

Company: Esso Australia Pty/Ltd.

Well: A-4B
Field: Flounder
Rig: Prod 4 / Crane
Country: Australia

MWPT
2 1/8 Enerjet
Perforation Record

LOCATION	
Gippsland	Elev.: K.B. 34 m
Basin	G.L. -94 m
Bass Strait	D.F. 34 m
Permanent Datum:	M.S.L.
Log Measured From:	D.F.
Drilling Measured From:	D.F.
State: Victoria	Max. Well Deviation 32 deg
	Longitude 148°06'15.1"E
	Latitude 038°18'45.2"S

		Run 1		
Oil Density				
Water Salinity				
Gas Gravity				
Bo				
Bw				
1/Bq				
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				
Unit Number				
Recorded By				
Witnessed By				

Logging Date	8-Feb-2007		
Run Number	1		
Depth Driller	2735 m		
Schlumberger Depth	2680 m		
Bottom Log Interval	2680 m		
Top Log Interval	2650 m		
Casing Fluid Type	Production Fluids		
Salinity			
Density			
Fluid Level	0 m		
BIT/CASING/TUBING STRING			
Bit Size	9.875 in		
From			
To			
Casing/Tubing Size	7.625 in		
Weight	29.7 lbm/ft		
Grade	L-80		
From	19.8 m		
To	2782 m		
Maximum Recorded Temperatures	233 degF		
Logger On Bottom	8-Feb-2007		10:39
Unit Number	889	Ausl	
Recorded By	G Wright , A McGill		
Witnessed By	B White , B Robinson		

DEPTH SUMMARY LISTING	
-----------------------	--

Date Created: 6-FEB-2007 16:26:31

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-EB	Type:	CMTD-B/A	Type:	2-32ZT
Serial Number:	6373	Serial Number:	325357	Serial Number:	24426
Calibration Date:	5-JUL-2006	Calibration Date:	6-FEB-2007	Length:	6600.14 M
Calibrator Serial Number:	9	Calibrator Serial Number:	1174	Conveyance Method:	Wireline
Calibration Cable Type:	2-32ZT	Calibration Gain:	0.90	Rig Type:	Offshore_Fixed
Wheel Correction 1:	-2	Calibration Offset:	197.00		
Wheel Correction 2:	-4				

Depth Control Parameters	
--------------------------	--

Log Sequence:	Subsequent Log In the Well
Reference Log Name:	Solar Compersite Log
Reference Log Run Number:	
Reference Log Date:	

Depth Control Remarks	
-----------------------	--

1. IDW used as primary depth control
2. Z chart used as secondary depth control
- 3.
- 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.

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:	
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:

OS1:	
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
Objectives	
Log correlated to Solar Log supplied by client	
Perforate at 2671m to 2672m & 2674m to 2675.5m Intervals	
CCL to top shot 5.2m	
Max well deviation 32 deg	
Max well temp 233 degf	
Perforate using 2 1/8 Powerjet 6spf 45deg phased Enerjet Gun	

SBHP=3116
Crew G Martin.P Lawrence

RUN 1 SERVICE ORDER #: AUSL07336254 PROGRAM VERSION: 14C0-302 FLUID LEVEL: 0 m					
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

RUN 1

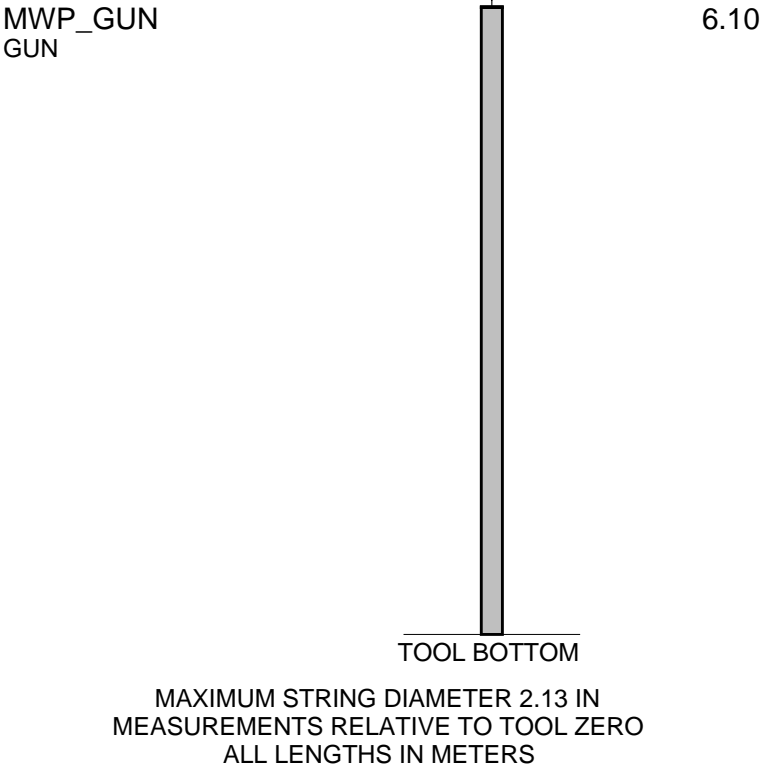
RUN 2

SURFACE EQUIPMENT

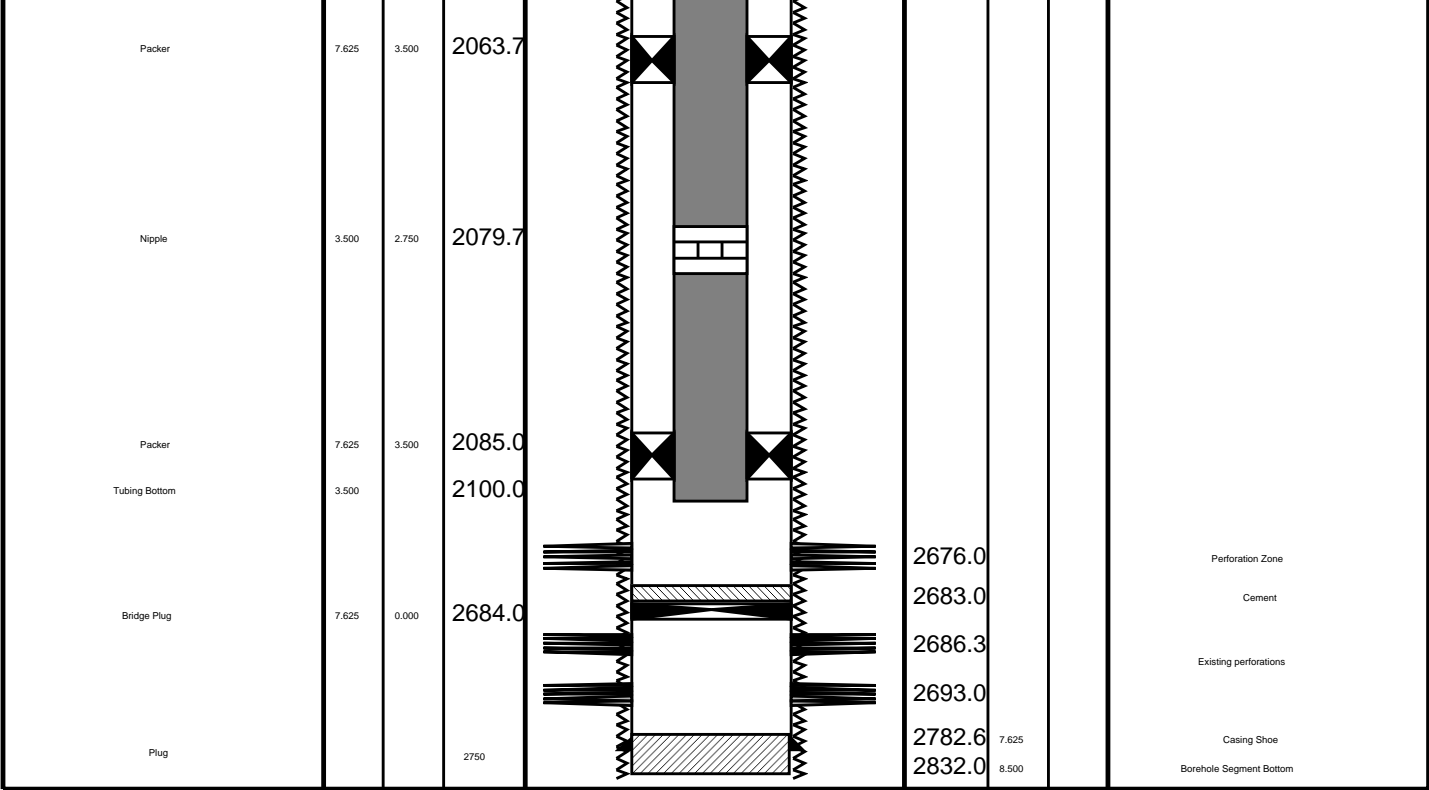
MWPM-AA

DOWNHOLE EQUIPMENT

Material	Value
AH-SWBS 731	14.19
AH-SWBS 731	
AH-SWBS 761	13.76
AH-SWBS 761	
AH-SWBS 762	13.33
AH-SWBS 762	
AH-SWBS 763	12.89
AH-SWBS 763	
MH-SWHS 726	12.46
MWGT-AA 64	12.13
MWPG-AA 64	
MWGH-AA 64	
MWPG GR	2.41
MWPT-CA 94	11.15
MWPH-AA 94	
MWPS-AA 94	
CCL	
SMWP Pres	
SMWP Temp	
Tension	TOOL ZERO
SAH-SAHG 1035	8.34
SAH-SAHG 1035	
AH-FLEX 42	7.75
AH-FLEX 42	
MPD-H 2868	7.22
MPD-H 2868	
AH-ESIC 15042003	6.68
AH-ESIC 15042003	



Production String	(m)		(m)	Well Schematic	(m)			Casing String
	OD	ID	MD		MD	OD	ID	
Tubing	3.500		19.4		19.8	13.625 11.750		Borehole Segment Casing String Borehole Segment Bottom Borehole Segment Liner Hanger Casing String, 44.3 kg/m, L=80
SSSV			453.5		587.2 587.2 587.2	13.625 8.500 11.750 7.625		
Gas Lift Mandrel	5.968	2.920	627.1					
Gas Lift Mandrel	5.968	2.920	818.1					
Gas Lift Mandrel	5.680	2.920	1000.0					
Nipple	3.500	2.750	1016.1					



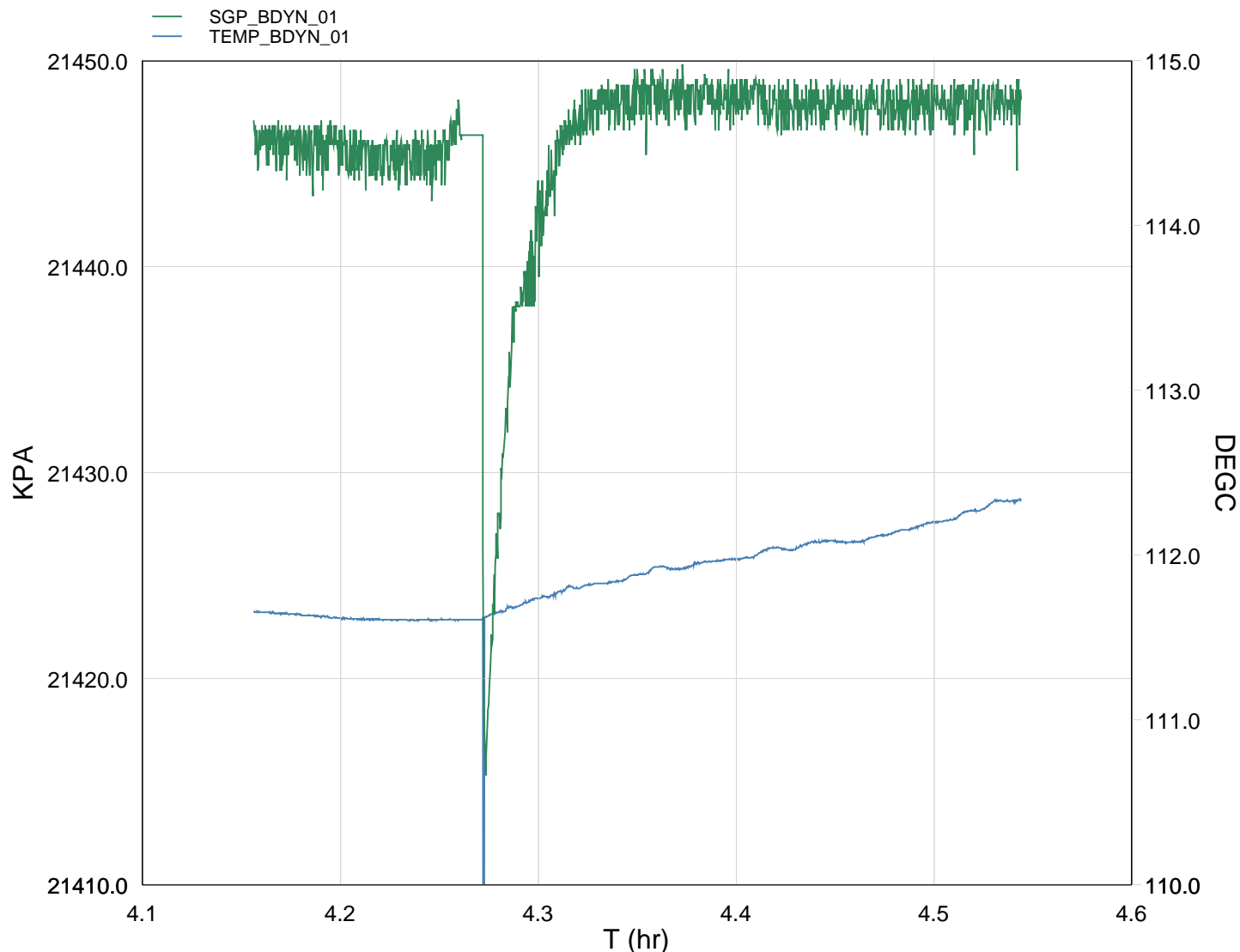
All depths are drillers depths

Schlumberger Job Event Summary

	Time	Elapsed Time	Depth (M)	File
Log Pass (down)	8-Feb-2007	3:26	000:21	1297.1 – 2675.1 PERFO_012LDP
Log Pass (up)	8-Feb-2007	3:47	000:05	2675.1 – 2635.6 PERFO_013LUP
Log Pass (up)	8-Feb-2007	4:04	000:34	2673.6 – 2634.1 PERFO_016LUP
Station Log	8-Feb-2007	4:09	000:24	2665.8 – 3.6 PERFO_017LTP



Gun # 1 2671m to 2672m MDKB
2674m to 2675.5m MDKB



TIME	PSIA	DEGF
4020.0	3110.7254	234.1906
3960.0	3110.8466	234.1033
3900.0	3110.6898	233.9835
3840.0	3110.8336	233.9085
3780.0	3110.6608	233.8238
3720.0	3110.6329	233.7422
3660.0	3110.7615	233.7459
3600.0	3110.7037	233.6623
3540.0	3110.8466	233.5808
3480.0	3110.6391	233.5364
3420.0	3110.8676	233.4602
3360.0	3110.9400	233.4622
3300.0	3110.7746	233.3183
3240.0	3110.5821	233.2787
3180.0	3110.2915	233.1578
3120.0	3109.4462	233.0608
3060.0	3106.4503	232.9361
3000.0	3110.6612	232.8954
2940.0	3110.5054	232.8986
2880.0	3110.3551	232.8949
2820.0	3110.5555	232.9043
2760.0	3110.2192	232.9319
2700.0	3110.5492	232.9575

2640.0 3110.5206 232.9852

Schlumberger

Shooting Pass

MAXIS Field Log

Company: Esso Australia Pty/Ltd.

Well: A-4B

Input DLIS Files

DEFAULT PERFO_016LUP FN:15 PRODUCER 08-Feb-2007 04:04 2673.6 M 2634.1 M

Output DLIS Files

DEFAULT PERFO_022PUP FN:21 PRODUCER 08-Feb-2007 12:19 2673.6 M 2634.5 M

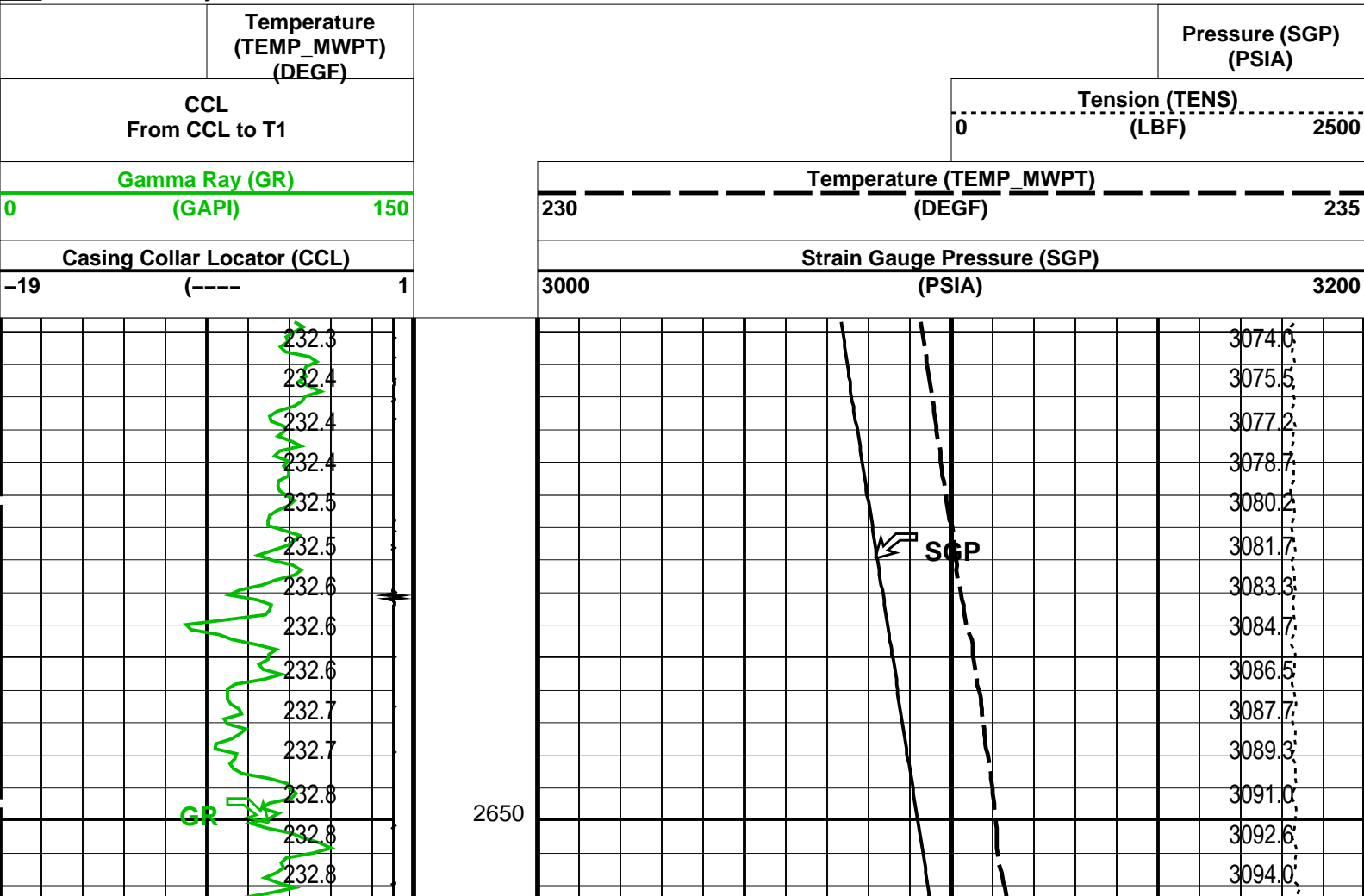
OP System Version: 14C0-302

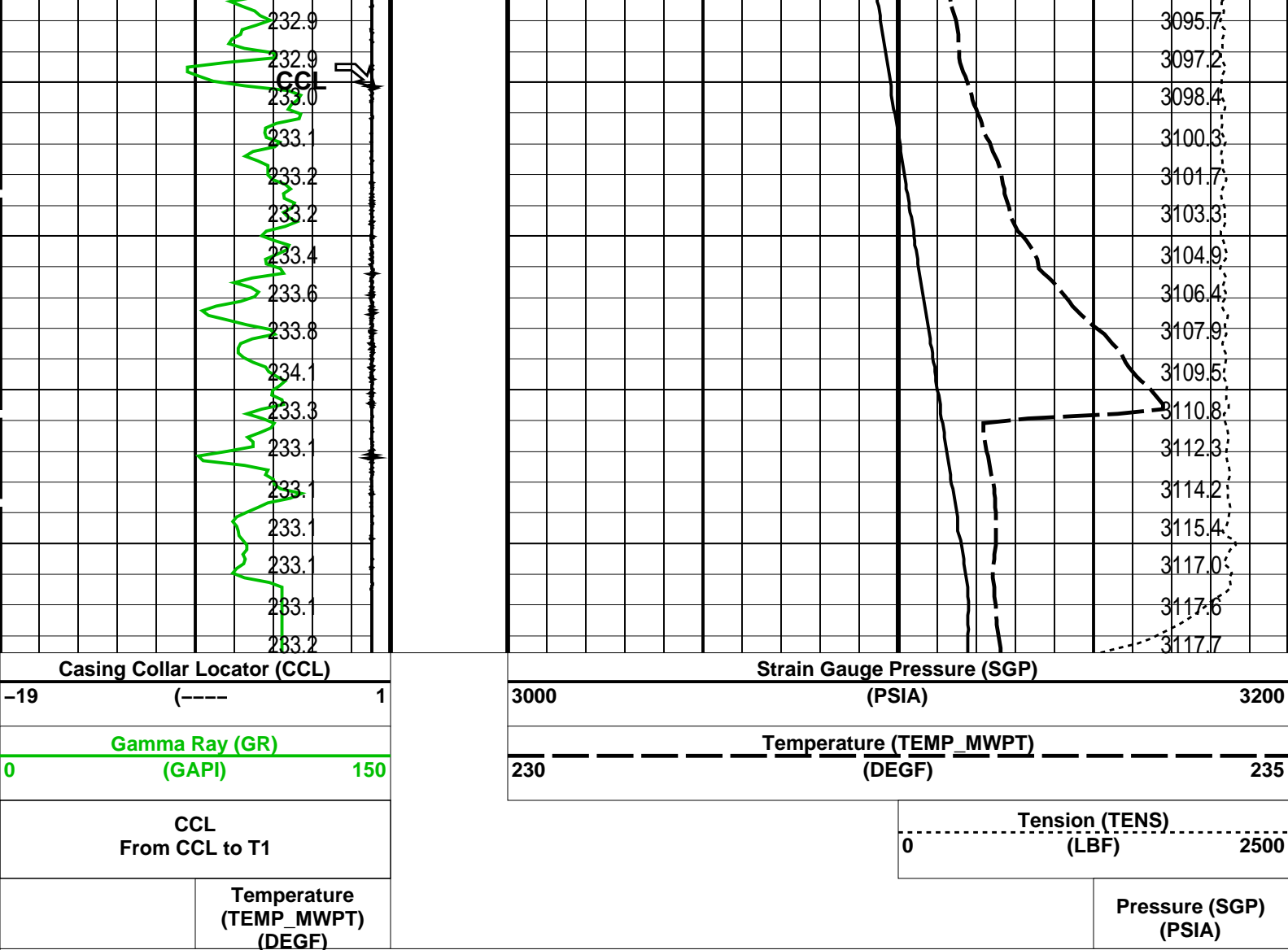
MCM

MWP_GUN SRC-3220-WPP-AAP5 MWPT-CA SRC-3220-WPP-AAP5
MWGT-AA SRC-3220-WPP-AAP5

PIP SUMMARY

Time Mark Every 60 S





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	0.0	M
PP	Playback Processing	NORMAL	

Format: MWP Vertical Scale: 1:200 Graphics File Created: 08-Feb-2007 12:19

OP System Version: 14C0-302			
MCM			
MWP_GUN	SRC-3220-WPP-AAP\$	MWPT-CA	SRC-3220-WPP-AAP\$
MWGT-AA	SRC-3220-WPP-AAP\$		

Input DLIS Files					
DEFAULT	PERFO_016LUP	FN:15	PRODUCER	08-Feb-2007 04:04	2673.6 M 2634.1 M
Output DLIS Files					
DEFAULT	PERFO_022PUP	FN:21	PRODUCER	08-Feb-2007 12:19	

Company: Esso Australia Pty/Ltd.

Well: A-4B

Input DLIS Files

DEFAULT

PERFO_013LUP

FN:12

PRODUCER

08-Feb-2007 03:47

2675.1 M

2635.6 M

Output DLIS Files

DEFAULT

PERFO_021PUP

FN:20

PRODUCER

08-Feb-2007 12:17

2674.0 M

2635.0 M

OP System Version: 14C0-302
MCM

MWP_GUN

SRC-3220-WPP-AAP\$

MWPT-CA

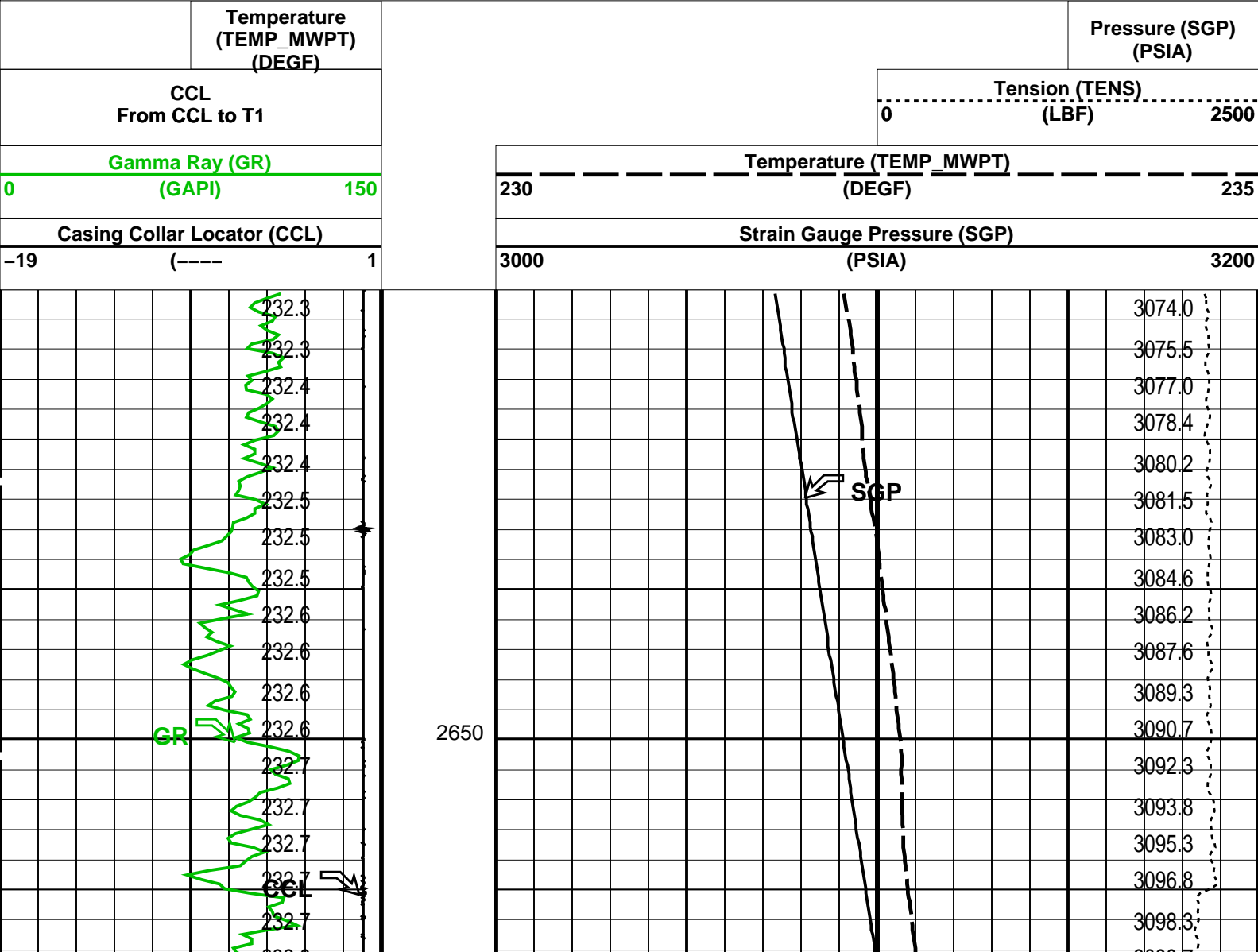
SRC-3220-WPP-AAP\$

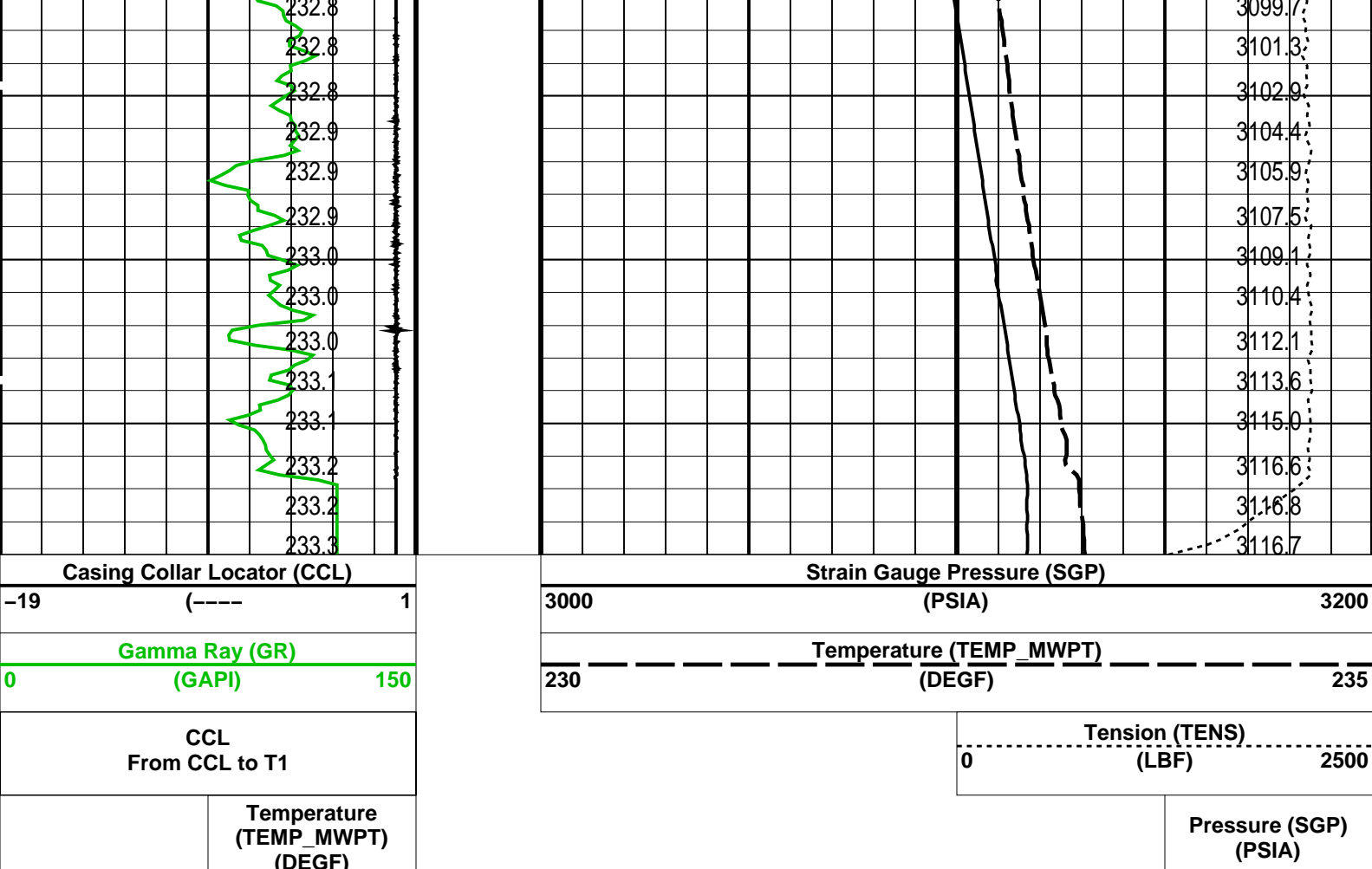
MWGT-AA

SRC-3220-WPP-AAP\$

PIP SUMMARY

Time Mark Every 60 S





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
DO	Depth Offset for Playback	-1.1	M
PP	Playback Processing	NORMAL	

Format: MWP Vertical Scale: 1:200 Graphics File Created: 08-Feb-2007 12:17

OP System Version: 14C0-302			
MCM			
MWP_GUN	SRC-3220-WPP-AAP\$	MWPT-CA	SRC-3220-WPP-AAP\$
MWGT-AA	SRC-3220-WPP-AAP\$		

Input DLIS Files					
DEFAULT	PERFO_013LUP	FN:12	PRODUCER	08-Feb-2007 03:47	2675.1 M 2635.6 M
Output DLIS Files					
DEFAULT	PERFO_021PUP	FN:20	PRODUCER	08-Feb-2007 12:17	

Rig: **Prod 4 / Crane**
Country: **Australia**

MWPT
2 1/8 Enerjet
Perforation Record