

Prod4 / Crane  
Tuna

Rig :  
Field:

Logg
Run
Depi
Schl
Bott
Top
Casi
Salin
Dens
Fluic
Bit
Bit S
From
To
Casi
Weig
Grac
From
To
Max
Logg
Unit
Rec
With

Company: Esso Australia Ltd.

Well: A-2

Field: Tuna

Prod4 / Crane

Country: Australia

RST Sigma/DEFT/Spinner  
Pressure/Temperature  
Survey

Location: Gippsland

Well: A-2

Company: Esso Australia Ltd.

LOCATION

Gippsland	Elev.: K.B. 32.9 m
Basin	G.L. -59 m
Bas Strait	D.F. 32.9 m
Permanent Datum:	M.S.L. _____
Log Measured From:	D.F. _____
Drilling Measured From:	D.F. _____
State: Victoria	Max. Well Deviation 42 deg
	Longitude 148 25' 06.5" E
	Latitude 030 10' 16.5" S

Logging Date

Number

Sh Driller

Slumberger Depth

Bottom Log Interval

Log Interval

Log Fluid Type

Fluidity

7.5 g/cm3

1602 m

BIT/CASING/TUBING STRING

8.500 in

1

1

Log/Tubing Size

7.000 in

23 lpm/ft

X-Line

1936 m

3272.84 m

Maximum Recorded Temperatures

196 degF

20-Jun-2005

11:23

Log On Bottom

Location

1

Prod4 / VEA

G Wright & J. Wooster.

B. White.

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	42 deg		
CEMENTING DATA			
Primary/Squeeze	Squeeze		
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			
Log On Bottom			
Unit Number			
Location			
Recorded By			
Witnessed By			

## DEPTH SUMMARY LISTING

Date Created: 19-JUN-2005 8:10:33

### Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-H	Type:	CMTD-C	Type:	7-46 M18
Serial Number:	797	Serial Number:	1037	Serial Number:	4202
Calibration Date:	01-May-2005	Calibration Date:	22-Dec-2004.	Length:	4400.09 M
Calibrator Serial Number:	8	Calibrator Serial Number:	57144	Conveyance Method: Wireline Rig Type: Rigless	
Calibration Cable Type:	7-46 M18	Calibration Gain:	1.00		
Wheel Correction 1:	-3	Calibration Offset:	0.00		
Wheel Correction 2:	2				

### Depth Control Parameters

Log Sequence:	First Log In the Well
Rig Up Length At Surface:	0.00 M
Rig Up Length At Bottom:	0.00 M
Rig Up Length Correction:	0.00 M
Stretch Correction:	0.00 M
Tool Zero Check At Surface:	0.00 M

### Depth Control Remarks

1. First descent into well.
2.
3.
4.
5.
6.

#### DISCLAIMER

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OTHER SERVICES1 OS1: Nil OS2: OS3: OS4: OS5:	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
The objective of this program was to determine the integrity of the cement squeeze and to identify the source of the ingress of water.	
This log was correlated to the Solar log supplied by the client dated 21 July 2003.	
Well static, RIH and correlated on depth. Completed a spinner/DEFT pass up/down followed by an RST pass all at 900ft/hr.	
Well opened to flowing, completed a station log until a constant flow rate was achieved.	
Well flowing, choke opened to 20%. Completed spinner/DEFT	

Well flowing, choke opened to 20%. Completed spinner/DEFT	
up/down pass and two RST passes all at 900ft/hr. This was	
followed by a spinner/DEFT up/down pass at 3000ft/hr.	
BHP = 2711 psia, BHT = 196 degF (Static)	
BHP = 2666 psia, BHT = 196 degF (Flowing)	
A flow was seen to be coming from the cement squeeze, it	
appeared to be a mix of oil and water.	
Crew : J. Light, J. Annear & E. Mezenberg.	

RUN 1 SERVICE ORDER #: AUSL05146071 PROGRAM VERSION: 13C0-300 FLUID LEVEL: 1602 m			RUN 2 SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

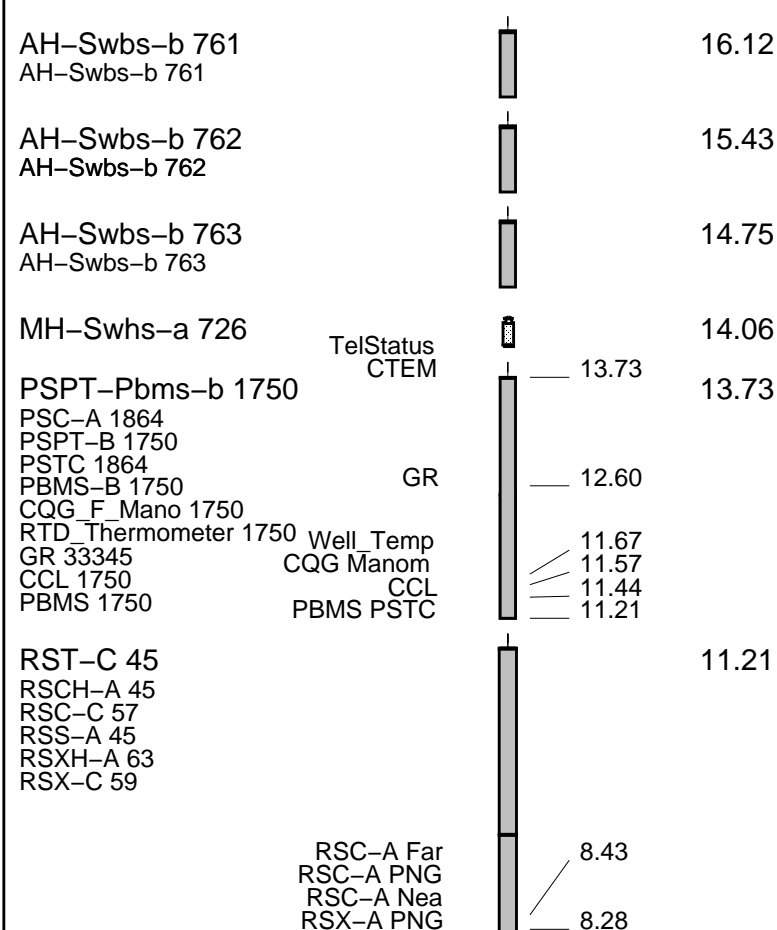
EQUIPMENT	DESCRIPTION
1	...
2	...
3	...
4	...
5	...
6	...
7	...
8	...
9	...
10	...
11	...
12	...
13	...
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96	...
97	...
98	...
99	...
100	...

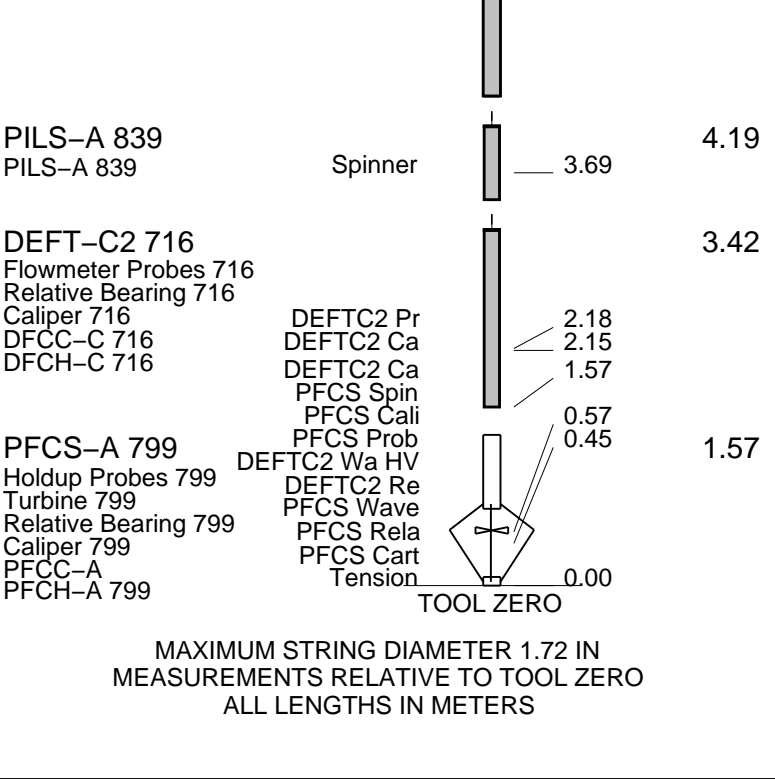
	RUN 1	RUN 2
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2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	1	1
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9	1	1
10	1	1
11	1	1
12	1	1
13	1	1
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96	1	1
97	1	1
98	1	1
99	1	1
100	1	1

## SURFACE EQUIPMENT

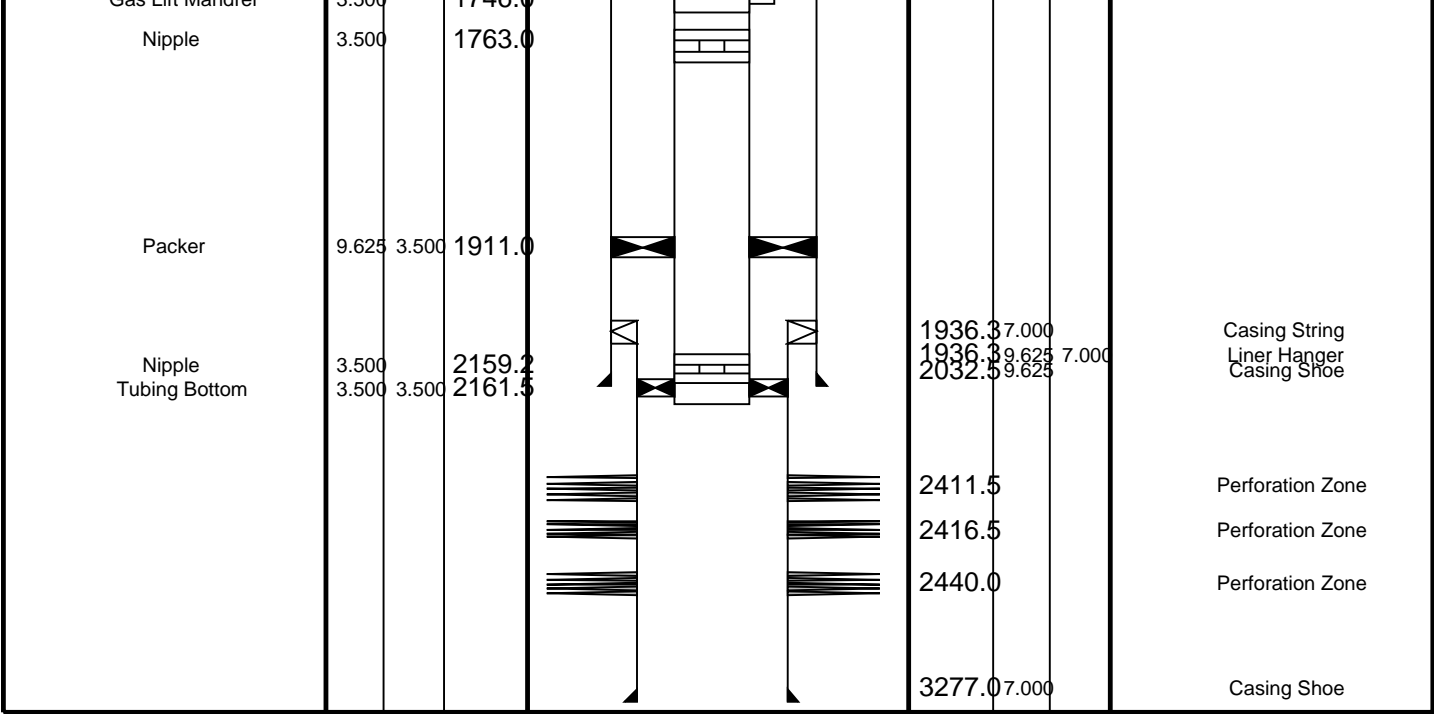
WITM-A 1

## DOWNHOLE EQUIPMENT





Production String	(in)		(m)	Well Schematic	(m)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
Tubing Hanger Tubing	9.625 3.500	3.500	12.0 13.8		14.5 14.5	13.375 13.375	59.625	Casing String Liner Hanger
Shutin Valve	3.500		449.0					
Gas Lift Mandrel	3.500		982.0		642.8	13.375		Casing Shoe
Gas Lift Mandrel	3.500		1716.0					
Gas Lift Mandrel	3.500		1716.0					



Single Pass Interpretation

MAXIS Field Log

Company: Esso Australia Ltd.

Well: A-2

Input DLIS Files

DEFAULT

Flip\_FCS\_DEFT\_ILS\_029LUP

PRODUCER

20-Jun-2005 15:36

2470.3 M

2372.0 M

Output DLIS Files

DEFAULT

FCS\_DEFT\_ILS\_RST\_040PUP

FN:38

PRODUCER

20-Jun-2005 16:28

2467.7 M

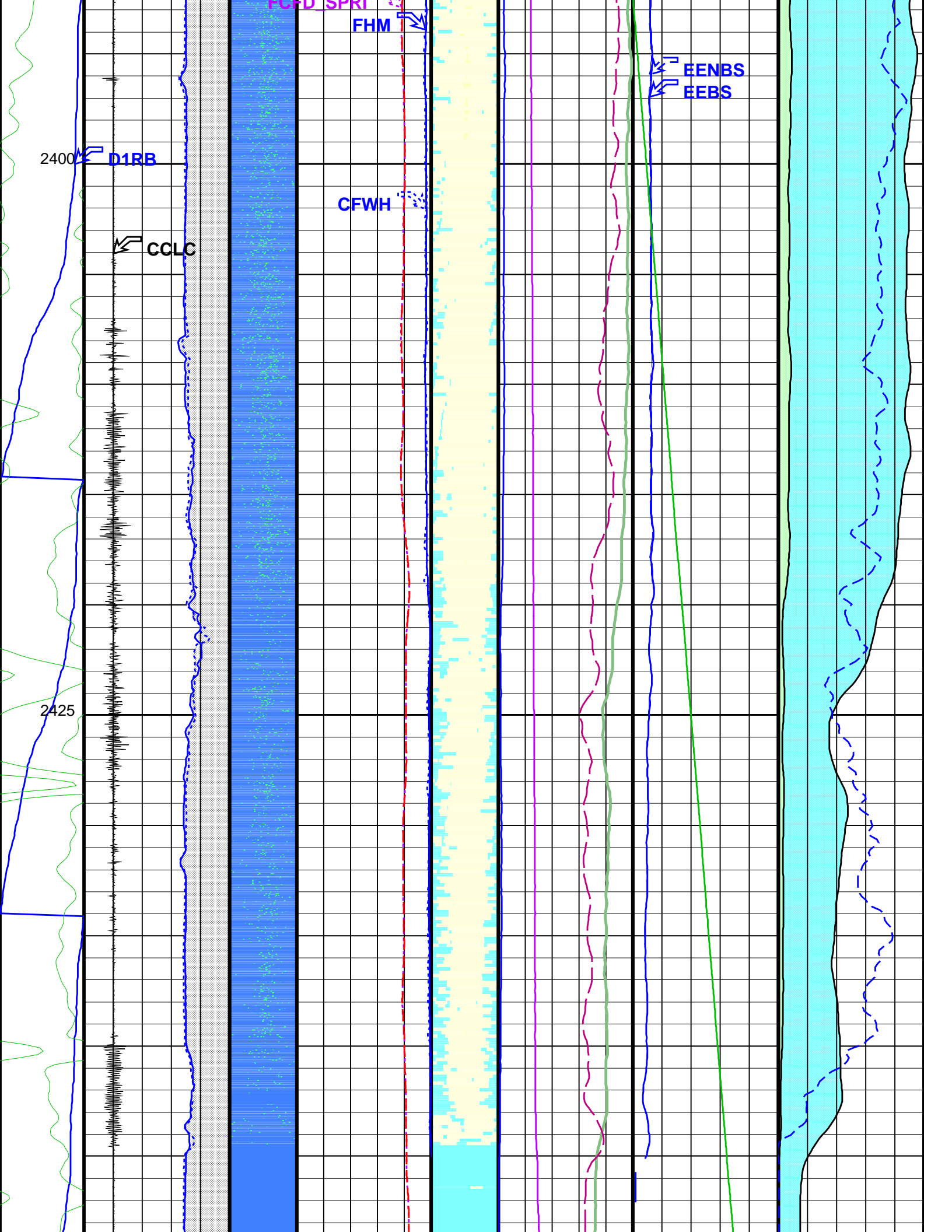
2366.5 M

OP System Version: 13C0-300  
MCM

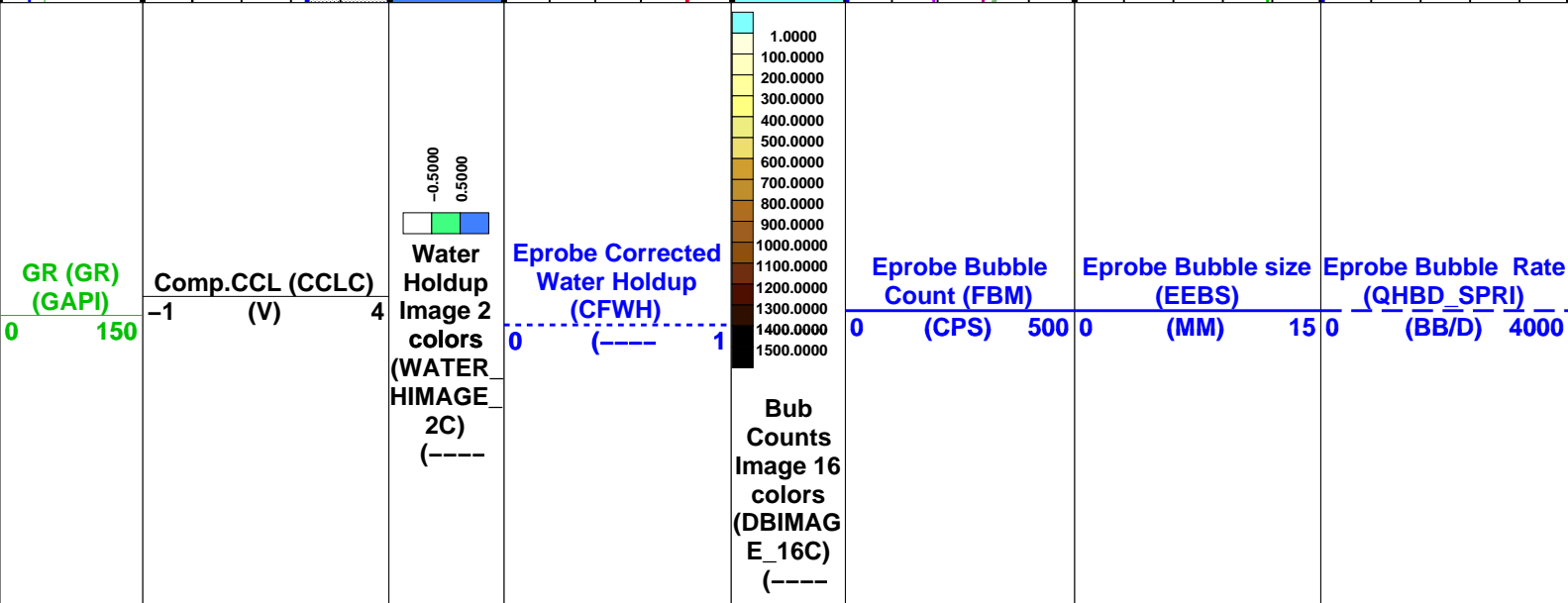
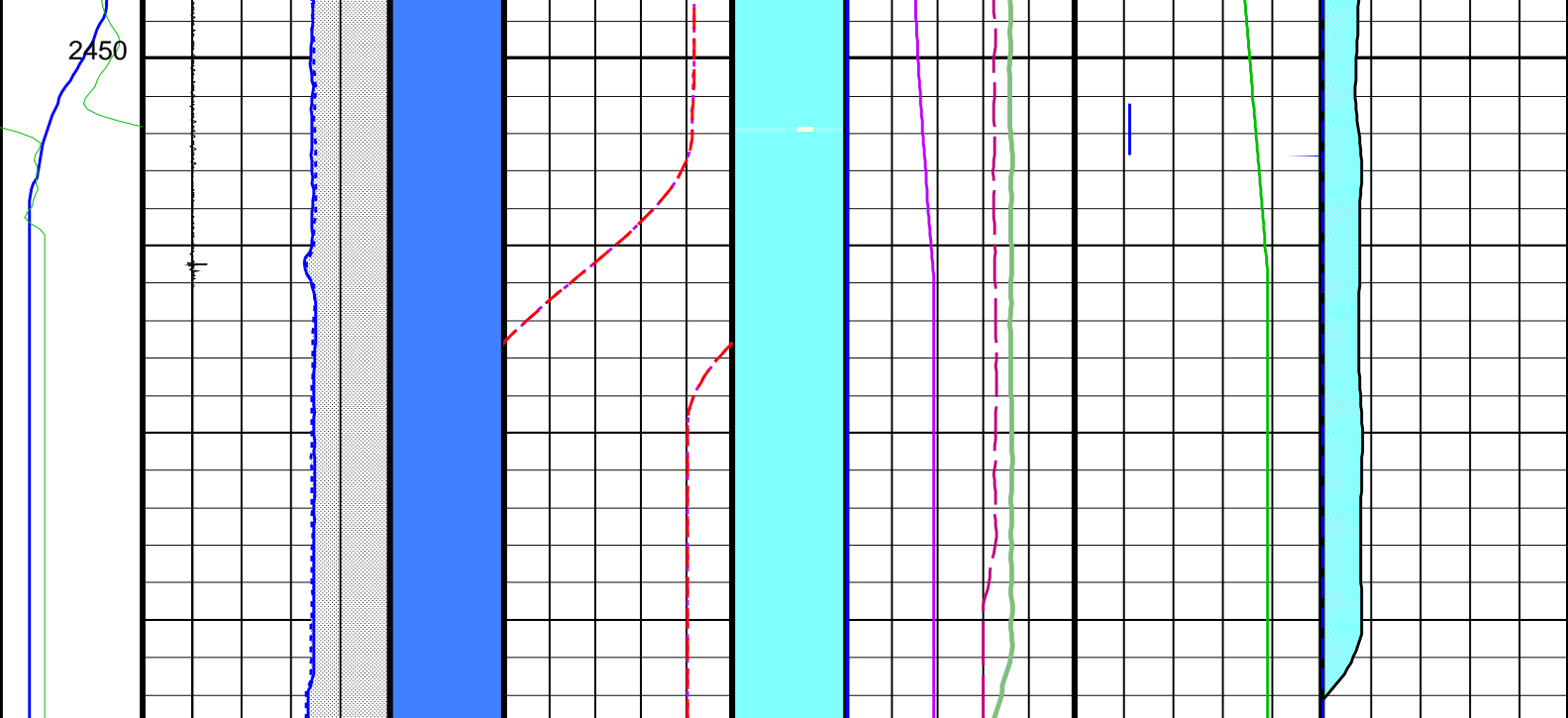
PFCS-A	13C0-300	DEFT-C2	13C0-300
PILS-A	13C0-300	RST-C	PTC-2716-NUCL
PSPT-Pbms-b	13C0-300		

Well Diameter  
From PFC2 to  
PFCS\_T1









<b>Probe1 RB (D1RB) (DEG)</b> 0 360	<b>Cable Speed (CS) (F/HR)</b> 0 3000		<b>Eprobe Water Holdup (FHM) (----)</b> 0 1	<b>Filtered Main Spinner (SPIN) (RPS)</b> -10 10	<b>Eprobe Standalone Computed Bubble size (EENBS) (MM)</b> 0 15	Gas
	<b>PFCS Caliper X (PFC1) (IN)</b> 3 8		<b>Friction Corrected Well Fluid Density (FCFD_SPRI) (G/C3)</b> 0.2 1.2	<b>Filtered Auxiliary Spinner 1 (SPI1) (RPS)</b> -10 10	<b>Well Pressure (WPRE) (PSIA)</b> 2600 2700	Oil
	<b>PFCS Caliper Y (PFC2) (IN)</b> 3 8		<b>Pressure Gradient Density (MWFD) (G/C3)</b> 0.2 1.2	<b>Well Temperature (WTEP) (DEGF)</b> 195 198		Water Flowrate
	<b>Well Diameter From PFC1 to PFCS_T1</b>					
	<b>Well Diameter From PFC2 to PFCS_T1</b>					

PFCS-A	13C0-300	DEFT-C2	13C0-300
PILS-A	13C0-300	RST-C	PTC-2716-NUCL
PSPT-Pbms-b	13C0-300		

## Parameters

DLIS Name	Description	Value	
PFCS-A: PSP Flow and caliper Tool			
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
CSID	Casing Size I.D.	6.151	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	
SDCF	Spinner Depth Constant Filter	6	
SP11	Auxiliary Spinner 1 Flowmeter Sonde	PILS-A	
SPIN	Main Spinner Flowmeter Sonde	PFCS-A_TURB	
DEFT-C2: DEFT_C Tool			
CSID	Casing Size I.D.	6.151	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	
PILS-A: PSP In Line Spinner Flowmeter			
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SP11	Auxiliary Spinner 1 Flowmeter Sonde	PILS-A	
SPIN	Main Spinner Flowmeter Sonde	PFCS-A_TURB	
RST-C: Reservoir Saturation Pro Tool C			
CSID	Casing Size I.D.	6.151	IN
GDEV	Average Angular Deviation of Borehole from Normal	30	DEG
PSPT-Pbms-b: Production Services Logging Platform			
CSID	Casing Size I.D.	6.151	IN
GDEV	Average Angular Deviation of Borehole from Normal	30	DEG
SPRI: Single Pass Rate Interpretation			
DENS_SEL	SPRInt Density Selector	MWFD	
DGHC	Deft Ghost Probe Holdup Correction	MANU	
ESBS	Electrical-probe Stand-alone Bubble Size	0.06	IN
FLOWVIEW_FLAG	FlowView Water Holdup Used Flag	YES	
GDD_SPRI	Gas Downhole Density	0.15	G/C3
GFECF	Gradio Friction Effect Correction Factor	1	
GHCf	GHOST Gas Holdup Correction Factor	0	
GHOST_FLAG	Ghost Gas Holdup Used Flag	NO	
GOR_SPRI	Gas Oil Ratio	89.0538	M3M3
GRADIO_FLAG	Gradiomaometer Holdup Used Flag	NO	
ODD_SPRI	Oil Downhole Density	0.8	G/C3
OGRA_SPRI	Gravity of Oil	40	DAPI
OSBS	Optical-probe Stand-alone Bubble Size	0.06	IN
PVT_DDENS_FLAG	Compute Downhole Densities from PVT Data	YES	
SEFF	Spinner Efficiency	1	
SPINNER_PITCH	Spinner Pitch	2.08	IN
SPIN_SEL	SPRInt Spinner Selector	SPIN	
SPRI_INTPR_TYPE	SPRInt Type of Interpretation	WATER_OIL_FLOW	
SURFACE_SPRI	Surface Flowrates Computation	YES	
THRE	Spinner Threshold	4.98	M/MN
WDD_SPRI	Water Downhole Density	1	G/C3
WHCF	PFCS/DEFT Water Holdup Correction Factor	0	
WSAL_SPRI	Water Salinity	50000	PPM
BORDYN: BorDyn (Well Test Validation)			
CSID	Casing Size I.D.	6.151	IN
System and Miscellaneous			
DO	Depth Offset for Playback	-2.6	M
PP	Playback Processing	NORMAL	

## Input DLIS Files

DEFAULT	Flip_FCS_DEFT_ILS_029LUP	PRODUCER	20-Jun-2005 15:36	2470.3 M	2372.0 M
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## Output DLIS Files

DEFAULT	FCS_DEFT_ILS_RST_040PUP	FN:38	PRODUCER	20-Jun-2005 16:28
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Flowing RST Sigma  
Pass 2

MAXIS Field Log

Company: Esso Australia Ltd. Well: A-2

Input DLIS Files

DEFAULT FCS\_DEFT\_ILS\_RST\_026LUP FN:25 PRODUCER 20-Jun-2005 15:03 2473.6 M 2373.5 M

Output DLIS Files

DEFAULT FCS\_DEFT\_ILS\_RST\_074PUP FN:72 PRODUCER 21-Jun-2005 10:18 2473.0 M 2380.3 M

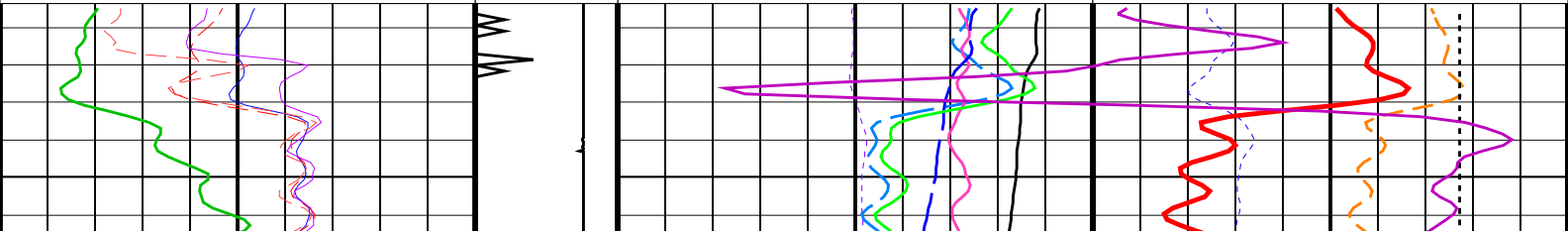
OP System Version: 13C0-300  
MCM

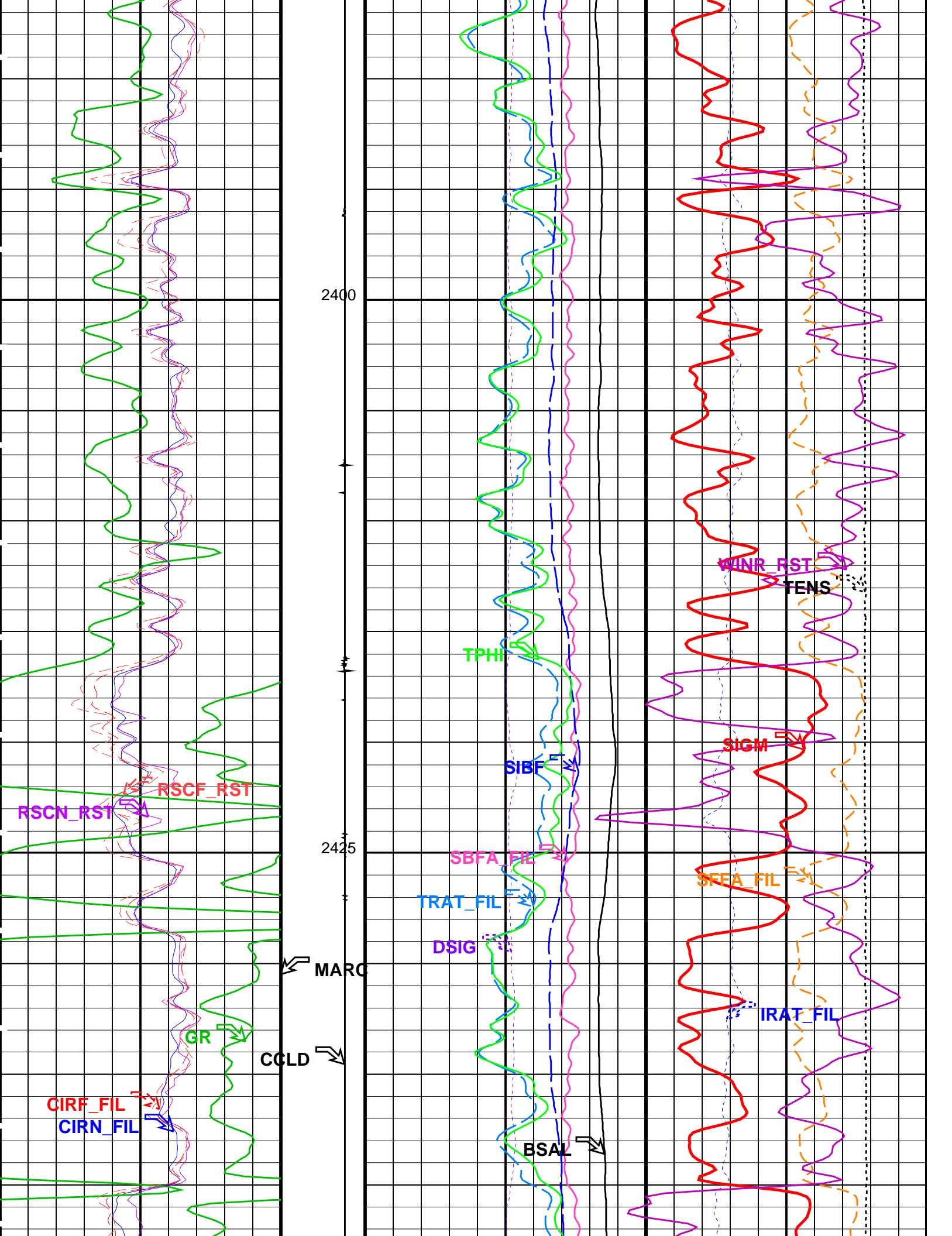
PFCS-A 13C0-300 DEFT-C2 13C0-300  
PILS-A 13C0-300 RST-C PTC-2716-NUCL  
PSPT-Pbms-b 13C0-300

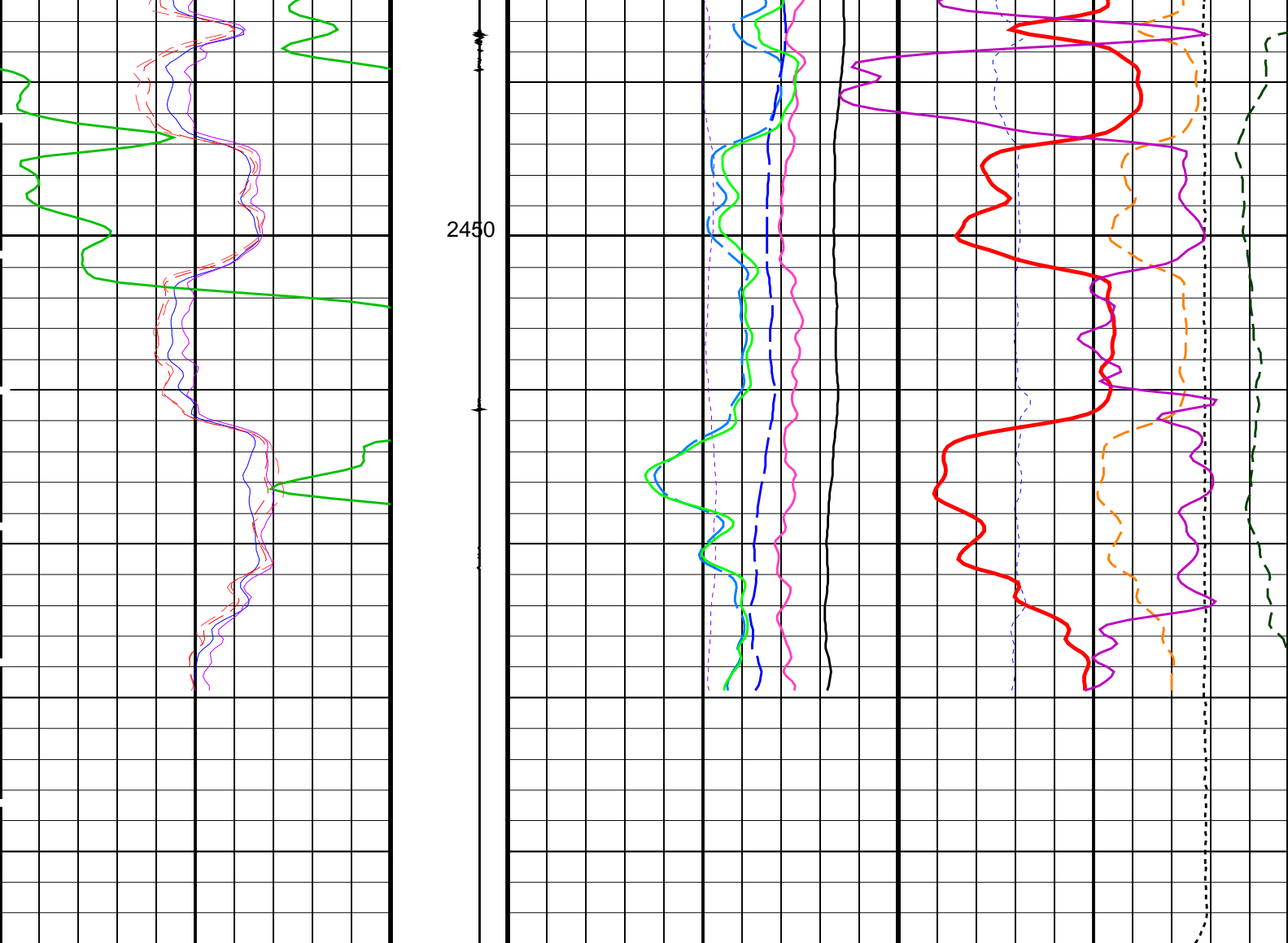
PIP SUMMARY

Time Mark Every 60 S

		RST Sigma (SIGM)	
60		(CU)	0
		RST Weighted Inelastic Ratio (WINR_RST)	
0.4		(----	0
		RST Porosity (TPHI)	
0.6		(V/V)	0
RST Far Effective Capture CR (RSCF_RST)		RST Sigma Borehole Fluid (SIBF)	
45	(----	100	(CU) 0
RST Near Effective Capture CR (RSCN_RST)		Sigma Borehole Far Apparent (SBFA_FIL)	
45	(----	150	(CU) 0
RST Capture to Inelastic Ratio Far (CIRF_FIL)		Sigma Formation Far Apparent (SFFA_FIL)	
5	(----	1.5	(----) 0.5 60 (CU) 0
RST Capture to Inelastic Ratio Near (CIRN_FIL)		RST Sigma Difference (DSIG)	
2.5	(----	-30	(CU) 30
Gamma Ray (GR)		MCS Far Background (filtered) (FBAC)	
0	(GAPI) 150	0	
		RST Borehole Salinity (BSAL)	
		450	(PPK) -50
		RST Inelastic Ratio (IRAT_FIL)	
		0.75	(----) 0





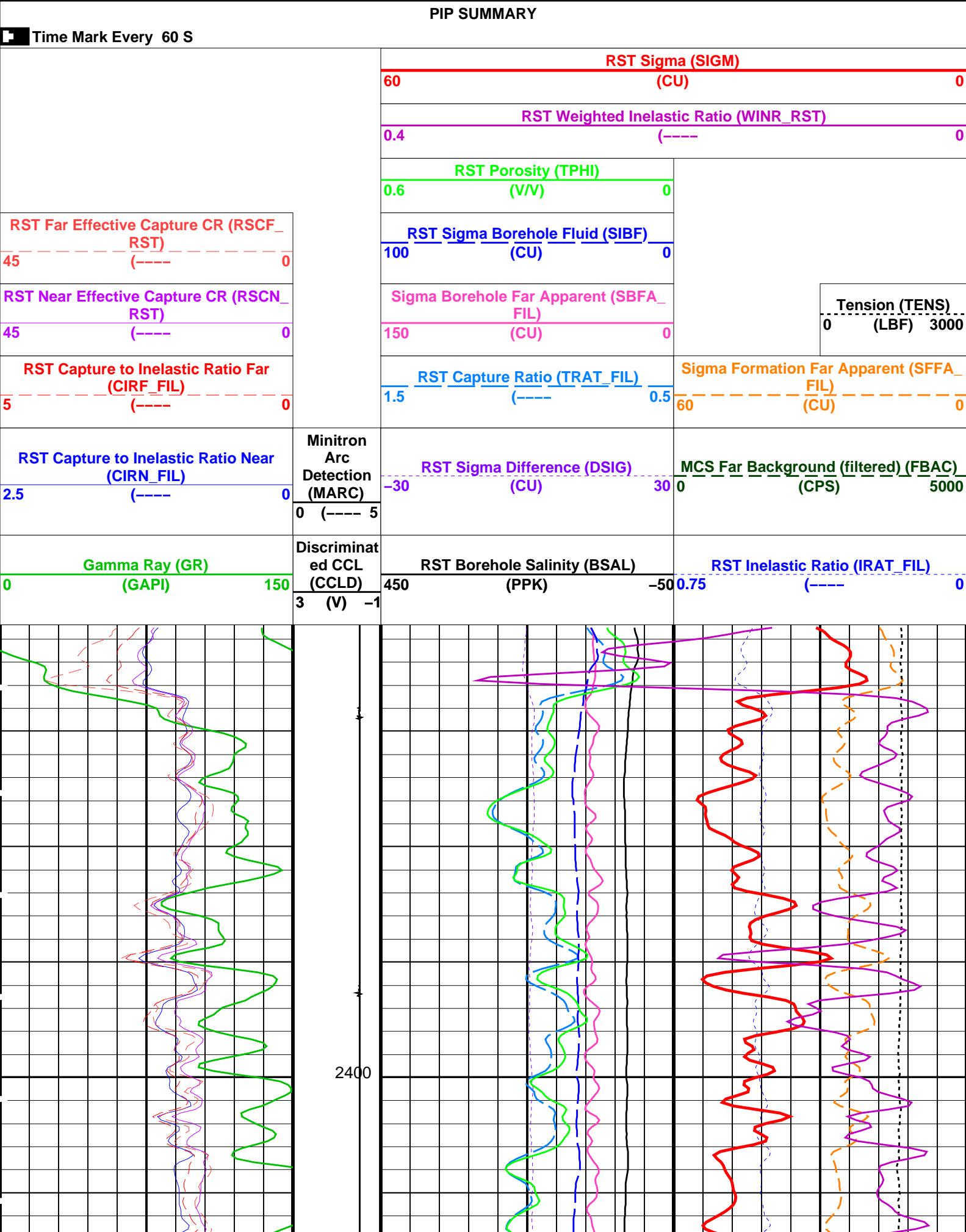


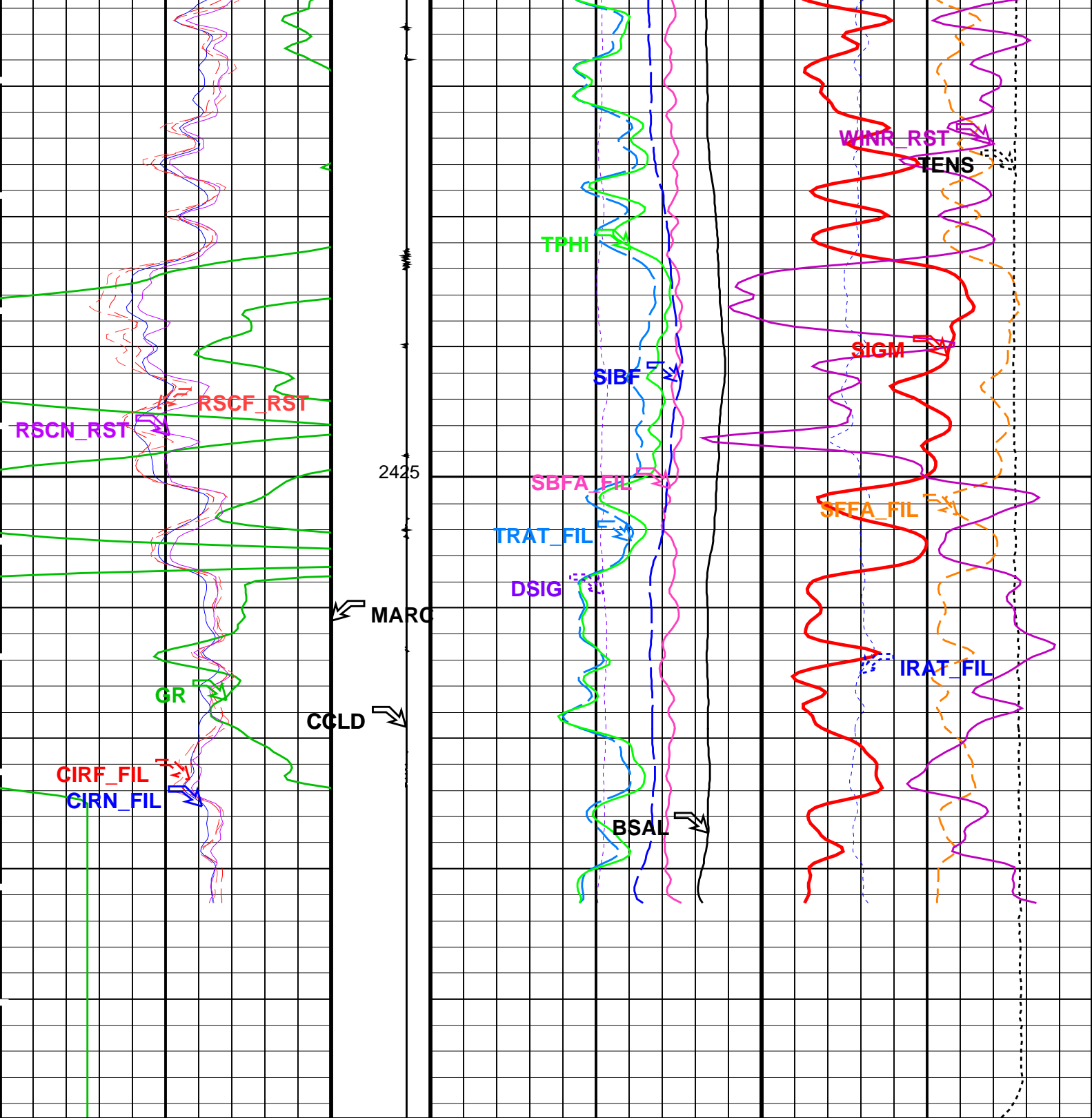
<div>Gamma Ray (GR) (GAPI)</div> <div>0150</div>	<div>Discriminat ed CCL (CCLD)</div> <div>3 (V) -1</div>	<div>RST Borehole Salinity (BSAL)</div> <div>450 (PPK) -50</div>	<div>RST Inelastic Ratio (IRAT_FIL)</div> <div>0.75 (----) 0</div>
		<div>RST Sigma Difference (DSIG)</div> <div>-30 (CU) 30</div>	<div>MCS Far Background (filtered) (FBAC)</div> <div>0 (CPS) 5000</div>
<div>RST Capture to Inelastic Ratio Near (CIRN_FIL)</div> <div>2.5 (----) 0</div>	<div>Minitron Arc Detection (MARC)</div> <div>0 (----) 5</div>	<div>RST Capture Ratio (TRAT_FIL)</div> <div>1.5 (----) 0.5</div>	<div>Sigma Formation Far Apparent (SFFA_FIL)</div> <div>60 (CU) 0</div>
<div>RST Capture to Inelastic Ratio Far (CIRF_FIL)</div> <div>5 (----) 0</div>		<div>Sigma Borehole Far Apparent (SBFA_FIL)</div> <div>150 (CU) 0</div>	<div>Tension (TENS)</div> <div>0 (LBF) 3000</div>
<div>RST Near Effective Capture CR (RSCN_RST)</div> <div>45 (----) 0</div>		<div>RST Sigma Borehole Fluid (SIBF)</div> <div>100 (CU) 0</div>	
<div>RST Far Effective Capture CR (RSCF_RST)</div> <div>45 (----) 0</div>		<div>RST Porosity (TPHI)</div> <div>0.6 (V/V) 0</div>	
		<div>RST Weighted Inelastic Ratio (WINR_RST)</div> <div>0.4 (----) 0</div>	
		<div>RST Sigma (SIGM)</div> <div>60 (CU) 0</div>	

Time Mark Every 60 S

PIP SUMMARY

Parameters						
DLIS Name		Description		Value		
RST-C: Reservoir Saturation Pro Tool C						
AIRB		RST Air Borehole		No		
BHS		Borehole Status		CASED		
BSALOPT		RST Borehole Salinity Option		Unknown		
BSFL		RST Borehole Salinity Filter Length		51		
DFPC		RST Depth Filter Processing Constant		One		
DFPC_TDTL		RST Depth Filter Processing Constant (TDT-like)		Two		
MATR		Rock Matrix for Neutron Porosity Corrections		SANDSTONE		
NORM_IRAT_RST		RST Normalized Inelastic Ratio		0.48		
NORM_SIGM_RST		RST Normalized Sigma		30	CU	
RGAI		Near/Far Gain Calibration Ratio		1		
SMBMO		RST Sigma Mode Background Minitron Off		No		
TIER_SIGM		RST Sigma Acquisition Mode		0_RST_Sigma		
PSPT-Pbms-b: Production Services Logging Platform						
BHS		Borehole Status		CASED		
MATR		Rock Matrix for Neutron Porosity Corrections		SANDSTONE		
System and Miscellaneous						
BS		Bit Size		8.500	IN	
BSAL		Borehole Salinity		-50000.00	PPM	
CSIZ		Current Casing Size		7.000	IN	
CWEI		Casing Weight		23.00	LB/F	
DO		Depth Offset for Playback		-0.6	M	
PP		Playback Processing		NORMAL		
Format: RST_SIG_ANSW		Vertical Scale: 1:200		Graphics File Created: 21-Jun-2005 10:18		
OP System Version: 13C0-300						
MCM						
PFCS-A		13C0-300		DEFT-C2		13C0-300
PILS-A		13C0-300		RST-C		PTC-2716-NUCL
PSPT-Pbms-b		13C0-300				
Input DLIS Files						
DEFAULT		FCS_DEFT_ILS_RST_026LUP		FN:25	PRODUCER	20-Jun-2005 15:03 2473.6 M 2373.5 M
Output DLIS Files						
DEFAULT		FCS_DEFT_ILS_RST_074PUP		FN:72	PRODUCER	21-Jun-2005 10:18
<div><div><div><div><div></div><div>Schlumberger</div></div></div><div><div>Flowing RST Sigma</div><div>Pass 1</div></div></div><div>MAXIS Field Log</div></div>						
Company: Esso Australia Ltd. Well: A-2						
Input DLIS Files						
DEFAULT		FCS_DEFT_ILS_RST_024LUP		FN:23	PRODUCER	20-Jun-2005 14:25 2450.1 M 2364.6 M
Output DLIS Files						
DEFAULT		FCS_DEFT_ILS_RST_073PUP		FN:71	PRODUCER	21-Jun-2005 10:11 2449.5 M 2380.3 M
OP System Version: 13C0-300						
MCM						





<div>Gamma Ray (GR)</div> <div>(GAPI)</div> <div>0150</div>	<div>Discriminat</div> <div>ed CCL</div> <div>(CCLD)</div> <div>3 (V) -1</div>	<div>RST Borehole Salinity (BSAL)</div> <div>(PPK)</div> <div>450-50</div>	<div>RST Inelastic Ratio (IRAT_FIL)</div> <div>(----</div> <div>0.750</div>
<div>RST Capture to Inelastic Ratio Near</div> <div>(CIRN_FIL)</div> <div>2.5 (----</div> <div>0</div>	<div>Minitron</div> <div>Arc</div> <div>Detection</div> <div>(MARC)</div> <div>0 (---- 5</div>	<div>RST Sigma Difference (DSIG)</div> <div>(CU)</div> <div>-3030</div>	<div>MCS Far Background (filtered) (FBAC)</div> <div>(CPS)</div> <div>05000</div>
<div>RST Capture to Inelastic Ratio Far</div> <div>(CIRF_FIL)</div> <div>5 (----</div> <div>0</div>		<div>RST Capture Ratio (TRAT_FIL)</div> <div>(----</div> <div>1.50.5</div>	<div>Sigma Formation Far Apparent (SFFA_</div> <div>FIL)</div> <div>(CU)</div> <div>600</div>
<div>RST Near Effective Capture CR (RSCN_</div> <div>RST)</div>		<div>Sigma Borehole Far Apparent (SBFA_</div> <div>FIL)</div>	<div>Tension (TENS)</div>



45	RST) (-----)	0	150	RST) (CU)	0	0	(LBF)	3000
RST Far Effective Capture CR (RSCF_ RST)			RST Sigma Borehole Fluid (SIBF)					
45	-----	0	100	(CU)	0			
			RST Porosity (TPHI)					
			0.6	(V/V)	0			
			RST Weighted Inelastic Ratio (WINR_RST)					
			0.4	(-----)	0			
			RST Sigma (SIGM)					
			60	(CU)	0			


PIP SUMMARY								
Time Mark Every 60 S								

Parameters			
DLIS Name	Description	Value	
RST-C: Reservoir Saturation Pro Tool C			
AIRB	RST Air Borehole	No	
BHS	Borehole Status	CASED	
BSALOPT	RST Borehole Salinity Option	Unknown	
BSFL	RST Borehole Salinity Filter Length	51	
DFPC	RST Depth Filter Processing Constant	One	
DFPC_TDTL	RST Depth Filter Processing Constant (TDT-like)	Two	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
NORM_IRAT_RST	RST Normalized Inelastic Ratio	0.48	
NORM_SIGM_RST	RST Normalized Sigma	30	CU
RGAI	Near/Far Gain Calibration Ratio	1	
SMBMO	RST Sigma Mode Background Minitron Off	No	
TIER_SIGM	RST Sigma Acquisition Mode	0_RST_Sigma	
PSPT-Pbms-b: Production Services Logging Platform			
BHS	Borehole Status	CASED	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
System and Miscellaneous			
BS	Bit Size	8.500	IN
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	7.000	IN
CWEI	Casing Weight	23.00	LB/F
DO	Depth Offset for Playback	-0.6	M
PP	Playback Processing	NORMAL	

Format: RST_SIG_ANSW	Vertical Scale: 1:200	Graphics File Created: 21-Jun-2005 10:11
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OP System Version: 13C0-300			
MCM			
PFCS-A	13C0-300	DEFT-C2	13C0-300
PILS-A	13C0-300	RST-C	PTC-2716-NUCL
PSPT-Pbms-b	13C0-300		

Input DLIS Files						
DEFAULT	FCS_DEFT_ILS_RST_024LUP	FN:23	PRODUCER	20-Jun-2005 14:25	2450.1 M	2364.6 M
Output DLIS Files						
DEFAULT	FCS_DEFT_ILS_RST_073PUP	FN:71	PRODUCER	21-Jun-2005 10:11		

	<div>Flowing Down Log 3000 ft/hr</div>
MAXIS Field Log	

# Input DLIS Files

DEFAULT Flip\_FCS\_DEFT\_ILS\_083LUP PRODUCER 21-Jun-2005 10:54 2470.3 M 2372.0 M

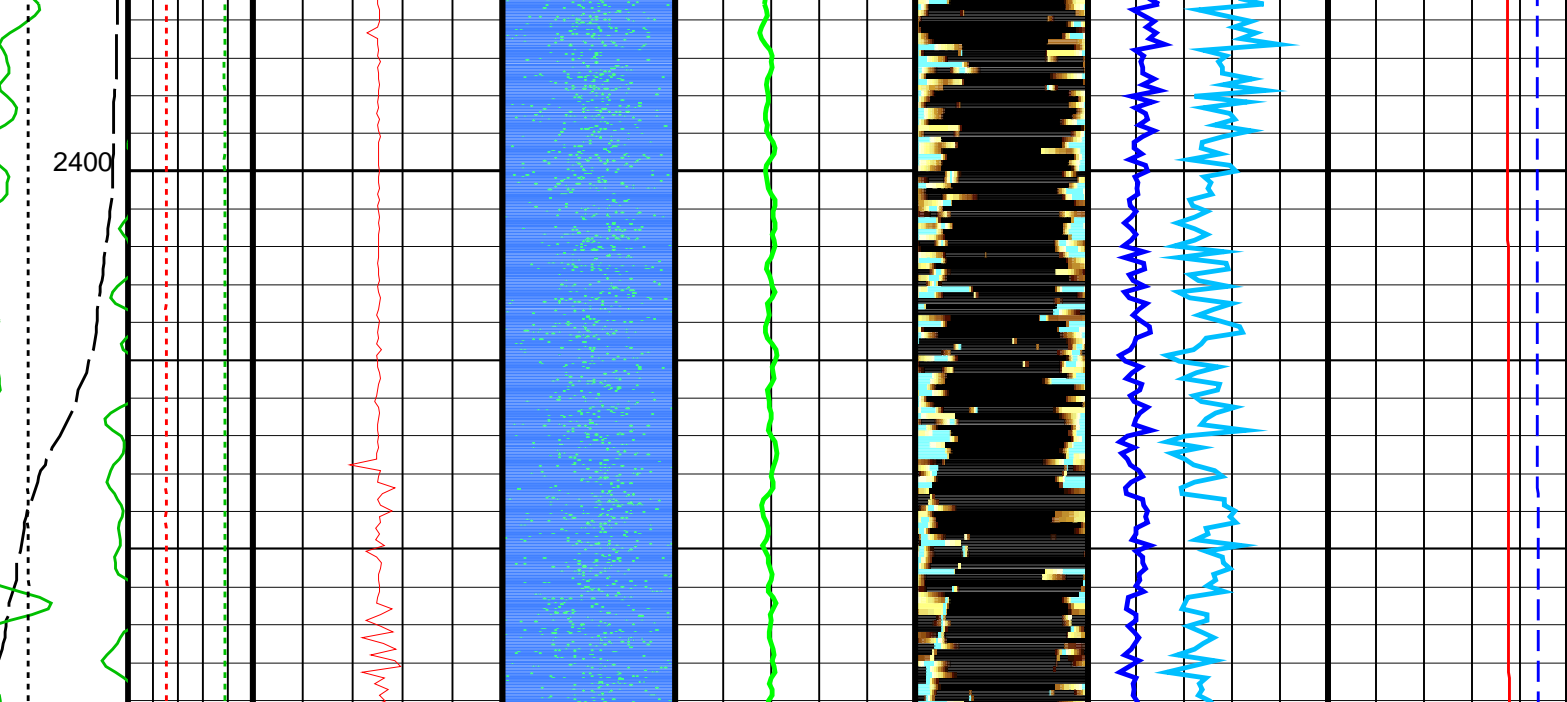
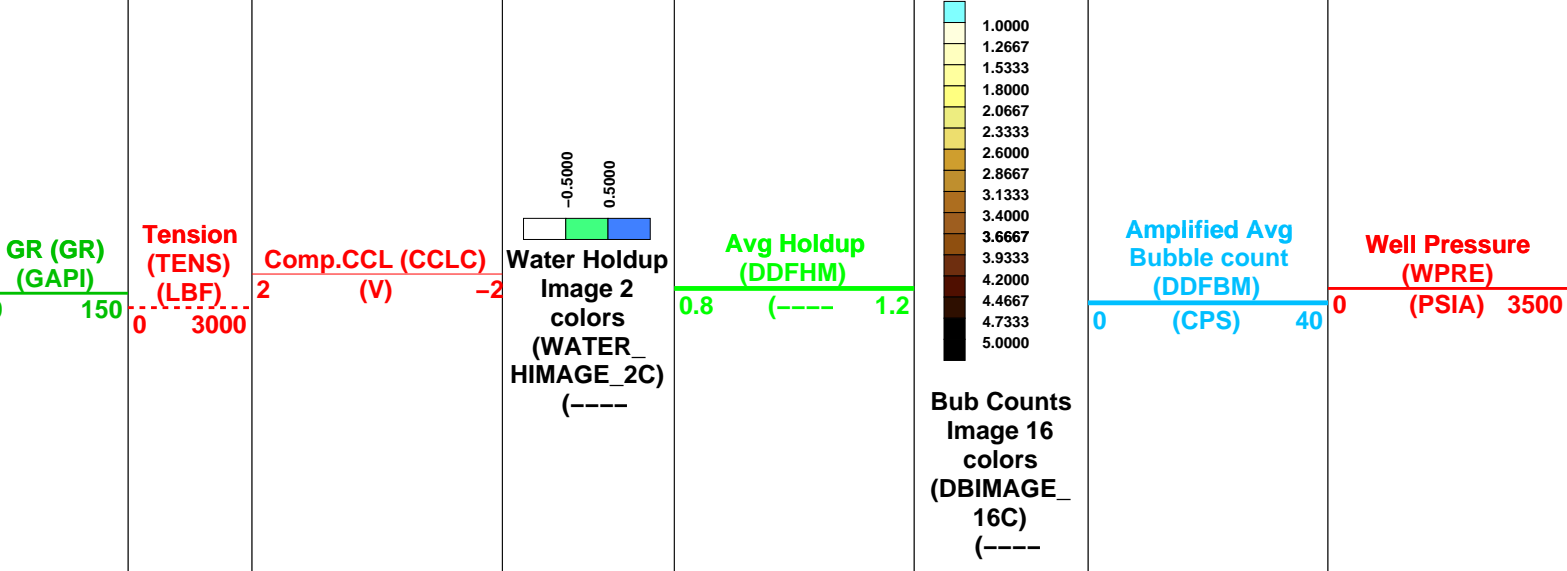
# Output DLIS Files

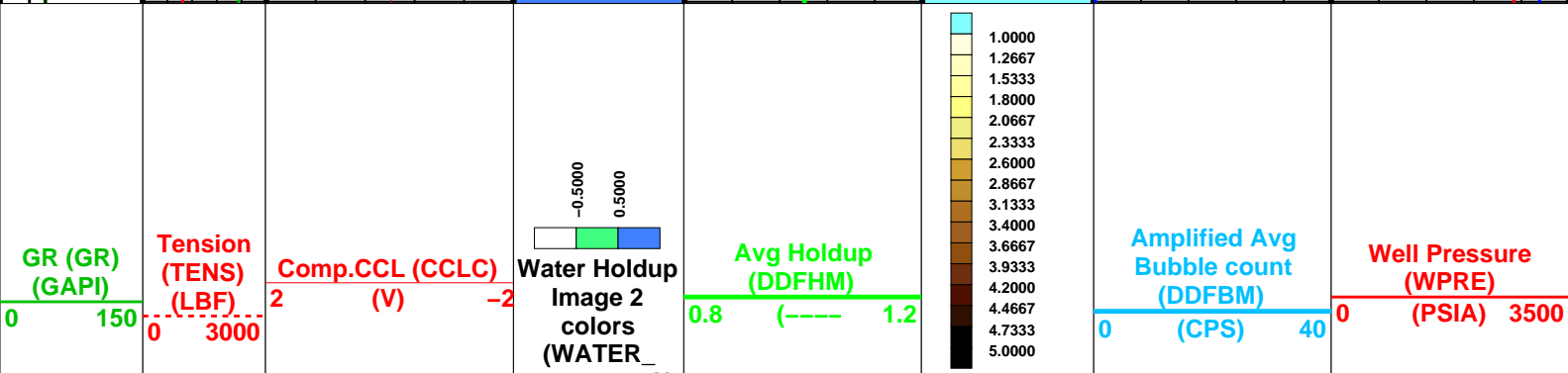
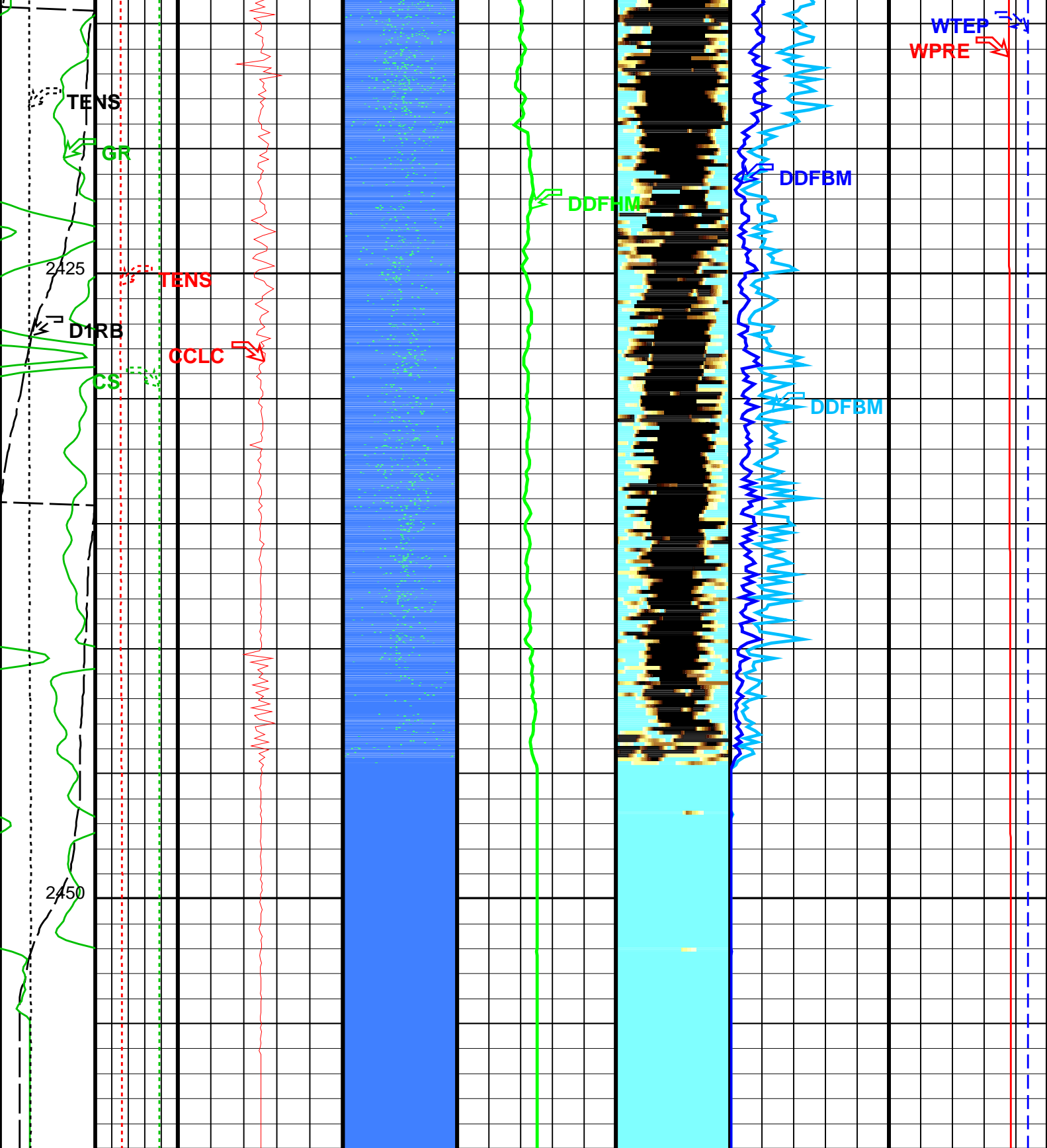
DEFAULT FCS\_DEFT\_ILS\_RST\_093PUP FN:88 PRODUCER 21-Jun-2005 12:15 2460.0 M 2395.3 M

# OP System Version: 13C0-300

MCM

PFCS-A 13C0-300 DEFT-C2 13C0-300  
PILS-A 13C0-300 RST-C PTC-2716-NUCL  
PSPT-Pbms-b 13C0-300





			HIMAGE_2C) (----		Bub Counts Image 16 colors (DBIMAGE_ 16C) (----		
Probe1 RB (D1RB) (DEG) 0 360	Cable Speed (CS) (F/HR) 0 4000					Avg BUB count (DDFBM) 0 (CPS) 100	Well Temperature (WTEP) (DEGF) 225
Tension (TENS) (LBF) 0 3000							

Format: DEFT_Image_DL	Vertical Scale: 1:200	Graphics File Created: 21-Jun-2005 12:15
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OP System Version: 13C0-300			
MCM			
PFCS-A	13C0-300	DEFT-C2	13C0-300
PILS-A	13C0-300	RST-C	PTC-2716-NUCL
PSPT-Pbms-b	13C0-300		

Parameters			
DLIS Name	Description	Value	
PFCS-A: PSP Flow and caliper Tool			
CSID	Casing Size I.D.	6.151	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	
DEFT-C2: DEFT_C Tool			
CSID	Casing Size I.D.	6.151	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	
RST-C: Reservoir Saturation Pro Tool C			
CSID	Casing Size I.D.	6.151	IN
PSPT-Pbms-b: Production Services Logging Platform			
CSID	Casing Size I.D.	6.151	IN
BORDYN: BorDyn (Well Test Validation)			
CSID	Casing Size I.D.	6.151	IN
System and Miscellaneous			
DO	Depth Offset for Playback	-2.4	M
PP	Playback Processing	NORMAL	

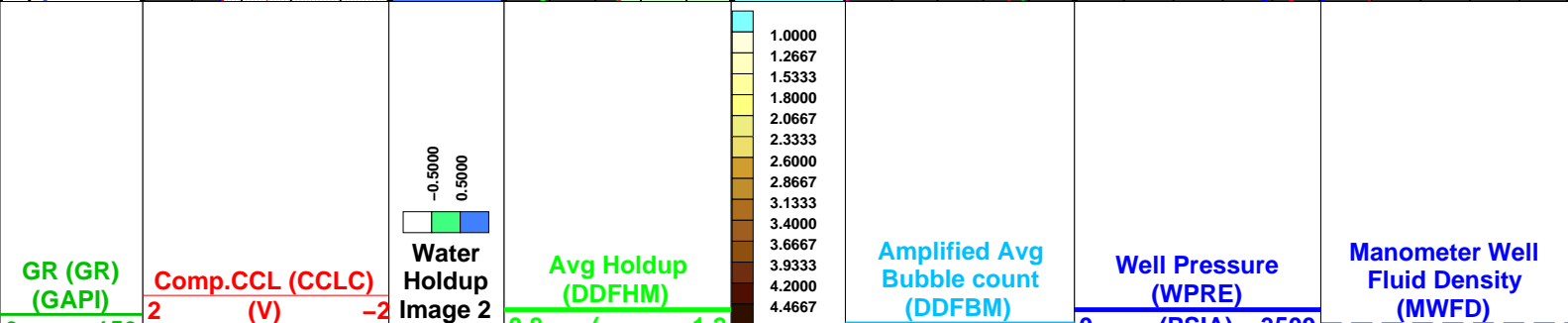
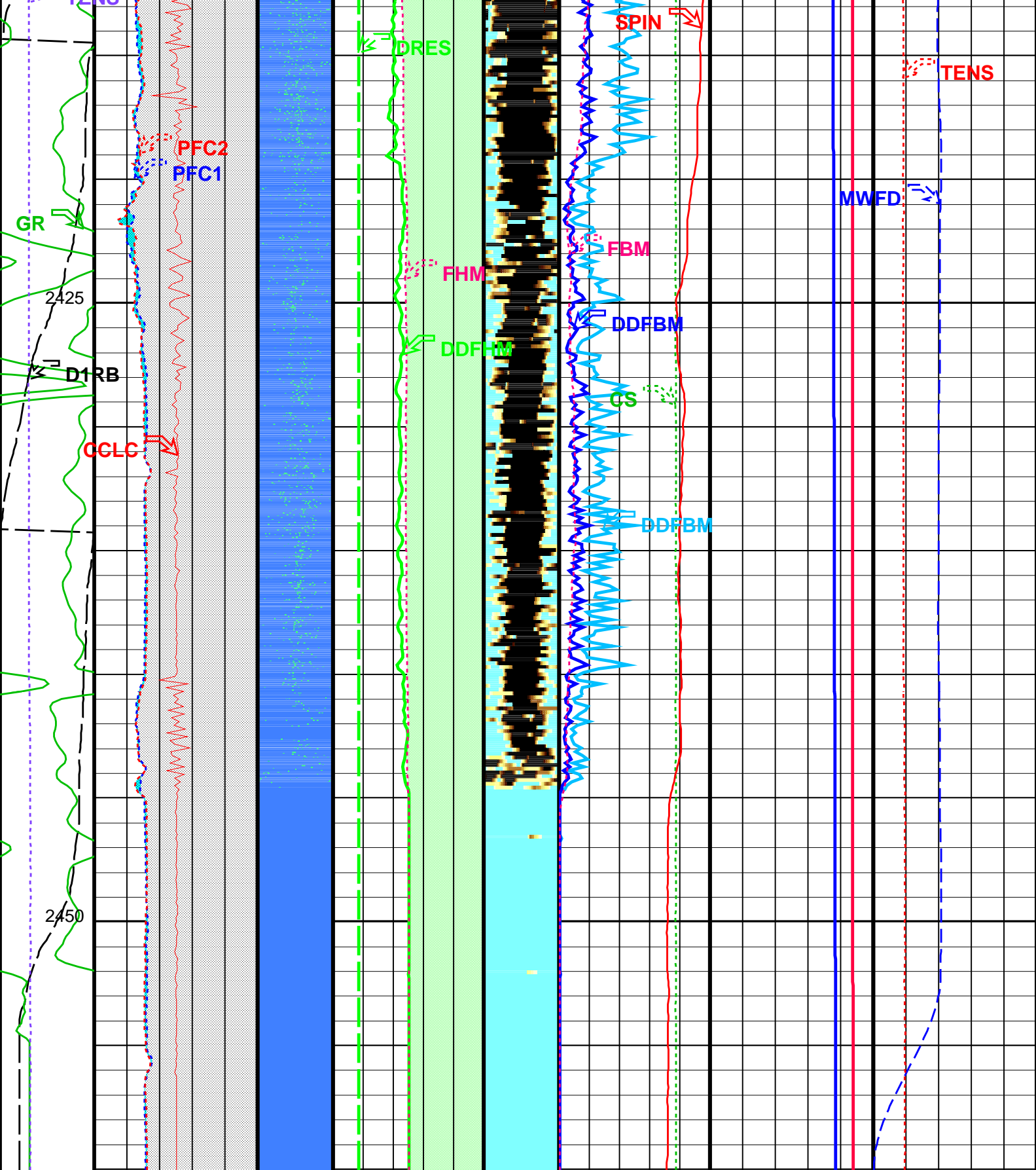
Input DLIS Files					
DEFAULT	Flip_FCS_DEFT_ILS_083LUP	PRODUCER	21-Jun-2005 10:54	2470.3 M	2372.0 M
Output DLIS Files					
DEFAULT	FCS_DEFT_ILS_RST_093PUP	FN:88	PRODUCER	21-Jun-2005 12:15	

Input DLIS Files					
DEFAULT	Flip_FCS_DEFT_ILS_083LUP	PRODUCER	21-Jun-2005 10:54	2470.3 M	2372.0 M
Output DLIS Files					
DEFAULT	FCS_DEFT_ILS_RST_093PUP	FN:88	PRODUCER	21-Jun-2005 12:15	2460.0 M
					2395.3 M

# MCM

13C0-300  
PTC-2716-NUCL







150		colors (WATER HIMAGE 2C) (-----	0.8 (----- 1.2	4.7333 5.0000	0 (CPS) 40	0 (PSIA) 3500	0 (G/C3) 2.5
Probe1 RB (D1RB) (DEG)	PFCS Caliper X (PFC1) (IN)		Filtered Water Holdup (FHM)		Cable Speed (CS) (F/HR)	Well Temperature (WTEP) (DEGF)	Tension (TENS) (LBF)
0 360	8 3		0.5 (----- 1.5		0 4000	0 225	0 (LBF) 5000
Tension (TENS) (LBF)	PFCS Caliper Y (PFC2) (IN)		PFCS Fluid Resistivity (DRES) (OHMM)		Avg BUB count (DDFBM) (CPS)		
0 3000	8 3		2 (OHMM) -10		0 100		
	Well Diameter From PFC1 to PFC2_T1				Filtered Bubble Count (FBM) (CPS)		
	Well Diameter From PFC2 to PFC2_T1				PFCS Spinner (SPIN) (RPS)		
	Pipe Ovalisation Between PFC1 and PFC2				-10 10		

Format: PFCS\_Image\_DL Vertical Scale: 1:200 Graphics File Created: 21-Jun-2005 12:15

## OP System Version: 13C0-300

MCM

PFCS-A	13C0-300	DEFT-C2	13C0-300
PILS-A	13C0-300	RST-C	PTC-2716-NUCL
PSPT-Pbms-b	13C0-300		

## Parameters

DLIS Name	Description	Value
PFCS-A: PSP Flow and caliper Tool		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE
CSID	Casing Size I.D.	6.151 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
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
SPIN	Main Spinner Flowmeter Sonde	PFCS-A_TURB
DEFT-C2: DEFT_C Tool		
CSID	Casing Size I.D.	6.151 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
PFGC	PFCS Geometrical coefficient	1200
PILS-A: PSP In Line Spinner Flowmeter		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE
SDCF	Spinner Depth Constant Filter	6
SPIN	Main Spinner Flowmeter Sonde	PFCS-A_TURB
RST-C: Reservoir Saturation Pro Tool C		
CSID	Casing Size I.D.	6.151 IN

CSID	Casing Size I.D.	6.151	IN
GDEV	Average Angular Deviation of Borehole from Normal	30	DEG
PSPT-Pbms-b:	Production Services Logging Platform		
CSID	Casing Size I.D.	6.151	IN
GDEV	Average Angular Deviation of Borehole from Normal	30	DEG
BORDYN:	BorDyn (Well Test Validation)		
CSID	Casing Size I.D.	6.151	IN
	System and Miscellaneous		
DO	Depth Offset for Playback	-2.4	M
PP	Playback Processing	NORMAL	

Input DLIS Files

DEFAULT Flip\_FCS\_DEFT\_ILS\_083LUP PRODUCER 21-Jun-2005 10:54 2470.3 M 2372.0 M

Output DLIS Files

DEFAULT FCS\_DEFT\_ILS\_RST\_093PUP FN:88 PRODUCER 21-Jun-2005 12:15



Flowing Up Log  
3000 ft/hr

MAXIS Field Log

Input DLIS Files

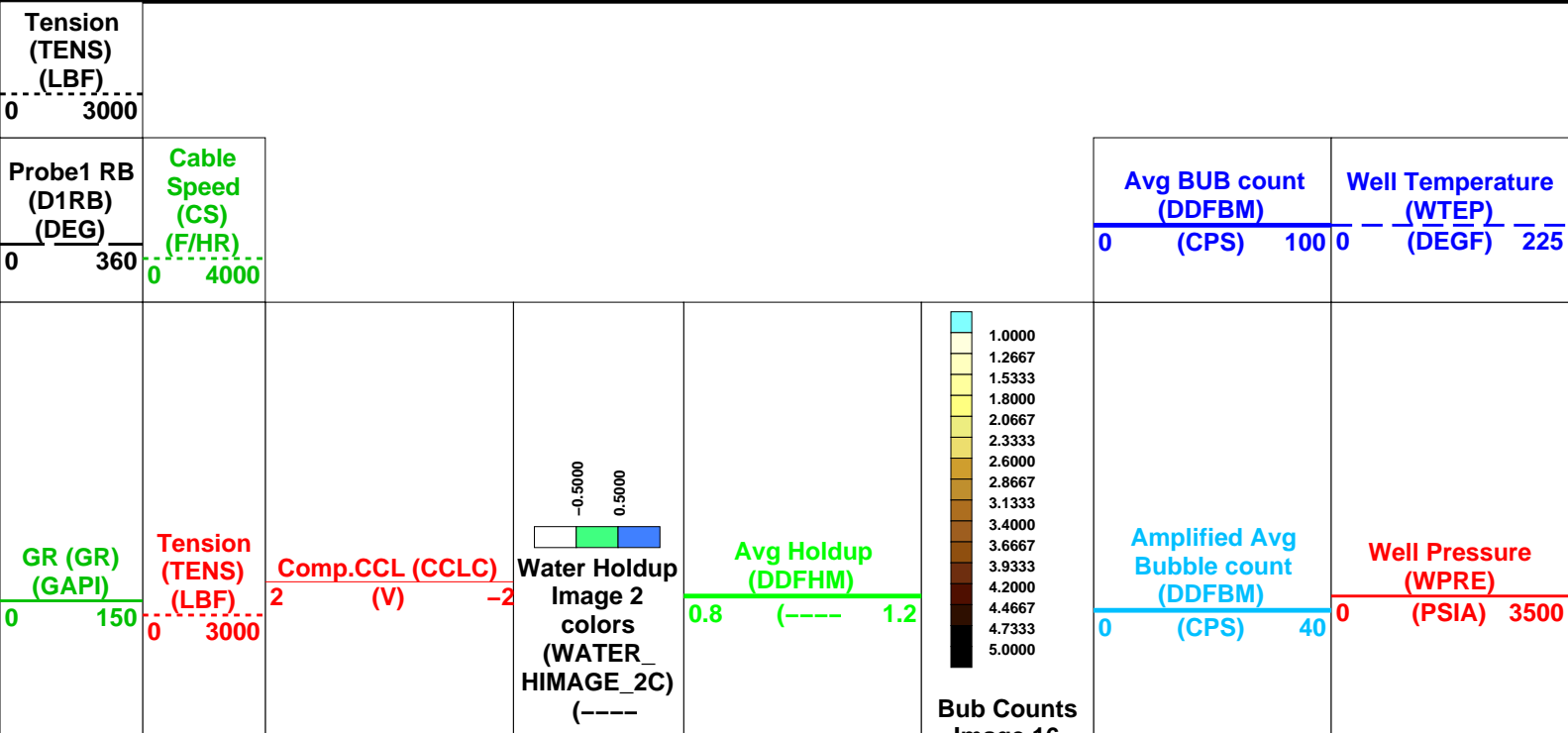
DEFAULT FCS\_DEFT\_ILS\_RST\_028LUP FN:27 PRODUCER 20-Jun-2005 15:30 2470.1 M 2381.6 M

Output DLIS Files

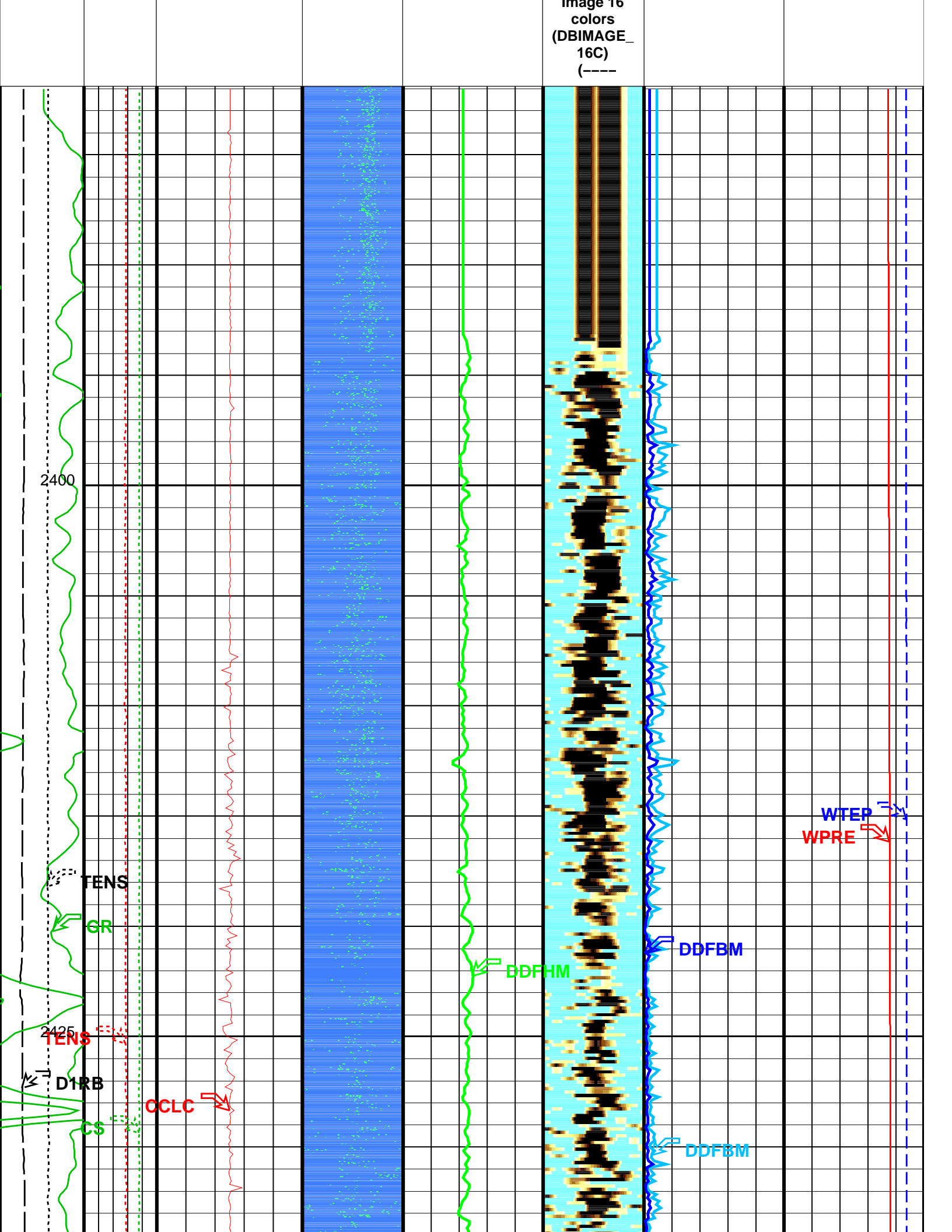
DEFAULT FCS\_DEFT\_ILS\_RST\_076PUP FN:74 PRODUCER 21-Jun-2005 10:26 2469.9 M 2381.9 M

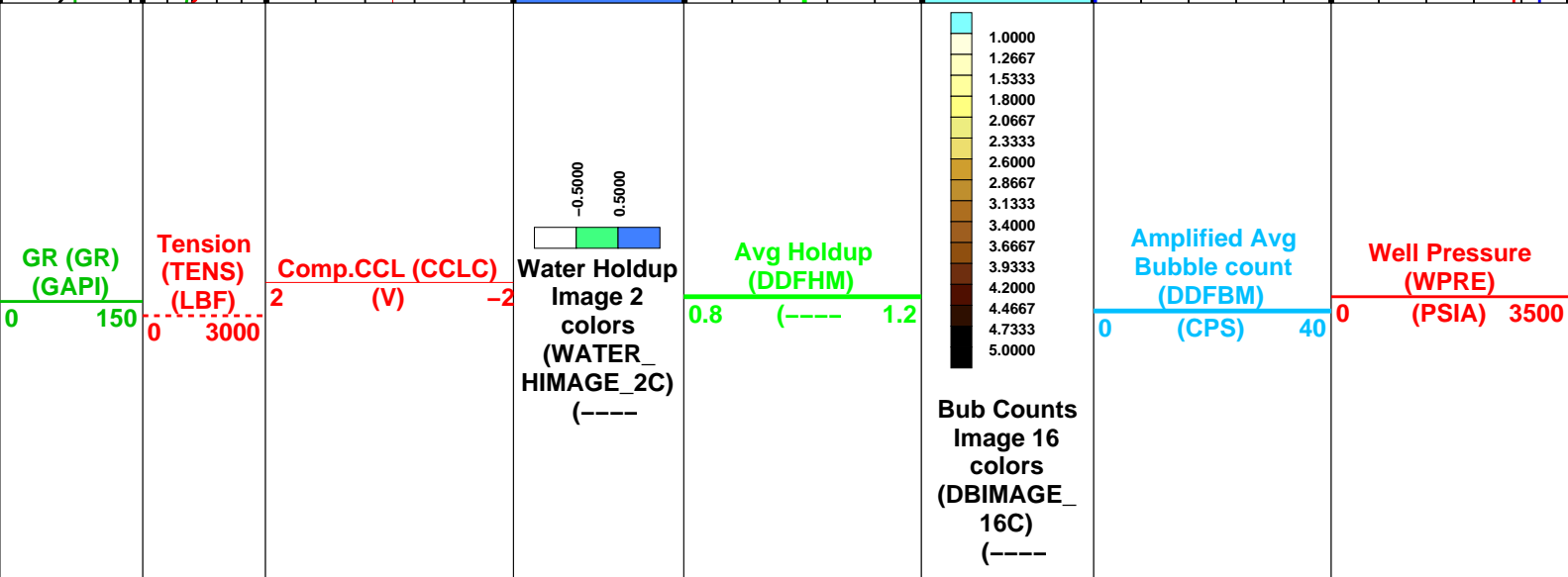
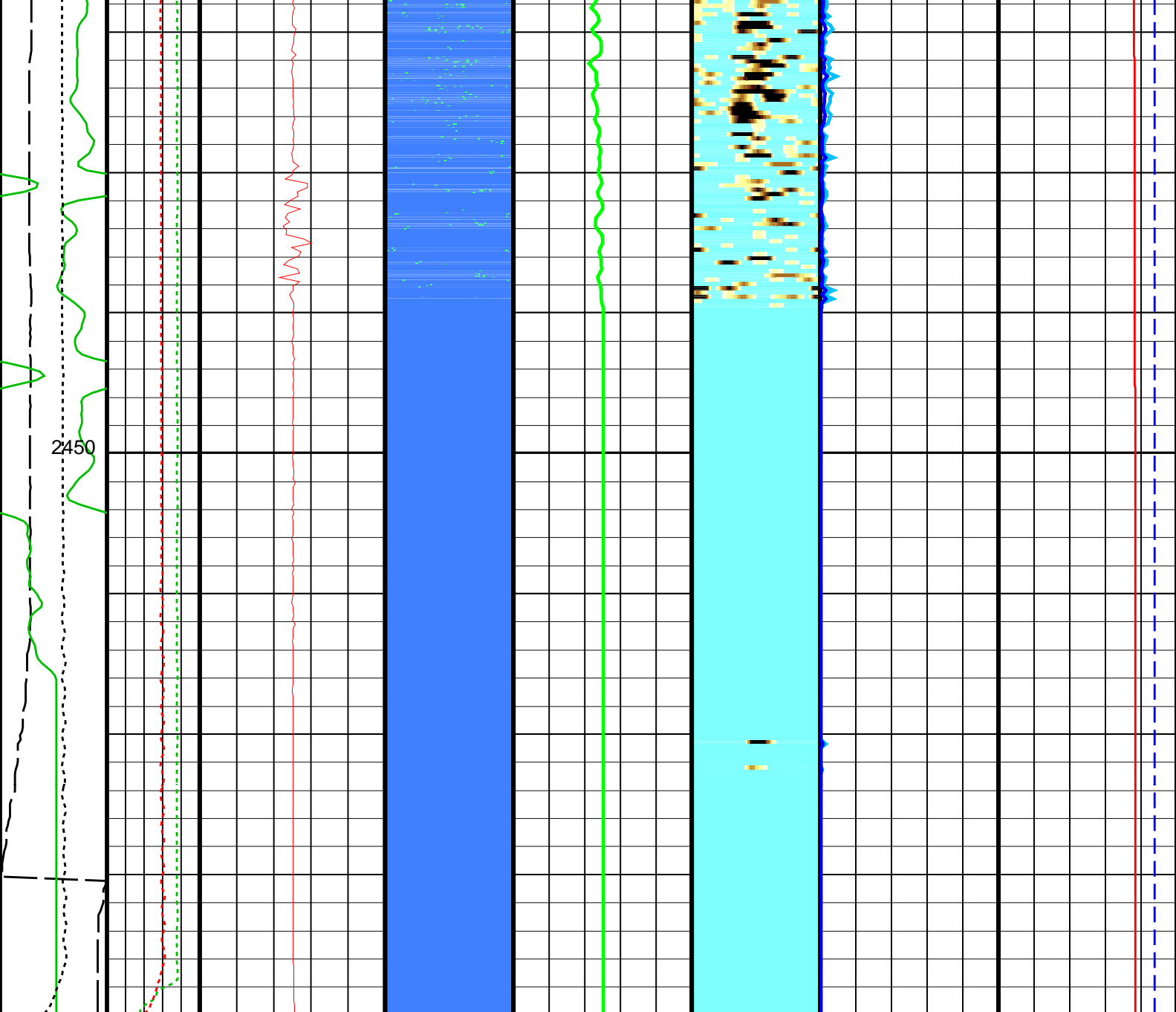
OP System Version: 13C0-300  
MCM

PFCS-A	13C0-300	DEFT-C2	13C0-300
PILS-A	13C0-300	RST-C	PTC-2716-NUCL
PSPT-Pbms-b	13C0-300		









Tension (TENS) (LBF)						
0	3000					
Format: DEFT_Image_DL		Vertical Scale: 1:200		Graphics File Created: 21-Jun-2005 10:26		
OP System Version: 13C0-300						
MCM						
PFCS-A	13C0-300		DEFT-C2	13C0-300		
PILS-A	13C0-300		RST-C	PTC-2716-NUCL		
PSPT-Pbms-b	13C0-300					
Parameters						
DLIS Name		Description		Value		
PFCS-A: PSP Flow and caliper Tool						
CSID		Casing Size I.D.		6.151	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		
DEFT-C2: DEFT_C Tool						
CSID		Casing Size I.D.		6.151	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		
RST-C: Reservoir Saturation Pro Tool C						
CSID		Casing Size I.D.		6.151	IN	
PSPT-Pbms-b: Production Services Logging Platform						
CSID		Casing Size I.D.		6.151	IN	
BORDYN: BorDyn (Well Test Validation)						
CSID		Casing Size I.D.		6.151	IN	
System and Miscellaneous						
DO		Depth Offset for Playback		-0.2	M	
PP		Playback Processing		NORMAL		
Input DLIS Files						
DEFAULT	FCS_DEFT_ILS_RST_028LUP	FN:27	PRODUCER	20-Jun-2005 15:30	2470.1 M	2381.6 M
Output DLIS Files						
DEFAULT	FCS_DEFT_ILS_RST_076PUP	FN:74	PRODUCER	21-Jun-2005 10:26		

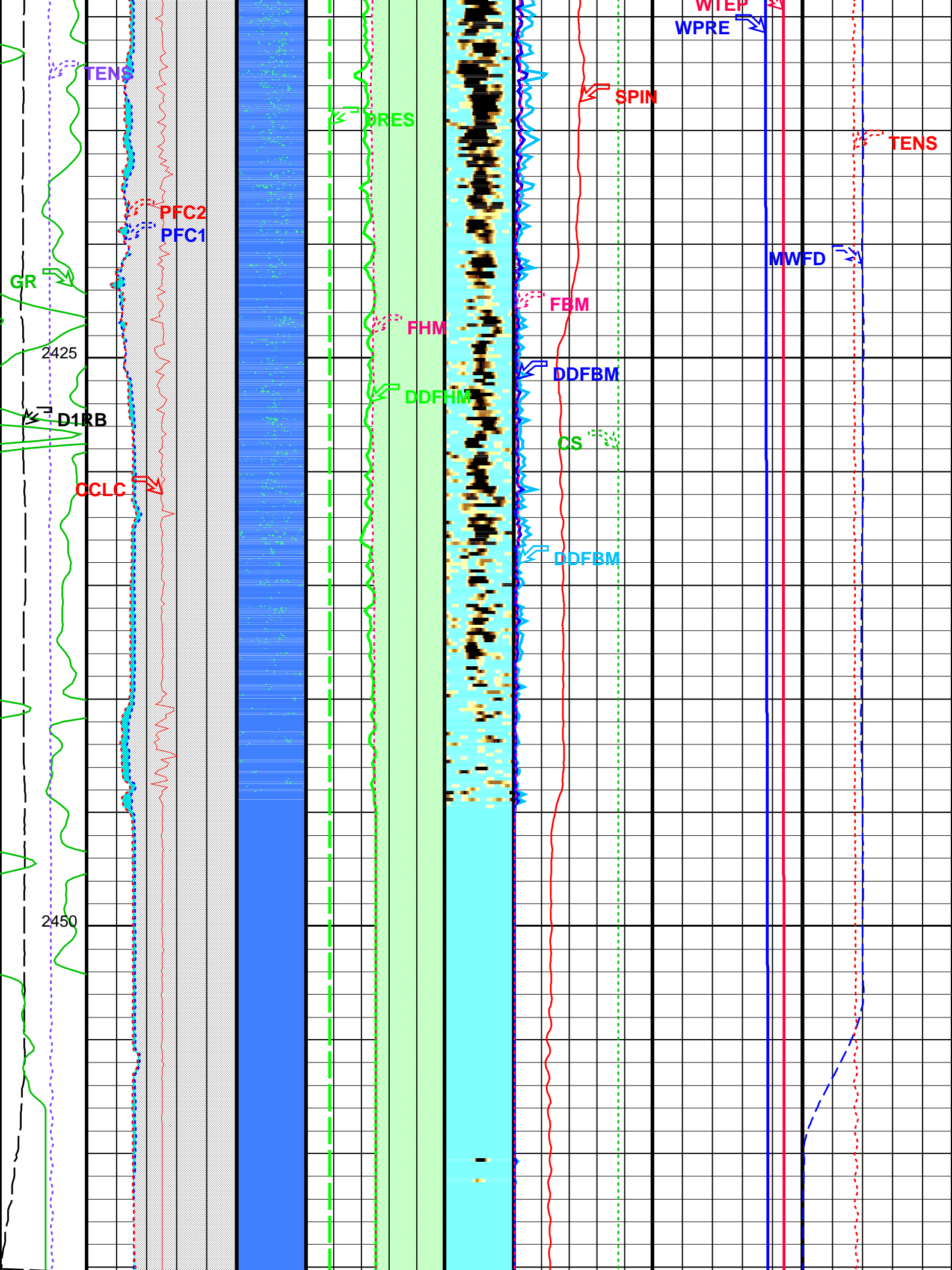
Input DLIS Files						
DEFAULT	FCS_DEFT_ILS_RST_028LUP	FN:27	PRODUCER	20-Jun-2005 15:30	2470.1 M	2381.6 M
Output DLIS Files						
DEFAULT	FCS_DEFT_ILS_RST_076PUP	FN:74	PRODUCER	21-Jun-2005 10:26	2469.9 M	2381.9 M
OP System Version: 13C0-300						
MCM						
PFCs-A	13C0-300		DEFT-C2	13C0-300		
PILS-A	13C0-300		RST-C	PTC-2716-NUCL		
PSPT-Pbms-b	13C0-300					

Pipe Ovalisation  
Between PFC1 and  
PFC2

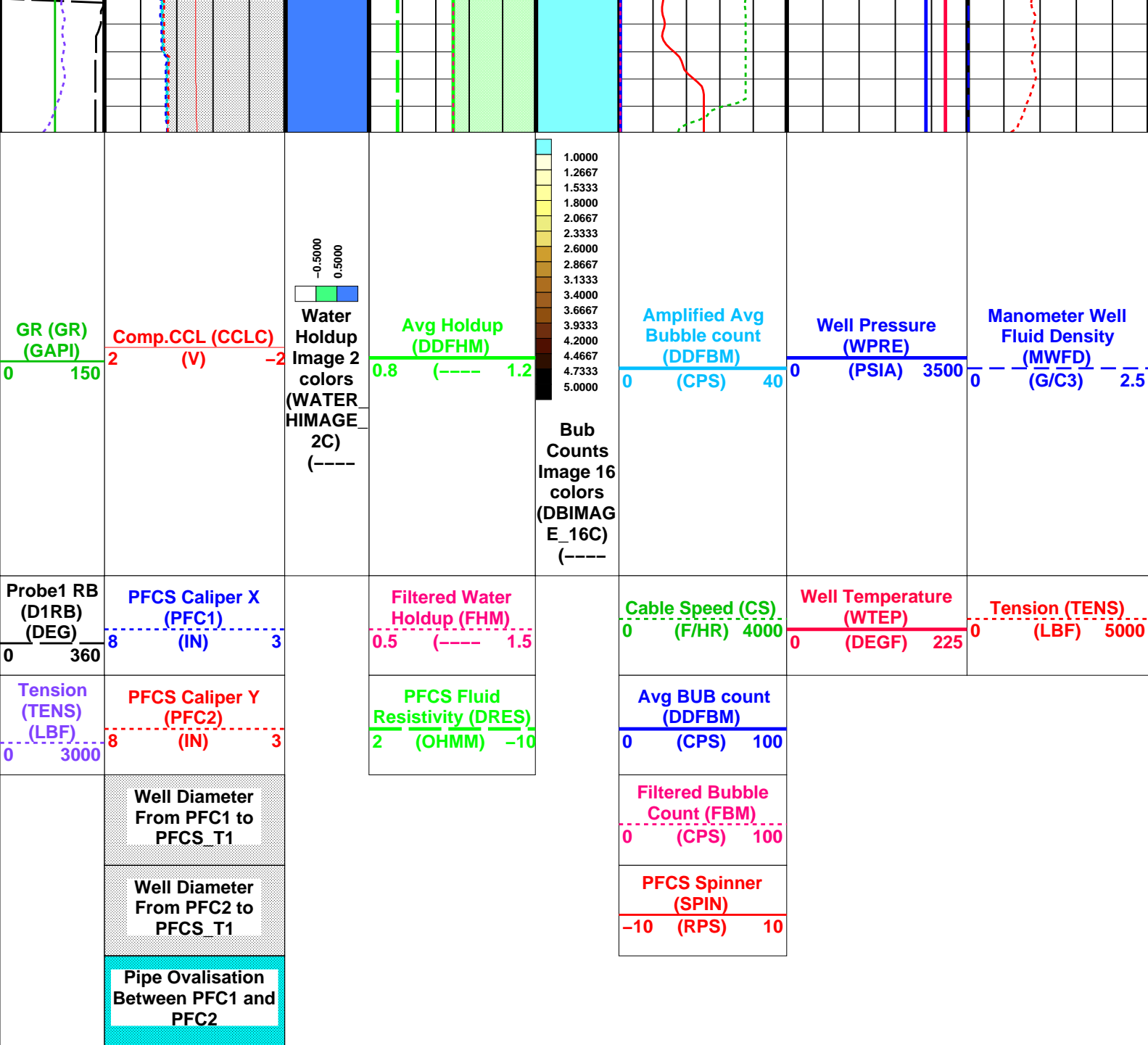
Well Diameter  
From PFC2 to

PFCs Spinner  
(SPIN)









Format: PFCS\_Image\_DL Vertical Scale: 1:200 Graphics File Created: 21-Jun-2005 10:26

## OP System Version: 13C0-300 MCM

PFCS-A	13C0-300	DEFT-C2	13C0-300
PILS-A	13C0-300	RST-C	PTC-2716-NUCL
PSPT-Pbms-b	13C0-300		

## Parameters

DLIS Name	Description	Value
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PFCS-A: PSP Flow and caliper Tool

AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE
CSID	Casing Size I.D.	6.151 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
PFGC	PFCS Geometrical coefficient	1200
PFSE	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	
SPIN	Main Spinner Flowmeter Sonde	PFCS-A_TURB	
DEFT-C2: DEFT_C Tool			
CSID	Casing Size I.D.	6.151	IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2-D1RB	
DDRS	Dual DEFT RB Source	D1RB	
DFBD	DEFT Blank Disallowed Probes	NO	
DDFI	DEFT Flip Image	NO	
DFII	DEFT Image Interpolation	YES	
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE	
PFGC	PFCS Geometrical coefficient	1200	
PILS-A: PSP In Line Spinner Flowmeter			
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SPIN	Main Spinner Flowmeter Sonde	PFCS-A_TURB	
RST-C: Reservoir Saturation Pro Tool C			
CSID	Casing Size I.D.	6.151	IN
GDEV	Average Angular Deviation of Borehole from Normal	30	DEG
PSPT-Pbms-b: Production Services Logging Platform			
CSID	Casing Size I.D.	6.151	IN
GDEV	Average Angular Deviation of Borehole from Normal	30	DEG
BORDYN: BorDyn (Well Test Validation)			
CSID	Casing Size I.D.	6.151	IN
System and Miscellaneous			
DO	Depth Offset for Playback	-0.2	M
PP	Playback Processing	NORMAL	

### Input DLIS Files

DEFAULT	FCS_DEFT_ILS_RST_028LUP	FN:27	PRODUCER	20-Jun-2005 15:30	2470.1 M	2381.6 M
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### Output DLIS Files

DEFAULT	FCS_DEFT_ILS_RST_076PUP	FN:74	PRODUCER	21-Jun-2005 10:26
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**Schlumberger**

Flowing Down Log  
900 ft/hr

MAXIS Field Log

### Input DLIS Files

DEFAULT	Flip_FCS_DEFT_ILS_082LUP		PRODUCER	21-Jun-2005 10:54	2474.7 M	2364.0 M
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### Output DLIS Files

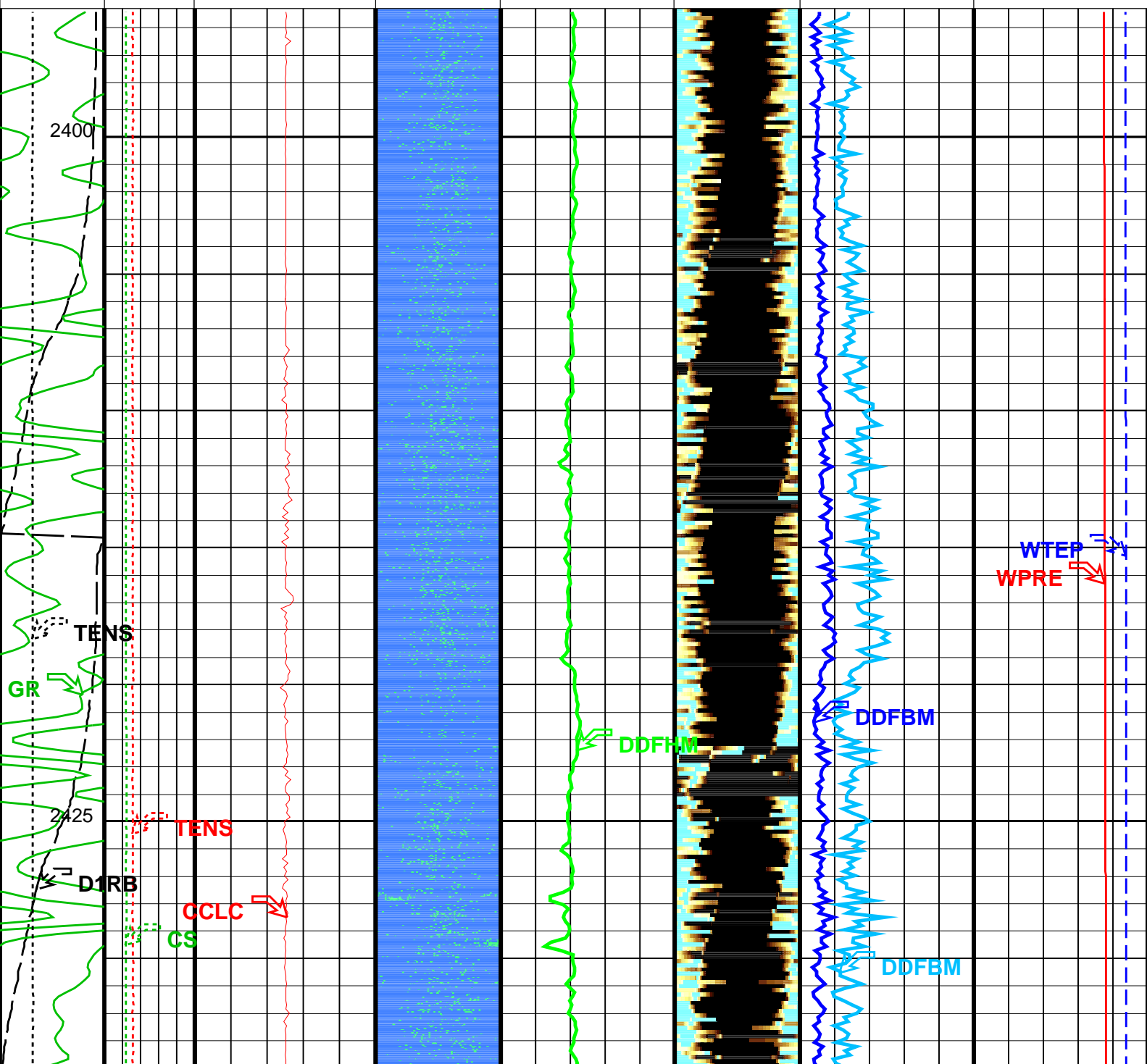
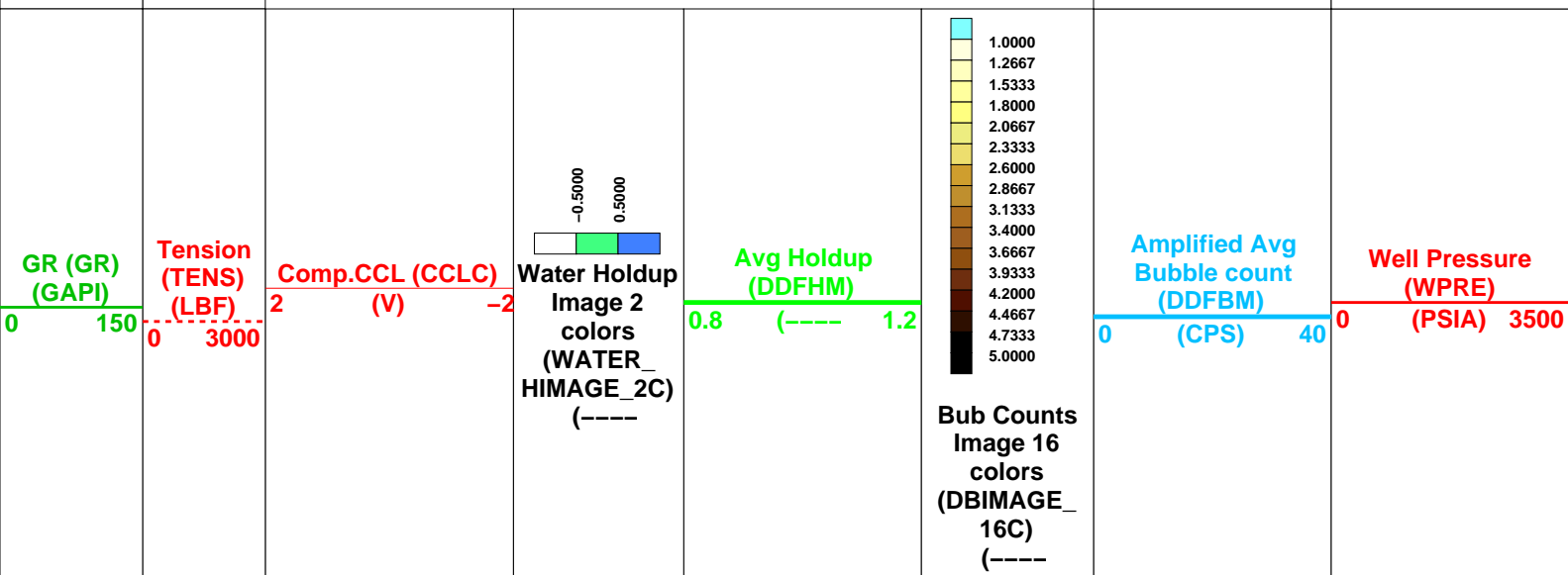
DEFAULT	FCS_DEFT_ILS_RST_092PUP	FN:87	PRODUCER	21-Jun-2005 12:10	2460.0 M	2395.3 M
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### OP System Version: 13C0-300

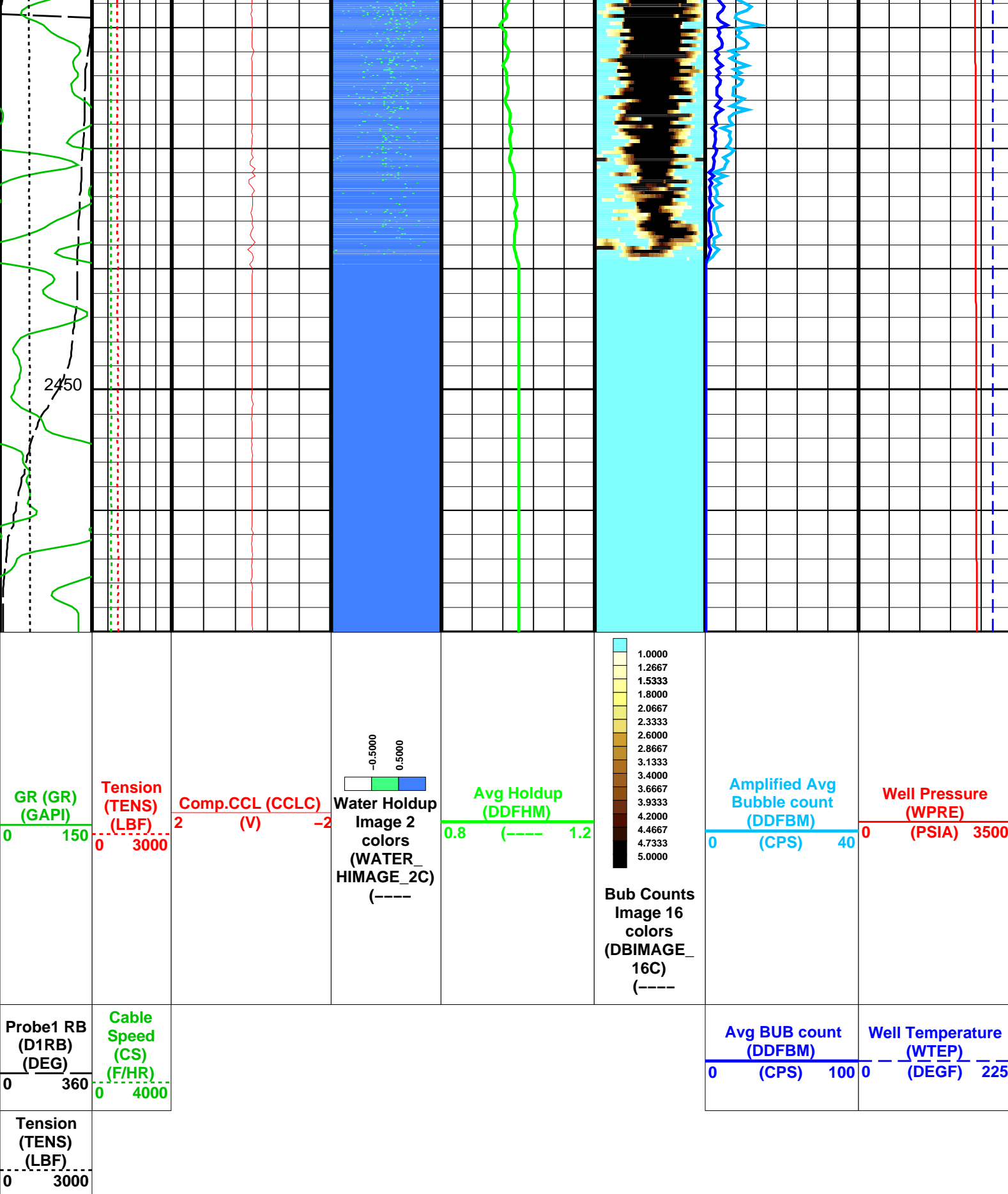
MCM

PFCS-A	13C0-300	DEFT-C2	13C0-300
PILS-A	13C0-300	RST-C	PTC-2716-NUCL
PSPT-Pbms-b	13C0-300		

Tension (TENS) (LBF)				
0	3000			
Probe1 RB (D1RB) (DEG)	Cable Speed (CS)		Avg BUB count (DDFBM)	Well Temperature (WTEP)







Format: DEFT\_Image\_DL Vertical Scale: 1:200 Graphics File Created: 21-Jun-2005 12:10

## OP System Version: 13C0-300

MCM

PFCS-A	13C0-300	DEFT-C2	13C0-300
PILS-A	13C0-300	RST-C	PTC-2716-NUCL
PSPT-Pbms-b	13C0-300		

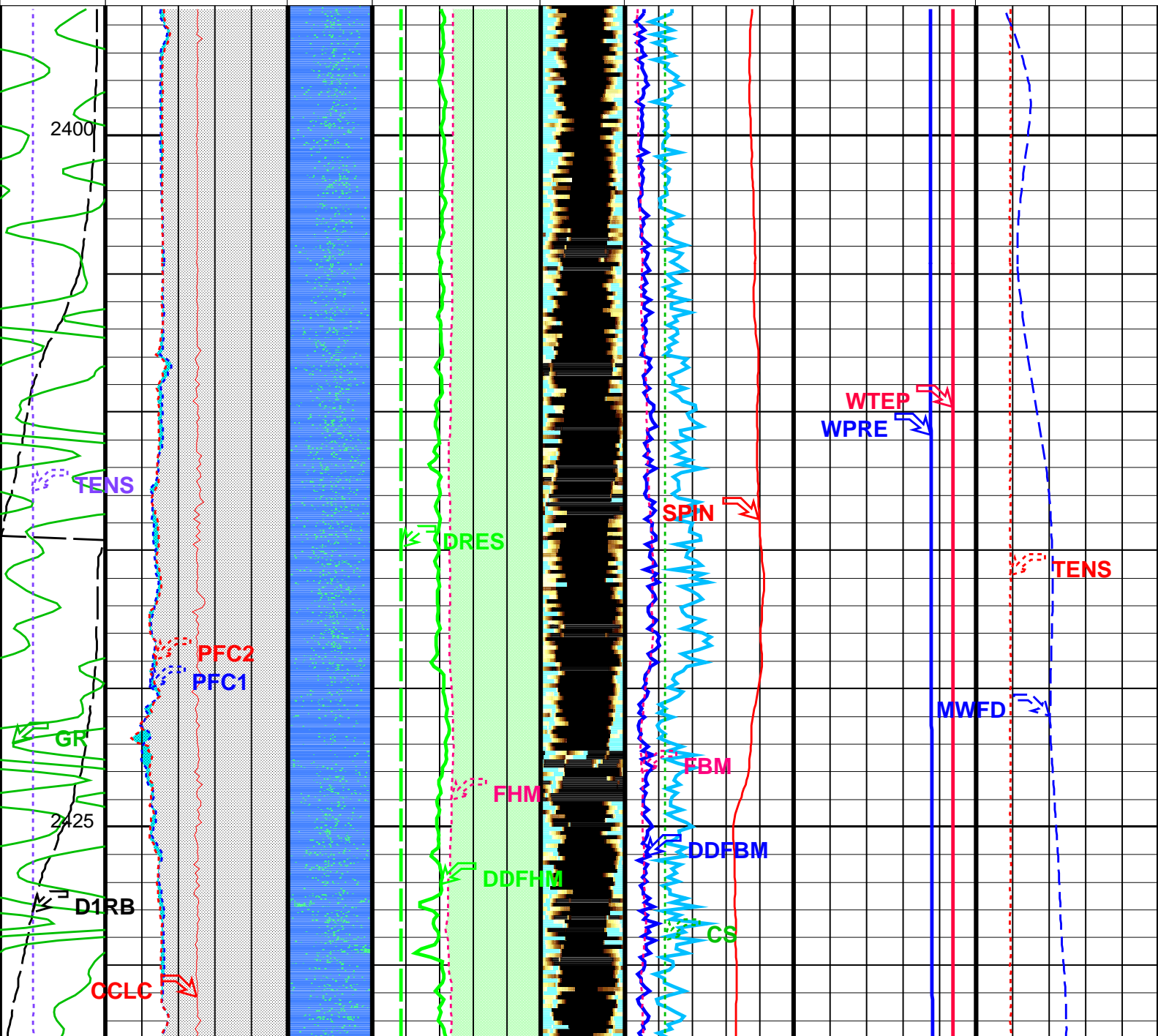
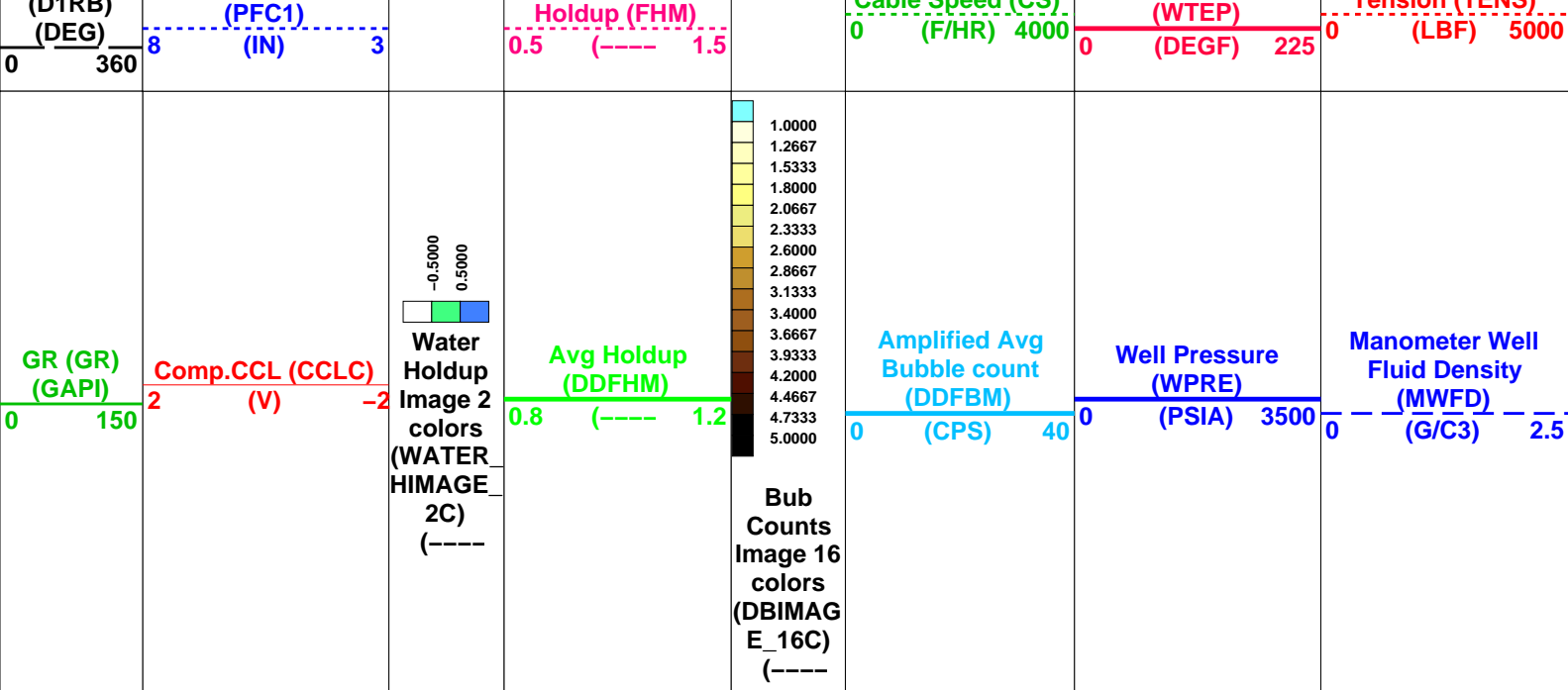
Parameters				
DLIS Name		Description	Value	
PFCS-A: PSP Flow and caliper Tool				
CSID		Casing Size I.D.	6.151	IN
DDRC		Dual DEFT DELTA RB COMPUTATION	D1RB2-D1RB	
DDRS		Dual DEFT RB Source	D1RB	
DFBD		DEFT Blank Disallowed Probes	NO	
DFFI		DEFT Flip Image	NO	
DFII		DEFT Image Interpolation	YES	
DFIRS		DEFT Image Rotation Selection	TOP_MIDDLE	
DFPP		Probes Arm Position	C	
DEFT-C2: DEFT_C Tool				
CSID		Casing Size I.D.	6.151	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	
RST-C: Reservoir Saturation Pro Tool C				
CSID		Casing Size I.D.	6.151	IN
PSPT-Pbms-b: Production Services Logging Platform				
CSID		Casing Size I.D.	6.151	IN
BORDYN: BorDyn (Well Test Validation)				
CSID		Casing Size I.D.	6.151	IN
System and Miscellaneous				
DO		Depth Offset for Playback	-2.4	M
PP		Playback Processing	NORMAL	

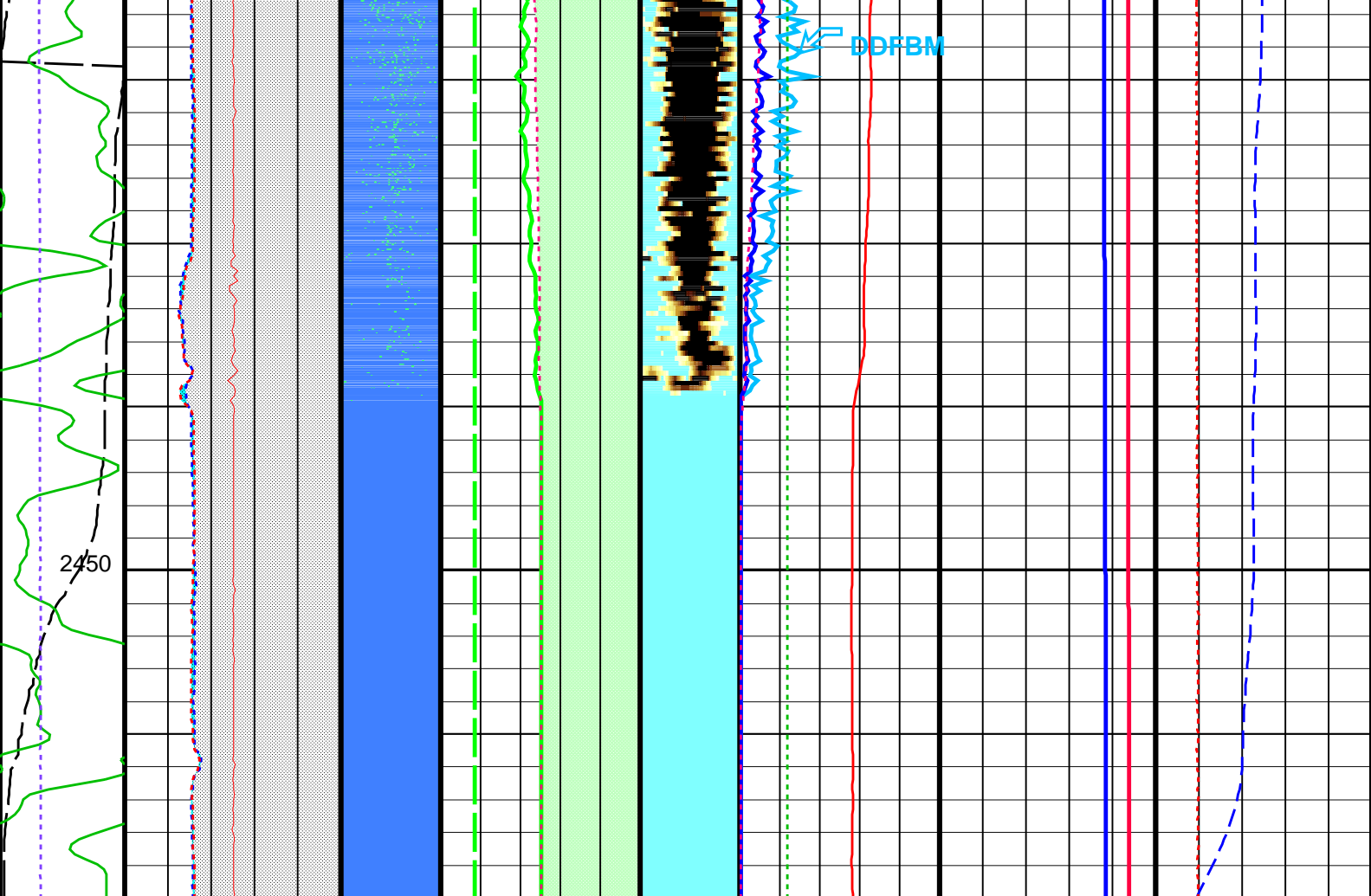
Input DLIS Files						
DEFAULT	Flip_FCS_DEFT_ILS_082LUP	PRODUCER	21-Jun-2005 10:54	2474.7 M	2364.0 M	
Output DLIS Files						
DEFAULT	FCS_DEFT_ILS_RST_092PUP	FN:87	PRODUCER	21-Jun-2005 12:10		

Input DLIS Files						
DEFAULT	Flip_FCS_DEFT_ILS_082LUP	PRODUCER	21-Jun-2005 10:54	2474.7 M	2364.0 M	
Output DLIS Files						
DEFAULT	FCS_DEFT_ILS_RST_092PUP	FN:87	PRODUCER	21-Jun-2005 12:10	2460.0 M	2395.3 M

OP System Version: 13C0-300				
MCM				
PFCS-A	13C0-300	DEFT-C2	13C0-300	
PILS-A	13C0-300	RST-C	PTC-2716-NUCL	
PSPT-Pbms-b	13C0-300			

	<div>Pipe Ovalisation Between PFC1 and PFC2</div>					
	<div>Well Diameter From PFC2 to PFC5_T1</div>			<div>PFCS Spinner (SPIN)</div> <div>-10 (RPS) 10</div>		
	<div>Well Diameter From PFC1 to PFC5_T1</div>			<div>Filtered Bubble Count (FBM)</div> <div>0 (CPS) 100</div>		
<div>Tension (TENS) (LBF)</div> <div>0 3000</div>	<div>PFCS Caliper Y (PFC2)</div> <div>8 (IN) 3</div>	<div>PFCS Fluid Resistivity (DRES)</div> <div>2 (OHMM) -10</div>		<div>Avg BUB count (DDFBM)</div> <div>0 (CPS) 100</div>		
Probe1 RB (D1RB)	<div>PFCS Caliper X</div>	<div>Filtered Water</div>		<div>Cable Speed (CS)</div>	<div>Well Temperature</div>	<div>Tension (TENS)</div>





GR (GR) (GAPI)	Comp.CCL (CCLC) (V)	Water Holdup Image 2 colors (WATER HIMAGE 2C) (----	Avg Holdup (DDFHM)	Bub Counts Image 16 colors (DBIMAG E_16C) (----	Amplified Avg Bubble count (DDFBM)	Well Pressure (WPRE)	Manometer Well Fluid Density (MWFD)
0 150	2 -2	-0.5000 0.5000	0.8 (----) 1.2	1.0000 1.2667 1.5333 1.8000 2.0667 2.3333 2.6000 2.8667 3.1333 3.4000 3.6667 3.9333 4.2000 4.4667 4.7333 5.0000	0 (CPS) 40	0 (PSIA) 3500	0 (G/C3) 2.5

Probe1 RB (D1RB) (DEG)	PFCS Caliper X (PFC1)	Filtered Water Holdup (FHM)	Cable Speed (CS)	Well Temperature (WTEP)	Tension (TENS)
0 360	8 (IN) 3	0.5 (----) 1.5	0 (F/HR) 4000	0 (DEGF) 225	0 (LBF) 5000
Tension (TENS) (LBF)	PFCS Caliper Y (PFC2)	PFCS Fluid Resistivity (DRES)	Avg BUB count (DDFBM)	Filtered Bubble Count (FBM)	PFCS Spinner (SPIN)
0 3000	8 (IN) 3	2 (OHMM) -10	0 (CPS) 100	0 (CPS) 100	
	Well Diameter From PFC1 to PFC5_T1				
	Well Diameter From PFC2 to				

Pipe Ovalisation  
Between PFC1 and  
PFC2

Format: PFC2\_Image\_DL Vertical Scale: 1:200

Graphics File Created: 21-Jun-2005 12:10

## OP System Version: 13C0-300

MCM

PFC2-A	13C0-300	DEFT-C2	13C0-300
PILS-A	13C0-300	RST-C	PTC-2716-NUCL
PSPT-Pbms-b	13C0-300		

## Parameters

DLIS Name	Description	Value	
PFC2-A: PSP Flow and caliper Tool			
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
CSID	Casing Size I.D.	6.151	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	
PFGC	PFC2 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	
SPIN	Main Spinner Flowmeter Sonde	PFC2-A_TURB	
DEFT-C2: DEFT_C Tool			
CSID	Casing Size I.D.	6.151	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	
PFGC	PFC2 Geometrical coefficient	1200	
PILS-A: PSP In Line Spinner Flowmeter			
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SPIN	Main Spinner Flowmeter Sonde	PFC2-A_TURB	
RST-C: Reservoir Saturation Pro Tool C			
CSID	Casing Size I.D.	6.151	IN
GDEV	Average Angular Deviation of Borehole from Normal	30	DEG
PSPT-Pbms-b: Production Services Logging Platform			
CSID	Casing Size I.D.	6.151	IN
GDEV	Average Angular Deviation of Borehole from Normal	30	DEG
BORDYN: BorDyn (Well Test Validation)			
CSID	Casing Size I.D.	6.151	IN
System and Miscellaneous			
DO	Depth Offset for Playback	-2.4	M
PP	Playback Processing	NORMAL	

## Input DLIS Files

DEFAULT	Flip_FCS_DEFT_ILS_082LUP	PRODUCER	21-Jun-2005 10:54	2474.7 M	2364.0 M
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## Output DLIS Files

DEFAULT	FCS_DEFT_ILS_RST_092PUP	FN:87	PRODUCER	21-Jun-2005 12:10
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Input DLIS Files

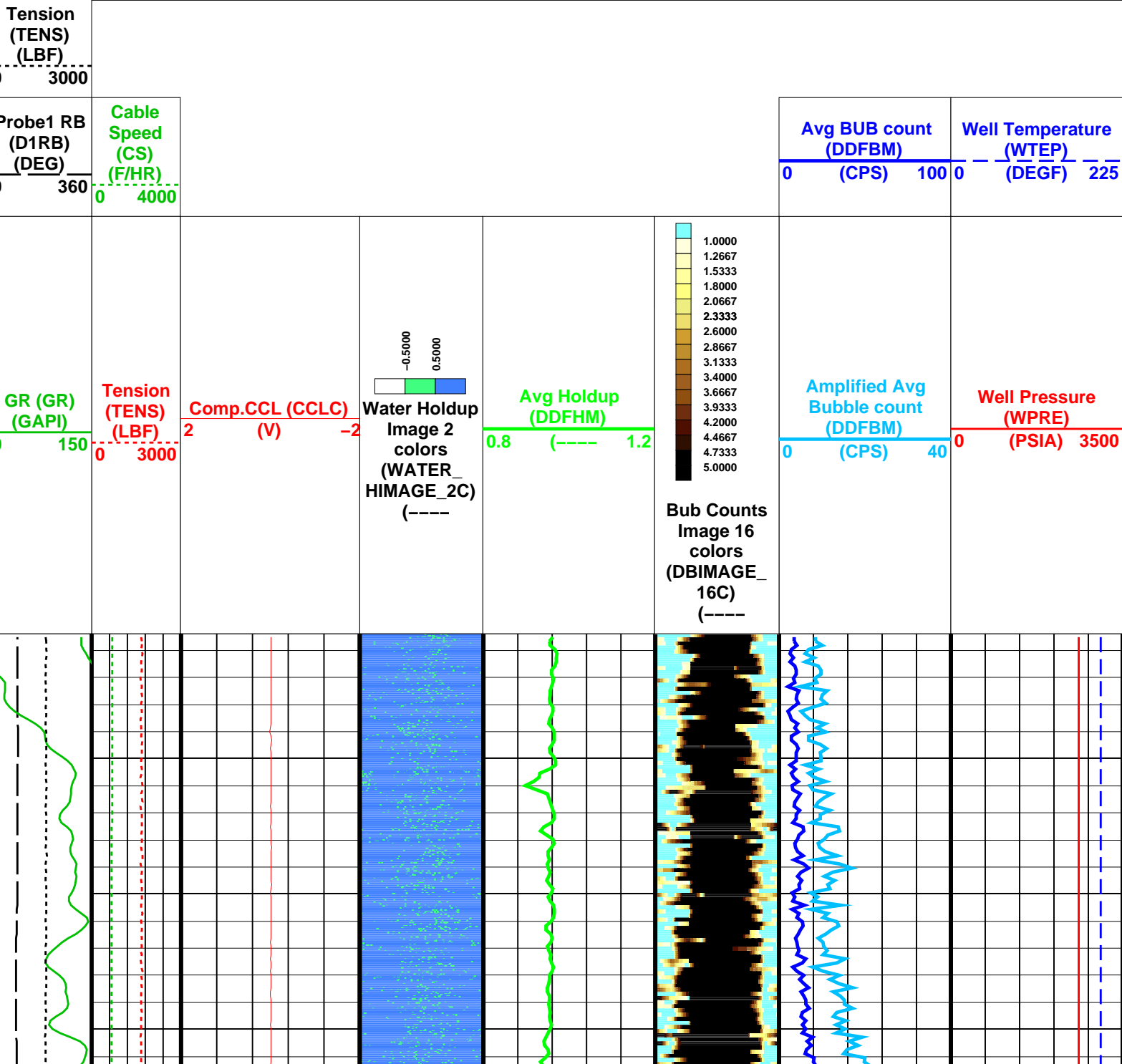
DEFAULT FCS\_DEFT\_ILS\_RST\_024LUP FN:23 PRODUCER 20-Jun-2005 14:25 2450.1 M 2364.6 M

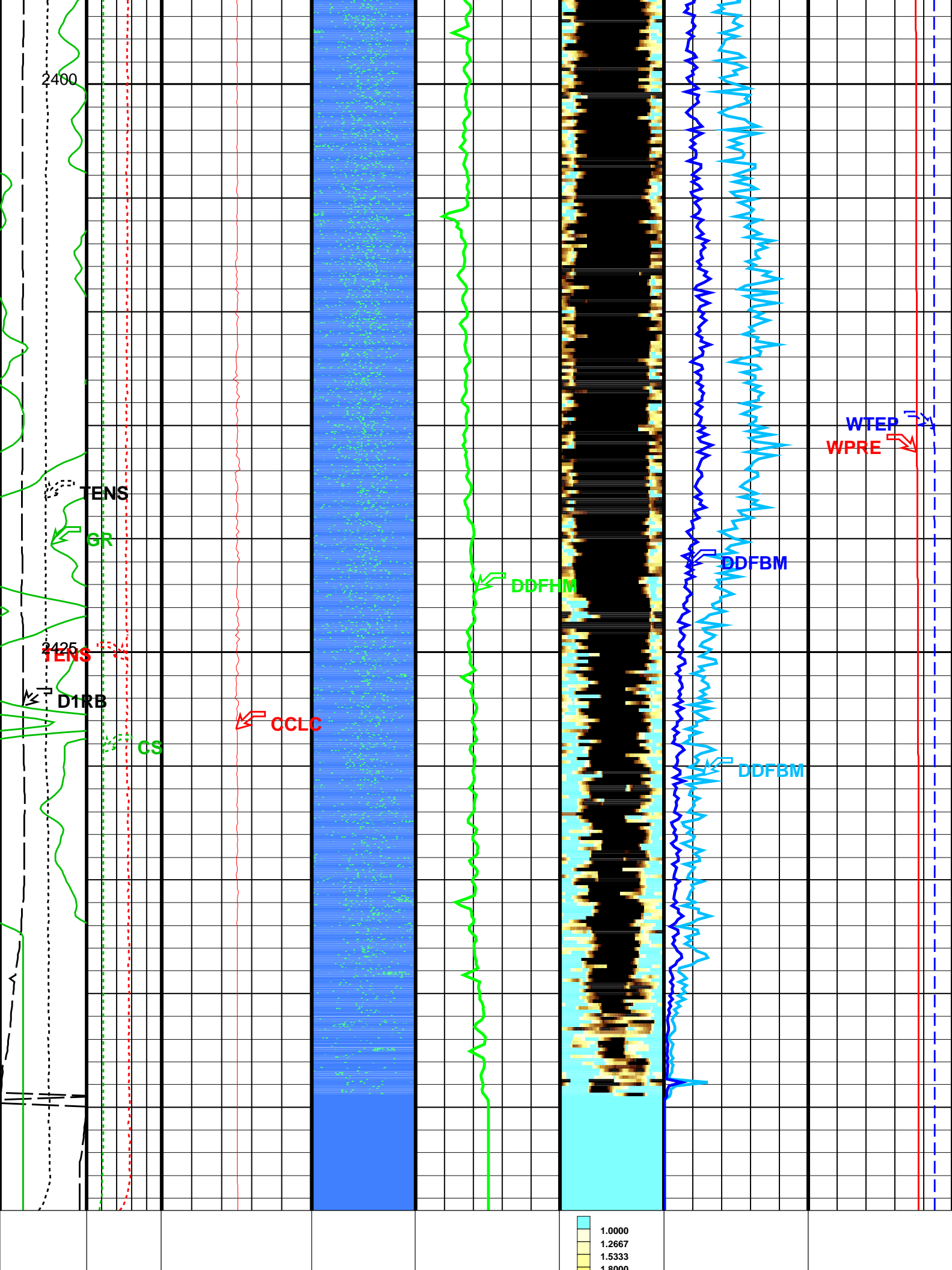
Output DLIS Files

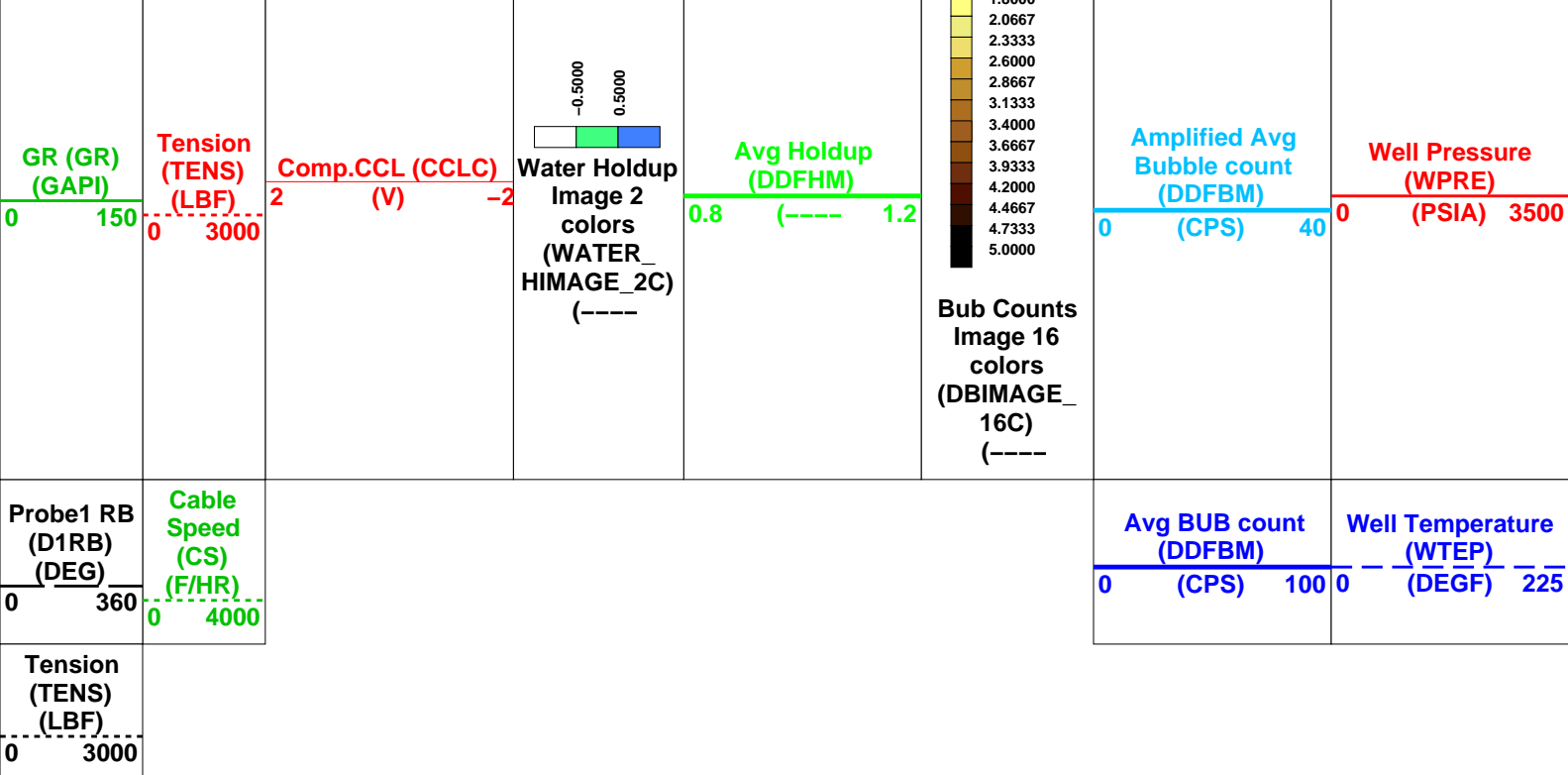
DEFAULT FCS\_DEFT\_ILS\_RST\_073PUP FN:71 PRODUCER 21-Jun-2005 10:11 2449.5 M 2380.3 M

OP System Version: 13C0-300  
MCM

PFCS-A 13C0-300 DEFT-C2 13C0-300  
PILS-A 13C0-300 RST-C PTC-2716-NUCL  
PSPT-Pbms-b 13C0-300







Format: DEFT\_Image\_DL    Vertical Scale: 1:200    Graphics File Created: 21-Jun-2005 10:11

OP System Version: 13C0-300

MCM

PFCS-A13C0-300

DEFT-C213C0-300

PILS-A13C0-300

RST-CPTC-2716-NUCL

PSPT-Pbms-b13C0-300

Parameters			
DLIS Name	Description	Value	
PFCS-A: PSP Flow and caliper Tool			
CSID	Casing Size I.D.	6.151	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	
DEFT-C2: DEFT_C Tool			
CSID	Casing Size I.D.	6.151	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	
RST-C: Reservoir Saturation Pro Tool C			
CSID	Casing Size I.D.	6.151	IN
PSPT-Pbms-b: Production Services Logging Platform			
CSID	Casing Size I.D.	6.151	IN
BORDYN: BorDyn (Well Test Validation)			
CSID	Casing Size I.D.	6.151	IN
System and Miscellaneous			
DO	Depth Offset for Playback	-0.6	M
PP	Playback Processing	NORMAL	

Input DLIS Files						
DEFAULT	FCS_DEFT_ILS_RST_024LUP	FN:23	PRODUCER	20-Jun-2005 14:25	2450.1 M	2364.6 M
Output DLIS Files						
DEFAULT	FCS_DEFT_ILS_RST_073PUP	FN:71	PRODUCER	21-Jun-2005 10:11		



# Input DLIS Files

DEFAULT FCS\_DEFT\_ILS\_RST\_024LUP FN:23 PRODUCER 20-Jun-2005 14:25 2450.1 M 2364.6 M

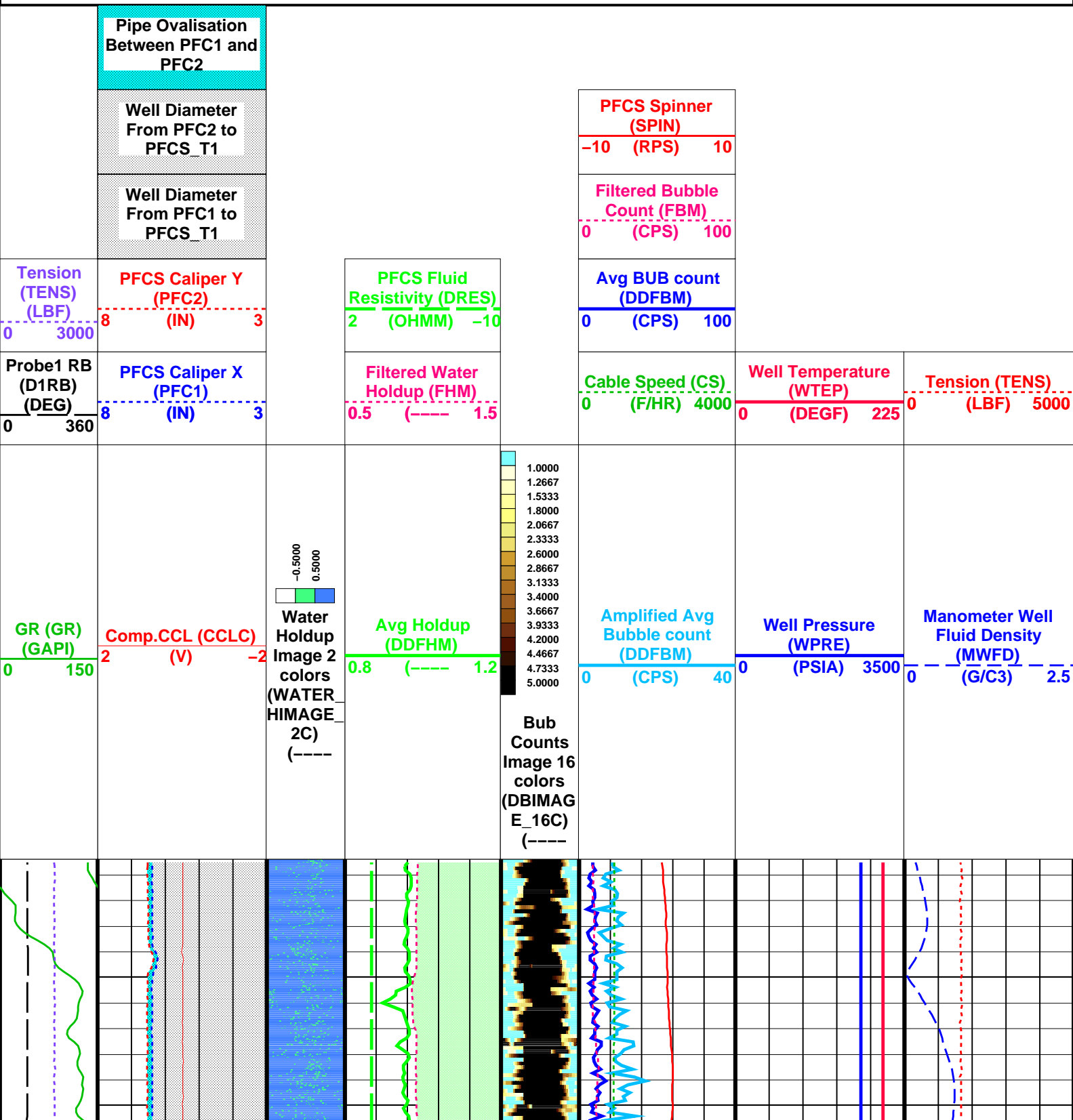
# Output DLIS Files

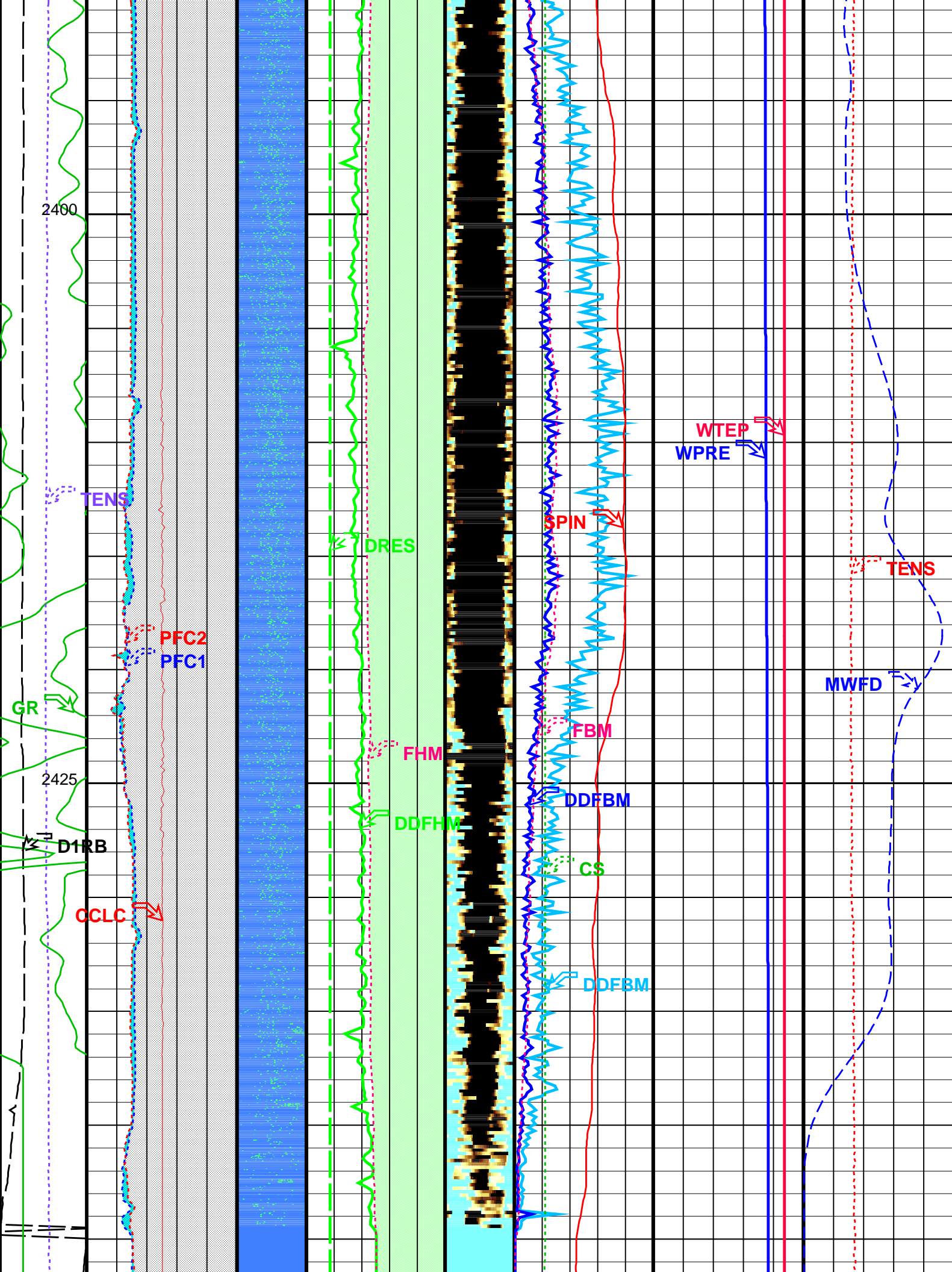
DEFAULT FCS\_DEFT\_ILS\_RST\_073PUP FN:71 PRODUCER 21-Jun-2005 10:11 2449.5 M 2380.3 M

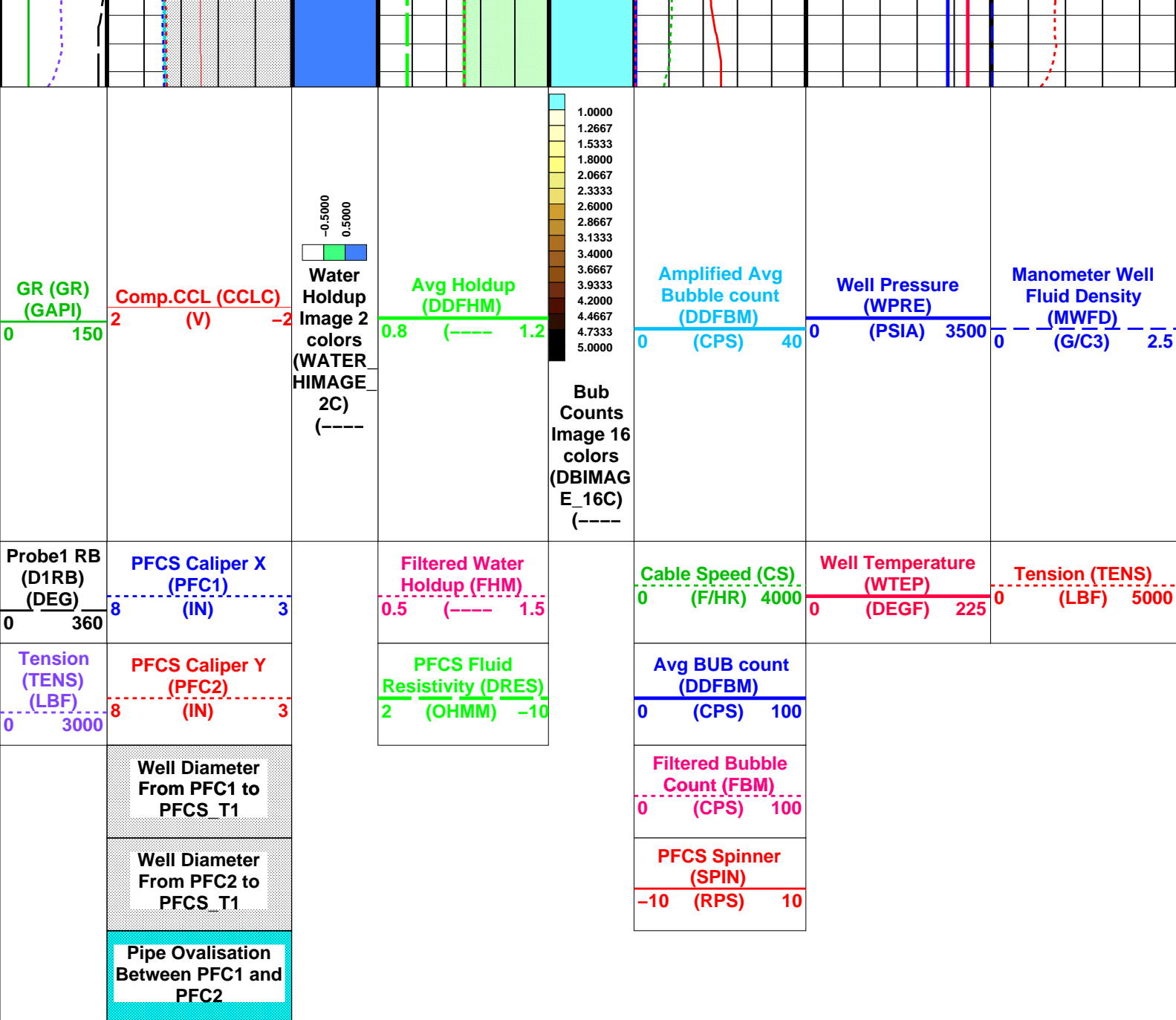
## OP System Version: 13C0-300

MCM

PFCS-A 13C0-300 DEFT-C2 13C0-300  
 PILS-A 13C0-300 RST-C PTC-2716-NUCL  
 PSPT-Pbms-b 13C0-300







Format: PFCS\_Image\_DL Vertical Scale: 1:200 Graphics File Created: 21-Jun-2005 10:11

## OP System Version: 13C0-300 MCM

PFCS-A	13C0-300	DEFT-C2	13C0-300
PILS-A	13C0-300	RST-C	PTC-2716-NUCL
PSPT-Pbms-b	13C0-300		

## Parameters

DLIS Name	Description	Value
PFCS-A: PSP Flow and caliper Tool		
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE
CSID	Casing Size I.D.	6.151 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
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	
SPIN	Main Spinner Flowmeter Sonde	PFCS-A_TURB	
DEFT-C2: DEFT_C Tool			
CSID	Casing Size I.D.	6.151	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	
PFGC	PFCS Geometrical coefficient	1200	
PILS-A: PSP In Line Spinner Flowmeter			
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SPIN	Main Spinner Flowmeter Sonde	PFCS-A_TURB	
RST-C: Reservoir Saturation Pro Tool C			
CSID	Casing Size I.D.	6.151	IN
GDEV	Average Angular Deviation of Borehole from Normal	30	DEG
PSPT-Pbms-b: Production Services Logging Platform			
CSID	Casing Size I.D.	6.151	IN
GDEV	Average Angular Deviation of Borehole from Normal	30	DEG
BORDYN: BorDyn (Well Test Validation)			
CSID	Casing Size I.D.	6.151	IN
System and Miscellaneous			
DO	Depth Offset for Playback	-0.6	M
PP	Playback Processing	NORMAL	

Input DLIS Files

DEFAULT	FCS_DEFT_ILS_RST_024LUP	FN:23	PRODUCER	20-Jun-2005 14:25	2450.1 M	2364.6 M
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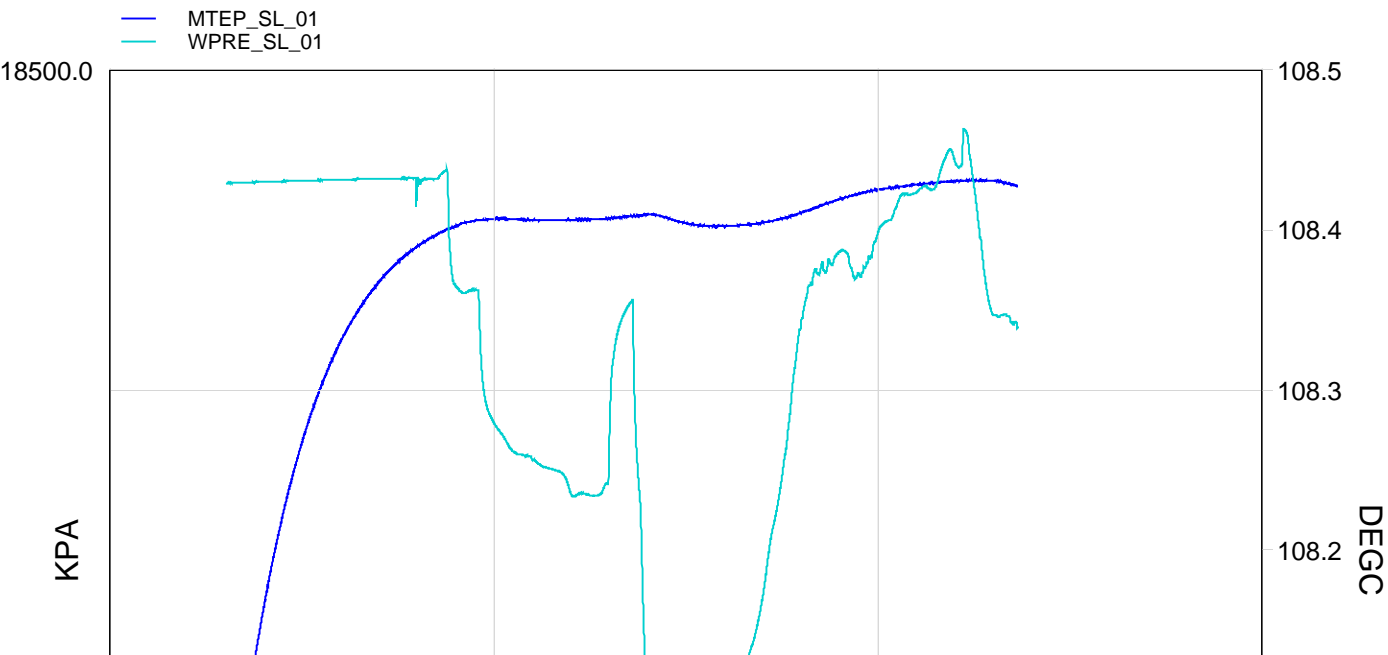
Output DLIS Files

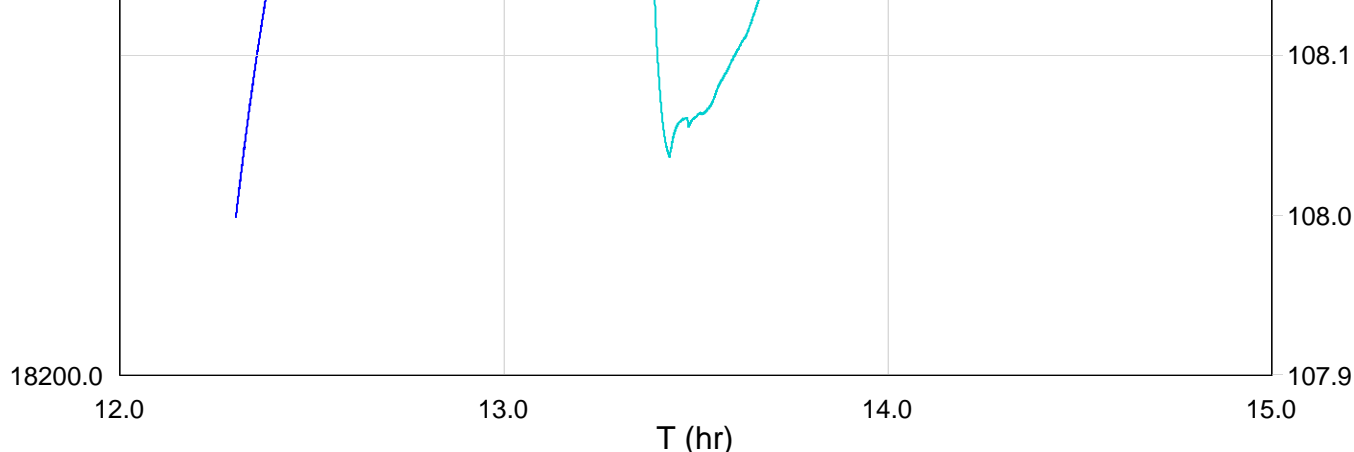
DEFAULT	FCS_DEFT_ILS_RST_073PUP	FN:71	PRODUCER	21-Jun-2005 10:11		
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Well Opened  
Static to Flowing

MAXIS Field Log





TIME	TOJ	WTEP_SL	WPRE_SL
12000.0000	12.2838	195.5160	2674.1033
12120.0000	12.3304	195.8100	2678.0966
12240.0000	12.3637	195.8119	2678.1172
12360.0000	12.3970	195.8138	2678.1411
12480.0000	12.4304	195.8099	2678.1593
12600.0000	12.4637	195.8102	2678.1775
12720.0000	12.4970	195.8122	2678.1933
12840.0000	12.5304	195.8146	2678.2049
12960.0000	12.5637	195.8155	2678.2196
13080.0000	12.5970	195.8159	2678.2373
13200.0000	12.6304	195.8159	2678.2521
13320.0000	12.6637	195.8126	2678.2670
13440.0000	12.6970	195.8159	2678.2767
13560.0000	12.7304	195.8152	2678.2900
13680.0000	12.7637	195.8165	2678.3011
13800.0000	12.7970	195.8156	2677.6979
13920.0000	12.8304	195.8111	2678.2604
14040.0000	12.8637	195.8175	2678.5063
14160.0000	12.8970	195.8113	2673.5375
14280.0000	12.9304	195.8001	2673.1567
14400.0000	12.9637	195.7986	2671.4497
14520.0000	12.9970	195.7885	2667.3247
14640.0000	13.0304	195.7848	2666.4539
14760.0000	13.0637	195.7873	2665.8074
14880.0000	13.0970	195.7889	2665.7012
15000.0000	13.1304	195.7891	2665.2179
15120.0000	13.1637	195.7929	2665.0564
15240.0000	13.1970	195.7904	2664.2077
15360.0000	13.2304	195.7906	2664.0406
15480.0000	13.2637	195.7937	2663.9072
15600.0000	13.2970	195.7958	2664.4457
15720.0000	13.3304	195.8078	2671.8008
15840.0000	13.3637	195.8209	2670.7088
15960.0000	13.3970	195.7801	2655.1678
16080.0000	13.4304	195.7574	2649.6290
16200.0000	13.4637	195.7673	2651.2793
16320.0000	13.4970	195.7751	2651.3644
16440.0000	13.5304	195.7800	2651.7337
16560.0000	13.5637	195.7845	2652.9492
16680.0000	13.5970	195.7891	2654.0422
16800.0000	13.6304	195.7915	2655.0772
16920.0000	13.6637	195.7952	2656.6796
17040.0000	13.6970	195.7999	2659.0097
17160.0000	13.7304	195.8130	2662.7090



17280.0000	13.7637	195.8186	2666.4135
17400.0000	13.7970	195.8321	2671.4496
17520.0000	13.8304	195.8356	2673.7051
17640.0000	13.8637	195.8411	2674.0208
17760.0000	13.8970	195.8397	2674.8956
17880.0000	13.9304	195.8410	2674.2581
18000.0000	13.9637	195.8379	2674.3039
18120.0000	13.9970	195.8350	2675.6404
18240.0000	14.0304	195.8348	2676.4252
18360.0000	14.0637	195.8368	2677.5949
18480.0000	14.0970	195.8375	2677.6431
18600.0000	14.1304	195.8385	2677.8714
18720.0000	14.1637	195.8349	2678.6617
18840.0000	14.1970	195.8382	2679.3080
18960.0000	14.2304	195.8391	2680.4106
19080.0000	14.2637	195.8334	2676.0539
19200.0000	14.2970	195.8149	2672.2230
19320.0000	14.3304	195.8052	2672.1359
19440.0000	14.3637	195.8058	2671.5144

Schlumberger

Static RST Sigma

MAXIS Field Log

Company: Esso Australia Ltd. Well: A-2

Input DLIS Files

DEFAULT FCS\_DEFT\_ILS\_RST\_022LUP FN:21 PRODUCER 20-Jun-2005 11:44 2470.6 M 2376.8 M

Output DLIS Files

DEFAULT FCS\_DEFT\_ILS\_RST\_080PUP FN:78 PRODUCER 21-Jun-2005 10:43 2460.0 M 2395.4 M

OP System Version: 13C0-300  
MCM

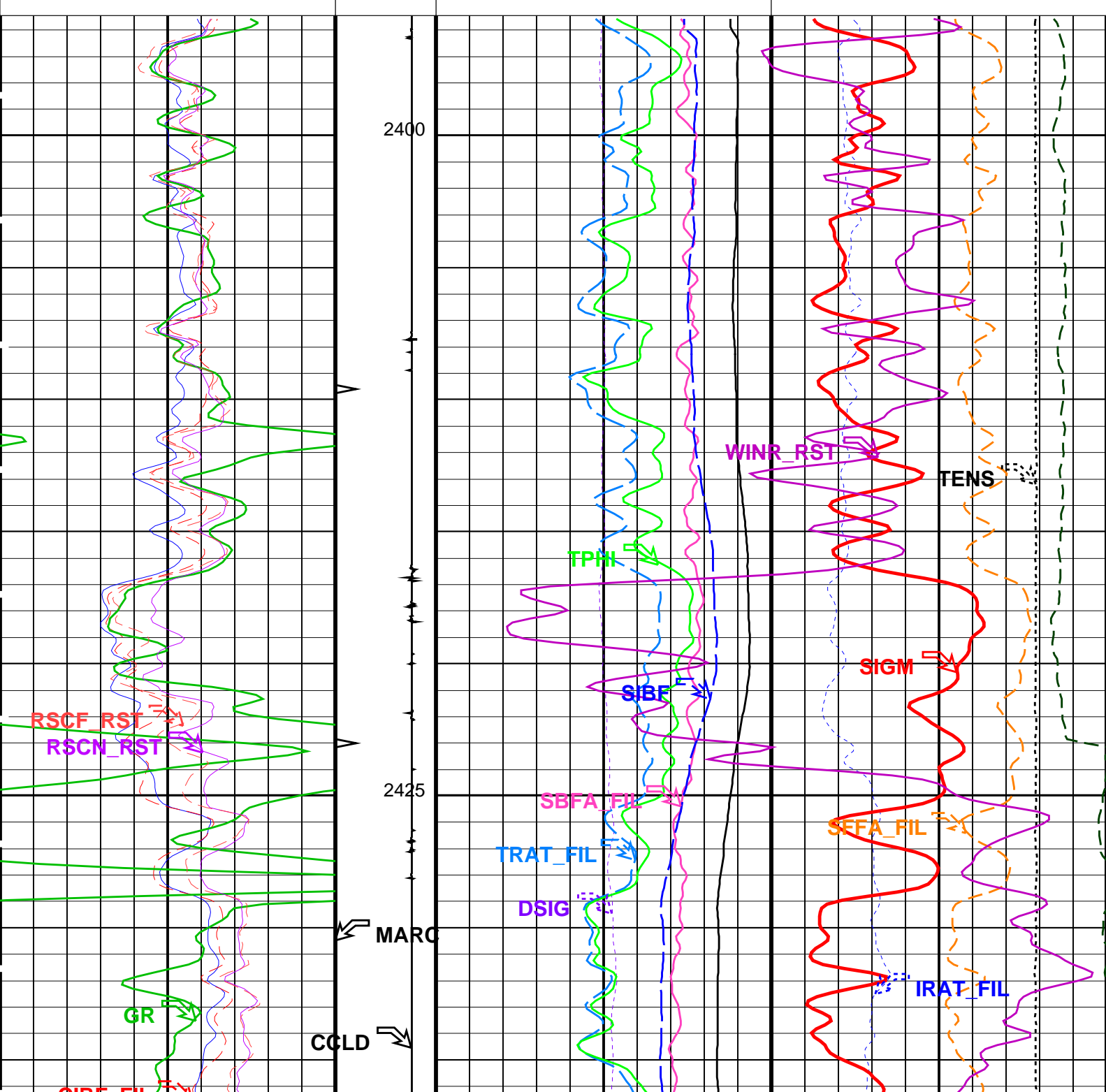
PFCS-A 13C0-300 DEFT-C2 13C0-300  
PILS-A 13C0-300 RST-C PTC-2716-NUCL  
PSPT-Pbms-b 13C0-300

PIP SUMMARY

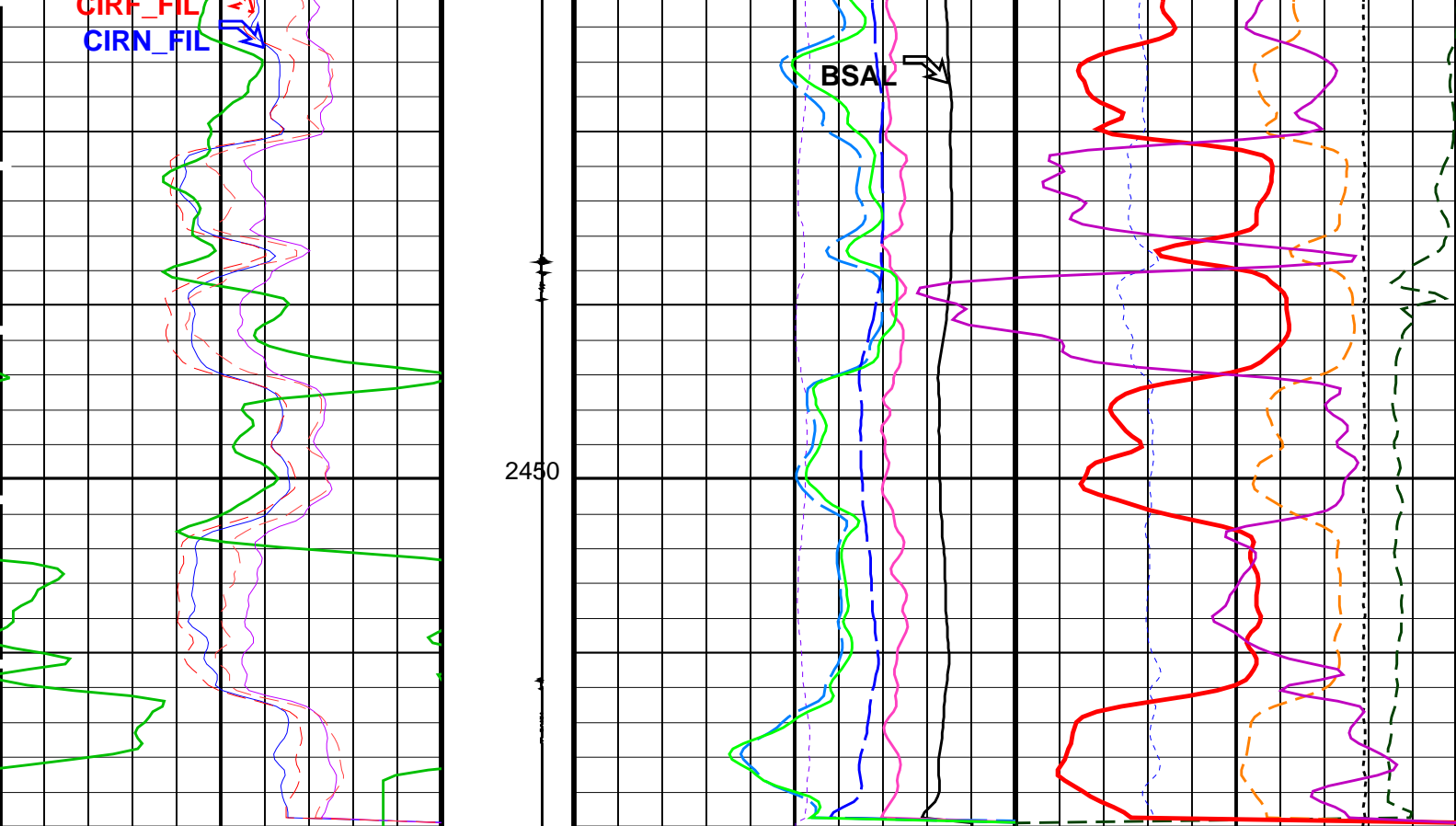
Time Mark Every 60 S

		RST Sigma (SIGM)	
		60 (CU)	0
		RST Weighted Inelastic Ratio (WINR_RST)	
		0.4 (----	0
		RST Porosity (TPHI)	
		0.6 (V/V)	0
RST Far Effective Capture CR (RSCF_RST)		RST Sigma Borehole Fluid (SIBF)	
45 (-----	0	100 (CU)	0

RST Near Effective Capture CR (RSCN_RST) (-----) 0		Sigma Borehole Far Apparent (SBFA_FIL) (CU) 0	Tension (TENS) (LBF) 0 3000
RST Capture to Inelastic Ratio Far (CIRF_FIL) (-----) 0		RST Capture Ratio (TRAT_FIL) (-----) 0.5	Sigma Formation Far Apparent (SFFA_FIL) (CU) 0
RST Capture to Inelastic Ratio Near (CIRN_FIL) (-----) 0	Minitron Arc Detection (MARC) 0 (----- 5	RST Sigma Difference (DSIG) (CU) -30 30	MCS Far Background (filtered) (FBAC) (CPS) 0 5000
Gamma Ray (GR) (GAPI) 0 150	Discriminat ed CCL (CCLD) 3 (V) -1	RST Borehole Salinity (BSAL) (PPK) 450 -50	RST Inelastic Ratio (IRAT_FIL) (-----) 0







<div>Gamma Ray (GR) (GAPI)</div> <div>0150</div>	<div>Discriminat ed CCL (CCLD) (V)</div> <div>3-1</div>	<div>RST Borehole Salinity (BSAL) (PPK)</div> <div>450-50</div>	<div>RST Inelastic Ratio (IRAT_FIL) (----</div> <div>0.750</div>
<div>RST Capture to Inelastic Ratio Near (CIRN_FIL) (----</div> <div>2.50</div>	<div>Minitron Arc Detection (MARC) (----</div> <div>05</div>	<div>RST Sigma Difference (DSIG) (CU)</div> <div>-3030</div>	<div>MCS Far Background (filtered) (FBAC) (CPS)</div> <div>05000</div>
<div>RST Capture to Inelastic Ratio Far (CIRF_FIL) (----</div> <div>50</div>		<div>RST Capture Ratio (TRAT_FIL) (----</div> <div>1.50.5</div>	<div>Sigma Formation Far Apparent (SFFA_ FIL) (CU)</div> <div>600</div>
<div>RST Near Effective Capture CR (RSCN_ RST) (----</div> <div>450</div>		<div>Sigma Borehole Far Apparent (SBFA_ FIL) (CU)</div> <div>1500</div>	<div>Tension (TENS) (LBF)</div> <div>03000</div>
<div>RST Far Effective Capture CR (RSCF_ RST) (----</div> <div>450</div>		<div>RST Sigma Borehole Fluid (SIBF) (CU)</div> <div>1000</div>	
		<div>RST Porosity (TPHI) (V/V)</div> <div>0.60</div>	
		<div>RST Weighted Inelastic Ratio (WINR_RST) (----</div> <div>0.40</div>	
		<div>RST Sigma (SIGM) (CU)</div> <div>600</div>	

PIP SUMMARY

Time Mark Every 60 S

Parameters		
DLIS Name	Description	Value
AIRB	RST-C: Reservoir Saturation Pro Tool C RST Air Borehole	No

BHS	Borehole Status	CASED	
BSALOPT	RST Borehole Salinity Option	Unknown	
BSFL	RST Borehole Salinity Filter Length	51	
DFPC	RST Depth Filter Processing Constant	One	
DFPC_TDTL	RST Depth Filter Processing Constant (TDT-like)	Two	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
NORM_IRAT_RST	RST Normalized Inelastic Ratio	0.48	
NORM_SIGM_RST	RST Normalized Sigma	30	CU
RGAI	Near/Far Gain Calibration Ratio	1	
SMBMO	RST Sigma Mode Background Minitron Off	No	
TIER_SIGM	RST Sigma Acquisition Mode	0_RST_Sigma	
PSPT-Pbms-b: Production Services Logging Platform			
BHS	Borehole Status	CASED	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
System and Miscellaneous			
BS	Bit Size	8.500	IN
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	7.000	IN
CWEI	Casing Weight	23.00	LB/F
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	


Format: RST\_SIG\_ANSW

Vertical Scale: 1:200

Graphics File Created: 21-Jun-2005 10:43

OP System Version: 13C0-300			
MCM			
PFCS-A	13C0-300	DEFT-C2	13C0-300
PILS-A	13C0-300	RST-C	PTC-2716-NUCL
PSPT-Pbms-b	13C0-300		

Input DLIS Files						
DEFAULT	FCS_DEFT_ILS_RST_022LUP	FN:21	PRODUCER	20-Jun-2005 11:44	2470.6 M	2376.8 M
Output DLIS Files						
DEFAULT	FCS_DEFT_ILS_RST_080PUP	FN:78	PRODUCER	21-Jun-2005 10:43		

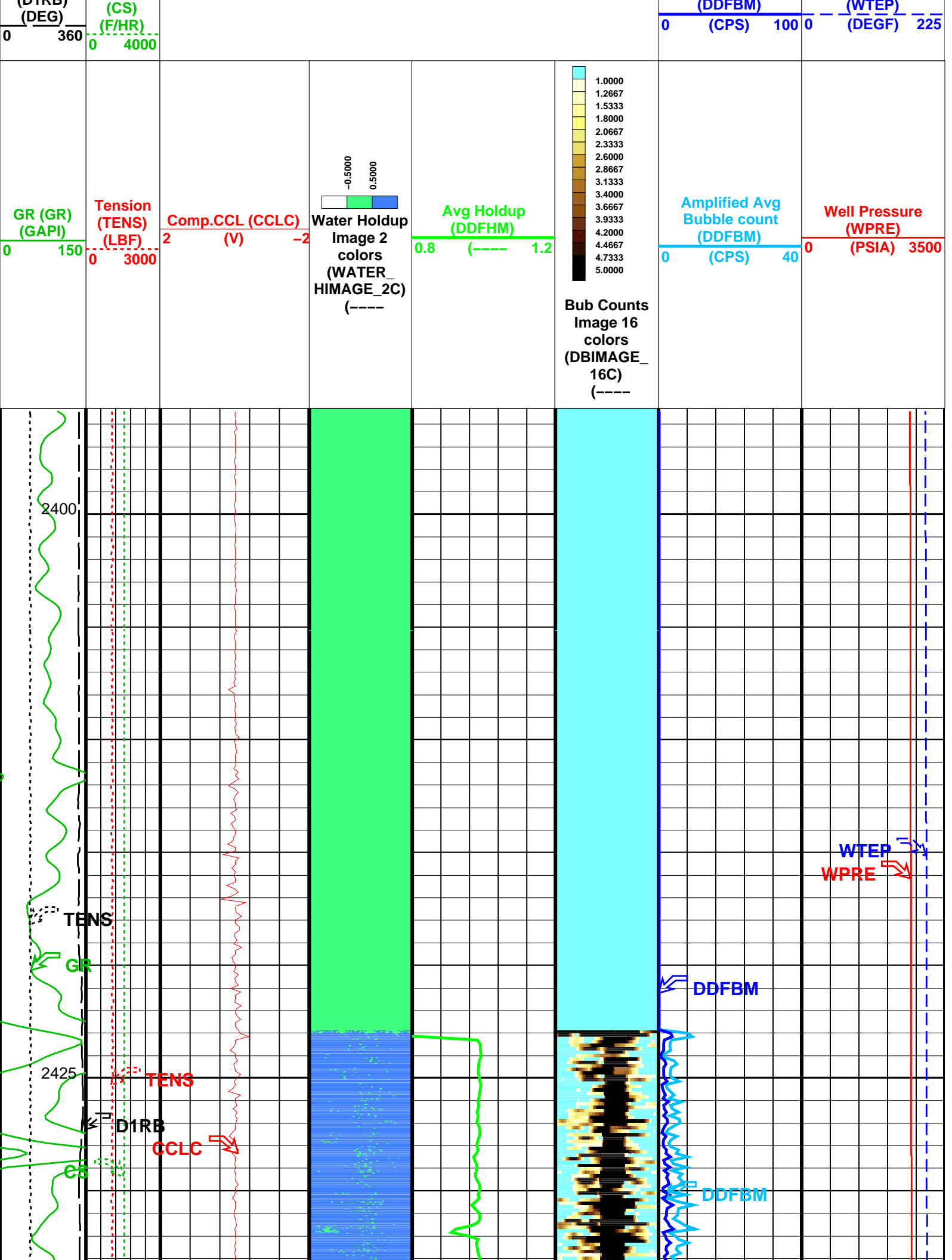


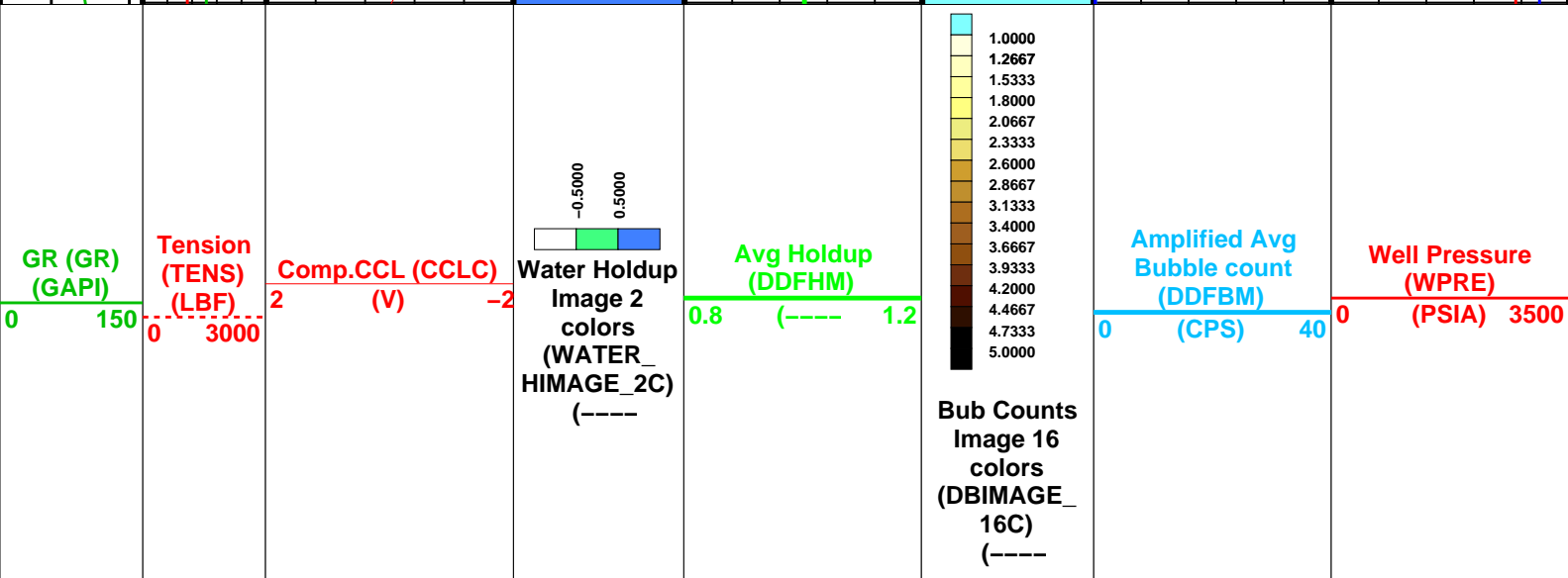
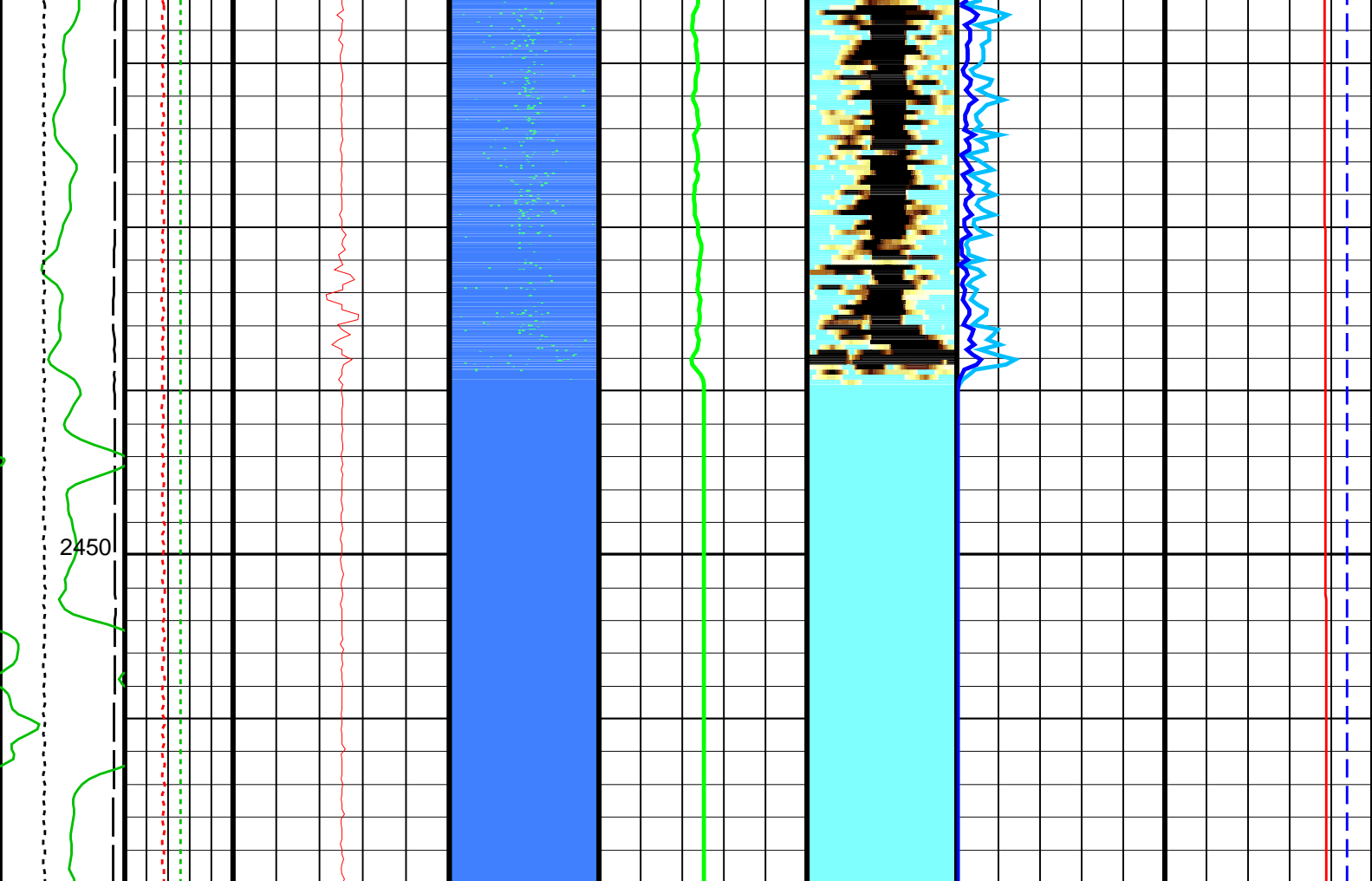
Static Down Log

MAXIS Field Log

Input DLIS Files						
DEFAULT	Flip_FCS_DEFT_ILS_081LUP		PRODUCER	21-Jun-2005 10:53	2477.1 M	2317.7 M
Output DLIS Files						
DEFAULT	FCS_DEFT_ILS_RST_087PUP	FN:82	PRODUCER	21-Jun-2005 11:06	2460.0 M	2395.3 M
OP System Version: 13C0-300						
MCM						
PFCS-A	13C0-300	DEFT-C2	13C0-300			
PILS-A	13C0-300	RST-C	PTC-2716-NUCL			
PSPT-Pbms-b	13C0-300					

Tension (TENS) (LBF)					
0 3000					
Probe1 RB (D1RB)	Cable Speed				
		Avg BUB count		Well Temperature	





Tension (TENS) (LBF)	0 3000
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Format: DEFT\_Image\_DL      Vertical Scale: 1:200      Graphics File Created: 21-Jun-2005 11:06

## Parameters

DLIS Name	Description	Value
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## PFCS-A: PSP Flow and caliper Tool

CSID	Casing Size I.D.	6.151	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	

## DEFT-C2: DEFT\_C Tool

CSID	Casing Size I.D.	6.151	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	

## RST-C: Reservoir Saturation Pro Tool C

CSID	Casing Size I.D.	6.151	IN
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## PSPT-Pbms-b: Production Services Logging Platform

CSID	Casing Size I.D.	6.151	IN
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## BORDYN: BorDyn (Well Test Validation)

CSID	Casing Size I.D.	6.151	IN
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## System and Miscellaneous

DO	Depth Offset for Playback	-2.0	M
PP	Playback Processing	NORMAL	

## Input DLIS Files

DEFAULT	Flip_FCS_DEFT_ILS_081LUP	PRODUCER	21-Jun-2005 10:53	2477.1 M	2317.7 M
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## Output DLIS Files

DEFAULT	FCS_DEFT_ILS_RST_087PUP	FN:82	PRODUCER	21-Jun-2005 11:06
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## Input DLIS Files

DEFAULT	Flip_FCS_DEFT_ILS_081LUP	PRODUCER	21-Jun-2005 10:53	2477.1 M	2317.7 M
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## Output DLIS Files

DEFAULT	FCS_DEFT_ILS_RST_087PUP	FN:82	PRODUCER	21-Jun-2005 11:06	2460.0 M	2395.3 M
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## OP System Version: 13C0-300

MCM

PFCS-A	13C0-300	DEFT-C2	13C0-300
PILS-A	13C0-300	RST-C	PTC-2716-NUCL
PSPT-Pbms-b	13C0-300		

Pipe Ovalisation  
Between PFC1 and  
PFC2

Well Diameter  
From PFC2 to  
PFCS\_T1

Well Diameter  
From PFC1 to  
PFCS\_T1

Tension  
(TENS)  
(LBF)

PFCS Caliper Y  
(PFC2)  
(IN)

PFCS Fluid  
Resistivity (DRES)  
(OHMM)

PFCS Spinner  
(SPIN)

-10 (RPS) 10

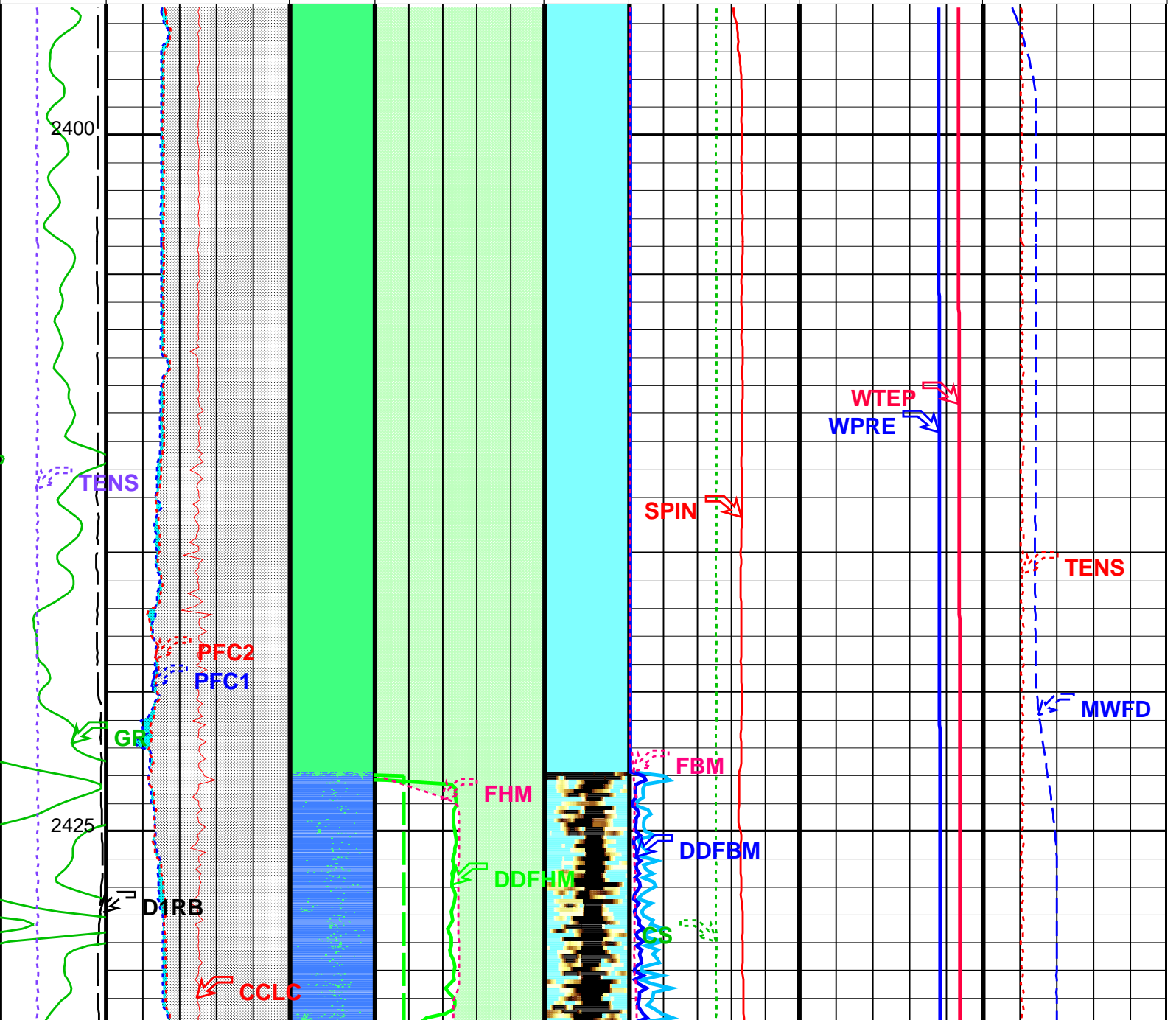
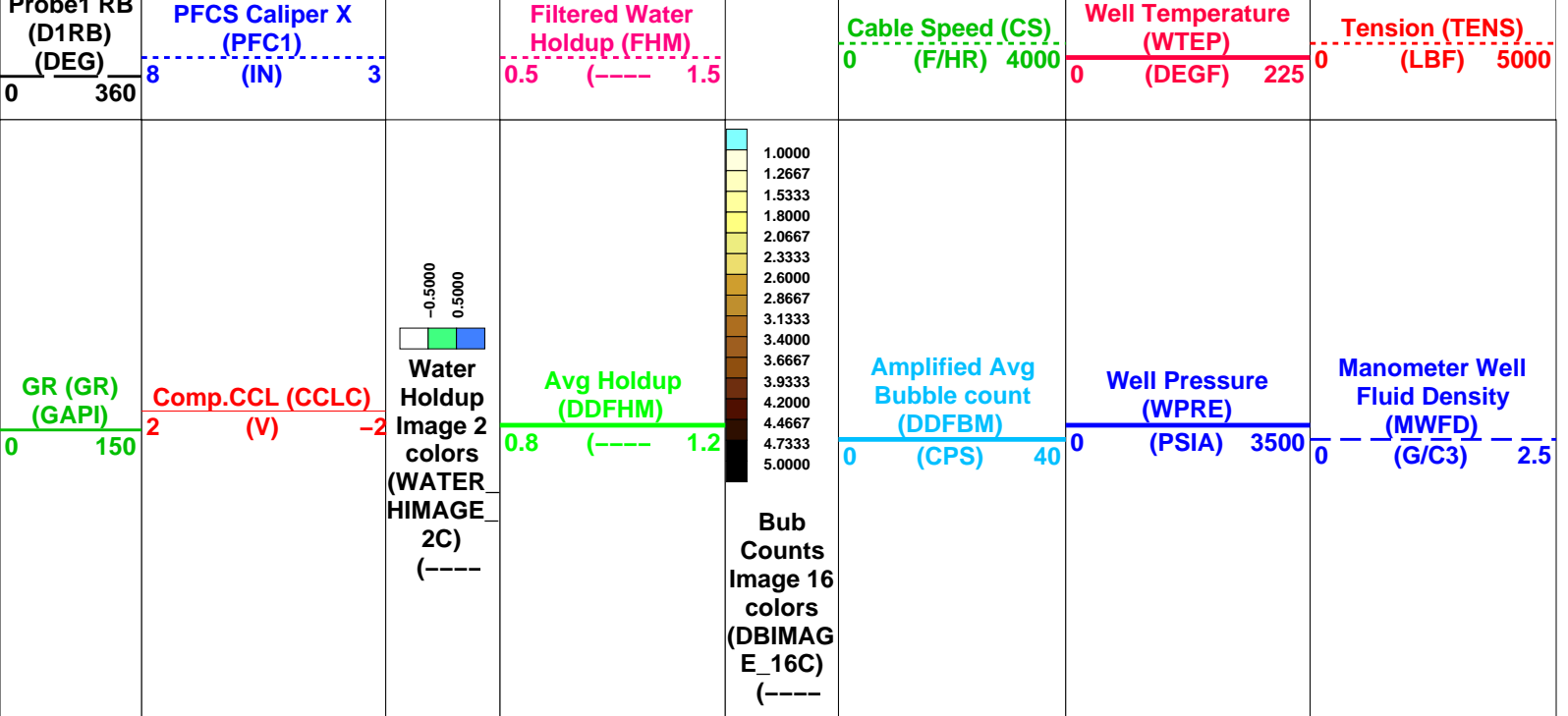
Filtered Bubble  
Count (FBM)

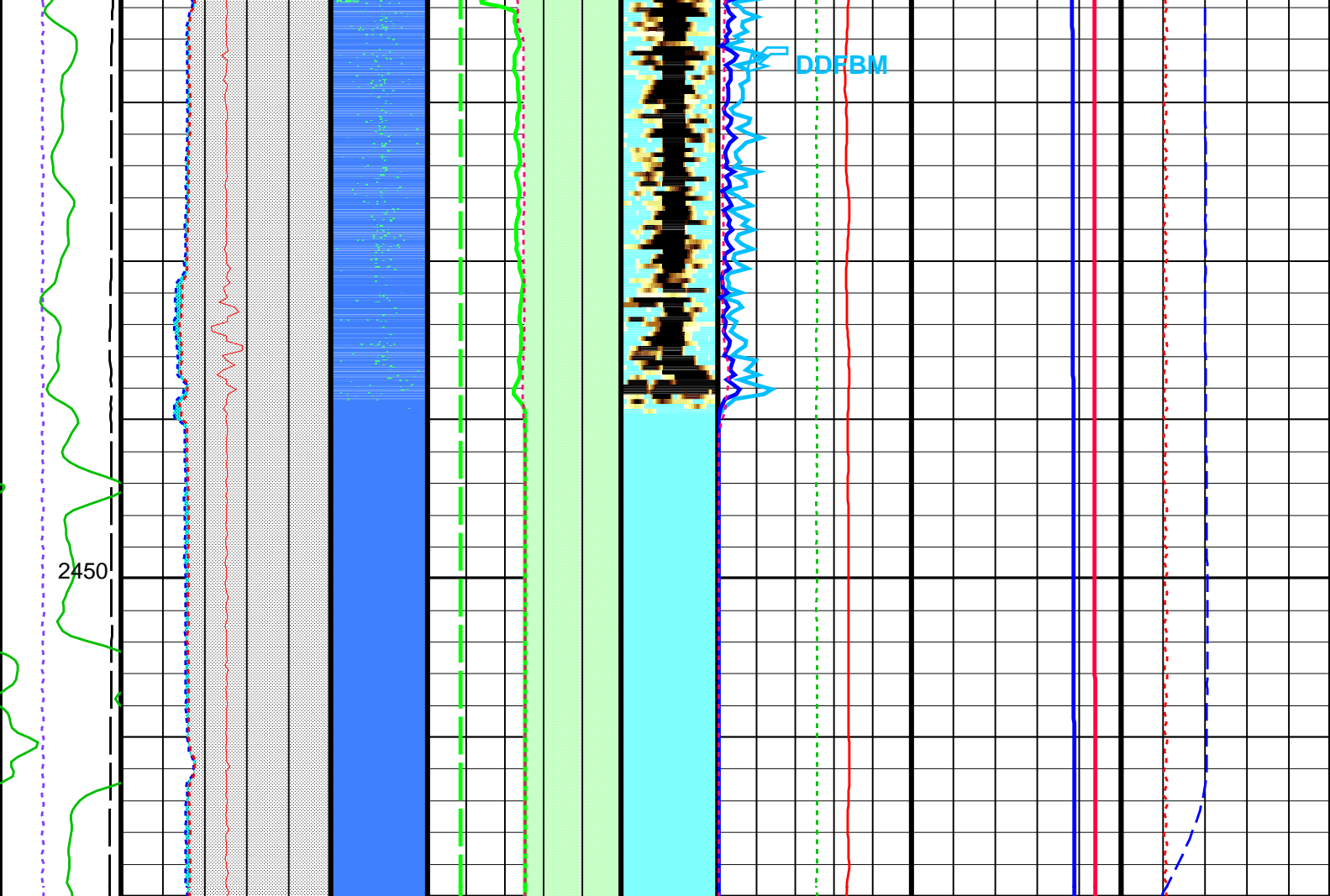
0 (CPS) 100

Avg BUB count  
(DDFBM)

0 (CPS) 100

Depth (PP)





<div>GR (GR) (GAPI)</div> <div>0150</div>	<div>Comp.CCL (CCLC) (V)</div> <div>2-----2</div>	<div>Water Holdup Image 2 colors (WATER HIMAGE_2C) (----</div> <div><div><div>-0.5000</div><div>0.5000</div></div></div>	<div>Avg Holdup (DDFHM)</div> <div>0.8-----1.2</div>	<div><div>1.0000</div><div>1.2667</div><div>1.5333</div><div>1.8000</div><div>2.0667</div><div>2.3333</div><div>2.6000</div><div>2.8667</div><div>3.1333</div><div>3.4000</div><div>3.6667</div><div>3.9333</div><div>4.2000</div><div>4.4667</div><div>4.7333</div><div>5.0000</div></div> <div>Bub Counts Image 16 colors (DBIMAG_E_16C) (----</div>	<div>Amplified Avg Bubble count (DDFBM)</div> <div>0-----40 (CPS)</div>	<div>Well Pressure (WPRE)</div> <div>0-----3500 (PSIA)</div>	<div>Manometer Well Fluid Density (MWFD) (G/C3)</div> <div>0-----2.5</div>
					<div>Probe1 RB (D1RB) (DEG)</div> <div>0-----360</div>	<div>PFCS Caliper X (PFC1) (IN)</div> <div>8-----3</div>	<div>Filtered Water Holdup (FHM)</div> <div>0.5-----1.5</div>
<div>Tension (TENS) (LBF)</div> <div>0-----3000</div>	<div>PFCS Caliper Y (PFC2) (IN)</div> <div>8-----3</div>	<div>PFCS Fluid Resistivity (DRES) (OHMM)</div> <div>2-----10</div>	<div>Avg BUB count (DDFBM)</div> <div>0-----100 (CPS)</div>	<div>Filtered Bubble Count (FBM)</div> <div>0-----100 (CPS)</div>			
	<div>Well Diameter From PFC1 to PFC5_T1</div>			<div>PFCS Spinner</div>			
	<div>Well Diameter</div>						



Well Diameter  
From PFC2 to  
PFC5\_T1

Pipe Ovalisation  
Between PFC1 and  
PFC2

(SPIN)

-10 (RPS) 10

Format: PFCS\_Image\_DL Vertical Scale: 1:200

Graphics File Created: 21-Jun-2005 11:06

## OP System Version: 13C0-300

MCM

PFCS-A	13C0-300	DEFT-C2	13C0-300
PILS-A	13C0-300	RST-C	PTC-2716-NUCL
PSPT-Pbms-b	13C0-300		

## Parameters

DLIS Name	Description	Value	
PFCS-A: PSP Flow and caliper Tool			
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
CSID	Casing Size I.D.	6.151	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	
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	
SPIN	Main Spinner Flowmeter Sonde	PFCS-A_TURB	
DEFT-C2: DEFT_C Tool			
CSID	Casing Size I.D.	6.151	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	
PFGC	PFCS Geometrical coefficient	1200	
PILS-A: PSP In Line Spinner Flowmeter			
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
SDCF	Spinner Depth Constant Filter	6	
SPIN	Main Spinner Flowmeter Sonde	PFCS-A_TURB	
RST-C: Reservoir Saturation Pro Tool C			
CSID	Casing Size I.D.	6.151	IN
GDEV	Average Angular Deviation of Borehole from Normal	30	DEG
PSPT-Pbms-b: Production Services Logging Platform			
CSID	Casing Size I.D.	6.151	IN
GDEV	Average Angular Deviation of Borehole from Normal	30	DEG
BORDYN: BorDyn (Well Test Validation)			
CSID	Casing Size I.D.	6.151	IN
System and Miscellaneous			
DO	Depth Offset for Playback	-2.0	M
PP	Playback Processing	NORMAL	

## Input DLIS Files

DEFAULT	Flip_FCS_DEFT_ILS_081LUP	PRODUCER	21-Jun-2005 10:53	2477.1 M	2317.7 M
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## Output DLIS Files

DEFAULT	FCS_DEFT_ILS_RST_087PUP	FN:82	PRODUCER	21-Jun-2005 11:06
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Input DLIS Files

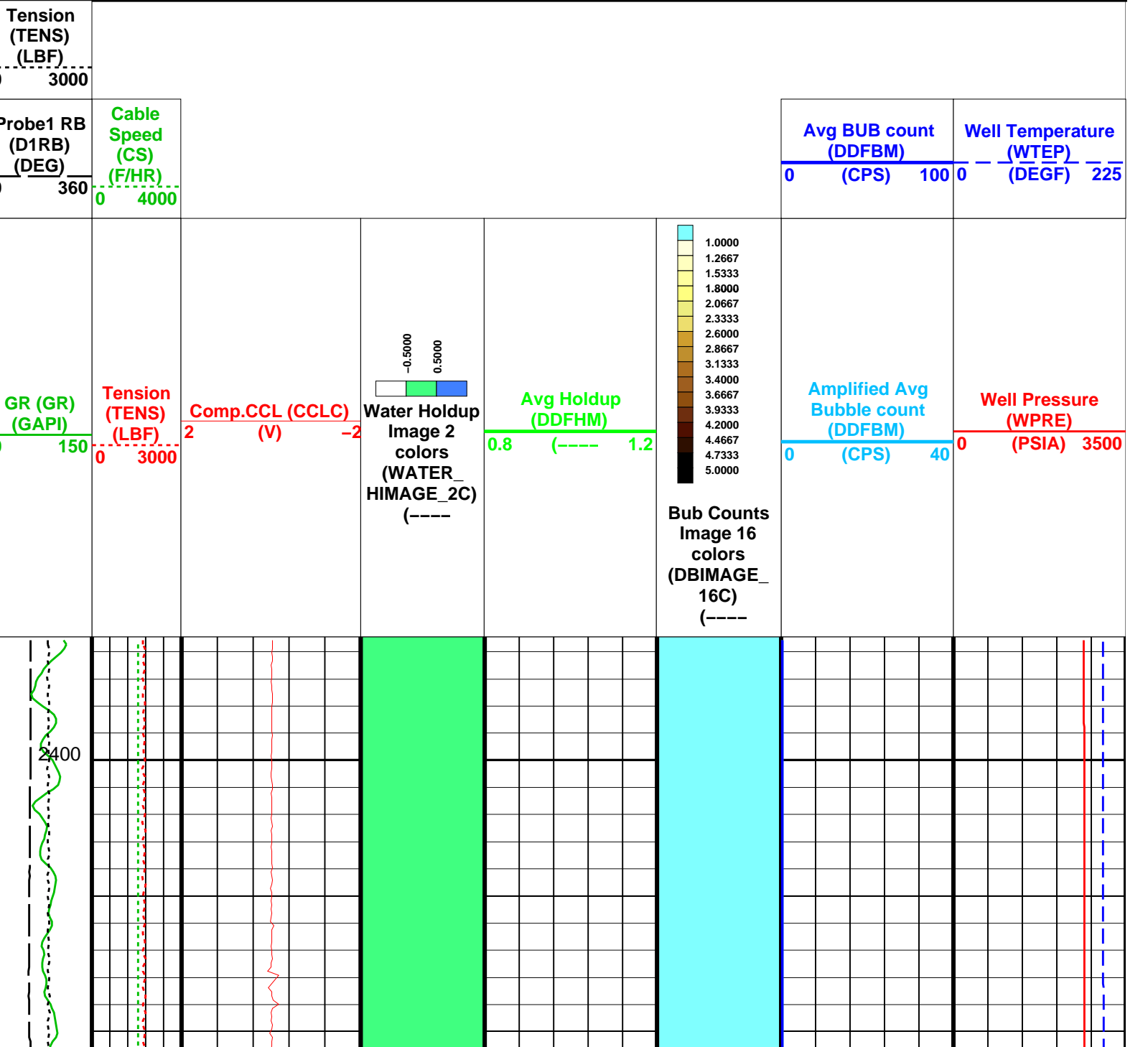
DEFAULT FCS\_DEFT\_ILS\_RST\_020LUP FN:19 PRODUCER 20-Jun-2005 11:23 2477.7 M 2373.6 M

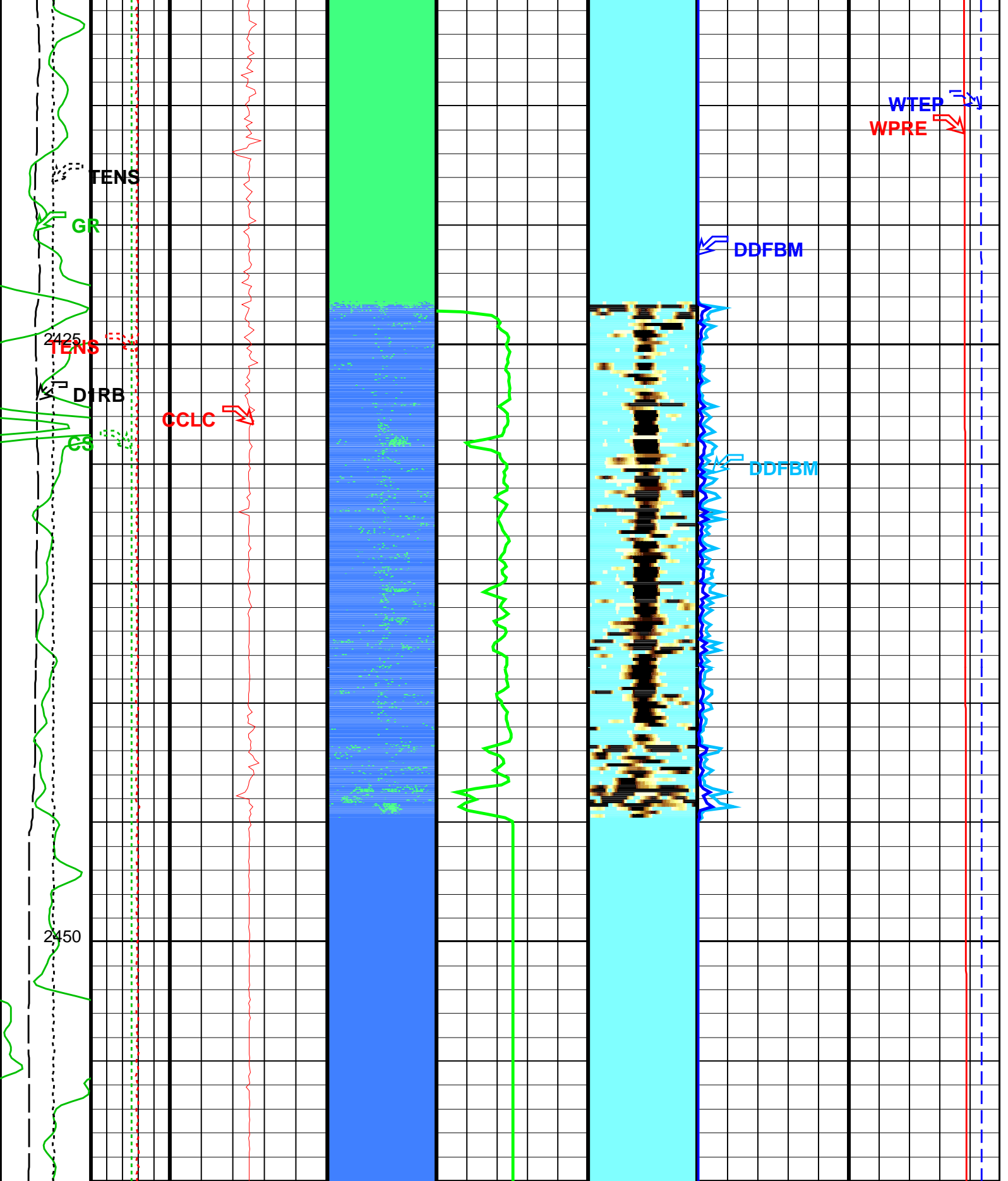
Output DLIS Files

DEFAULT FCS\_DEFT\_ILS\_RST\_079PUP FN:77 PRODUCER 21-Jun-2005 10:38 2460.0 M 2395.4 M

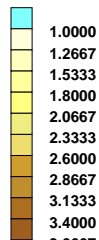
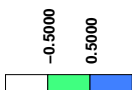
OP System Version: 13C0-300  
MCM

PFCS-A 13C0-300 DEFT-C2 13C0-300  
PILS-A 13C0-300 RST-C PTC-2716-NUCL  
PSPT-Pbms-b 13C0-300

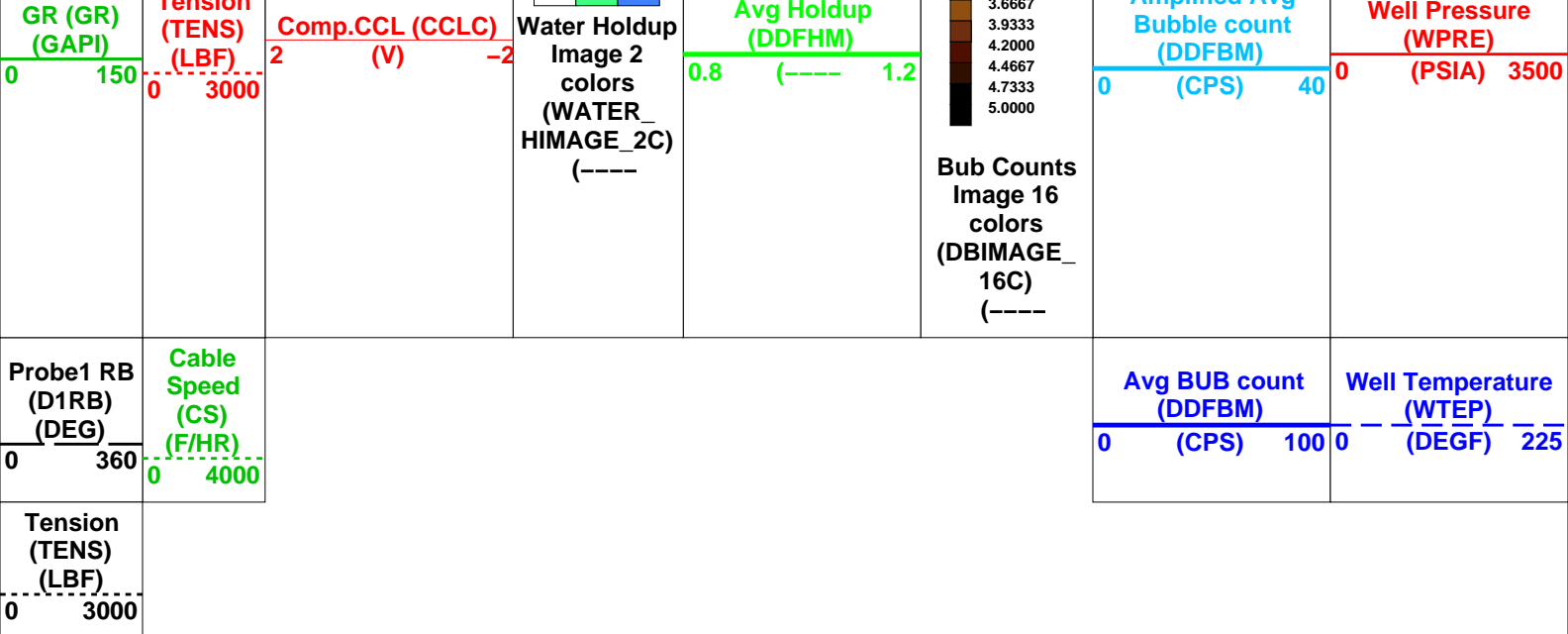




Tension



Amplified Avg



Format: DEFT\_Image\_DL Vertical Scale: 1:200 Graphics File Created: 21-Jun-2005 10:38

## OP System Version: 13C0-300

MCM

PFCS-A 13C0-300 DEFT-C2 13C0-300  
 PILS-A 13C0-300 RST-C PTC-2716-NUCL  
 PSPT-Pbms-b 13C0-300

## Parameters

DLIS Name	Description	Value
PFCS-A: PSP Flow and caliper Tool		
CSID	Casing Size I.D.	6.151 IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2-D1RB
DDRS	Dual DEFT RB Source	D1RB
DFBD	DEFT Blank Disallowed Probes	NO
DDFI	DEFT Flip Image	NO
DFII	DEFT Image Interpolation	YES
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE
DFPP	Probes Arm Position	C
DEFT-C2: DEFT_C Tool		
CSID	Casing Size I.D.	6.151 IN
DDRC	Dual DEFT DELTA RB COMPUTATION	D1RB2-D1RB
DDRS	Dual DEFT RB Source	D1RB
DFBD	DEFT Blank Disallowed Probes	NO
DDFI	DEFT Flip Image	NO
DFII	DEFT Image Interpolation	YES
DFIRS	DEFT Image Rotation Selection	TOP_MIDDLE
RST-C: Reservoir Saturation Pro Tool C		
CSID	Casing Size I.D.	6.151 IN
PSPT-Pbms-b: Production Services Logging Platform		
CSID	Casing Size I.D.	6.151 IN
BORDYN: BorDyn (Well Test Validation)		
CSID	Casing Size I.D.	6.151 IN
System and Miscellaneous		
DO	Depth Offset for Playback	0.0 M
PP	Playback Processing	NORMAL

## Input DLIS Files

DEFAULT FCS\_DEFT\_ILS\_RST\_020LUP FN:19 PRODUCER 20-Jun-2005 11:23 2477.7 M 2373.6 M

## Output DLIS Files

DEFAULT FCS\_DEFT\_ILS\_RST\_079PUP FN:77 PRODUCER 21-Jun-2005 10:38

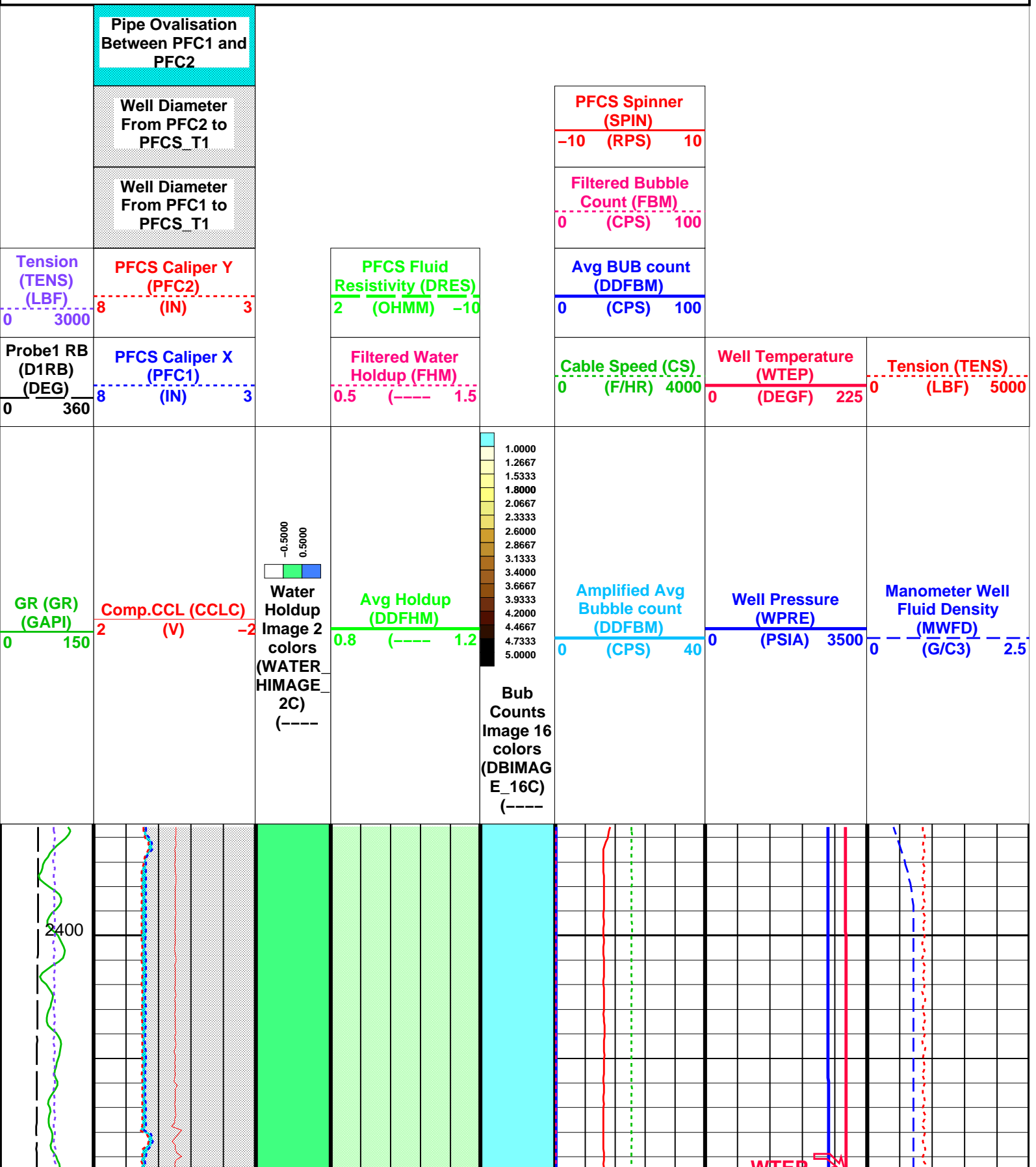
## Input DLIS Files

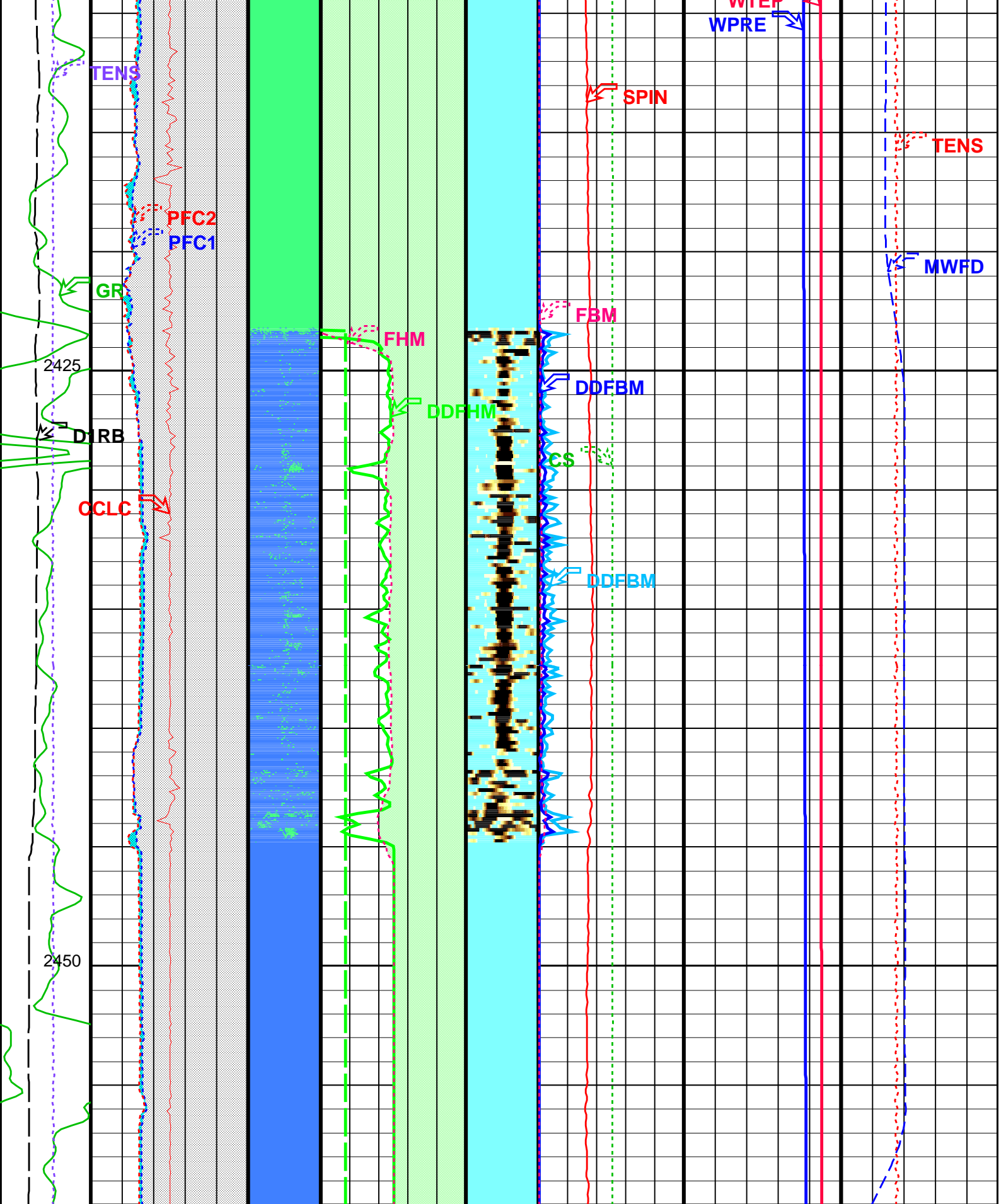
DEFAULT FCS\_DEFT\_ILS\_RST\_020LUP FN:19 PRODUCER 20-Jun-2005 11:23 2477.7 M 2373.6 M

DEFAULT	FCS_DEFT_ILS_RST_079PUP	FN:77	PRODUCER	21-Jun-2005 10:38	2460.0 M	2395.4 M
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## MCM

PFCS-A	13C0-300	DEFT-C2	13C0-300
PILS-A	13C0-300	RST-C	PTC-2716-NUCL
PSPT-Pbms-b	13C0-300		

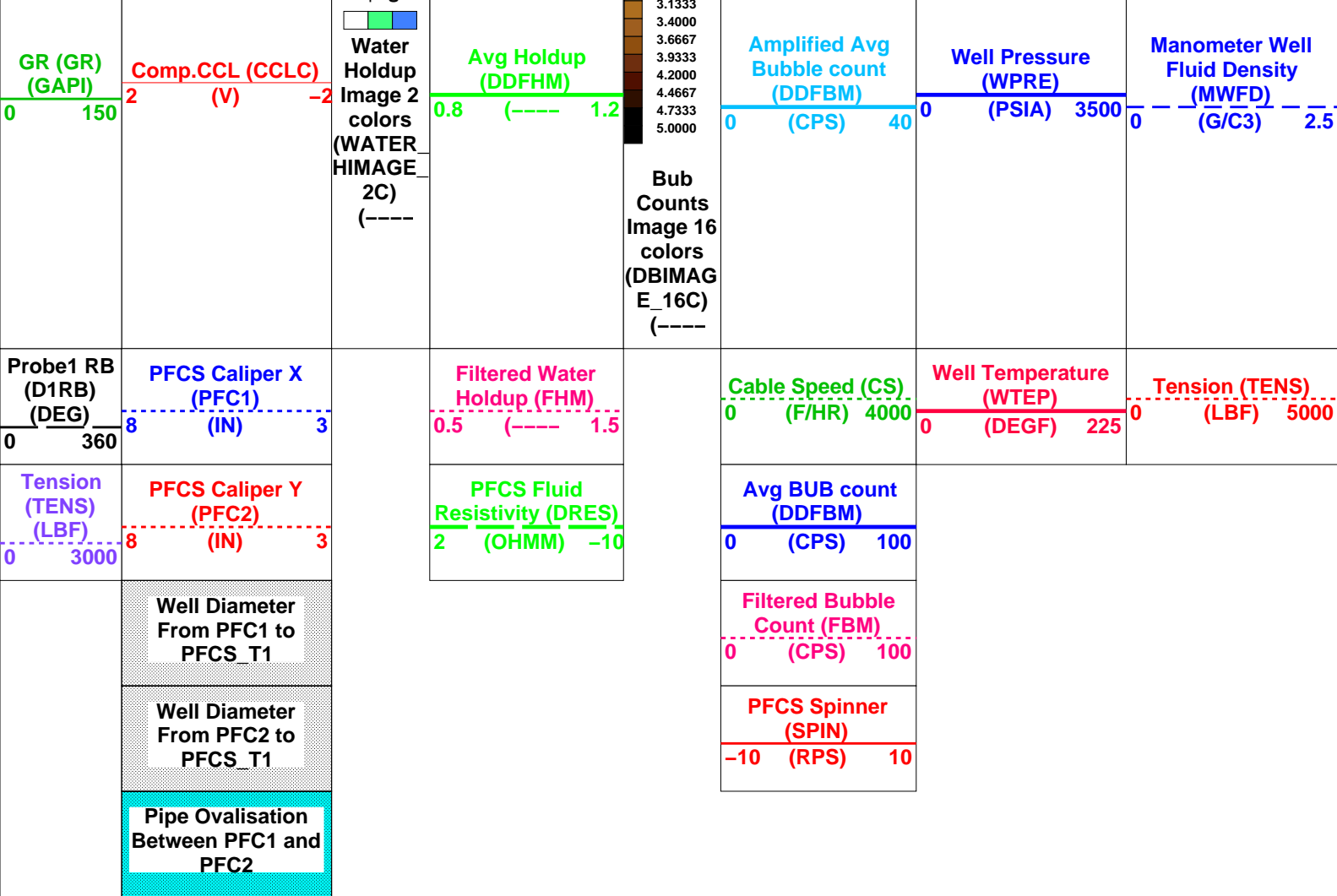




-0.5000  
0.5000

1.0000  
1.2667  
1.5333  
1.8000  
2.0667  
2.3333  
2.6000  
2.8667



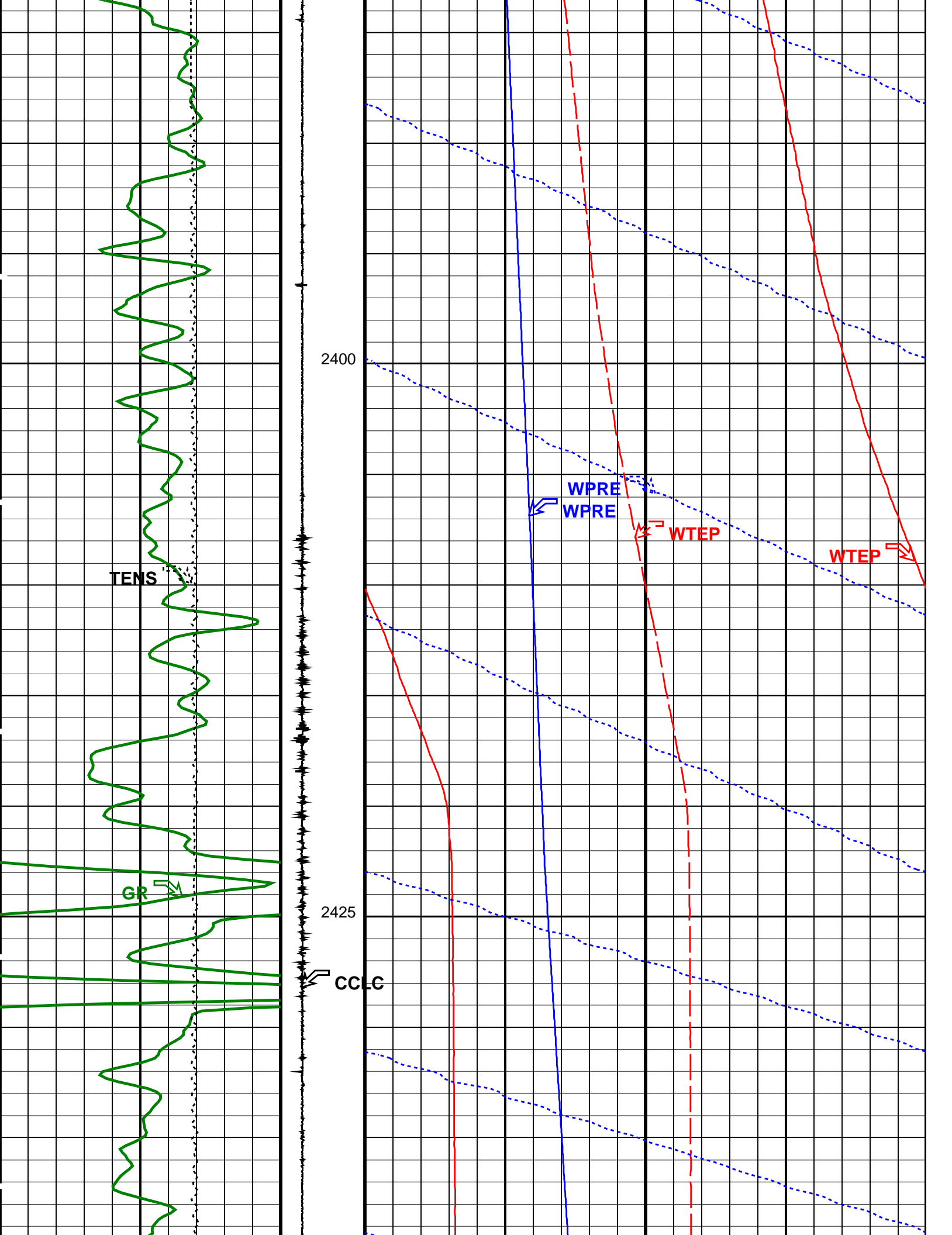


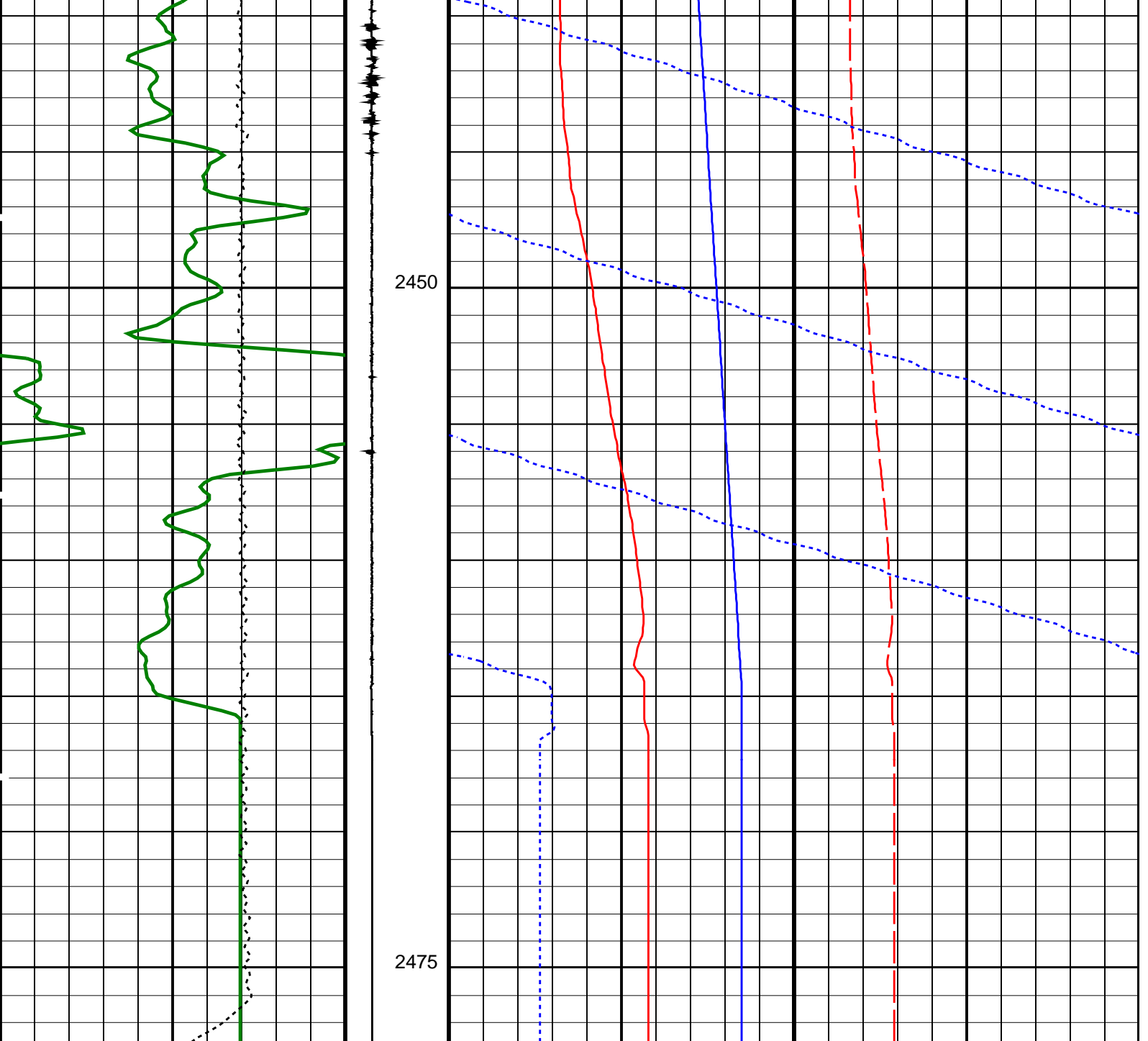
Format: PFCS_Image_DL		Vertical Scale: 1:200		Graphics File Created: 21-Jun-2005 10:38	
OP System Version: 13C0-300					
MCM					
PFCS-A	13C0-300	DEFT-C2	13C0-300		
PILS-A	13C0-300	RST-C	PTC-2716-NUCL		
PSPT-Pbms-b	13C0-300				

Parameters			
DLIS Name	Description	Value	
PFCS-A: PSP Flow and caliper Tool			
AMOD	Spinner Filter Averaging Mode	LINEAR_AVERAGE	
CSID	Casing Size I.D.	6.151	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	
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	
SPIN	Main Spinner Flowmeter Sonde	PFCS-A_TURB	
DEFT-C2: DEFT_C Tool			
CSID	Casing Size I.D.	6.151	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	
PFGC	PFCS Geometrical coefficient	1200	
PIL S-A: PSP In Line Spinner Flowmeter			









Tension (TENS) (LBF)	0	2500	Computed CCL (CCLC)	1	(V)	-3	Well Temperature (WTEP)	
							220	225
Gamma Ray (GR) (GAPI)	0	150					Well Temperature (WTEP)	
							0	10
							Well Pressure (WPRE)	
							3000	3500
							Amplified Well Pressure (WPRE)	
							0	10

PIP SUMMARY

Time Mark Every 60 S

Format: PSP\_1 Vertical Scale: 1:200 Graphics File Created: 21-Jun-2005 10:31

OP System Version: 13C0-300  
MCM

PILS-A		13C0-300	RST-C		PTC-2716-NUCL	
PSPT-Pbms-b		13C0-300				
Parameters						
DLIS Name		Description			Value	
System and Miscellaneous						
DO		Depth Offset for Playback			0.0	M
PP		Playback Processing			NORMAL	
Input DLIS Files						
DEFAULT	FCS_DEFT_ILS_RST_020LUP	FN:19	PRODUCER	20-Jun-2005 11:23	2477.7 M	2373.6 M
Output DLIS Files						
DEFAULT	FCS_DEFT_ILS_RST_077PUP	FN:75	PRODUCER	21-Jun-2005 10:31		

Calibration and Check Summary							
Measurement	Nominal	Master	Before	After	Change	Limit	Units
PSP Flow and caliper Tool Wellsite Calibration – PFCS Caliper Calibration							
Before: 10-Jun-2005 7:36							
PFCS CaliperX Small Ring	3.000	N/A	3.035	N/A	N/A	N/A	IN
PFCS CaliperX Large Ring	5.500	N/A	5.535	N/A	N/A	N/A	IN
PFCS CaliperY Small Ring	3.000	N/A	2.921	N/A	N/A	N/A	IN
PFCS CaliperY Large Ring	5.500	N/A	5.535	N/A	N/A	N/A	IN
DEFT_C Tool Wellsite Calibration – DEFT_C2 Caliper Calibration							
Before: 10-Jun-2005 7:37							
DEFT-C2 Caliper Small Ring	3.000	N/A	3.115	N/A	N/A	N/A	IN
DEFT-C2 Caliper Large Ring	5.500	N/A	5.570	N/A	N/A	N/A	IN
Production Services Logging Platform Wellsite Calibration – Detector Calibration							
Before: 10-Jun-2005 7:39							
Gamma-Ray Jig-Bkg	125.0	N/A	122.3	N/A	N/A	N/A	GAPI

PSP Flow and caliper Tool / Equipment Identification	
Primary Equipment:	
PFCS Cartridge	PFCC – A
PFCS Caliper	Cali –
PFCS Relative Bearing	Rela –
PFCS Turbine Spinner	Turb –
PFCS Fluid Holdup Electric Probes	Hold –
Auxiliary Equipment:	
PFCS Cartridge Housing	PFCH – A

PSP Flow and caliper Tool Wellsite Calibration																		
PFCS Caliper Calibration																		
Phase	PFCS CaliperX Small Ring IN			Value	Phase	PFCS CaliperX Large Ring IN			Value	Phase	PFCS CaliperY Small Ring IN			Value				
Before	<div><div></div></div>			3.035	Before	<div><div></div></div>			5.535	Before	<div><div></div></div>			2.921				
N/A (Minimum)				3.000 (Nominal)	N/A (Maximum)					N/A (Minimum)				3.000 (Nominal)	N/A (Maximum)			
Phase	PFCS CaliperY Large Ring IN			Value														
Before	<div><div></div></div>			5.535														
N/A (Minimum)				5.500 (Nominal)										N/A (Maximum)				
Before: 10-Jun-2005 7:36																		



DEFT_C Tool / Equipment Identification	
--	--

Primary Equipment:  
 DEFTC Cartridge  
 DEFT\_C Caliper  
 DEFT\_C2 Relative Bearing  
 DEFT\_C Flowmeter probes

DFCC – C  
 Cali –  
 Rela –  
 Flow –

Auxiliary Equipment:  
 DEFTC Cartridge Housing

DFCH – C

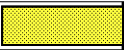

DEFT_C Tool Wellsite Calibration					
DEFT_C2 Caliper Calibration					
Phase	DEFT-C2 Caliper Small Ring IN	Value	Phase	DEFT-C2 Caliper Large Ring IN	Value
Before		3.115	Before		5.570
	N/A (Minimum) 3.000 (Nominal) N/A (Maximum)			N/A (Minimum) 5.500 (Nominal) N/A (Maximum)	
Before: 10-Jun-2005 7:37					

### Production Services Logging Platform / Equipment Identification

Primary Equipment:  
 Production Logging Platform (CQG-F)  
 PSP Basic Measurement Sonde (CQG\_F)  
 PSP Basic measurement module  
 PSP CCL  
 PSP GR  
 PSP RTD Well Temperature  
 PSP Crystal Quartz Gauge Type F  
 PSP Telemetry and bus master cartridge

PSPT – B  
 PBMS – B  
 PBMS –  
 CCL –  
 GR –  
 RTD\_ –  
 CQG\_ –  
 PSTC –

Auxiliary Equipment:

Production Services Logging Platform Wellsite Calibration					
Detector Calibration					
Phase	Gamma-Ray Background GAPI	Value	Phase	Gamma-Ray Jig-Bkg GAPI	Value
Before		6.811	Before		122.3
	0 (Minimum) 30.00 (Nominal) 120.0 (Maximum)			110.0 (Minimum) 125.0 (Nominal) 140.0 (Maximum)	
Before: 10-Jun-2005 7:39					

Company: **Esso Australia Ltd.**

**Schlumberger**

Well: **A-2**  
 Field: **Tuna**  
 Rig : **Prod4 / Crane**  
 Country: **Australia**

RST Sigma/DEFT/Spinner  
 Pressure/Temperature  
 Survey