



## Schlumberger

Company: **ExxonMobil**

Well: **MLA A-10aST1**

Field: **Marlin**

# Rig: Crane / Prod 4

Country: **Australia**

# 2 1/8" Enerjet Gun

# MWPT

## Perforating Record

## Gippsland Basin

## Bass Strait

Elev.: K.B. 27.9 m

G.L. -59 m

D.F. 27.9 m

Permanent Datum:	Mean Sea Level	Elev.:	0.0 m
Measured From:	Kelly Bushing		27.9 m above Perm Datum

Drilling Measured From:

Kelly Bushing

Elev.: 0.0 m

27.9 m above Perm. Datum

State: Victoria	Max. Well Deviation 45 deg
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Longitude  
48 13' 09.81" E

Latitude 38° 13' 55.49" S

Logging Date

Crane / Prod 4

## Marlin

## Gippsland Basin

MLA A-10aST1

ExxonMobil

<h1>2 1/8" Enerjet Gun</h1> <h2>MWPT</h2> <h3>Perforating Record</h3>			
<b>LOCATION</b>		<b>Elev.:</b> K.B.    27.9 m G.L.    -59 m D.F.    27.9 m	
Gippsland Basin Bass Strait			
Permanent Datum: <u>Mean Sea Level</u> Log Measured From: <u>Kelly Bushing</u> Drilling Measured From: <u>Kelly Bushing</u>		Elev.: <u>0.0 m</u> 27.9 m    above Perm. Datum	
State:                      Victoria	Max. Well Deviation 45 deg	Longitude 148 13' 09.81" E	Latitude 38 13' 55.49" S

PVT DATA			
Oil Density	Run 1	Run 2	Run 3
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	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		8.45	
Unit Number	Location			
Recorded By	Paul Tarrant			
Witnessed By	Barrie White			

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: 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.

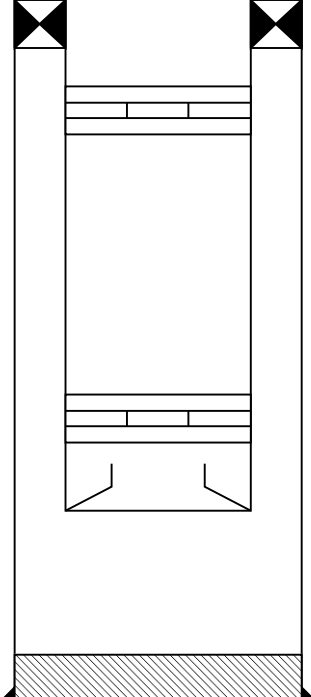
**DISCLAIMER**

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 Solar log dated 21 Sep 2004 , provided by the client.
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

Status: DTH = 3620psi, FBHT = 267.4degF					
After Shooting: FBHP = 3632psi, FBHT = 267.4degF					
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: FLUID LEVEL:			PROGRAM VERSION: FLUID LEVEL:		
AUSL05148529 13C0-300					
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		
AH-SWBS AH-SWBS 731		13.77	AH-SWBS AH-SWBS 731		11.02
AH-SWBS AH-SWBS 761		13.08	AH-SWBS AH-SWBS 761		10.34
AH-SWBS AH-SWBS 762		12.40	AH-SWBS AH-SWBS 762		9.65
AH-SWBS AH-SWBS 763		11.71	AH-SWBS AH-SWBS 763		8.97
MH-SWHS		11.02	MH-SWHS		8.28
MWGT-AA MWPG-AA 24 MWGH-AA 19	 MWPG GR ____ 2.41	10.69	MH-SWHS MH-SWHS 726 MWGT-AA MWPG-AA 24 MWGH-AA 19	 MWPG GR ____ 2.41	7.95
MWPT-CA MWPH-AA 74 MWPS-AA 74	 CCL SMWP Pres SMWP Temp Tension ____ TOOL ZERO	9.72	MWPT-CA MWPH-AA 74 MWPS-AA 74	 CCL SMWP Pres SMWP Temp Tension ____ TOOL ZERO	6.97
AH-FLEX JOINT		6.90	AH-FLEX JOINT		4.15
AH-SAH-G		6.59			
MPD-H MPD-H 2868		6.29			
AH-FLEX JOINT		5.75			



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

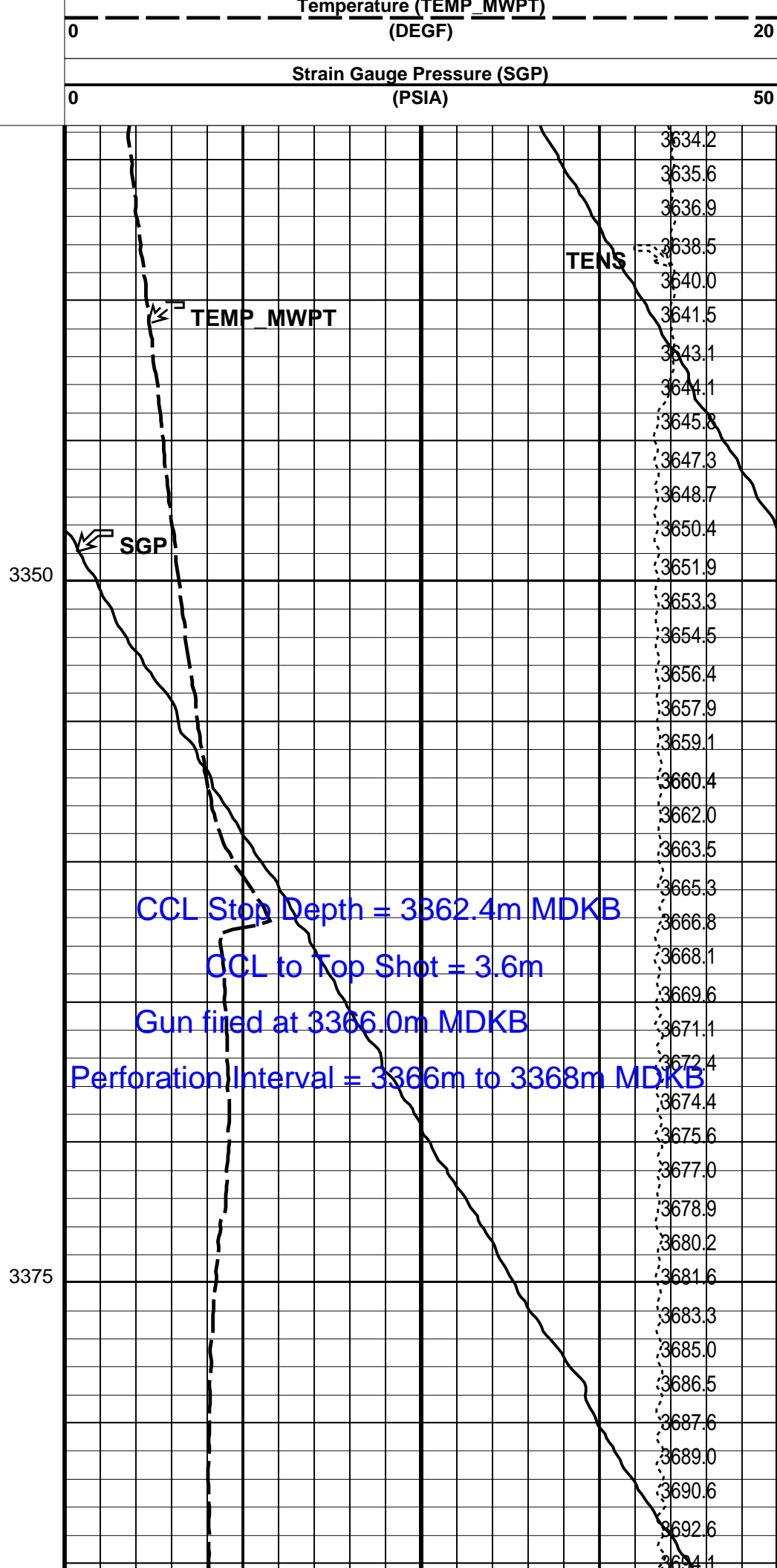
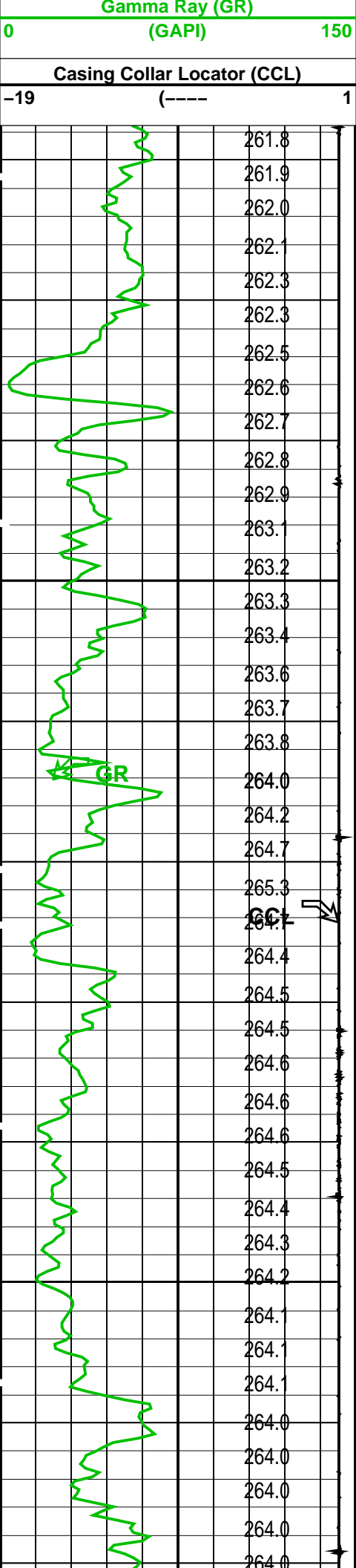
DEFAULT      PERFO\_025LUP      FN:24      PRODUCER      27-Dec-2005 12:31      3390.3 M      3333.8 M

OP System Version: 13C0-300  
MCM

MWP\_GUN      SRC-2820-ASFS-WPP\_1      MWPT-CA      SRC-2820-ASFS-WPP\_1  
MWGT-AA      SRC-2820-ASFS-WPP\_1

PIP SUMMARY

Time Mark Every 60 S				Temperature (TEMP_MWPT) (DEGE)		Pressure (SGPA) (PSIA)	
CCL From CCL to T1				Tension (TENS) (LBF)		0	3000







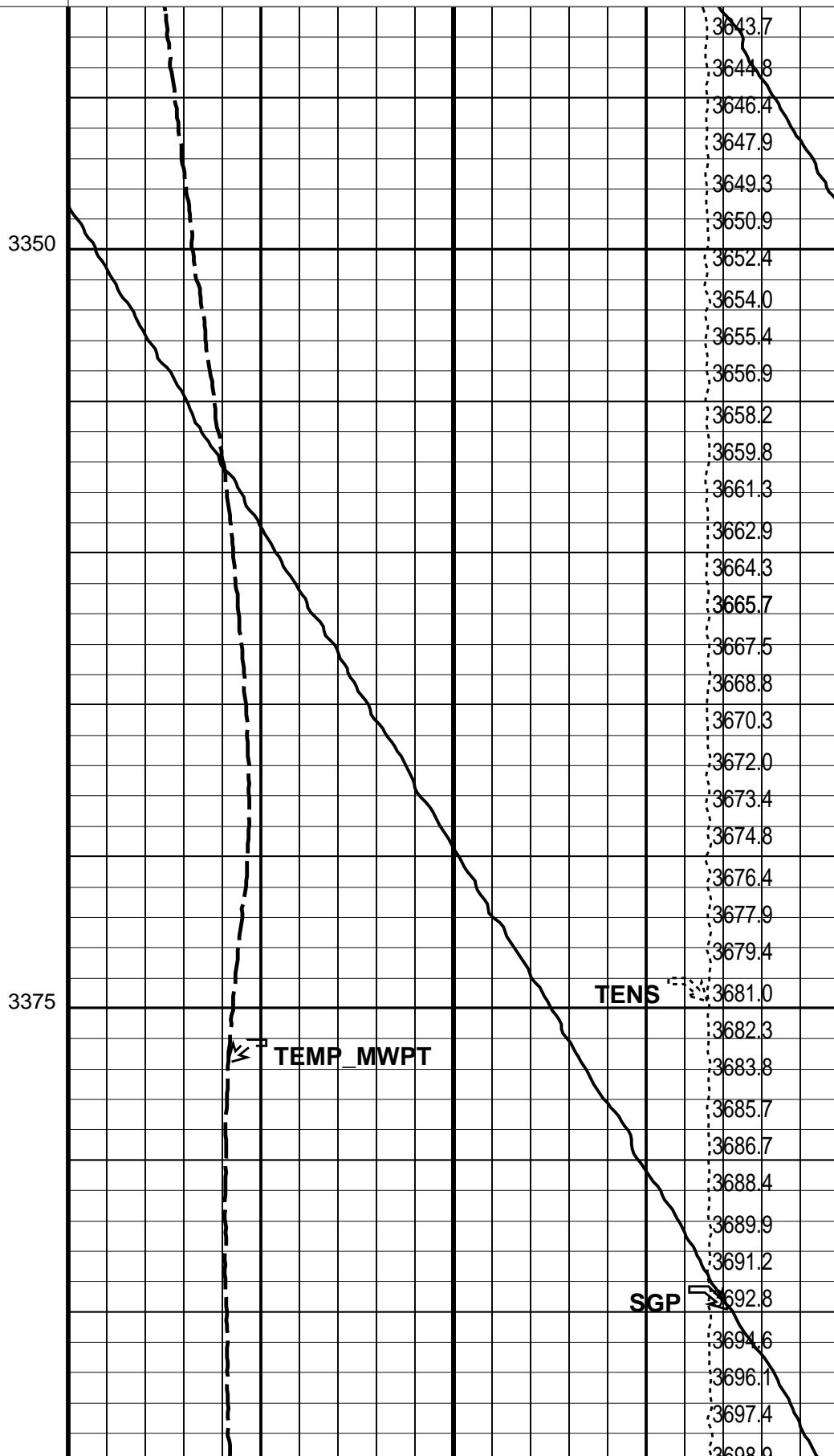
(PSIA)

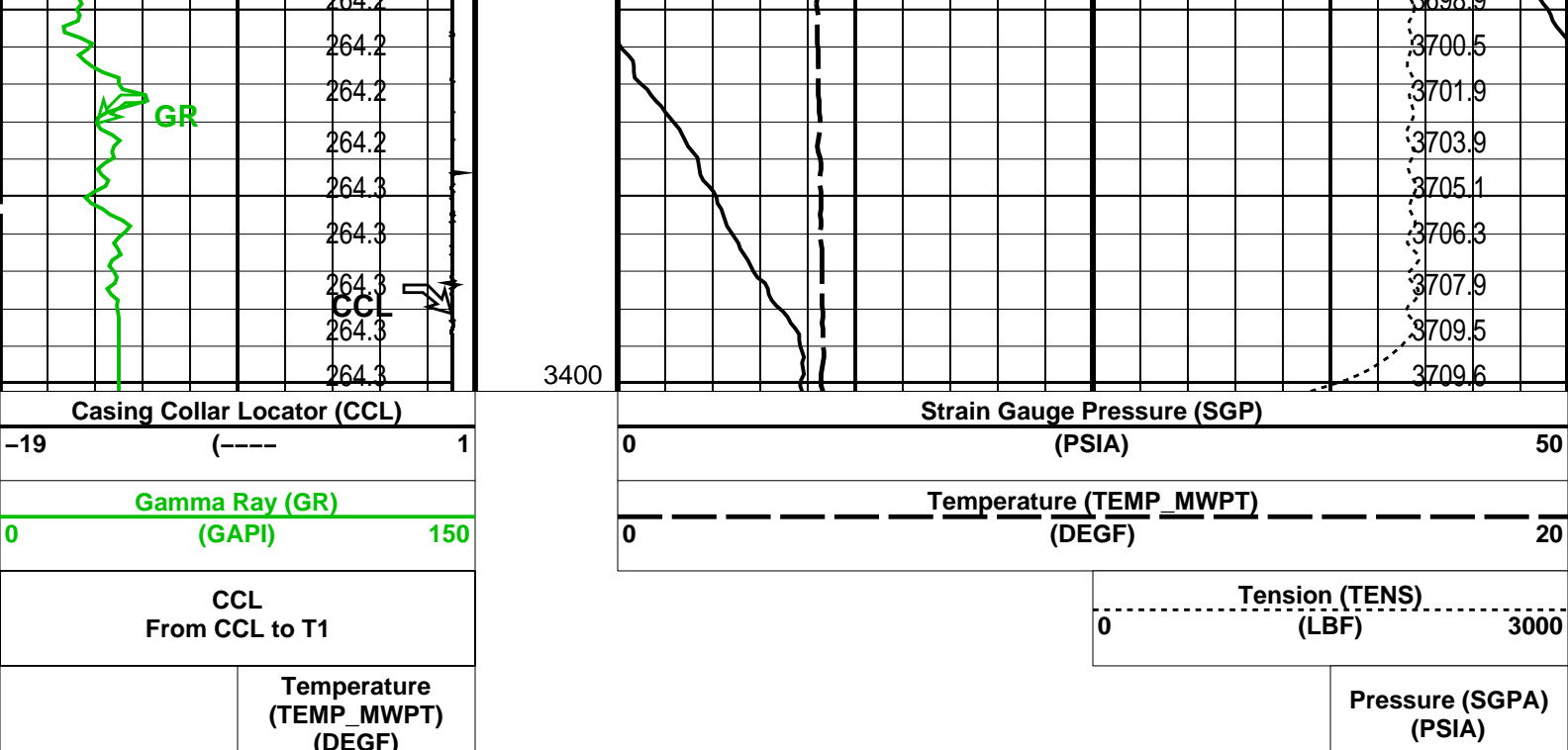
**Tension (TENS)**  
0 (LBF) 3000

Temperature (TEMP\_MWPT)  
(DEGF)

### Strain Gauge Pressure (SGP)

0 (PSIA) 50





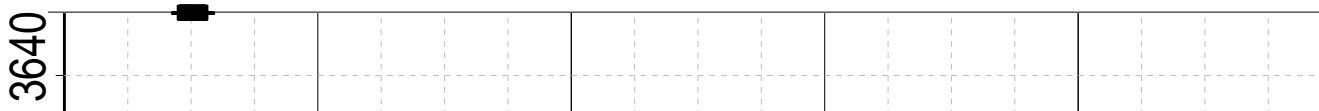
Time Mark Every 60 S			
Parameters			
DLIS Name	Description	Value	
MWPT-CA: MEASUREMENT WHILE PERFORATING TOOL			
DEVI_FL_CORR	Deviation Angle for Flow Line Correction	0	DEG
FLD	Flow Line Density	1	G/C3
MWPT_NULL_SOURCE	MWPT NULL Temperature Source	TEMS	
MWPT_NULL_TEMP	MWPT NULL Temperature	0.0	DEGC
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_t	MWPT-CA	SRC-2820-ASFS-WPP_t
MWGT-AA	SRC-2820-ASFS-WPP_t		
Output DLIS Files			
DEFAULT	PERFO_024LUP	FN:23 PRODUCER	27-Dec-2005 12:22

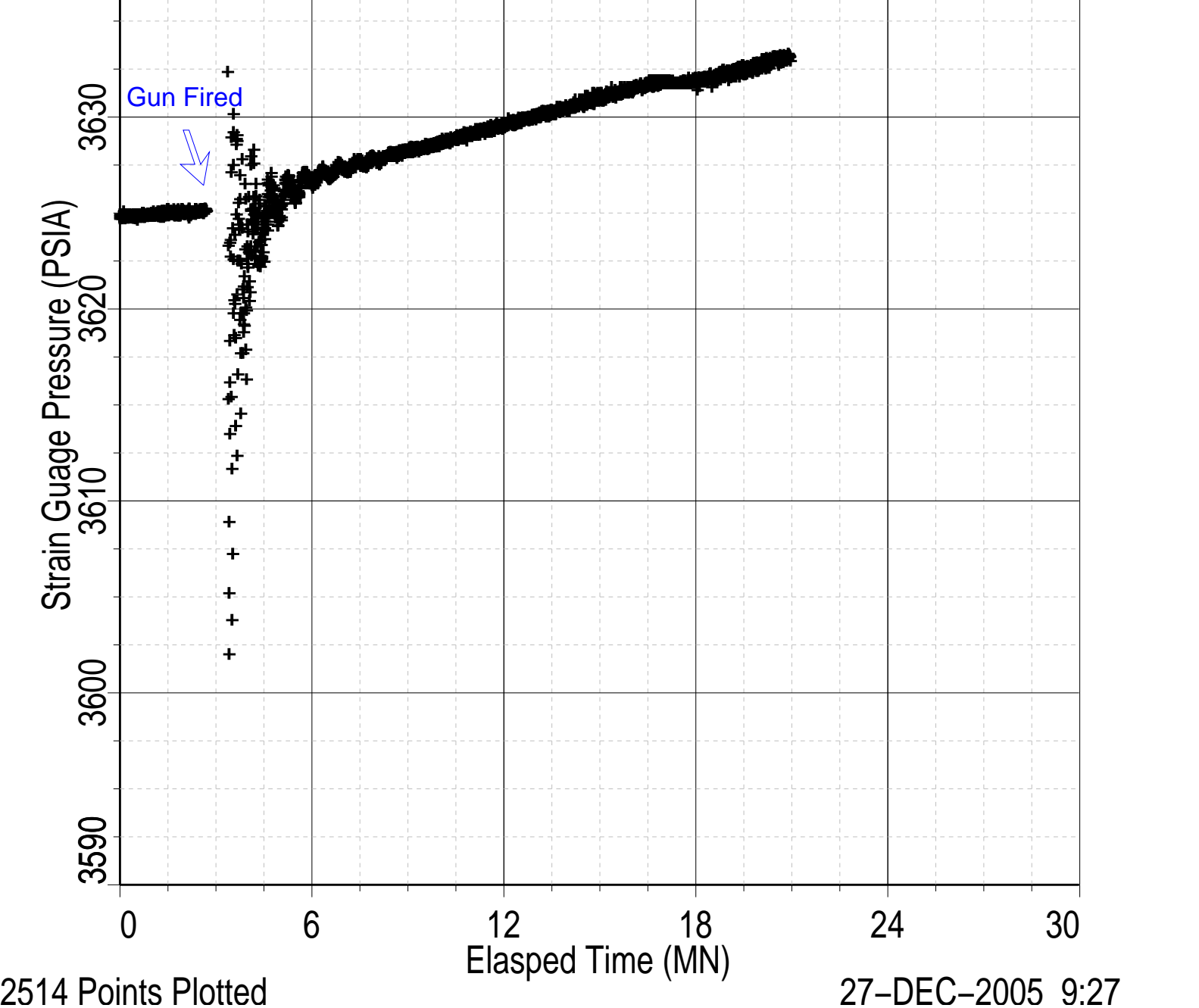
**Schlumberger**

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

MAXIS Field Log

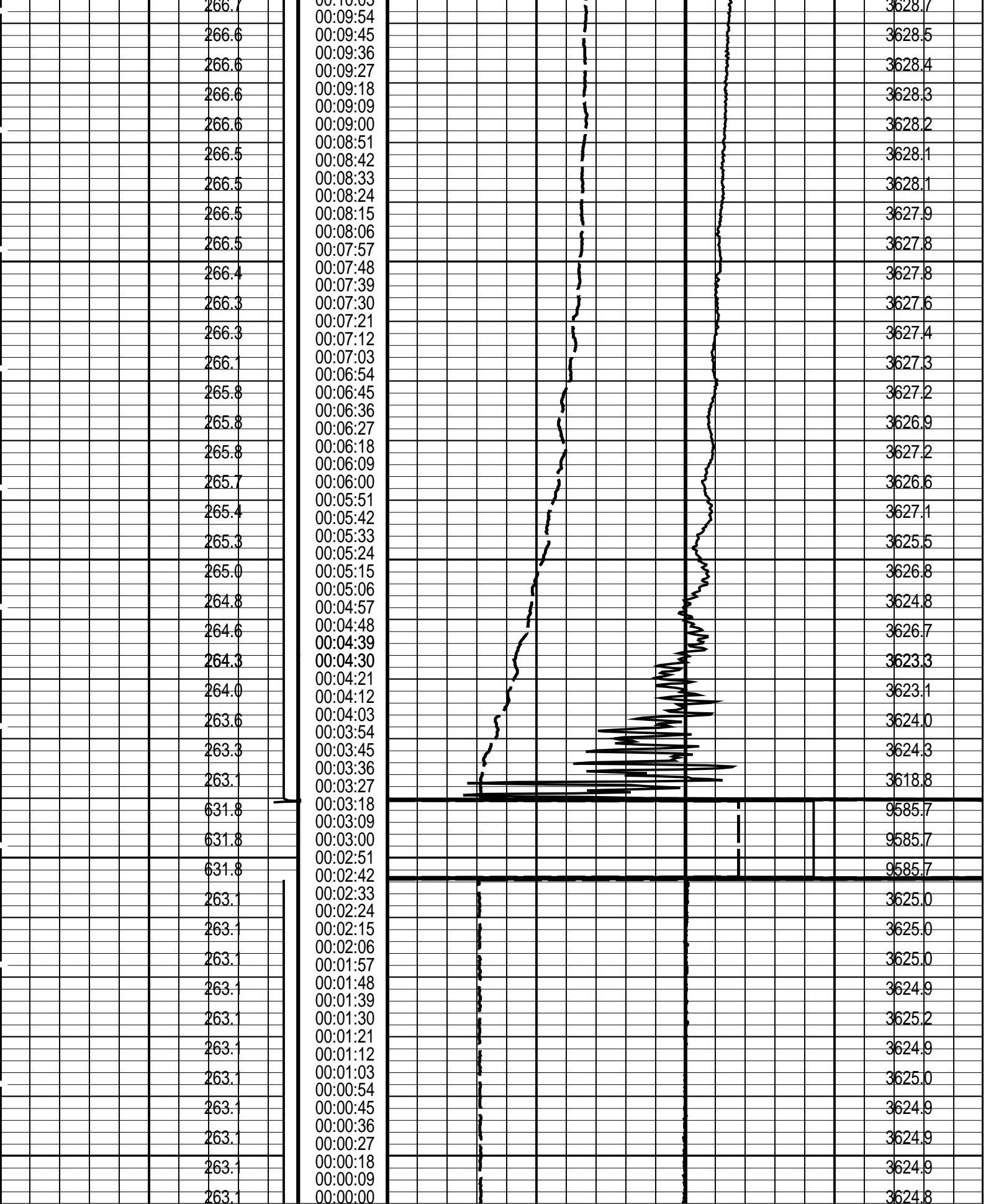
Index: 18409.9 – 24792.9 M






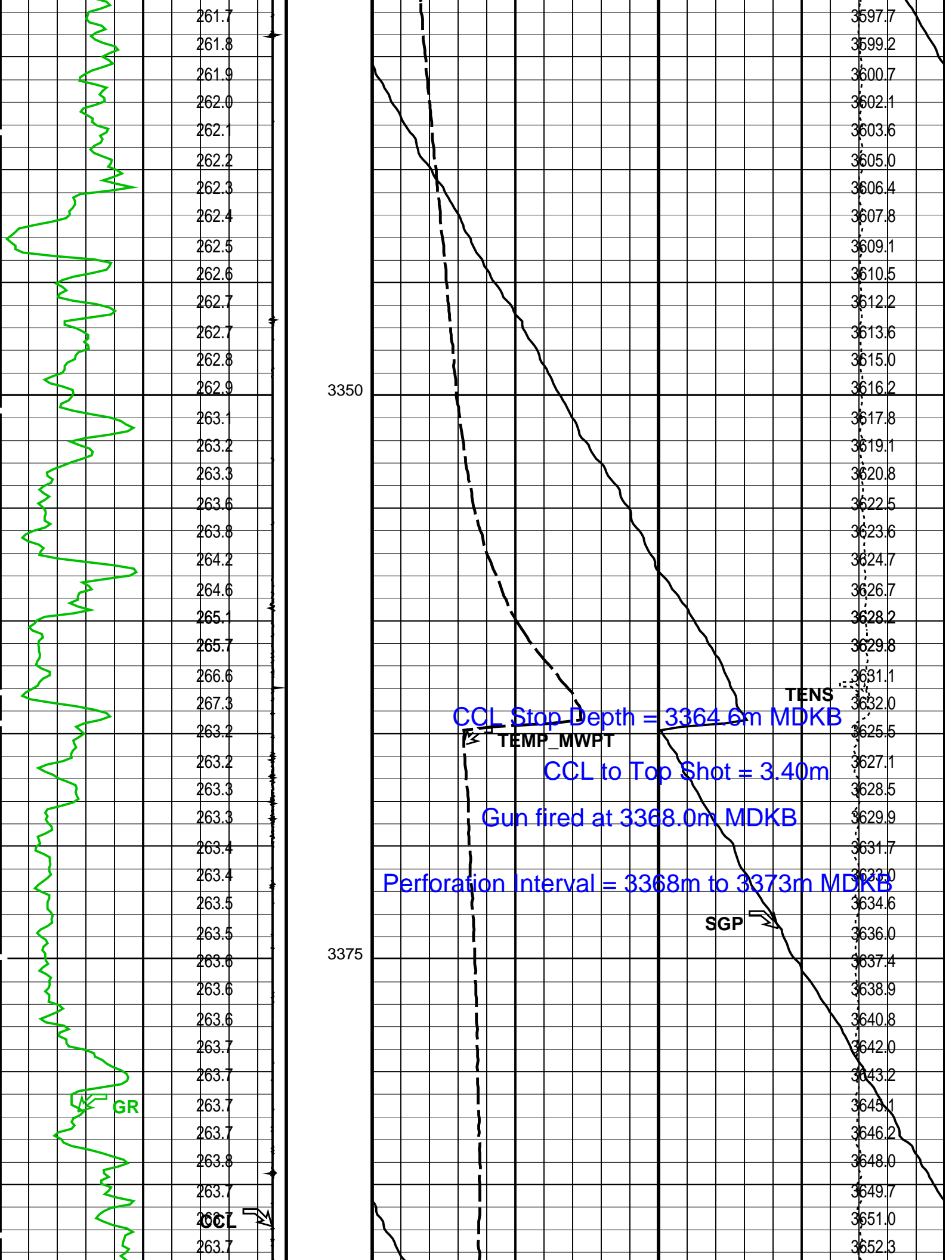
Output DLIS Files						
DEFAULT	PERFO_015LTP	FN:14	PRODUCER	27-Dec-2005 08:54	3364.6 M	3.2 M
OP System Version: 13C0-300						
MCM						
MWP_GUN	SRC-2820-ASFS-WPP_t	MWPT-CA		SRC-2820-ASFS-WPP_t		
MWGT-AA	SRC-2820-ASFS-WPP_t					
PIP SUMMARY						
<div><div></div>Time Mark Every 60 S</div>						
		Temperature (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)	Strain Gauge Pressure (SGP_SL) (PSIA)			
-19 (----		1	0 50			

267.3	00:20:51	3633.3
267.4	00:20:42	3633.0
267.4	00:20:33	3632.9
267.4	00:20:24	3632.8
267.4	00:20:15	3632.7
267.4	00:20:06	3632.7
267.3	00:19:57	3632.7
267.3	00:19:48	3632.6
267.3	00:19:39	3632.6
267.3	00:19:30	3632.2
267.4	00:19:21	3632.2
267.3	00:19:12	3632.3
267.3	00:19:03	3632.1
267.3	00:18:54	3632.0
267.3	00:18:45	3632.0
267.3	00:18:36	3632.0
267.4	00:18:27	3632.0
267.3	00:18:18	3632.0
267.3	00:18:09	3632.0
267.3	00:18:00	3631.8
267.3	00:17:51	3631.7
267.3	00:17:42	3631.7
267.3	00:17:33	3631.7
267.3	00:17:24	3631.9
267.2	00:17:15	3631.7
267.2	00:17:06	3631.7
267.2	00:16:57	3631.6
267.2	00:16:48	3631.6
267.2	00:16:39	3631.6
267.2	00:16:30	3631.4
267.2	00:16:21	3631.4
267.2	00:16:12	3631.3
267.3	00:16:03	3631.1
267.2	00:15:54	3631.0
267.2	00:15:45	3630.9
267.2	00:15:36	3630.7
267.2	00:15:27	3630.8
267.2	00:15:18	3630.3
267.2	00:15:09	3630.4
267.2	00:15:00	3630.4
267.2	00:14:51	3630.1
267.2	00:14:42	3630.1
267.2	00:14:33	3629.9
267.2	00:14:24	3629.8
267.1	00:14:15	3629.7
267.3	00:14:06	3629.5
267.1	00:13:57	3629.4
267.1	00:13:48	3629.3
267.1	00:13:39	3629.2
267.1	00:13:30	3629.1
267.1	00:13:21	3628.9
267.0	00:13:12	3628.9
267.0	00:13:03	3628.7
266.9	00:12:54	3628.7
266.9	00:12:45	3628.7
266.8	00:12:36	3628.7
267.0	00:12:27	3628.7
267.0	00:12:18	3628.7
267.0	00:12:09	3628.7
267.0	00:12:00	3628.7
266.9	00:11:51	3628.7
266.9	00:11:42	3628.7
266.8	00:11:33	3628.7
266.8	00:11:24	3628.7
266.8	00:11:15	3628.7
266.8	00:11:06	3628.7
266.8	00:10:57	3628.7
266.8	00:10:48	3628.7
266.8	00:10:39	3628.7
266.8	00:10:30	3628.7
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266.7	00:10:12	3628.7
266.7	00:10:03	3628.7



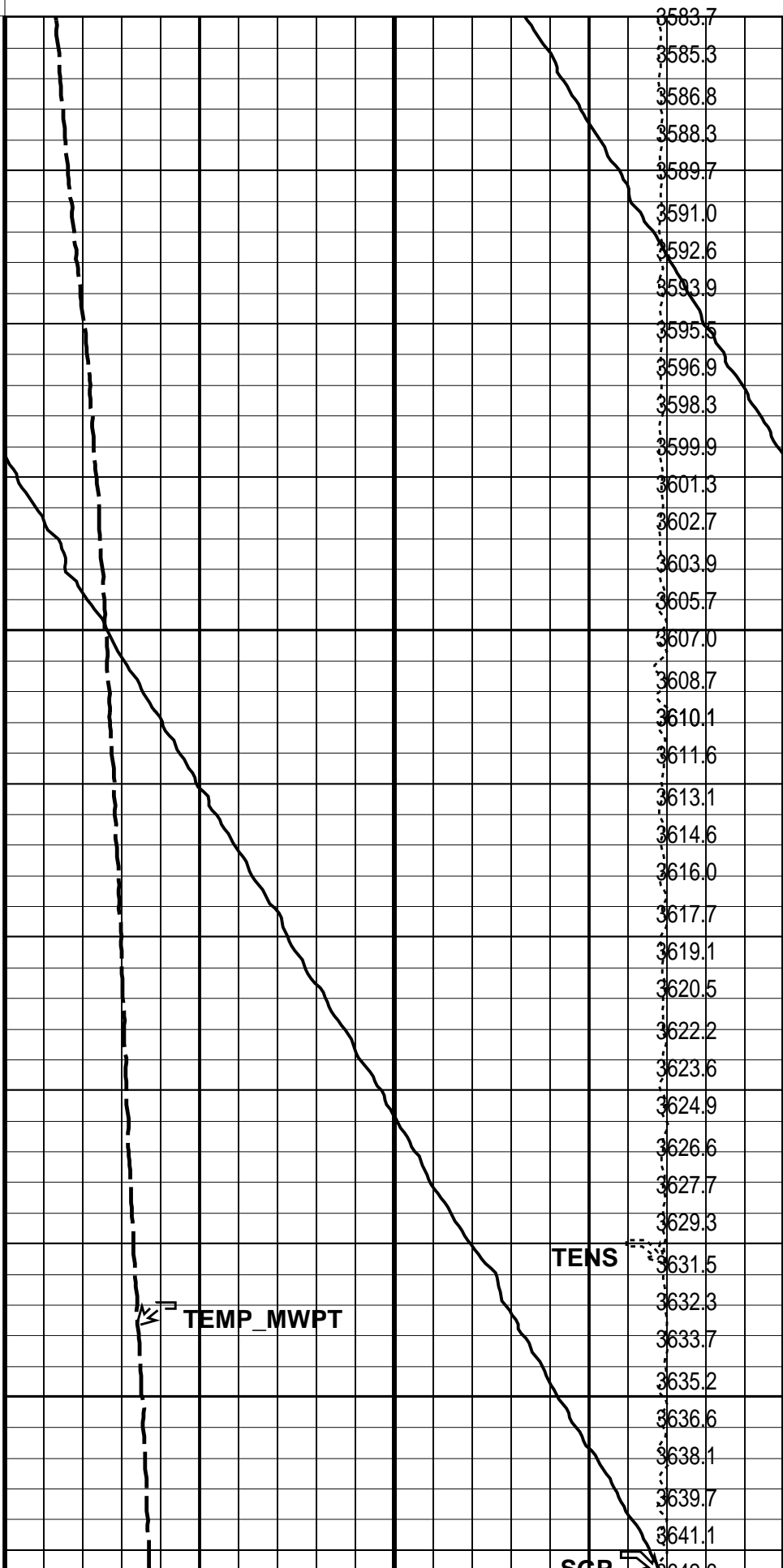
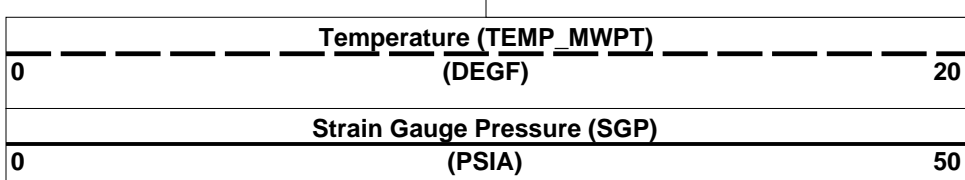
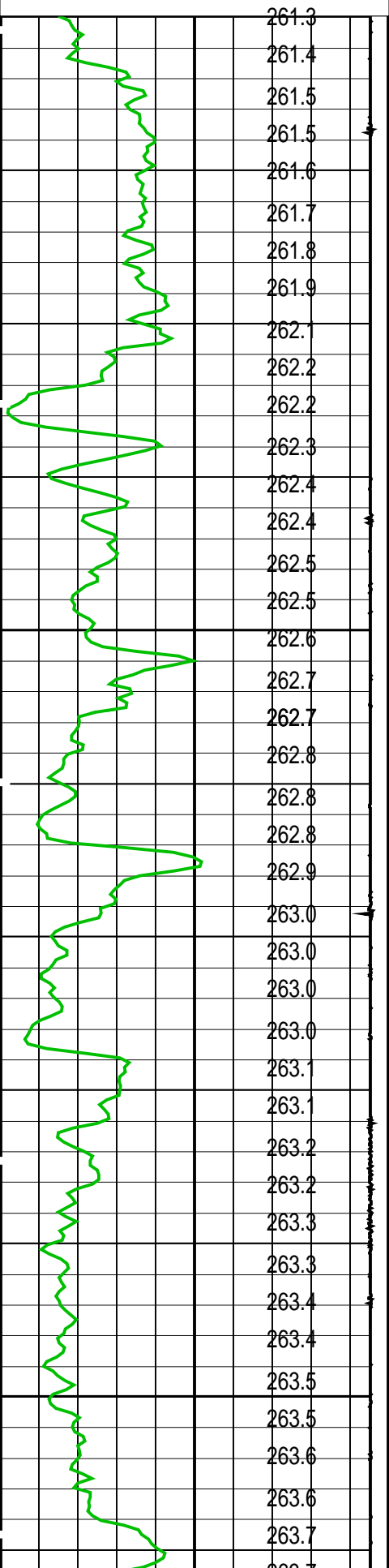
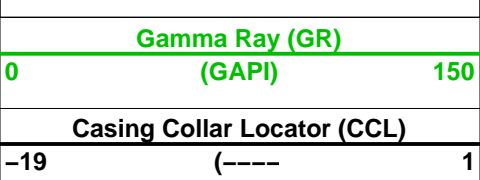
Casing Collar Locator (CCL_SL)		Elapsed Time (ETIM) (S)	Strain Gauge Pressure (SGP_SL)	
-19	(-----)	1	0	50
		Firing Sequence		

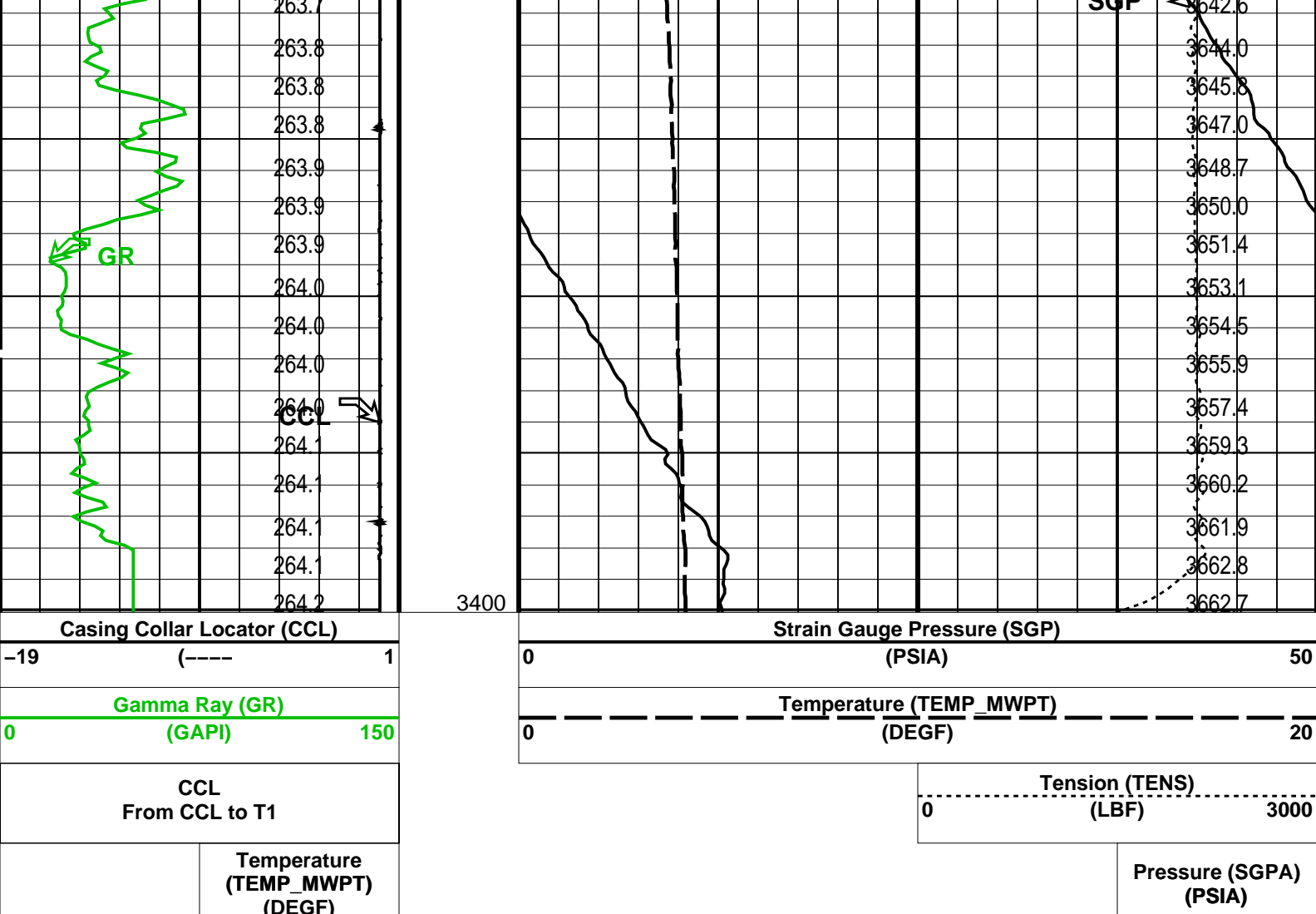
CCL From CCL to T1		State (FSS SL) (----	0-----Temperature (TEMP_MWPT_SL) (DEGF)-----20																										
		0	1024									Pressure (SGPA_ SL) (PSIA)																	
PIP SUMMARY																													
Time Mark Every 60 S																													
Parameters																													
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_1				MWPT-CA				SRC-2820-ASFS-WPP_1																				
MWGT-AA	SRC-2820-ASFS-WPP_1																												
Output DLIS Files																													
DEFAULT	PERFO_015LTP				FN:14	PRODUCER		27-Dec-2005 08:54																					
<div><div></div><div>MWPT 2 1/8" Enerjet Gun Shooting Pass – 1st Gun</div></div> <div>MAXIS Field Log</div>																													
													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_1				MWPT-CA								SRC-2820-ASFS-WPP_1																
MWGT-AA	SRC-2820-ASFS-WPP_1																												
PIP SUMMARY																													
Time Mark Every 60 S																													
		Temperature (TEMP_MWPT) (DEGF)									Pressure (SGPA) (PSIA)																		
CCL From CCL to T1								Tension (TENS) ----- 0 (LBF) 3000																					
Gamma Ray (GR)		Temperature (TEMP_MWPT)																											
0	(GAPI)	150	0-----Temperature (TEMP_MWPT) (DEGF)-----20																										
Casing Collar Locator (CCL)		Strain Gauge Pressure (SGP)																											
-19	(----	1	0----- (PSIA)-----50																										
		261.7							3596.4																				











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

Company: ExxonMobil

Well: MLA A-10aST1

Field: Marlin

Rig: Crane / Prod 4

Country: Australia

Schlumberger

2 1/8" Enerjet Gun  
MWPT  
Perforating Record