

HALLIBURTON

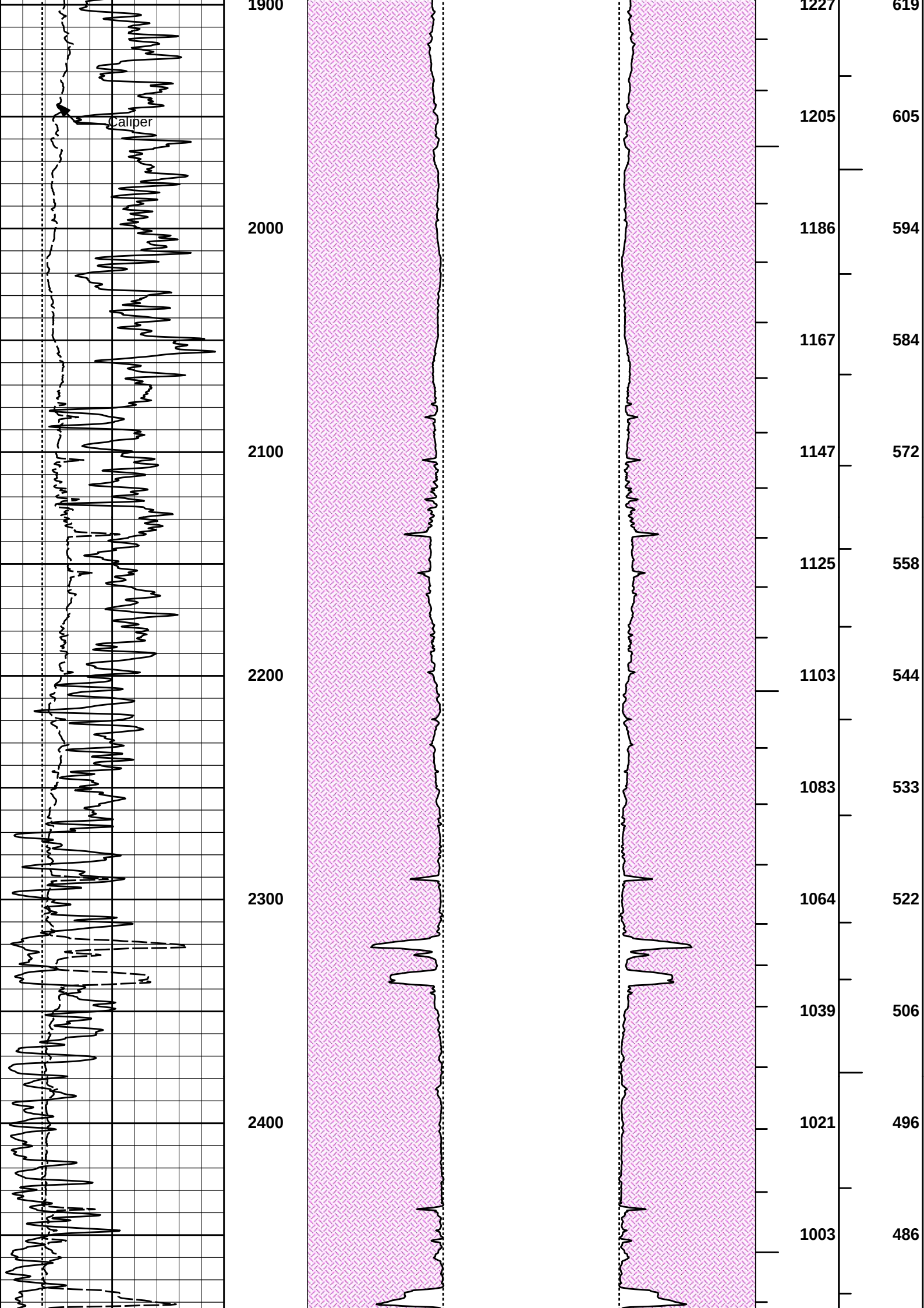
ANNUAL HOLE VOLUME

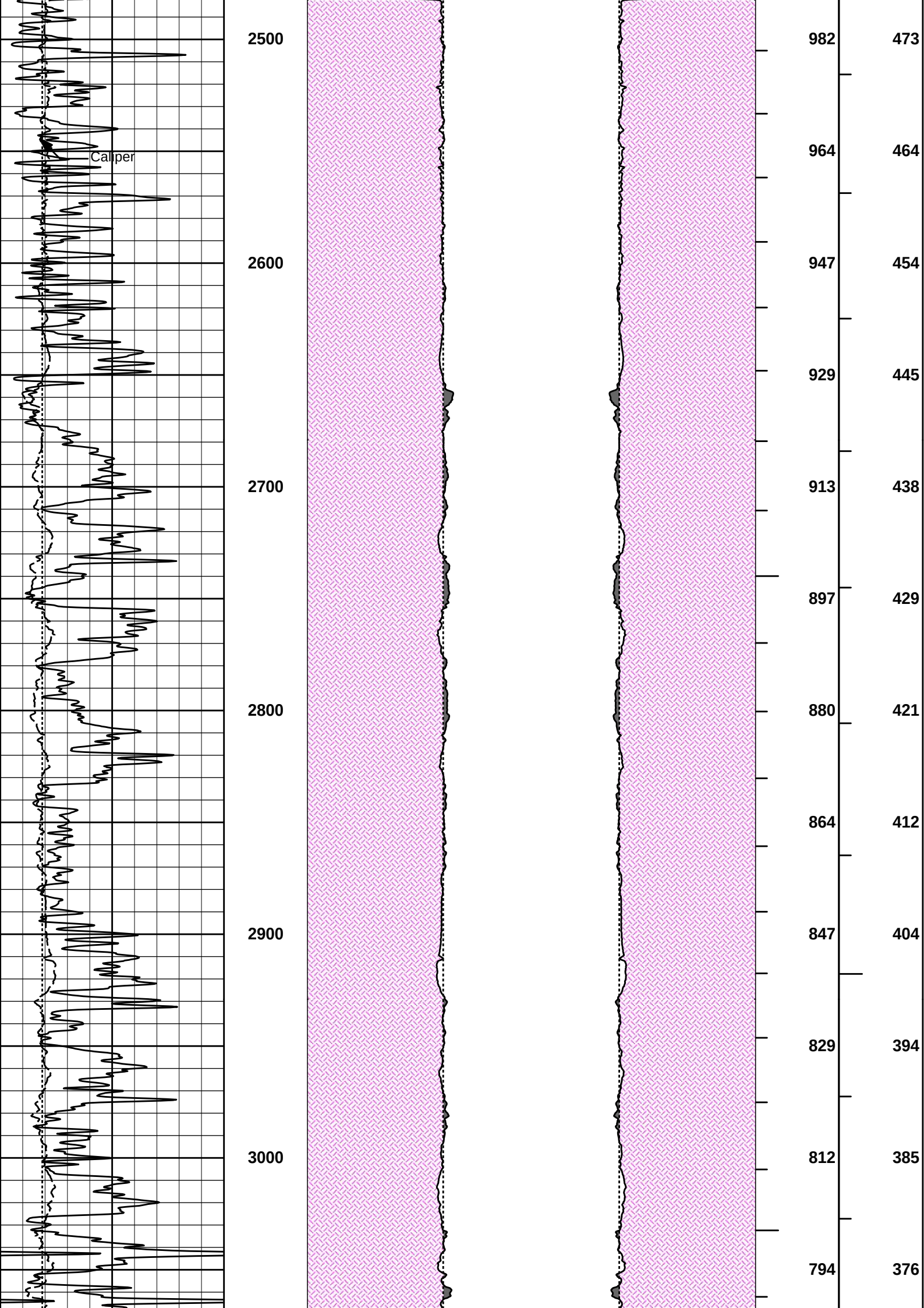
HALLIBURTON										ANNULAR HOLE VOLUME																			
COMPANY WELL FIELD/BLOCK COUNTY STATE										MERIT ENERGY COMPANY ANDREW 17-3 HASKELL TOWNSHIP HASKELL KANSAS																			
Permanent Datum Log measured from Drilling measured from										GL KB KB 12.0 ft above perm. Datum										Elev. 2906.6 ft D.F. G.L. 2918.6 ft 2918.6 ft 2906.6 ft									
Date										02-Apr-19																			
Run No.										ONE																			
Depth - Driller										5581.0 ft																			
Depth - Logger										5582.0 ft																			
Bottom - Logged Interval										5544.00 ft																			
Top - Logged Interval										1702.00 ft																			
Casing - Driller										8.625 in @ 1705.0 ft										@									
Casing - Logger										1702.0 ft																			
Bit Size										7.875 in										@									
Type Fluid in Hole										Water Based Mud										@									
Density										9.2 ppg										50.00 s/qt									
PH										10.50 pH										6.4 cpm									
Source of Sample										MUDDIT																			
Rm @ Meas. Temperature										1.25 ohmm @ 75.00 degF										@									
Rmf @ Meas. Temperature										1.11 ohmm @ 75.00 degF										@									
Rmc @ Meas. Temperature										1.35 ohmm @ 75.00 degF										@									
Source Rmf										Rmc MEAS										@									
Rm @ BHT										0.74 ohmm @ 131.0 degF										@									
Time Since Circulation										5.0 hr																			
Time on Bottom										02-Apr-19 04:00																			
Max. Rec. Temperature										131.00 degF @ 5582.0 ft										@									
Equipment										12147634										EL RENO, OK									
Recorded By										JORGE ORLANDO PEREZ																			
Witnessed By										MARTIN LANGE																			

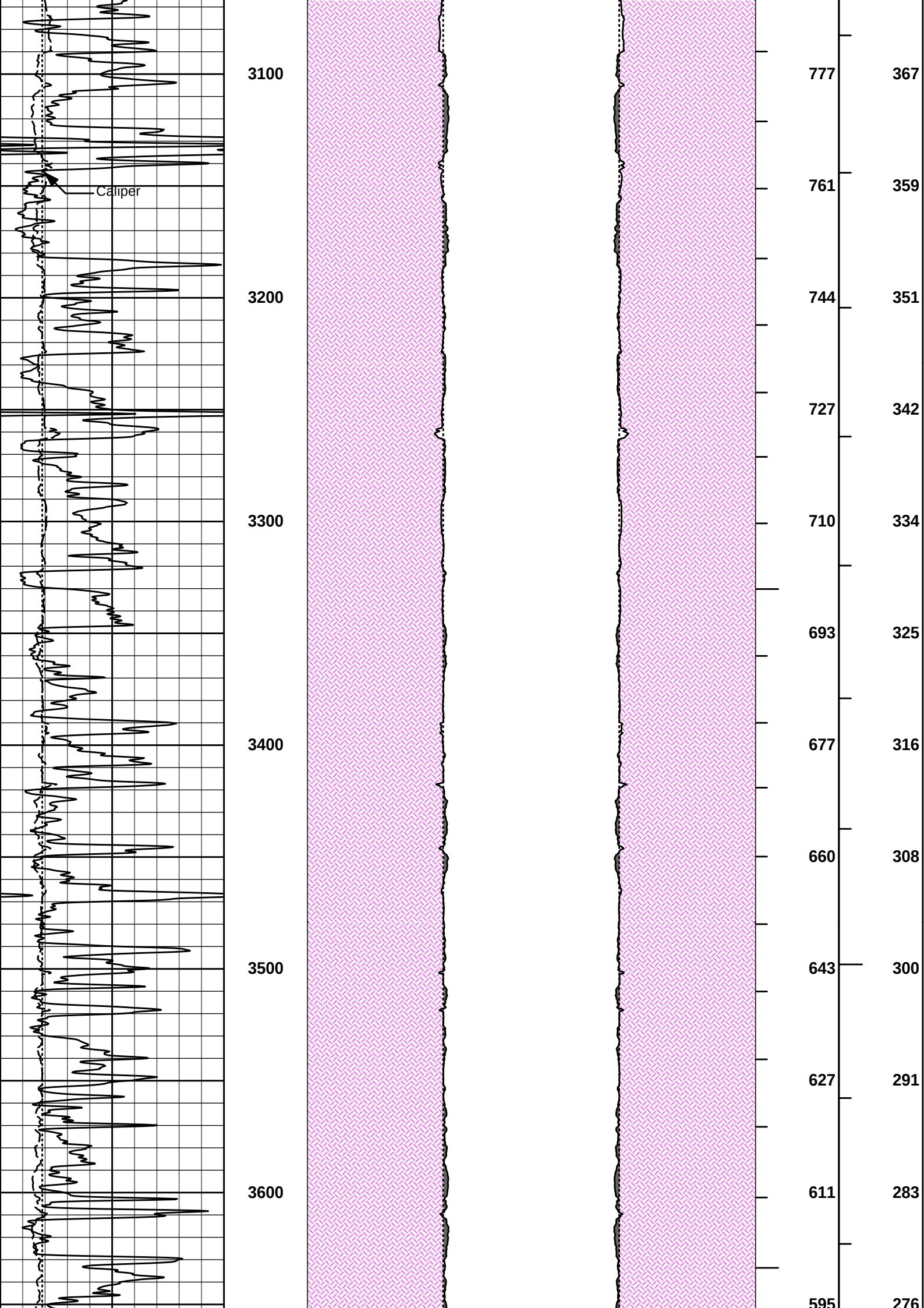
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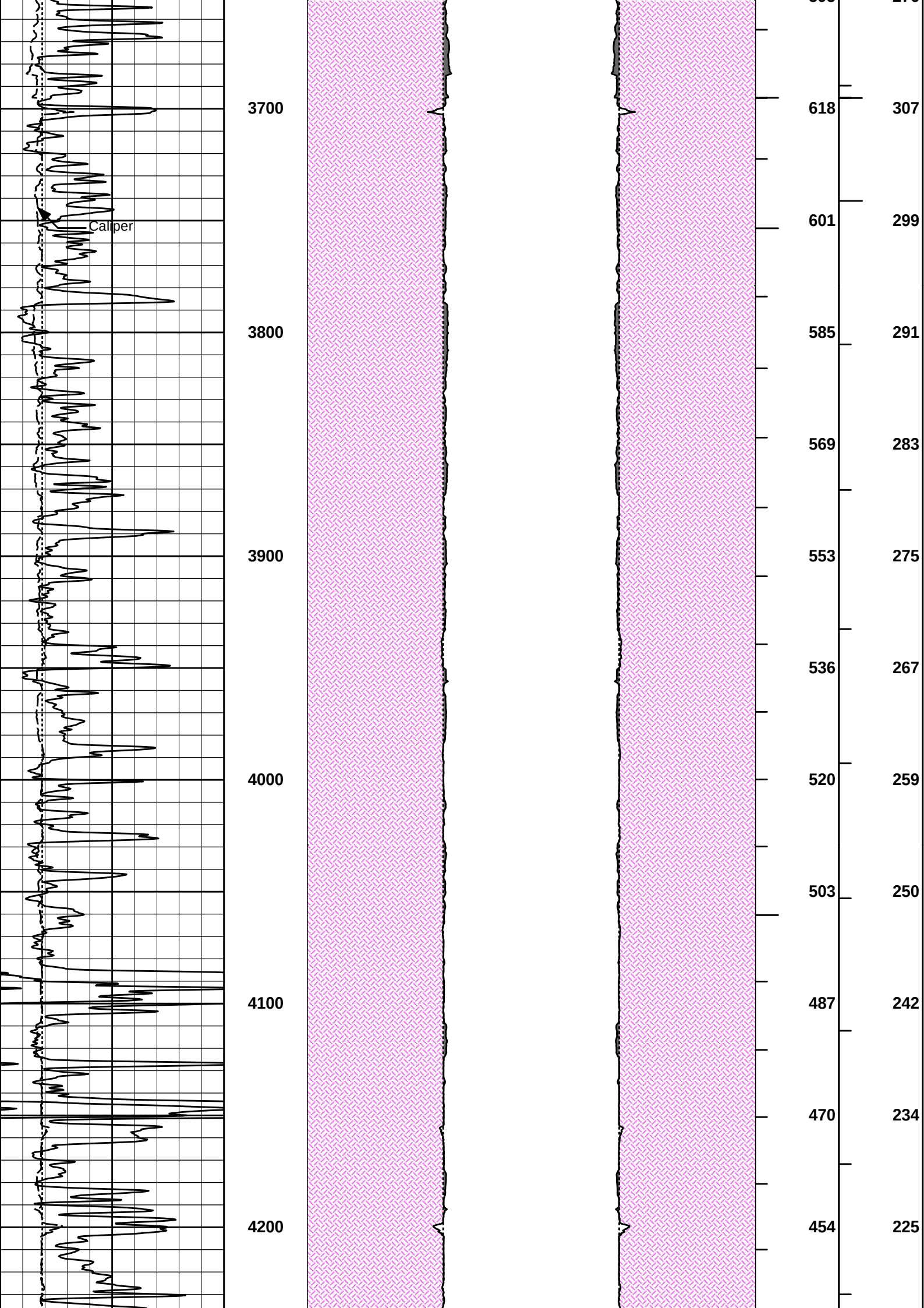
Service Ticket No.: 905593182						API No.: 15-081-22189-00-00						PGM Version: WL INSITE R5.8.10 (Build 2)																	
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE												RESISTIVITY SCALE CHANGES																	
Date		Sample No.										Type Log		Depth		Scale Up Hole				Scale Down Hole									
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.				@				@				ONE		ACRT		N/A		1.5" S.O.		N/A									
Rmc @ Meas. Temp.				@				@						I-12109517															
Source Rmf		Rmc												S-12109515															
Rm @ BHT				@				@																					
Rmf @ BHT				@				@																					
Rmc @ BHT				@				@																					
EQUIPMENT DATA																													
GAMMA						ACOUSTIC						DENSITY						NEUTRON											
Run No.		ONE				Run No.		ONE				Run No.		ONE				Run No.		ONE									
Serial No.		11958947				Serial No.		10747686				Serial No.		10950489				Serial No.		10993115									
Model No.		GTET				Model No.		BSAT				Model No.		SDLT				Model No.		DSNT									
Diameter		3.625"				No. of Cent.		2				Diameter		5.5"				Diameter		3.625"									
Detector Model No.		T-102				Spacing		EVEN				Log Type		GAM-GAM				Log Type		NEU-NEU									
Type		SCINT										Source Type		CS137				Source Type		AM241BE									
Length		8"				LSA [Y/N]						Serial No.		5471GW				Serial No.		DSN-424									
Distance to Source		N/A				FWDA [Y/N]						Strength		1.78 Ci				Strength		15.0 Ci									
LOGGING DATA																													
GENERAL						GAMMA				ACOUSTIC				DENSITY						NEUTRON									
Run		Depth		Speed		Scale				Scale				Matrix		Scale		Matrix		Scale				Matrix					
No.		From		To		ft/min		L		R		L				R				L		R							
ONE		TD		CSC		REC		0		150		20		10		47.6 uSec/ft		20		10		2.71 gr/cc		20		10		LIME	

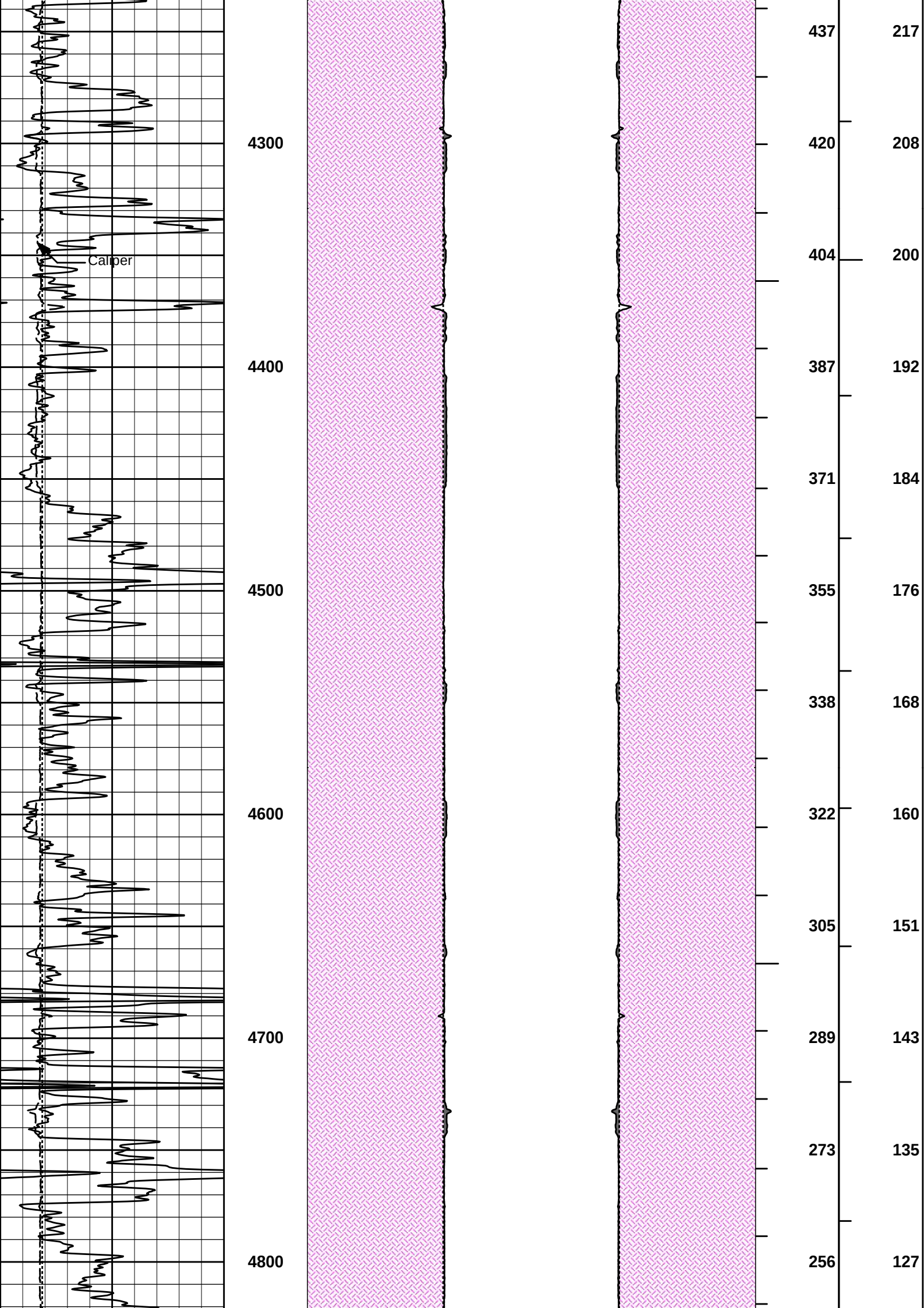
ONE	TD	CSG	REC	0	150	30	-10	47.6 uSec/ft	30	-10	2.71 g/cc	30	-10	TIME	
DIRECTIONAL INFORMATION															
Maximum Deviation							@	KOP							@
Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 5.5 INCH CASING															

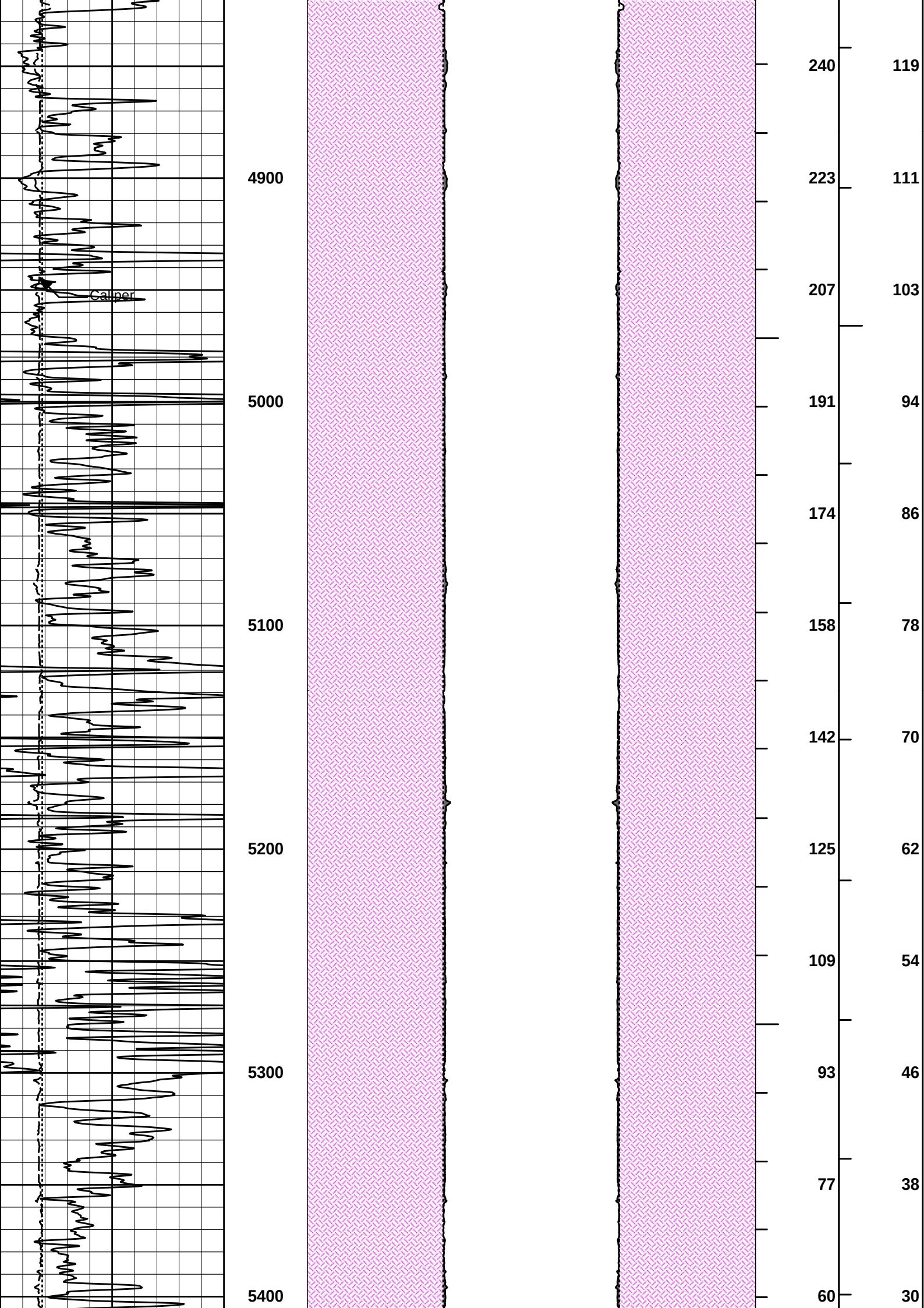


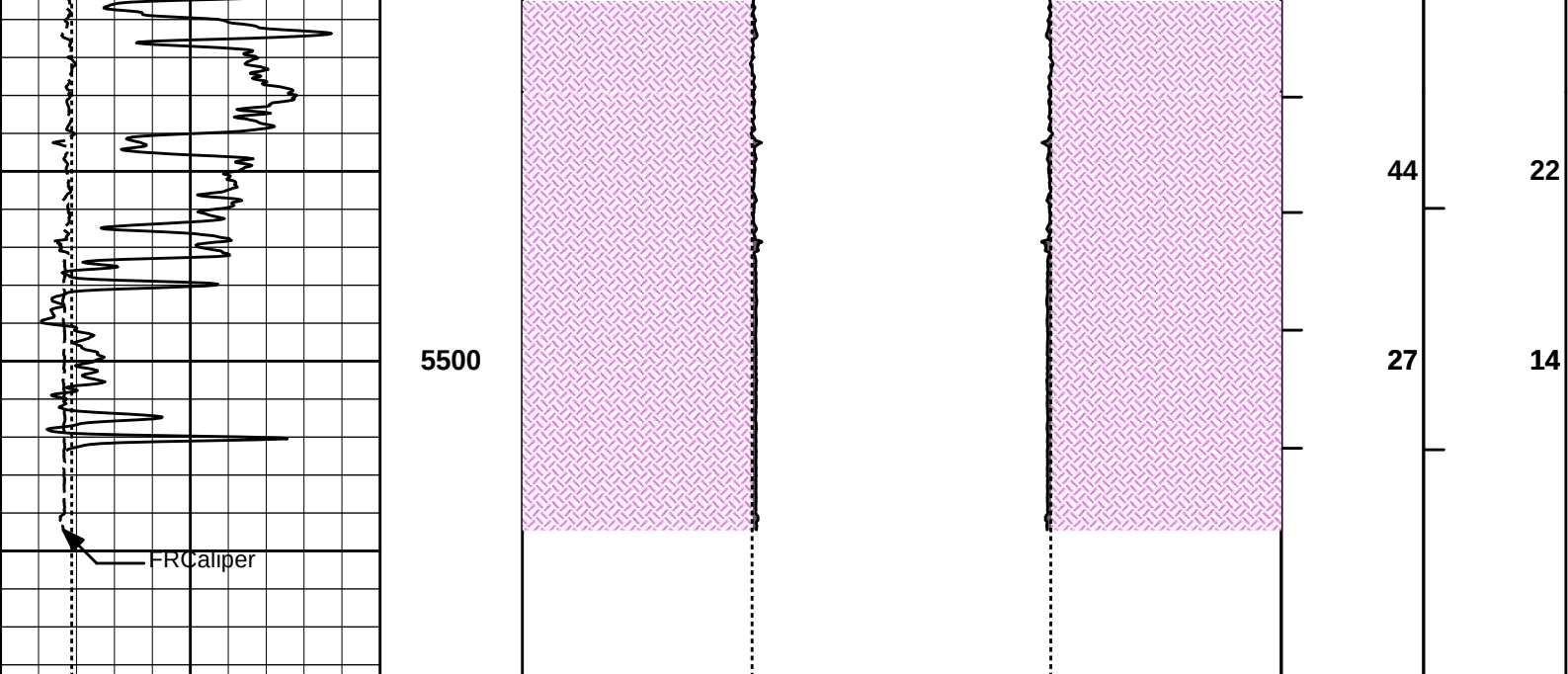












6	Caliper	16	MD 1 : 600 ft	20	Caliper	0 0	20	Caliper	20	BHVT	AHVT
	inches				inches			inches			
6	Bit Size	16		20	Bit Size	0 0	20	Bit Size	20		
	inches										
0	Gamma API	150			MUDCAKE			MUDCAKE			
	api										

HALLIBURTON

Plot Time: 02-Apr-19 05:26:16
Plot Range: 1690 ft to 5582.83 ft
Data: ANDREW_17-3\Well Based\MAIN\
Plot File: \\-LOCAL-ANDREW_17-3\Well Based\AHV\AHV_2_IQ_LIB

ANNULAR HOLE VOLUME PLOT

COMPANY	MERIT ENERGY COMPANY				
WELL	ANDREW 17-3				
FIELD	HASKELL TOWNSHIP				
COUNTY	HASKELL	STATE	KANSAS		
HALLIBURTON			ANNULAR HOLE VOLUME		