

6.75" LWD Service

Density Caliper

Recorded Mode Data

Schlumberger

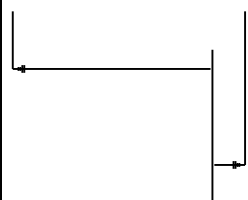
Company: IODP
 Lamont - Doherty Earth Observatory
 Well: U1379A
 Expedition 334
 Rig Name: JOIDES Resolution
 State: Puntarenas
 Country: Costa Rica

Latitude: 8.59 degrees
 Longitude: -84.08 degrees
 Block: Expedition 334
 Custom: U1379A
 Rig Name: JOIDES Resolution
 Rig Type: Drill Ship

FL: CRISP
 FL1: n/a
 FL2: n/a

Log Measured From - Drill Floor: 9.8 m
 Permanent Datum - Mean Sea Level

Ground Level: 137.0 m



Other Services:

Acquisition Dates: 20 Mar 11 to 23 Mar 11
 Log Interval: 130.0(m) to 1099.0(m)
 Index Types: Measured Depth
 Index Scales: 1:500
 Depth Source: Driller's Depth
 Depth Sensor: DES
 Conveyance: Drill Pipe
 Print Type: Field
 Spud Date: 19-Mar-2011

Disclaimer

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Borehole Size/Casing Record

Bit					
Bit Size (in)	8.5				
Bottom Driller (m)	1098.42				

Operational Run Summary


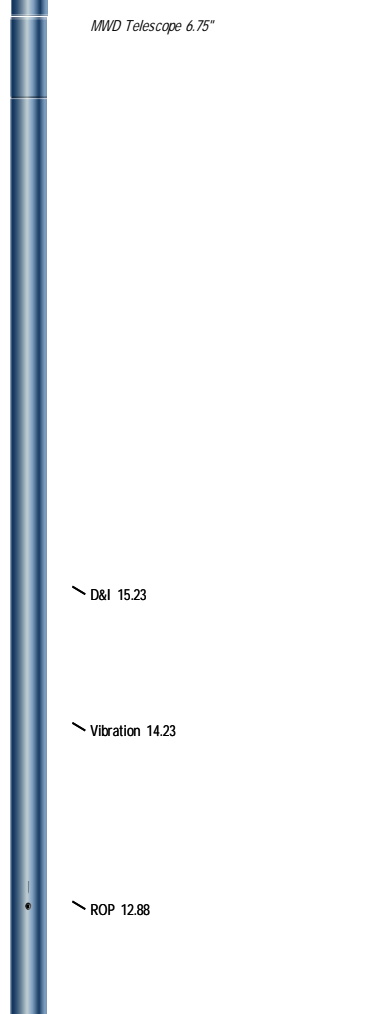
Parameter (unit)	Run 01				
Date Log Started	20-Mar-2011				
Time Log Started	03:15:21				
Date Log Finished	23-Mar-2011				
Time Log Finished	15:22:35				
Bit Size (in)	8.500				
Bit Start Depth (m)	49.81				
Bit Stop Depth (m)	1098.42				
Top Log Interval (m)	137.00				
Bottom Log Interval (m)	1099.00				
Max Hole Deviation (deg)	1.64				
Azimuth of Max Deviation (deg)	218.55				
Logging Unit Number	n/a				
Logging Unit Location	n/a				
Recorded By	Carrillo/Garcia				
Witnessed By	Alberto Malinverno				
Service Order Number	11MED0004				

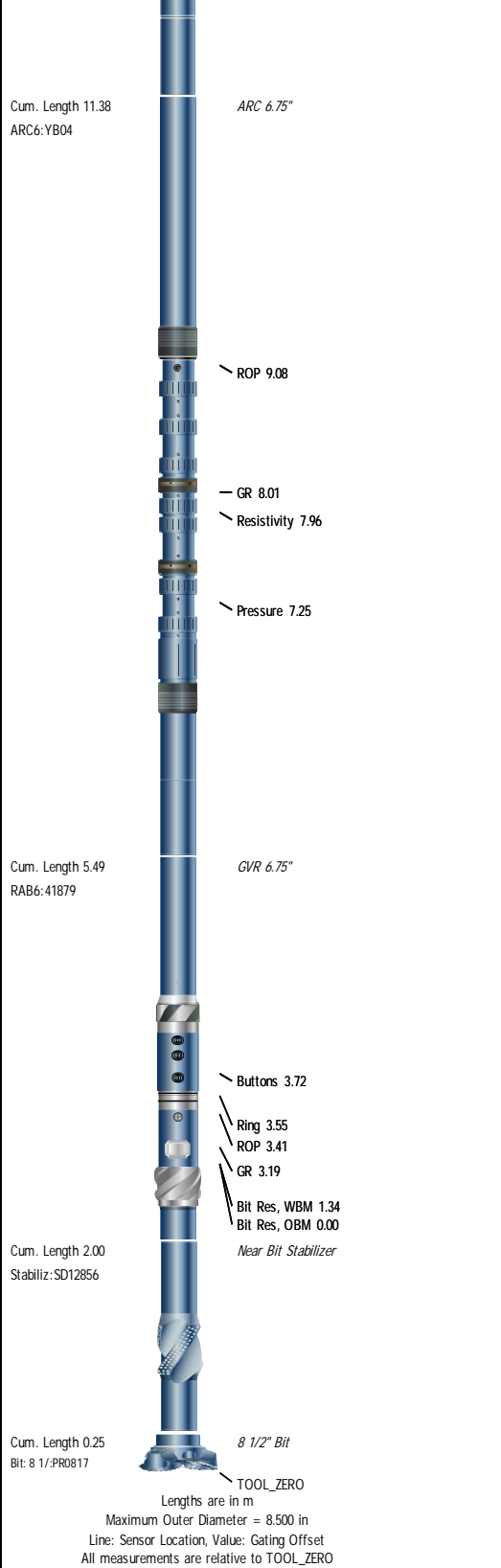
Borehole Fluids

Parameter (unit)	Run 01				
Type Fluid	Water				
Max Recorded Temperature (degC)	NaN				
Source of Sample	Active Tank				
Salinity (ppm)	31737.15				
Density (g/cm3)	1.03				
Viscosity (s)					
Fluid Loss (cm3)					
pH					
Source Rmf					
Source Rmc	Pressed				
Rm @ Meas Temp (ohm.m@degC)	0.2 @ 23.89				
Rmf @ Meas Temp (ohm.m@degC)	0.15 @ 20				
Rmc @ Meas Temp (ohm.m@degC)					

Rm @ BHT (ohm.m@degC)	0.07 @ 100				
Rmf @ BHT (ohm.m@degC)	0.05 @ 100				
Rmc @ BHT (ohm.m@degC)	NaN @ 100				

Remarks and Equipment Summary

Run 01: Toolstring	Run 01: Remarks	
<div style="display: flex; justify-content: space-between;"> <div style="font-size: small;">Cum. Length 25.69 ADN6C:YJ56</div> <div style="font-size: small;">ADN 6.75"</div> </div> 	<p>Gamma Ray corrected for Bit Size, Tool Diameter and Mud Weight.</p> <p>Density processed on a Sandstone (2.65 g/cm3) matrix.</p> <p>Neutron Source: A2145, Gamma Source: A01</p>	
<div style="display: flex; justify-content: space-between;"> <div style="font-size: small;">Cum. Length 19.48 TELE675:E4156</div> <div style="font-size: small;">MWD Telescope 6.75"</div> </div> 		



Run 01

U1379A

Integration Summary

Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
Software Version				
Acquisition System			Version	
MaxWell			2.1.6903.0	
Application Patch			SP-20110302-2.1.6903.1130	
Computation	Description			Version

ULTRASON_PROC	Ultrasonic Processing, ADN	2.1.6903.1067	
DENSITY_PROC	Density Processing, ADN	2.1.6903.1067	
Tool Interface	System Version	Loaded Version	
HSPM	hspm15_1c_03	2.1.6903.1130	
Tool Elements	Description	Software Version	Firmware Version
ADSE	Azimuthal Density Sensor Electronics, Vision ADN 6-3/4 Inch	2.1.6903.1067	V8.4A

Pass Summary

Run Name	Objective	Direction	Top	Bottom	Start Time	Stop Time
Run 01	Drilling	Down	49.81 m	1098.42 m	20-Mar-2011 03:15:21	23-Mar-2011 15:22:35

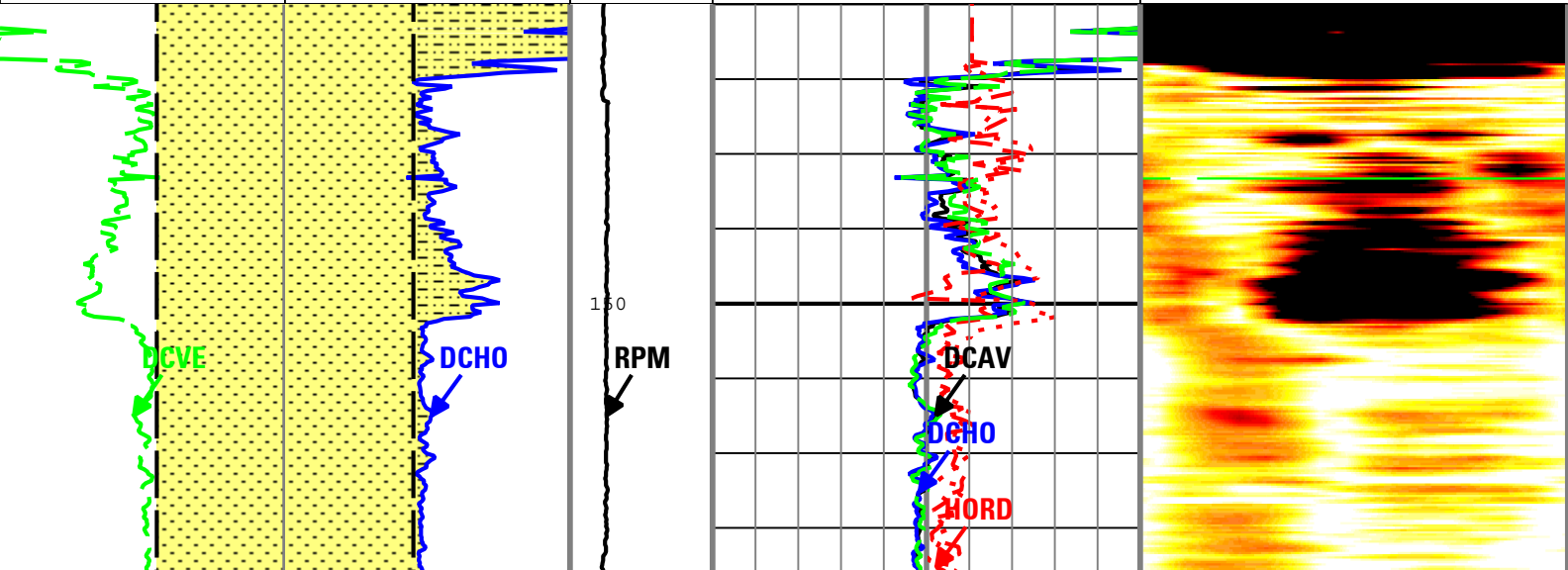
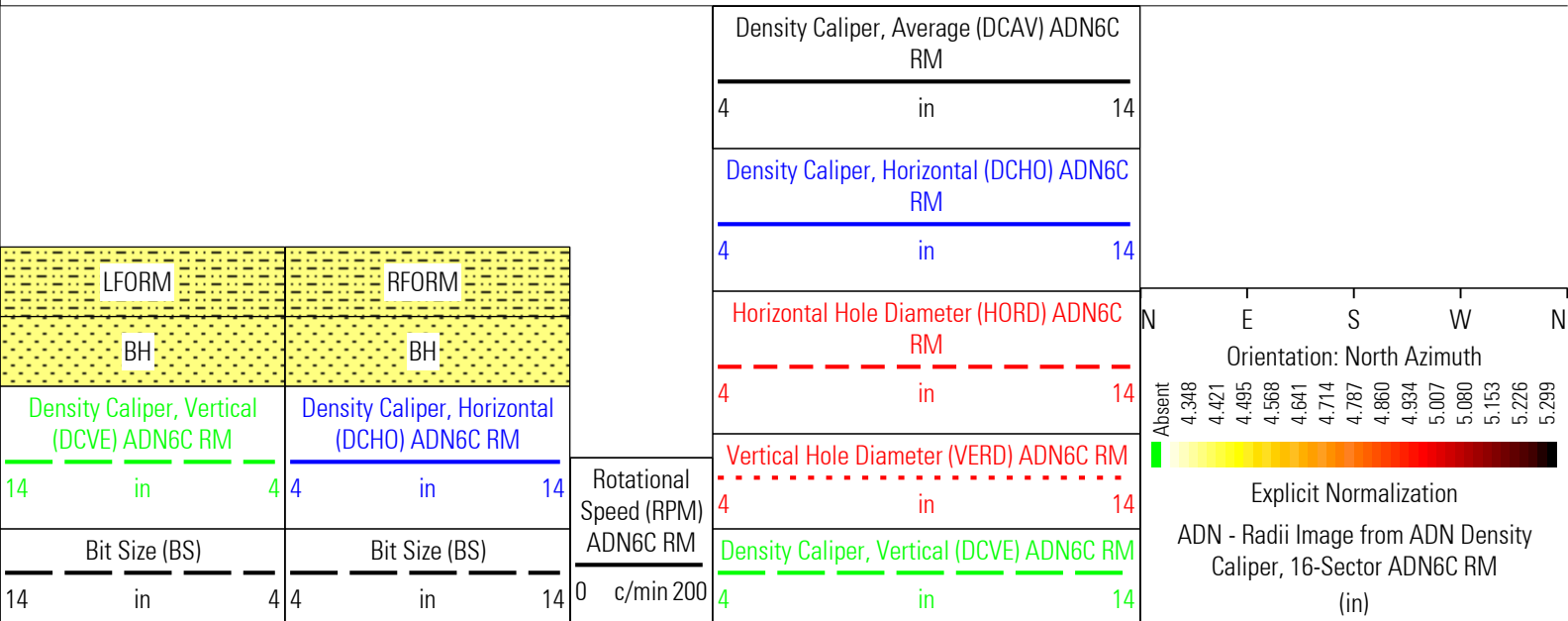
All depths are referenced to toolstring zero

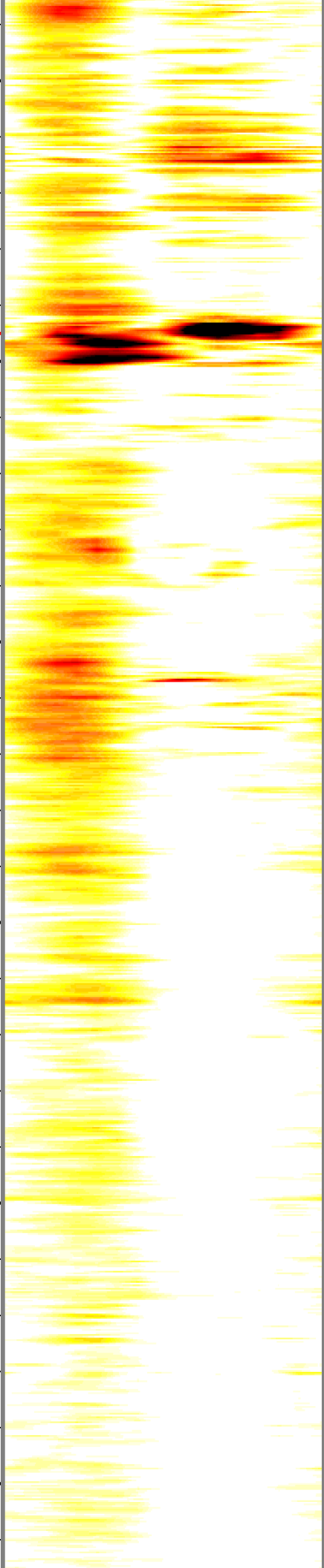
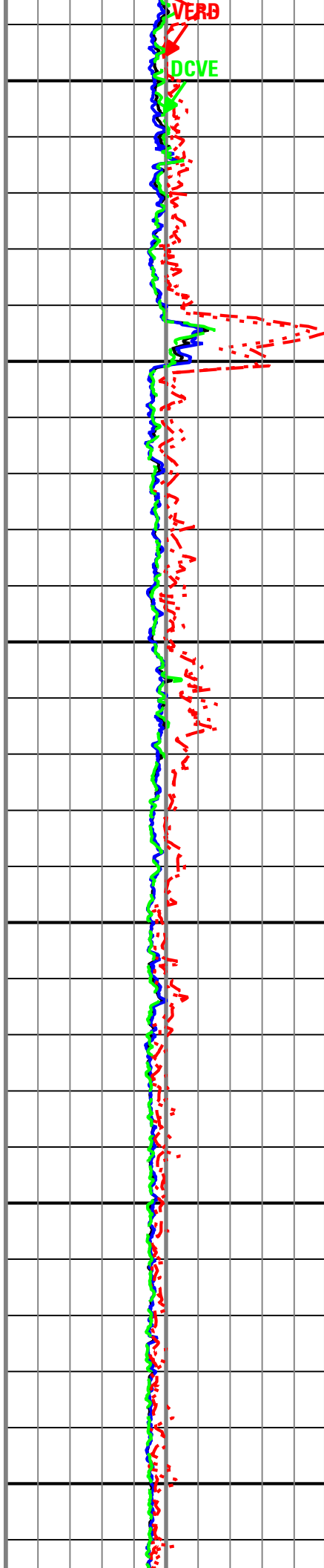
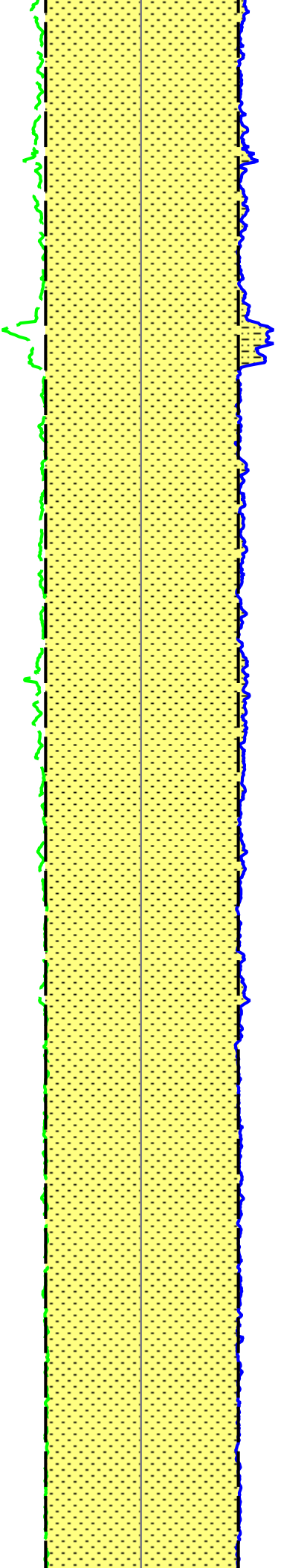
Log

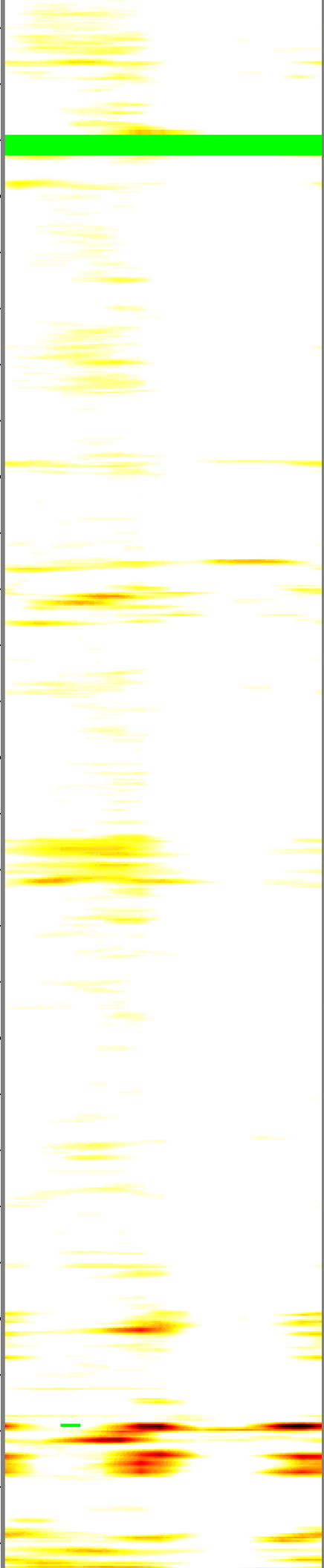
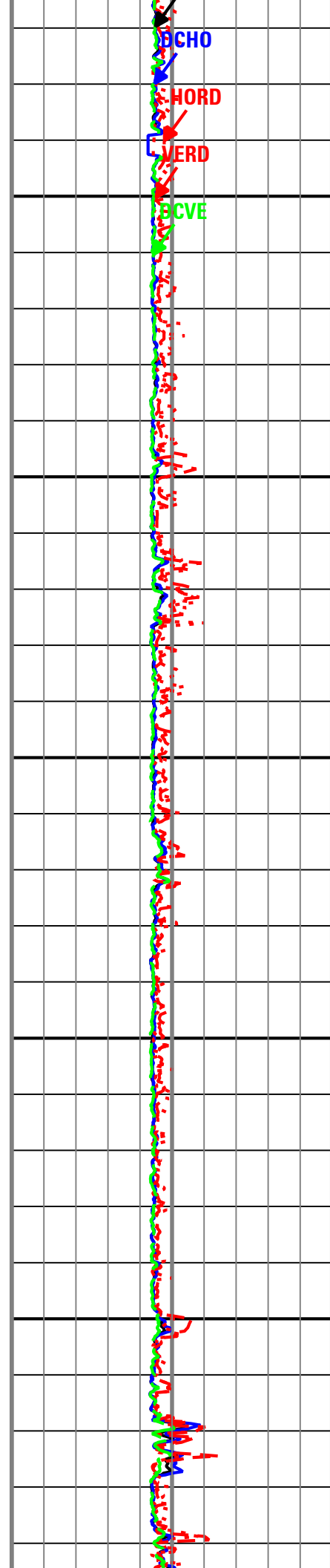
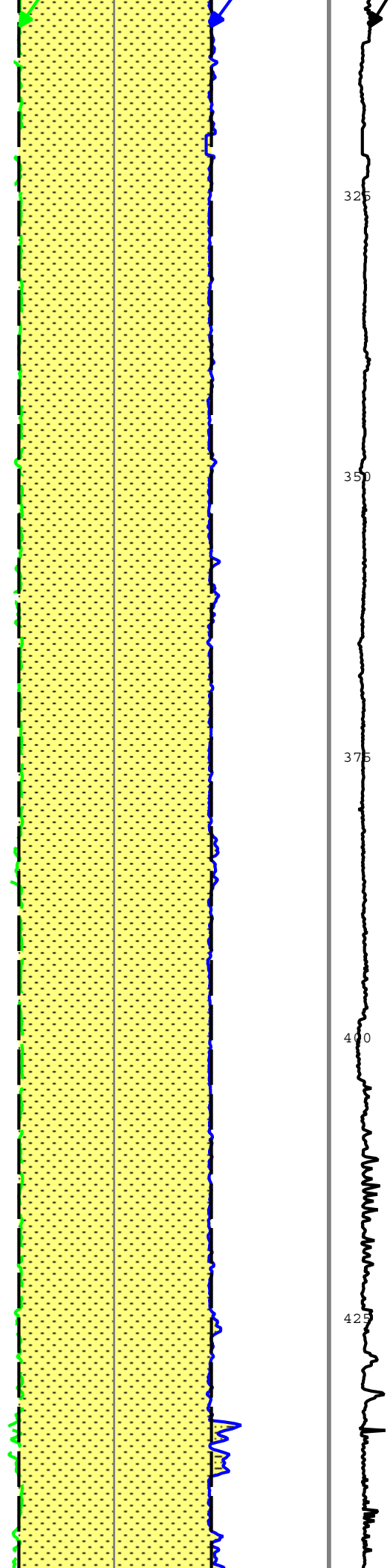
Run 01: Drilling 950170E2-A9D5-4924-862A-7DF83A989827

Description: VDN Density Caliper Image Log Format: Log (ADN Density Caliper Image) Index Scale: 1:500 Index Unit: m Index Type: Measured Depth
 Creation Date: 24-Mar-2011 00:56:24

Channel	Source	Sampling
DCAV	ADN6C:ADN6C:ADSE	6in - RM
DCHO	ADN6C:ADN6C:ADSE	6in - RM
DCVE	ADN6C:ADN6C:ADSE	6in - RM
RPM	ADN6C:ADN6C	6in - RM
HORD	ADN6C:ADN6C:ADSE	6in - RM
VERD	ADN6C:ADN6C:ADSE	6in - RM







BCHO

HORD

VERD

BCVE

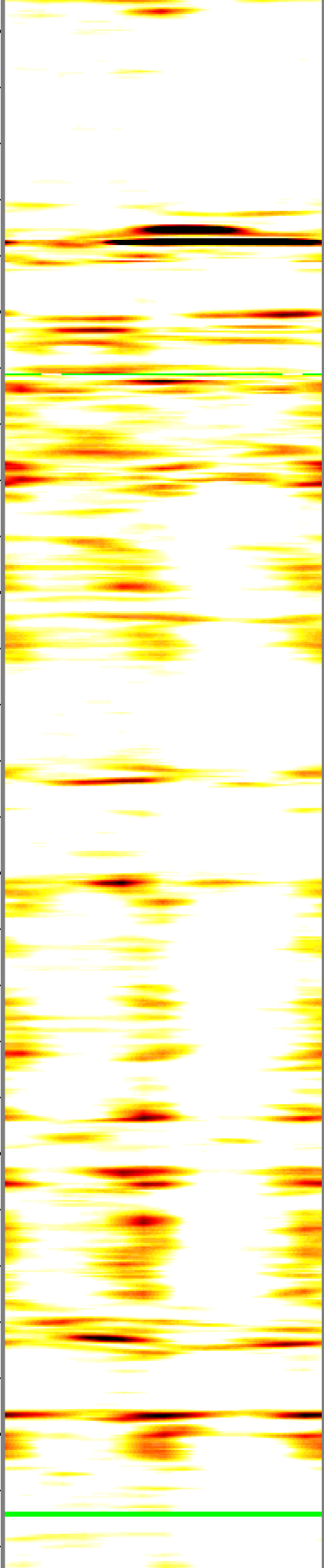
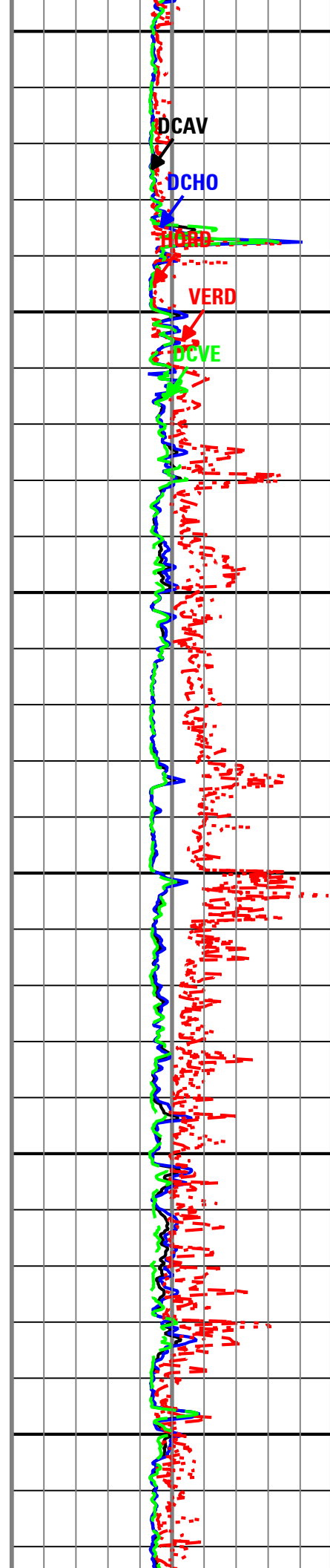
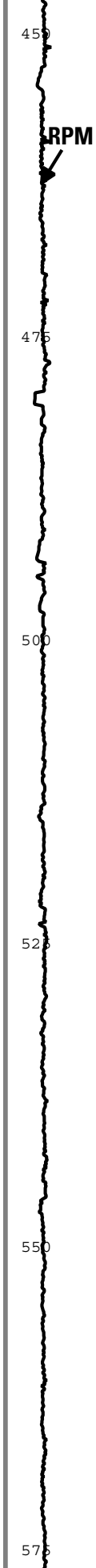
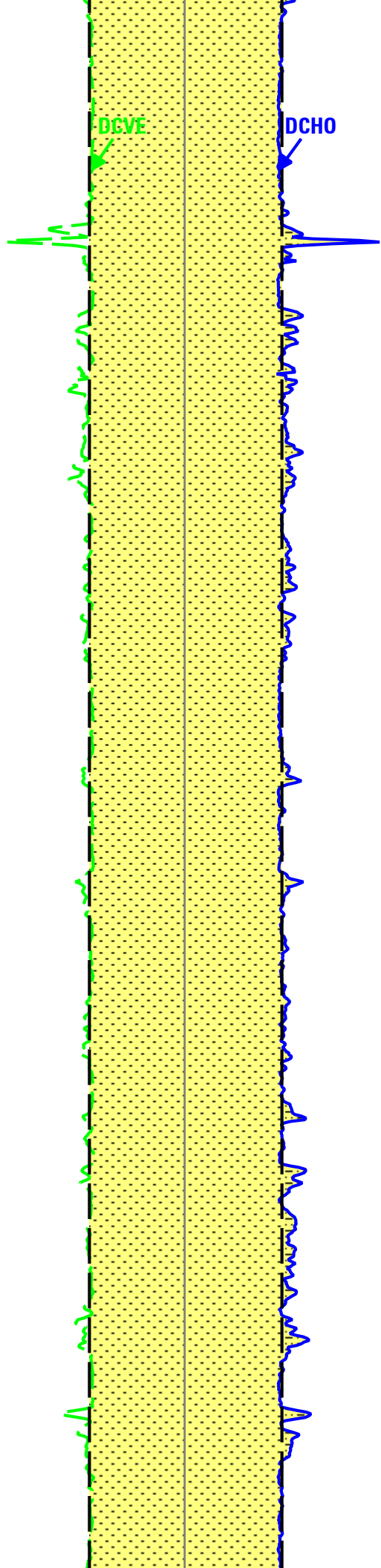
325

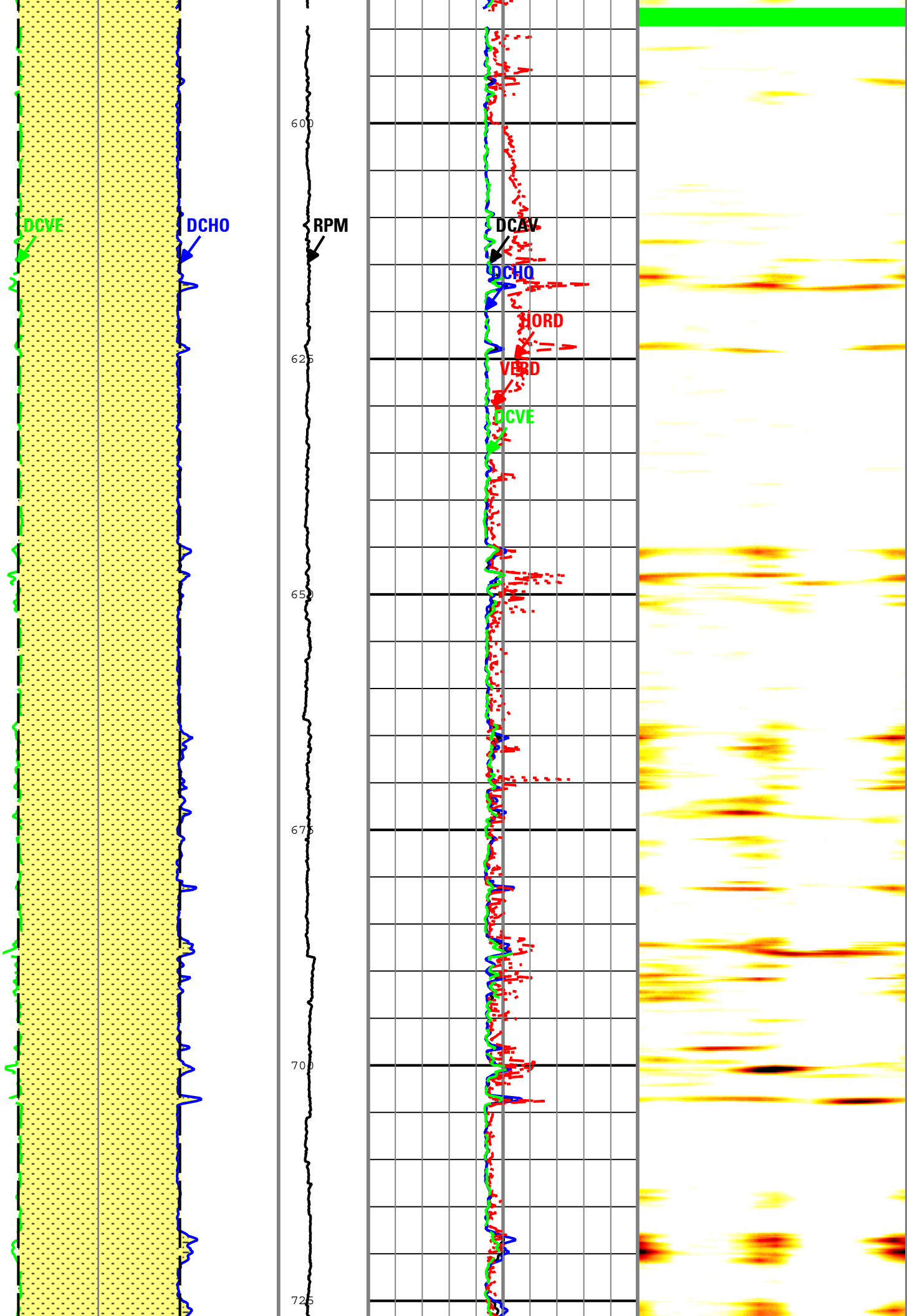
350

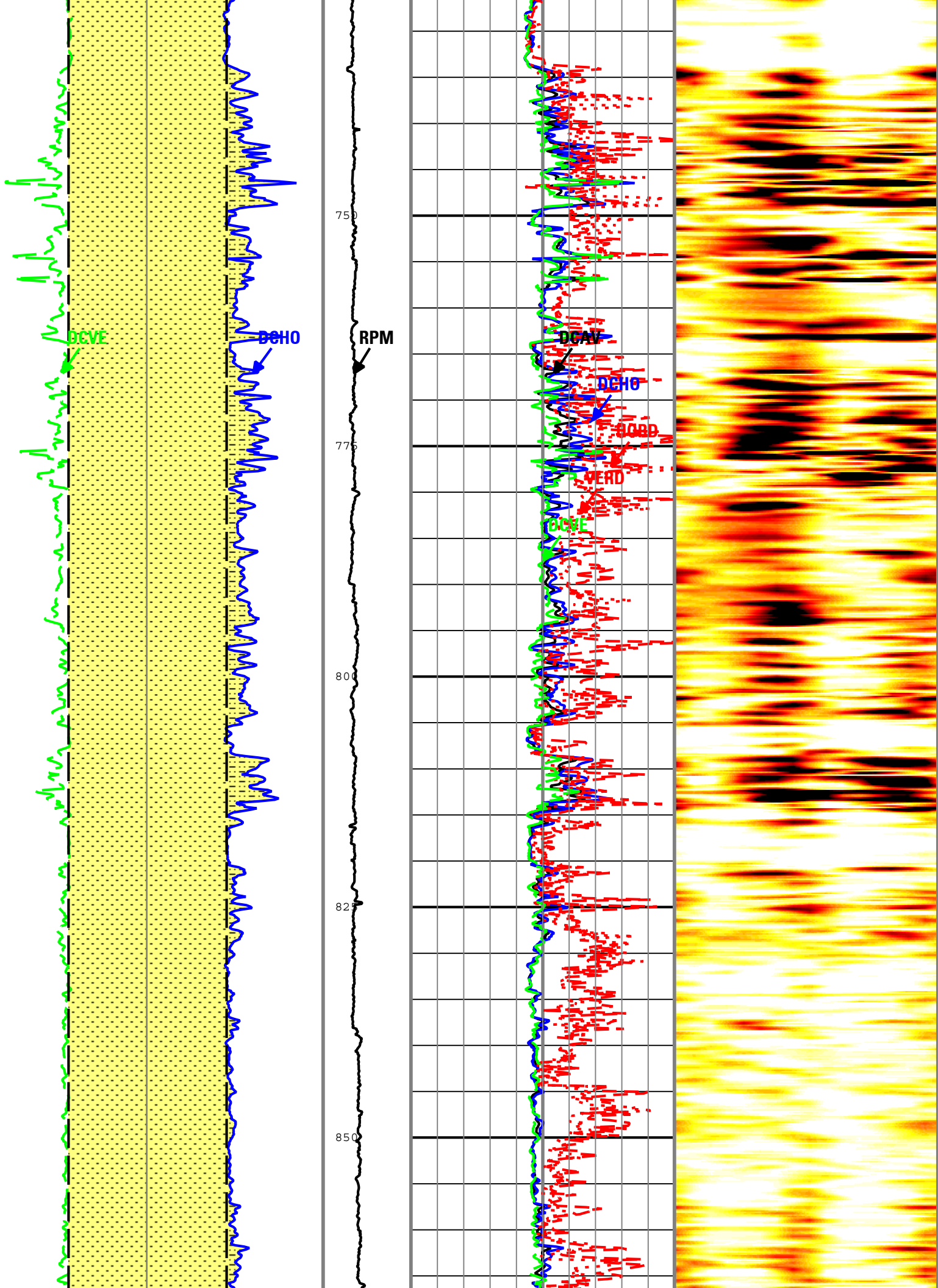
375

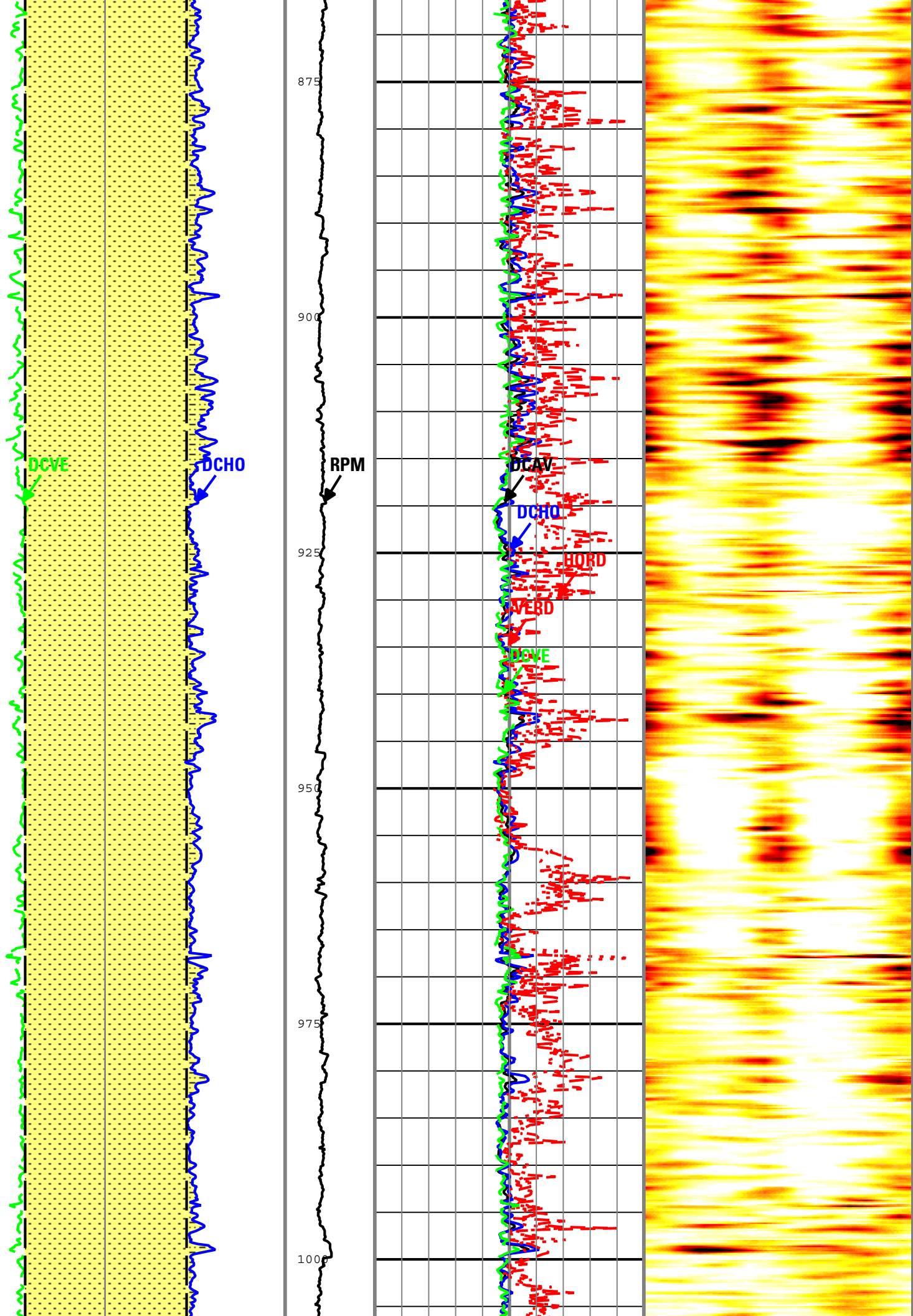
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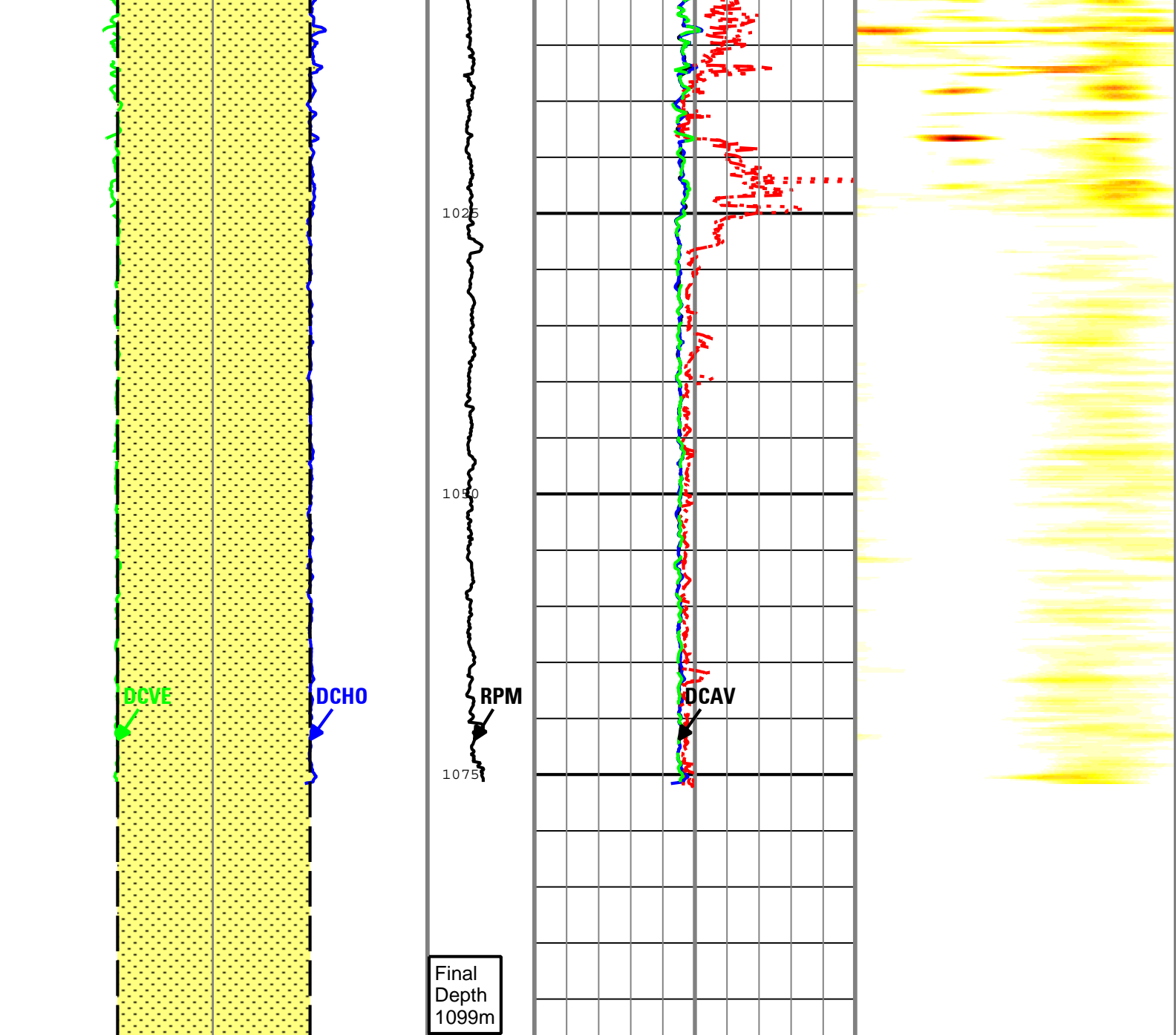
425





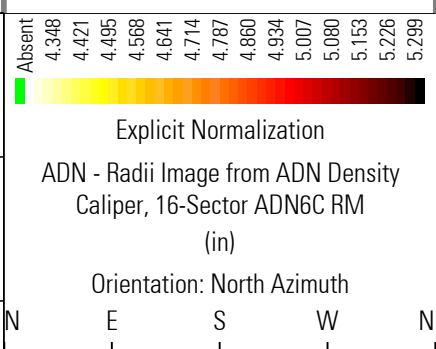






LFORM	RFORM
BH	BH
Density Caliper, Vertical (DCVE) ADN6C RM	Density Caliper, Horizontal (DCHO) ADN6C RM
14 in 4	4 in 14
Bit Size (BS)	Bit Size (BS)
14 in 4	4 in 14

Rotational Speed (RPM) ADN6C RM	Density Caliper, Average (DCAV) ADN6C RM
0 c/min 200	4 in 14
	Density Caliper, Horizontal (DCHO) ADN6C RM
	4 in 14
	Horizontal Hole Diameter (HORD) ADN6C RM
	4 in 14
	Vertical Hole Diameter (VERD) ADN6C RM
	4 in 14
	Density Caliper, Vertical (DCVE) ADN6C RM
	4 in 14



Channel Processing Parameters

Parameter	Description	ToolPath	Value	Unit
ALPHA_DEN_OPT	Density Enhanced Vertical Resolution Processing Switch	ADN6C:ADN6C:ADSE	Yes	
BS	Bit Size	COMPLETION	8.5	in
DEPTH_SEL	Depth Selection Parameter	DNMSESSION	Driller's Depth	
DFD	Drilling Fluid Density	Borehole	1.03	g/cm3
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
STOH	Top of Hole Sector	ADN6C:ADN6C:ADSE	SECTOR_0	
USIN	Ultrasonic Sensor Inset	ADN6C:ADN6C:ADSE	0.18	in

Tool Control Parameters

Parameter	Description	ToolPath	Value	Unit
OFFBTM_TH	Threshold for deciding whether the bit is off bottom	DnMWorkflow	0	m

Detailed Calibration Record

RAB6 : 6.75-in. geoVISION resistivity tool Calibration M2 at T1 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	236
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	18-Feb-2011 05:04:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Resistivity			
Description	Min/Nominal/Max	Shop	Unit
C21M2T1 Monitor 2 at T1 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	0.9990	

RAB6 : 6.75-in. geoVISION resistivity tool Calibration M2 at T2 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	236
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	18-Feb-2011 05:04:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Resistivity			
Description	Min/Nominal/Max	Shop	Unit
C22M2T2 Monitor 2 at T2 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	1.0044	

RAB6 : 6.75-in. geoVISION resistivity tool Calibration M0 at T1 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	236
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	18-Feb-2011 05:04:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Resistivity			
Description	Min/Nominal/Max	Shop	Unit
C01M0T1 Monitor 0 at T1 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	0.9986	

RAB6 : 6.75-in. geoVISION resistivity tool Calibration M0 at T2 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	236
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	18-Feb-2011 05:04:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Resistivity			

Description	Min/Nominal/Max	Shop	Unit
C02M0T2 Monitor 0 at T2 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	1.0041	

RAB6 : 6.75-in. geoVISION resistivity tool Calibration Ring at T1 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	236
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	18-Feb-2011 05:04:34 PM - Valid		
Calibration Source	Time Frame File		

Calibration Type: Resistivity

Description	Min/Nominal/Max	Shop	Unit
CR1RINGT1 Ring at T1 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	1.0029	

RAB6 : 6.75-in. geoVISION resistivity tool Calibration Ring at T2 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	236
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	18-Feb-2011 05:04:34 PM - Valid		
Calibration Source	Time Frame File		

Calibration Type: Resistivity

Description	Min/Nominal/Max	Shop	Unit
CR2RINGT2 Ring at T2 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	1.0091	

RAB6 : 6.75-in. geoVISION resistivity tool Calibration BD at T1 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	236
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	18-Feb-2011 05:04:34 PM - Valid		
Calibration Source	Time Frame File		

Calibration Type: Resistivity

Description	Min/Nominal/Max	Shop	Unit
CD1BDT1 Button Deep at T1 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	1.0078	

RAB6 : 6.75-in. geoVISION resistivity tool Calibration BD at T2 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	236
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	18-Feb-2011 05:04:34 PM - Valid		
Calibration Source	Time Frame File		

Calibration Type: Resistivity

Description	Min/Nominal/Max	Shop	Unit
CD2BDT2 Button Deep at T2 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	1.0137	

RAB6 : 6.75-in. geoVISION resistivity tool Calibration BM at T1 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	236
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	18-Feb-2011 05:04:34 PM - Valid		
Calibration Source	Time Frame File		

Calibration Type: Resistivity

Description	Min/Nominal/Max	Shop	Unit
CM1BMT1	0.9750 / 1.0000 / 1.0250	1.0024	

RAB6 : 6.75-in. geoVISION resistivity tool Calibration BM at T2 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	236
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	18-Feb-2011 05:04:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Resistivity			
Description	Min/Nominal/Max	Shop	Unit
CM2BMT2 Button Medium at T2 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	1.0084	

RAB6 : 6.75-in. geoVISION resistivity tool Calibration BS at T1 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	236
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	18-Feb-2011 05:04:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Resistivity			
Description	Min/Nominal/Max	Shop	Unit
CS1BST1 Button Shallow at T1 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	1.0064	

RAB6 : 6.75-in. geoVISION resistivity tool Calibration BS at T2 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	236
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	18-Feb-2011 05:04:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Resistivity			
Description	Min/Nominal/Max	Shop	Unit
CS2BST2 Button Shallow at T2 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	1.0126	

RAB6 : 6.75-in. geoVISION resistivity tool Calibration Gamma Ray Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	236
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	18-Feb-2011 04:26:29 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Gamma Ray: Blanket			
Description	Min/Nominal/Max	Shop	Unit
GR_GAIN Gamma Ray Calibration Gain	0.7500 / 1.0000 / 1.2500	1.0259	

ARC6 : Calibration Resistivity - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Elec. Chassis HP w/o AIM Receiver	AREA	556
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	27-Feb-2011 04:01:10 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Resistivity: Air			
Description	Min/Nominal/Max	Shop	Unit
ATT1F2AIR Attenuation T1 at 2 MHz	6.500 / 8.500 / 10.500	8.868	dB
ATT2F2AIR Attenuation T2 at 2 MHz	4.500 / 6.500 / 8.500	6.071	dB

ATT3F2AIR Attenuation T3 at 2 MHz	2.500 / 4.500 / 6.500	5.496	dB
ATT4F2AIR Attenuation T4 at 2 MHz	2.600 / 4.600 / 6.600	3.975	dB
ATT5F2AIR Attenuation T5 at 2 MHz	1.600 / 3.600 / 5.600	4.046	dB
PST1F2AIR Phase Shift T1 at 2 MHz	-3.900 / 0.100 / 4.100	-1.326	deg
PST2F2AIR Phase Shift T2 at 2 MHz	-3.900 / 0.100 / 4.100	1.331	deg
PST3F2AIR Phase Shift T3 at 2 MHz	-3.900 / 0.100 / 4.100	-1.391	deg
PST4F2AIR Phase Shift T4 at 2 MHz	-3.900 / 0.100 / 4.100	1.282	deg
PST5F2AIR Phase Shift T5 at 2 MHz	-3.900 / 0.100 / 4.100	-1.412	deg
ATT1F4AIR Attenuation T1 at 400 KHz	6.500 / 8.500 / 10.500	8.824	dB
ATT2F4AIR Attenuation T2 at 400 KHz	4.500 / 6.500 / 8.500	6.124	dB
ATT3F4AIR Attenuation T3 at 400 KHz	2.500 / 4.500 / 6.500	5.448	dB
ATT4F4AIR Attenuation T4 at 400 KHz	2.600 / 4.600 / 6.600	4.037	dB
ATT5F4AIR Attenuation T5 at 400 KHz	1.600 / 3.600 / 5.600	4.002	dB
PST1F4AIR Phase Shift T1 at 400 KHz	-3.900 / 0.100 / 4.100	1.374	deg
PST2F4AIR Phase Shift T2 at 400 KHz	-3.900 / 0.100 / 4.100	-1.379	deg
PST3F4AIR Phase Shift T3 at 400 KHz	-3.900 / 0.100 / 4.100	1.338	deg
PST4F4AIR Phase Shift T4 at 400 KHz	-3.900 / 0.100 / 4.100	-1.422	deg
PST5F4AIR Phase Shift T5 at 400 KHz	-3.900 / 0.100 / 4.100	1.389	deg

ARC6 : Calibration Gamma Ray - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Elec. Chassis HP w/o AIM Receiver	AREA	556
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	27-Feb-2011 10:57:06 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Gamma Ray: Blanket			
Description	Min/Nominal/Max	Shop	Unit
GR_GAIN Gamma Ray Calibration Gain	0.580 / 1.000 / 1.250	1.130	

ADN6C : 6.75-in. Azimuthal Density Neutron Calibration Density LS Window 3 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Chassis, Hi-Pres, Non-Mag	ADSE	297
	Collar, IBS 8-1/4, P550	ADDC	YJ56
	Retrievable Neutron Gamma Src Plugless	RNGS	01-21
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	23-Feb-2011 06:44:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Density: LS Window 3			
Description	Min/Nominal/Max	Shop	Unit
LSW3_BG LS window 3 - Background	30.0 / 52.5 / 75.0	47.4	1/s
LSW3_AL LS window 3 - Al	75.0 / 537.5 / 1000.0	161.0	1/s
LSW3_MG LS window 3 - Mg	500.0 / 3000.0 / 5500.0	1093.7	1/s
RHOL_H2O Long spacing water density	1.024 / 1.039 / 1.054	1.049	g/cm3

ADN6C : 6.75-in. Azimuthal Density Neutron Calibration Density SS Window 1 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Chassis, Hi-Pres, Non-Mag	ADSE	297
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	23-Feb-2011 06:44:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Density: SS Window 1			
Description	Min/Nominal/Max	Shop	Unit
SSW1_BG SS window 1 - Background	75.0 / 125.0 / 175.0	104.0	1/s
SSW1_AL SS window 1 - Al	750.0 / 2625.0 / 4500.0	1377.6	1/s
SSW1_MG SS window 1 - Mg	1500.0 / 5750.0 / 10000.0	2693.7	1/s

ADN6C : 6.75-in. Azimuthal Density Neutron Calibration Density SS Window 3 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Chassis, Hi-Pres, Non-Mag	ADSE	297
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	23-Feb-2011 06:44:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Density: SS Window 3			
Description	Min/Nominal/Max	Shop	Unit
SSW3_BG SS window 3 - Background	350.0 / 550.0 / 750.0	445.6	1/s
SSW3_AL SS window 3 - Al	2000.0 / 8500.0 / 15000.0	4146.8	1/s
SSW3_MG SS window 3 - Mg	3500.0 / 14250.0 / 25000.0	6590.8	1/s
RHOS_H2O Short spacing water density	1.096 / 1.126 / 1.156	1.147	g/cm3

ADN6C : 6.75-in. Azimuthal Density Neutron Calibration Neutron Far 1 Tube 1 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Chassis, Hi-Pres, Non-Mag	ADSE	297
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	23-Feb-2011 06:44:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Neutron: Far 1 Tube 1			
Description	Min/Nominal/Max	Shop	Unit
FR11_AIR Far 1 tube 1 - Air	13.300 / 21.150 / 29.000	16.618	1/s
FR11_ROD Far 1 tube 1 - Rod	3.900 / 5.700 / 7.500	4.276	1/s
FR11_H2O Far 1 tube 1 - Water	1.900 / 2.800 / 3.700	2.099	1/s

ADN6C : 6.75-in. Azimuthal Density Neutron Calibration Neutron Far 1 Tube 2 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Chassis, Hi-Pres, Non-Mag	ADSE	297
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	23-Feb-2011 06:44:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Neutron: Far 1 Tube 2			
Description	Min/Nominal/Max	Shop	Unit
FR12_AIR Far 1 tube 2 - Air	13.300 / 21.150 / 29.000	17.654	1/s
FR12_ROD Far 1 tube 2 - Rod	3.900 / 5.700 / 7.500	4.442	1/s
FR12_H2O Far 1 tube 2 - Water	1.900 / 2.800 / 3.700	2.180	1/s

Far 1 tube 2 - Water

ADN6C : 6.75-in. Azimuthal Density Neutron Calibration Neutron Far 1 Tube 3 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Chassis, Hi-Pres, Non-Mag	ADSE	297
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	23-Feb-2011 06:44:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Neutron: Far 1 Tube 3			
Description	Min/Nominal/Max	Shop	Unit
FR13_AIR Far 1 tube 3 - Air	13.300 / 21.150 / 29.000	17.334	1/s
FR13_ROD Far 1 tube 3 - Rod	3.900 / 5.700 / 7.500	4.303	1/s
FR13_H2O Far 1 tube 3 - Water	1.900 / 2.800 / 3.700	2.085	1/s

ADN6C : 6.75-in. Azimuthal Density Neutron Calibration Neutron Far 2 Tube 1 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Chassis, Hi-Pres, Non-Mag	ADSE	297
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	23-Feb-2011 06:44:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Neutron: Far 2 Tube 1			
Description	Min/Nominal/Max	Shop	Unit
FR21_AIR Far 2 tube 1 - Air	13.300 / 21.150 / 29.000	17.545	1/s
FR21_ROD Far 2 tube 1 - Rod	3.900 / 5.700 / 7.500	4.402	1/s
FR21_H2O Far 2 tube 1 - Water	1.900 / 2.800 / 3.700	2.187	1/s

ADN6C : 6.75-in. Azimuthal Density Neutron Calibration Neutron Far 2 Tube 2 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Chassis, Hi-Pres, Non-Mag	ADSE	297
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	23-Feb-2011 06:44:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Neutron: Far 2 Tube 2			
Description	Min/Nominal/Max	Shop	Unit
FR22_AIR Far 2 tube 2 - Air	13.300 / 21.150 / 29.000	17.396	1/s
FR22_ROD Far 2 tube 2 - Rod	3.900 / 5.700 / 7.500	4.234	1/s
FR22_H2O Far 2 tube 2 - Water	1.900 / 2.800 / 3.700	2.146	1/s

ADN6C : 6.75-in. Azimuthal Density Neutron Calibration Neutron Far 2 Tube 3 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Chassis, Hi-Pres, Non-Mag	ADSE	297
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	23-Feb-2011 06:44:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Neutron: Far 2 Tube 3			
Description	Min/Nominal/Max	Shop	Unit
FR23_AIR Far 2 tube 3 - Air	13.300 / 21.150 / 29.000	16.993	1/s
FR23_ROD Far 2 tube 3 - Rod	3.900 / 5.700 / 7.500	4.233	1/s
FR23_H2O Far 2 tube 3 - Water	1.900 / 2.800 / 3.700	2.091	1/s

NEUT_PORO_H2O_FAR Far Neutron Water Porosity	86.000 / 103.500 / 121.000	95.000	pu
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ADN6C : 6.75-in. Azimuthal Density Neutron Calibration Neutron Near 1 Tube 1 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Chassis, Hi-Pres, Non-Mag	ADSE	297
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	23-Feb-2011 06:44:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Neutron: Near 1 Tube 1			
Description	Min/Nominal/Max	Shop	Unit
NR11_AIR Near 1 tube 1 - Air	400.000 / 575.000 / 750.000	444.159	1/s
NR11_ROD Near 1 tube 1 - Rod	640.000 / 895.000 / 1150.000	721.410	1/s
NR11_H2O Near 1 tube 1 - Water	275.000 / 412.500 / 550.000	318.322	1/s

ADN6C : 6.75-in. Azimuthal Density Neutron Calibration Neutron Near 2 Tube 1 Calibration - Run 01

Primary Set Components	Description	Tool Element	Serial Number
	Chassis, Hi-Pres, Non-Mag	ADSE	297
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	23-Feb-2011 06:44:34 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Neutron: Near 2 Tube 1			
Description	Min/Nominal/Max	Shop	Unit
NR21_AIR Near 2 tube 1 - Air	400.000 / 575.000 / 750.000	446.312	1/s
NR21_ROD Near 2 tube 1 - Rod	640.000 / 895.000 / 1150.000	717.931	1/s
NR21_H2O Near 2 tube 1 - Water	275.000 / 412.500 / 550.000	316.561	1/s

Survey Record

Survey Calculation

Method :	Minimum Radius of Curvature	DLS Method :	Lubinski
North Reference :	True North	Total Correction Formula :	Magnetic Dec

Rig Location

Latitude :	8.59 degrees	Longitude :	-84.08 degrees
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Tie In Point

Measured Depth:	0.00 m	Inclination:	0.00 deg	Azimuth:	0.00 deg
True Vertical Depth:	0.00 m	North Displacement:	0.00 m	East Displacement:	0.00 m
N/-S VSec Origin:	0.00 m	E/-W VSec Origin:	0.00 m	Vertical Section Azimuth:	0.00 deg

D&I Inits Computed and Values Used - Run 01

Geomagnetic Model :	BGGM 2010	Geomagnetic Date :	19-Mar-2011
Computed Location B :	34288.69 nT +/- 300.00nT	Used Location B :	34288.69 nT +/- 300.00nT
Computed Location G :	32.09 ft/s2 +/- 0.08ft/s2	Used Location G :	32.09 ft/s2 +/- 0.08ft/s2
Computed Magnetic Dip :	35.35 deg +/- 0.45deg	Used Magnetic Dip :	35.35 deg +/- 0.45deg
Computed Magnetic Dec :	-0.61 deg	Used Magnetic Dec :	-0.61 deg
Computed Total Correction :	-0.61 deg	Used Total Correction :	-0.61 deg

Survey Quality Index

0 : Long, passed all criteria	2 : Long, failed mag criteria
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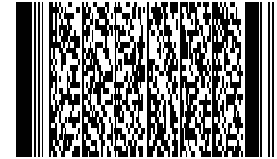
Survey Correction Index

0 : No correction

Seq	MD	Incl	Azim	Course	TVD	V Sec	N/ -S	E/ -W	Closure	at Azim	DLS	Tool Type	QI	CI
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	(m)	(deg)	(deg)	(m)	(m)	(m)	(m)	(m)	(m)	(deg)	deg/100ft			
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	TIP		
2	131.49	1.26	187.64	131.49	131.48	-1.43	-1.43	-0.19	1.45	187.64	0.29	TeleScope	2	0
3	151.61	1.64	218.55	20.12	151.60	-1.88	-1.88	-0.40	1.92	192.06	1.29	TeleScope	2	0
4	198.95	1.56	218.41	47.34	198.92	-2.91	-2.91	-1.22	3.16	202.78	0.05	TeleScope	0	0
5	227.11	1.46	217.88	28.16	227.07	-3.49	-3.49	-1.68	3.88	205.69	0.10	TeleScope	0	0
6	238.14	1.48	217.86	11.03	238.10	-3.72	-3.72	-1.85	4.15	206.51	0.04	TeleScope	0	0
7	738.55	1.07	230.42	500.40	738.37	-11.79	-11.79	-9.42	15.10	218.63	0.03	TeleScope	0	0
8	815.86	0.72	225.72	77.32	815.68	-12.60	-12.60	-10.33	16.29	219.36	0.14	TeleScope	2	0
9	958.01	0.79	181.29	142.15	957.82	-14.20	-14.20	-10.99	17.96	217.74	0.12	TeleScope	0	0
10	995.43	0.96	172.97	37.41	995.23	-14.77	-14.77	-10.96	18.39	216.58	0.17	TeleScope	0	0
11	1006.32	1.63	156.44	10.90	1006.12	-15.00	-15.00	-10.89	18.53	215.97	2.14	TeleScope	0	0
12	1044.81	1.08	151.02	38.49	1044.60	-15.82	-15.82	-10.49	18.98	213.55	0.45	TeleScope	2	0
13	1063.64	1.25	144.54	18.83	1063.43	-16.14	-16.14	-10.29	19.14	212.51	0.35	TeleScope	0	0

Company: IODP
 Lamont - Doherty Earth Observatory
Well: U1379A
Field: Expedition 334
Rig Name: JOIDES Resolution
State: Puntarenas
Country: Costa Rica



Schlumberger

6.75" LWD Service
 Density Caliper
 Recorded Mode Data