

ALL PRESENTATION PER CUSTOMER REQUEST
 GRT,CNT,LDT,PIT RUN IN COMBINATION
 CALIPERS ORIENTED ON X-Y AXIS
 2.71 G/CC USED TO CALCULATE POROSITY
 ANNULAR & BOREHOLE VOLUME CALCULATED USING 5.5 PRODUCTION CASING
 PHIN IS CALIPER CORRECTED
 DETAIL FROM TD TO 3750'
 ANHYDRITE SECTION FROM 1750' TO 1200'

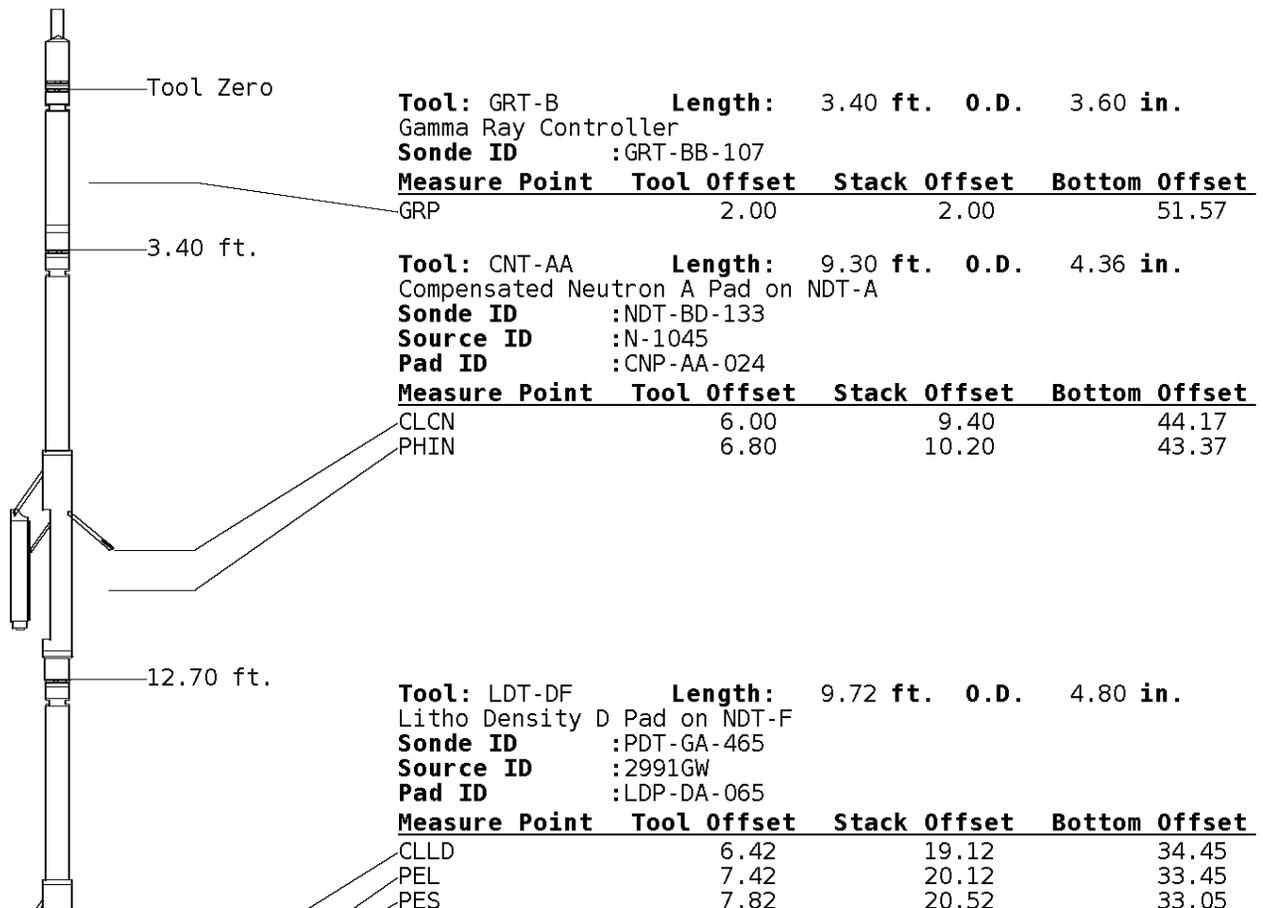
GRT; GRP,
 CNT; PHIN, CLCNIN
 LDT; PORL, LCORN, PECLN, LDENN, CLLDIN
 MLT; NOR.RF, INV.RF, MSCLPIN.
 PIT; ILD, ILM, SPU, SFLAEC, CIRD

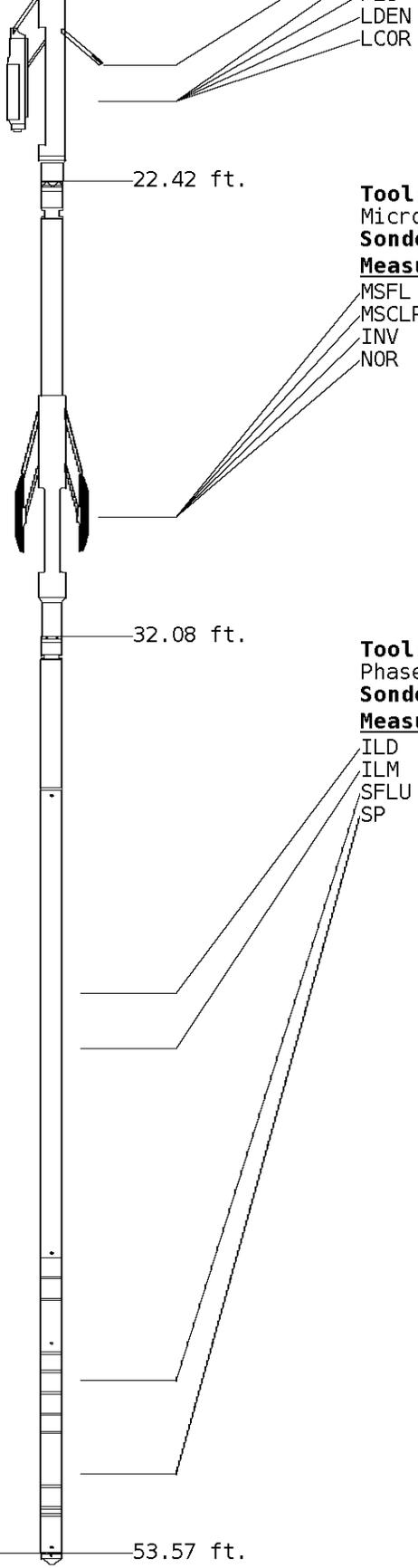
OPERATORS;

C. GONZALES
 J. THOMAS

Tool String Schematic

Total Tool Length - 53.57 ft.
Maximum Outside diameter - 6.00 in.
Net Weight in Air - 943.00 lbs.





LDEN	7.62	20.32	33.25
LCOR	7.62	20.32	33.25

Tool: MST-DA **Length:** 9.66 ft. **O.D.** 6.00 in.
 Micro Spherically Focused (IC,D)
Sonde ID :MST-DA-057

Measure Point	Tool Offset	Stack Offset	Bottom Offset
MSFL	7.60	30.02	23.55
MSCLP	7.60	30.02	23.55
INV	7.60	30.02	23.55
NOR	7.60	30.02	23.55

Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
 Phased Dual Induction w/ RM & D
Sonde ID :PIT-AB-005

Measure Point	Tool Offset	Stack Offset	Bottom Offset
ILD	8.92	41.00	12.56
ILM	10.10	42.18	11.39
SFLU	17.49	49.57	4.00
SP	20.60	52.68	0.88

Well File: chief-rath-4-mstk-jun-4	Scale: 1:240	Format: CAL-240
Segment: V1.D1.S6 MAIN	Acquired: 2014-06/04 19:35 3.3.0-12594	
Reference: 0	Processed: 2014-06/04 21:30 3.3.0-12594	

BIT SIZE INCHES (IN)	
6	16

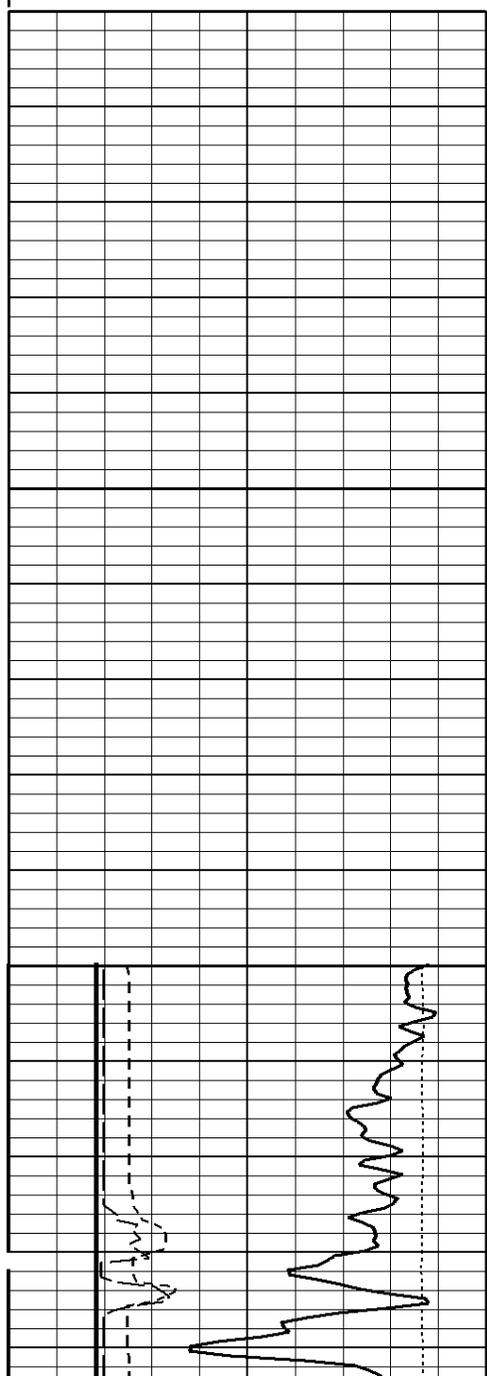
Y CALIPER INCHES (IN)	
16	26

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

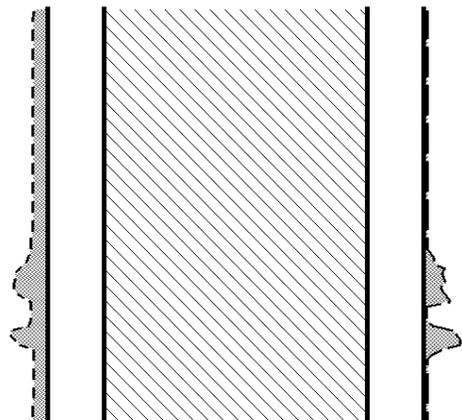
**BOREHOLE VOLUME
CU.FT**

**ANNULAR HOLE VOLUME
CU.FT.**

1:240 MAIN SECTION



3700

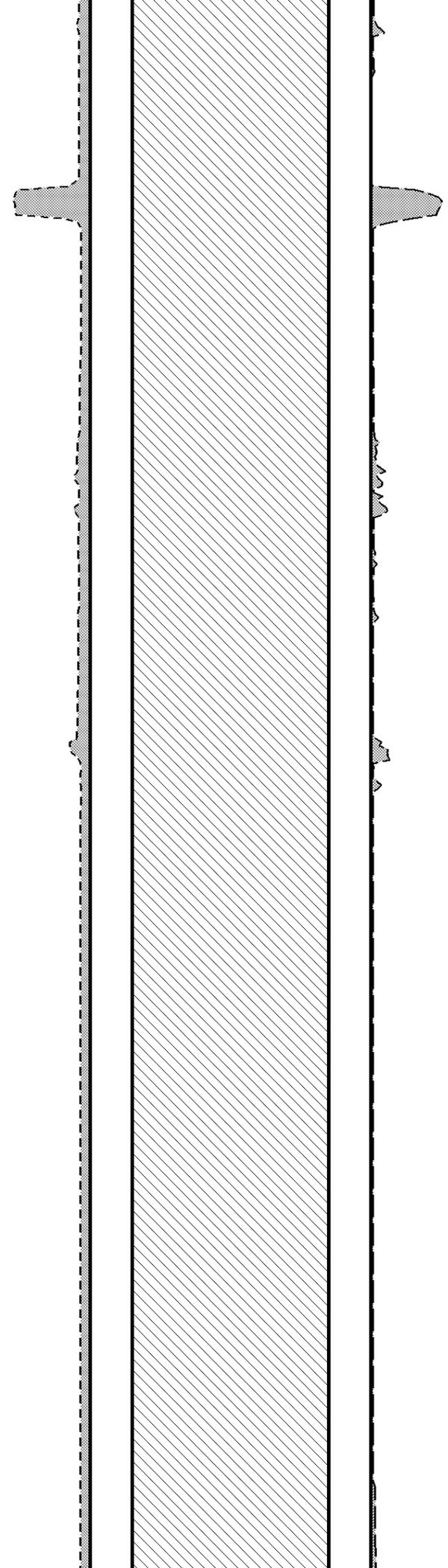
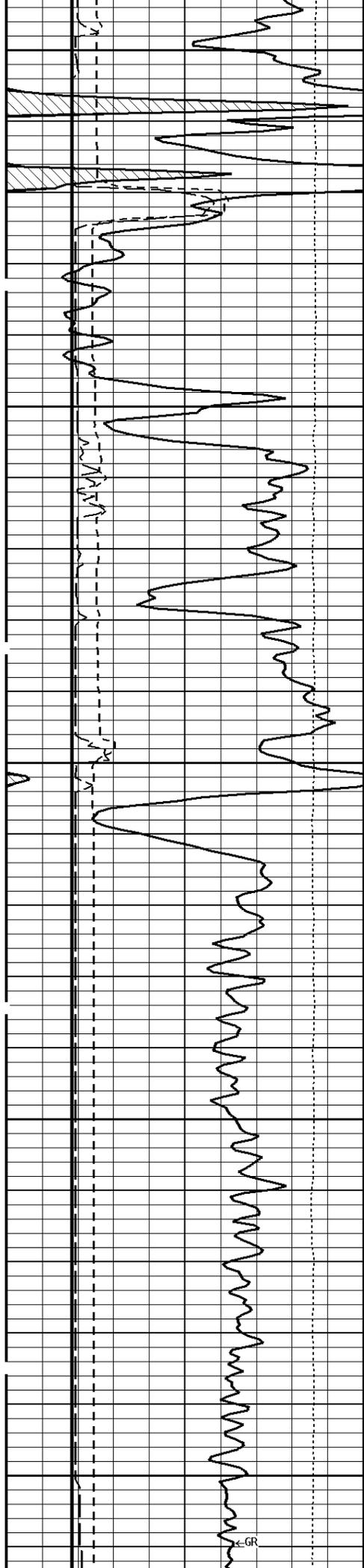


3800

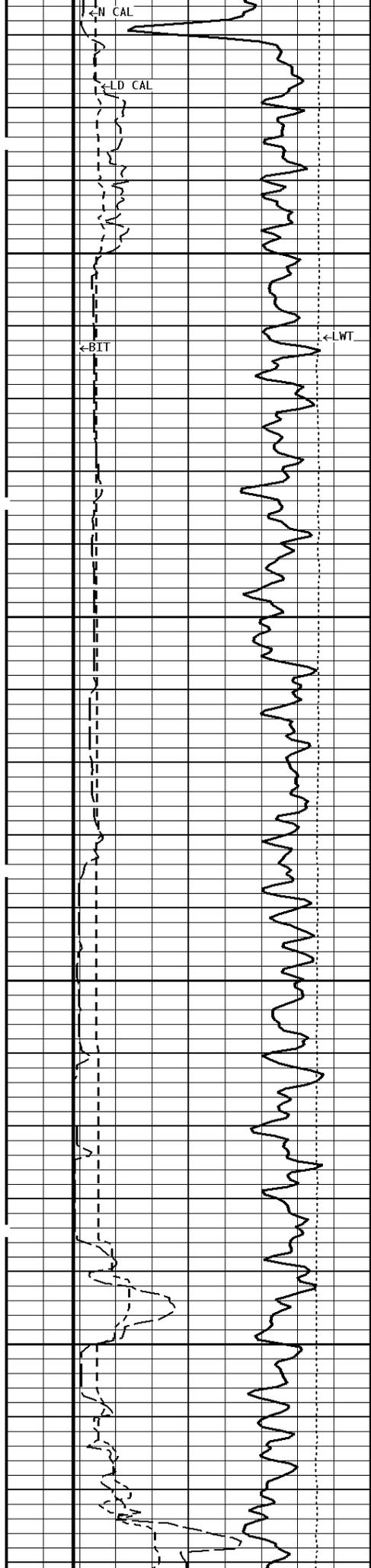
3900

4000

-600Cu.ft



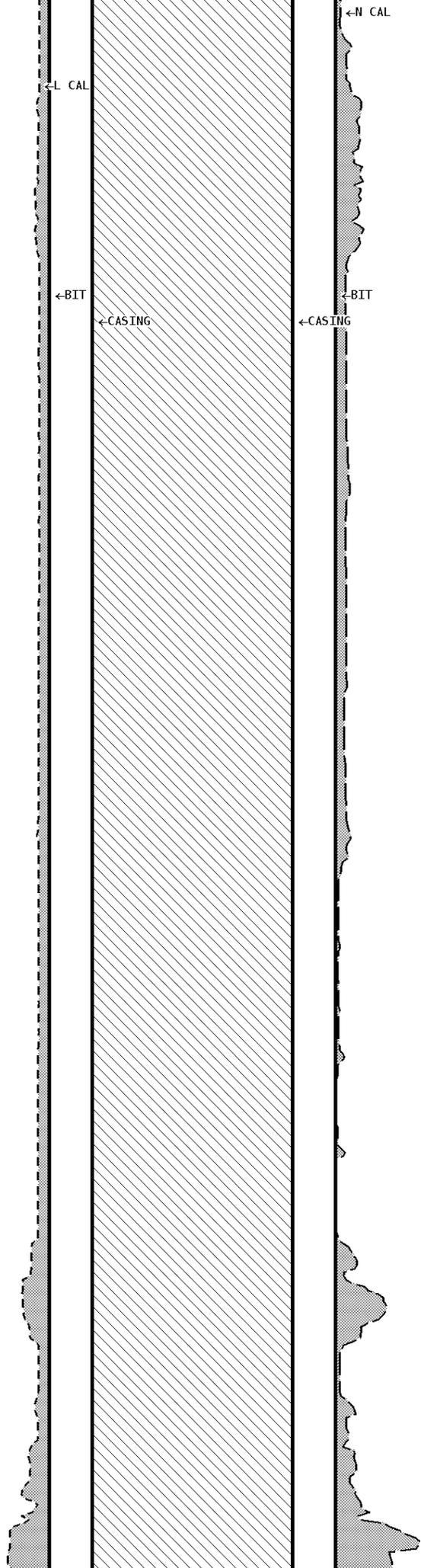
GR



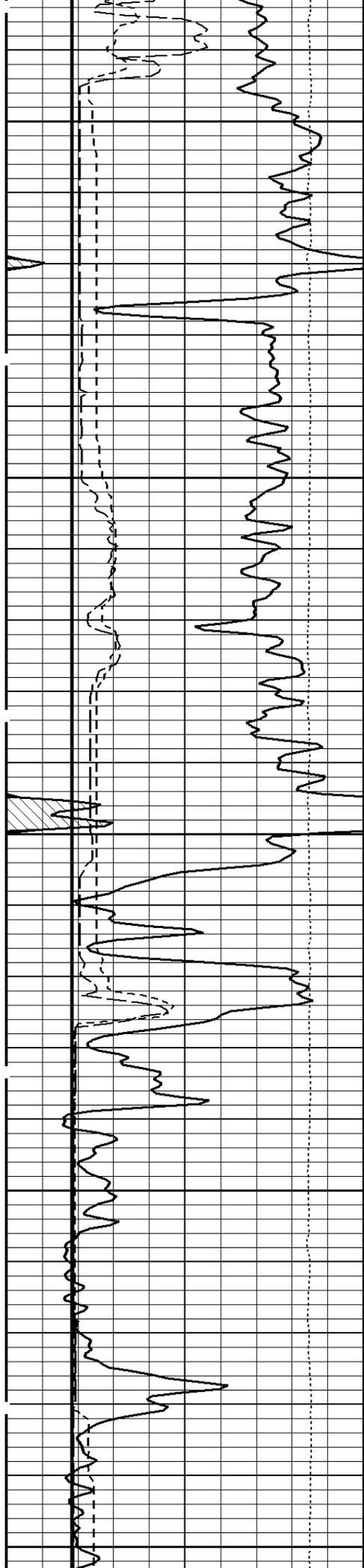
4100

-500Cu.ft

4200



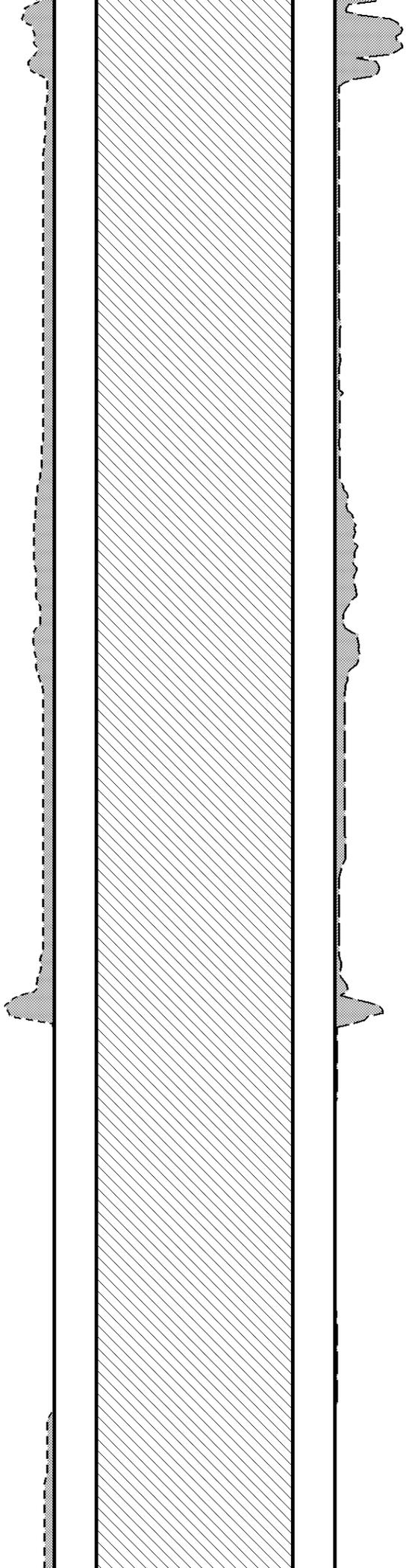
300Cu.ft

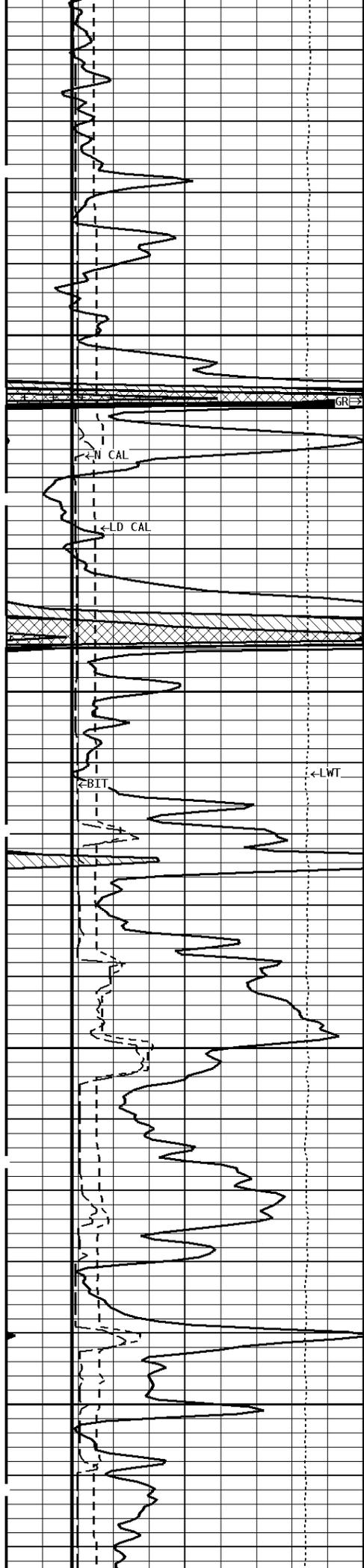


4300

4400

-400Cu.ft





4500

4600

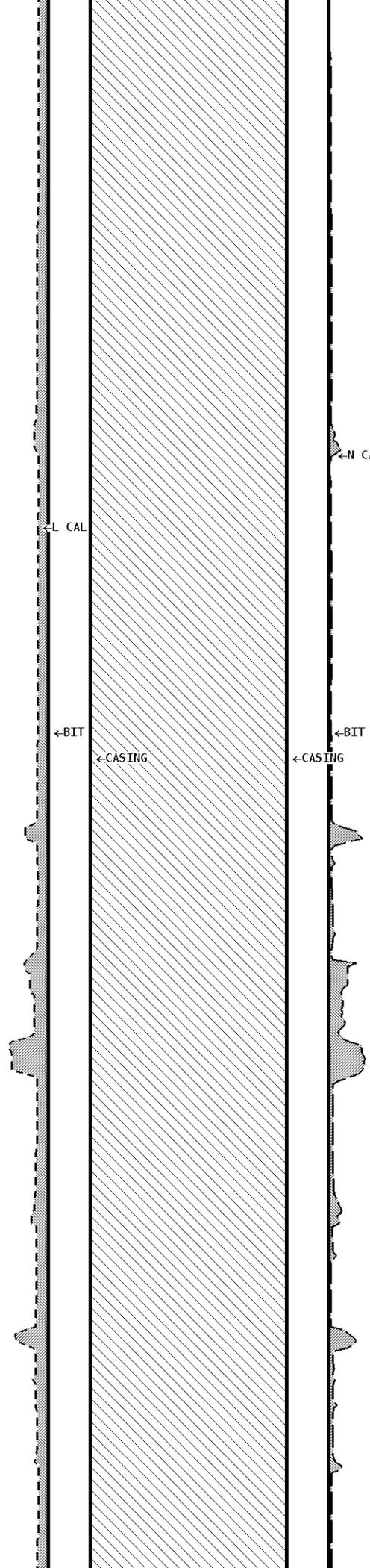
←N CAL

←LD CAL

←BIT

←LWT

GRE



←L CAL

←BIT

←CASING

200Cu. ft.

←N CAL

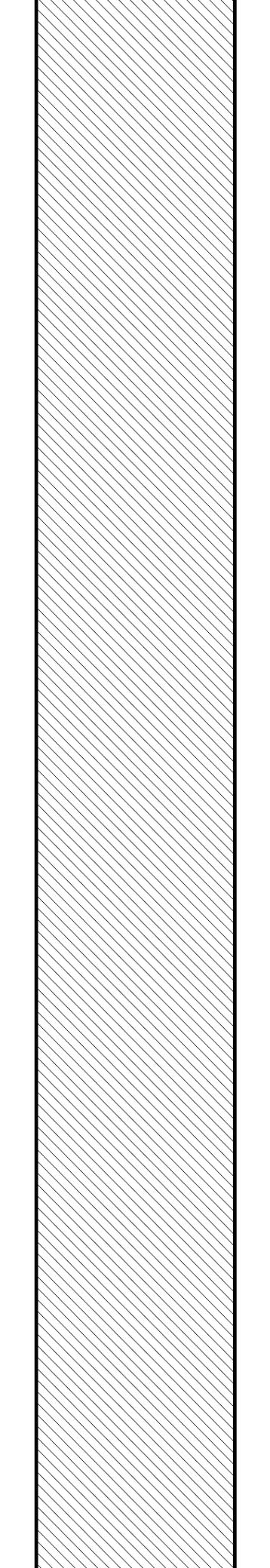
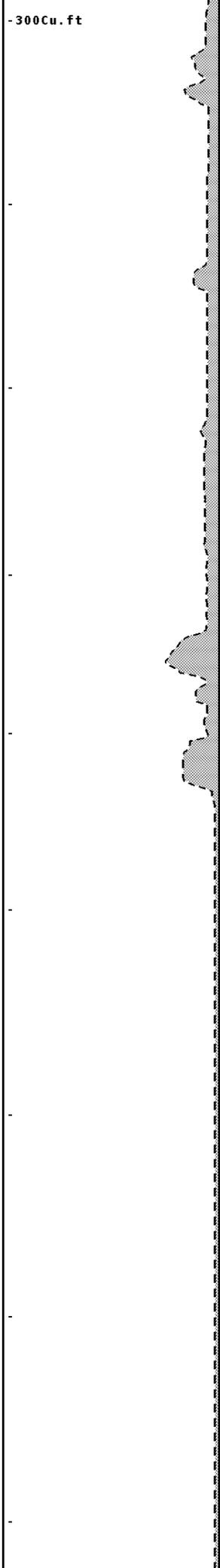
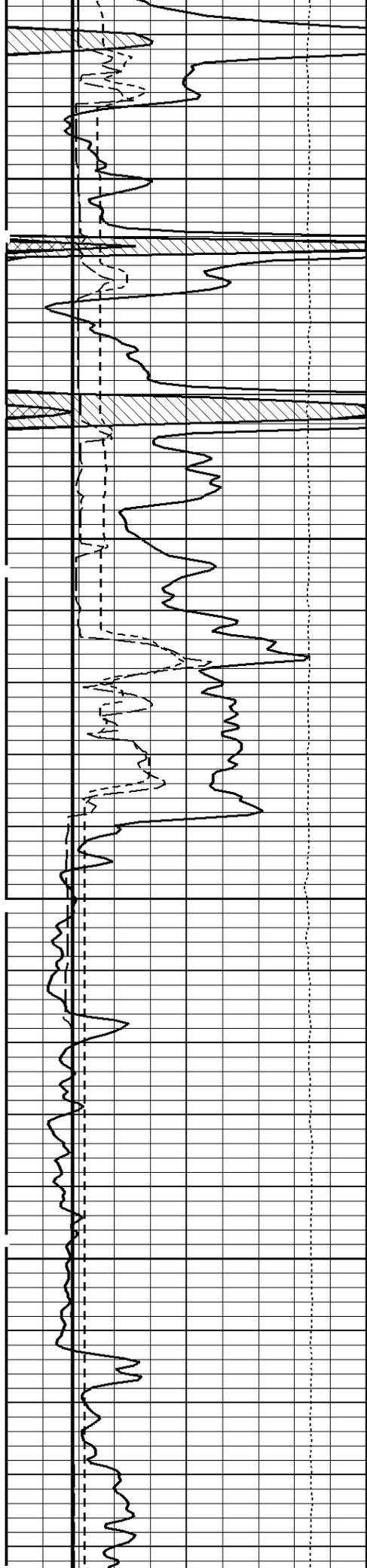
←BIT

←CASING

-300Cu.ft

4700

4800



4900

-200Cu. ft

100Cu. ft-

5000

←GR

←N CAL

←N CAL

←LD CAL

←L CAL

←BIT

←LWT

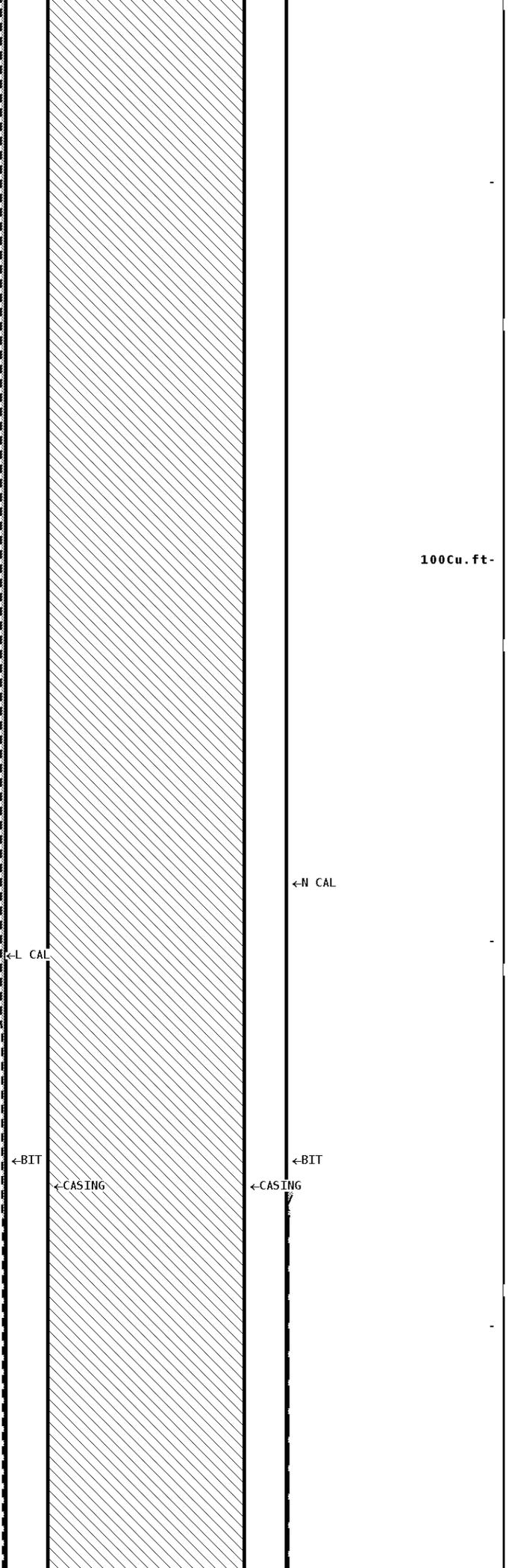
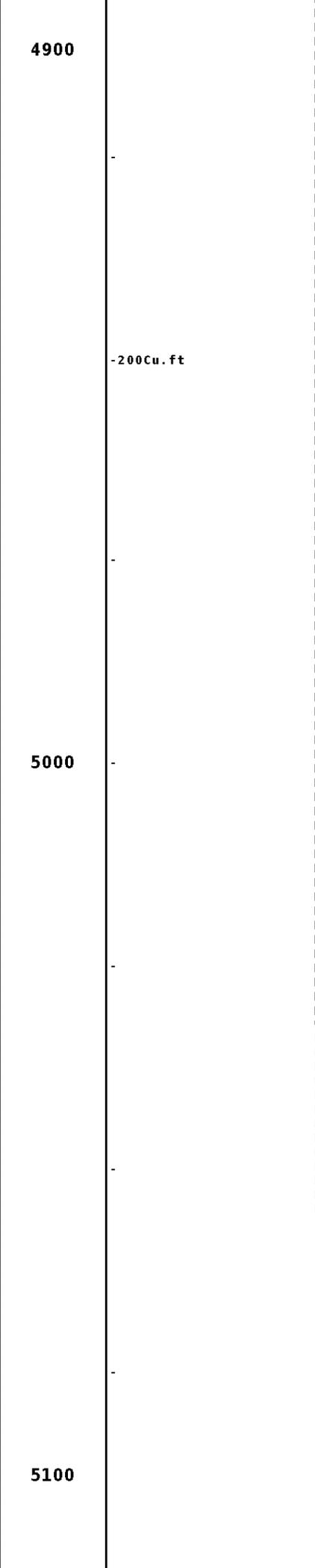
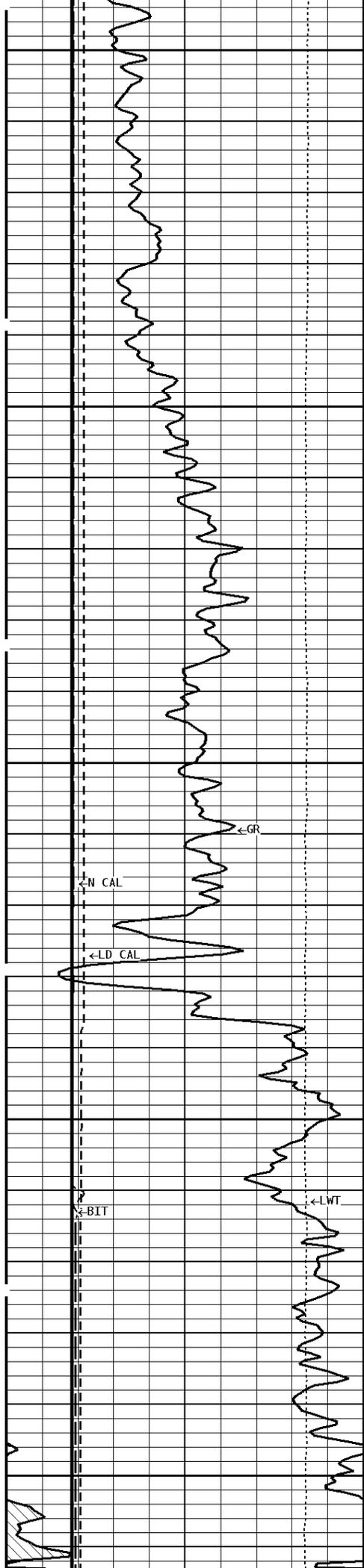
←BIT

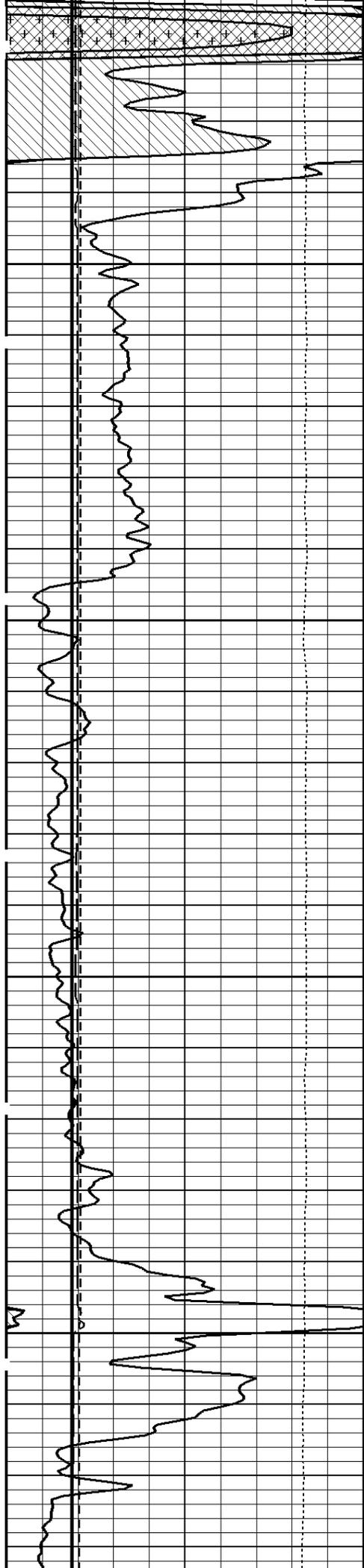
←CASING

←BIT

←CASING

5100

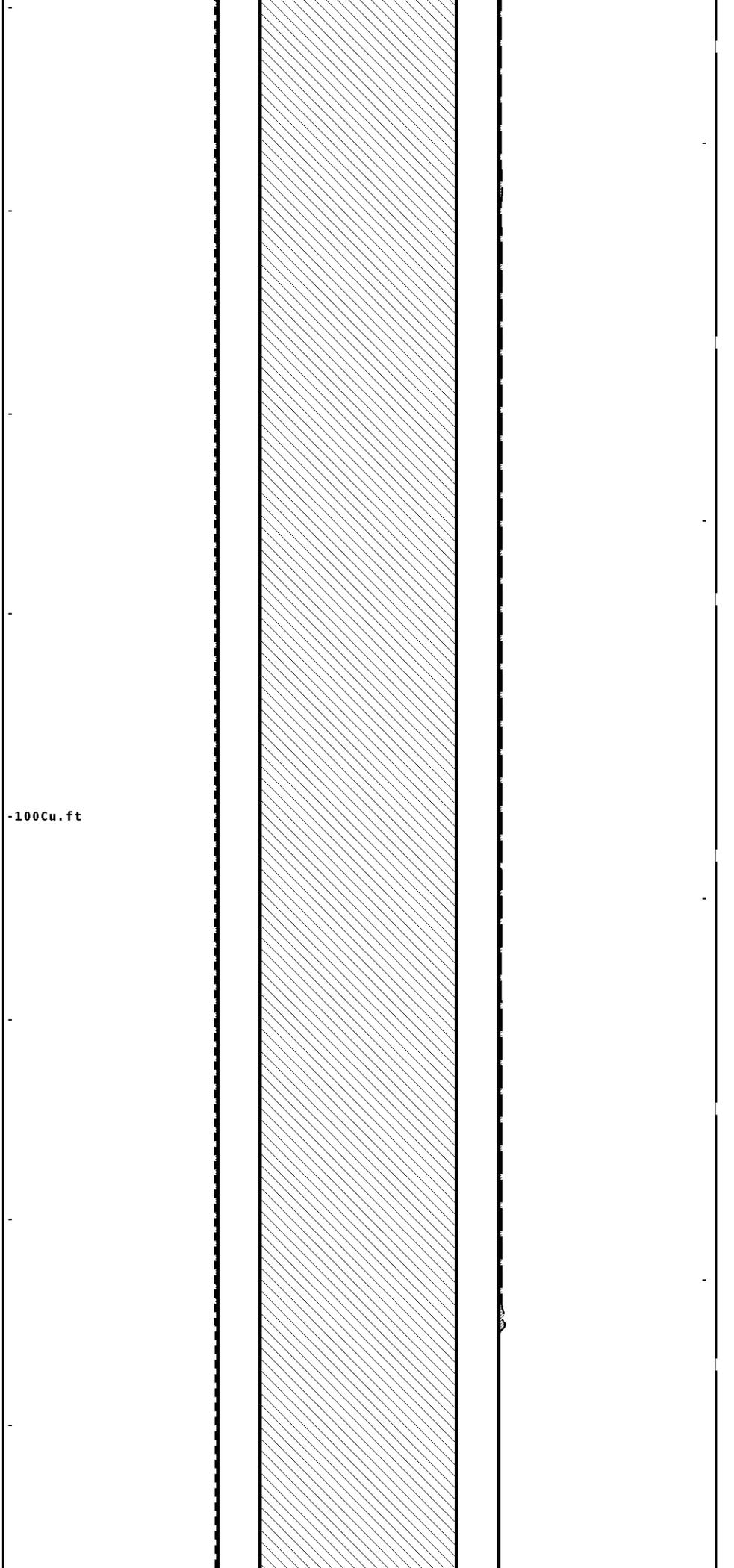


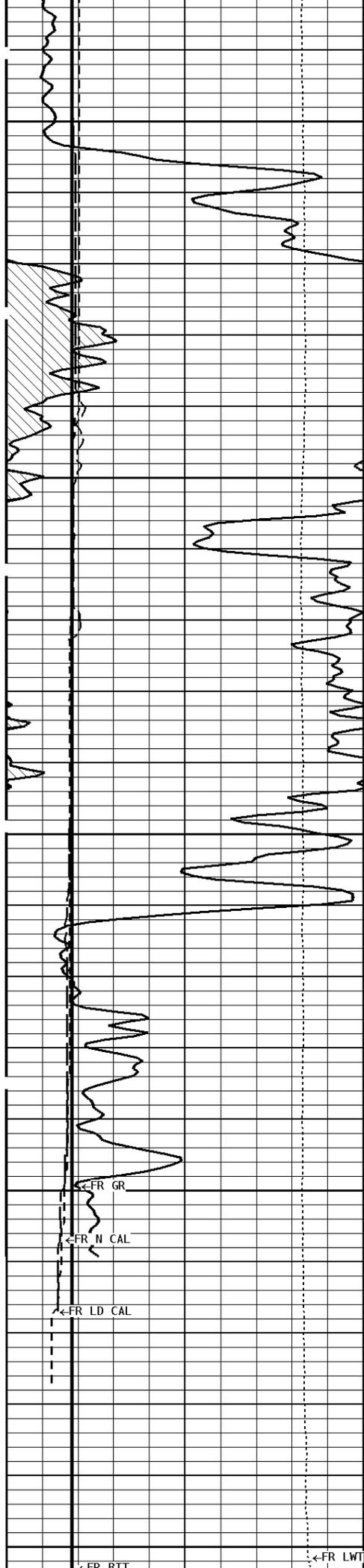


5200

-100Cu.ft

5300





5400

5500

<-FR GR

<-FR N CAL

<-FR LD CAL

<-FR BITT

<-FR LWT

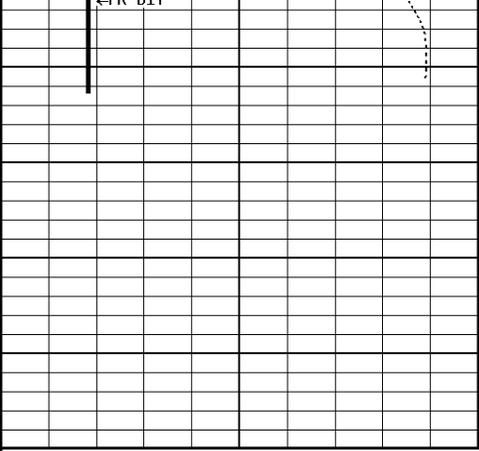
5550

<-FR L CAL

<-FR BITZER CASTING

<-FR N CAL

<-FR CASTINGBITT



File #1.1.6

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.

*** 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 : 21-APR-2014			Time : 11:21		
Sensor Suite : GR-GR5			ID : GRT-BB-107		
	Measured	Units	Calibrated	Units	
GR	Background	Jig	Jig	GRAPI	
	75	381	175		

Shop Calibration CNT-AA					
Performed : 29-MAY-2014			Time : 10:57		
Sensor Suite : CALI-BCN			ID : NDT-BD-133		
	Jig - Measured	Units	Jig - Calibrated	Units	
	Ring#1	Ring#2	Ring#1	Ring#2	

CL # 1	9.3	13.9	6.0	12.0	IN.
Shop Calibration					
LDT-DF					
Performed : 29-MAY-2014			Time : 13:15		
Sensor Suite : CALI-LTH			ID : PDT-GA-465		
	Jig - Measured		Jig - Calibrated		Units
	Ring#1	Ring#2	Ring#1	Ring#2	
CL # 1	7.1	10.8	6.0	12.0	IN.



Tucker
ENERGY SERVICES

Company: CHIEFTON OIL CO.INC.
 Well: RATHGERBER #4
 Location: 1912' FSL & 340' FWL
 Logged: 06-04-2014
 K.B. Elev: 1404.0 Ft