

**Company: CDEX**

**Well: C0009A**

**Field: Kumanonada, Offshore Kii peninsula**

**Rig: Chikyu Country: JAPAN**

**Rig:** Chikyu  
**Field:** Kumanonada, Offshore Kii peninsula  
**Location:** NanKai Trough  
**Well:** C0009A  
**Company:** CDEX

**PPC Borehole Volume**  
**3634.7m – 2785.0m**  
**Suite 1, Run 2 (1:200)**

<b>LOCATION</b>			
NanKai Trough		Elev.: K.B.	
NT2-11B		G.L.	
		D.F.	28.30 m
Permanent Datum:	MEAN SEA LEVEL	Elev.:	28.30 m
Log Measured From:	DRILL FLOOR		0.00 m above Perm. Datum
Drilling Measured From:	DRILL FLOOR		
Prefecture: Wakayama		Longitude	Latitude
	Max. Well Deviation	136° 32.1489' E	33° 27.4704' N
	0.7 deg		

Logging Date	12-Jul-2009		
Run Number	2		
Depth Driller	3666 m		
Schlumberger Depth	3667 m		
Bottom Log Interval	3634.7 m		
Top Log Interval	2785 m		
Casing Driller Size @ Depth	20,000 in @ 2786.2 m		
Casing Schlumberger	2785 m		
Bit Size	12.250 in		
Type Fluid In Hole	KCl-NaCl Polymer		
Density	1.1 g/cm3	97 s	
Fluid Loss	4.1 cm3	10.6	
Source Of Sample	Flow Line		
RM @ Measured Temperature	0.068 ohm.m	@	26 degC
RMF @ Measured Temperature	0.059 ohm.m	@	27 degC
RMC @ Measured Temperature	0.083 ohm.m	@	26 degC
Source RMF	RMC	Press	
RM @ MRT	0.058 @ 34	0.051 @ 34	
Maximum Recorded Temperatures	33 degC	33	34
Circulation Stopped	Time	11-Jul-2009	5:30
Logger On Bottom	Time	12-Jul-2009	19:00
Unit Number	4308	JPOP	
Recorded By	Payap Thongpracharn		
Witnessed By	T. Honda / K. Takahashi		

		Run 1	Run 2	Run
Logging Date				
Run Number				
Depth Driller				
Schlumberger Depth				
Bottom Log Interval				
Top Log Interval				
Casing Driller Size @ Depth		@		
Casing Schlumberger				
Bit Size				
Type Fluid In Hole				
Density				
Fluid Loss				
Source Of Sample				
RM @ Measured Temperature		@		
RMF @ Measured Temperature		@		
RMC @ Measured Temperature		@		
Source RMF				
RM @ MRT		@	@	
Maximum Recorded Temperatures				
Circulation Stopped				
Logger On Bottom				
Unit Number				
Recorded By				
Witnessed By				

## DEPTH SUMMARY LISTING

Date Created: 15-JUL-2009 16:02:45

### Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-JA Serial Number: 6726 Calibration Date: 3-Apr-2009 Calibrator Serial Number: 17 Calibration Cable Type: 7-46A XXS Wheel Correction 1: -6 Wheel Correction 2: -6	Type: CMTD-B/A Serial Number: 2986 Calibration Date: 16-Apr-2009 Calibrator Serial Number: 1049 Number of Calibration Points: 10 Calibration RMS: 373 Calibration Peak Error: 499	Type: 7-46A XXS Serial Number: 6019 Length: 9200 M <hr/> Conveyance Method: Wireline Rig Type: Offshore Floater with WMC

### Depth Control Parameters

Log Sequence:	Subsequent Log In the Well
Reference Log Name:	EMS-HRLA-TLD-CNL-GR-SP
Reference Log Run Number:	1
Reference Log Date:	11-Jul-2009

### Depth Control Remarks

1. Schlumberger Depth Control Policy followed.
2. IDW used as primary depth control device.
3. Z-Chart used as secondary depth control device.
4. Tide level = 0 m.
- 5.
- 6.

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#### OTHER SERVICES1

- OS1: EMS-HRLA-TLD-CNL-GR-SF
- OS2: MDT Dual Packer & Single Probe
- OS3:
- OS4:
- OS5:

#### REMARKS: RUN NUMBER 1

- This is the subsequence run in the well.
- The depth correlated with EMS-HRLA-TLD-CNL-GR-SP log on 11-Jul-09.
- Tool ran as per tool sketch and 2.5 inch standoffs used.
- Maximum recorded temperature from logging head thermometers = 33.89 degC.
- Maximum deviation = 0.70 deg @ 2749.79mBRT.
- Logging speed was 1,000 ft/hr.
- Repeat section was taken from 2900.0m - 2850.0m as per client request.

PPC used as for borehole measurement as well as tool centerization for Sonic Scanner.

Caliper check in casing = 18.75 inch.

Some of data affected by borehole condition (rugosity/washout).

Circulation Started: 11-Jul-2009; 1:45am

Circulation Stopped: 11-Jul-2009; 5:30am

AV=55 cps, PV=35 cps, YV=40 lb/100ft2, Gel=7-8 lb/100ft2, WL=4.1 ml, MC=0.5 mm

pH=10.6 ml, Pf=0.2 ml, Pm=0.3 ml, Mf=0.3 ml, Cl=-71,700 mg/l, Ca++Mg++=80/97 mg/l, Sand = 0.2%

O/S/W=0/6/94 %Vol, MBC=0.5 ml/ml mud, K+=26,400 mg/l

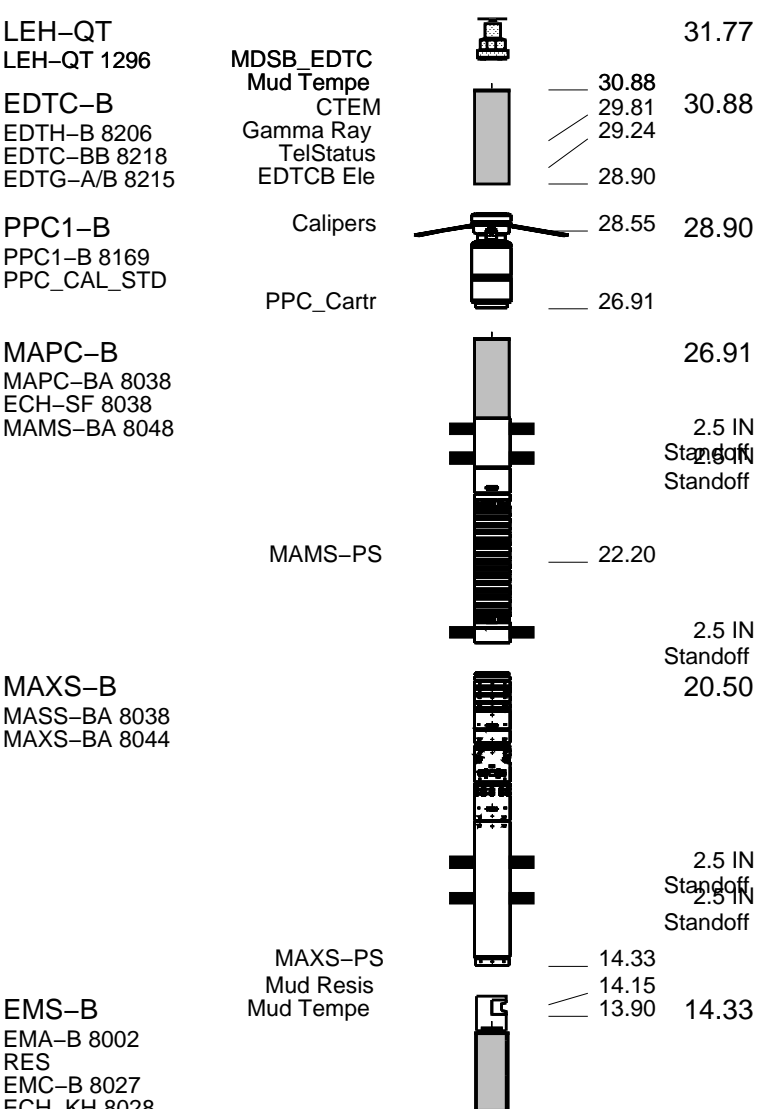
RUN 1			RUN 2		
SERVICE ORDER #:		ADVO-0003	SERVICE ORDER #:		
PROGRAM VERSION:		17C0-154	PROGRAM VERSION:		
FLUID LEVEL:		10 m	FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

## EQUIPMENT DESCRIPTION

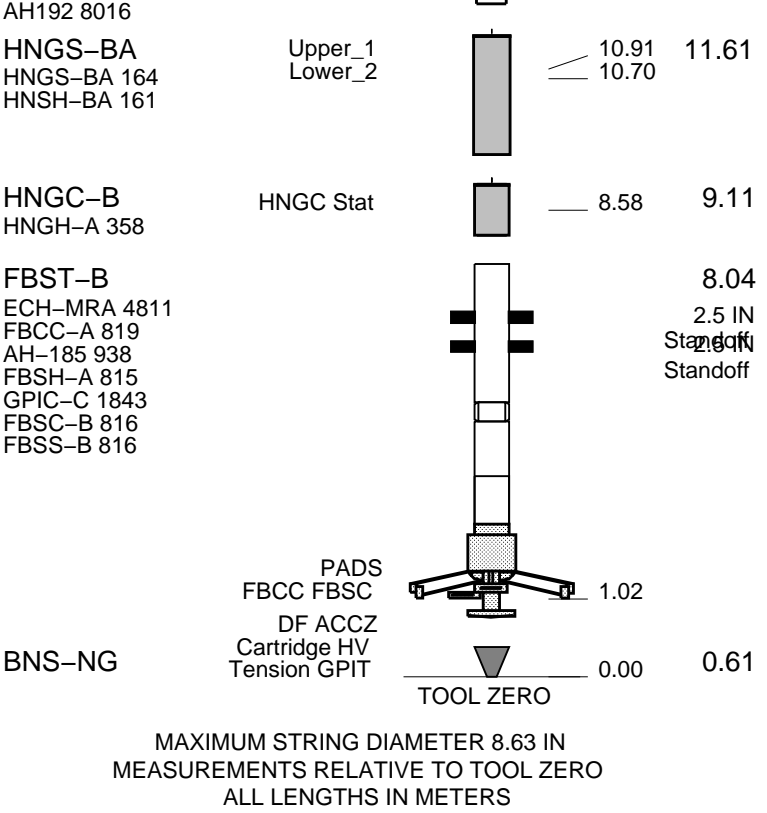
RUN 1 RUN 2

**SURFACE EQUIPMENT**  
 GSR-Y 1005  
 WITM (EDTS)-A

### DOWNHOLE EQUIPMENT

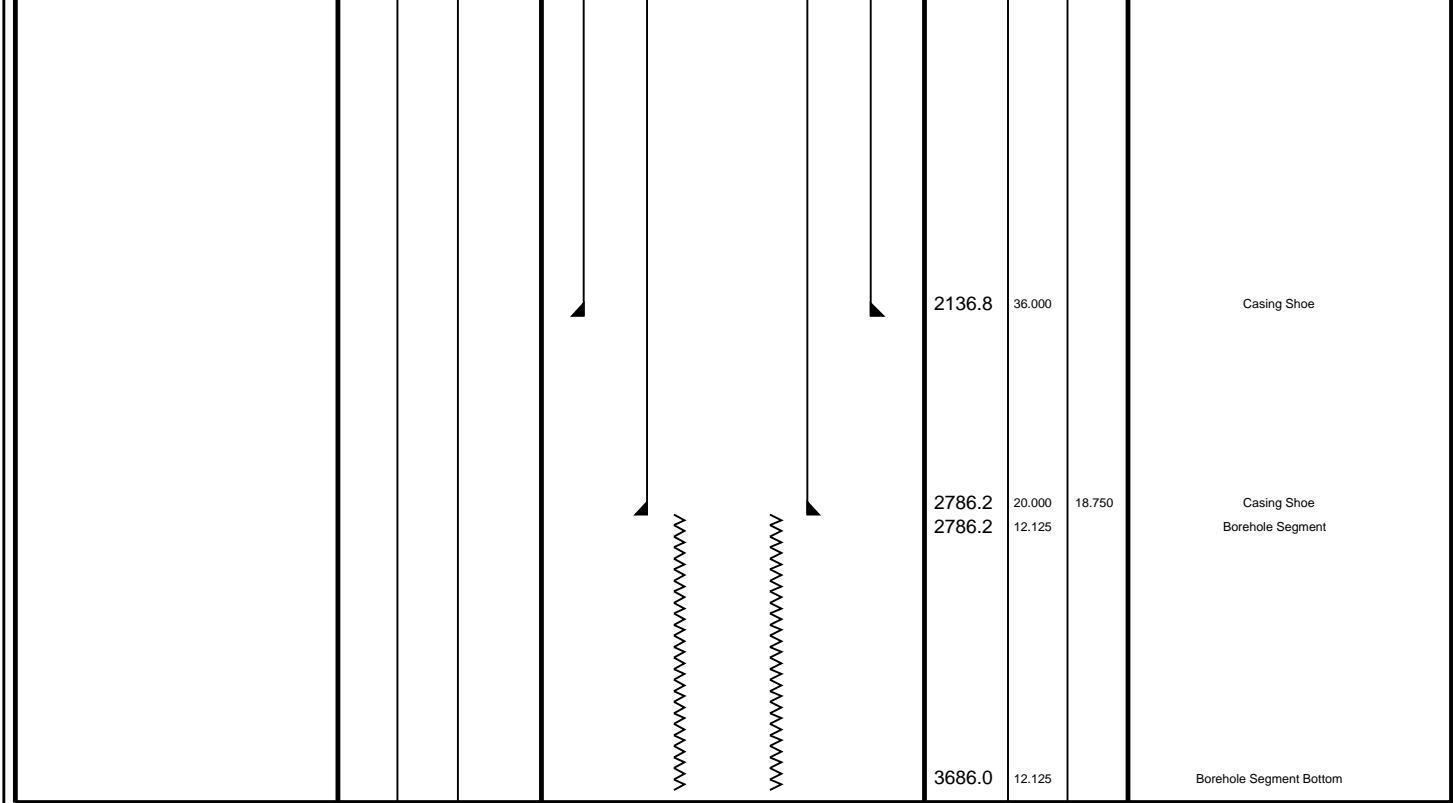


RUN 2



Client: CDEX  
 Well: C0009A  
 Field: Nankai Trough  
 State: Wakayama  
 Country: JAPAN  
 Rig Name: Chikyu  
 Reference Datum: Mean Sea Level  
 Elevation: 28.3 m  
 Drawing Date: 7/11/2009

Production String	(in)			Well Schematic	(m)			Casing String
	OD	ID	MD		MD	OD	ID	
				Derrick Floor Elevation 28.3 Mean Sea Level 0.0				
					2082.3	36.000		Casing String



**Main Log  
1:200**

MAXIS Field Log

Company: CDEX Well: C0009A

**Input DLIS Files**

DEFAULT	FMI_NGS_EMS_MAXS_038LUP	FN:114	PRODUCER	13-Jul-2009 17:16	3659.9 M	2752.6 M
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**Output DLIS Files**

DEFAULT	FMI_NGS_EMS_CAL_017PUP	FN:50	PRODUCER	12-Aug-2009 23:04	3662.2 M	2755.8 M
CLIENT	FMI_NGS_EMS_CAL_017PUC	FN:51	CUSTOMER	12-Aug-2009 23:04	3662.2 M	2755.8 M

**Integrated Hole/Cement Volume Summary**

Hole Volume = 71.35 M3  
 Cement Volume = 71.35 M3 (assuming 0.00 IN casing O.D.)  
 Computed from 3662.2 M to 2785.1 M using data channel(s) C1 C2

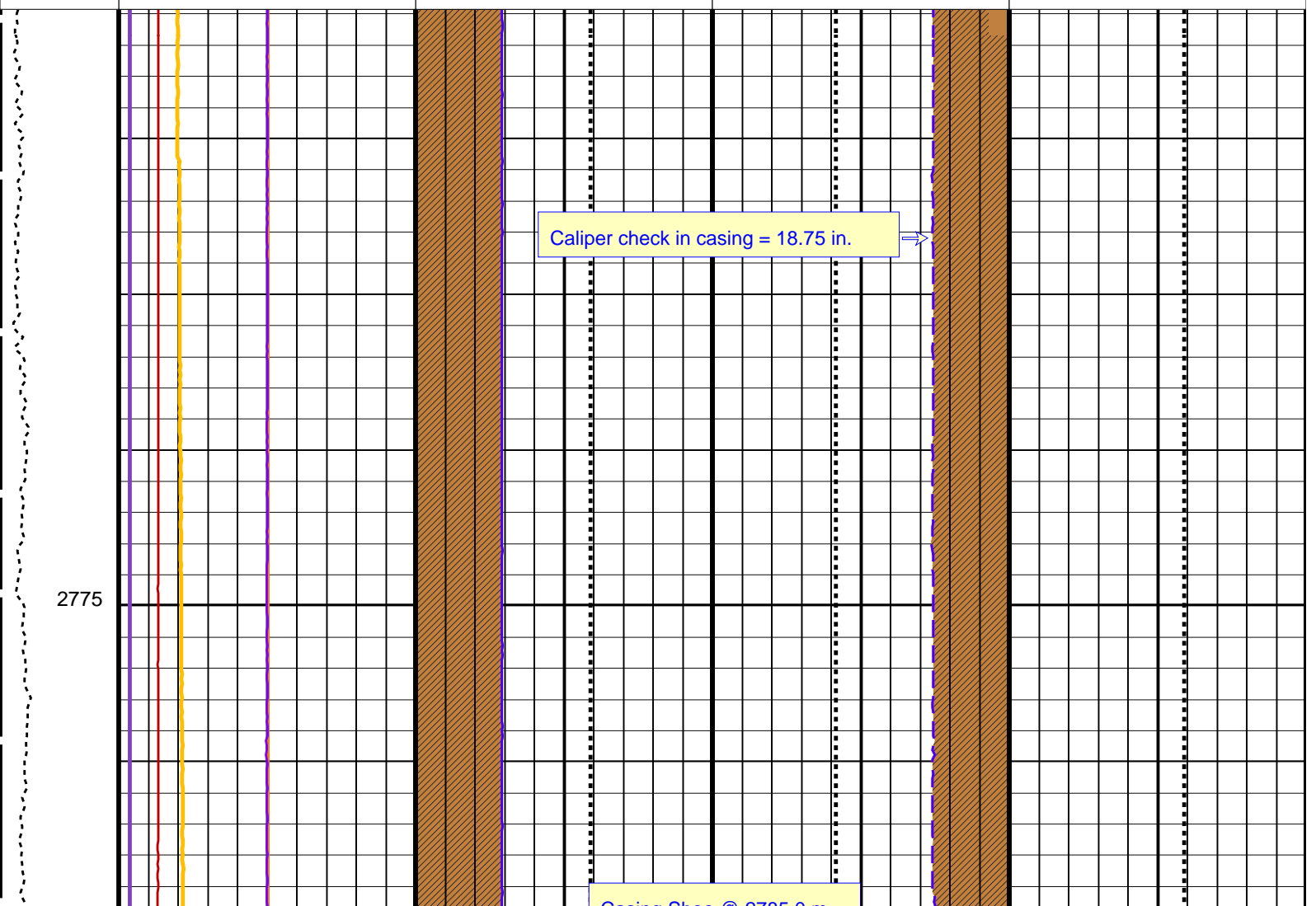
# OP System Version: 17C0-154

FBST-B	17C0-154	HNGC-B	17C0-154
HNGS-BA	SPC-3839-NUCL	EMS-B	17C0-154
PPC1-B	17C0-154	EDTC-B	17C0-154

## PIP SUMMARY

- ┆ Integrated Hole Volume Minor Pip Every 0.1 M3
- ┆ Integrated Hole Volume Major Pip Every 1 M3
- ┆ Integrated Cement Volume Minor Pip Every 0.1 M3
- ┆ Integrated Cement Volume Major Pip Every 1 M3
- Time Mark Every 60 S

	<b>PPC1 Relative Bearing (RB_ PPC1)</b> 0 (DEG) 360	HD difference From EHD1_PPC1 to HD1_PPC1	HD difference From HD2_PPC1 to EHD2_PPC1
	<b>PPC1 Tool Center 2 (ETC2_ PPC1)</b> -10 (IN) 10	<b>PPC1 Hole Diameter 1 (HD1_ PPC1)</b> 24 (IN) 4	Formation From EHD2_PPC1 to F3
	<b>Mud Temperature (TMP)</b> 0 (DEGC) 100	<b>PPC1 Ellipse Hole Diameter 1 (EHD1_PPC1)</b> 24 (IN) 4	<b>PPC1 Hole Diameter 2 (HD2_ PPC1)</b> 4 (IN) 24
	<b>Mud Resistivity (REMS)</b> 0 (OHMM) 2	Formation From F2 to EHD1_PPC1	<b>PPC1 Ellipse Hole Diameter 2 (EHD2_PPC1)</b> 4 (IN) 24
Tension (TENS) (LBF) 0 2000	<b>PPC1 Tool Center 1 (ETC1_ PPC1)</b> -10 (IN) 10	Bit Size (BS) 24 (IN) 4	Bit Size (BS) 4 (IN) 24



Casing Shoe @ 2785.0 m

2800

TENS

TMP

REMS

RB\_PPC1

HD1\_PPC1

HD2\_PPC1

EHD1\_PPC1

EHD2\_PPC1

ETC2\_PPC1

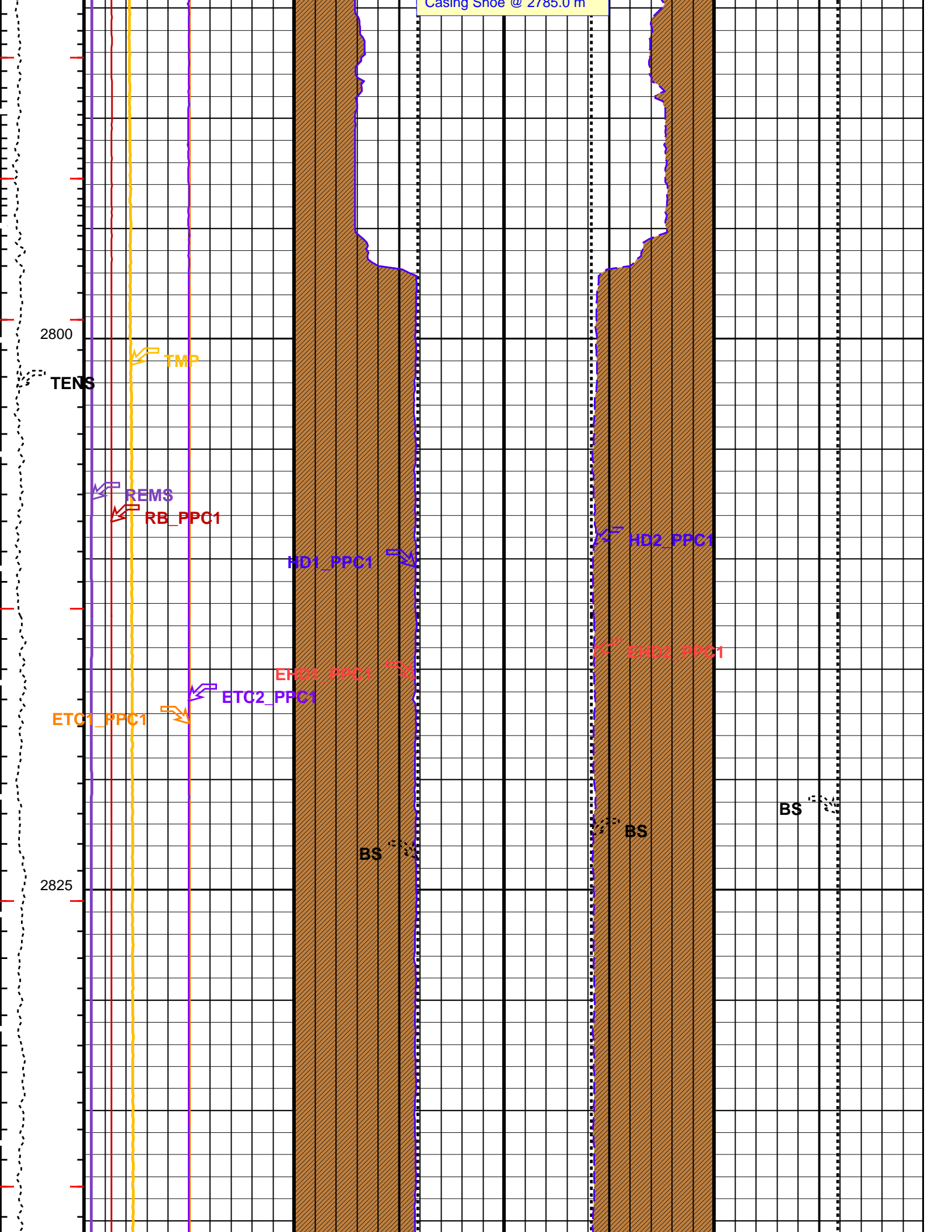
ETC1\_PPC1

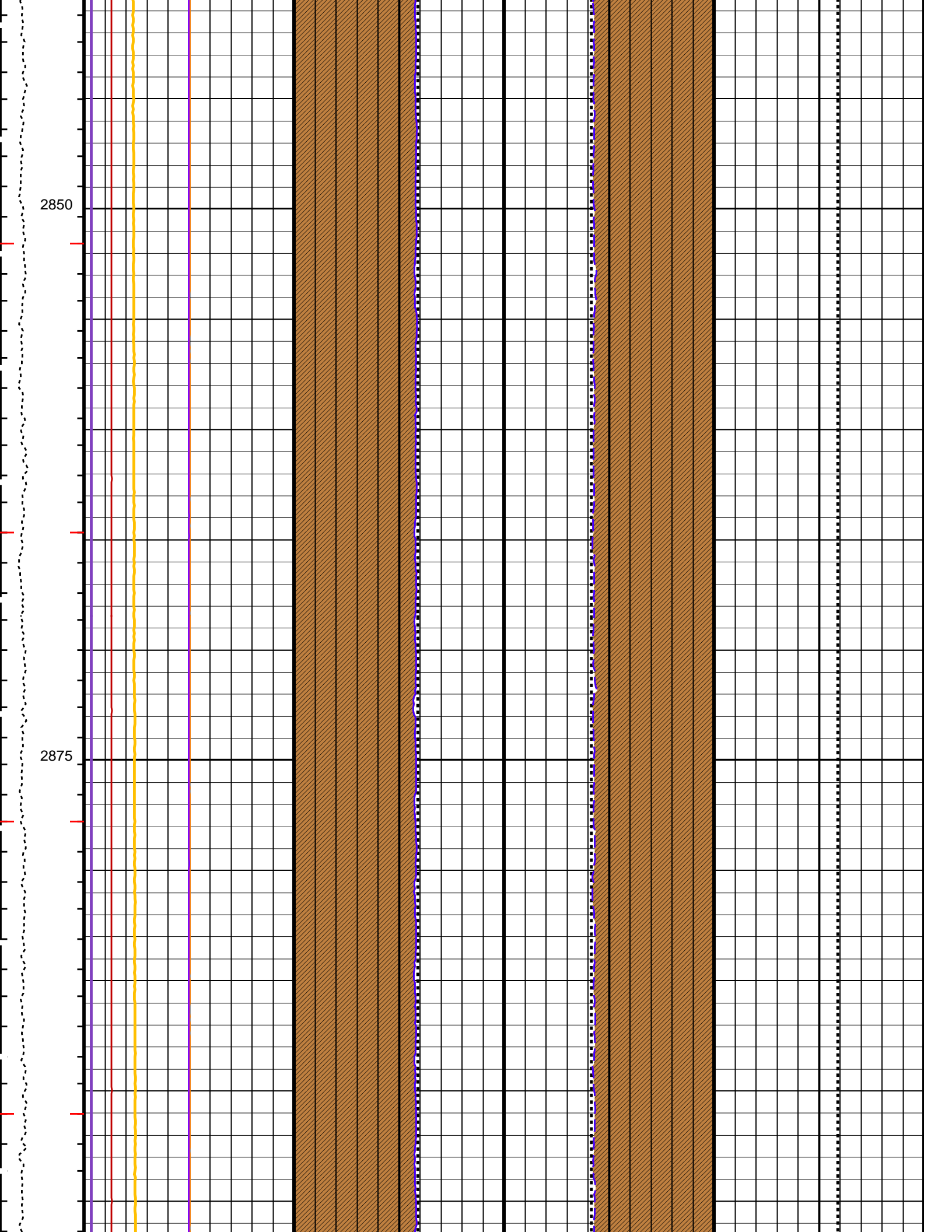
2825

BS

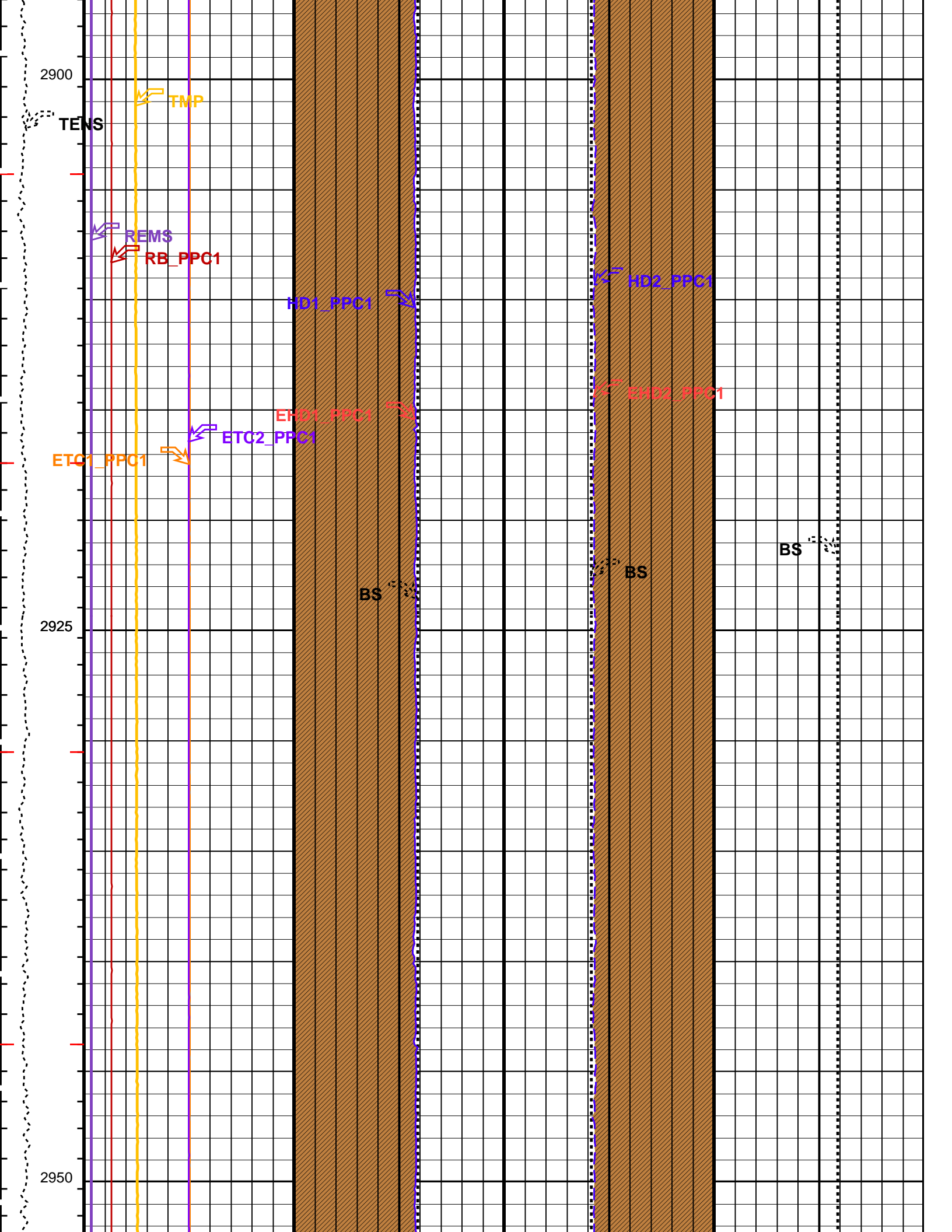
BS

BS









2900

TENS

TMP

REMS

RB\_PPC1

HD1\_PPC1

HD2\_PPC1

EHD1\_PPC1

EHD2\_PPC1

ETC2\_PPC1

ETC1\_PPC1

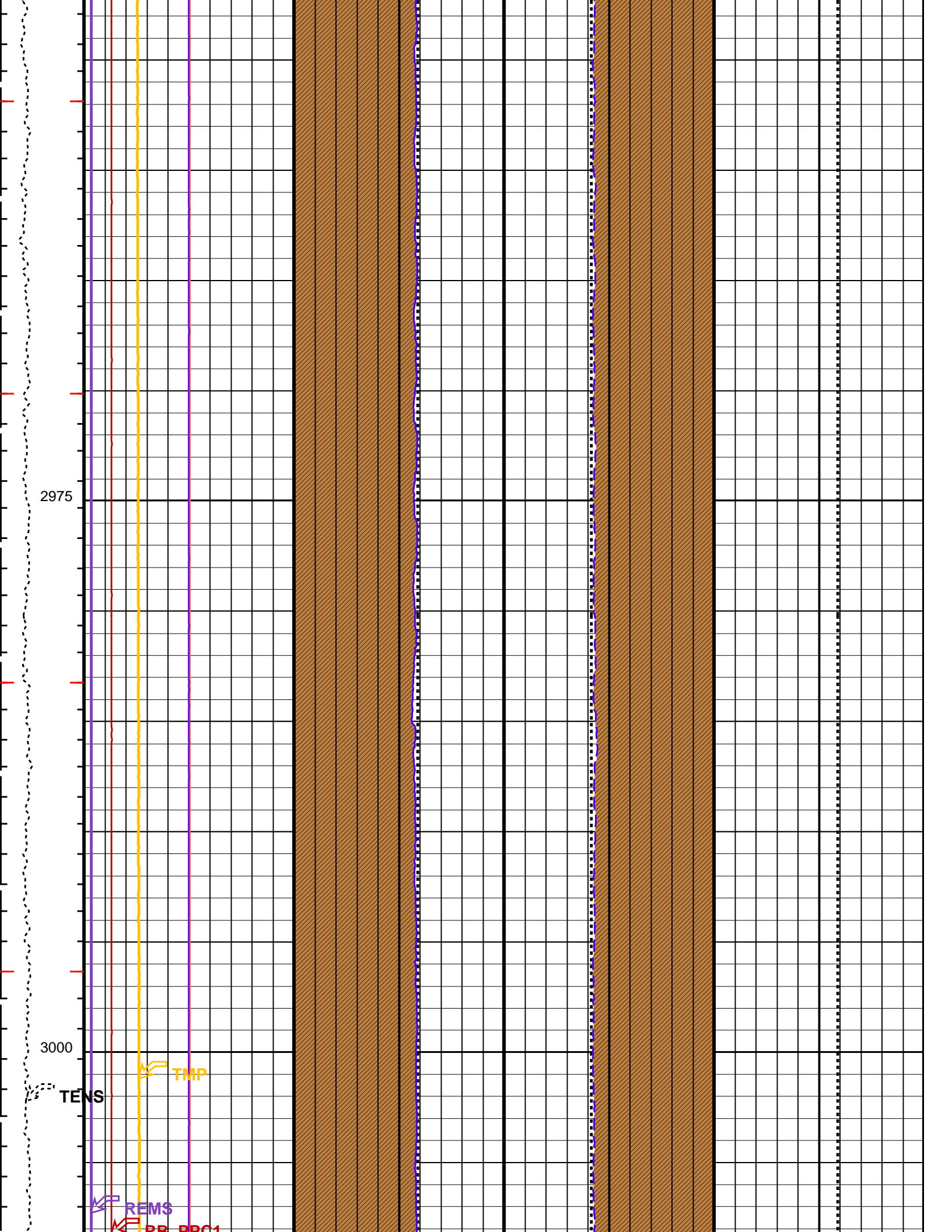
BS

BS

BS

2925

2950



2975

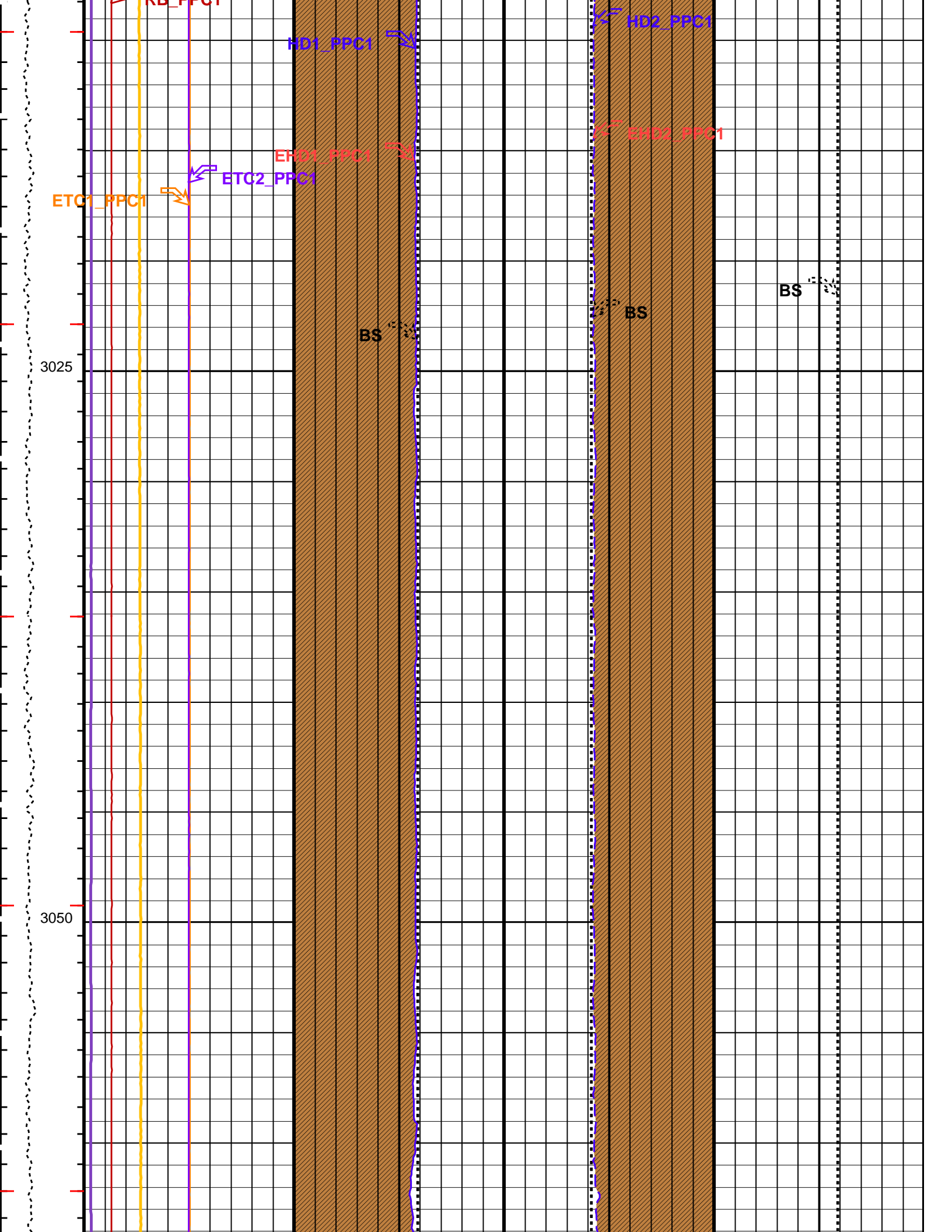
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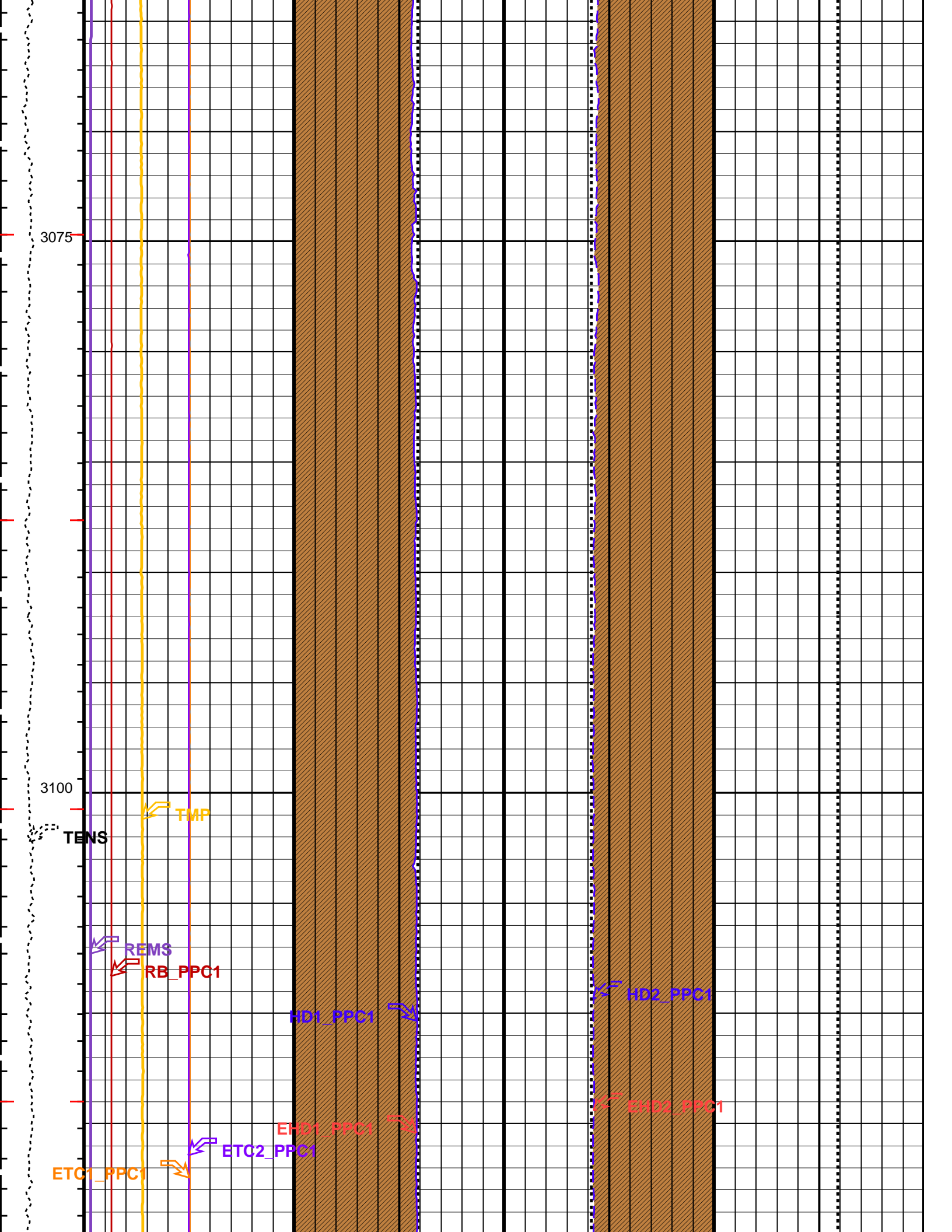
TENS

TMP

REMS

BB BBC1





3075

3100

TENS

TWP

REMS

RB\_PPC1

HD1\_PPC1

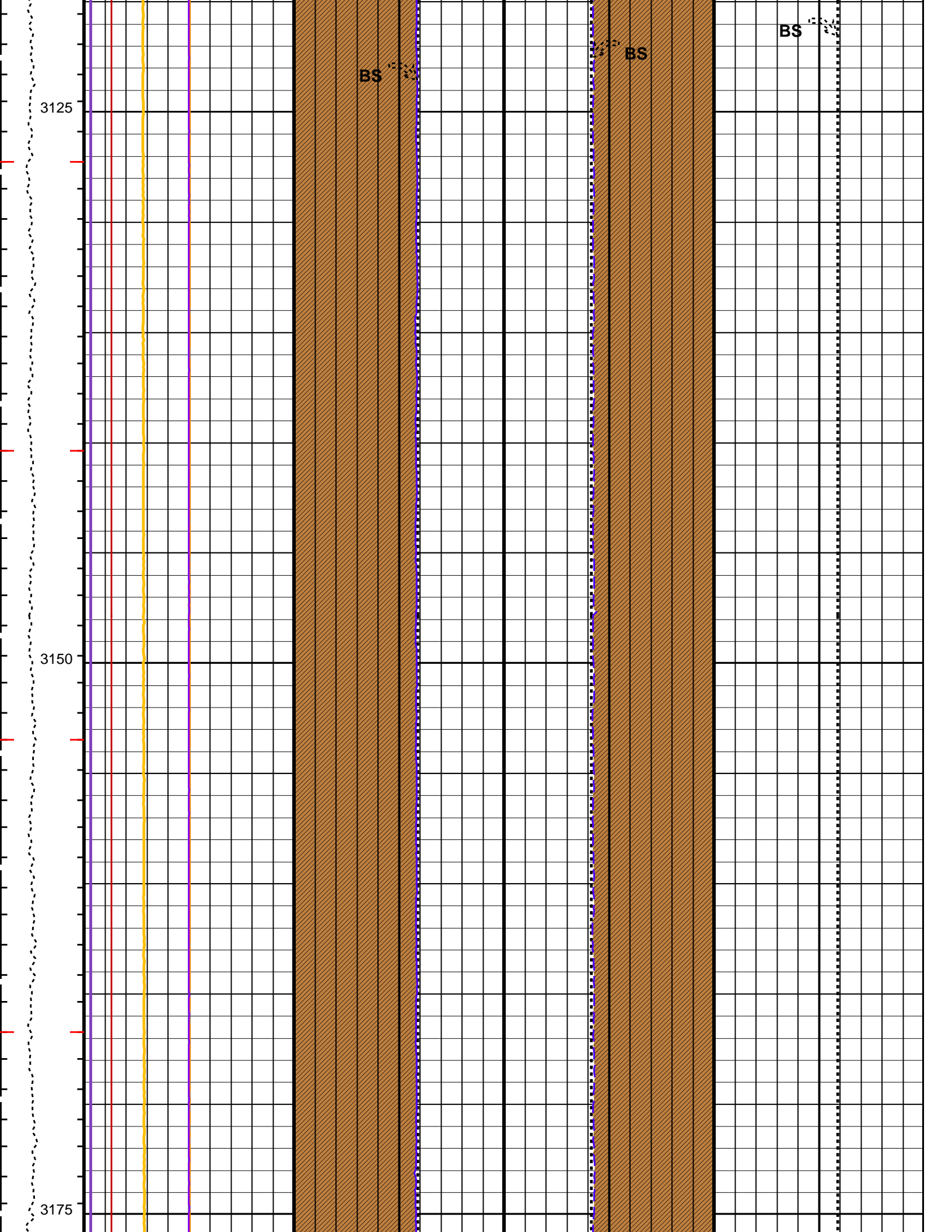
HD2\_PPC1

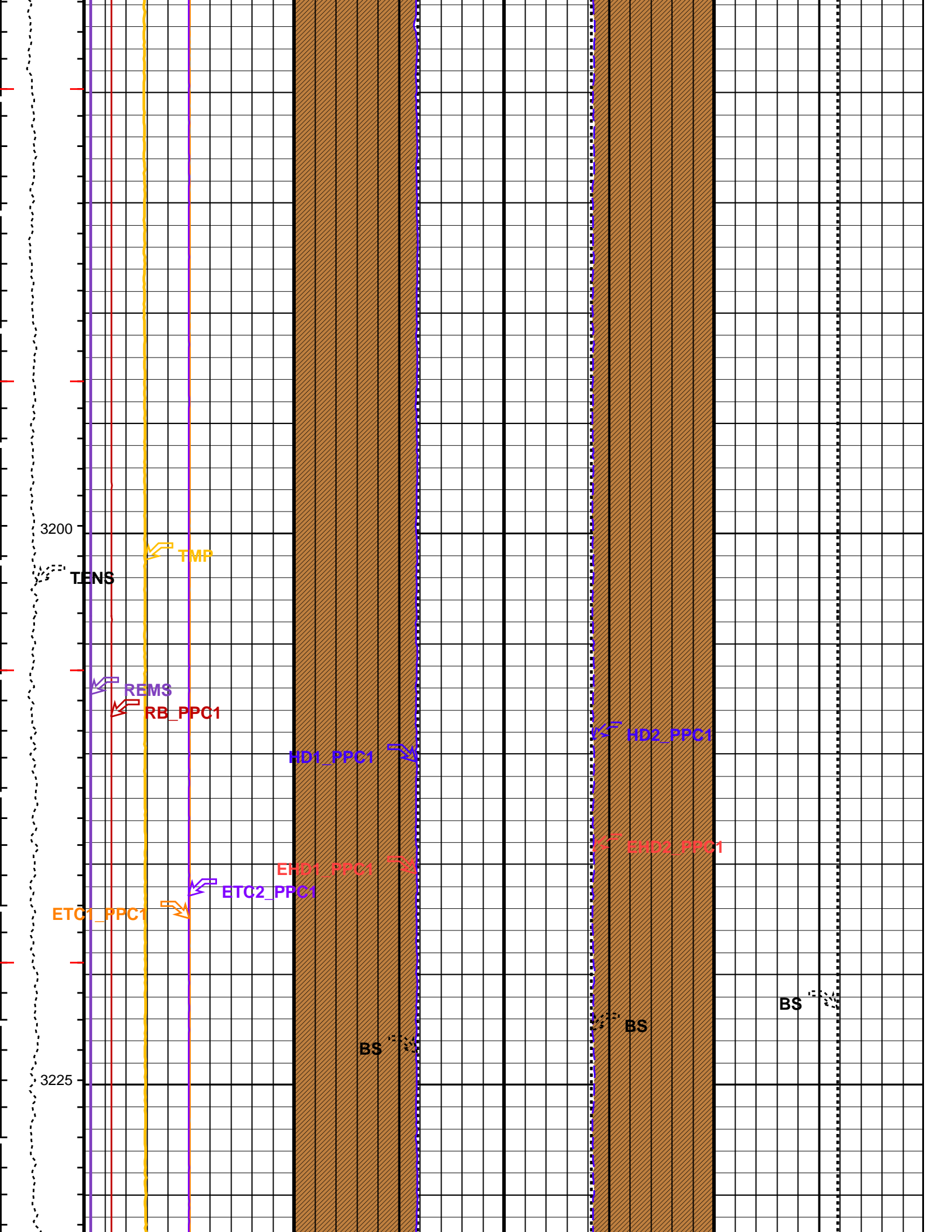
EHD1\_PPC1

EHD2\_PPC1

ETC1\_PPC1

ETC2\_PPC1





3200

TENS

TMP

REMS

RB\_PPC1

HD1\_PPC1

HD2\_PPC1

EHD2\_PPC1

EHD1\_PPC1

ETC2\_PPC1

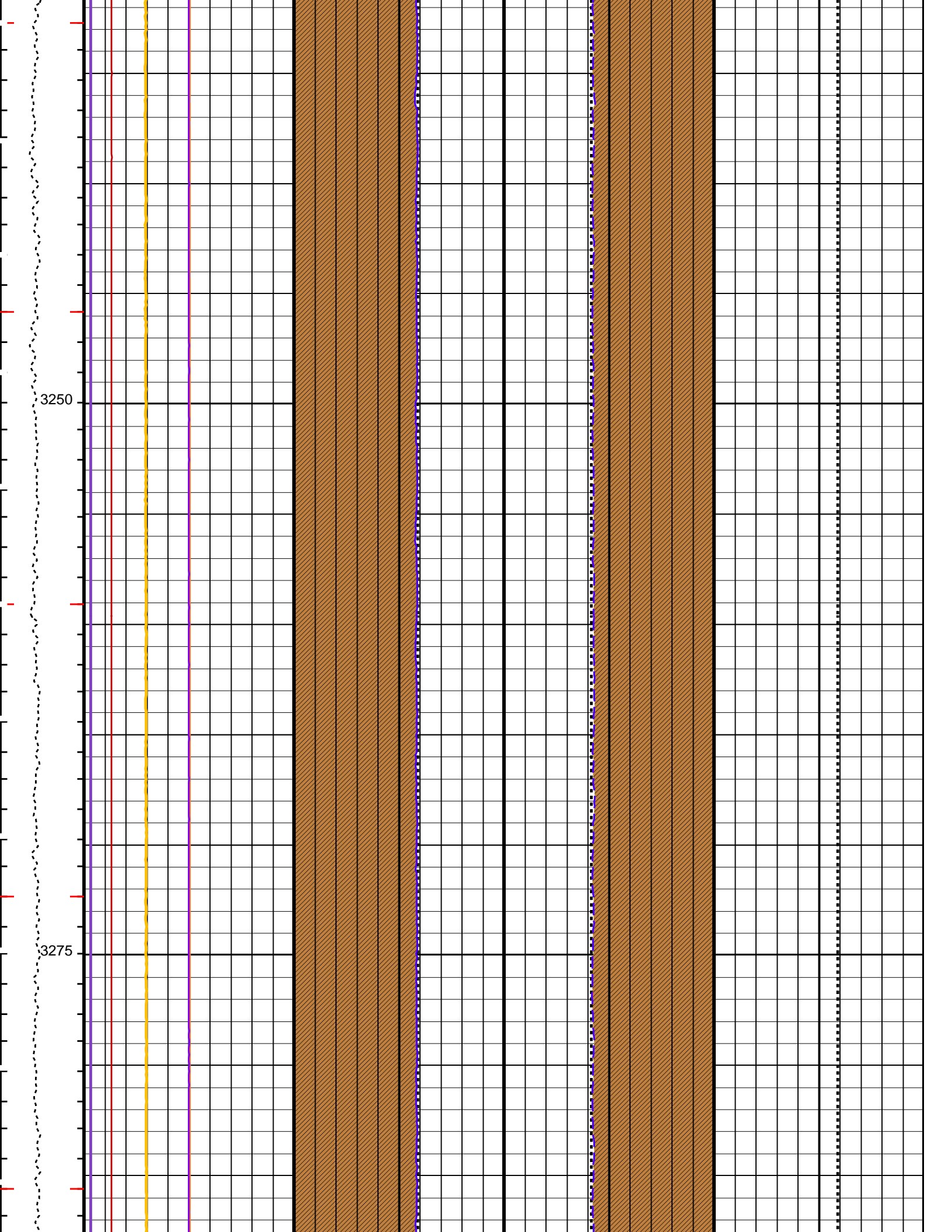
ETC1\_PPC1

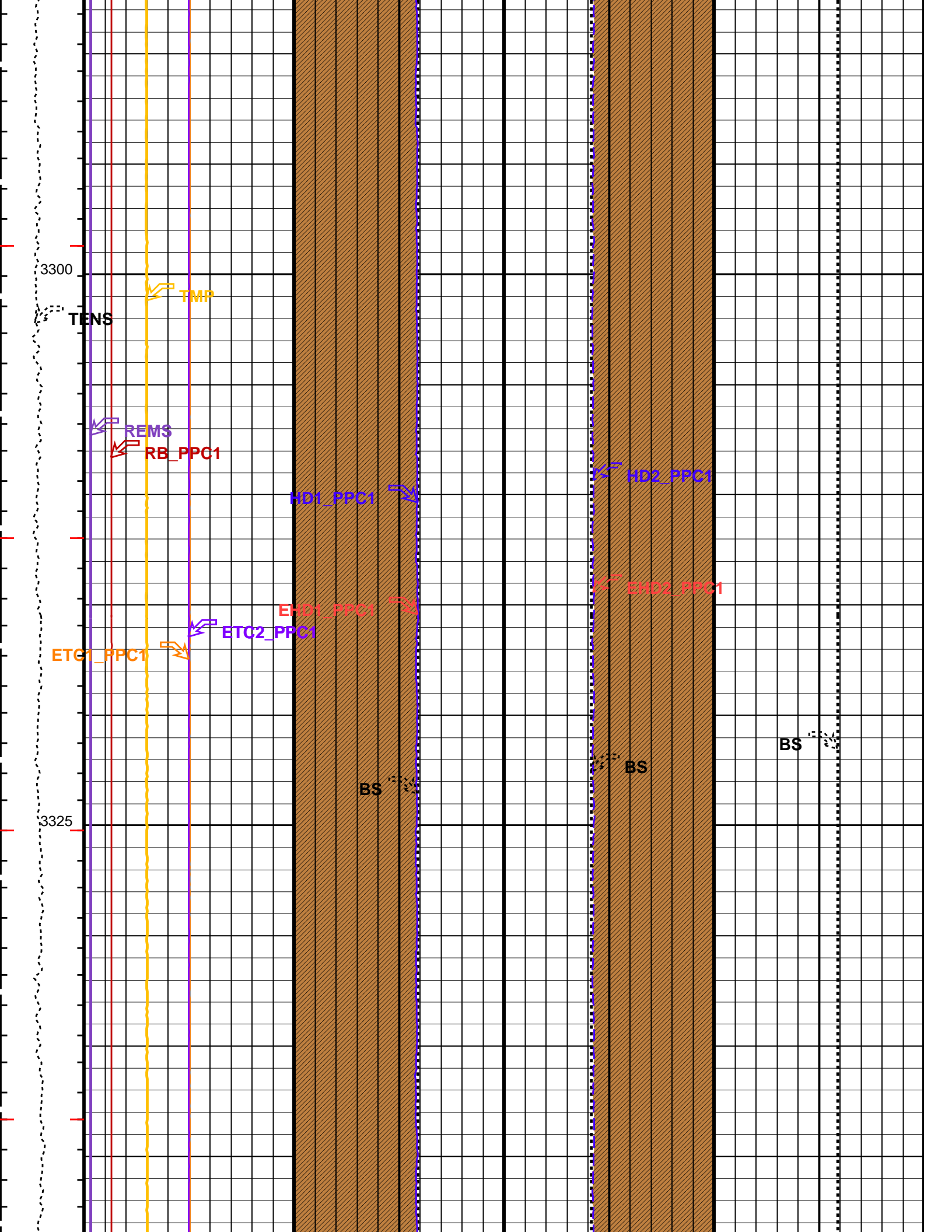
BS

BS

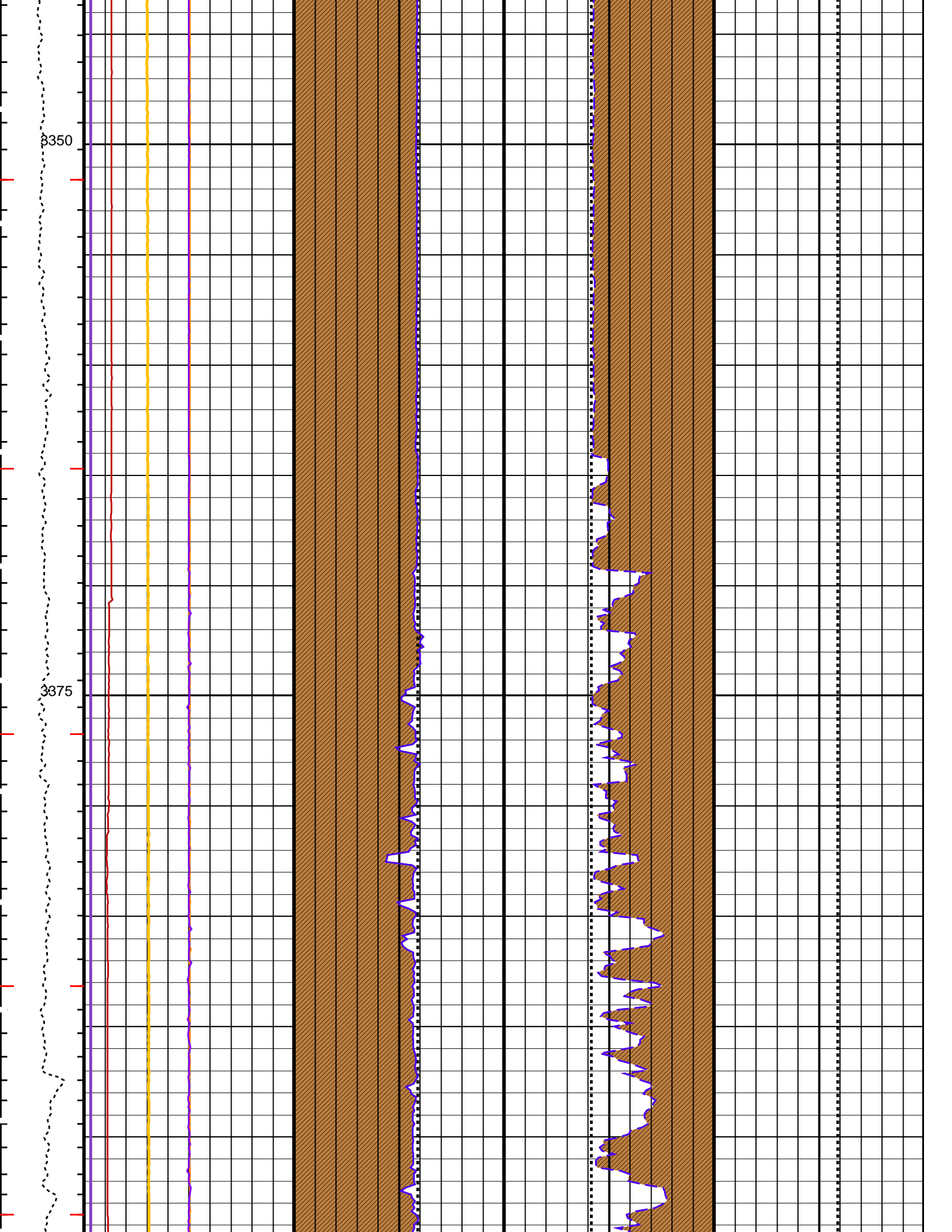
BS

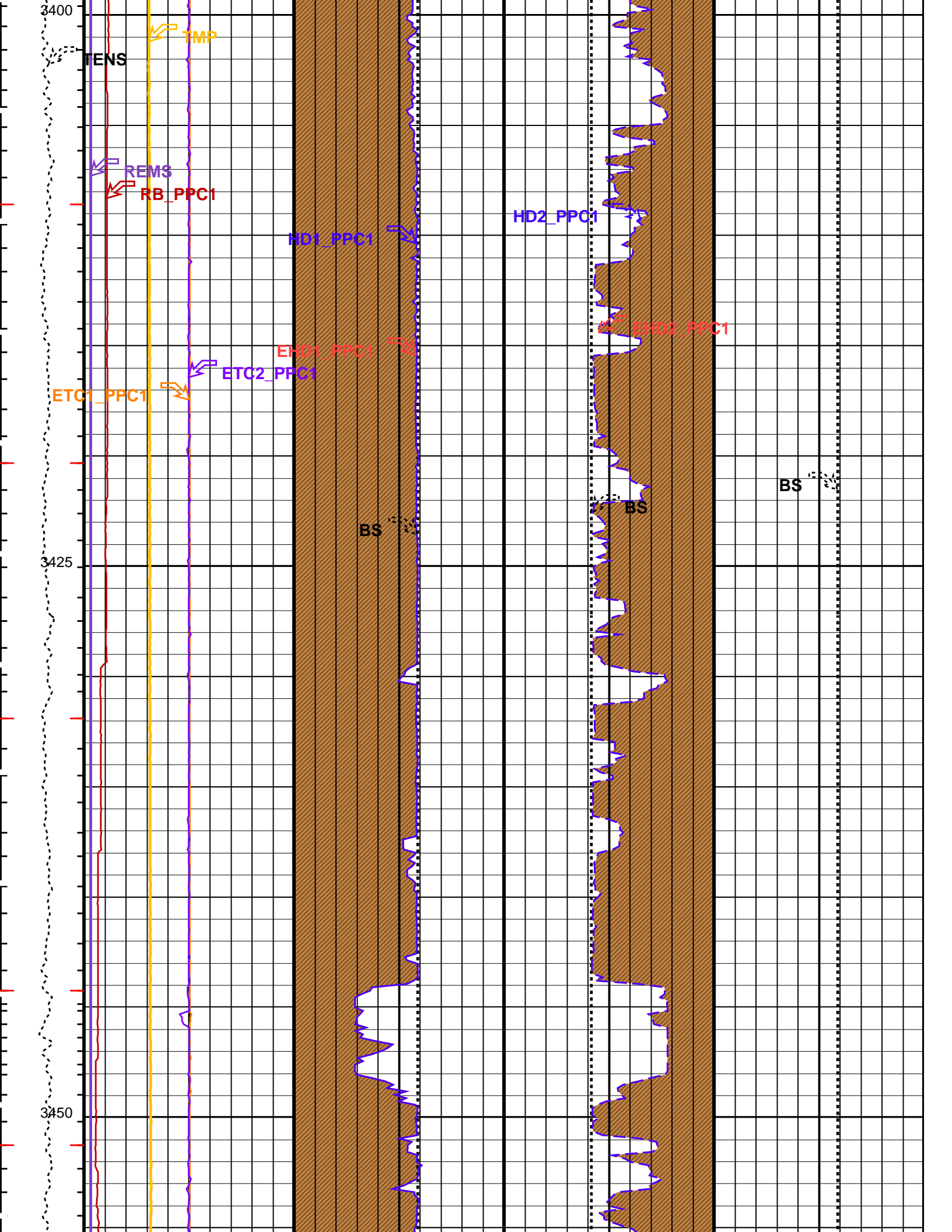
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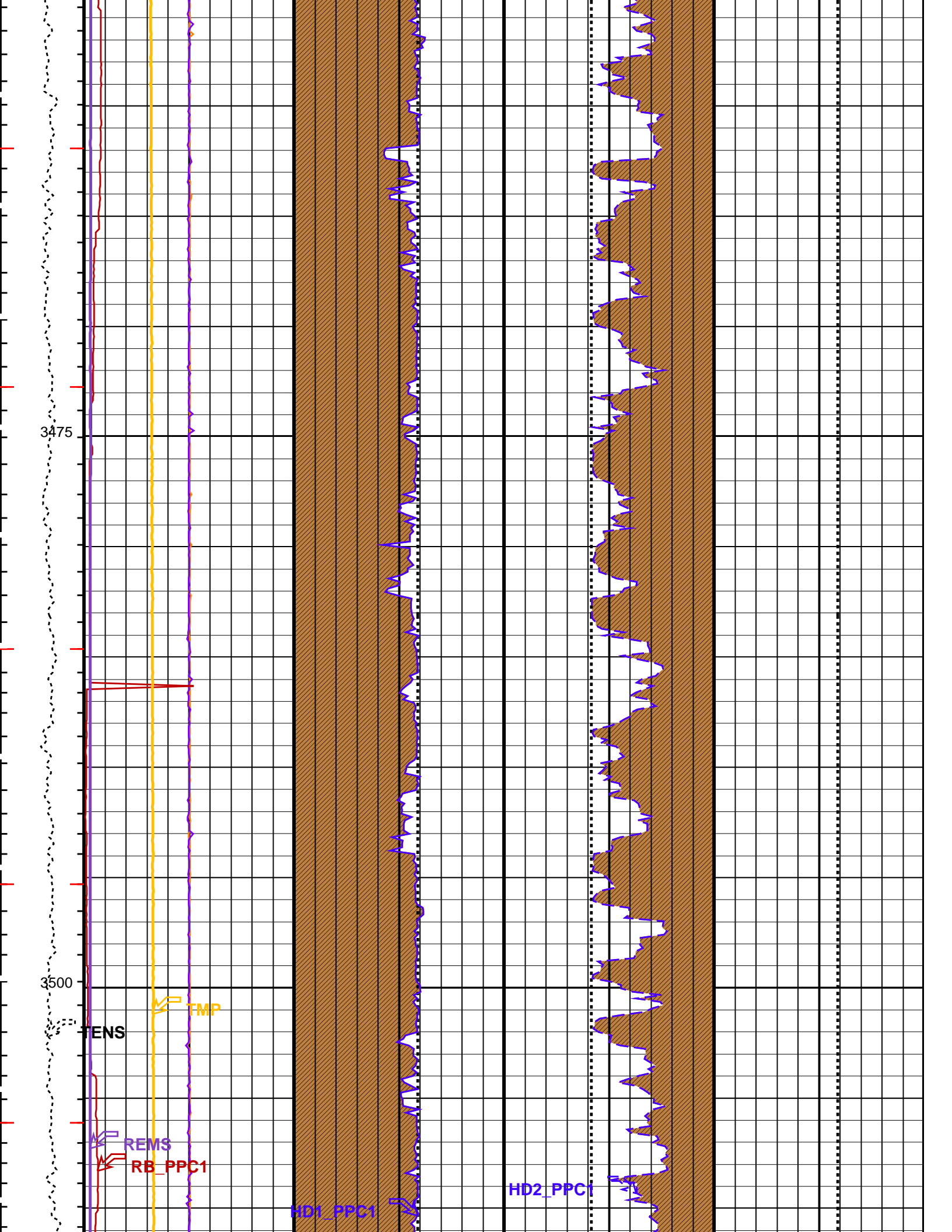


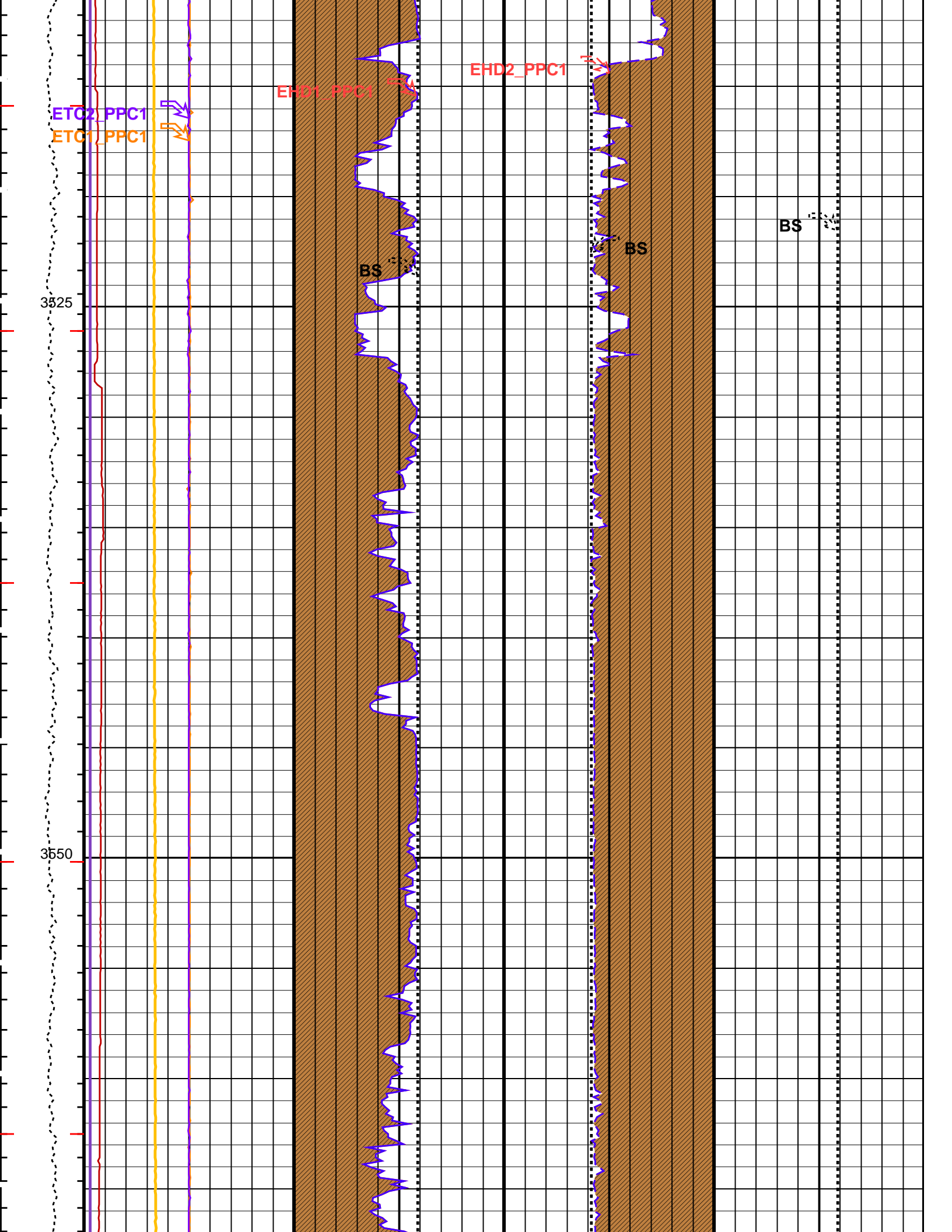


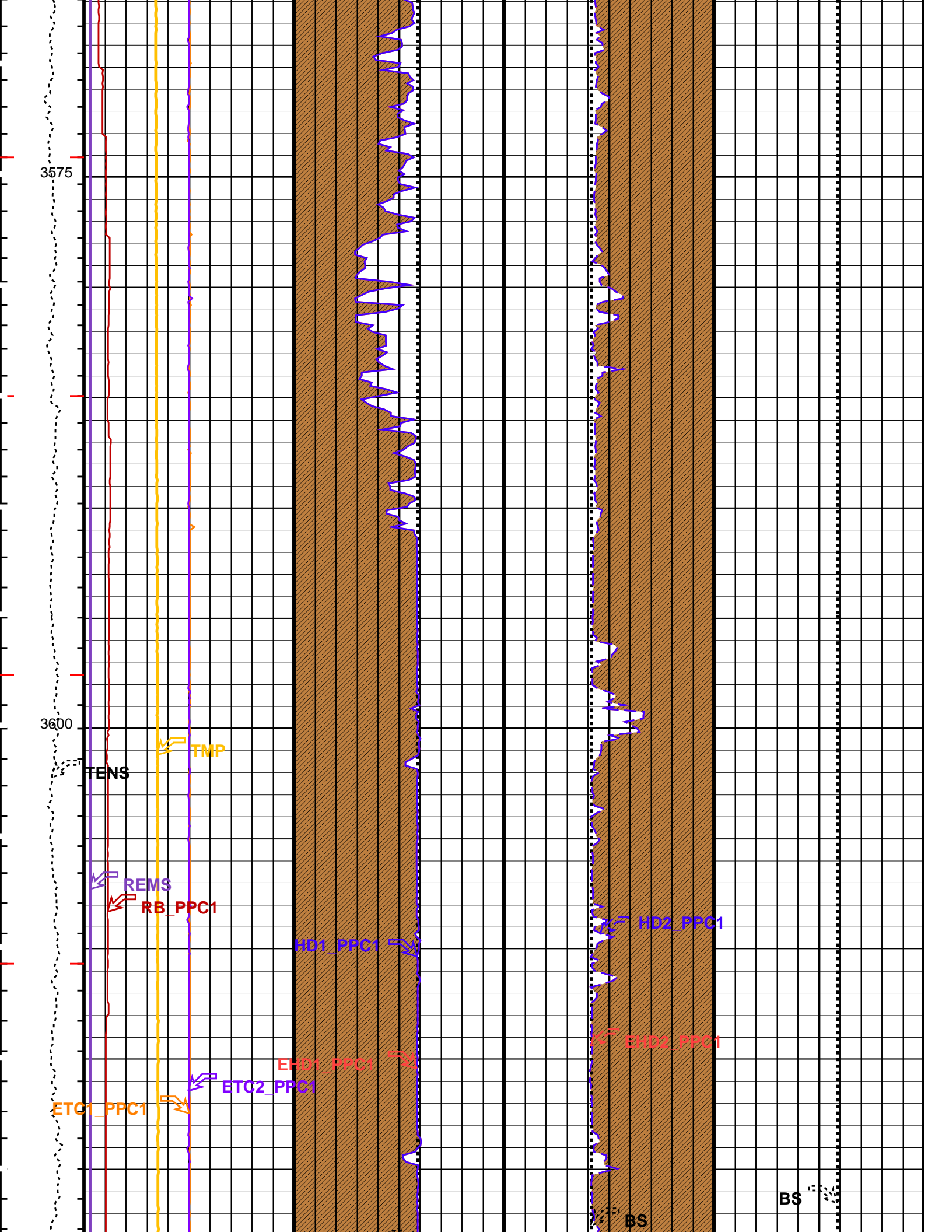


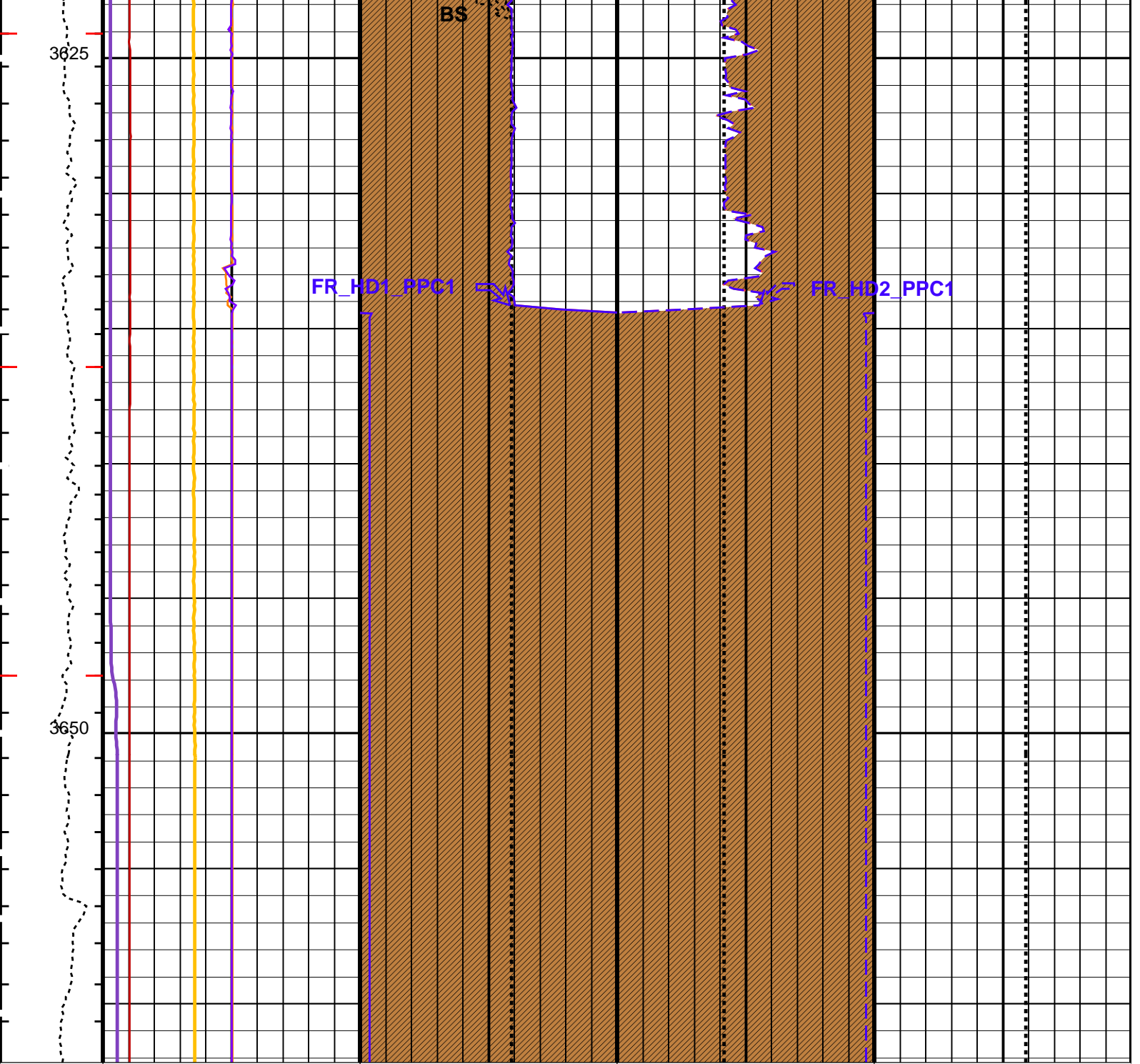












Tension (TENS) (LBF)	PPC1 Tool Center 1 (ETC1_PPC1)	Bit Size (BS)	Bit Size (BS)	Bit Size (BS)
0 2000	-10 (IN) 10	24 (IN) 4 4	(IN) 24 24	(IN) 4
Mud Resistivity (REMS) (OHMM)	0 2	Formation From F2 to EHD1_PPC1	PPC1 Ellipse Hole Diameter 2 (EHD2_PPC1)	4 (IN) 24
Mud Temperature (TMP) (DEGC)	0 100	PPC1 Ellipse Hole Diameter 1 (EHD1_PPC1)	PPC1 Hole Diameter 2 (HD2_PPC1)	24 (IN) 4 4 (IN) 24
PPC1 Tool Center 2 (ETC2_PPC1)	-10 (IN) 10	PPC1 Hole Diameter 1 (HD1_PPC1)	Formation From EHD2_PPC1 to F3	24 (IN) 4
PPC1 Relative Bearing (RB_PPC1) (DEG)	0 360	HD difference From EHD1_PPC1 to HD1_PPC1	HD difference From HD2_PPC1 to EHD2_PPC1	

- ┆ Integrated Hole Volume Minor Pip Every 0.1 M3
- ┆ Integrated Hole Volume Major Pip Every 1 M3
  - ┆ Integrated Cement Volume Minor Pip Every 0.1 M3
  - ┆ Integrated Cement Volume Major Pip Every 1 M3
- Time Mark Every 60 S

## Parameters

DLIS Name	Description	Value	
<b>FBST-B: Full-Bore Scanner - B</b>			
ACPP	Accelerometer PROM Presence	PRESENT	
AFMO	Accelerometer Filtering Mode	MOVING_AVERAGE	
ART	Accelerometer Reference Temperature	20	DEGC
EGCO	FMI EMEX and GAIN Correction	NO	
FBCD	Correct Dip Buttons Values by EMEX and Gain	OFF	
FBEF	FMI EMEX filtering activation	OFF	
FBMV	FMI EMEX maximum voltage calculation	OFF	
FDBD	FMI Dead Buttons detection	AUTO	
FDBP	FMI Dead Buttons Patching	ON	
FDFL	FMI DSP Filter Length	1	
FIEQ	FMI Image Equalisation	ON	
FIGA	FMI Image Gain	1	
FIOF	FMI Image Offset	0	
FLM	FMI Logging Mode	8PAD	
FPSA	FMI Peak Signal Amplitude for Required Servo Level	ON	
GLM	GPIT Logging Mode	DIPM	
GMOD	Gain Mode	AUTOLOW	
ICMO	Inclinometry Computation Mode	AUTOMATIC_SELECTION	
MAPP	Magnetometer PROM Presence	PRESENT	
MDEC	Magnetic Field Declination	-6.587	DEG
MRTE	Magneto Reference Temperature	22	DEGC
RBS	Resistivity Button Selection	AUTO	
RBSI	Auto RBS Change Interval	10	
SOFF	Standoff	-1	IN
TEMS	GPIT Temperature Sensor Used	BOTH	
U-GPOF	Playback OLD VERSION GPIT FILE (BEFORE OP14 + SRPC-3098-FEB_2006_C) ?	NO	
XGAI_FBST	Gain Value in Manual Mode	0_dB	
XGMO	EMEX & Gain Modes	EmexManu_GainAutoLowRange	
XMOD	EMEX Voltage Regulation Mode	MANU	
XVOL	EMEX Voltage	175	V
<b>HNGS-BA: Hostile Natural Gamma Ray Sonde</b>			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	33.89	DEGC
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	EMS_RESIST	
GTSE	Generalized Temperature Selection	EMS_TEMP	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	0.0134006	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
SHT	Surface Hole Temperature	20	DEGC
TPOS	Tool Position	CENT	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.03291	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.05889	
<b>EMS-B: Environment Measurement Sonde</b>			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	33.89	DEGC
EAAB	EMS Accelerometer Coefficient:Ab	0	
EAAS	EMS Accelerometer Coefficient:As	0	
EABB	EMS Accelerometer Coefficient:Bb	0	
EABS	EMS Accelerometer Coefficient:Bs	0	
EACB	EMS Accelerometer Coefficient:Cb	0	

EACS	EMS Accelerometer Coefficient:Cs	0	
EMUD	EMS Mudcake Correction	OFF	
FCD	Future Casing (Outer) Diameter	0	IN
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	EMS_RESIST	
GTSE	Generalized Temperature Selection	EMS_TEMP	
HVCS	Integrated Hole Volume Caliper Selection	PPC1_Calipers	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	20	DEGC
PPC1-B: Powered Positioning Device/Caliper 1			
	PPC1 Caliper Type	CAL_STD	
CLBD_PPC	PPC Calibration data selection	ROM	
PWEL_PPC	PPC Primary Tool for WellCAD	NONE	
SWEL_PPC	PPC Secondary Tool for WellCAD (45 Degrees Rotation PPC Tool)	NONE	
WRDR_PPC	PPC Rotation Direction for Secondary Tool	NONE	
EDTC-B: Enhanced DTS Cartridge			
BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	33.89	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DPPM	Density Porosity Processing Mode	STAN	
FSAL	Formation Salinity	-50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	EMS_RESIST	
GTSE	Generalized Temperature Selection	EMS_TEMP	
HSCO	Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
ISSBAR_EDTC	Nuclear Mud Type	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MWCO	Mud Weight Correction Option	NO	
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	20	DEGC
SOCN	Standoff Distance	2.5	IN
SOCO	Standoff Correction Option	NO	
TPOS_EDTC	EDTC Tool Centered/Eccentered	Centered	
System and Miscellaneous			
ALTDPCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	12.250	IN
BSAL	Borehole Salinity	110000.00	PPM
CSIZ	Current Casing Size	20.000	IN
CWEI	Casing Weight	133.00	LB/F
DFD	Drilling Fluid Density	1.10	G/C3
DO	Depth Offset for Playback	3.2	M
FLEV	Fluid Level	10.00	M
MST	Mud Sample Temperature	25.70	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	0.0587	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	3667	M
TDD	Total Depth - Driller	3686.00	M
TDL	Total Depth - Logger	3667.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: PPC HoleDia\_200 Vertical Scale: 1:200 Graphics File Created: 12-Aug-2009 23:04

### OP System Version: 17C0-154

FBST-B	17C0-154	HNGC-B	17C0-154
HNGS-BA	SPC-3839-NUCL	EMS-B	17C0-154
PPC1-B	17C0-154	EDTC-B	17C0-154

### Input DLIS Files

DEFAULT	FMI_NGS_EMS_MAXS_038LUP	FN:114	PRODUCER	13-Jul-2009 17:16	3659.9 M	2752.6 M
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### Output DLIS Files

DEFAULT	FMI_NGS_EMS_CAL_017PUP	FN:50	PRODUCER	12-Aug-2009 23:04
CLIENT	FMI_NGS_EMS_CAL_017PUC	FN:51	CUSTOMER	12-Aug-2009 23:04



Company: CDEX

Well: C0009A

### Input DLIS Files

DEFAULT	FMI_NGS_EMS_MAXS_038LUP	FN:114	PRODUCER	13-Jul-2009 17:16	3659.9 M	2752.6 M
DEFAULT	FMI_NGS_EMS_CAL_005PUP	FN:28	PRODUCER	08-Aug-2009 16:39	2900.0 M	2844.9 M

### Output DLIS Files

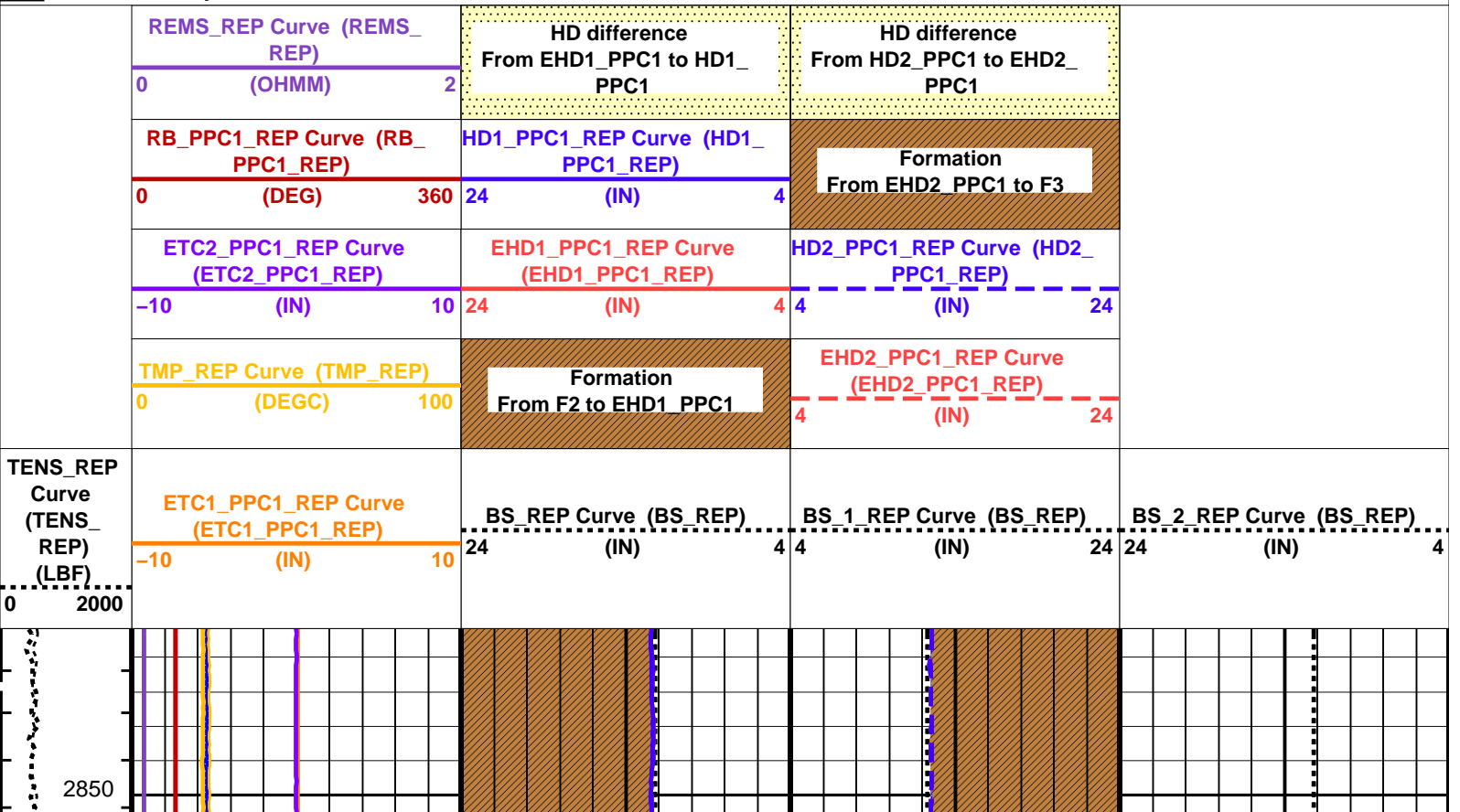
DEFAULT	FMI_NGS_EMS_CAL_006PUP	FN:30	PRODUCER	08-Aug-2009 16:43		
CLIENT	FMI_NGS_EMS_CAL_006PUC	FN:31	CUSTOMER	08-Aug-2009 16:43		

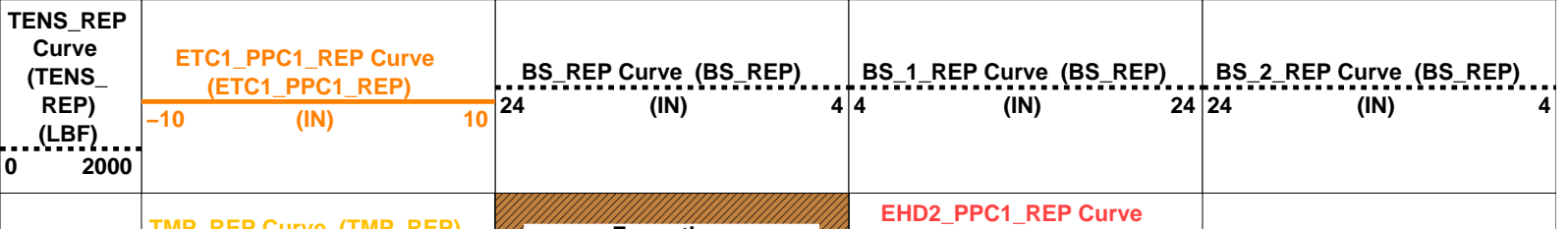
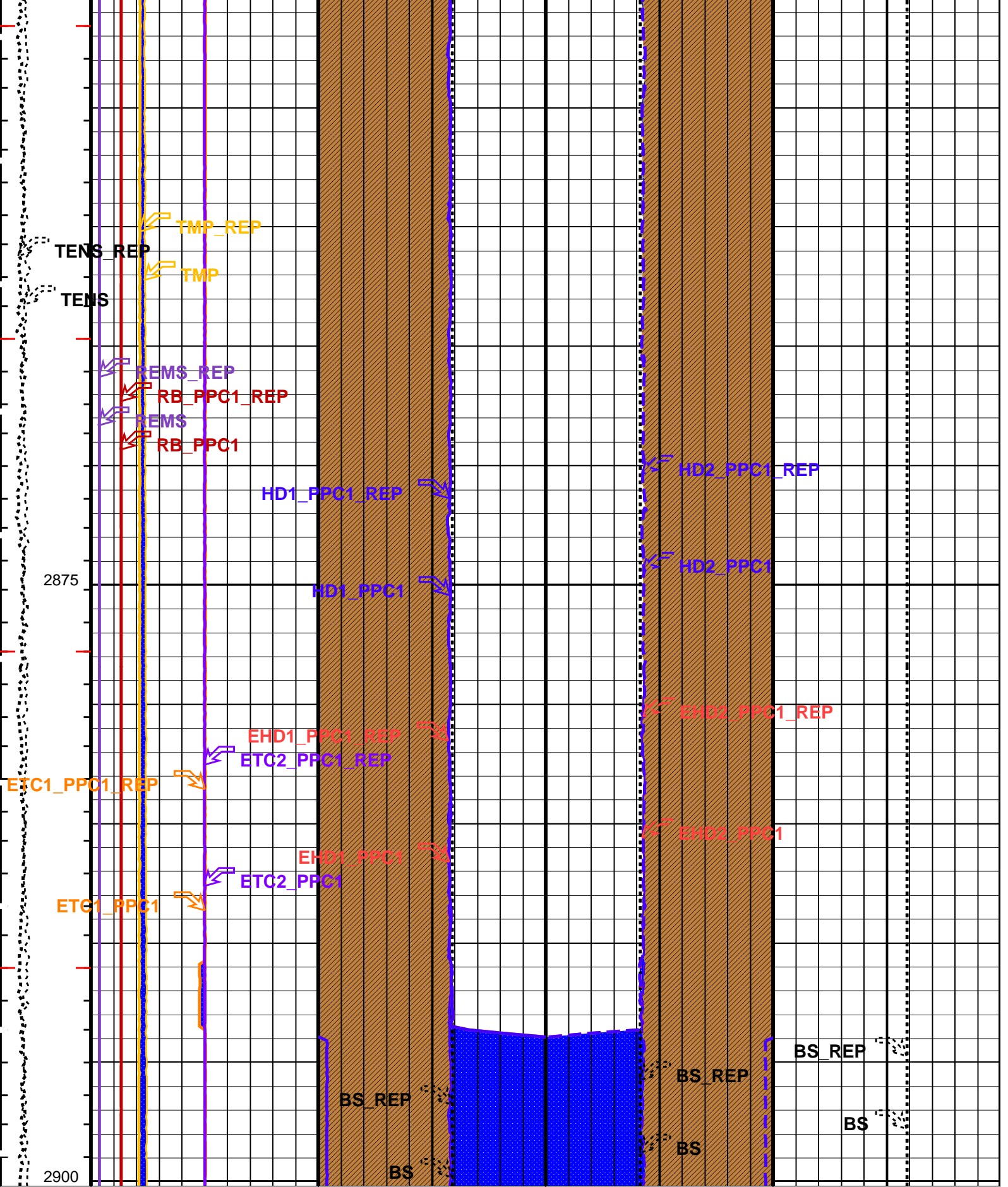
### OP System Version: 17C0-154

FBST-B	17C0-154	HNGC-B	17C0-154
HNGS-BA	SPC-3839-NUCL	EMS-B	17C0-154
PPC1-B	17C0-154	EDTC-B	17C0-154

### PIP SUMMARY

- ┆ Integrated Hole Volume Minor Pip Every 0.1 M3
- ┆ Integrated Hole Volume Major Pip Every 1 M3
- ┆ Integrated Cement Volume Minor Pip Every 0.1 M3
- ┆ Integrated Cement Volume Major Pip Every 1 M3
- Time Mark Every 60 S





TMP_REP Curve (TMP_REP)		Formation From F2 to EHD1_PPC1		(EHD2_PPC1_REP)	
0	(DEGC)	100		4	24
ETC2_PPC1_REP Curve (ETC2_PPC1_REP)		EHD1_PPC1_REP Curve (EHD1_PPC1_REP)		HD2_PPC1_REP Curve (HD2_PPC1_REP)	
-10	(IN)	10	24	4	24
RB_PPC1_REP Curve (RB_PPC1_REP)		HD1_PPC1_REP Curve (HD1_PPC1_REP)		Formation From EHD2_PPC1 to F3	
0	(DEG)	360	24	4	
REMS_REP Curve (REMS_REP)		HD difference From EHD1_PPC1 to HD1_PPC1		HD difference From HD2_PPC1 to EHD2_PPC1	
0	(OHMM)	2			

PIP SUMMARY

- ┆ Integrated Hole Volume Minor Pip Every 0.1 M3
- ┆ Integrated Hole Volume Major Pip Every 1 M3
  - ┆ Integrated Cement Volume Minor Pip Every 0.1 M3
  - ┆ Integrated Cement Volume Major Pip Every 1 M3
- Time Mark Every 60 S

Format: PPC HoleDia\_200\_REP Vertical Scale: 1:200 Graphics File Created: 08-Aug-2009 16:43

OP System Version: 17C0-154

FBST-B	17C0-154	HNGC-B	17C0-154
HNGS-BA	SPC-3839-NUCL	EMS-B	17C0-154
PPC1-B	17C0-154	EDTC-B	17C0-154

Input DLIS Files

DEFAULT	FMI_NGS_EMS_MAXS_038LUP	FN:114	PRODUCER	13-Jul-2009 17:16	3659.9 M	2752.6 M
DEFAULT	FMI_NGS_EMS_CAL_005PUP	FN:28	PRODUCER	08-Aug-2009 16:39	2900.0 M	2844.9 M

Output DLIS Files

DEFAULT	FMI_NGS_EMS_CAL_006PUP	FN:30	PRODUCER	08-Aug-2009 16:43
CLIENT	FMI_NGS_EMS_CAL_006PUC	FN:31	CUSTOMER	08-Aug-2009 16:43



Calibrations

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Full-Bore Scanner – B Wellsite Calibration – Caliper Calibration							
Before: 12-Jul-2009 11:56							
Caliper 1 Small Jig	8.000	N/A	7.973	N/A	N/A	N/A	IN
Caliper 2 Small Jig	16.00	N/A	16.03	N/A	N/A	N/A	IN
Caliper 1 Large Jig	16.00	N/A	15.80	N/A	N/A	N/A	IN
Caliper 2 Large Jig	8.000	N/A	7.906	N/A	N/A	N/A	IN

Full-Bore Scanner – B Wellsite Calibration – CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY

Before: 12-Jul-2009 12:49	TEMPERATURE REFERENCE :	N/A	N/A	20	N/A	N/A	N/A	DEGC
---------------------------	-------------------------	-----	-----	----	-----	-----	-----	------

TEMPERATURE REFERENCE : N/A N/A 23 N/A N/A N/A DEGC  
 YEAR OF CALIBRATION : N/A N/A 3 N/A N/A N/A N/A  
 MONTH OF CALIBRATION : N/A N/A 4 N/A N/A N/A N/A  
 SERIAL NUMBER : N/A N/A 852 N/A N/A N/A N/A

Full-Bore Scanner – B Wellsite Calibration – CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY

Before: 12-Jul-2009 12:49

TEMPERATURE REFERENCE : N/A N/A 22 N/A N/A N/A N/A DEGC  
 YEAR OF CALIBRATION : N/A N/A 97 N/A N/A N/A N/A  
 MONTH OF CALIBRATION : N/A N/A 2 N/A N/A N/A N/A  
 SERIAL NUMBER : N/A N/A 287 N/A N/A N/A N/A

Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 1 Check

Master: 5-Jul-2009 18:42 Before: 5-Jul-2009 18:56

Na 511 Peak Loc 40.00 39.49 39.74 N/A N/A 1.000  
 Na 511 Peak Res 15.50 17.60 16.16 N/A N/A 2.000 %  
 High Voltage 1150 1214 1215 N/A N/A N/A V  
 Na 1785 Peak Loc 142.6 143.1 143.6 N/A N/A 7.000  
 Na 1785 Peak Res 8.500 9.645 9.431 N/A N/A 2.000 %  
 Temperature 15.50 26.77 26.77 N/A N/A N/A DEGC  
 Na Count Rate 45.00 23.60 23.58 N/A N/A 8.000 CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check

Master: 5-Jul-2009 18:42 Before: 5-Jul-2009 18:56

Na 511 Peak Loc 40.00 39.91 39.56 N/A N/A 1.000  
 Na 511 Peak Res 15.50 16.82 17.24 N/A N/A 2.000 %  
 High Voltage 1150 1105 1106 N/A N/A N/A V  
 Na 1785 Peak Loc 142.6 144.3 143.7 N/A N/A 7.000  
 Na 1785 Peak Res 8.500 9.151 8.788 N/A N/A 2.000 %  
 Temperature 15.50 26.35 26.46 N/A N/A N/A DEGC  
 Na Count Rate 45.00 23.75 23.52 N/A N/A 8.000 CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2

Master: 5-Jul-2009 18:42 Before: 5-Jul-2009 18:56

Coincidence Count Rate Ratio 1.000 0.9925 1.004 N/A N/A 0.05000

Powered Positioning Device/Caliper 1 Wellsite Calibration – PPC1 Caliper Calibration

Before: 12-Jul-2009 12:03

PPC1 Radius 1 Raw Small Radius 3.500 N/A 4.426 N/A N/A 0.5000 IN  
 PPC1 Radius 1 Raw Large Radius 8.000 N/A 8.666 N/A N/A 0.5000 IN  
 PPC1 Radius 2 Raw Small Radius 3.500 N/A 3.337 N/A N/A 0.5000 IN  
 PPC1 Radius 2 Raw Large Radius 8.000 N/A 7.746 N/A N/A 0.5000 IN  
 PPC1 Radius 3 Raw Small Radius 3.500 N/A 4.219 N/A N/A 0.5000 IN  
 PPC1 Radius 3 Raw Large Radius 8.000 N/A 8.465 N/A N/A 0.5000 IN  
 PPC1 Radius 4 Raw Small Radius 3.500 N/A 2.510 N/A N/A 0.5000 IN  
 PPC1 Radius 4 Raw Large Radius 8.000 N/A 7.022 N/A N/A 0.5000 IN

Enhanced DTS Cartridge Wellsite Calibration – EDTC Accelerometer Calibration

Before: 12-Jul-2009 13:01

EDTC Z-Axis Acceleration 9.810 N/A 9.794 N/A N/A N/A M/S2

Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration

Before: 12-Jul-2009 12:51

Gamma Ray (Jig – Bkg) 167.1 N/A 167.1 N/A N/A 15.19 GAPI  
 Gamma Ray (Calibrated) 160.0 N/A 160.0 N/A N/A 15.00 GAPI

Full-Bore Scanner – B / Equipment Identification

Primary Equipment:



FullBore Scanner Sonde FBSS – B 816  
 FullBore Scanner Sonde Upper part FBSH – A 815  
 FullBore Scanner Sonde Cartridge FBSC – B 816  
 GPIT Cartridge – C GPIC – C 1843  
 Insulating Sub AH – 185 938  
 FullBore Scanner Control Cartridge FBCC – A 819

Auxiliary Equipment:

Electronics Cartridge Housing ECH – MRA 4811

Full-Bore Scanner – B Wellsite Calibration

Caliper Calibration

Phase	Caliper 1 Small Jig IN	Value	Phase	Caliper 2 Small Jig IN	Value	
Before		7.973	Before		16.03	
	6.800 (Minimum)	8.000 (Nominal)	9.200 (Maximum)	13.60 (Minimum)	16.00 (Nominal)	18.40 (Maximum)
Phase	Caliper 1 Large Jig IN	Value	Phase	Caliper 2 Large Jig IN	Value	

Phase	Caliper 1 Edge sig. IN	Value	Phase	Caliper 2 Edge sig. IN	Value	
Before		15.80	Before		7.906	
	13.60 (Minimum)	16.00 (Nominal)	18.40 (Maximum)	6.800 (Minimum)	8.000 (Nominal)	9.200 (Maximum)

Before: 12-Jul-2009 11:56

### Hostile Natural Gamma Ray Cartridge – B / Equipment Identification

Primary Equipment: HNGC Cartridge	HNGC – B	424
Auxiliary Equipment: HNGC Housing	HNGH – A	358

### Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment: HNGS Sonde	HNGS – BA	164
Auxiliary Equipment: HNGS Sonde Housing Gamma Source Radioactive	HNSH – BA GSR – Y	161 1005

### Hostile Natural Gamma Ray Sonde Wellsite Calibration

#### Detector 1 Check

Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value	
Master		39.49	Master		17.60	Master		1214	
Before		39.74	Before		16.16	Before		1215	
	37.50 (Minimum)	40.00 (Nominal)	43.50 (Maximum)	12.00 (Minimum)	15.50 (Nominal)	19.00 (Maximum)	900.0 (Minimum)	1150 (Nominal)	1600 (Maximum)
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value	
Master		143.1	Master		9.645	Master		26.77	
Before		143.6	Before		9.431	Before		26.77	
	135.0 (Minimum)	142.6 (Nominal)	150.3 (Maximum)	7.000 (Minimum)	8.500 (Nominal)	11.00 (Maximum)	-28.89 (Minimum)	15.50 (Nominal)	60.00 (Maximum)
Phase	Na Count Rate CPS	Value							
Master		23.60							
Before		23.58							
	10.00 (Minimum)	45.00 (Nominal)	100.0 (Maximum)						

Master: 5-Jul-2009 18:42

Before: 5-Jul-2009 18:56



### Hostile Natural Gamma Ray Sonde Wellsite Calibration

#### Detector 2 Check

Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value	
Master		39.91	Master		16.82	Master		1105	
Before		39.56	Before		17.24	Before		1106	
	37.50 (Minimum)	40.00 (Nominal)	43.50 (Maximum)	12.00 (Minimum)	15.50 (Nominal)	19.00 (Maximum)	900.0 (Minimum)	1150 (Nominal)	1600 (Maximum)
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value	
Master		144.3	Master		9.151	Master		26.35	
Before		143.7	Before		8.788	Before		26.46	
	135.0 (Minimum)	142.6 (Nominal)	150.3 (Maximum)	7.000 (Minimum)	8.500 (Nominal)	11.00 (Maximum)	-28.89 (Minimum)	15.50 (Nominal)	60.00 (Maximum)
Phase	Na Count Rate CPS	Value							
Master		23.75							
Before		23.52							
	10.00 (Minimum)	45.00 (Nominal)	100.0 (Maximum)						

Master: 5-Jul-2009 18:42

Before: 5-Jul-2009 18:56

Hostile Natural Gamma Ray Sonde Wellsite Calibration		
Ratio Of Detector 1 To Detector 2		
Phase	Coincidence Count Rate Ratio	Value
Master		0.9925
Before		1.004
	0.9500 (Minimum)      1.000 (Nominal)      1.050 (Maximum)	
Master: 5-Jul-2009 18:42		
Before: 5-Jul-2009 18:56		

Multimode Array Sonic Power Cartridge / Equipment Identification

Primary Equipment:

Multimode Array Sonic Minimum Service So      MAMS – BA      8048  
 Multimode Array Sonic Control Cartridge      MAPC – BA      8038

Auxiliary Equipment:









Electronics Cartridge Housing      ECH – SF      8038

Powered Positioning Device/Caliper 1 / Equipment Identification

Primary Equipment:

PPC Powered Positioning Device/Caliper      PPC1 – B      8169  
 PPC1 Caliper Standard      PPC\_ –

Auxiliary Equipment:

Powered Positioning Device/Caliper 1 Wellsite Calibration					
PPC1 Caliper Calibration					
Phase	PPC1 Radius 1 Raw Small Radius IN	Value	Phase	PPC1 Radius 1 Raw Large Radius IN	Value
Before		4.426	Before		8.666
	1.200 (Minimum)      3.500 (Nominal)      5.600 (Maximum)			6.100 (Minimum)      8.000 (Nominal)      9.700 (Maximum)	
Phase	PPC1 Radius 2 Raw Small Radius IN	Value	Phase	PPC1 Radius 2 Raw Large Radius IN	Value
Before		3.337	Before		7.746
	1.200 (Minimum)      3.500 (Nominal)      5.600 (Maximum)			6.100 (Minimum)      8.000 (Nominal)      9.700 (Maximum)	
Phase	PPC1 Radius 3 Raw Small Radius IN	Value	Phase	PPC1 Radius 3 Raw Large Radius IN	Value
Before		4.219	Before		8.465
	1.200 (Minimum)      3.500 (Nominal)      5.600 (Maximum)			6.100 (Minimum)      8.000 (Nominal)      9.700 (Maximum)	
Phase	PPC1 Radius 4 Raw Small Radius IN	Value	Phase	PPC1 Radius 4 Raw Large Radius IN	Value
Before		2.510	Before		7.022
	1.200 (Minimum)      3.500 (Nominal)      5.600 (Maximum)			6.100 (Minimum)      8.000 (Nominal)      9.700 (Maximum)	
Before: 12-Jul-2009 12:03					


Enhanced DTS Cartridge / Equipment Identification

Primary Equipment:

EDTC Gamma Ray Detector      EDTG – A/B      8215  
 Enhanced DTS Cartridge      EDTC – BB      8218

Auxiliary Equipment:

EDTC Housing      EDTH – B      8206

Enhanced DTS Cartridge Wellsite Calibration		
EDTC Accelerometer Calibration		
Phase	EDTC Z-Axis Acceleration M/S2	Value
Before		9.794
	9.610 (Minimum)      9.810 (Nominal)      10.01 (Maximum)	
Before: 12-Jul-2009 13:01		

Enhanced DTS Cartridge Wellsite Calibration

Detector Calibration

Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jig - Bkg) GAPI	Value	Phase	Gamma Ray (Calibrated) GAPI	Value
Before		3.157	Before		167.1	Before		160.0
	0 (Minimum)      30.00 (Nominal)      120.0 (Maximum)			151.9 (Minimum)      167.1 (Nominal)      182.3 (Maximum)			145.0 (Minimum)      160.0 (Nominal)      175.0 (Maximum)	

Before: 12-Jul-2009 12:51

Company: **CDEX**

**Schlumberger**

Well: **C0009A**

Field: **Kumanonada, Offshore Kii peninsula**

Rig: **Chikyu**

Country: **JAPAN**

PPC Borehole Volume  
3634.7m – 2785.0m  
Suite 1, Run 2 (1:200)