



Company: ExxonMobil

Well: MLA A-10aST1

Field: Marlin

Rig: Crane / Prod 4

Country: Australia

2 1/8" Enerjet Gun MWPT Perforating Record

Rig: Crane / Prod 4
Field: Marlin
Location: Gippsland Basin
Well: MLA A-10aST1
Company: ExxonMobil

LOCATION	
Gippsland Basin Bass Strait	Elev.: K.B. 27.9 m G.L. -59 m D.F. 27.9 m
Permanent Datum: _____	Mean Sea Level _____
Log Measured From: _____	Kelly Bushing _____
Drilling Measured From: _____	Kelly Bushing _____
State: Victoria	Max. Well Deviation 45 deg
	Elev.: 0.0 m _____
	27.9 m above Perm. Datum
	Longitude 148 13' 09.81" E
	Latitude 38 13' 55.49" S

	Run 1	Run 2	Run 3
PVT DATA			
Oil Density			
Water Salinity			
Gas Gravity			
Bo			
Bw			
1/Bg			
Bubble Point Pressure			
Bubble Point Temperature			
Solution GOR			
Maximum Deviation	45 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			

Logging Date	27-Dec-2005	
Run Number	1	
Depth Driller	3485 m	
Schlumberger Depth	3400 m – Not Tagged	
Bottom Log Interval	3398 m	
Top Log Interval	3329.9 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	12.5 m	
To	3485 m	
Maximum Recorded Temperatures	131 degC	
Logger On Bottom	27-Dec-2005	Time 8:45
Unit Number	1	Location AUSL
Recorded By	Paul Tarrant	
Witnessed By	Barrie White	

DEPTH SUMMARY LISTING

Date Created: 27-DEC-2005 8:11:39

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-H Serial Number: 797 Calibration Date: 01-May-2005 Calibrator Serial Number: 1009 Calibration Cable Type: 2-32ZT Wheel Correction 1: -3 Wheel Correction 2: 2	Type: CMTD-C Serial Number: 1037 Calibration Date: 22 Sep 05 Calibrator Serial Number: 57144 Calibration Gain: 1.29 Calibration Offset: 777.00	Type: 2-32ZT Serial Number: 22372 Length: 5099.91 M Conveyance Method: Wireline Rig Type: Offshore_Fixed

Depth Control Parameters

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	Solar Log
Reference Log Run Number:	Unknown
Reference Log Date:	21 Sep 2004

Depth Control Remarks

1.	
2.	
3.	
4.	
5.	
6.	

DISCLAIMER

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OTHER SERVICES1 OS1: None OS2: OS3: OS4: OS5:
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REMARKS: RUN NUMBER 1 Log correlated to Solar log dated 21 Sep 2004 , provided by the client.
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Objective: To perforate the well at 3366m to 3373m MDKB using 2 1/8" Enerjet gun loaded with PowerSpiral charges. Before perforating, obtain static FBHP and FBHT. After perforating, couldn't flow well due to no tubing head pressure but continued to monitor well for 15min Static: FBHP = 3625psi. FBHT = 263.1degF

API Data: PowerSpiral charges, UN 0441
 Penetration: 27.3"
 Entrance Hole: 0.25 "
 Specialist: Paul Tarrant
 Operators: Eddy Mezenberg & John Light
 Performed by Schlumberger

RUN 1			RUN 2		
PROGRAM VERSION:		AUSL05148529	PROGRAM VERSION:		
FLUID LEVEL:		13C0-300	FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

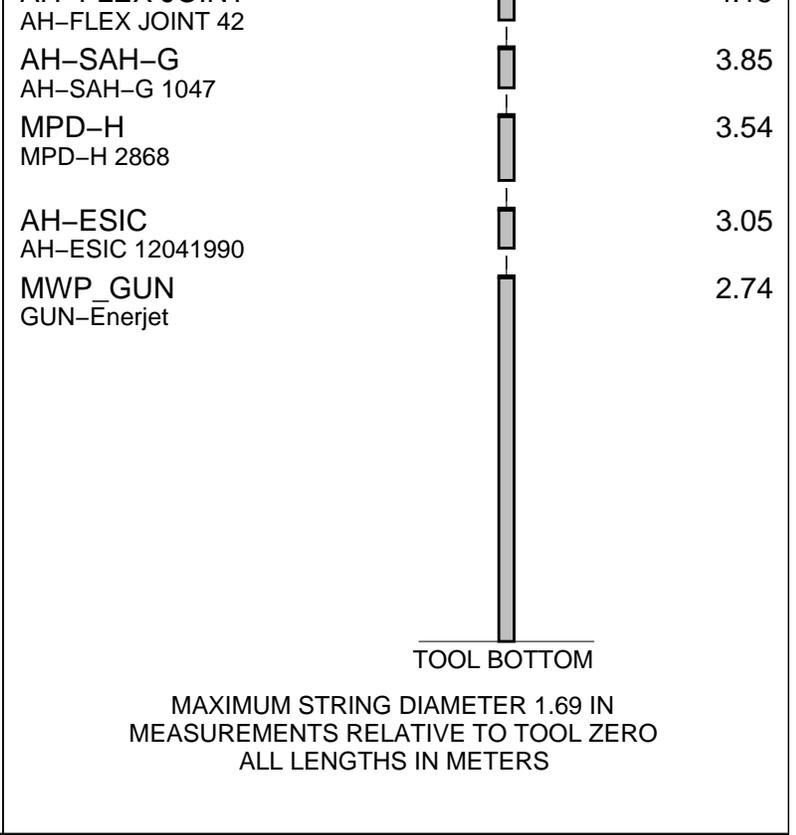
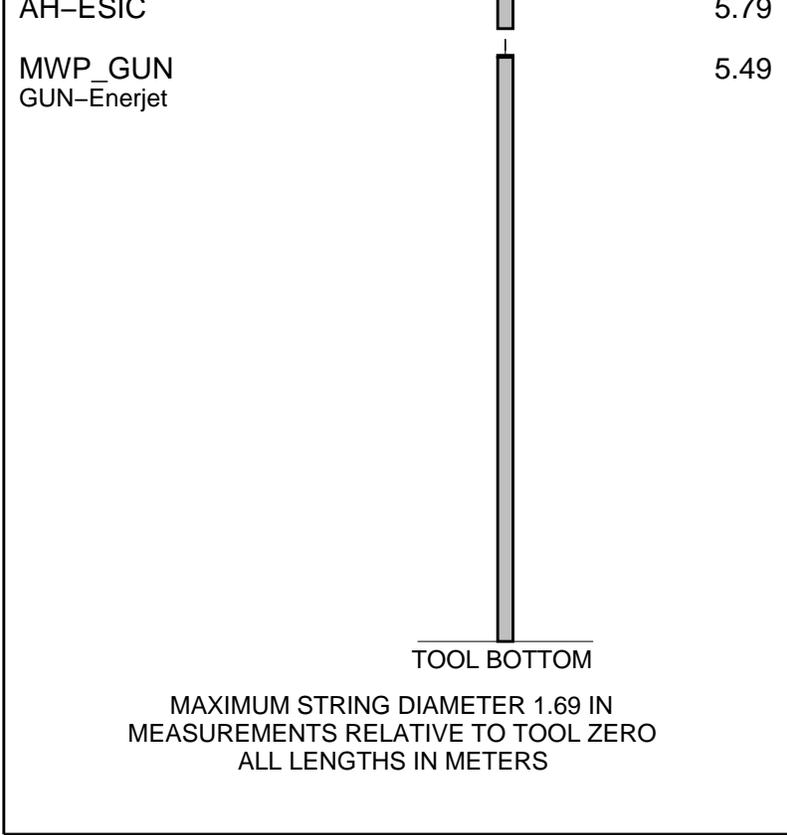
EQUIPMENT DESCRIPTION

RUN 1 RUN 2

SURFACE EQUIPMENT	SURFACE EQUIPMENT
MWPM-AA 37	MWPM-AA 37

DOWNHOLE EQUIPMENT

DOWNHOLE EQUIPMENT	DOWNHOLE EQUIPMENT
<p>AH-SWBS AH-SWBS 731 13.77</p> <p>AH-SWBS AH-SWBS 761 13.08</p> <p>AH-SWBS AH-SWBS 762 12.40</p> <p>AH-SWBS AH-SWBS 763 11.71</p> <p>MH-SWHS 11.02</p> <p>MWGT-AA MWPG-AA 24 MWGH-AA 19 10.69</p> <p style="margin-left: 100px;">MWPG GR 2.41</p> <p>MWPT-CA MWPH-AA 74 MWPS-AA 74 9.72</p> <p style="margin-left: 100px;">CCL SMWP Pres SMWP Temp Tension</p> <p style="margin-left: 100px;">TOOL ZERO</p> <p>AH-FLEX JOINT 6.90</p> <p>AH-SAH-G 6.59</p> <p>MPD-H MPD-H 2868 6.29</p>	<p>AH-SWBS AH-SWBS 731 11.02</p> <p>AH-SWBS AH-SWBS 761 10.34</p> <p>AH-SWBS AH-SWBS 762 9.65</p> <p>AH-SWBS AH-SWBS 763 8.97</p> <p>MH-SWHS MH-SWHS 726 8.28</p> <p>MWGT-AA MWPG-AA 24 MWGH-AA 19 7.95</p> <p style="margin-left: 100px;">MWPG GR 2.41</p> <p>MWPT-CA MWPH-AA 74 MWPS-AA 74 6.97</p> <p style="margin-left: 100px;">CCL SMWP Pres SMWP Temp Tension</p> <p style="margin-left: 100px;">TOOL ZERO</p> <p>AH-FLEX JOINT 4.15</p>

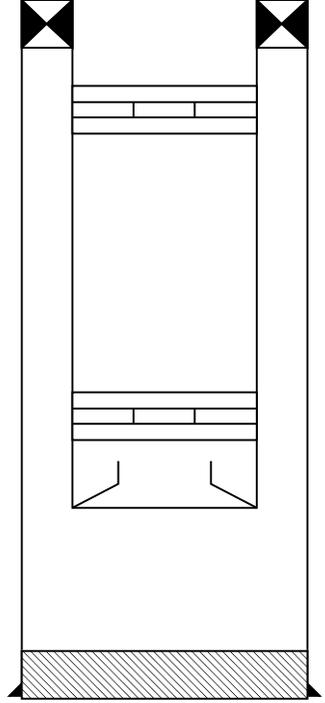


Client: ExxonMobil
Well: MLA A-10aST1
Field: Marlin
State: Victoria
Country: Australia

Rig Name: Marlin
Reference Datum: Kelly Bushing
Elevation: 27.9 m

Production String	(in)		(m)	Well Schematic	(m)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
Tubing Hanger	7.000	4.500	12.4		12.5	7.000	Casing String	
Tubing	4.500		12.4					
Shutin Valve	4.500		451.1					
Gas Lift Mandrel	4.500		485.5					
Gas Lift Mandrel	4.500		771.4					
Gas Lift Mandrel	4.500		1209.7					
Gas Lift Mandrel	4.500		1331.5					
Nipple	4.500		1352.1					

Packer	7.000	4.500	1700.0
Nipple	4.500		1719.0
Nipple	4.500		2673.5
Bell Nipple Guide	4.500		2679.7



2485.0	
3485.0	7.000

PBTD
Casing Shoe



MWPT 2 1/8" Enerjet Gun
Shooting Pass – 2nd Gun

MAXIS Field Log

Output DLIS Files

DEFAULT PERFO_025LUP FN:24 PRODUCER 27-Dec-2005 12:31 3390.3 M 3333.8 M

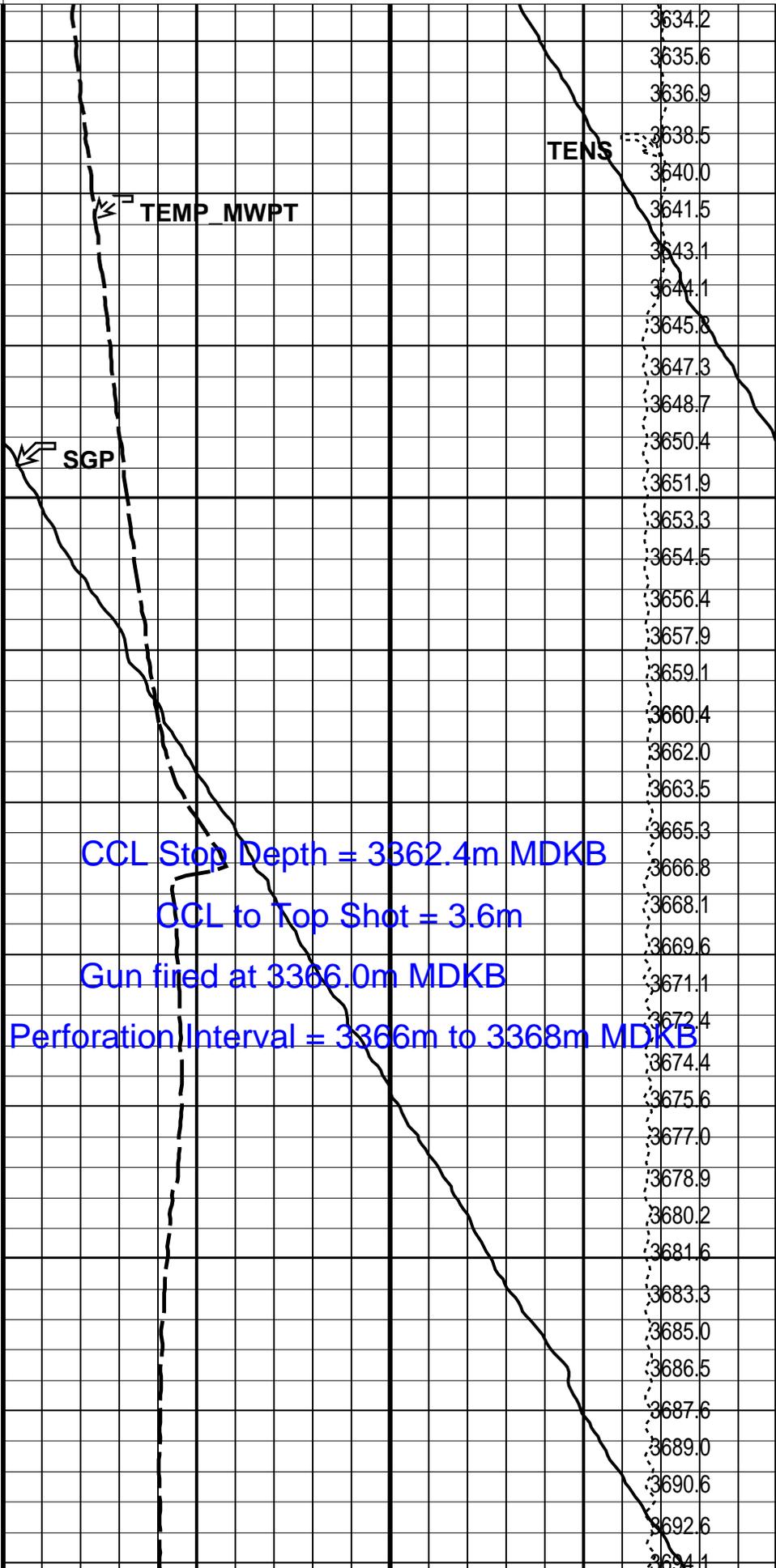
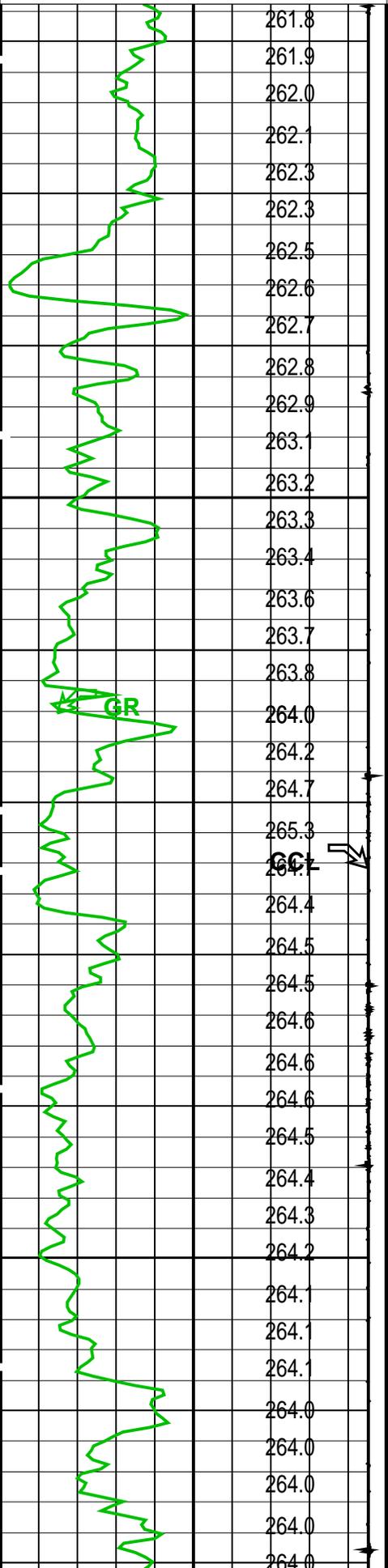
OP System Version: 13C0-300
MCM

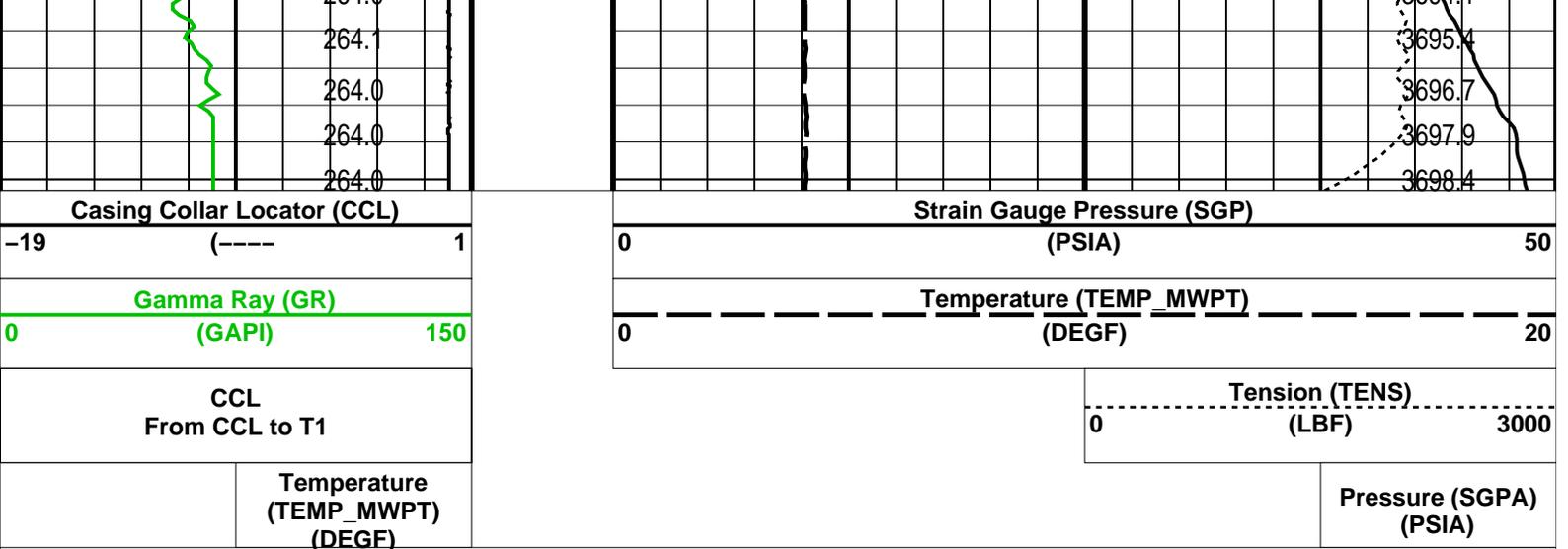
MWP_GUN SRC-2820-ASFS-WPP_t MWPT-CA SRC-2820-ASFS-WPP_t
MWGT-AA SRC-2820-ASFS-WPP_t

PIP SUMMARY

Time Mark Every 60 S

	Temperature (TEMP_MWPT) (DEGE)		Pressure (SGPA) (PSIA)
CCL From CCL to T1			Tension (TENS) (LBF) 3000
		0	





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: 27-Dec-2005 12:31

OP System Version: 13C0-300
MCM

MWP_GUN SRC-2820-ASFS-WPP_t MWPT-CA SRC-2820-ASFS-WPP_t
MWGT-AA SRC-2820-ASFS-WPP_t

Output DLIS Files

DEFAULT PERFO_025LUP FN:24 PRODUCER 27-Dec-2005 12:31



MWPT 2 1/8" Enerjet Gun
Correlation Pass - 2nd Gun

MAXIS Field Log

Output DLIS Files

DEFAULT PERFO_024LUP FN:23 PRODUCER 27-Dec-2005 12:22 3400.2 M 3342.0 M

OP System Version: 13C0-300
MCM

MWP_GUN SRC-2820-ASFS-WPP_t MWPT-CA SRC-2820-ASFS-WPP_t
MWGT-AA SRC-2820-ASFS-WPP_t

PIP SUMMARY

Time Mark Every 60 S

Temperature (TEMP_MWPT) (DEGF)

Pressure (SGPA) (PSIA)

(DEGF)

CCL
From CCL to T1

Gamma Ray (GR)
(GAPI) 0 150

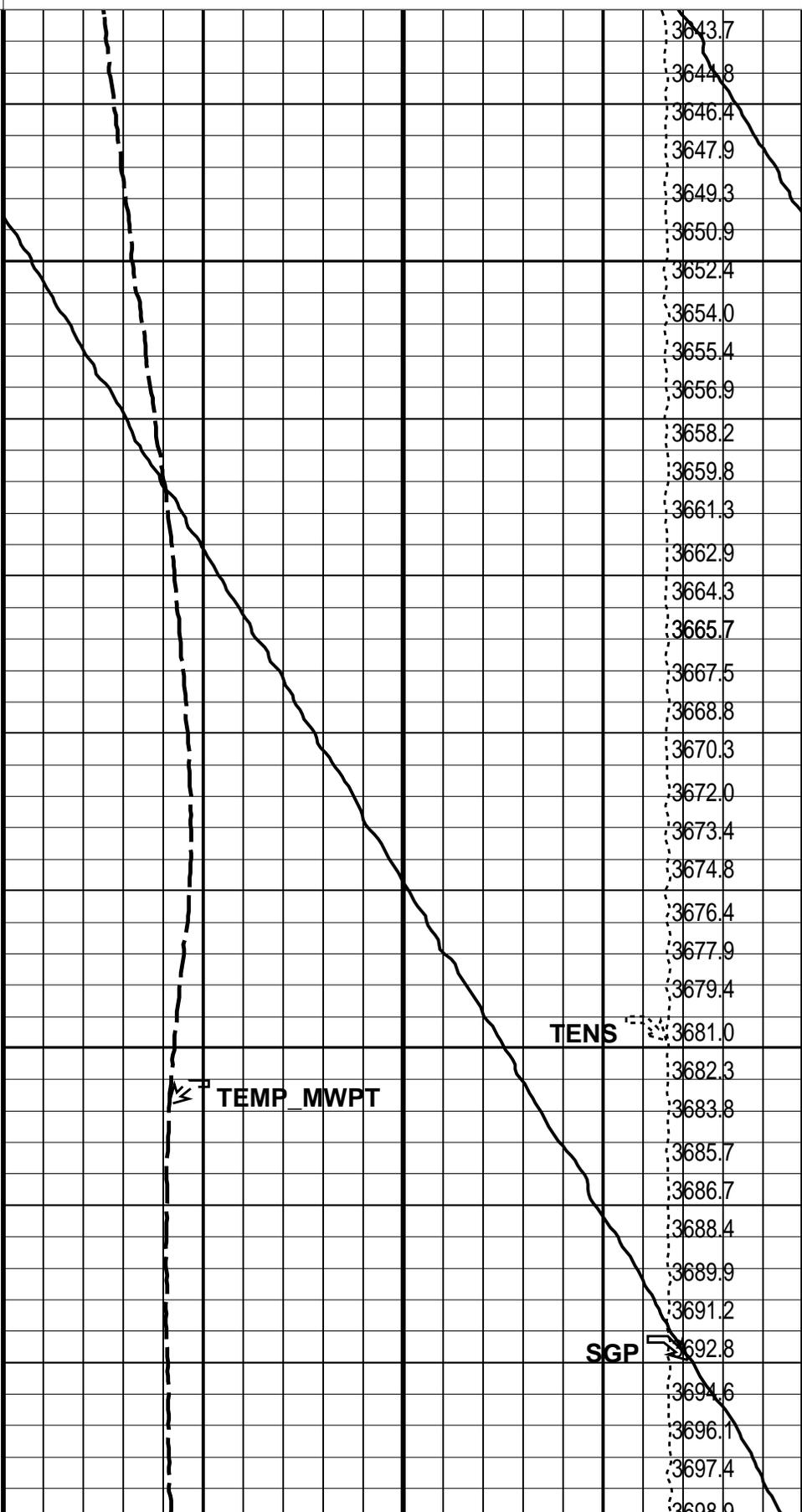
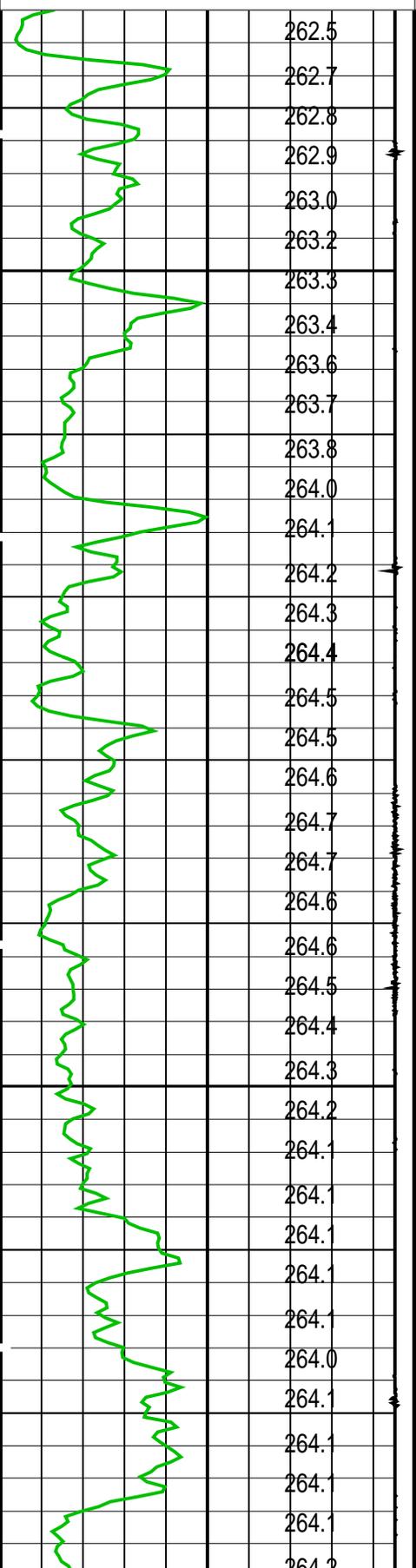
Casing Collar Locator (CCL)
-19 (----) 1

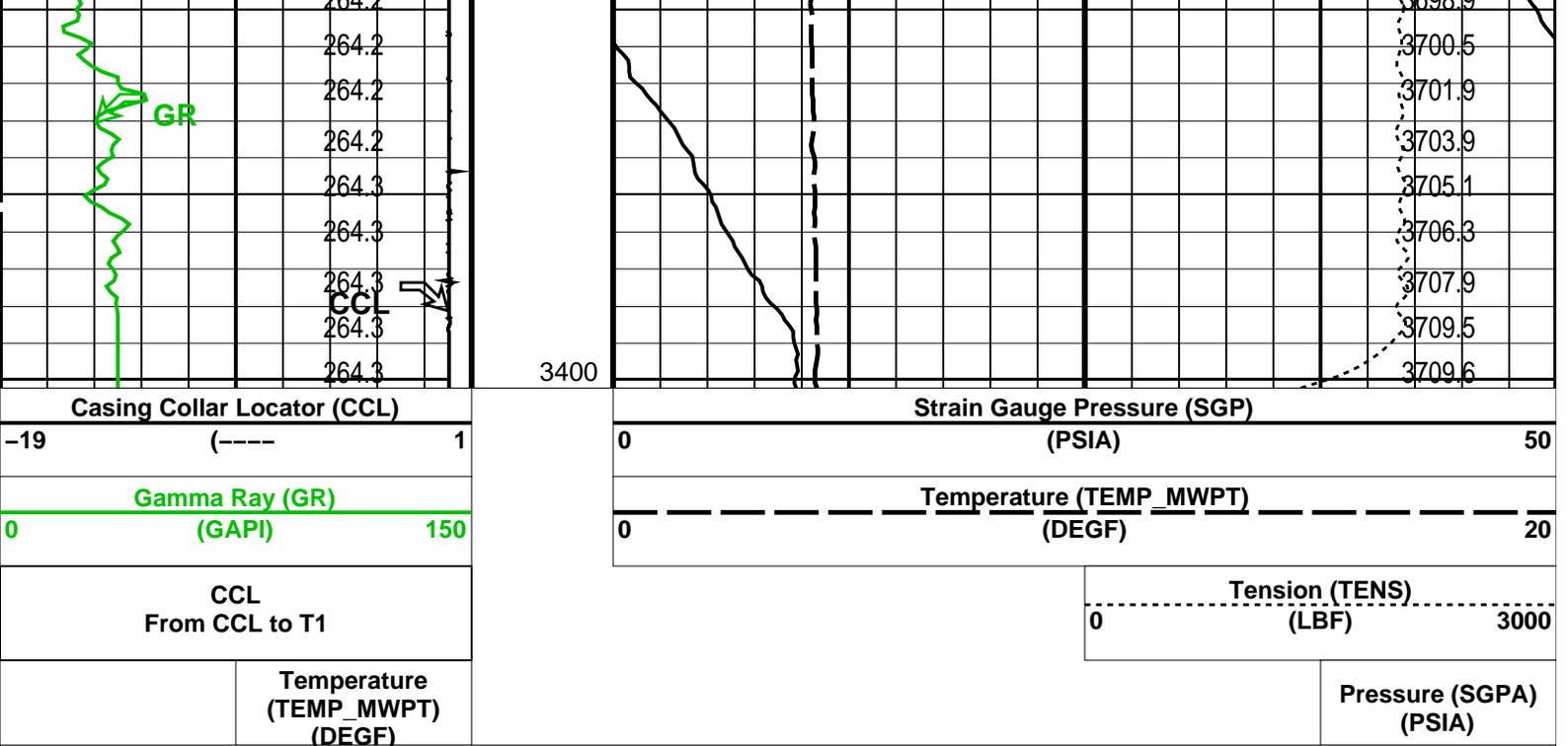
(PSIA)

Tension (TENS)
(LBF) 0 3000

Temperature (TEMP_MWPT)
(DEGF) 0 20

Strain Gauge Pressure (SGP)
(PSIA) 0 50





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: 27-Dec-2005 12:22

OP System Version: 13C0-300
MCM

MWP_GUN	SRC-2820-ASFS-WPP_1	MWPT-CA	SRC-2820-ASFS-WPP_1
MWGT-AA	SRC-2820-ASFS-WPP_1		

Output DLIS Files

DEFAULT	PERFO_024LUP	FN:23	PRODUCER	27-Dec-2005 12:22
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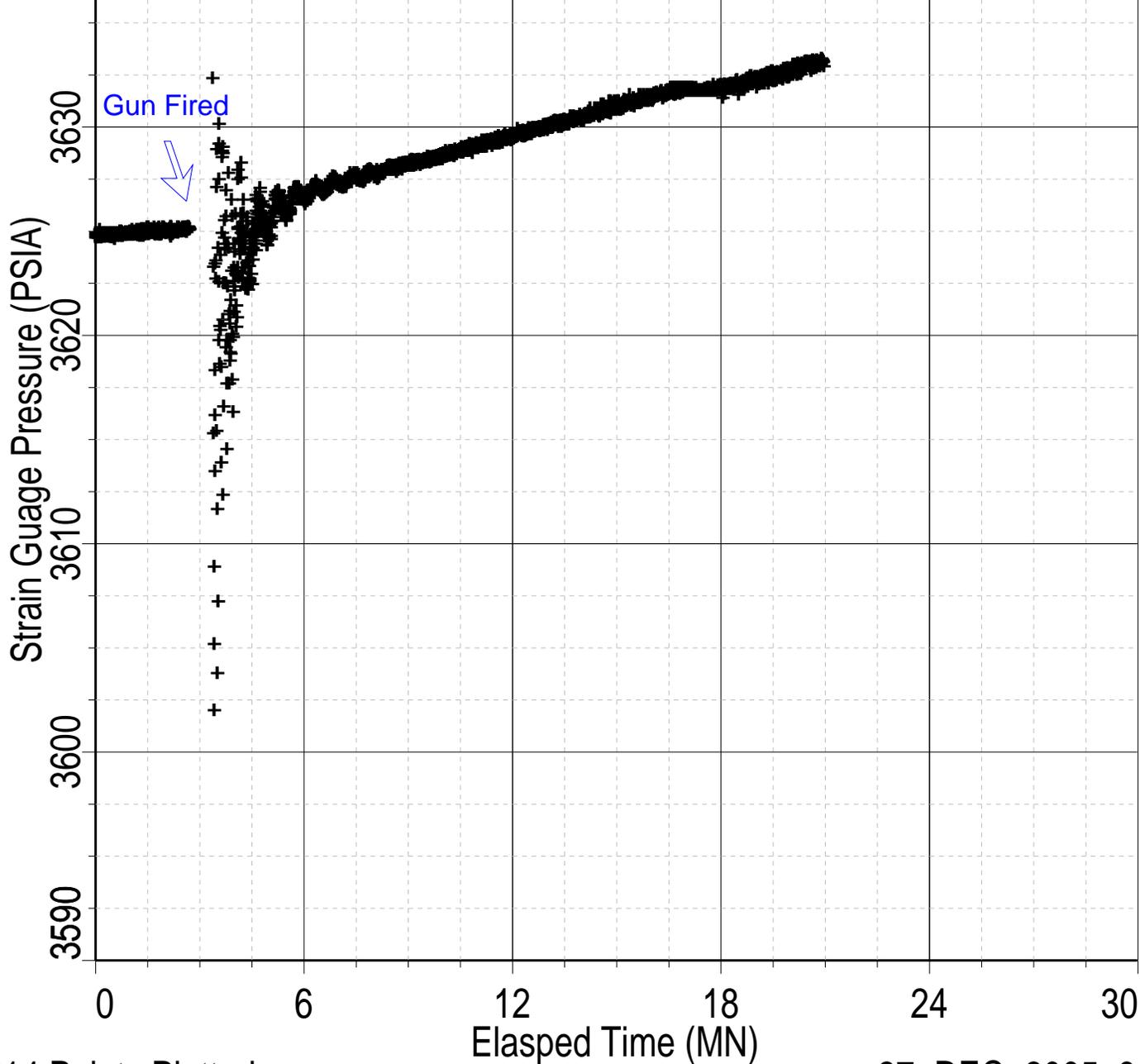


MWPT 2 1/8" Enerjet Gun
Station Log - 1st Gun

MAXIS Field Log

Index: 18409.9 - 24792.9 M





2514 Points Plotted

27-DEC-2005 9:27

Output DLIS Files

DEFAULT PERFO_015LTP FN:14 PRODUCER 27-Dec-2005 08:54 3364.6 M 3.2 M

OP System Version: 13C0-300

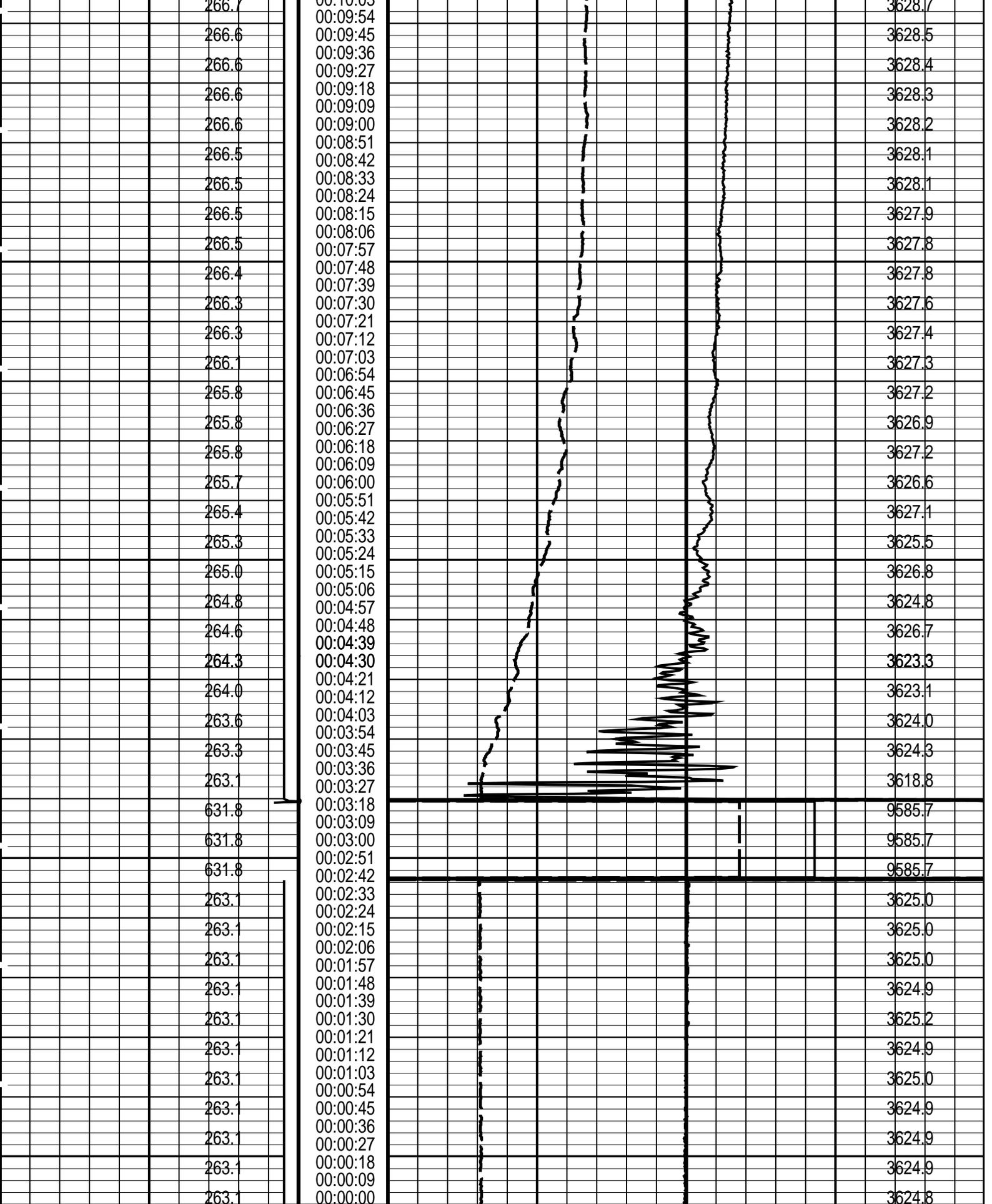
MCM

MWP_GUN SRC-2820-ASFS-WPP_t MWPT-CA SRC-2820-ASFS-WPP_t
 MWGT-AA SRC-2820-ASFS-WPP_t

PIP SUMMARY

Time Mark Every 60 S

Temperature (TEMP_MWPT_SL) (DEGF)		Pressure (SGPA_SL) (PSIA)	
CCL From CCL to T1	Firing Sequence State (FSS SL) (----)	Temperature (TEMP_MWPT_SL) (DEGF)	
	0 1024	0	20
Casing Collar Locator (CCL_SL) (----)	Elapsed Time (ETIM) (MN)	Strain Gauge Pressure (SGP_SL) (PSIA)	
-19	1	0	50



-19 (----) 1 Casing Collar Locator (CCL_SL) Elapsed Time (ETIM) (S) 0 50 Strain Gauge Pressure (SGP_SL) (PSIA)

Firing Sequence

CCL From CCL to T1	State (FSS SL)	0	Temperature (TEMP_MWPT_SL) (DEGF)	20
	(----	0	1024	
	Temperature (TEMP_MWPT_SL) (DEGF)			Pressure (SGPA_SL) (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_SL Vertical Scale: 1" per 60S Graphics File Created: 27-Dec-2005 08:54

OP System Version: 13C0-300
MCM

MWP_GUN	SRC-2820-ASFS-WPP_t	MWPT-CA	SRC-2820-ASFS-WPP_t
MWGT-AA	SRC-2820-ASFS-WPP_t		

Output DLIS Files

DEFAULT PERFO_015LTP FN:14 PRODUCER 27-Dec-2005 08:54



MWPT 2 1/8" Enerjet Gun
Shooting Pass - 1st Gun

MAXIS Field Log

Output DLIS Files

DEFAULT PERFO_014LUP FN:13 PRODUCER 27-Dec-2005 08:50

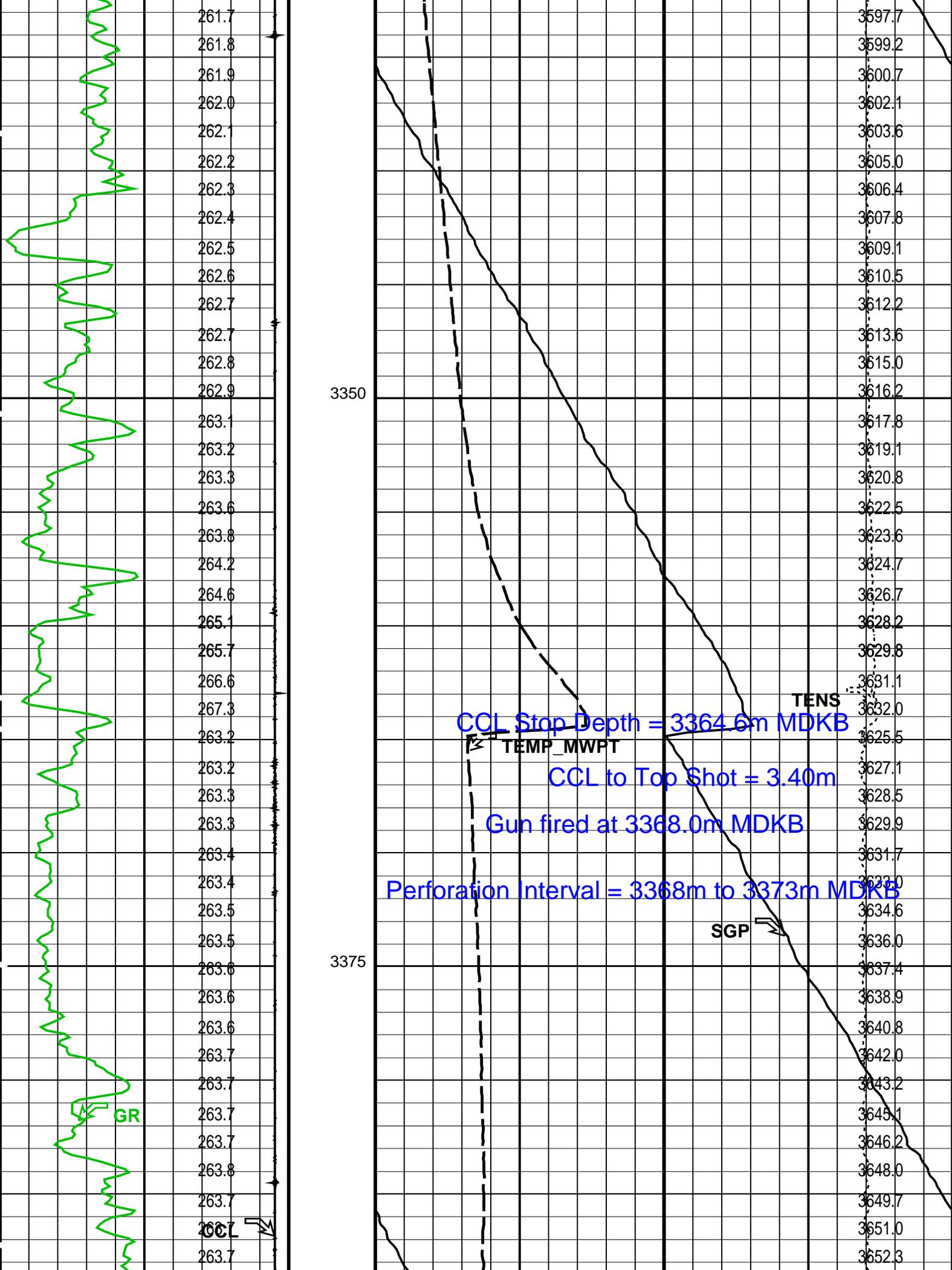
OP System Version: 13C0-300
MCM

MWP_GUN	SRC-2820-ASFS-WPP_t	MWPT-CA	SRC-2820-ASFS-WPP_t
MWGT-AA	SRC-2820-ASFS-WPP_t		

PIP SUMMARY

Time Mark Every 60 S

CCL From CCL to T1	Temperature (TEMP_MWPT) (DEGF)		Pressure (SGPA) (PSIA)
			Tension (TENS) (LBF)
		0	3000
Gamma Ray (GR) (GAPI)		0	261.7
		0	150
Casing Collar Locator (CCL)			
		0	1
		0	261.7
		0	3596.4



261.7
261.8
261.9
262.0
262.1
262.2
262.3
262.4
262.5
262.6
262.7
262.7
262.8
262.9
263.1
263.2
263.3
263.6
263.8
264.2
264.6
265.1
265.7
266.6
267.3
263.2
263.2
263.3
263.3
263.4
263.4
263.5
263.5
263.6
263.6
263.6
263.7
263.7
263.7
263.7
263.8
263.7
263.7

3597.7
3599.2
3600.7
3602.1
3603.6
3605.0
3606.4
3607.8
3609.1
3610.5
3612.2
3613.6
3615.0
3616.2
3617.8
3619.1
3620.8
3622.5
3623.6
3624.7
3626.7
3628.2
3629.8
3631.1
3632.0
3625.5
3627.1
3628.5
3629.9
3631.7
3633.0
3634.6
3636.0
3637.4
3638.9
3640.8
3642.0
3643.2
3645.1
3646.2
3648.0
3649.7
3651.0
3652.3

3350

3375

CCL Stop Depth = 3364.6m MDKB

CCL to Top Shot = 3.40m

Gun fired at 3368.0m MDKB

Perforation Interval = 3368m to 3373m MDKB

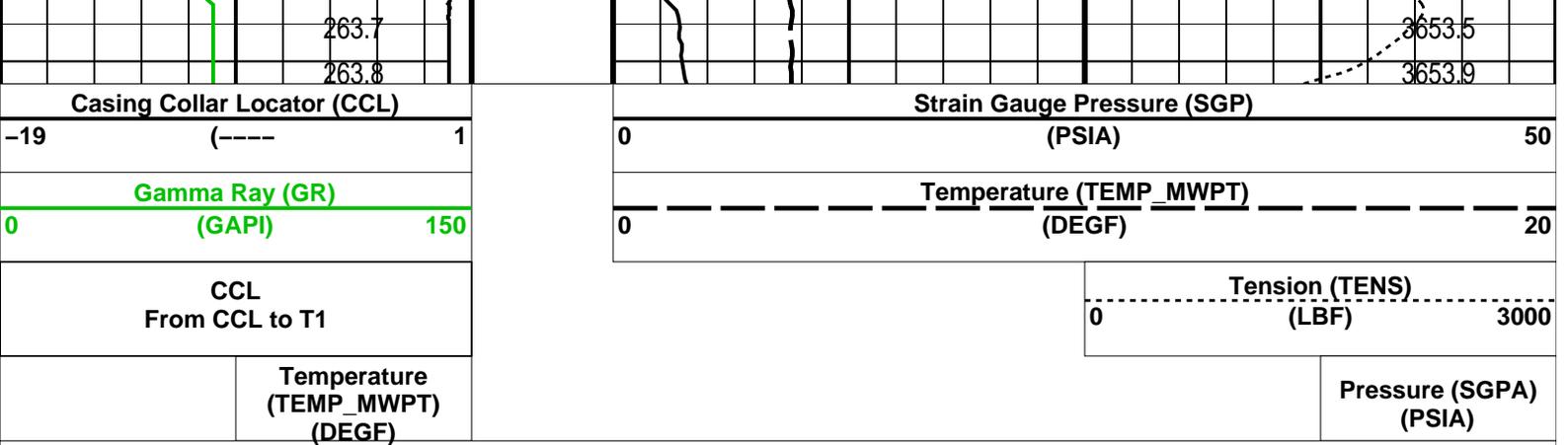
TENS

TEMP_MWPT

SGP

GR

CCL



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: 27-Dec-2005 08:50

OP System Version: 13C0-300
MCM

MWP_GUN	SRC-2820-ASFS-WPP_t	MWPT-CA	SRC-2820-ASFS-WPP_t
MWGT-AA	SRC-2820-ASFS-WPP_t		

Output DLIS Files

DEFAULT	PERFO_014LUP	FN:13	PRODUCER	27-Dec-2005 08:50
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MWPT 2 1/8" Enerjet Gun
Correlation Pass - 1st Gun

MAXIS Field Log

Output DLIS Files

DEFAULT	PERFO_013LUP	FN:12	PRODUCER	27-Dec-2005 08:41	3400.0 M	3329.9 M
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OP System Version: 13C0-300
MCM

MWP_GUN	SRC-2820-ASFS-WPP_t	MWPT-CA	SRC-2820-ASFS-WPP_t
MWGT-AA	SRC-2820-ASFS-WPP_t		

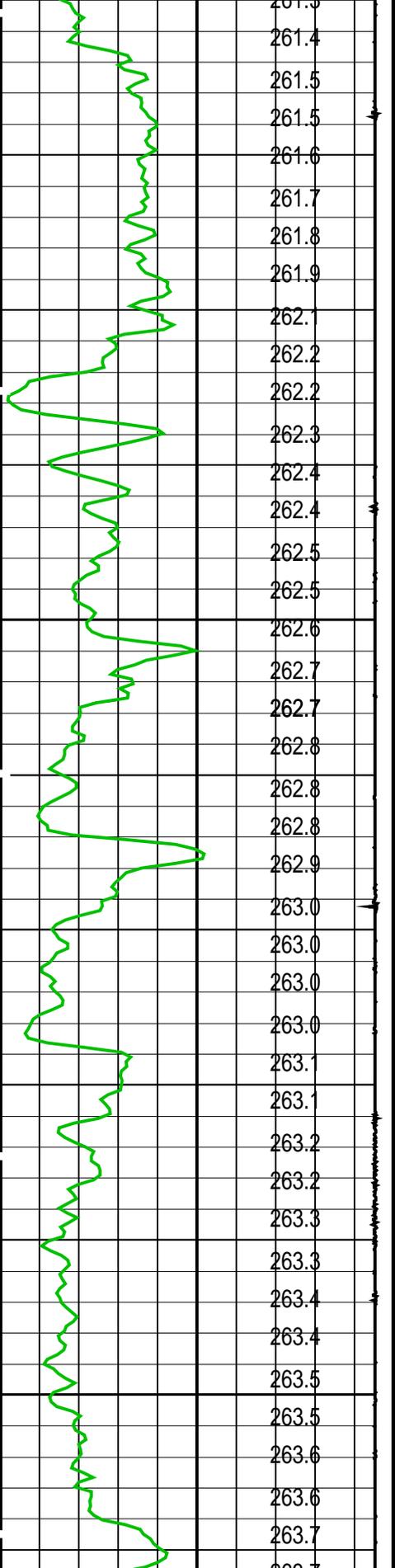
PIP SUMMARY

Time Mark Every 60 S



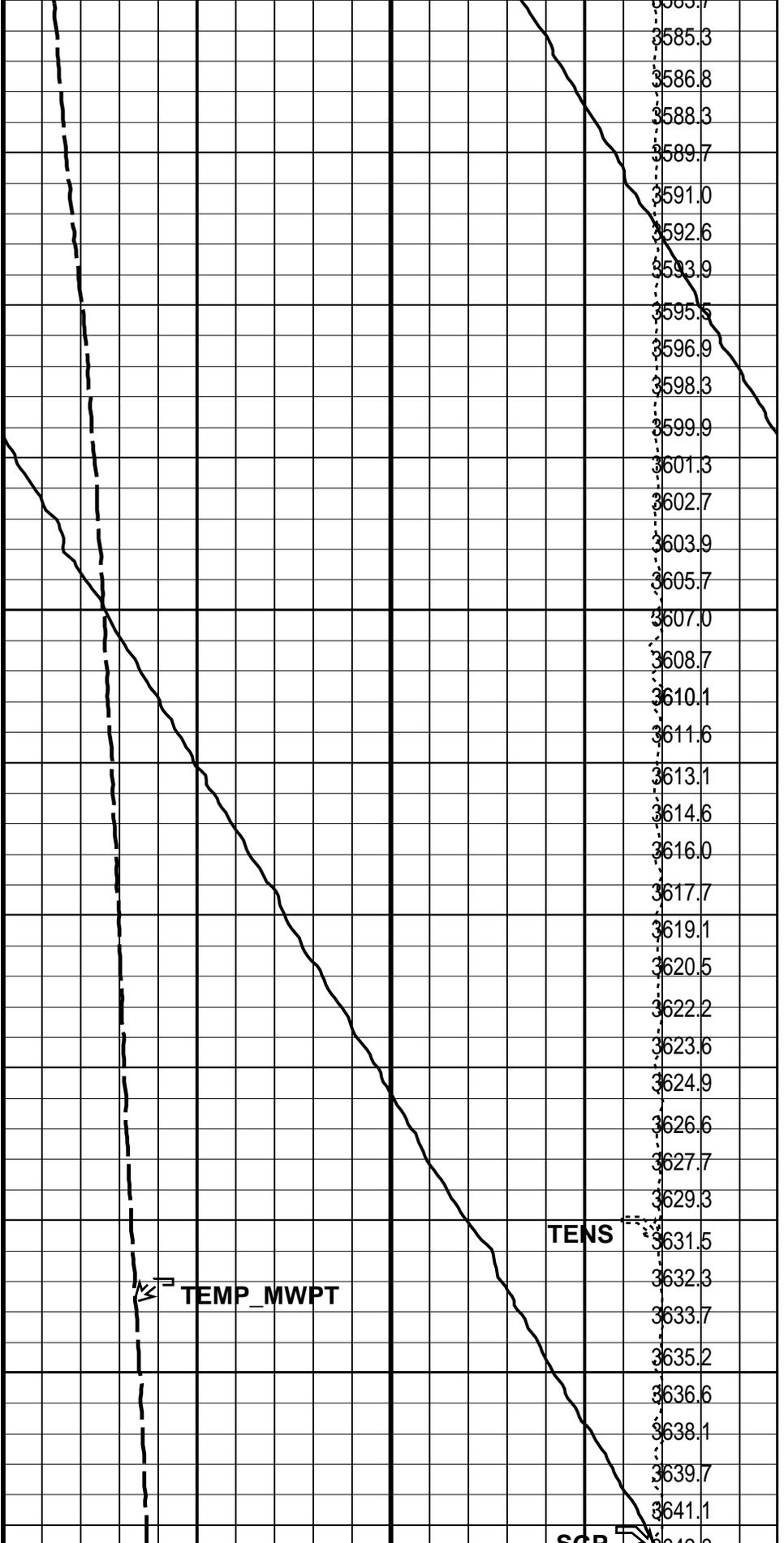
Gamma Ray (GR)
 0 (GAPI) 150

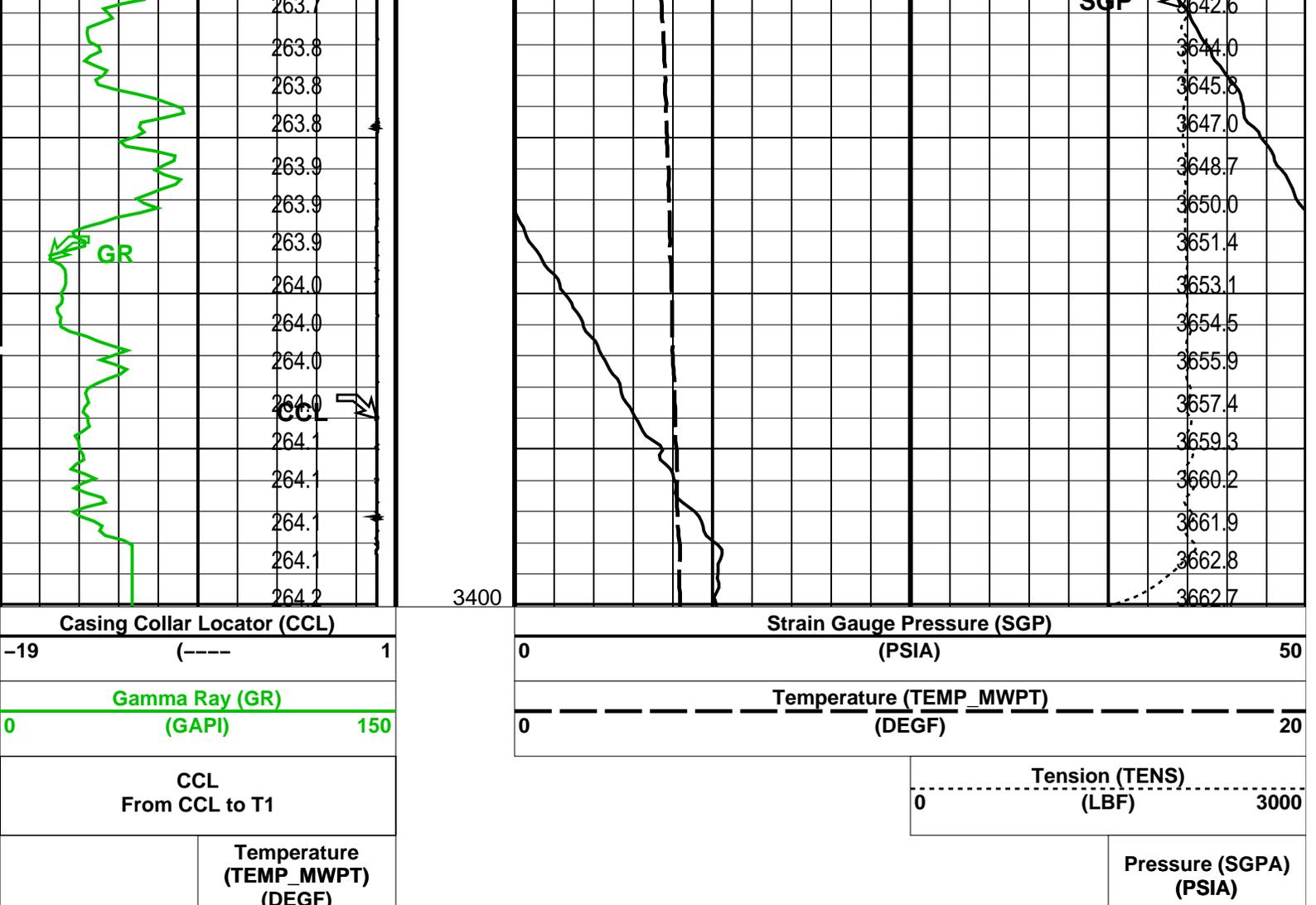
Casing Collar Locator (CCL)
 -19 (----) 1



Temperature (TEMP_MWPT)
 0 (DEGF) 20

Strain Gauge Pressure (SGP)
 0 (PSIA) 50





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: 27-Dec-2005 08:41

OP System Version: 13C0-300
MCM

MWP_GUN	SRC-2820-ASFS-WPP_1	MWPT-CA	SRC-2820-ASFS-WPP_1
MWGT-AA	SRC-2820-ASFS-WPP_1		

Output DLIS Files

DEFAULT	PERFO_013LUP	FN:12	PRODUCER	27-Dec-2005 08:41
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Company: ExxonMobil		Schlumberger
Well: MLA A-10aST1		
Field: Marlin		
Rig: Crane / Prod 4		
Country: Australia		

2 1/8" Enerjet Gun
MWPT
Perforating Record