

Company: Esso Australia Ltd

Well: A7a

Field: Snapper

Rig: Prod 4 / Crane

Country: Australia

7" Mechanical Bridge Plug  
Casing Collar Log  
Plug Set Record

Prod 4 / Crane

Snapper

Gippsland

A7a

Esso Australia Ltd

LOCATION

Gippsland

Basin

Bas Strait

Elev.: K.B. 41.68 m

G.L. -55.00 m

D.F. 41.68 m

Permanent Datum: \_\_\_\_\_

Mean Sea Level \_\_\_\_\_

Elev.: 41.68 m

Log Measured From: \_\_\_\_\_

Kelly Bushing \_\_\_\_\_

-41.68 m above Perm. Datum

Drilling Measured From: \_\_\_\_\_

Kelly Bushing \_\_\_\_\_

State: Victoria

Max. Well Deviation 64 deg

Longitude 148 101 26.72 E

Latitude 038 011 43.23 S

PVT DATA			
Oil Density	Run 1	Run 2	Run 3
Water Salinity			
Gas Gravity			
Bo			
Bw			
1/Bg			
Bubble Point Pressure			
Bubble Point Temperature			
Solution GOR			
Maximum Deviation	64 deg		
CEMENTING DATA			
Primary/Squeeze	Primary		
Casing String No			
Lead Cement Type			
Volume			
Density			
Water Loss			
Additives			
Tail Cement Type			
Volume			
Density			
Water Loss			
Additives			
Expected Cement Top			

Logging Date	23-Jul-2009		
Run Number	1 through 16		
Depth Driller	2984 m		
Schlumberger Depth	2871 m		
Bottom Log Interval	2040 m		
Top Log Interval	2020 m		
Casing Fluid Type	Production Fluids		
Salinity			
Density	1.2 g/cm3		
Fluid Level			
BIT/CASING/TUBING STRING			
Bit Size	9.875 in		
From	730 m		
To	2984 m		
Casing/Tubing Size	7.000 in		
Weight	26 lbn/ft		
Grade	L-80		
From	21.72 m		
To	2984 m		
Maximum Recorded Temperatures	103 degC		
Logger On Bottom	23-Jul-2009	Time	5:49
Unit Number	889	Location	Prod4 / AUSL
Recorded By	B.Parker B.Donahoe		
Witnessed By	G.Rimmer D.Madden		

Logging Date			
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Fluid Type			
Salinity			
Density			
Fluid Level			
BIT/CASING/TUBING STRING			
Bit Size			
From			
To			
Casing/Tubing Size			
Weight			
Grade			
From			
To			
Maximum Recorded Temperatures			
Logger On Bottom		Time	
Unit Number		Location	
Recorded By			
Witnessed By			

DEPTH SUMMARY LISTING	
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Date Created: 24-JUL-2009 10:55:42

Depth System Equipment	
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Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-EB	Type:	PSDS/OSDS	Type:	2-32ZT
Serial Number:	6373	Serial Number:	325357	Serial Number:	208196
Calibration Date:	2-Dec-2008	Calibration Date:	20-Jul-2009	Length:	5100 M
Calibrator Serial Number:	30	Calibrator Serial Number:	1167		
Calibration Cable Type:	2-32ZT	Number of Calibration Points:	10	Conveyance Method:	Wireline
Wheel Correction 1:	-1	Calibration RMS:	10	Rig Type:	Offshore Fixed
Wheel Correction 2:	-2	Calibration Peak Error:	19		

Depth Control Parameters	
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Log Sequence:	Subsequent Log In the Well
Reference Log Name:	ExxonMobil Composite Log
Reference Log Run Number:	N/A
Reference Log Date:	18-May-2008

Depth Control Remarks	
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1. All Schlumberger depth procedures followed.
2. IDW used as primary depth reference, Z chart used as secondary.
3. CMTD used as primary tension device.

**DISCLAIMER**

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OTHER SERVICES1
OS1:    Powercutter
OS2:
OS3:

## REMARKS: RUN NUMBER 1

Log correlated to ExxonMobil Composite Log 18-May-2009, supplied with the logging program.

Maximum well deviation = 64deg @ 1749m MDPKB.



















Maximum recorded temperature 217 degF.

	Plug 1- Top of seal @ 2855m MDKB	
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Set 7" 26lb/ft MPBT with top of seal @ 2855m MDKB and dump approx 0.9m of cement. CCL Stop depth = 2847.8m

Plug 2 – Top of seal @ 2760m MDKB

Set 7" 36lb/ft MPRT with top of seal @ 2760m MDKB and dump approx 0.9m of cement. CCL Stop Depth = 2752.8m

Set 7" 26lb/ft MPBT with top of seal @ 2760m MDKB and dump approx 0.9m of cement. CCL Stop Depth = 2752.8m					
Plug 3 - Top of Seal @ 2235m MDKB					
Set 7" 26lb/ft MPBT with top of seal @ 2235m MDKB and dump approx 0.9m of cement. CCL Stop Depth = 2227.8m					
CCL to top of seal 7.1m					
After Pressure testing well is complete, RIH 8 times to 1m above calculated top of cement with 2 1/8" dump bailer. On completion TOC estimated at 2226.8 MDKB.					
Crew: J Light, N Simmons, R Murray, B Taylor.					
RUN 1 SERVICE ORDER #: B297-00011 PROGRAM VERSION: 16C0-147 FLUID LEVEL:			RUN 2 SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP
EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		
SURFACE EQUIPMENT			SURFACE EQUIPMENT		
MPBM 16			WITM (SHM)		
DOWNHOLE EQUIPMENT			DOWNHOLE EQUIPMENT		
AH-SWBS-B AH-SWBS-B 785		13.43	AH-SWBS-B AH-SWBS-B 785		16.08
AH-SWBS-B AH-SWBS-B 786		12.75	AH-SWBS-B AH-SWBS-B 786		15.39
AH-SWBS-B AH-SWBS-B 787		12.06	AH-SWBS-B AH-SWBS-B 787		14.71
AH-SWBS-B AH-SWBS-B 788		11.38	AH-SWBS-B AH-SWBS-B 788		14.02
AH-SWBS-B AH-SWBS-B 789		10.69	AH-SWBS-B AH-SWBS-B 789		13.34
MH-SWHS-A MH-SWHS-A 759		10.01	MH-SWHS-A		12.65
CCL-L CCL-L 9851		TOOL ZERO	CCL-L CCL-L		TOOL ZERO
MPSU-CA MPSU-CA 1011		9.20	SHM_GUN GUN		11.85
 CCL Tachomete Cable Cur Head Volt Tension			 Tension CCL		
CCL to top of seal 7.1m			CCL to bottom of bailer 12.1m		

MPEX-BA  
MPEX-BA

2.79

TOOL BOTTOM

MAXIMUM STRING DIAMETER 2.13 IN  
MEASUREMENTS RELATIVE TO TOOL ZERO  
ALL LENGTHS IN METERS

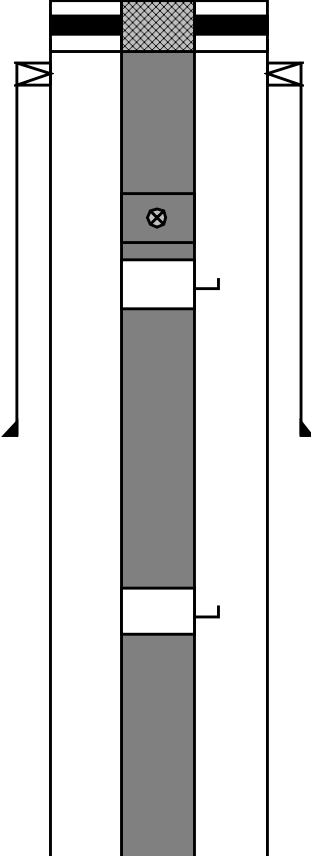
TOOL BOTTOM

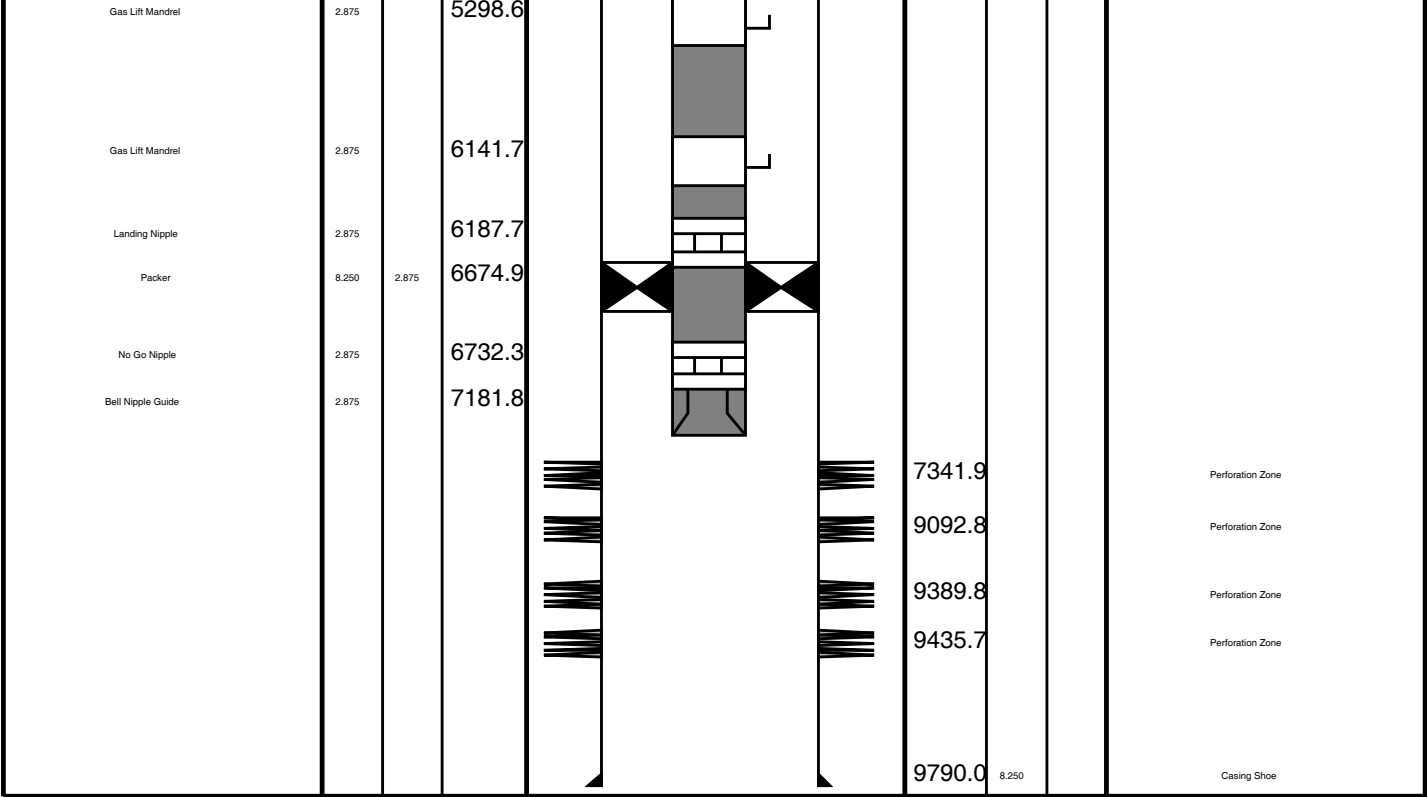
MAXIMUM STRING DIAMETER 2.13 IN  
MEASUREMENTS RELATIVE TO TOOL ZERO  
ALL LENGTHS IN METERS

Client: Esso Australia Ltd  
Well: A7a  
Field: Snapper  
State: Victoria  
Country: Australia

Drawing Date: 7/21/2009  
API #:

Rig Name:  
Reference Datum: Drill Floor  
Elevation: 41.6 ft

Production String	(in)		(ft)	Well Schematic	(ft)			Casing String
	OD	ID			MD	OD	ID	
Tubing Hanger	3.5	2.875	68.9		0.0	8.250		Casing String
Tubing	2.875		68.9		136.7	10.750		Casing String
					136.7	8.250	10.750	Liner Hanger
Shutin Valve	2.875		1475.1					
Gas Lift Mandrel	2.875		1629.3					
Gas Lift Mandrel	2.875		3605.6		2395.0	10.750		Casing Shoe



Plug # 3 Cement Dump Pass

MAXIS Field Log

Company: Well:

Input DLIS Files

DEFAULT Flip\_PERFO\_114LUP PRODUCER 23-Jul-2009 21:41 2224.3 M 2185.0 M

Output DLIS Files

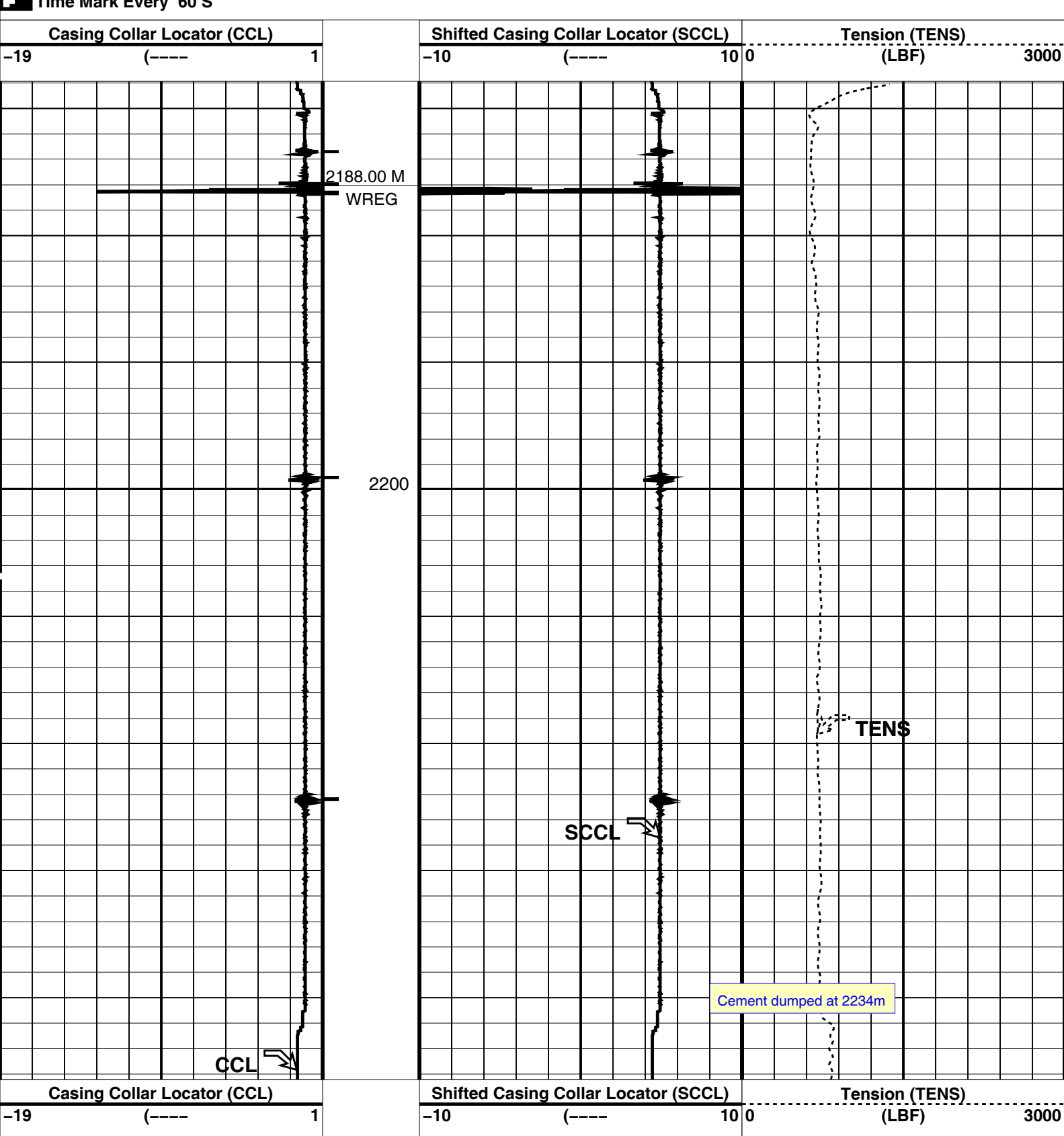
DEFAULT PERFO\_115PUP FN:118 PRODUCER 23-Jul-2009 21:44 2223.2 M 2183.9 M

OP System Version: 16C0-147  
MCM

SHM\_GUN 16C0-147 CCL-L 16C0-147

PIP SUMMARY

Time Mark Every: 60 S  
Casing Collars



PIP SUMMARY

Time Mark Every 60 S

— Casing Collars

Parameters

DLIS Name	Description	Value	
CCLD	CCL-L: Casing Collar Locator	12	IN
CCLT	CCL reset delay	0.3	V
	CCL Detection Level		
	System and Miscellaneous		
DO	Depth Offset for Playback	-1.0	M
PP	Playback Processing	NORMAL	

OP System Version: 16C0-147						
MCM						
SHM_GUN	16C0-147	CCL-L	16C0-147			
Input DLIS Files						
DEFAULT	Flip_PERFO_114LUP	PRODUCER	23-Jul-2009 21:41	2224.3 M	2185.0 M	
Output DLIS Files						
DEFAULT	PERFO_115PUP	FN:118	PRODUCER	23-Jul-2009 21:44		

Schlumberger

Plug # 3 Setting Record

Top Of Seal @ 2235m MDKB

MAXIS Field Log

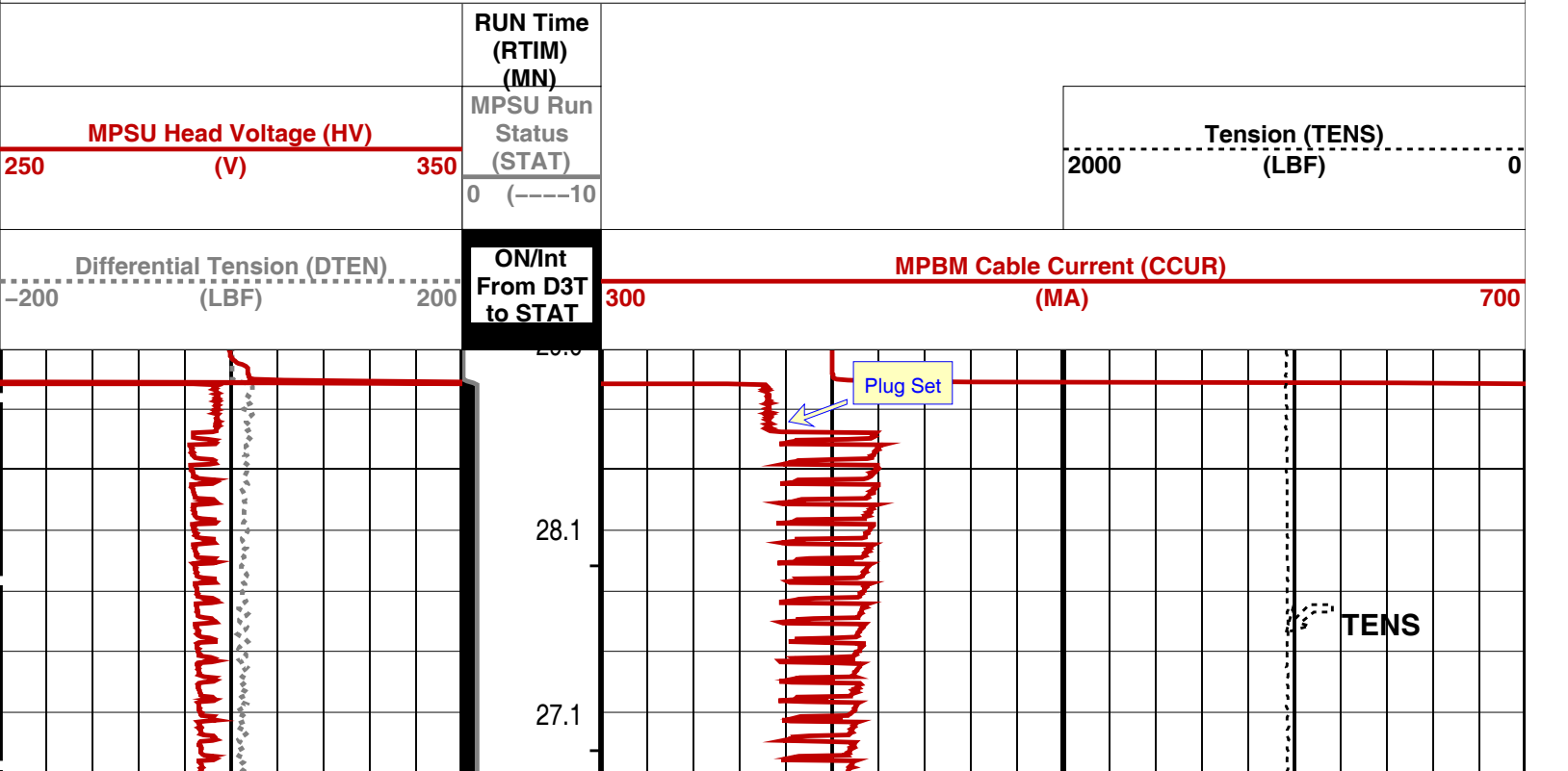
Output DLIS Files					
DEFAULT	MPBT_101LUP	FN:106	PRODUCER	23-Jul-2009 18:20	
OP System Version: 16C0-147					
MCM					
MPEX-BA	16C0-147		MPSU-CA	16C0-147	
CCL-L	16C0-147				

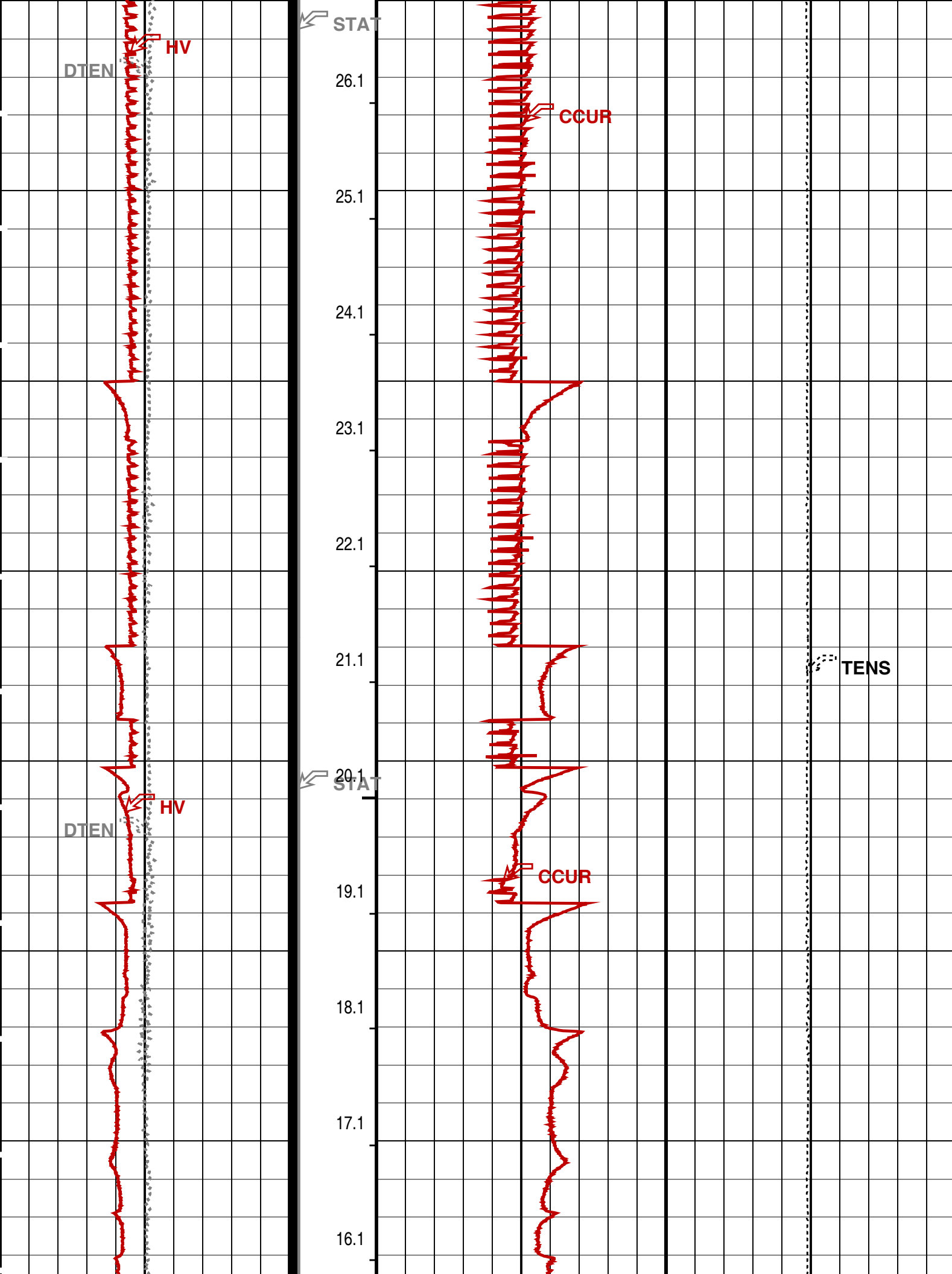
PIP SUMMARY

↵ MPSU Run Time Every 1 MN

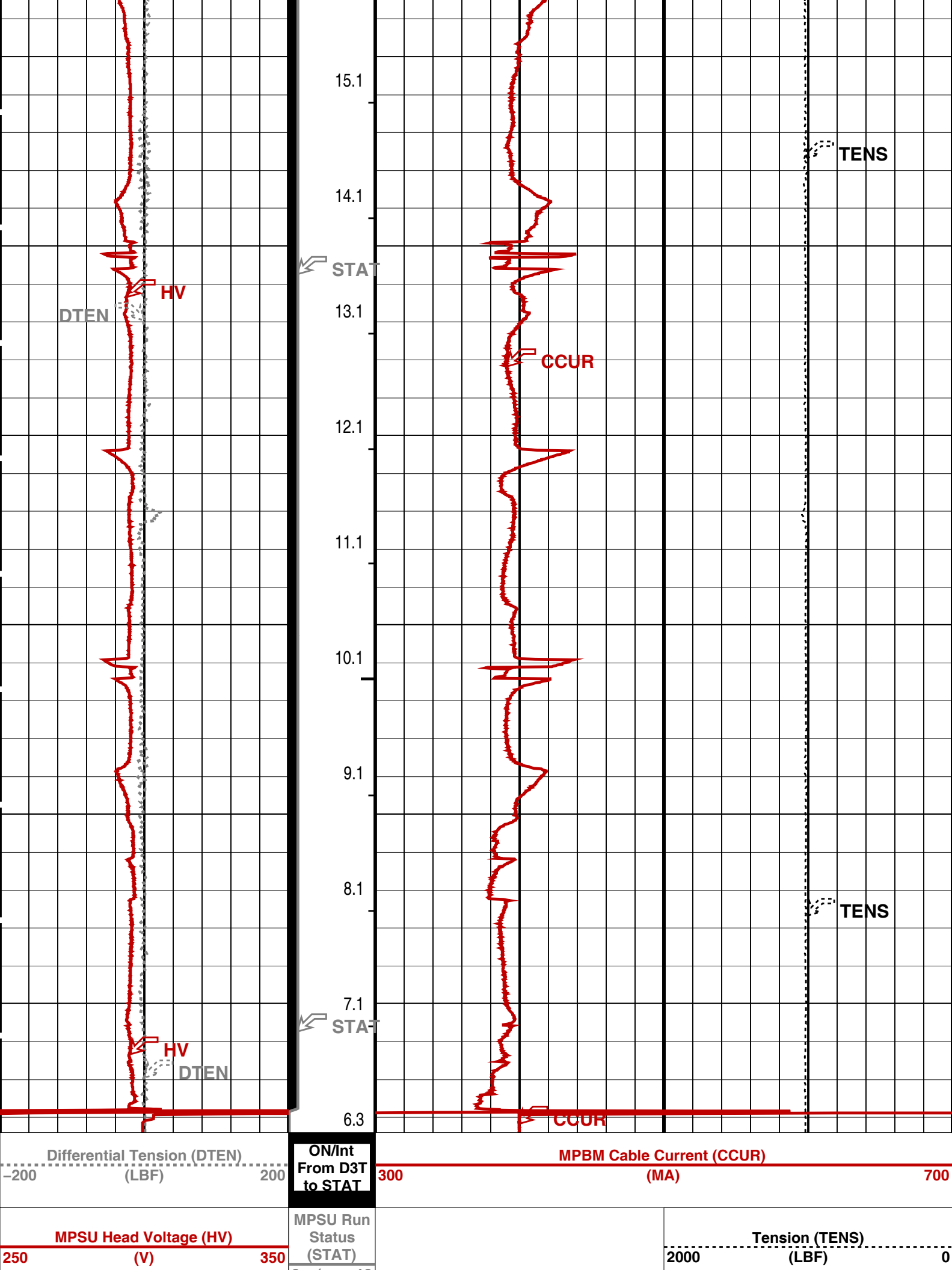
↵ MPSU Run Time Every 10 MN

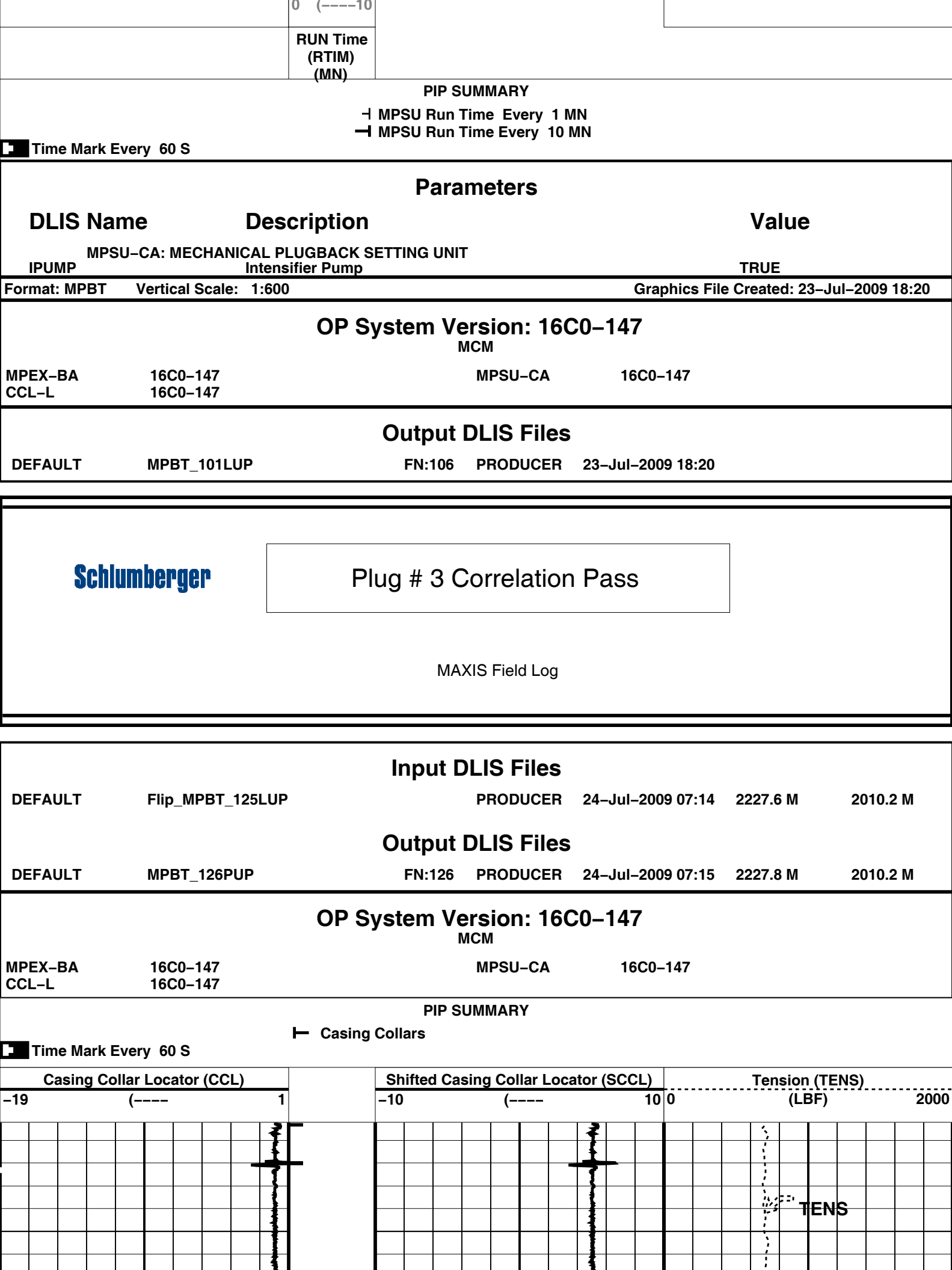
Time Mark Every 60 S

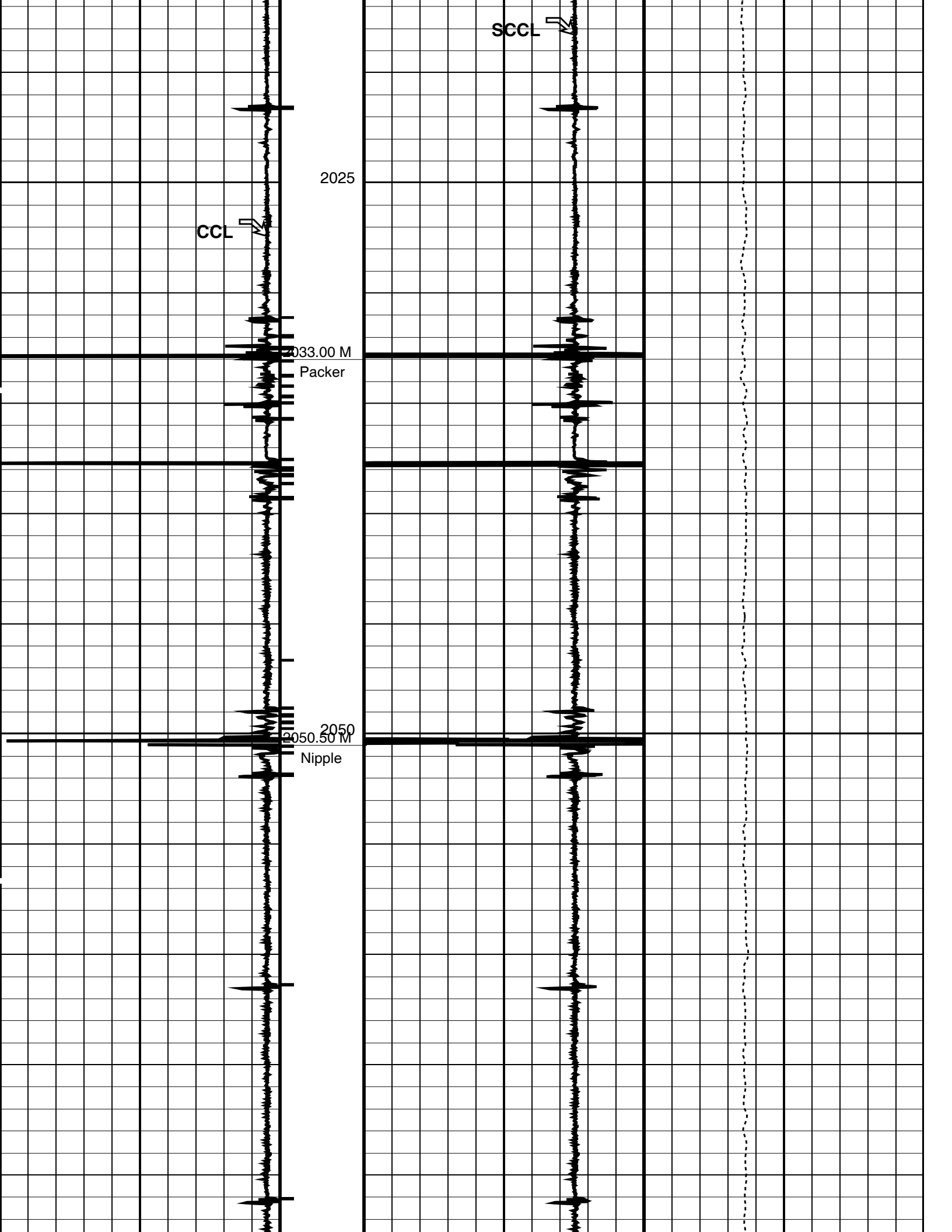


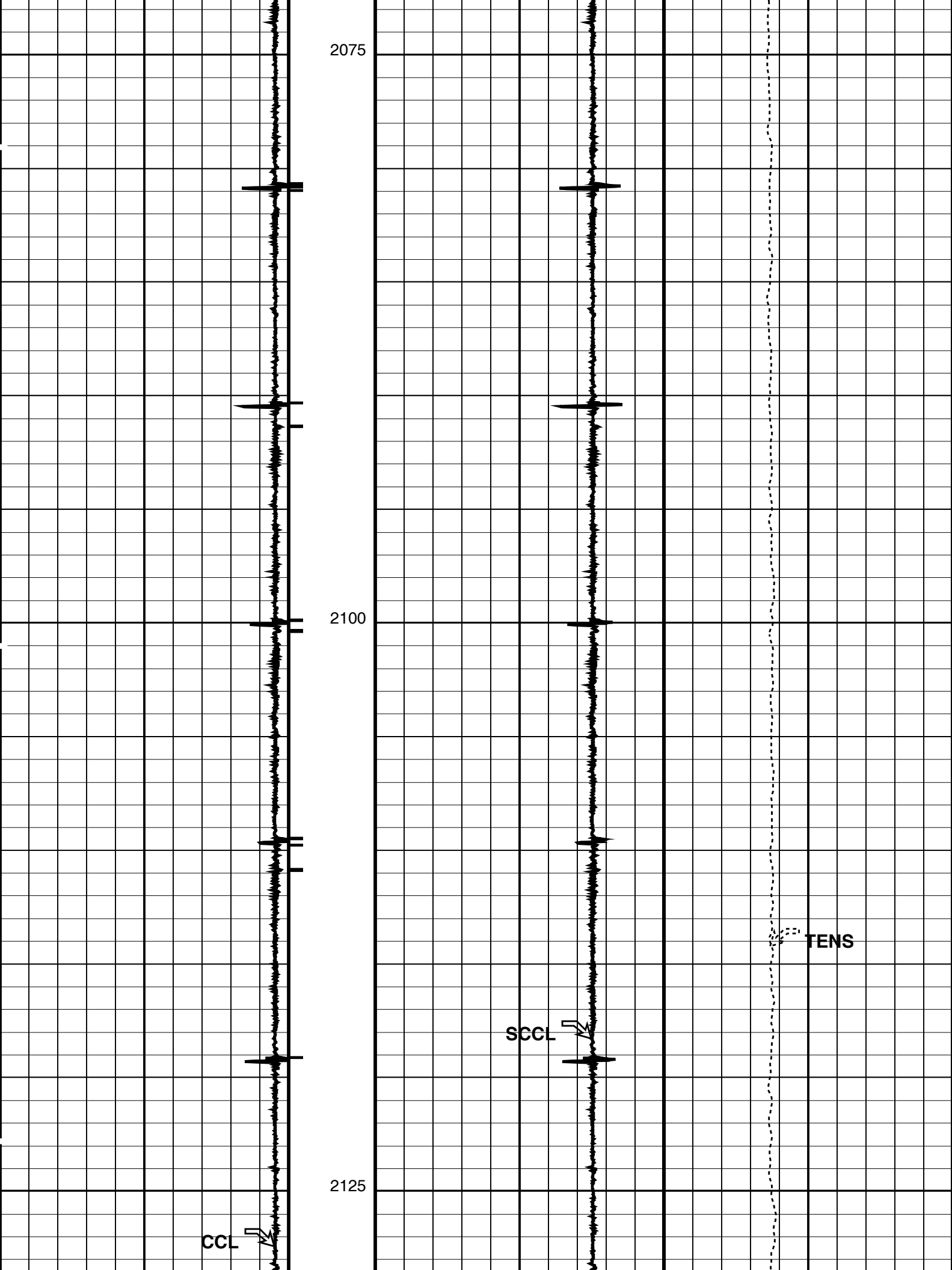












2075

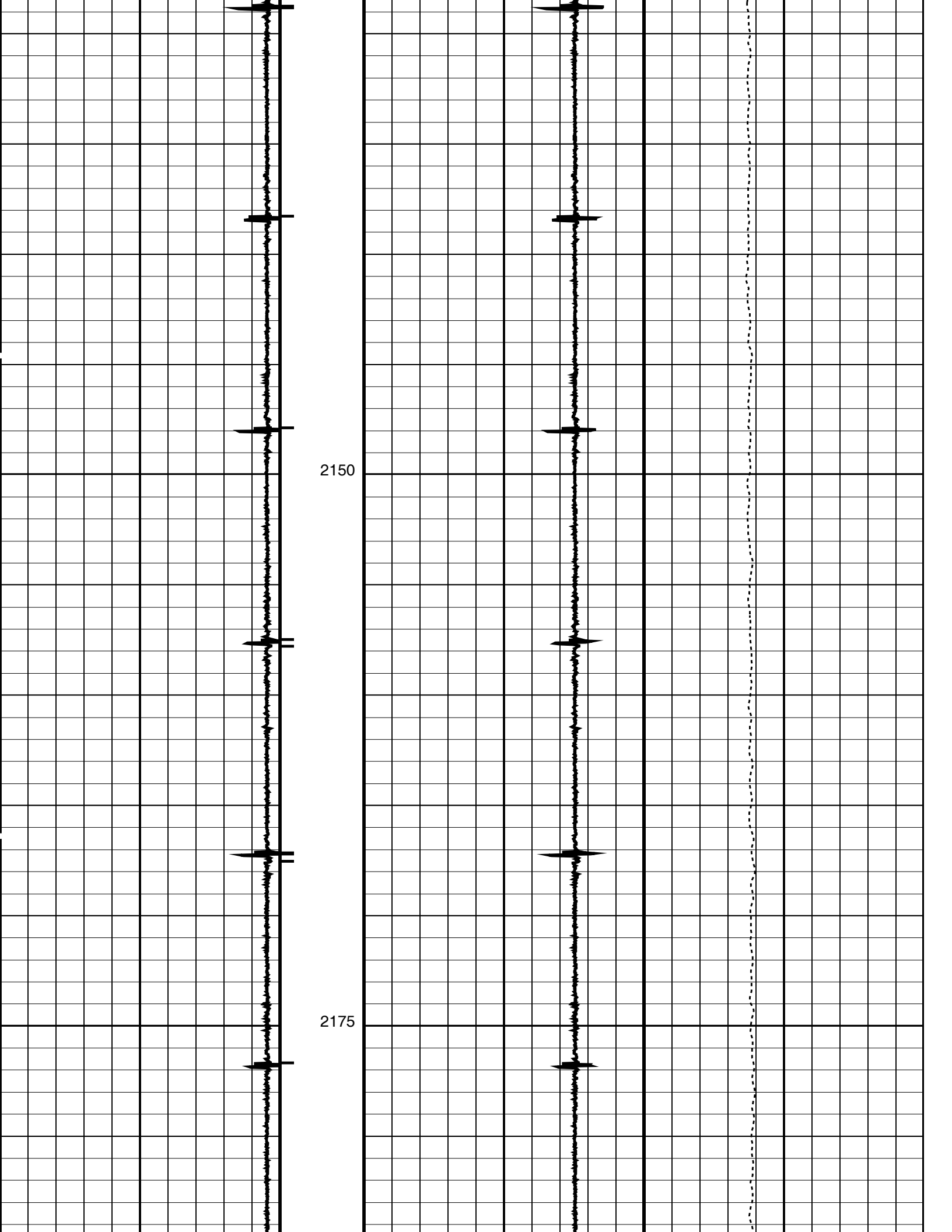
2100

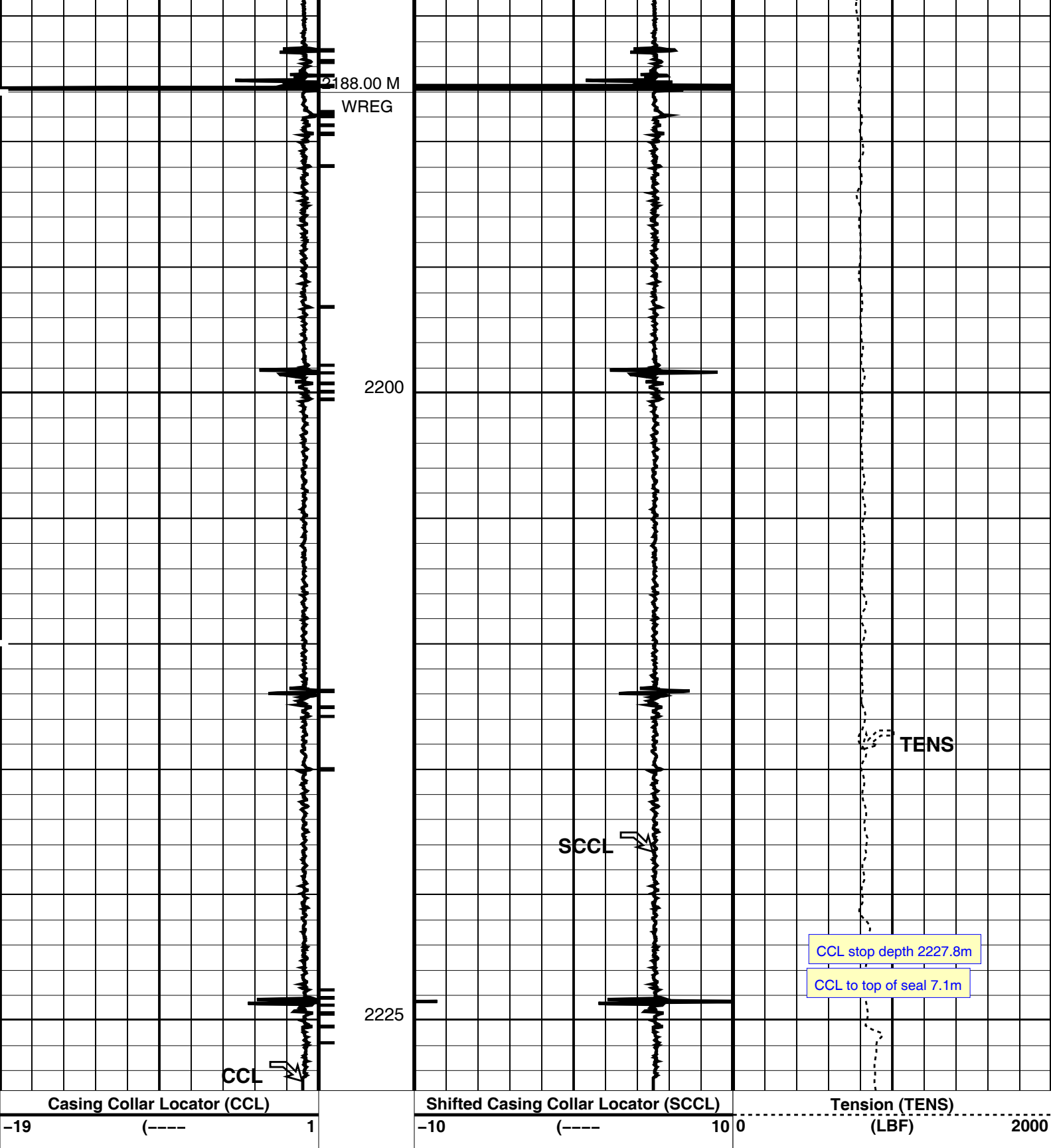
2125

CCL

SCC

TENS






PIP SUMMARY		
Time Mark Every 60 S		
Casing Collars		

Parameters		
DLIS Name	Description	Value
CCLD	CCL-L: Casing Collar Locator	
CCLT	CCL reset delay	12 IN
	CCL Detection Level	0.3 V
System and Miscellaneous		
DO	Depth Offset for Playback	0.0 M

PP	Playback Processing	NORMAL
Format: PERFO	Vertical Scale: 1:200	Graphics File Created: 24-Jul-2009 07:15
<div>OP System Version: 16C0-147</div> <div>MCM</div> <div> <div>MPEX-BA16C0-147</div> <div>CCL-L16C0-147</div> <div>MPSU-CA16C0-147</div> </div>		
<div>Input DLIS Files</div> <div> <div>DEFAULT</div> <div>Flip_MPBT_125LUP</div> <div>PRODUCER</div> <div>24-Jul-2009 07:14</div> <div>2227.6 M</div> <div>2010.2 M</div> </div>		
<div>Output DLIS Files</div> <div> <div>DEFAULT</div> <div>MPBT_126PUP</div> <div>FN:126</div> <div>PRODUCER</div> <div>24-Jul-2009 07:15</div> </div>		

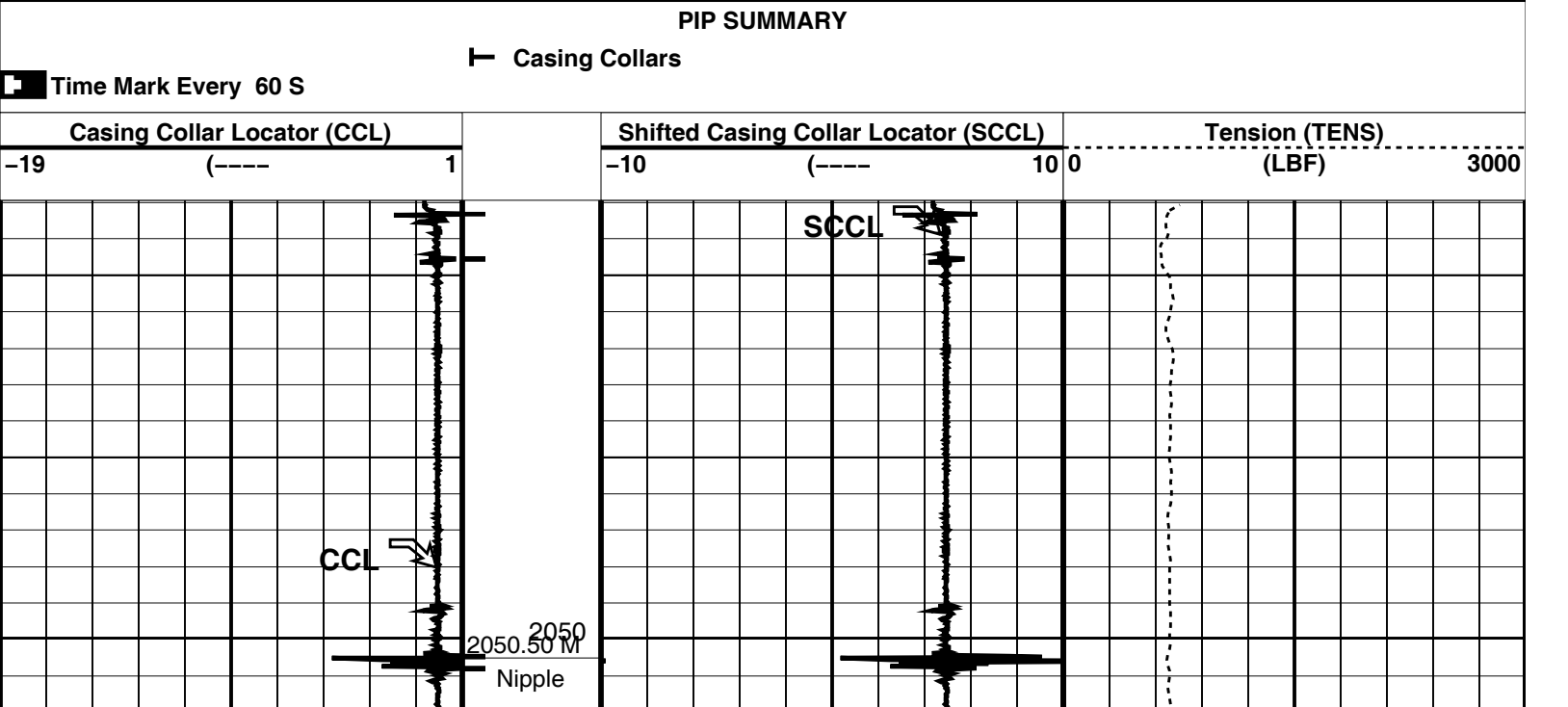


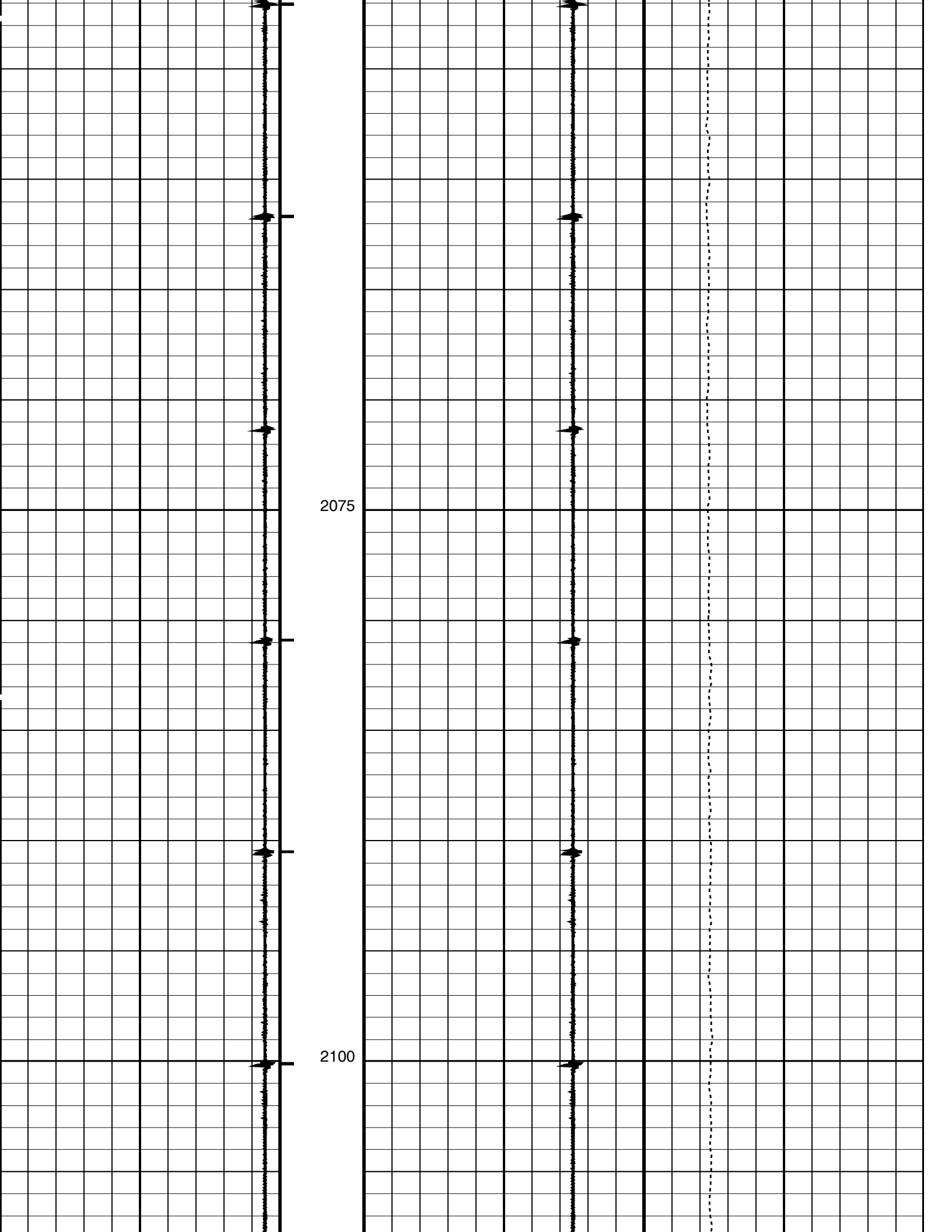
Plug # 2 Cement Dump Pass

MAXIS Field Log

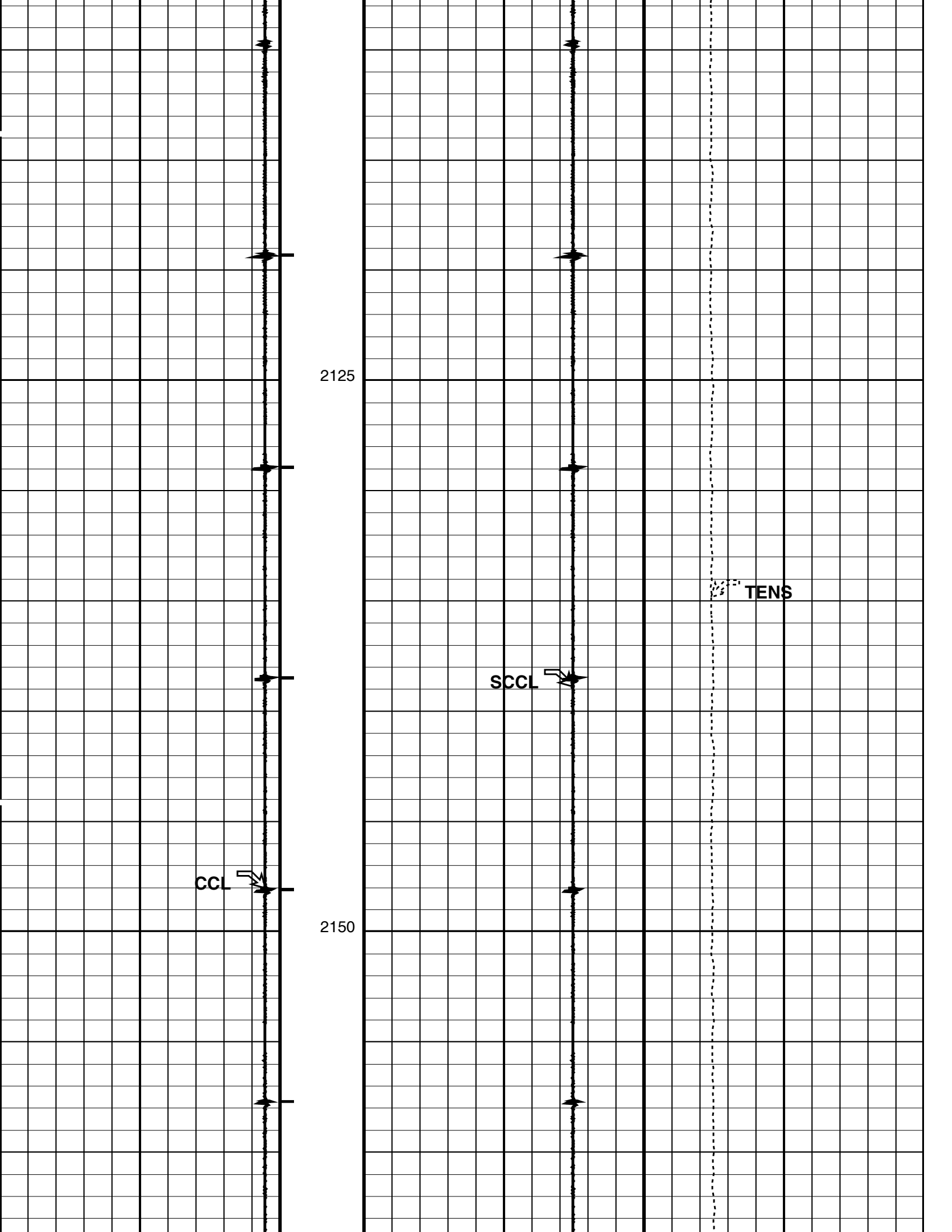
Company:	Well:
<div>Input DLIS Files</div> <div> <div>DEFAULT</div> <div>Flip_PERFO_086LUP</div> <div>PRODUCER</div> <div>23-Jul-2009 15:32</div> <div>2748.4 M</div> <div>2037.9 M</div> </div>	
<div>Output DLIS Files</div> <div> <div>DEFAULT</div> <div>PERFO_087PUP</div> <div>FN:93</div> <div>PRODUCER</div> <div>23-Jul-2009 15:32</div> <div>2748.4 M</div> <div>2037.9 M</div> </div>	

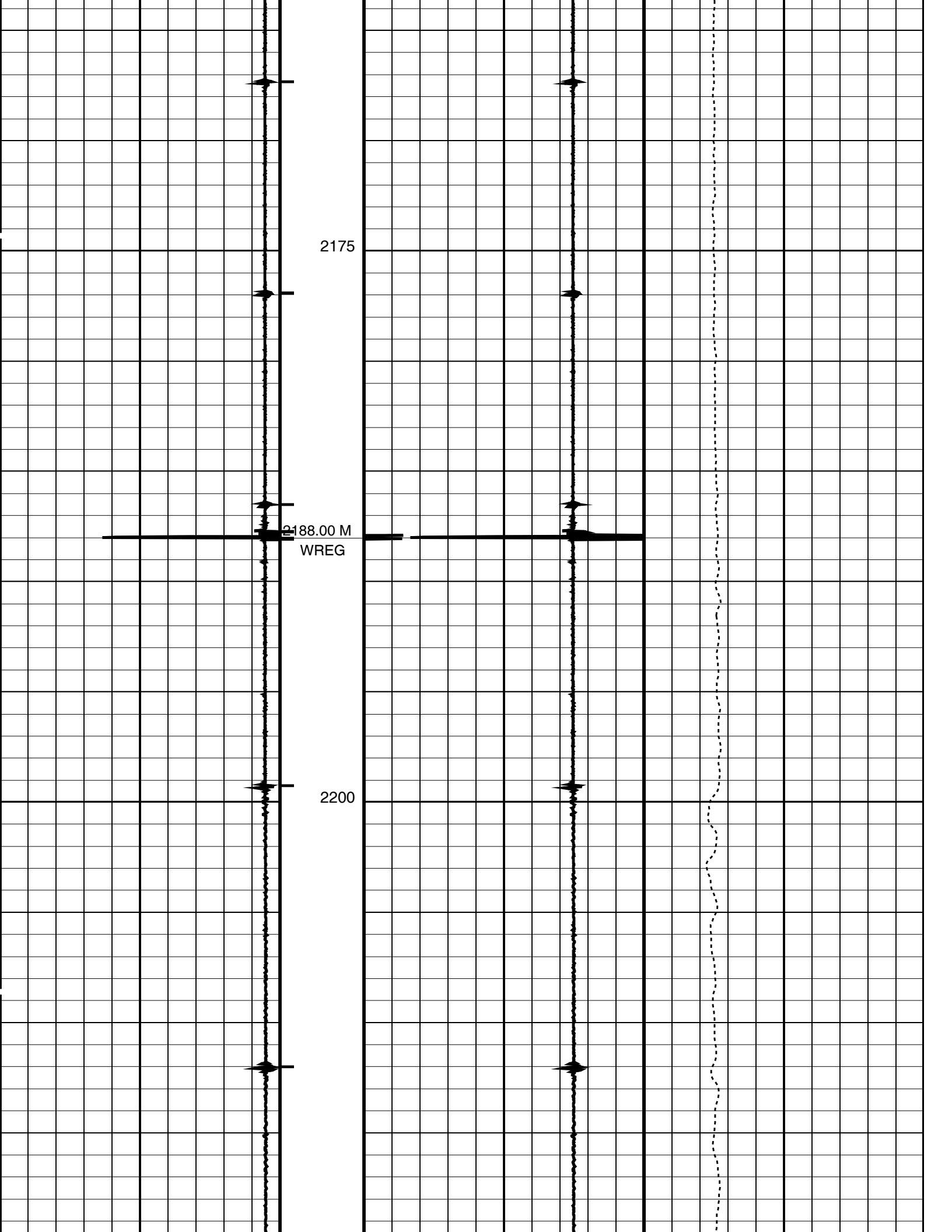
OP System Version: 16C0-147		
MCM		
SHM_GUN	16C0-147	CCL-L 16C0-147

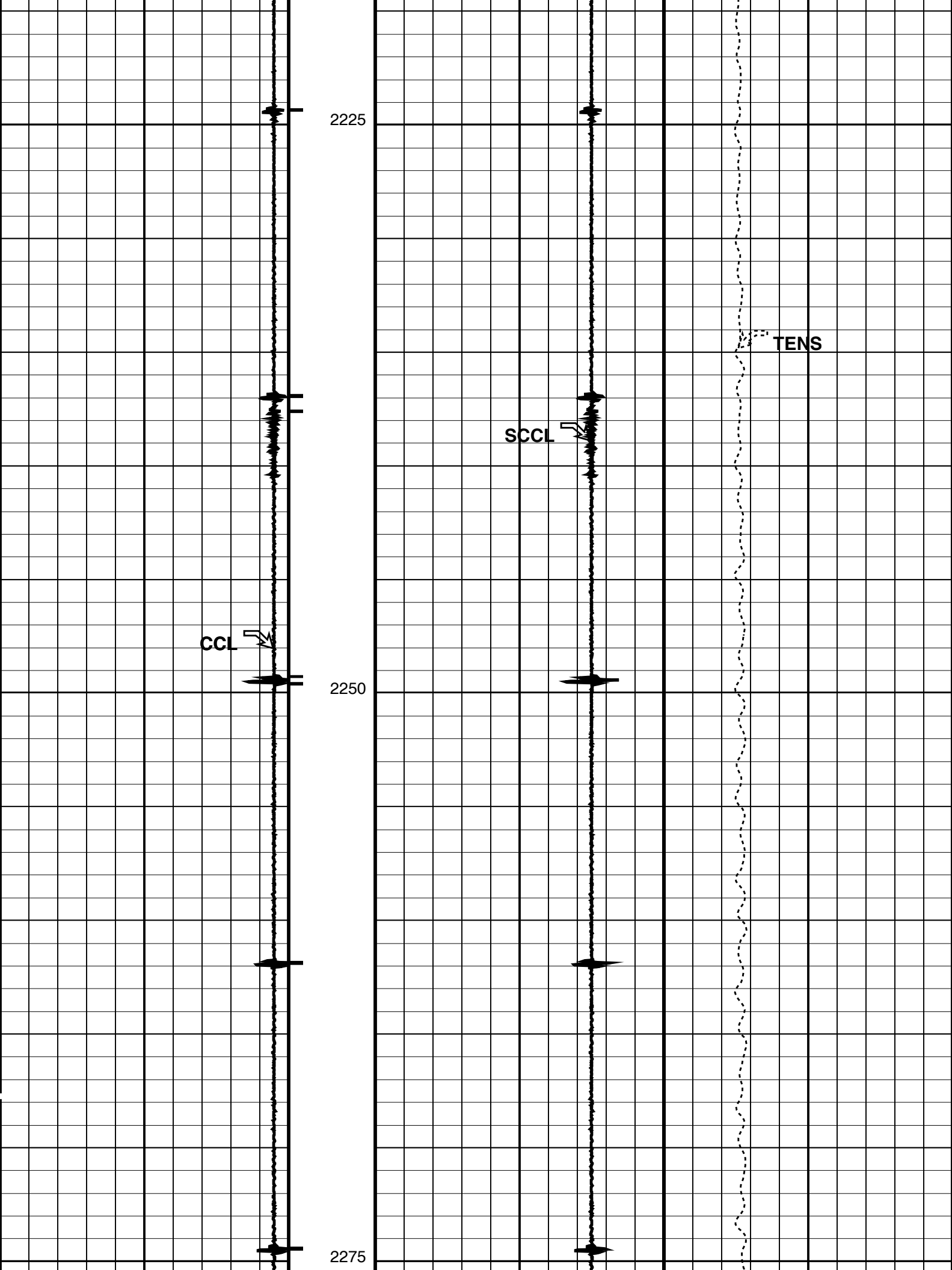


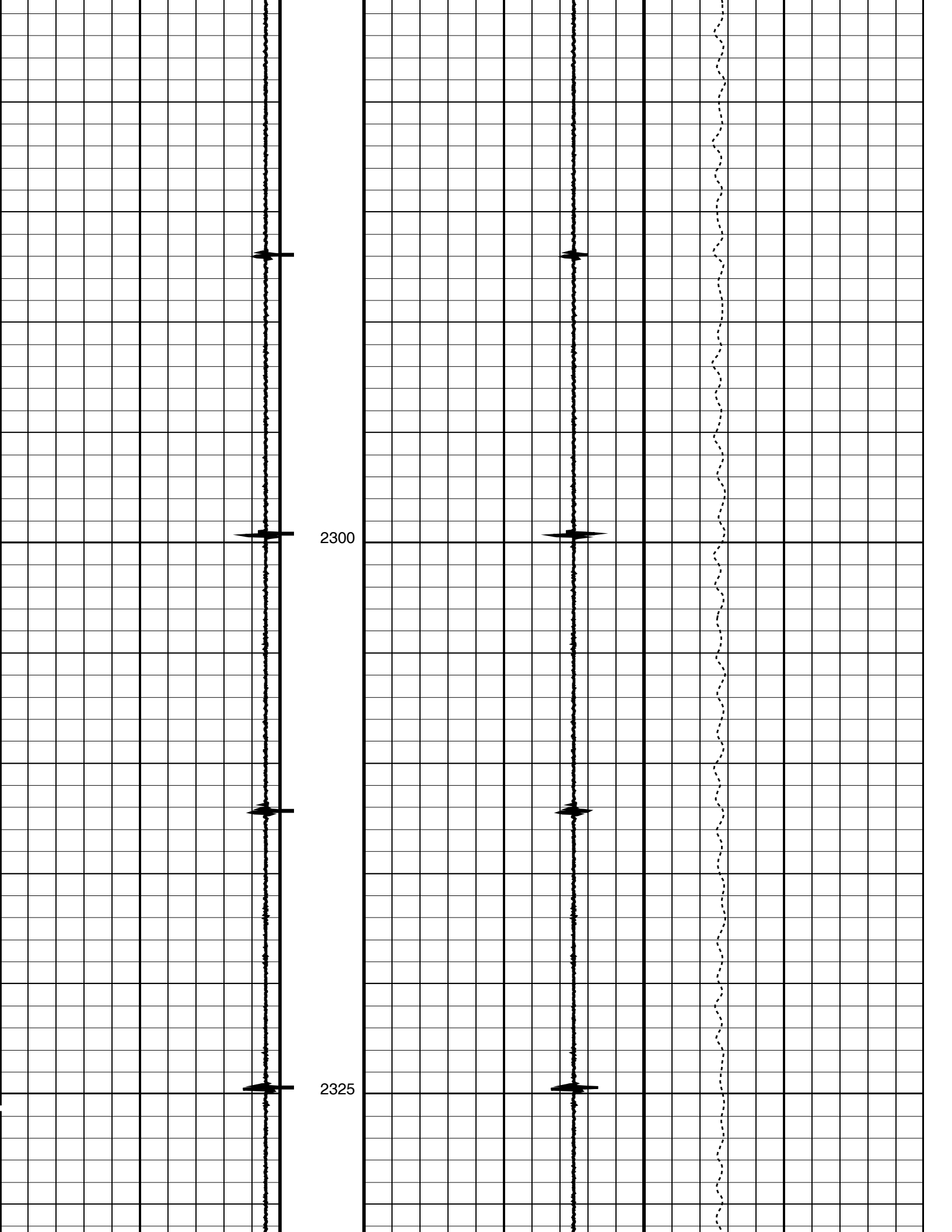


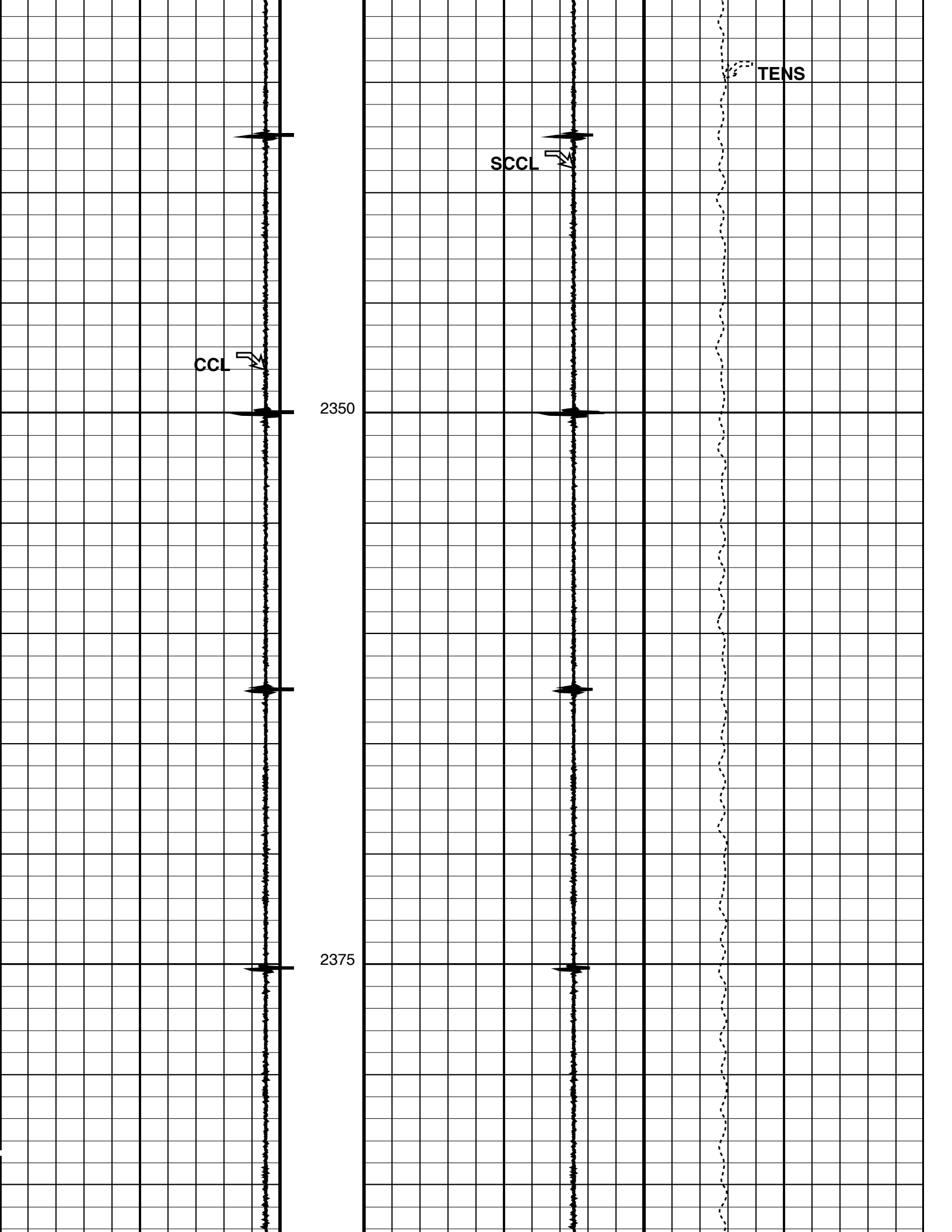


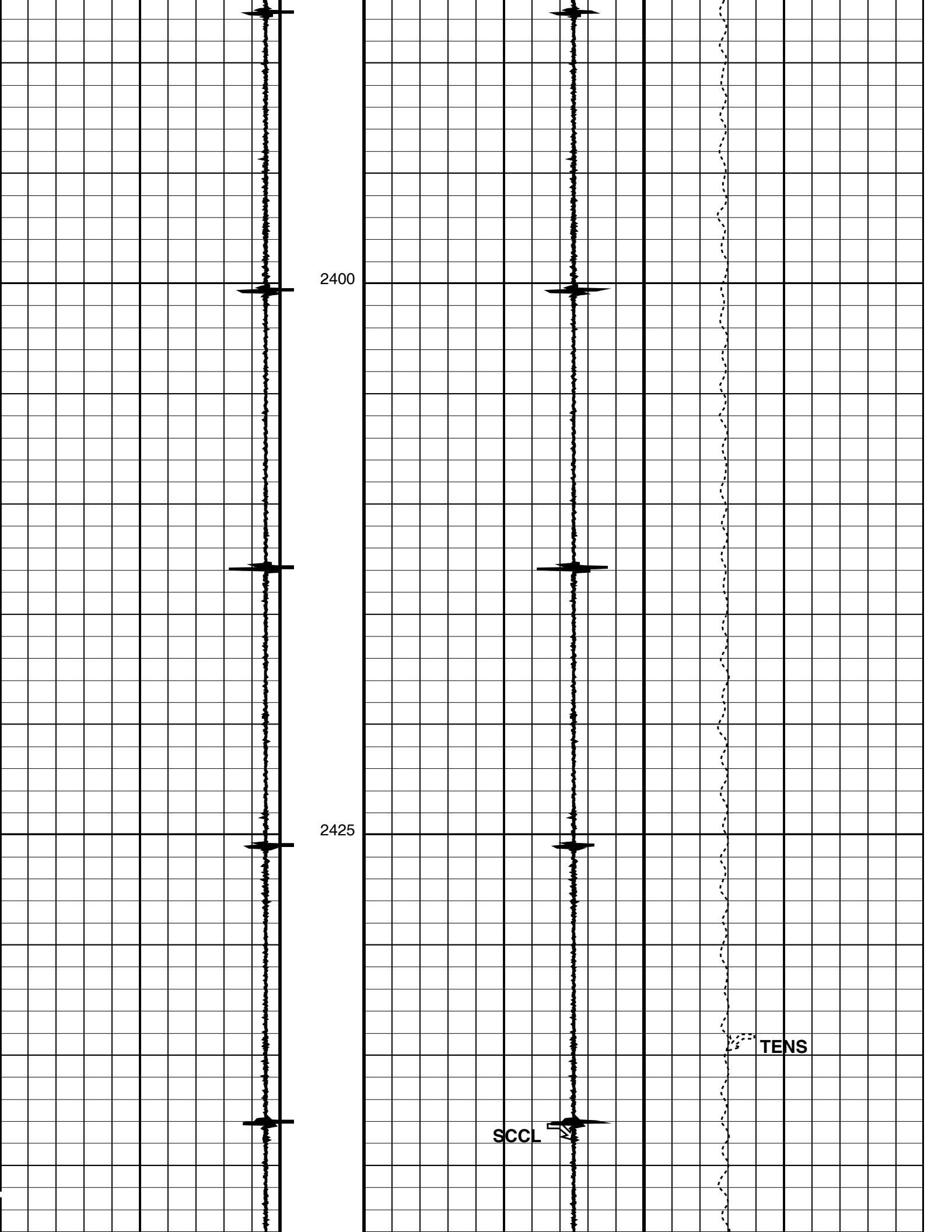


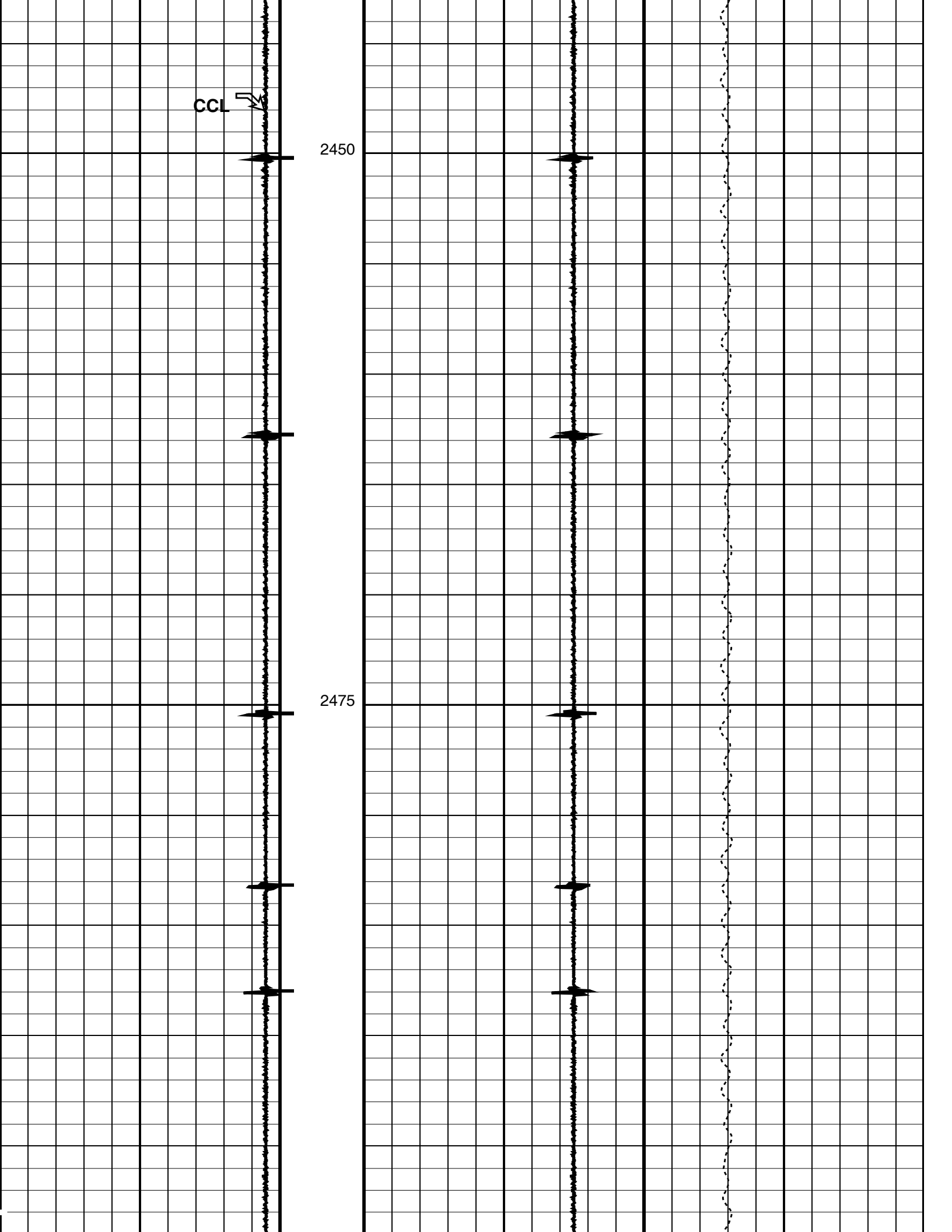


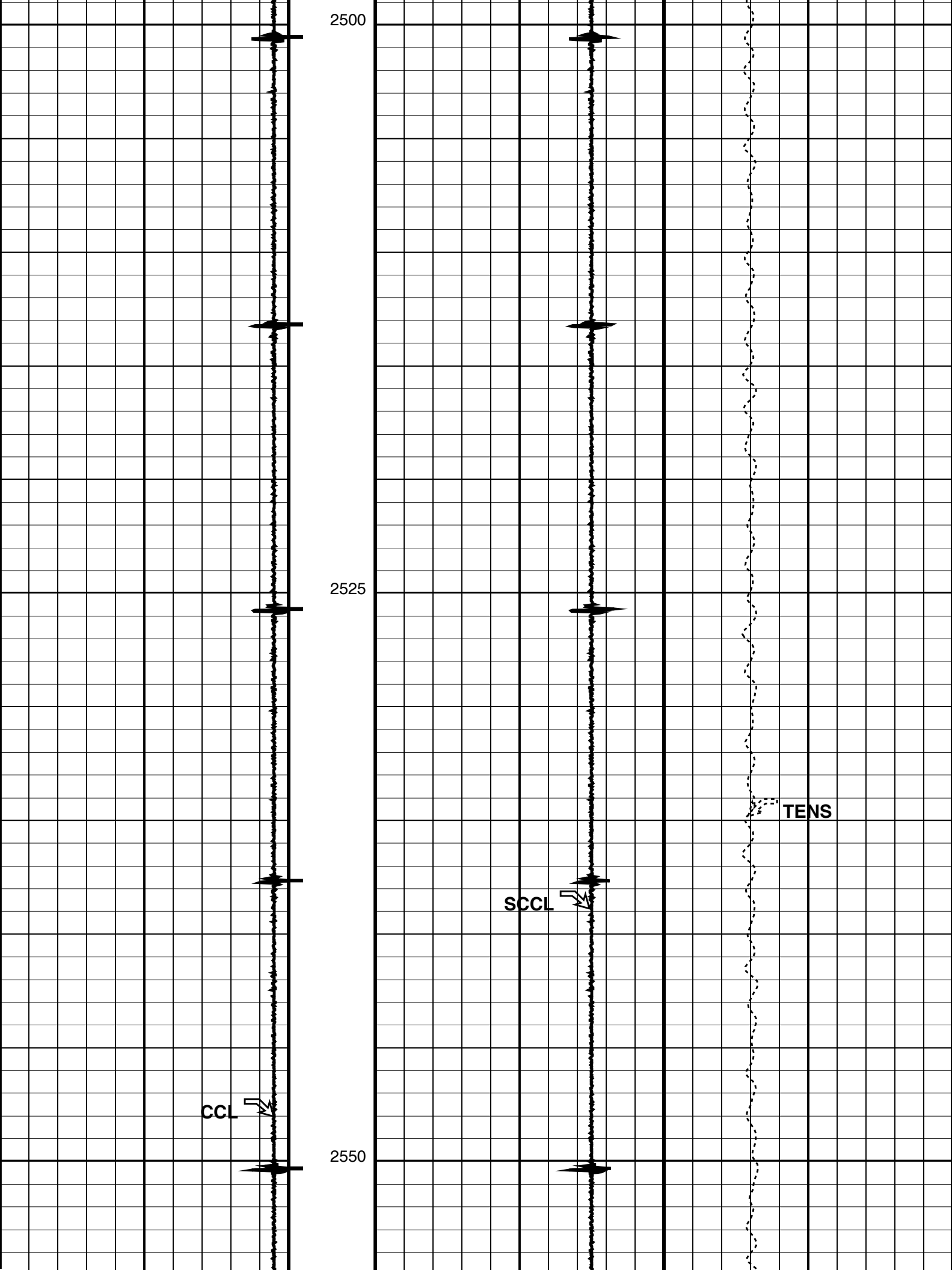




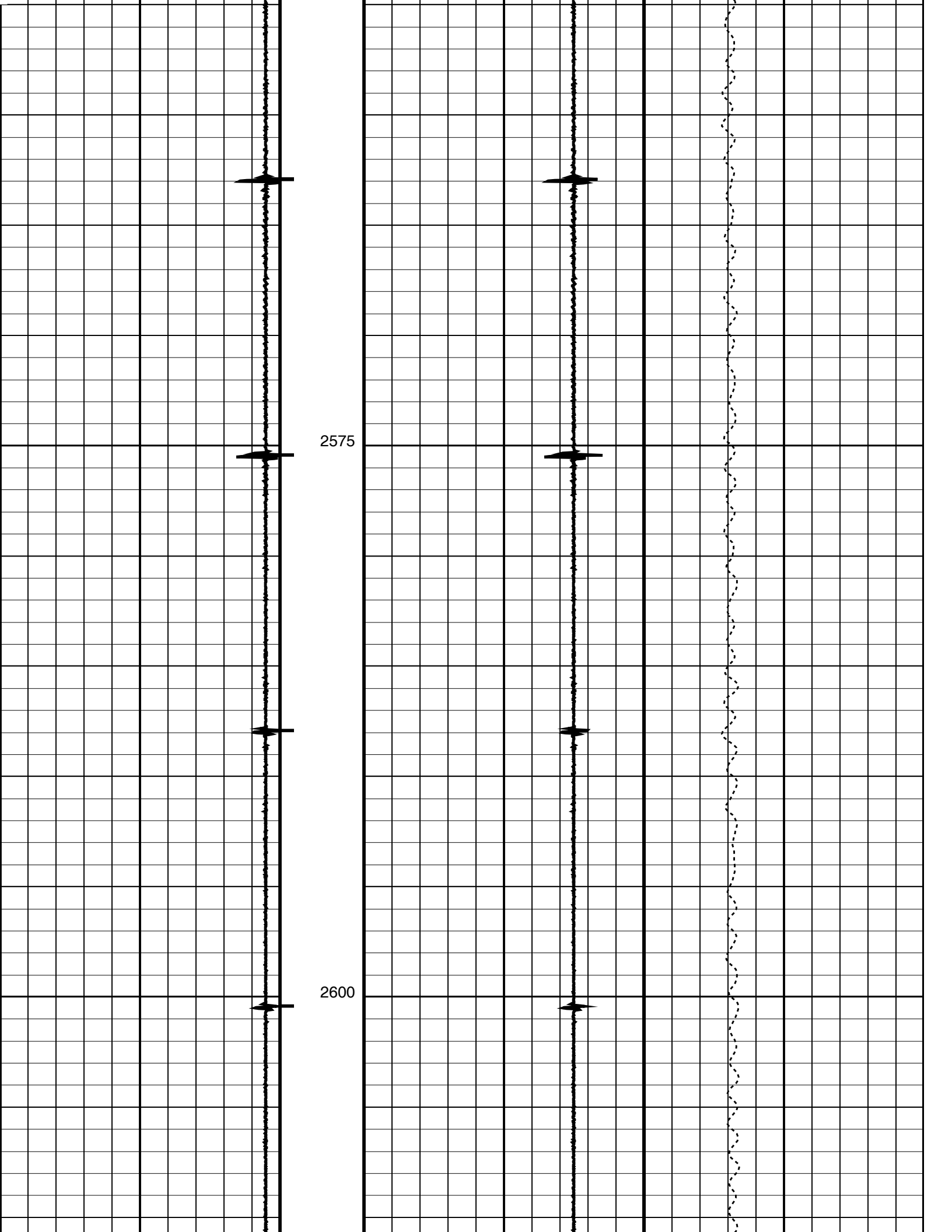


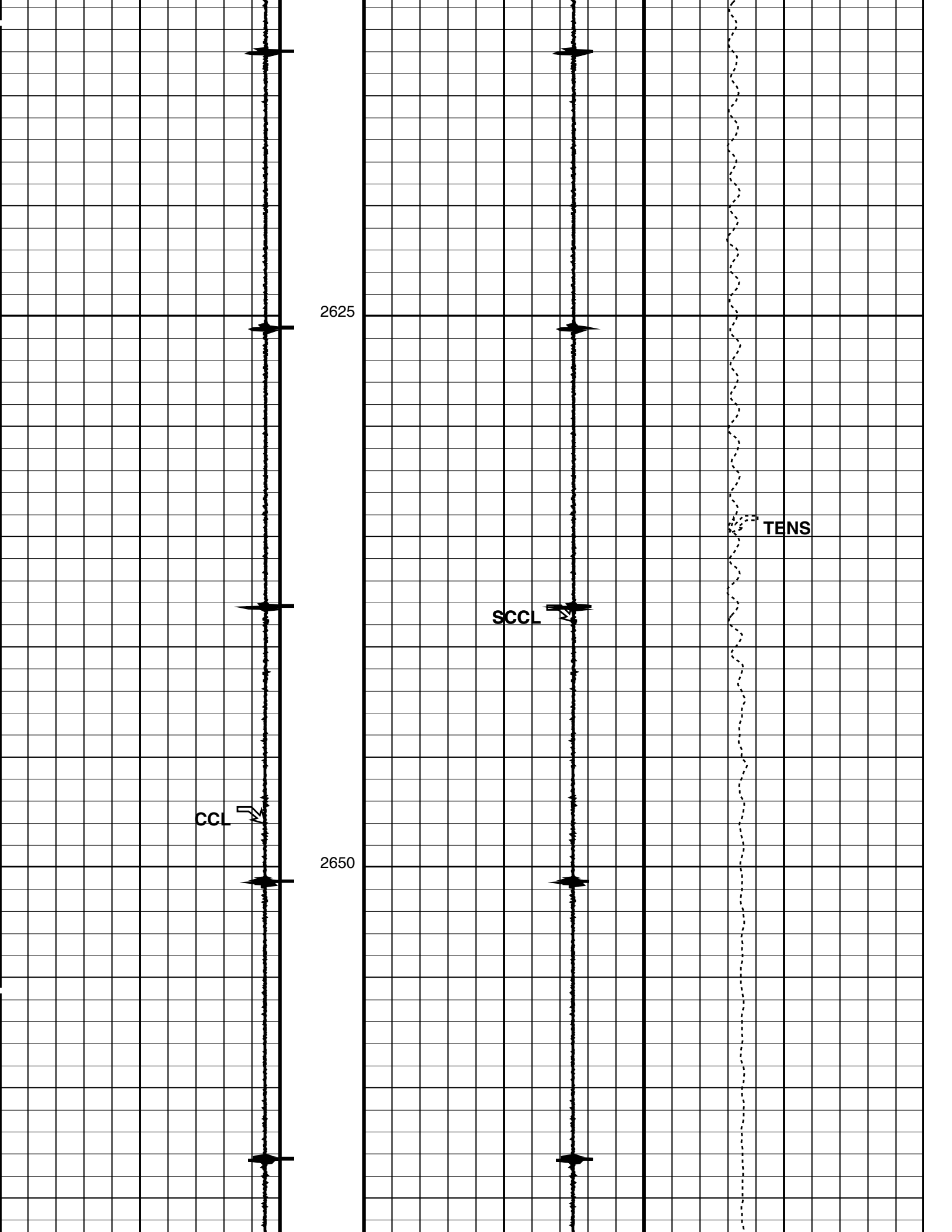


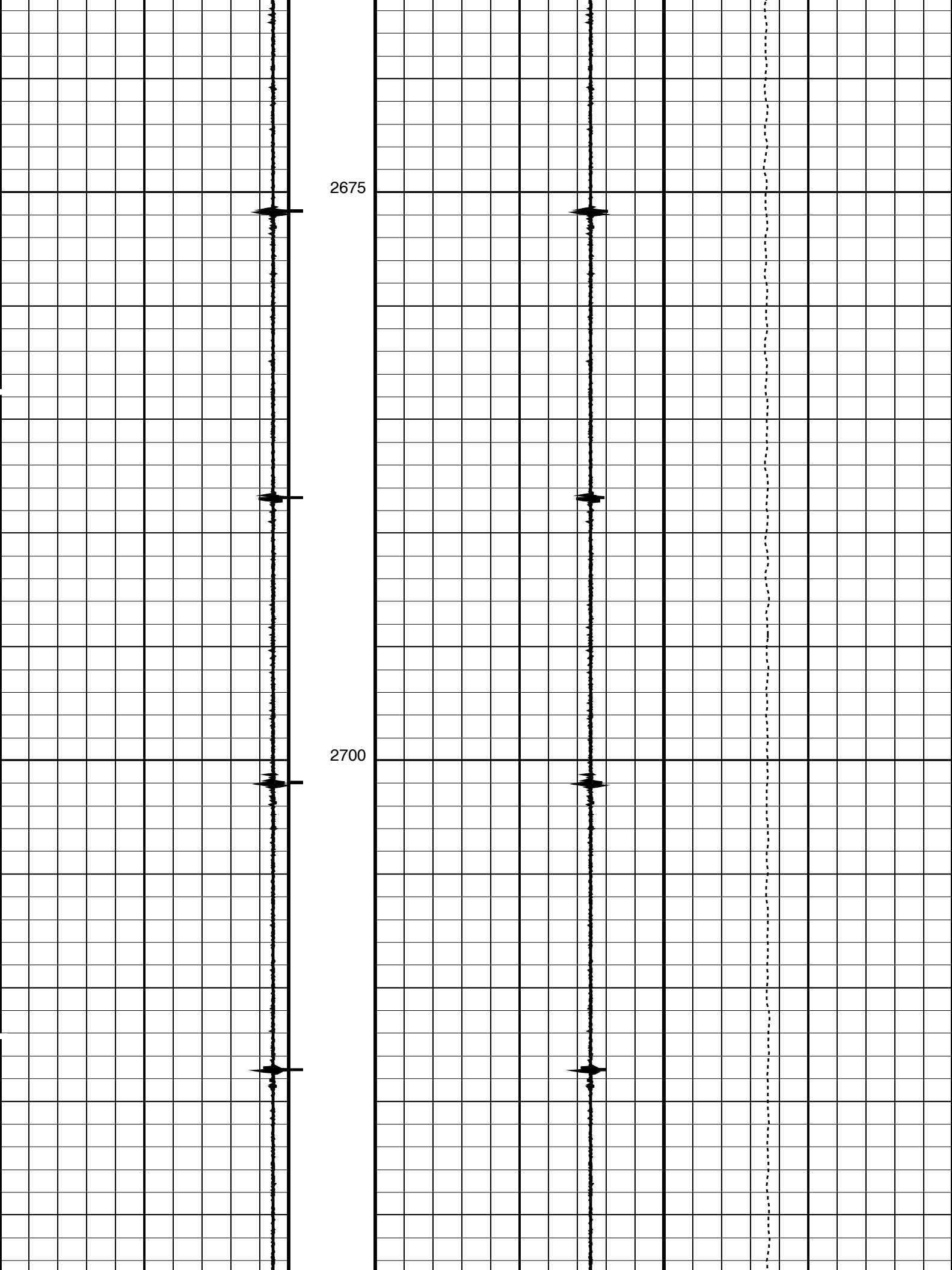


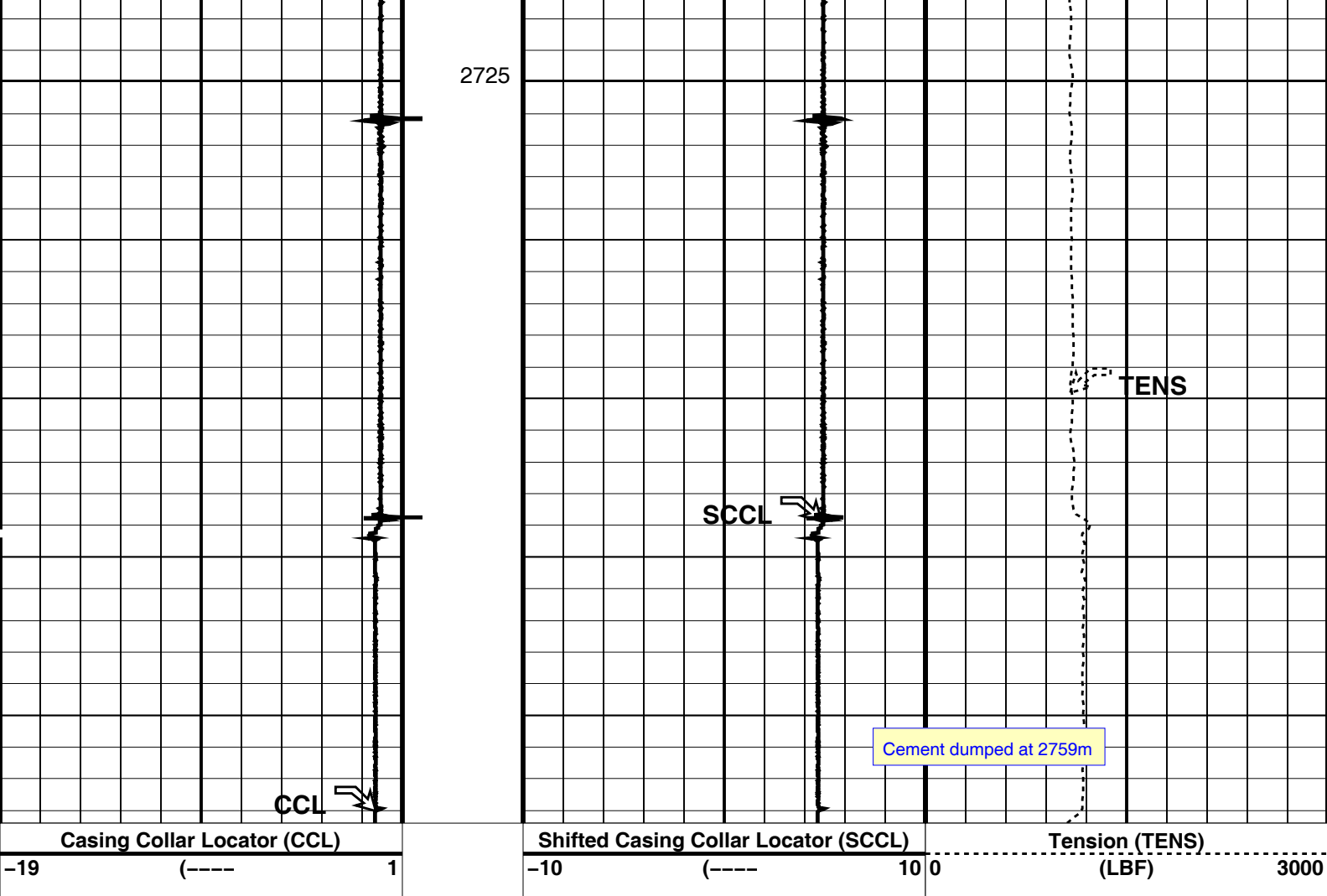












### PIP SUMMARY

Time Mark Every 60 S

Casing Collars

### Parameters

DLIS Name	Description	Value
CCLD	CCL-L: Casing Collar Locator	12 IN
CCLT	CCL reset delay	0.3 V
	CCL Detection Level	
DO	System and Miscellaneous	0.0 M
PP	Depth Offset for Playback	
	Playback Processing	NORMAL

Format: PERFO Vertical Scale: 1:200 Graphics File Created: 23-Jul-2009 15:32

### OP System Version: 16C0-147

MCM

SHM\_GUN 16C0-147 CCL-L 16C0-147

### Input DLIS Files

DEFAULT Flip\_PERFO\_086LUP PRODUCER 23-Jul-2009 15:32 2748.4 M 2037.9 M

### Output DLIS Files

DEFAULT PERFO\_087PUP FN:93 PRODUCER 23-Jul-2009 15:32

## MAXIS Field Log

## Output DLIS Files

DEFAULT	CCL_073LUP	FN:77	PRODUCER	23-Jul-2009 12:34
RTB	CCL_073LUP	FN:78	PRODUCER	23-Jul-2009 12:34

## OP System Version: 16C0-147

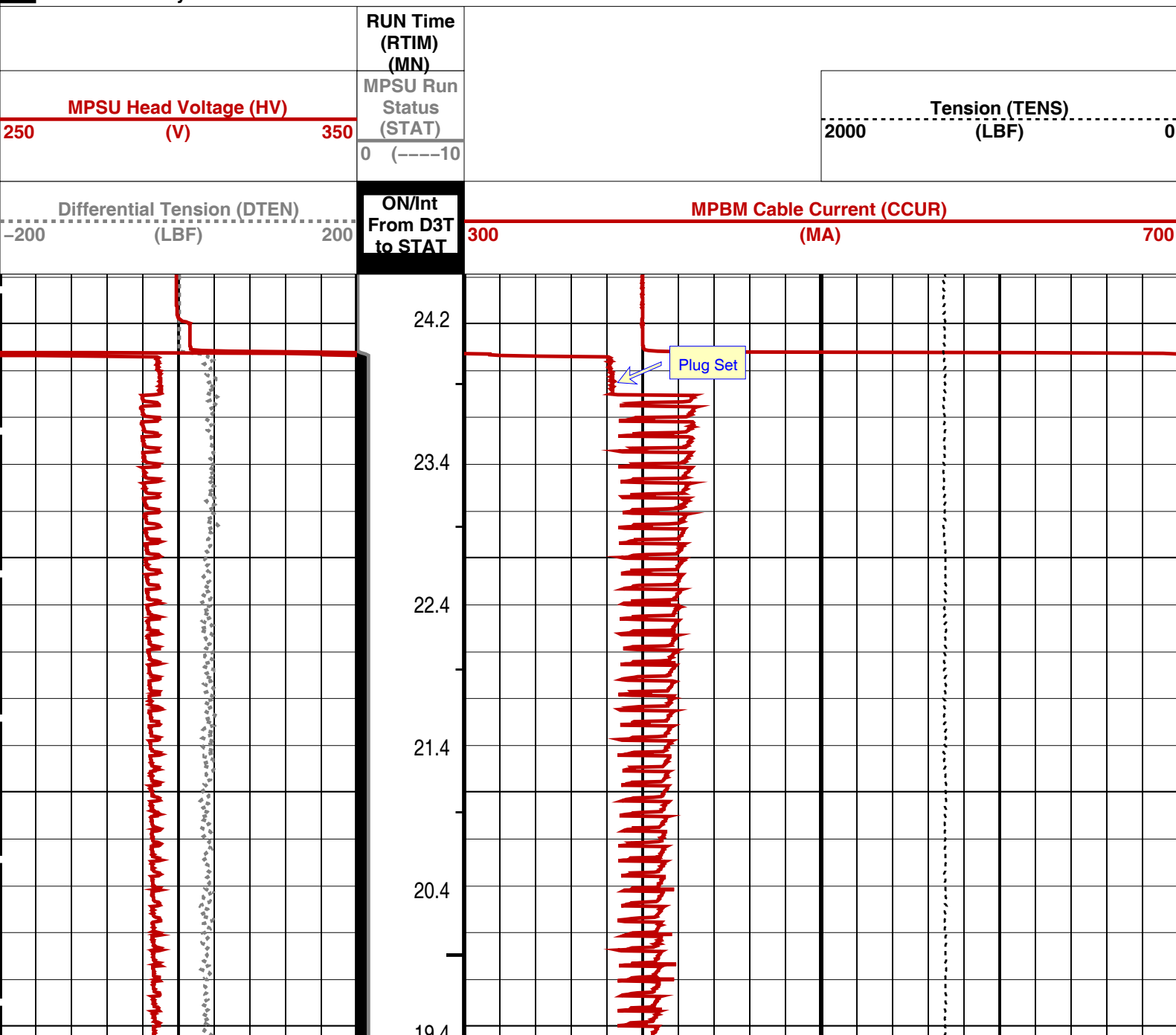
MCM

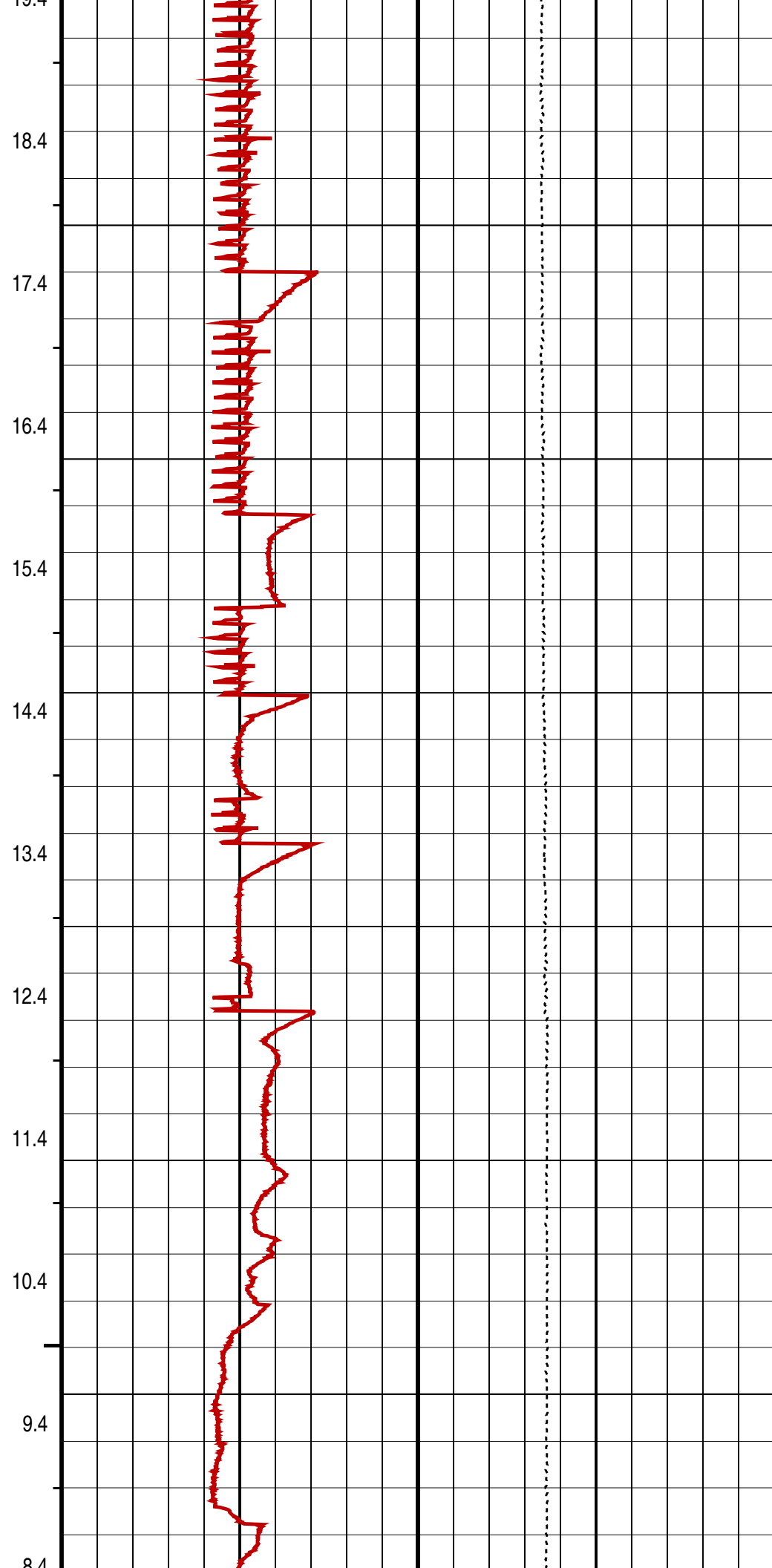
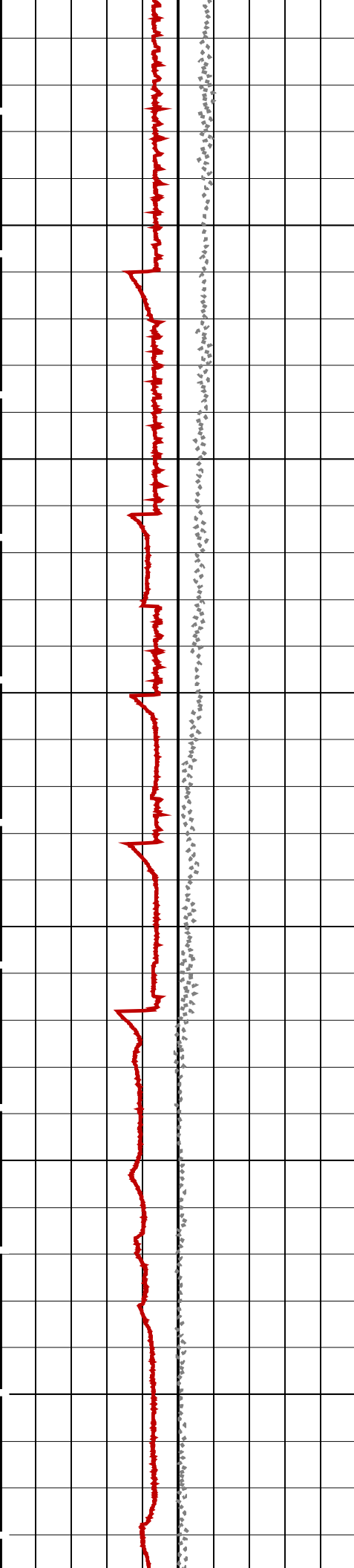
MPEX-CA	16C0-147	MPSU-CA	16C0-147
CCL-L	16C0-147		

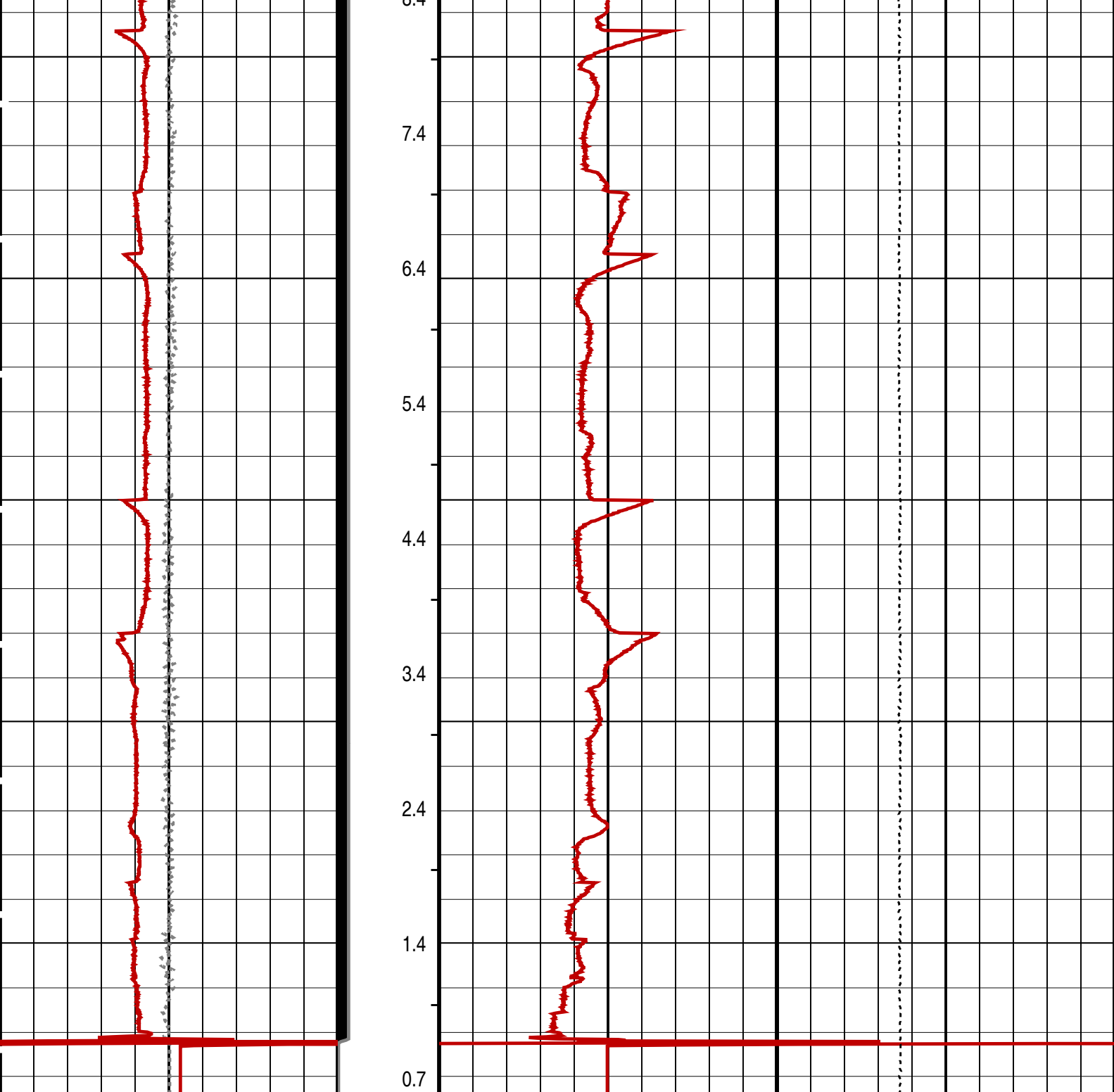
## PIP SUMMARY

└ MPSU Run Time Every 1 MN  
└ MPSU Run Time Every 10 MN

Time Mark Every 60 S







Differential Tension (DTEN) (LBF)	ON/Int From D3T to STAT	MPBM Cable Current (CCUR) (MA)
-200 200		300 700
MPSU Head Voltage (HV) (V)	MPSU Run Status (STAT)	Tension (TENS) (LBF)
250 350	0 (----10)	2000 0
	RUN Time (RTIM) (MN)	

PIP SUMMARY


⊣ MPSU Run Time Every 1 MN

⊣ MPSU Run Time Every 10 MN

Time Mark Every 60 S

Parameters

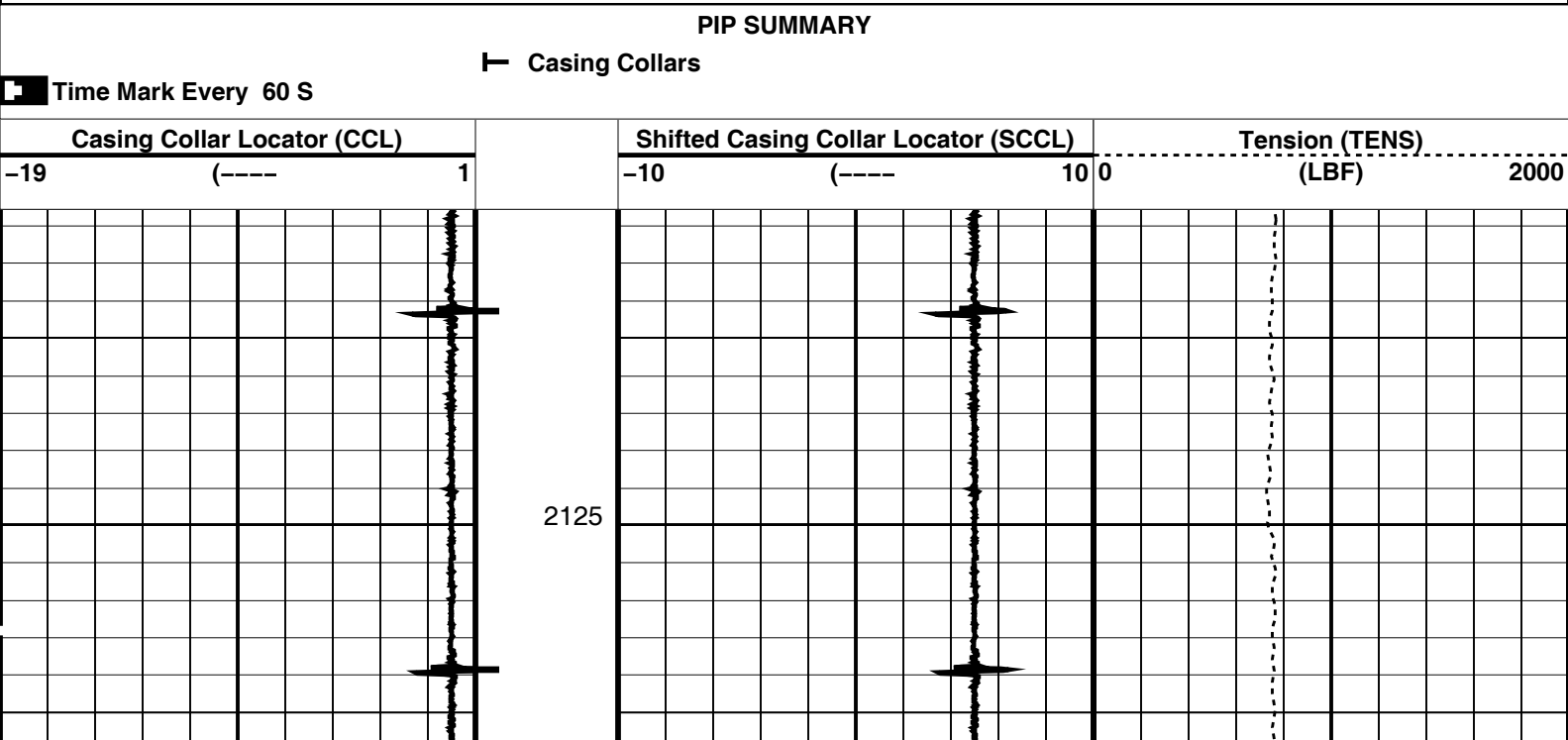
DLIS Name		Description			Value
IPUMP		MPSU-CA: MECHANICAL PLUGBACK SETTING UNIT Intensifier Pump			TRUE
Format: MPBT		Vertical Scale: 1:600		Graphics File Created: 23-Jul-2009 12:34	
OP System Version: 16C0-147 MCM					
MPEX-CA CCL-L	16C0-147 16C0-147	MPSU-CA		16C0-147	
Output DLIS Files					
DEFAULT	CCL_073LUP	FN:77	PRODUCER	23-Jul-2009 12:34	
RTB	CCL_073LUP	FN:78	PRODUCER	23-Jul-2009 12:34	



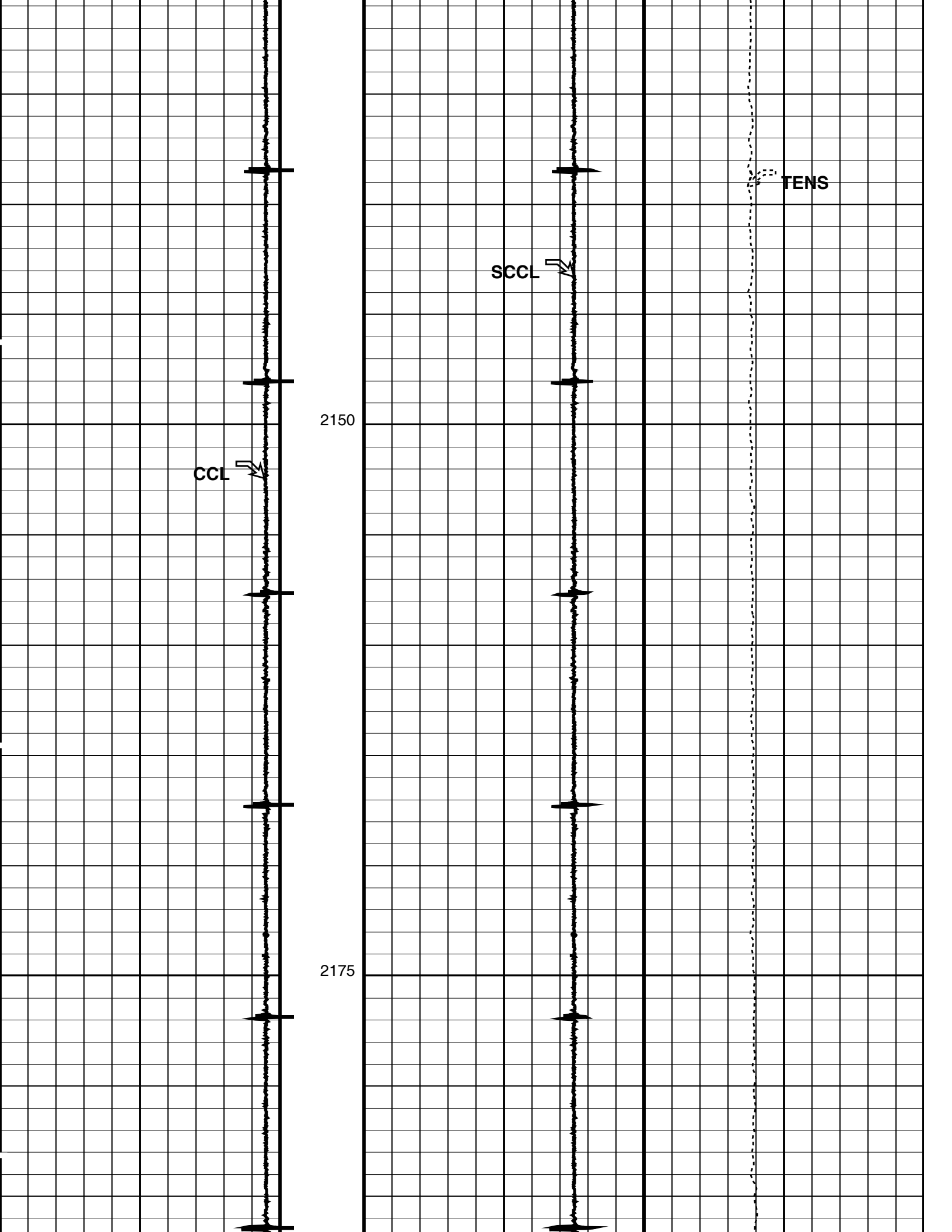
Plug # 2 Correlation Pass

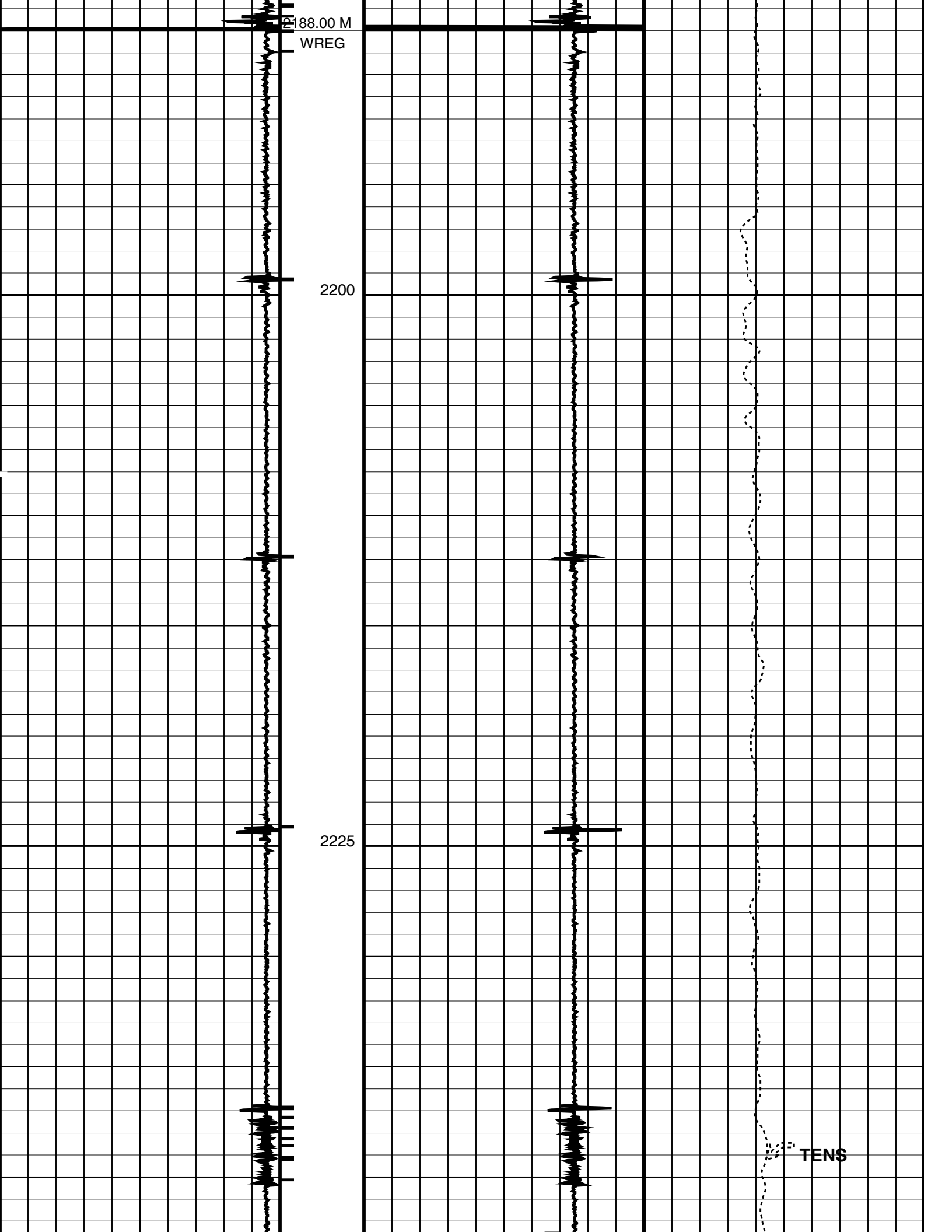
MAXIS Field Log

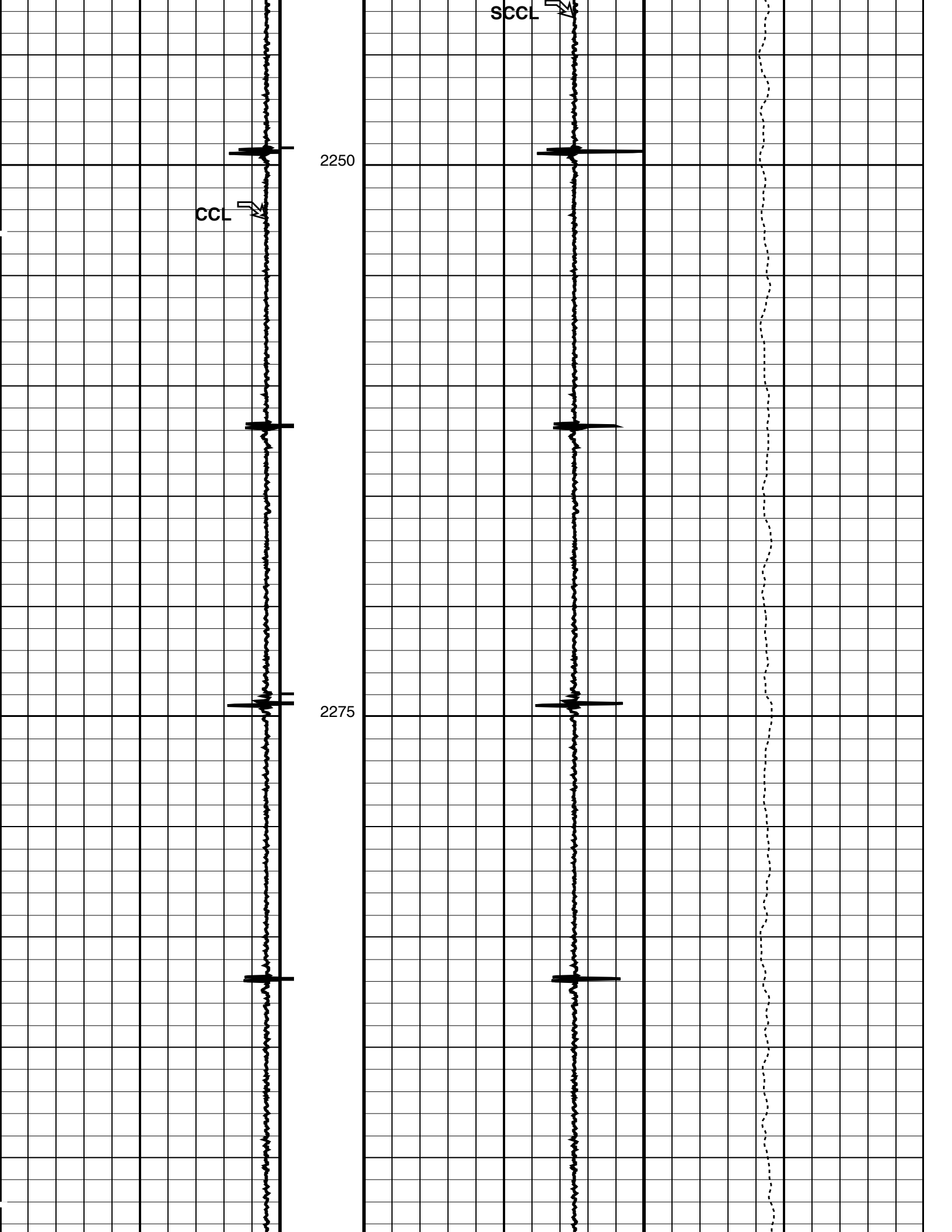
Input DLIS Files					
DEFAULT	Flip_CCL_076LUP	PRODUCER	23-Jul-2009 13:42	2752.6 M	2039.9 M
Output DLIS Files					
DEFAULT	MPBT_119PUP	FN:122	PRODUCER	24-Jul-2009 06:50	2752.8 M 2116.5 M
OP System Version: 16C0-147 MCM					
MPEX-BA CCL-L	16C0-147 16C0-147	MPSU-CA		16C0-147	

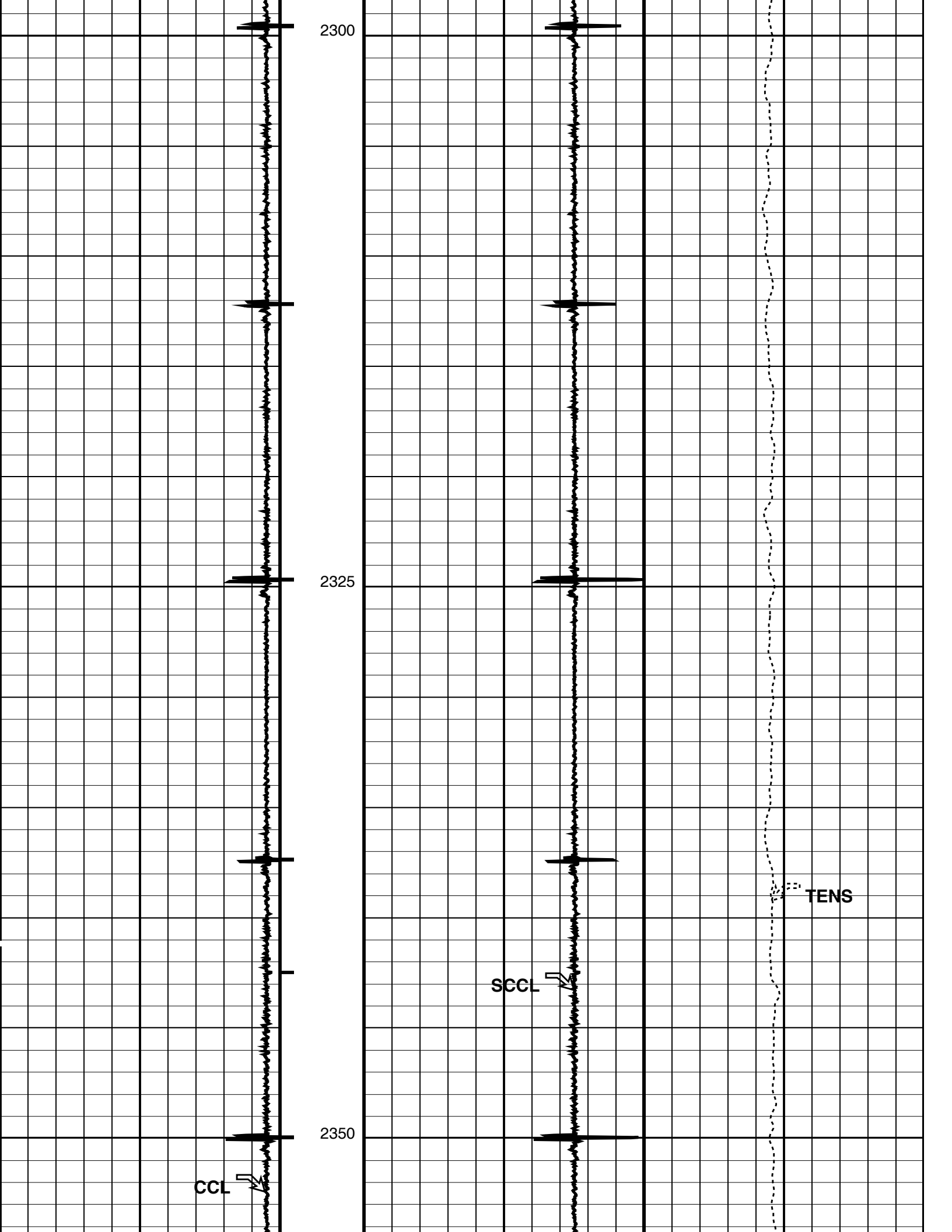


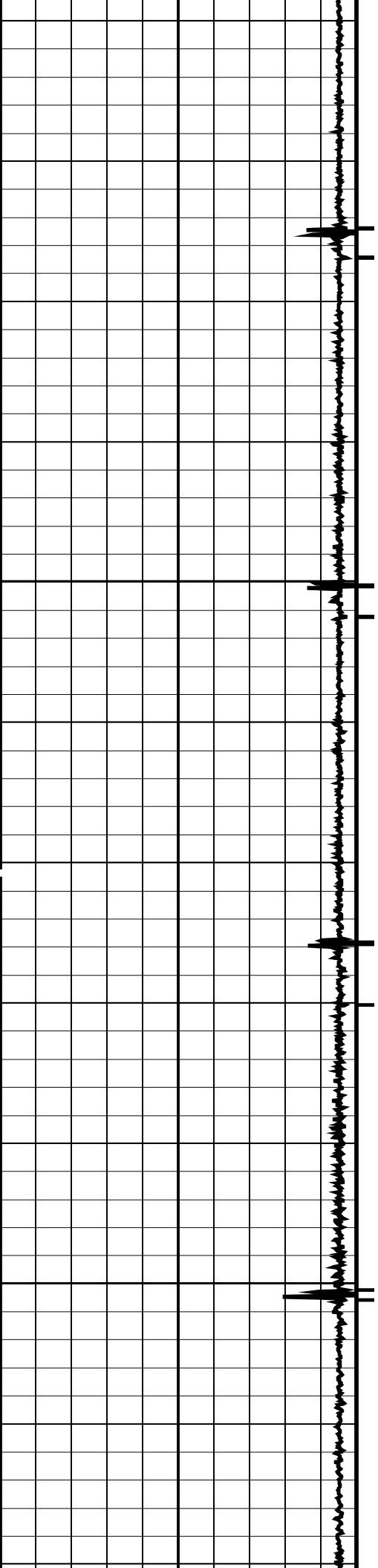






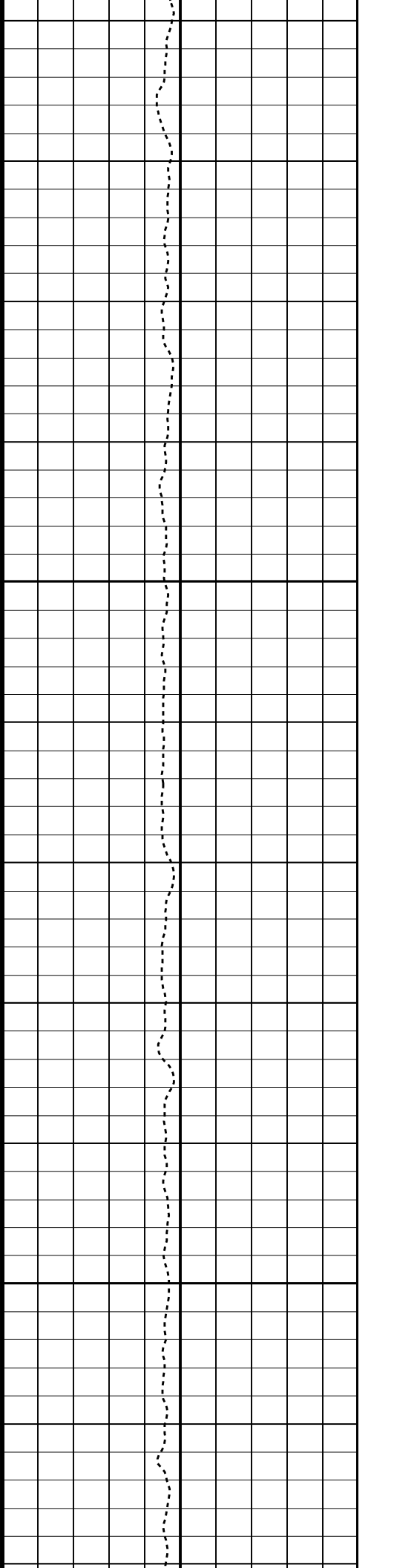
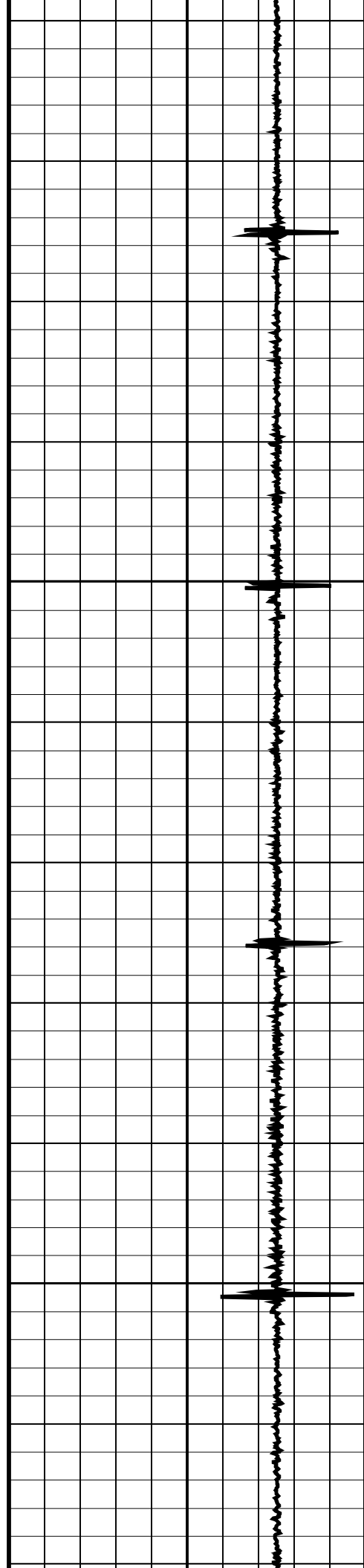


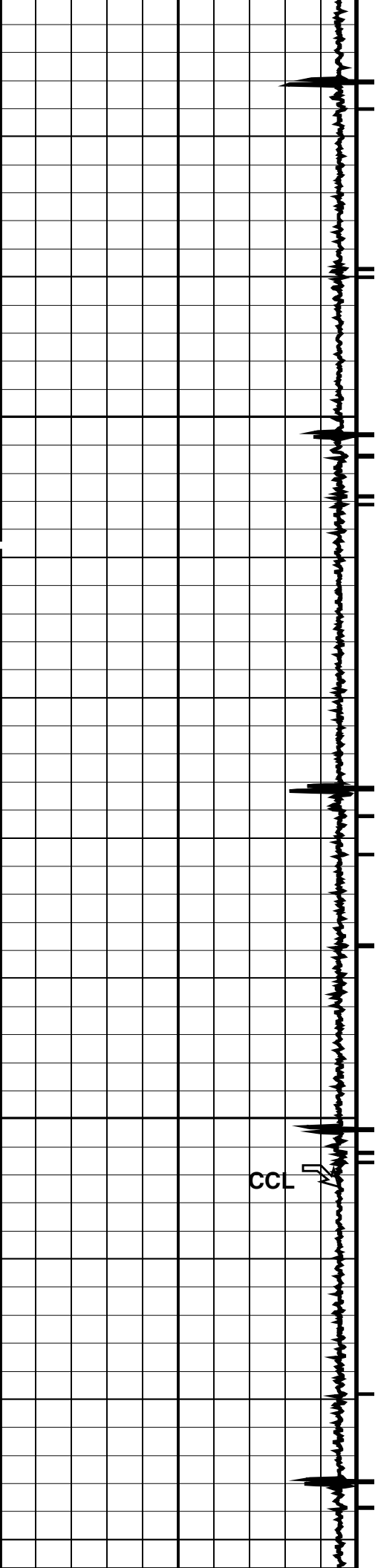




2375

2400



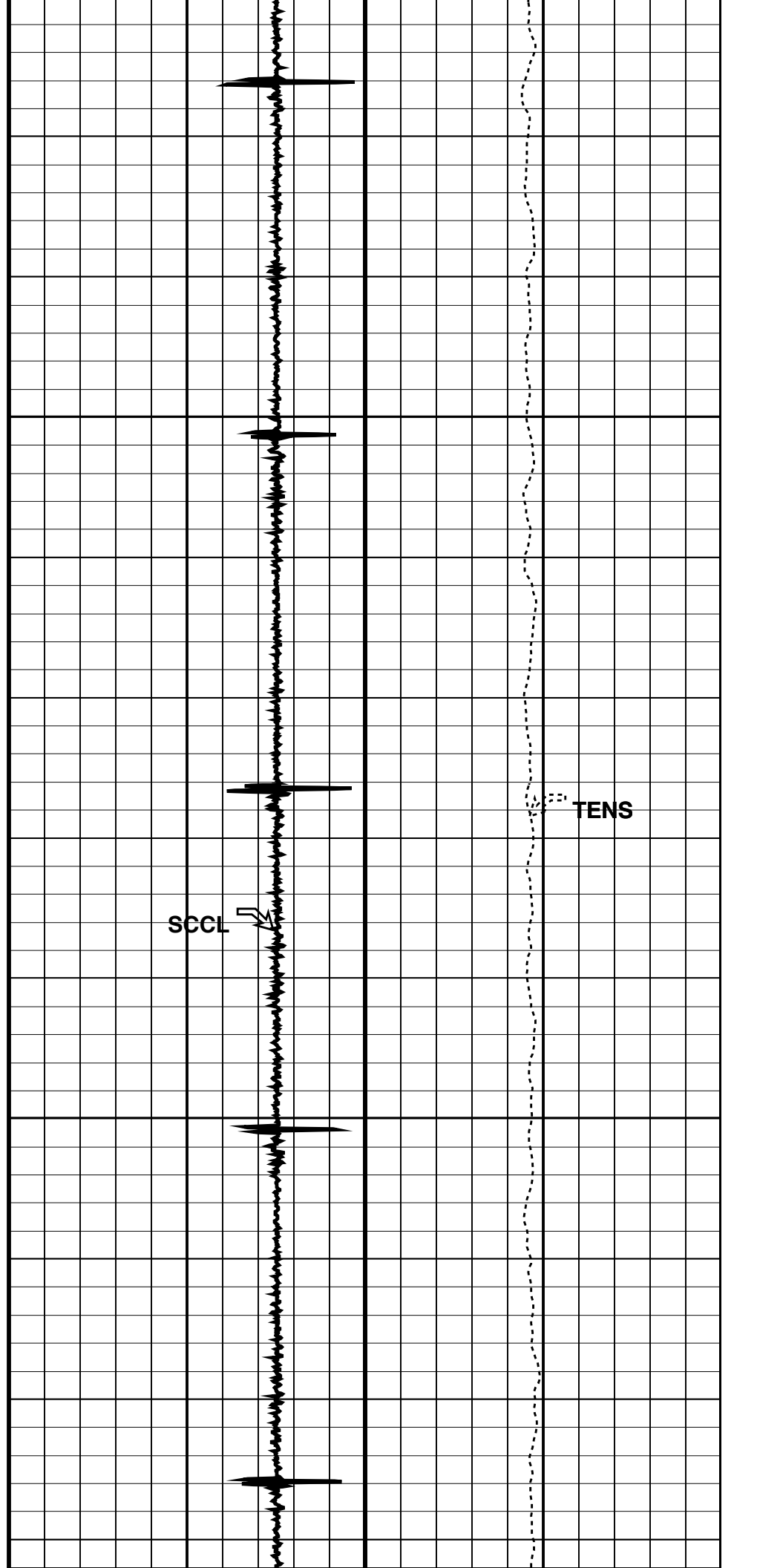


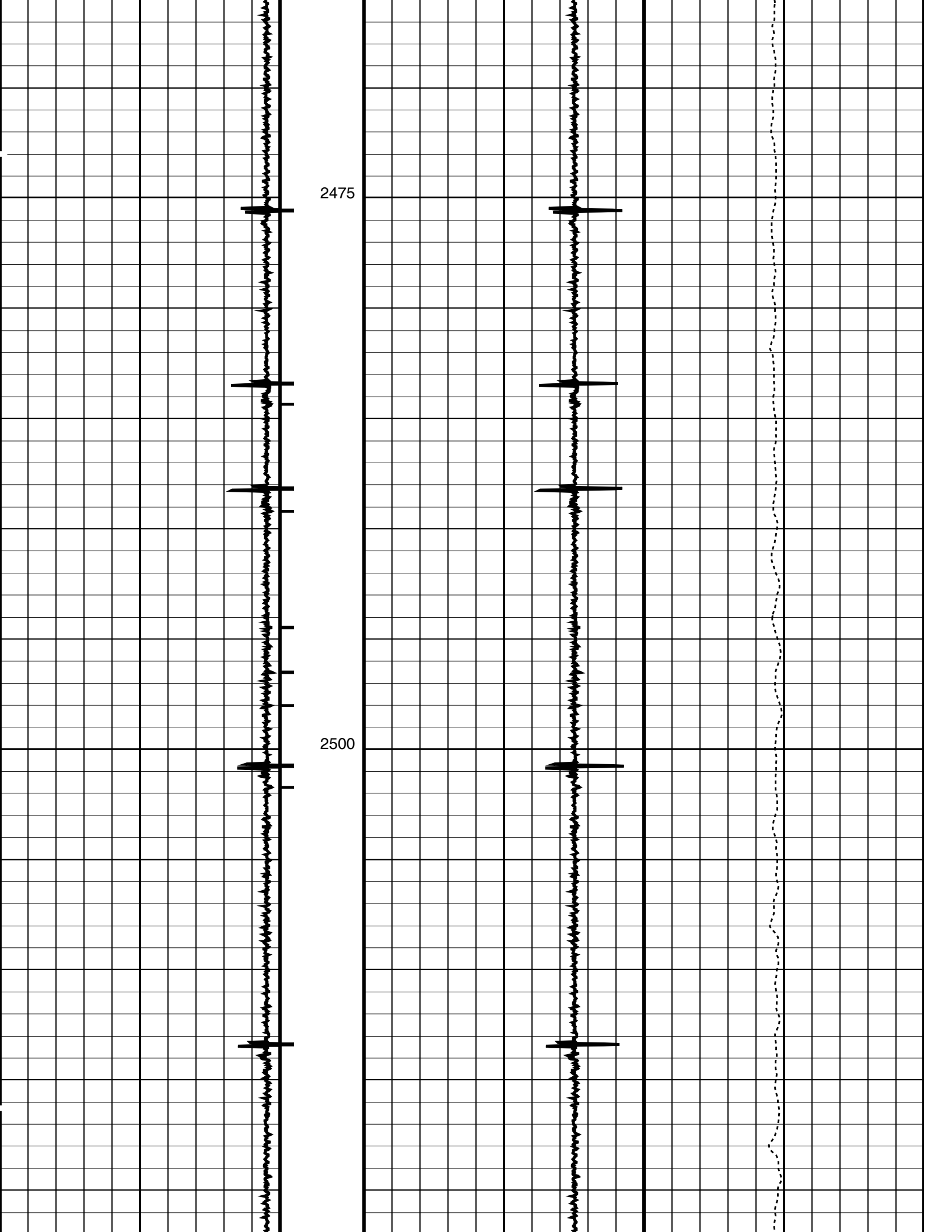
2425

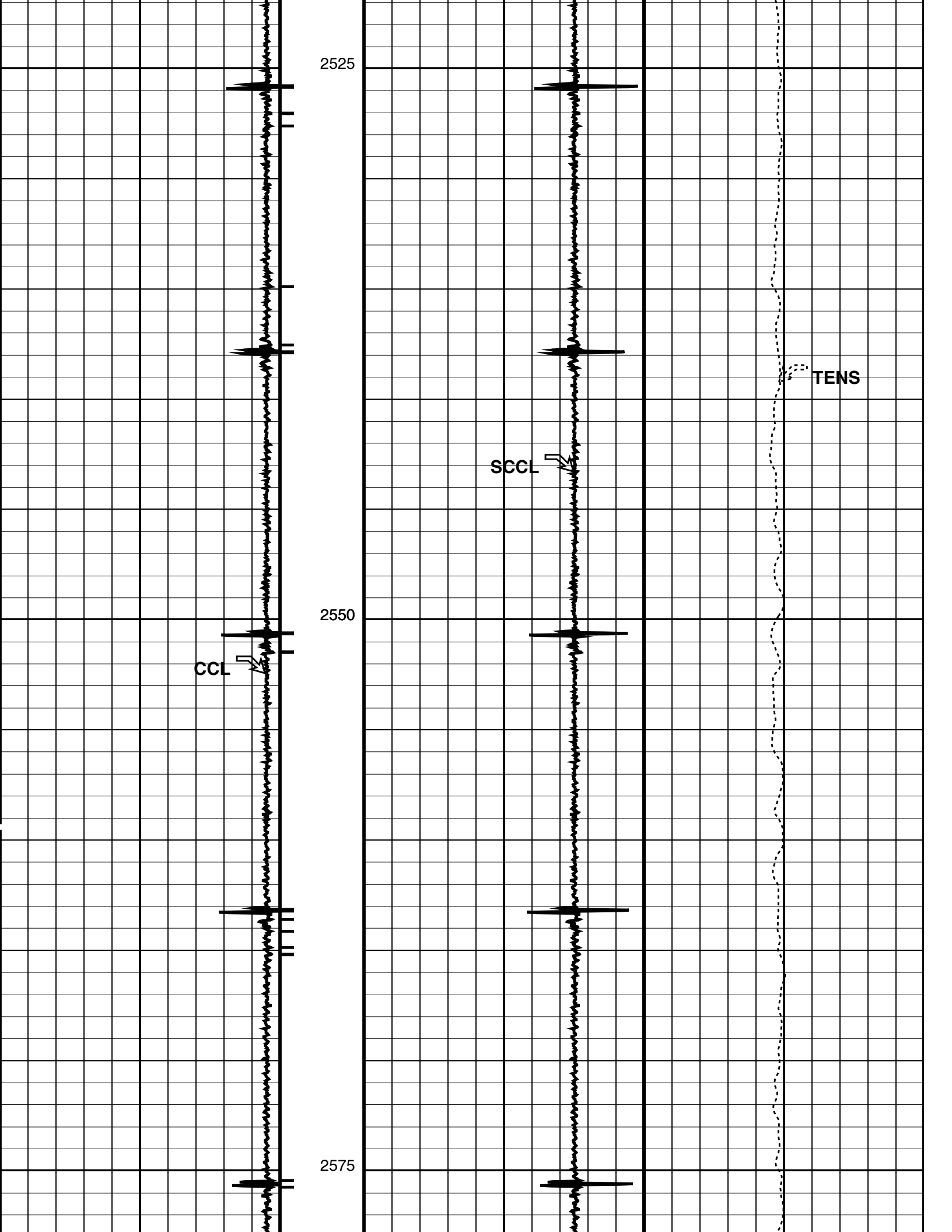
2450

SCCL

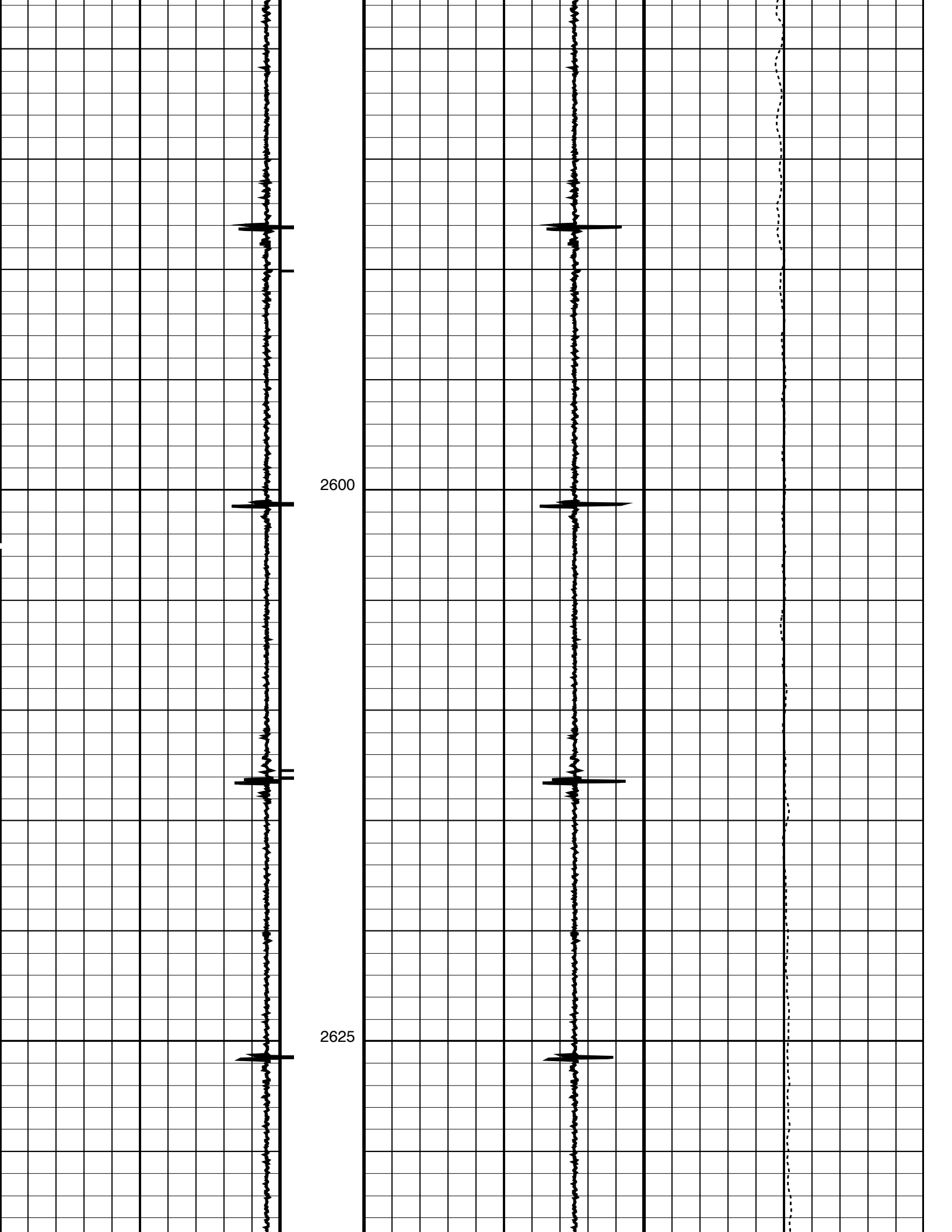
TENS

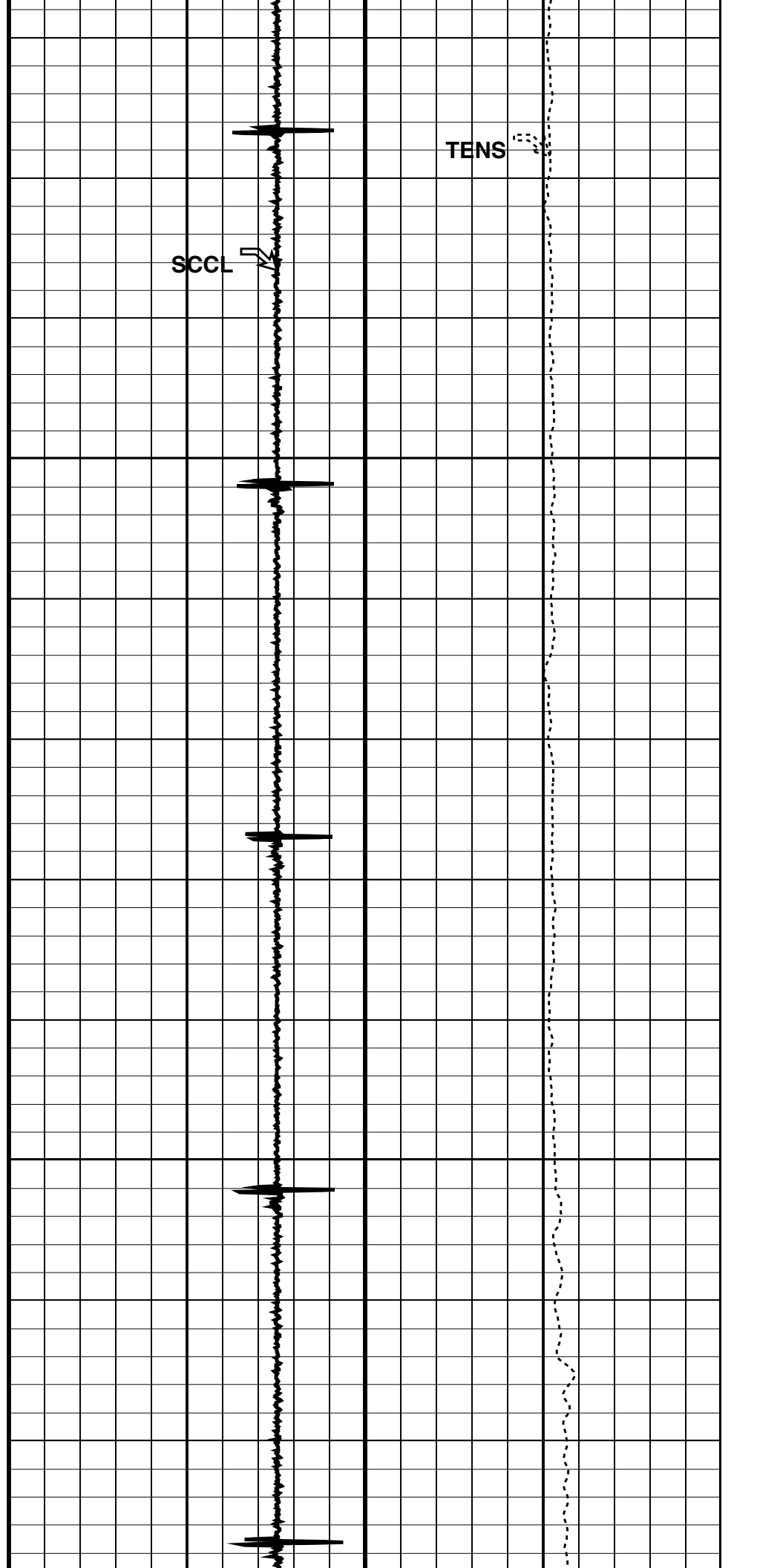
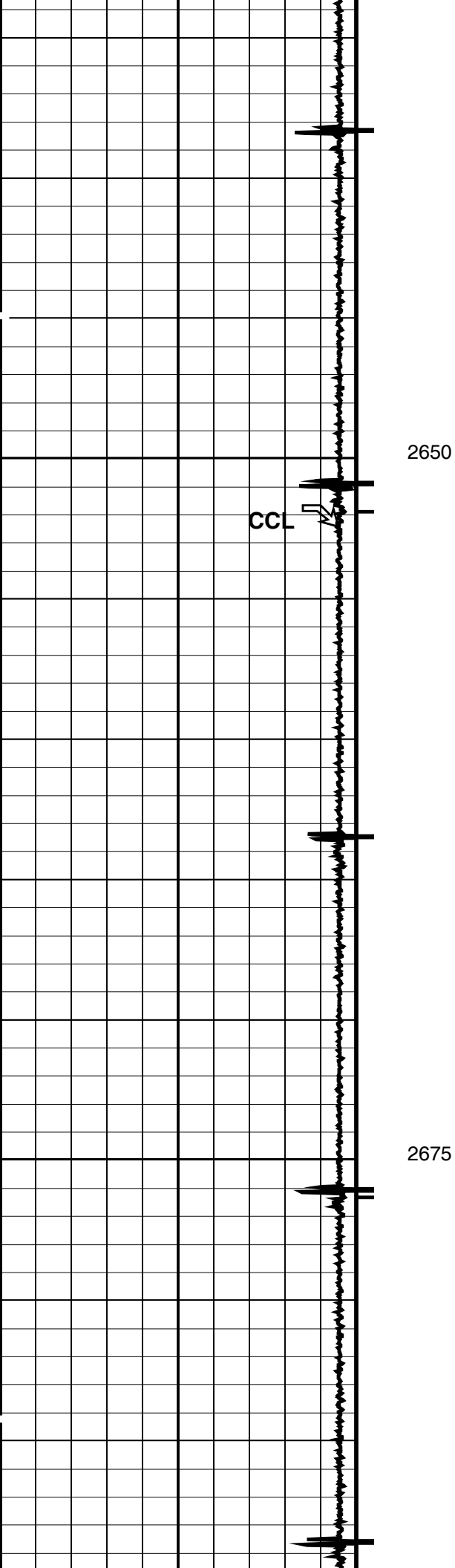


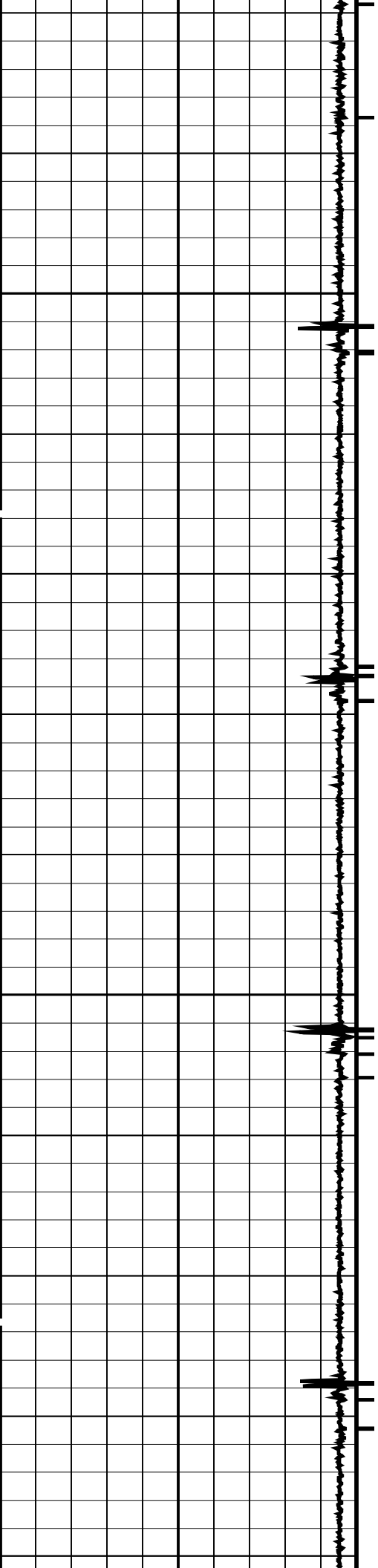












2700

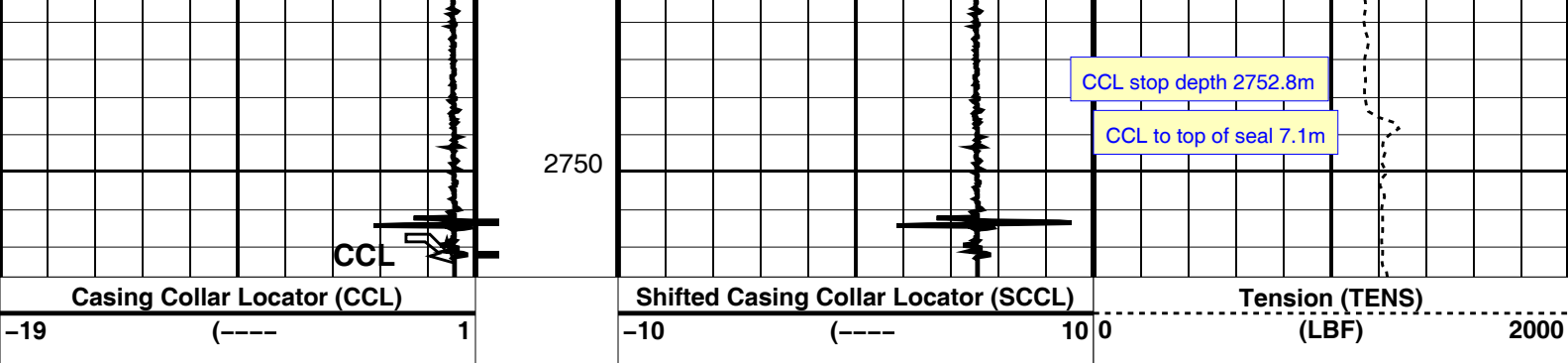
2725

SCCL



TENS





PIP SUMMARY


Time Mark Every 60 S

Parameters			
DLIS Name	Description	Value	
CCLD	CCL-L: Casing Collar Locator	12	IN
CCLT	CCL reset delay	0.3	V
	CCL Detection Level		
DO	System and Miscellaneous	0.0	M
PP	Depth Offset for Playback		
	Playback Processing	NORMAL	

Format: PERFO Vertical Scale: 1:200 Graphics File Created: 24-Jul-2009 06:50

OP System Version: 16C0-147			
MCM			
MPEX-BA	16C0-147	MPSU-CA	16C0-147
CCL-L	16C0-147		

Input DLIS Files					
DEFAULT	Flip_CCL_076LUP	PRODUCER	23-Jul-2009 13:42	2752.6 M	2039.9 M
Output DLIS Files					
DEFAULT	MPBT_119PUP	FN:122	PRODUCER	24-Jul-2009 06:50	



Plug # 1 Cement Dump Pass

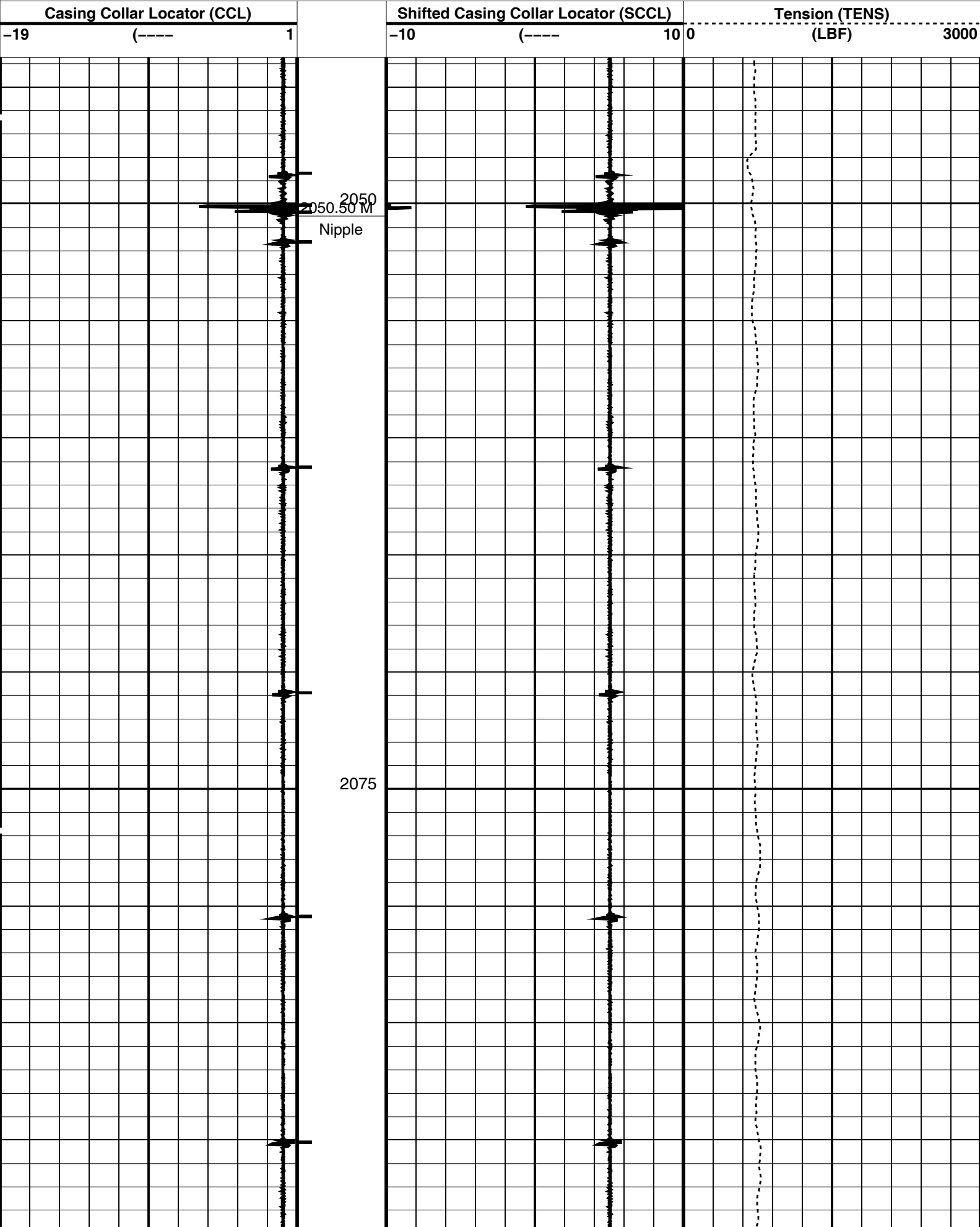
MAXIS Field Log

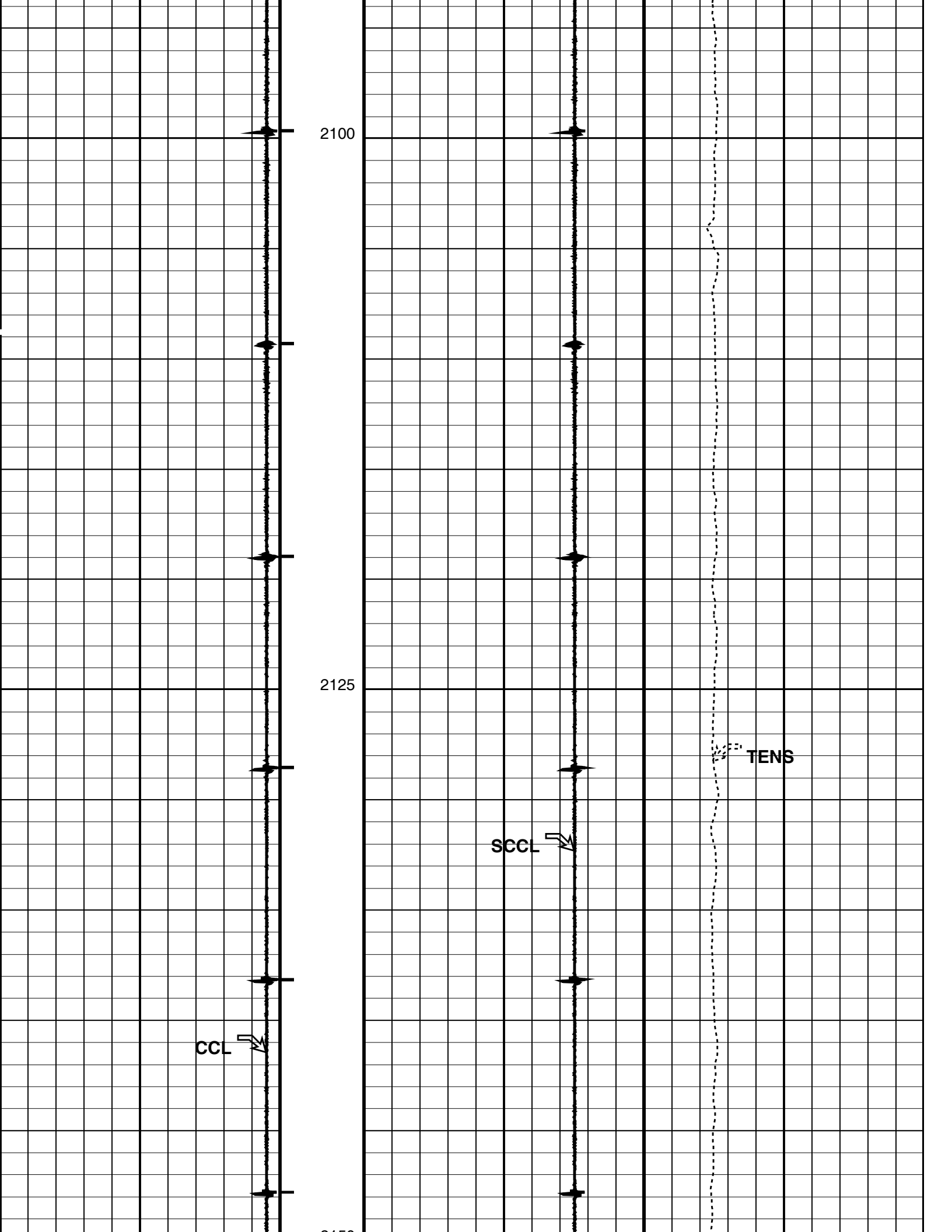
Company:				Well:		
Input DLIS Files						
DEFAULT	Flip_PERFO_089LUP	PRODUCER	23-Jul-2009 16:14			
Output DLIS Files						
DEFAULT	PERFO_090PUP	FN:95	PRODUCER	23-Jul-2009 16:16	2841.8 M	2043.7 M
OP System Version: 16C0-147						
MCM						
SHM_GUN	16C0-147	CCL-L	16C0-147			

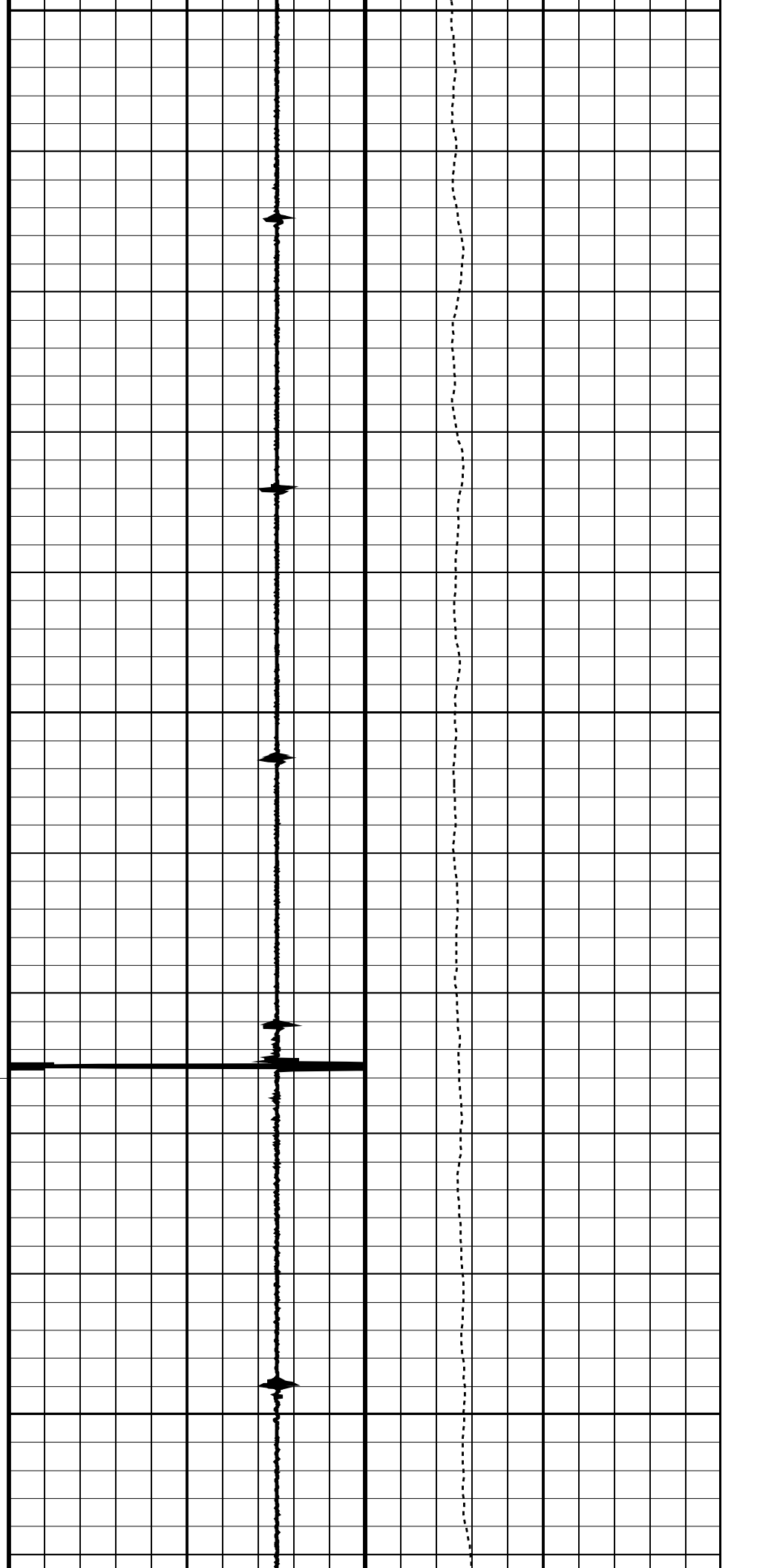
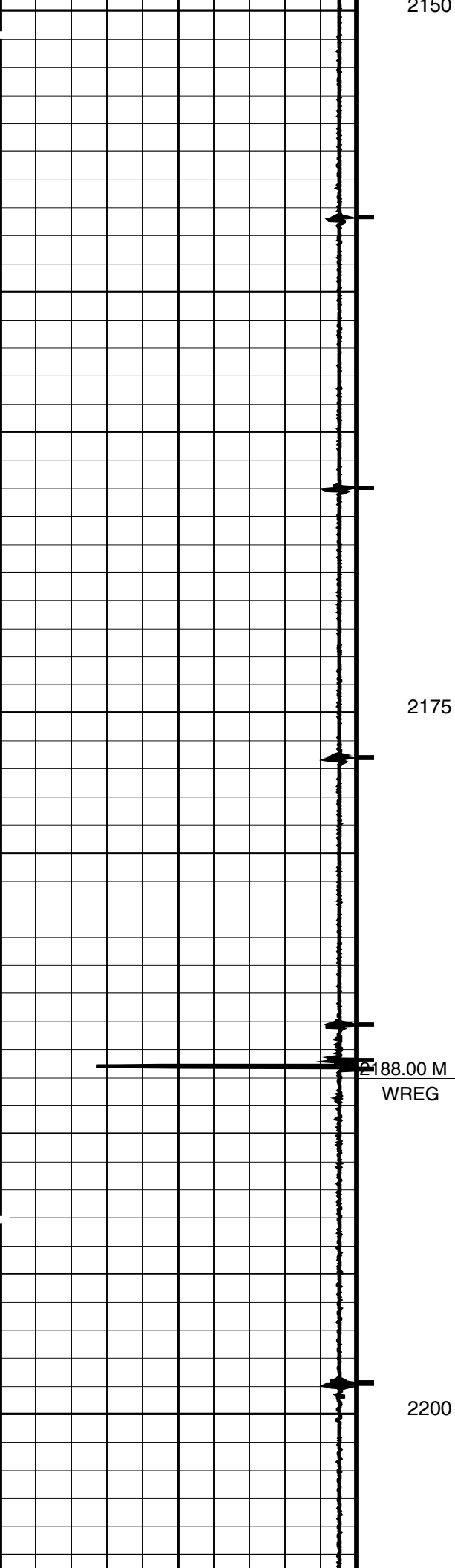
PIP SUMMARY

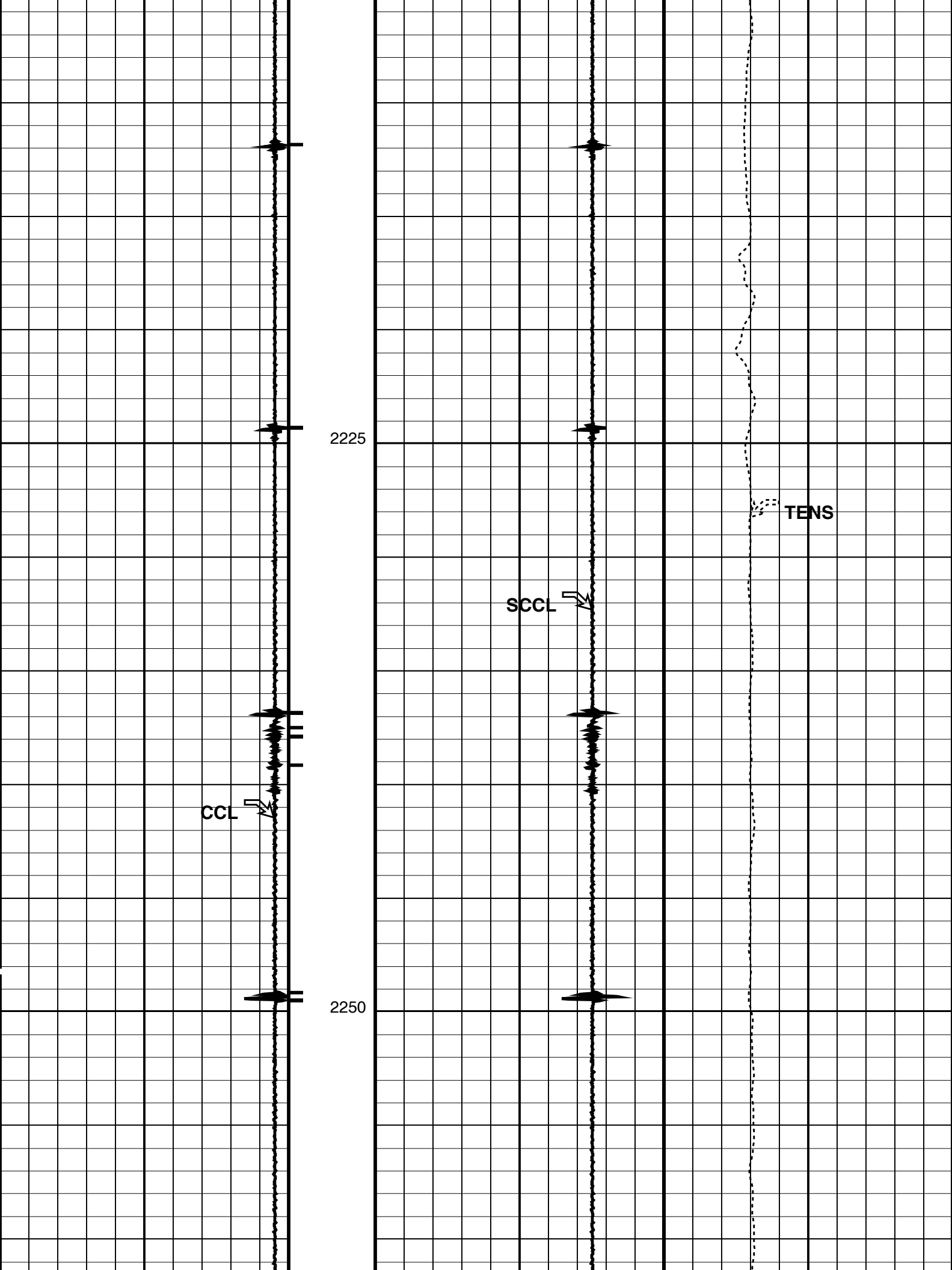
Time Mark Every 60 S

Casing Collars

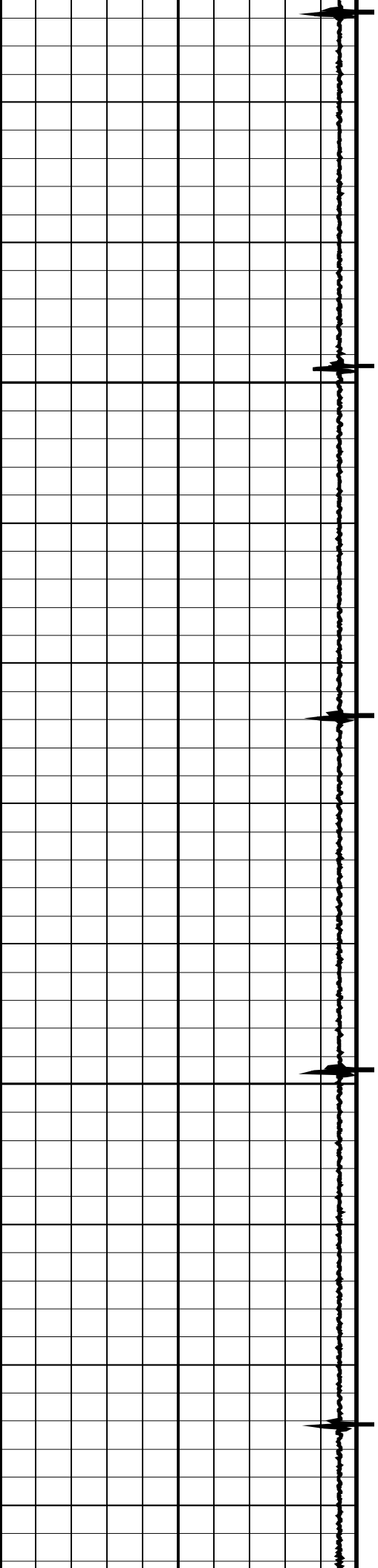






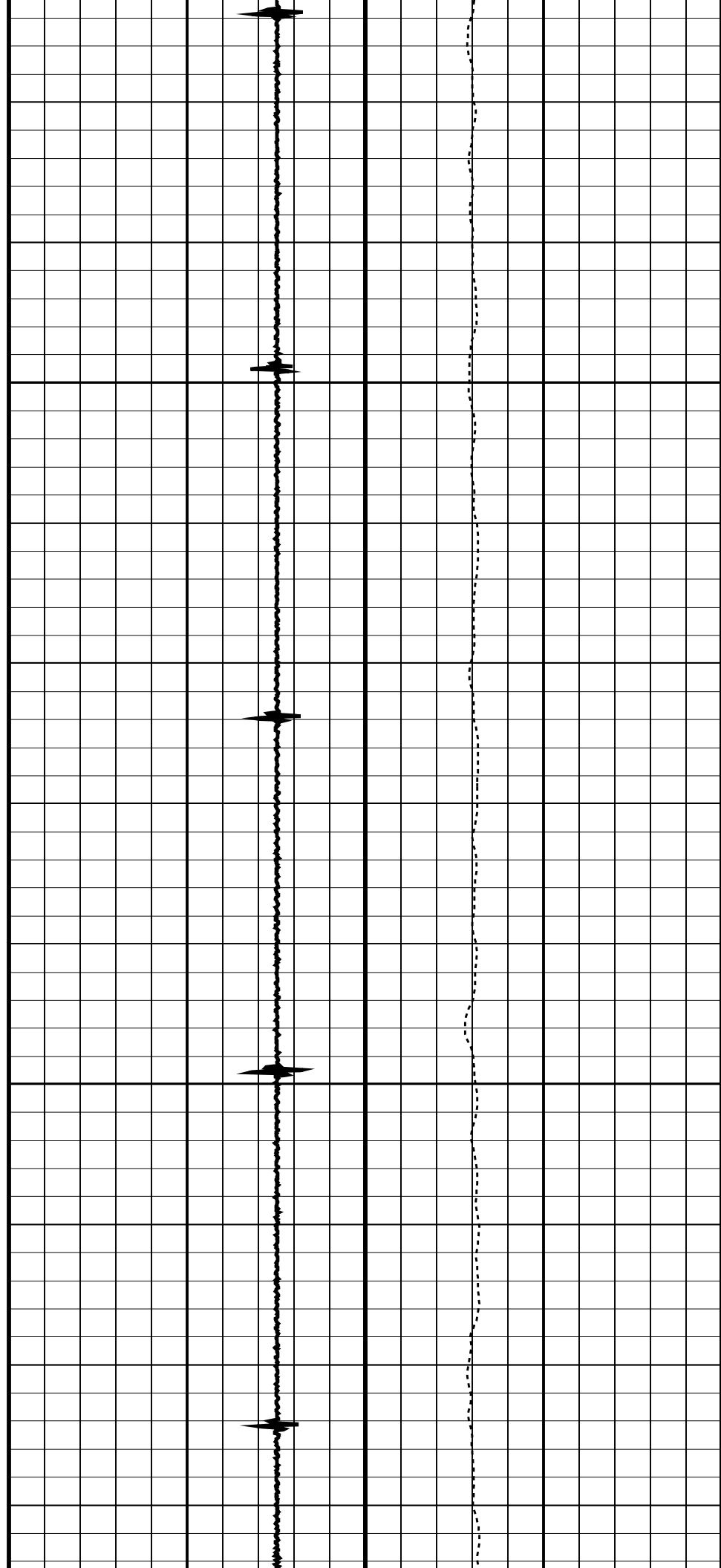


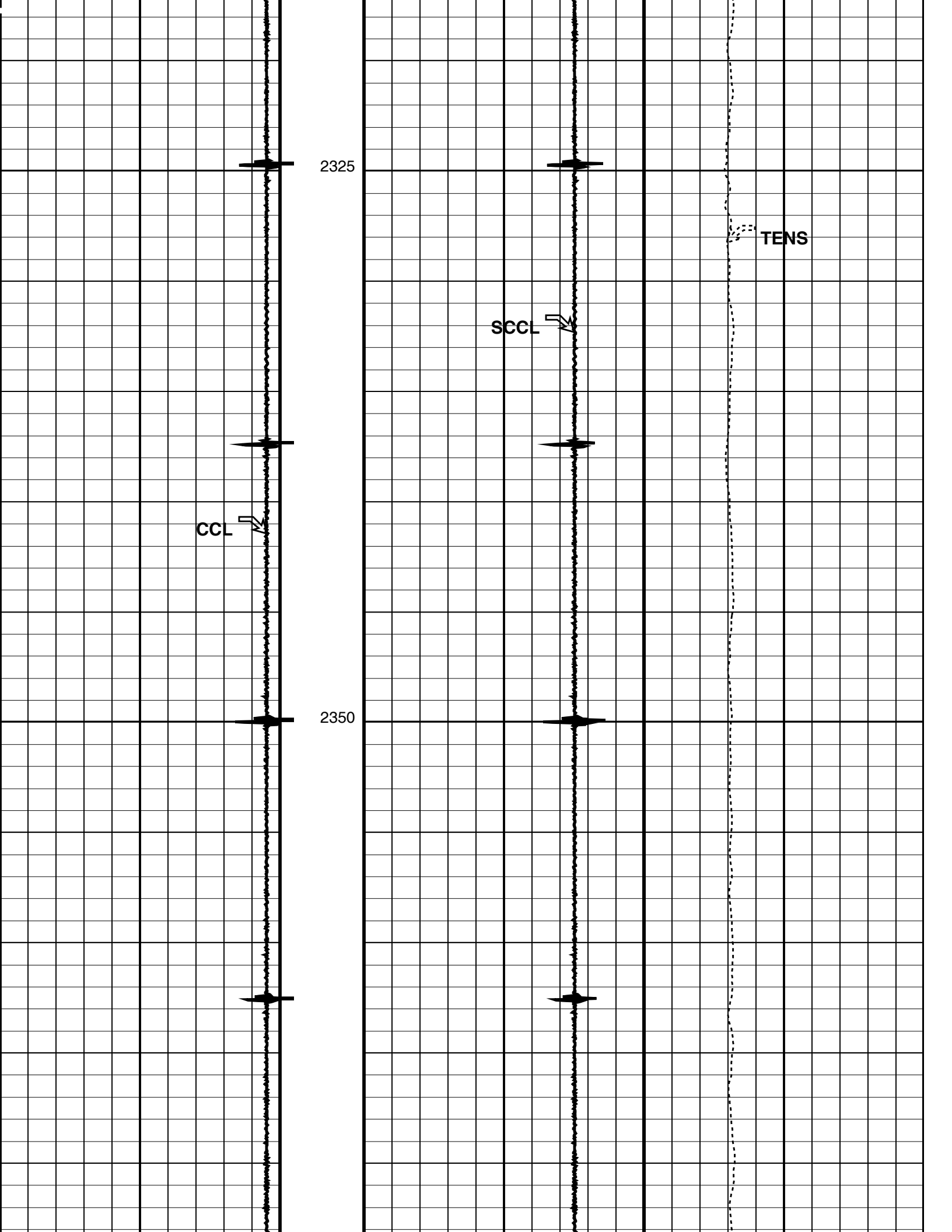


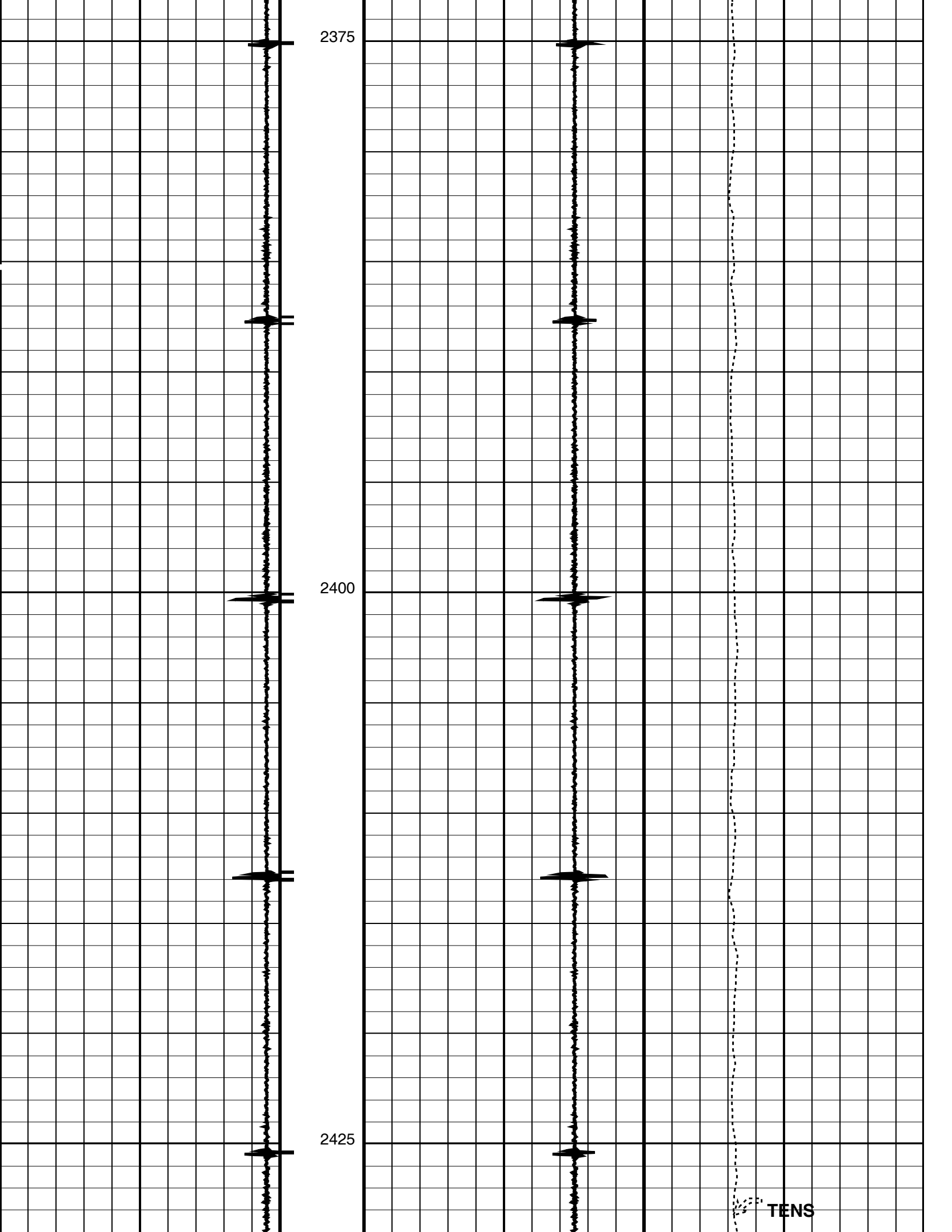


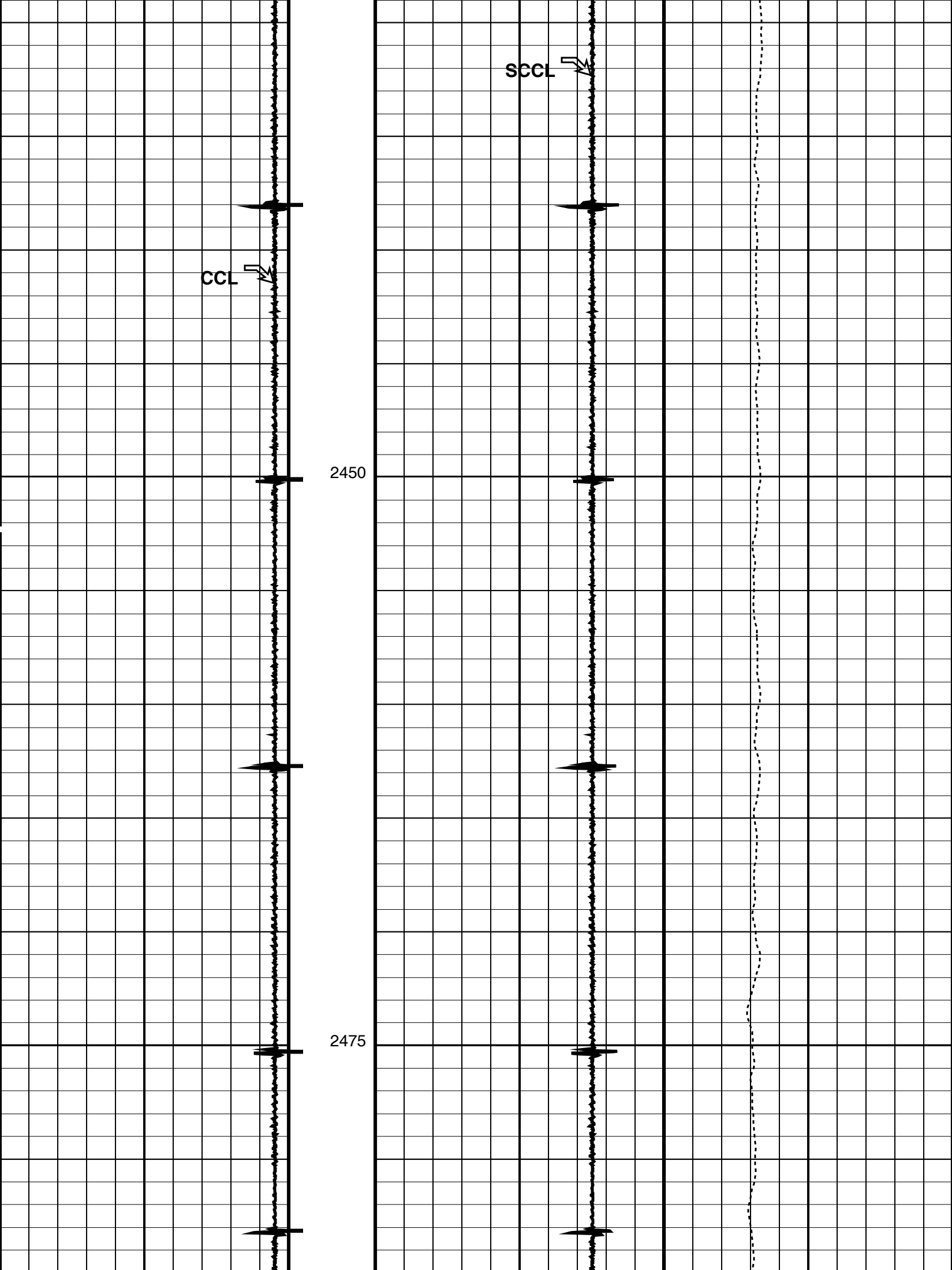
2275

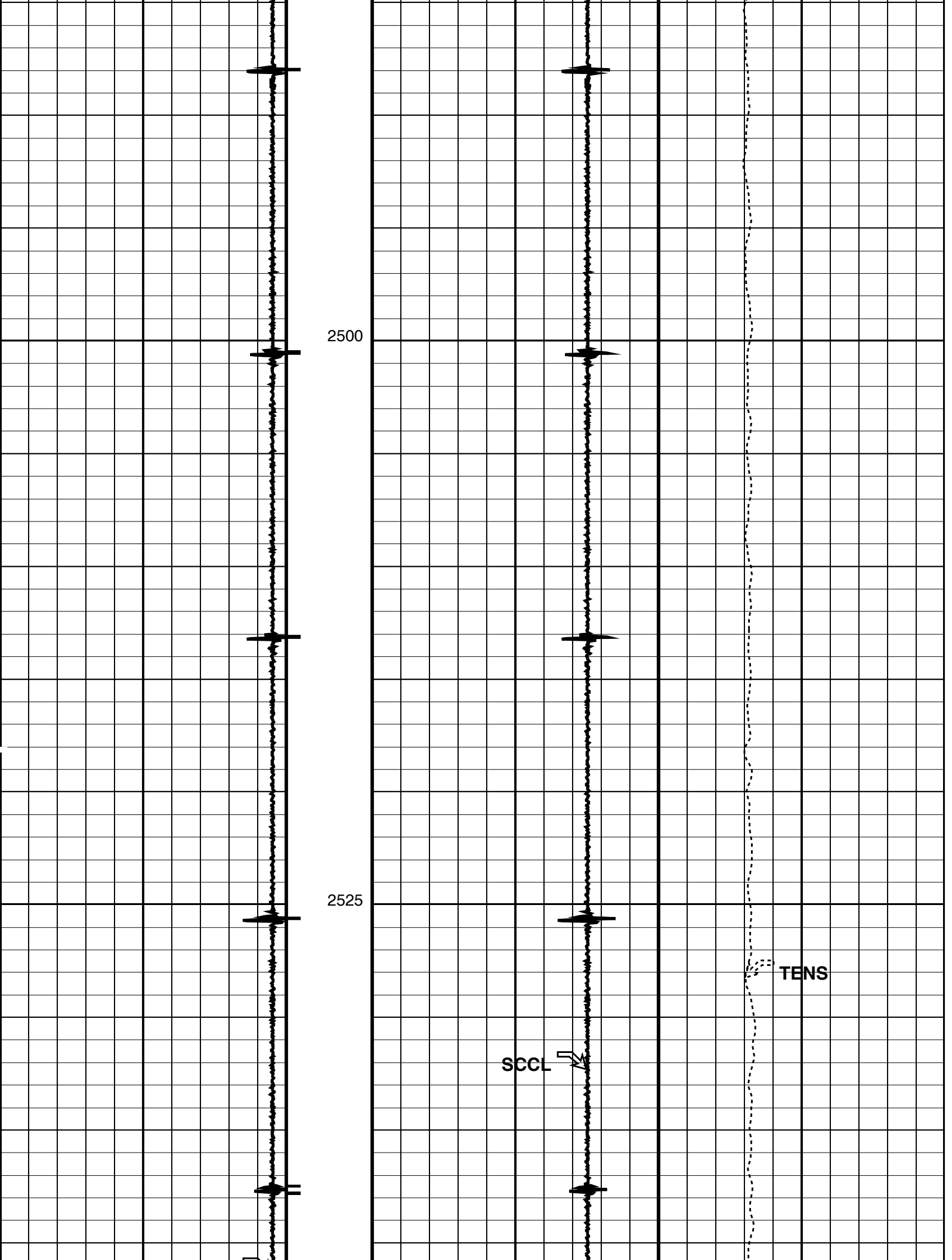
2300

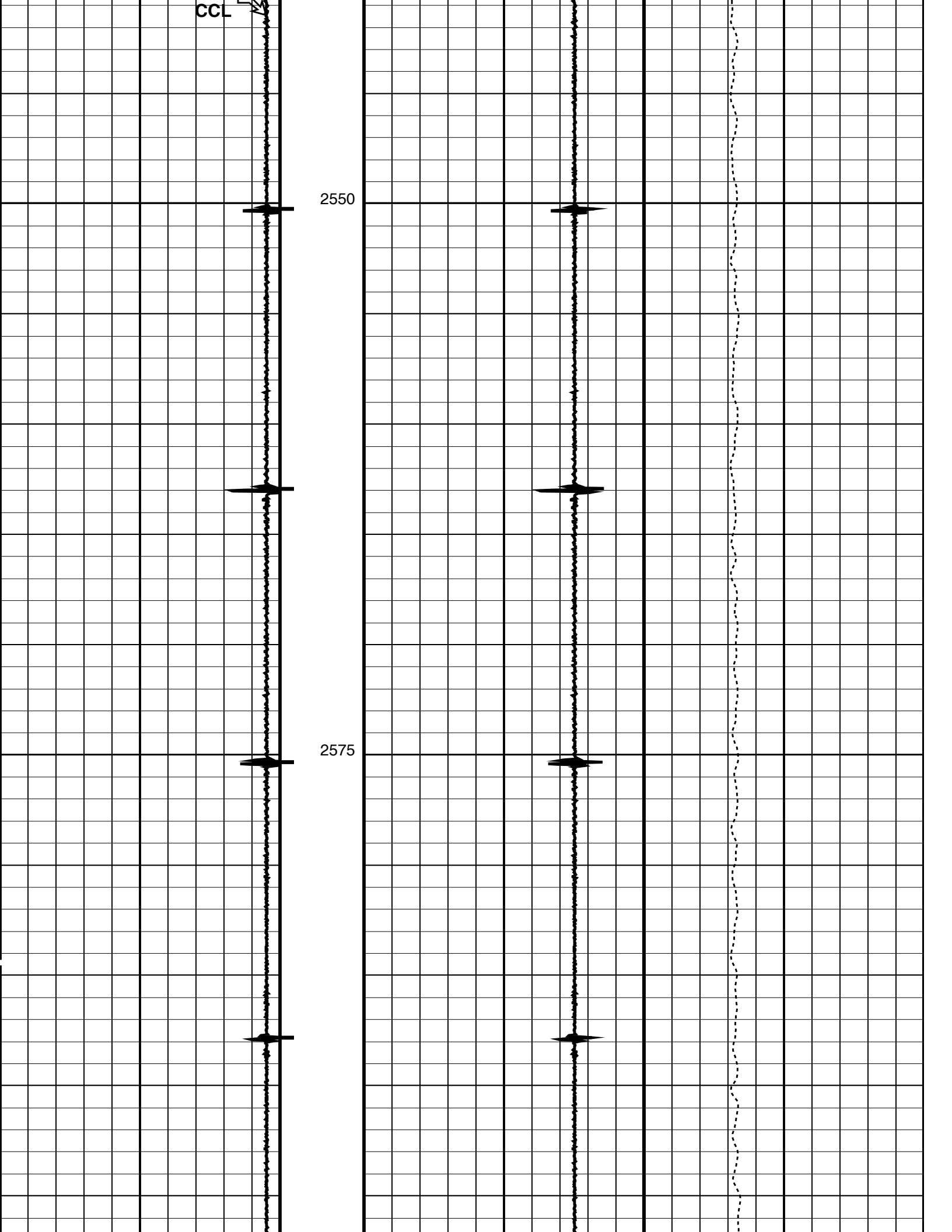


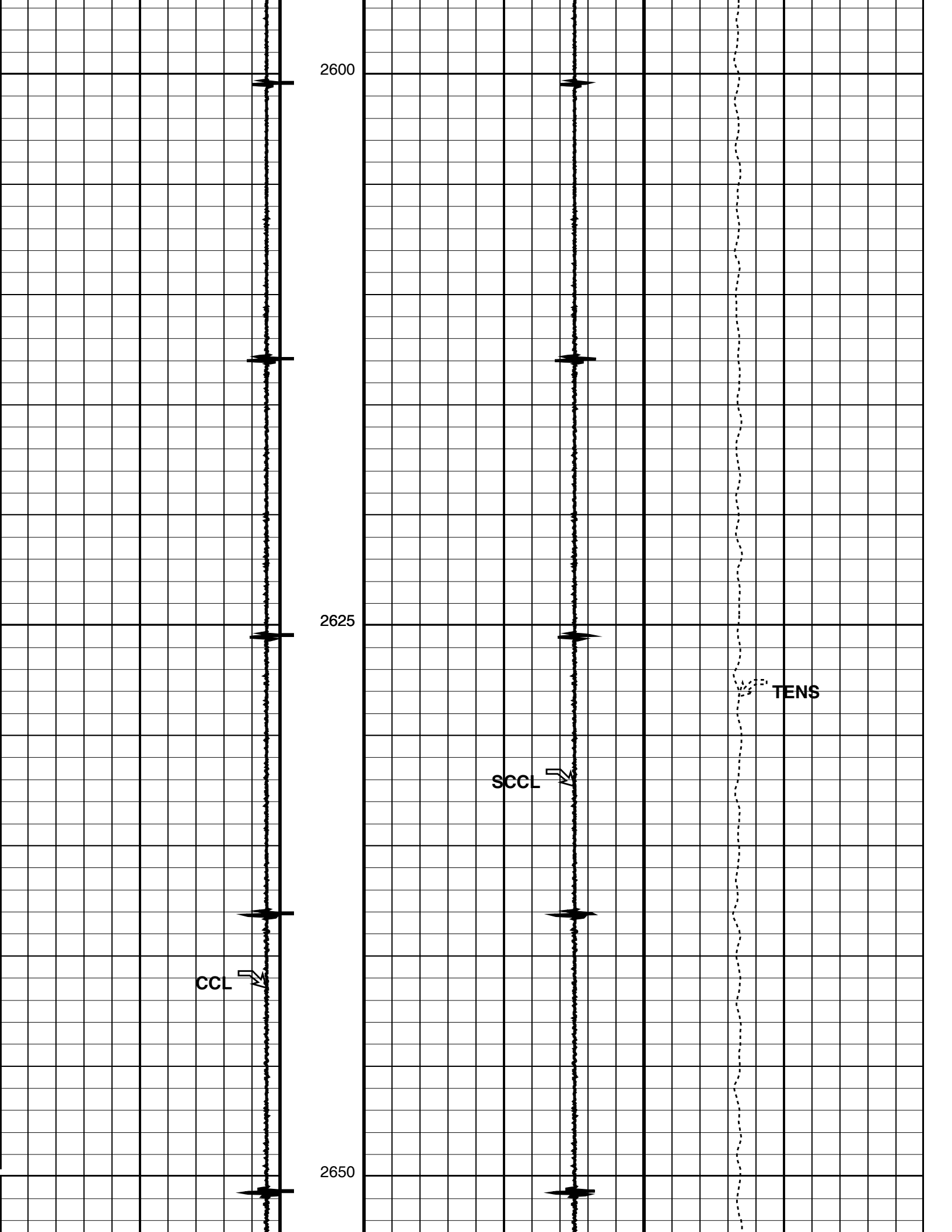


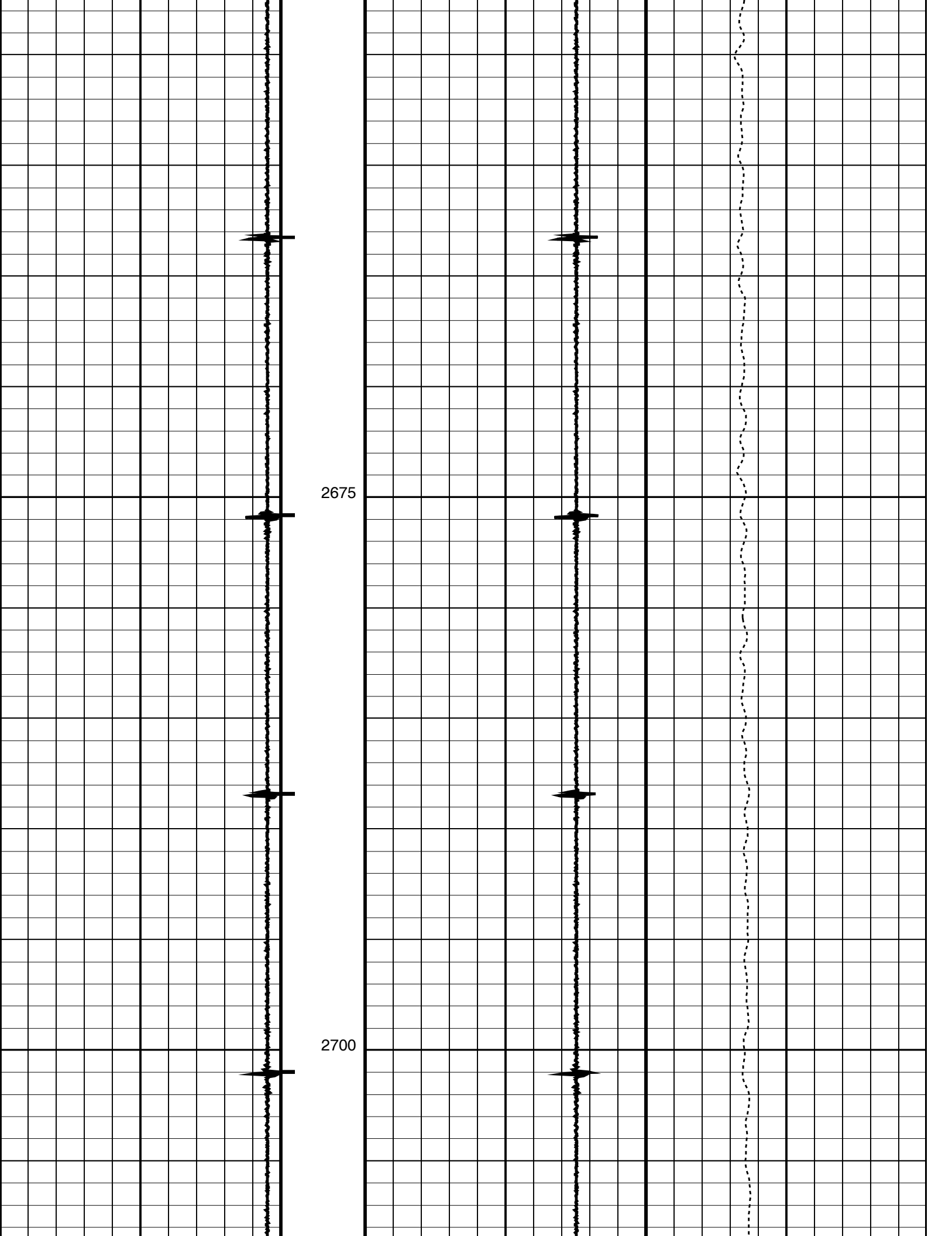




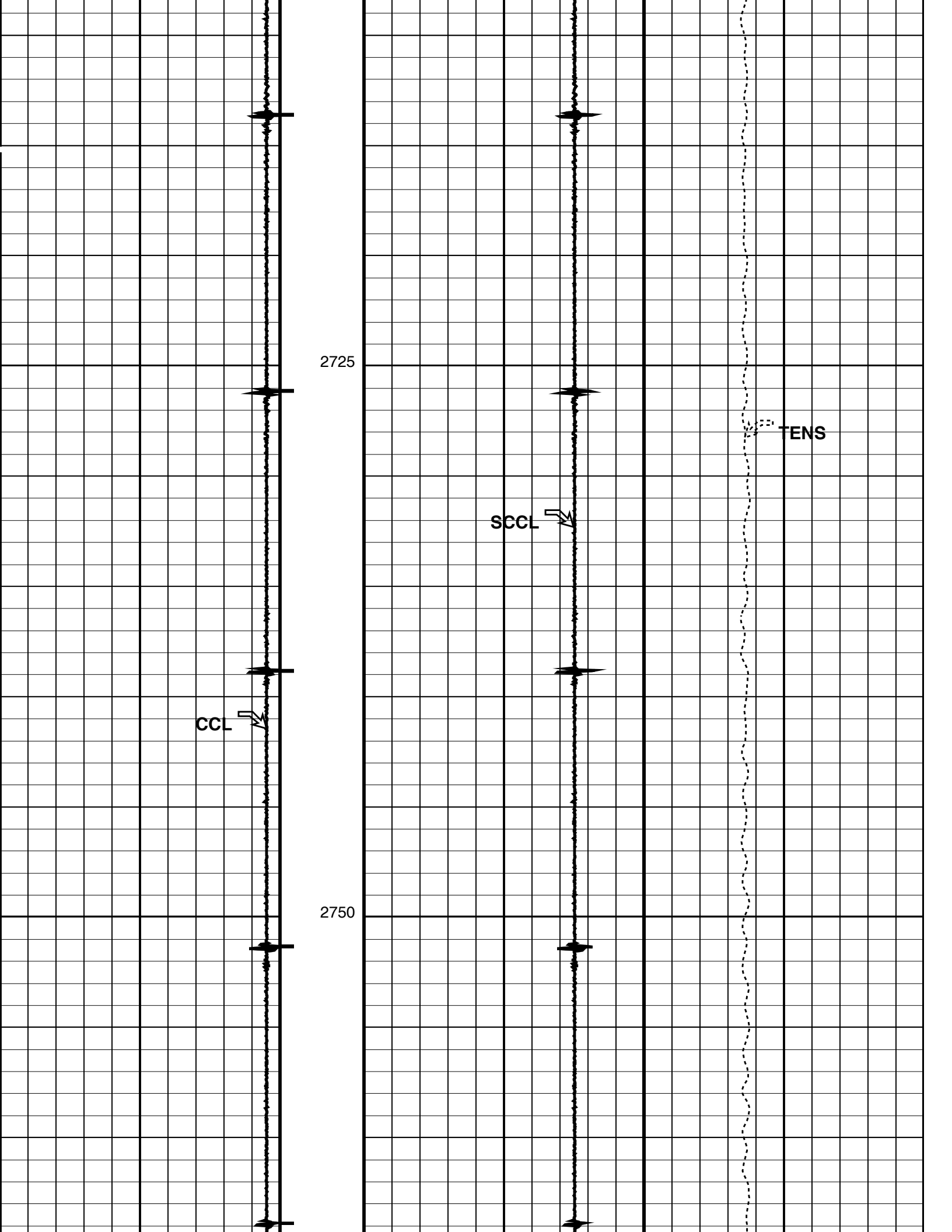


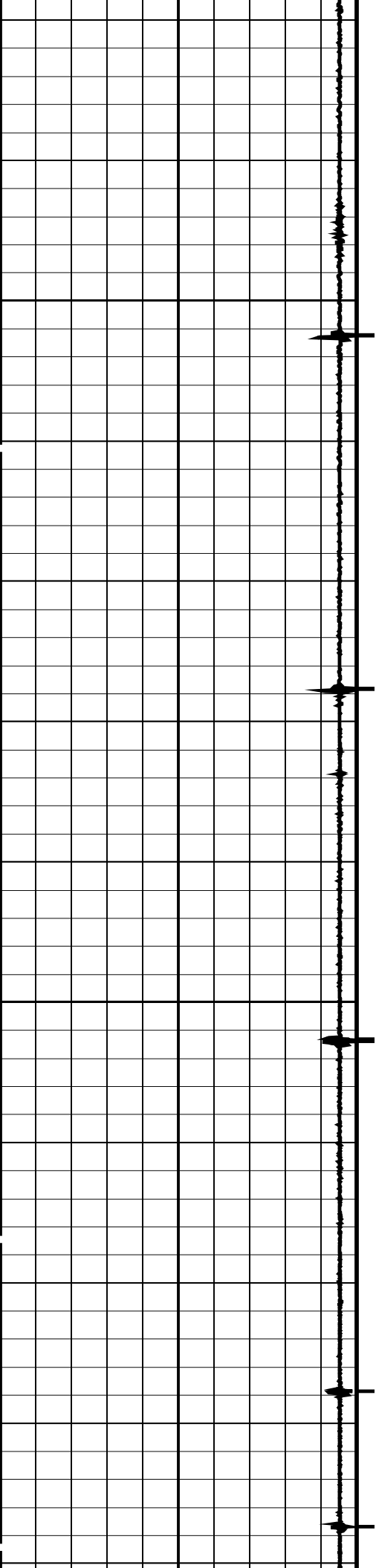






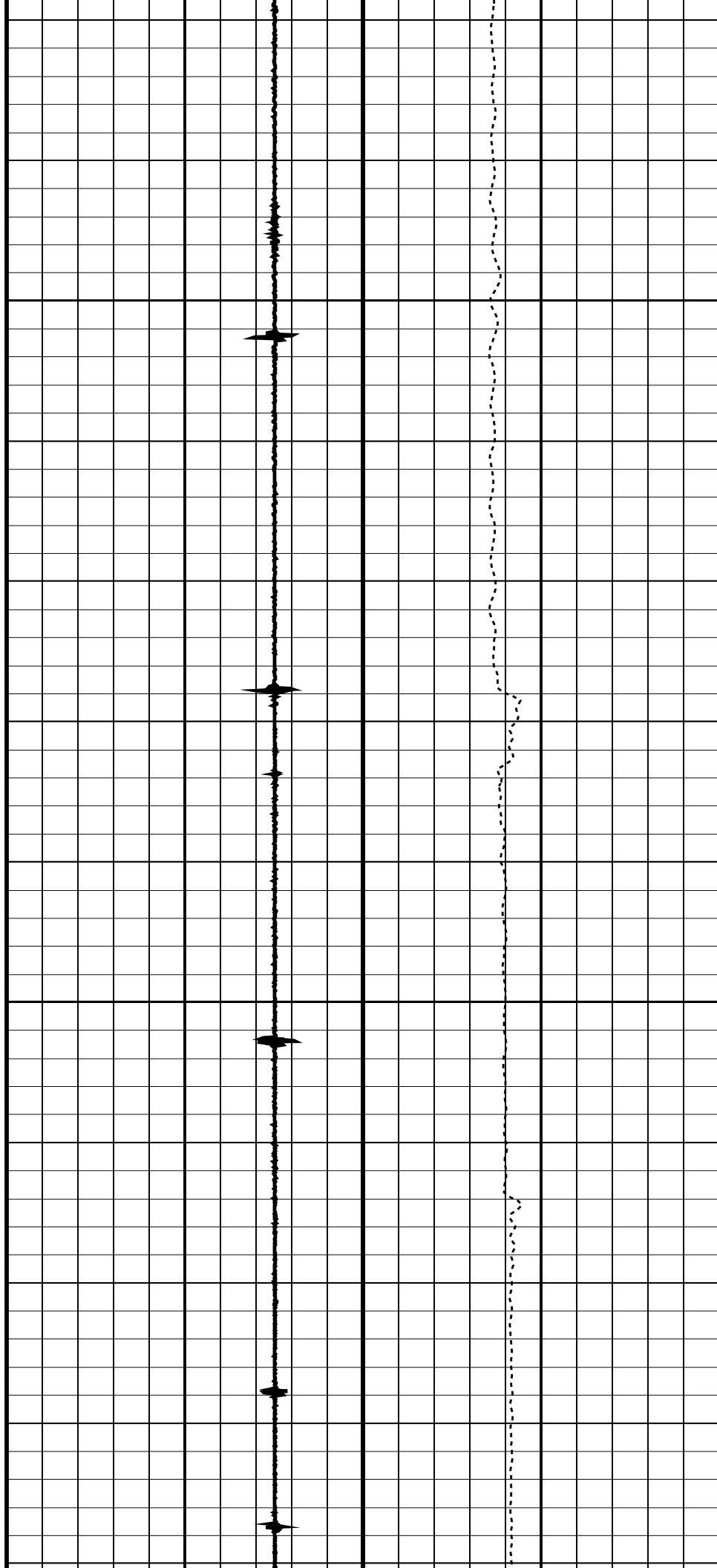


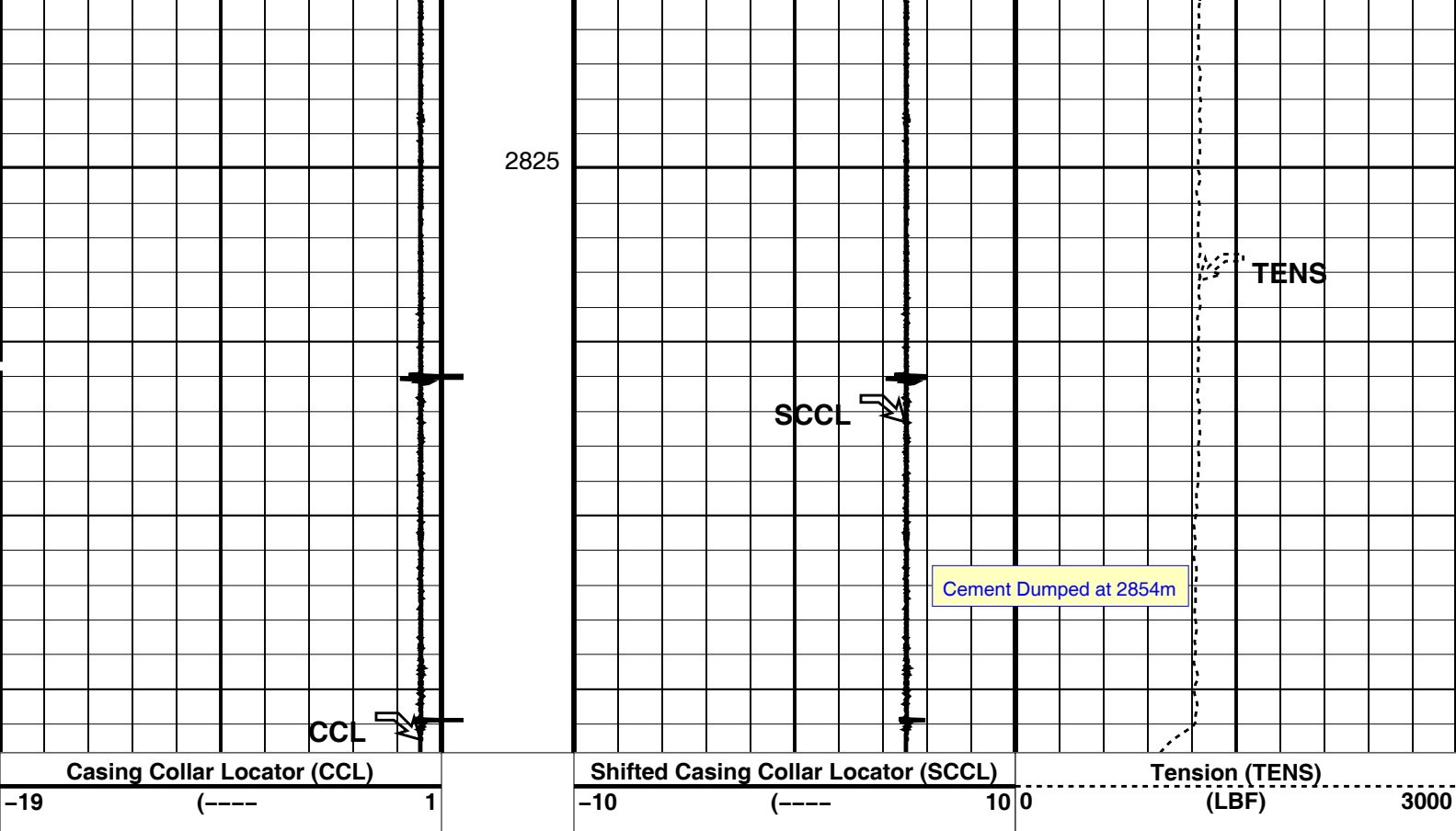




2775

2800





#### PIP SUMMARY

← Casing Collars

Time Mark Every 60 S

#### Parameters

DLIS Name	Description	Value
CCLD	CCL-L: Casing Collar Locator	12 IN
CCLT	CCL reset delay	0.3 V
	CCL Detection Level	
DO	System and Miscellaneous	
PP	Depth Offset for Playback	0.0 M
	Playback Processing	NORMAL

Format: PERFO Vertical Scale: 1:200

Graphics File Created: 23-Jul-2009 16:16

#### OP System Version: 16C0-147

MCM

SHM\_GUN 16C0-147 CCL-L 16C0-147

#### Input DLIS Files

DEFAULT Flip\_PERFO\_089LUP PRODUCER 23-Jul-2009 16:14

#### Output DLIS Files

DEFAULT PERFO\_090PUP FN:95 PRODUCER 23-Jul-2009 16:16

**Schlumberger**

Plug # 1 Setting Record  
Top Of Seal @ 2855m MDKB

# Output DLIS Files

DEFAULT

MPBT\_050LUP

FN:52

PRODUCER

23-Jul-2009 04:26

## OP System Version: 16C0-147

MCM

MPEX-BA  
CCL-L

16C0-147  
16C0-147

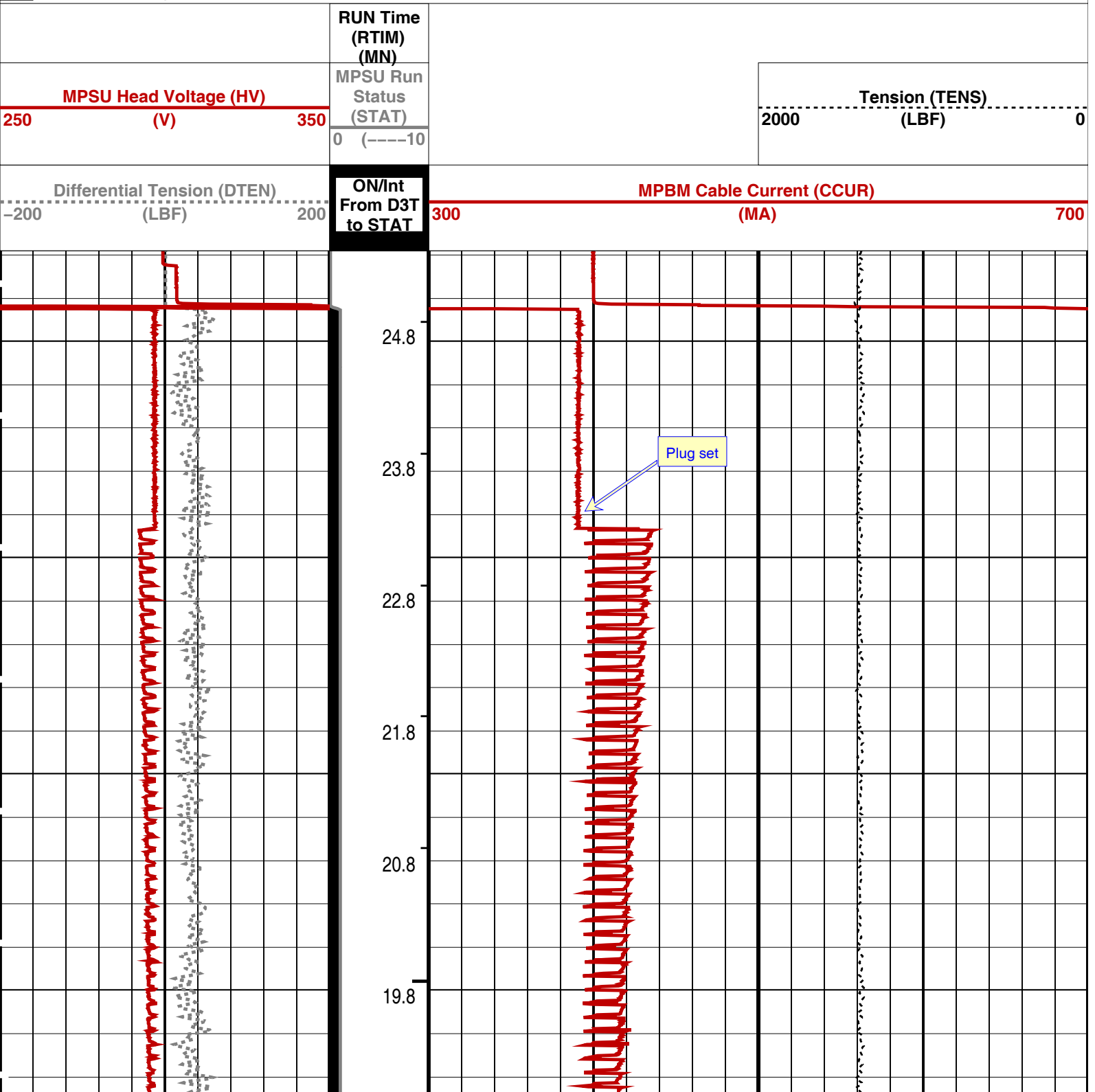
MPSU-CA

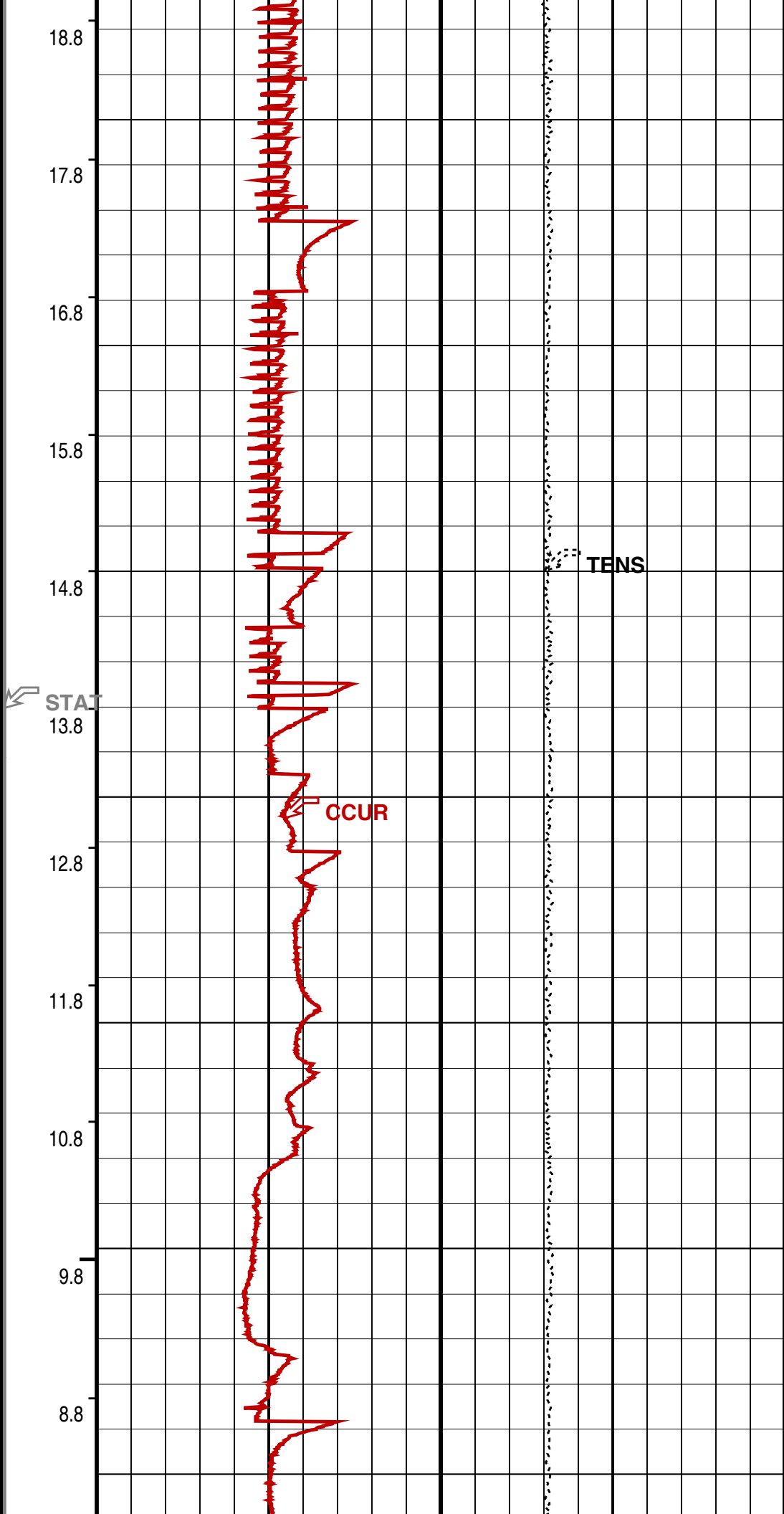
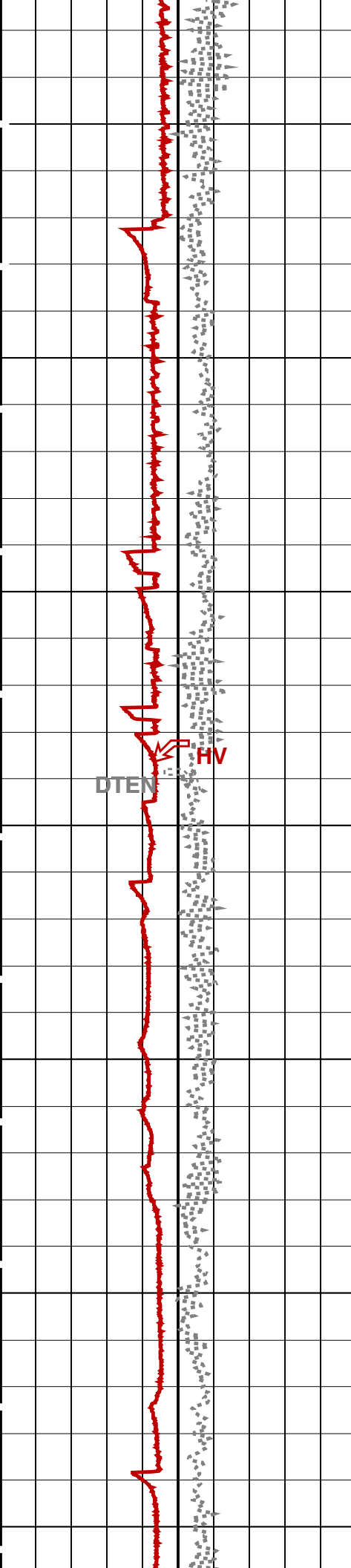
16C0-147

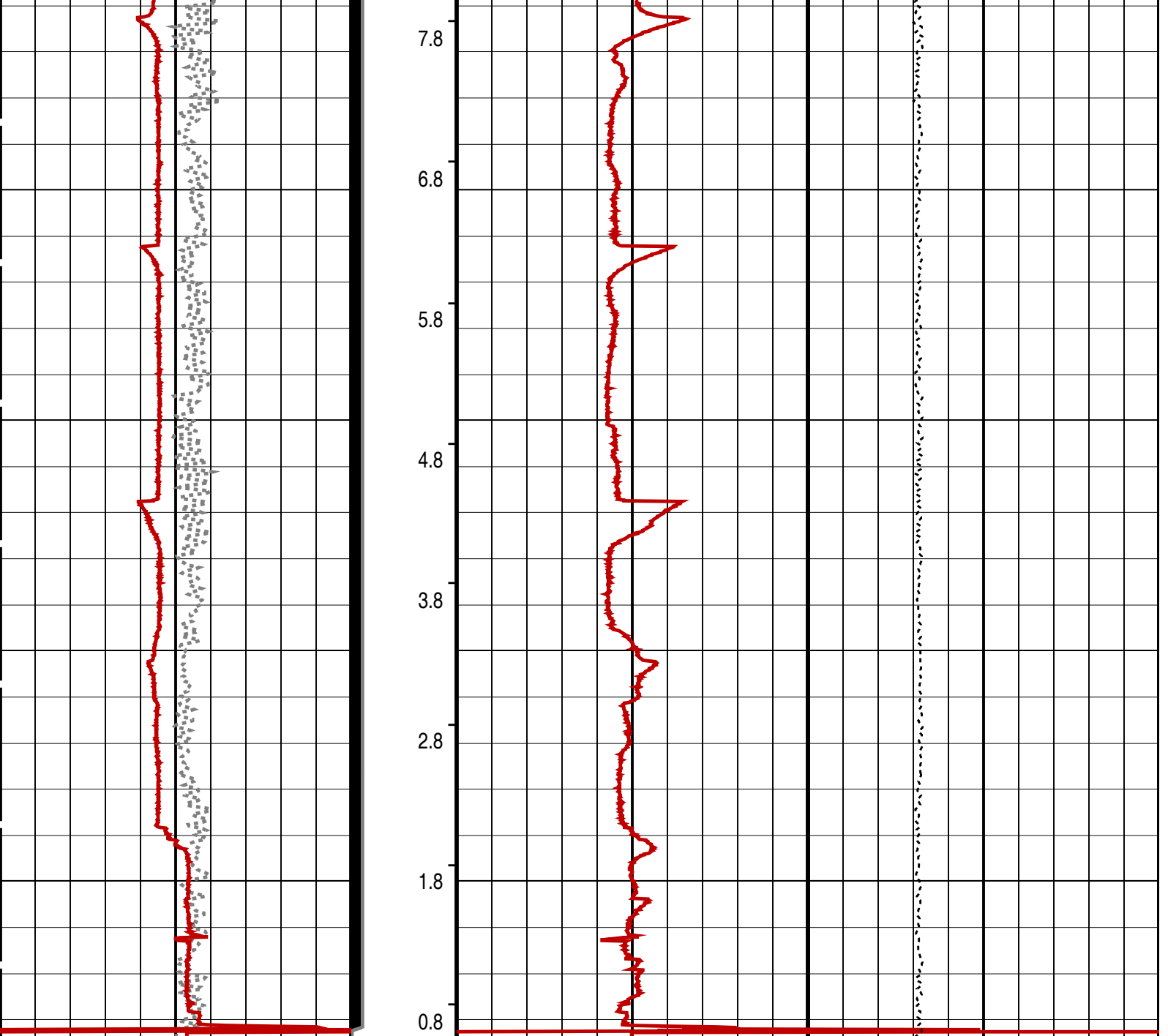
### PIP SUMMARY

- └ MPSU Run Time Every 1 MN
- └ MPSU Run Time Every 10 MN

Time Mark Every 60 S







Differential Tension (DTEN) (LBF)	ON/Int From D3T to STAT	MPBM Cable Current (CCUR) (MA)
-200200		300700
MPSU Head Voltage (HV) (V)	MPSU Run Status (STAT)	Tension (TENS) (LBF)
250350	0 (----10)	20000
	RUN Time (RTIM) (MN)	

#### PIP SUMMARY

- ↵ MPSU Run Time Every 1 MN
- ↵ MPSU Run Time Every 10 MN

Time Mark Every 60 S

#### Parameters

DLIS Name	Description	Value
MPSU-CA: MECHANICAL PLUGBACK SETTING UNIT IPUMP	Intensifier Pump	TRUE

OP System Version: 16C0-147

MCM

MPEX-BA

16C0-147

CCL-L

16C0-147

MPSU-CA

16C0-147

Output DLIS Files

DEFAULT

MPBT\_050LUP

FN:52

PRODUCER

23-Jul-2009 04:26

Schlumberger

Plug # 1 Correlation Pass

MAXIS Field Log

Input DLIS Files

DEFAULT

Flip\_MPBT\_120LUP

PRODUCER

24-Jul-2009 06:58

2847.9 M

2815.3 M

Output DLIS Files

DEFAULT

MPBT\_121PUP

FN:123

PRODUCER

24-Jul-2009 07:00

2847.9 M

2815.3 M

OP System Version: 16C0-147

MCM

MPEX-BA

16C0-147

CCL-L

16C0-147

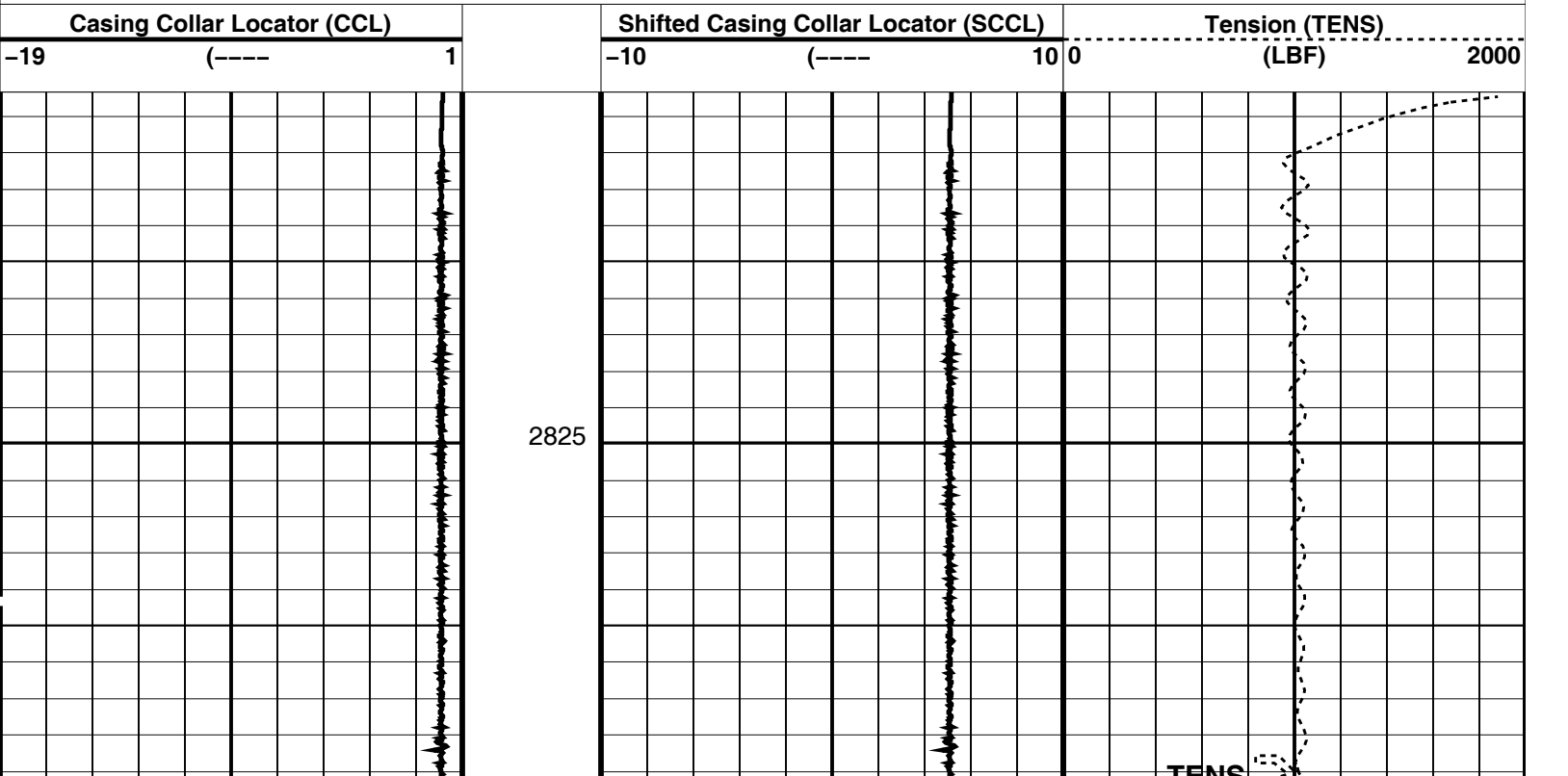
MPSU-CA

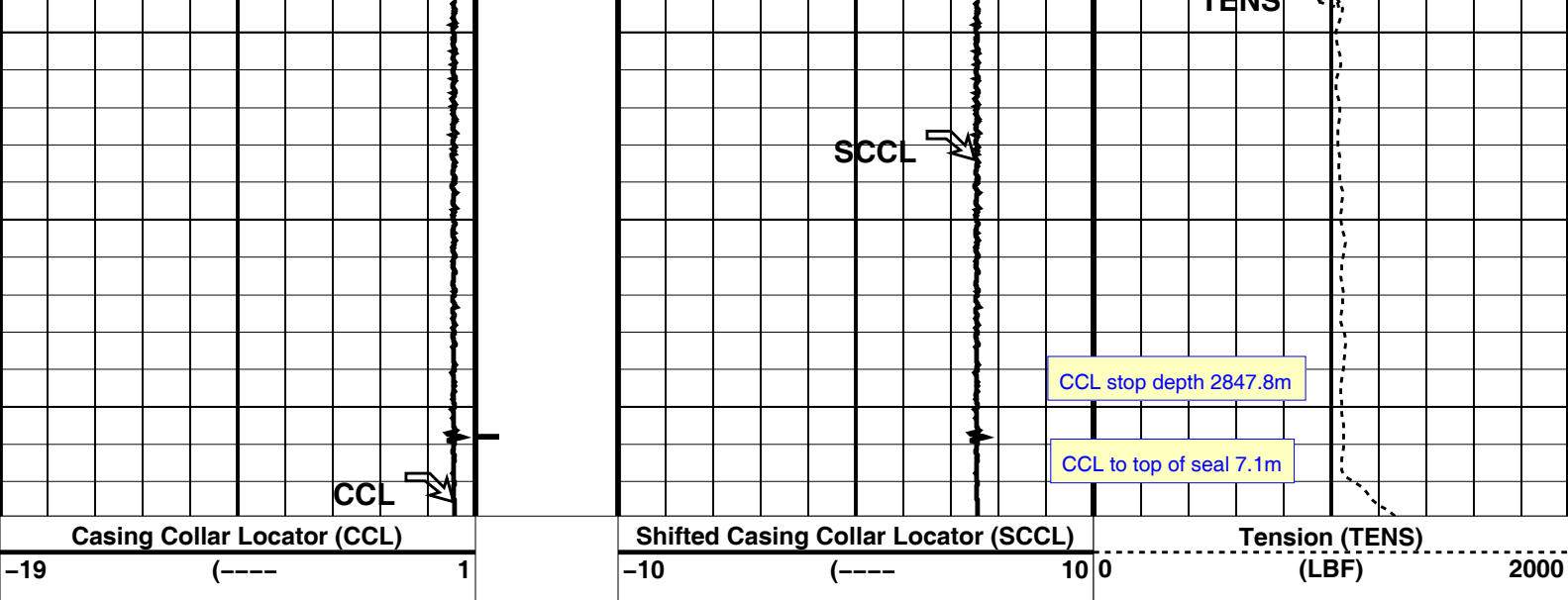
16C0-147

PIP SUMMARY

Time Mark Every 60 S

Casing Collars





PIP SUMMARY

Time Mark Every 60 S

Casing Collars

Parameters		
DLIS Name	Description	Value
CCL-L	Casing Collar Locator	
CCLD	CCL reset delay	12 IN
CCLT	CCL Detection Level	0.3 V
DO	System and Miscellaneous	
PP	Depth Offset for Playback	0.0 M
	Playback Processing	NORMAL

Format: PERFO Vertical Scale: 1:200 Graphics File Created: 24-Jul-2009 07:00

OP System Version: 16C0-147			
MCM			
MPEX-BA	16C0-147	MPSU-CA	16C0-147
CCL-L	16C0-147		

Input DLIS Files					
DEFAULT	Flip_MPBT_120LUP	PRODUCER	24-Jul-2009 06:58	2847.9 M	2815.3 M
Output DLIS Files					
DEFAULT	MPBT_121PUP	FN:123	PRODUCER	24-Jul-2009 07:00	

Company:	Esso Australia Ltd	Schlumberger
Well:	A7a	
Field:	Snapper	
Rig:	Prod 4 / Crane	
Country:	Australia	
7" Mechanical Bridge Plug		
Casing Collar Log		
Plug Set Record		