

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		EMS Caliper Log 3665.4m – 2785.0m Suite 1, Run 1 (1:500)	
LOCATION NanKai Trough NT2-11B		Elev.: K.B. G.L. D.F. 28.30 m	
Permanent Datum: _____ Log Measured From: _____ Drilling Measured From: _____		MEAN SEA LEVEL _____ DRILL FLOOR _____ DRILL FLOOR _____ Elev.: 28.30 m 0.00 m above Perm. Datum	
Prefecture: Wakayama		Max. Well Deviation 0.7 deg Longitude 136° 32.1489' E Latitude 33° 27.4704' N	

Logging Date	12-Jul-2009	
Run Number	1	
Depth Driller	3686 m	
Schlumberger Depth	3667 m	
Bottom Log Interval	3665.4 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	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	Press	Press	
RM @ MRT	0.060 @ 32	0.052 @ 32	31
Maximum Recorded Temperatures	32 degC	31	31
Circulation Stopped	11-Jul-2009	Time	5:30
Logger On Bottom	11-Jul-2009	Time	4:45
Unit Number	4308	Location	JPOP
Recorded By	Payap Thongpracharn		
Witnessed By	T. Honda / K. Takahashi		

Logging Date	Run 1	Run 2	Run
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			
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 16:22:03

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-JA Serial Number: 6726 Calibration Date: 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-09 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:	First Log In the Well
Rig Up Length At Surface:	89.00 M
Rig Up Length At Bottom:	89.00 M
Rig Up Length Correction:	0.00 M
Stretch Correction:	3.20 M
Tool Zero Check At Surface:	0.00 M

Depth Control Remarks

1. Schlumberger Depth Control Policy is 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.

DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OTHER SERVICES1
OS1: FMI-HNGS-EMS-Sonic Scanner-PPC-GR
OS2: MDT Dual Packer & Sungle Probe
OS3:
OS4:
OS5:

REMARKS: RUN NUMBER 1
This is the first log in the well.
Downlog used as the reference log.
Tool ran as per tool sketch and 2.5 inch standoffs used.
Maximum recorded temperature from logging head thermometers = 32.22 degC.
Maximum deviation = 0.70 deg @ 2749.79mBRT.
Logging speed was 1,800 ft/hr.
Repeat section was taken from 3665.4m-3575.0m as per client request.

Caliper check in casing = 18.75 inch.

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





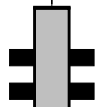
RUN 1			RUN 2		
SERVICE ORDER #:		AVDO-0003	SERVICE ORDER #:		
PROGRAM VERSION:		17C0-154	PROGRAM VERSION:		
FLUID LEVEL:		10 m	FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1 RUN 2

SURFACE EQUIPMENT
 WITM (DTS)-A
 GSR-Y 1005
 NCT-B 2138
 CNB-AB
 NCS-YC 5380

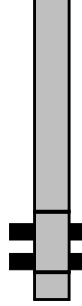
DOWNHOLE EQUIPMENT

LEH-QT		23.60
LEH-QT 1794		
AH-369		22.71
DTC-H	CTEM	22.00
ECH-KC 9799	TelStatus	22.28
DTCH0-A	ToolStatu	0.5 IN Standoff
SPA-A	SP SPARC	20.75
SPA-A 9933	HGNS HTEM	21.36
	HMCA	20.14
HILTH-FTB	HGNS Gamm	19.92
HGNSD-H 3840		20.14
HMCA-H		
HGNH 2916	HGNS Neut	18.14
NLS-KL 5228	HGNS Neut	17.99
NSR-F 5228		
HACCZ-H	HGNS sens	17.27
HCNT-H		
HGR		
HRCC-H 3794		
HRMS-H 3846	HRCC cart	16.06
HRGD-H 3824		
GLS-VJ 3804	MCFL	14.40
MCFL Device-H	HILT cali	14.25
HILT Nucl. LS-H	HRDD-LS	
HILT Nucl. SS-H	HRDD-SS	
HILT Nucl. BS-H	HRDD-BS	14.13
BOW-SPR		
AH-184		13.54
AH-184 936		
AH-184		12.93
AH-184 917		
HRLT-B		12.32
HRLT-B 755		2.5 IN
HRLT-B 755		Standoff
HRLT-B 846		Standoff
HRLT-B 849		
HRLC-B 847		
AH-270 846		



High Res.

8.74



2.5 IN Standoff

Mud Resis
Mud Tempe

4.77
4.52

4.95

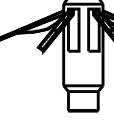


2.5 IN Standoff

Calipers

1.63

DF
HTEN HMAS HV
Accelerom
Cartridge
Tension



0.00

0.61

TOOL ZERO

EMS-B
EMA-B 8002
RES
EMC-B 8027
ECH-KH 8028
EMM-B 8023

BNS-NG
BNS-NG

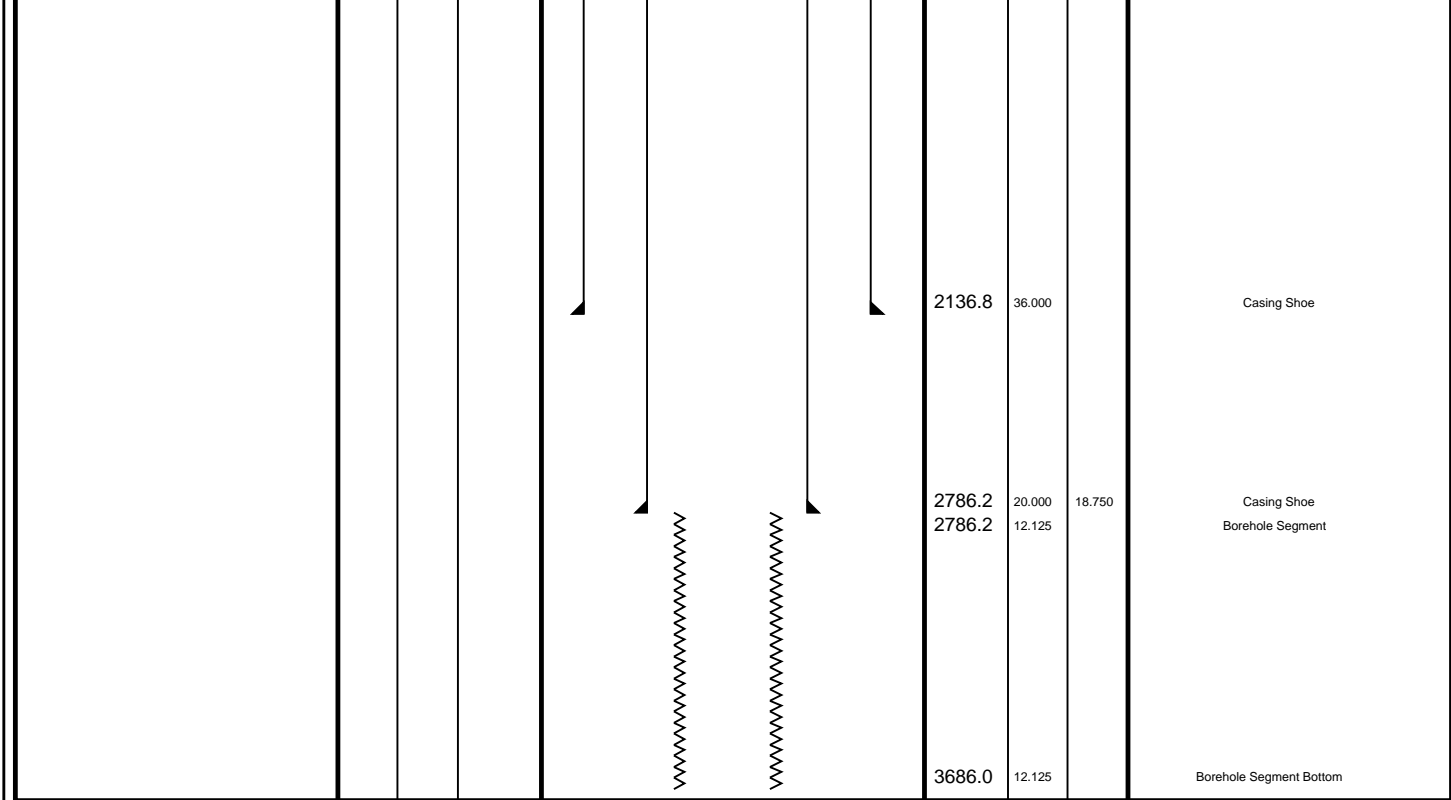
MAXIMUM STRING DIAMETER 8.63 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

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



**Main Log
1:500**

MAXIS Field Log

Company: CDEX Well: C0009A

Input DLIS Files

DEFAULT	MERGE_EMS_HRLA_TLD_025GUP	FN:1	PRODUCER	13-Aug-2009 12:50	3670.2 M	2755.7 M
---------	---------------------------	------	----------	-------------------	----------	----------

Output DLIS Files

DEFAULT	EMS_HRLA_TLD_MCFL_029PUP	FN:65	PRODUCER	13-Aug-2009 13:36	3670.2 M	2761.4 M
CLIENT	EMS_HRLA_TLD_MCFL_029PUC	FN:66	CUSTOMER	13-Aug-2009 13:36	3670.2 M	2761.4 M

Integrated Hole/Cement Volume Summary

Hole Volume = 0.50 M3
 Computed from 3666.9 M to 3658.5 M using data channel(s) RD1 RD2 RD3 RD4 RD5 RD6

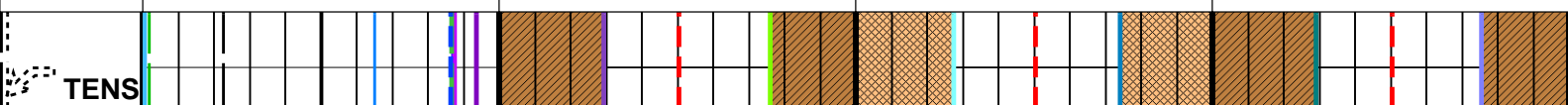
OP System Version: 17C0-154

EMS-B	17C0-154	HRLT-B	17C0-154
HILTH-FTB	17C0-154	SPA-A	17C0-154
DTC-H	17C0-154	MAXS-B	SKK-3704-MAST
MAPC-B	SKK-3704-MAST		

PIP SUMMARY

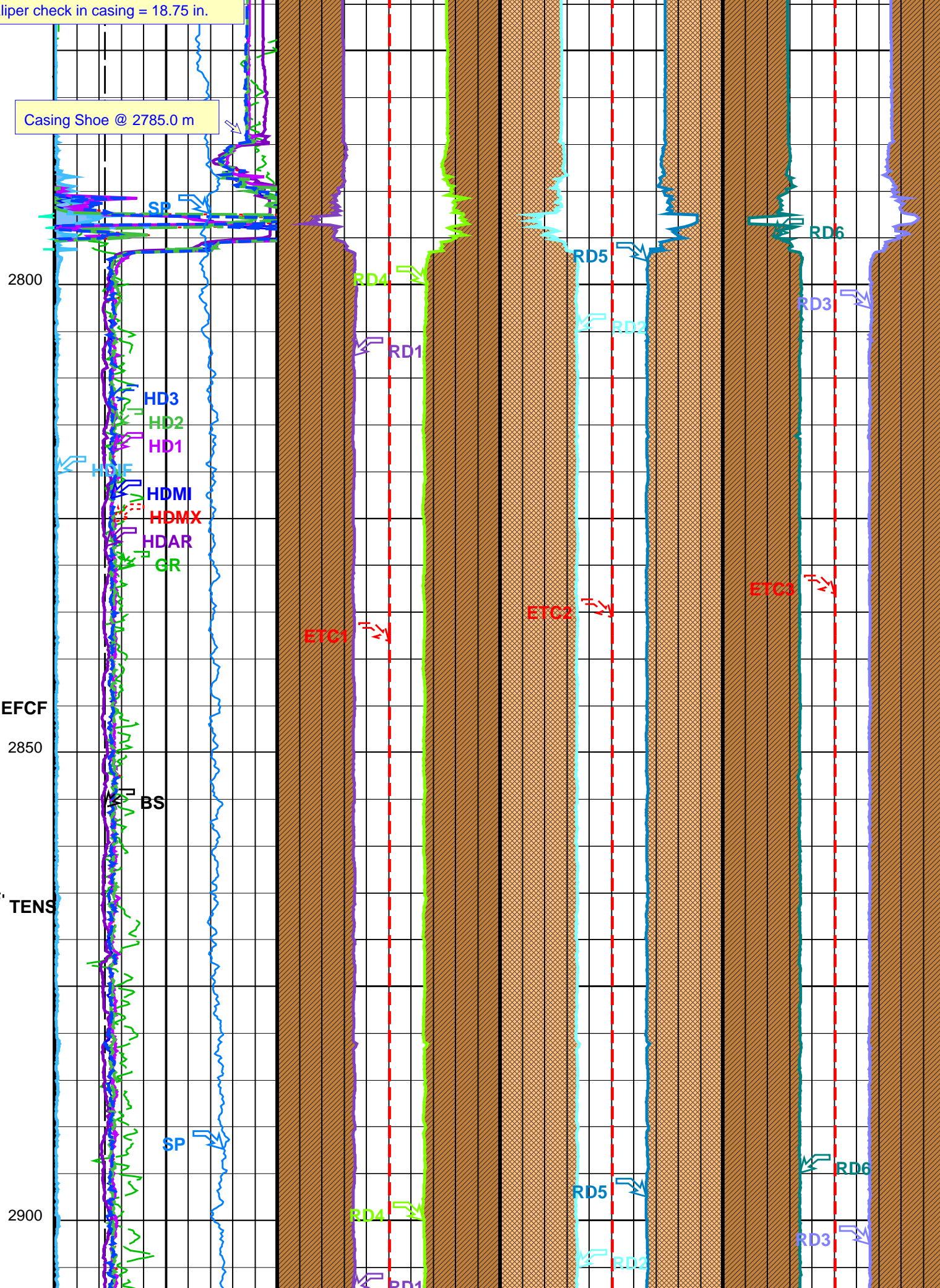
- ┆ Integrated Hole Volume Minor Pip Every 0.1 M3
- ┆ Integrated Hole Volume Major Pip Every 1 M3
- ┆ Integrated Cement Volume Minor Pip Every 0.1 M3
- ┆ Integrated Cement Volume Major Pip Every 1 M3
- Time Mark Every 60 S

	HD difference From F1 to HDIF			
	Hole Diameter 3 (HD3) 10 (IN) 20			
	Hole Diameter 2 (HD2) 10 (IN) 20			
	SP (SP) -80 (MV) 20			
Standard deviation for HDAR From OSDV to D4T	Hole Diameter 1 (HD1) 10 (IN) 20			
Probability Angle for HDMI (CHAM) (DEG) 90 240	Hole Diameter Difference (HDIF) 0 (IN) 20			
Probability angle for HDMI From D4T to CHAM	Hole Diameter Minimum (HDMI) 10 (IN) 20	Formation From RD4 to F2	Formation From RD5 to F3	Formation From F4 to RD6
Fixed caliper flag From D4T to EFCF	Hole Diameter Maximum (HDMX) 10 (IN) 20	Formation From F2 to RD1	Formation From F3 to RD2	Formation From RD3 to F4
Oval Standard Deviation (OSDV) 23 () 3	Hole Diameter from Area (HDAR) 10 (IN) 20	Radius 4 (RD4) -20 (IN) 20	Radius 5 (RD5) -20 (IN) 20	Radius 6 (RD6) 20 (IN) -20
EMS Fixed Caliper Flag (EFCF) 0 () 20	Gamma Ray (GR) 50 (GAPI) 150	Radius 1 (RD1) 20 (IN) -20	Radius 2 (RD2) 20 (IN) -20	Radius 3 (RD3) -20 (IN) 20
Tension (TENS) (LBF) 0 2000	Bit Size (BS) 10 (IN) 20	EMS Tool Center (ETC1) 20 (IN) -20	EMS Tool Center (ETC2) 20 (IN) -20	EMS Tool Center (ETC3) 20 (IN) -20



Caliper check in casing = 18.75 in.

Casing Shoe @ 2785.0 m



2800

2850

2900

HD3
HD2
HD1
HDM1
HDMX
HDAR
GR

ETC1

ETC2

ETC3

BS

SP

RD4

RD1

RD4

RD1

RD5

RD2

RD5

RD2

RD6

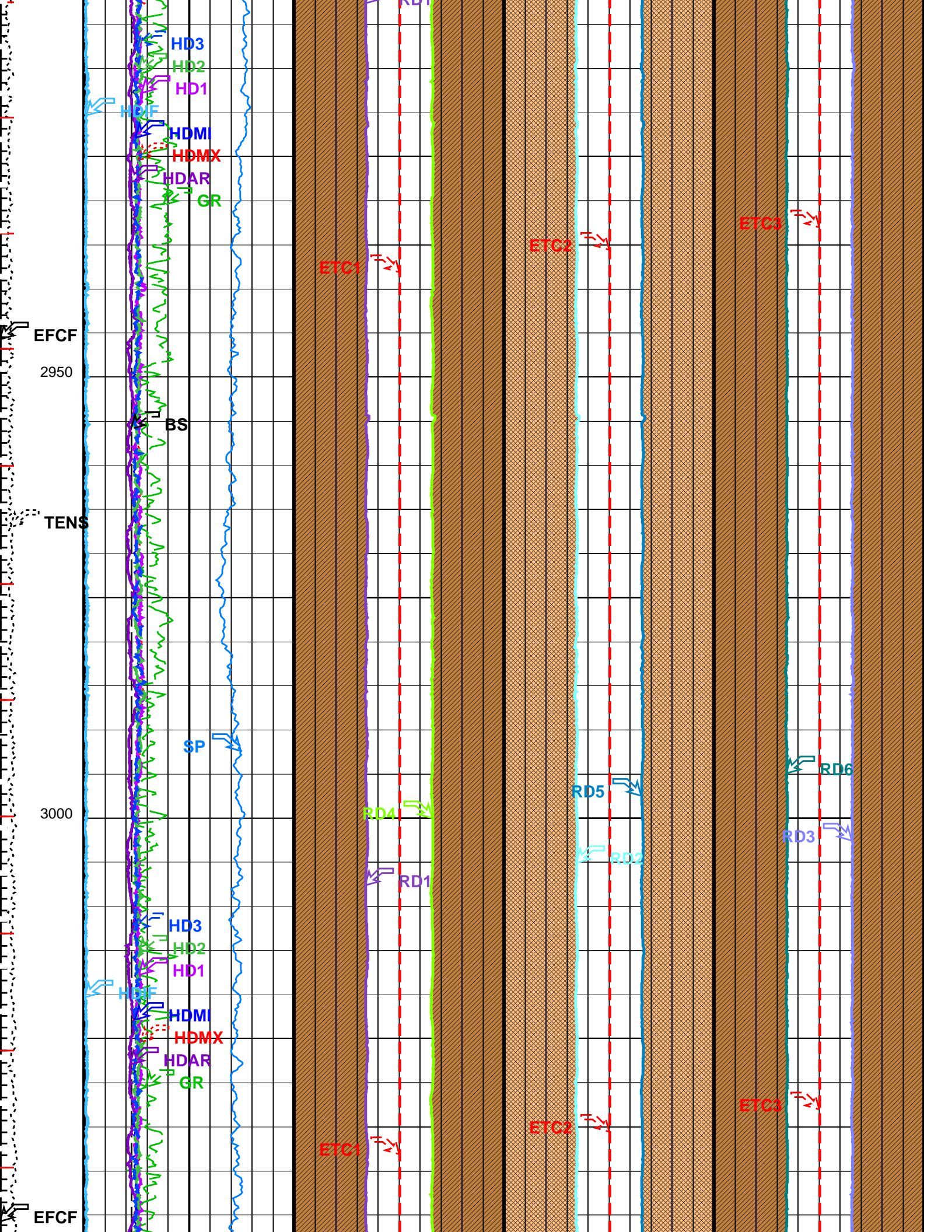
RD3

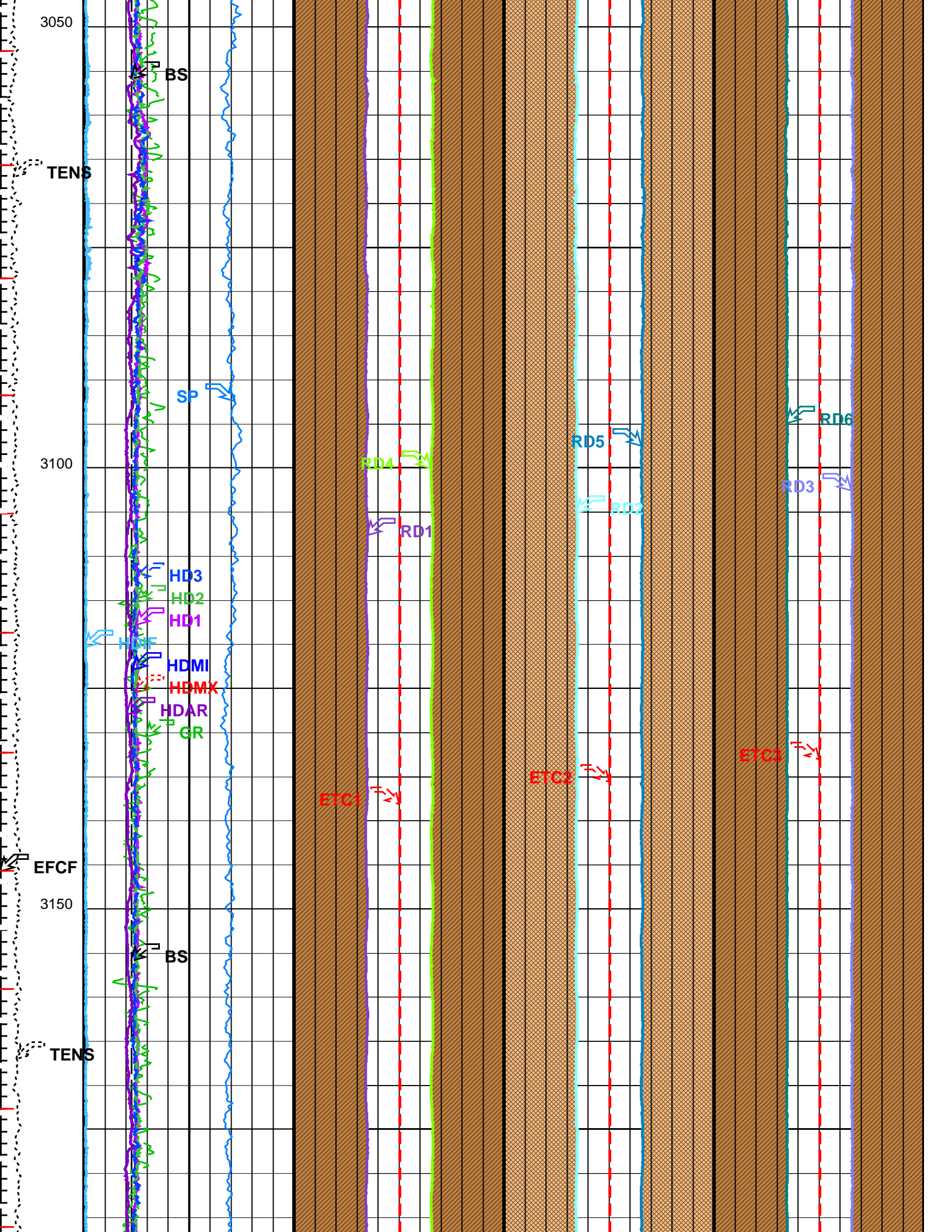
RD6

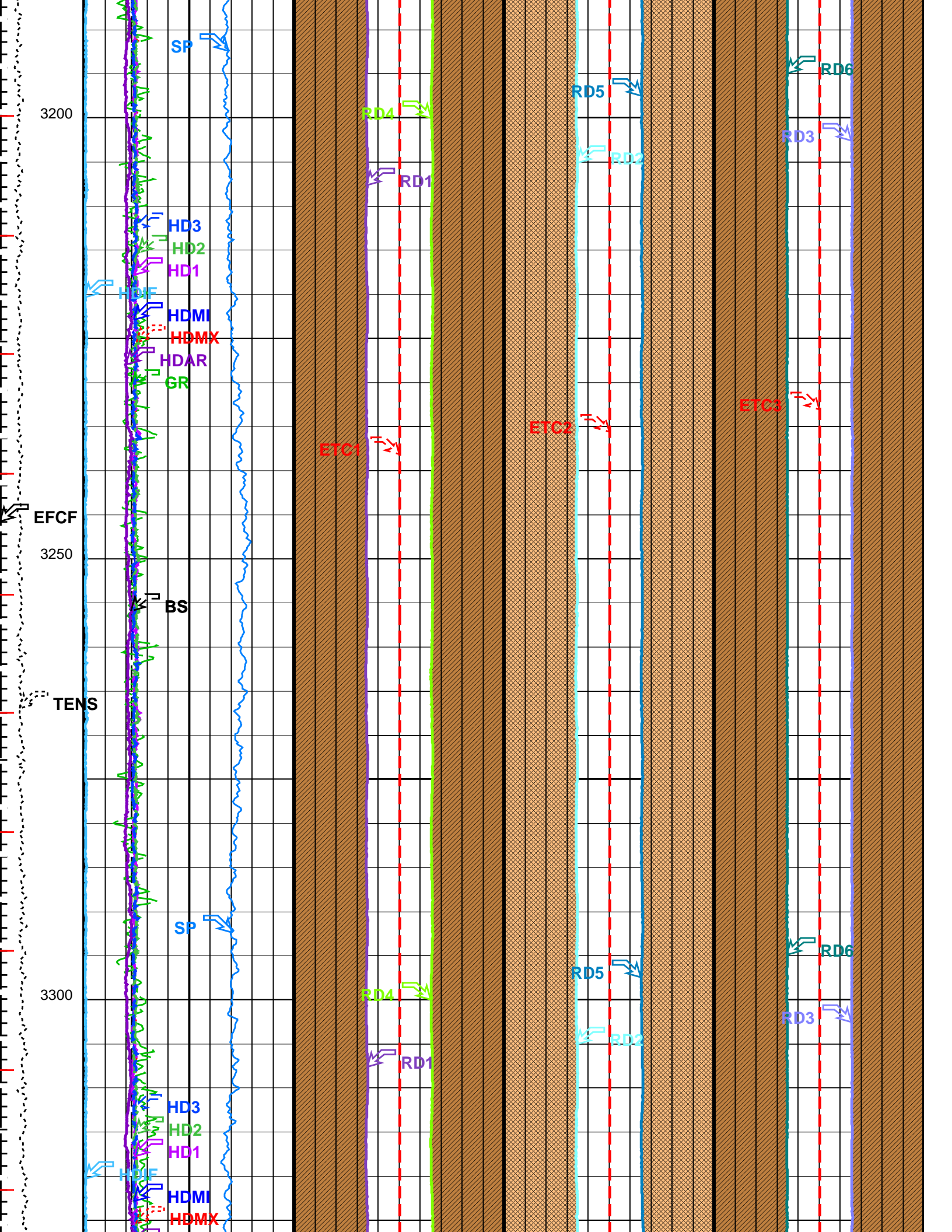
RD3

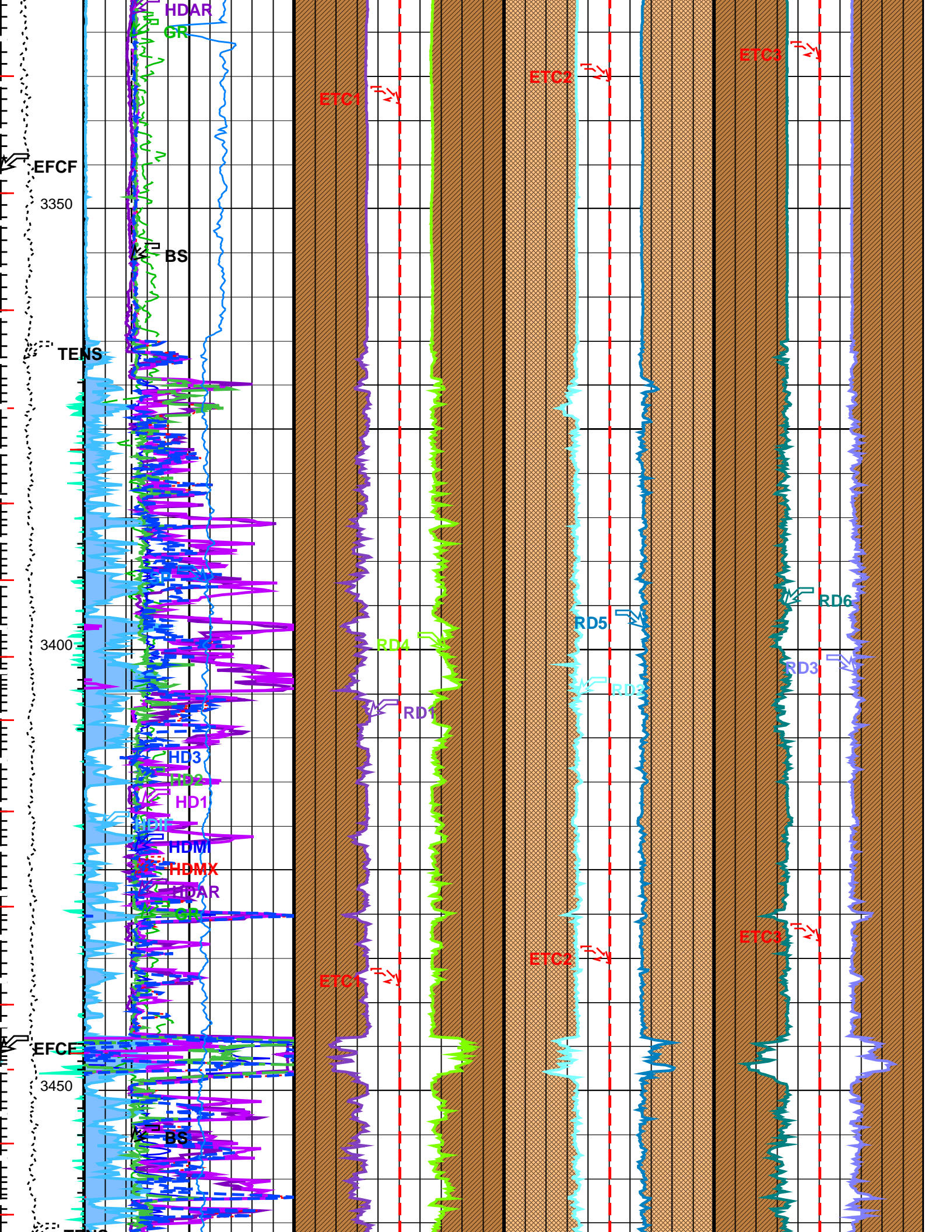
EFCF

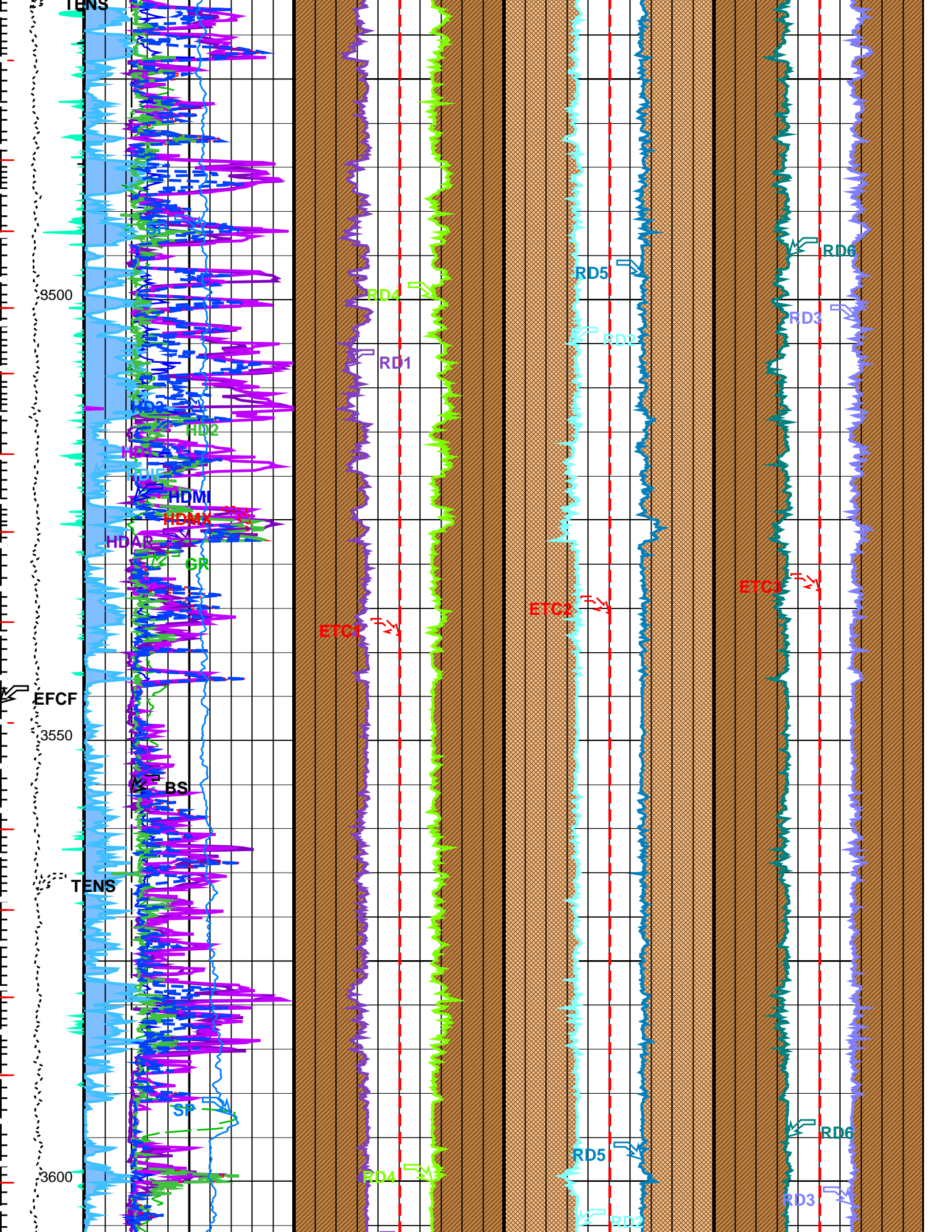
TENS

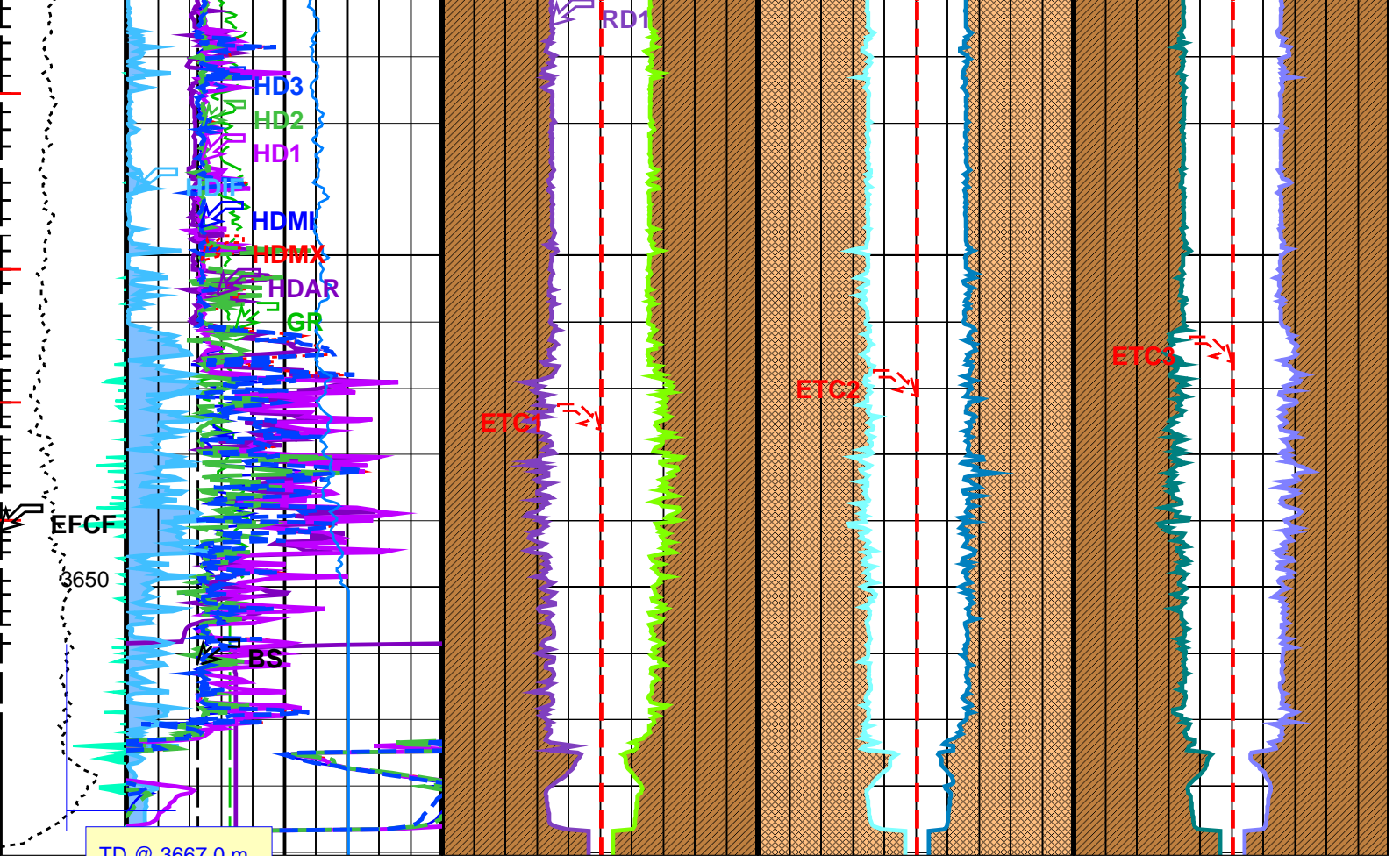












Tension (TENS) (LBF) 0 2000	Bit Size (BS) (IN) 10 20	EMS Tool Center (ETC1) (IN) 20 -20	EMS Tool Center (ETC2) (IN) 20 -20	EMS Tool Center (ETC3) (IN) 20 -20
EMS Fixed Caliper Flag (EFCF) 0 () 20	Gamma Ray (GR) (GAPI) 50 150	Radius 1 (RD1) (IN) 20 -20	Radius 2 (RD2) (IN) 20 -20	Radius 3 (RD3) (IN) 20 -20
Oval Standard Deviation (OSDV) 23 () 3	Hole Diameter from Area (HDAR) (IN) 10 20	Radius 4 (RD4) (IN) -20 20	Radius 5 (RD5) (IN) -20 20	Radius 6 (RD6) (IN) 20 -20
Fixed caliper flag From D4T to EFCF	Hole Diameter Maximum (HDMX) (IN) 10 20	Formation From F2 to RD1	Formation From F3 to RD2	Formation From RD3 to F4
Probabilit y angle for HDMI From D4T to CHAM	Hole Diameter Minimum (HDMI) (IN) 10 20	Formation From RD4 to F2	Formation From RD5 to F3	Formation From F4 to RD6
Probability Angle for HDMI (CHAM) (DEG) 90 240	Hole Diameter Difference (HDIF) (IN) 0 20			
Standard deviation for HDAR From	Hole Diameter 1 (HD1) (IN) 10 20			

FROM OSDV to D4T	10	(IN)	20
SP (SP)			
-80	(MV)		20
Hole Diameter 2 (HD2)			
10	(IN)		20
Hole Diameter 3 (HD3)			
10	(IN)		20
HD difference From F1 to HDIF			

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

Parameters

DLIS Name	Description	Value	
EMS-B: Environment Measurement Sonde			
ECOF	EMS Caliper Offset	2	IN
EFC	EMS Fixed Caliper Operation	OFF	
ESCL	EMS Synthetic Caliper Log	OFF	
FCD	Future Casing (Outer) Diameter	13.375	IN
HVCS	Integrated Hole Volume Caliper Selection	EMS_Calipers	
SPA-A: SP ADAPTOR			
SPNV	SP Next Value	0	MV
MAPC-B: Multimode Array Sonic Power Cartridge			
BS	Bit Size	12.250	IN
HOLEV: Integrated Hole/Cement Volume			
FCD	Future Casing (Outer) Diameter	13.375	IN
HVCS	Integrated Hole Volume Caliper Selection	EMS_Calipers	
System and Miscellaneous			
DO	Depth Offset for Playback	0.0	M
DORL	Depth Offset for Repeat Analysis	0.0	M
PP	Playback Processing	OFF	
TD	Total Depth	3667	M

Format: EMS_Caliper 500 Vertical Scale: 1:500 Graphics File Created: 13-Aug-2009 13:36

OP System Version: 17C0-154

EMS-B	17C0-154	HRLT-B	17C0-154
HILTH-FTB	17C0-154	SPA-A	17C0-154
DTC-H	17C0-154	MAXS-B	SKK-3704-MAST
MAPC-B	SKK-3704-MAST		

Input DLIS Files

DEFAULT	MERGE_EMS_HRLA_TLD_025GUP	FN:1	PRODUCER	13-Aug-2009 12:50	3670.2 M	2755.7 M
---------	---------------------------	------	----------	-------------------	----------	----------

Output DLIS Files

DEFAULT	EMS_HRLA_TLD_MCFL_029PUP	FN:65	PRODUCER	13-Aug-2009 13:36
CLIENT	EMS_HRLA_TLD_MCFL_029PUC	FN:66	CUSTOMER	13-Aug-2009 13:36



Calibrations

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Environment Measurement Sonde Wellsite Calibration – EMS Caliper Calibration							
Before: 11-Jul-2009 23:37							
Radius 1 Short Radius	4.000	N/A	3.627	N/A	N/A	0.2000	IN
Radius 1 Long Radius	8.000	N/A	7.897	N/A	N/A	0.2000	IN
Radius 2 Short Radius	4.000	N/A	3.405	N/A	N/A	0.2000	IN
Radius 2 Long Radius	8.000	N/A	7.651	N/A	N/A	0.2000	IN
Radius 3 Short Radius	4.000	N/A	3.595	N/A	N/A	0.2000	IN
Radius 3 Long Radius	8.000	N/A	7.818	N/A	N/A	0.2000	IN
Radius 4 Short Radius	4.000	N/A	3.824	N/A	N/A	0.2000	IN
Radius 4 Long Radius	8.000	N/A	8.065	N/A	N/A	0.2000	IN
Radius 5 Short Radius	4.000	N/A	3.791	N/A	N/A	0.2000	IN
Radius 5 Long Radius	8.000	N/A	8.051	N/A	N/A	0.2000	IN
Radius 6 Short Radius	4.000	N/A	3.728	N/A	N/A	0.2000	IN
Radius 6 Long Radius	8.000	N/A	7.967	N/A	N/A	0.2000	IN
High Resolution Laterolog Array – B Wellsite Calibration – HRLT M01							
Before: 12-Jul-2009 3:18							
HRLT M0-M1 Voltage Plus – 0	0	N/A	-316.4	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus – 1	0	N/A	-325.5	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus – 2	0	N/A	-317.9	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus – 3	0	N/A	-320.9	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus – 4	0	N/A	-314.2	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus – 5	0	N/A	-319.8	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus – 6	0	N/A	319.2	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus – 7	0	N/A	-322.7	N/A	N/A	9.681	UV
High Resolution Laterolog Array – B Wellsite Calibration – HRLT M12							
Before: 12-Jul-2009 3:18							
HRLT M1-M2 Voltage Plus – 0	0	N/A	1749	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus – 1	0	N/A	1800	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus – 2	0	N/A	1753	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus – 3	0	N/A	1769	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus – 4	0	N/A	1733	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus – 5	0	N/A	1764	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus – 6	0	N/A	-1773	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus – 7	0	N/A	1781	N/A	N/A	53.42	UV
High Resolution Laterolog Array – B Wellsite Calibration – HRLT M23							
Before: 12-Jul-2009 3:18							
HRLT M2-M3 Voltage Plus – 0	0	N/A	1738	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus – 1	0	N/A	1793	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus – 2	0	N/A	1749	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus – 3	0	N/A	1770	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus – 4	0	N/A	1730	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus – 5	0	N/A	1764	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus – 6	0	N/A	-1754	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus – 7	0	N/A	1781	N/A	N/A	53.42	UV
High Resolution Laterolog Array – B Wellsite Calibration – HRLT V34							
Before: 12-Jul-2009 3:18							
HRLT A3-A4 Voltage Plus – 0	0	N/A	68360	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus – 1	0	N/A	70650	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus – 2	0	N/A	69170	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus – 3	0	N/A	70140	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus – 4	0	N/A	68390	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus – 5	0	N/A	69680	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus – 6	0	N/A	-68180	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus – 7	0	N/A	70000	N/A	N/A	2100	UV
High Resolution Laterolog Array – B Wellsite Calibration – HRLT V45							
Before: 12-Jul-2009 3:18							
HRLT A4-A5 Voltage Plus – 0	0	N/A	68340	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus – 1	0	N/A	70770	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus – 2	0	N/A	69260	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus – 3	0	N/A	70190	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus – 4	0	N/A	68390	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus – 5	0	N/A	69660	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus – 6	0	N/A	-68320	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus – 7	0	N/A	70000	N/A	N/A	2100	UV

High Resolution Laterolog Array – B Wellsite Calibration – HRLT V56

Before: 12-Jul-2009 3:18

HRLT A5-A6 Voltage Plus – 0	0	N/A	68600	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus – 1	0	N/A	71030	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus – 2	0	N/A	69500	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus – 3	0	N/A	70440	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus – 4	0	N/A	68640	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus – 5	0	N/A	69930	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus – 6	0	N/A	-68520	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus – 7	0	N/A	70000	N/A	N/A	2100	UV

High Resolution Laterolog Array – B Wellsite Calibration – HRLT VTP

Before: 12-Jul-2009 3:18

HRLT Torpedo-M0 Voltage – 0	0	N/A	-68120	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage – 1	0	N/A	-70960	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage – 2	0	N/A	-69440	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage – 3	0	N/A	-70410	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage – 4	0	N/A	-68600	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage – 5	0	N/A	-69880	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage – 6	0	N/A	68420	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage – 7	0	N/A	-70000	N/A	N/A	2100	UV

High Resolution Laterolog Array – B Wellsite Calibration – HRLT VBD

Before: 12-Jul-2009 3:18

HRLT Bridle#9-M0 Voltage – 0	0	N/A	-68130	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage – 1	0	N/A	-70950	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage – 2	0	N/A	-69440	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage – 3	0	N/A	-70410	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage – 4	0	N/A	-68610	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage – 5	0	N/A	-69880	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage – 6	0	N/A	68420	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage – 7	0	N/A	-70000	N/A	N/A	2100	UV

High Resolution Laterolog Array – B Wellsite Calibration – HRLT ISO

Before: 12-Jul-2009 3:18

HRLT Source Current Plus – 0	0	N/A	283.7	N/A	N/A	8.520	UA
HRLT Source Current Plus – 1	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus – 2	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus – 3	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus – 4	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus – 5	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus – 6	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus – 7	0	N/A	281.1	N/A	N/A	8.520	UA

High Resolution Laterolog Array – B Wellsite Calibration – HRLT MV

Before: 12-Jul-2009 3:18

HRLT Vertical Voltage PI – 0	0	N/A	-320.2	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI – 1	0	N/A	-322.1	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI – 2	0	N/A	-313.4	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI – 3	0	N/A	-314.7	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI – 4	0	N/A	-305.2	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI – 5	0	N/A	-325.5	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI – 6	0	N/A	328.8	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI – 7	0	N/A	-322.7	N/A	N/A	9.681	UV

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Stab Measurement Summary

Before: 12-Jul-2009 0:20

BS Window Ratio	0.7445	N/A	0.7439	N/A	N/A	N/A	
BS Window Sum	27090	N/A	27070	N/A	N/A	N/A	CPS
SS Window Ratio	0.4832	N/A	0.4839	N/A	N/A	N/A	
SS Window Sum	11550	N/A	11540	N/A	N/A	N/A	CPS
LS Window Ratio	0.2926	N/A	0.2954	N/A	N/A	N/A	
LS Window Sum	1253	N/A	1251	N/A	N/A	N/A	CPS

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Photo-multiplier High Voltages Calibrations

Before: 12-Jul-2009 0:20

BS PM High Voltage (Command)	1557	N/A	1555	N/A	N/A	N/A	V
SS PM High Voltage (Command)	1608	N/A	1607	N/A	N/A	N/A	V
LS PM High Voltage (Command)	1432	N/A	1438	N/A	N/A	N/A	V

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Crystal Quality Resolutions Calibration

Before: 12-Jul-2009 0:20

BS Crystal Resolution	12.45	N/A	12.29	N/A	N/A	N/A	%
SS Crystal Resolution	9.204	N/A	9.168	N/A	N/A	N/A	%
LS Crystal Resolution	8.148	N/A	8.234	N/A	N/A	N/A	%

High resolution Integrated Logging Tool–DTS Wellsite Calibration – MCFL Calibration

Before: 12-Jul-2009 1:48

Raw B0 Resistivity	3875	N/A	3868	N/A	N/A	N/A	OHMM
Raw B1 Resistivity	3830	N/A	3812	N/A	N/A	N/A	OHMM

Raw B2 Resistivity	3830	N/A	3866	N/A	N/A	N/A	N/A	OHMM
High resolution Integrated Logging Tool–DTS Wellsite Calibration – HILT Caliper Calibration								
Before: 12–Jul–2009 0:30								
HILT Caliper Zero Measurement	8.000	N/A	8.514	N/A	N/A	N/A	N/A	IN
HILT Caliper Plus Measurement	12.00	N/A	12.40	N/A	N/A	N/A	N/A	IN
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Detector Calibration								
Before: 12–Jul–2009 0:21								
Gamma Ray Background	30.00	N/A	4.160	N/A	N/A	N/A	N/A	GAPI
Gamma Ray (Jig – Bkgd)	160.0	N/A	184.7	N/A	N/A	N/A	14.55	GAPI
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Zero Measurement								
Master: 29–Jun–2009 23:18 Before: 12–Jul–2009 0:22								
CNTC Background	28.54	28.54	27.66	N/A	N/A	4.281		CPS
CFTC Background	30.72	30.72	29.47	N/A	N/A	4.608		CPS
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Ratio Measurement								
Master: 29–Jun–2009 23:18								
Thermal Near Corr. (Tank)	5800	2617	N/A	N/A	N/A	N/A	N/A	CPS
Thermal Far Corr. (Tank)	2400	1121	N/A	N/A	N/A	N/A	N/A	CPS
CNTC/CFTC (Tank)	2.159	2.335	N/A	N/A	N/A	N/A	N/A	
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Accelerometer Calibration								
Before: 12–Jul–2009 0:21								
Z–Axis Acceleration	9.810	N/A	9.781	N/A	N/A	N/A	N/A	M/S2
High resolution Integrated Logging Tool–DTS Master Calibration – Inversion results								
Master: 3–Jul–2009 18:59								
Rho Aluminum	2.596	2.597	--	--	--	--	--	G/C3
Rho Magnesium	1.686	1.688	--	--	--	--	--	G/C3
Pe Aluminum	2.570	2.516	--	--	--	--	--	
Pe Magnesium	2.650	2.634	--	--	--	--	--	
High resolution Integrated Logging Tool–DTS Master Calibration – Deviation Summary								
Master: 3–Jul–2009 18:59								
BS Average Deviation	0	0.2800	--	--	--	--	--	%
BS Max Deviation	0	0.6805	--	--	--	--	--	%
SS Average Deviation	0	0.4310	--	--	--	--	--	%
SS Max Deviation	0	1.992	--	--	--	--	--	%
LS Average Deviation	0	0.6905	--	--	--	--	--	%
LS Max Deviation	0	1.788	--	--	--	--	--	%

The GLS–VJ source activity is acceptable.

The HGNS Neutron Master Calibration was done with the following parameters :

NCT–B Water Temperature 27.0 DEGC.
 Thermal Housing Size 3.375 IN.
 NSR–F serial number 5228

Environment Measurement Sonde / Equipment Identification

Primary Equipment:

EMS Mechanical	EMM – B	8023
EMS Cartridge	EMC – B	8027
EMS Adaptor	EMA – B	8002
Resistivity Meter	RES –	

Auxiliary Equipment:

Electronics Cartridge Housing	ECH – KH	8028
-------------------------------	----------	------

Environment Measurement Sonde Wellsite Calibration

EMS Caliper Calibration

Phase	Radius 1 Short Radius IN	Value	Phase	Radius 1 Long Radius IN	Value
Before		3.627	Before		7.897
	3.000 (Minimum)	4.000 (Nominal)	5.000 (Maximum)	7.000 (Minimum)	8.000 (Nominal)
				9.000 (Maximum)	
Phase	Radius 2 Short Radius IN	Value	Phase	Radius 2 Long Radius IN	Value
Before		3.405	Before		7.651

3.000 (Minimum) 4.000 (Nominal) 5.000 (Maximum)			7.000 (Minimum) 8.000 (Nominal) 9.000 (Maximum)		
Phase	Radius 3 Short Radius IN	Value	Phase	Radius 3 Long Radius IN	Value
Before		3.595	Before		7.818
3.000 (Minimum) 4.000 (Nominal) 5.000 (Maximum)			7.000 (Minimum) 8.000 (Nominal) 9.000 (Maximum)		
Phase	Radius 4 Short Radius IN	Value	Phase	Radius 4 Long Radius IN	Value
Before		3.824	Before		8.065
3.000 (Minimum) 4.000 (Nominal) 5.000 (Maximum)			7.000 (Minimum) 8.000 (Nominal) 9.000 (Maximum)		
Phase	Radius 5 Short Radius IN	Value	Phase	Radius 5 Long Radius IN	Value
Before		3.791	Before		8.051
3.000 (Minimum) 4.000 (Nominal) 5.000 (Maximum)			7.000 (Minimum) 8.000 (Nominal) 9.000 (Maximum)		
Phase	Radius 6 Short Radius IN	Value	Phase	Radius 6 Long Radius IN	Value
Before		3.728	Before		7.967
3.000 (Minimum) 4.000 (Nominal) 5.000 (Maximum)			7.000 (Minimum) 8.000 (Nominal) 9.000 (Maximum)		

Before: 11-Jul-2009 23:37

High Resolution Laterolog Array – B / Equipment Identification

Primary Equipment:

HRLT Sonde

HRLS – B

846

Auxiliary Equipment:

HRLT lower Housing

HRLH – B

849

HRLT Lower Cartridge

HRLC – B

847

HRLT upper Housing

HRUH – B

755

HRLT Upper Cartridge

HRUC – B

755

High Resolution Laterolog Array – B Wellsite Calibration

HRLT M01









Idx	Phase	HRLT M0-M1 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-316.4	-322.7	-280.7	-379.7
1	Before		-325.5	-322.7	-280.7	-379.7
2	Before		-317.9	-322.7	-280.7	-379.7
3	Before		-320.9	-322.7	-280.7	-379.7
4	Before		-314.2	-322.7	-280.7	-379.7
5	Before		-319.8	-322.7	-280.7	-379.7
6	Before		319.2	322.7	379.7	280.7
7	Before		-322.7	-322.7	-280.7	-379.7
		(Minimum) (Nominal) (Maximum)				









Before: 12-Jul-2009 3:18









High Resolution Laterolog Array – B Wellsite Calibration




HRLT M12

Idx	Phase	HRLT M1-M2 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1749	1781	2095	1549
1	Before		1800	1781	2095	1549
2	Before		1753	1781	2095	1549
3	Before		1769	1781	2095	1549
4	Before		1733	1781	2095	1549
5	Before		1764	1781	2095	1549
6	Before		-1773	-1781	-1549	-2095
7	Before		1781	1781	2095	1549
		(Minimum) (Nominal) (Maximum)				

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT M23						
Idx	Phase	HRLT M2-M3 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1738	1781	2095	1549
1	Before		1793	1781	2095	1549
2	Before		1749	1781	2095	1549
3	Before		1770	1781	2095	1549
4	Before		1730	1781	2095	1549
5	Before		1764	1781	2095	1549
6	Before		-1754	-1781	-1549	-2095
7	Before		1781	1781	2095	1549
		(Minimum) (Nominal) (Maximum)				

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V34						
Idx	Phase	HRLT A3-A4 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68360	70000	82360	60900
1	Before		70650	70000	82360	60900
2	Before		69170	70000	82360	60900
3	Before		70140	70000	82360	60900
4	Before		68390	70000	82360	60900
5	Before		69680	70000	82360	60900
6	Before		-68180	-70000	-60900	-82360
7	Before		70000	70000	82360	60900
		(Minimum) (Nominal) (Maximum)				

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V45						
Idx	Phase	HRLT A4-A5 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68340	70000	82360	60900
1	Before		70770	70000	82360	60900
2	Before		69260	70000	82360	60900
3	Before		70190	70000	82360	60900
4	Before		68390	70000	82360	60900
5	Before		69660	70000	82360	60900
6	Before		-68320	-70000	-60900	-82360
7	Before		70000	70000	82360	60900
		(Minimum) (Nominal) (Maximum)				

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V56						
Idx	Phase	HRLT A5-A6 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68600	70000	82360	60900
1	Before		71030	70000	82360	60900
2	Before		69500	70000	82360	60900

3	Before		70440	70000	82360	60900
4	Before		68640	70000	82360	60900
5	Before		69930	70000	82360	60900
6	Before		-68520	-70000	-60900	-82360
7	Before		70000	70000	82360	60900
(Minimum) (Nominal) (Maximum)						

Before: 12-Jul-2009 3:18

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT VTP						
Idx	Phase	HRLT Torpedo-M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68120	-70000	-60900	-82360
1	Before		-70960	-70000	-60900	-82360
2	Before		-69440	-70000	-60900	-82360
3	Before		-70410	-70000	-60900	-82360
4	Before		-68600	-70000	-60900	-82360
5	Before		-69880	-70000	-60900	-82360
6	Before		68420	70000	82360	60900
7	Before		-70000	-70000	-60900	-82360
(Minimum) (Nominal) (Maximum)						

Before: 12-Jul-2009 3:18

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT VBD						
Idx	Phase	HRLT Bridle#9-M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68130	-70000	-60900	-82360
1	Before		-70950	-70000	-60900	-82360
2	Before		-69440	-70000	-60900	-82360
3	Before		-70410	-70000	-60900	-82360
4	Before		-68610	-70000	-60900	-82360
5	Before		-69880	-70000	-60900	-82360
6	Before		68420	70000	82360	60900
7	Before		-70000	-70000	-60900	-82360
(Minimum) (Nominal) (Maximum)						

Before: 12-Jul-2009 3:18

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT ISO						
Idx	Phase	HRLT Source Current Plus UA	Value	Nominal	Maximum	Minimum
0	Before		283.7	284.0	334.1	247.0
1	Before		281.1	281.1	330.7	244.4
2	Before		281.1	281.1	330.7	244.4
3	Before		281.1	281.1	330.7	244.4
4	Before		281.1	281.1	330.7	244.4
5	Before		281.1	281.1	330.7	244.4
6	Before		281.1	281.1	330.7	244.4
7	Before		281.1	281.1	330.7	244.4
(Minimum) (Nominal) (Maximum)						

Before: 12-Jul-2009 3:18

High Resolution Laterolog Array – B Wellsite Calibration

HRLT MV

Idx	Phase	HRLT Vertical Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-320.2	-322.7	-280.7	-379.7
1	Before		-322.1	-322.7	-280.7	-379.7
2	Before		-313.4	-322.7	-280.7	-379.7
3	Before		-314.7	-322.7	-280.7	-379.7
4	Before		-305.2	-322.7	-280.7	-379.7
5	Before		-325.5	-322.7	-280.7	-379.7
6	Before		328.8	322.7	379.7	280.7
7	Before		-322.7	-322.7	-280.7	-379.7
		(Minimum) (Nominal) (Maximum)				

Before: 12-Jul-2009 3:18

High resolution Integrated Logging Tool–DTS / Equipment Identification

Primary Equipment:

HILT high-Resolution Mechanical Sonde	HRMS – H	3846
HILT Rxo Gamma-ray Device	HRGD – H	3824
HILT Micro Cylindrically Focused Log Dev	MCFL – H	
GR Logging Source	GLS – VJ	3856
HILT High Res. Control Cartridge	HRCC – H	3794
HILT Gamma-Ray Neutron Sonde–DTS	HGNS – H	3840
HGNS Gamma-Ray Device	HGR –	
HGNS Neutron Detector with Alpha Source	HCNT – H	

Auxiliary Equipment:

Neutron Calibration Tank	NCT – B	2138
Gamma Source Radioactive	GSR – Y	1005
HGNS Housing	HGNH –	2916

High resolution Integrated Logging Tool–DTS Wellsite Calibration

Stab Measurement Summary

Phase	BS Window Ratio	Value	Phase	SS Window Ratio	Value	Phase	LS Window Ratio	Value
Before		0.7439	Before		0.4839	Before		0.2954
	0.7073 (Minimum) 0.7445 (Nominal) 0.7817 (Maximum)			0.4591 (Minimum) 0.4832 (Nominal) 0.5074 (Maximum)			0.2779 (Minimum) 0.2926 (Nominal) 0.3072 (Maximum)	
Phase	BS Window Sum CPS	Value	Phase	SS Window Sum CPS	Value	Phase	LS Window Sum CPS	Value
Before		27070	Before		11540	Before		1251
	25730 (Minimum) 27090 (Nominal) 28440 (Maximum)			10980 (Minimum) 11550 (Nominal) 12130 (Maximum)			1190 (Minimum) 1253 (Nominal) 1315 (Maximum)	

Before: 12-Jul-2009 0:20

High resolution Integrated Logging Tool–DTS Wellsite Calibration

Photo-multiplier High Voltages Calibrations

Phase	BS PM High Voltage (Command) V	Value	Phase	SS PM High Voltage (Command) V	Value	Phase	LS PM High Voltage (Command) V	Value
Before		1555	Before		1607	Before		1438
	1457 (Minimum) 1557 (Nominal) 1657 (Maximum)			1508 (Minimum) 1608 (Nominal) 1708 (Maximum)			1332 (Minimum) 1432 (Nominal) 1532 (Maximum)	

Before: 12-Jul-2009 0:20

High resolution Integrated Logging Tool–DTS Wellsite Calibration

Crystal Quality Resolutions Calibration

Phase	BS Crystal Resolution %	Value	Phase	SS Crystal Resolution %	Value	Phase	LS Crystal Resolution %	Value
Before		12.29	Before		9.168	Before		8.234
	11.45 (Minimum) 12.45 (Nominal) 13.45 (Maximum)			8.204 (Minimum) 9.204 (Nominal) 10.20 (Maximum)			7.148 (Minimum) 8.148 (Nominal) 9.148 (Maximum)	

Before: 12-Jul-2009 0:20

High resolution Integrated Logging Tool–DTS Wellsite Calibration

MCFL Calibration

Phase	Value
Before	

Phase	Raw B0 Resistivity OHMM	Value	Phase	Raw B1 Resistivity OHMM	Value	Phase	Raw B2 Resistivity OHMM	Value
Before		3868	Before		3812	Before		3866
	3565 (Minimum) 3875 (Nominal) 4185 (Maximum)			3524 (Minimum) 3830 (Nominal) 4136 (Maximum)			3524 (Minimum) 3830 (Nominal) 4136 (Maximum)	

Before: 12-Jul-2009 1:48

High resolution Integrated Logging Tool-DTS Wellsite Calibration					
HILT Caliper Calibration					
Phase	HILT Caliper Zero Measurement IN	Value	Phase	HILT Caliper Plus Measurement IN	Value
Before		8.514	Before		12.40
	6.000 (Minimum) 8.000 (Nominal) 10.00 (Maximum)			9.000 (Minimum) 12.00 (Nominal) 15.00 (Maximum)	

Before: 12-Jul-2009 0:30

High resolution Integrated Logging Tool-DTS Wellsite Calibration					
Detector Calibration					
Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jig - Bkgd) GAPI	Value
Before		4.160	Before		184.7
	0 (Minimum) 30.00 (Nominal) 120.0 (Maximum)			152.3 (Minimum) 160.0 (Nominal) 200.0 (Maximum)	

Before: 12-Jul-2009 0:21

High resolution Integrated Logging Tool-DTS Wellsite Calibration					
Zero Measurement					
Phase	CNTC Background CPS	Value	Phase	CFTC Background CPS	Value
Master		28.54	Master		30.72
Before		27.66	Before		29.47
	5.000 (Minimum) 28.54 (Nominal) 40.00 (Maximum)			5.000 (Minimum) 30.72 (Nominal) 40.00 (Maximum)	

Master: 29-Jun-2009 23:18

Before: 12-Jul-2009 0:22

High resolution Integrated Logging Tool-DTS Wellsite Calibration								
Ratio Measurement								
Phase	Thermal Near Corr. (Tank) CPS	Value	Phase	Thermal Far Corr. (Tank) CPS	Value	Phase	CNTC/CFTC (Tank)	Value
Master		2617	Master		1121	Master		2.335
	4700 (Minimum) 5800 (Nominal) 6900 (Maximum)			1900 (Minimum) 2400 (Nominal) 2900 (Maximum)			2.120 (Minimum) 2.159 (Nominal) 2.540 (Maximum)	

Master: 29-Jun-2009 23:18

High resolution Integrated Logging Tool-DTS Wellsite Calibration		
Accelerometer Calibration		
Phase	Z-Axis Acceleration M/S2	Value
Before		9.781
	9.610 (Minimum) 9.810 (Nominal) 10.01 (Maximum)	

Before: 12-Jul-2009 0:21

High resolution Integrated Logging Tool-DTS Master Calibration					
Inversion results					
Phase	Rho Aluminum G/C3	Value	Phase	Rho Magnesium G/C3	Value
Master		2.597	Master		1.688
	2.586 (Minimum) 2.596 (Nominal) 2.606 (Maximum)			1.676 (Minimum) 1.686 (Nominal) 1.696 (Maximum)	
Phase	Pe Aluminum	Value	Phase	Pe Magnesium	Value
Master		2.516	Master		2.634
	2.470 (Minimum) 2.570 (Nominal) 2.670 (Maximum)			2.550 (Minimum) 2.650 (Nominal) 2.750 (Maximum)	

Master: 3-Jul-2009 18:59

High resolution Integrated Logging Tool-DTS Master Calibration								
Deviation Summary								
Phase	BS Average Deviation %	Value	Phase	SS Average Deviation %	Value	Phase	LS Average Deviation %	Value
Master		0.2800	Master		0.4310	Master		0.6905

Phase	BS Max Deviation %	Value	Phase	SS Max Deviation %	Value	Phase	LS Max Deviation %	Value
Master		0.6805	Master		1.992	Master		1.788
	-1.600 (Minimum) 0 (Nominal) 1.600 (Maximum)			-2.500 (Minimum) 0 (Nominal) 2.500 (Maximum)			-3.500 (Minimum) 0 (Nominal) 3.500 (Maximum)	

Master: 3-Jul-2009 18:59

High resolution Integrated Logging Tool-DTS Master Calibration					
Zero Measurement					
Phase	CNTC Background CPS	Value	Phase	CFTC Background CPS	Value
Master		28.54	Master		30.72
	5.000 (Minimum) 28.54 (Nominal) 40.00 (Maximum)			5.000 (Minimum) 30.72 (Nominal) 40.00 (Maximum)	

Master: 29-Jun-2009 23:18

High resolution Integrated Logging Tool-DTS Master Calibration								
Tank Measurement								
Phase	Thermal Near Corr. (Tank) CPS	Value	Phase	Thermal Far Corr. (Tank) CPS	Value	Phase	CNTC/CFTC (Tank)	Value
Master	EXCEEDS LIMIT	2617	Master	EXCEEDS LIMIT	1121	Master		2.335
	4700 (Minimum) 5800 (Nominal) 6900 (Maximum)			1900 (Minimum) 2400 (Nominal) 2900 (Maximum)			2.120 (Minimum) 2.159 (Nominal) 2.540 (Maximum)	

Master: 29-Jun-2009 23:18

DTS Telemetry Tool / Equipment Identification			
Primary Equipment:			
DTC-H Auxiliary Cartridge		DTCH - A	
DTC-H Telemetry Cartridge		DTCH - A	
Auxiliary Equipment:			
DTCH Telemetry Cartridge Housing		ECH - KC	9799

Company: **CDEX**

Schlumberger

Well: **C0009A**

Field: **Kumanonada, Offshore Kii peninsula**

Rig: **Chikyu**

Country: **JAPAN**

EMS Caliper Log
3665.4m - 2785.0m
Suite 1, Run 1 (1:500)