

Company: Esso Australia Pty Ltd.

Well: A-3a

Field: Flounder

Rig: Crane

Country: Australia

2" HSD Powerjet Omega / MPBT  
Perforation & Plug Setting Record  
5-July-2008

Rig: Crane  
Field: Flounder  
Location: Gippsland  
Well: A-3a  
Company: Esso Australia Pty Ltd.

LOCATION		Elev.: K.B. 50.52 m G.L. -94 m D.F. 50.52 m
Gippsland Basin Bass Strait	Permanent Datum: M.S.L.	
Log Measured From: K.B.	Elev.: 0 m	
Drilling Measured From: K.B.	50.5 m above Perm. Datum	
State: Victoria	Max. Well Deviation 67 deg	Longitude 148° 26' 21.829" E Latitude 38° 18' 39.104" S

Logging Date	7-Jul-2008			
Run Number	1 to 5			
Depth Driller	5267 m			
Schlumberger Depth	5178.4 m			
Bottom Log Interval	5141.5 m			
Top Log Interval	5139 m			
Casing Fluid Type	Production Fluids			
Salinity				
Density	1 g/cm3			
Fluid Level	2816 m			
BIT/CASING/TUBING STRING				
Bit Size	8.500 in			
From	840 m			
To	5267 m			
Casing/Tubing Size	7.000 in			
Weight	26 lbm/ft			
Grade	L-80			
From	28.75 m			
To	5267 m			
Maximum Recorded Temperatures	228 degF			
Logger On Bottom	7-Jul-2008	Time	19:15	
Unit Number	3827	Location	AUSL / Prod 2	
Recorded By	A Sword / R Sani			
Witnessed By	Mr B Robinson / Mr J Dean			

PVT DATA			
Oil Density			
Water Salinity			
Gas Gravity			
Bo			
Bw			
1/Bg			
Bubble Point Pressure			
Bubble Point Temperature			
Solution GOR			
Maximum Deviation	67 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: 8-JUL-2008 0:59:09

### Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-H Serial Number: 794 Calibration Date: 8-Nov-2007 Calibrator Serial Number: 1009 Calibration Cable Type: 2-32ZT Wheel Correction 1: -6 Wheel Correction 2: -2	Type: CMTD-B/A Serial Number: 1711 Calibration Date: 8-Jun-2008 Calibrator Serial Number: 1173 Calibration Gain: 1.01 Calibration Offset: 272.27	Type: 2-32 ZT Serial Number: 24187 Length: 5900 M Conveyance Method: Wireline Rig Type: Offshore_Fixed

### Depth Control Parameters

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	ExxonMobil Petrophysical Analysis
Reference Log Date:	8-Jun-2005

### Depth Control Remarks

1. Log correlated to ExxonMobil Solar Composite Log. 2. IDW used as primary depth control. 3. Z-Chart used as back-up.
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OTHER SERVICES1 OS1: MWP OS2: GR-CH OS3: DB-TT
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Log correlated to ExxonMobil Solar Composite Log dated 8-Jun-2005. Maximum deviation of 67 deg at 4761m MDKB. Objectives: Set a 7" MPBT for 26.0ppf casing with the top of sealing element at approximately 5172m MDKB and dump 1.0m of cement on top. Also, to perforate the interval 5139.0m to 5141.5m MDKB using 2" HSD guns with Powerjet charges.
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RUN #1: RIH dummy 2-1/8" MPBT Plug. Tagged HUD @ 5178.4m MDKB. RUN #2: RIH MPBT and set top of sealing element @ 5172m MDKB.
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Run #	Run ID	DT	and set top screening element @ 5172 MPa
Run #0	Run ID	1/2" W	D = 1/2" T = 1/2" MPa @ 5172

RUN #3: RIH 2-1/8" Water Dump Bailer. Tagged MPBT @ 5172m MDKB.

RUN #4: RIH 2-1/8" Cement Dump Bailer and dumped 1.0m of cement on top of MPBT.

RUN #5: Perforate 5139.0m to 5141.5m MDKB with 2" HSD perforating guns with PowerJet Omega charges.

Schlumberger Specialist / Engineer: A Sword / R Sani

Schlumberger Crews: B Glover / M Hancock / S Kiss / A Pratt

SERVICE ORDER #:  
PROGRAM VERSION:  
FLUID LEVEL:

AUSL 08589253  
15C0-309  
2816 m

EQUIPMENT	DESCRIPTION
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## SURFACE EQUIPMENT

MPBM-BA 81

## SURFACE EQUIPMENT

MWPM-AA 37

## DOWNHOLE EQUIPMENT

MH-22		13.10
MH-22		

Material	Value
EQF-46	12.62
EQF-46 212	

Material	Value
EQF-46	10.79
EQF-46 3006	

PCCL-LA 7202 Head Volt Tension  8.96

Configuration	Value
MPSU-BA	8.50
MPSU-BA 1102	

CCL  
Tachomete  
Cable Cur  
Head Volt  
Tension

TOOL ZERO 8.96

## DOWNHOLE EQUIPMENT

MH-22		12.68
MH-22		

EQF-46	12.12
EQF-46 212	

EQF-46	10.29
EQF-46 3006	

AH-124 9901		8.46
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MWGT-CGRS  
MWPG-CGRS 796  
MWGH-CGRS 796

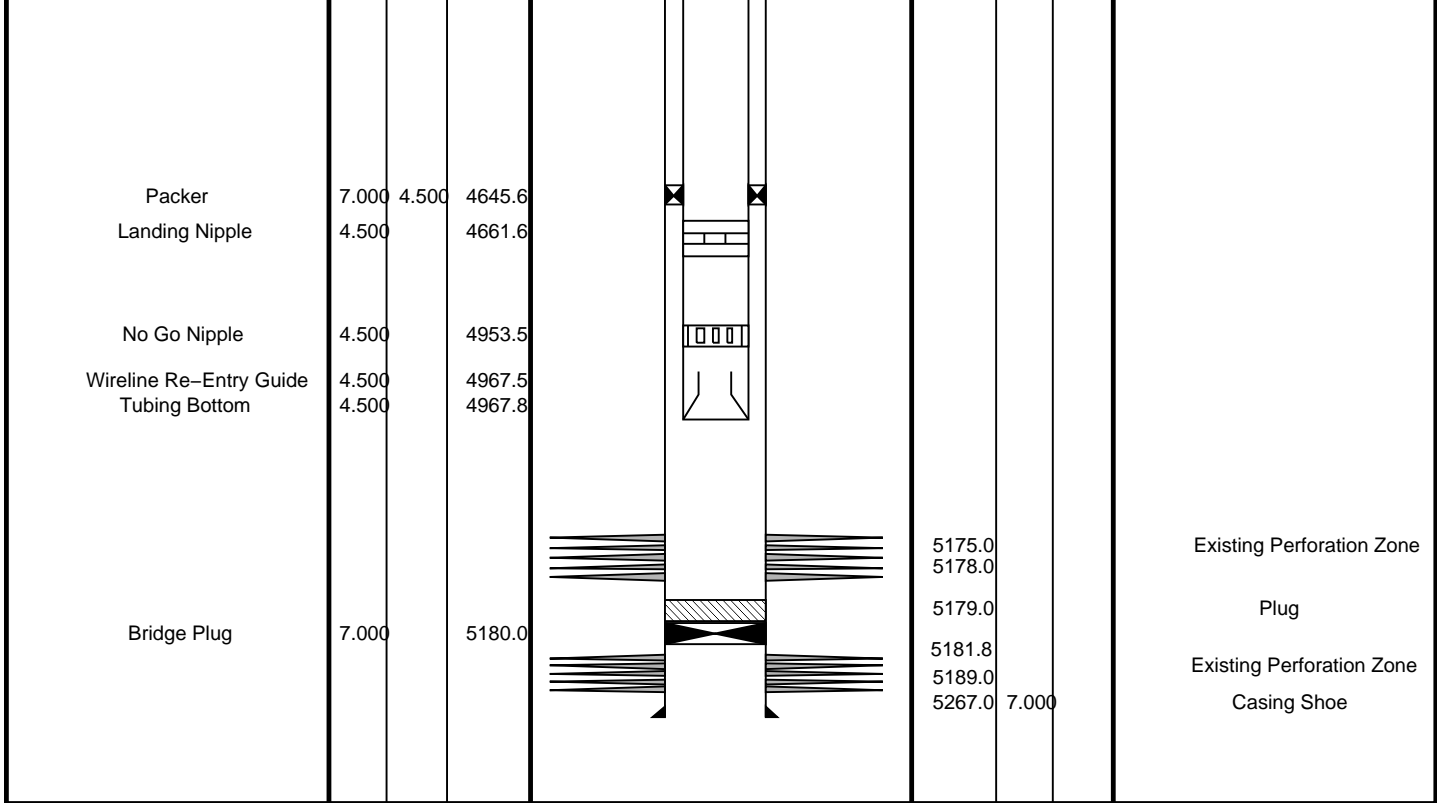
MWPG GR

— 2.77 8.24

Material	Modulus (GPa)
MWPT-CA	7.26
MWPH-AA 90	7.26
MWPS-BA 121	7.26

CCL	
SMWP Pres	
SMWP Temp	
Tension	___ TOOL ZERO





Existing Perforation Zone

Plug

Existing Perforation Zone

Casing Shoe

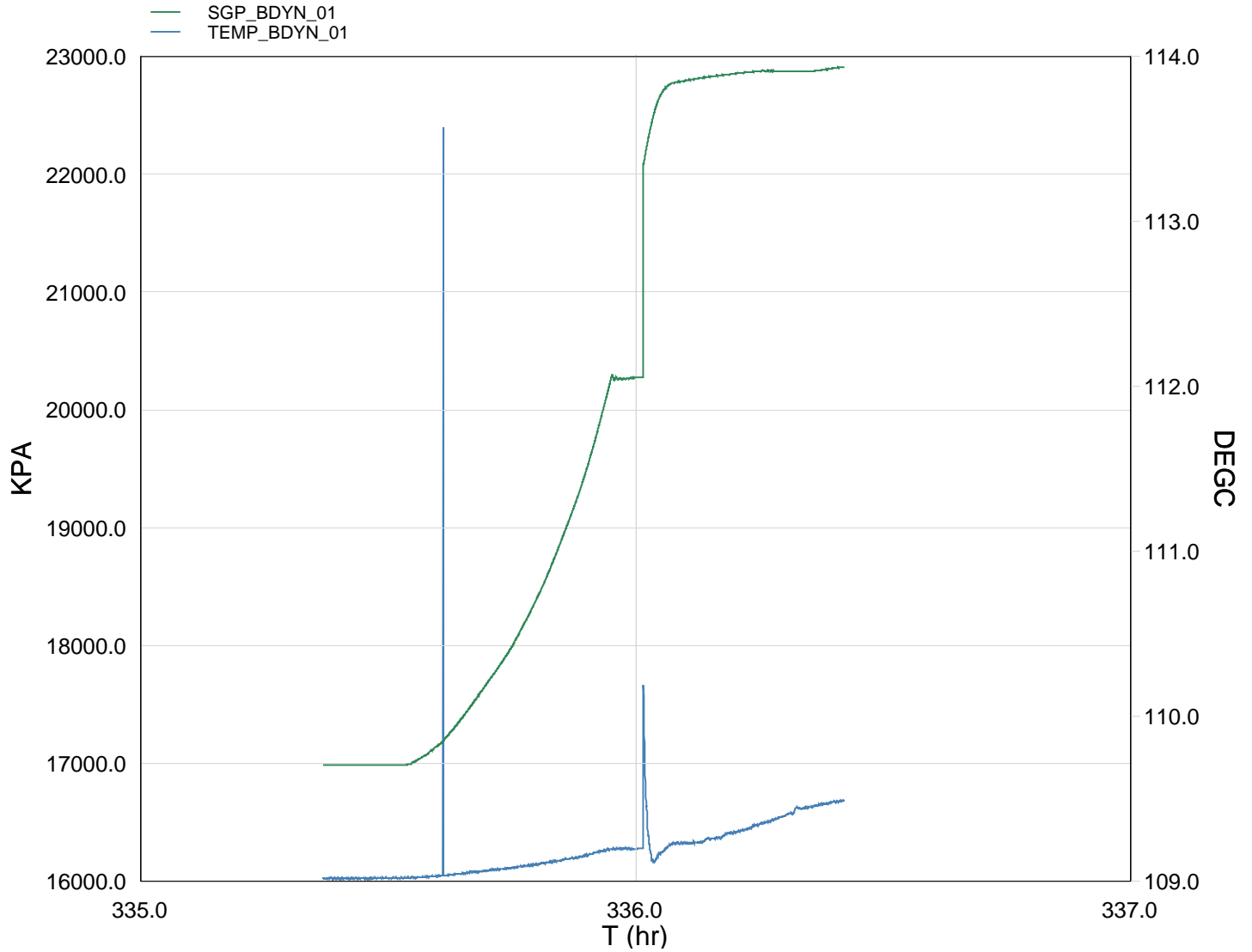


# Job Event Summary

MAXIS Field Log

## Schlumberger Job Event Summary

Time	Elapsed Time	Depth (M)	File
Log Pass (up)	5-Jul-2008 19:12 000:29	5199.9 - 4947.5	PSP_025LUP
Log Pass (up)	6-Jul-2008 2:11 000:23	5153.4 - 4951.3	MPBT_042LUP
Simulated Log	6-Jul-2008 2:42 000:30		MPBT_043LUP
Log Pass (up)	6-Jul-2008 3:21 000:11	5164.8 - 5076.3	MPBT_044LUP
Log Pass (up)	6-Jul-2008 9:10 000:10	5162.1 - 5089.2	PERFO_050LUP
Log Pass (up)	6-Jul-2008 13:15 000:09	5152.3 - 5084.4	PERFO_057LUP
Log Pass (up)	6-Jul-2008 22:57 000:11	5164.1 - 5050.8	PERFO_073LUP
Log Pass (up)	6-Jul-2008 23:17 002:01	5163.9 - 5050.2	PERFO_075LUP
Station Log	6-Jul-2008 23:21 001:04	5136.0 - 9.6	PERFO_076LTP



TIME	PSIA	DEG F
2700.0	2463.8607	228.2293
2750.0	2463.9150	228.2350
2800.0	2463.8671	228.2329
2850.0	2463.8732	228.2309
2900.0	2463.8789	228.2319
2950.0	2463.8607	228.2299
3000.0	2463.8066	228.2360
3050.0	2463.9817	228.2303
3100.0	2463.8426	228.2350
3150.0	2463.8607	228.2365

3150.0	2463.8607	228.2365
3200.0	2463.9150	228.2293
3250.0	2463.8127	228.2355
3300.0	2464.5423	228.2365
3350.0	2468.3546	228.2396
3400.0	2472.9675	228.2433
3450.0	2478.6410	228.2540
3500.0	2485.9073	228.2561
3550.0	2491.8984	228.2632
3600.0	2502.0663	228.2663
3650.0	2512.1434	228.2751
3700.0	2522.8823	228.2879
3750.0	2534.6920	228.2987
3800.0	2546.2419	228.3064
3850.0	2558.2186	228.3136
3900.0	2570.3091	228.3177
3950.0	2582.0208	228.3311
4000.0	2594.5019	228.3383
4050.0	2607.5599	228.3470
4100.0	2622.7053	228.3537
4150.0	2638.9615	228.3645
4200.0	2655.3674	228.3769
4250.0	2672.6939	228.3887
4300.0	2691.0852	228.3980
4350.0	2711.7687	228.4134
4400.0	2732.5244	228.4216
4450.0	2754.6700	228.4407
4500.0	2777.1586	228.4515
4550.0	2800.9225	228.4658
4600.0	2827.4941	228.4823
4650.0	2856.4633	228.5060
4700.0	2887.4912	228.5302
4750.0	2920.1247	228.5399
4800.0	2936.8618	228.5492
4850.0	2939.4947	228.5538
4900.0	2939.8802	228.5621
4950.0	2940.6359	228.5527
5000.0	2941.3579	228.5621
5050.0	3235.0896	228.6944
5100.0	3271.0540	228.4190
5150.0	3291.4121	228.5189
5200.0	3301.0053	228.5889
5250.0	3304.3729	228.6121
5300.0	3305.4244	228.6187
5350.0	3307.3419	228.6213
5400.0	3308.4103	228.6244
5450.0	3309.9037	228.6378
5500.0	3310.8711	228.6641
5550.0	3311.9553	228.6651
5600.0	3313.0842	228.6919
5650.0	3314.0891	228.7269
5700.0	3315.2273	228.7403
5750.0	3316.1450	228.7666
5800.0	3317.1514	228.7872
5850.0	3317.7241	228.8151
5900.0	3318.1356	228.8463
5950.0	3318.0112	228.8695
6000.0	3317.7468	228.8880
6050.0	3317.3931	228.9189
6100.0	3317.3495	228.9441
6150.0	3317.3864	228.9966
6200.0	3317.3864	229.0074

6200.0	3317.3804	229.0074
6250.0	3317.8277	229.0167
6300.0	3318.8706	229.0404
6350.0	3320.0474	229.0502
6400.0	3321.4828	229.0646
6450.0	3322.5793	229.0734

Schlumberger

## 2" HSD Gun Shooting Pass

MAXIS Field Log

Company: Esso Australia Pty Ltd.

Well: A-3a

### Output DLIS Files

DEFAULT

PERFO\_075LUP

FN:74

PRODUCER

06-Jul-2008 23:17

### OP System Version: 15C0-309

MCM

MWP\_GUN  
MWGT-CGRS

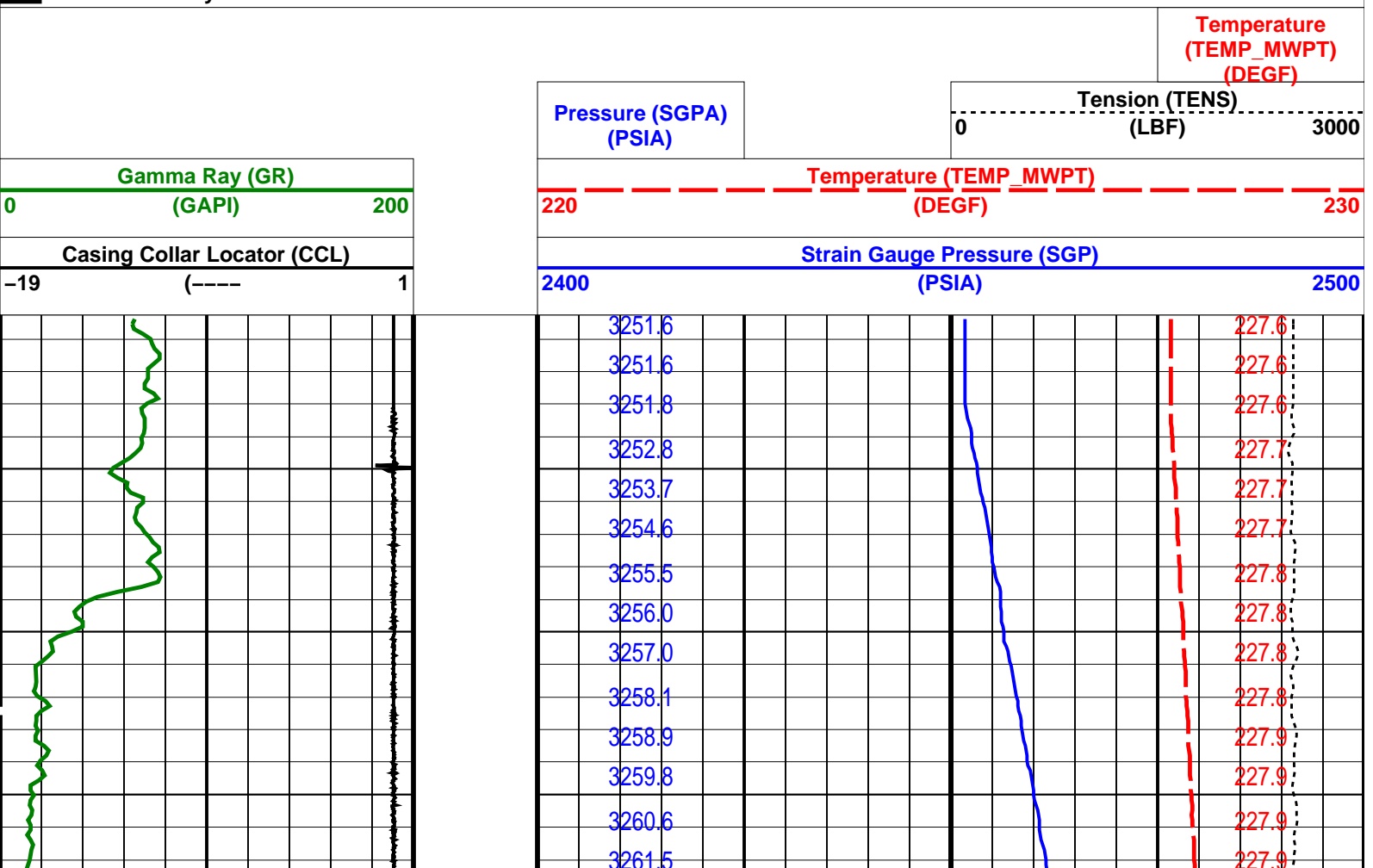
SRPC-3582-Q1\_2008\_OP15  
SRPC-3582-Q1\_2008\_OP15

MWPT-CA

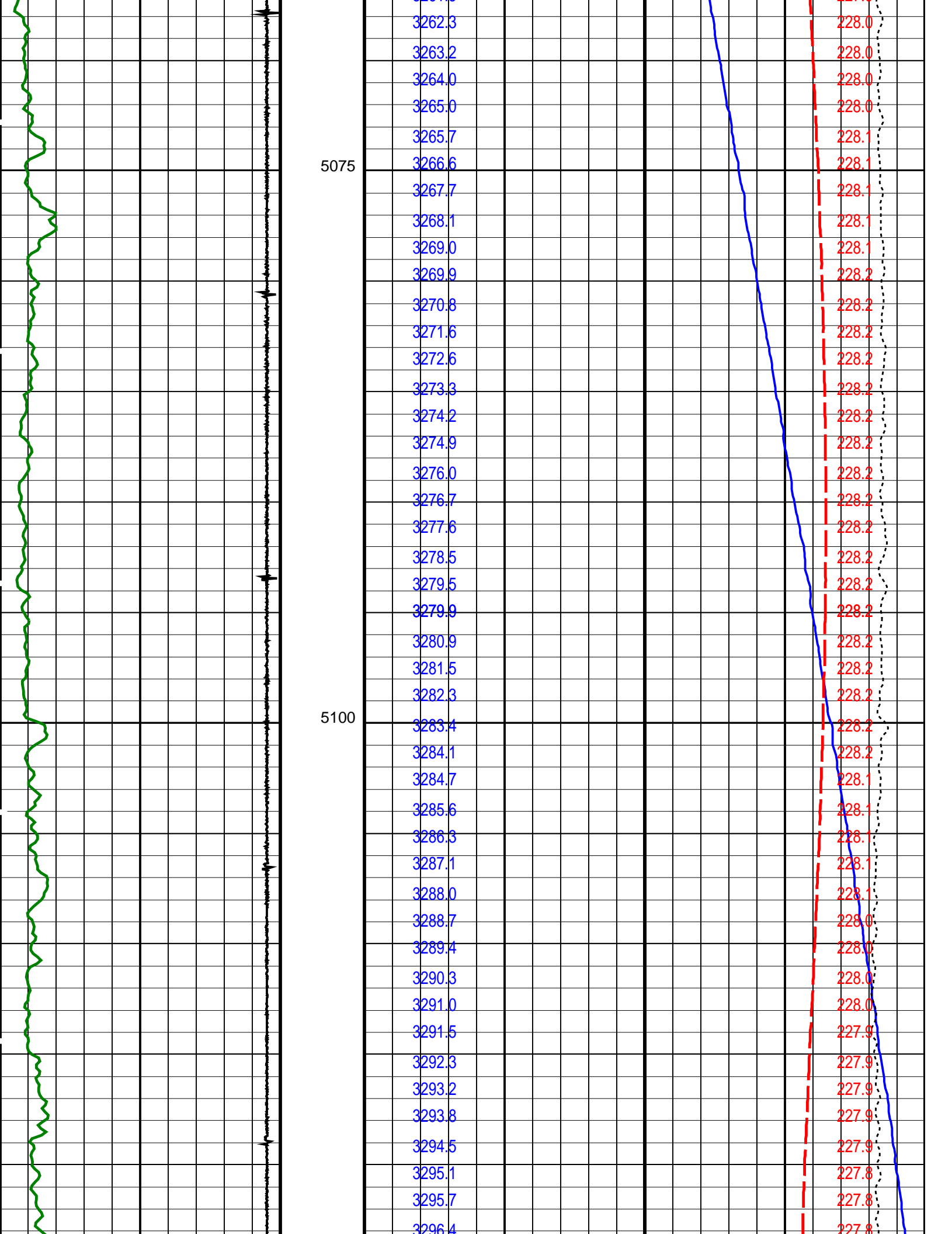
SRPC-3582-Q1\_2008\_OP15

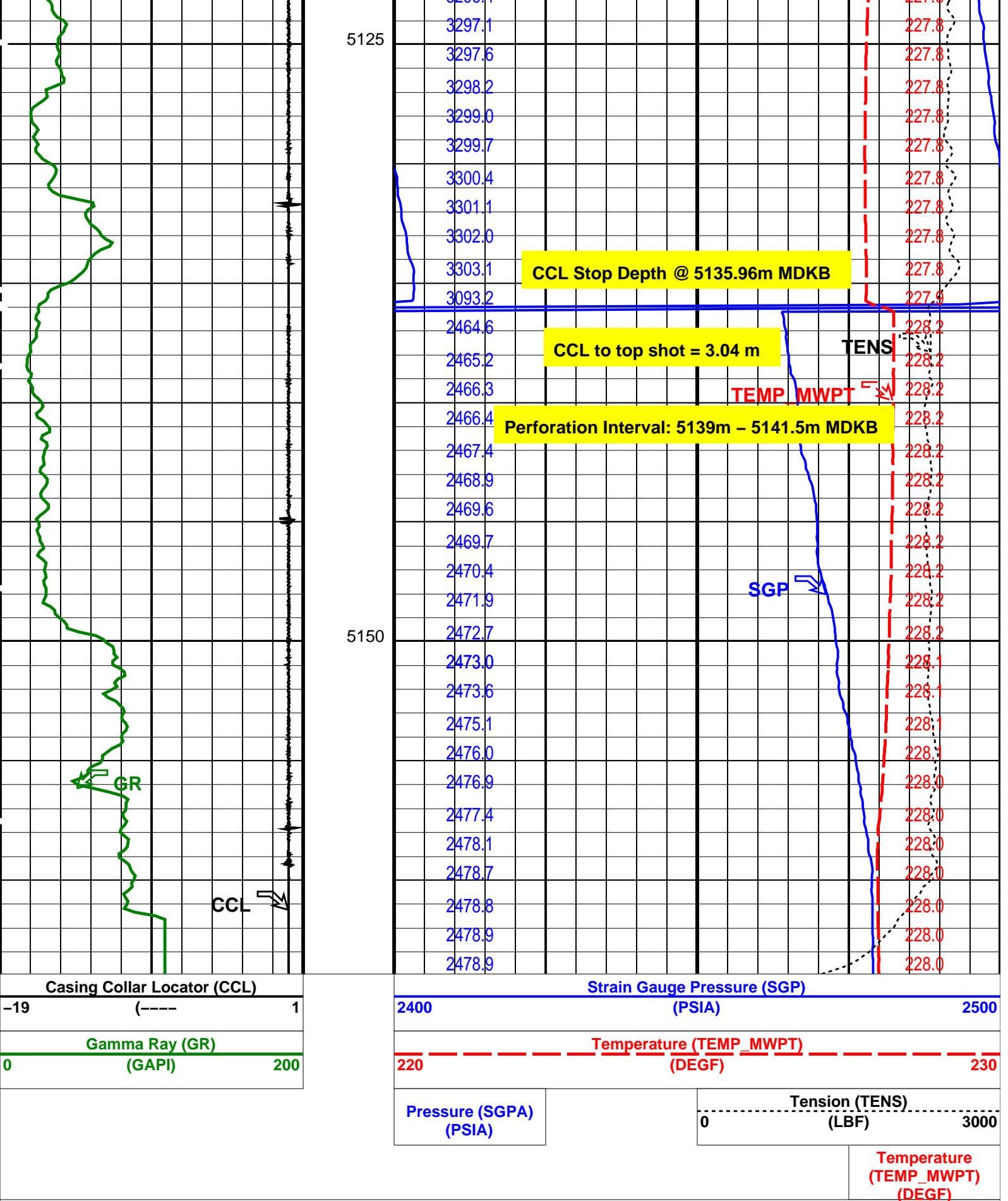
### PIP SUMMARY

Time Mark Every 60 S









PIP SUMMARY

Time Mark Every 60 S

Parameters		
DLIS Name	Description	Value

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

Format: MWP	Vertical Scale: 1:200	Graphics File Created: 06-Jul-2008 23:17
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OP System Version: 15C0-309			
MCM			
MWP_GUN	SRPC-3582-Q1_2008_OP15	MWPT-CA	SRPC-3582-Q1_2008_OP15
MWGT-CGRS	SRPC-3582-Q1_2008_OP15		

Output DLIS Files			
DEFAULT	PERFO_075LUP	FN:74	PRODUCER 06-Jul-2008 23:17



## 2" HSD Gun Correlation Pass

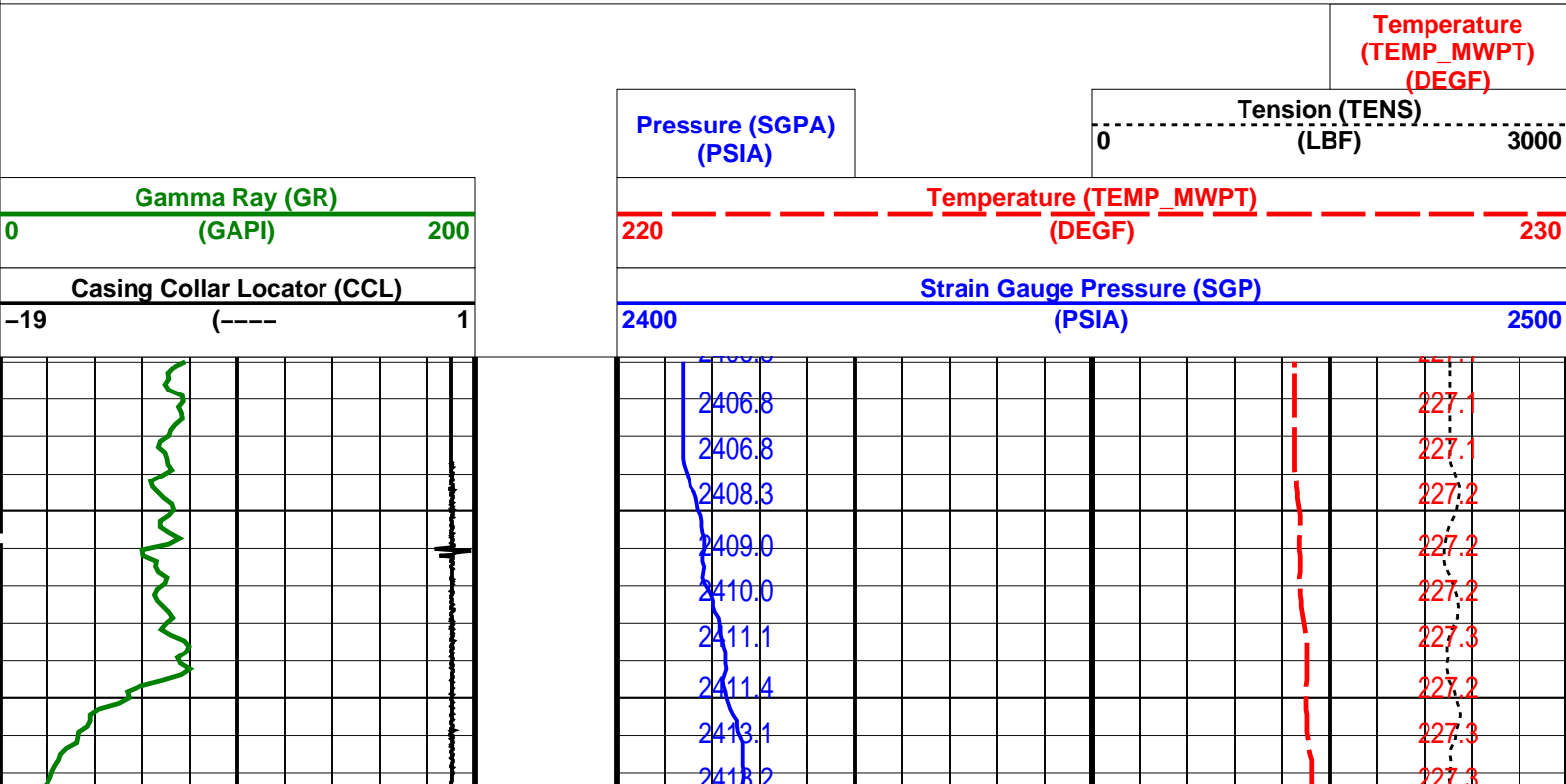
MAXIS Field Log

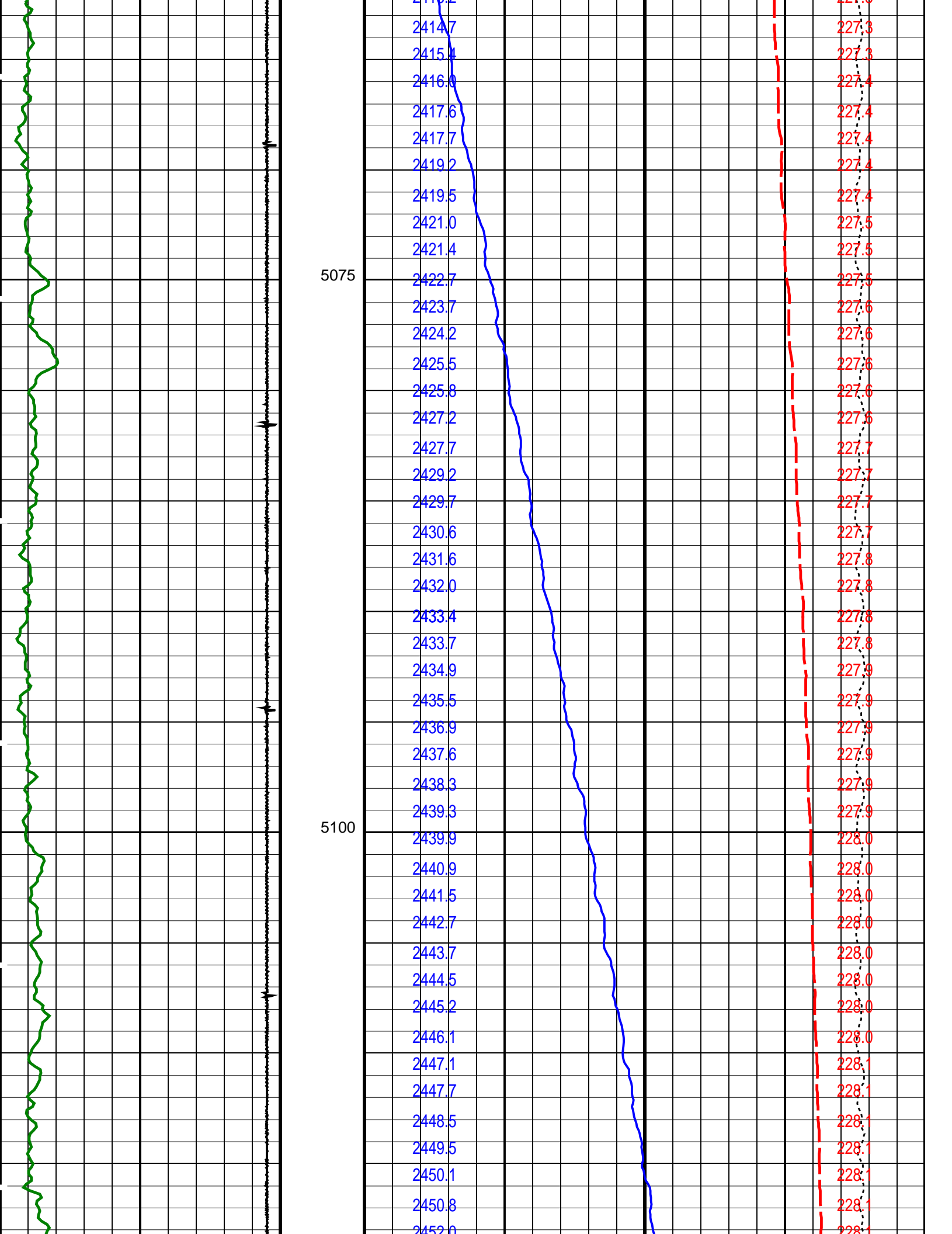
Company: Esso Australia Pty Ltd.	Well: A-3a
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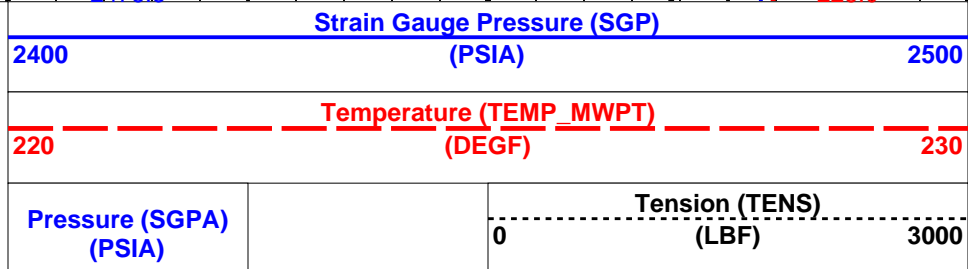
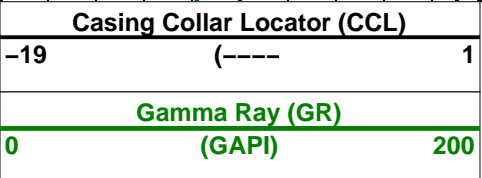
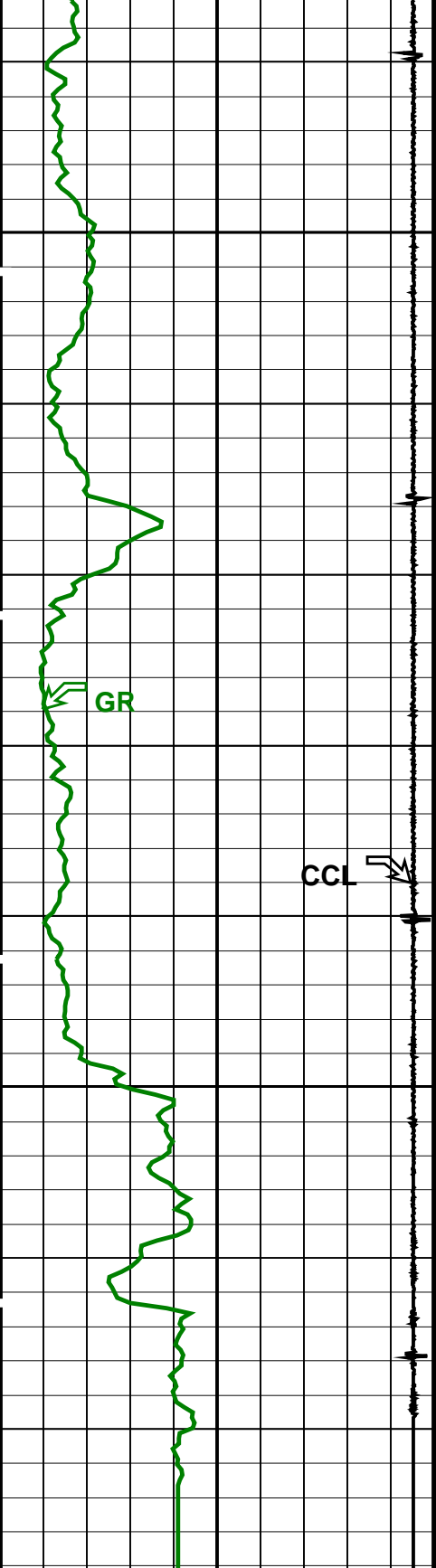
Output DLIS Files			
DEFAULT	PERFO_073LUP	FN:72	PRODUCER 06-Jul-2008 22:57 5164.1 M 5050.8 M
OP System Version: 15C0-309			
MCM			
MWP_GUN	SRPC-3582-Q1_2008_OP15	MWPT-CA	SRPC-3582-Q1_2008_OP15
MWGT-CGRS	SRPC-3582-Q1_2008_OP15		

PIP SUMMARY

Time Mark Every 60 S

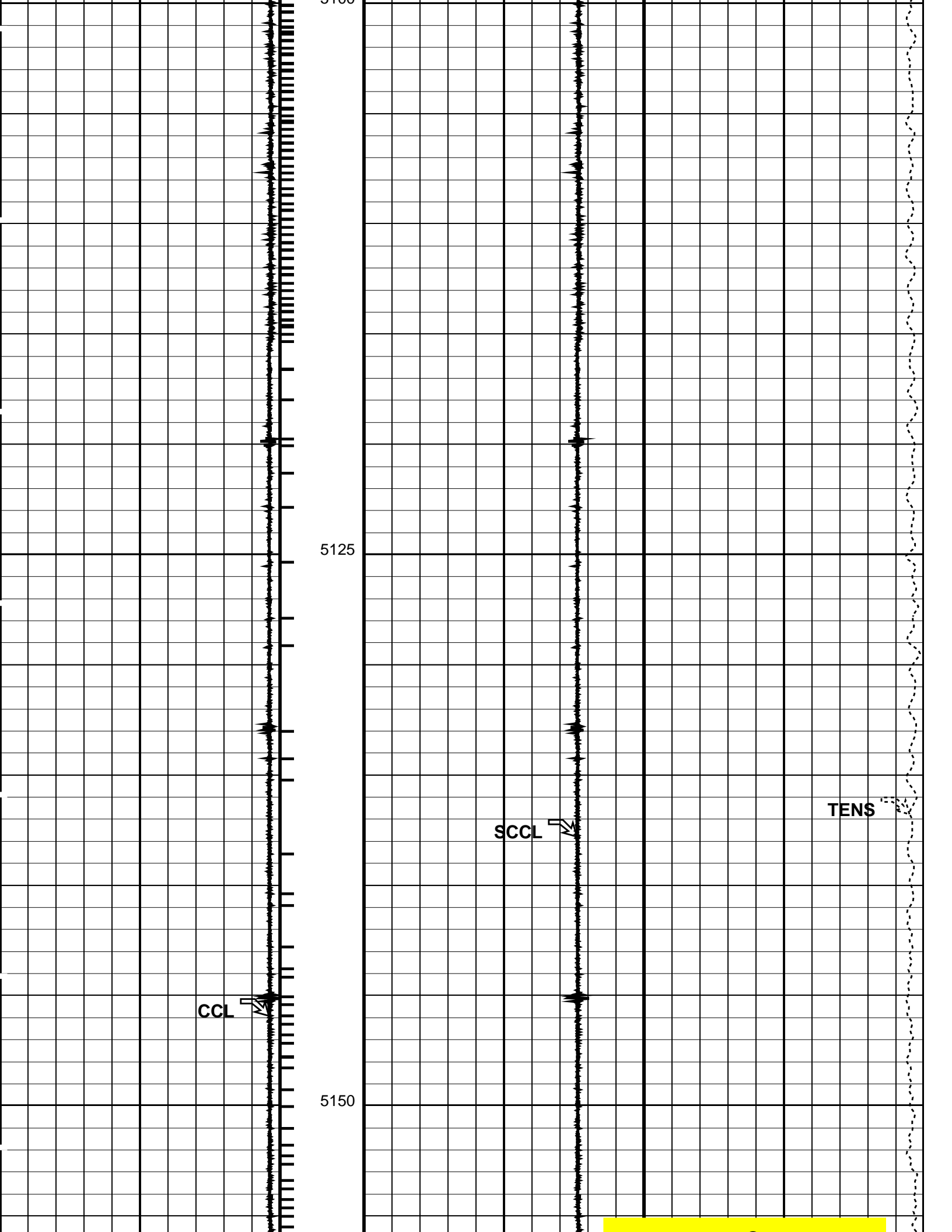






Pressure (SGPA) (PSIA)	Temperature (TEMP_MWPT) (DEGF)
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Dumped cement @ 5171m MDKB

Casing Collar Locator (CCL)	Shifted Casing Collar Locator (SCCL)	Tension (TENS) (LBF)
-19 ----- 1	-10 ----- 10 0	2500

PIP SUMMARY

Time Mark Every 60 S

Casing Collars

Format: CCLLog    Vertical Scale: 1:200    Graphics File Created: 08-Jul-2008 00:28

OP System Version: 15C0-309  
MCM

MWP\_GUN      SRPC-3582-Q1\_2008\_OP15      MWPT-CA      SRPC-3582-Q1\_2008\_OP15  
MWGT-CGRS      SRPC-3582-Q1\_2008\_OP15

Input DLIS Files

DEFAULT	PERFO_057LUP	FN:56	PRODUCER	07-Jul-2008 19:49	5152.3 M	5084.4 M
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Output DLIS Files

DEFAULT	PERFO_092PUP	FN:12	PRODUCER	08-Jul-2008 00:28		
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Schlumberger

2-1/8" Dump Bailer  
Water Dump Pass

MAXIS Field Log

Company: Esso Australia Pty Ltd.    Well: A-3a

Input DLIS Files

DEFAULT	PERFO_050LUP	FN:49	PRODUCER	07-Jul-2008 19:49	5162.1 M	5089.2 M
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Output DLIS Files

DEFAULT	PERFO_090PUP	FN:10	PRODUCER	07-Jul-2008 21:16	5166.1 M	5093.7 M
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OP System Version: 15C0-309  
MCM

MWP\_GUN      SRPC-3582-Q1\_2008\_OP15      MWPT-CA      SRPC-3582-Q1\_2008\_OP15  
MWGT-CGRS      SRPC-3582-Q1\_2008\_OP15

PIP SUMMARY

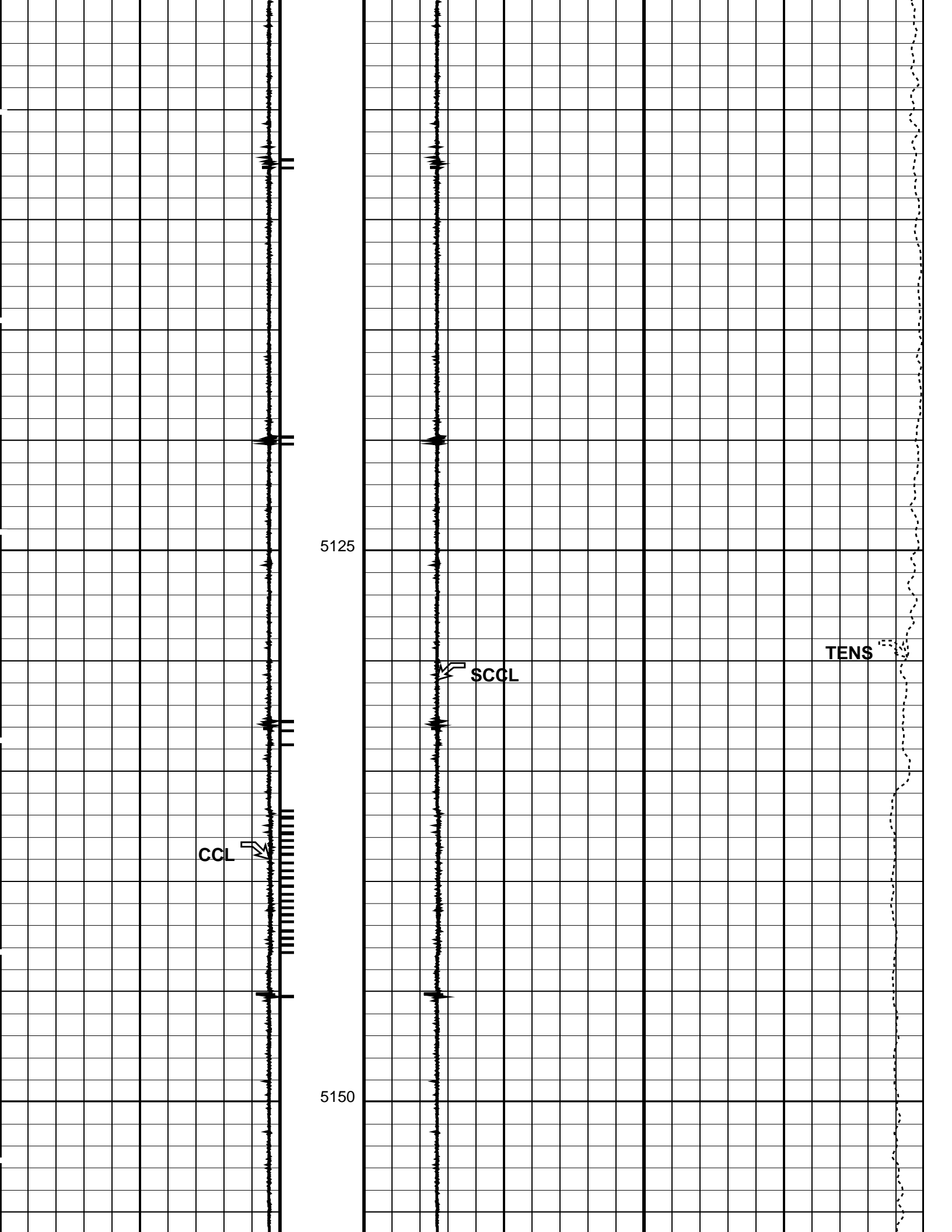
Time Mark Every 60 S

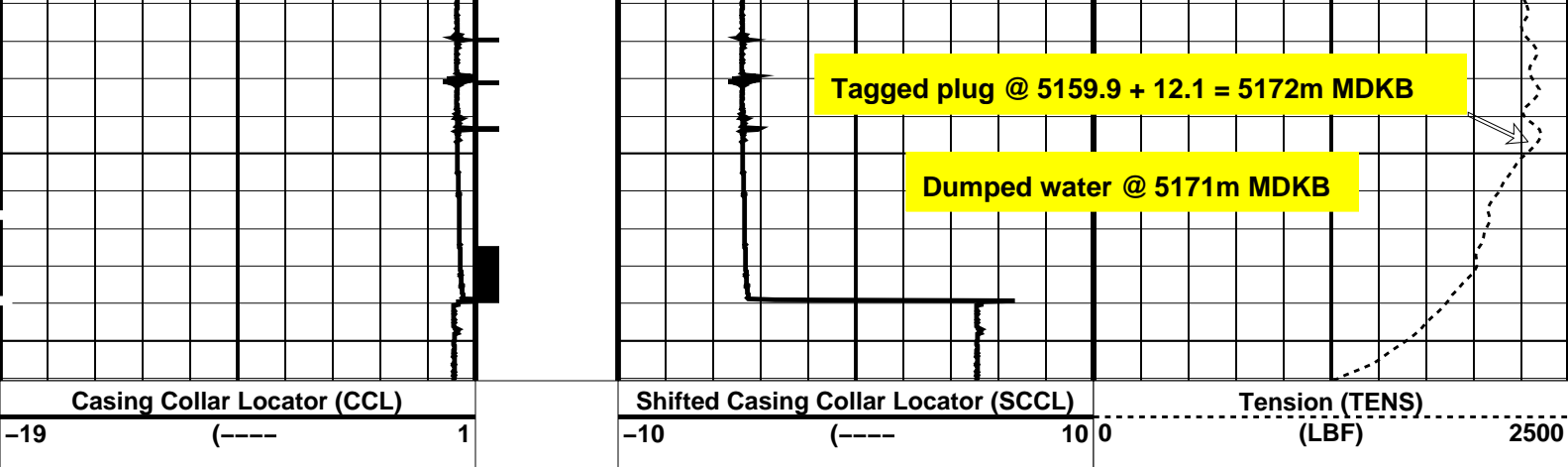
Casing Collars

Casing Collar Locator (CCL)	Shifted Casing Collar Locator (SCCL)	Tension (TENS) (LBF)
-19 ----- 1	-10 ----- 10 0	2500

5100







PIP SUMMARY

← Casing Collars

Time Mark Every 60 S

Format: CCLLog Vertical Scale: 1:200

Graphics File Created: 07-Jul-2008 21:16

OP System Version: 15C0-309

MCM

MWP\_GUN SRPC-3582-Q1\_2008\_OP15 MWPT-CA SRPC-3582-Q1\_2008\_OP15  
MWGT-CGRS SRPC-3582-Q1\_2008\_OP15

Input DLIS Files

DEFAULT PERFO\_050LUP FN:49 PRODUCER 07-Jul-2008 19:49 5162.1 M 5089.2 M

Output DLIS Files

DEFAULT PERFO\_090PUP FN:10 PRODUCER 07-Jul-2008 21:16

Schlumberger

MPBT  
Setting Record

MAXIS Field Log

Company: Esso Australia Pty Ltd.

Well: A-3a

Output DLIS Files

DEFAULT MPBT\_043LUP FN:42 PRODUCER 06-Jul-2008 02:42 12192.0 M 11746.8 M

OP System Version: 15C0-309

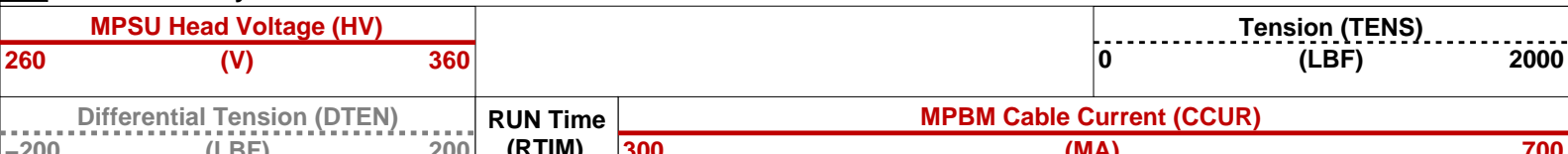
MCM

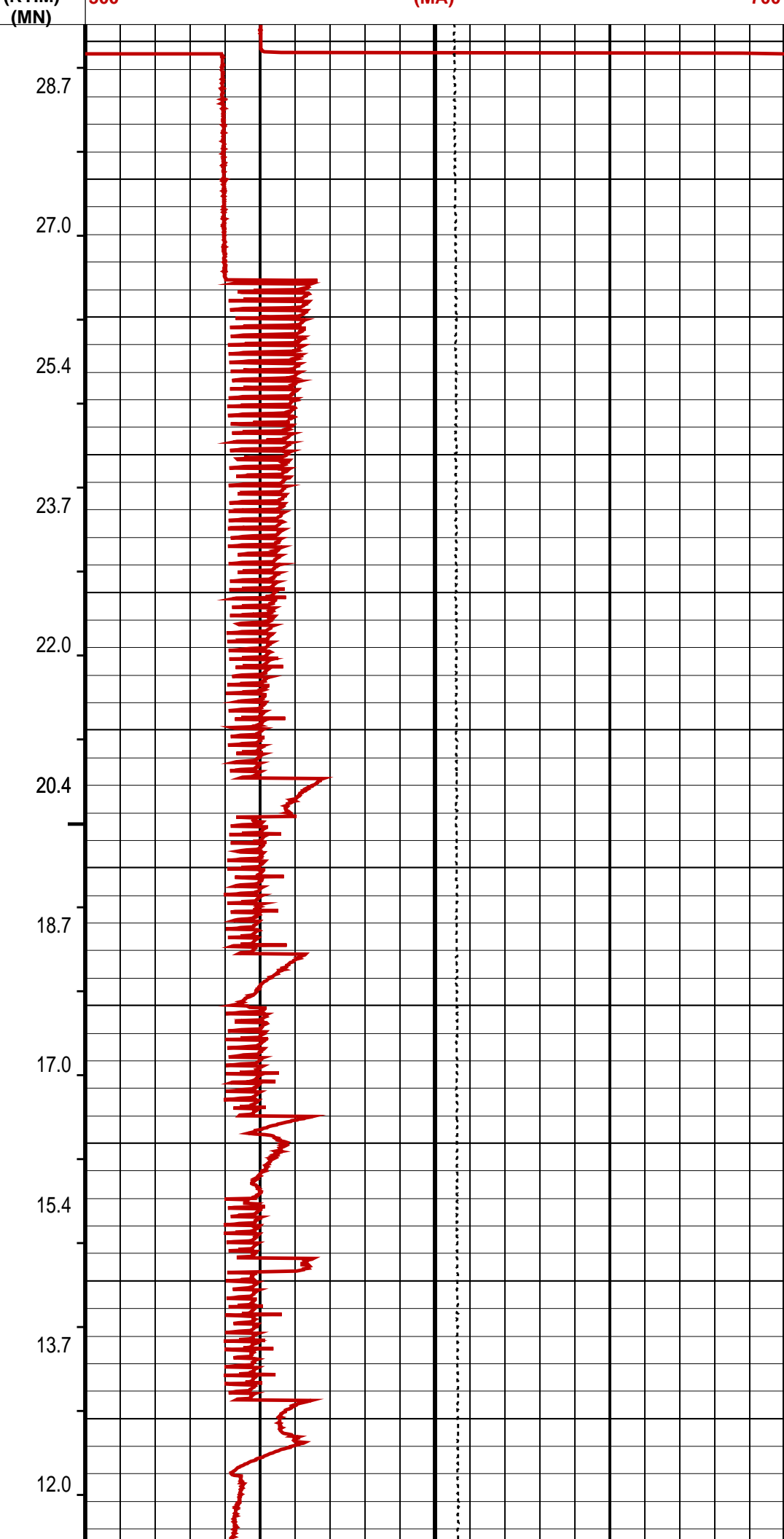
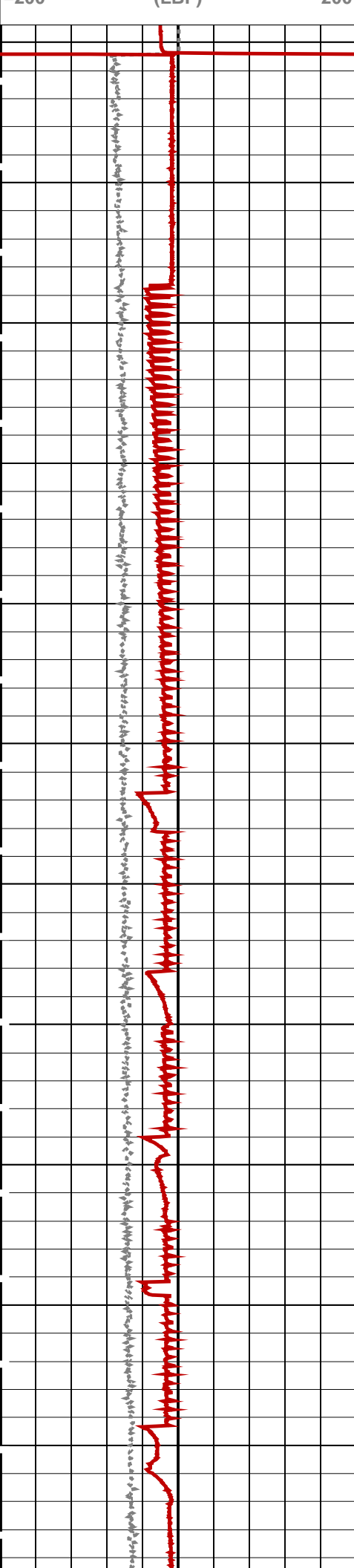
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CCL-LA 15C0-309

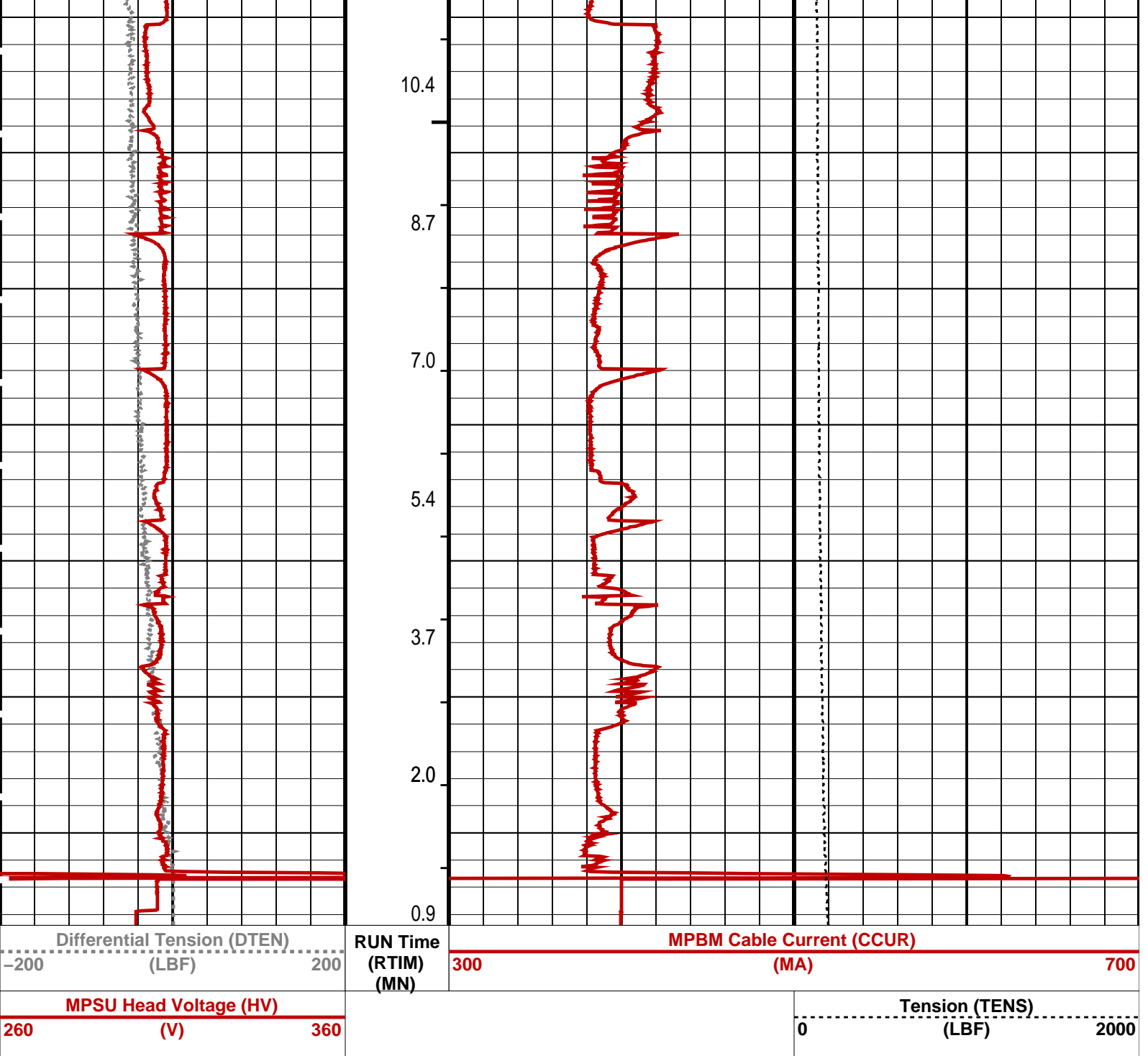
PIP SUMMARY

→ 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
MPSU-BA: MECHANICAL PLUGBACK SETTING UNIT		
IPUMP	Intensifier Pump	TRUE

Format: MPBT\_1    Vertical Scale: 1:1000    Graphics File Created: 06-Jul-2008 02:42

OP System Version: 15C0-309			
MCM			
MPEX-BA	SRPC-3582-Q1_2008_OP15	MPSU-BA	SRPC-3582-Q1_2008_OP15
CCL-LA	15C0-309		

Output DLIS Files			
DEFAULT	MPBT_043LUP	EN-12	PRODUCER 06-Jul-2008 02:42



MPBT  
Log Out of Position

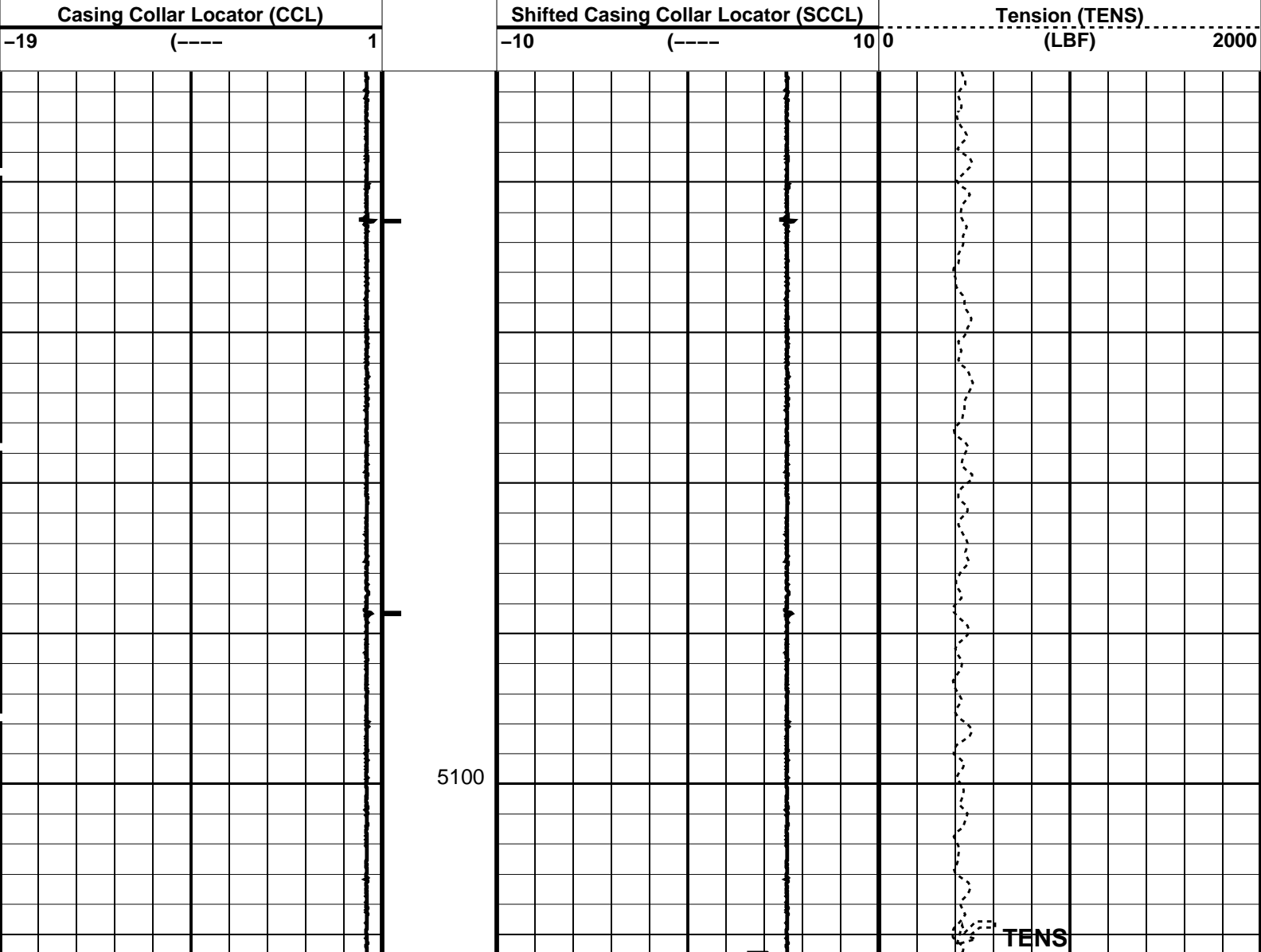
MAXIS Field Log

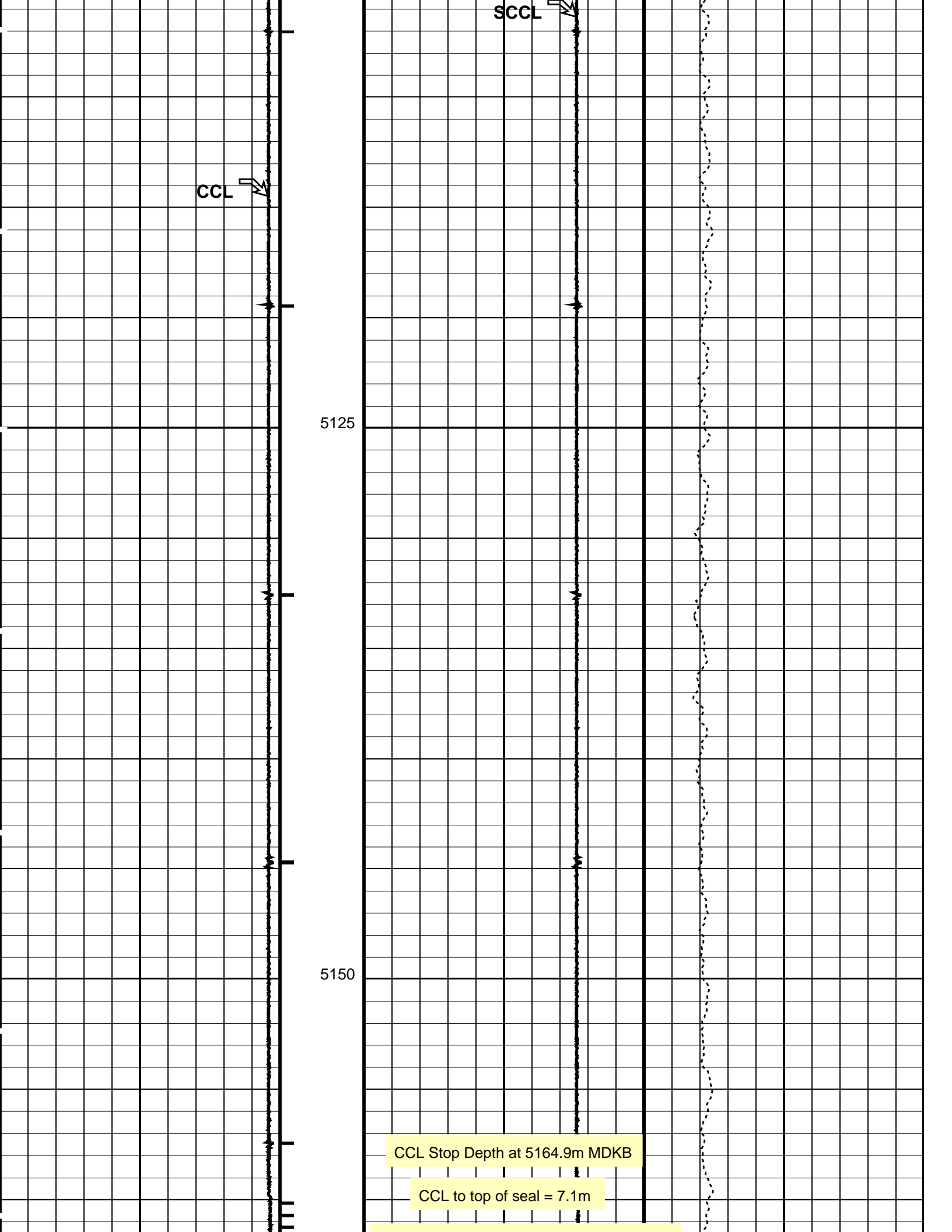
Company: Esso Australia Pty Ltd. Well: A-3a

Output DLIS Files					
DEFAULT	MPBT_044LUP	FN:43	PRODUCER	06-Jul-2008 03:21	5164.8 M 5076.3 M

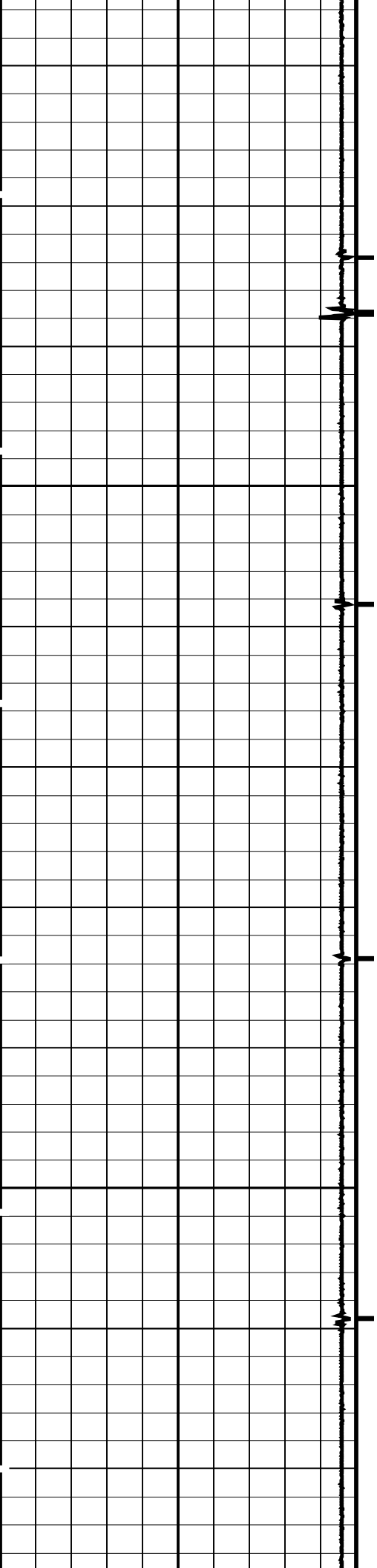
OP System Version: 15C0-309			
MCM			
MPEX-BA	SRPC-3582-Q1_2008_OP15	MPSU-BA	SRPC-3582-Q1_2008_OP15
CCL-LA	15C0-309		

PIP SUMMARY  
Time Mark Every 60 S  
Casing Collars



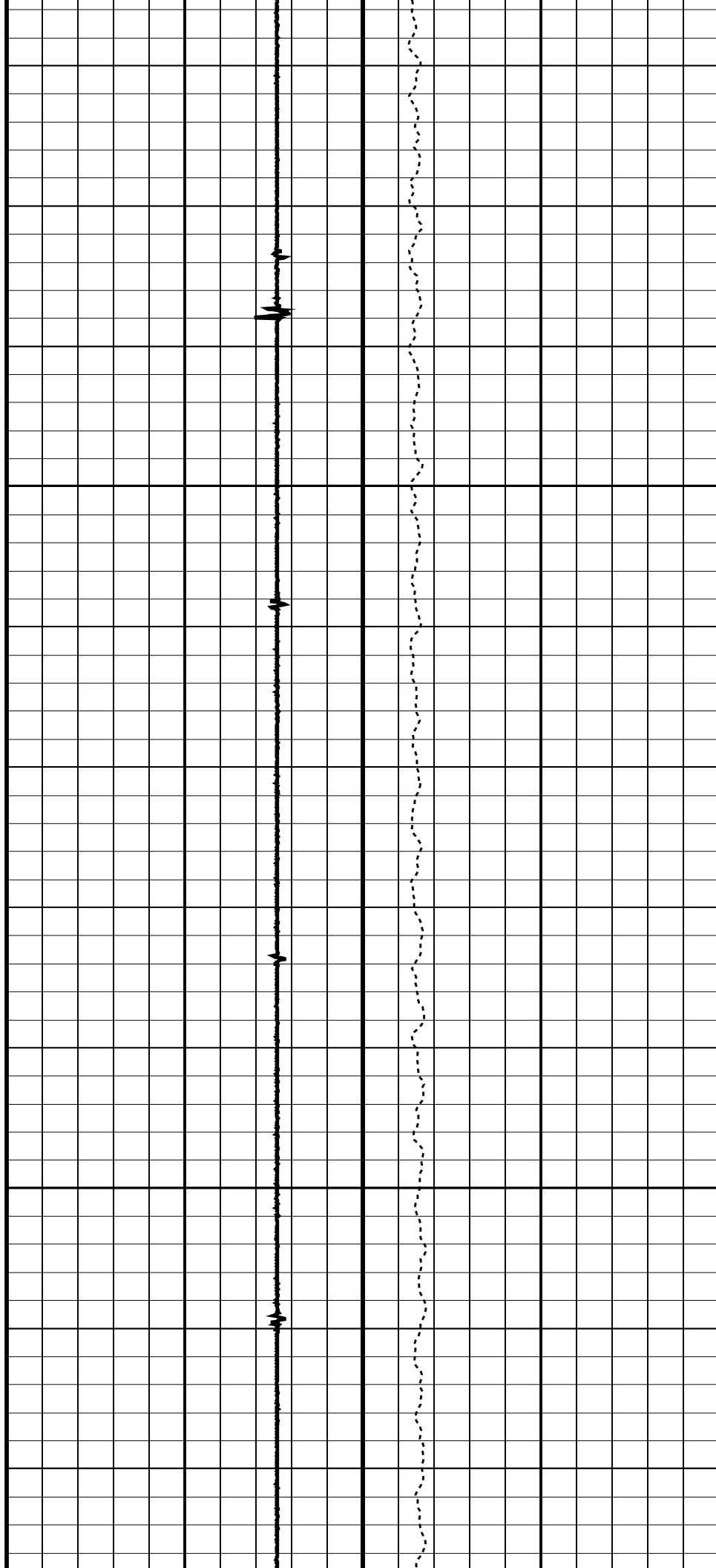




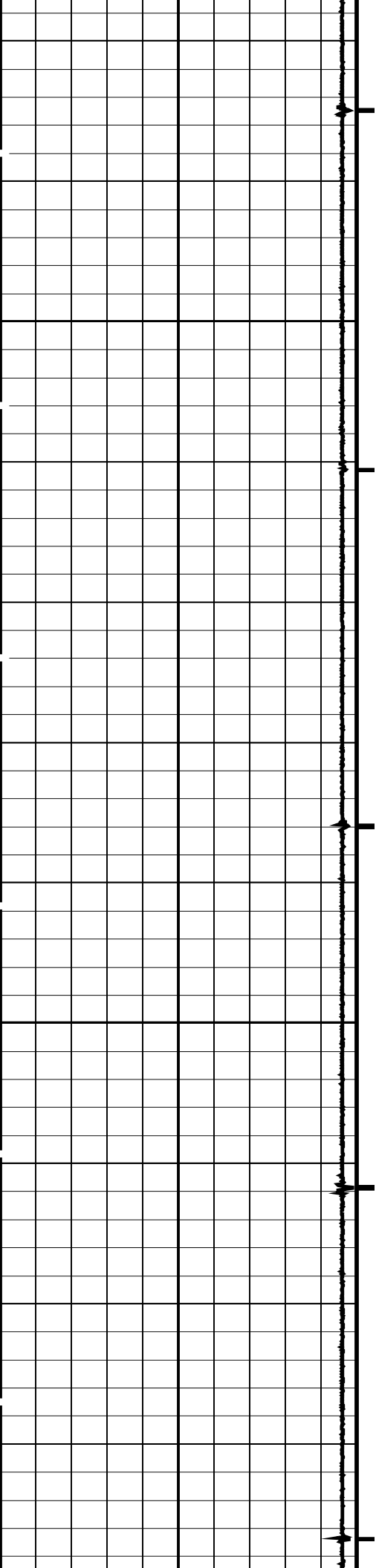


4975

5000

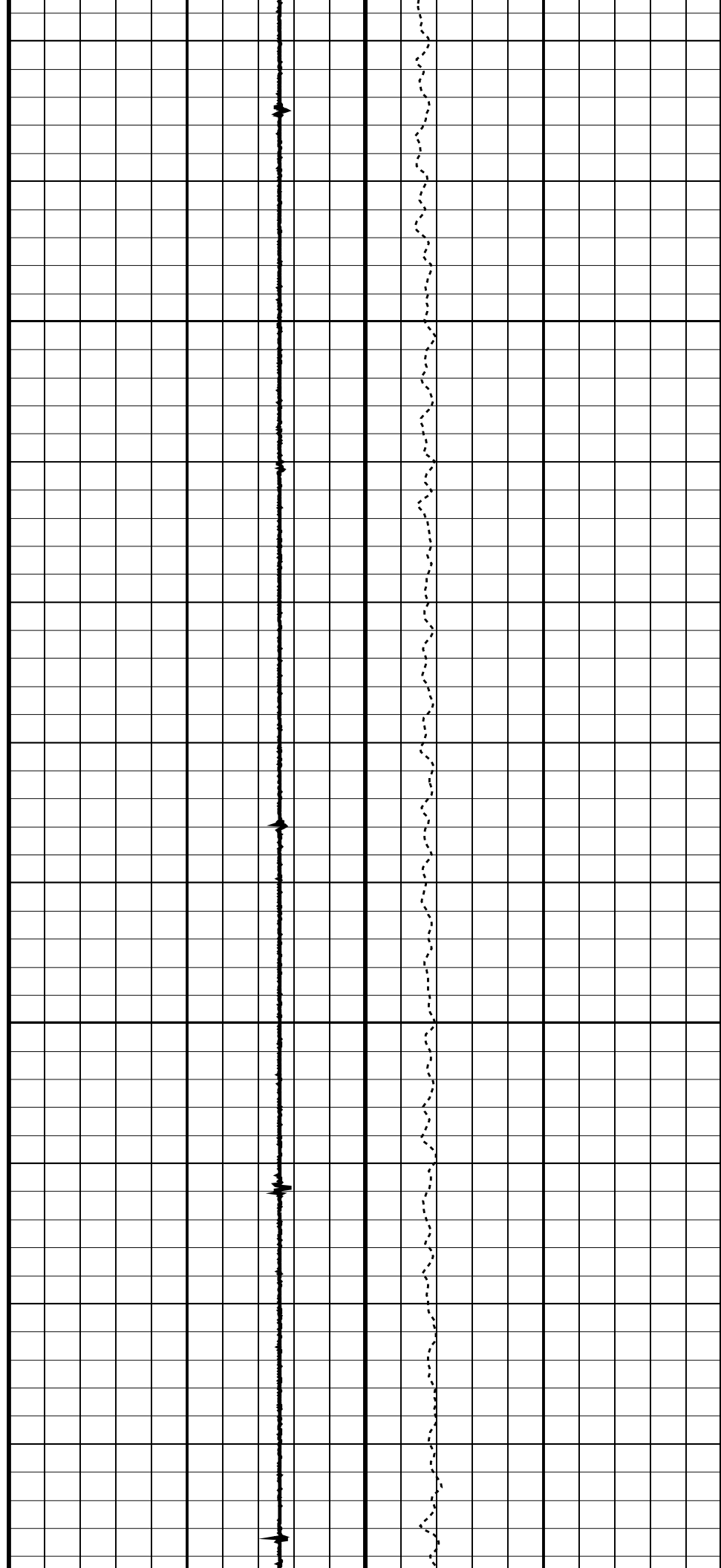


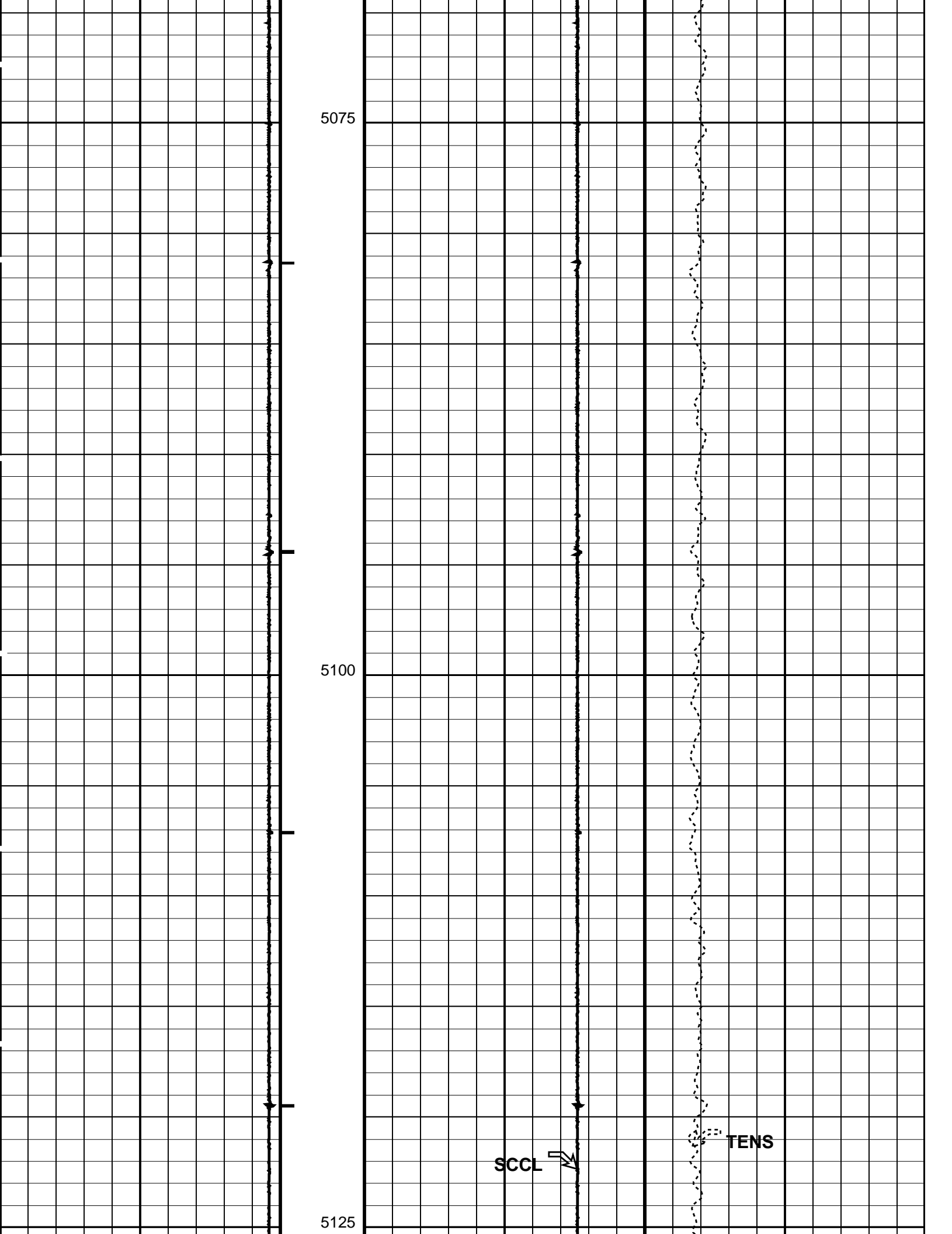


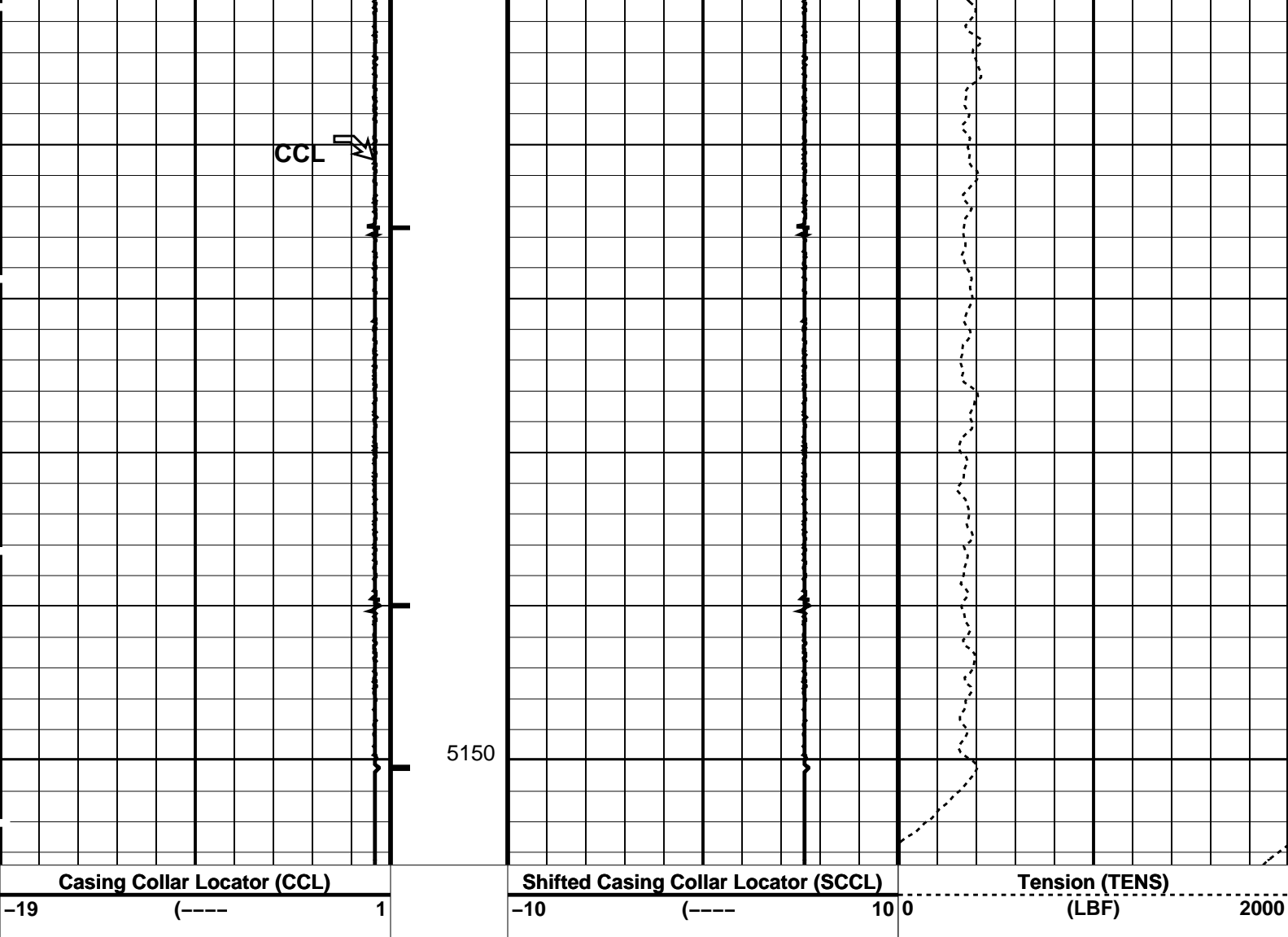


5025

5050







PIP SUMMARY

Time Mark Every 60 S

Parameters

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

Format: CCLLog Vertical Scale: 1:200 Graphics File Created: 06-Jul-2008 02:11

OP System Version: 15C0-309

MCM

MPEX-BA SRPC-3582-Q1\_2008\_OP15 MPSU-BA SRPC-3582-Q1\_2008\_OP15  
CCL-LA 15C0-309

Output DLIS Files

DEFAULT MPBT\_042LUP FN:41 PRODUCER 06-Jul-2008 02:11



Dummy MPBT  
Correlation Pass

Company: Esso Australia Pty Ltd.

Well: A-3a

Input DLIS Files

DEFAULT

PSP\_025LUP

FN:24

PRODUCER

05-Jul-2008 19:12

5199.9 M

4947.5 M

Output DLIS Files

DEFAULT

PSP\_029PUP

FN:28

PRODUCER

05-Jul-2008 19:53

5204.2 M

4952.2 M

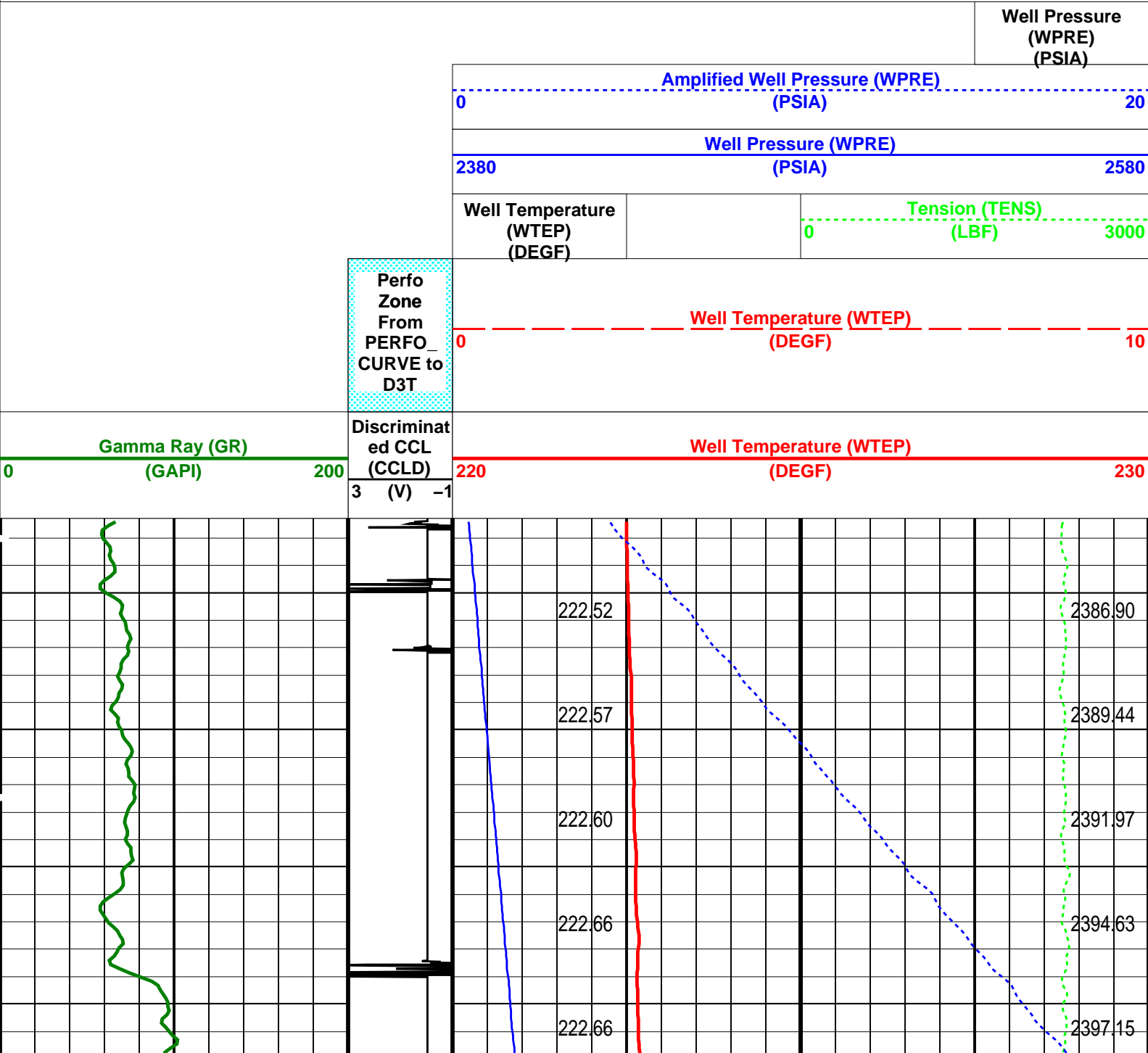
OP System Version: 15C0-309

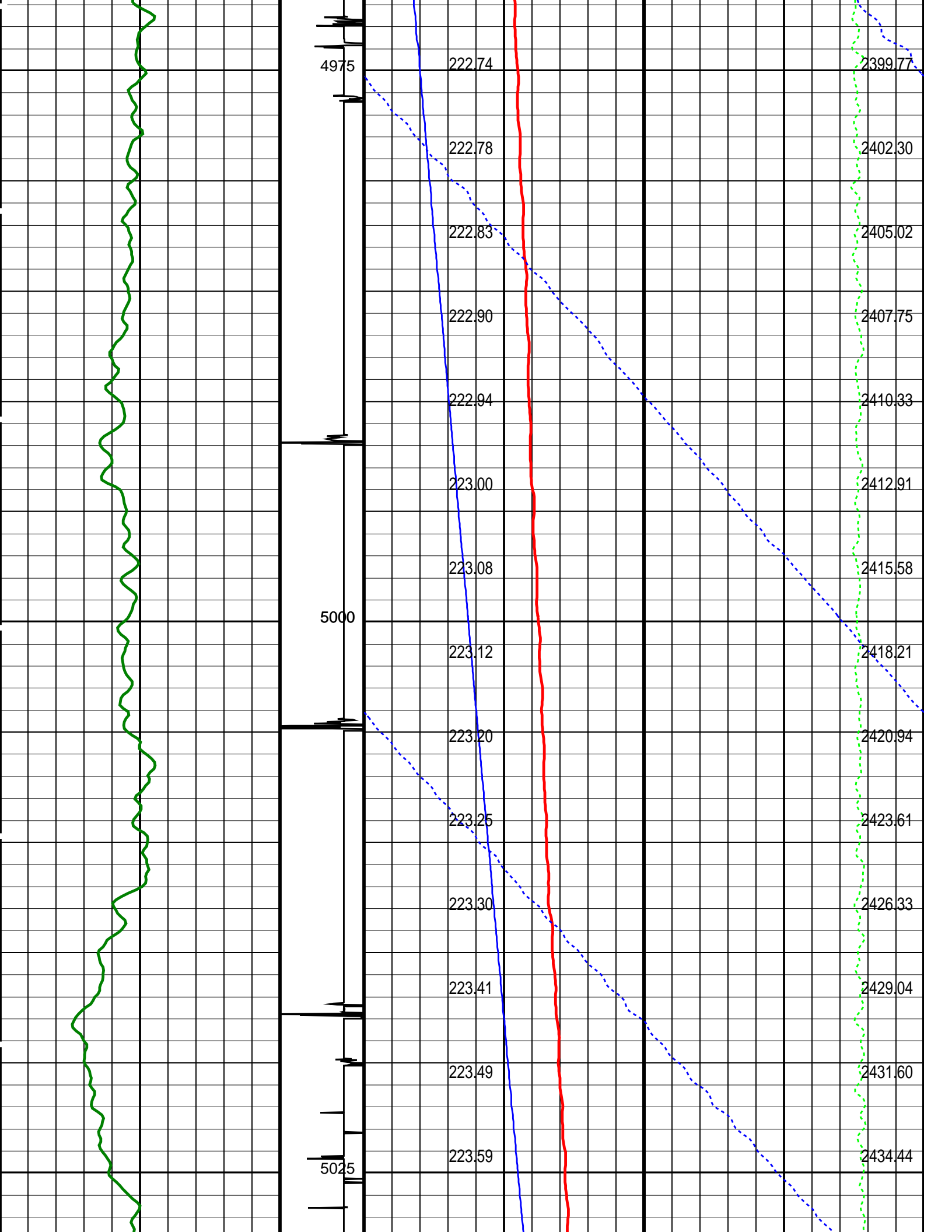
MCM

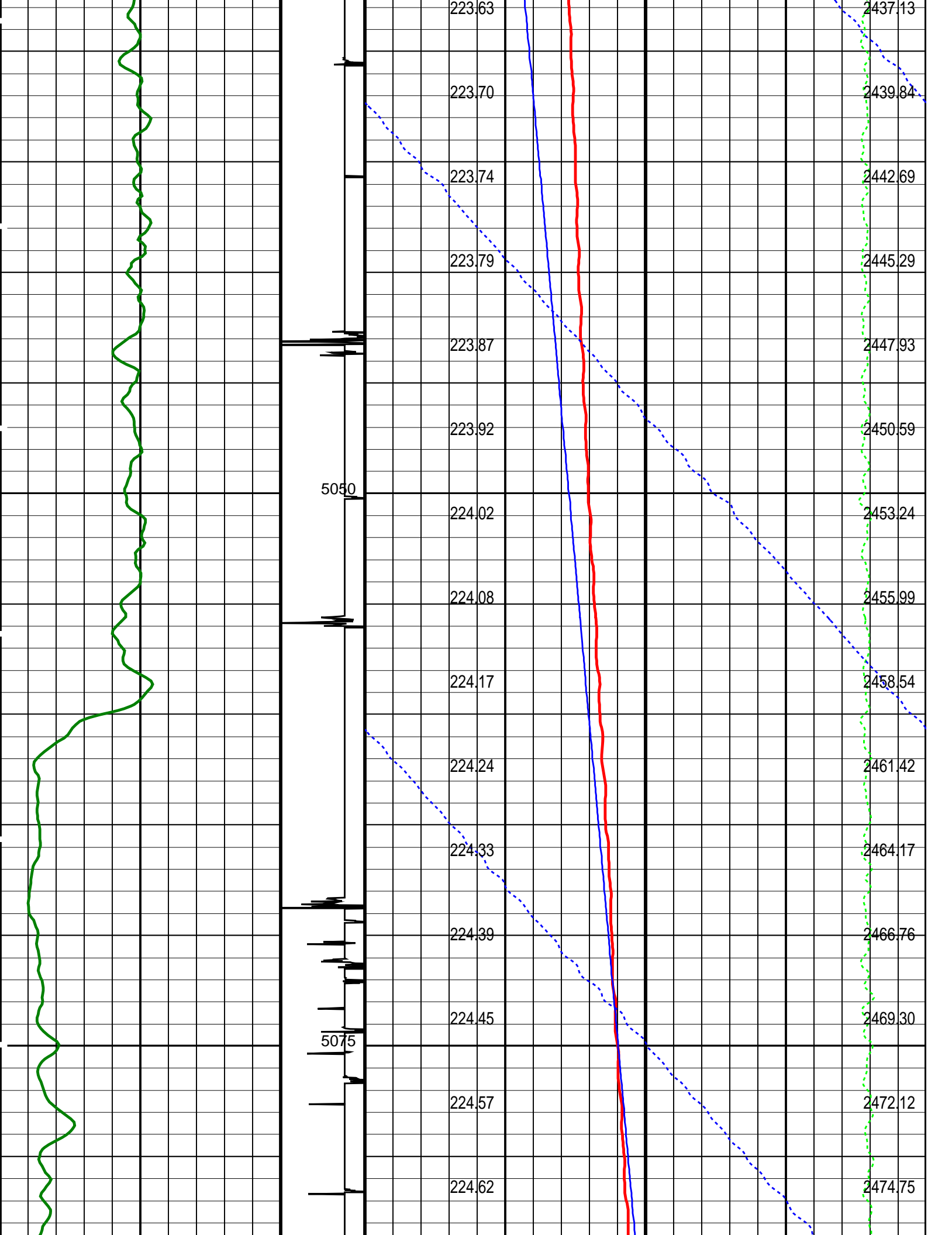
PSPT-A/B      SRPC-3582-Q1\_2008\_OP15

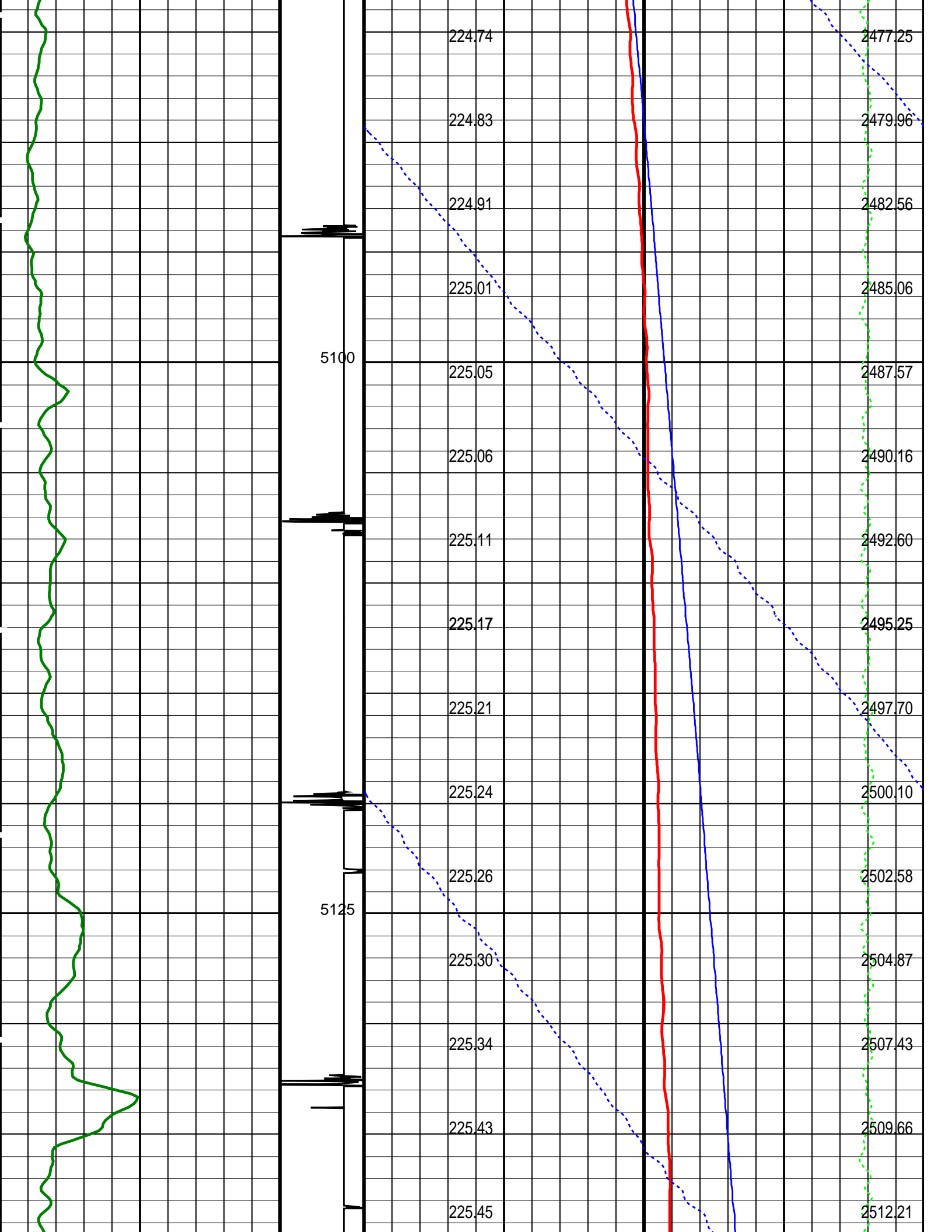
PIP SUMMARY

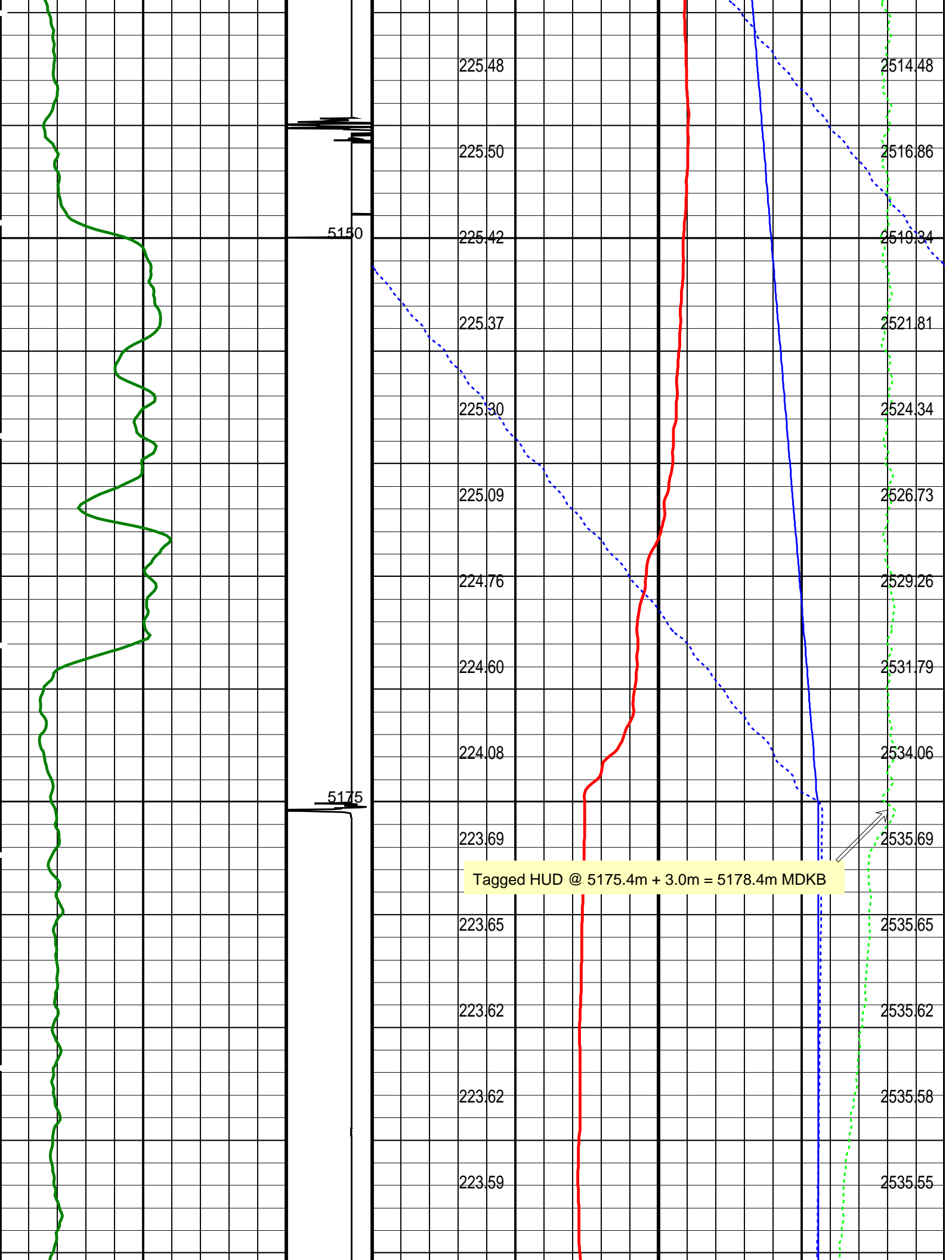
Time Mark Every 60 S



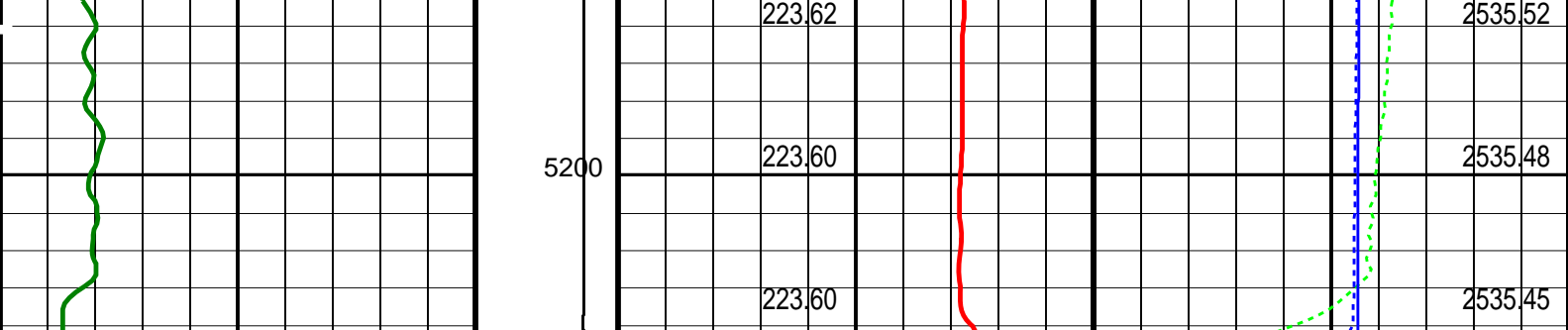












Gamma Ray (GR) (GAPI)		0	200
Well Temperature (WTEP) (DEGF)		220	230
Well Temperature (WTEP) (DEGF)		0	10
Tension (TENS) (LBF)		0	3000
Well Pressure (WPRE) (PSIA)		2380	2580
Amplified Well Pressure (WPRE) (PSIA)		0	20
Well Pressure (WPRE) (PSIA)			

PIP SUMMARY

Time Mark Every 60 S

Format: PSP\_1\_2\_1 Vertical Scale: 1:200 Graphics File Created: 05-Jul-2008 19:53

OP System Version: 15C0-309  
MCM

PSPT-A/B SRPC-3582-Q1\_2008\_OP15

Parameters		
DLIS Name	Description	Value
DO	System and Miscellaneous	4.3 M
PP	Depth Offset for Playback Playback Processing	NORMAL

Input DLIS Files					
DEFAULT	PSP_025LUP	FN:24	PRODUCER	05-Jul-2008 19:12	5199.9 M 4947.5 M

Output DLIS Files					
DEFAULT	PSP_029PUP	FN:28	PRODUCER	05-Jul-2008 19:53	

Company: Esso Australia Pty Ltd.

Well: A-3a  
Field: Flounder  
Rig: Crane  
Country: Australia

Schlumberger

2" HSD Powerjet Omega / MPBT  
Perforation & Plug Setting Record  
5-July-2008