

Company: ESSO Australia Pty. Ltd.

Well: Cobia A19A

Field: Cobia

Rig: Rig 175

Country: Australia

6" Junk Basket
4 1/2" HSD Perforating Record

Rig: Rig 175

Field: Cobia

Location: Bass Strait

Well: Cobia A19A

Company: ESSO Australia Pty. Ltd.

LOCATION

Bass Strait

Elev.: K.B. 40.99 m
G.L. -79.00 m
D.F. 40.99 m

Permanent Datum: MSL

Elev.: 0.00 m

Log Measured From: RT

40.99 m above Perm. Datum

Drilling Measured From: RT

State: Victoria

Max. Well Deviation 48 deg

Longitude 148d 18' 32.999" E

Latitude 38d 26' 57.499" S

PVT DATA			Run 1	Run 2	R
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	1-May-2009		
Run Number	1& 2 & 3		
Depth Driller	3170 m		
Schlumberger Depth	3153.3 m		
Bottom Log Interval	3153.3 m		
Top Log Interval	2991 m		
Casing Fluid Type	Brine		
Salinity			
Density	8.55 lbm/gal		
Fluid Level	0 m		
BIT/CASING/TUBING STRING			
Bit Size	8.500 in		
From	3200 m		
To	607.6 m		
Casing/Tubing Size	7.000 in		
Weight	26 lbm/ft		
Grade	L-80		
From	3195 m		
To	0 m		
Maximum Recorded Temperatures			
Logger On Bottom	1-May-2009		18:00
Unit Number	3929	AUSL	
Recorded By	Owen D, Gaffar F		
Witnessed By	Greg & Sam		

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: 1-MAY-2009 21:24:07

Logging Cable

Type:	7-46V XS
Serial Number:	708145
Length:	7315 M
Conveyance Method:	Wireline
Rig Type:	Offshore Fixed

Log Sequence:	Subsequent Log In the Well
Reference Log Name:	Cobia A19A
Reference Log Run Number:	Not provided
Reference Log Date:	Not provided

1. Subsequent log in the well, Schlumberger depth control procedures applied. All logs zeroed at drill floor
2. Depth correlated to Schlumberger LWD log provided by client
3. IDW was used as primary depth control device
4. Z-chart was used as a secondary depth control
- 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.

OS1: None
OS2:
OS3:
OS4:
OS5:

Objective: Run 6" Junk Basket to confirm perforation guns access to at least 3120.0 m MD.
Run a 4 1/2" HSD Gun to perforate lower zone (3077.5 – 3081.5) m MD
Run a second 4 1/2" HSD Gun to perforate upper zone (3043.5 – 3047.0) m MD

Maximum well deviation = 48 deg @ 2558.51 m MDKB
HUD tagged @ 3153.3 m MDKB with Junk Basket

[illegible]

2.28

2.05

0.05

MAXIMUM STRING DIAMETER 6.00 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

0.15

TOOL BOTTOM

MAXIMUM STRING DIAMETER 4.50 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Client: ESSO Australia Pty. Ltd.

Drawing Date: 5/1/2009

Well: Cobia A19A

API #:

Field: Cobia



Rig Name: Rig 175

State: Victoria

Reference Datum: Mean Sea Level

Country: Australia

Elevation: 41.0 m

Production String			Well Schematic			Casing String		
	(in)	(m)				(m)	(in)	
OD	ID	MD				MD	OD	ID
						597.0	9.625	Casing Shoe

[illegible]

Job Events Summary

MAXIS Field Log

Schlumberger Job Event Summary						
	Time	Elapsed Time	Depth (M)		File	
Rig Up Started	1-May-2009 16:00					
Descent 1: PGGD						
Begin Descent	1-May-2009 17:00					
Descent 2: GUN/PGGD						
Begin Descent	2-May-2009 11:30					
Log Pass (down)	2-May-2009 13:45	000:25	774.3 - 3115.8		PERFO_031LDP	
Log Pass (up)	2-May-2009 14:18	000:07	3108.2 - 3038.4		PERFO_036LUP	

Log Pass (up) 2-May-2009 14:28 000:16 3110.0 - 3036.1 PERFO_037LUP

Descent 3: GUN/PGGD

Begin Descent 2-May-2009 17:30

Log Pass (down) 2-May-2009 17:42 000:26 617.8 - 3087.2 PERFO_043LDP

Log Pass (up) 2-May-2009 18:25 000:09 3085.8 - 3008.7 PERFO_047LUP

Log Pass (up) 2-May-2009 18:38 000:22 3086.6 - 2993.1 PERFO_048LUP

Descent 4: PGGD

Begin Descent 2-May-2009 21:30

Log Pass (down) 2-May-2009 21:49 001:21 2.1 - 3135.9 PERFO_053LDP

Log Pass (up) 2-May-2009 23:09 000:11 3135.9 - 3018.1 PERFO_054LUP

Rig Down Completed 3-May-2009 2:02

Schlumberger

Tubing Depth Determination
Correlation Pass

MAXIS Field Log

Company: Well:

Output DLIS Files

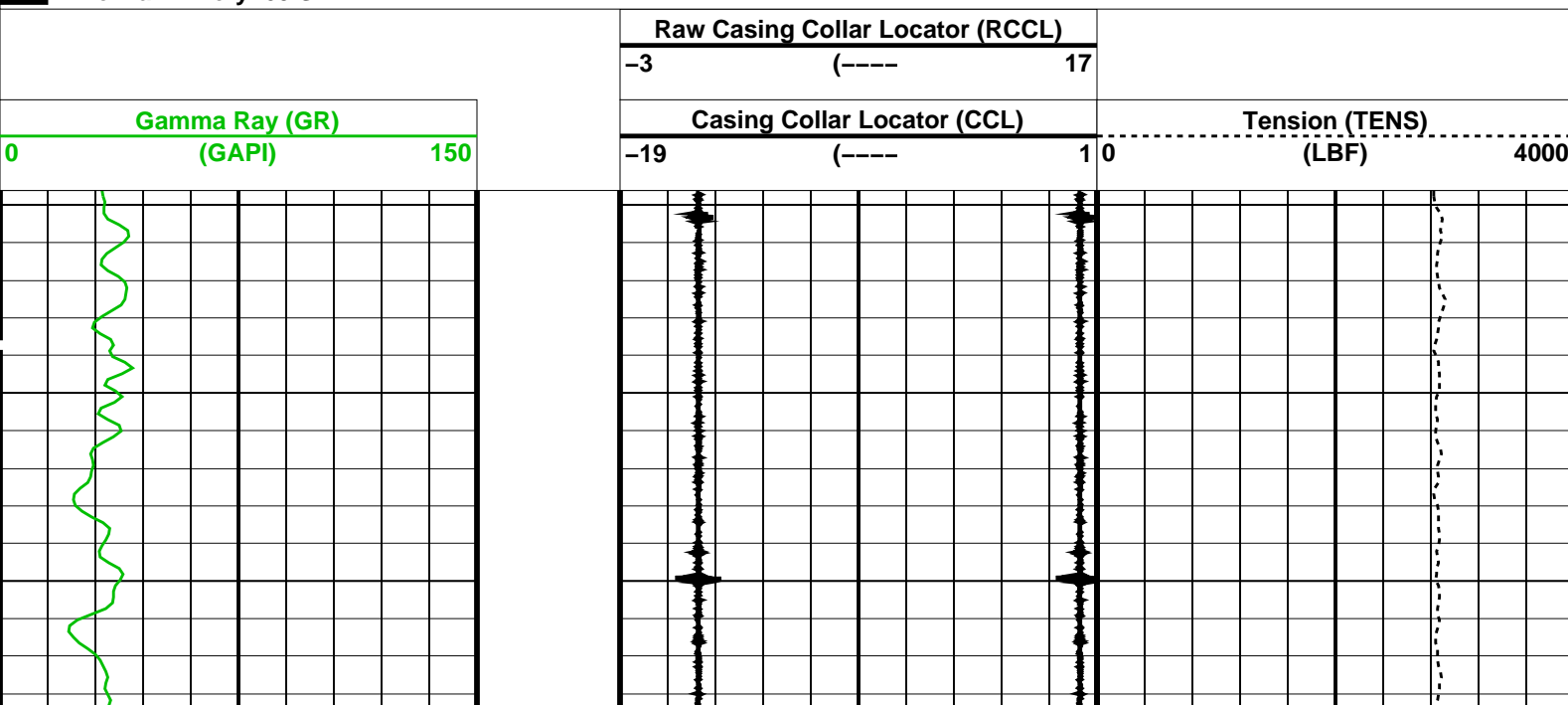
DEFAULT PERFO_074LUP FN:73 PRODUCER 04-May-2009 07:53

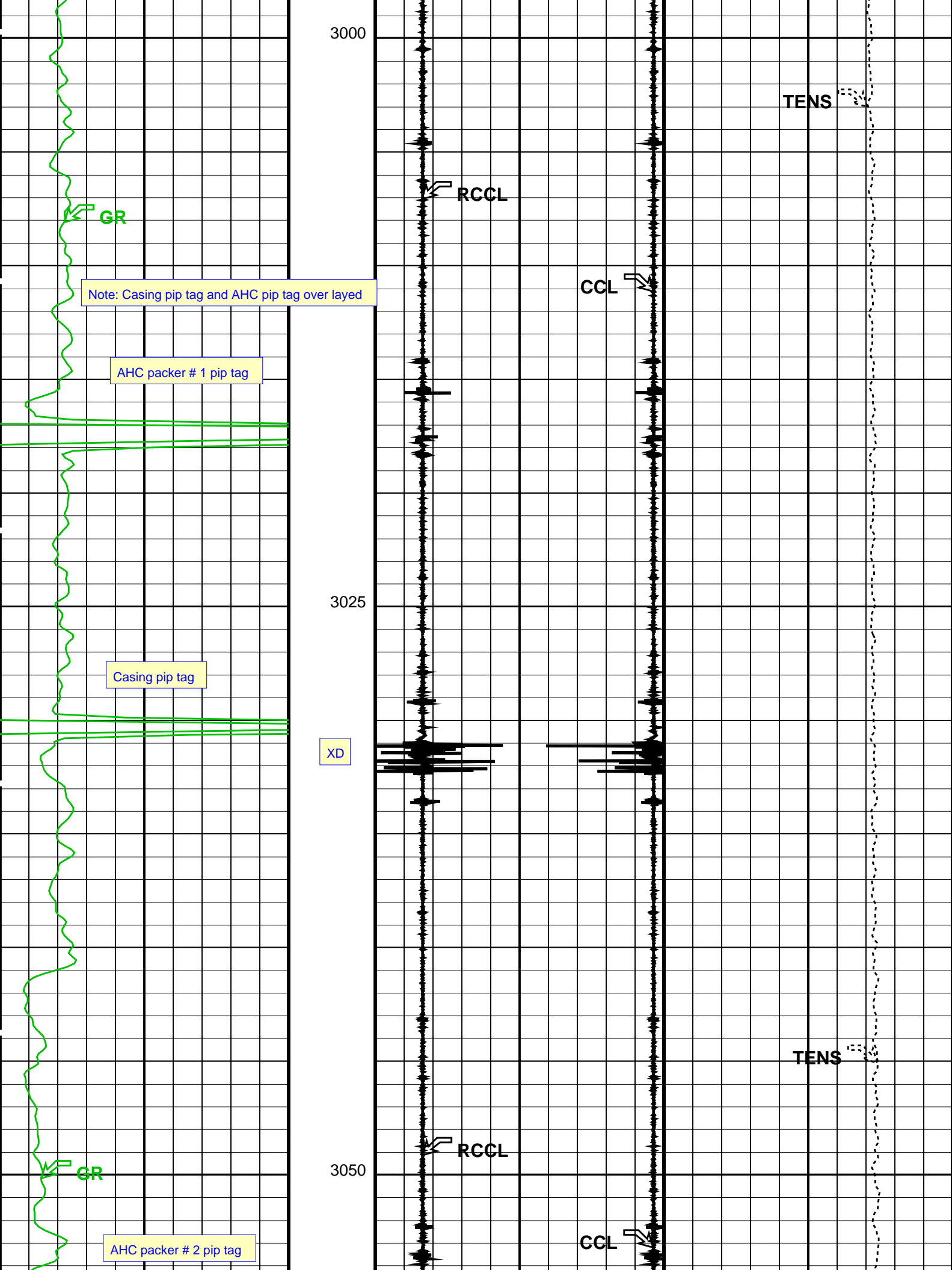
OP System Version: 17C0-154

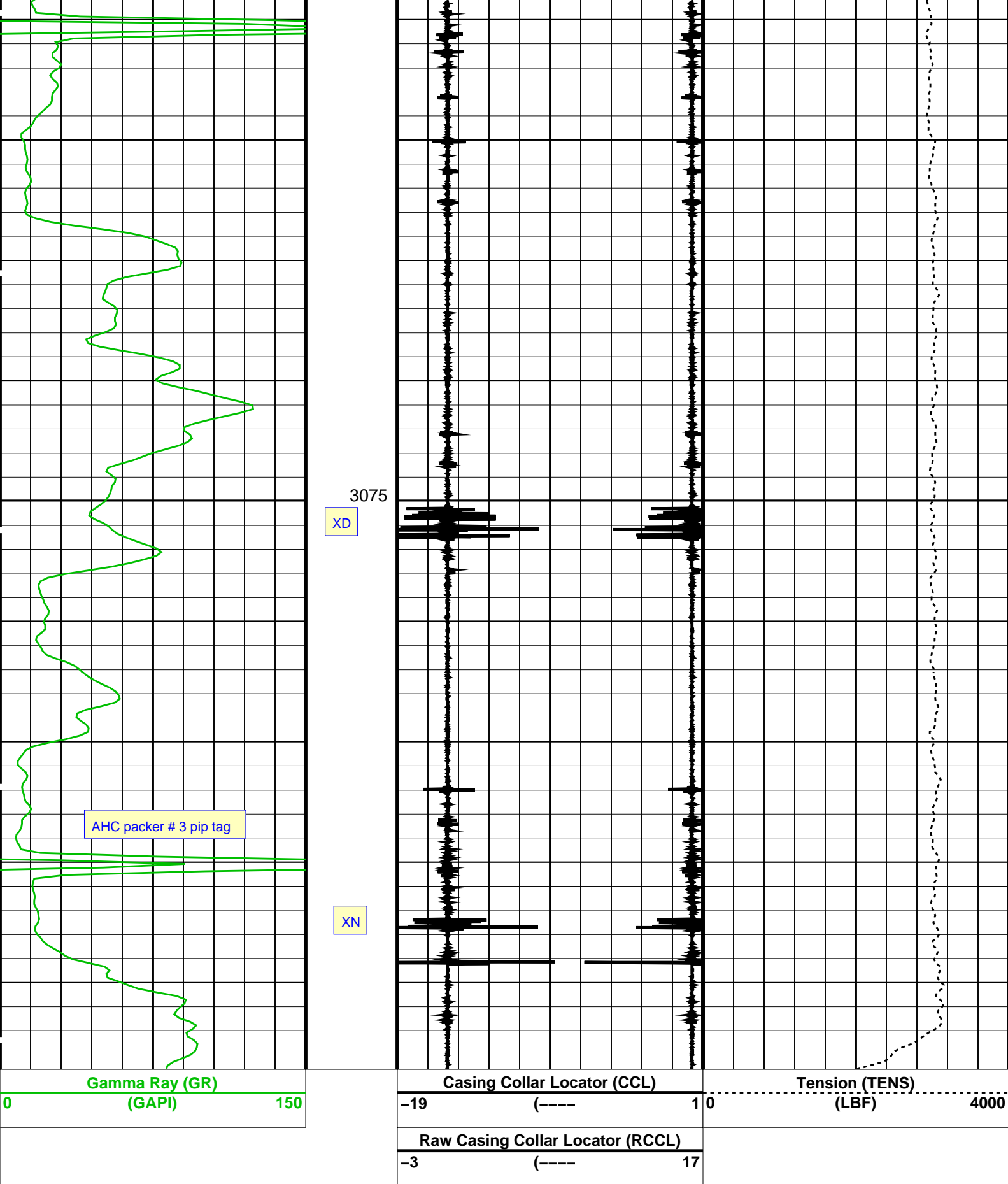
PGGT-CC 17C0-154 SHM_GUN 17C0-154

PIP SUMMARY

Time Mark Every 60 S







PIP SUMMARY

Time Mark Every 60 S

Format: CCLLog Vertical Scale: 1:200 Graphics File Created: 04-May-2009 07:53

OP System Version: 17C0-154

PGGT-CC 17C0-154 SHM GUN 17C0-154

Output DLIS Files

DEFAULT

PERFO_074LUP

FN:73

PRODUCER

04-May-2009 07:53

Schlumberger

**Junk Basket with 6" Gauge Ring
After Perforation Correlation Pass**

MAXIS Field Log

Company:

Well:

Input DLIS Files

DEFAULT

PERFO_054LUP

FN:53

PRODUCER

02-May-2009 23:09

3135.9 M

3018.1 M

Output DLIS Files

DEFAULT

PERFO_058PUP

FN:57

PRODUCER

03-May-2009 01:44

3131.8 M

3014.0 M

OP System Version: 17C0-154

PGGT-D

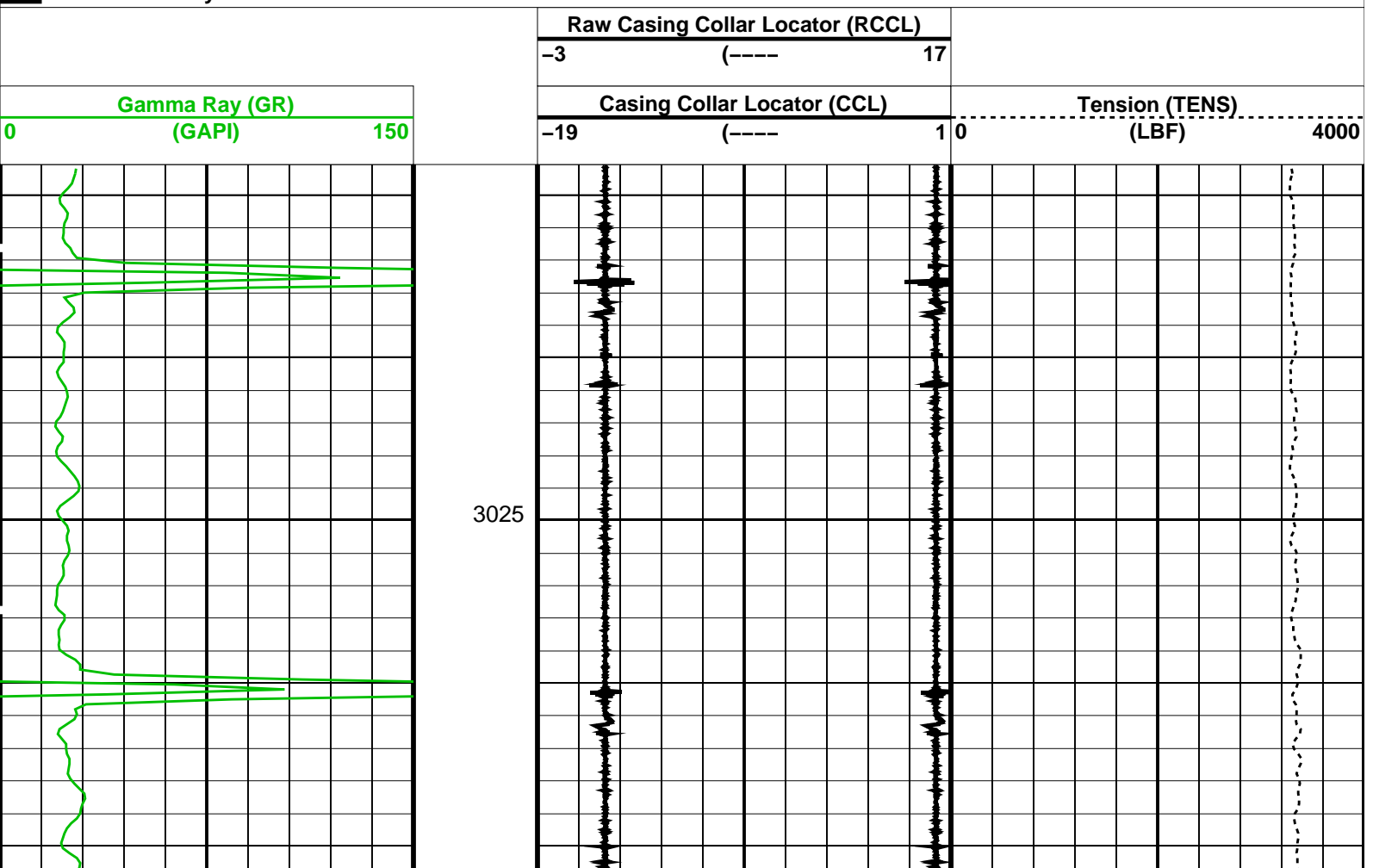
17C0-154

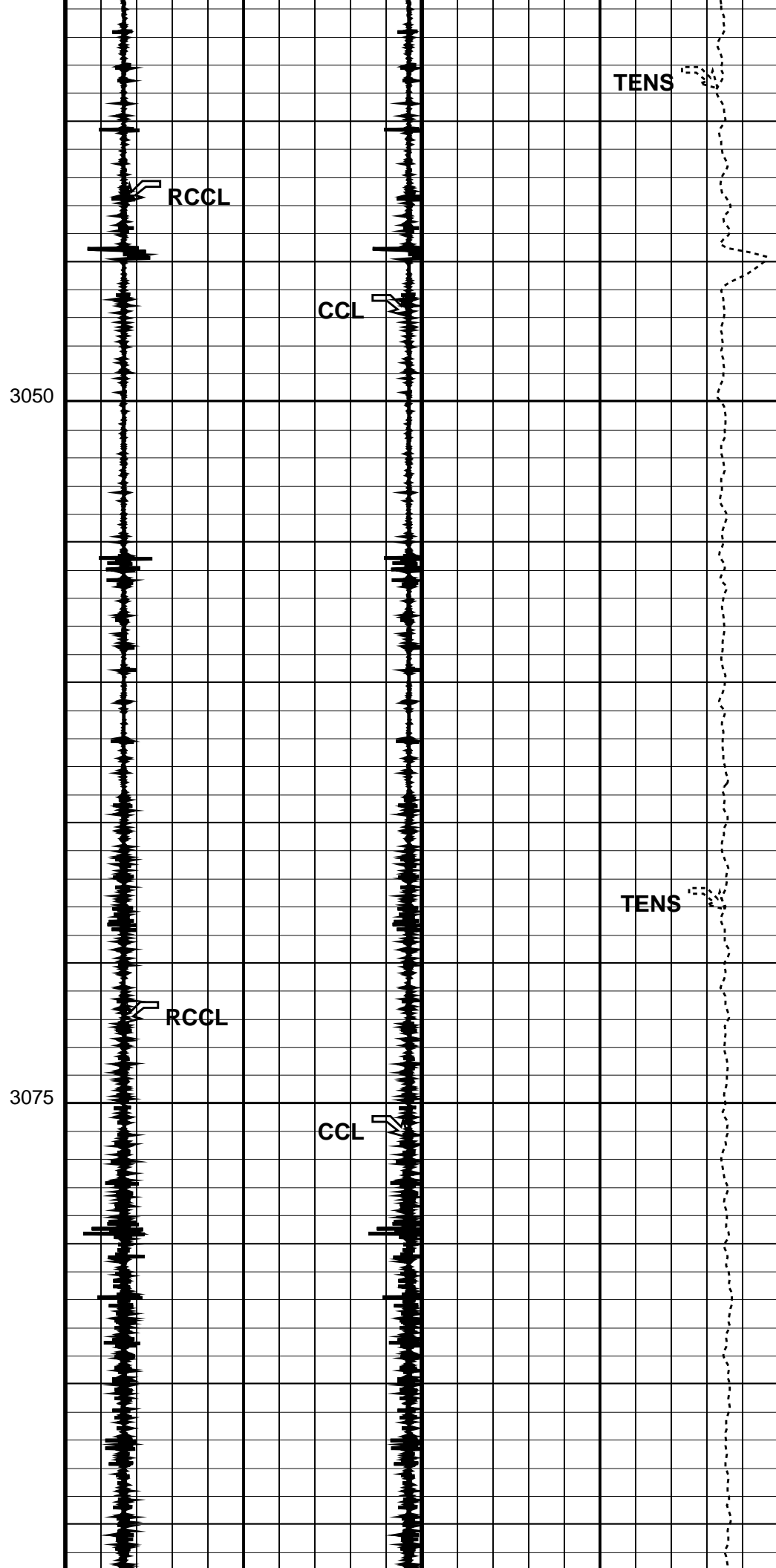
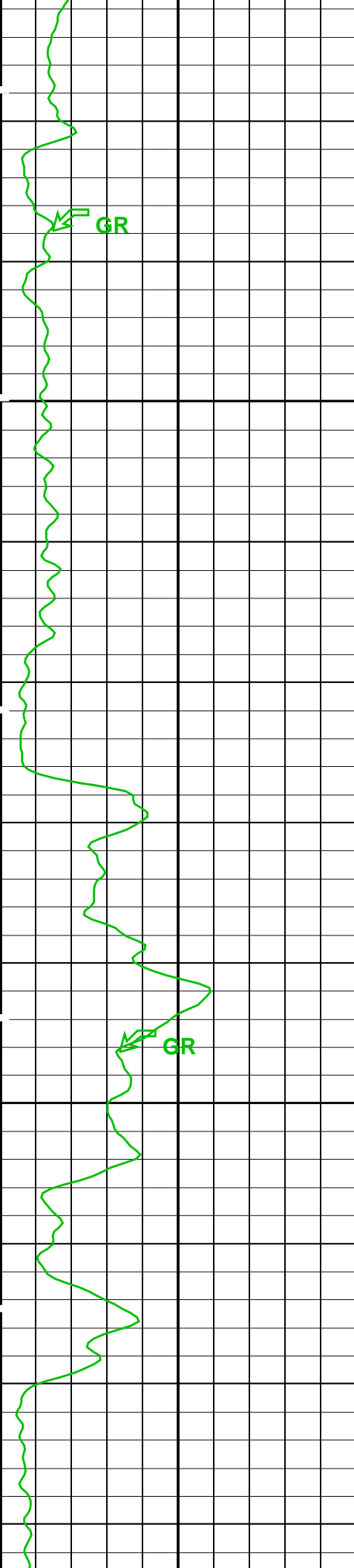
SHM_GUN

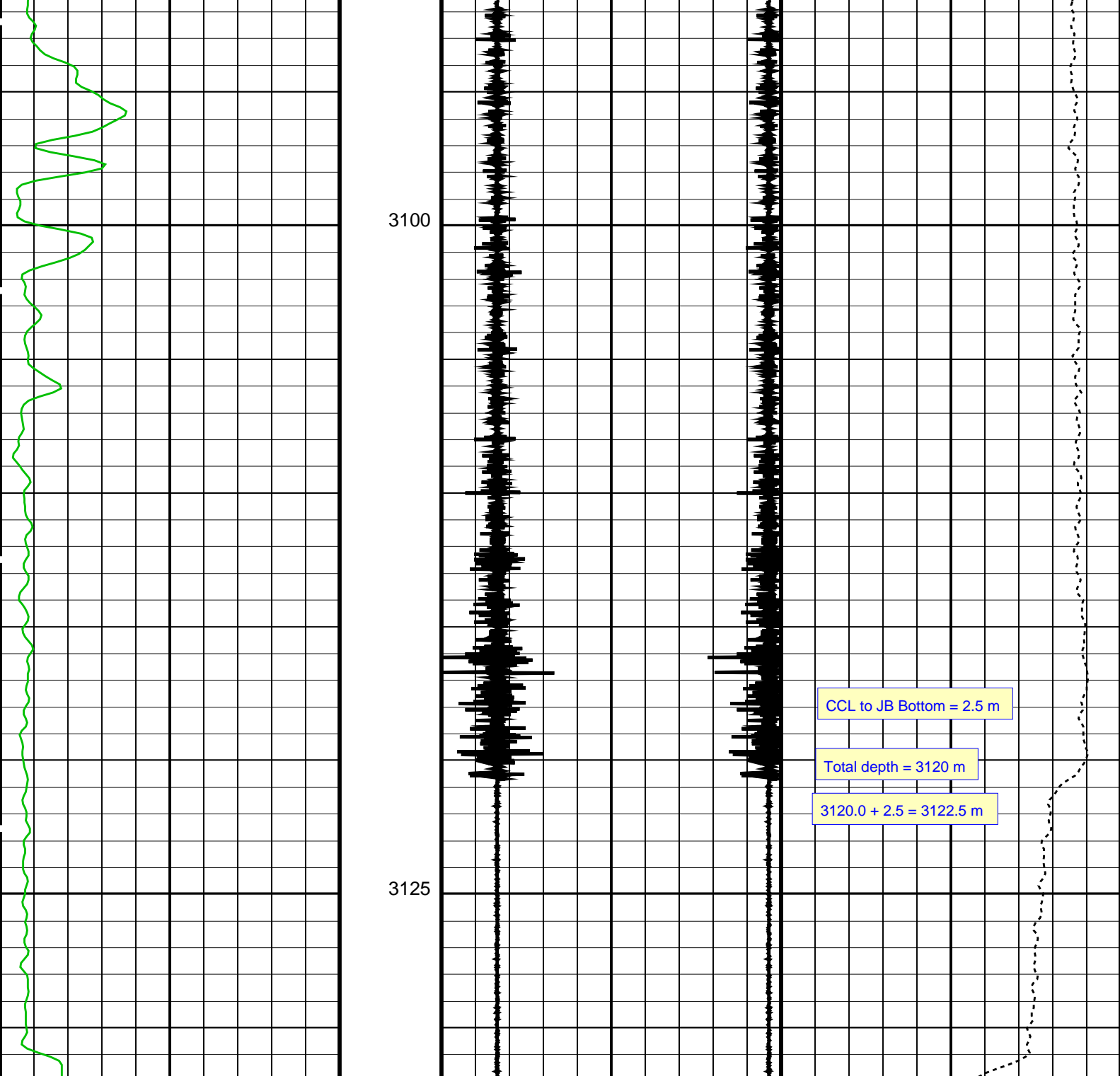
17C0-154

PIP SUMMARY

Time Mark Every 60 S








Gamma Ray (GR) (GAPI)		Casing Collar Locator (CCL)		Tension (TENS)	
0	150	-19	1	0	4000
		Raw Casing Collar Locator (RCCL)			
		-3	17		

PIP SUMMARY

Time Mark Every 60 S

Parameters		
DLIS Name	Description	Value
DO	System and Miscellaneous	
PP	Depth Offset for Playback	-4.1 M
	Playback Processing	NORMAL

Input DLIS Files					
DEFAULT	PERFO_054LUP	FN:53	PRODUCER	02-May-2009 23:09	3135.9 M 3018.1 M
Output DLIS Files					
DEFAULT	PERFO_058PUP	FN:57	PRODUCER	03-May-2009 01:44	



4 1/2" HSD – Gun Run 2
Shooting Pass

MAXIS Field Log

PERFO2 Operational Summary Listing

Device	Status	Req Depth (M)	Obs Depth (M)	Time Used
GUN1	Used	3043.5	3043.5	Sat May 02 18:47:02 200

Company: ESSO Australia Pty. Ltd.

Well: Cobia A19A

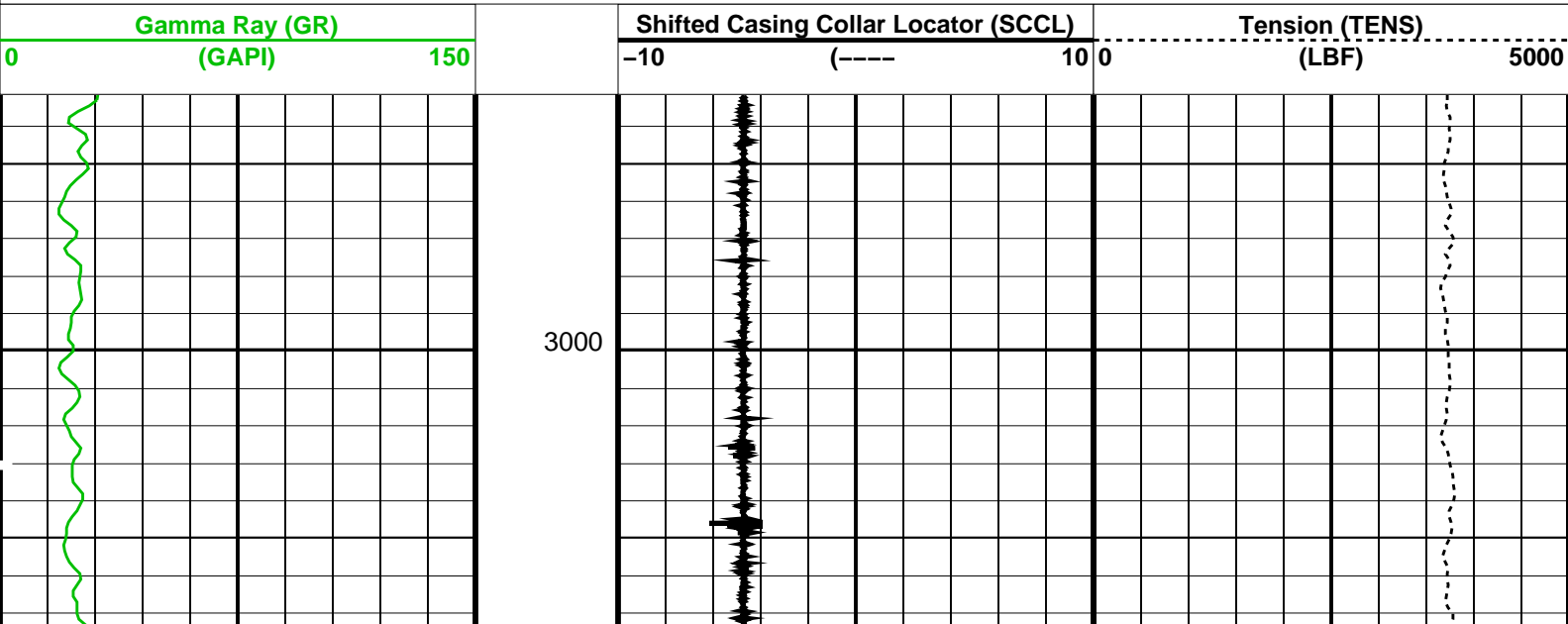
Output DLIS Files					
DEFAULT	PERFO_048LUP	FN:47	PRODUCER	02-May-2009 18:38	

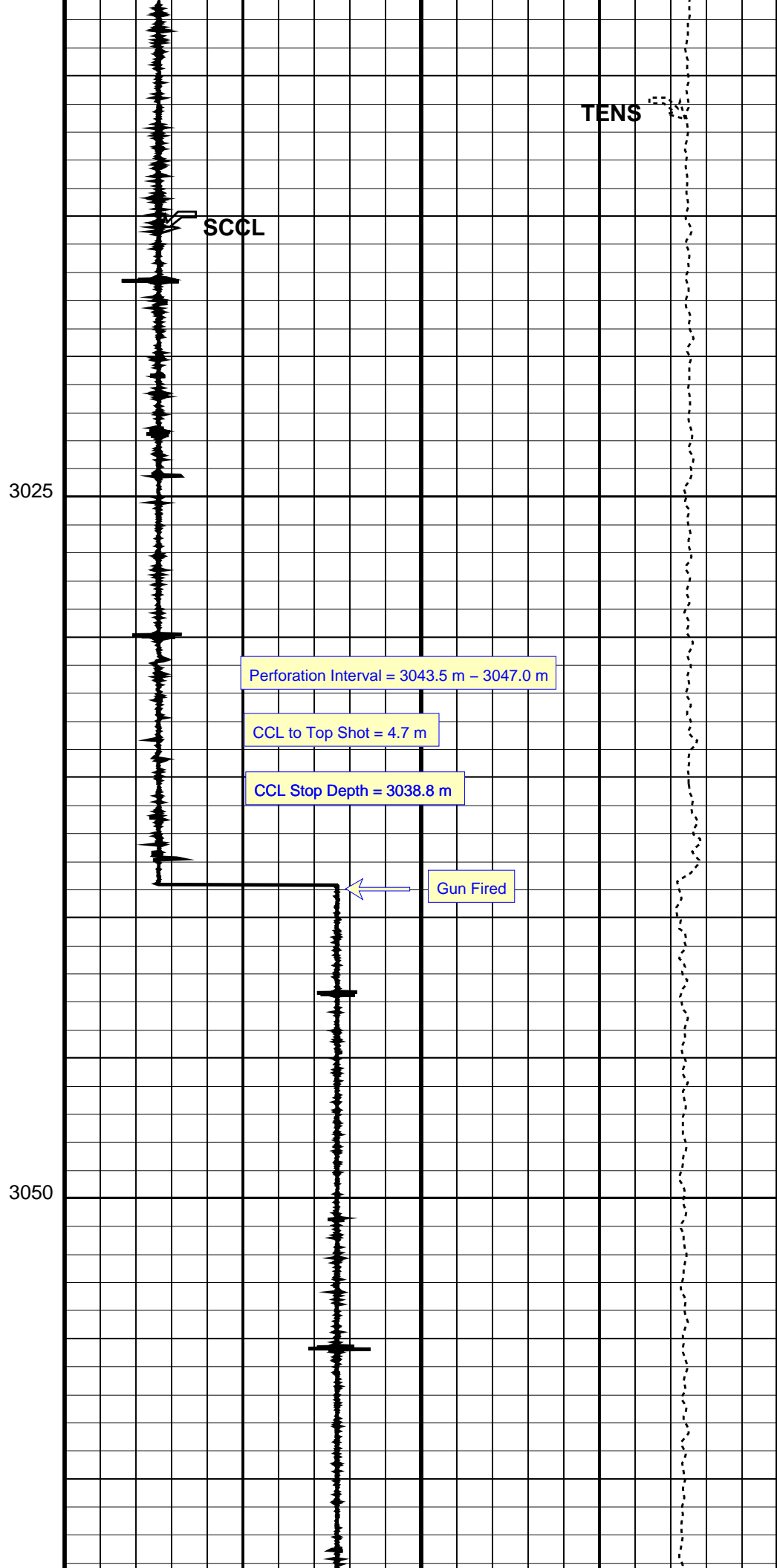
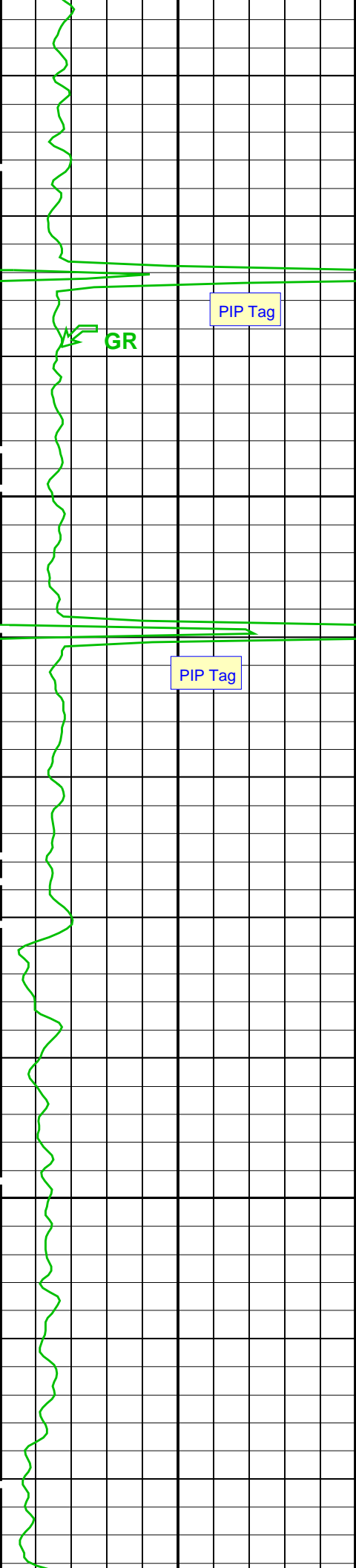
OP System Version: 17C0-154

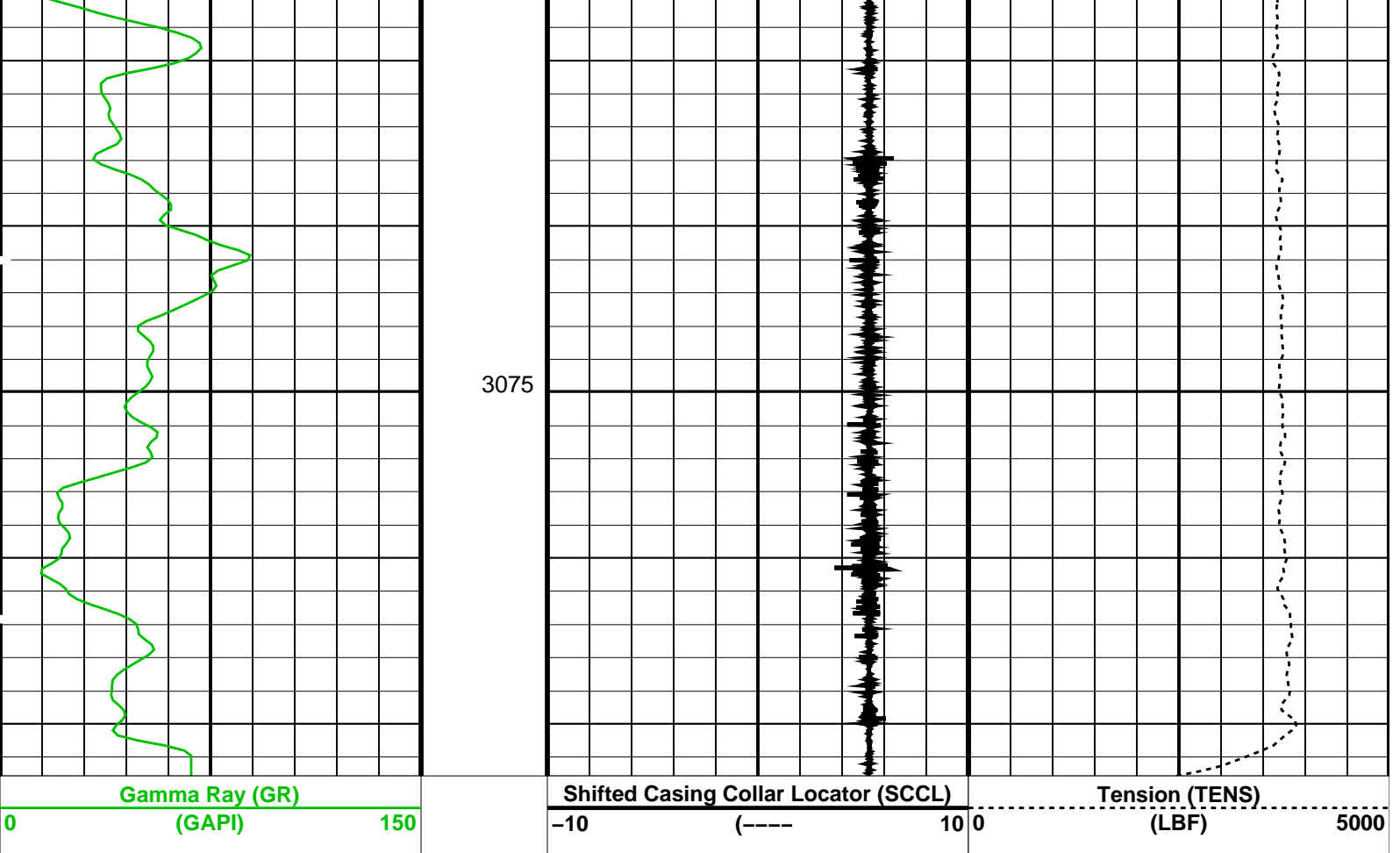
SHM_GUN	17C0-154	PGGT-D	17C0-154
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PIP SUMMARY

 Time Mark Every 60 S







PIP SUMMARY

Time Mark Every 60 S

Format: PERFO_1 Vertical Scale: 1:200

Graphics File Created: 02-May-2009 18:38

OP System Version: 17C0-154

SHM_GUN

17C0-154

PGGT-D

17C0-154

Output DLIS Files

DEFAULT

PERFO_048LUP

FN:47

PRODUCER

02-May-2009 18:38

Schlumberger

4 1/2" HSD – Gun Run 2 Correlation Pass

MAXIS Field Log

Company: ESSO Australia Pty. Ltd.

Well: Cobia A19A

Output DLIS Files

DEFAULT

PERFO_047LUP

FN:46

PRODUCER

02-May-2009 18:25

OP System Version: 17C0-154

SHM_GUN

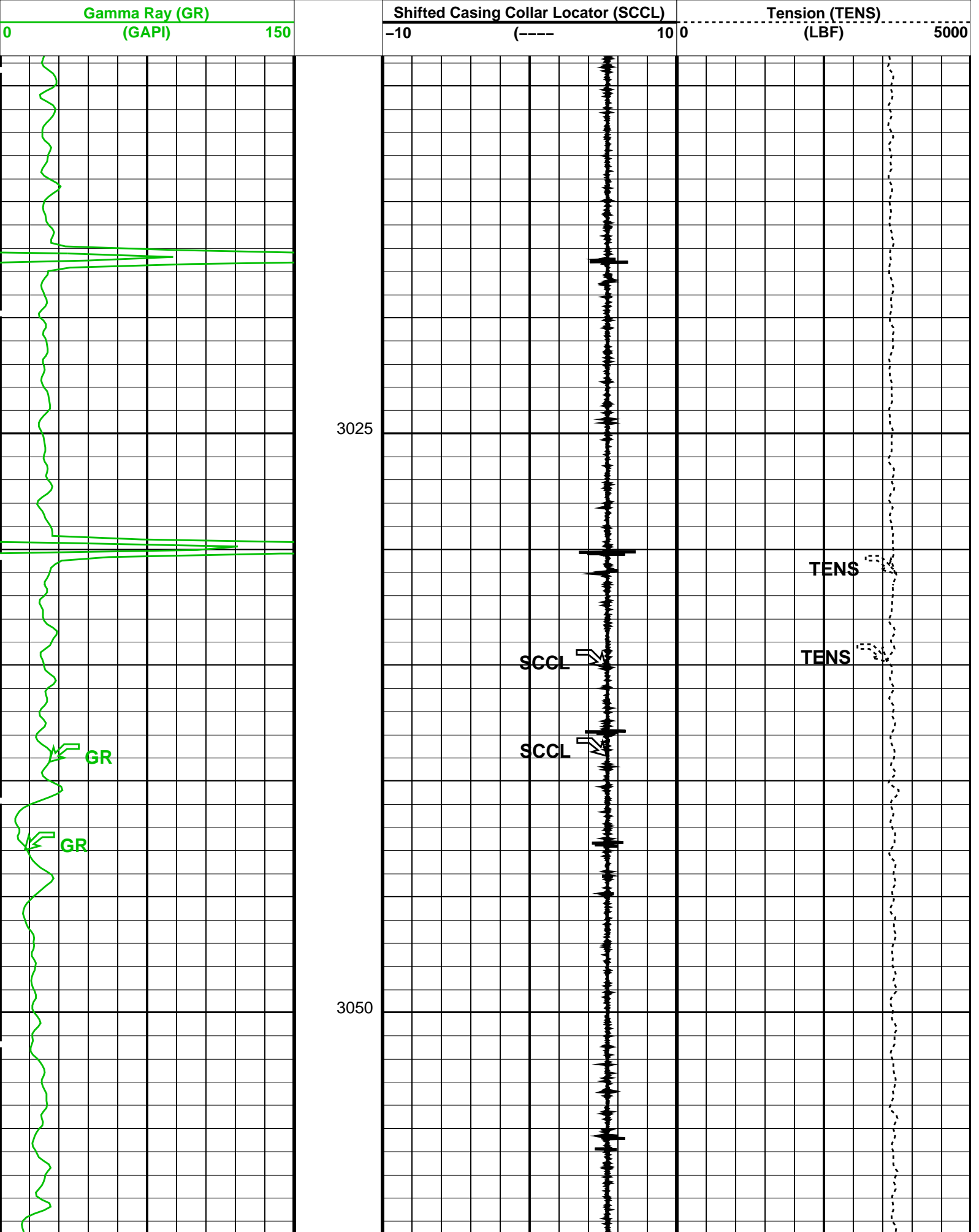
17C0-154

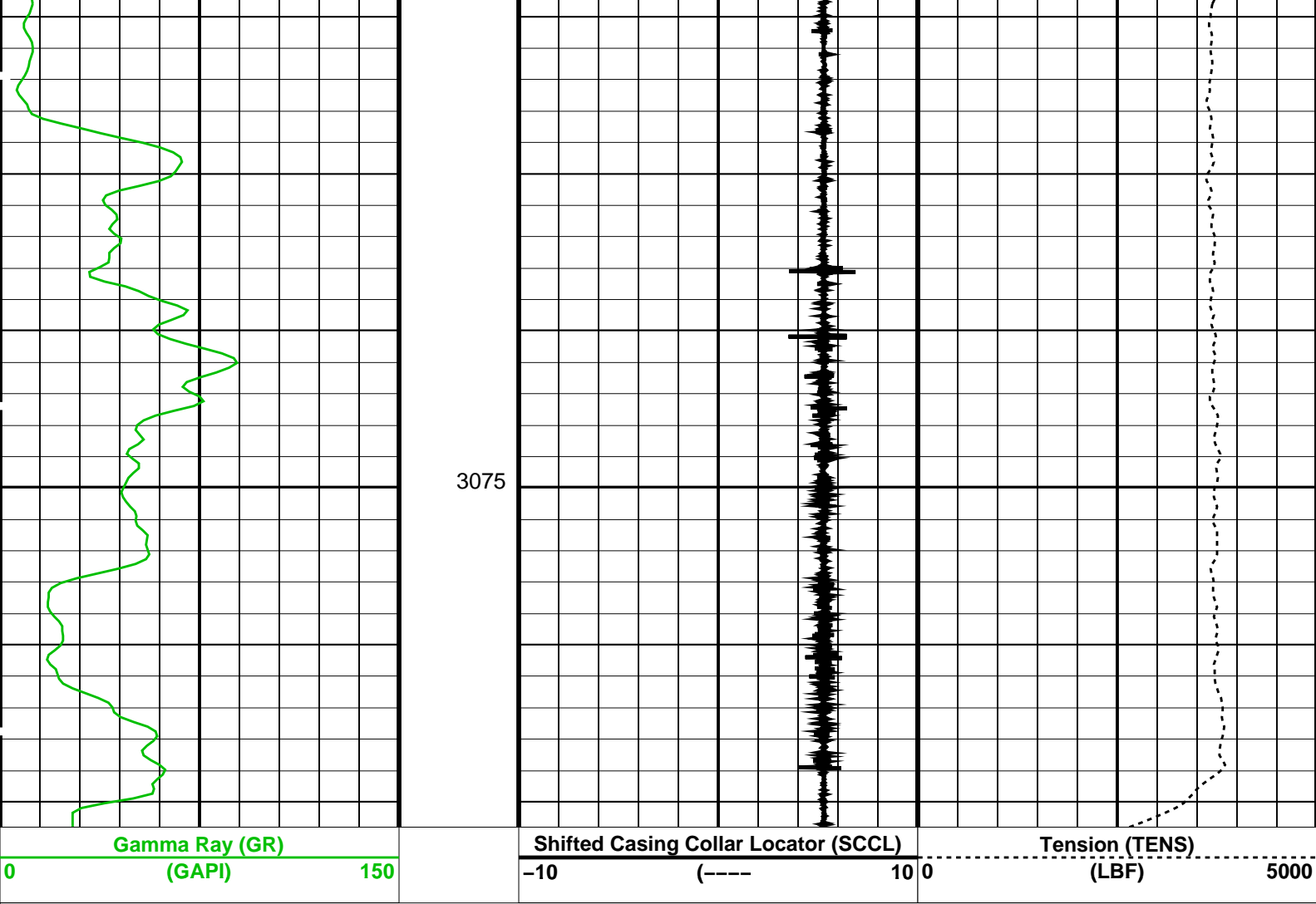
PGGT-D

17C0-154

PIP SUMMARY

Time Mark Every 60 S





PIP SUMMARY

Time Mark Every 60 S

Format: PERFO_1 Vertical Scale: 1:200 Graphics File Created: 02-May-2009 18:25

OP System Version: 17C0-154

SHM_GUN 17C0-154 PGGT-D 17C0-154

Output DLIS Files

DEFAULT PERFO_047LUP FN:46 PRODUCER 02-May-2009 18:25



4 1/2" HSD – Gun Run 1
Shooting Pass

MAXIS Field Log

PERFO2 Operational Summary Listing

Device	Status	Req Depth (M)	Obs Depth (M)	Time Used
GUN1	Used	3077.5	3077.5	Sat May 02 14:35:30 2009

Output DLIS Files

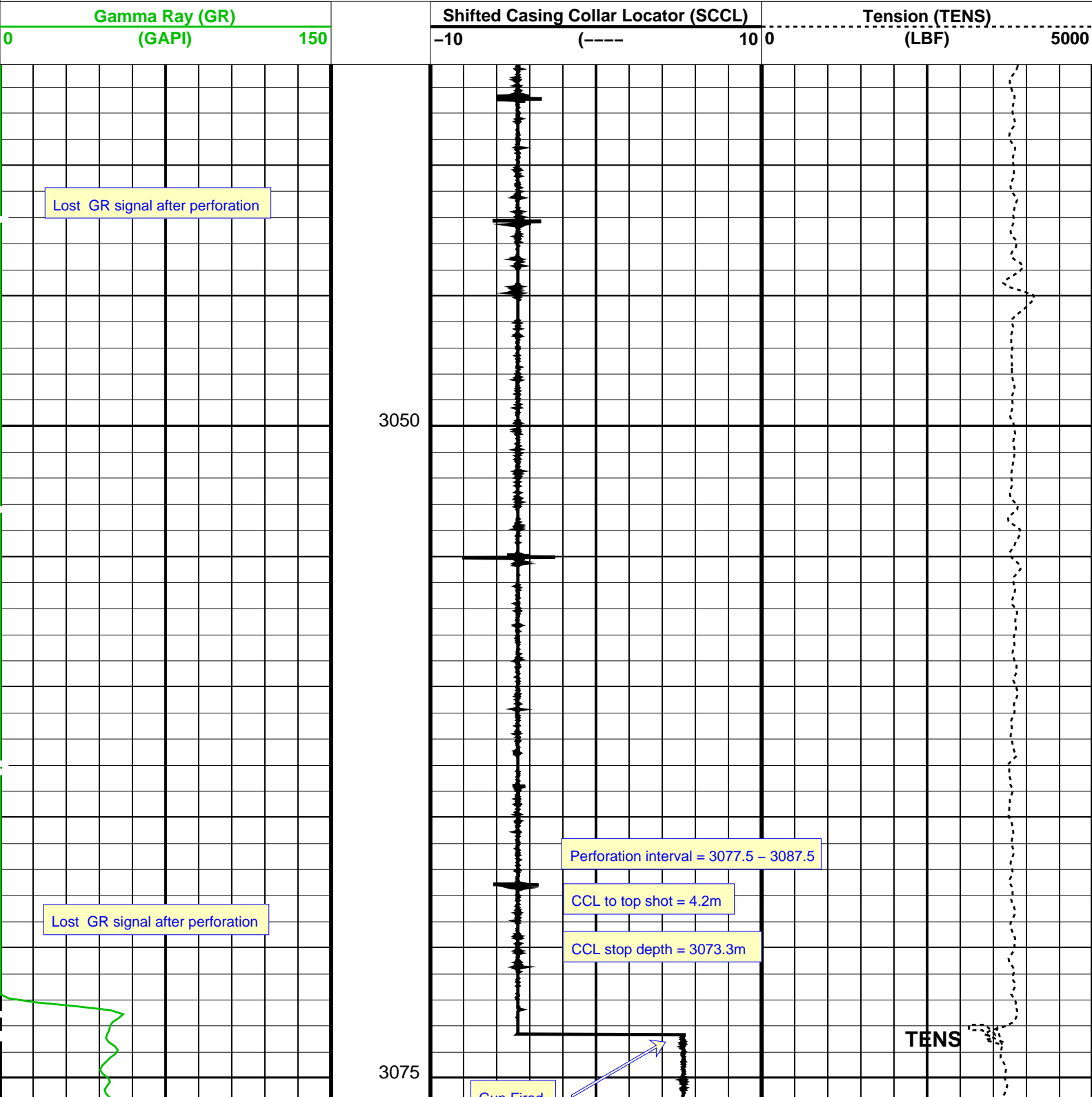
DEFAULTPERFO_037LUPFN:36PRODUCER02-May-2009 14:283110.0 M3036.1 M

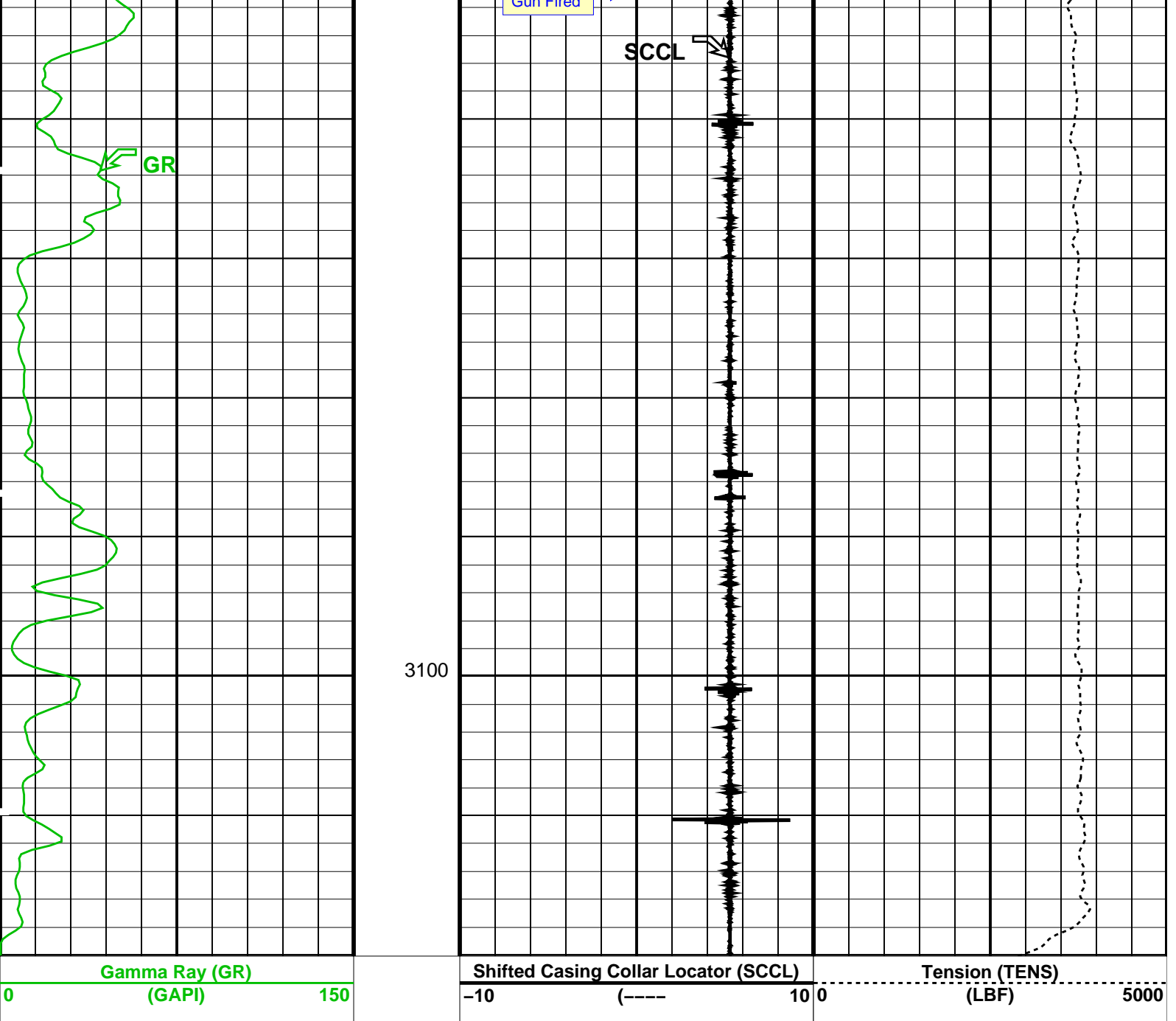
OP System Version: 17C0-154

SHM_GUN17C0-154PGGT-D17C0-154

PIP SUMMARY

Time Mark Every 60 S





PIP SUMMARY

Time Mark Every 60 S

Format: PERFO_1 Vertical Scale: 1:200

Graphics File Created: 02-May-2009 14:28

OP System Version: 17C0-154

SHM_GUN

17C0-154

PGGT-D

17C0-154

Output DLIS Files

DEFAULT

PERFO_037LUP

FN:36

PRODUCER

02-May-2009 14:28

Schlumberger

**4 1/2" HSD – Gun Run 1
Correlation Pass**

Company: ESSO Australia Pty. Ltd.

Well: Cobia A19A

Output DLIS Files

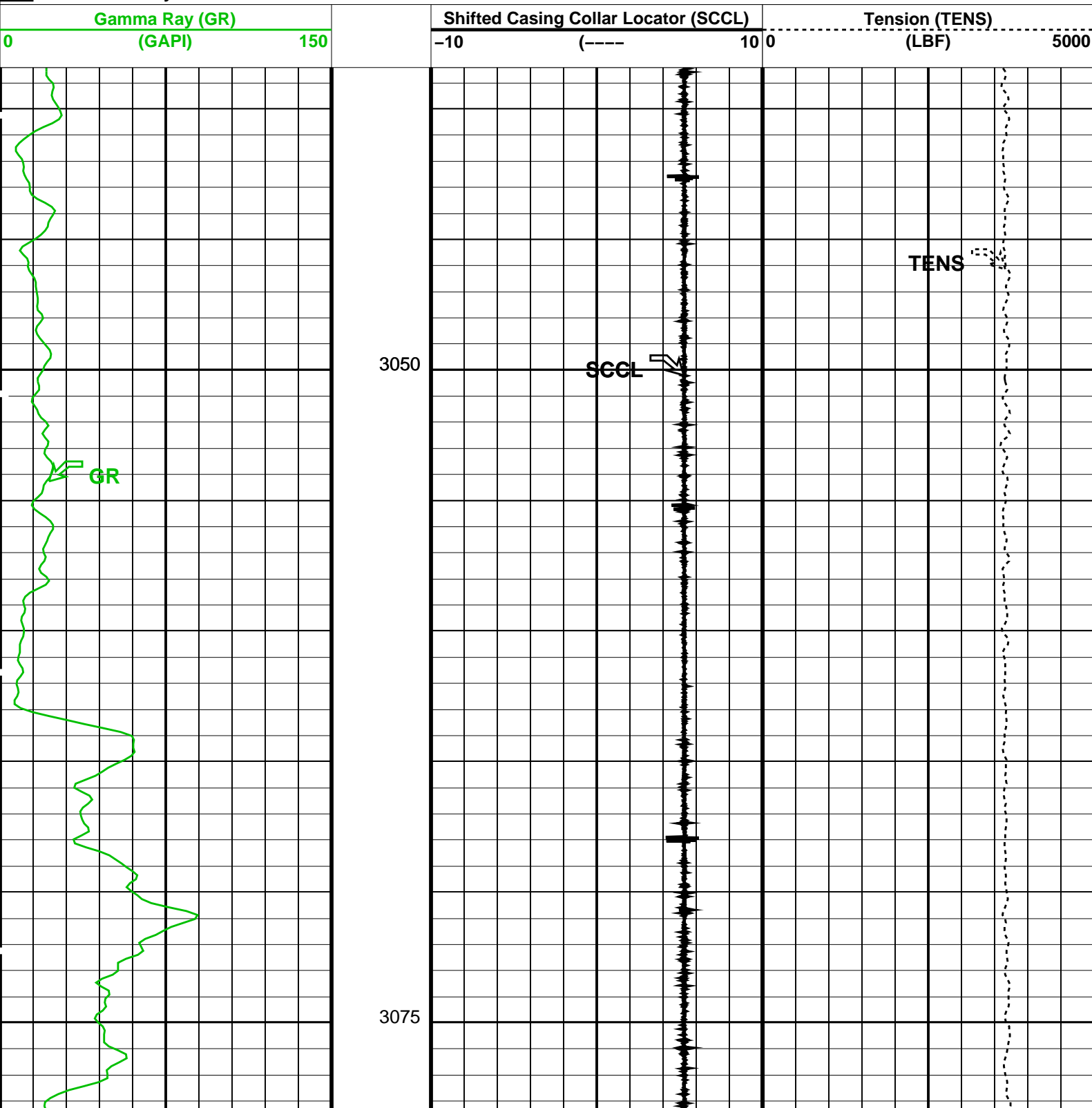
DEFAULT PERFO_036LUP FN:35 PRODUCER 02-May-2009 14:18

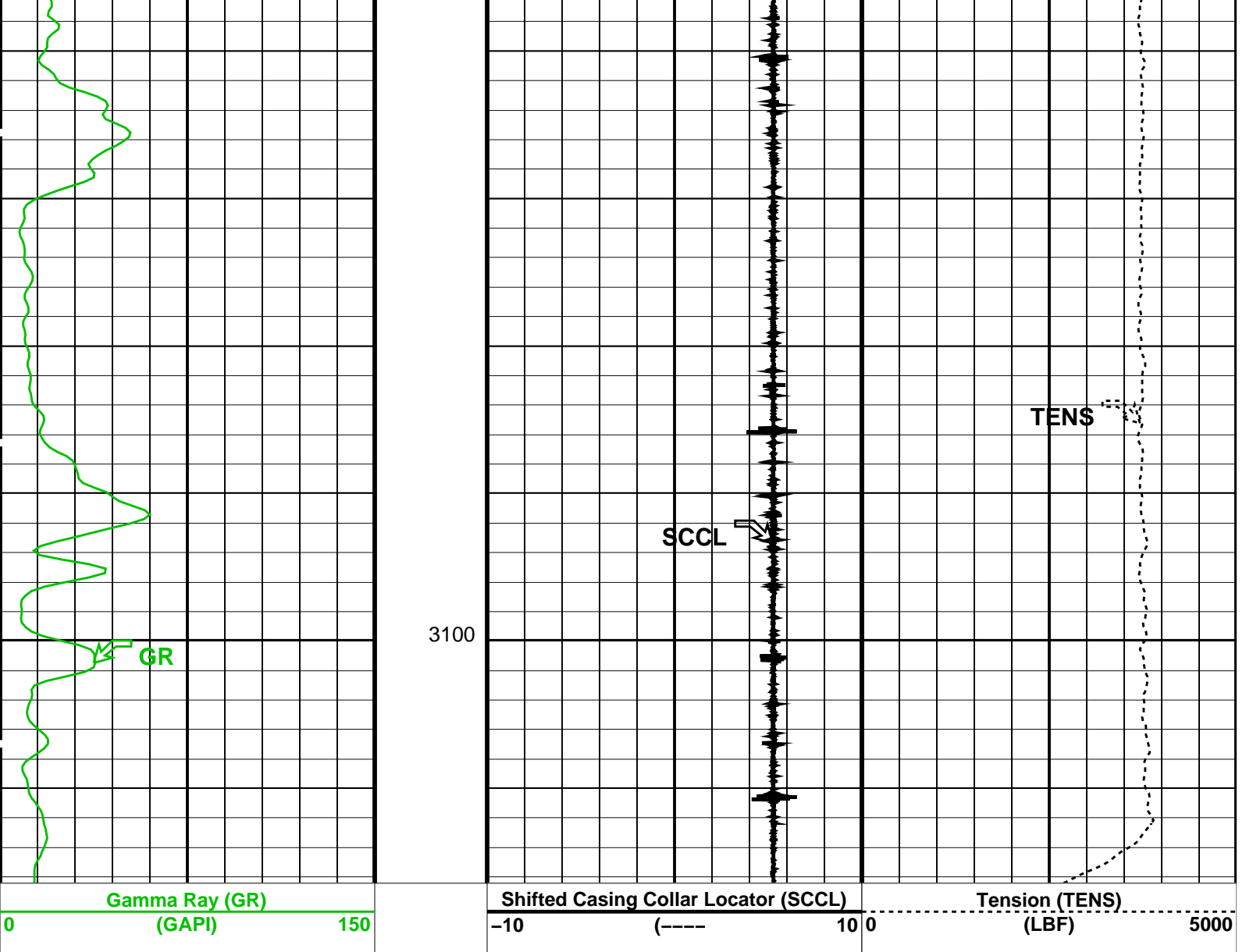
OP System Version: 17C0-154

SHM_GUN 17C0-154 PGGT-D 17C0-154

PIP SUMMARY

Time Mark Every 60 S





PIP SUMMARY

Time Mark Every 60 S

Format: PERFO_1 Vertical Scale: 1:200

Graphics File Created: 02-May-2009 14:18

OP System Version: 17C0-154

SHM_GUN

17C0-154

PGGT-D

17C0-154

Output DLIS Files

DEFAULT

PERFO_036LUP

FN:35

PRODUCER

02-May-2009 14:18

Schlumberger

**Junk Basket with 6" Gauge Ring
Correlation Pass**

MAXIS Field Log

Company:

Well:

Input DLIS Files

DEFAULT PERFO_009LUP FN:8 PRODUCER 01-May-2009 18:00 3160.3 M 2992.8 M

Output DLIS Files

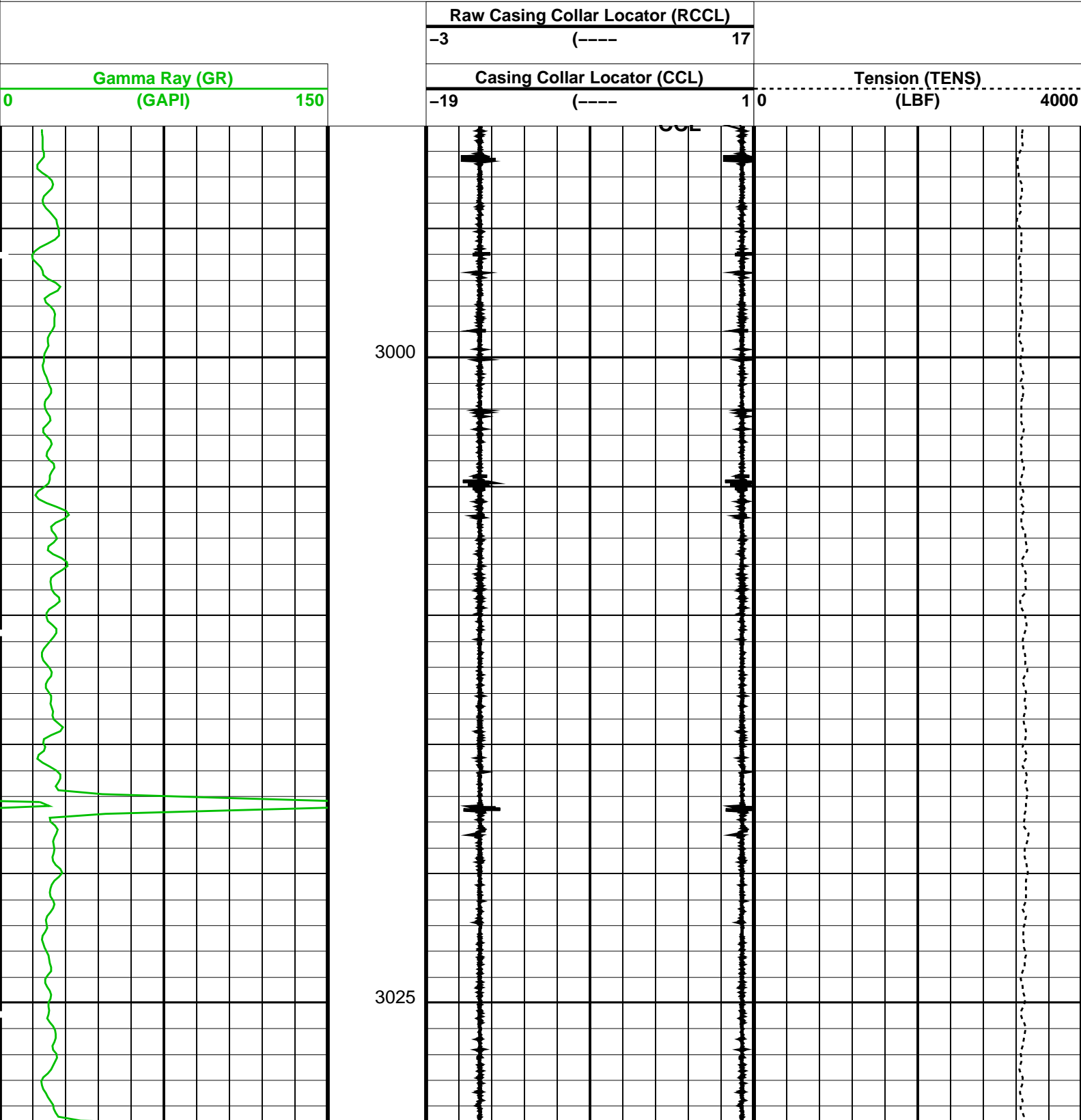
DEFAULT PERFO_016PUP FN:15 PRODUCER 01-May-2009 18:20 3158.5 M 2991.0 M

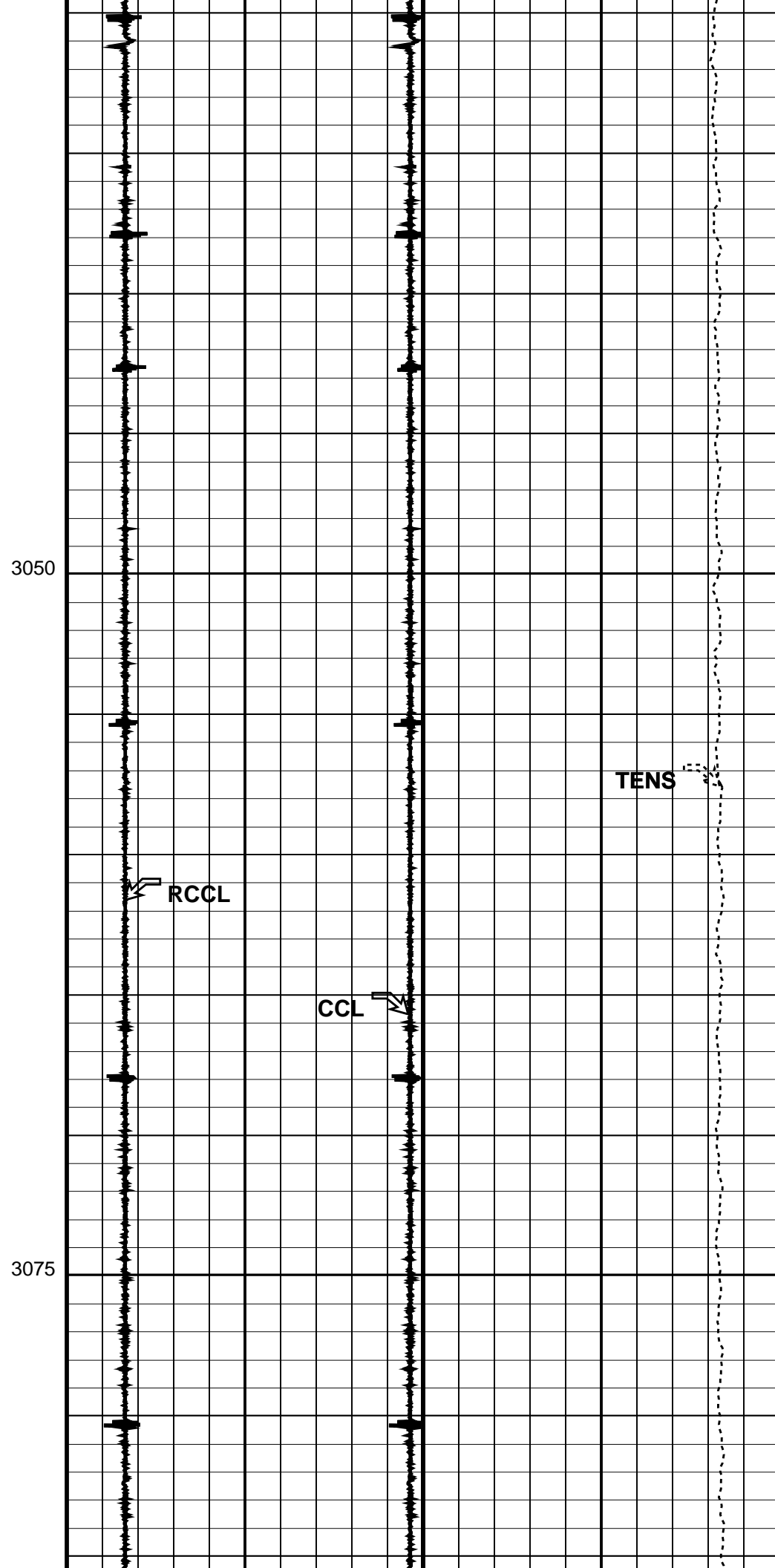
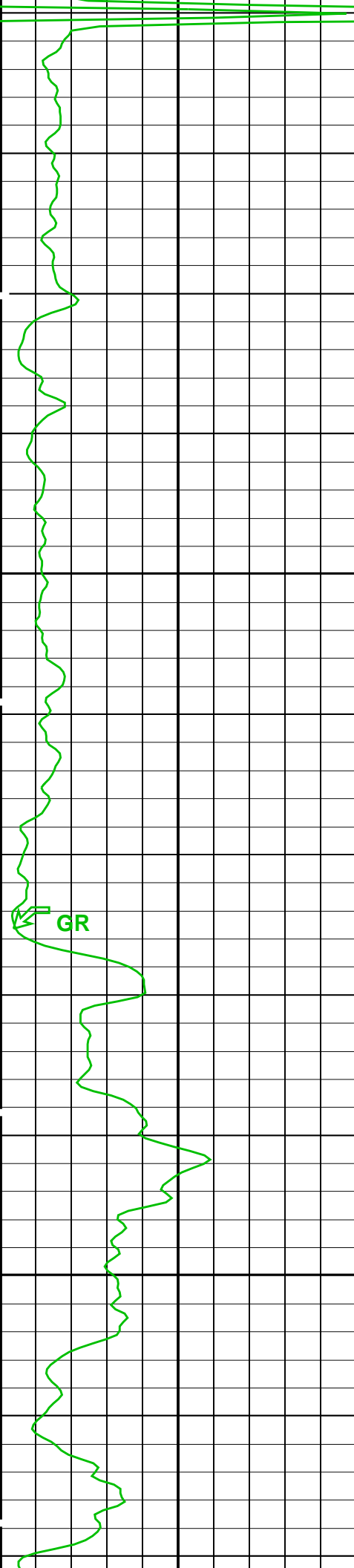
OP System Version: 17C0-154

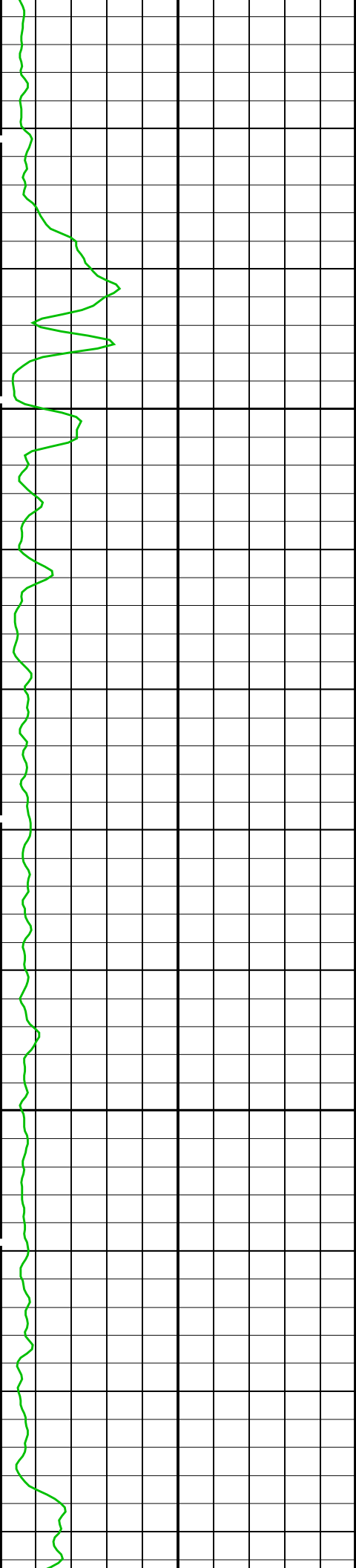
PGGT-D 17C0-154 SHM_GUN 17C0-154

PIP SUMMARY

Time Mark Every 60 S

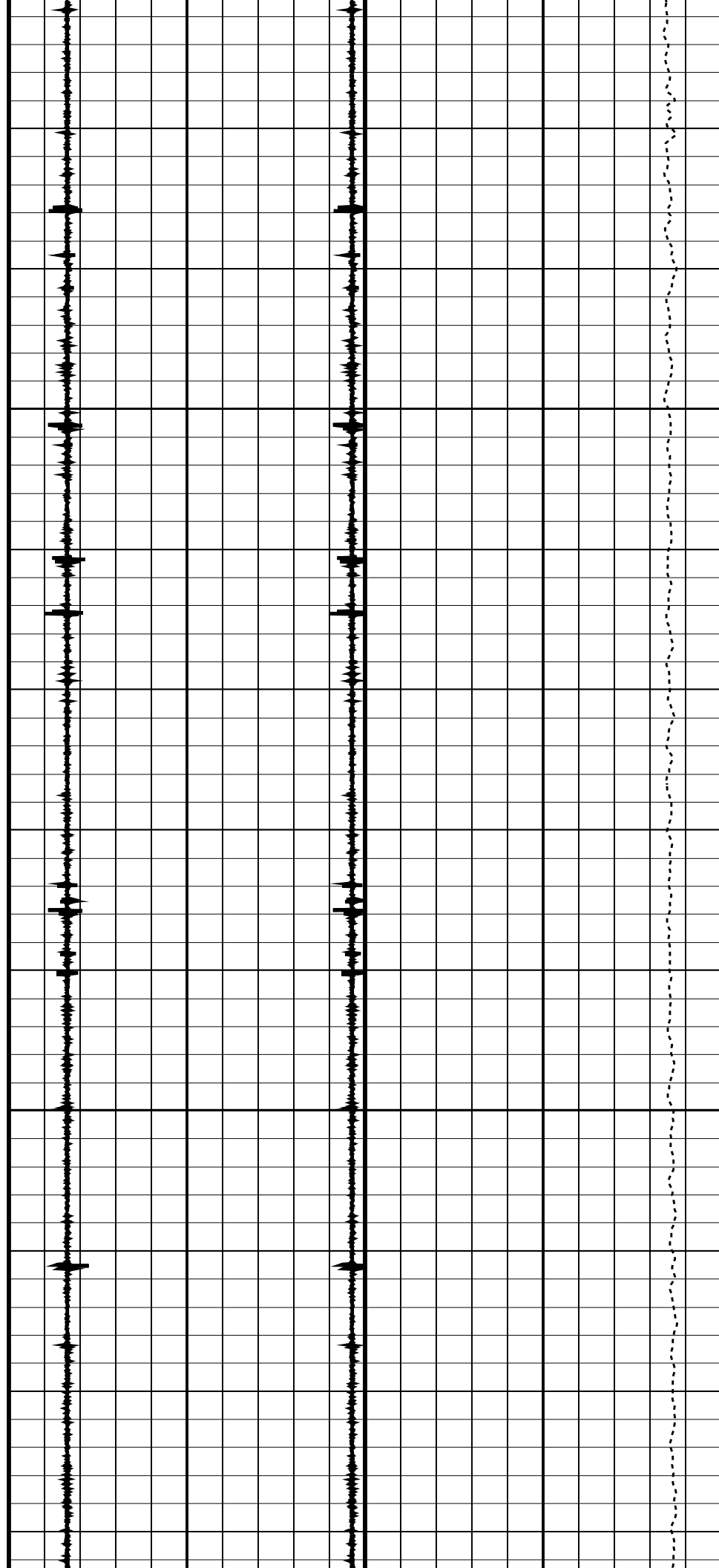


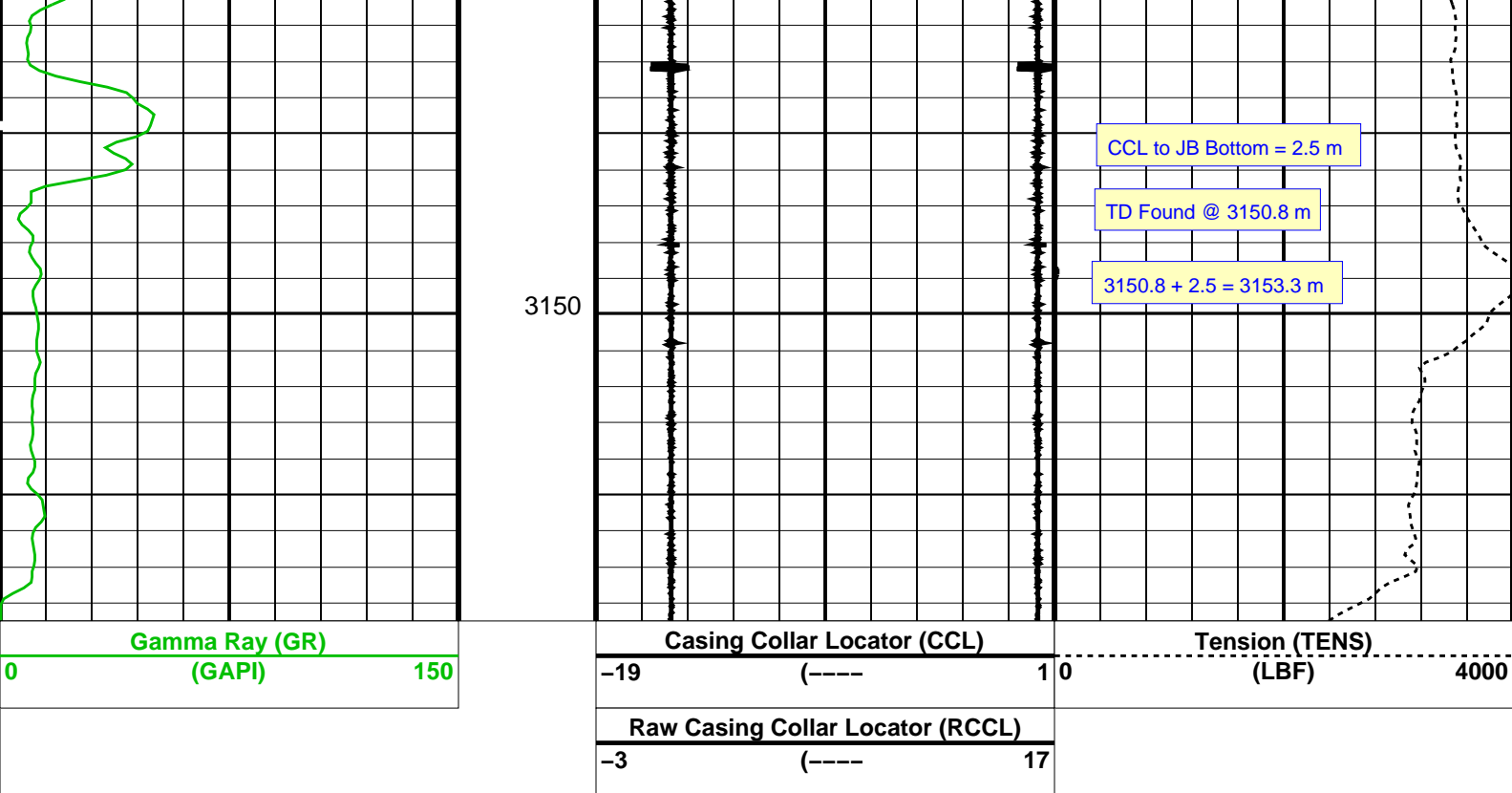




3100

3125





PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
DO	System and Miscellaneous	
PP	Depth Offset for Playback	-1.8 M
	Playback Processing	NORMAL

Format: CCLLog Vertical Scale: 1:200 Graphics File Created: 01-May-2009 18:20

OP System Version: 17C0-154

PGGT-D 17C0-154 SHM_GUN 17C0-154

Input DLIS Files

DEFAULT PERFO_009LUP FN:8 PRODUCER 01-May-2009 18:00 3160.3 M 2992.8 M

Output DLIS Files

DEFAULT PERFO_016PUP FN:15 PRODUCER 01-May-2009 18:20

Company: **ESSO Australia Pty. Ltd.**

Schlumberger

Well: **Cobia A19A**
Field: **Cobia**
Rig: **Rig 175**
Country: **Australia**

6" Junk Basket
4 1/2" HSD Perforating Record