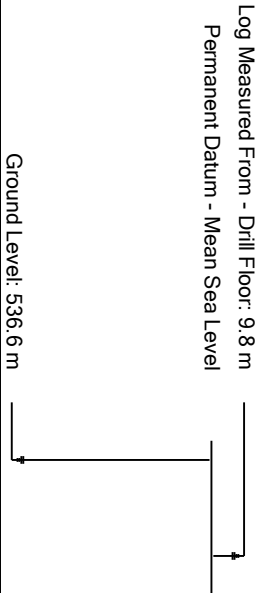


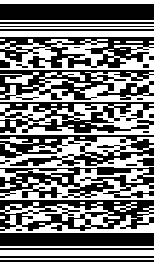


Company: IODP
Lamont - Doherty Earth Observatory
Well: U1378A
Field: Expedition 334
Rig Name: JOIDES Resolution
State: Puntarenas
Country: Costa Rica

Latitude:	8.59 degrees	Custom:	U1378A
Longitude:	-84.08 degrees	Rig Name:	JOIDES Resolution
Block:	Expedition 334	Rig Type:	Drill Ship
FL:	CRISP		
FL1:	n/a		
FL2:	n/a		



Acquisition Dates:	17 Mar 11 to 19 Mar 11	Other Services:	adnVISION
Log Interval:	525.0(m) to 992.0(m)		Telescope
Index Types:	Measured Depth		arcVISION
Index Scales:	1:500		geoVISION
Depth Source:	Driller's Depth		
Depth Sensor:	DES		
Conveyance:	Drill Pipe		
Print Type:	Final		
Spud Date:	17-Mar-2011		



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 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.

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- 2. Disclaimer
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- 7. Remarks and Equipment Summary
- 8. Run1 U1378A
 - 8.1 Integration Summary
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 - 8.3 Composite Summary
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 - 8.5 Parameter Listing
- 9. Calibration Report
- 10. Survey Record
- 11. Tail

Borehole Size/Casing Record

Bit						
Bit Size (in)	8.5					
Bottom Driller (m)	992					

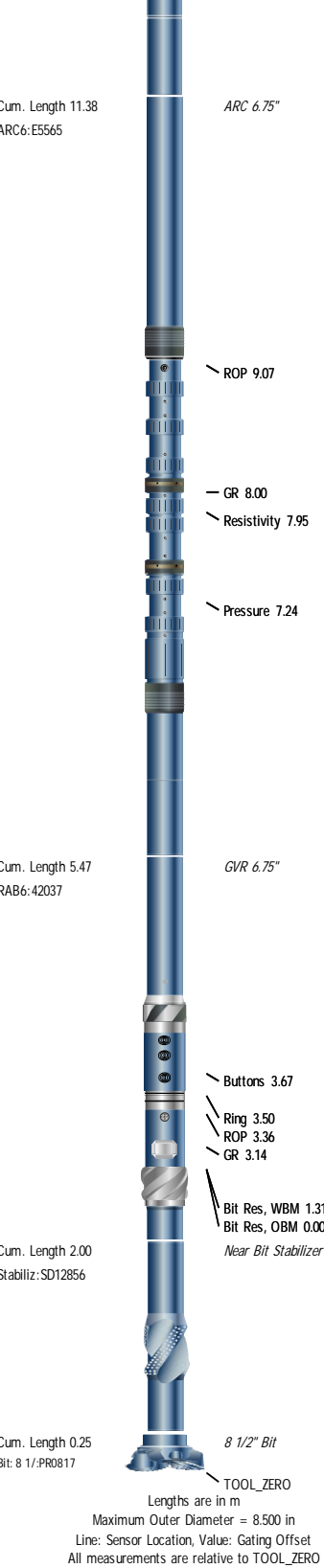
Operational Run Summary

Parameter (unit)	Run1					
Date Log Started	17-Mar-2011					
Time Log Started	15:44:23					
Date Log Finished	19-Mar-2011					
Time Log Finished	21:09:21					
Bit Size (in)	8.500					
Bit Start Depth (m)	64.80					
Bit Stop Depth (m)	992.00					
Top Log Interval (m)	536.00					
Bottom Log Interval (m)	992.00					
Max Hole Deviation (deg)	0.09					
Azimuth of Max Deviation (deg)	355.97					
Logging Unit Number	n/a					
Logging Unit Location	n/a					
Recorded By	Garcia/Carrillo					
Witnessed By	Alberto Malinverno					
Service Order Number	11MED0004					

Borehole Fluids

Parameter (unit)	Run1					
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)						

Run1: Toolstring		Run1: Remarks	
<div>Cum. Length 25.27 ADN6C:YJ56</div> <div>Neutron 23.21</div> <div>Density 22.17</div> <div>UltraSonic 21.78</div> <div>ROP 21.02</div> <div>MWD Telescope 6.75"</div> <div>D&I 14.88</div> <div>Vibration 13.88</div> <div>ROP 12.53</div>		Gamma Ray corrected for Bit Size, Tool Diameter and Mud Weight.	
		Density processed on a Sandstone (2.65 g/cm3) matrix.	
		Neutron Source: A2145, Gamma Source: A0174	
<div>Cum. Length 19.06 TELE675:E4155</div>			



Run1

U1378A

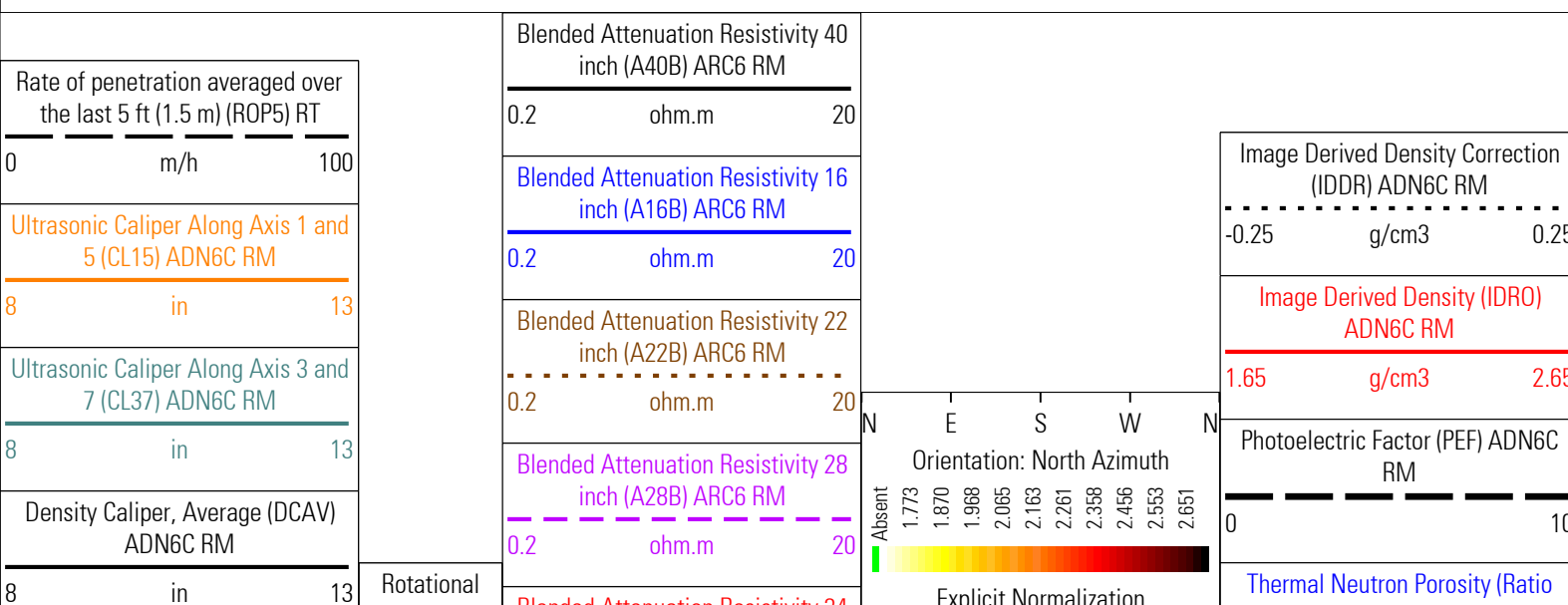
Integration Summary

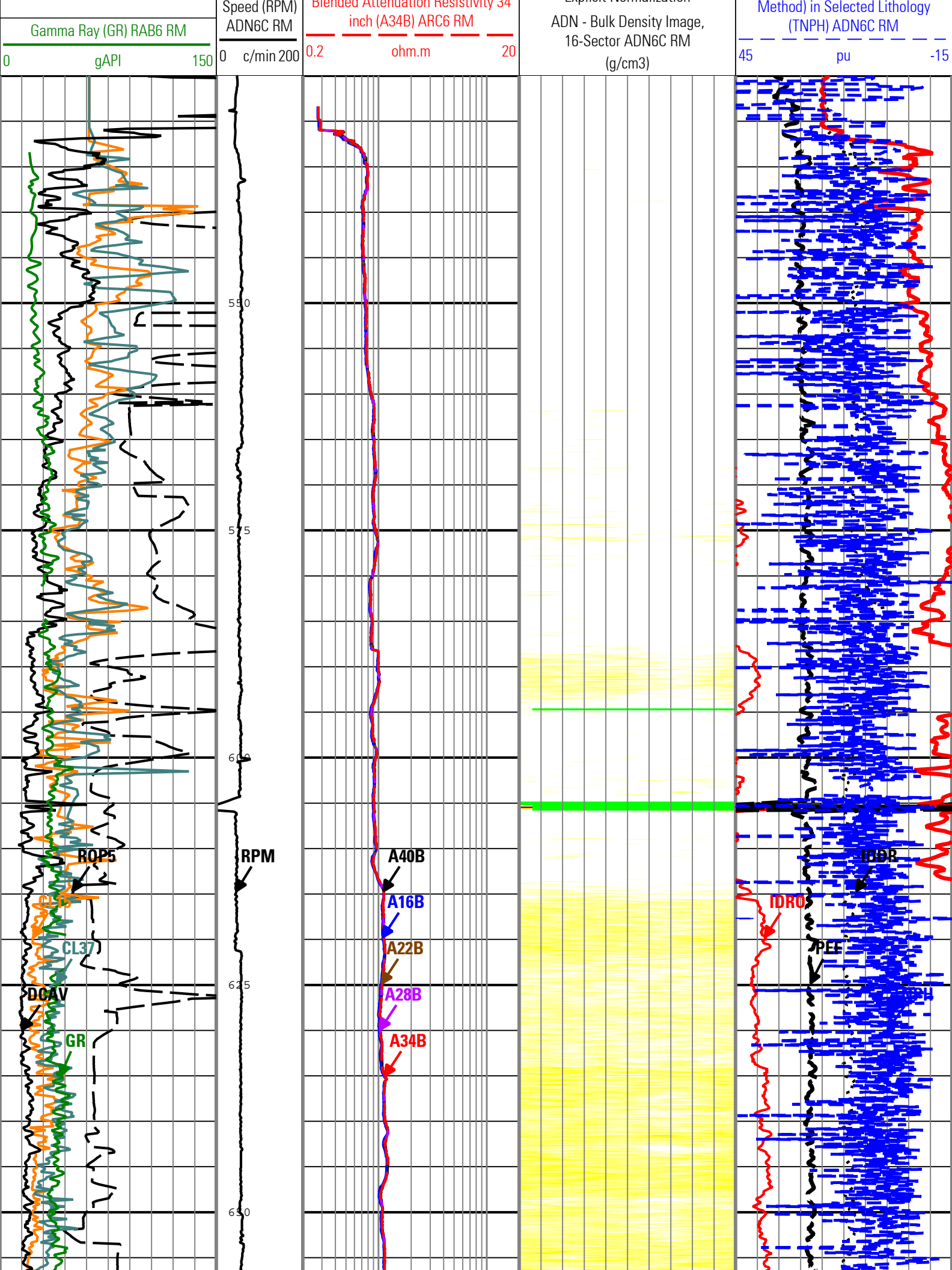
Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
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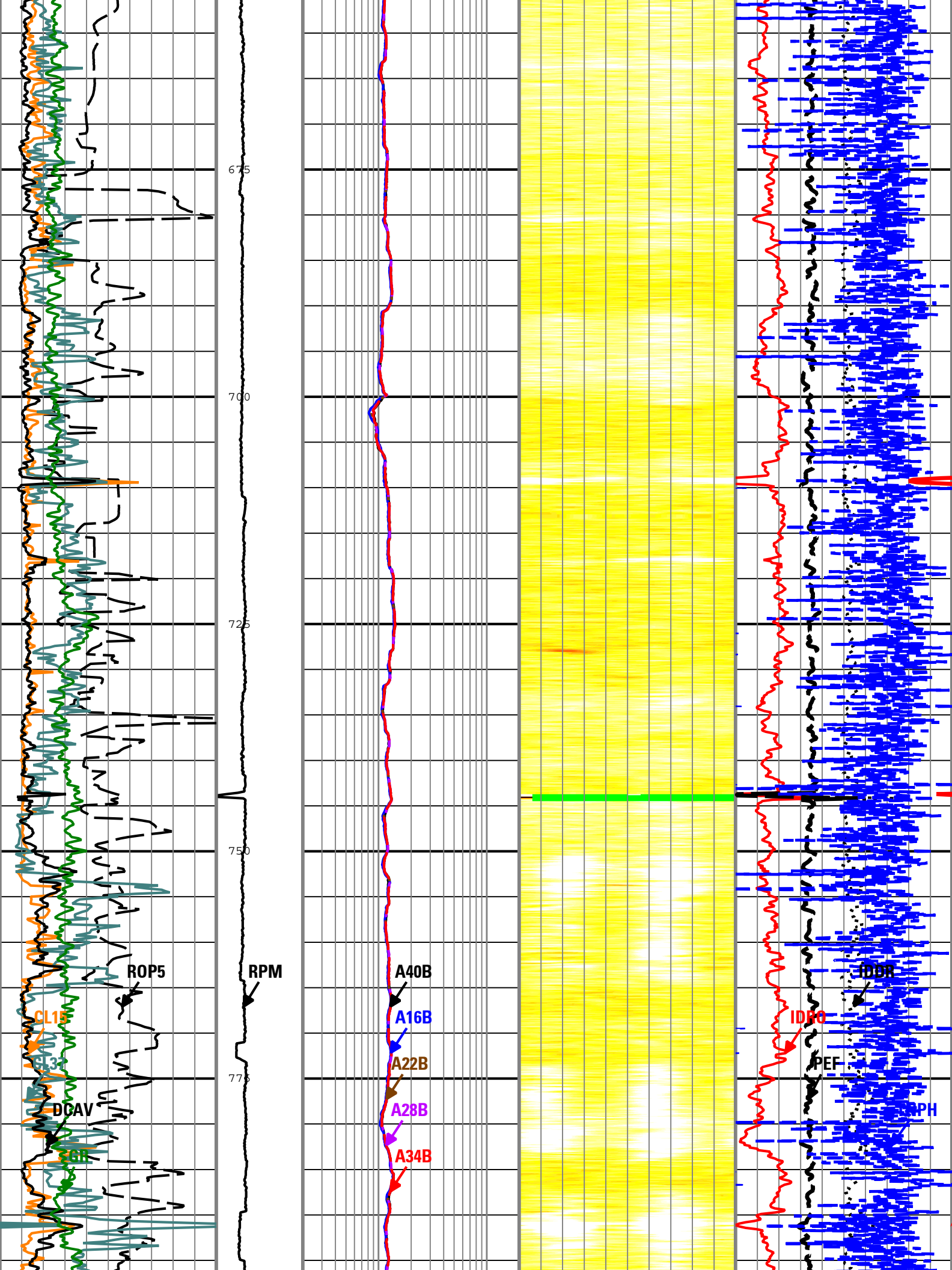
Software Version

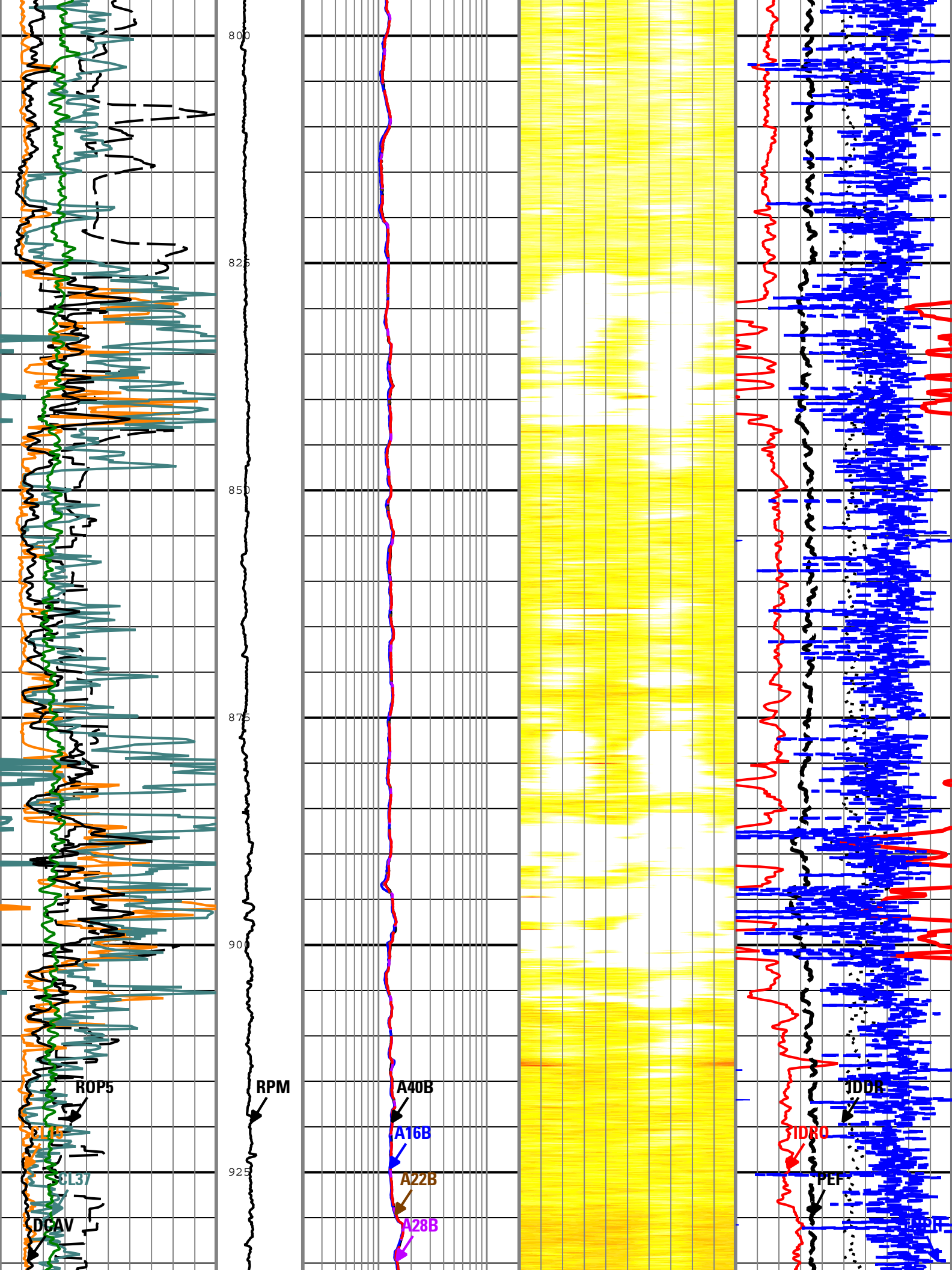
Acquisition System		Version		
MaxWell		2.1.6903.0		
Application Patch		SP-20110302-2.1.6903.1130		

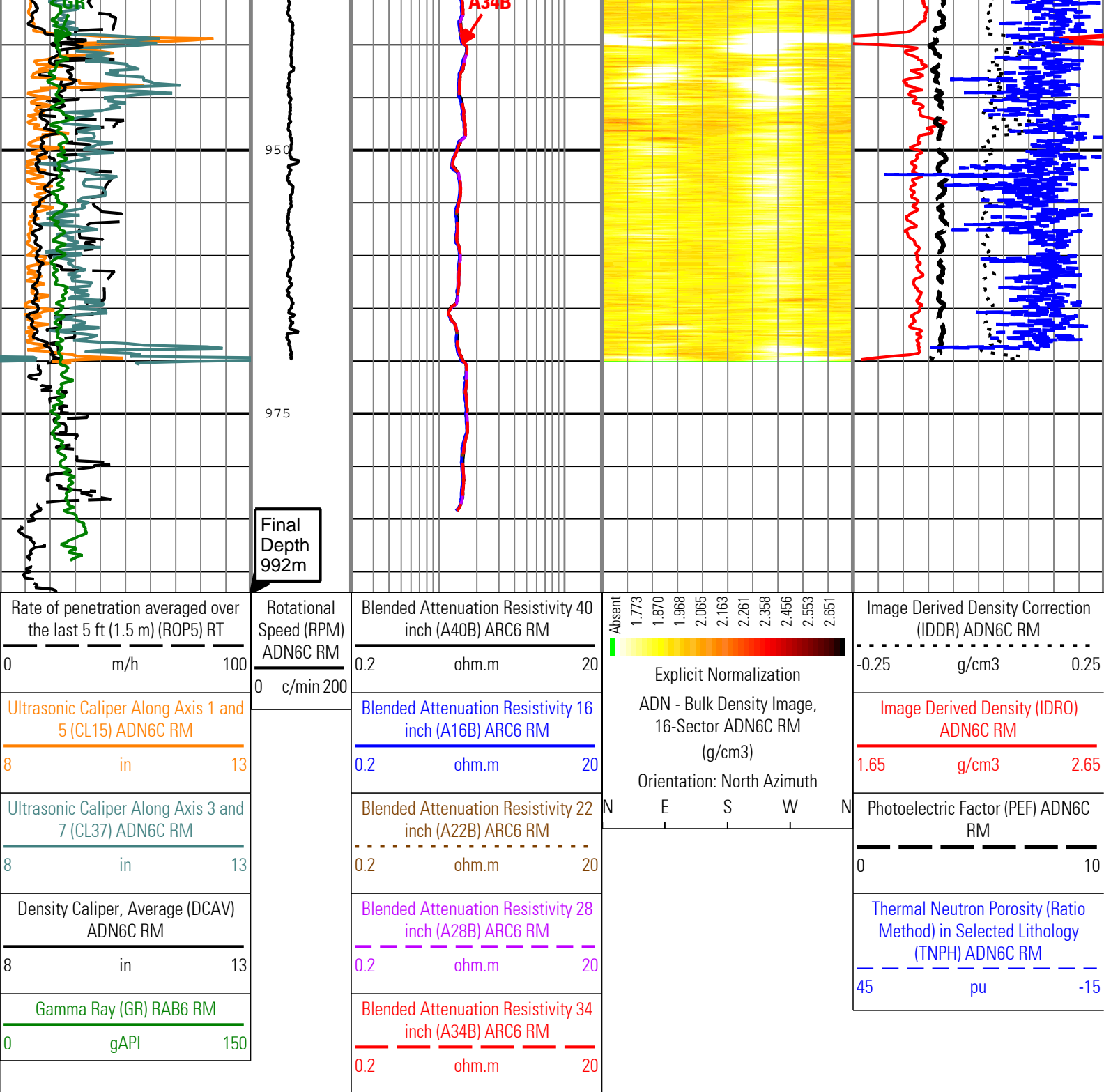
Computation	Description	Version
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Description: VDN6 LQC Format: Log (ADN + ARC Log) Index Scale: 1:500 Index Unit: m Index Type: Measured Depth Creation Date: 21-Mar-2011 00:19:54

Channel Processing Parameters				
Parameter	Description	ToolPath	Value	Unit
BHK	Drilling Fluid Potassium Concentration	Borehole	0	%
BHT	Bottom Hole Temperature	Borehole	25	degC
BS	Bit Size	COMPLETION	8.5	in
BSAL	Borehole Salinity	Borehole	31737.15	ppm
DEPTH_SEL	Depth Selection Parameter	DNMSESSION	Driller's Depth	
DFD	Drilling Fluid Density	Borehole	1.03	g/cm3
DFT	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
FSAL	Formation Salinity	Borehole	6126.75	ppm
GCSE_RM	Generalized Caliper Selection for DnM recorded mode	Borehole	BS	

GRGRD	Geothermal Gradient	Borehole	1	0.01 degF/ft
GRSE_RM	Generalized Mud Resistivity Selection for Recorded Mode	Borehole	REMS	
GTSE_RM	Generalized Temperature Selection for Recorded Mode	Borehole	GTEM_GRDSURF	
GTSE_RT	Generalized Temperature Selection for Realtime Mode	Borehole	GTEM_GRDSURF	
HIGH_BLEND	High Resistivity Threshold for Blending	ARC6:ARC6:ARDC	2	ohm.m
IDQT	Image Derived Quality Threshold	ADN6C:ADN6C:ADSE	2	
KF11	Far Bank 1 Tube 1 Processing Switch	ADN6C:ADN6C:ADSE	On	
KF12	Far Bank 1 Tube 2 Processing Switch	ADN6C:ADN6C:ADSE	On	
KF13	Far Bank 1 Tube 3 Processing Switch	ADN6C:ADN6C:ADSE	On	
KF21	Far Bank 2 Tube 1 Processing Switch	ADN6C:ADN6C:ADSE	On	
KF22	Far Bank 2 Tube 2 Processing Switch	ADN6C:ADN6C:ADSE	On	
KF23	Far Bank 2 Tube 3 Processing Switch	ADN6C:ADN6C:ADSE	On	
KN11	Near Bank 1 Tube 1 Processing Switch	ADN6C:ADN6C:ADSE	On	
KN21	Near Bank 2 Tube 1 Processing Switch	ADN6C:ADN6C:ADSE	On	
LOW_BLEND	Low Resistivity Threshold for Blending	ARC6:ARC6:ARDC	1	ohm.m
MATR	Rock Matrix for Neutron Porosity Corrections	Borehole	SANDSTONE	
MST	Mud Sample Temperature	Borehole	23.89	degC
RMS	Resistivity of Mud Sample	Borehole	0.2	ohm.m
SHT	Surface Hole Temperature	Borehole	20	degC
STOH	Top of Hole Sector	ADN6C:ADN6C:ADSE	SECTOR_0	
TD	Total Measured Depth	Borehole	992.27	m
TEMP_SEL_ARC	ARC Temperature Selection	ARC6:ARC6:ARDC	Annular	
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 - Run1

Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	247
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	17-Feb-2011 09:37:36 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	1.0047	

RAB6 : 6.75-in. geoVISION resistivity tool Calibration M2 at T2 Calibration - Run1

Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	247
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	17-Feb-2011 09:37:36 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	1.0091	

RAB6 : 6.75-in. geoVISION resistivity tool Calibration M0 at T1 Calibration - Run1

Primary Set Components	Description	Tool Element	Serial Number
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	Electronics Chassis		RBEC	247
Calibration Dates	Shop Calibration			
Date & Time / Date Validity	17-Feb-2011 09:37:36 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 - Run1				
Primary Set Components	Description	Tool Element	Serial Number	
	Electronics Chassis	RBEC	247	
Calibration Dates	Shop Calibration			
Date & Time / Date Validity	17-Feb-2011 09:37:36 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	1.0028		
RAB6 : 6.75-in. geoVISION resistivity tool Calibration Ring at T1 Calibration - Run1				
Primary Set Components	Description	Tool Element	Serial Number	
	Electronics Chassis	RBEC	247	
Calibration Dates	Shop Calibration			
Date & Time / Date Validity	17-Feb-2011 09:37:36 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	1.0075		
RAB6 : 6.75-in. geoVISION resistivity tool Calibration Ring at T2 Calibration - Run1				
Primary Set Components	Description	Tool Element	Serial Number	
	Electronics Chassis	RBEC	247	
Calibration Dates	Shop Calibration			
Date & Time / Date Validity	17-Feb-2011 09:37:36 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	1.0127		
RAB6 : 6.75-in. geoVISION resistivity tool Calibration BD at T1 Calibration - Run1				
Primary Set Components	Description	Tool Element	Serial Number	
	Electronics Chassis	RBEC	247	
Calibration Dates	Shop Calibration			
Date & Time / Date Validity	17-Feb-2011 09:37:36 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	1.0005		
RAB6 : 6.75-in. geoVISION resistivity tool Calibration BD at T2 Calibration - Run1				
Primary Set Components	Description	Tool Element	Serial Number	
	Electronics Chassis	RBEC	247	
Calibration Dates	Shop Calibration			
Date & Time / Date Validity	17-Feb-2011 09:37:36 PM - Valid			

Date & Time / Date Validity	17-Feb-2011 09:37:36 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	1.0050	
RAB6 : 6.75-in. geoVISION resistivity tool Calibration BM at T1 Calibration - Run1			
Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	247
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	17-Feb-2011 09:37:36 PM - Valid		
Calibration Source	Time Frame File		
Calibration Type: Resistivity			
Description	Min/Nominal/Max	Shop	Unit
CM1BMT1 Button Medium at T1 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	1.0043	
RAB6 : 6.75-in. geoVISION resistivity tool Calibration BM at T2 Calibration - Run1			
Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	247
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	17-Feb-2011 09:37:36 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	1.0088	
RAB6 : 6.75-in. geoVISION resistivity tool Calibration BS at T1 Calibration - Run1			
Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	247
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	17-Feb-2011 09:37:36 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	1.0000	
RAB6 : 6.75-in. geoVISION resistivity tool Calibration BS at T2 Calibration - Run1			
Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	247
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	17-Feb-2011 09:37:36 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	1.0044	
RAB6 : 6.75-in. geoVISION resistivity tool Calibration Gamma Ray Calibration - Run1			
Primary Set Components	Description	Tool Element	Serial Number
	Electronics Chassis	RBEC	247
Calibration Dates	Shop Calibration		
Date & Time / Date Validity	17-Feb-2011 08:55:08 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	1.0072		
ARC6 : Calibration Resistivity - Run1				
Primary Set Components	Description	Tool Element		Serial Number
	Elec. Chassis HP w/o AIM Receiver	AREA		595
Calibration Dates	Shop Calibration			
Date & Time / Date Validity	22-Jan-2011 09:16:15 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	8.932		dB
ATT2F2AIR Attenuation T2 at 2 MHz	4.500 / 6.500 / 8.500	5.981		dB
ATT3F2AIR Attenuation T3 at 2 MHz	2.500 / 4.500 / 6.500	5.571		dB
ATT4F2AIR Attenuation T4 at 2 MHz	2.600 / 4.600 / 6.600	3.891		dB
ATT5F2AIR Attenuation T5 at 2 MHz	1.600 / 3.600 / 5.600	4.123		dB
PST1F2AIR Phase Shift T1 at 2 MHz	-3.900 / 0.100 / 4.100	1.493		deg
PST2F2AIR Phase Shift T2 at 2 MHz	-3.900 / 0.100 / 4.100	-1.501		deg
PST3F2AIR Phase Shift T3 at 2 MHz	-3.900 / 0.100 / 4.100	1.423		deg
PST4F2AIR Phase Shift T4 at 2 MHz	-3.900 / 0.100 / 4.100	-1.538		deg
PST5F2AIR Phase Shift T5 at 2 MHz	-3.900 / 0.100 / 4.100	1.407		deg
ATT1F4AIR Attenuation T1 at 400 KHz	6.500 / 8.500 / 10.500	8.848		dB
ATT2F4AIR Attenuation T2 at 400 KHz	4.500 / 6.500 / 8.500	6.075		dB
ATT3F4AIR Attenuation T3 at 400 KHz	2.500 / 4.500 / 6.500	5.478		dB
ATT4F4AIR Attenuation T4 at 400 KHz	2.600 / 4.600 / 6.600	3.976		dB
ATT5F4AIR Attenuation T5 at 400 KHz	1.600 / 3.600 / 5.600	4.041		dB
PST1F4AIR Phase Shift T1 at 400 KHz	-3.900 / 0.100 / 4.100	0.269		deg
PST2F4AIR Phase Shift T2 at 400 KHz	-3.900 / 0.100 / 4.100	-0.263		deg
PST3F4AIR Phase Shift T3 at 400 KHz	-3.900 / 0.100 / 4.100	0.278		deg
PST4F4AIR Phase Shift T4 at 400 KHz	-3.900 / 0.100 / 4.100	-0.279		deg
PST5F4AIR Phase Shift T5 at 400 KHz	-3.900 / 0.100 / 4.100	0.257		deg
ARC6 : Calibration Gamma Ray - Run1				
Primary Set Components	Description	Tool Element		Serial Number
	Elec. Chassis HP w/o AIM Receiver	AREA		595
Calibration Dates	Shop Calibration			
Date & Time / Date Validity	22-Jan-2011 07:57:15 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	1.067		
ADN6C : 6.75-in. Azimuthal Density Neutron Calibration Density LS Window 3 Calibration - Run1				

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 - Run1			
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 - Run1			
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 - Run1			
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_F2O	2.000 / 5.700 / 7.500	4.270	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 - Run1

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

ADN6C : 6.75-in. Azimuthal Density Neutron Calibration Neutron Far 1 Tube 3 Calibration - Run1

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 - Run1

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 - Run1

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

Far 2 tube 2 - Rod			
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 - Run1

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

ADN6C : 6.75-in. Azimuthal Density Neutron Calibration Neutron Near 1 Tube 1 Calibration - Run1

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 - Run1

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

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

D&I Inits Computed and Values Used - Run1

Geomagnetic Model :	BGGM 2010	Geomagnetic Date :	17-Mar-2011
Computed Location B :	34289.31 nT +/- 300.00nT	Used Location B :	34289.31 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

3 : Long, failed G criteria

Survey Correction Index

0 : No correction

Seq	MD (m)	Incl (deg)	Azim (deg)	Course (m)	TVD (m)	V Sec (m)	N/ -S (m)	E/ -W (m)	Closure (m)	at Azim (deg)	DLS deg/100ft	Tool Type	QI	CI
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	515.74	0.09	355.97	515.74	515.74	0.41	0.41	-0.03	0.41	355.97	0.01	TeleScope	3	0

Company:

IODP

Lamont - Doherty Earth Observatory

Well:

U1378A

Field:

Expedition 334

Rig Name:

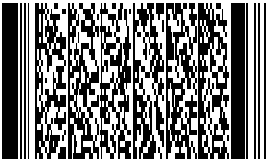
JOIDES Resolution

State:

Puntarenas

Country:

Costa Rica



Schlumberger

6.75" LWD Service

Density / Porosity / Induction Resistivity

Recorded Mode Data