

Bit Run Summary										
Run number		2	3							
Bit size	in.	8.5	8.5							
Bit start depth	m	851.0	1570.0							
Bit end depth	m	2108.0	1625.0							
Top interval logged	m	848.0	1562.3							
Bottom interval logged	m	2090.7	1602.6							
Begin log: time		11:40	20:15							
Begin log: date		01-Mar-05	04-Mar-05							
End log: time		02:30	22:30							
End log: date		04-Mar-05	04-Mar-05							
Mud data										
Depth	m	2084	2084							

Type		KCL/PHPA/Glycol	KCL/PHPA/Glycol								
Mud weight	ppg	10.0	10.0								
Solids	%	7.1	7.1								
Chlorides	mg/L	31000	31000								
Rm	ohm.m@°C	0.14@24.1	0.14@24.1								
Rmf	ohm.m@°C	0.12@23.5	0.12@23.5								
Rmc	ohm.m@°C	0.23@24.5	0.23@24.5								
Potassium	%	6.0	6.0								
Environmental data											
GR											
Mud weight	ppg	10.0	10.0								
Bit size	in.	8.5	8.5								
Resistivity											
Neutron porosity											
Hole Size	in.	8.5	8.5								
Mud weight	ppg	10.0	10.0								
Temperature	°C	70.6	70.6								
Mud salinity	ppm	45746	45746								
Formation salinity											
Recording rate 1	SEC	10 sec.	10 sec.								
Recording rate 2	SEC	10 sec.	10 sec.								
Filtering GR		3 pt.	3 pt.								
Filtering density		3 pt.	3 pt.								
Filtering Neutron		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 RUN
REMARKS: RUN NUMBER 2 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.	REMARKS: RUN NUMBER 3 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.	REMARKS: RUN NUMBER

sliding intervals.

PEF readings were affected by the presence of Barite in the mud system.

Data density compromised at high ROP.

POOH due to drill plug.

Barite in the mud system.

POOH to change BHA.

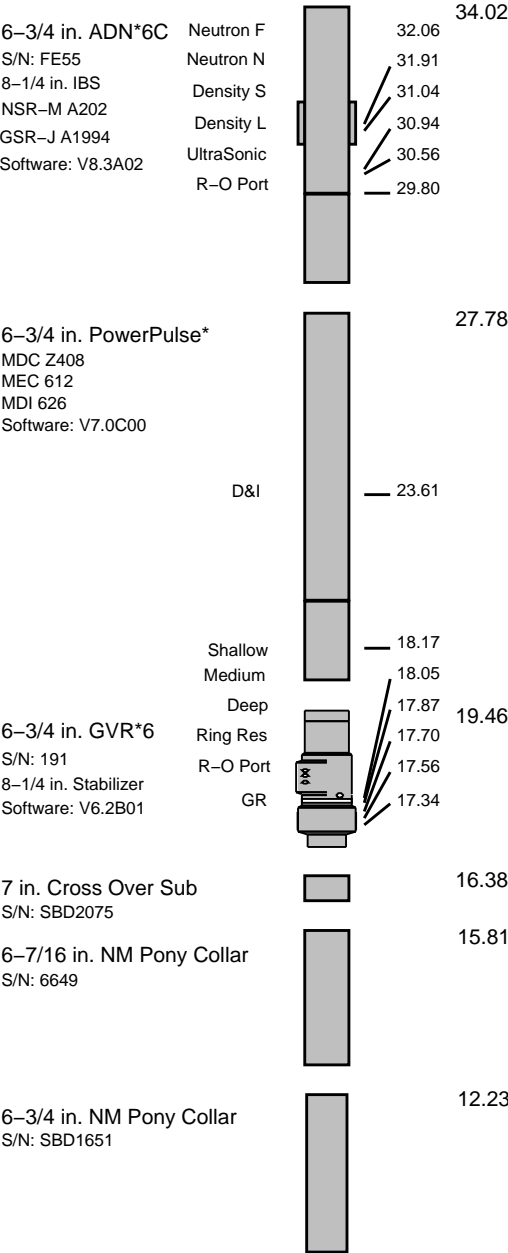
EQUIPMENT DESCRIPTION

RUN2

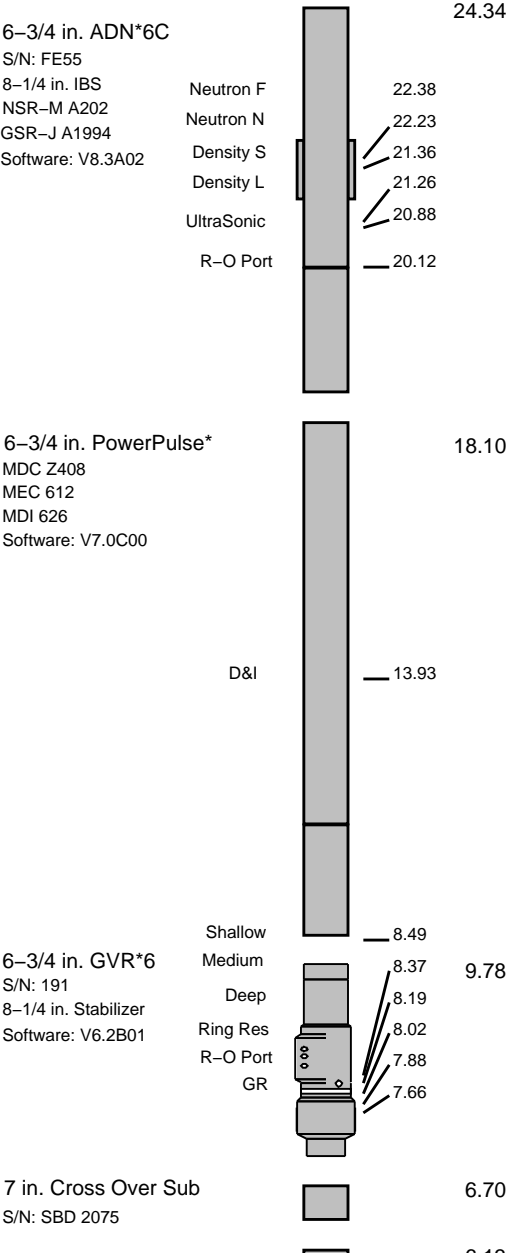
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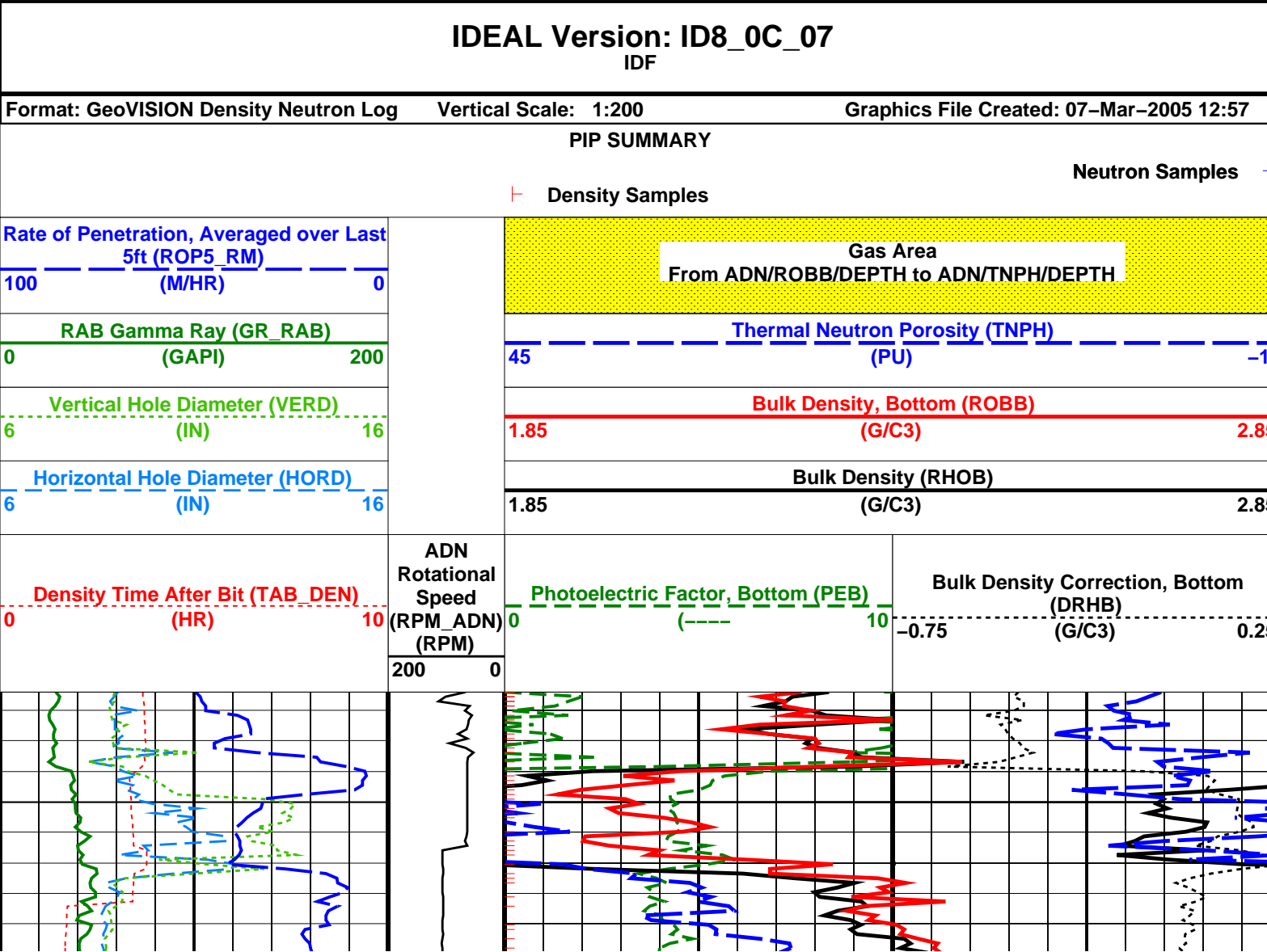
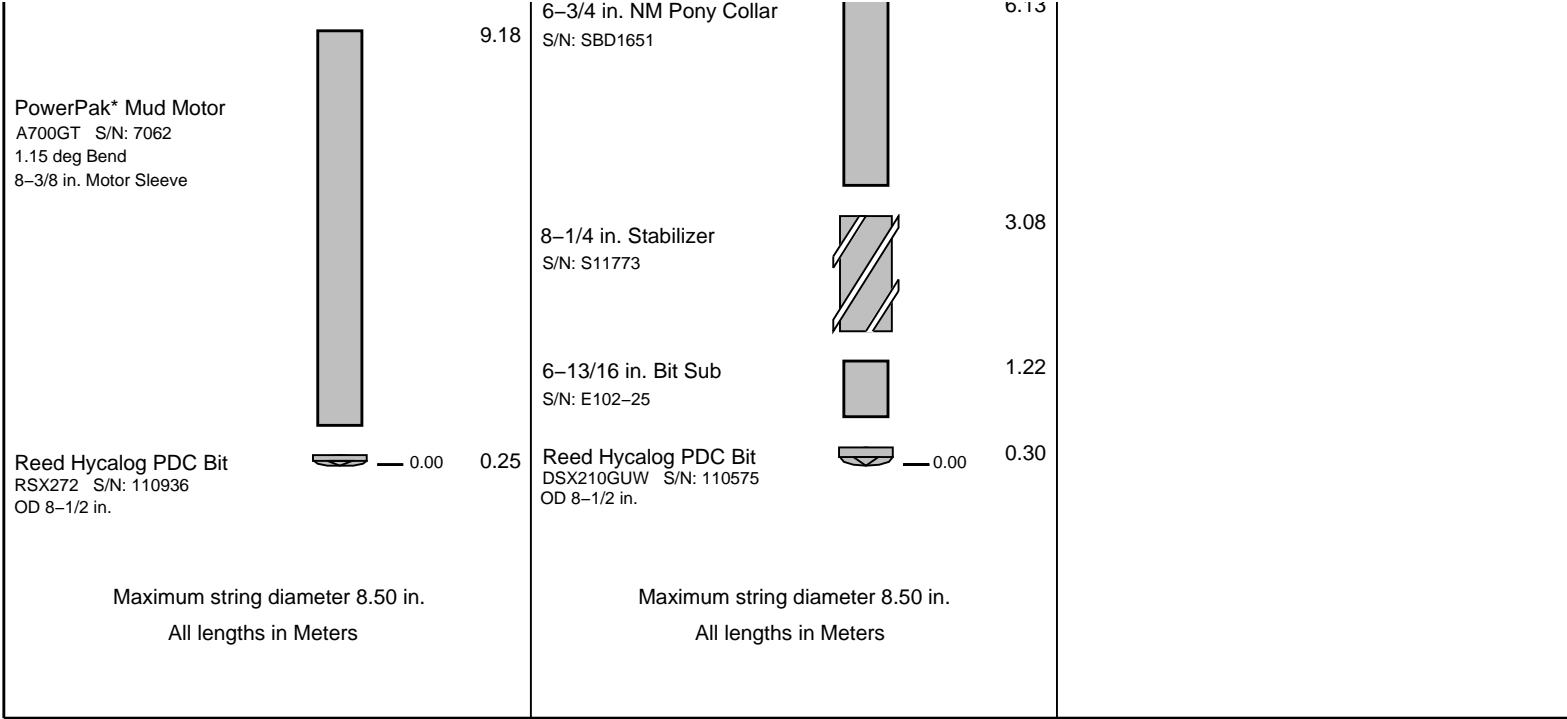
RUN

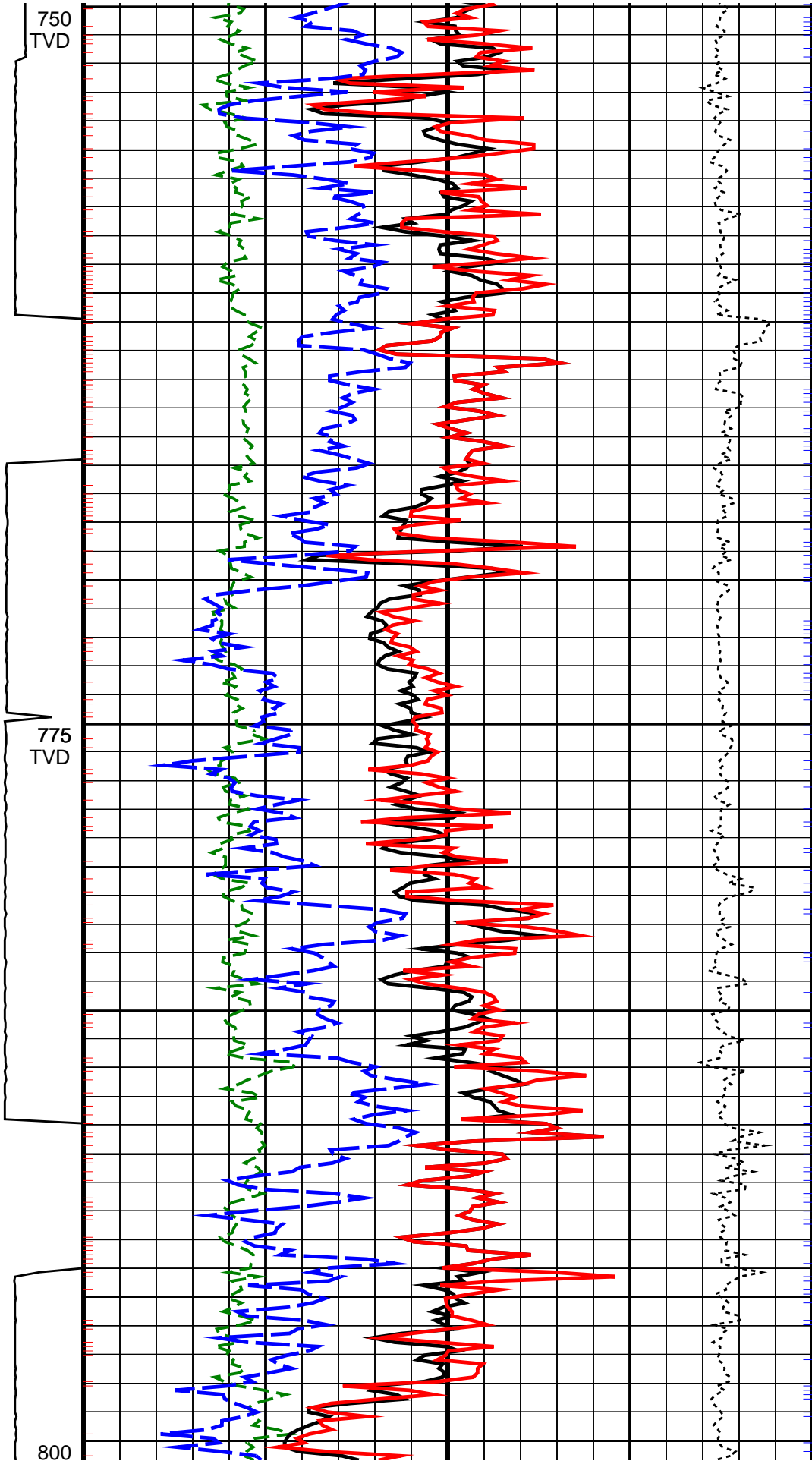
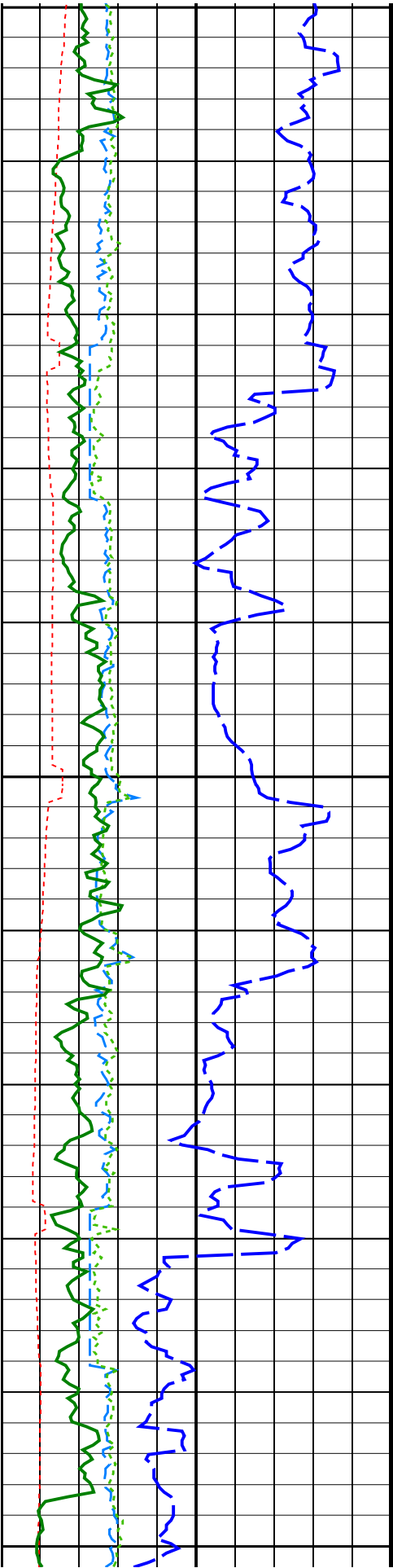
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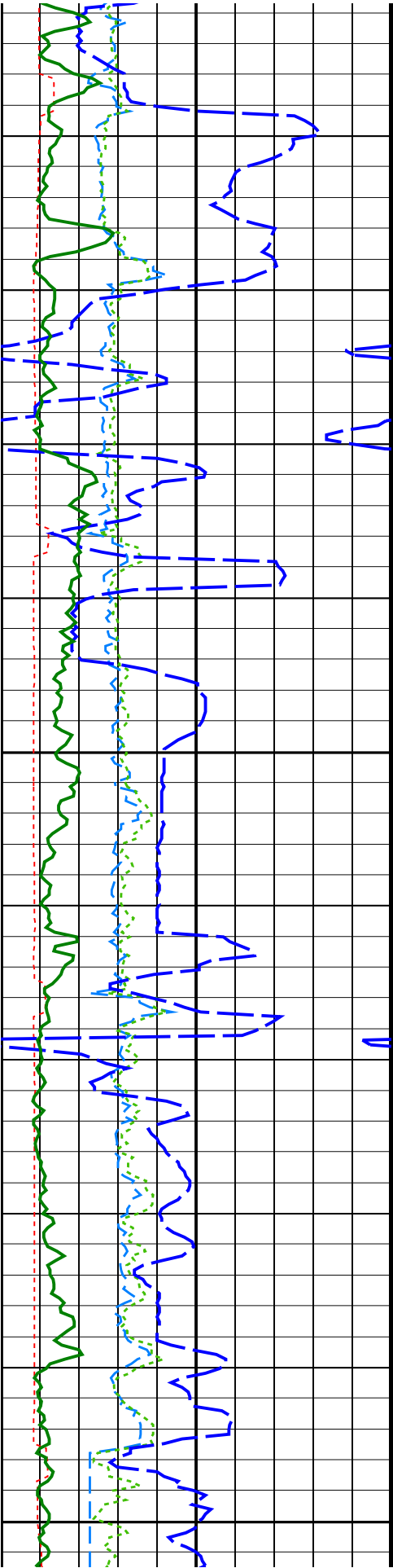


DOWNHOLE EQUIPMENT





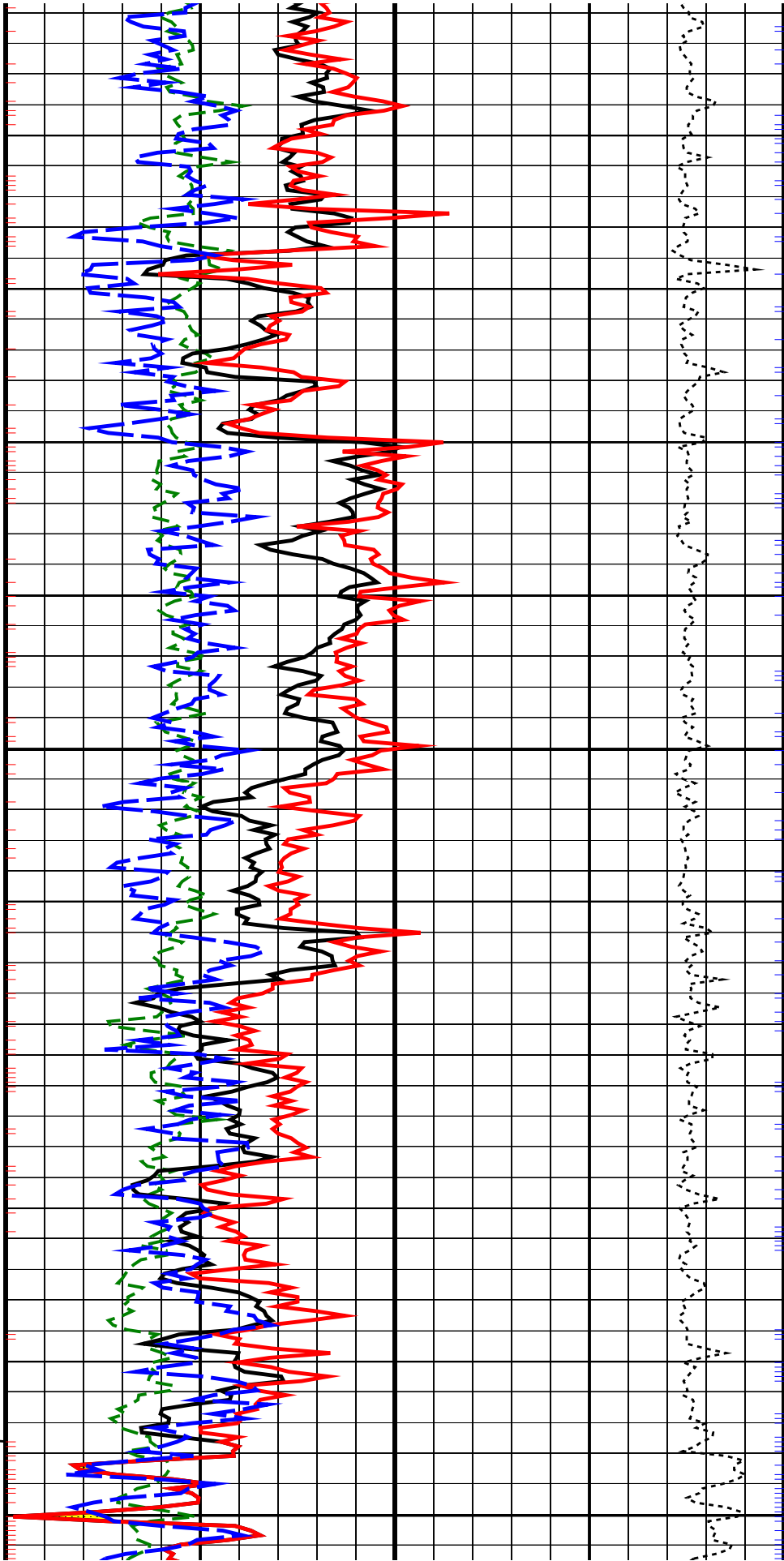


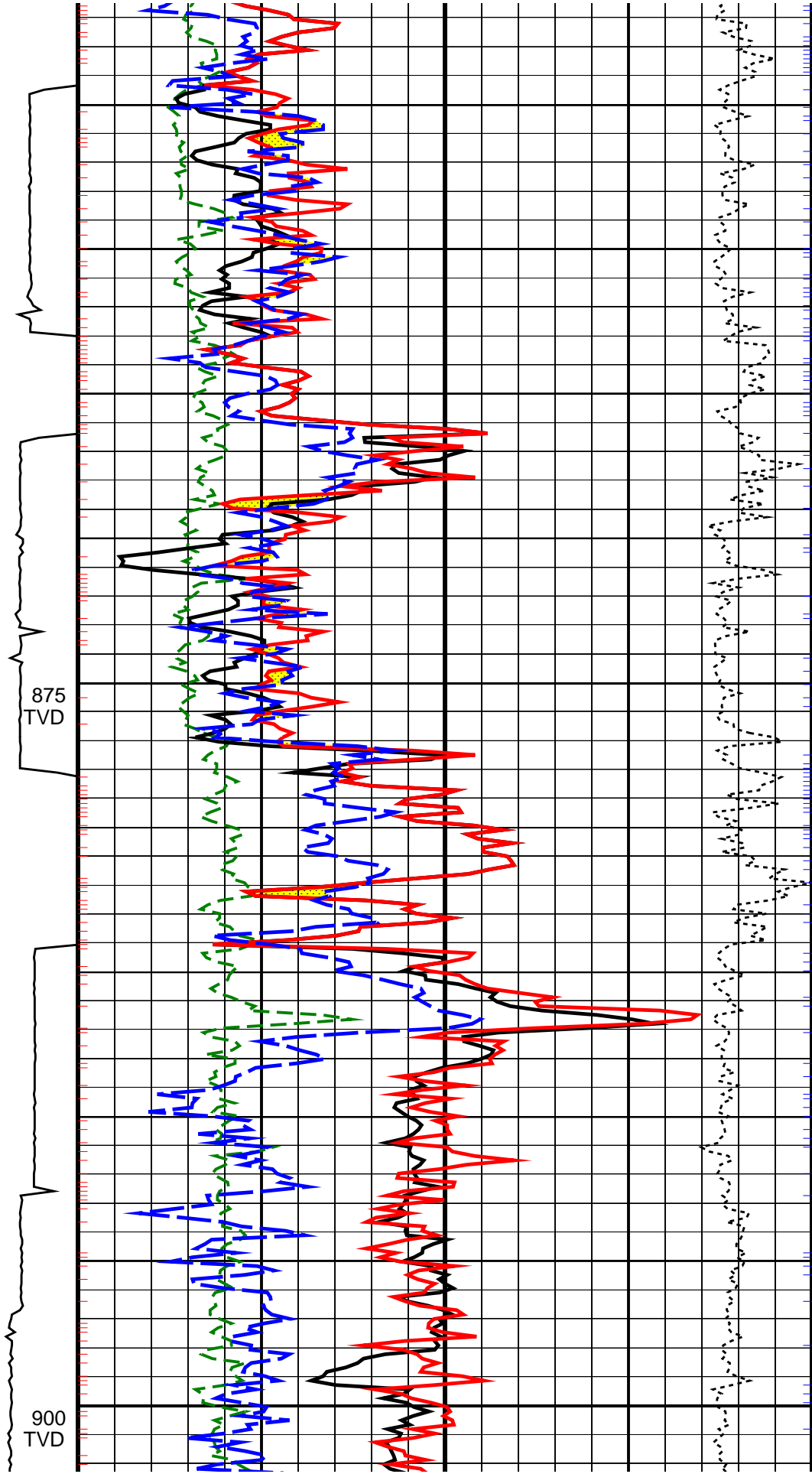
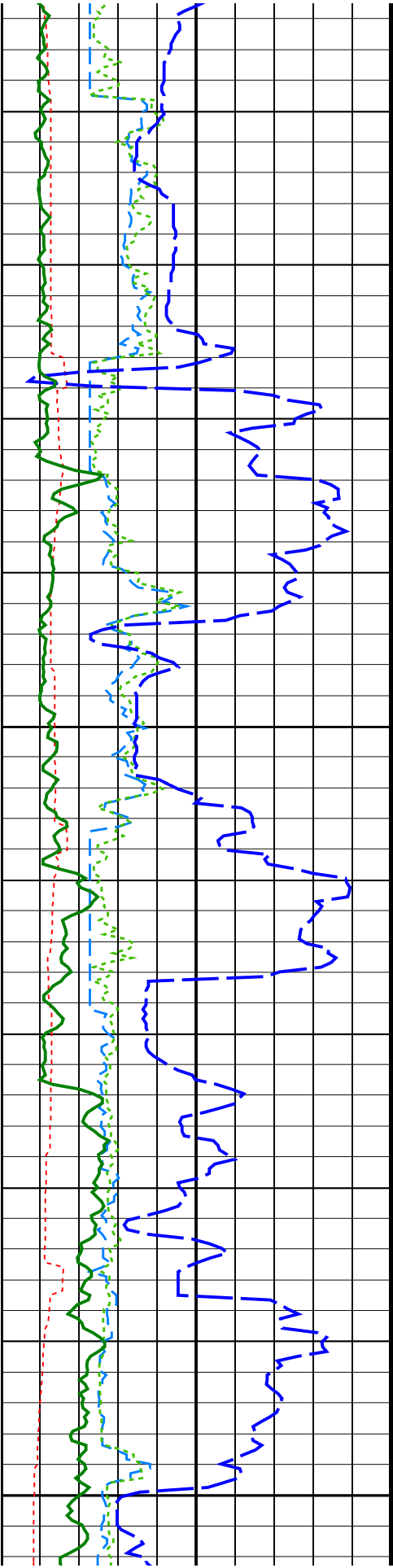


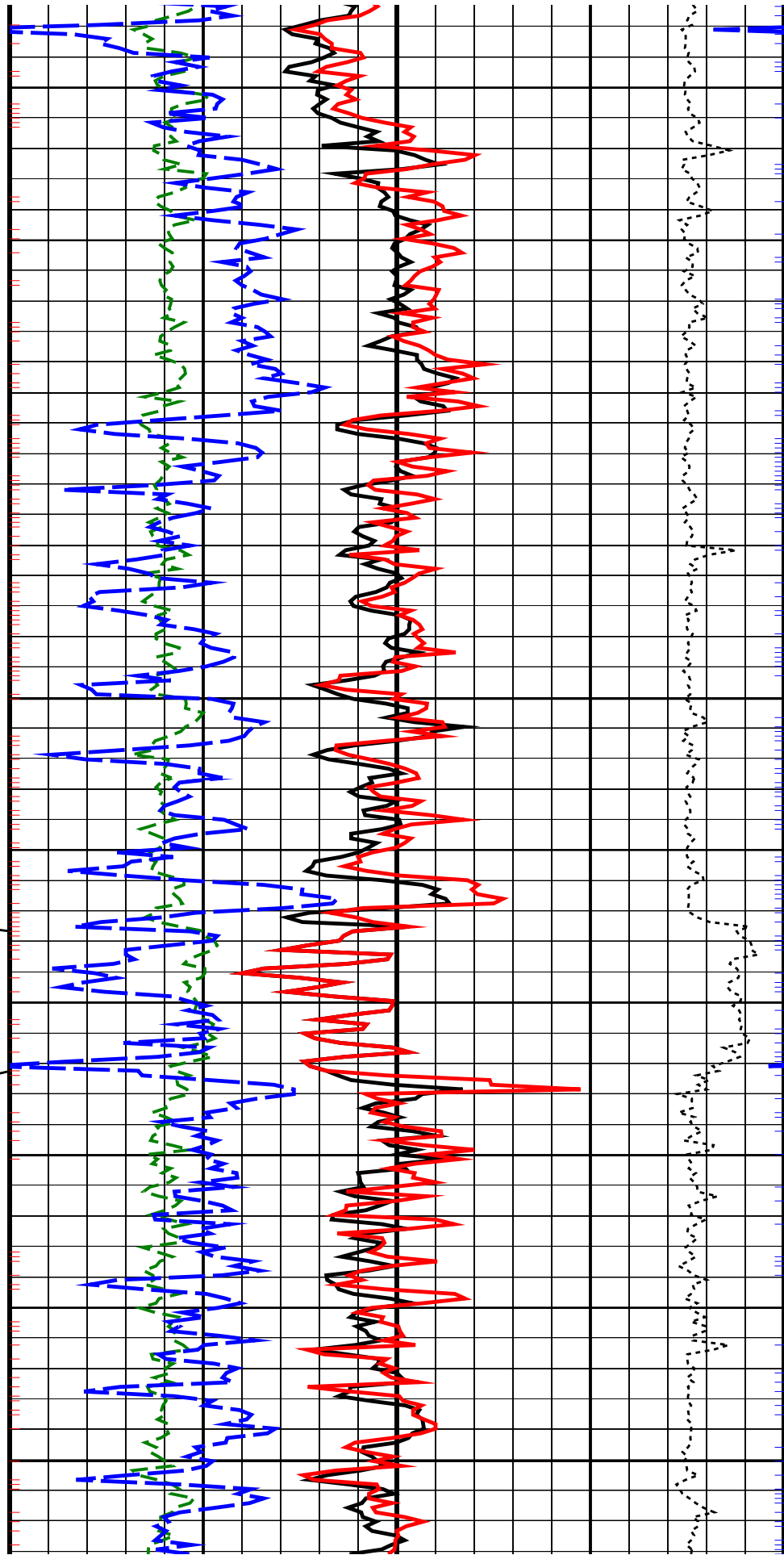
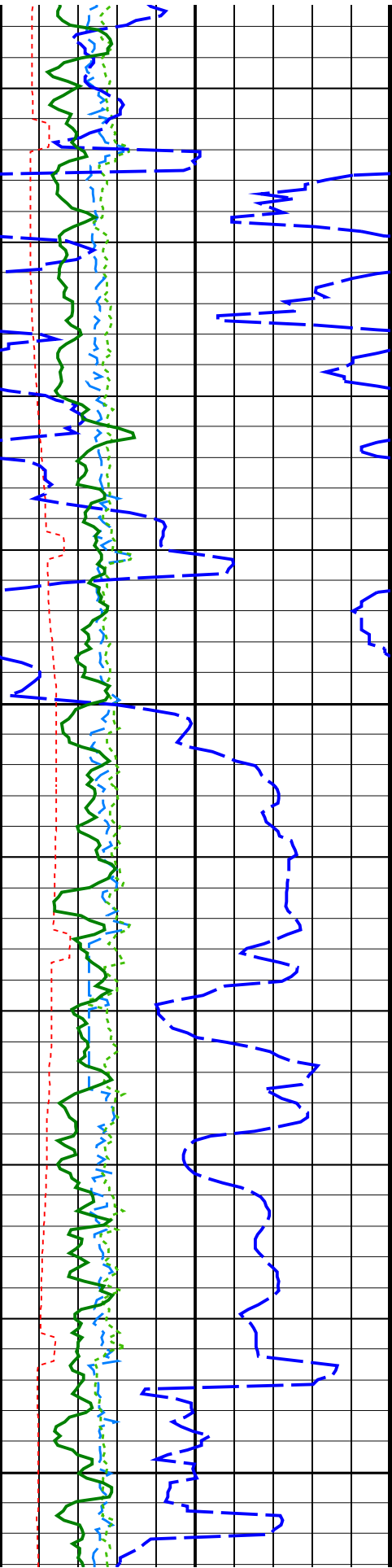
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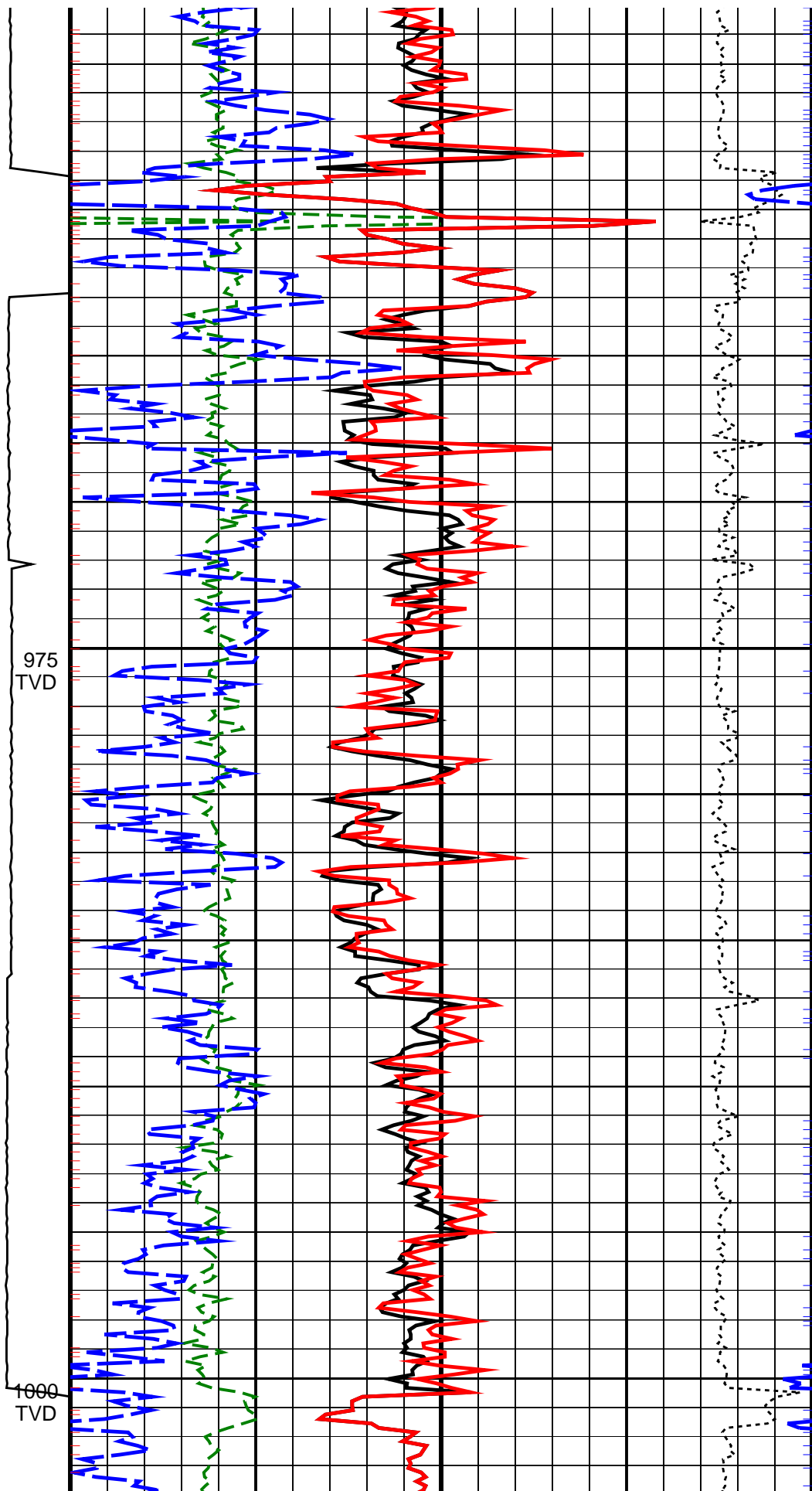
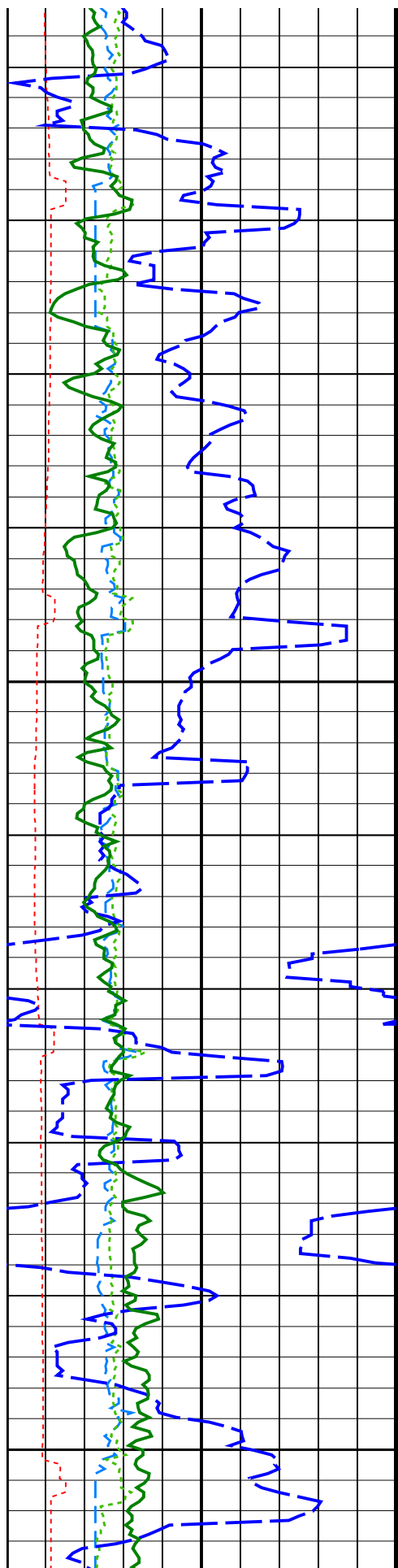
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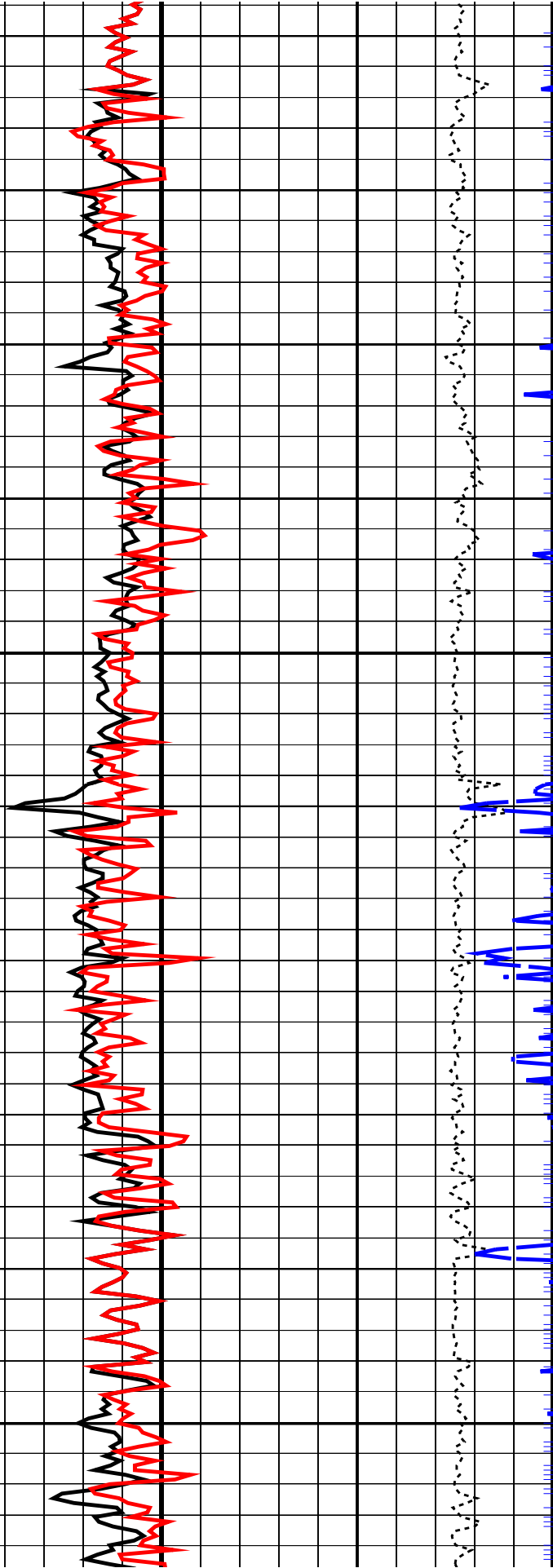
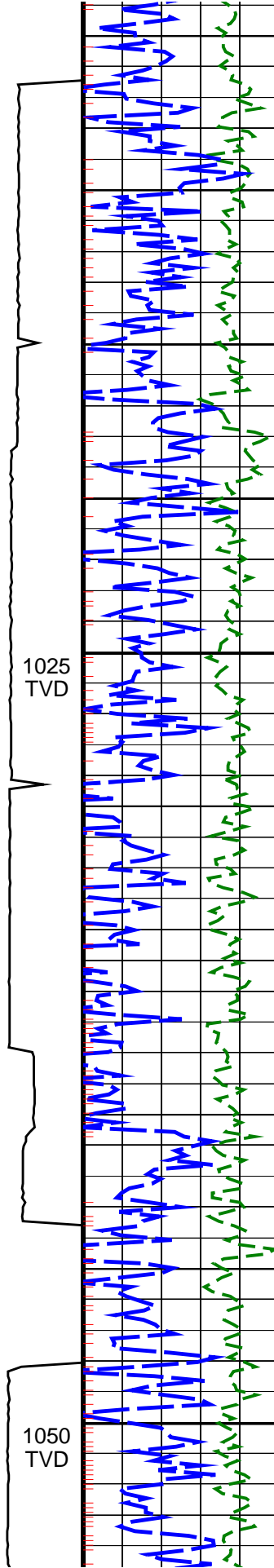
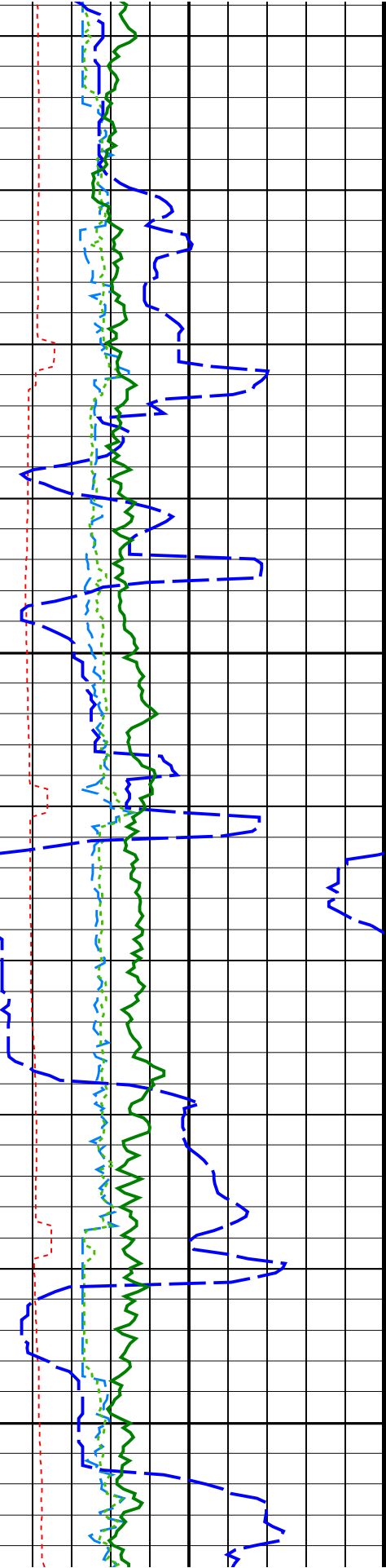
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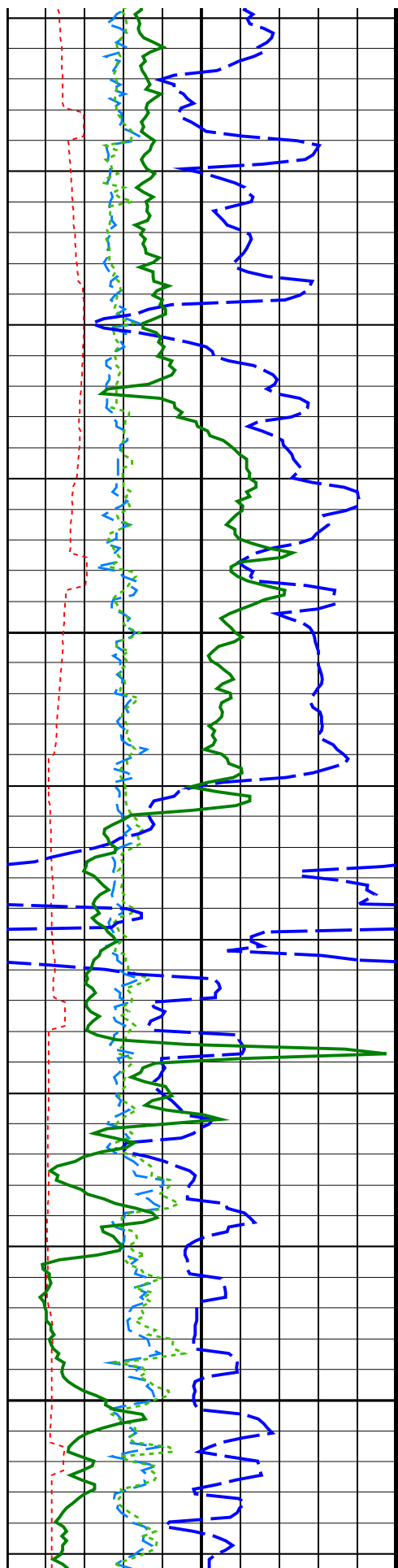






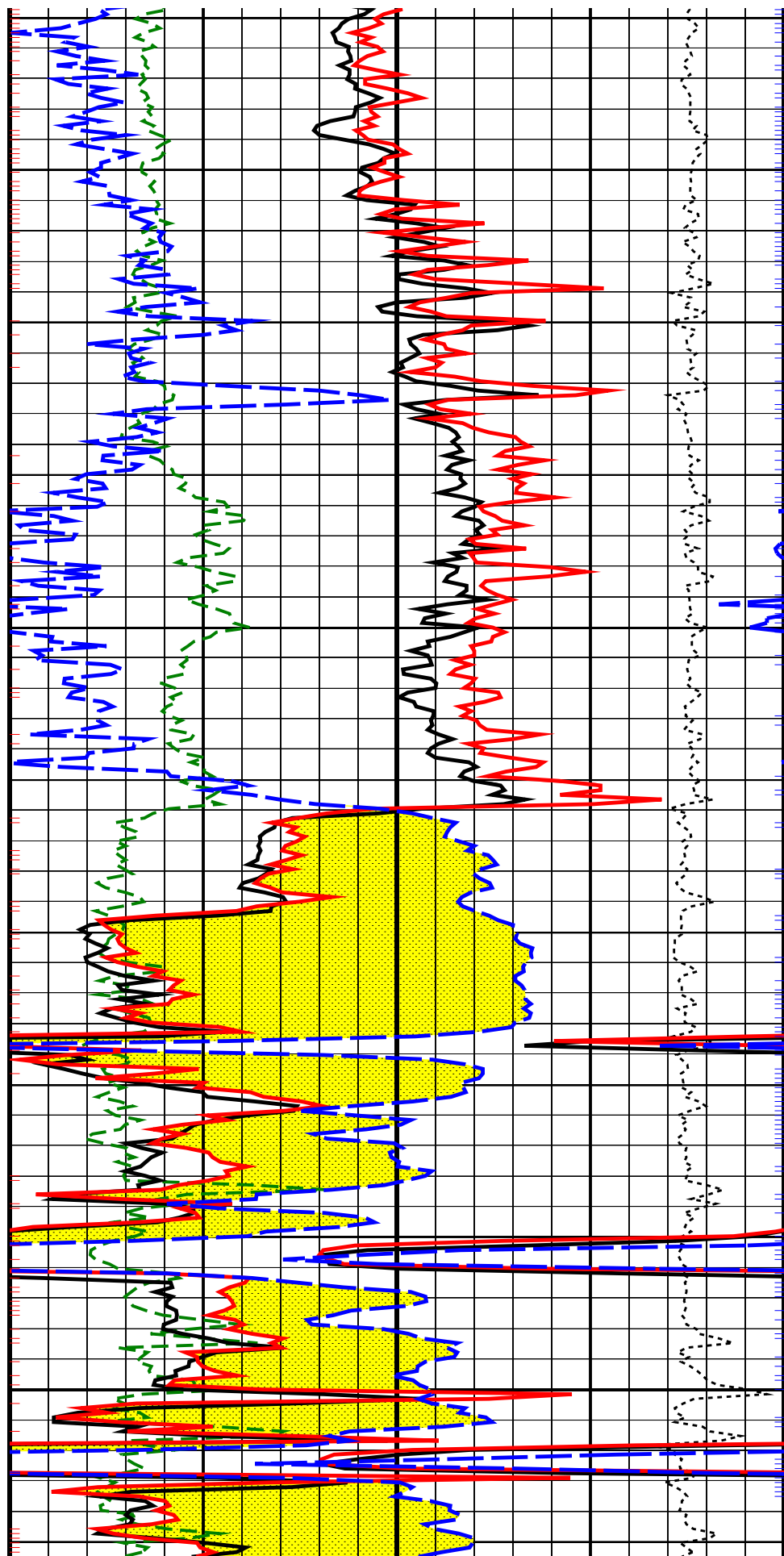
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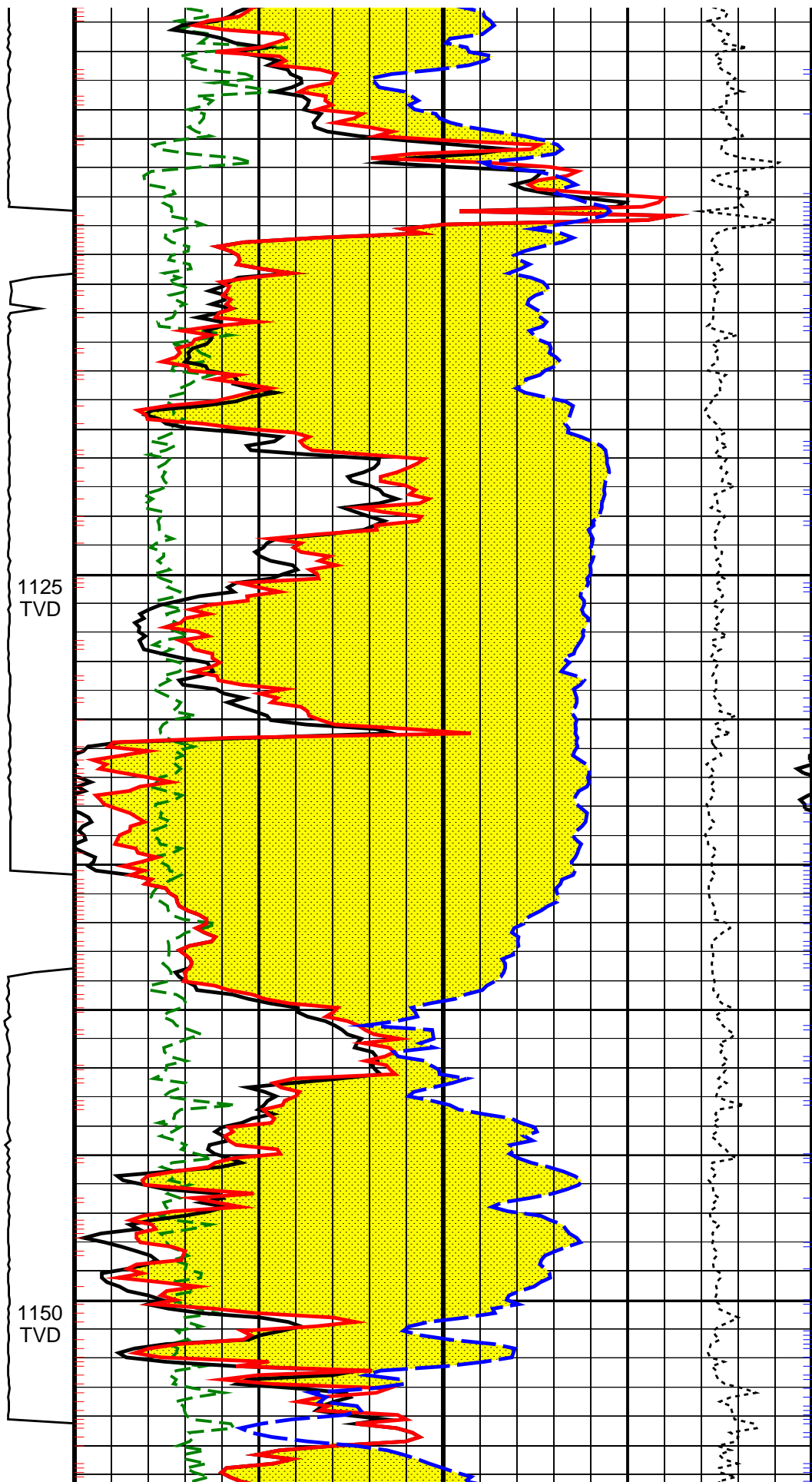
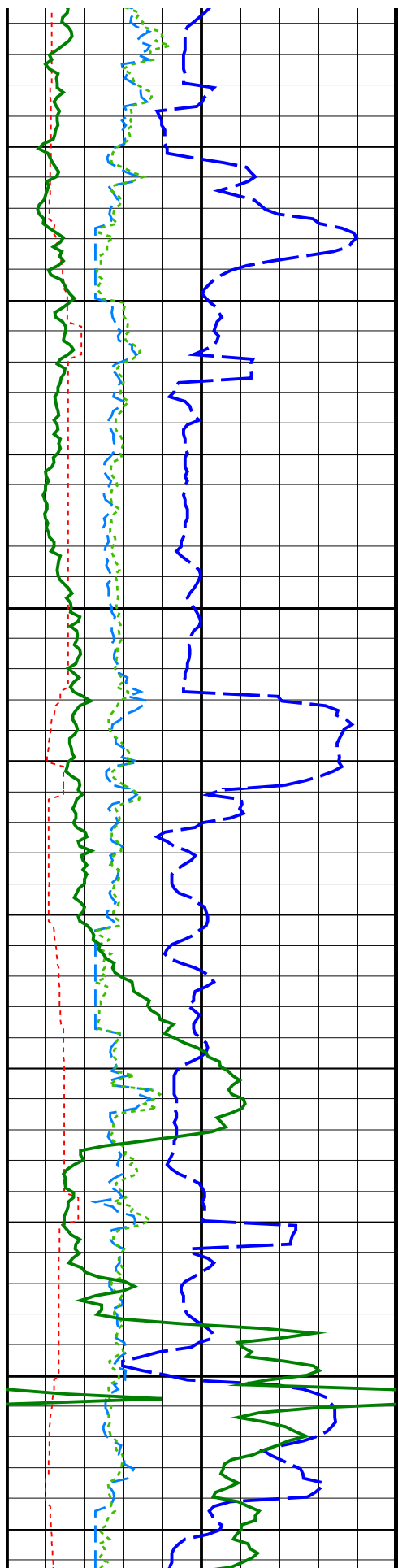
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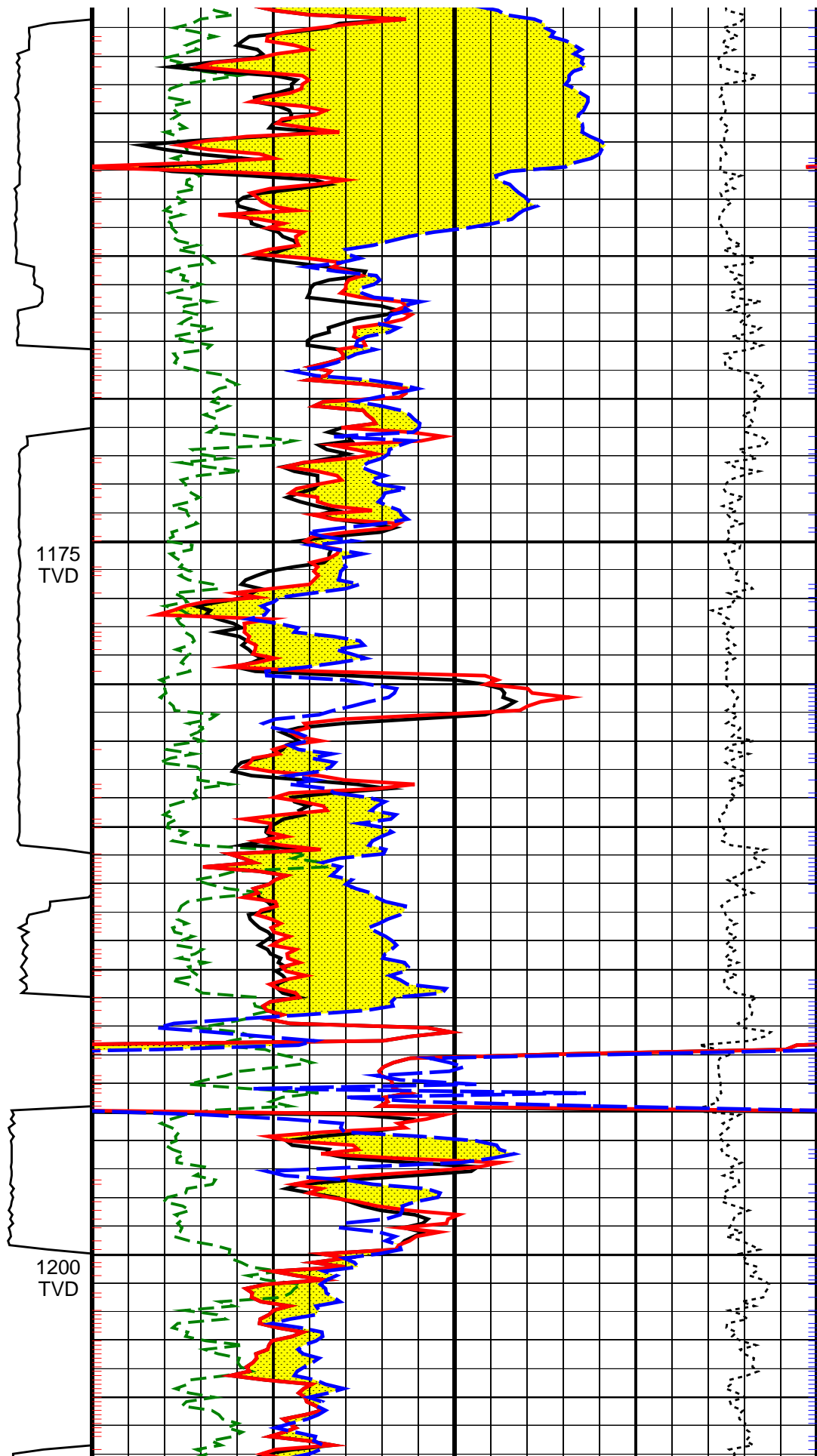
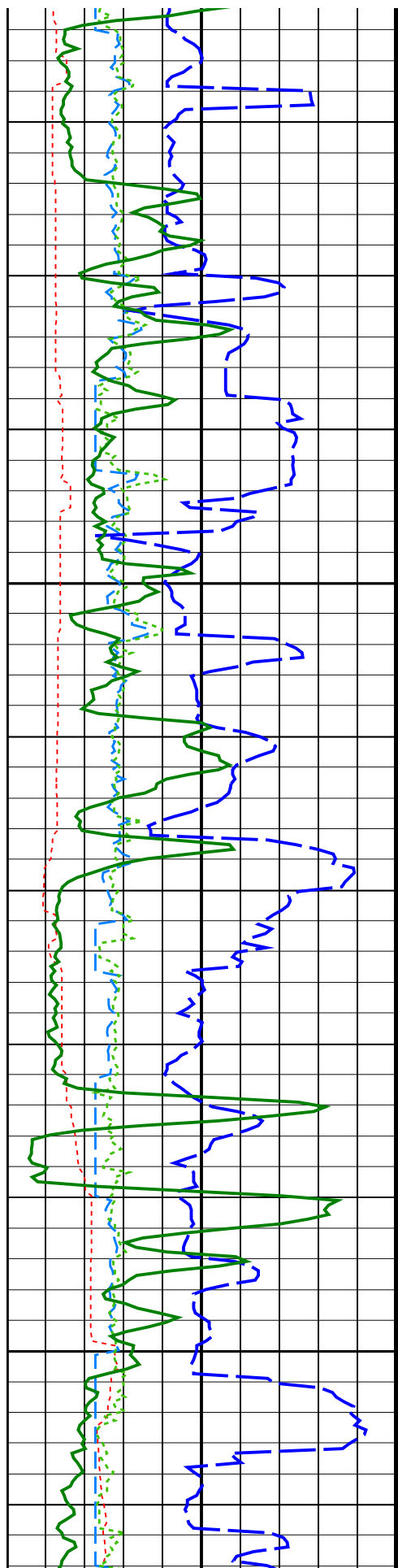


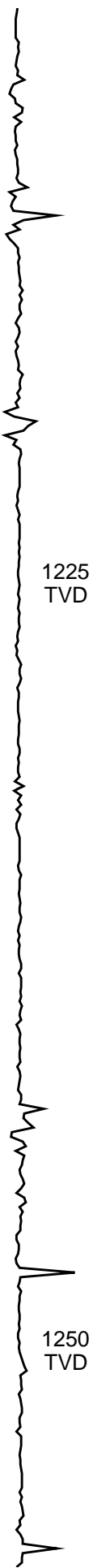
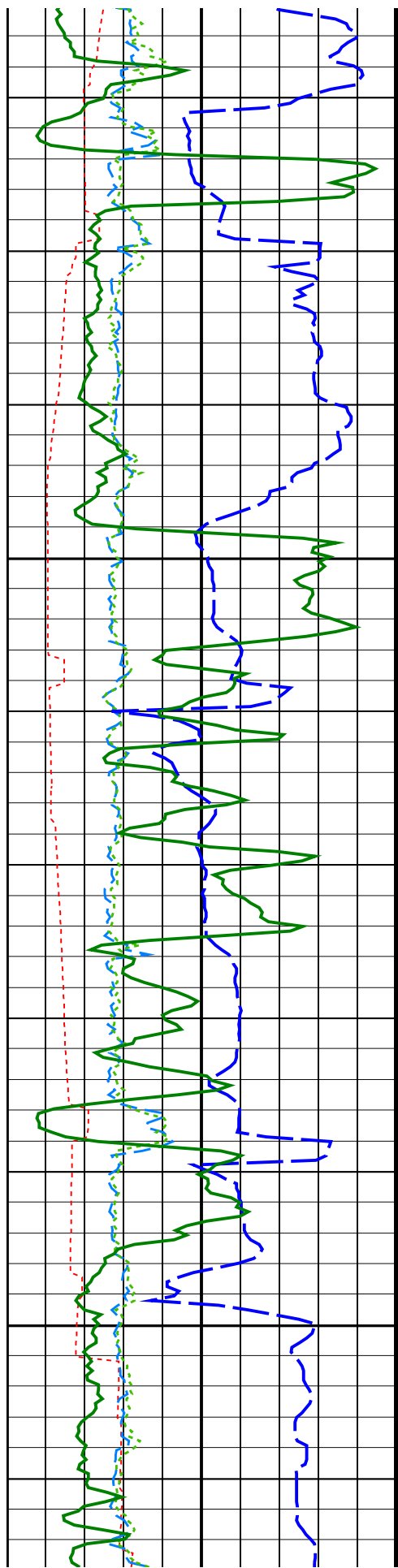
1075
TVD

1100
TVD



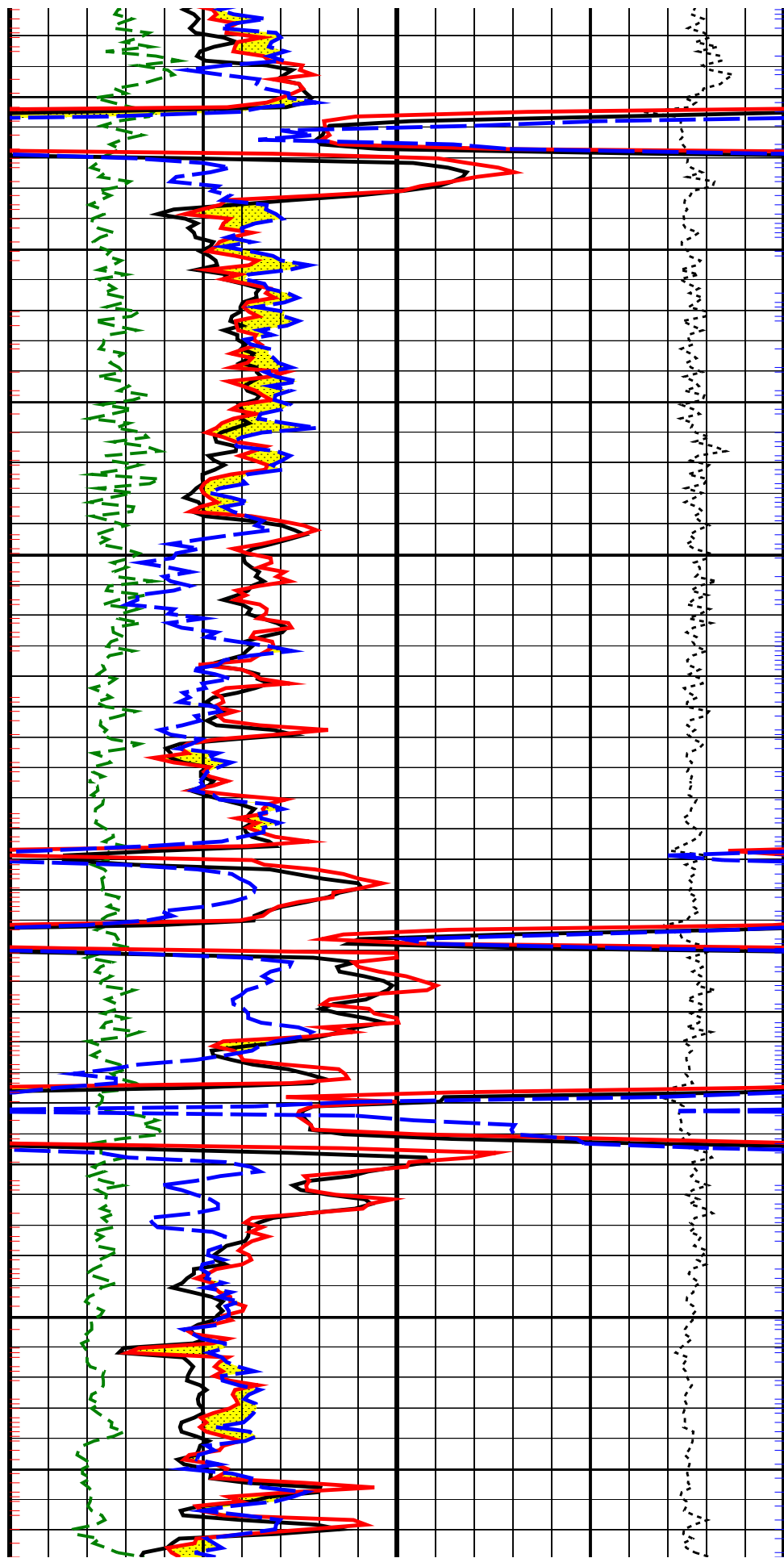


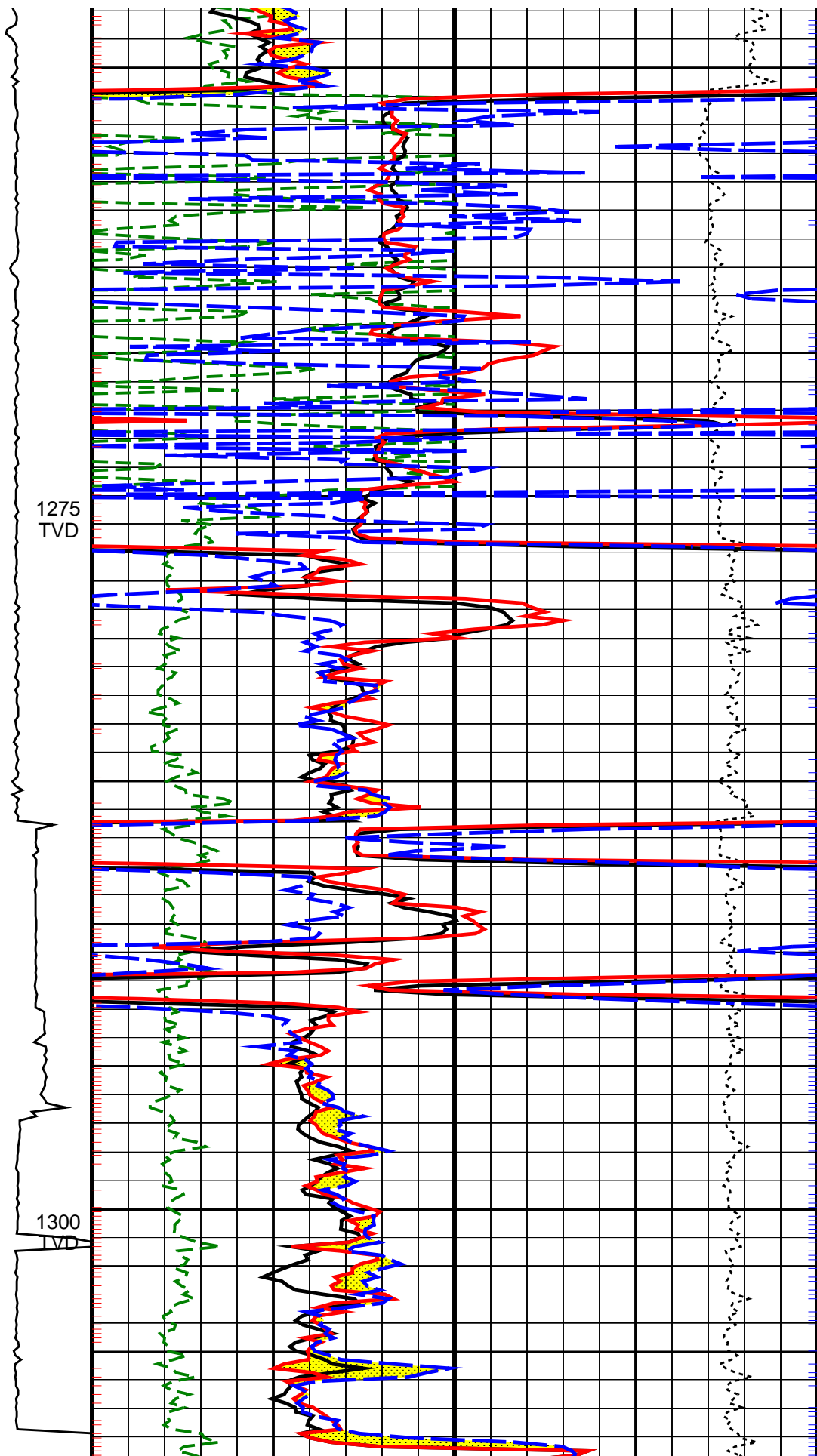
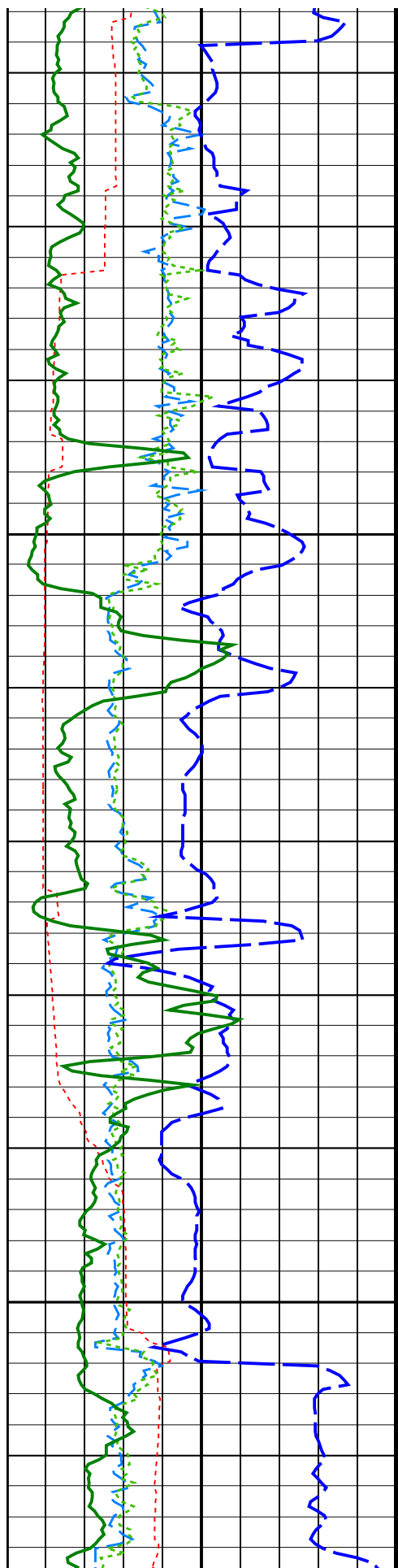


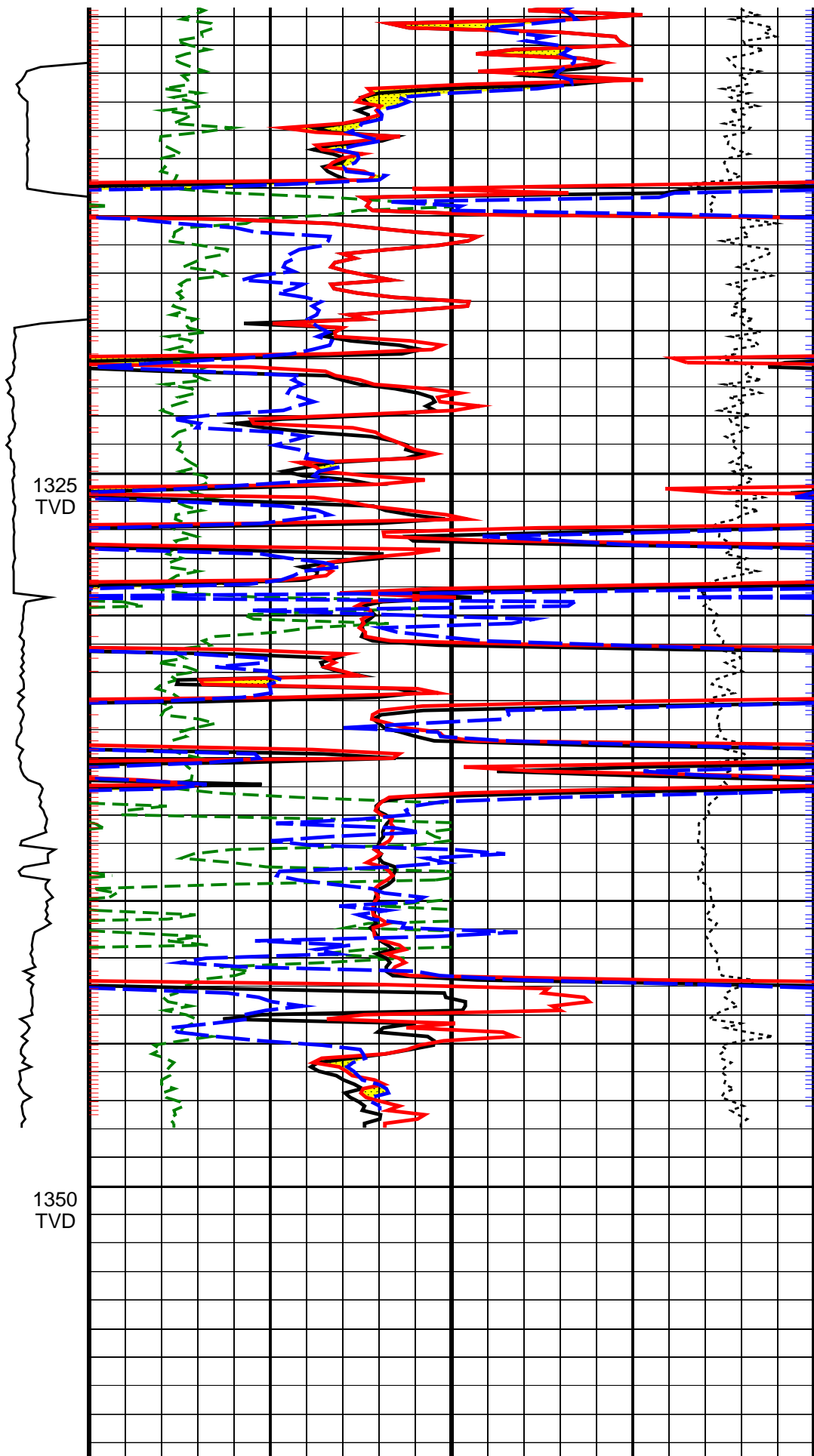
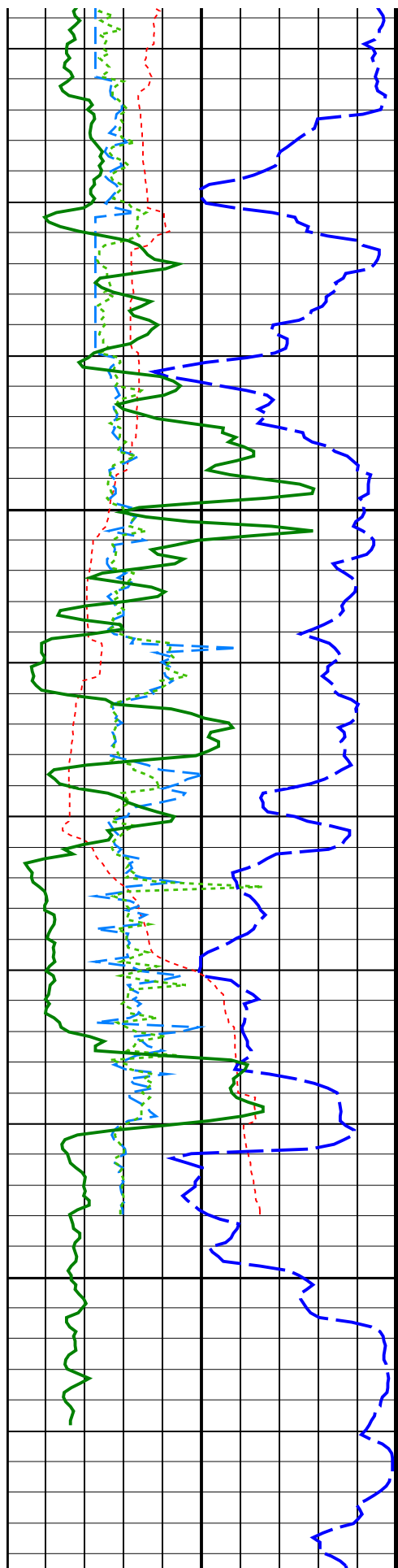


1225
TVD




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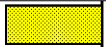
























[illegible]

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		
Master				1.029	Master			
	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		
Master				1.068	Master			
	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			
	0.8000 (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			
	0.8000 (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			
	0.8000 (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			
	0.8000 (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			
	0.8000 (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			
	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			
	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

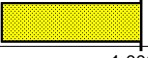
Resistivity: Fixture

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)		0.9750 (Minimum)	1.000 (Nominal)		0.9750 (Minimum)	1.000 (Nominal)
		1.025 (Maximum)			1.025 (Maximum)			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)		0.9750 (Minimum)	1.000 (Nominal)		0.9750 (Minimum)	1.000 (Nominal)
		1.025 (Maximum)			1.025 (Maximum)			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)		0.9750 (Minimum)	1.000 (Nominal)		0.9750 (Minimum)	1.000 (Nominal)
		1.025 (Maximum)			1.025 (Maximum)			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)		0.9750 (Minimum)	1.000 (Nominal)		0.9750 (Minimum)	1.000 (Nominal)
		1.025 (Maximum)			1.025 (Maximum)			1.025 (Maximum)

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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)

SCHLUMBERGER

Survey report

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Client..... ESSO
Field..... Barracouta

Well..... BTA-A4A
API number.....
Engineer..... K.Handley, M.Y.Tan, R.Burns

Rig:..... ENSCO 102
STATE:..... Victoria

----- 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

Spud date..... 24-Feb-05
Last survey date..... 06-Mar-05
Total accepted surveys... 63
MD of first survey..... 344.00 m
MD of last survey..... 2108.00 m

----- 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

----- Platform reference point-----

Latitude (+N/S-).....: -304.57 m
Departure (+E/W-).....: -304.57 m

Azimuth from Vsect Origin to target: 76.22 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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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/10m)	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	4.23	GYR	None
3	371.56	6.26	115.73	19.96	371.48	2.00	-0.42	10.90	10.91	92.23	1.67	MWD	None
4	400.60	10.44	98.23	29.04	400.21	5.66	-1.49	14.93	15.01	95.69	1.67	GYR	None
5	430.00	13.39	92.42	29.40	428.97	11.40	-2.01	20.97	21.07	95.48	1.08	MWD	None
6	458.41	16.35	82.38	28.41	456.43	18.54	-1.62	28.22	28.27	93.29	1.38	MWD	None
7	487.44	19.21	75.25	29.03	484.08	27.38	0.14	36.90	36.90	89.79	1.24	MWD	None
8	516.58	22.78	75.14	29.14	511.28	37.82	2.80	46.99	47.07	86.58	1.23	MWD	None
9	545.52	27.31	73.86	28.94	537.49	50.06	6.09	58.79	59.10	84.09	1.58	MWD	None
10	574.63	31.33	72.34	29.11	562.87	64.29	10.24	72.42	73.14	81.95	1.40	MWD	None
11	603.86	34.81	75.42	29.23	587.36	80.22	14.65	87.74	88.95	80.52	1.32	MWD	None
12	632.38	38.27	75.46	28.52	610.27	97.19	18.92	104.17	105.88	79.71	1.21	MWD	None
13	661.80	41.30	75.07	29.42	632.87	116.01	23.71	122.38	124.65	79.04	1.03	MWD	None
14	691.10	45.16	74.90	29.30	654.22	136.07	28.91	141.76	144.67	78.47	1.32	MWD	None
15	719.99	48.91	74.32	28.89	673.90	157.20	34.52	162.13	165.77	77.98	1.31	MWD	None
16	749.12	52.83	74.48	29.13	692.28	179.78	40.59	183.89	188.32	77.55	1.35	MWD	None
17	778.33	56.53	75.07	29.21	709.17	203.61	46.85	206.89	212.13	77.24	1.28	MWD	None
18	806.73	58.42	75.06	28.40	724.44	227.54	53.02	230.02	236.05	77.02	0.67	MWD	None
19	826.51	60.05	75.43	19.78	734.56	244.54	57.35	246.46	253.04	76.90	0.84	MWD	None
20	857.08	60.11	75.02	30.57	749.80	271.03	64.11	272.08	279.53	76.74	0.12	MWD	None
21	885.76	61.34	74.96	28.68	763.83	296.04	70.58	296.24	304.53	76.60	0.43	MWD	None
22	914.88	60.95	74.82	29.12	777.88	321.54	77.23	320.86	330.03	76.47	0.14	MWD	None
23	943.53	60.68	75.21	28.65	791.85	346.55	83.70	345.03	355.03	76.36	0.15	MWD	None
24	972.56	59.77	76.43	29.03	806.27	371.74	89.87	369.45	380.23	76.33	0.48	MWD	None
25	1001.50	59.54	77.10	28.94	820.89	396.72	95.59	393.77	405.20	76.35	0.22	MWD	None
26	1030.64	59.11	76.93	29.14	835.76	421.78	101.22	418.19	430.26	76.39	0.16	MWD	None
27	1059.78	57.85	76.77	29.14	850.99	446.61	106.87	442.38	455.10	76.42	0.43	MWD	None
28	1089.10	58.34	76.70	29.32	866.49	471.50	112.59	466.60	479.99	76.43	0.17	MWD	None
29	1118.03	59.62	78.08	28.93	881.39	496.29	118.00	490.80	504.78	76.48	0.60	MWD	None
30	1147.18	61.65	77.56	29.15	895.69	521.68	123.36	515.63	530.18	76.55	0.71	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/10m)	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	0.37	MWD	None
32	1205.78	63.29	77.18	29.34	922.65	573.70	134.71	566.40	582.20	76.62	0.20	MWD	None
33	1234.53	63.22	77.02	28.75	935.59	599.37	140.44	591.43	607.87	76.64	0.06	MWD	None
34	1263.41	63.32	74.80	28.88	948.58	625.16	146.72	616.44	633.66	76.61	0.69	MWD	None
35	1292.28	62.74	73.74	28.87	961.67	650.88	153.70	641.21	659.37	76.52	0.38	MWD	None
36	1321.68	61.29	72.83	29.40	975.47	676.80	161.16	666.07	685.29	76.40	0.56	MWD	None
37	1350.51	60.59	72.52	28.83	989.47	701.95	168.67	690.13	710.44	76.27	0.26	MWD	None
38	1379.66	60.36	72.02	29.15	1003.84	727.26	176.39	714.29	735.75	76.13	0.17	MWD	None
39	1408.57	60.11	72.24	28.91	1018.19	752.29	184.09	738.18	760.78	76.00	0.11	MWD	None
40	1437.70	60.53	73.72	29.13	1032.61	777.56	191.50	762.37	786.06	75.90	0.46	MWD	None
41	1466.67	60.32	73.21	28.97	1046.91	802.72	198.67	786.53	811.23	75.82	0.17	MWD	None
42	1494.99	59.98	74.68	28.32	1061.01	827.27	205.46	810.13	835.78	75.77	0.47	MWD	None
43	1524.16	60.08	76.01	29.17	1075.58	852.53	211.85	834.58	861.05	75.76	0.40	MWD	None
44	1553.56	60.34	75.95	29.40	1090.19	878.05	218.04	859.33	886.56	75.76	0.09	MWD	None
45	1582.31	59.93	76.35	28.75	1104.50	902.98	224.00	883.54	911.49	75.77	0.19	MWD	None
46	1611.11	60.27	75.83	28.80	1118.86	927.95	230.01	907.77	936.46	75.78	0.20	MWD	None
47	1640.37	60.83	76.43	29.26	1133.25	953.42	236.11	932.51	961.94	75.79	0.26	MWD	None
48	1669.37	61.92	76.44	29.00	1147.14	978.88	242.08	957.25	987.39	75.81	0.38	MWD	None
49	1697.95	61.74	77.55	28.58	1160.63	1004.07	247.75	981.80	1012.58	75.84	0.35	MWD	None
50	1727.34	61.10	76.95	29.39	1174.69	1029.88	253.45	1006.98	1038.38	75.87	0.28	MWD	None
51	1756.52	60.74	76.03	29.18	1188.87	1055.38	259.41	1031.77	1063.88	75.89	0.30	MWD	None
52	1785.84	61.68	75.81	29.32	1202.99	1081.07	265.66	1056.69	1089.58	75.89	0.33	MWD	None
53	1814.73	60.60	74.63	28.89	1216.94	1106.37	272.11	1081.16	1114.88	75.87	0.52	MWD	None
54	1843.93	59.17	75.44	29.20	1231.59	1131.62	278.63	1105.56	1140.13	75.85	0.55	MWD	None
55	1873.01	60.22	75.24	29.08	1246.26	1156.72	284.99	1129.85	1165.24	75.84	0.37	MWD	None

56	1901.51	60.30	75.12	28.50	1260.40	1181.47	291.32	1153.77	1189.98	75.83	0.05	MWD	None
57	1930.50	59.14	74.53	28.99	1275.02	1206.49	297.87	1177.93	1215.01	75.81	0.44	MWD	None
58	1959.59	60.04	74.44	29.09	1289.74	1231.57	304.58	1202.11	1240.09	75.78	0.31	MWD	None
59	1988.62	60.66	73.85	29.03	1304.10	1256.78	311.47	1226.37	1265.31	75.75	0.28	MWD	None
60	2017.48	61.16	73.65	28.86	1318.14	1281.98	318.53	1250.59	1290.51	75.71	0.18	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/ 10m)	Srvy tool type	Tool Corr (deg)
61	2046.69	59.38	74.45	29.21	1332.62	1307.32	325.50	1274.97	1315.87	75.68	0.65	MWD	None
62	2075.98	59.44	74.58	29.29	1347.53	1332.52	332.24	1299.27	1341.08	75.66	0.04	MWD	None
63	2108.00	59.44	74.48	32.02	1363.81	1360.08	339.59	1325.84	1368.64	75.63	0.03	Projection to TD	

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

Schlumberger

Well: **BTA-A4A**

Field: **Barracouta**

Rig: **ENSCO 102**

8.5 in. Section

State: **Victoria**

**GeoVISION Density Neutron
1:200 True Vertical Depth
Recorded Mode Log**