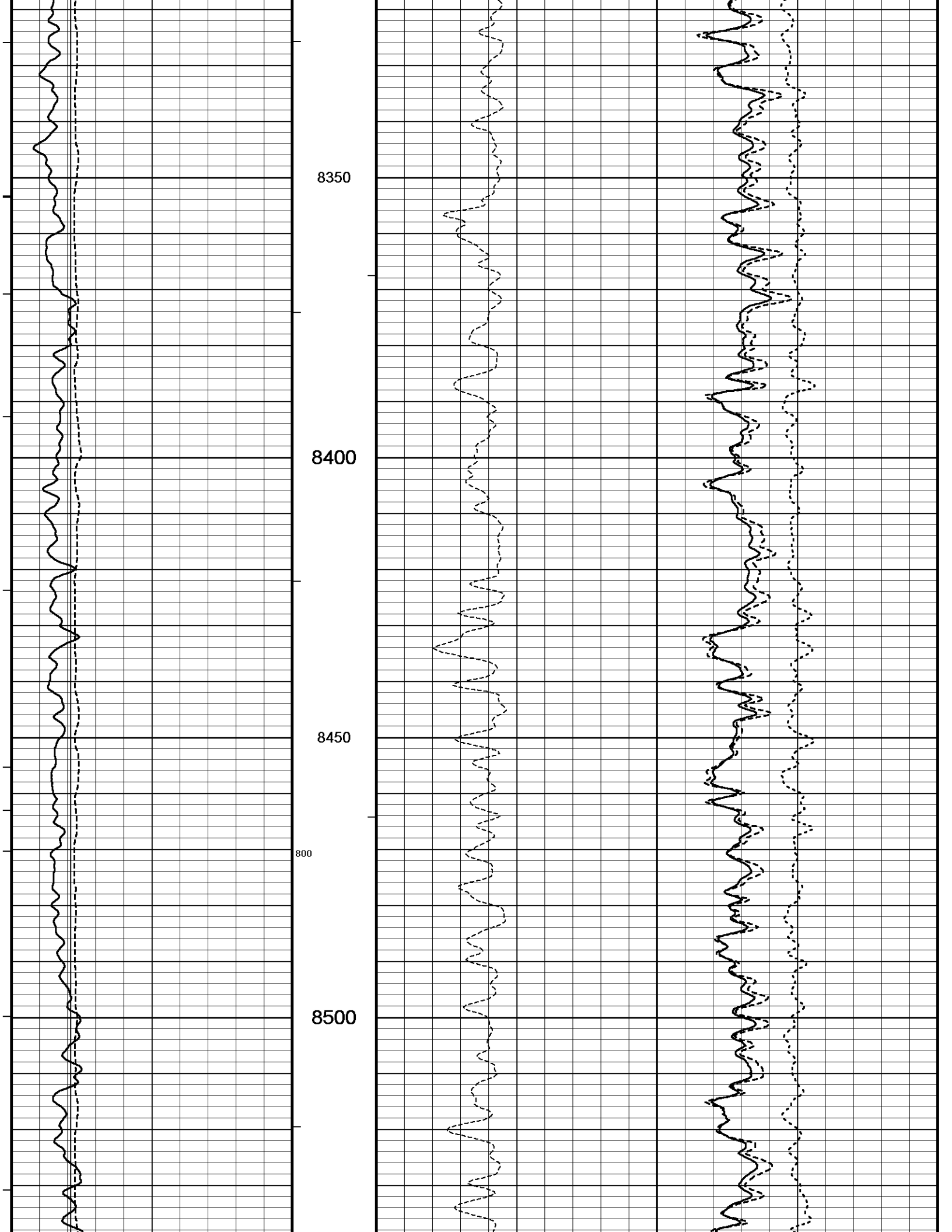

7250
7300
7350
7400
Bit Size
MGS Gamma Ray
Density Caliper
PE
Limestone Density Por.
Compensated Density
Density Correction

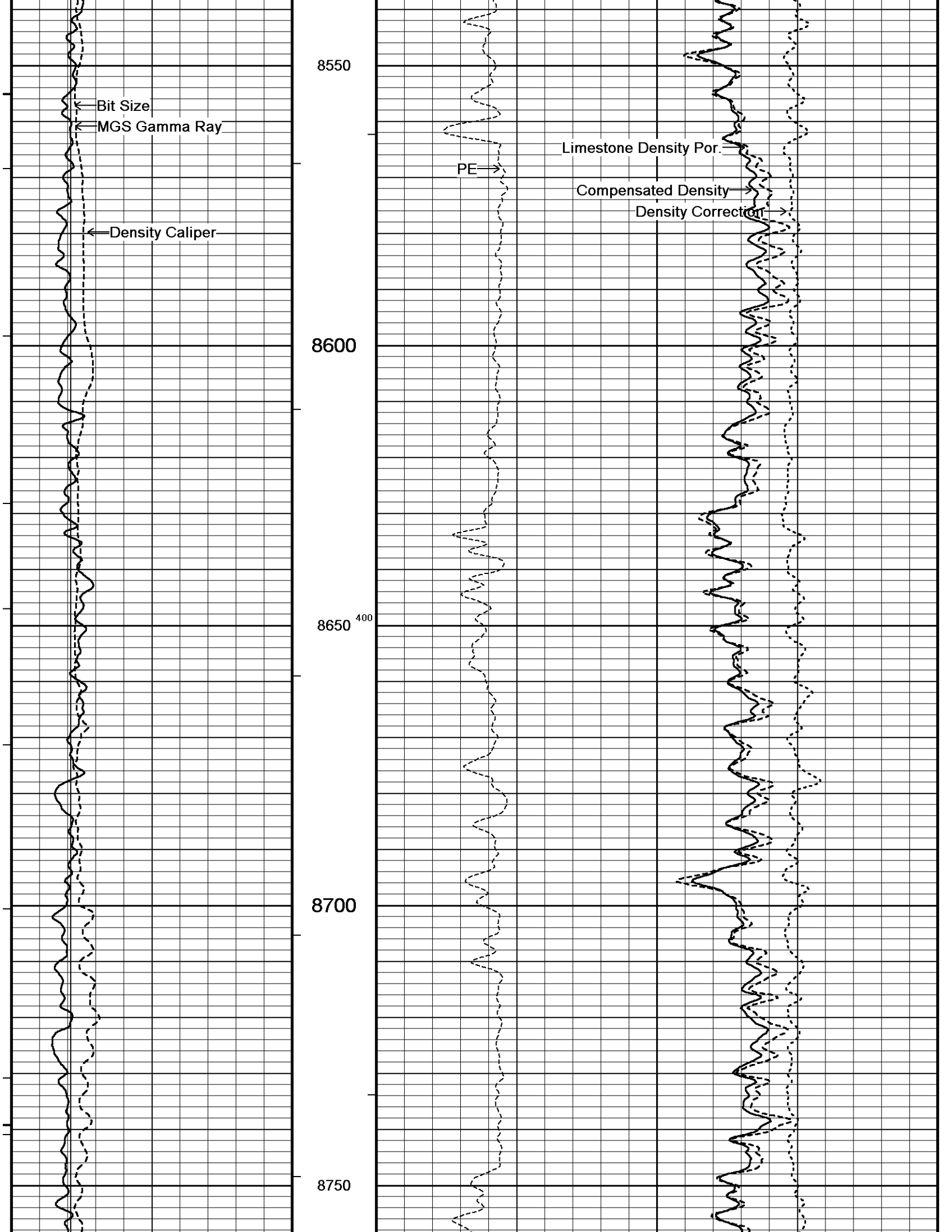

7450
7500
1000
7550
7600
7650

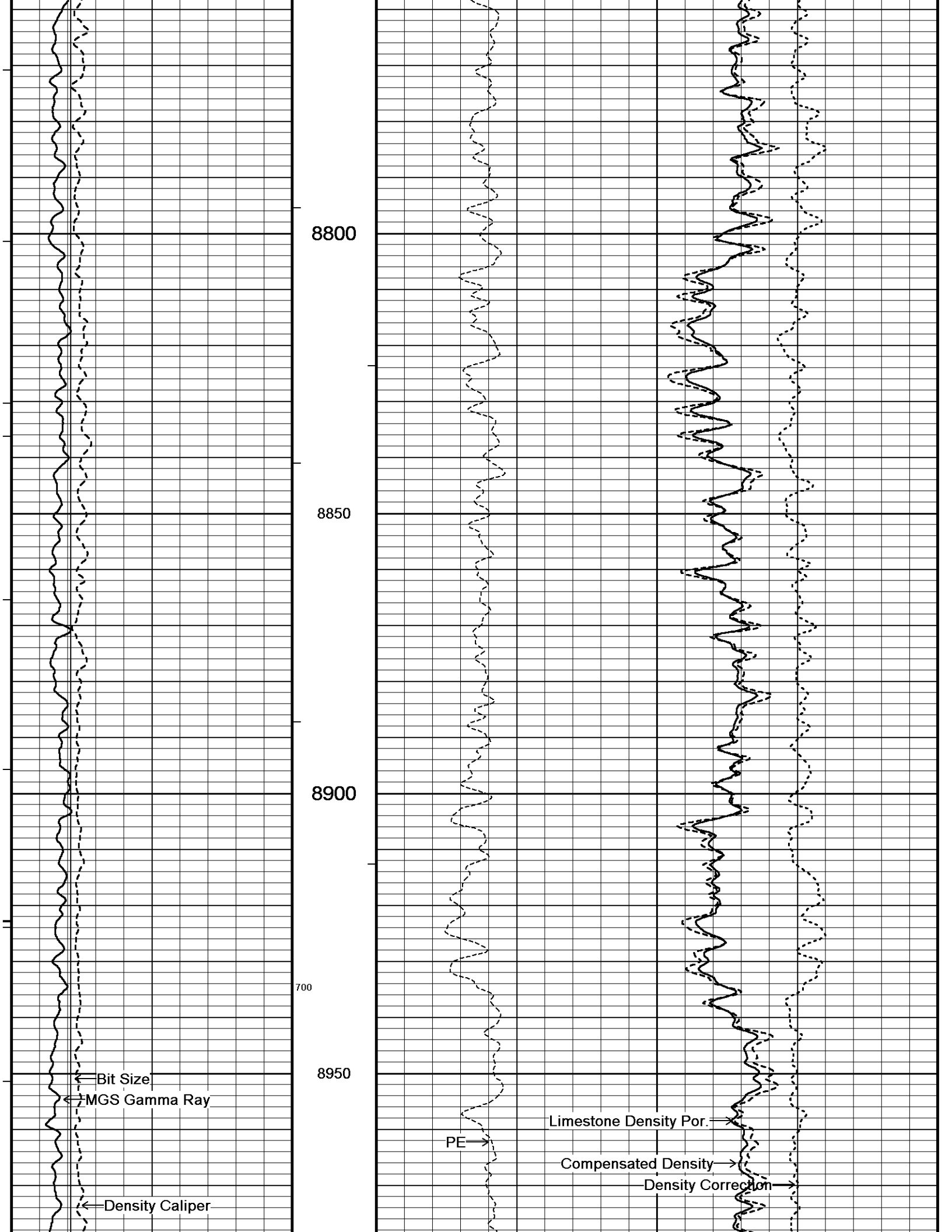

7700
500
7750
7800
7850
Bit Size
MGS Gamma Ray
Density Caliper
PE
Limestone Density Por.
Compensated Density
Density Correction

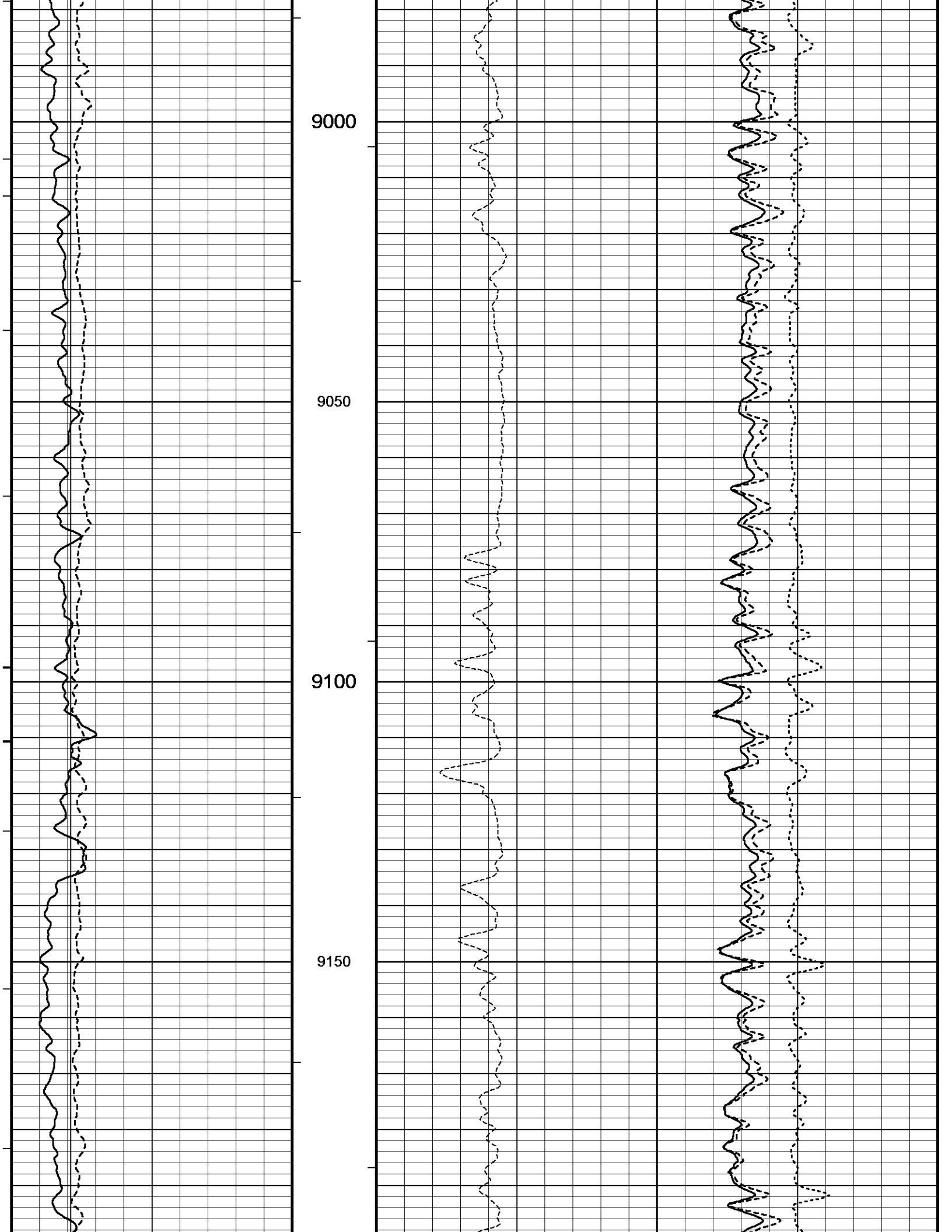

7900
7950
900
8000
8050

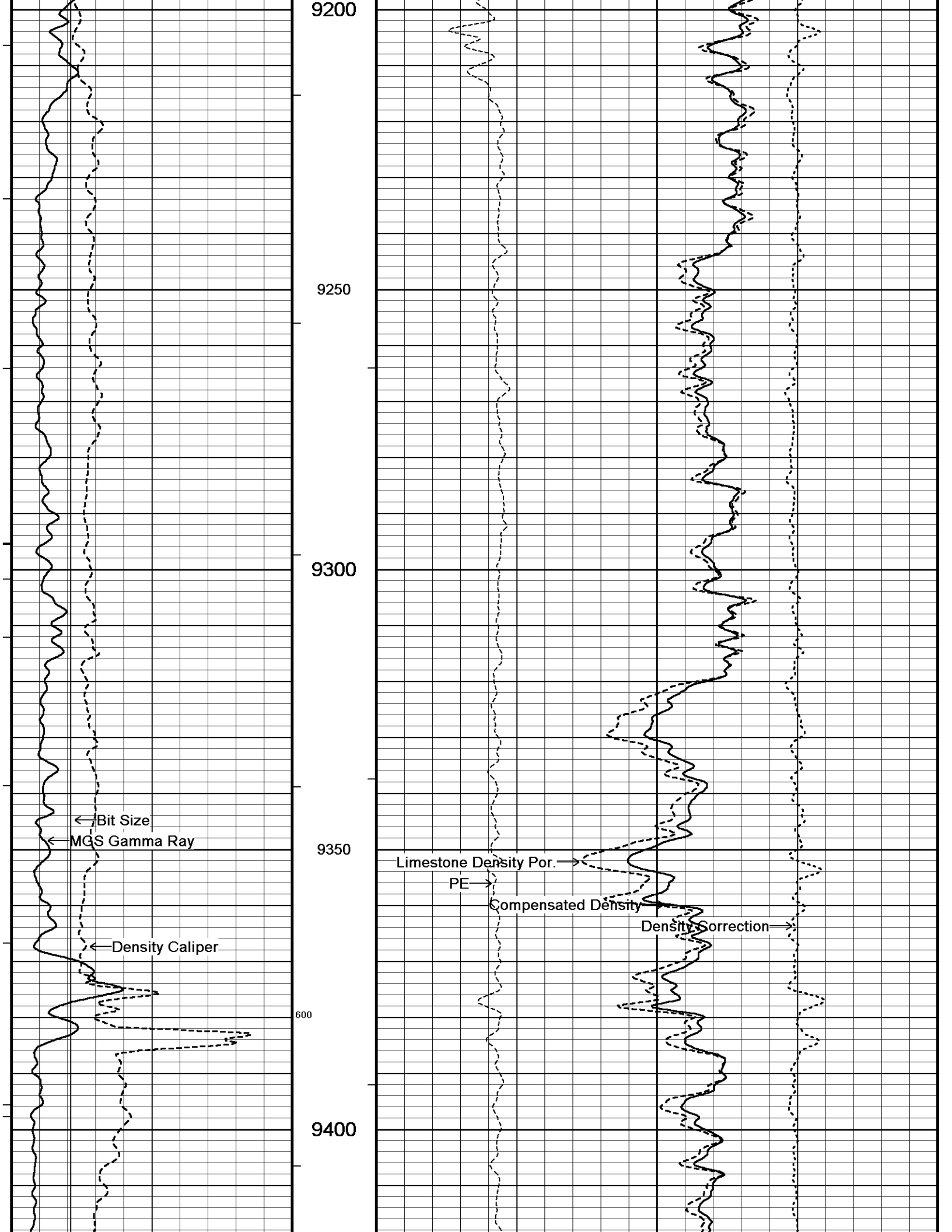

8100
8150
8200
8250
8300
Bit Size
MGS Gamma Ray
Density Caliper
PE
Limestone Density Por.
Compensated Density
Density Correction

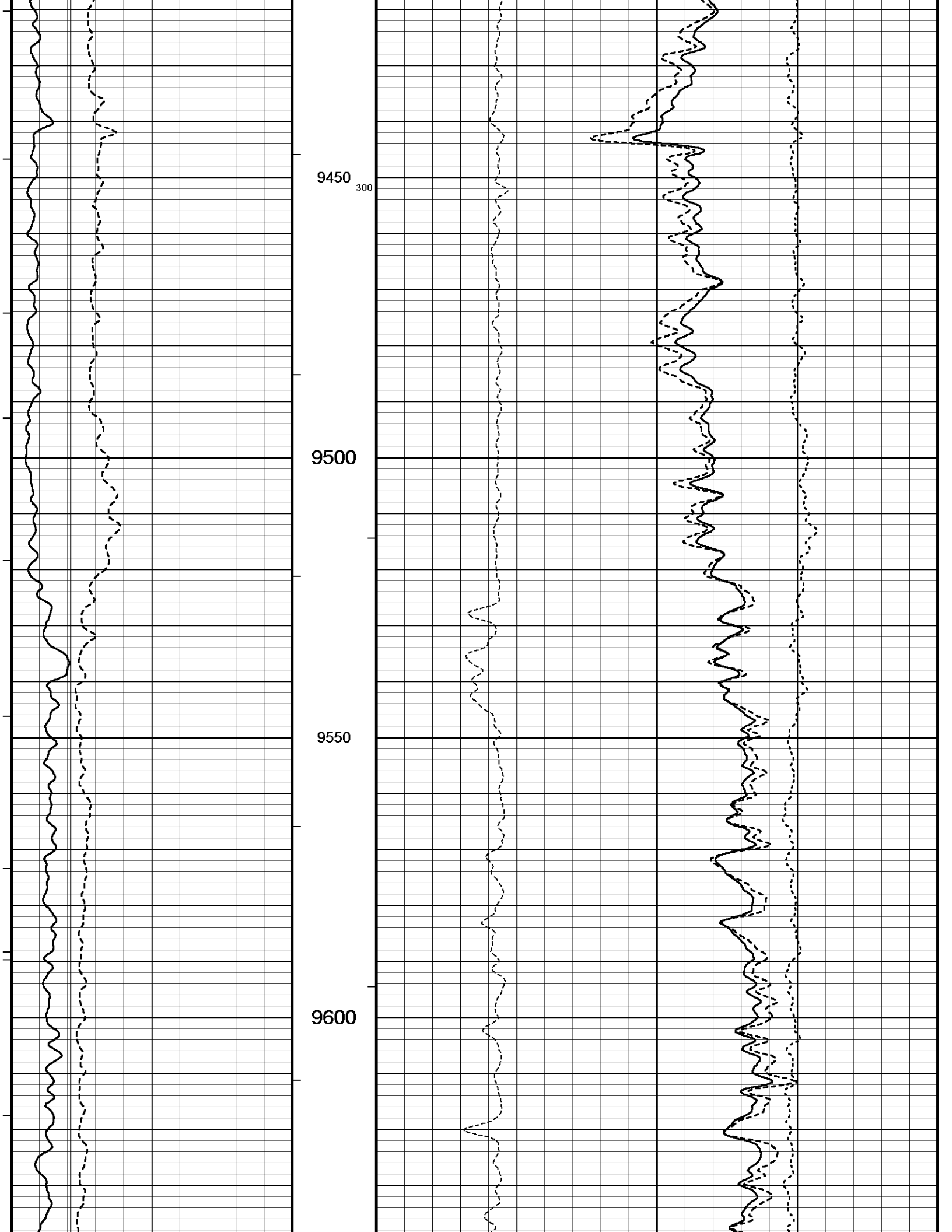

8350
8400
8450
800
8500

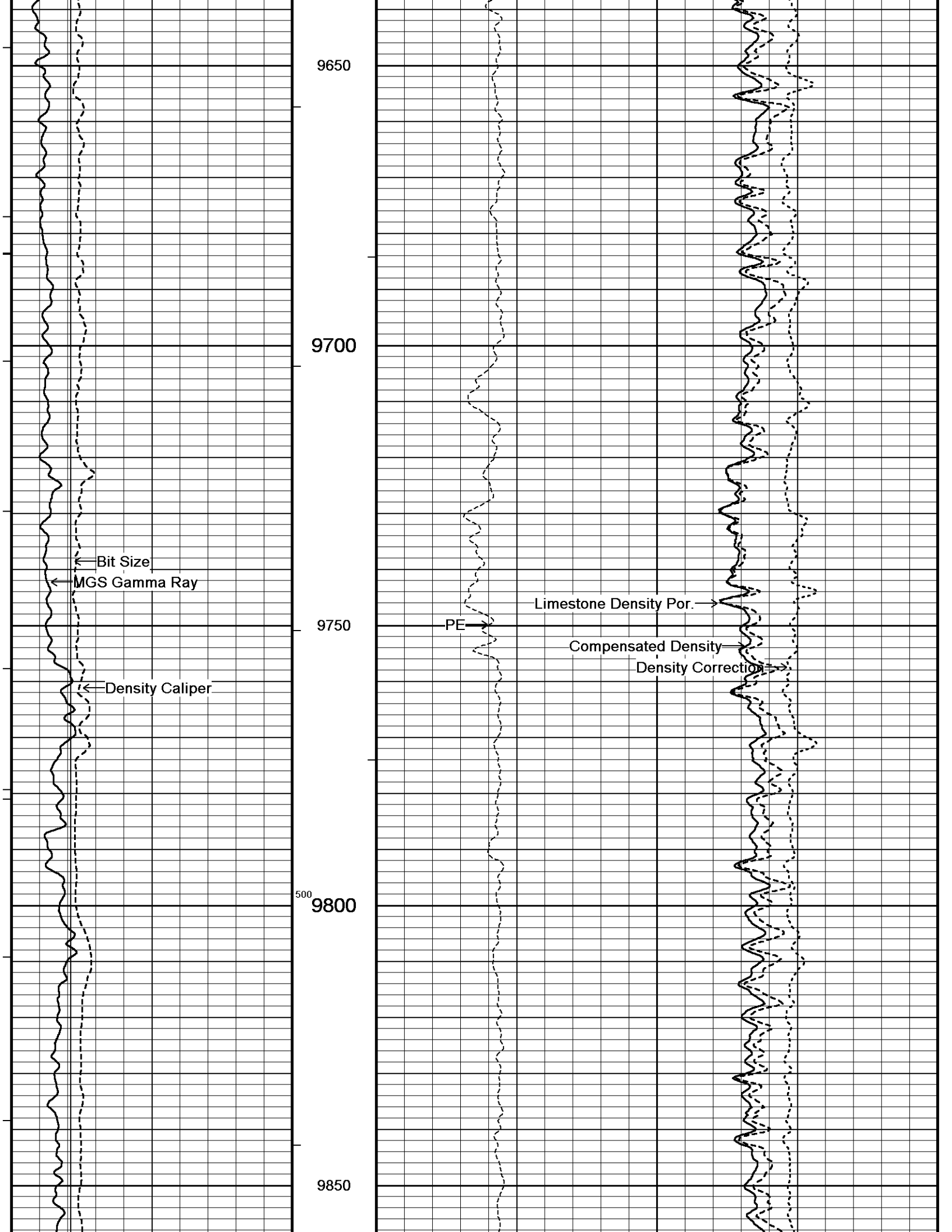

8550
Bit Size
MGS Gamma Ray
Density Caliper
PE
Limestone Density Por.
Compensated Density
Density Correction
8600
8650
400
8700
8750

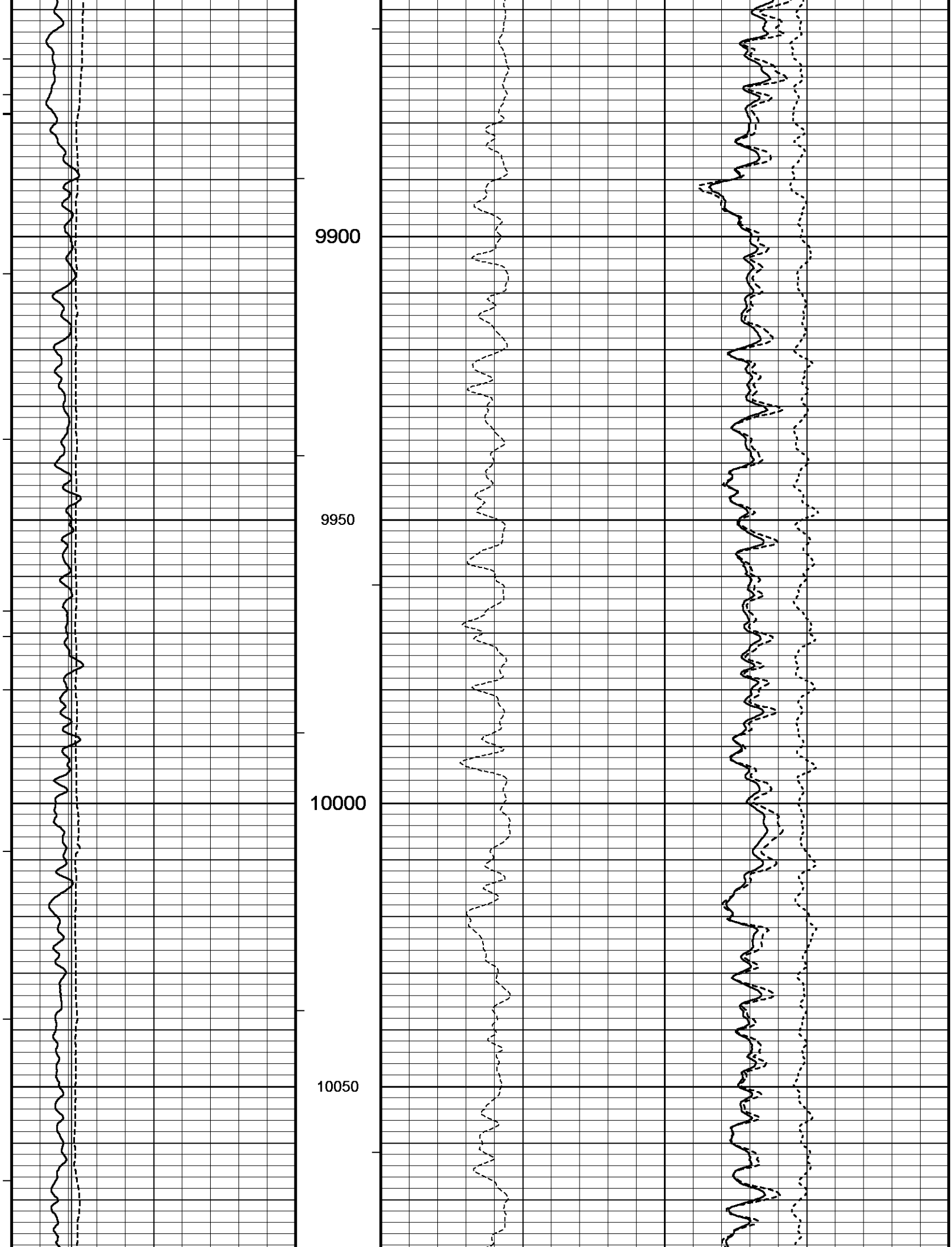

8800
8850
8900
700
8950
Bit Size
MGS Gamma Ray
Density Caliper
PE
Limestone Density Por.
Compensated Density
Density Correction

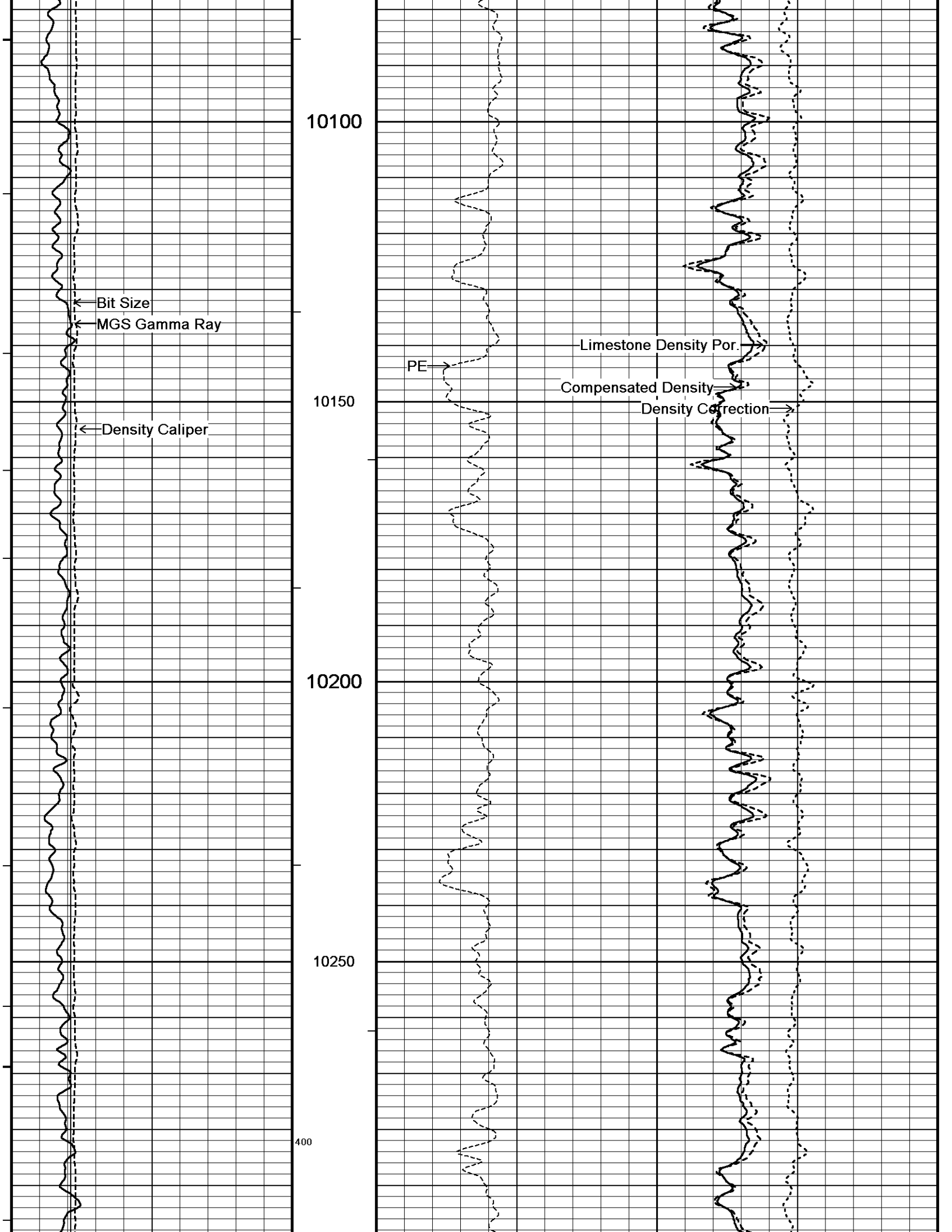

9000
9050
9100
9150

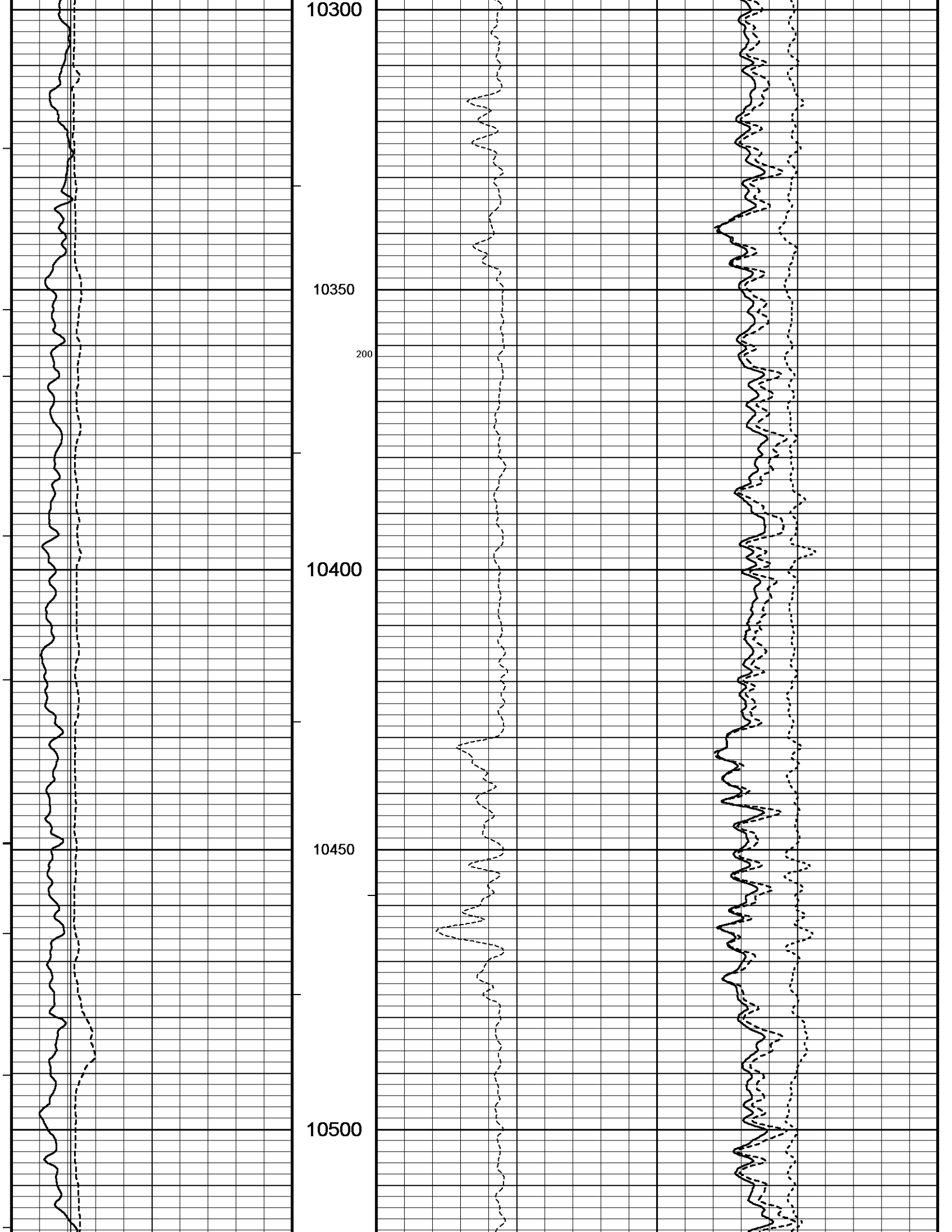

9200
9250
9300
9350
9400
600
Bit Size
MGS Gamma Ray
Density Caliper
Limestone Density Por.
PE
Compensated Density
Density Correction

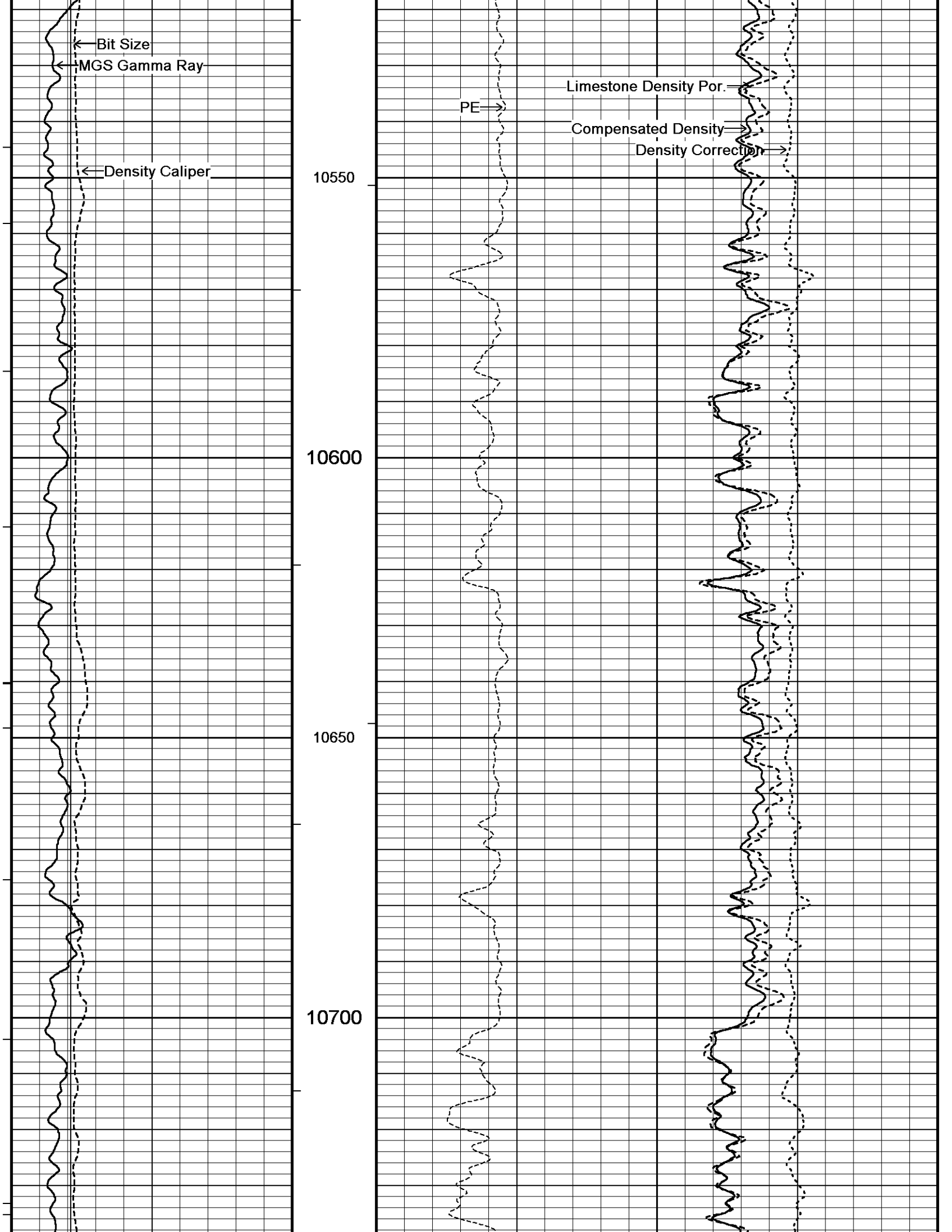

9450
300
9500
9550
9600

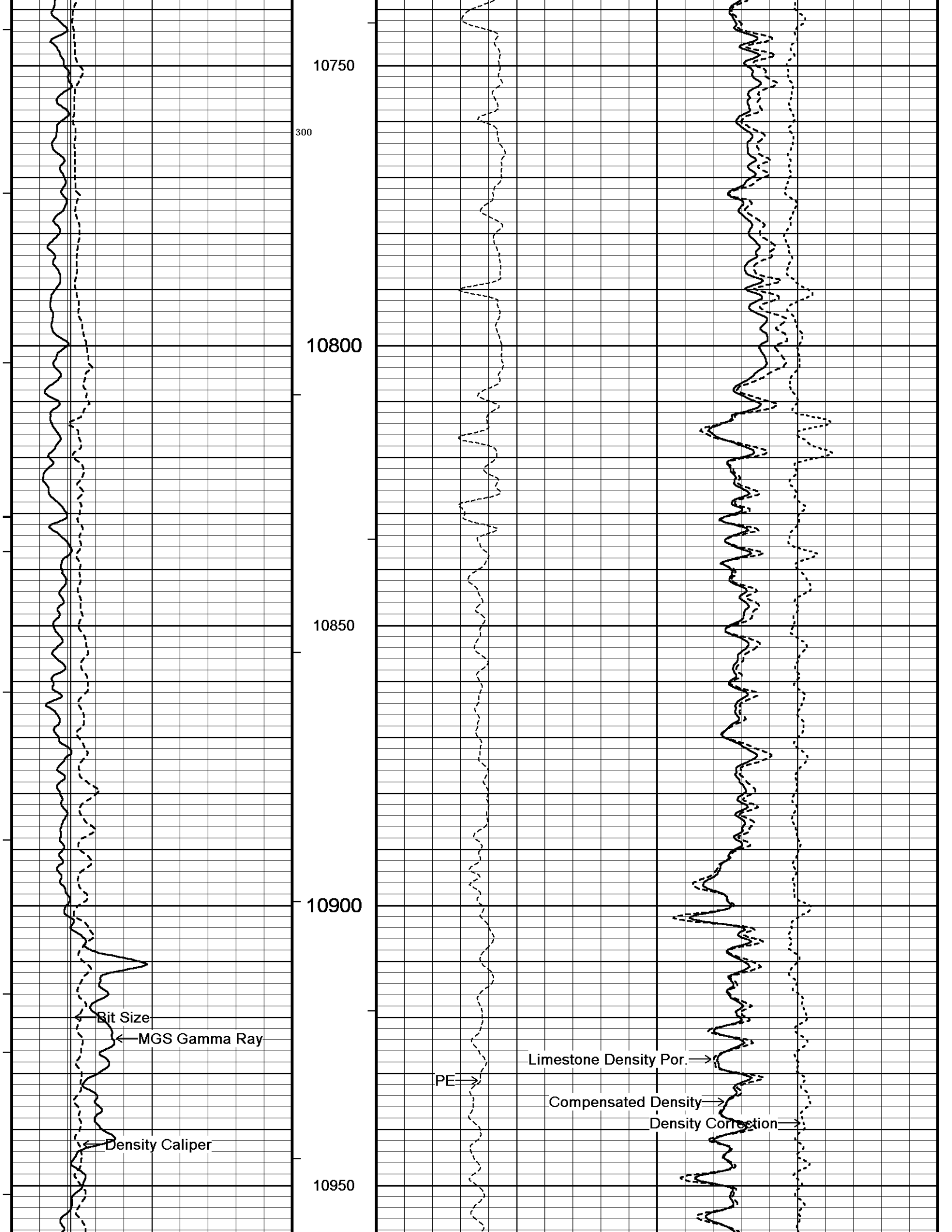

9650
9700
9750
9800
9850
500
Bit Size
MGS Gamma Ray
Density Caliper
PE
Limestone Density Por.
Compensated Density
Density Correction

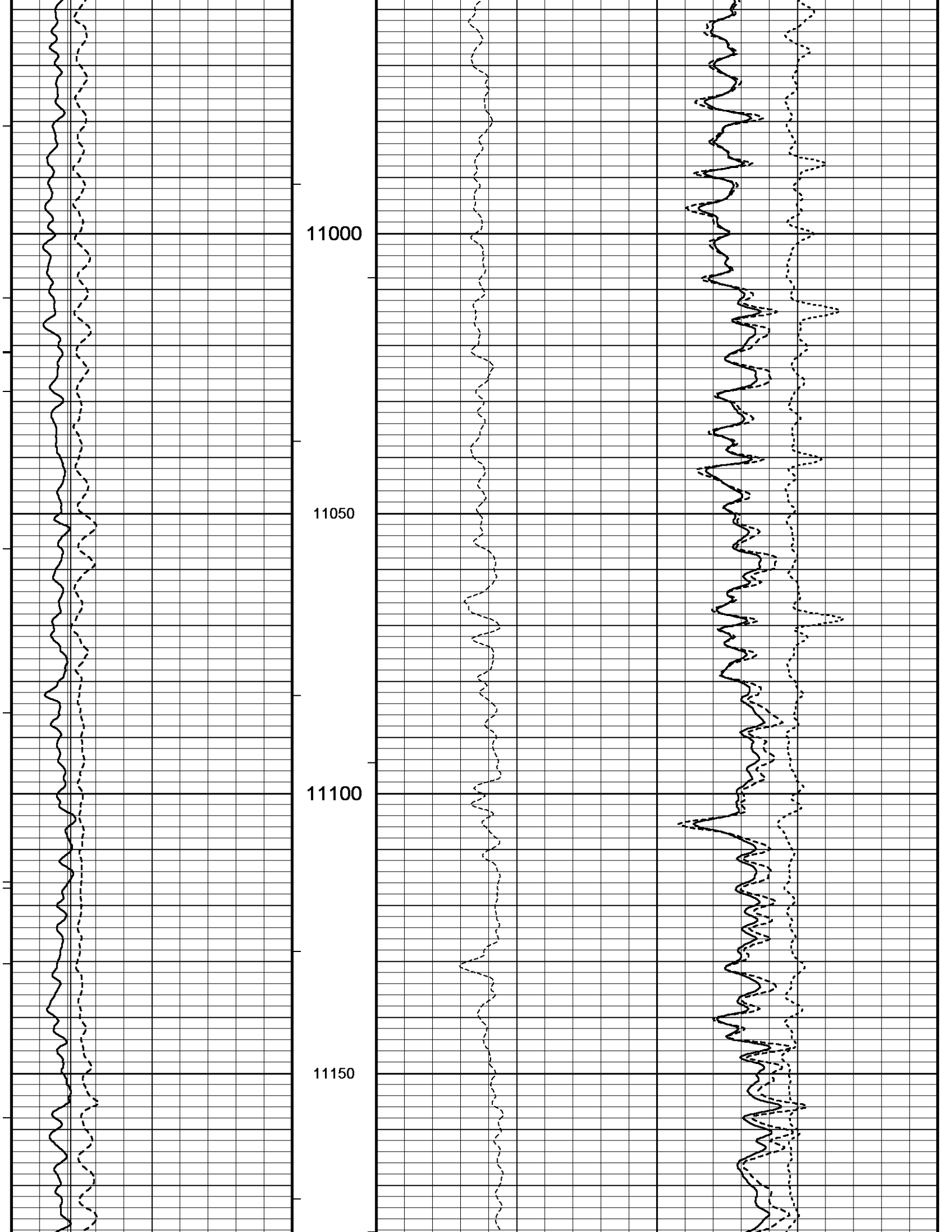

9900
9950
10000
10050

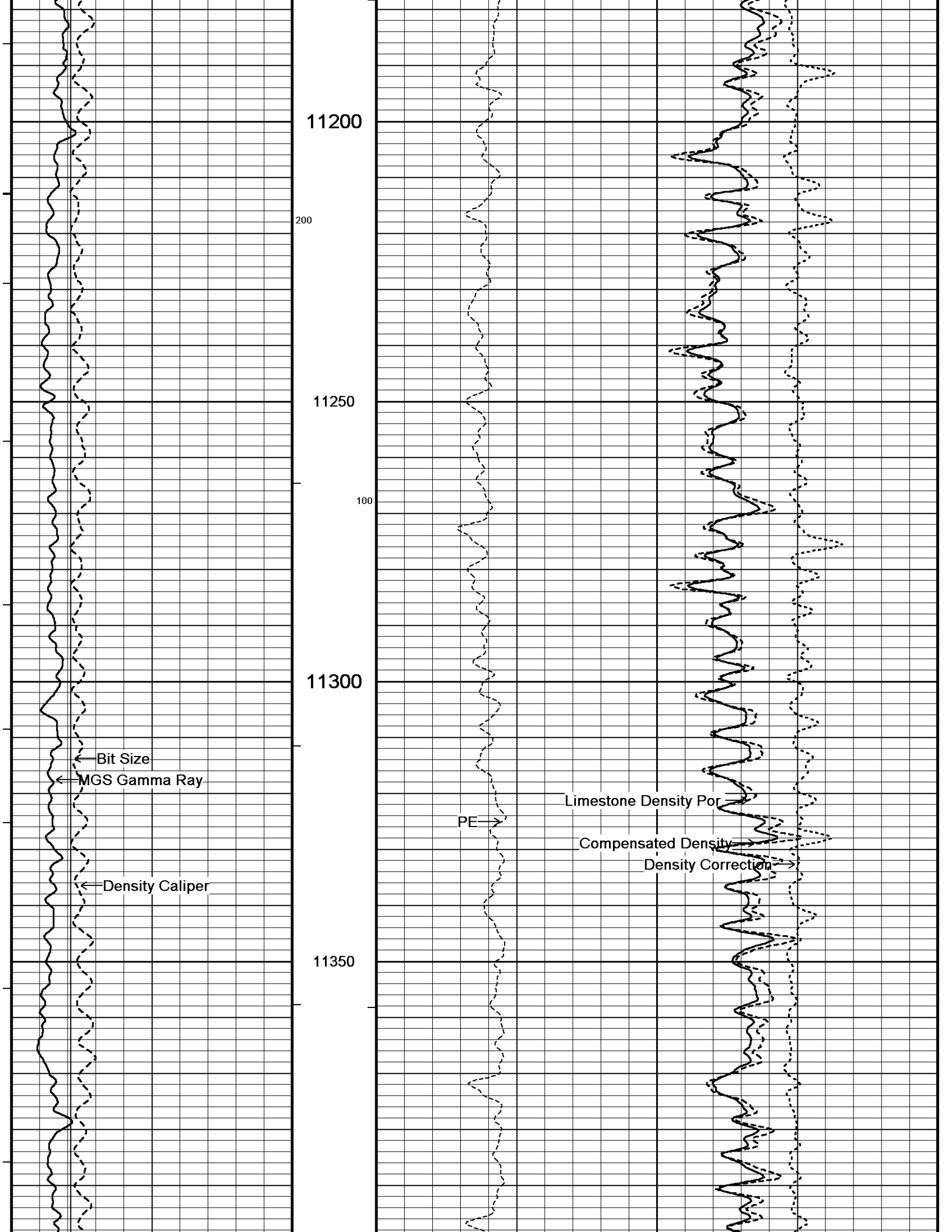

10100
10150
10200
10250
400
Bit Size
MGS Gamma Ray
Density Caliper
PE
Limestone Density Por.
Compensated Density
Density Correction

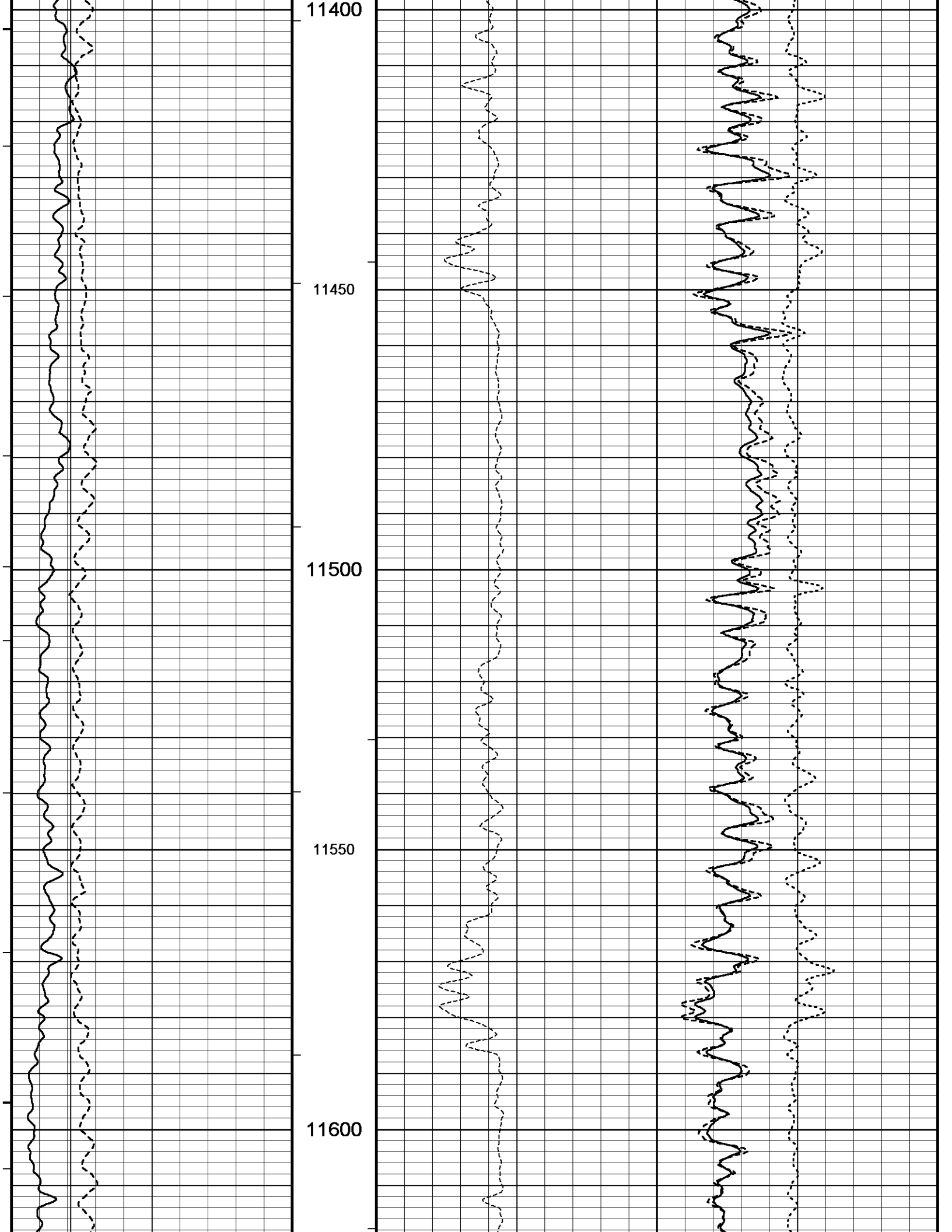

10300
10350
200
10400
10450
10500

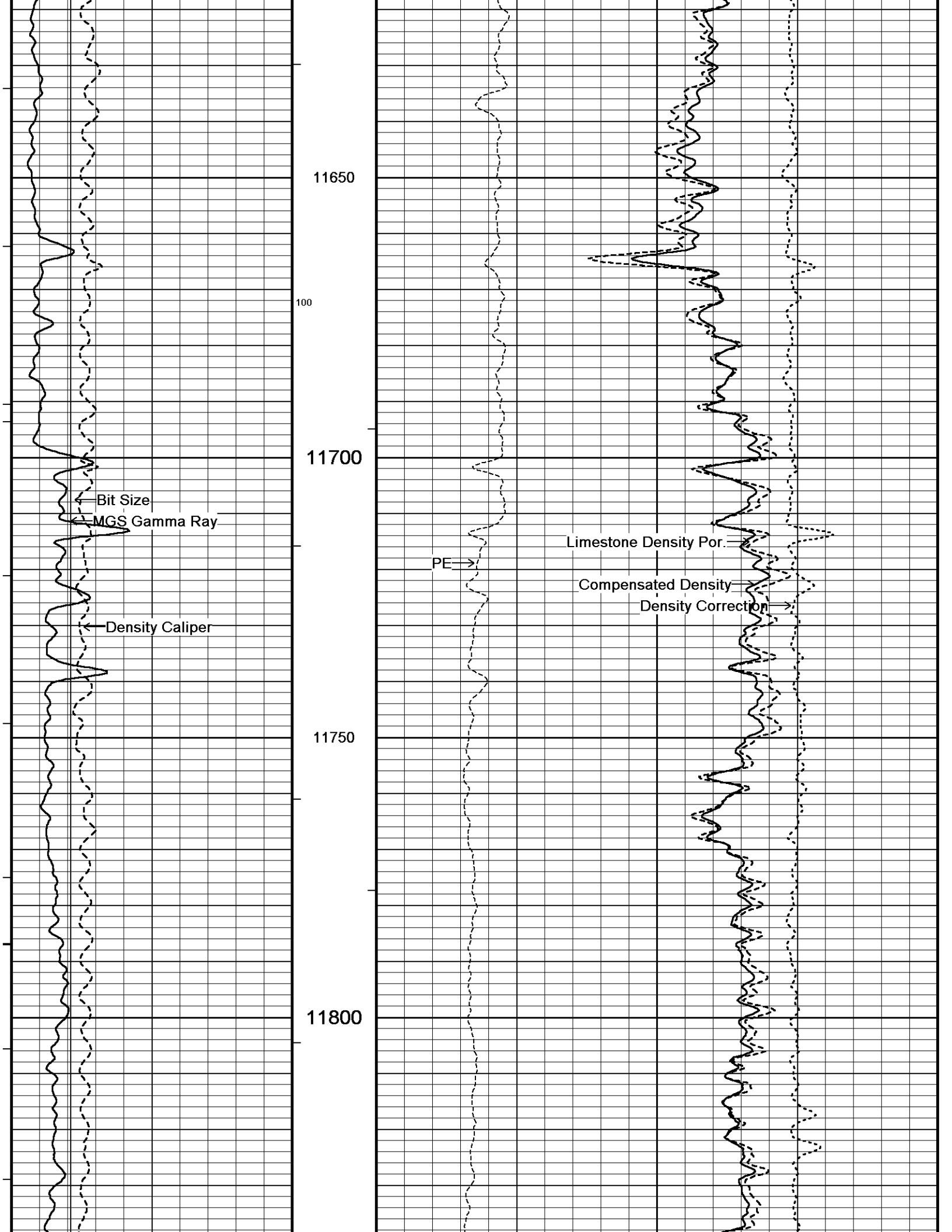

Bit Size
MGS Gamma Ray
Density Caliper
PE
Limestone Density Por.
Compensated Density
Density Correction
10550
10600
10650
10700

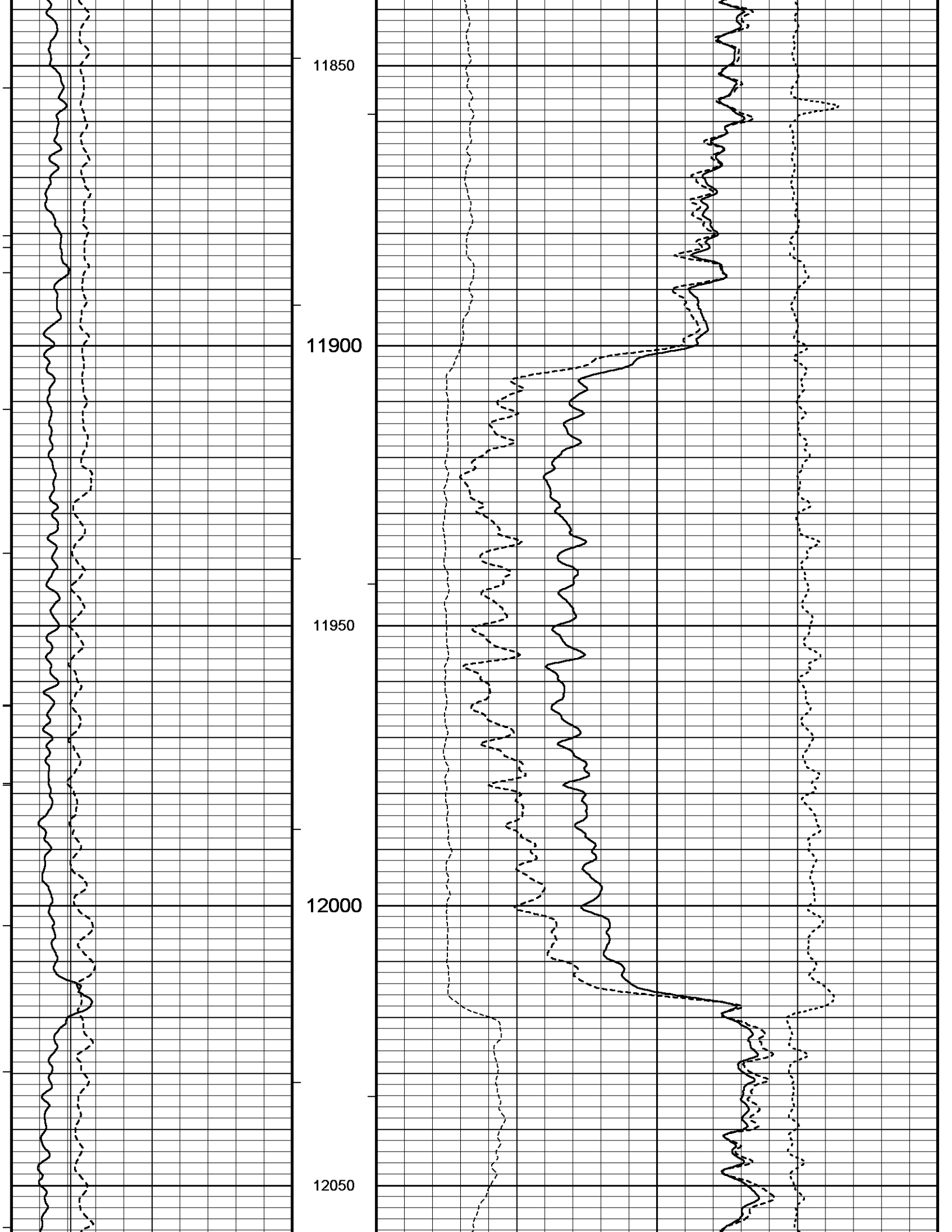

10750
300
10800
10850
10900
10950
Bit Size
MGS Gamma Ray
Density Caliper
PE
Limestone Density Por
Compensated Density
Density Correction

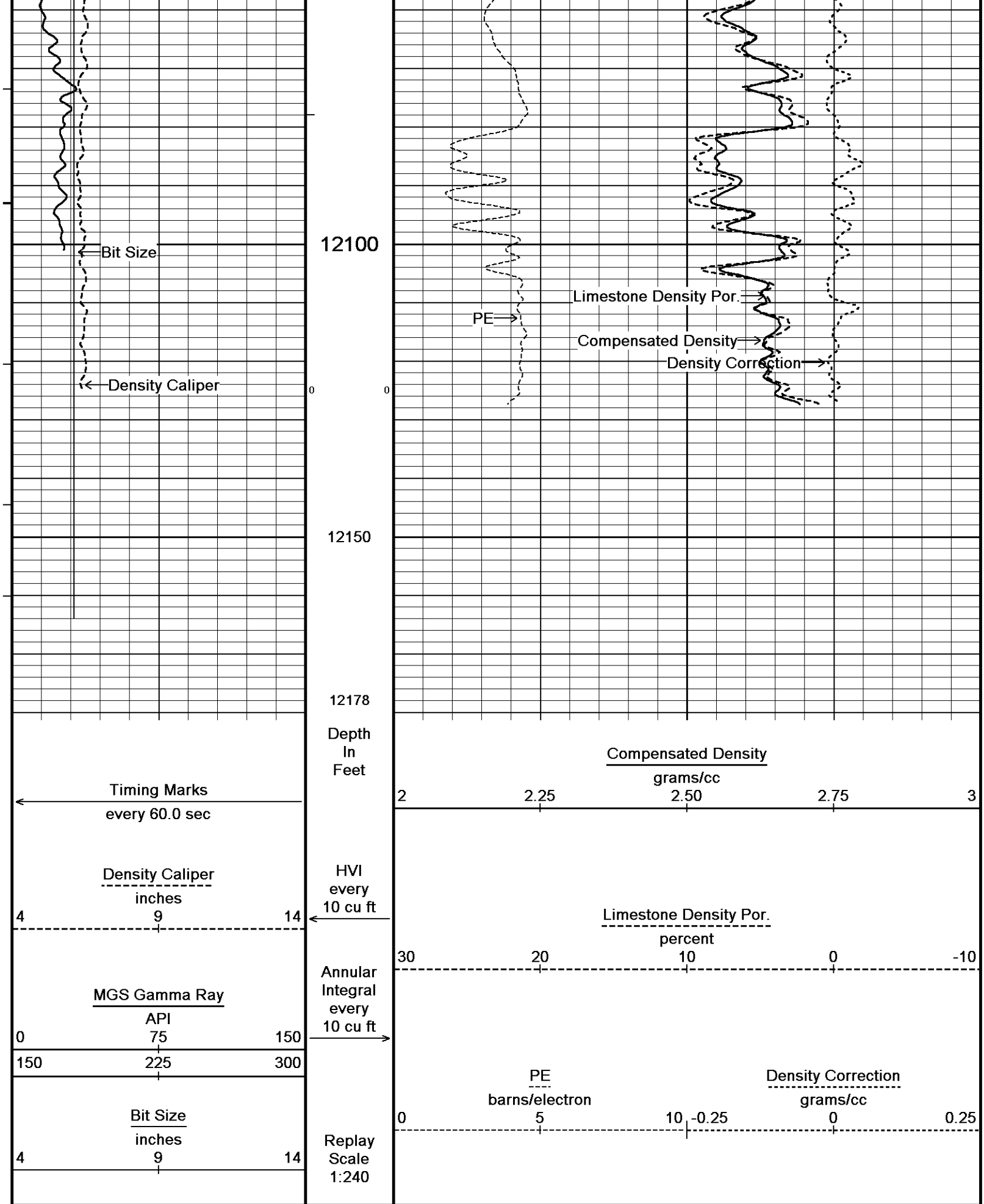

11000
11050
11100
11150


11200
200
11250
100
11300
Bit Size
MGS Gamma Ray
Density Caliper
PE
Limestone Density Por
Compensated Density
Density Correction
11350


11400
11450
11500
11550
11600


11650
100
11700
Bit Size
MGS Gamma Ray
Density Caliper
PE
Limestone Density Por.
Compensated Density
Density Correction
11750
11800


11850
11900
11950
12000
12050



Depth In Feet

Timing Marks
every 60.0 sec

Density Caliper
inches
4 9 14

MGS Gamma Ray
API
0 75 150
150 225 300

Bit Size
inches
4 9 14

HVI every 10 cu ft

Annular Integral every 10 cu ft

Replay Scale 1:240

Compensated Density
grams/cc
2 2.25 2.50 2.75 3

Limestone Density Por.
percent
30 20 10 0 -10

PE
barns/electron
0 5 10

Density Correction
grams/cc
-0.25 0 0.25

Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Data\Sandridge\Sandridge Sally 3420 1-12H\MMS167 Depthlog.dta
System Versions: Processed with 12.02.4401 Plotted with 12.02.4401

Plotted on 10-AUG-2012 01:09
Recorded on 10-AUG-2012 00:29

5 INCH BULK DENSITY DSC

BEFORE SURVEY CALIBRATION

C:\Data\Sandridge\Sandridge Sally 3420 1-12H\MMS167 Depthlog.dta

General Constants All 000

Last Edited on 10-AUG-2012 00:33

General Parameters		
Mud Resistivity	1.850	ohm-metres
Mud Resistivity Temperature	75.000	degrees F
Water Level	0.000	feet
Density/Neutron Processing	Wet Hole	
Hole/Annular Volume and Differential Caliper Parameters		
HVOL Method	Single Caliper	
HVOL Caliper 1	Density Caliper	
HVOL Caliper 2	N/A	
Annular Volume Diameter	4.500	inches
Caliper for Differential Caliper	Density Caliper	
Rwa Parameters		
Porosity used	Base Density Porosity	
Resistivity used	Array Ind. Four Res Rt	
RWA Constant A	0.610	
RWA Constant M	2.150	

Down-hole Tension Calibration SMS 0

Field Calibration on 27-APR-2009 11:57

Reading No	Measured	Calibrated (lbs)
1	15257.84	0.00
2	16706.18	410.00

Strain Gauge Constants SER-B.A 166

Last Edited on

Atmospheric Pressure	14.70	psi
Serial Number	0	
Calibration Date	000000000000	
Base Check Date		
Dead Weight Serial Number	0	
Dead Weight Gravitational Correction	1.0	

Temperature	75.0		150.0		250.0		350.0	degrees F
Pressure psia	Inc.	Dec.	Inc.	Dec.	Inc.	Dec.	Inc.	Dec.
0.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10000.0	0.000		0.000		0.000		0.000	

Gamma Calibration MGS-C.J 108

Field Calibration on 05-AUG-2012 08:40

	Measured	Calibrated (API)
Background	38	26
Calibrator (Gross)	1048	722
Calibrator (Net)	1010	696

Gamma Constants MGS-C.J 108

Last Edited on 10-AUG-2012 00:32

Gamma Calibrator Number		
Mud Density	1.02	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

High Resolution Temperature Constants MGS-C.J 108

Last Edited on

Pre-filter Length	11

Neutron Calibration MDN-C.A 423

Base Calibration on 03-JUN-2012 17:50
Field Check on 05-AUG-2012 08:40

Base Calibration

	Measured	Calibrated (cps)

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	3350	100	3714	110
Ratio	33.500		33.764	

Field Calibrator at Base	Calibrated (cps)	
	1130	1749
Ratio	0.646	

Field Check	Calibrated (cps)	
	1130	1755
Ratio	0.644	

Neutron Constants MDN-C.A 423

Last Edited on 27-JUL-2012 08:26

Neutron Source Id		
Neutron Jig Number		
Epithermal Neutron	No	
Caliper Source for Processing	Density Caliper	
Stand-off	0.00	inches
Mud Density	1.00	gm/cc
Limestone Sigma	7.10	cu
Sandstone Sigma	4.26	cu
Dolomite Sigma	4.70	cu
Formation Pressure Source	Constant Value	
Formation Pressure	0.00	kpsi
Temperature Source	MGS External Temperature	
Temperature	N/A	degrees F
Mud Salinity	0.00	kppm
Formation Fluid Salinity Source	Constant Value	
Formation Fluid Salinity	140.00	kppm
Barite Mud Correction	Not Applied	
Salinity Correction	Not Applied	

FE Constants MFE-B.J 328

Last Edited on

Running Mode	No Sleeve	
MFE K Factor	0.1268	
Caliper Source for FE correction	Bit Size	
Caliper Value for FE correction	2.25	inches
Rm Source for FE correction	Constant Value	
Temp. for Rm Corr.	MCG External Temperature	
Stand-off	Centred	inches

High Resolution Temperature Calibration MAI-B.J 394

Field Calibration on 08-MAR-2012 12:02

	Measured	Calibrated(Deg F)
Lower	10.00	50.00
Upper	100.00	212.00

High Resolution Temperature Constants MAI-B.J 394

Last Edited on

Pre-filter Length	11

Induction Calibration MAI-B.J 394

Base Calibration on 08-MAR-2012 11:57
Field Check on 05-AUG-2012 08:38

Base Calibration

Test Loop Calibration

Channel	Measured Low	Measured High	Calibrated (mmho/m) Low	Calibrated (mmho/m) High
1	16.7	473.5	9.3	966.2
2	5.6	368.9	7.6	821.4
3	3.3	256.4	5.2	566.0
4	1.8	133.4	2.6	279.2

Array Temperature	71.8	Deg F

Channel	Base Check (mmho/m) Low	Base Check (mmho/m) High	Field Check (mmho/m) Low	Field Check (mmho/m) High
1	0.0	0.0	14.0	3832.0
2	0.0	0.0	31.8	3650.5
3	0.0	0.0	28.8	3083.2
4	0.0	0.0	19.4	2068.6
Deep	0.0	0.0	16.2	1912.0

Medium	0.0	0.0	42.9	4143.5	
Shallow	0.0	0.0	49.5	5536.4	
Array Temperature		0.0		81.5	Deg F

Induction Constants MAI-B.J 394

Last Edited on 10-AUG-2012 00:31

Induction Model	RtAP-WBM	
Caliper for Borehole Corr.	Density Caliper	
Hole Size for Borehole Correction	N/A	inches
Tool Centred	No	
Stand-off Type	Fins	
Stand-off	0.50	inches
Number of Fins on Stand-off	6.0000	
Stand-off Fin Angle	60.00	degrees
Stand-off Fin Width	0.5000	inches
Borehole Corr. Rm Source	Temperature Corr	
Temp. for Rm Corr.	MGS External Temperature	
Squasher Start	0.0030	mhos/metre
Squasher Offset	N/A	mhos/metre

Borehole Normalisation

DRM1	0.0000	DRC1	0.0000
DRM2	0.0000	DRC2	0.0000
MRM1	0.0000	MRC1	0.0000
MRM2	0.0000	MRC2	0.0000
SRM1	0.0000	SRC1	0.0000
SRM2	0.0000	SRC2	0.0000

Calibration Site Corrections

Channel 1	0.00	mmhos/metre
Channel 2	0.00	mmhos/metre
Channel 3	0.00	mmhos/metre
Channel 4	0.00	mmhos/metre

Apparent Porosity and Water Saturation Constants

Archie Constant (A)	1.00	
Cementation Exponent (M)	2.00	
Saturation Exponent (N)	2.00	
Saturation of Water for Apor	100.00	percent
Resistivity of Water for Apor and Sw	0.05	ohm-m
Resistivity of Mud Filtrate for Sw	0.00	ohm-m
Source for Rt	0.00	
Source for Rxo	0.00	

Caliper Calibration MPD-C.J 395

Base Calibration on 10-JUL-2012 00:07
Field Calibration on 05-AUG-2012 08:45

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	15488	3.99
2	24960	5.97
3	34848	7.99
4	44224	9.86
5	55360	11.93
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
7.89	7.99

Photo Density Calibration MPD-C.J 395

Base Calibration on 08-MAR-2012 11:47
Field Check on 05-AUG-2012 08:45

Density Calibration

Base Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	54938	28656	60364	31945
Reference 2	22898	2647	25079	2547

Field Check at Base

1172.4	1346.5

Field Check

Field Check

1245.3	1464.8	

PE Calibration

Base Calibration	WS	Measured WH	Ratio	Calibrated Ratio
Background	218	1051		
Reference 1	24528	54744	0.453	0.399
Reference 2	6633	22766	0.295	0.273

Field Check at Base

218.2	1051.4

Field Check

228.3	1118.3

Density Constants MPD-C.J 395

Last Edited on 10-AUG-2012 00:32

Density Source Id	246	
Nylon Calibrator Number	DNCE603	
Aluminium Calibrator Number	DACA509	
Density Shoe Profile	4 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1.02	gm/cc
Mud Density Z/A Multiplier	1.11	
Mud Filtrate Density	1.00	gm/cc
Dry Hole Mud Filtrate Density	1.00	gm/cc
DNCT	0.00	gm/cc
CRCT	0.00	gm/cc
Density Z/A Correction	Hybrid	

Matrix Density (gm/cc)	Depth (ft)
2.71	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00

DOWNHOLE EQUIPMENT

C:\Data\Sandridge\Sandridge Sally 3420 1-12H\MMS167 Depthlog.dta

Shuttle Mechanical Release (SMR A)
SMR-A 152 LG: 8.53 ft WT: 77.2 lb OD: 2.52 in

Shuttle Electrical Release
SER-B.A 166 LG: 6.90 ft WT: 50.7 lb OD: 2.24 in

MBS-F.A 200v Compact Battery Sub
MBS-F.A 65 LG: 10.22 ft WT: 66.1 lb OD: 2.24 in

Compact Memory Sub E.B
MMS-E.B 167 LG: 5.20 ft WT: 37.5 lb OD: 2.24 in

Compact Tool Isolator sub.
MTI-B.A 72 LG: 1.54 ft WT: 13.2 lb OD: 2.24 in

Compact Short Gamma
MGS-C.J 108 LG: 3.41 ft WT: 24.3 lb OD: 2.24 in

SKJ-E.B Compact Knuckle Joint
SKJ-E.B 471 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

SHA-J.A Compact Swivel Head Adaptor
SHA-J.A 450 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in

MIS-D.A Compact Inline Bowspring sub
MIS-D.A 310 LG: 5.70 ft WT: 33.1 lb OD: 2.24 in

Compact Neutron
MDN-C.A 423 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

Compact Density/Caliper
MPD-C.J 395 LG: 9.59 ft WT: 90.4 lb OD: 2.24 in

MIS-D.A Compact Inline Bowspring sub
MIS-D.A 609 LG: 5.70 ft WT: 33.1 lb OD: 2.24 in

SHA-J.A Compact Swivel Head Adaptor
SHA-J.A 454 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in

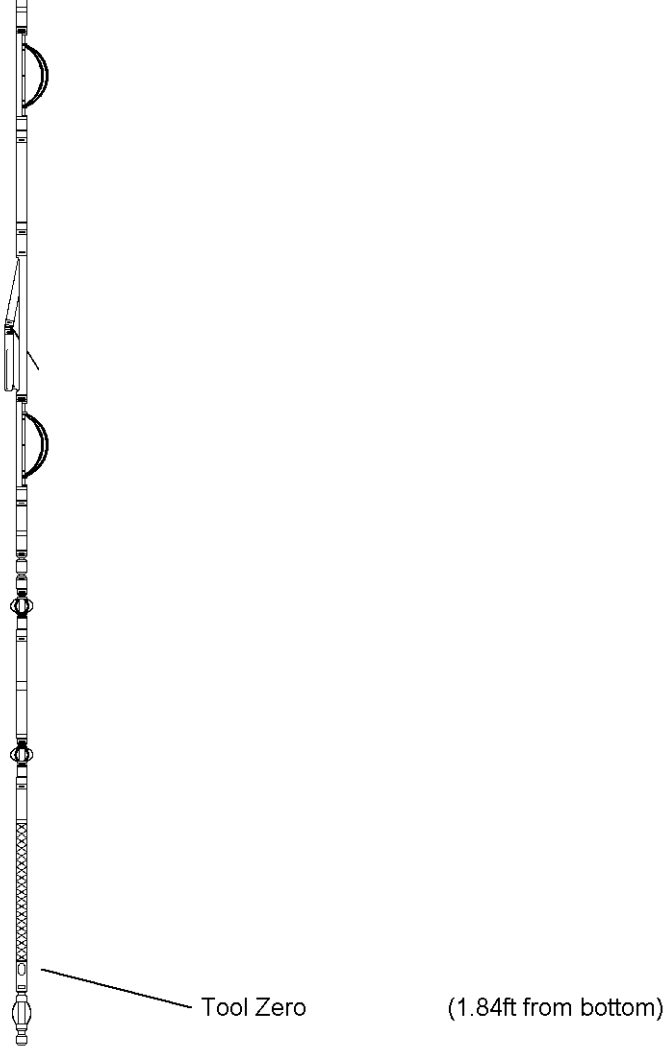
SKJ-E.B Compact Knuckle Joint
SKJ-E.B 456 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

MIS-E.B Compact Inline Standoff sub
MIS-E.B 576 LG: 2.14 ft WT: 15.4 lb OD: 2.24 in

Compact Focussed Electric
MFE-B.J 328 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

MIS-E.B Compact Inline Standoff sub
MIS-E.B 574 LG: 2.14 ft WT: 15.4 lb OD: 2.24 in

Compact Induction
MAI-B.J 394 LG: 12.52 ft WT: 48.5 lb OD: 2.24 in



COMPANY	SANDRIDGE EXPLORATION & PRODUCTION
WELL	SALLY 3420 1-12H
FIELD	COLLIER FLATS
PROVINCE/COUNTY	COMANCHE
COUNTRY/STATE	USA / KANSAS

Elevation Kelly Bushing	1808.00	feet	First Reading	12130.00	feet
Elevation Drill Floor	1808.00	feet	Depth Driller	12182.00	feet
Elevation Ground Level	1788.00	feet	Depth Logger	12164.00	feet

Weatherford®

CML IMPULSE SHUTTLE
COMPENSATED PHOTO-DENSITY
COMPENSATED NEUTRON LOG

40 Years of Wireline 1970 2010