

## 6.75" LWD Service

## Ultrasonic Caliper

## Recorded Mode Data

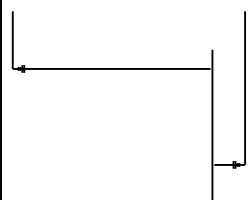
Schlumberger

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

Latitude:	8.59 degrees	Custom:	U1379A
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: 137.0 m



Acquisition Dates:	20 Mar 11 to 23 Mar 11	Other Services:	adnVISION
Log Interval:	130.0(m) to 1099.0(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:	19-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.

## 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. Run 01 U1379A
  - 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 )	1098.42				

## Operational Run Summary


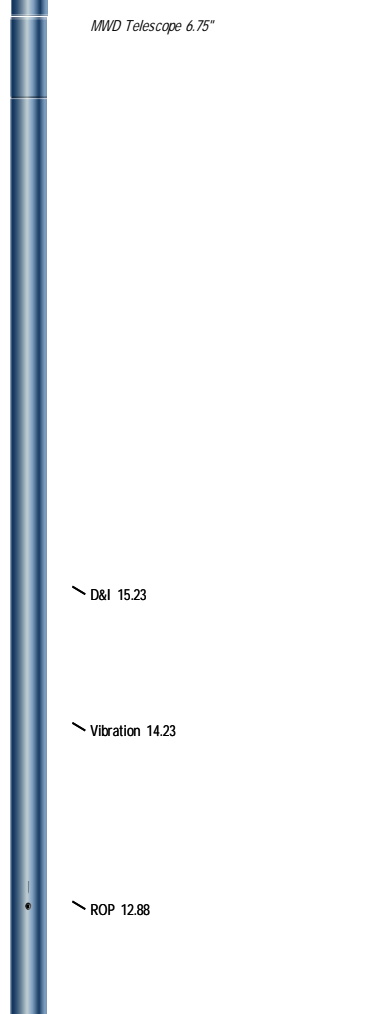
Parameter ( unit )	Run 01				
Date Log Started	20-Mar-2011				
Time Log Started	03:15:21				
Date Log Finished	23-Mar-2011				
Time Log Finished	15:22:35				
Bit Size ( in )	8.500				
Bit Start Depth ( m )	49.81				
Bit Stop Depth ( m )	1098.42				
Top Log Interval ( m )	137.00				
Bottom Log Interval ( 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				

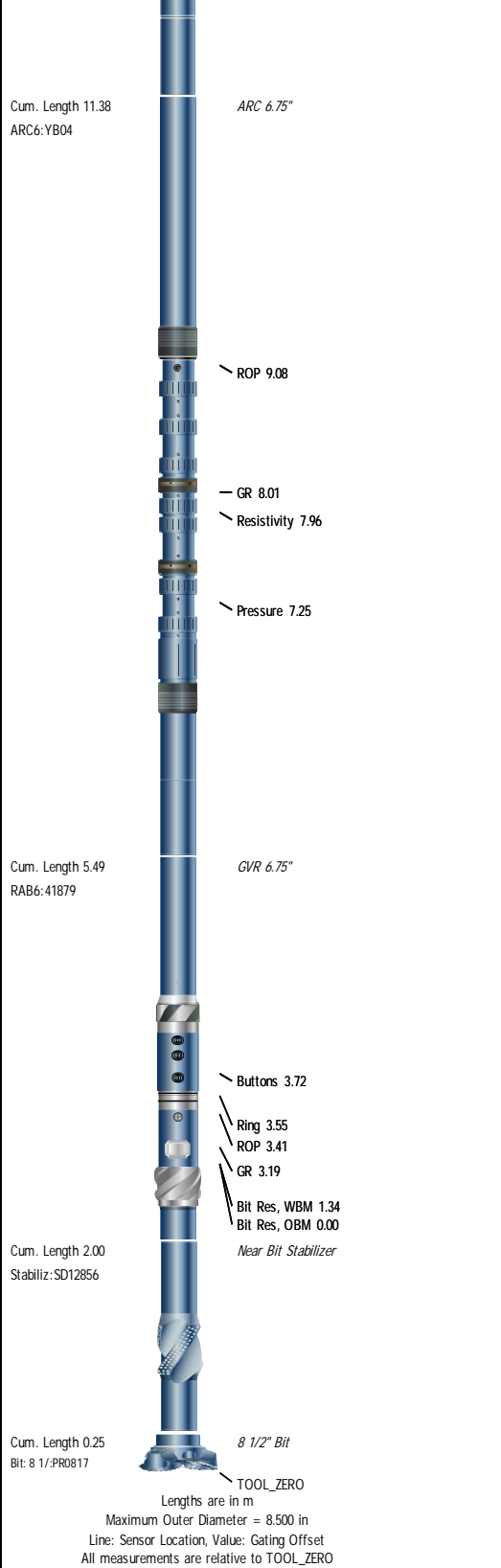
## Borehole Fluids

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	
<p>Cum. Length 25.69 ADN6C:YJ56</p>  <p style="text-align: right;"><i>ADN 6.75"</i></p>	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: A01	
<p>Cum. Length 19.48 TELE675:E4156</p>  <p style="text-align: right;"><i>MWD Telescope 6.75"</i></p>		



**Run 01**

**U1379A**

**Integration Summary**

Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
<b>Software Version</b>				
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
ARC6GammaRay	ARC6 Gamma Ray Computation Package for both Real-time and Recorded Mode		2.1.6903.0
ULTRASON_PROC	Ultrasonic Processing, ADN		2.1.6903.1067
<b>Tool Interface</b>	<b>System Version</b>	<b>Loaded Version</b>	
HSPM	hspm15_1c_03	2.1.6903.1130	
<b>Tool Elements</b>	<b>Description</b>	<b>Software Version</b>	<b>Firmware Version</b>
ADSE	Azimuthal Density Sensor Electronics, Vision ADN 6-3/4 Inch	2.1.6903.1067	V8.4A
ARDC	ARC 6.75 Inch Tool Drill Collar	2.1.6903.0	V9.4B

## 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

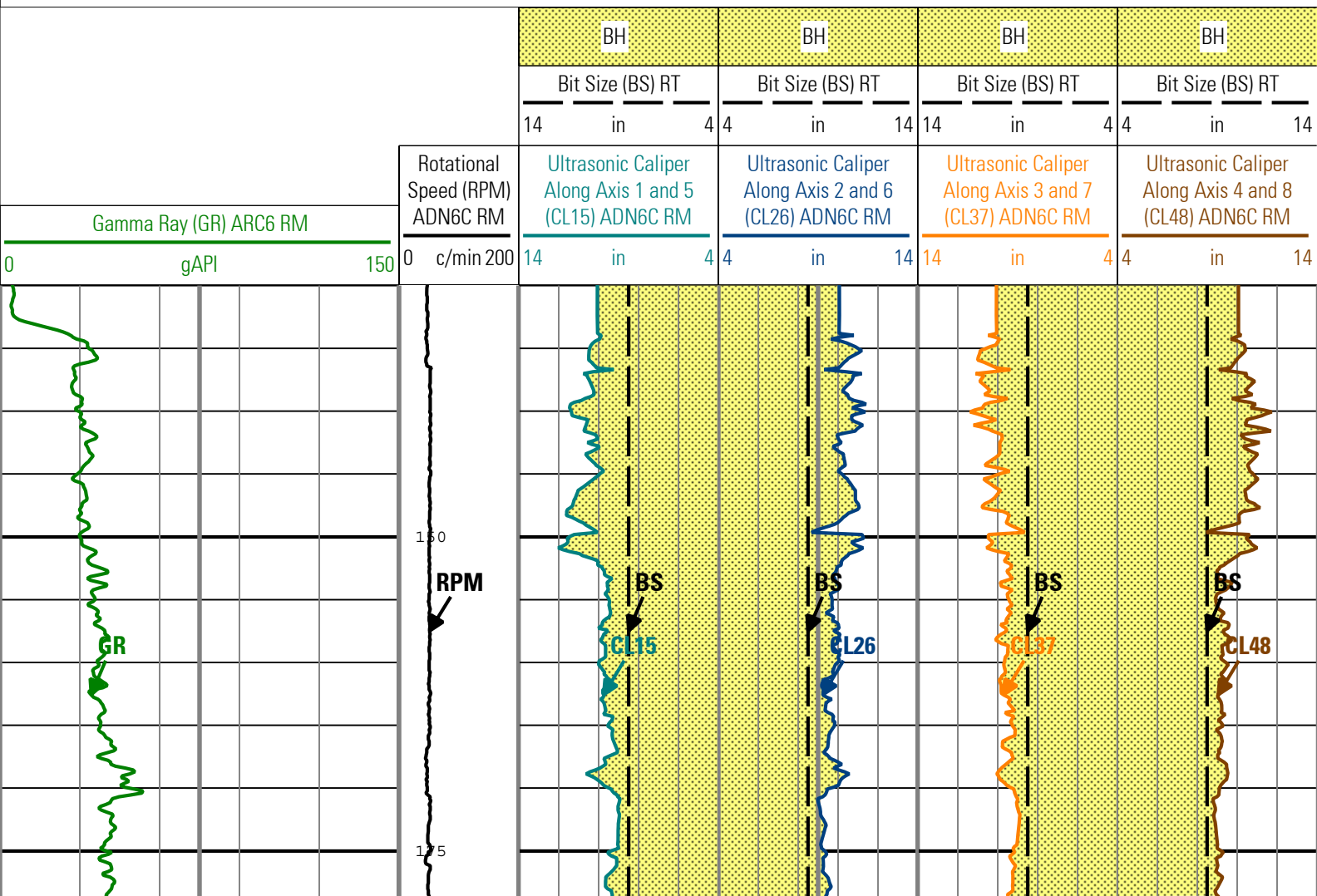
All depths are referenced to toolstring zero

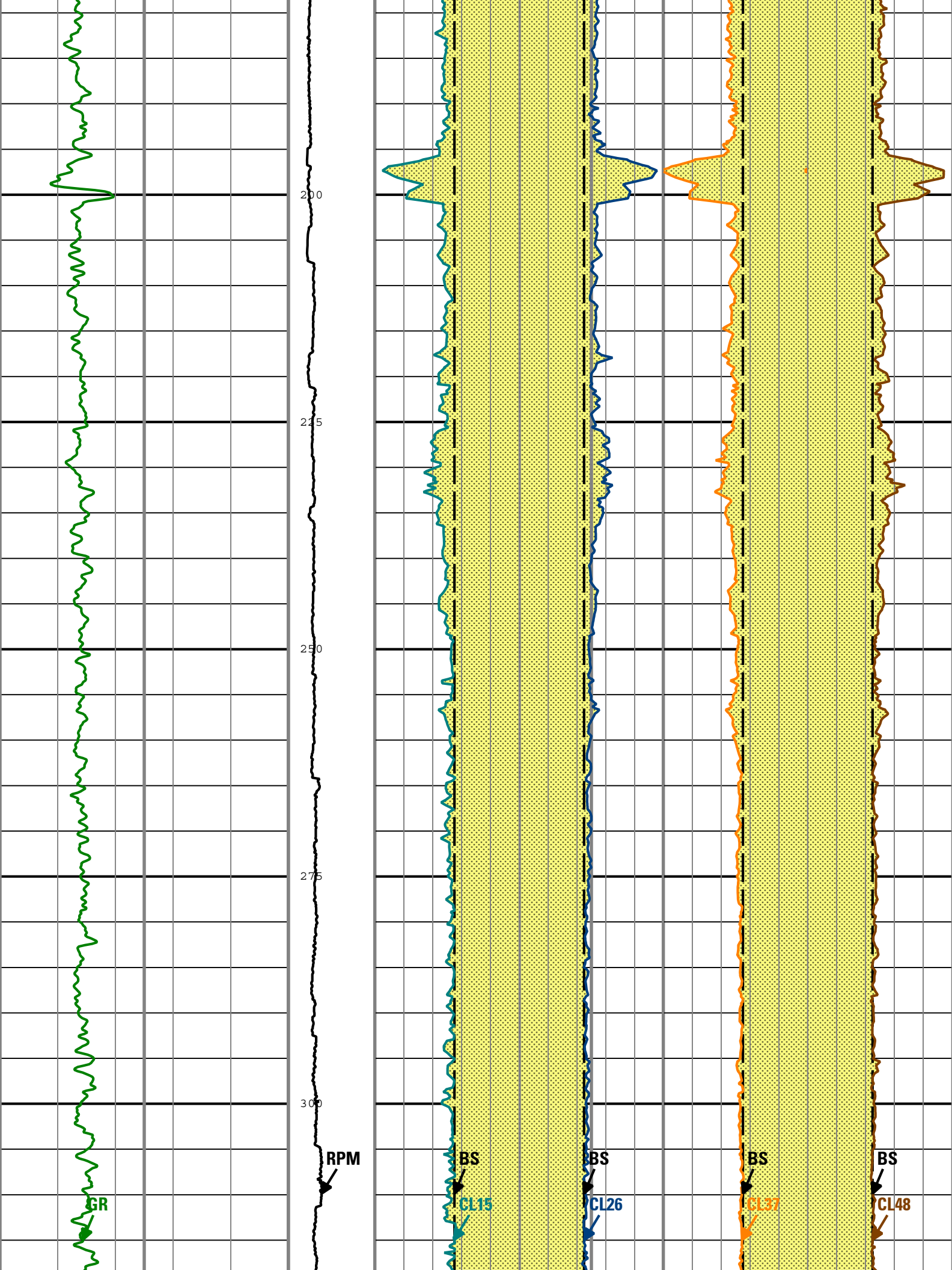
## Log

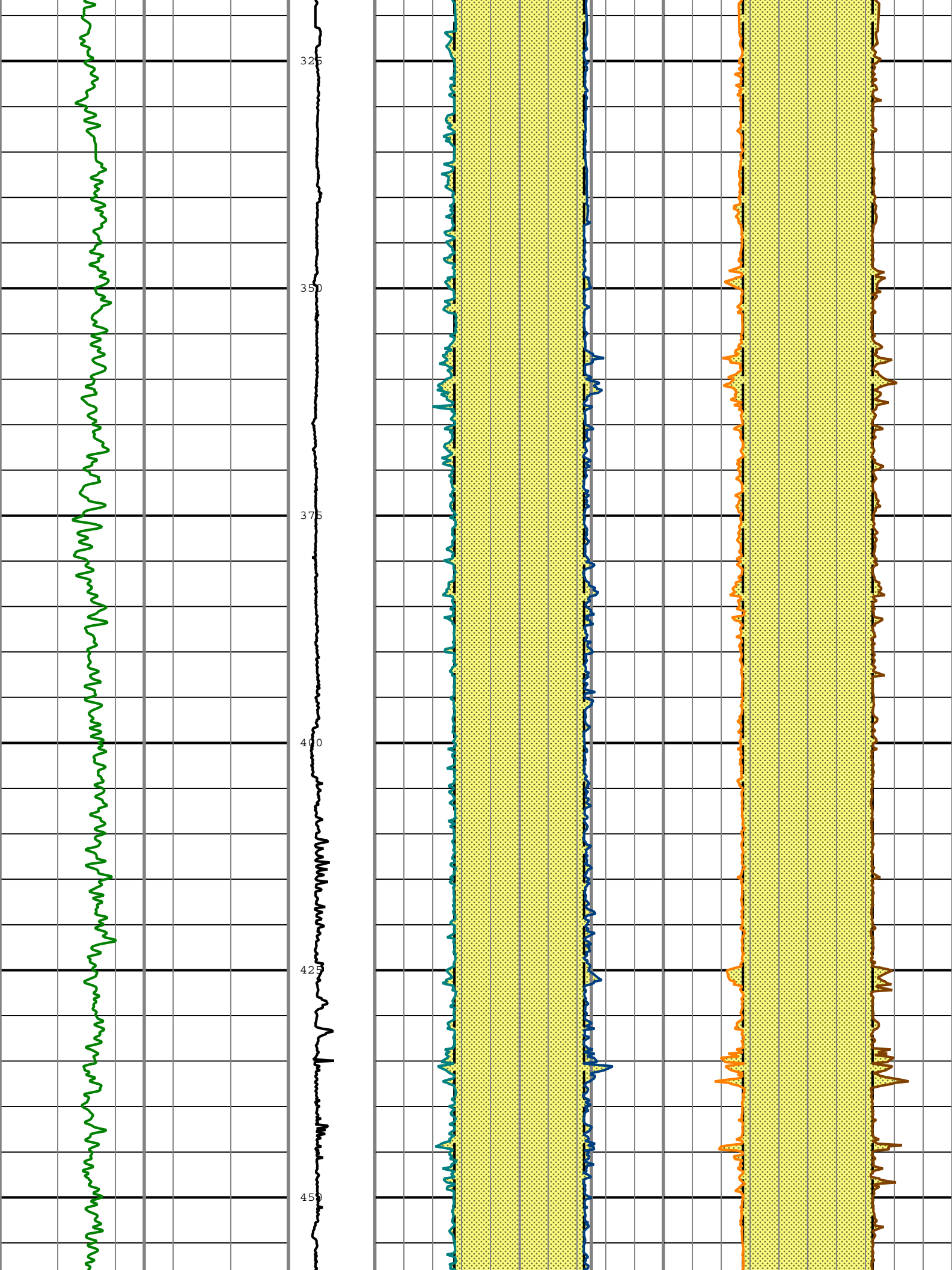
Run 01: Drilling 950170E2-A9D5-4924-862A-7DF83A989827

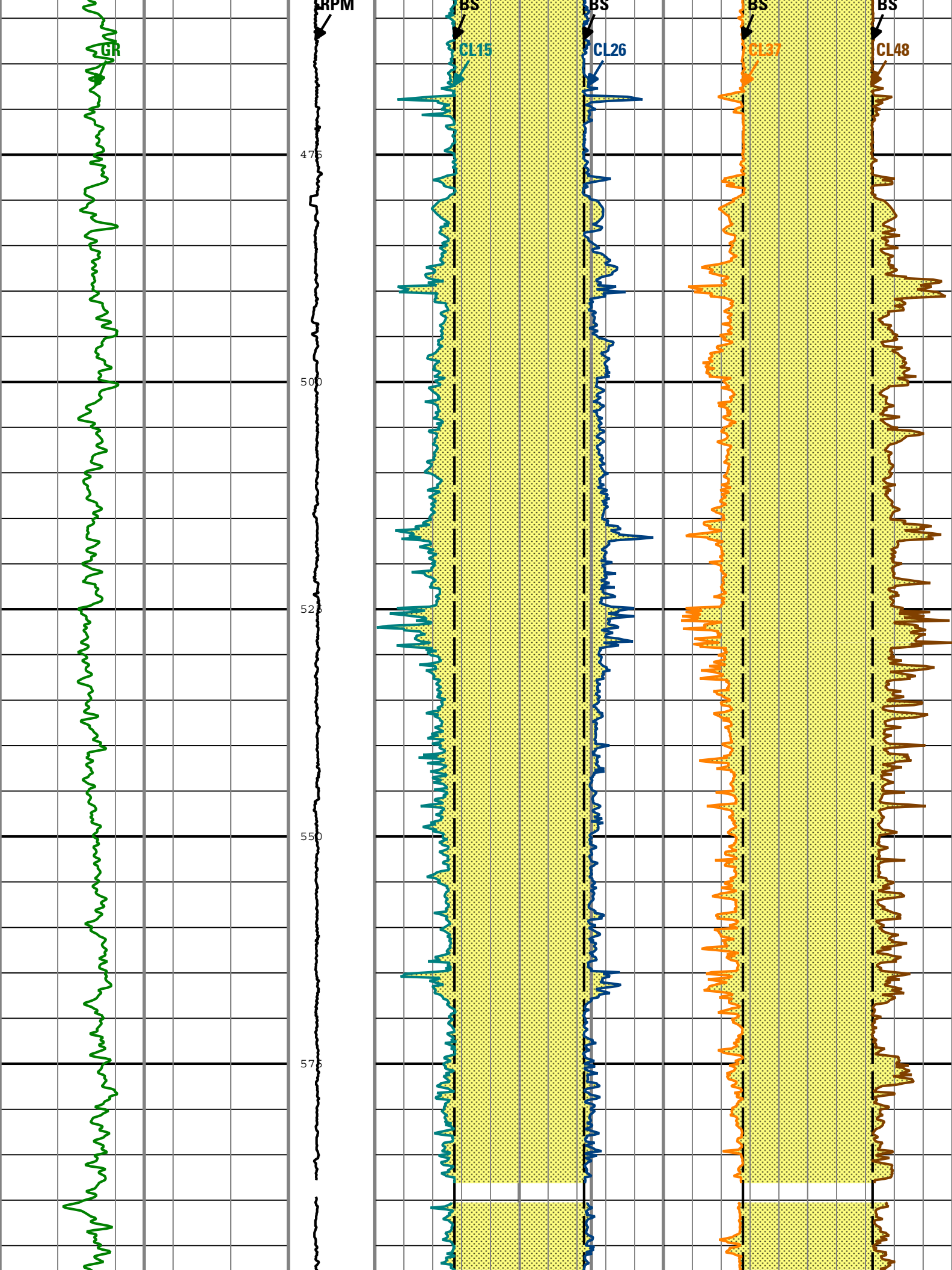
Description: VDN QDensity QPEF Format: Log ( ADN Ultrasonic Caliper ) Index Scale: 1:500 Index Unit: m Index Type: Measured Depth Creation Date: 24-Mar-2011 01:45:13

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	ARC6:ARC6:ARDC	6in - RM
RPM	ADN6C:ADN6C	6in - RM

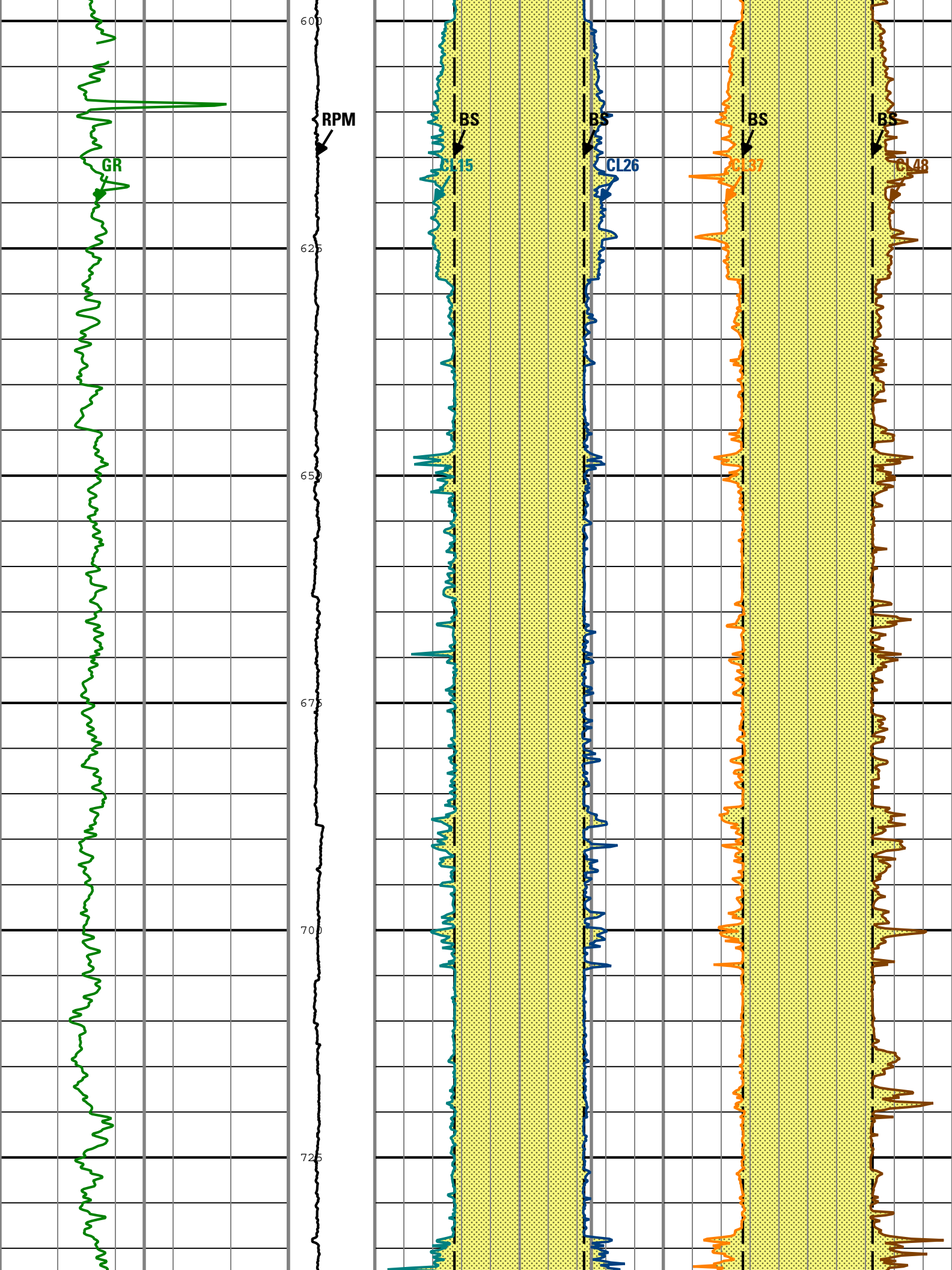


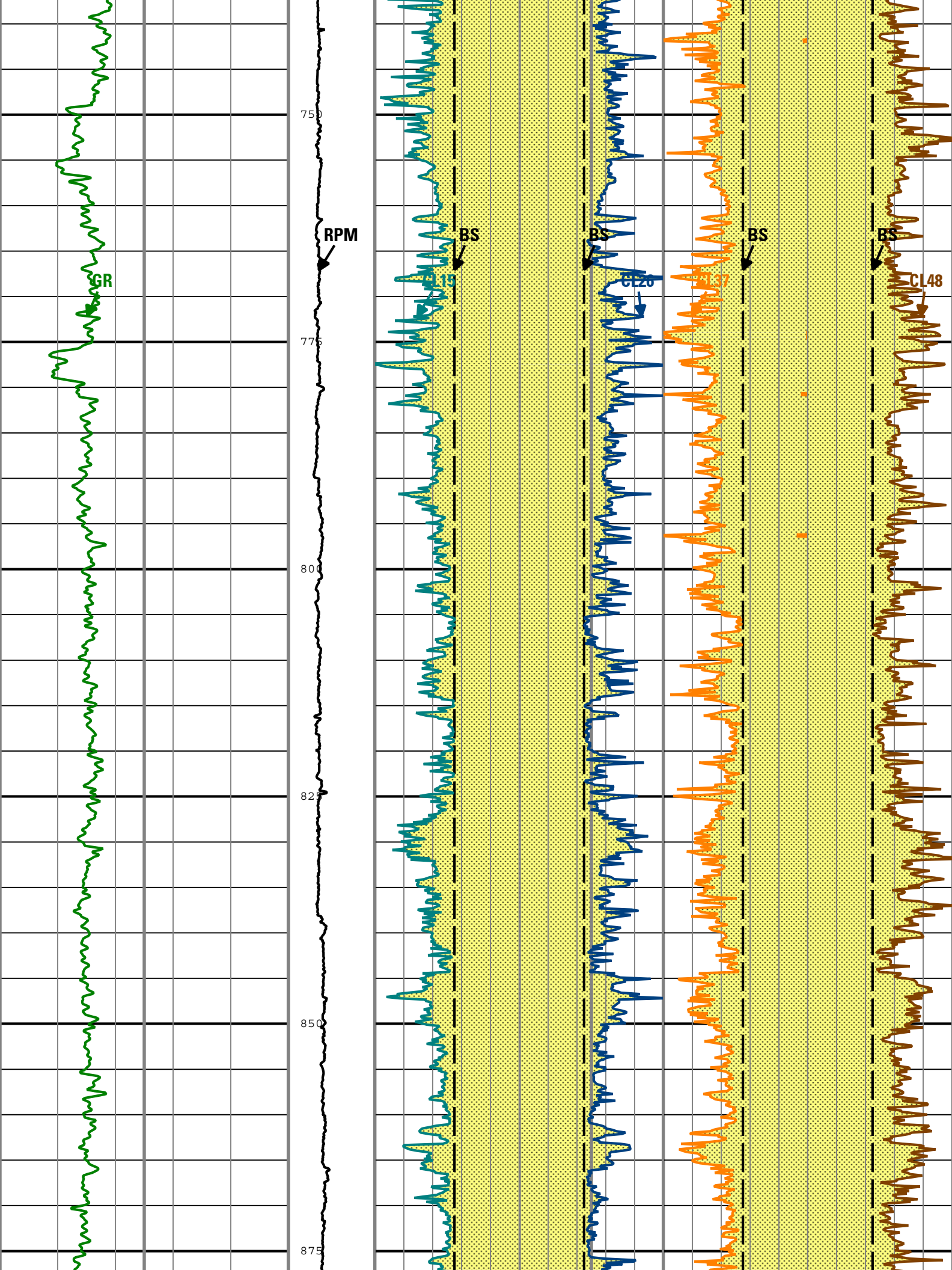


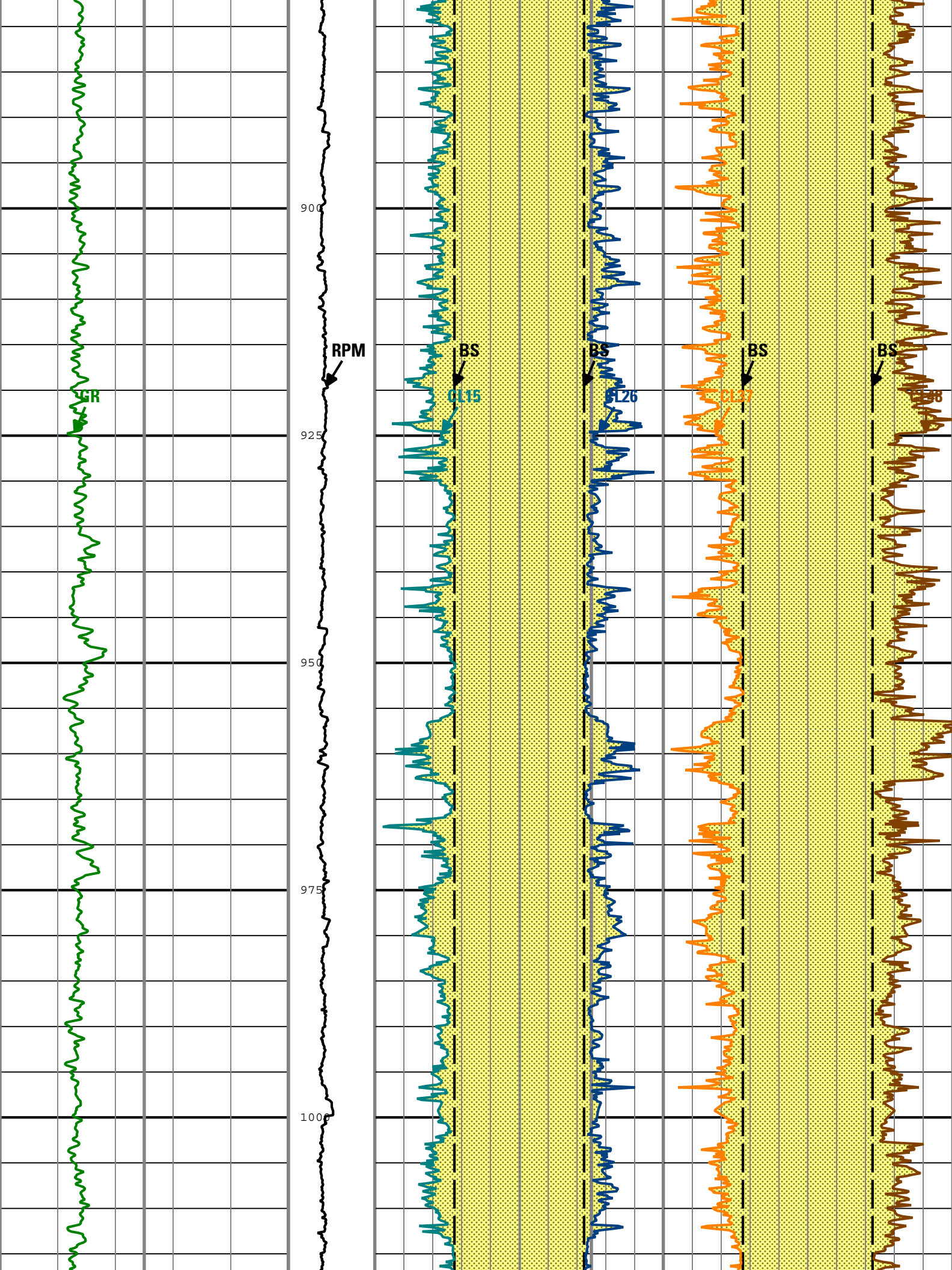


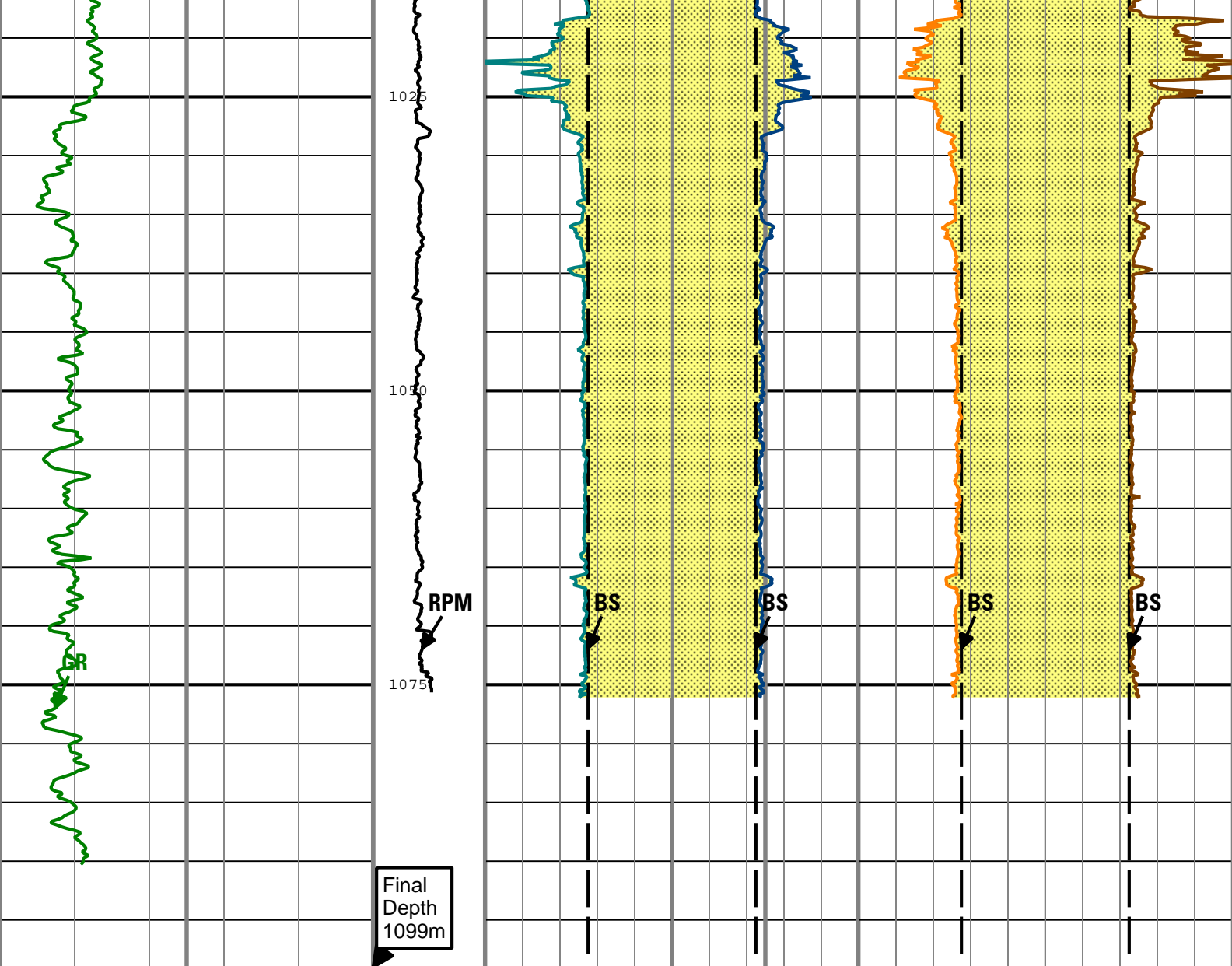












Gamma Ray (GR) ARC6 RM	Rotational Speed (RPM) ADN6C RM	BH	BH	BH	BH
0 gAPI 150	0 c/min 200	Bit Size (BS) RT	Bit Size (BS) RT	Bit Size (BS) RT	Bit Size (BS) RT
		14 in 4	4 in 14	14 in 4	4 in 14
		Ultrasonic Caliper Along Axis 1 and 5 (CL15) ADN6C RM	Ultrasonic Caliper Along Axis 2 and 6 (CL26) ADN6C RM	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: 24-Mar-2011 01:45:13

Channel Processing Parameters				
Parameter	Description	ToolPath	Value	Unit
BHK	Drilling Fluid Potassium Concentration	Borehole	0	%
BS	Bit Size	COMPLETION	8.5	in
DFD	Drilling Fluid Density	Borehole	1.03	g/cm3
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 - Run 01

<b>Primary Set Components</b>		<b>Description</b>		<b>Tool Element</b>		<b>Serial Number</b>	
		Electronics Chassis		RBEC		236	
<b>Calibration Dates</b>		<b>Shop Calibration</b>					
Date & Time / Date Validity		18-Feb-2011 05:04:34 PM - Valid					
Calibration Source		Time Frame File					
<b>Calibration Type:</b>				<b>Resistivity</b>			
<b>Description</b>		<b>Min/Nominal/Max</b>		<b>Shop</b>		<b>Unit</b>	
C21M2T1 Monitor 2 at T1 Calibration Coefficient		0.9750 / 1.0000 / 1.0250		0.9990			
<b>RAB6 : 6.75-in. geoVISION resistivity tool Calibration M2 at T2 Calibration - Run 01</b>							
<b>Primary Set Components</b>		<b>Description</b>		<b>Tool Element</b>		<b>Serial Number</b>	
		Electronics Chassis		RBEC		236	
<b>Calibration Dates</b>		<b>Shop Calibration</b>					
Date & Time / Date Validity		18-Feb-2011 05:04:34 PM - Valid					
Calibration Source		Time Frame File					
<b>Calibration Type:</b>				<b>Resistivity</b>			
<b>Description</b>		<b>Min/Nominal/Max</b>		<b>Shop</b>		<b>Unit</b>	
C22M2T2 Monitor 2 at T2 Calibration Coefficient		0.9750 / 1.0000 / 1.0250		1.0044			
<b>RAB6 : 6.75-in. geoVISION resistivity tool Calibration M0 at T1 Calibration - Run 01</b>							
<b>Primary Set Components</b>		<b>Description</b>		<b>Tool Element</b>		<b>Serial Number</b>	
		Electronics Chassis		RBEC		236	
<b>Calibration Dates</b>		<b>Shop Calibration</b>					
Date & Time / Date Validity		18-Feb-2011 05:04:34 PM - Valid					
Calibration Source		Time Frame File					
<b>Calibration Type:</b>				<b>Resistivity</b>			
<b>Description</b>		<b>Min/Nominal/Max</b>		<b>Shop</b>		<b>Unit</b>	
C01M0T1 Monitor 0 at T1 Calibration Coefficient		0.9750 / 1.0000 / 1.0250		0.9986			
<b>RAB6 : 6.75-in. geoVISION resistivity tool Calibration M0 at T2 Calibration - Run 01</b>							
<b>Primary Set Components</b>		<b>Description</b>		<b>Tool Element</b>		<b>Serial Number</b>	
		Electronics Chassis		RBEC		236	
<b>Calibration Dates</b>		<b>Shop Calibration</b>					
Date & Time / Date Validity		18-Feb-2011 05:04:34 PM - Valid					
Calibration Source		Time Frame File					
<b>Calibration Type:</b>				<b>Resistivity</b>			
<b>Description</b>		<b>Min/Nominal/Max</b>		<b>Shop</b>		<b>Unit</b>	
C02M0T2 Monitor 0 at T2 Calibration Coefficient		0.9750 / 1.0000 / 1.0250		1.0041			
<b>RAB6 : 6.75-in. geoVISION resistivity tool Calibration Ring at T1 Calibration - Run 01</b>							
<b>Primary Set Components</b>		<b>Description</b>		<b>Tool Element</b>		<b>Serial Number</b>	
		Electronics Chassis		RBEC		236	
<b>Calibration Dates</b>		<b>Shop Calibration</b>					
Date & Time / Date Validity		18-Feb-2011 05:04:34 PM - Valid					
Calibration Source		Time Frame File					
<b>Calibration Type:</b>				<b>Resistivity</b>			
<b>Description</b>		<b>Min/Nominal/Max</b>		<b>Shop</b>		<b>Unit</b>	
CR1RINGT1 Ring at T1 Calibration Coefficient		0.9750 / 1.0000 / 1.0250		1.0029			
<b>RAB6 : 6.75-in. geoVISION resistivity tool Calibration Ring at T2 Calibration - Run 01</b>							
<b>Primary Set Components</b>		<b>Description</b>		<b>Tool Element</b>		<b>Serial Number</b>	
		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		
<b>Calibration Type: Resistivity</b>			
Description	Min/Nominal/Max	Shop	Unit
CR2RINGT2 Ring at T2 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	1.0091	
<b>RAB6 : 6.75-in. geoVISION resistivity tool Calibration BD at T1 Calibration - Run 01</b>			
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		
<b>Calibration Type: Resistivity</b>			
Description	Min/Nominal/Max	Shop	Unit
CD1BDT1 Button Deep at T1 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	1.0078	
<b>RAB6 : 6.75-in. geoVISION resistivity tool Calibration BD at T2 Calibration - Run 01</b>			
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		
<b>Calibration Type: Resistivity</b>			
Description	Min/Nominal/Max	Shop	Unit
CD2BDT2 Button Deep at T2 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	1.0137	
<b>RAB6 : 6.75-in. geoVISION resistivity tool Calibration BM at T1 Calibration - Run 01</b>			
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		
<b>Calibration Type: Resistivity</b>			
Description	Min/Nominal/Max	Shop	Unit
CM1BMT1 Button Medium at T1 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	1.0024	
<b>RAB6 : 6.75-in. geoVISION resistivity tool Calibration BM at T2 Calibration - Run 01</b>			
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		
<b>Calibration Type: Resistivity</b>			
Description	Min/Nominal/Max	Shop	Unit
CM2BMT2 Button Medium at T2 Calibration Coefficient	0.9750 / 1.0000 / 1.0250	1.0084	
<b>RAB6 : 6.75-in. geoVISION resistivity tool Calibration BS at T1 Calibration - Run 01</b>			
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

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

<b>Primary Set Components</b>	<b>Description</b>	<b>Tool Element</b>	<b>Serial Number</b>
	Chassis, Hi-Pres, Non-Mag	ADSE	297
	Collar, IBS 8-1/4, P550	ADDC	YJ56
	Retrievable Neutron Gamma Src Plugless	RNGS	01-21
<b>Calibration Dates</b>	<b>Shop Calibration</b>		
Date & Time / Date Validity	23-Feb-2011 06:44:34 PM - Valid		
Calibration Source	Time Frame File		
<b>Calibration Type: Density: LS Window 3</b>			
<b>Description</b>	<b>Min/Nominal/Max</b>	<b>Shop</b>	<b>Unit</b>
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

<b>Primary Set Components</b>	<b>Description</b>	<b>Tool Element</b>	<b>Serial Number</b>
	Chassis, Hi-Pres, Non-Mag	ADSE	297
<b>Calibration Dates</b>	<b>Shop Calibration</b>		
Date & Time / Date Validity	23-Feb-2011 06:44:34 PM - Valid		
Calibration Source	Time Frame File		
<b>Calibration Type: Density: SS Window 1</b>			
<b>Description</b>	<b>Min/Nominal/Max</b>	<b>Shop</b>	<b>Unit</b>
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

<b>Primary Set Components</b>	<b>Description</b>	<b>Tool Element</b>	<b>Serial Number</b>
	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

**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
--	---------------------------	------	-----

<b>Calibration Dates</b>	<b>Shop Calibration</b>		
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**

<b>Primary Set Components</b>	<b>Description</b>	<b>Tool Element</b>	<b>Serial Number</b>
	Chassis, Hi-Pres, Non-Mag	ADSE	297
<b>Calibration Dates</b>	<b>Shop Calibration</b>		
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**

<b>Primary Set Components</b>	<b>Description</b>	<b>Tool Element</b>	<b>Serial Number</b>
	Chassis, Hi-Pres, Non-Mag	ADSE	297
<b>Calibration Dates</b>	<b>Shop Calibration</b>		
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 - Run 01**

<b>Primary Set Components</b>	<b>Description</b>	<b>Tool Element</b>	<b>Serial Number</b>
	Chassis, Hi-Pres, Non-Mag	ADSE	297
<b>Calibration Dates</b>	<b>Shop Calibration</b>		
Date & Time / Date Validity	23-Feb-2011 06:44:34 PM - Valid		
Calibration Source	Time Frame File		

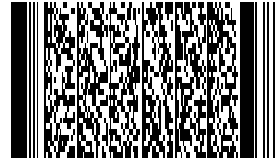
**Calibration Type:** Neutron: Near 1 Tube 1

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												
<b>Calibration Type:</b>		<b>Neutron: Near 2 Tube 1</b>												
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				
<b>Survey Record</b>														
<b>Survey Calculation</b>														
Method :		Minimum Radius of Curvature				DLS Method :		Lubinski						
North Reference :		True North				Total Correction Formula :		Magnetic Dec						
<b>Rig Location</b>														
Latitude :		8.59 degrees				Longitude :		-84.08 degrees						
<b>Tie In Point</b>														
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				
<b>D&amp;I Inits Computed and Values Used - Run 01</b>														
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						
<b>Survey Quality Index</b>														
0 : Long, passed all criteria		2 : Long, failed mag criteria												
<b>Survey Correction Index</b>														
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	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
<b>Company:</b>		<b>IODP</b>												
		<b>l amont - Doherty Earth Observatory</b>												

Well: U1379A  
Field: Expedition 334  
Rig Name: JOIDES Resolution  
State: Puntarenas  
Country: Costa Rica



**Schlumberger**

6.75" LWD Service  
Ultrasonic Caliper  
Recorded Mode Data