

Company: Esso Australia Pty Ltd.

Well: A-20a
Field: Bream A
Rig: Crane / Prod 4
Country: Australia

2 1/8" Powerjet MWPT Perforation Record
7" Posiset Plug Setting Record
Cement Dump Record

Rig: Crane / Prod 4
Field: Bream A
Location: Gippsland
Well: A-20a
Company: Esso Australia Pty Ltd.

LOCATION			
Gippsland	Elev.:	K.B.	32.82 m
Basin		G.L.	-59.00 m
Bass Strait		D.F.	32.82 m
Permanent Datum:	M.S.L	Elev.:	0.00 m
Log Measured From:	D.F	32.82 m	above Perm. Datum
Drilling Measured From:	D.F		
State: Victoria	Max. Well Deviation 57 deg	Longitude 147 46'15"E	Latitude 038 30'04"S

Logging Date	5-Nov-2009		
Run Number	2 through 6		
Depth Driller	2326 m		
Schlumberger Depth	2222 m		
Bottom Log Interval	2216 m		
Top Log Interval	2150 m		
Casing Fluid Type	Production Fluids		
Salinity			
Density			
Fluid Level	680 m		
BIT/CASING/TUBING STRING			
Bit Size	8.500 in		
From	1123.2 m		
To	2326 m		
Casing/Tubing Size	7.000 in		
Weight	26 lbn/ft		
Grade	L-80		
From	12.2 m		
To	2321 m		
Maximum Recorded Temperatures	206 degF		
Logger On Bottom	5-Nov-2009	23:44	
Unit Number	889	AUSL / PROD 4	
Recorded By	S Gilbert. O Darby		
Witnessed By	B White		

PVT DATA			
Oil Density	Run 1	Run 2	R
Water Salinity			
Gas Gravity			
Bo			
Bw			
1/Bg			
Bubble Point Pressure			
Bubble Point Temperature			
Solution GOR			
Maximum Deviation	57 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			

Date Created: 22-OCT-2009 3:04:54

Logging Cable

Type:	2-32ZT
Serial Number:	207505
Length:	6421 M
<hr/>	
Conveyance Method:	Wireline
Rig Type:	Rigless

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	
Reference Log Run Number:	Solar Composite Log
Reference Log Date:	22-Oct-2008
Subsequent Trip Down Log Correction:	

1. IDW used as primary depth control
2. Z Chart used as secondary depth control.
3. Full pressure gear used in rig up , surface Zero check incorrect.
- 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.

OTHER SERVICES2
OS1:
OS2:
OS3:
OS4:
OS5:

REMARKS: RUN NUMBER 2

Set 7" 26 lb/ft Posiset plug with Top of Seal at 2215.5m MDKB and then dump approx 1m of cement on top .



















Perforation Zone = 2212.5 m to 2214.5m MDKB
Top Shot @ 2212.5m MDKB
CCL to Top Shot = 3.6 m
CCL Stop Depth = 2208.9 m MDKB
CCL to Bottom of Dummy Plug = 5.5m
7" Posiset Plug top of Seal Set @ 2215.5m MDKB
CCL to Top of Seal = 7 m
CCL stop Depth = 2208.5m MDKB
1m of Cement dumped in 1 Run.

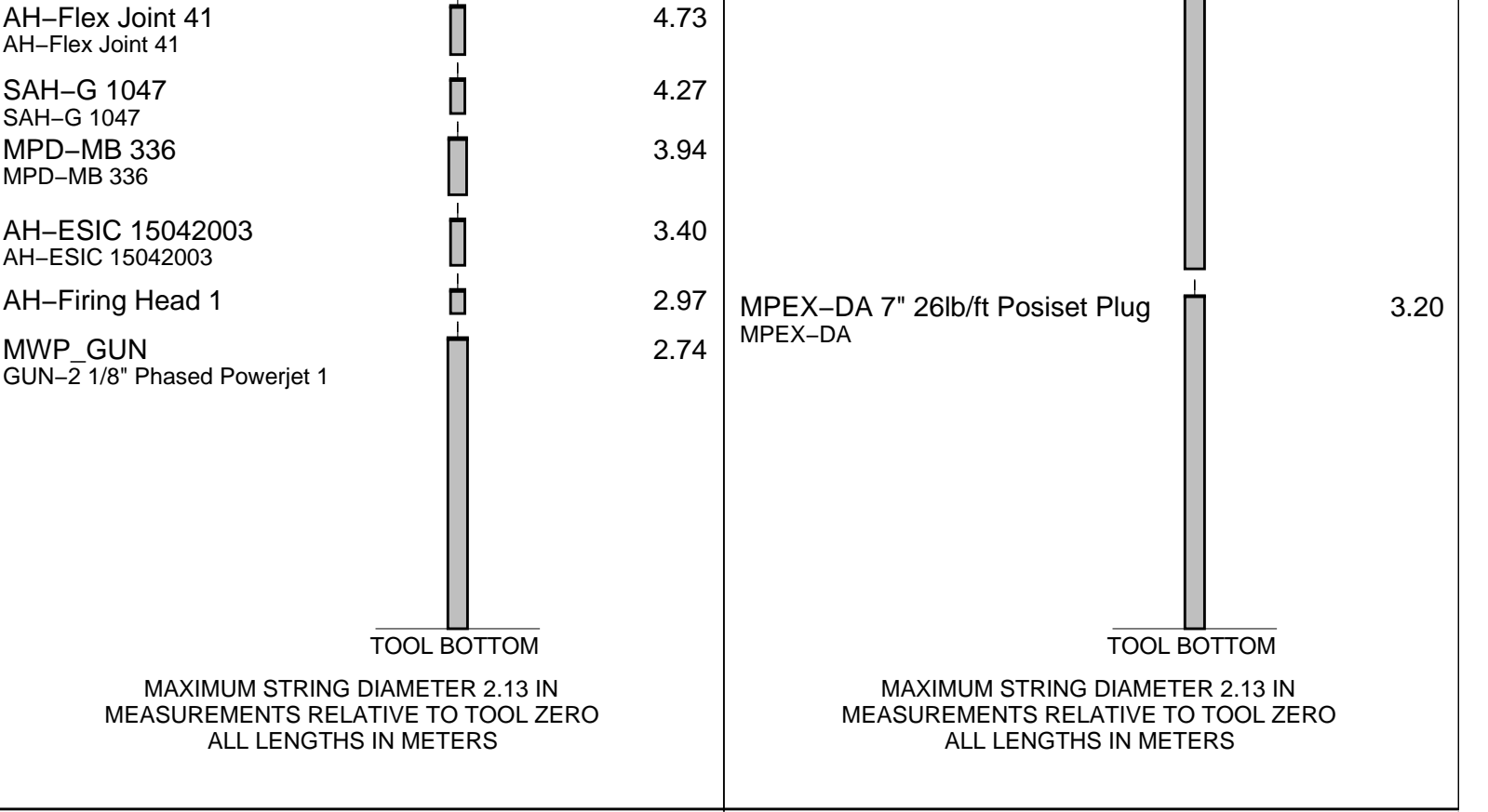
Crew :A Pratt , G Martin

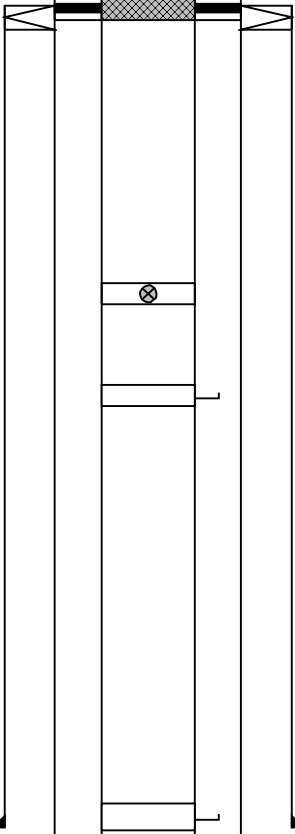
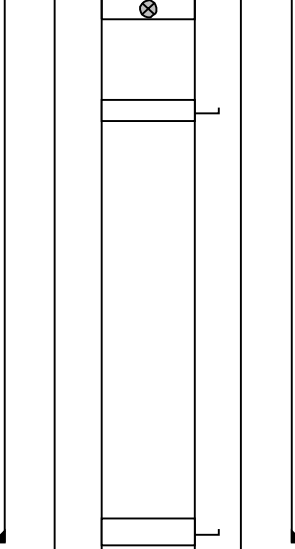
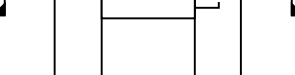
RUN 1			RUN 2		
SERVICE ORDER #:		B297-00019	SERVICE ORDER #:		
PROGRAM VERSION:		17C0-154	PROGRAM VERSION:		
FLUID LEVEL:		680 m	FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

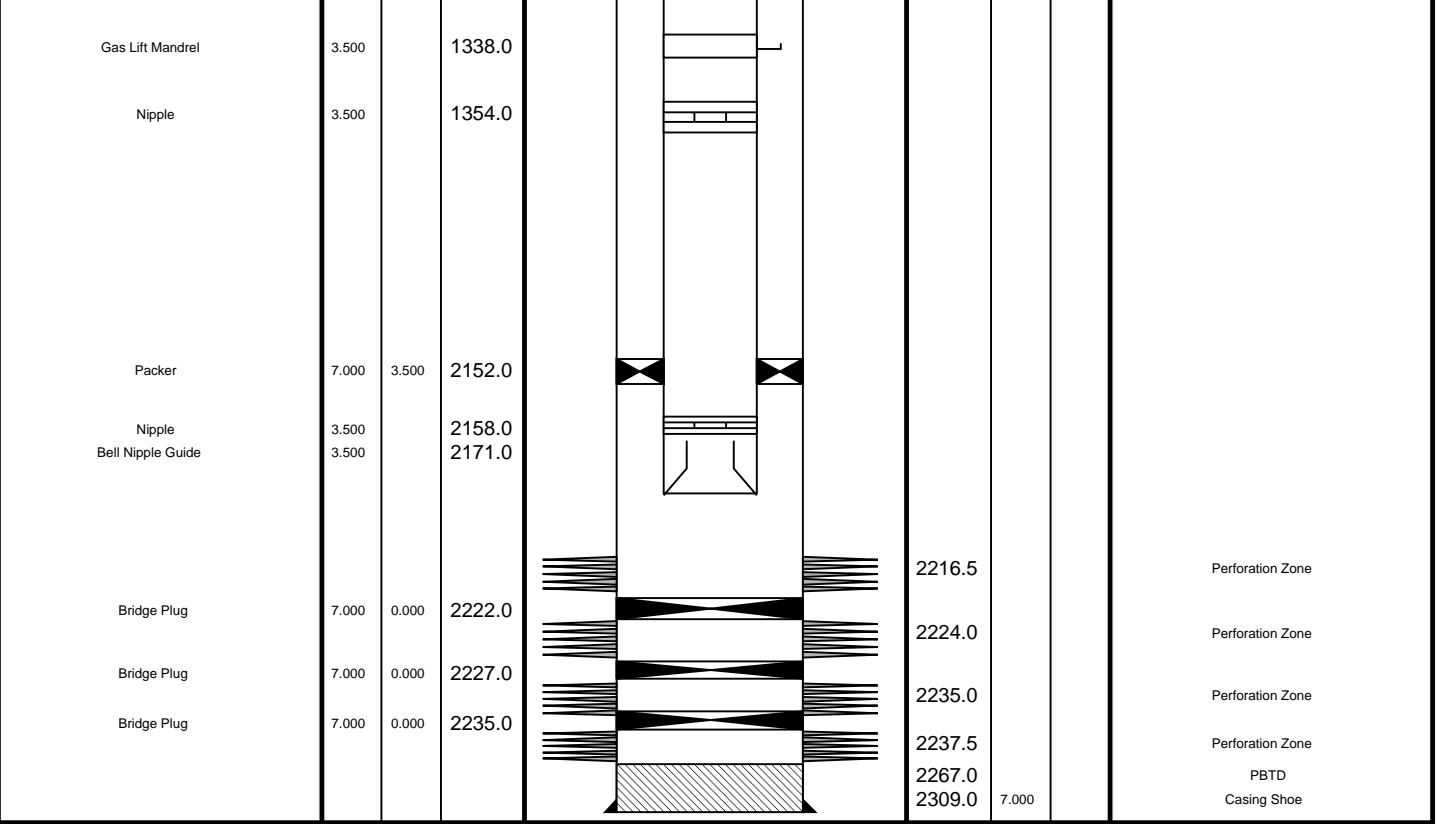
EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		

SURFACE EQUIPMENT			SURFACE EQUIPMENT		
MWPM-AA			MPBM		

DOWNHOLE EQUIPMENT				DOWNHOLE EQUIPMENT			
AH-SWBS-B 789 AH-SWBS-B 789			12.39	AH-SWBS-B 785 AH-SWBS-B 785			13.84
AH-SWBS-B 788 AH-SWBS-B 788			11.70	AH-SWBS-B 786 AH-SWBS-B 786			13.15
AH-SWBS-B 787 AH-SWBS-B 787			11.01	AH-SWBS-B 787 AH-SWBS-B 787			12.47
AH-SWBS-B 786 AH-SWBS-B 786			10.33	AH-SWBS-B 788 AH-SWBS-B 788			11.78
AH-SWBS-B 785 AH-SWBS-B 785			9.64	AH-SWBS-B 789 AH-SWBS-B 789			11.10
MH-SWHS-A 759 MH-SWHS-A 759			8.96	MH-SWHS-A 759 MH-SWHS-A 759			10.41
AH-124 7002			8.63	CCL-PCCL 08055 CCL-PCCL 8055			10.07
MWGT-AA 24			8.53	MPSU-CA 1102 MPSU-CA 1102			TOOL ZERO
MWPG-AA 24							
MWGH-AA 24							
MWPT-CA 11 MWPH-AA 94 MWPS-AA 11			7.55				9.61
CCL SMWP Pres SMWP Temp Tension			TOOL ZERO	CCL Cable Cur Head Volt Tension			



Production String	(in)		(m)	Well Schematic	(m)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
Tubing	3.500		11.0		12.9	10.750		Casing String
Tubing Hanger	7.000	3.500	10.0		12.2	7.000		Casing String
					12.2	10.750	7.000	Liner Hanger
Shutin Valve	3.500		450.0					
Gas Lift Mandrel	3.500		595.0					
Gas Lift Mandrel	3.500		1154.0		1123.1	10.750		Casing Shoe



Job Events Summary

MAXIS Field Log

Schlumberger Job Event Summary						
	Time	Elapsed Time	Depth (M)		File	
Log Pass (up)	4-Nov-2009 22:36	000:06	2223.4	- 2176.6	RST_PSP_009LUP	
RST - GR Pass						
Log Pass (up)	4-Nov-2009 22:51	000:08	2223.4	- 2184.3	RST_PSP_014LUP	
RST - Sigma pass static						
Station Log	4-Nov-2009 23:05	002:45	2216.0		RST_PSP_015LTP	
Flowing well						
Log Pass (up)	5-Nov-2009 2:03	000:07	2223.8	- 2191.5	RST_PSP_017LUP	
RST Sigma pass flowing						
Log Pass (up)	5-Nov-2009 23:01	000:04	2213.3	- 2186.6	PERFO_042LUP	
Gun Correlation pass						
Log Pass (up)	5-Nov-2009 23:09	000:20	2212.7	- 2182.7	PERFO_043LUP	
Gun - Shooting pass						
Station Log	5-Nov-2009 23:12	000:14	2208.9		PERFO_044LTP	
Gun - draw down						

Log Pass (up)	6-Nov-2009	0:57	000:08	2218.0 -	2143.0	PERFO_052LUP
Dummy plug - Correlation pass						
Log Pass (up)	6-Nov-2009	3:08	000:04	2200.5 -	2169.9	CCL_065LUP
Plug - Correlation pass						
Simulated Log	6-Nov-2009	3:22	000:31			CCL_066LUP
Plug - Setting pass						
Simulated Log	6-Nov-2009	17:13	000:27			PERFO_073LUP
OP checked DB						
Log Pass (up)	6-Nov-2009	18:58	000:06	2204.6 -	2140.5	PERFO_076LUP
Dumped water						
Log Pass (up)	6-Nov-2009	21:36	000:06	2203.1 -	2139.4	PERFO_082LUP
Dumped cement						

Schlumberger

Cement Dump Pass

MAXIS Field Log

PERFO2 Operational Summary Listing

Device	Status	Req Depth (M)	Obs Depth (M)	Time Used
DB	Used	2201.2	2201.2	Fri Nov 06 21:39:47 200

Input DLIS Files

DEFAULT	PERFO_082LUP	FN:80	PRODUCER	06-Nov-2009 21:36	2203.1 M	2139.4 M
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Output DLIS Files

DEFAULT	PERFO_085PUP	FN:83	PRODUCER	06-Nov-2009 21:46	2204.6 M	2140.9 M
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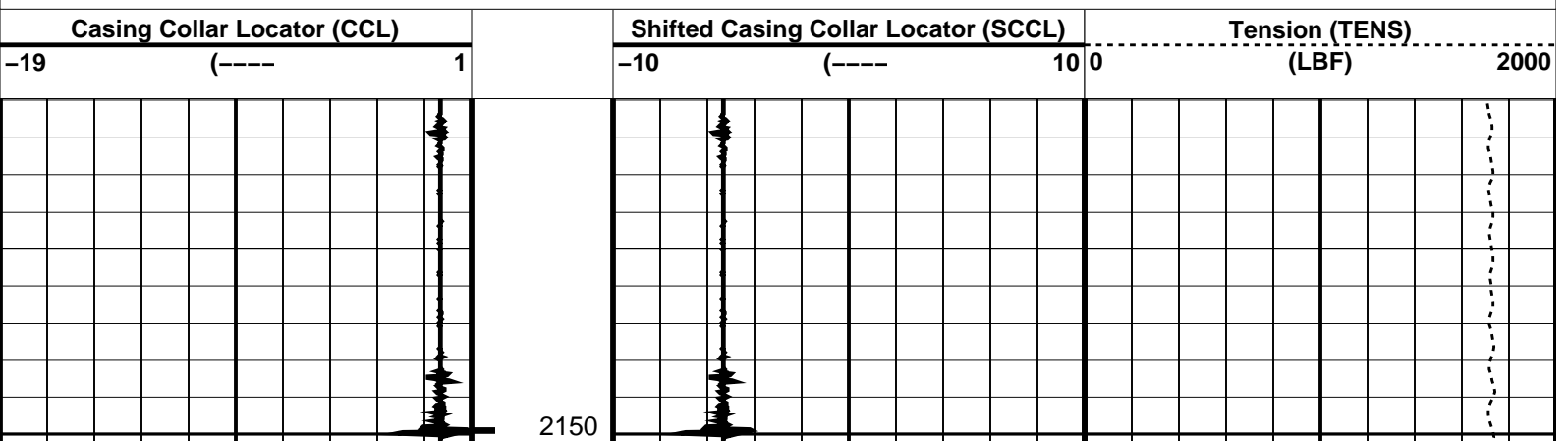
OP System Version: 17C0-154

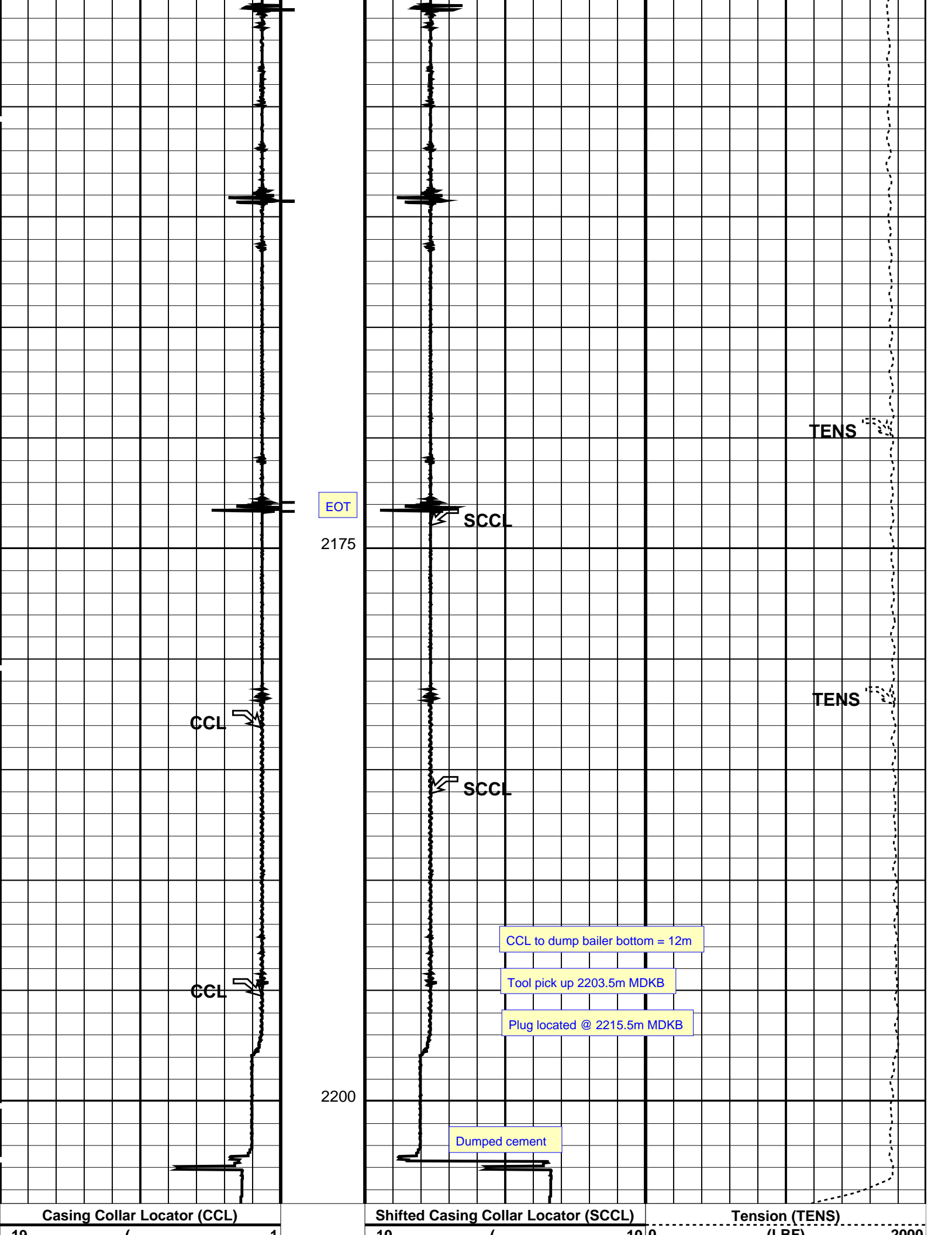
CCL-PCCL	17C0-154	SHM_GUN	17C0-154
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PIP SUMMARY

└─ Casing Collars

☒ Time Mark Every 60 S





PIP SUMMARY

└ Casing Collars

Time Mark Every 60 S

Parameters

DLIS Name		Description	Value	
	CCL-PCCL: Casing Collar Locator			
CCLD		CCL reset delay	12	IN
CCLT		CCL Detection Level	0.3	V
	System and Miscellaneous			
DO		Depth Offset for Playback	1.5	M
PP		Playback Processing	NORMAL	

Format: PERFO Vertical Scale: 1:200 Graphics File Created: 06-Nov-2009 21:46

OP System Version: 17C0-154

CCL-PCCL	17C0-154	SHM_GUN	17C0-154
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Input DLIS Files

DEFAULT	PERFO_082LUP	FN:80	PRODUCER	06-Nov-2009 21:36	2203.1 M	2139.4 M
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Output DLIS Files

DEFAULT	PERFO_085PUP	FN:83	PRODUCER	06-Nov-2009 21:46
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Water Dump Pass

MAXIS Field Log

PERF02 Operational Summary Listing

Device	Status	Req Depth (M)	Obs Depth (M)	Time Used
DB	Used	2202.5	2202.5	Fri Nov 06 19:01:11 200

Input DLIS Files

DEFAULT	PERFO_076LUP	FN:74	PRODUCER	06-Nov-2009 18:58	2204.6 M	2140.5 M
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Output DLIS Files

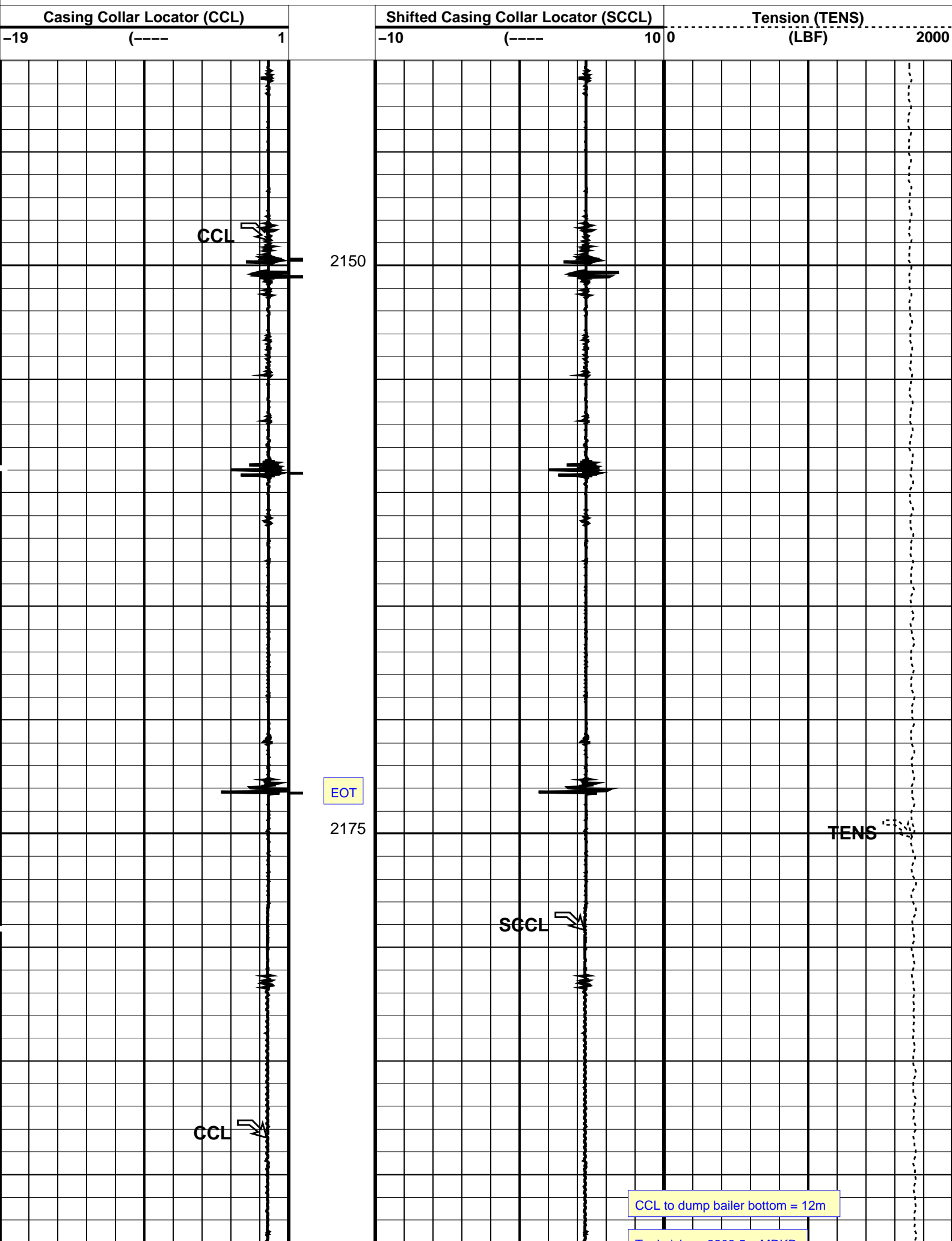
DEFAULT	PERFO_079PUP	FN:77	PRODUCER	06-Nov-2009 19:09	2205.1 M	2140.9 M
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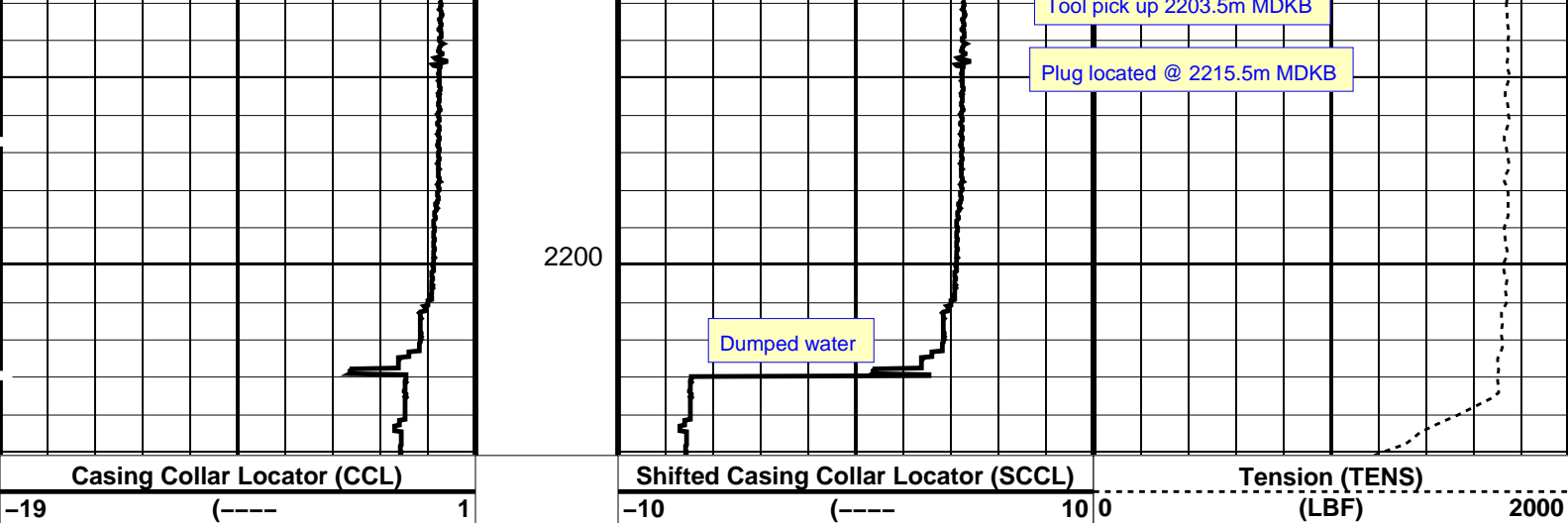
OP System Version: 17C0-154

CCL-PCCL	17C0-154	SHM_GUN	17C0-154
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PIP SUMMARY

└ Casing Collars





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	
DO	System and Miscellaneous	
PP	Depth Offset for Playback	0.4 M
	Playback Processing	NORMAL

Format: PERFO Vertical Scale: 1:200 Graphics File Created: 06-Nov-2009 19:09

OP System Version: 17C0-154			
CCL-PCCL	17C0-154	SHM_GUN	17C0-154

Input DLIS Files					
DEFAULT	PERFO_076LUP	FN:74	PRODUCER	06-Nov-2009 18:58	2204.6 M 2140.5 M

Output DLIS Files					
DEFAULT	PERFO_079PUP	FN:77	PRODUCER	06-Nov-2009 19:09	



Log Away From Plug Setting

MAXIS Field Log

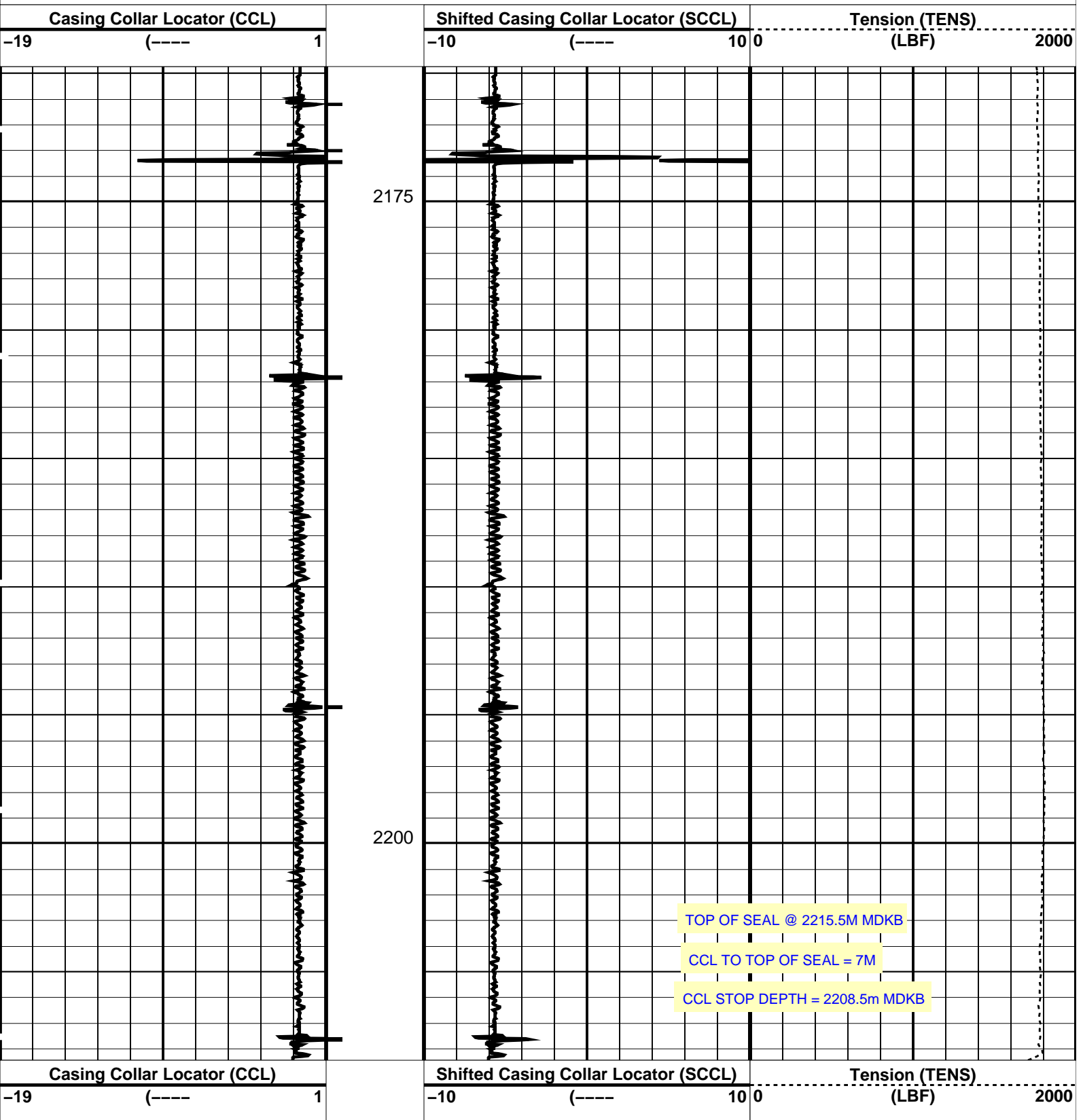
Output DLIS Files					
DEFAULT	CCL_069LUP	FN:67	PRODUCER	06-Nov-2009 04:01	2208.4 M 2169.7 M

OP System Version: 17C0-154			
MPEX-DA	17C0-154	MPSU-CA	17C0-154

PIP SUMMARY

Casing Collars

Time Mark Every 60 S



PIP SUMMARY

Casing Collars

Time Mark Every 60 S

Parameters

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

CCL

CCL Detection Level

0.3

V

Format: PERFO Vertical Scale: 1:200 Graphics File Created: 06-Nov-2009 04:01

OP System Version: 17C0-154

MPEX-DA 17C0-154 MPSU-CA 17C0-154
CCL-PCCL 17C0-154

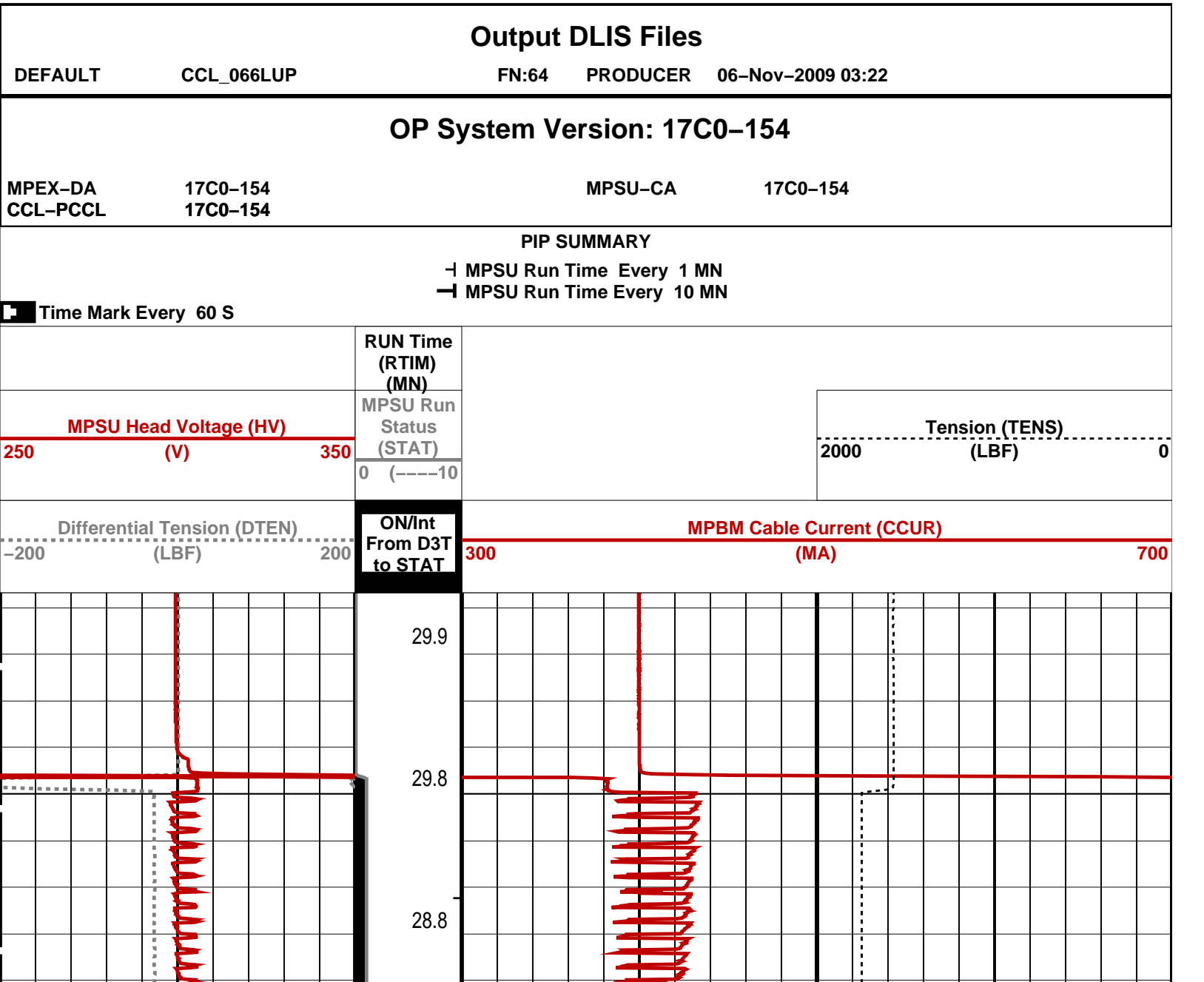
Output DLIS Files

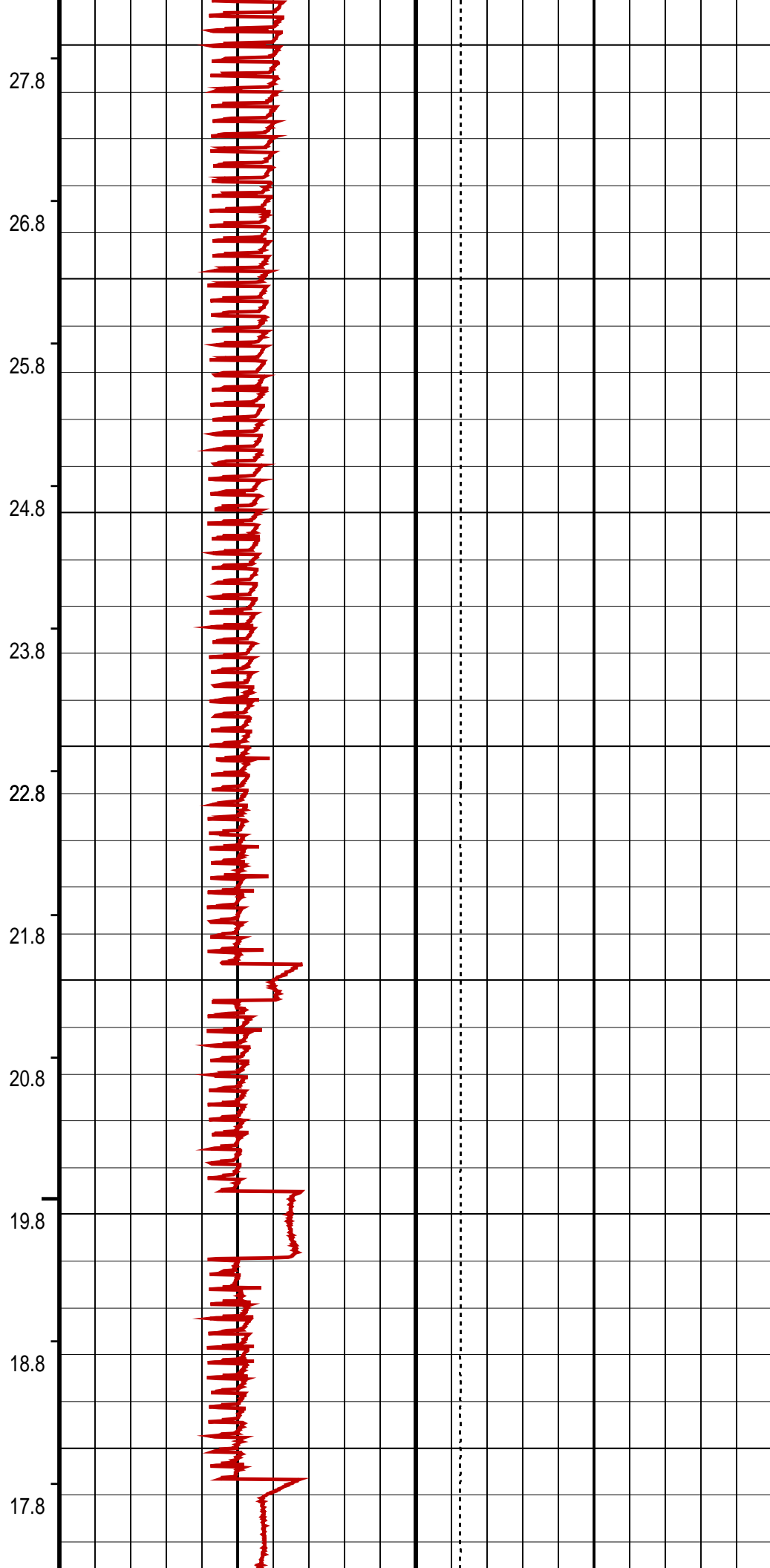
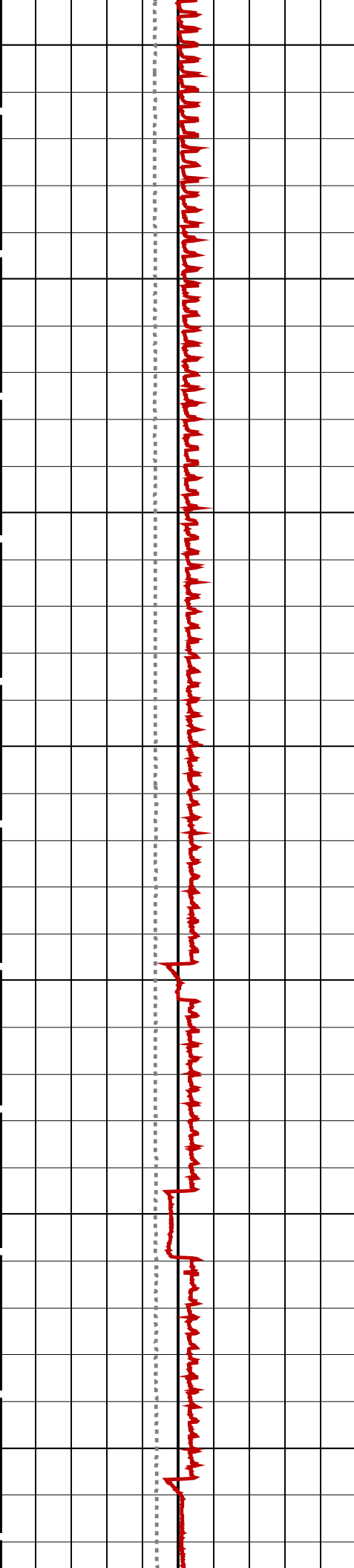
DEFAULT CCL_069LUP FN:67 PRODUCER 06-Nov-2009 04:01

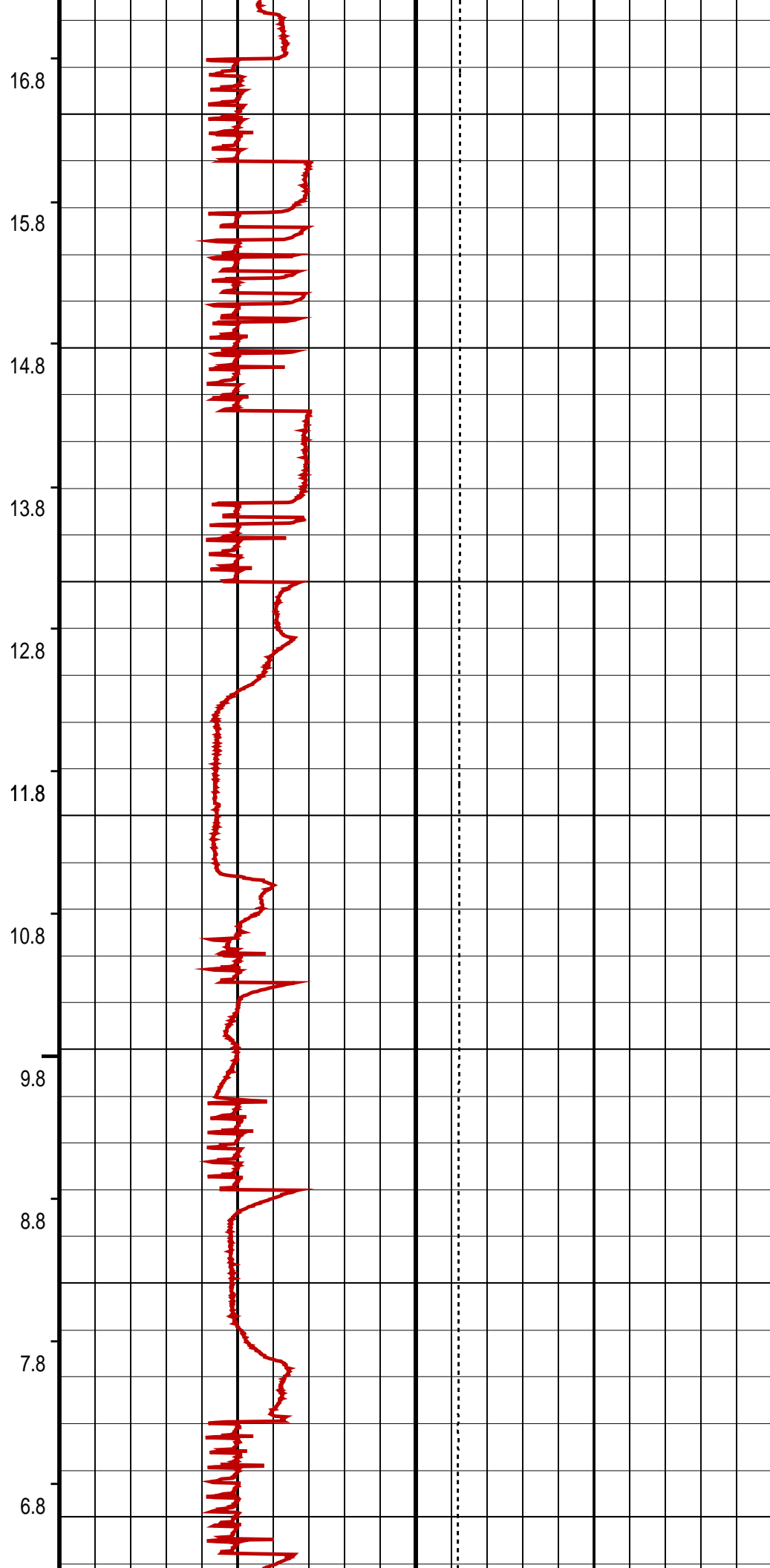
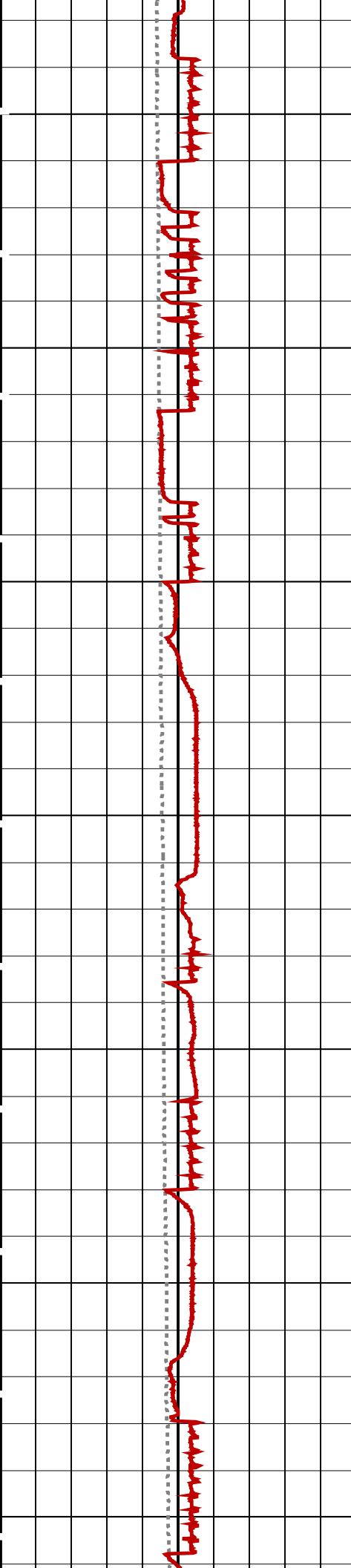
Schlumberger

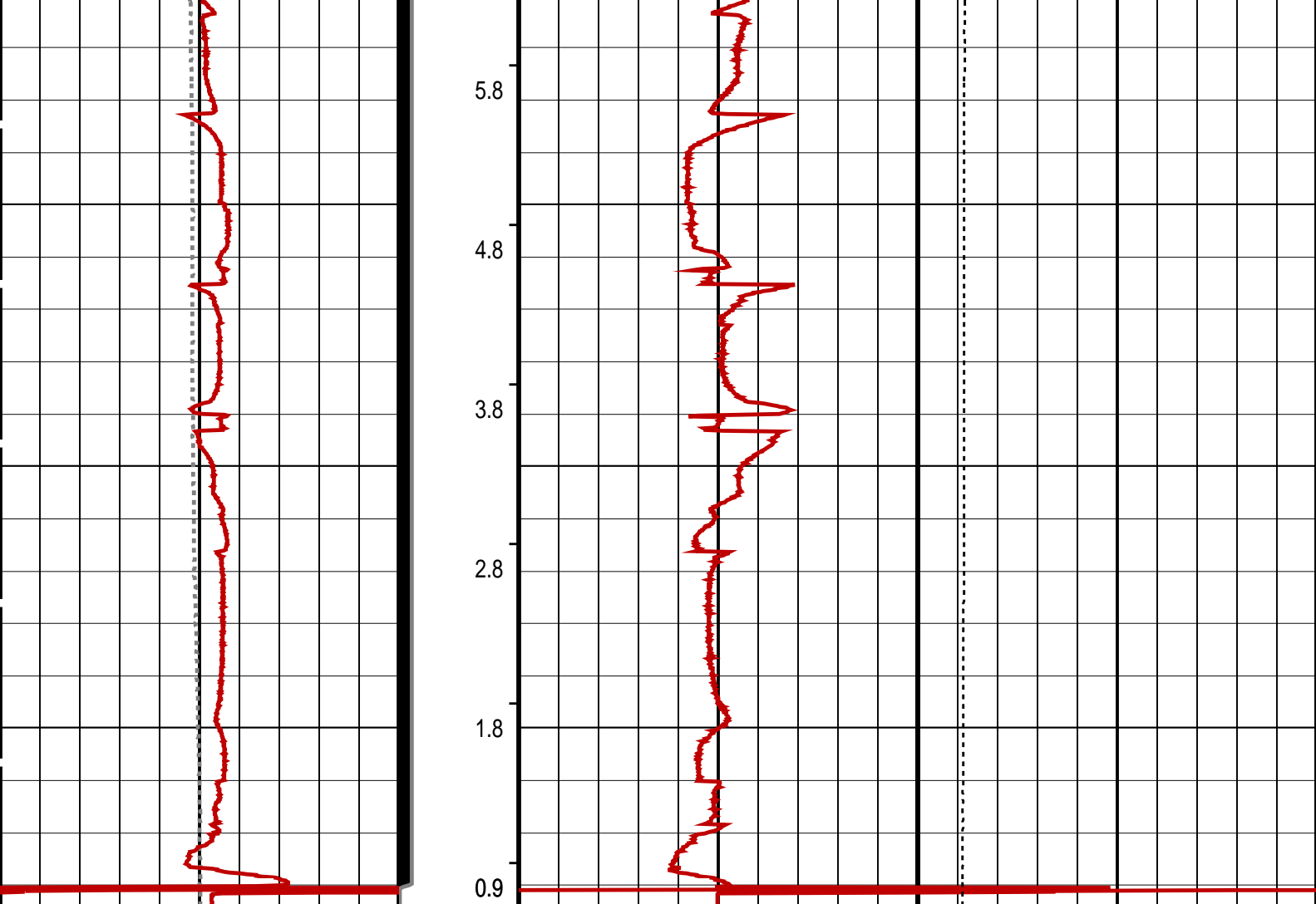
7" Posiset Plug Setting
Top of Seal @ 2515.5m MDKB

MAXIS Field Log









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: 06-Nov-2009 03:22

OP System Version: 17C0-154

MPEX-DA	17C0-154	MPSU-CA	17C0-154
CCL-PCCL	17C0-154		

Output DLIS Files

DEFAULT	CCL_066LUP	FN:64	PRODUCER	06-Nov-2009 03:22
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Plug Correlation Pass

MAXIS Field Log

Output DLIS Files

DEFAULT CCL_065LUP FN:63 PRODUCER 06-Nov-2009 03:08 2200.5 M 2169.9 M

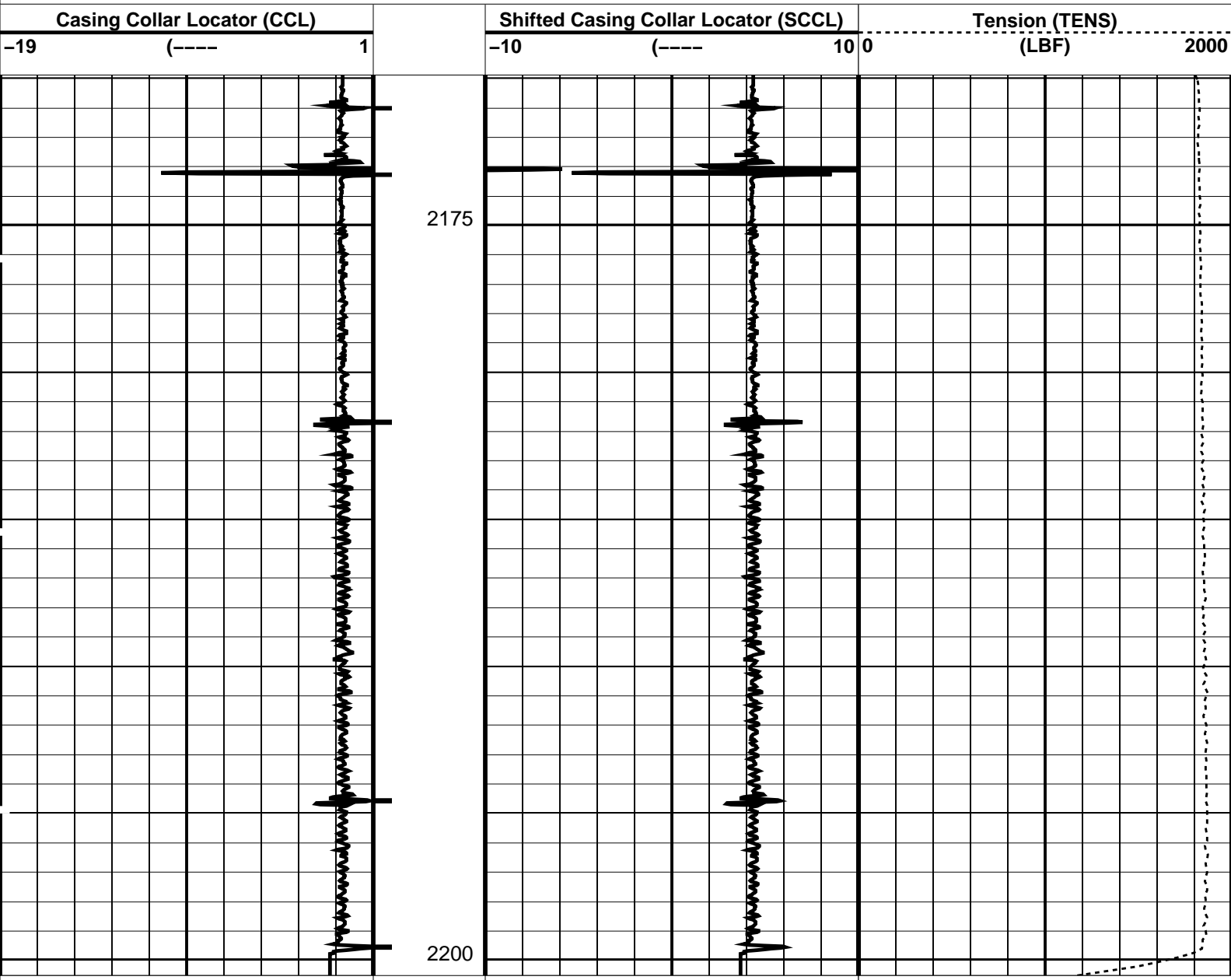
OP System Version: 17C0-154

MPEX-DA 17C0-154 MPSU-CA 17C0-154
CCL-PCCL 17C0-154

PIP SUMMARY

└─ Casing Collars

Time Mark Every 60 S



Casing Collar Locator (CCL)		Shifted Casing Collar Locator (SCCL)		Tension (TENS)	
-19	(----	1	-10	(----	10 0
					(LBF) 2000

PIP SUMMARY

Casing Collars

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
CCL-PCCL: 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: 06-Nov-2009 03:08

OP System Version: 17C0-154

MPEX-DA	17C0-154	MPSU-CA	17C0-154
CCL-PCCL	17C0-154		

Output DLIS Files

DEFAULT	CCL_065LUP	FN:63	PRODUCER	06-Nov-2009 03:08
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Schlumberger

2.13" Dummy Plug Pass

MAXIS Field Log

Company: Esso Australia Pty Ltd.	Well: A-20a
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Input DLIS Files

DEFAULT	PERFO_052LUP	FN:50	PRODUCER	06-Nov-2009 00:57	2218.0 M	2143.0 M
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Output DLIS Files

DEFAULT	PERFO_054PUP	FN:52	PRODUCER	06-Nov-2009 01:06	2217.3 M	2139.8 M
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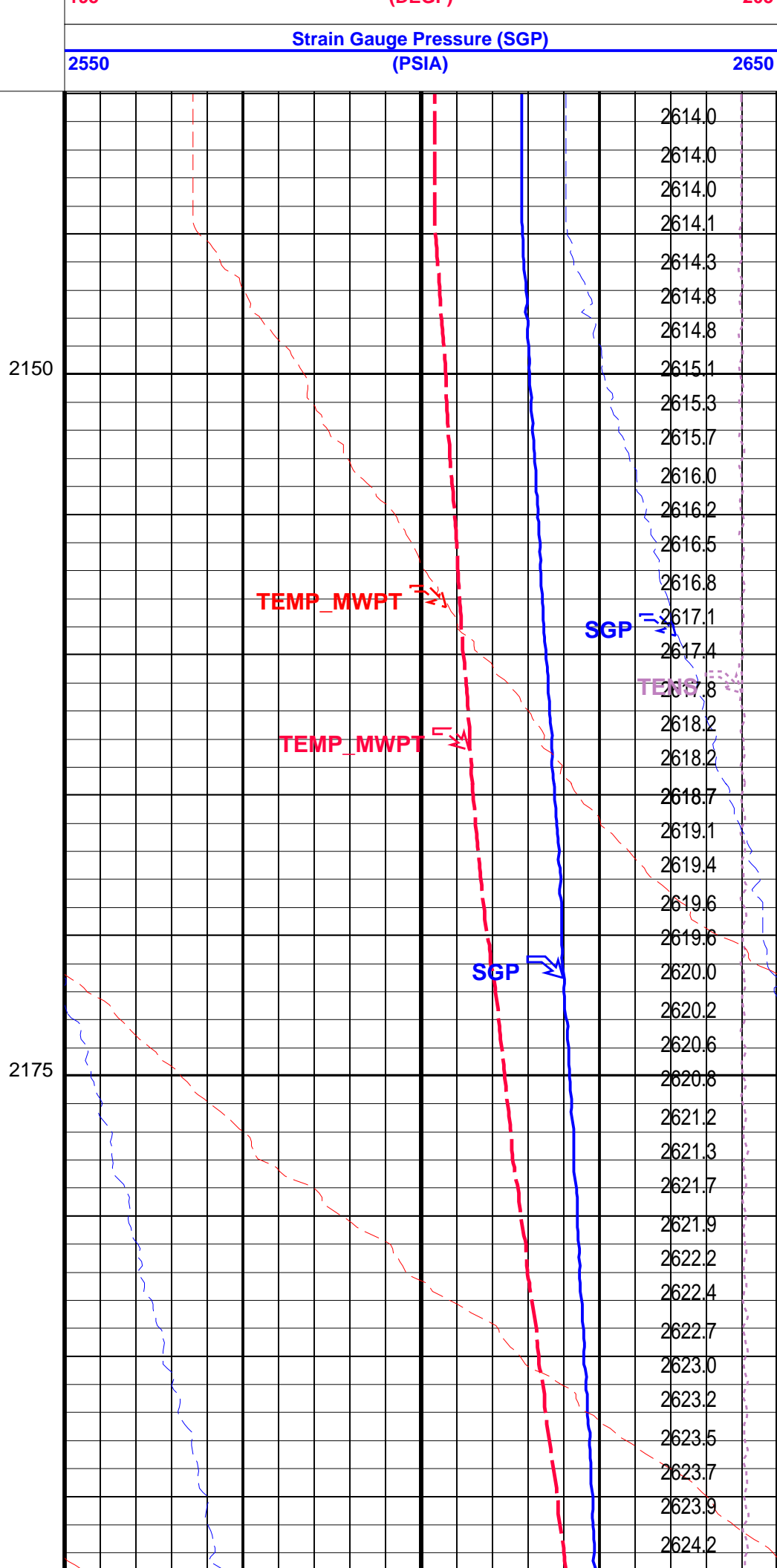
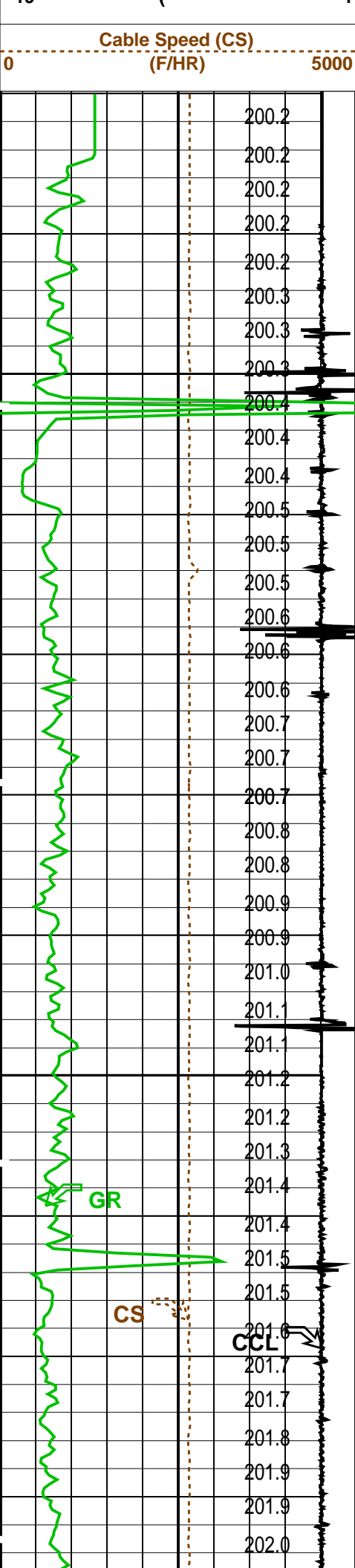
OP System Version: 17C0-154

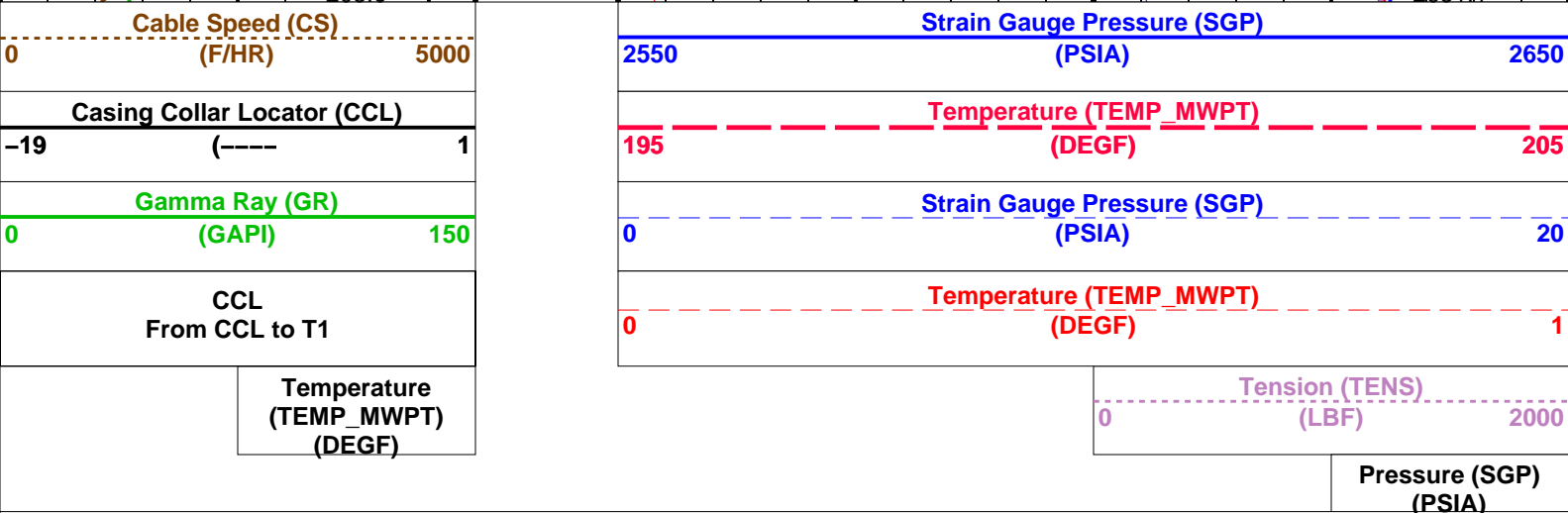
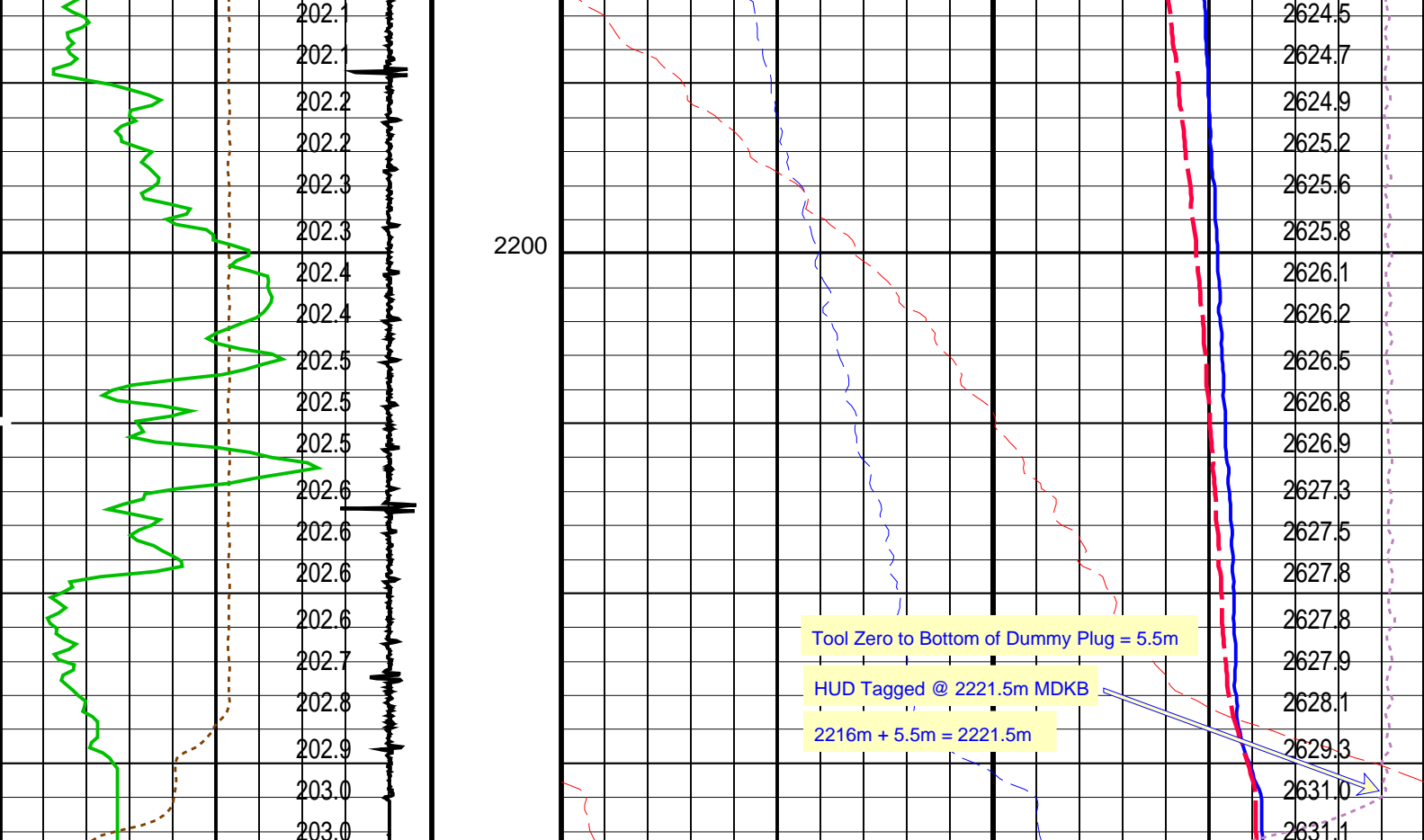
MWPT-CA	17C0-154	MWGT-AA	17C0-154
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PIP SUMMARY

Time Mark Every 60 S

		Pressure (SGP) (PSIA)	
Temperature (TEMP_MWPT) (DEGF)		Tension (TENS) (LBF)	
		0	2000
CCL From CCL to T1		Temperature (TEMP_MWPT) (DEGF)	
		0	1
Gamma Ray (GR) (GAPI)		Strain Gauge Pressure (SGP) (PSIA)	
0		150	20
Casing Collar Locator (CCL)		Temperature (TEMP_MWPT) (DEGF)	
-19		195	205





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	-0.7 M
PP	Playback Processing	NORMAL

Format: MWP Vertical Scale: 1:200 Graphics File Created: 06-Nov-2009 01:06

OP System Version: 17C0-154

MWPT-CA 17C0-154 MWGT-AA 17C0-154

Input DLIS Files

Input DLIS Files

DEFAULT PERFO_052LUP FN:50 PRODUCER 06-Nov-2009 00:57 2218.0 M 2143.0 M

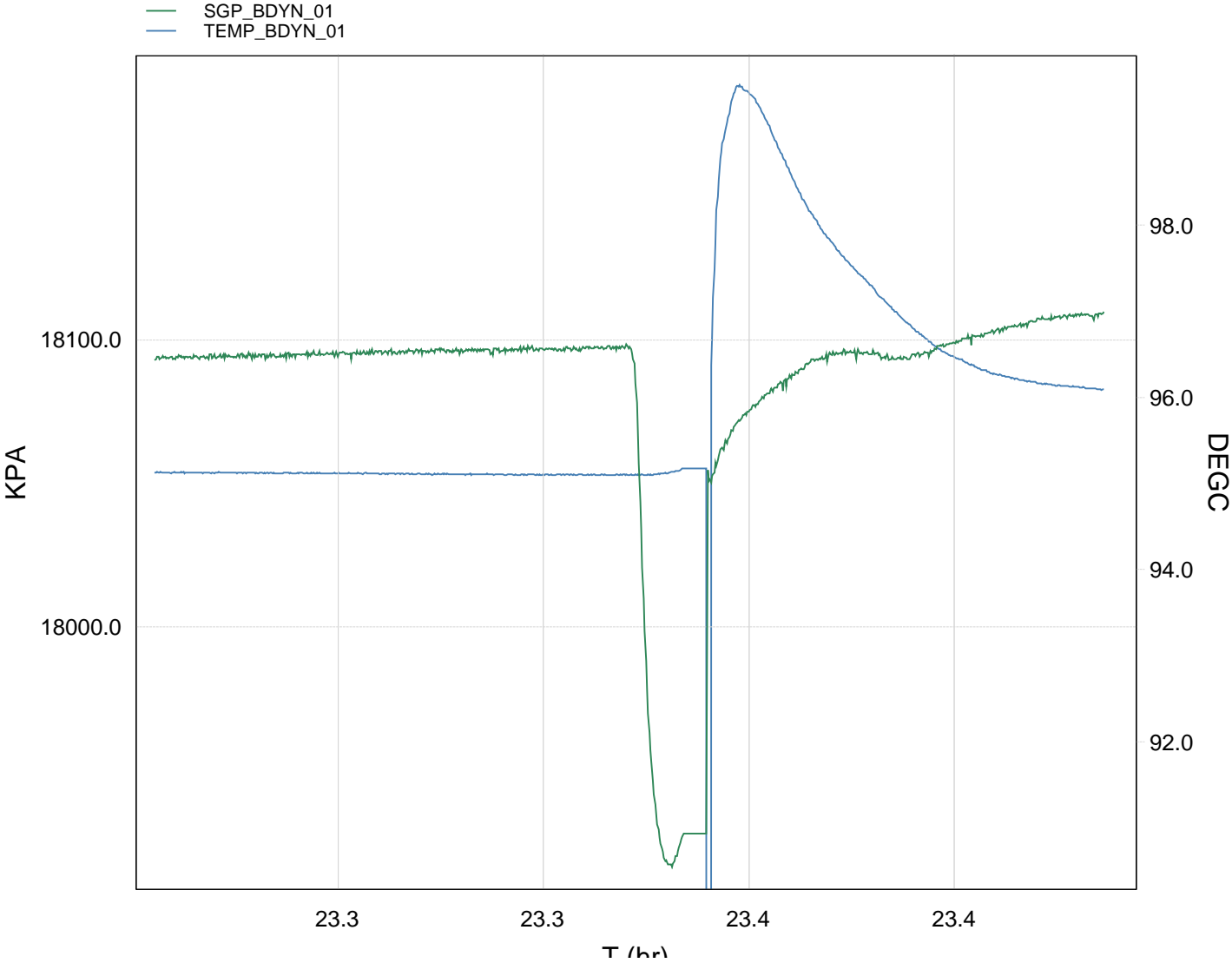
Output DLIS Files

DEFAULT PERFO_054PUP FN:52 PRODUCER 06-Nov-2009 01:06



Gun Fired @
2212.5m to 2214.5m MDKB

MAXIS Field Log



TIME KPA PSIA DEGF

2370.0 18094.1280 2624.3357 203.2290

2400.0 18004.0707 2624.4579 203.2349

2400.0	18094.9707	2624.4579	203.2249	
2430.0	18094.3662	2624.3702	203.2186	
2460.0	18094.5090	2624.3909	203.2199	
2490.0	18095.3910	2624.5188	203.2173	
2520.0	18096.0763	2624.6182	203.1946	
2550.0	18095.0691	2624.4721	203.2000	
2580.0	18096.3348	2624.6557	203.2017	
2610.0	18096.4542	2624.6730	203.2009	
2640.0	18096.2747	2624.6470	203.1963	
2670.0	18095.9523	2624.6002	203.1905	
2700.0	18096.7158	2624.7110	203.1804	
2730.0	18097.2458	2624.7879	203.1832	
2760.0	18096.7964	2624.7227	203.1681	
2790.0	17960.3211	2604.9286	203.1740	
2820.0	17927.9993	2600.2407	203.3172	Gun Fired
2850.0	18058.9304	2619.2307	209.1273	
2880.0	18076.3439	2621.7563	211.0953	
2910.0	18086.1340	2623.1762	209.6384	
2940.0	18093.6861	2624.2716	208.3306	
2970.0	18095.5101	2624.5361	207.4715	
3000.0	18093.4251	2624.2337	206.7177	
3030.0	18095.0894	2624.4751	206.0585	
3060.0	18099.9770	2625.1840	205.6094	
3090.0	18102.7311	2625.5834	205.2973	
3120.0	18105.7026	2626.0144	205.1288	
3150.0	18107.4785	2626.2720	205.0431	
3180.0	18108.9105	2626.4797	204.9791	

Schlumberger

Gun Shooting Pass

MAXIS Field Log

Company: Esso Australia Pty Ltd.

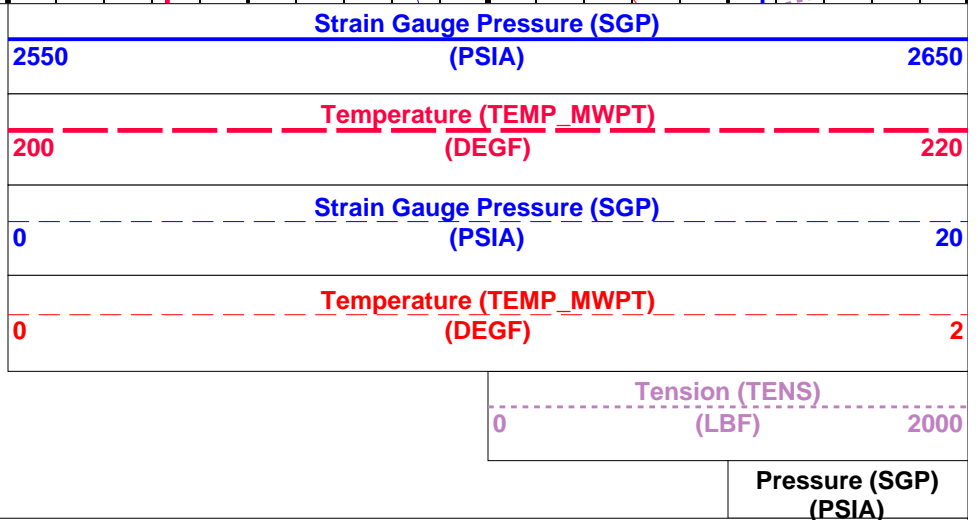
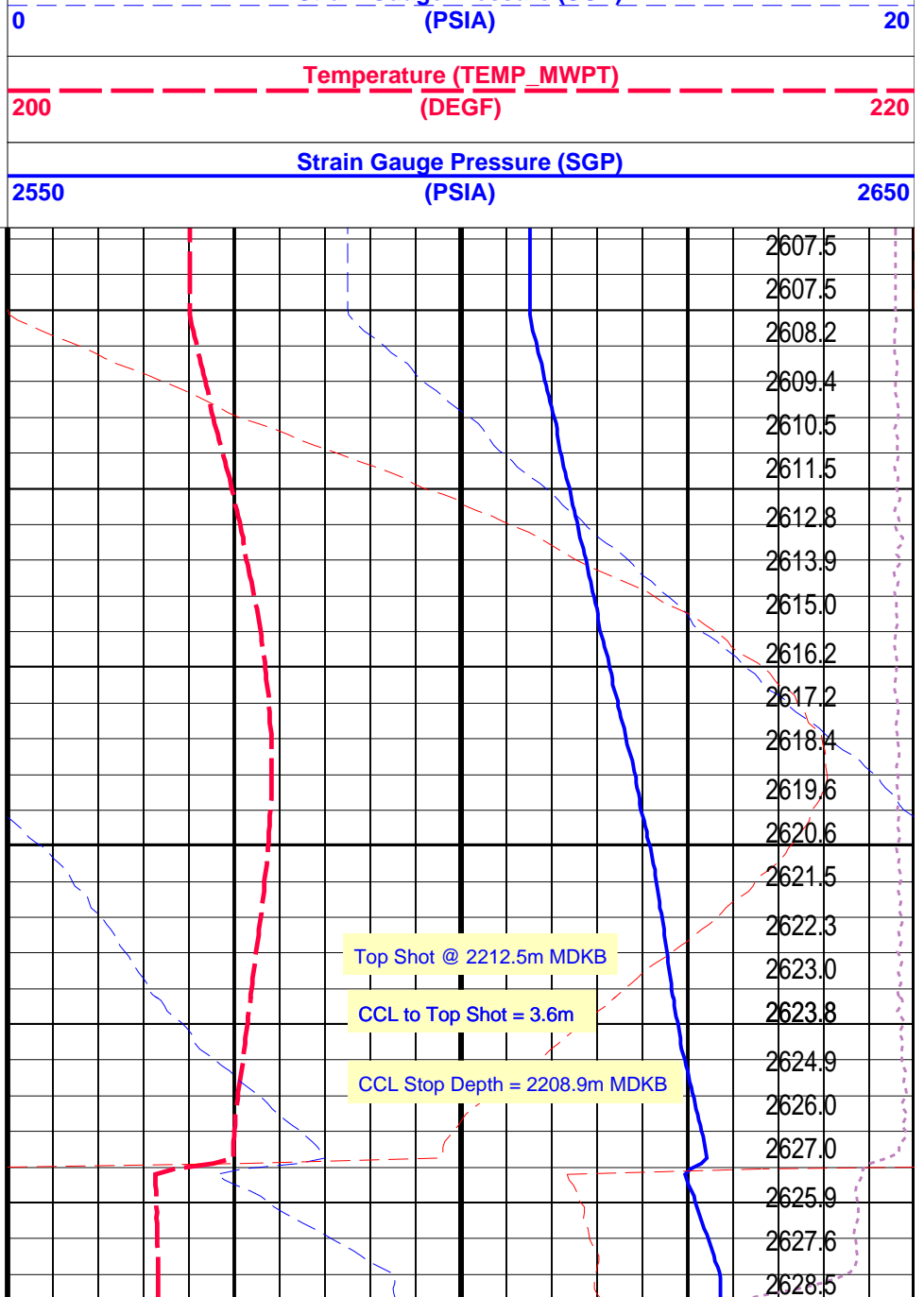
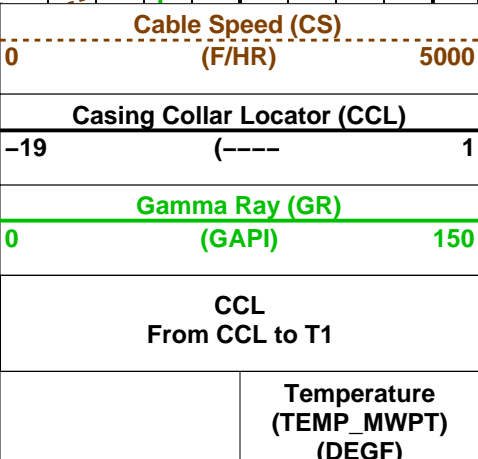
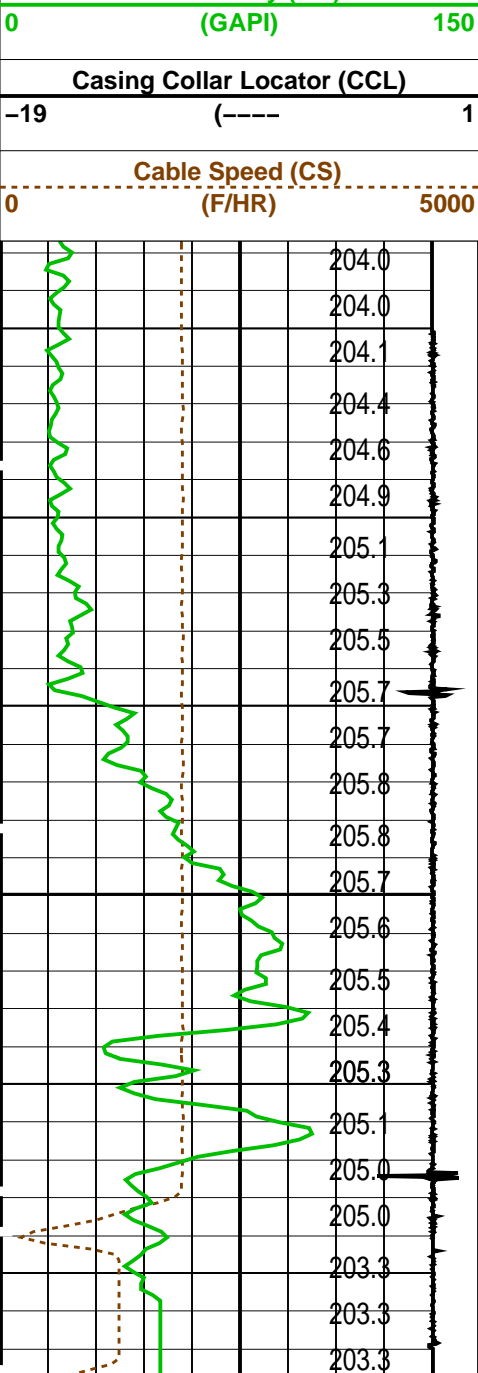
Well: A-20a

Output DLIS Files						
DEFAULT	PERFO_043LUP	FN:41	PRODUCER	05-Nov-2009 23:09	2212.7 M	2182.7 M
OP System Version: 17C0-154						
MWP_GUN	17C0-154		MWPT-CA	17C0-154		
MWGT-AA	17C0-154					

PIP SUMMARY

Time Mark Every 60 S

		Pressure (SGP) (PSIA)	
Temperature (TEMP_MWPT) (DEGF)	Tension (TENS) (LBF)		
	0		2000
CCL From CCL to T1		Temperature (TEMP_MWPT) (DEGF)	
		0	2
Gamma Ray (GR)		Strain Gauge Pressure (SGP)	

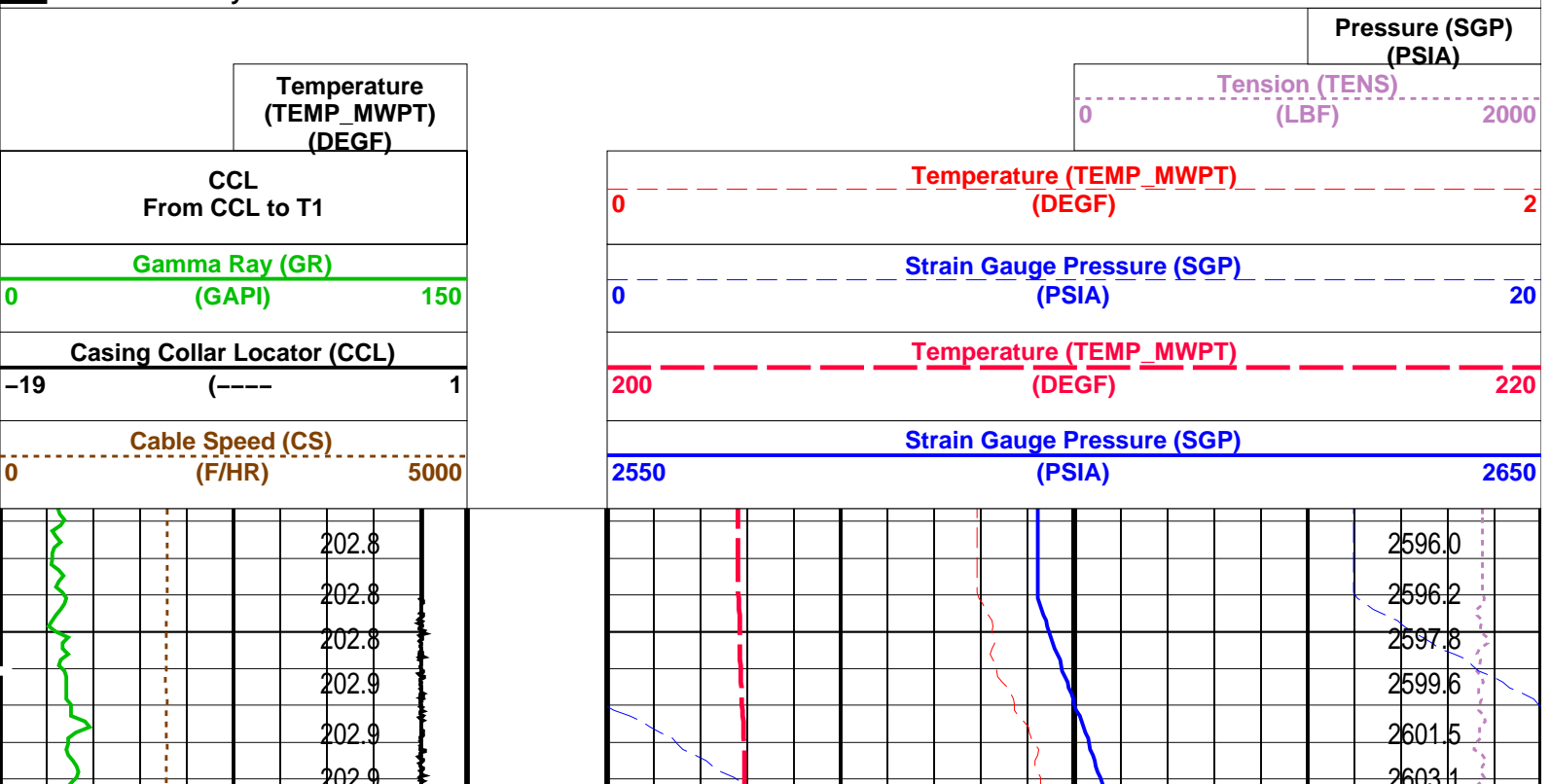


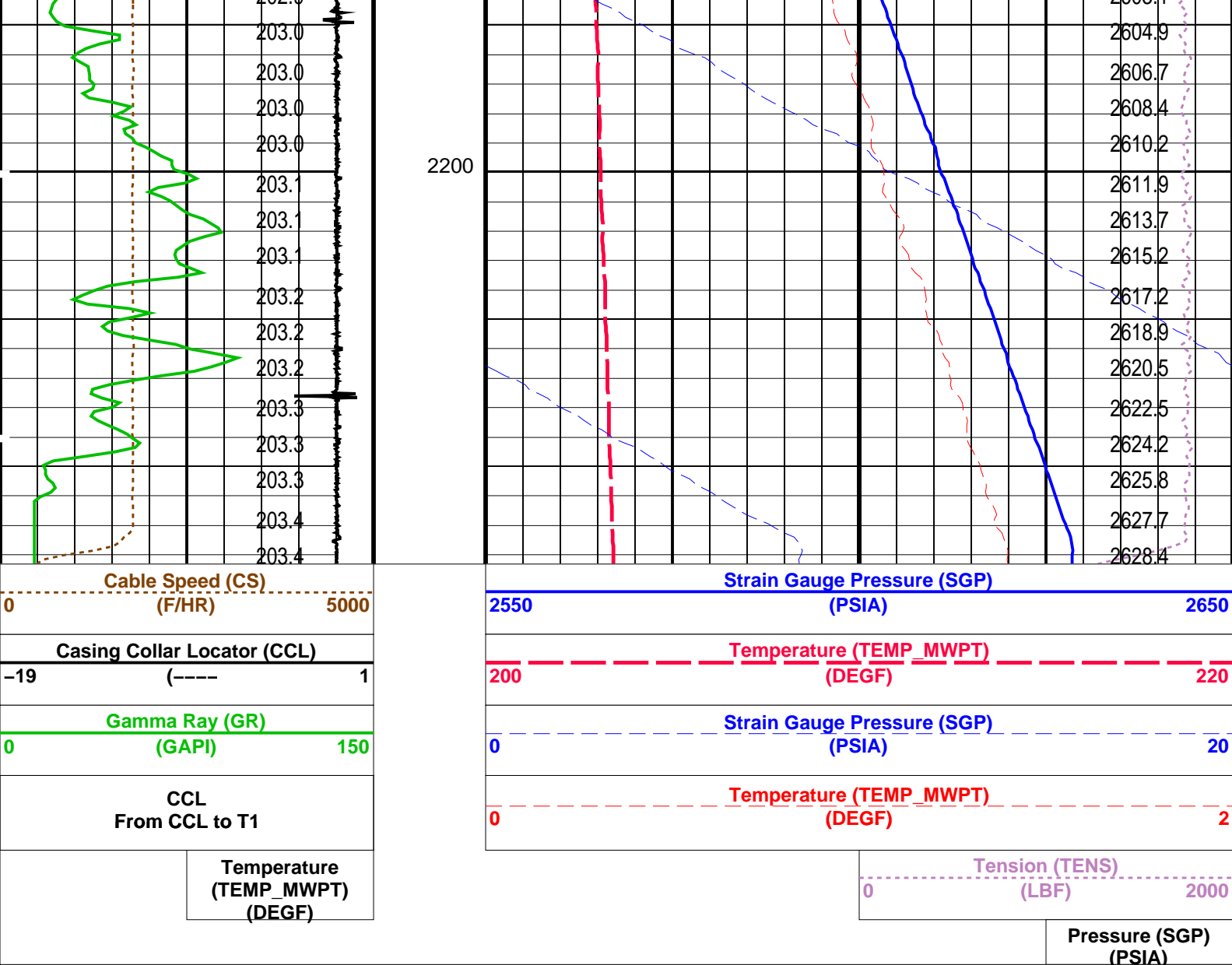
PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
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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: 05-Nov-2009 23:01	
OP System Version: 17C0-154			
MWP_GUN	17C0-154	MWPT-CA	17C0-154
MWGT-AA	17C0-154		
Output DLIS Files			
DEFAULT	PERFO_042LUP	FN:40	PRODUCER 05-Nov-2009 23:01

Field: **Bream A**
Rig: **Crane / Prod 4**
Country: **Australia**

2 1/8" Powerjet MWPT Perforation Record
7" Posiset Plug Setting Record
Cement Dump Record