Schlumberger

Company: **Esso Australia Pty Ltd.**

Well: **B−1**
Field: **Bream B**
Rig : **Prod4** Country: **Australia**

2 1/8"Phased Powerjet
MWPT Perforation
7"HPI PSP Plug

Rig : Prod4
Field: Bream B
Location: Gippsland
Well: B−1
Company: Esso Australia Pty Ltd.

LOCATION

Gippsland		Elev.: K.B.	47m
Basin		G.L.	−61
Bass Strait		D.F.	47m
Permanent Datum:	M.S.L	Elev.:	0 m
Log Measured From:	D.F	47.1 m	above Perm. Datum
Drilling Measured From:	D.F		

State:	Max. Well Deviation	Longitude	Latitude
Victoria	32 deg	147 50'16.81"E	038 31'10.90"S

Logging Date		16−Oct−2006					
Run Number		1 thru 3					
Depth Driller		2180 m					
Schlumberger Depth		2179 m					
Bottom Log Interval		2179 m					
Top Log Interval		2125 m					
Casing Fluid Type		Production Fluids					
Salinity							
Density							
Fluid Level							
BIT/CASING/TUBING STRING							
Bit Size		8.500 in					
From							
To							
Casing/Tubing Size		7.000 in					
Weight		26 lbm/ft					
Grade		L−80					
From		21.0007 m					
To		2336 m					
Maximum Recorded Temperatures		215 degF					
Logger On Bottom	Time	16−Oct−2006	10:00				
Unit Number	Location	889	Prod4 / Ausl				
Recorded By		S Gilbert					
Witnessed By		G Rimmer					

		Run 1
PVT DATA	Oil Density	
	Water Salinity	
	Gas Gravity	
	Bo	
	Bw	
	1/Bg	
	Bubble Point Pressure	
	Bubble Point Temperature	
	Solution GOR	
	Maximum Deviation	32 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

Depth System Equipment

Date Created: 05−Oct−2006 12:10:45

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW−EB	Type:	CMTD−B/A	Type:	2−32ZT
Serial Number:	6373	Serial Number:	949	Serial Number:	24425
Calibration Date:	28−SEP−2006	Calibration Date:	28−SEP−2006	Length:	6600.00 M
Calibrator Serial Number:	1009	Calibrator Serial Number:	1174	Conveyance Method:	Wireline
Calibration Cable Type:	2−32ZT	Calibration Gain:	1.01	Rig Type:	Offshore_Mobile
Wheel Correction 1:	−2	Calibration Offset:	195.00		
Wheel Correction 2:	−2				

Depth Control Parameters

Log Sequence: Subsequent Log In the Well

Reference Log Name: Solar composite.
Reference Log Run Number: 1
Reference Log Date:

Depth Control Remarks

1. Correlated to Solar composite log supplied with program.
2. IDW−EB 6373 used as primary depth control.
3. Z−chart used as back−up.
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
OS1: None
OS2:
OS3:
OS4:
OS5:

REMARKS: RUN NUMBER 1
Log correlated to ExxonMobil composite supplied with program.
Maximum well deviation 32 degrees at 845 − 874m MDKB.
Perforated interval was 2168.1m to 2170.2m MDKB,2 1/8" 6spf,
45 degree phased Powerjet with MWPT used for this perforation.
SBHP = 2650psia,SBHT = 209 degf
Gun# 1 : Top shot @ 2168.1m MDKB
CCL to Top Shot = 3.5m
CCL Stop Depth = 2164.6m MDKB

CCL Stop Depth = 2164.6m MDKB

HPI Plug : Top of Seal = 2173m MDKB

CCL to Top of Seal =10m

CCL Stop Depth = 2163m MDKB

Crew : Alex Sword , Eddy Mezenburg

RUN 1

SERVICE ORDER #: Ausl06328195
PROGRAM VERSION: 14C0−302
FLUID LEVEL:

LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1

SURFACE EQUIPMENT

MWPM−AA 3008

DOWNHOLE EQUIPMENT

AH−SWBS−B 731 — 11.60

AH−SWBS−B — 10.91

MH−SWHS−A 726 — 10.22

MWGT−AA — 9.89
MWPG−AA 19
MWGH−AA 19
MWPG GR — 2.41

MWPT−CA — 8.92
MWPH−AA 94
MWPS−AA 94
CCL
SMWP Pres
SMWP Temp
Tension — TOOL ZERO

MWP_GUN — 6.10
GUN−5mtr 2 1/8" Phased Powerjet Gun

RUN 2

SURFACE EQUIPMENT

WITM (SHM) 3576

DOWNHOLE EQUIPMENT

AH−SWBS−B 731 — 15.19

AH−SWBS−B — 14.50

MH−SWHS−A 726 — 13.82

Tension CCL — TOOL ZERO

CCL−L 4195 — 13.49

GUN−HPI Setting Tool & PSP Plug — 13.03

TOOL BOTTOM

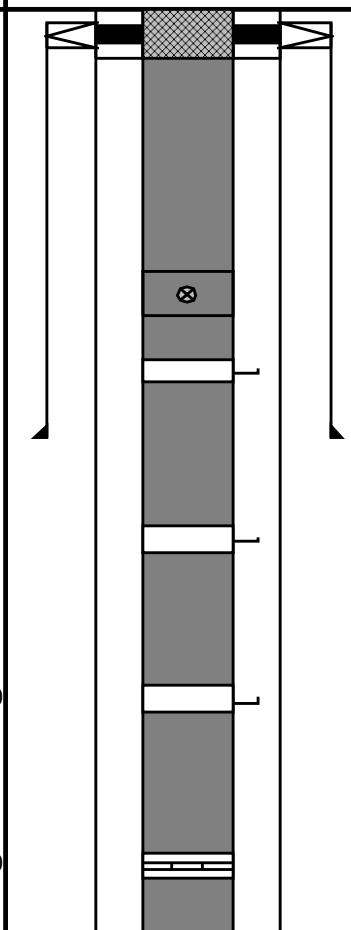
MAXIMUM STRING DIAMETER 2.13 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

TOOL BOTTOM

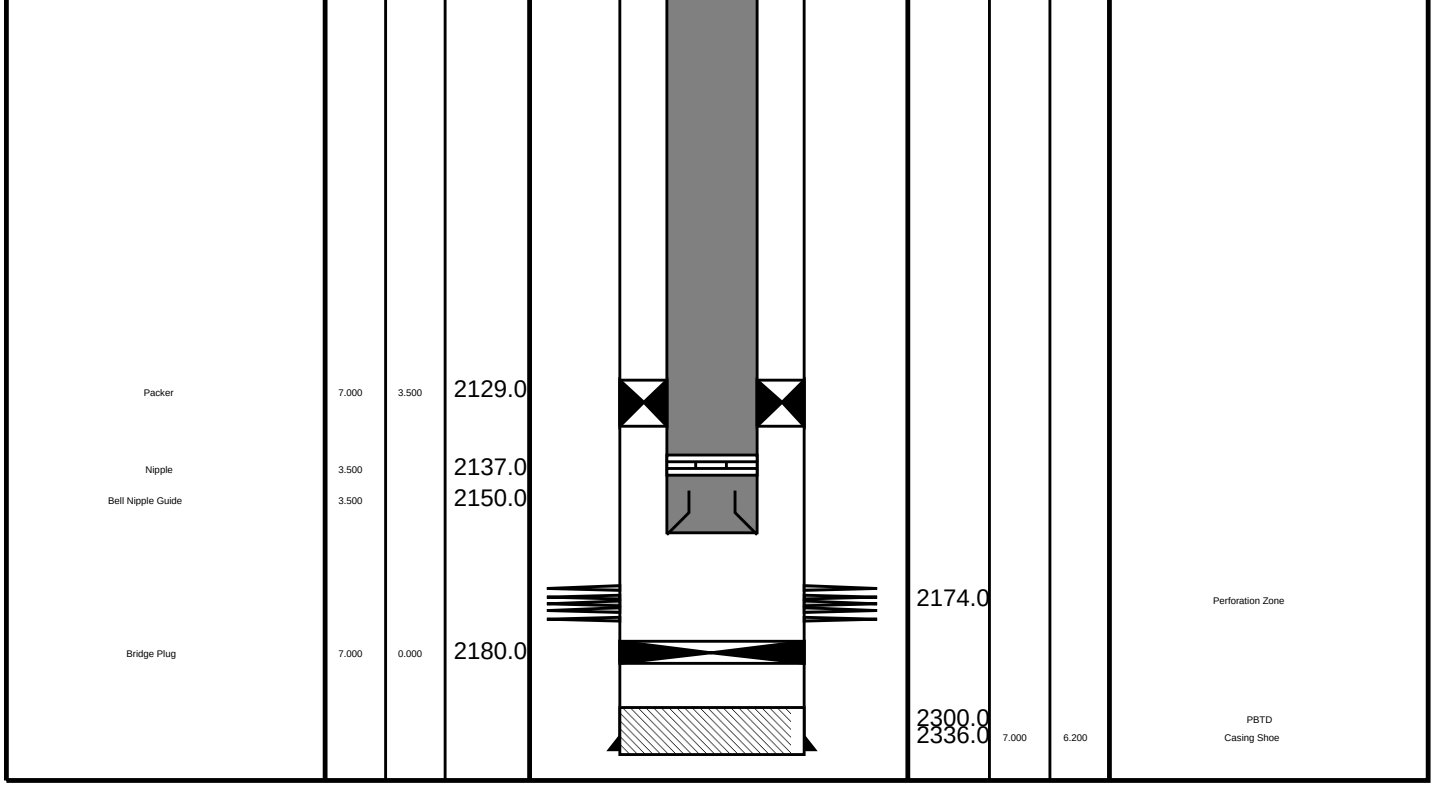
MAXIMUM STRING DIAMETER 2.13 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Production String	(in) OD	(in) ID	(ft) MD
Tubing Hanger	7.000	3.500	20.0
Tubing	3.500		20.3
Shutin Valve	3.500		453.0
Gas Lift Mandrel	3.500		550.0
Gas Lift Mandrel	3.500		836.0
Gas Lift Mandrel	3.500		1084.0
Nipple	3.500		1101.0

Well Schematic



(ft) MD	(in) OD	(in) ID	Casing String
19.4	10.750	6.200	Casing String
19.4	10.750	7.000	Liner Hanger
633.0	10.750		Casing Shoe



Schlumberger

Job Events Summary

MAXIS Field Log

Schlumberger Job Event Summary

	Time	Elapsed Time	Depth (M)	File
Log Pass (up)	16−Oct−2006 9:17	000:06	2175.8 − 2096.7	PERFO_013LUP
Log Pass (up)	16−Oct−2006 11:34	000:05	2174.4 − 2149.6	PERFO_021LUP
Log Pass (up)	16−Oct−2006 11:42	000:17	2174.4 − 2123.1	PERFO_022LUP
Station Log	16−Oct−2006 11:44	000:08	2164.6 − 1.3	PERFO_023LTP
Log Pass (up)	16−Oct−2006 14:36	000:14	2167.4 − 2119.9	PERFO_038LUP

Schlumberger

Setting The Plug

MAXIS Field Log

Output DLIS Files

DEFAULT	PERFO_038LUP	FN:37	PRODUCER	16−Oct−2006 14:36	2167.4 M	2119.9 M

OP System Version: 14C0−302

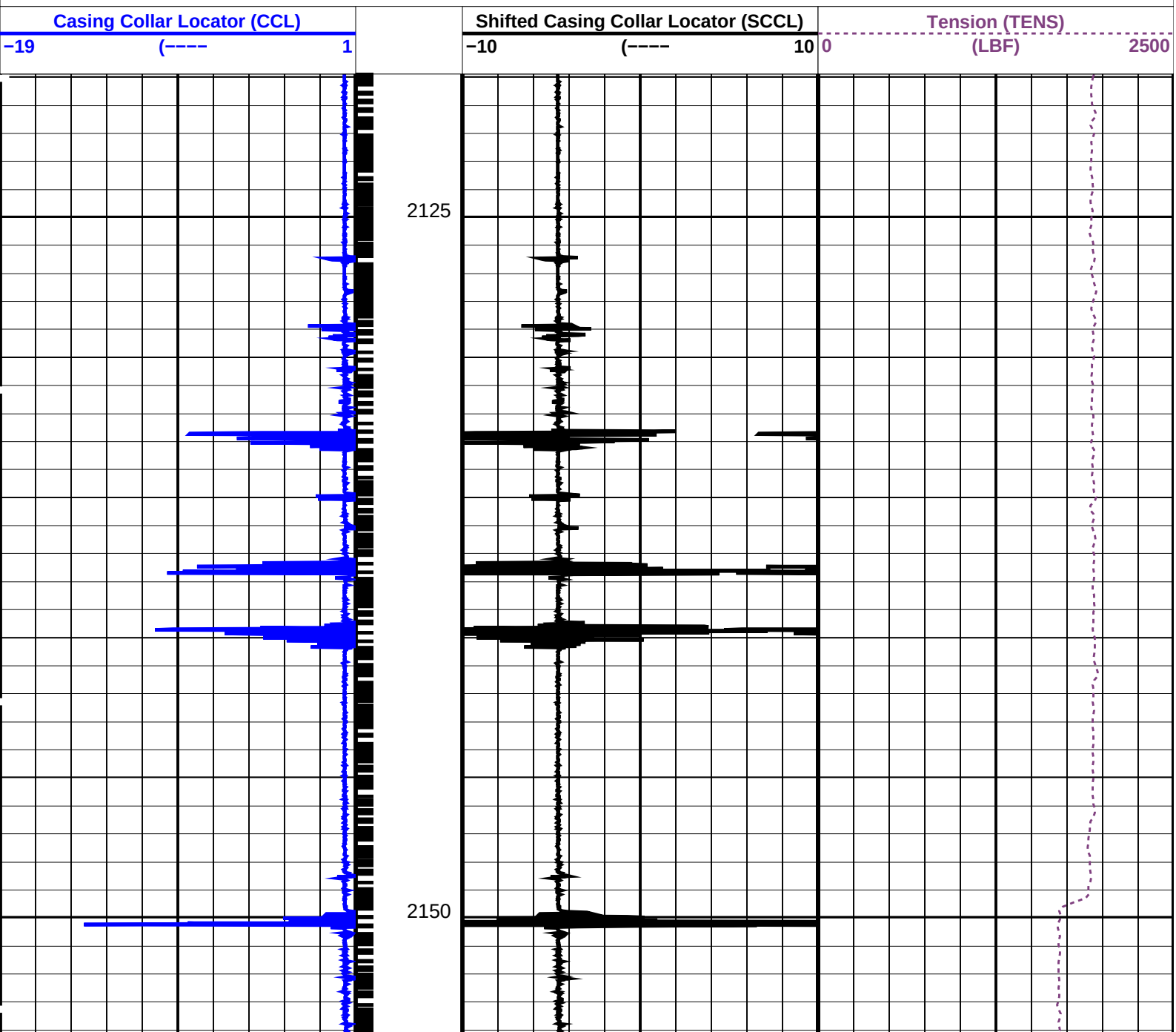
MCM

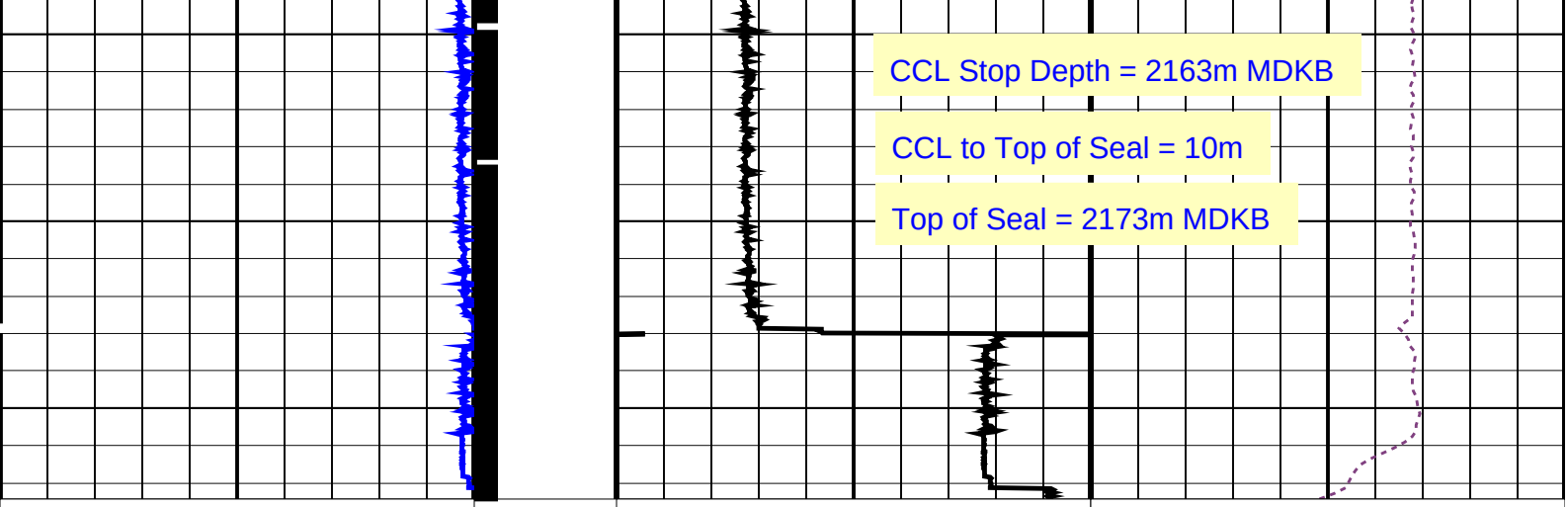
SHM_GUN	SRC−3220−WPP−AAPS	CCL−L	14C0−302

PIP SUMMARY

Casing Collars

Time Mark Every 60 S





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

PIP SUMMARY

Casing Collars

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: PERFO Vertical Scale: 1:200 Graphics File Created: 16−Oct−2006 14:36

OP System Version: 14C0−302

MCM

SHM_GUN	SRC−3220−WPP−AAPS	CCL−L	14C0−302

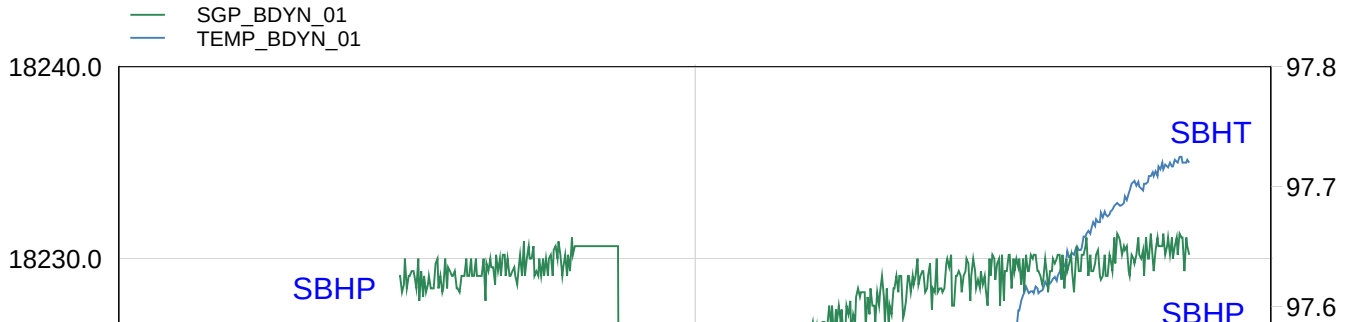
Output DLIS Files

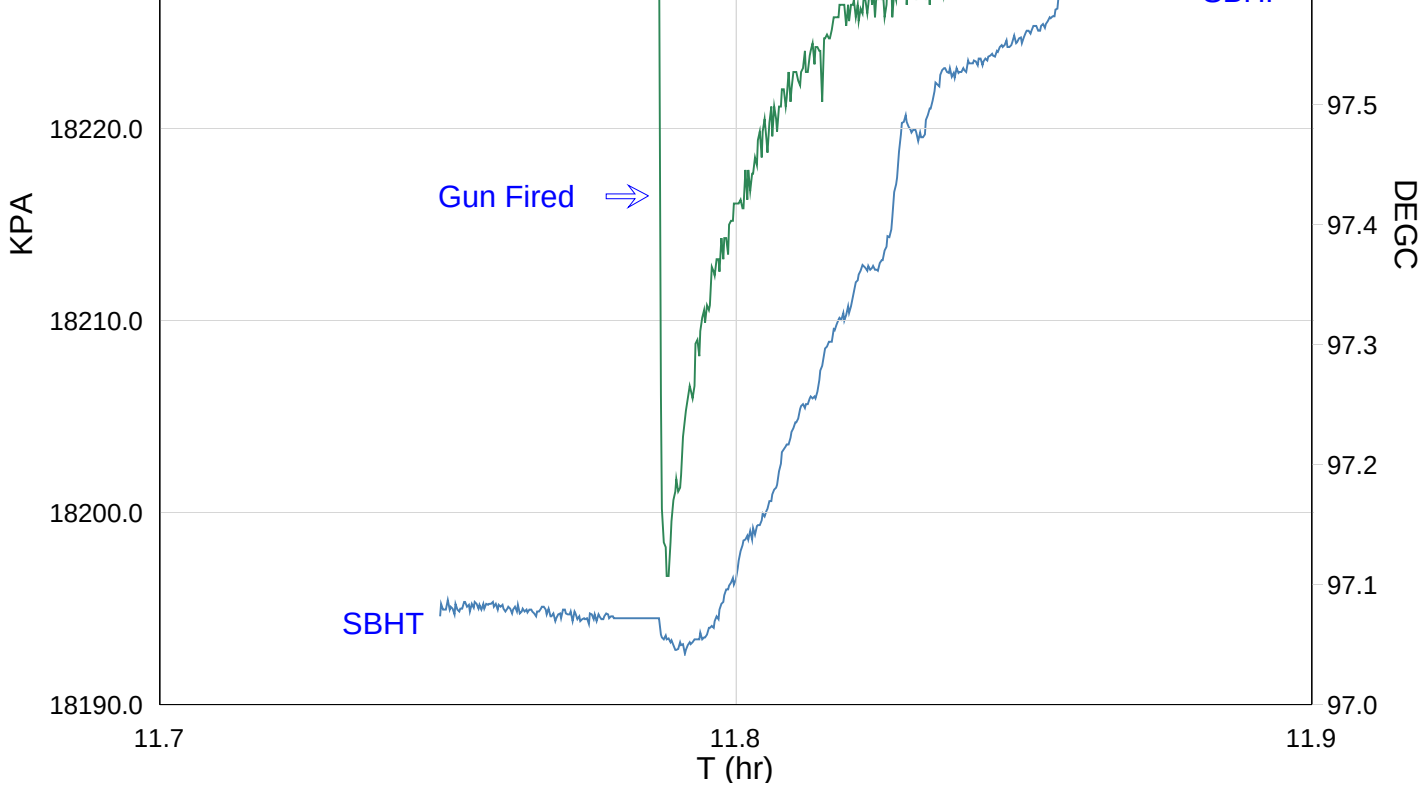
DEFAULT	PERFO_038LUP	FN:37	PRODUCER	16−Oct−2006 14:36

Schlumberger

Gun # 1 Fired
@ 2168.1m to 2170.1m MDKB

MAXIS Field Log





TIME	SGPA_SL	TEMP_MWPT_SL
2340.0	2643.9723	97.0803
2360.0	2643.7637	97.0852
2380.0	2643.9142	97.0834
2400.0	2644.0083	97.0766
2420.0	2644.0142	97.0758
2440.0	2644.0723	97.0753
2460.0	2644.1360	97.0721
2480.0	2644.1360	97.0721
2500.0	2640.5099	97.0491
2520.0	2641.5165	97.0790
2540.0	2642.2708	97.1390
2560.0	2642.8636	97.2119
2580.0	2643.2015	97.2562
2600.0	2643.5095	97.3305
2620.0	2643.6754	97.3682
2640.0	2643.8102	97.4775
2660.0	2643.6330	97.5302
2680.0	2643.8136	97.5361
2700.0	2643.9985	97.5474
2720.0	2643.9985	97.5621
2740.0	2644.0663	97.6130
2760.0	2644.0307	97.6329
2780.0	2643.9963	97.6672
2800.0	2644.1003	97.6894
2820.0	2644.1003	97.7168
2840.0	2644.1182	97.7197

MAXIS Field Log

Company: Esso Australia Pty Ltd. **Well: B−1**

Output DLIS Files

DEFAULT	PERFO_022LUP	FN:21	PRODUCER	16−Oct−2006 11:42	2174.4 M	2123.1 M

OP System Version: 14C0−302

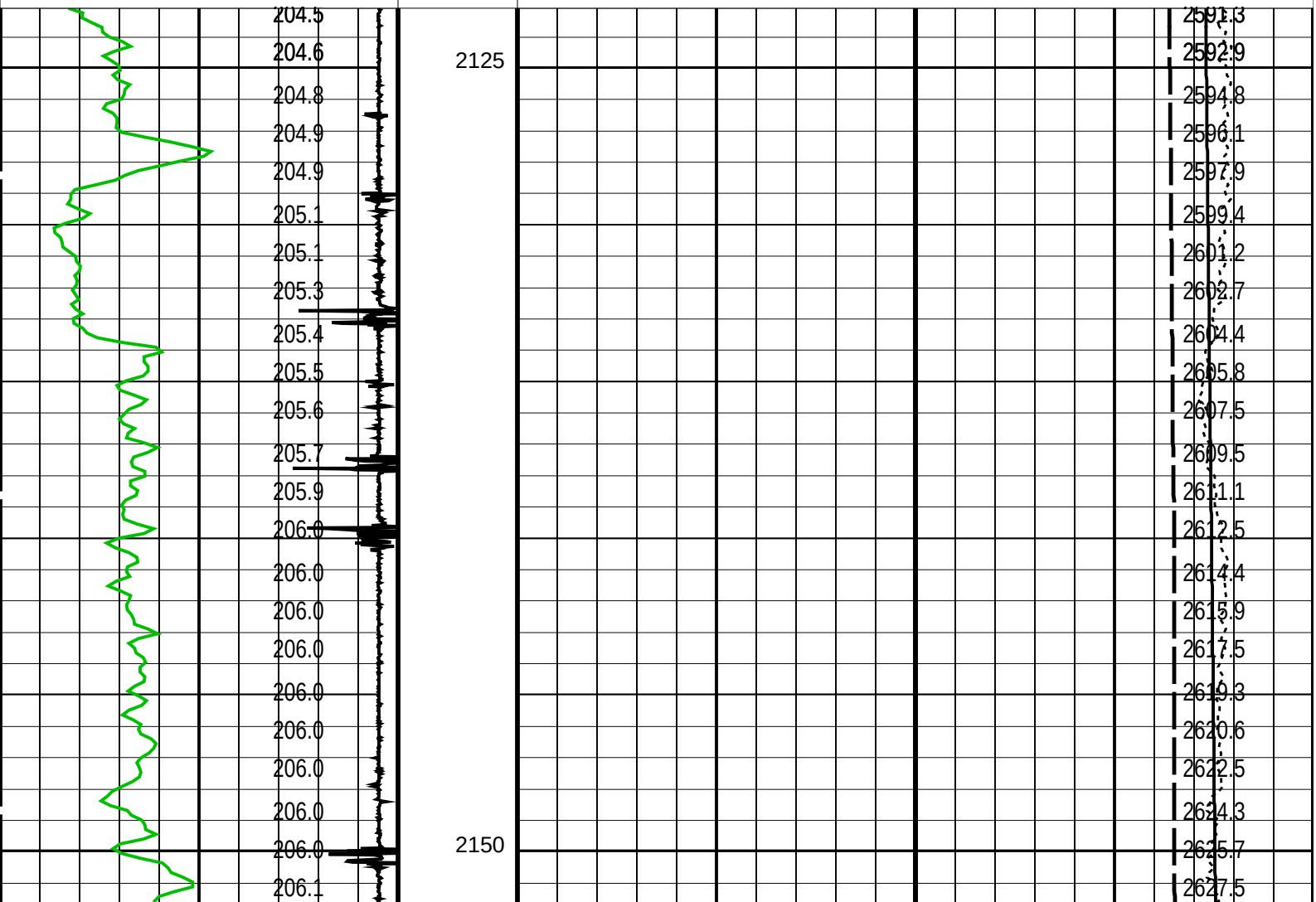
MCM

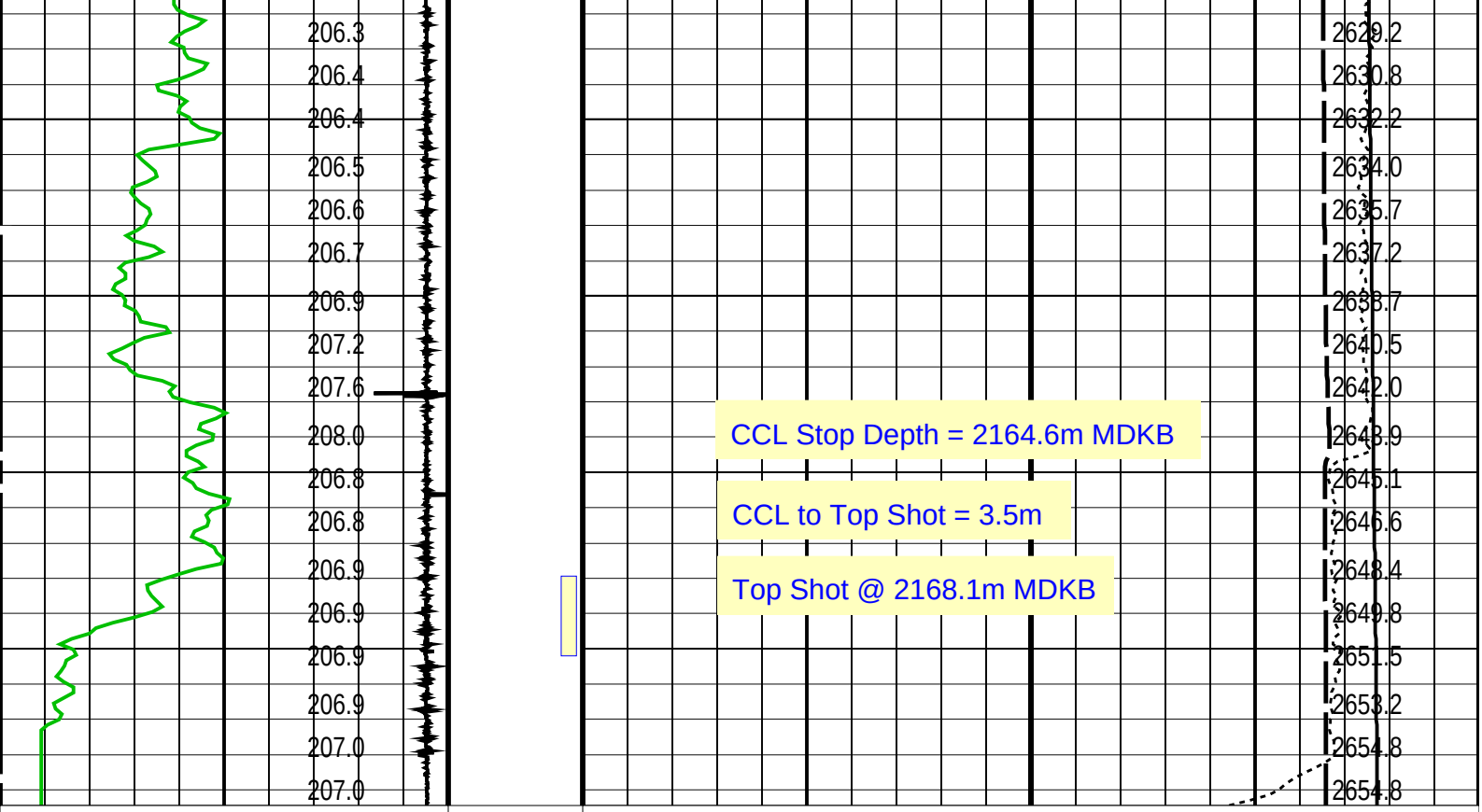
MWP_GUN	SRC−3220−WPP−AAPS	MWPT−CA	SRC−3220−WPP−AAPS
MWGT−AA	SRC−3220−WPP−AAPS		

PIP SUMMARY

Time Mark Every 60 S

Temperature (TEMP_MWPT) (DEGF)		Pressure (SGP) (PSIA)
CCL From CCL to T1		Tension (TENS) 0 (LBF) 2500
Gamma Ray (GR) 0 (GAPI) 150		Temperature (TEMP_MWPT) 0 (DEGF) 250
Casing Collar Locator (CCL) −19 (−−−− 1		Strain Gauge Pressure (SGP) 0 (PSIA) 3000





Casing Collar Locator (CCL)	Strain Gauge Pressure (SGP)
−19 (−−−− 1	0 (PSIA) 3000
Gamma Ray (GR)	Temperature (TEMP_MWPT)
0 (GAPI) 150	0 (DEGF) 250
CCL From CCL to T1	Tension (TENS)
	0 (LBF) 2500
Temperature (TEMP_MWPT) (DEGF)	Pressure (SGP) (PSIA)

PIP SUMMARY

Time Mark Every 60 S

Parameters

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

Format: MWP Vertical Scale: 1:200 Graphics File Created: 16−Oct−2006 11:42

OP System Version: 14C0−302

MCM

MWP_GUN	SRC−3220−WPP−AAPS	MWPT−CA	SRC−3220−WPP−AAPS
MWGT−AA	SRC−3220−WPP−AAPS		

Output DLIS Files

DEFAULT PERFO_022LUP FN:21 PRODUCER 16−Oct−2006 11:42

Schlumberger

Correlation Pass

MAXIS Field Log

Company: Esso Australia Pty Ltd. **Well: B−1**

Output DLIS Files

DEFAULT **PERFO_021LUP** **FN:20** **PRODUCER** **16−Oct−2006 11:34** **2174.4 M** **2149.6 M**

OP System Version: 14C0−302

MCM

MWP_GUN	**SRC−3220−WPP−AAPS**	**MWPT−CA**	**SRC−3220−WPP−AAPS**
MWGT−AA	**SRC−3220−WPP−AAPS**		

PIP SUMMARY

Time Mark Every 60 S

Temperature (TEMP_MWPT) (DEGF)

Pressure (SGP) (PSIA)

CCL From CCL to T1

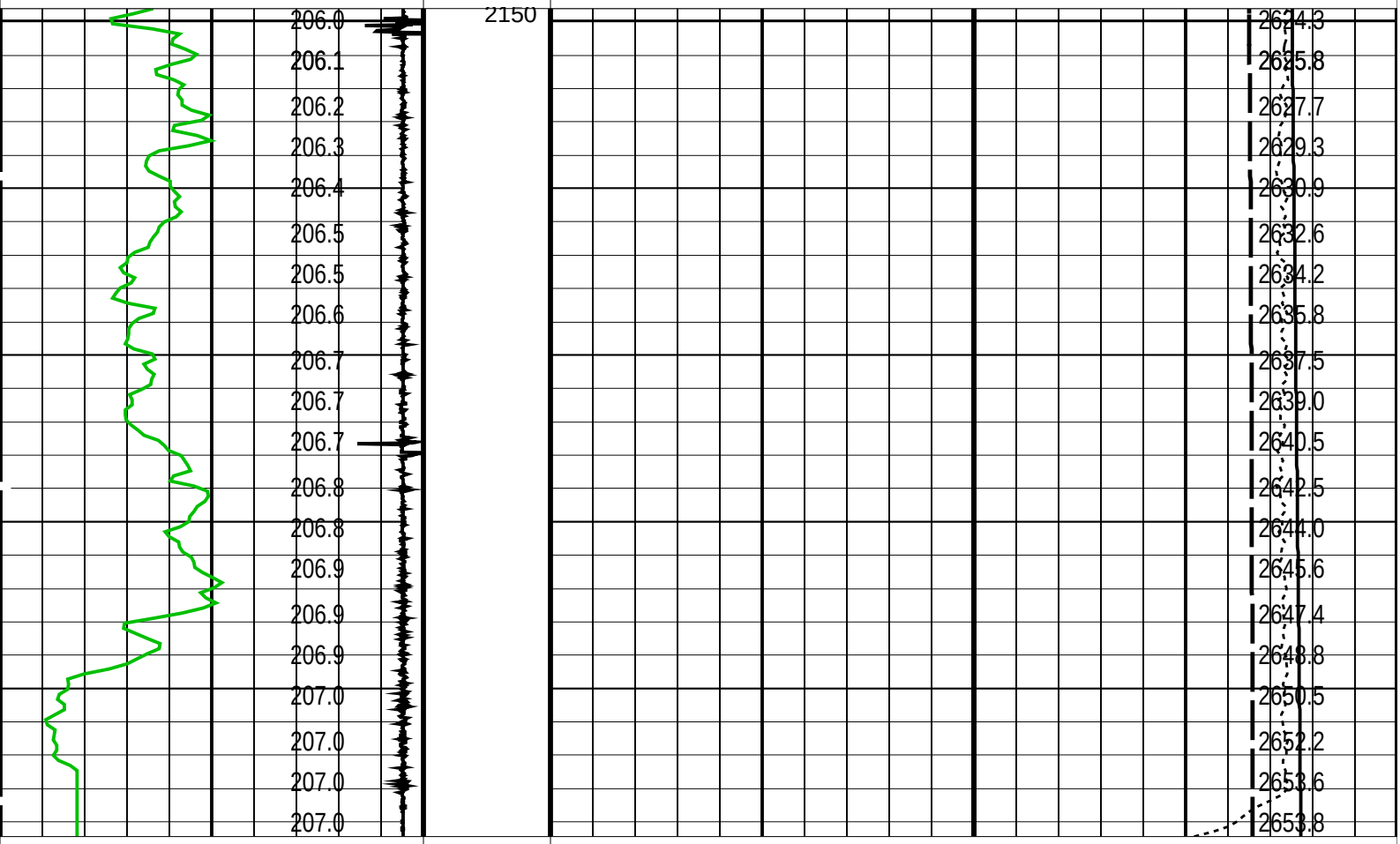
Tension (TENS)
0 (LBF) 2500

Gamma Ray (GR)
0 (GAPI) 150

Temperature (TEMP_MWPT)
0 (DEGF) 250

Casing Collar Locator (CCL)
−19 (−−−− 1

Strain Gauge Pressure (SGP)
0 (PSIA) 3000



Casing Collar Locator (CCL)
−19 (−−−− 1

Strain Gauge Pressure (SGP)
0 (PSIA) 3000

Gamma Ray (GR)
0 (GAPI) 150

Temperature (TEMP_MWPT)
0 (DEGF) 250

CCL From CCL to T1		Tension (TENS) 0 (LBF) 2500
	Temperature (TEMP_MWPT) (DEGF)	Pressure (SGP) (PSIA)

PIP SUMMARY

Time Mark Every 60 S

Parameters

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

Format: MWP Vertical Scale: 1:200 Graphics File Created: 16−Oct−2006 11:34

OP System Version: 14C0−302

MCM

MWP_GUN	SRC−3220−WPP−AAPS	MWPT−CA	SRC−3220−WPP−AAPS
MWGT−AA	SRC−3220−WPP−AAPS		

Output DLIS Files

DEFAULT	PERFO_021LUP	FN:20	PRODUCER	16−Oct−2006 11:34

Schlumberger

Dummy Plug

MAXIS Field Log

Company: Esso Australia Pty Ltd. Well: B−1

Input DLIS Files

DEFAULT	PERFO_013LUP	FN:12	PRODUCER	16−Oct−2006 09:17	2175.8 M	2096.7 M

Output DLIS Files

DEFAULT	PERFO_014PUP	FN:13	PRODUCER	16−Oct−2006 09:30	2179.5 M	2101.0 M

OP System Version: 14C0−302

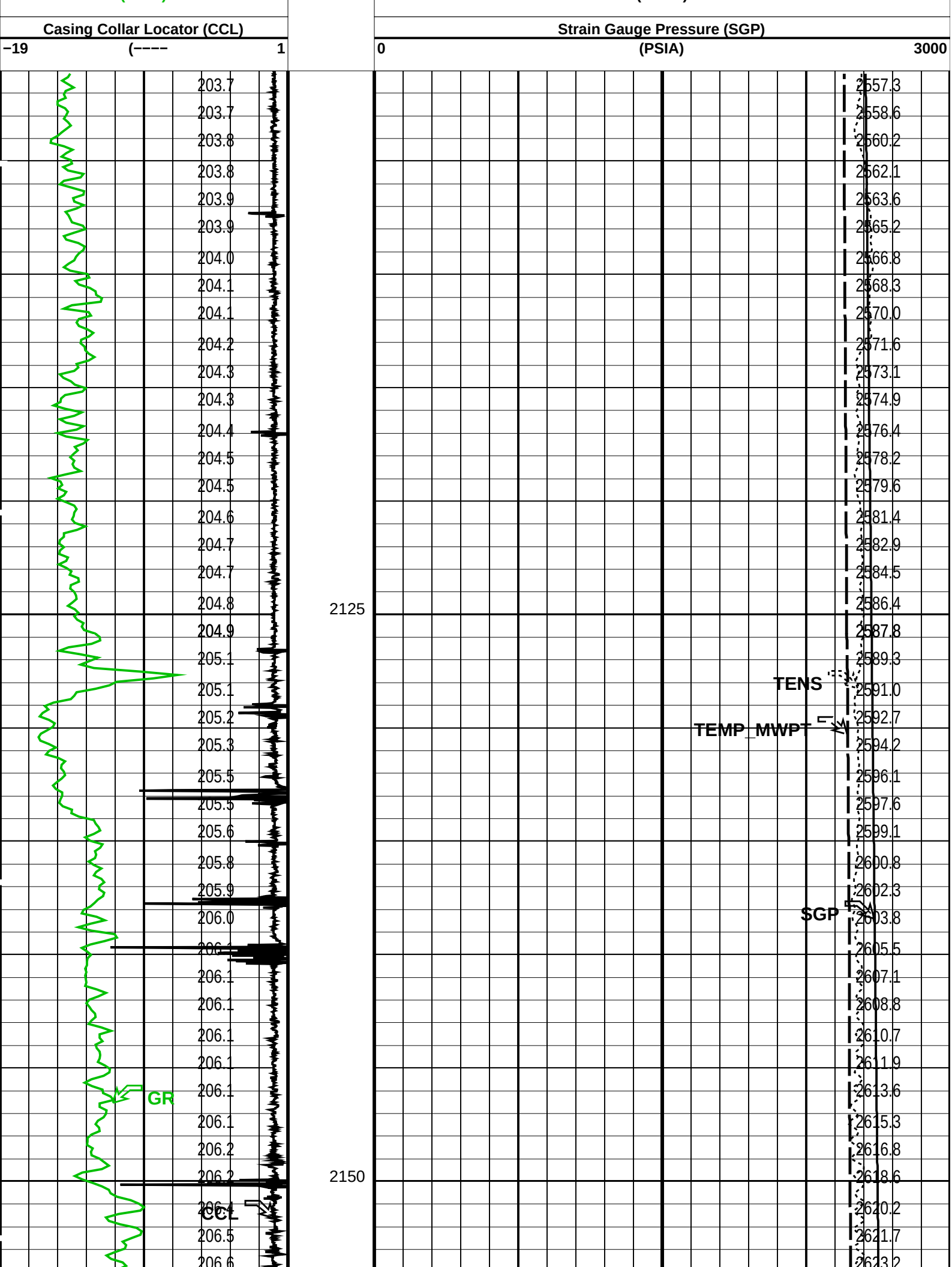
MCM

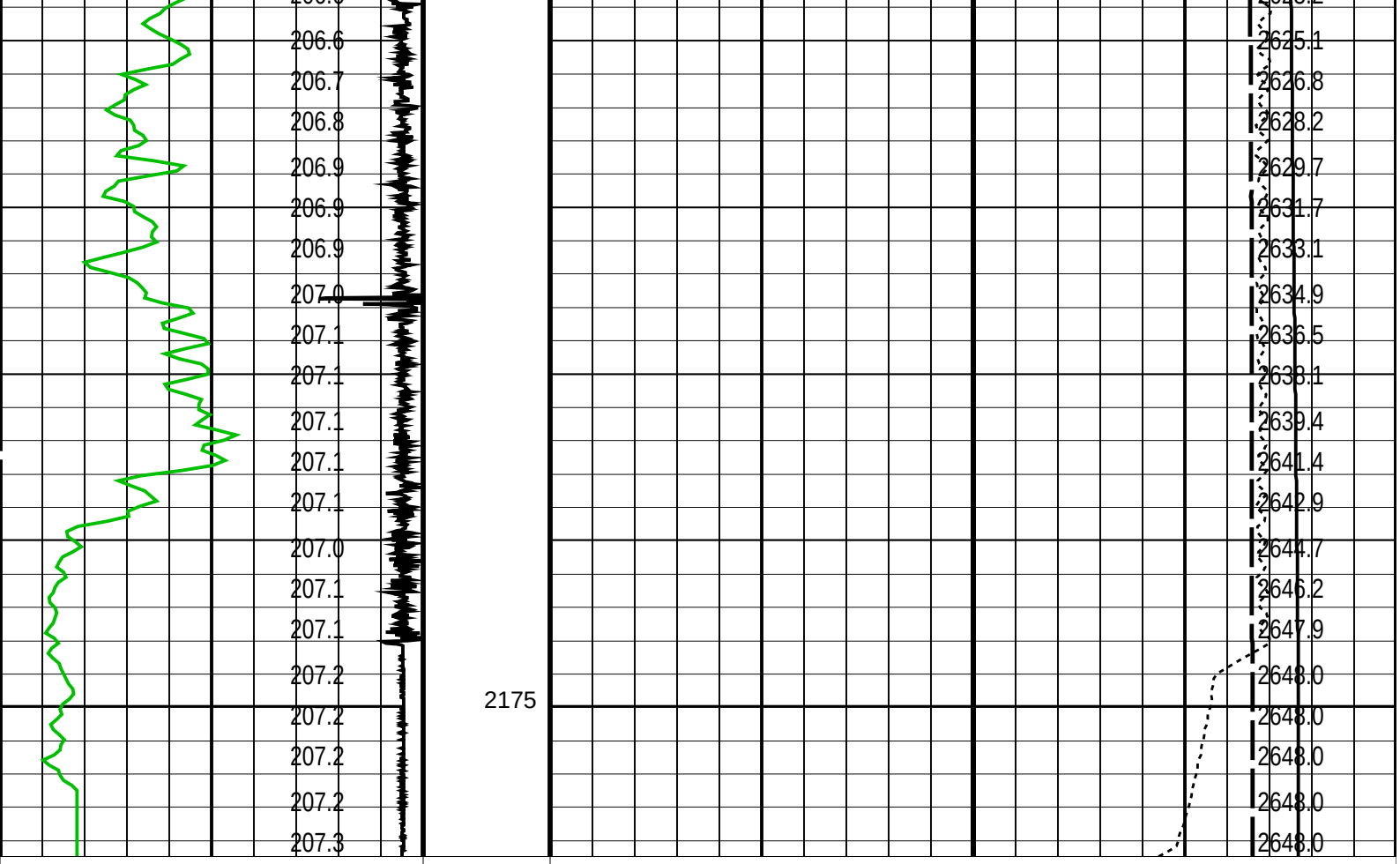
MWP_GUN	SRC−3220−WPP−AAPS	MWPT−CA	SRC−3220−WPP−AAPS
MWGT−AA	SRC−3220−WPP−AAPS		

PIP SUMMARY

Time Mark Every 60 S

	Temperature (TEMP_MWPT) (DEGF)		Pressure (SGP) (PSIA)
CCL From CCL to T1		Tension (TENS) 0 (LBF) 2500	
Gamma Ray (GR) 0 (GAPI) 150		Temperature (TEMP_MWPT) 0 (DEGF) 250	


Casing Collar Locator (CCL)
−19
(−−−−
1
Strain Gauge Pressure (SGP)
0
(PSIA)
3000
GR
CCL
TENS
TEMP_MWPT
SGP
2125
2150



Casing Collar Locator (CCL)	Strain Gauge Pressure (SGP)
−19 (−−−− 1	0 (PSIA) 3000
Gamma Ray (GR)	Temperature (TEMP_MWPT)
0 (GAPI) 150	0 (DEGF) 250
CCL From CCL to T1	Tension (TENS)
	0 (LBF) 2500
Temperature (TEMP_MWPT) (DEGF)	Pressure (SGP) (PSIA)

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
MWPT−CA: MEASUREMENT WHILE PERFORATING TOOL			
DEVI_FL_CORR	Deviation Angle for Flow Line Correction	0	DEG
FLD	Flow Line Density	1	G/C3
MWPT_NULL_SOURCE	MWPT NULL Temperature Source	TEMS	
MWPT_NULL_TEMP	MWPT NULL Temperature	0.0	DEGC
System and Miscellaneous			
DO	Depth Offset for Playback	3.6	M
PP	Playback Processing	NORMAL	

Format: MWP Vertical Scale: 1:200 Graphics File Created: 16−Oct−2006 09:30

OP System Version: 14C0−302

MCM

MWP_GUN	SRC−3220−WPP−AAPS	MWPT−CA	SRC−3220−WPP−AAPS
MWGT−AA	SRC−3220−WPP−AAPS		

Input DLIS Files

DEFAULT	PERFO_013LUP	FN:12	PRODUCER	16−Oct−2006 09:17	2175.8 M	2096.7 M

Output DLIS Files

DEFAULT	PERFO_014PUP	FN:13	PRODUCER	16−Oct−2006 09:30

Schlumberger

Company: **Esso Australia Pty Ltd.**

Well: **B−1**
Field: **Bream B**
Rig : **Prod4**
Country: **Australia**

2 1/8"Phased Powerjet
MWPT Perforation
7"HPI PSP Plug