

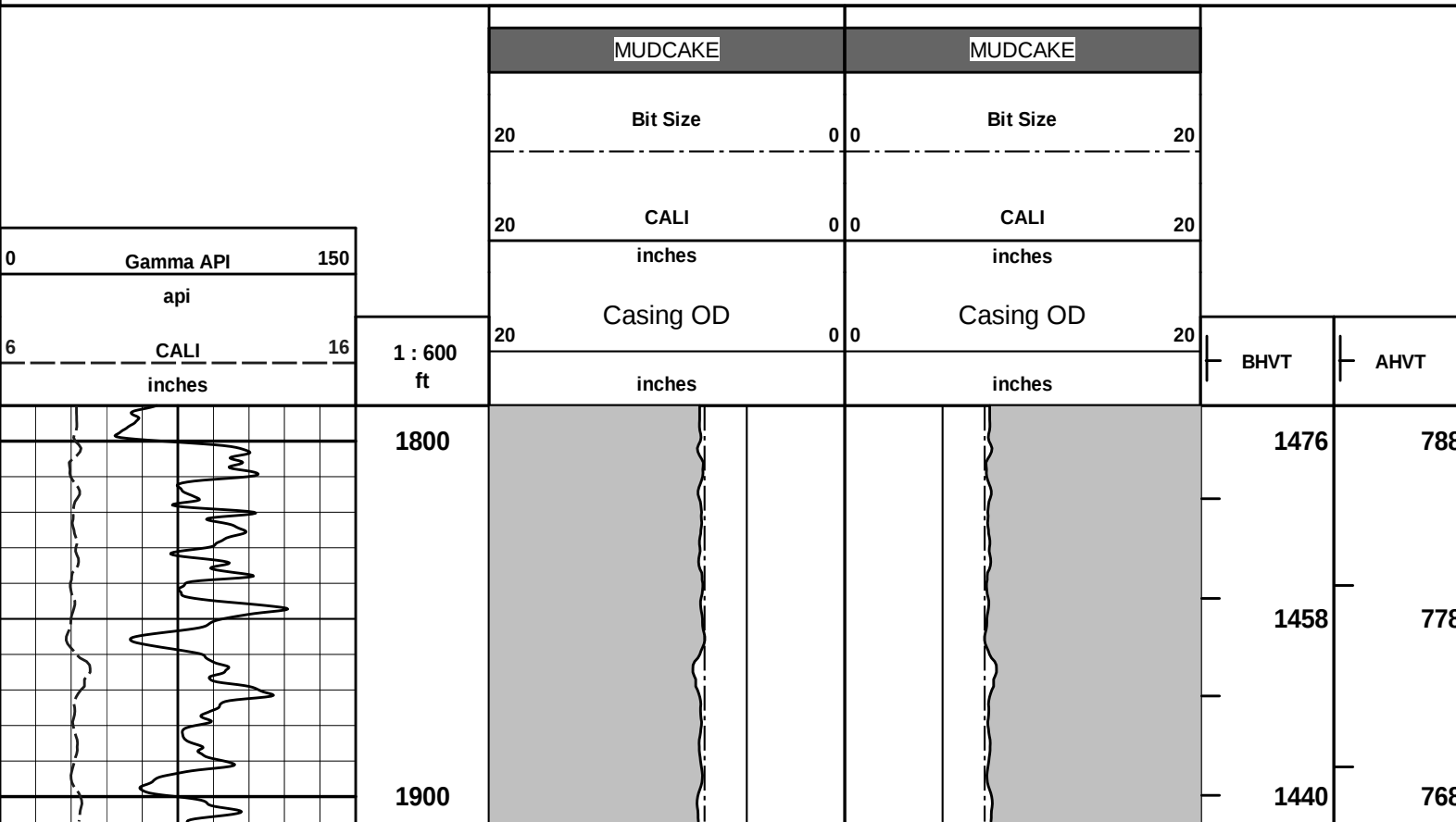
HALLIBURTON

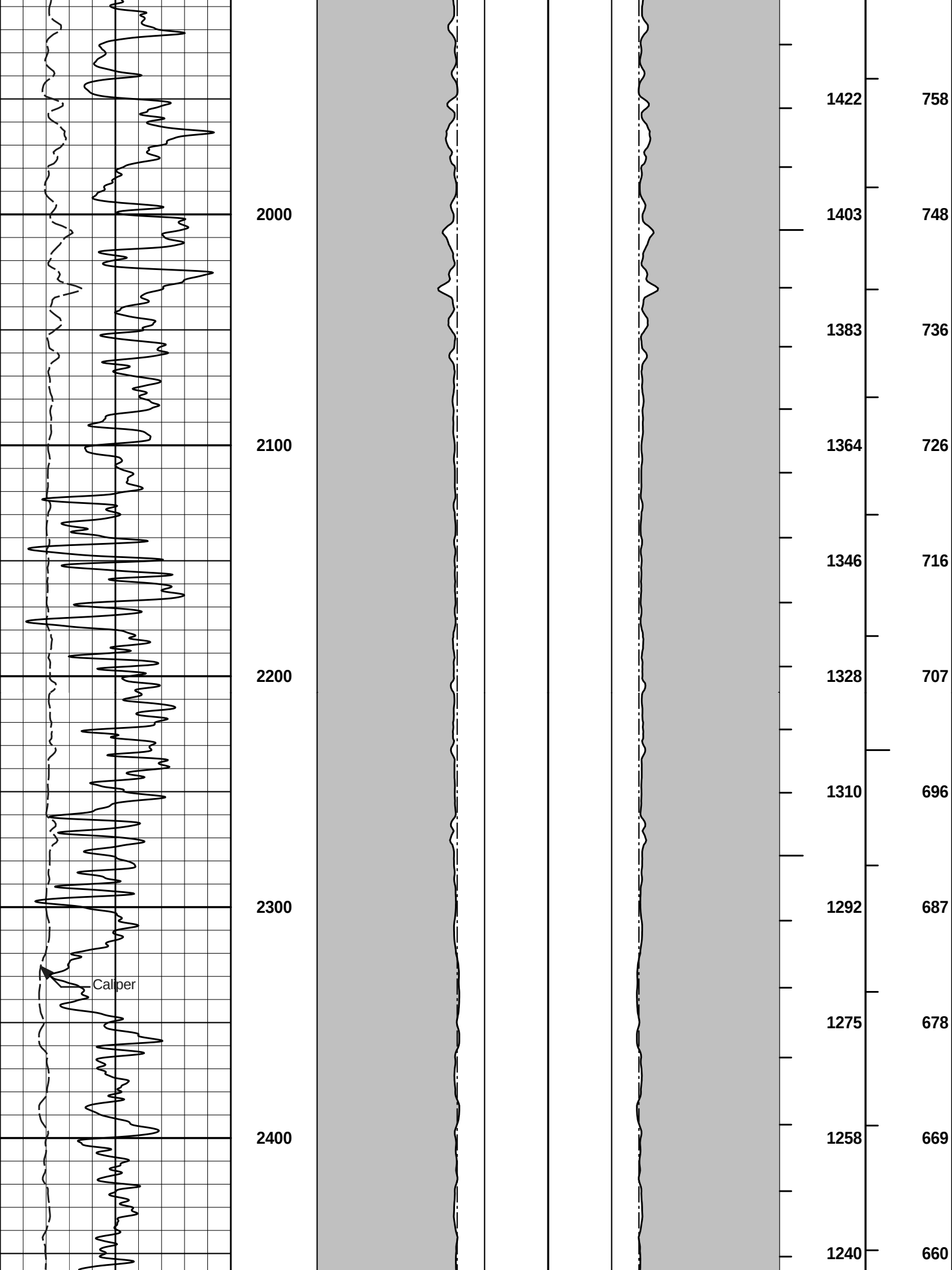
ANNULAR HOLE VOLUME PLOT

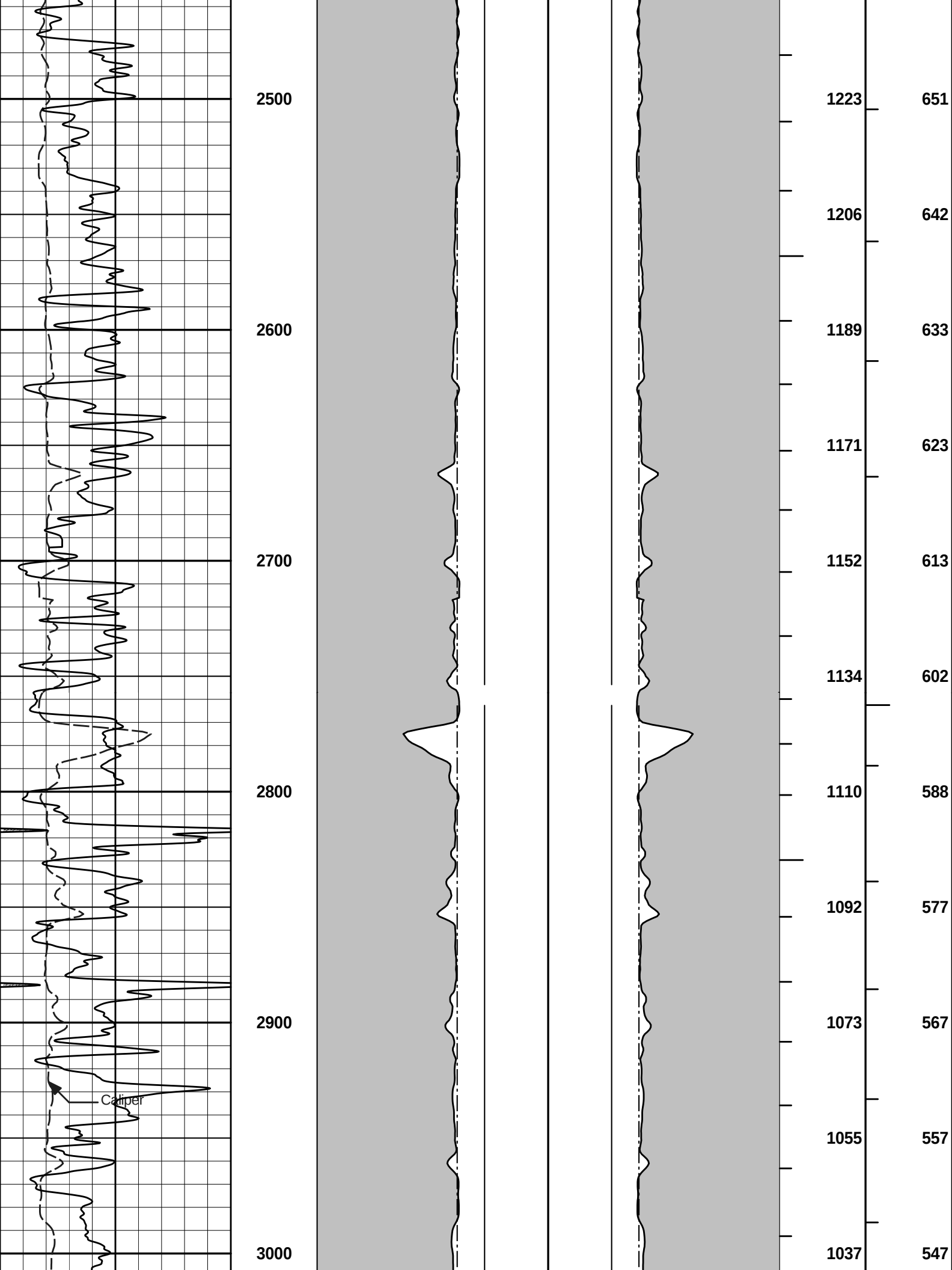
COMPANY		OXY USA INC	
WELL		EDWARDS B-1	
FIELD		BIG BOW WEST	
COUNTY		STANTON	
STATE		KANSAS	
Permanent Datum		GL	
Log measured from		KB	
Drilling measured from		KB	
Date		13-Apr-13	
Run No.		ONE	
Depth - Driller		6000.00 ft	
Depth - Logger		5966.0 ft	
Bottom - Logged Interval		5966 ft	
Top - Logged Interval		1797 ft	
Casing - Driller		8.625 in @ 1798.0 ft	
Casing - Logger		1797.0 ft	
Bit Size		7.875 in	
Type Fluid in Hole		WATER BASED	
Density		9.2 ppg	
Viscosity		45.00 s/qt	
PH		10.70 pH	
Fluid Loss		9.6 cpm	
Source of Sample		FLOW LINE	
Rm @ Meas. Temperature		1.140 ohmm @ 85.00 degF	
Rmf @ Meas. Temperature		0.96 ohmm @ 70.00 degF	
Rmc @ Meas. Temperature		1.420 ohmm @ 70.00 degF	
Source Rmf		MEASURED	
Rmc		MEASURED	
Rm @ BHT		0.80 ohmm @ 124.0 degF	
Time Since Circulation		8.0 hr	
Time on Bottom		13-Apr-13 18:11	
Max. Rec. Temperature		124.0 degF @ 5966.0 ft	
Equipment		10549592	
Location		PVOK	
Recorded By		JEREMY COTHREN	
Witnessed By		ROBERT WEBSTER	

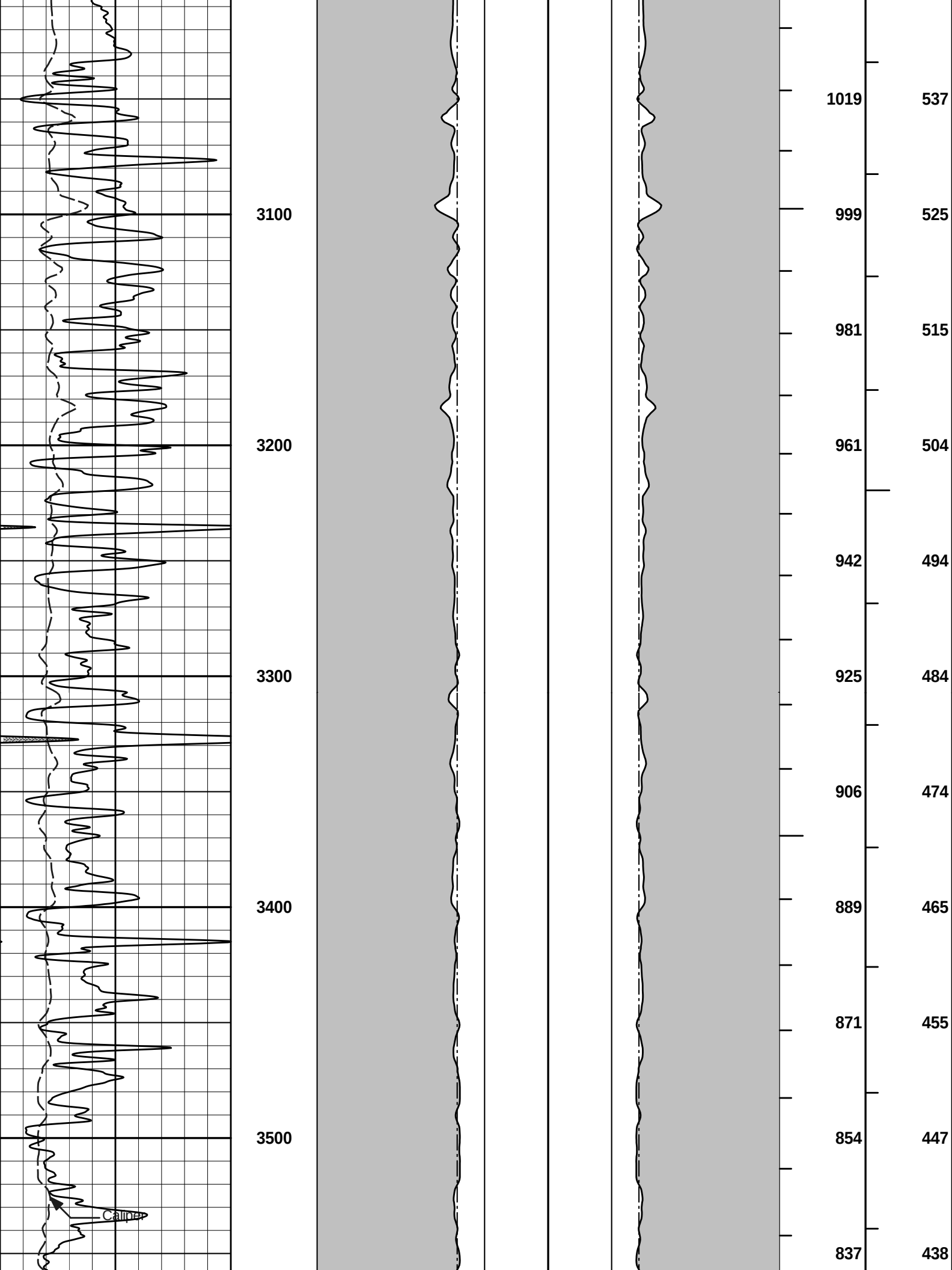
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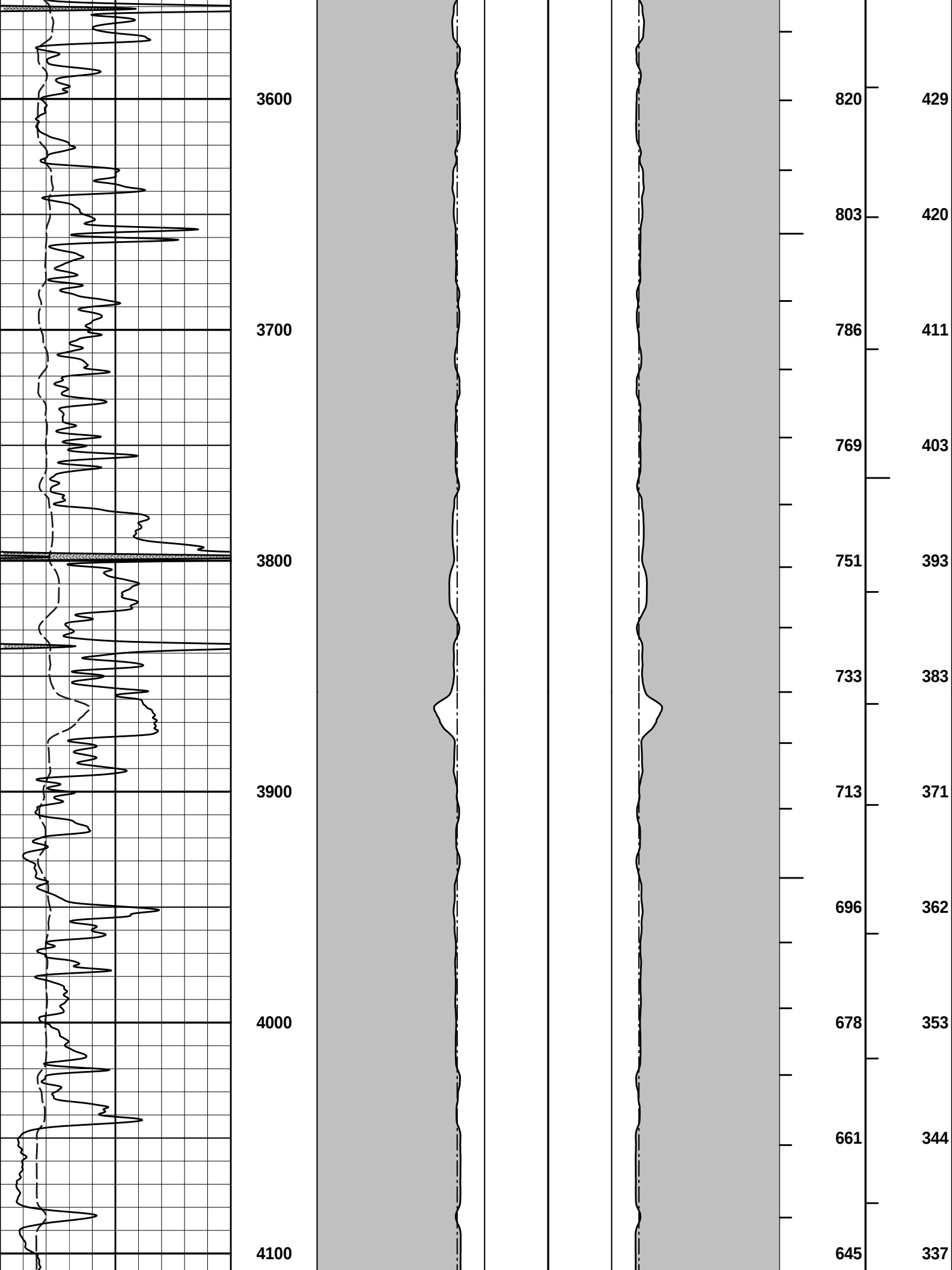
Service Ticket No.: 900357203				API Serial No.: 15187212220000				PGM Version: WL INSITE R3.6.0 (Build 3)											
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE						RESISTIVITY SCALE CHANGES													
Date		Sample No.				Type Log		Depth		Scale Up Hole		Scale Down Hole							
Depth-Driller																			
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.		Other					
Rmf @ Meas. Temp.		@		@															
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.				Run No.							
Serial No.		113		Serial No.				Serial No.				Serial No.							
Model No.		GTET		Model No.				Model No.				Model No.							
Diameter		3.625"		No. of Cent.				Diameter				Diameter							
Detector Model No.		A-102		Spacing				Log Type				Log Type							
Type		SCINT.						Source Type				Source Type							
Length		8"		LSA [Y/N]				Serial No.				Serial No.							
Distance to Source		10'		FWDA [Y/N]				Strength				Strength							
LOGGING DATA																			
GENERAL				GAMMA				ACOUSTIC				DENSITY				NEUTRON			

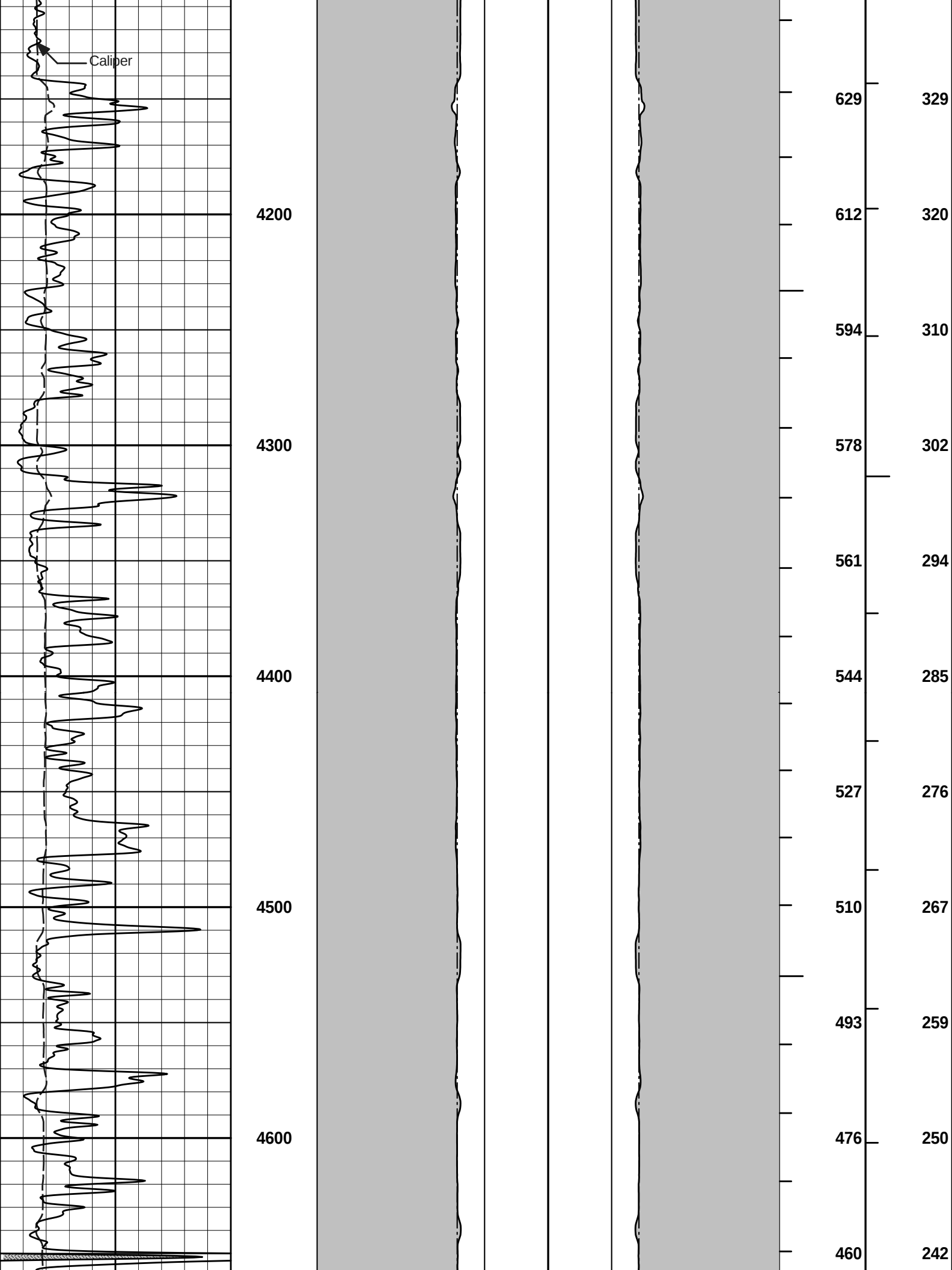


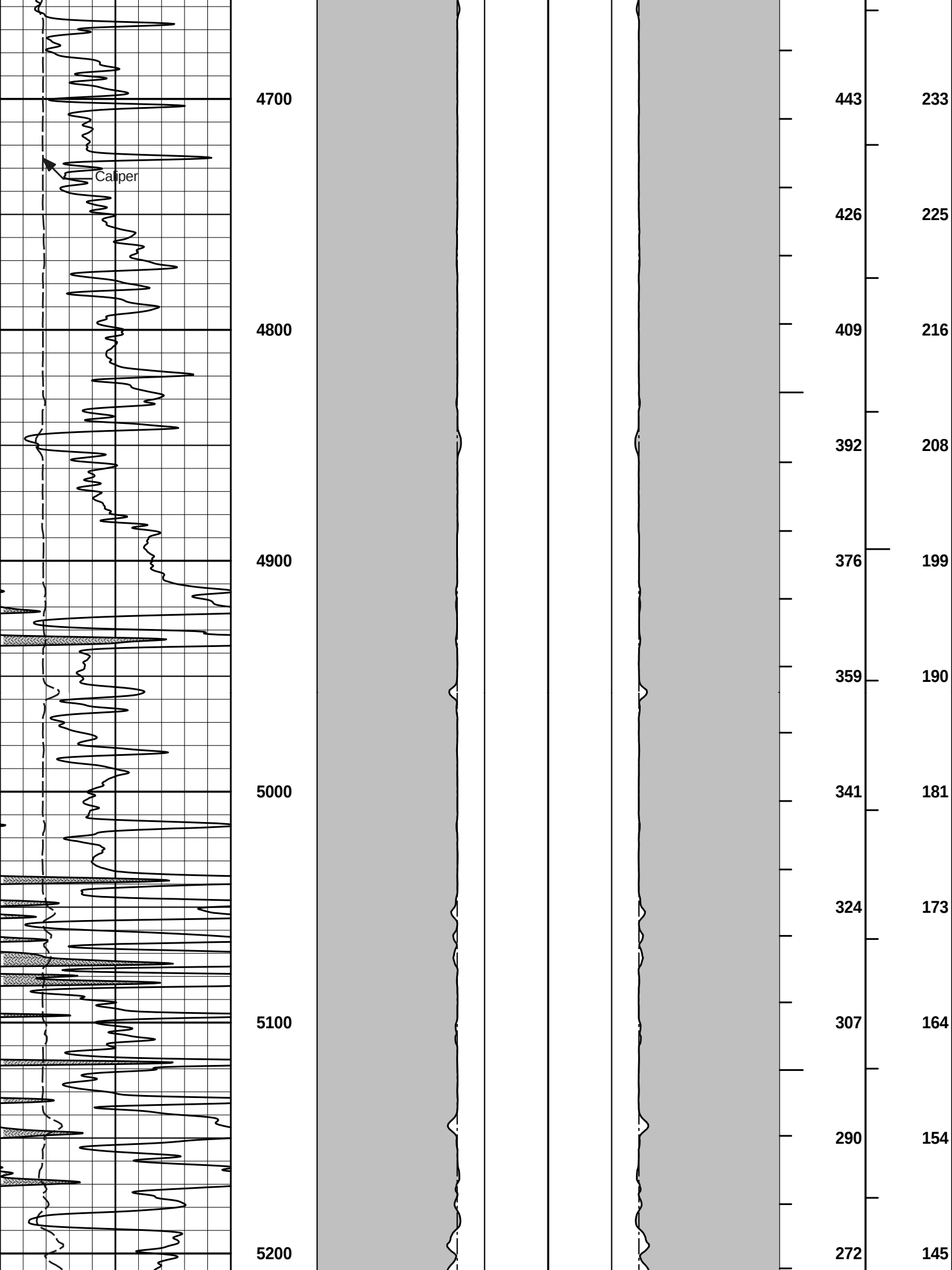


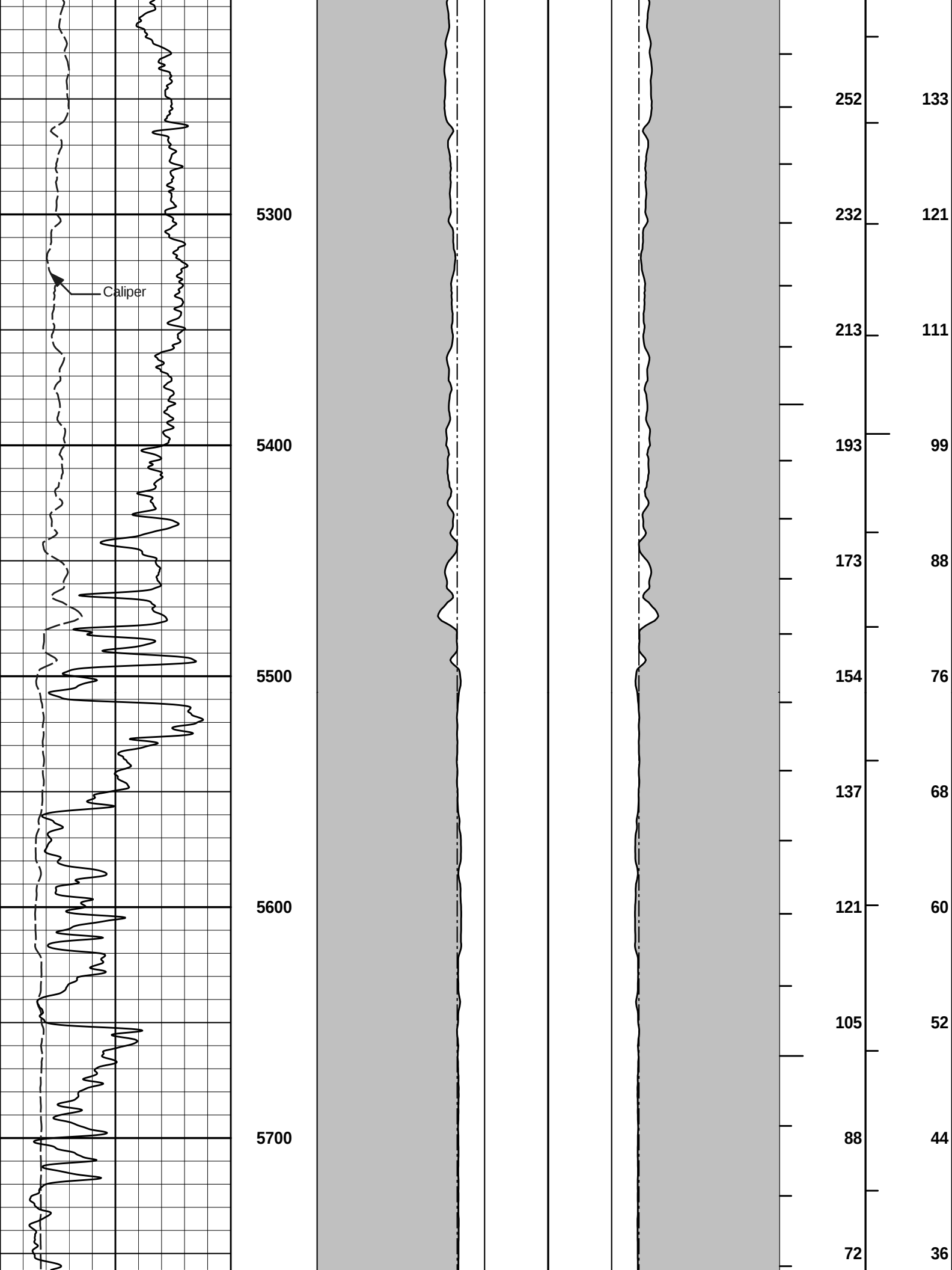


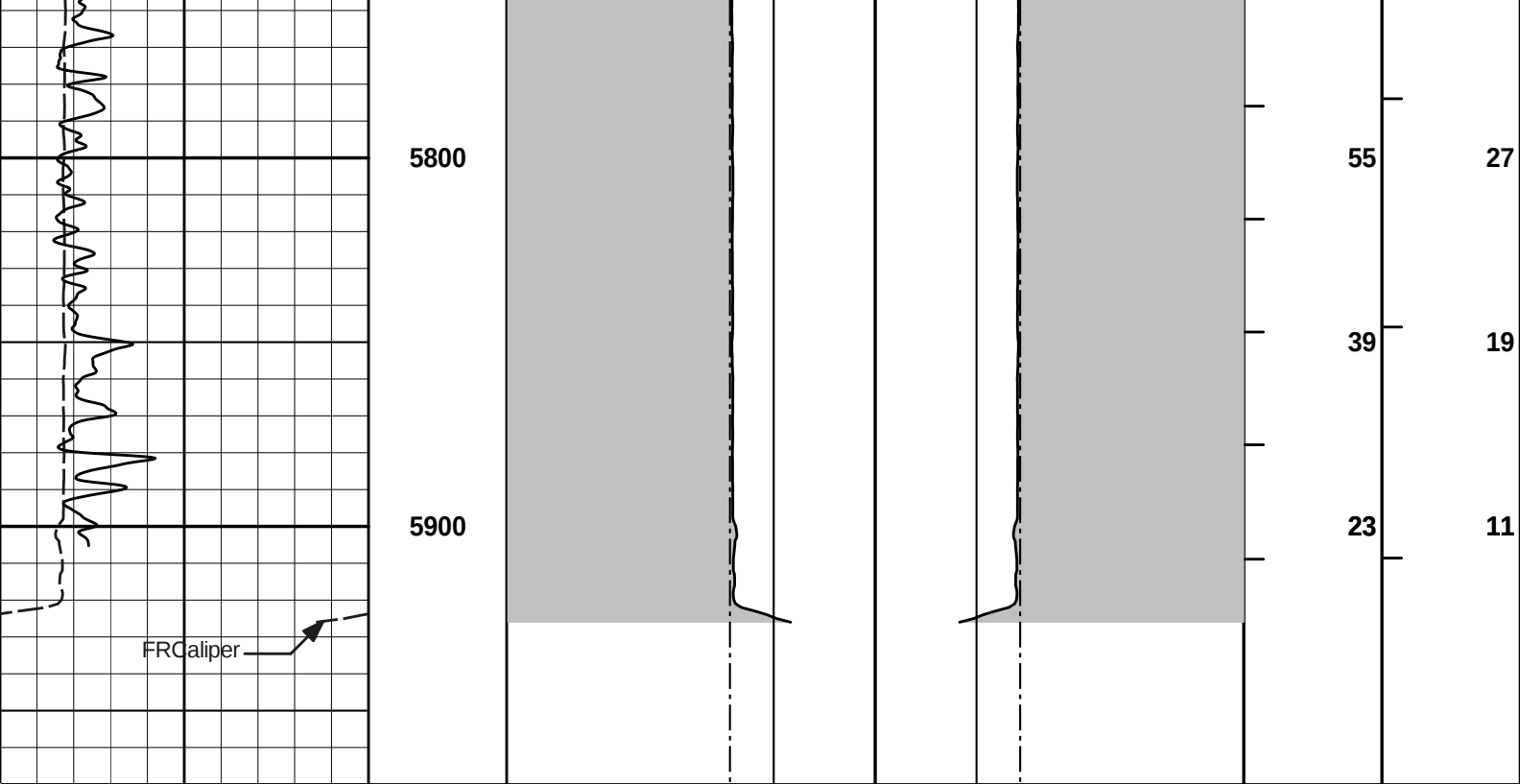












6	CALI	16	1 : 600 ft	20	Casing OD	0 0	20	Casing OD	20	BHVT	AHVT
	inches										
0	Gamma API	150		20	inches	0 0	20	inches			
	api			20	CALI	0 0	20	CALI			
				20	inches	0 0	20	inches			
				20	Bit Size	0 0	20	Bit Size			
					MUDCAKE			MUDCAKE			

HALLIBURTON	Plot Time: 13-Apr-13 23:48:41 Plot Range: 1790 ft to 5970.08 ft Data: {ActiveWell}\Well Based\DAQ-0001-003\ Plot File: \\-LOCAL-(not saved)\1_AHV Plot_x
ANNULAR HOLE VOLUME PLOT	

COMPANY	OXY USA INC		
WELL	EDWARDS B-1		
FIELD	BIG BOW WEST		
COUNTY	STANTON	STATE	KANSAS
HALLIBURTON		ANNULAR HOLE VOLUME PLOT	