

Schlumberger

Company: **Esso Australia Ltd.**

Well: FLA A-21a

Field: **Flounder**

Rig: Crane/Prod 4

Country: **Australia**

2 1/8" Enerjet Gun

MWPT

Perforating Record

Rig:		Crane/Prod 4	
Field:		Flounder	
Location:		Gippsland Basin	
Well:		FLA A-21a	
Company:		Esso Australia Ltd.	
LOCATION			
State: Victoria		Gippsland Basin Bass Strait Permanent Datum: _____ Log Measured From: _____ Drilling Measured From: _____	
Max. Well Deviation 60 deg		Elev.: K.B. 40.8 m G.L. -93 m D.F. 40.8 m Mean Sea Level _____ Kelly Bushing _____ Kelly Bushing _____	
Longitude 148° 26' 17.304"S		Latitude 038° 18' 44.786"E	

Logging Date	15-Dec-2005								
Run Number	1								
Depth Driller	3880 m								
Schlumberger Depth	3340.8 m								
Bottom Log Interval	3340.8 m								
Top Log Interval	3302.4 m								
Casing Fluid Type	Production Fluids								
Salinity									
Density									
Fluid Level									
BIT/CASING/TUBING STRING									
Bit Size									
From									
To									
Casing/Tubing Size	7.625 in								
Weight	29.7 lbm/ft								
Grade	L-80								
From	20.43 m								
To	3826 m								
Maximum Recorded Temperatures	107 degC								
Logger On Bottom	Time								
Unit Number	Location								
Recorded By	1			VEA		10.45			
Witnessed By	Paul Tarrant & Owen Darby								
	Barrie White								

			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	60 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	Location			
	Recorded By				
	Witnessed By				

DEPTH SUMMARY LISTING

Date Created: 15-Dec-2005 10:08:00

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: 4799.99 M Conveyance Method: Wireline Rig Type: Offshore_Fixed

Depth Control Parameters

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	MWPT Perforation Log
Reference Log Run Number:	1
Reference Log Date:	21 Nov 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: DB-TT OS3: OS4: OS5:
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REMARKS: RUN NUMBER 1
Log correlated to MWPT Perforation Record, Run 1, dated 21-Nov-2005 provided by client.
Objective:
To perforate well at 3335.0m to 3336.0m MDKB using 2 1/8" Enerjet Gun loaded with PowerSpiral charges.
Before perforating, obtain static FBHP and FBHT. After perforating, flow well for 15min to obtain FBHP, FBHT and also for well clean up.
Static FBHP: 3330psi, FBHT: 310 degF

Tool	Tool Number	Tool Length (mm)
AH-SWBS	AH-SWBS 731	11.04
AH-SWBS	AH-SWBS 761	10.35
AH-SWBS	AH-SWBS 762	9.65
AH-SWBS	AH-SWBS 763	8.95
MH-SWHS	MH-SWHS 726	8.25
MWGT-AA	MWGH-AA 19	7.95
MWPG GR		2.41
MWPT-CA	MWPH-AA 74 MWPS-AA 74	6.97
CCL	SMWP Pres SMWP Temp Tension	TOOL ZERO
ALL FLEX JOINT		4.14

Diagram illustrating the vertical tool structure with segments labeled 1 through 5 from bottom to top. The bottom segment is the longest, and the top segment is the shortest. The label "TOOL BOTTOM" is at the base.

TOOL BOTTOM

MAXIMUM STRING DIAMETER 2.17 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Client: ExxonMobil

Well: FLA A-21a

Field: Flounder

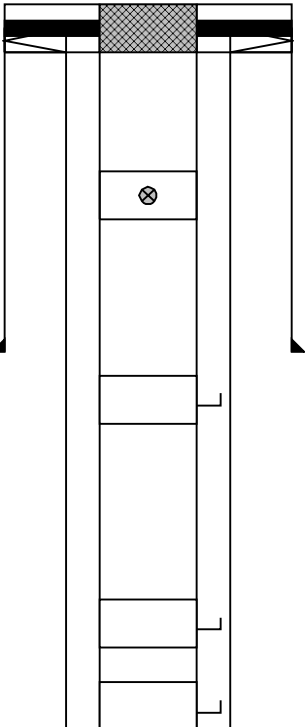
State: Victoria

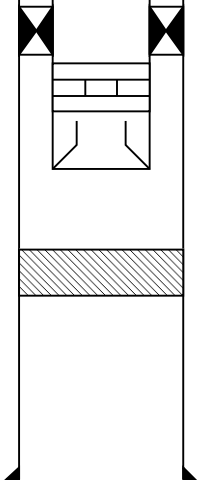
Country: Australia

Rig Name: Flounder

Reference Datum: Kelly Bushing

Elevation: 40.8 m

Production String	(in)		(m)	Well Schematic	(m)		(in)	Casing String
	OD	ID	MD		MD	OD	ID	
Tubing Hanger Tubing	13.375 4.500	4.500	19.3 19.3		20.4 20.4	13.375 13.375	7.625	Casing String Liner Hanger
Shutin Valve	4.500		450.1					
Gas Lift Mandrel	4.500		950.5		750.0	13.375		Casing Shoe
Gas Lift Mandrel	4.500		1660.7					
Gas Lift Mandrel	4.500		1814.2					

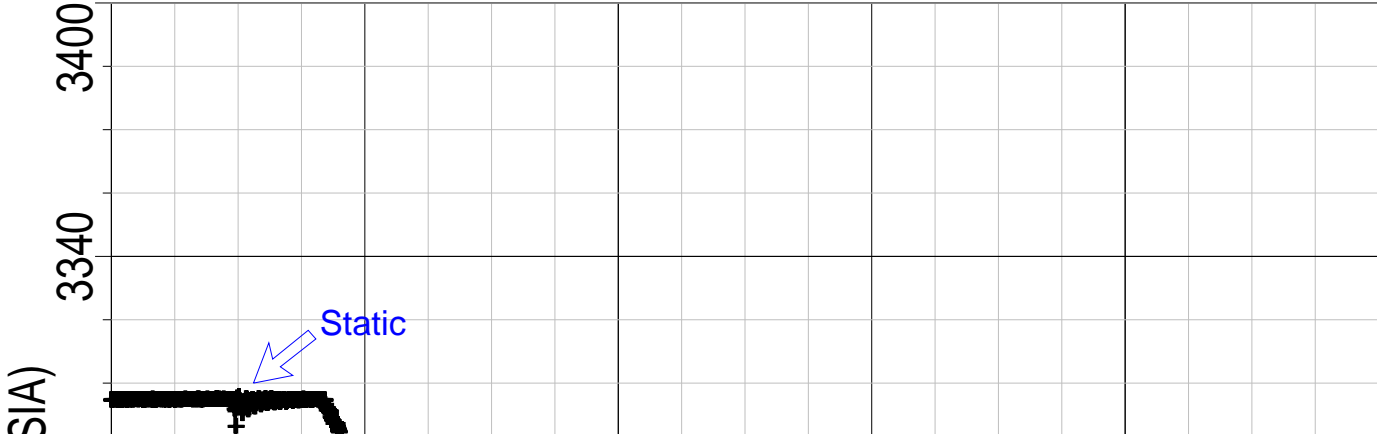
Packer	7.625	4.500	3289.0					
Nipple	4.500		3304.8					
Bell Nipple Guide	4.500		3306.9					
					3348.0			PBTD
					3826.3	7.625		Casing Shoe

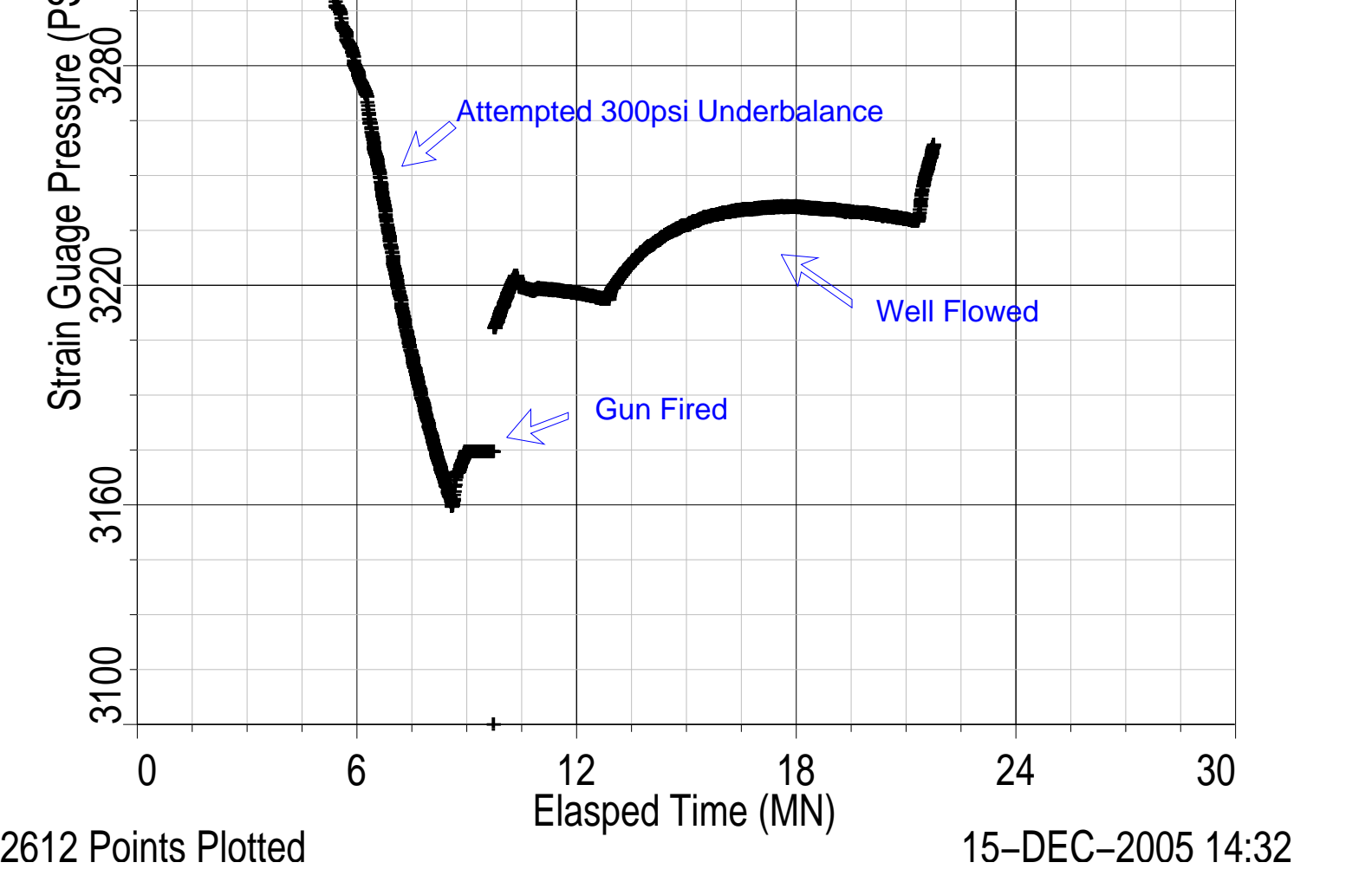


MWPT 2 1/8" Enerjet Gun
Station Log

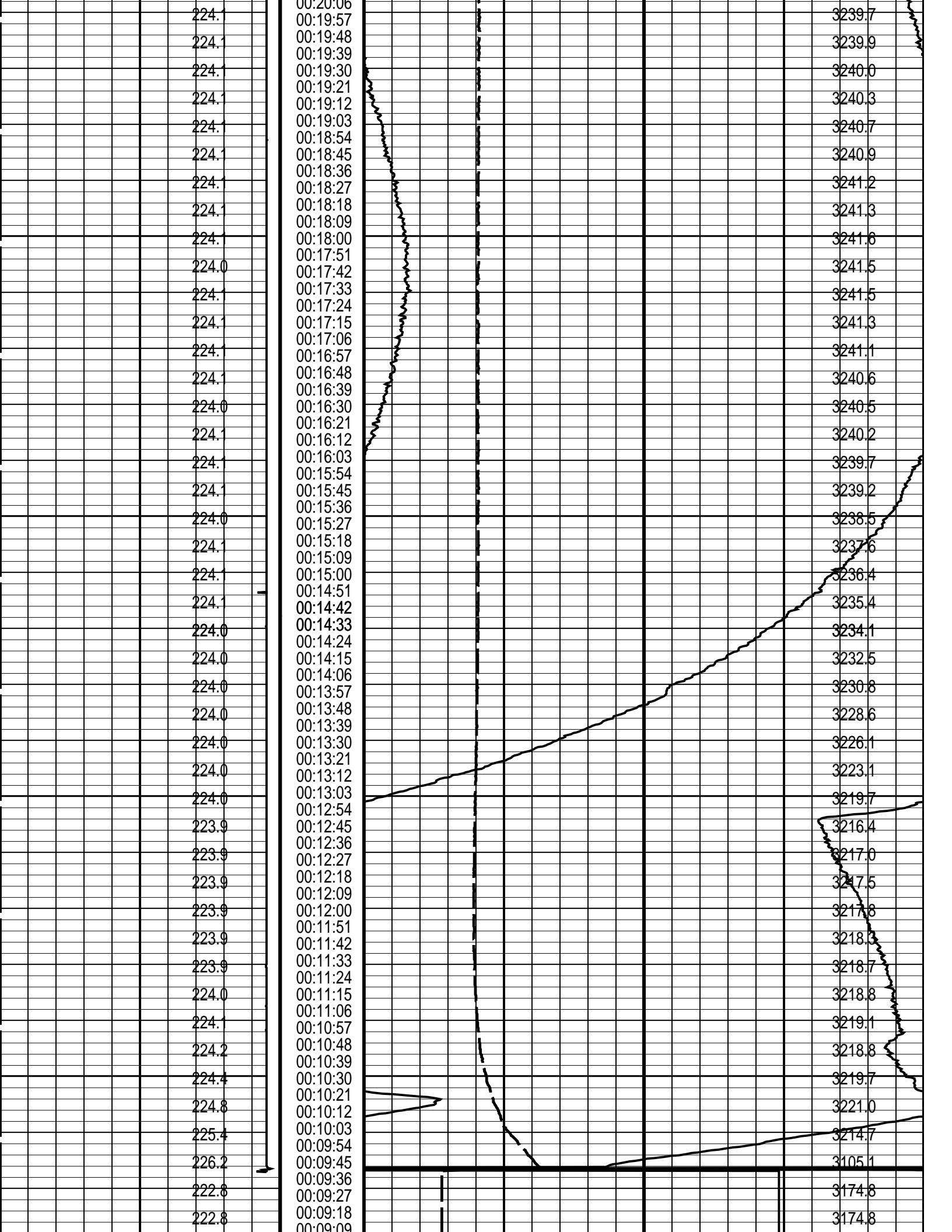
MAXIS Field Log

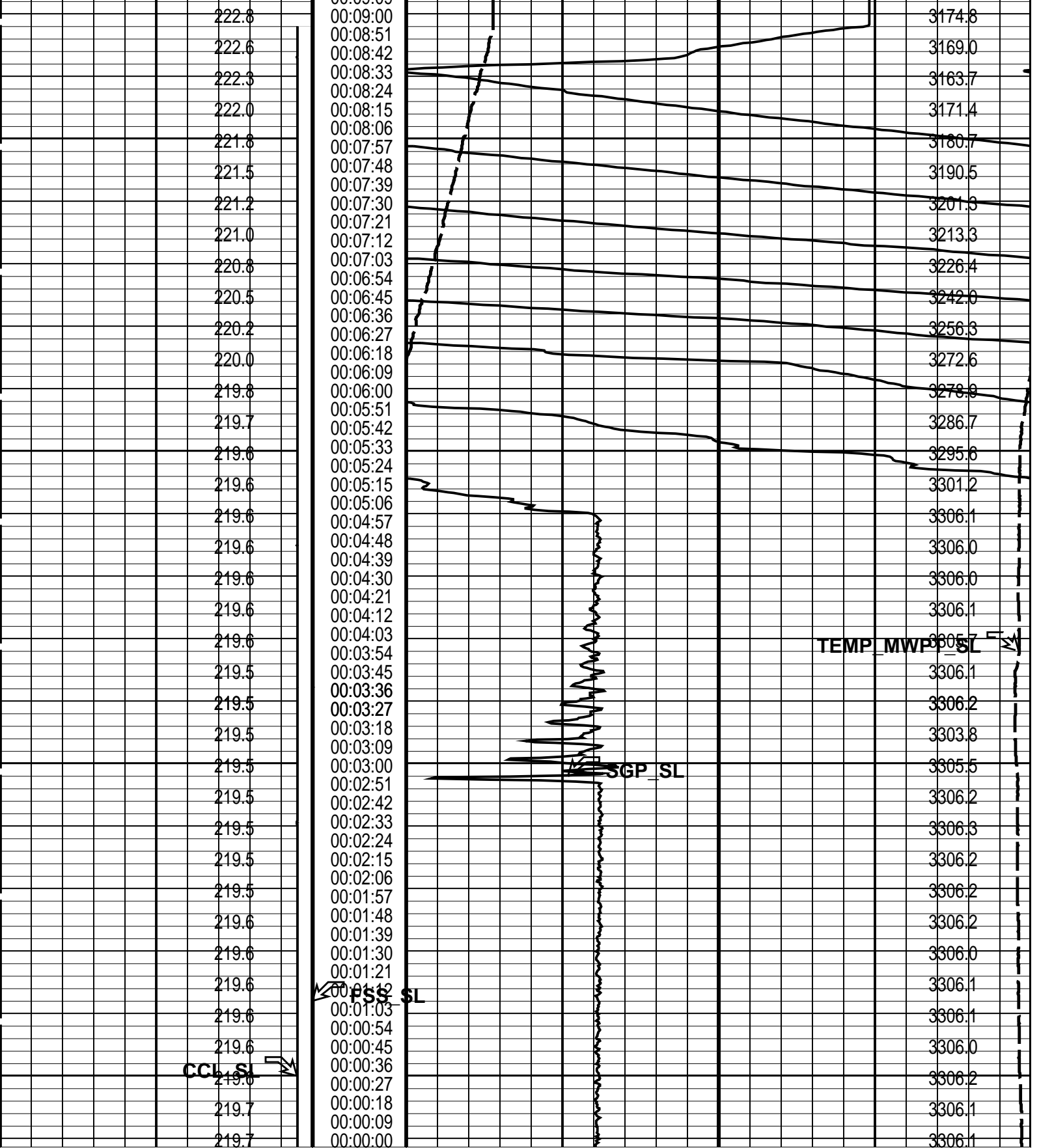
Index: 19984.7 – 26616.7 M





Output DLIS Files									
DEFAULT		PERFO_021LTP		FN:20		PRODUCER		15-Dec-2005 11:13 3330.4 M 3.3 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) (S)	Strain Gauge Pressure (SGP_SL) (PSIA)						
-19 (----) 1			0 20						
224.1		00:21:45	3258.0						
224.1		00:21:36	3249.1						
224.1		00:21:27	3237.7						
224.1		00:21:18	3238.9						
224.1		00:21:09	3238.5						
224.1		00:21:00	3239.1						
224.1		00:20:51	3239.4						
224.1		00:20:42							
224.1		00:20:33							
224.1		00:20:24							
224.1		00:20:15							
224.1		00:20:06							






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

Temperature		Pressure (SGPA)	
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	(TEMP_MWPT_SL) (DEGF)		(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: 15-Dec-2005 11:13	
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_021LTP	FN:20	PRODUCER 15-Dec-2005 11:13



MWPT 2 1/8" Enerjet Gun
Shooting Pass

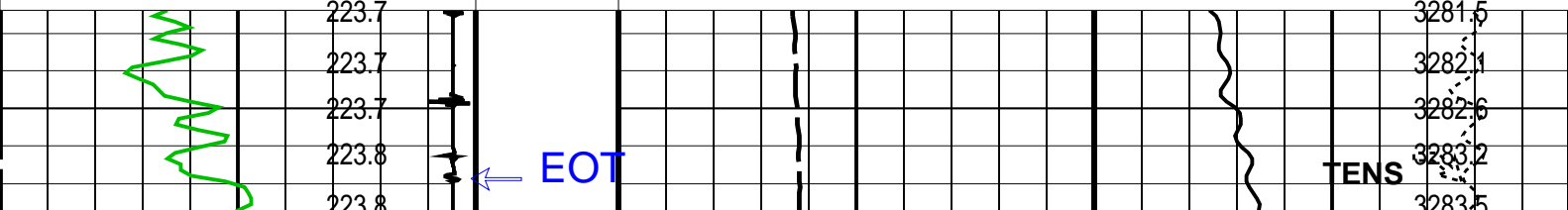
MAXIS Field Log

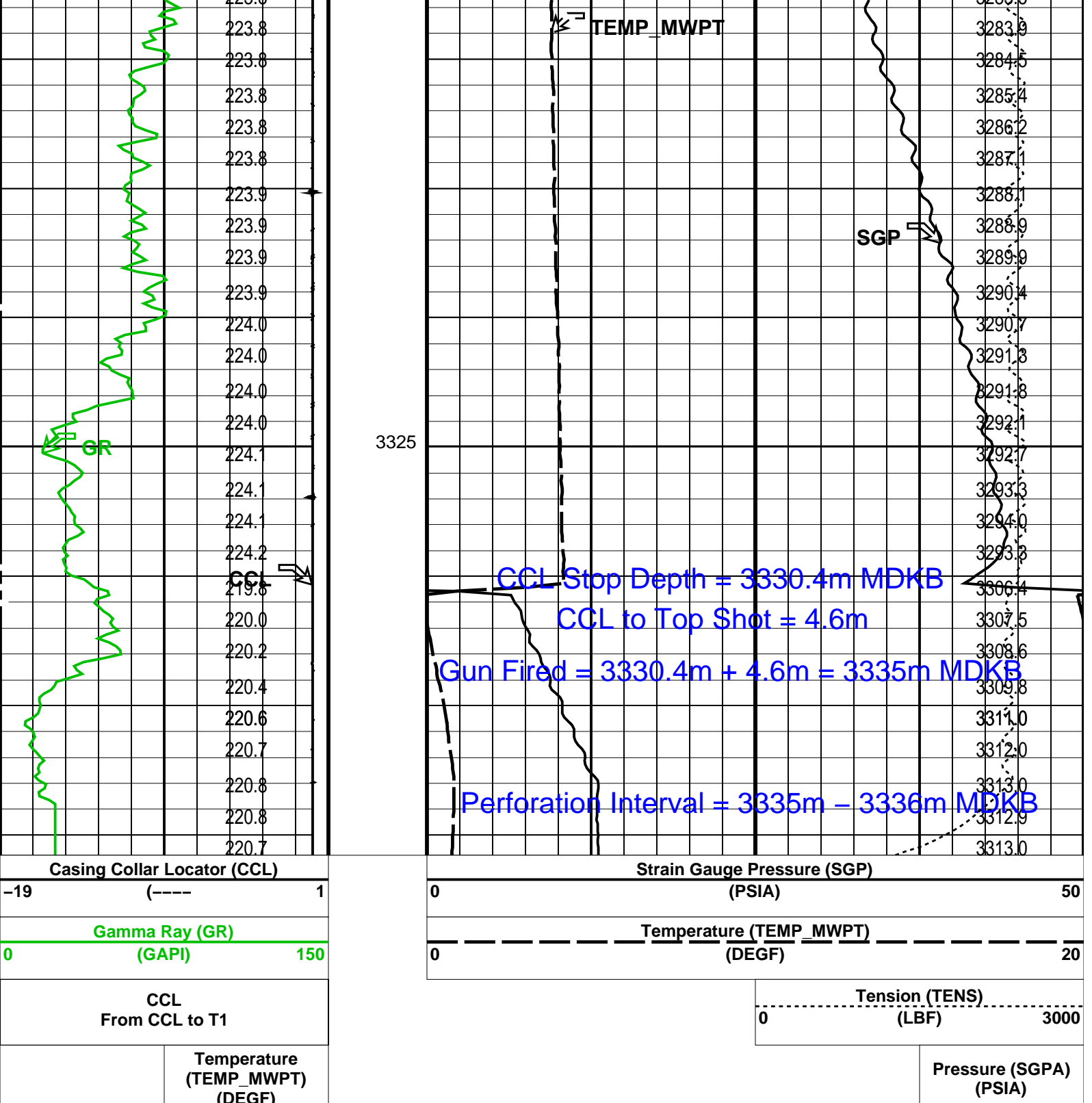
Output DLIS Files					
DEFAULT	PERFO_020LUP	FN:19	PRODUCER	15-Dec-2005 11:12	3340.8 M 3302.4 M
OP System Version: 13C0-300					
MCM					
MWP_GUN	SRC-2820-ASFS-WPP_1	MWPT-CA	SRC-2820-ASFS-WPP_1		
MWGT-AA	SRC-2820-ASFS-WPP_1				

PIP SUMMARY

Time Mark Every 60 S

	Temperature (TEMP_MWPT) (DEGF)		Pressure (SGPA) (PSIA)
CCL From CCL to T1		Tension (TENS) (LBF)	0 3000
Gamma Ray (GR) (GAPI)	0 150	Temperature (TEMP_MWPT) (DEGF)	0 20
Casing Collar Locator (CCL)		Strain Gauge Pressure (SGP) (PSIA)	0 50
-19 (----) 1			





PIP SUMMARY

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: 15-Dec-2005 11:12

Output DLIS Files

DEFAULTPERFO_020LUPFN:19PRODUCER15-Dec-2005 11:12

Schlumberger

MWPT 2 1/8" Enerjet Gun
Correlation Pass

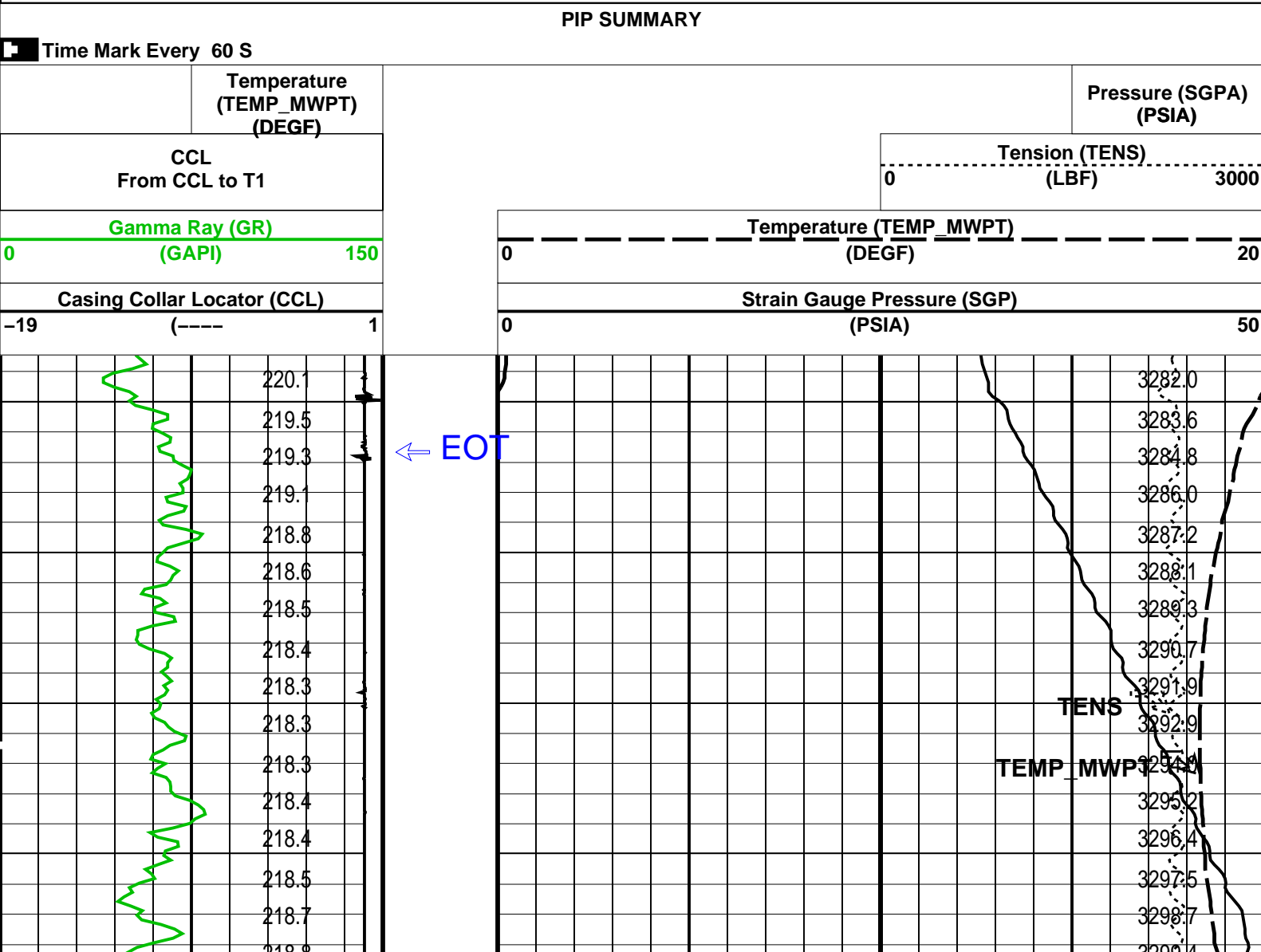
MAXIS Field Log

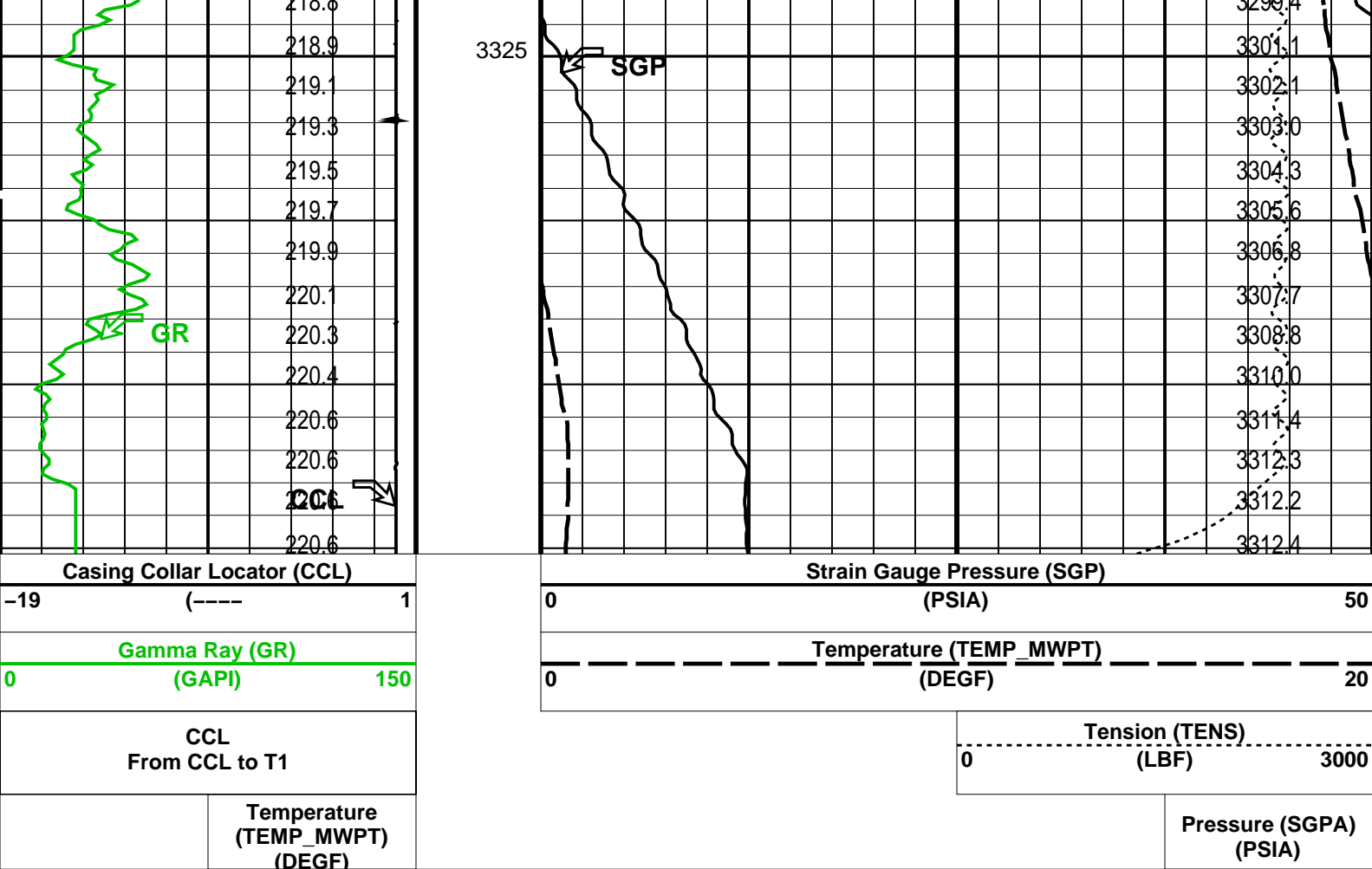
Output DLIS Files

DEFAULTPERFO_019LUPFN:18PRODUCER15-Dec-2005 11:07

OP System Version: 13C0-300
MCM

MWP_GUNSRC-2820-ASFS-WPP_1MWPT-CA
MWGT-ASFS-WPP_1SRC-2820-ASFS-WPP_1





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: 15-Dec-2005 11:07

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_019LUP	FN:18	PRODUCER 15-Dec-2005 11:07

Company: **Esso Australia Ltd.**

Well: **FLA A-21a**

Field: **Flounder**

Rig: **Crane/Prod 4**

Country: **Australia**

Schlumberger

2 1/8" Enerjet Gun
MWPT

