

Company: Esso Australia Pty Ltd.

Well: TNA A9a

Field: Tuna

Rig: Crane / Prod2

Country: Australia

2-1/8" Powerjet / MPBT
Perforation and Plug Setting Record
15-Jun-2008

Rig: Crane / Prod2
Field: Tuna
Location: Gippsland
Well: TNA A9a
Company: Esso Australia Pty Ltd.

LOCATION	
Gippsland	Elev.: K.B. 32.4 m
Basin	G.L. -59.0 m
Bass Strait	D.F. 32.4 m
Permanent Datum:	M.S.L. _____
Log Measured From:	R.T. _____
Drilling Measured From:	R.T. _____
Elev.: 0 m	32.4 m above Perm. Datum

State: Victoria	Max. Well Deviation 66 deg	Longitude 148 25' 06.5" E	Latitude 038 10' 16.5" S
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Logging Date	15-Jun-2008
Run Number	1
Depth Driller	2793 m
Schlumberger Depth	2597 m
Bottom Log Interval	2587 m
Top Log Interval	2568 m
Casing Fluid Type	Produced Fluids
Salinity	
Density	
Fluid Level	
BIT/CASING/TUBING STRING	
Bit Size	9.875 in
From	954 m
To	2793 m
Casing/Tubing Size	7.625 in
Weight	29.7 lbm/ft
Grade	L-80
From	585 m
To	2772 m
Maximum Recorded Temperatures	181 degF
Logger On Bottom	15-Jun-2008
Unit Number	3827 AUSL
Recorded By	C.Rowand / O.Darby
Witnessed By	A. Smythe / S.Murphy

PVT DATA				Run 1	Run 2	Run 3
Oil Density						
Water Salinity						
Gas Gravity						
Bo						
Bw						
1/Bg						
Bubble Point Pressure						
Bubble Point Temperature						
Solution GOR						
Maximum Deviation	66 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						
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						
Unit Number						
Recorded By						
Witnessed By						

DEPTH SUMMARY LISTING

Date Created: 17-JUN-2008 12:06:41

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-H	Type:	CMTD-B/A	Type:	2-32ZT
Serial Number:	794	Serial Number:	1711	Serial Number:	24187
Calibration Date:	8-Nov-2007	Calibration Date:	8-Jun-2008	Length:	5900.01 M
Calibrator Serial Number:	1009	Calibrator Serial Number:	1173	Conveyance Method:	Wireline
Calibration Cable Type:	2-32ZT	Calibration Gain:	1.00	Rig Type:	Offshore_Fixed
Wheel Correction 1:	-6	Calibration Offset:	0.00		
Wheel Correction 2:	-2				

Depth Control Parameters

Log Sequence:	Subsequent Log In the Well
Reference Log Name:	Petrophysical Analysis
Reference Log Run Number:	
Reference Log Date:	19-Apr-2004

Depth Control Remarks

1. Log correlated to RST-C Sigma Log (1:200) of 21-Apr-2004 over the interval 2450-2555m.
2. Log correlated to Petrophysical Analysis (1:500) of 19-Apr-2004 over the interval 2450-2585m.
- 3.
- 4.
- 5.
6. Tension Calibration: RMS=3, Peak Error= 5

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: MWP	OS1:
OS2: GR-CH	OS2:
OS3: DB-TT	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1

Log correlated to RST-C Sigma Log of 21-Apr-2004

Log referenced to Petrophysical Analysis (1:500) of 21-Apr-2004.














Objective:– to perforate intervals 2568–2574, 2584–2587m MDKB and set a MPBT plug at 2591m MDKB

to isolate the existing perforation at 2592.5–2596.5m MDKB.

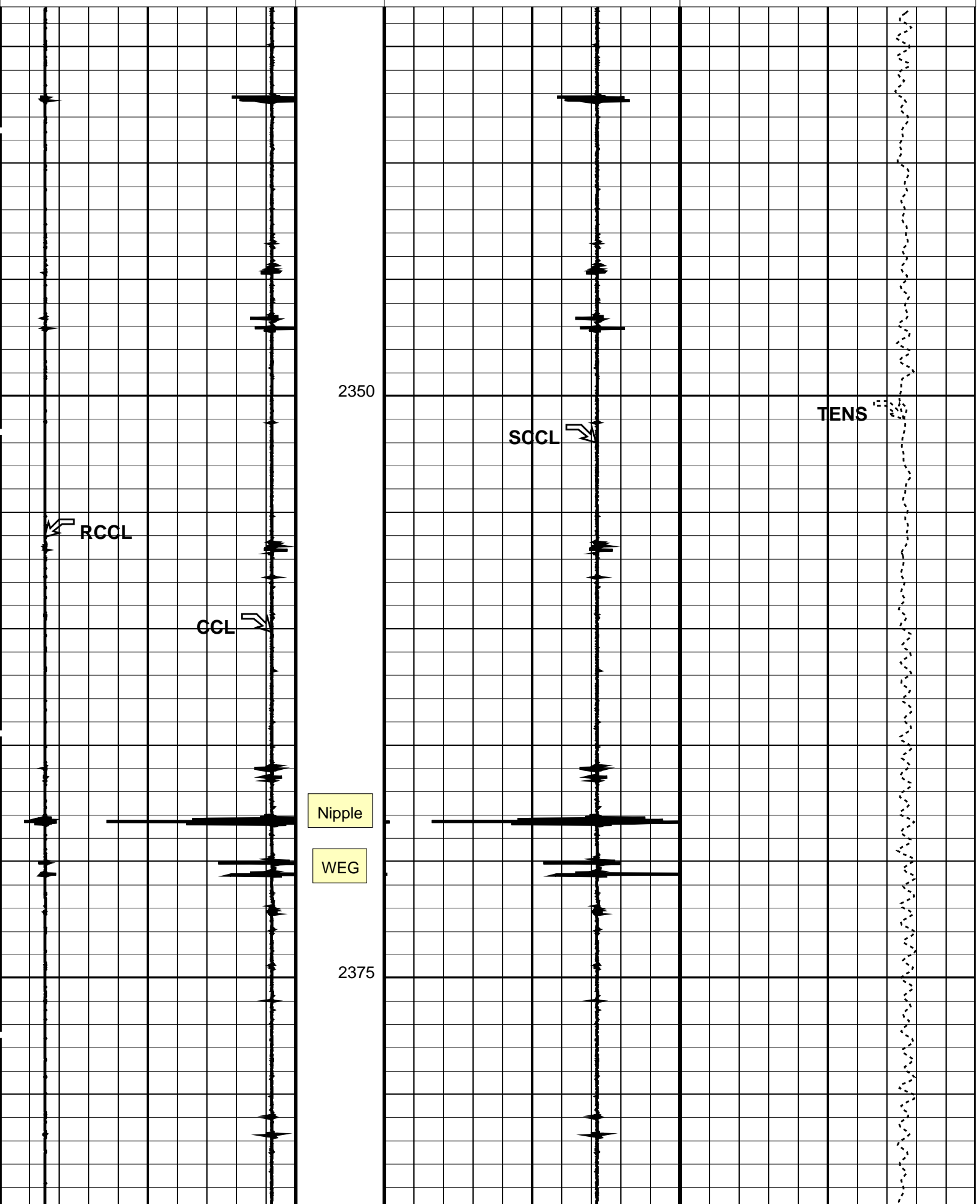
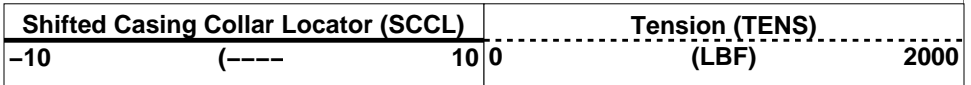
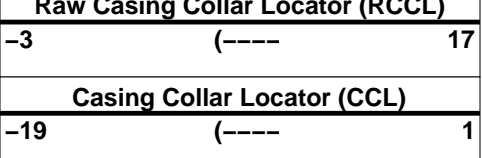
Run #1: Perforate 2584–2587m MDKB, with 2–1/8" Powerjets using SAFE.

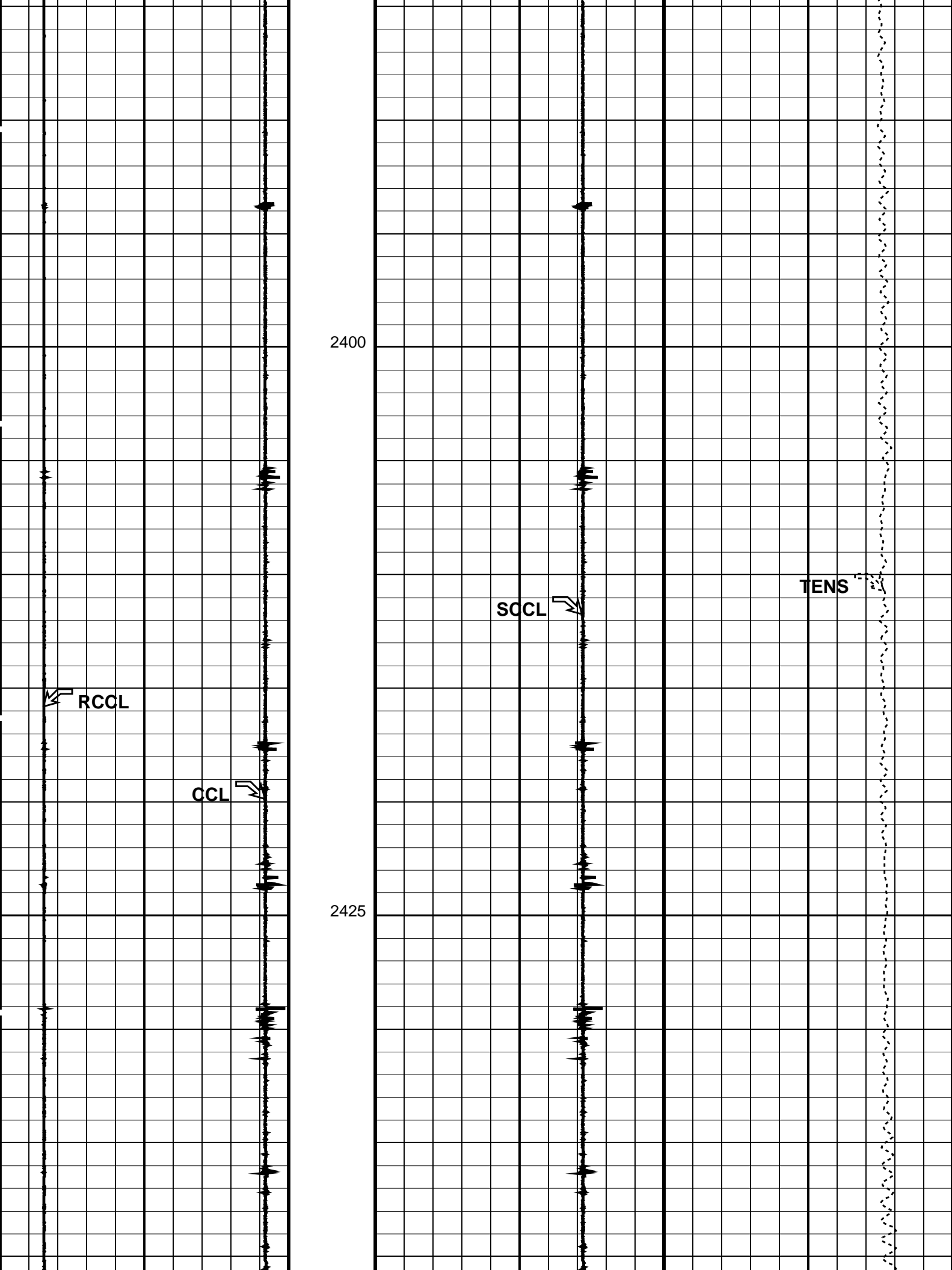
BHP before firing : 2065.9 psia, BHT before firing: 167.7 DegF, BHP after firing: 2066.3 psia, BHT after firing: 170.2DegF

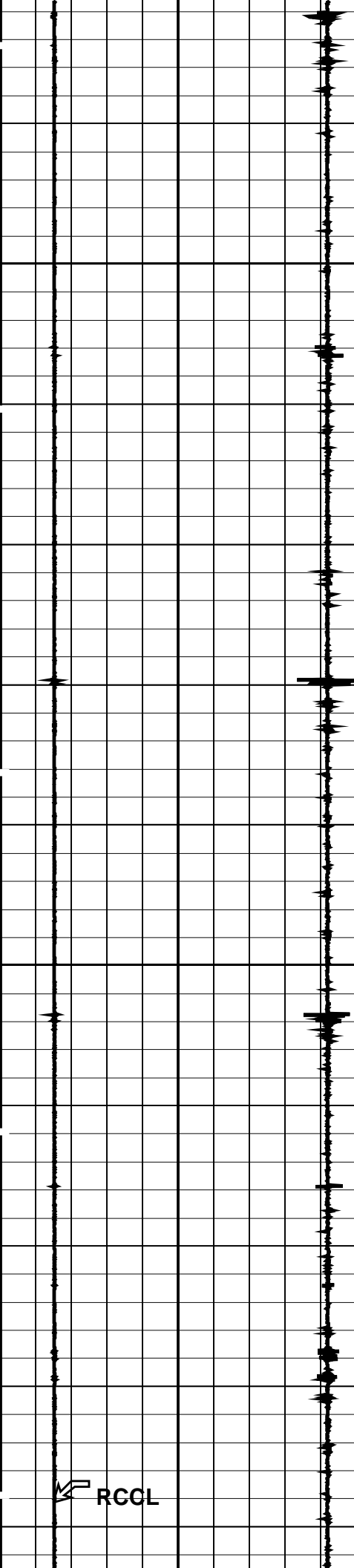
Run #2: Perforate 2568-2574m MDKB. with 2-1/8" Powerjets using SAFE

Run #1: Generate 2597.2m MPBT, Run #2: 2-1/8" Water Bailer using 2597.2m					
BHP before firing: 2048.1 psia, BHT before firing: 174.5 DegF, BHP after firing: 2050.1 psia, BHT after firing: 181.7DegF.					
Run #3: Dummy 2-1/8" MPBT plug. Tagged HUD @ 2597 m MDKB.					
Run #4: MPBT set with Top Seal @ 2591.0m MDKB					
Run #5: 2-1/8" Water Bailer. Tagged MPBT at 2591.1m MDKB.					
Run #6: 2-1/8" Cement Dump Bailer. Dumping 0.84m of cement in 7-5/8" casing					
High GR was observed in the tubing, indicating possible presence of NORM.					
RUN 1			RUN 2		
SERVICE ORDER #: PROGRAM VERSION: 15C0-309 FLUID LEVEL:			SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP
EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		
SURFACE EQUIPMENT			SURFACE EQUIPMENT		
MWPM-AA			MPBM-81		
DOWNHOLE EQUIPMENT			DOWNHOLE EQUIPMENT		
MH-22 MH-22		11.85	MH-22 MH-22		14.21
EQF-46 EQF-46 3006		11.37	EQF-46 EQF-46 210		13.73
AH-124		9.54	EQF-46 EQF-46 3006		11.90
MWGT-CGRS MWPG-CGRS 796 MWGH-CGRS 796	MWPG GR 	2.77 9.39			
MWPT-CA MWPH-AA 90 MWPS-AA 121		8.41	CCL-L PCCL-L CCL-L 7202		TOOL ZERO 10.07
	CCL SMWP Pres SMWP Temp Tension 	TOOL ZERO	MPSU-CA MPSU-CA 1102		9.61
AH-121 AH-121 31		5.59			
SAH-G SAH-G 1032		4.98			

Production String	(in)		(m)	Well Schematic	(m)	(in)		Casing String	
	OD	ID	MD		MD	OD	ID		
Tubing Hanger	9.625	3.500	12.0		13.375			Casing String	
Tubing	3.500	2.992				9.625			Casing String
SSSV	3.500	2.750	461.0						
						584.0	9.625	7.625	Crossover
						954.0	13.375		Casing Shoe
Side Pocket Mandrel	3.500		1105.0						
Side Pocket Mandrel	3.500		2212.0						

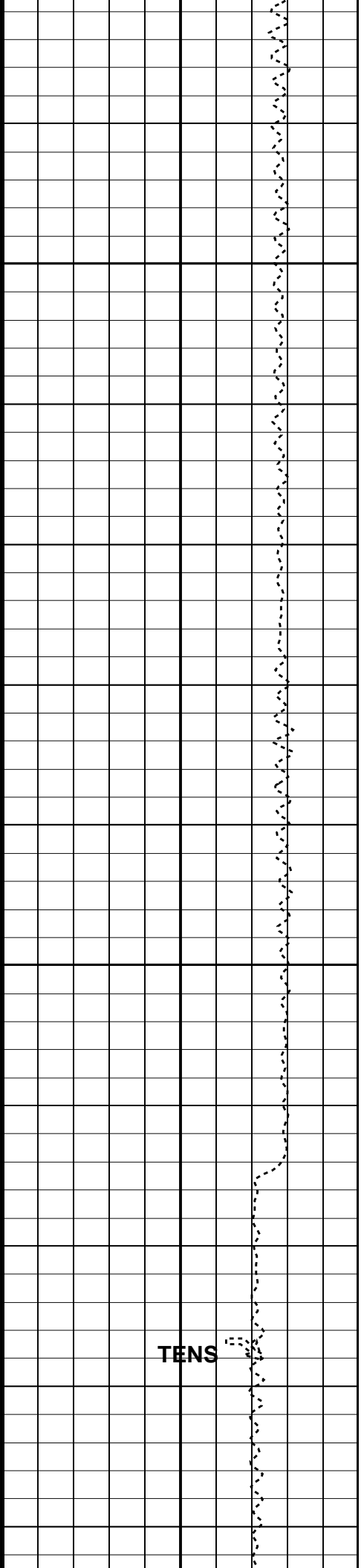
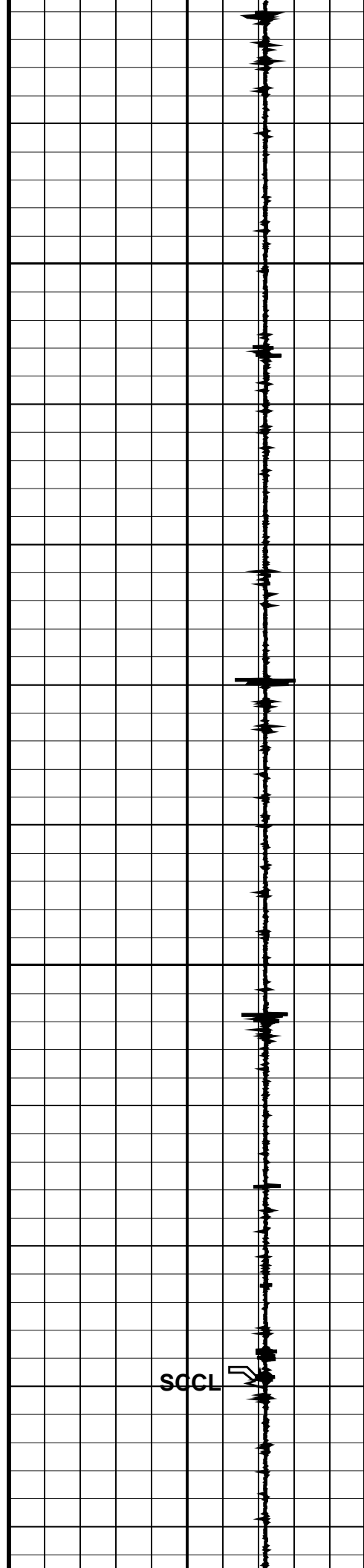


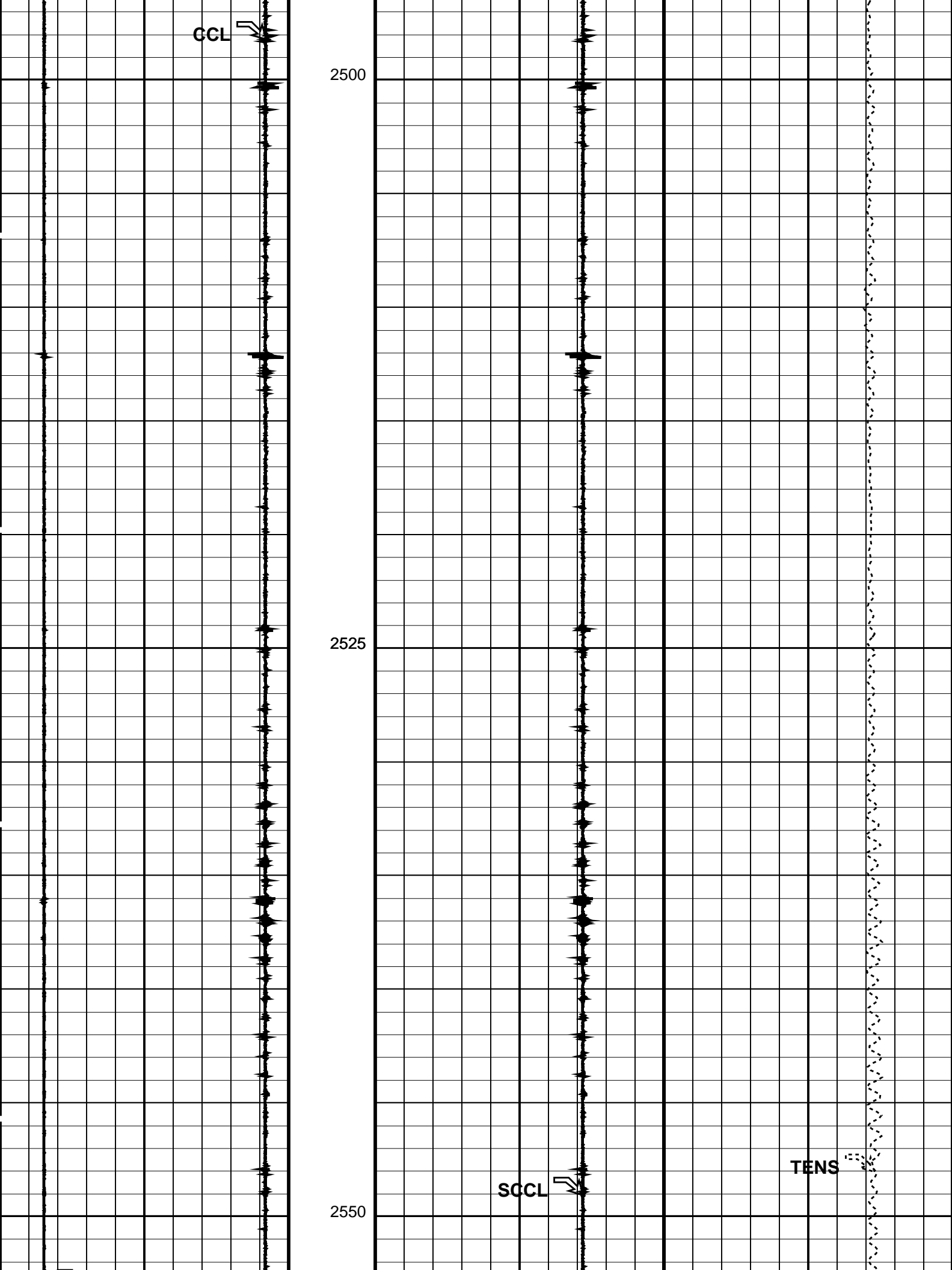


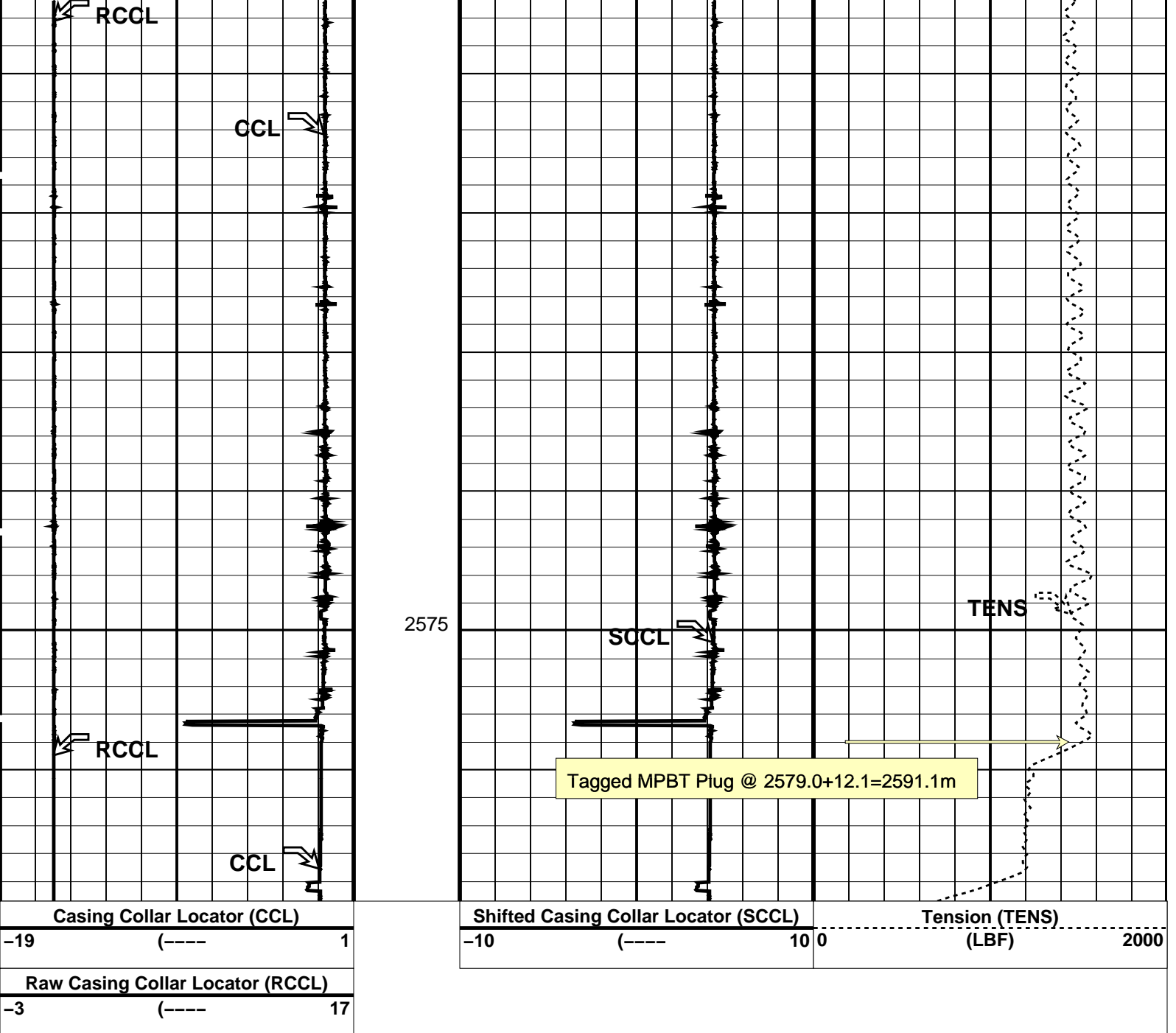


2450

2475







PIP SUMMARY

Time Mark Every 60 S

Parameters		
DLIS Name	Description	Value
CCLD	CCL-L: Casing Collar Locator	
CCLT	CCL reset delay	12 IN
	CCL Detection Level	0.3 V
DO	System and Miscellaneous	
PP	Depth Offset for Playback	5.1 M
	Playback Processing	NORMAL

Format: CCLLog Vertical Scale: 1:200

Graphics File Created: 16-Jun-2008 21:37

OP System Version: 15C0-309

MCM

SHM_GUN SRPC-3582-Q1_2008_OP15 CCL-L 15C0-309

Input DLIS Files

DEFAULT PERFO_073LUP FN:72 PRODUCER 16-Jun-2008 21:11 2579.7 M 2327.8 M

Output DLIS Files

DEFAULT

PERFO_075PUP

FN:74

PRODUCER

16-Jun-2008 21:37

Schlumberger

2 1/8" Dump Bailer Water Run

MAXIS Field Log

Company: Esso Australia Pty Ltd.

Well: TNA A9a

Output DLIS Files

DEFAULT

PERFO_065LUP

FN:64

PRODUCER

16-Jun-2008 17:58

OP System Version: 15C0-309

MCM

SHM_GUN

SRPC-3582-Q1_2008_OP15

CCL-L

15C0-309

PIP SUMMARY

Time Mark Every 60 S

Raw Casing Collar Locator (RCCL)

-3 (----) 17

Casing Collar Locator (CCL)

-19 (----) 1

Shifted Casing Collar Locator (SCCL)

-10 (----) 10 0

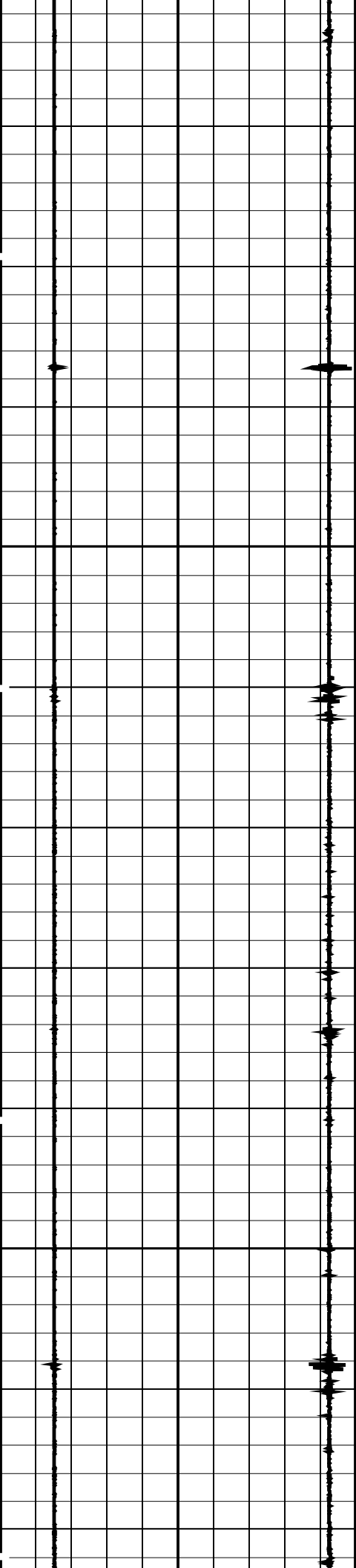
Tension (TENS)

(LBF) 2000

Nipple

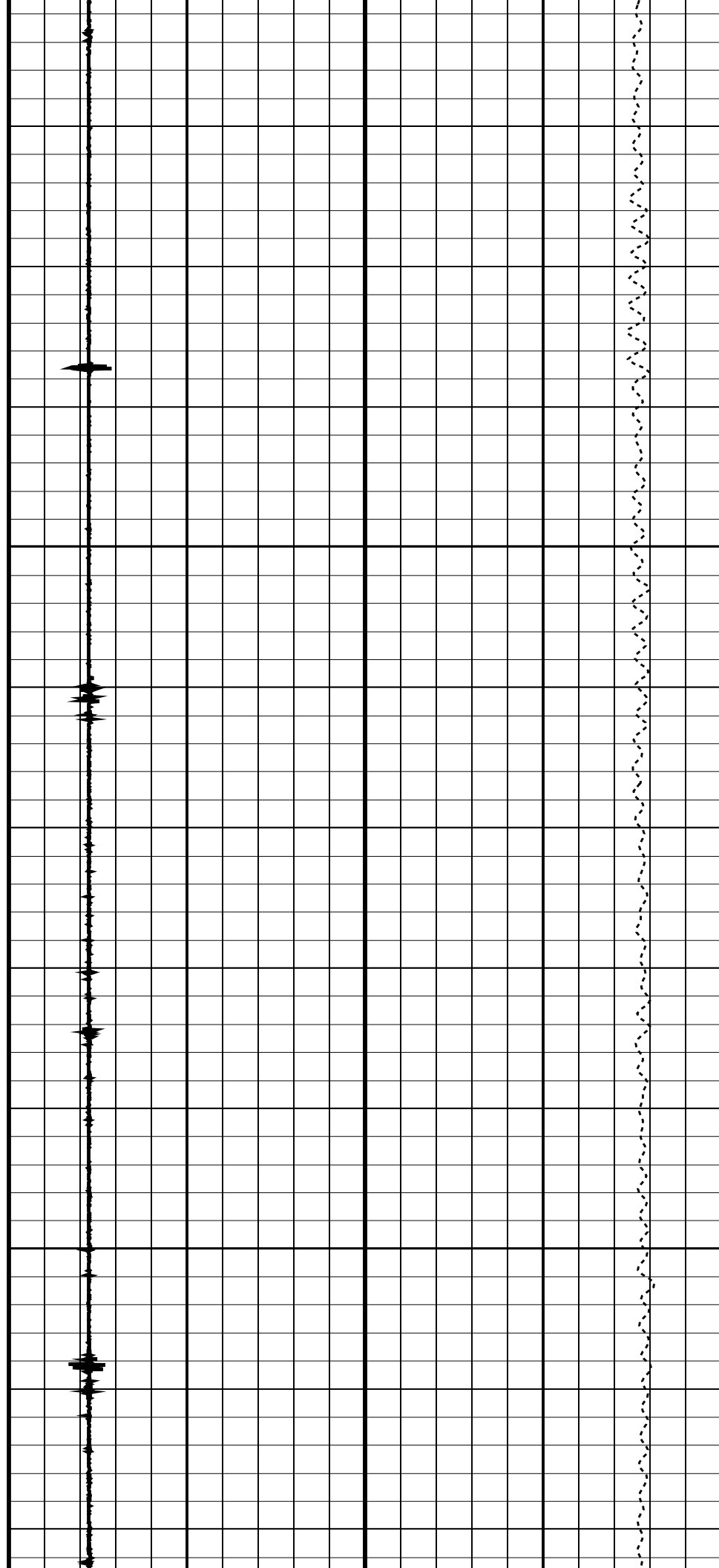
WEG

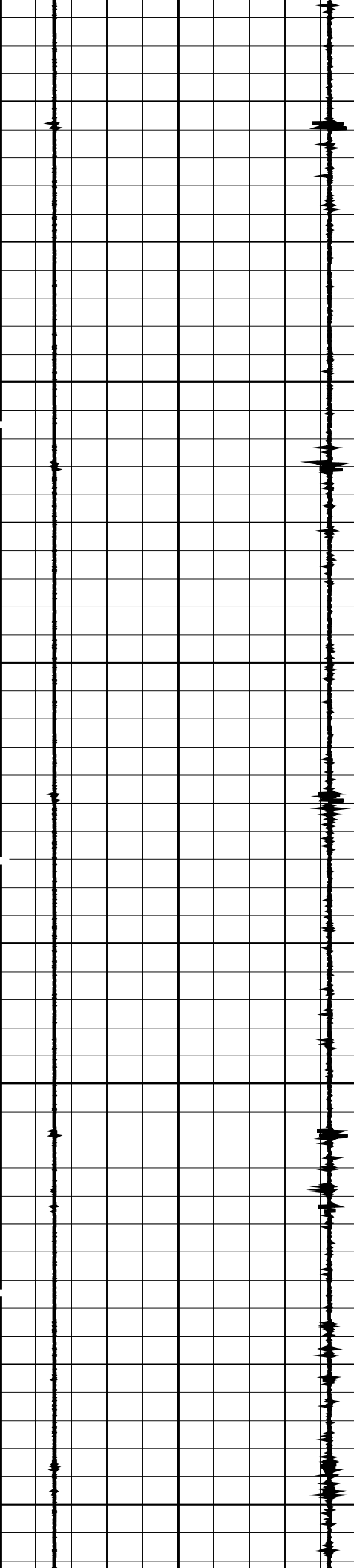
2375



2400

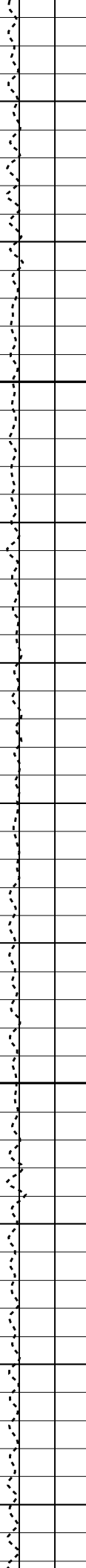
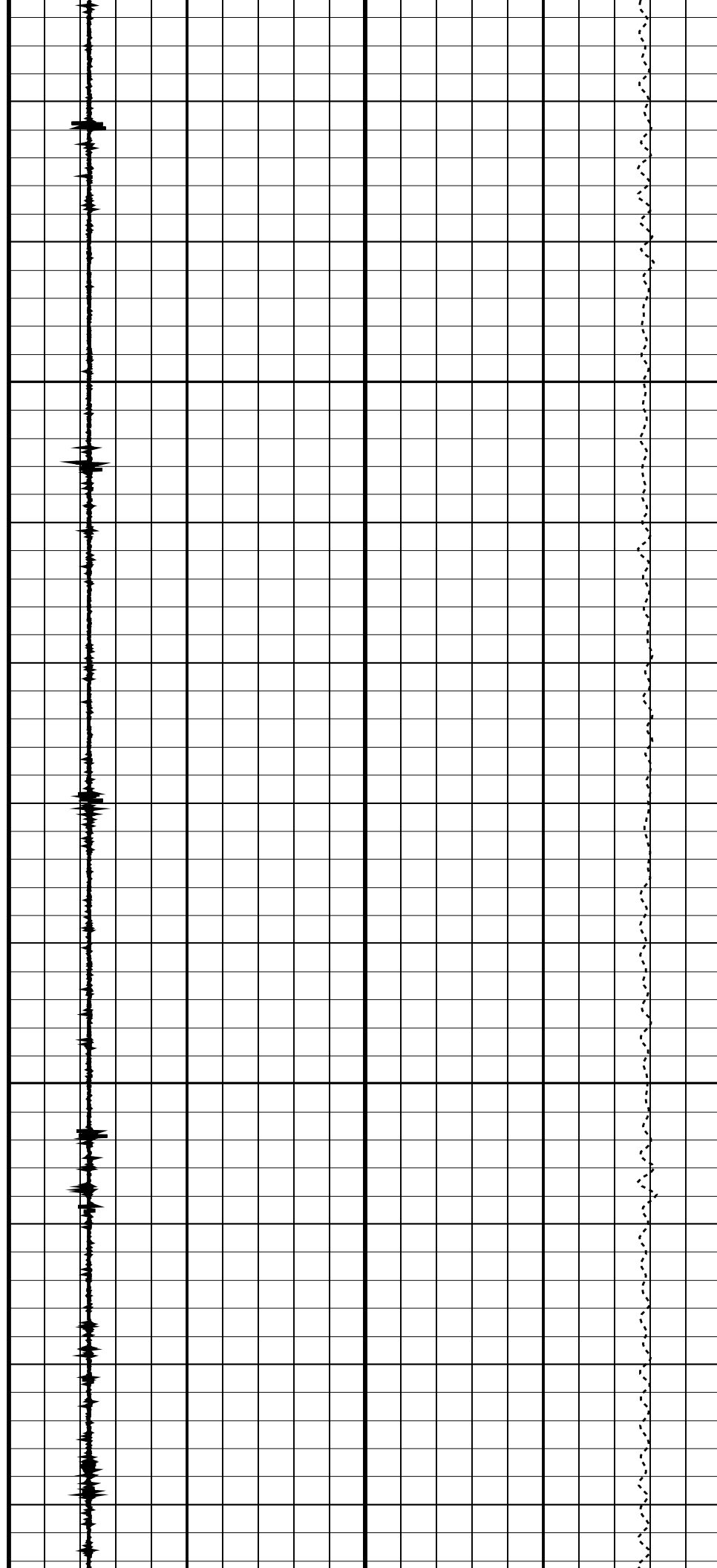
2425

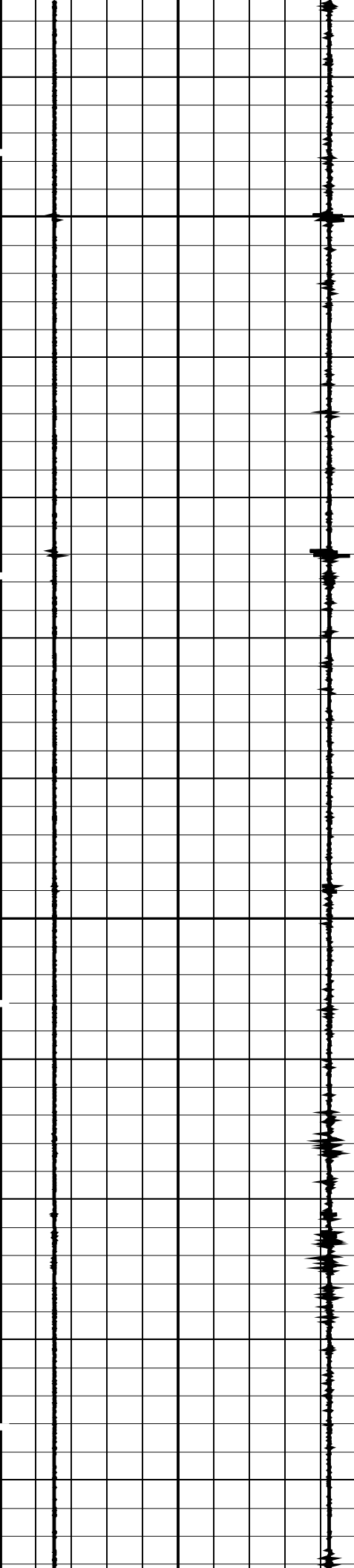




2450

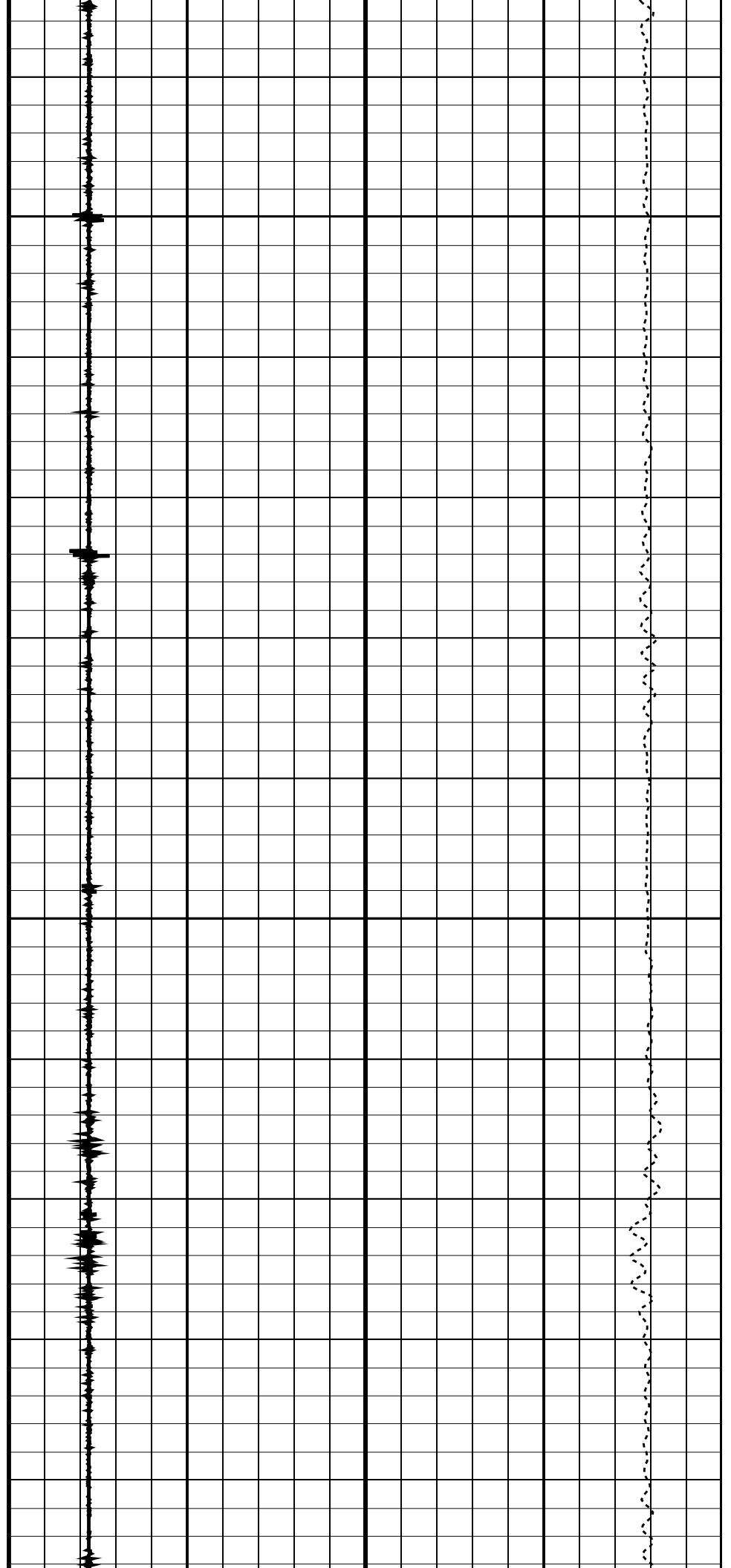
2475

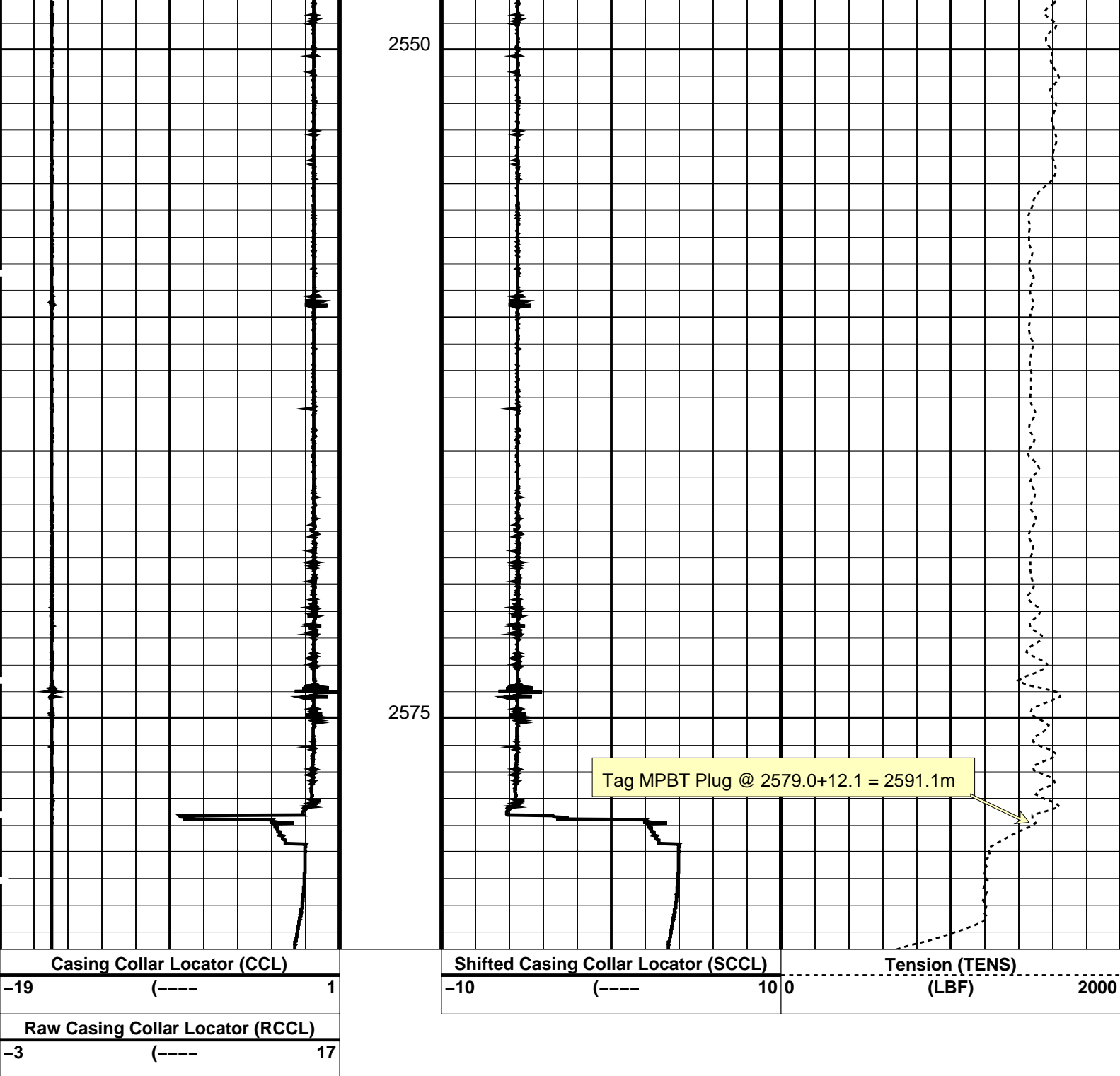




2500

2525





PIP SUMMARY

Time Mark Every 60 S

Parameters			
DLIS Name		Description	Value
CCL-L: Casing Collar Locator			
CCLD		CCL reset delay	12 IN
CCLT		CCL Detection Level	0.3 V
Format: CCLLog		Vertical Scale: 1:200	Graphics File Created: 16-Jun-2008 17:58
OP System Version: 15C0-309			
MCM			
SHM_GUN	SRPC-3582-Q1_2008_OP15	CCL-L	15C0-309

Output DLIS Files

DETAILS

REPORT: 2008-06-16

FILE: 15C0-309

PRODUCED: 16-Jun-2008 17:58

Schlumberger

MPBT
Log Out of Position

MAXIS Field Log

Company: Well:

Output DLIS Files

DEFAULT CCL_059LUP FN:58 PRODUCER 16-Jun-2008 13:56

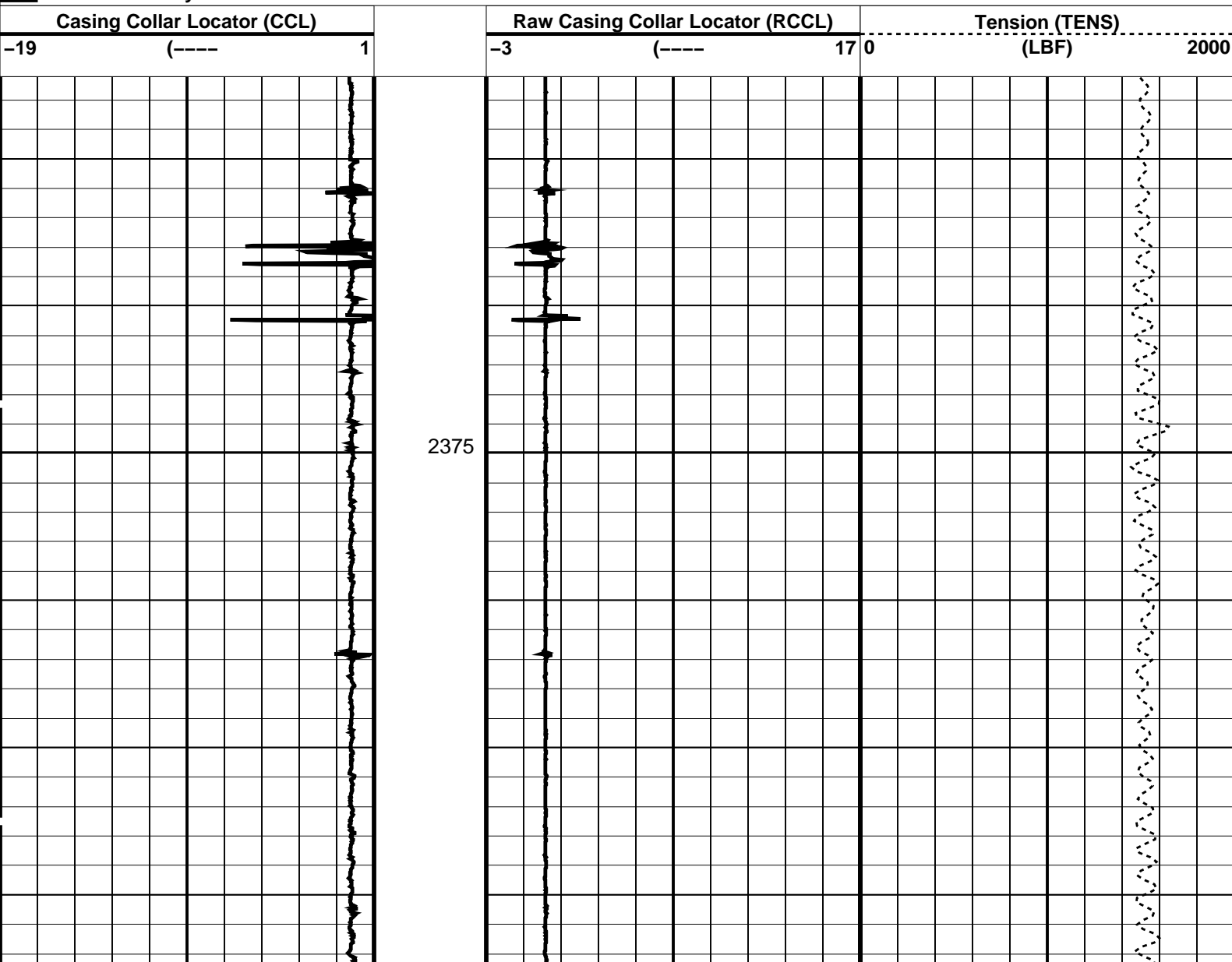
OP System Version: 15C0-309

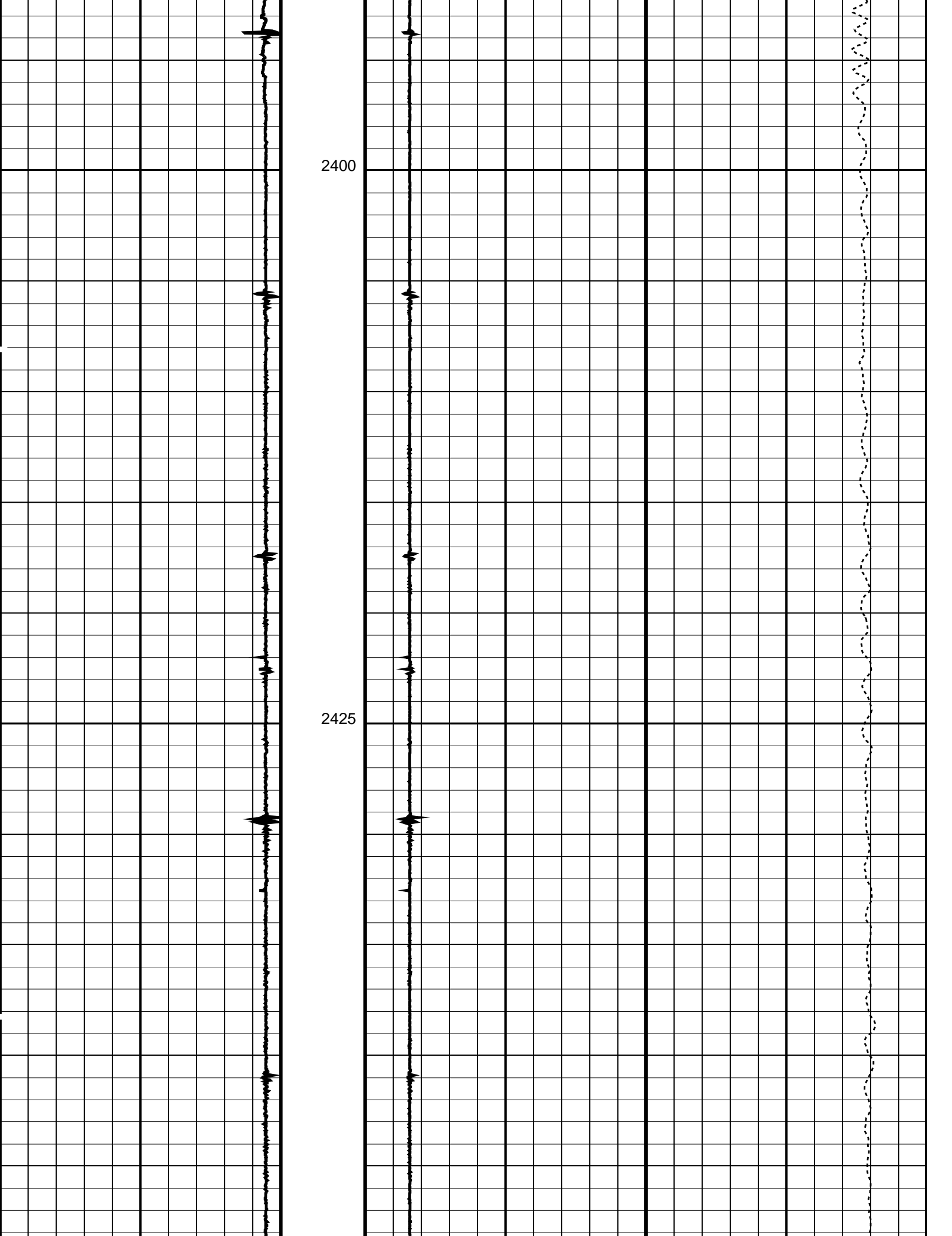
MCM

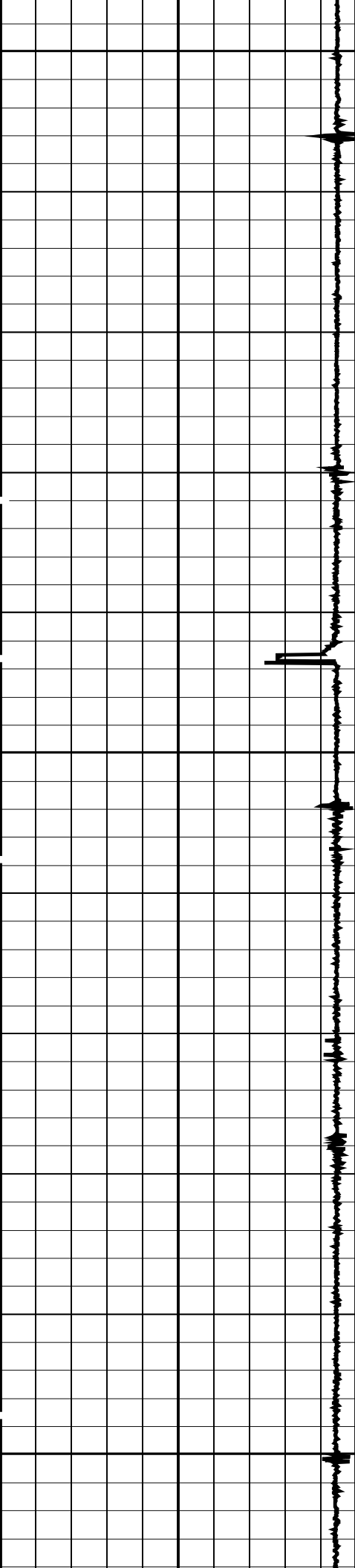
MPEX-DA SRPC-3582-Q1_2008_OP15 MPSU-CA SRPC-3582-Q1_2008_OP15
CCL-L 15C0-309

PIP SUMMARY

 Time Mark Every 60 S



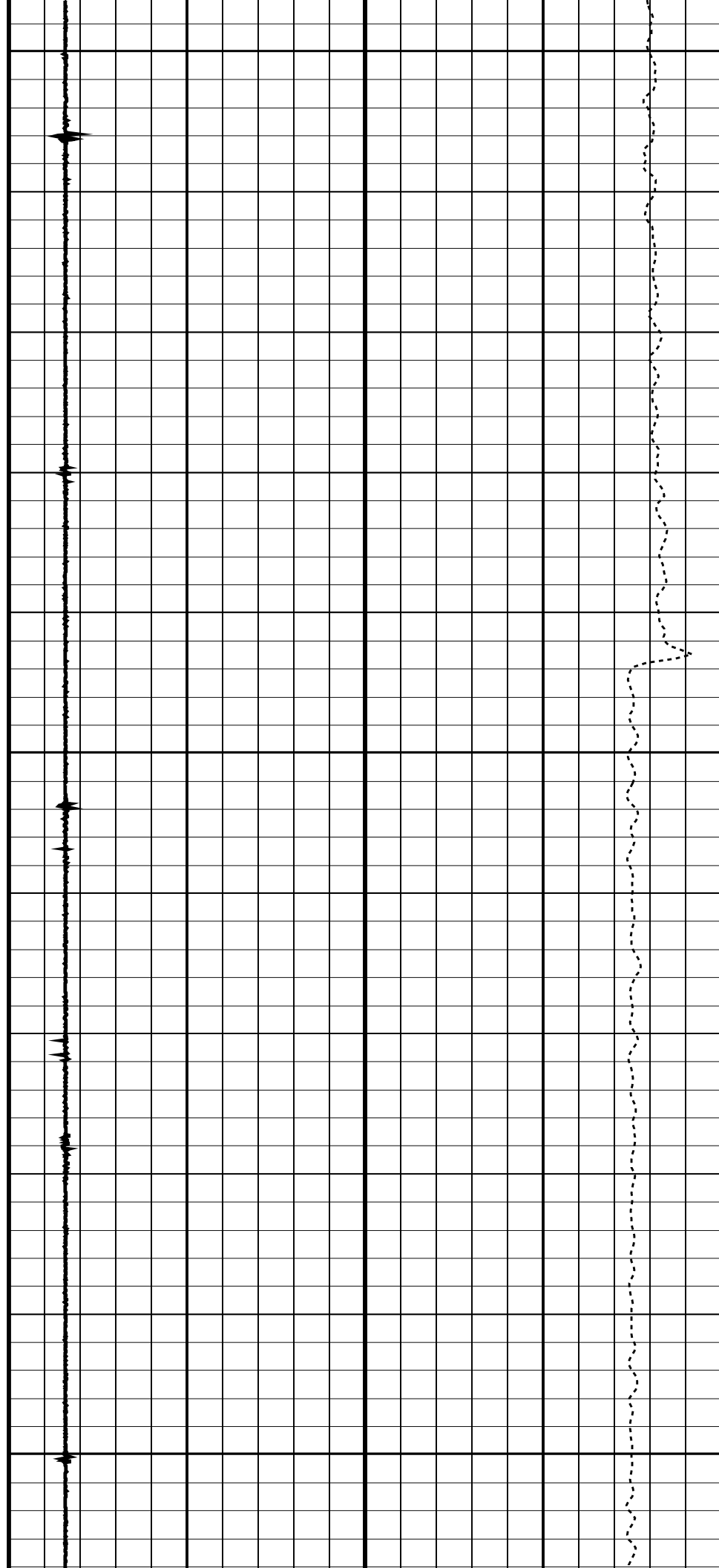


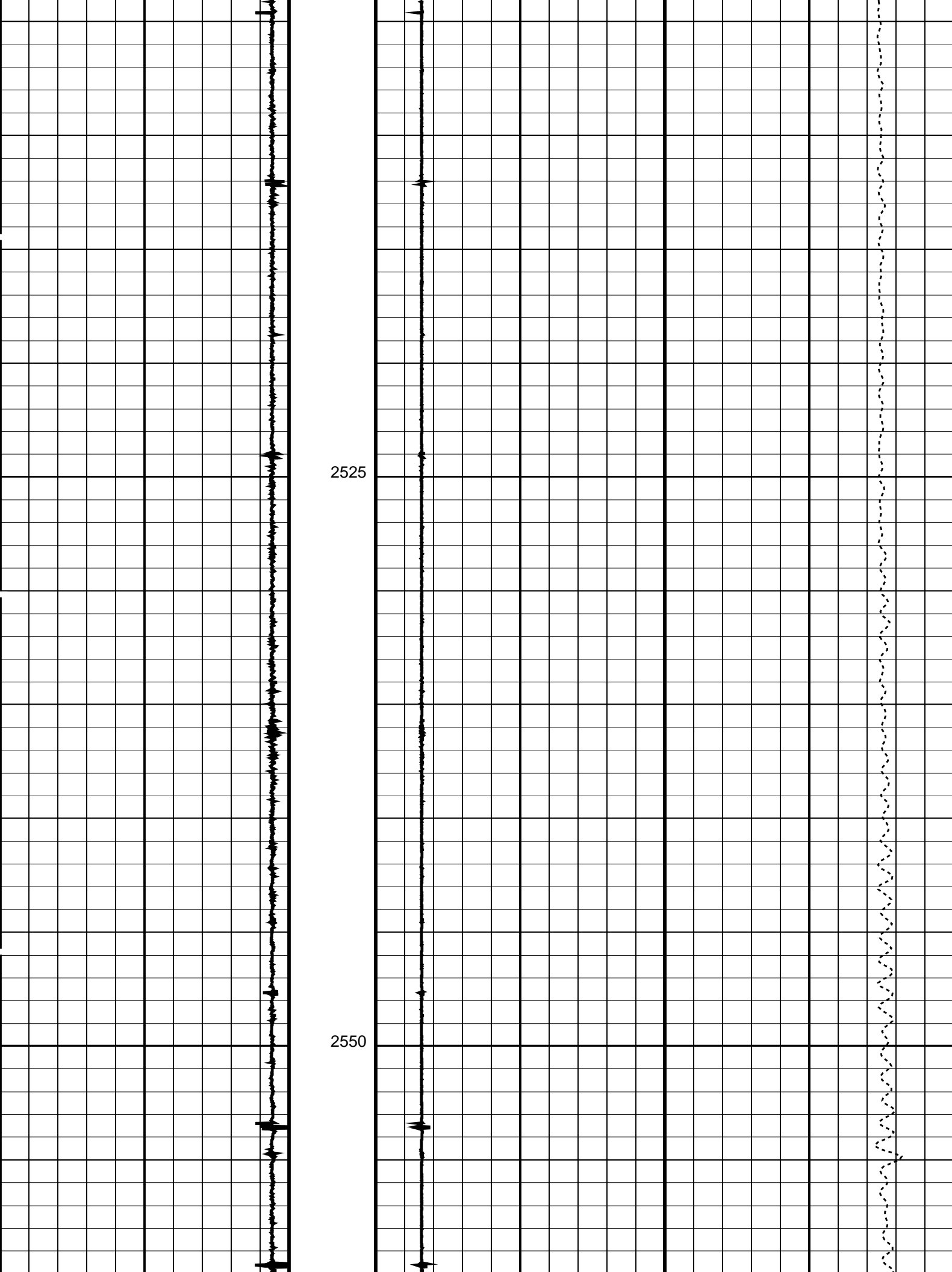


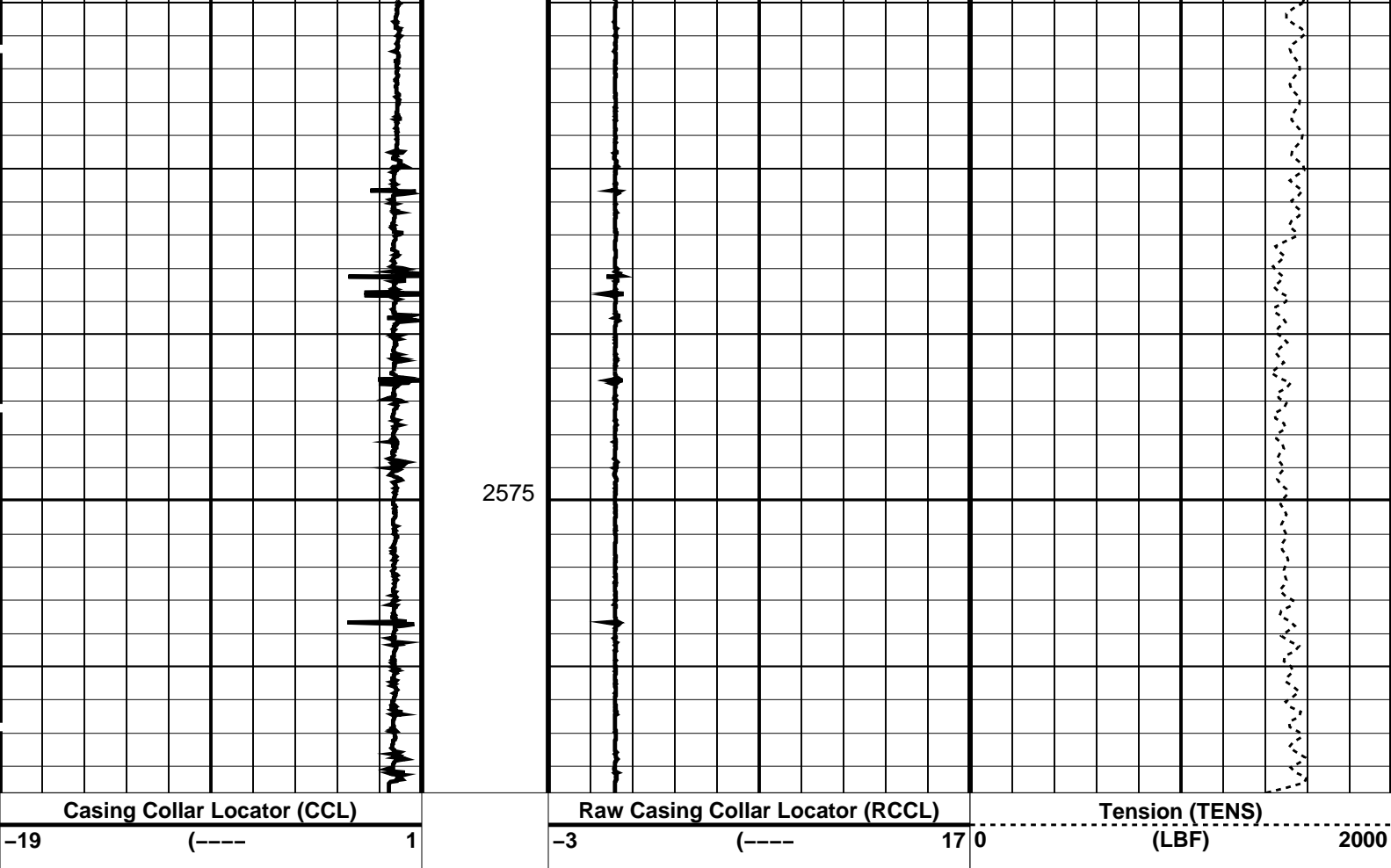
2450

2475

2500







PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
CCL-L: Casing Collar Locator		
CCLD	CCL reset delay	12 IN
CCLT	CCL Detection Level	0.3 V

Format: CCLLog Vertical Scale: 1:200 Graphics File Created: 16-Jun-2008 13:56

OP System Version: 15C0-309

MCM

MPEX-DA	SRPC-3582-Q1_2008_OP15	MPSU-CA	SRPC-3582-Q1_2008_OP15
CCL-L	15C0-309		

Output DLIS Files

DEFAULT	CCL_059LUP	FN:58	PRODUCER	16-Jun-2008 13:56
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Schlumberger

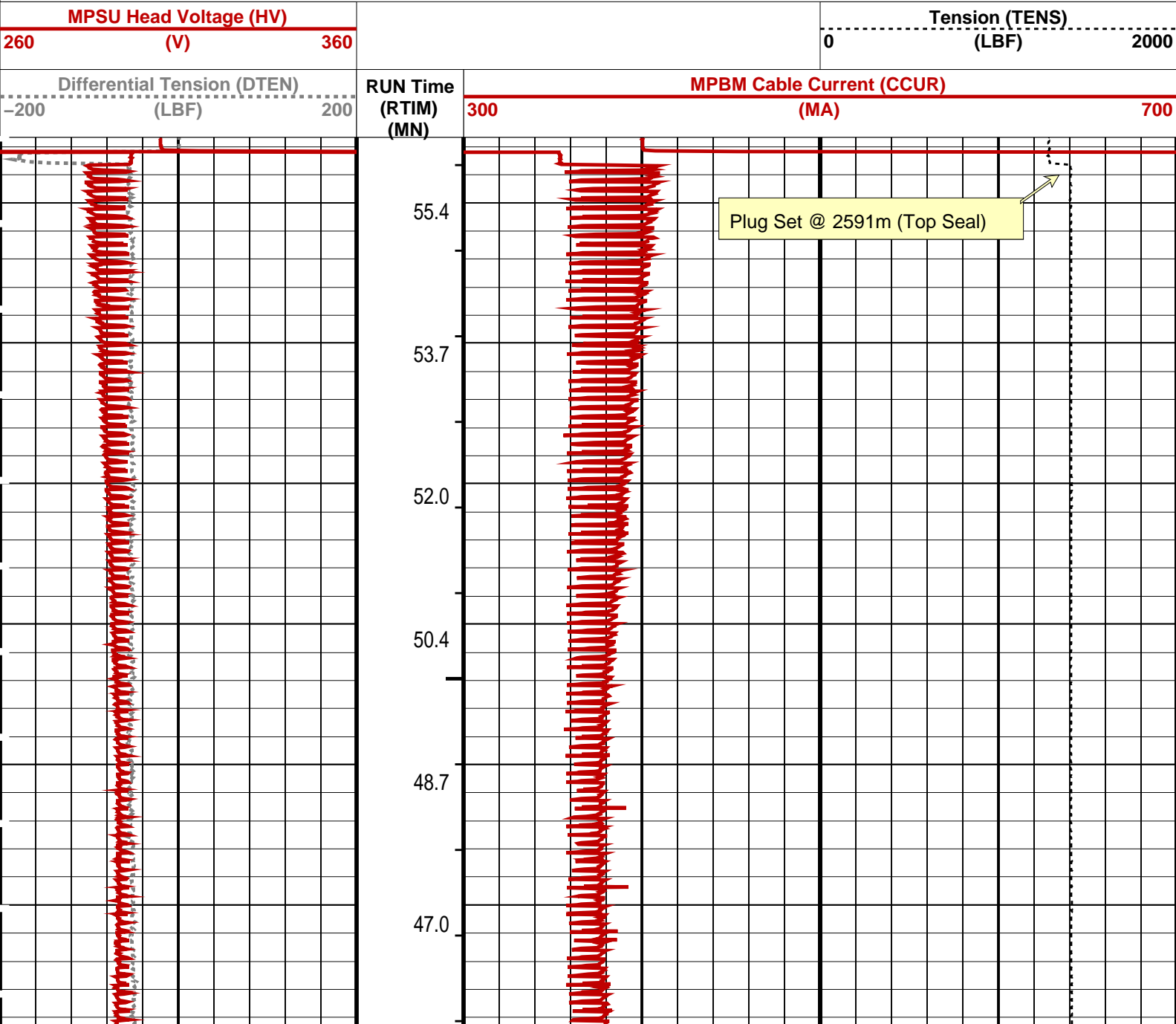
MPBT
Setting Record

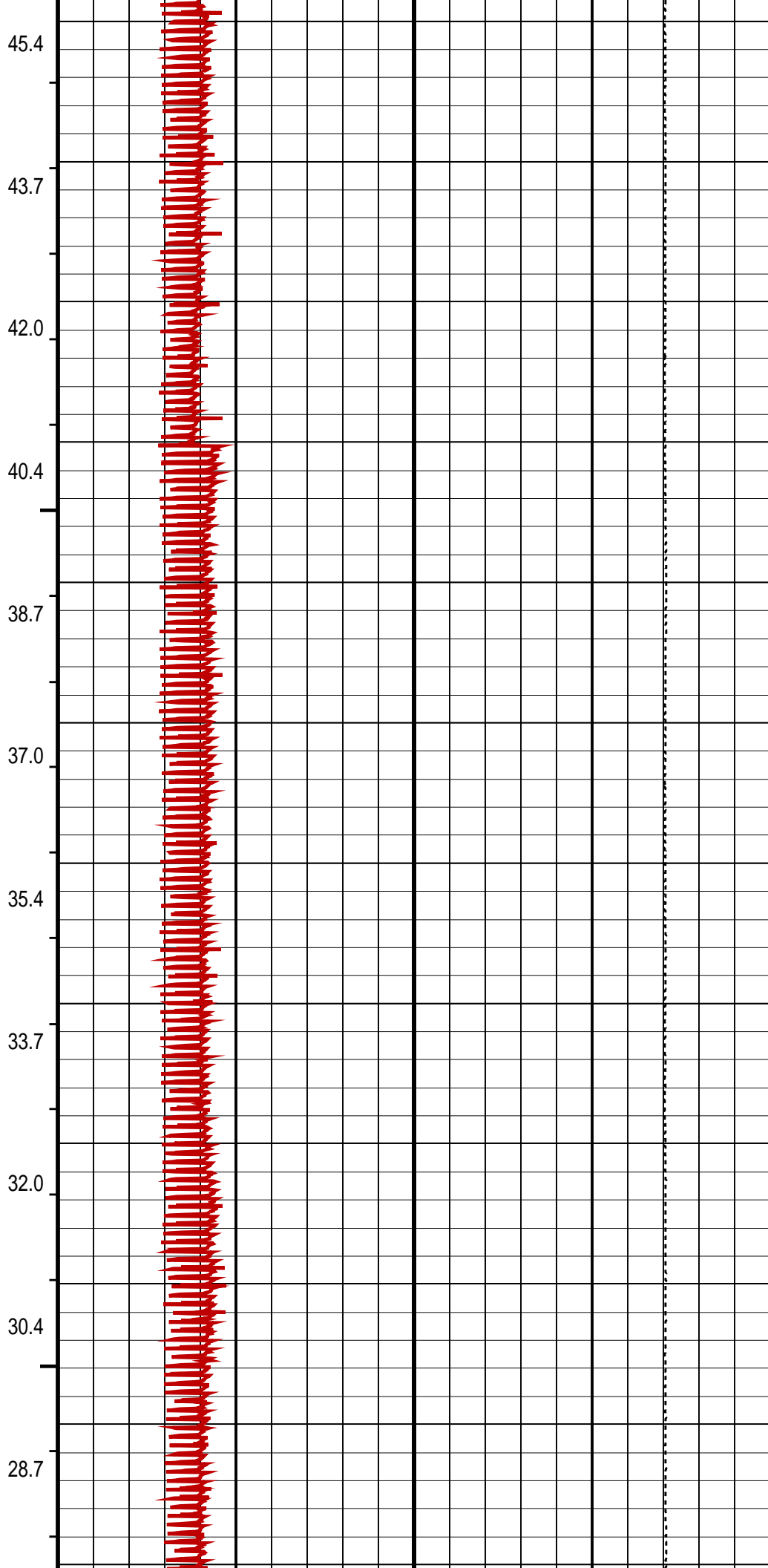
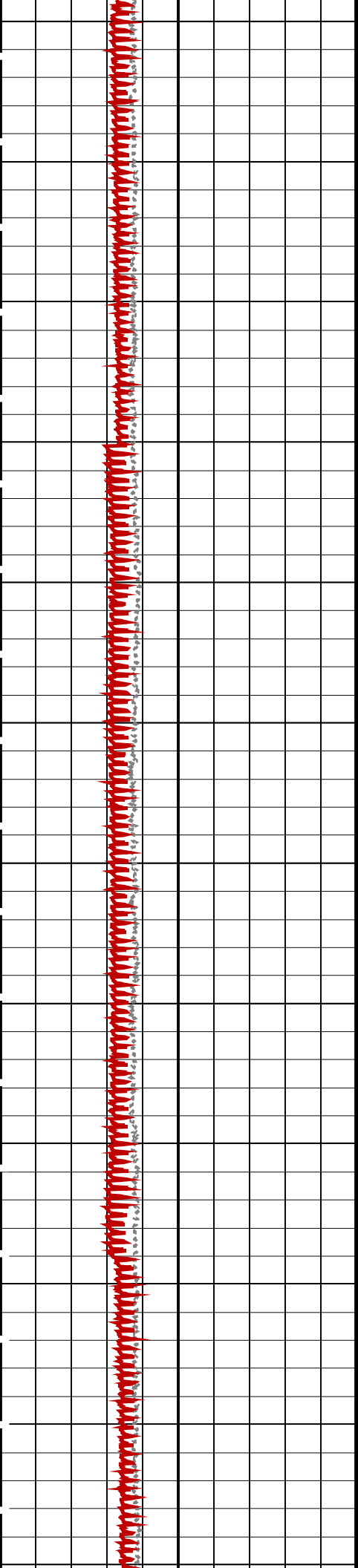
MAXIS Field Log

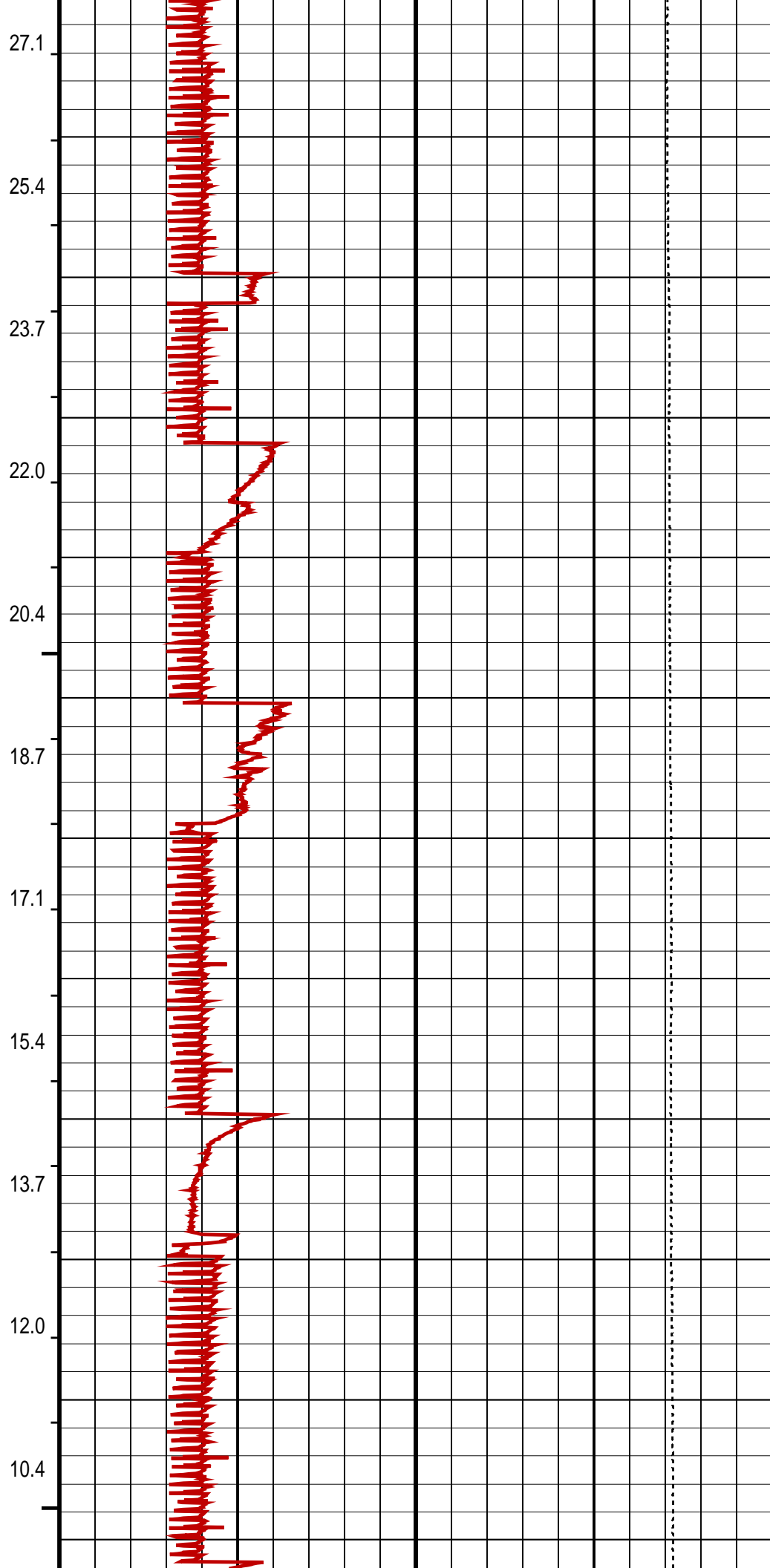
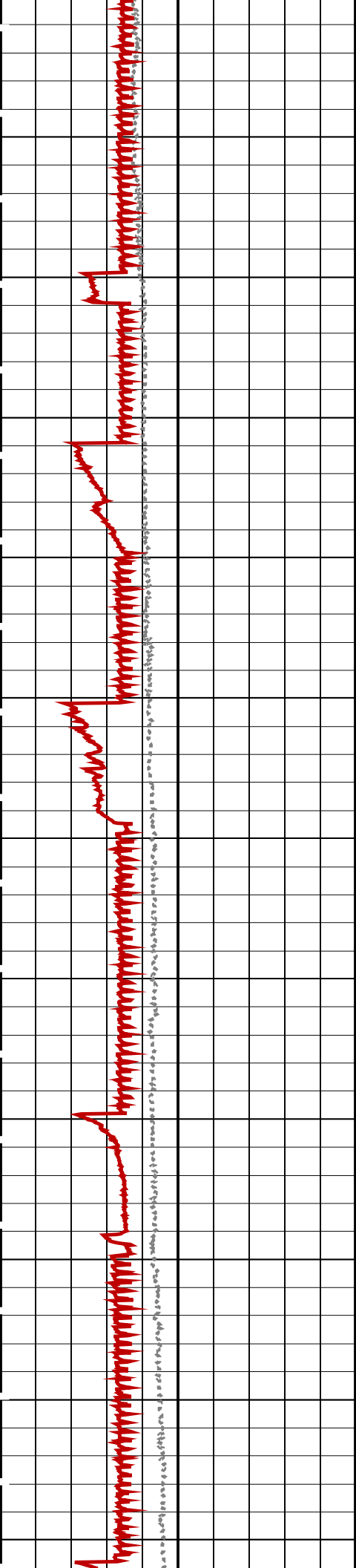
Device	Status	Req Depth (M)	Obs Depth (M)	Time Used
MPEX	Used	2591.0	2591.0	Mon Jun 16 13:54:23 2008

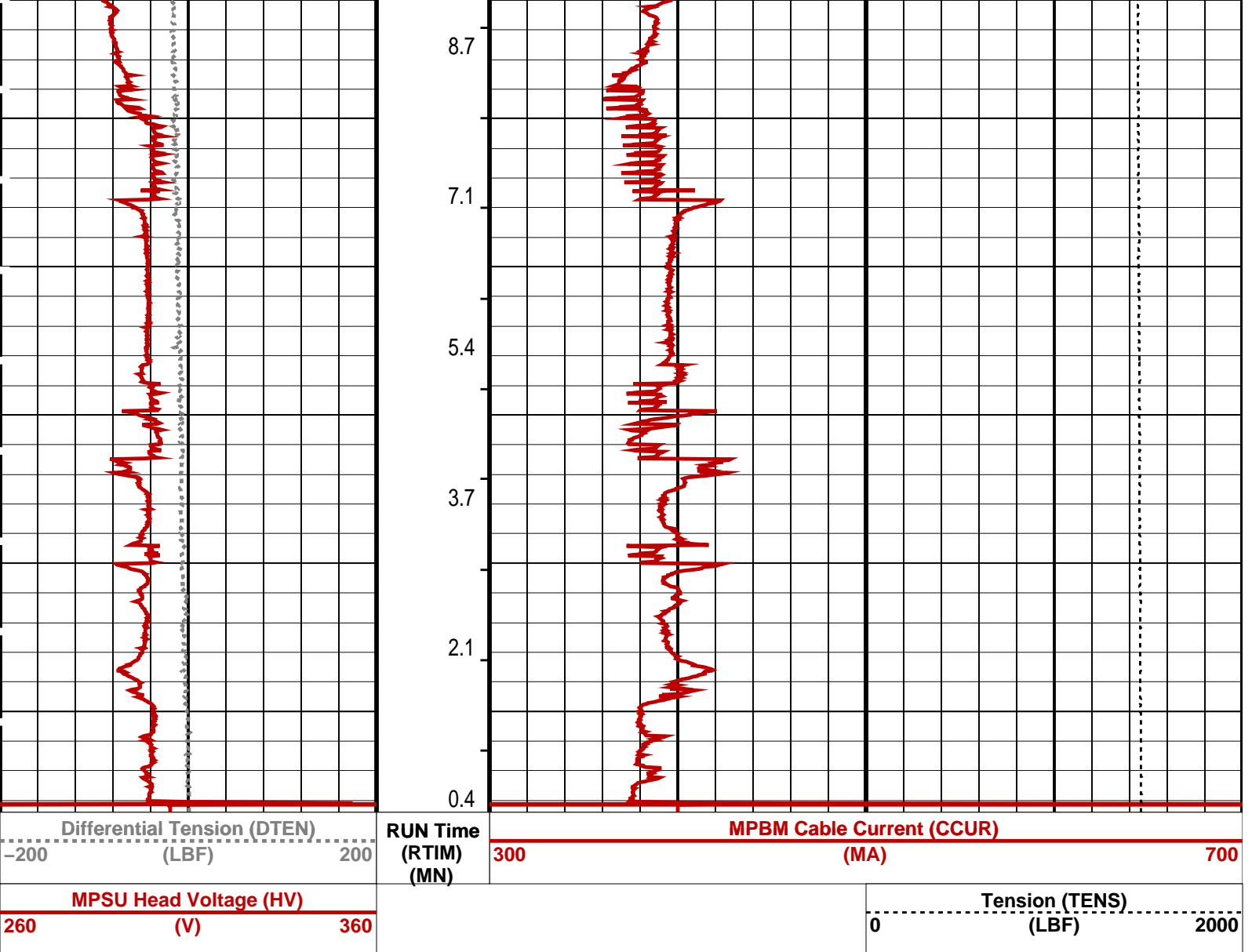
Company:						Well:	
Output DLIS Files							
DEFAULT	CCL_058LUP	FN:57	PRODUCER	16-Jun-2008 12:58	12192.0 M	11338.3 M	
OP System Version: 15C0-309							
MCM							
MPEX-DA	SRPC-3582-Q1_2008_OP15	MPSU-CA		SRPC-3582-Q1_2008_OP15			
CCL-L	15C0-309						

PIP SUMMARY	
└ MPSU Run Time Every 1 MN	
└ MPSU Run Time Every 10 MN	
Time Mark Every 60 S	









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_1		Vertical Scale: 1:1000	
Graphics File Created: 16-Jun-2008 12:58			
OP System Version: 15C0-309			
MCM			
MPEX-DA CCL-L	SRPC-3582-Q1_2008_OP15 15C0-309	MPSU-CA	SRPC-3582-Q1_2008_OP15
Output DLIS Files			
DEFAULT	CCL_058LUP	FN:57	PRODUCER 16-Jun-2008 12:58

Company:

Well:

Output DLIS Files

DEFAULT

CCL_055LUP

FN:54

PRODUCER

16-Jun-2008 12:25

OP System Version: 15C0-309

MCM

MPEX-DA

SRPC-3582-Q1_2008_OP15

MPSU-CA

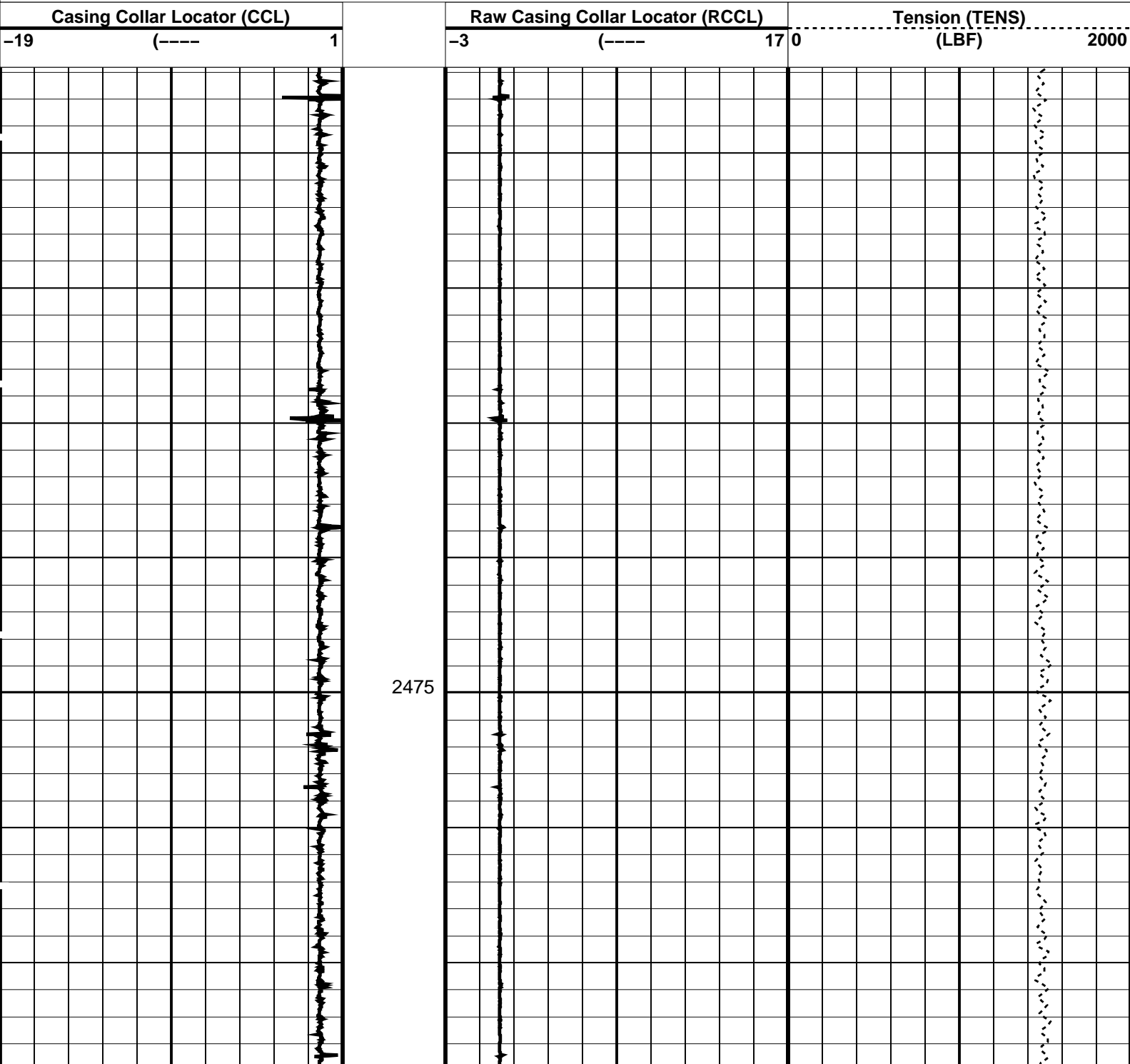
SRPC-3582-Q1_2008_OP15

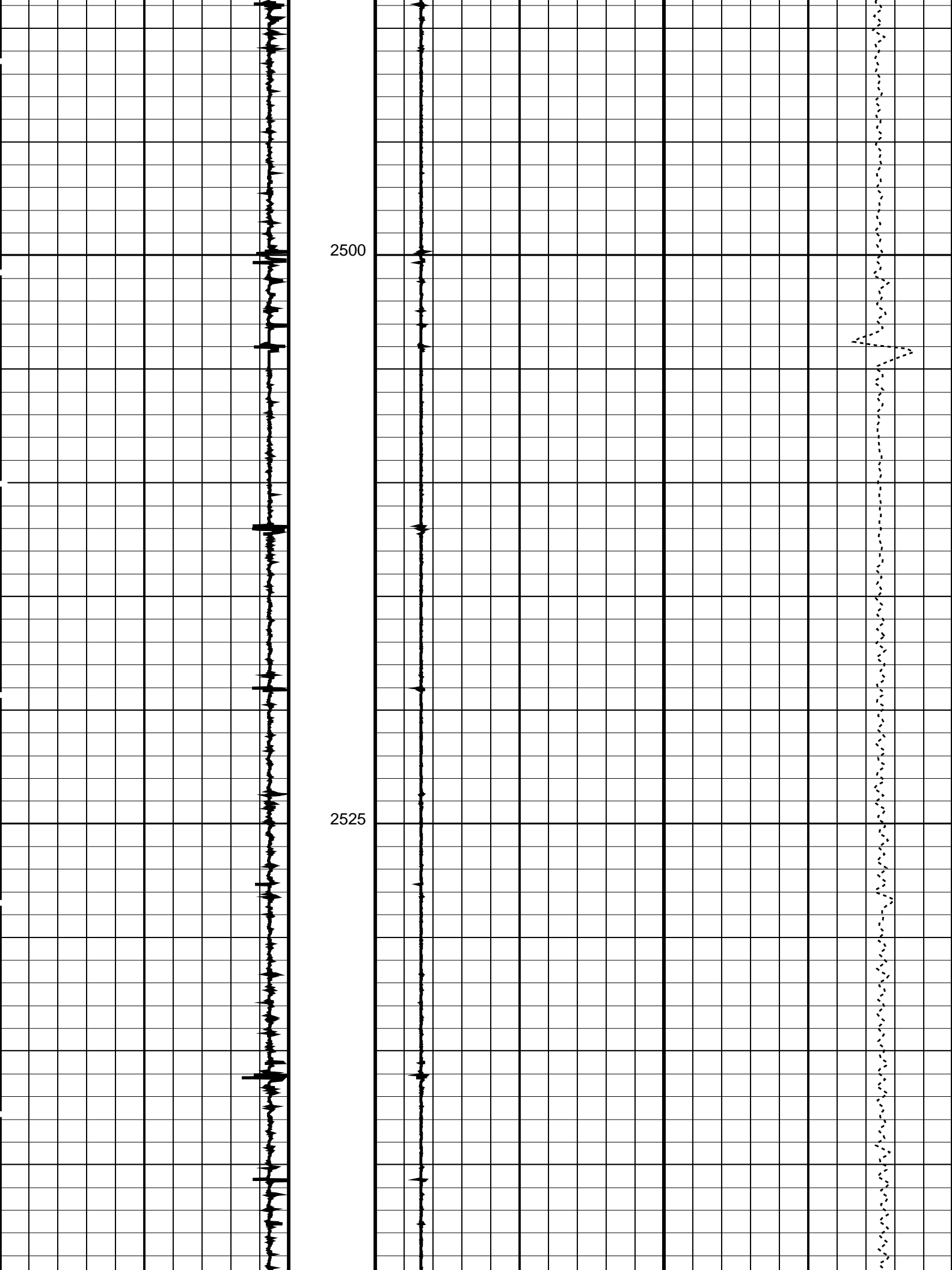
CCL-L

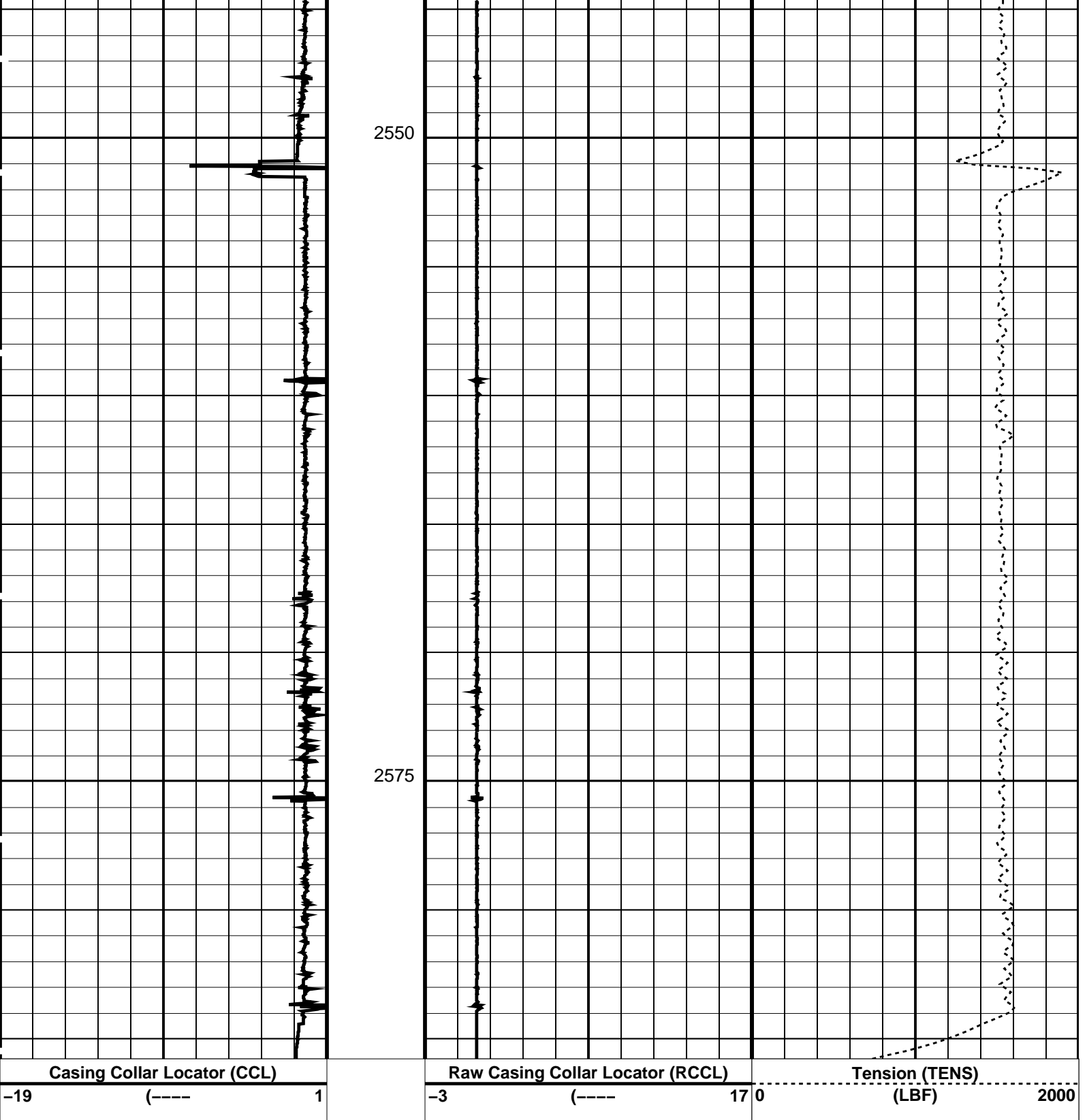
15C0-309

PIP SUMMARY

 Time Mark Every 60 S







PIP SUMMARY

Time Mark Every 60 S

Parameters		
DLIS Name	Description	Value
CCL-L: Casing Collar Locator		
CCLD	CCL reset delay	12 IN
CCLT	CCL Detection Level	0.3 V

Format: CCLLog Vertical Scale: 1:200 Graphics File Created: 16-Jun-2008 12:25

OP System Version: 15C0-309
MCM

CCL-L

15C0-309

Output DLIS Files

DEFAULTCCL_055LUPFN:54PRODUCER16-Jun-2008 12:25

Schlumberger

MPBT
WEG Correlation

MAXIS Field Log

Company:

Well:

Output DLIS Files

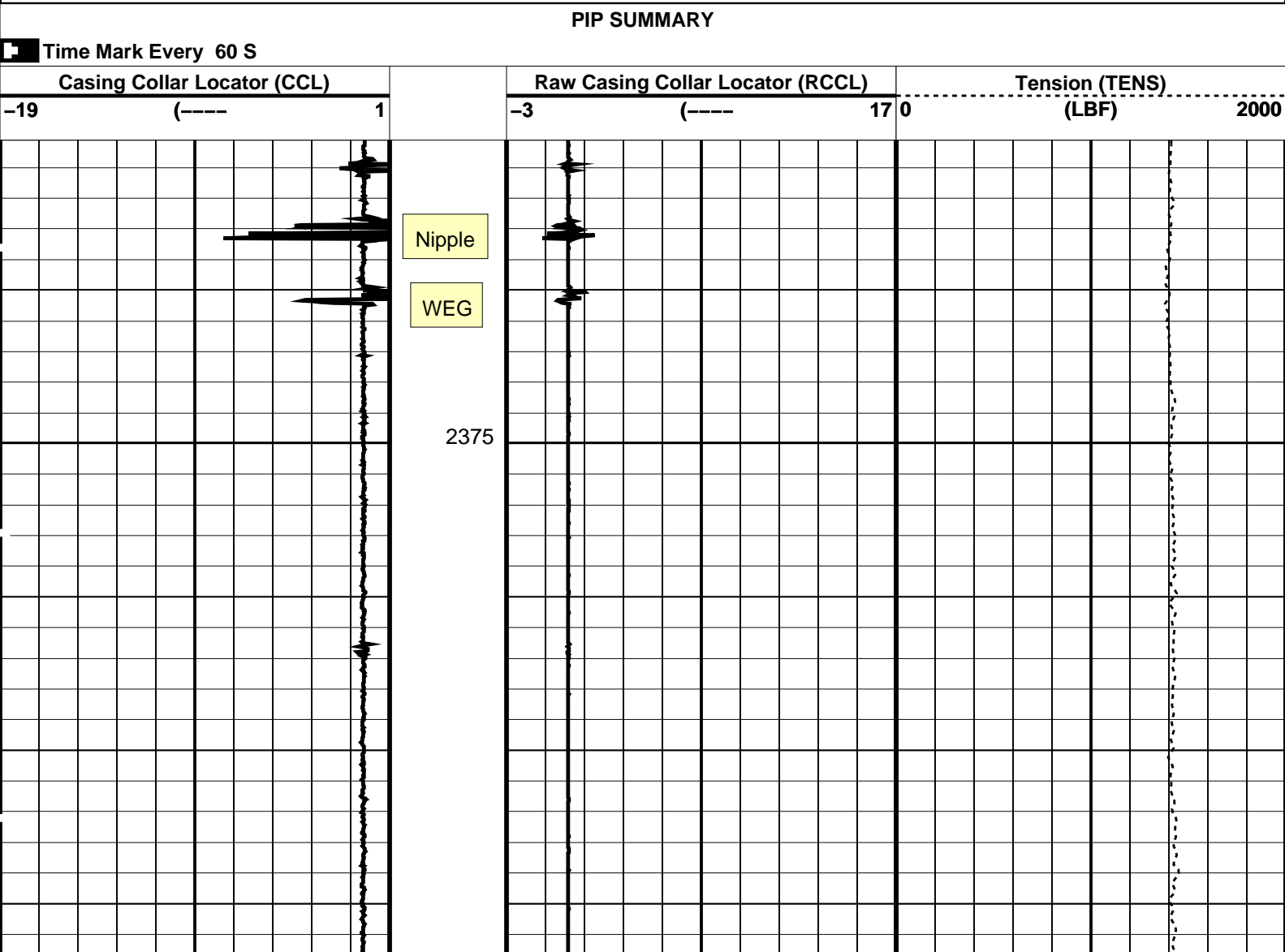
DEFAULTCCL_052LUPFN:51PRODUCER16-Jun-2008 11:51

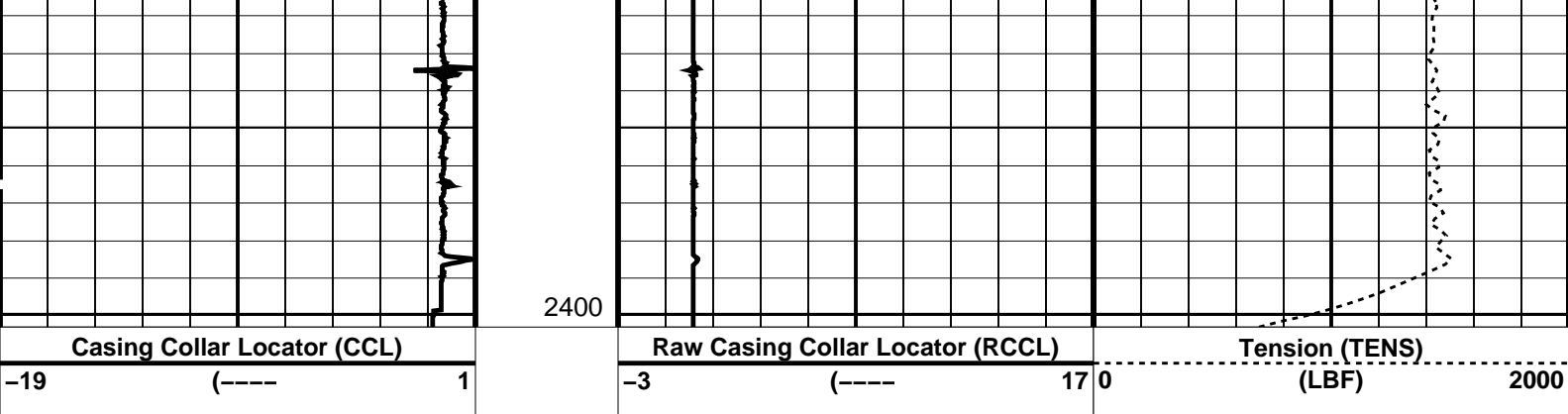
OP System Version: 15C0-309

MCM

MPEX-DA SRPC-3582-Q1_2008_OP15 MPSU-CA SRPC-3582-Q1_2008_OP15

CCL-L 15C0-309





PIP SUMMARY


Time Mark Every 60 S

Parameters		
DLIS Name	Description	Value
CCL-L: Casing Collar Locator		
CCLD	CCL reset delay	12 IN
CCLT	CCL Detection Level	0.3 V

Format: CCLLog Vertical Scale: 1:200 Graphics File Created: 16-Jun-2008 11:51

OP System Version: 15C0-309			
MCM			
MPEX-DA	SRPC-3582-Q1_2008_OP15	MPSU-CA	SRPC-3582-Q1_2008_OP15
CCL-L	15C0-309		

Output DLIS Files			
DEFAULT	CCL_052LUP	FN:51	PRODUCER 16-Jun-2008 11:51



Dummy MPBT Correlation

MAXIS Field Log

Company: Well:

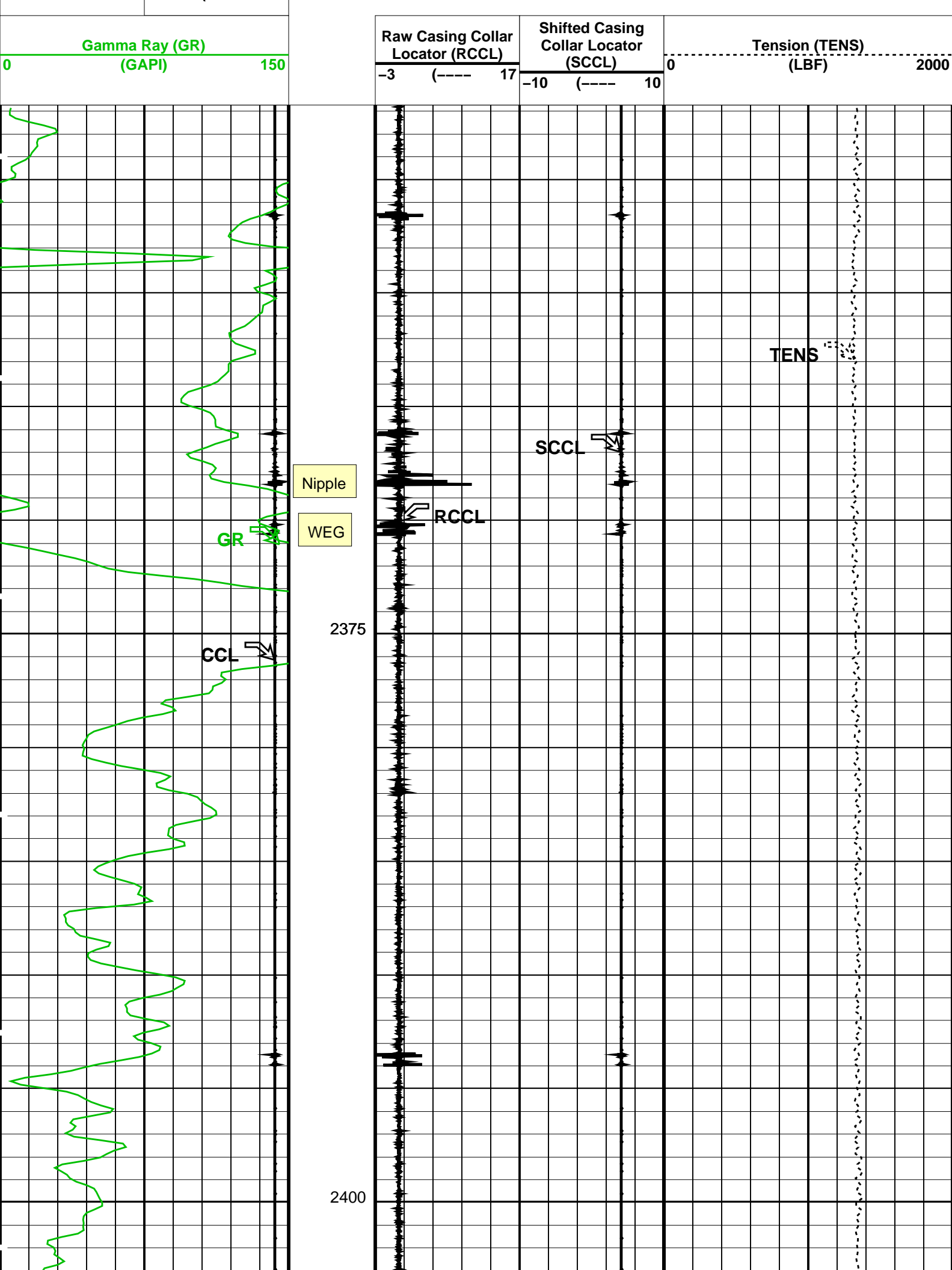
Input DLIS Files					
DEFAULT	PERFO_042LUP	FN:41	PRODUCER	16-Jun-2008 06:13	2600.9 M 2350.5 M
Output DLIS Files					
DEFAULT	PERFO_044PUP	FN:43	PRODUCER	16-Jun-2008 06:45	2601.6 M 2351.7 M

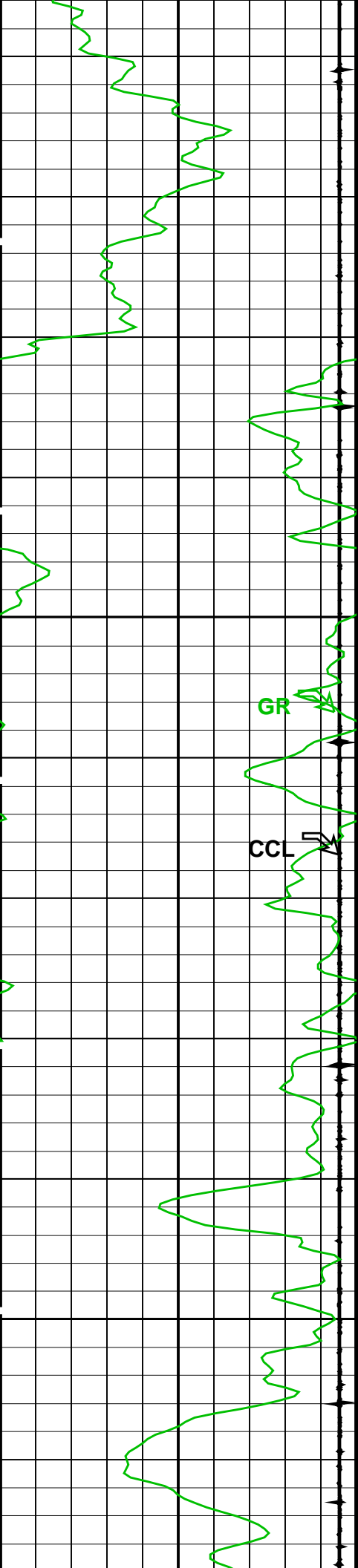
OP System Version: 15C0-309			
MCM			
UPCT-A	15C0-309	SHM_GUN	SRPC-3582-Q1_2008_OP15

PIP SUMMARY

Time Mark Every 60 S

Casing Collar Locator (CCL)	
-19	1



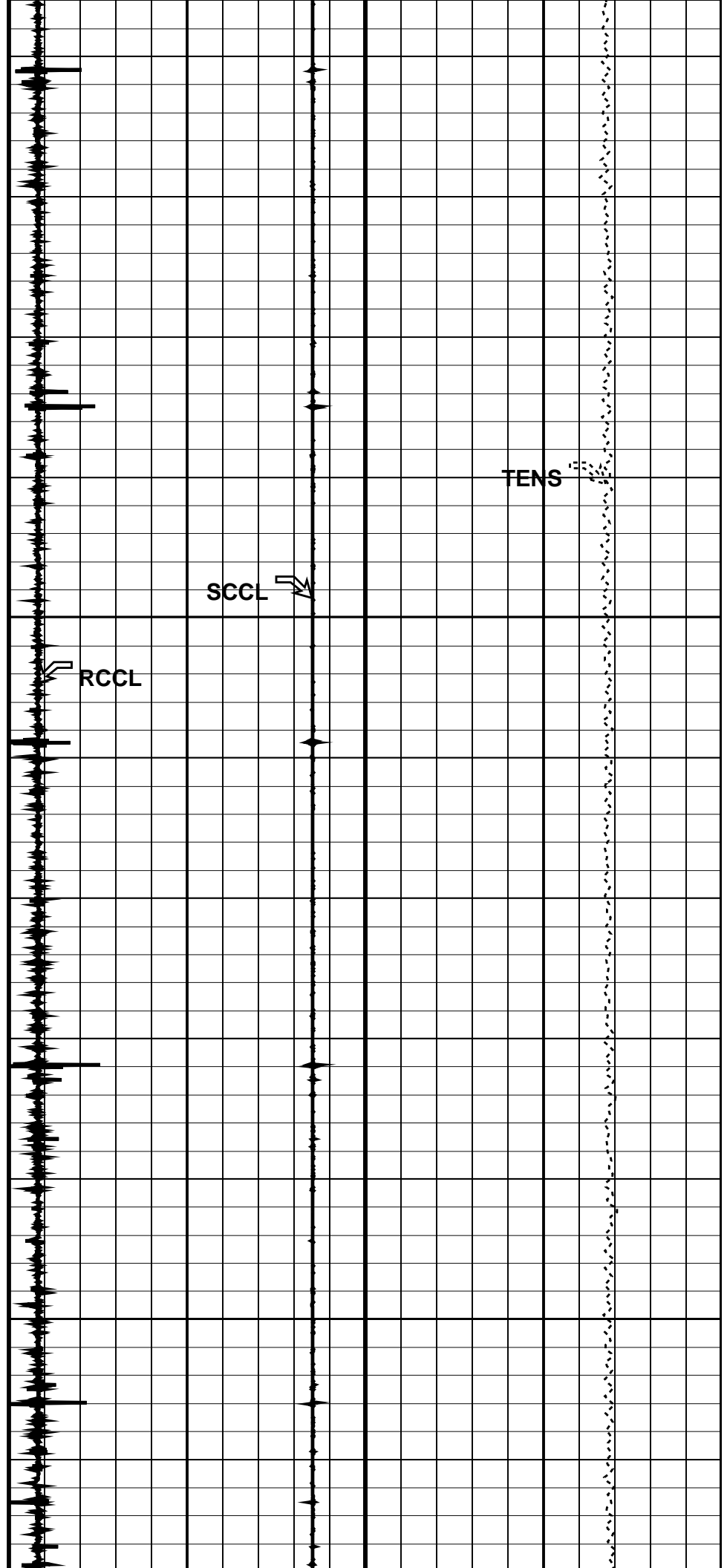


GR

CCL

2425

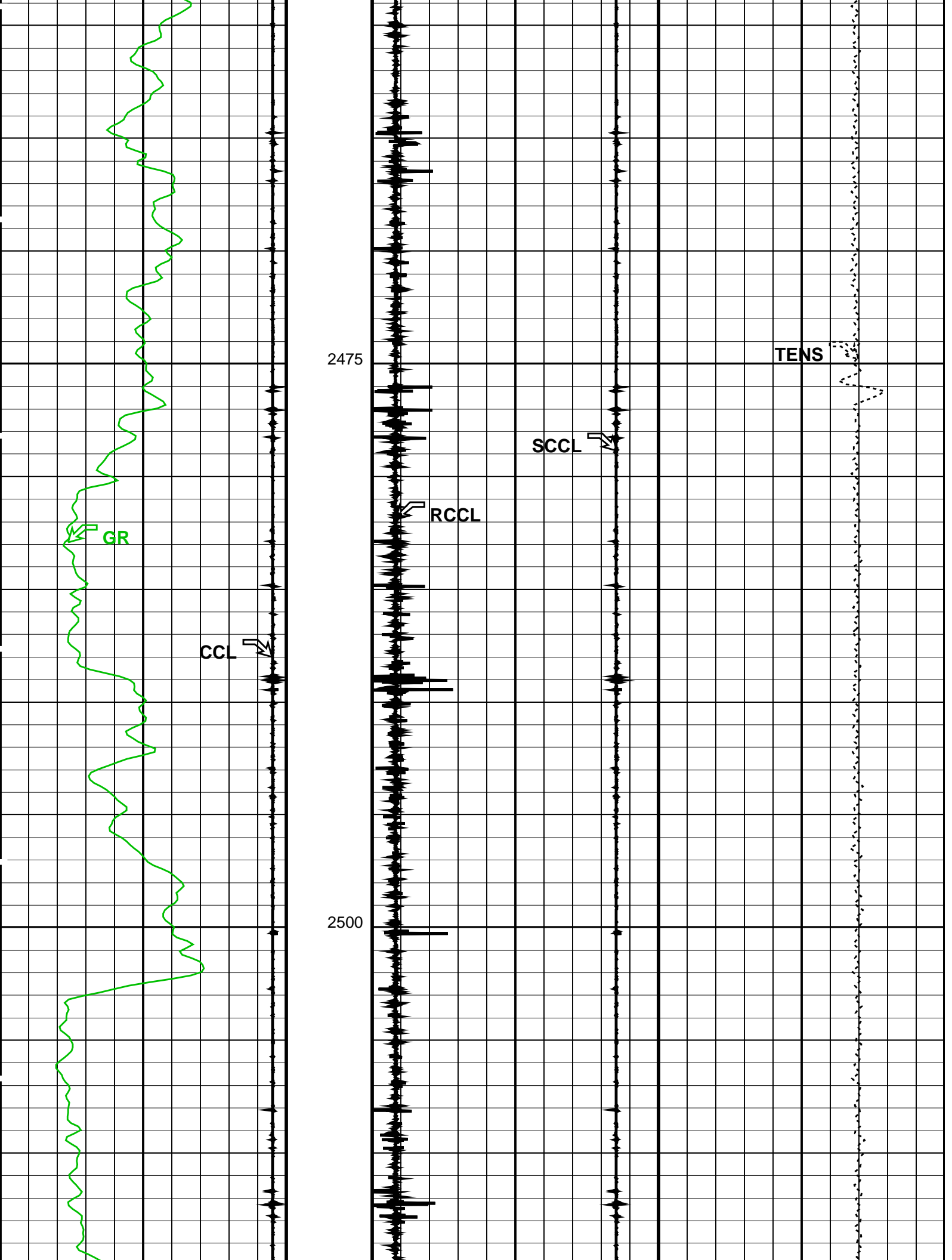
2450

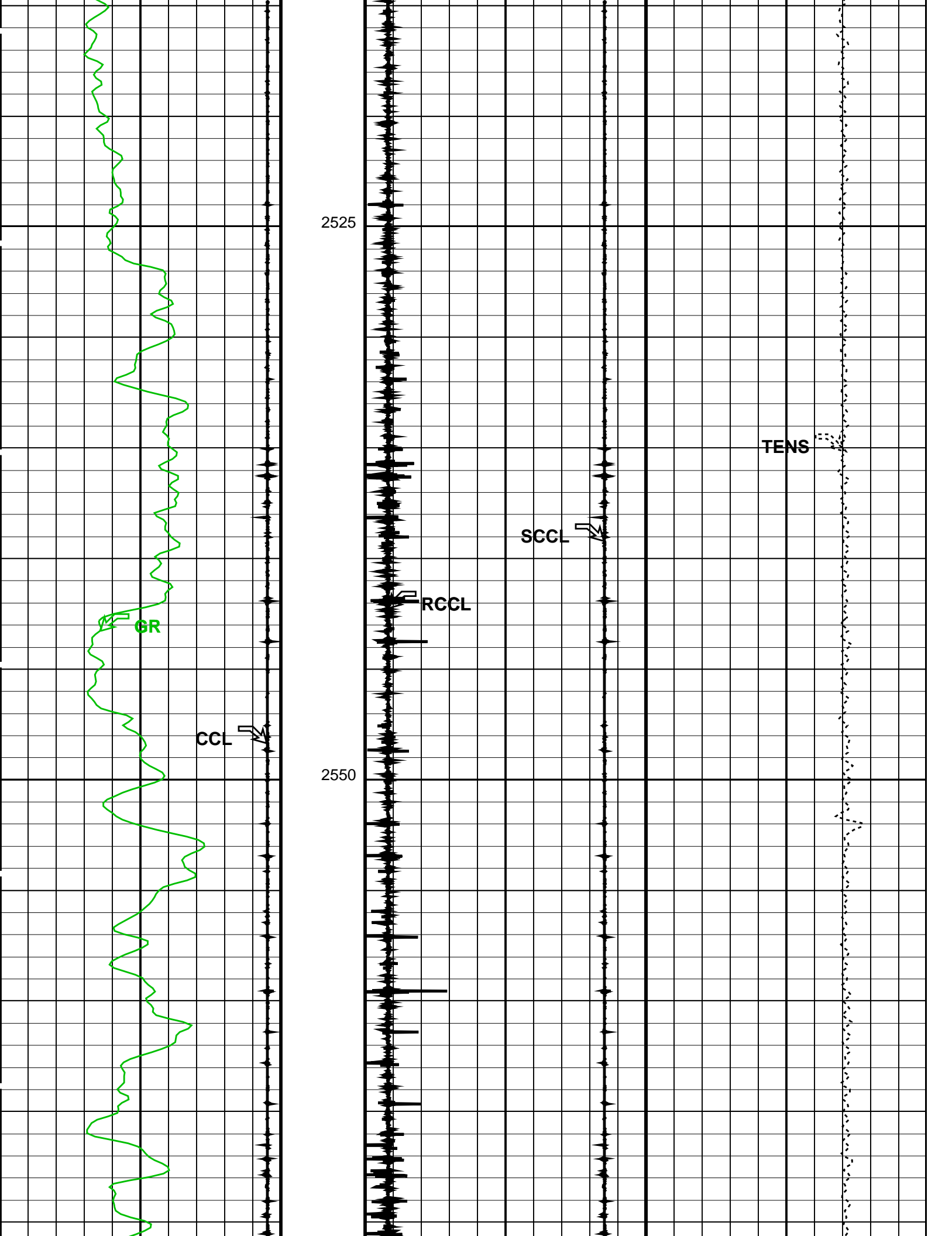


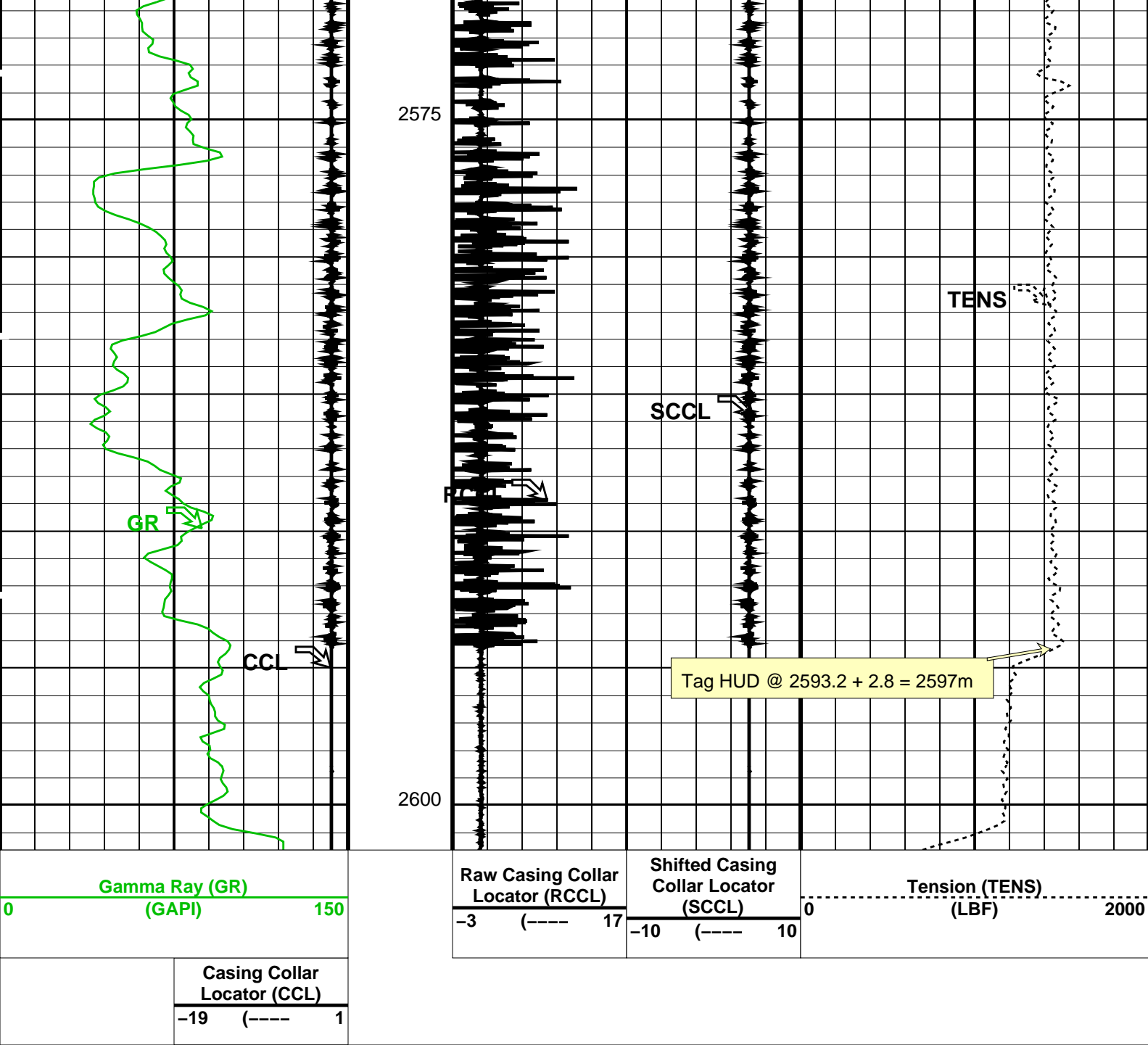
TENS

SCCL

RCCL







PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
System and Miscellaneous		
DO	Depth Offset for Playback	0.8 M
PP	Playback Processing	NORMAL

Format: PERFO Vertical Scale: 1:200 Graphics File Created: 16-Jun-2008 06:45

OP System Version: 15C0-309

MCM

UPCT-A 15C0-309 SHM_GUN SRPC-3582-Q1_2008_OP15

Input DLIS Files

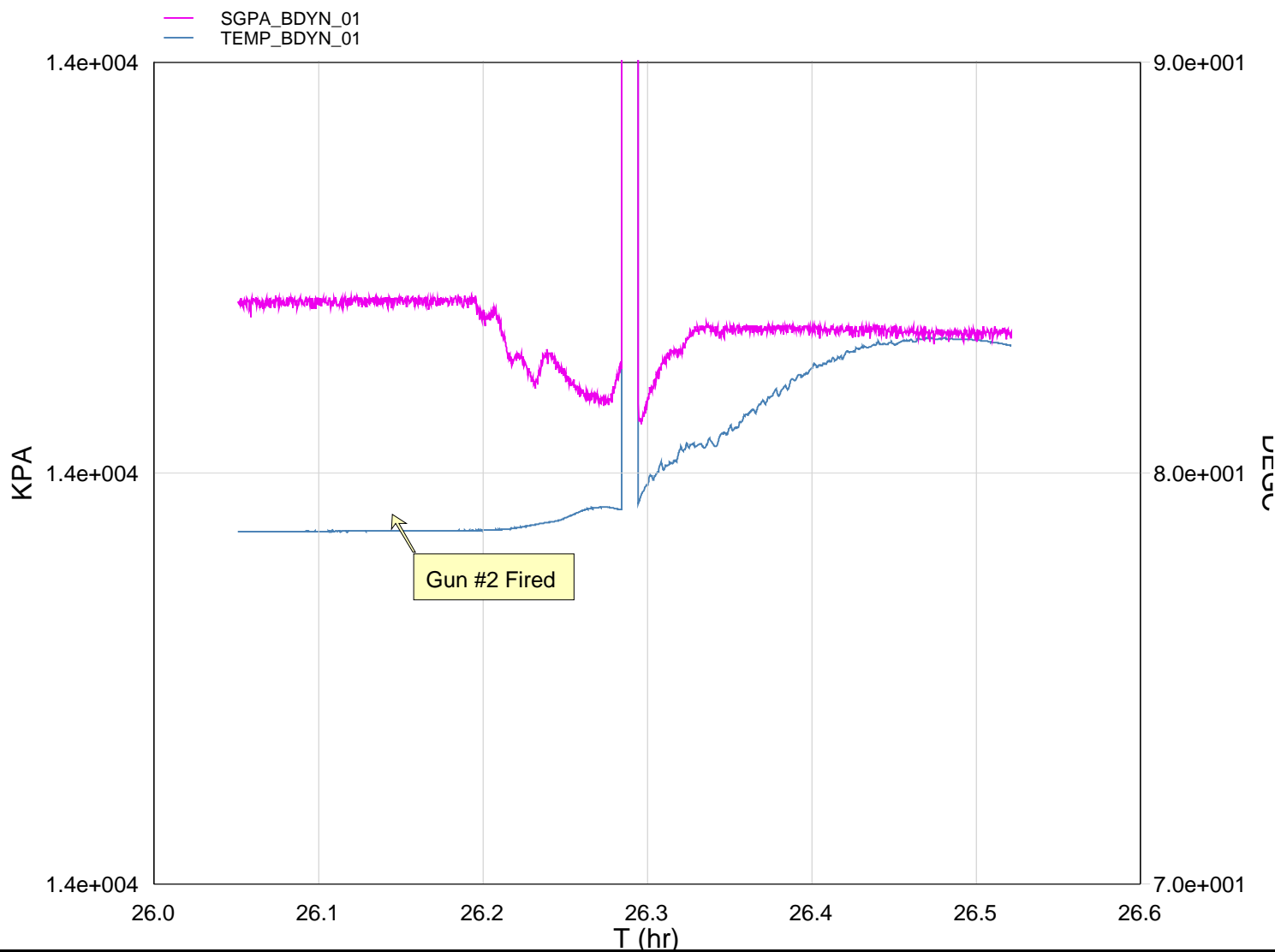
DEFAULT PERFO_042LUP FN:41 PRODUCER 16-Jun-2008 06:13 2600.9 M 2350.5 M

Output DLIS Files

Schlumberger

2 1/8" Power Spiral Gun # 2 Station Log

MAXIS Field Log

**Schlumberger**

2 1/8" Power Spiral Shooting Pass Gun # 2

MAXIS Field Log

```
GUN2    Used      2568.0    2568.0  02:13:32
```

Well: TNA A9a

DEFAULT	PERFO 031LUP	FN:30	PRODUCER	16-Jun-2008 02:00	2575.0 M	2493.0 M
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MCM

MWP_GUN	SRPC-3582-Q1_2008_OP15	MWPT-CA	SRPC-3582-Q1_2008_OP15
MWGT-AA	SRPC-3582-Q1_2008_OP15		

Time Mark Every 60 S

Temperature
(TEMP_MWPT)
(DEGF)Pressure (SGPA)
(PSIA)

Tension (TENS)
(LBF)

0 (LBF) 2000

Temperature (TEMP_MWPT)
(DEGF)

165 (DEGF) 175

Strain Gauge Pressure (SGP)
(PSIA)

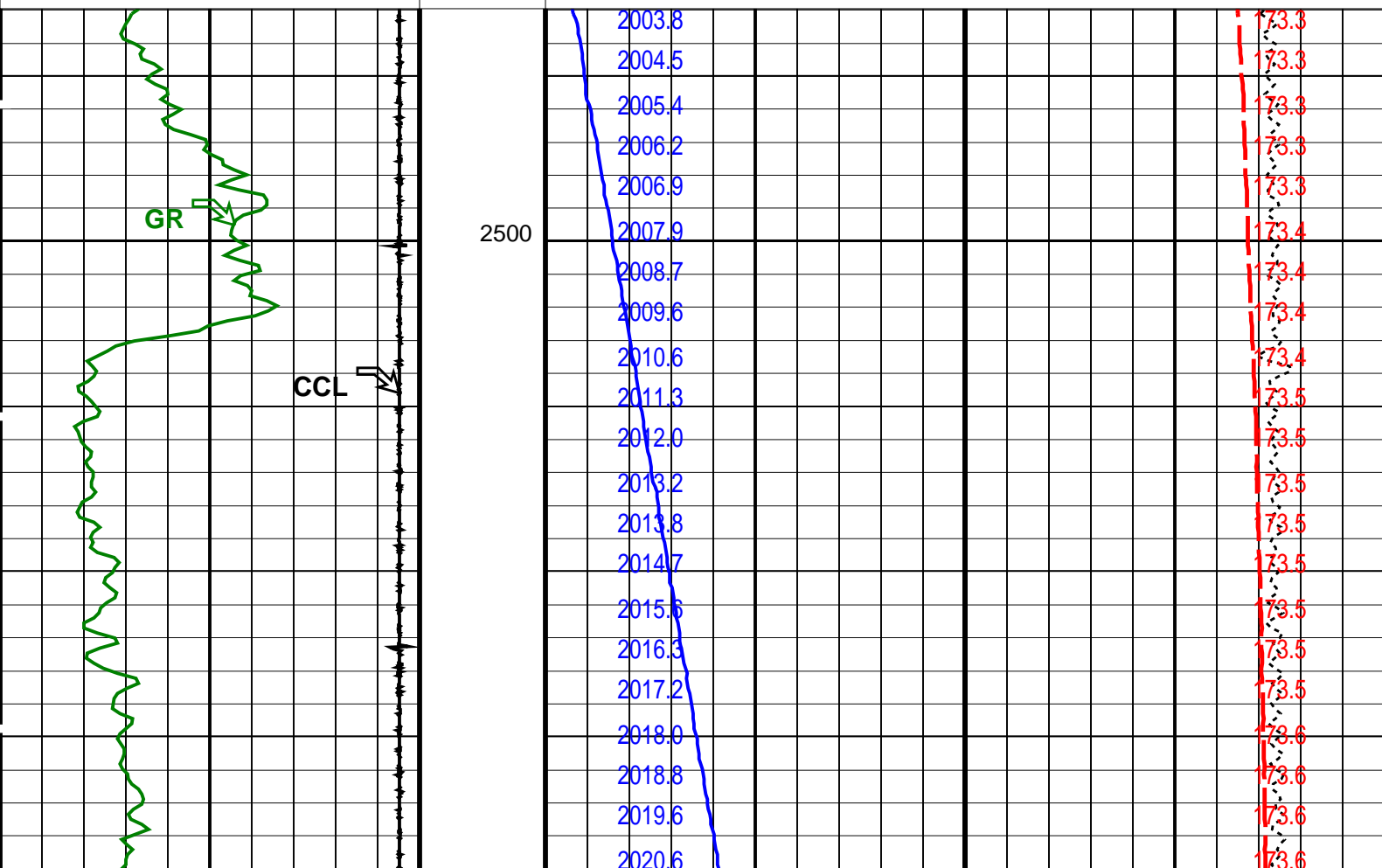
2000 (PSIA) 2100

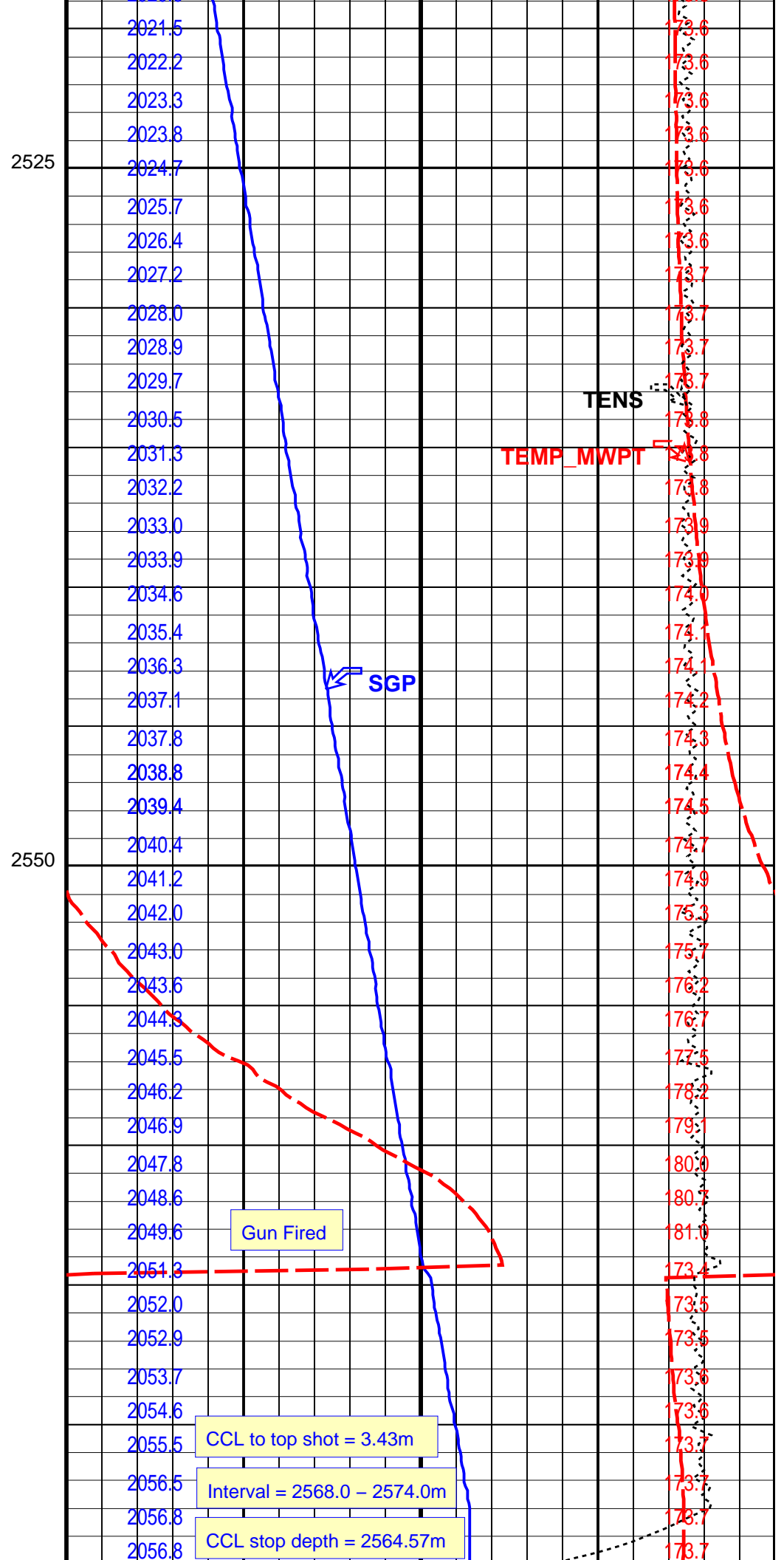
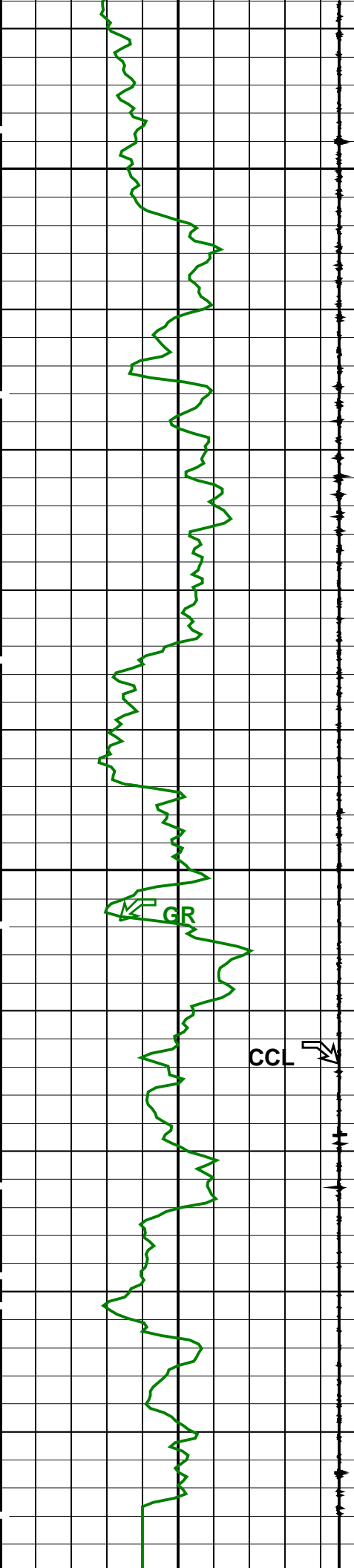
Gamma Ray (GR)
(GAPI)

0 (GAPI) 150

Casing Collar Locator (CCL)

-19 (----- 1





Casing Collar Locator (CCL)		Strain Gauge Pressure (SGP)	
-19	(----	2000	2100
Gamma Ray (GR)		Temperature (TEMP_MWPT)	
0	(GAPI) 150	165	175
Pressure (SGPA) (PSIA)		Tension (TENS) (LBF)	
		0	2000
		Temperature (TEMP_MWPT) (DEGF)	

PIP SUMMARY	
Time Mark Every 60 S	

Parameters			
DLIS Name	Description	Value	
MWPT-CA: MEASUREMENT WHILE PERFORATING TOOL			
DEVI_FL_CORR	Deviation Angle for Flow Line Correction	0	DEG
FLD	Flow Line Density	1	G/C3
MWPT_NULL_SOURCE	MWPT NULL Temperature Source	TEMS	
MWPT_NULL_TEMP	MWPT NULL Temperature	0.0	DEGC
Format: MWP	Vertical Scale: 1:200	Graphics File Created: 16-Jun-2008 02:00	

OP System Version: 15C0-309			
MCM			
MWP_GUN	SRPC-3582-Q1_2008_OP15	MWPT-CA	SRPC-3582-Q1_2008_OP15
MWGT-AA	SRPC-3582-Q1_2008_OP15		
Output DLIS Files			
DEFAULT	PERFO_031LUP	FN:30 PRODUCER	16-Jun-2008 02:00

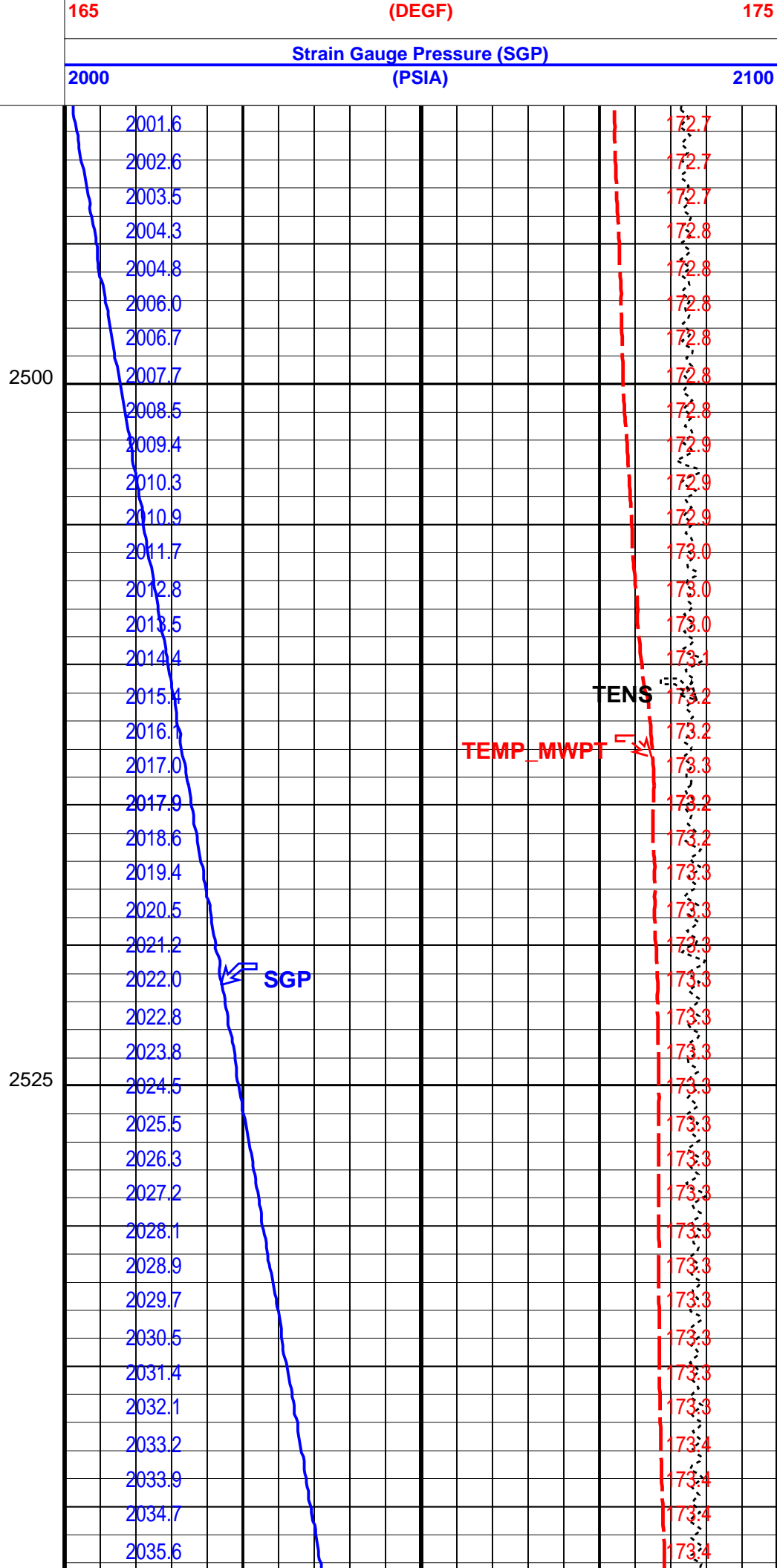
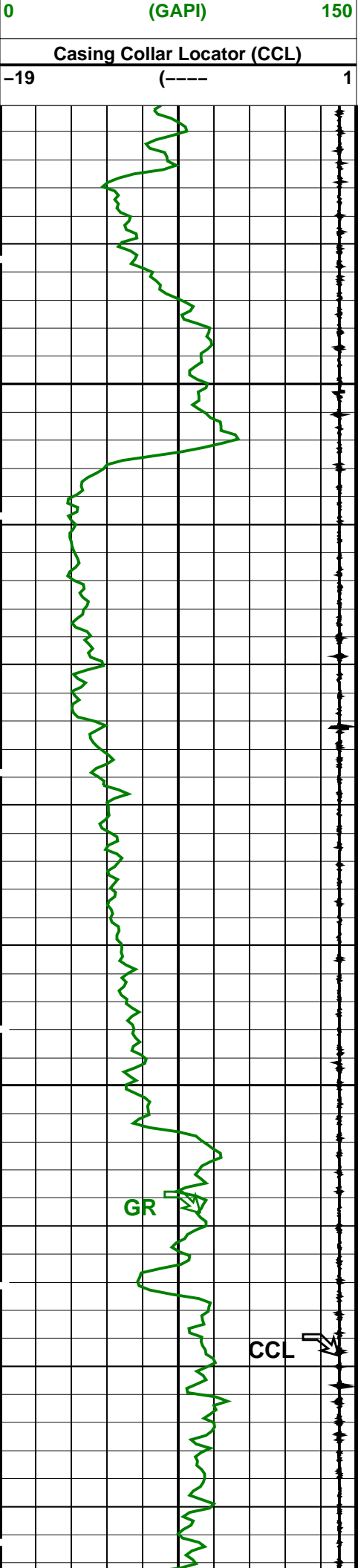
Schlumberger

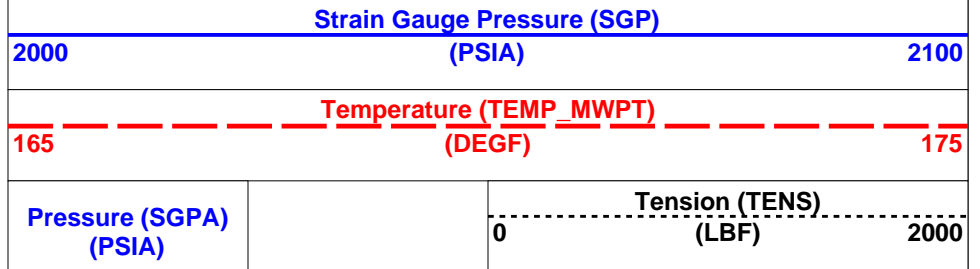
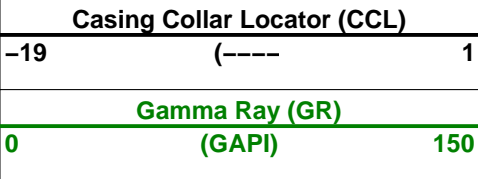
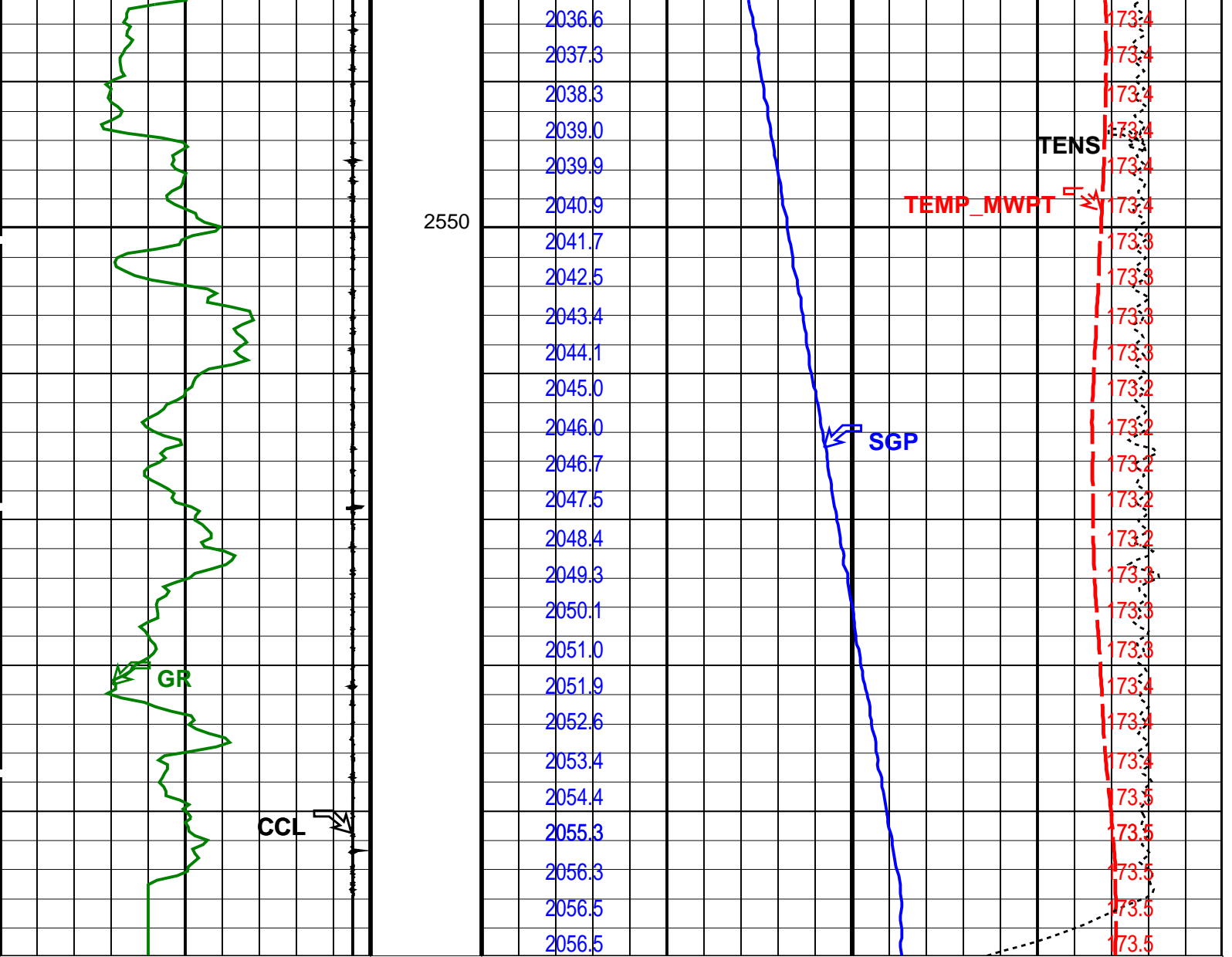
2 1/8" Power Spiral
Correlation Pass Gun # 2

MAXIS Field Log

Company: Esso Australia Pty Ltd					Well: TNA A9a	
Output DLIS Files						
DEFAULT	PERFO_030LUP	FN:29	PRODUCER	16-Jun-2008 01:41	2575.0 M	2489.9 M
OP System Version: 15C0-309						
MCM						
MWP_GUN	SRPC-3582-Q1_2008_OP15	MWPT-CA		SRPC-3582-Q1_2008_OP15		
MWGT-AA	SRPC-3582-Q1_2008_OP15					
PIP SUMMARY						
<div><div></div>Time Mark Every 60 S</div>						

		Temperature (TEMP_MWPT) (DEGF)	
Pressure (SGPA) (PSIA)		Tension (TENS) (LBF)	
		0	2000
Gamma Ray (GR)		Temperature (TEMP_MWPT)	





PIP SUMMARY

Time Mark Every 60 S

Parameters			
DLIS Name	Description	Value	
MWPT-CA: MEASUREMENT WHILE PERFORATING TOOL			
DEVI_FL_CORR	Deviation Angle for Flow Line Correction	0	DEG
FLD	Flow Line Density	1	G/C3
MWPT_NULL_SOURCE	MWPT NULL Temperature Source	TEMS	
MWPT_NULL_TEMP	MWPT NULL Temperature	0.0	DEGC

Format: MWP Vertical Scale: 1:200

Graphics File Created: 16-Jun-2008 01:41

OP System Version: 15C0-309

MCM

Output DLIS Files

DEFAULT

PERFO_030LUP

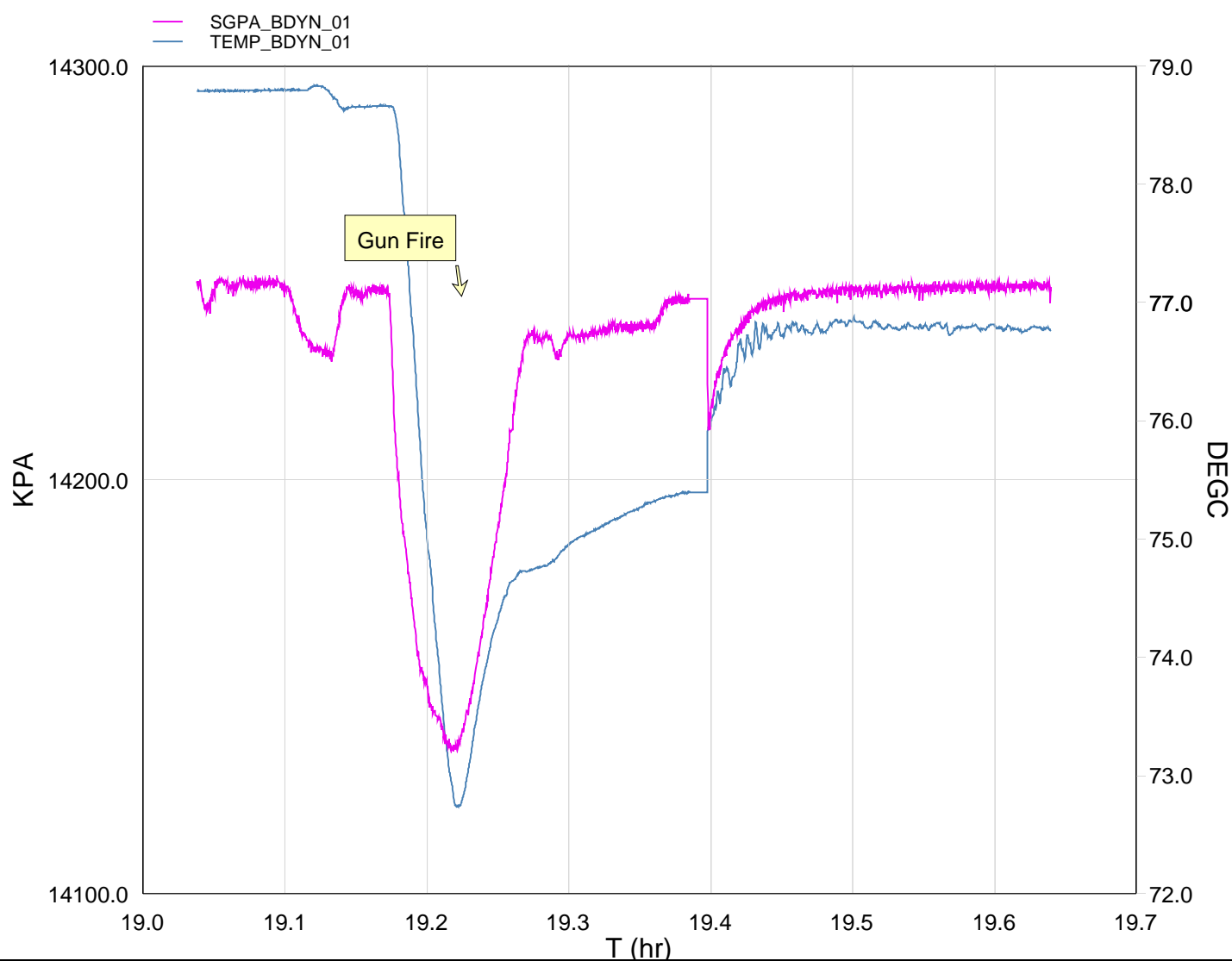
FN:29

PRODUCER

16-Jun-2008 01:41

Schlumberger**2 1/8" Power Spiral Gun # 1
Station Log**

MAXIS Field Log

**Schlumberger****2 1/8" Power Spiral
Shooting Pass Gun # 1**

MAXIS Field Log

PERFO2 Operational Summary Listing

Device Status Req Depth (M) Obs Depth (M) Time Used

GUN1 Used 2584.0 2584.0 19:39:32

Company: Well:

Output DLIS Files

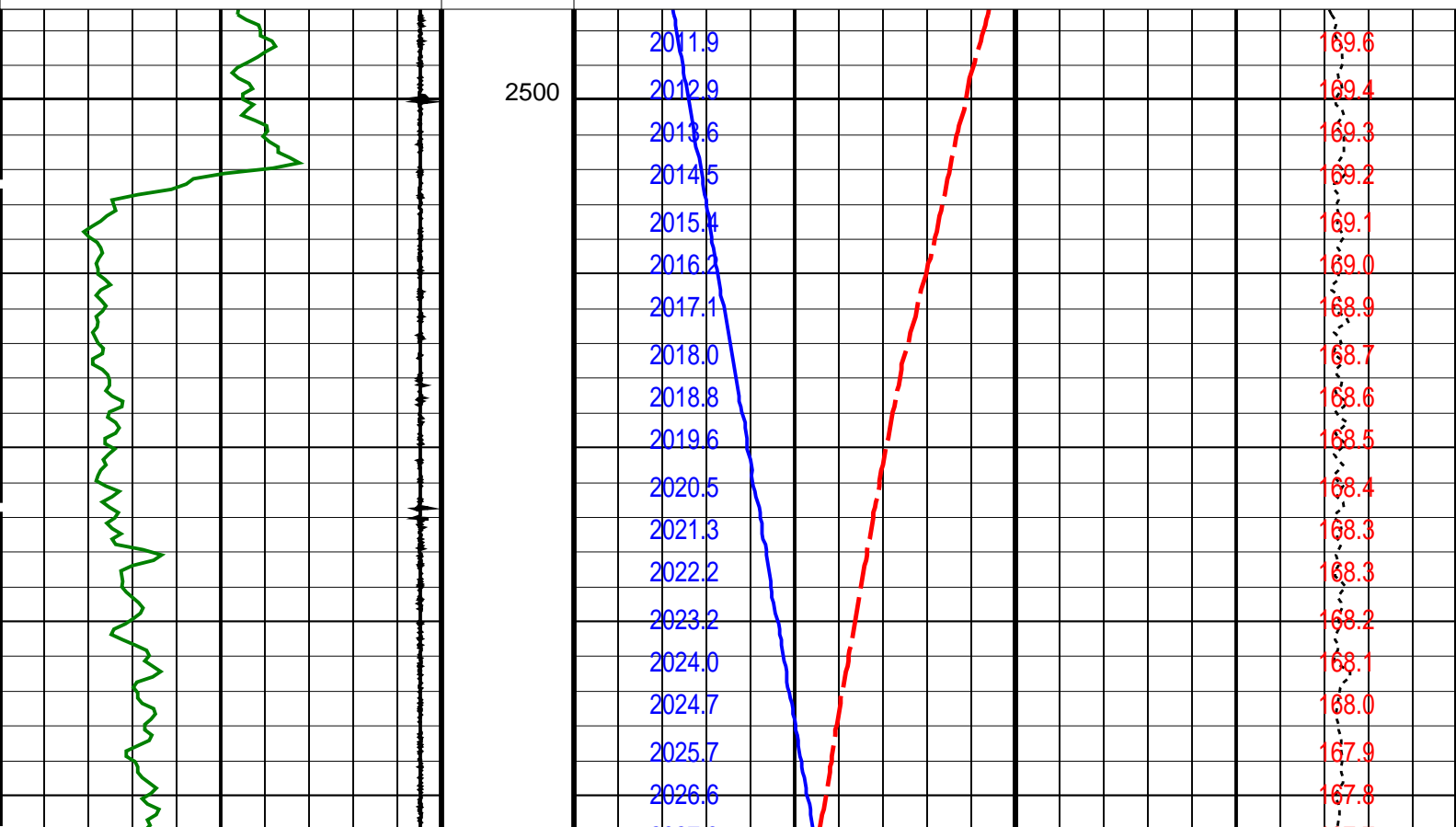
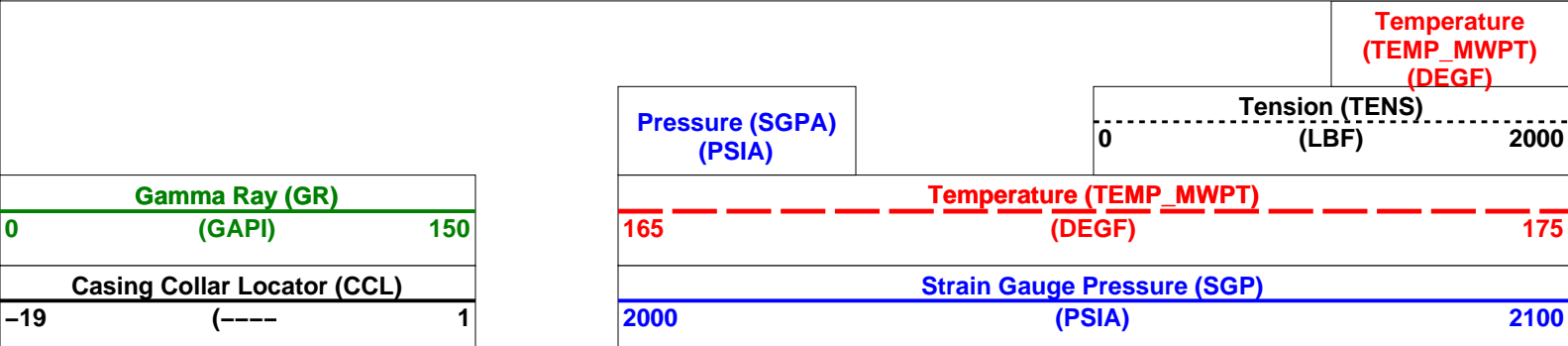
DEFAULT PERFO_017LUP FN:16 PRODUCER 15-Jun-2008 18:59 2590.0 M 2497.4 M

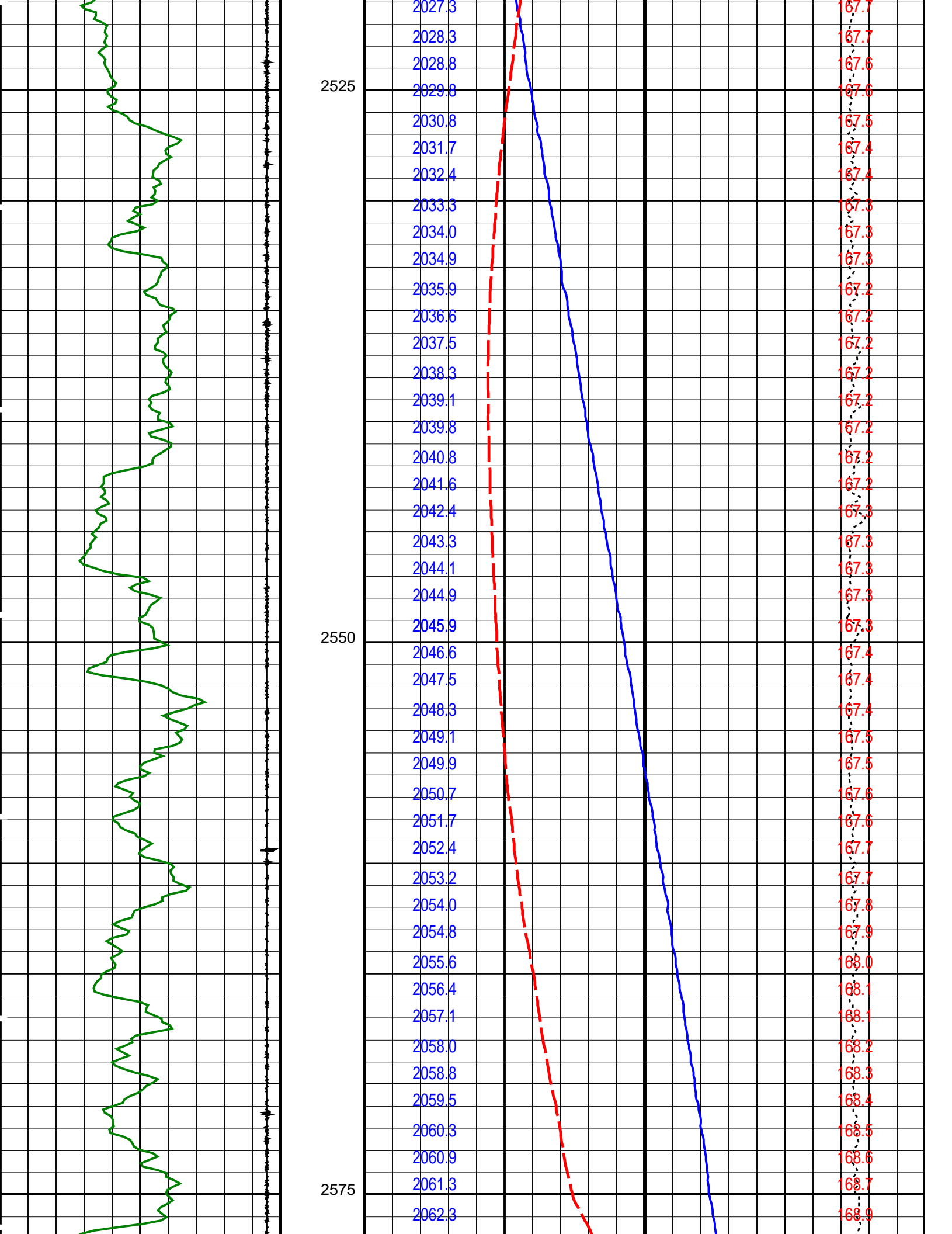
OP System Version: 15C0-309
MCM

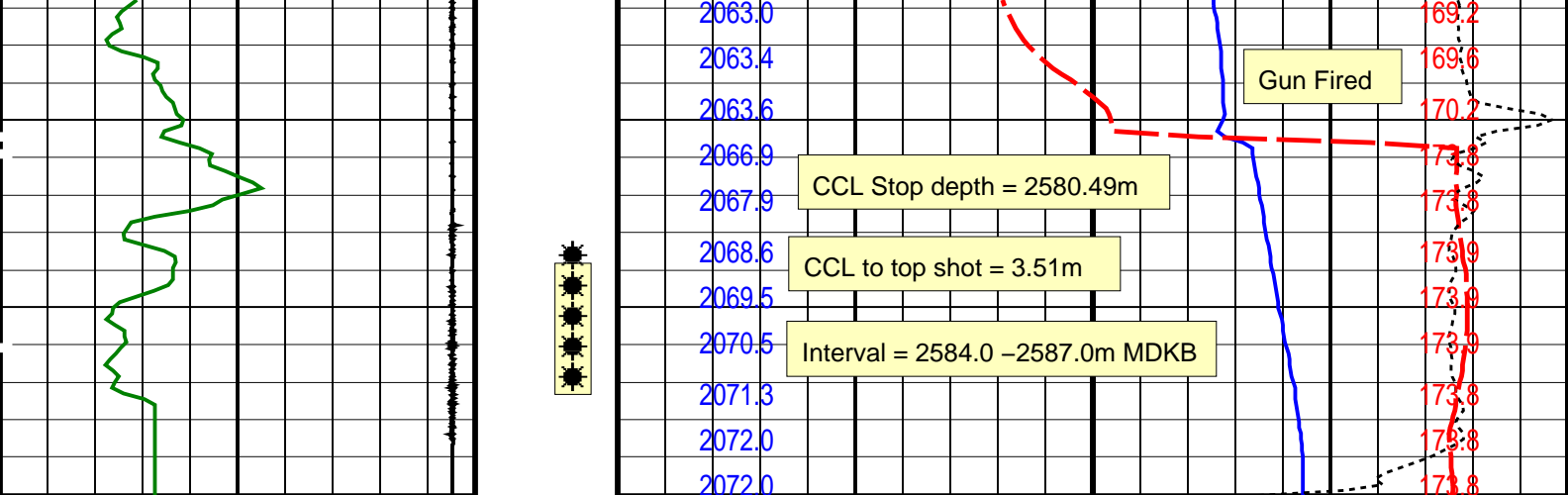
MWP_GUN SRPC-3582-Q1_2008_OP15 MWPT-CA SRPC-3582-Q1_2008_OP15
MWGT-AA SRPC-3582-Q1_2008_OP15

PIP SUMMARY

Time Mark Every 60 S







Casing Collar Locator (CCL)		Strain Gauge Pressure (SGP)	
-19	(----) 1	2000	(PSIA) 2100
Gamma Ray (GR)		Temperature (TEMP_MWPT)	
0	(GAPI) 150	165	(DEGF) 175
Pressure (SGPA)		Tension (TENS)	
(PSIA)		(LBF)	
0		2000	
		Temperature (TEMP_MWPT)	
		(DEGF)	

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
MWPT-CA: MEASUREMENT WHILE PERFORATING TOOL		
DEVI_FL_CORR	Deviation Angle for Flow Line Correction	0 DEG
FLD	Flow Line Density	1 G/C3
MWPT_NULL_SOURCE	MWPT NULL Temperature Source	TEMS
MWPT_NULL_TEMP	MWPT NULL Temperature	0.0 DEGC

Format: MWP Vertical Scale: 1:200 Graphics File Created: 15-Jun-2008 18:59

OP System Version: 15C0-309

MCM

MWP_GUN	SRPC-3582-Q1_2008_OP15	MWPT-CA	SRPC-3582-Q1_2008_OP15
MWGT-AA	SRPC-3582-Q1_2008_OP15		

Output DLIS Files

DEFAULT	PERFO_017LUP	FN:16	PRODUCER	15-Jun-2008 18:59
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Schlumberger

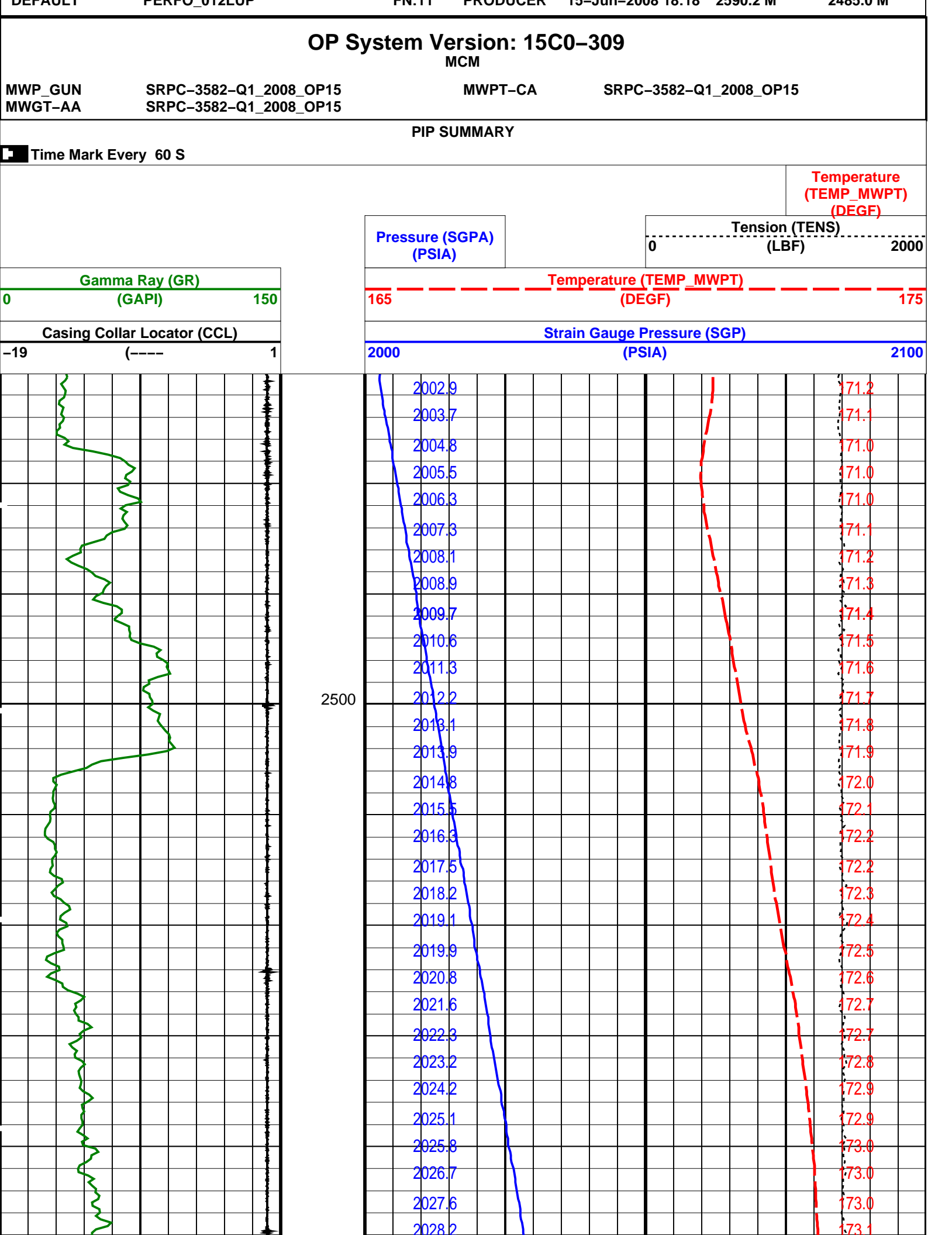
**2 1/8" Power Spiral
Correlation Pass Gun # 1**

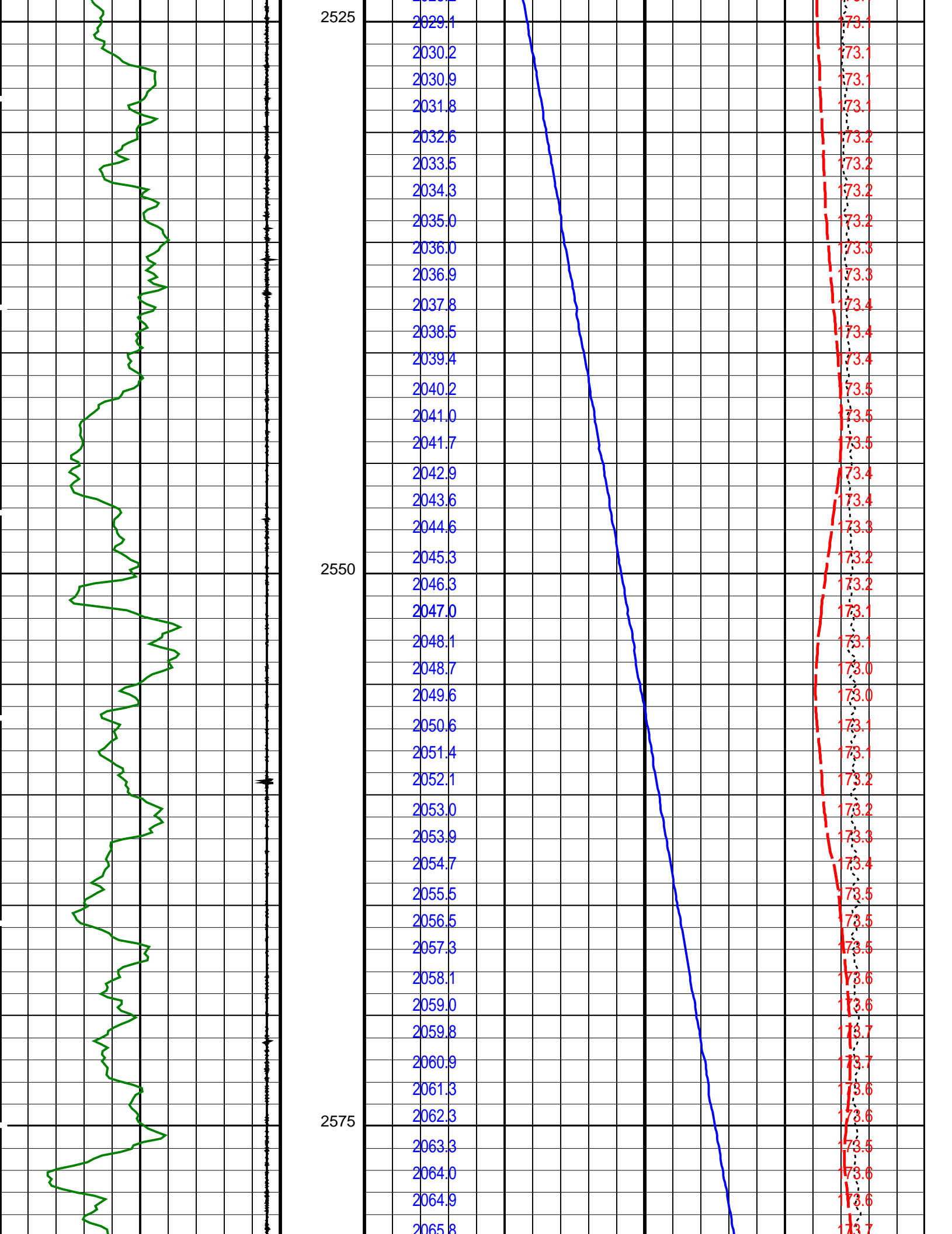
MAXIS Field Log

Company: Well:

Output DLIS Files

DEFAULT	PERFO_012LUP	FN:11	PRODUCER	15-Jun-2008 18:18	2580.2 M	2485.0 M
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Before: 15-Jun-2008 8:43							
Gamma Ray (Signal) Background	30.00	N/A	2.173	N/A	N/A	N/A	GAPI
Gamma Ray (Jig – Background)	113.1	N/A	113.1	N/A	N/A	10.28	GAPI
Gamma Ray (Calibrated)	135.0	N/A	135.0	N/A	N/A	15.00	GAPI

MEASUREMENT WHILE PERFORATING GAMMA RAY TOOL / Equipment Identification

Primary Equipment:

GAMMA RAY CARTRIDGE

MWPG – CGR

796

Auxiliary Equipment:

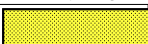


GAMMA RAY HOUSING

MWGH – CGR

796

MEASUREMENT WHILE PERFORATING GAMMA RAY TOOL Wellsite Calibration

Detector Calibration

Phase	Gamma Ray (Signal) Background	GAPI	Value	Phase	Gamma Ray (Jig – Background)	GAPI	Value	Phase	Gamma Ray (Calibrated)	GAPI	Value
Before			2.173	Before			113.1	Before			135.0
	0 (Minimum)				102.8 (Minimum)				120.0 (Minimum)		
	30.00 (Nominal)				113.1 (Nominal)				135.0 (Nominal)		
	120.0 (Maximum)				123.3 (Maximum)				150.0 (Maximum)		

Before: 15-Jun-2008 8:43

Company: **Esso Australia Pty Ltd.**

Schlumberger

Well: **TNA A9a**

Field: **Tuna**

Rig: **Crane / Prod2**

Country: **Australia**

2-1/8" Powerjet / MPBT

Perforation and Plug Setting Record

15-Jun-2008