

# Bit Run Summary

Type		KCL/PHPA/Glycol	KCL/PHPA/Glycol	KCL/PHPA/Glycol						
Mud weight	ppg	10.0	10.0	10.0						
Solids	%	7.1	7.1	8.1						
Chlorides	mg/L	31000	31000	31000						
Rm	ohm.m@°C	0.14@24.1	0.14@24.1	0.12@24.0						
Rmf	ohm.m@°C	0.12@23.5	0.12@23.5	0.13@24.9						
Rmc	ohm.m@°C	0.23@24.5	0.23@24.5	0.14@24.6						
Potassium	%	6.0	6.0	6.0						
<b>Environmental data</b>										
<b>GR</b>										
Mud weight	ppg	10.0	10.0	10.0						
Bit size	in.	8.5	8.5	8.5						
<b>Resistivity</b>										
<b>Neutron porosity</b>										
Hole Size	in.	8.5	8.5	8.5						
Mud weight	ppg	10.0	10.0	10.0						
Temperature	°C	70.6	70.6	69.0						
Mud salinity	ppm	45746	45746	47390						
Formation salinity										
Recording rate 1	SEC	10 sec.	10 sec.	10 sec.						
Recording rate 2	SEC	10 sec.	10 sec.	10 sec.						
Filtering GR		3 pt.	3 pt.	3 pt.						
Filtering density		3 pt.	3 pt.	3 pt.						
Filtering Neutron		3 pt.	3 pt.	3 pt.						
Company representative		B. Steel	M. Jackson	A. Bassett						
Anadrill personnel		K. Handley	M. Y. Tan	R. Burns	K. Wilson	D. Hay				

#### DISCLAIMER

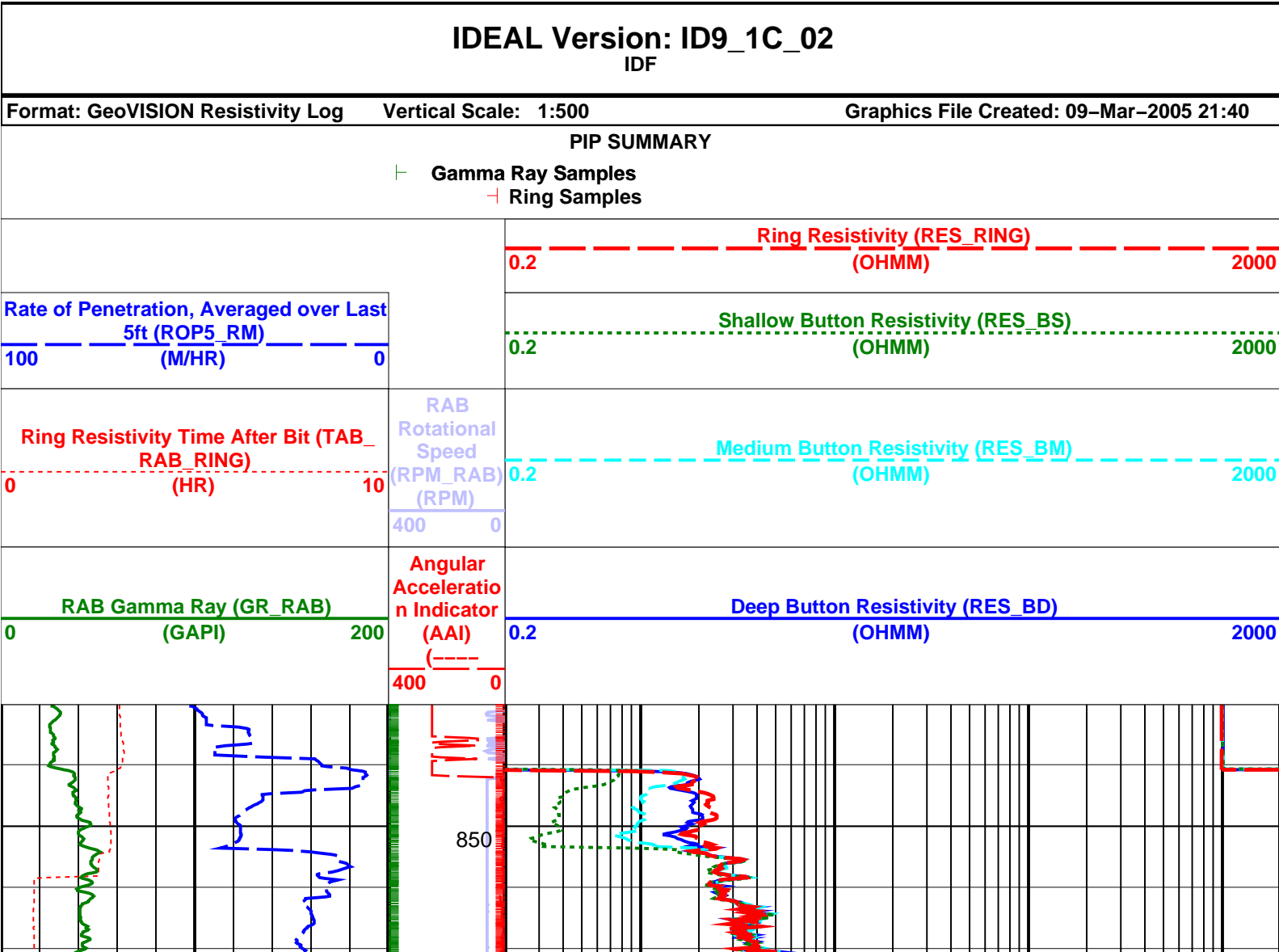
THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF 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.

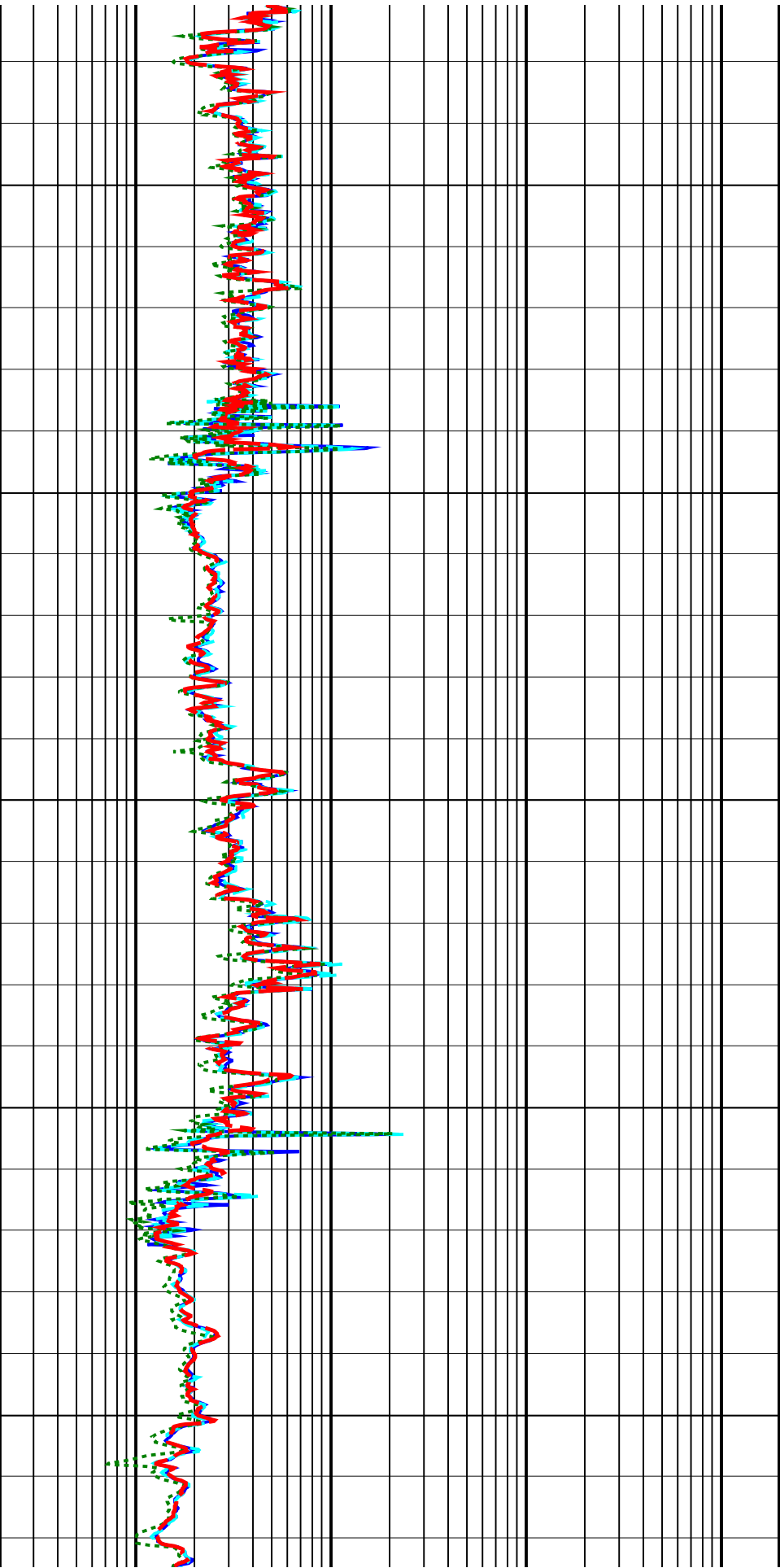
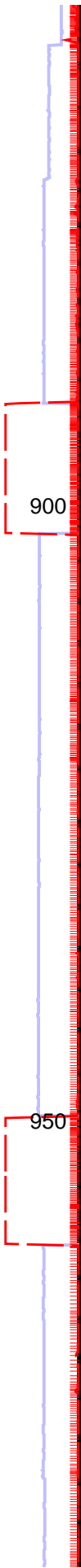
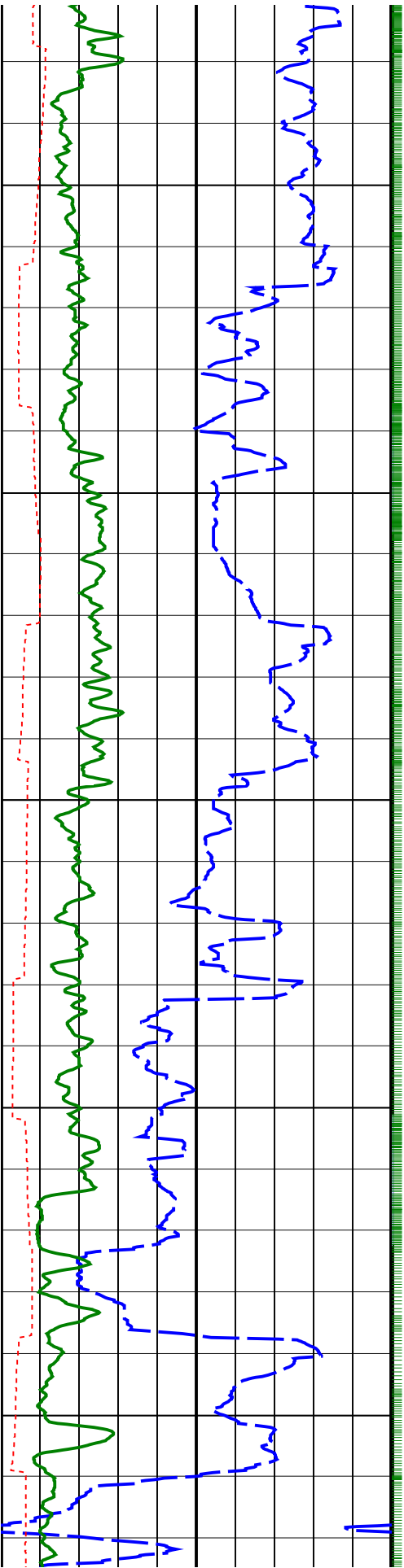
OTHER SERVICES FOR RUN2 Directional Drilling D&I Survey	OTHER SERVICES FOR RUN3 Directional Drilling D&I Survey	OTHER SERVICES FOR RUN4 Directional Drilling D&I Survey
<b>REMARKS: RUN NUMBER 2</b> 8-1/2 in. hole section was drilled from 851.0 m to 2108.0 m.  Depth is referenced to Driller's Depth.  All data presented is from tool memory.  GR corrected for mud weight, tool and bit size.  GVR*6 resistivity is corrected for bit size, mud resistivity and borehole temperature.  Neutron porosity is calculated with a limestone matrix and is corrected for bit size, borehole salinity, temperature and mud hydrogen index.  Ultrasonic Caliper not available during sliding intervals.	<b>REMARKS: RUN NUMBER 3</b> 8-1/2 in. hole section was reamed from 1570.0 m to 1625.0 m.  Depth is referenced to Driller's Depth.  All data presented is from tool memory.  GR corrected for mud weight, tool and bit size.  GVR*6 resistivity is corrected for bit size, mud resistivity and borehole temperature.  Neutron porosity is calculated with a limestone matrix and is corrected for bit size, borehole salinity, temperature and mud hydrogen index.  PEF readings were affected by the presence of Barite in the mud system.	<b>REMARKS: RUN NUMBER 4</b> 8-1/2 in. hole section was drilled from 1930.0 m to 2165.0 m.  Depth is referenced to Driller's Depth.  All data presented is from tool memory.  GR corrected for mud weight, tool and bit size.  GVR*6 resistivity is corrected for bit size, mud resistivity and borehole temperature.  Neutron porosity is calculated with a limestone matrix and is corrected for bit size, borehole salinity, temperature and mud hydrogen index.  Ultrasonic Caliper not available during sliding intervals.

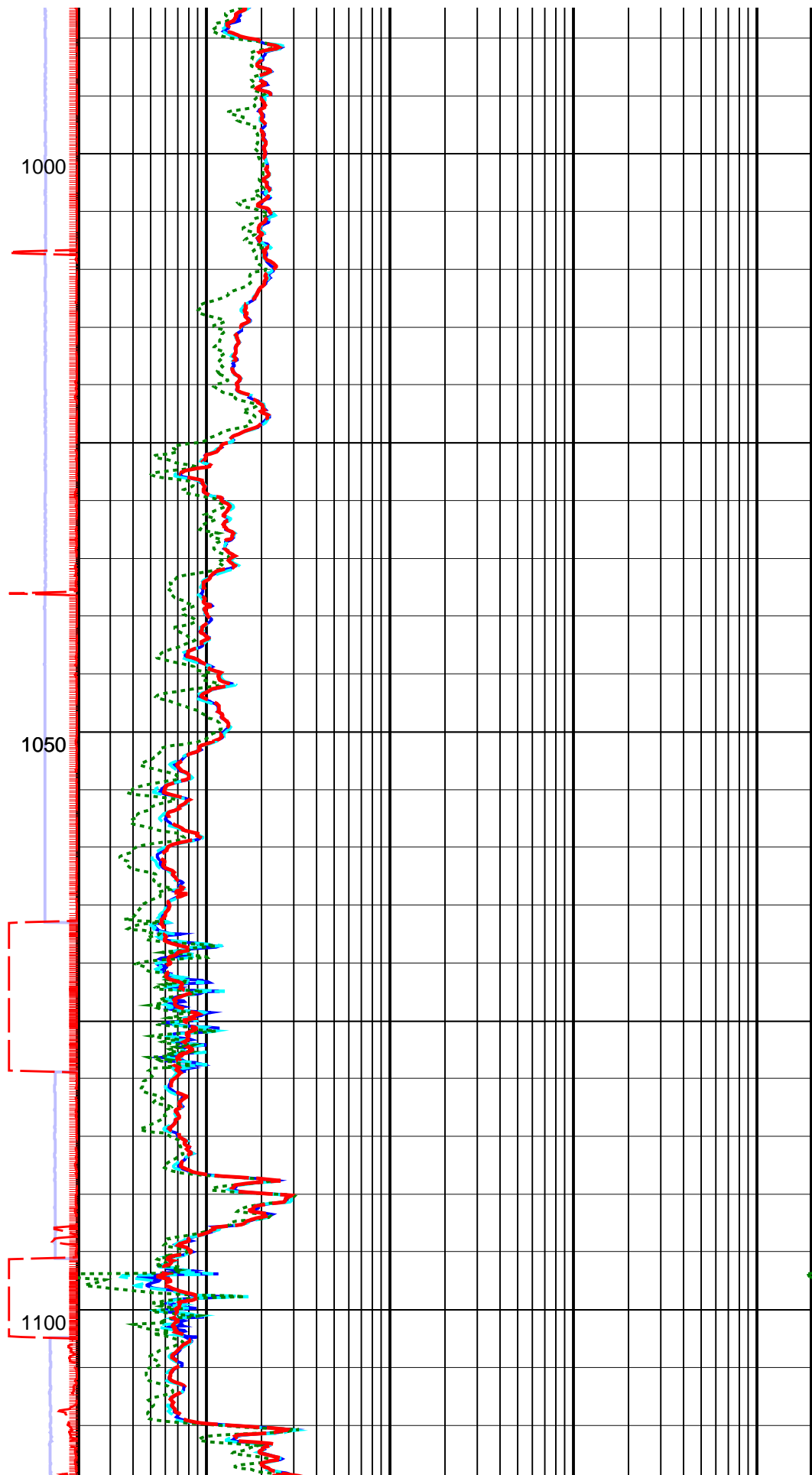
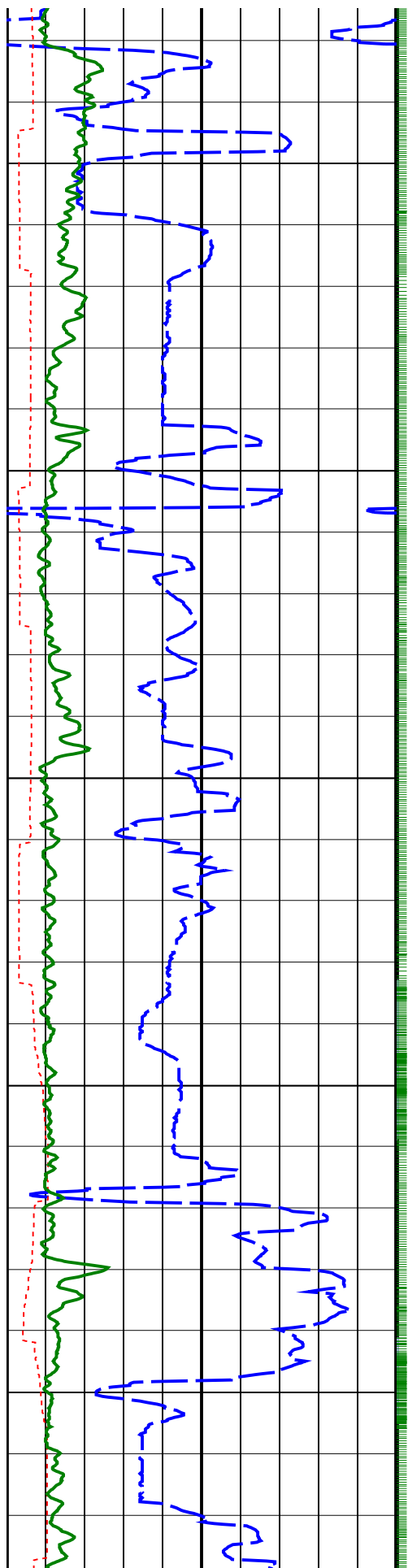
sliding intervals.	Barite in the mud system.	sliding intervals.
PEF readings were affected by the presence of Barite in the mud system.	POOH to change BHA.	PEF readings were affected by the presence of Barite in the mud system.
Data density compromised at high ROP.		Data density compromised at high ROP.
POOH due to drill plug.		POOH due to penetration rate.

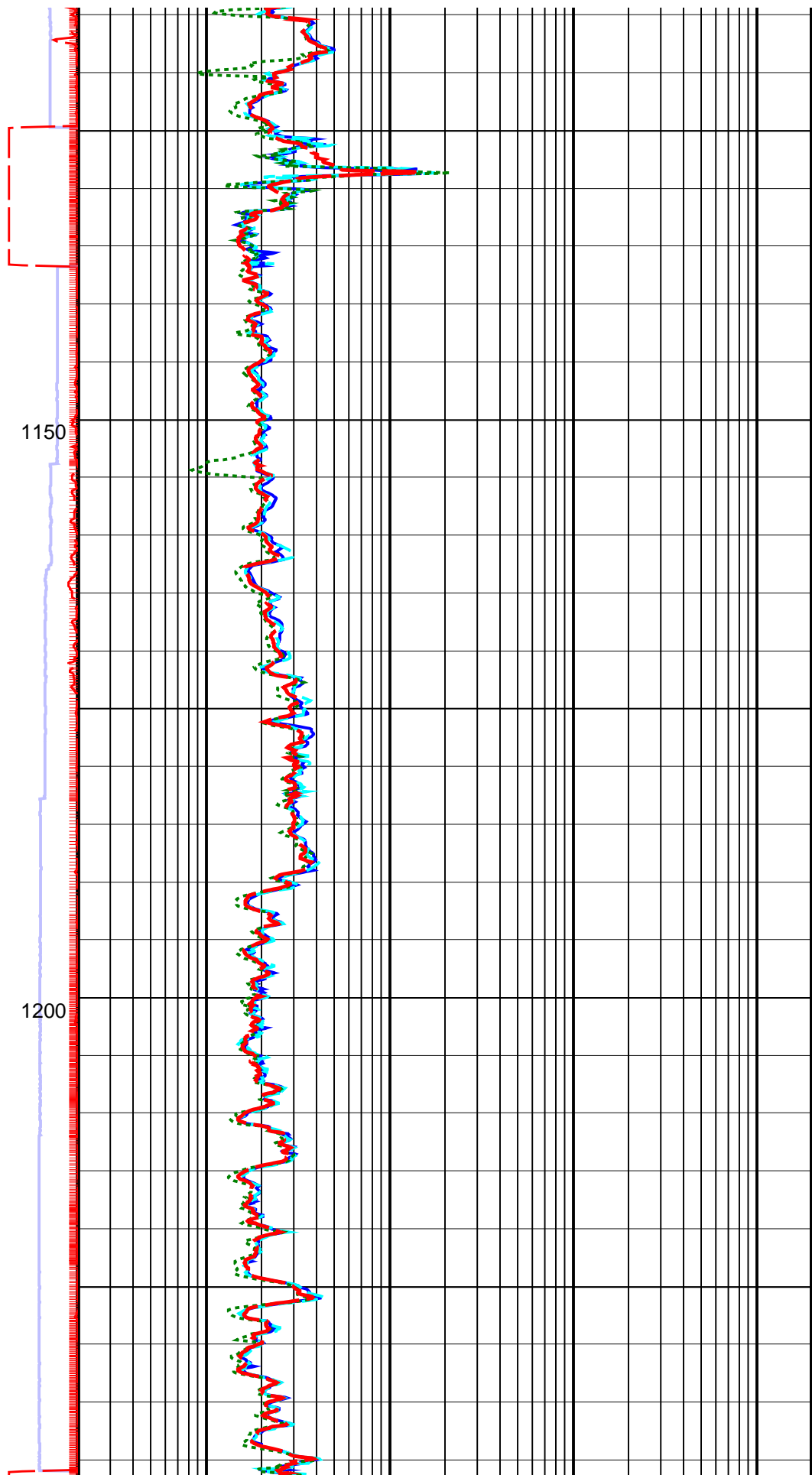
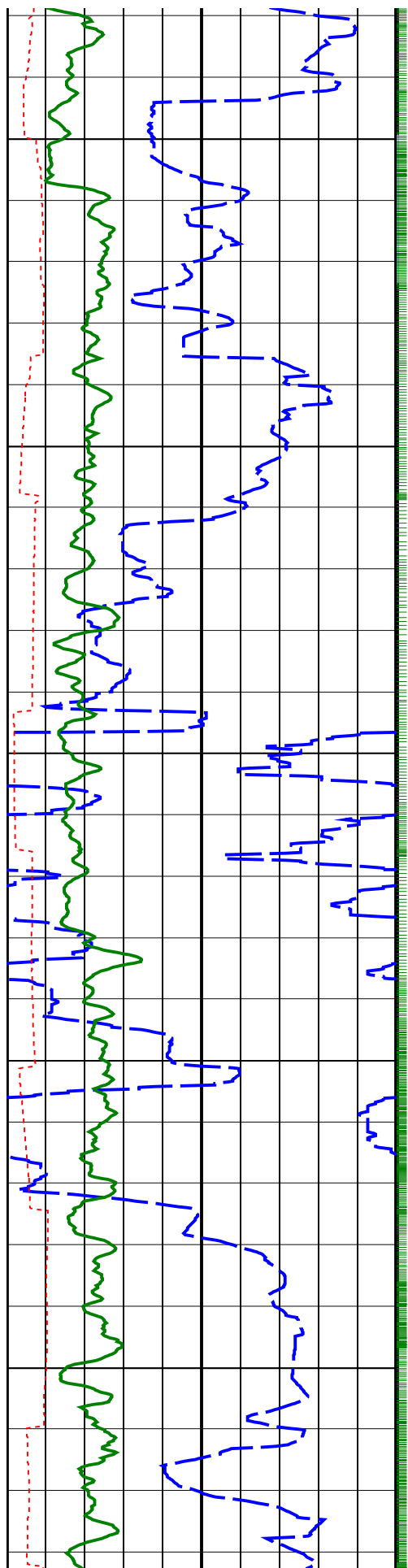
EQUIPMENT DESCRIPTION		
RUN2	RUN3	RUN4
<div>DOWNHOLE EQUIPMENT</div> <div> <div> <div>6-3/4 in. ADN*6C</div> <div> <div>S/N: FE55</div> <div>8-1/4 in. IBS</div> <div>NSR-M A202</div> <div>GSR-J A1994</div> <div>Software: V8.3A02</div> </div> <div> <div>Neutron F</div> <div>Neutron N</div> <div>Density S</div> <div>Density L</div> <div>UltraSonic</div> <div>R-O Port</div> </div> <div> <div>32.06</div> <div>31.91</div> <div>31.04</div> <div>30.94</div> <div>30.56</div> <div>29.80</div> </div> <div>34.02</div> </div> <div> <div>6-3/4 in. PowerPulse*</div> <div> <div>MDC Z408</div> <div>MEC 612</div> <div>MDI 626</div> <div>Software: V7.0C00</div> </div> <div> <div>D&amp;I</div> <div>Shallow</div> <div>Medium</div> <div>Deep</div> </div> <div> <div>27.78</div> <div>23.61</div> <div>18.17</div> <div>18.05</div> <div>17.87</div> </div> <div> <div>6-3/4 in. GVR*6</div> <div> <div>S/N: 191</div> <div>8-1/4 in. Stabilizer</div> <div>Software: V6.2B01</div> </div> <div> <div>Ring Res</div> <div>R-O Port</div> <div>GR</div> </div> <div> <div>19.46</div> <div>17.70</div> <div>17.56</div> <div>17.34</div> </div> </div> <div> <div>7 in. Cross Over Sub</div> <div>S/N: SBD2075</div> <div>16.38</div> </div> <div> <div>6-7/16 in. NM Pony Collar</div> <div>S/N: 6649</div> <div>15.81</div> </div> <div> <div>6-3/4 in. NM Pony Collar</div> <div>S/N: SBD 1651</div> <div>12.23</div> </div> </div></div>	<div>DOWNHOLE EQUIPMENT</div> <div> <div> <div>6-3/4 in. ADN*6C</div> <div> <div>S/N: FE55</div> <div>8-1/4 in. IBS</div> <div>NSR-M A202</div> <div>GSR-J A1994</div> <div>Software: V8.3A02</div> </div> <div> <div>Neutron F</div> <div>Neutron N</div> <div>Density S</div> <div>Density L</div> <div>UltraSonic</div> <div>R-O Port</div> </div> <div> <div>24.34</div> <div>22.38</div> <div>22.23</div> <div>21.36</div> <div>21.26</div> <div>20.88</div> <div>20.12</div> </div> </div> <div> <div>6-3/4 in. PowerPulse*</div> <div> <div>MDC Z408</div> <div>MEC 612</div> <div>MDI 626</div> <div>Software: V7.0C00</div> </div> <div> <div>D&amp;I</div> <div>Shallow</div> <div>Medium</div> <div>Deep</div> </div> <div> <div>18.10</div> <div>13.93</div> </div> <div> <div>6-3/4 in. GVR*6</div> <div> <div>S/N: 191</div> <div>8-1/4 in. Stabilizer</div> <div>Software: V6.2B01</div> </div> <div> <div>Ring Res</div> <div>R-O Port</div> <div>GR</div> </div> <div> <div>9.78</div> <div>8.49</div> <div>8.37</div> <div>8.19</div> <div>8.02</div> <div>7.88</div> <div>7.66</div> </div> </div> <div> <div>6-3/4 in. NM Pony Collar</div> <div>S/N: SBD1651</div> <div>12.80</div> </div> </div></div>	<div>DOWNHOLE EQUIPMENT</div> <div> <div> <div>6-3/4 in. ADN*6C</div> <div> <div>S/N: FE55</div> <div>8-1/4 in. IBS</div> <div>NSR-M A202</div> <div>GSR-J A1994</div> <div>Software: V8.3A02</div> </div> <div> <div>Neutron F</div> <div>Neutron N</div> <div>Density S</div> <div>Density L</div> <div>Ultrasonic</div> <div>R-O Port</div> </div> <div> <div>34.06</div> <div>32.10</div> <div>31.95</div> <div>31.08</div> <div>30.98</div> <div>30.60</div> <div>29.84</div> </div> </div> <div> <div>6-3/4 in. PowerPulse*</div> <div> <div>MDC Z408</div> <div>MEC 612</div> <div>MDI 626</div> <div>Software: V7.0C00</div> </div> <div> <div>D&amp;I</div> <div>Shallow</div> <div>Medium</div> <div>Deep</div> </div> <div> <div>27.82</div> <div>23.65</div> <div>18.21</div> <div>18.09</div> <div>17.91</div> </div> <div> <div>6-3/4 in. GVR*6</div> <div> <div>S/N: 191</div> <div>8-1/4 in. Stabilizer</div> <div>Software: V6.2B01</div> </div> <div> <div>Ring Res</div> <div>R-O Port</div> <div>GR</div> </div> <div> <div>19.50</div> <div>17.74</div> <div>17.60</div> <div>17.38</div> </div> </div> <div> <div>7 in. Cross Over Sub</div> <div>S/N: SBD2075</div> <div>16.42</div> </div> <div> <div>6-3/4 in. NM Pony Collar</div> <div>S/N: 6649</div> <div>15.85</div> </div> <div> <div>6-7/16 in. NM Pony Collar</div> <div>S/N: 6649</div> <div>12.80</div> </div> </div></div>

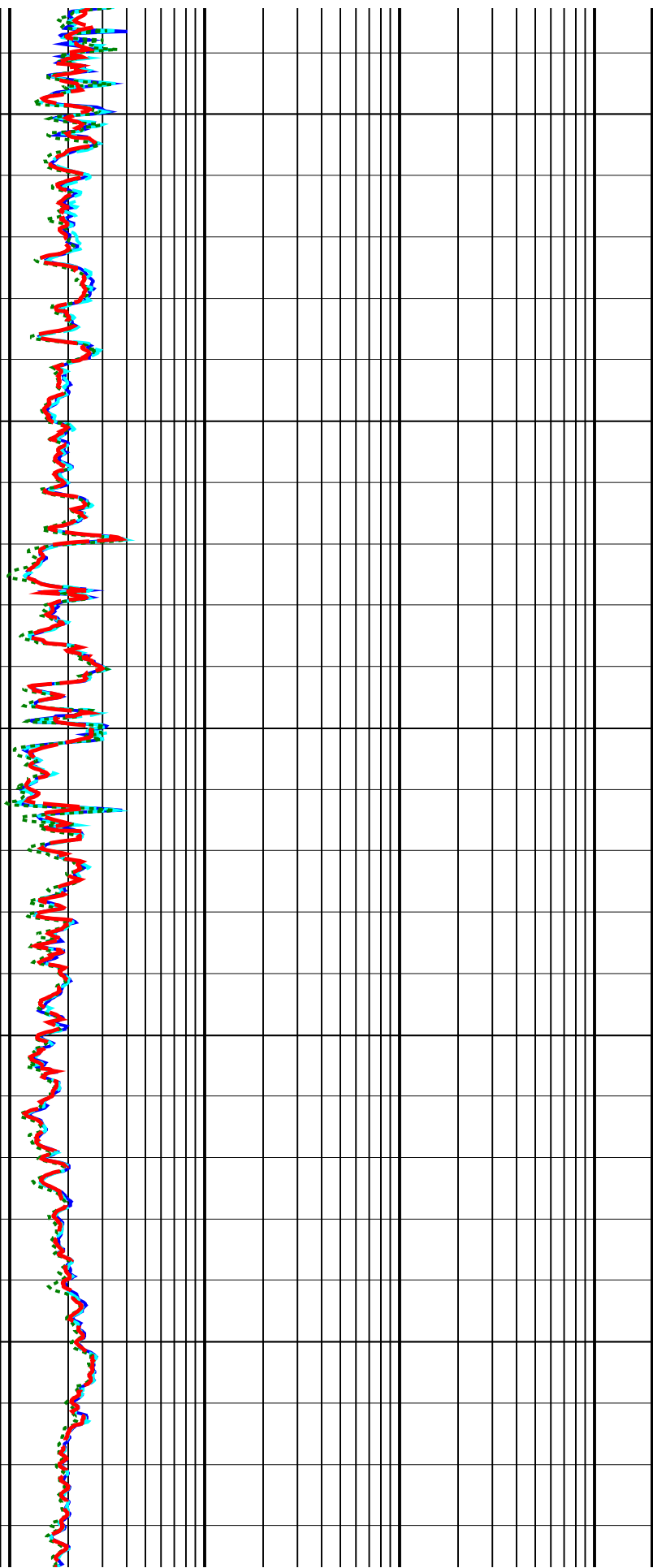
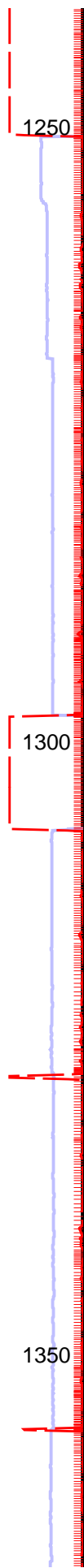
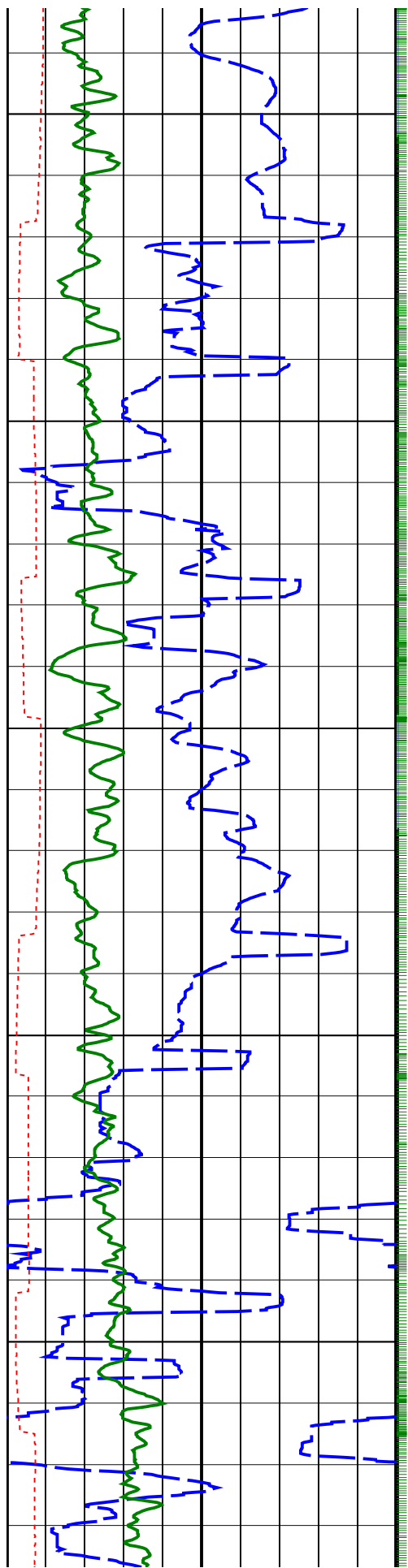
<p>PowerPak* Mud Motor A700GT S/N: 7062 1.15 deg Bend 8-3/8 in. Motor Sleeve</p> <p>Reed Hycalog PDC Bit RSX272 S/N: 110936 OD 8-1/2 in.</p> <p>Maximum string diameter 8.50 in. All lengths in Meters</p>	<p>6-3/4 in. NM Pony Collar S/N: SBD 1651</p> <p>8-1/4 in. Stabilizer S/N: S11773</p> <p>6-13/16 in. Bit Sub S/N: E102-25</p> <p>Reed Hycalog PDC Bit DSX210GUW S/N: 110575 OD 8-1/2 in.</p> <p>Maximum string diameter 8.50 in. All lengths in Meters</p>	<p>PowerPak* Mud Motor A700GT S/N: N7311 1.20 deg. Bend 8-3/8 in. Motor Sleeve</p> <p>Hughes Insert Bit MX20DX S/N: 6027923 OD 8-1/2 in.</p> <p>Maximum string diameter 8.50 in. All lengths in Meters</p>
9.18	6.13	9.22
0.00	0.00	0.00
0.25	0.30	0.24



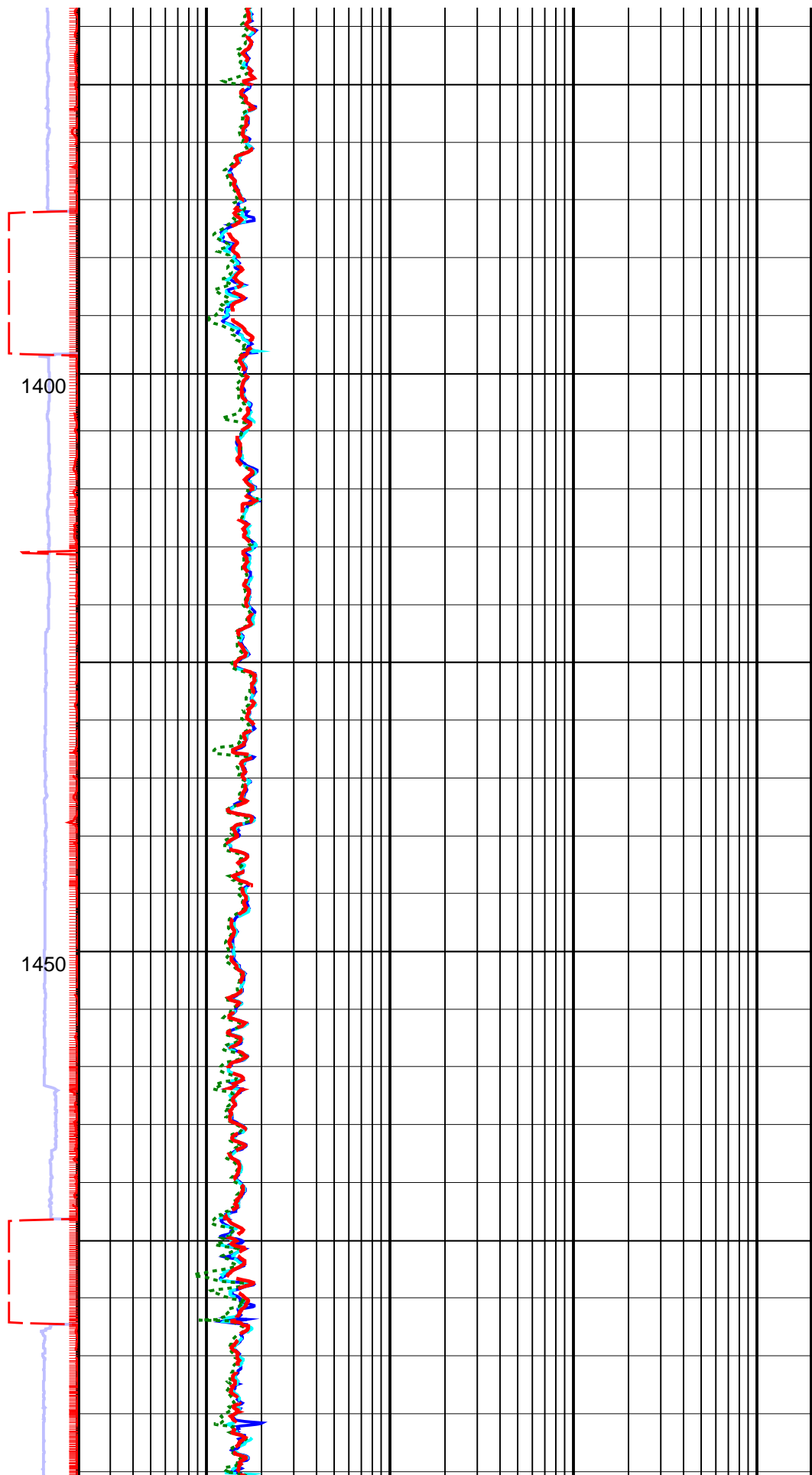
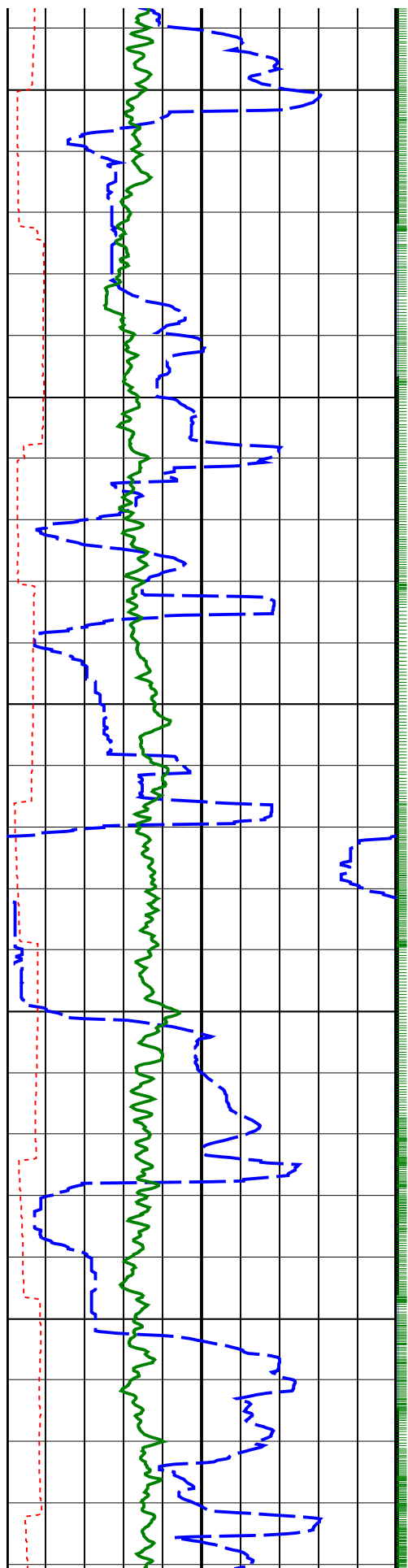


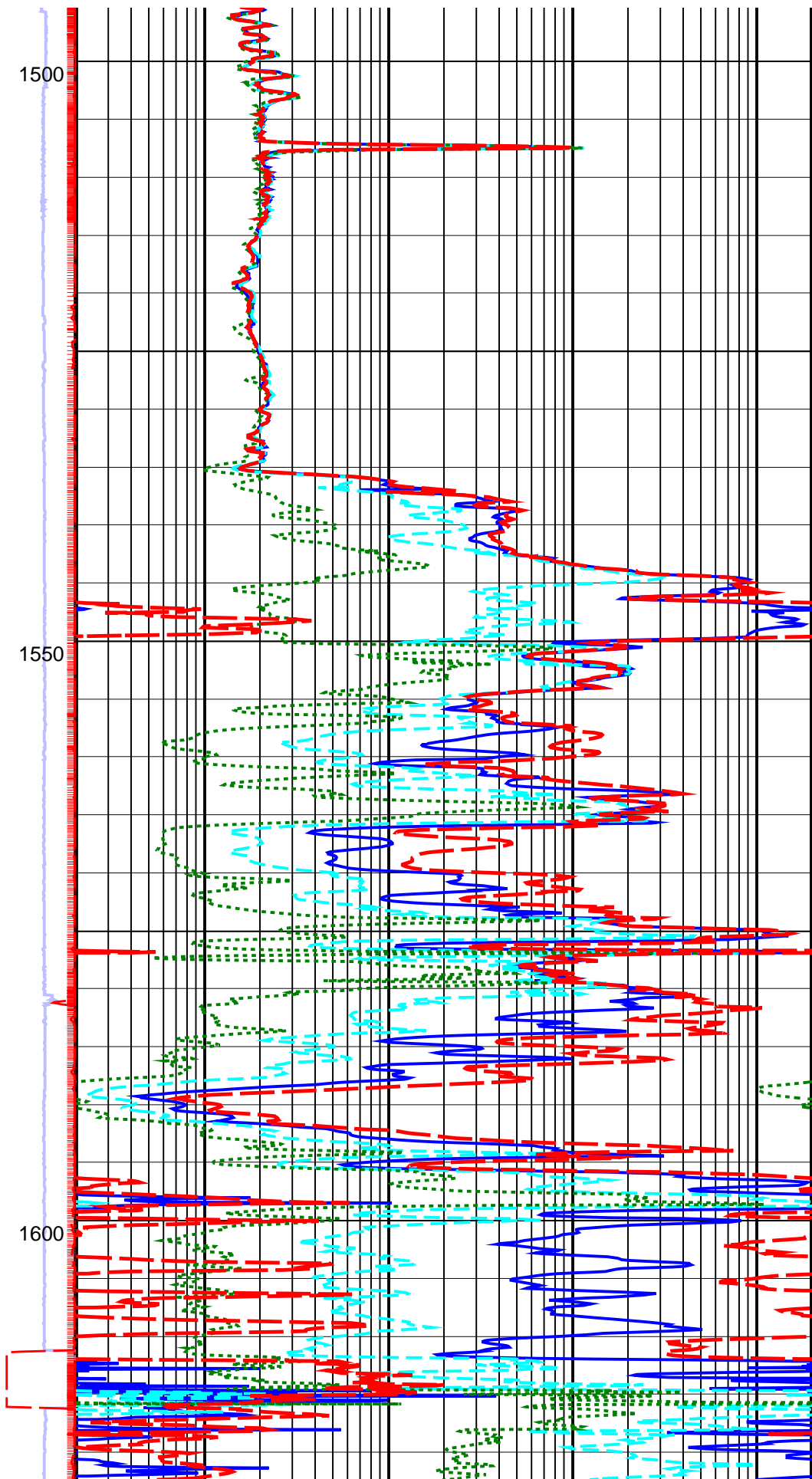
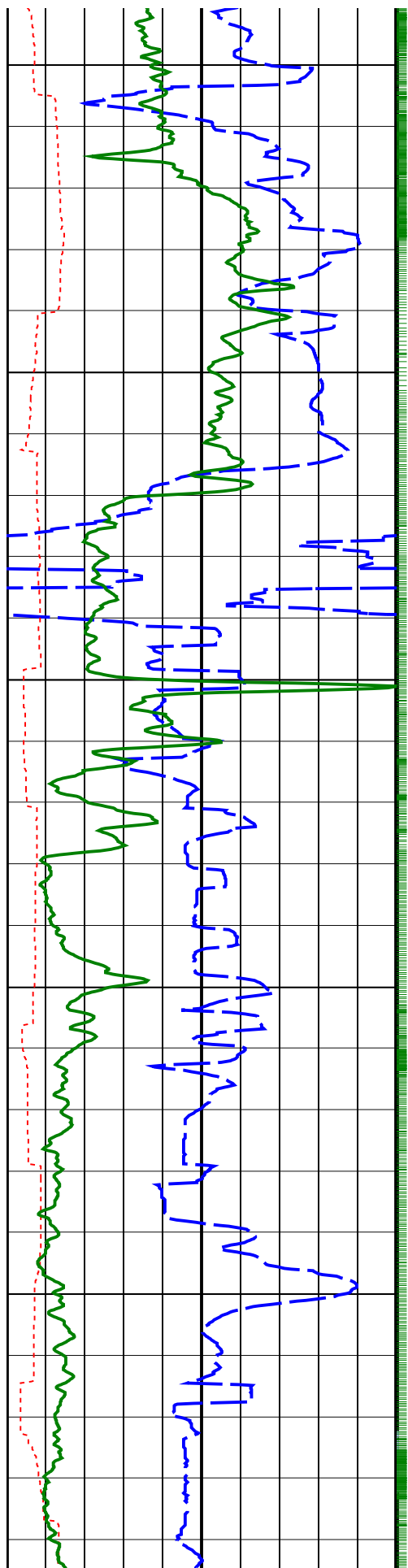


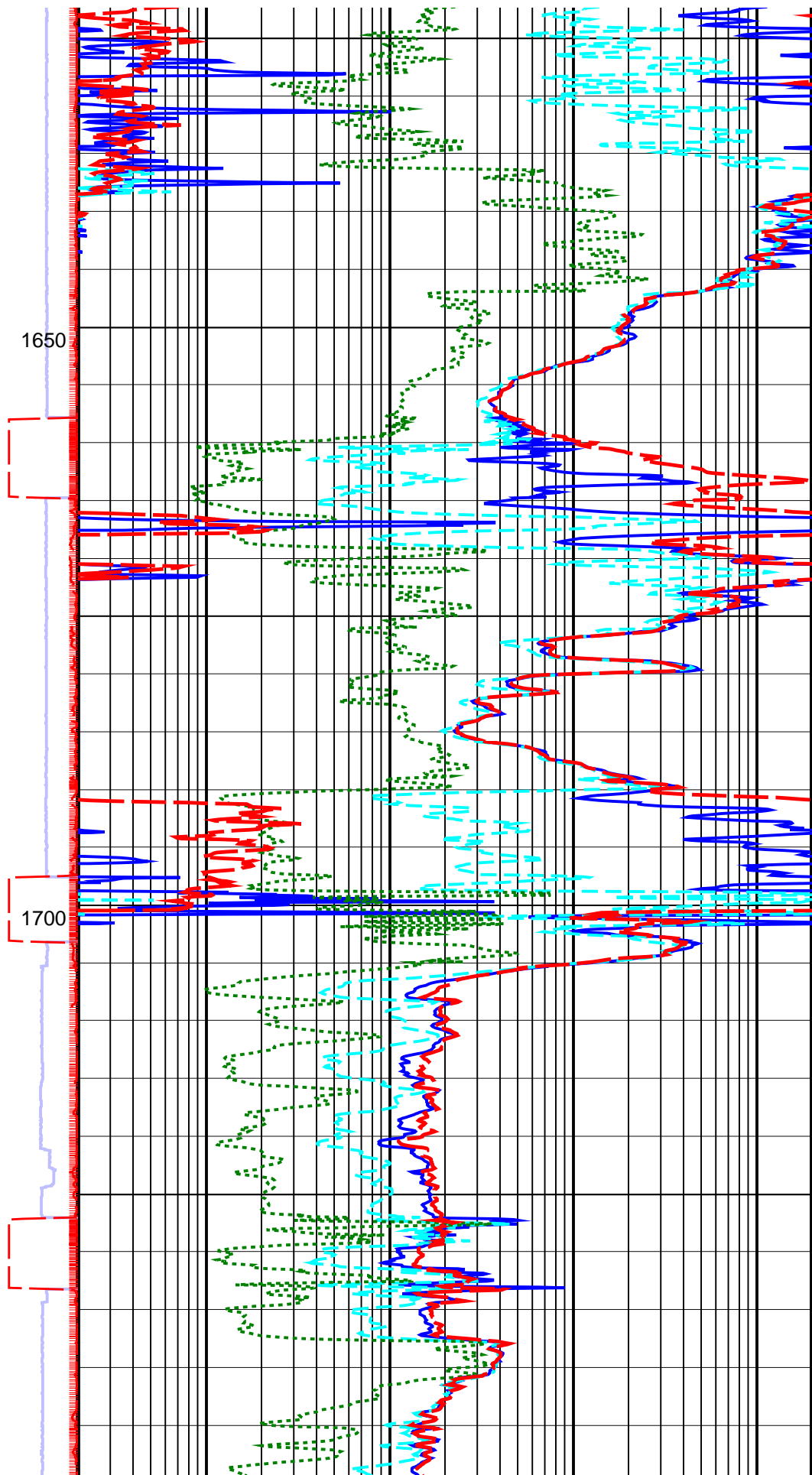
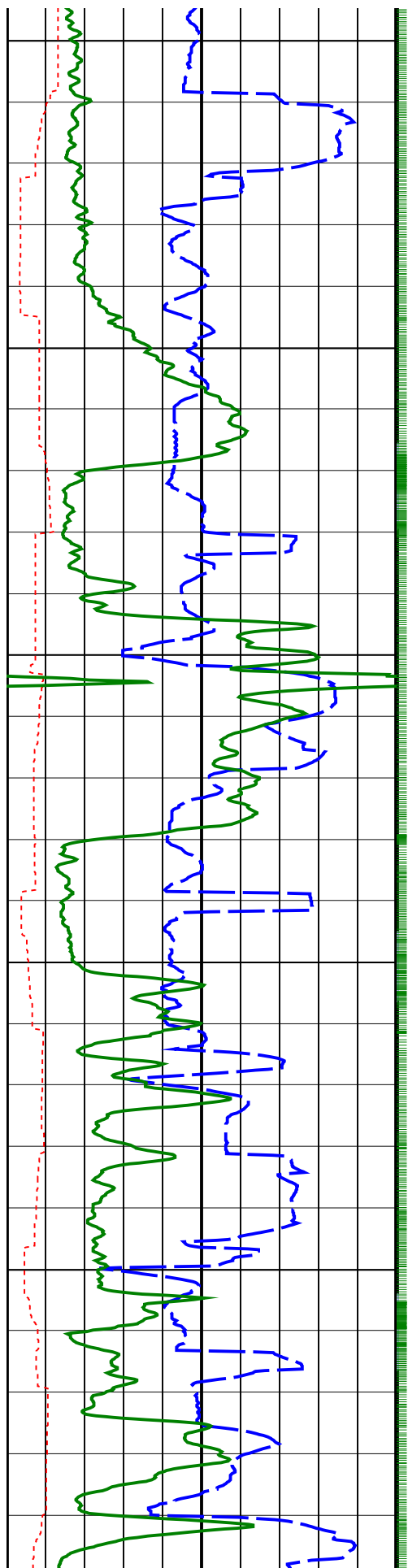


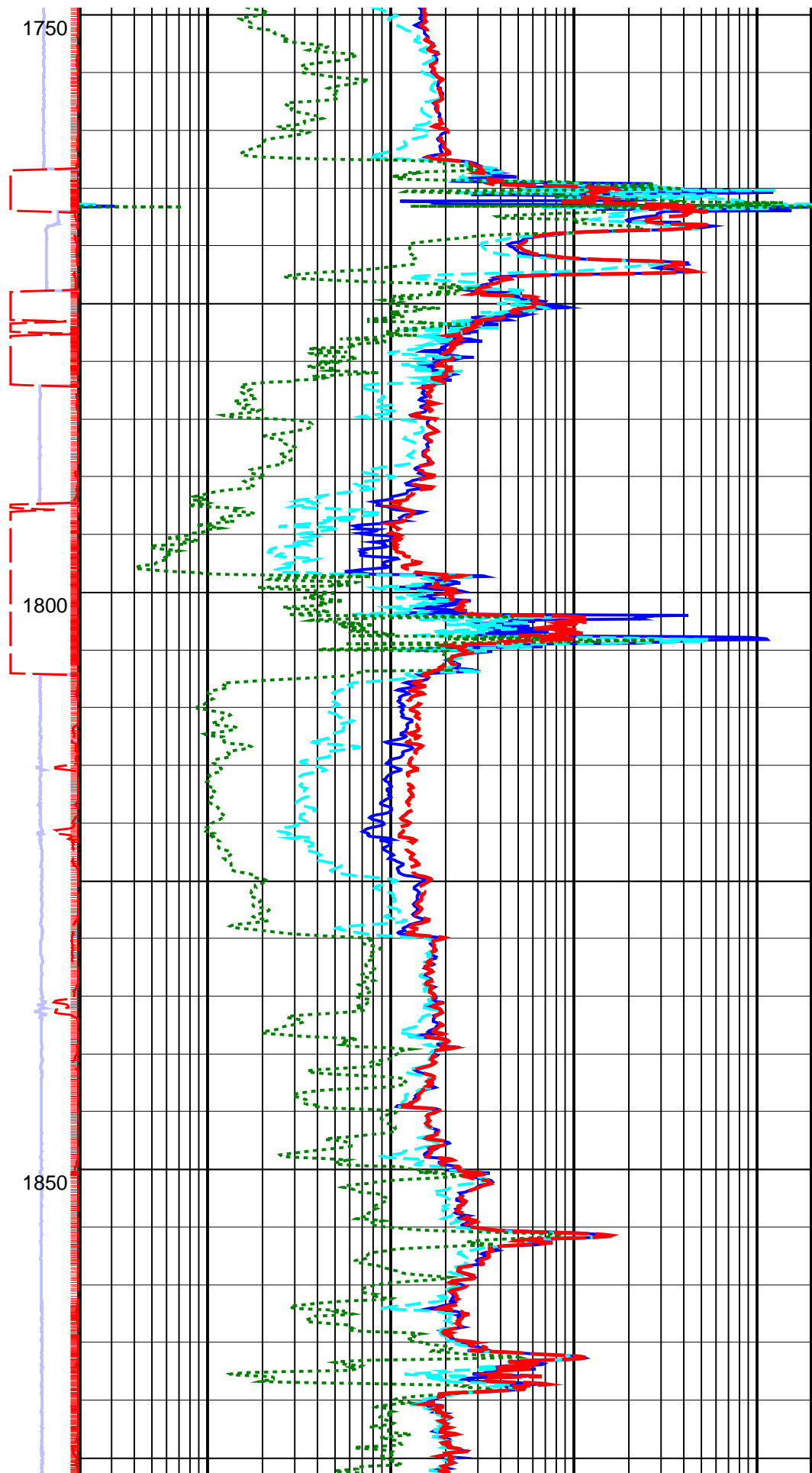
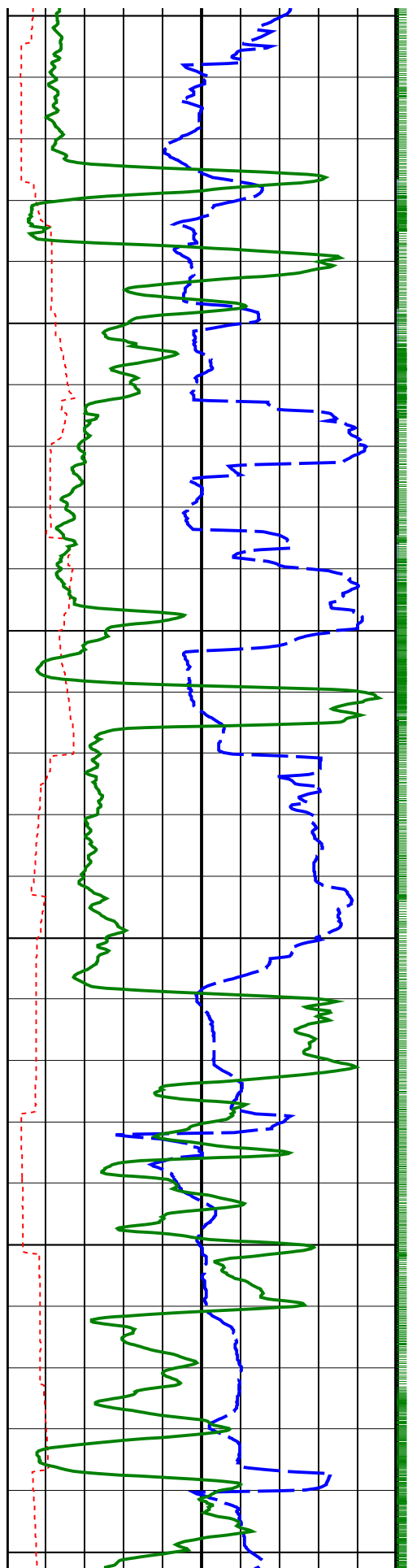


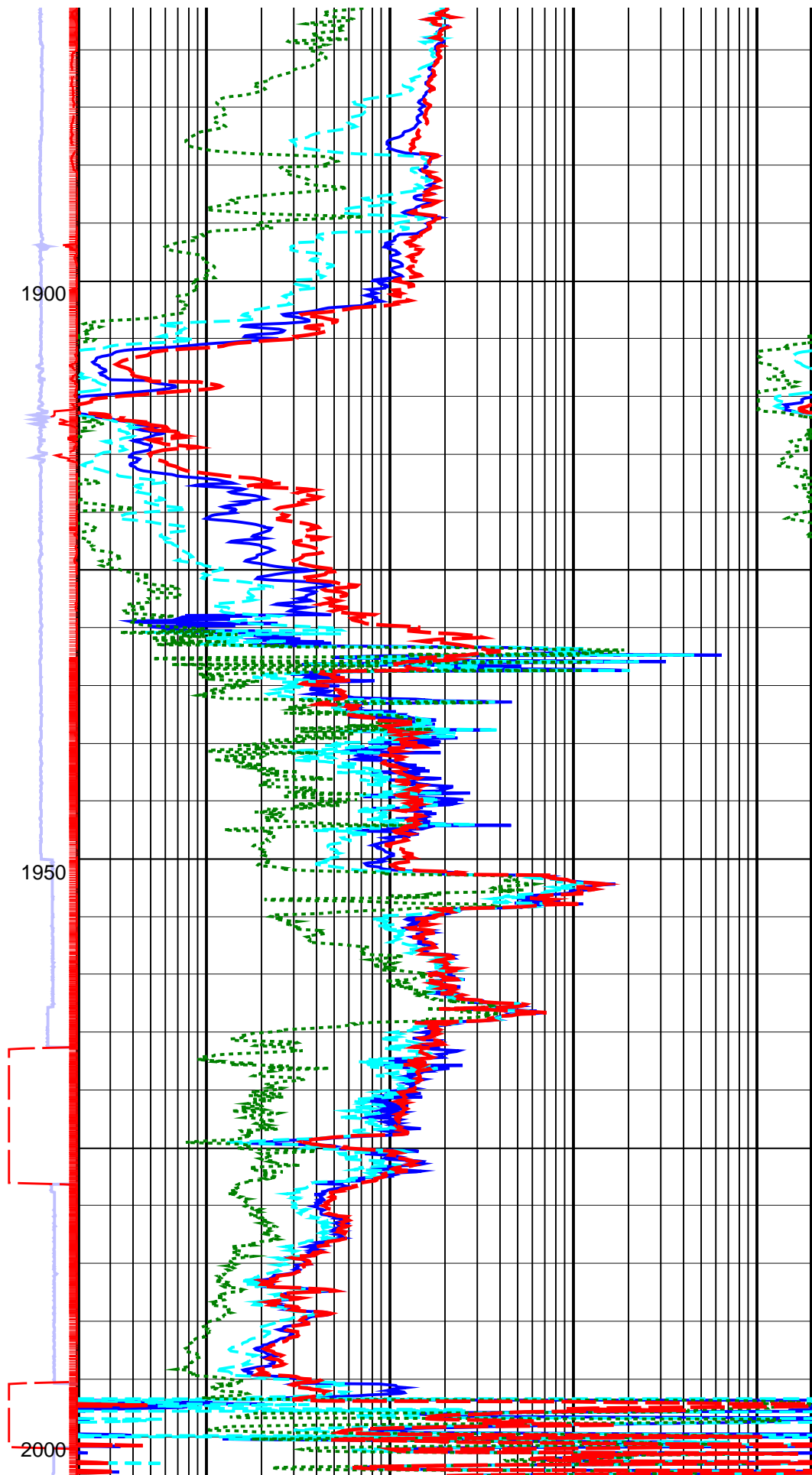
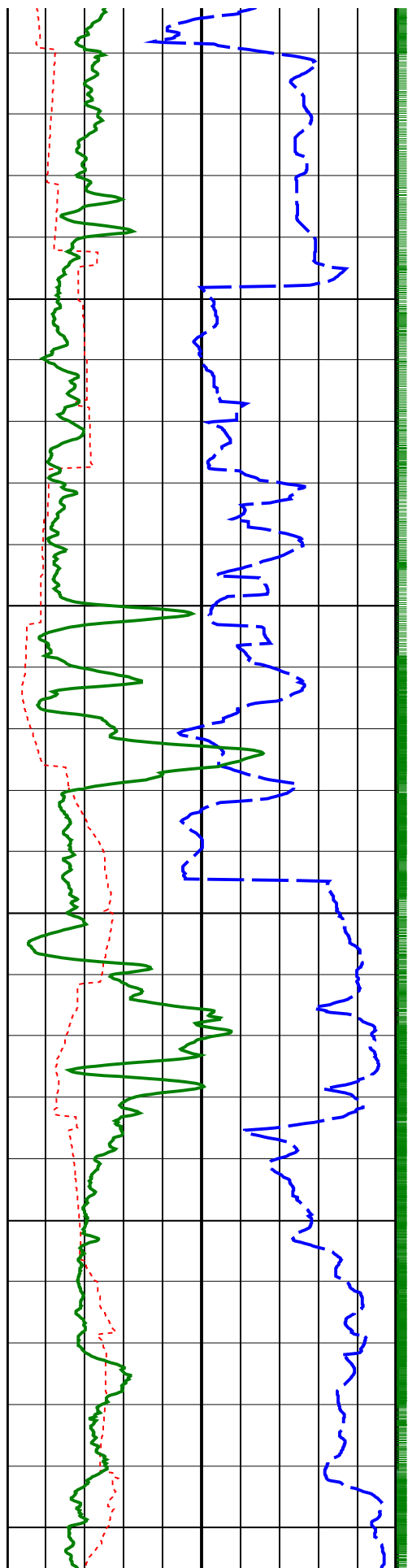


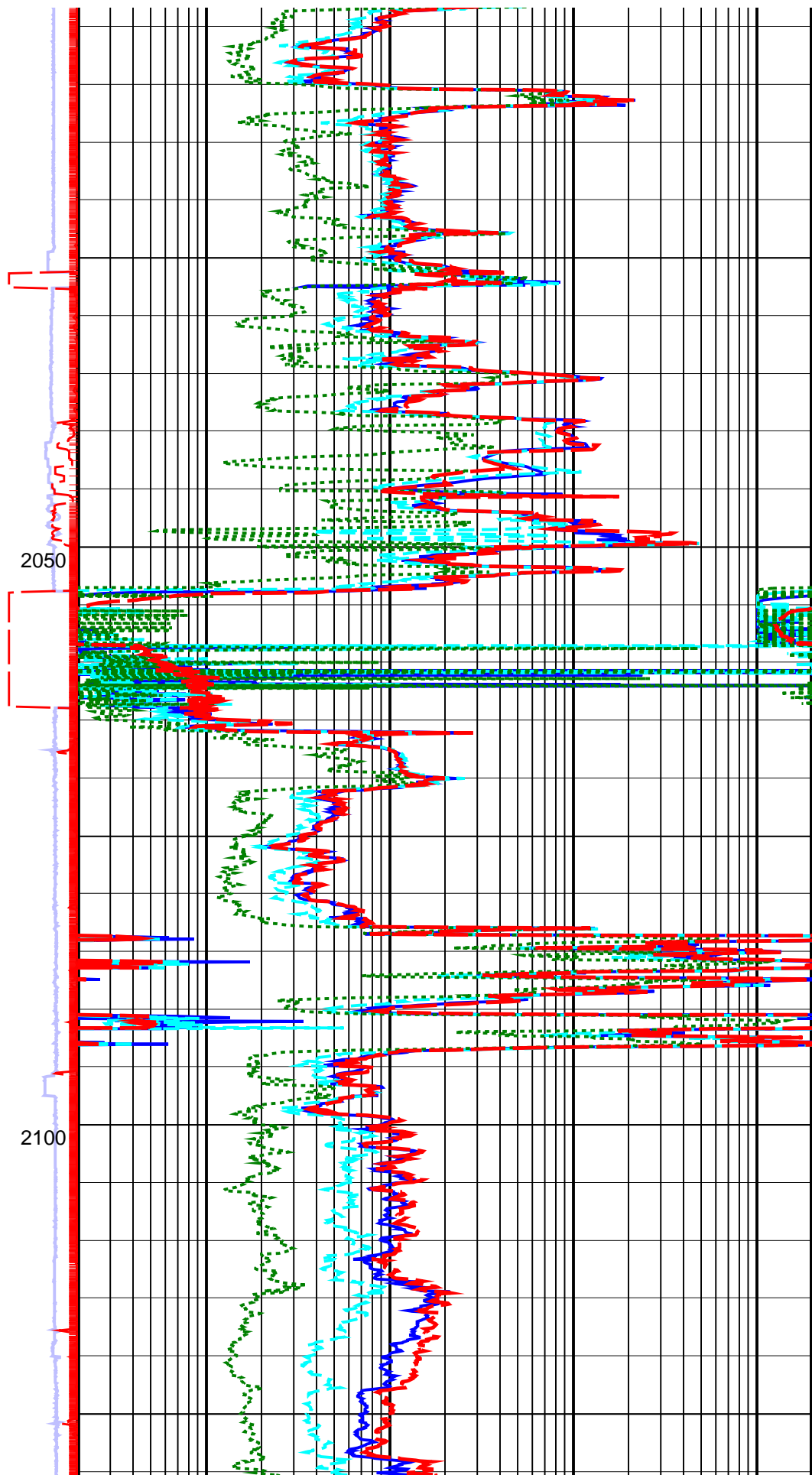
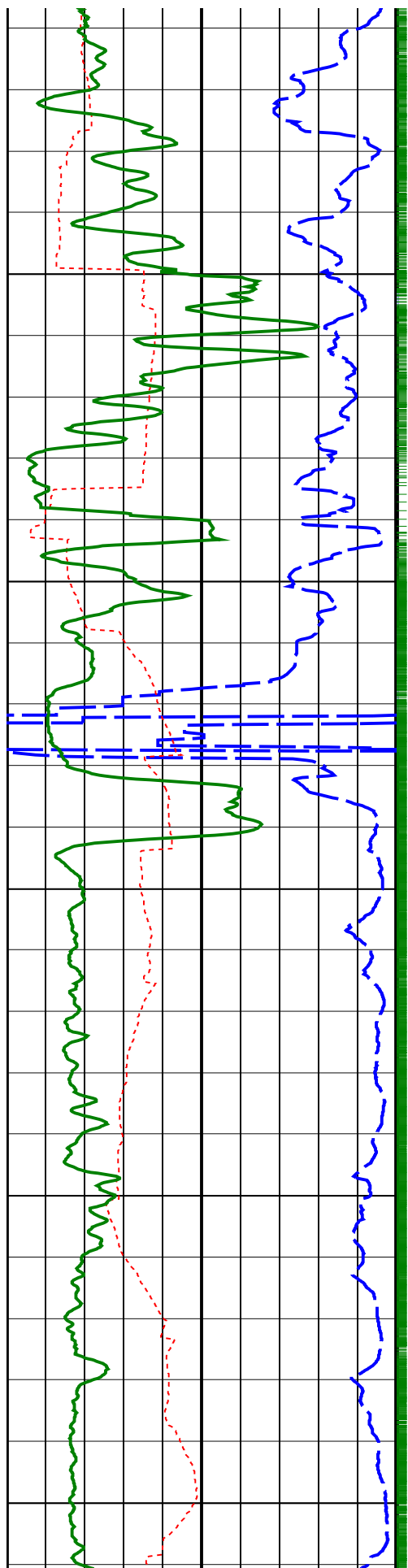


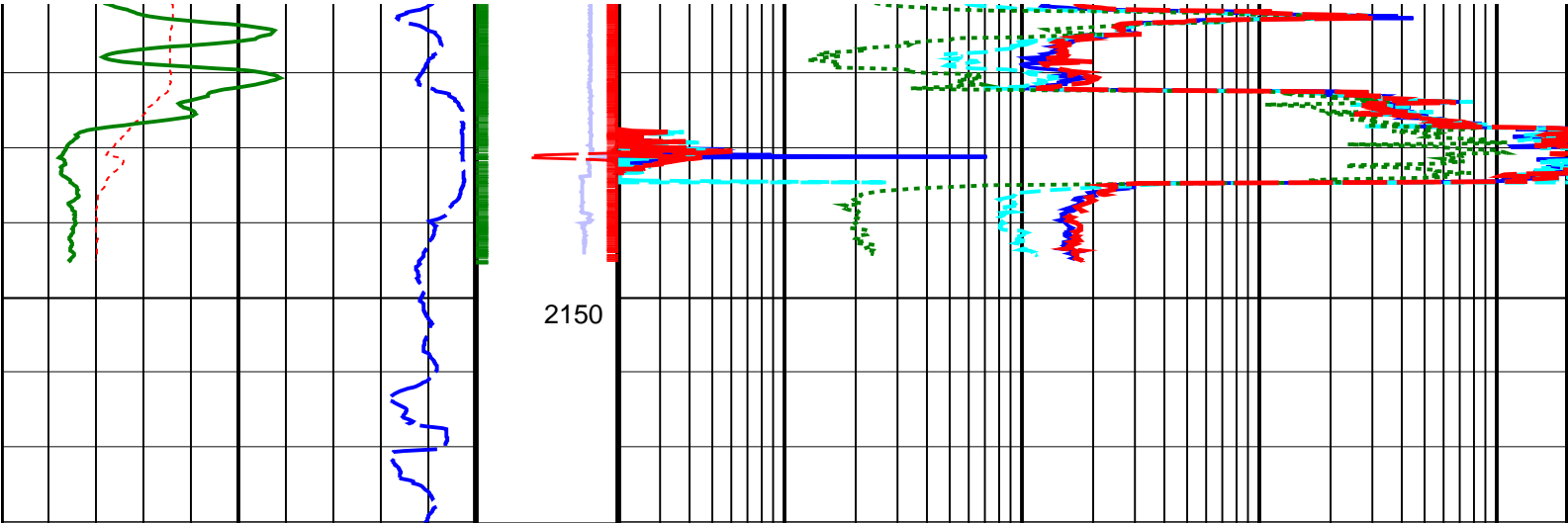












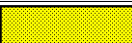
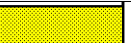
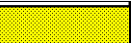
RAB Gamma Ray (GR_RAB) (GAPI)		Angular Acceleration Indicator (AAI) (-----) 400 0	Deep Button Resistivity (RES_BD) (OHMM)	
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Ring Resistivity Time After Bit (TAB_RAB_RING) (HR)		RAB Rotational Speed (RPM_RAB) (RPM) 400 0	Medium Button Resistivity (RES_BM) (OHMM)	
0	10		0.2	2000
Rate of Penetration, Averaged over Last 5ft (ROP5_RM) (M/HR)			Shallow Button Resistivity (RES_BS) (OHMM)	
100	0		0.2	2000
			Ring Resistivity (RES_RING) (OHMM)	
			0.2	2000




PIP SUMMARY	
└	Gamma Ray Samples
└	Ring Samples



IDEAL Version: ID9\_1C\_02  
IDF

















6.75-in. Azimuthal Density Neutron / Equipment Identification		
Primary Equipment:		
Tool Name and Serial Number	ADN6 - CA	FE55
Collar Type and Serial Number	ADDC - AA	FE55
Chassis Type and Serial Number	ADSE - EA	380
Neutron Logging Source	NSR - M	202
Density Logging Source	GSR - JZ	1994
Stabilizer Size	8.25 - in.	
Calibration Status	Valid	

Master: 4-Jan-2005 21:40											
6.75-in. Azimuthal Density Neutron Calibration											
Density: Magnesium Block											
Phase	LS window 3 - Mg CPS		Value	Phase	SS window 1 - Mg CPS		Value	Phase	SS window 3 - Mg CPS		Value
Master			1041	Master			2505	Master			6228
	250.0 (Minimum)	4125 (Nominal)	8000 (Maximum)		700.0 (Minimum)	9350 (Nominal)	18000 (Maximum)		2500 (Minimum)	23750 (Nominal)	45000 (Maximum)


Master: 4-Jan-2005 21:40											
6.75-in. Azimuthal Density Neutron Calibration											
Density: Aluminum Block											
Phase	LS window 3 – Al CPS		Value	Phase	SS window 1 – Al CPS		Value	Phase	SS window 3 – Al CPS		Value
Master			156.5	Master			1275	Master			3922
	50.00 (Minimum)	725.0 (Nominal)	1400 (Maximum)		500.0 (Minimum)	4250 (Nominal)	8000 (Maximum)		1500 (Minimum)	15750 (Nominal)	30000 (Maximum)

Master: 4-Jan-2005 21:40											
6.75-in. Azimuthal Density Neutron Calibration											
Density: Background											
Phase	LS window 3 – Background CPS		Value	Phase	SS window 1 – Background CPS		Value	Phase	SS window 3 – Background CPS		Value
Master			51.03	Master			129.8	Master			563.0
	15.00 (Minimum)	82.50 (Nominal)	150.0 (Maximum)		40.00 (Minimum)	220.0 (Nominal)	400.0 (Maximum)		150.0 (Minimum)	825.0 (Nominal)	1500 (Maximum)













Master: 4-Jan-2005 21:40											
6.75-in. Azimuthal Density Neutron Calibration											
Density: Water Block Check											
Phase	Long spacing water density G/C3		Value	Phase	Short spacing water density G/C3		Value				
Master			1.029	Master			1.116				
	1.024 (Minimum)	1.039 (Nominal)	1.054 (Maximum)		1.096 (Minimum)	1.126 (Nominal)	1.156 (Maximum)				


Master: 4-Jan-2005 21:40											
6.75-in. Azimuthal Density Neutron Calibration											
Neutron: Water Tank											
Phase	Far 1 tube 1 gain		Value	Phase	Far 1 tube 1 offset CPS		Value				
Master			1.068	Master			0.06511				
	0.8000 (Minimum)	1.050 (Nominal)	1.300 (Maximum)		-1.000 (Minimum)	0 (Nominal)	1.000 (Maximum)				
Phase	Far 1 tube 2 gain		Value	Phase	Far 1 tube 2 offset CPS		Value				
Master			1.013	Master			-0.03114				
	0.8000 (Minimum)	1.050 (Nominal)	1.300 (Maximum)		-1.000 (Minimum)	0 (Nominal)	1.000 (Maximum)				
Phase	Far 1 tube 3 gain		Value	Phase	Far 1 tube 3 offset CPS		Value				
Master			1.039	Master			0.01313				
	0.8000 (Minimum)	1.050 (Nominal)	1.300 (Maximum)		-1.000 (Minimum)	0 (Nominal)	1.000 (Maximum)				
Phase	Far 2 tube 1 gain		Value	Phase	Far 2 tube 1 offset CPS		Value				
Master			1.096	Master			0.07837				
	0.8000 (Minimum)	1.050 (Nominal)	1.300 (Maximum)		-1.000 (Minimum)	0 (Nominal)	1.000 (Maximum)				
Phase	Far 2 tube 2 gain		Value	Phase	Far 2 tube 2 offset CPS		Value				
Master			0.9974	Master			-0.1285				
	0.8000 (Minimum)	1.050 (Nominal)	1.300 (Maximum)		-1.000 (Minimum)	0 (Nominal)	1.000 (Maximum)				
Phase	Far 2 tube 3 gain		Value	Phase	Far 2 tube 3 offset CPS		Value				
Master			1.042	Master			0.1064				
	0.8000 (Minimum)	1.050 (Nominal)	1.300 (Maximum)		-1.000 (Minimum)	0 (Nominal)	1.000 (Maximum)				
Phase	Near 1 tube 1 gain		Value	Phase	Near 1 tube 1 offset CPS		Value				
Master			0.9812	Master			-40.77				
	0.8000 (Minimum)	1.050 (Nominal)	1.300 (Maximum)		-100.0 (Minimum)	0 (Nominal)	100.0 (Maximum)				
Phase	Near 2 tube 1 gain		Value	Phase	Near 2 tube 1 offset CPS		Value				
Master			0.9674	Master			-32.21				
	0.8000 (Minimum)	1.050 (Nominal)	1.300 (Maximum)		-100.0 (Minimum)	0 (Nominal)	100.0 (Maximum)				



Master: 4-Jan-2005 21:40		
6.75-in. Azimuthal Density Neutron Calibration		
Neutron: Water Block Check		
Phase	Far Neutron water porosity PU	Value
Master		103.2
	90.00 (Minimum) 100.0 (Nominal) 125.0 (Maximum)	

6.75-in. Resistivity At-the-Bit / Equipment Identification		
Primary Equipment:		
Tool Name and Serial Number	RAB6 - CA	191
Calibration Status	Valid	

Master: 28-Jan-2005 18:29								
6.75-in. Resistivity At-the-Bit Calibration								
Resistivity: Fixture								
Phase	Ring/T1 factor	Value	Phase	Ring/T2 factor	Value	Phase	M0/T1 factor	Value
Master		0.9967	Master		0.9942	Master		1.007
	0.9750 (Minimum) 1.000 (Nominal) 1.025 (Maximum)			0.9750 (Minimum) 1.000 (Nominal) 1.025 (Maximum)			0.9750 (Minimum) 1.000 (Nominal) 1.025 (Maximum)	
Phase	M0/T2 factor	Value	Phase	M2/T1 factor	Value	Phase	M2/T2 factor	Value
Master		1.004	Master		1.007	Master		1.004
	0.9750 (Minimum) 1.000 (Nominal) 1.025 (Maximum)			0.9750 (Minimum) 1.000 (Nominal) 1.025 (Maximum)			0.9750 (Minimum) 1.000 (Nominal) 1.025 (Maximum)	
Phase	BTN shallow/T1 factor	Value	Phase	BTN shallow/T2 factor	Value	Phase	BTN medium/T1 factor	Value
Master		1.003	Master		0.9999	Master		0.9950
	0.9750 (Minimum) 1.000 (Nominal) 1.025 (Maximum)			0.9750 (Minimum) 1.000 (Nominal) 1.025 (Maximum)			0.9750 (Minimum) 1.000 (Nominal) 1.025 (Maximum)	
Phase	BTN medium/T2 factor	Value	Phase	BTN deep/T1 factor	Value	Phase	BTN deep/T2 factor	Value
Master		0.9919	Master		1.012	Master		1.009
	0.9750 (Minimum) 1.000 (Nominal) 1.025 (Maximum)			0.9750 (Minimum) 1.000 (Nominal) 1.025 (Maximum)			0.9750 (Minimum) 1.000 (Nominal) 1.025 (Maximum)	

Master: 28-Jan-2005 18:29		
6.75-in. Resistivity At-the-Bit Calibration		
Gamma Ray: Blanket		
Phase	Gamma ray factor	Value
Master		0.9256
	0.7500 (Minimum) 1.000 (Nominal) 1.250 (Maximum)	

API number.....  
Engineer..... K.Handley, M.Y.Tan, R.Burns  
Rig:..... ENSCO 102  
STATE:..... Victoria

Last survey date..... 08-Mar-05  
Total accepted surveys.... 65  
MD of first survey..... 344.00 m  
MD of last survey..... 2165.00 m

----- Survey calculation methods-----  
Method for positions..... Minimum curvature  
Method for DLS..... Mason & Taylor

----- Depth reference -----  
Permanent datum..... Mean Sea Level  
Depth reference..... Driller's Depth  
GL above permanent..... -45.70 m  
KB above permanent..... Top Drive  
DF above permanent..... 56.00 m

----- Vertical section origin-----  
Latitude (+N/S-)..... 0.85 m  
Departure (+E/W-)..... 8.53 m

----- Platform reference point-----  
Latitude (+N/S-)..... -304.57 m  
Departure (+E/W-)..... -304.57 m

Azimuth from Vsect Origin to target: 76.22 degrees

----- Geomagnetic data -----  
Magnetic model..... BGGM version 2004  
Magnetic date..... 22-Feb-2005  
Magnetic field strength... 1201.43 HCNT  
Magnetic dec (+E/W-)..... 12.97 degrees  
Magnetic dip..... -68.87 degrees

----- MWD survey Reference Criteria -----  
Reference G..... 1000.03 mGal  
Reference H..... 1201.43 HCNT  
Reference Dip..... -68.87 degrees  
Tolerance of G..... (+/-) 2.50 mGal  
Tolerance of H..... (+/-) 6.00 HCNT  
Tolerance of Dip..... (+/-) 0.45 degrees

----- Corrections -----  
Magnetic dec (+E/W-)..... 12.97 degrees  
Grid convergence (+E/W-).. -0.42 degrees  
Total az corr (+E/W-)..... 13.39 degrees  
(Total az corr = magnetic dec - grid conv)  
Survey Correction Type ...:  
I=Sag Corrected Inclination  
M=Schlumberger Magnetic Correction  
S=Shell Magnetic Correction  
F=Failed Axis Correction  
R=Magnetic Resonance Tool Correction  
D=Dmag Magnetic Correction

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Seq #	Measured depth (m)	Incl angle (deg)	Azimuth angle (deg)	Course length (m)	TVD depth (m)	Vertical section (m)	Displ +N/S- (m)	Displ +E/W- (m)	Total displ (m)	At Azim (deg)	DLS (deg/ D/M)	Srvy tool type	Tool Corr (deg)
1	344.00	0.25	235.37	0.00	343.99	0.73	0.55	9.36	9.38	86.64	0.00	TIP	None
2	351.60	3.14	130.65	7.60	351.59	0.84	0.40	9.50	9.51	87.56	0.42	GYR	None
3	371.56	6.26	115.73	19.96	371.48	2.00	-0.42	10.90	10.91	92.23	0.17	MWD	None
4	400.60	10.44	98.23	29.04	400.21	5.66	-1.49	14.93	15.01	95.69	0.17	GYR	None
5	430.00	13.39	92.42	29.40	428.97	11.40	-2.01	20.97	21.07	95.48	0.11	MWD	None
6	458.41	16.35	82.38	28.41	456.43	18.54	-1.62	28.22	28.27	93.29	0.14	MWD	None
7	487.44	19.21	75.25	29.03	484.08	27.38	0.14	36.90	36.90	89.79	0.12	MWD	None
8	516.58	22.78	75.14	29.14	511.28	37.82	2.80	46.99	47.07	86.58	0.12	MWD	None
9	545.52	27.31	73.86	28.94	537.49	50.06	6.09	58.79	59.10	84.09	0.16	MWD	None
10	574.63	31.33	72.34	29.11	562.87	64.29	10.24	72.42	73.14	81.95	0.14	MWD	None
11	603.86	34.81	75.42	29.23	587.36	80.22	14.65	87.74	88.95	80.52	0.13	MWD	None
12	632.38	38.27	75.46	28.52	610.27	97.19	18.92	104.17	105.88	79.71	0.12	MWD	None
13	661.80	41.30	75.07	29.42	632.87	116.01	23.71	122.38	124.65	79.04	0.10	MWD	None
14	691.10	45.16	74.90	29.30	654.22	136.07	28.91	141.76	144.67	78.47	0.13	MWD	None
15	719.99	48.91	74.32	28.89	673.90	157.20	34.52	162.13	165.77	77.98	0.13	MWD	None
16	749.12	52.83	74.48	29.13	692.28	179.78	40.59	183.89	188.32	77.55	0.13	MWD	None
17	778.33	56.53	75.07	29.21	709.17	203.61	46.85	206.89	212.13	77.24	0.13	MWD	None
18	806.73	58.42	75.06	28.40	724.44	227.54	53.02	230.02	236.05	77.02	0.07	MWD	None
19	826.51	60.05	75.43	19.78	734.56	244.54	57.35	246.46	253.04	76.90	0.08	MWD	None
20	857.08	60.11	75.02	30.57	749.80	271.03	64.11	272.08	279.53	76.74	0.01	MWD	None
21	885.76	61.34	74.96	28.68	763.83	296.04	70.58	296.24	304.53	76.60	0.04	MWD	None
22	914.88	60.95	74.82	29.12	777.88	321.54	77.23	320.86	330.03	76.47	0.01	MWD	None
23	943.53	60.68	75.21	28.65	791.85	346.55	83.70	345.03	355.03	76.36	0.02	MWD	None
24	972.56	59.77	76.43	29.03	806.27	371.74	89.87	369.45	380.23	76.33	0.05	MWD	None
25	1001.50	59.54	77.10	28.94	820.89	396.72	95.59	393.77	405.20	76.35	0.02	MWD	None
26	1030.64	59.11	76.93	29.14	835.76	421.78	101.22	418.19	430.26	76.39	0.02	MWD	None
27	1059.78	57.85	76.77	29.14	850.99	446.61	106.87	442.38	455.10	76.42	0.04	MWD	None
28	1089.10	58.34	76.70	29.32	866.49	471.50	112.59	466.60	479.99	76.43	0.02	MWD	None
29	1118.03	59.62	78.08	28.93	881.39	496.29	118.00	490.80	504.78	76.48	0.06	MWD	None
30	1147.18	61.65	77.56	29.15	895.69	521.68	123.36	515.63	530.18	76.55	0.07	MWD	None

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Seq #	Measured depth (m)	Incl angle (deg)	Azimuth angle (deg)	Course length (m)	TVD depth (m)	Vertical section (m)	Displ +N/S- (m)	Displ +E/W- (m)	Total displ (m)	At Azim (deg)	DLS (deg/ D/M)	Srvy tool type	Tool Corr (deg)
31	1176.44	62.74	77.42	29.26	909.34	547.56	128.96	540.89	556.06	76.59	0.04	MWD	None
32	1205.78	63.29	77.18	29.34	922.65	573.70	134.71	566.40	582.20	76.62	0.02	MWD	None
33	1234.53	63.22	77.02	28.75	935.59	599.37	140.44	591.43	607.87	76.64	0.01	MWD	None
34	1263.41	63.32	74.80	28.88	948.58	625.16	146.72	616.44	633.66	76.61	0.07	MWD	None
35	1292.28	62.74	73.74	28.87	961.67	650.88	153.70	641.21	659.37	76.52	0.04	MWD	None
36	1321.68	61.29	72.83	29.40	975.47	676.80	161.16	666.07	685.29	76.40	0.06	MWD	None
37	1350.51	60.59	72.52	28.83	989.47	701.95	168.67	690.13	710.44	76.27	0.03	MWD	None
38	1379.66	60.36	72.02	29.15	1003.84	727.26	176.39	714.29	735.75	76.13	0.02	MWD	None

39	1408.57	60.11	72.24	28.91	1018.19	752.29	184.09	738.18	760.78	76.00	0.01	MWD	None
40	1437.70	60.53	73.72	29.13	1032.61	777.56	191.50	762.37	786.06	75.90	0.05	MWD	None
41	1466.67	60.32	73.21	28.97	1046.91	802.72	198.67	786.53	811.23	75.82	0.02	MWD	None
42	1494.99	59.98	74.68	28.32	1061.01	827.27	205.46	810.13	835.78	75.77	0.05	MWD	None
43	1524.16	60.08	76.01	29.17	1075.58	852.53	211.85	834.58	861.05	75.76	0.04	MWD	None
44	1553.56	60.34	75.95	29.40	1090.19	878.05	218.04	859.33	886.56	75.76	0.01	MWD	None
45	1582.31	59.93	76.35	28.75	1104.50	902.98	224.00	883.54	911.49	75.77	0.02	MWD	None
46	1611.11	60.27	75.83	28.80	1118.86	927.95	230.01	907.77	936.46	75.78	0.02	MWD	None
47	1640.37	60.83	76.43	29.26	1133.25	953.42	236.11	932.51	961.94	75.79	0.03	MWD	None
48	1669.37	61.92	76.44	29.00	1147.14	978.88	242.08	957.25	987.39	75.81	0.04	MWD	None
49	1697.95	61.74	77.55	28.58	1160.63	1004.07	247.75	981.80	1012.58	75.84	0.03	MWD	None
50	1727.34	61.10	76.95	29.39	1174.69	1029.88	253.45	1006.98	1038.38	75.87	0.03	MWD	None
51	1756.52	60.74	76.03	29.18	1188.87	1055.38	259.41	1031.77	1063.88	75.89	0.03	MWD	None
52	1785.84	61.68	75.81	29.32	1202.99	1081.07	265.66	1056.69	1089.58	75.89	0.03	MWD	None
53	1814.73	60.60	74.63	28.89	1216.94	1106.37	272.11	1081.16	1114.88	75.87	0.05	MWD	None
54	1843.93	59.17	75.44	29.20	1231.59	1131.62	278.63	1105.56	1140.13	75.85	0.05	MWD	None
55	1873.01	60.22	75.24	29.08	1246.26	1156.72	284.99	1129.85	1165.24	75.84	0.04	MWD	None
56	1901.51	60.30	75.12	28.50	1260.40	1181.47	291.32	1153.77	1189.98	75.83	0.00	MWD	None
57	1930.45	57.71	75.01	28.94	1275.30	1206.27	297.71	1177.74	1214.78	75.81	0.09	MWD	None
58	1959.57	61.45	74.05	29.12	1290.04	1231.36	304.41	1201.93	1239.88	75.79	0.13	MWD	None
59	1988.76	61.26	74.58	29.19	1304.04	1256.96	311.34	1226.60	1265.49	75.76	0.02	MWD	None
60	2016.21	59.94	74.18	27.45	1317.51	1280.87	317.78	1249.63	1289.40	75.73	0.05	MWD	None

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SCHLUMBERGER Survey Report

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Seq #	Measured depth (m)	Incl angle (deg)	Azimuth angle (deg)	Course length (m)	TVD depth (m)	Vertical section (m)	Displ +N/S- (m)	Displ +E/W- (m)	Total displ (m)	At Azim (deg)	DLS (deg/ D/M	Srvy tool type	Tool Corr (deg)
61	2047.03	60.93	73.76	30.82	1332.72	1307.65	325.18	1275.39	1316.19	75.70	0.03	MWD	None
62	2075.72	59.49	73.40	28.69	1346.97	1332.52	332.22	1299.28	1341.08	75.66	0.05	MWD	None
63	2104.69	60.28	74.27	28.97	1361.51	1357.56	339.19	1323.34	1366.12	75.62	0.04	MWD	None
64	2133.61	61.55	74.59	28.92	1375.57	1382.82	345.98	1347.69	1391.39	75.60	0.04	MWD	None
65	2165.00	62.93	74.93	31.39	1390.19	1410.59	353.28	1374.49	1419.16	75.59	0.04	Projection to TD	

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Company: **ESSO Australia Pty. Ltd.**

**Schlumberger**

Well: **BTA-A4A-ST**

Field: **Barracouta**

Rig: **ENSCO 102**

**8.5 in. Section**

State: **Victoria**

**GeoVISION Resistivity  
1:500 Measured Depth  
Recorded Mode Log**

