

BOREHOLE VOLUME

Company	GRAND MESA OPERATING COMPANY
Well	PREISSER #1-34
Field	WILDCAT
County	RENO
State	KANSAS
Country	USA
API No.	15-155-21771-00-00

File No	: HAYS-70428
Company	: GRAND MESA OPERATING COMPANY
Well	: PREISSER #1-34
Field	: WILDCAT
County	: RENO
State	: KANSAS
Country	: USA
API No	: 15-155-21771-00-00

Location :	330' FNL & 1620' FEL
	E2 NE NW NE

LSD :	Sect : 34	Twp : 24S	Rge : 09W
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The customer is hereby warned that by providing the log data herein, STEP Energy Services does not agree to provide any interpretation of log data, conversion of log data to physical rock parameters or recommendations. STEP Energy Services 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 STEP Energy Services 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 STEP Energy Services 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	4140.00	8.625	17.00	266.00	0.00

Run Number	1		
Date	12-14-2019		
Date/Time On Bottom	12-14-2019 11:57		
Depth to Fluid	0.0 Ft		
Salinity	10400.000		
RMF@BHT	0.610 @ 119 F		
RMC@BHT	0.830 @ 119 F		

Run Number 1

Comments

ALL PRESENTATIONS AS PER CUSTOMER REQUEST.

GRT, CNT, LDT, CST, MLT, AND PIT RUN IN COMBINATION.

2.71 G/CC DENSITY MATRIX USED TO CALCULATE POROSITY.

5.5" PRODUCTION CASING USED TO CALCULATE ANNULAR HOLE VOLUME.

CALIPERS ORIENTED ON X-Y AXIS.

PHIN IS CALIPER CORRECTED

GRT: GRP

CNT: PHIN, PHINDOL, CLCNIN

LDT: PORL, PORLDOL, LCORN, LDENN, PECLN, CLLDIN

MLT: MSFI, MSFN, CLMRIN.

PIT: ILD, ILM, SFLAEC, SPU, CIRD

OPERATORS:

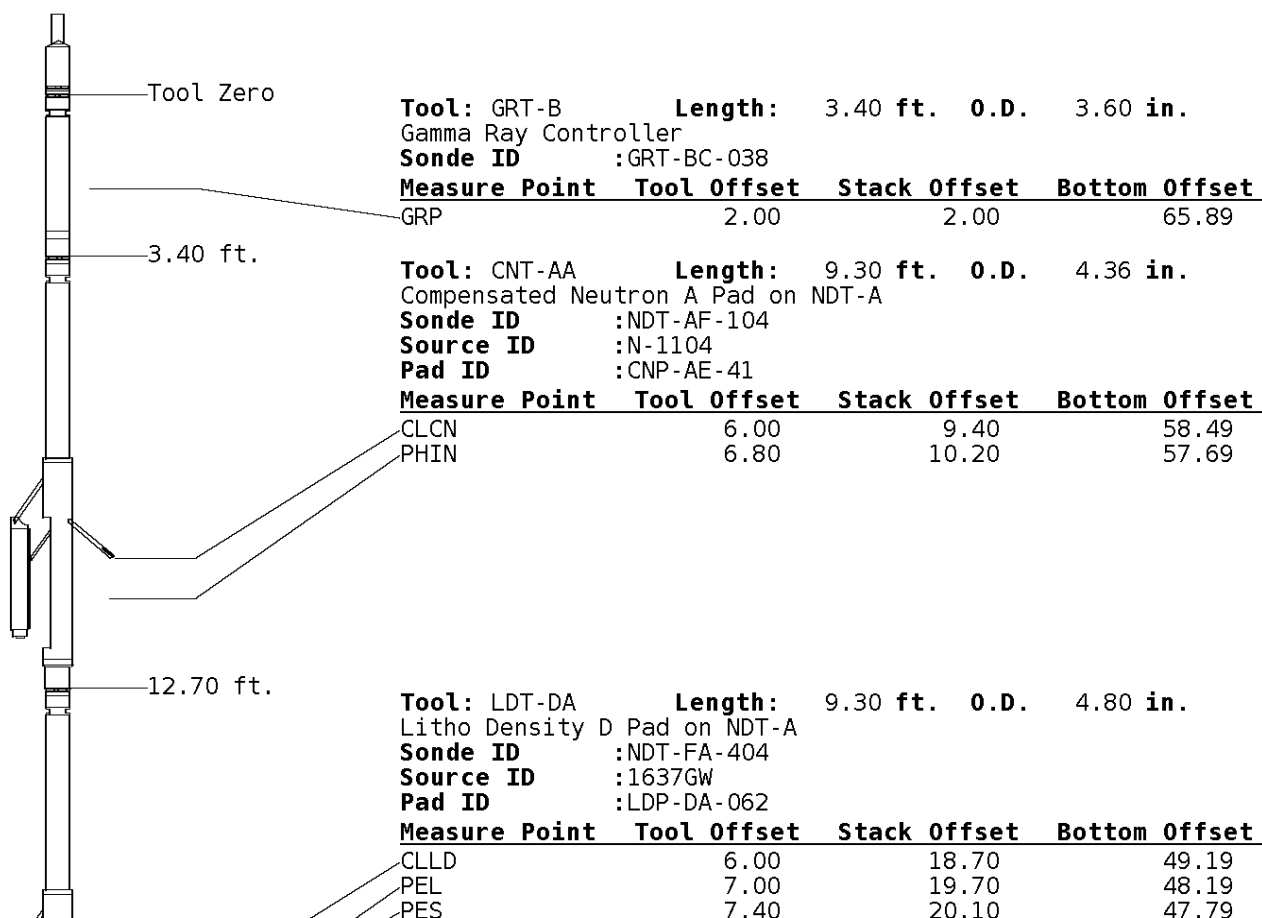
D.LEGLEGITER

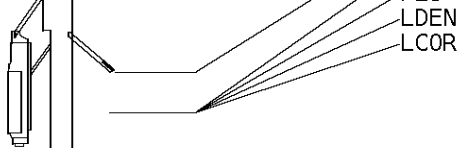
D.RAGSDALE

J.VAUGHN

Tool String Schematic

Total Tool Length - 67.89 ft.
Maximum Outside diameter - 6.00 in.
Net Weight in Air - 1171.00 lbs.



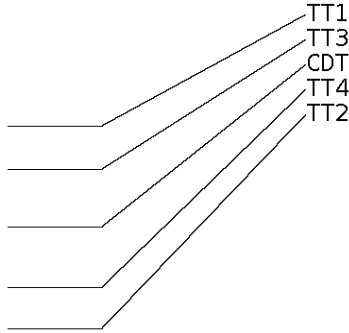


7.20	19.90	47.99
7.20	19.90	47.99

22.00 ft.

Tool: CST-AD **Length:** 13.80 ft. **O.D.** 3.60 in.
 Open Hole Sonic
Sonde ID : CST-AB-24

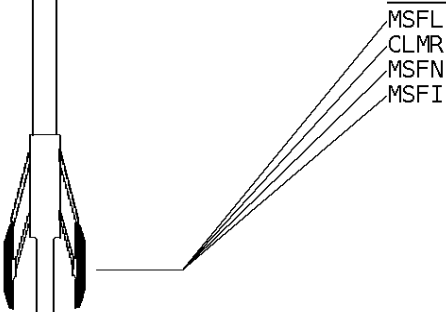
Measure Point	Tool Offset	Stack Offset	Bottom Offset
TT1	4.80	26.80	41.09
TT3	5.80	27.80	40.09
CDT	7.30	29.30	38.59
TT4	8.80	30.80	37.09
TT2	9.80	31.80	36.09



35.80 ft.

Tool: MLT-AB **Length:** 10.60 ft. **O.D.** 6.00 in.
 Micro Log Tool
Sonde ID : MLT-012

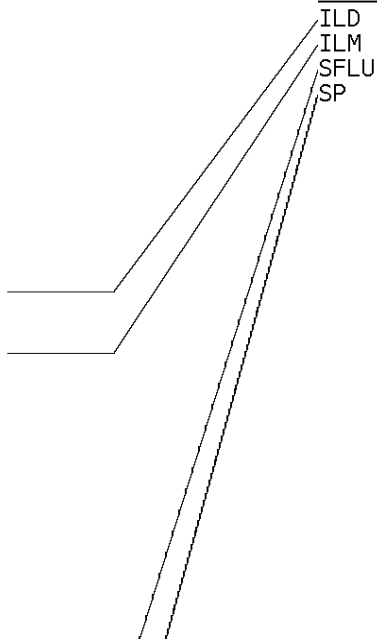
Measure Point	Tool Offset	Stack Offset	Bottom Offset
MSFL	8.90	44.70	23.19
CLMR	7.60	43.40	24.49
MSFN	8.90	44.70	23.19
MSFI	8.90	44.70	23.19



46.40 ft.

Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
 Phased Dual Induction w/ RM & D
Sonde ID : PIT-AC-043

Measure Point	Tool Offset	Stack Offset	Bottom Offset
ILD	8.92	55.32	12.56
ILM	10.10	56.50	11.39
SFLU	17.49	63.89	4.00
SP	20.60	67.00	0.88



LWT 67.89 ft.

Well File: GRAND MESA PREISSER 1-34 DEC-14 QUINT

Scale: 1:600

Format: CAL-600

Segment: V1.D1.S3 mn

Acquired: 2019-12/14 12:23 3.4.1-13972

Reference: 0

Processed: 2019-12/14 12:23 3.4.1-13972

BIT SIZE
INCHES (IN)

6 16

Y CALIPER
INCHES (IN)

16 26
6 16

X CALIPER
INCHES (IN)

16 26
6 16

TENSION
LBS

10000 0

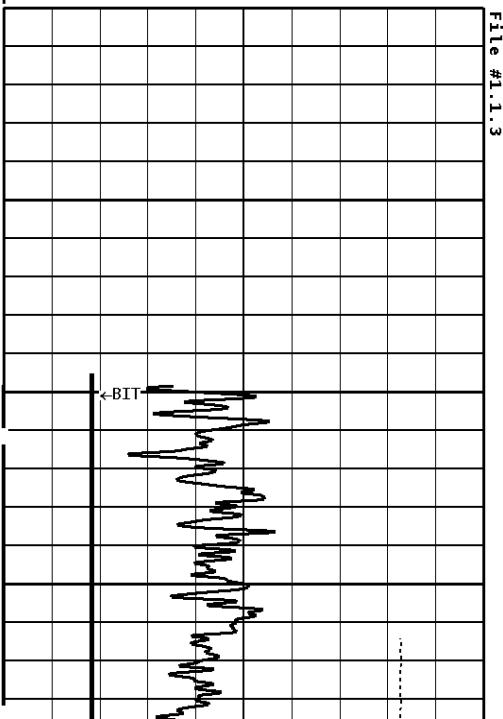
GAMMA RAY
API UNITS

150 300
0 150

BOREHOLE VOLUME
CU.FT

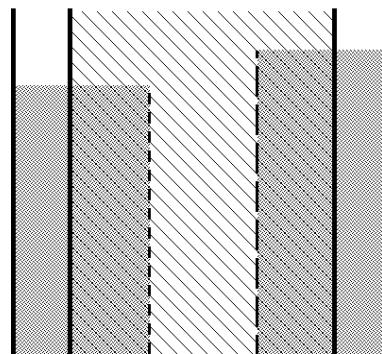
ANNULAR HOLE VOLUME
CU.FT.

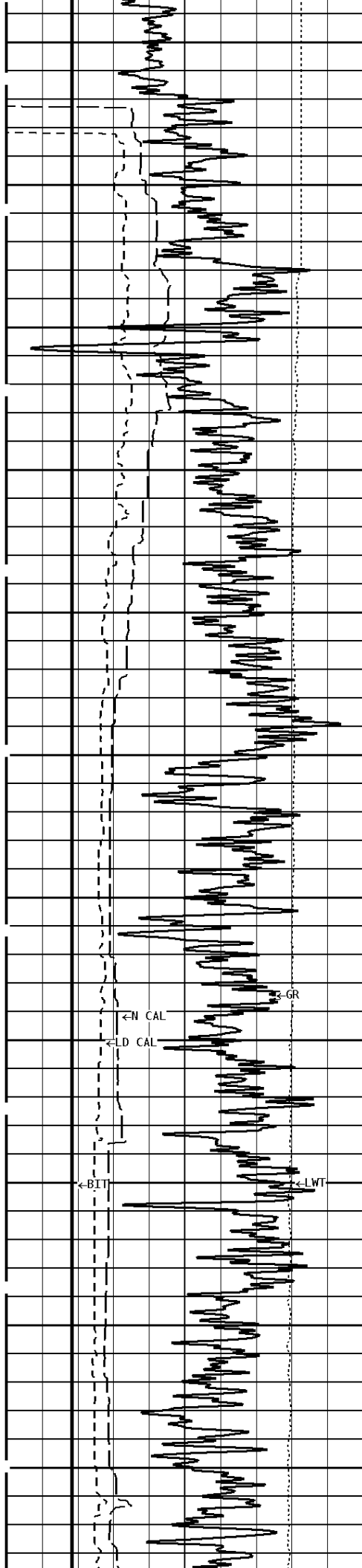
1:600 MAIN SECTION



100

200





300

400

500

600

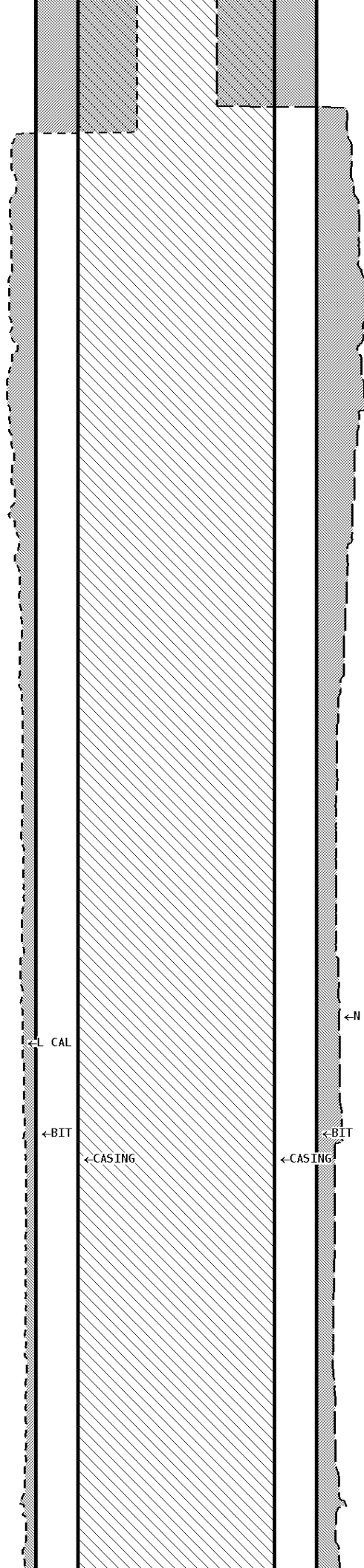
700

-1800Cu.ft

-1700Cu.ft

1200Cu.ft

1100Cu.ft



←N CAL

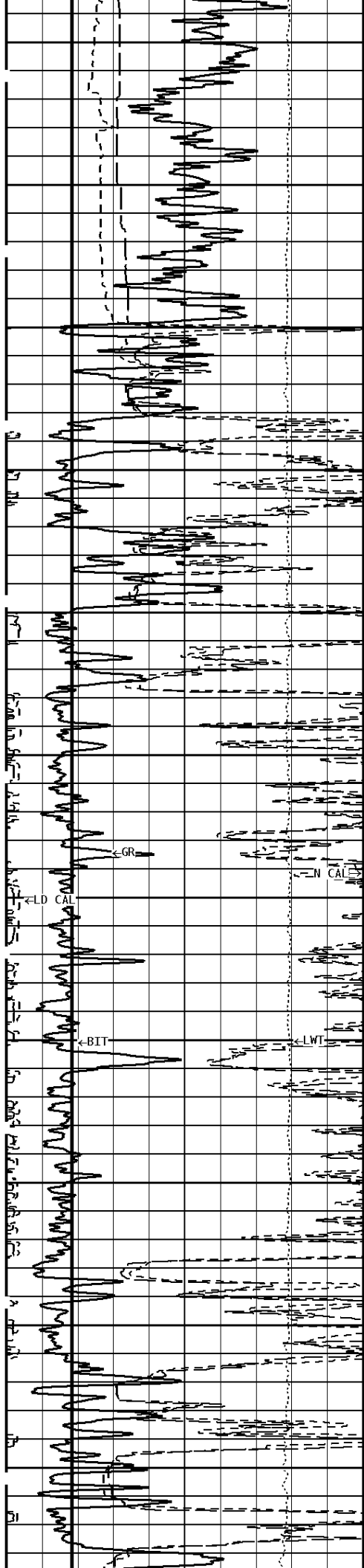
←BIT

←CASING

←N CAL

←BIT

←CASING



800

900

1000

1100

1200

1300

-1600Cu.ft

-1500Cu.ft

-1400Cu.ft

-1300Cu.ft

-1200Cu.ft

L CAL

←BIT

←CASING

←BIT

←CASING

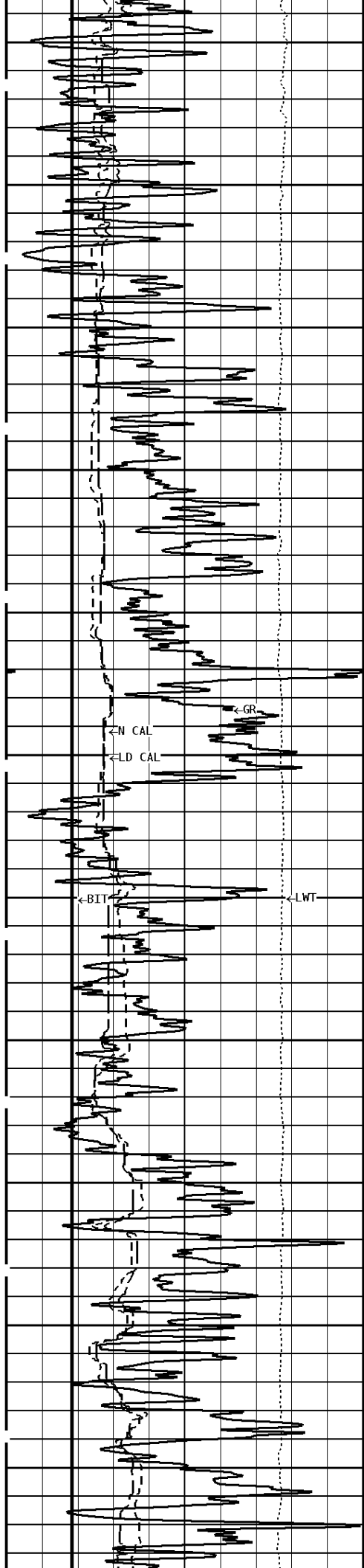
1000Cu.ft-

900Cu.ft-

←N CAL

800Cu.ft-

700Cu.ft-



1400

1500

1600

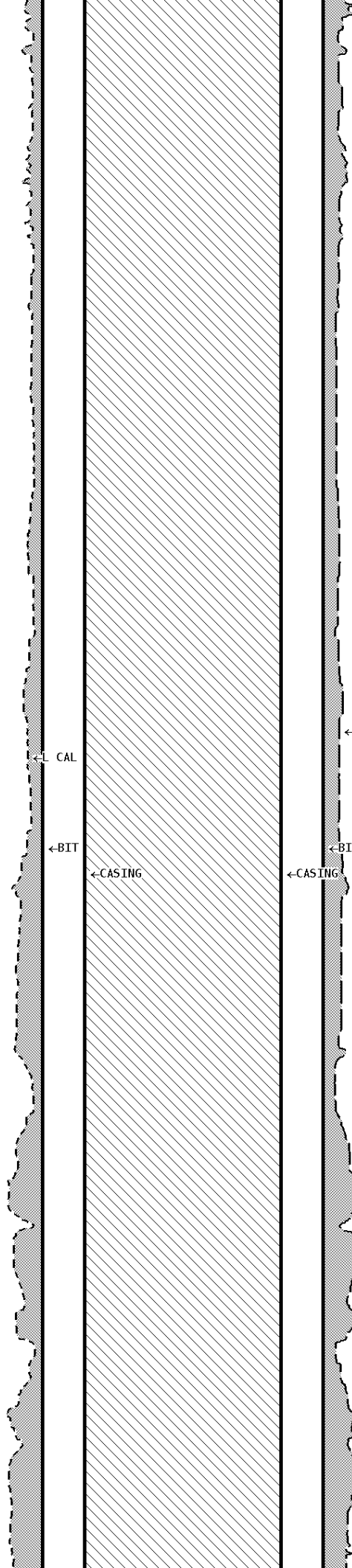
1700

1800

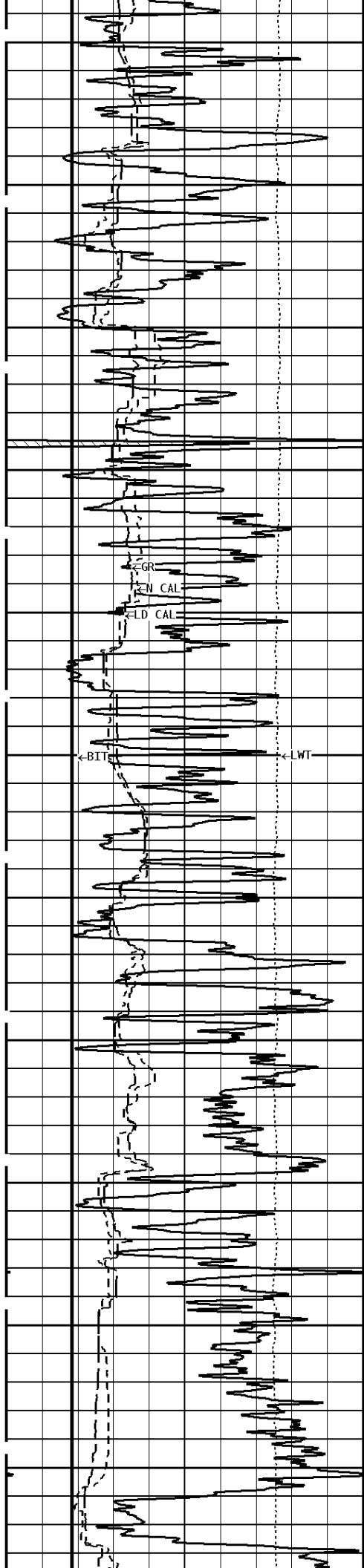
-1100Cu.ft

-1000Cu.ft

-900Cu.ft



600Cu.ft-



1900

2000

2100

2200

2300

2400

500Cu.ft-

-800Cu.ft

400Cu.ft-

←L CAL

←BIT

←CASING

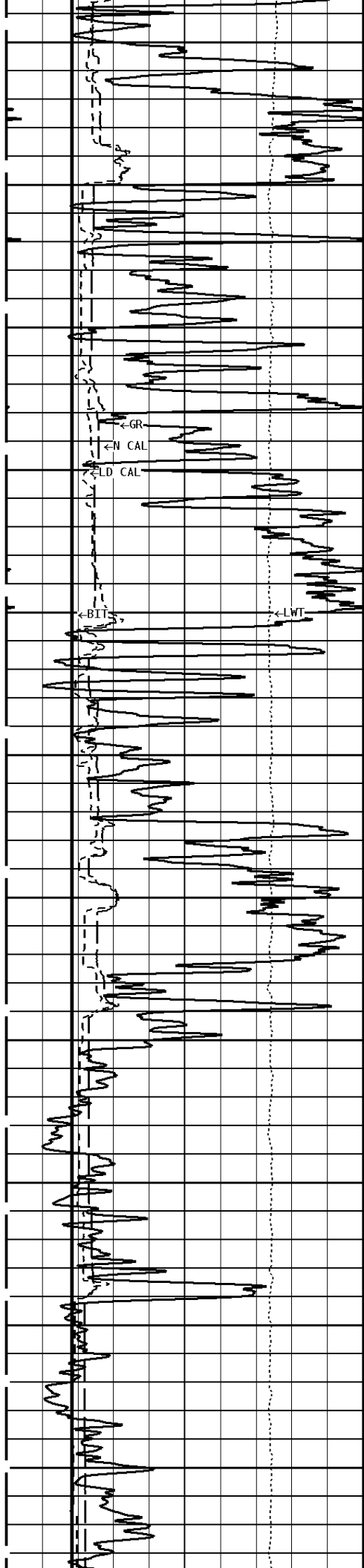
←N CAL

←BIT

←CASING

←BIT

←LWT



2500

2600

2700

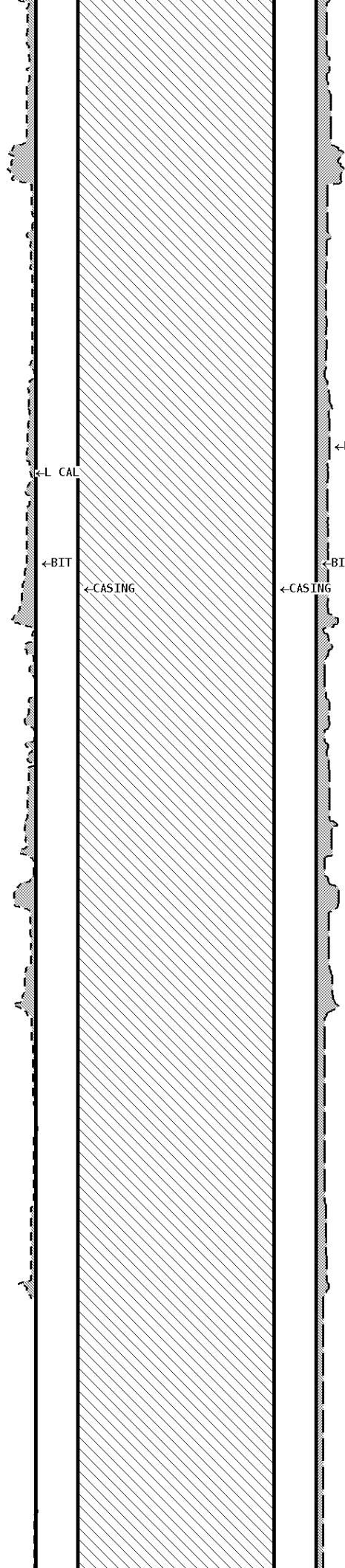
2800

2900

-600Cu.ft

-500Cu.ft

300Cu.ft-



L CAL

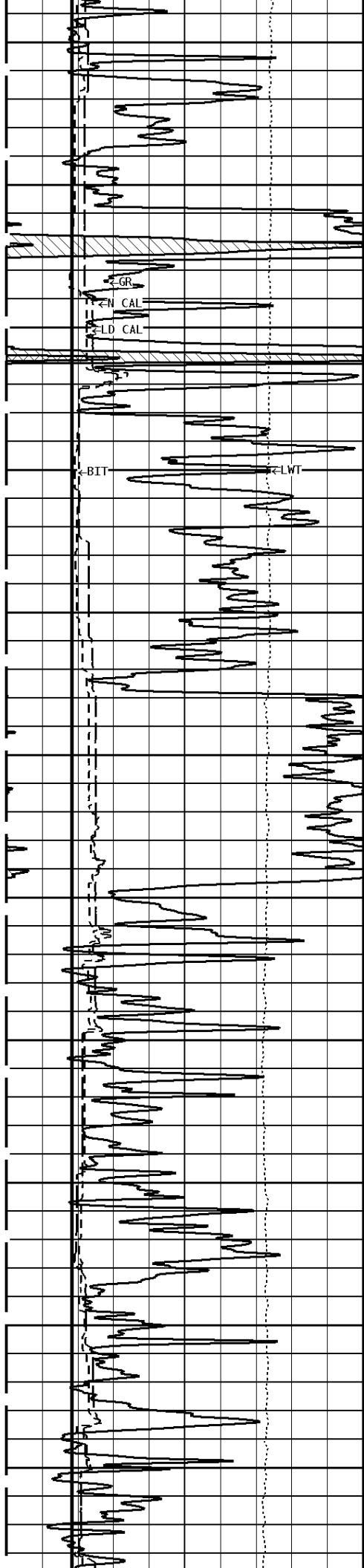
BIT

CASING

N CAL

BIT

CASING



3000

-400Cu.ft

3100

←L CAL

←N CAL

200Cu.ft-

←BIT

←BIT

←CASING

←CASING

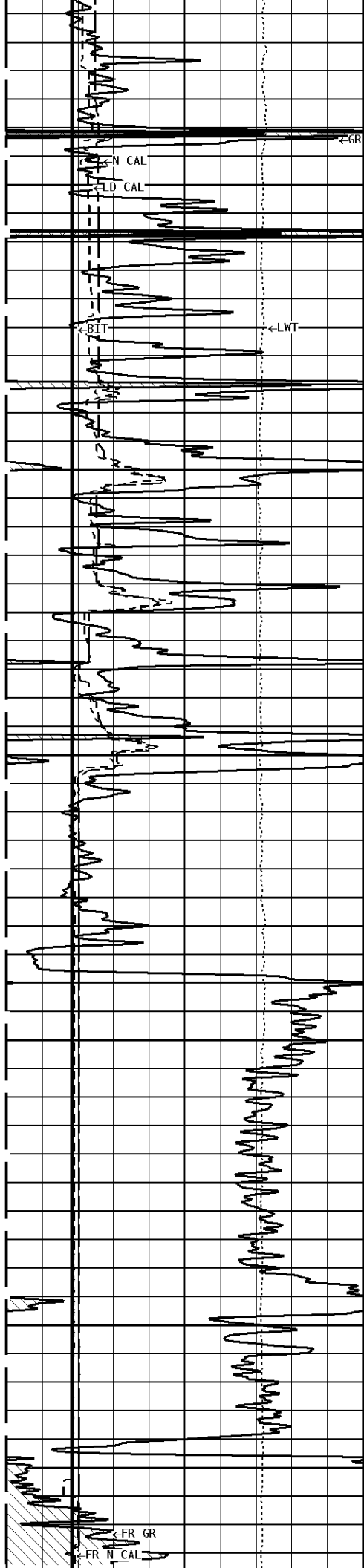
3200

-300Cu.ft

3300

3400

3500



3600

3700

3800

3900

4000

-200Cu.ft

-100Cu.ft

L CAL

BIT

CASING

N CAL

BIT

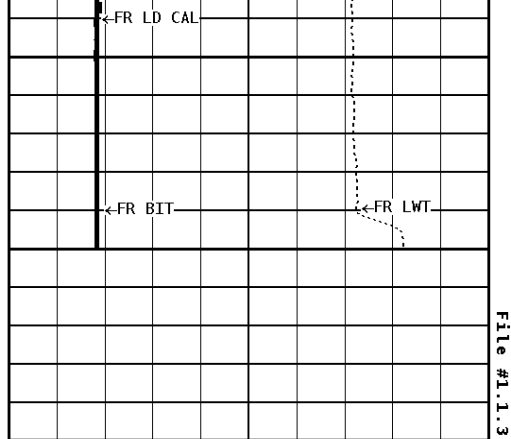
CASING

100Cu.ft

FR GR

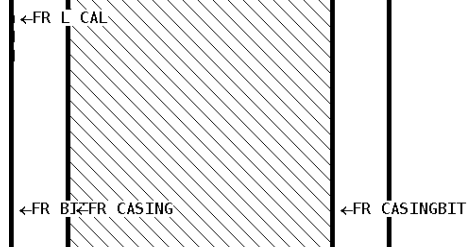
FR N CAL

FR N CAL



4100

4140



1:600 MAIN SECTION

GAMMA RAY API UNITS 1500 300150		BOREHOLE VOLUME CU.FT ANNULAR HOLE VOLUME CU.FT.
TENSION LBS 100000		
X CALIPER INCHES (IN) 1662616		
Y CALIPER INCHES (IN) 1662616		
BIT SIZE INCHES (IN) 616		

* 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 : 24-JUN-2019			Time : 12:20		
Sensor Suite : GR-GR5			ID : GRT-BC-038		
	Measured	Units	Calibrated	Units	
GR	Background	Jig	Jig		
	36	266	160	GRAPI	
Shop Calibration CNT-AA					
Performed : 03-Jun-2019			Time : 11:06		
Sensor Suite : CALI-BCN			ID : NDT-AF-104		
	Jig - Measured		Jig - Calibrated	Units	
	Ring#1 Ring#2		Ring#1 Ring#2		
CL # 1	8 3 13 2		6 0 12 0	IN	

CL #1	8.3	13.2	6.0	12.0	IN.
Shop Calibration					
LDT-DA					
Performed : 03-Jun-2019			Time : 14:53		
Sensor Suite : CALI-LTH			ID : NDT-FA-404		
Jig - Measured			Jig - Calibrated		
Ring#1 Ring#2			Ring#1 Ring#2		
CL # 1	8.3	13.2	6.0	12.0	IN.



Company: GRAND MESA OPERATING COMPANY

Well: PREISSER #1-34

Location: 330' FNL & 1620' FEL

Logged: 12-14-2019

K.B. Elev: 1687.0 Ft