

Company: Esso Australia Pty Ltd

Well: Snapper A21a

Field: Gippsland Basin

Rig: Nabors Rig 175

Country: Australia

Perforation Record

4 1/2" HSD

Junk Basket

Rig: Nabors Rig 175

Field: Gippsland Basin

Location: Bass Strait

Well: Snapper A21a

Company: Esso Australia Pty Ltd

LOCATION			
State: Victoria	Bass Strait	Elev.: K.B. 41.68 m	
	Gippsland Basin	G.L. -55 m	
		D.F. 41.68 m	
	Permanent Datum:	Mean Sea Level	
	Log Measured From:	Rig Floor	41.7 m above Perm. Datum
	Drilling Measured From:	Drill Floor	

Max. Well Deviation
35 deg

Longitude
148°01'26.52"E

Latitude
38°11'42.96"S

Logging Date	24-Mar-2008	
Run Number	1	
Depth Driller	3410 m	
Schlumberger Depth	2485 m	
Bottom Log Interval	2348.5 m	
Top Log Interval	1874.5 m	
Casing Fluid Type		
Salinity		
Density		
Fluid Level		
BIT/CASING/TUBING STRING		
Bit Size	11,000 in	
From	22 m	
To	3410 m	
Casing/Tubing Size	9,750 in	
Weight	47 lbm/ft	
Grade	L80	
From	22 m	
To	2516.5 m	
Maximum Recorded Temperatures		
Logger On Bottom	24-Mar-2008	3:00
Unit Number	3829	AUSL
Recorded By	Brendan Donahoe, Owen Darby	
Witnessed By	Mr D. Daniels, Mr G. Doty, Mr M. Turner	

PVT DATA			Run 1	Run 2	Run 3
Oil Density					
Water Salinity					
Gas Gravity					
Bo					
Bw					
1/Bg					
Bubble Point Pressure					
Bubble Point Temperature					
Solution GOR					
Maximum Deviation	35 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					

DEPTH SUMMARY LISTING

Date Created: 26-MAR-2008 10:52:44

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-H	Type:	CMTD-B/A	Type:	7-46ZV-XS
Serial Number:	797	Serial Number:	2268	Serial Number:	76371
Calibration Date:	04-Dec-2007	Calibration Date:	6-Dec-2007	Length:	5700.06 M
Calibrator Serial Number:	1009	Calibrator Serial Number:	1174		
Calibration Cable Type:	7-42ZV-XS	Calibration Gain:	1.24	Conveyance Method:	Wireline
Wheel Correction 1:	-6	Calibration Offset:	-904.00	Rig Type:	Offshore_Fixed
Wheel Correction 2:	3				

Depth Control Parameters

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	Esso Australia Pty Ltd
Reference Log Run Number:	
Reference Log Date:	21-Feb-2008
Subsequent Trip Down Log Correction:	1.00 M

Depth Control Remarks












1. Correlated to Esso Australia Log dated 21-Feb-2008
2. Used IDW as primary depth control.
3. Used Z-Chart as Secondary depth control.
- 4.
- 5.
- 6.

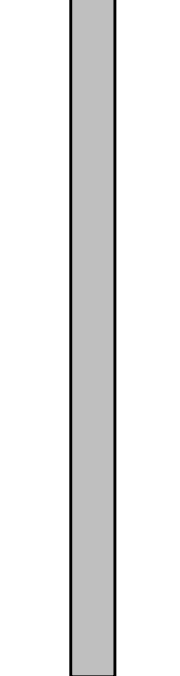
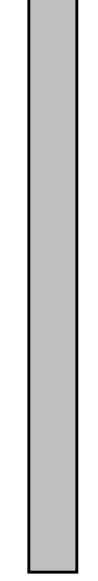
DISCLAIMER

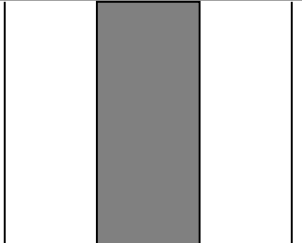
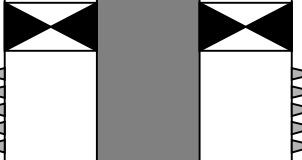
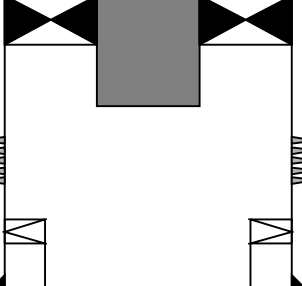

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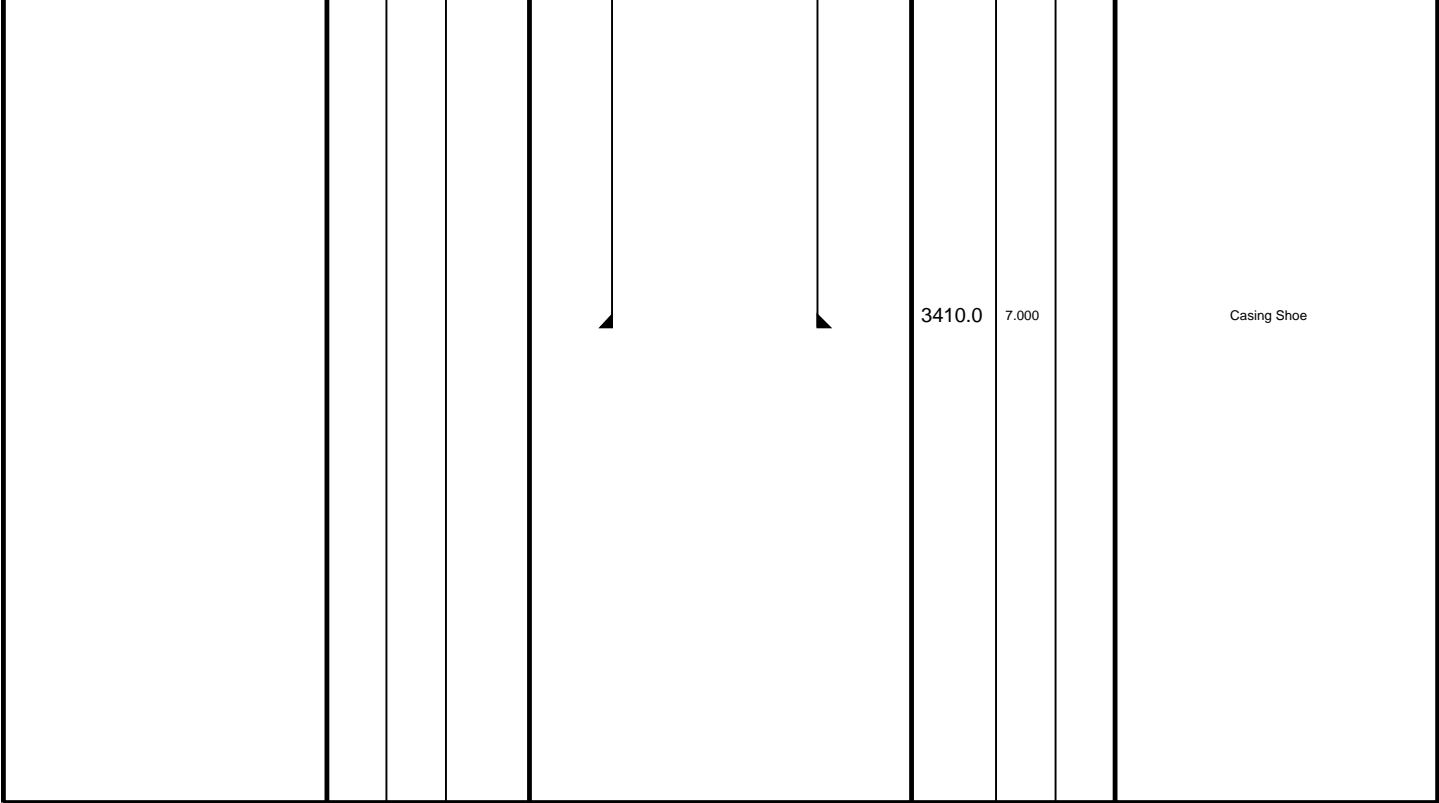
OTHER SERVICES1	OTHER SERVICES2
OS1:	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
Correlated to Esso Australia log dated 21–Feb–2008	
Objective: RIH with 8.5" Gauge Ring, GR,CCL and Junk Basket.	
RIH with 4.5"HSD gun and perforate the interval 1874.5 – 1879.5m MDKB.	
RIH with 4.5"HSD gun and perforate the interval 2346.5 – 2348.5m MDKB.	
Both guns 12SPF loaded with Powerjet Omega charges.	

BIH with 8.5" Gauge Ring, GR, CCI and Junk Basket

Run 1: CCL to Top Shot = 1.1 Run 2: CCL to Top Shot = 1.96m					
CCL Stop Depth = 1873.3 CCL Stop Depth = 2344.54m MDKB					
Specialists: Brendan Donahoe, Owen Darby					
Operators: Days: Luke Dooley, Paul Flood					
Nights: Nathan Simmons, Scott Lansbury					
RUN 1			RUN 2		
SERVICE ORDER #: PROGRAM VERSION: 15C0-309 FLUID LEVEL:			SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP
EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		
SURFACE EQUIPMENT			SURFACE EQUIPMENT		
SHM-EA			WITM (SHM)		
DOWNHOLE EQUIPMENT			DOWNHOLE EQUIPMENT		
PEH-A PEH-A		9.14	PEH-A PEH-A 3001		5.99
AH-64 AH-64		8.59			
PGGT-D PGGC PGGH-D		8.18	AH-64 AH-64 8001		5.44
Gamma Ray	— 1.07				
Casing Co Tension	— TOOL ZERO		PGGT-D PGGC PGGH-D		5.03
			Gamma Ray	— 1.07	
AH-283 AH-283		6.40			
SHM_GUN GUN		6.10	Casing Co Tension	— TOOL ZERO	
			AH-283 AH-283 5002		3.25
			AH-WPSA AH-WPSA		2.95
			AH-Junk basket		2.64

<div>  <p>TOOL BOTTOM</p> <p>MAXIMUM STRING DIAMETER 4.50 IN MEASUREMENTS RELATIVE TO TOOL ZERO ALL LENGTHS IN METERS</p> </div>	<div> <p>AH-Junk basket</p>  <p>AH-8.5 " Gauge ring</p> <p>SHM_GUN</p> <p>TOOL BOTTOM</p> <p>MAXIMUM STRING DIAMETER 8.50 IN MEASUREMENTS RELATIVE TO TOOL ZERO ALL LENGTHS IN METERS</p> </div>
	<div> <p>0.05</p> <p>0.00</p> </div>

Production String	(in) OD	(in) ID	(m) MD	Well Schematic	(m) MD	(in) OD	(in) ID	Casing String
Tubing	3.500		22.0		22.0	9.750		Casing String
Packer	9.750	3.500	1853.0		1874.5			Perforation Zone
Packer	9.750	3.500	2148.0		2346.5			Perforation Zone
					2379.0 2516.0	9.750 9.750	7.000	Liner Hanger Casing Shoe



Junk basket run 2
8 1/2" Gauge Ring

MAXIS Field Log

Company: Esso Australia Pty Ltd Well: Snapper A21a

Input DLIS Files

DEFAULT	PERFO_059LUP	FN:58	PRODUCER	24-Mar-2008 16:30	1908.2 M	1841.3 M
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Output DLIS Files

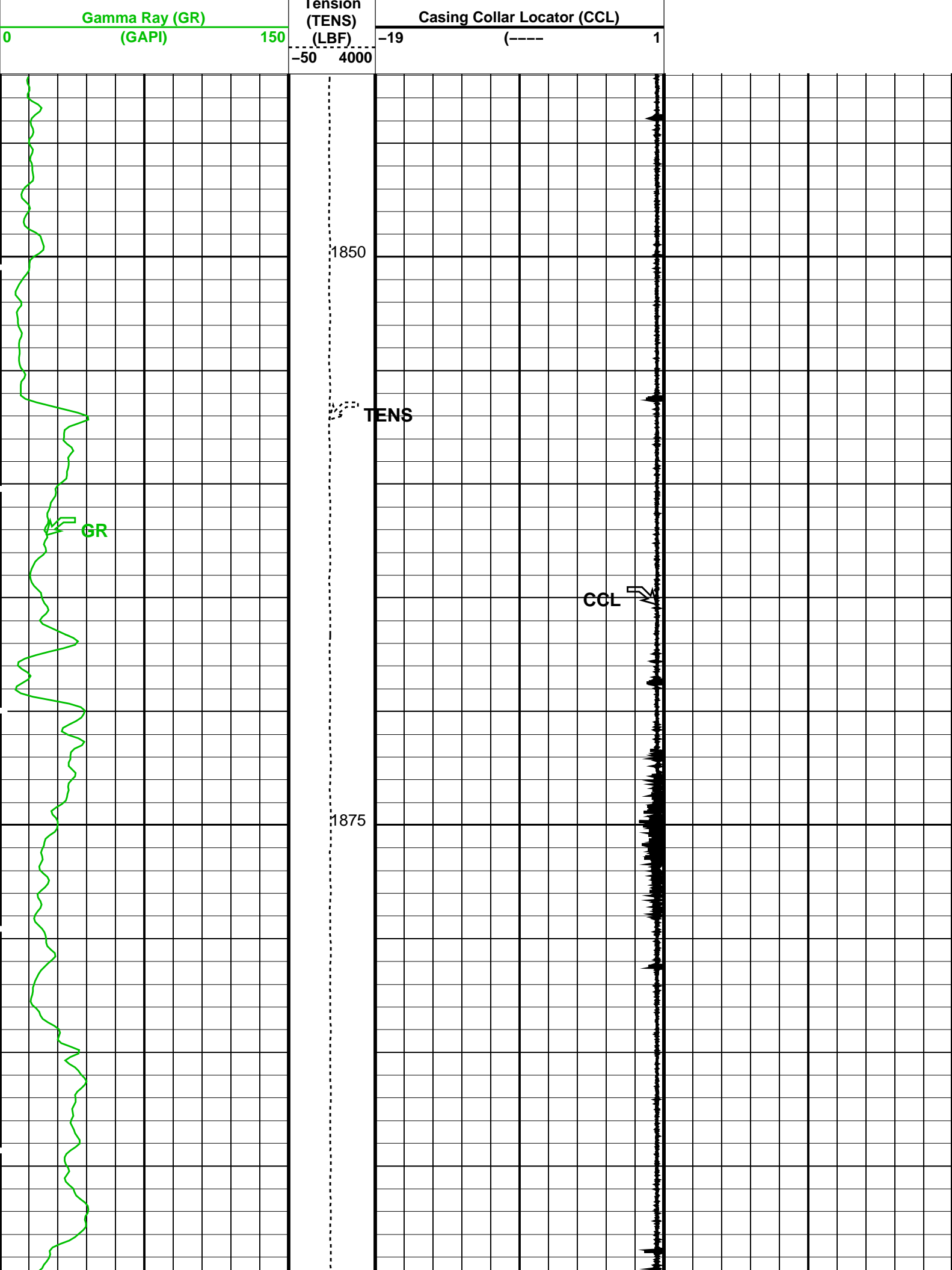
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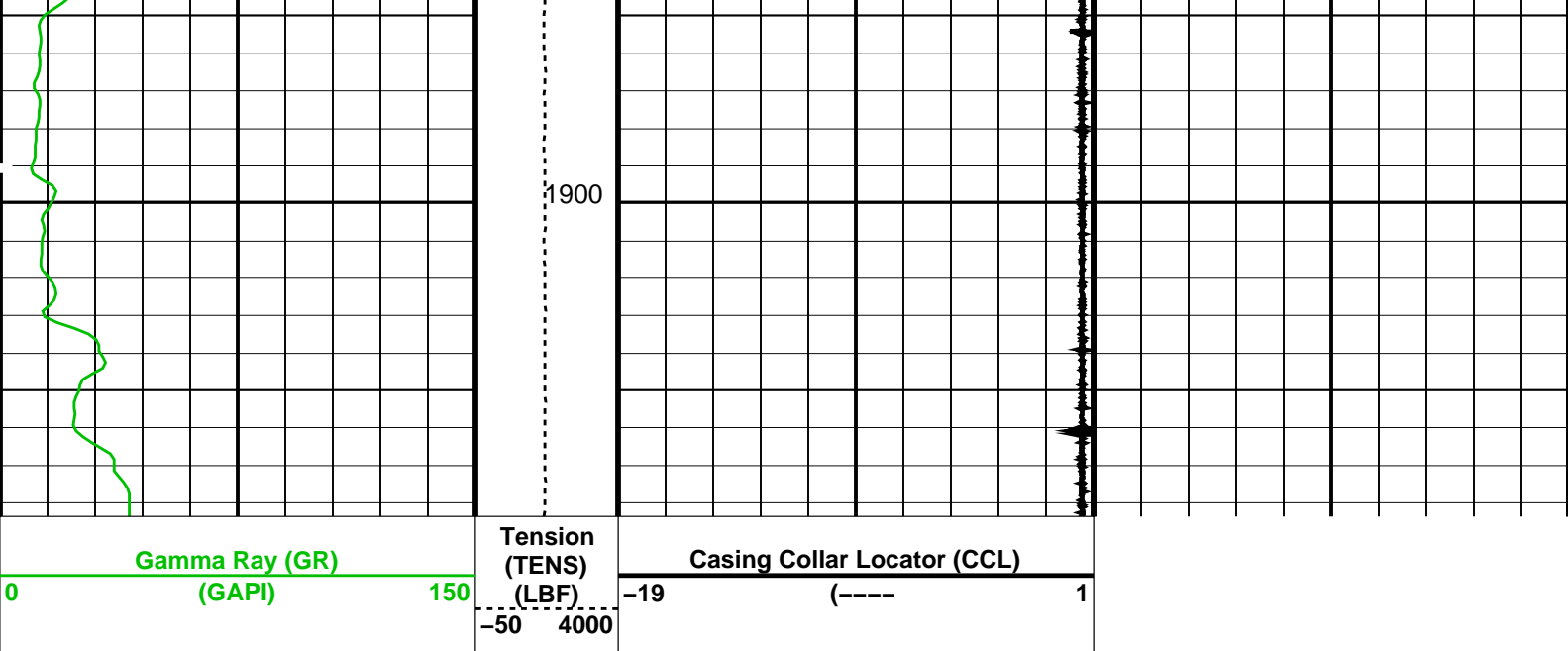
OP System Version: 15C0-309
MCM

SHM_GUN	15C0-309	PGGT-D	15C0-309
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PIP SUMMARY

Time Mark Every 60 S





PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
DO	System and Miscellaneous	0.2 M
PP	Depth Offset for Playback	NORMAL
	Playback Processing	

Format: PERFO_1 Vertical Scale: 1:200

Graphics File Created: 24-Mar-2008 17:15

OP System Version: 15C0-309
MCM

SHM_GUN 15C0-309 PGGT-D 15C0-309

Input DLIS Files

DEFAULT PERFO_059LUP FN:58 PRODUCER 24-Mar-2008 16:30 1908.2 M 1841.3 M

Output DLIS Files

DEFAULT PERFO_061PUP FN:60 PRODUCER 24-Mar-2008 17:15

Schlumberger

Perforation Record
Gun 2

MAXIS Field Log

Company: Esso Australia Pty Ltd

Well: Snapper A21a

Output DLIS Files

DEFAULT PERFO_048LUP FN:47 PRODUCER 24-Mar-2008 12:06

OP System Version: 15C0-309
MCM

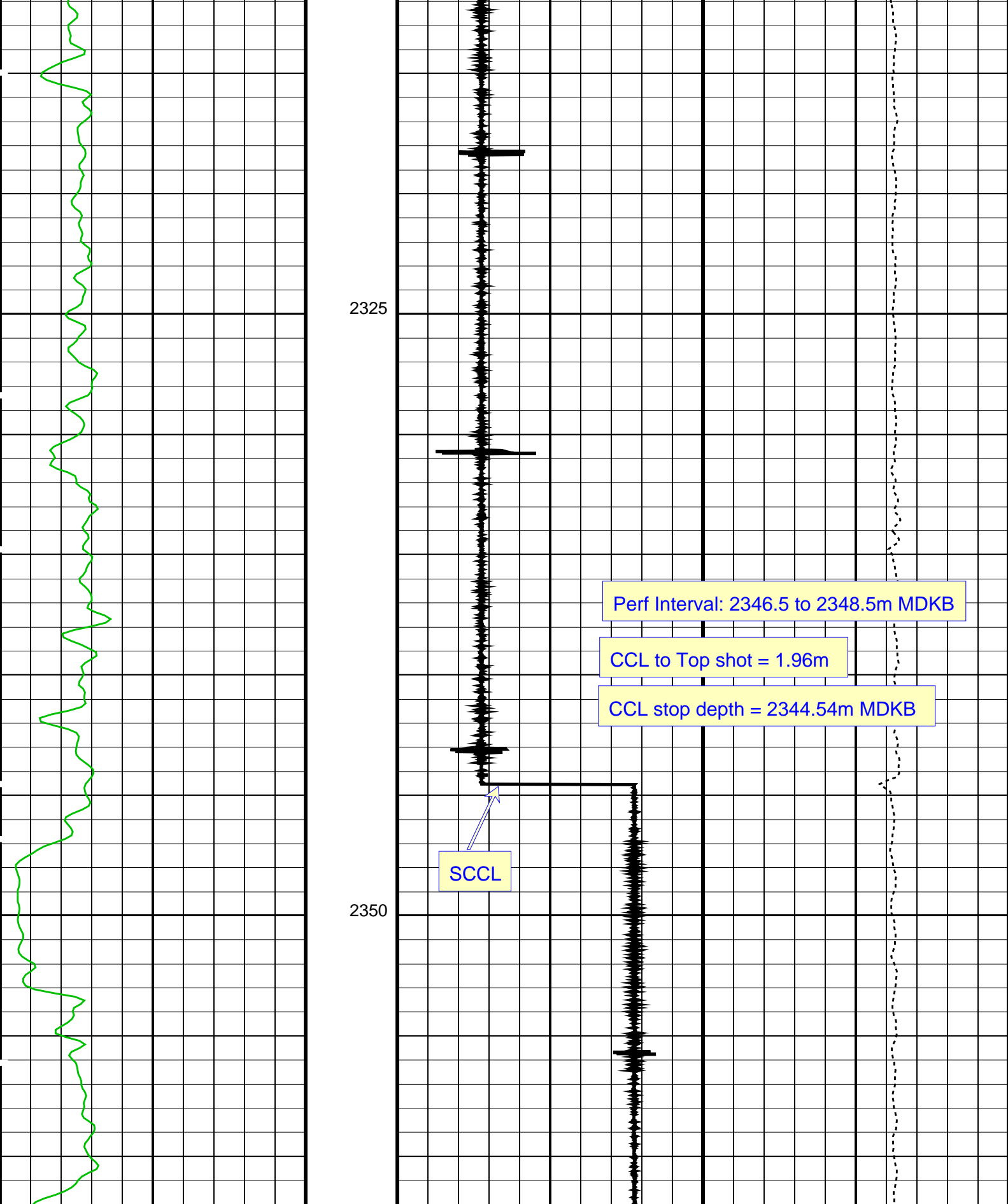
PIP SUMMARY

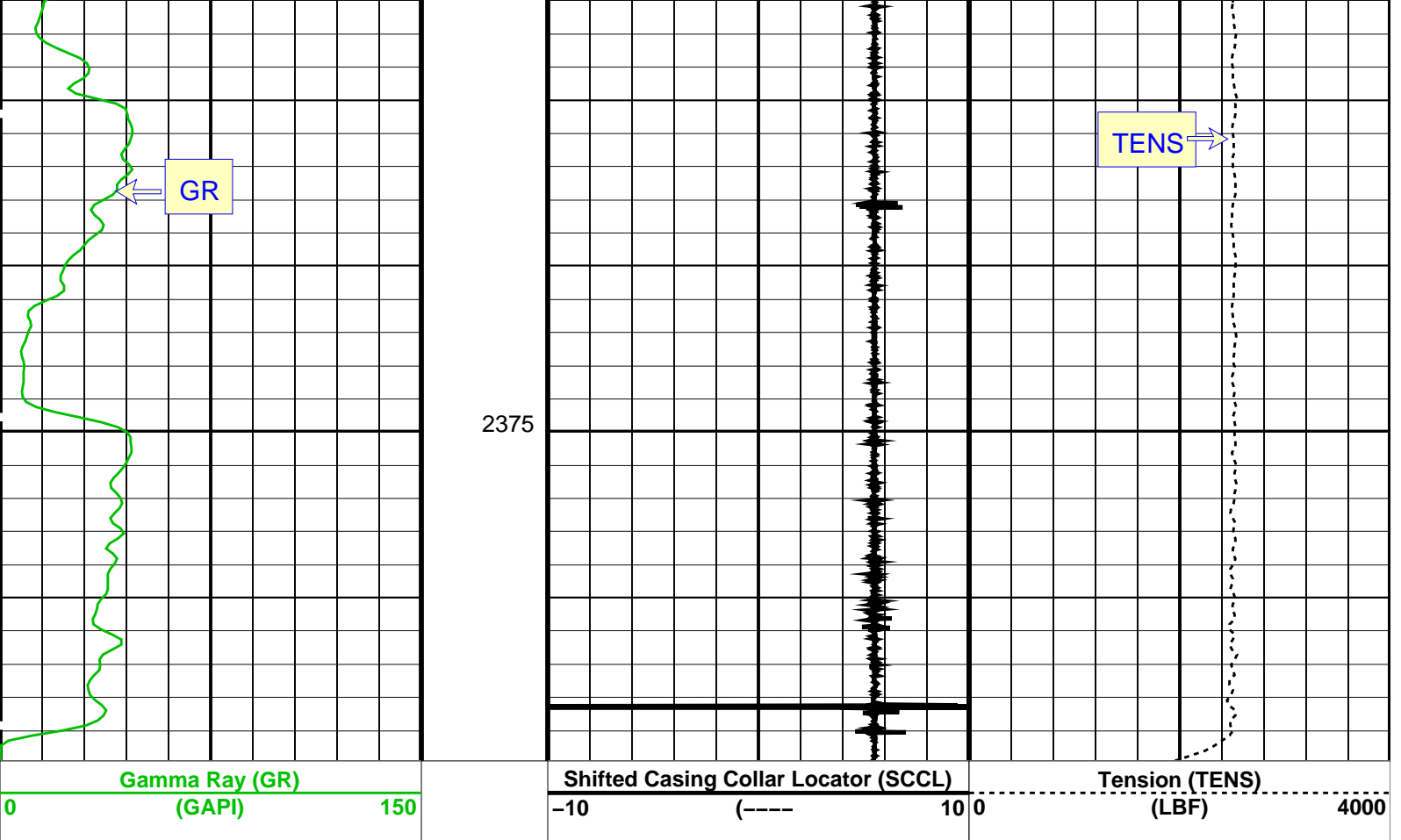
Time Mark Every 60 S

Gamma Ray (GR)
(GAPI)0150

Shifted Casing Collar Locator (SCCL)-1010

Tension (TENS)
(LBF)04000





PIP SUMMARY

Time Mark Every 60 S

Format: PERFO_1_1 Vertical Scale: 1:200

Graphics File Created: 24-Mar-2008 12:06

OP System Version: 15C0-309
MCM

SHM_GUN 15C0-309 PGGT-D 15C0-309

Output DLIS Files

DEFAULT PERFO_048LUP FN:47 PRODUCER 24-Mar-2008 12:06

Schlumberger

Correlation Pass
Gun 2

MAXIS Field Log

Company: Esso Australia Pty Ltd

Well: Snapper A21a

Output DLIS Files

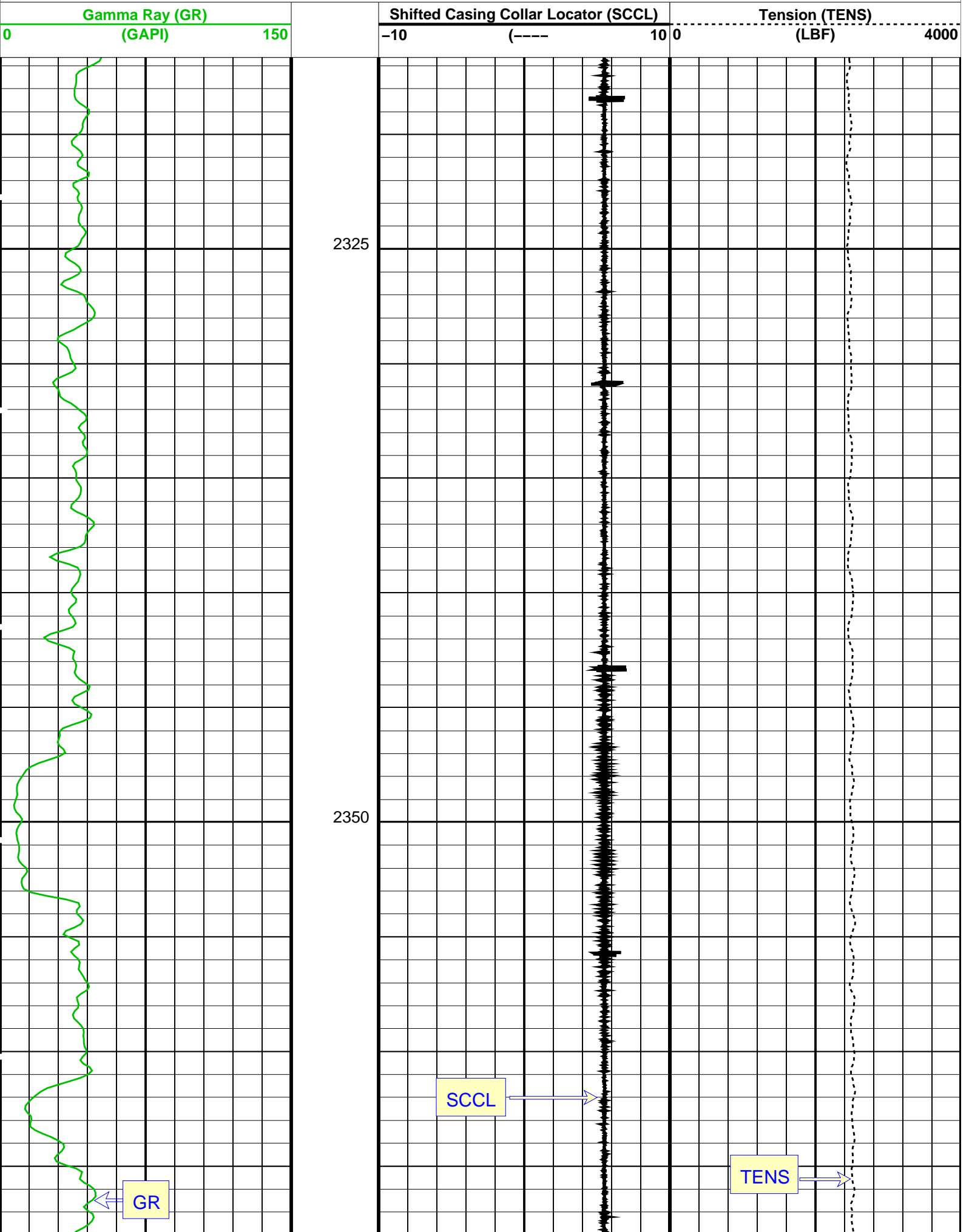
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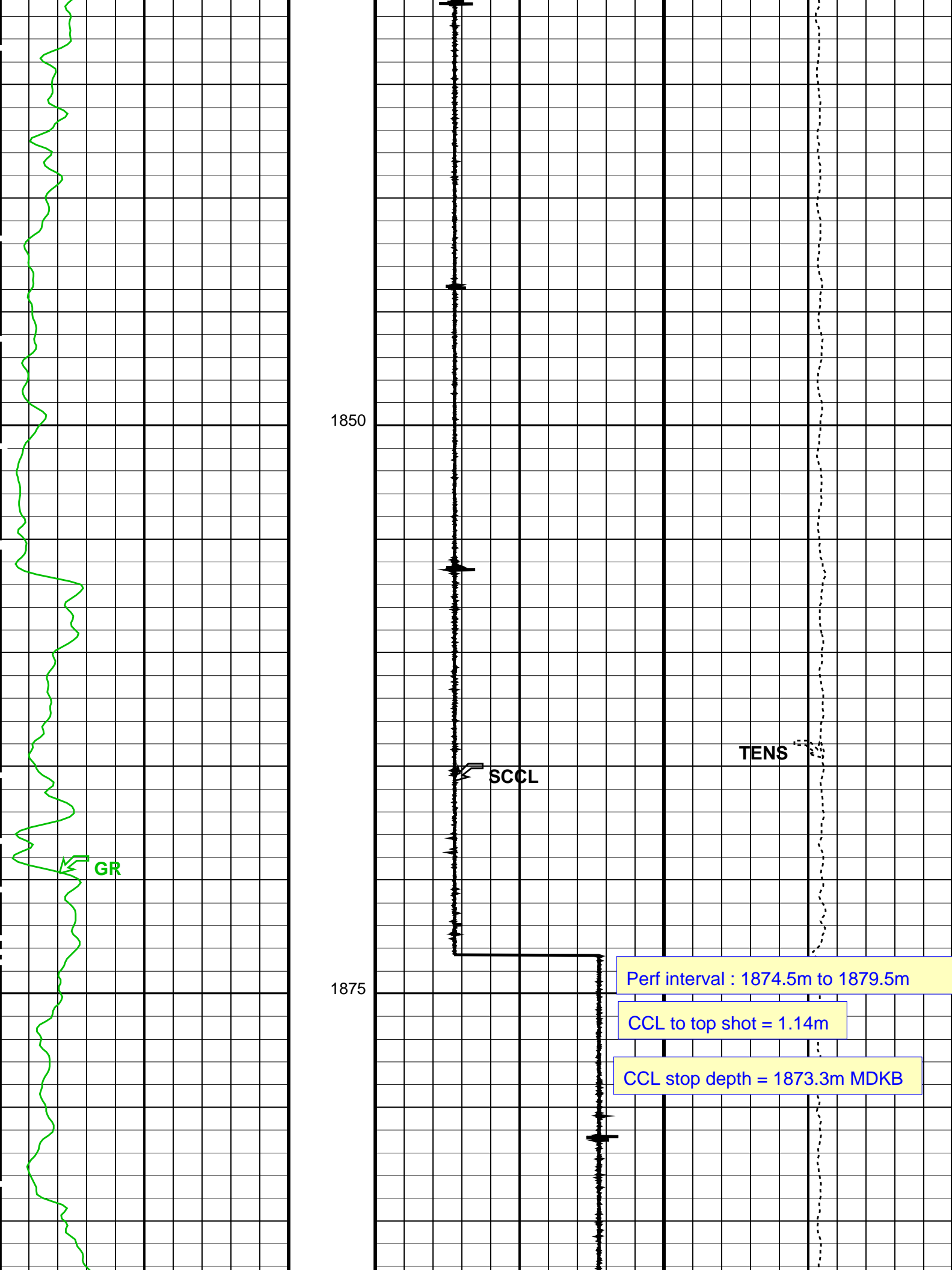
OP System Version: 15C0-309
MCM

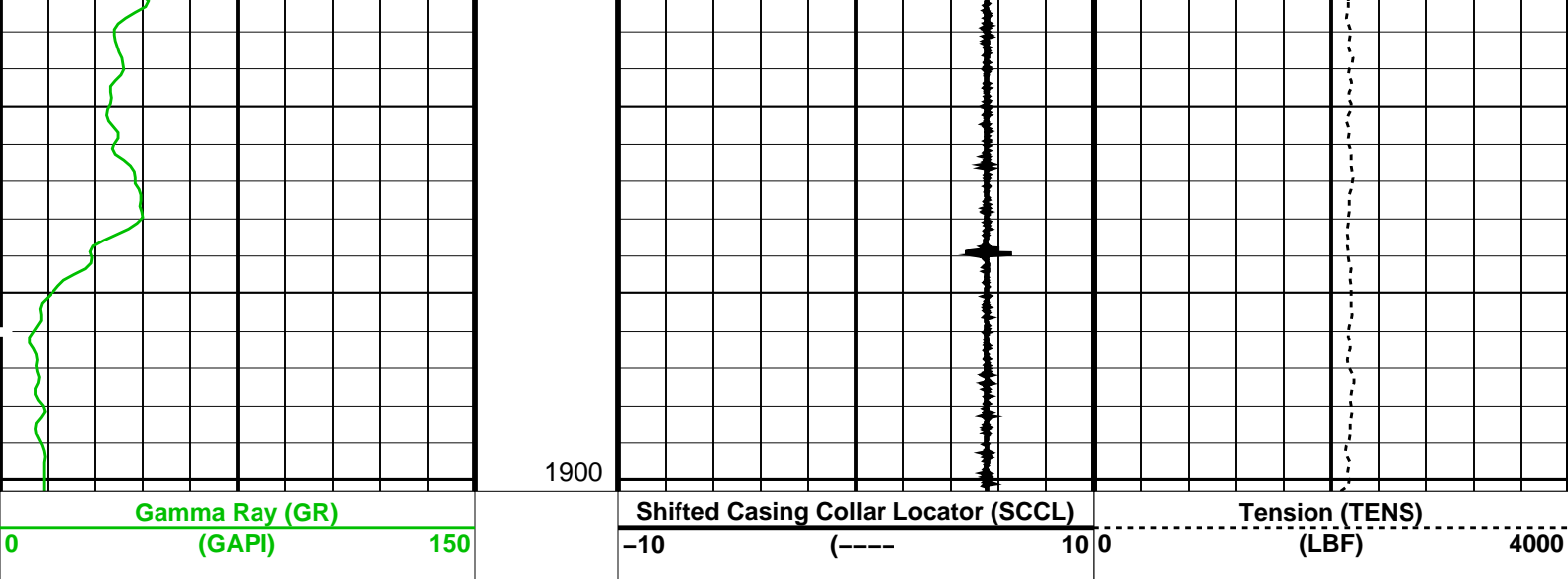
SHM_GUN 15C0-309 PGGT-D 15C0-309

PIP SUMMARY

Time Mark Every 60 S







PIP SUMMARY

Time Mark Every 60 S

Format: PERFO_1_1 Vertical Scale: 1:200

Graphics File Created: 24-Mar-2008 06:45

OP System Version: 15C0-309

MCM

SHM_GUN

15C0-309

PGGT-D

15C0-309

Output DLIS Files

DEFAULT

PERFO_038LUP

FN:37

PRODUCER

24-Mar-2008 06:45

Schlumberger

Correlation Pass
Gun 1

MAXIS Field Log

Company: Esso Australia Pty Ltd

Well: Snapper A21a

Output DLIS Files

DEFAULT

PERFO_037LUP

FN:36

PRODUCER

24-Mar-2008 06:37

OP System Version: 15C0-309

MCM

SHM_GUN

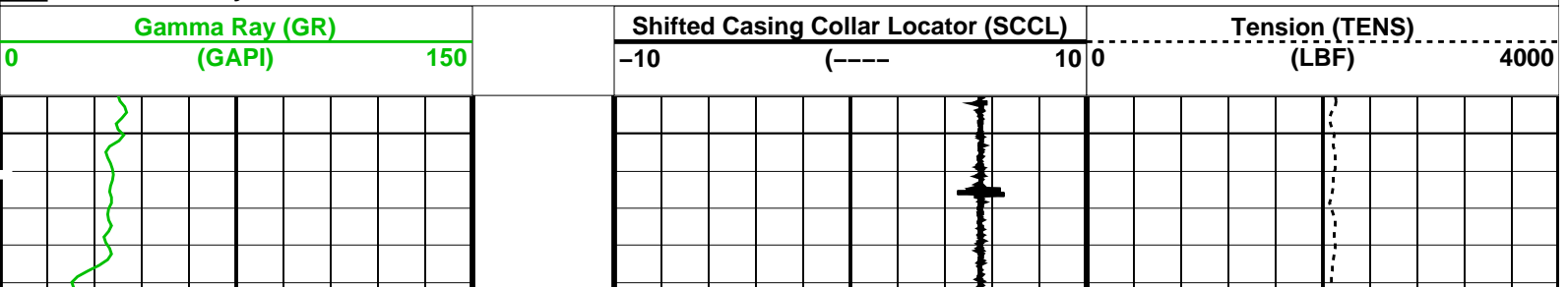
15C0-309

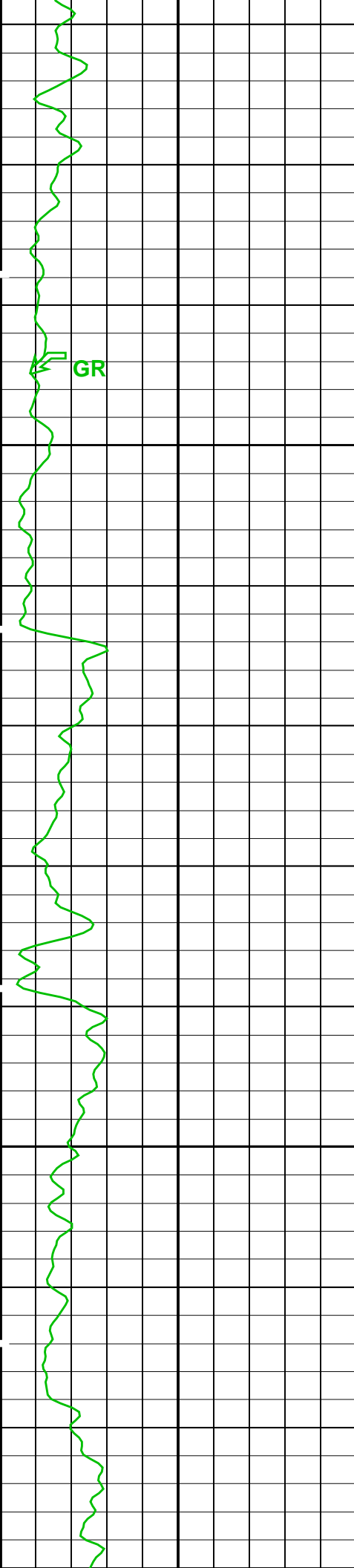
PGGT-D

15C0-309

PIP SUMMARY

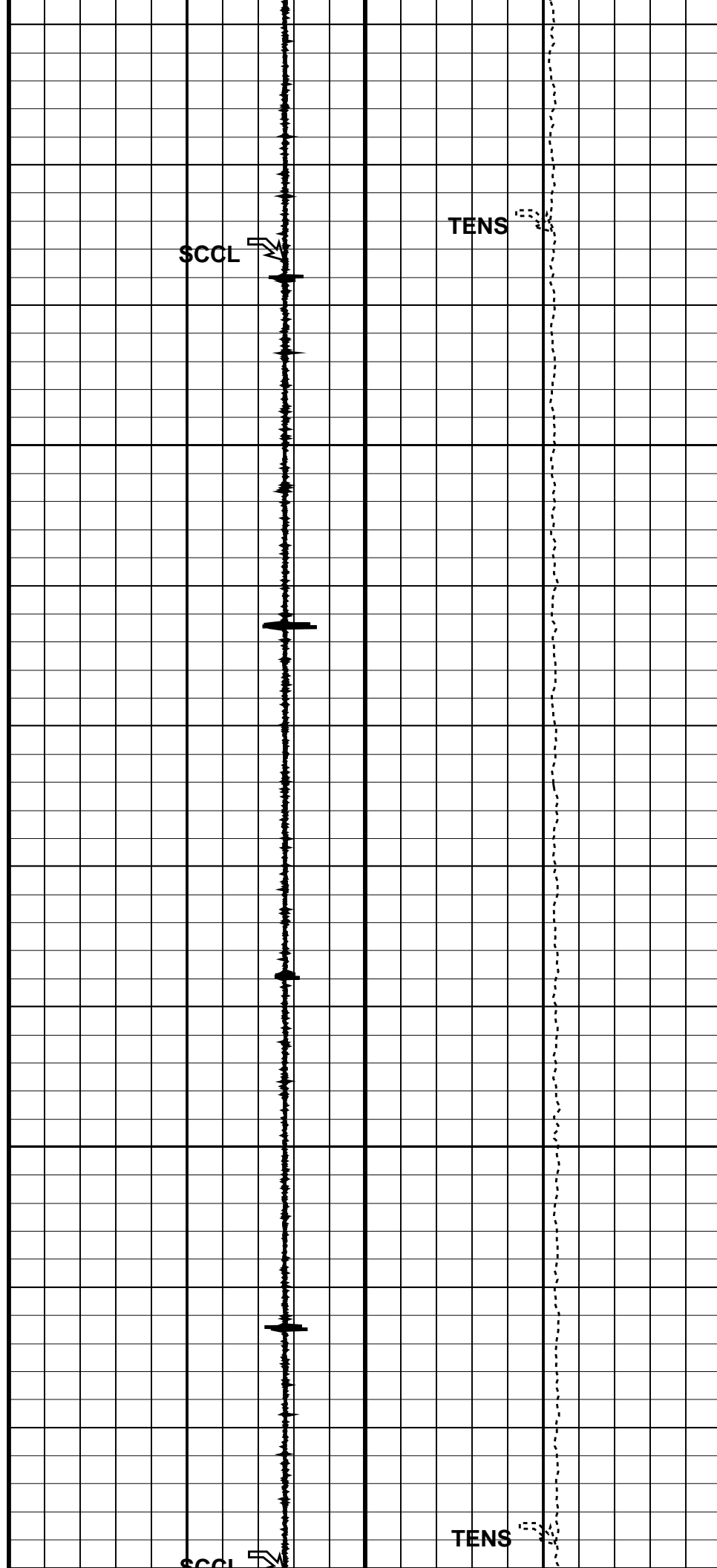
Time Mark Every 60 S

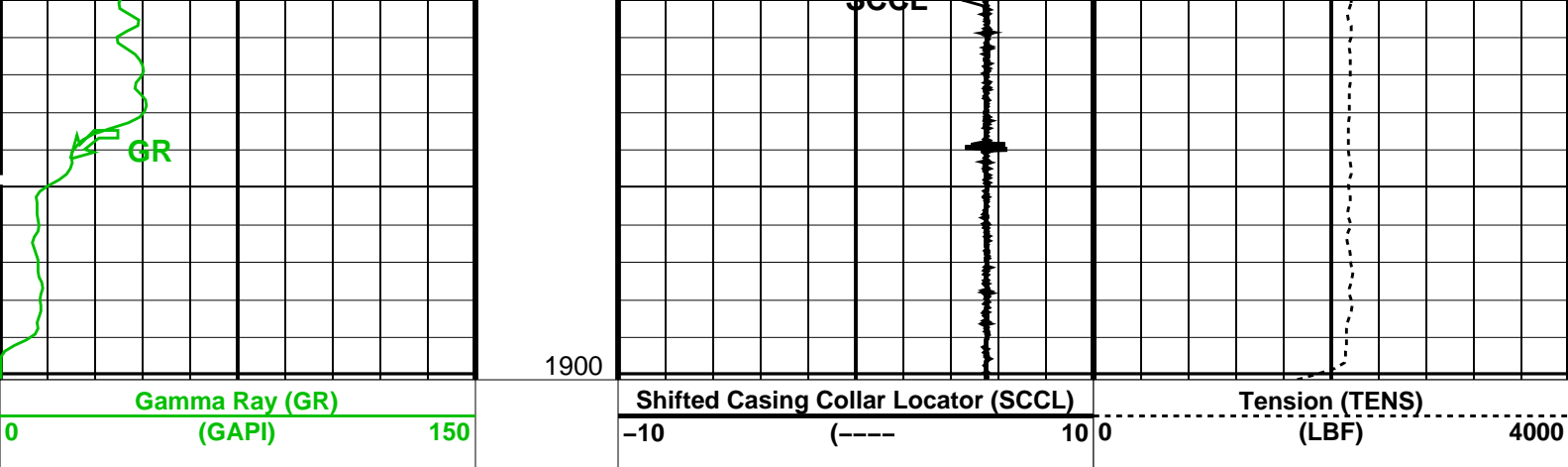




1850

1875





PIP SUMMARY

Time Mark Every 60 S

Format: PERFO_1_1 Vertical Scale: 1:200

Graphics File Created: 24-Mar-2008 06:37

OP System Version: 15C0-309

MCM

SHM_GUN 15C0-309

PGGT-D

15C0-309

Output DLIS Files

DEFAULT PERFO_037LUP

FN:36

PRODUCER

24-Mar-2008 06:37

Schlumberger

**Junk basket run 1
8 1/2" Gauge Ring**

MAXIS Field Log

Company: Esso Australia Pty Ltd

Well: Snapper A21a

Input DLIS Files

DEFAULT PERFO_016LUP

FN:15

PRODUCER

23-Mar-2008 22:14

2357.8 M

2245.3 M

Output DLIS Files

DEFAULT PERFO_018PUP

FN:17

PRODUCER

23-Mar-2008 22:22

2358.5 M

2246.5 M

OP System Version: 15C0-309

MCM

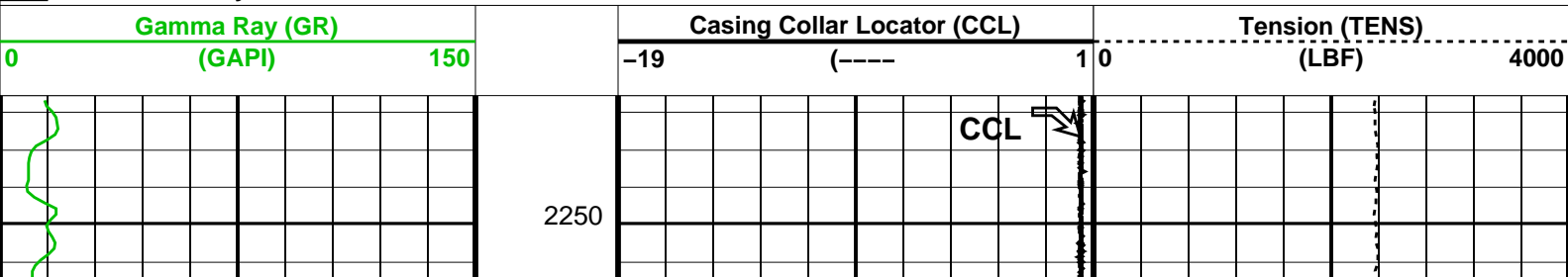
SHM_GUN 15C0-309

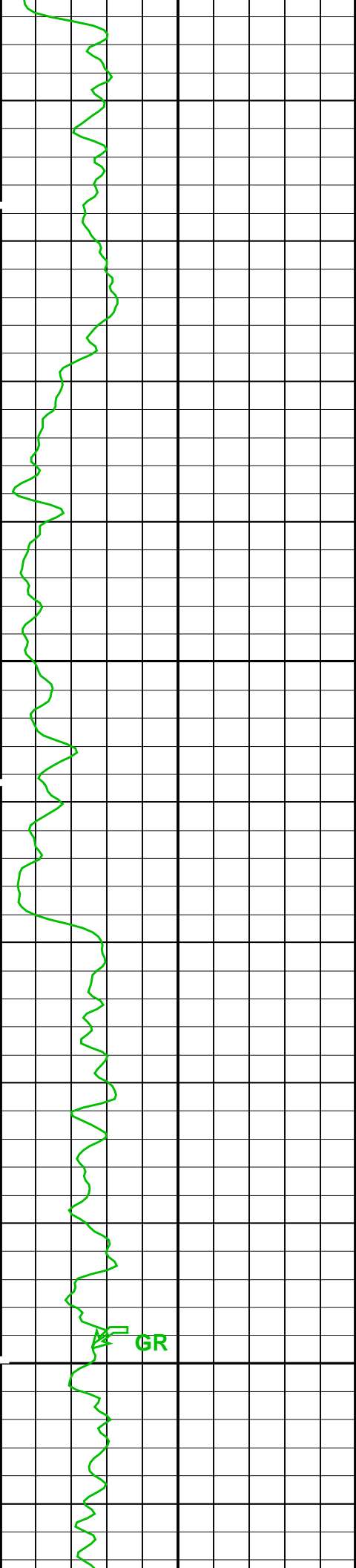
PGGT-D

15C0-309

PIP SUMMARY

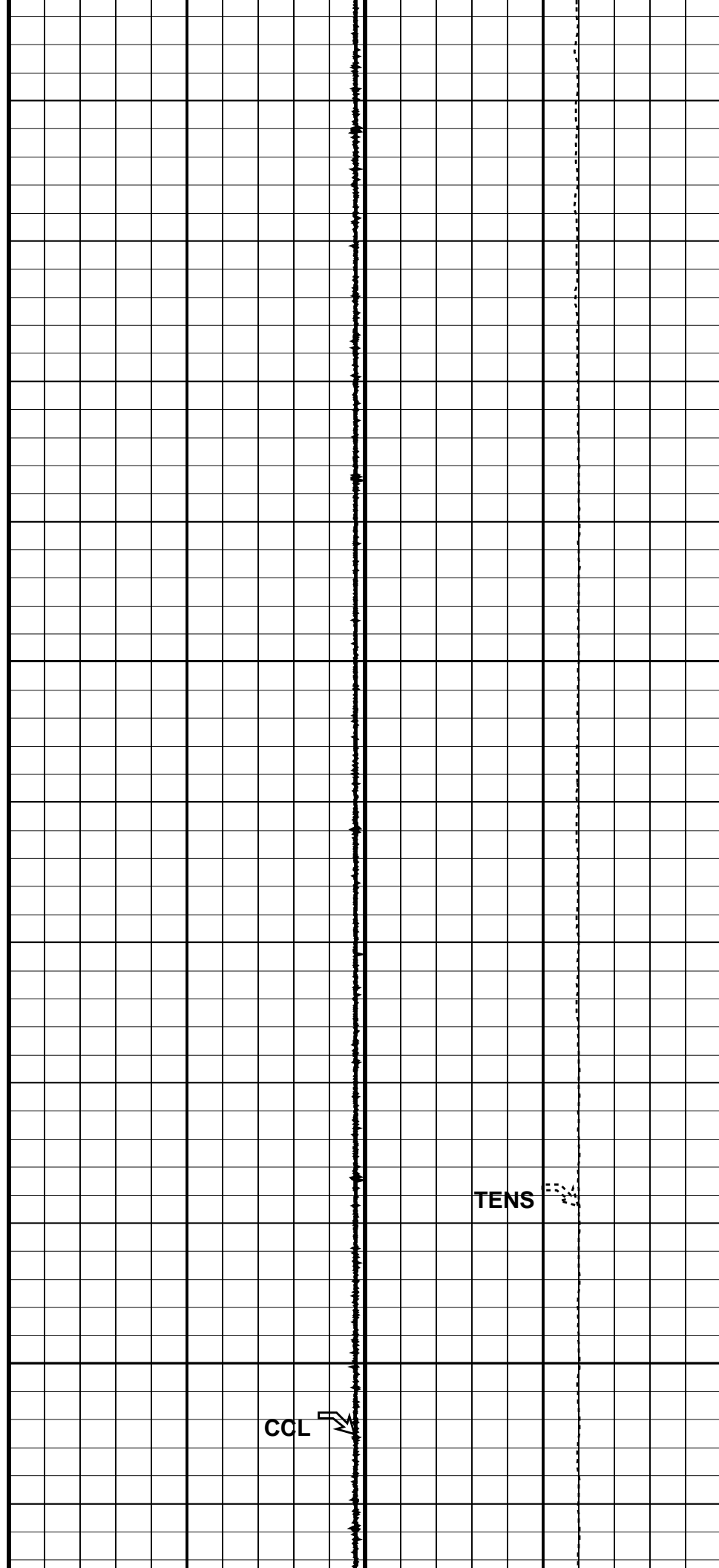
Time Mark Every 60 S

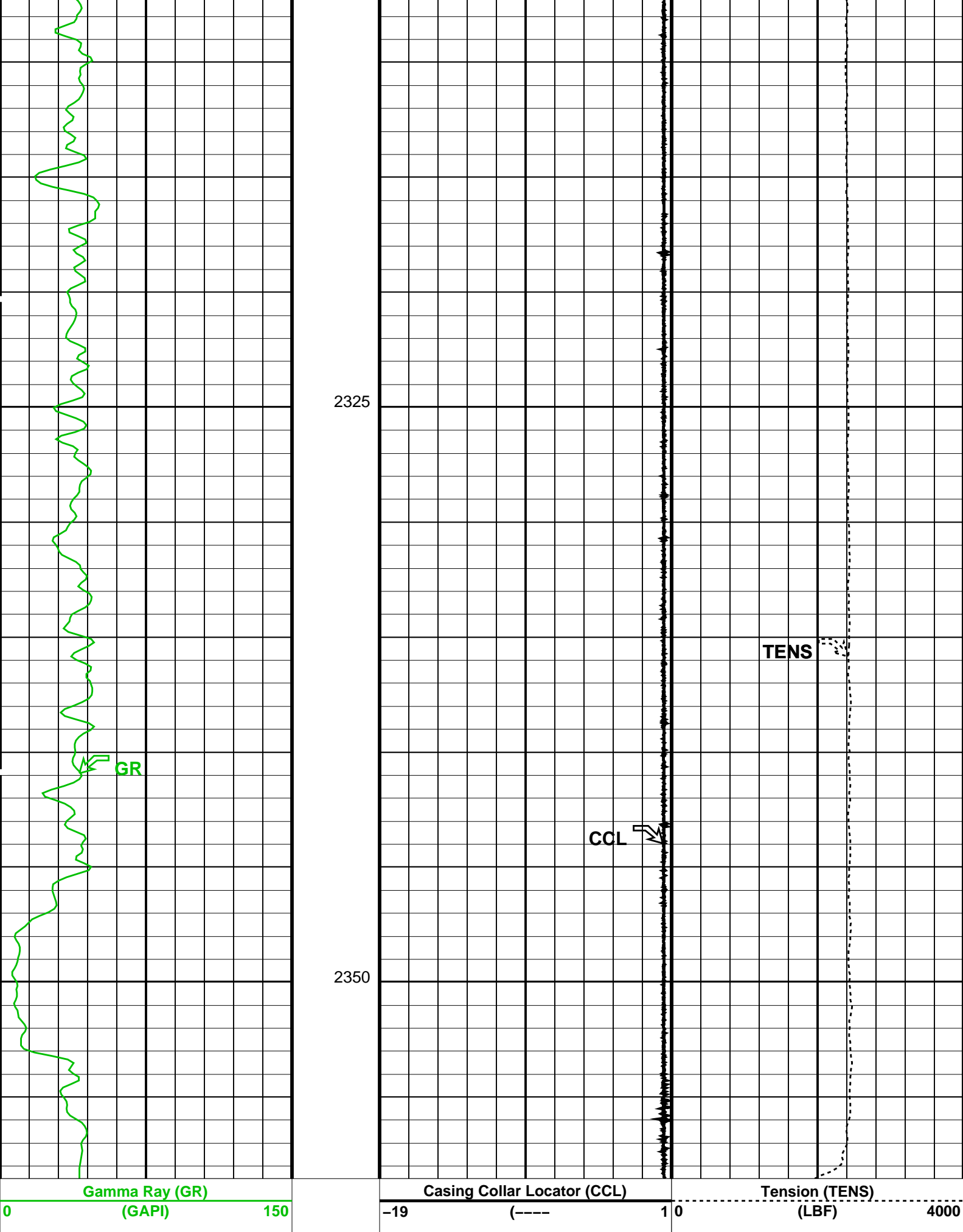




2275

2300





Parameters

DLIS Name		Description			Value		
DO	System and Miscellaneous		Depth Offset for Playback		0.8	M	
PP			Playback Processing		NORMAL		
Format: PERFO_1		Vertical Scale: 1:200			Graphics File Created: 23-Mar-2008 22:22		
OP System Version: 15C0-309							
MCM							
SHM_GUN	15C0-309		PGGT-D		15C0-309		
Input DLIS Files							
DEFAULT	PERFO_016LUP		FN:15	PRODUCER	23-Mar-2008 22:14	2357.8 M	2245.3 M
Output DLIS Files							
DEFAULT	PERFO_018PUP		FN:17	PRODUCER	23-Mar-2008 22:22		

Company: **Esso Australia Pty Ltd**

Schlumberger

Well: **Snapper A21a**
Field: **Gippsland Basin**
Rig: **Nabors Rig 175**
Country: **Australia**

Perforation Record
4 1/2" HSD
Junk Basket