Schlumberger

Company: **CDEX**

Well: **C0009A**

Field: **Kumanonada, Offshore Kii peninsula**

Rig: **Chikyu** Country: **JAPAN**

Natural Spectroscopy Gamma Ray (HNGS)

3652.2m − 2785.0m

Suite 1, Run 2 (1:500)

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

LOCATION

NanKai Trough
NT2−11B

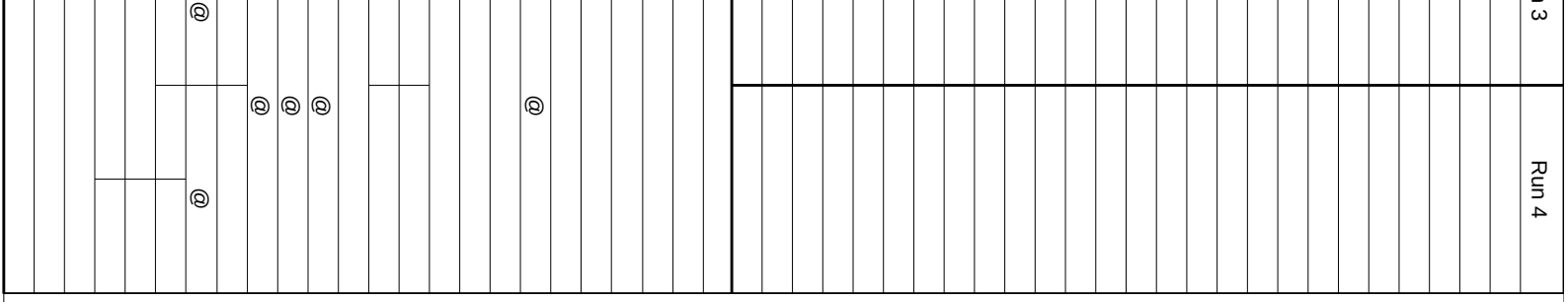
Elev.: K.B.
G.L.
D.F. 28.30 m

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:	Max. Well Deviation	Longitude	Latitude
Wakayama	0.7 deg	136* 32.1489' E	33* 27.4704' N

	Run 1	Run 2	Run 1	Run 2
Logging Date	12−Jul−2009			
Run Number	2			
Depth Driller	3686 m			
Schlumberger Depth	3667 m			
Bottom Log Interval	3652.5 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			
MUD Density / Viscosity	1.1 g/cm3	97 s		
MUD Fluid Loss / PH	4.1 cm3	10.6		
MUD 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	Press		
RM @ MRT / RMF @ 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 / Location	4308	JPOP		
Recorded By	Payap Thongpracharn			
Witnessed By	T. Honda / K. Takahashi			

	Run 1	Run 2	Run 1	Run 2
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				
MUD Density / Viscosity				
MUD Fluid Loss / PH				
MUD Source Of Sample				
RM @ Measured Temperature	@		@	
RMF @ Measured Temperature	@		@	
RMC @ Measured Temperature	@		@	
Source RMF / RMC				
RM @ MRT / RMF @ MRT	@	@	@	@
Maximum Recorded Temperatures				
Circulation Stopped / Time				
Logger On Bottom / Time				
Unit Number / Location				
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	Type:	CMTD−B/A	Type:	7−46A XXS
Serial Number:	6726	Serial Number:	2986	Serial Number:	6019
Calibration Date:	3−Apr−2009	Calibration Date:	16−Apr−2009	Length:	9200 M
Calibrator Serial Number:	17	Calibrator Serial Number:	1049		
Calibration Cable Type:	7−46A XXS	Number of Calibration Points:	10	Conveyance Method:	Wireline
Wheel Correction 1:	−6	Calibration RMS:	373	Rig Type:	Offshore Floater with WMC
Wheel Correction 2:	−6	Calibration Peak Error:	499		

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.

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.

Repeat section was taken from [illegible] – [illegible] as per client request.

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

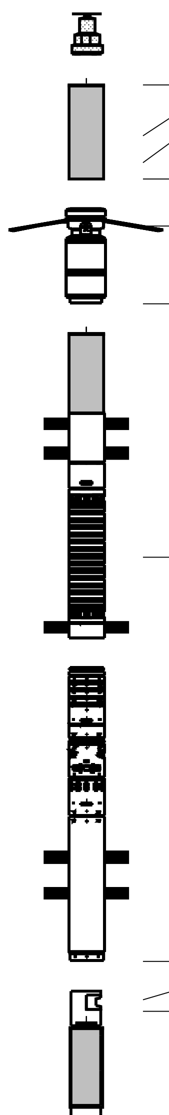
EQUIPMENT DESCRIPTION

RUN 1 | RUN 2

SURFACE EQUIPMENT

GSR−Y 1005
WITM (EDTS)−A

DOWNHOLE EQUIPMENT



LEH−QT — 31.77
LEH−QT 1296
MDSB_EDTC

EDTC−B — 30.88
EDTH−B 8206
EDTC−BB 8218
EDTG−A/B 8215
Mud Tempe — 30.88
CTEM — 29.81
Gamma Ray — 29.24
TelStatus
EDTCB Ele — 28.90

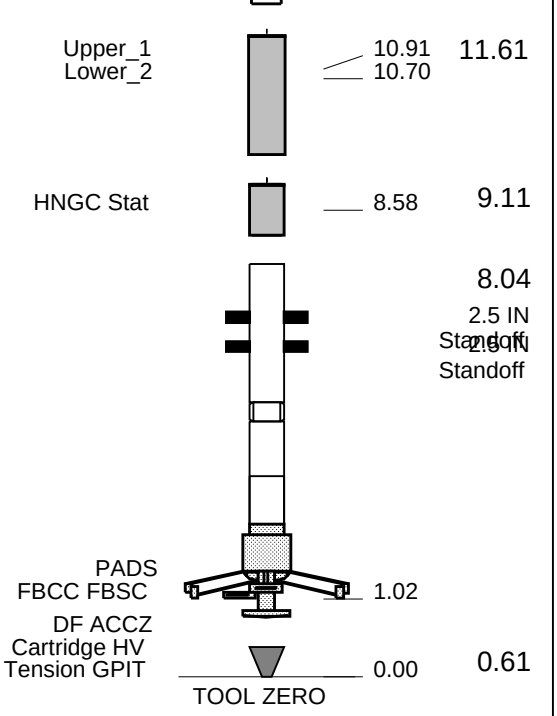
PPC1−B — 28.90
PPC1−B 8169
PPC_CAL_STD
Calipers — 28.55
PPC_Cartr — 26.91

MAPC−B — 26.91
MAPC−BA 8038
ECH−SF 8038
MAMS−BA 8048
2.5 IN Standoff
2.5 IN Standoff
MAMS−PS — 22.20
2.5 IN Standoff

MAXS−B — 20.50
MASS−BA 8038
MAXS−BA 8044
2.5 IN Standoff
2.5 IN Standoff
MAXS−PS — 14.33

EMS−B — 14.33
EMA−B 8002
RES
EMC−B 8027
ECH−KH 8028
Mud Resis — 14.15
Mud Tempe — 13.90

AH192 8016



MAXIMUM STRING DIAMETER 8.63 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Client: CDEX

Well: C0009A

Field: Nankai Trough

State: Wakayama

Country: JAPAN

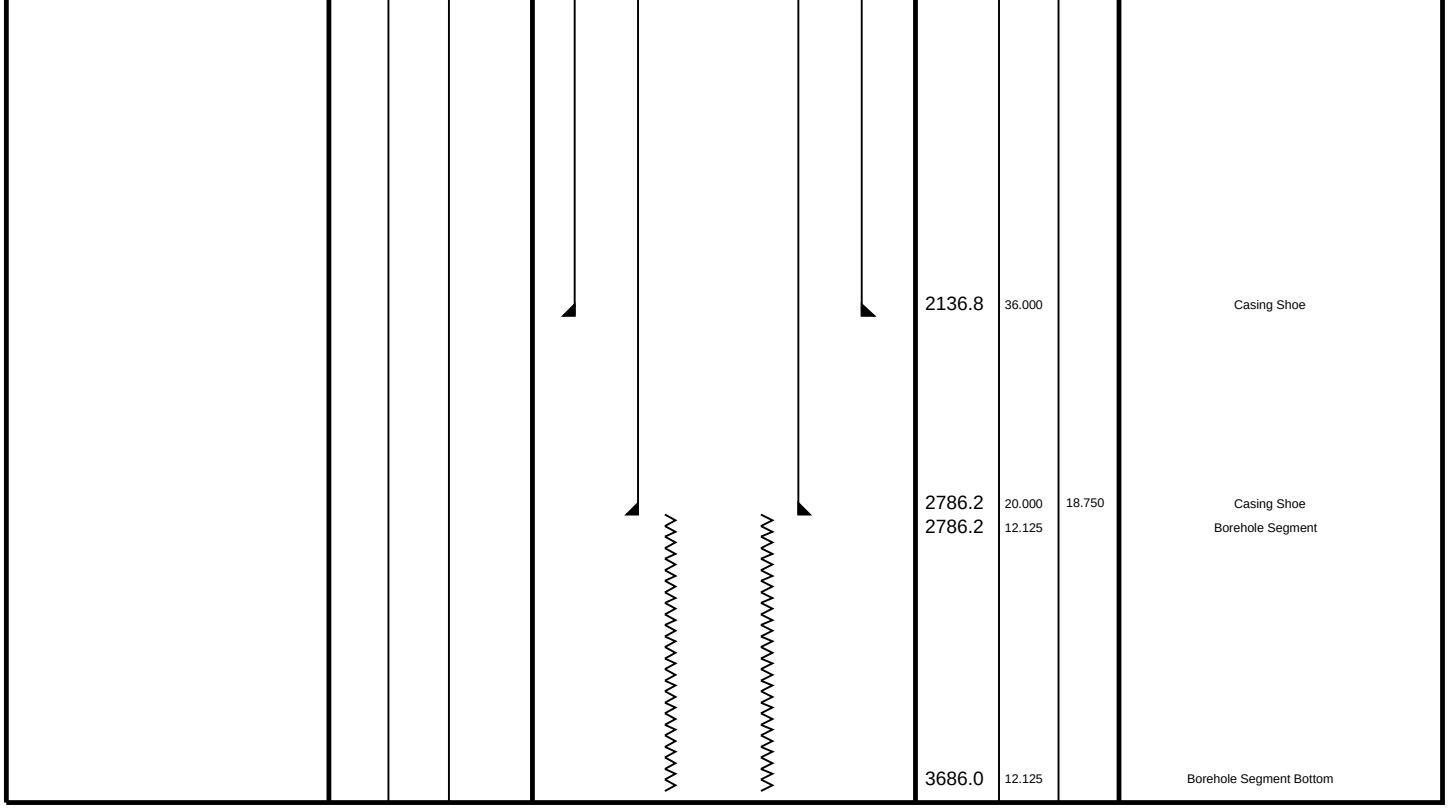
Drawing Date: 7/11/2009

Rig Name: Chikyu

Reference Datum: Mean Sea Level

Elevation: 28.3 m

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



Schlumberger

Main Log
1:500

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

Output DLIS Files

DEFAULT	FMI_NGS_EMS_CAL_006PUP	FN:30	PRODUCER	08−Aug−2009 16:43	3662.2 M	2755.8 M
CLIENT	FMI_NGS_EMS_CAL_006PUC	FN:31	CUSTOMER	08−Aug−2009 16:43	3662.2 M	2755.8 M

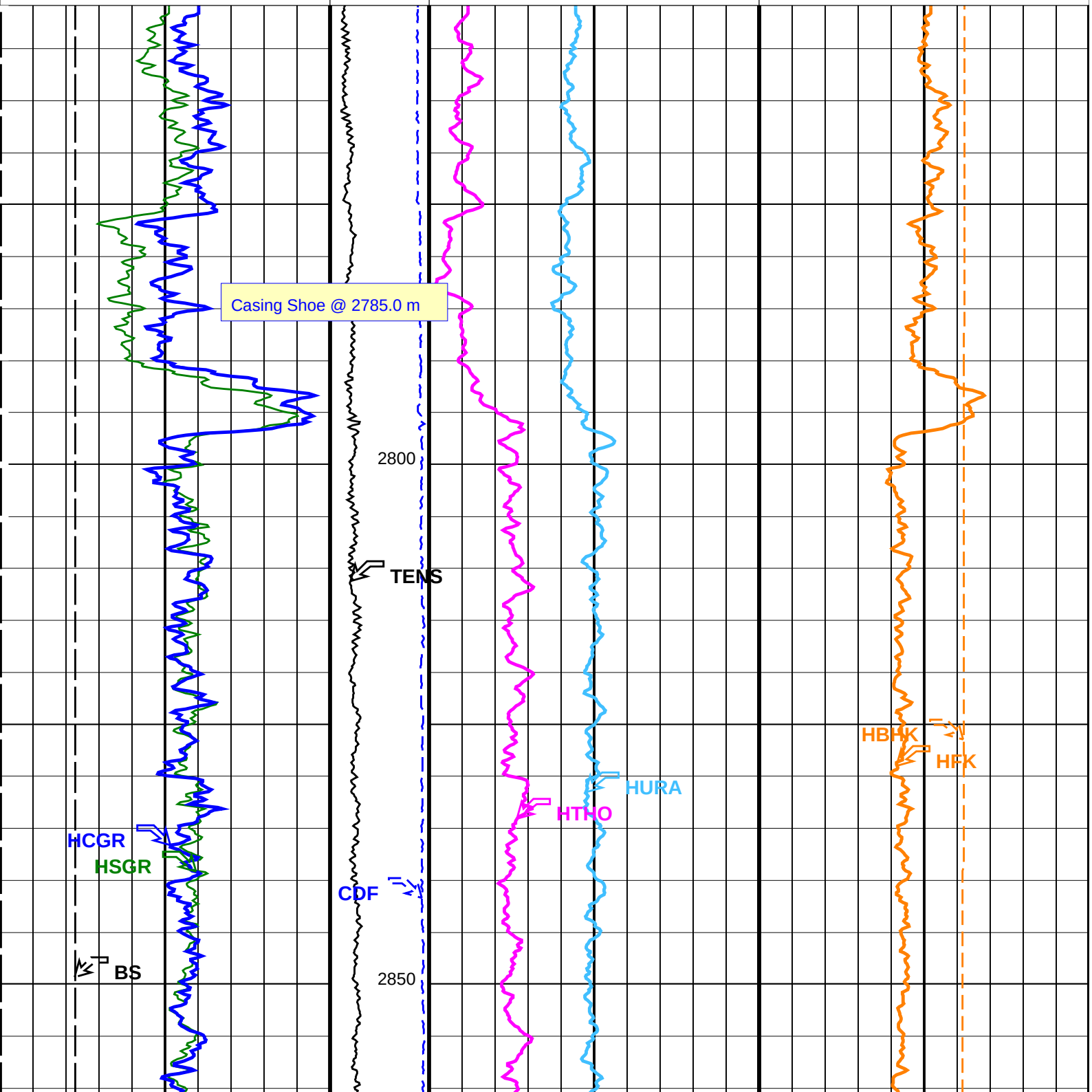
OP System Version: 17C0−154

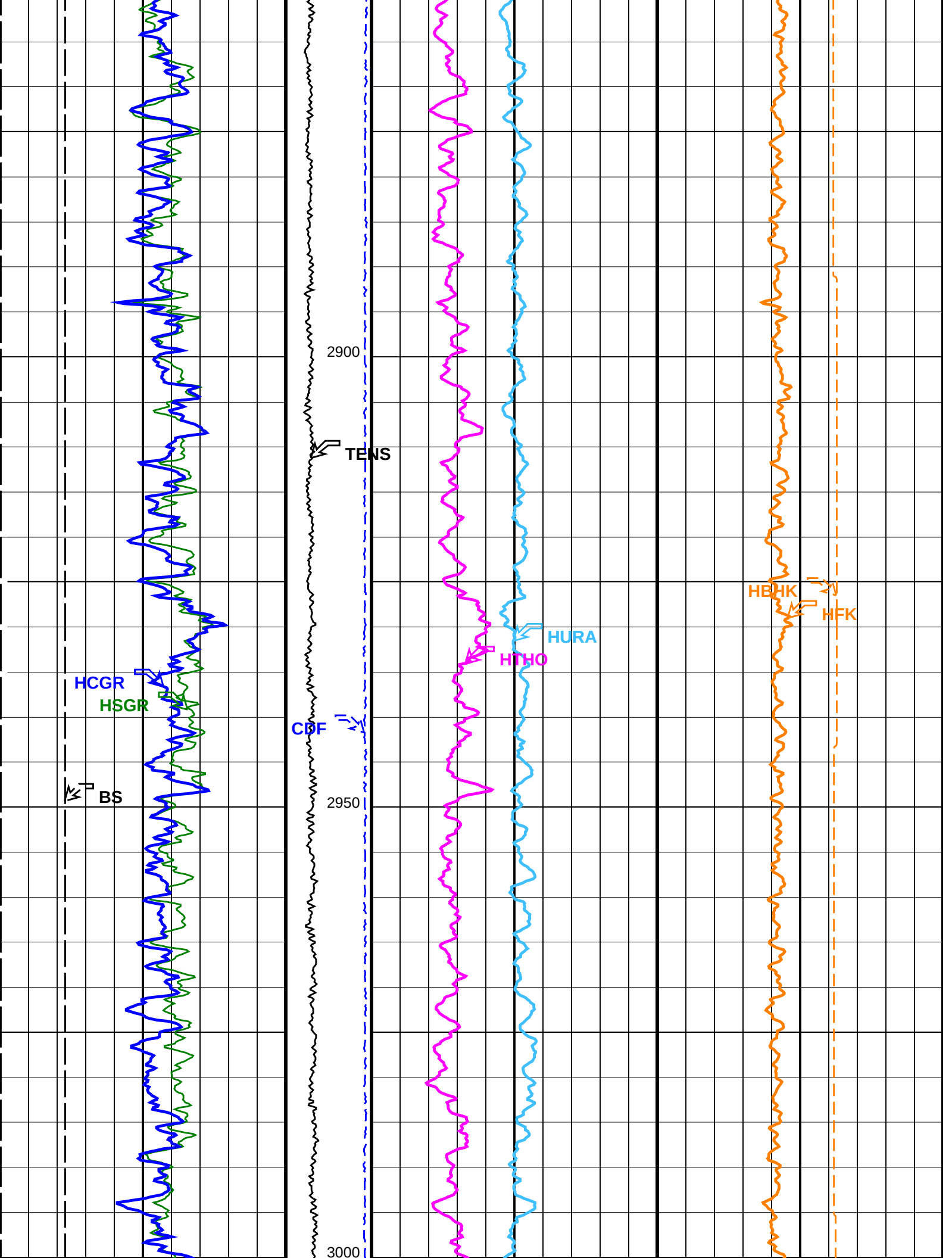
FBST−B	17C0−154	HNGC−B	17C0−154
HNGS−BA	SPC−3839−NUCL	EMS−B	17C0−154
PPC1−B	17C0−154	EDTC−B	17C0−154

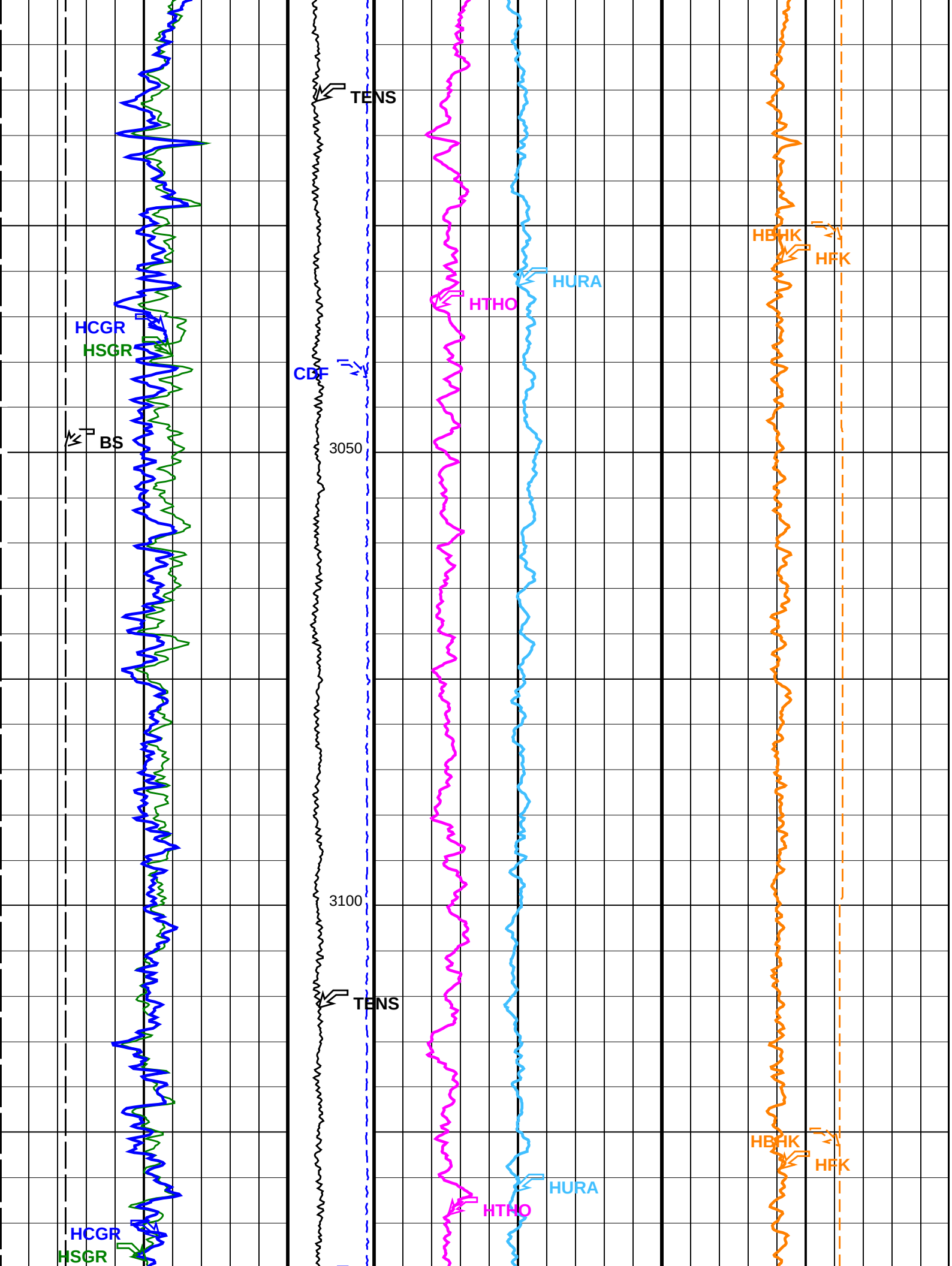
PIP SUMMARY

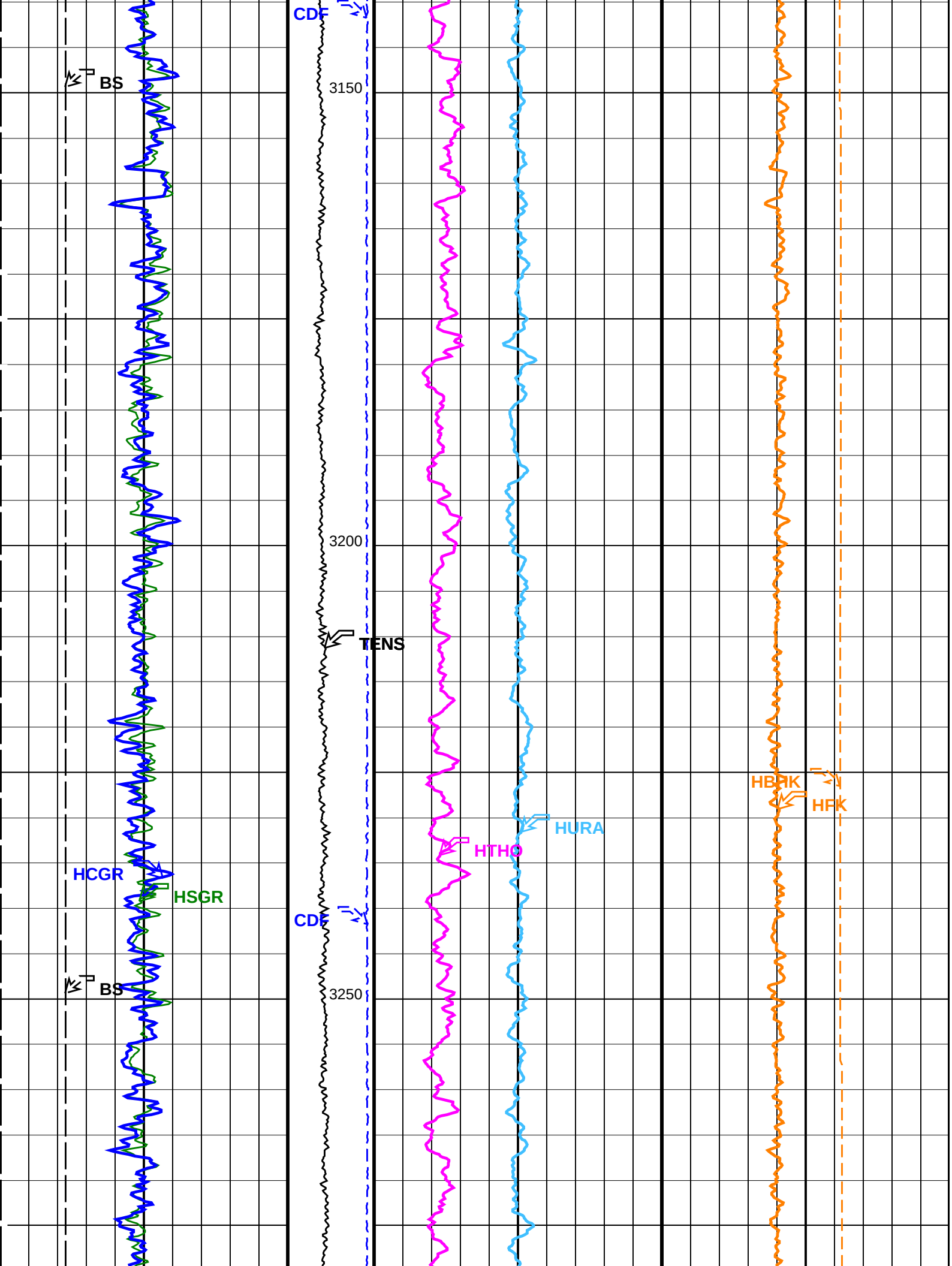
Time Mark Every 60 S

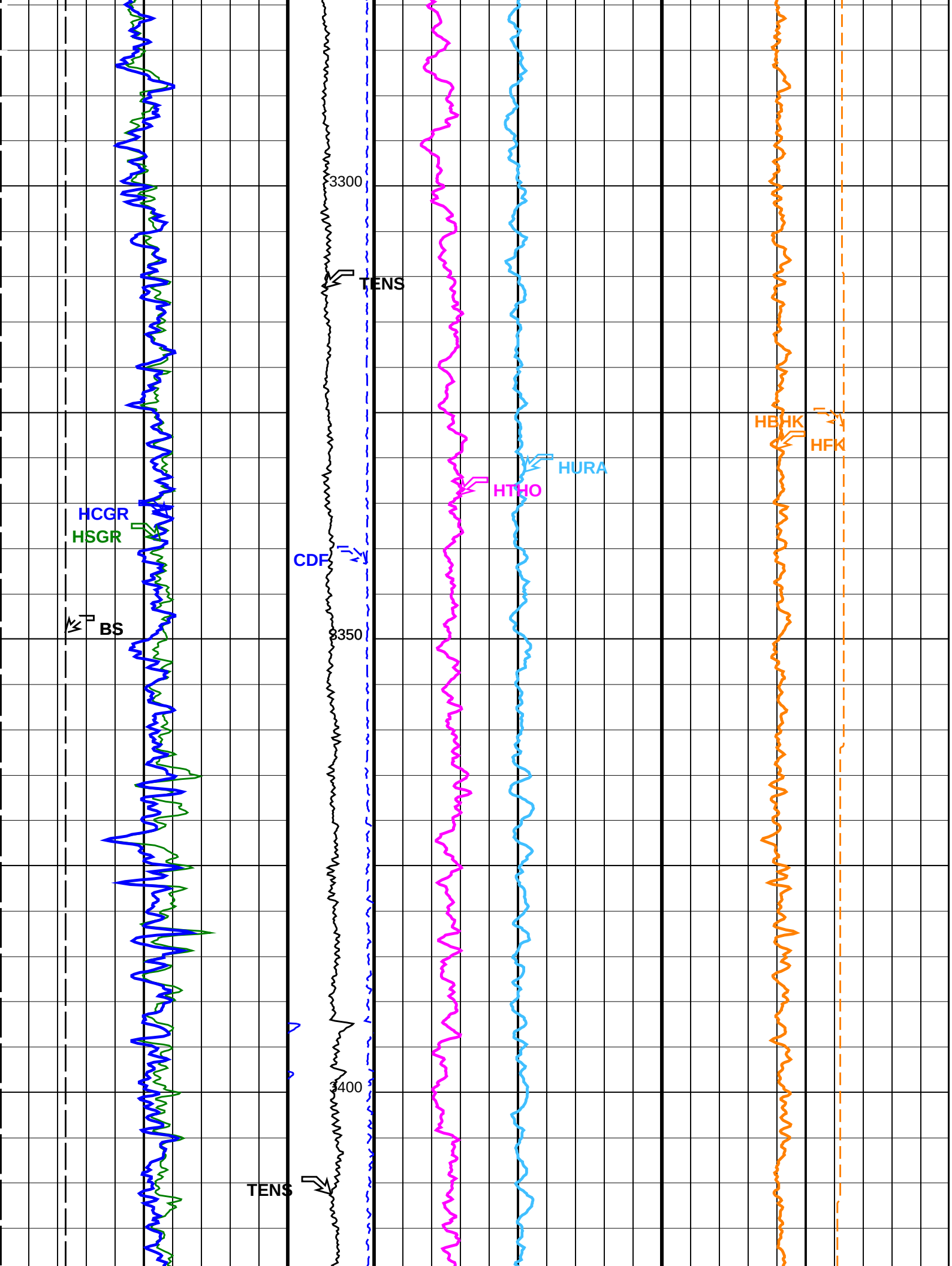
HNGS Spectroscopy Gamma Ray (HSGR) 50 (GAPI) 150		HNGS Borehole Potassium (HBHK) −0.05 (V/V) 0.05
HNGS Computed Gamma Ray (HCGR) 50 (GAPI) 150	Calibrated Downhole Force (CDF) (LBF) −200 1800	HNGS Uranium (HURA) −10 (PPM) 30
Bit Size (BS) 10 (IN) 20	Tension (TENS) (LBF) 0 2000	HNGS Thorium (HTHO) 0 (PPM) 30
		HNGS Potassium (HFK) 0 (V/V) 0.1

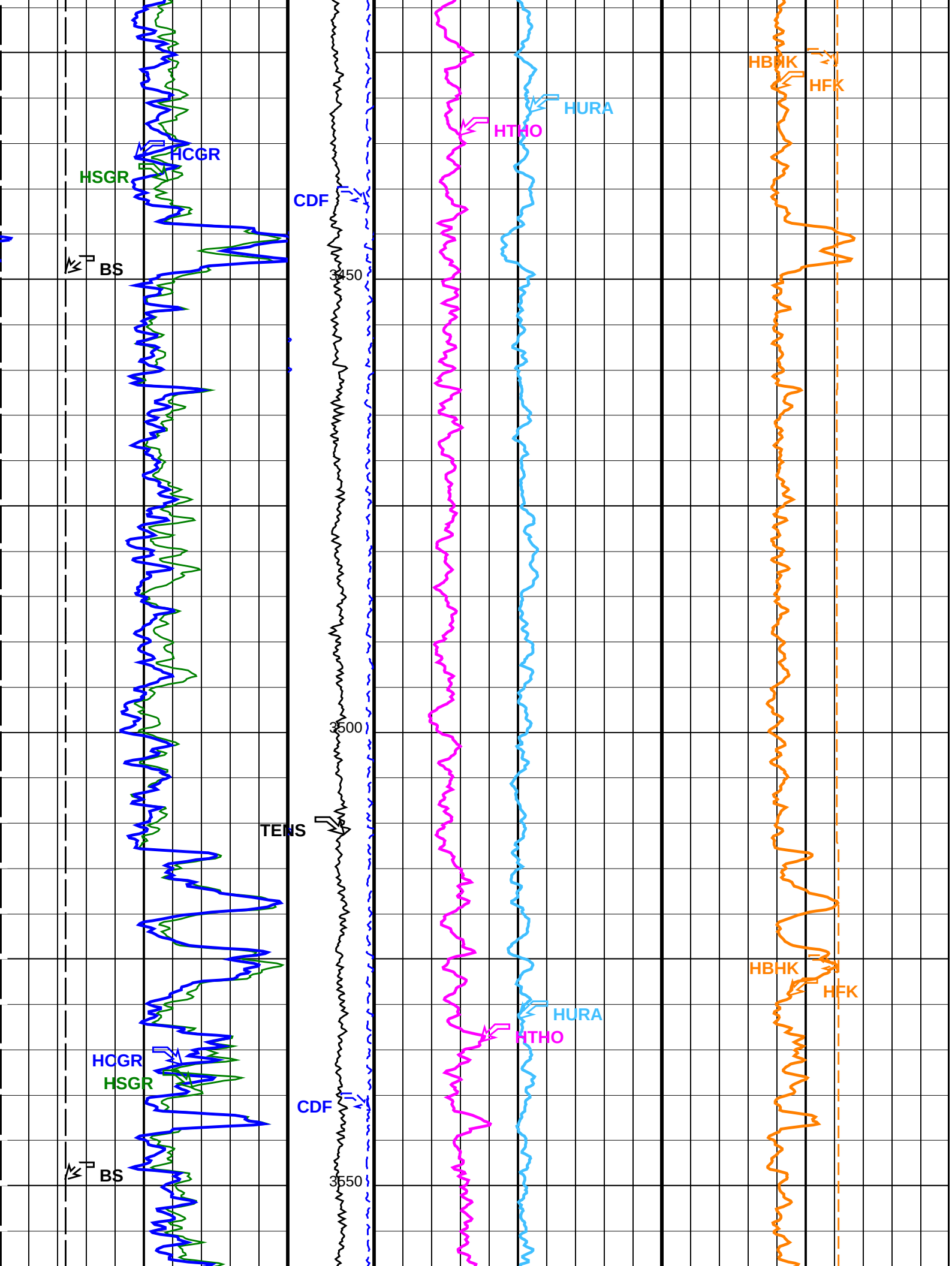


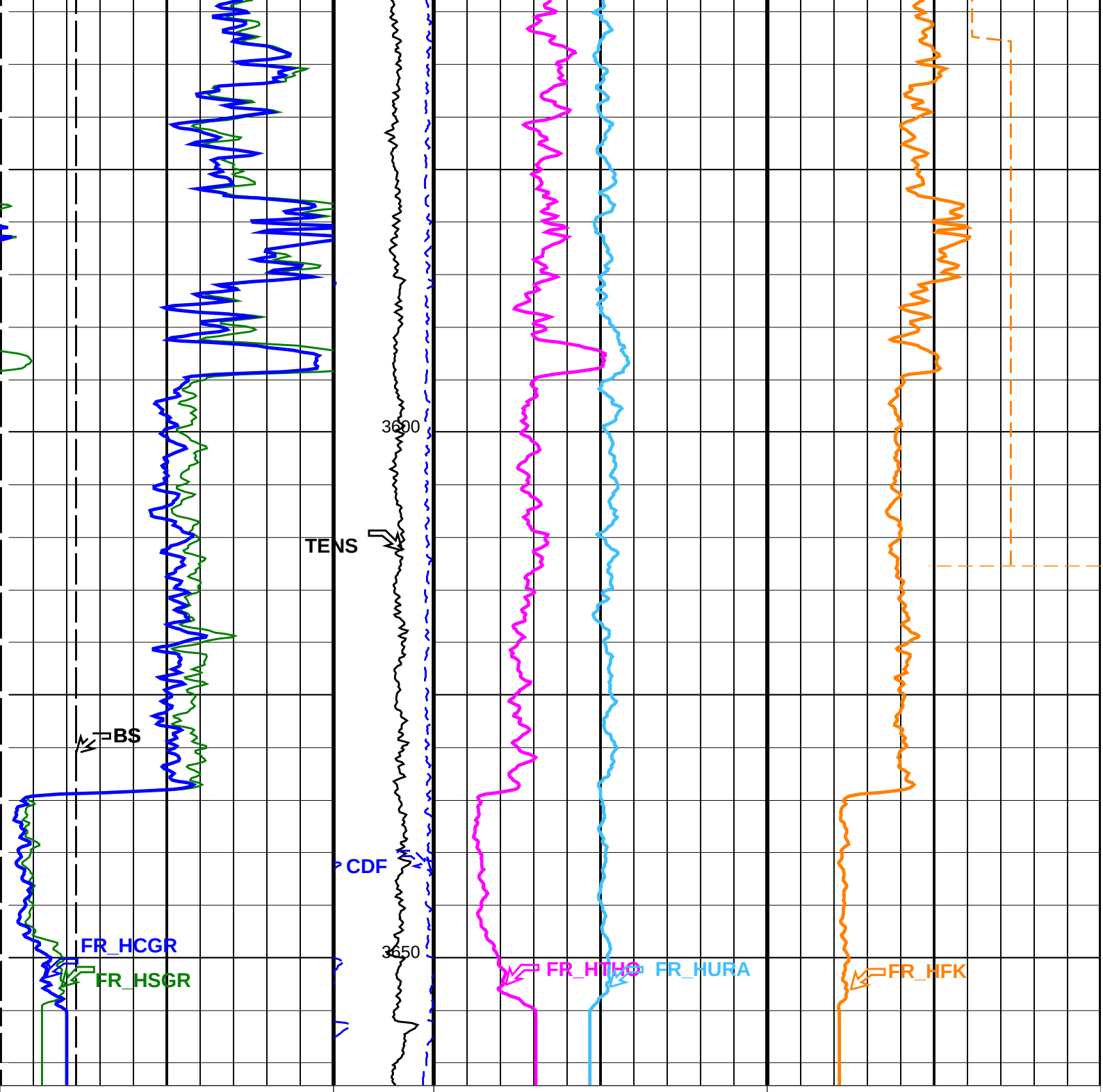

2900
TENS
HCGR
HSGR
CDF
BS
HURA
HTHO
HBHK
HFK
2950
3000


TENS
HBHK
HFK
HURA
HTHO
HCGR
HSGR
CBF
BS
3050
3100
TENS
HBHK
HFK
HURA
HTHO
HCGR
HSGR


BS
CDF
3150
3200
TENS
HBHK
HFK
HURA
HTHO
HCGR
HSGR
CDF
BS
3250


3300
TENS
HBHK
HFK
HURA
HTHO
HCGR
HSGR
CDF
BS
3350
3400
TENS


HCGR
HSGR
CDF
BS
HTHO
HURA
HBHK
HFK
3450
3500
TENS
3550



Bit Size (BS) (IN) 10 — 20	Tension (TENS) (LBF) 0 — 2000	HNGS Thorium (HTHO) (PPM) 0 — 30
		HNGS Potassium (HFK) (V/V) 0 — 0.1
HNGS Computed Gamma Ray (HCGR) (GAPI) 50 — 150	Calibrated Downhole Force (CDF) (LBF) −200 — 1800	HNGS Uranium (HURA) (PPM) −10 — 30
HNGS Spectroscopy Gamma Ray (HSGR) (GAPI) 50 — 150		HNGS Borehole Potassium (HBHK) (V/V) −0.05 — 0.05

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	HNGS−BA: Hostile Natural Gamma Ray Sonde		
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	
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	
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	
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	
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	
	EMS−B: Environment Measurement Sonde		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	HD1_PPC1	
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	HD1_PPC1	
	System and Miscellaneous		
BS	Bit Size	12.250	IN
DFD	Drilling Fluid Density	1.10	G/C3
DO	Depth Offset for Playback	3.2	M
DORL	Depth Offset for Repeat Analysis	0.0	M
PP	Playback Processing	RECOMPUTE	

Format: HNGSNGT 500 Vertical Scale: 1:500 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

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

Schlumberger

Calibrations

MAXIS Field Log

Calibration and Check Summary

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
YEAR OF CALIBRATION :	N/A	N/A	3	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	4	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	852	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	DEGC
YEAR OF CALIBRATION :	N/A	N/A	97	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	2	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	287	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
Before		7.973
	6.800 (Minimum) 8.000 (Nominal) 9.200 (Maximum)	

Phase	Caliper 2 Small Jig IN	Value
Before		16.03
	13.60 (Minimum) 16.00 (Nominal) 18.40 (Maximum)	

Phase	Caliper 1 Large Jig IN	Value
Before		15.80
	13.60 (Minimum) 16.00 (Nominal) 18.40 (Maximum)	

Phase	Caliper 2 Large Jig IN	Value
Before		7.906
	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	HNSH − BA	161
Gamma Source Radioactive	GSR − Y	1005

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 1 Check

Phase	Na 511 Peak Loc	Value
Master		39.49
Before		39.74
	37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)	

Phase	Na 511 Peak Res %	Value
Master		17.60
Before		16.16
	12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)	

Phase	High Voltage V	Value
Master		1214
Before		1215
	900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)	

Phase	Na 1785 Peak Loc	Value
Master		143.1
Before		143.6
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)	

Phase	Na 1785 Peak Res %	Value
Master		9.645
Before		9.431
	7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)	

Phase	Temperature DEGC	Value
Master		26.77
Before		26.77
	−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
Master		39.91
Before		39.56
	37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)	

Phase	Na 511 Peak Res %	Value
Master		16.82
Before		17.24
	12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)	

Phase	High Voltage V	Value
Master		1105
Before		1106
	900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)	

Phase	Na 1785 Peak Loc	Value
Master		144.3

Phase	Na 1785 Peak Res %	Value
Master		9.151

Phase	Temperature DEGC	Value
Master		26.35

Phase		Value
Before		143.7
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)	

Phase		Value
Before		8.788
	7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)	

Phase		Value
Before		26.46
	−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

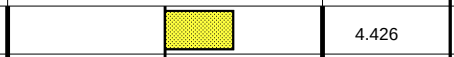
Primary Equipment:

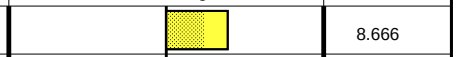
PPC Powered Positioning Device/Caliper	PPC1 − B	8169
PPC1 Caliper Standard	PPC_ −	

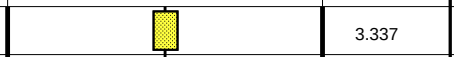
Auxiliary Equipment:

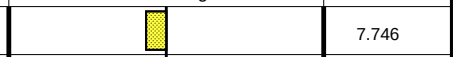
Powered Positioning Device/Caliper 1 Wellsite Calibration

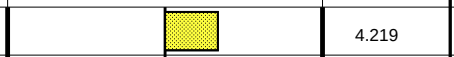
PPC1 Caliper Calibration

Phase	PPC1 Radius 1 Raw Small Radius IN	Value
Before		4.426
	1.200 (Minimum) 3.500 (Nominal) 5.600 (Maximum)	

Phase	PPC1 Radius 1 Raw Large Radius IN	Value
Before		8.666
	6.100 (Minimum) 8.000 (Nominal) 9.700 (Maximum)	

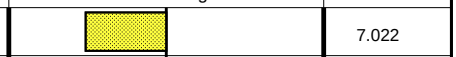
Phase	PPC1 Radius 2 Raw Small Radius IN	Value
Before		3.337
	1.200 (Minimum) 3.500 (Nominal) 5.600 (Maximum)	

Phase	PPC1 Radius 2 Raw Large Radius IN	Value
Before		7.746
	6.100 (Minimum) 8.000 (Nominal) 9.700 (Maximum)	

Phase	PPC1 Radius 3 Raw Small Radius IN	Value
Before		4.219
	1.200 (Minimum) 3.500 (Nominal) 5.600 (Maximum)	

Phase	PPC1 Radius 3 Raw Large Radius IN	Value
Before		8.465
	6.100 (Minimum) 8.000 (Nominal) 9.700 (Maximum)	

Phase	PPC1 Radius 4 Raw Small Radius IN	Value
Before		2.510
	1.200 (Minimum) 3.500 (Nominal) 5.600 (Maximum)	

Phase	PPC1 Radius 4 Raw Large Radius IN	Value
Before		7.022
	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**

Natural Spectroscopy Gamma Ray (HNGS)
3652.2m − 2785.0m
Suite 1, Run 2 (1:500)