



Tucker
ENERGY SERVICES

BOREHOLE VOLUME

CALIPER LOG

Company LASSO ENERGY, LLC Well MCCLAREN 'B' #1 Field NICHOLS County KIOWA State KANSAS Country USA API No. 15-097-21759-0000		File No : TUL-58316 Company : LASSO ENERGY, LLC Well : MCCLAREN 'B' #1 Field : NICHOLS County : KIOWA State : KANSAS Country : USA API No : 15-097-21759-0000	
Location : 330' FNL & 330' FEL		LSD : Sect : 06 Twp : 30S Rge : 18W	
Permanent Datum:	GL	Elevations:	Services:
Drilling Measured From:	KB	KB 2248.00	GRT
Log Measured From:	KB	DF 2247.00	CNT
Above Permanent Datum:	13.00 Ft	GL 2235.00	PIT
Date	07-08-2013		
Run Number	1		
Depth--Driller	5570.0	Ft	
Depth--Logger	5566.0	Ft	
First Reading	5533.0	Ft	
Last Reading	3300.0	Ft	
Casing--Driller	485.0	Ft	
Casing--Logger	480.0	Ft	
Bit Size	7.875	In	
Casing Size	8.625	In	
Hole Fluid Type	WBM		
Density	9.3	LBS/GAL	
Fluid Loss	9.6	CC	
PH/Viscosity	10.0	56.0 SEC	
Sample Source	MEASURED		
RMF@Measured Temp.	0.850 @ 82 F		
RMF@Measured Temp	0.720 @ 82 F		
RMF@Measured Temp.	0.980 @ 82 F		
Source RMF/RMC	CALCULATED/CALCULATED		
RM@BHT	0.573 @ 125 F		
Time Circulation Stopped			
Max Recorded Temp.	125	F	
Equipment/Base	127	TULSA	
Recorded By	Z. HICKMAN		
Witnessed By	B. KELSO		

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)
7.875	5570.00	8.625	24.00	485.00

Run Number	1	
Date	07-08-2013	
Date/Time On Bottom	07-08-2013 11:30 am	
Depth to Fluid	0.0 Ft	
Salinity	0.000 PPM	
RMF@BHT	0.485 @ 125 F	
RMC@BHT	0.660 @ 125 F	

Run Number 1

Comments

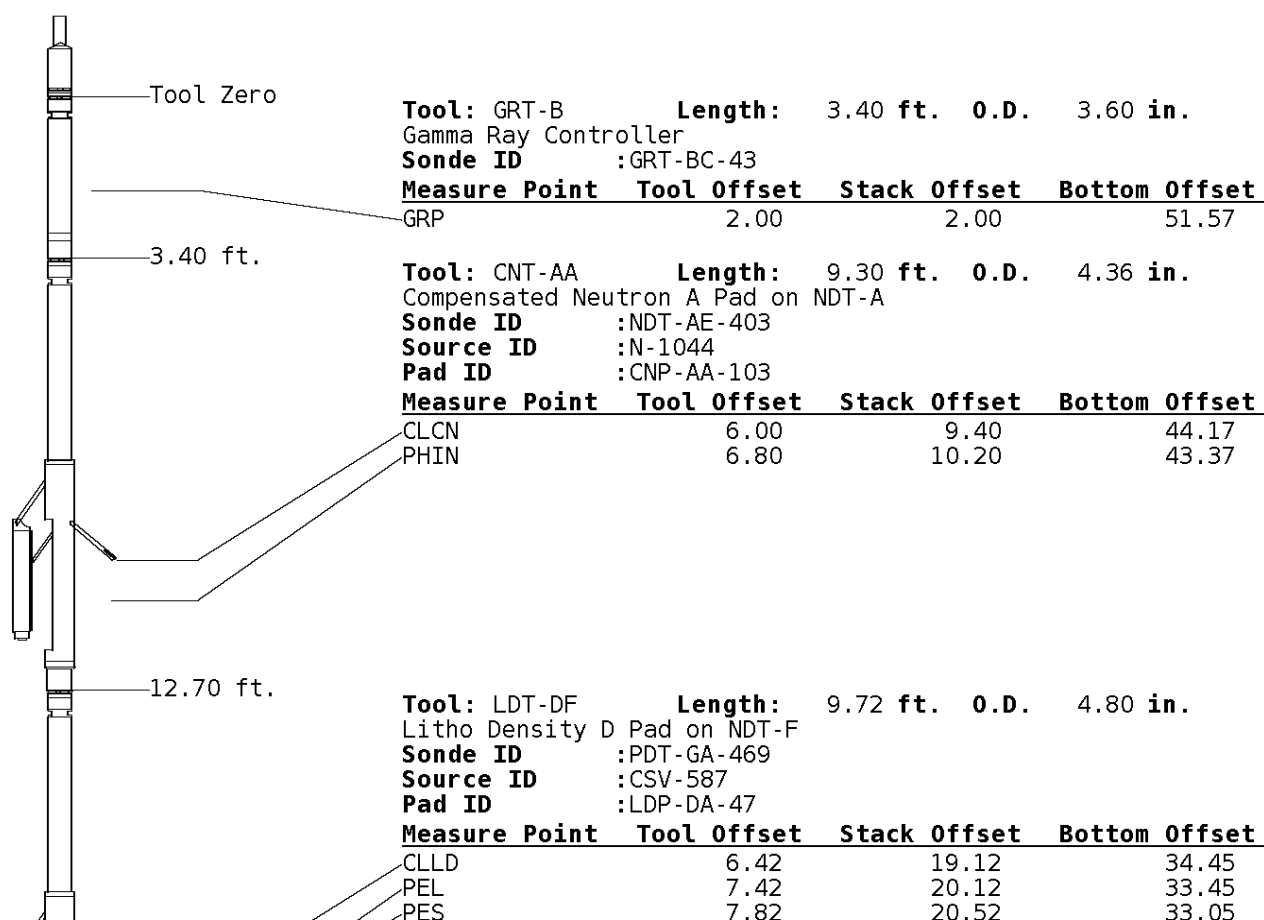
ALL PRESENTATIONS AS PER CUSTOMER REQUEST
 GRT, CNT, LDT, MLT AND PIT RUN IN COMBINATION.
 CALIPERS ORIENTED ON X-Y AXIS.
 2.71 G/CC USED TO CALCULATED POROSITY.
 ANNULAR HOLE VOLUME CALCULATED USING 5.50" PRODUCTION CASING.
 PHIN IS CALIPER CORRECTED
 DETAIL PULLED FROM TD TO 3300'

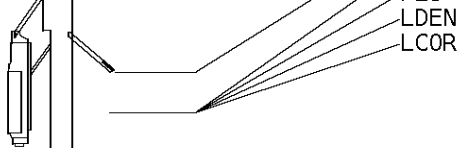
GRT: GRP.
 CNT: PHIN, CLCNIN
 LDT: PORL, LCORN, PECLN, LDENN, PORLLS, CLLDIN.
 MLT: NOR_RF, INV_RF, MSCLPIN.
 PIT: ILD, ILM, SPU, SFLAEC, CIRD

OPERATORS:
 A. DJAHO
 D. HOPPER

Tool String Schematic

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



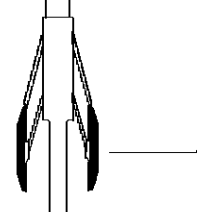


7.62	20.32	33.25
7.62	20.32	33.25

22.42 ft.

Tool: MST-DA **Length:** 9.66 ft. **O.D.** 6.00 in.
 Micro Spherically Focused (IC)
Sonde ID :MST-DA-31

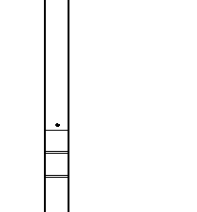
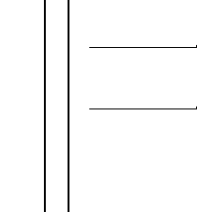
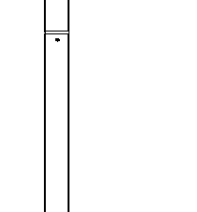
Measure Point	Tool Offset	Stack Offset	Bottom Offset
MSFL	7.60	30.02	23.55
MSCLP	7.60	30.02	23.55
INV	7.60	30.02	23.55
NOR	7.60	30.02	23.55



32.08 ft.

Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
 Phased Dual Induction w/ RM & D
Sonde ID :PIT-AB-12

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



LWT 53.57 ft.

Well File: LASSO MCCLAREN_B 1 JULY 08 MSTK

Scale: 1:240

Segment: V1.D2.S6 MAIN

Acquired: 2013-07/08 12:29 3.2.0-11535

Reference: 0

Processed: 2013-07/08 13:52 3.2.0-11535

**BIT SIZE
INCHES (IN)**

6 16

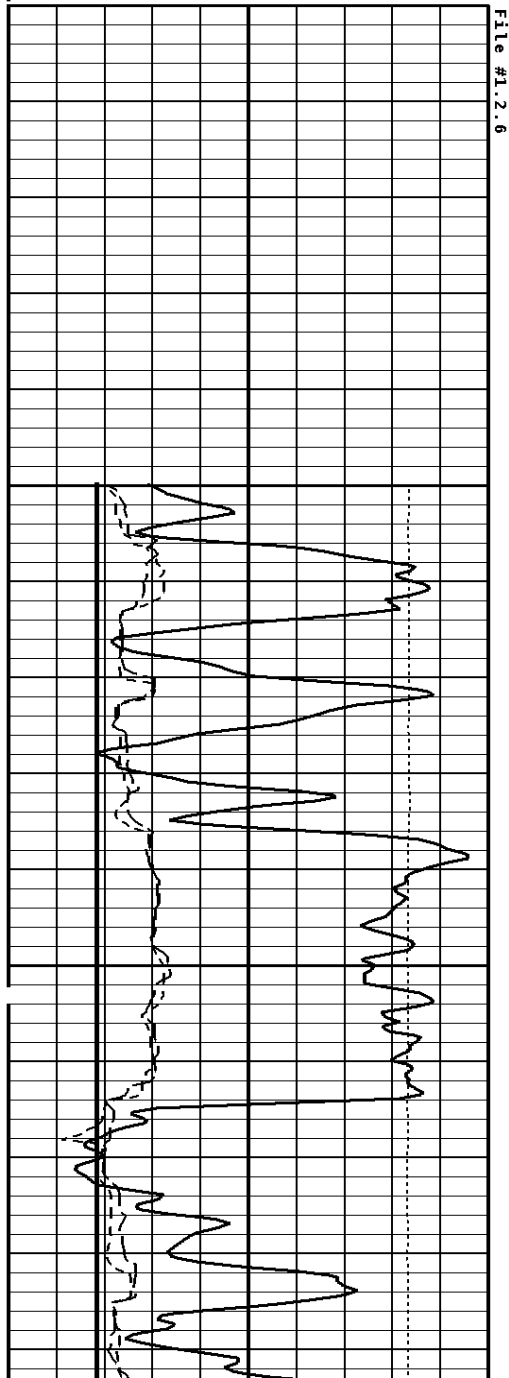
**Y CALIPER
INCHES (IN)**

16 26

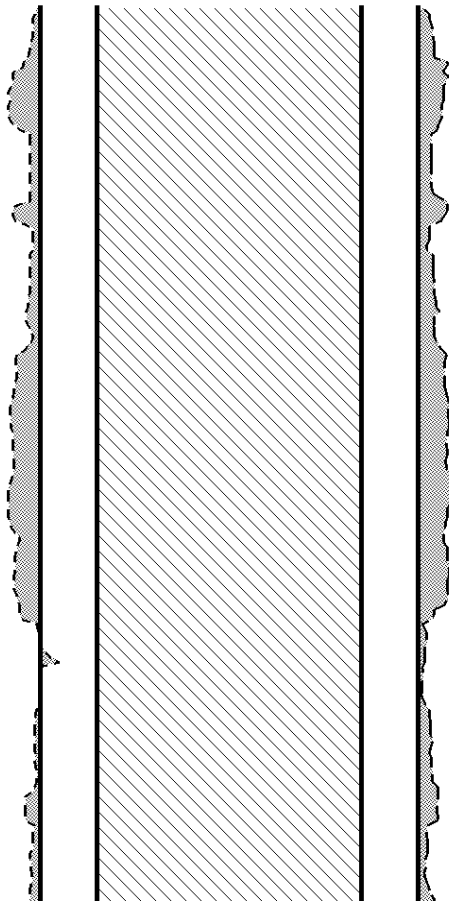
16 6	26 16
X CALIPER INCHES (IN)	
16 6	26 16
TENSION LBS	
10000	0
GAMMA RAY API UNITS	
150 0	300 150

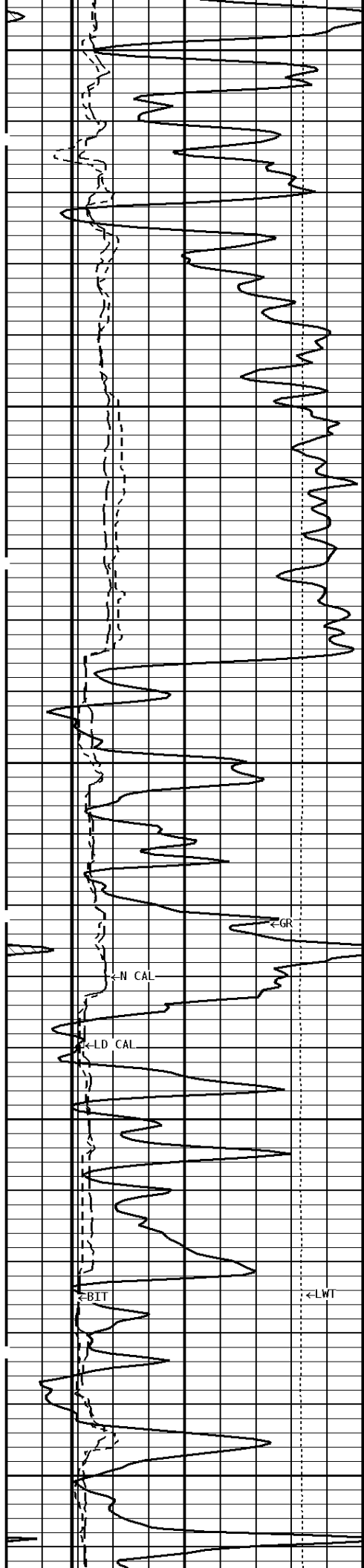
BOREHOLE VOLUME CU.FT	ANNULAR HOLE VOLUME CU.FT.
--------------------------	-------------------------------

1:240 MAIN SECTION



3300



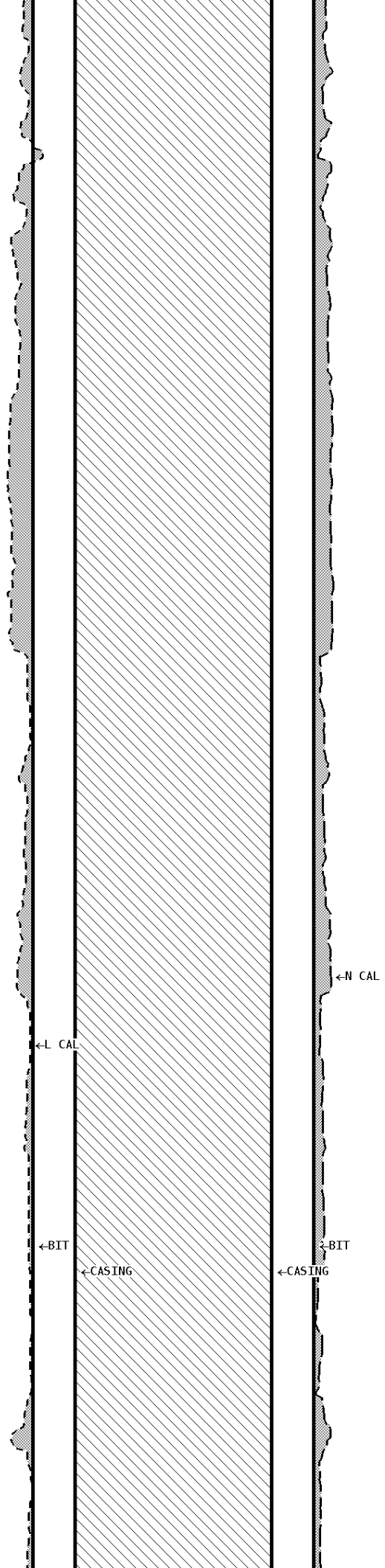


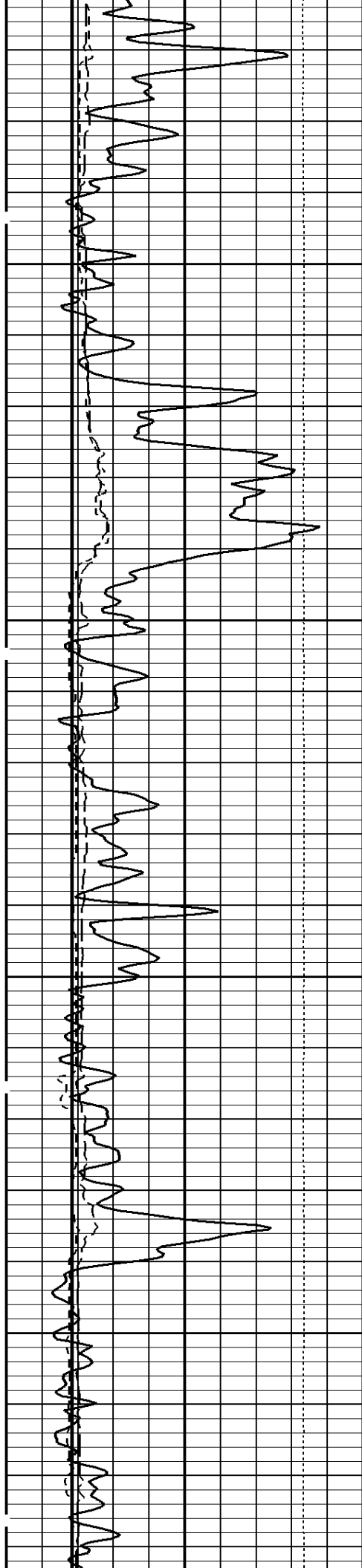
3400

-800Cu.ft

3500

3600



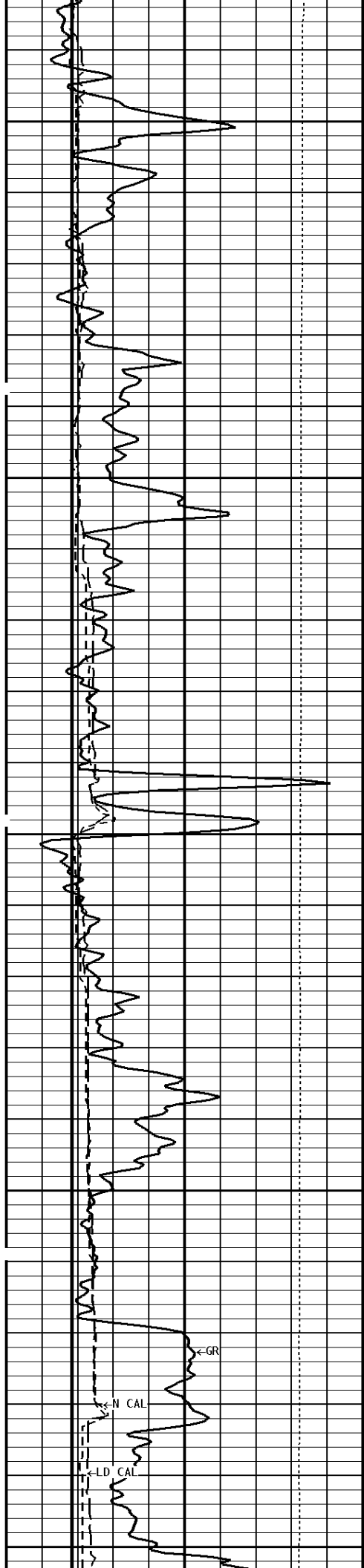


3700

-700Cu.ft

3800

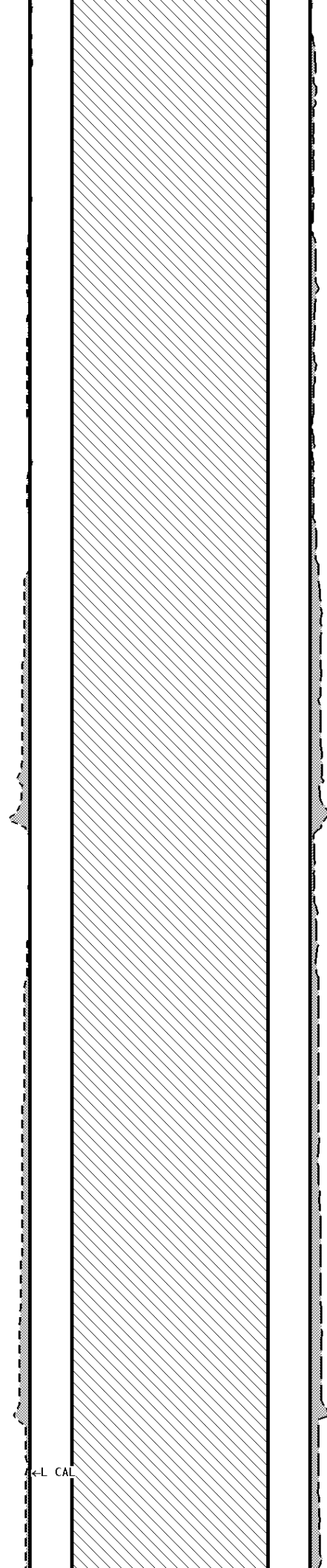
400Cu.ft-



3900

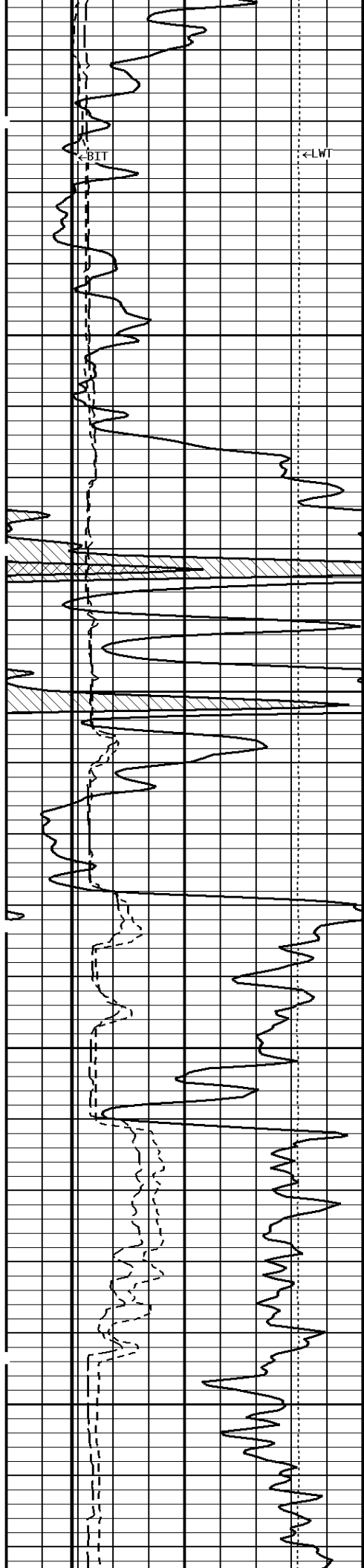
4000

-600Cu.ft



N CAL

L CAL



4100

4200

-500Cu.ft

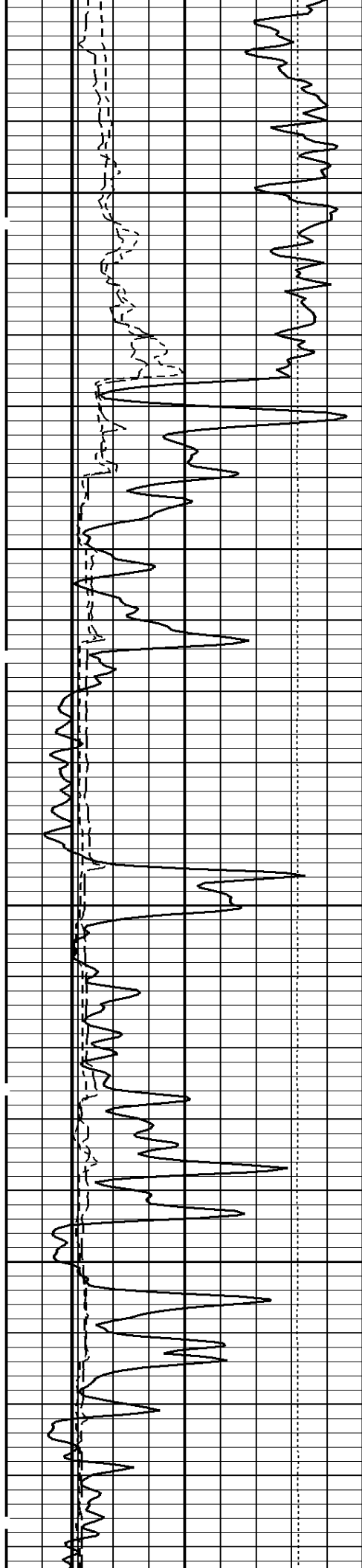
←BIT

←CASING

←BIT

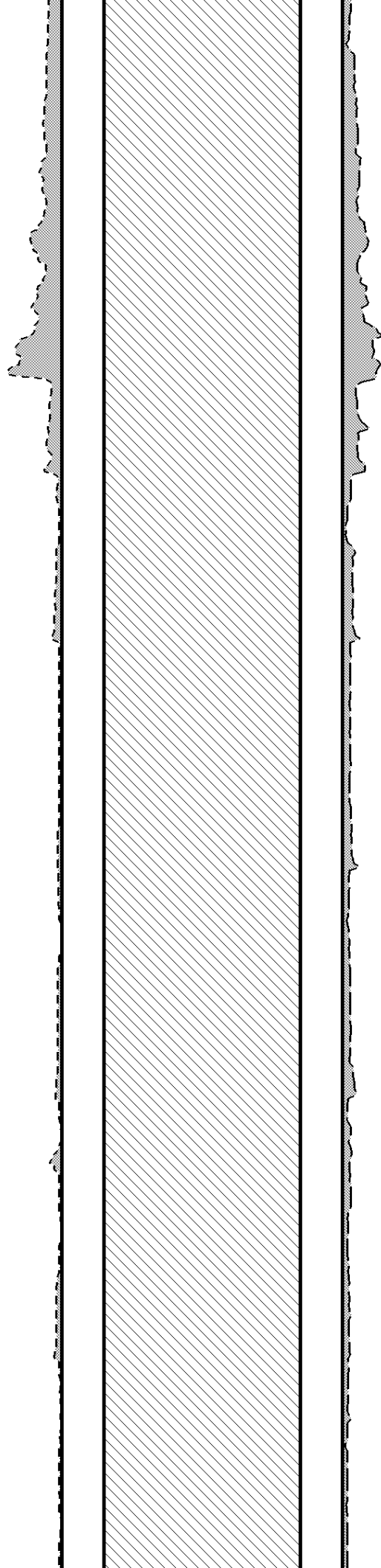
←CASING

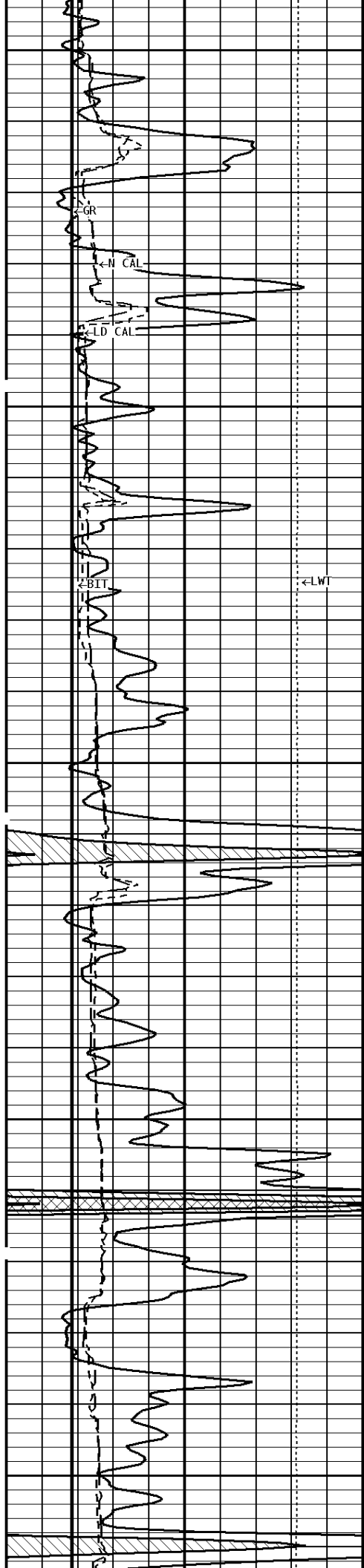
300Cu.ft-



4300

4400



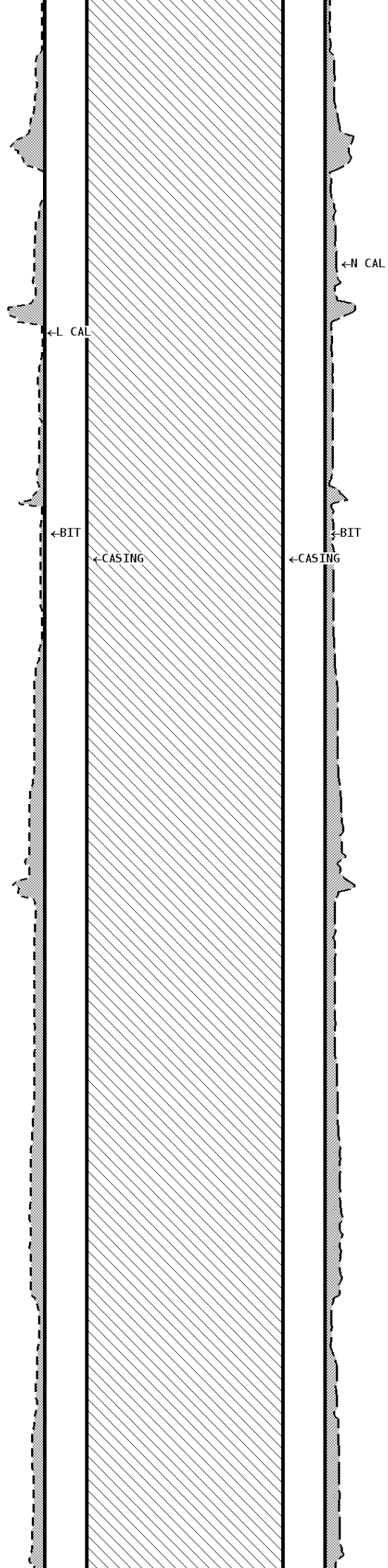


4500

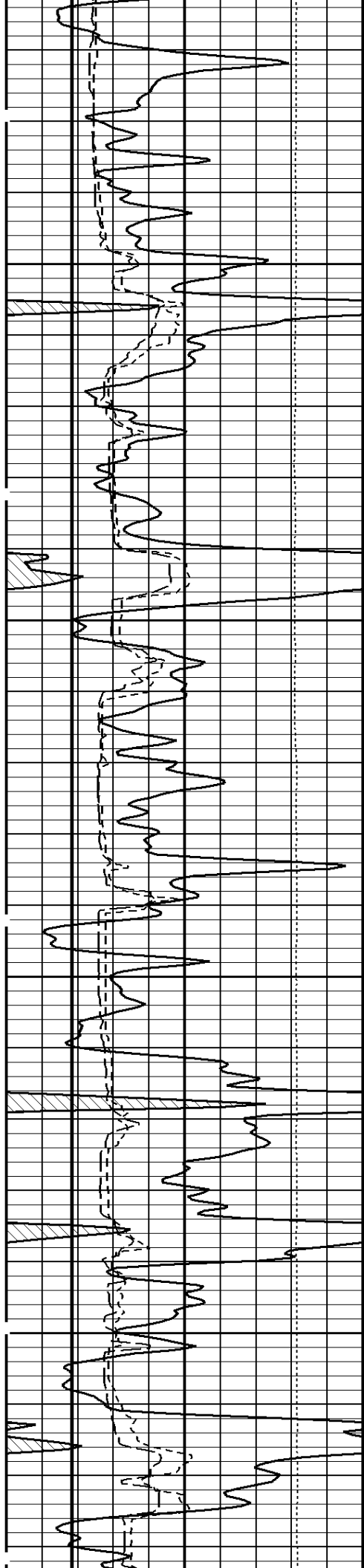
-400Cu.ft

4600

4700



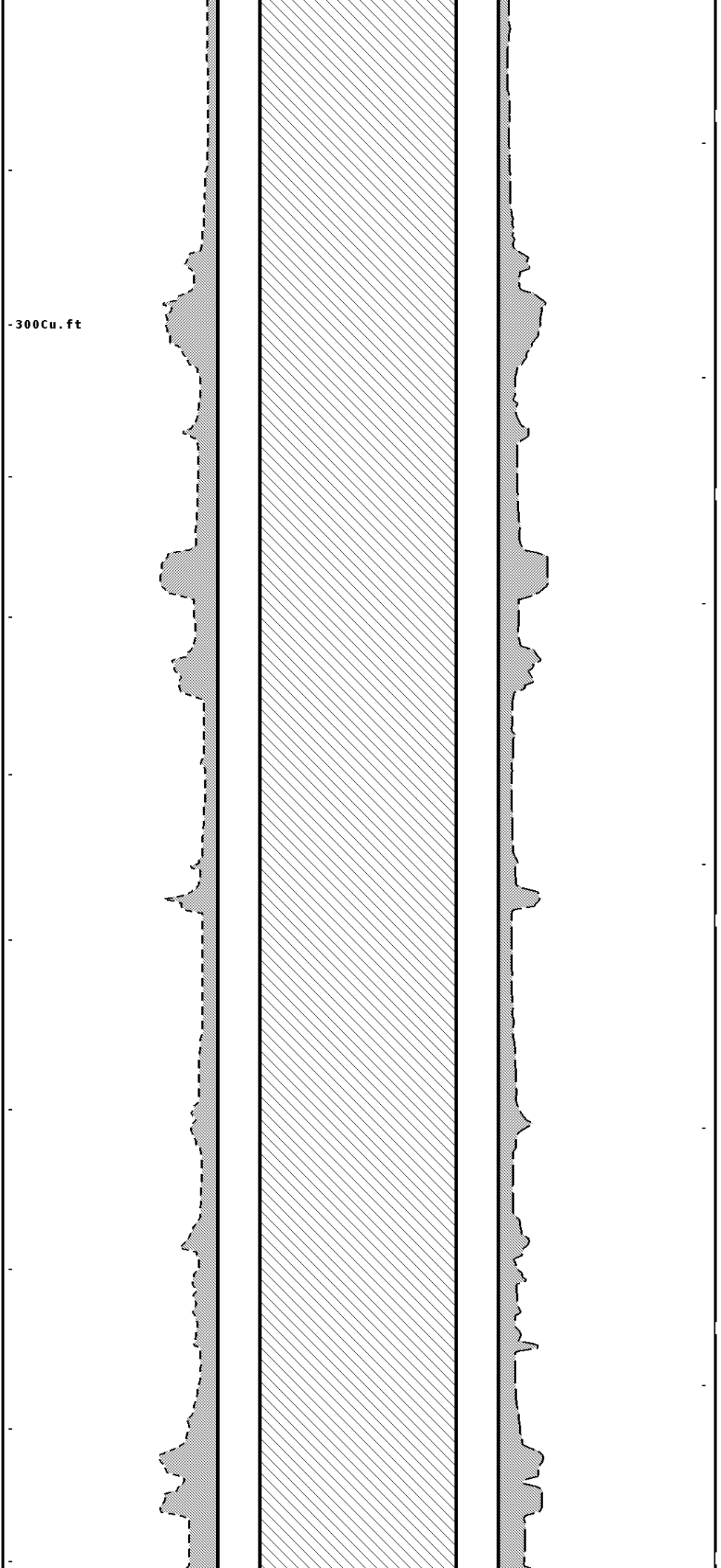
200Cu.ft-

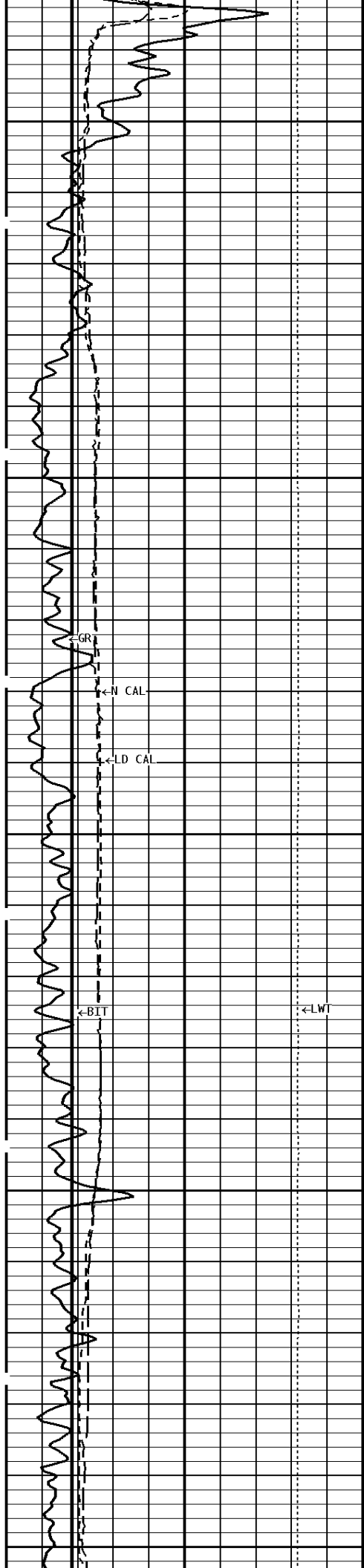


4800

4900

-300Cu.ft

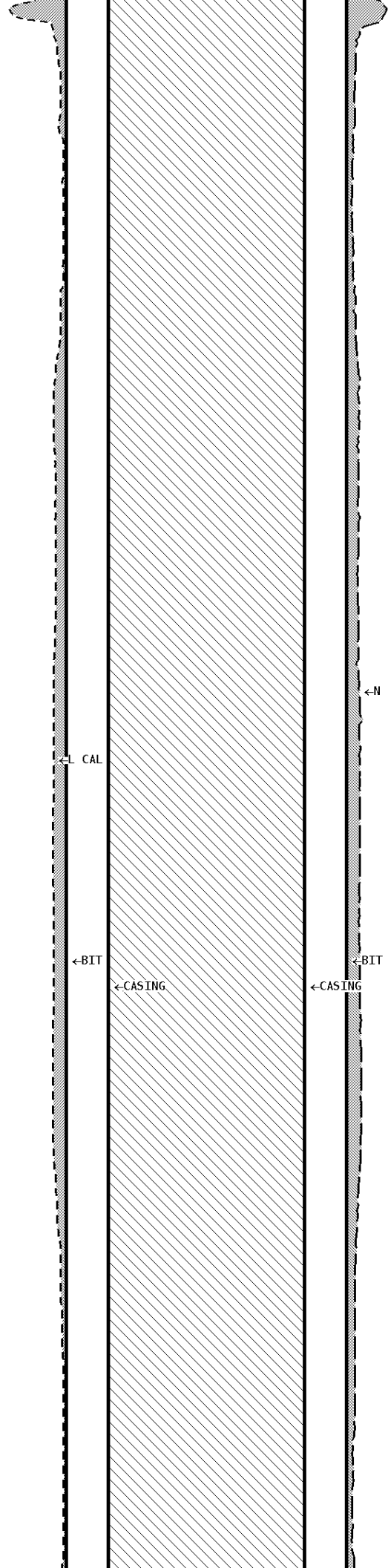




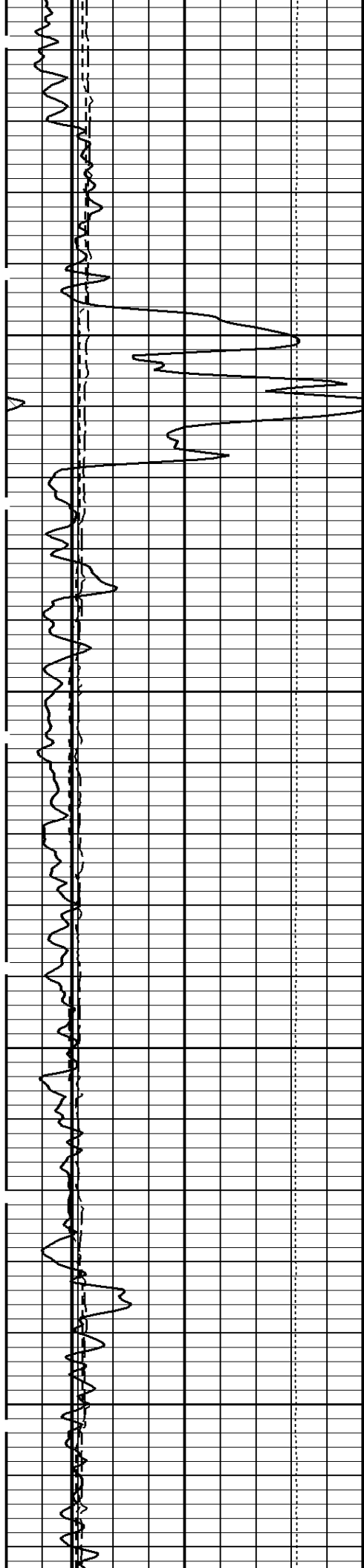
5000

5100

-200Cu.ft



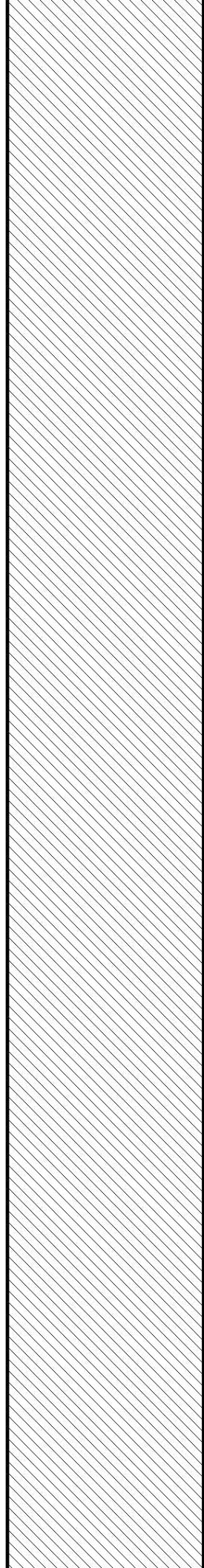
100Cu.ft

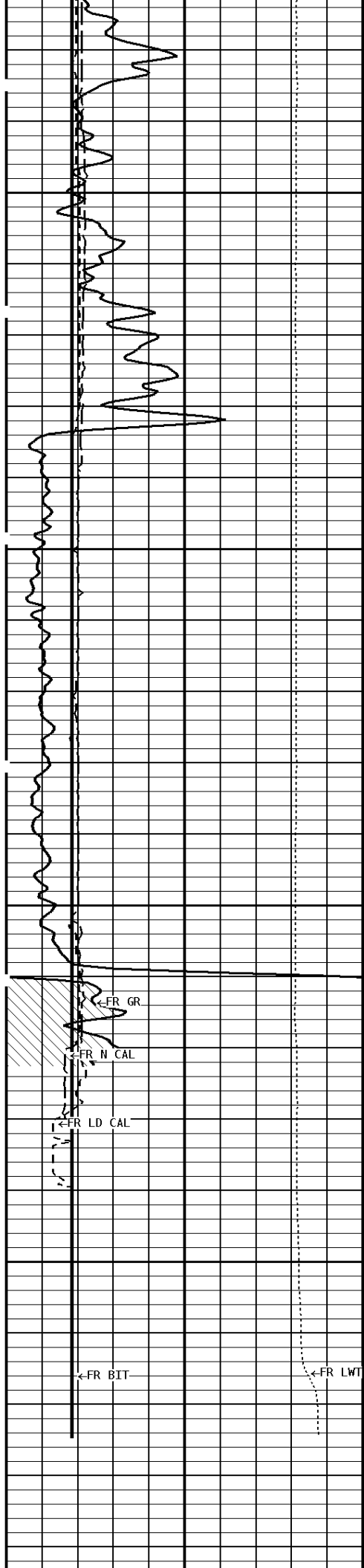


5200

-100Cu.ft

5300



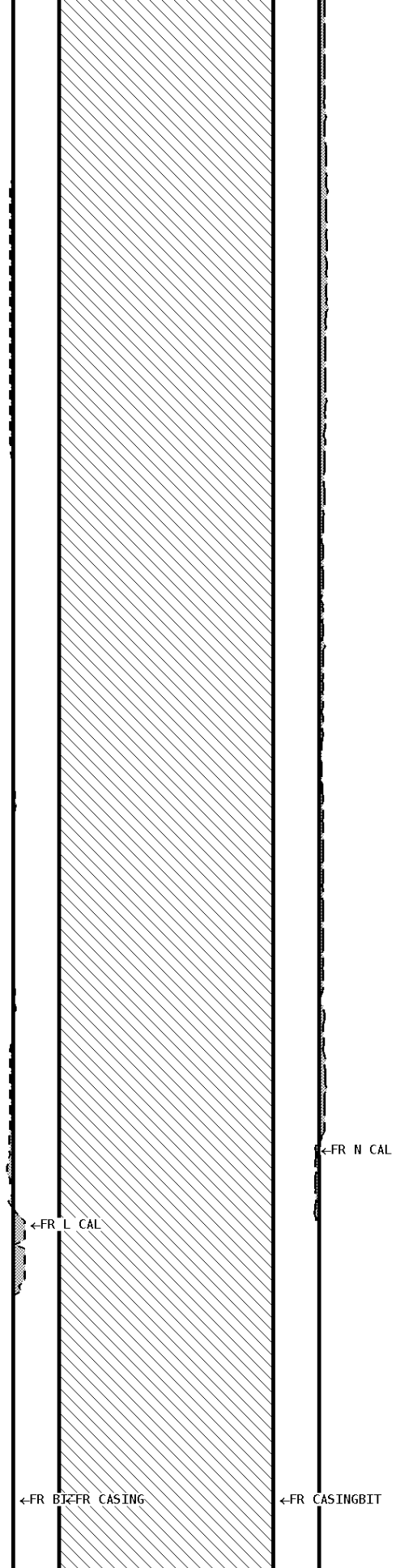


5400

5500

5566

File #



1:240 MAIN SECTION

GAMMA RAY API UNITS 150  300 0 150	
TENSION LBS 10000 0	
X CALIPER INCHES (IN) 16 26 6 16	
Y CALIPER INCHES (IN) 16 26 6 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 : 27-JUN-2013 Time : 10:03 Sensor Suite : GR-GR5 ID : GRT-BC-43					
GR	Background	Measured Jig	Units	Calibrated Jig	Units
	46	309	CPS	175	GRAPI
Shop Calibration CNT-AA Performed : 27-JUN-2013 Time : 13:55 Sensor Suite : CALI-BCN ID : NDT-AE-403					
CL # 1	Jig - Measured	Jig - Calibrated	Units		
	Ring#1 Ring#2	Ring#1 Ring#2			IN.
	7.5 13.5	6.0 12.0			
Shop Calibration LDT-DF Performed : 27-JUN-2013 Time : 10:04 Sensor Suite : CALI-LTH ID : PDT-GA-469					
CL # 1	Jig - Measured	Jig - Calibrated	Units		
	Ring#1 Ring#2	Ring#1 Ring#2			IN.
	7.4 10.6	6.0 12.0			

Company: LASSO ENERGY, LLC

Well: MCCLAREN 'B' #1





Tucker
ENERGY SERVICES

Location: 330' FNL & 330' FEL

Logged: 07-08-2013

K.B. Elev: 2248.0 Ft