



Weatherford

**HOLE VOLUME
CALIPER
LOG**

COMPANY	ALTA MESA SERVICES, LP		
WELL	ML INVESTMENTS 1-3		
FIELD	WILDCAT		
PROVINCE/COUNTY	PAYETTE		
COUNTRY/STATE	U.S.A. / IDAHO		
LOCATION	SHL:1625' FNL& 3276' FEL		
SEC 3	TWP 8N	RGE 4W	Other Services
			PHOTO DENSITY
			DUAL SPACED NEUTRON
API Number	11-075-20026	ARRAY INDUCTION	
Permanent Datum G.L., Elevation 2675 feet			
Log Measured From KB			Elevations: KB 2687.00
Drilling Measured From KB @ 13 FT			DF 2686.00
			GL 2675.00
Date	13-DEC-2015		
Run Number	ONE		
Service Order	2653-137165422		
Depth Driller	5585.00	feet	
Depth Logger	5585.00	feet	
First Reading	5528.00	feet	
Last Reading	1088.00	feet	
Casing Driller	1084.00	feet	
Casing Logger	1088.00	feet	
Bit Size	8.750	inches	
Hole Fluid Type	WBM		
Density / Viscosity	10.00 lb/USg	40.00 sec/qt	
PH / Fluid Loss	12.00	13.80 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	2.70 @ 79.0	ohm-m	
Rmf @ Measured Temp	2.16 @ 79.0	ohm-m	
Rmc @ Measured Temp	3.24 @ 79.0	ohm-m	
Source Rmf / Rmc	CALC	CALC	
Rm @ BHT	1.38 @150.0	ohm-m	
Time Since Circulation	0 HOURS		
Max Recorded Temp	158.00	deg F	
Equipment / Base	13045	CASPER	
Recorded By	W.HANKS		
Witnessed By	DAVE SMITH		

BOREHOLE RECORD

Last Edited: 12-DEC-2015 20:59

Bit Size inches	Depth From feet	Depth To feet
8.750	1084.00	5585.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	1084.00	40.00

REMARKS

SOFTWARE VERSION USED: 15.03.5939
 TOOLS CONVEYED VIA DRILL PIPE/COMPACT WELL SHUTTLE

LOGS RECORDED USING A 200V MEMORY LOGGING SYSTEM
 200V EXTENDED BATTERIES USED TO POWER TOOLSTRING

ALL DEPTHS RECORDED WITH WEATHERFORD ADVANTAGE DEPTH SYSTEM IN CONJUNCTION WITH RIG PASON EDR SYSTEM
 ALL DEPTHS CORRECTED TO DRILLER'S STRAP DEPTH

TIGHT PULLS, BOREHOLE SIZE, AND RUGOSITY MAY AFFECT DATA QUALITY

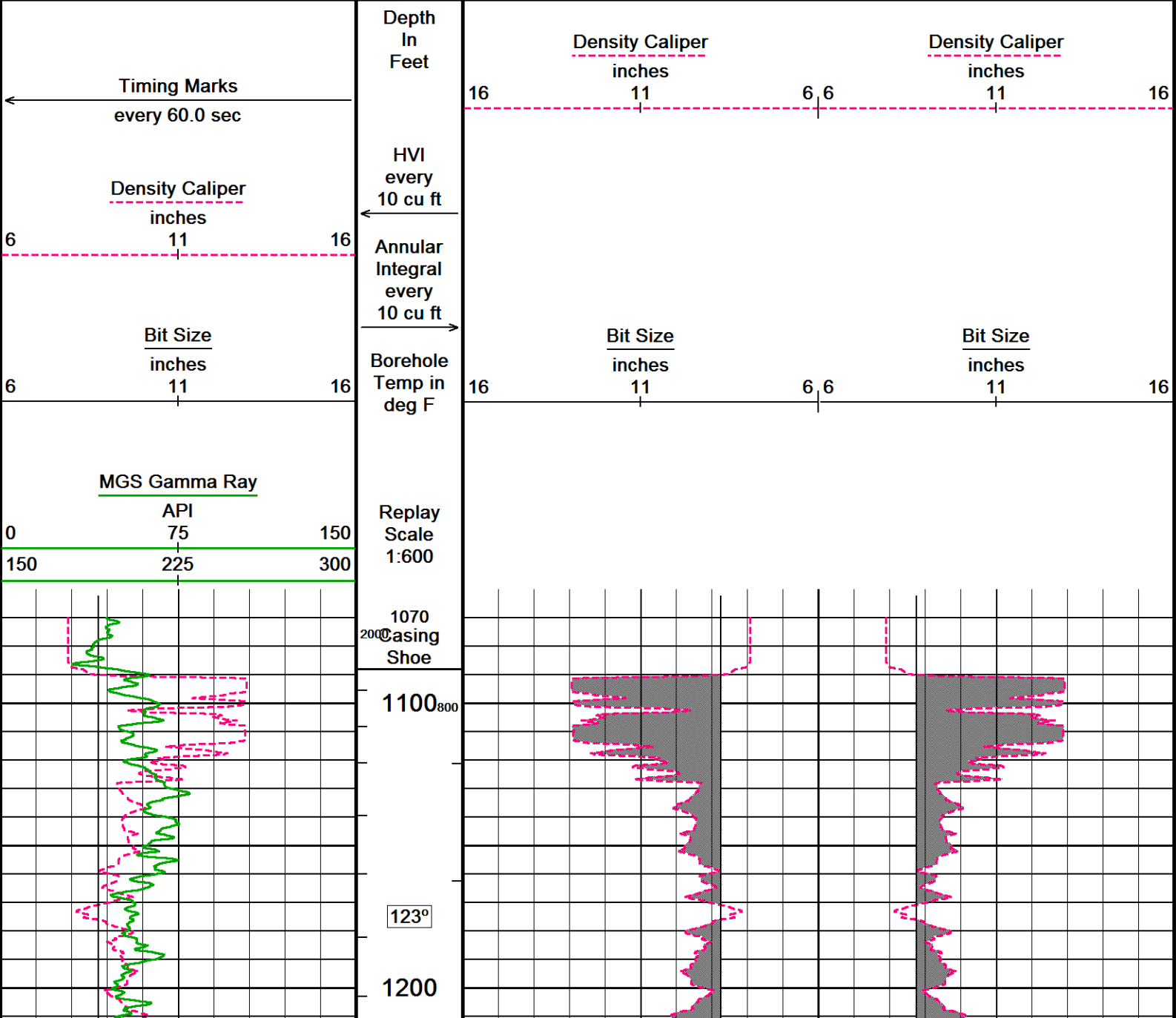
HARDWARE USED: MPD - 4 INCH PROFILE PLATE
 MAI - INDUCTION STANDOFF ASSEMBLY
 MFE AND MAI STOOD OFF 0.5 INCHES USING ISA AND MISE ANCILLARIES

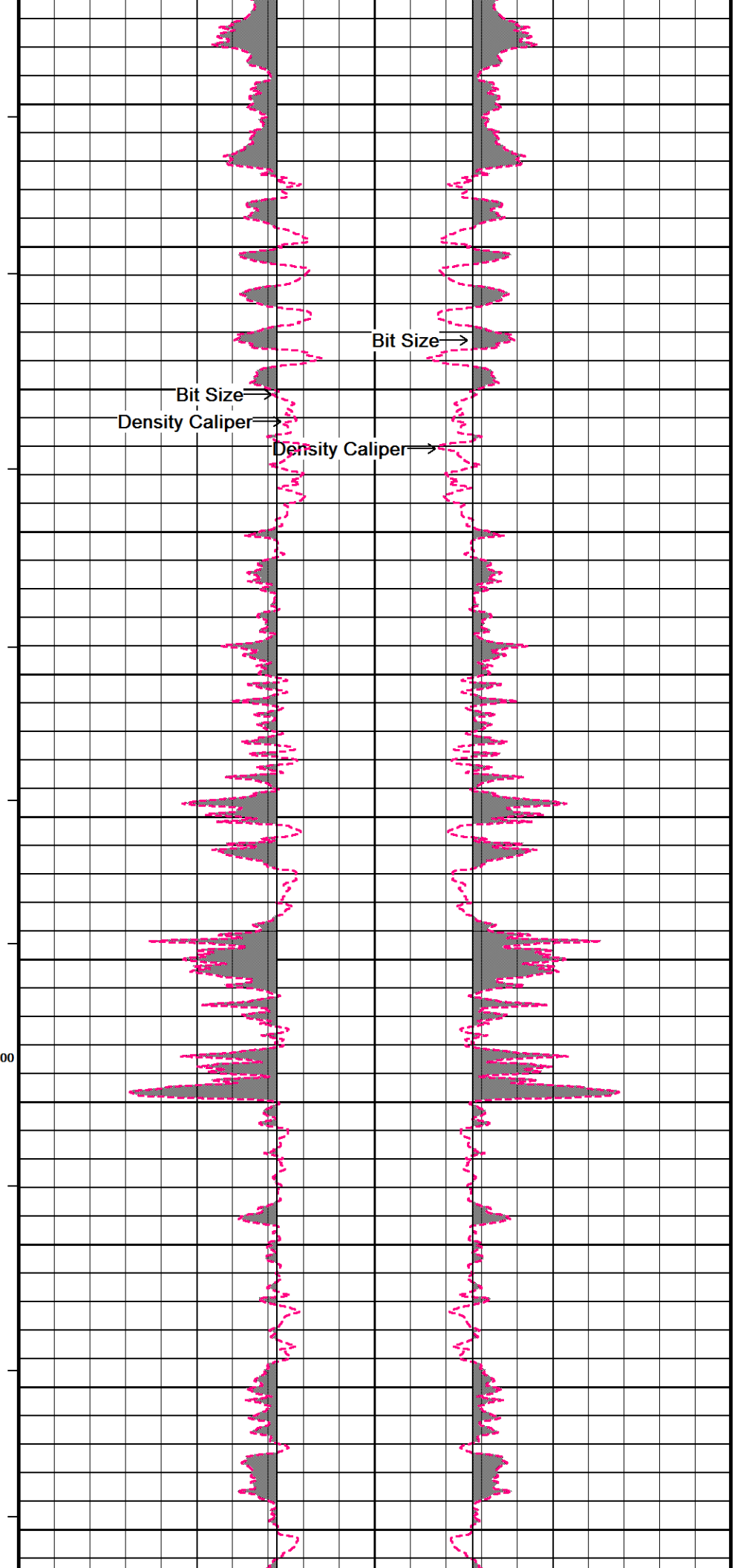
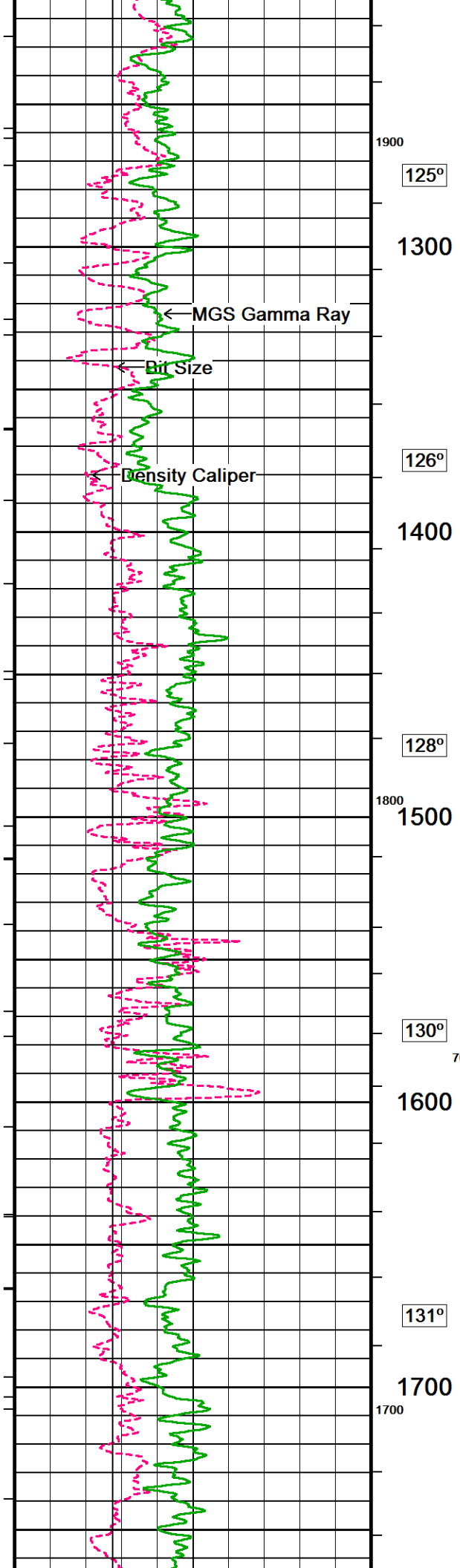
7 INCH PRODUCTION CASING SIZE USED TO CALCULATE ANNULAR HOLE VOLUME
 ANNULAR HOLE VOLUME FROM T.D. TO SURFACE CASING : 810 CUBIC FEET
 HOLE VOLUME FROM T.D. TO SURFACE CASING: 2000 CUBIC FEET

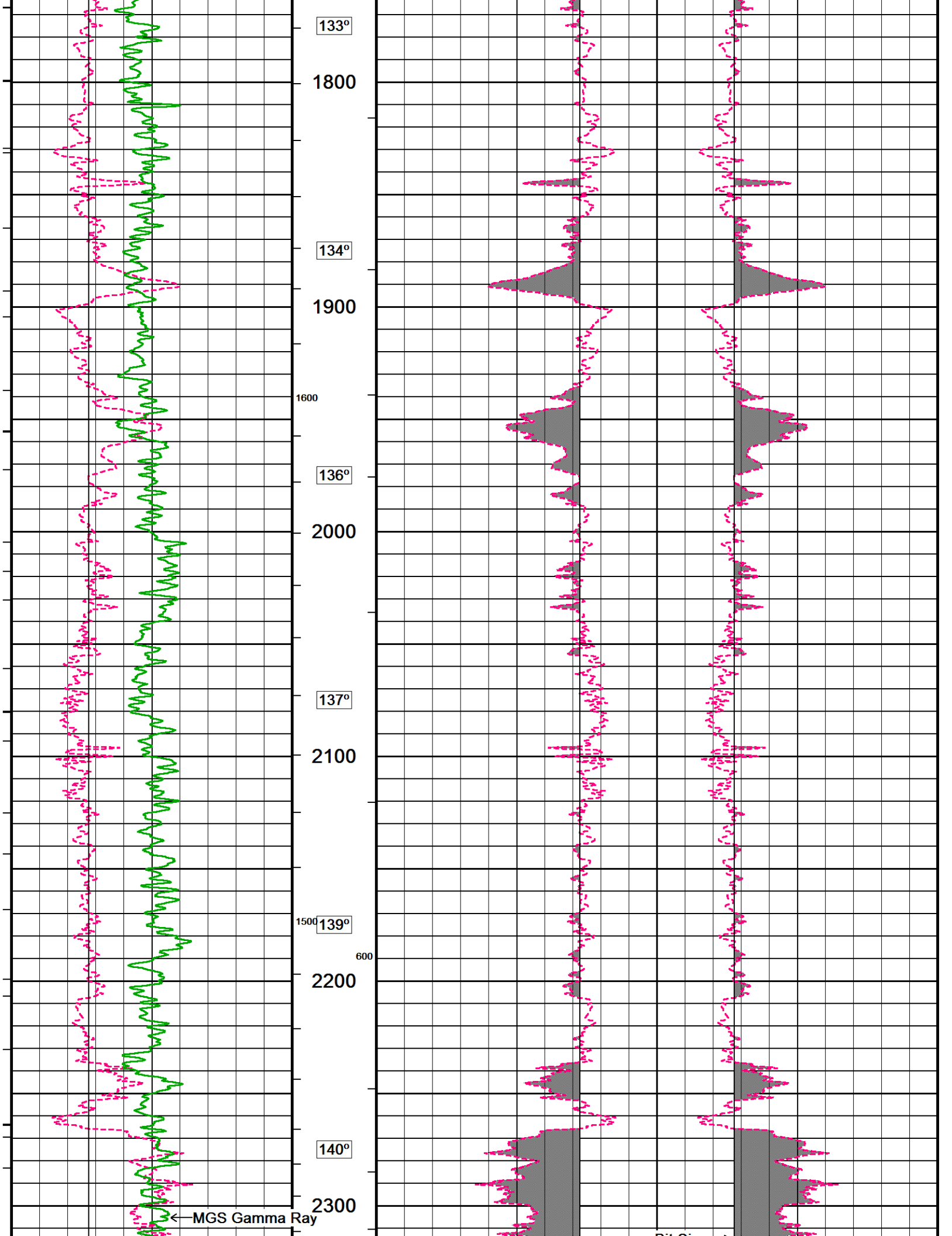
In interpreting, communicating or providing information and/or making recommendations, either written or oral, as to logs or test or other data, type or amount of material, or Work or other service to be furnished, or manner of performance, or in predicting results to be obtained, the Contractor will give the Company the benefit of the Contractor's best judgment based on its experience and will perform all such Work in a good and workmanlike manner. Any interpretation of test or other data, and any recommendation or reservoir description based upon such interpretations, are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and assumptions are not infallible, and with respect to which professional engineers and analysts may differ. ACCORDINGLY ANY INTERPRETATION OR RECOMMENDATION RESULTING FROM THE SERVICES WILL BE AT THE SOLE RISK OF THE COMPANY, AND THE CONTRACTOR CANNOT AND DOES NOT WARRANT THE ACCURACY, CORRECTNESS OR COMPLETENESS OF ANY SUCH INTERPRETATION OR RECOMMENDATION, WHICH INTERPRETATIONS AND RECOMMENDATIONS SHOULD NOT, THEREFORE, UNDER ANY CIRCUMSTANCES BE RELIED UPON AS THE SOLE OR MAIN BASIS FOR ANY DRILLING, COMPLETION, WELL TREATMENT, PRODUCTION OR FINANCIAL DECISION, OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING ACTIVITY, DRILLING RIG OR ITS CREW OR ANY OTHER INDIVIDUAL. THE COMPANY HAS FULL RESPONSIBILITY FOR ALL DECISIONS CONCERNING THE SERVICES.

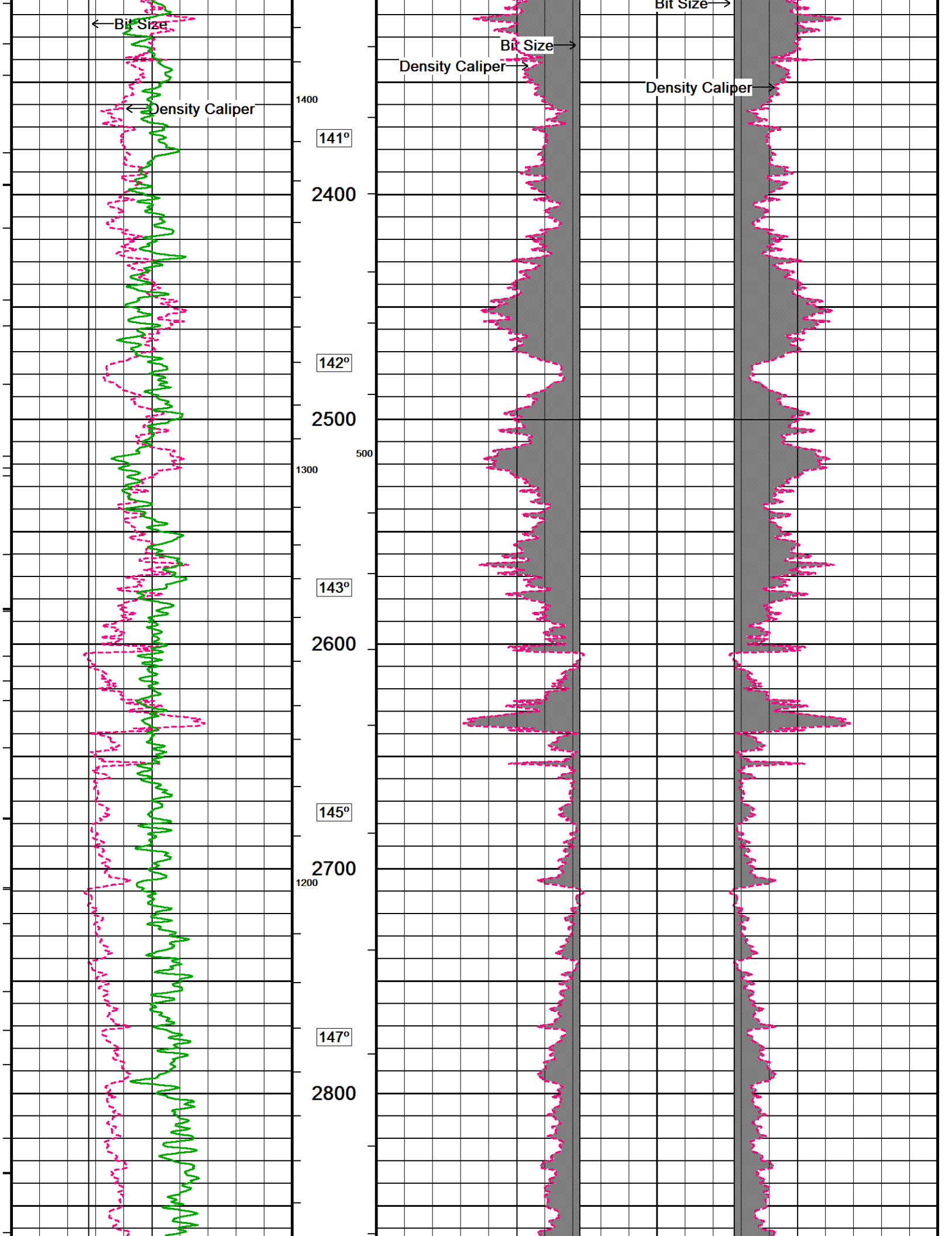
5 INCH MAIN LOG

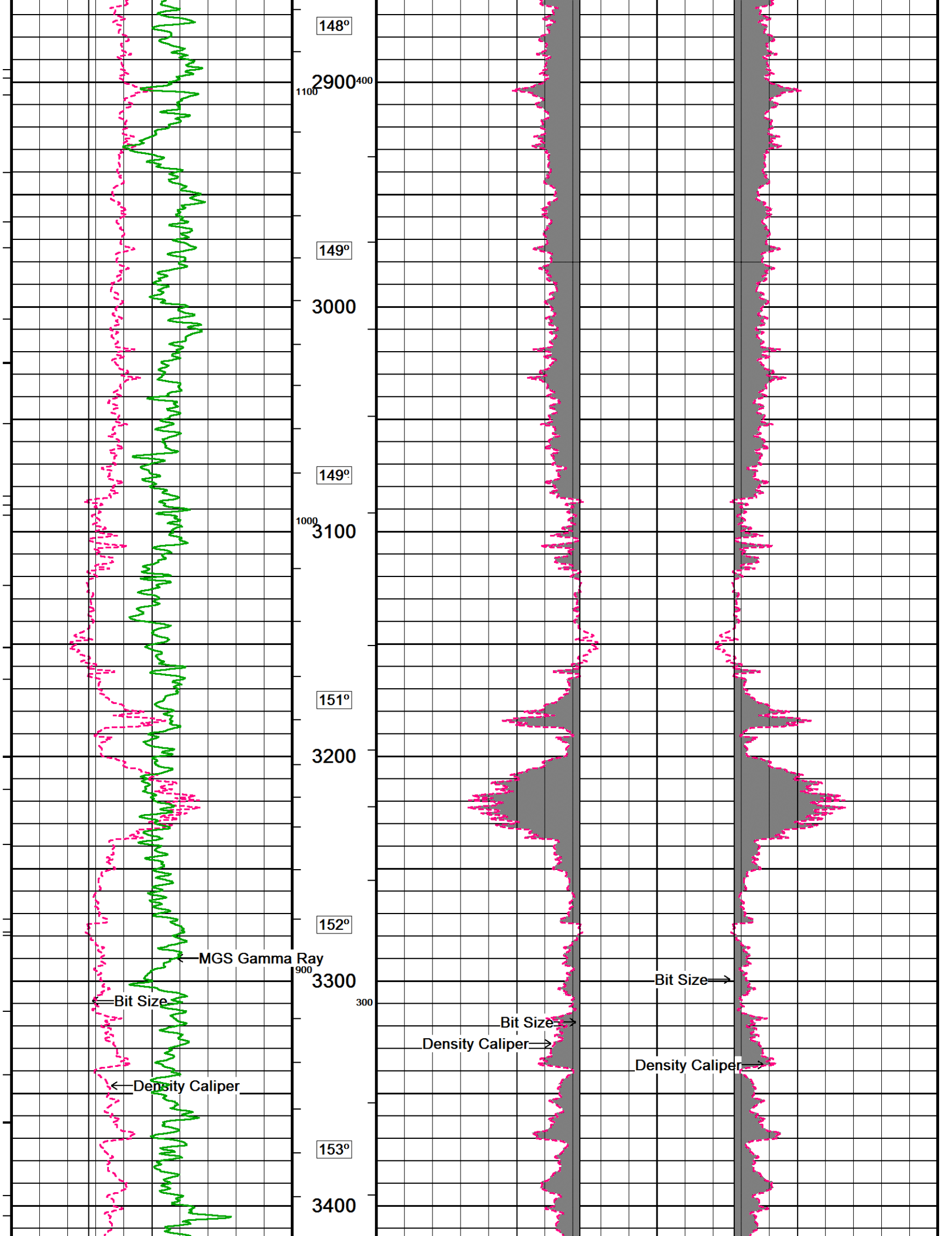
Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 16-DEC-2015 10:39
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 System Versions: Logged with 15.03.5939 Processed with 15.03.5939 Plotted with 13.08.1505











148°

2900⁴⁰⁰
1100

149°

3000

149°

1000
3100

151°

3200

152°

900
3300
300

153°

3400

MGS Gamma Ray

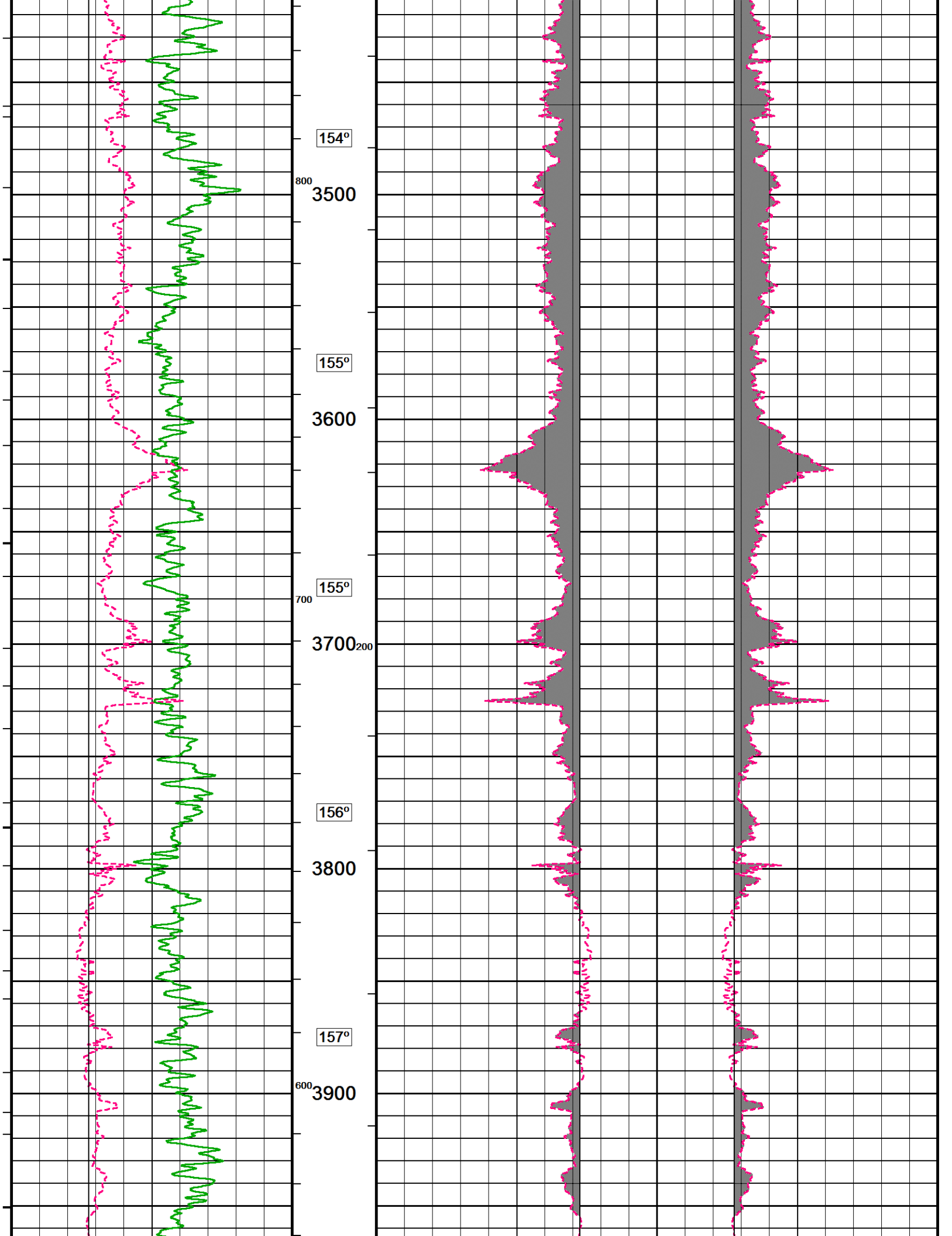
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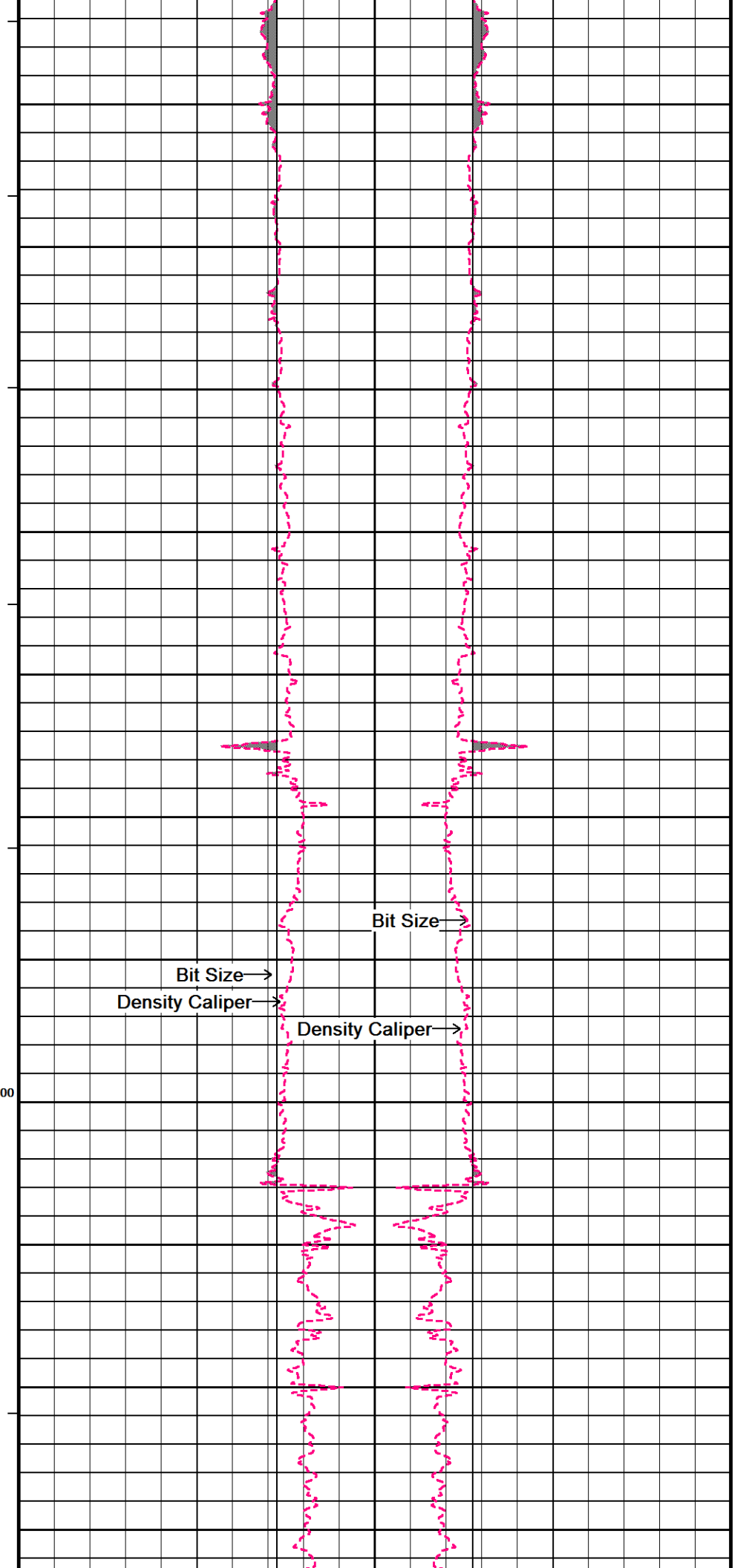
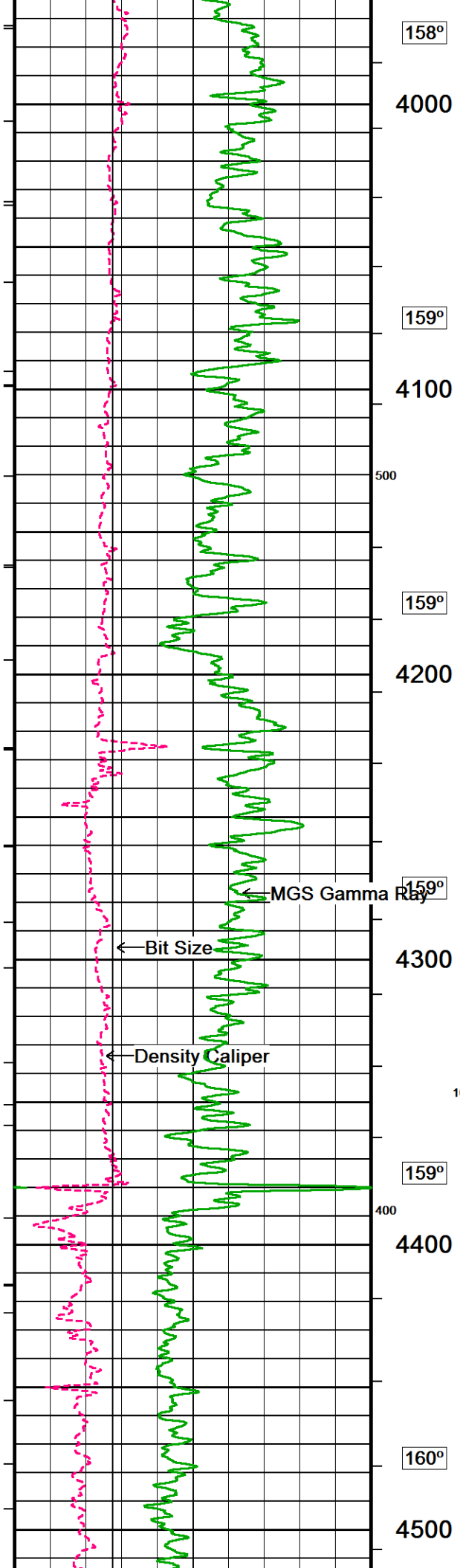
Density Caliper

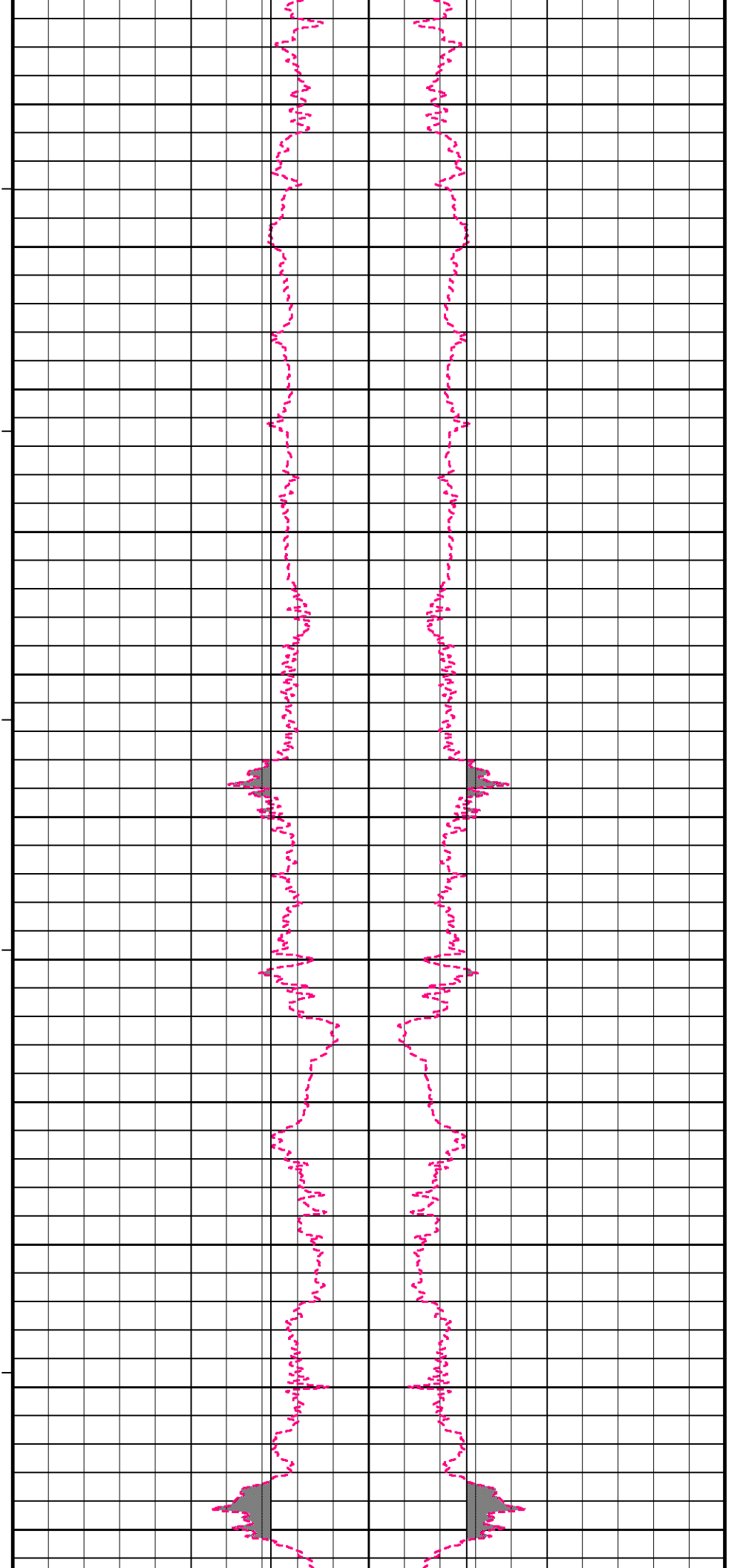
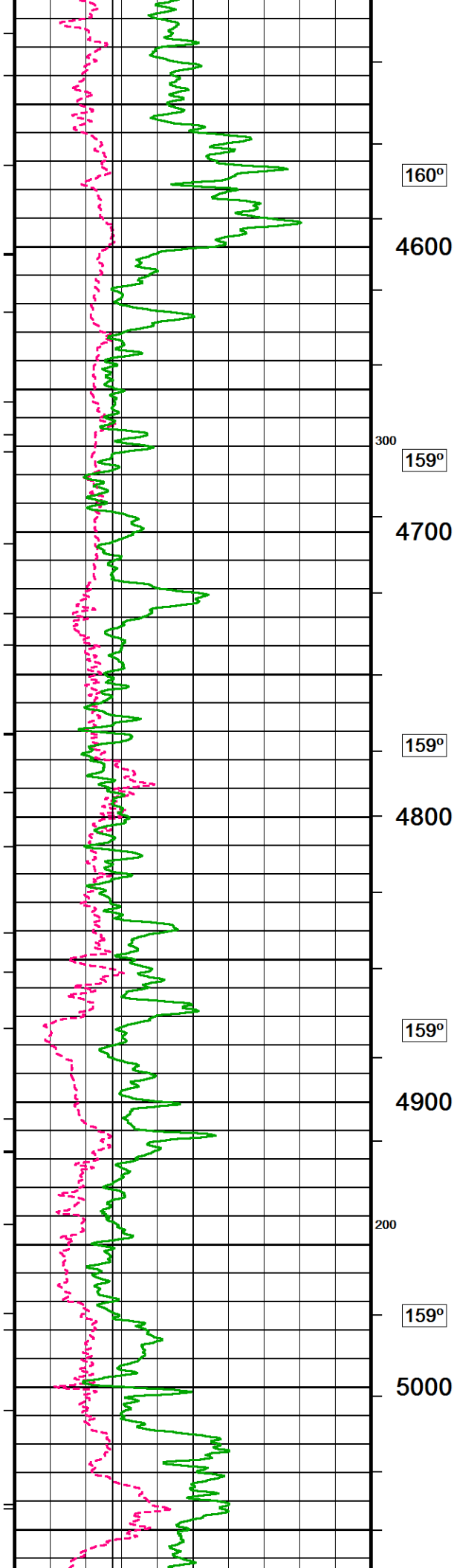
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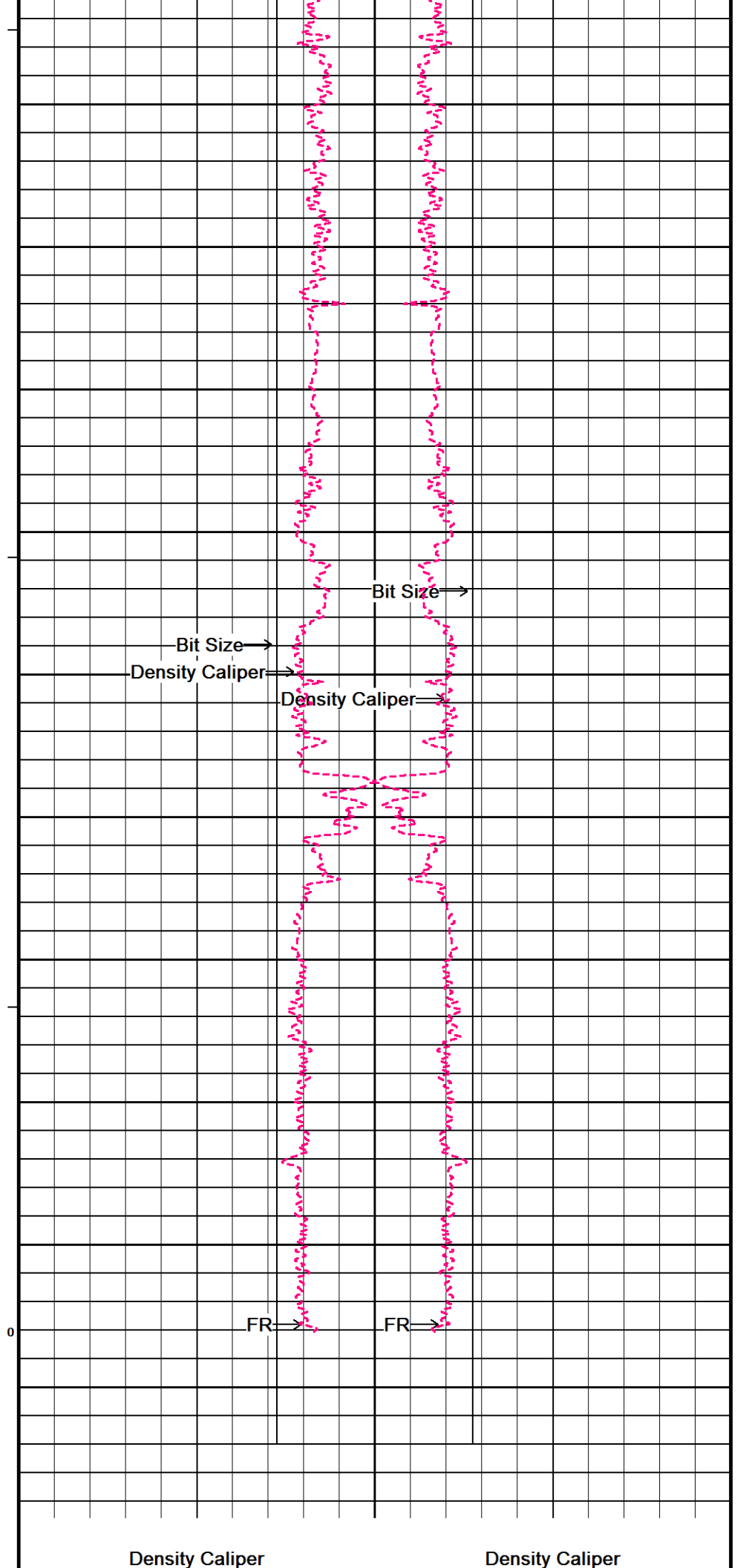
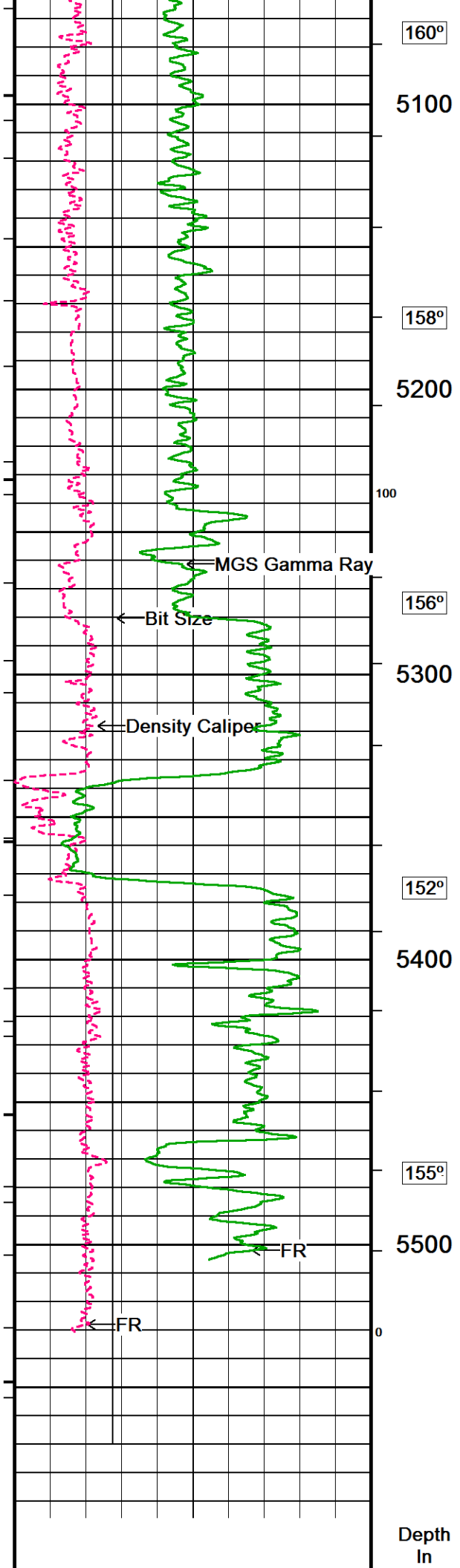
Density Caliper

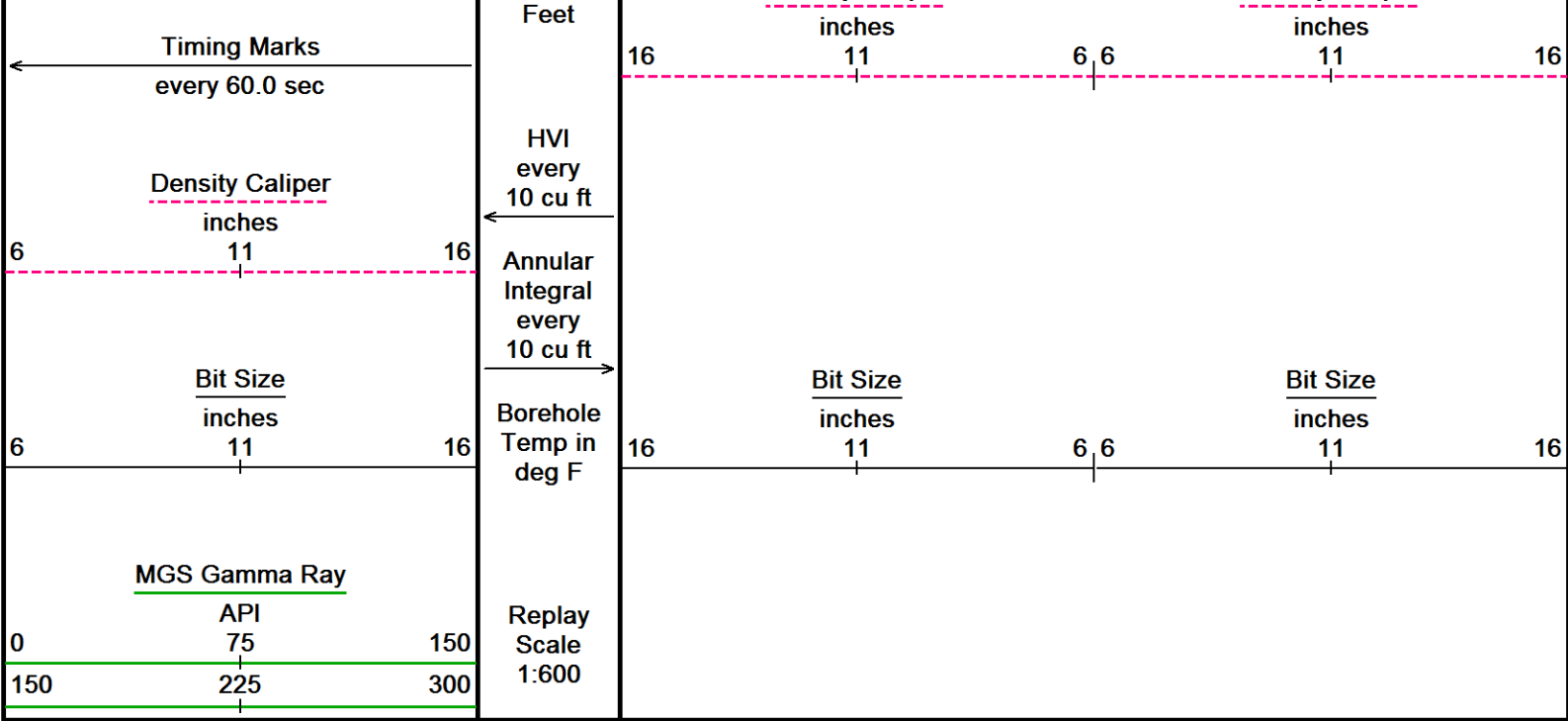
Density Caliper









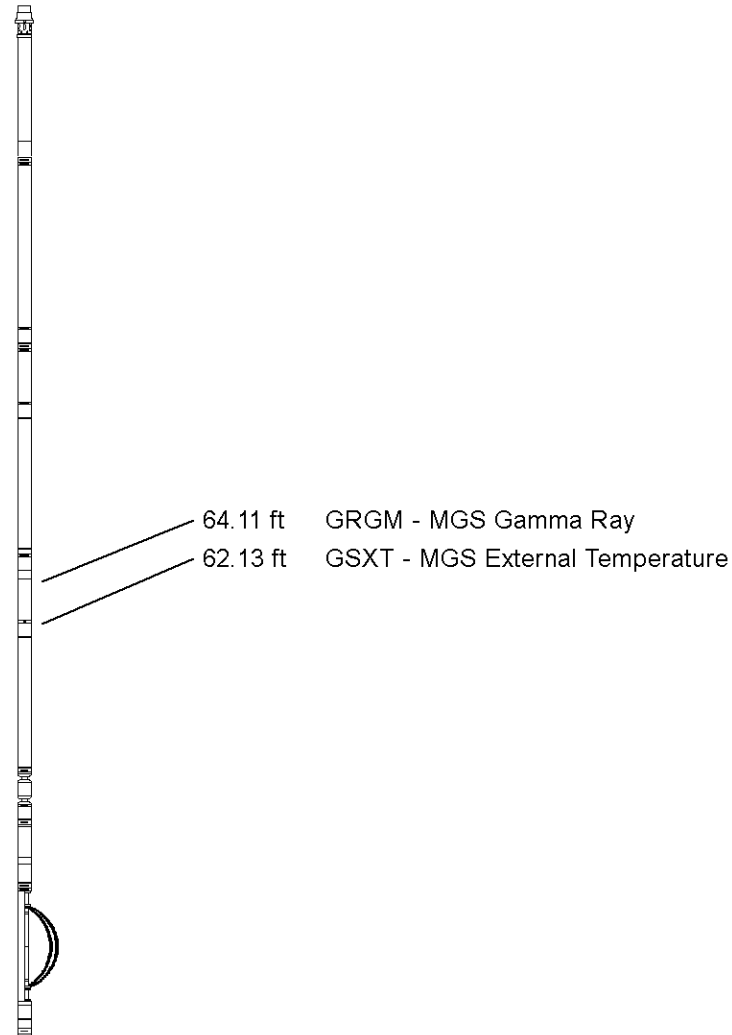


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5 INCH MAIN LOG

DOWNHOLE EQUIPMENT
 C:\Users\jenkinlm\AppData\Local\Temp\Weatherford PreView16\0\ML Investments 1-3 MMS Depth.dta

- Shuttle Running Tool 3.5"
SRT-A.A 35 LG: 6.62 ft WT: 37.5 lb OD: 2.520 in
- 200v Compact Battery Sub
MBS-F.A 145 LG: 10.61 ft WT: 70.5 lb OD: 2.240 in
- Compact Memory Sub F.A
MMS-F.A 249 LG: 5.20 ft WT: 37.5 lb OD: 2.240 in
- Compact Tool Isolator sub.
MTI-C.A 99 LG: 1.54 ft WT: 13.2 lb OD: 2.240 in
- Compact Short Gamma
MGS-D.A 218 LG: 3.41 ft WT: 24.3 lb OD: 2.244 in
- Compact Collar Locator
MCL-C.A 128 LG: 3.17 ft WT: 26.5 lb OD: 2.244 in
- Compact Knuckle Joint
SKJ-E.B 537 LG: 2.17 ft WT: 24.3 lb OD: 2.240 in
- Compact Swivel Head Adaptor
SHA-J.B 512 LG: 2.30 ft WT: 22.0 lb OD: 2.244 in
- Compact Inline Bowspring sub
MIS-D.B 730 LG: 5.70 ft WT: 33.1 lb OD: 2.240 in



Compact Neutron
MDN-C.A 462 LG: 5.04 ft WT: 50.7 lb OD: 2.244 in

Compact Density/Caliper
MPD-D.A 478 LG: 9.59 ft WT: 90.4 lb OD: 2.244 in

Compact Vee Arm Caliper
MVC-A.A 142 LG: 8.06 ft WT: 61.7 lb OD: 2.244 in

Compact Swivel Head Adaptor
SHA-J.B 573 LG: 2.30 ft WT: 22.0 lb OD: 2.244 in

Compact Knuckle Joint
SKJ-E.A 203 LG: 2.17 ft WT: 24.3 lb OD: 2.244 in

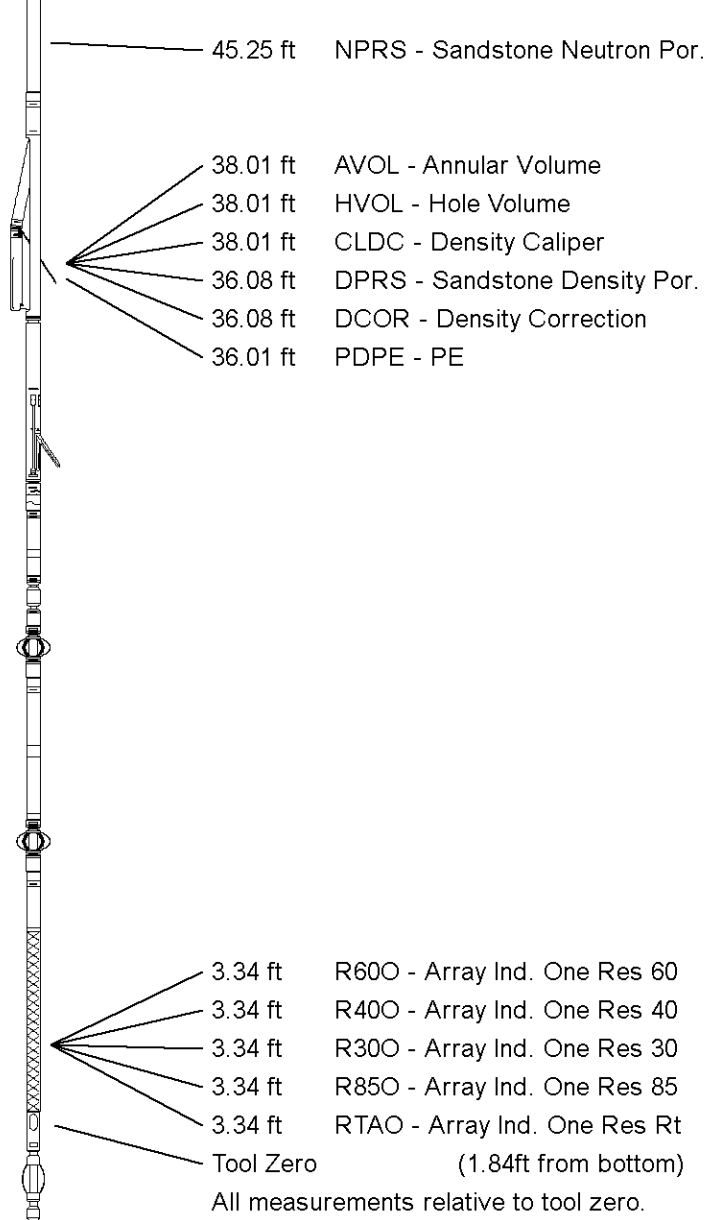
Compact Inline Standoff sub
MIS-E.A 277 LG: 2.14 ft WT: 15.4 lb OD: 2.240 in

Compact Focussed Electric
MFE-C.A 404 LG: 6.05 ft WT: 48.5 lb OD: 2.244 in

Compact Inline Standoff sub
MIS-E.B 662 LG: 2.14 ft WT: 15.4 lb OD: 2.240 in

Compact Induction
MAI-B.J 363 LG: 12.52 ft WT: 48.5 lb OD: 2.240 in

Total Length: 90.72 ft Weight: 665.8 lb



COMPANY	ALTA MESA SERVICES, LP
WELL	ML INVESTMENTS 1-3
FIELD	WILDCAT
PROVINCE/COUNTY	PAYETTE
COUNTRY/STATE	U.S.A. / IDAHO

Elevation Kelly Bushing	2687.00	feet	First Reading	5528.00	feet
Elevation Drill Floor	2686.00	feet	Depth Driller	5585.00	feet
Elevation Ground Level	2675.00	feet	Depth Logger	5585.00	feet



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