

6.75" LWD Service

Ultrasonic Caliper

Recorded Mode Data

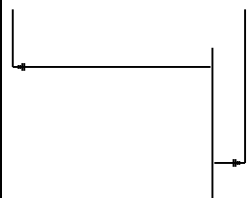
Schlumberger

Company: IODP
 Lamont - Doherty Earth Observatory
 Well: U1378A
 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		

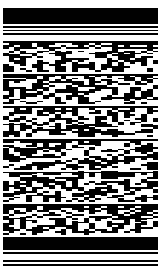
Log Measured From - Drill Floor: 9.8 m
 Permanent Datum - Mean Sea Level

Ground Level: 536.6 m



Acquisition Dates:	17 Mar 11 to 19 Mar 11	Other Services:	adnVISION
Log Interval:	64.8(m) to 992.0(m)	Telescope	arcVISION
Index Types:	Measured Depth	Driller's Depth	geoVISION
Index Scales:	1:500	DES	
Depth Source:	Driller's Depth	Drill Pipe	
Depth Sensor:	DES	Final	
Conveyance:	Drill Pipe	Spud Date:	17-Mar-2011
Print Type:	Final		

Other Services:
 adnVISION
 Telescope
 arcVISION
 geoVISION



Disclaimer

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Content

1. Header
2. Disclaimer
3. Contents
4. Borehole Size/Casing/Tubing Record
5. Operational Run Summary
6. Borehole Fluids
7. Remarks and Equipment Summary
8. Run1 U1378A
 - 8.1 Integration Summary
 - 8.2 Software Version
 - 8.3 Composite Summary
 - 8.4 Log (ADN Ultrasonic Caliper)
 - 8.5 Parameter Listing
9. Calibration Report
10. Survey Record
11. Tail

Borehole Size/Casing Record

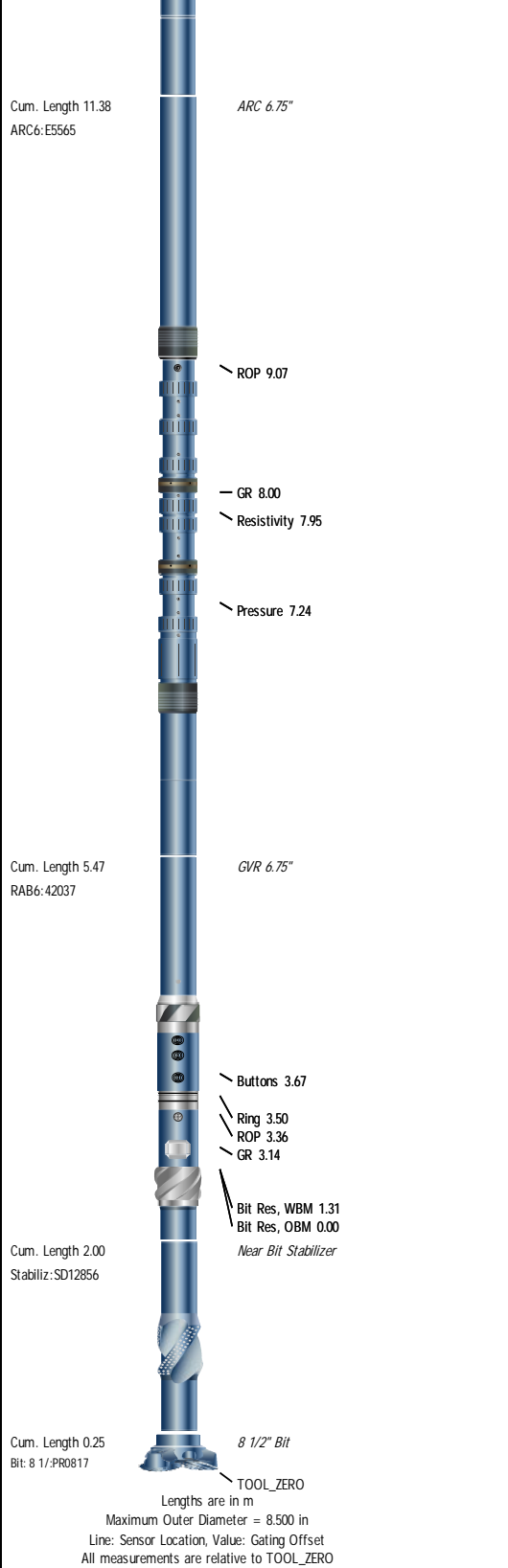
Bit						
Bit Size (in)	8.5					
Bottom Driller (m)	992					

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

U1378A

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

Borehole	Borehole Ensemble provides common Borehole Parameters and Channels		2.1.6903.1067
ULTRASON_PROC	Ultrasonic Processing, ADN		2.1.6903.1067
RAB6GR	RAB6 Gamma Ray Computation Package for both Real-time and Recorded Mode		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
RBEC	Electronics Chassis Assembly for RAB6-C	2.1.6903.1067	V8.5B
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
Run1	Drilling	Down	64.80 m	992.25 m	17-Mar-2011 21:53:54	19-Mar-2011 21:09:21

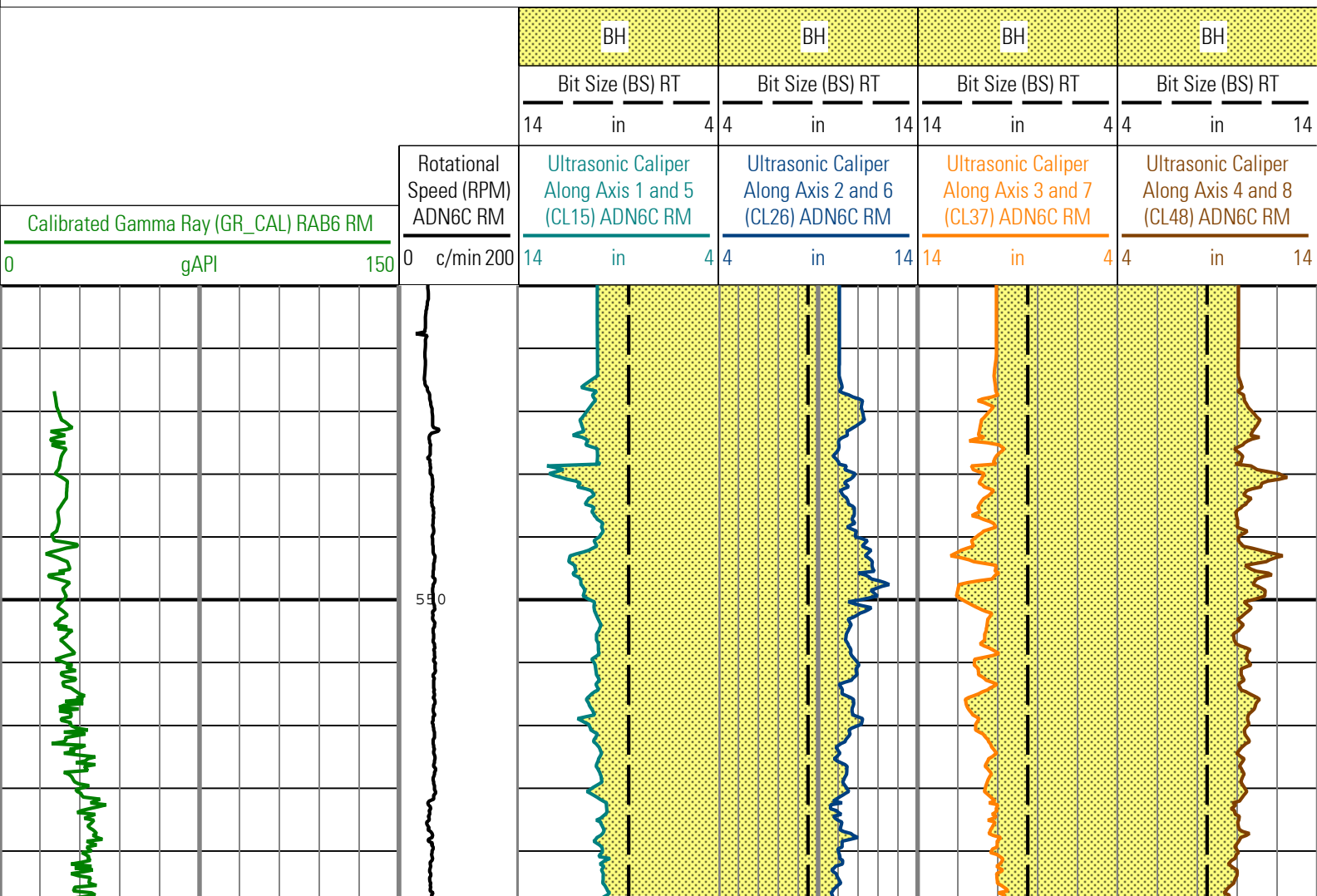
All depths are referenced to toolstring zero

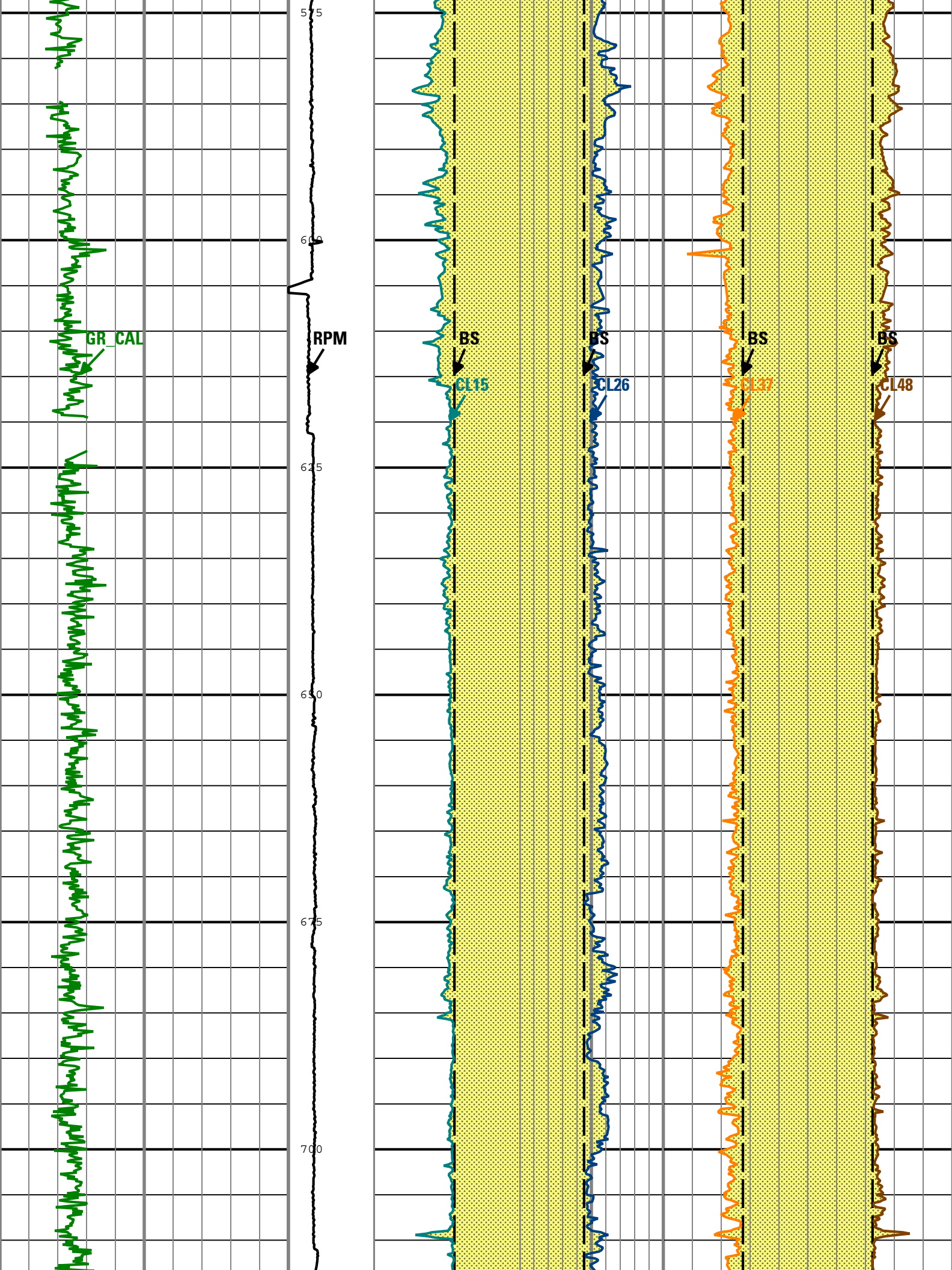
Log

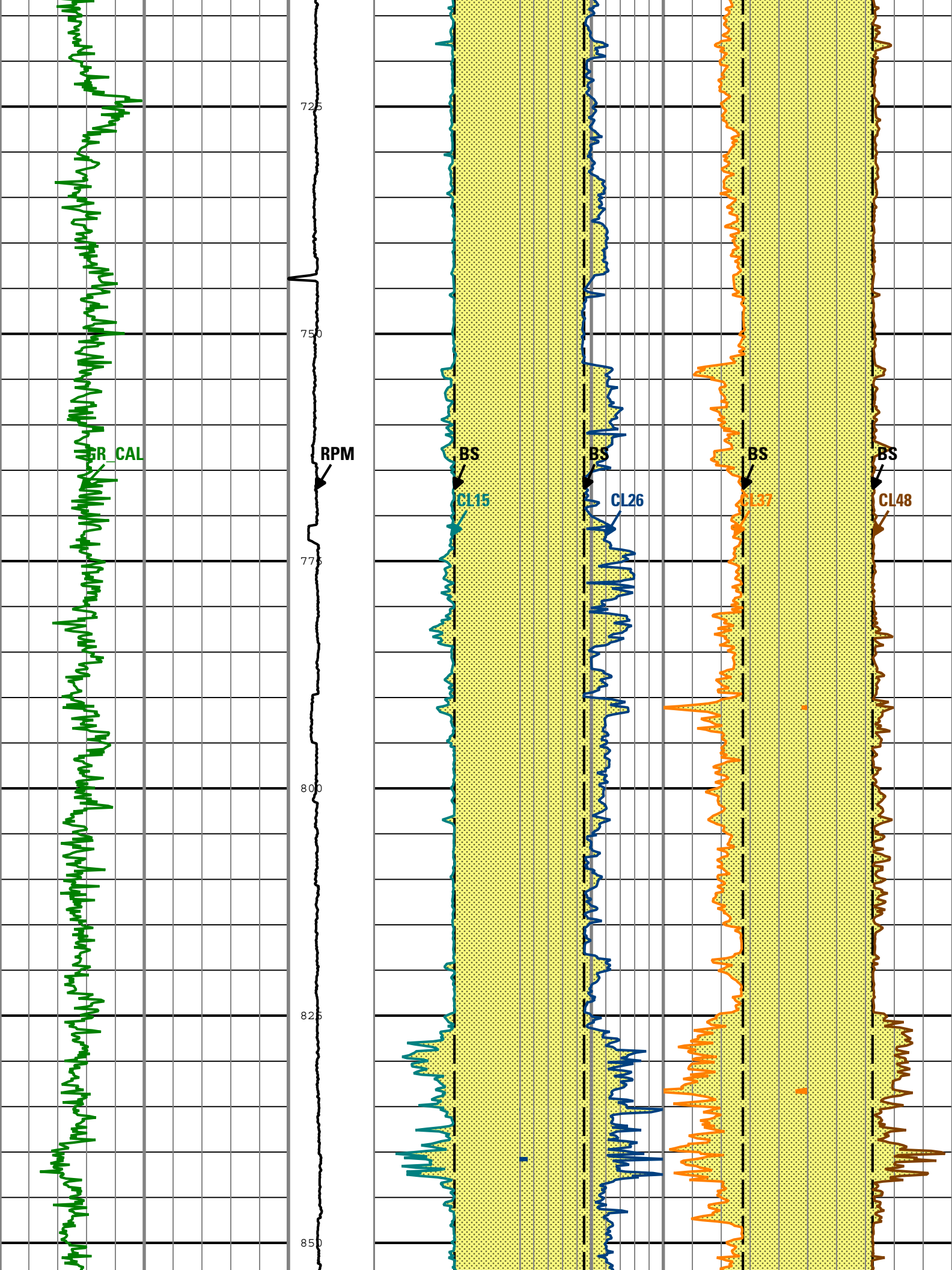
Run1: Drilling EF739E37-774F-4F79-B87E-A87B79D3DF9A

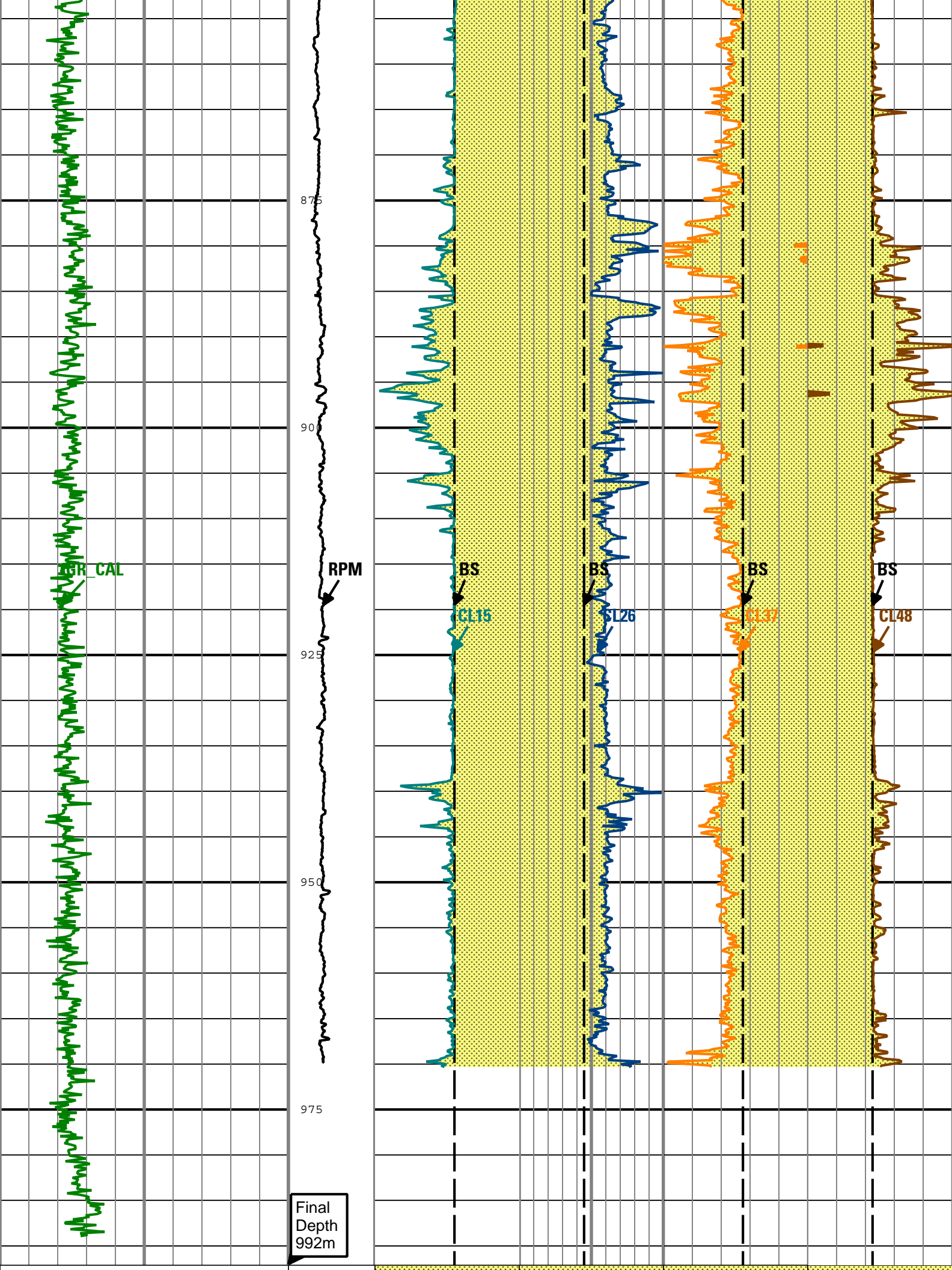
Description: VDN QDensity QPEF Format: Log (ADN Ultrasonic Caliper) Index Scale: 1:500 Index Unit: m Index Type: Measured Depth Creation Date: 21-Mar-2011 00:17:57

Channel	Source	Sampling
BS	Borehole	6in - RT
CL15	ADN6C:ADN6C:ADSE	6in - RM
CL26	ADN6C:ADN6C:ADSE	6in - RM
CL37	ADN6C:ADN6C:ADSE	6in - RM
CL48	ADN6C:ADN6C:ADSE	6in - RM
GR_CAL	RAB6:RAB6:RBEC	6in - RM
RPM	ADN6C:ADN6C	6in - RM









Calibrated Gamma Ray (GR_CAL) RAB6 RM		Rotational Speed (RPM)	BH	BH	BH	BH
0	gAPI	150	Bit Size (BS) RT	Bit Size (BS) RT	Bit Size (BS) RT	Bit Size (BS) RT
		0 c/min 200	14 in 4	4 in 14	14 in 4	4 in 14
			Ultrasonic Caliper Along Axis 1 and 5 (CL15) ADN6C RM	Ultrasonic Caliper Along Axis 2 and 6 (CL26) ADN6C RM	Ultrasonic Caliper Along Axis 3 and 7 (CL37) ADN6C RM	Ultrasonic Caliper Along Axis 4 and 8 (CL48) ADN6C RM
			14 in 4	4 in 14	14 in 4	4 in 14

Description: VDN QDensity QPEF Format: Log (ADN Ultrasonic Caliper) Index Scale: 1:500 Index Unit: m Index Type: Measured Depth Creation Date: 21-Mar-2011 00:17:57

Channel Processing Parameters				
Parameter	Description	ToolPath	Value	Unit
BS	Bit Size	COMPLETION	8.5	in
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
USIN	Ultrasonic Sensor Inset	ADN6C:ADN6C:ADSE	0.18	in

Tool Control Parameters

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
	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		

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		
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_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
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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
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	13.300 / 21.150 / 29.000	16.993	1/s

Far 2 tube 3 - Air			
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
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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 - 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

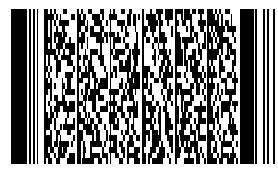
Well: U1378A

Field: Expedition 334

Rig Name: JOIDES Resolution

State: Puntarenas

Country: Costa Rica



Schlumberger 6.75" LWD Service
Ultrasonic Caliper
Recorded Mode Data