

Company: Esso Australia Pty Ltd.

Well: HLA A16a

Field: Hailbut

Rig: 453

Country: Australia

4-1/2" HSD Powerjet Omega
Perforation Record
16-Mar-2007

Rig: 453
Field: Hailbut
Location: Bass Strait
Well: HLA A16a
Company: Esso Australia Pty Ltd.

LOCATION	
Bass Strait Gippsland Basin	Elev.: K.B. 29.45 m G.L. -72.5 m D.F. 29.45 m
Permanent Datum: Log Measured From:	Mean Sea Level Drill Floor
Drilling Measured From:	Drill Floor

State: Victoria	Max. Well Deviation 17 deg	Longitude 148° 19' 13.283"E	Latitude 38° 24' 15.028"S
--------------------	-------------------------------	--------------------------------	------------------------------

Logging Date	16-Mar-2007								
Run Number	1								
Depth Driller	2536 m								
Schlumberger Depth	2526.8 m								
Bottom Log Interval	2410 m								
Top Log Interval	2398.5 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	545 m								
To	2536 m								
Casing/Tubing Size	7.000 in								
Weight	26 lbm/ft								
Grade	N-80								
From	11.36 m								
To	2535.3 m								
Maximum Recorded Temperatures									
Logger On Bottom	16-Mar-2007				14.45				
Unit Number	93	AUSL							
Recorded By	Chris Rowand								
Witnessed By	Mr B. Bigby / Mr C.Stead								

PVT DATA				Run 1	Run 2	Run 3
Oil Density						
Water Salinity						
Gas Gravity						
Bo						
Bw						
1/Bq						
Bubble Point Pressure						
Bubble Point Temperature						
Solution GOR						
Maximum Deviation				17 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: 17-MAR-2007 0:24:13

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-H Serial Number: 796 Calibration Date: 6-Sep-2006 Calibrator Serial Number: 1009 Calibration Cable Type: 7-46V-XS Wheel Correction 1: -3 Wheel Correction 2: -2	Type: CMTD-B/A Serial Number: 1721 Calibration Date: 24-Feb-2007 Calibrator Serial Number: 1051 Calibration Gain: 0.71 Calibration Offset: 428.00	Type: 7-46V-XS Serial Number: 76075 Length: 5979.87 M Conveyance Method: Wireline Rig Type: Offshore_Fixed

Depth Control Parameters

Log Sequence:	Subsequent Log In the Well
Reference Log Name:	LWD Petrophysical Analysis
Reference Log Run Number:	N/A
Reference Log Date:	N/A

Depth Control Remarks

1. Used IDW as primary depth control
2. Used Z-Chart as secondary depth control
3. Correlated to LWD Petrophysical Analysis provided by the client
4.
5.
6.

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	OTHER SERVICES2
OS1: Junk Basket	OS1:
OS2: 6" Gauge Ring	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
Correlated to LWD Petrophysical Analysis provided by client	
Objective: run Junk Basket then perforate overbalanced the M-111 sand with	
4-1/2", 12 spf, Powerjet Omega HSD guns.	
Junk Basket tagged HUD @ 2526.8 M	
Perforated intervals:	
Run #1: 2398.5-2399.5, 2409-2410 M	

[illegible]

[illegible]

TOOL BOTTOM

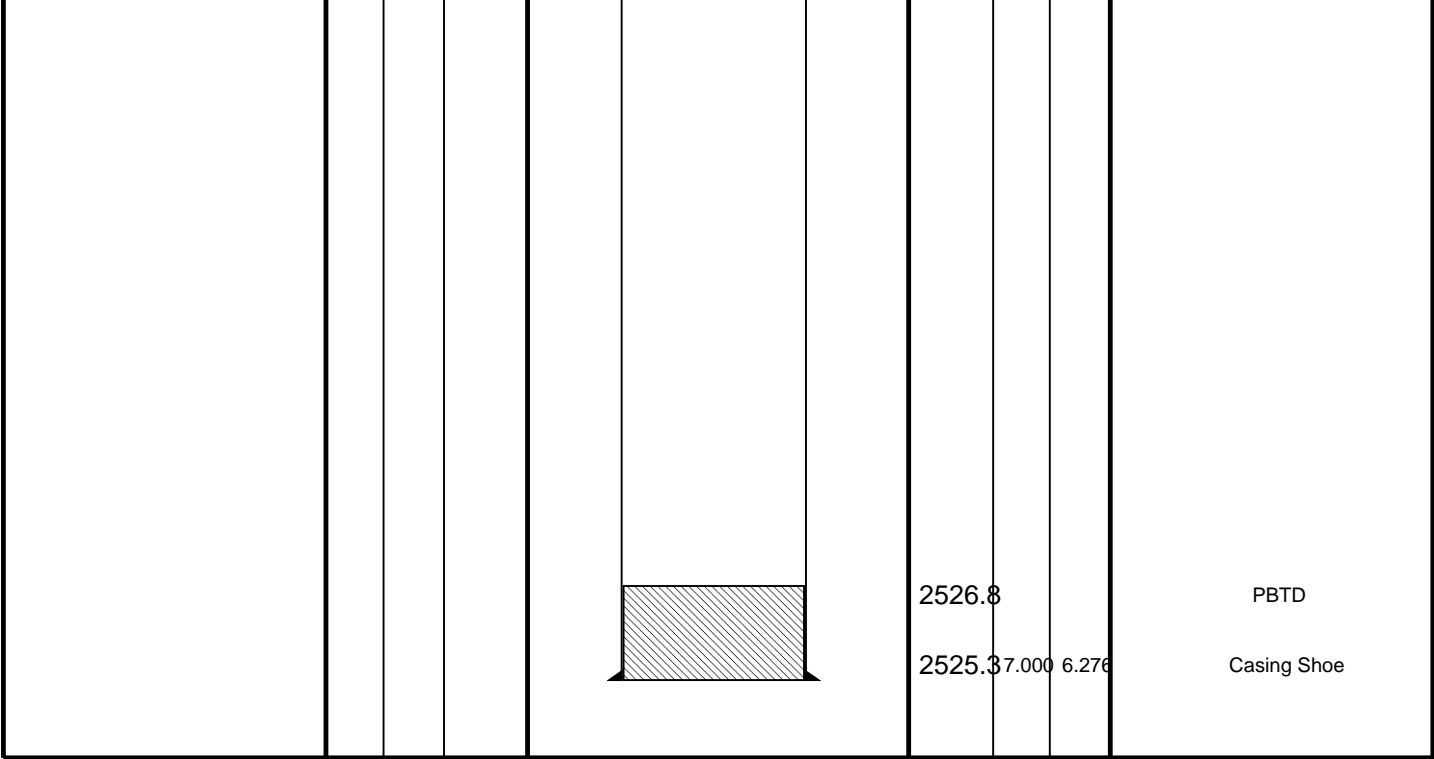
0.05



TOOL BOTTOM

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

[illegible]



Gun
Log Out of Position

MAXIS Field Log

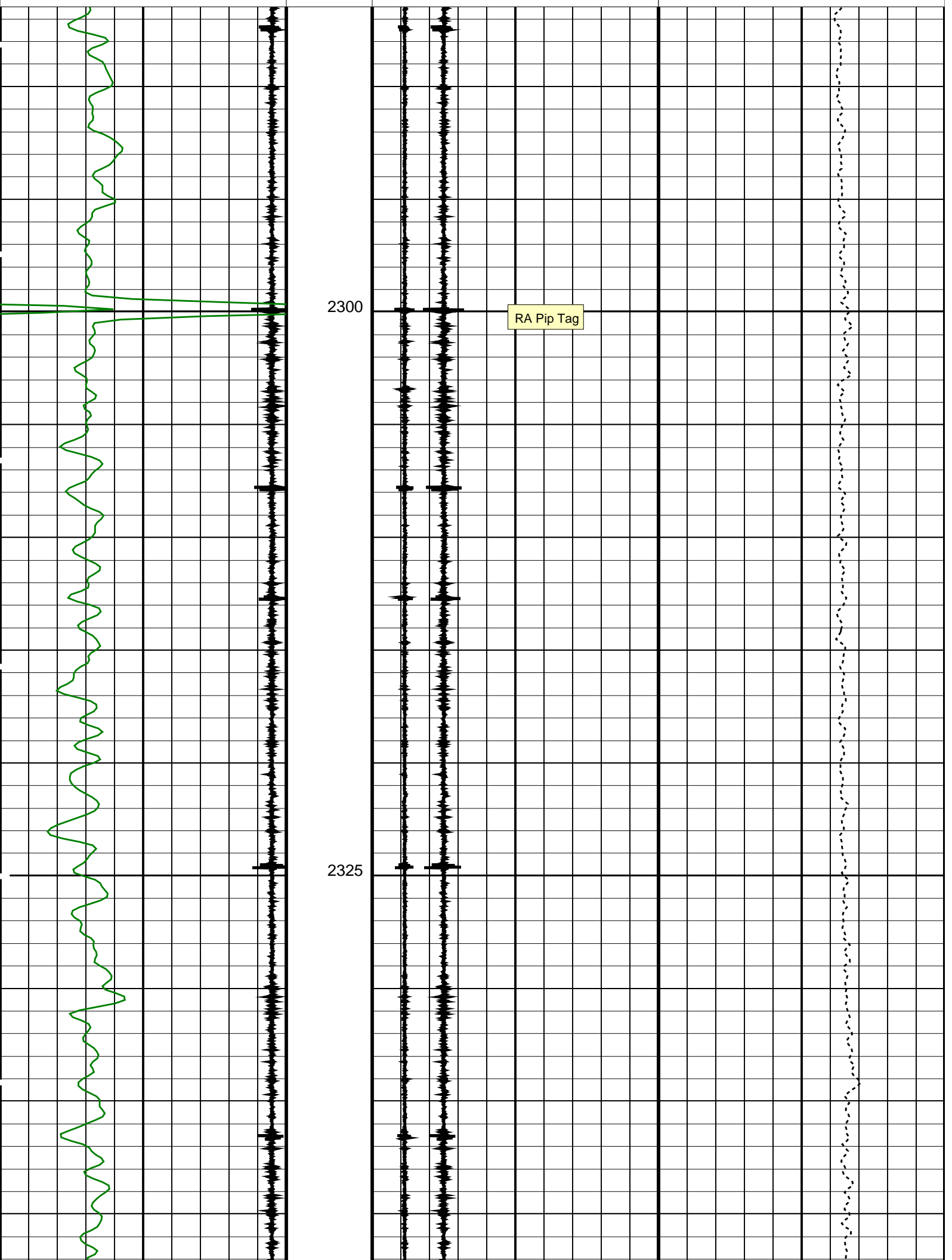
Company: Esso Australia Pty Ltd. Well: HLA A16a

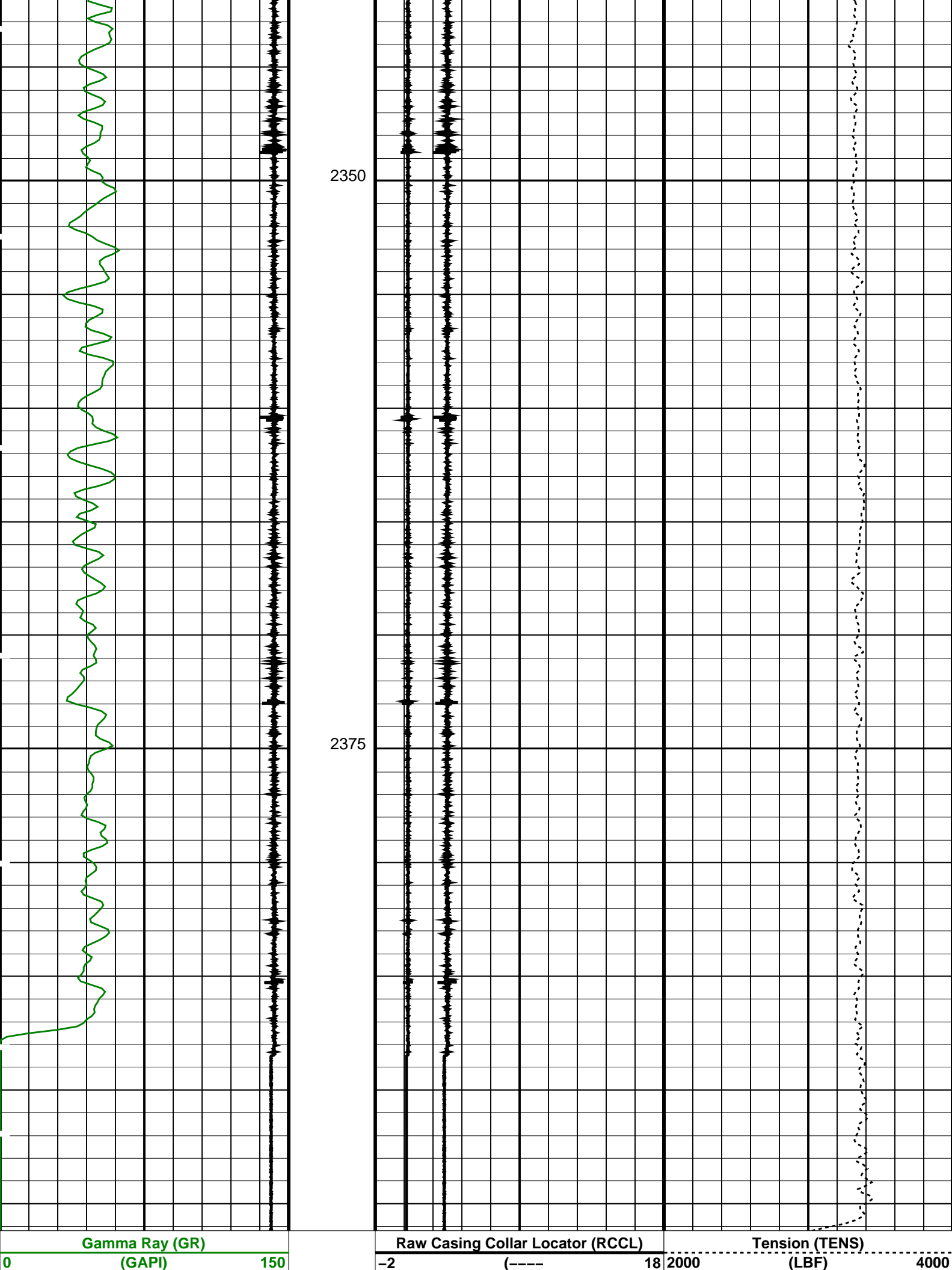
Output DLIS Files						
DEFAULT	PERFO_017LUP	FN:19	PRODUCER	16-Mar-2007 23:46	2396.2 M	2286.5 M

OP System Version: 14C0-302		
MCM		
SHM_GUN	14C0-302	PGGT-D 14C0-302

PIP SUMMARY


Time Mark Every 60 S			
Casing Collar Locator (CCL)		Shifted Casing Collar Locator (SCCL)	
-19	(----	1	
Gamma Ray (GR)		Raw Casing Collar Locator (RCCL)	
0	(GAPI)	150	
		Tension (TENS)	
-2	(----	18	2000 (LBF) 4000





Casing Collar Locator (CCL)		Shifted Casing Collar Locator (SCCL)	
-19 (---- 1		-10 (---- 10	

PIP SUMMARY			
Time Mark Every 60 S			
Format: CORRELATION		Vertical Scale: 1:200	Graphics File Created: 16-Mar-2007 23:46
OP System Version: 14C0-302			
MCM			
SHM_GUN	14C0-302	PGGT-D	14C0-302
Output DLIS Files			
DEFAULT	PERFO_017LUP	FN:19	PRODUCER 16-Mar-2007 23:46



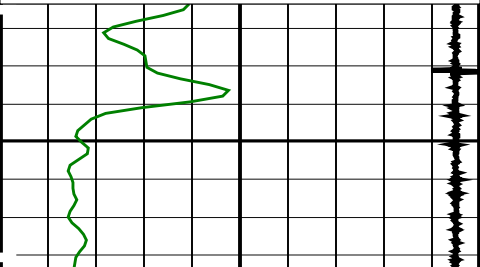
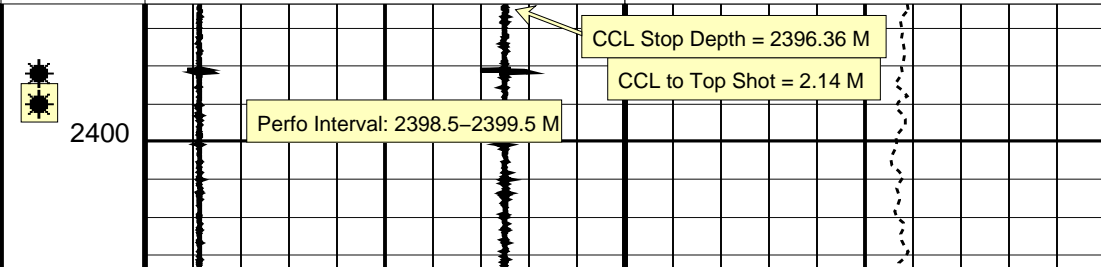
Gun

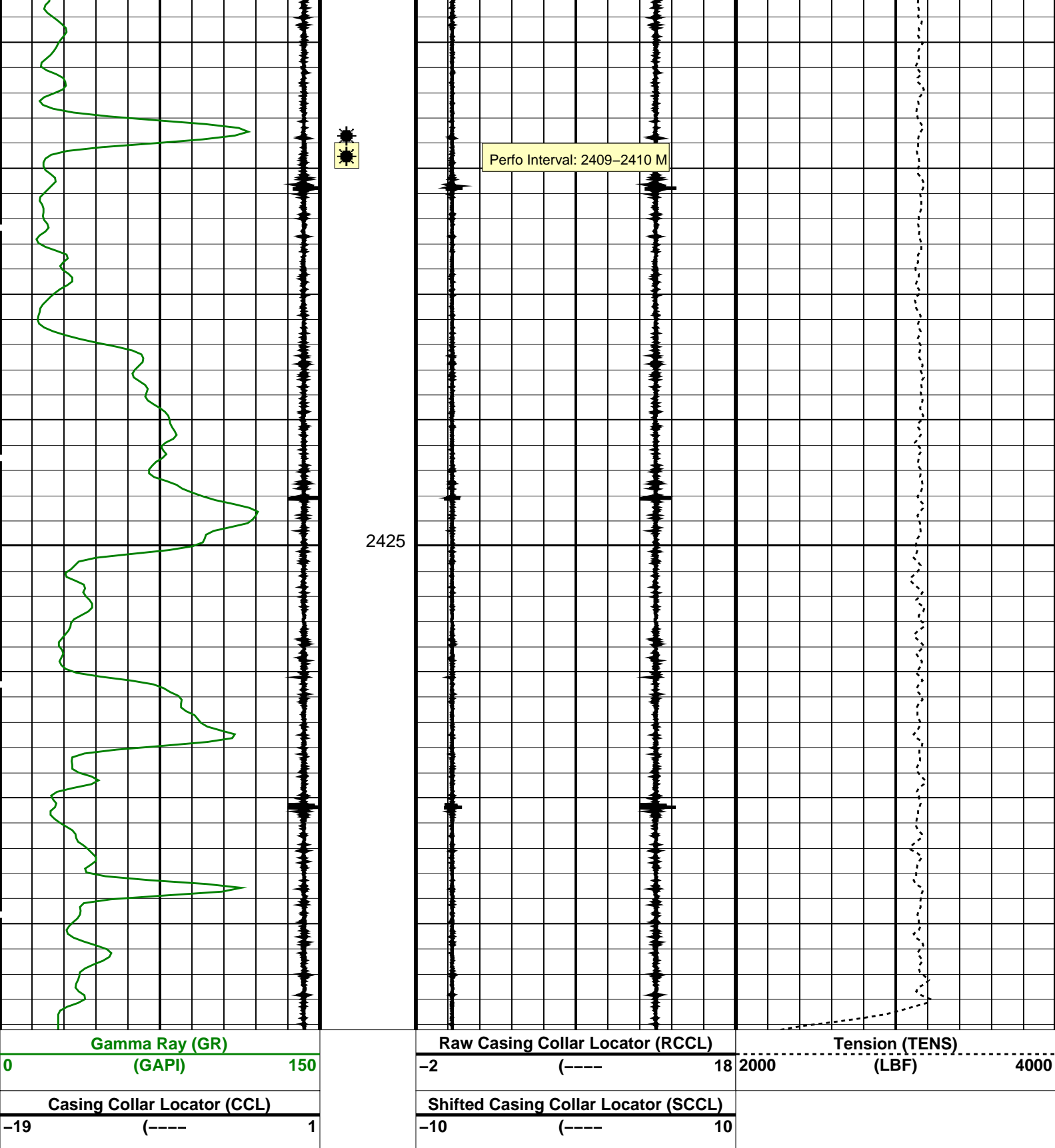
Log Into Position

MAXIS Field Log

PERFO2 Operational Summary Listing

Device	Status	Req Depth (M)	Obs Depth (M)	Time Used
GUN1	Used	2398.5	2398.5	Fri Mar 16 23:46:32 2007

Company: Esso Australia Pty Ltd.				Well: HLA A16a	
Output DLIS Files					
DEFAULT	PERFO_016LUP	FN:18	PRODUCER	16-Mar-2007 23:31	2444.2 M 2396.3 M
OP System Version: 14C0-302					
MCM					
SHM_GUN	14C0-302	PGGT-D	14C0-302		
PIP SUMMARY					
Time Mark Every 60 S					
Casing Collar Locator (CCL)		Shifted Casing Collar Locator (SCCL)			
-19 (---- 1		-10 (---- 10			
Gamma Ray (GR)		Raw Casing Collar Locator (RCCL)		Tension (TENS)	
0 (GAPI) 150		-2 (---- 18		2000 (LBF) 4000	
					



PIP SUMMARY

Time Mark Every 60 S

Format: CORRELATION Vertical Scale: 1:200

Graphics File Created: 16-Mar-2007 23:31

OP System Version: 14C0-302
MCM

SHM_GUN

14C0-302

PGGT-D

14C0-302

Output DLIS Files

DEFAULT

PERFO 016LUP

FN:18

PRODUCER

16-Mar-2007 23:31



Gun Correlation

MAXIS Field Log

Company: Esso Australia Pty Ltd.

Well: HLA A16a

Output DLIS Files

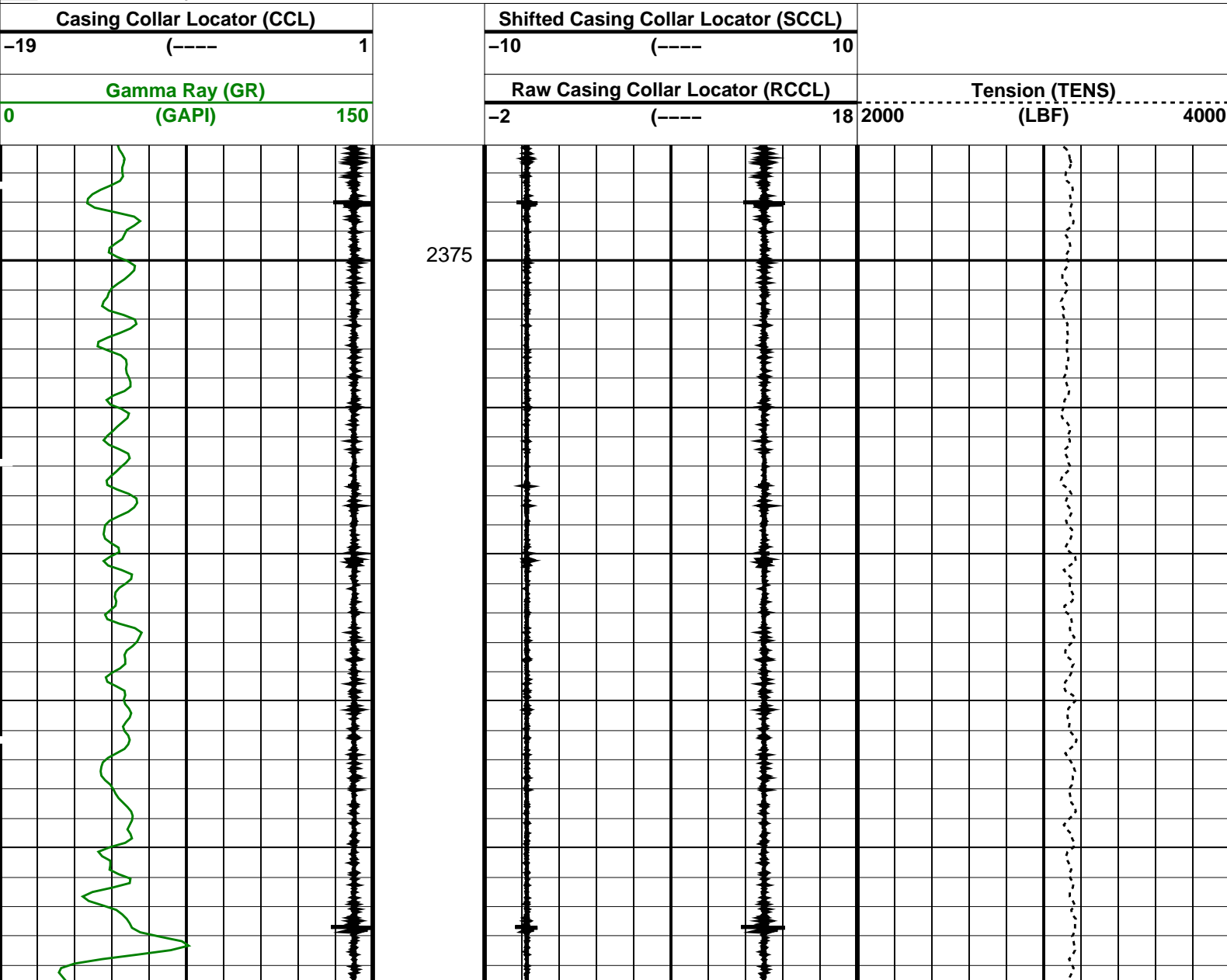
DEFAULT PERFO_009LUP FN:11 PRODUCER 16-Mar-2007 22:02 2445.7 M 2371.0 M

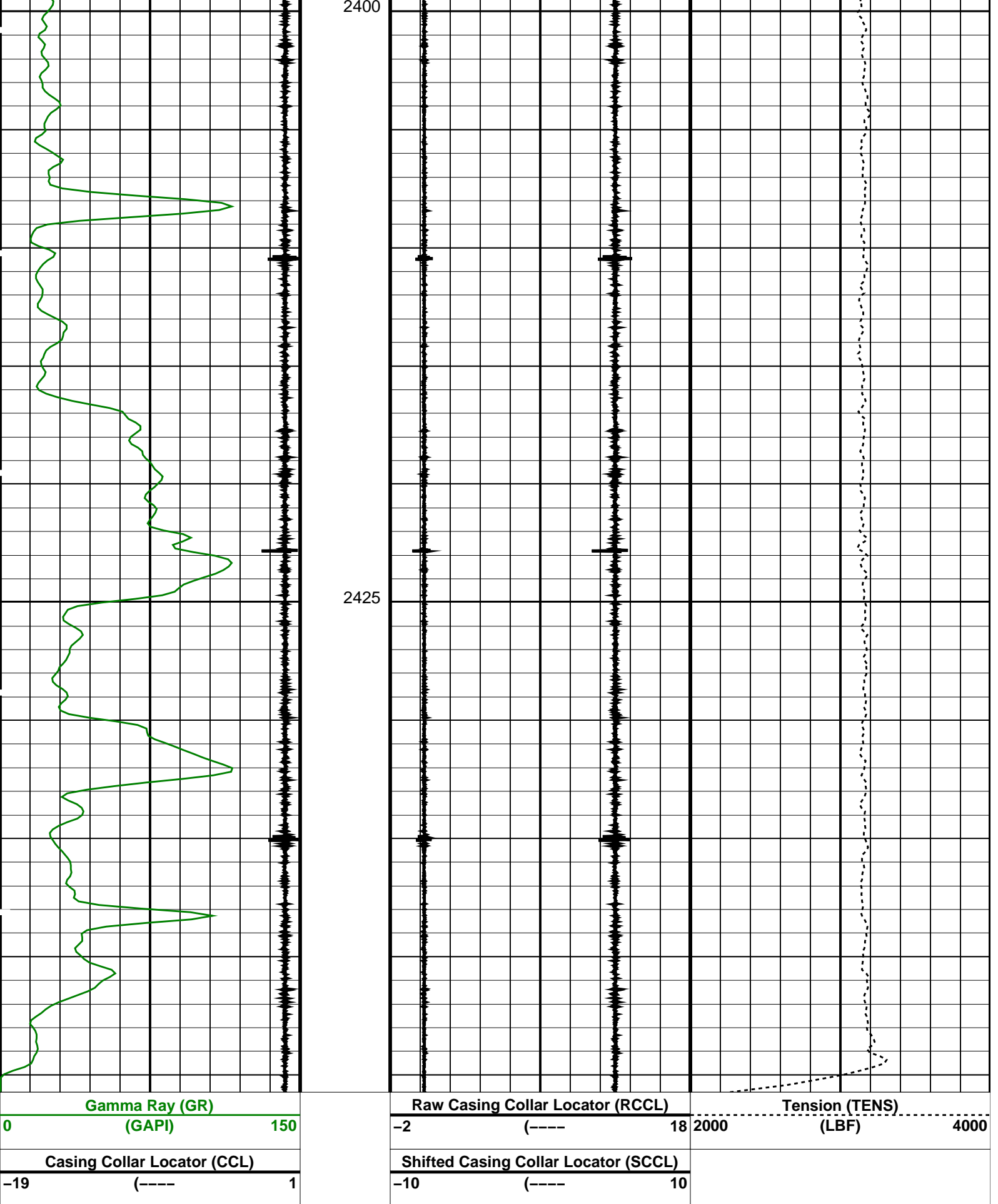
OP System Version: 14C0-302
MCM

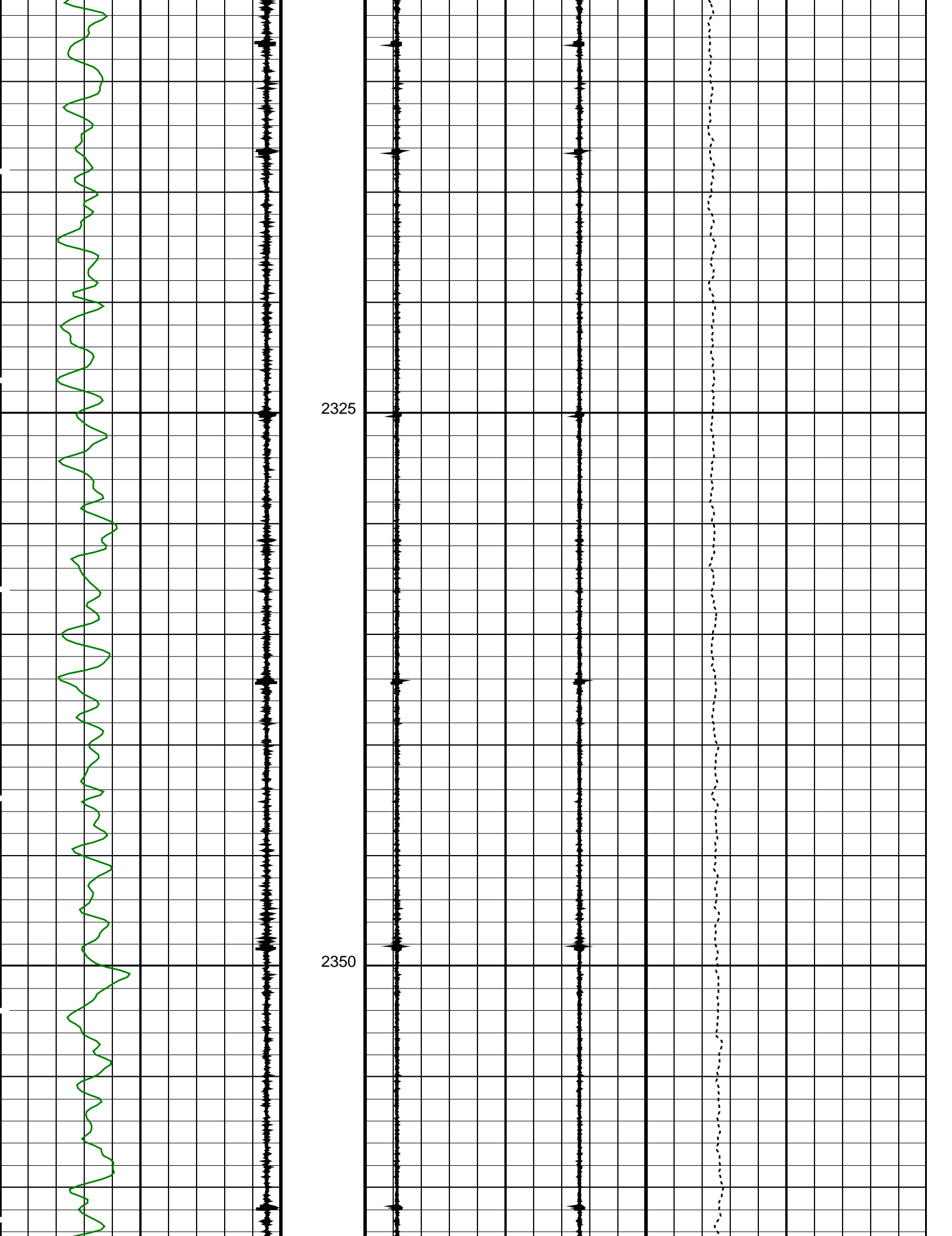
SHM_GUN 14C0-302 PGGT-D 14C0-302

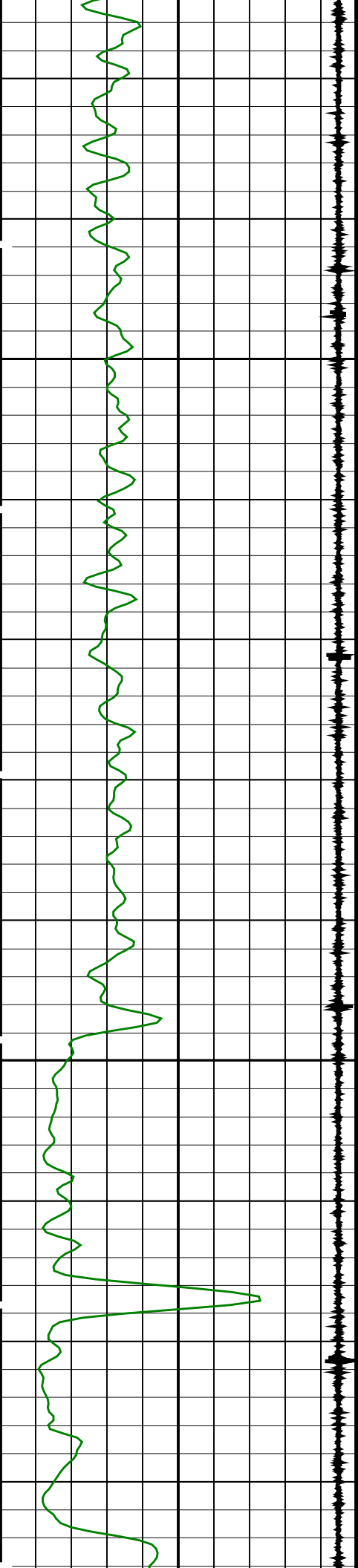
PIP SUMMARY

Time Mark Every 60 S



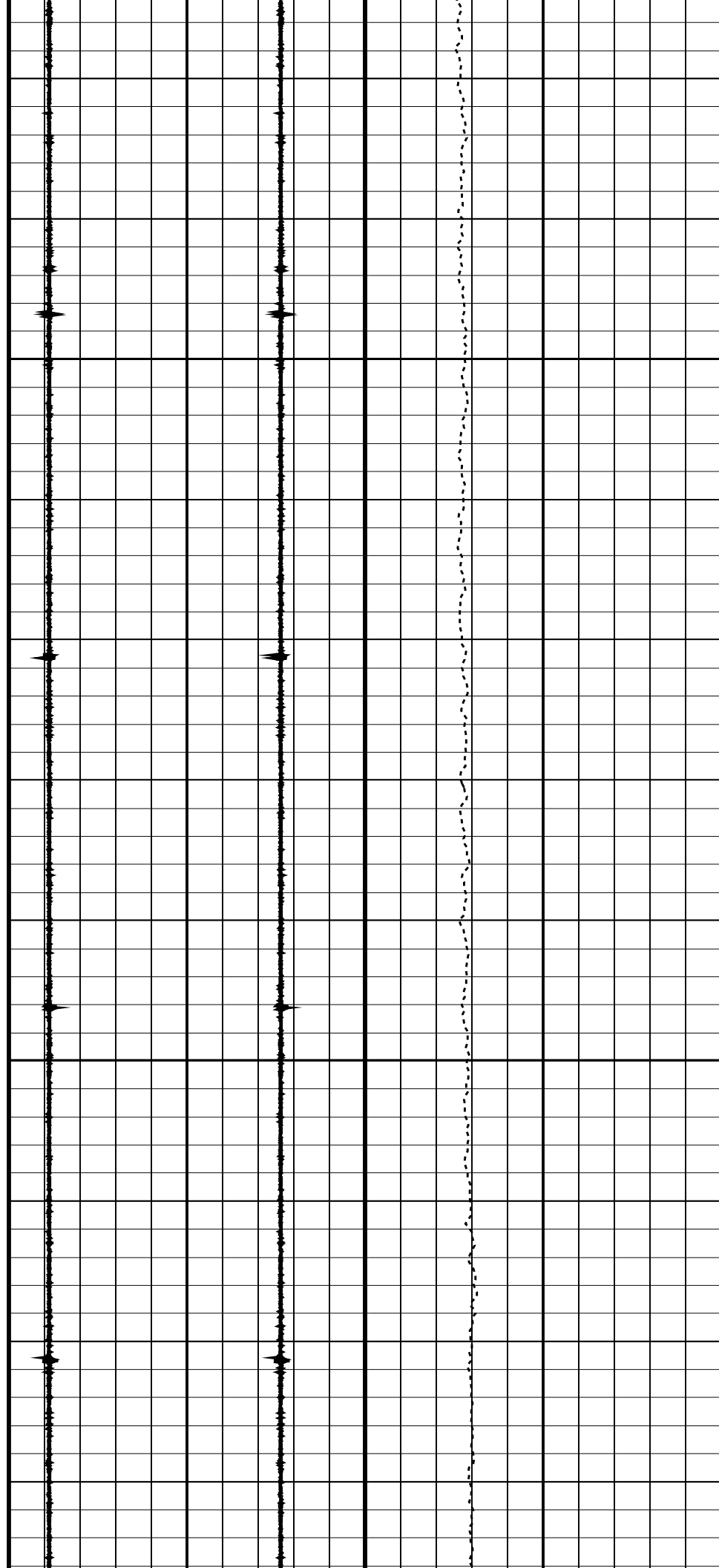


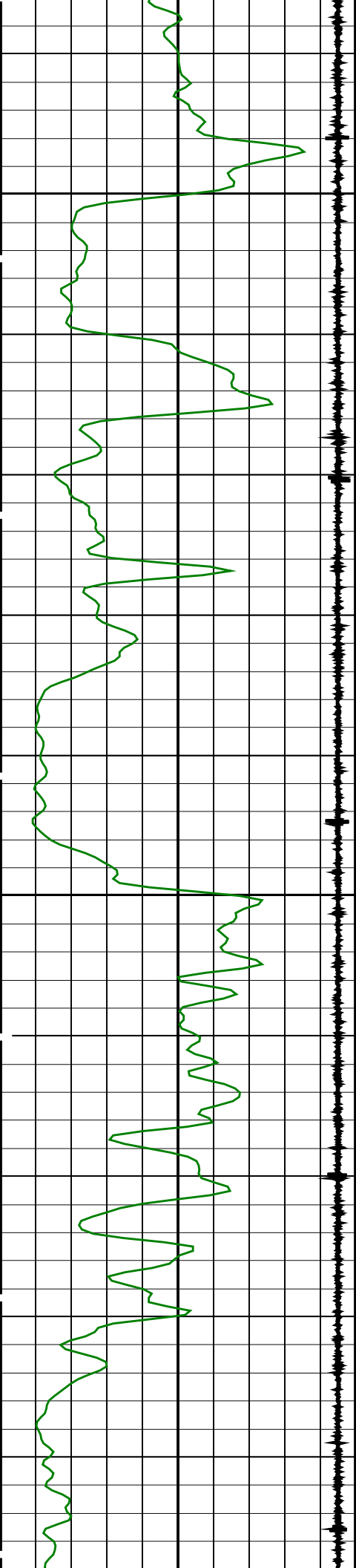




2375

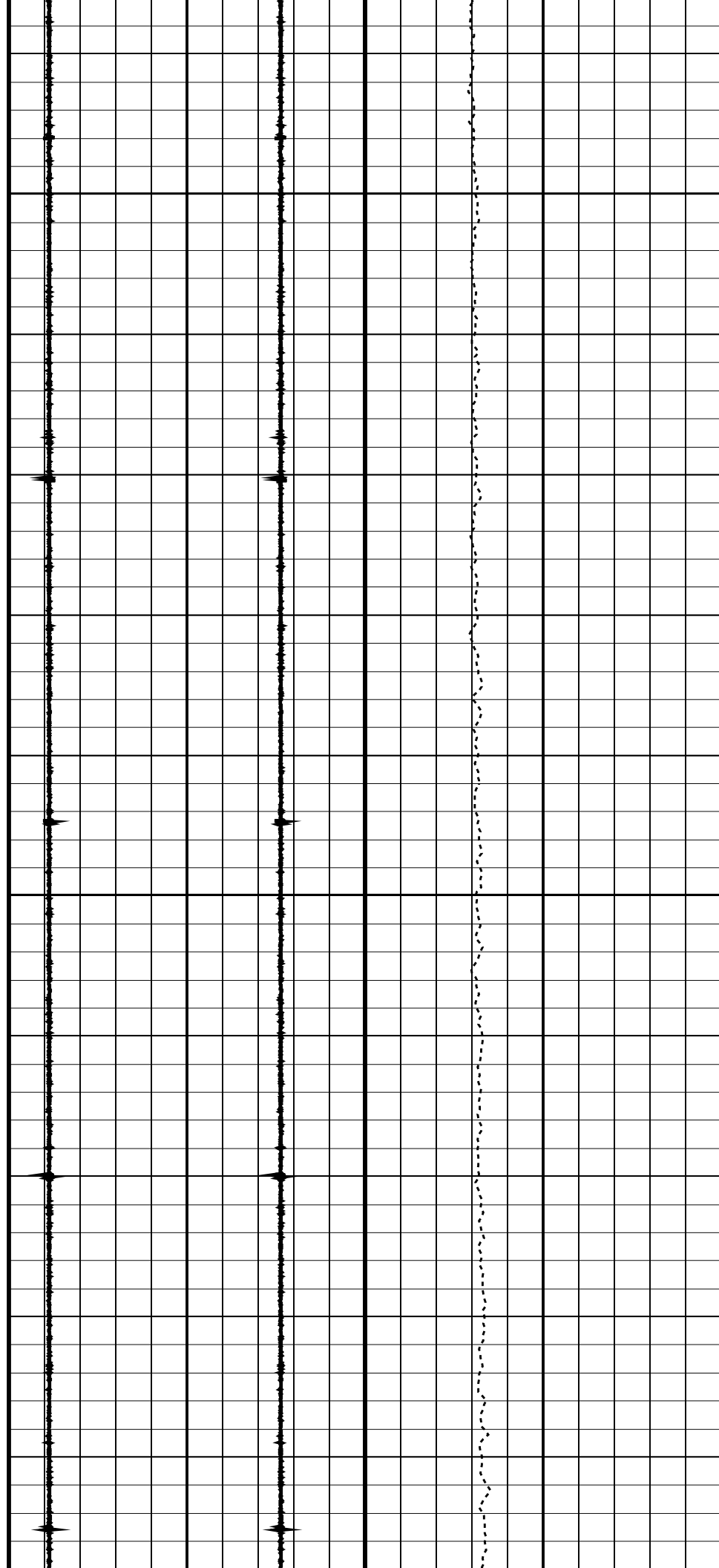
2400

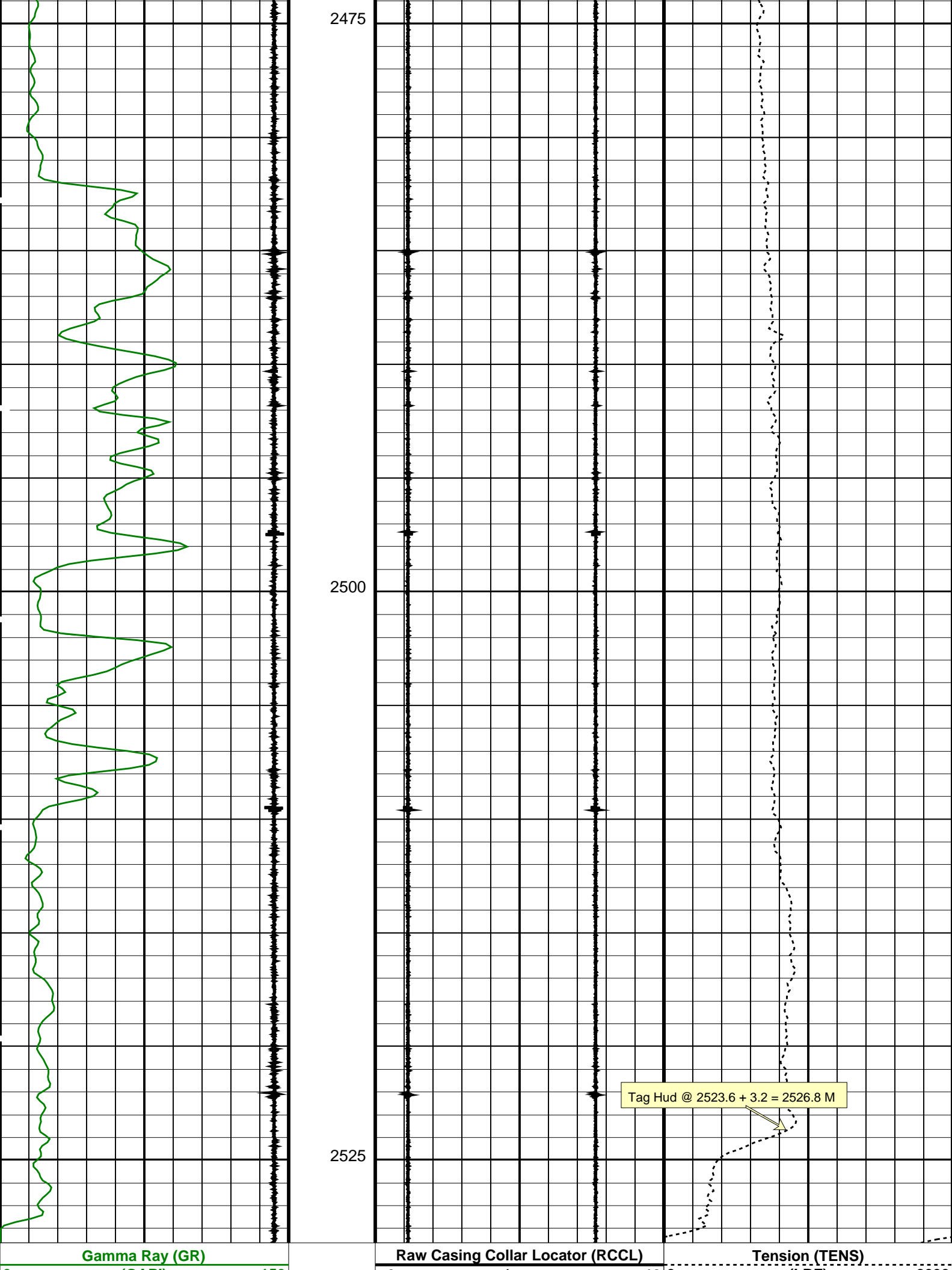




2425

2450





(GAPI) 150		-2 (---- 18 0		(LBF) 2000	
Casing Collar Locator (CCL)		Shifted Casing Collar Locator (SCCL)			
-19 (---- 1		-10 (---- 10			
PIP SUMMARY					
Time Mark Every 60 S					
Parameters					
DLIS Name		Description		Value	
System and Miscellaneous		Depth Offset for Playback		-3.2 M	
DO		PP		RECOMPUTE	
Format: CORRELATION		Vertical Scale: 1:200		Graphics File Created: 16-Mar-2007 15:18	
OP System Version: 14C0-302					
MCM					
PLUG		14C0-302		PGGT-D 14C0-302	
Input DLIS Files					
DEFAULT		PLUG_006LUP		FN:5 PRODUCER 16-Mar-2007 14:44 2531.8 M 2289.2 M	
Output DLIS Files					
DEFAULT		PLUG_006PUP		FN:8 PRODUCER 16-Mar-2007 15:17	
Company: Esso Australia Pty Ltd.					
Well: HLA A16a					
Field: Halibut					
Rig: 453					
Country: Australia					
4-1/2" HSD Powerjet Omega					
Perforation Record					
16-Mar-2007					