

Company: Esso Australia Pty Ltd.

Well: A-24a  
Field: Flounder  
Rig: Mast

Country: Australia

2-1/8" Phased Powerjet  
MWPT Perforation Record

Mast  
Flounder  
Gippsland  
A-24a  
Esso Australia Pty Ltd.

LOCATION			
Gippsland Basin Bass Strait	Permanent Datum:	M.S.L. _____	
	Log Measured From:	K.B. _____	
	Drilling Measured From:	K.B. _____	
State: Victoria	Max. Well Deviation 47 deg	Longitude 148° 06' 15.10"E	Latitude 38° 18' 45.24"S

Logging Date	3-Feb-2008								
Run Number	1								
Depth Driller	3193 m								
Schlumberger Depth	3128.5 m								
Bottom Log Interval	3103.2 m								
Top Log Interval	3102.5 m								
Casing Fluid Type	Production Fluids								
Salinity									
Density									
Fluid Level	990 m								
BIT/CASING/TUBING STRING									
Bit Size	8.500 in								
From	662 m								
To	3193 m								
Casing/Tubing Size	7.000 in								
Weight	26 lbm/ft								
Grade	L-80								
From	13.5 m								
To	3186 m								
Maximum Recorded Temperatures	230 degF								
Logger On Bottom	3-Feb-2008				11:00				
Unit Number	Location		889	Prod 4 / AUSL					
Recorded By	S Gilbert / C.Rowand								
Witnessed By	B White / J.DiGiovanni								

PVT DATA			
Oil Density	Run 1	Run 2	R
Water Salinity			
Gas Gravity			
Bo			
Bw			
1/Bg			
Bubble Point Pressure			
Bubble Point Temperature			
Solution GOR			
Maximum Deviation	47 deg		
CEMENTING DATA			
Primary/Squeeze			
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	Location		
Recorded By			
Witnessed By			

[illegible]

## DEPTH SUMMARY LISTING

Date Created: 2-FEB-2008 23:20:14

## Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-EB	Type:	PSDS/OSDS	Type:	2-32ZT
Serial Number:	6373	Serial Number:	325357	Serial Number:	24425
Calibration Date:	04-Jan-2007	Calibration Date:	15-Jan-2008	Length:	5259.93 M
Calibrator Serial Number:	9	Calibrator Serial Number:	1174	Conveyance Method:	Wireline
Calibration Cable Type:	2-32ZT	Calibration Gain:	0.91	Rig Type:	Offshore_Fixed
Wheel Correction 1:	-2	Calibration Offset:	220.00		
Wheel Correction 2:	-4				

## Depth Control Parameters

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	ExxonMobil Petrophysical Analysis
Reference Log Run Number:	
Reference Log Date:	16-Mar-2003
Subsequent Trip Down Log Correction:	

### Depth Control Remarks

1. IDW used as primary depth control
2. Z-Chart used as back-up
- 3.
- 4.
5. Rigged up utilising the MAST
- 6.

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OTHER SERVICES1	OTHER SERVICES2
OS1:   None	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
Log correlated to ExxonMobil Solar Composite Log supplied with logging program.	
Objectives: Perforate the well over the interval 3102.5m 3103.2m MDKB	
using 2–1/8" 6 SPF, 45 deg phased Powerjet gun with MWPT.	
Maximum Well Deviation – 47deg @ 630m MDKB	
Perforation interval: 3102.5m to 3103.2m MDKB.	
CCL to top shot = 3.50 m	

CCL Stop Depth = 3099.00 m MDKB
Before gun shot: SBHT = 230.2 degF SBHP = 3089.4 psia
After gun shot: SBHT = 231.3degF SBHP = 3090.0 psia
Schlumberger crews: P.Lawerence, Z Casey, G Martin, C Shiells

RUN 1			RUN 2		
SERVICE ORDER #:		AUSL07336277	SERVICE ORDER #:		
PROGRAM VERSION:		15C0-309	PROGRAM VERSION:		
FLUID LEVEL:		990 m	FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

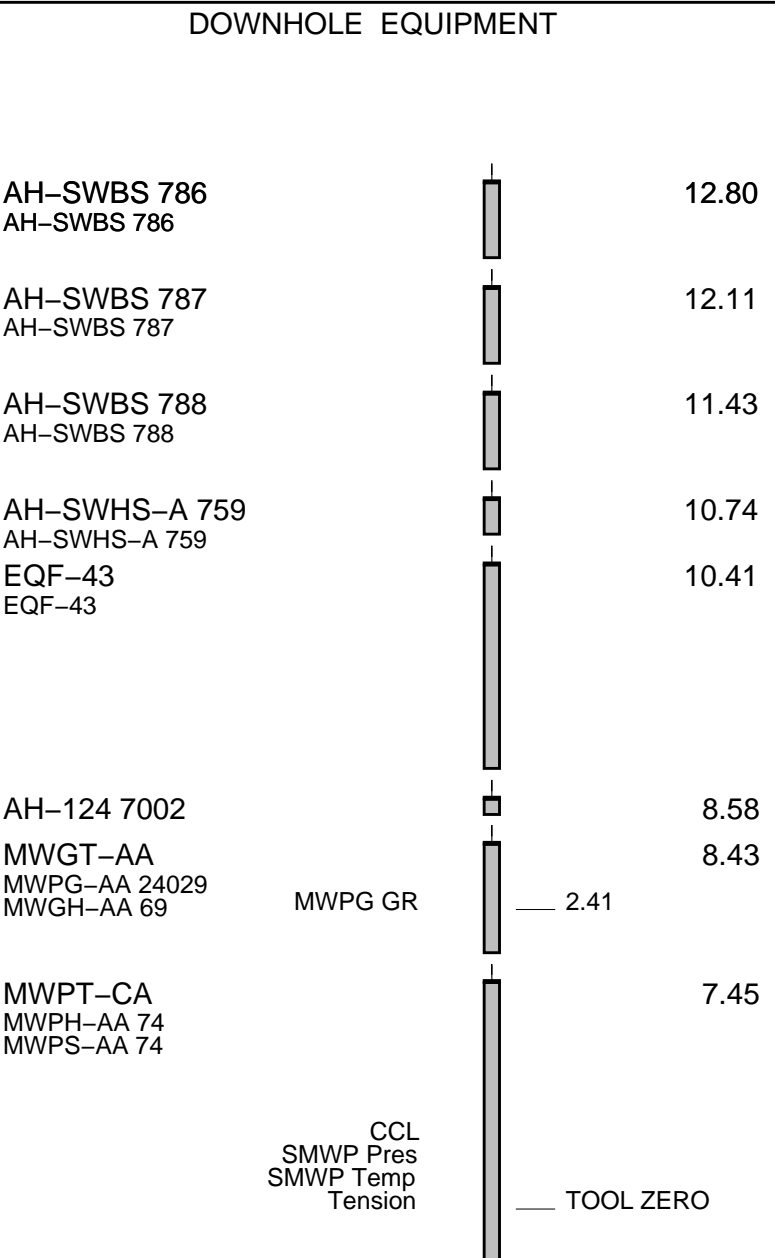
EQUIPMENT DESCRIPTION

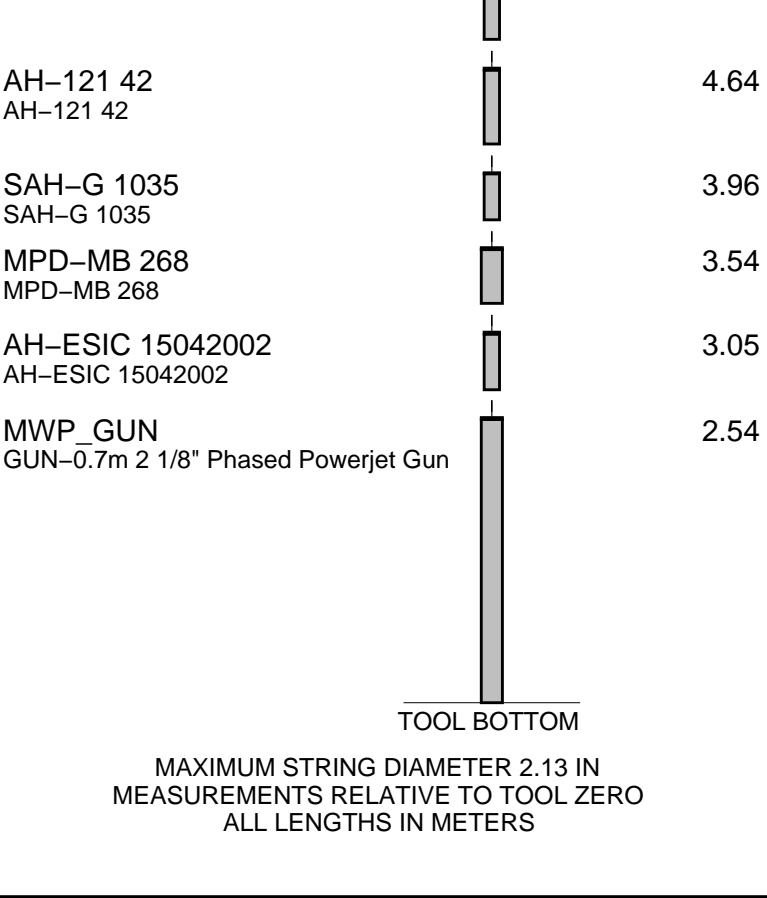
RUN 1

RUN 2

SURFACE EQUIPMENT

MWPM-3008





Production String	(in)		(m)	Well Schematic	(m)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
Tubing Hanger	7.000	3.500	12.2		7.000	6.276	Casing String	
Tubing	3.500	2.992			10.750			Casing String
SSSV	3.500	2.750	453.0					
Side Pocket Mandrel	3.500		906.7		662.6	10.750		Casing Shoe
Side Pocket Mandrel	3.500		1494.2					
Side Pocket Mandrel	3.500		1734.3					





Gun  
Log Out of Position

MAXIS Field Log

Company: Esso Australia Pty Ltd. Well: A-24a

Output DLIS Files

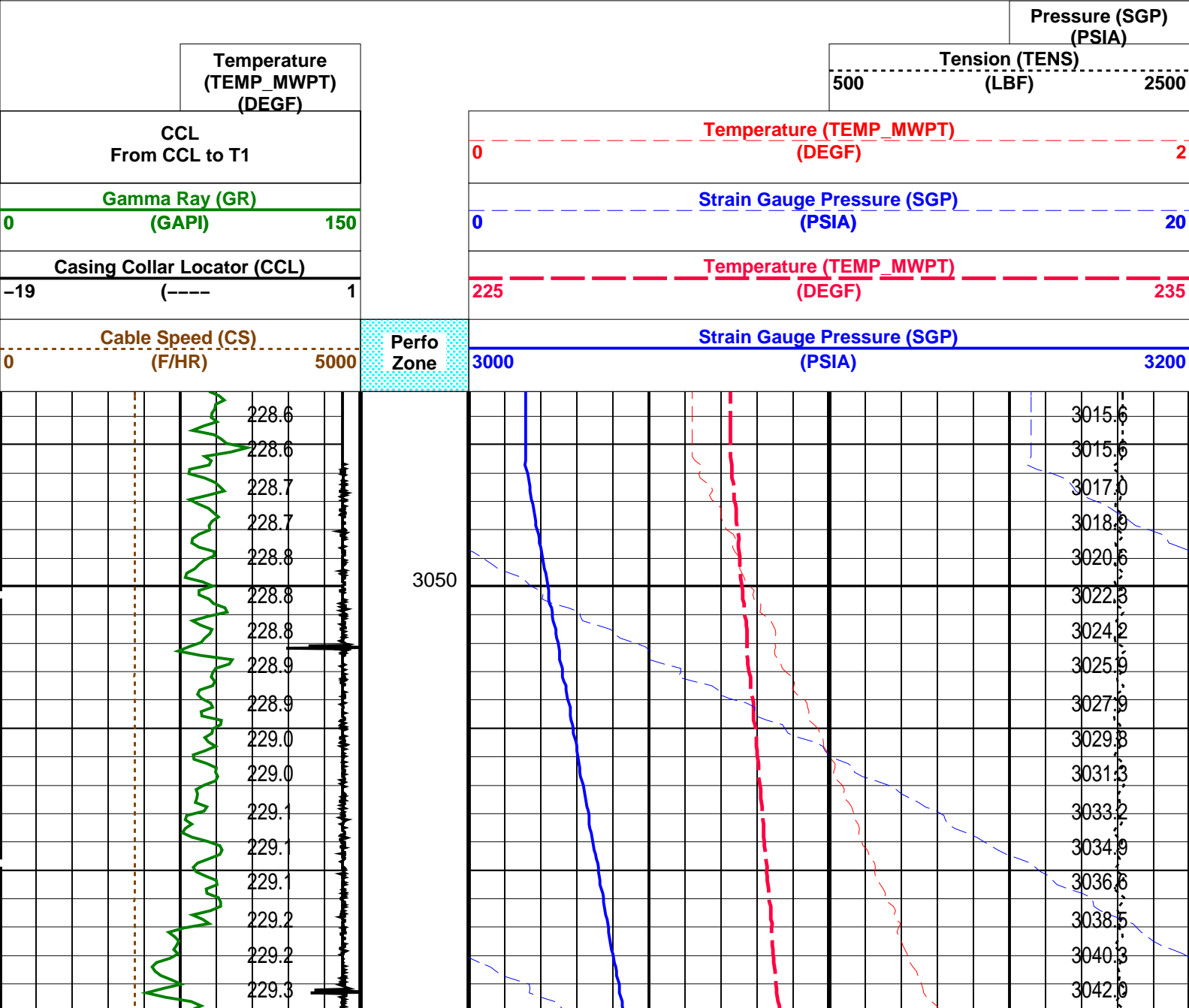
DEFAULT PERFO\_021LUP FN:20 PRODUCER 03-Feb-2008 21:04 3098.9 M 3043.1 M

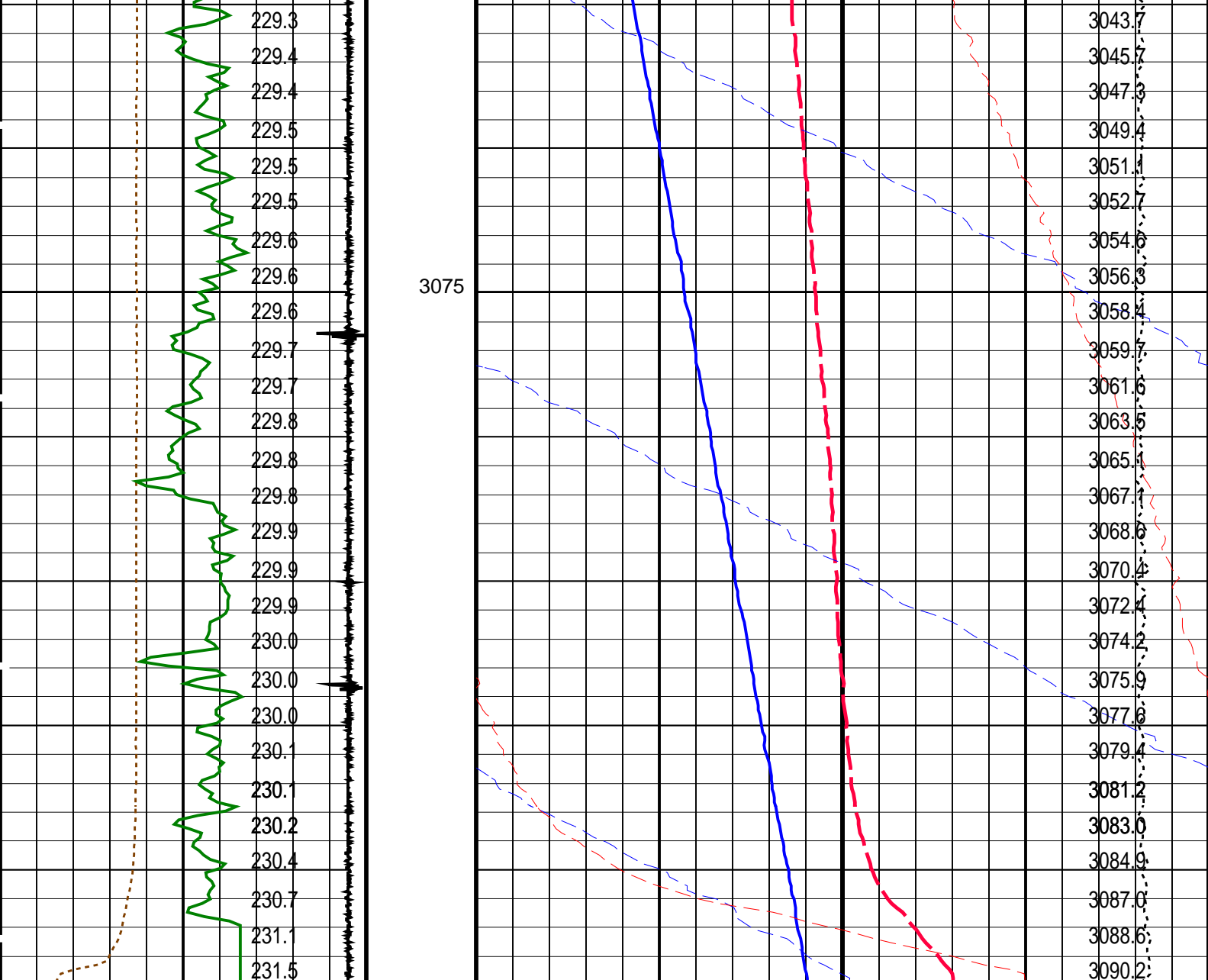
OP System Version: 15C0-309  
MCM

MWP\_GUN 15C0-309 MWPT-CA 15C0-309  
MWGT-AA 15C0-309

PIP SUMMARY

Time Mark Every 60 S





Cable Speed (CS) (F/HR)		Perfo Zone	Strain Gauge Pressure (SGP) (PSIA)		
0	5000		3000	3200	
Casing Collar Locator (CCL) (----			Temperature (TEMP_MWPT) (DEGF)		
-19	1		225	235	
Gamma Ray (GR) (GAPI)		CCL From CCL to T1	Strain Gauge Pressure (SGP) (PSIA)		
0	150		0	20	
			Temperature (TEMP_MWPT) (DEGF)		
		Temperature (TEMP_MWPT) (DEGF)	Tension (TENS) (LBF)		
			500	2500	
		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	

MWPT\_NULL\_SOURCE

MWPT\_NULL\_TEMP

MWPT NULL Temperature Source

MWPT NULL Temperature

TEMS

0.0

DEGC

Format: MWP

Vertical Scale: 1:200

Graphics File Created: 03-Feb-2008 21:04

OP System Version: 15C0-309

MCM

MWP\_GUN

15C0-309

MWPT-CA

15C0-309

MWGT-AA

15C0-309

Output DLIS Files

DEFAULT

PERFO\_021LUP

FN:20

PRODUCER

03-Feb-2008 21:04

Schlumberger

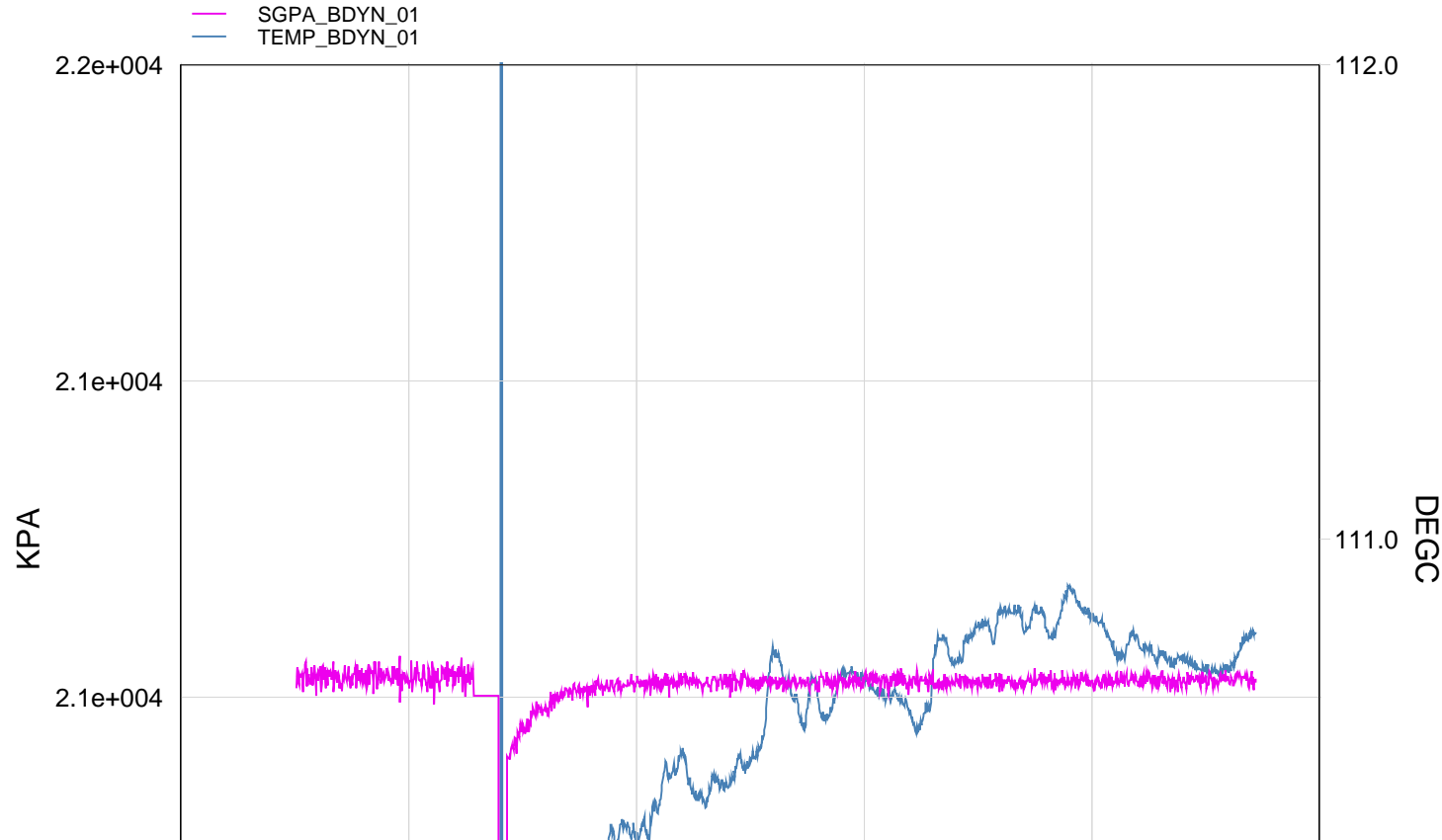
Gun Fired @

3102.5m to 3103,2m MDKB

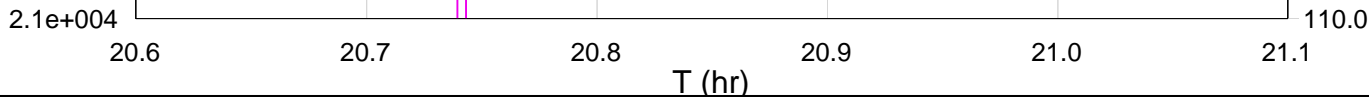
MAXIS Field Log

PERFO2 Operational Summary Listing

Device	Status	Req Depth ( M)	Obs Depth ( M)	Time Used
GUN1	Used	3102.5	3102.5	Sun 20:43:34 3-Feb-2008







Gun  
Log Into Position

MAXIS Field Log

Company: Esso Australia Pty Ltd. Well: A-24a

Output DLIS Files

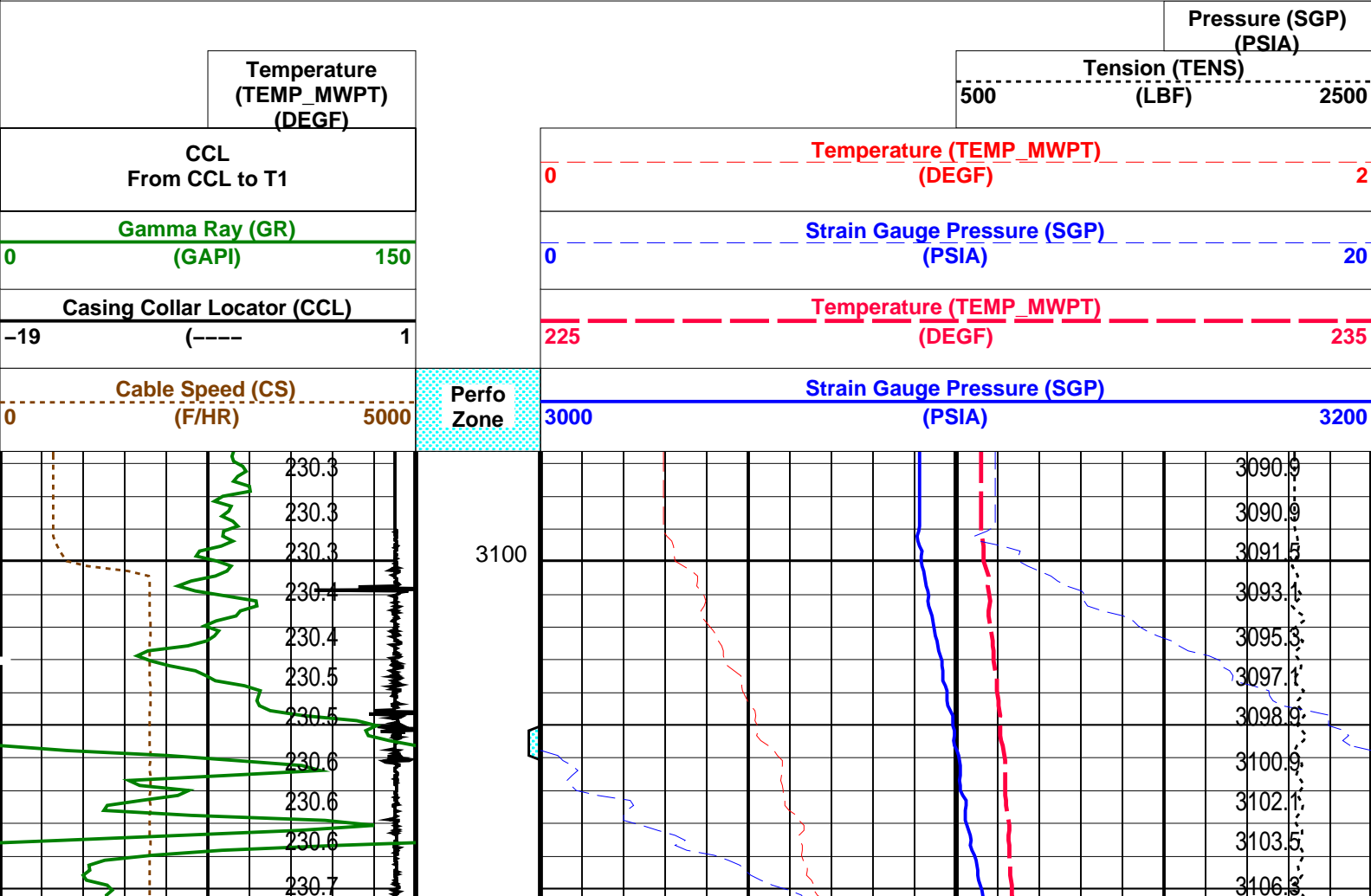
DEFAULT PERFO\_018LUP FN:17 PRODUCER 03-Feb-2008 20:27 3124.0 M 3096.6 M

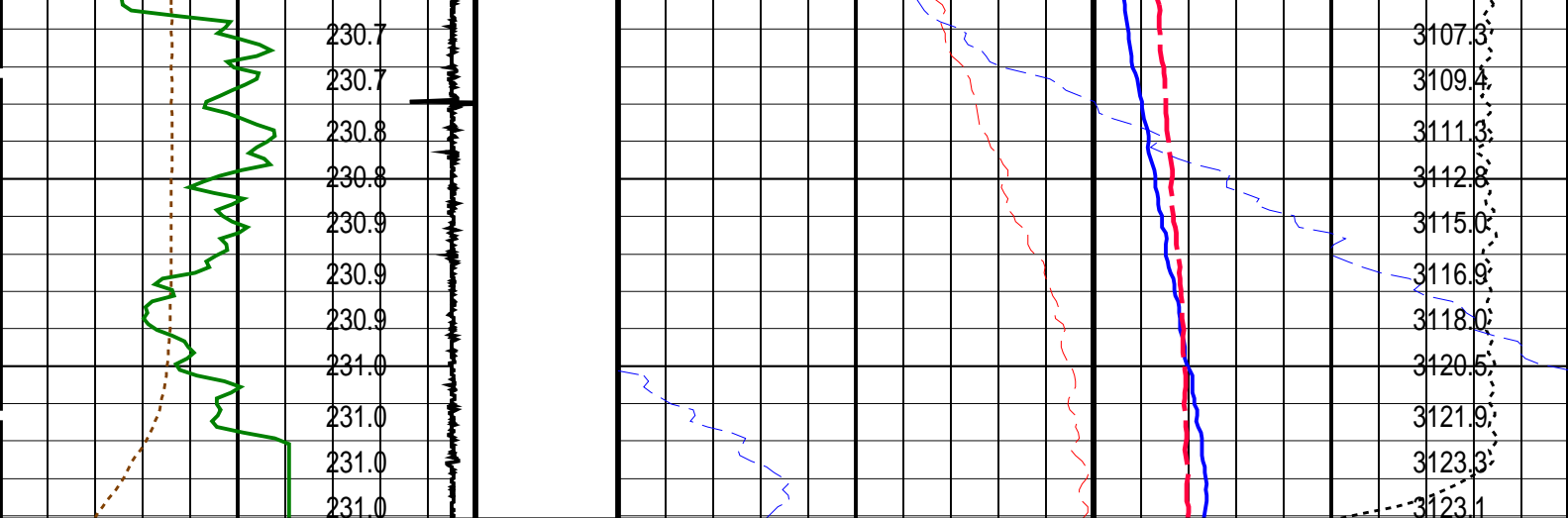
OP System Version: 15C0-309  
MCM

MWP\_GUN 15C0-309 MWPT-CA 15C0-309  
MWGT-AA 15C0-309

PIP SUMMARY

Time Mark Every 60 S





Cable Speed (CS) (F/HR)		Perfo Zone	Strain Gauge Pressure (SGP) (PSIA)		
0	5000		3000	3200	
Casing Collar Locator (CCL) (----			Temperature (TEMP_MWPT) (DEGF)		
-19	1		225	235	
Gamma Ray (GR) (GAPI)			Strain Gauge Pressure (SGP) (PSIA)		
0	150		0	20	
CCL From CCL to T1			Temperature (TEMP_MWPT) (DEGF)		
			0	2	
Temperature (TEMP_MWPT) (DEGF)		Tension (TENS) (LBF)			
		500		2500	
		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: 03-Feb-2008 20:27

OP System Version: 15C0-309			
MCM			
MWP_GUN	15C0-309	MWPT-CA	15C0-309
MWGT-AA	15C0-309		

Output DLIS Files			
DEFAULT	PERFO_018LUP	FN:17	PRODUCER 03-Feb-2008 20:27



Gun Correlation Pass

Output DLIS Files

DEFAULT

PERFO\_017LUP

FN:16

PRODUCER

03-Feb-2008 20:09

3124.0 M

3044.8 M

OP System Version: 15C0-309

MCM

MWP\_GUN

15C0-309

MWGT-AA

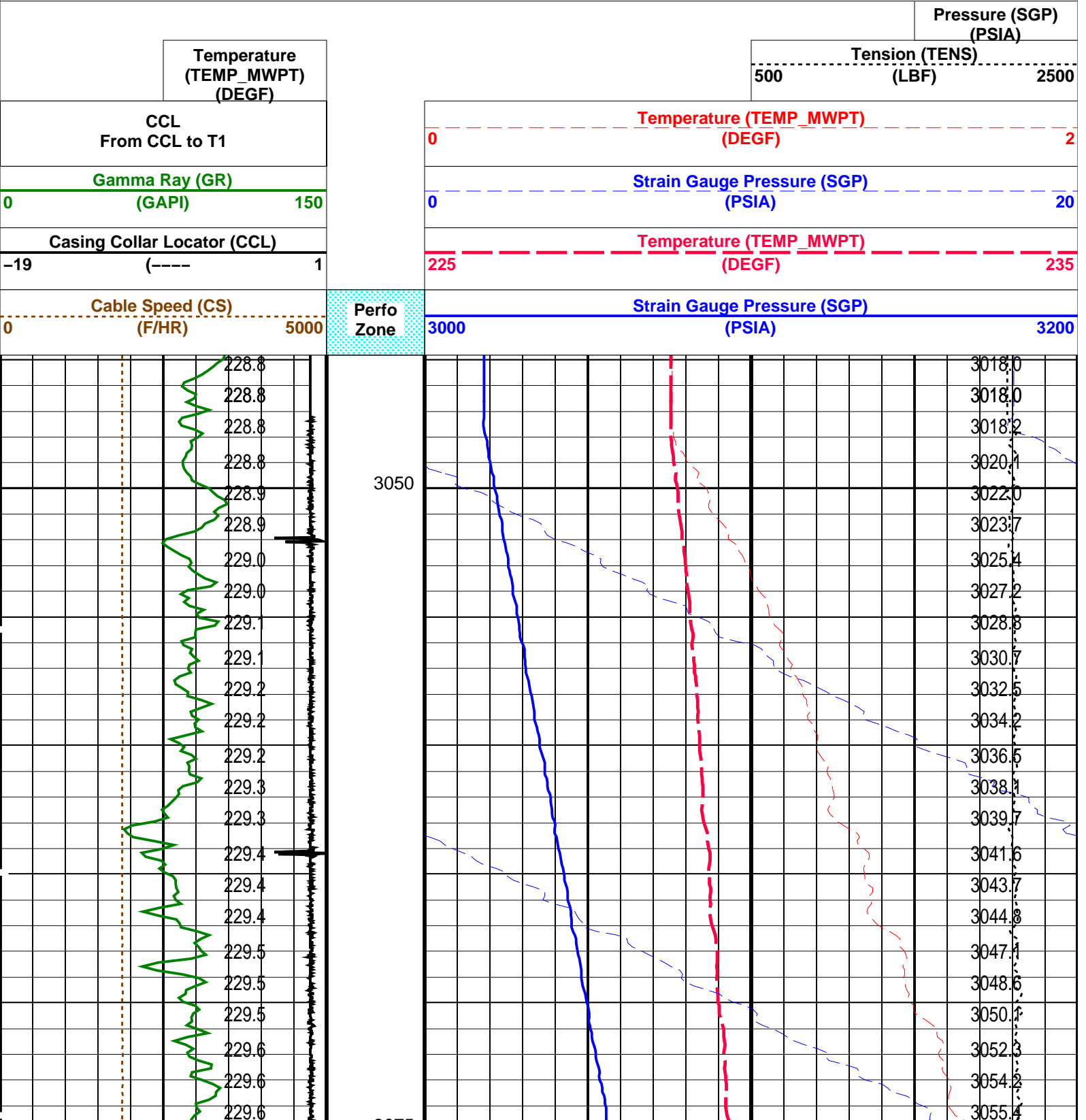
15C0-309

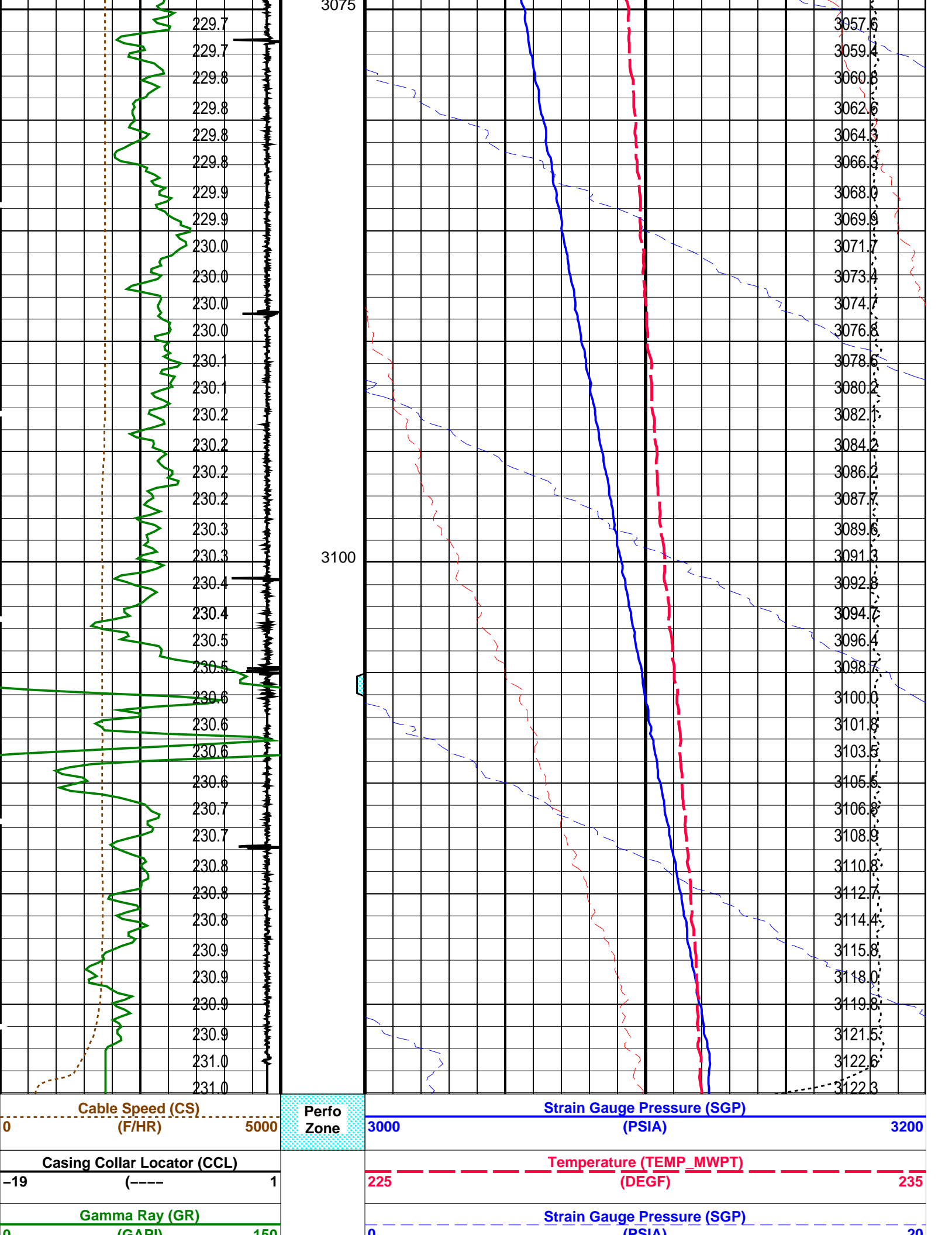
MWPT-CA

15C0-309



PIP SUMMARY

Time Mark Every 60 S







MEASUREMENT WHILE PERFORATING GAMMA RAY TOOL Wellsite Calibration									
Detector Calibration									
Phase	Gamma Ray (Signal) Background GAPI			Value	Phase	Gamma Ray (Jig – Background) GAPI			Value
Before				4.230	Before				120.8
	0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)			109.8 (Minimum)	120.8 (Nominal)	131.8 (Maximum)	
Before: 3-Feb-2008 3:18									

Company:	Esso Australia Pty Ltd.	Schlumberger
Well:	A-24a	
Field:	Flounder	
Rig:	Mast	
Country:	Australia	
2-1/8" Phased Powerjet MWPT Perforation Record		