Weatherford®

ARRAY INDUCTION - RTAP
SHALLOW FOCUSED
ELECTRIC LOG

COMPANY	FRAM OPERATING LLC
WELL	MANSUR 33-1-G
FIELD	WILDCAT
PROVINCE/COUNTY	MESA
COUNTRY/STATE	U.S.A. / COLORADO
LOCATION	SHL: 2165' FNL & 2087' FWL
	BHL: 1732' FNL & 588' FWL

40 Years of Wireline 1973 2010

SEC	TWP	RGE
33	12S	97W

API Number 05-077-09473
Permit Number

Other Services
MPD/MDN
MSS

Permanent Datum G.L., Elevation 6087 feet
Log Measured From K.B. @ 14 FEET above Permanent Datum
Drilling Measured From K.B.

Elevations:	feet
KB	6097.00
DF	6096.00
GL	6083.00

Date	13-JUN-2011		
Run Number	ONE		
Depth Driller	4227.00	feet	
Depth Logger	4196.00	feet	
First Reading	4165.00		
Last Reading	506.00		
Casing Driller	503.00	feet	
Casing Logger	506.00	feet	
Bit Size	8.750	inches	
Hole Fluid Type	DAP		
Density / Viscosity	9.20 lb/USg	38.00 CP	
PH / Fluid Loss	7.90	8.00 ml/30Min	
Sample Source	FLOW LINE		
Rm @ Measured Temp	1.05 @ 86.9	ohm-m	
Rmf @ Measured Temp	0.84 @ 86.9	ohm-m	
Rmc @ Measured Temp	1.26 @ 86.9	ohm-m	
Source Rmf / Rmc	CALC	CALC	
Rm @ BHT	0.729 @127.0	ohm-m	
Time Since Circulation	1 HOUR		
Max Recorded Temp	127.00	deg F	
Equipment Name	COMPACT		
Equipment / Base	18063	RK SPG	
Recorded By	J. BOON		
Witnessed By	J. GRIGGS		

BOREHOLE RECORD

Last Edited: 13-JUN-2011 20:21

Bit Size inches	Depth From feet	Depth To feet
8.750	503.00	4227.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
	9.625	0.00	503.00	36.00

REMARKS

TOOLS: MCG, MDN, MPD, MAI RAN IN COMBINATION.

WLS VERSION 11.02.3186

LOGGED USING COMPACT WELL SHUTTLE - CWS MESSENGER 475

HARDWARE: SEE TOOL DIAGRAM

2.68 G/CC DENSITY MATRIX USED TO CALCULATE POROSITY.

ALL INTERVALS LOGGED AND SCALED PER CUSTOMERS REQUEST

ALL INTERVALS LOGGED AND SCALED PER CUSTOMER'S REQUEST.

TIGHT PULLS, BOREHOLE SIZE, AND RUGOSITY WILL AFFECT REPEATABILITY AND DATA QUALITY.

5.5 INCH PRODUCTION CASING USED TO CALCULATE ANNULAR HOLE VOLUME.

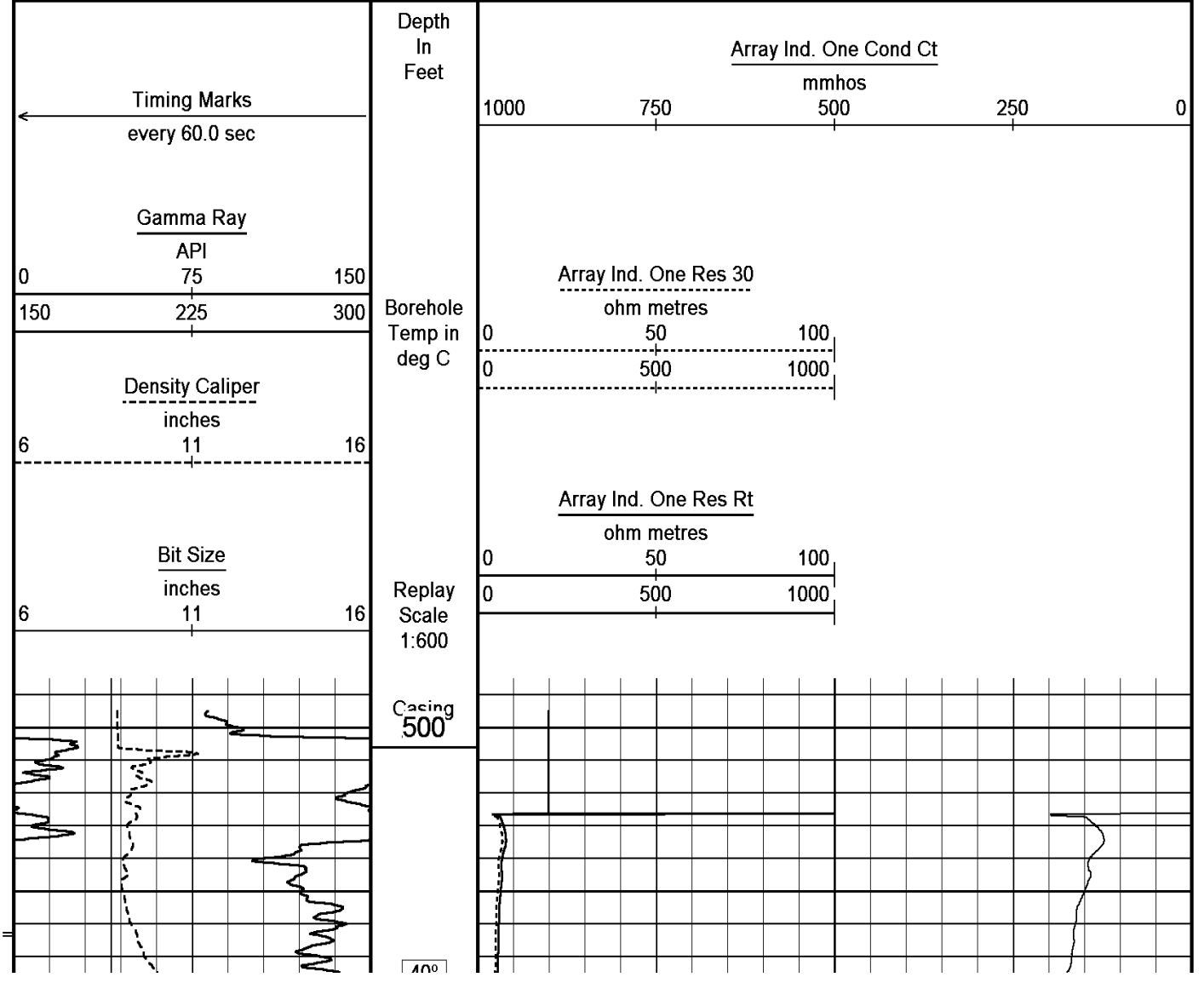
TOTAL HOLE VOLUME FROM TD TO CASING = 2090 CU.FT.
ANNULAR VOLUME WITH 5.5 INCH PRODUCTION CASING = 1485 CU.FT.

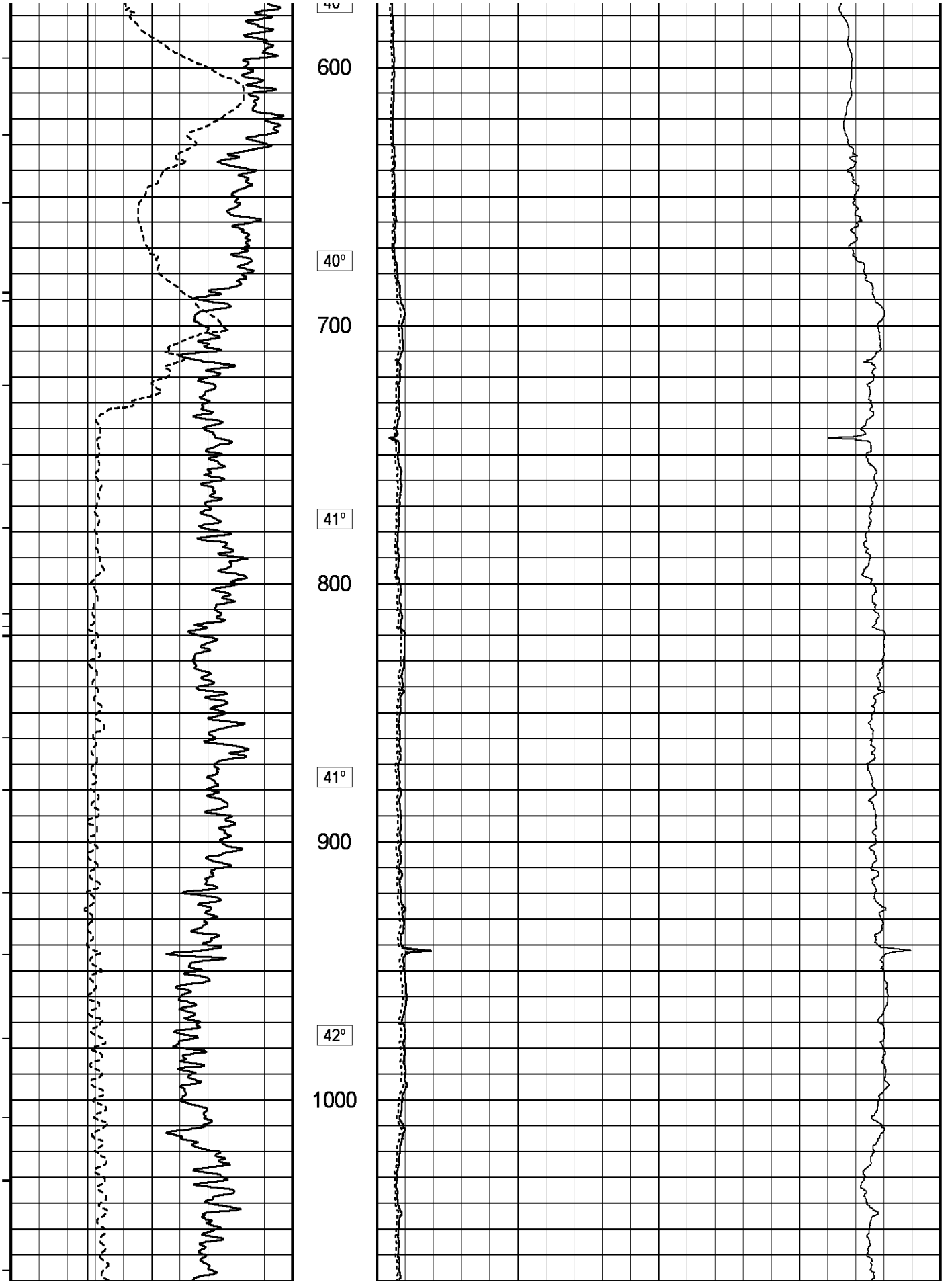
OPERATOR: B. SUMMERALL, M. LAMOREAX
SERVICE ORDER 3529599

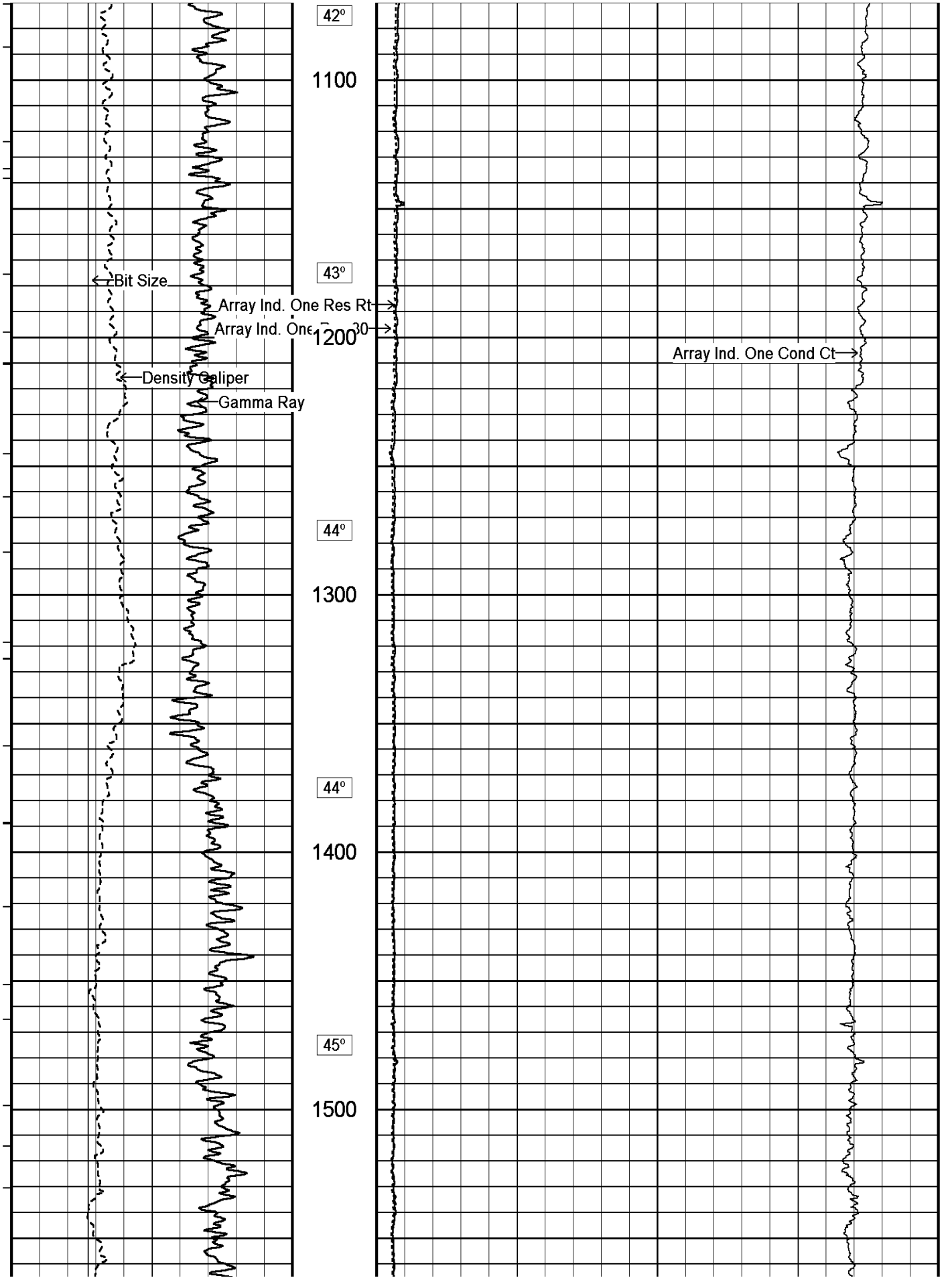
RIG: FRONTIER 4

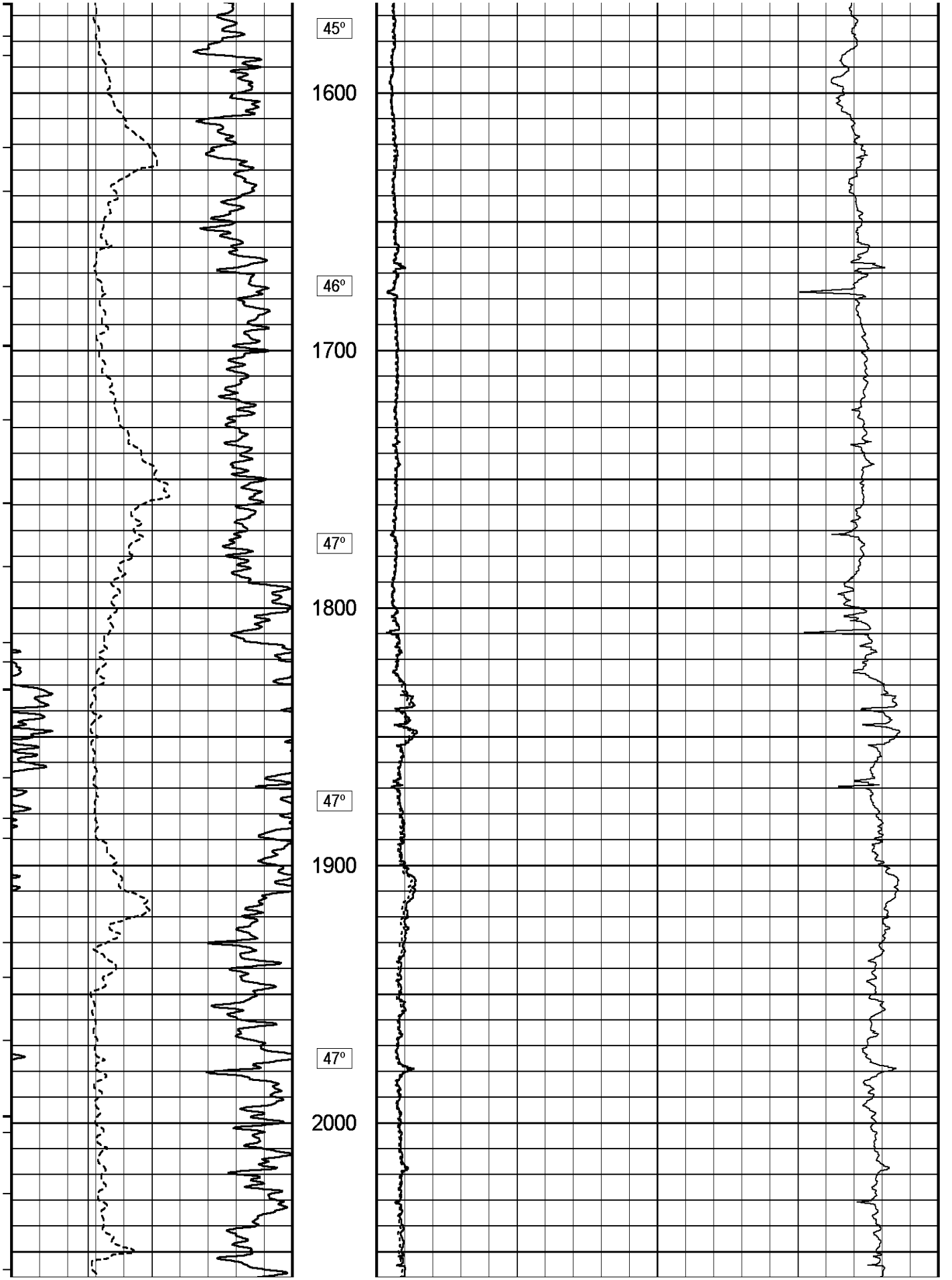
2 INCH MAIN LOG

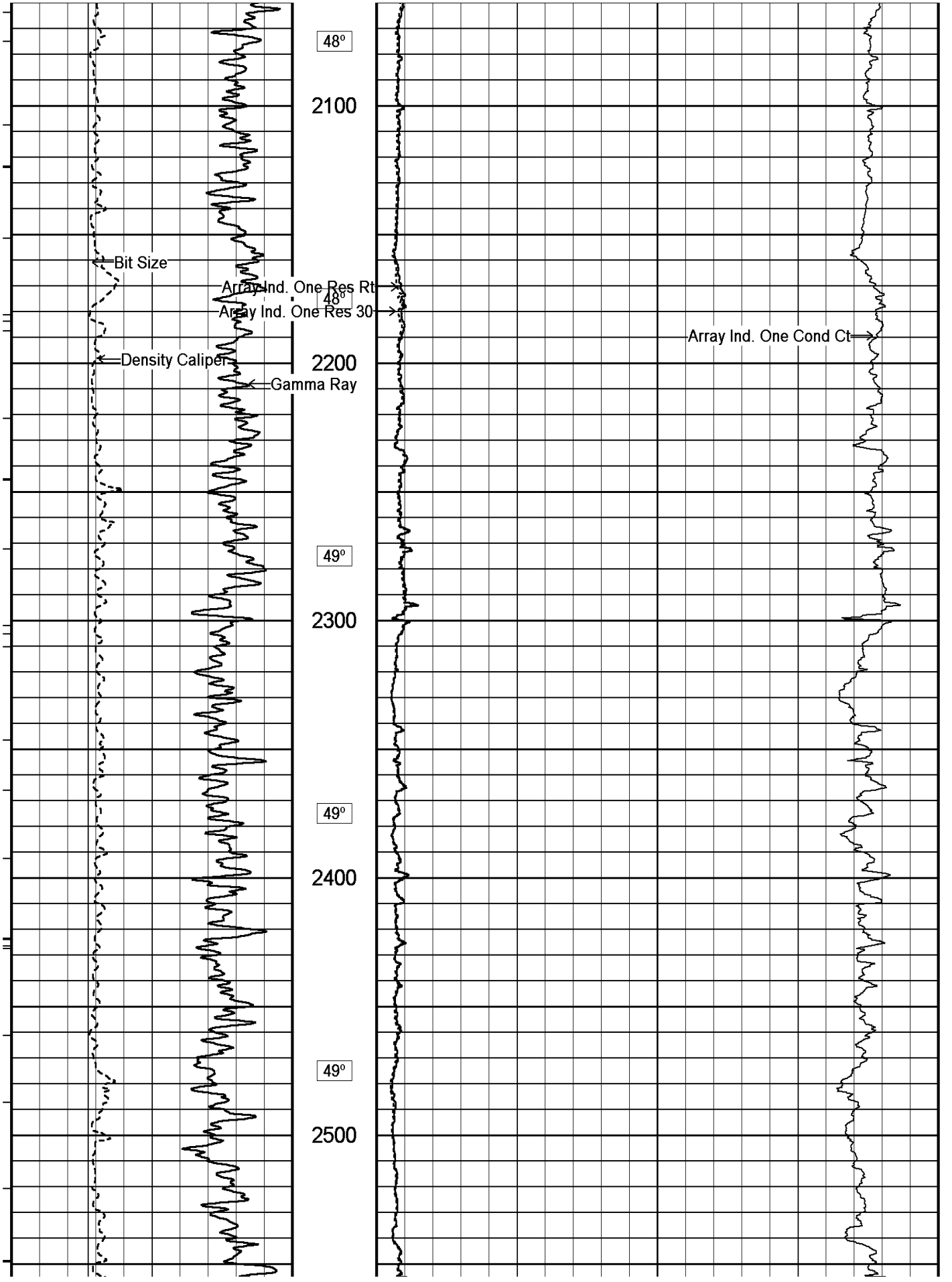
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 22-JUN-2011 12:54
Filename: C:\Minimus\Logs\Fram\Mansur 33-1-G\Mansur 33-1-G depth RTAP.dta — Recorded on 15-JUN-2011 03:11
System Versions: Processed with 11.02.3186 Plotted with 11.02.3186

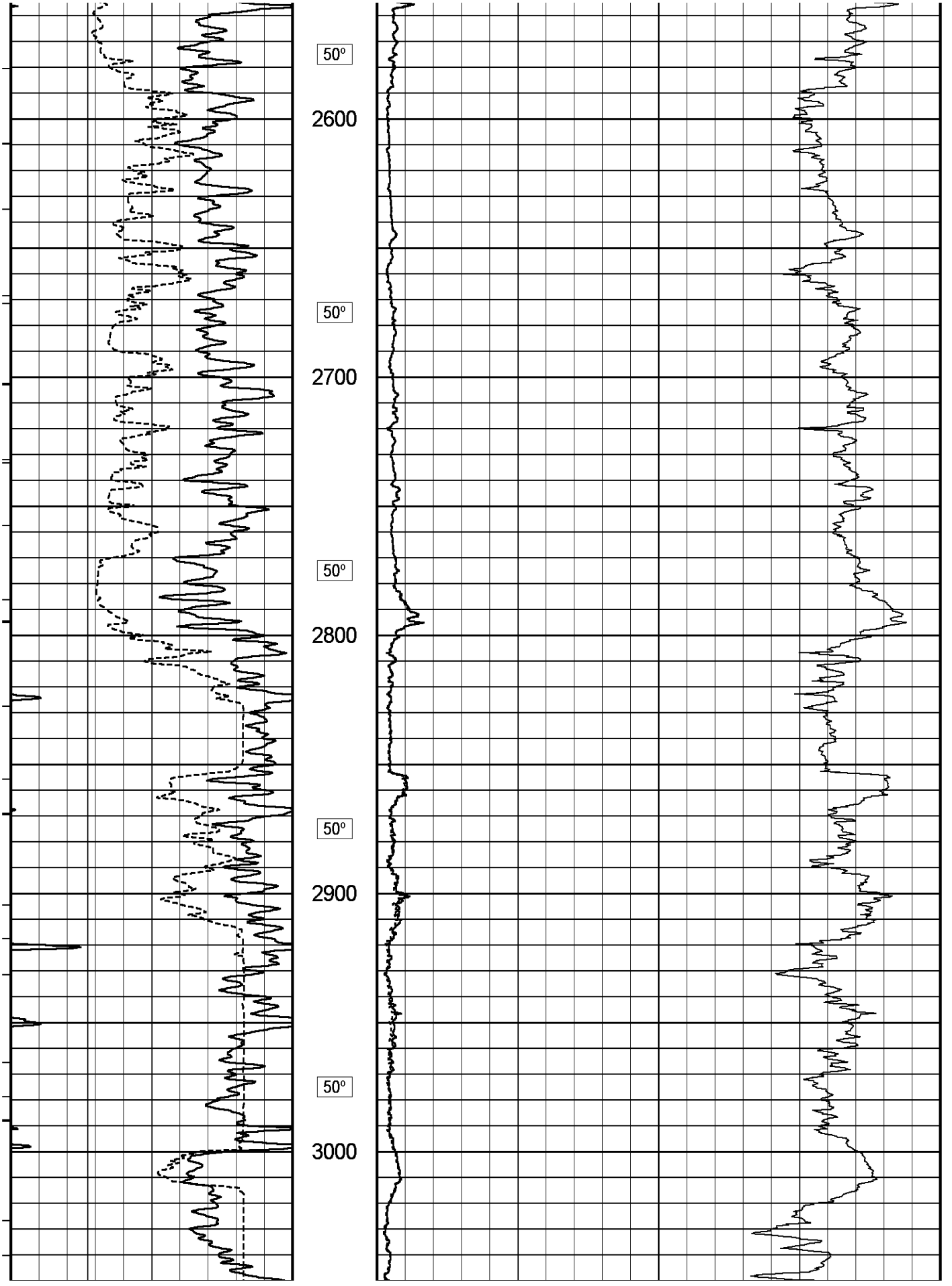


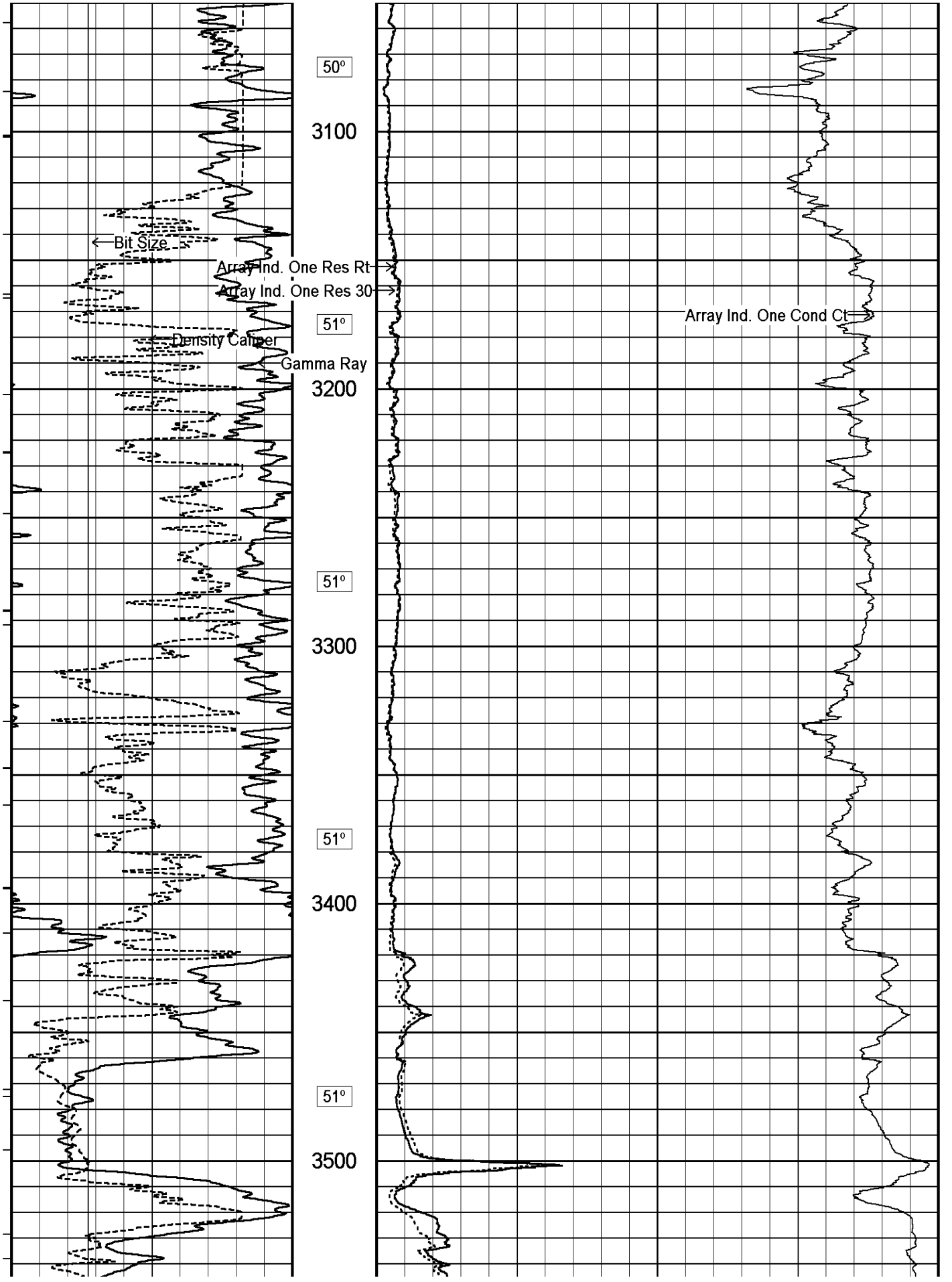

600
40°
700
41°
800
41°
900
42°
1000

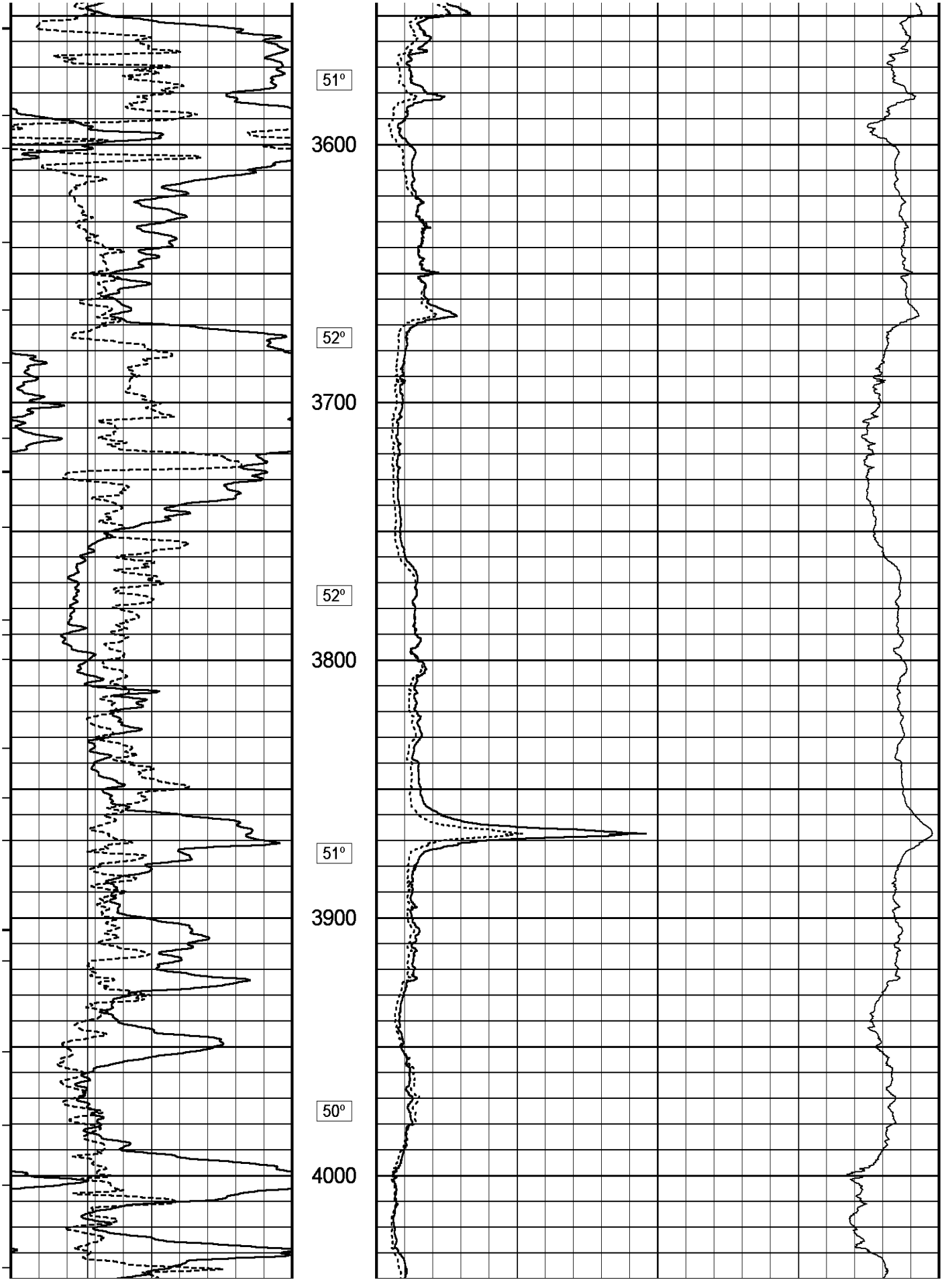

42°
1100
43°
Bit Size
Array Ind. One Res Rt
Array Ind. One
1200
Array Ind. One Cond Ct
Density Caliper
Gamma Ray
44°
1300
44°
1400
45°
1500

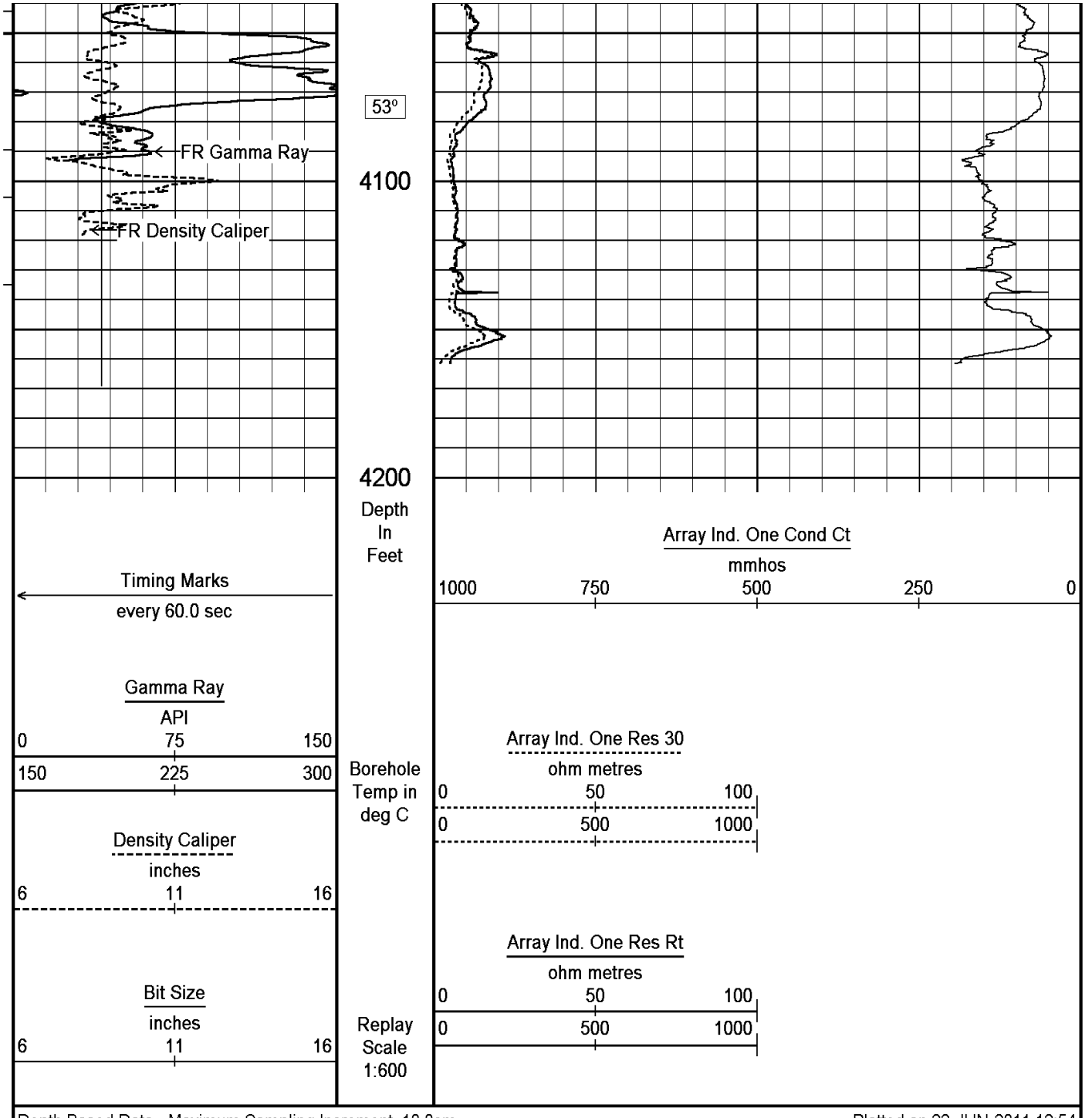

45°
1600
46°
1700
47°
1800
47°
1900
47°
2000


48°
2100
Bit Size
Array Ind. One Res Rt
48°
Array Ind. One Res 30
Array Ind. One Cond Ct
Density Caliper
2200
Gamma Ray
49°
2300
49°
2400
49°
2500


50°
2600
50°
2700
50°
2800
50°
2900
50°
3000


50°
3100
Bit Size
Array Ind. One Res Rt
Array Ind. One Res 30
51°
Density Caliper
Gamma Ray
3200
Array Ind. One Cond Ct
51°
3300
51°
3400
51°
3500


51°
3600
52°
3700
52°
3800
51°
3900
50°
4000



Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 22-JUN-2011 12:54
Filename: C:\Minimus\Logs\Fram\Mansur 33-1-G\Mansur 33-1-G depth RTAP.dta
Recorded on 15-JUN-2011 03:11
System Versions: Processed with 11.02.3186 Plotted with 11.02.3186

2 INCH MAIN LOG

5 INCH MAIN LOG

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 22-JUN-2011 12:54
Filename: C:\Minimus\Logs\Fram\Mansur 33-1-G\Mansur 33-1-G depth RTAP.dta
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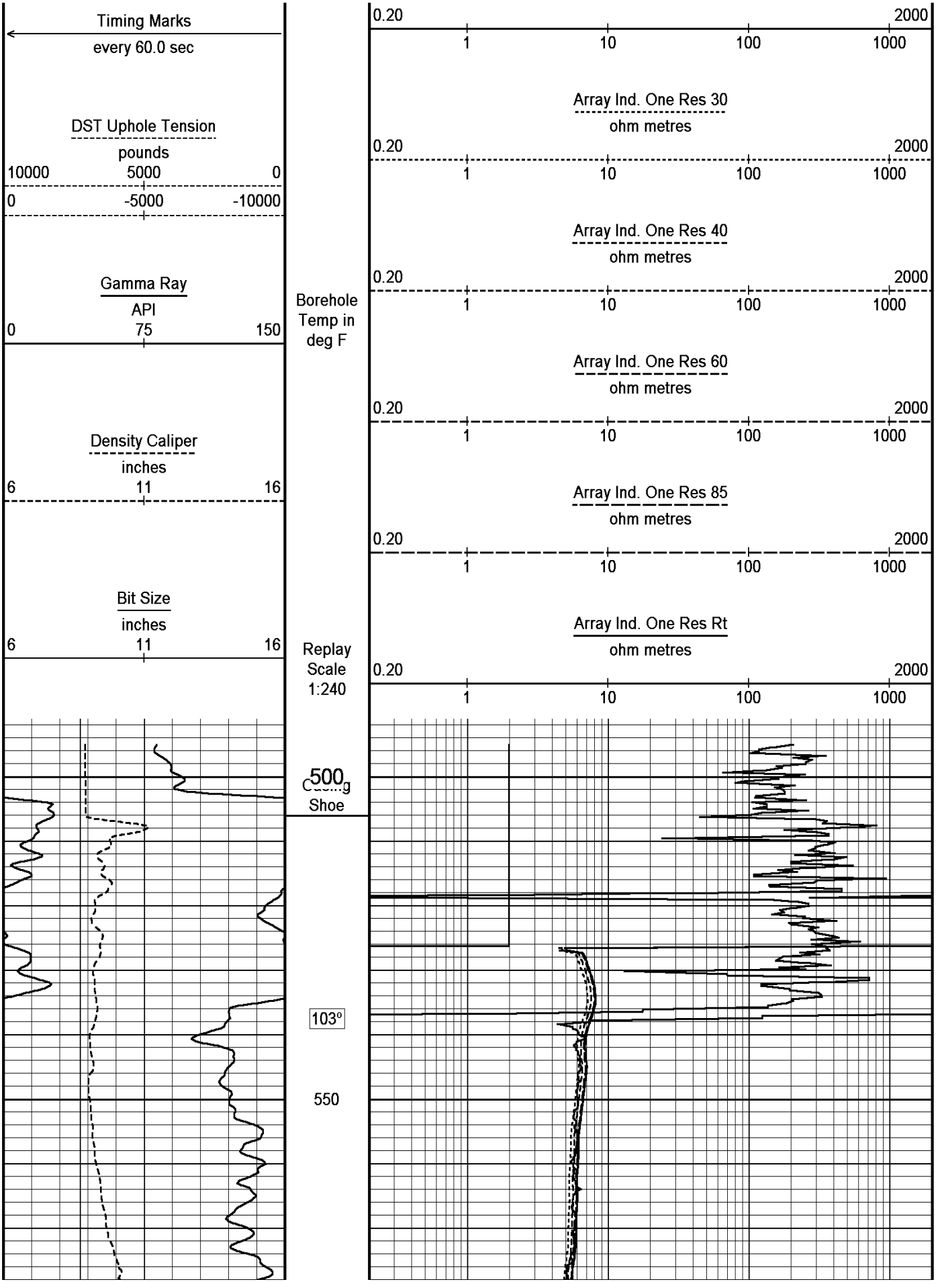
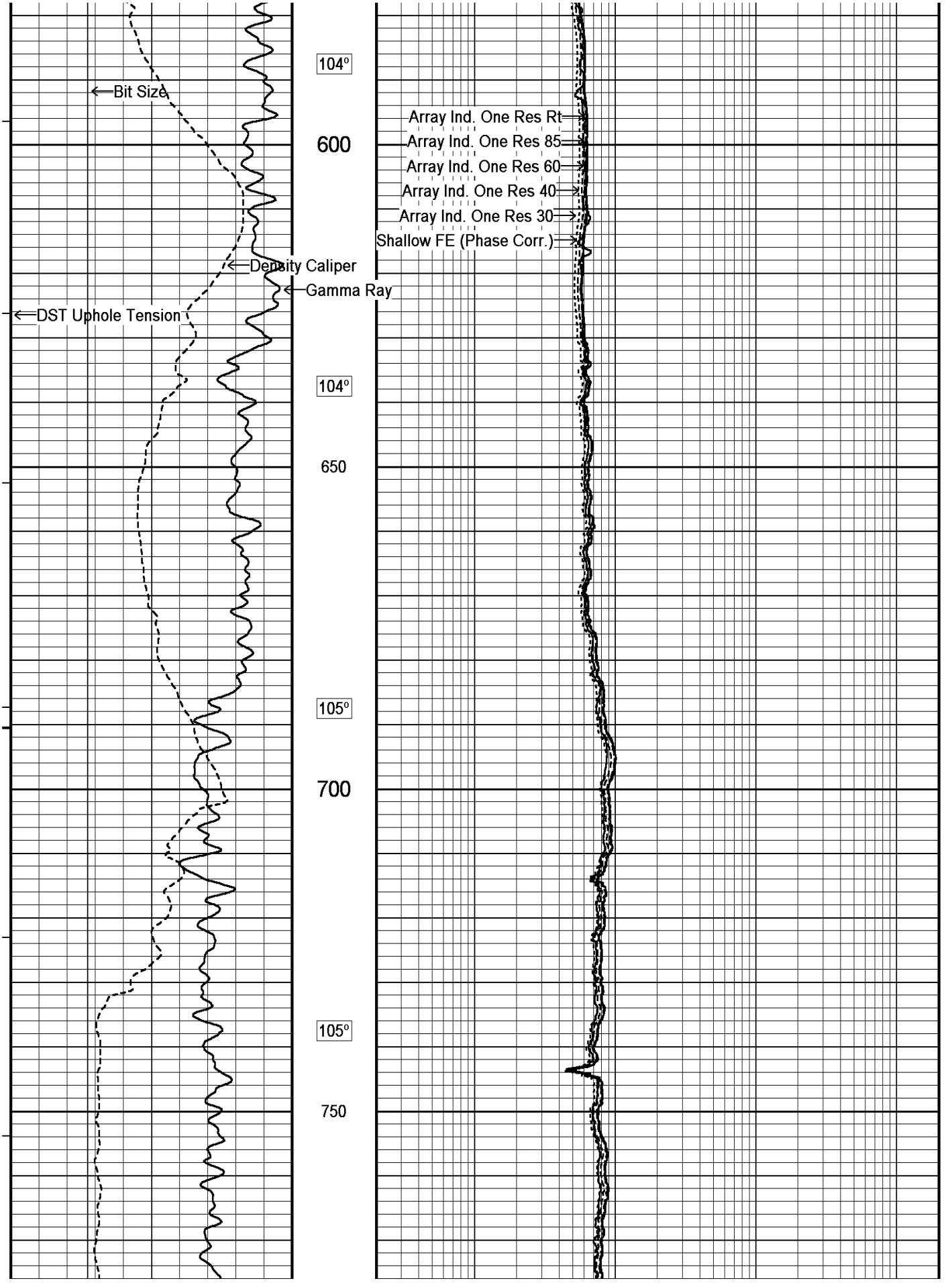
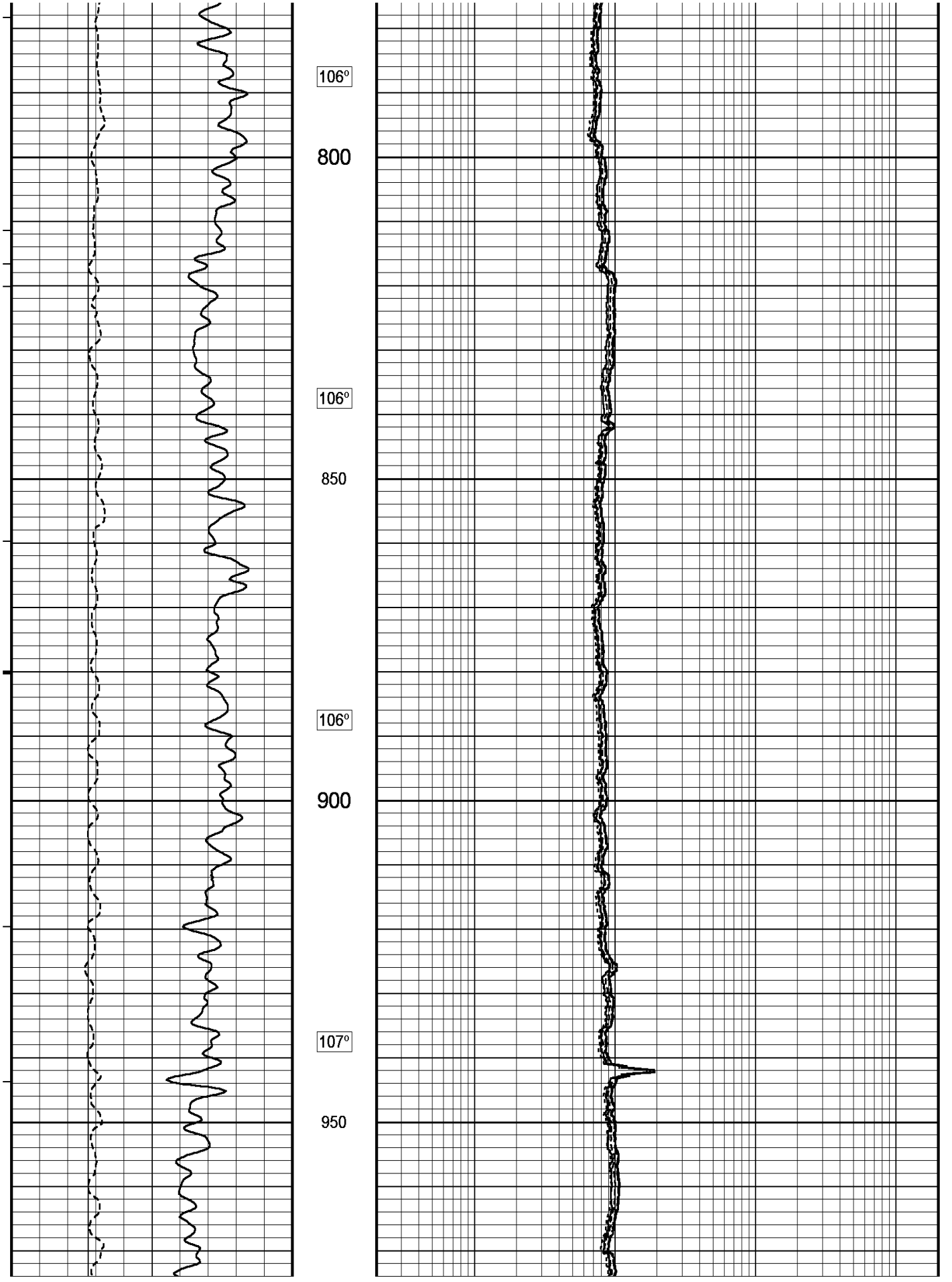
System Versions: Processed with 11.02.3186 Plotted with 11.02.3186

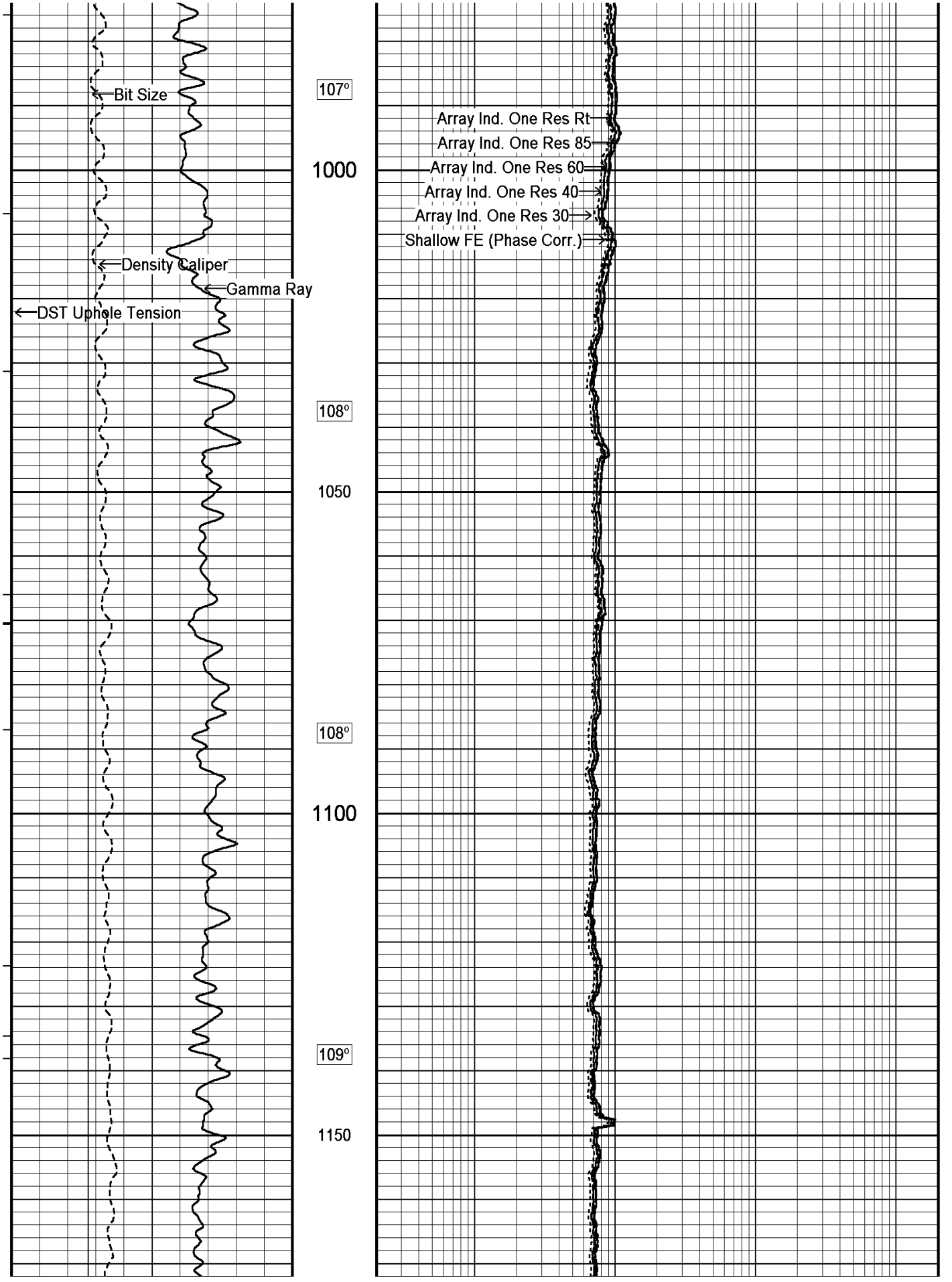
Depth
In
Feet

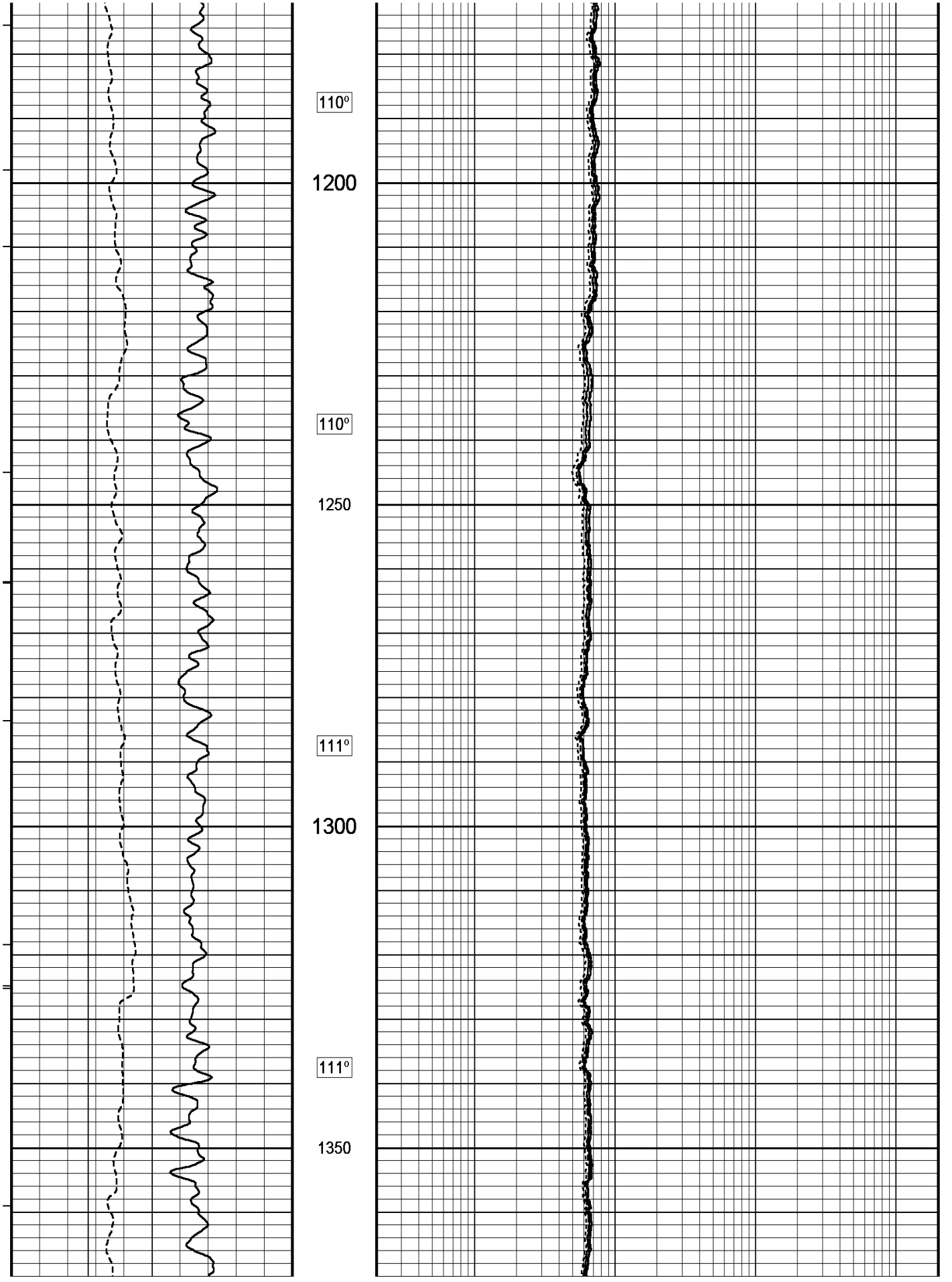
Shallow FE (Phase Corr.)
ohm metres

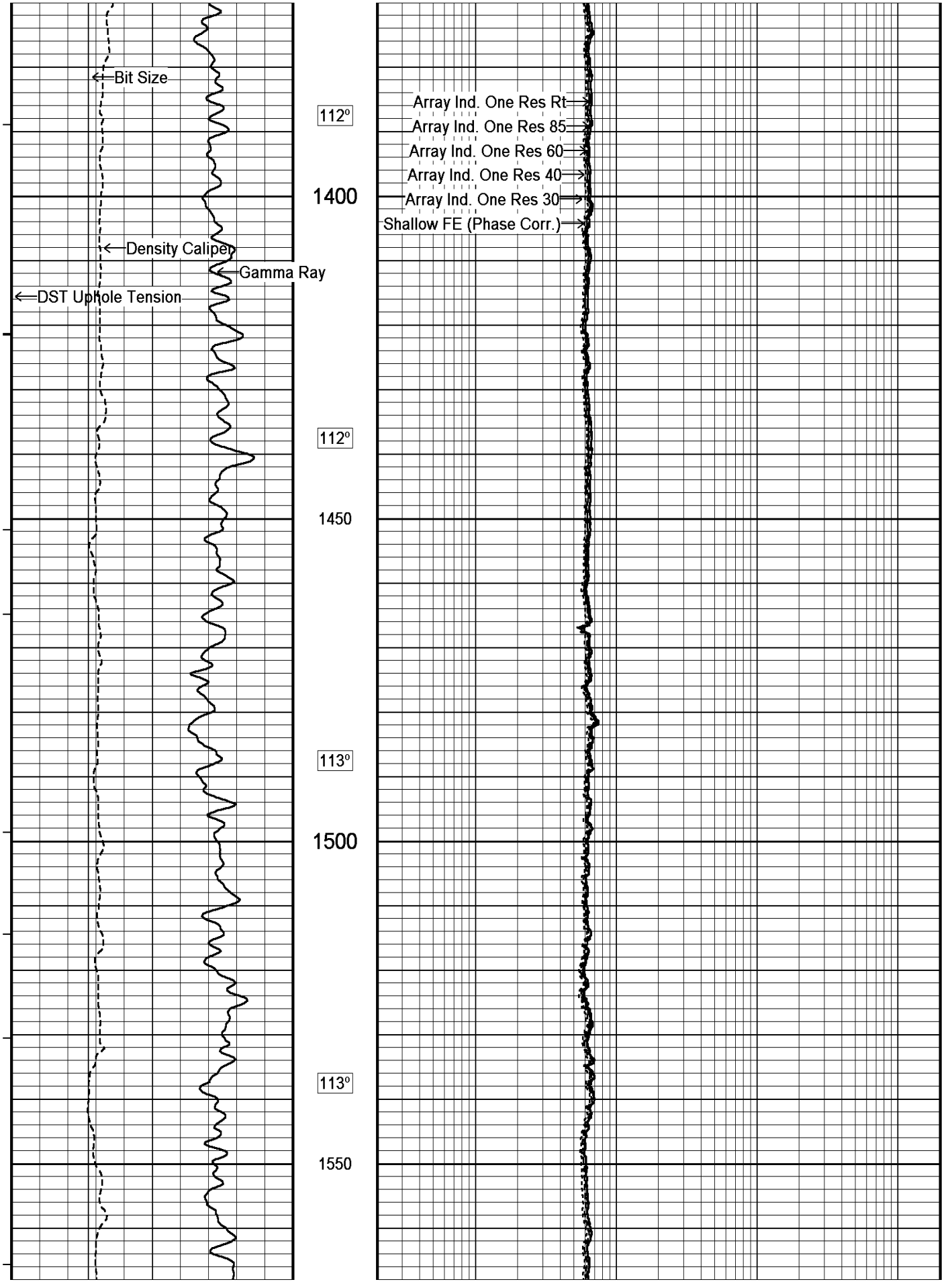

Timing Marks
every 60.0 sec
DST Uphole Tension
pounds
10000
5000
0
0
-5000
-10000
Gamma Ray
API
0
75
150
Density Caliper
inches
6
11
16
Bit Size
inches
6
11
16
Borehole Temp in deg F
Replay Scale 1:240
500
Shoe
103°
550
0.20
2000
1
10
100
1000
Array Ind. One Res 30
ohm metres
Array Ind. One Res 40
ohm metres
Array Ind. One Res 60
ohm metres
Array Ind. One Res 85
ohm metres
Array Ind. One Res Rt
ohm metres

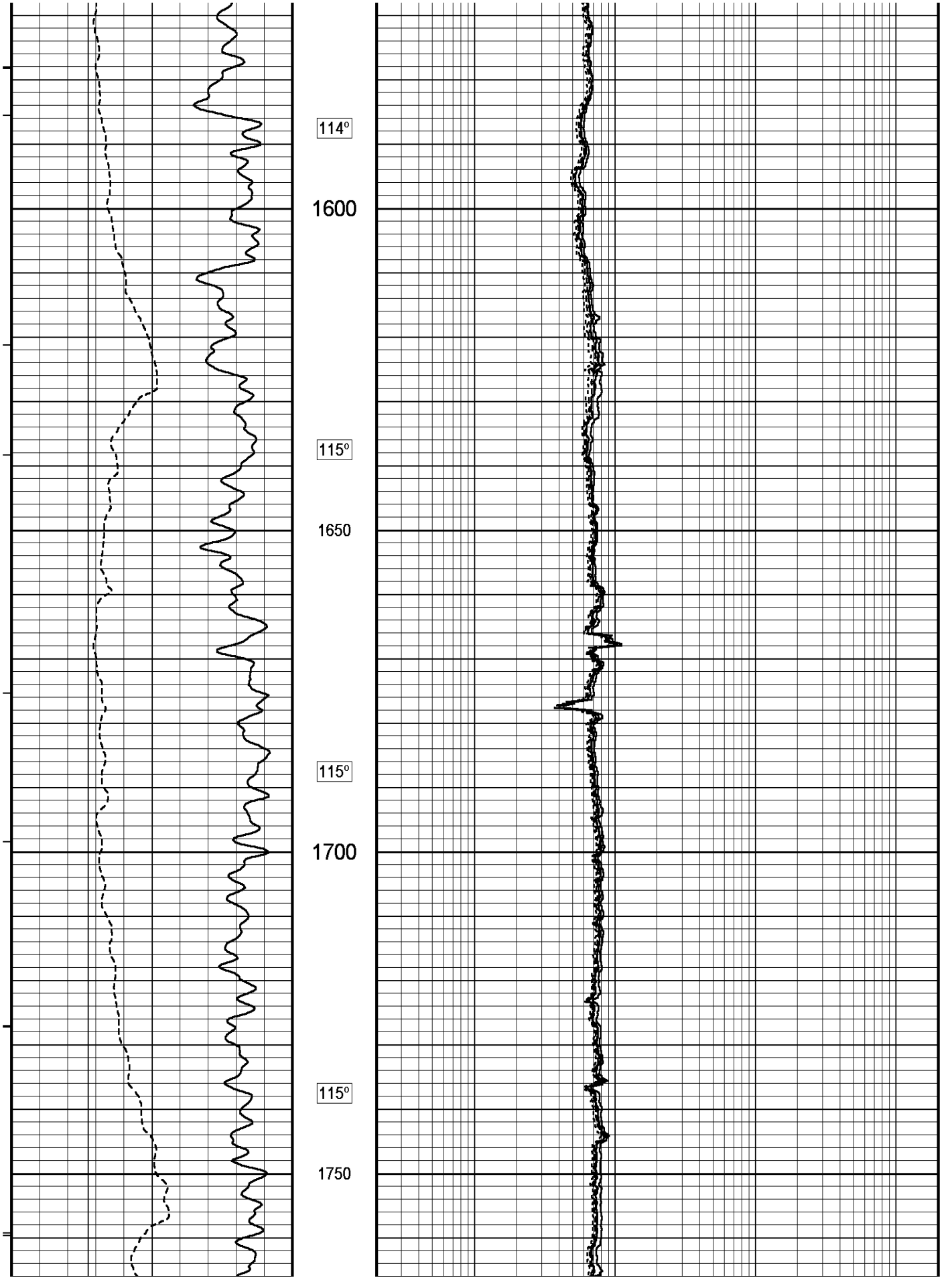

104°
Bit Size
600
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
Density Caliper
Gamma Ray
DST Uphole Tension
104°
650
105°
700
105°
750

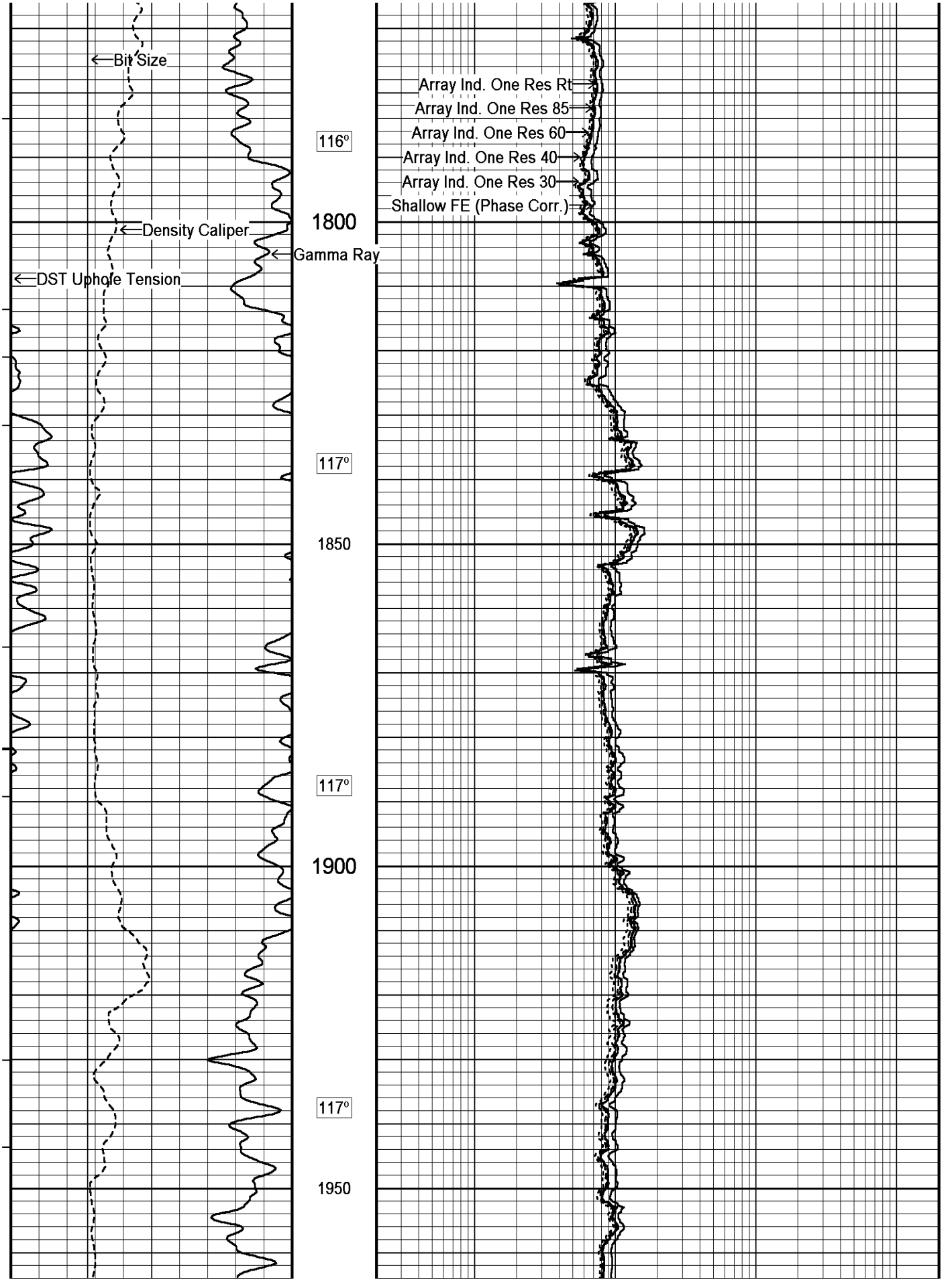

106°
800
106°
850
106°
900
107°
950

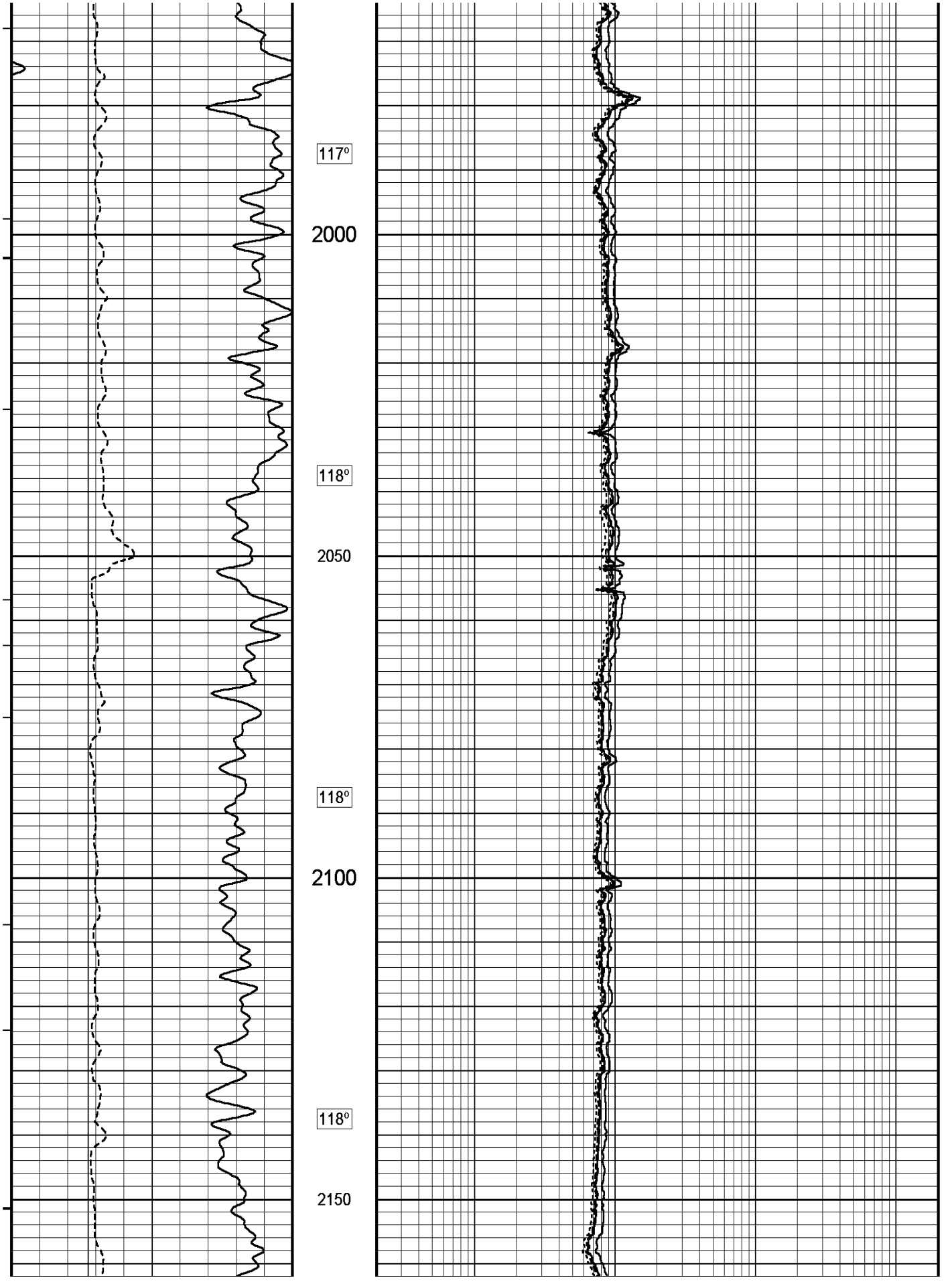

Bit Size
Density Caliper
Gamma Ray
DST Uphole Tension
107°
1000
108°
1050
108°
1100
109°
1150
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)

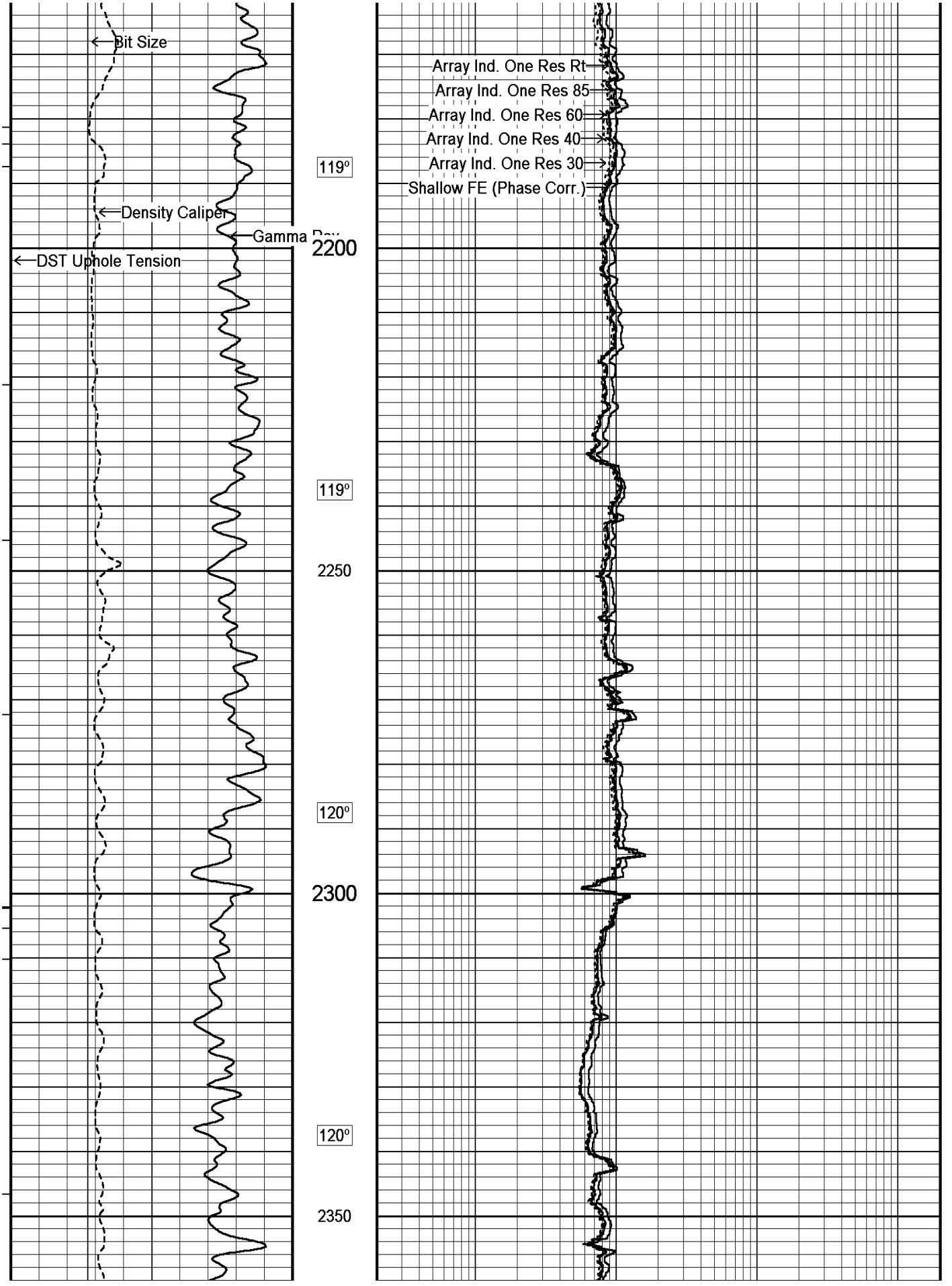

110°
1200
110°
1250
111°
1300
111°
1350

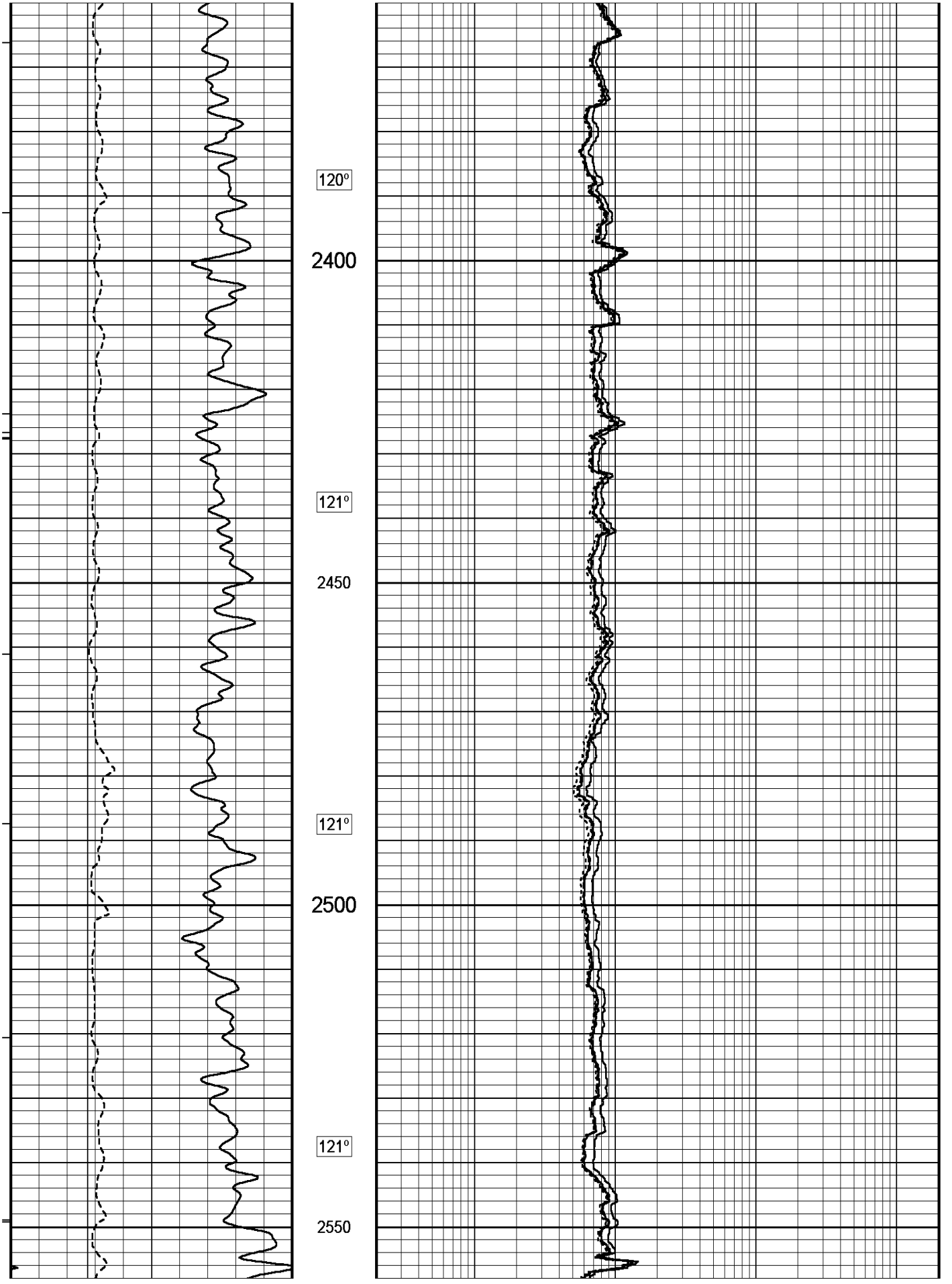

Bit Size
Density Caliper
Gamma Ray
DST Uphole Tension
112°
1400
112°
1450
113°
1500
113°
1550
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)

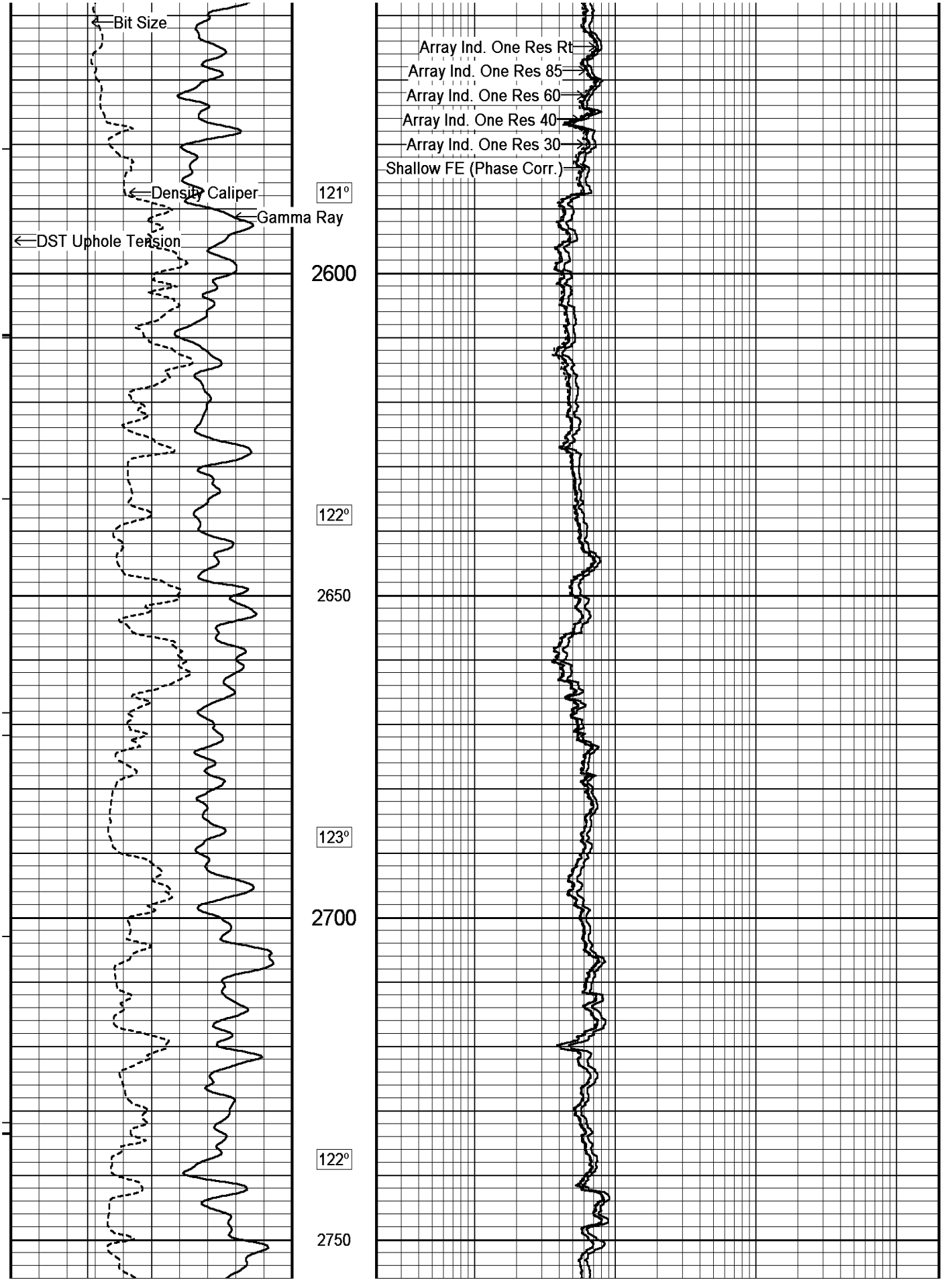

114°
1600
115°
1650
115°
1700
115°
1750

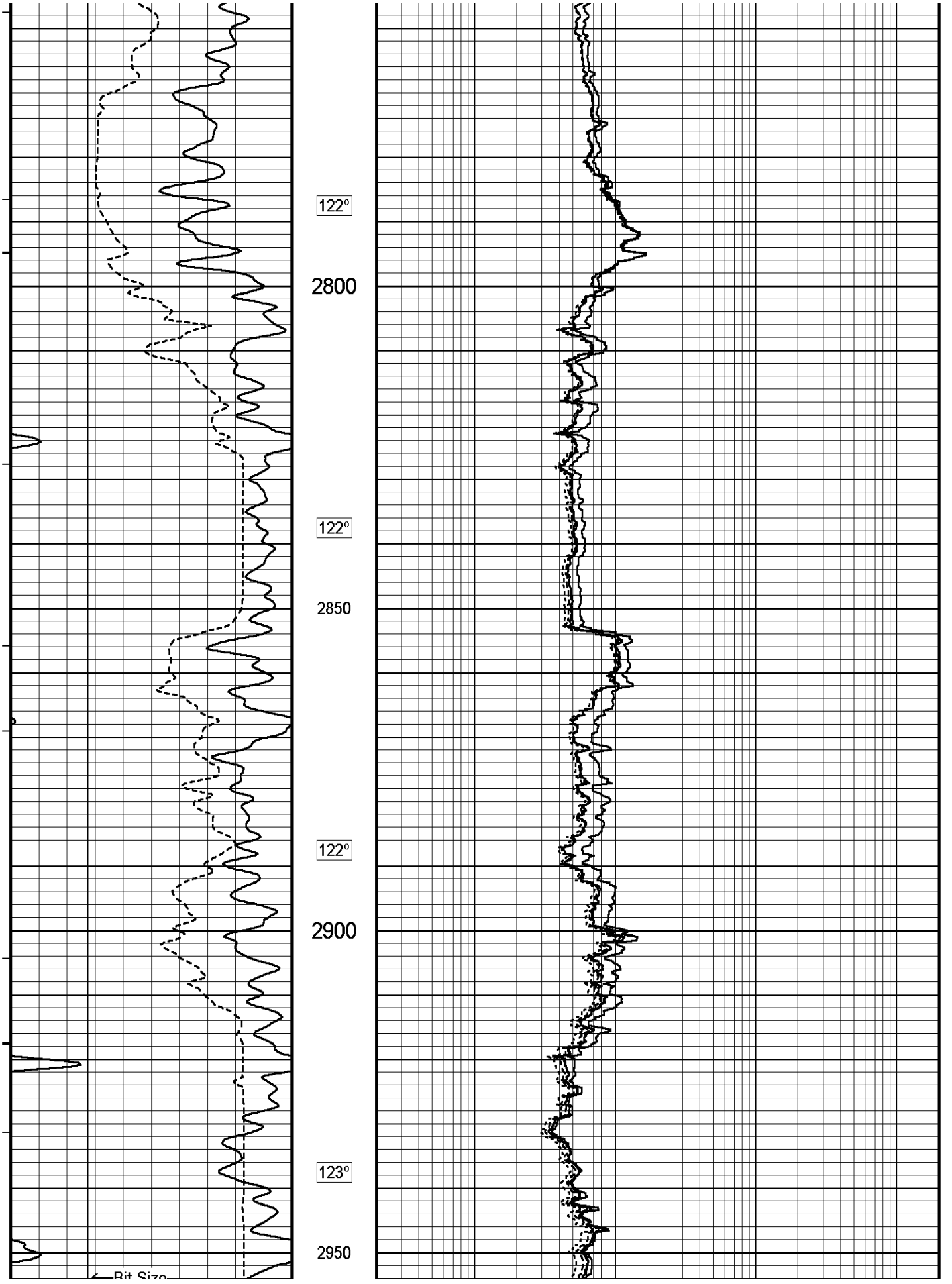

Bit Size
Density Caliper
Gamma Ray
DST Uphole Tension
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
116°
1800
117°
1850
117°
1900
117°
1950

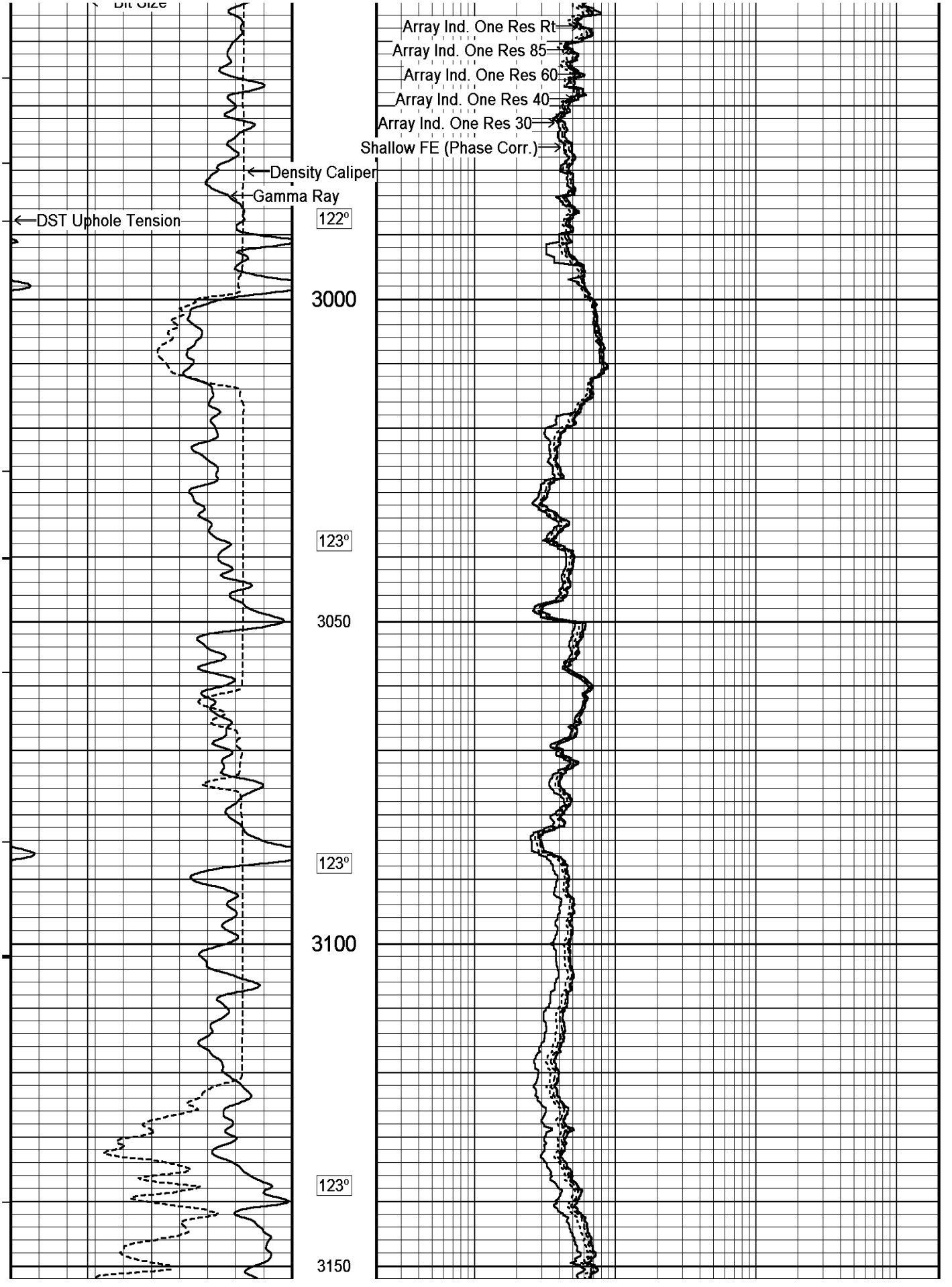

117°
2000
118°
2050
118°
2100
118°
2150

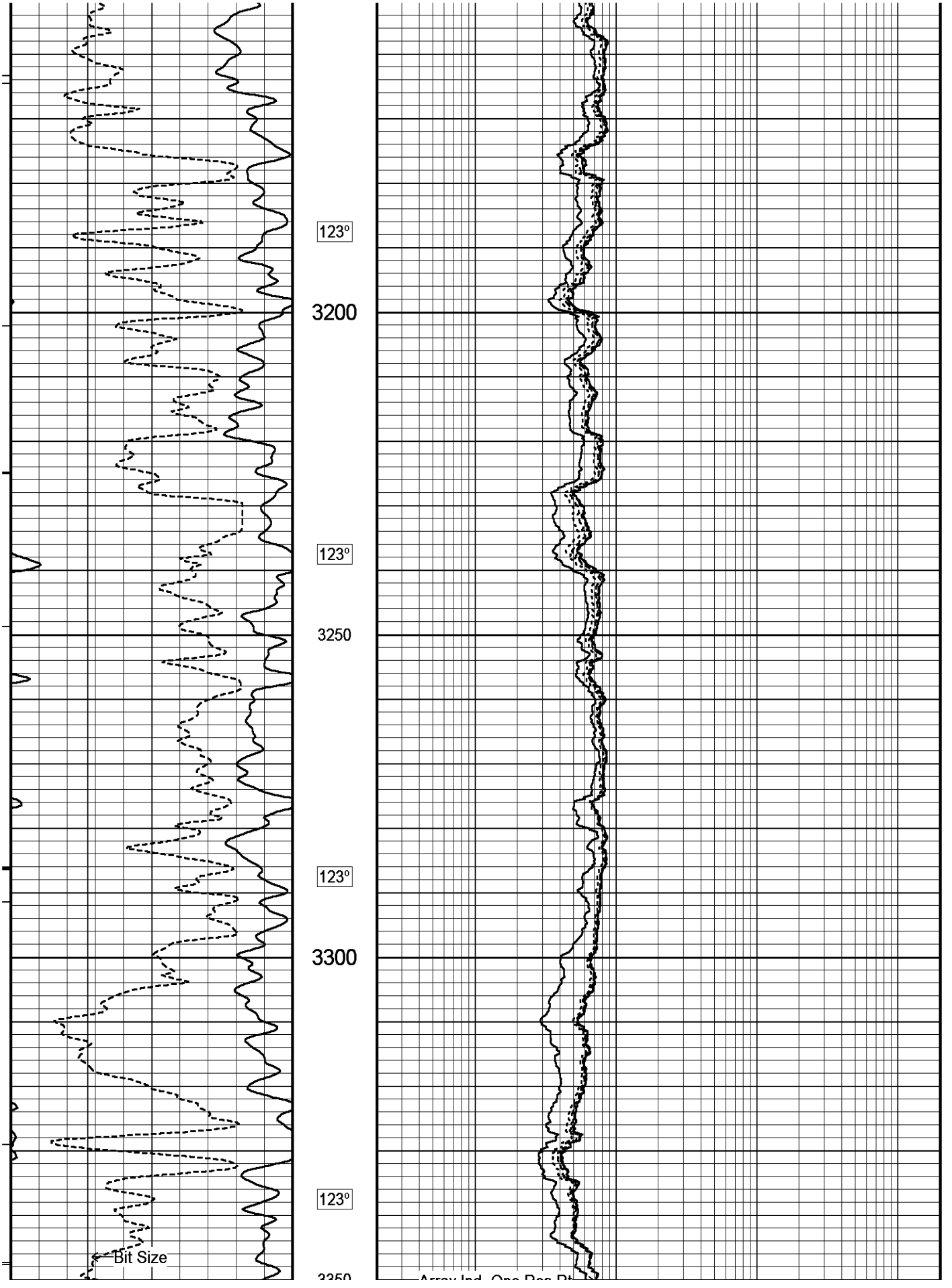

Bit Size
Density Caliper
Gamma Ray
DST Uphole Tension
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
119°
119°
120°
120°
2200
2250
2300
2350

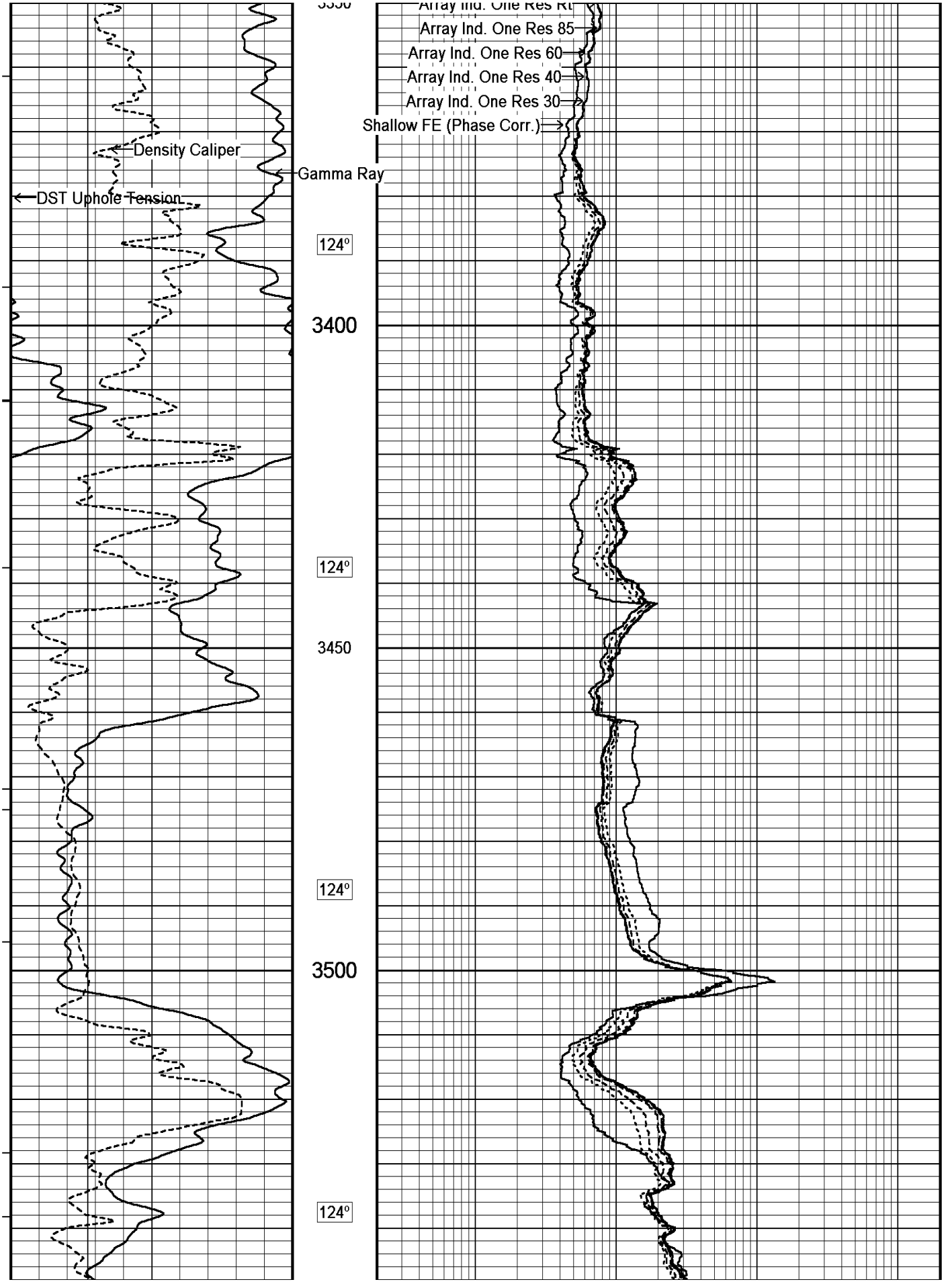

120°
2400
121°
2450
121°
2500
121°
2550

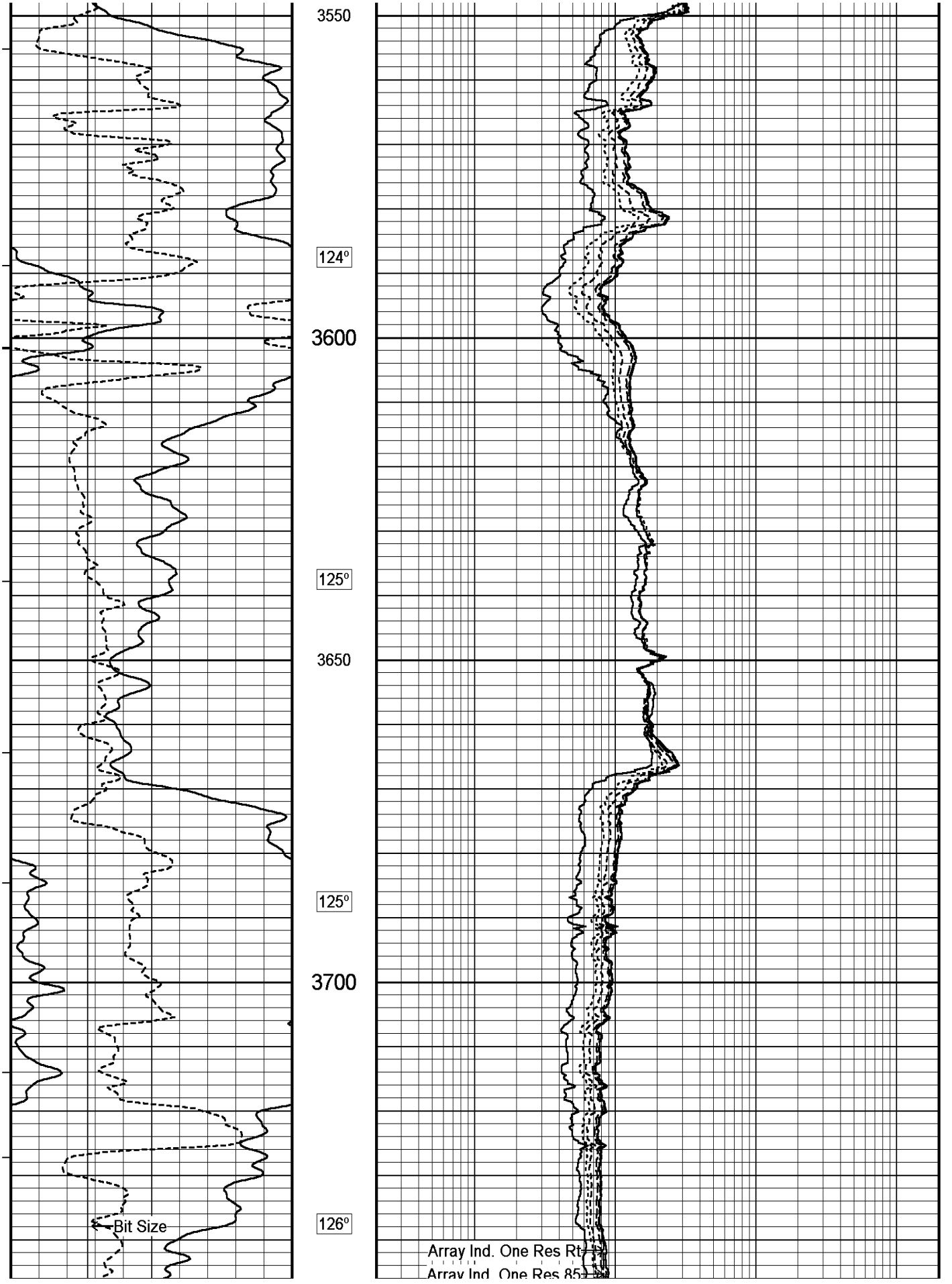

Bit Size
Density Caliper
Gamma Ray
DST Uphole Tension
121°
2600
122°
2650
123°
2700
122°
2750
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)

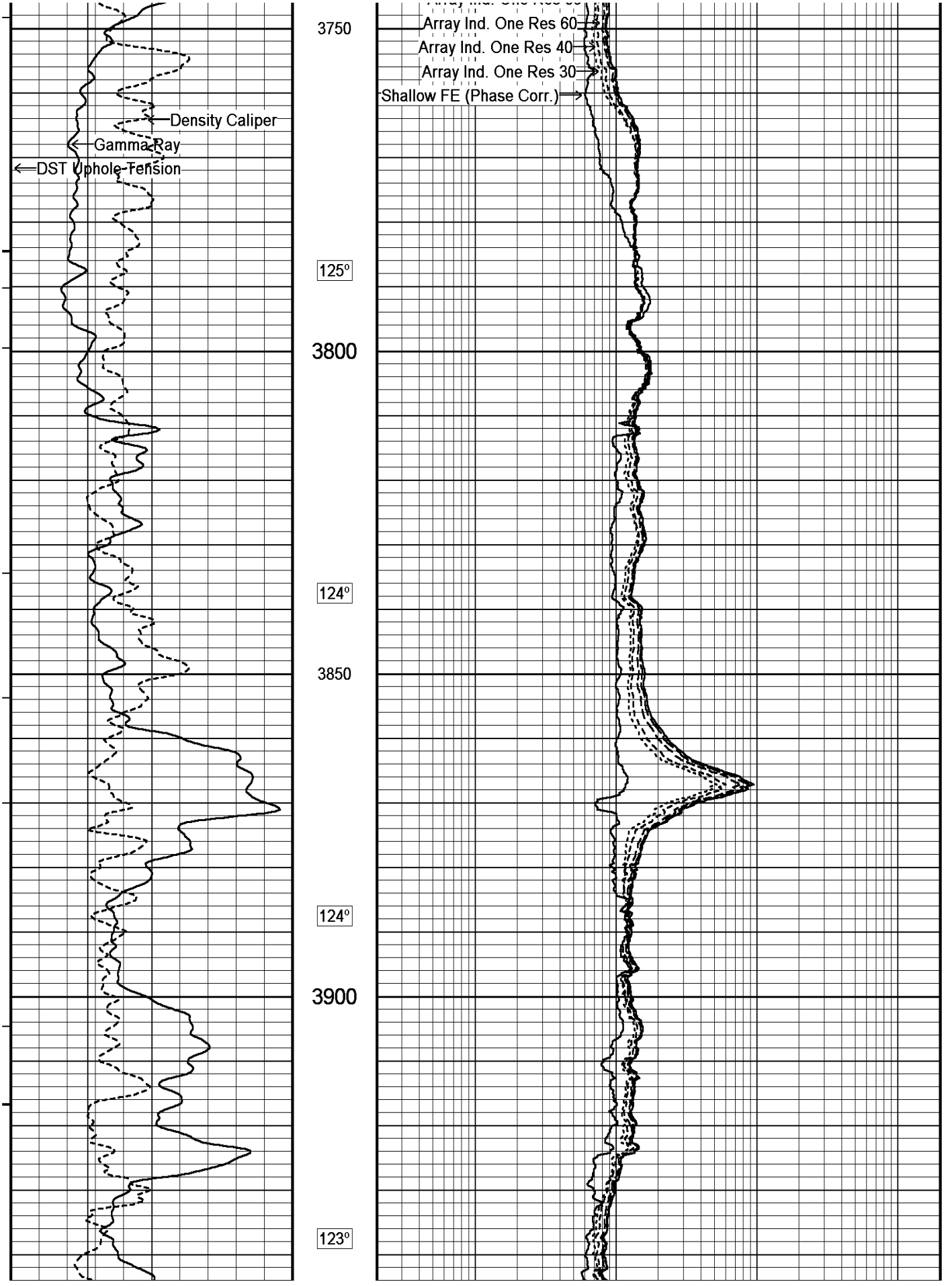

122°
2800
122°
2850
122°
2900
123°
2950
Bit Size

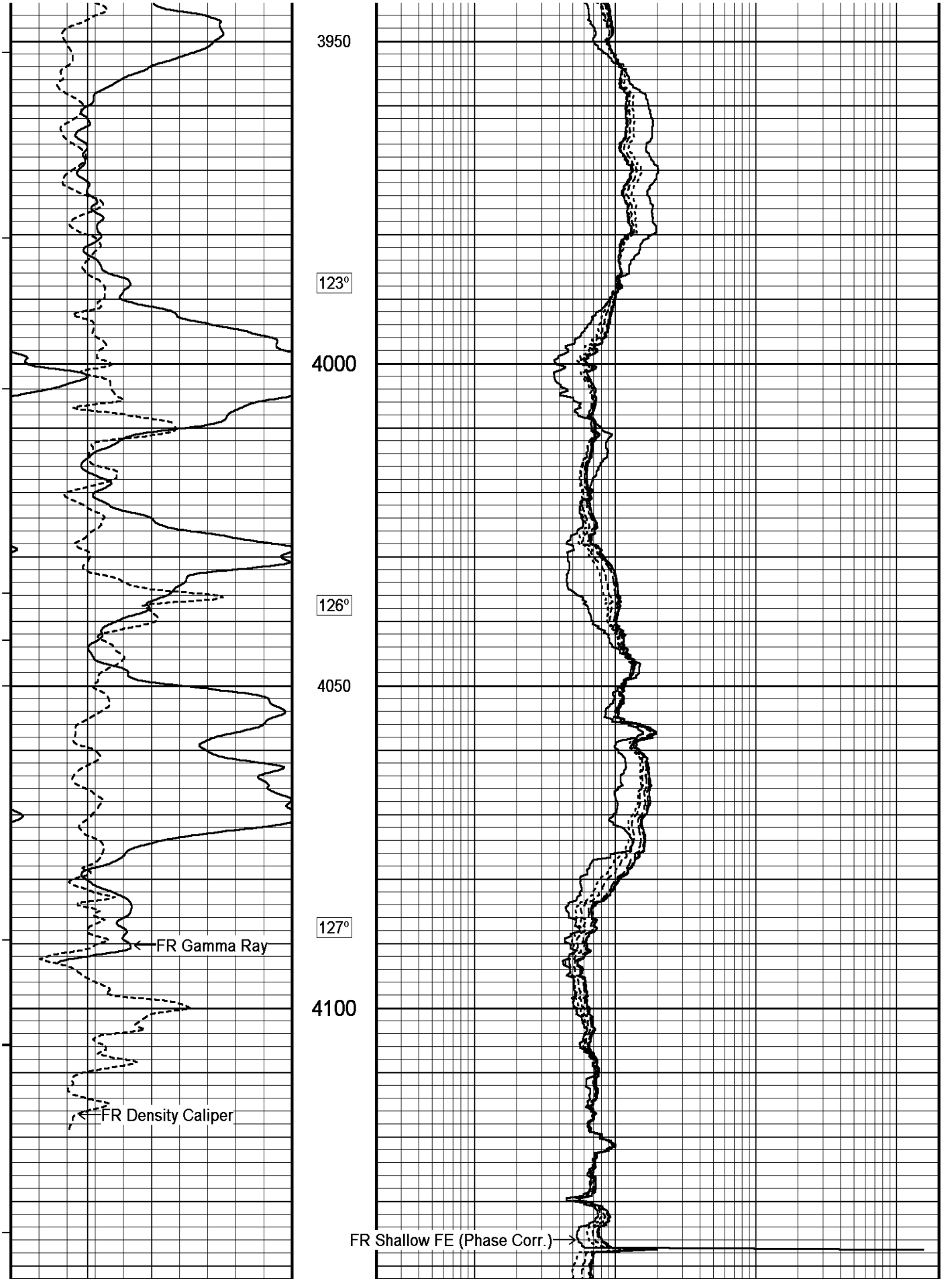

Bit Size
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
Density Caliper
Gamma Ray
DST Uphole Tension
122°
3000
123°
3050
123°
3100
123°
3150

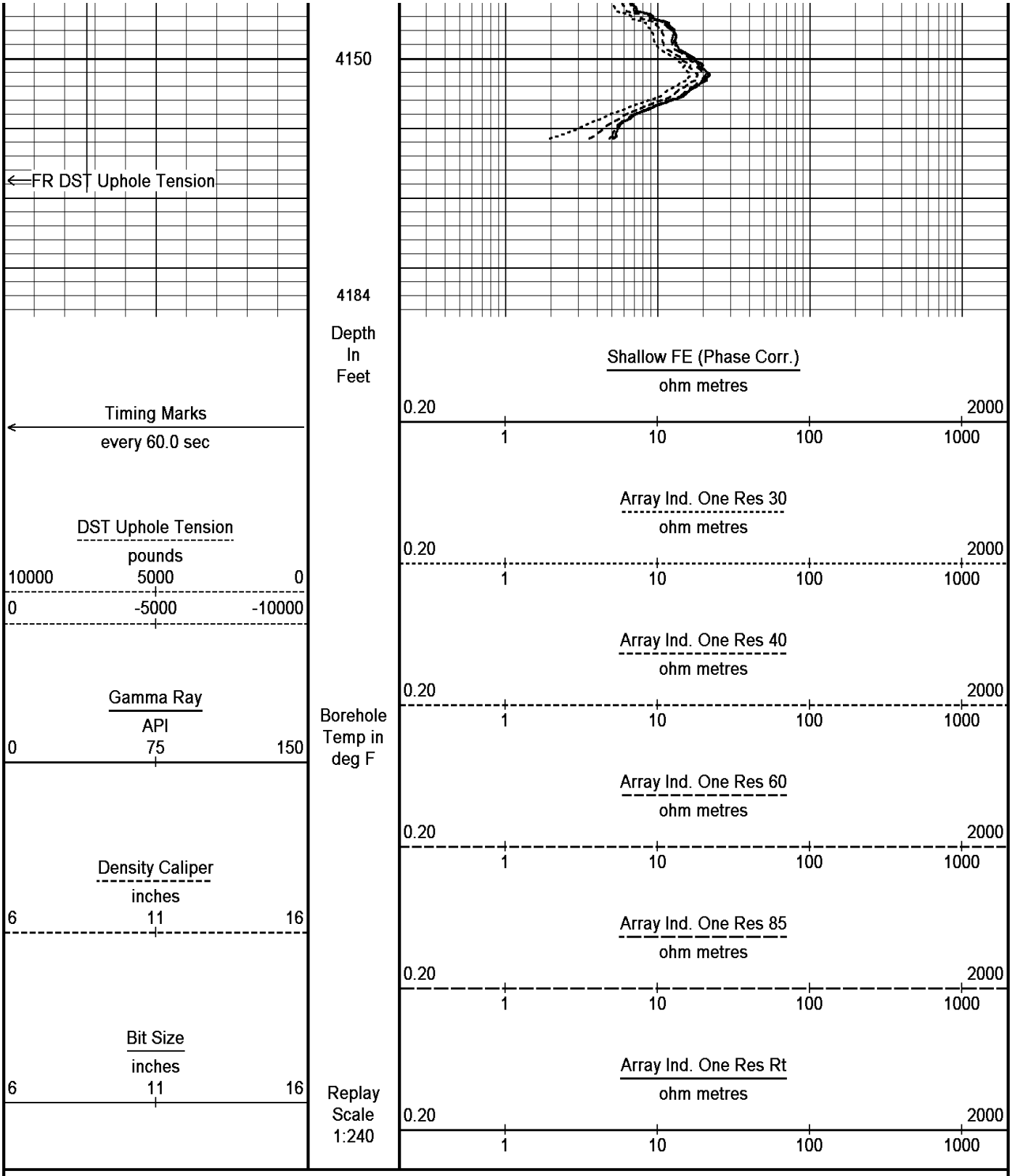

123°
3200
123°
3250
123°
3300
123°
Bit Size
3350


Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
Density Caliper
Gamma Ray
DST Uphole Tension
124°
3400
124°
3450
124°
3500
124°


3550
124°
3600
125°
3650
125°
3700
126°
Bit Size
Array Ind. One Res Rt
Array Ind. One Res 85


Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
Density Caliper
Gamma Ray
DST Uphole Tension
3750
125°
3800
124°
3850
124°
3900
123°


3950
123°
4000
126°
4050
127°
4100
FR Gamma Ray
FR Density Caliper
FR Shallow FE (Phase Corr.)



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5 INCH MAIN LOG

BEFORE SURVEY CALIBRATION

C:\Minimus\Logs\Fram\Mansur 33-1-G\Mansur 33-1-G depth RTAP.dta

General Constants All 000

Last Edited on 15-JUN-2011,01:17

General Parameters		
Mud Resistivity	1.050	ohm-metres
Mud Resistivity Temperature	86.900	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	5.500	inches
Caliper for Differential Caliper	None	
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 08-OCT-2007 09:22

Reading No	Measured	Calibrated (lbs)
1	15585.87	0.00
2	15586.05	0.10

Gamma Calibration MCG-D.J 423

Field Calibration on 11-MAY-2011 16:15

	Measured	Calibrated (API)
Background	71	49
Calibrator (Gross)	851	583
Calibrator (Net)	779	534

Gamma Constants MCG-D.J 423

Last Edited on 15-JUN-2011,01:17

Gamma Calibrator Number	GRCC225	
Mud Density	1.00	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

High Resolution Temperature Constants MCG-D.J 423

Last Edited on

Pre-filter Length	11

Neutron Calibration MDN-A.B 180

Base Calibration on 11-MAY-2011 15:18
Field Check on 13-JUN-2011 17:17

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	2919	91	3714	110
Ratio	32.187		33.764	

Field Calibrator at Base

	Calibrated (cps)	
	2362	3474
Ratio	0.680	

Field Check

	Calibrated (cps)	
	2382	3540
Ratio	0.673	

Neutron Constants MDN-A.B 180

Last Edited on 15-JUN-2011,01:18

Neutron Source Id	P31131B

Neutron Jig Number	NJ6630	
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	7.00	cu
Dolomite Sigma	4.70	cu
Formation Pressure Source	None	
Formation Pressure	N/A	kpsi
Temperature Source	None	
Temperature	N/A	degrees F
Mud Salinity	0.00	kppm
Formation Fluid Salinity Source	None	
Formation Fluid Salinity	N/A	kppm
Barite Mud Correction	Not Applied	

FE Calibration MFE-B.J 314

Base Calibration on 16-MAY-2011 14:12
Field Check on 13-JUN-2011 17:40

Base Calibration

	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	962.4	126.8
Base Check		280.7
Field Check		280.8

FE Constants MFE-B.J 314

Last Edited on 15-JUN-2011,01:19

Running Mode	No Sleeve	
MFE K Factor	0.1268	
Caliper Source for FE correction	Density Caliper	
Caliper Value for FE correction	N/A	inches
Rm Source for FE correction	Temperature Corr	
Temp. for Rm Corr.	MCG External Temperature	
Stand-off	0.5	inches

Sonic Constants MSS-C.K 322

Last Edited on 15-JUN-2011,01:19

Maximum Boundary Contrast	100.00	micro-sec/ft
Fluid Transit Time	189.00	micro-sec/ft
Limestone Transit Time	47.50	micro-sec/ft
Sandstone Transit Time	55.50	micro-sec/ft
Dolomite Transit Time	43.50	micro-sec/ft
Sonic used for Porosities	3-5' Compensated Sonic	
Correction for Sonde Skew	Applied	
Cycle Stretch Algorithm	Applied	
MN3FT	N/A	micro-sec
MX3FT	N/A	micro-sec
Hunt-Raymer Constant	83.13	micro-sec/ft
Sonde Mode	Full Waveform	
Hole Type	Open Hole	

Sonde Parameters

	Measured	Calibrated
Offset	0.0000	0.0000
Free Pipe	0.0000	0.0000

Peak Amplitude Source 0

Waveform	Start Time (micro-sec)	Width (micro-sec)	Pre Gain	Start Gain	Discriminator (mV)
3'	N/A	N/A	N/A	N/A	N/A
4'	N/A	N/A	N/A	N/A	N/A

5'	N/A	N/A	N/A	N/A	N/A
6'	N/A	N/A	N/A	N/A	N/A

Processed Fixed Gate Parameters

Waveform Used For Processing 3 foot

Start Time (micro-sec)	End Time (micro-sec)	Discriminator (mV)	Depth (ft)
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	0.00
0.00	0.00	0.00	

Full Waveform Parameters

Use 3' Waveform to derive TR	No	
Use 4' Waveform to derive TR	No	
Use 5' Waveform to derive TR	No	
Use 6' Waveform to derive TR	No	
3' Waveform Discriminator Level	0.30	mV
4' Waveform Discriminator Level	0.30	mV
5' Waveform Discriminator Level	0.15	mV
6' Waveform Discriminator Level	0.15	mV
3' Waveform Filter	0	
4' Waveform Filter	0	
5' Waveform Filter	0	
6' Waveform Filter	0	
Semblance Level	0.50	
Semblance Window Width	120.00	micro-sec
Sonic 1 Despiker	100.00	micro-sec/ft
Sonic 2 Despiker	100.00	micro-sec/ft

Induction Calibration MAI-B.J 376

Base Calibration on 11-MAY-2011,16:18
Field Check on 13-JUN-2011 16:52

Base Calibration

Test Loop Calibration

Channel	Measured Low	Measured High	Calibrated (mmho/m) Low	Calibrated (mmho/m) High
1	16.4	461.5	9.3	966.2
2	5.9	377.0	7.6	821.4
3	3.1	255.4	5.2	566.0
4	1.7	130.3	2.6	279.2

Array Temperature 73.8 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	15.2	3907.0
2	0.0	0.0	30.9	3550.4
3	0.0	0.0	29.8	3073.4
4	0.0	0.0	20.4	2104.2
Deep	0.0	0.0	18.9	2032.2
Medium	0.0	0.0	43.0	4024.2
Shallow	0.0	0.0	45.2	5211.7
Array Temperature	0.0		82.2	Deg F

Induction Constants MAI-B.J 376

Last Edited on 15-JUN-2011,01:21

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	

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.	MCG External Temperature	
Squasher Start	0.0020	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	

High Resolution Temperature Constants MAI-B.J 376

Last Edited on

Pre-filter Length	11

Photo Density Calibration MPD-C.J 376

Base Calibration on 11-MAY-2011 10:50
Field Check on 13-JUN-2011 17:31

Density Calibration

Base Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	51222	16994	52994	19128
Reference 2	24121	2659	25185	2558

Field Check at Base

1246.9	1415.2

Field Check

1241.4	1421.9

PE Calibration

Base Calibration	Measured			Calibrated
	WS	WH	Ratio	Ratio
Background	227	1117		
Reference 1	16986	51033	0.336	0.309
Reference 2	6836	23979	0.289	0.274

Field Check at Base

226.7	1117.1

Field Check

226.6	1114.1

Density Constants MPD-C.J 376

Last Edited on 15-JUN-2011,01:35

Density Source Id	P21136B	
Nylon Calibrator Number	527	
Aluminium Calibrator Number	527	
Density Shoe Profile	4 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1.10	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)
2.68	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	

Caliper Calibration MPD-C.J 376

Base Calibration on 08-JUN-2011 20:12
Field Calibration on 13-JUN-2011 17:35

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	16928	4.01
2	25105	5.97
3	33035	7.96
4	41488	9.86
5	50640	11.92
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
8.00	7.96

DOWNHOLE EQUIPMENT

C:\Minimus\Logs\Fram\Mansur 33-1-G\Mansur 33-1-G depth RTAP.dta

Shuttle Running Tool 3.5" (SRT A)
SRT-A 34 LG: 5.42 ft WT: 37.5 lb OD: 2.52 in

MBS-A 400v Compact Battery Sub
MBS-A 26 LG: 14.24 ft WT: 105.8 lb OD: 2.24 in

Compact Comms Gamma
MCG-D.J 423 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in

Compact Memory Sub A.C
MMS-A.C 21 LG: 3.12 ft WT: 30.9 lb OD: 2.24 in

SKJ-D.A Compact Knuckle Joint
SKJ-D.A 89 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

SHA-J.A Compact Swivel Head Adaptor
SHA-J.A 397 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in

MIS-A.A Compact Inline Bowspring sub
MIS-A.A 23 LG: 5.70 ft WT: 33.1 lb OD: 2.24 in

Compact Neutron
MDN-A.B 180 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

Compact Density/Caliper
MPD-C.J 376 LG: 9.59 ft WT: 90.4 lb OD: 2.24 in

MIS-A.A Compact Inline Bowspring sub
MIS-A.A 274 LG: 5.70 ft WT: 33.1 lb OD: 2.24 in

SHA-J.A Compact Swivel Head Adaptor
SHA-J.A 225 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in

SKJ-D.A Compact Knuckle Joint
SKJ-D.A 143 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

MIS-E.A Compact Inline Standoff sub
MIS-E.A 333 LG: 2.14 ft WT: 15.4 lb OD: 2.24 in

Compact Focussed Electric
MFE-B.J 314 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

MIS-E.A Compact Inline Standoff sub
MIS-E.A 334 LG: 2.14 ft WT: 15.4 lb OD: 2.24 in

Compact Sonic
MSS-C.K 322 LG: 12.52 ft WT: 72.8 lb OD: 2.24 in

MIS-E.A Compact Inline Standoff sub
MIS-E.A 108 LG: 2.14 ft WT: 15.4 lb OD: 2.24 in

Compact Induction
MAI-B.J 376 LG: 12.52 ft WT: 48.5 lb OD: 2.24 in

Total Length: 103.94 ft Weight: 754.0 lb

Tool Zero (1.84ft from bottom)
All measurements relative to tool zero.

COMPANY	FRAM OPERATING LLC
WELL	MANSUR 33-1-G
FIELD	WILDCAT
PROVINCE/COUNTY	MESA
COUNTRY/STATE	U.S.A. / COLORADO

Elevation Kelly Bushing	6097.00	feet	First Reading	4165.00	
Elevation Drill Floor	6096.00	feet	Depth Driller	4227.00	feet
Elevation Ground Level	6083.00	feet	Depth Logger	4196.00	feet

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ELECTRIC LOG

40 Years of Wireline 1970 2010

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ARRAY INDUCTION - RTAP
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ELECTRIC LOG

COMPANY	FRAM OPERATING LLC
WELL	MANSUR 33-1-G
FIELD	WILDCAT
PROVINCE/COUNTY	MESA
COUNTRY/STATE	U.S.A. / COLORADO
LOCATION	SHL: 2165' FNL & 2087' FWL
	BHL: 1732' FNL & 588' FWL

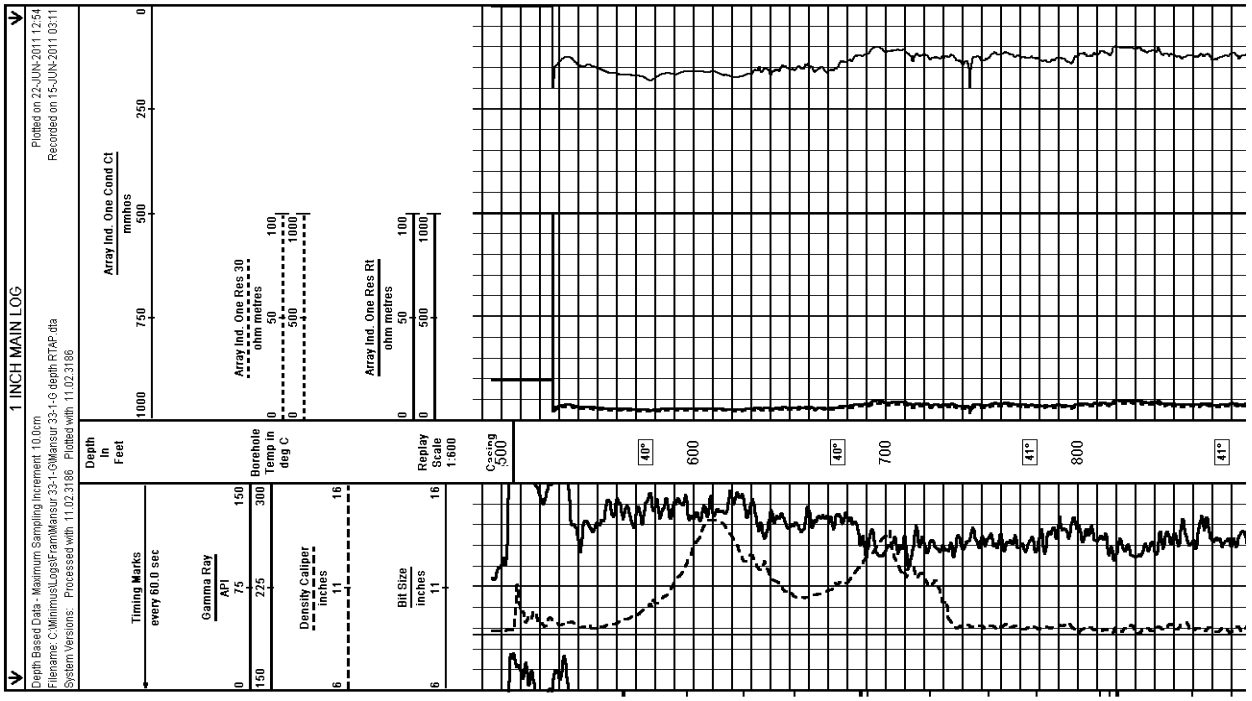
SEC	TWP	RGE	Other Services
33	12S	97W	MPD/MDN
			MSS

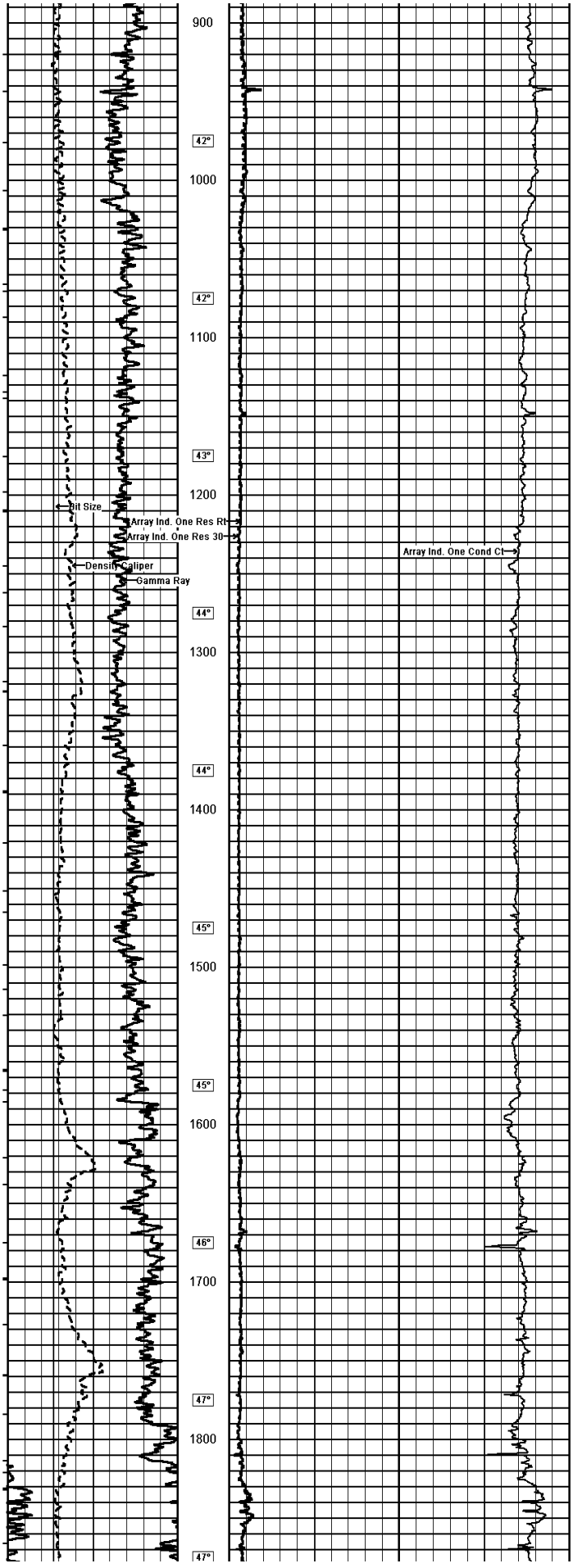
API Number 05-077-09473
Permit Number

Permanent Datum G.L., Elevation 6087 feet
Log Measured From K.B. @ 14 FEET above Permanent Datum
Drilling Measured From K.B.

Elevations:	feet
KB	6097.00
DF	6096.00
GL	6083.00

Date	13-JUN-2011				
Run Number	ONE				
Depth Driller	4227.00	feet			
Depth Logger	4196.00	feet			
First Reading	4165.00				
Last Reading	506.00				
Casing Driller	503.00	feet			
Casing Logger	506.00	feet			
Bit Size	8.750	inches			
Hole Fluid Type	DAP				
Density / Viscosity	9.20	lb/USg	38.00	CP	
PH / Fluid Loss	7.90		8.00	ml/30Min	
Sample Source	FLOW LINE				
Rm @ Measured Temp	1.05 @ 86.9	ohm-m			
Rmf @ Measured Temp	0.84 @ 86.9	ohm-m			
Rmc @ Measured Temp	1.26 @ 86.9	ohm-m			
Source Rmf / Rmc	CALC		CALC		
Rm @ BHT	0.729 @127.0	ohm-m			
Time Since Circulation	1 HOUR				
Max Recorded Temp	127.00	deg F			
Equipment Name	COMPACT				
Equipment / Base	18063		RK SPG		
Recorded By	J. BOON				
Witnessed By	J. GRIGGS				

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1000
42°
1100
43°
1200
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Array Ind. One Res Rt
Array Ind. One Res 30
Array Ind. One Cond Ct
Density Caliper
Gamma Ray
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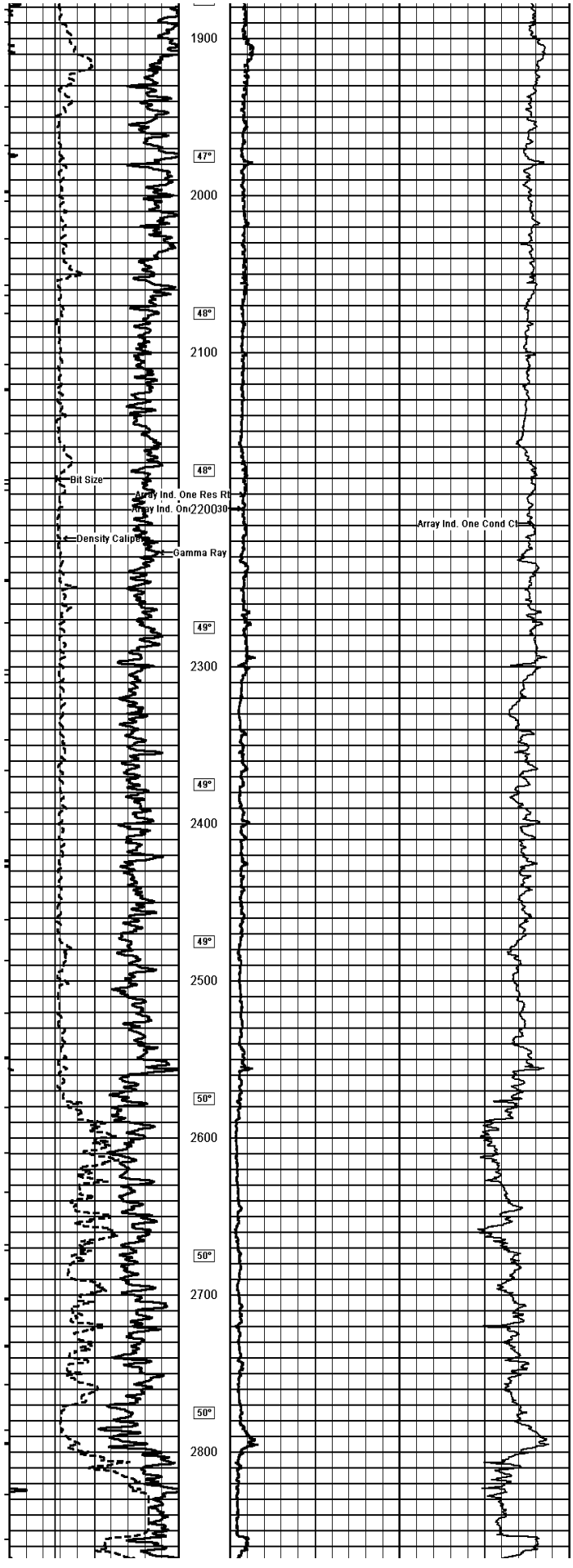
1300
44°
1400
45°
1500
45°
1600
46°
1700
47°
1800
47°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Array Ind. One Cond Ct
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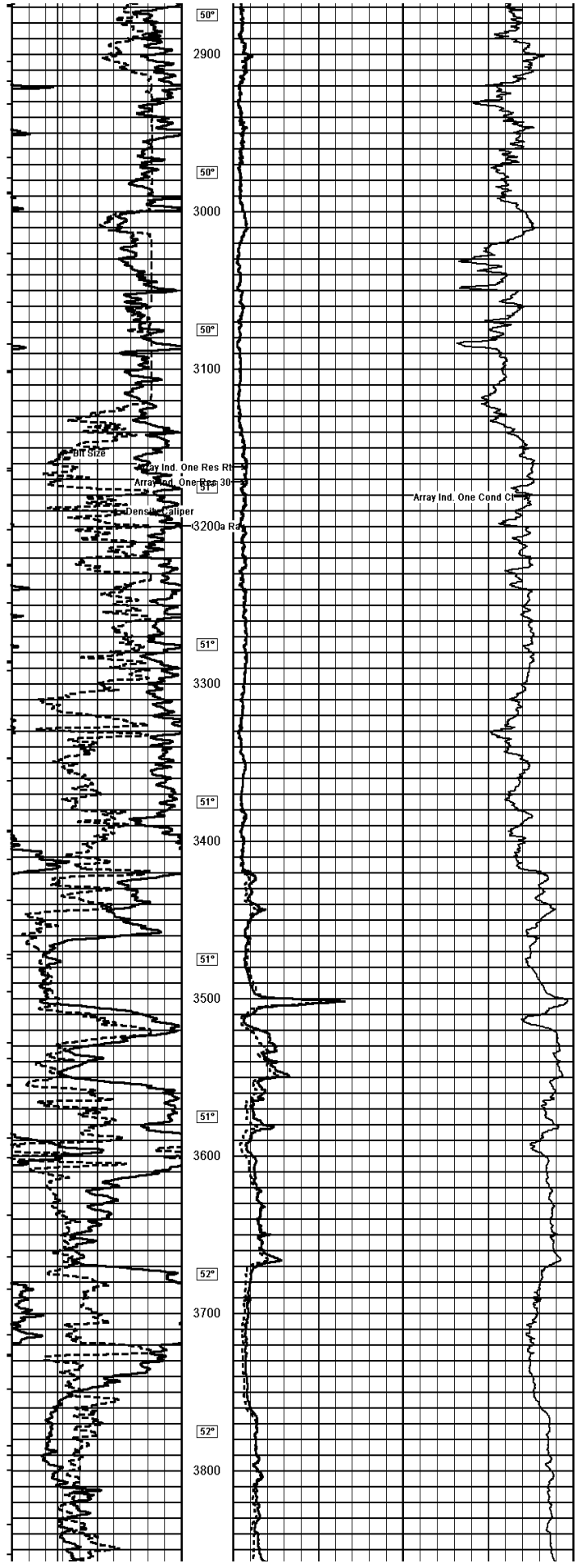
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Bit Size
Array Ind. One Res Rt
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Array Ind. One Cond Cl
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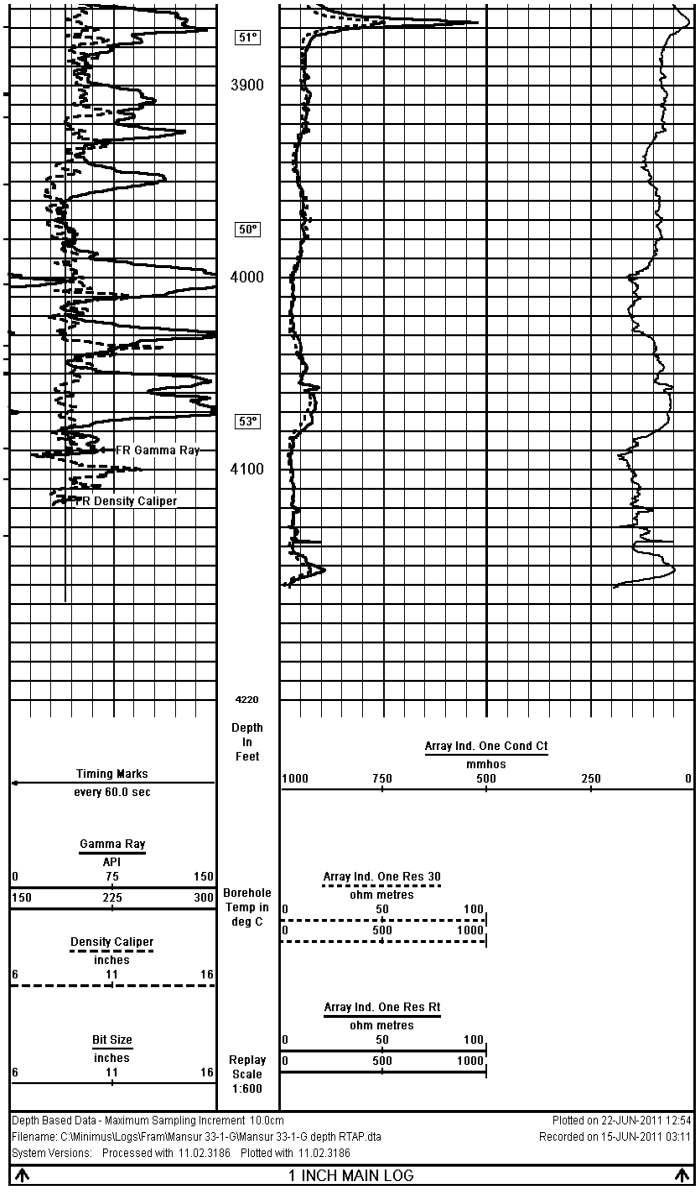

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WELL	MANSUR 33-1-G
FIELD	WILDCAT
PROVINCE/COUNTY	MESA
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