

Company: CONOCOPHILLIPS CANADA RESOURCES CORP.

Well: COPRC DODO CANYON E76

Field: DODO CANYON

Province: NORTHWEST TERRITORE

LOG QUALITY CONTROL

Province:	NORTHWEST TERRITORIES		
Field:	DODO CANYON		
Location:	UNIT E SECTION 76		
Well:	COPRC DODO CANYON E76		
Company:	CONOCOPHILLIPS CANADA RESOURCES CO		
Location:		UNIT E SECTION 76	
		300E766510126450	
		NORTHING: 7219874.66 EASTING: 594010.01	
Permanent Datum:		Ground Level	Elev.: 273.40 m
Log Measured From:		Kelly Bushing	G.L. 268.20 m
Drilling Measured From:		Kelly Bushing	D.F. 273.10 m
API Serial No.		Longitude:	Latitude:
EL470		126° 59' 58" W	65° 5' 27" N

Logging Date	14-Jan-2014		
Run Number	1.1		
Depth Driller	1908.00 m		
Schlumberger Depth	1819.10 m		
Bottom Log Interval	1816.69 m		
Top Log Interval	603.00 m		
Casing Driller Size @ Depth	244.5 mm @ 603.00 m		
Casing Schlumberger	603 m		
Bit Size	222 mm		
Type Fluid In Hole	INVERT		
Density	1025 kg/m3	75 s	
Fluid Loss	PH		
Source of Sample	N/A		
RM @ Meas Temp	N/A		
RMF @ Meas Temp	N/A		
RMC @ Meas Temp	N/A		
Source RMF	RMC	N/A	N/A
RM @ BHT	RMF @ BHT	N/A	N/A
Max Recorded Temperatures	71.5 degC		
Circulation Stopped	Time	07:20:00	
Logger on Bottom	Time	18:25:00	
Unit Number	Location:	GRANDE PRAIRIE	
Recorded By	JEFFREY TATLOCK		
Witnessed By	DAVID LAWRENCE		

Disclaimer

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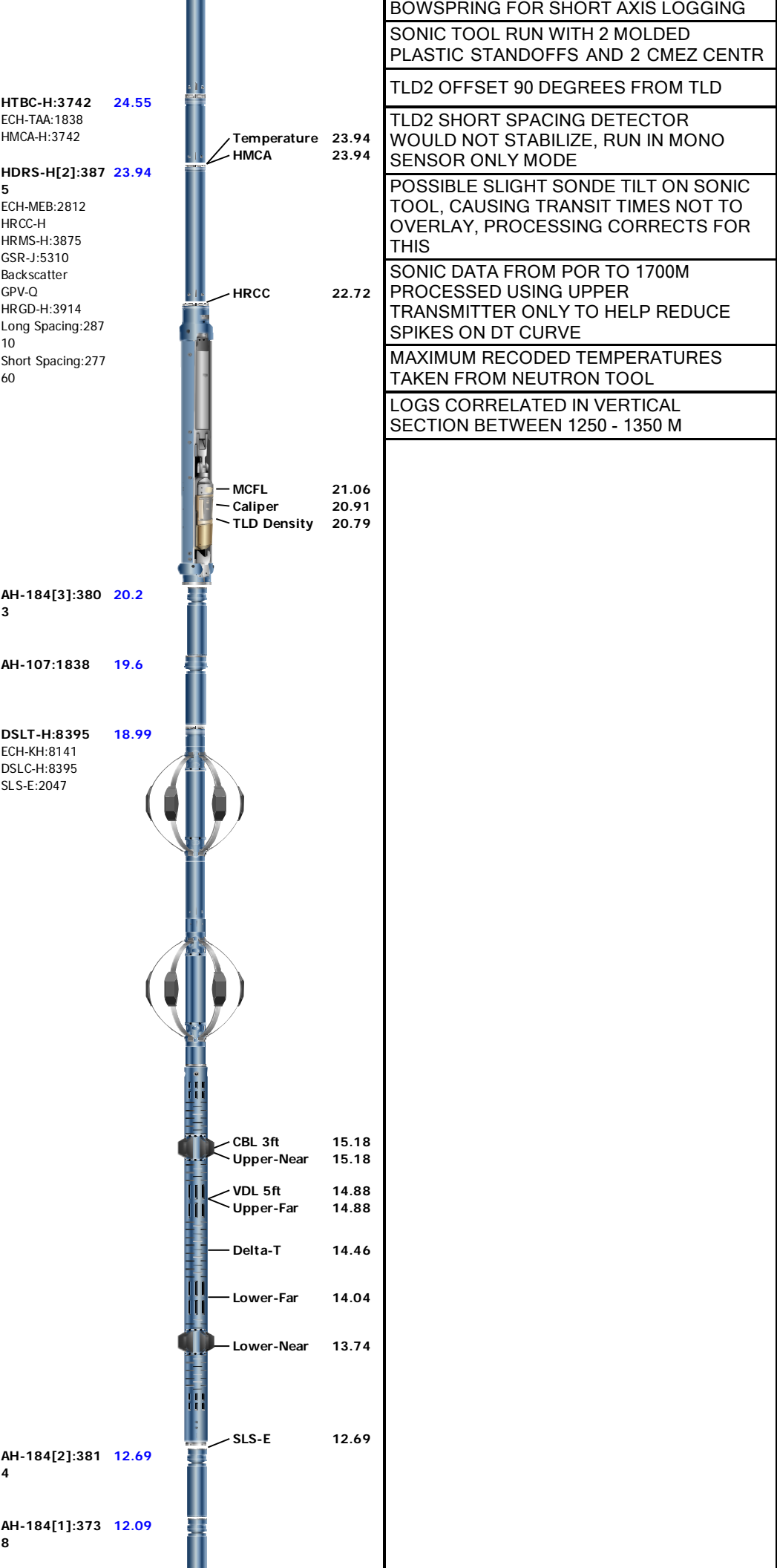
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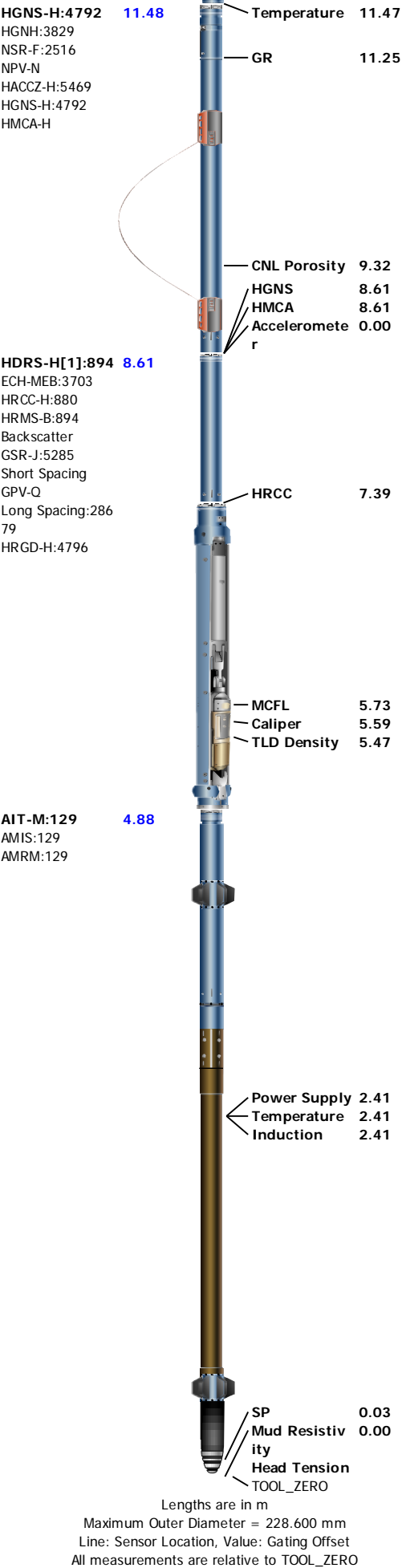
Borehole Fluids

Parameter(unit)	1.1					
Fluid Type	Oil					
Fluid Name	INVERT					
Max Recorded Temperatures (degC)	71.5					
Source of Sample	N/A					
Salinity (ppm)	0					
Density (kg/m3)	1025					
Funnel Viscosity (s)	75					
Fluid Loss (cm3)						
PH						
Date/Time Circulation Stopped	14-Jan-2014 07:20:00					
Date Logger on Bottom	14-Jan-2014					
Time Logger on Bottom	18:25:00					
Source RMF	N/A					
RMC	N/A					
RM @ Meas Temp (ohm.m@degC)	N/A					
RMF @ Meas Temp (ohm.m@degC)	N/A					
RMC @ Meas Temp (ohm.m@degC)	N/A					
RM @ BHT (ohm.m@degC)	N/A					
RMF @ BHT (ohm.m@degC)	N/A					
RMC @ BHT (ohm.m@degC)	N/A					
Electricity Stability (V)						
Oil/Water						
Total Solid (%)						
High Gravity Solids (%)						

Remarks and Equipment Summary

1.1: Toolstring				1.1: Remarks	
<div><div><div>Equip name</div><div>LEH-QT:2850</div><div>LEH-QT:2850</div></div><div><div>DTC-H:9100</div><div>ECH-KC:10172</div><div>DTC-H:9100</div></div><div><div>SGT-N:10447</div><div>SGH-K:3210</div><div>SGC-TB:10447</div><div>SGD-TAA</div></div></div> <div><div>Length</div><div>28.03</div></div> <div></div> <div><div>MP name</div><div>Offset</div></div>	ALL INTERVALS AND PRESENTATIONS AS PER CLIENT REQUEST				
	RIG: BEAVER 2				
	SLB CREW: JASON LEGASSIE				
	LOGGER REQUESTED AT: 10:30 14-JAN-2014				
	LOGGER ARRIVED AT: 09:30 14-JAN-2014				
	RIG READY AT: 15:45 14-JAN-2014				
	INDUCTION TOOL RUN WITH 38.1 MM STANDOFFS IN COMPUTE MUD RESISTIVITY MODE				
	NEUTRON TOOL RUN WITH DUAL AXIS				





Depth Summary

1.1
















Depth Measuring Device

Depth Measuring Device									
Type	IDW-JA								
Serial Number	6162								
Calibration Date	10-MAY-2010								
Calibrator Serial Number	4								
Calibration Cable Type	7-39 PLXS								
Wheel Correction 1	-3								
Wheel Correction 2	1								
Tension Device									
Type	CMTD-B/A								
Serial Number	1293								
Calibration Date	06-SEP-2013								
Calibrator Serial Number	1111								
Number of Calibration Points	10								
Calibration Root Mean Square Error	28								
Calibration Peak Error	54								
Logging Cable									
Type	7-39P-LXS								
Serial Number									
Length	3100.00 m								
Conveyance Type	Wireline								
Rig Type									
1.1:Depth Control Parameters					Depth Control Remarks				
Log Sequence	First Log In the Well				ALL SCHLUMBERGER DEPTH CONTROL PROCEDURES FOLLOWED				
Rig Up Length At Surface	56.06 m				IDW USED AS PRIMARY DEPTH CONTROL				
Rig Up Length At Bottom	56.02 m				Z-CHART USED AS SECONDARY DEPTH CONTROL				
Rig Up Length Correction	0.04 m				ALL LOGS CORRELATED TO DOWN LOG IN VERTICAL SECTION BETWEEN 1250 - 1350 M				
Stretch Correction	1.27 m								
Tool Zero Check At Surface	0.30 m								
1.1									
Software Version									
Acquisition System						Version			
MaxWell						4.0.9163.3000			
Application Patch						Patch-SP-10767_13075-4.0.9163.3001			
Computation	Description							Version	
HENVIR	Computation Ensemble for the HGNS Neutron environmental corrections							4.0.9033.3000	
DepthCorrection	DepthCorrection							4.0.9213.3000	
HILT	Platform Express Shared Ensemble							4.0.9231.3000	
Tool Elements	Description				Software Version			Firmware Version	
HRCC-H	HILT High-Resolution Control Cartridge, 150 degC				4.0.9231.3000			2.0	
HRGD-H	HILT Resistivity Gamma-Ray Density Device, 150 degC				4.0.9231.3000			3.0	
HGNS-H	HILT Gamma-Ray and Neutron Sonde, 150 degC				4.0.9231.3000			2.0	
AMIS	Array Induction Sonde - M				4.0.9247.3000			1	
Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
1.1	Log[5]:Up	Up	543.85 m	1822.88 m	14-Jan-2014 6:48:20 PM	14-Jan-2014 8:17:20 PM	ON	-1.90 m	Yes
All depths are referenced to toolstring zero									
Log	Company:CONOCOPHILLIPS CANADA RESOURCES CORP.				Well:COPRC DODO CANYON E76				

Description: Induction LQC for Platform Express Format: Log (PEX+AIT LQC) Index Scale: 1:600 Index Unit: m Index Type: Measured Depth Creation Date: 15-Jan-2014 01:17:16



















Channel	Source	Sampling
ABFR	AIT-M:AMIS:AMIS	3in
AEFL	AIT-M:AMIS:AMIS	3in
AQABN	AIT-M:AMIS:AMIS	3in
CALI	HDRS-H[1]:HRCC-H:HRCC-H	1in
CFGR	HGNS-H:HGNS-H:HGNS-H	6in
DNPH	HGNS-H:HGNS-H:HGNS-H	6in
DSOZ	HDRS-H[1]:HRMS-H:HRGD-H	2in
GR	HGNS-H:HGNS-H:HGNS-H	6in
HDRA	HDRS-H[1]:HRMS-H:HRGD-H	2in
HDRB	HDRS-H[1]:HRMS-H:HRGD-H	2in
HNQFI	HILT	6in
HPRA	HDRS-H[1]:HRMS-H:HRGD-H	2in
RSOZ	HDRS-H[1]:HRMS-H:HRGD-H	2in
SDEV	HGNS-H:HGNS-H:HGNS-H	6in
STIT	DepthCorrection	6in
TENS	WLWorkflow	1in
TIME_1900	WLWorkflow	0.1in

Answer Product Flag Image (HNQFI)

1 - TQCA - :	 TQCA valid	 TQCA error	 TQCA absent
2 - QCBSL - :	 QCBSL valid	 QCBSL error	 QCBSL absent
3 - QCPOR - :	 QCPOR valid	 QCPOR error	 QCPOR absent
4 - QCRH - :	 QCRH valid	 QCRH error	 QCRH absent
5 - QCPE - :	 QCPE valid	 QCPE error	 QCPE absent

TIME_1900 - Time Marked every 60.00 (s)

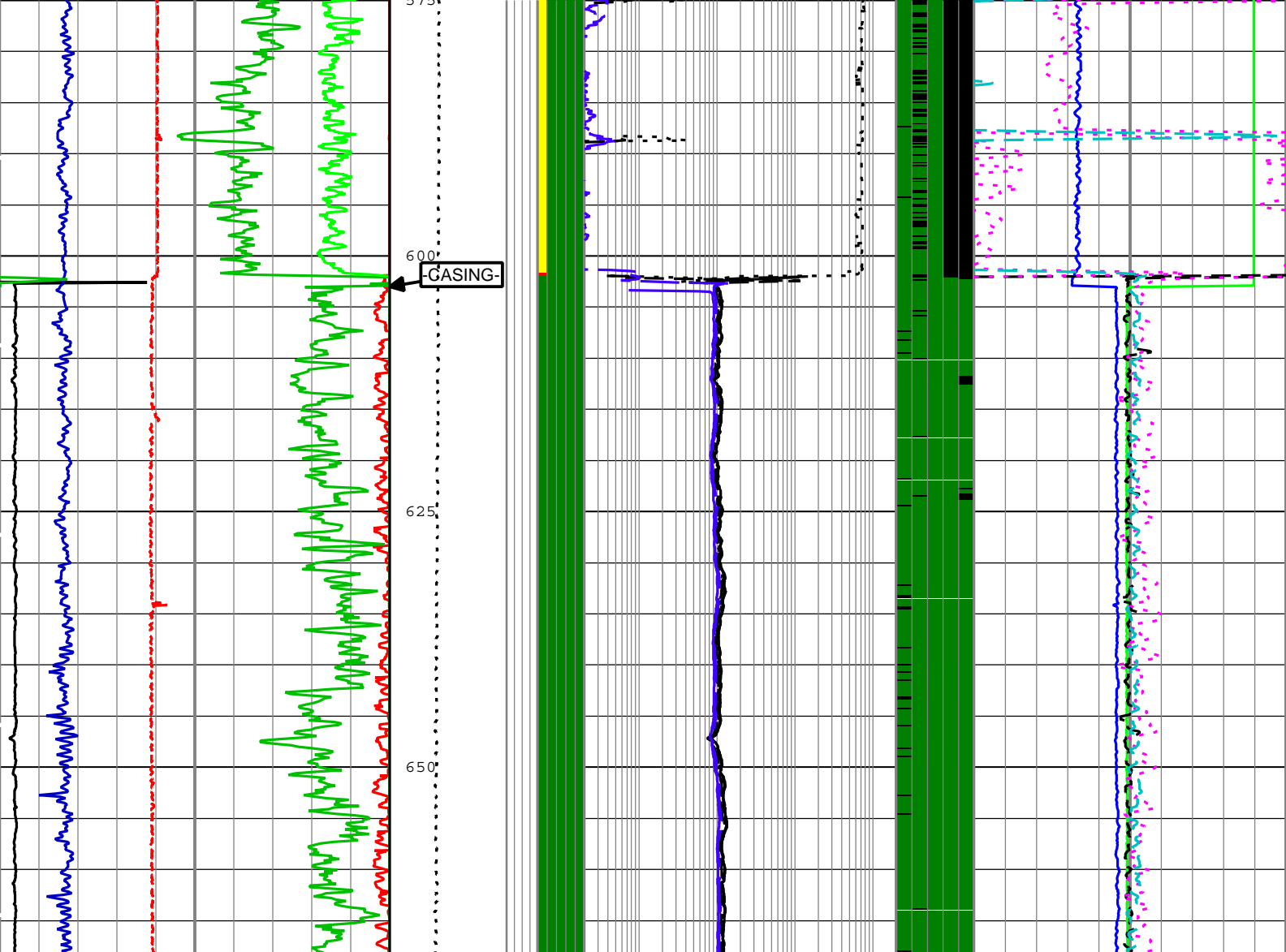
Array Induction Environmentally Compensated Log Processing Flags (AEFL) AIT-M

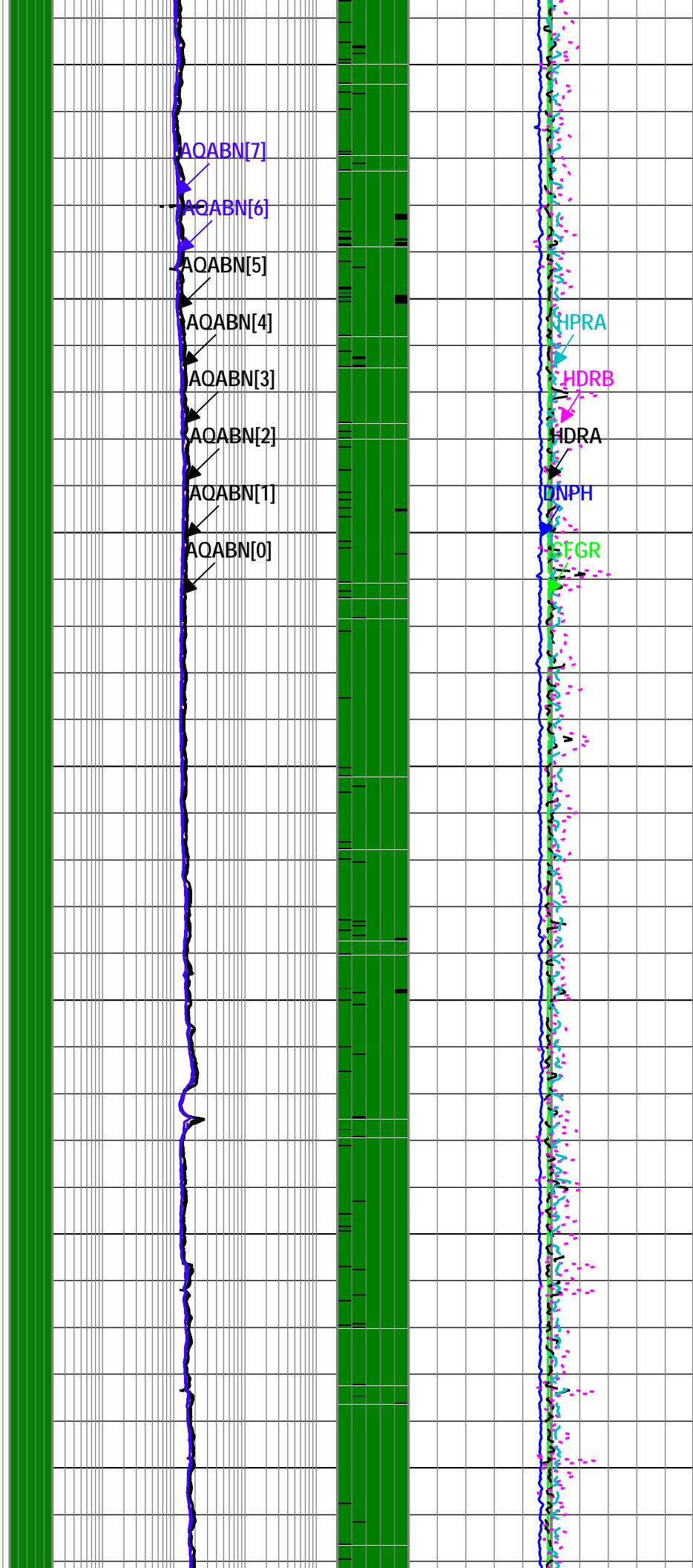
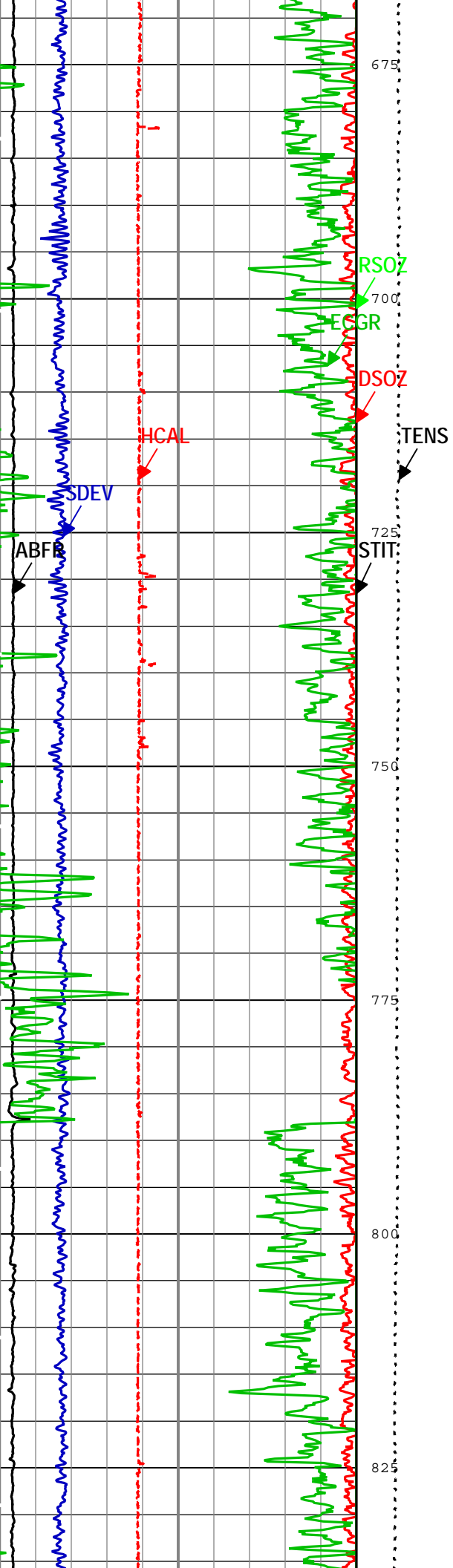
1 - Tool Status - From ADES :	 Tool status OK	 Tool status warning
	 Tool status error	
2 - Mag Mud - Magnetic Mud :	 No magnetic mud detected	
	 Magnetic mud detected and magnetic mud processing	
	 Magnetic mud detected and non-magnetic mud processing	
3 - Chart Flag - Chart :	 1, 2, 4 ft logs all valid	 Only 2, 4 ft logs valid
	 Only 4 ft logs valid	 Out of range - All logs invalid
4 - Hole Flag - Hole :	 1, 2, 4 ft logs all valid	 Only 2, 4 ft logs valid
	 Only 4 ft logs valid	 Out of range - All logs invalid
5 - Res Flag - Resolution :	 1, 2, 4 ft logs all valid	 Only 2, 4 ft logs valid
	 Only 4 ft logs valid	 Out of range - All logs invalid

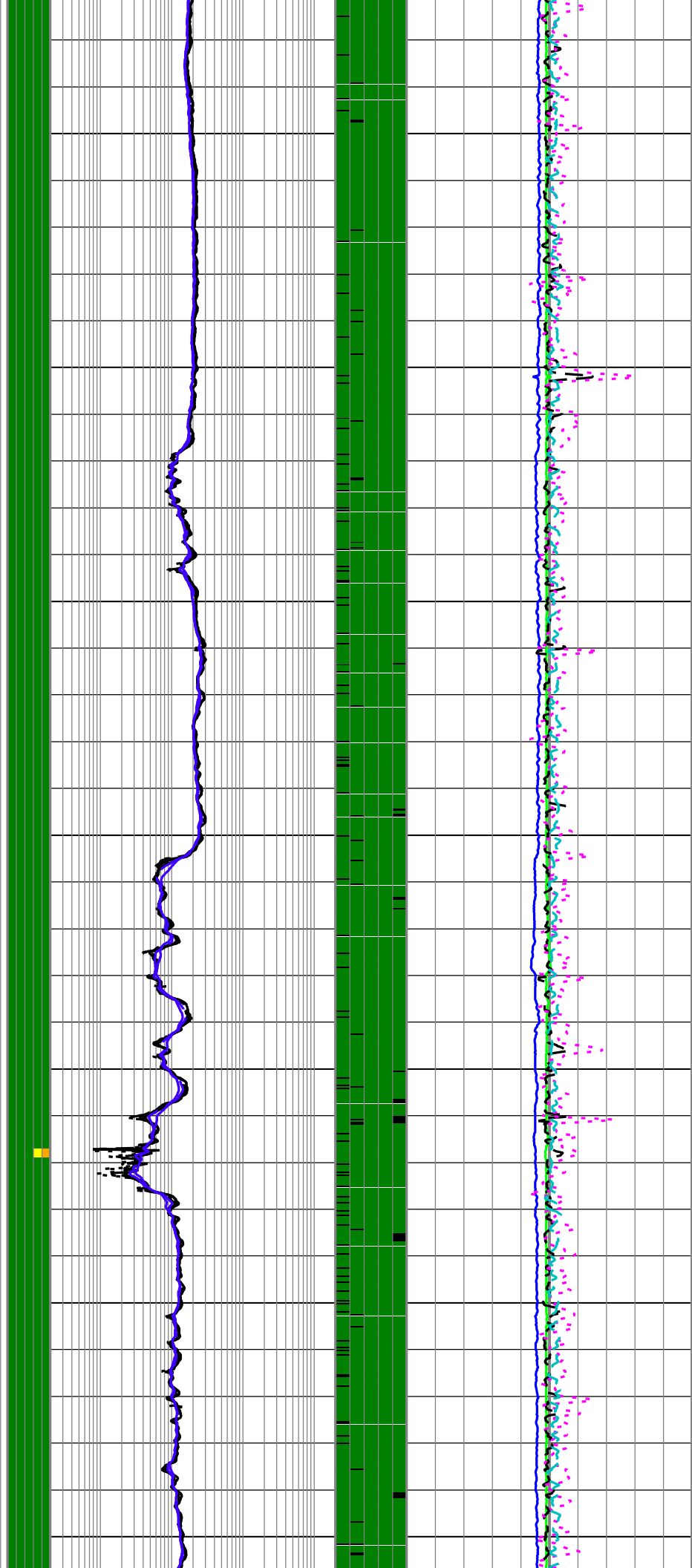
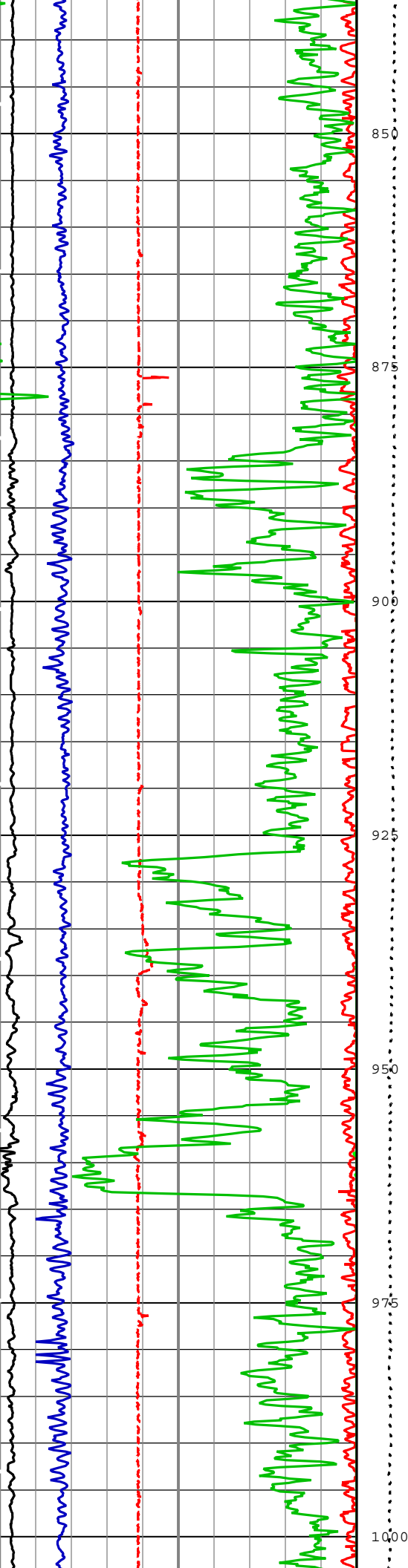
Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[0]) AIT-M		
2	mS/m	20000
Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[1]) AIT-M		
2	mS/m	20000
Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[2]) AIT-M		

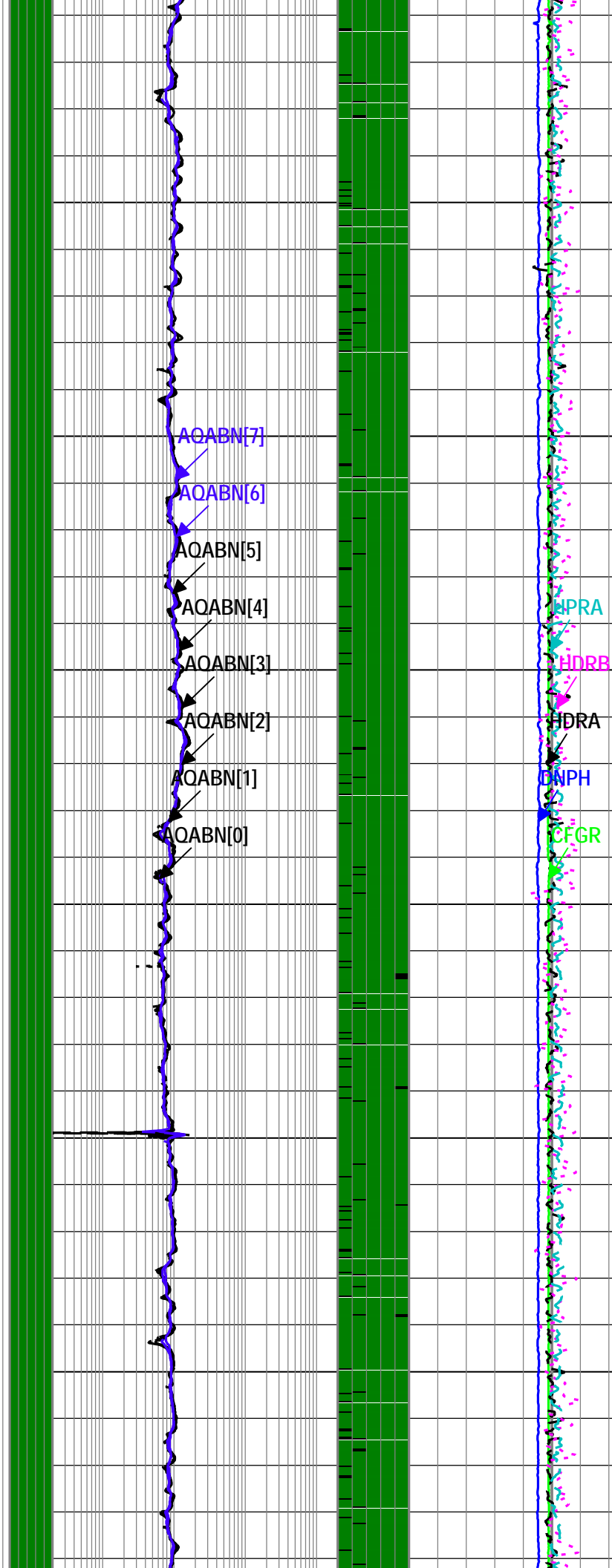
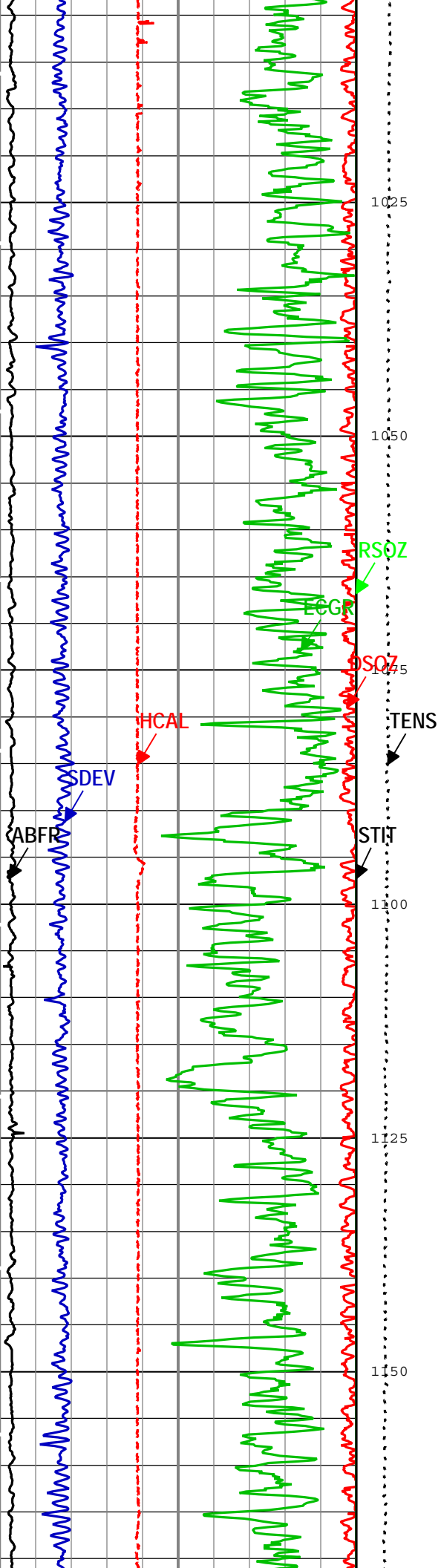
Array Induction Quality Control Borehole Formation Ratio (ABFR) AIT-M			2mS/m20000			Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[3]) AIT-M			2mS/m20000			Gamma Ray Correction Coefficient (CFGR) HGNS-H		
0		25	Sonde Deviation (SDEV) HGNS-H			2mS/m20000			Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[4]) AIT-M			0.5		1.5
-5	deg	45	HCAL			2mS/m20000			Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[5]) AIT-M			Difference between Corrected Thermal Neutron Porosity and Uncorrected (DNPH) HGNS-H		
125	mm	375	Standard Resolution Density Standoff (DSOZ) HDRS-H[1]			2mS/m20000			Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[6]) AIT-M			-0.1	m3/m3	0.1
65	mm	0	ECGR			2mS/m20000			Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[7]) AIT-M			Density Standoff Correction (HDRA) HDRS-H[1]		
0	gAPI	150	Resistivity Standoff Standard Resolution (RSOZ) HDRS-H[1]			2mS/m20000			Answer Product Flag Image (HNOFI)			-250	kg/m3	250
65	mm	0	Cable Tension (TENS)			2mS/m20000			Difference Between Bulk Density (RHOZ) and Apparent Density from Back Scatter Monosensor Inversion (RHBA) (HDRB) HDRS-H[1]			-500	kg/m3	500
			20000 N			2mS/m20000			Photoelectric Factor Correction (HPRA) HDRS-H[1]			-3		3
			ToolDrag			2mS/m20000			15					

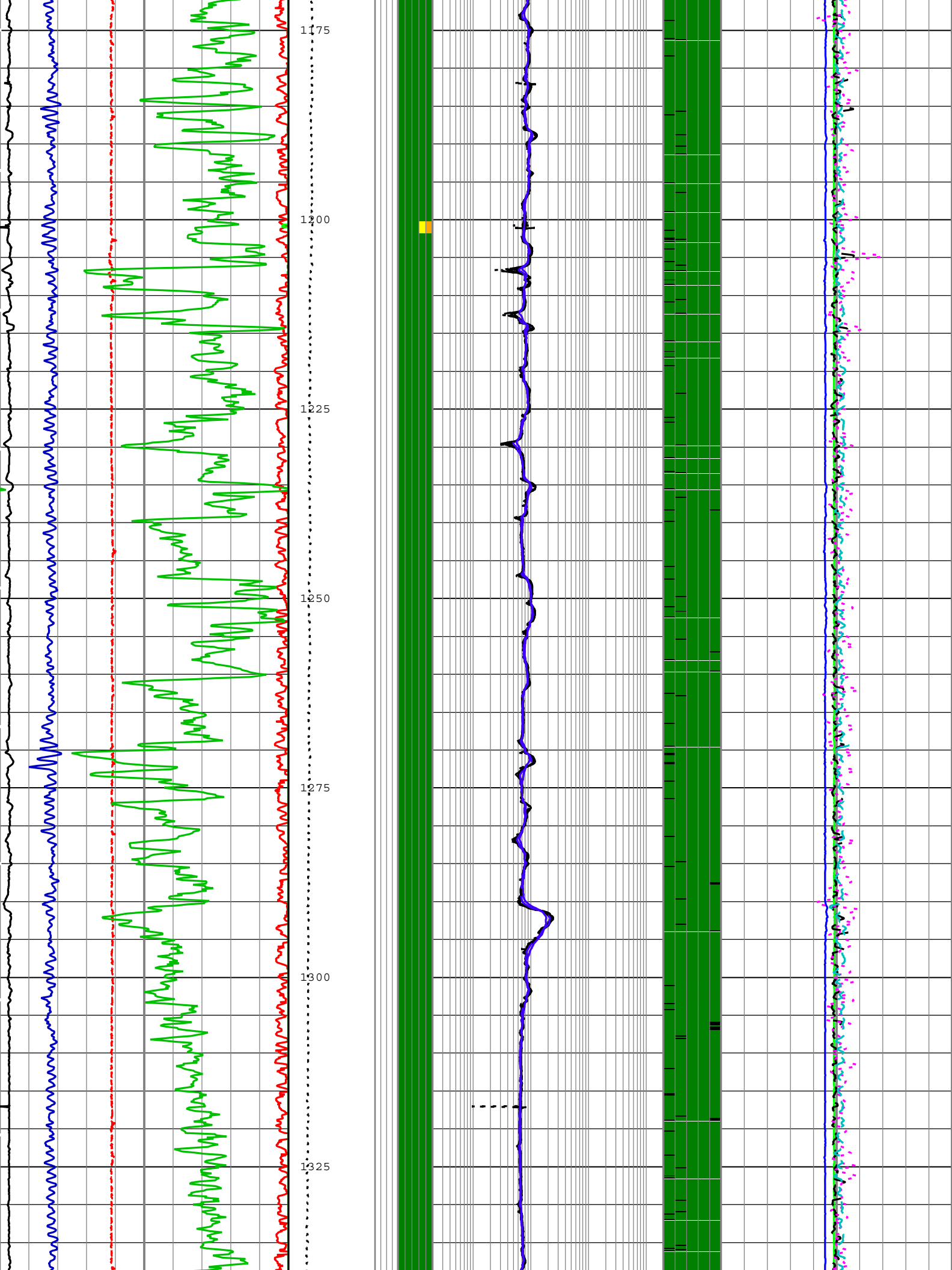
LOG QUALITY CONTROL

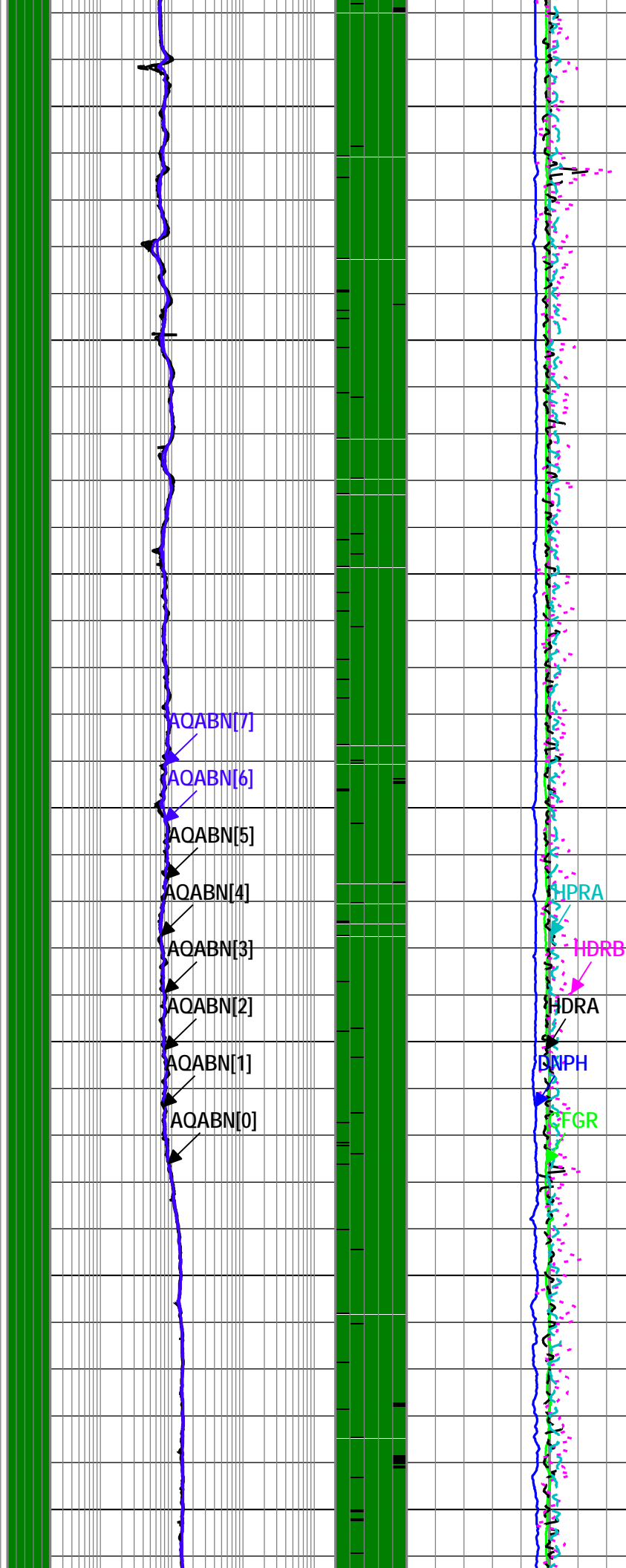
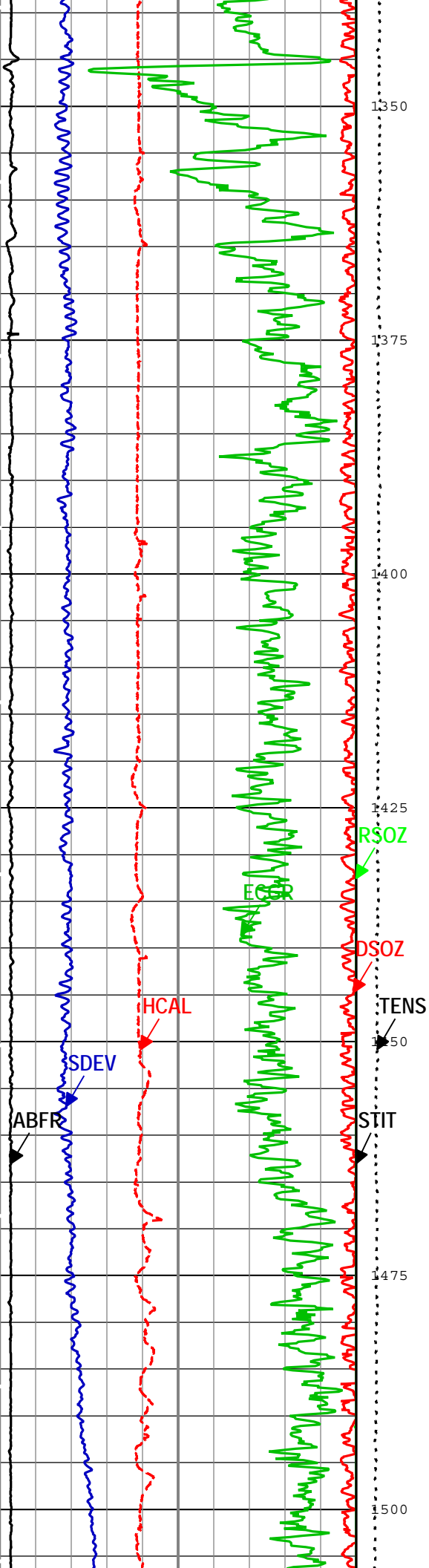


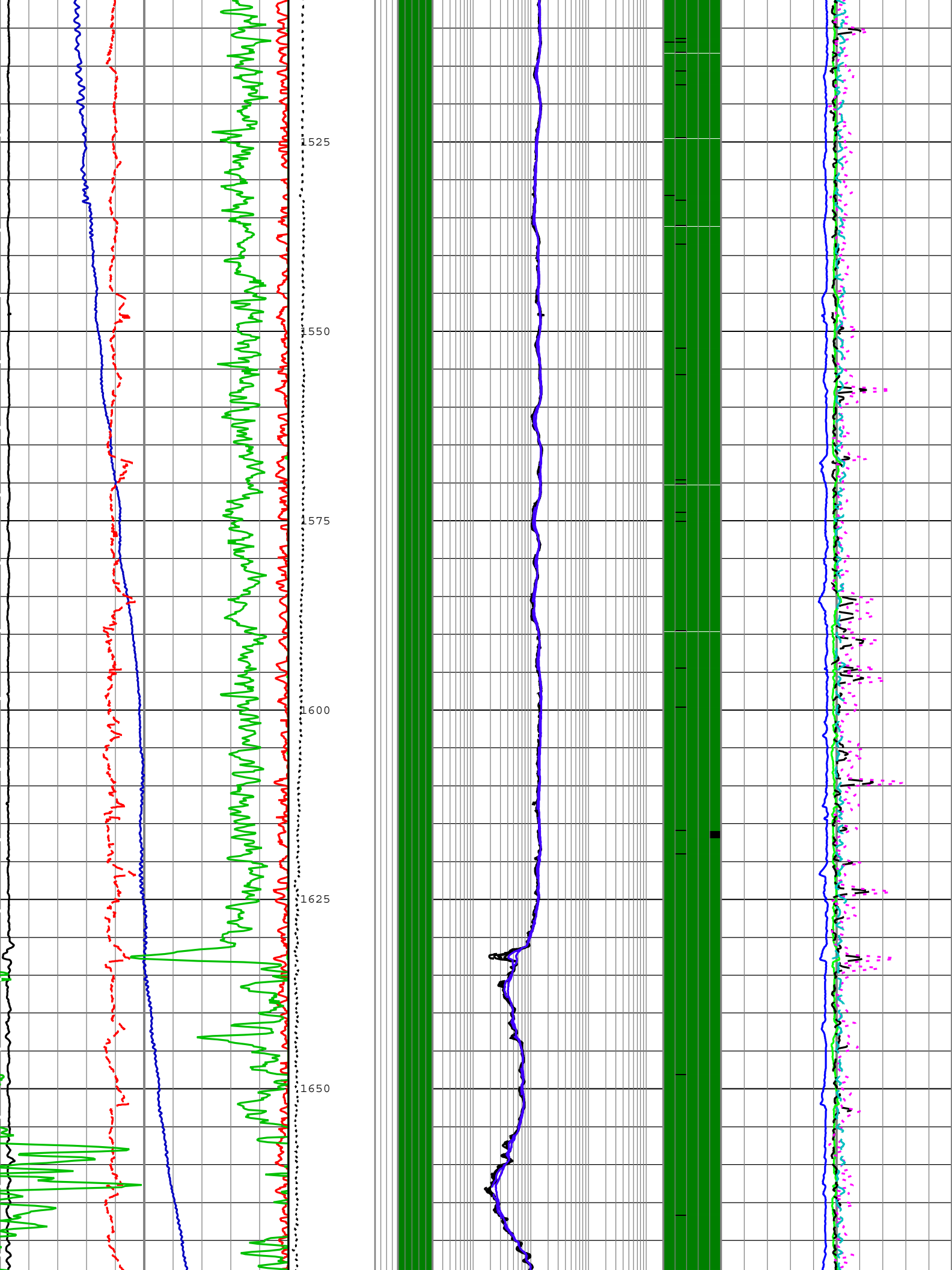


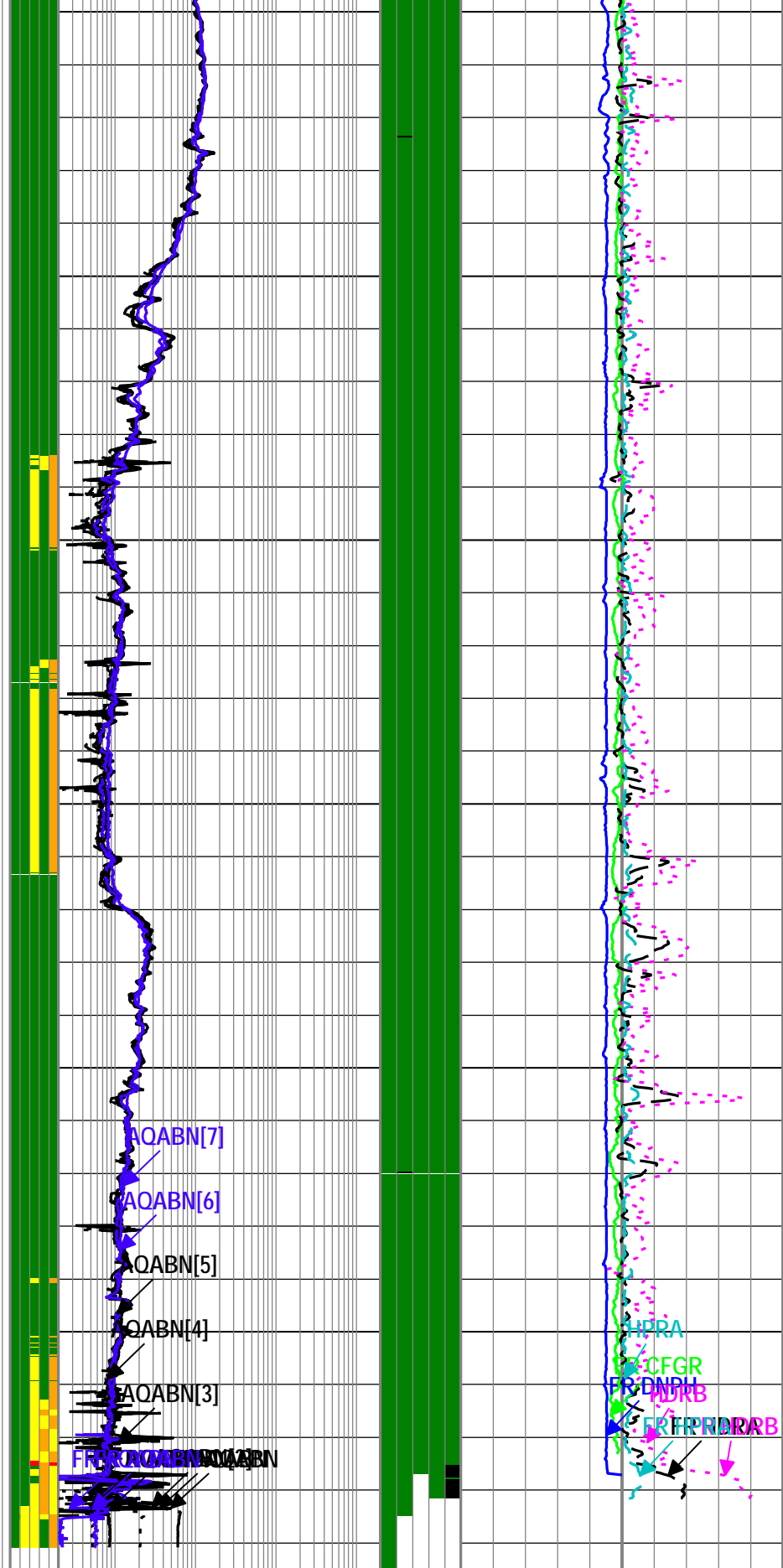






























Array Induction Quality Control Borehole Formation Ratio (ABFR) AIT-M	Stuck Tool Indicator, Total (STIT)	Array Induction Environment	Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[0]) AIT-M	Answer Product Flag Image (HNQFI)	Gamma Ray Correction Coefficient (CFGR) HGNS-H
0 25	0 m 20		2 mS/m 20000		0.5 1.5
Sonde Deviation (SDEV) HGNS-H	Cable		Array Induction Quality Control	1 5	Difference between Corrected Thermal Neutron Density and











-5	deg	45	Cable Tension (TENS)	20000	0	men tally Com pens ated Log Proc essi ng Flag s (AE FL) AIT-M	1	5	Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[1]) AIT-M	2	mS/m	20000	Thermal Neutron Porosity and Uncorrected (DNPH) HGNS-H	-0.1	m3/m3	0.1					
HCAL			N		ToolDrag				Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[2]) AIT-M			Density Standoff Correction (HDRA) HDRS-H[1]			-250			kg/m3	250		
125	mm	375				ToolDrag	Log Processing Flag s (AE FL) AIT-M	1	5	Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[3]) AIT-M			Difference Between Bulk Density (RHOZ) and Apparent Density from Back Scatter Monosensor Inversion (RHBA) (HDRB) HDRS-H[1]			-500			kg/m3	500	
Standard Resolution Density Standoff (DSOZ) HDRS-H[1]										Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[4]) AIT-M			Photoelectric Factor Correction (HPRA) HDRS-H[1]			-3			3		
65	mm	0				ToolDrag	Log Processing Flag s (AE FL) AIT-M	1	5	Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[5]) AIT-M											
ECGR										Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[6]) AIT-M											
0	gAPI	150				ToolDrag	Log Processing Flag s (AE FL) AIT-M	1	5	Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[7]) AIT-M											
Resistivity Standoff Standard Resolution (RSOZ) HDRS-H[1]																					
65	mm	0				ToolDrag	Log Processing Flag s (AE FL) AIT-M	1	5												

Array Induction Environmentally Compensated Log Processing Flags (AEFL) AIT-M

1 - Tool Status - From ADES :		Tool status OK		Tool status warning
		Tool status error		
2 - Mag Mud - Magnetic Mud :		No magnetic mud detected		
		Magnetic mud detected and magnetic mud processing		
		Magnetic mud detected and non-magnetic mud processing		
3 - Chart Flag - Chart :		1, 2, 4 ft logs all valid		Only 2, 4 ft logs valid
		Only 4 ft logs valid		Out of range - All logs invalid
4 - Hole Flag - Hole :		1, 2, 4 ft logs all valid		Only 2, 4 ft logs valid
		Only 4 ft logs valid		Out of range - All logs invalid
5 - Res Flag - Resolution :		1, 2, 4 ft logs all valid		Only 2, 4 ft logs valid
		Only 4 ft logs valid		Out of range - All logs invalid

TIME_1900 - Time Marked every 60.00 (s)

Answer Product Flag Image (HNQFI)

1 - TQCA - :		TQCA valid		TQCA error	<input data-bbox="683 1738 715 1770" type="checkbox"/>	TQCA absent
2 - QCBSL - :		QCBSL valid		QCBSL error	<input data-bbox="683 1780 715 1812" type="checkbox"/>	QCBSL absent
3 - QCPOR - :		QCPOR valid		QCPOR error	<input data-bbox="683 1822 715 1854" type="checkbox"/>	QCPOR absent
4 - QCRH - :		QCRH valid		QCRH error	<input data-bbox="683 1864 715 1896" type="checkbox"/>	QCRH absent
5 - QCPE - :		QCPE valid		QCPE error	<input data-bbox="683 1906 715 1938" type="checkbox"/>	QCPE absent

Description: Induction LQC for Platform Express Format: Log (PEX+AIT LQC) Index Scale: 1:600 Index Unit: m Index Type: Measured Depth Creation Date: 15-Jan-2014 01:17:16

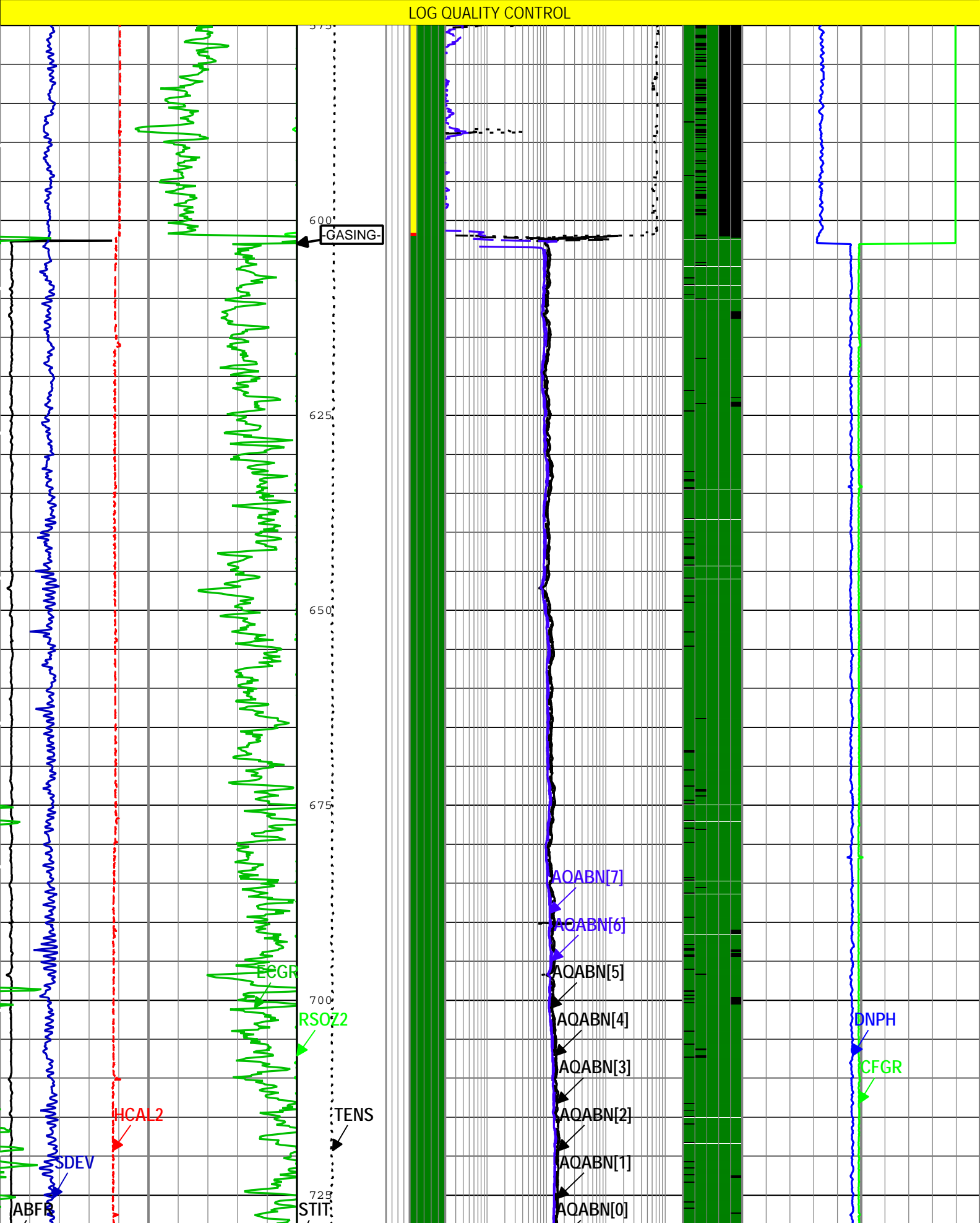
Channel Processing Parameters				
Parameter	Description	Tool	Value	Unit

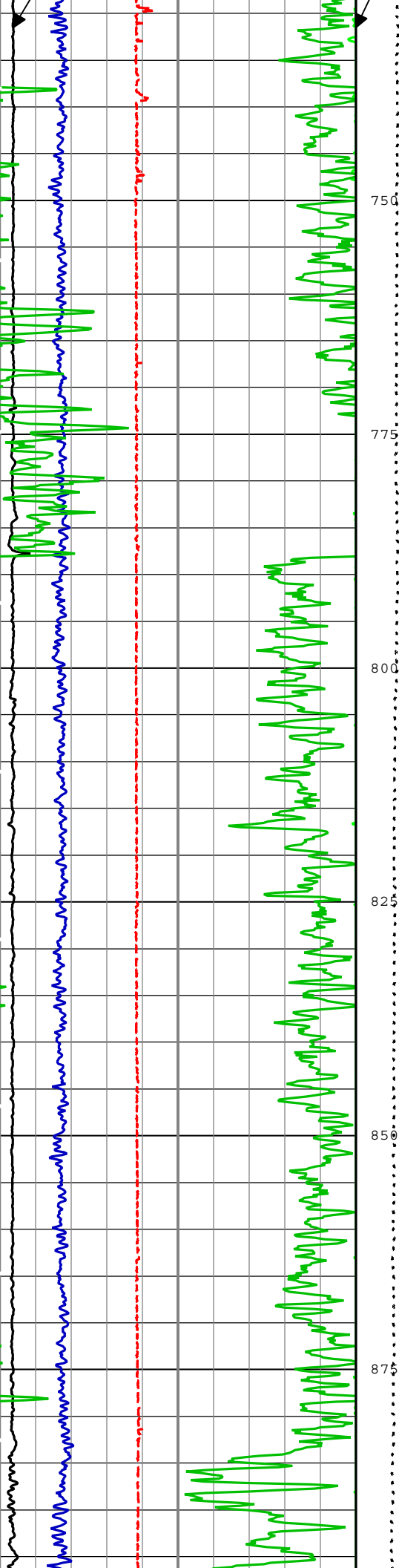
Parameter	Description	Tool	Value	Unit
AAPL	Array Induction Answer Product Level(Depth Log/View only)	AIT-M	Radial	
ABHM	Array Induction Borehole Correction Mode	AIT-M	Compute Mud Resistivity	
ACDE	Array Induction Casing Detection Enable	AIT-M	Yes	
ACEN	Array Induction Tool Centering Flag (in Borehole)	AIT-M	Eccentered	
AMRF	Array Induction Mud Resistivity Factor	AIT-M	1	
ASTA	Array Induction Tool Standoff	AIT-M	40.64	mm
ATSE	Array Induction Temperature Selection(Sonde Error Correction)	AIT-M	Internal	
BARI	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Depth Zoned	
BHT	Bottom Hole Temperature	Borehole	71.5	degC
BS	Bit Size	WLSESSION	Depth Zoned	mm
BSAL	Borehole Salinity	Borehole	0	ppm
BSCO	Borehole Salinity Correction Option	HGNS-H	No	
CALI_SHIFT	CALI Supplementary Offset	HDRS-H	4.4	mm
CBLO	Casing Bottom (Logger)	WLSESSION	603	m
CCCO	Casing & Cement Thickness Correction Option	HGNS-H	Yes	
CDEN	Cement Density	HGNS-H	2000	kg/m3
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	1025	kg/m3
DFT	Drilling Fluid Type	Borehole	Oil	
DHC	Density Hole Correction	HDRS-H	Bit Size	
FSAL	Formation Salinity	Borehole	0	ppm
FSCO	Formation Salinity Correction Option	HGNS-H	No	
GCLF	Coal-Like Formation	HDRS-H	No	
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	Depth Zoned	
GR_MULTIPLIER	Gamma Ray Multiplier	HGNS-H	1	
GRSE	Generalized Mud Resistivity Selection, from Measured or Computed Mud Resistivity	Borehole	REMS	
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	CTEM	
HSCO	Hole Size Correction Option	HGNS-H	Yes	
MATR	Rock Matrix for Neutron Porosity Corrections	Borehole	SANDSTONE	
MCCO	Mud Cake Correction Option	HGNS-H	No	
MHCC	Switch to select MCFL High Contrast Correction	HDRS-H	No	
MPOF	MCFL Processing Operation Mode	HDRS-H	On	
MWCO	Mud Weight Correction Option	HGNS-H	No	
NAAC	Switch for the correction of formation activation by the APS	HDRS-H	Off	
NPRM	HRDD Nuclear Processing Mode	HDRS-H	High Resolution	
NTCO	HRDD Nuclear Temperature Correction Option	HDRS-H	On	
PTCO	Pressure Temperature Correction Option	HGNS-H	No	
SOCN	Standoff Distance	HGNS-H	3.175	mm
SOCO	Standoff Correction Option	HGNS-H	Yes	
TD	Total Measured Depth	Borehole	1819.1	m
TPOS	Tool Position: Centered or Eccentered	HGNS-H	Eccentered	

Depth Zone Parameters			
Parameter	Value	Start (m)	Stop (m)
BHS	Cased	575	603
BHS	Open	603	1822.88
BS	311	575	603
CC	CCC	CCC	1819.1

BS	222	603	1819.1						
GCSE_UP_PASS	BS	575	603						
GCSE_UP_PASS	CALI	603	1822.88						
All depth are actual.									
Tool Control Parameters									
Parameter	Description	Tool	Value	Unit					
HMCA_BRD_TYPE	HMCA Board Type	HGNS-H	1						
HRGD_BRD_TYPE	HRGD Board Type	HDRS-H	WITH_HET						
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	548.64	m/h					
NDTC	Nuclear Dead Time Correction	HDRS-H	On						
NPUC	Nuclear Pile-Up Correction	HDRS-H	Off						
STSO_HRDD	Temperature Source for the Density Algorithm	HDRS-H	HET data channel						
1.1									
Software Version									
Acquisition System			Version						
MaxWell			4.0.9163.3000						
Application Patch			Patch-SP-10767_13075-4.0.9163.3001						
Computation	Description			Version					
HENVIR	Computation Ensemble for the HGNS Neutron environmental corrections			4.0.9033.3000					
DepthCorrection	DepthCorrection			4.0.9213.3000					
HILT	Platform Express Shared Ensemble			4.0.9231.3000					
Tool Elements	Description	Software Version		Firmware Version					
HRCC-H	HILT High-Resolution Control Cartridge, 150 degC	4.0.9231.3000		2.0					
HRGD-H	HILT Resistivity Gamma-Ray Density Device, 150 degC	4.0.9231.3000		3.0					
HGNS-H	HILT Gamma-Ray and Neutron Sonde, 150 degC	4.0.9231.3000		2.0					
AMIS	Array Induction Sonde - M	4.0.9247.3000		1					
Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
1.1	Log[5]:Up	Up	543.85 m	1822.88 m	14-Jan-2014 6:48:20 PM	14-Jan-2014 8:17:20 PM	ON	-1.90 m	Yes
All depths are referenced to toolstring zero									
Log	Company:CONOCOPHILLIPS CANADA RESOURCES CORP. Well:COPRC DODO CANYON E76 1.1: Log[5]:Up:S023								
Description: Induction LQC for Platform Express Format: Log (PEX+AIT LQC2) Index Scale: 1:600 Index Unit: m Index Type: Measured Depth Creation Date: 15-Jan-2014 01:17:22									
Channel	Source		Sampling						
ABFR	AIT-M:AMIS:AMIS		3in						
AEFL	AIT-M:AMIS:AMIS		3in						
AQABN	AIT-M:AMIS:AMIS		3in						
CALI	HDRS-H[2]:HRCC-H:HRCC-H		1in						
CFGR	HGNS-H:HGNS-H:HGNS-H		6in						
DNPH	HGNS-H:HGNS-H:HGNS-H		6in						
GR	HGNS-H:HGNS-H:HGNS-H		6in						
HNQFI	HILT		6in						
RSOZ	HDRS-H[2]:HRMS-H:HRGD-H		2in						
SDEV	HGNS-H:HGNS-H:HGNS-H		6in						
STIT	DepthCorrection		6in						

[illegible]





750

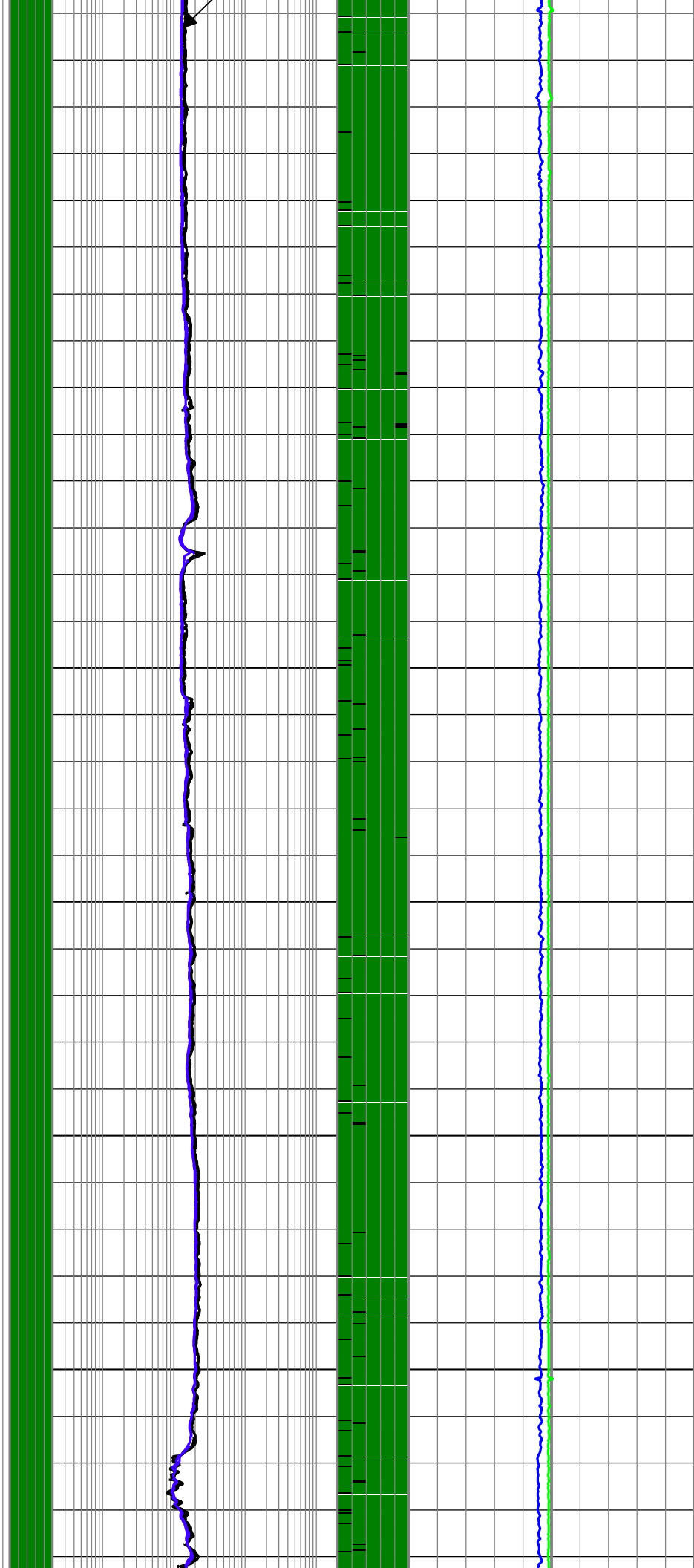
775

800

825

850

875



750

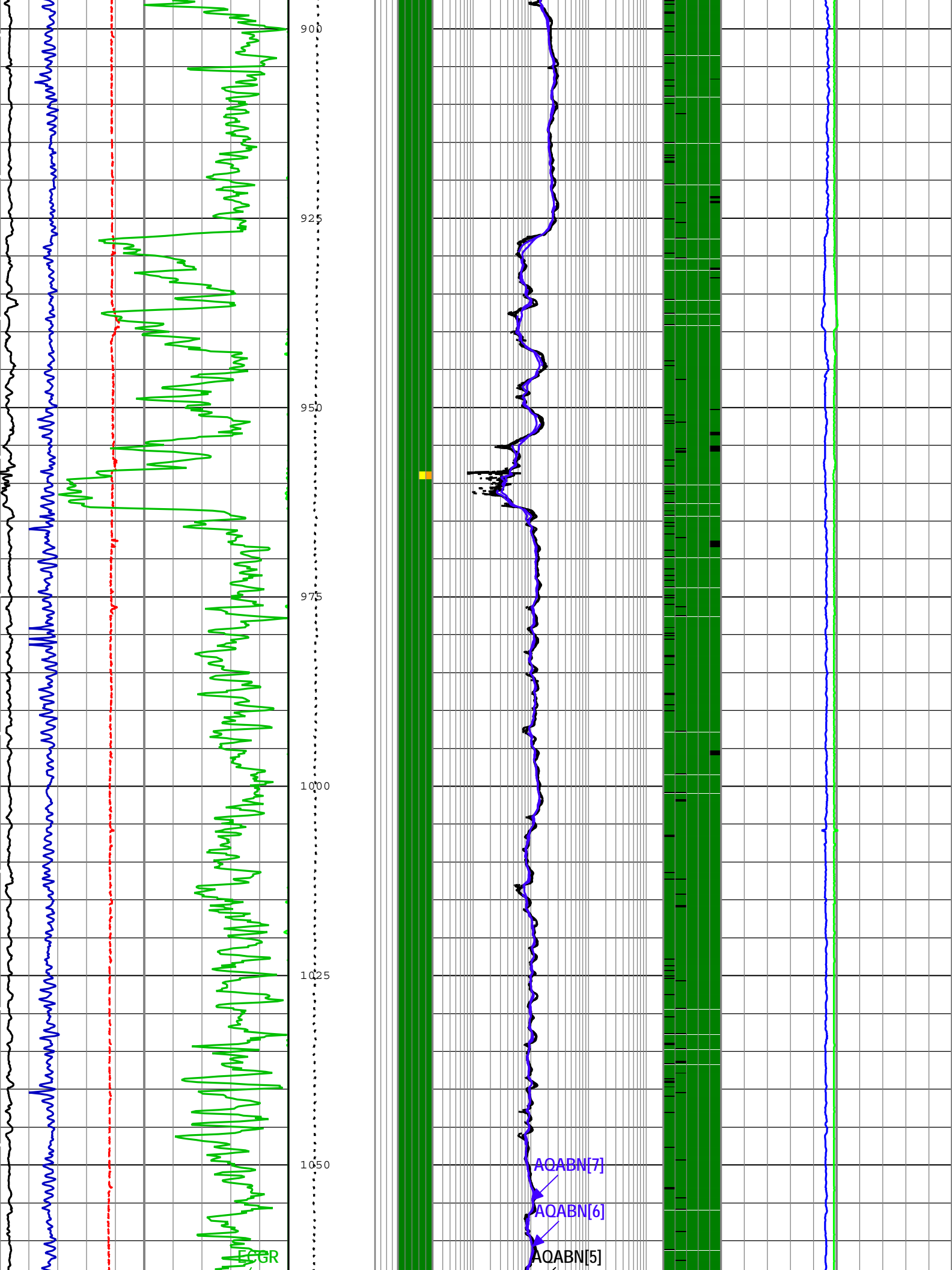
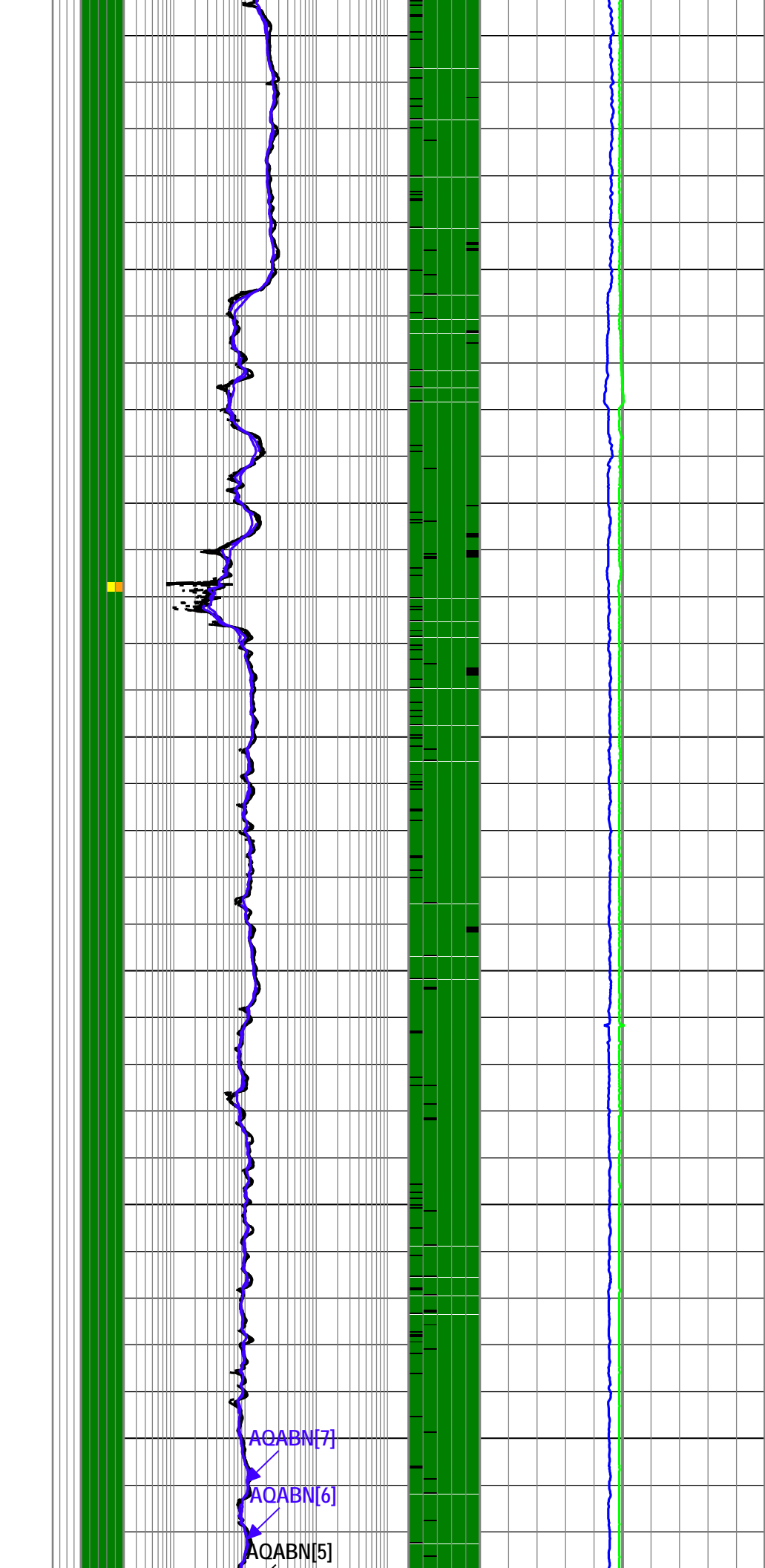
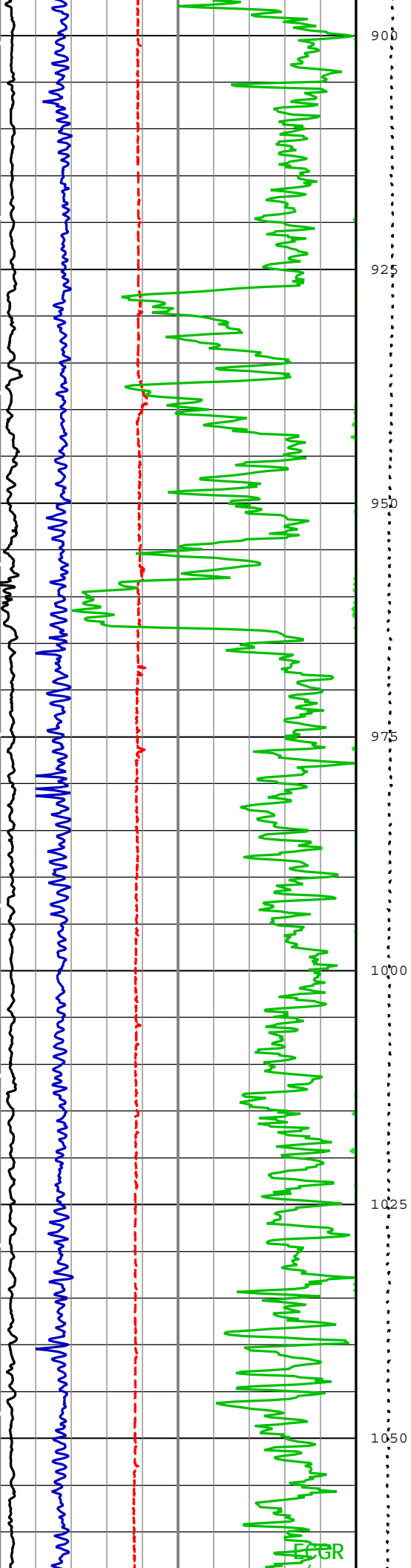
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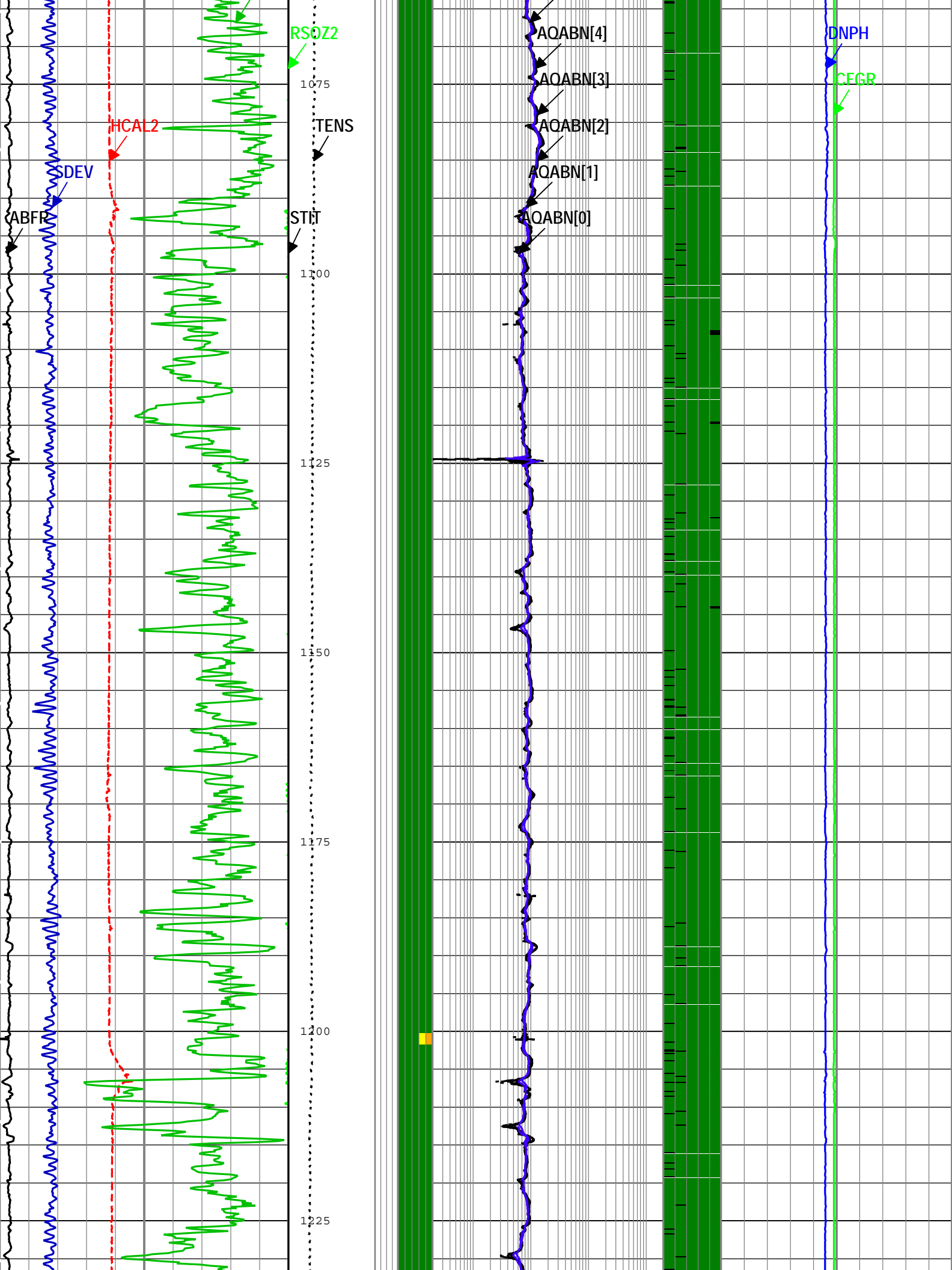
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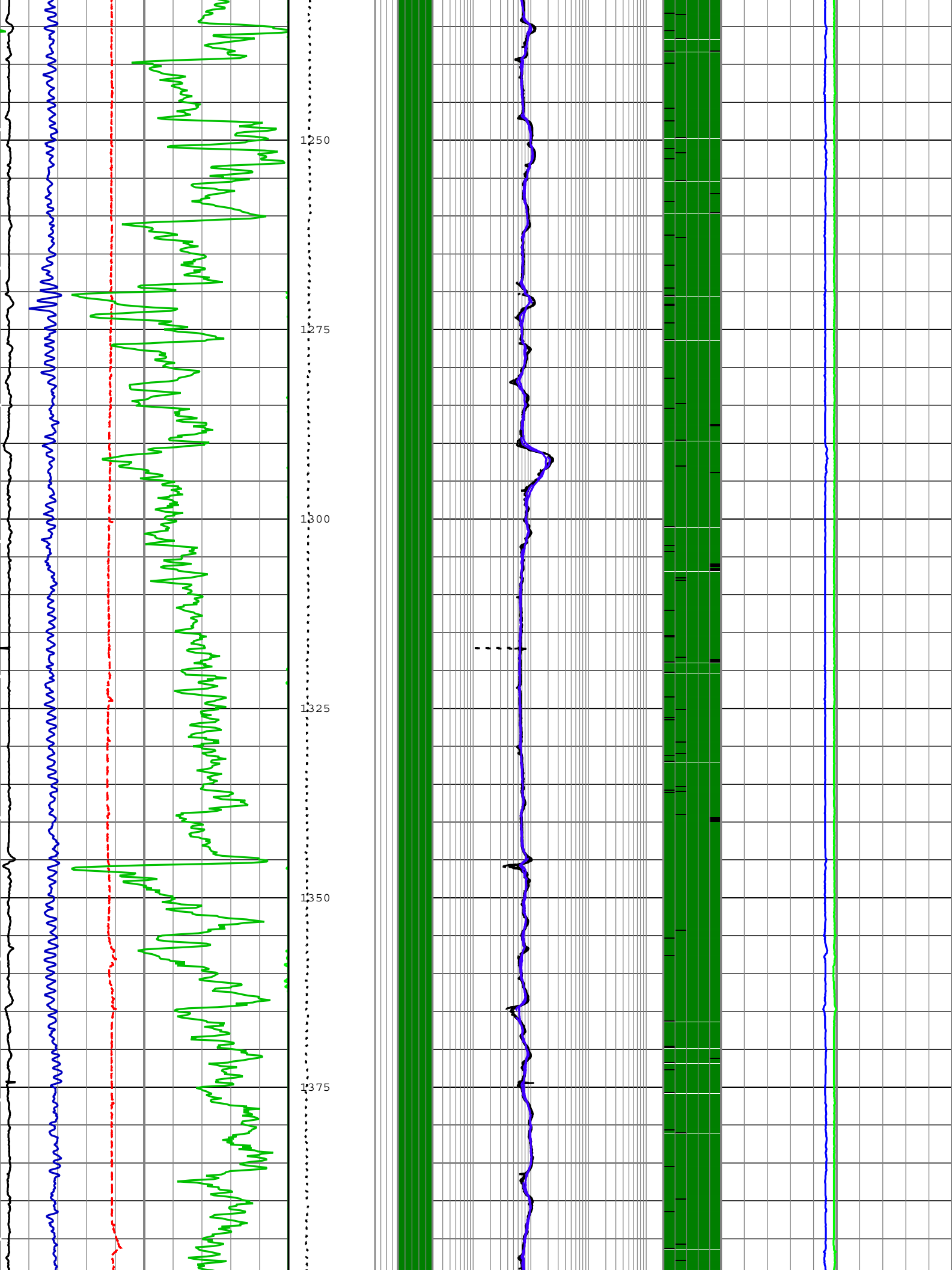
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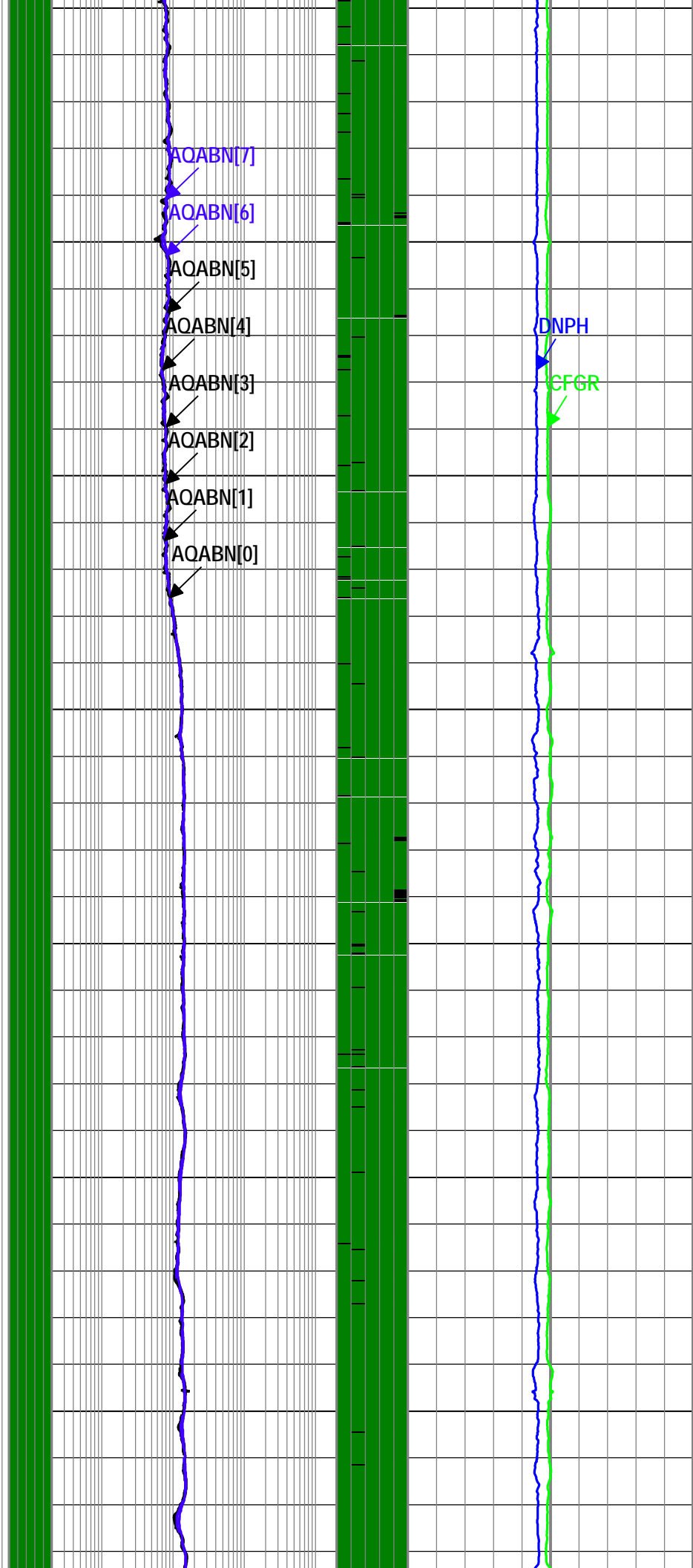
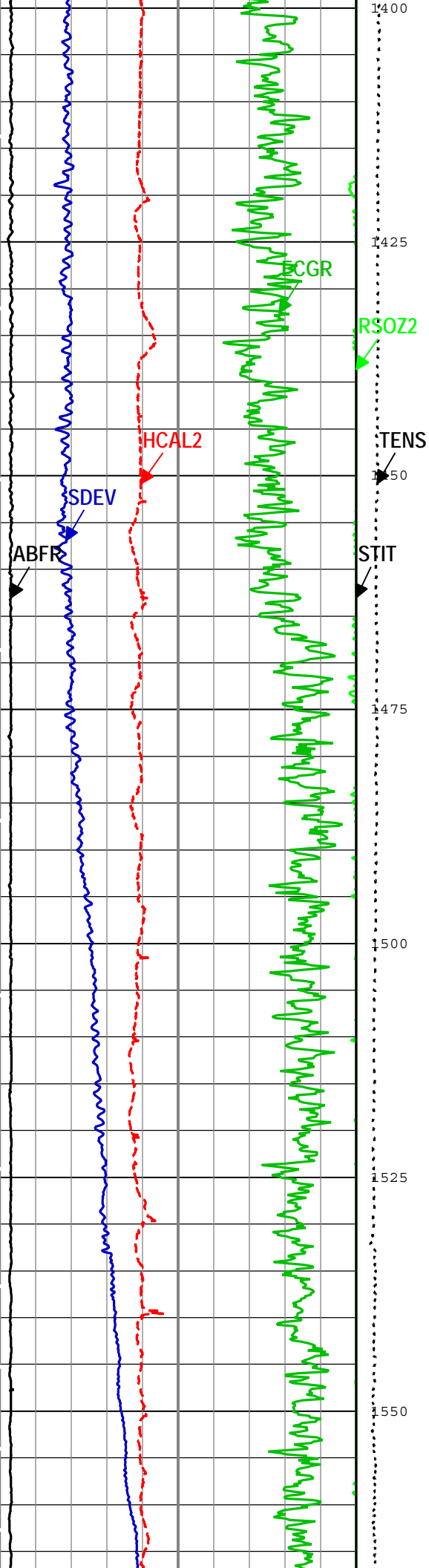
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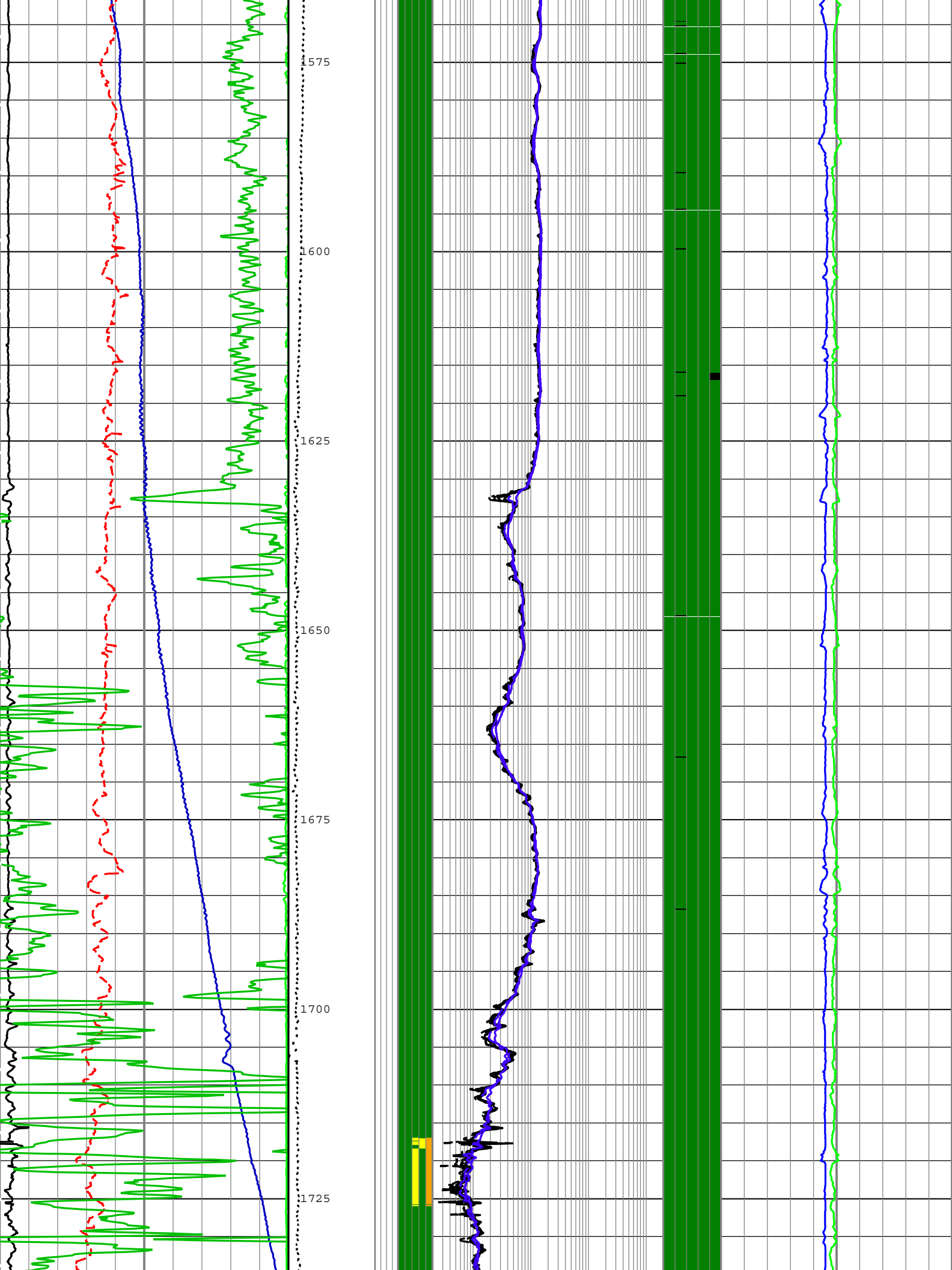
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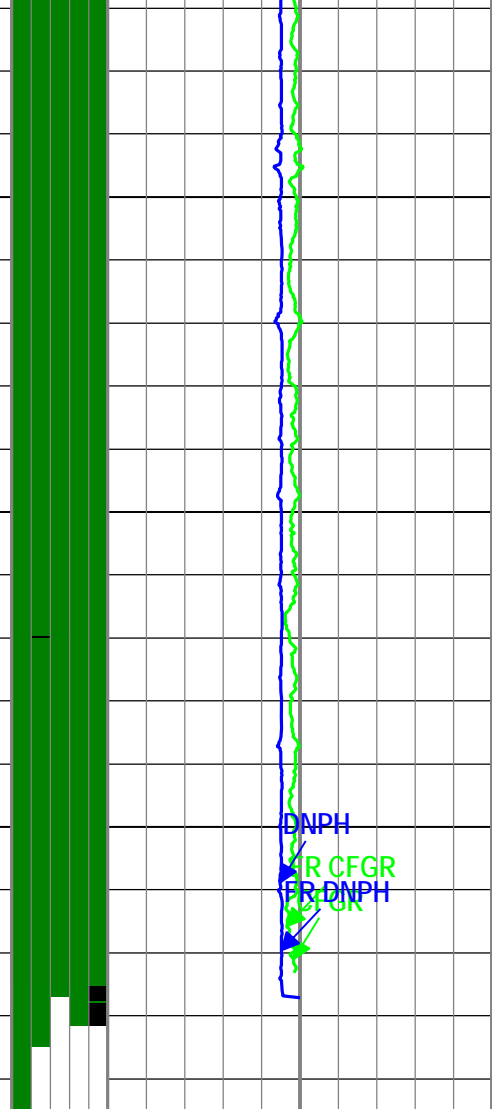
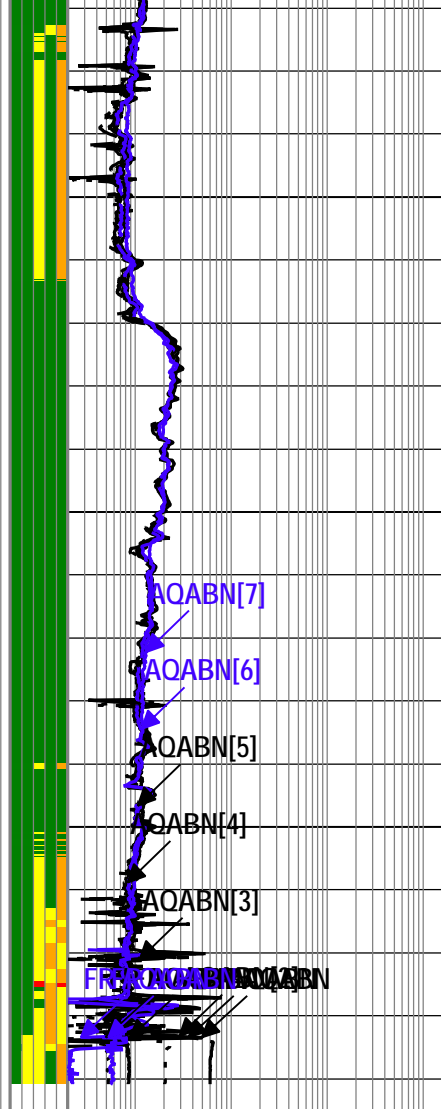
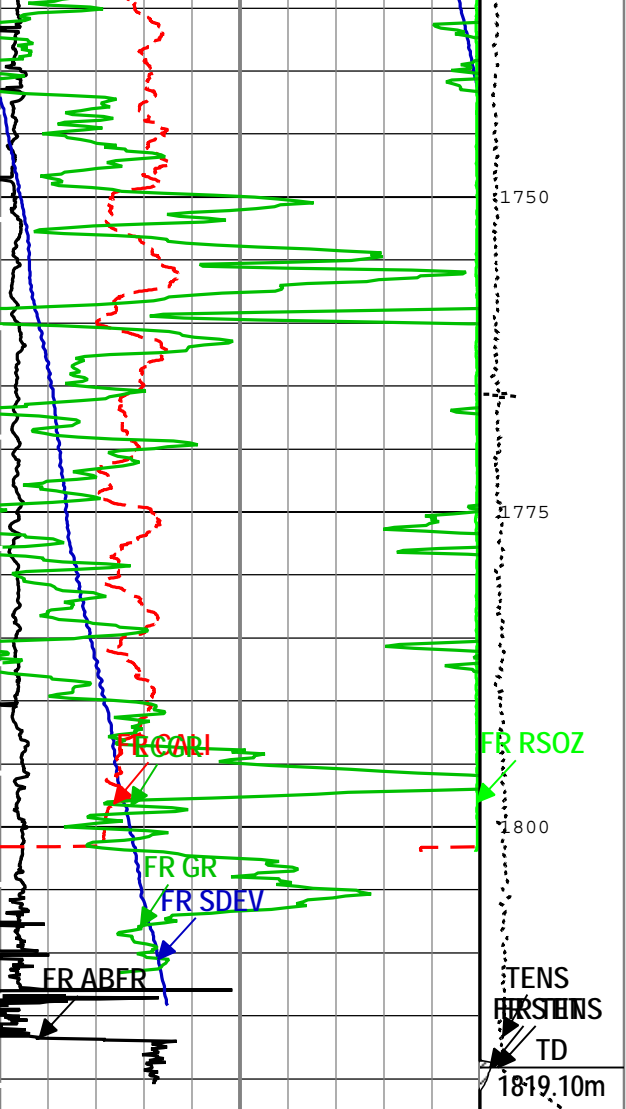












LOG QUALITY CONTROL

Array Induction Quality Control Borehole Formation Ratio (ABFR) AIT-M		Stuck Tool Indicator, Total (STIT)
0	25	
Sonde Deviation (SDEV) HGNS-H		Cable Tension (TENS)
-5	45	
HCAL2		20000
125	375	
RSOZ2		ToolDrag
65	0	
ECGR		
0	150	
gAPI		

Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[0]) AIT-M	2	mS/m	20000
	2	mS/m	20000
	2	mS/m	20000
Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[1]) AIT-M	2	mS/m	20000
	2	mS/m	20000
	2	mS/m	20000
Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[2]) AIT-M	2	mS/m	20000
	2	mS/m	20000
	2	mS/m	20000
Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[3]) AIT-M	2	mS/m	20000
	2	mS/m	20000
	2	mS/m	20000
Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[4]) AIT-M	2	mS/m	20000
	2	mS/m	20000
	2	mS/m	20000
Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[5]) AIT-M	2	mS/m	20000
	2	mS/m	20000
	2	mS/m	20000

Answer Product Flag Image (HNQFI)	Gamma Ray Correction Coefficient (CFGR) HGNS-H	
	0.5	1.5
1	Difference between Corrected Thermal Neutron Porosity and Uncorrected (DNPB) HGNS-H	
	-0.1	0.1

	2	mS/m	20000
	Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[6]) AIT-M		
	2	mS/m	20000
	Array Induction Quality Control Borehole Corrected Non-Filtered Array Signal (AQABN[7]) AIT-M		
	2	mS/m	20000

Array Induction Environmentally Compensated Log Processing Flags (AEFL) AIT-M

1 - Tool Status - From ADES :	<div> <div></div> Tool status OK <div></div> Tool status warning </div> <div> <div></div> Tool status error </div>
2 - Mag Mud - Magnetic Mud :	<div> <div></div> No magnetic mud detected <div></div> Magnetic mud detected and magnetic mud processing <div></div> Magnetic mud detected and non-magnetic mud processing </div>
3 - Chart Flag - Chart :	<div> <div></div> 1, 2, 4 ft logs all valid <div></div> Only 2, 4 ft logs valid <div></div> Only 4 ft logs valid <div></div> Only 2, 4 ft logs valid <div></div> Out of range - All logs invalid </div>
4 - Hole Flag - Hole :	<div> <div></div> 1, 2, 4 ft logs all valid <div></div> Only 2, 4 ft logs valid <div></div> Only 4 ft logs valid <div></div> Only 2, 4 ft logs valid <div></div> Out of range - All logs invalid </div>
5 - Res Flag - Resolution :	<div> <div></div> 1, 2, 4 ft logs all valid <div></div> Only 2, 4 ft logs valid <div></div> Only 4 ft logs valid <div></div> Only 2, 4 ft logs valid <div></div> Out of range - All logs invalid </div>

Answer Product Flag Image (HNQFI)

1 - TQCA - :	<div> <div></div> TQCA valid <div></div> TQCA error <div></div> TQCA absent </div>
2 - QCBSL - :	<div> <div></div> QCBSL valid <div></div> QCBSL error <div></div> QCBSL absent </div>
3 - QCPOR - :	<div> <div></div> QCPOR valid <div></div> QCPOR error <div></div> QCPOR absent </div>
4 - QCRH - :	<div> <div></div> QCRH valid <div></div> QCRH error <div></div> QCRH absent </div>
5 - QCPE - :	<div> <div></div> QCPE valid <div></div> QCPE error <div></div> QCPE absent </div>

TIME_1900 - Time Marked every 60.00 (s)

Description: Induction LQC for Platform Express Format: Log (PEX+AIT LQC2) Index Scale: 1:600 Index Unit: m Index Type: Measured Depth
 Creation Date: 15-Jan-2014 01:17:22

Channel Processing Parameters				
Parameter	Description	Tool	Value	Unit
AAPL	Array Induction Answer Product Level(Depth Log/View only)	AIT-M	Radial	
ABHM	Array Induction Borehole Correction Mode	AIT-M	Compute Mud Resistivity	
ACDE	Array Induction Casing Detection Enable	AIT-M	Yes	
ACEN	Array Induction Tool Centering Flag (in Borehole)	AIT-M	Eccentered	
AMRF	Array Induction Mud Resistivity Factor	AIT-M	1	
ASTA	Array Induction Tool Standoff	AIT-M	40.64	mm
ATSE	Array Induction Temperature Selection(Sonde Error Correction)	AIT-M	Internal	
BARI	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Depth Zoned	
BHT	Bottom Hole Temperature	Borehole	71.5	degC
BS	Bit Size	WLSESSION	Depth Zoned	mm
BSAL	Borehole Salinity	Borehole	0	ppm
BSCO	Borehole Salinity Correction Option	HGNS-H	No	
CALI_SHIFT.1	CALI Supplementary Offset	HDRS-H	4.4	mm
CALI_SHIFT.2	CALI Supplementary Offset	HDRS-H	13.5	mm
CBLO	Casing Bottom (Logger)	WLSESSION	603	m
CCCO	Casing & Cement Thickness Correction Option	HGNS-H	Yes	

AIT Sonde Calibration - Test Loop Gain

Master (EEPROM): 10:28:12 31-Dec-2013

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Test Loop Gain - 0		Master	1.000	0.950	1.014	1.050	
Test Loop Phase - 0	deg	Master	0	-3.000	1.089	3.000	
Test Loop Gain - 1		Master	1.000	0.950	1.008	1.050	
Test Loop Phase - 1	deg	Master	0	-3.000	0.684	3.000	
Test Loop Gain - 2		Master	1.000	0.950	1.009	1.050	
Test Loop Phase - 2	deg	Master	0	-3.000	-0.018	3.000	
Test Loop Gain - 3		Master	1.000	0.950	1.004	1.050	
Test Loop Phase - 3	deg	Master	0	-3.000	0.042	3.000	
Test Loop Gain - 4		Master	1.000	0.950	0.989	1.050	
Test Loop Phase - 4	deg	Master	0	-3.000	0.028	3.000	
Test Loop Gain - 5		Master	1.000	0.950	0.980	1.050	
Test Loop Phase - 5	deg	Master	0	-3.000	-0.052	3.000	
Test Loop Gain - 6		Master	1.000	0.950	0.987	1.050	
Test Loop Phase - 6	deg	Master	0	-3.000	0.343	3.000	
Test Loop Gain - 7		Master	1.000	0.950	1.007	1.050	
Test Loop Phase - 7	deg	Master	0	-3.000	0.019	3.000	

AIT Sonde Calibration - Sonde Error Correction

Master (EEPROM): 10:28:12 31-Dec-2013

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Sonde Error Correction Real - 0	mS/m	Master	----	-231.000	-80.037	119.000	
Sonde Error Correction Quad - 0		Master	----	-2250.000	-45.287	2250.000	
Sonde Error Correction Real - 1	mS/m	Master	----	114.000	162.947	204.000	
Sonde Error Correction Quad - 1		Master	----	-625.000	140.227	625.000	
Sonde Error Correction Real - 2	mS/m	Master	----	66.000	107.663	156.000	
Sonde Error Correction Quad - 2		Master	----	-350.000	-65.097	350.000	
Sonde Error Correction Real - 3	mS/m	Master	----	39.000	59.198	89.000	
Sonde Error Correction Quad - 3		Master	----	-250.000	32.514	250.000	
Sonde Error Correction Real - 4	mS/m	Master	----	15.000	25.111	35.000	
Sonde Error Correction Quad - 4		Master	----	-63.000	12.558	63.000	
Sonde Error Correction Real - 5	mS/m	Master	----	4.000	11.772	24.000	
Sonde Error Correction Quad - 5		Master	----	-50.000	12.598	50.000	
Sonde Error Correction Real - 6	mS/m	Master	----	5.000	9.450	15.000	
Sonde Error Correction Quad - 6		Master	----	-30.000	-1.456	30.000	
Sonde Error Correction Real - 7	mS/m	Master	----	-5.000	-1.529	5.000	
Sonde Error Correction Quad - 7		Master	----	-30.000	-9.453	30.000	

AIT Mud Calibration - Mud Calibration Gain

Master (EEPROM): 10:28:12 31-Dec-2013

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Coarse Gain		Master	1.000	0.800	0.854	1.200	
Fine Gain		Master	1.000	0.800	0.855	1.200	

AIT Electronics Check - Thru Calibration Check

Master (EEPROM): 10:28:12 31-Dec-2013 Before (Measured): 17:33:23 14-Jan-2014 After:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Thru Cal Mag - 0	V	Master	----	0.366	0.621	0.854	
		Before	----	0.366	0.621	0.854	
		After	----	----	----	----	
		Before-Master	----	----	0.000	----	
		After-Before	----	----	----	----	
Thru Cal Phase - 0	deg	Master	----	137.000	-174.832	-103.000	
		Before	----	137.000	-166.266	-103.000	
		After	----	----	----	----	
		Before-Master	----	----	8.566	----	
		After-Before	----	----	----	----	
Thru Cal Mag - 1	V	Master	----	0.762	1.275	1.778	
		Before	----	0.762	1.275	1.778	
		After	----	----	----	----	

		Before-Master After-Before	----- -----	----- -----	0.000 -----	----- -----	<div><div></div><div></div><div></div></div>
Thru Cal Phase - 1	deg	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	136.000 136.000 ----- ----- -----	-175.928 -167.360 ----- 8.568 -----	-104.000 -104.000 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Mag - 2	V	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	0.372 0.372 ----- ----- -----	0.632 0.632 ----- 0.000 -----	0.868 0.868 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Phase - 2	deg	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	132.000 132.000 ----- ----- -----	-179.506 -170.938 ----- 8.568 -----	-108.000 -108.000 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Mag - 3	V	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	0.420 0.420 ----- ----- -----	0.715 0.715 ----- 0.000 -----	0.980 0.980 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Phase - 3	deg	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	131.000 131.000 ----- ----- -----	179.717 -171.711 ----- -351.428 -----	-109.000 -109.000 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Mag - 4	V	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	0.804 0.804 ----- ----- -----	1.338 1.338 ----- 0.000 -----	1.876 1.876 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Phase - 4	deg	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	125.000 125.000 ----- ----- -----	173.499 -177.921 ----- -351.420 -----	-115.000 -115.000 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Mag - 5	V	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	1.176 1.176 ----- ----- -----	1.944 1.943 ----- -0.001 -----	2.744 2.744 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Phase - 5	deg	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	122.000 122.000 ----- ----- -----	171.861 -179.552 ----- -351.413 -----	-118.000 -118.000 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Mag - 6	V	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	1.176 1.176 ----- ----- -----	1.941 1.940 ----- -0.001 -----	2.744 2.744 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Phase - 6	deg	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	121.000 121.000 ----- ----- -----	171.902 -179.513 ----- -351.415 -----	-119.000 -119.000 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Mag - 7	V	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	0.846 0.846 ----- ----- -----	1.395 1.395 ----- 0.000 -----	1.974 1.974 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Phase - 7	deg	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	115.000 115.000 ----- ----- -----	171.159 179.812 ----- 8.653 -----	-125.000 -125.000 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
SPA Zero	mV	Master	-----	-50.000	-0.122	50.000	<div><div></div><div></div><div></div></div>

	mV	Master Before After Before-Master After-Before		-50.000 ----- ----- ----- -----	-0.133 ----- ----- -0.011 -----	50.000 ----- ----- ----- -----	
SPA Plus	mV	Master Before After Before-Master After-Before		941.000 941.000 ----- ----- -----	990.432 990.105 ----- -0.327 -----	1040.000 1040.000 ----- ----- -----	
Temperature Zero	V	Master Before After Before-Master After-Before		-0.050 -0.050 ----- ----- -----	0.000 0.000 ----- 0.000 -----	0.050 0.050 ----- ----- -----	
Temperature Plus	V	Master Before After Before-Master After-Before		0.870 0.870 ----- ----- -----	0.917 0.917 ----- 0.000 -----	0.960 0.960 ----- ----- -----	

HDRS-H[1] (HILT Density and Rxo Sonde, 150 degC) Calibration - Run 1.1

Primary Equipment :

HILT High-Resolution Control Cartridge, 150 degC	HRCC-H	880
HILT Resistivity Gamma-Ray Density Device, 150 degC	HRGD-H	4796

Auxiliary Equipment :

HRDD Backscatter Detector	Backscatter	
HRDD Long Spacing Detector	Long Spacing	28679
HRDD Short Spacing Detector	Short Spacing	
Cesium 137 Gamma-Ray Logging Source	GSR-J	5285
HILT High-Resolution Control Cartridge, 150 degC	HRCC-H	880
HRMS, 125 degC, 10 kpsi	HRMS-B	894

Calibration Parameter :

Small Ring Size (Caliper Calibration Small Ring)	203.2
Large Ring Size (Caliper Calibration Large Ring)	304.8

HDRS Caliper Calibration - Caliper Accumulations

Before (Measured): 06:27:32 14-Jan-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Small Ring	mm	Before	203.2	152.4	199.0	254.0	
Large Ring	mm	Before	304.8	228.6	292.0	381.0	

HDRS Density Calibration - Inversion Results

Master (EEPROM): 12:27:24 24-Dec-2013

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Rho Aluminum	kg/m3	Master	2596	2586	2600	2606	
Rho Magnesium	kg/m3	Master	1686	1676	1690	1696	
Pe Aluminum		Master	2.570	2.470	2.579	2.670	
Pe Magnesium		Master	2.650	2.550	2.603	2.750	

HDRS Density Calibration - Deviation Summary

Master (EEPROM): 12:27:24 24-Dec-2013

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Average Deviation	%	Master	0	-0.6000	0.2068	0.6000	
BS Max Deviation	%	Master	0	-1.6000	0.6397	1.6000	
SS Average Deviation	%	Master	0	-1.0000	0.3839	1.0000	
SS Max Deviation	%	Master	0	-2.5000	1.5922	2.5000	
LS Average Deviation	%	Master	0	-1.5000	0.8683	1.5000	
LS Max Deviation	%	Master	0	-3.5000	2.7525	3.5000	

HDRS Density Calibration - Background Summary

Master (EEPROM): 12:27:24 24-Dec-2013

Before (Measured):

06:28:18 14-Jan-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
-------------	------	-------	---------	-----------	--------	------------	--

BS Window Ratio		Master Before Before-Master	1.0000 0.7364 -----	0.6996 -----	0.7419 0.0055	0.7732 -----	
BS Window Sum	1/s	Master Before Before-Master	1 26467 -----	25143 -----	26467 26655 188	27790 -----	
SS Window Ratio		Master Before Before-Master	1.0000 0.4815 -----	0.4574 -----	0.4815 0.4769 -0.0046	0.5056 -----	
SS Window Sum	1/s	Master Before Before-Master	1 11894 -----	11300 -----	11894 11857 -37	12489 -----	
LS Window Ratio		Master Before Before-Master	1.0000 0.2994 -----	0.2844 -----	0.2994 0.2975 -0.0019	0.3144 -----	
LS Window Sum	1/s	Master Before Before-Master	1 1353 -----	1285 -----	1353 1341 -12	1421 -----	

HDRS Density Calibration - Photo-multiplier High Voltages

Master (EEPROM): 12:27:24 24-Dec-2013		Before (Measured): 06:28:18 14-Jan-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS PM High Voltage	V	Master		1000	1339	2400	
		Before		1000	1329	2400	
		Before-Master	-----	-100	-10	100	
SS PM High Voltage	V	Master		1000	1361	2400	
		Before		1000	1398	2400	
		Before-Master	-----	-100	37	100	
LS PM High Voltage	V	Master		1000	1321	2400	
		Before		1000	1343	2400	
		Before-Master	-----	-100	22	100	

HDRS Density Calibration - Crystal Quality Resolutions

Master (EEPROM): 12:27:24 24-Dec-2013		Before (Measured): 06:28:18 14-Jan-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Crystal Resolution	%	Master		5.00	10.60	25.00	
		Before		5.00	10.44	25.00	
		Before-Master	-----	-1.00	-0.16	1.00	
SS Crystal Resolution	%	Master		5.00	9.82	20.00	
		Before		5.00	10.29	20.00	
		Before-Master	-----	-1.00	0.47	1.00	
LS Crystal Resolution	%	Master		5.00	8.22	20.00	
		Before		5.00	8.07	20.00	
		Before-Master	-----	-1.00	-0.15	1.00	

HDRS MCFL Calibration - MCFL Accumulations

Before (Measured): 06:24:53 14-Jan-2014							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Main Resistivity	ohm.m	Before	3875	3565	3839	4185	
Deep Resistivity	ohm.m	Before	3830	3524	3808	4136	
Shallow Resistivity	ohm.m	Before	3830	3524	3810	4136	

HGNS-H (HILT Gamma-Ray and Neutron Sonde, 150 degC) Calibration - Run 1.1

Primary Equipment :			
HILT Gamma-Ray and Neutron Sonde, 150 degC	HGNS-H	4792	
Auxiliary Equipment :			
HGNS Accelerometer, 150 degC	HACCZ-H	5469	
AmBe Neutron Logging Source	NSR-F	2516	
Calibration Parameter :			
Water Temperature			
Housing Size			
JIG-BKG (Jig minus background reference)	165		

HGNS Accelerometer Calibration - Accelerometer Accumulations

Before (Measured):		17:31:34 14-Jan-2014							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div></div>		
AZ Vertical Measurement	m/s2	Before	9.81	9.61	9.81	10.01	<div><div></div></div>		
HGNS Accelerometer EEPROM - Accelerometer EEPROM Read									
Master (EEPROM):		00:00:00 15-Sep-2006							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div></div>		
Accelerometer Manufacturer		Master			QAT_160		<div><div></div></div>		
Accelerometer Reference Temperature	degC	Master		-1.0	25.0	50.0	<div><div></div></div>		
Accelerometer Coefficients - 0		Master	----	----	7241.000	----	<div><div></div></div>		
Accelerometer Coefficients - 1		Master	----	----	5.473	----	<div><div></div></div>		
Accelerometer Coefficients - 2		Master	----	----	-0.012	----	<div><div></div></div>		
Accelerometer Coefficients - 3		Master	----	----	0.000	----	<div><div></div></div>		
Accelerometer Coefficients - 4		Master	----	----	2.735	----	<div><div></div></div>		
Accelerometer Coefficients - 5		Master	----	----	0.000	----	<div><div></div></div>		
Accelerometer Coefficients - 6		Master	----	----	0.000	----	<div><div></div></div>		
Accelerometer Coefficients - 7		Master	----	----	0.000	----	<div><div></div></div>		
Accelerometer Coefficients - 8		Master	----	----	300.400	----	<div><div></div></div>		
Accelerometer Coefficients - 9		Master	----	----	0.984	----	<div><div></div></div>		
HGNS Neutron Calibration - HGNS Neutron Accumulations									
Master (EEPROM):		09:05:16 31-Dec-2013		Before (Measured):		06:25:14 14-Jan-2014		After:	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div></div>		
Near Zero Measurement	1/s	Master	0	5.0	27.0	40.0	<div><div></div></div>		
		Before	0	5.0	27.3	40.0	<div><div></div></div>		
		After	----	----	----	----	<div><div></div></div>		
		Before-Master	----	-4.1	0.3	4.1	<div><div></div></div>		
		After-Before	----	----	----	----	<div><div></div></div>		
Far Zero Measurement	1/s	Master	0	5.0	26.1	40.0	<div><div></div></div>		
		Before	0	5.0	28.5	40.0	<div><div></div></div>		
		After	----	----	----	----	<div><div></div></div>		
		Before-Master	----	-3.9	2.4	3.9	<div><div></div></div>		
		After-Before	----	----	----	----	<div><div></div></div>		
Near Plus Measurement	1/s	Master	6031.0	4700.0	5851.0	6900.0	<div><div></div></div>		
		Before	----	----	----	----	<div><div></div></div>		
		After	----	----	----	----	<div><div></div></div>		
		Before-Master	----	----	----	----	<div><div></div></div>		
		After-Before	----	----	----	----	<div><div></div></div>		
Far Plus Measurement	1/s	Master	2793.0	1900.0	2454.0	2900.0	<div><div></div></div>		
		Before	----	----	----	----	<div><div></div></div>		
		After	----	----	----	----	<div><div></div></div>		
		Before-Master	----	----	----	----	<div><div></div></div>		
		After-Before	----	----	----	----	<div><div></div></div>		
Near Corrected Plus Measurement	1/s	Master		4700.0	5865.0	6900.0	<div><div></div></div>		
		Before	----	----	----	----	<div><div></div></div>		
		After	----	----	----	----	<div><div></div></div>		
		Before-Master	----	----	----	----	<div><div></div></div>		
		After-Before	----	----	----	----	<div><div></div></div>		
Far Corrected Plus Measurement	1/s	Master		1900.0	2454.0	2900.0	<div><div></div></div>		
		Before	----	----	----	----	<div><div></div></div>		
		After	----	----	----	----	<div><div></div></div>		
		Before-Master	----	----	----	----	<div><div></div></div>		
		After-Before	----	----	----	----	<div><div></div></div>		
HGNS Gamma-Ray Calibration - Gamma-Ray Accumulations									
Before (Measured):		06:27:38 14-Jan-2014		After:					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div></div>		
RGR Zero Measurement	gAPI	Before	30.0	0	33.9	120.0	<div><div></div></div>		
		After	----	----	----	----	<div><div></div></div>		
		After-Before	----	----	----	----	<div><div></div></div>		
RGR Plus Measurement	gAPI	Before	185.4	157.1	159.9	206.3	<div><div></div></div>		
		After	----	----	NOT DONE	----	<div><div></div></div>		
		After-Before	----	----	----	----	<div><div></div></div>		
GR Calibration Gain		Before	0.89	0.80	1.03	1.05	<div><div></div></div>		
		After	----	----	----	----	<div><div></div></div>		
		After-Before	----	----	----	----	<div><div></div></div>		

DSLT-H (Digitizing Sonic Logging Tool - H) Calibration - Run 1.1

Primary Equipment :							
Sonic Logging Sonde E supports 3'-5'BHC DT and CBL/VDL				SLS-E	2047		

CBL Normalization - CBL Accumulations

Master:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Upper Far Amplitude - 0		Master	----	----	----	----	
Upper Near Raw Amplitude - 0	mV	Master	----	----	----	----	
Lower Far Amplitude - 0		Master	----	----	----	----	
Lower Near Raw Amplitude - 0	mV	Master	----	----	----	----	

CBL Normalization - CBL/VDL Coefficients

Master:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
CBL Correction Factor for UT		Master	3.500	2.700	NOT DONE	4.300	
CBL Correction Factor for LT		Master	2.500	1.700	NOT DONE	4.300	
VDL Ratio between UT and LT for CBLB Mode		Master	1.000		NOT DONE		

CBL Free Pipe Adjustment - Free Pipe Measurement

Before:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
CBL Amplitude - 0	mV	Before	----	----	----	----	
CBL Reference Amplitude (CBRA) - 0	mV	Before	----	----	----	----	
Measurement Depth - 0	m	Before	----	----	----	----	

CBL Free Pipe Adjustment - CBL Amplitude Coefficient

Before:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
CBL Adjustment Factor		Before	1.000	0.200	NOT DONE	5.000	
Depth of Before Calibration	ft	Before			NOT DONE		

HDRS-H[2] (HILT Density and Rxo Sonde, 150 degC) Calibration - Run 1.1

Primary Equipment :			
HILT High-Resolution Control Cartridge, 150 degC	HRCC-H		
HILT Resistivity Gamma-Ray Density Device, 150 degC	HRGD-H		3914
Auxiliary Equipment :			
HRDD Backscatter Detector	Backscatter		
HRDD Long Spacing Detector	Long Spacing		28710
HRDD Short Spacing Detector	Short Spacing		27760
Cesium 137 Gamma-Ray Logging Source	GSR-J		5310
HILT High-Resolution Control Cartridge, 150 degC	HRCC-H		
HILT High-Resolution Mechanical Sonde, 150 degC	HRMS-H		3875
Calibration Parameter :			
Small Ring Size (Caliper Calibration Small Ring)	203.2		
Large Ring Size (Caliper Calibration Large Ring)	304.8		

HDRS Caliper Calibration - Caliper Accumulations

Before (Measured): 06:29:21 14-Jan-2014							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Small Ring	mm	Before	203.2	152.4	204.6	254.0	
Large Ring	mm	Before	304.8	228.6	313.3	381.0	

HDRS Density Calibration - Inversion Results

Master (EEPROM): 10:28:40 24-Dec-2013							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Rho Aluminum	kg/m3	Master	2596	2586	2598	2606	
Rho Magnesium	kg/m3	Master	1686	1676	1690	1696	
Pe Aluminum		Master	2.570	2.470	2.568	2.670	
Pe Magnesium		Master	2.650	2.550	2.615	2.750	

HDRS Density Calibration - Deviation Summary

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Average Deviation	%	Master	0	-0.6000	0.2310	0.6000	
BS Max Deviation	%	Master	0	-1.6000	0.8128	1.6000	
SS Average Deviation	%	Master	0	-1.0000	0.6214	1.0000	
SS Max Deviation	%	Master	0	-2.5000	1.9703	2.5000	
LS Average Deviation	%	Master	0	-1.5000	0.3753	1.5000	
LS Max Deviation	%	Master	0	-3.5000	1.3653	3.5000	

HDRS Density Calibration - Background Summary

Master (EEPROM):		10:28:40 24-Dec-2013		Before (Measured):		14:51:08 09-Jan-2014 Expired by 4 days	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Window Ratio		Master	1.0000		0.7406		
		Before	0.7406	0.7036	0.7452	0.7776	
		Before-Master	-----	-----	0.0046	-----	
BS Window Sum	1/s	Master	1		23979		
		Before	23979	22780	24136	25178	
		Before-Master	-----	-----	157	-----	
SS Window Ratio		Master	1.0000		0.4809		
		Before	0.4809	0.4569	0.4768	0.5050	
		Before-Master	-----	-----	-0.0041	-----	
SS Window Sum	1/s	Master	1		10589		
		Before	10589	10060	10583	11119	
		Before-Master	-----	-----	-6	-----	
LS Window Ratio		Master	1.0000		0.3042		
		Before	0.3042	0.2890	0.2988	0.3194	
		Before-Master	-----	-----	-0.0054	-----	
LS Window Sum	1/s	Master	1		1192		
		Before	1192	1132	1180	1251	
		Before-Master	-----	-----	-12	-----	

HDRS Density Calibration - Photo-multiplier High Voltages

Master (EEPROM):		10:28:40 24-Dec-2013		Before (Measured):		14:51:08 09-Jan-2014 Expired by 4 days	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS PM High Voltage	V	Master		1000	1448	2400	
		Before		1000	1447	2400	
		Before-Master	-----	-100	-1	100	
SS PM High Voltage	V	Master		1000	1477	2400	
		Before		1000	1506	2400	
		Before-Master	-----	-100	29	100	
LS PM High Voltage	V	Master		1000	1289	2400	
		Before		1000	1286	2400	
		Before-Master	-----	-100	-3	100	

HDRS Density Calibration - Crystal Quality Resolutions

Master (EEPROM):		10:28:40 24-Dec-2013		Before (Measured):		14:51:08 09-Jan-2014 Expired by 4 days	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Crystal Resolution	%	Master		5.00	10.46	25.00	
		Before		5.00	10.41	25.00	
		Before-Master	-----	-1.00	-0.05	1.00	
SS Crystal Resolution	%	Master		5.00	10.04	20.00	
		Before		5.00	10.64	20.00	
		Before-Master	-----	-1.00	0.60	1.00	
LS Crystal Resolution	%	Master		5.00	8.04	20.00	
		Before		5.00	8.03	20.00	
		Before-Master	-----	-1.00	-0.01	1.00	

HDRS MCFL Calibration - MCFL Accumulations

Before (Measured):		06:25:34 14-Jan-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Main Resistivity	ohm.m	Before	3875	3565	3906	4185	
Deep Resistivity	ohm.m	Before	3830	3524	3827	4136	
Shallow Resistivity	ohm.m	Before	3830	3524	3837	4136	

SGT-N (Scintillation Gamma-Ray Tool) Calibration - Run 1.1

Primary Equipment :							
Scintillation Gamma Cartridge		SGC-TB		10447			

Calibration Parameter :	Plus Reference (Jig minus background reference)	165
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SGT-N Gamma-Ray Calibration - Gamma Ray Coefficients

Before (Measured):		06:28:02 14-Jan-2014		After:			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Gamma Ray Gain		Before	-----	-----	1.169	-----	
		After			-----		
		After-Before			-----		

SGT-N Gamma-Ray Calibration - Gamma Ray Accumulations

Before (Measured):		06:28:02 14-Jan-2014		After:			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
RGR Zero Measurement	gAPI	Before	-----	0	44.958	120.000	
		After			-----		
		After-Before			-----		
RGR Plus Measurement	gAPI	Before	141.161	128.328	141.161	153.994	
		After			NOT DONE		
		After-Before			-----		

SGT-N Gamma-Ray Plateau Check - Gamma Ray Plateau Check

Before (Measured):		14:58:24 09-Jan-2014		After:			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
RGR Plus Plateau Measurement	gAPI	Before	-----	-----	173.529	-----	
		After			-----		
		After-Before			-----		
RGR Minus Plateau Measurement	gAPI	Before	-----	-----	170.096	-----	
		After			-----		
		After-Before			-----		

LEH-QT (Logging Equipment Head - QT, 3-3/8 inch 31 pin HPHT with Tension Sensor) Calibration - Run 1.1

Primary Equipment :			
Logging Equipment Head - QT, 3-3/8 inch 31 pin HPHT with Tension Sensor		LEH-QT	2850

HTEN Master Calibration - HTEN Master Calibration

Master:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
HTEN Shop Gain		Master	1.000	0.800	NOT DONE	4.500	
HTEN Shop Offset	lbf	Master	0	-4448.222	NOT DONE	4448.222	

HTEN Before Calibration - HTEN Before Calibration

Before:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
RHTE Zero Measurement - 0	lbf	Before	-----	-----	-----	-----	
RHTE Plus Measurement - 0	lbf	Before	-----	-----	-----	-----	
HTEN Gain - 0		Before	-----	-----	-----	-----	
HTEN Offset - 0	lbf	Before	-----	-----	-----	-----	

Company: CONOCOPHILLIPS CANADA RESOURCES CORP

Schlumberger

Well: COPRC DODO CANYON E76

Field: DODO CANYON

Province: NORTHWEST TERRITORIES

LOG QUALITY CONTROL