

Tucker
ENERGY SERVICES

BOREHOLE VOLUME

CALIPER LOG

Company LASSO ENERGY LLC Well RENICK #2 Field WILDCAT County GRAY State KANSAS Country USA API No. 15-069-20460-00-00		File No : TUL-59478 Company : LASSO ENERGY LLC Well : RENICK #2 Field : WILDCAT County : GRAY State : KANSAS Country : USA API No : 15-069-20460-00-00	
Location : 680' FNL & 1960' FEL NW SE NW NE		LSD : Sect : 19 Twp : 25 S Rge : 29 W	
Permanent Datum:	GL	Elevations:	Services:
Drilling Measured From:	KB	KB 2822.00	CNT
Log Measured From:	KB	DF 2821.00	LDT
Above Permanent Datum:	8.00 Ft	GL 2814.00	XYT
Date	03-03-2014		
Run Number	1		
Depth--Driller	5205.0 Ft		
Depth--Logger	5206.0 Ft		
First Reading	5166.0 Ft		
Last Reading	1790.0 Ft		
Casing--Driller	1785.0 Ft		
Casing--Logger	1790.0 Ft		
Bit Size	7.875 In		
Casing Size	8.625 In		
Hole Fluid Type	GEL / CHEMICAL		
Density	8.8 LBS/GAL		
Fluid Loss	13.2 CC		
PH/Viscosity	11.0 @ 49.0 SEC		
Sample Source	MEASURED		
RMF@Measured Temp.	0.300 @ 44 F		
RMF@Measured Temp	0.264 @ 44 F		
RMF@Measured Temp.	0.363 @ 44 F		
Source RMF/RMC	CALCULATED/CALCULATED		
RM@BHT	0.129 @ 111 F		
Time Circulation Stopped	03-03-2014 7:00 pm		
Max Recorded Temp.	111 F		
Equipment/Base	TRUCK 127 TULSA		
Recorded By	R. KING		
Witnessed By	M. BURTON		

The customer is hereby warned that by providing the log data herein, T. E. S. does not agree to provide any interpretation of log data, conversion of log data to physical rock parameters or recommendations. T. E. S. does not guarantee or warrant either expressly or impliedly, the accuracy of any interpretation of log data, conversion of log data to physical rock parameters or recommendations which may be given by T. E. S. personnel. Any interpretation, conversion or recommendation is not part of the consideration for the agreement between the parties and is not part of any part of the charge by T. E. S. for its services. Any user of the log data is warned that said user is not entitled to rely on interpretations, conversions or recommendations as aforesaid.

Bitsize Intervals		Casing Strings			
Size (In)	Bottom (Ft)	Size (In)	Weight (Lbs)	Bottom (Ft)	Top (Ft)
7.875	5205.00	8.625	24.00	1785.00	0.00

Run Number	1	
Date	03-03-2014	
Date/Time On Bottom	03-04-2014 1:15 am	
Depth to Fluid	0.0 Ft	
Salinity	13600.000 PPM	
RMF@BHT	0.114 @ 111 F	
RMC@BHT	0.156 @ 111 F	

Run Number 1

Comments

ALL PRESENTATIONS AS PER CUSTOMER REQUEST
 GRT, CNT, LDT, MLT, NAV AND PIT RUN IN COMBINATION.
 CALIPERS ORIENTED ON X-Y AXIS.
 2.71 G/CC USED TO CALCULATED POROSITY.
 ANNULAR HOLE VOLUME CALCULATED UISING 5.5" PRODUCTION CASING.
 PHIN IS CALIPER CORRECTED.

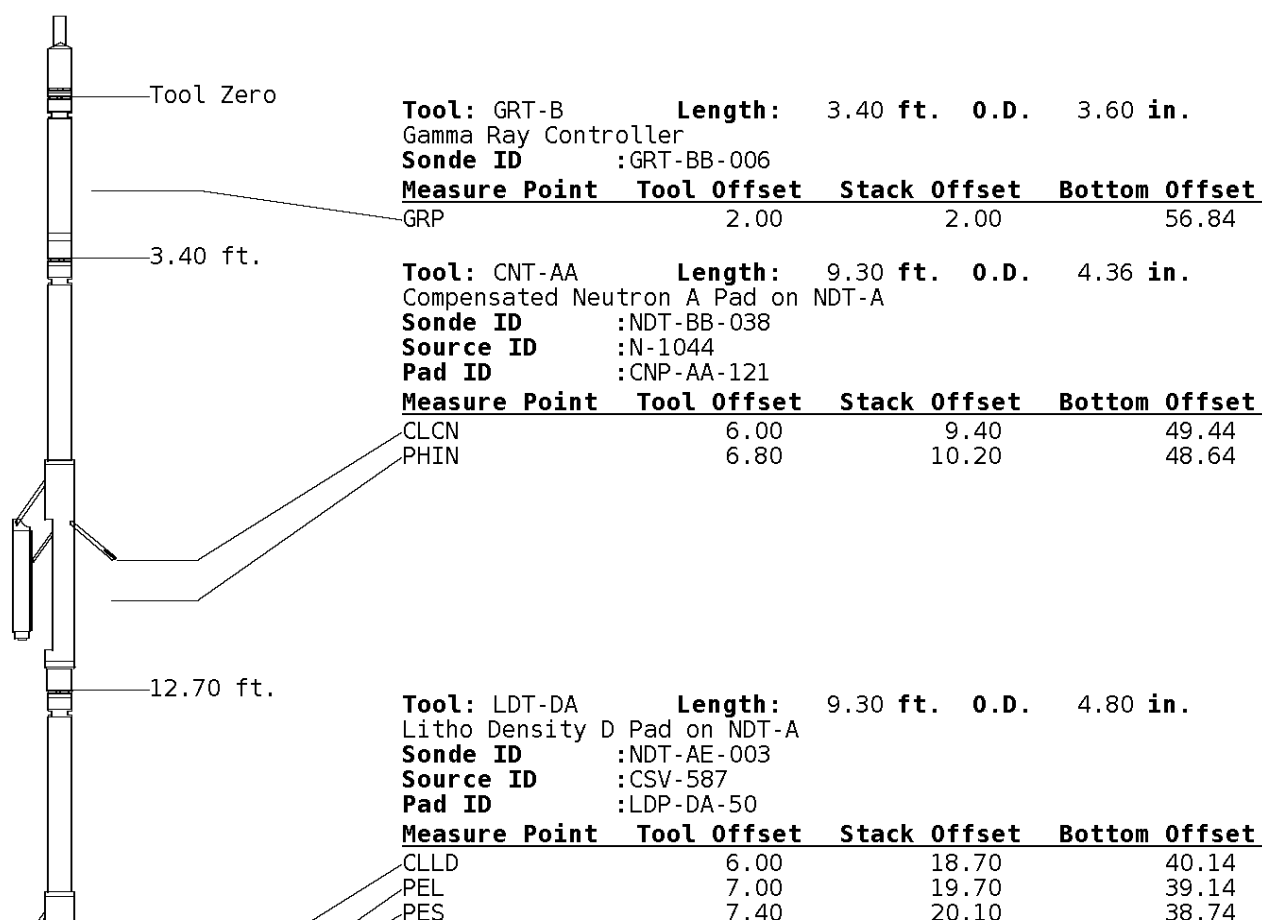
MAGNETIC DECLINATION: 5.98 DEG.

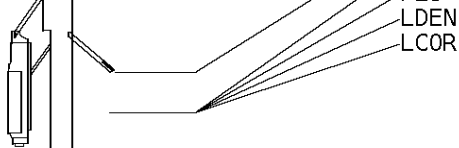
GRT: GRP
 CNT: PHIN, CLCNIN
 LDT: PORL, LCORN, PECLN, LDENN, PORLLS, CLLDIN
 MLT: NOR_RF, INV_RF, MSCLPIN.
 NAV: CALIBRATED_WOT_AE, WOT_AE_NAVAGATION
 PIT: EIRMDS, VIRDDS, SPU, SFLAEC, CIRD.

OPERATORS:
 C. GONZALES
 A.DJAH

Tool String Schematic

Total Tool Length - 58.84 ft.
Maximum Outside diameter - 6.00 in.
Net Weight in Air - 1031.00 lbs.



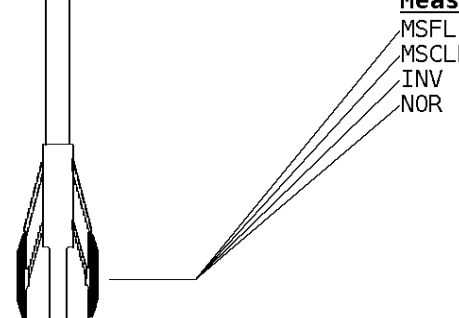


LDEN	7.20	19.90	38.94
LCOR	7.20	19.90	38.94

22.00 ft.

Tool: MST-DA **Length:** 9.66 ft. **O.D.** 6.00 in.
 Micro Spherically Focused (IC)
Sonde ID :MST-DA-28

Measure Point	Tool Offset	Stack Offset	Bottom Offset
MSFL	7.60	29.60	29.24
MSCLP	7.60	29.60	29.24
INV	7.60	29.60	29.24
NOR	7.60	29.60	29.24



31.66 ft.

Tool: WOT-AA **Length:** 5.69 ft. **O.D.** 3.50 in.
 Well Orientation Tool
Sonde ID :WGT-001

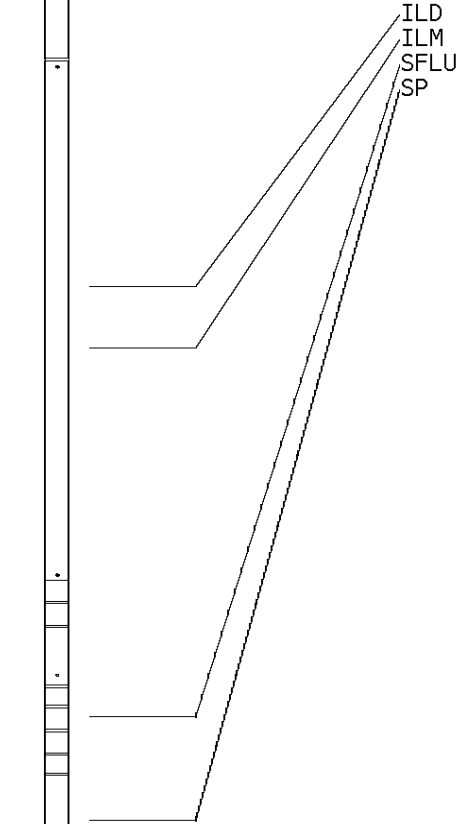
Measure Point	Tool Offset	Stack Offset	Bottom Offset
NAVTEMP	3.00	34.66	24.18
ACCX, ACCY, ACCZ	3.00	34.66	24.18
MAGX, MAGY, MAGZ	3.00	34.66	24.18



37.35 ft.

Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
 Phased Dual Induction w/ RM & D
Sonde ID :PIT-BA-20

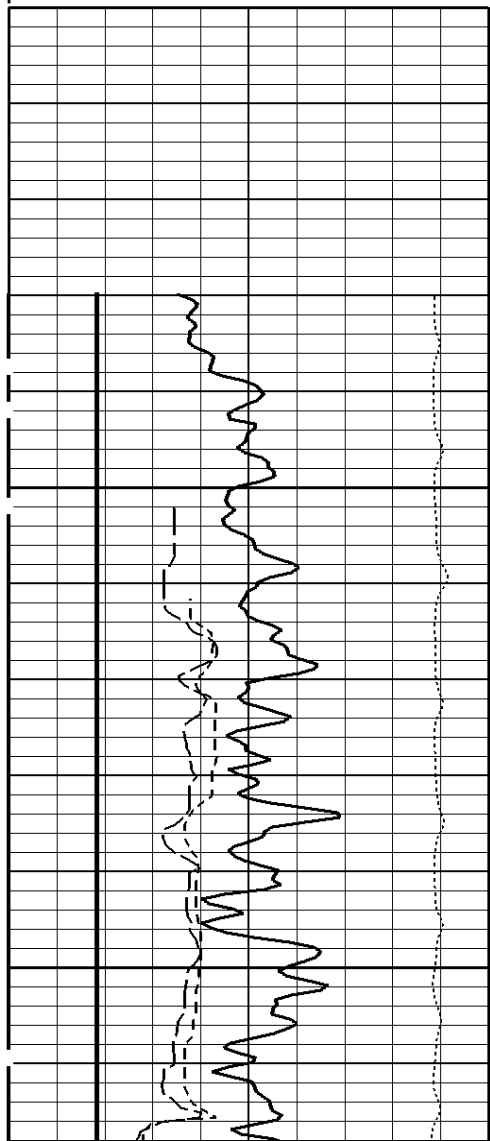
Measure Point	Tool Offset	Stack Offset	Bottom Offset
ILD	8.92	46.27	12.56
ILM	10.10	47.45	11.39
SFLU	17.49	54.84	4.00
SP	20.60	57.95	0.88



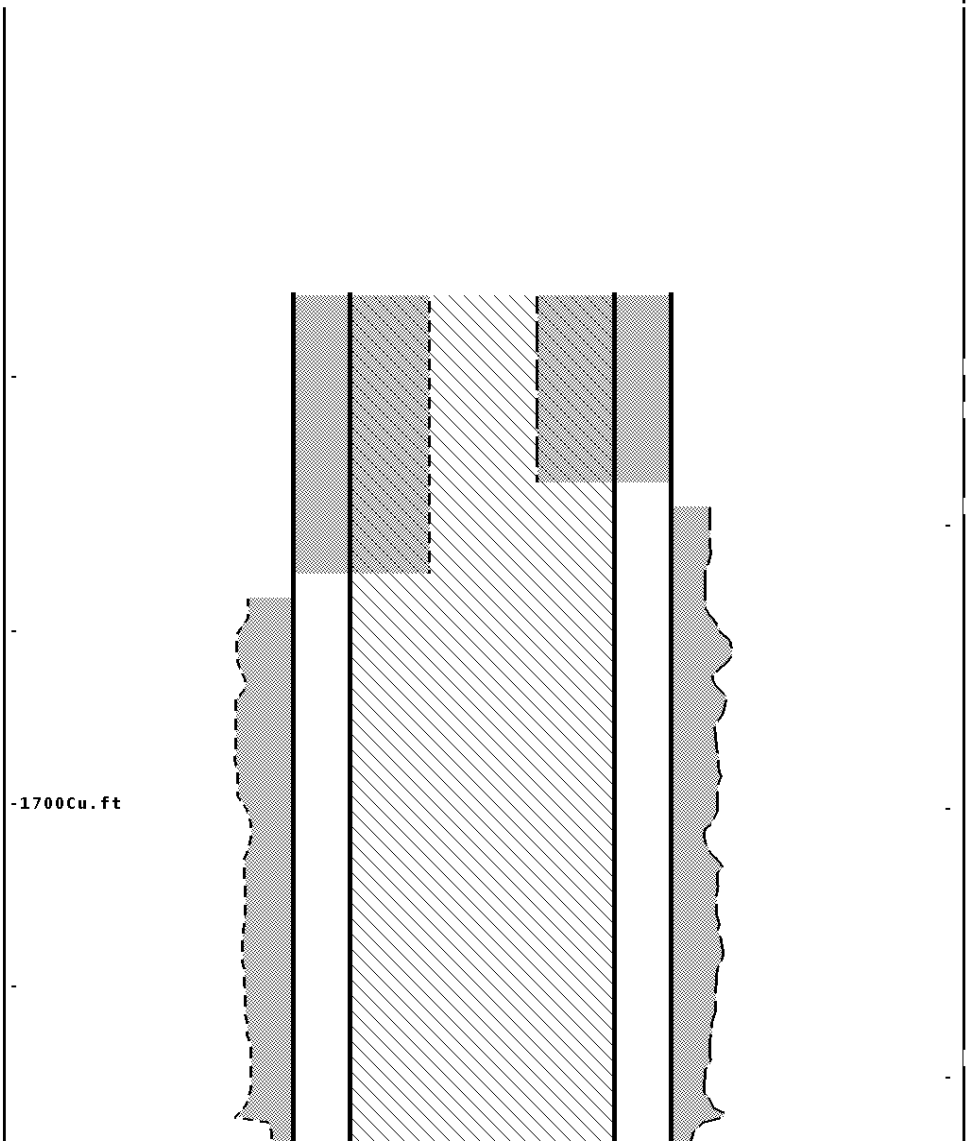
LWT 58.84 ft.

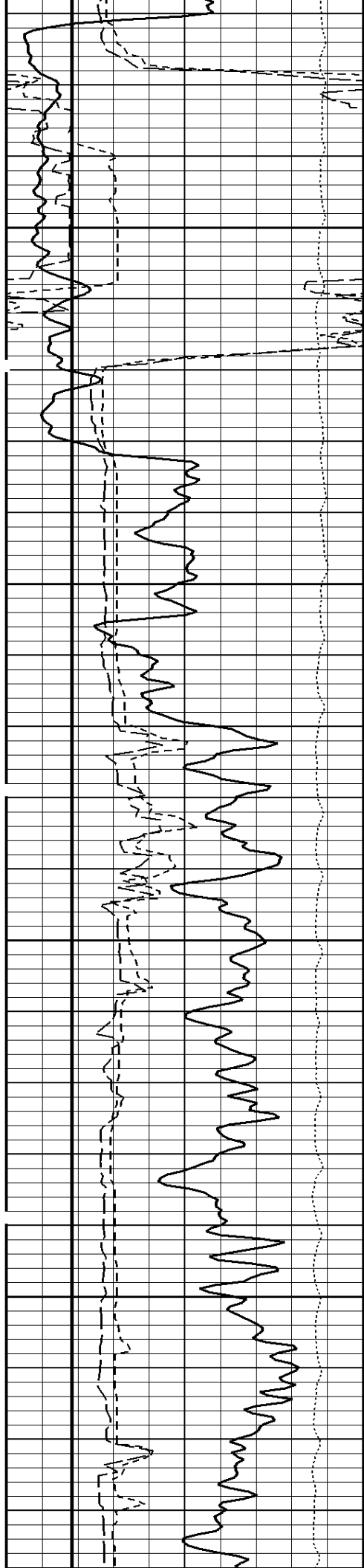
BIT SIZE INCHES (IN)		
6	16	
Y CALIPER INCHES (IN)		
16 6	26 16	
X CALIPER INCHES (IN)		
16 6	26 16	
TENSION LBS		
10000	0	
GAMMA RAY API UNITS	BOREHOLE VOLUME CU.FT	ANNULAR HOLE VOLUME CU.FT.
150 0  300 150		

1:240 MAIN SECTION



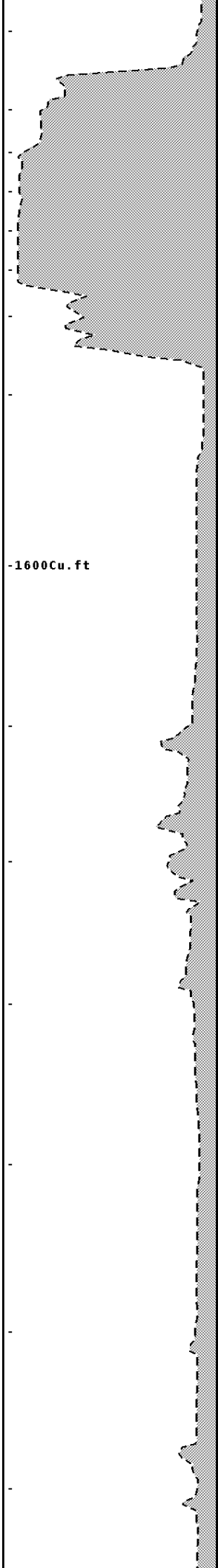
1800



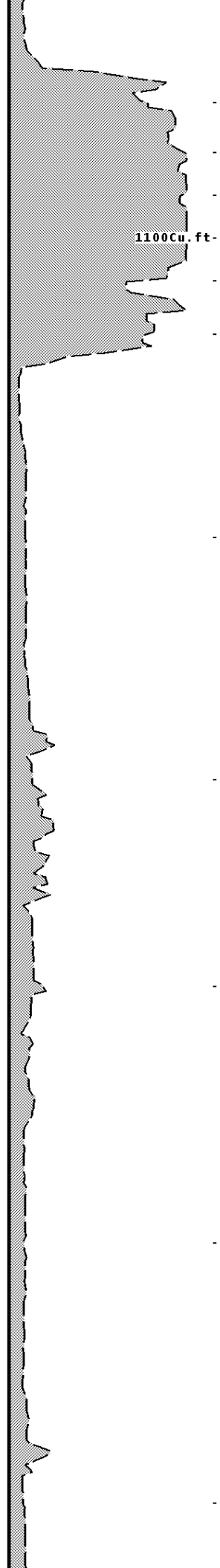
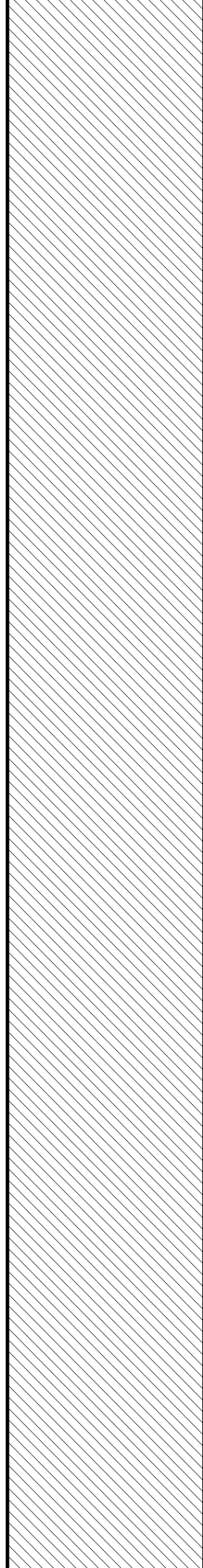


1900

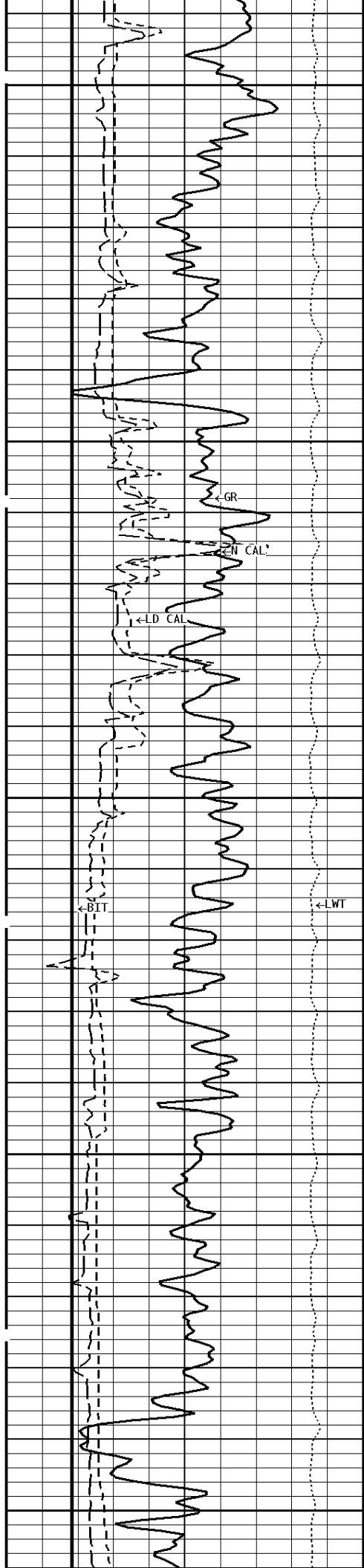
2000



-1600Cu.ft



1100Cu.ft



2100

-1500Cu.ft

2200

2300

←L CAL

←BIT

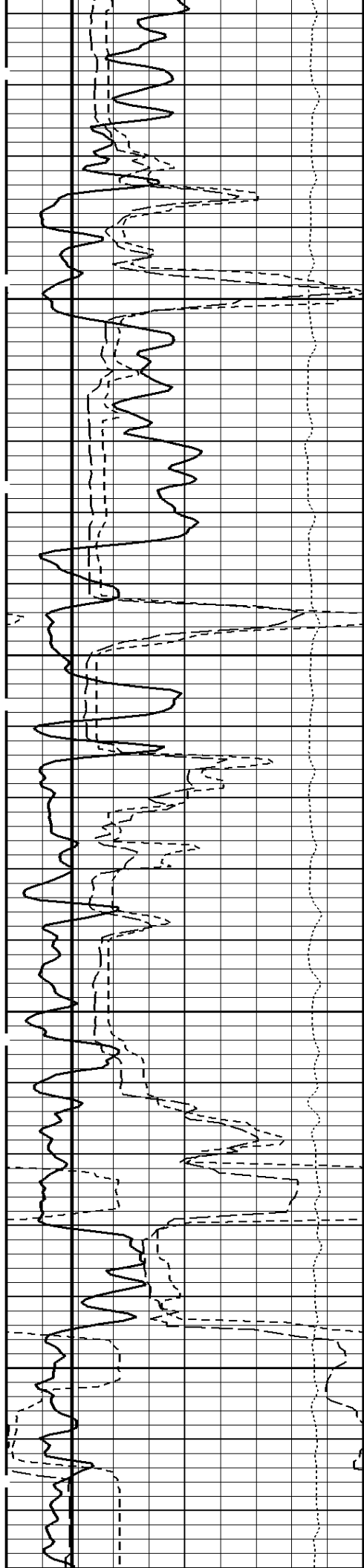
←CASING

←N CAL

1000Cu.ft

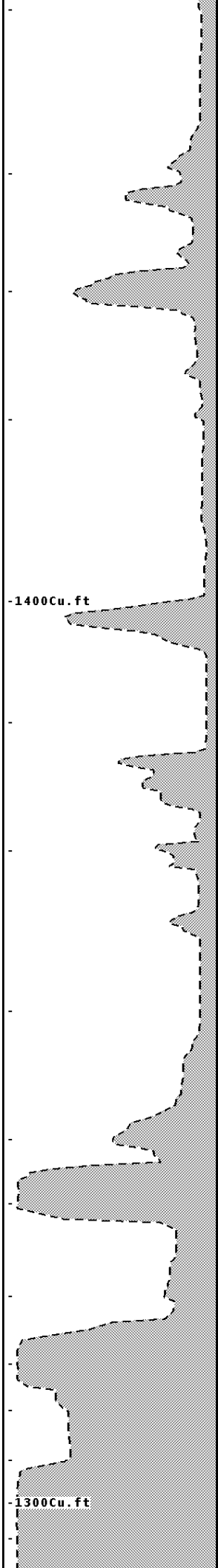
←BIT

←CASING



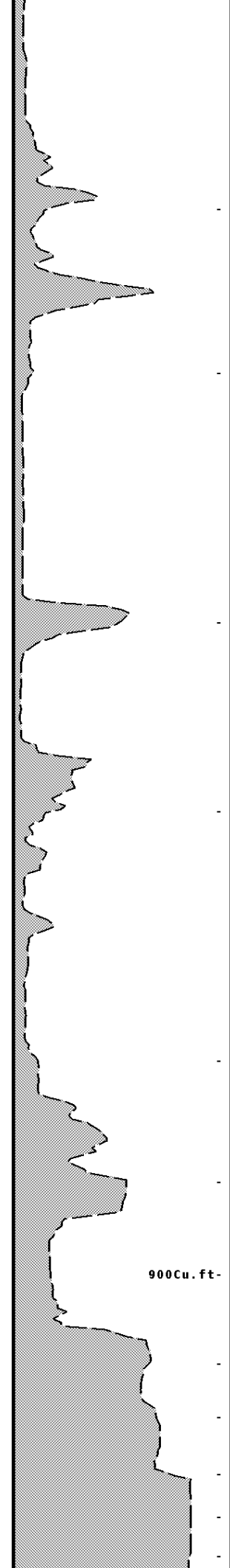
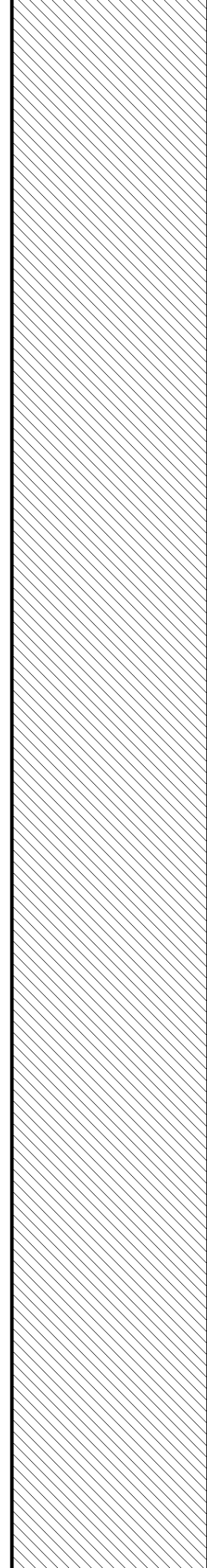
2400

2500

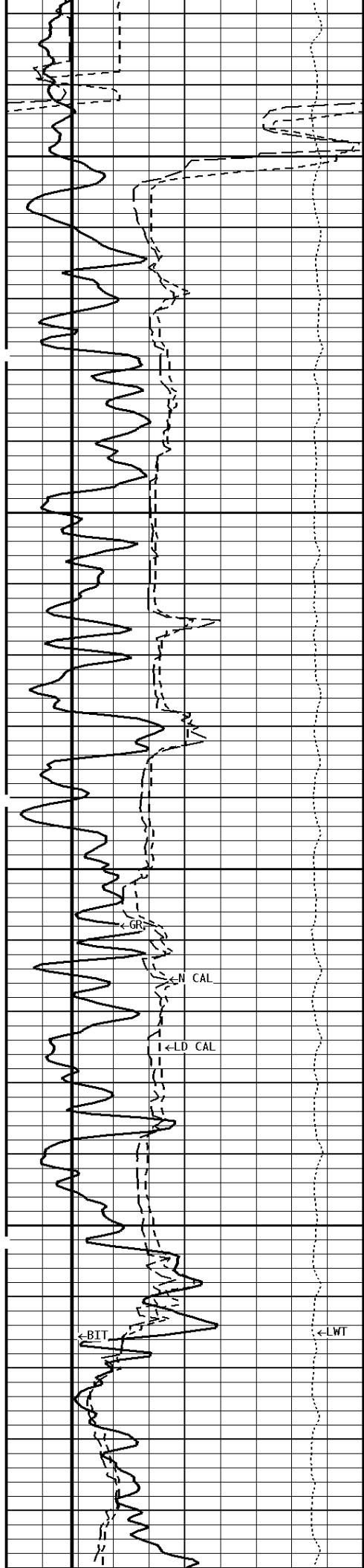


-1400Cu.ft

-1300Cu.ft

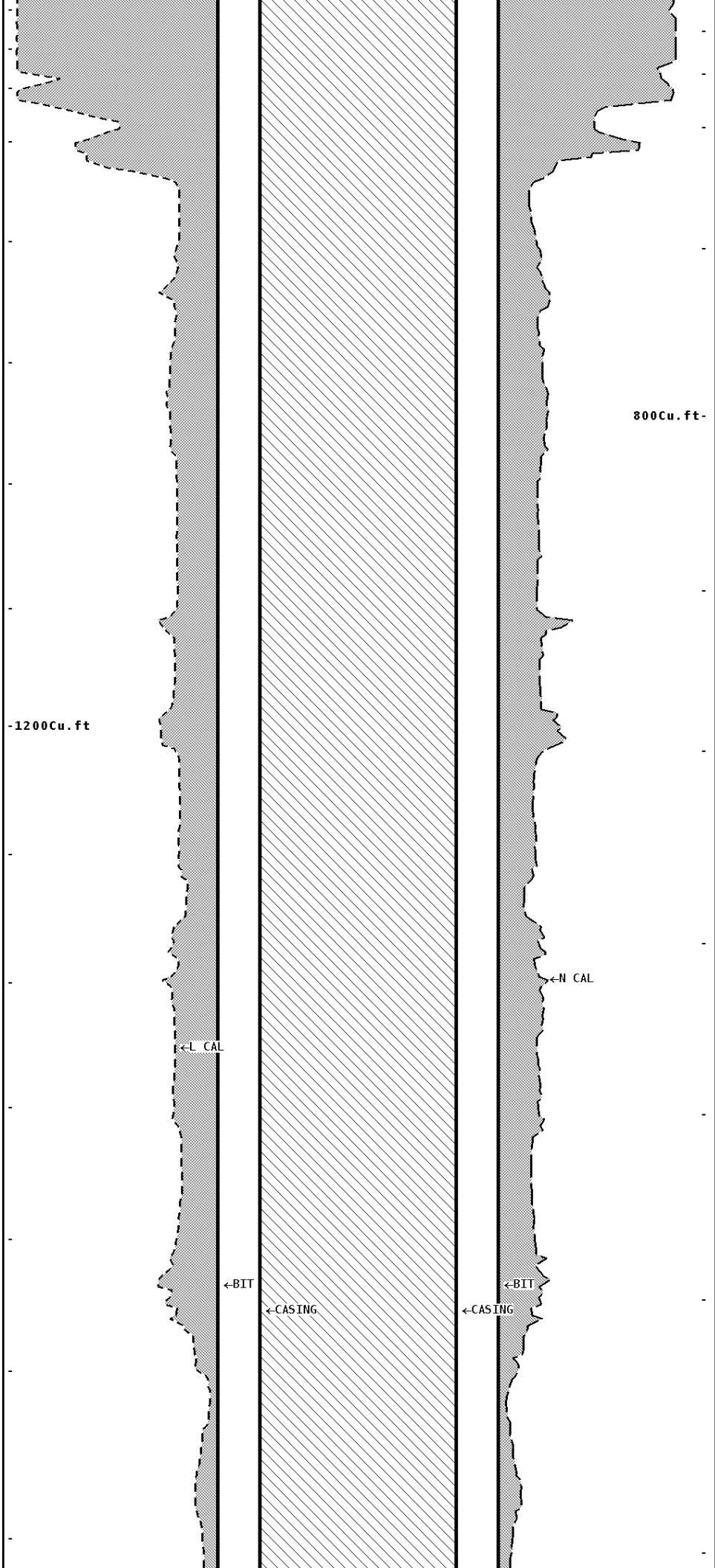


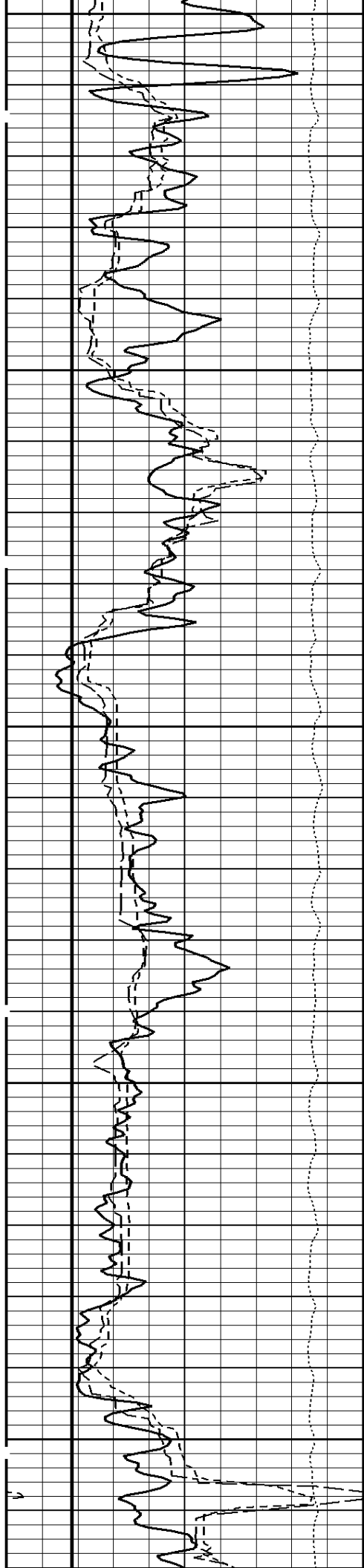
900Cu.ft-



2600

2700

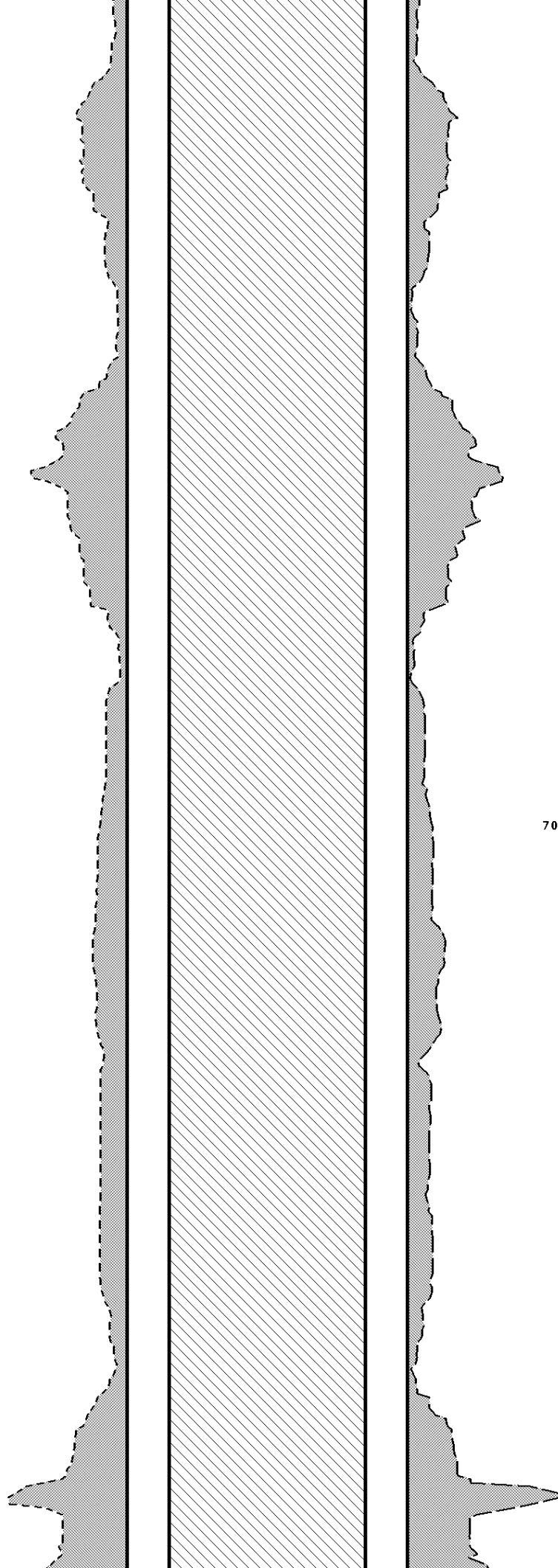




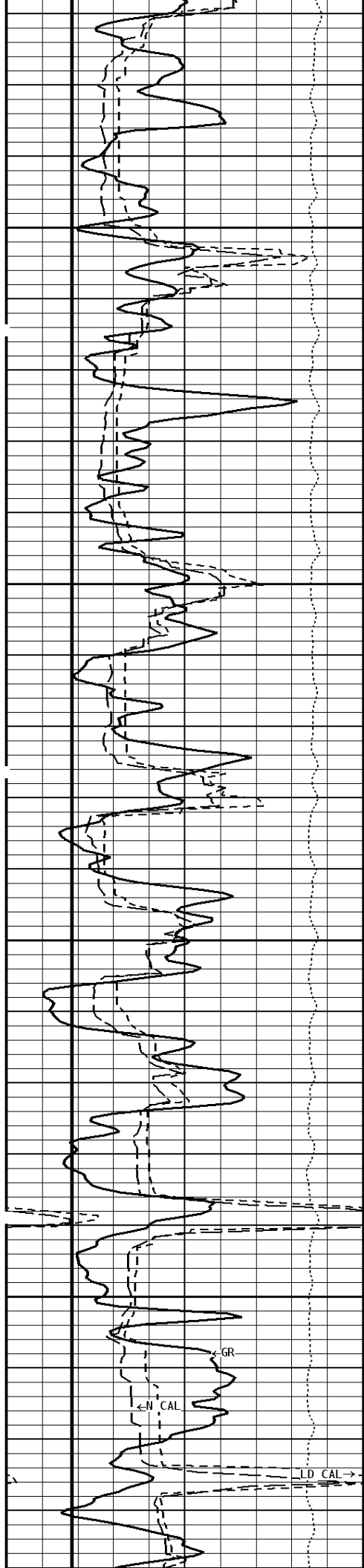
2800

-1100Cu.ft

2900



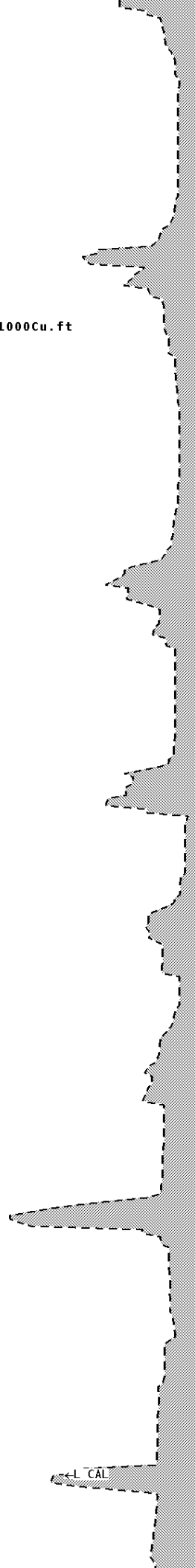
700Cu.ft-



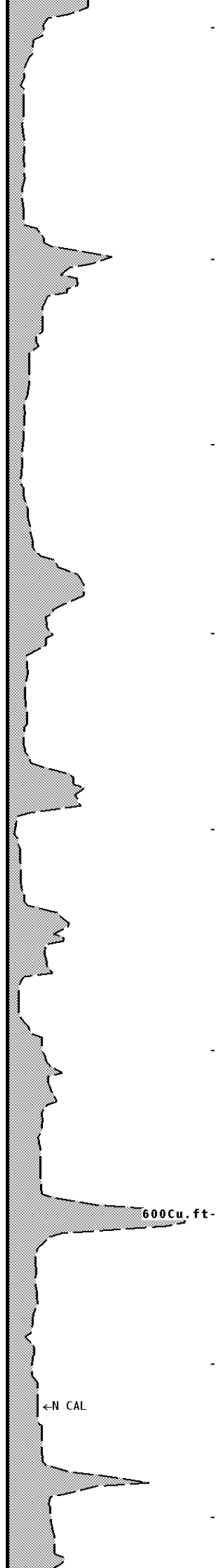
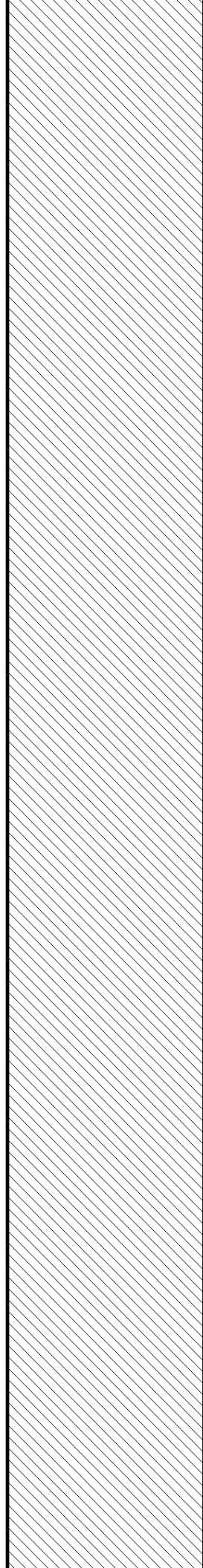
3000

-1000Cu.ft

3100

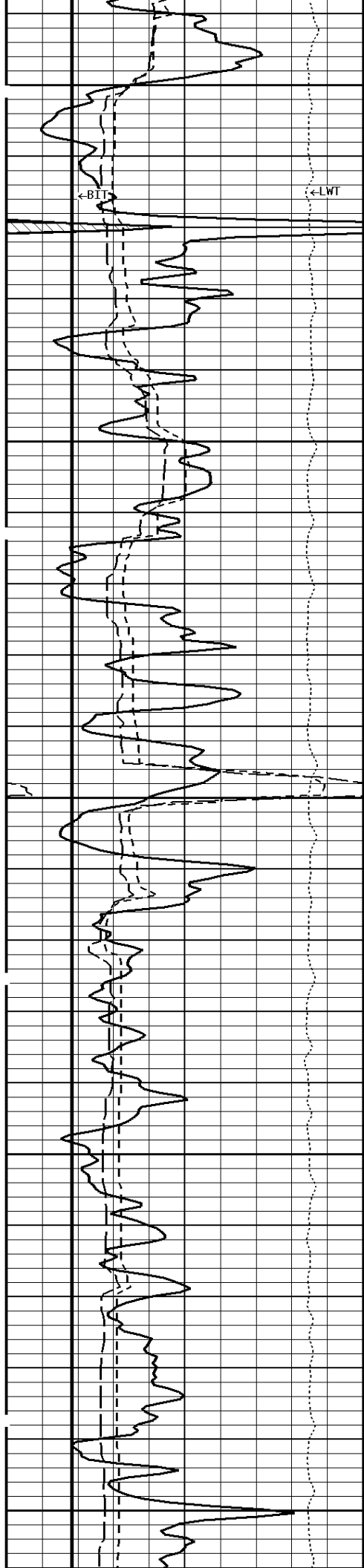


←L CAL



600Cu.ft

←N CAL



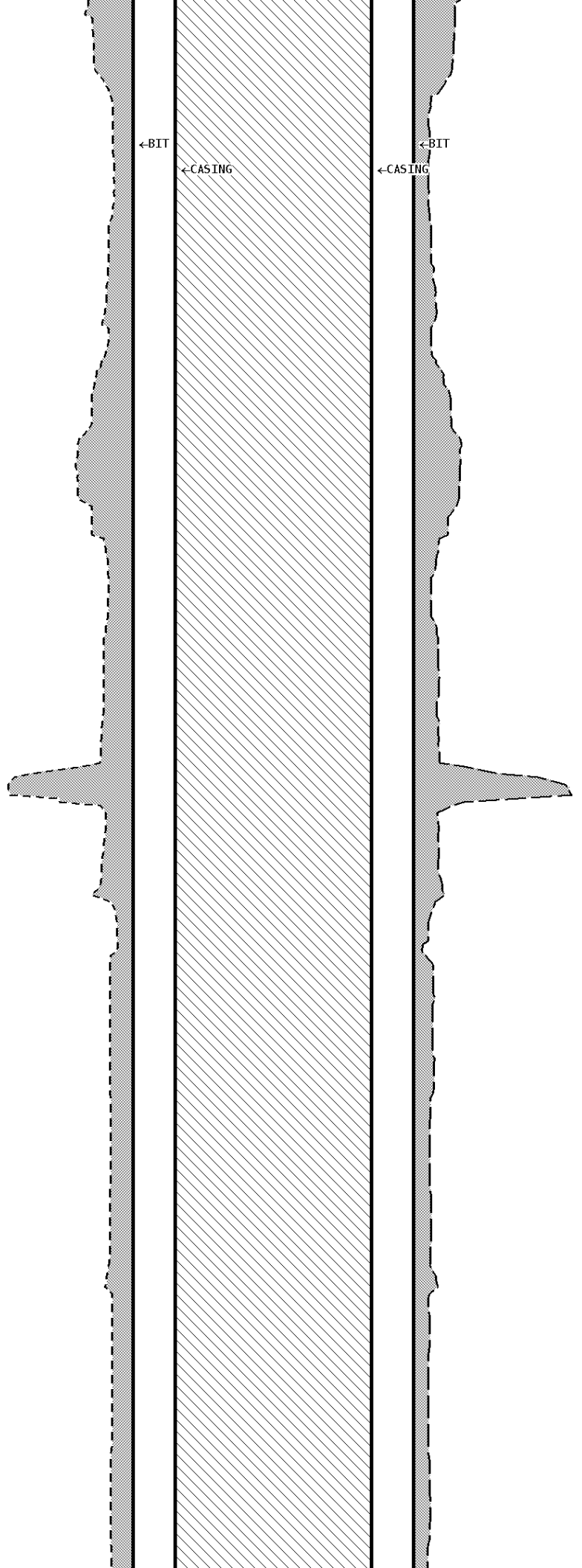
3200

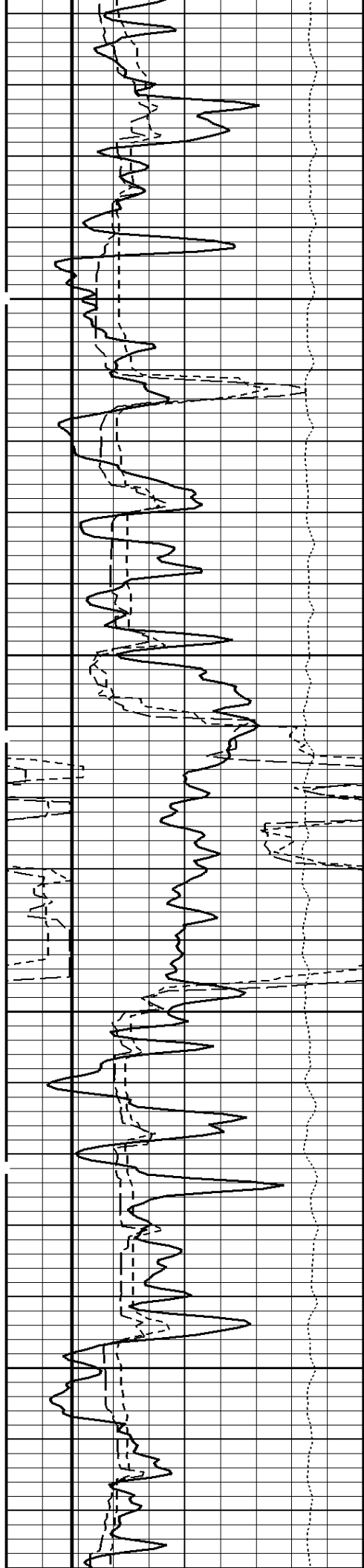
3300

3400

-900Cu.ft

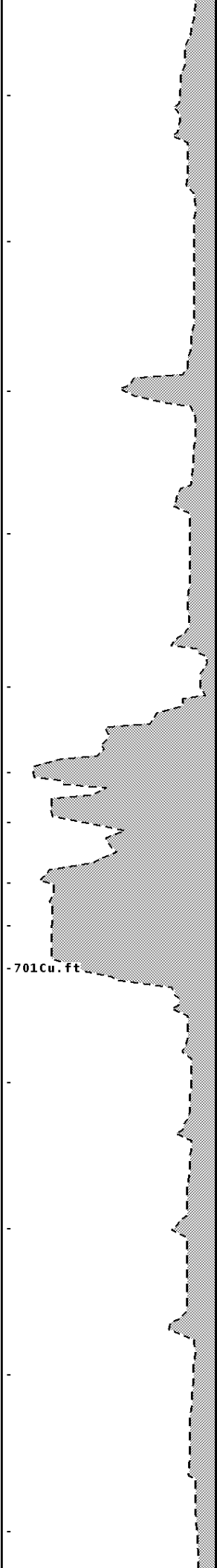
-800Cu.ft



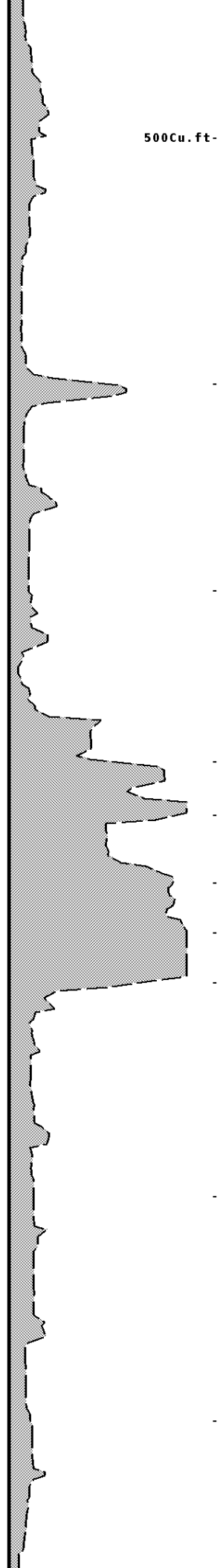
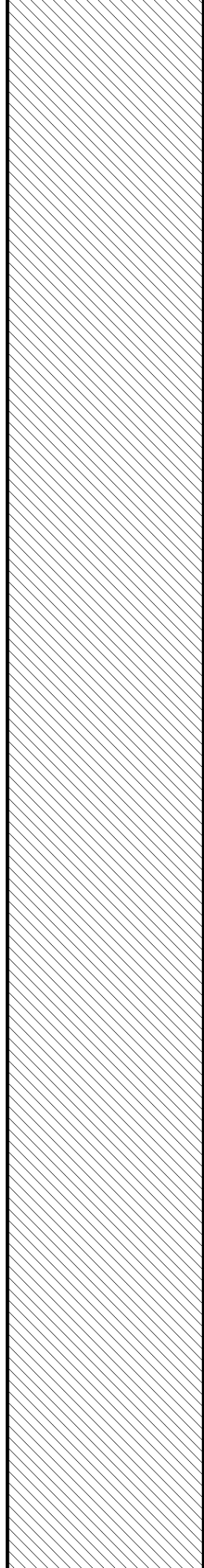


3500

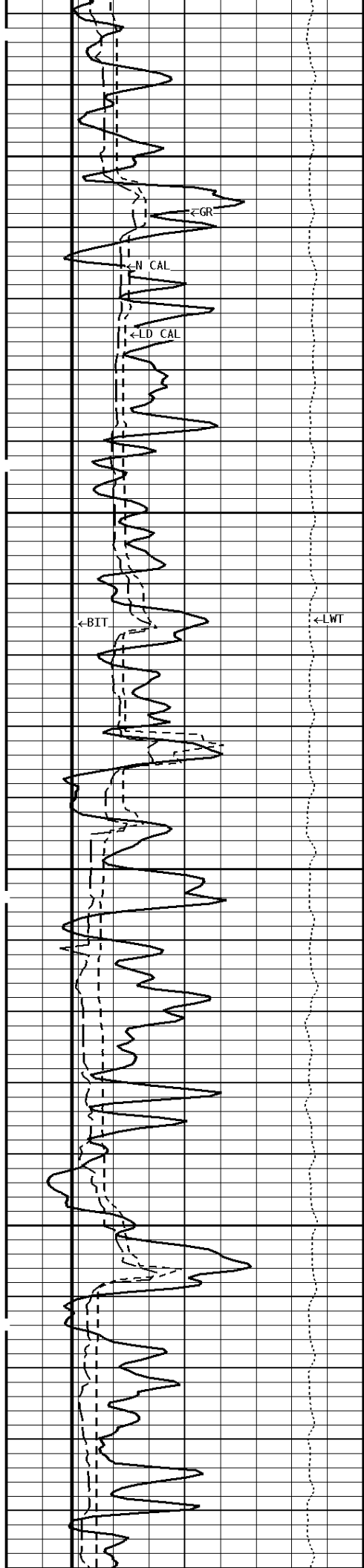
3600



-701Cu.ft



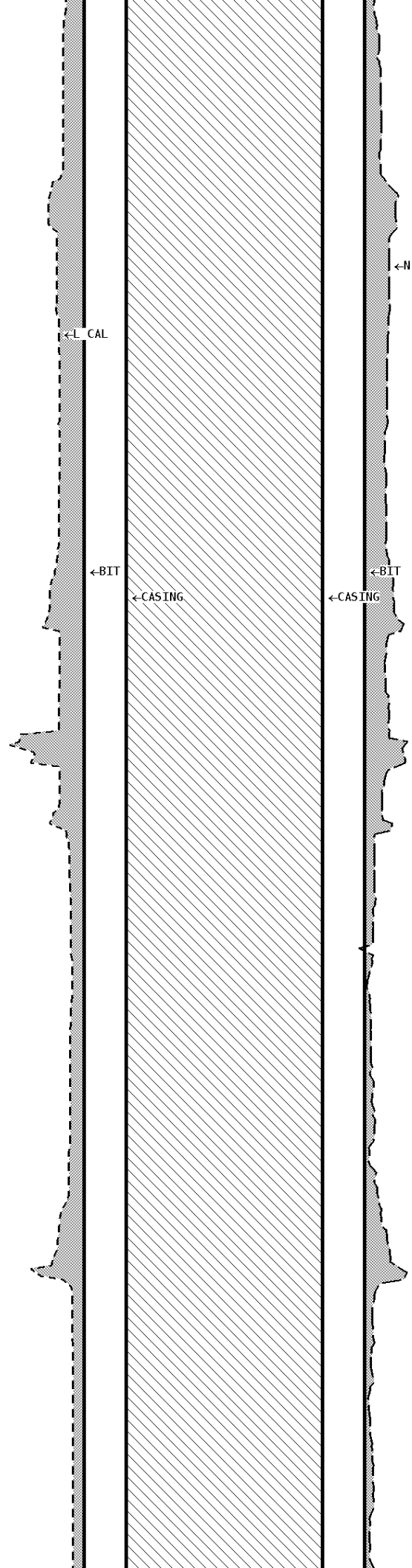
500Cu.ft-



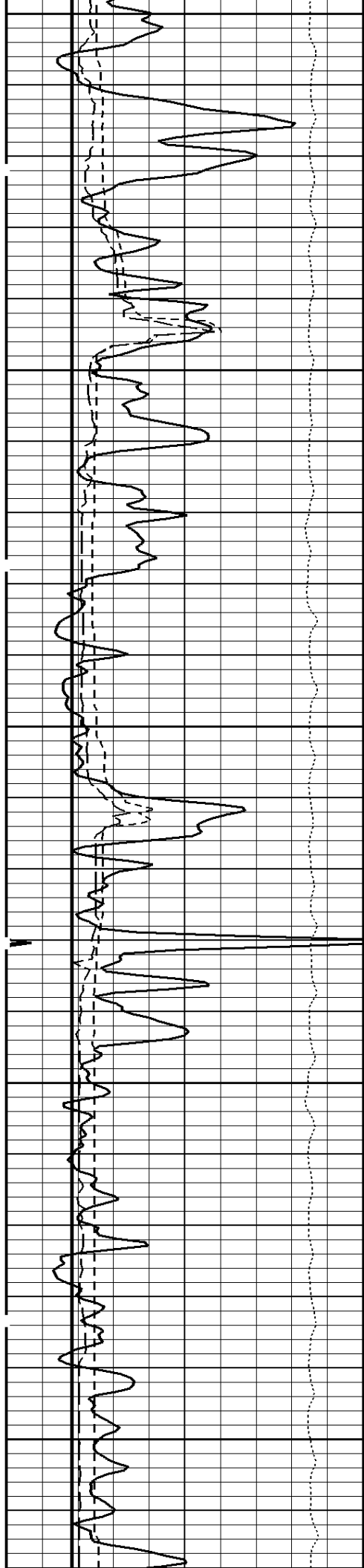
3700

-600Cu.ft

3800



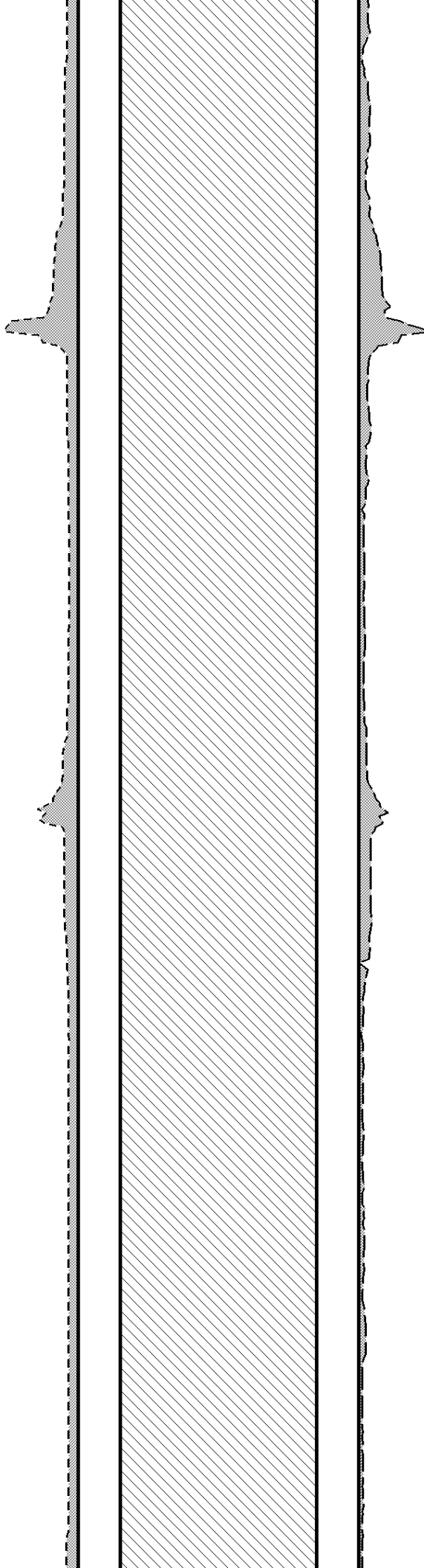
400Cu.ft-



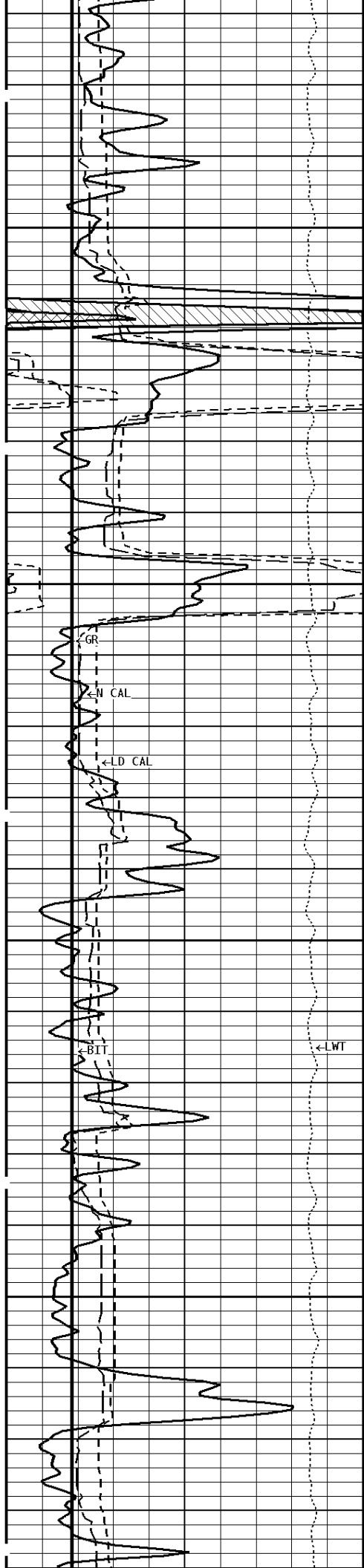
3900

4000

-500Cu.ft



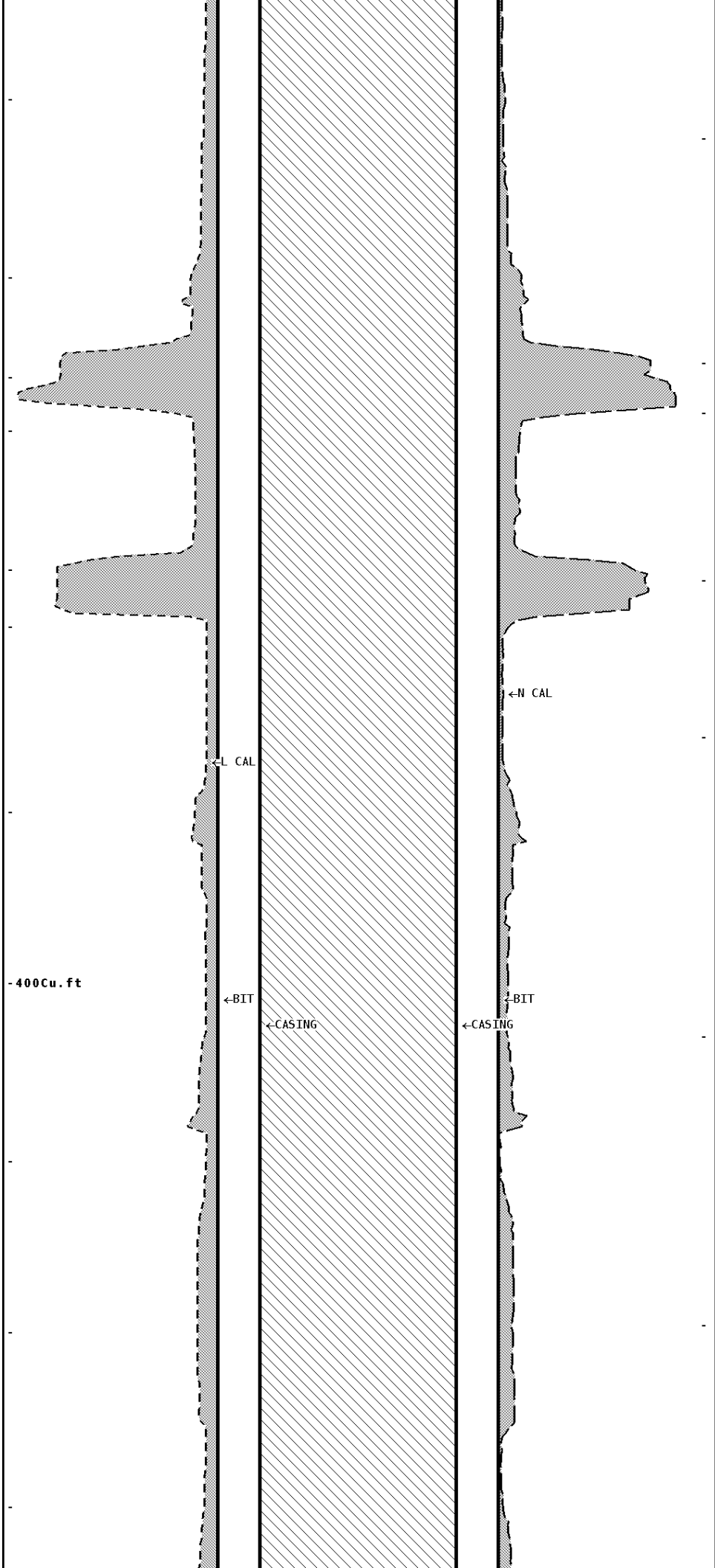
300Cu.ft-

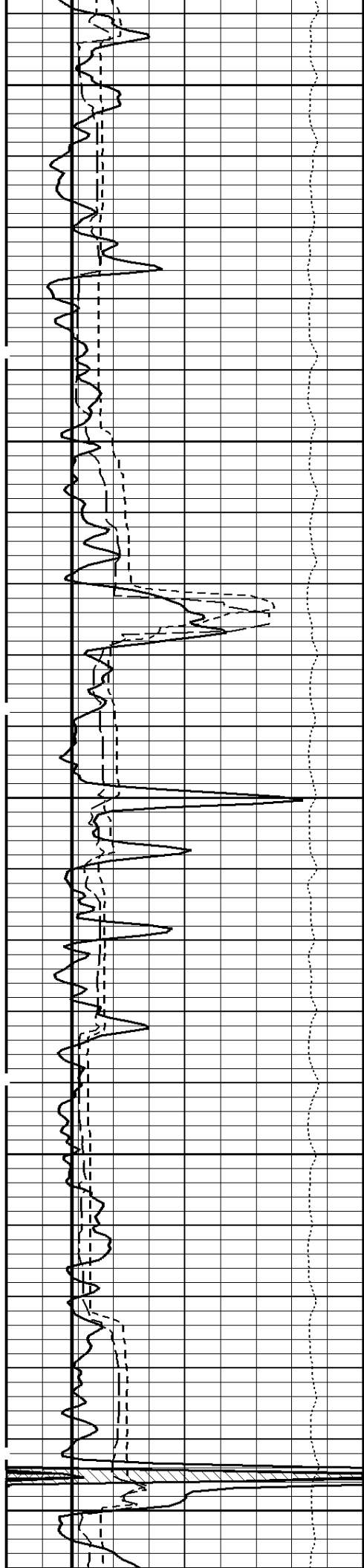


4100

4200

-400Cu.ft



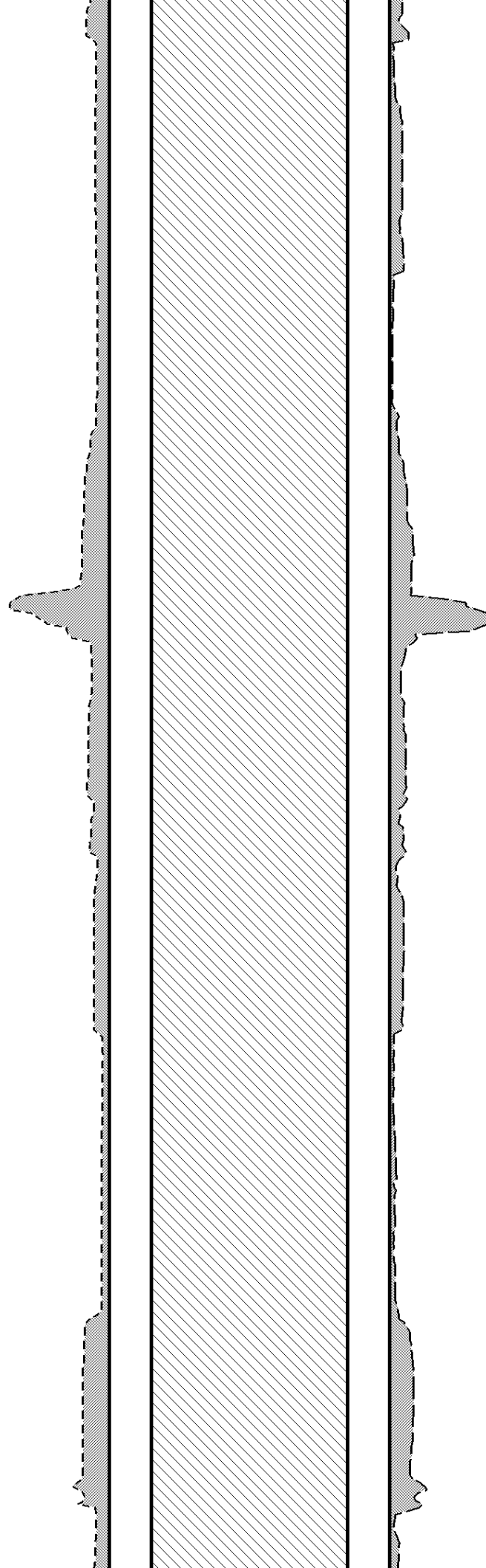


4300

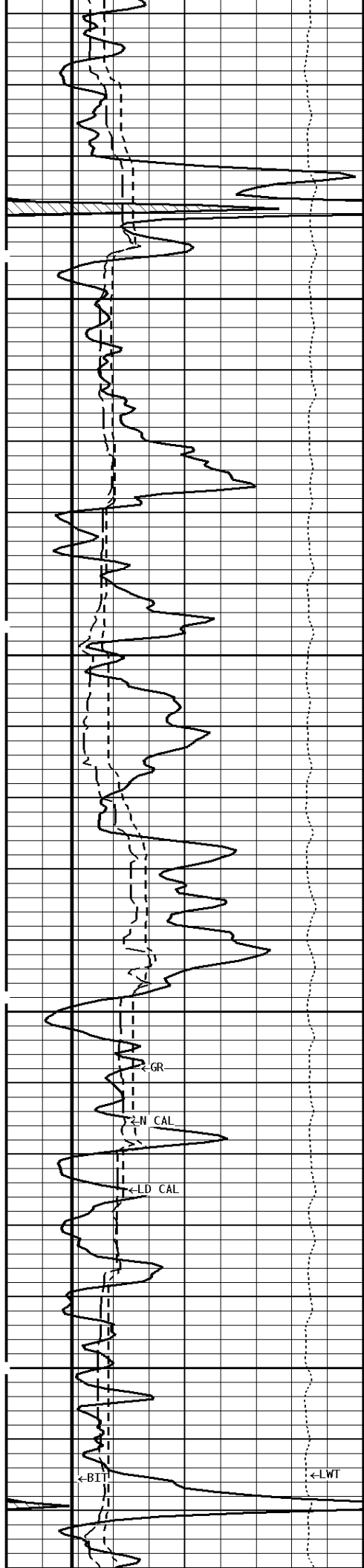
4400

4500

-300Cu.ft



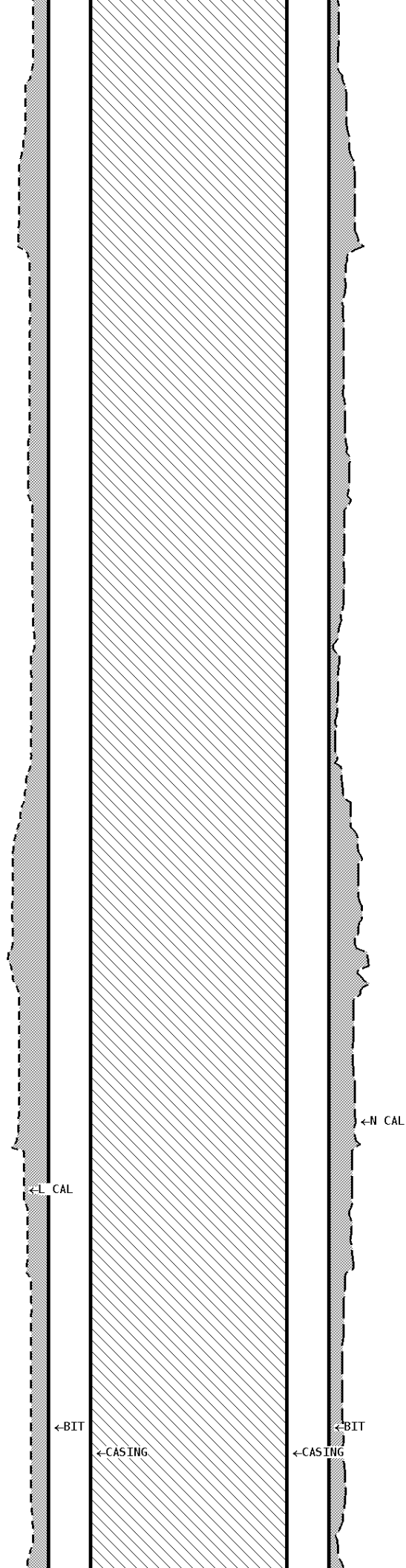
200Cu.ft-

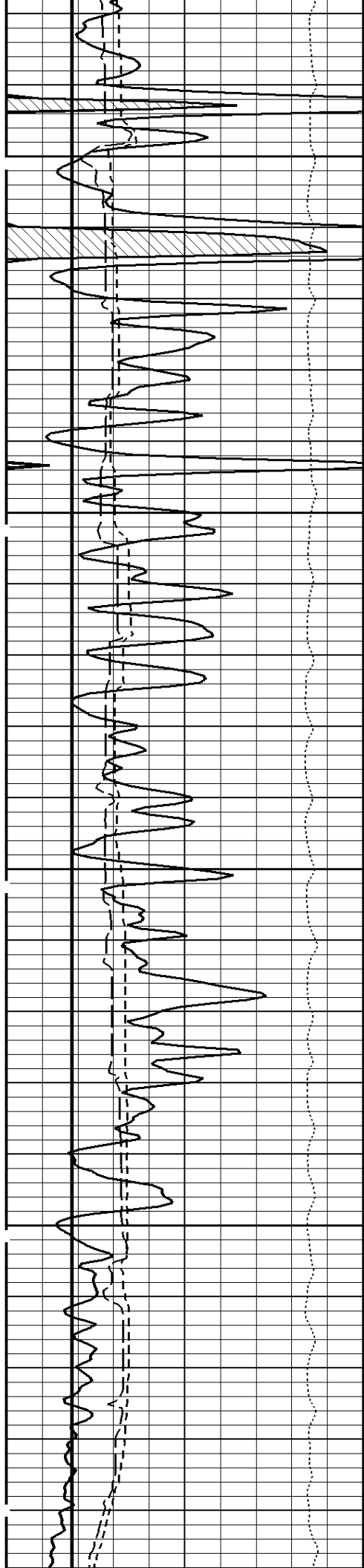


4600

-200Cu.ft

4700



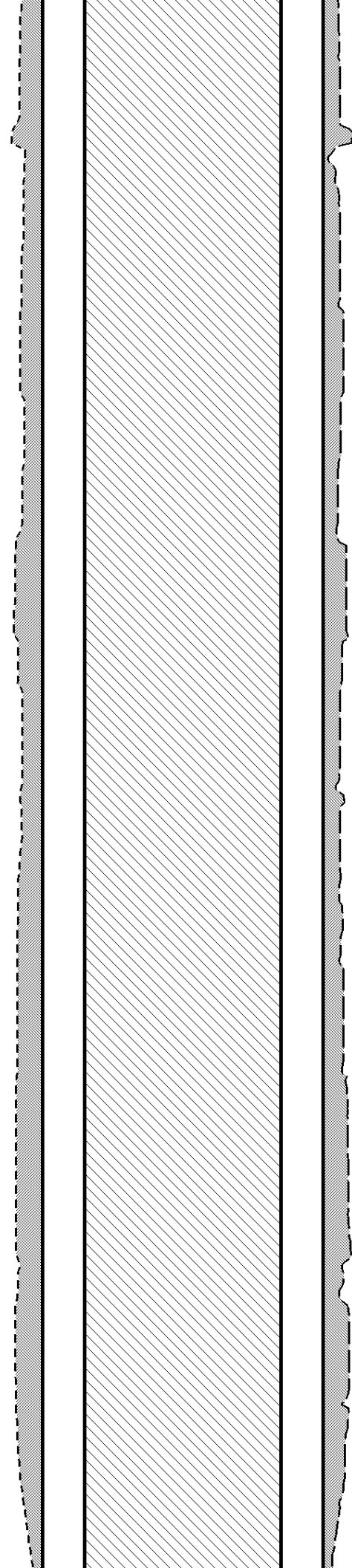


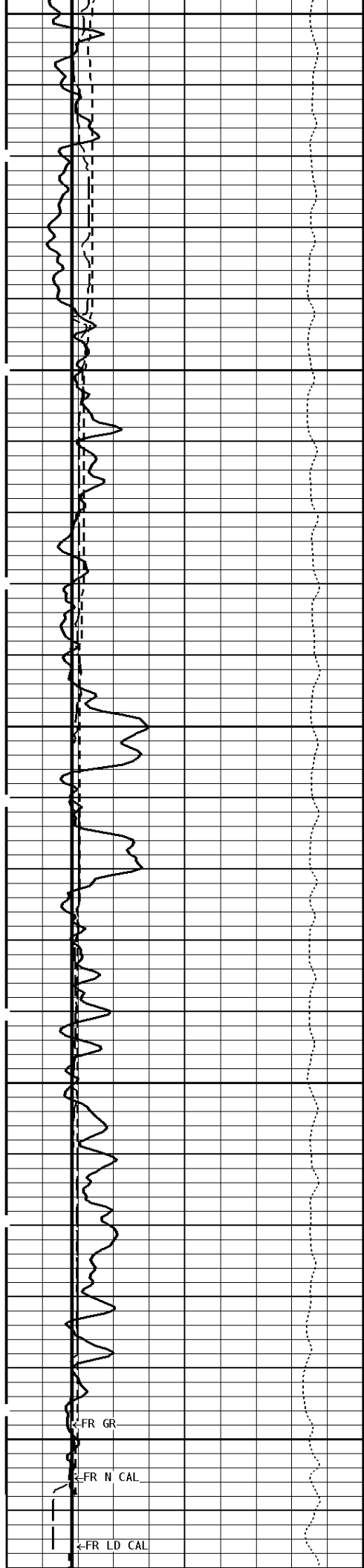
4800

4900

-100Cu.ft

100Cu.ft-





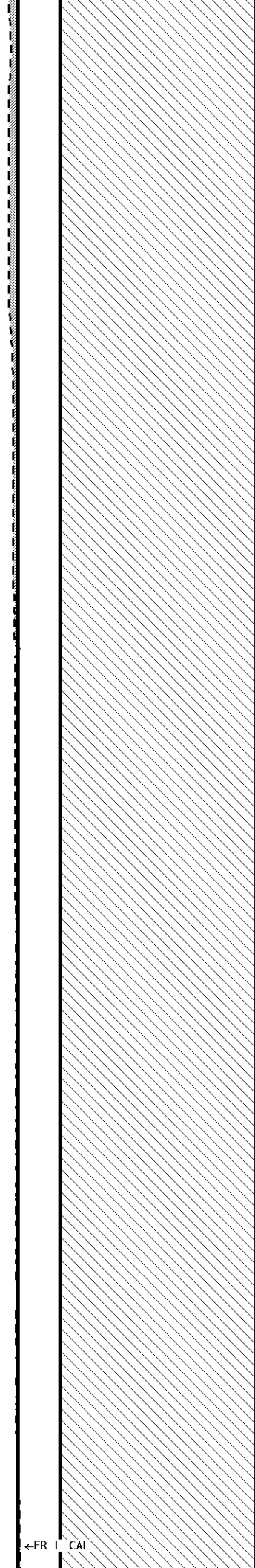
5000

5100

←FR GR

←FR N CAL

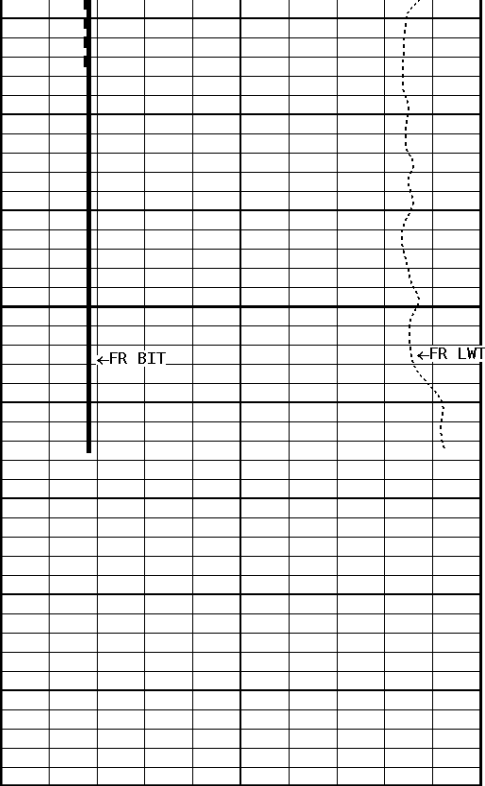
←FR LD CAL



←FR L CAL



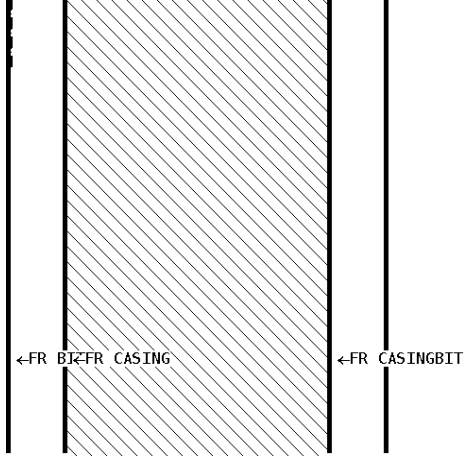
←FR N CAL



5200

5206

File #1.1.5



1:240 MAIN SECTION

GAMMA RAY API UNITS	
150 0	300 150
TENSION LBS	
10000	0
X CALIPER INCHES (IN)	
16 6	26 16
Y CALIPER INCHES (IN)	
16 6	26 16
BIT SIZE INCHES (IN)	
6	16

BOREHOLE VOLUME CU.FT	ANNULAR HOLE VOLUME CU.FT.
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* Borehole Zone Factors *

Zone 1 99999.0 to 0.0 Feet	
Drill Bit Size _____	7.875 in
Casing Diameter _____	5.500 in

* Calibration Summary *

Shop Calibration GRT-B	
Performed : 23-Jan-2014	Time : 11:12

Sensor Suite : GR-GR5			ID : GRT-BB-006			
GR	Measured		Units	Calibrated		Units
	Background	Jig		Jig		
	62	374	CPS	175		GRAPI
Shop Calibration						
CNT-AA						
Performed : 23-Jan-2014			Time : 11:07			
Sensor Suite : CALI-BCN			ID : NDT-BB-038			
CL # 1	Jig - Measured		Jig - Calibrated		Units	
	Ring#1	Ring#2	Ring#1	Ring#2		
	8.6	14.0	6.0	12.0	IN.	
Shop Calibration						
LDT-DA						
Performed : 23-Jan-2014			Time : 10:36			
Sensor Suite : CALI-LTH			ID : NDT-AE-003			
CL # 1	Jig - Measured		Jig - Calibrated		Units	
	Ring#1	Ring#2	Ring#1	Ring#2		
	9.4	14.0	6.0	12.0	IN.	



Tucker
ENERGY SERVICES

Company: LASSO ENERGY LLC
 Well: RENICK #2
 Location: 680' FNL & 1960' FEL
 Logged: 03-03-2014
 K.B. Elev: 2822.0 Ft