

Company: Esso Australia Pty Ltd.

Well: A-16a

Field: Hailbut

Rig: Crane

Country: Australia

2-1/8" Phased Powerjet MWPT  
Perforation Record  
7" Posiset Plug Setting Record

Crane  
Halibut  
Gippsland  
A-16a  
Esso Australia Pty Ltd.

LOCATION			
Gippsland		Elev.:	K.B. 29.45 m
Basin			G.L. -73 m
Bass Strait			D.F. 29.45 m
Permanent Datum:	M.S.L.	Elev.:	0 m
Log Measured From:	K.B.	29.5 m	above Perm. Datum
Drilling Measured From:	K.B.		
State: Victoria	Max. Well Deviation 48 deg	Longitude 148° 19' 07.62"E	Latitude 38° 24' 20.36"S

Logging Date	25-Jan-2008
Run Number	1 through 5
Depth Driller	2563 m
Schlumberger Depth	2500 m
Bottom Log Interval	2500 m
Top Log Interval	2380 m
Casing Fluid Type	Production Fluids
Salinity	
Density	
Fluid Level	455 m
BIT/CASING/TUBING STRING	
Bit Size	8.500 in
From	
To	
Casing/Tubing Size	7.000 in
Weight	26 lbm/ft
Grade	L-80
From	11.98 m
To	2563 m
Maximum Recorded Temperatures	229 degF
Logger On Bottom	25-Jan-2008
Unit Number	889
Recorded By	S Gilbert / R Sani / C Rowand
Witnessed By	B White

			Run 1
Oil Density			
Water Salinity			
Gas Gravity			
Bo			
Bw			
1/Bg			
Bubble Point Pressure			
Bubble Point Temperature			
Solution GOR			
Maximum Deviation			48 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		Time	
Unit Number	Location		
Recorded By			
Witnessed By			

## DEPTH SUMMARY LISTING

Depth System Equipment	
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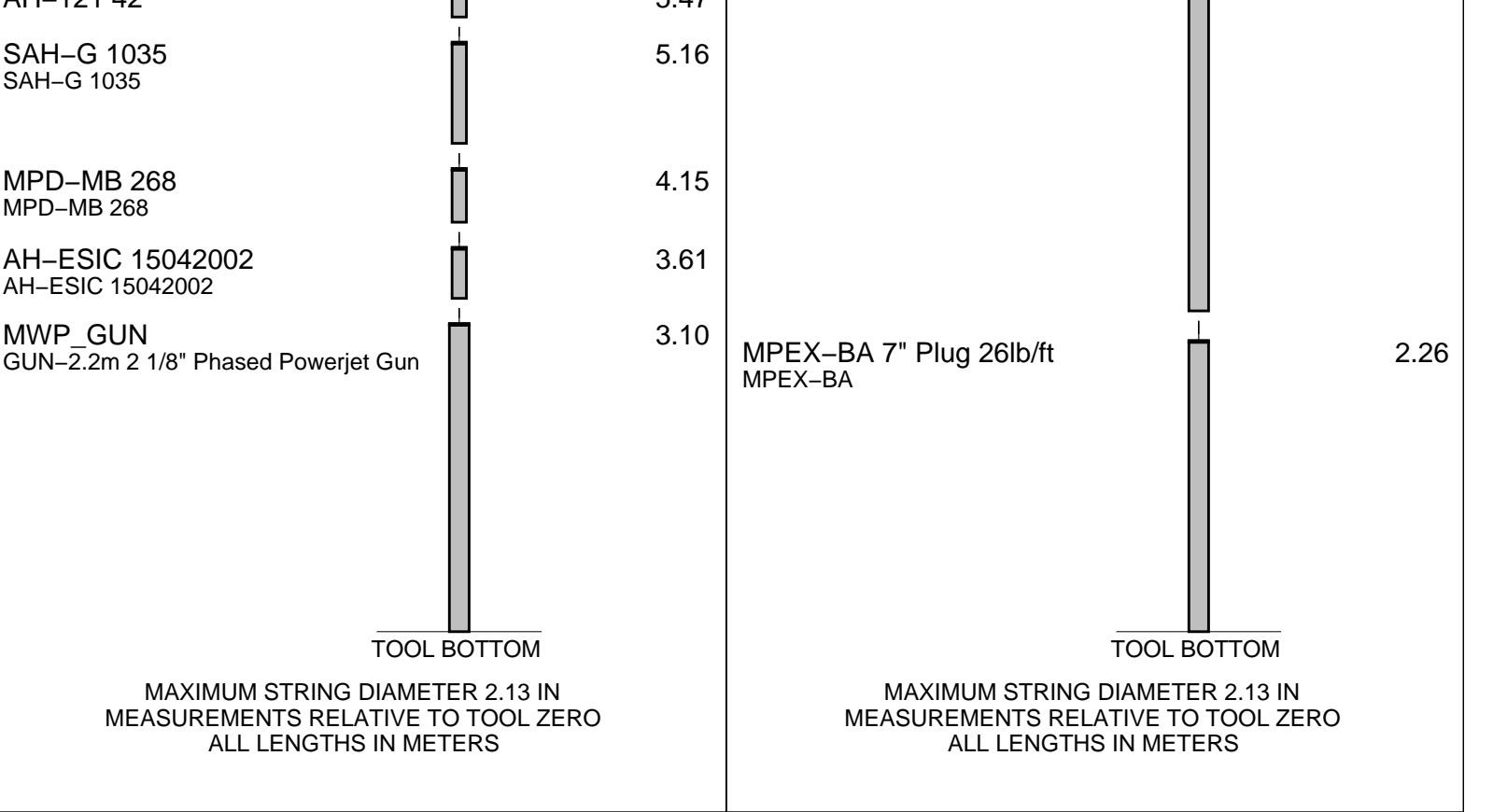
Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-EB	Type:	PSDS/OSDS	Type:	2-32ZT
Serial Number:	6373	Serial Number:	325357	Serial Number:	24425
Calibration Date:	04-Jan-2007	Calibration Date:	15-Jan-2008	Length:	5299.86 M
Calibrator Serial Number:	9	Calibrator Serial Number:	1174	Conveyance Method:	Wireline
Calibration Cable Type:	2-32ZT	Calibration Gain:	0.91	Rig Type:	Rigless
Wheel Correction 1:	-2	Calibration Offset:	220.00		
Wheel Correction 2:	-4				








Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	ExxonMobil Petrophysical Analysis

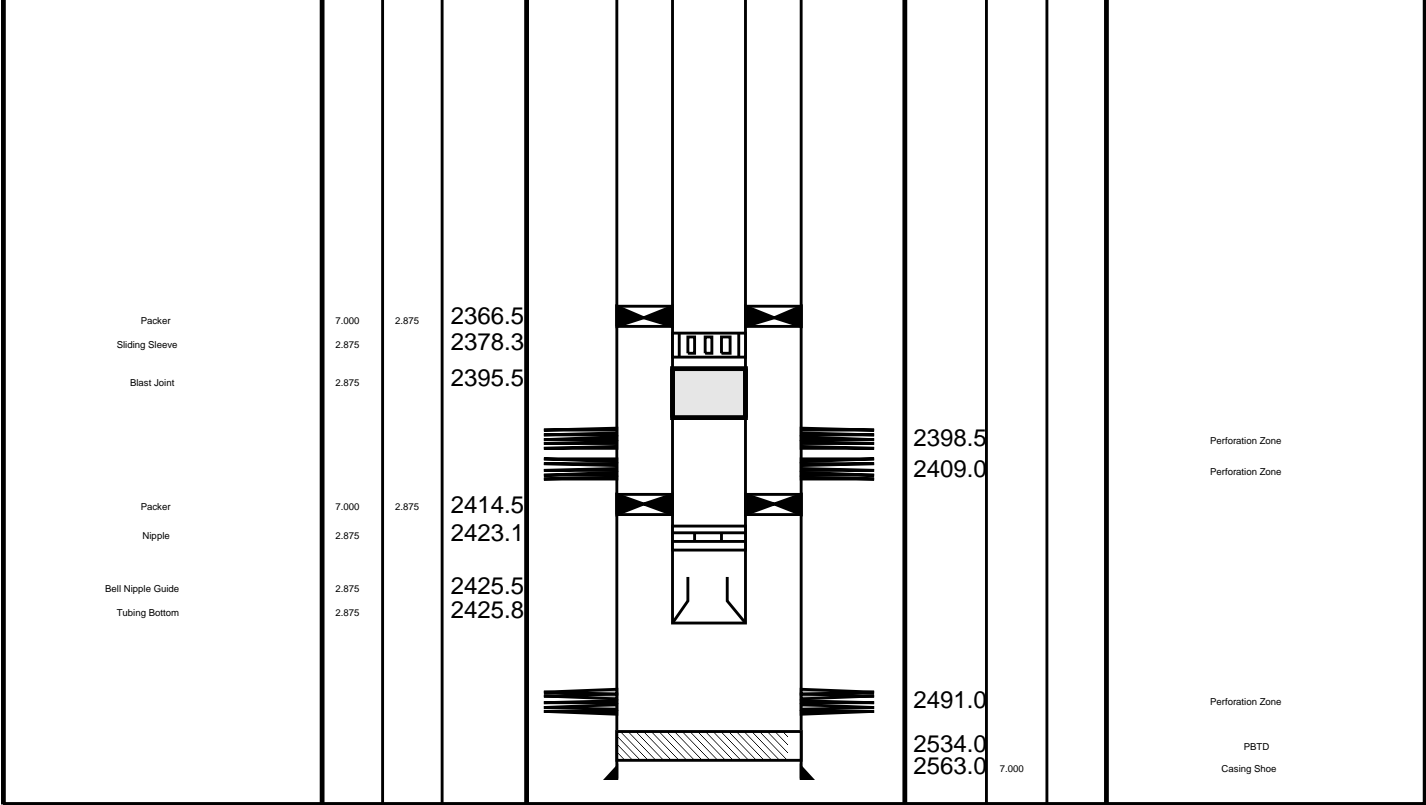
1. IDW used as primary depth control.
2. Z-chart used as back up.
- 3.
- 4.
- 5.
- 6.

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.





Production String	(in)		(m)	Well Schematic	(m)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
Tubing Tubing Hanger	2.875 7.000	2.875	12.0 12.0		13.2 -0.8	10.750 7.000		Casing String Casing String
SSSV	2.875		137.7					
Side Pocket Mandrel	2.875		648.9		544.6	10.750		Casing Shoe
Side Pocket Mandrel	2.875		860.5					
Side Pocket Mandrel	2.875		1099.2					
Side Pocket Mandrel	2.875		1386.0					
Landing Nipple	2.875		1410.1					



Job Event Summary

MAXIS Field Log

Schlumberger Job Event Summary

Time	Elapsed Time	Depth (M)	File
Log Pass (up)	25-Jan-2008 10:34	000:05	2518.9 - 2471.6 PERFO_064LUP
Log Pass (up)	25-Jan-2008 10:43	000:15	2517.8 - 2462.3 PERFO_065LUP
Station Log	25-Jan-2008 10:47	000:09	2483.6 - 1.3 PERFO_066LTP
Log Pass (up)	25-Jan-2008 17:07	000:04	2461.9 - 2420.0 MPBT_085LUP
Simulated Log	25-Jan-2008 17:32	000:24	MPBT_088LUP
Log Pass (up)	25-Jan-2008 17:58	000:08	2483.4 - 2419.8 MPBT_090LUP
Log Pass (up)	25-Jan-2008 21:00	000:09	2482.1 - 2414.6 PERFO_096LUP
Log Pass (up)	25-Jan-2008 23:17	000:10	2481.5 - 2373.8 PERFO_101LUP
Log Pass (down)	26-Jan-2008 1:47	000:11	2399.5 - 2478.3 PERFO_104LDP



Cement Dump Pass #2

MAXIS Field Log

Input DLIS Files

DEFAULT Flip\_PERFO\_104LUP PRODUCER 26-Jan-2008 02:12 2478.3 M 2399.5 M

Output DLIS Files

DEFAULT PERFO\_104PUP FN:105 PRODUCER 26-Jan-2008 02:13 2478.3 M 2400.0 M

OP System Version: 15C0-309

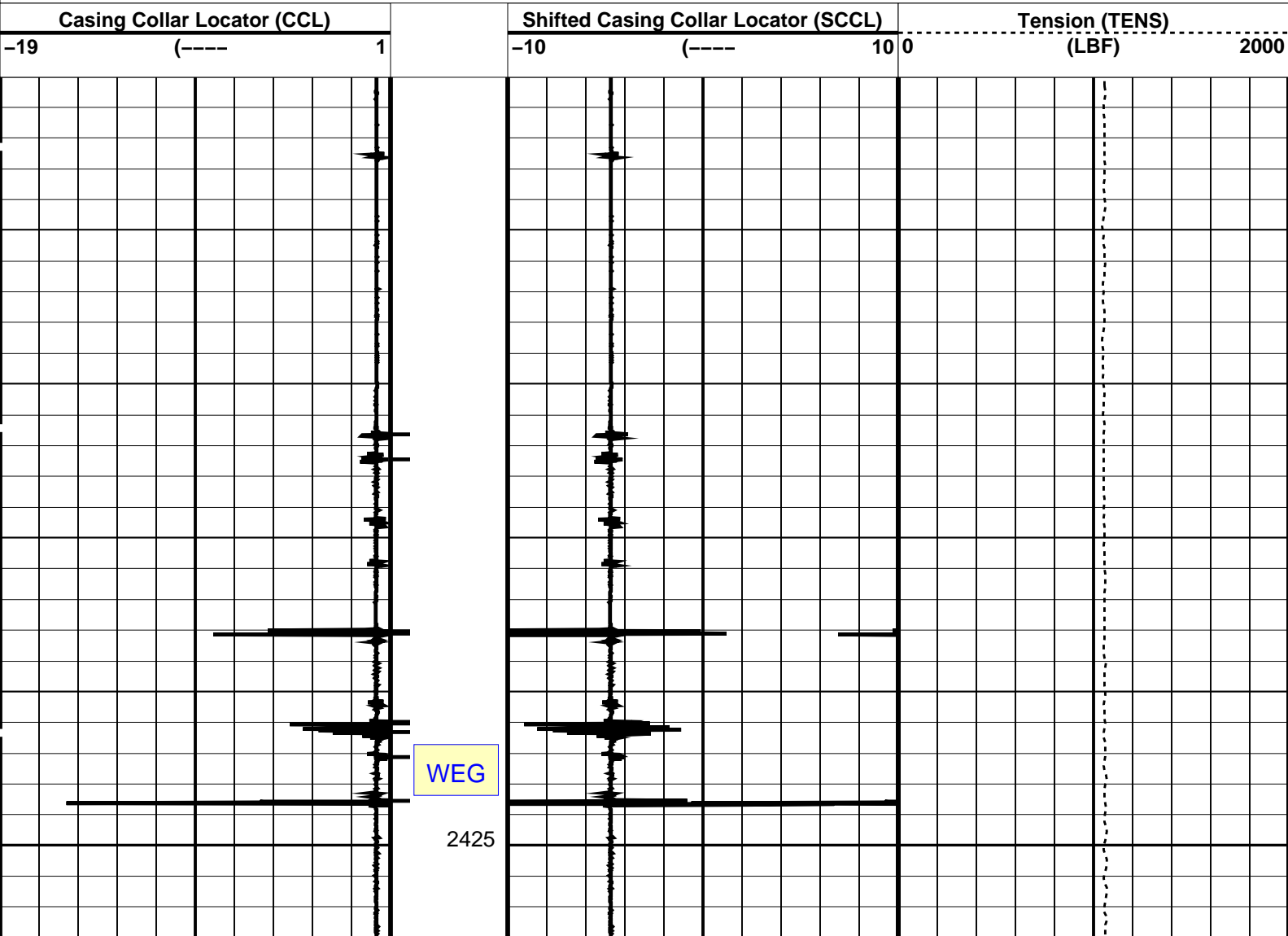
MCM

SHM\_GUN SRPC-3474-Q4\_2007 CCL-L 15C0-309

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	0.8 V
DO	System and Miscellaneous	0.0 M
PP	Depth Offset for Playback	NORMAL
	Playback Processing	

Format: PERFO    Vertical Scale: 1:200    Graphics File Created: 26-Jan-2008 02:13

OP System Version: 15C0-309  
MCM

SHM\_GUN    SRPC-3474-Q4\_2007    CCL-L    15C0-309

Input DLIS Files

DEFAULT    Flip\_PERFO\_104LUP    PRODUCER    26-Jan-2008 02:12    2478.3 M    2399.5 M

Output DLIS Files

DEFAULT    PERFO\_104PUP    FN:105    PRODUCER    26-Jan-2008 02:13



Cement Dump Pass #1

MAXIS Field Log

Output DLIS Files

DEFAULT    PERFO\_101LUP    FN:100    PRODUCER    25-Jan-2008 23:17    2481.5 M    2373.8 M

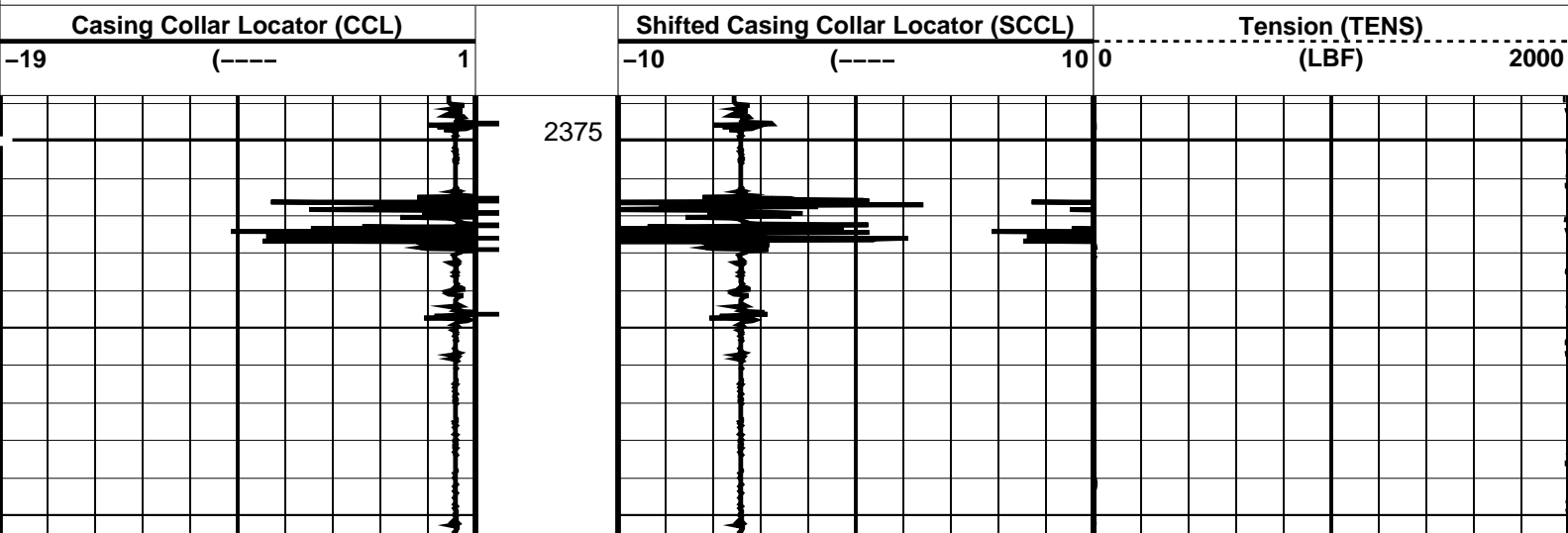
OP System Version: 15C0-309  
MCM

SHM\_GUN    SRPC-3474-Q4\_2007    CCL-L    15C0-309

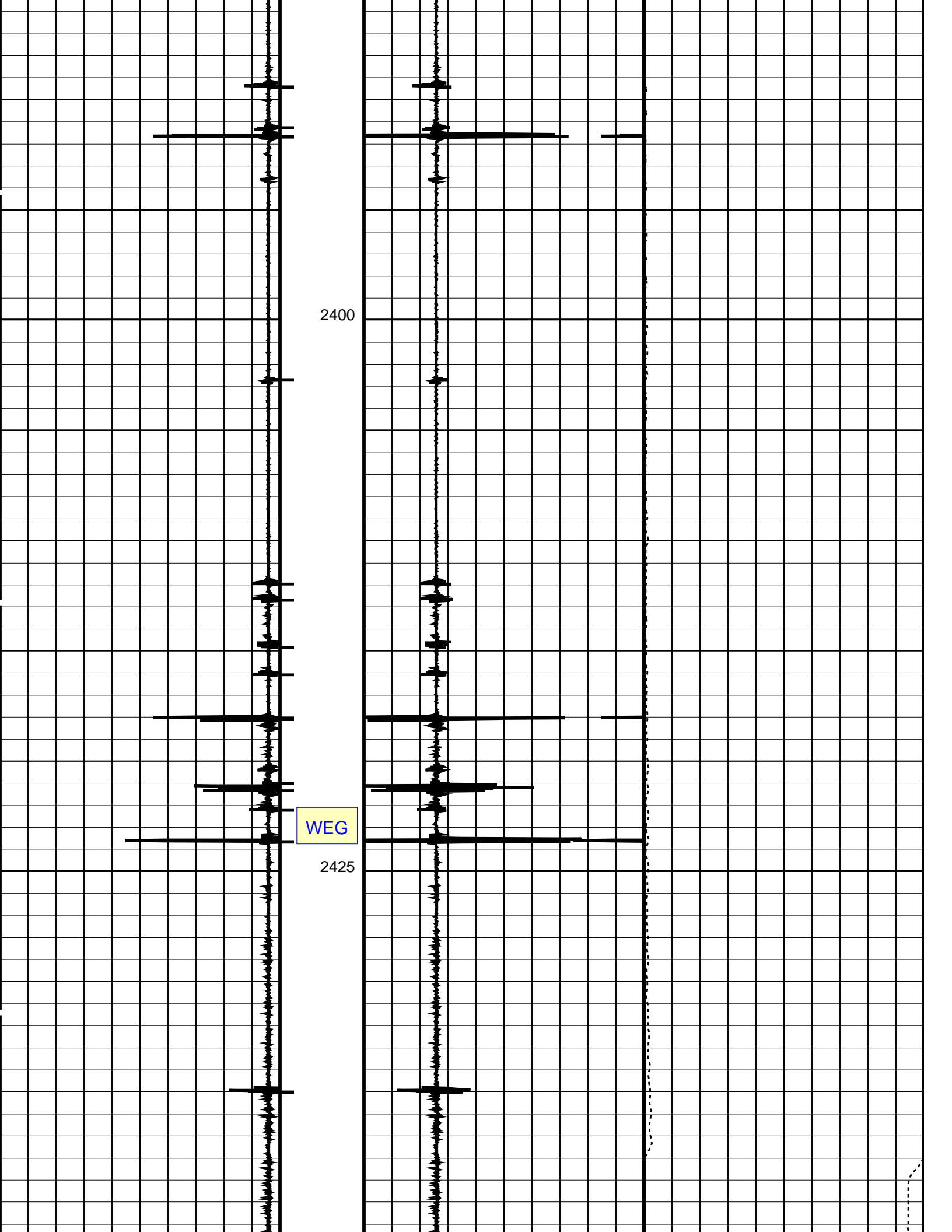
PIP SUMMARY

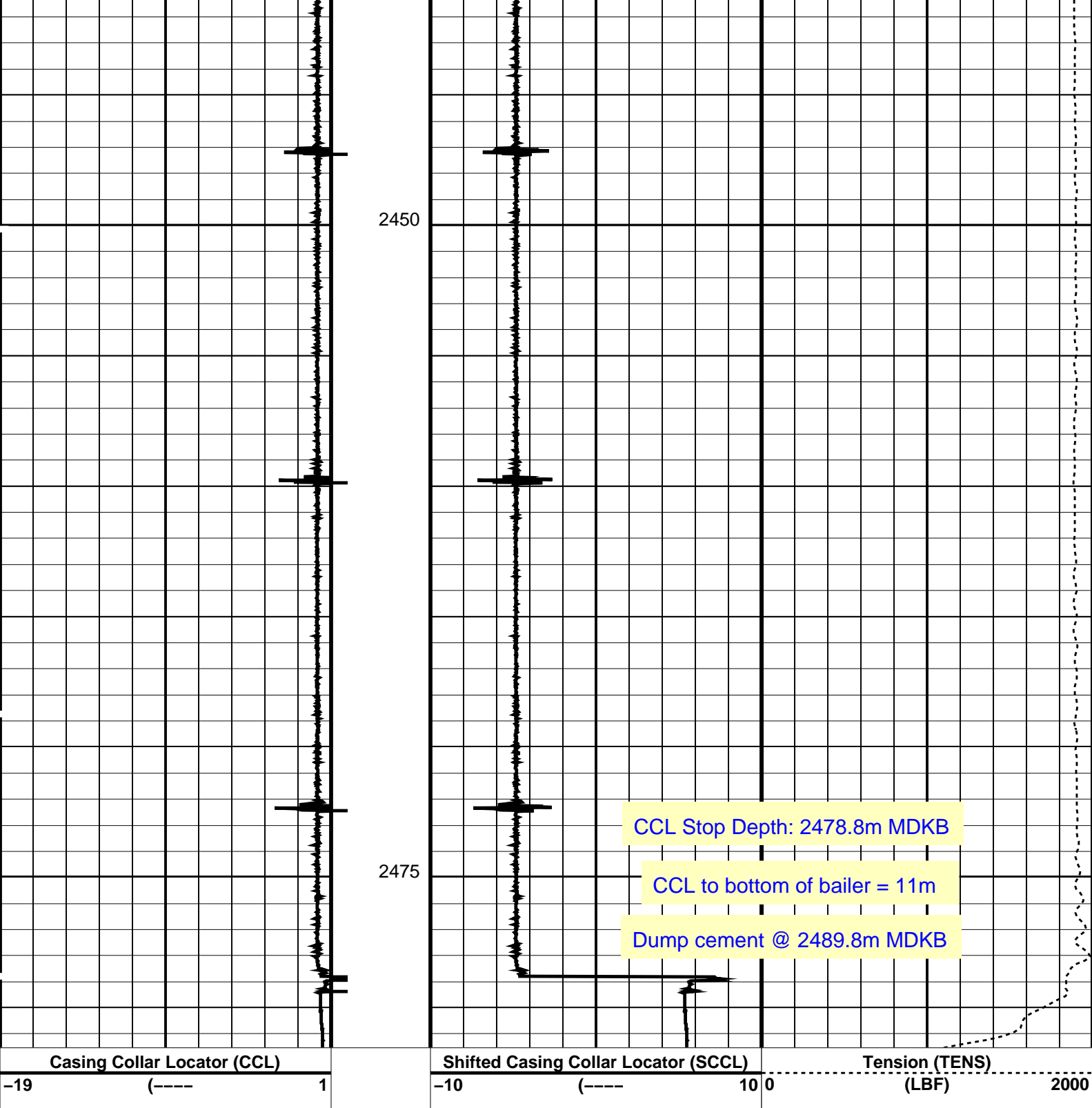
└─ Casing Collars

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	0.8 V
	CCL Detection Level	

Format: PERFO Vertical Scale: 1:200 Graphics File Created: 25-Jan-2008 23:17

OP System Version: 15C0-309

MCM

SHM\_GUN

SRPC-3474-Q4\_2007

CCL-L

15C0-309

Output DLIS Files

DEFAULTPERFO\_101LUPFN:100PRODUCER25-Jan-2008 23:17

Schlumberger

Water Dump Pass

MAXIS Field Log

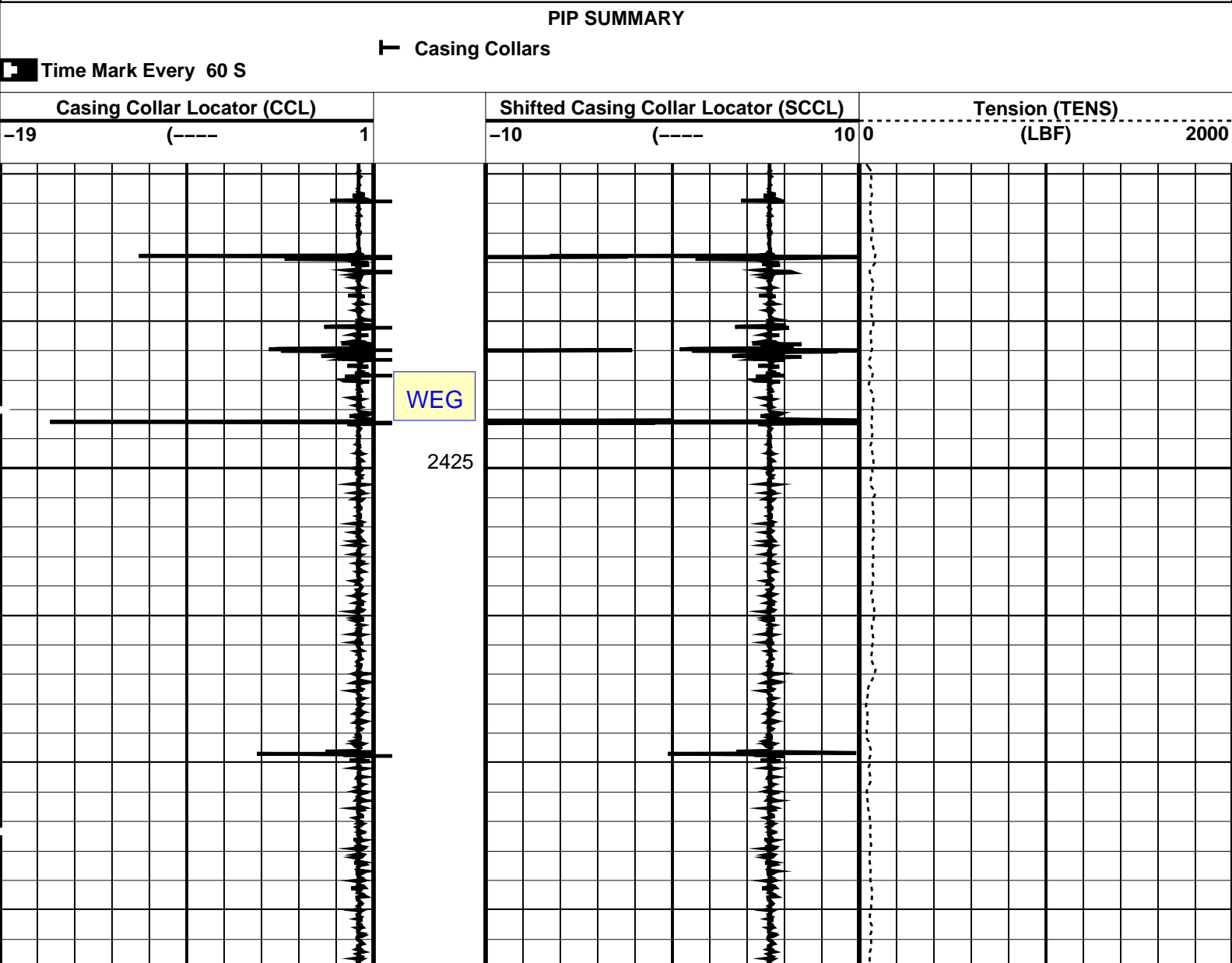
Output DLIS Files

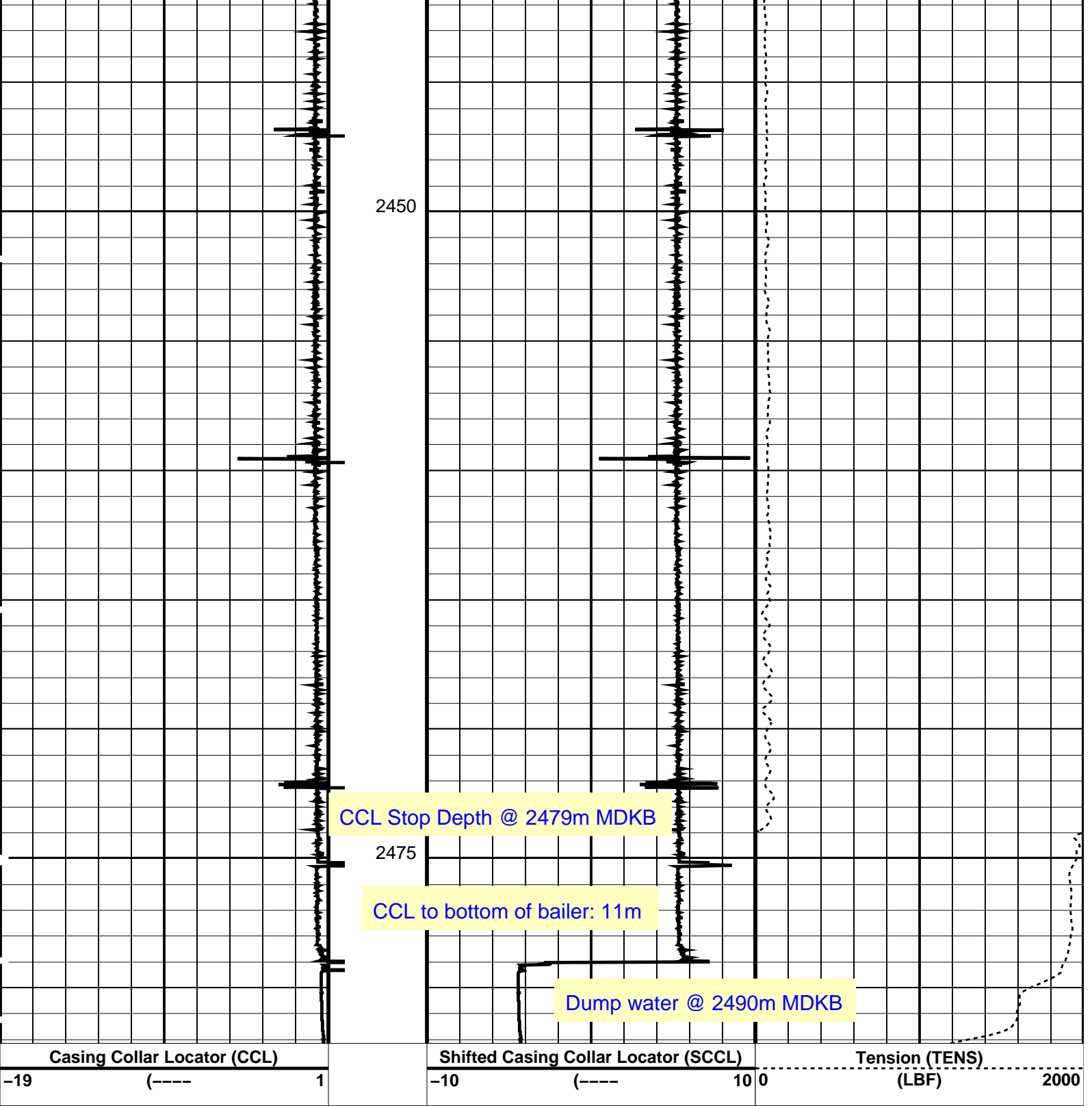
DEFAULTPERFO\_096LUPFN:95PRODUCER25-Jan-2008 21:002482.1 M2414.6 M

OP System Version: 15C0-309

MCM

SHM\_GUNSRPC-3474-Q4\_2007CCL-L15C0-309





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	0.8 V
	CCL Detection Level	

Format: PERFO      Vertical Scale: 1:200      Graphics File Created: 25-Jan-2008 21:00

OP System Version: 15C0-309

MCM

SRPC-3474-Q4\_2007

15C0-309

Output DLIS Files

DEFAULTPERFO\_096LUPFN:95PRODUCER25-Jan-2008 21:00

Schlumberger

7" Posiset Plug  
@ 2490.4m MDKB

MAXIS Field Log

MPBT\_088LUP

FN:87PRODUCER25-Jan-2008 17:32

Output DLIS Files

DEFAULTMPBT\_088LUPFN:87PRODUCER25-Jan-2008 17:32

OP System Version: 15C0-309

MCM

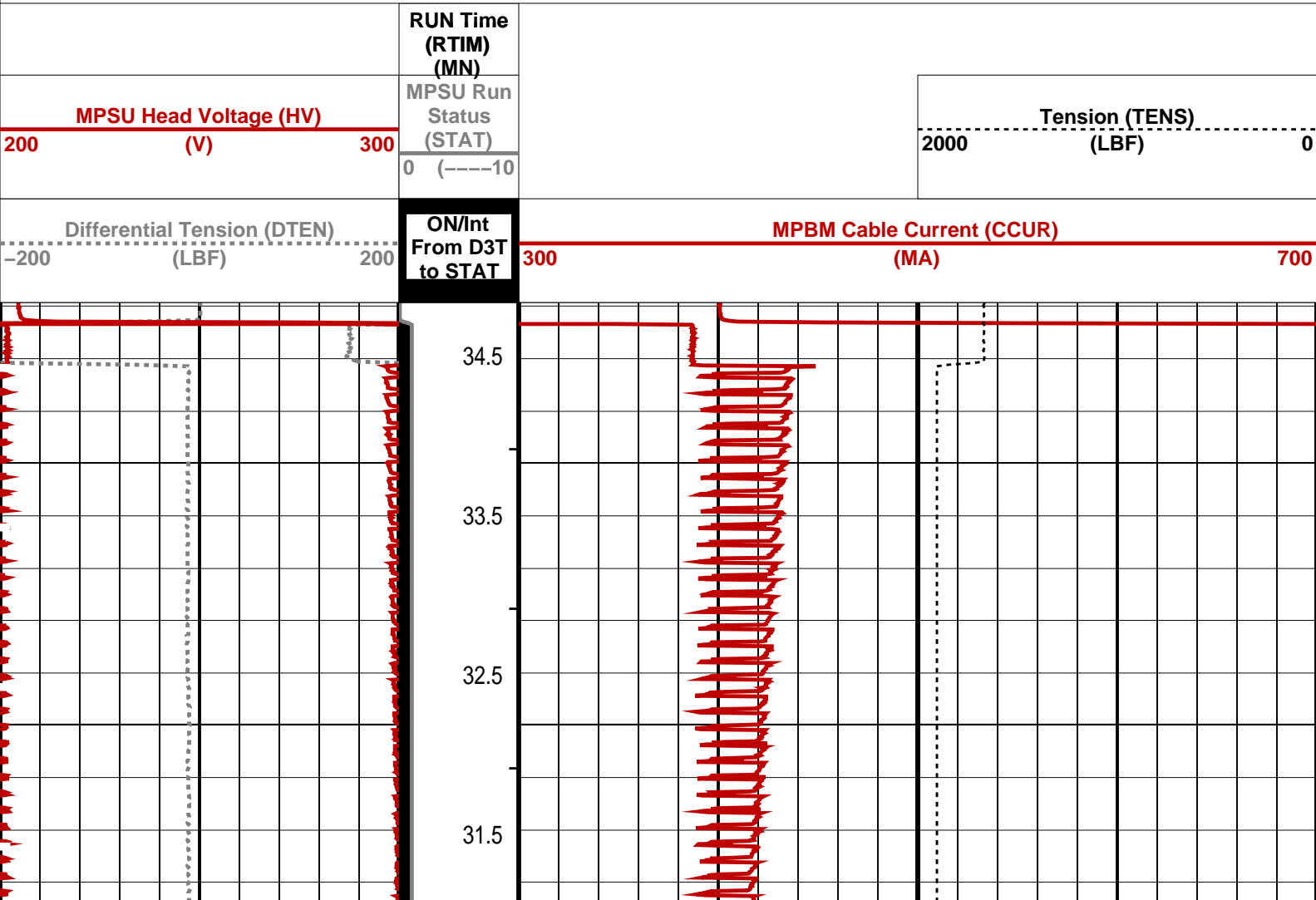
MPEX-BASRPC-3474-Q4\_2007MPSU-CASRPC-3474-Q4\_2007CCL-LSRPC-3474-Q4\_200715C0-309

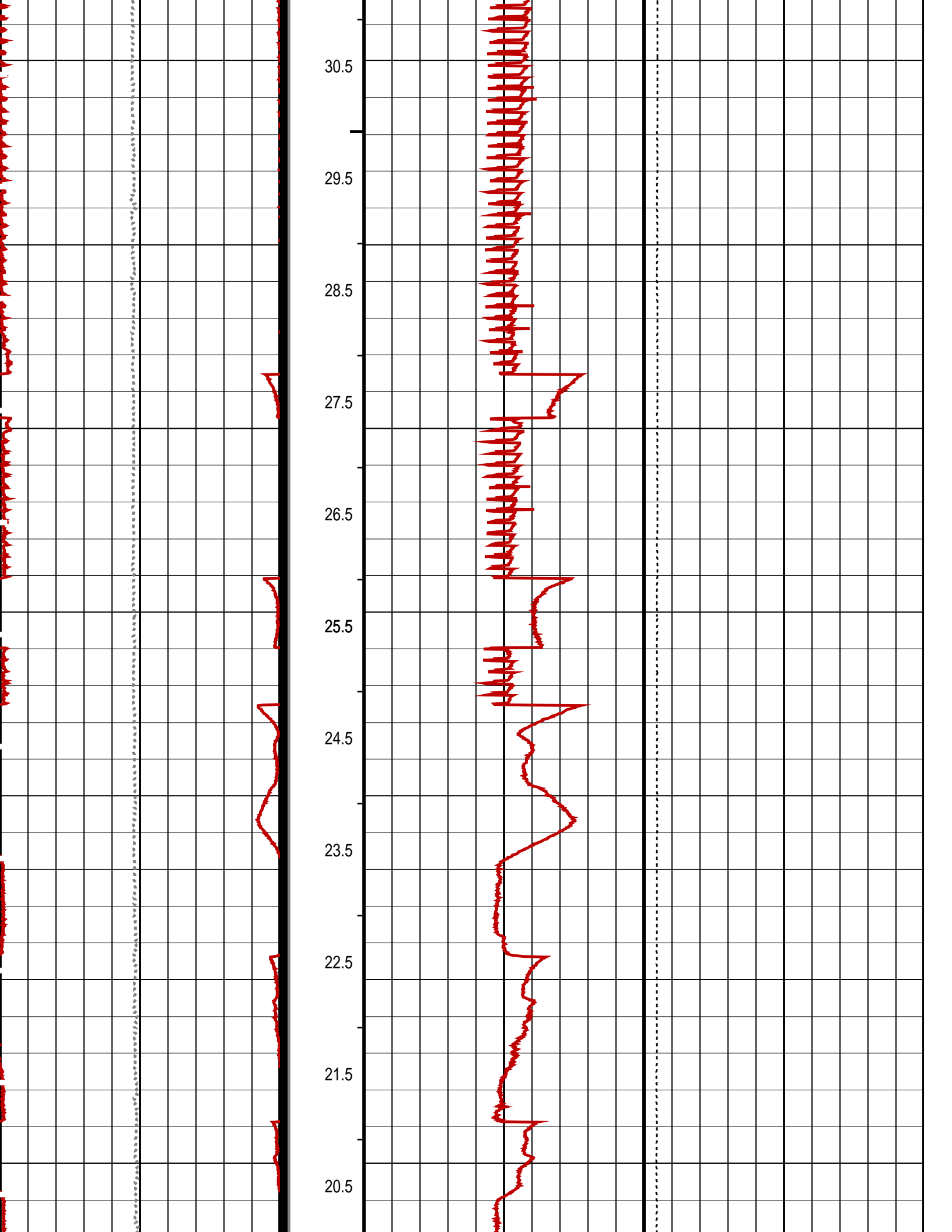
PIP SUMMARY

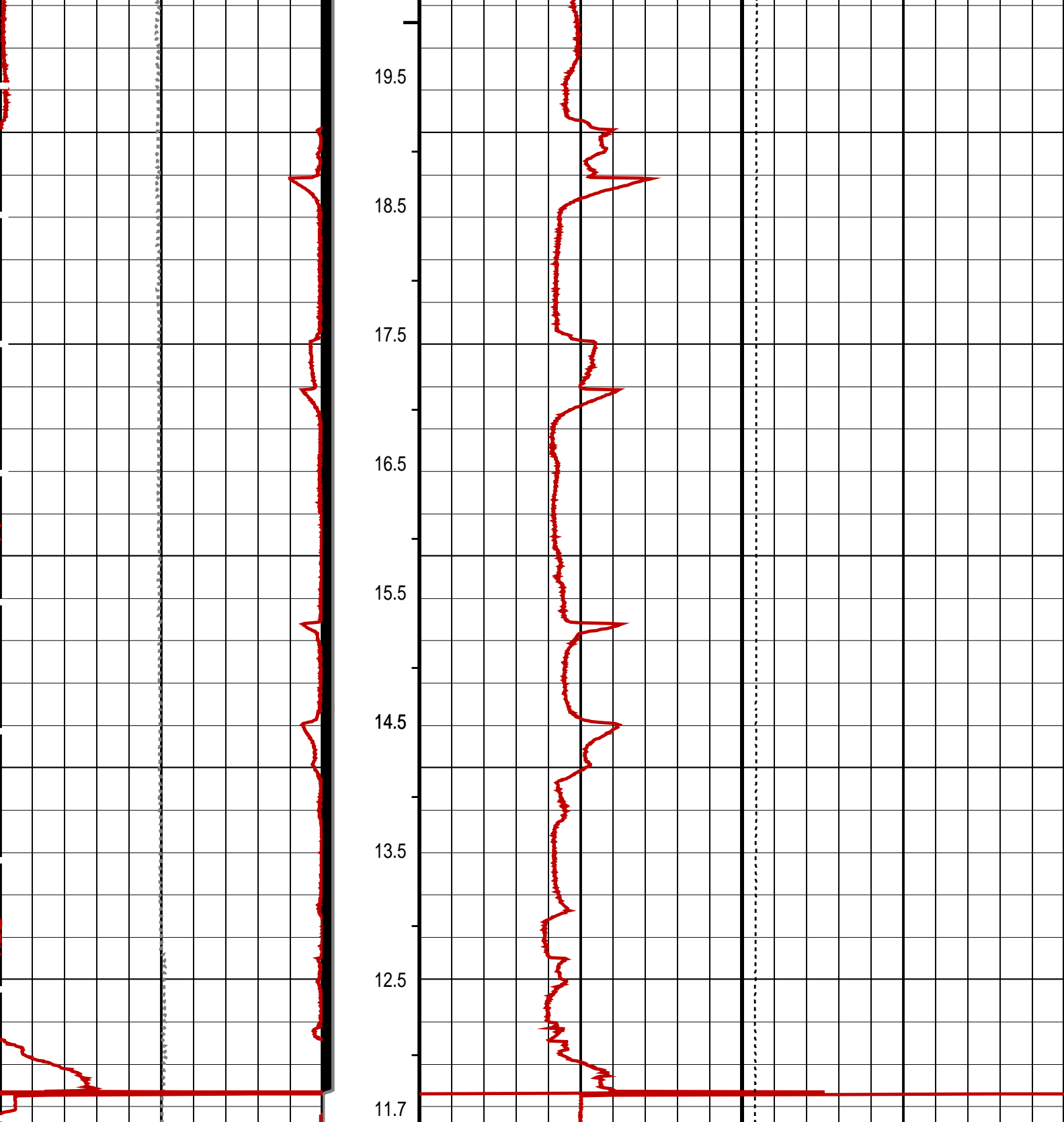
└ MPSU Run Time Every 1 MN

└ 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)	
200	300	0 (----10		
		RUN Time (RTIM) (MN)	2000 0	

PIP SUMMARY

↓ MPSU Run Time Every 1 MN  
↓ MPSU Run Time Every 10 MN

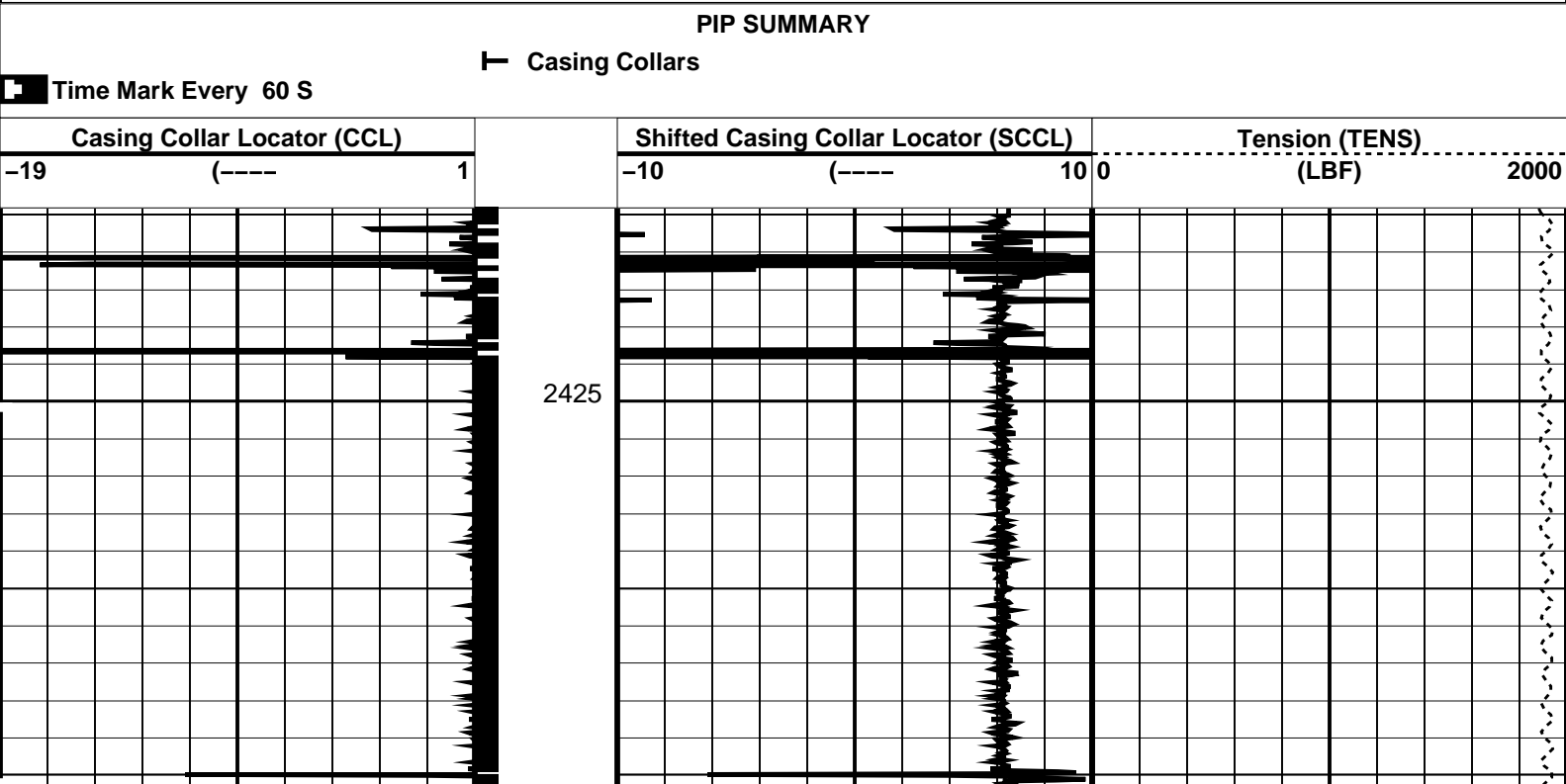
Time Mark Every 60 S		MPSU Run Time Every 10 MN	
Parameters			
DLIS Name	Description	Value	
IPUMP	MPSU-CA: MECHANICAL PLUGBACK SETTING UNIT Intensifier Pump	TRUE	
Format: MPBT	Vertical Scale: 1:600	Graphics File Created: 25-Jan-2008 17:32	
OP System Version: 15C0-309			
MCM			
MPEX-BA CCL-L	SRPC-3474-Q4_2007 15C0-309	MPSU-CA	SRPC-3474-Q4_2007
Output DLIS Files			
DEFAULT	MPBT_088LUP	FN:87	PRODUCER 25-Jan-2008 17:32



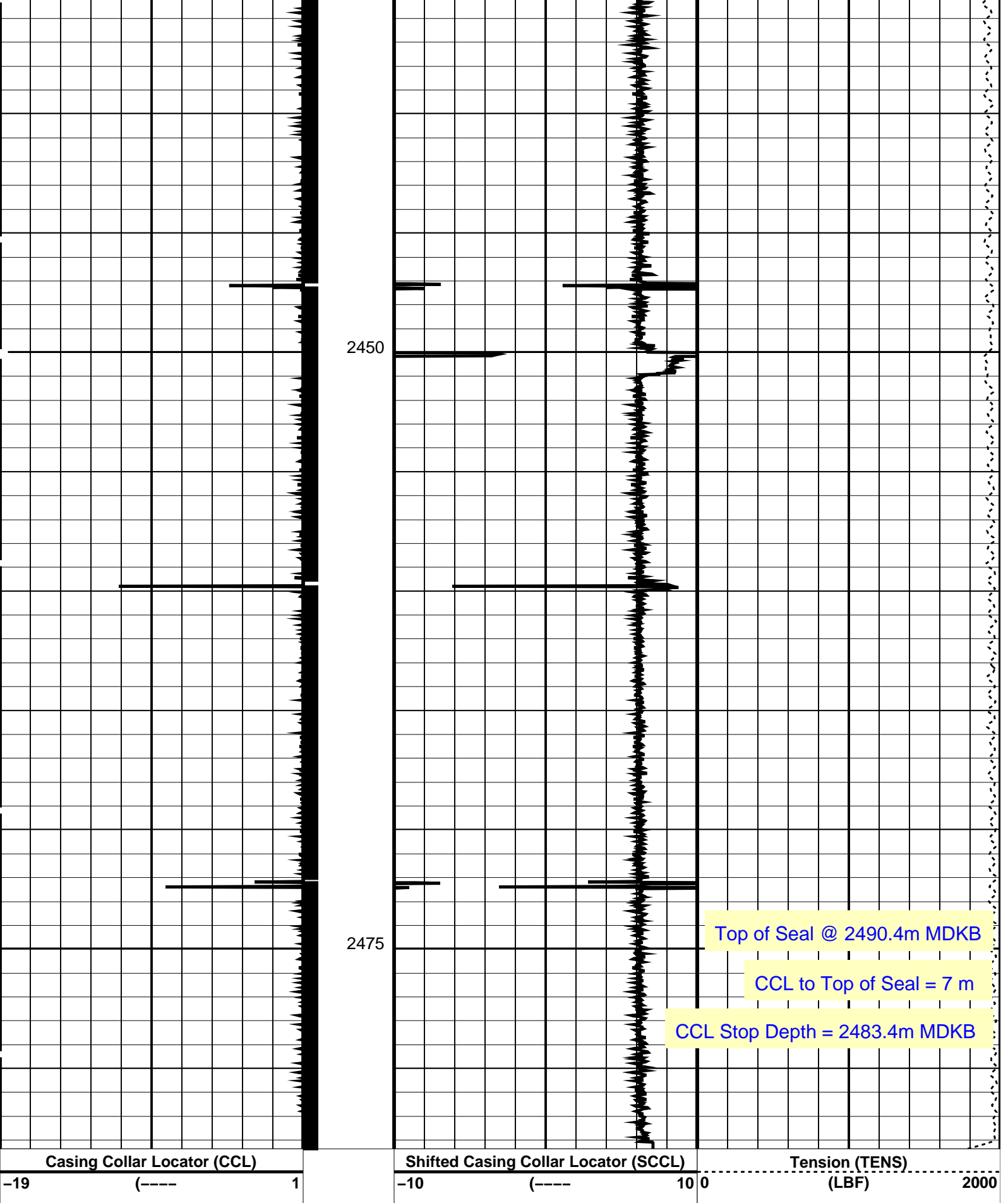
Plug Setting Pass

MAXIS Field Log

Output DLIS Files						
DEFAULT	MPBT_090LUP	FN:89	PRODUCER	25-Jan-2008 17:58	2483.4 M	2419.8 M
OP System Version: 15C0-309						
MCM						
MPEX-BA CCL-L	SRPC-3474-Q4_2007 15C0-309		MPSU-CA		SRPC-3474-Q4_2007	







PIP SUMMARY

Time Mark Every 60 S

Casing Collars

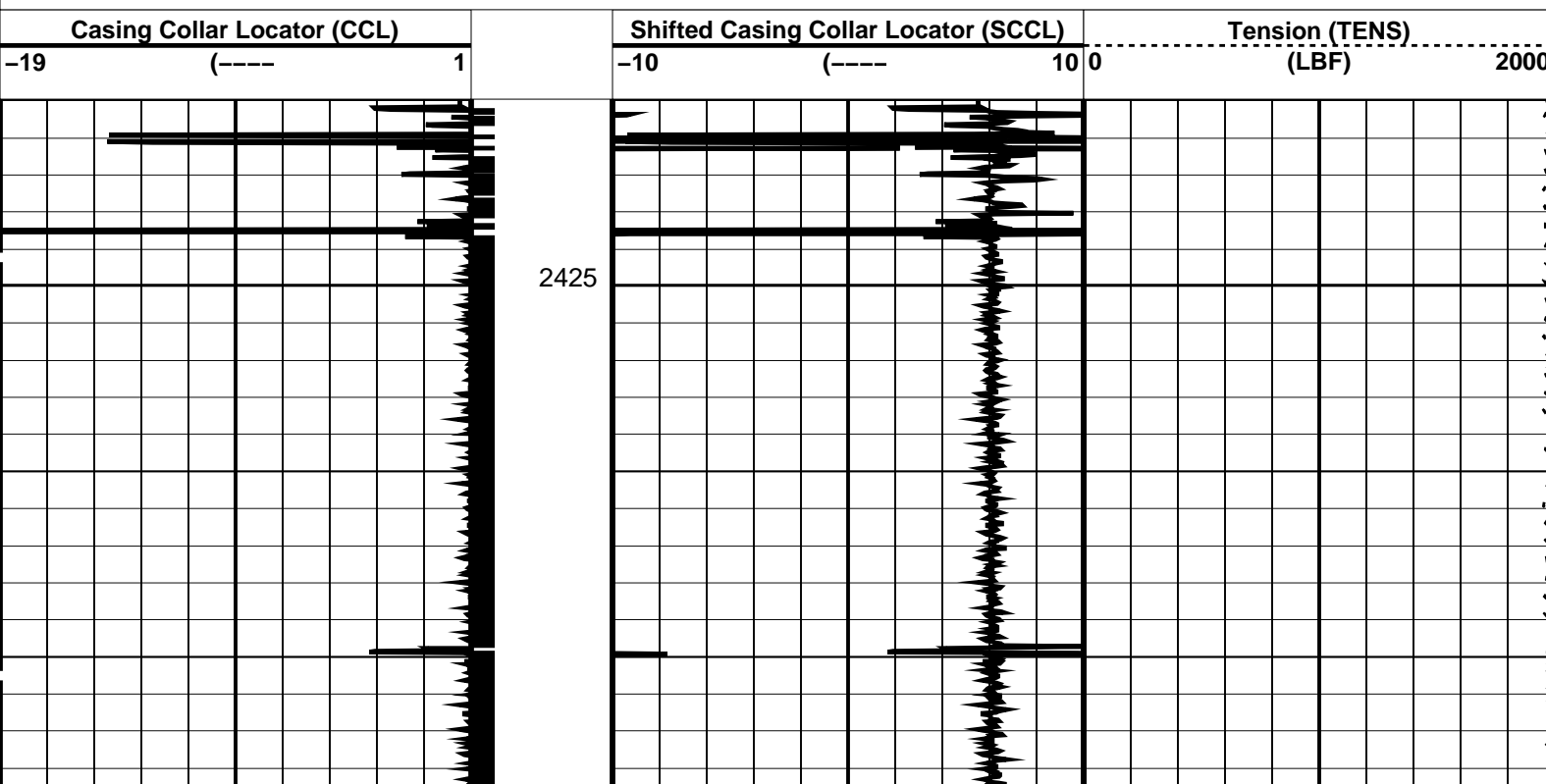
Parameters

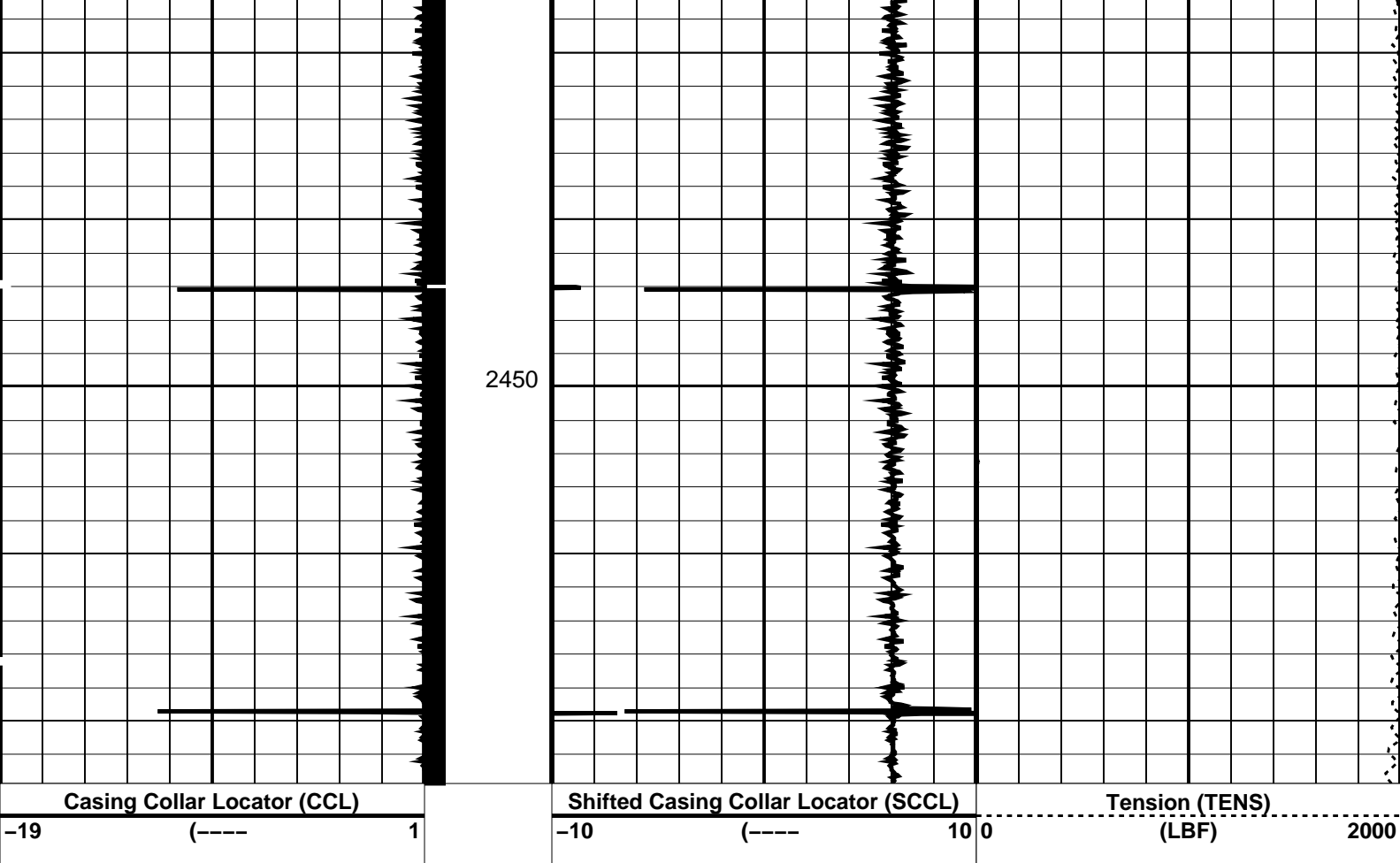
Output DLIS Files				
DEFAULT	MPBT_090LUP	FN:89	PRODUCER	25-Jan-2008 17:58



<p align="center"><b>OP System Version: 15C0-309</b></p> <p align="center"><b>MCM</b></p>			
<b>MPEX-BA</b>	<b>SRPC-3474-Q4_2007</b>	<b>MPSU-CA</b>	<b>SRPC-3474-Q4_2007</b>
<b>CCL-L</b>	<b>15C0-309</b>		

**Time Mark Every 60 S**





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

Format: PERFO Vertical Scale: 1:200 Graphics File Created: 25-Jan-2008 17:07

OP System Version: 15C0-309			
MCM			
MPEX-BA	SRPC-3474-Q4_2007	MPSU-CA	SRPC-3474-Q4_2007
CCL-L	15C0-309		

Output DLIS Files			
DEFAULT	MPBT_085LUP	FN:84	PRODUCER 25-Jan-2008 17:07



Dummy Plug Pass

MAXIS Field Log

# Input DLIS Files

DEFAULT PERFO\_071LUP FN:70 PRODUCER 25-Jan-2008 12:34 2529.8 M 2414.0 M

# Output DLIS Files

DEFAULT PERFO\_073PUP FN:72 PRODUCER 25-Jan-2008 12:50 2530.4 M 2412.6 M

## OP System Version: 15C0-309

MCM

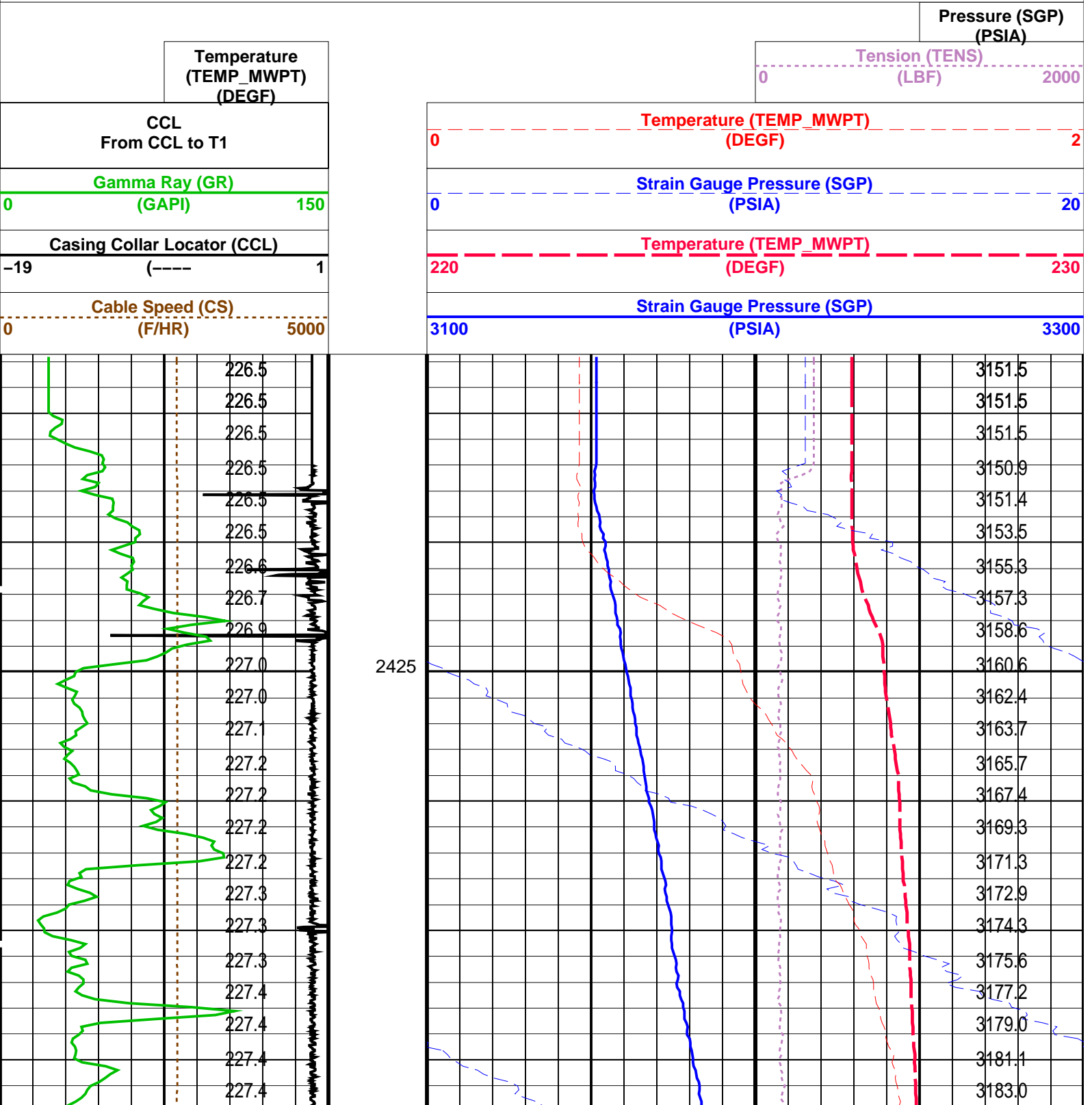
MWPT-CA SRPC-3474-Q4\_2007

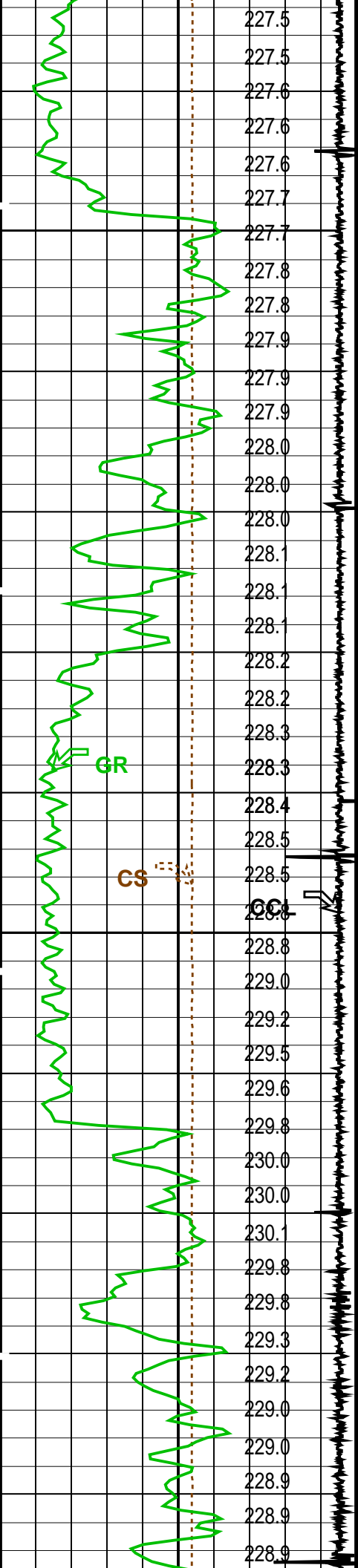
MWGT-AA

SRPC-3474-Q4\_2007

## PIP SUMMARY

Time Mark Every 60 S

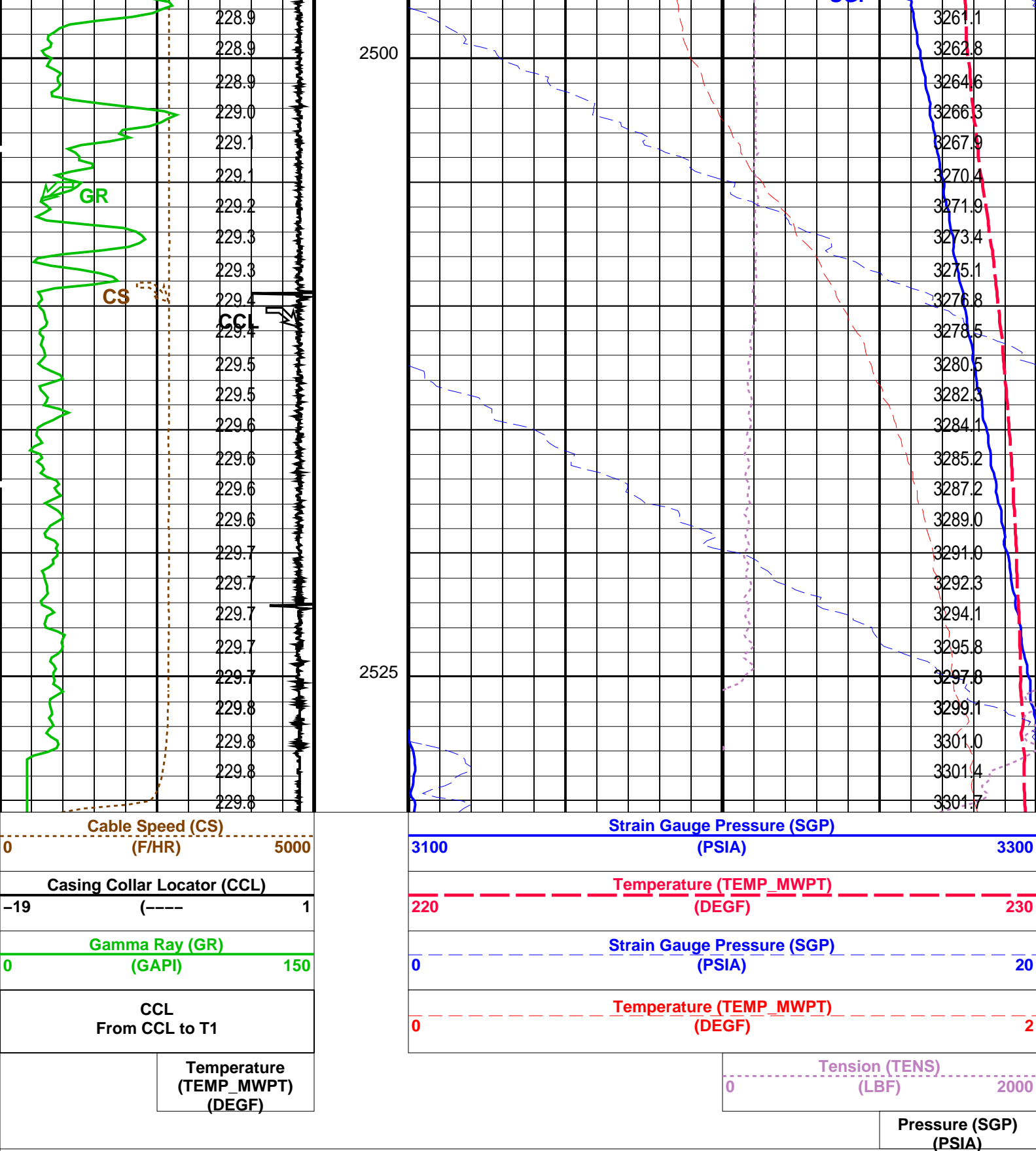




2450


2475





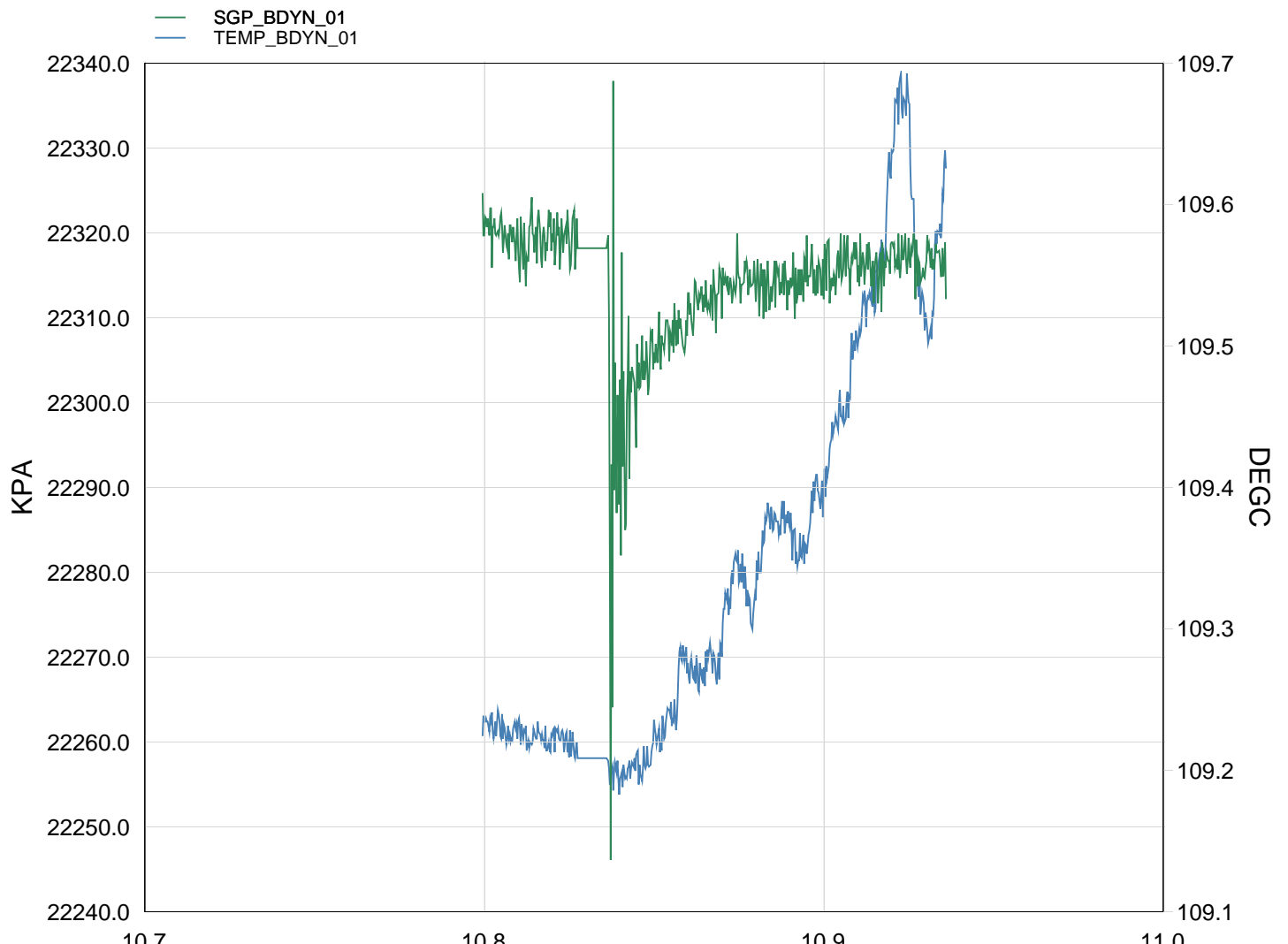
PIP SUMMARY			
Time Mark Every 60 S			
Parameters			
DLIS Name	Description	Value	
MWPT-CA: MEASUREMENT WHILE PERFORATING TOOL			
DEVI_FL_CORR	Deviation Angle for Flow Line Correction	0	DEG
FLD	Flow Line Density	1	G/C3
MWPT_NULL_SOURCE	MWPT NULL Temperature Source	TEMS	
MWPT_NULL_TEMP	MWPT NULL Temperature	0.0	DEGC
System and Miscellaneous			

DO PP	System and Miscellaneous Depth Offset for Playback Playback Processing	0.6 NORMAL	M
Format: MWP	Vertical Scale: 1:200	Graphics File Created: 25-Jan-2008 12:50	
OP System Version: 15C0-309			
MCM			
MWPT-CA	SRPC-3474-Q4_2007	MWGT-AA	SRPC-3474-Q4_2007
Input DLIS Files			
DEFAULT	PERFO_071LUP	FN:70	PRODUCER 25-Jan-2008 12:34 2529.8 M 2414.0 M
Output DLIS Files			
DEFAULT	PERFO_073PUP	FN:72	PRODUCER 25-Jan-2008 12:50



Bordyn Plot  
@2487m MDKB

MAXIS Field Log



T (hr)

TIME	DegF	PSIA
2430.0	228.61	3236.833
2460.0	228.61	3237.461
2490.0	228.61	3237.180
2520.0	228.61	3237.336
2550.0	228.57	3236.980
2580.0	228.56	3234.911
2610.0	228.55	3235.263
2640.0	228.64	3236.165
2670.0	228.67	3235.912
2700.0	228.82	3236.583
2730.0	228.85	3236.522
2760.0	228.89	3236.762
2790.0	228.92	3236.589
2820.0	229.01	3236.646
2850.0	229.15	3236.583
2880.0	229.43	3236.823
2910.0	229.15	3236.655

Schlumberger

2-1/8" Powerjet Gun  
Shooting Pass

MAXIS Field Log

Company: Esso Australia Pty Ltd. Well: A-16a

Output DLIS Files

DEFAULT PERFO\_065LUP FN:64 PRODUCER 25-Jan-2008 10:43 2517.8 M 2462.3 M

OP System Version: 15C0-309  
MCM

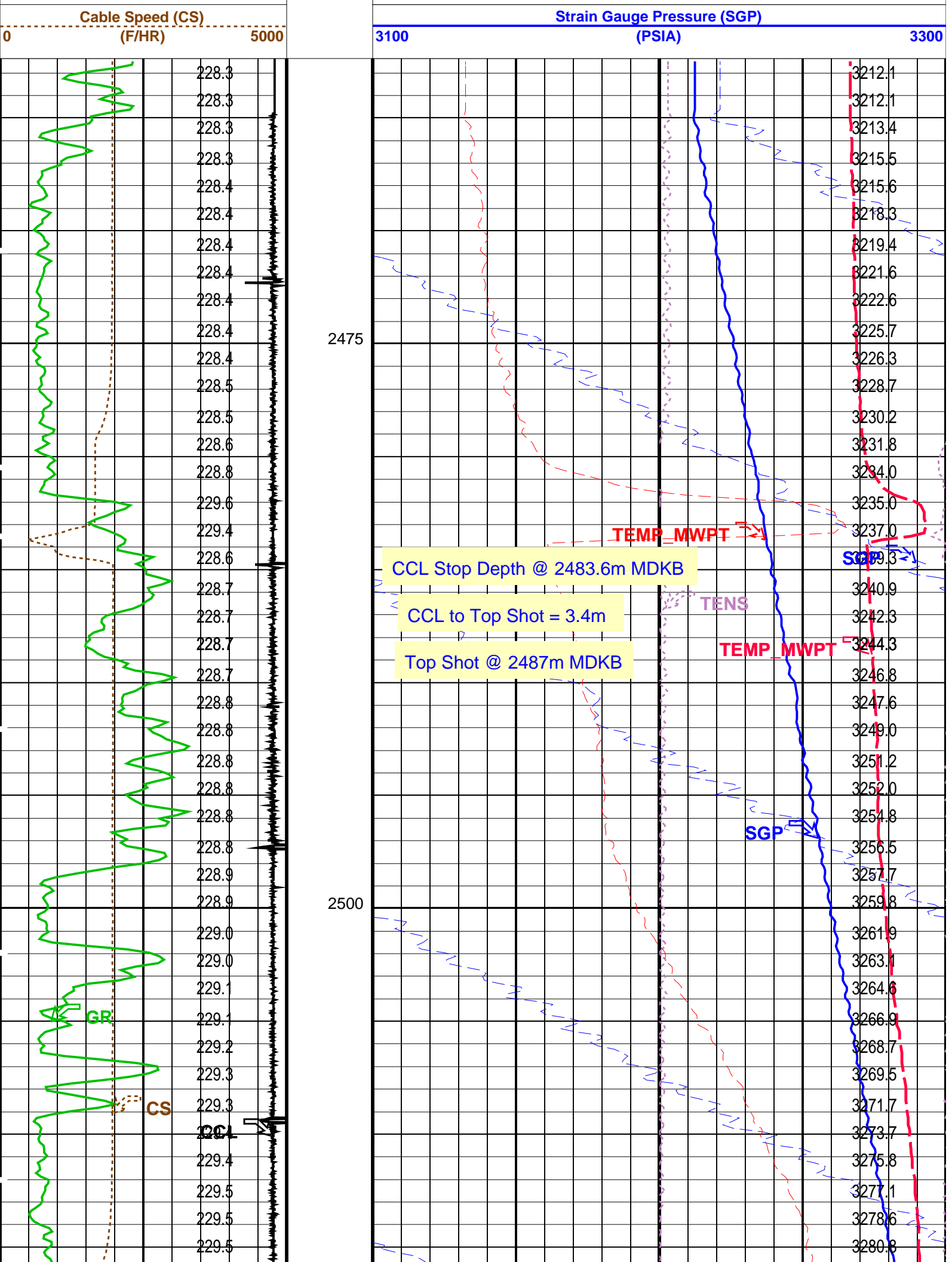
MWP\_GUN SRPC-3474-Q4\_2007 MWPT-CA SRPC-3474-Q4\_2007  
MWGT-AA SRPC-3474-Q4\_2007

PIP SUMMARY

☒ Time Mark Every 60 S

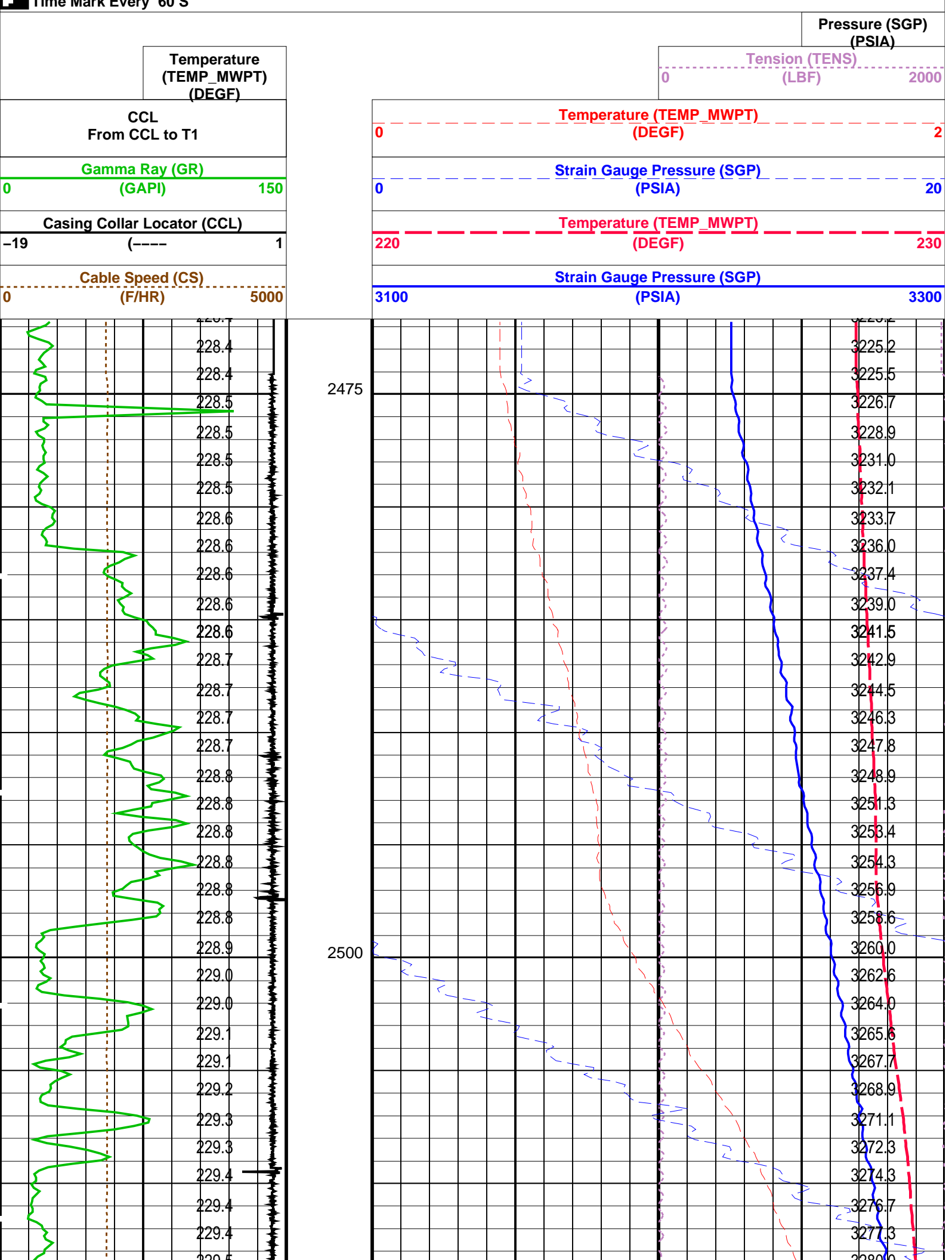
		Pressure (SGP) (PSIA)	
		Tension (TENS) (LBF)	
		0	2000
Temperature (TEMP_MWPT) (DEGF)		Temperature (TEMP_MWPT) (DEGF)	
CCL From CCL to T1		0	2
Gamma Ray (GR) (GAPI)		Strain Gauge Pressure (SGP) (PSIA)	
0	150	0	20
Casing Collar Locator (CCL)		Temperature (TEMP_MWPT) (DEGF)	
-19	1	220	230

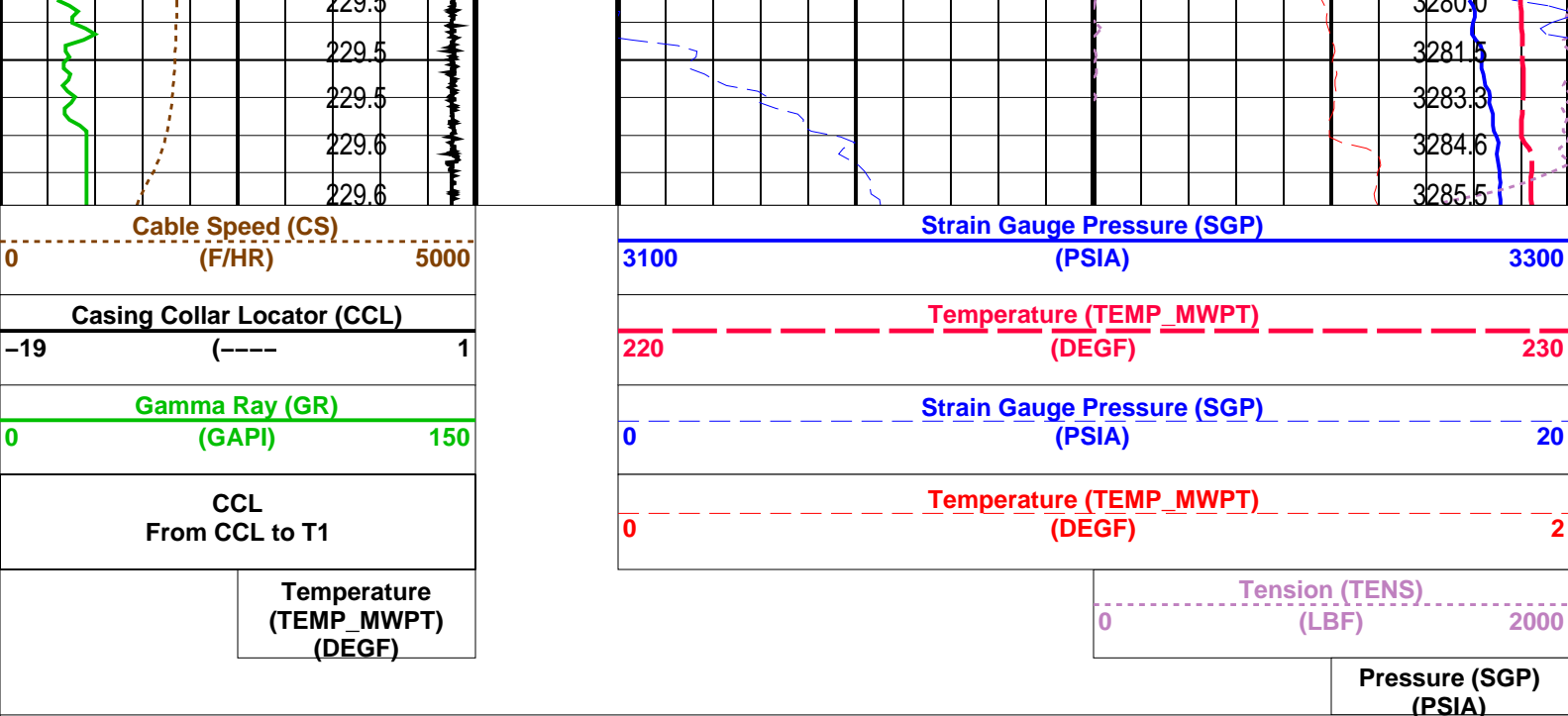






Time Mark Every 60 S





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: 25-Jan-2008 10:34

OP System Version: 15C0-309			
MCM			
MWP_GUN	SRPC-3474-Q4_2007	MWPT-CA	SRPC-3474-Q4_2007
MWGT-AA	SRPC-3474-Q4_2007		

Output DLIS Files			
DEFAULT	PERFO_064LUP	FN:63 PRODUCER	25-Jan-2008 10:34

Company: **Esso Australia Pty Ltd.**

**Schlumberger**

Well: **A-16a**

Field: **Halibut**

Rig: **Crane**

Country: **Australia**

2-1/8" Phased Powerjet MWPT

Perforation Record

7" Posiset Plug Setting Record