Schlumberger

Company: **Esso Australia Pty Ltd.**

Well: **A3A**
Field: **Halibut**
Rig: **Crane/Prod 4** Country: **Australia**

Rig: Crane/Prod 4
Field: Halibut
Location: Gippsland
Well: A3A
Company: Esso Australia Pty Ltd.

Gamma Ray / Pressure / Temperature
Dual DEFT / Inline and Fullbore
Spinner Survey

LOCATION

Gippsland	Elev.:	K.B.	29.45 m
Basin		G.L.	−73.00 m
Bass Strait		D.F.	29.45 m
Permanent Datum: Mean Sea Level	Elev.:	29.40 m	
Log Measured From: K.B	0.00 m	above Perm. Datum	
Drilling Measured From: K.B			

State:	Max. Well Deviation	Longitude	Latitude
Victoria	54 deg	148*19'07.62"E	38*24'20.36"S

		Run 1
PVT DATA	Oil Density	
	Water Salinity	
	Gas Gravity	
	Bo	
	Bw	
	1/Bg	
	Bubble Point Pressure	
	Bubble Point Temperature	
	Solution GOR	
	Maximum Deviation	54 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		
Logging Date		17−Jan−2009	Run Number		
Run Number		1 & 2	Depth Driller		
Depth Driller		2999 m	Schlumberger Depth		
Schlumberger Depth		2998 m	Bottom Log Interval		
Bottom Log Interval		2998 m	Top Log Interval		
Top Log Interval		2945 m	Casing Fluid Type		
Casing Fluid Type		Production fluids	Salinity		
Salinity			Density		
Density		0.79 g/cm3	Fluid Level		
Fluid Level		13 m	BIT/CASING/TUBING STRING		
BIT/CASING/TUBING STRING			Bit Size		
Bit Size		6.000 in	From		
From		2194 m	To		
To		3109 m	Casing/Tubing Size		
Casing/Tubing Size		4.500 in	Weight		
Weight		12.6 lbm/ft	Grade		
Grade		L−80	From		
From		2050.12 m	To		
To		3103.82 m	Maximum Recorded Temperatures		
Maximum Recorded Temperatures		226 degF	Logger On Bottom	Time	
Logger On Bottom	Time	17−Jan−2009	Unit Number	Location	
Unit Number	Location	889 Prod 4/AUSL	Recorded By		
Recorded By		B.White	Witnessed By		
Witnessed By		S.Gilbert, B.Donahoe			

DEPTH SUMMARY LISTING

Date Created: 6−JAN−2009 10:47:30

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW−EB	Type:	PSDS/OSDS	Type:	2−32ZT
Serial Number:	6373	Serial Number:	325337	Serial Number:	207308
Calibration Date:	2−Dec−2008	Calibration Date:	11−Dec−2008	Length:	6400 M
Calibrator Serial Number:	30	Calibrator Serial Number:	1174		
Calibration Cable Type:	2−32ZT	Number of Calibration Points:	0	Conveyance Method:	Wireline
Wheel Correction 1:	−1			Rig Type:	Offshore Fixed
Wheel Correction 2:	−2				

Depth Control Parameters

Log Sequence: Subsequent Log In the Well

Reference Log Name:
Reference Log Run Number:
Reference Log Date:

Depth Control Remarks

1. IDW−EB 6373 Used as primary depth control.
2. Z−Chart used as backup.
3. Log correlated on depth over zone of interest.
4.
5.
6.

OTHER SERVICES1
OS1:
OS2:
OS3:
OS4:
OS5:

REMARKS: RUN NUMBER 1

Log correlated to ExxonMobil Petrophysical Log Dated May 06.

Maximum Well deviation = 54 deg @ 3097m MDKB .

Objectives: Conduct a Static and Flowing Survey over the interval HUD(2999m) to 2945m MDKB .

Making 6 Passes (3 up , 3 down) while shut in and Flowing . Take Station Logs while POOH at required Depths .

HUD:2998m MDKB

SBHP: 3234 psai SBHT: 226 degf @ 2994m MDKB

Unable to do Flowing Surveys on first run due to problems with the gas lift configuration .

HSL Reconfigured Gas Lift and Flowing Passes were attempted again .

2 flowing Passes Completed . Well wasn't stable during flow period .

Decision made by client to POOH and abandon job .

Schlumberger Crew : J Light , R Murry , J Annear , A Mclellan

RUN 1

SERVICE ORDER #:	AXWT−00097
PROGRAM VERSION:	16C0−147
FLUID LEVEL:	13 m

LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1 RUN 2

SURFACE EQUIPMENT

WITM−A
PSC_16MHZ 827

DOWNHOLE EQUIPMENT

SWBS−B 785 — 11.93

SWBS−B 786 — 11.24

SWBS−B 787 — 10.56

SWBS−B 788 — 9.87

SWBS−B 789 — 9.19

SWHS−A 759 — 8.50

Detail MT
TelStatus
CTEM — 8.16

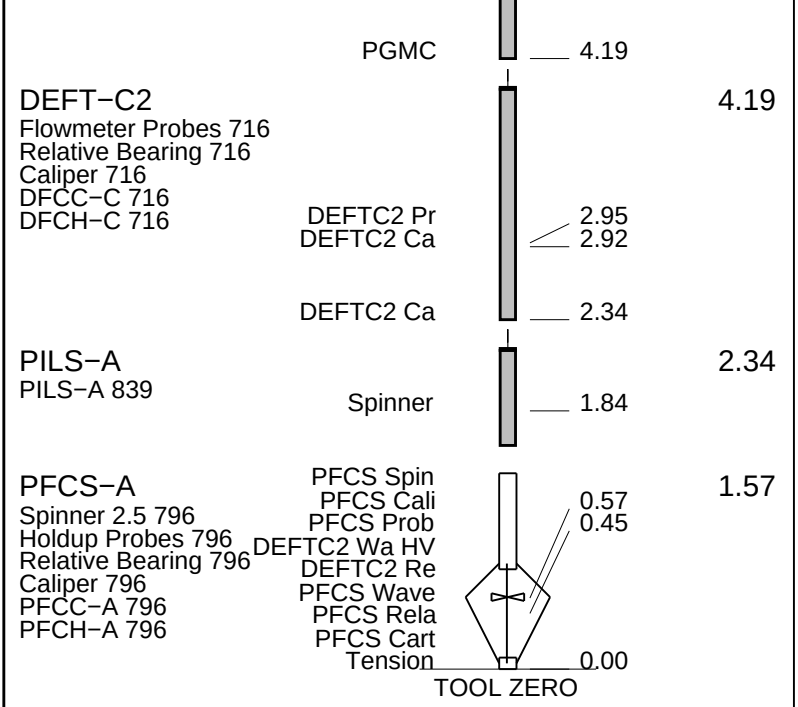
PSPT−B — 8.16
PSC−A
PSPT−B 827
PSTC 827
PBMS−B 827
CQG_F_Mano 827
RTD_Thermometer 827
GR 827
CCL 827
PBMS 827

GR — 7.03

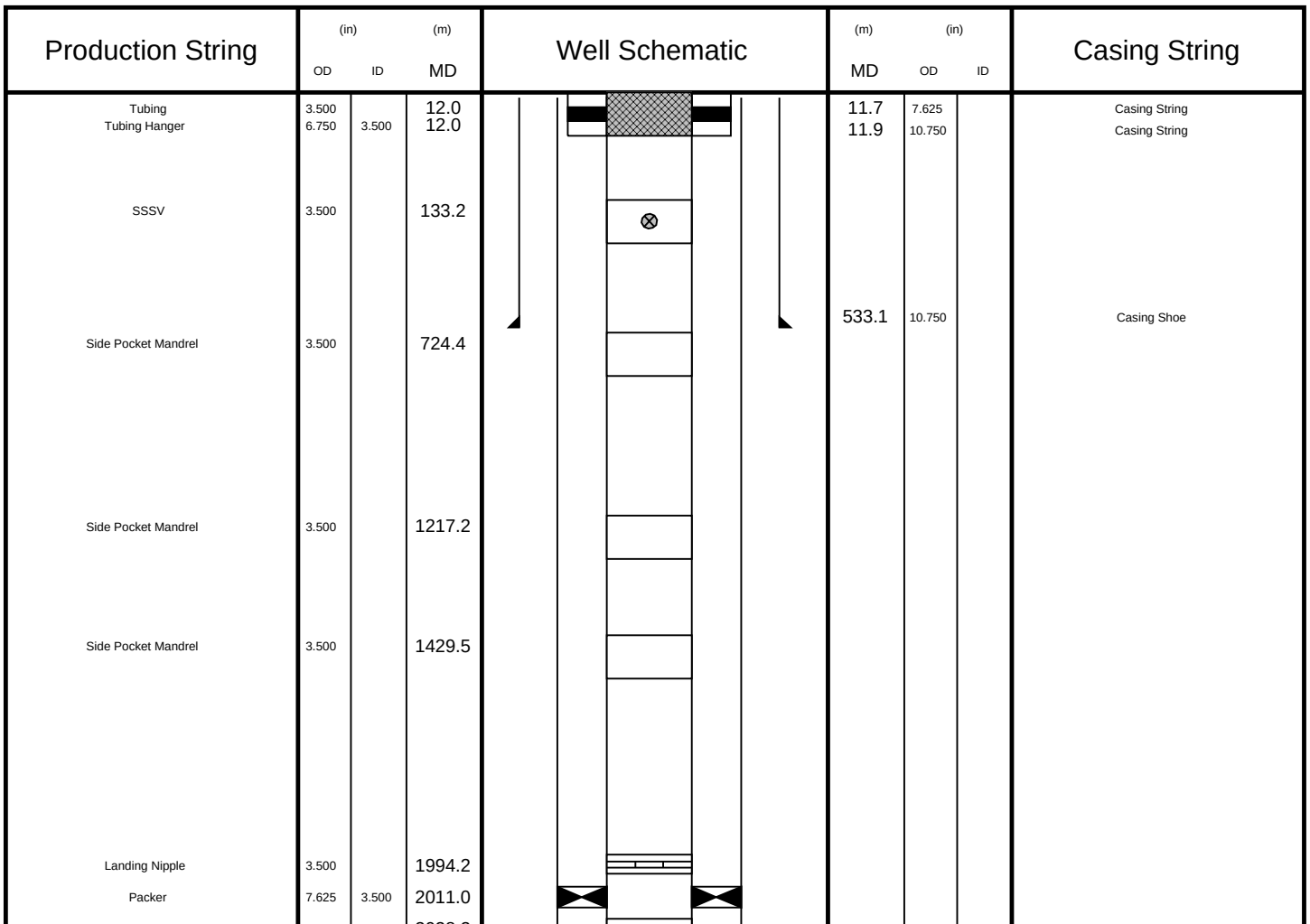
Well_Temp — 6.10
CQG Manom — 5.99
CCL — 5.87
PBMS PSTC — 5.64

PGMC−A — 5.64
PGMC−A 1926
PSOI_Gradio 716

Gradioman — 5.18



MAXIMUM STRING DIAMETER 1.69 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS



Landing Nipple	3.500		2028.2				
Tubing Bottom	3.500		2046.1				
				2043.1	5.500		Casing String
				2043.1	7.625	5.500	Liner Hanger
				2194.0	7.625		Casing Shoe
				2951.7			Perforation Zone
				2964.8			Perforation Zone
				2970.0			Perforation Zone
Bridge Plug	5.500	0.000	3000.0	2998.0			0
				3016.5			Perforation Zone
				3082.5			PBTD
				3104.0	5.500		Casing Shoe

Schlumberger

Job Events Summary

MAXIS Field Log

Schlumberger Job Event Summary

	Time	Elapsed Time	Depth (M)	File
Log Pass (down)	17-Jan-2009 8:36	000:12	2912.1 - 3003.2	FCS_ILS_DEFT_GMS_025LDP
Log Pass (up)	17-Jan-2009 8:48	000:08	3003.2 - 2915.7	FCS_ILS_DEFT_GMS_026LUP
Log Pass (down)	17-Jan-2009 9:00	000:17	2912.4 - 2999.2	FCS_ILS_DEFT_GMS_028LDP
Log Pass (up)	17-Jan-2009 9:17	000:17	2999.2 - 2914.3	FCS_ILS_DEFT_GMS_029LUP
Log Pass (down)	17-Jan-2009 9:34	000:04	2913.6 - 2999.7	FCS_ILS_DEFT_GMS_030LDP
Log Pass (up)	17-Jan-2009 9:38	000:04	2999.5 - 2914.2	FCS_ILS_DEFT_GMS_031LUP
Log Pass (down)	17-Jan-2009 9:43	000:03	2914.2 - 2999.1	FCS_ILS_DEFT_GMS_032LDP
Log Pass (up)	17-Jan-2009 9:46	000:03	2999.2 - 2912.8	FCS_ILS_DEFT_GMS_033LUP
Station Log	17-Jan-2009 10:11	006:51	2925.0	FCS_ILS_DEFT_GMS_048LTP
Log Pass (down)	19-Jan-2009 10:31	000:07	2920.9 - 2995.3	FCS_ILS_DEFT_GMS_065LDP
Log Pass (up)	19-Jan-2009 10:38	000:07	2995.4 - 2921.5	FCS_ILS_DEFT_GMS_066LUP
Station Log	19-Jan-2009 11:16	003:13	2931.0	FCS_ILS_DEFT_GMS_070LTP

Schlumberger

Flowing Pass Up @ 10m/min

MAXIS Field Log

Input DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_066LUP	FN:60	PRODUCER	19−Jan−2009 10:38	2995.4 M	2921.5 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_073PUP	FN:66	PRODUCER	19−Jan−2009 14:37	2995.6 M	2921.7 M

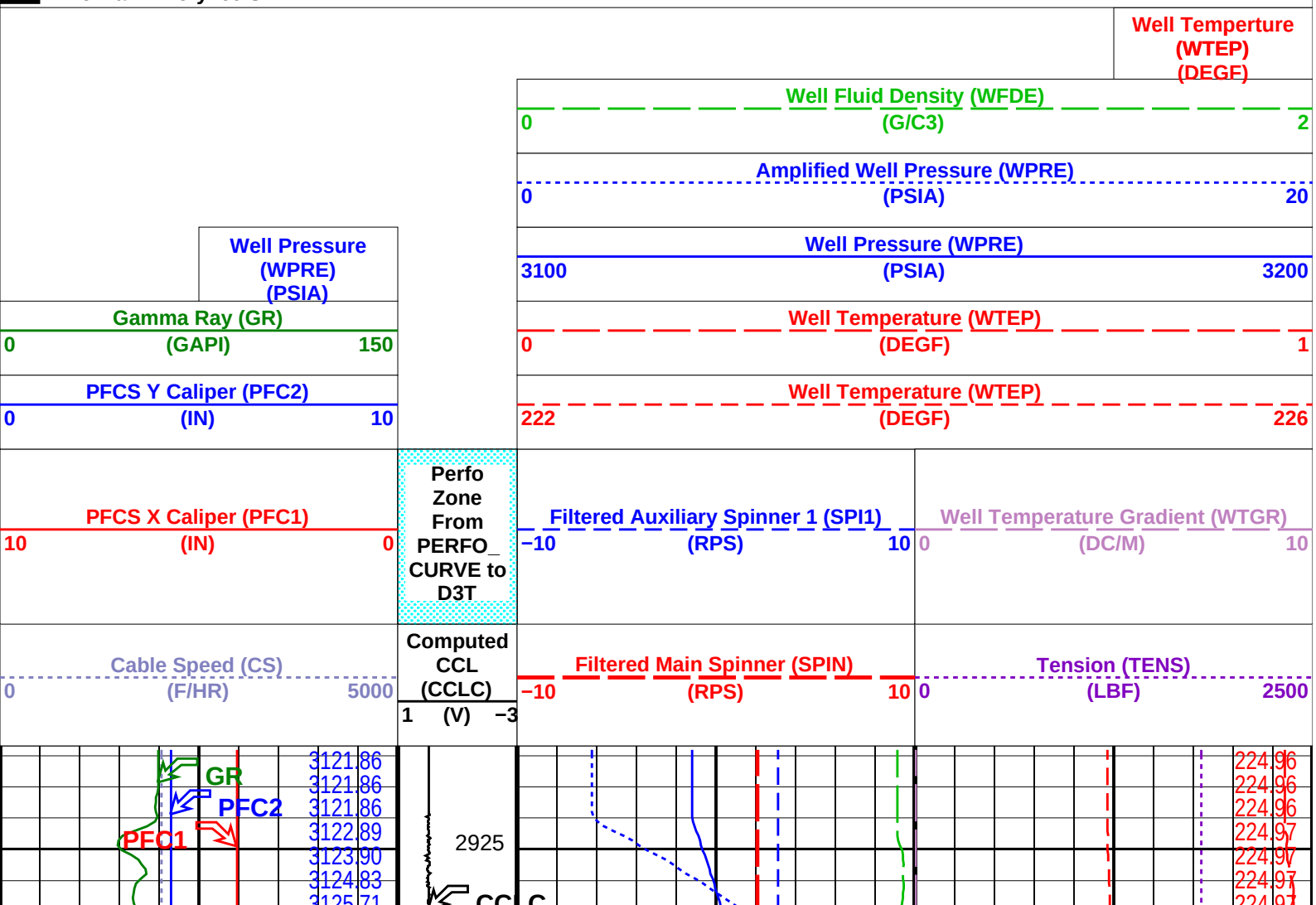
OP System Version: 16C0−147

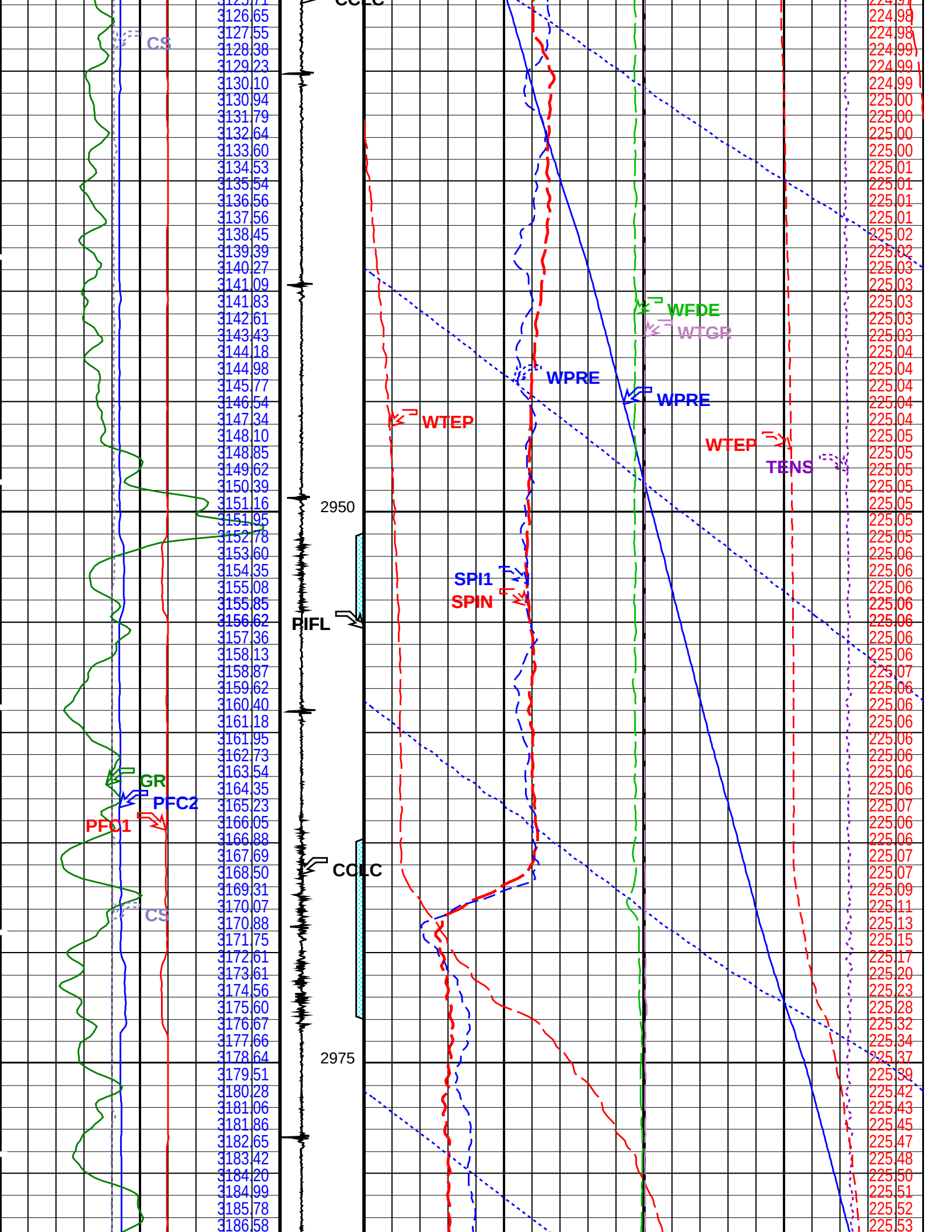
MCM

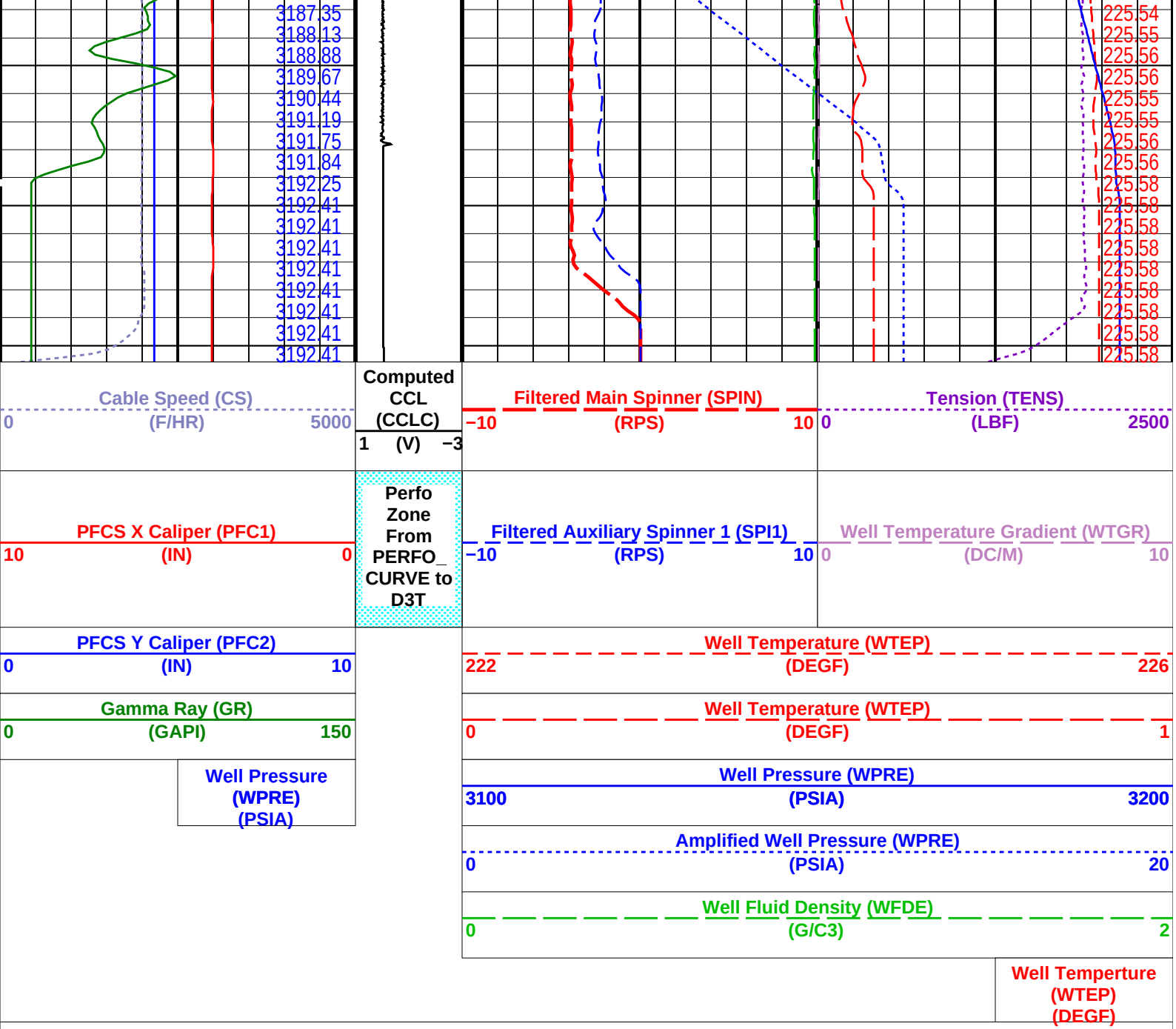
PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

PIP SUMMARY

Time Mark Every 60 S




CS
GR
PFC2
PFC1
CS
CCLC
2950
RIFL
2975
WTEP
WPRE
WFDE
WTGR
WPRE
WTEP
WTEP
TENS
SPI1
SPIN
CCLC



PIP SUMMARY

Time Mark Every 60 S

Format: PSP_1 **Vertical Scale: 1:200** **Graphics File Created: 19−Jan−2009 14:37**

OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

Parameters

DLIS Name	Description	Value	
	PFCS−A: PSP Flow and caliper Tool		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	
	PILS−A: PSP In Line Spinner Flowmeter		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	

	PGMC−A: PSP Gradiomanometer Measurement Module			
GCPG	Gradio Surf.Cal Diff.Pres Gain	1		
GCPO	Gradio Surf.Cal Diff.Pres Offset	0	KPAA	
PDSH	Gradio Correction Density Shift	0	G/C3	
	PSPT−B: Production Services Logging Platform			
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG	
	System and Miscellaneous			
DO	Depth Offset for Playback	0.1	M	
PP	Playback Processing	NORMAL		

Input DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_066LUP	FN:60	PRODUCER	19−Jan−2009 10:38	2995.4 M	2921.5 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_073PUP	FN:66	PRODUCER	19−Jan−2009 14:37		

Input DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_066LUP	FN:60	PRODUCER	19−Jan−2009 10:38	2995.4 M	2921.5 M

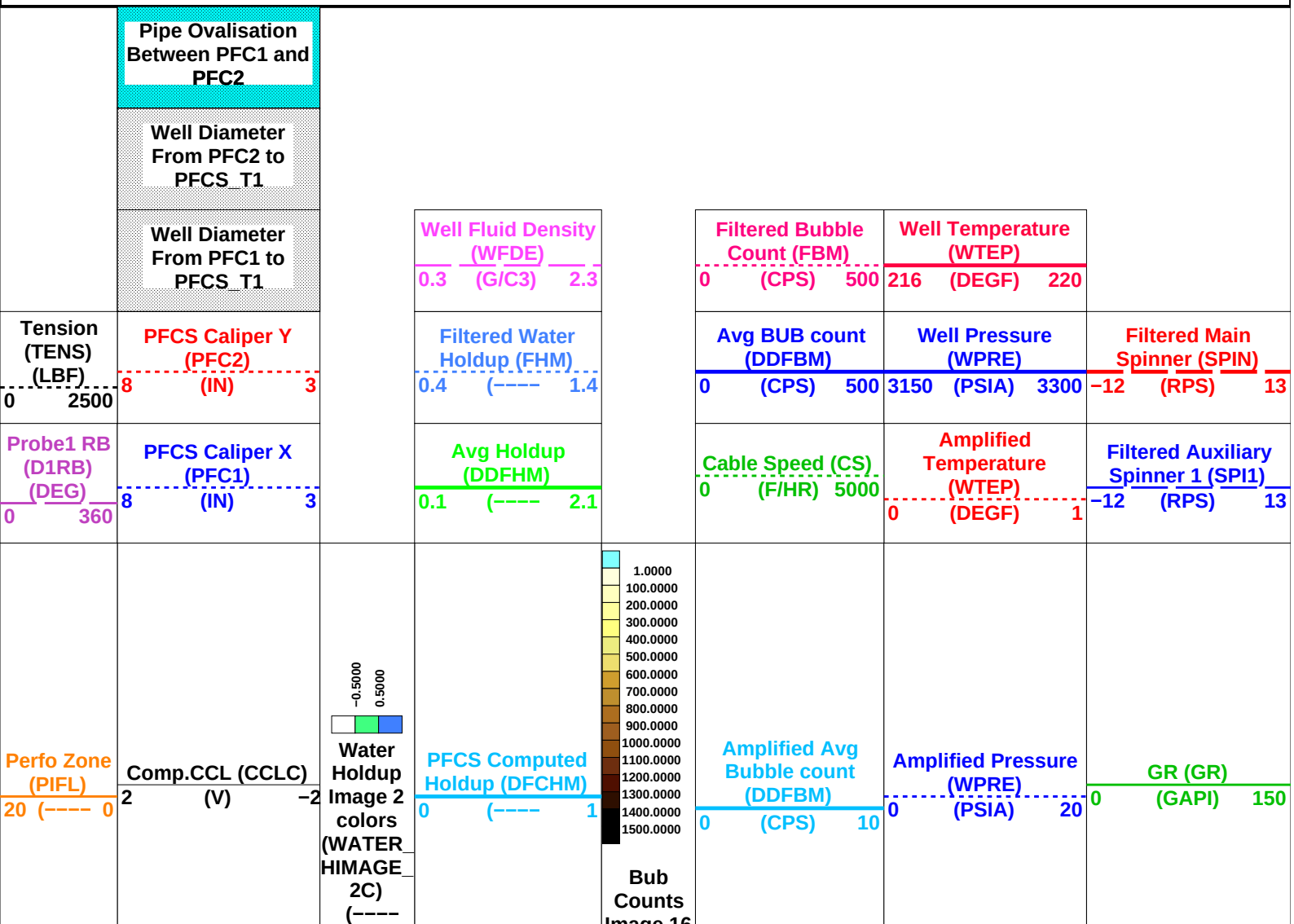
Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_073PUP	FN:66	PRODUCER	19−Jan−2009 14:37	2995.6 M	2921.7 M

OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		



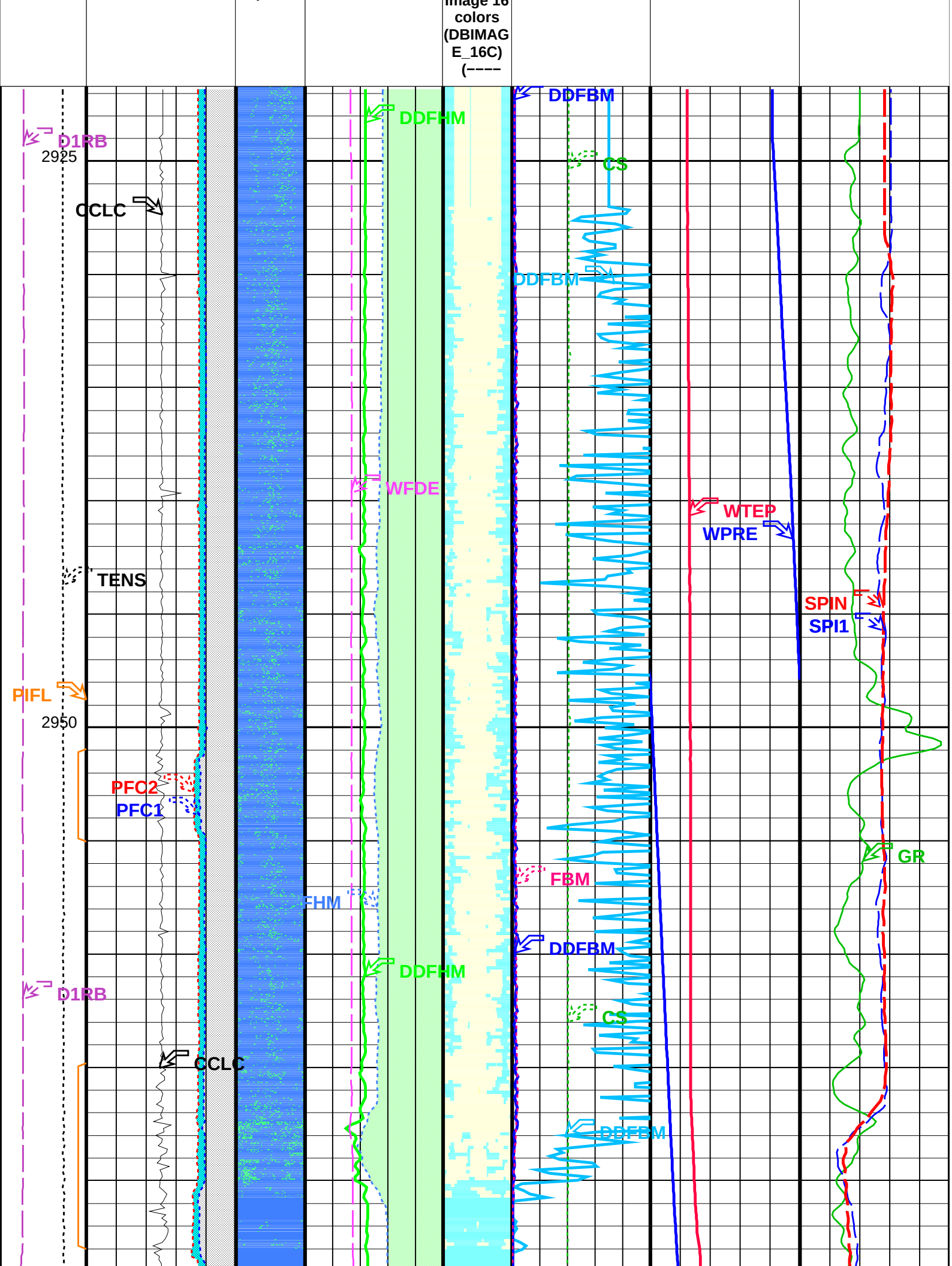
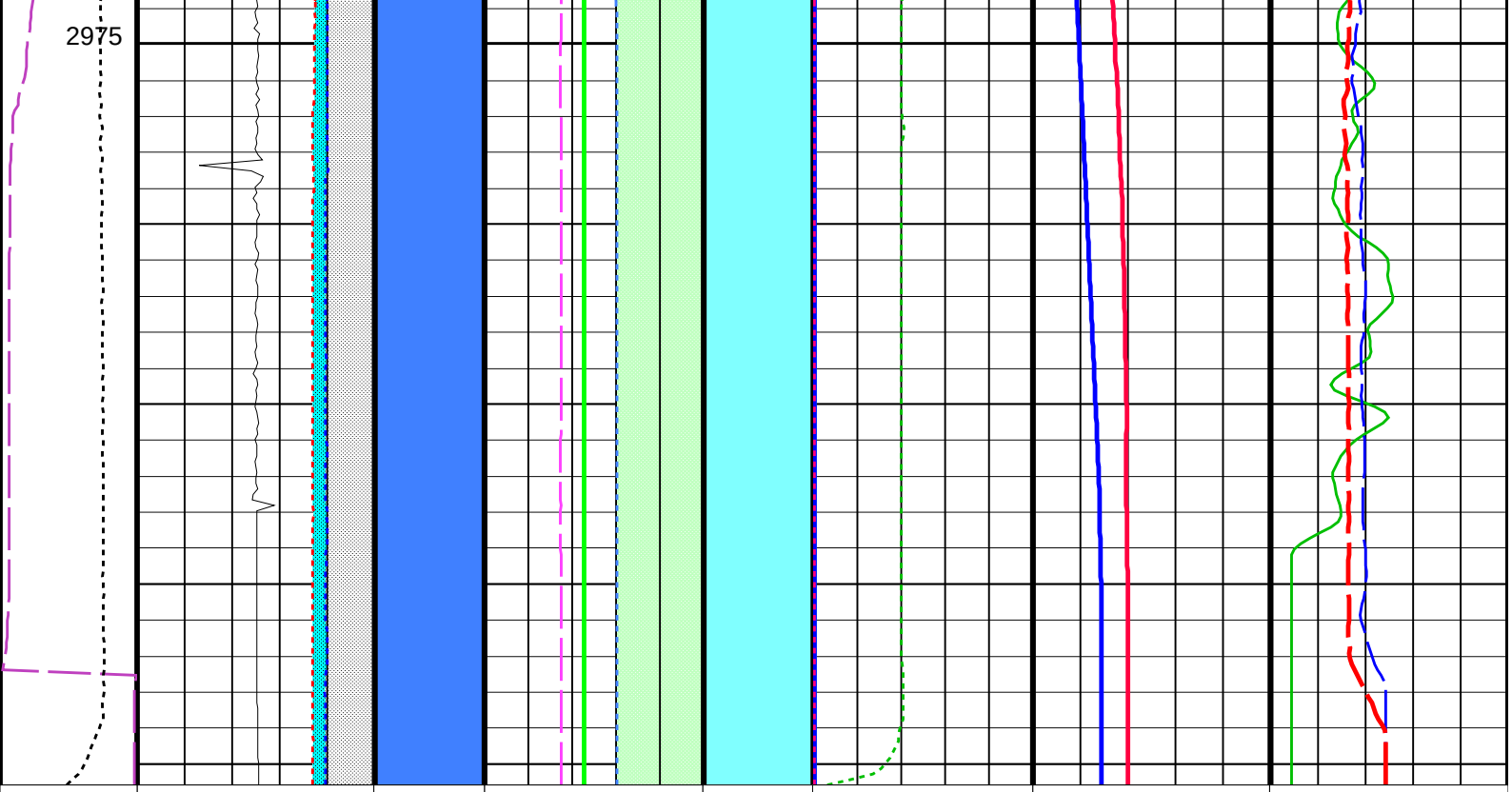


Image 16 colors (DBIMAGE_16C) (----
D1RB
2925
CCLC
TENS
PIFL
2950
PFC2
PFC1
D1RB
CCLC
DDFHM
WFDE
EHM
DDFHM
DDFBM
CS
DDFBM
WTEP
WPRE
FBM
DDFBM
CS
DDFBM
SPIN
SPI1
GR



Perfo Zone (PIFL)	Comp.CCL (CCLC)	Water Holdup Image 2 colors (WATER_HIMAGE_2C)	PFCS Computed Holdup (DFCHM)	Bub Counts Image 16 colors (DBIMAGE_16C)	Amplified Avg Bubble count (DDFBM)	Amplified Pressure (WPRE)	GR (GR)
20 (---- 0	2 (V) −2	−0.5000 0.5000	0 (---- 1	1.0000 100.0000 200.0000 300.0000 400.0000 500.0000 600.0000 700.0000 800.0000 900.0000 1000.0000 1100.0000 1200.0000 1300.0000 1400.0000 1500.0000	0 (CPS) 10	0 (PSIA) 20	0 (GAPI) 150
Probe1 RB (D1RB) (DEG)	PFCS Caliper X (PFC1)		Avg Holdup (DDFHM)		Cable Speed (CS)	Amplified Temperature (WTEP)	Filtered Auxiliary Spinner 1 (SPI1)
0 360	8 (IN) 3		0.1 (---- 2.1		0 (F/HR) 5000	0 (DEGF) 1	−12 (RPS) 13
Tension (TENS) (LBF)	PFCS Caliper Y (PFC2)		Filtered Water Holdup (FHM)		Avg BUB count (DDFBM)	Well Pressure (WPRE)	Filtered Main Spinner (SPIN)
0 2500	8 (IN) 3		0.4 (---- 1.4		0 (CPS) 500	3150 (PSIA) 3300	−12 (RPS) 13
	Well Diameter From PFC1 to PFCS_T1		Well Fluid Density (WFDE)		Filtered Bubble Count (FBM)	Well Temperature (WTEP)	
			0.3 (G/C3) 2.3		0 (CPS) 500	216 (DEGF) 220	
	Well Diameter From PFC2 to PFCS_T1						
	Pipe Ovalisation Between PFC1 and PFC2						

Format: PFCS_Image_DL Vertical Scale: 1:200 Graphics File Created: 10-Jan-2008 14:27

Format: PFCS_Image_DL Vertical Scale: 1:200 Graphics File Created: 19-Jan-2009 14:37

OP System Version: 16C0-147

MCM

PFCS-A	SRPC-3624-Q2_2008_OP16_b	PILS-A	SRPC-3624-Q2_2008_OP16_b
DEFT-C2	SRPC-3624-Q2_2008_OP16_b	PGMC-A	SRPC-3624-Q2_2008_OP16_b
PSPT-B	SRPC-3624-Q2_2008_OP16_b		

Parameters

DLIS Name	Description	Value	
	PFCS-A: PSP Flow and caliper Tool		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
CSID	Casing Size I.D.	3.958	IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2-D1RB	
DDRS	Dual DEFT RB Source	D1RB	
DFBD	DEFT Blank Disallowed Probes	NO	
DFFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
DFPP	Probes Arm Position	C	
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS-A	
SPIN	Main Spinner Flowmeter Sonde	PFCS-A_2.5	
	PILS-A: PSP In Line Spinner Flowmeter		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS-A	
SPIN	Main Spinner Flowmeter Sonde	PFCS-A_2.5	
	DEFT-C2: DEFT_C Tool		
CSID	Casing Size I.D.	3.958	IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2-D1RB	
DDRS	Dual DEFT RB Source	D1RB	
DFBD	DEFT Blank Disallowed Probes	NO	
DFFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
DFPP2	Probes Arm Position (2nd tool)	D	
	PGMC-A: PSP Gradiomanometer Measurement Module		
CSID	Casing Size I.D.	3.958	IN
GCPG	Gradio Surf.Cal Diff.Pres Gain	1	
GCPO	Gradio Surf.Cal Diff.Pres Offset	0	KPAA
PDSH	Gradio Correction Density Shift	0	G/C3
	PSPT-B: Production Services Logging Platform		
CSID	Casing Size I.D.	3.958	IN
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
	BORDYN: BorDyn (Well Test Validation)		
CSID	Casing Size I.D.	3.958	IN
	System and Miscellaneous		
CSIZ	Current Casing Size	4.500	IN
DO	Depth Offset for Playback	0.1	M
PP	Playback Processing	NORMAL	

Input DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_066LUP	FN:60	PRODUCER	19-Jan-2009 10:38	2995.4 M	2921.5 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_073PUP	FN:66	PRODUCER	19-Jan-2009 14:37		

Input DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_066LUP	FN:60	PRODUCER	19-Jan-2009 10:38	2995.4 M	2921.5 M

Output DLIS Files

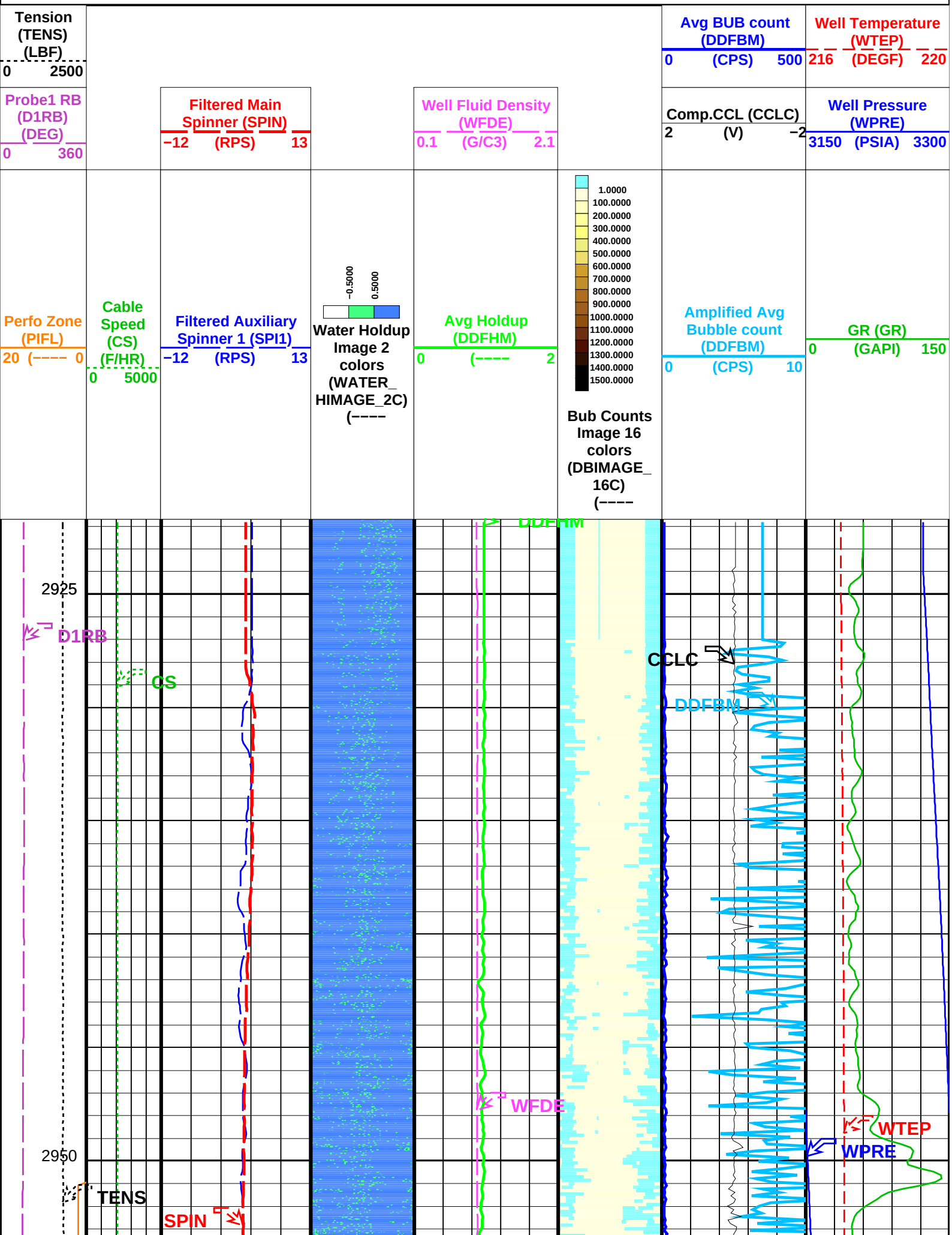
DEFAULT	FCS_ILS_DEFT_GMS_073PUP	FN:66	PRODUCER	19-Jan-2009 14:37	2995.6 M	2921.7 M

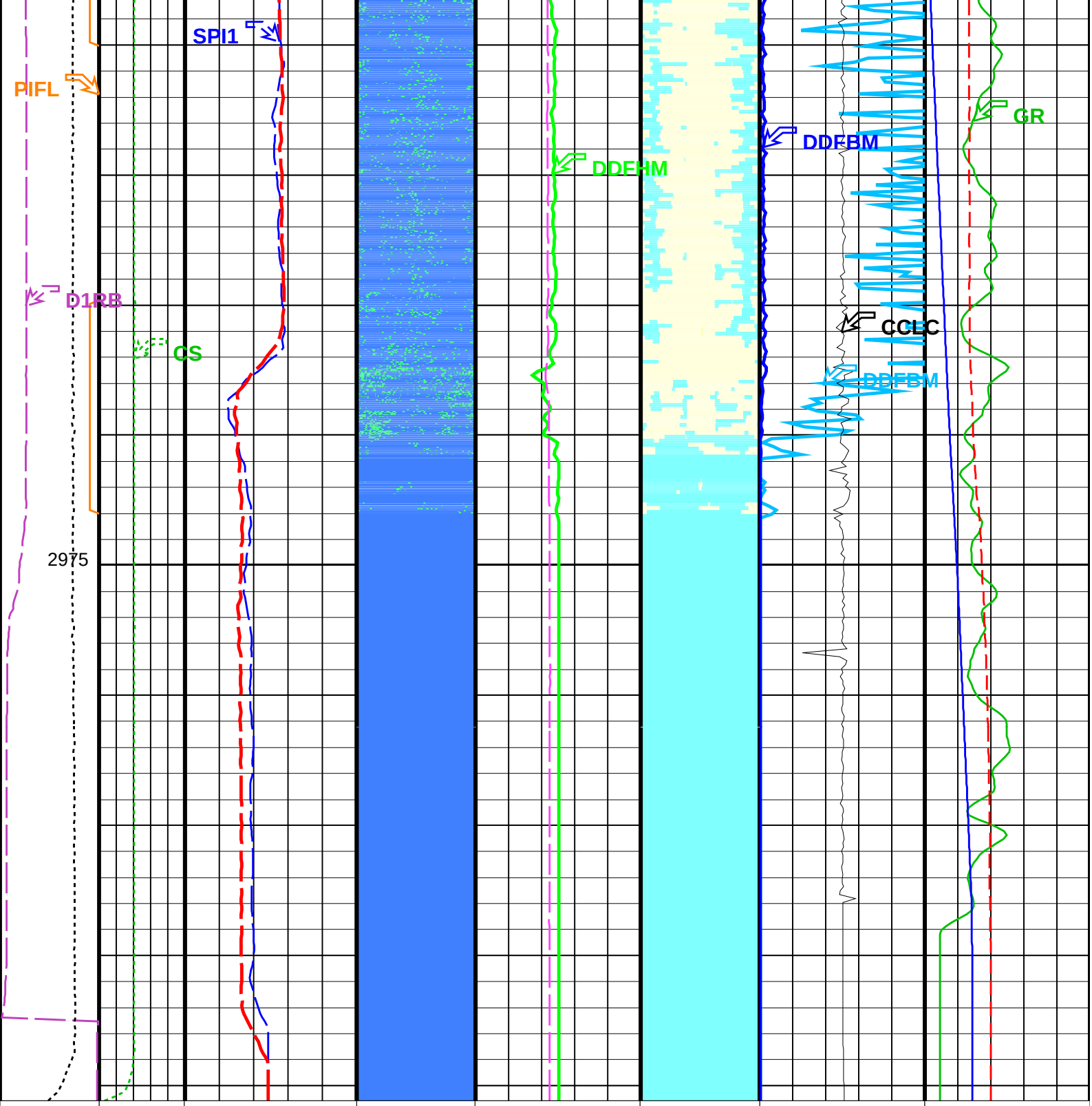
OP System Version: 16C0-147

MCM

PFCS-A	SRPC-3624-Q2_2008_OP16_b	PILS-A	SRPC-3624-Q2_2008_OP16_b

DEFT−C2 SRPC−3624−Q2_2008_OP16_b PGMC−A SRPC−3624−Q2_2008_OP16_b
PSPT−B SRPC−3624−Q2_2008_OP16_b





Perfo Zone (PIFL)
20 (---- 0

Cable Speed (CS) (F/HR)
0 5000

Filtered Auxiliary Spinner 1 (SPI1)
−12 (RPS) 13

−0.5000 0.5000
Water Holdup Image 2 colors (WATER_HIMAGE_2C) (----

Avg Holdup (DDFHM)
0 (---- 2

1.0000
100.0000
200.0000
300.0000
400.0000
500.0000
600.0000
700.0000
800.0000
900.0000
1000.0000
1100.0000
1200.0000
1300.0000
1400.0000
1500.0000
Bub Counts Image 16 colors (DBIMAGE_

Amplified Avg Bubble count (DDFBM)
0 (CPS) 10

GR (GR)
0 (GAPI) 150

				16C) (----		
Probe1 RB (D1RB) (DEG) 0 360		Filtered Main Spinner (SPIN) −12 (RPS) 13		Well Fluid Density (WFDE) 0.1 (G/C3) 2.1	Comp.CCL (CCLC) 2 (V) −2	Well Pressure (WPRE) 3150 (PSIA) 3300
Tension (TENS) (LBF) 0 2500					Avg BUB count (DDFBM) 0 (CPS) 500	Well Temperature (WTEP) 216 (DEGF) 220

Format: DEFT_Image_DL Vertical Scale: 1:200 Graphics File Created: 19−Jan−2009 14:37

OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

Parameters

DLIS Name	Description	Value	
	PFCS−A: PSP Flow and caliper Tool		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
CSID	Casing Size I.D.	3.958	IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2−D1RB	
DDRS	Dual DEFT RB Source	D1RB	
DFBD	DEFT Blank Disallowed Probes	NO	
DFFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
DFPP	Probes Arm Position	C	
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	
	PILS−A: PSP In Line Spinner Flowmeter		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	
	DEFT−C2: DEFT_C Tool		
CSID	Casing Size I.D.	3.958	IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2−D1RB	
DDRS	Dual DEFT RB Source	D1RB	
DFBD	DEFT Blank Disallowed Probes	NO	
DFFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
	PGMC−A: PSP Gradiomanometer Measurement Module		
CSID	Casing Size I.D.	3.958	IN
GCPG	Gradio Surf.Cal Diff.Pres Gain	1	
GCPO	Gradio Surf.Cal Diff.Pres Offset	0	KPAA
PDSH	Gradio Correction Density Shift	0	G/C3
	PSPT−B: Production Services Logging Platform		
CSID	Casing Size I.D.	3.958	IN
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
	BORDYN: BorDyn (Well Test Validation)		
CSID	Casing Size I.D.	3.958	IN
	System and Miscellaneous		
DO	Depth Offset for Playback	0.1	M
PP	Playback Processing	NORMAL	

Input DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_066LUP	FN:60	PRODUCER	19−Jan−2009 10:38	2995.4 M	2921.5 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_073PUP	FN:66	PRODUCER	19−Jan−2009 14:37

Schlumberger

Flowing Pass Down
@ 10m/min

MAXIS Field Log

Input DLIS Files

DEFAULT	Flip_FCS_ILS_DEFT_071LUP		PRODUCER	19−Jan−2009 14:34	2995.3 M	2920.9 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_072PUP	FN:65	PRODUCER	19−Jan−2009 14:35	2993.4 M	2919.1 M

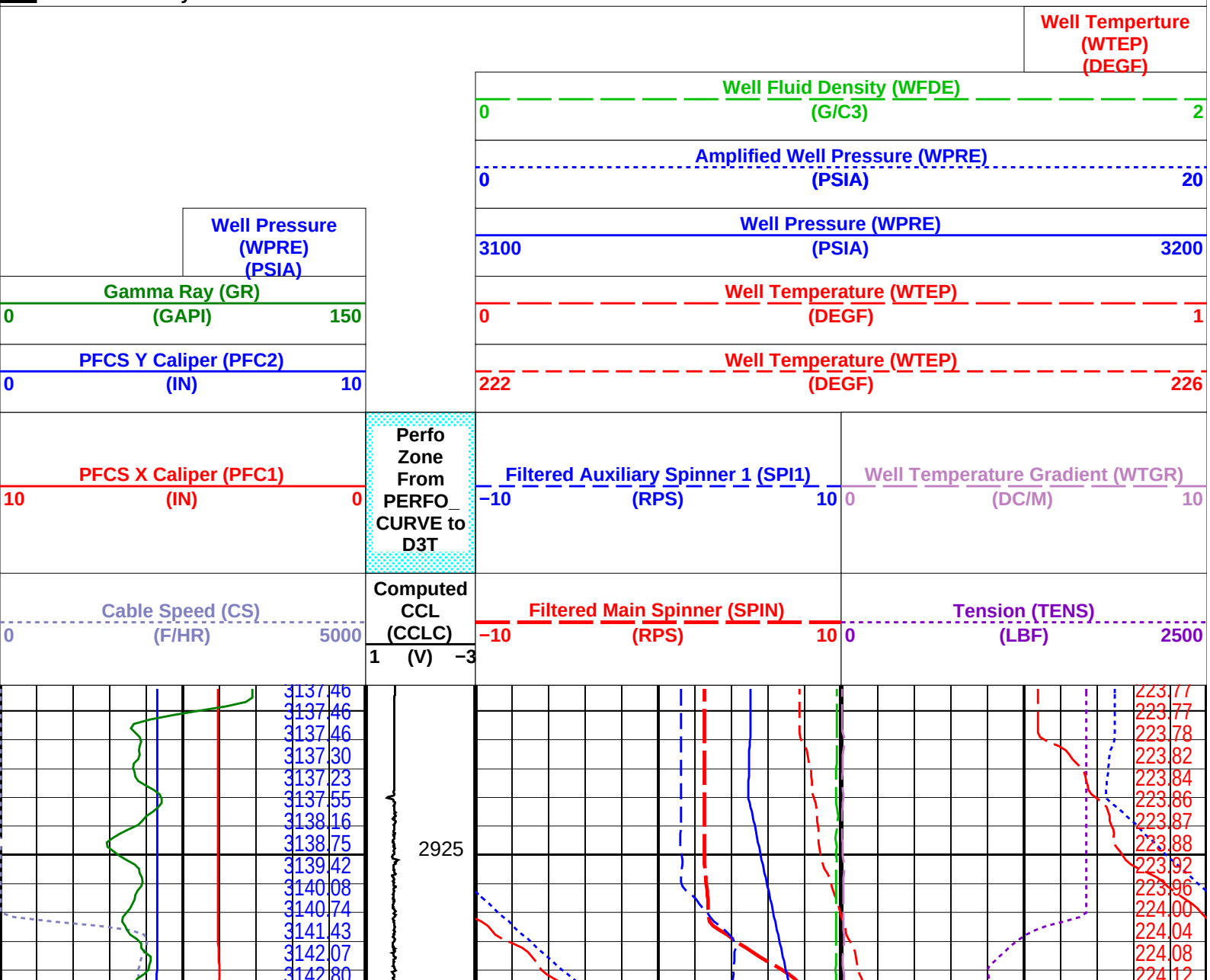
OP System Version: 16C0−147

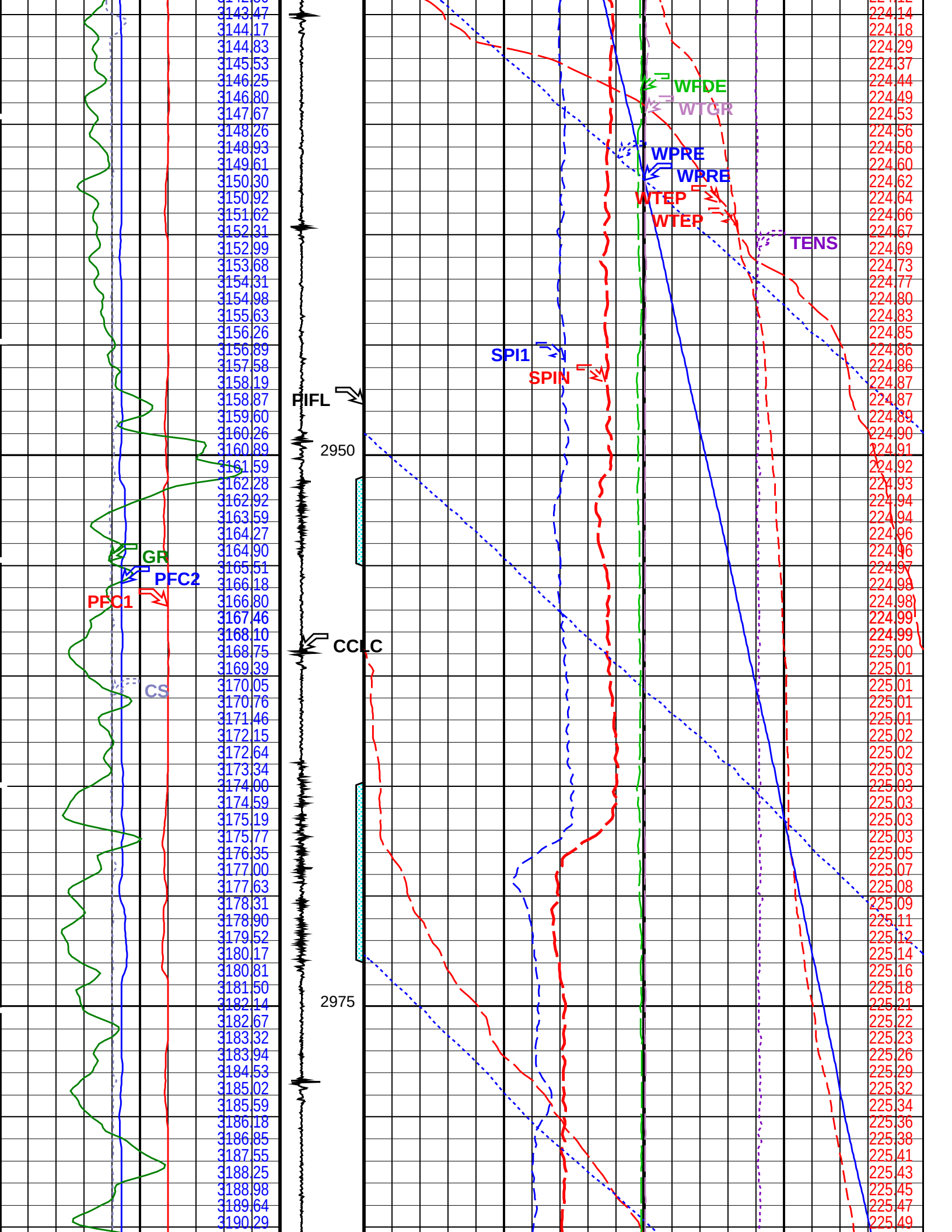
MCM

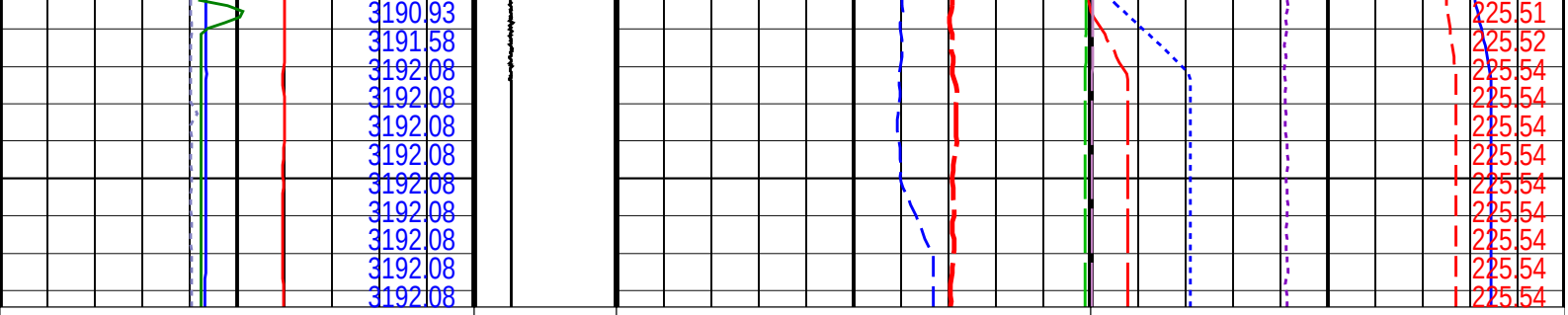
PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

PIP SUMMARY

Time Mark Every 60 S




WPDE
WTGR
WPRE
WPRE
WTEP
WTEP
TENS
SPI1
SPIN
RIFL
2950
GR
PFC2
PFC1
CCLC
CS
2975



Cable Speed (CS)
0 (F/HR) 5000

Computed CCL (CCLC)
1 (V) −3

Filtered Main Spinner (SPIN)
−10 (RPS) 10

Tension (TENS)
0 (LBF) 2500

PFCS X Caliper (PFC1)
10 (IN) 0

Perfo Zone From PERFO_ CURVE to D3T

Filtered Auxiliary Spinner 1 (SPI1)
−10 (RPS) 10

Well Temperature Gradient (WTGR)
0 (DC/M) 10

PFCS Y Caliper (PFC2)
0 (IN) 10

Well Temperature (WTEP)
222 (DEGF) 226

Gamma Ray (GR)
0 (GAPI) 150

Well Temperature (WTEP)
0 (DEGF) 1

Well Pressure (WPRE) (PSIA)

Well Pressure (WPRE)
3100 (PSIA) 3200

Amplified Well Pressure (WPRE)
0 (PSIA) 20

Well Fluid Density (WFDE)
0 (G/C3) 2

Well Temperture (WTEP) (DEGF)

PIP SUMMARY

Time Mark Every 60 S

Format: PSP_1 Vertical Scale: 1:200 Graphics File Created: 19−Jan−2009 14:35

OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

Parameters

DLIS Name	Description	Value	
	PFCS−A: PSP Flow and caliper Tool		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	
	PILS−A: PSP In Line Spinner Flowmeter		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	
	PGMC−A: PSP Gradiomanometer Measurement Module		
GCPG	Gradio Surf.Cal Diff.Pres Gain	1	
GCPO	Gradio Surf.Cal Diff.Pres Offset	0	KPAA
PDSH	Gradio Correction Density Shift	0	G/C3
	PSPT−B: Production Services Logging Platform		
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
	System and Miscellaneous		

DO	Depth Offset for Playback	−1.9	M
PP	Playback Processing	NORMAL	

Input DLIS Files

DEFAULT	Flip_FCS_ILS_DEFT_071LUP		PRODUCER	19−Jan−2009 14:34	2995.3 M	2920.9 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_072PUP	FN:65	PRODUCER	19−Jan−2009 14:35		

Input DLIS Files

DEFAULT	Flip_FCS_ILS_DEFT_071LUP		PRODUCER	19−Jan−2009 14:34	2995.3 M	2920.9 M

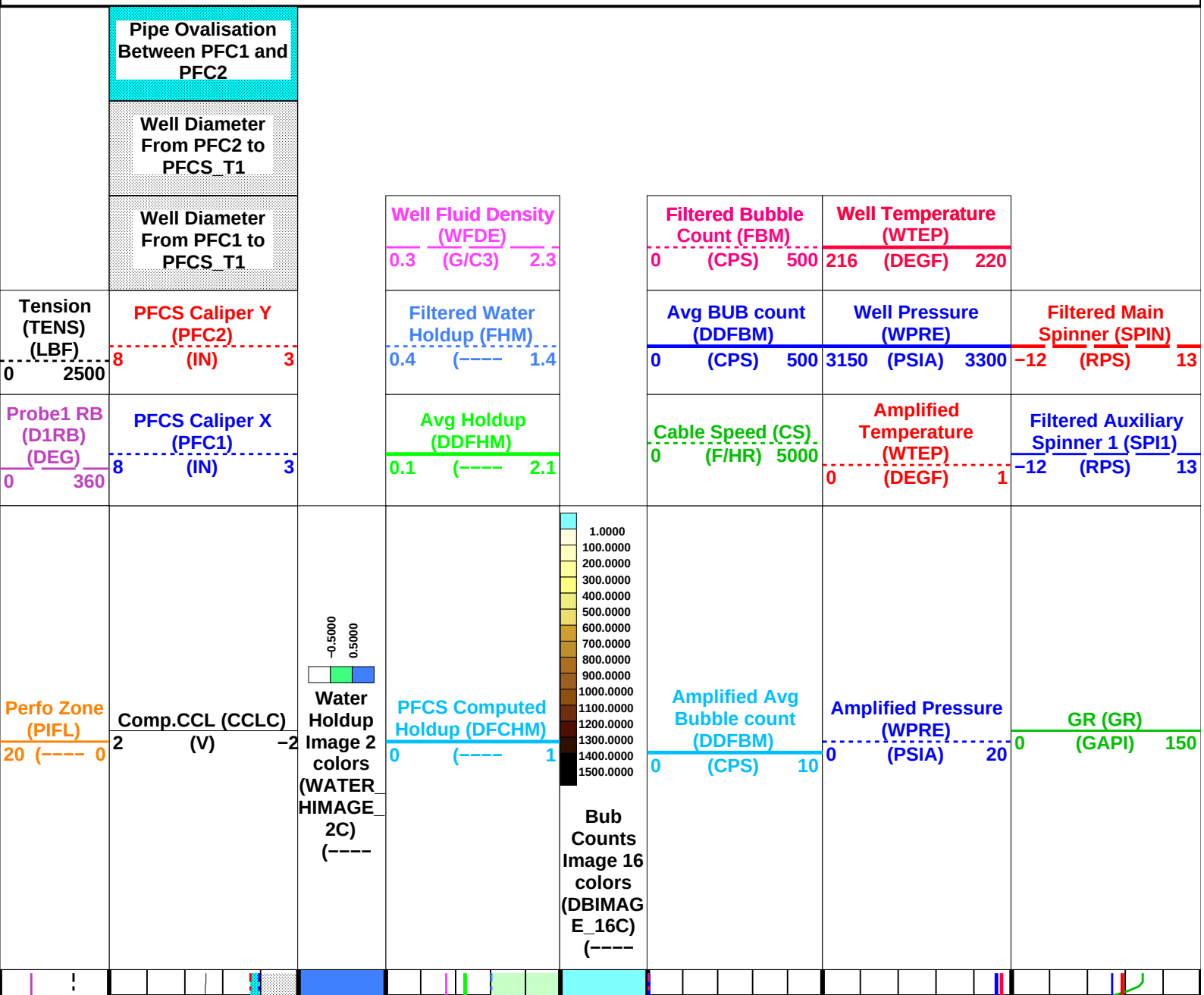
Output DLIS Files

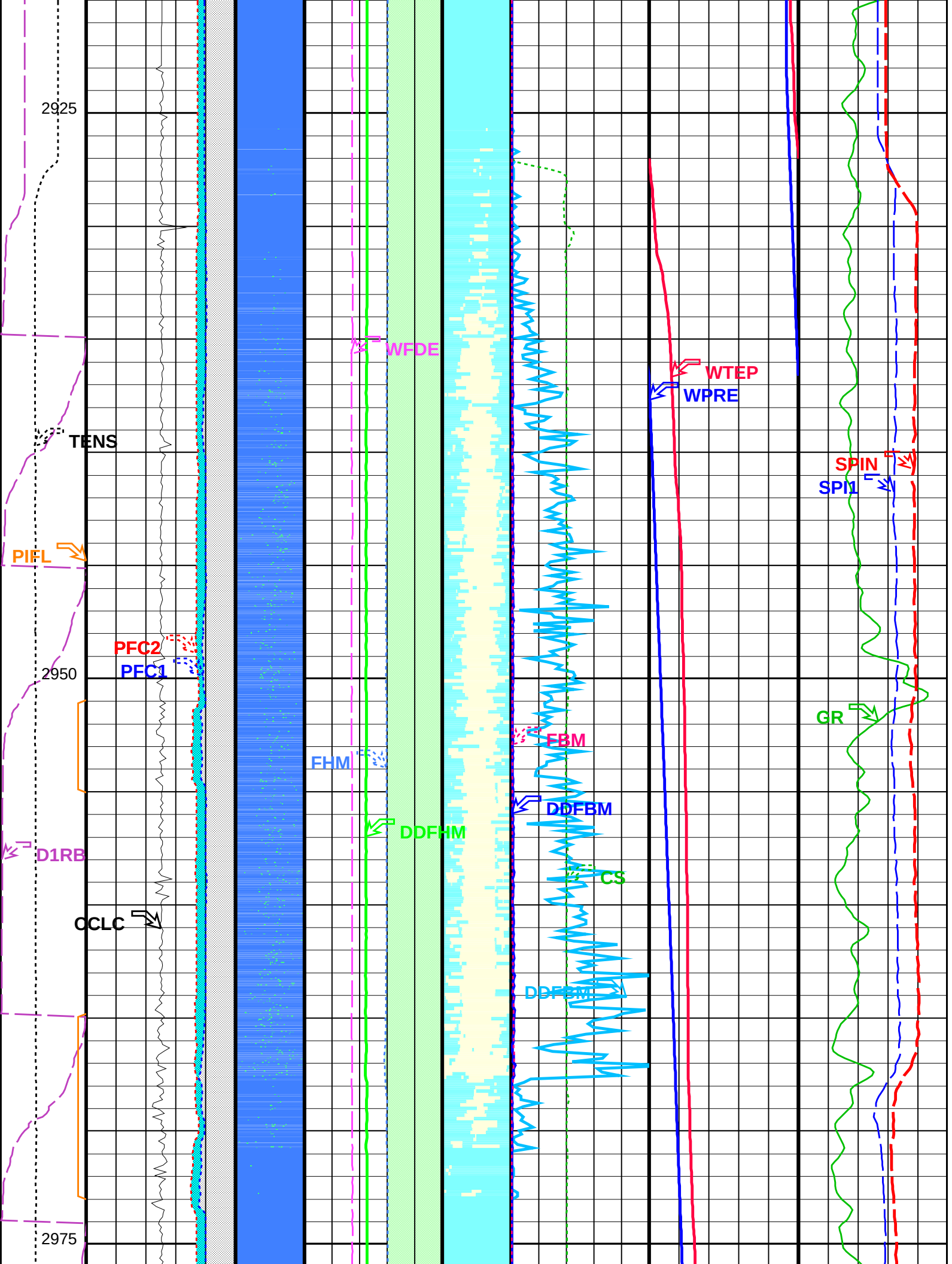
DEFAULT	FCS_ILS_DEFT_GMS_072PUP	FN:65	PRODUCER	19−Jan−2009 14:35	2993.4 M	2919.1 M

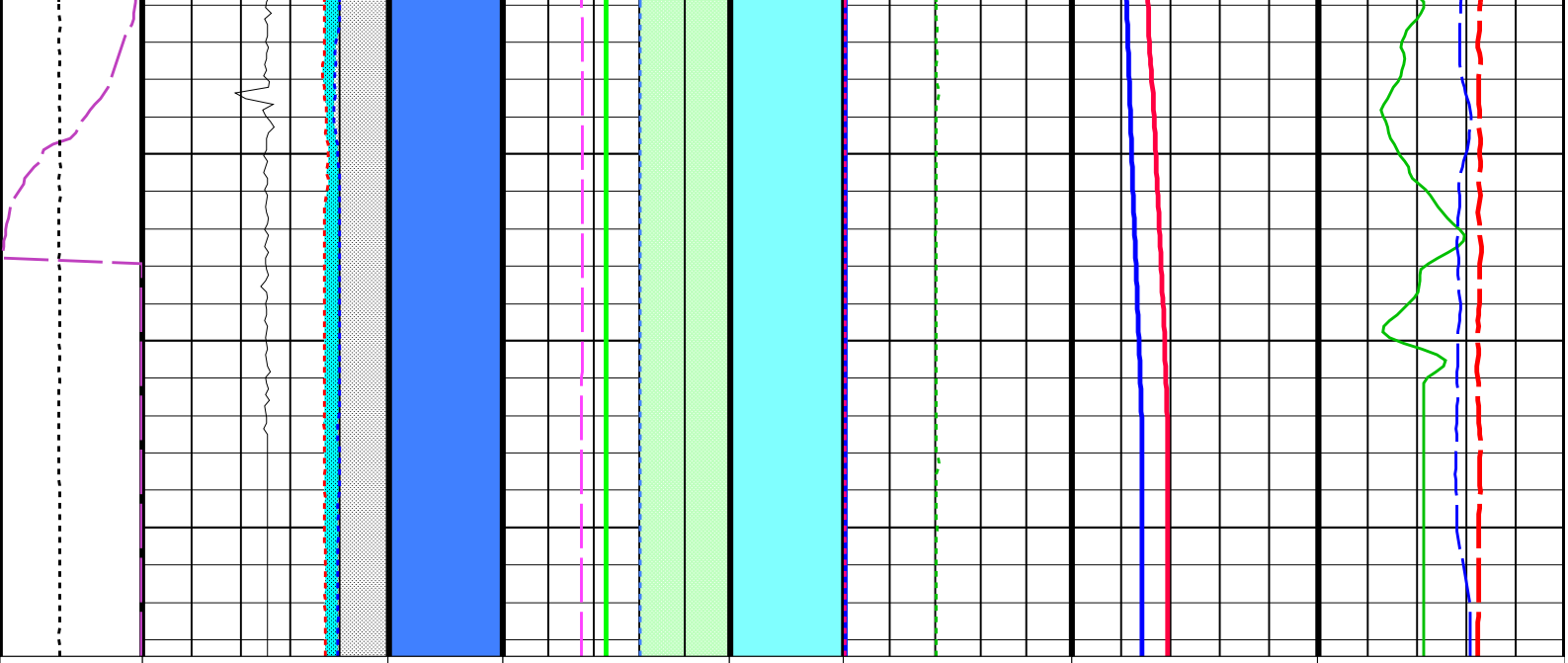
OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		




2925
2950
2975
TENS
PIFL
PFC2
PFC1
D1RB
OCLC
WFDE
FHM
DDFHM
FBM
DDFBM
CS
DDFBM
WTEP
WPRE
SPIN
SPI1
GR



Perfo Zone (PIFL)	Comp.CCL (CCLC)	Water Holdup Image 2 colors (WATER_HIMAGE_2C)	PFCS Computed Holdup (DFCHM)	Bub Counts Image 16 colors (DBIMAGE_16C)	Amplified Avg Bubble count (DDFBM)	Amplified Pressure (WPRE)	GR (GR)
20 (---- 0	2 (V) −2	−0.5000 0.5000	0 (---- 1	1.0000 100.0000 200.0000 300.0000 400.0000 500.0000 600.0000 700.0000 800.0000 900.0000 1000.0000 1100.0000 1200.0000 1300.0000 1400.0000 1500.0000	0 (CPS) 10	0 (PSIA) 20	0 (GAPI) 150
Probe1 RB (D1RB) (DEG)	PFCS Caliper X (PFC1)		Avg Holdup (DDFHM)		Cable Speed (CS)	Amplified Temperature (WTEP)	Filtered Auxiliary Spinner 1 (SPI1)
0 360	8 (IN) 3		0.1 (---- 2.1		0 (F/HR) 5000	0 (DEGF) 1	−12 (RPS) 13
Tension (TENS) (LBF)	PFCS Caliper Y (PFC2)		Filtered Water Holdup (FHM)		Avg BUB count (DDFBM)	Well Pressure (WPRE)	Filtered Main Spinner (SPIN)
0 2500	8 (IN) 3		0.4 (---- 1.4		0 (CPS) 500	3150 (PSIA) 3300	−12 (RPS) 13
	Well Diameter From PFC1 to PFCS_T1		Well Fluid Density (WFDE)		Filtered Bubble Count (FBM)	Well Temperature (WTEP)	
			0.3 (G/C3) 2.3		0 (CPS) 500	216 (DEGF) 220	
	Well Diameter From PFC2 to PFCS_T1						
	Pipe Ovalisation Between PFC1 and PFC2						

Format: PFCS_Image_DL Vertical Scale: 1:200 Graphics File Created: 19−Jan−2009 14:35

OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b

DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

Parameters

DLIS Name	Description	Value	
	PFCS−A: PSP Flow and caliper Tool		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
CSID	Casing Size I.D.	3.958	IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2−D1RB	
DDRS	Dual DEFT RB Source	D1RB	
DFBD	DEFT Blank Disallowed Probes	NO	
DFFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
DFPP	Probes Arm Position	C	
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	
	PILS−A: PSP In Line Spinner Flowmeter		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	
	DEFT−C2: DEFT_C Tool		
CSID	Casing Size I.D.	3.958	IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2−D1RB	
DDRS	Dual DEFT RB Source	D1RB	
DFBD	DEFT Blank Disallowed Probes	NO	
DFFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
DFPP2	Probes Arm Position (2nd tool)	D	
	PGMC−A: PSP Gradiomanometer Measurement Module		
CSID	Casing Size I.D.	3.958	IN
GCPG	Gradio Surf.Cal Diff.Pres Gain	1	
GCPO	Gradio Surf.Cal Diff.Pres Offset	0	KPAA
PDSH	Gradio Correction Density Shift	0	G/C3
	PSPT−B: Production Services Logging Platform		
CSID	Casing Size I.D.	3.958	IN
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
	BORDYN: BorDyn (Well Test Validation)		
CSID	Casing Size I.D.	3.958	IN
	System and Miscellaneous		
CSIZ	Current Casing Size	4.500	IN
DO	Depth Offset for Playback	−1.9	M
PP	Playback Processing	NORMAL	

Input DLIS Files

DEFAULT	Flip_FCS_ILS_DEFT_071LUP		PRODUCER	19−Jan−2009 14:34	2995.3 M	2920.9 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_072PUP	FN:65	PRODUCER	19−Jan−2009 14:35		

Input DLIS Files

DEFAULT	Flip_FCS_ILS_DEFT_071LUP		PRODUCER	19−Jan−2009 14:34	2995.3 M	2920.9 M

Output DLIS Files

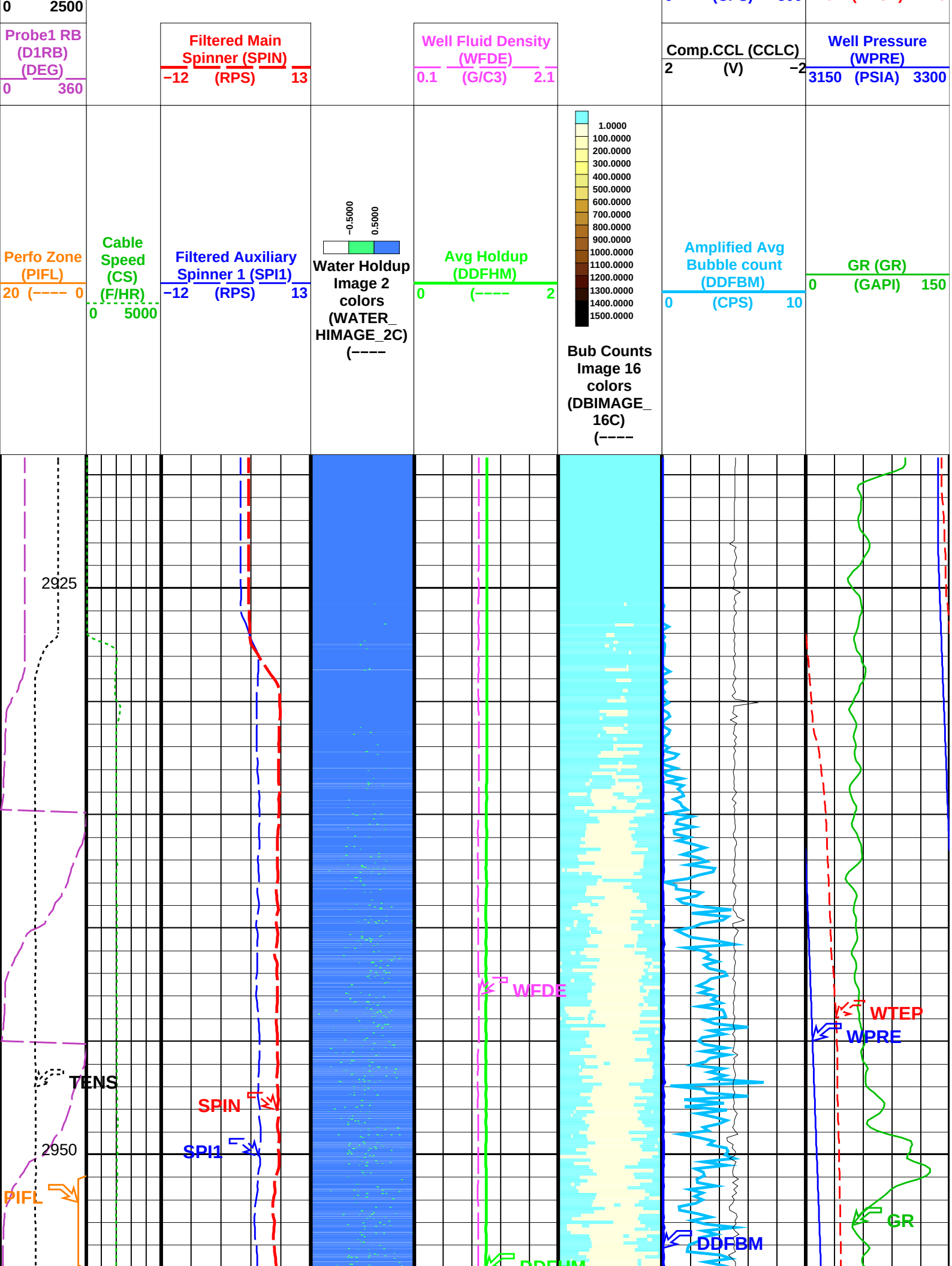
DEFAULT	FCS_ILS_DEFT_GMS_072PUP	FN:65	PRODUCER	19−Jan−2009 14:35	2993.4 M	2919.1 M

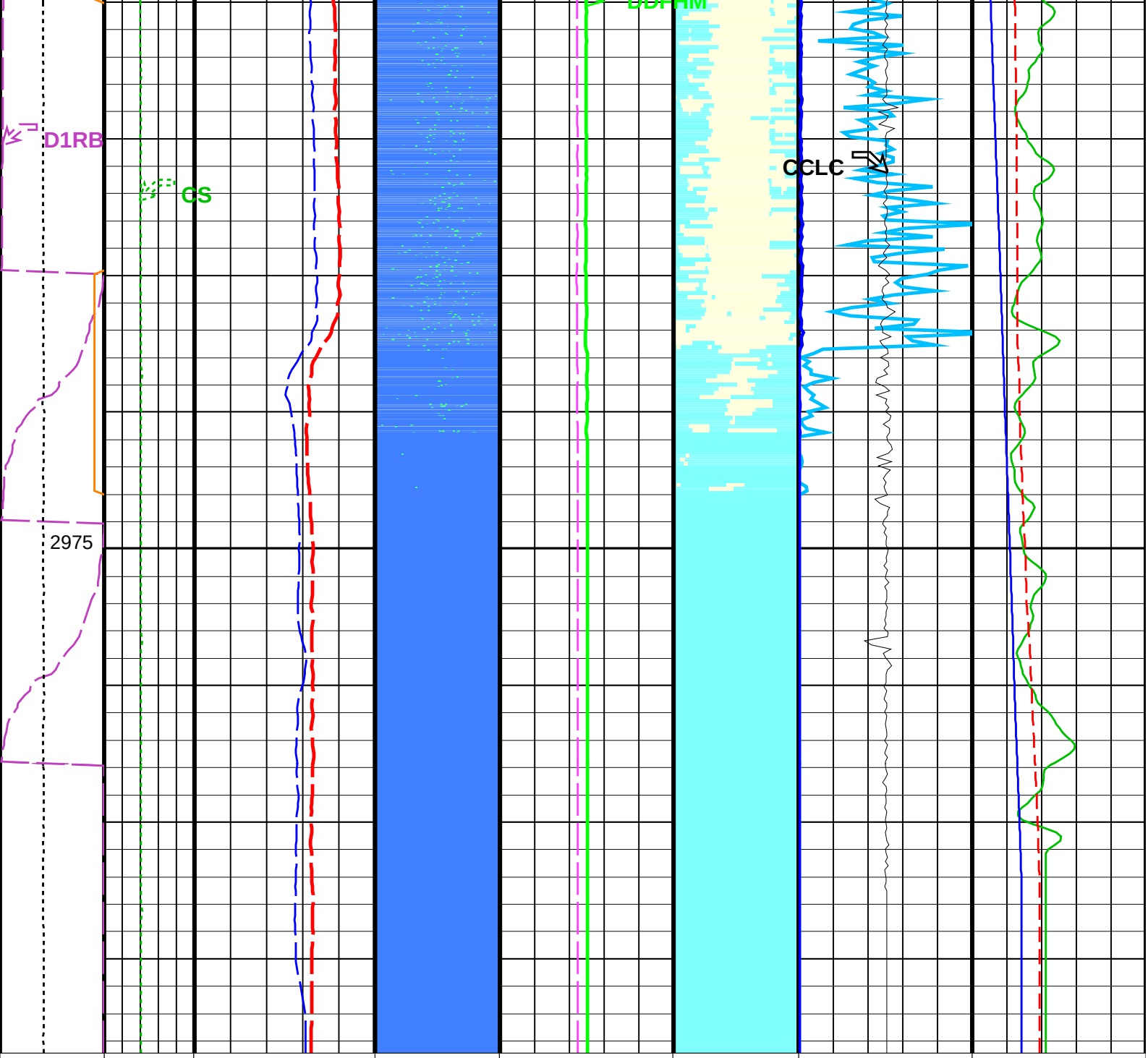
OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

Tension (TENS) (LBF)		Avg BUB count (DDFBM)			Well Temperature (WTEP)		
		0	(CPS)	500	216	(DEGF)	220


0 2500
Probe1 RB (D1RB) (DEG)
0 360
Filtered Main Spinner (SPIN)
−12 (RPS) 13
Well Fluid Density (WFDE)
0.1 (G/C3) 2.1
Comp.CCL (CCLC)
2 (V) −2
Well Pressure (WPRE)
3150 (PSIA) 3300
Perfo Zone (PIFL)
20 (---- 0
Cable Speed (CS) (F/HR)
0 5000
Filtered Auxiliary Spinner 1 (SPI1)
−12 (RPS) 13
−0.5000
0.5000
Water Holdup Image 2 colors (WATER_HIMAGE_2C) (----
Avg Holdup (DDFHM)
0 (---- 2
1.0000
100.0000
200.0000
300.0000
400.0000
500.0000
600.0000
700.0000
800.0000
900.0000
1000.0000
1100.0000
1200.0000
1300.0000
1400.0000
1500.0000
Bub Counts Image 16 colors (DBIMAGE_16C) (----
Amplified Avg Bubble count (DDFBM)
0 (CPS) 10
GR (GR)
0 (GAPI) 150
2925
2950
TENS
SPIN
SPI1
PIFL
WFDE
DDFHM
DDFBM
WTEP
WPRE
GR



Perfo Zone (PIFL)	Cable Speed (CS) (F/HR)	Filtered Auxiliary Spinner 1 (SPI1)	Water Holdup Image 2 colors (WATER_HIMAGE_2C) (----	Avg Holdup (DDFHM)	Bub Counts Image 16 colors (DBIMAGE_16C) (----	Amplified Avg Bubble count (DDFBM)	GR (GR)
20 (---- 0	0 5000	−12 (RPS) 13	−0.5000 0.5000	0 (---- 2	1.0000 100.0000 200.0000 300.0000 400.0000 500.0000 600.0000 700.0000 800.0000 900.0000 1000.0000 1100.0000 1200.0000 1300.0000 1400.0000 1500.0000	0 (CPS) 10	0 (GAPI) 150
Probe1 RB (D1RB)		Filtered Main Spinner (SPIN)		Well Fluid Density (WFDE)		Comp.CCL (CCLC)	Well Pressure (WPRE)

(DEG) 0 360	−12 (RPS) 13	0.1 (G/C3) 2.1	2 (V) −2	3150 (PSIA) 3300	
Tension (TENS) (LBF) 0 2500				Avg BUB count (DDFBM) 0 (CPS) 500	Well Temperature (WTEP) 216 (DEGF) 220

Format: DEFT_Image_DL Vertical Scale: 1:200 Graphics File Created: 19−Jan−2009 14:35

OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

Parameters

DLIS Name	Description	Value	
	PFCS−A: PSP Flow and caliper Tool		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
CSID	Casing Size I.D.	3.958	IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2−D1RB	
DDRS	Dual DEFT RB Source	D1RB	
DFBD	DEFT Blank Disallowed Probes	NO	
DFFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
DFPP	Probes Arm Position	C	
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	
	PILS−A: PSP In Line Spinner Flowmeter		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	
	DEFT−C2: DEFT_C Tool		
CSID	Casing Size I.D.	3.958	IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2−D1RB	
DDRS	Dual DEFT RB Source	D1RB	
DFBD	DEFT Blank Disallowed Probes	NO	
DFFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
	PGMC−A: PSP Gradiomanometer Measurement Module		
CSID	Casing Size I.D.	3.958	IN
GCPG	Gradio Surf.Cal Diff.Pres Gain	1	
GCPO	Gradio Surf.Cal Diff.Pres Offset	0	KPAA
PDSH	Gradio Correction Density Shift	0	G/C3
	PSPT−B: Production Services Logging Platform		
CSID	Casing Size I.D.	3.958	IN
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
	BORDYN: BorDyn (Well Test Validation)		
CSID	Casing Size I.D.	3.958	IN
	System and Miscellaneous		
DO	Depth Offset for Playback	−1.9	M
PP	Playback Processing	NORMAL	

Input DLIS Files

DEFAULT	Flip_FCS_ILS_DEFT_071LUP		PRODUCER	19−Jan−2009 14:34	2995.3 M 2920.9 M

Output DLIS Files

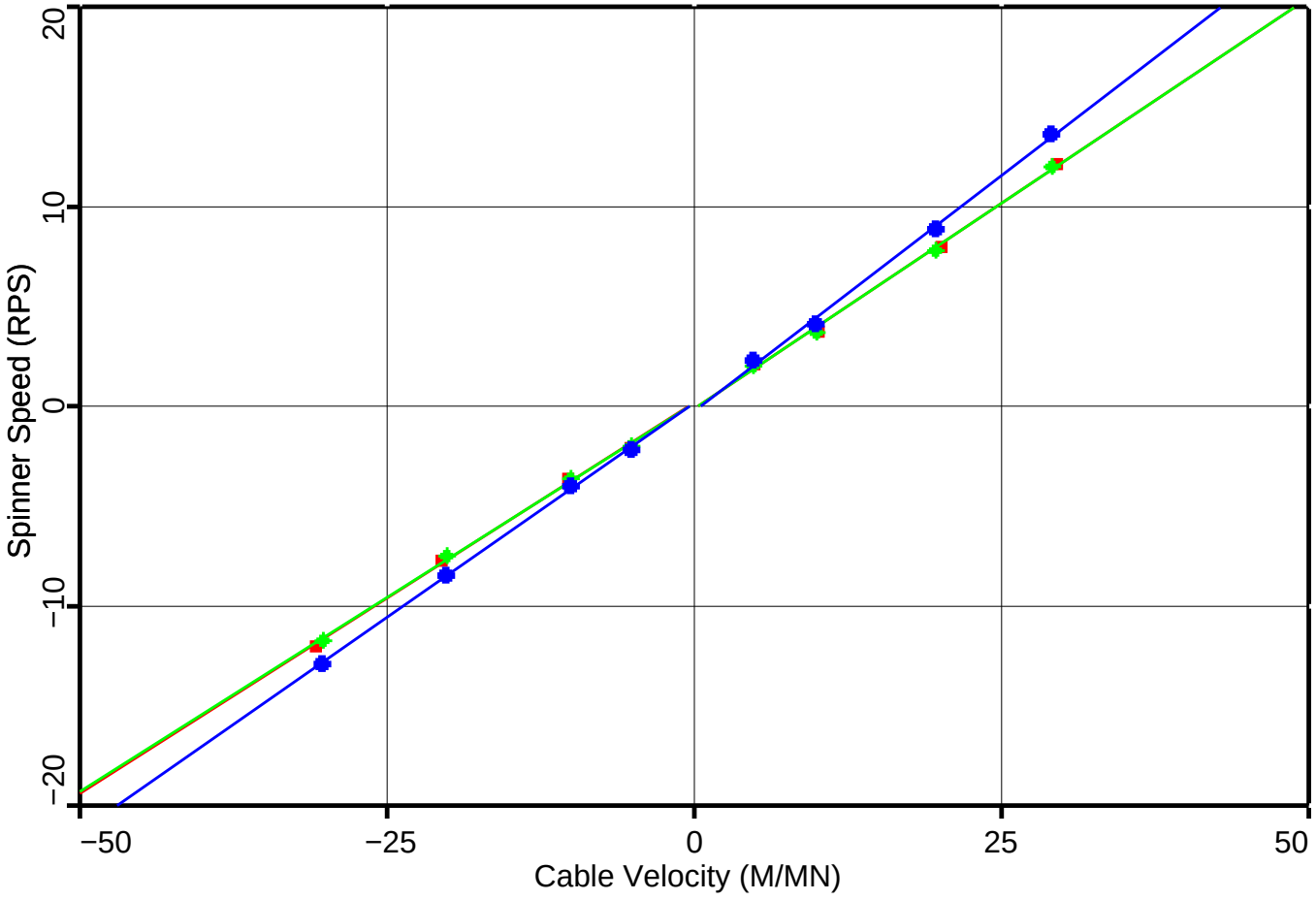
DEFAULT	FCS_ILS_DEFT_GMS_072PUP	FN:65	PRODUCER	19−Jan−2009 14:35

Schlumberger

Static Spinner Calibration Plot

Production Logging Quicklook Spinner Calibration

	Zone Depth (M)	Fluid Vel. (M/MN)	Positive Spinner Slope (RSMM)	Positive Spinner Intercept (M/MN)	Positive Spinner Correl.	Negative Spinner Slope (RSMM)	Negative Spinner Intercept (M/MN)	Negative Spinner Correl.
	Zone 1 2945.0 − 2935.0 :	−1.$	0.4132	0.4	0.999	0.3903	−0.4	0.999
	Zone 2 2962.0 − 2957.0 :	−1.$	0.4129	0.4	0.999	0.3881	−0.4	0.999
	Zone 3 2990.0 − 2975.0 :	−1.$	0.4735	0.6	0.999	0.4297	−0.4	1



Schlumberger

Static Multipass

PLQL Passes Summary

Pass # 1: Src: PLQL_CS, Log: DOWN , Avg.CS: 9 M/MN
Pass # 2: Src: PLQL_CS, Log: UP , Avg.CS: 10 M/MN
Pass # 3: Src: PLQL_CS, Log: DOWN , Avg.CS: 4 M/MN
Pass # 4: Src: PLQL_CS, Log: UP , Avg.CS: 5 M/MN
Pass # 5: Src: PLQL_CS, Log: DOWN , Avg.CS: 19 M/MN
Pass # 6: Src: PLQL_CS, Log: UP , Avg.CS: 20 M/MN
Pass # 7: Src: PLQL_CS, Log: DOWN , Avg.CS: 29 M/MN
Pass # 8: Src: PLQL_CS, Log: UP , Avg.CS: 30 M/MN

Company: Esso Australia Pty Ltd. Well: A3A
Company: Esso Australia Pty Ltd. Well: A3A

Input DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_052PUP	FN:46	PRODUCER	18−Jan−2009 06:54	2997.9 M	2907.0 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_053PUP	FN:47	PRODUCER	18−Jan−2009 07:00	2995.0 M	2924.9 M

OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

Well Pressure [01] (P01LPR)
3150 (PSIA) 3250

Well Pressure [02] (P02LPR)
3150 (PSIA) 3250

Well Pressure [03] (P03LPR)
3150 (PSIA) 3250

Well Pressure [04] (P04LPR)
3150 (PSIA) 3250

Well Pressure [05] (P05LPR)
3150 (PSIA) 3250

Well Pressure [06] (P06LPR)
3150 (PSIA) 3250

Well Pressure [07] (P07LPR)
3150 (PSIA) 3250

Well Pressure [08] (P08LPR)
3150 (PSIA) 3250

Gamma−Ray [01] (P01LGR)
0 (GAPI) 150

Fluid Density [01] (P01FDS)
0 (G/C3) 2

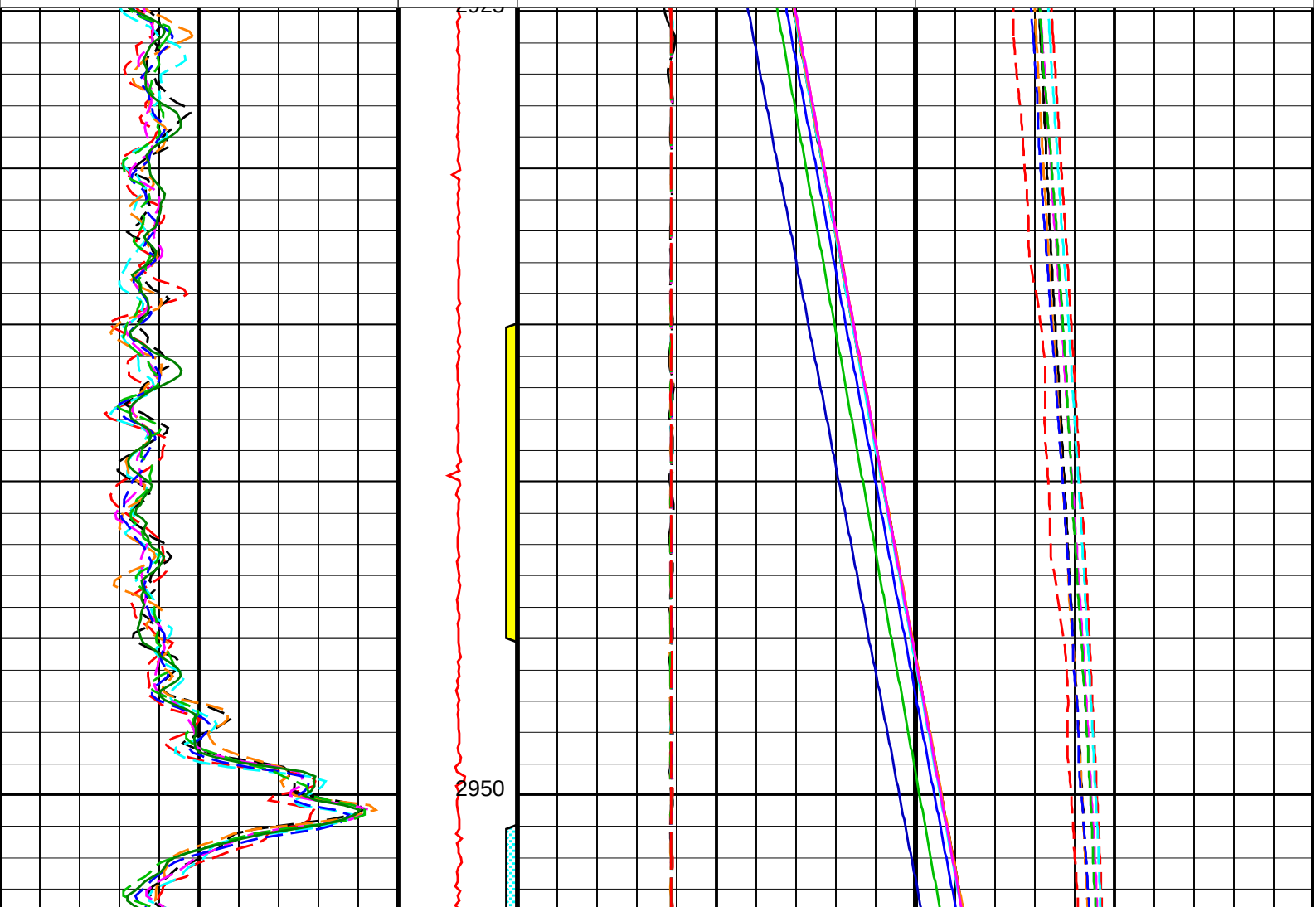
Fluid Temperature [01] (P01TMP)
220 (DEGF) 230

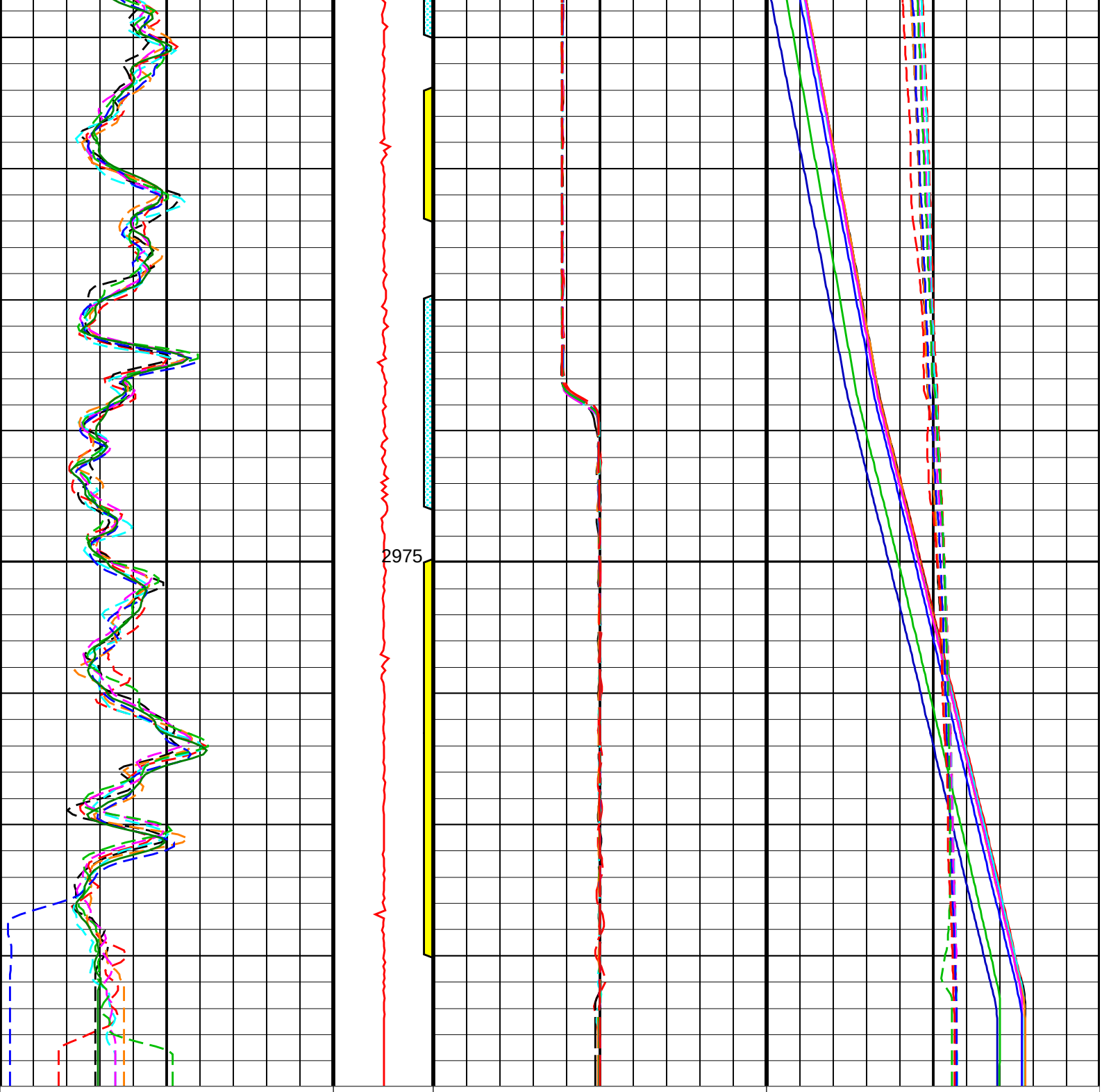
Gamma−Ray [02] (P02LGR)
0 (GAPI) 150

Fluid Density [02] (P02FDS)
0 (G/C3) 2

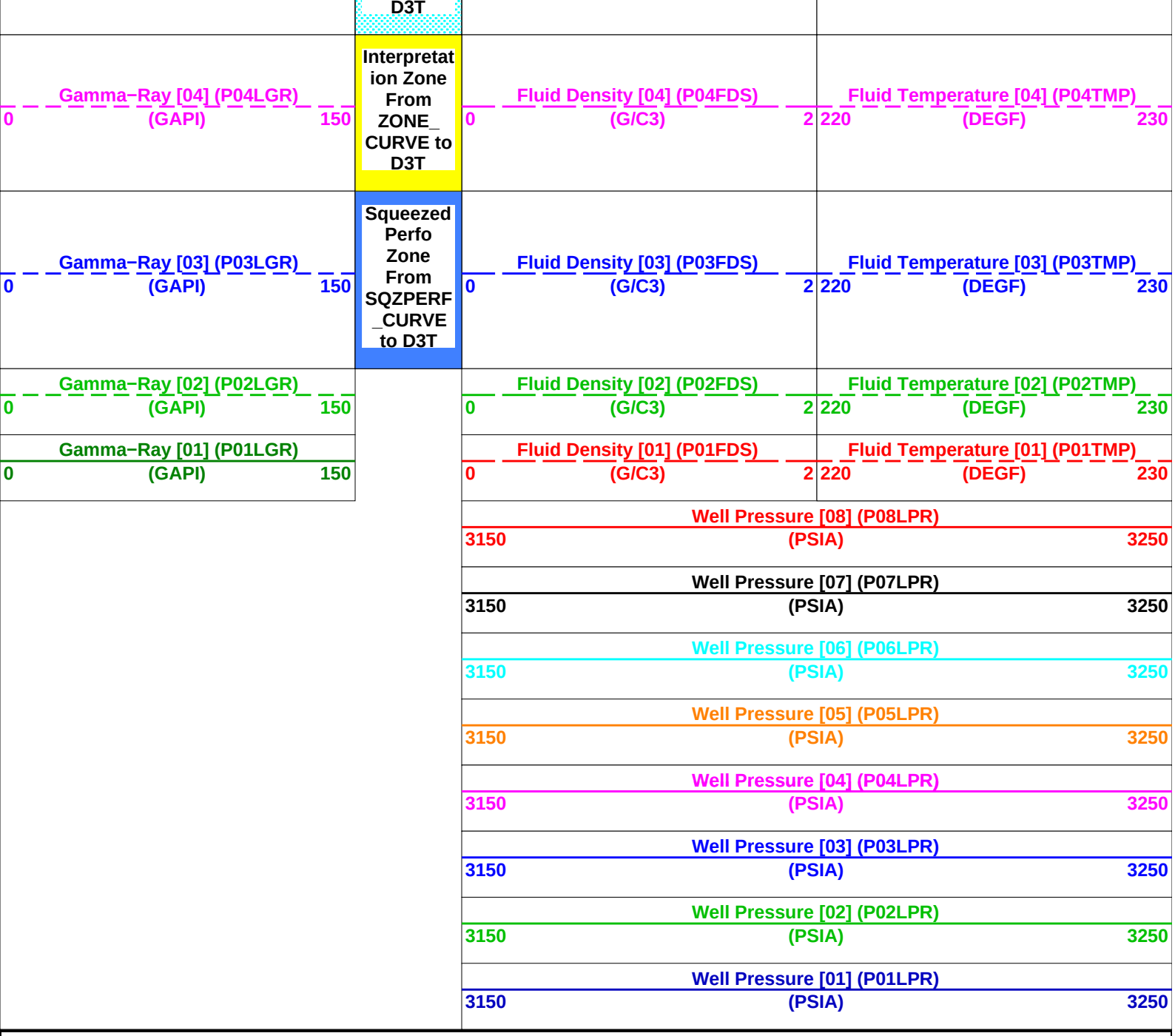
Fluid Temperature [02] (P02TMP)
220 (DEGF) 230

Gamma-Ray [03] (P03LGR) 0 (GAPI) 150	Squeezed Perfo Zone From SQZPERF_CURVE to D3T	Fluid Density [03] (P03FDS) 0 (G/C3) 2	Fluid Temperature [03] (P03TMP) 220 (DEGF) 230
Gamma-Ray [04] (P04LGR) 0 (GAPI) 150	Interpretation Zone From ZONE_CURVE to D3T	Fluid Density [04] (P04FDS) 0 (G/C3) 2	Fluid Temperature [04] (P04TMP) 220 (DEGF) 230
Gamma-Ray [05] (P05LGR) 0 (GAPI) 150	Perfo Zone From PERFO_CURVE to D3T	Fluid Density [05] (P05FDS) 0 (G/C3) 2	Fluid Temperature [05] (P05TMP) 220 (DEGF) 230
Gamma-Ray [06] (P06LGR) 0 (GAPI) 150	Squeezed Perfo Zone (SPIF) 30 (---- 0	Fluid Density [06] (P06FDS) 0 (G/C3) 2	Fluid Temperature [06] (P06TMP) 220 (DEGF) 230
Gamma-Ray [07] (P07LGR) 0 (GAPI) 150	Perfo Zone (PIFL) 20 (---- 0	Fluid Density [07] (P07FDS) 0 (G/C3) 2	Fluid Temperature [07] (P07TMP) 220 (DEGF) 230
Gamma-Ray [08] (P08LGR) 0 (GAPI) 150	CCL [01] (P01CCL) -3 (V) 3	Fluid Density [08] (P08FDS) 0 (G/C3) 2	Fluid Temperature [08] (P08TMP) 220 (DEGF) 230





Gamma-Ray [08] (P08LGR)	CCL [01] (P01CCL)	Fluid Density [08] (P08FDS)	Fluid Temperature [08] (P08TMP)
0 (GAPI) 150	−3 (V) 3	0 (G/C3) 2	220 (DEGF) 230
Gamma-Ray [07] (P07LGR)	Perfo Zone (PIFL)	Fluid Density [07] (P07FDS)	Fluid Temperature [07] (P07TMP)
0 (GAPI) 150	20 (---- 0	0 (G/C3) 2	220 (DEGF) 230
Gamma-Ray [06] (P06LGR)	Squeezed Perfo Zone (SPIF)	Fluid Density [06] (P06FDS)	Fluid Temperature [06] (P06TMP)
0 (GAPI) 150	30 (---- 0	0 (G/C3) 2	220 (DEGF) 230
Gamma-Ray [05] (P05LGR)	Perfo Zone From PERFO_ CURVE to	Fluid Density [05] (P05FDS)	Fluid Temperature [05] (P05TMP)
0 (GAPI) 150		0 (G/C3) 2	220 (DEGF) 230



Parameters

DLIS Name	Description	Value	
	PFCS−A: PSP Flow and caliper Tool		
CSID	Casing Size I.D.	3.958	IN
	DEFT−C2: DEFT_C Tool		
CSID	Casing Size I.D.	3.958	IN
	PGMC−A: PSP Gradiomanometer Measurement Module		
CSID	Casing Size I.D.	3.958	IN
	PSPT−B: Production Services Logging Platform		
CSID	Casing Size I.D.	3.958	IN
	BORDYN: BorDyn (Well Test Validation)		
CSID	Casing Size I.D.	3.958	IN
	PLQL: Production Logging Quick Look		
CCLS	CCL Selector	CCLC	
FCHD	Cased Hole Diameter Selector	PFC1	
PCVS	CVEL Selector	CVEL	
PGRS	GR Selector	GR	
PGS	Pressure Gauge Selector	WPRE	
PWHS	PLQL Water HoldUp Selector	DFHM	
RHOS	Fluid Density Selector	WFDE	
SPIS	Spinner Selector	SPIN	
TMPS	Temperature Selector	WTEP	
	System and Miscellaneous		
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: PLQLMultiPassWithInsert_1 Vertical Scale: 1:200 Graphics File Created: 18−Jan−2009 07:00

OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

Input DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_052PUP	FN:46	PRODUCER	18−Jan−2009 06:54	2997.9 M	2907.0 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_053PUP	FN:47	PRODUCER	18−Jan−2009 07:00		

Company: Esso Australia Pty Ltd. Well: A3A

PLQL Passes Summary

Pass # 1: Src: PLQL_CS, Log: DOWN , Avg.CS: 9 M/MN
Pass # 2: Src: PLQL_CS, Log: UP , Avg.CS: 10 M/MN
Pass # 3: Src: PLQL_CS, Log: DOWN , Avg.CS: 4 M/MN
Pass # 4: Src: PLQL_CS, Log: UP , Avg.CS: 5 M/MN
Pass # 5: Src: PLQL_CS, Log: DOWN , Avg.CS: 19 M/MN
Pass # 6: Src: PLQL_CS, Log: UP , Avg.CS: 20 M/MN
Pass # 7: Src: PLQL_CS, Log: DOWN , Avg.CS: 29 M/MN
Pass # 8: Src: PLQL_CS, Log: UP , Avg.CS: 30 M/MN

Company: Esso Australia Pty Ltd. Well: A3A

Company: Esso Australia Pty Ltd. Well: A3A

Input DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_052PUP	FN:46	PRODUCER	18−Jan−2009 06:54	2997.9 M	2907.0 M

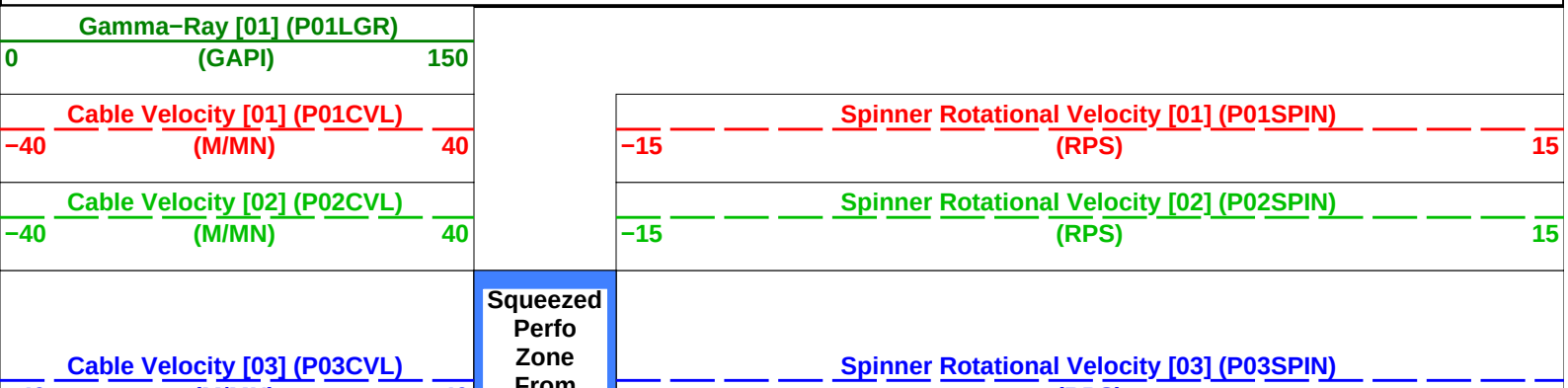
Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_053PUP	FN:47	PRODUCER	18−Jan−2009 07:00	2995.0 M	2924.9 M

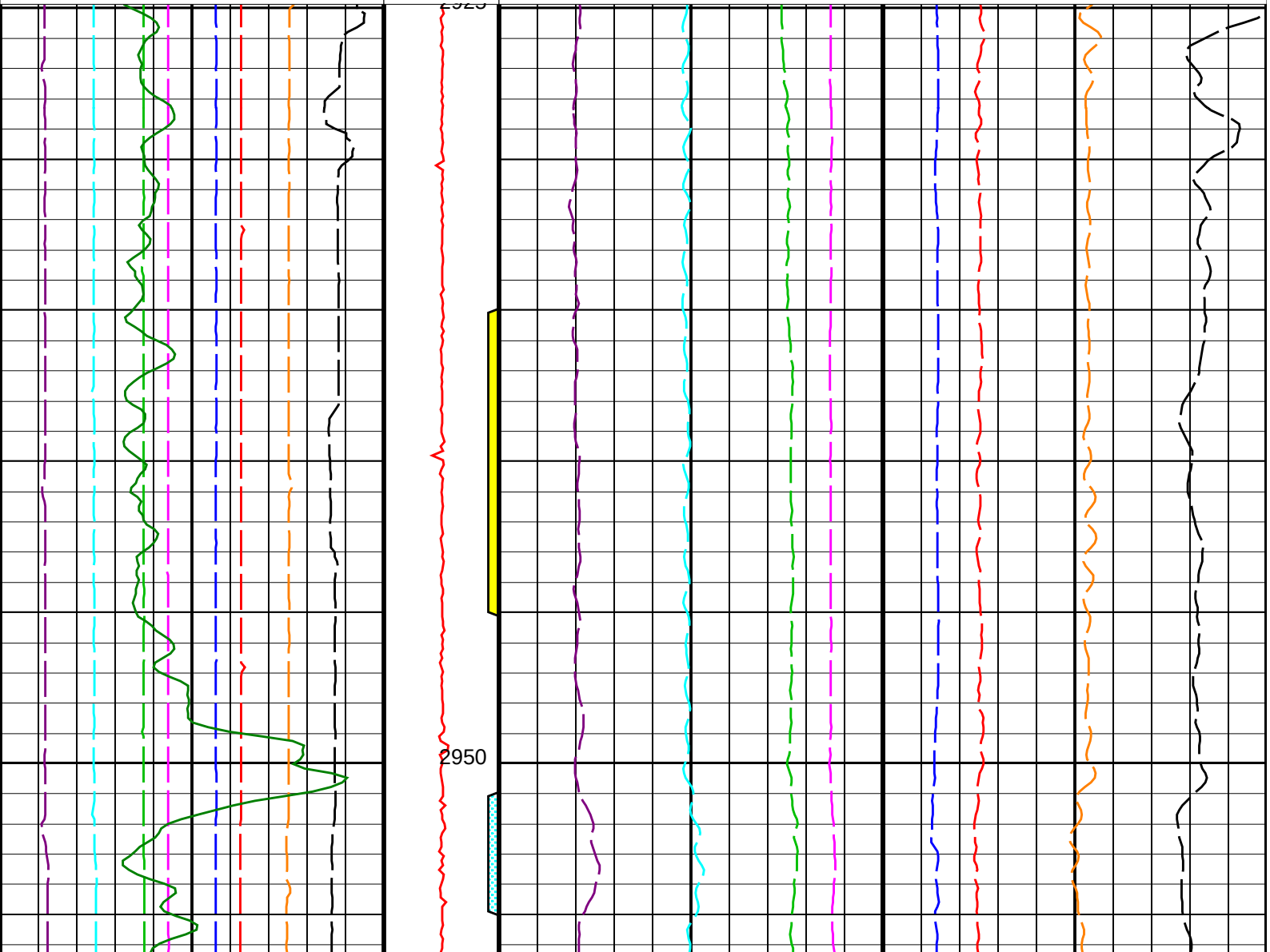
OP System Version: 16C0−147

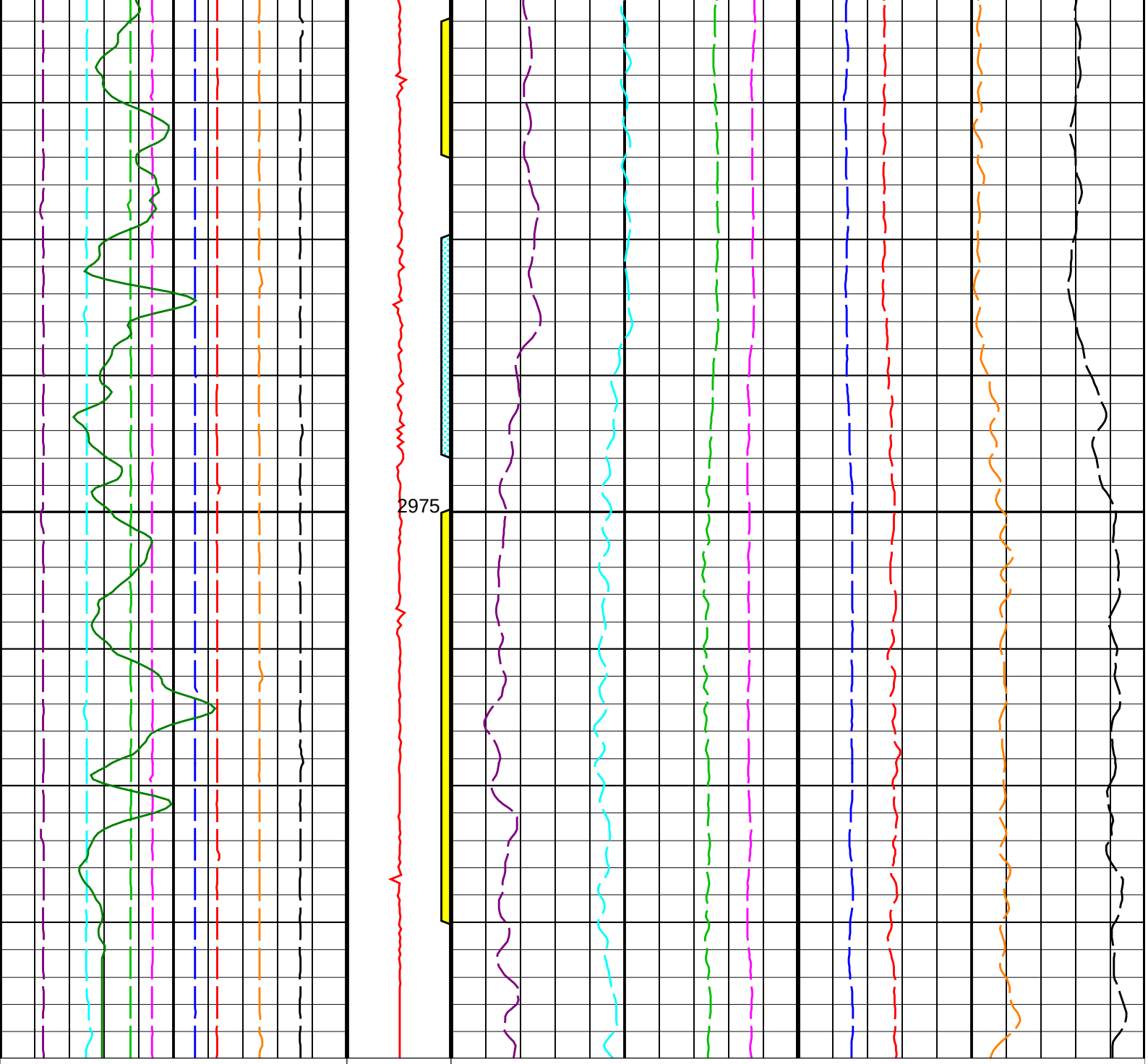
MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

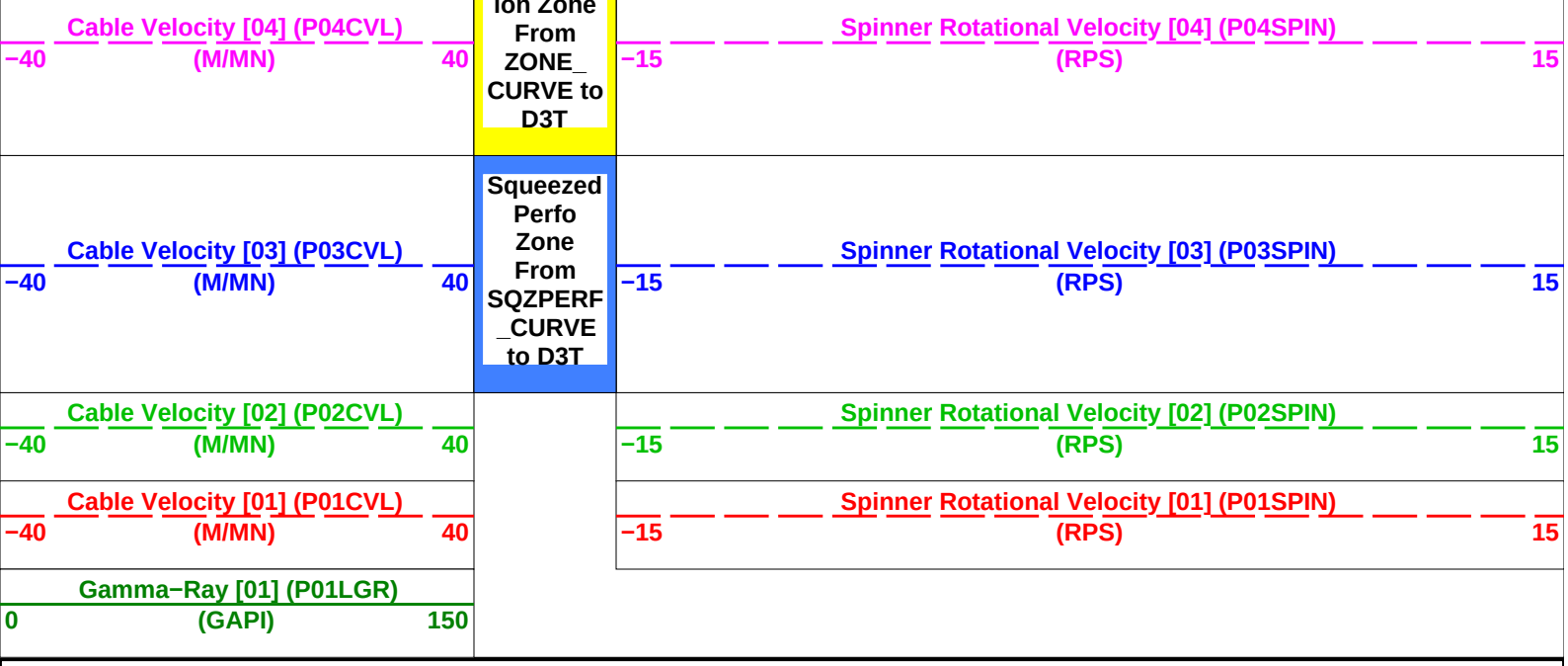


−40 (M/MN) 40	From SQZPERF_CURVE to D3T	−15 (RPS) 15
Cable Velocity [04] (P04CVL) −40 (M/MN) 40	Interpretation Zone From ZONE_CURVE to D3T	Spinner Rotational Velocity [04] (P04SPIN) −15 (RPS) 15
Cable Velocity [05] (P05CVL) −40 (M/MN) 40	Perfo Zone From PERFO_CURVE to D3T	Spinner Rotational Velocity [05] (P05SPIN) −15 (RPS) 15
Cable Velocity [06] (P06CVL) −40 (M/MN) 40	Squeezed Perfo Zone (SPIF) 30 (---- 0	Spinner Rotational Velocity [06] (P06SPIN) −15 (RPS) 15
Cable Velocity [07] (P07CVL) −40 (M/MN) 40	Perfo Zone (PIFL) 20 (---- 0	Spinner Rotational Velocity [07] (P07SPIN) −15 (RPS) 15
Cable Velocity [08] (P08CVL) −40 (M/MN) 40	CCL [01] (P01CCL) −3 (V) 3	Spinner Rotational Velocity [08] (P08SPIN) −15 (RPS) 15





Cable Velocity [08] (P08CVL) −40 (M/MN) 40	CCL [01] (P01CCL) −3 (V) 3	Spinner Rotational Velocity [08] (P08SPIN) −15 (RPS) 15
Cable Velocity [07] (P07CVL) −40 (M/MN) 40	Perfo Zone (PIFL) 20 (−−−− 0	Spinner Rotational Velocity [07] (P07SPIN) −15 (RPS) 15
Cable Velocity [06] (P06CVL) −40 (M/MN) 40	Squeezed Perfo Zone (SPIF) 30 (−−−− 0	Spinner Rotational Velocity [06] (P06SPIN) −15 (RPS) 15
Cable Velocity [05] (P05CVL) −40 (M/MN) 40	Perfo Zone From PERFO_CURVE to D3T	Spinner Rotational Velocity [05] (P05SPIN) −15 (RPS) 15
	Interpretat	



Parameters

DLIS Name	Description	Value	
	PFCS−A: PSP Flow and caliper Tool		
CSID	Casing Size I.D.	3.958	IN
	DEFT−C2: DEFT_C Tool		
CSID	Casing Size I.D.	3.958	IN
	PGMC−A: PSP Gradiomanometer Measurement Module		
CSID	Casing Size I.D.	3.958	IN
	PSPT−B: Production Services Logging Platform		
CSID	Casing Size I.D.	3.958	IN
	BORDYN: BorDyn (Well Test Validation)		
CSID	Casing Size I.D.	3.958	IN
	PLQL: Production Logging Quick Look		
CCLS	CCL Selector	CCLC	
FCHD	Cased Hole Diameter Selector	PFC1	
PCVS	CVEL Selector	CVEL	
PGRS	GR Selector	GR	
PGS	Pressure Gauge Selector	WPRE	
PWHS	PLQL Water HoldUp Selector	DFHM	
RHOS	Fluid Density Selector	WFDE	
SPIS	Spinner Selector	SPIN	
TMPS	Temperature Selector	WTEP	
	System and Miscellaneous		
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: PLQLMultiPassWithInsert **Vertical Scale: 1:200** **Graphics File Created: 18−Jan−2009 07:00**

OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

Input DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_052PUP	FN:46	PRODUCER	18−Jan−2009 06:54	2997.9 M	2907.0 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_053PUP	FN:47	PRODUCER	18−Jan−2009 07:00

Schlumberger

Static Log UP @ 10m/Min

Input DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_026LUP	FN:25	PRODUCER	17−Jan−2009 08:48	3003.2 M	2915.7 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_040PUP	FN:34	PRODUCER	17−Jan−2009 09:55	3000.1 M	2904.4 M

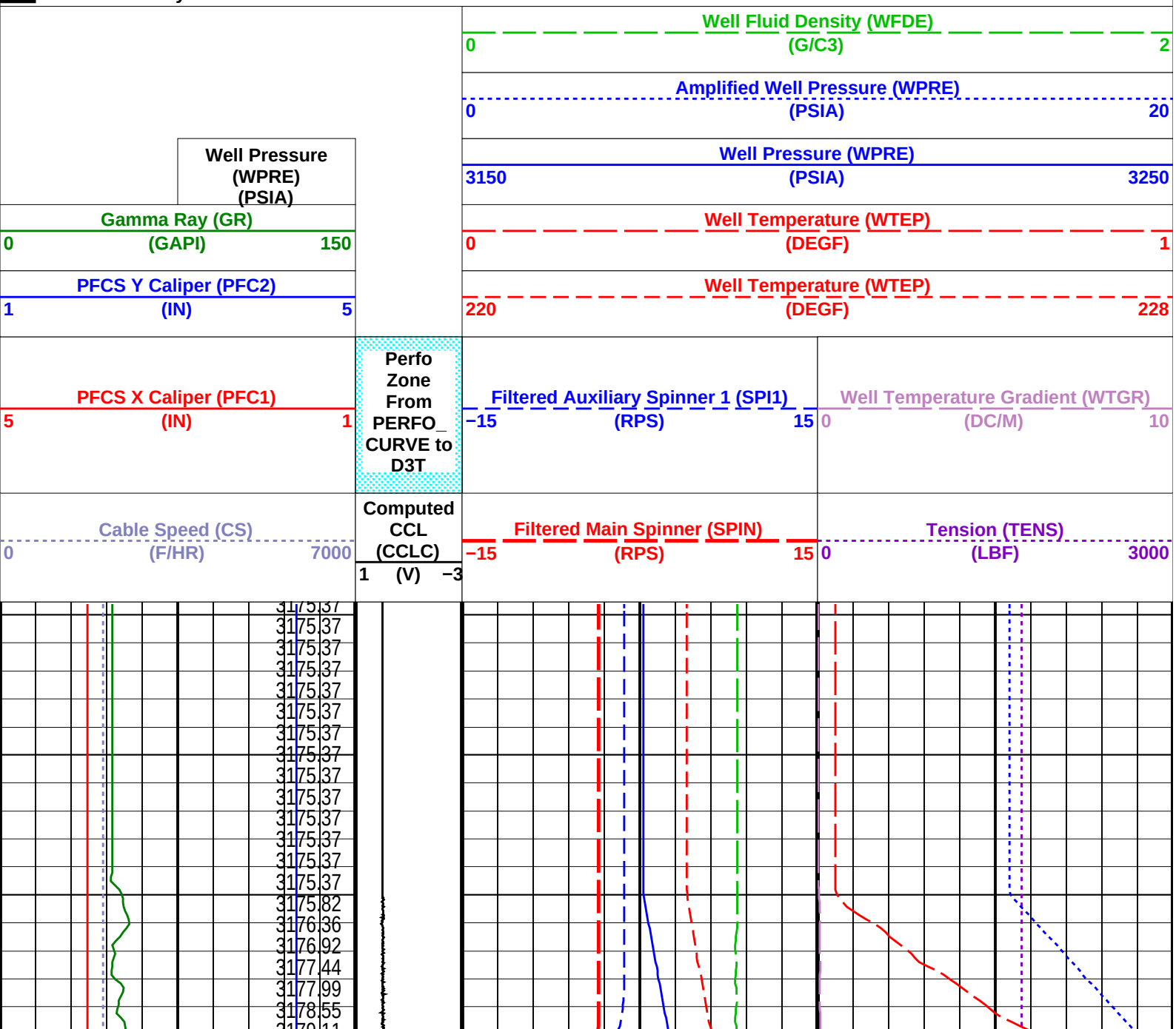
OP System Version: 16C0−147

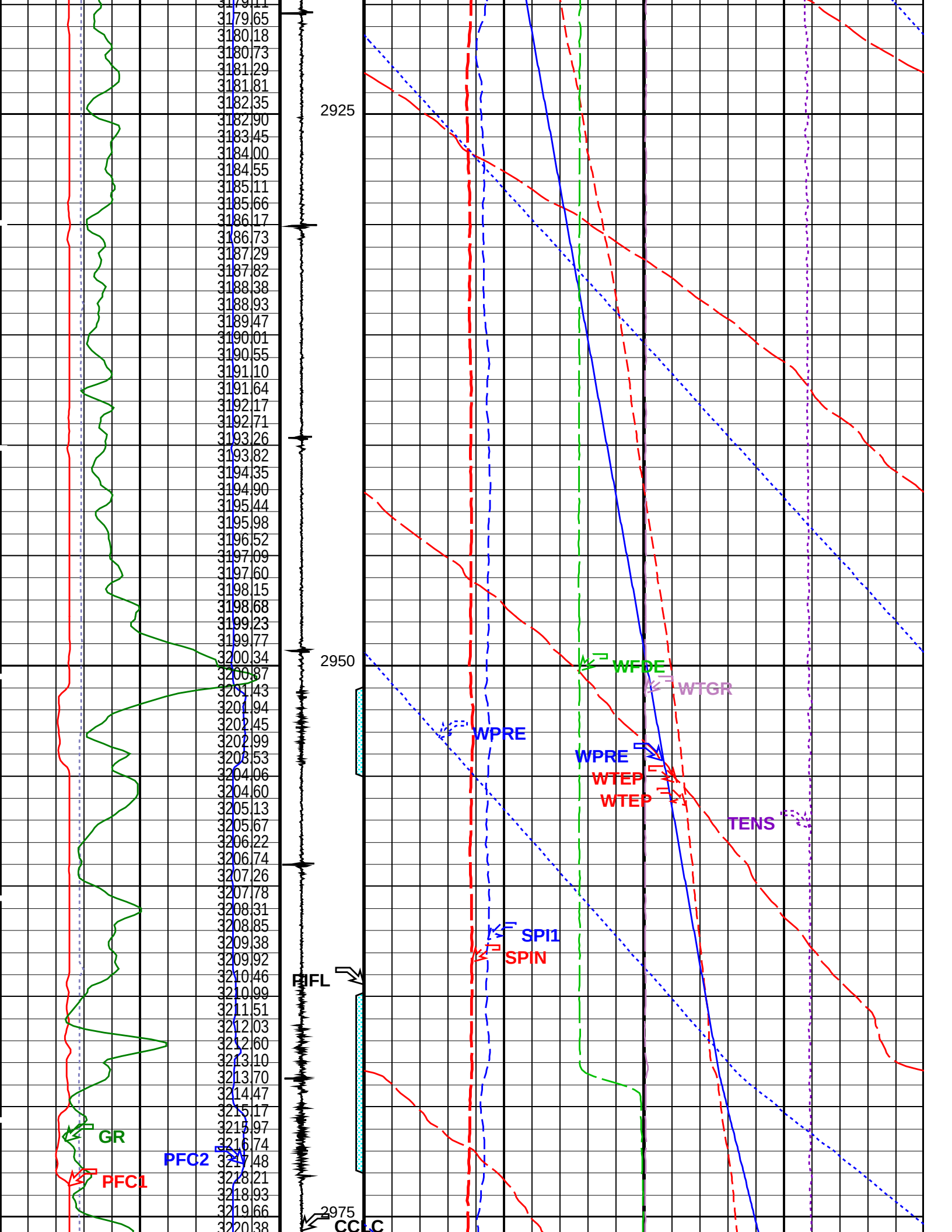
MCM

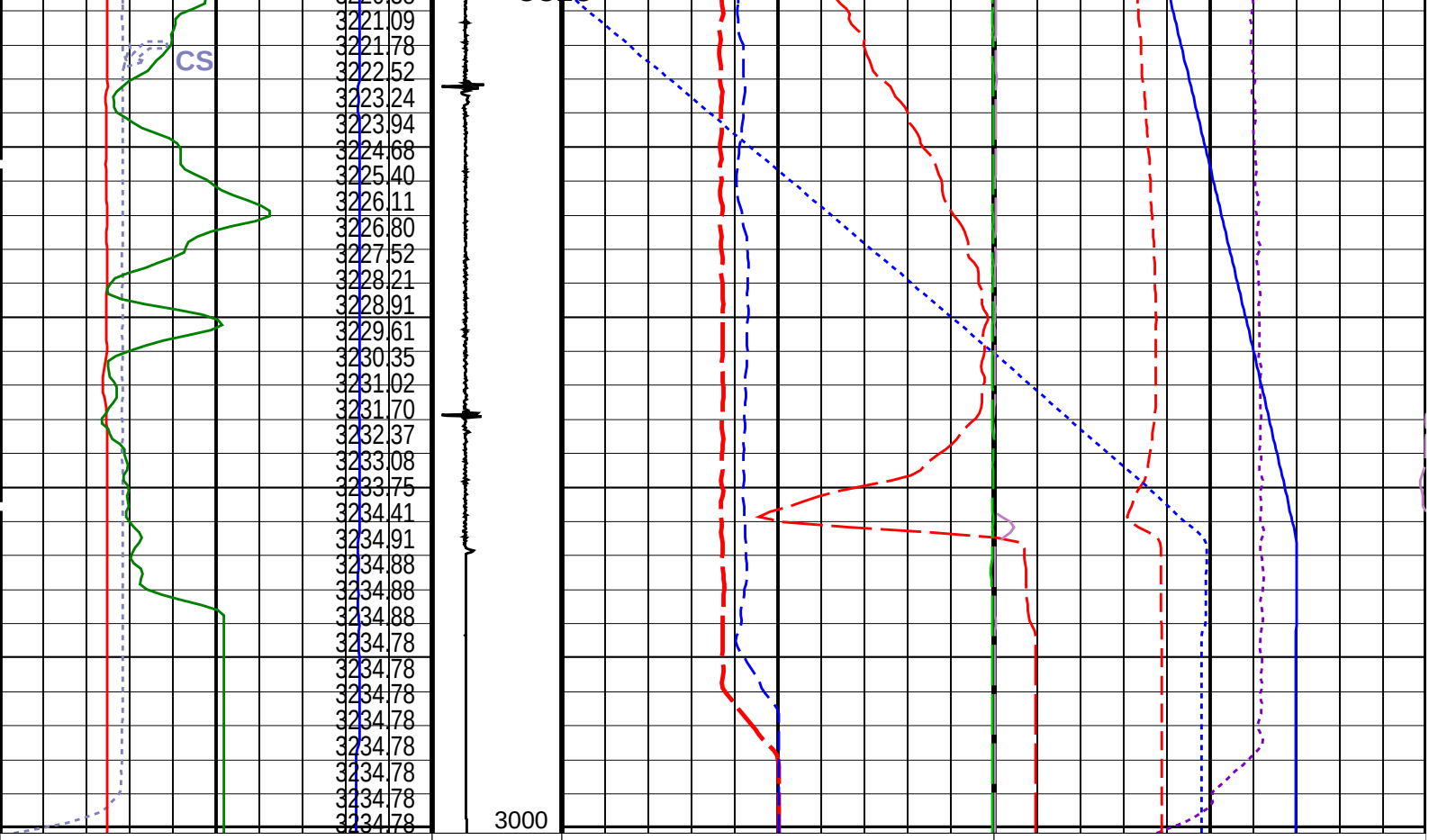
PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

PIP SUMMARY

Time Mark Every 60 S




3179.11
3179.65
3180.18
3180.73
3181.29
3181.81
3182.35
2925
3182.90
3183.45
3184.00
3184.55
3185.11
3185.66
3186.17
3186.73
3187.29
3187.82
3188.38
3188.93
3189.47
3190.01
3190.55
3191.10
3191.64
3192.17
3192.71
3193.26
3193.82
3194.35
3194.90
3195.44
3195.98
3196.52
3197.09
3197.60
3198.15
3198.68
3199.23
3199.77
3200.34
2950
3200.87
3201.43
3201.94
3202.45
3202.99
3203.53
3204.06
3204.60
3205.13
3205.67
3206.22
3206.74
3207.26
3207.78
3208.31
3208.85
3209.38
3209.92
3210.46
3210.99
3211.51
3212.03
3212.60
3213.10
3213.70
3214.47
3215.17
3215.97
3216.74
3217.48
3218.21
3218.93
3219.66
2975
3220.38
WFDE
WTGR
WPRE
WPRE
WTEP
WTEP
TENS
SPI1
SPIN
PIFL
GR
PFC2
PFC1
CCLC



Cable Speed (CS) 0 (F/HR) 7000	Computed CCL (CCLC) 1 (V) −3	Filtered Main Spinner (SPIN) −15 (RPS) 15
Tension (TENS) 0 (LBF) 3000		
PFCS X Caliper (PFC1) 5 (IN) 1	Perfo Zone From PERFO_ CURVE to D3T	Filtered Auxiliary Spinner 1 (SPI1) −15 (RPS) 15
Well Temperature Gradient (WTGR) 0 (DC/M) 10		
PFCS Y Caliper (PFC2) 1 (IN) 5		Well Temperature (WTEP) 220 (DEGF) 228
Gamma Ray (GR) 0 (GAPI) 150		Well Temperature (WTEP) 0 (DEGF) 1
Well Pressure (WPRE) (PSIA)		Well Pressure (WPRE) 3150 (PSIA) 3250
		Amplified Well Pressure (WPRE) 0 (PSIA) 20
		Well Fluid Density (WFDE) 0 (G/C3) 2

PIP SUMMARY

Time Mark Every 60 S

Format: PSP_1 Vertical Scale: 1:200 Graphics File Created: 17−Jan−2009 09:55

OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

Parameters

DLIS Name	Description	Value	
	PFCS−A: PSP Flow and caliper Tool		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	
	PILS−A: PSP In Line Spinner Flowmeter		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	
	PGMC−A: PSP Gradiomanometer Measurement Module		
GCPG	Gradio Surf.Cal Diff.Pres Gain	1	
GCPO	Gradio Surf.Cal Diff.Pres Offset	0	KPAA
PDSH	Gradio Correction Density Shift	0	G/C3
	PSPT−B: Production Services Logging Platform		
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
	System and Miscellaneous		
DO	Depth Offset for Playback	−3.0	M
PP	Playback Processing	NORMAL	

Input DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_026LUP	FN:25	PRODUCER	17−Jan−2009 08:48	3003.2 M	2915.7 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_040PUP	FN:34	PRODUCER	17−Jan−2009 09:55		

Input DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_026LUP	FN:25	PRODUCER	17−Jan−2009 08:48	3003.2 M	2915.7 M

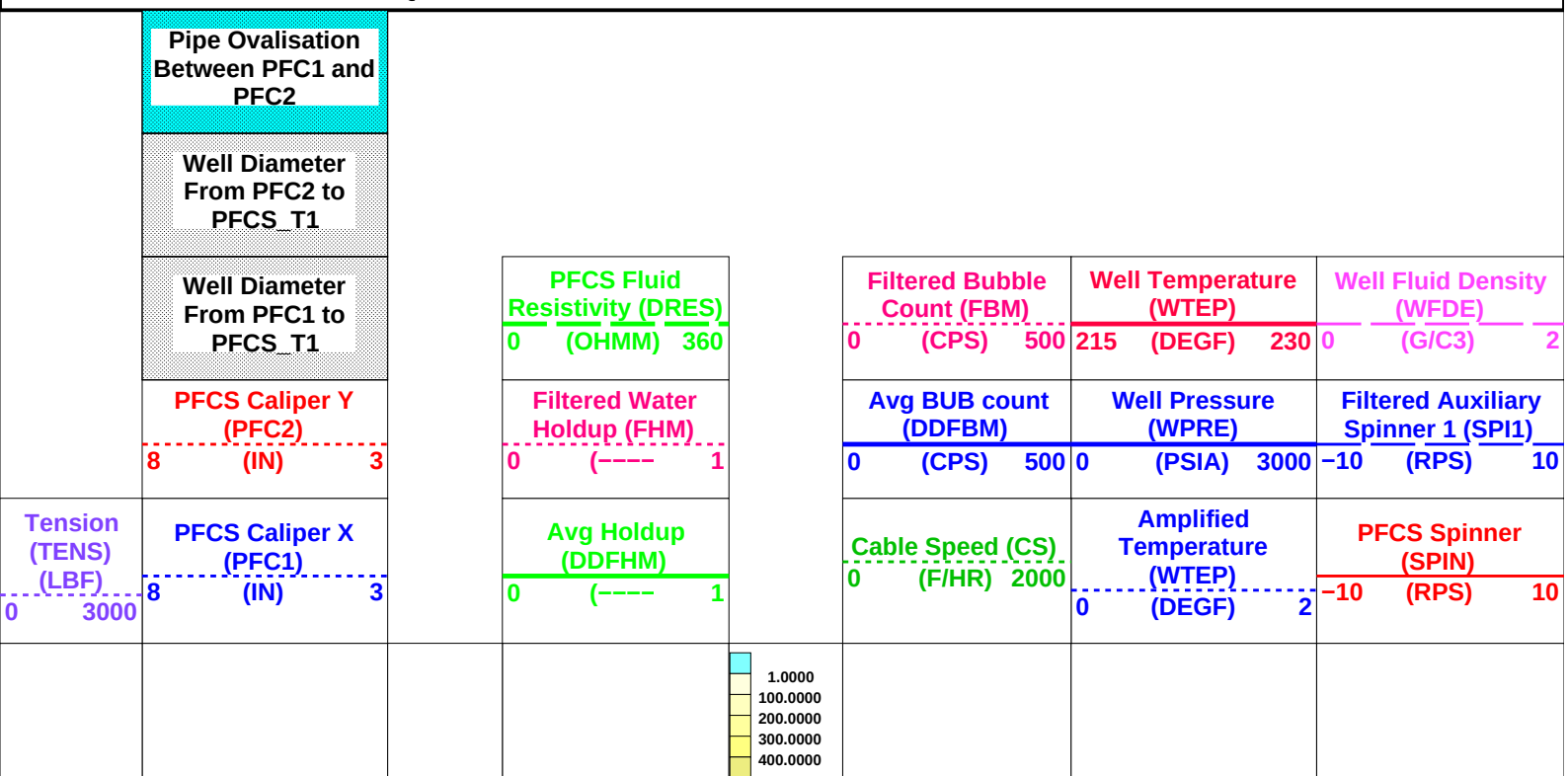
Output DLIS Files

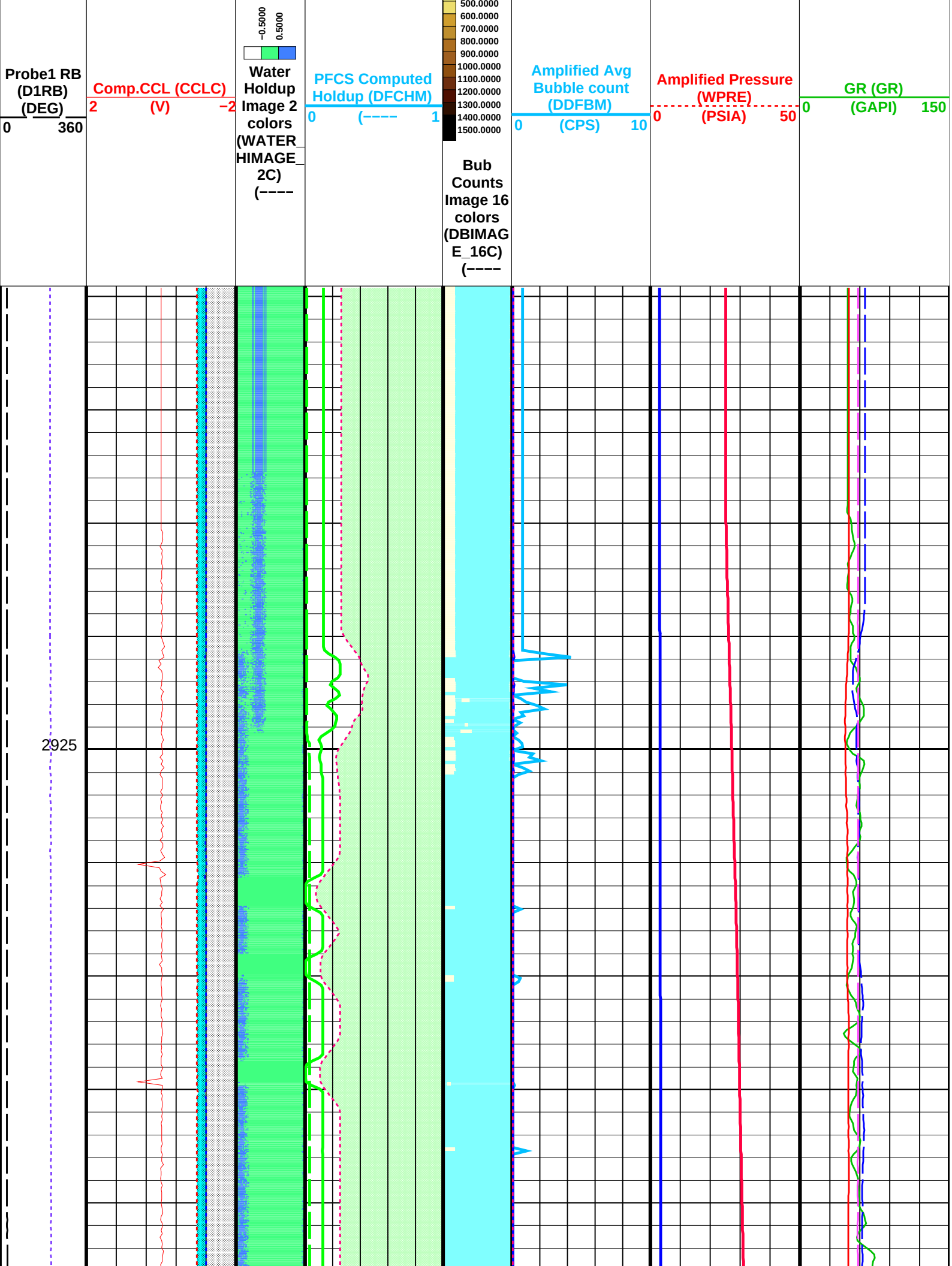
DEFAULT	FCS_ILS_DEFT_GMS_040PUP	FN:34	PRODUCER	17−Jan−2009 09:55	3000.1 M	2904.4 M

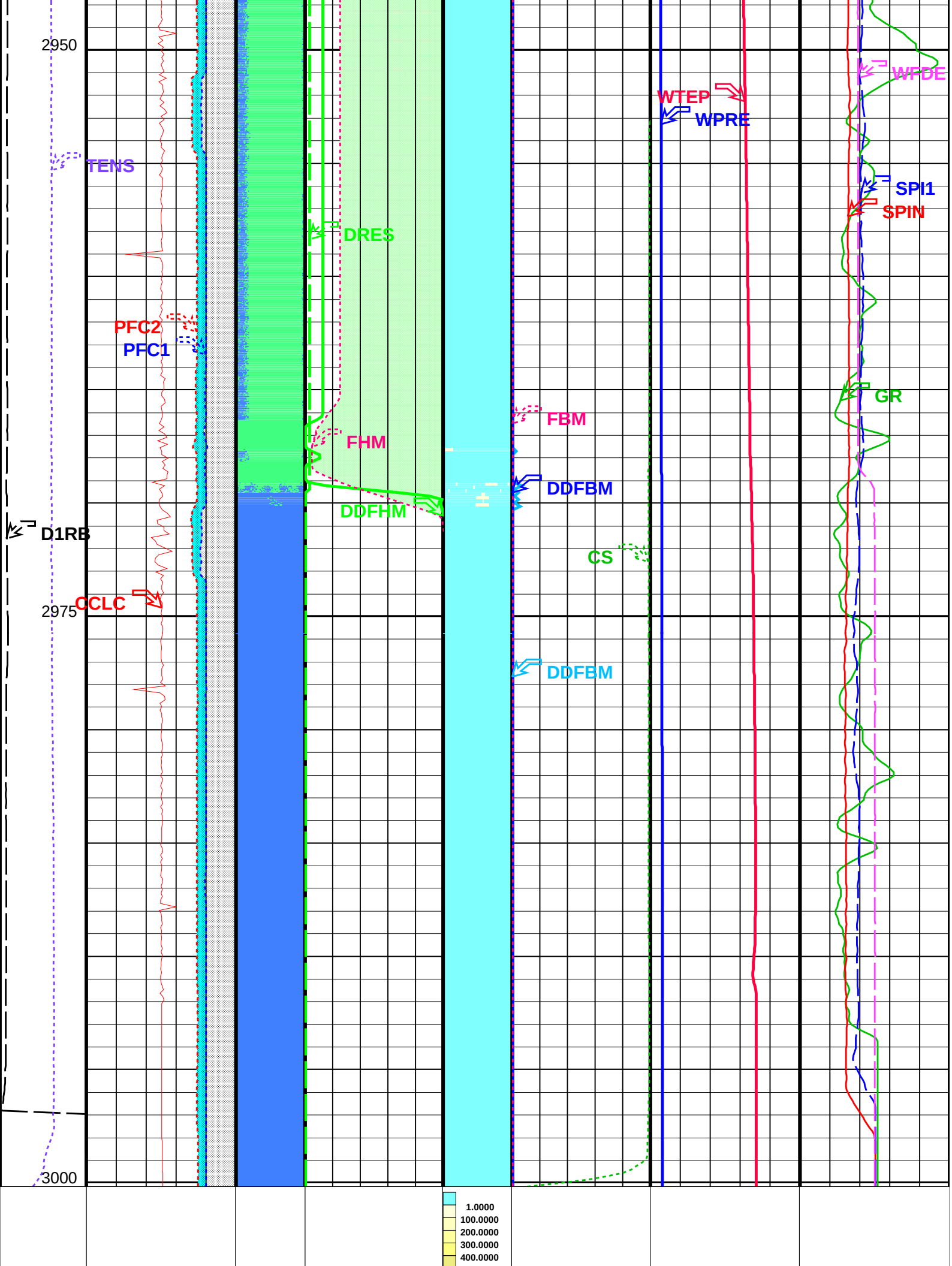
OP System Version: 16C0−147

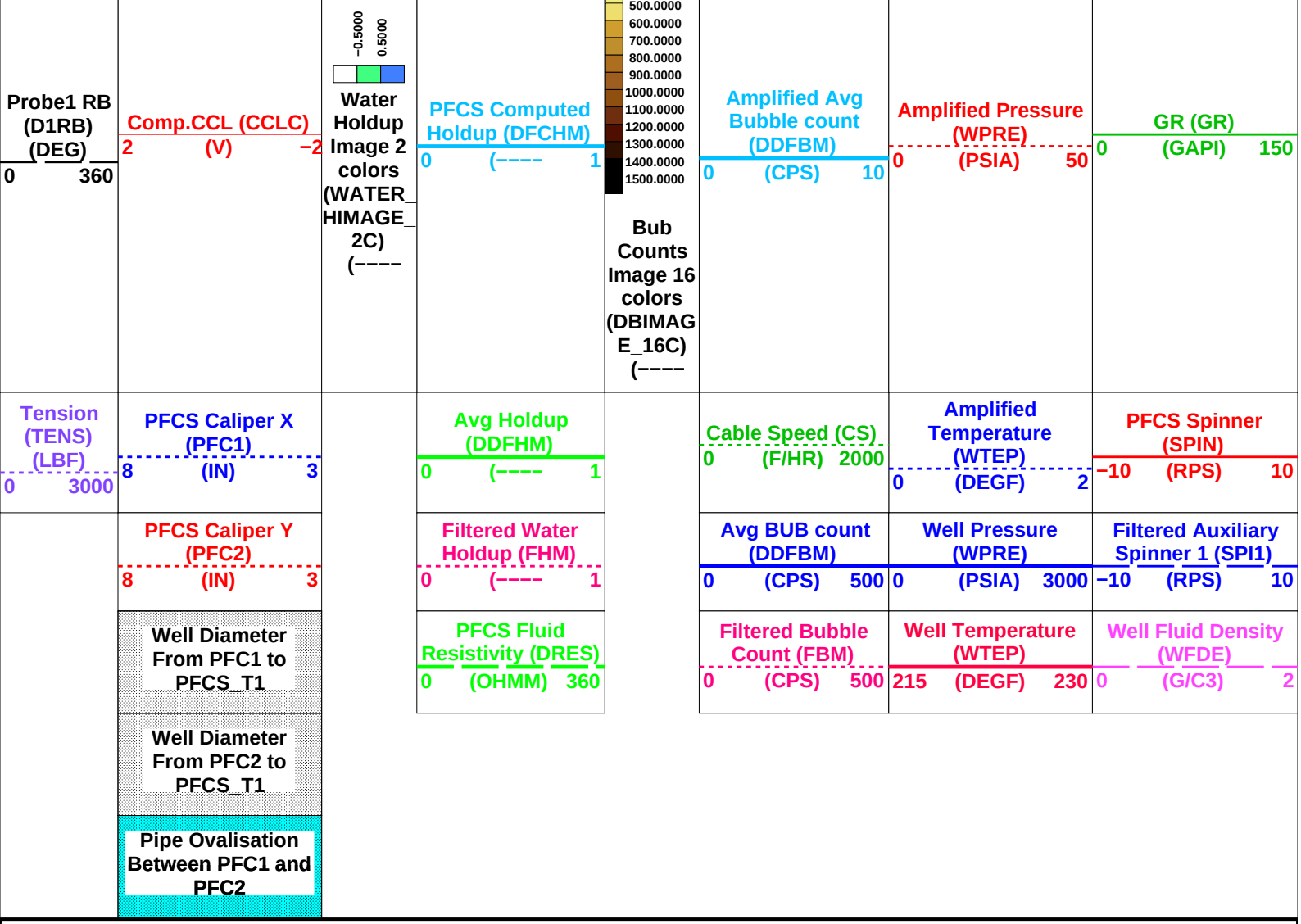
MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		




Probe1 RB (D1RB) (DEG)
0
360
Comp.CCL (CCLC)
2
(V)
−2
−0.5000
0.5000
Water Holdup Image 2 colors (WATER_HIMAGE_2C) (----
PFCS Computed Holdup (DFCHM)
0
(----
1
500.0000
600.0000
700.0000
800.0000
900.0000
1000.0000
1100.0000
1200.0000
1300.0000
1400.0000
1500.0000
Bub Counts Image 16 colors (DBIMAGE_16C) (----
Amplified Avg Bubble count (DDFBM)
0
(CPS)
10
Amplified Pressure (WPRE)
0
(PSIA)
50
GR (GR)
0
(GAPI)
150
2925


2950
2975
3000
TENS
DRES
PFC2
PFC1
FHM
DDFHM
D1RB
CCLC
FBM
DDFBM
CS
DDFBM
WTEP
WPRE
WFDE
SPI1
SPIN
GR
1.0000
100.0000
200.0000
300.0000
400.0000



Format: PFCS_Image_DL Vertical Scale: 1:200 Graphics File Created: 17−Jan−2009 09:55

OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

Parameters

DLIS Name	Description	Value	
	PFCS−A: PSP Flow and caliper Tool		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
CSID	Casing Size I.D.	3.958	IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2−D1RB	
DDRS	Dual DEFT RB Source	D1RB	
DFBD	DEFT Blank Disallowed Probes	NO	
DFFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
DFPP	Probes Arm Position	C	
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
PFGC	PFCS Geometrical coefficient	1200	
PFRE1	Downhole Resistor Probe 1	3000	OHMS
PFRE2	Downhole Resistor Probe 2	3000	OHMS
PFRE3	Downhole Resistor Probe 3	3000	OHMS
PFRE4	Downhole Resistor Probe 4	3000	OHMS
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	
	PILS−A: PSP In Line Spinner Flowmeter		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	

DEFT−C2: DEFT_C Tool			
CSID	Casing Size I.D.	3.958	IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2−D1RB	
DDRS	Dual DEFT RB Source	D1RB	
DFBD	DEFT Blank Disallowed Probes	NO	
DFFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
DFPP2	Probes Arm Position (2nd tool)	D	
PFGC	PFCS Geometrical coefficient	1200	
PGMC−A: PSP Gradiomanometer Measurement Module			
CSID	Casing Size I.D.	3.958	IN
GCPG	Gradio Surf.Cal Diff.Pres Gain	1	
GCPO	Gradio Surf.Cal Diff.Pres Offset	0	KPAA
PDSH	Gradio Correction Density Shift	0	G/C3
PSPT−B: Production Services Logging Platform			
CSID	Casing Size I.D.	3.958	IN
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
BORDYN: BorDyn (Well Test Validation)			
CSID	Casing Size I.D.	3.958	IN
System and Miscellaneous			
CSIZ	Current Casing Size	4.500	IN
DO	Depth Offset for Playback	−3.0	M
PP	Playback Processing	NORMAL	

Input DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_026LUP	FN:25	PRODUCER	17−Jan−2009 08:48	3003.2 M	2915.7 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_040PUP	FN:34	PRODUCER	17−Jan−2009 09:55		

Input DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_026LUP	FN:25	PRODUCER	17−Jan−2009 08:48	3003.2 M	2915.7 M

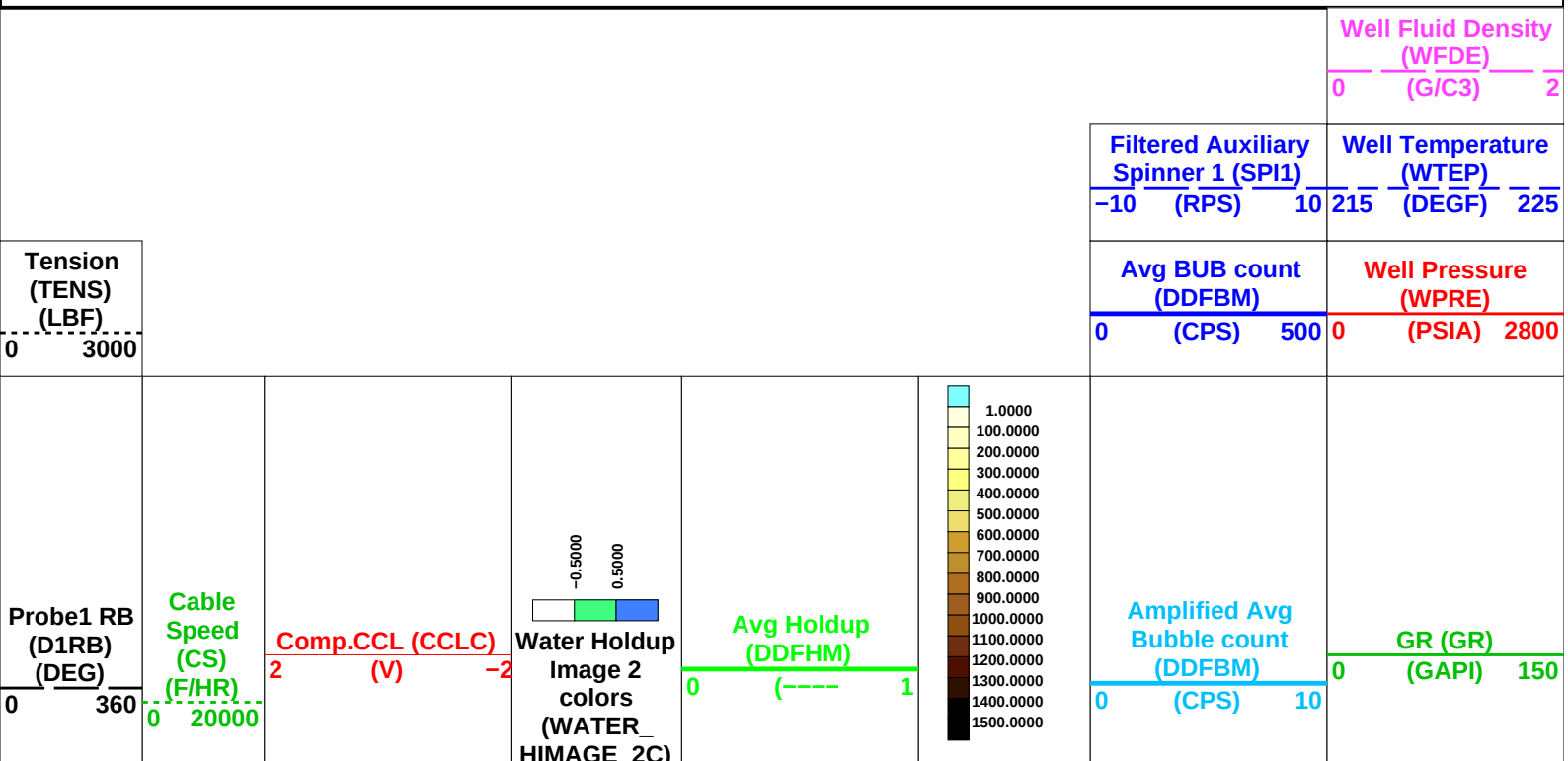
Output DLIS Files

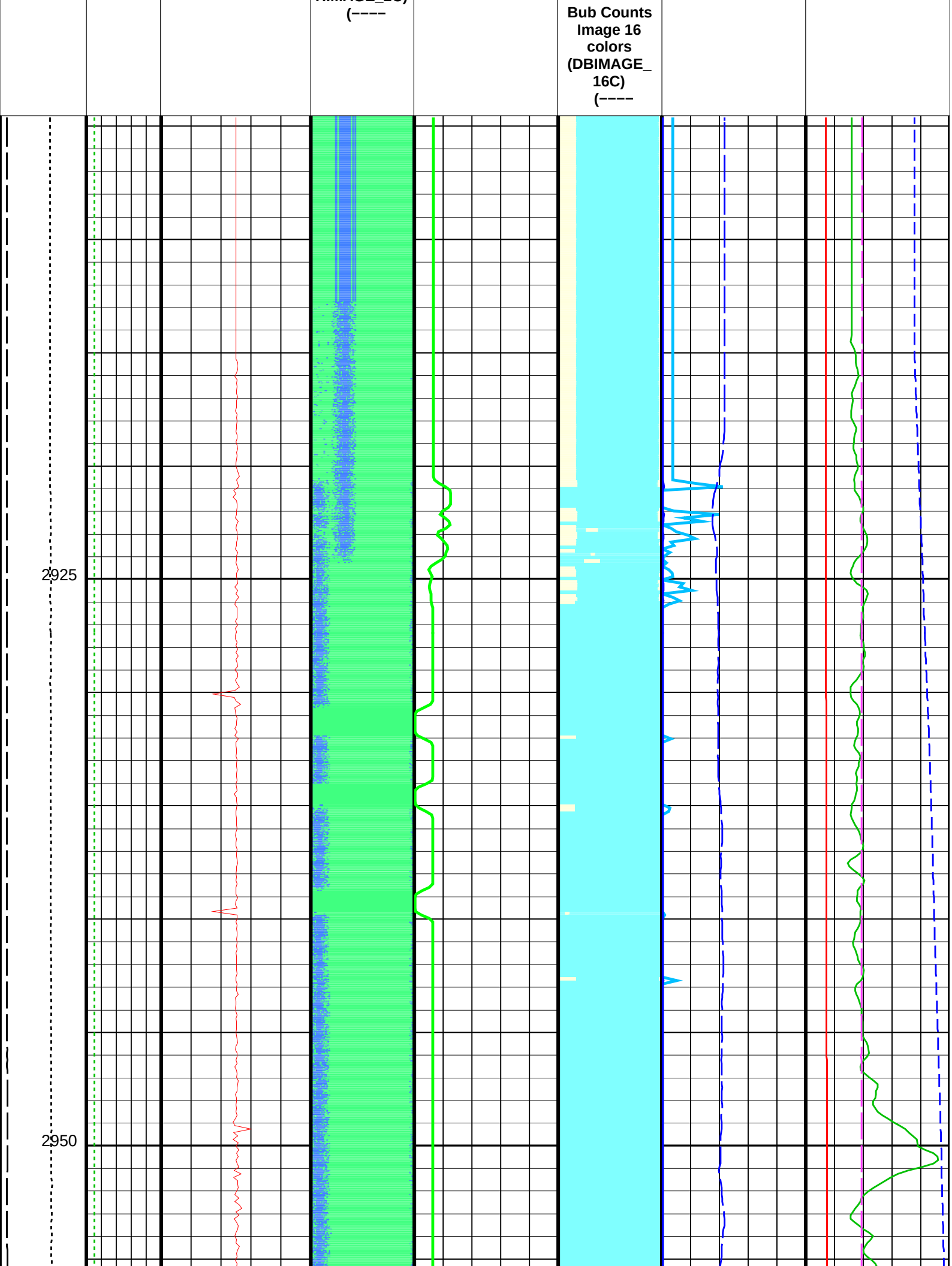
DEFAULT	FCS_ILS_DEFT_GMS_040PUP	FN:34	PRODUCER	17−Jan−2009 09:55	3000.1 M	2904.4 M

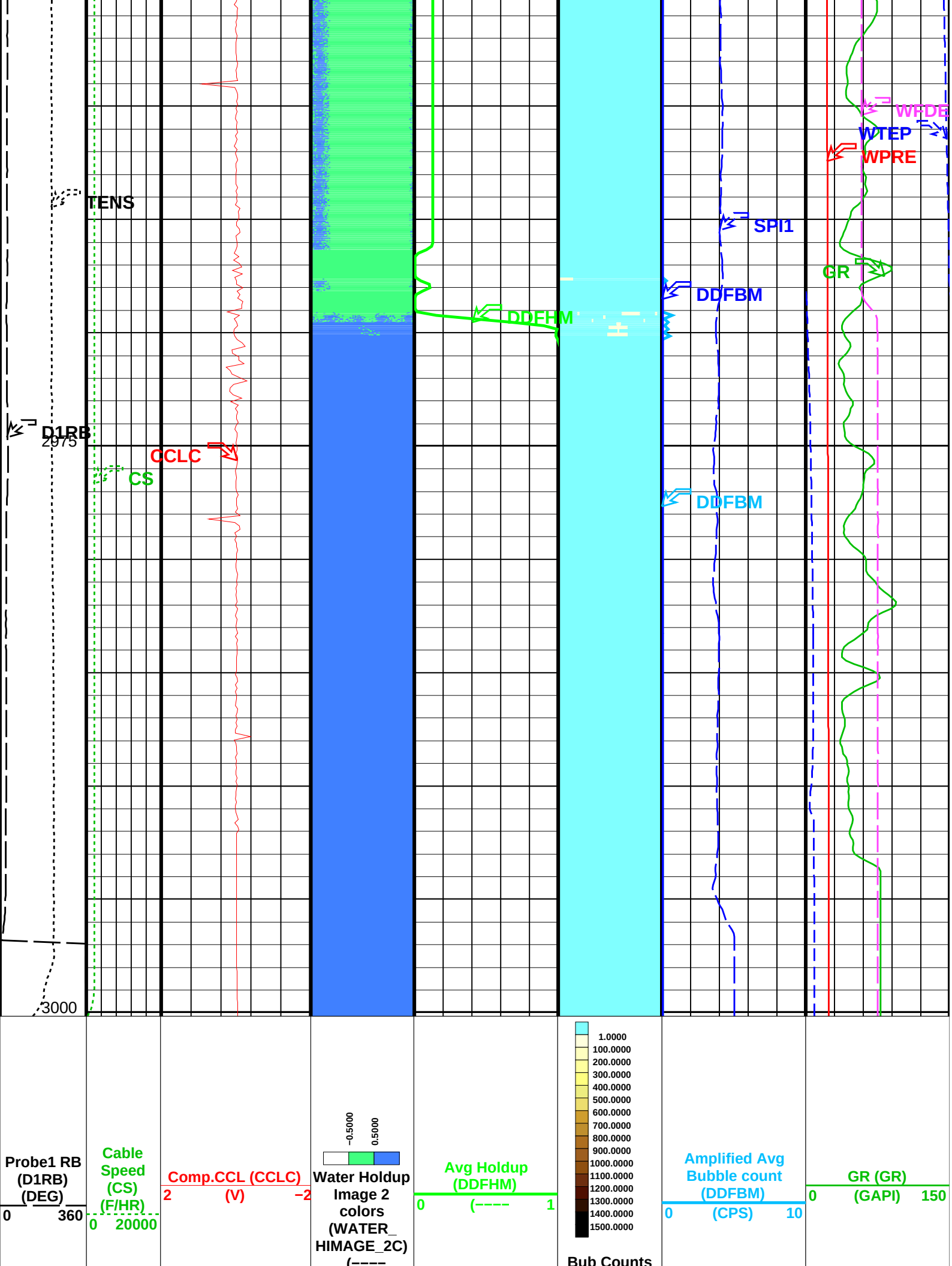
OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		




Bub Counts Image 16 colors (DBIMAGE_16C) (----
2925
2950


TENS
D1RB
2975
CCLC
CS
3000
WFDE
WTEP
WPRE
SPI1
GR
DDFBM
DDFHM
DDFBM
1.0000
100.0000
200.0000
300.0000
400.0000
500.0000
600.0000
700.0000
800.0000
900.0000
1000.0000
1100.0000
1200.0000
1300.0000
1400.0000
1500.0000
−0.5000
0.5000
Probe1 RB (D1RB) (DEG)
0 360
Cable Speed (CS) (F/HR)
0 20000
Comp.CCL (CCLC)
2 (V) −2
Water Holdup Image 2 colors (WATER_ HIMAGE_2C)
Avg Holdup (DDFHM)
0 (---- 1
Bub Counts
Amplified Avg Bubble count (DDFBM)
0 (CPS) 10
GR (GR)
0 (GAPI) 150

					Bub Counts Image 16 colors (DBIMAGE_16C) (----		

Tension (TENS) (LBF) 0 3000	Avg BUB count (DDFBM) 0 (CPS) 500	Well Pressure (WPRE) 0 (PSIA) 2800
	Filtered Auxiliary Spinner 1 (SPI1) -10 (RPS) 10	Well Temperature (WTEP) 215 (DEGF) 225
		Well Fluid Density (WFDE) 0 (G/C3) 2

Format: DEFT_Image_DL Vertical Scale: 1:200 Graphics File Created: 17-Jan-2009 09:55

OP System Version: 16C0-147

MCM

PFCS-A	SRPC-3624-Q2_2008_OP16_b	PILS-A	SRPC-3624-Q2_2008_OP16_b
DEFT-C2	SRPC-3624-Q2_2008_OP16_b	PGMC-A	SRPC-3624-Q2_2008_OP16_b
PSPT-B	SRPC-3624-Q2_2008_OP16_b		

Parameters

DLIS Name	Description	Value	
	PFCS-A: PSP Flow and caliper Tool		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
CSID	Casing Size I.D.	3.958	IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2-D1RB	
DDRS	Dual DEFT RB Source	D1RB	
DFBD	DEFT Blank Disallowed Probes	NO	
DFFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
DFPP	Probes Arm Position	C	
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS-A	
	PILS-A: PSP In Line Spinner Flowmeter		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS-A	
	DEFT-C2: DEFT_C Tool		
CSID	Casing Size I.D.	3.958	IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2-D1RB	
DDRS	Dual DEFT RB Source	D1RB	
DFBD	DEFT Blank Disallowed Probes	NO	
DFFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
	PGMC-A: PSP Gradiomanometer Measurement Module		
CSID	Casing Size I.D.	3.958	IN
GCPG	Gradio Surf.Cal Diff.Pres Gain	1	
GCPO	Gradio Surf.Cal Diff.Pres Offset	0	KPAA
PDSH	Gradio Correction Density Shift	0	G/C3
	PSPT-B: Production Services Logging Platform		
CSID	Casing Size I.D.	3.958	IN
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
	BORDYN: BorDyn (Well Test Validation)		
CSID	Casing Size I.D.	3.958	IN
	System and Miscellaneous		
DO	Depth Offset for Playback	-3.0	M
PP	Playback Processing	NORMAL	

Input DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_026LUP	FN:25	PRODUCER	17-Jan-2009 08:48	3003.2 M	2915.7 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_040PUP	FN:34	PRODUCER	17-Jan-2009 09:55		

Schlumberger

Static Log Down @ 10m/Min

MAXIS Field Log

Input DLIS Files

DEFAULT	Flip_FCS_ILS_DEFT_034LUP		PRODUCER	17−Jan−2009 09:49	3003.2 M	2912.1 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_039PUP	FN:33	PRODUCER	17−Jan−2009 09:54	2998.6 M	2899.3 M

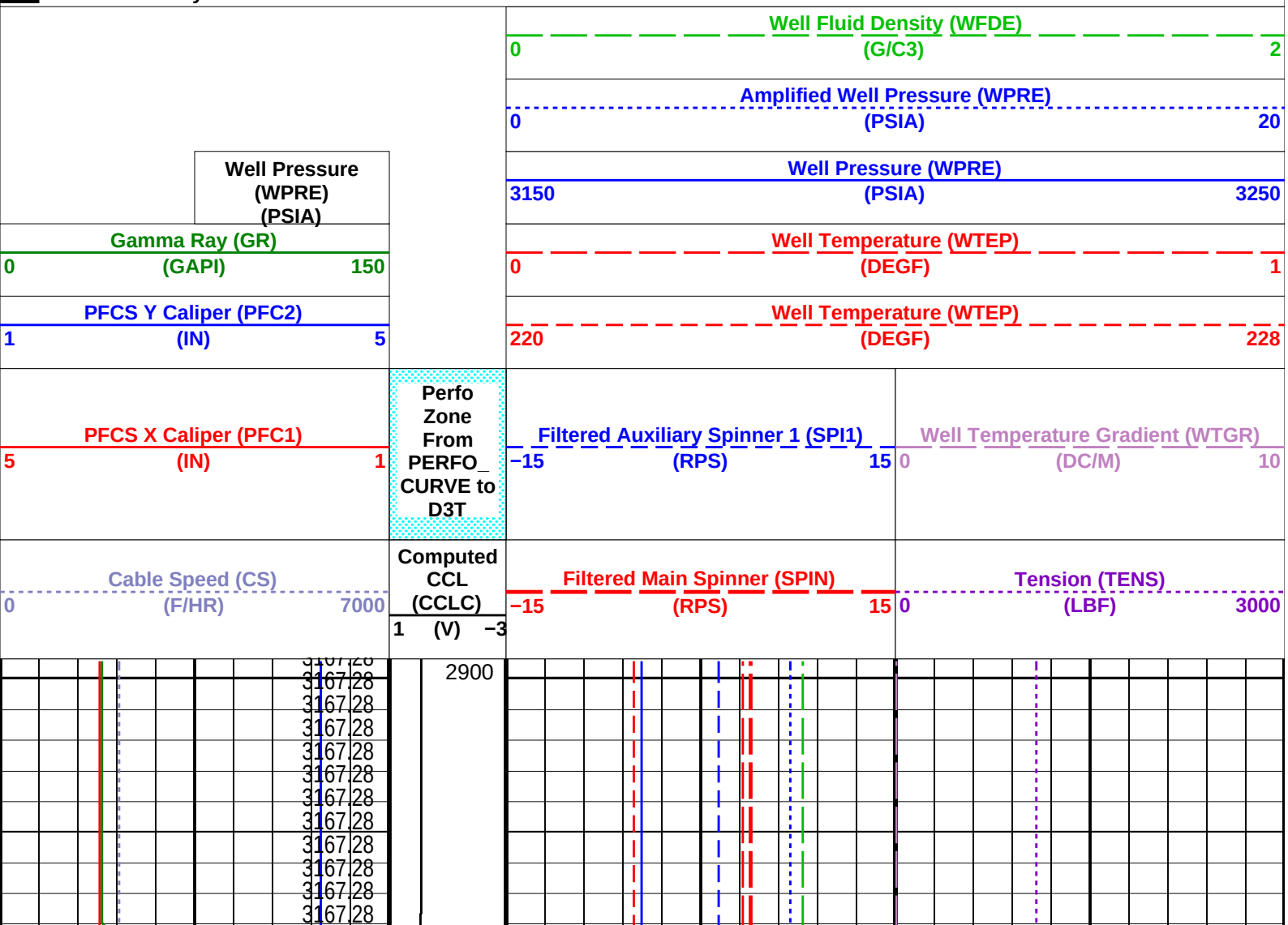
OP System Version: 16C0−147

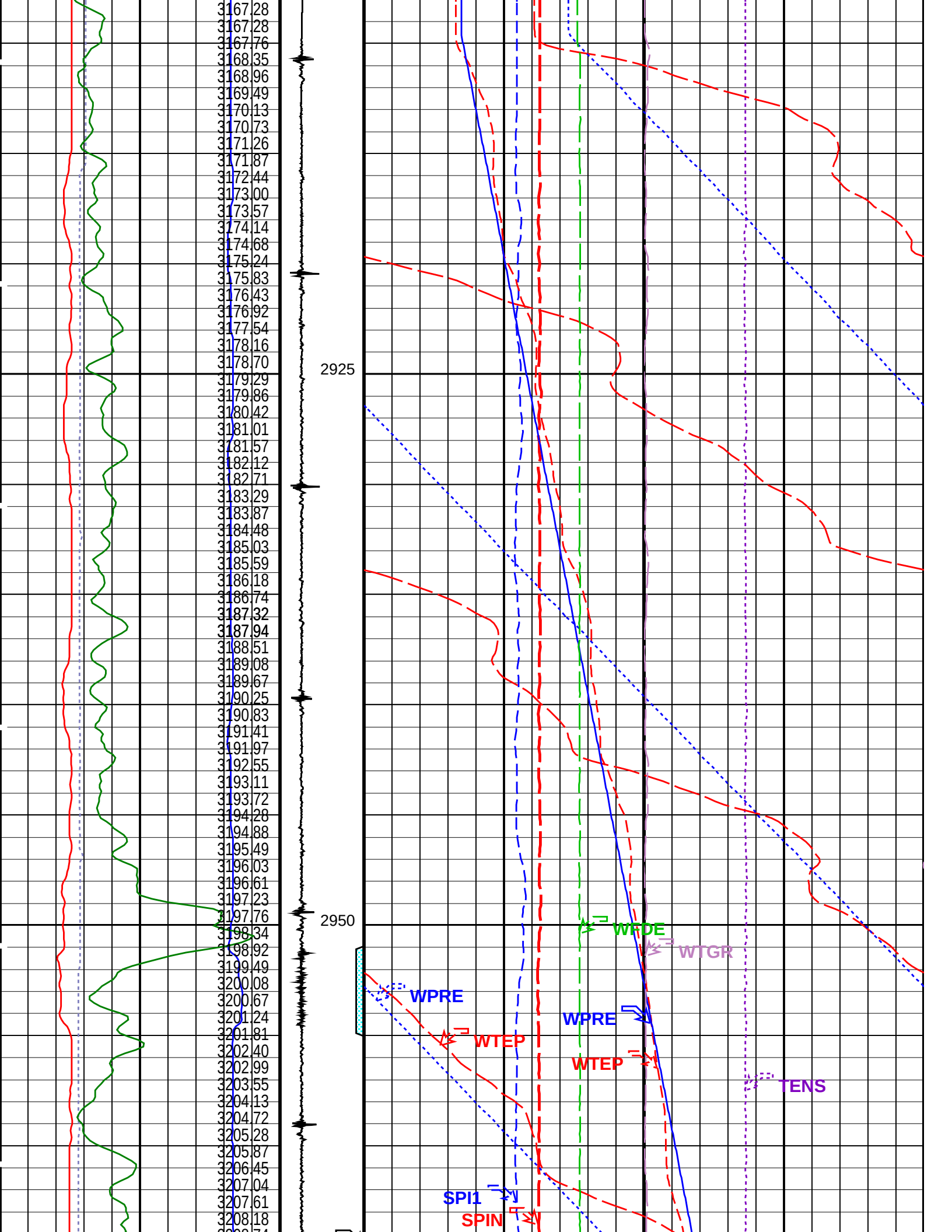
MCM

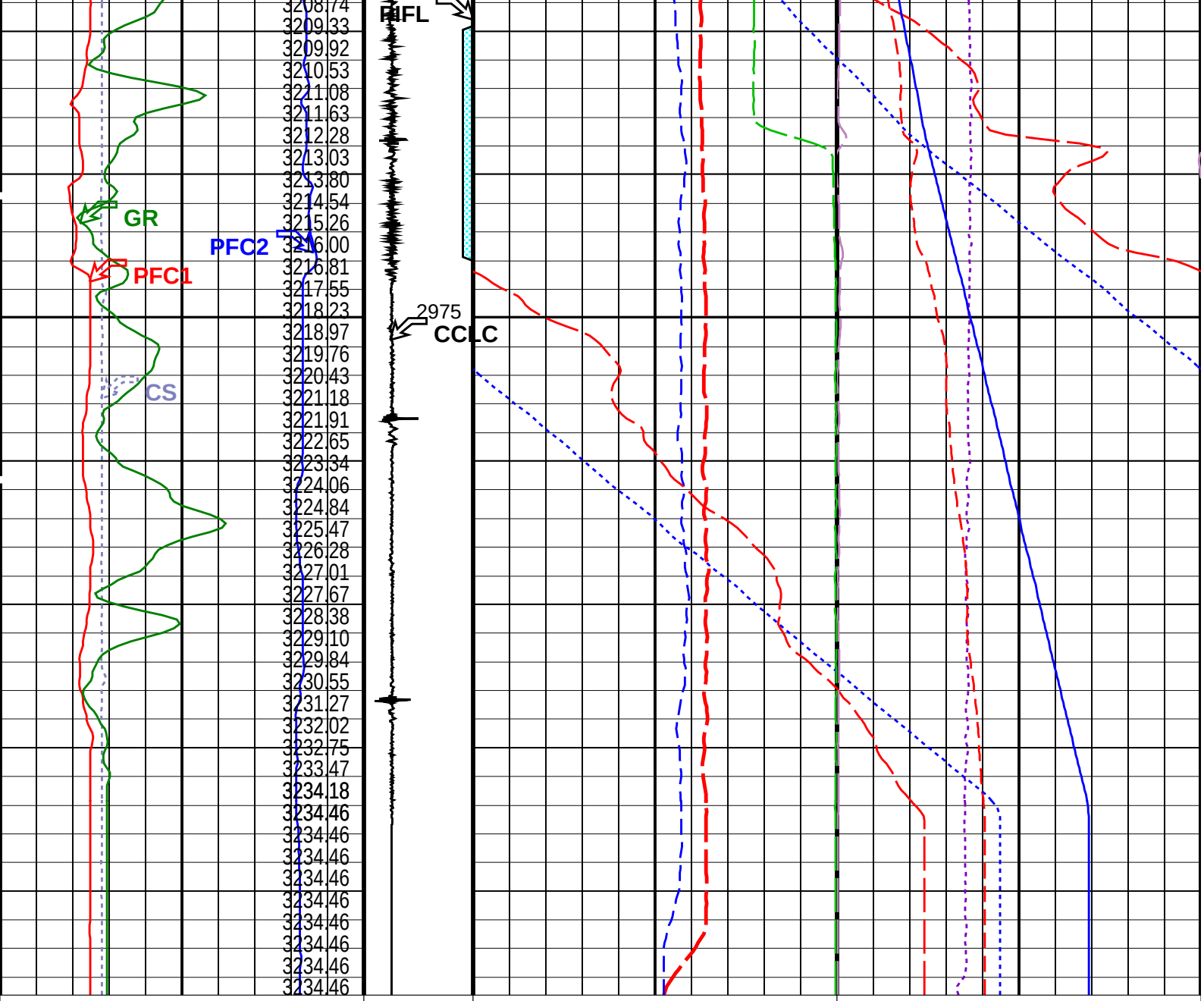
PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

PIP SUMMARY

Time Mark Every 60 S




3167.28
3167.28
3167.76
3168.35
3168.96
3169.49
3170.13
3170.73
3171.26
3171.87
3172.44
3173.00
3173.57
3174.14
3174.68
3175.24
3175.83
3176.43
3176.92
3177.54
3178.16
3178.70
2925
3179.29
3179.86
3180.42
3181.01
3181.57
3182.12
3182.71
3183.29
3183.87
3184.48
3185.03
3185.59
3186.18
3186.74
3187.32
3187.94
3188.51
3189.08
3189.67
3190.25
3190.83
3191.41
3191.97
3192.55
3193.11
3193.72
3194.28
3194.88
3195.49
3196.03
3196.61
3197.23
3197.76
2950
3198.34
3198.92
3199.49
3200.08
3200.67
3201.24
3201.81
3202.40
3202.99
3203.55
3204.13
3204.72
3205.28
3205.87
3206.45
3207.04
3207.61
3208.18
WFDE
WTGR
WPRE
WPRE
WTEP
WTEP
TENS
SPI1
SPIN



Cable Speed (CS) 0 (F/HR) 7000	Computed CCL (CCLC) 1 (V) −3	Filtered Main Spinner (SPIN) −15 (RPS) 15
PFCS X Caliper (PFC1) 5 (IN) 1	Perfo Zone From PERFO_ CURVE to D3T	Filtered Auxiliary Spinner 1 (SPI1) −15 (RPS) 15
PFCS Y Caliper (PFC2) 1 (IN) 5		Well Temperature (WTEP) 220 (DEGF) 228
Gamma Ray (GR) 0 (GAPI) 150		Well Temperature (WTEP) 0 (DEGF) 1
Well Pressure (WPRE) (PSIA)		Well Pressure (WPRE) 3150 (PSIA) 3250
		Amplified Well Pressure (WPRE) 0 (PSIA) 20
		Well Fluid Density (WFDE) 0 (G/C3) 2

Tension (TENS) 0 (LBF) 3000
Well Temperature Gradient (WTGR) 0 (DC/M) 10

PIP SUMMARY

Time Mark Every 60 S

Format: PSP_1 Vertical Scale: 1:200 Graphics File Created: 17−Jan−2009 09:54

OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

Parameters

DLIS Name	Description	Value	
	PFCS−A: PSP Flow and caliper Tool		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	
	PILS−A: PSP In Line Spinner Flowmeter		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	
	PGMC−A: PSP Gradiomanometer Measurement Module		
GCPG	Gradio Surf.Cal Diff.Pres Gain	1	
GCPO	Gradio Surf.Cal Diff.Pres Offset	0	KPAA
PDSH	Gradio Correction Density Shift	0	G/C3
	PSPT−B: Production Services Logging Platform		
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
	System and Miscellaneous		
DO	Depth Offset for Playback	−4.5	M
PP	Playback Processing	NORMAL	

Input DLIS Files

DEFAULT	Flip_FCS_ILS_DEFT_034LUP		PRODUCER	17−Jan−2009 09:49	3003.2 M	2912.1 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_039PUP	FN:33	PRODUCER	17−Jan−2009 09:54		

Input DLIS Files

DEFAULT	Flip_FCS_ILS_DEFT_034LUP		PRODUCER	17−Jan−2009 09:49	3003.2 M	2912.1 M

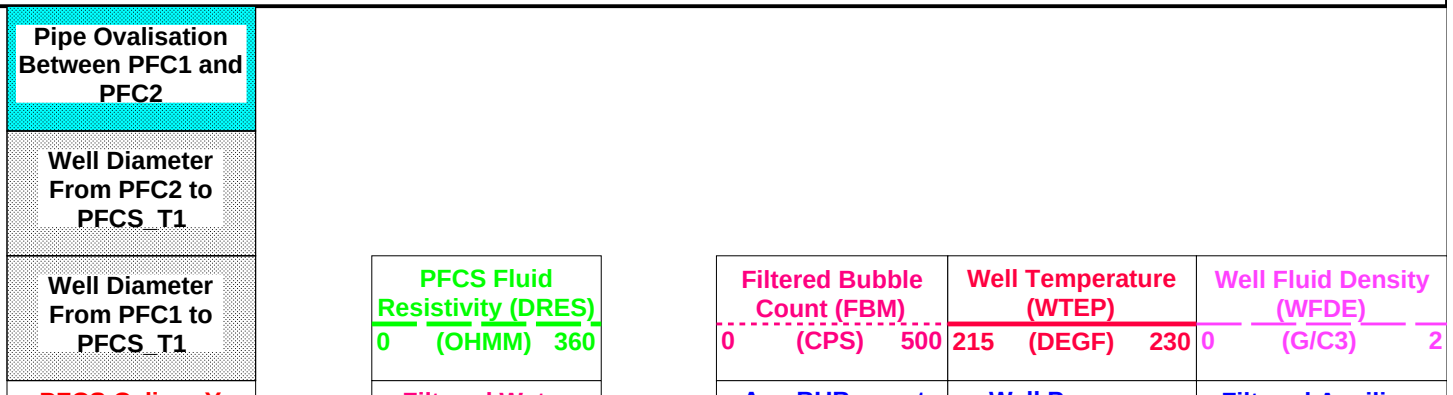
Output DLIS Files

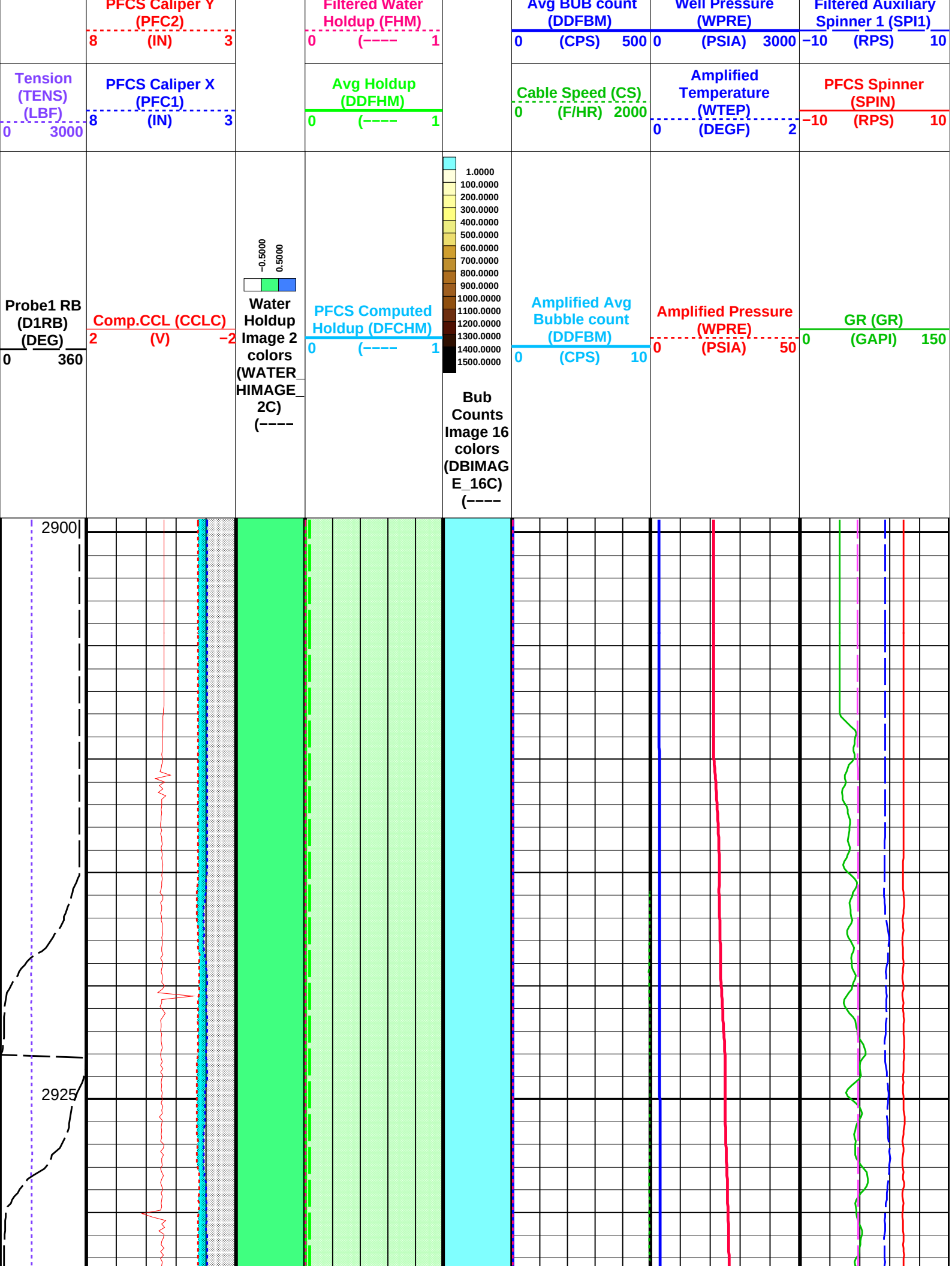
DEFAULT	FCS_ILS_DEFT_GMS_039PUP	FN:33	PRODUCER	17−Jan−2009 09:54	2998.6 M	2899.3 M

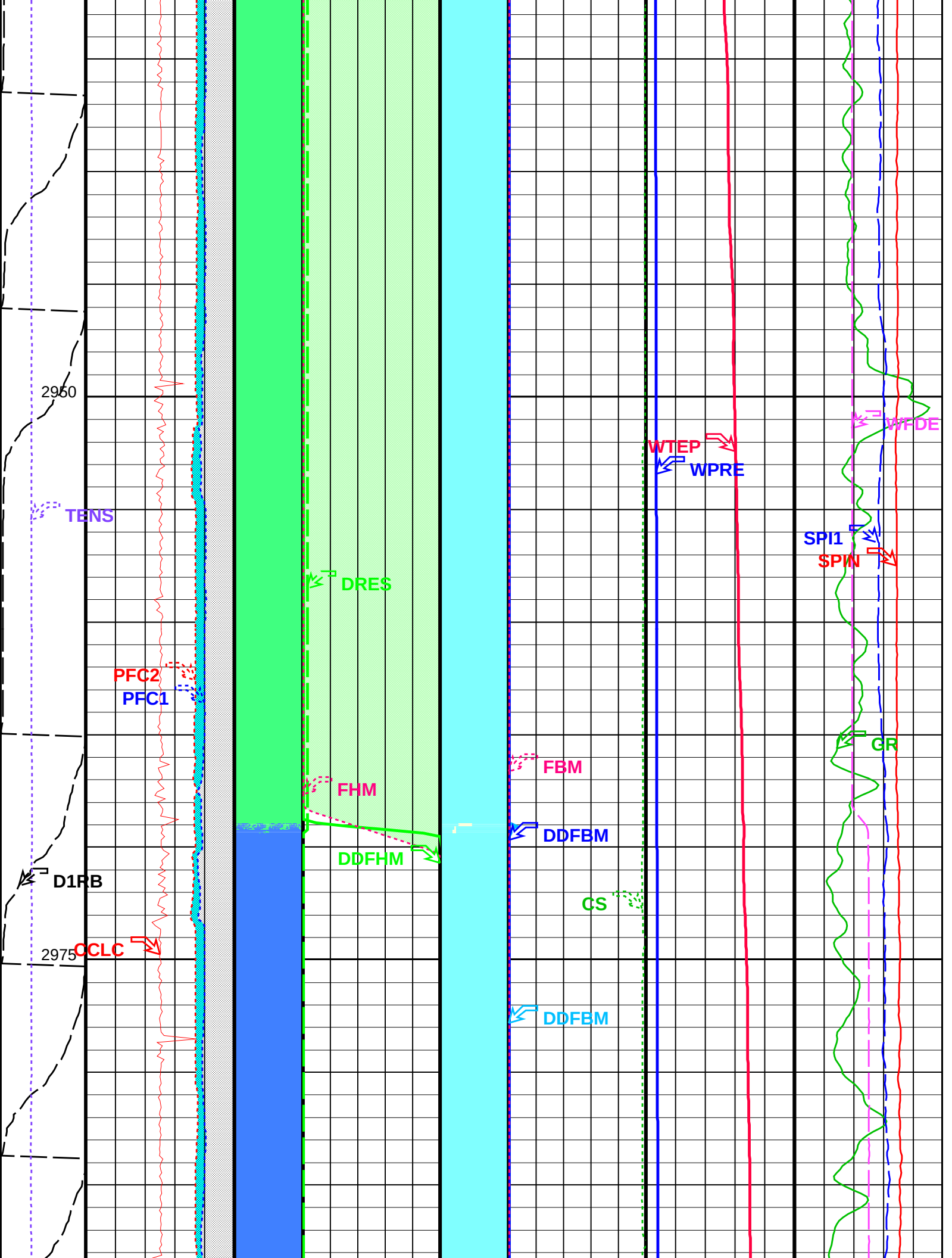
OP System Version: 16C0−147

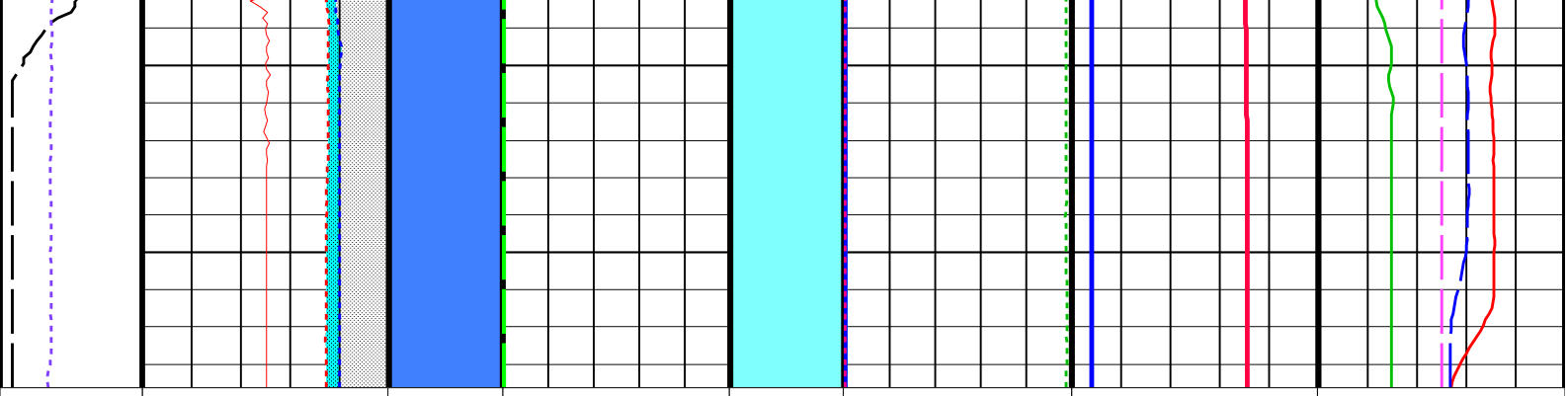
MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		




PFCS Caliper Y (PFC2)
8 (IN) 3
Filtered Water Holdup (FHM)
0 (----- 1
Avg BUB count (DDFBM)
0 (CPS) 500
Well Pressure (WPRE)
0 (PSIA) 3000
Filtered Auxiliary Spinner 1 (SPI1)
−10 (RPS) 10
Tension (TENS) (LBF)
0 3000
PFCS Caliper X (PFC1)
8 (IN) 3
Avg Holdup (DDFHM)
0 (----- 1
Cable Speed (CS)
0 (F/HR) 2000
Amplified Temperature (WTEP)
0 (DEGF) 2
PFCS Spinner (SPIN)
−10 (RPS) 10
Probe1 RB (D1RB) (DEG)
0 360
Comp.CCL (CCLC)
2 (V) −2
−0.5000
0.5000
Water Holdup Image 2 colors (WATER_HIMAGE_2C) (----
PFCS Computed Holdup (DFCHM)
0 (----- 1
1.0000
100.0000
200.0000
300.0000
400.0000
500.0000
600.0000
700.0000
800.0000
900.0000
1000.0000
1100.0000
1200.0000
1300.0000
1400.0000
1500.0000
Bub Counts Image 16 colors (DBIMAGE_16C) (----
Amplified Avg Bubble count (DDFBM)
0 (CPS) 10
Amplified Pressure (WPRE)
0 (PSIA) 50
GR (GR)
0 (GAPI) 150
2900
2925


2950
TENS
WTEP
WPRE
WFDE
SPI1
SPIN
DRES
PFC2
PFC1
GR
FBM
FHM
DDFBM
DDFHM
D1RB
CS
2975
CCLC
DDFBM



Probe1 RB (D1RB) (DEG)	Comp.CCL (CCLC)	Water Holdup Image 2 colors (WATER_HIMAGE_2C)	PFCS Computed Holdup (DFCHM)	Bub Counts Image 16 colors (DBIMAGE_16C)	Amplified Avg Bubble count (DDFBM)	Amplified Pressure (WPRE)	GR (GR)
0 360	2 (V) −2	−0.5000 0.5000	0 (−−−− 1	1.0000 100.0000 200.0000 300.0000 400.0000 500.0000 600.0000 700.0000 800.0000 900.0000 1000.0000 1100.0000 1200.0000 1300.0000 1400.0000 1500.0000	0 (CPS) 10	0 (PSIA) 50	0 (GAPI) 150
Tension (TENS) (LBF)	PFCS Caliper X (PFC1)		Avg Holdup (DDFHM)		Cable Speed (CS)	Amplified Temperature (WTEP)	PFCS Spinner (SPIN)
0 3000	8 (IN) 3		0 (−−−− 1		0 (F/HR) 2000	0 (DEGF) 2	−10 (RPS) 10
	PFCS Caliper Y (PFC2)		Filtered Water Holdup (FHM)		Avg BUB count (DDFBM)	Well Pressure (WPRE)	Filtered Auxiliary Spinner 1 (SPI1)
	8 (IN) 3		0 (−−−− 1		0 (CPS) 500	0 (PSIA) 3000	−10 (RPS) 10
	Well Diameter From PFC1 to PFCS_T1		PFCS Fluid Resistivity (DRES)		Filtered Bubble Count (FBM)	Well Temperature (WTEP)	Well Fluid Density (WFDE)
			0 (OHMM) 360		0 (CPS) 500	215 (DEGF) 230	0 (G/C3) 2
	Well Diameter From PFC2 to PFCS_T1						
	Pipe Ovalisation Between PFC1 and PFC2						

Format: PFCS_Image_DL Vertical Scale: 1:200 Graphics File Created: 17−Jan−2009 09:54

OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

Parameters

DLIS Name	Description	Value	
PFCS−A: PSP Flow and caliper Tool			
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
CSID	Casing Size I.D.	3.958	IN

DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2−D1RB	
DDRS	Dual DEFT RB Source	D1RB	
DFBD	DEFT Blank Disallowed Probes	NO	
DFFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
DFPP	Probes Arm Position	C	
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
PFGC	PFCS Geometrical coefficient	1200	
PFRE1	Downhole Resistor Probe 1	3000	OHMS
PFRE2	Downhole Resistor Probe 2	3000	OHMS
PFRE3	Downhole Resistor Probe 3	3000	OHMS
PFRE4	Downhole Resistor Probe 4	3000	OHMS
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	
PILS−A: PSP In Line Spinner Flowmeter			
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
SPIN	Main Spinner Flowmeter Sonde	PFCS−A_2.5	
DEFT−C2: DEFT_C Tool			
CSID	Casing Size I.D.	3.958	IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2−D1RB	
DDRS	Dual DEFT RB Source	D1RB	
DFBD	DEFT Blank Disallowed Probes	NO	
DFFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
DFPP2	Probes Arm Position (2nd tool)	D	
PFGC	PFCS Geometrical coefficient	1200	
PGMC−A: PSP Gradiomanometer Measurement Module			
CSID	Casing Size I.D.	3.958	IN
GCPG	Gradio Surf.Cal Diff.Pres Gain	1	
GCPO	Gradio Surf.Cal Diff.Pres Offset	0	KPAA
PDSH	Gradio Correction Density Shift	0	G/C3
PSPT−B: Production Services Logging Platform			
CSID	Casing Size I.D.	3.958	IN
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
BORDYN: BorDyn (Well Test Validation)			
CSID	Casing Size I.D.	3.958	IN
System and Miscellaneous			
CSIZ	Current Casing Size	4.500	IN
DO	Depth Offset for Playback	−4.5	M
PP	Playback Processing	NORMAL	

Input DLIS Files

DEFAULT	Flip_FCS_ILS_DEFT_034LUP		PRODUCER	17−Jan−2009 09:49	3003.2 M	2912.1 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_039PUP	FN:33	PRODUCER	17−Jan−2009 09:54		

Input DLIS Files

DEFAULT	Flip_FCS_ILS_DEFT_034LUP		PRODUCER	17−Jan−2009 09:49	3003.2 M	2912.1 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_039PUP	FN:33	PRODUCER	17−Jan−2009 09:54	2998.6 M	2899.3 M

OP System Version: 16C0−147

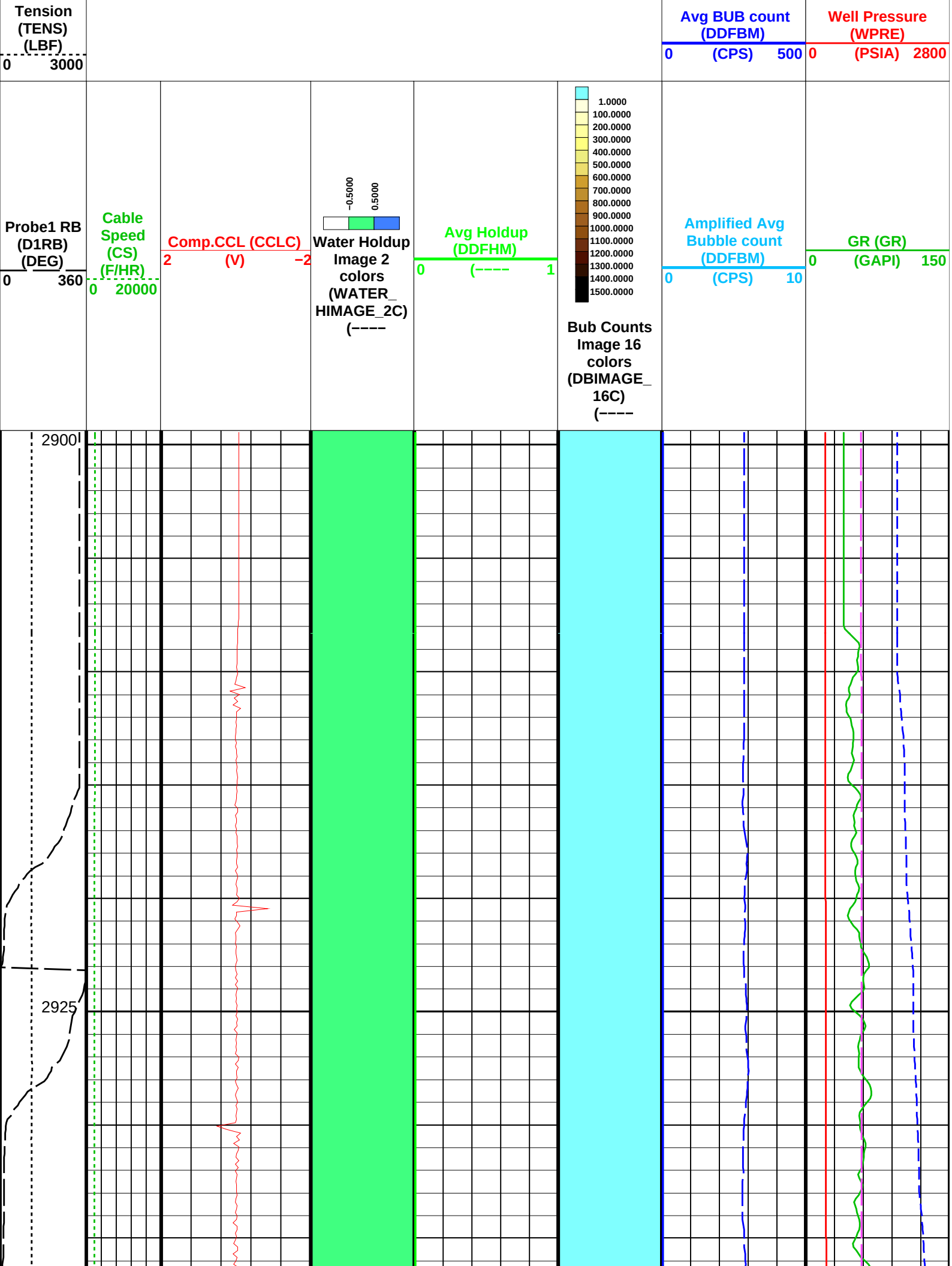
MCM

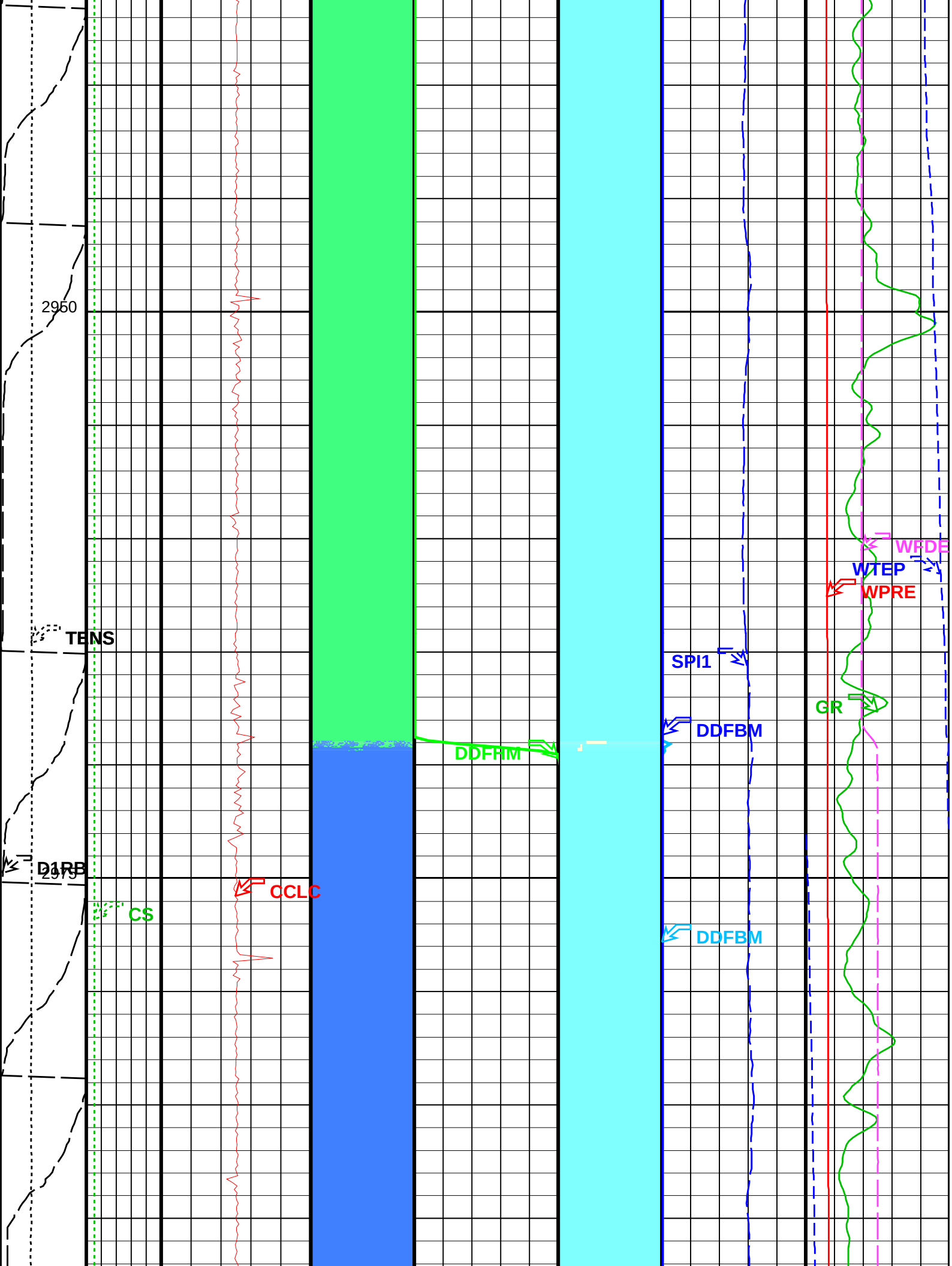
PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

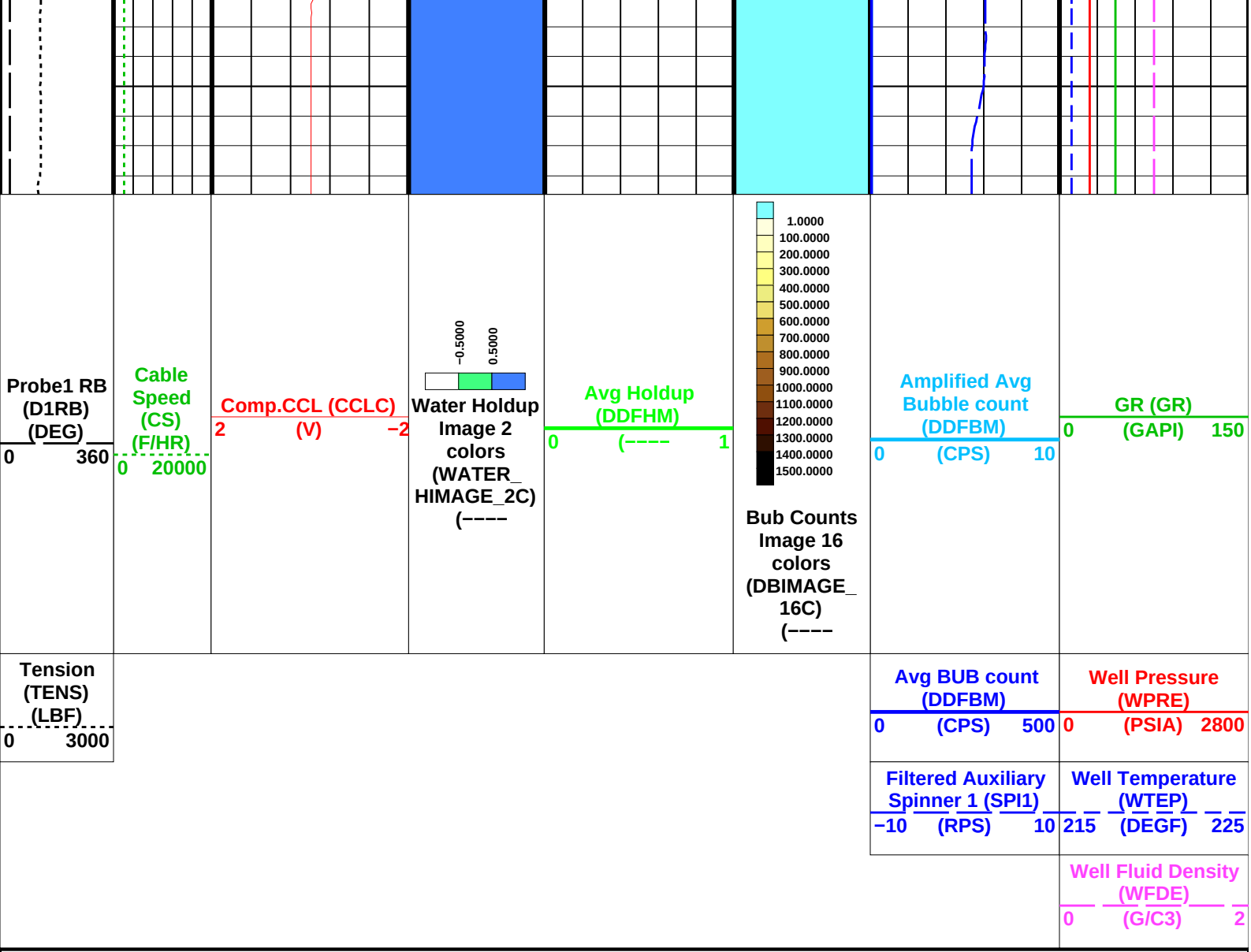
Well Fluid Density (WFDE)
0 (G/C3) 2

Filtered Auxiliary Spinner 1 (SPI1)
−10 (RPS) 10

Well Temperature (WTEP)
215 (DEGF) 225


Tension (TENS) (LBF)
0 3000
Avg BUB count (DDFBM)
0 (CPS) 500
Well Pressure (WPRE)
0 (PSIA) 2800
Probe1 RB (D1RB) (DEG)
0 360
Cable Speed (CS) (F/HR)
0 20000
Comp.CCL (CCLC)
2 (V) −2
−0.5000
0.5000
Water Holdup Image 2 colors (WATER_HIMAGE_2C) (----
Avg Holdup (DDFHM)
0 (---- 1
1.0000
100.0000
200.0000
300.0000
400.0000
500.0000
600.0000
700.0000
800.0000
900.0000
1000.0000
1100.0000
1200.0000
1300.0000
1400.0000
1500.0000
Bub Counts Image 16 colors (DBIMAGE_16C) (----
Amplified Avg Bubble count (DDFBM)
0 (CPS) 10
GR (GR)
0 (GAPI) 150
2900
2925


2950
TENS
D1RB
2975
CS
CCLC
DDFRM
SPI1
DDFBM
DDFBM
GR
WTEP
WPRE
WPDE



Format: DEFT_Image_DL **Vertical Scale: 1:200** **Graphics File Created: 17−Jan−2009 09:54**

OP System Version: 16C0−147

MCM

PFCS−A	SRPC−3624−Q2_2008_OP16_b	PILS−A	SRPC−3624−Q2_2008_OP16_b
DEFT−C2	SRPC−3624−Q2_2008_OP16_b	PGMC−A	SRPC−3624−Q2_2008_OP16_b
PSPT−B	SRPC−3624−Q2_2008_OP16_b		

Parameters

DLIS Name	Description	Value	
	PFCS−A: PSP Flow and caliper Tool		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
CSID	Casing Size I.D.	3.958	IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2−D1RB	
DDRS	Dual DEFT RB Source	D1RB	
DFBD	DEFT Blank Disallowed Probes	NO	
DFFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
DFPP	Probes Arm Position	C	
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
	PILS−A: PSP In Line Spinner Flowmeter		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SPI1	Auxiliary Spinner 1 Flowmeter Sonde	PILS−A	
	DEFT−C2: DEFT_C Tool		
CSID	Casing Size I.D.	3.958	IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2−D1RB	
DDRS	Dual DEFT RB Source	D1RB	

DFBD	DEFT Blank Disallowed Probes	NO	
DFFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
	PGMC−A: PSP Gradiomanometer Measurement Module		
CSID	Casing Size I.D.	3.958	IN
GCPG	Gradio Surf.Cal Diff.Pres Gain	1	
GCPO	Gradio Surf.Cal Diff.Pres Offset	0	KPAA
PDSH	Gradio Correction Density Shift	0	G/C3
	PSPT−B: Production Services Logging Platform		
CSID	Casing Size I.D.	3.958	IN
GDEV	Average Angular Deviation of Borehole from Normal	46	DEG
	BORDYN: BorDyn (Well Test Validation)		
CSID	Casing Size I.D.	3.958	IN
	System and Miscellaneous		
DO	Depth Offset for Playback	−4.5	M
PP	Playback Processing	NORMAL	

Input DLIS Files

DEFAULT	Flip_FCS_ILS_DEFT_034LUP		PRODUCER	17−Jan−2009 09:49	3003.2 M	2912.1 M

Output DLIS Files

DEFAULT	FCS_ILS_DEFT_GMS_039PUP	FN:33	PRODUCER	17−Jan−2009 09:54	

Company: **Esso Australia Pty Ltd.**

Schlumberger

Well: **A3A**
Field: **Halibut**
Rig: **Crane/Prod 4**
Country: **Australia**

Gamma Ray / Pressure / Temperature
Dual DEFT / Inline and Fullbore
Spinner Survey