

Company: Esso Australia Ltd.

Well: A-13a

Field: Bream A

Rig : Prod4 / Crane

Country: Australia

2 1/8" Enerjet Gun
MWPT
Perforating Record

Prod4 / Crane
Bream A
Gippsland
A-13a
Esso Australia Ltd.

LOCATION			
Gippsland		Elev.:	K.B. 32.2 m
Basin			G.L. -59 m
Bass Strait			D.F. 32.2 m
Permanent Datum:	M.S.L.	Elev.:	0 m
Log Measured From:	D.F.	32.8 m	above Perm. Datum
Drilling Measured From:	D.F.		
State:	Max. Well Deviation	Longitude	Latitude
Victoria	65 deg	147 46'20.32673"	E038 29'58.84674" S

Logging Date	9-May-2006		
Run Number	1		
Depth Driller	2733 m		
Schlumberger Depth	2590 m – Not Tagged		
Bottom Log Interval	2585 m		
Top Log Interval	2582 m		
Casing Fluid Type	Production Fluids		
Salinity			
Density			
Fluid Level			
BIT/CASING/TUBING STRING			
Bit Size	5.500 in		
From	11 m		
To	2326 m		
Casing/Tubing Size	4.500 in		
Weight	12.6 lbm/ft		
Grade	L-80		
From	2291.6 m		
To	2683 m		
Maximum Recorded Temperatures	98 degC		
Logger On Bottom	9-May-2006	0:30	
Unit Number	1	AUSL	
Recorded By	G Wright & P Tarrant		
Witnessed By	B White & B Robinson		

PVT DATA				Run 1	Run 2	Run 3
Oil Density						
Water Salinity						
Gas Gravity						
Bo						
Bw						
1/Bg						
Bubble Point Pressure						
Bubble Point Temperature						
Solution GOR						
Maximum Deviation	65 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: 8-MAY-2006 22:43:49

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-H	Type:	CMTD-B/A	Type:	2-23ZT
Serial Number:	797	Serial Number:	1037	Serial Number:	22372
Calibration Date:	01 May 2005	Calibration Date:	01 Apr 2006	Length:	5049.93 M
Calibrator Serial Number:	1009	Calibrator Serial Number:	1174	Conveyance Method:	Wireline
Calibration Cable Type:	2-32ZT	Calibration Gain:	1.37	Rig Type:	Offshore_Fixed
Wheel Correction 1:	-3	Calibration Offset:	635.00		
Wheel Correction 2:	-3				

Depth Control Parameters

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	Solar Log
Reference Log Run Number:	Unknown
Reference Log Date:	31 Jan 2005

Depth Control Remarks

1.	
2.	
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.

OTHER SERVICES1

OS1: MPBT

OS2:

OS3:

OS4:

QS5:

REMARKS: RUN NUMBER 1

Log correlated to ExxonMobil Solar correlation composite log supplied

by K Kuttan.

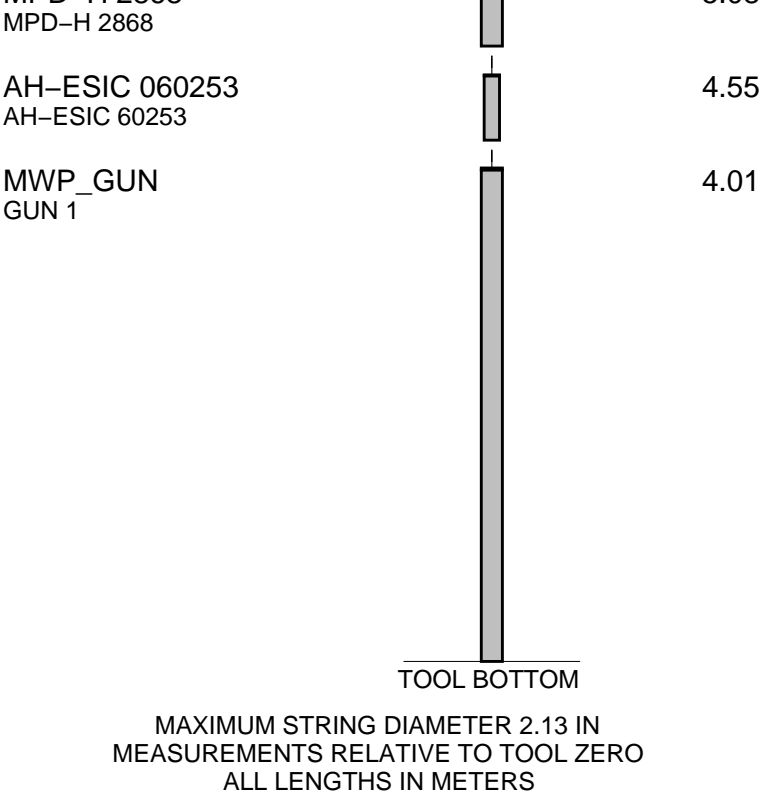
Maximum well deviation = 65 degrees at 1656.2m MDKB.

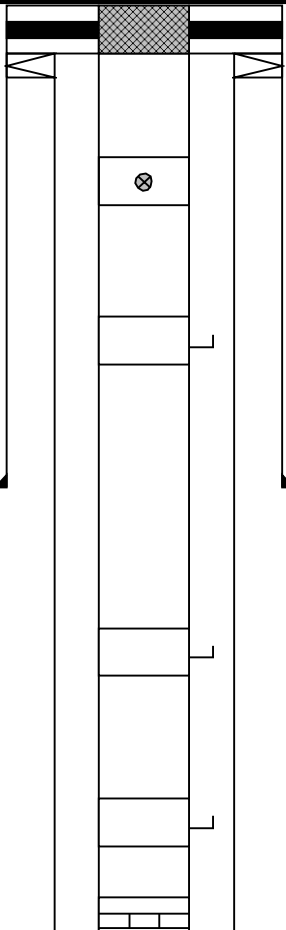
Objective:

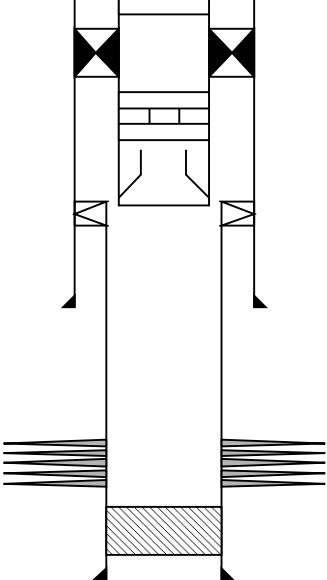
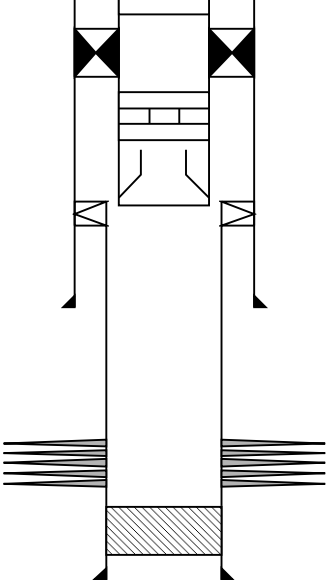
Perforate the interval 2582m to 2585m MDKB with 2 1/8" Enerjet Gun

loaded with PowerSpirol charges, while trying to obtain a 300psi

Item	Value
AH-SWBS-B AH-SWBS-B 761	12.18
AH-SWBS-B AH-SWBS-B 762	11.50
AH-SWBS-B AH-SWBS-B 763	10.81
AH-SWHS-A AH-SWHS-A 726	10.13
MWGT-AA MWPG-AA 19 MWGH-AA 19	9.80
MWPT-CA MWPH-AA 74 MWPS-AA 74	8.82
CCL SMWP Pres SMWP Temp Tension	TOOL ZERO
AH-SAH-G 1047 AH-SAH-G 1047	6.00
AH-FLEXJOINT 41 AH-FLEXJOINT 41	5.57
MPD-H 2868	5.08



Production String	(in)		(m)	Well Schematic	(m)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
Tubing Hanger	10.750	3.500	15.0					Casing String Liner Hanger
Tubing	3.500		15.0		14.1 14.1	10.750 10.750	7.000	
Shutin Valve	3.500		464.0					
Gas Lift Mandrel	3.500		1138.5					
					1298.0	10.750		Casing Shoe
Gas Lift Mandrel	3.500		1814.6					
Gas Lift Mandrel	3.500		2064.4					
Nipple	3.500		2252.5					

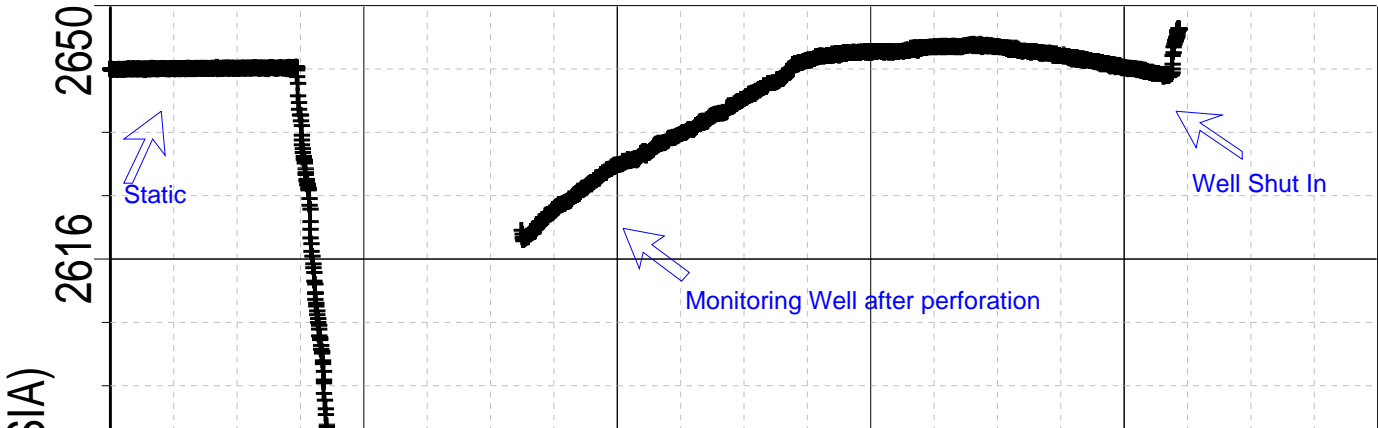
Packer	7.000	3.500	2268.4		2291.6	4.500		2291.6	7.000	4.500	Casing String Liner Hanger
Nipple	3.500		2295.5		2455.3	7.000					Casing Shoe
Bell Nipple Guide	3.500		2297.8		2592.5						Perforation Zone
					2597.0						PBTD
					2683.0	4.500					Casing Shoe

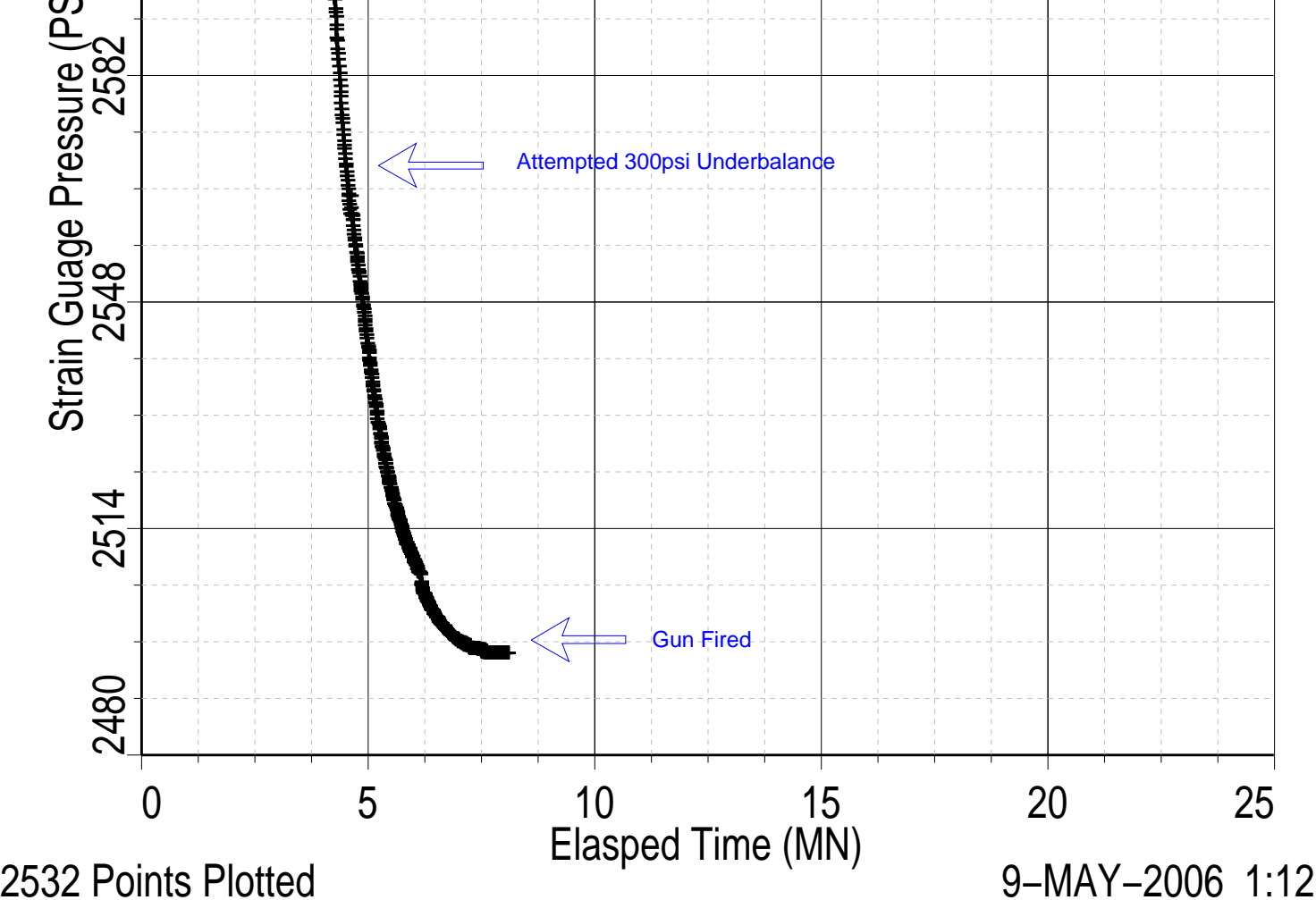
Schlumberger

2 1/8" MWPT Enerjet Gun
Station Log

MAXIS Field Log

Index: 11851.6 – 18280.4 M





Output DLIS Files

DEFAULT PERFO_014LTP FN:13 PRODUCER 09-May-2006 00:39 2578.5 M 3.2 M

OP System Version: 14C0-302

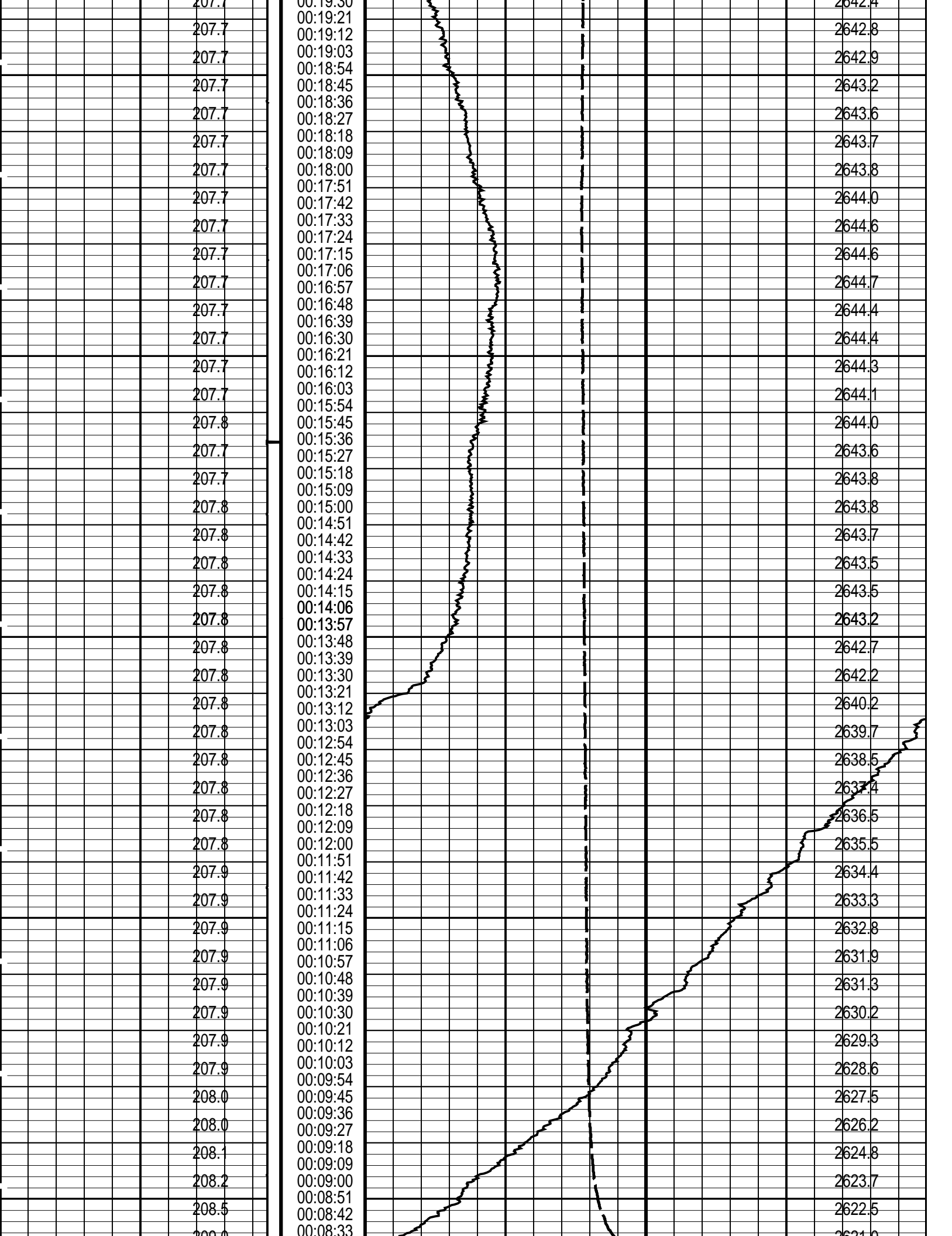
MCM

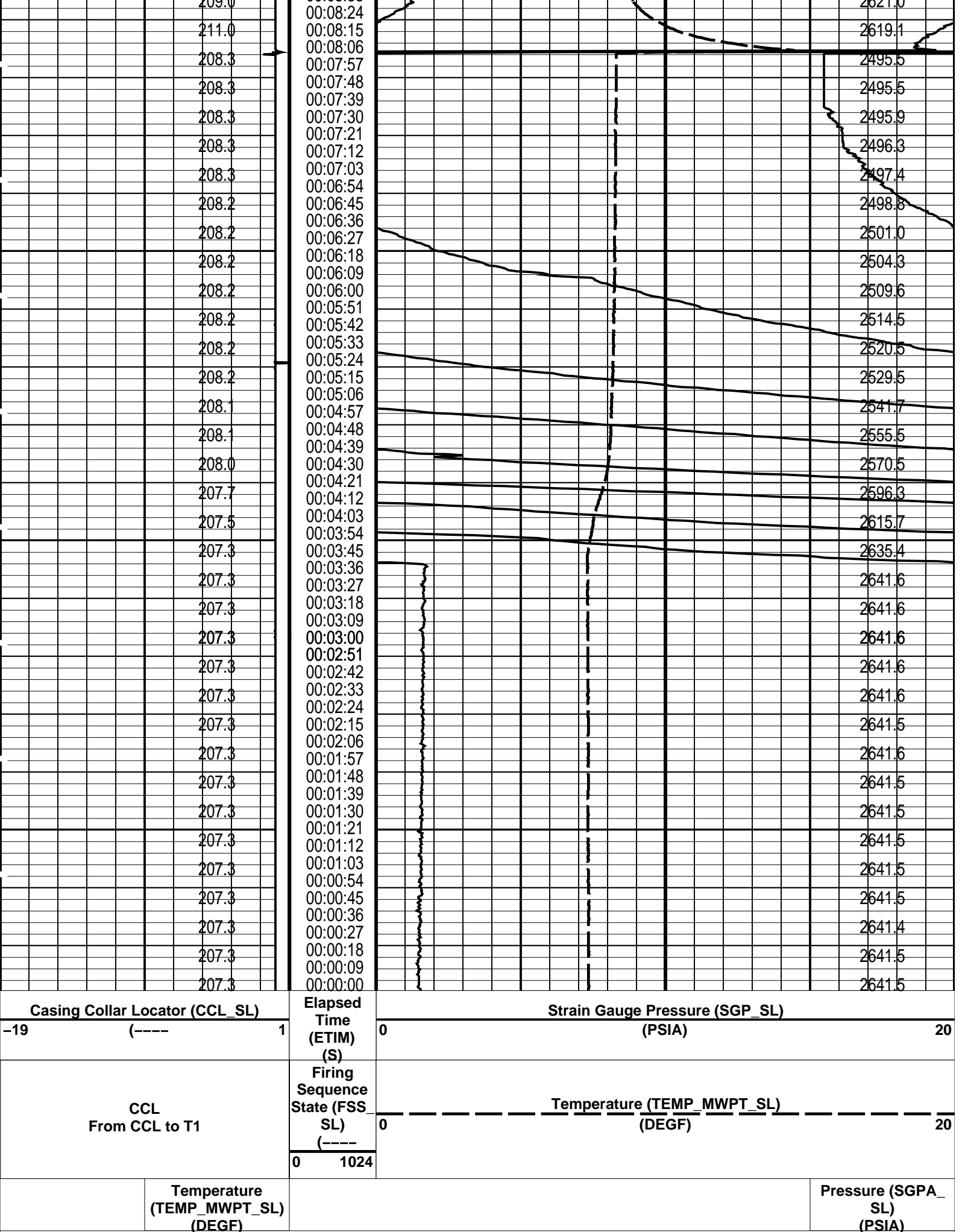
MWP_GUN 14C0-302 MWPT-CA 14C0-302
MWGT-AA 14C0-302

PIP SUMMARY

☒ Time Mark Every 60 S

Temperature (TEMP_MWPT_SL) (DEGF)		Pressure (SGPA_ SL) (PSIA)	
CCL From CCL to T1		Temperature (TEMP_MWPT_SL) (DEGF)	
Firing Sequence State (FSS SL) (----		0 1024	
Casing Collar Locator (CCL_SL) -19 (----- 1		Elapsed Time (ETIM) (S)	
		Strain Gauge Pressure (SGP_SL) (PSIA)	
207.8	00:21:00	2645.2	
207.7	00:20:51	2640.8	
207.7	00:20:42	2641.0	
207.7	00:20:33	2641.4	
207.7	00:20:15	2641.7	
207.7	00:20:06	2642.0	
207.7	00:19:57	2642.4	
207.7	00:19:48	2642.8	
207.7	00:19:39	2643.2	
207.7	00:19:30	2643.6	





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_SL Vertical Scale: 1" per 60S Graphics File Created: 09-May-2006 00:40

OP System Version: 14C0-302
MCM

MWP_GUN	14C0-302	MWPT-CA	14C0-302
MWGT-AA	14C0-302		

Output DLIS Files

DEFAULT	PERFO_014LTP	FN:13	PRODUCER	09-May-2006 00:39
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2 1/8" MWPT Enerjet Gun
Shooting Pass

MAXIS Field Log

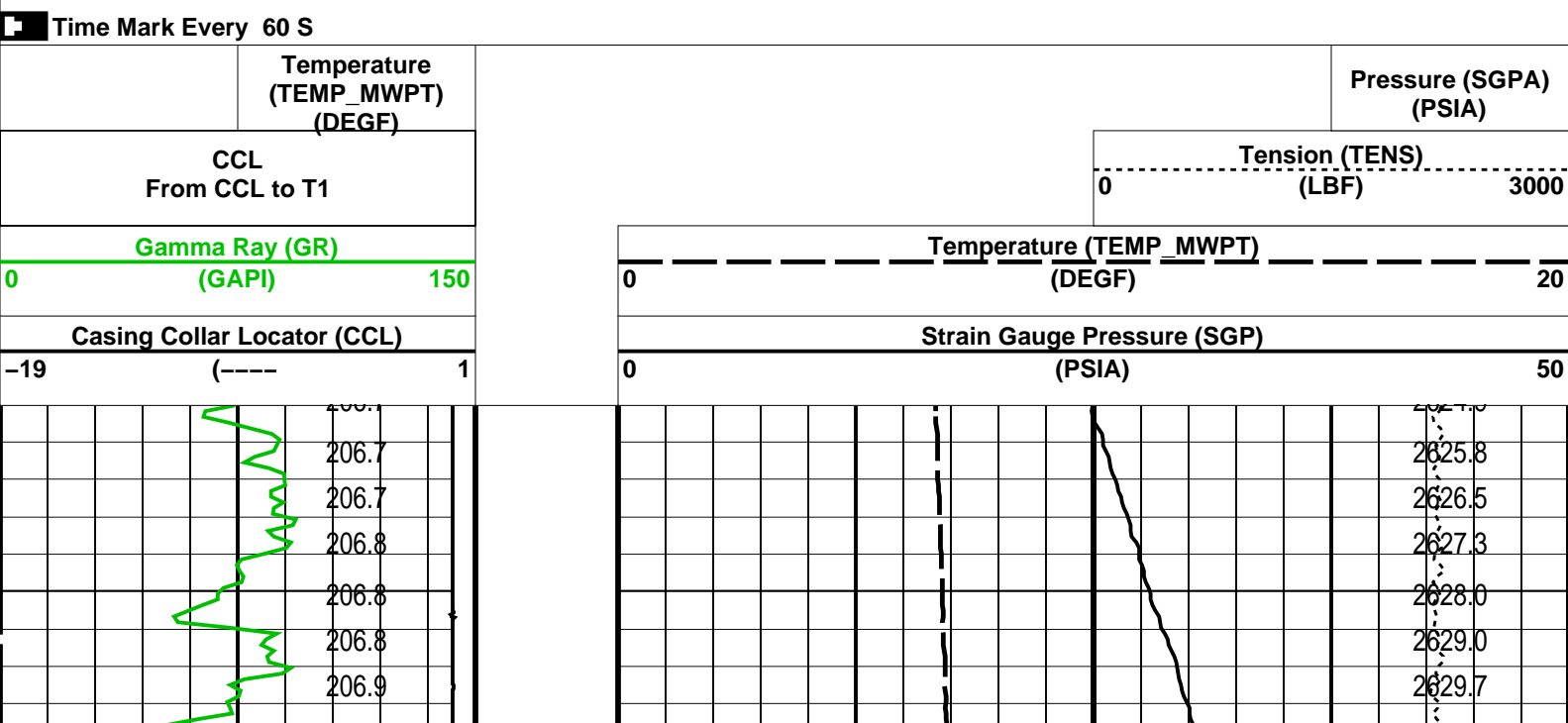
Output DLIS Files

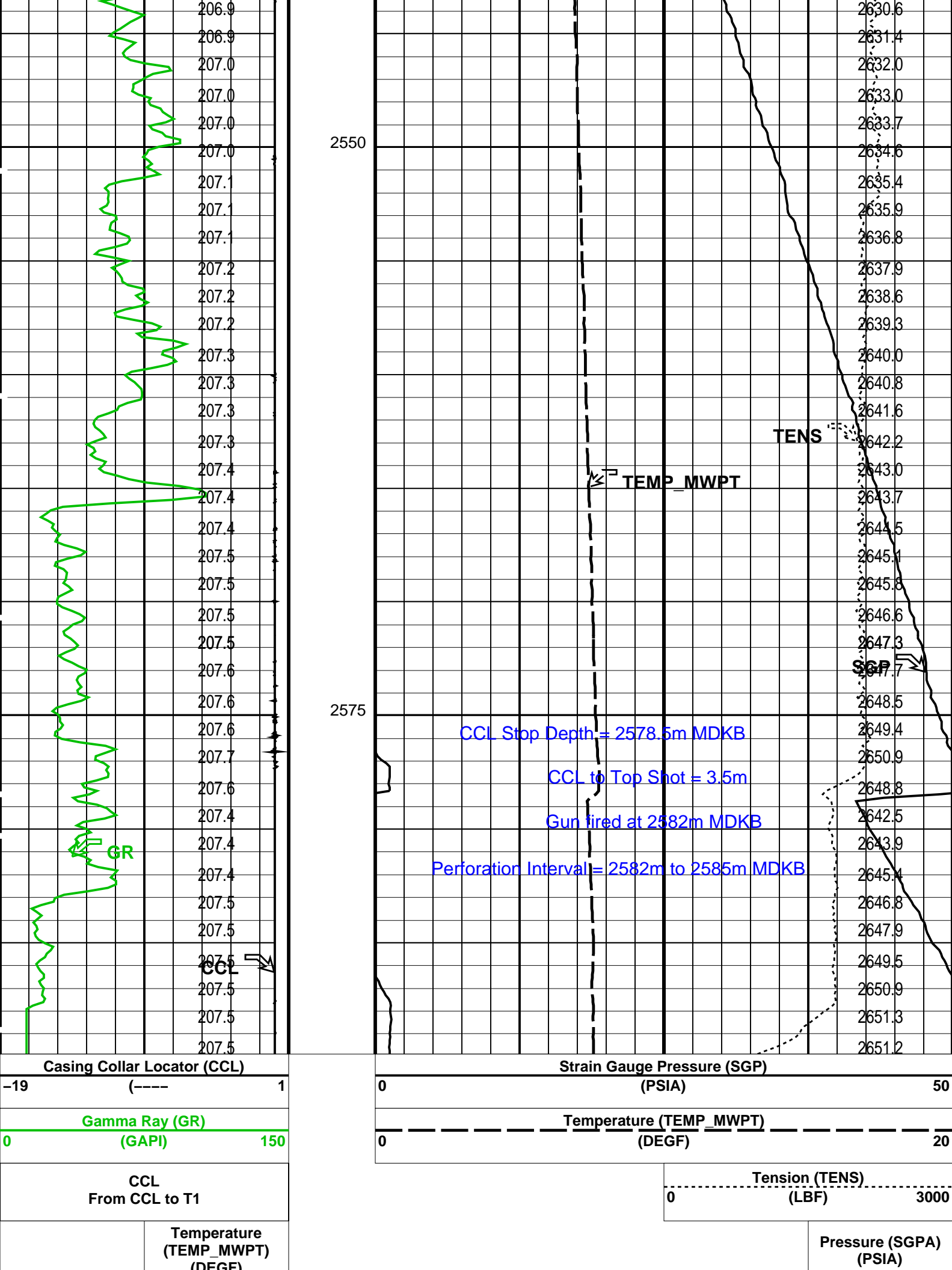
DEFAULT	PERFO_013LUP	FN:12	PRODUCER	09-May-2006 00:36	2589.9 M	2535.0 M
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OP System Version: 14C0-302
MCM

MWP_GUN	14C0-302	MWPT-CA	14C0-302
MWGT-AA	14C0-302		

PIP SUMMARY





<div><div></div>Time Mark Every 60 S</div>			
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: 09-May-2006 00:28
OP System Version: 14C0-302			
MCM			
MWP_GUN	14C0-302	MWPT-CA	14C0-302
MWGT-AA	14C0-302		
Output DLIS Files			
DEFAULT	PERFO_012LUP	FN:11	PRODUCER 09-May-2006 00:28
Company: Esso Australia Ltd.			
Schlumberger			
Well:	A-13a		
Field:	Bream A		
Rig :	Prod4 / Crane		
Country:	Australia		
2 1/8" Enerjet Gun			
MWPT			
Perforating Record			