

Company: Esso Australia Pty Ltd.

Well: B-18a
Field: Kingfish B
Rig: Crane / Prod # 4 Country: Australia

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

Rig:Crane / Prod # 4

Field:Kingfish B

Location:Gippsland

Well:B-18a

Company:Esso Australia Pty Ltd.

LOCATION		Gippsland Basin Bass Strait	Elev.: K.B. 23.8 m G.L. -78 m D.F. 23.8 m		
State: Victoria	Max. Well Deviation 47 deg			Longitude 148°06'15.37E	Latitude 038°35'40.34S
Permanent Datum:	M.S.L.	Elev.: 0 m			
Log Measured From:	K.B.	23.8 m above Perm. Datum			
Drilling Measured From:	K.B.				

Logging Date		25-May-2008	
Run Number		1 thru 4	
Depth Driller		2731 m	
Schlumberger Depth		2731 m	
Bottom Log Interval		2720 m	
Top Log Interval		2650 m	
Casing Fluid Type		Production Fluids	
Salinity			
Density			
Fluid Level		230 m	
BIT/CASING/TUBING STRING			
Bit Size		6.500 in	
From		1715 m	
To		2817 m	
Casing/Tubing Size		5.000 in	
Weight		15 lbm/ft	
Grade		L-80	
From		1546.66 m	
To		2812.5 m	
Maximum Recorded Temperatures		213 degF	
Logger On Bottom	Time	25-May-2008	9:30
Unit Number	Location	889	Prod 4 / AUSL
Recorded By		G Wright.	
Witnessed By		G Rimmer.	

			Run 1
OIL DATA			
Oil Density			
Water Salinity			
Gas Gravity			
Bo			
Bw			
1/Bq			
Bubble Point Pressure			
Bubble Point Temperature			
Solution GOR			
Maximum Deviation			47 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

Date Created: 17-MAY-2008 7:10:35

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-EB Serial Number: 6373 Calibration Date: 04-JAN-2007 Calibrator Serial Number: 9 Calibration Cable Type: 2-32ZT Wheel Correction 1: -2 Wheel Correction 2: -4	Type: PSDS/OSDS Serial Number: 325357 Calibration Date: 17-May-2008 Calibrator Serial Number: 1174 Calibration Gain: 0.90 Calibration Offset: -191.00	Type: 2-32ZT Serial Number: 27244 Length: 6227.98 M Conveyance Method: Wireline Rig Type: Rigless

Depth Control Parameters

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

Depth Control Remarks

1. IDW used as primary depth control. 2. Z-chart used as secondary backup
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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: RST-C SIGMA & CO OS2: Survey

REMARKS: RUN NUMBER 1
Log correlated to ExxonMobil Composite Log supplied with logging program.
Maximum well deviation = 47 degree's at 1054m MDKB.
Interval perforated was 2685m to 2687m MDKB.
SBHP = 3084 psia,SBHT = 213 degf,FBHP = 3085 psia,FBHT = 213 degf.
2 1/8" Phased Powerjet at 6 spf,45 degree phasing used for this perforation.
5" Mpbt plug was then set at 2720m MDKB,water and cement dumped on top of the plug.
HUD = 2718.8m MDKB

EQUIPMENT DESCRIPTION							
RUN 1						RUN 2	

DOWNHOLE EQUIPMENT	DOWNHOLE EQUIPMENT
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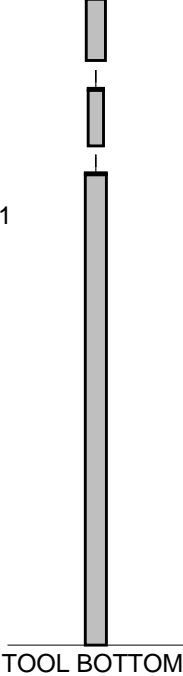
AH-SWBS 787			12.41	AH-SWBS-B 787			9.90
AH-SWBS 785			11.73	AH-SWBS-B 786			9.21
AH-SWBS 786			11.04	AH-SWBS-B 785			8.53
MH-SWHS 759			10.35	MH-22 759			7.84
AH-124 7001			10.00	CCL-L 4195			7.51
MWPG-AA 19 MWGH-AA 19	MWPG GR	— 2.41	9.80	MPSU-BA 20			7.05
MWPH-AA 94 MWPS-AA 94			8.82				
	CCL SMWP Pres SMWP Temp Tension	— TOOL ZERO					
AH-Flex-Joint 42			6.00				
SAH-G 1035			5.52				

MPD–MB 268

AH–ESIC 4007395

GUN–2 1/8" Phased Powerjet Gun 1

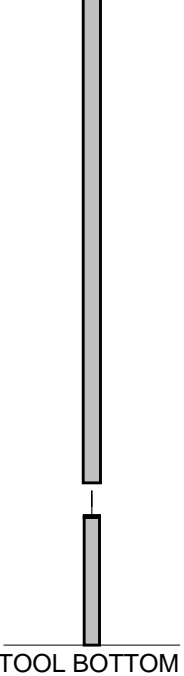
4.98
4.45
3.96



TOOL BOTTOM

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

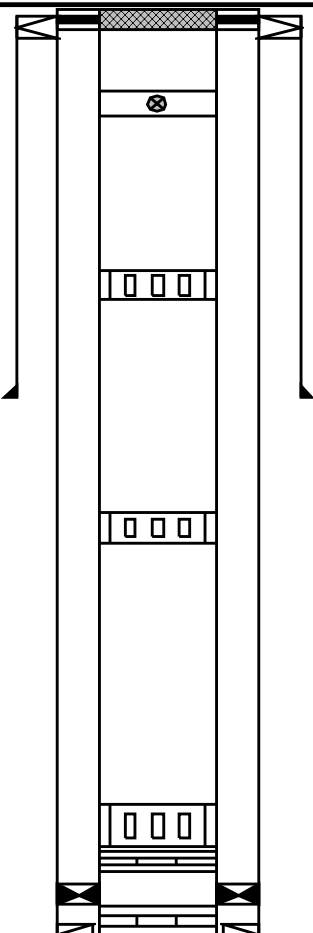
MPEX–FA 1

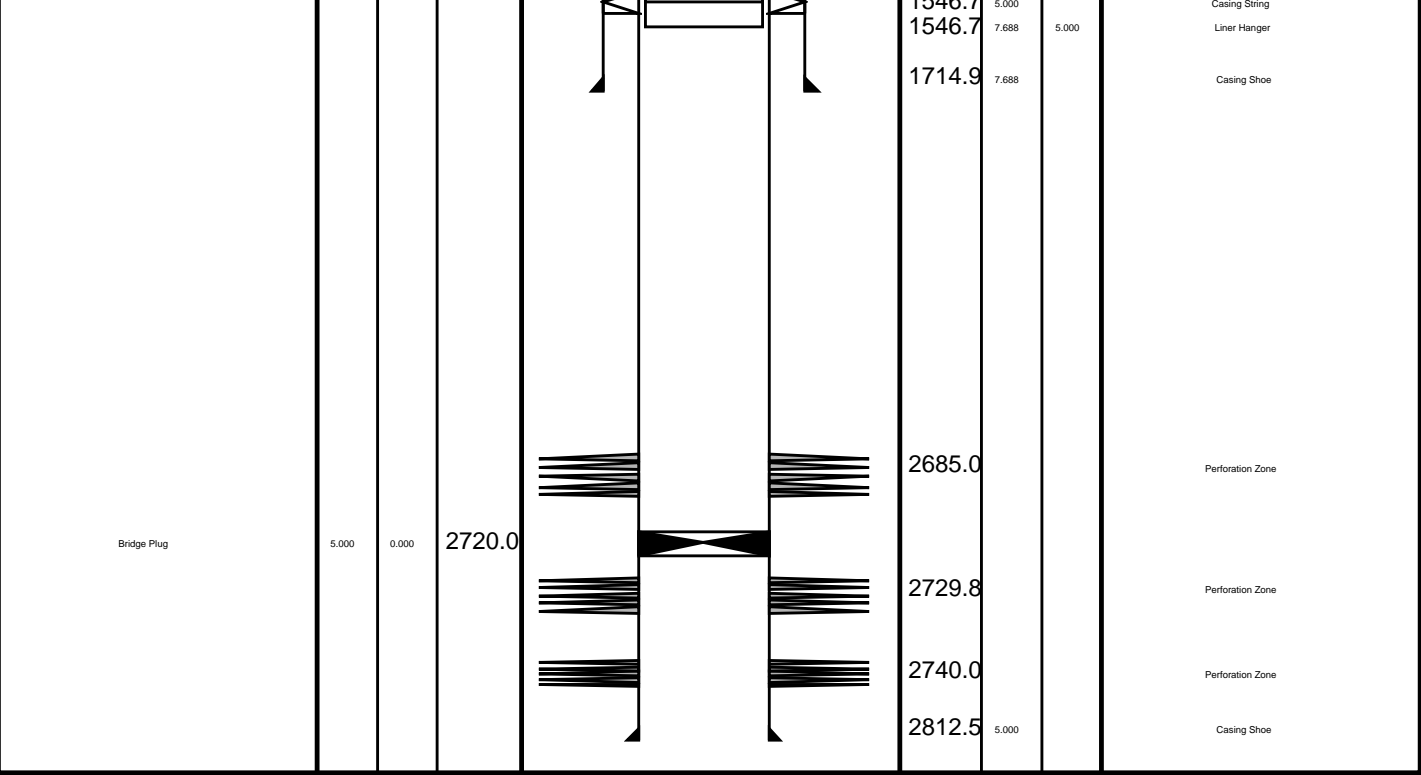


TOOL BOTTOM

MAXIMUM STRING DIAMETER 1.71 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

0.81

Production String	(in)		(m)	Well Schematic	(m)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
Tubing Tubing Hanger	4.500 7.688	4.500	14.9 13.0		16.0 16.0	7.688 10.750	7.688	Casing String Liner Hanger
Shut-in Valve	4.500		139.0					
Sliding Sleeve	4.500		511.0					
Sliding Sleeve	4.500		944.0		663.5	10.750		Casing Shoe
Sliding Sleeve	4.500		1487.0					
Nipple	4.500		1501.0					
Packer	7.688	4.500	1509.0					
Nipple	4.500		1530.0					
						1546.7		



Job Event Summary

MAXIS Field Log

Schlumberger Job Event Summary

Time	Elapsed Time	Depth (M)	File
Log Pass (up)	25-May-2008 9:35	000:06	2707.4 - 2644.6 PERFO_056LUP
Log Pass (up)	25-May-2008 9:43	000:16	2692.9 - 2658.3 PERFO_057LUP
Station Log	25-May-2008 9:47	000:08	2681.5 - 1.2 PERFO_058LTP
Simulated Log	25-May-2008 13:00	000:35	CCL_067LUP
Log Pass (up)	25-May-2008 13:37	000:02	2712.9 - 2659.2 CCL_069LUP
Log Pass (up)	25-May-2008 15:35	000:04	2712.1 - 2663.0 PERFO_075LUP
Log Pass (up)	25-May-2008 16:41	000:04	2713.9 - 2657.2 PERFO_079LUP

Input DLIS Files

DEFAULT PERFO_079LUP FN:77 PRODUCER 25-May-2008 16:41 2713.9 M 2657.2 M

Output DLIS Files

DEFAULT PERFO_080PUP FN:78 PRODUCER 25-May-2008 16:46 2717.4 M 2661.2 M

OP System Version: 15C0-309
MCM

SHM_GUN SRPC-3546-Q1_2008_OP15 CCL-L SRPC-3546-Q1_2008_OP15

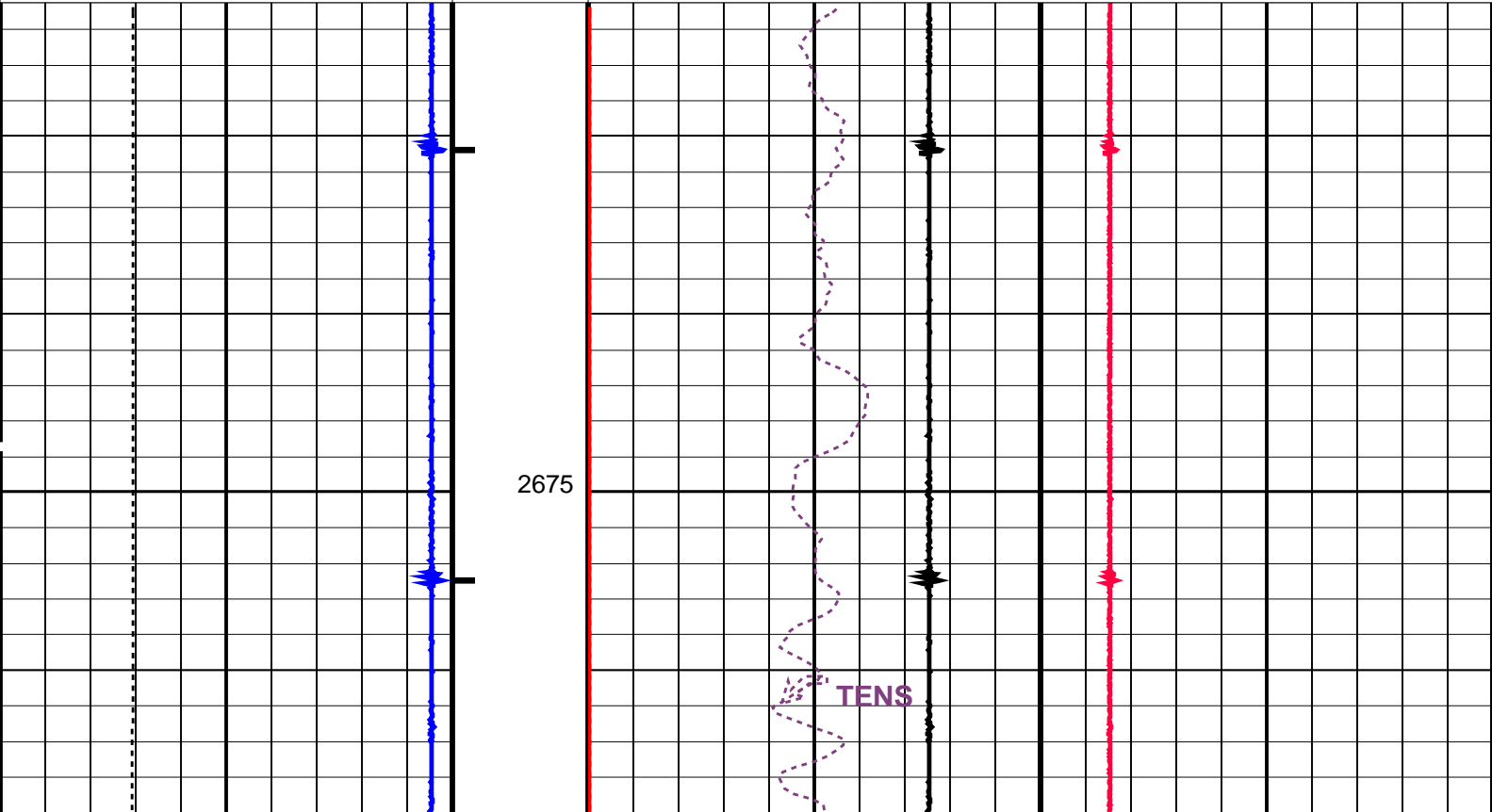
PIP SUMMARY

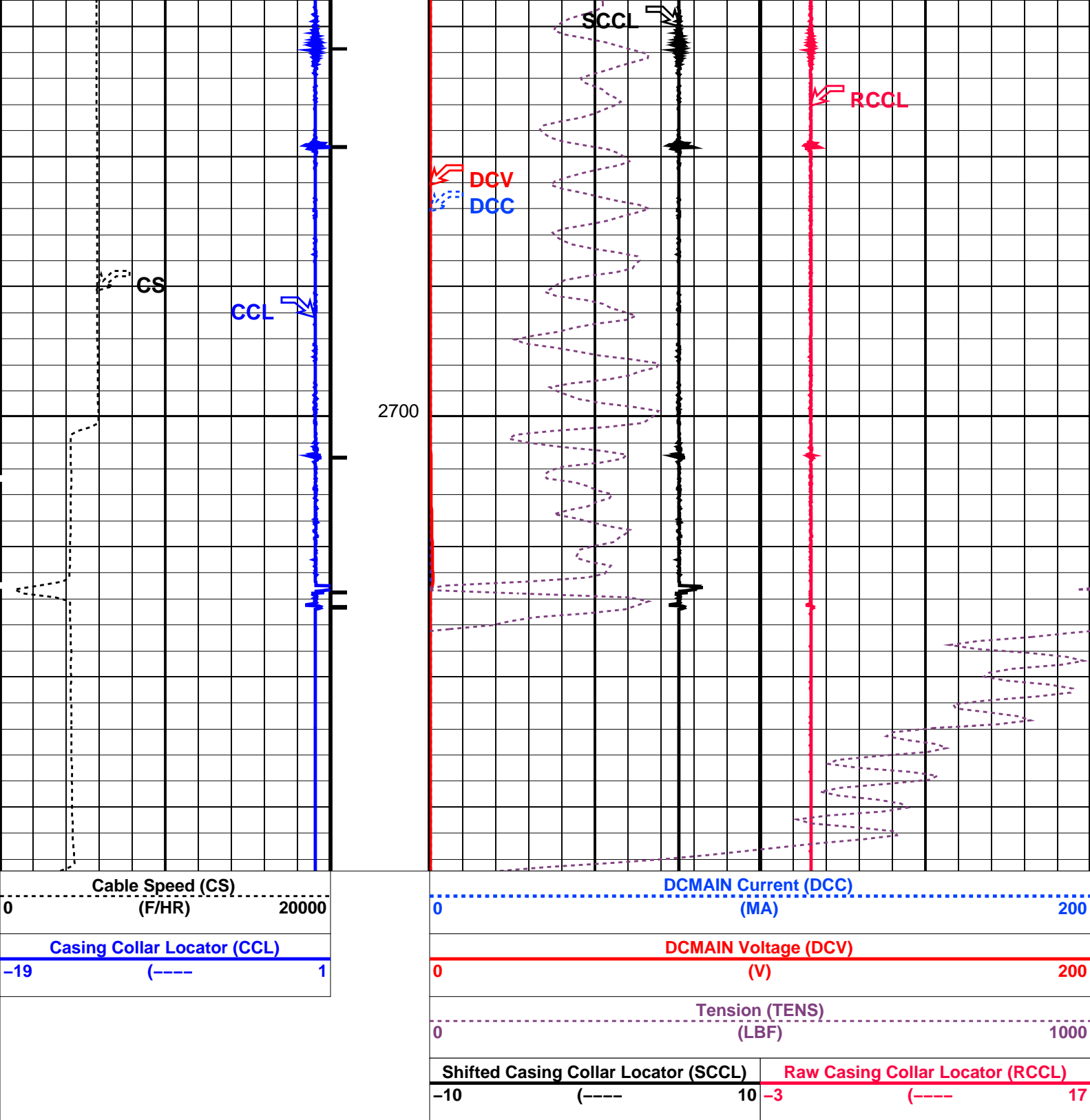
Casing Collars

Time Mark Every 60 S

Shifted Casing Collar Locator (SCCL)		Raw Casing Collar Locator (RCCL)	
-10	(----	10	-3 (----
Tension (TENS)		1000	
(LBF)		200	
DCMAIN Voltage (DCV)		200	
(V)		200	
DCMAIN Current (DCC)		200	
(MA)		200	

Casing Collar Locator (CCL)	
-19	(----
1	
Cable Speed (CS)	
(F/HR)	
20000	





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	3.5 M
PP	Playback Processing	NORMAL

OP System Version: 15C0-309

MCM

SHM_GUN SRPC-3546-Q1_2008_OP15 CCL-L SRPC-3546-Q1_2008_OP15

Input DLIS Files

DEFAULT PERFO_079LUP FN:77 PRODUCER 25-May-2008 16:41 2713.9 M 2657.2 M

Output DLIS Files

DEFAULT PERFO_080PUP FN:78 PRODUCER 25-May-2008 16:46

Schlumberger

Water Dump Pass

MAXIS Field Log

Input DLIS Files

DEFAULT PERFO_075LUP FN:73 PRODUCER 25-May-2008 15:35 2712.1 M 2663.0 M

Output DLIS Files

DEFAULT PERFO_076PUP FN:74 PRODUCER 25-May-2008 15:41 2709.1 M 2660.4 M

OP System Version: 15C0-309

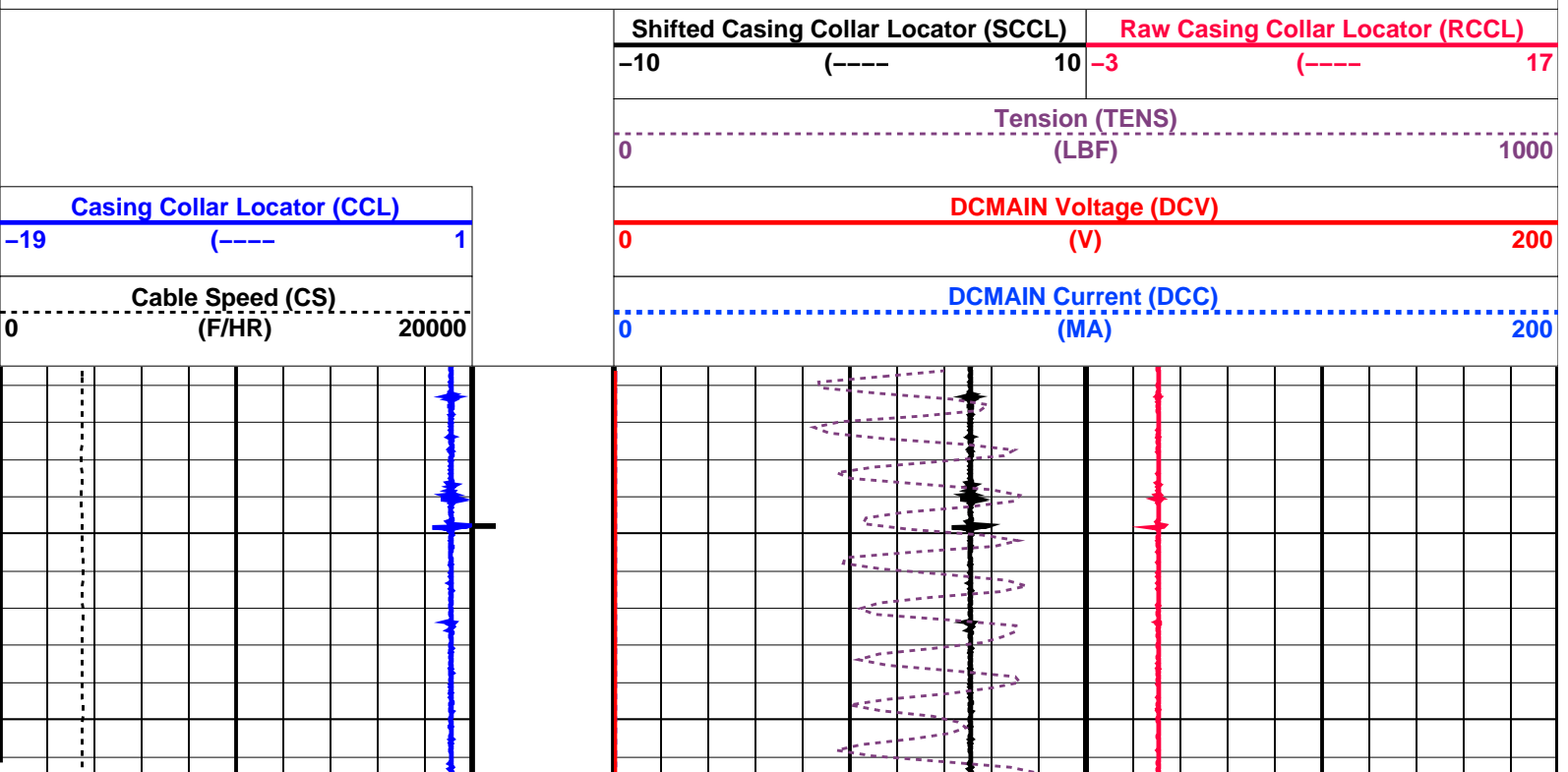
MCM

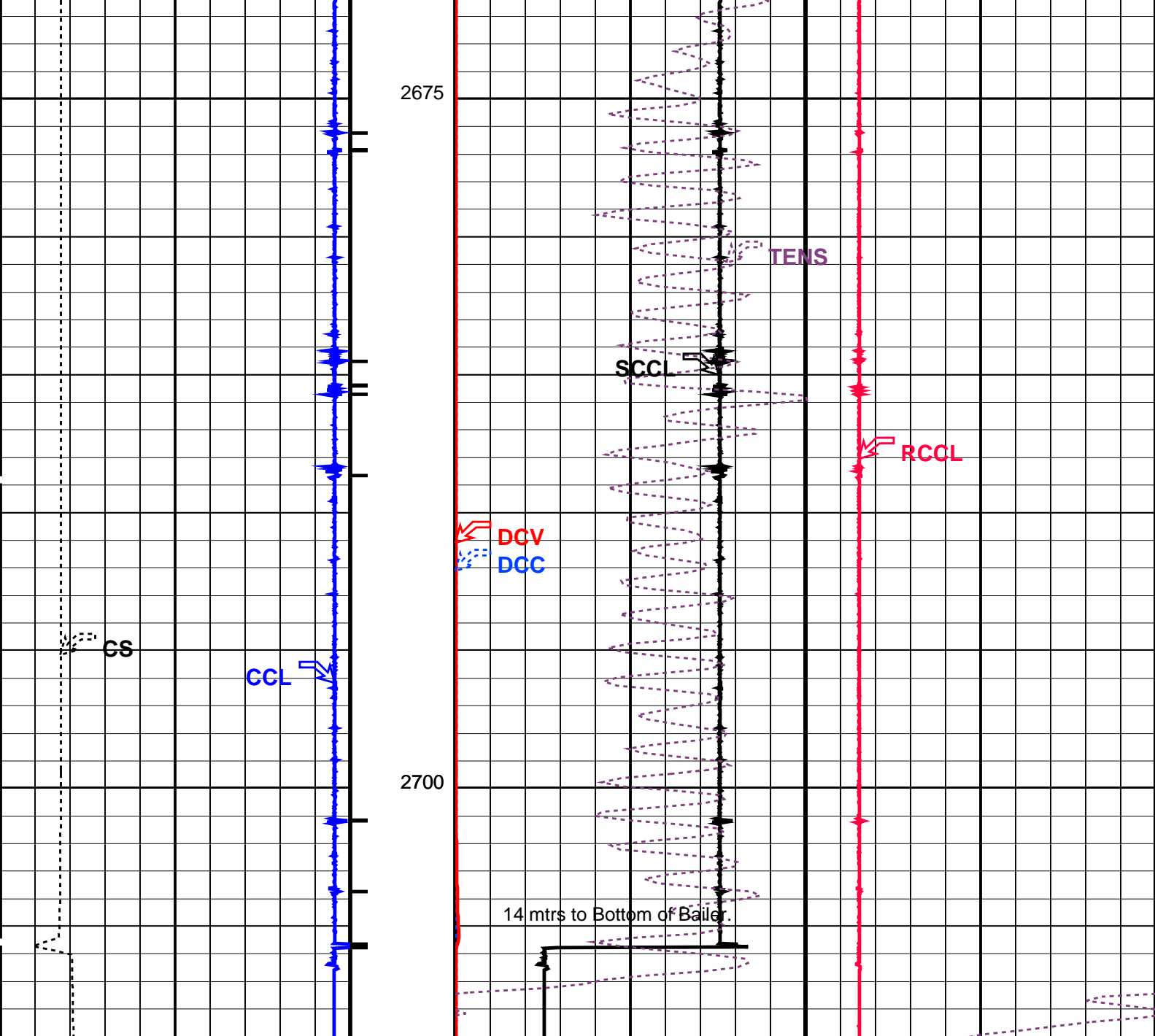
SHM_GUN SRPC-3546-Q1_2008_OP15 CCL-L SRPC-3546-Q1_2008_OP15

PIP SUMMARY

← Casing Collars

Time Mark Every 60 S





Cable Speed (CS) (F/HR)		0	20000
Casing Collar Locator (CCL) (----)		-19	1
DCMAIN Current (DCC) (MA)		0	200
DCMAIN Voltage (DCV) (V)		0	200
Tension (TENS) (LBF)		0	1000
Shifted Casing Collar Locator (SCCL) (----)	Raw Casing Collar Locator (RCCL) (----)	-10	10
		-3	17

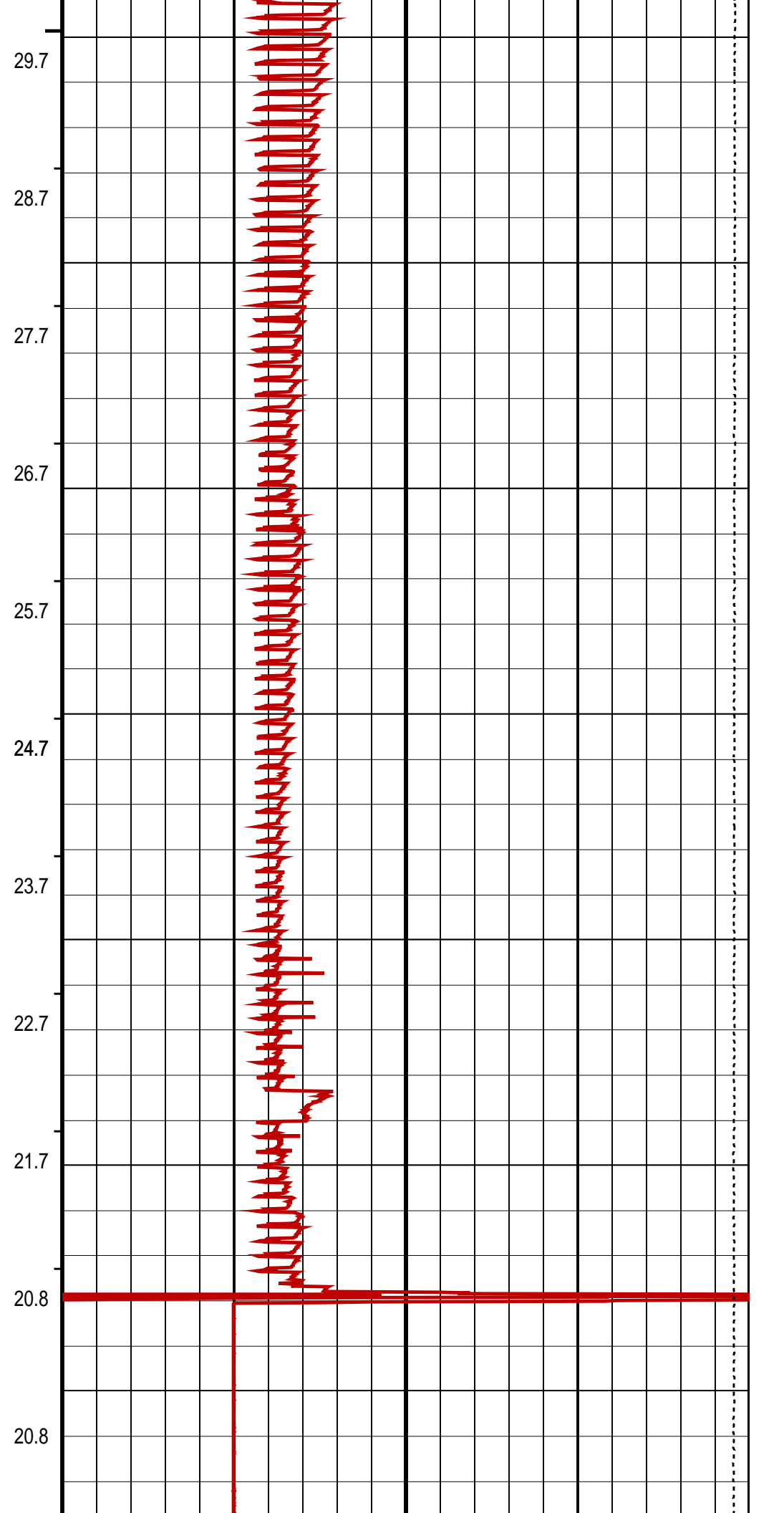
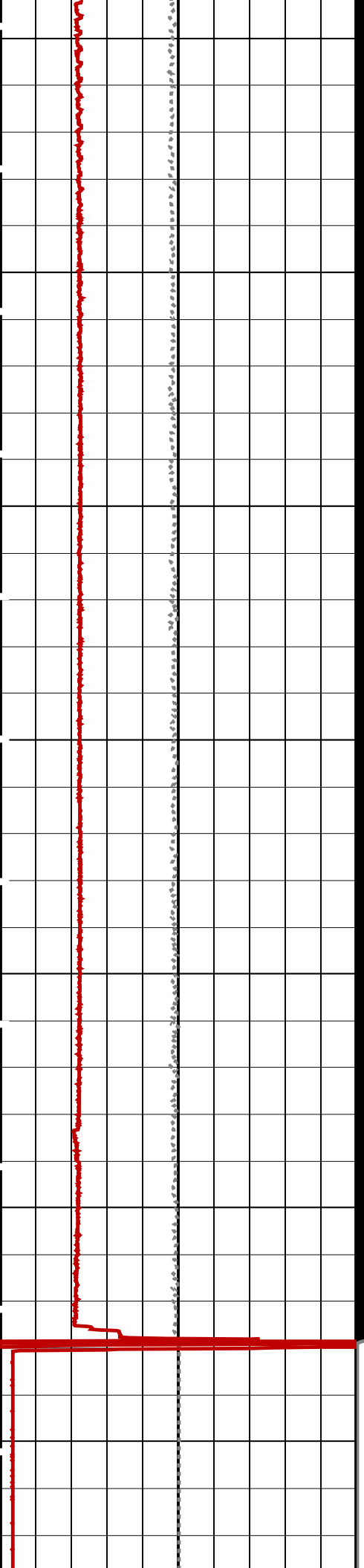
PIP SUMMARY

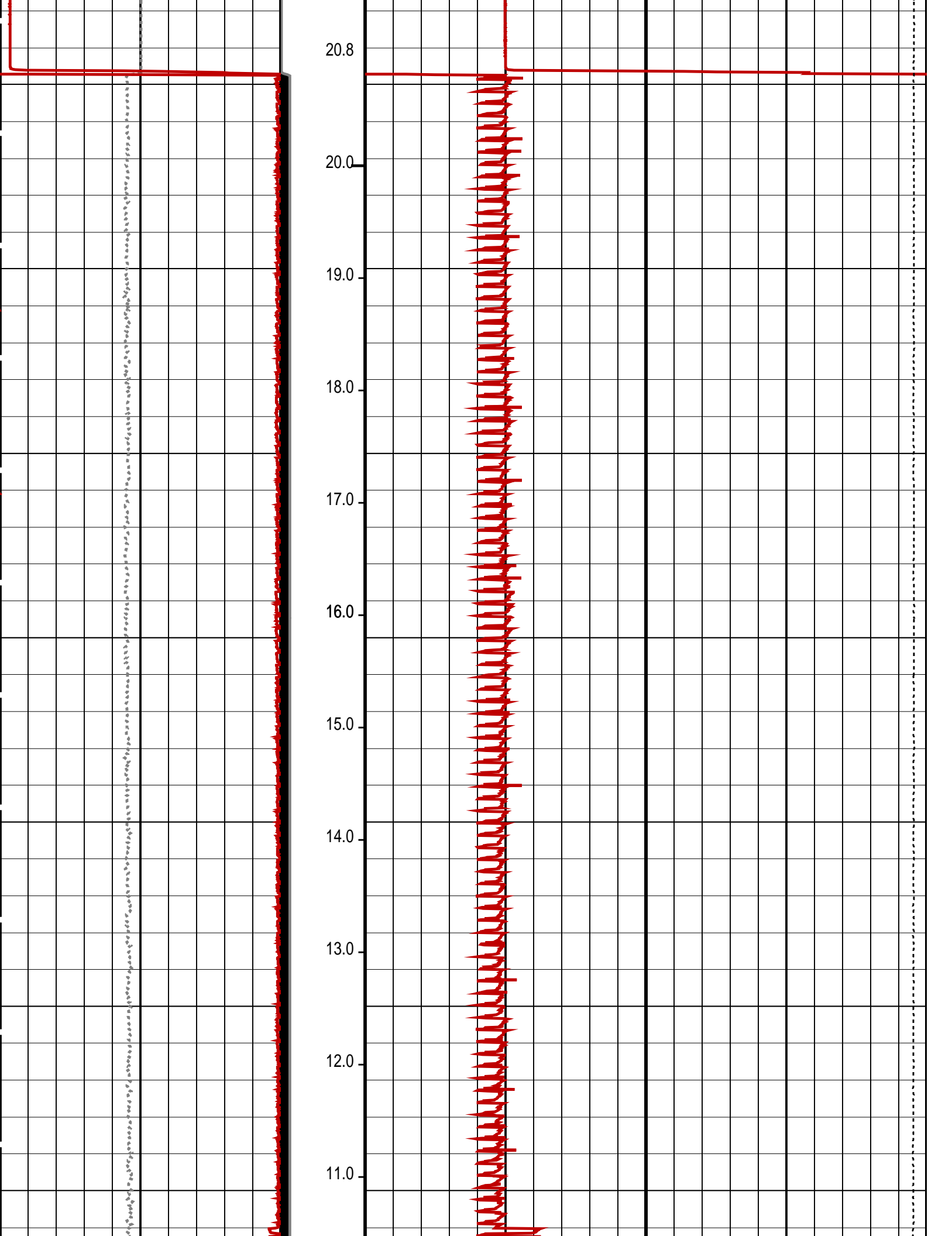
└─ Casing Collars

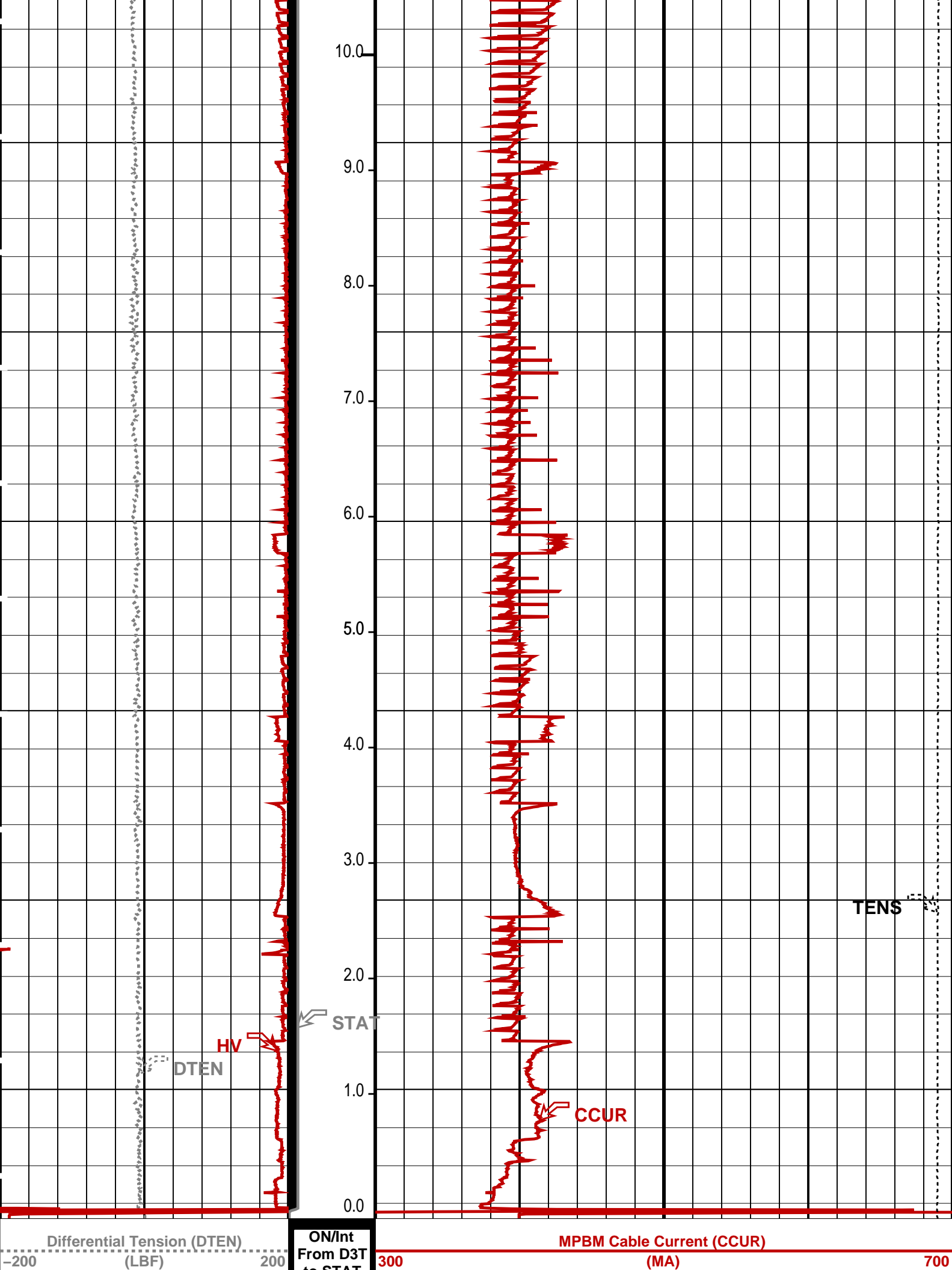
Time Mark Every 60 S

Parameters

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







MPSU Head Voltage (HV) 200 (V) 300		MPSU Run Status (STAT) 0 (----10	Tension (TENS) (LBF) 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-BA: MECHANICAL PLUGBACK SETTING UNIT Intensifier Pump	TRUE
Format: MPBT Vertical Scale: 1:600		Graphics File Created: 25-May-2008 13:00

OP System Version: 15C0-309

MCM

MPEX-FA SRPC-3546-Q1_2008_OP15 MPSU-BA SRPC-3546-Q1_2008_OP15
CCL-L SRPC-3546-Q1_2008_OP15

Output DLIS Files		
DEFAULT	CCL_067LUP	FN:65 PRODUCER 25-May-2008 13:00

Output DLIS Files		
DEFAULT	CCL_069LUP	FN:67 PRODUCER 25-May-2008 13:37

OP System Version: 15C0-309

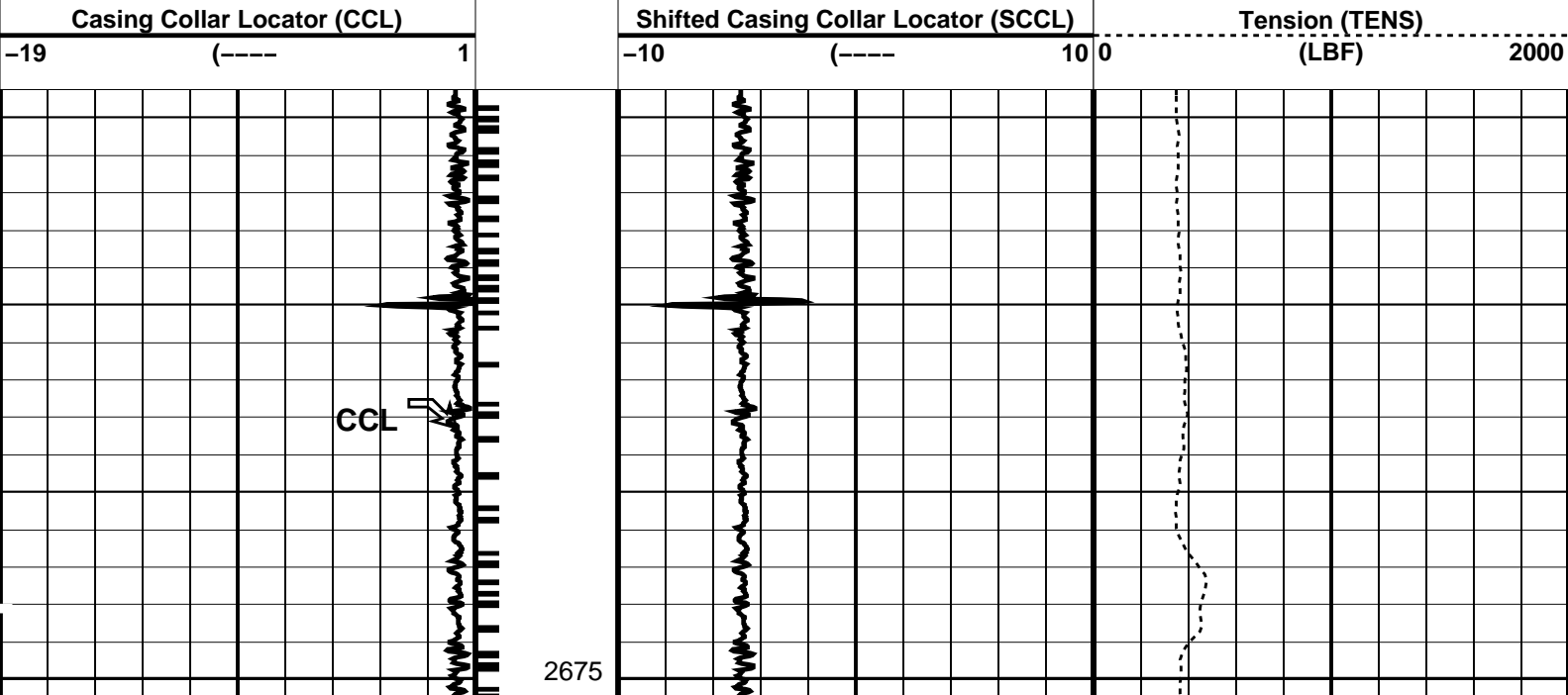
MCM

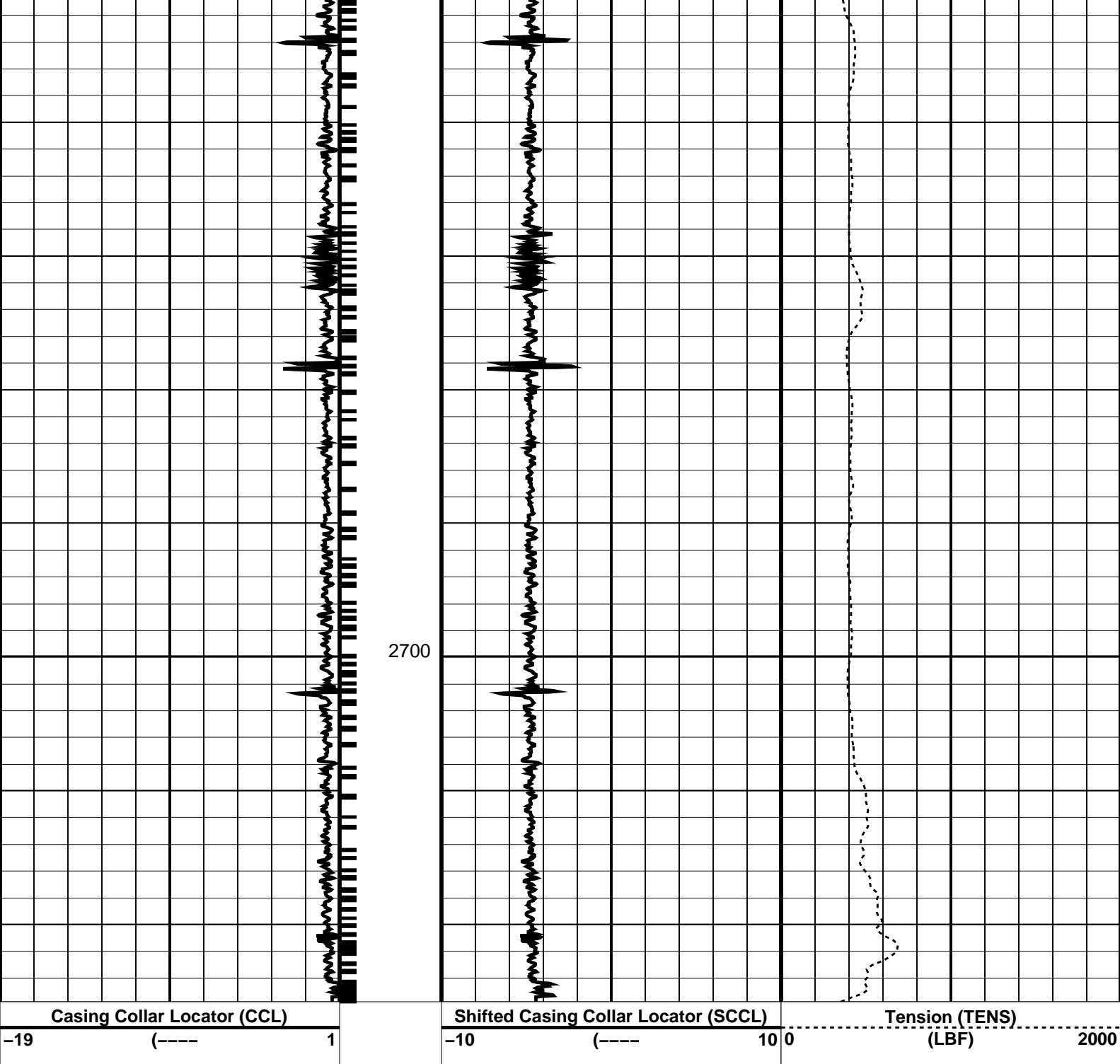
MPEX-FA SRPC-3546-Q1_2008_OP15 MPSU-BA SRPC-3546-Q1_2008_OP15
CCL-L SRPC-3546-Q1_2008_OP15

PIP SUMMARY

⌊ Casing Collars

Time Mark Every 60 S





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 Vertical Scale: 1:200 Graphics File Created: 25-May-2008 13:37

OP System Version: 15C0-309
MCM

MPEX-FA	SRPC-3546-Q1_2008_OP15	MPSU-BA	SRPC-3546-Q1_2008_OP15
CCL-L	SRPC-3546-Q1_2008_OP15		

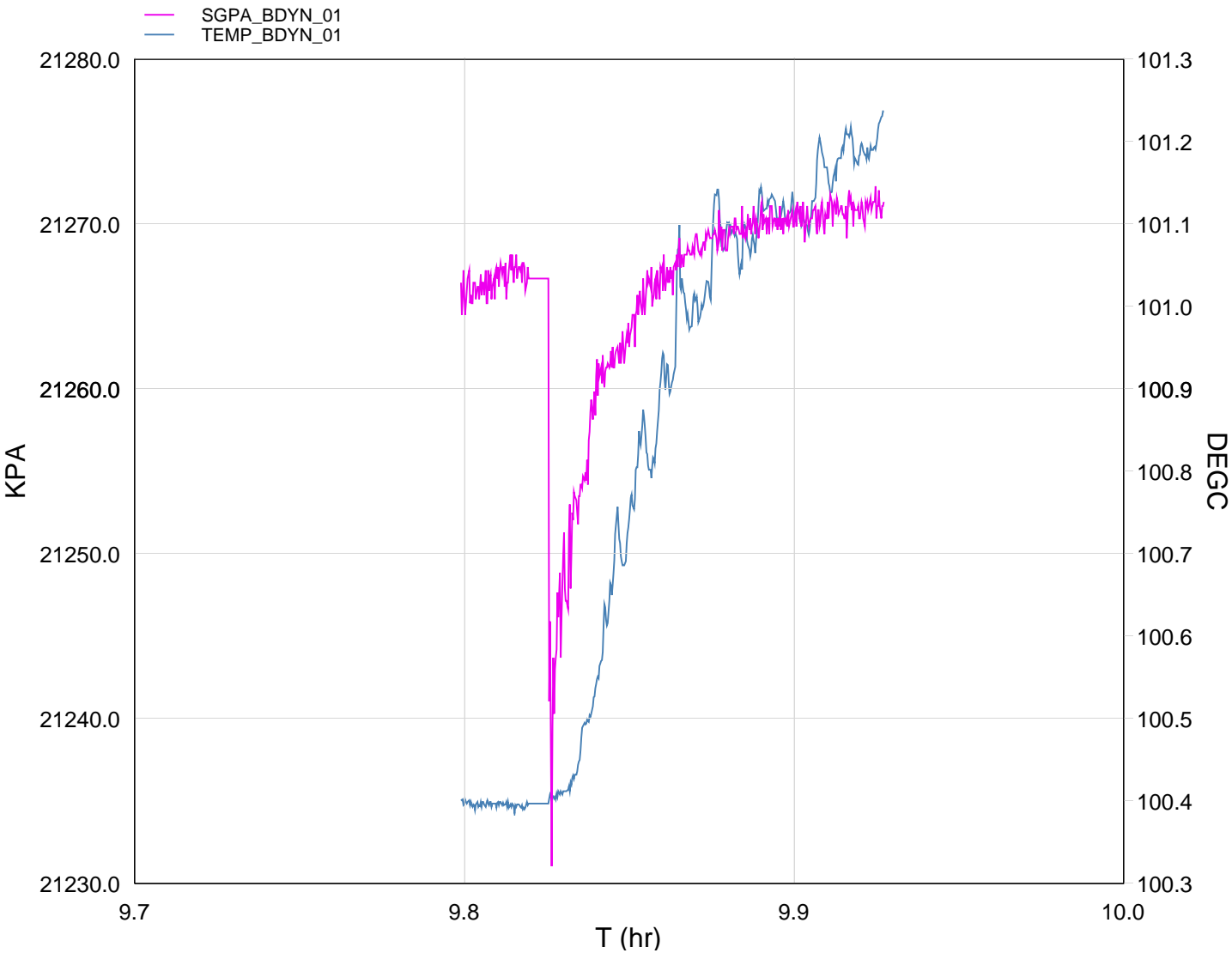
Output DLIS Files



GUN # 1

2685m to 2687m MDKB.

MAXIS Field Log



TIME	DEGF	PSIA
2850.0	214.12	3085.110
2820.0	214.14	3085.105
2790.0	214.03	3085.066
2760.0	213.98	3084.995
2730.0	214.05	3084.911
2700.0	213.96	3084.937
2670.0	213.81	3084.795

2070.0	213.81	3084.793
2640.0	213.87	3084.680
2610.0	213.44	3084.467
2580.0	213.24	3083.820
2550.0	212.95	3083.488
2520.0	212.74	3081.689
2490.0	212.71	3084.471
2460.0	212.71	3084.685
2430.0	212.71	3084.343
2400.0	212.72	3084.400

Schlumberger

GUN # 1
Shooting Pass

MAXIS Field Log

Company: Esso Australia Pty Ltd. Well: B-18a

Output DLIS Files

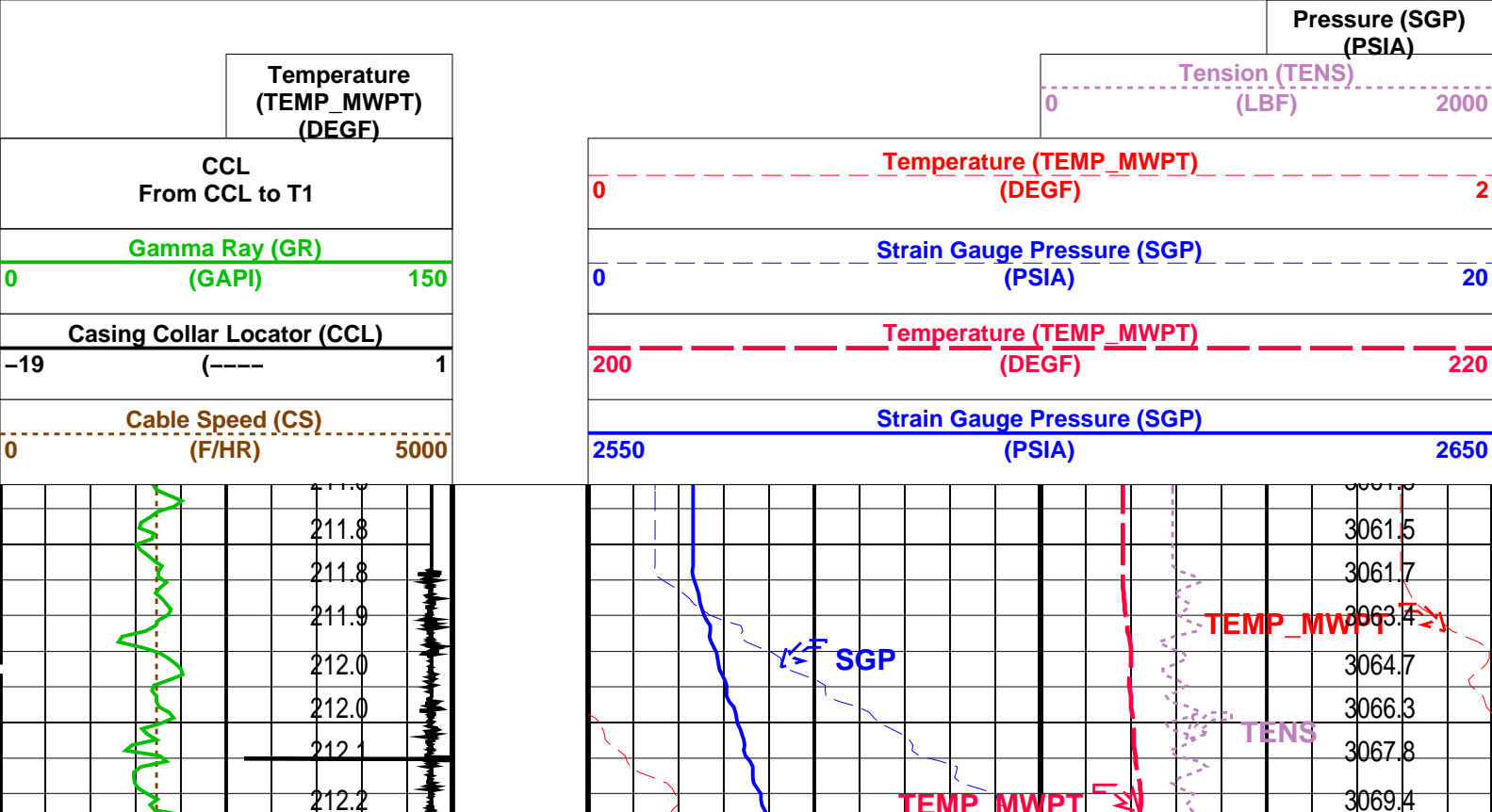
DEFAULT PERFO_057LUP FN:55 PRODUCER 25-May-2008 09:43 2692.9 M 2658.3 M

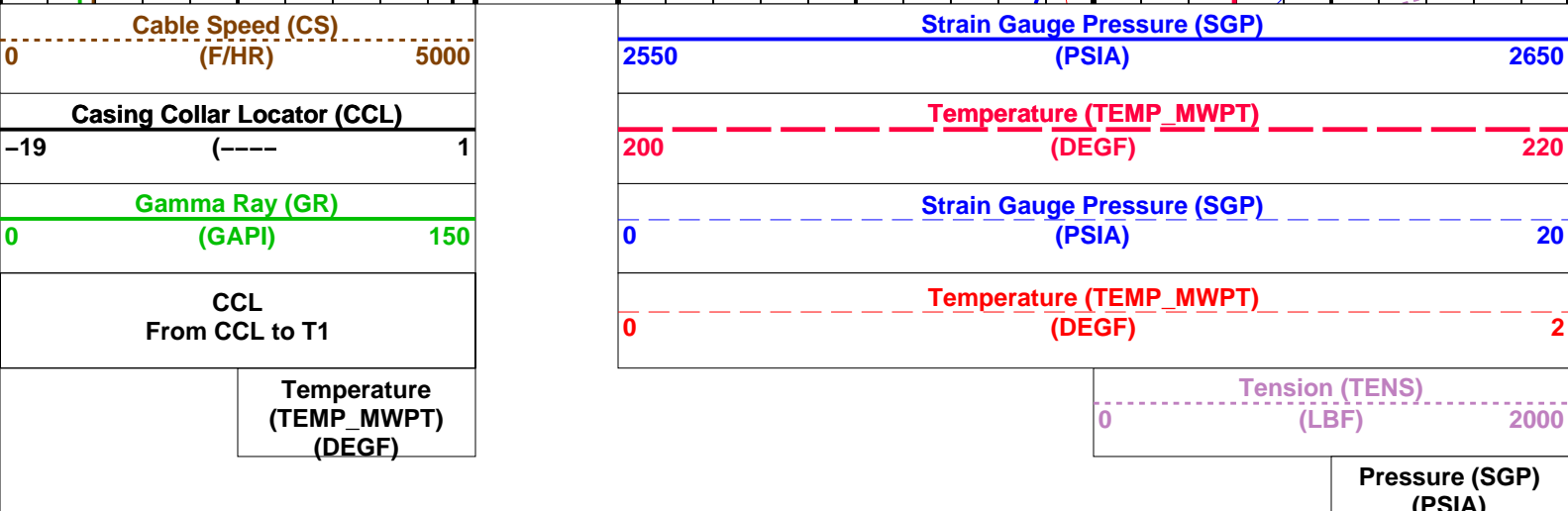
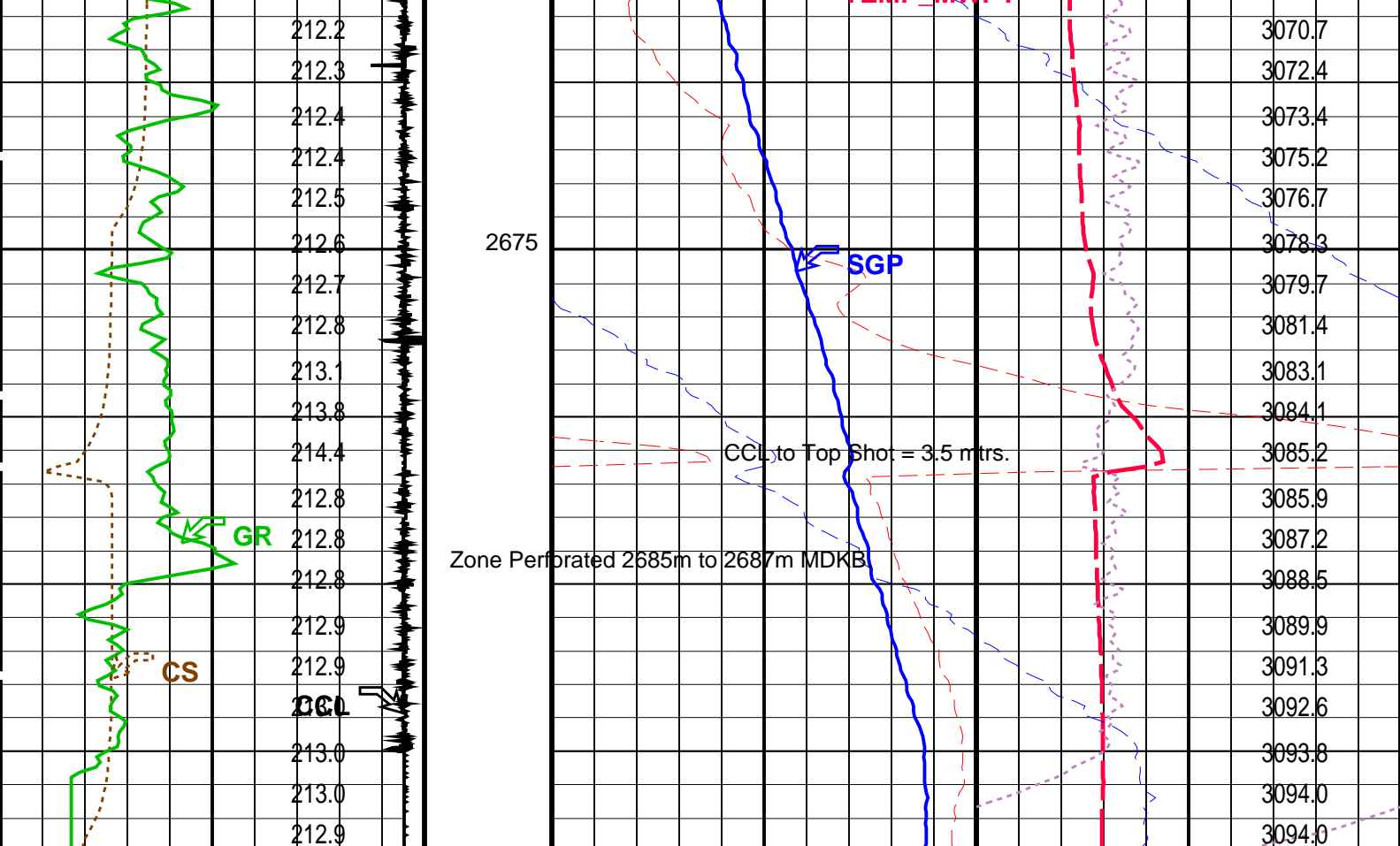
OP System Version: 15C0-309
MCM

MWP_GUN SRPC-3546-Q1_2008_OP15 MWPT-CA SRPC-3546-Q1_2008_OP15
MWGT-AA SRPC-3546-Q1_2008_OP15

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: 25-May-2008 09:43

OP System Version: 15C0-309
MCM

MWP_GUN SRPC-3546-Q1_2008_OP15 MWPT-CA SRPC-3546-Q1_2008_OP15
MWGT-AA SRPC-3546-Q1_2008_OP15

Output DLIS Files



GUN # 1

Correlation Pass

MAXIS Field Log

Company: Esso Australia Pty Ltd.

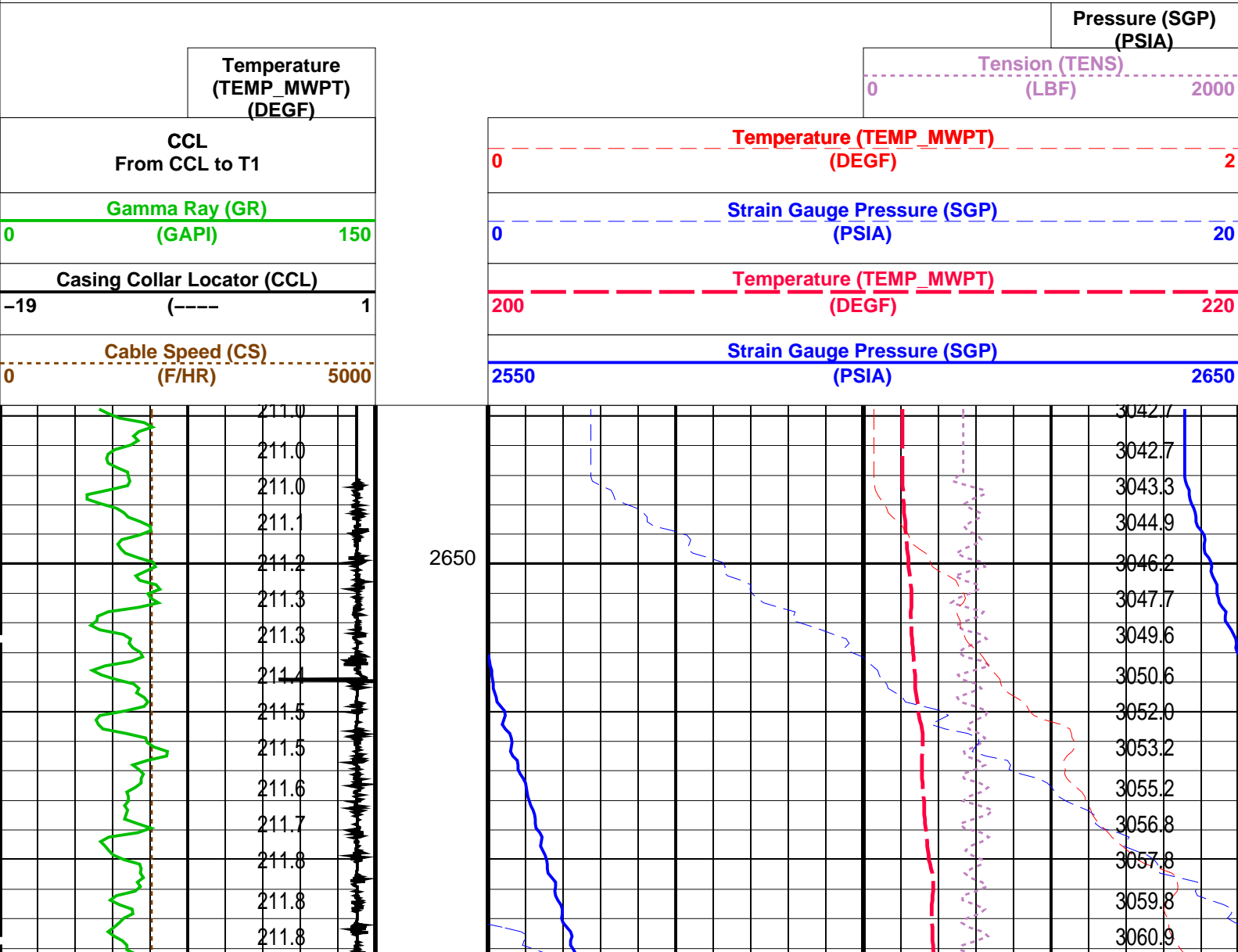
Well: B-18a

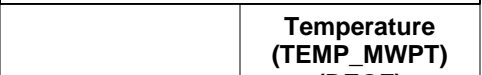
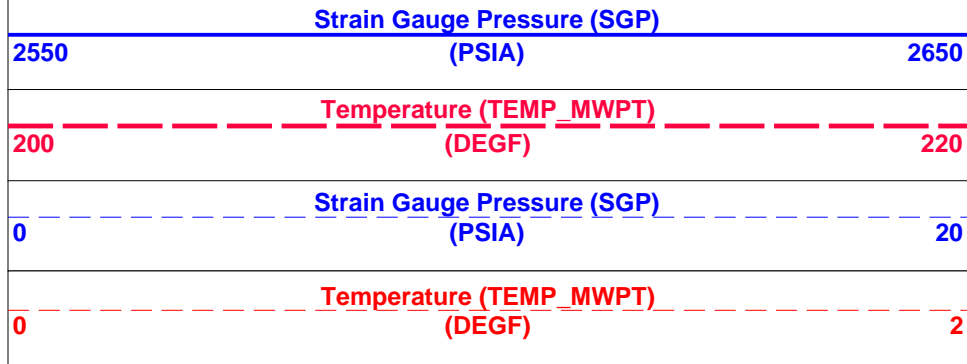
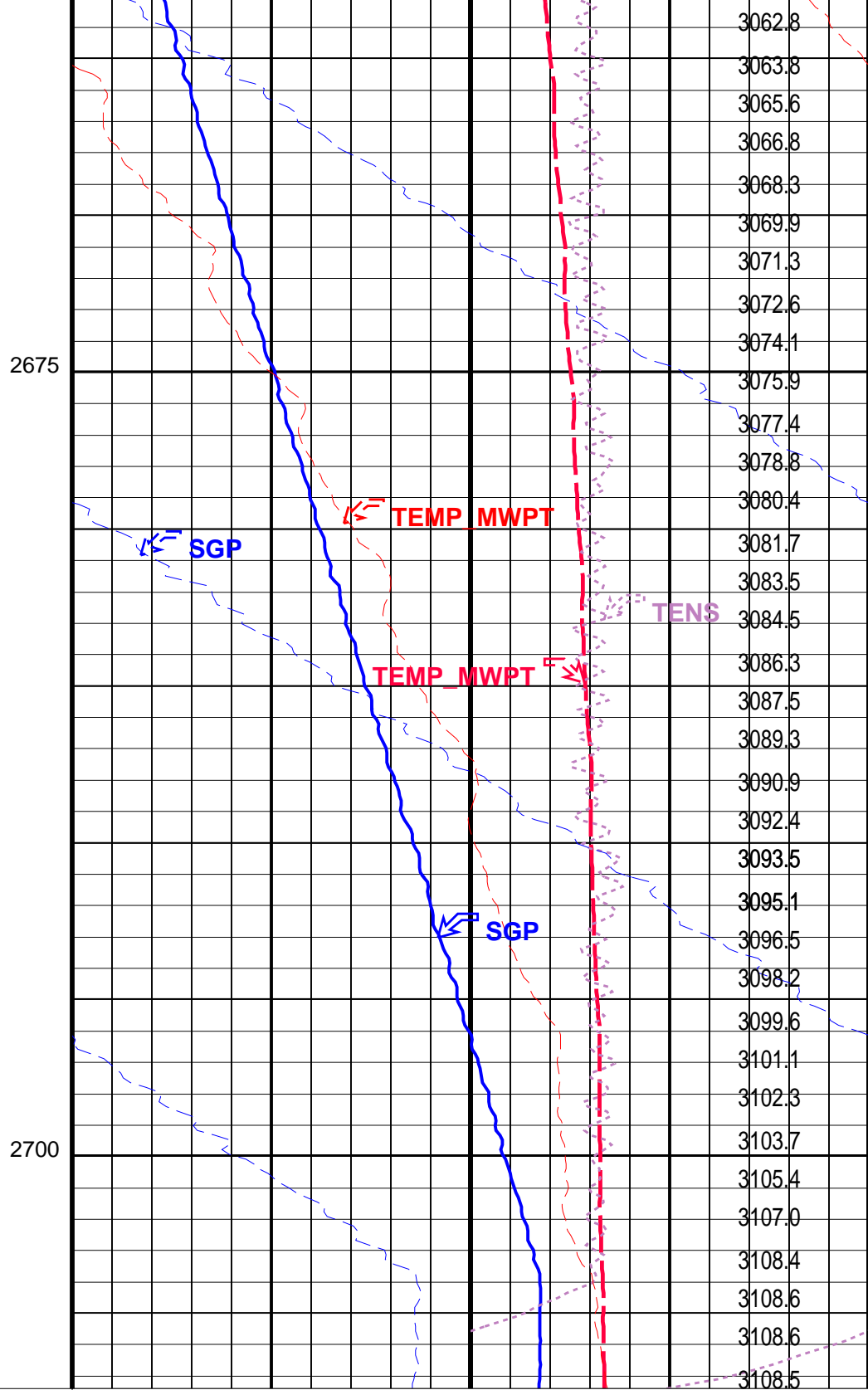
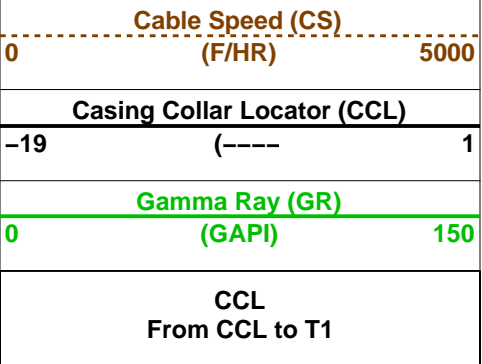
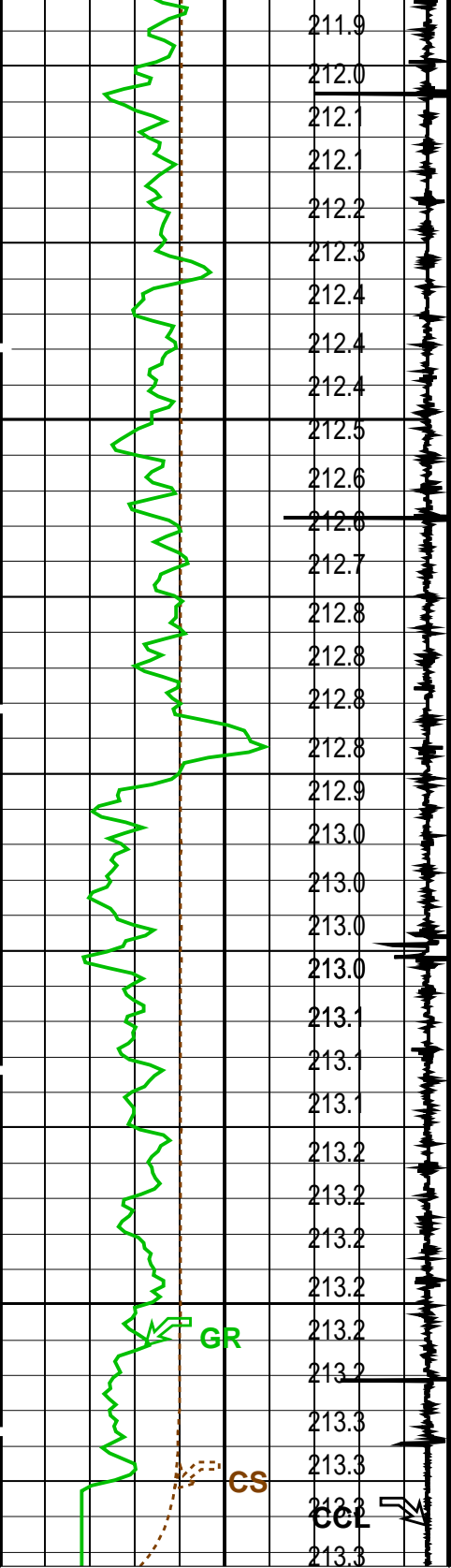
Output DLIS Files

DEFAULT	PERFO_056LUP	FN:54	PRODUCER	25-May-2008 09:35	2707.4 M	2644.6 M
OP System Version: 15C0-309						
MCM						
MWP_GUN	SRPC-3546-Q1_2008_OP15	MWPT-CA	SRPC-3546-Q1_2008_OP15			
MWGT-AA	SRPC-3546-Q1_2008_OP15					

PIP SUMMARY

Time Mark Every 60 S





(DEGF)				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: 25-May-2008 09:35	
OP System Version: 15C0-309					
MCM					
MWP_GUN		SRPC-3546-Q1_2008_OP15		MWPT-CA SRPC-3546-Q1_2008_OP15	
MWGT-AA		SRPC-3546-Q1_2008_OP15			
Output DLIS Files					
DEFAULT		PERFO_056LUP		FN:54 PRODUCER 25-May-2008 09:35	
Company: Esso Australia Pty Ltd.					
Well: B-18a					
Field: Kingfish B					
Rig: Crane / Prod # 4					
Country: Australia					
2 1/8" Phased Powerjet					
MWPT Perforation Record					
5" Posiset Plug Setting Record					

Schlumberger