

[illegible]

Company: ExxonMobil Production Corp.

Well: PCU 197-34A7

Field: Piceance Creek

County: Rio Blanco

State: Colorado

CORRELATION LOG
GAMMA RAY – CCL

County: Rio Blanco
Field: Piceance Creek
Location: Latitude: 39° 55' 4.889" N
Well: PCU 197-34A7
Company: ExxonMobil Production Corp.

LOCATION			
Latitude: 39° 55' 4.889" N	Elev.: K.B. 6548.00 ft		
Longitude: 108° 16' 34.956" W	G.L. 6518.00 ft		
	D.F. 6547.00 ft		
Permanent Datum:	GROUND LEVEL	Elev.: 6518.00 ft	
Log Measured From:	KELLY BUSHING	30.00 ft	above Perm. Datum
Drilling Measured From:	KELLY BUSHING		
API Serial No. 05-103-11538	Section 34	Township 1S	Range 97W

				Run 1	Run 2	Run 3
PVT DATA						
Oil Density						
Water Salinity						
Gas Gravity						
Bo						
Bw						
1/Bg						
Bubble Point Pressure						
Bubble Point Temperature						
Solution GOR						
Maximum Deviation						
CEMENTING DATA						
Primary/Squeeze				Primary		
Casing String No						
Lead Cement Type						
Volume						
Density				11 lbm/gal		
Water Loss						
Additives						
Tail Cement Type						
Volume						
Density						
Water Loss						
Additives						
Expected Cement Top						
Logging Date						

Logging Date 18-Aug-2010

Run Number 1

Depth Driller 8495 ft

Schlumberger Depth 8250 ft

Bottom Log Interval 8250 ft

Top Log Interval 3500 ft

Casing Fluid Type WATER

Salinity

Density 8.35 lbm/gal

Fluid Level 30 ft

BIT/CASING/TUBING STRING

Bit Size 9.875 in

From 30.2 ft

To 8495 ft

Casing/Tubing Size 7.000 in

Weight 26 lbm/ft

Grade

From 30.2 ft

To 8495 ft

Maximum Recorded Temperatures

Logger On Bottom 18-Aug-2010

Unit Number 2379

Recorded By MIKE SEPTON

Witnessed By JOSH

Location VERNAL, UT

Time 12:15						
Location						
VERNAL, UT						
MIKE SEPTON						
JOSH						

DEPTH SUMMARY LISTING

Date Created: 18-AUG-2010 13:30:03

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CMTD-B/A	Type:	7-46P XS
Serial Number:	6197	Serial Number:	8093	Serial Number:	709025
Calibration Date:	27-APR-2010	Calibration Date:	22-JUL-2010	Length:	29000 FT
Calibrator Serial Number:	33	Calibrator Serial Number:		Conveyance Method: Wireline Rig Type: Rigless	
Calibration Cable Type:	7-46P	Number of Calibration Points:	10		
Wheel Correction 1:	-8	Calibration RMS:	24		
Wheel Correction 2:	-8	Calibration Peak Error:	51		

Depth Control Parameters

Log Sequence:	First Log In the Well
Rig Up Length At Surface:	165.00 FT
Rig Up Length At Bottom:	165.00 FT
Rig Up Length Correction:	0.00 FT
Stretch Correction:	6.00 FT
Tool Zero Check At Surface:	0.00 FT

Depth Control Remarks

1. ALL SCHLUMBERGER DEPTH CONTROL PROCEDURES FOLLOWED
2. IDW USED AS PRIMARY DEPTH CONTROL, Z-CHART USED AS SECONDARY DEPTH CONTROL
3. LOG CORRELATED TO DOWN LOG
4.
5.
6.

DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

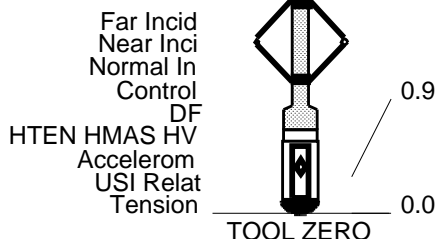
OTHER SERVICES1	OTHER SERVICES2
OS1: IBC	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
THIS IS THE FIRST RUN IN THE WELL	
TOOL STRING RAN AS PER TOOL SKETCH	
NEUTRON TOOL RAN FOR GR ONLY	

RUN 1			RUN 2		
SERVICE ORDER #:		BEHA-00028	SERVICE ORDER #:		
PROGRAM VERSION:		17C0-154	PROGRAM VERSION:		
FLUID LEVEL:		30 ft	FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		

SURFACE EQUIPMENT	
WITM (DTS)-A	
GSR-U/Y	
NCT-B	
CNB-AB	
NCS-VB	

DOWNHOLE EQUIPMENT	
<div> <div>LEH-QT</div> <div>LEH-QT 2379</div> </div> <div> <div>DTC-H</div> <div>ECH-KC 10503</div> <div>DTCH0-A</div> <div>DTCH1-A</div> </div> <div> <div>HILTH-FTB</div> <div>HGNSD-H 2986</div> <div>HMCA-H</div> <div>HGNH</div> <div>NLS-KL</div> <div>NSR-F</div> <div>HACCZ-H</div> <div>HCNT-H</div> <div>HGR</div> <div>NPV-N</div> </div> <div> <div>AH-107</div> <div>AH-107 2379</div> </div> <div> <div>USIT-D</div> <div>ECH-MRA</div> <div>USIC-D 4952</div> <div>USIS-A 704</div> <div>USSC-B</div> <div>IBCS_B-100158202 769</div> <div>Top Transducer</div> <div>Middle Top Transducer</div> <div>Middle Bottom Transducer</div> <div>Bottom Transducer</div> </div>	<div> <div> <div> <div>CTEM</div> <div>TelStatus</div> <div>ToolStatu</div> <div>HGNS HTEM</div> <div>HMCA</div> <div>HGNS Gamm</div> <div>HGNS Neut</div> <div>HGNS Neut</div> <div>HGNS sens</div> </div> <div> <div>35.2</div> <div>33.1</div> <div>33.1</div> <div>32.4</div> <div>26.5</div> <div>26.0</div> <div>23.7</div> </div> </div> <div> <div>39.0</div> <div>36.1</div> <div>33.1</div> <div>23.7</div> <div>21.7</div> </div> </div>



MAXIMUM STRING DIAMETER 7.50 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN FEET

Schlumberger

CORRELATION LOG

MAXIS Field Log

Company: ExxonMobil Production Corp.

Well: PCU 197-34A7

Input DLIS Files

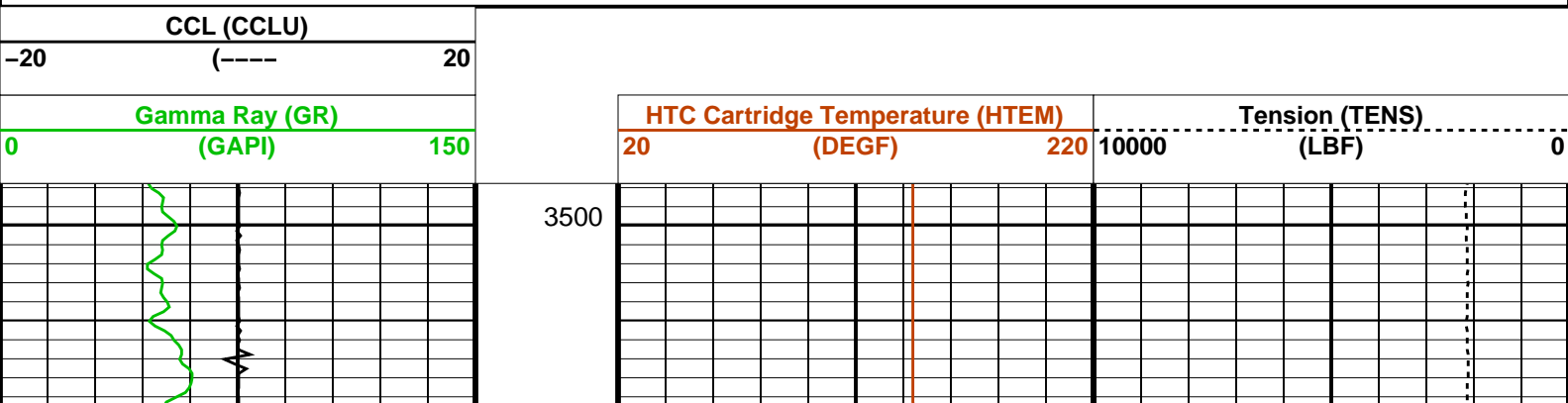
DEFAULT	USI_TLD_MCFL_CNL_011LUP	FN:10	PRODUCER	18-Aug-2010 12:25	8250.5 FT	3495.1 FT
---------	-------------------------	-------	----------	-------------------	-----------	-----------

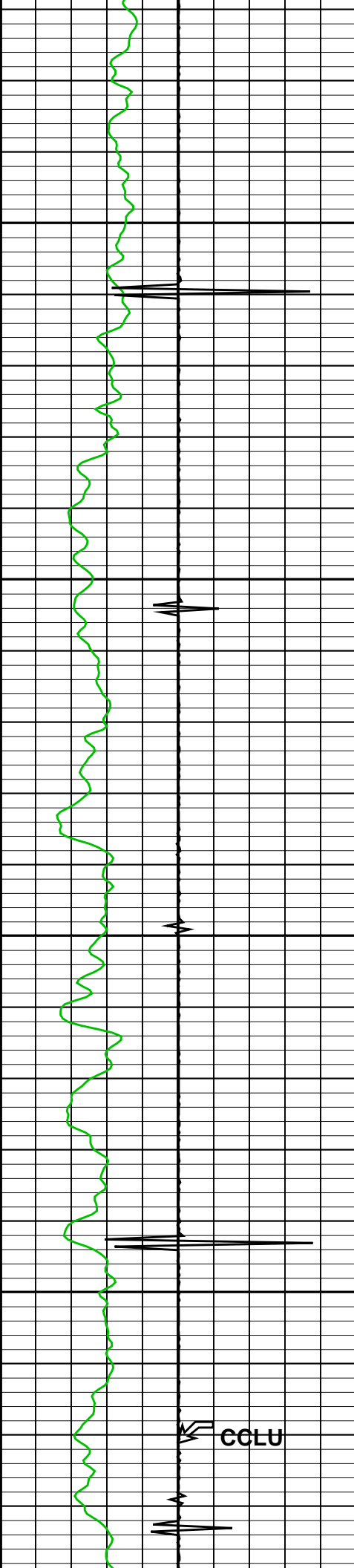
Output DLIS Files

DEFAULT	USI_TLD_MCFL_CNL_003PUP	FN:2	PRODUCER	18-Aug-2010 14:37	8250.5 FT	3495.5 FT
---------	-------------------------	------	----------	-------------------	-----------	-----------

OP System Version: 17C0-154

USIT-D	SRPC-3971-Q1_2010_OP17	HILTH-FTB	SRPC-3971-Q1_2010_OP17
DTC-H	17C0-154		



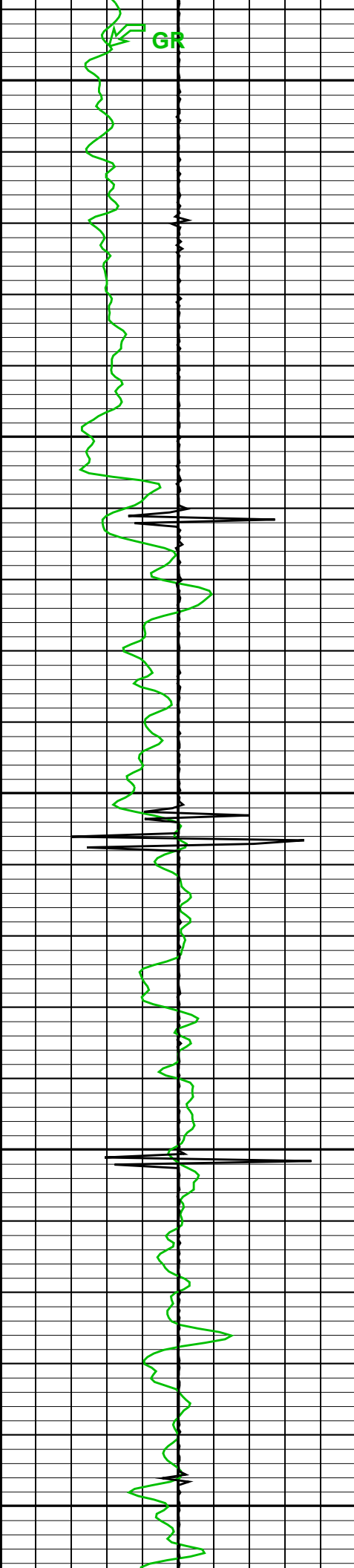


3600

3700

CCLU

TENS

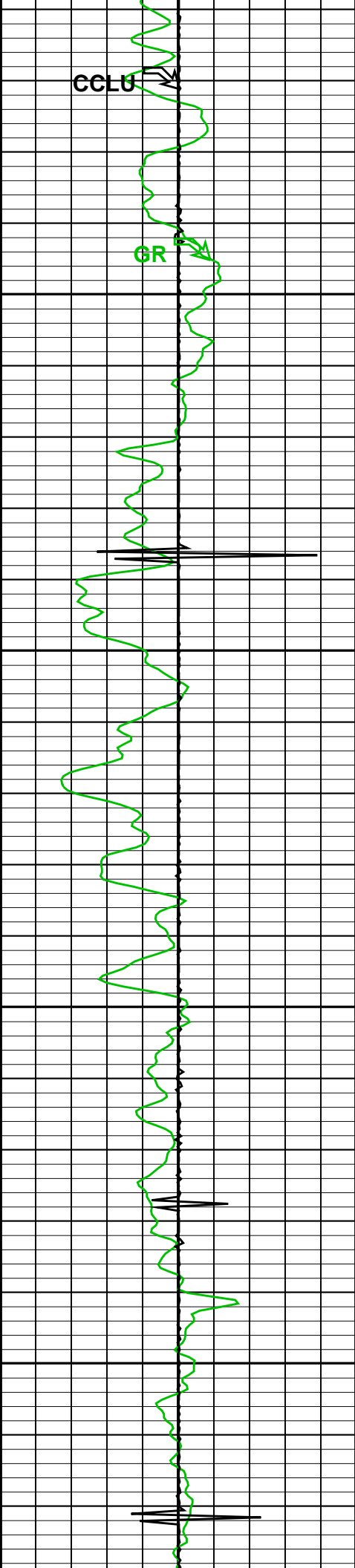


3800

3900

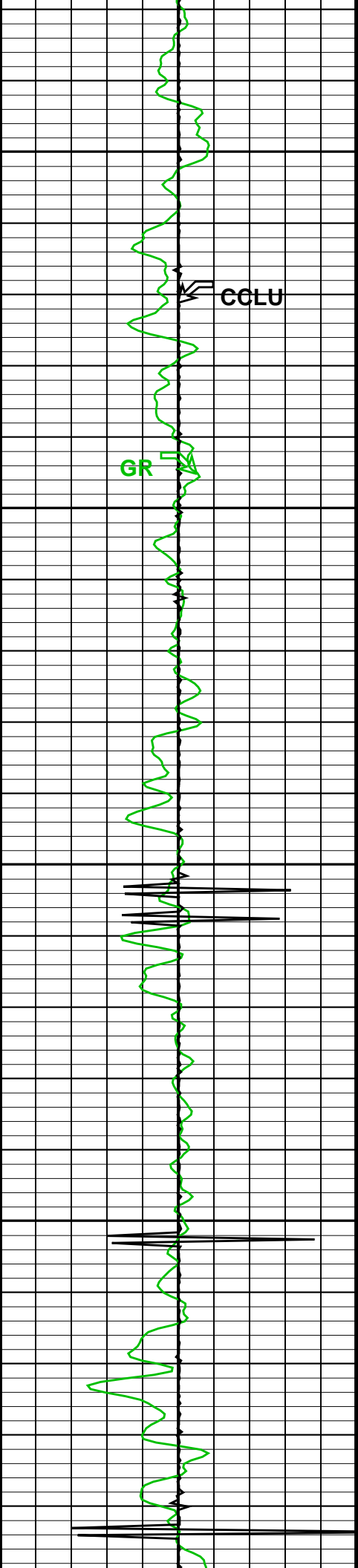
HTEM

GR



4000

4100



4200

CCLU

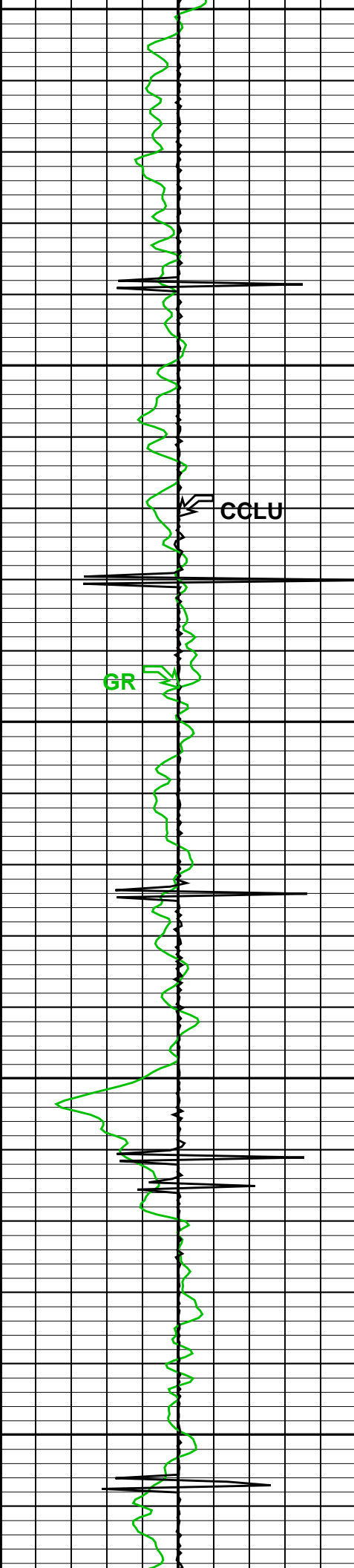
GR

4300

4400

HTEM

TENS



4400

4500

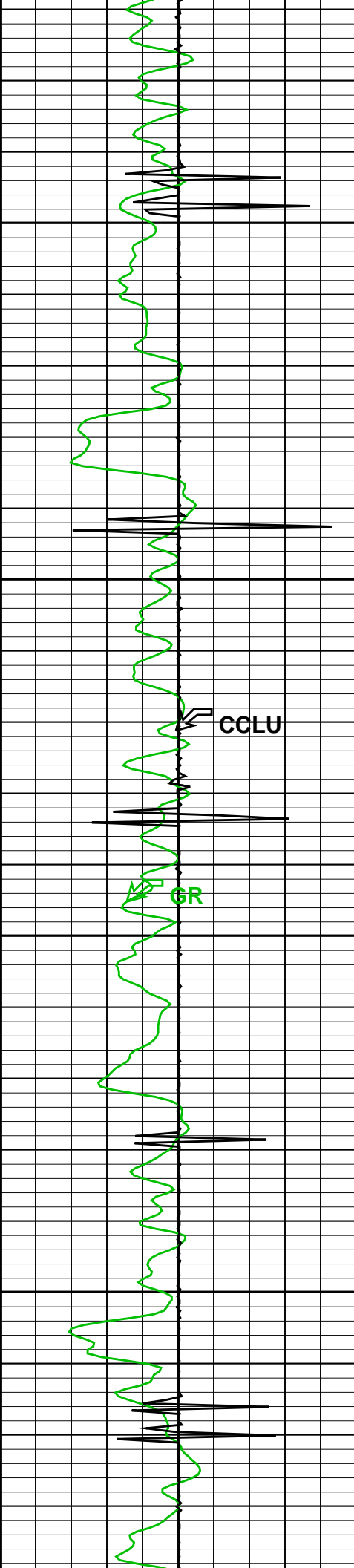
4600

CCLU

GR

HTEM

TENS



4700

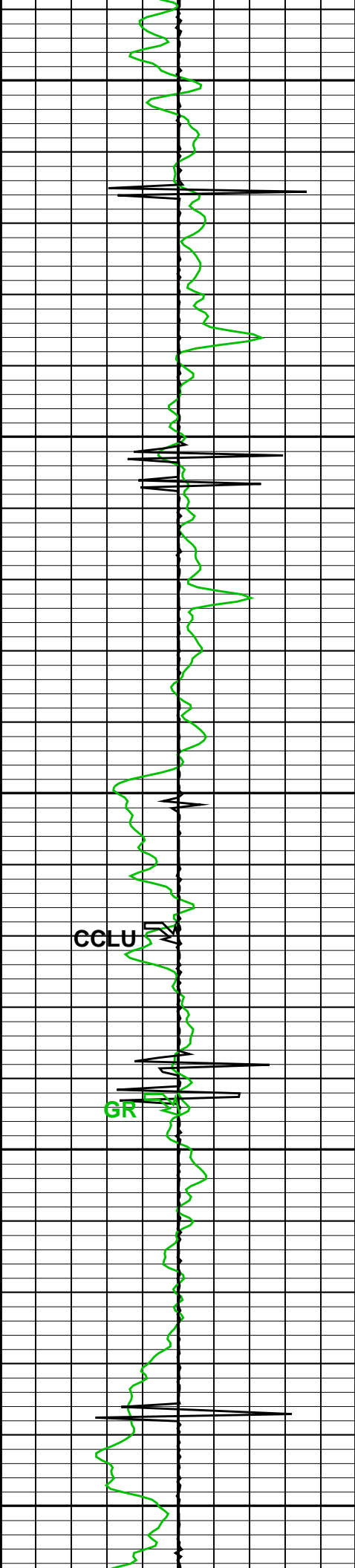
CCLU

GR

4800

HTEM

TENS

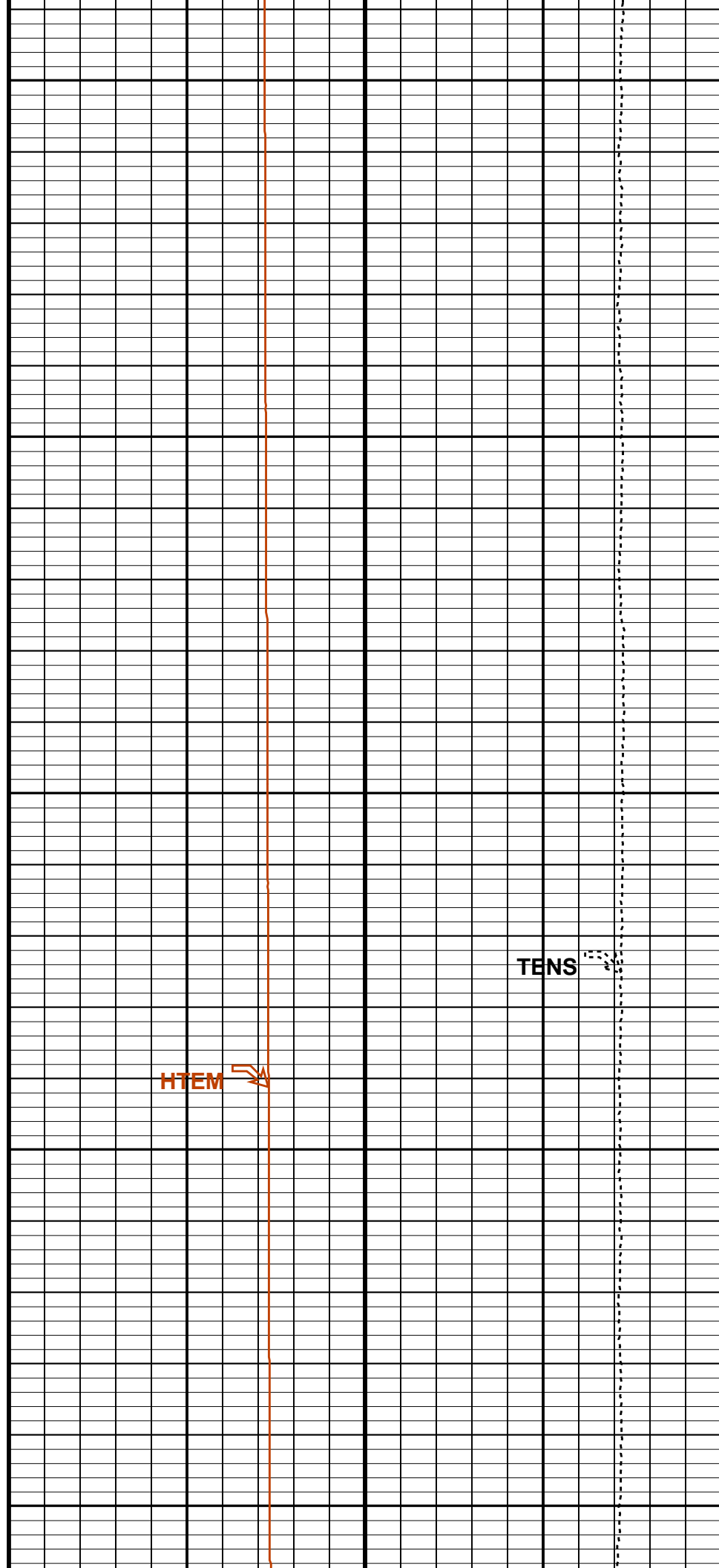


4900

CCLU

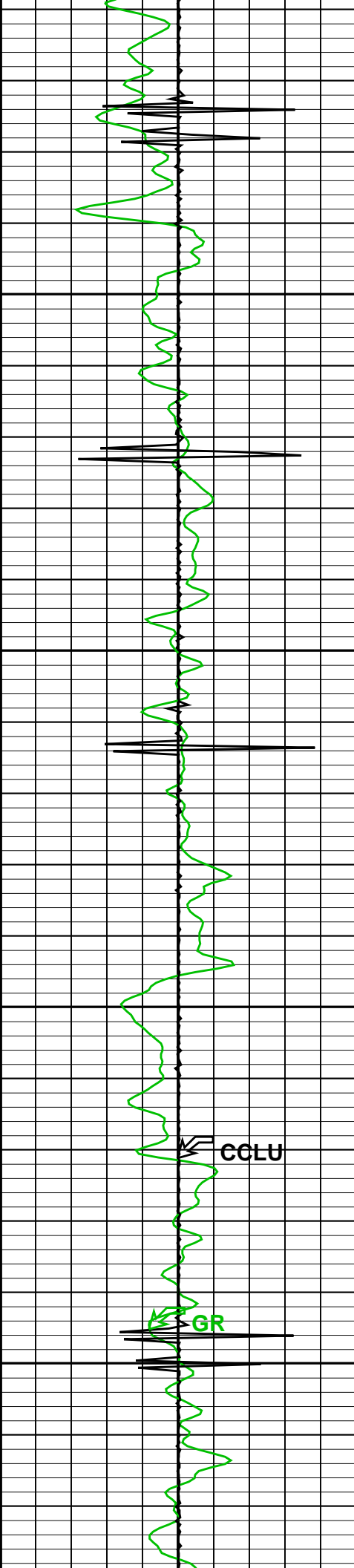
GR

5000



HTEM

TENS



5100

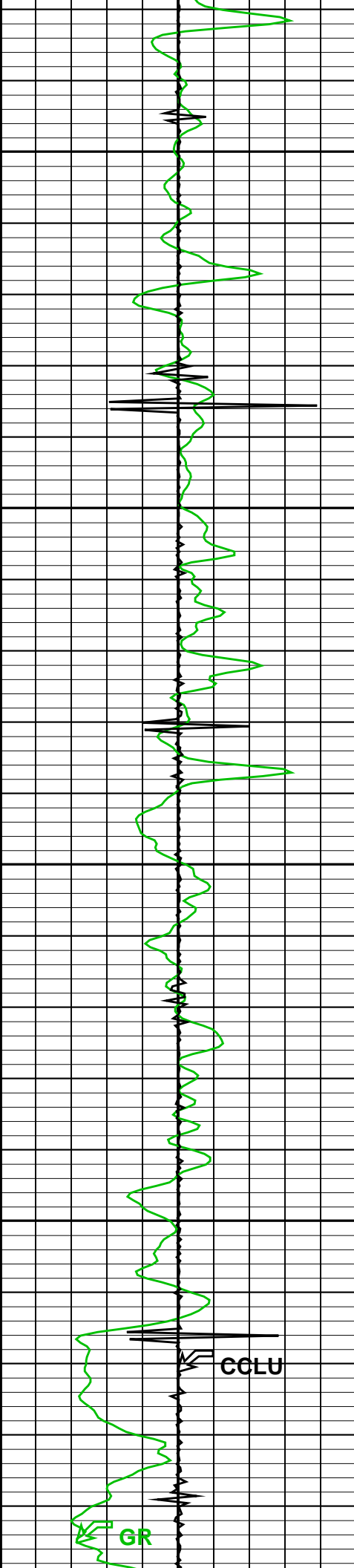
5200

CCLU

GR

HTEM

TENS



5300

5400

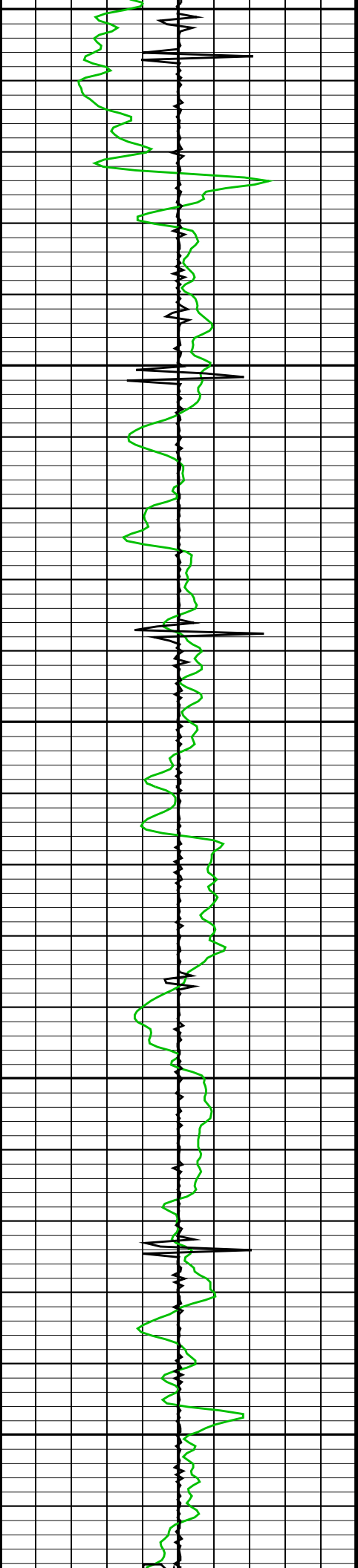
5500

CCLU

GR

HTEM

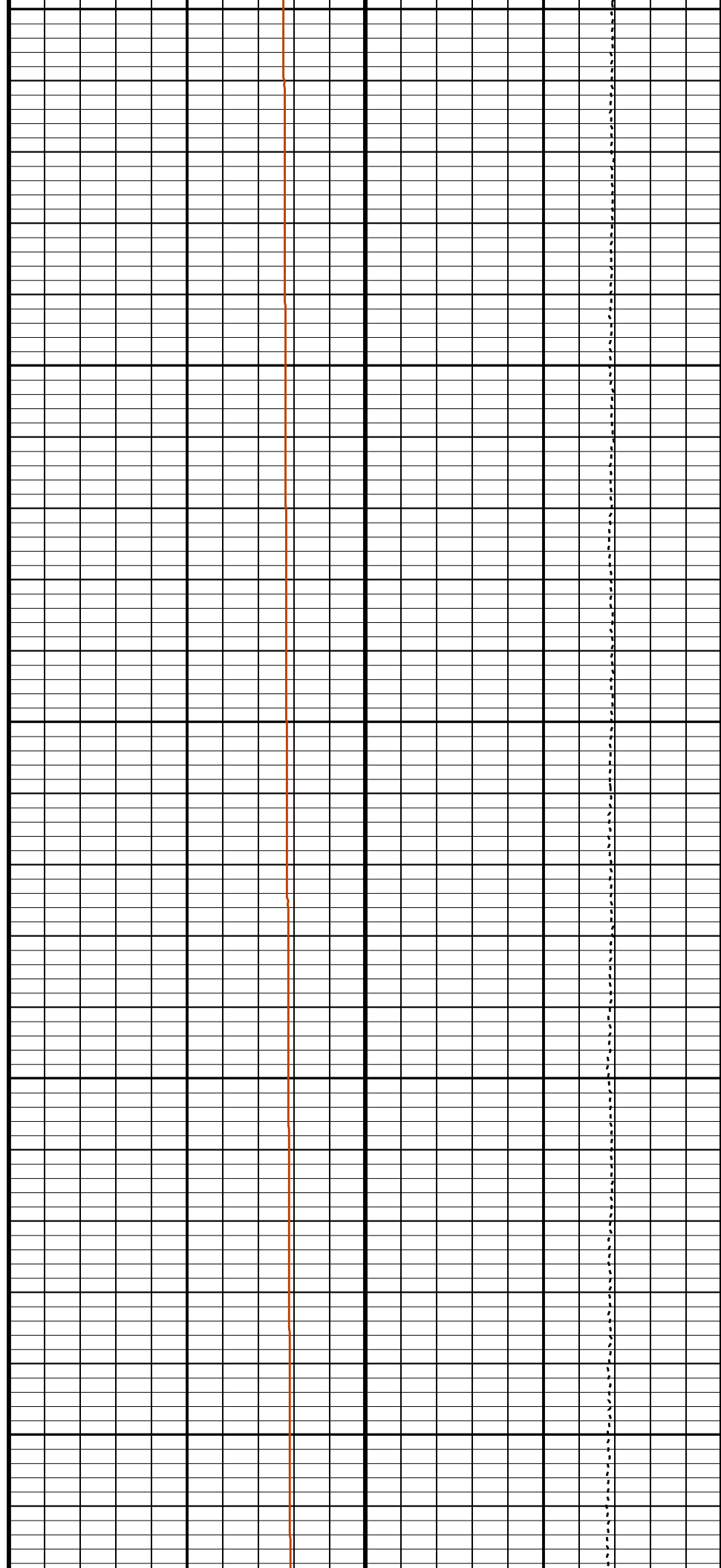
TENS

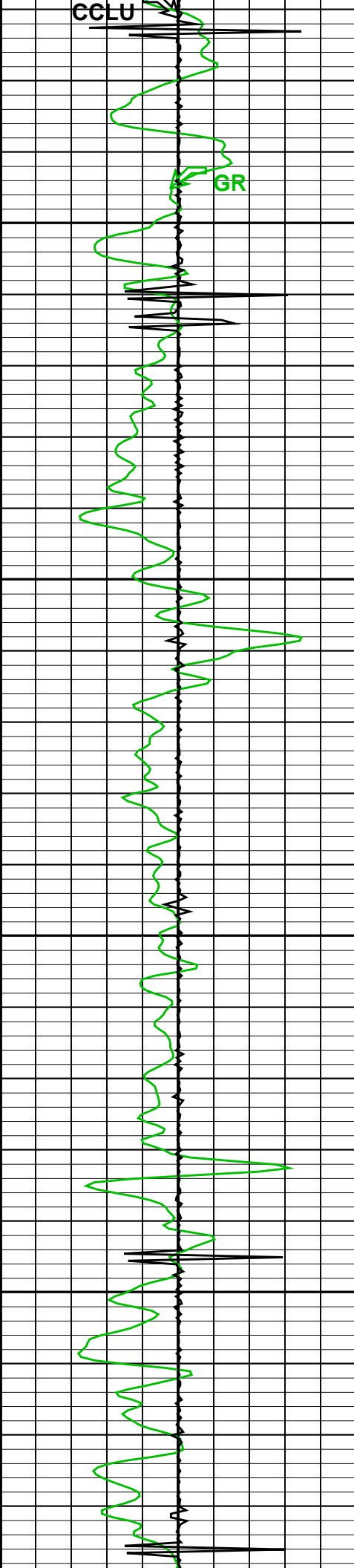


5500

5600

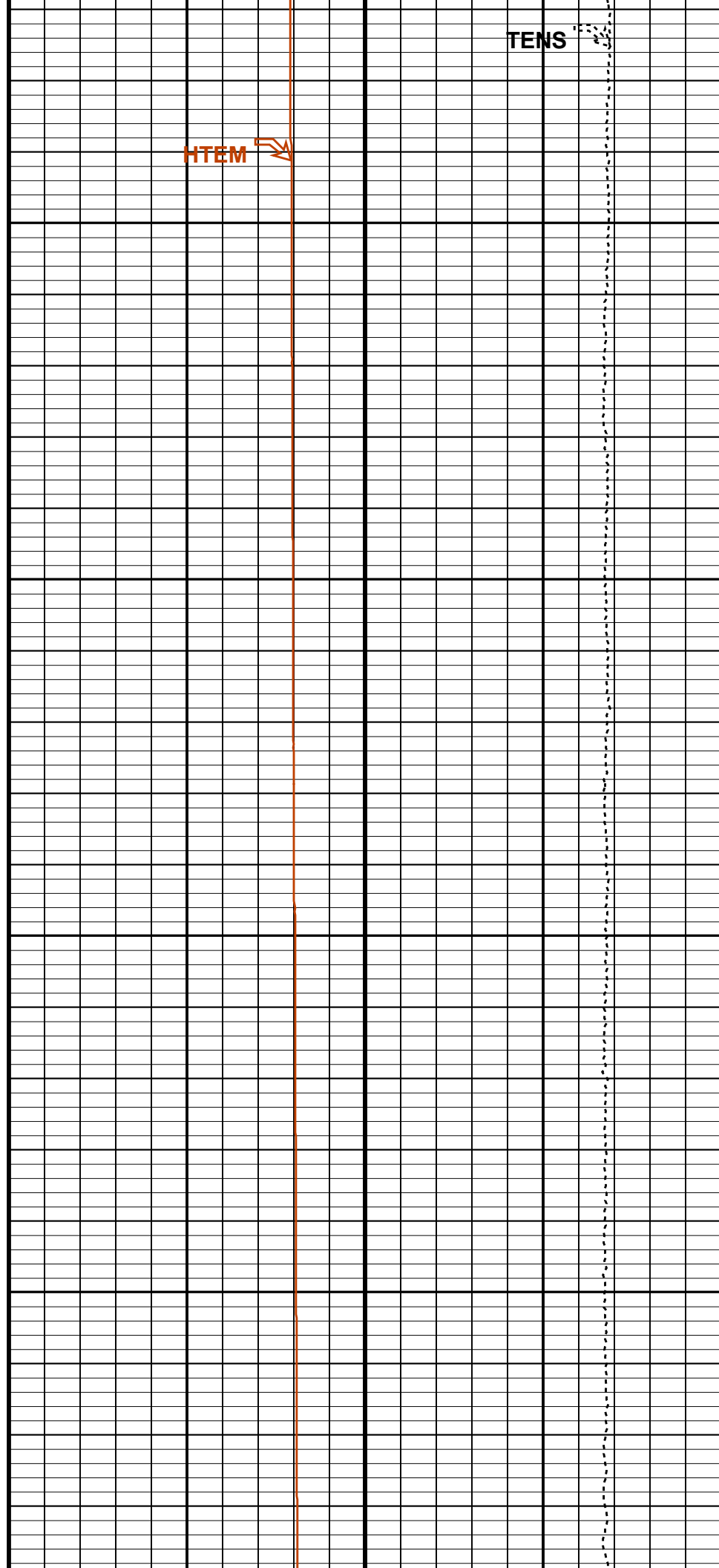
5700

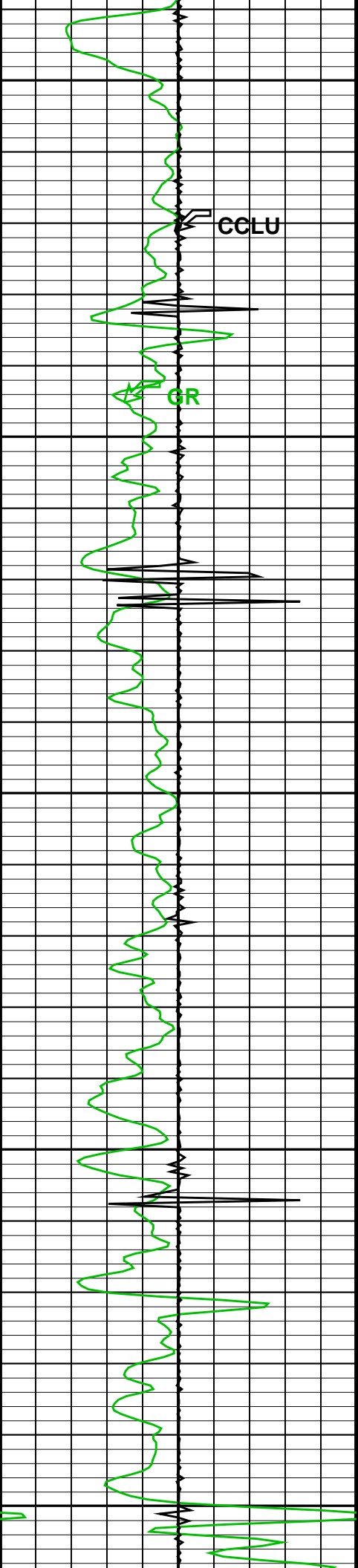




5800

5900





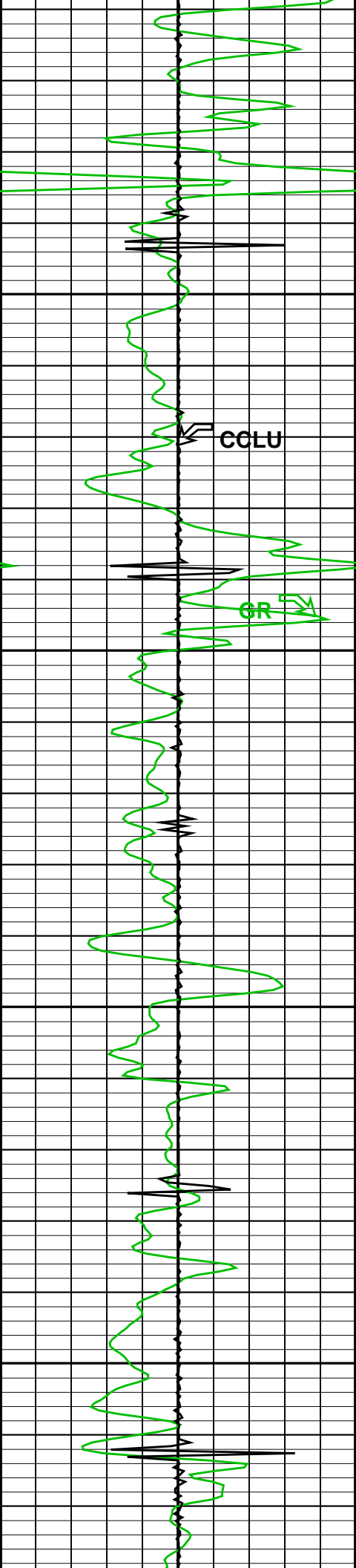
6000

6100

HTEM

TENS

TENS



6200

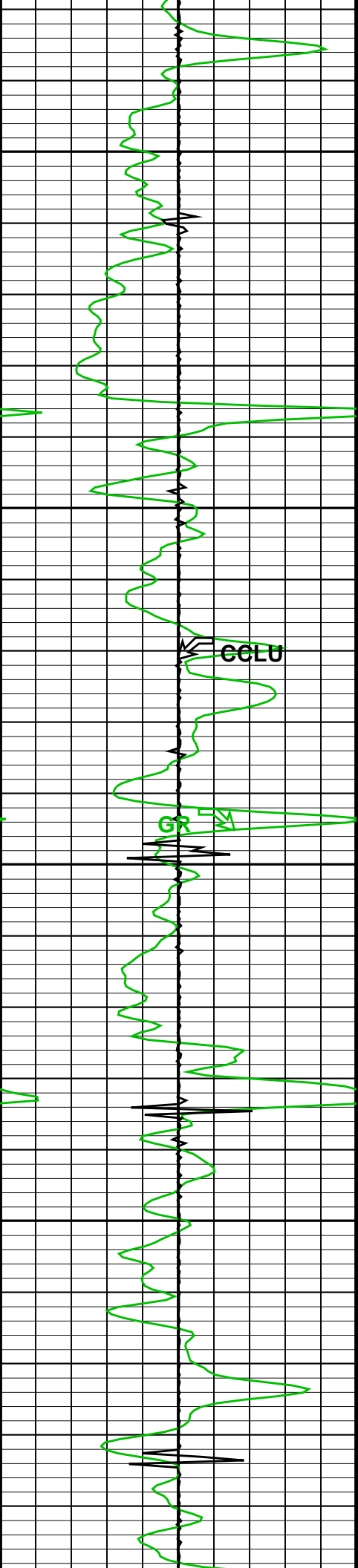
CCLU

GR

6300

HTEM

TENS



6400

6500

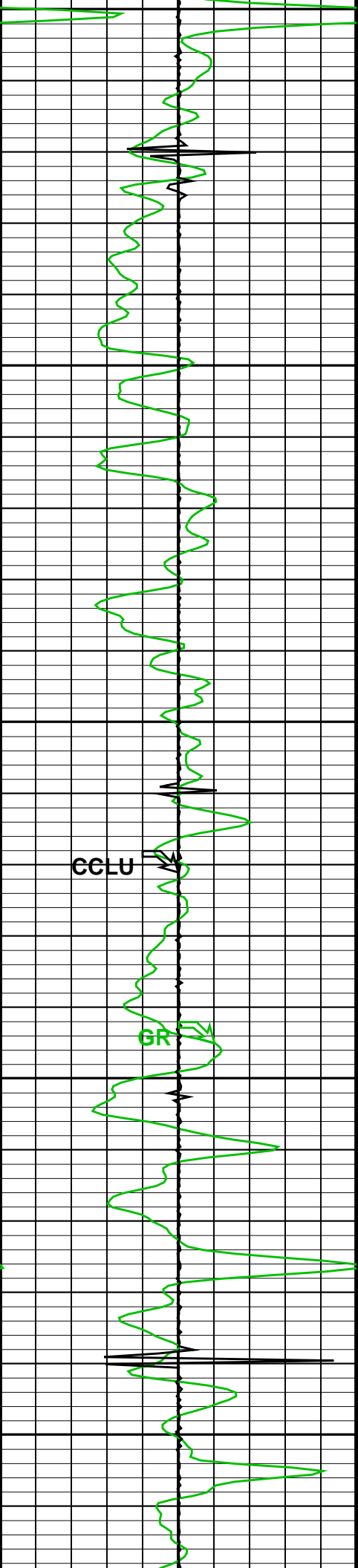
6600

CCLU

G

HTEM

TENS



6600

6700

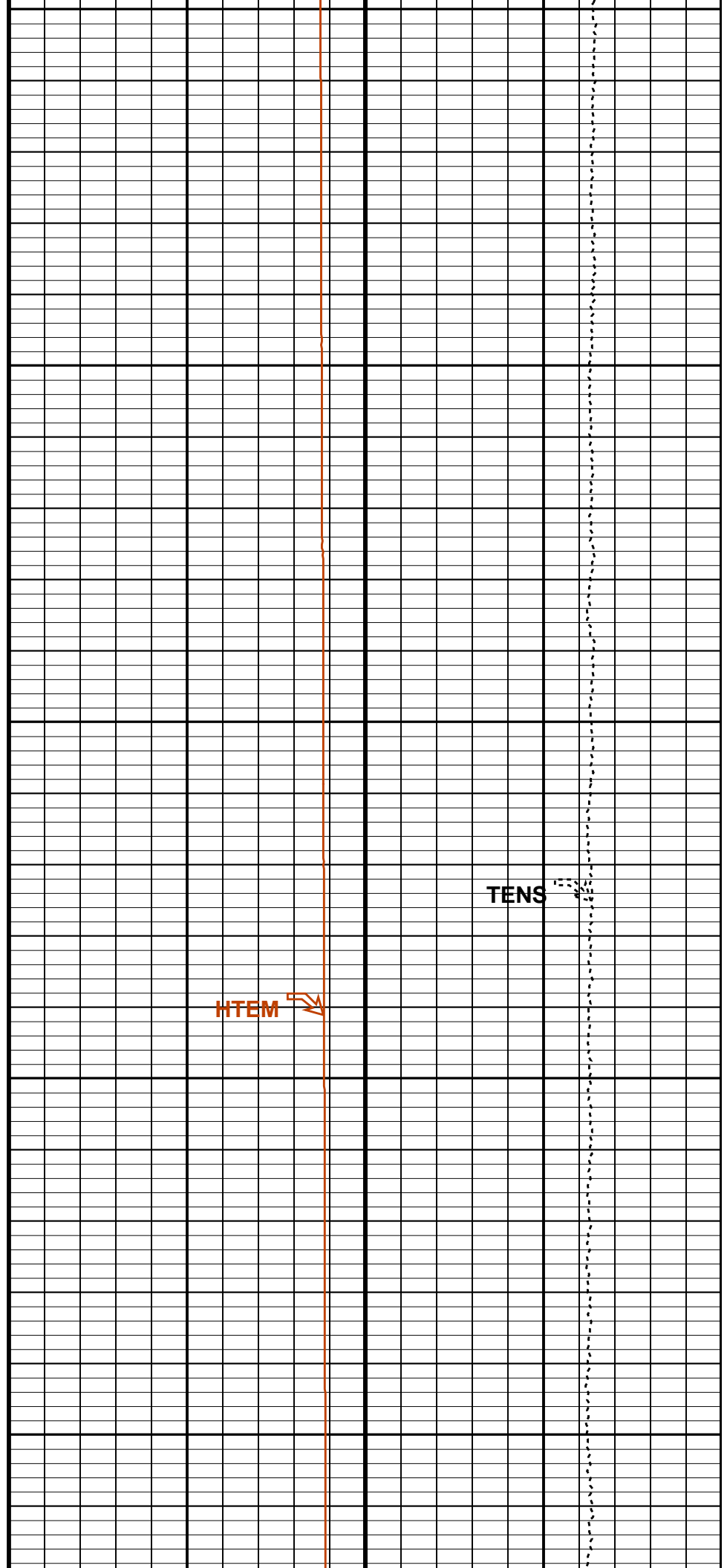
6800

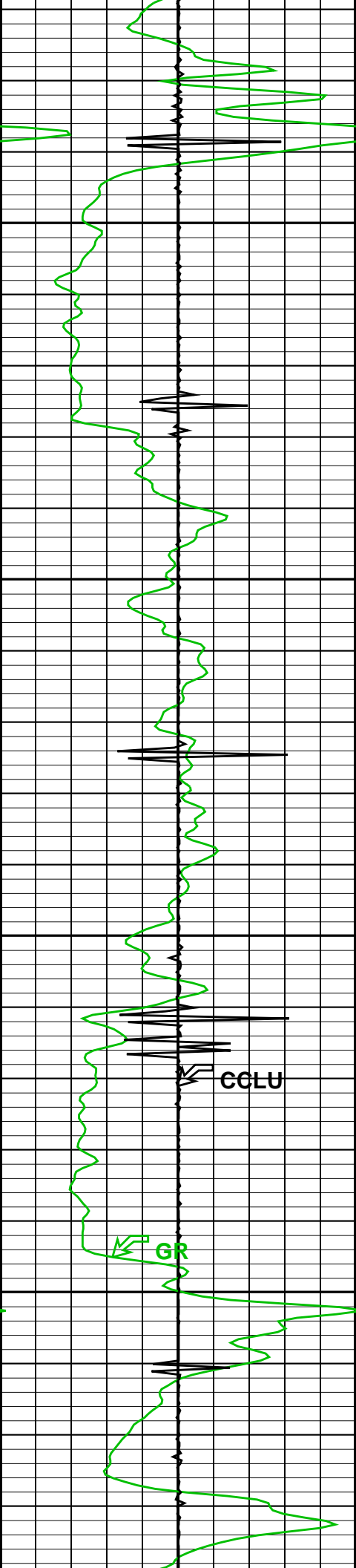
CCLU

GR

HTEM

TENS





6900

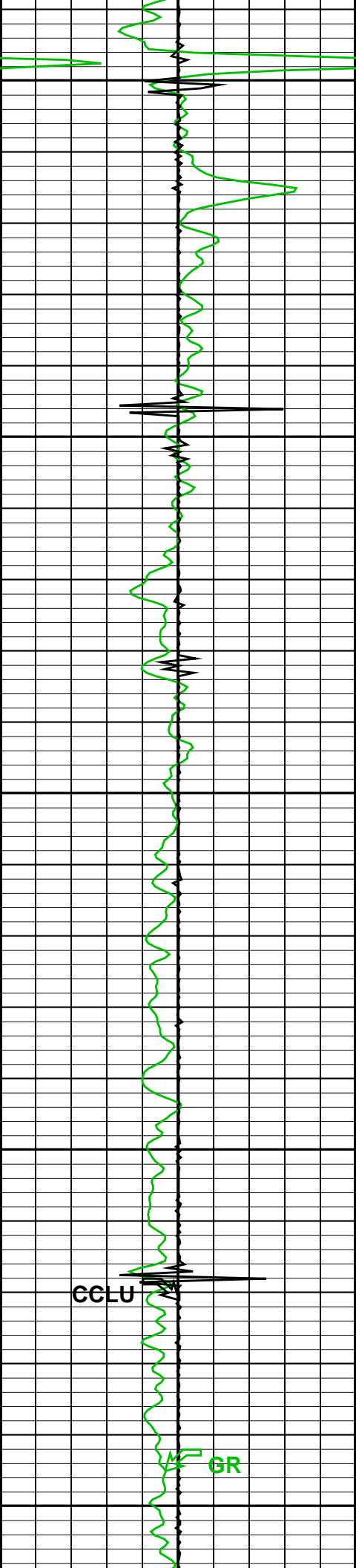
7000

CCLU

GR

HTEM

TENS

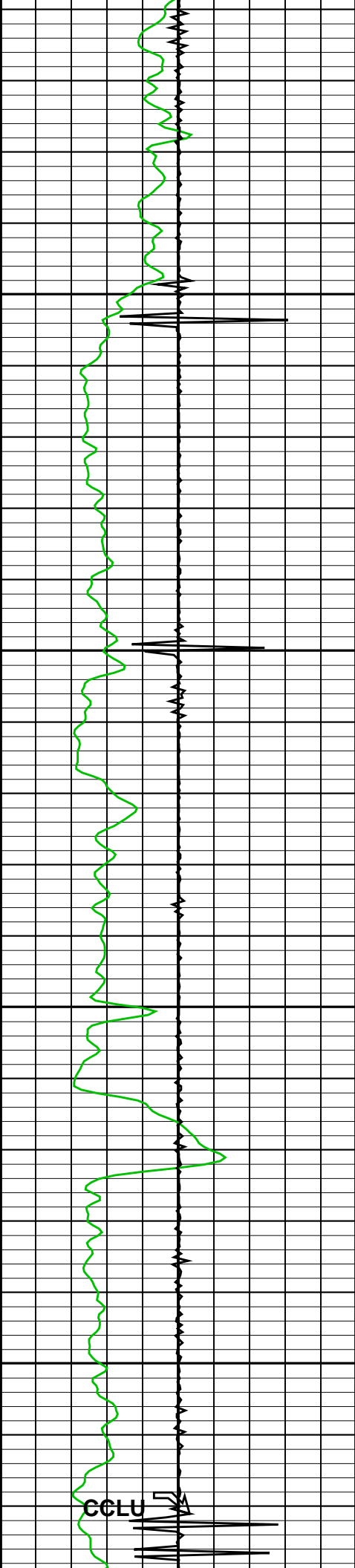


7100

7200

HTEM

TENS

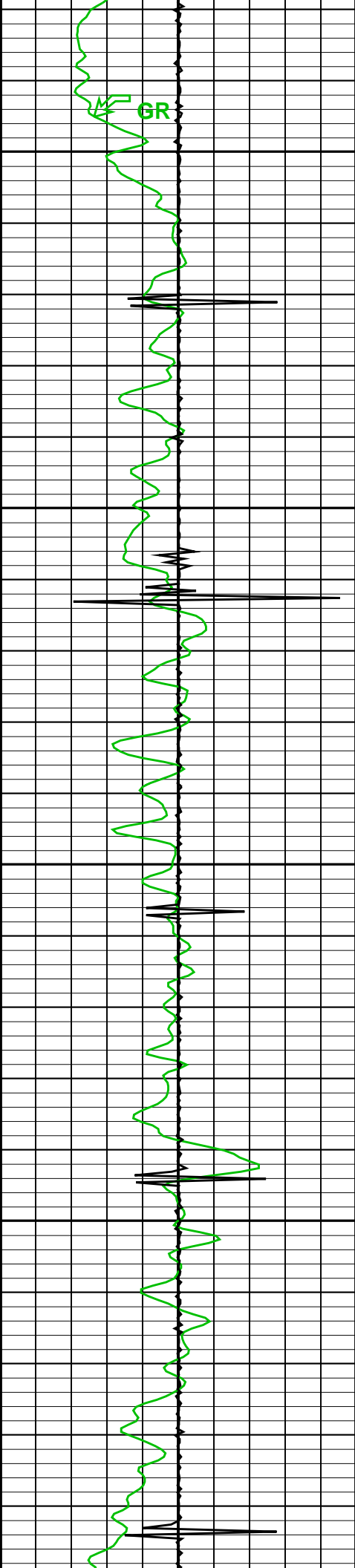


7300

7400

CCLU

TENS



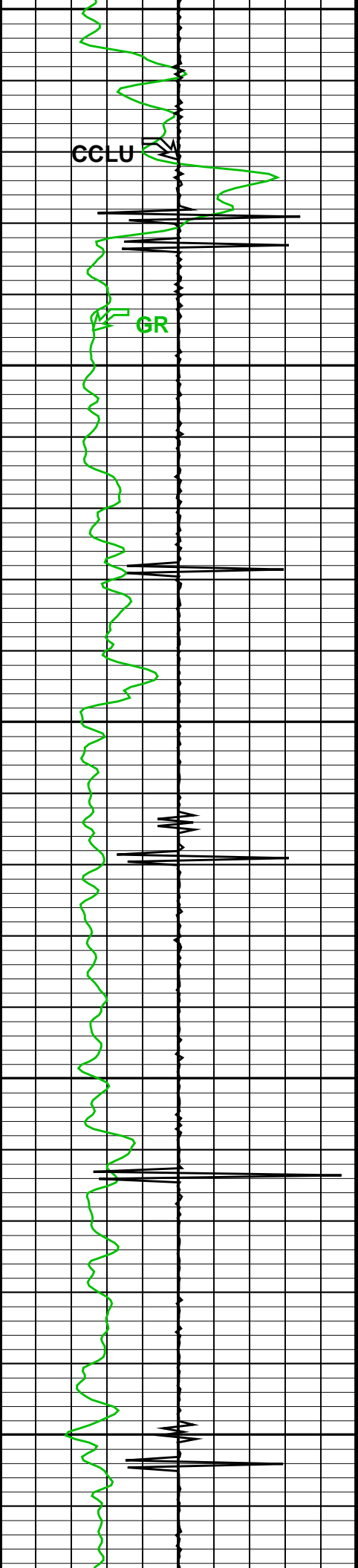
7500

7600

7700

HTEM

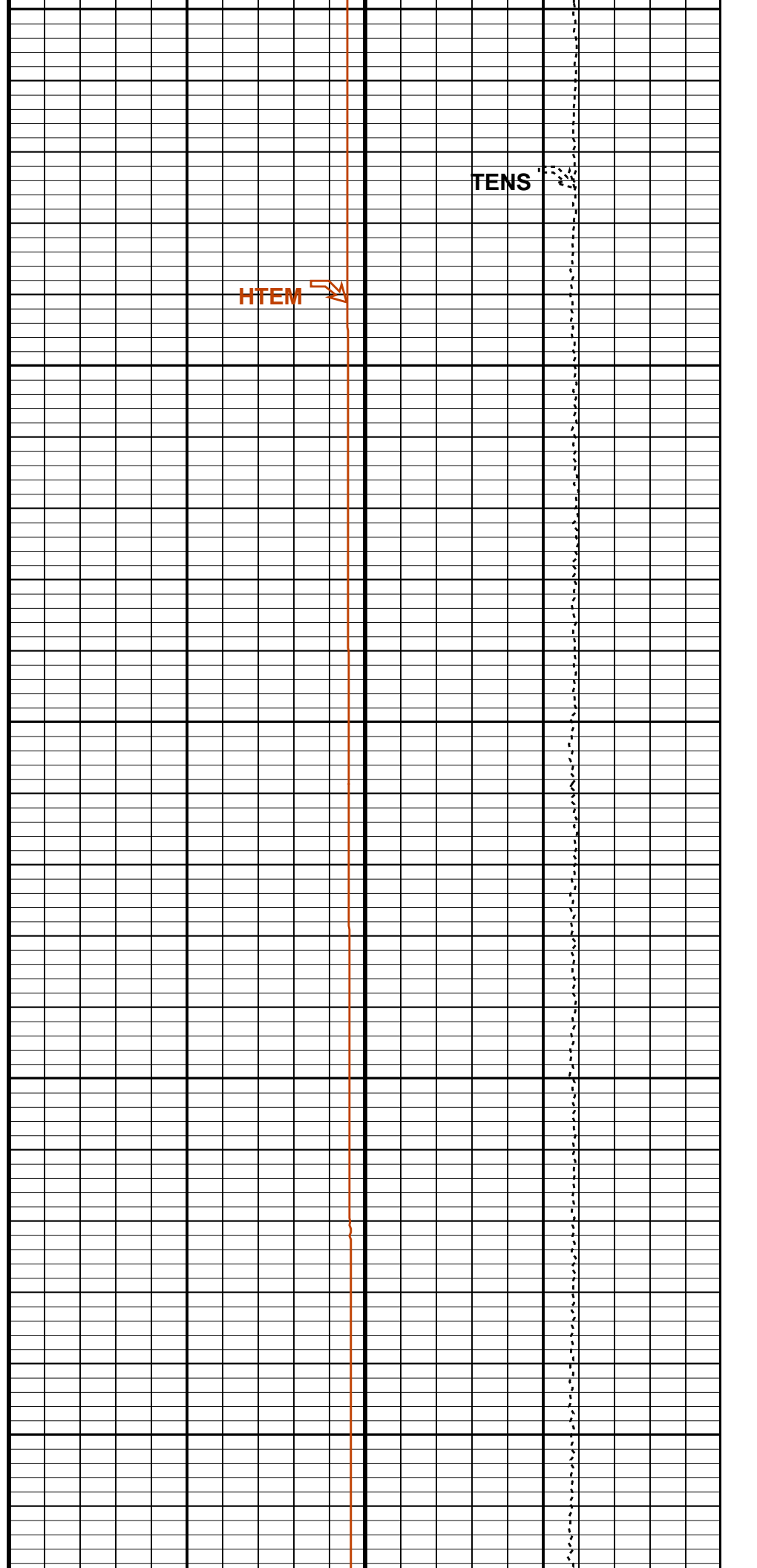


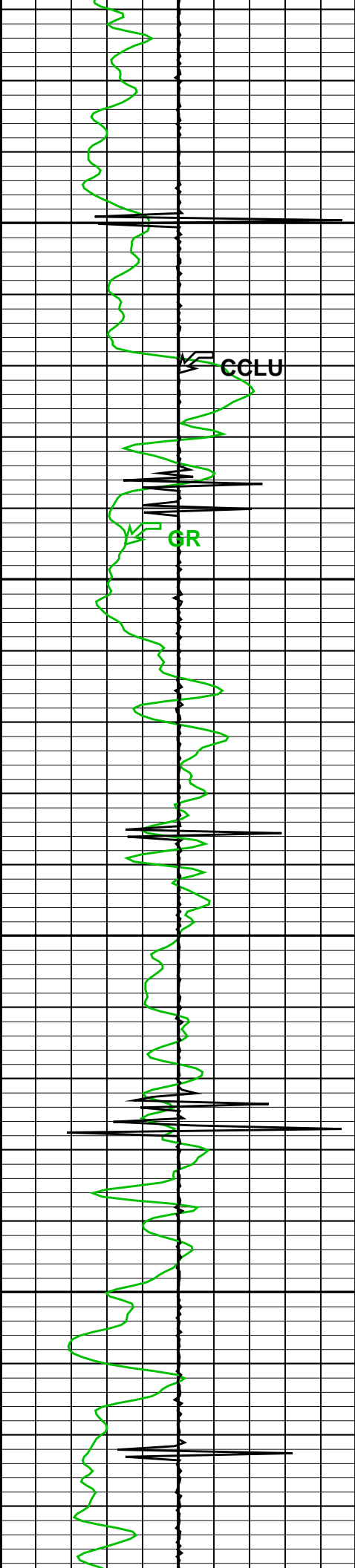


7700

7800

7900



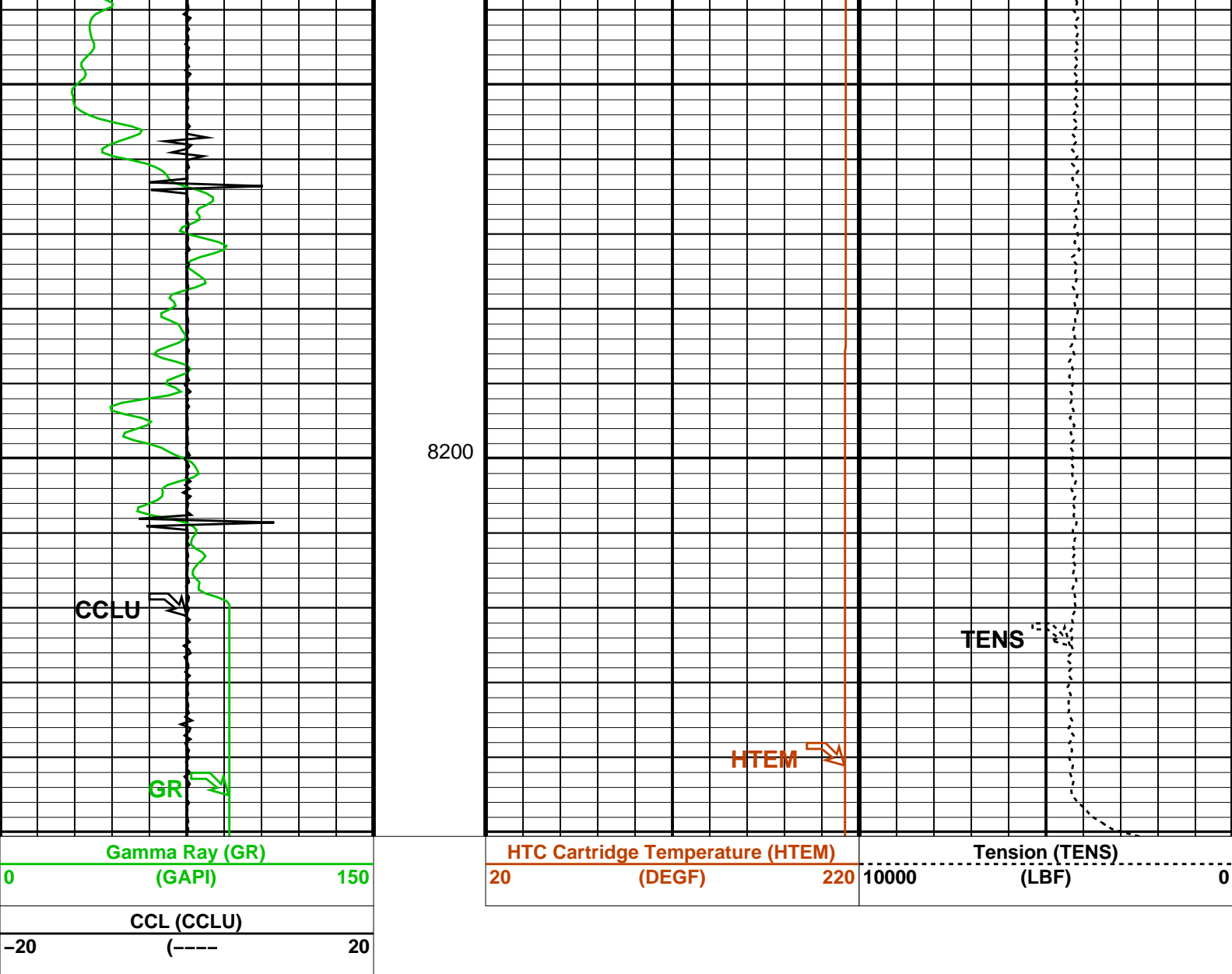


8000

8100

HTEM

TENS



Parameters

DLIS Name

Description

Value

USIT-D: Ultrasonic Imaging - D

AGMN	Minimum Gain of Cartridge	-4	DB
AGMX	Maximum Gain of Cartridge	20	DB
BERJ	Bad Echo Rejection	ON	
CDIA	Casing Outer Diameter	7	IN
CSDE	Casing Density	486.94	LBCF
CSID	Casing Inner Diameter	6.276	IN
DFVL	Default Fluid Velocity	206	US/F
DOT	Diameter of Transducer Sensor	2.874	IN
EMXV	EMEX Voltage	110	V
MW	Mud Weight	8.4	LB/G
RCOD	Reference Calibrator Outer Diameter	7	IN
RCSO	Reference Calibrator Standoff	1.1811	IN
RCTH	Reference Calibrator Thickness	0.2952	IN
TCUB	T^3 Processing Level	Vax_Loop	
THDH	Maximum Search Thickness (percentage of nominal)	130	
THDL	Minimum Search Thickness (percentage of nominal)	70	
THDP	Thickness Detection Policy	Fundamental	
THNO	Nominal Thickness of Casing	0.362	IN
USTO	Ultrasonic Time Offset	-2	US
USUB	Ultrasonic Subassembly Identifier	Sub_7_inch	
UWKM	Ultrasonic Working Mode	5DEG_6IN_136UNF_LF	
VCAS	Ultrasonic Transversal Velocity in Casing	51.4	US/F
WLEN	T^3 Processing Length	21.7078	US
ZCAS	Acoustic Impedance of Casing	46.25	MRAY
ZINI	Initial Estimate of Cement Impedance	-1	MRAY
ZMUD	Acoustic Impedance of Mud	1.85	MRAY
ZTCM	Acoustic Impedance Threshold for Cement	2.6	MRAY
ZTGS	Acoustic Impedance Threshold for Gas	0.3	MRAY

System and Miscellaneous		Acoustic Impedance Threshold for Gas		0.0		MINMAX	
CWEI		Casing Weight		26.00	LB/F		
DO		Depth Offset for Playback		0.0	FT		
PP		Playback Processing		RECOMPUTE			
Format: CORRELATION		Vertical Scale: 5" per 100'		Graphics File Created: 18-Aug-2010 14:37			
OP System Version: 17C0-154							
USIT-D	SRPC-3971-Q1_2010_OP17	HILTH-FTB	SRPC-3971-Q1_2010_OP17				
DTC-H	17C0-154						
Input DLIS Files							
DEFAULT	USI_TLD_MCFL_CNL_011LUP	FN:10	PRODUCER	18-Aug-2010 12:25			
Output DLIS Files							
DEFAULT	USI_TLD_MCFL_CNL_003PUP	FN:2	PRODUCER	18-Aug-2010 14:37			
Company: ExxonMobil Production Corp.							
Schlumberger							
Well: PCU 197-34A7							
Field: Piceance Creek							
County: Rio Blanco							
State: Colorado							
CORRELATION LOG							
GAMMA RAY - CCL							