

Company: Esso Australia Pty. Ltd.

Well: FLOUNDER A6
Field: FLOUNDER
Rig: Crane / Prod#4

Country: Australia

2-1/8" Phased Powerjet
Perforating and MPBT Plug Setting Record
31-Jul-2010

Rig: Crane / Prod#4
Field: FLOUNDER
Location: Gippsland
Well: FLOUNDER A6
Company: Esso Australia Pty. Ltd.

Crane / Prod#4				Elev.: K.B. 34.20 m	
Rig:	FLOUNDER			G.L. -94.00 m	
Field:	Gippsland			D.F. 34.20 m	
Location:	FLOUNDER A6			Elev.: 0.00 m	
Well:	Esso Australia Pty			34.20 m above Perm. Datum	
Company:					
LOCATION					
Gippsland					
Basin					
Bass Strait					
Permanent Datum:		M.S.L.			
Log Measured From:		D.F.			
Drilling Measured From:		D.F.			
State: Victoria	Max. Well Deviation 64.49 deg	Longitude 148° 26' 22.092"E		Latitude 38° 18' 39.095"S	
Logging Date	31-Jul-2010				
Run Number	1				
Depth Driller	4147 m				
Schlumberger Depth	4078 m				
Bottom Log Interval	4069.5 m				
Top Log Interval	4068 m				
Casing Fluid Type	Production Fluid				
Salinity					
Density					
Fluid Level					
BIT/CASING/TUBING STRING					
Bit Size	8.500 in				
From	3886 m				
To	4147 m				
Casing/Tubing Size	7.000 in				
Weight	26 lbm/ft				
Grade	N-80				
From	3786 m				
To	4146 m				
Maximum Recorded Temperatures					
Logger On Bottom	Time	31-Jul-2010		9:25	
Unit Number	Location	889	AUSL		
Recorded By		C.Rowand / W.Mackenzie			
Witnessed By		B.White			

PVT DATA						Run 1	Run 2	R
Oil Density								
Water Salinity								
Gas Gravity								
Bo								
Bw								
1/Bq								
Bubble Point Pressure								
Bubble Point Temperature								
Solution GOR								
Maximum Deviation						64.49 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: 31-JUL-2010 10:39:20

Logging Cable

Type:	2-32ZT
Serial Number:	208558
Length:	5800 M
Conveyance Method:	Wireline
Rig Type:	Offshore Fixed

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	Schlumberger RST-C Log
Reference Log Run Number:	
Reference Log Date:	14-Sept-2009
Subsequent Trip Down Log Correction:	-1.80 M

1. Log correlated to Schlumberger RST-C log dated 14-Sept-2010
2. Tool Zero is referenced from the Tubing Hanger at 12.8m
- 3.
- 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

Log referenced to Schlumberger RST-C log dated 14-Sept-2009.

Objective: perforate 4068–4069.5m with 2–1/8" Ph. Powerjets,
Set 7" MPBT plug at 4072.0 m and dump 0.7m of cement.

Gun #1: 4068.0 – 4069.5m. SAFE firing system used.

MPBT Plug (H405501) set at 4072.0m.					
0.7m of water and cement dumped on top					
2–1/8" Ph. Powerjet API data:–					
– Penetration 27.2"					
– Entrance hole 0.32"					
CCL – Top Shot: 2.77m					
Top Shot – Bottom Shot: 1.5m					
CCL Stop Depth: 4065.23m MDKB					
RUN 1			RUN 2		
SERVICE ORDER #:		AUSL07336256	SERVICE ORDER #:		
PROGRAM VERSION:		17C0–154	PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP
EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		
SURFACE EQUIPMENT			SURFACE EQUIPMENT		
WITM (SHM) 3576			MPBM		
DOWNHOLE EQUIPMENT			DOWNHOLE EQUIPMENT		
<div><div>AH–SWBS–B AH–SWBS–B 785</div><div></div><div>9.60</div></div>			<div><div>AH–SWBS–B AH–SWBS–B 789</div><div></div><div>15.40</div></div>		
<div><div>AH–SWBS–B AH–SWBS–B 786</div><div></div><div>8.90</div></div>			<div><div>AH–SWBS–B AH–SWBS–B 788</div><div></div><div>14.70</div></div>		
<div><div>AH–SWBS–B AH–SWBS–B 787</div><div></div><div>8.20</div></div>			<div><div>AH–SWBS–B AH–SWBS–B 787</div><div></div><div>14.00</div></div>		
<div><div>AH–SWBS–B AH–SWBS–B 788</div><div></div><div>7.50</div></div>			<div><div>AH–SWBS–B AH–SWBS–B 786</div><div></div><div>13.30</div></div>		
<div><div>AH–SWBS–B AH–SWBS–B 789</div><div></div><div>6.80</div></div>			<div><div>AH–SWBS–B AH–SWBS–B 785</div><div></div><div>12.60</div></div>		
<div><div>MH–SWHS–A 759 MH–SWHS–A 759</div><div></div><div>6.10</div></div>			<div><div>MH–SWHS–A 759 MH–SWHS–A 759</div><div></div><div>11.90</div></div>		
<div><div>UPCT–A UPCC–A 445 UPCH–A 517</div><div>Gamma Ray</div><div>— 0.79</div><div></div><div>5.69</div></div>			<div><div>CCL–L 8055 CCL–L 8055</div><div>Cable Cur Head Volt Tension</div><div>— TOOL ZERO</div><div></div><div>9.66</div></div>		
<div><div>SAH–G 1032 SAH–G 1032</div><div>Casing Co Tension</div><div>— TOOL ZERO</div><div></div><div>4.32</div></div>			<div><div>MPSU–CA MPSU–CA 1011</div><div></div><div>9.20</div></div>		

MPEX-DA

MPEX-DA

2.79

TOOL BOTTOM

MAXIMUM STRING DIAMETER 2.13 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Drawing Date: 7/28/2010
API #:

Country: Australia		Elevation: 0.0 m						
Production String		(in) (m)		Well Schematic	(m) (in)		Casing String	
OD	ID	MD	MD		OD	ID		
Tubing Hanger	9.625	4.500	12.8		16.000	Casing String		
	4.500	3.968			13.375		Casing String	
SSSV	4.500	3.813	457.4		9.625		Casing String	
	Gas Lift Mandrel	4.500	3.863		969.5		687.0	16.000
Gas Lift Mandrel		4.500	3.863		1874.3		2441.0	13.375
	Nipple	4.500	3.813		1890.6			

Technical drawing of a vertical shaft assembly. The shaft is shown in cross-section with various components labeled. At the top, there is a large grey cylindrical component. Below it is a smaller grey component with a flange. The shaft continues down through several sections, including a large grey section, a section with horizontal lines, and a section with a cross-hatched pattern. The shaft is supported by bearings or guides, indicated by the black and white triangular patterns on either side. At the bottom, there is a section with a cross-hatched pattern and a section with a black and white triangular pattern. The drawing is a detailed technical illustration of a mechanical assembly.

Perforation Zone
Perforation Zone Bottom
0.7m Cement Plug



PERFO2 Operational Summary Listing

Cement Used	4058.9	4058.8	Sun Aug 01 13:29:17 2010
Bailer			

Well: FLOUNDER A6

Output DLIS Files

DEFAULT	PERFO 048LUP	FN:48	PRODUCER	01-Aug-2010 13:25	4065.3 M	3997.9 M
---------	--------------	-------	----------	-------------------	----------	----------

OP System Version: 17C0-154

17C0-154

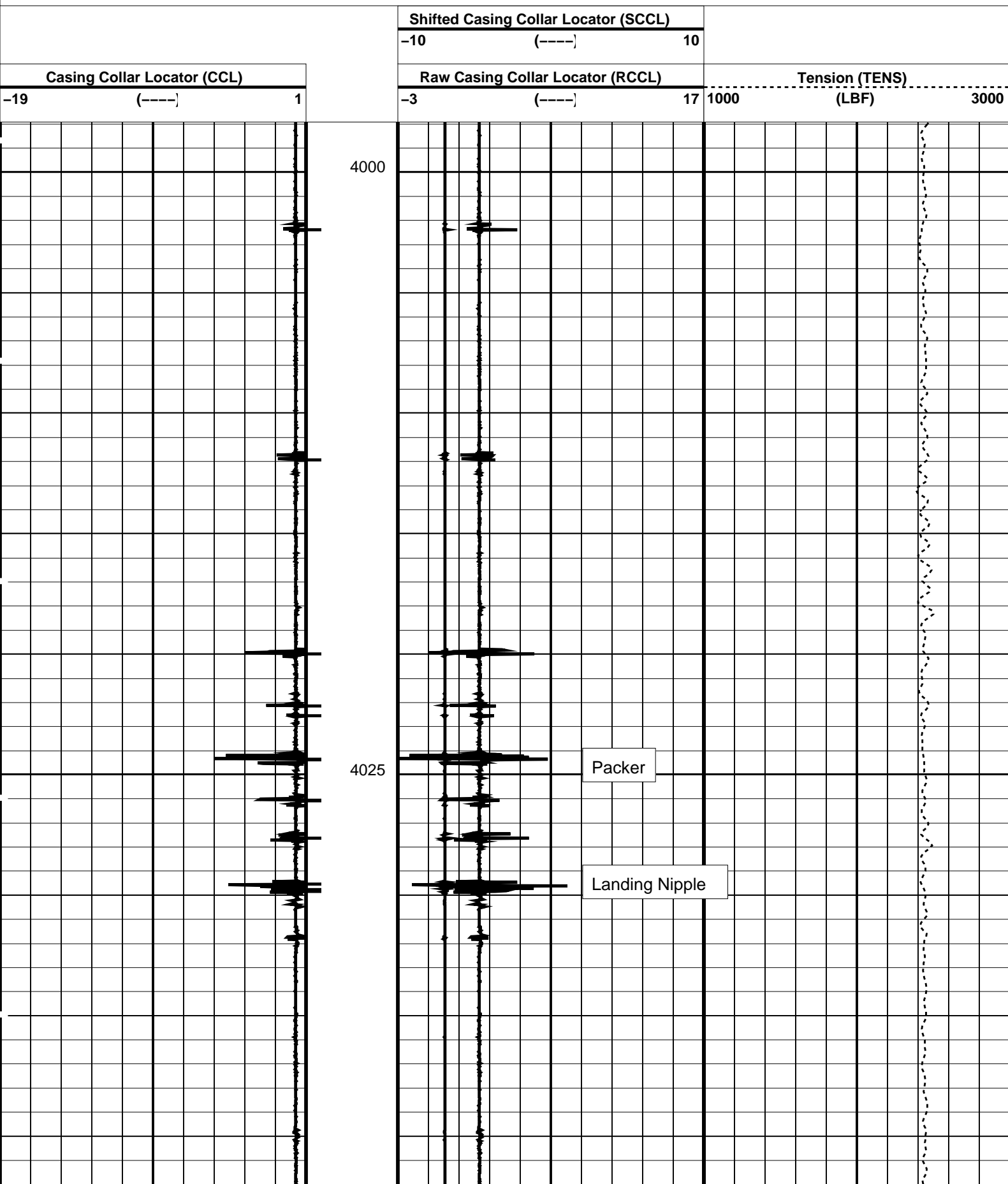
CCL-L

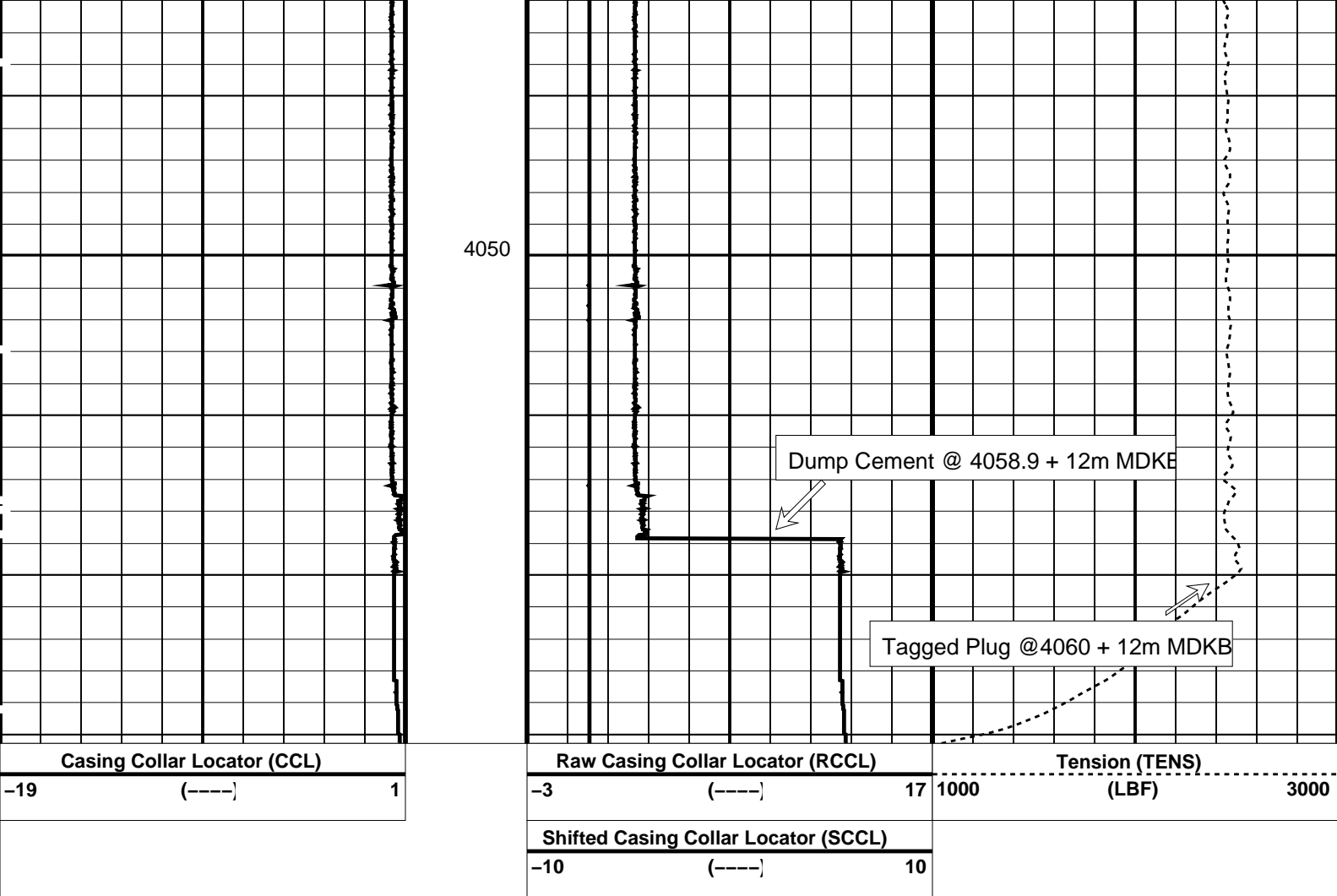
17C0-154

PIP SUMMARY

└─ Casing Collars

Time Mark Every 60 S





PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
CCL-L: Casing Collar Locator		
CCLD	CCL reset delay	12 IN
CCLT	CCL Detection Level	1 V

Format: CCLLog Vertical Scale: 1:200 Graphics File Created: 01-Aug-2010 13:25

OP System Version: 17C0-154

SHM_GUN 17C0-154 CCL-L 17C0-154

Output DLIS Files

DEFAULT PERFO_048LUP FN:48 PRODUCER 01-Aug-2010 13:25

Schlumberger

Water Bailer #1
Dump Record

PERFO2 Operational Summary Listing

Device Status Req Depth (M) Obs Depth (M) Time Used

Water Used 4059.5 4059.5 Sun Aug 01 10:28:52 2010
Bailer

Company: Esso Australia Pty. Ltd. Well: FLOUNDER A6

Output DLIS Files

DEFAULT PERFO_044LUP FN:43 PRODUCER 01-Aug-2010 10:25 4066.5 M 3992.9 M

OP System Version: 17C0-154

SHM_GUN 17C0-154 CCL-L 17C0-154

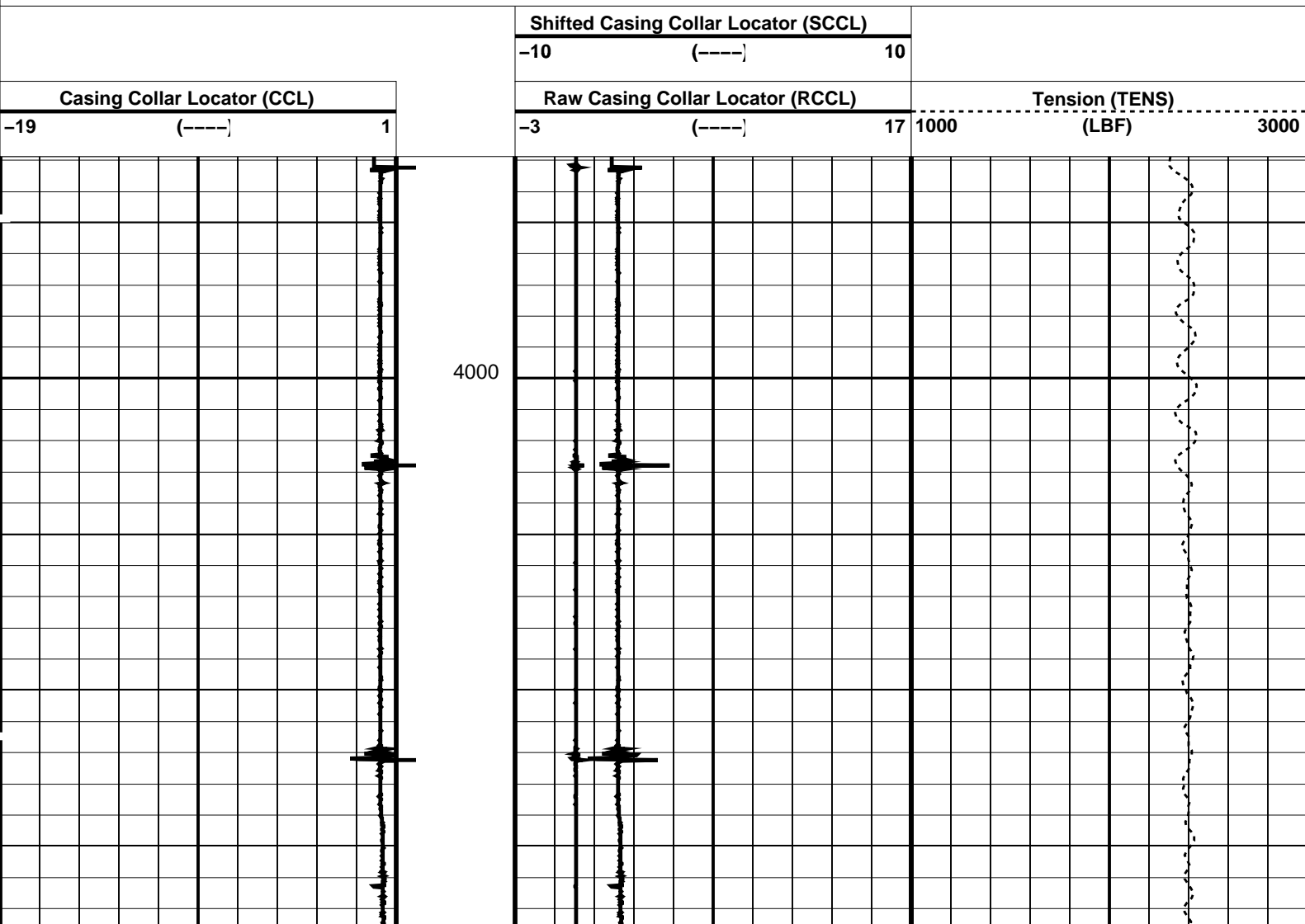
Changed Parameter Summary

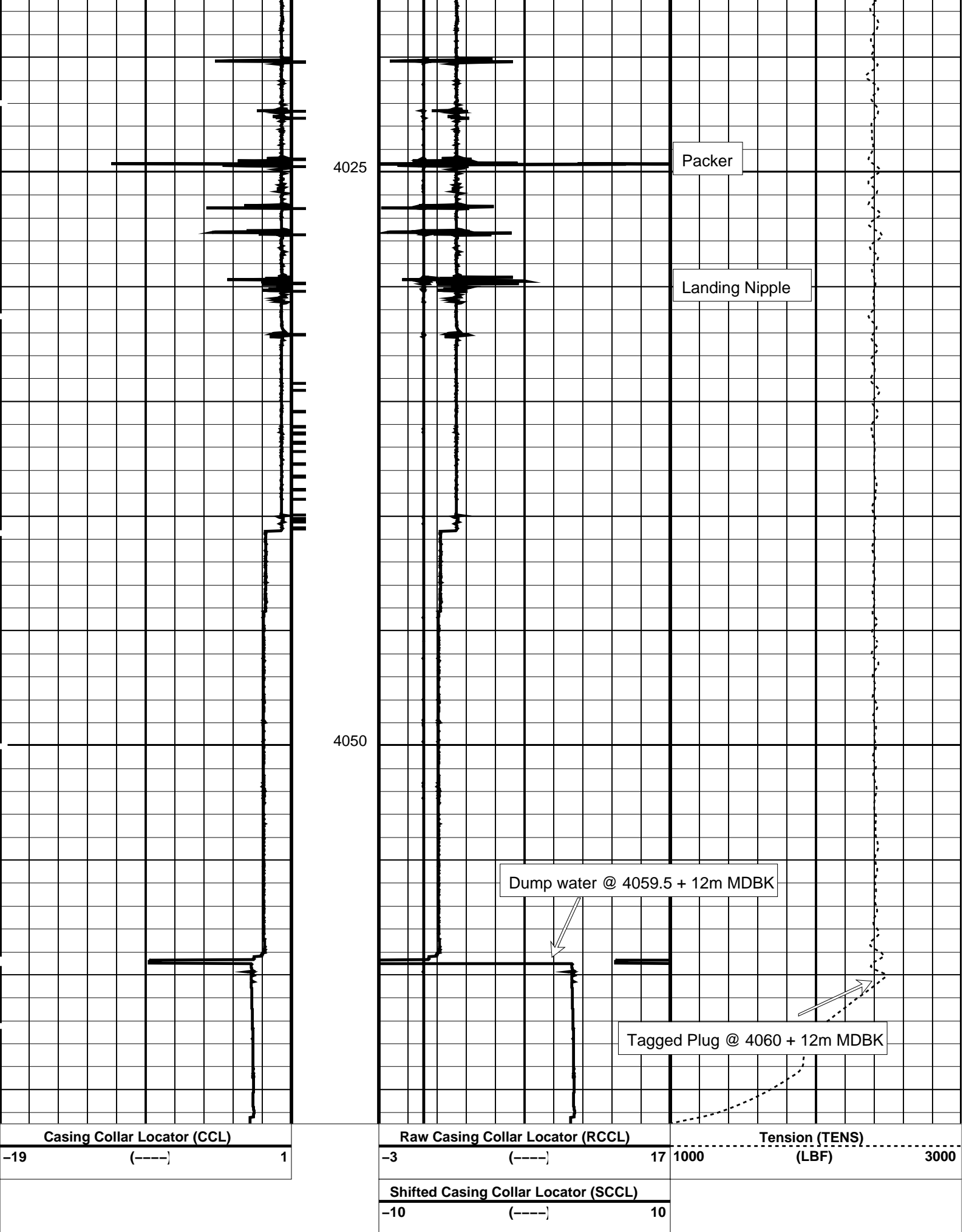
DLIS Name	New Value	Previous Value	Depth & Time
CCLT	1 V	0.3 V	4032.8 10:31:51

PIP SUMMARY

└─ Casing Collars

☐ Time Mark Every 60 S





PIP SUMMARY

└─ Casing Collars

Parameters				
DLIS Name		Description	Value	
CCL-L: Casing Collar Locator				
CCLD		CCL reset delay	12	IN
CCLT		CCL Detection Level	0.3	V
Format: CCLLog	Vertical Scale: 1:200	Graphics File Created: 01-Aug-2010 10:25		
OP System Version: 17C0-154				
SHM_GUN	17C0-154	CCL-L	17C0-154	
Output DLIS Files				
DEFAULT	PERFO_044LUP	FN:43	PRODUCER	01-Aug-2010 10:25

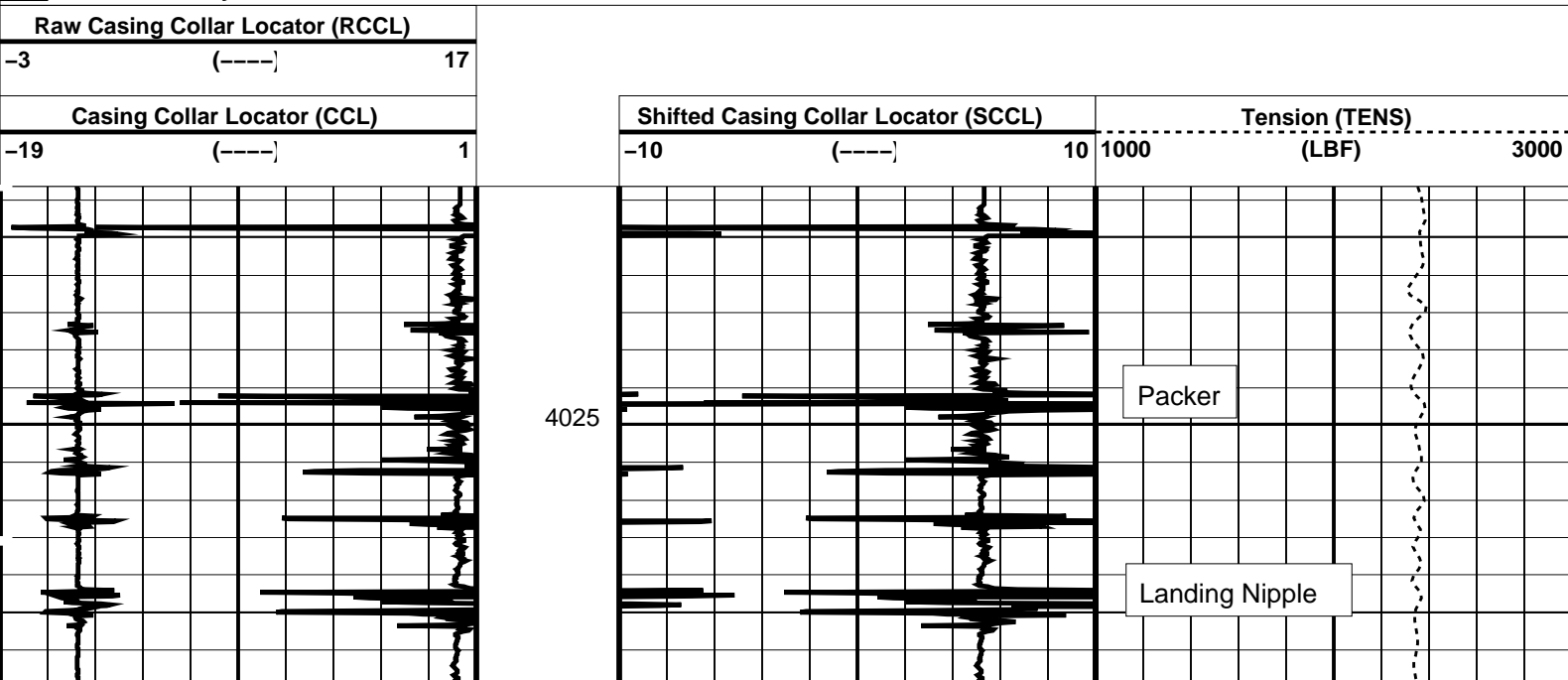


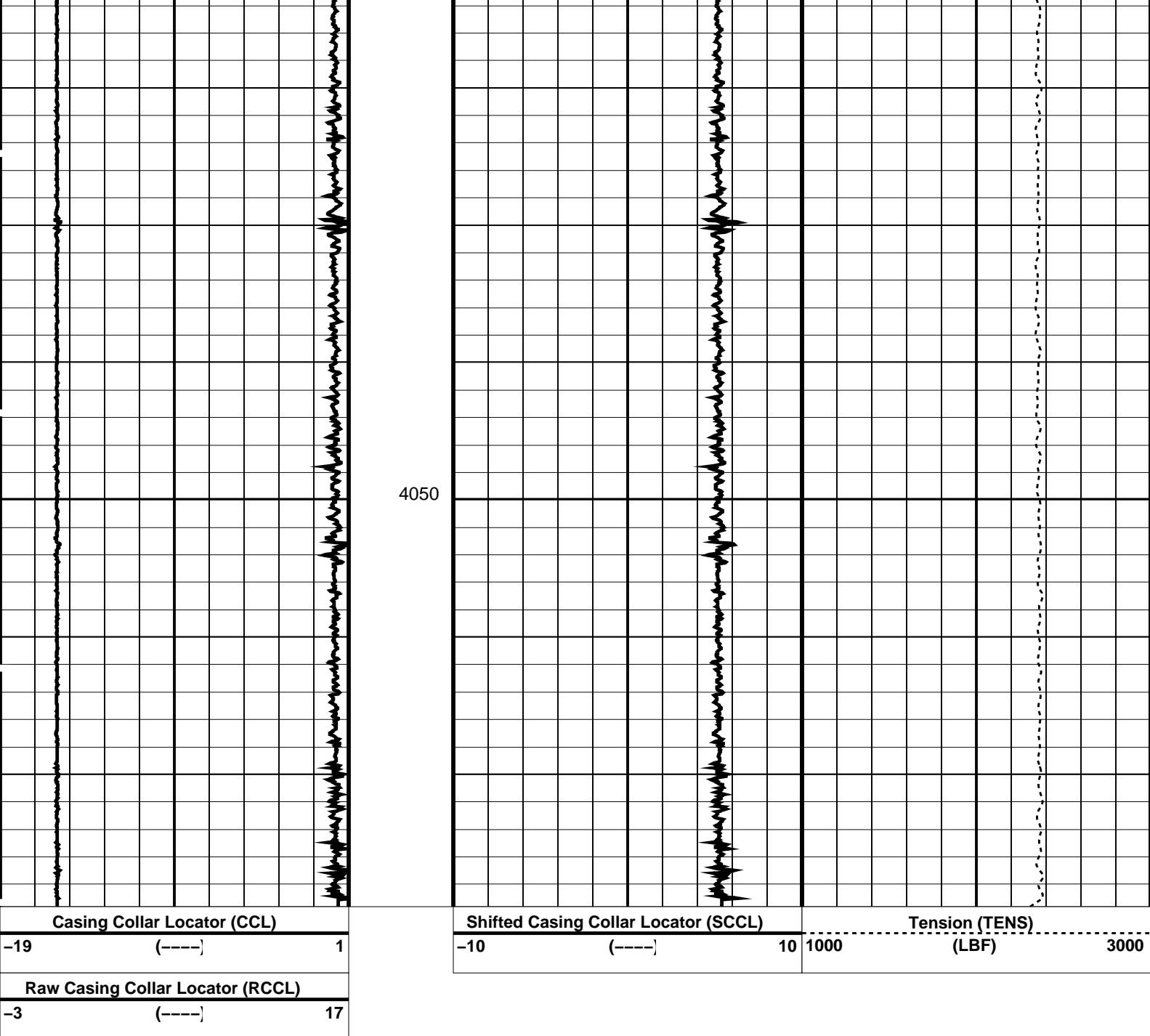
MPBT
Log Out of Position

MAXIS Field Log

Company: Esso Australia Pty Ltd.				Well: FLOUNDER A6	
Output DLIS Files					
DEFAULT	CCL_036LUP	FN:35	PRODUCER	31-Jul-2010 18:07	
OP System Version: 17C0-154					
MPEX-DA	17C0-154		MPSU-CA	17C0-154	
CCL-L	17C0-154				

PIP SUMMARY





PIP SUMMARY

Time Mark Every 60 S

Parameters

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

Format: CCLLog Vertical Scale: 1:200

Graphics File Created: 31-Jul-2010 18:07

OP System Version: 17C0-154

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

Output DLIS Files

DEFAULT CCL_036LUP FN:35 PRODUCER 31-Jul-2010 18:07

Company: Esso Australia Pty Ltd.

Well: FLOUNDER A6

Output DLIS Files

DEFAULT CCL_035LUP FN:34 PRODUCER 31-Jul-2010 17:39

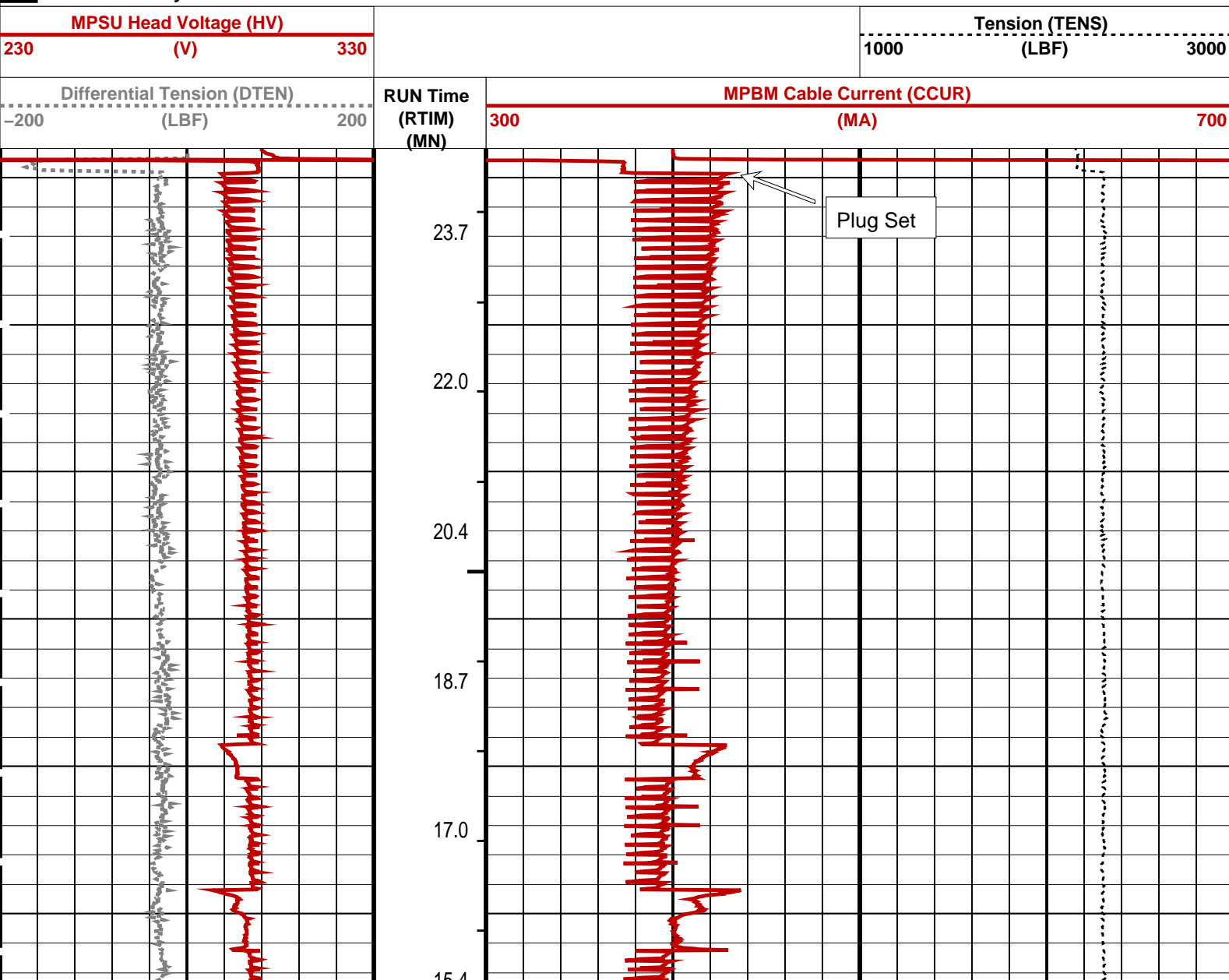
OP System Version: 17C0-154

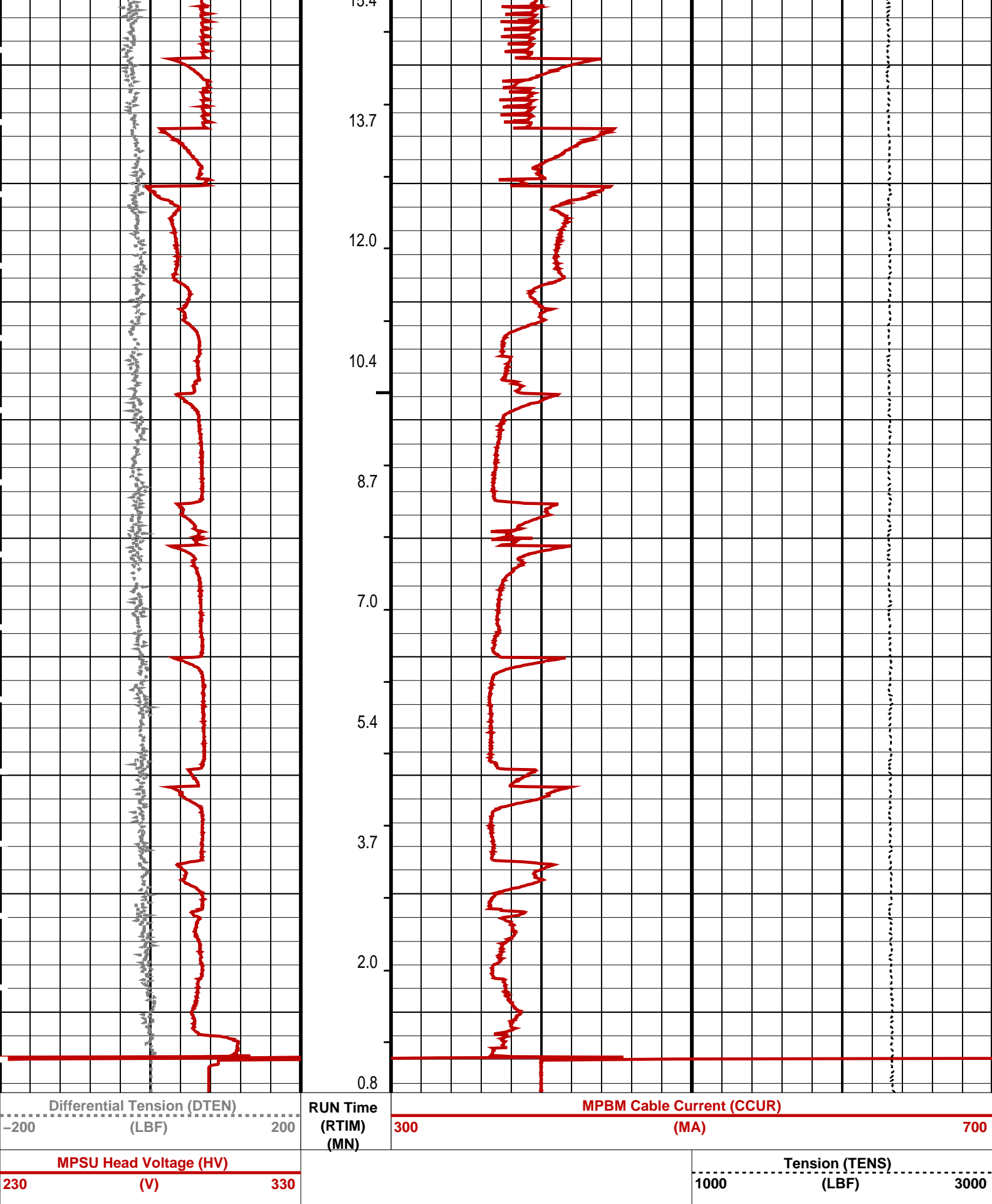
MPEX-DA 17C0-154 MPSU-CA 17C0-154
CCL-L 17C0-154

PIP SUMMARY

- └ MPSU Run Time Every 1 MN
- └ MPSU Run Time Every 10 MN

Time Mark Every 60 S






PIP SUMMARY

- Time Mark Every 60 S
- MPSU Run Time Every 1 MN
- MPSU Run Time Every 10 MN

Parameters

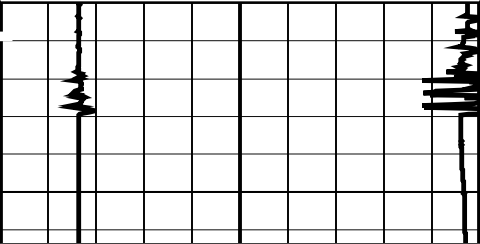
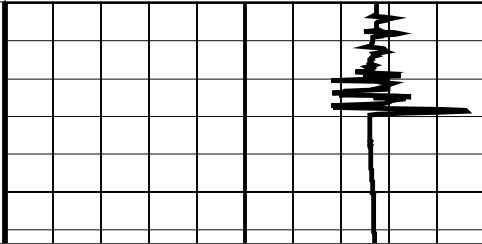
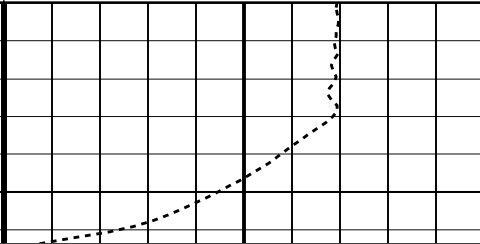
DLIS Name		Description		Value	
MPSU-CA: MECHANICAL PLUGBACK SETTING UNIT					
IPUMP		Intensifier Pump		TRUE	
Format: MPBT_1	Vertical Scale:	1:1000	Graphics File Created: 31-Jul-2010 17:39		
OP System Version: 17C0-154					
MPEX-DA	17C0-154		MPSU-CA	17C0-154	
CCL-L	17C0-154				
Output DLIS Files					
DEFAULT	CCL_035LUP	FN:34	PRODUCER	31-Jul-2010 17:39	



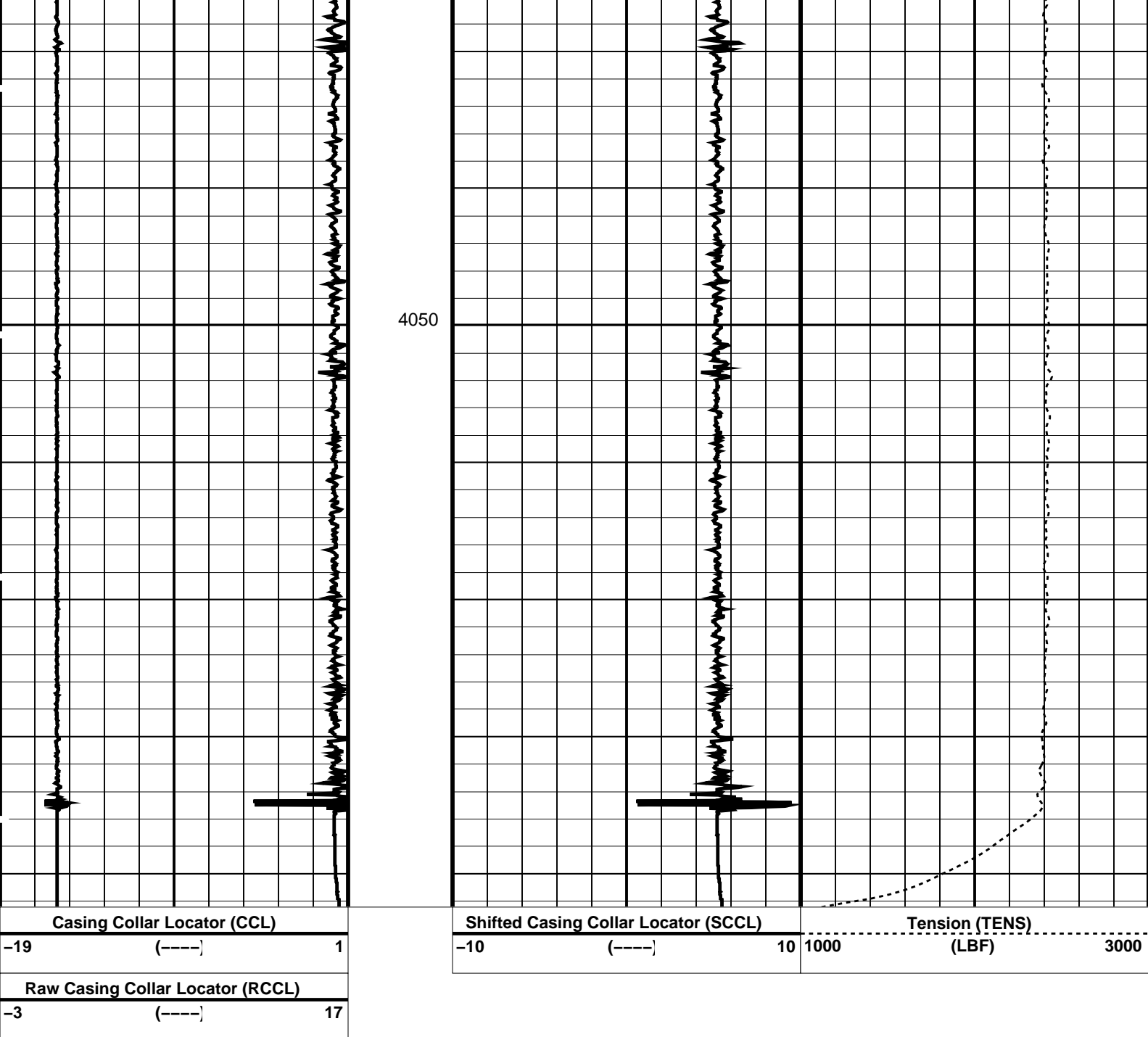
MPBT

Log into Position

MAXIS Field Log

Company: Esso Australia Pty Ltd.				Well: FLOUNDER A6									
Output DLIS Files													
DEFAULT		CCL_034LUP		FN:33		PRODUCER		31-Jul-2010 17:35		4071.4 M		4065.0 M	
OP System Version: 17C0-154													
MPEX-DA		17C0-154		MPSU-CA		17C0-154							
CCL-L		17C0-154											
PIP SUMMARY													
<div><div></div>Time Mark Every 60 S</div>													
Raw Casing Collar Locator (RCCL)													
-3 (----] 17													
Casing Collar Locator (CCL)													
-19 (----] 1													
													
Casing Collar Locator (CCL)													
-19 (----] 1													
Raw Casing Collar Locator (RCCL)													
-3 (----] 17													
				Shifted Casing Collar Locator (SCCL)				Tension (TENS)					
				-10 (----] 10				1000 (LBF) 3000					
													
				Shifted Casing Collar Locator (SCCL)				Tension (TENS)					
				-10 (----] 10				1000 (LBF) 3000					

PIP SUMMARY						
<div> <div></div> <div>Time Mark Every 60 S</div> </div>						
Parameters						
DLIS Name	Description	Value				



PIP SUMMARY

Time Mark Every 60 S

Parameters

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

Format: CCLLog Vertical Scale: 1:200

Graphics File Created: 31-Jul-2010 17:25

OP System Version: 17C0-154

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

Output DLIS Files

DEFAULT	CCL_033LUP	FN:32	PRODUCER	31-Jul-2010 17:25
---------	------------	-------	----------	-------------------

2-1/8" Dummy Plug Correlation Pass

MAXIS Field Log

Company: Esso Australia Pty. Ltd.

Well: FLOUNDER A6

Input DLIS Files

DEFAULT	PERFO_027LUP	FN:26	PRODUCER	31-Jul-2010 13:28	4077.6 M	4013.1 M
---------	--------------	-------	----------	-------------------	----------	----------

Output DLIS Files

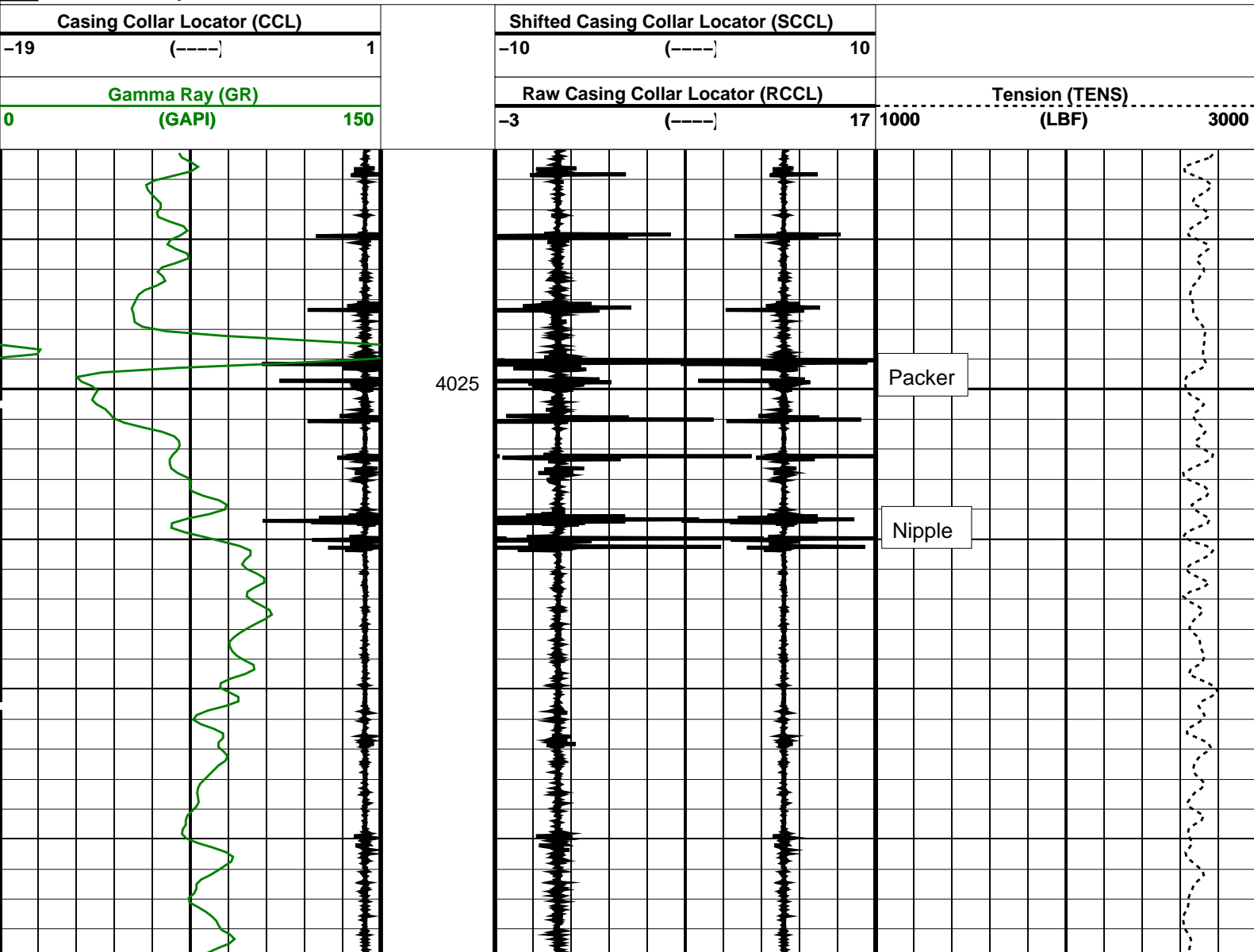
DEFAULT	PERFO_028PUP	FN:27	PRODUCER	31-Jul-2010 13:47	4081.4 M	4017.0 M
---------	--------------	-------	----------	-------------------	----------	----------

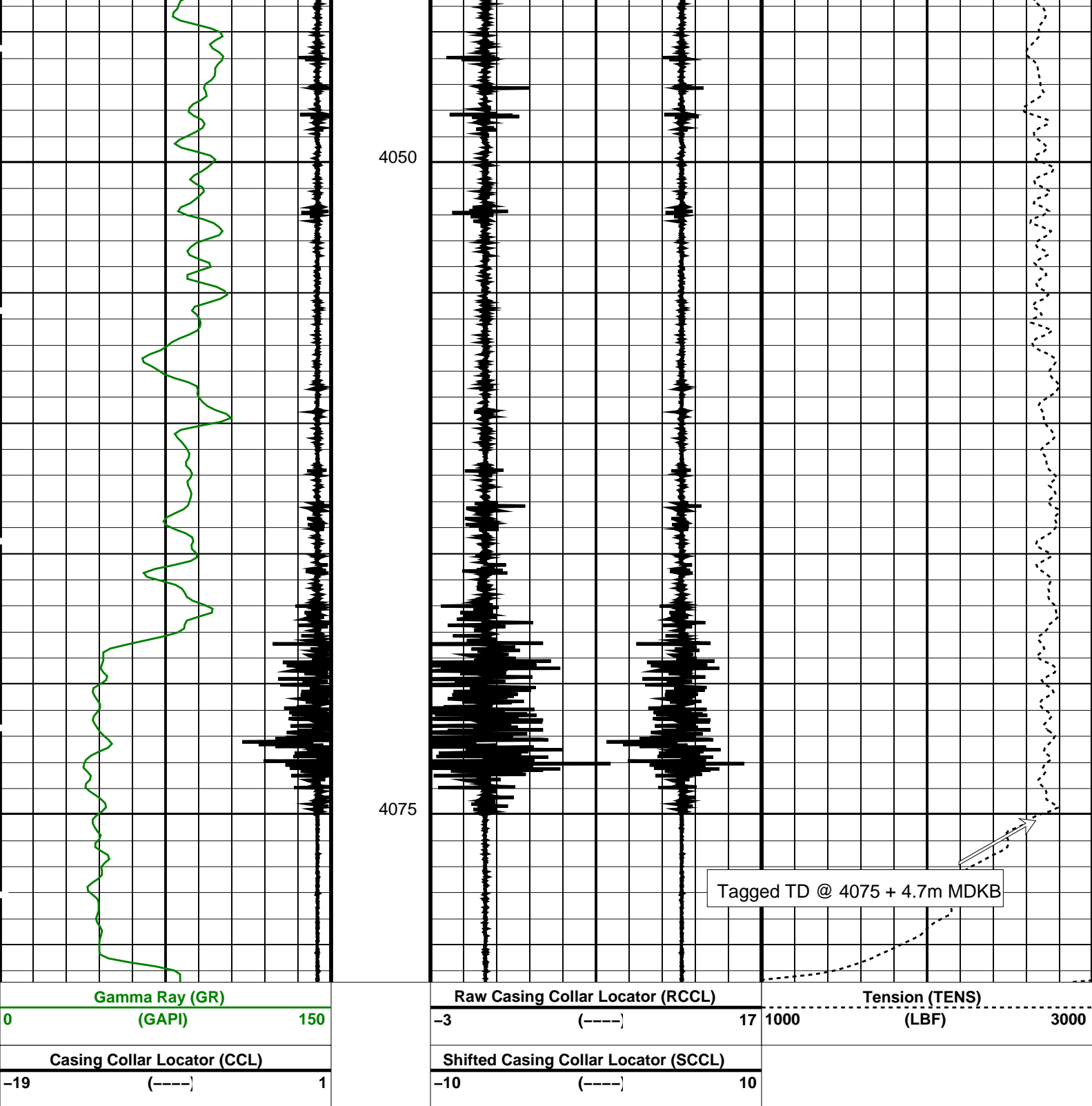
OP System Version: 17C0-154

SHM_GUN	17C0-154	UPCT-A	17C0-154
---------	----------	--------	----------

PIP SUMMARY

☒ Time Mark Every 60 S





PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
-----------	-------------	-------

DO	System and Miscellaneous	
PP	Depth Offset for Playback	3.8 M
	Playback Processing	NORMAL

Format: CCLLog Vertical Scale: 1:200 Graphics File Created: 31-Jul-2010 13:47

OP System Version: 17C0-154

SHM_GUN	17C0-154	UPCT-A	17C0-154
---------	----------	--------	----------

Input DLIS Files

DEFAULT	PERFO_027LUP	FN:26	PRODUCER	31-Jul-2010 13:28	4077.6 M	4013.1 M
---------	--------------	-------	----------	-------------------	----------	----------

Output DLIS Files

DEFAULT	PERFO_028PUP	FN:27	PRODUCER	31-Jul-2010 13:47
---------	--------------	-------	----------	-------------------

Schlumberger

**2-1/8" Ph. Powerjets
Log Out of Position**

MAXIS Field Log

Company: Esso Australia Pty. Ltd.

Well: FLOUNDER A6

Output DLIS Files

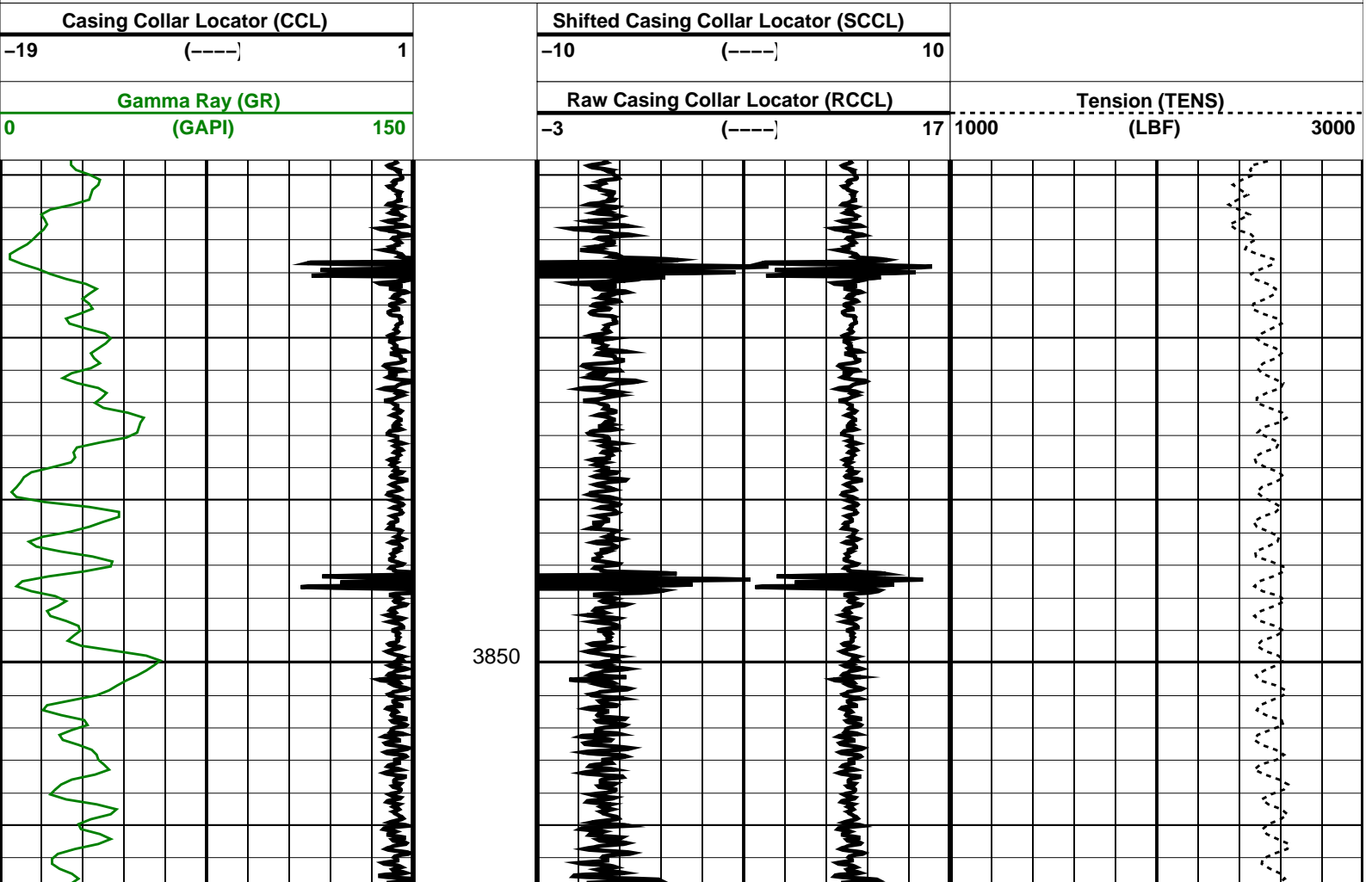
DEFAULT	PERFO_020LUP	FN:19	PRODUCER	31-Jul-2010 10:12	4065.1 M	3834.4 M
---------	--------------	-------	----------	-------------------	----------	----------

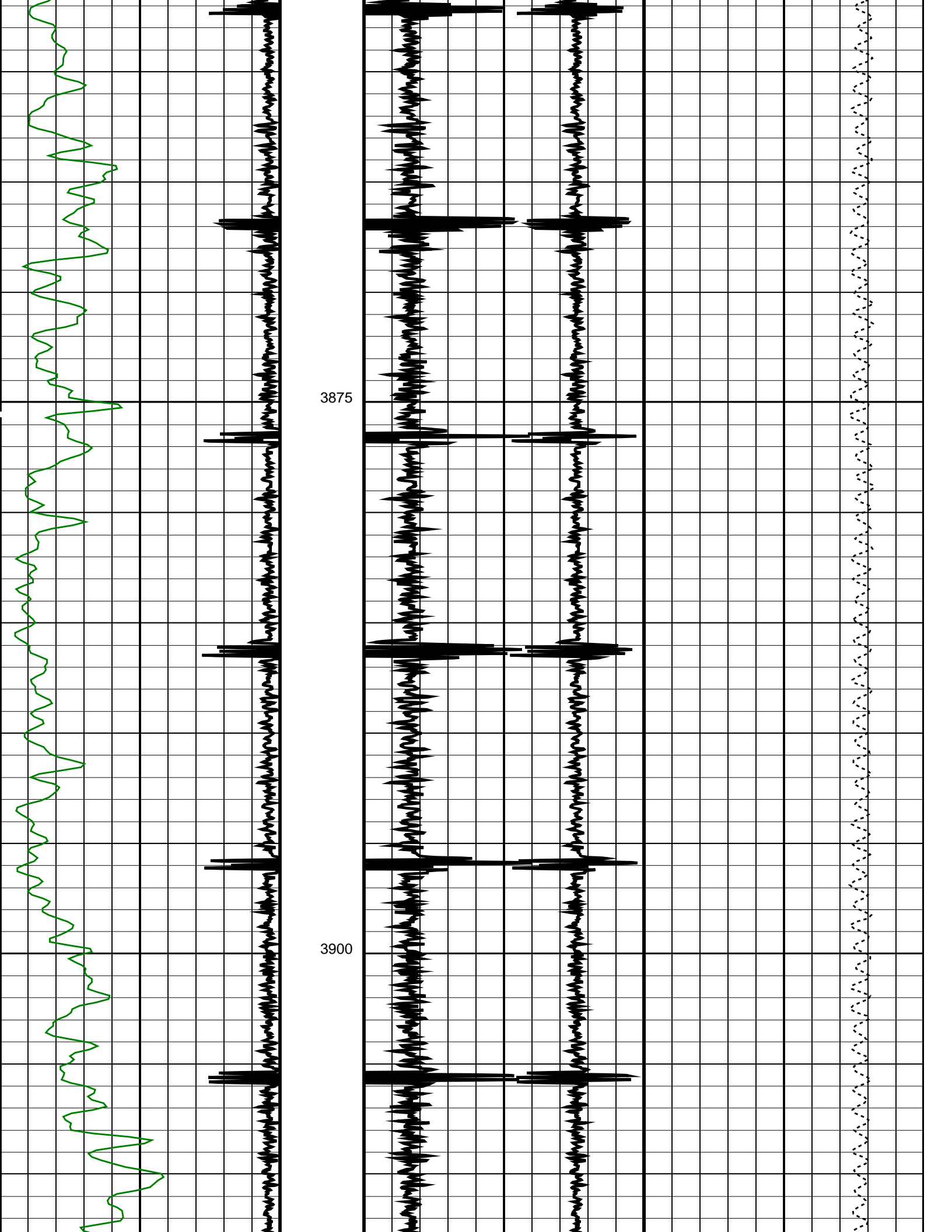
OP System Version: 17C0-154

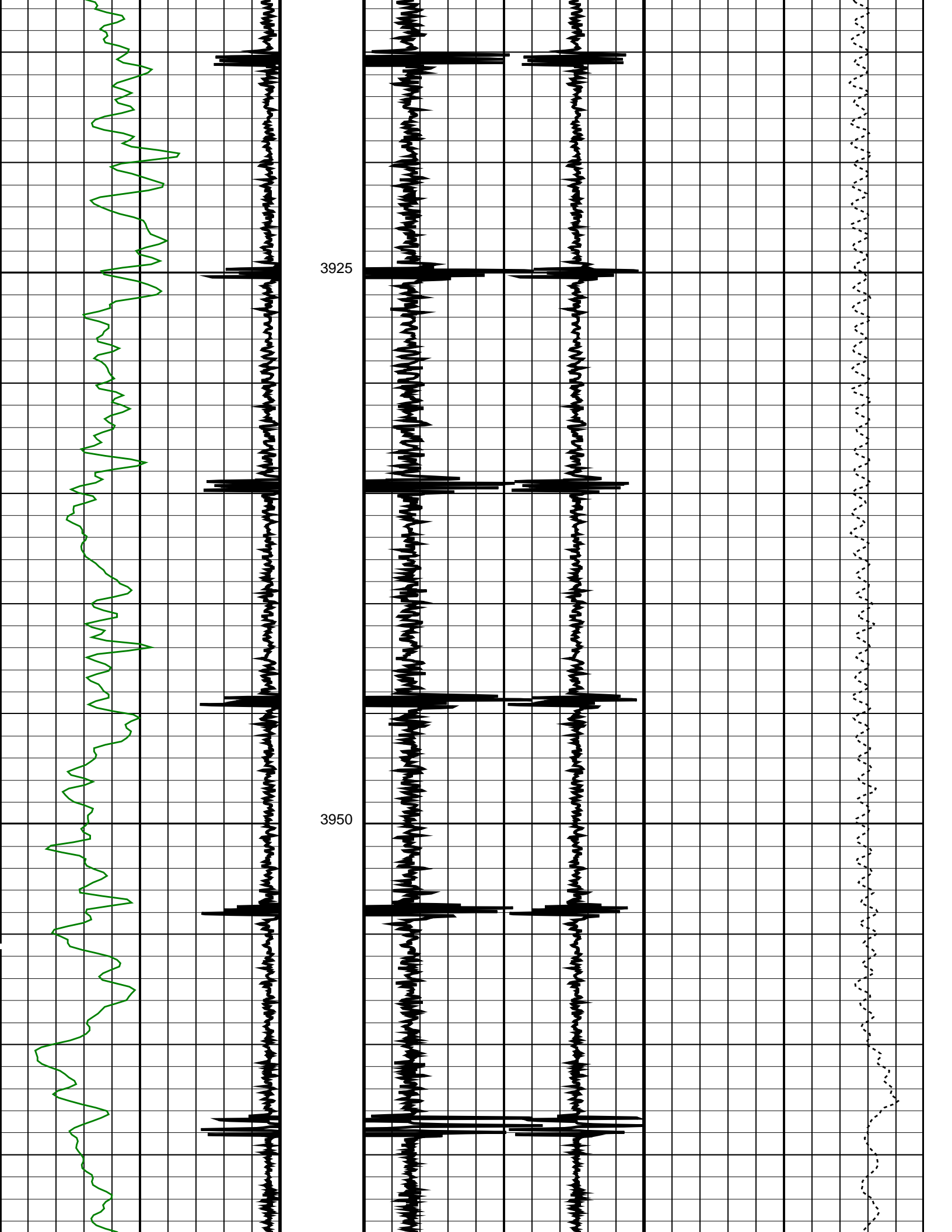
SHM_GUN	17C0-154	SAFE	17C0-154
UPCT-A	17C0-154		

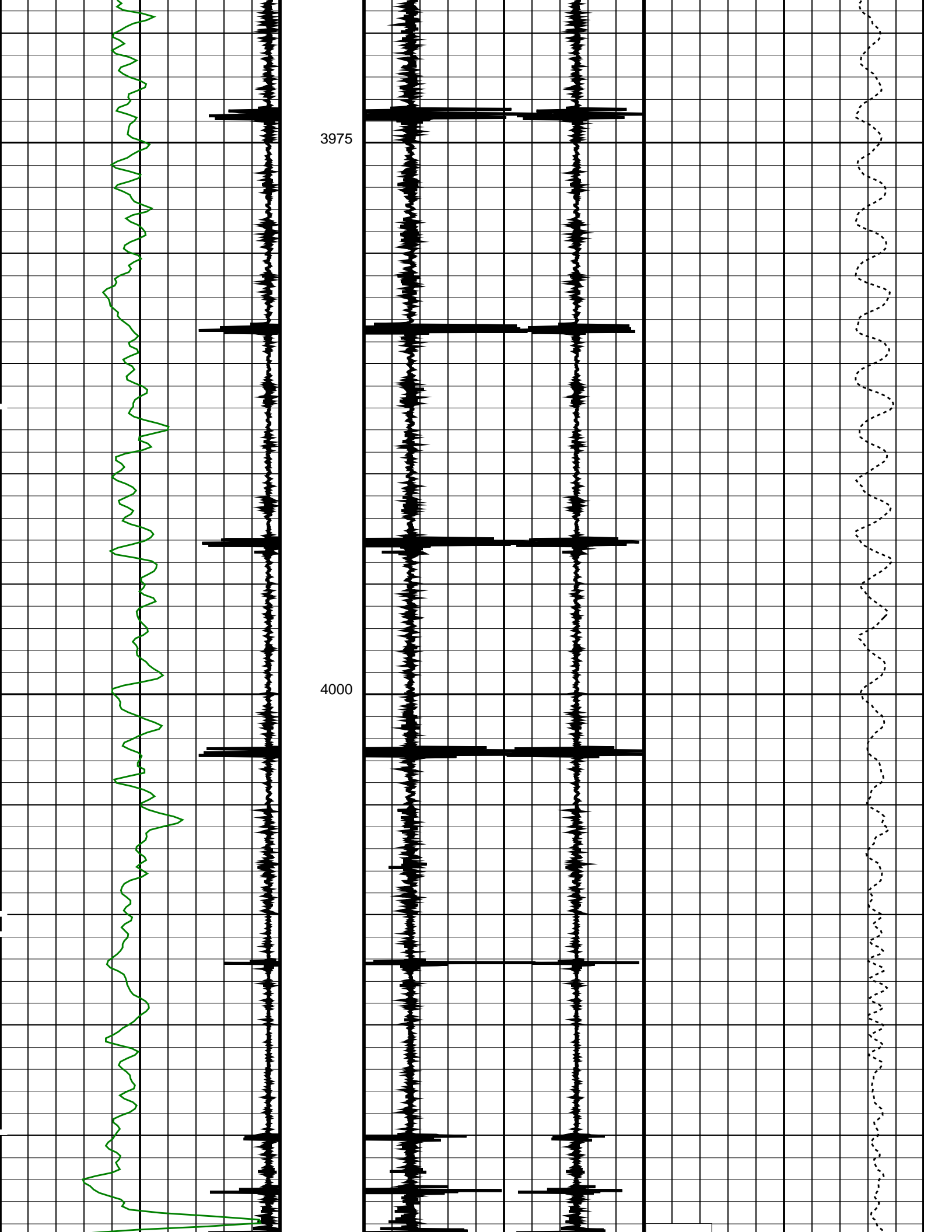
PIP SUMMARY

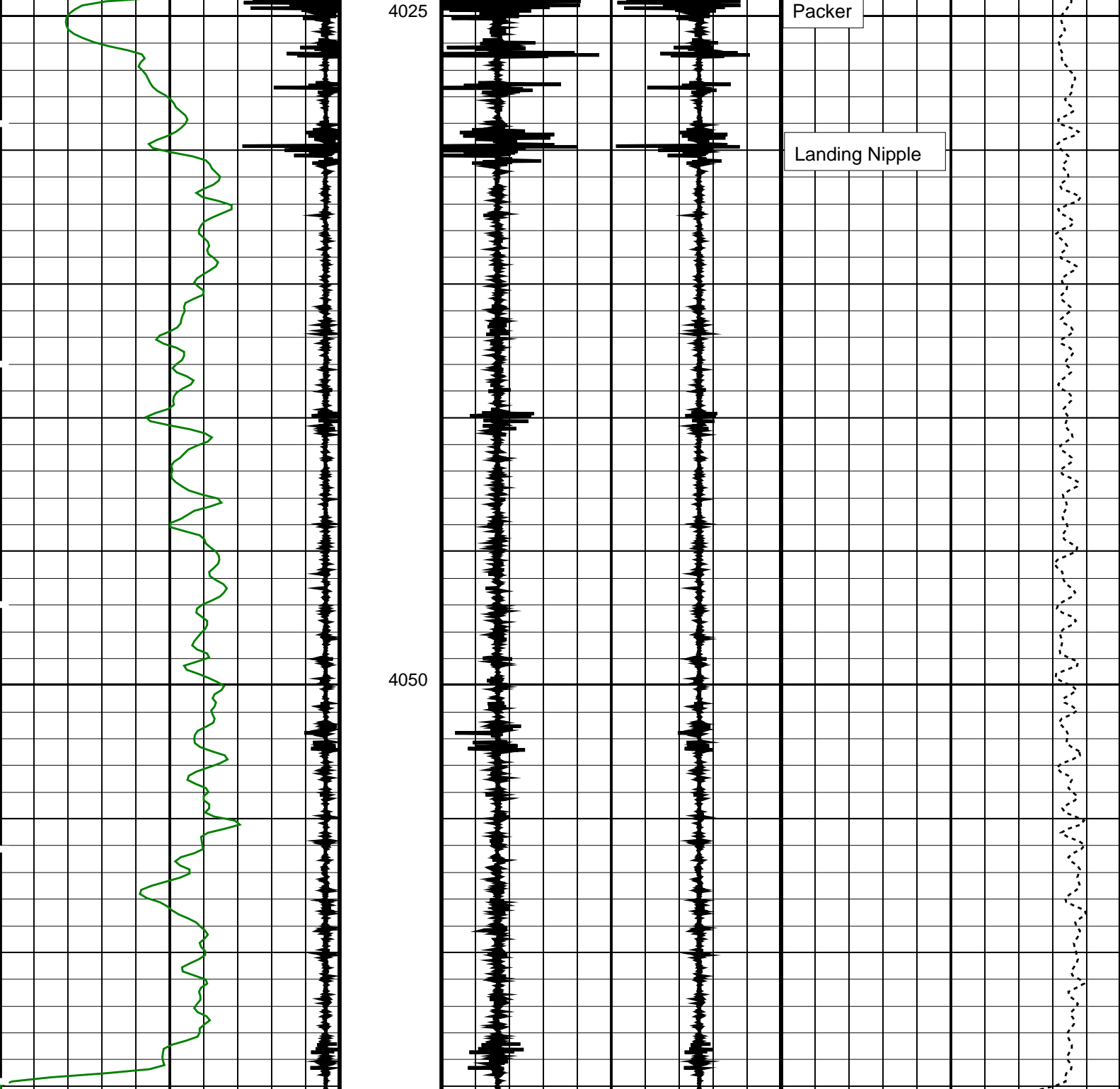
☒ Time Mark Every 60 S











Gamma Ray (GR) (GAPI)	Raw Casing Collar Locator (RCCL)	Tension (TENS) (LBF)
0150	-317	10003000
Casing Collar Locator (CCL)	Shifted Casing Collar Locator (SCCL)	
-191	-1010	

PIP SUMMARY

Time Mark Every 60 S

Format: CCLLog Vertical Scale: 1:200

Graphics File Created: 31-Jul-2010 10:12

OP System Version: 17C0-154

SHM_GUN	17C0-154	SAFE	17C0-154
UPCT-A	17C0-154		

Output DLIS Files

DEFAULT	REFCO 020110	FN:10	PRODUCER	31-Jul-2010 10:12
---------	--------------	-------	----------	-------------------

Schlumberger

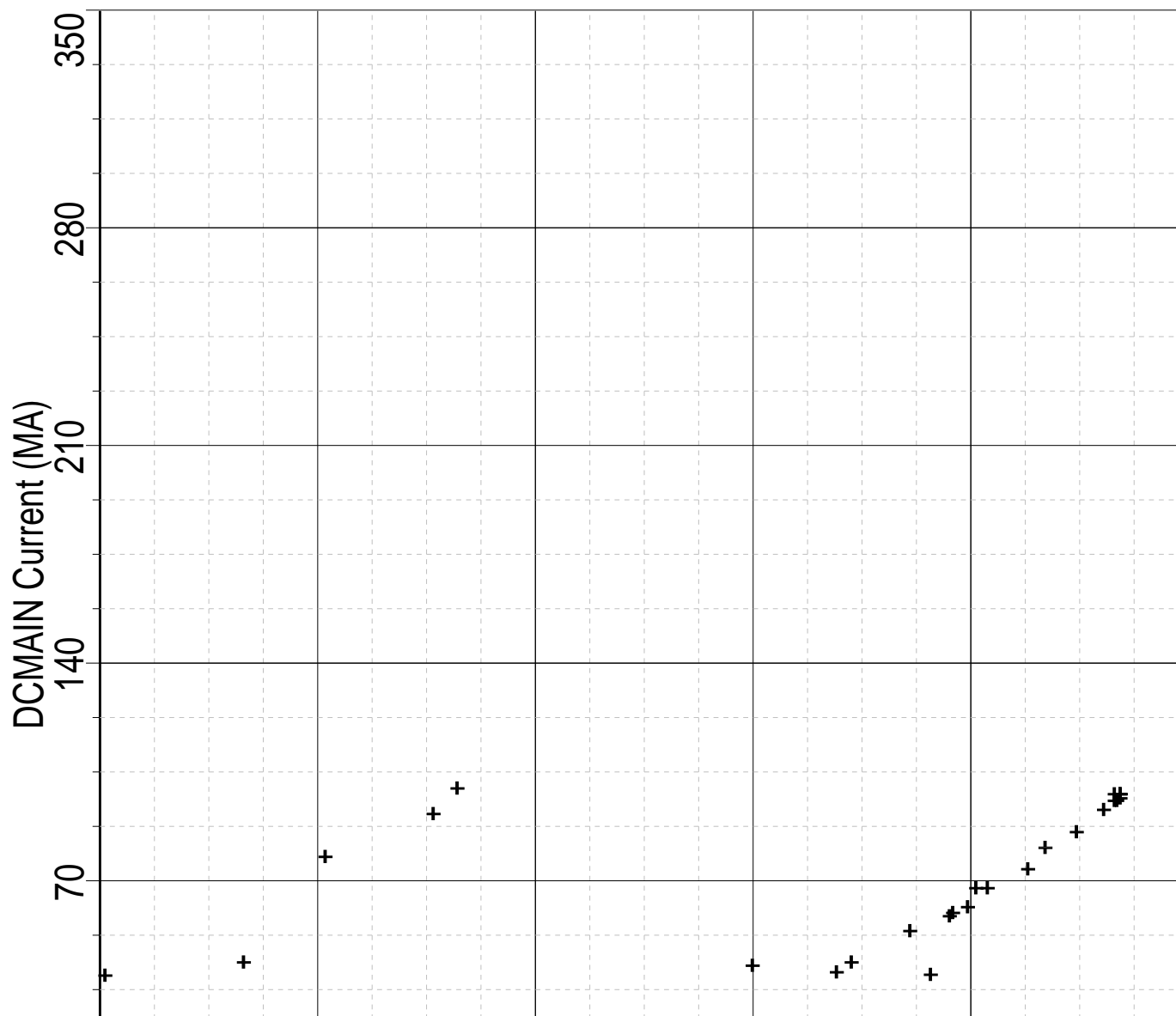
**2-1/8" Ph. Powerjets
ESIC Activation**

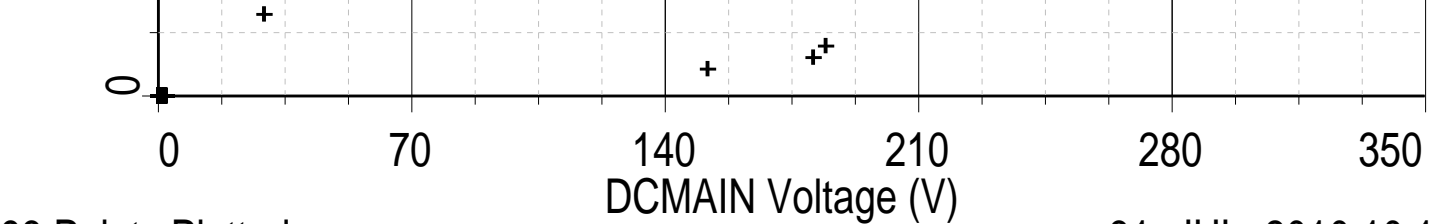
MAXIS Field Log

PERFO2 Operational Summary Listing

Device	Status	Req Depth (M)	Obs Depth (M)	Time Used
2-1/8" Enerjet	Used	4068.0	4068.0	Sat Jul 31 10:11:18 2010

Index: 12192.0 – 12166.7 M





93 Points Plotted

31-JUL-2010 10:11

Company: Esso Australia Pty. Ltd.

Well: FLOUNDER A6

Output DLIS Files

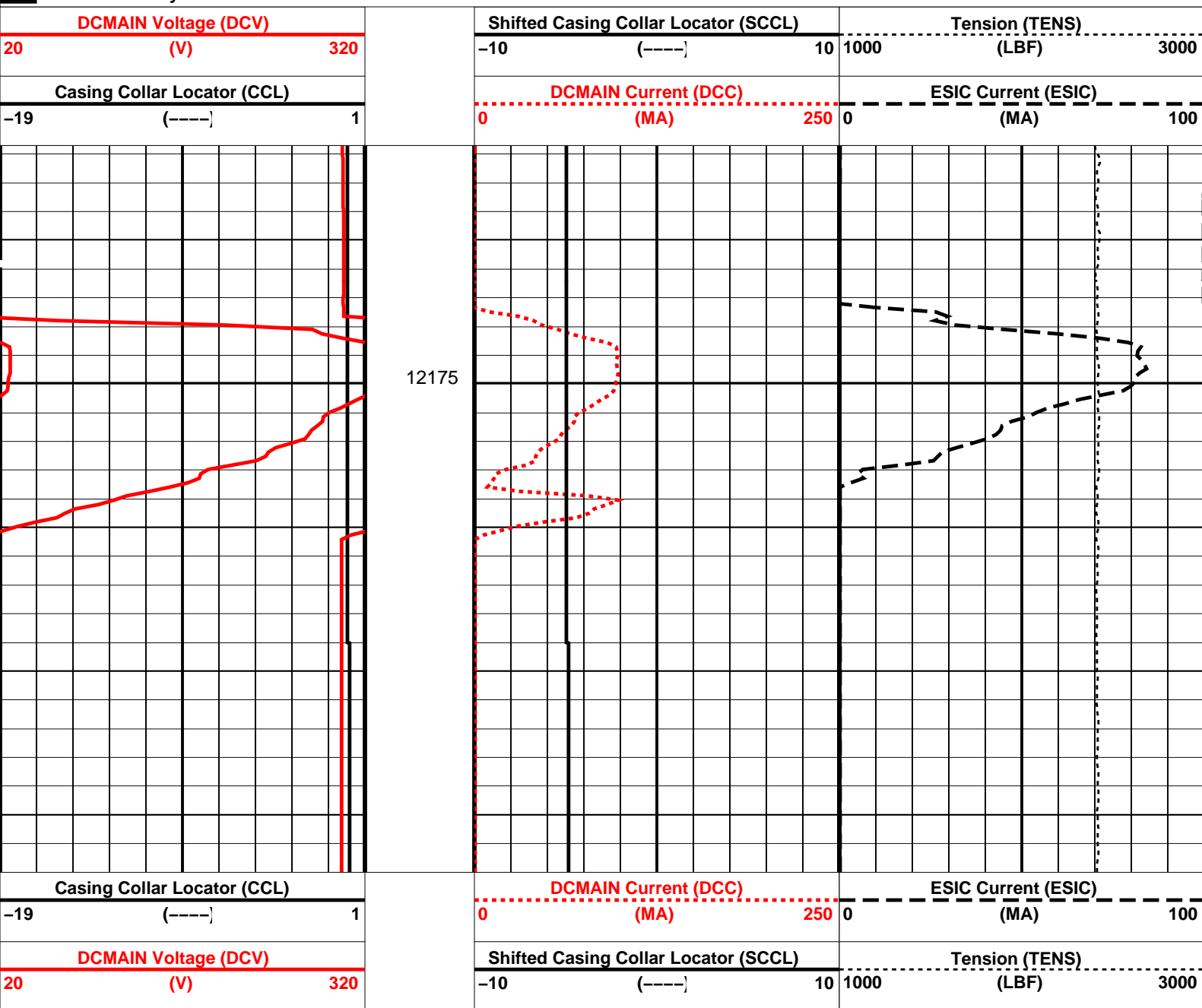
DEFAULT PERFO_019LUP FN:18 PRODUCER 31-Jul-2010 10:10 12192.0 M 12166.7 M

OP System Version: 17C0-154

SHM_GUN 17C0-154 SAFE 17C0-154
UPCT-A 17C0-154

PIP SUMMARY

Time Mark Every 60 S



PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name

Description

Value

SAFE: SAFE DETONATING SYSTEM

ESDT

ESIC Shot Depth Temperature

250 DEGF

Format: PERFO Vertical Scale: 1:200

Graphics File Created: 31-Jul-2010 10:10

OP System Version: 17C0-154

SHM_GUN

17C0-154

SAFE

17C0-154

UPCT-A

17C0-154

Output DLIS Files

DEFAULT

PERFO_019LUP

FN:18

PRODUCER

31-Jul-2010 10:10

Schlumberger

2-1/8" Ph. Powerjets
Log Into Position

MAXIS Field Log

Company: Esso Australia Pty. Ltd.

Well: FLOUNDER A6

Output DLIS Files

DEFAULT

PERFO_017LUP

FN:16

PRODUCER

31-Jul-2010 10:04

4076.5 M

4065.3 M

OP System Version: 17C0-154

SHM_GUN

17C0-154

SAFE

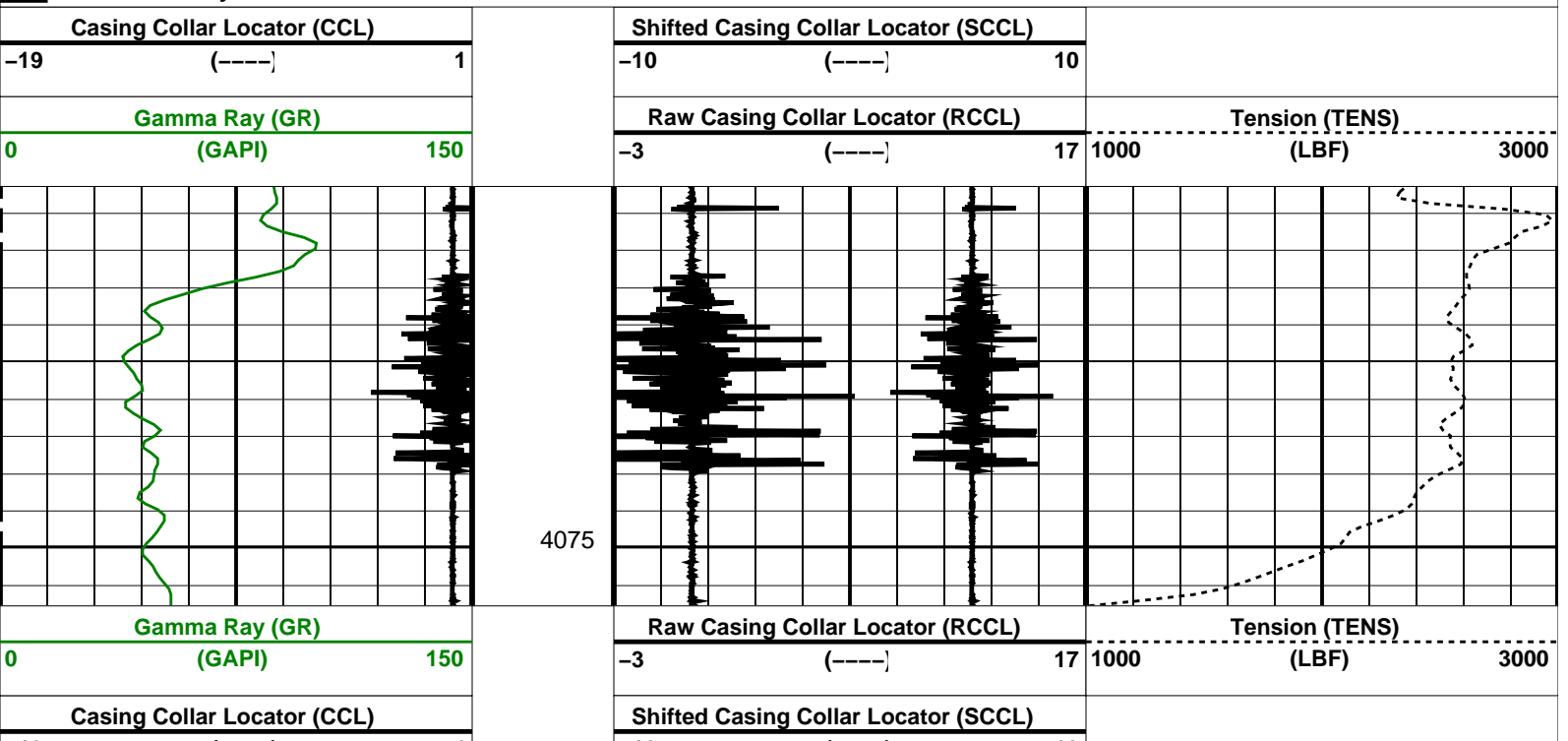
17C0-154

UPCT-A

17C0-154


PIP SUMMARY

Time Mark Every 60 S



19	(-----]	1	-10	(-----]	10
----	---------	---	-----	---------	----

PIP SUMMARY					
Time Mark Every 60 S					
Format: CCLLog		Vertical Scale: 1:200		Graphics File Created: 31-Jul-2010 10:04	
OP System Version: 17C0-154					
SHM_GUN	17C0-154	SAFE		17C0-154	
UPCT-A	17C0-154				
Output DLIS Files					
DEFAULT	PERFO_017LUP	FN:16	PRODUCER	31-Jul-2010 10:04	



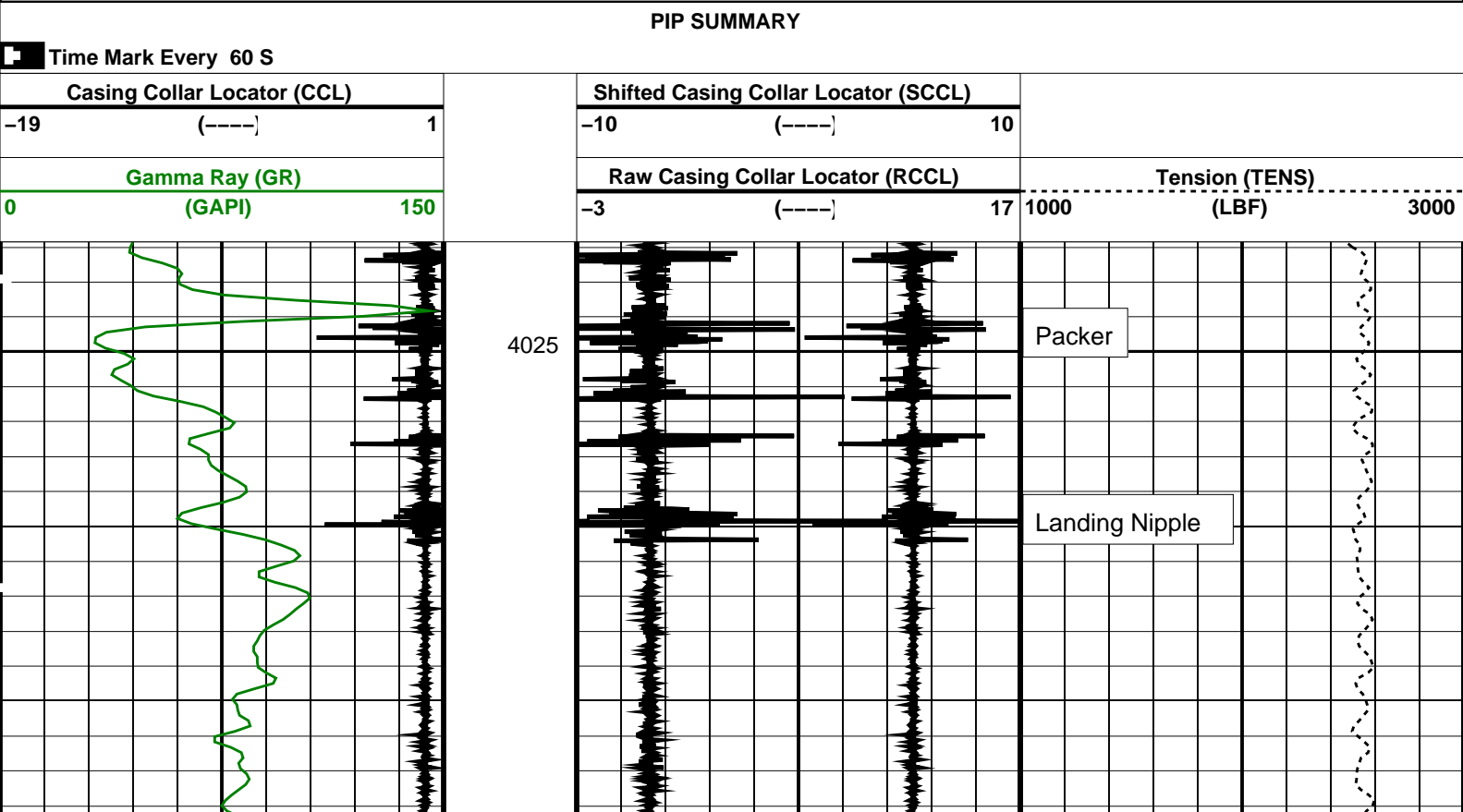
2-1/8" Ph. Powerjets

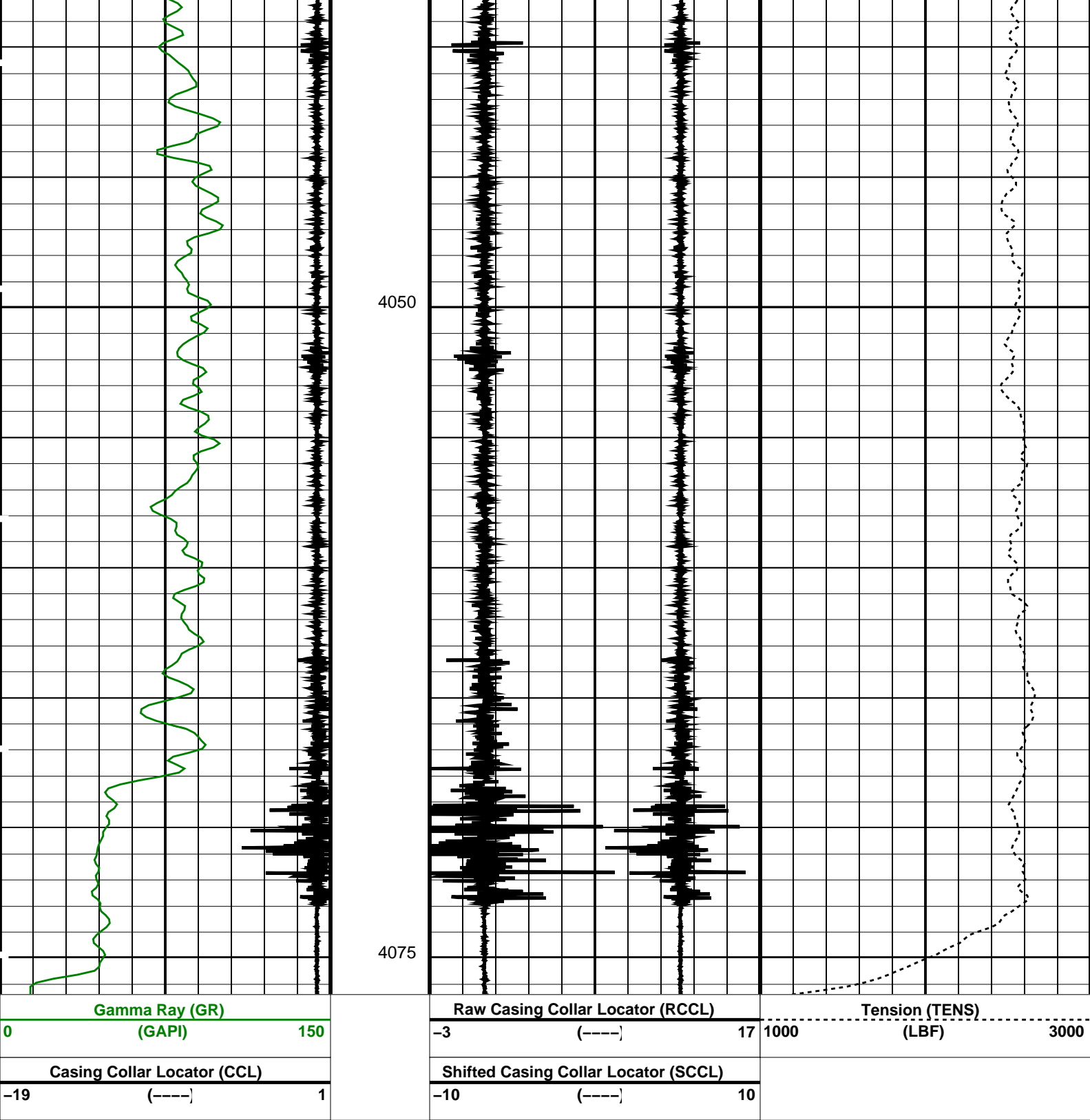
Correlation Log

MAXIS Field Log

Company: Esso Australia Pty. Ltd.	Well: FLOUNDER A6
-----------------------------------	-------------------

Output DLIS Files				
DEFAULT	PERFO_016LUP	FN:15	PRODUCER	31-Jul-2010 09:51
OP System Version: 17C0-154				
SHM_GUN	17C0-154	SAFE	17C0-154	
UPCT-A	17C0-154			





PIP SUMMARY

Time Mark Every 60 S

Format: CCLLog Vertical Scale: 1:200

Graphics File Created: 31-Jul-2010 09:51

OP System Version: 17C0-154

SHM_GUN 17C0-154 SAFE 17C0-154
UPCT-A 17C0-154

Output DLIS Files

DEFAULT PERFO_016LUP FN:15 PRODUCER 31-Jul-2010 09:51

Company: ESSO Australia Pty Ltd.

Schlumberger

Well: **FLOUNDER A6**
Field: **FLOUNDER**
Rig: **Crane / Prod#4**
Country: **Australia**

2-1/8" Phased Powerjet
Perforating and MPBT Plug Setting Record
31-Jul-2010