

Company: Esso Australia Pty Ltd.

Well: A14
Field: Marlin
Rig: Crane / Prod 4
Country: Australia

2" Phased PowerJet Omega MWPT
Perforation Record
9 5/8" Posiset Plug Setting Record

Rig: Crane / Prod 4
Field: Marlin
Location: Gippsland
Well: A14
Company: Esso Australia Pty Ltd.

LOCATION	
Gippsland	Elev.: K.B. 27.40 m
Basin	G.L. -59.00 m
Bass Strait	D.F. 27.40 m
Permanent Datum:	M.S.L.
Log Measured From:	K.B.
Drilling Measured From:	K.B.
State: Victoria	Max. Well Deviation 30 deg
	Longitude 148 13'09.18"E
	Latitude 038 13'55.49"S

Logging Date	4-Feb-2009
Run Number	1 through 7
Depth Driller	1628 m
Schlumberger Depth	1600 m
Bottom Log Interval	1563 m
Top Log Interval	1521 m
Casing Fluid Type	Production fluids
Salinity	
Density	
Fluid Level	
BIT/CASING/TUBING STRING	
Bit Size	12.250 in
From	57 m
To	1749.2 m
Casing/Tubing Size	9.625 in
Weight	40 lbm/ft
Grade	N-80
From	12.51 m
To	1740 m
Maximum Recorded Temperatures	184 degF
Logger On Bottom	4-Feb-2009
Unit Number	889
Recorded By	S.Gilbert
Witnessed By	B White

Run 1	
PVT DATA	
Oil Density	
Water Salinity	
Gas Gravity	
Bo	
Bw	
1/Bg	
Bubble Point Pressure	
Bubble Point Temperature	
Solution GOR	
Maximum Deviation	30 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: 31-JAN-2009 16:41:19

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-EB	Type:	PSDS/OSDS	Type:	2-32ZT
Serial Number:	6373	Serial Number:	325337	Serial Number:	207308
Calibration Date:	2-Dec-2008	Calibration Date:	30-Jan-2009	Length:	6400 M
Calibrator Serial Number:	30	Calibrator Serial Number:	1174	Conveyance Method: Wireline Rig Type: Offshore Fixed	
Calibration Cable Type:	2-23ZT	Number of Calibration Points:	9		
Wheel Correction 1:	-1	Calibration RMS:	16		
Wheel Correction 2:	-2	Calibration Peak Error:	27		

Depth Control Parameters

Log Sequence:	Subsequent Log In the Well
Reference Log Name:	
Reference Log Run Number:	
Reference Log Date:	

Depth Control Remarks

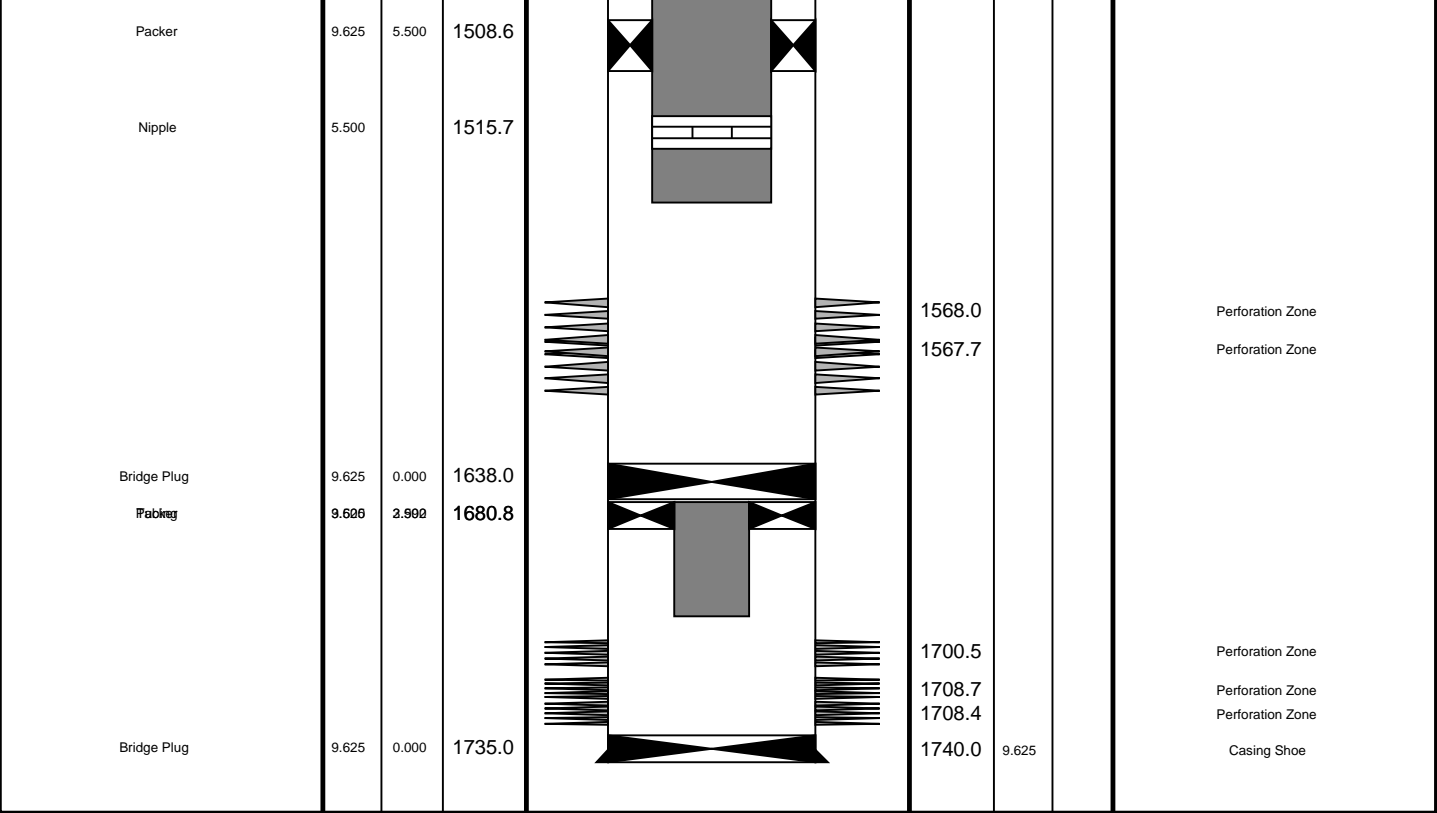
1. IDW-EB 6373 Used as primary depth control.
2. Z-Chart used as Backup
3. Log Correlated on depth over Zone of interest.
4.
5.
6.

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
OS1: None

REMARKS: RUN NUMBER 1
Log correlated to
Objective: RIH with dummy toolstring to ensure access through minimum restrictions.
Perforate the interval 1521m to 1531m MDKB using 2", 6spf, 60deg Phased Powerjet Omega HSD guns with MWPT.
Set 9 5/8 posiset plug with top of Seal @ 1563m MDKB, then Dump approx 1.0m of Cement on top in 2 runs.
Gun#1: Before Gun SBHP- 1957.6 psia SBHT- 174.6 degf / After Gun SBHP- 1957.9 psia SBHT-179.4 degf
Gun#1: 1521m to 1526m MDKB Top Shot @1521m MDKB
CC1: 1521m to 1526m MDKB CC1: 1521m to 1526m MDKB



Job Events Summary

MAXIS Field Log

Schlumberger Job Event Summary						
		Time	Elapsed Time	Depth (M)		File
Log Pass (up)	4-Feb-2009	9:06	000:04	1534.8	- 1497.3	PERFO_033LUP
Log Pass (up)	4-Feb-2009	9:11	000:15	1532.5	- 1497.2	PERFO_034LUP
Station Log	4-Feb-2009	9:17	000:06	1517.4		PERFO_035LTP
Log Pass (up)	4-Feb-2009	11:22	000:05	1535.6	- 1497.3	PERFO_041LUP
Station Log	4-Feb-2009	11:32	000:07	1522.4		PERFO_043LTP
Log Pass (up)	4-Feb-2009	11:50	000:03	1531.2	- 1497.2	PERFO_044LUP
Log Pass (up)	4-Feb-2009	14:52	000:11	1599.7	- 1491.1	PERFO_049LUP
Log Pass (up)	4-Feb-2009	16:46	000:06	1559.5	- 1518.7	CCL_058LUP
Simulated Log	4-Feb-2009	16:57	001:18			CCL_059LUP
Log Pass (up)	4-Feb-2009	18:16	000:04	1556.0	- 1515.9	CCL_060LUP
Log Pass (up)	5-Feb-2009	8:56	000:07	1552.0	- 1519.1	PERFO_065LUP
Log Pass (up)	5-Feb-2009	10:15	000:08	1551.7	- 1518.5	PERFO_069LUP
Log Pass (up)	5-Feb-2009	11:35	000:08	1550.1	- 1514.4	PERFO_072LUP



Dump Cement
Run # 2

MAXIS Field Log

Output DLIS Files

DEFAULT PERFO_072LUP FN:71 PRODUCER 05-Feb-2009 11:35 1550.1 M 1514.4 M

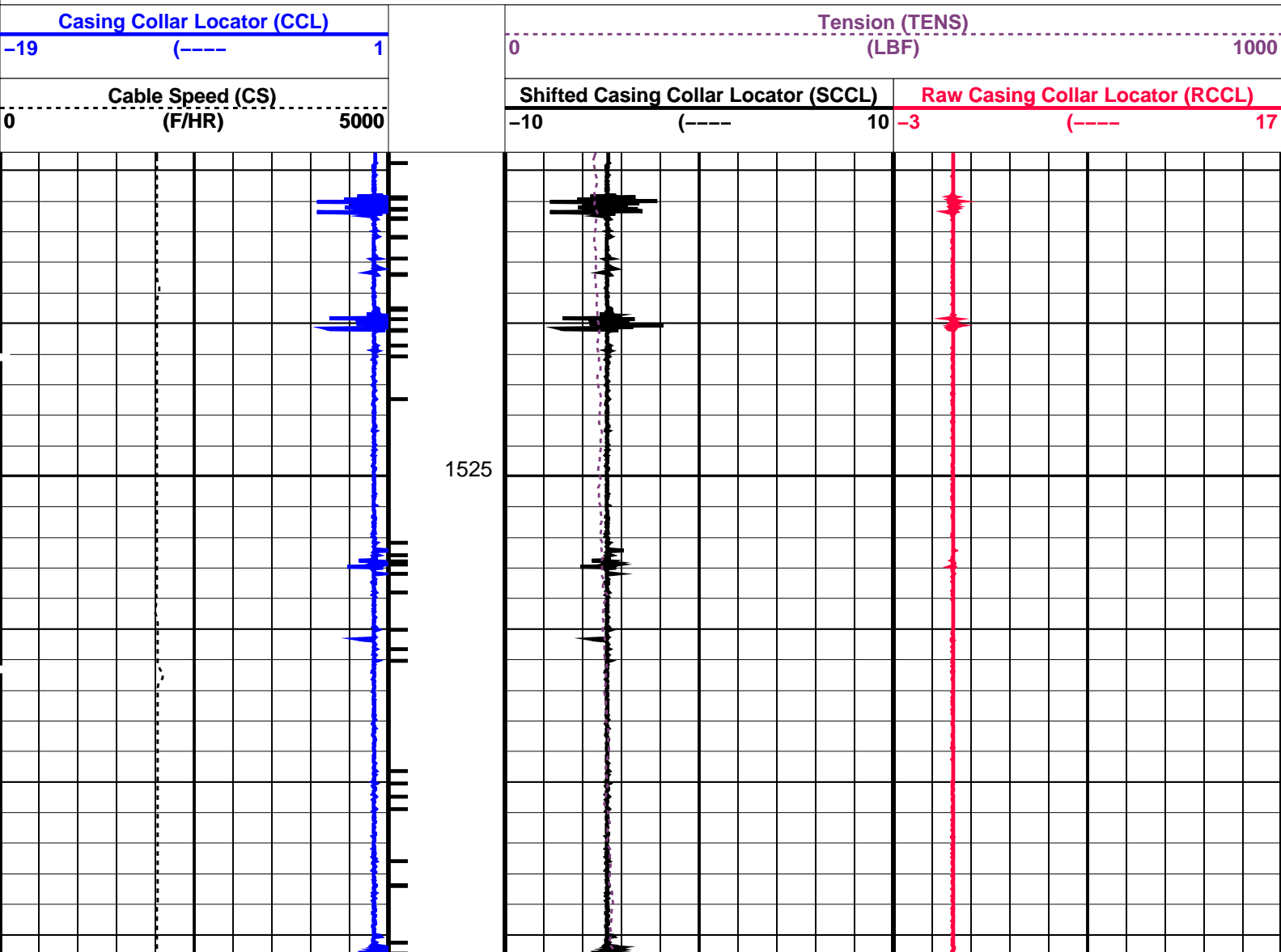
OP System Version: 16C0-147
MCM

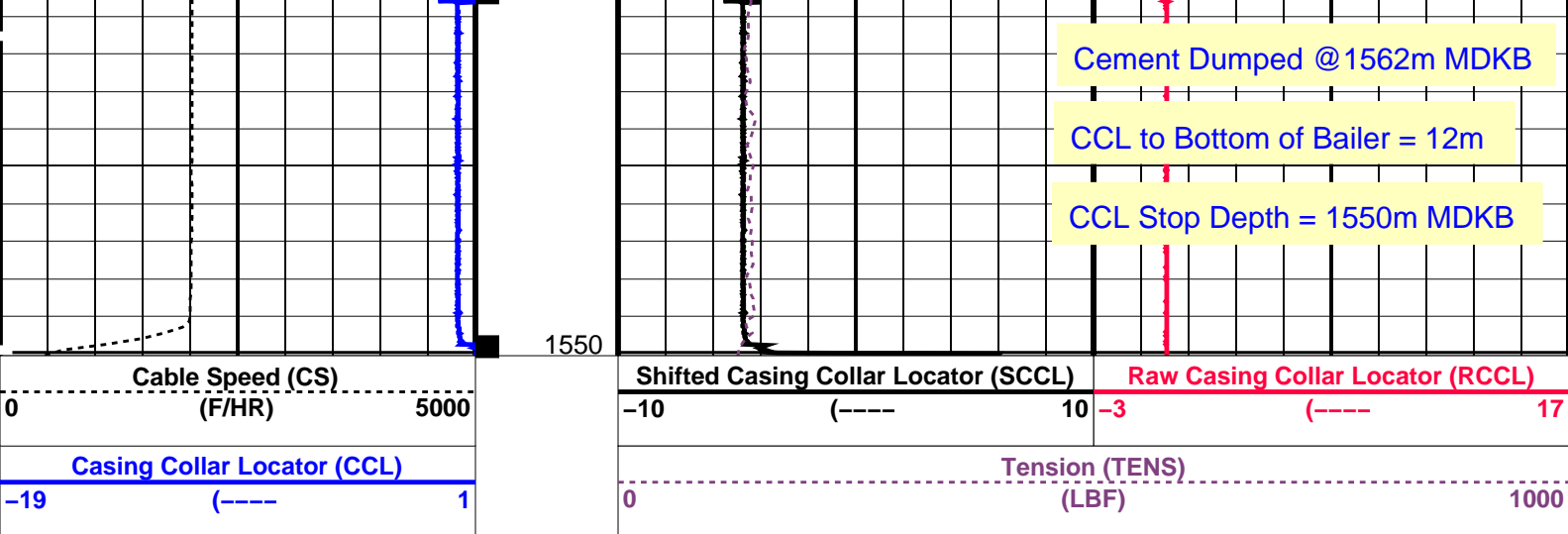
SHM_GUN 16C0-147 CCL-L 16C0-147

PIP SUMMARY

└─ Casing Collars

Time Mark Every 60 S





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
CCLT	CCL Detection Level	

Format: PERFO_1 Vertical Scale: 1:200 Graphics File Created: 05-Feb-2009 11:35

OP System Version: 16C0-147

MCM

SHM_GUN 16C0-147 CCL-L 16C0-147

Output DLIS Files

DEFAULT PERFO_072LUP FN:71 PRODUCER 05-Feb-2009 11:35

Schlumberger

Dump Cement
Run # 1

MAXIS Field Log

Output DLIS Files

DEFAULT PERFO_069LUP FN:68 PRODUCER 05-Feb-2009 10:15

OP System Version: 16C0-147

MCM

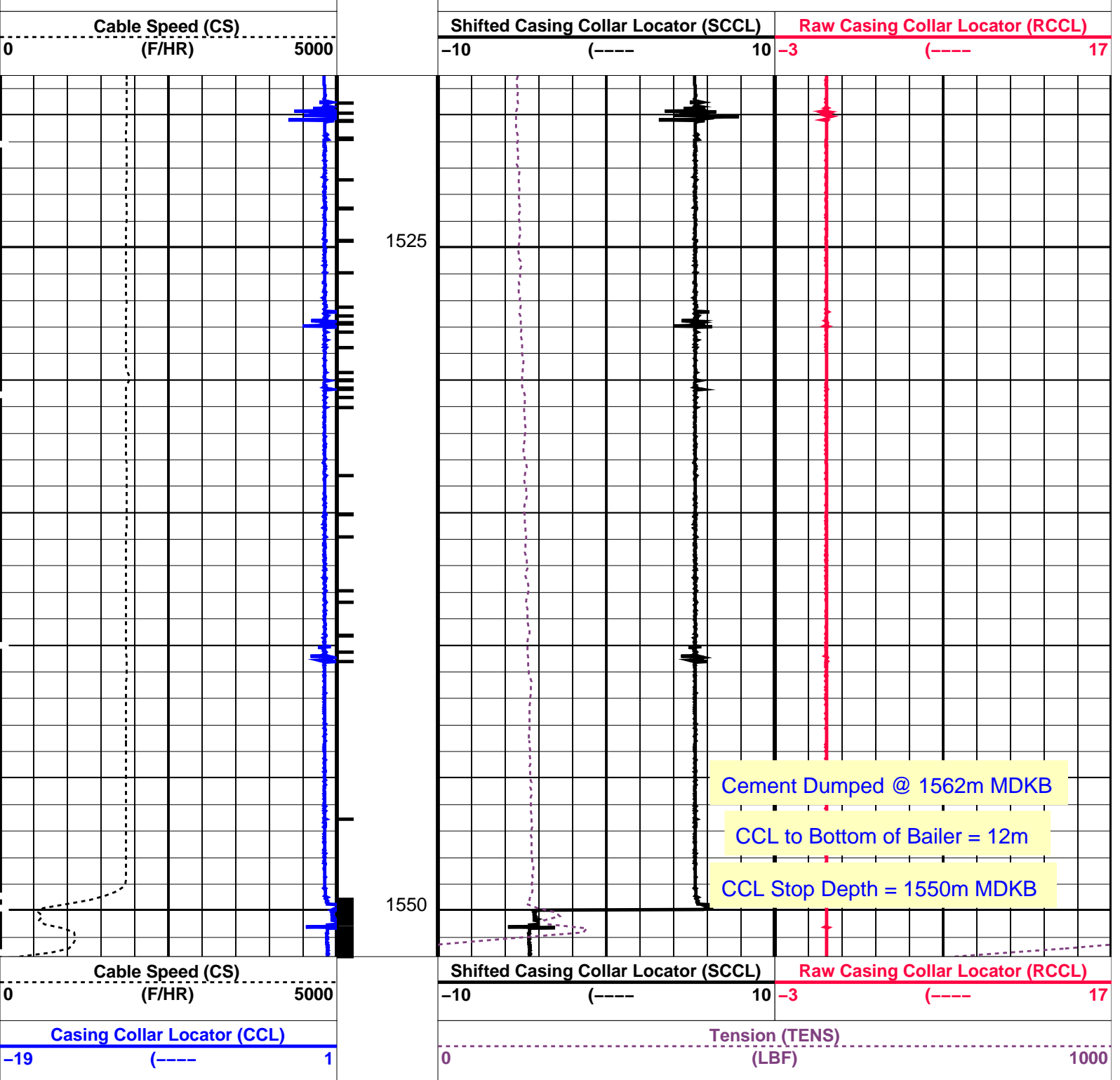
SHM_GUN 16C0-147 CCL-L 16C0-147

PIP SUMMARY

Time Mark Every 60 S

Casing Collars





PIP SUMMARY

└─ Casing Collars

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: PERFO_1 Vertical Scale: 1:200

Graphics File Created: 05-Feb-2009 10:15

OP System Version: 16C0-147

MCM

SHM_GUN

16C0-147

CCL-L

16C0-147

Output DLIS Files

DEFAULT

PERFO_069LUP

FN:68

PRODUCER

05-Feb-2009 10:15

Schlumberger

Water Dump Pass

MAXIS Field Log

Output DLIS Files

DEFAULT

PERFO_065LUP

FN:64

PRODUCER

05-Feb-2009 08:56

1552.0 M

1519.1 M

OP System Version: 16C0-147

MCM

SHM_GUN

16C0-147

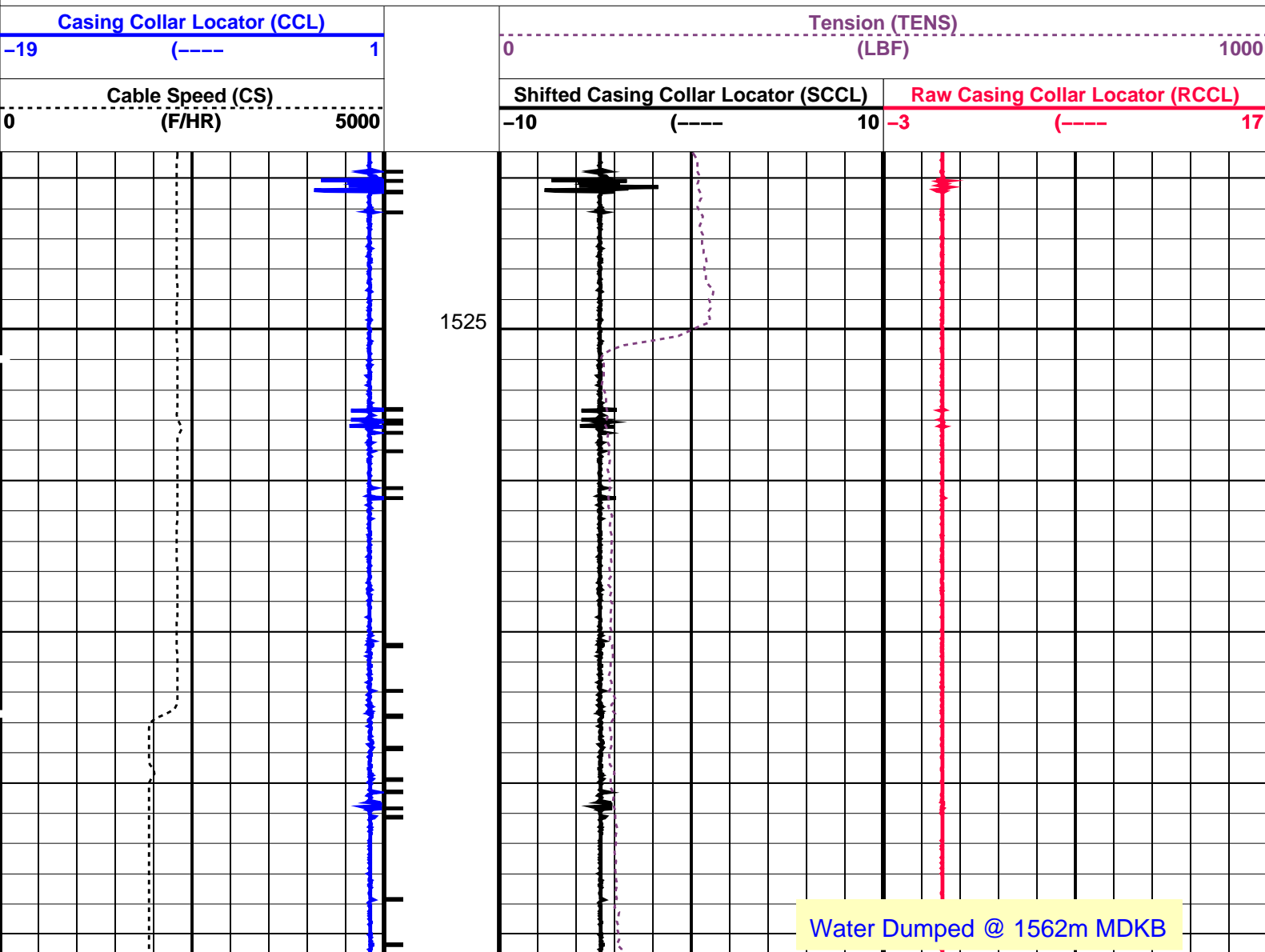
CCL-L

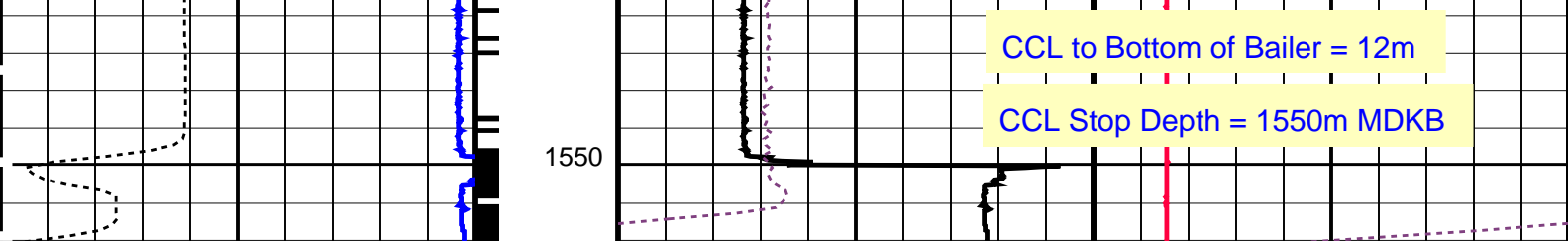
16C0-147

PIP SUMMARY

└─ Casing Collars

Time Mark Every 60 S





Cable Speed (CS)		Shifted Casing Collar Locator (SCCL)		Raw Casing Collar Locator (RCCL)	
0	(F/HR)	5000	-10	(----	10
			-3	(----	17
Casing Collar Locator (CCL)			Tension (TENS)		
-19	(----	1	0	(LBF)	1000

PIP SUMMARY

← Casing Collars

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: PERFO_1 Vertical Scale: 1:200 Graphics File Created: 05-Feb-2009 08:56

OP System Version: 16C0-147

MCM

SHM_GUN 16C0-147 CCL-L 16C0-147

Output DLIS Files

DEFAULT PERFO_065LUP FN:64 PRODUCER 05-Feb-2009 08:56

Schlumberger

Log Away From Plug Setting

MAXIS Field Log

Output DLIS Files

DEFAULT CCL_060LUP FN:59 PRODUCER 04-Feb-2009 18:16 1556.0 M 1515.9 M

OP System Version: 16C0-147

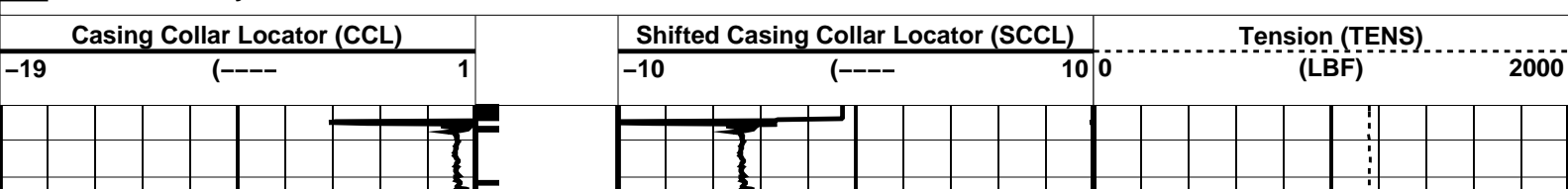
MCM

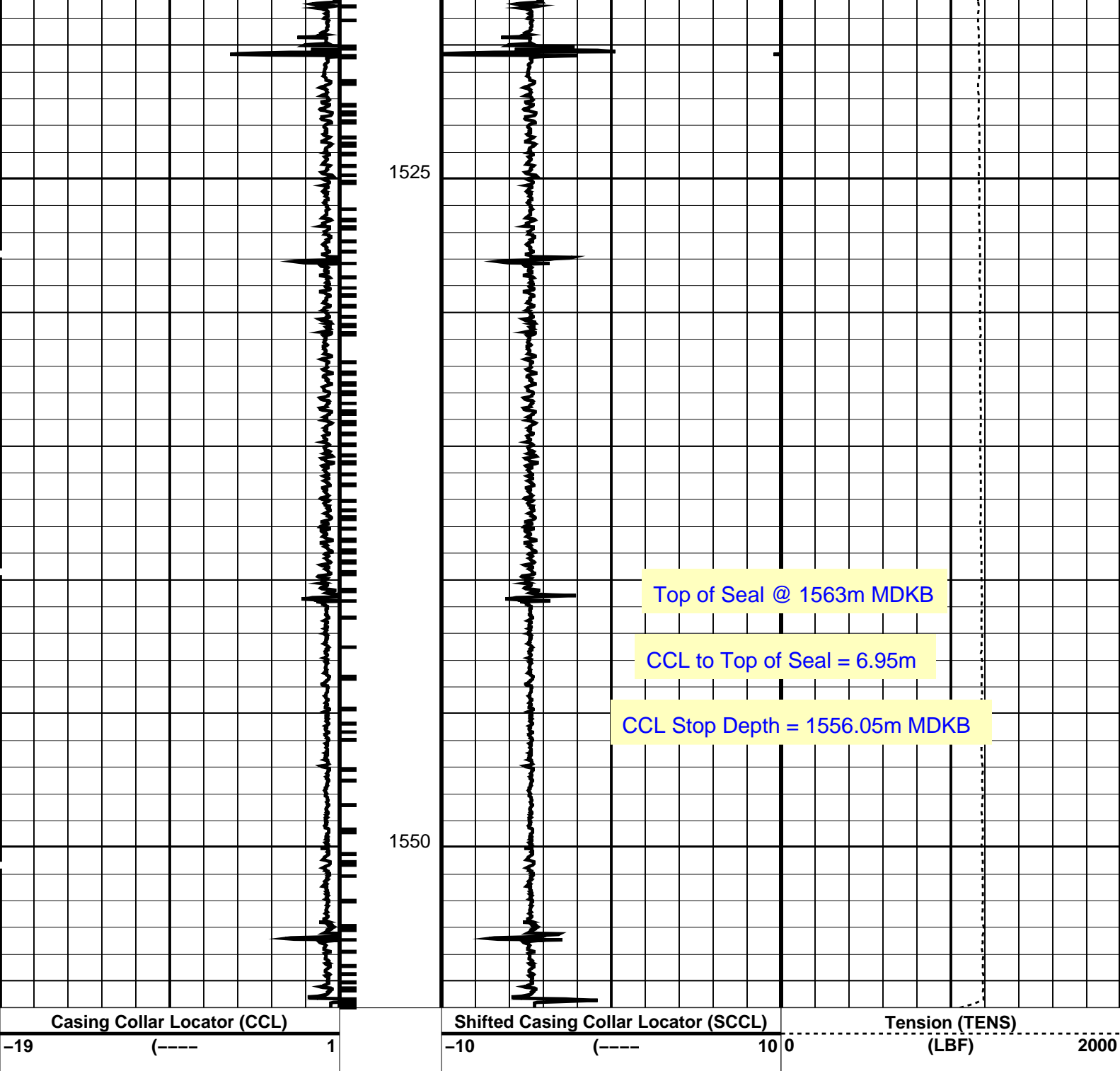
MPEX-CA 16C0-147 MPSU-CA 16C0-147
CCL-PCCL 16C0-147

PIP SUMMARY

← Casing Collars

Time Mark Every 60 S





PIP SUMMARY

└─ Casing Collars

Time Mark Every 60 S

Parameters

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

Format: PERFO Vertical Scale: 1:200

Graphics File Created: 04-Feb-2009 18:16

OP System Version: 16C0-147
MCM

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

Output DLIS Files

Schlumberger

9 5/8" 40 lb/ft Posiset Plug
Top Of Seal @ 1563m MDKB

MAXIS Field Log

Output DLIS Files

DEFAULT

CCL_059LUP

FN:58

PRODUCER

04-Feb-2009 16:57

OP System Version: 16C0-147

MCM

MPEX-CA
CCL-PCCL16C0-147
16C0-147

MPSU-CA

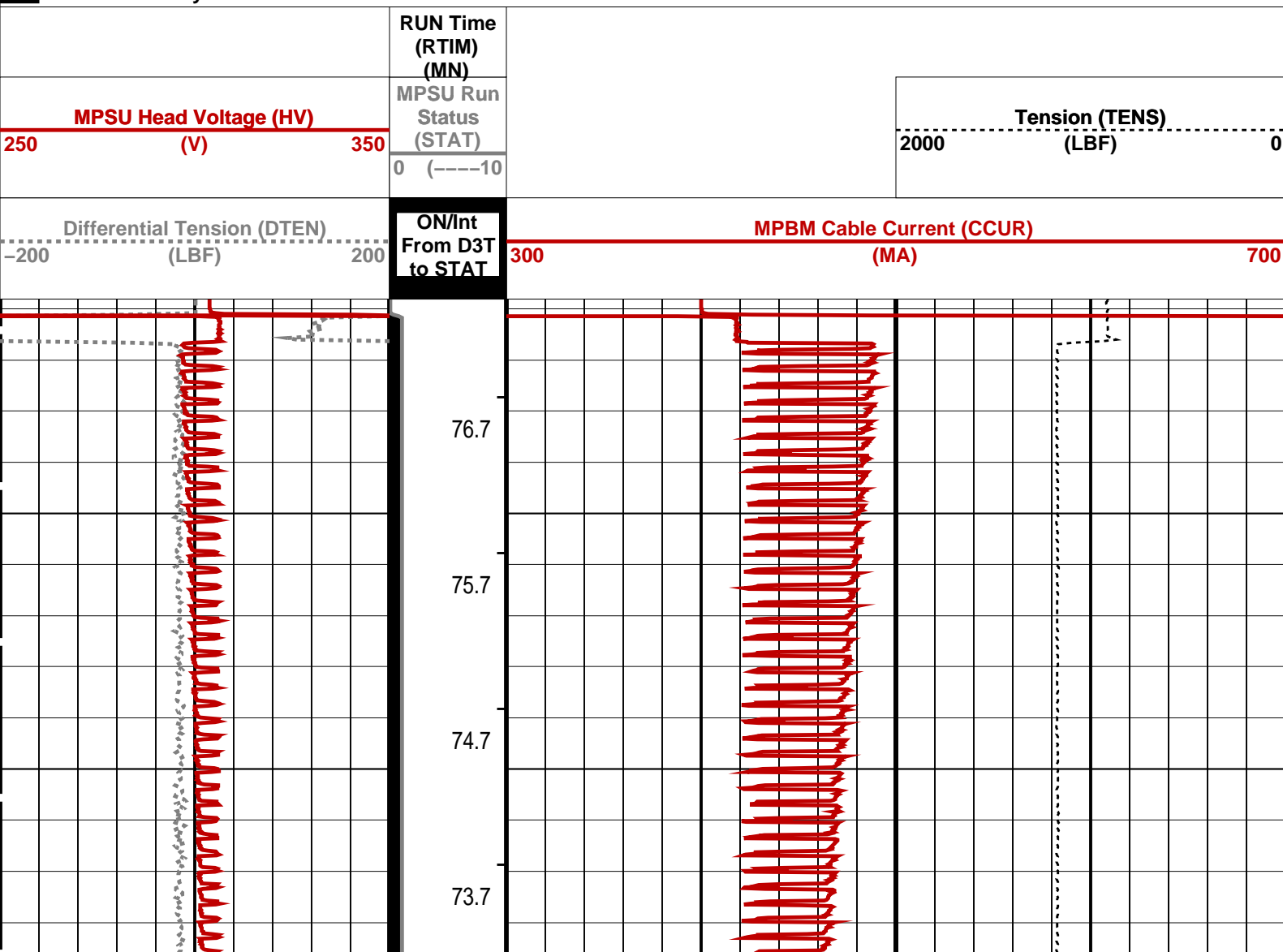
16C0-147

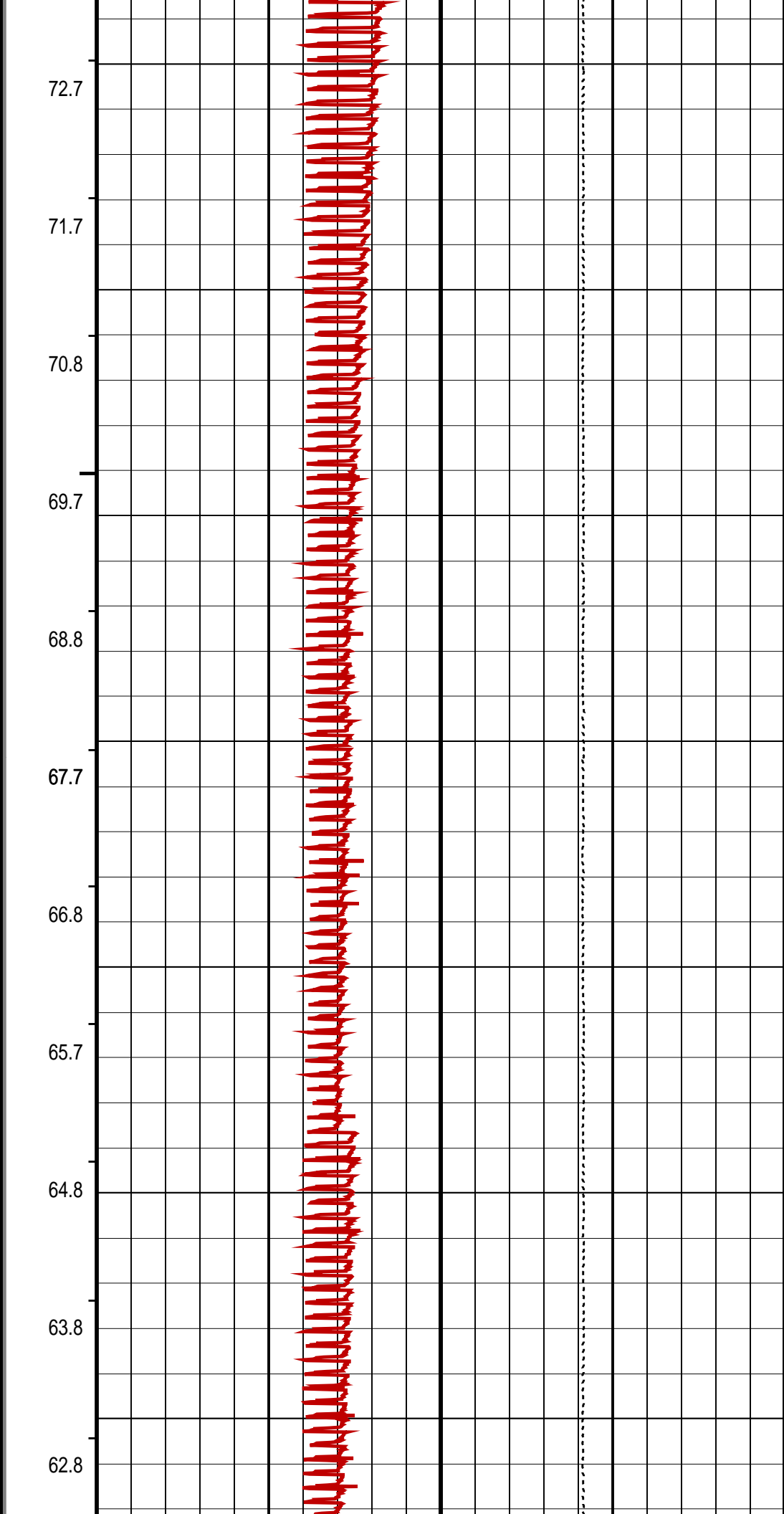
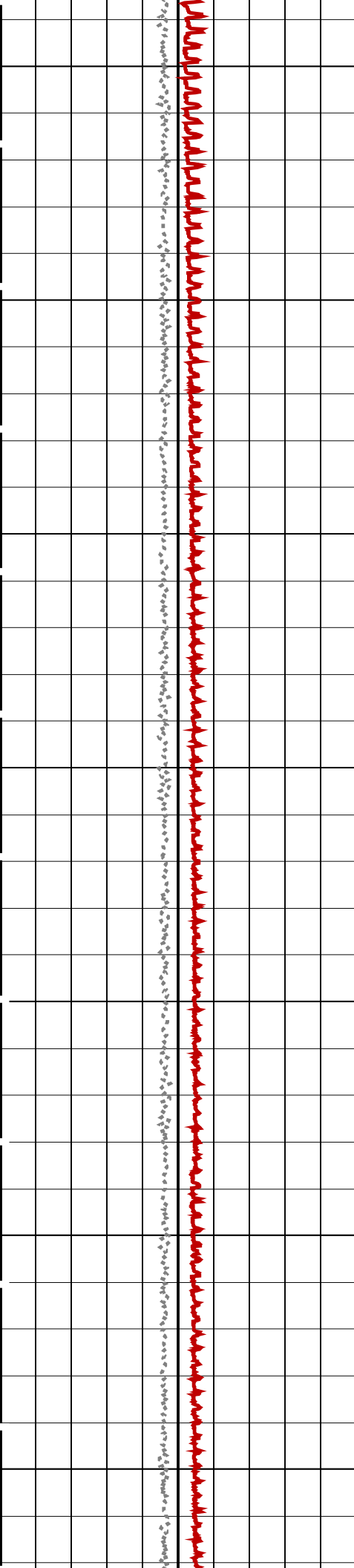
PIP SUMMARY

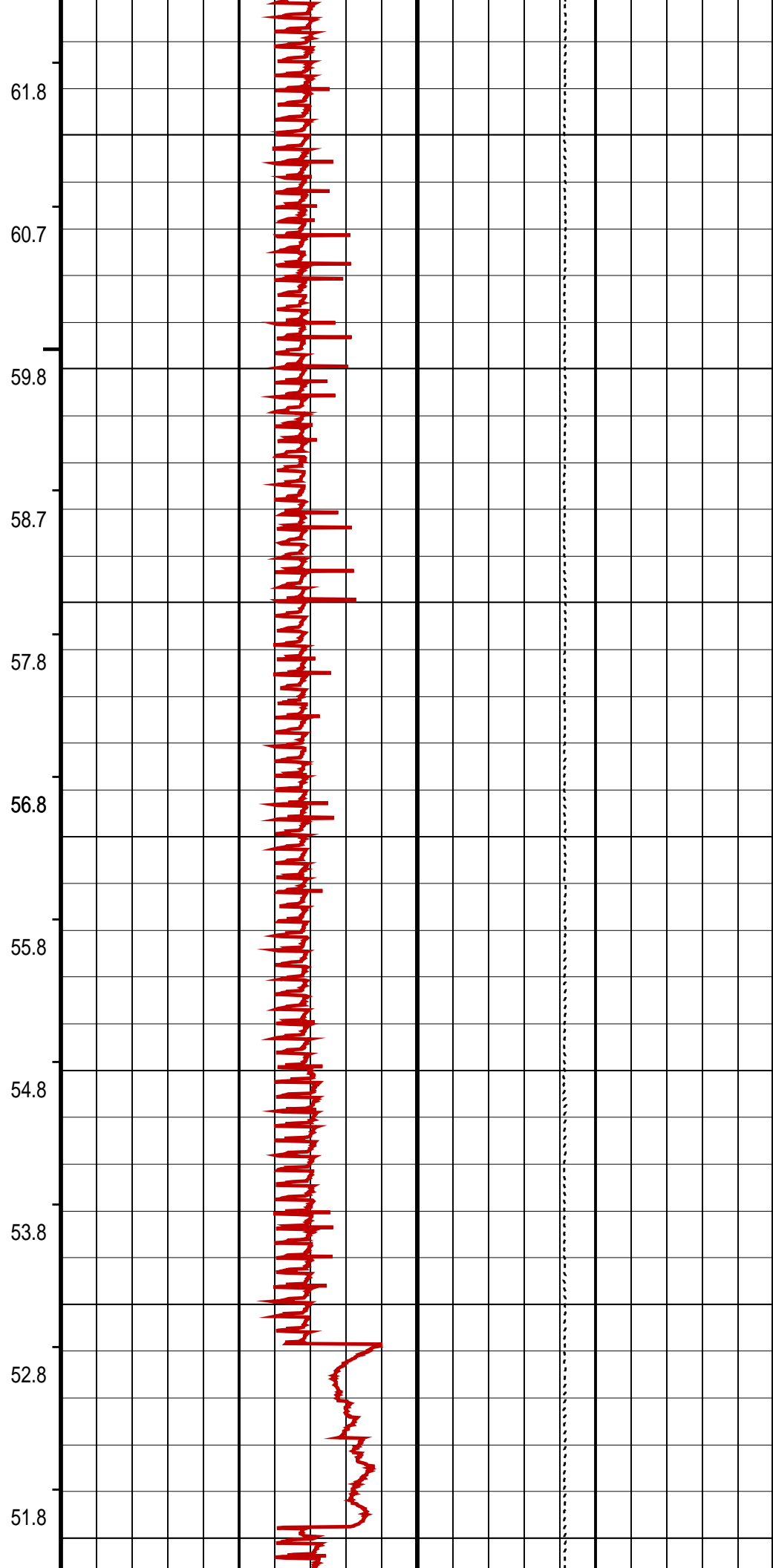
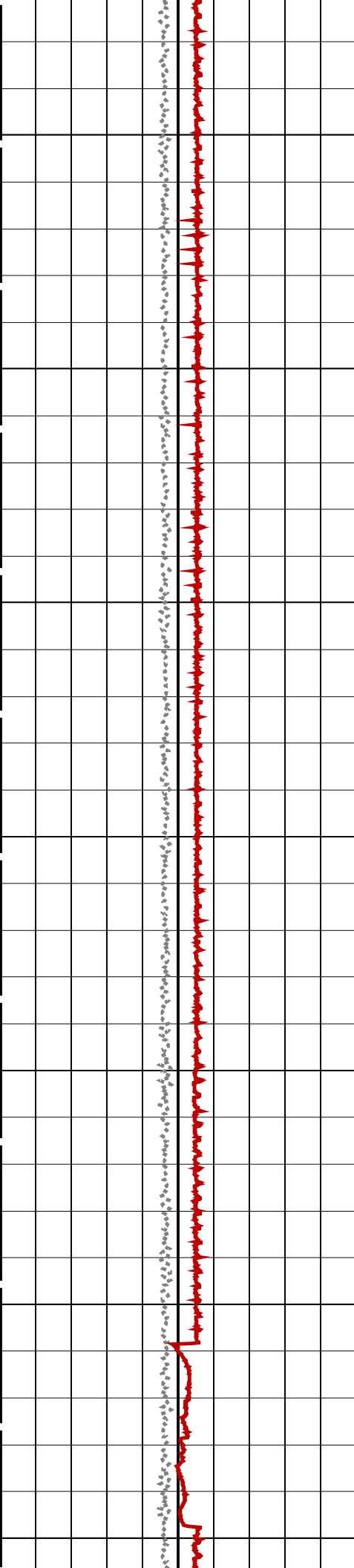
└ MPSU Run Time Every 1 MN

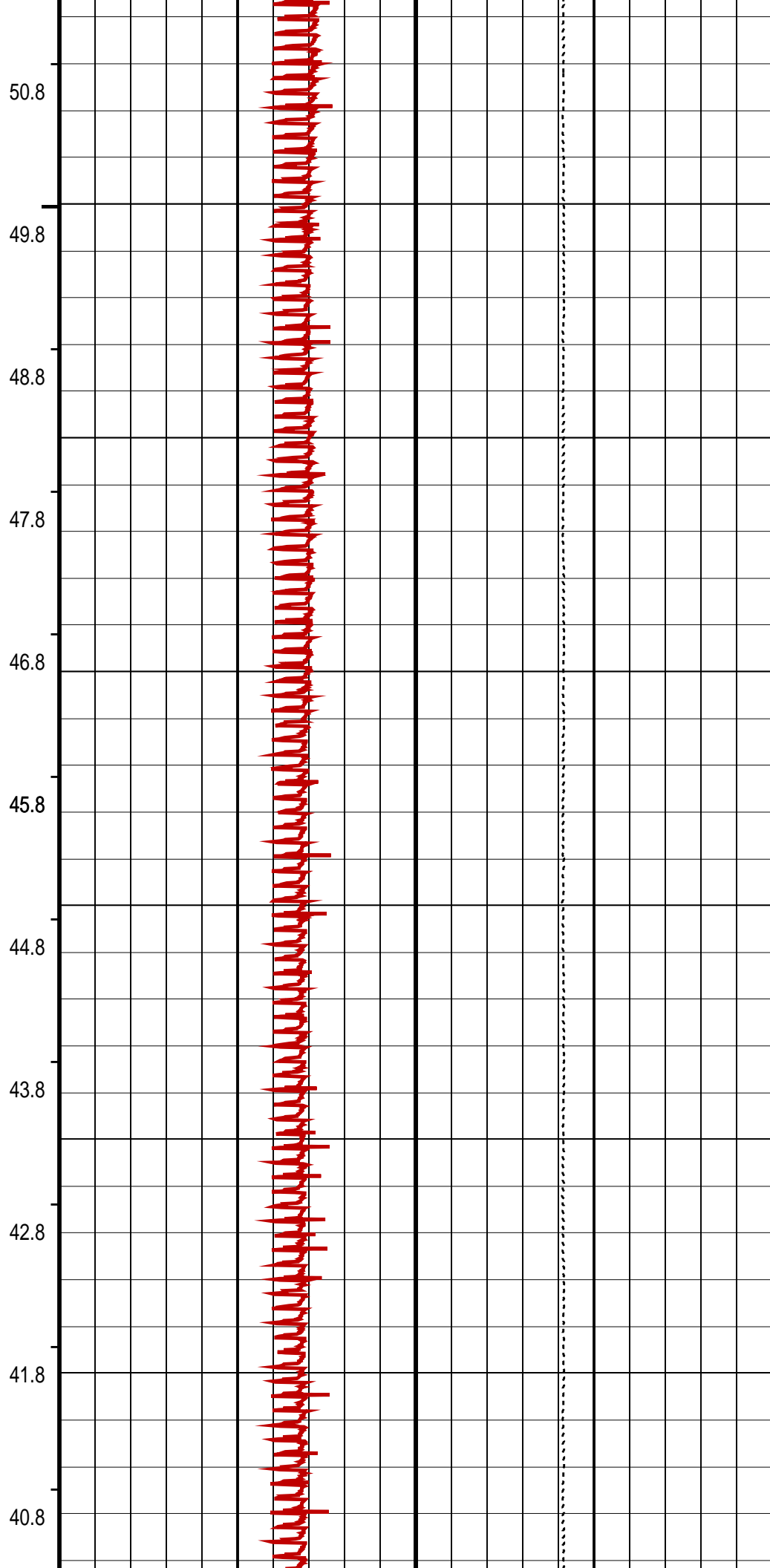
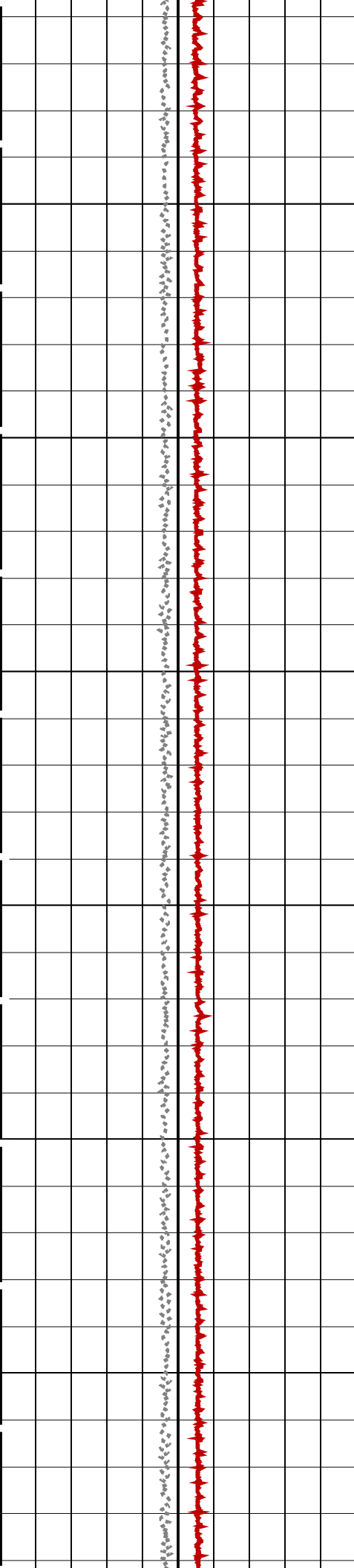
└ MPSU Run Time Every 10 MN

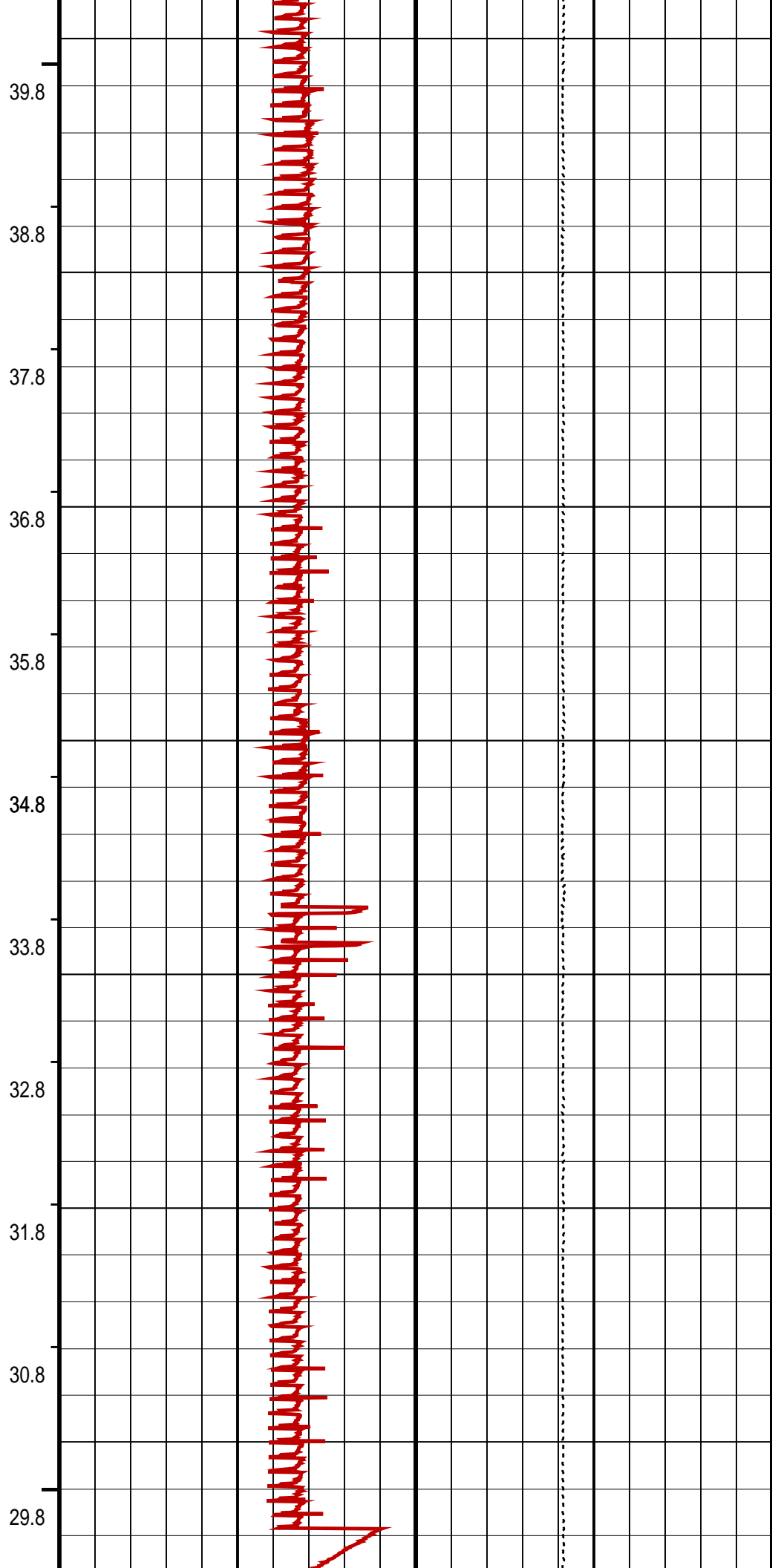
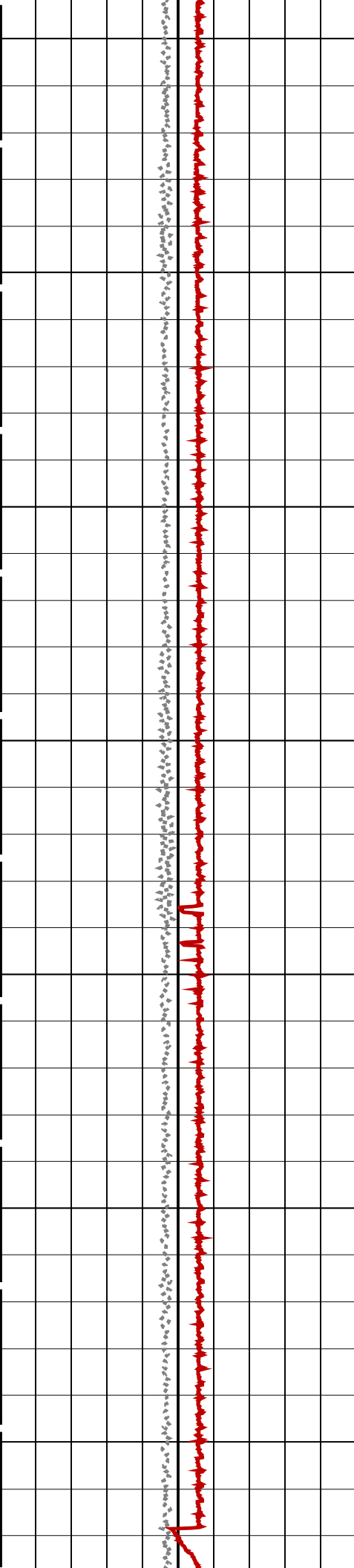
Time Mark Every 60 S

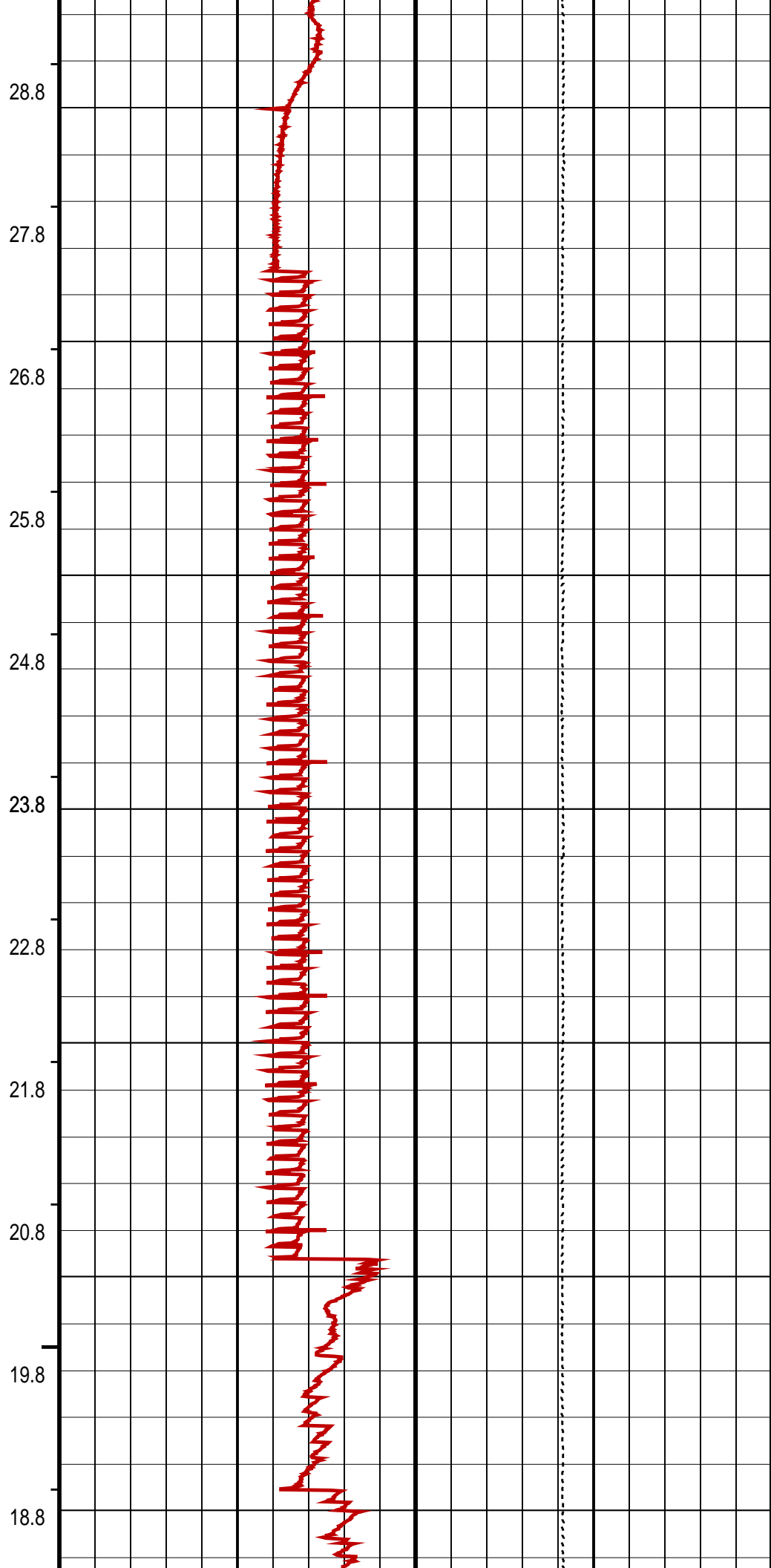
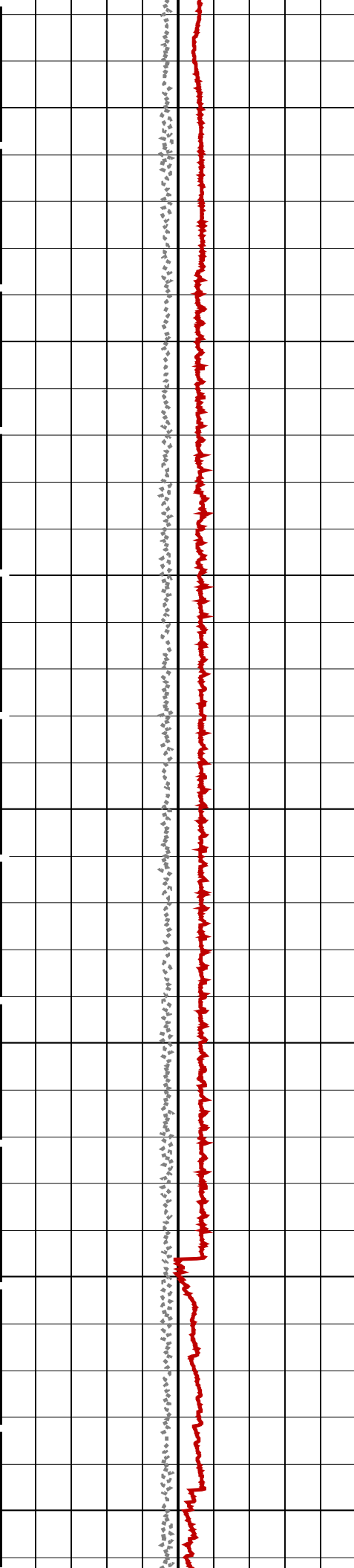


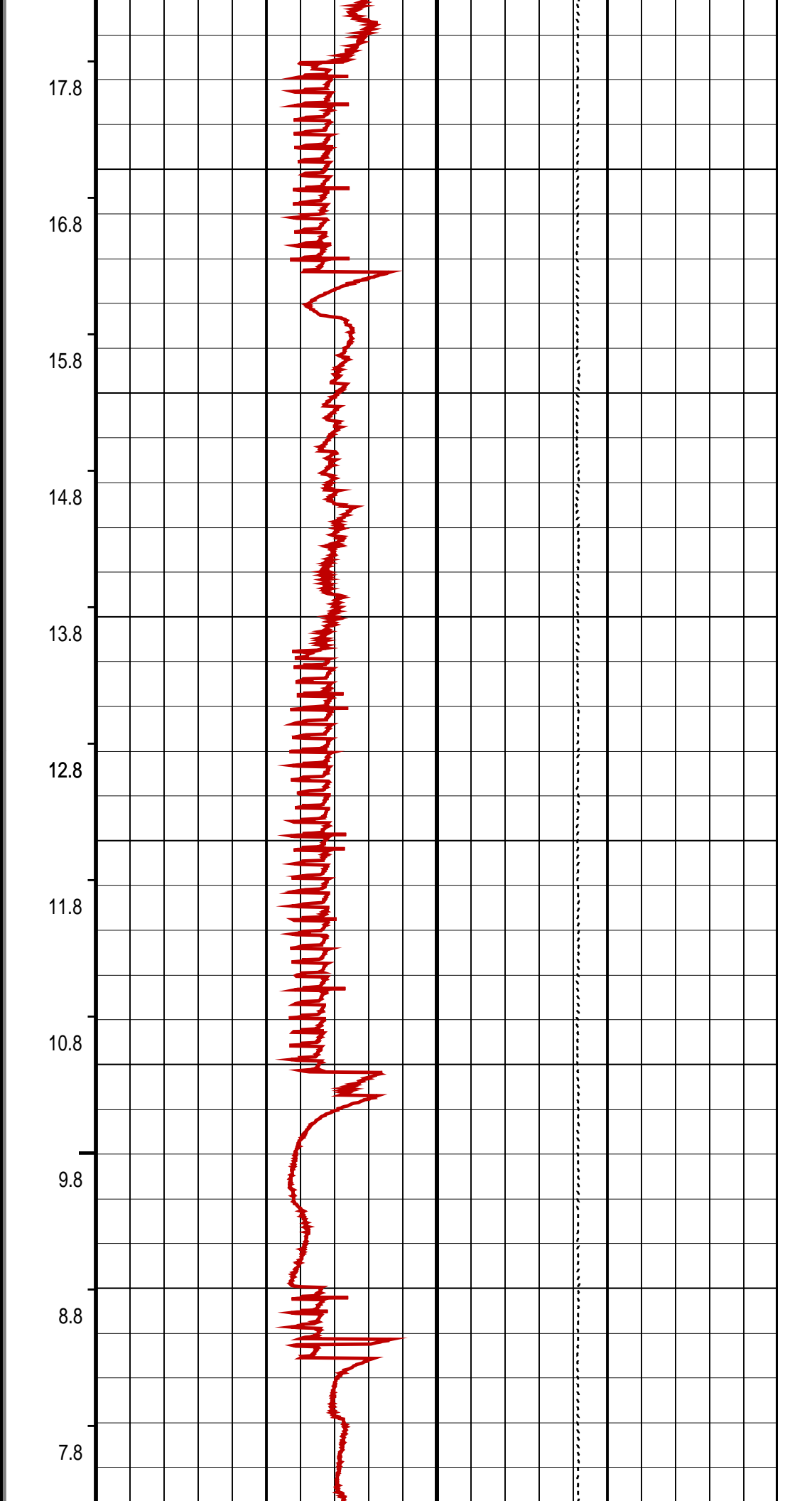
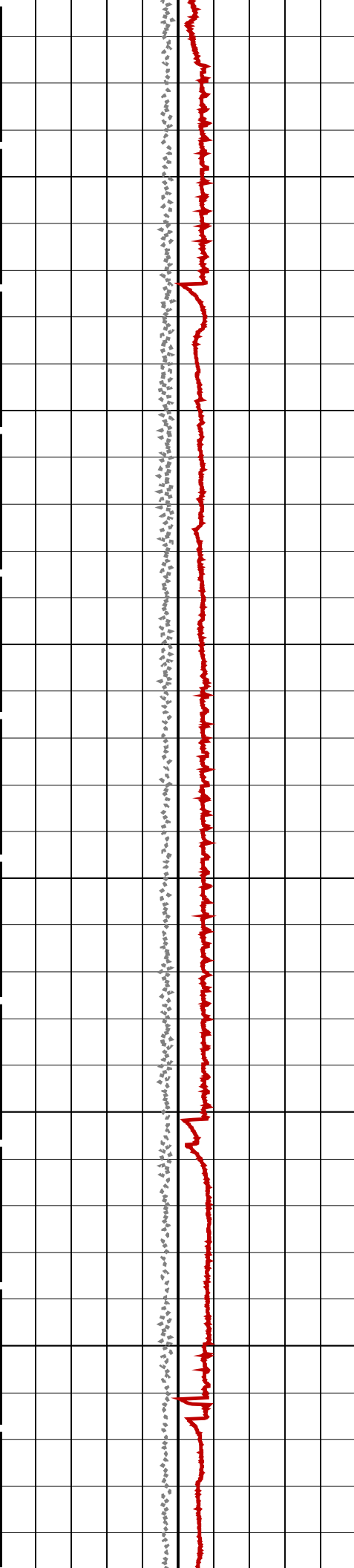


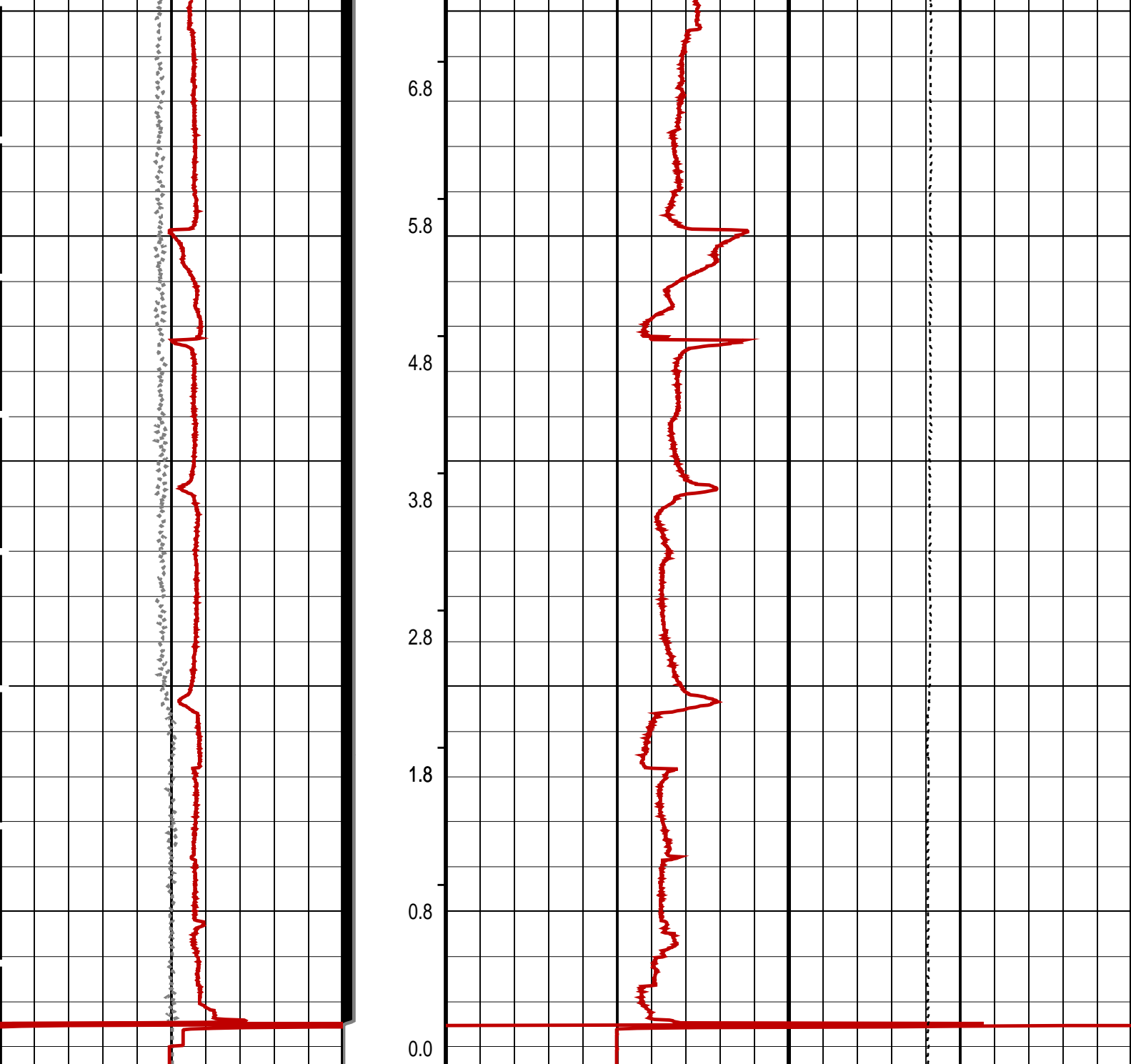












Differential Tension (DTEN) (LBF)	ON/Int From D3T to STAT	MPBM Cable Current (CCUR) (MA)
-200200	300700	
MPSU Head Voltage (HV) (V)	MPSU Run Status (STAT)	Tension (TENS) (LBF)
250350	0 (----10	20000
	RUN Time (RTIM) (MN)	

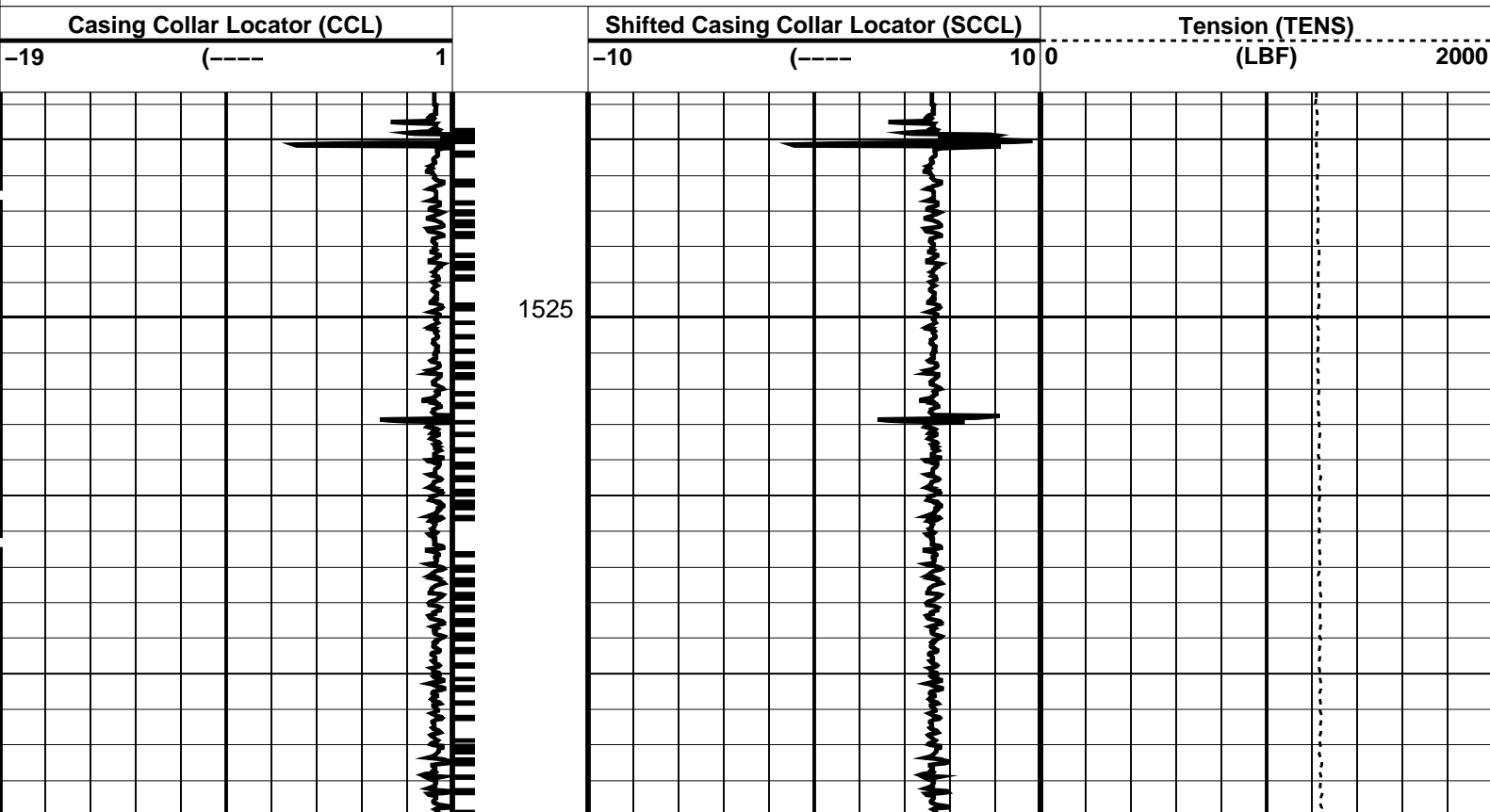
PIP SUMMARY

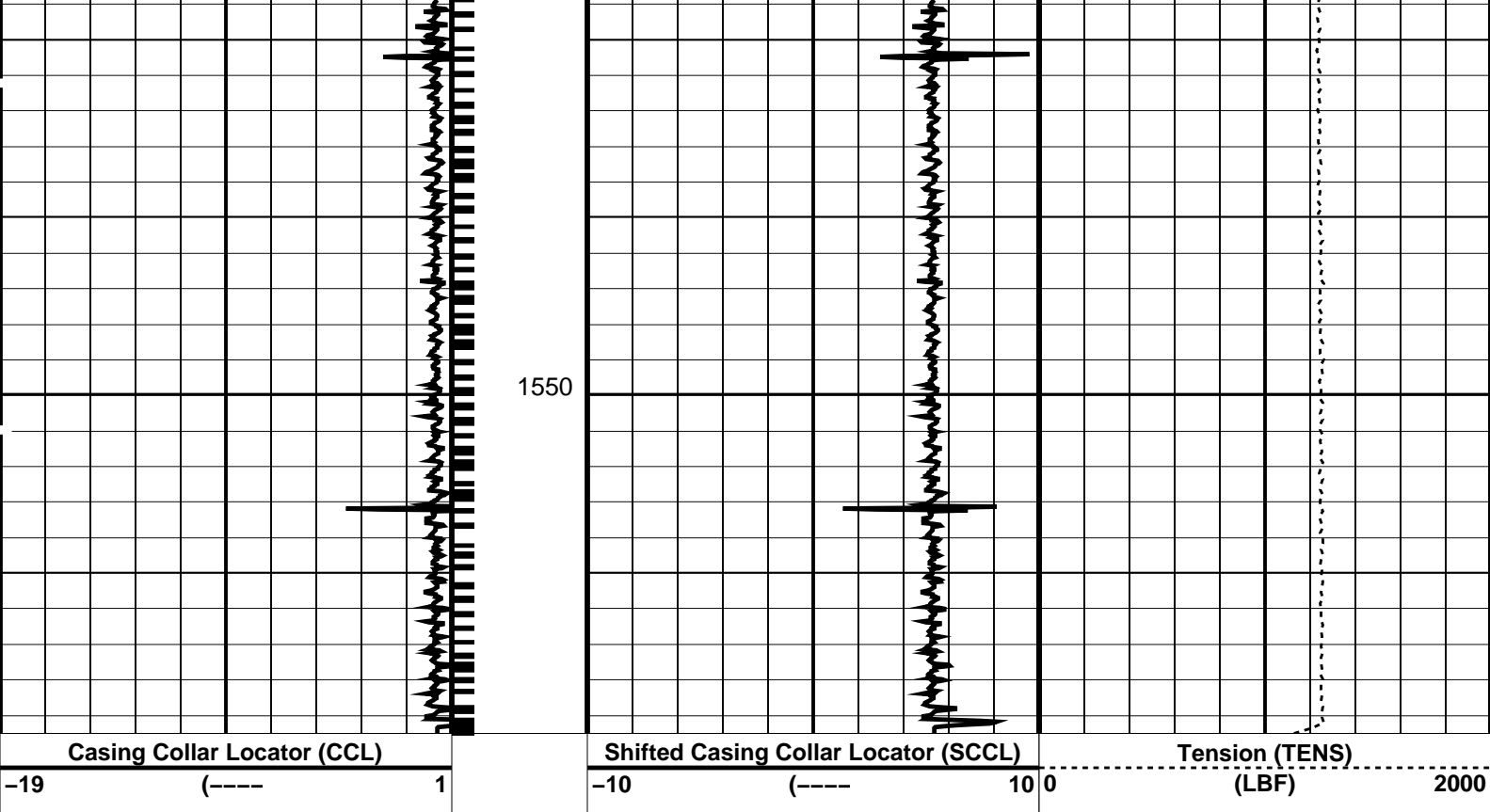
↵ MPSU Run Time Every 1 MN

↵ MPSU Run Time Every 10 MN

Time Mark Every 60 S

Parameters		
DLIS Name	Description	Value





PIP SUMMARY

← Casing Collars

Time Mark Every 60 S

Parameters

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

Format: PERFO Vertical Scale: 1:200 Graphics File Created: 04-Feb-2009 16:46

OP System Version: 16C0-147

MCM

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

Output DLIS Files

DEFAULT CCL_058LUP FN:57 PRODUCER 04-Feb-2009 16:46

Schlumberger

Dummy Plug Pass

MAXIS Field Log

Company: Esso Australia Pty Ltd.

Well: A14

Input DLIS Files

DEFAULT PERFO_040LUP FN:48 PRODUCER 04-Feb-2009 14:52 1500.7 M 1401.1 M

Output DLIS Files

DEFAULT PERFO_052PUP FN:51 PRODUCER 04-Feb-2009 15:04 1599.1 M 1488.0 M

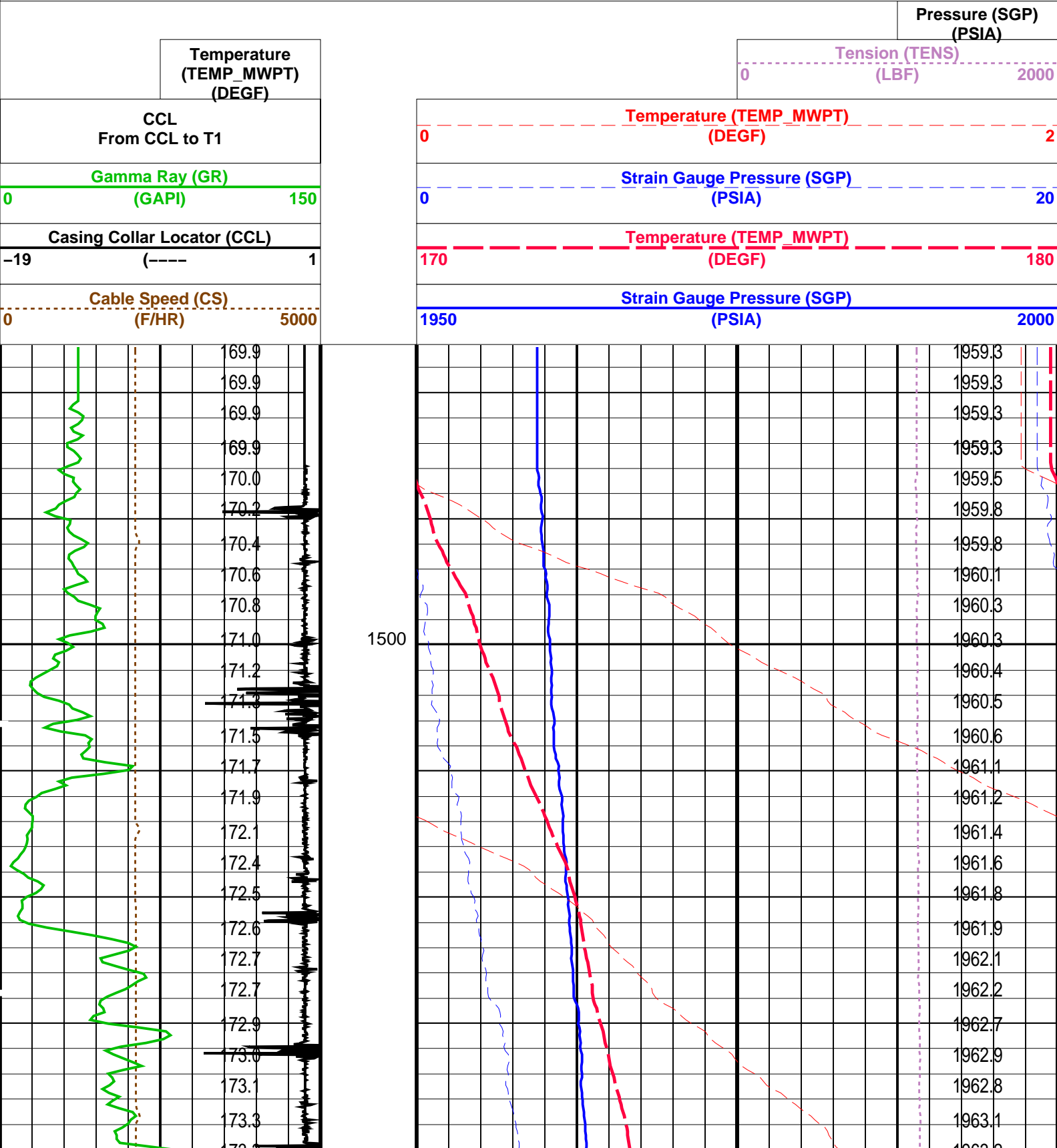
OP System Version: 16C0-147

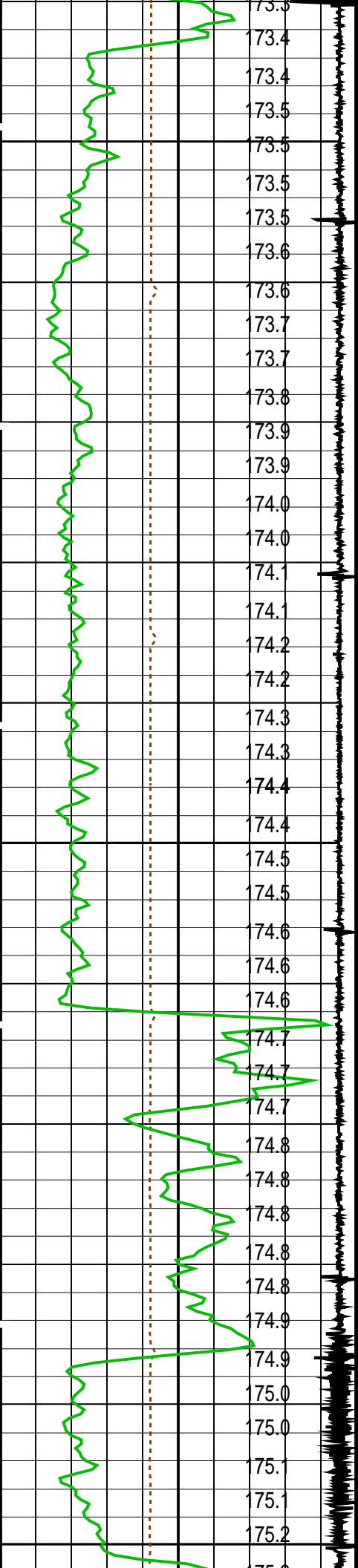
MCM

MWPT-CA 16C0-147 MWGT-AA 16C0-147

PIP SUMMARY

Time Mark Every 60 S

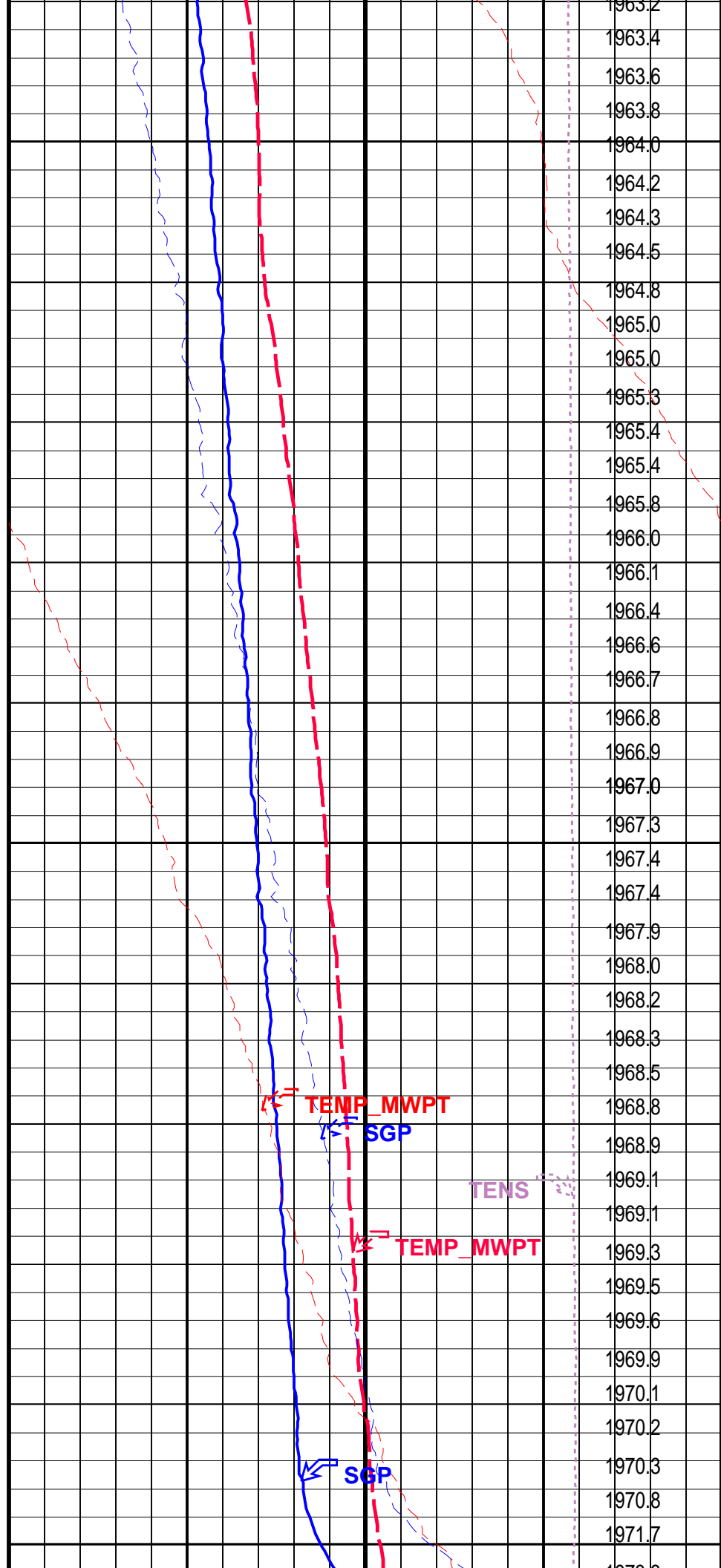


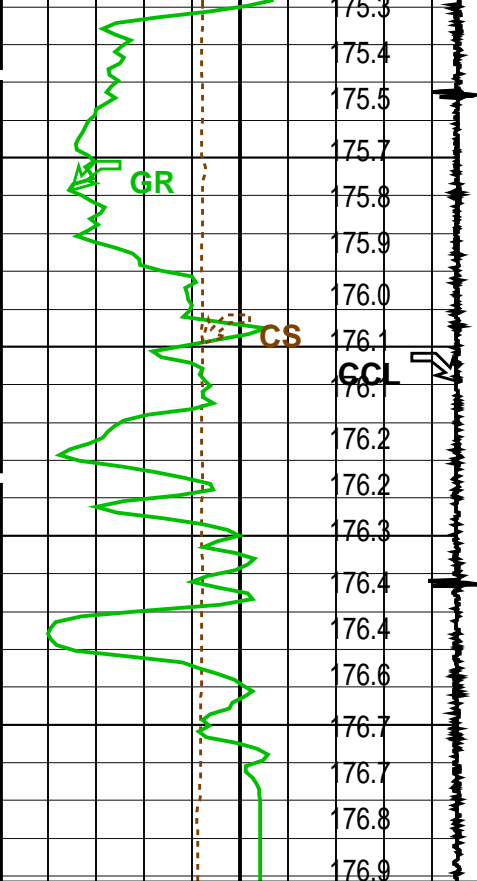


1525

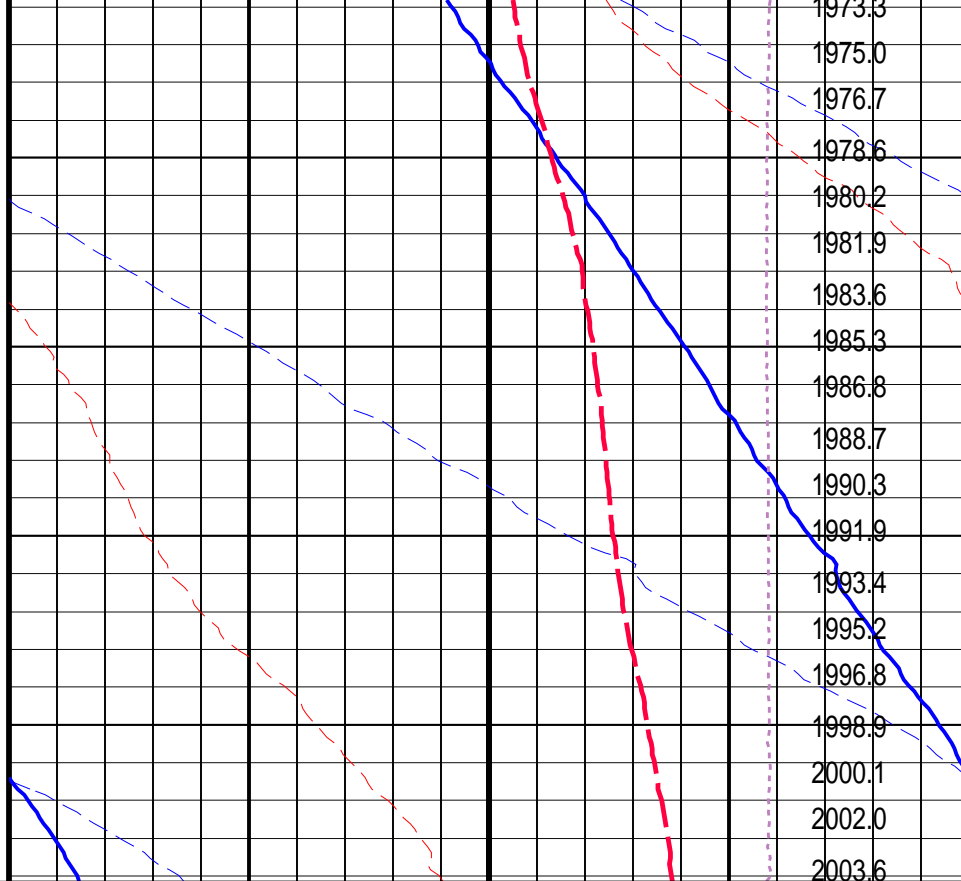
1550

1575





Cable Speed (CS) (F/HR)		0	5000
Casing Collar Locator (CCL) (-----)		-19	1
Gamma Ray (GR) (GAPI)		0	150
CCL From CCL to T1			
Temperature (TEMP_MWPT) (DEGF)			



Strain Gauge Pressure (SGP) (PSIA)		1950	2000
Temperature (TEMP_MWPT) (DEGF)		170	180
Strain Gauge Pressure (SGP) (PSIA)		0	20
Temperature (TEMP_MWPT) (DEGF)		0	2
Tension (TENS) (LBF)		0	2000
Pressure (SGP) (PSIA)			

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
System and Miscellaneous		
DO	Depth Offset for Playback	-0.6 M
PP	Playback Processing	NORMAL

Format: MWP Vertical Scale: 1:200 Graphics File Created: 04-Feb-2009 15:04

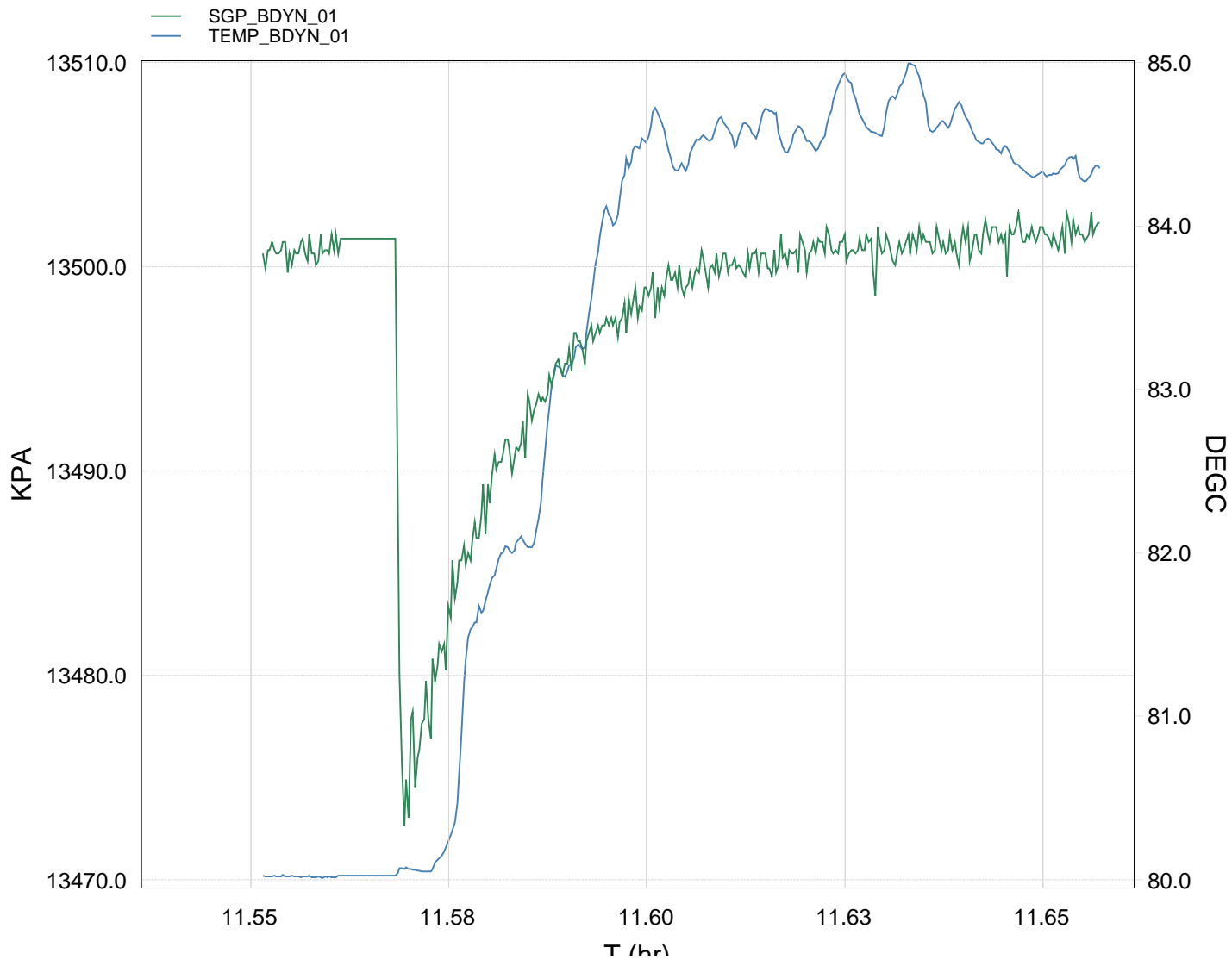
OP System Version: 16C0-147			
MCM			
MWPT-CA	16C0-147	MWGT-AA	16C0-147

Input DLIS Files			
DEFAULT	DEFEQ 042 LUP	FN:10	PRODUCER 04-Feb-2009 14:59 1500.7 M 1101.1 M



Gun 2 Fired @
1521m to 1526m MDKB

MAXIS Field Log



TIME	KPA	PSIA	DEGF
1260.0	13500.6367	1958.1058	176.0396
1290.0	13501.3809	1958.2137	176.0428
1320.0	13478.8177	1954.9413	176.0861
1350.0	13490.9511	1956.7011	179.3316

Gun Fired

1380.0	13494.8916	1957.2726	181.6286
1410.0	13497.3023	1957.6222	183.8084
1440.0	13498.8284	1957.8436	184.0385
1470.0	13500.5451	1958.0926	184.1961
1500.0	13500.7753	1958.1260	184.1659
1530.0	13501.3342	1958.2070	184.5939
1560.0	13501.1956	1958.1869	184.5082
1590.0	13501.1953	1958.1869	183.8344
1620.0	13501.0066	1958.1596	183.7154

Schlumberger

Gun 2 Shooting Pass

MAXIS Field Log

Company: Esso Australia Pty Ltd. Well: A14

Output DLIS Files

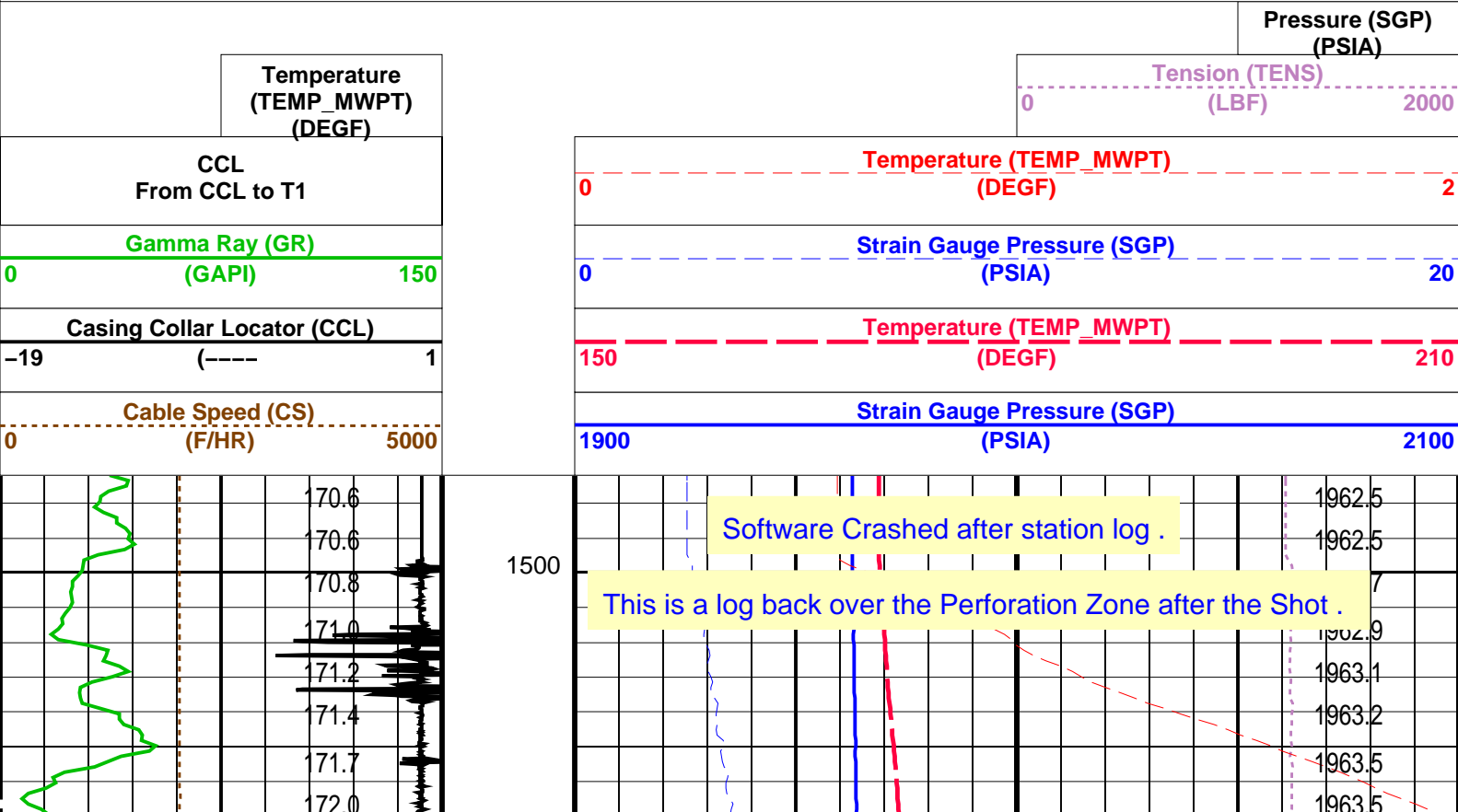
DEFAULT PERFO_044LUP FN:43 PRODUCER 04-Feb-2009 11:50 1531.2 M 1497.2 M

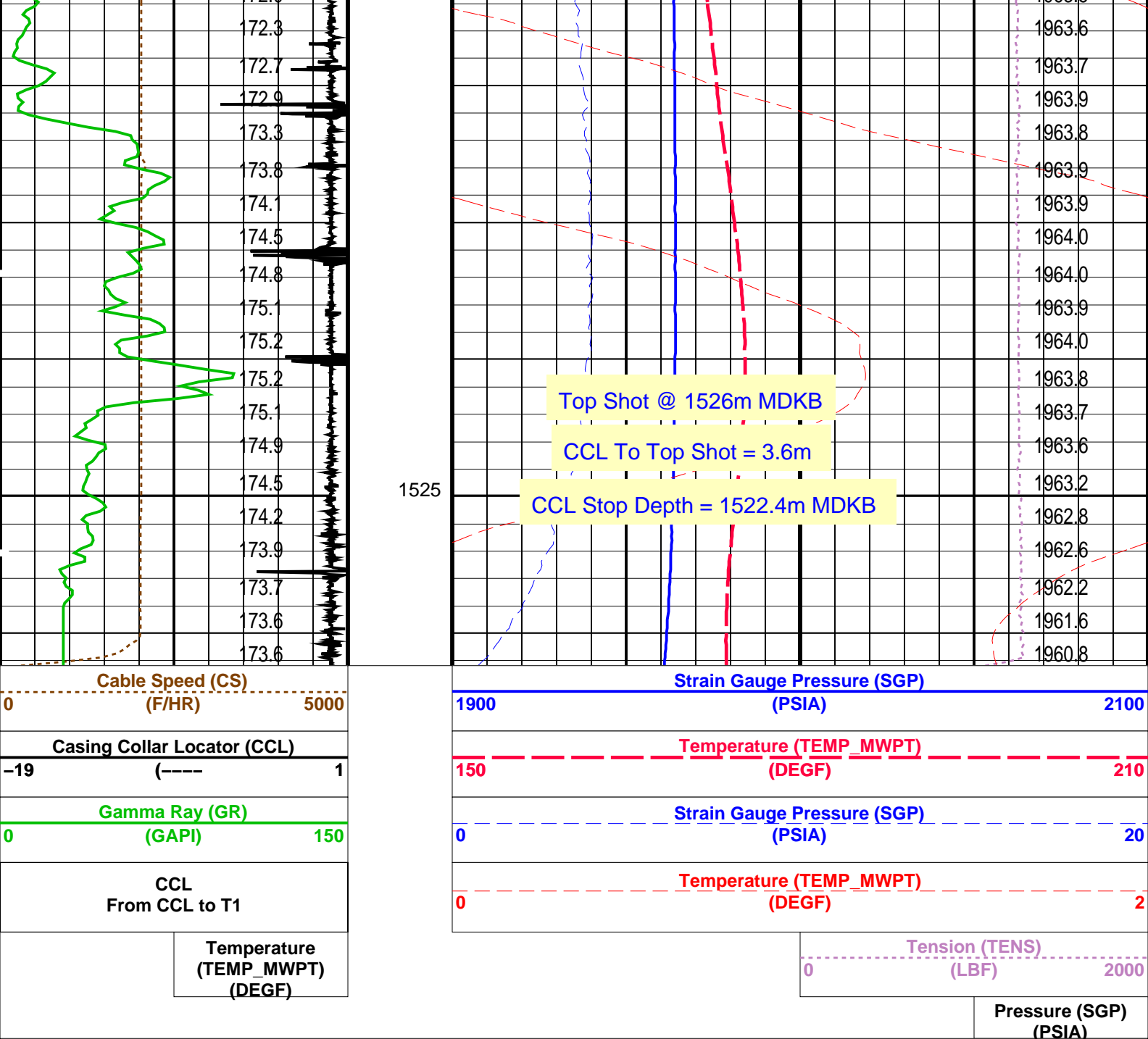
OP System Version: 16C0-147
MCM

MWP_GUN 16C0-147 MWPT-CA 16C0-147
MWGT-AA 16C0-147

PIP SUMMARY

Time Mark Every 60 S





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: 04-Feb-2009 11:50

OP System Version: 16C0-147 MCM

MWP_GUN	16C0-147	MWPT-CA	16C0-147
MWGT-AA	16C0-147		

Output DLIS Files

DEFAULT	PERFO_044LUP	FN:43	PRODUCER	04-Feb-2009 11:50
---------	--------------	-------	----------	-------------------



Gun 2 Correlation Pass

MAXIS Field Log

Company: Esso Australia Pty Ltd. Well: A14

Output DLIS Files

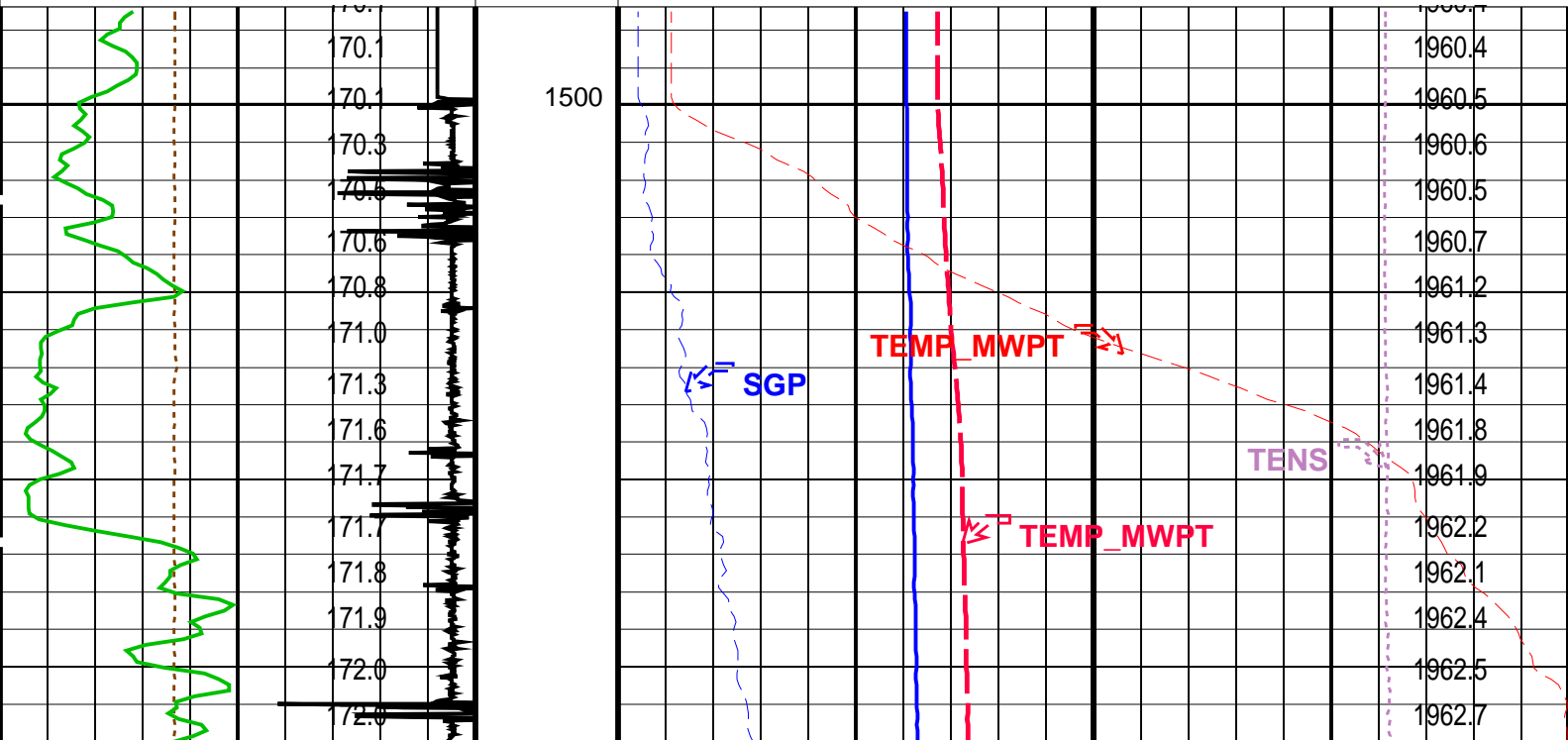
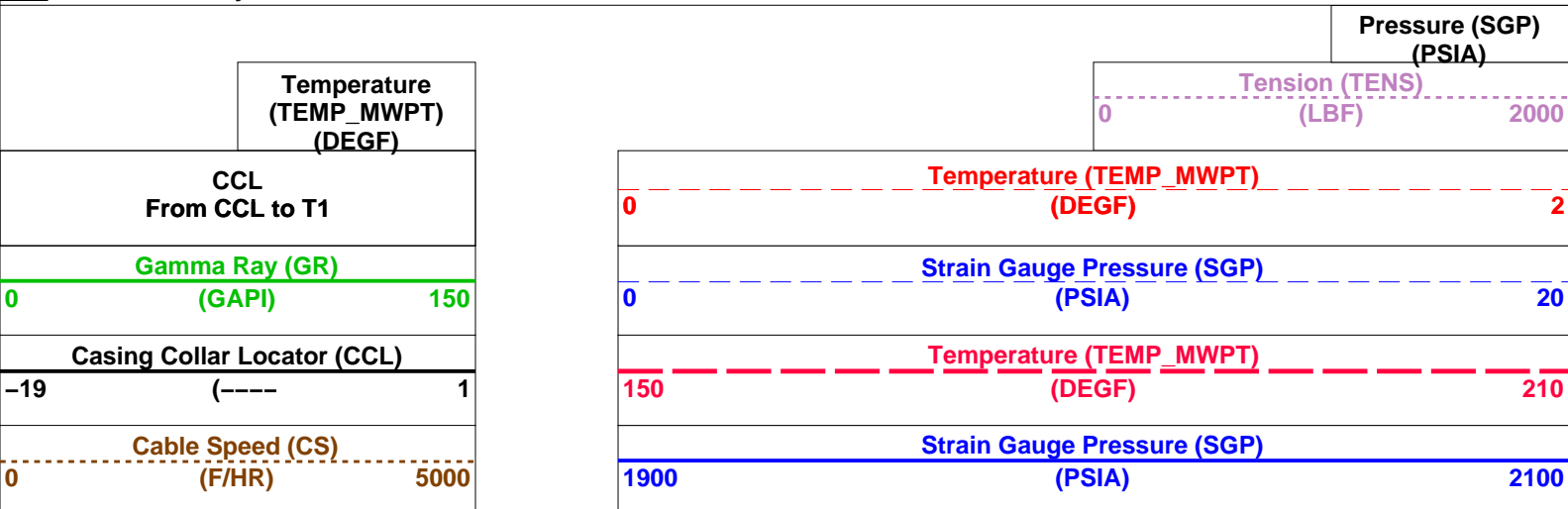
DEFAULT PERFO_041LUP FN:40 PRODUCER 04-Feb-2009 11:22 1535.6 M 1497.3 M

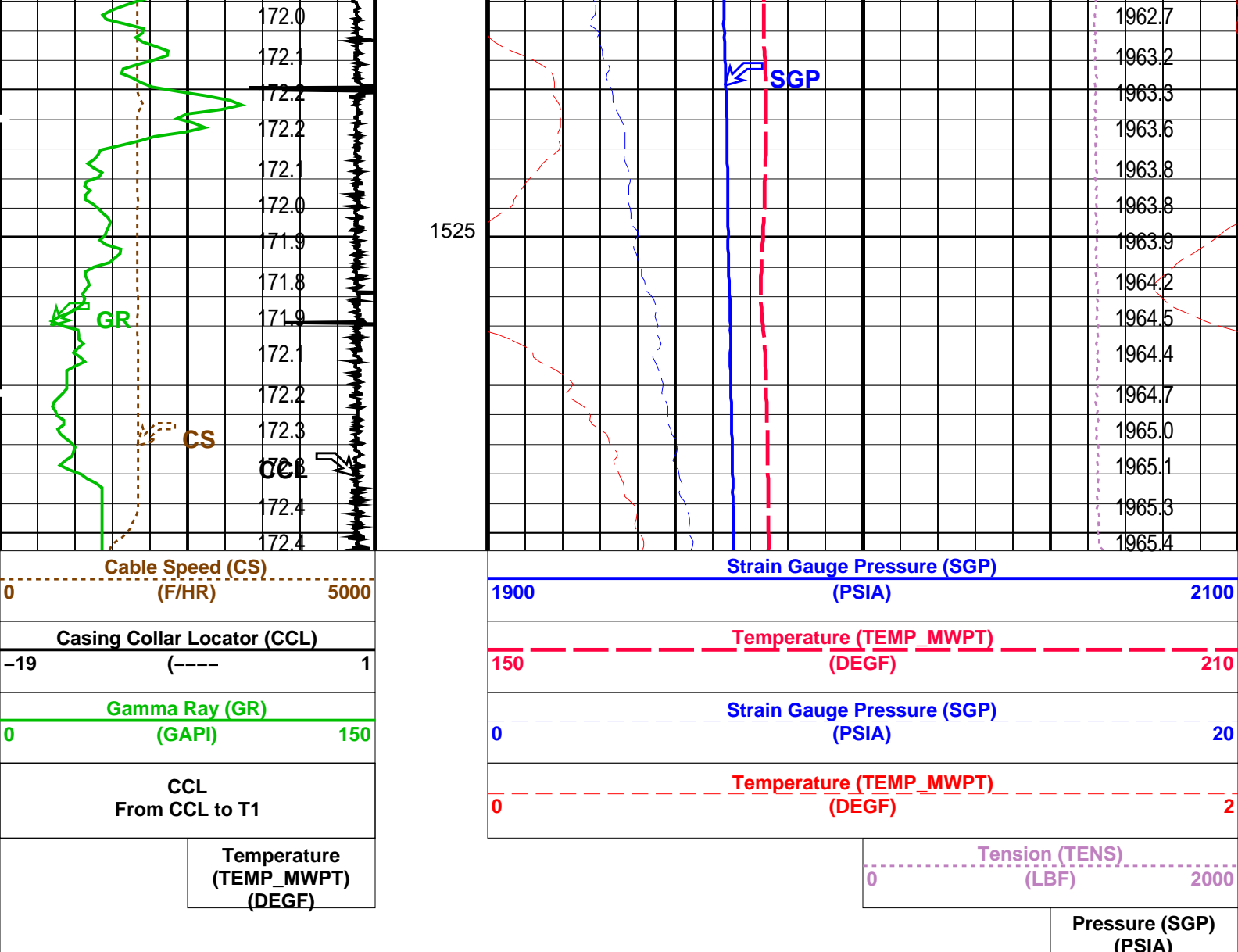
OP System Version: 16C0-147 MCM

MWP_GUN 16C0-147 MWPT-CA 16C0-147
MWGT-AA 16C0-147

PIP SUMMARY

Time Mark Every 60 S





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: 04-Feb-2009 11:22

OP System Version: 16C0-147

MCM

MWP_GUN	16C0-147	MWPT-CA	16C0-147
MWGT-AA	16C0-147		

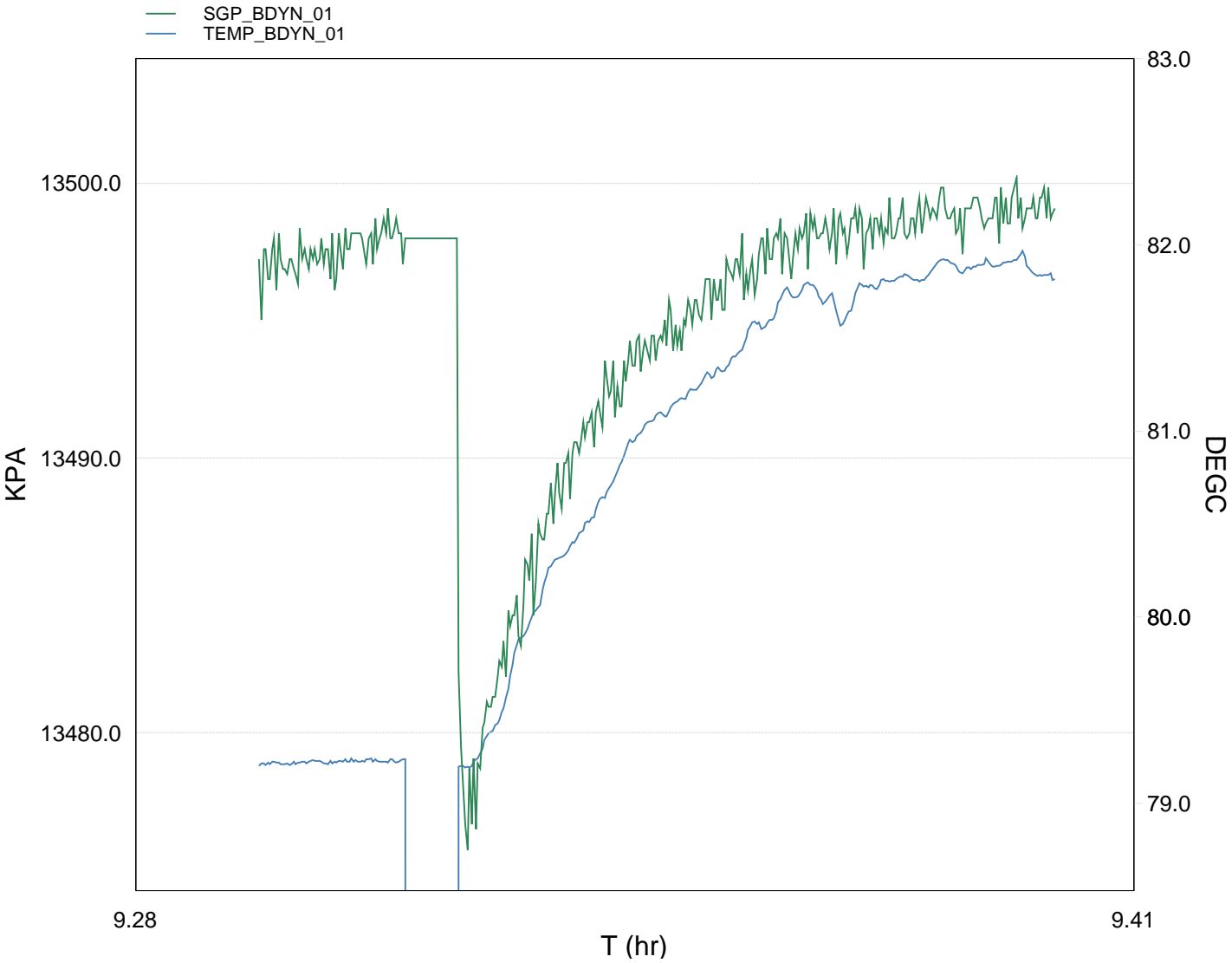
Output DLIS Files

DEFAULT	PERFO_041LUP	FN:40	PRODUCER	04-Feb-2009 11:22
---------	--------------	-------	----------	-------------------

Schlumberger

Gun 1 Fired @
1526m to 1531m MDKB

MAXIS Field Log



TIME	KPA	PSIA	DEGF
1380.0	13497.3003	1957.6220	174.5775
1410.0	13498.1748	1957.7488	174.6054
1440.0	13497.9717	1957.7194	82.2741
1470.0	13480.2912	1955.1549	174.7359
1500.0	13487.9288	1956.2627	176.4088
1530.0	13492.4626	1956.9203	177.2749
1560.0	13494.8378	1957.2649	178.0805
1590.0	13496.7447	1957.5414	178.5738
1620.0	13498.1748	1957.7488	179.2162
1650.0	13498.4486	1957.7885	179.1887
1680.0	13499.1548	1957.8910	179.3654
1710.0	13499.4386	1957.9320	179.3999

Company: Esso Australia Pty Ltd.

Well: A14

Output DLIS Files

DEFAULT

PERFO_034LUP

FN:33

PRODUCER

04-Feb-2009 09:11

OP System Version: 16C0-147

MCM

MWP_GUN

16C0-147

MWPT-CA

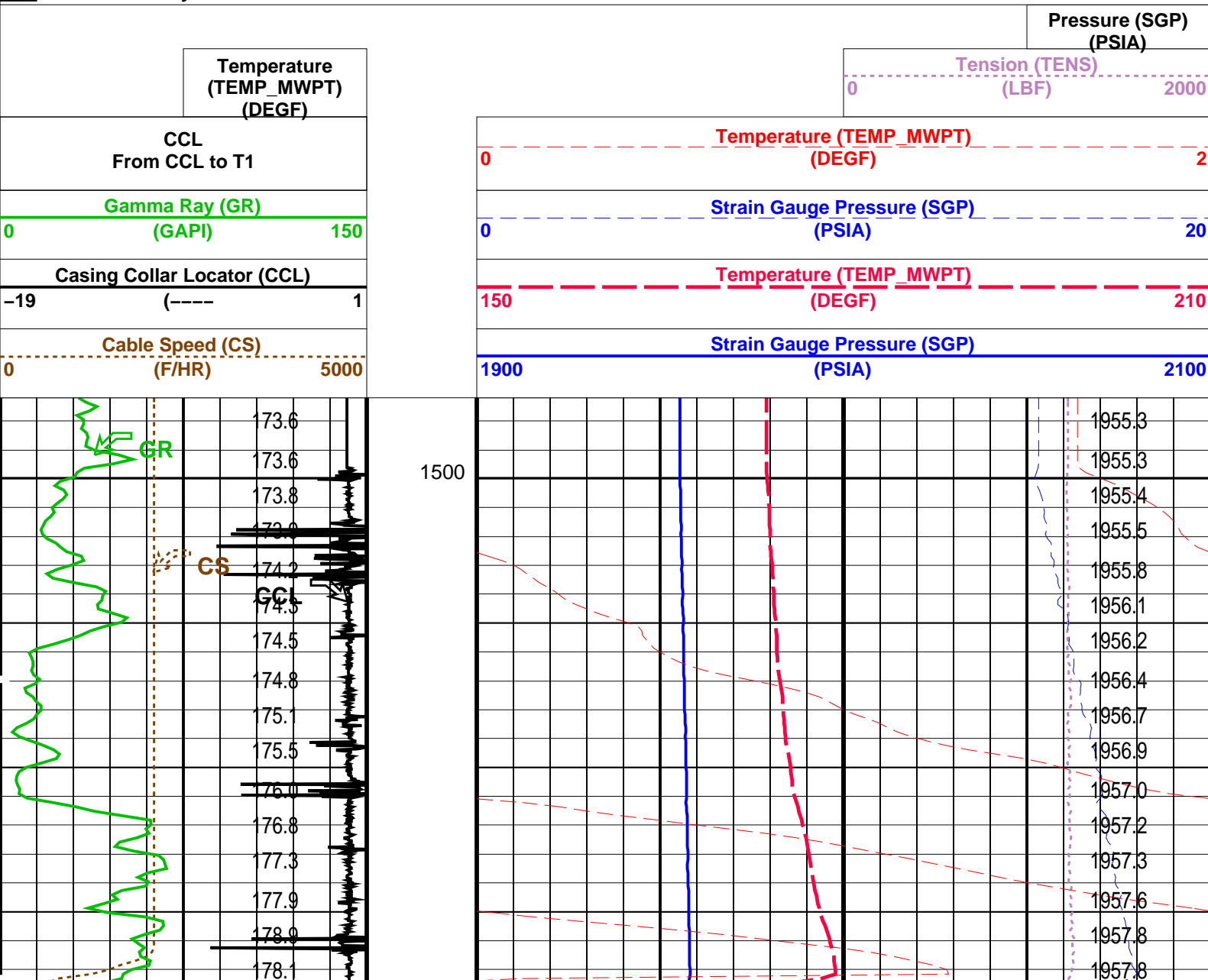
16C0-147

MWGT-AA

16C0-147

PIP SUMMARY

Time Mark Every 60 S



Output DLIS Files

DEFAULT

PERFO_033LUP

FN:32

PRODUCER

04-Feb-2009 09:06

OP System Version: 16C0-147

MCM

MWP_GUN

16C0-147

MWGT-AA

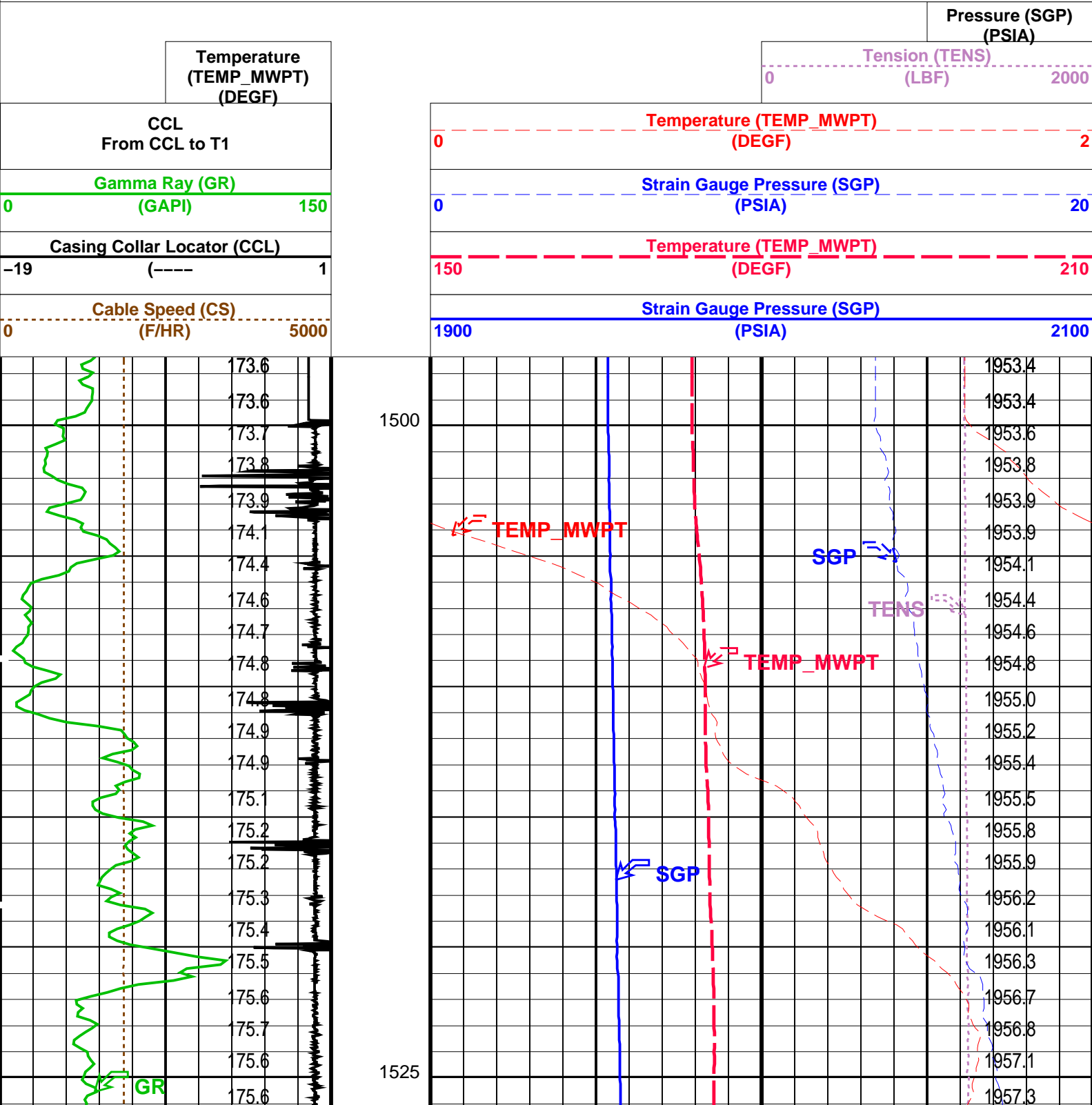
16C0-147

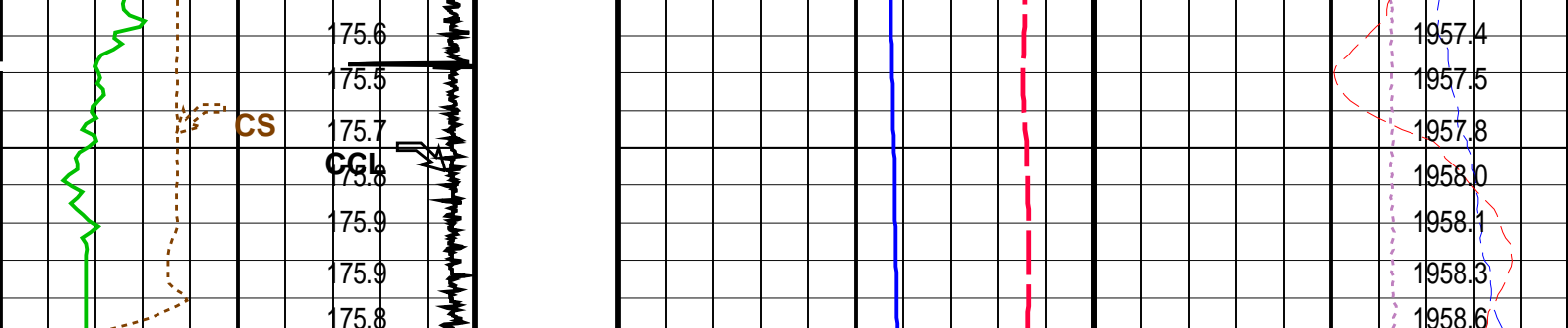
MWPT-CA

16C0-147

PIP SUMMARY

Time Mark Every 60 S





Cable Speed (CS) (F/HR)		Strain Gauge Pressure (SGP) (PSIA)	
0	5000	1900	2100
Casing Collar Locator (CCL) (GAPI)		Temperature (TEMP_MWPT) (DEGF)	
-19	1	150	210
Gamma Ray (GR) (GAPI)		Strain Gauge Pressure (SGP) (PSIA)	
0	150	0	20
CCL From CCL to T1		Temperature (TEMP_MWPT) (DEGF)	
Temperature (TEMP_MWPT) (DEGF)		Tension (TENS) (LBF)	
		0	2000
		Pressure (SGP) (PSIA)	

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: 04-Feb-2009 09:06

OP System Version: 16C0-147			
MCM			
MWP_GUN	16C0-147	MWPT-CA	16C0-147
MWGT-AA	16C0-147		

Output DLIS Files			
DEFAULT	PERFO_033LUP	FN:32	PRODUCER 04-Feb-2009 09:06

Company:	Esso Australia Pty Ltd.	Schlumberger
Well:	A14	
Field:	Marlin	
Rig:	Crane / Prod 4	
Country:	Australia	
2" Phased PowerJet Omega MWPT Perforation Record 9 5/8" Posiset Plug Setting Record		