Company: **ESSO Australia Ltd.**

Well: **WTN−W48 A**

Field: **Tuna**

Rig: **NABORS 453** State: **Victoria**

Rig: NABORS 453
Field: Tuna
Location: Bass Strait
Well: WTN−W48 A
Company: ESSO Australia Ltd.

Schlumberger

GeoVISION Resistivity
1 : 200 True Vertical Depth
Recorded Mode

Location

		Elevation		
Total depth:	2268 m		K.B.	Top Drive
Spud date:	19−Jan−02		G.L.	−61.00 m
Runs:	1 To 2		D.F.	34.69 m

Permanent datum: Mean Sea Level Elev.: 0 m
Log measured from: Drill Floor 34.69 m above Perm. datum
Depth reference: Driller's Depth

API serial no.	x = 5,771,791.69 m	Longitude	Latitude
	y = 621,538.528 m	E 148 23' 16.531"	S 38 11' 36.558"

Depth logged:	622 m To 2253 m	Mag decl:	13.18 deg	Other services:	
Date logged:	20−Jan−02 To 24−Jan−02	Mag dip:	−68.71 deg	Directional Surveys	

Bore hole record

Hole size	from	to
8.5 in.	622 m	2268 m

Casing record

Size	Density	from	to
10.75 in.	40.5 lbm/ft	Surface	622 m

Mud record

Type	from	to
SeaWater	622 m	647 m
KCL/PHPA	647 m	2268 m

Borehole deviation record

Min	Max	from	to
25.50 deg	25.67 deg	628 m	647 m
25.67 deg	66.50 deg	647 m	2268 m

Surface equipment		Software record	
Unit	OLU−FB−924	IDEAL Wis	id6_1c_10
Depth system	PDA	SPM	id6_1c_10
		LWD	See Toolsketch
		MWD	See Toolsketch

IDEAL
services from
Anadrill

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 RUN1
Directional Surveys

OTHER SERVICES FOR RUN2
Directional Surveys

OTHER SERVICES FOR RUN
Directional Surveys

REMARKS: RUN NUMBER 1
622 to 637 m interval was drilled in sliding mode.
All data presented is from memory.
GR is corrected for mud weight and bit size.
GVR 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 (from Rm), temperature, and mud hydrogen index (from mud weight, temperature and pressure).

REMARKS: RUN NUMBER 2
637 to 2268 m interval was drilled in rotating and sliding mode.
All data presented is from memory.
GR is corrected for mud weight and bit size.
GVR Resistivity is corrected for bit size, mud resistivity and borehole temperature.
There was barite in the mud.
The PEF curve is not presented.
Bottom quadrant density is presented.
Neutron porosity is calculated with a limestone matrix, and is corrected for bit size, borehole

REMARKS: RUN NUMBER

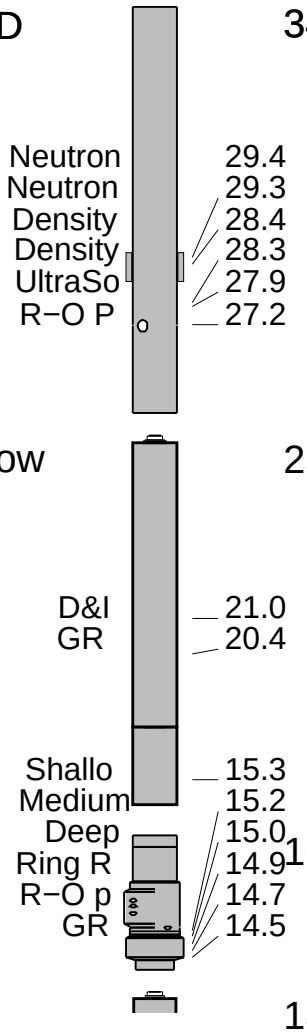
hydrogen index (from mud weight, temperature and pressure).
Pulled out of the hole at 637 m to change the bit and motor bend after kicking off.

Neutron porosity is calculated with a limestone matrix, and is corrected for bit size, borehole salinity (from Rm), temperature, and mud hydrogen index (from mud weight, temperature and pressure).
Mud weight was increased from 9 to 10 lbm/gal at 1600 m before drilling into the Lakes Entrance formation.
Mud weight was increased from 10 to 10.5 lbm/gal at 2125 m to improve well stability.
Zoned processing used for mud weight and mud salinity.
Pulled out of the hole at 2268 m to run casing after reaching TD.

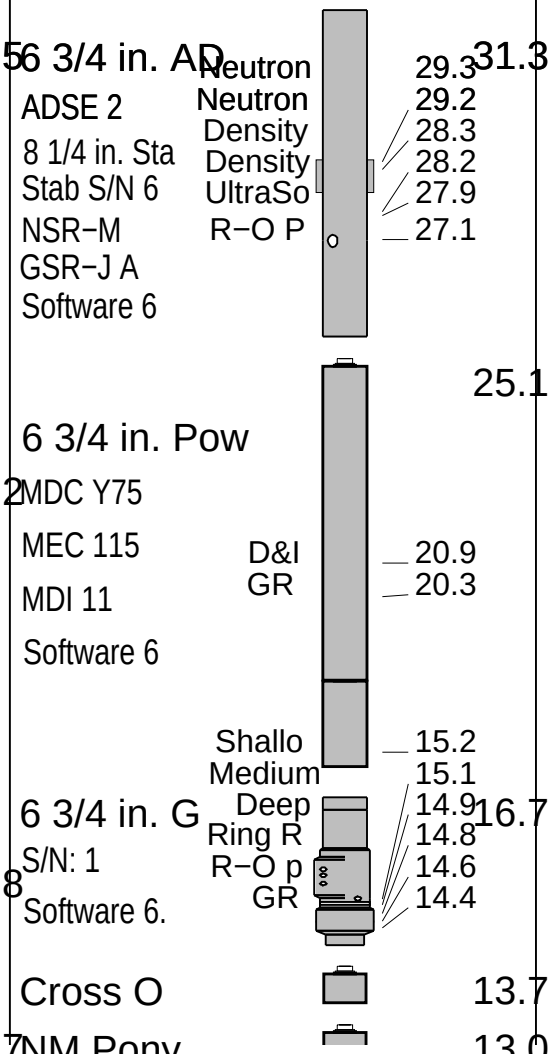
EQUIPMENT DESCRIPTION

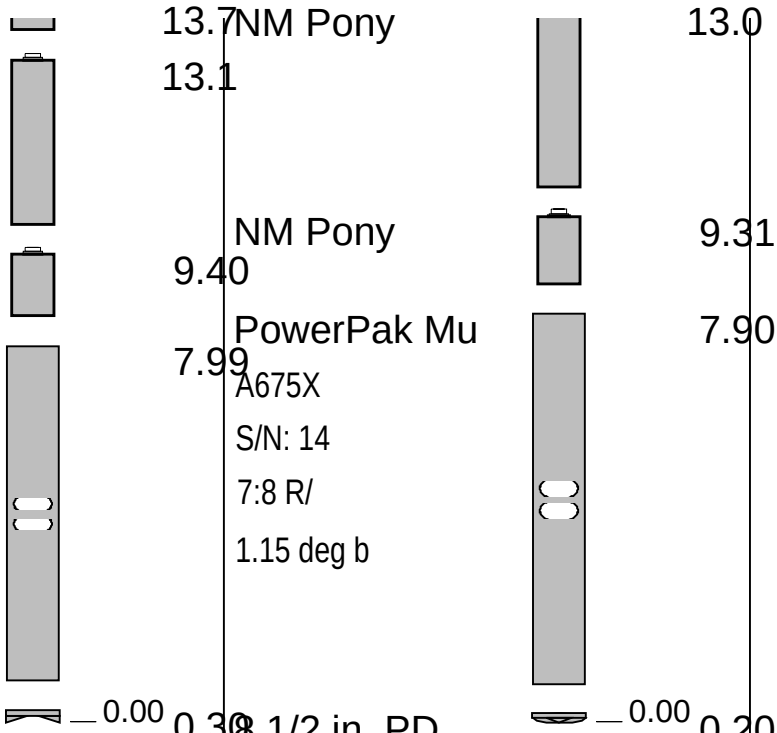
RUN1	RUN2	RUN

DOWNHOLE EQ



DOWNHOLE E





Bit Run Summary

Run number		1	2
Bit size	in.	8.5	8.5
Bit start depth	m	622	647
Bit end depth	m	647	2268
Top interval logged	m	626	632
Bottom interval logged	m	632	2253
Begin log: time		12:45	0:18
Begin log: date		20−Jan−02	21−Jan−01
End log: time		17:00	03:38
End log: date		20−Jan−02	24−Jan−02
Mud data			
Depth	m	626	2125
Type		Seawater	KCL−PHPA
Mud weight	lbm/gal	8.5	10.5
Solids	%	0.0	10.7
Chlorides	mg/l	0.0	44,000
Rm	ohmm@degC	n/a	0.1279@21
Rmf	ohmm@degC	n/a	0.1005@20
Rmc	ohmm@degC	n/a	0.2340@21
Potassium	%	0.0	8.0
Environmental data			
GR			

Environmental data											
GR											
Mud weight	lbm/gal	8.5	10.5								
Bit size	in.	8.5	8.5								
Resistivity											
Neutron porosity											
Hole Size	in.	8.5	8.5								
Mud weight	lbm/gal	8.5	10.5								
Temperature	deg C	30	74.5								
Mud salinity	mg/l	0.0	72,600								
Formation salinity	mg/l	n/a	n/a								
Recording rate 1	SEC	10	10	GR/Res							
Recording rate 2	SEC	10	10	Den/Neut							
Filtering GR		3 pt.	3 pt.								
Filtering density		3 pt.	3 pt.								
Filtering Neutron		3 pt.	3 pt.								
Company representative		B.Woodward	J.Booker	B.Davis							
Anadrill personnel		T.Sims	T.Ford	L.Bon	C.Soper	T.Harvey	C.Cocks				

True Vertical Depth Log

IDEAL Version: ID6_1C_10

IDF

RAB	**id6_1c_10**	**MWD_10**	**id6_1c_10**
ADN	**id6_1c_10**		

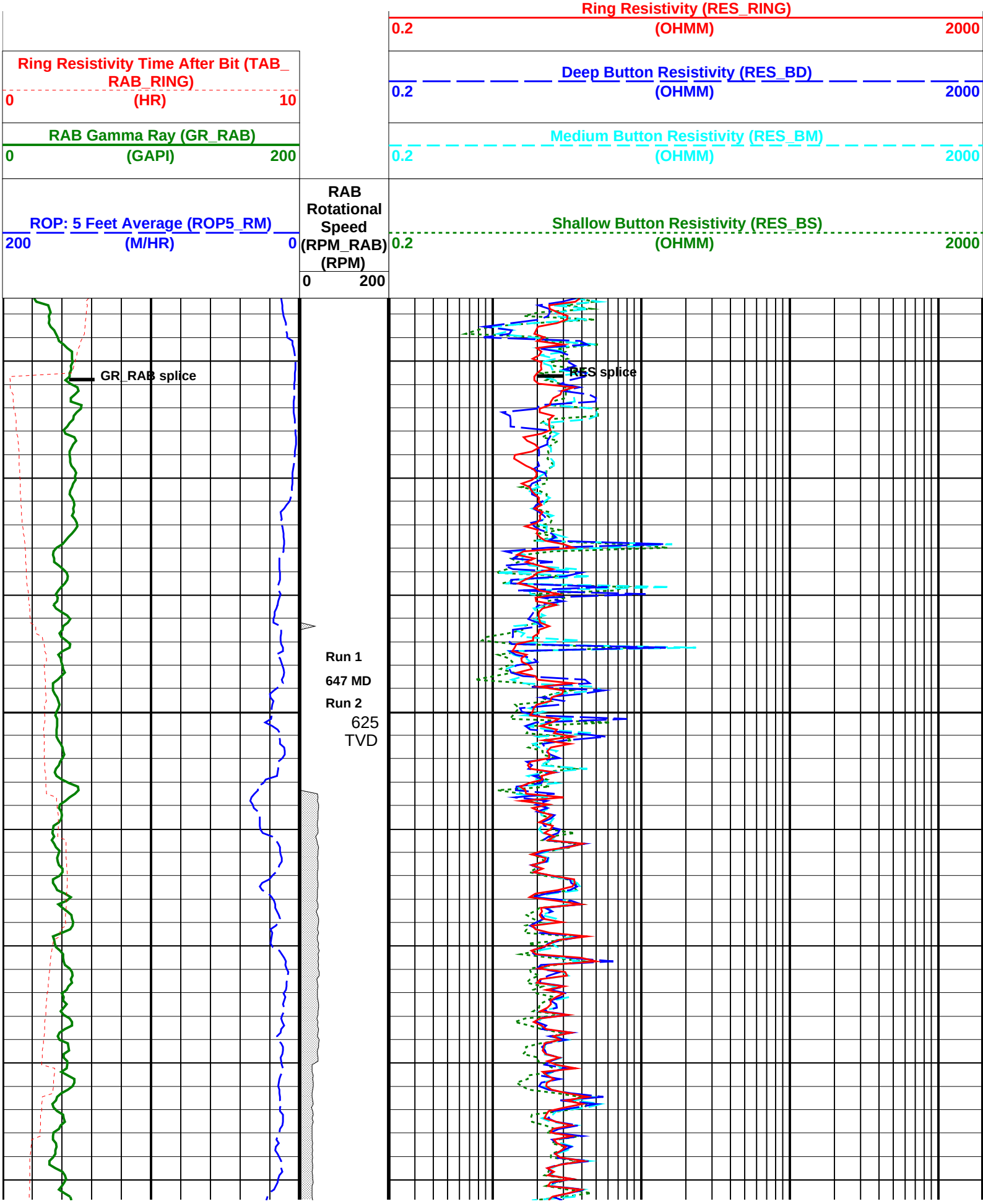
Format: RABDepthLogAvgBtns **Vertical Scale: 1:200** **Graphics File Created: 28−Jan−2002 19:51**

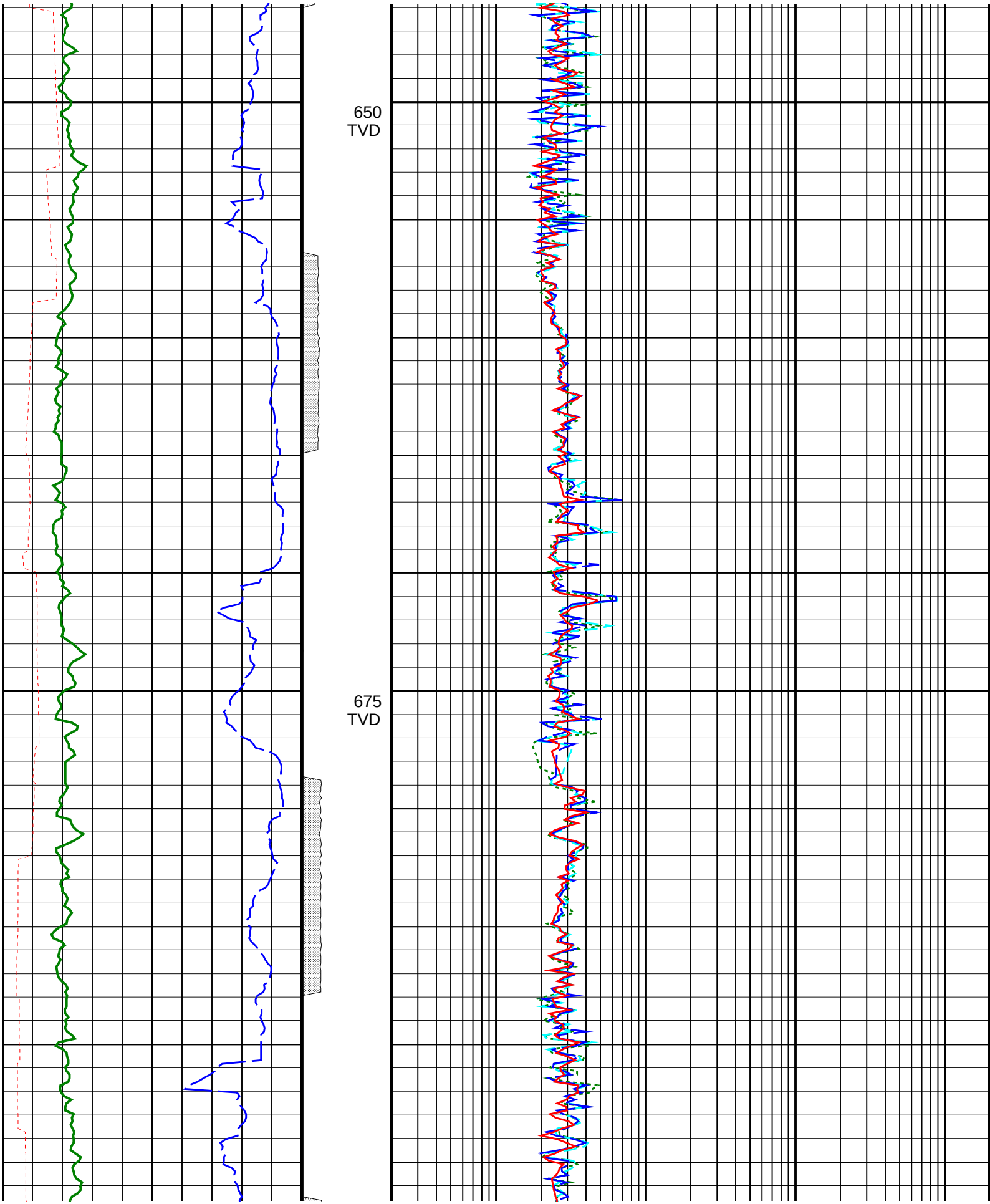
Parameters

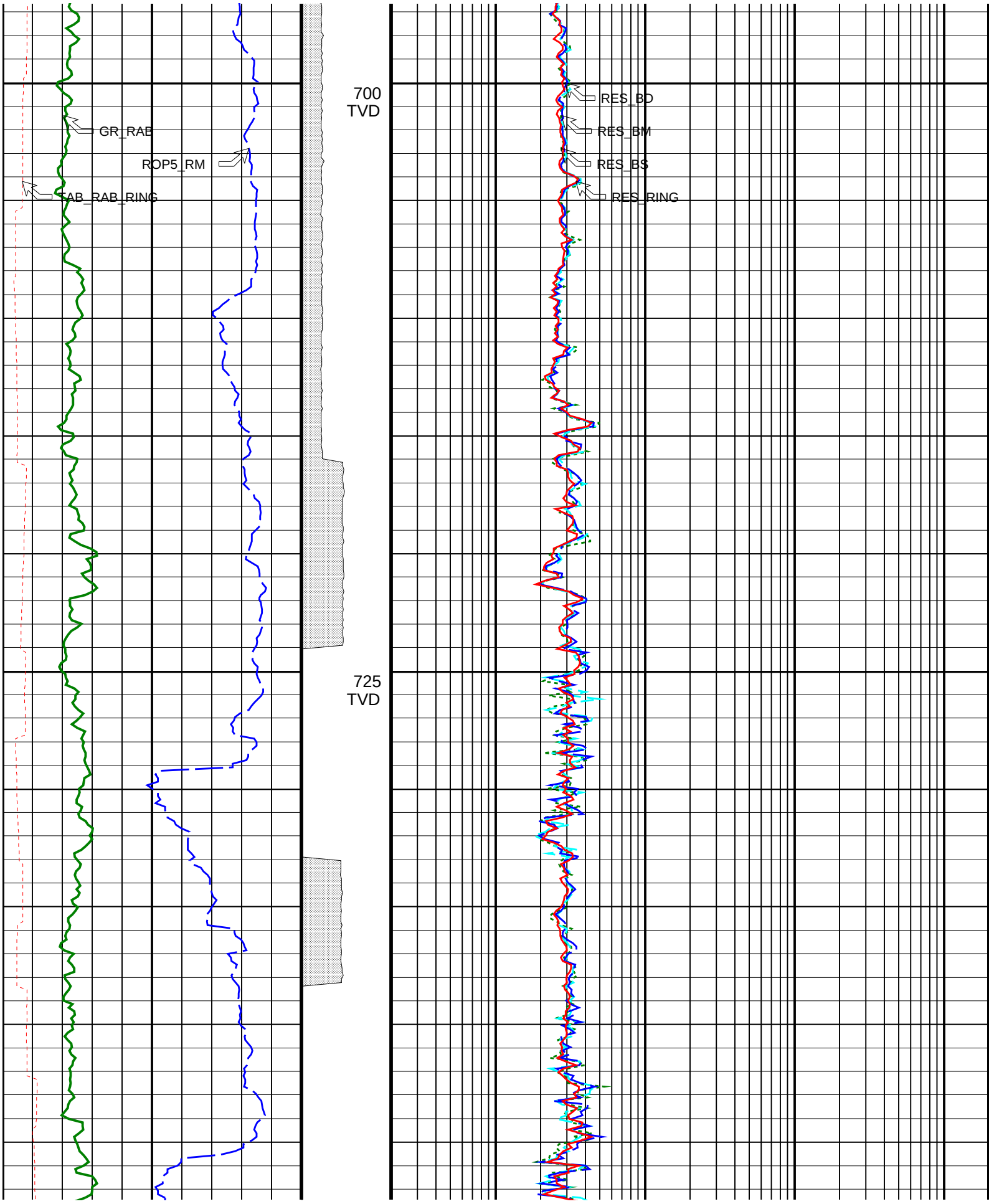
DLIS Name	Description	Value	
BDBHCA	RAB: Button Deep Borehole A Factor	0.005	
BDBHCB	RAB: Button Deep Borehole B Factor	0.000	
BHA_COEF_VER	RAB: BHA Coef Generator Version	62012.0	
BITBHCA	RAB: Bit A Borehole Factor	0.058	
BITBHCB	RAB: Bit B Borehole Factor	0.000	
BIT_K_FACTOR	RAB: Bit K Factor	17.240	
BMBHCA	RAB: Button Medium Borehole A Factor	0.024	
BMBHCB	RAB: Button Medium Borehole B Factor	0.000	
BSBHCA	RAB: Button Shallow Borehole A Factor	0.024	
BSBHCB	RAB: Button Shallow Borehole B Factor	0.000	
BS_RM	Bit Size (RM)	8.500	in
BUT_KIMP_A	RAB: Button Impedance Coeff A	0.000	
BUT_KIMP_B	RAB: Button Impedance Coeff B	0.000	
DBUTTON_K_FACTOR	RAB: Button Deep K factor	0.005	
DHS_VERSION	RAB: DownHole Software Version	6.101	
DO	Depth Offset	0.0	m
MBUTTON_K_FACTOR	RAB: Button Medium K Factor	0.005	
MST_RM	Mud Sample temperature (RM)	21.000	degC
MW_RM	Mud Weight (RM)	10.500	lbm/gal
OBM	RAB: Oil base Mud	NO	
RABEC	RAB: Resistivity Env−Cor	YES	
RAB_TEMP_SELECT	RAB Temperature Selection	MEAS	
READOUT_PORT_MP	RAB: ROP to Bit Face Distance	14.718	m
RINGBHCA	RAB: Ring Borehole A Factor	0.161	
RINGBHCB	RAB: Ring Borehole B Factor	0.000	
RING_KIMP_A	RAB: Ring Impedance Coeff A	0.000	
RING_KIMP_B	RAB: Ring Impedance Coeff B	0.000	
RING_K_FACTOR	RAB: Ring K Factor	0.153	
RMS_RM	Resistivity of Mud Sample (RM)	0.130	ohm.m
SBUTTON_K_FACTOR	RAB: Button Shallow K Factor	0.007	
STAB	RAB: Run with Stabilizer	YES	
TOOLTYPE	RAB: Azimuthal Tool	YES	
TS_VERSION	RAB: ToolScope Software Version	6.101	
VRAB6	Rab Tool type (ENP/PILOT)	RAB6_C_SERIES	

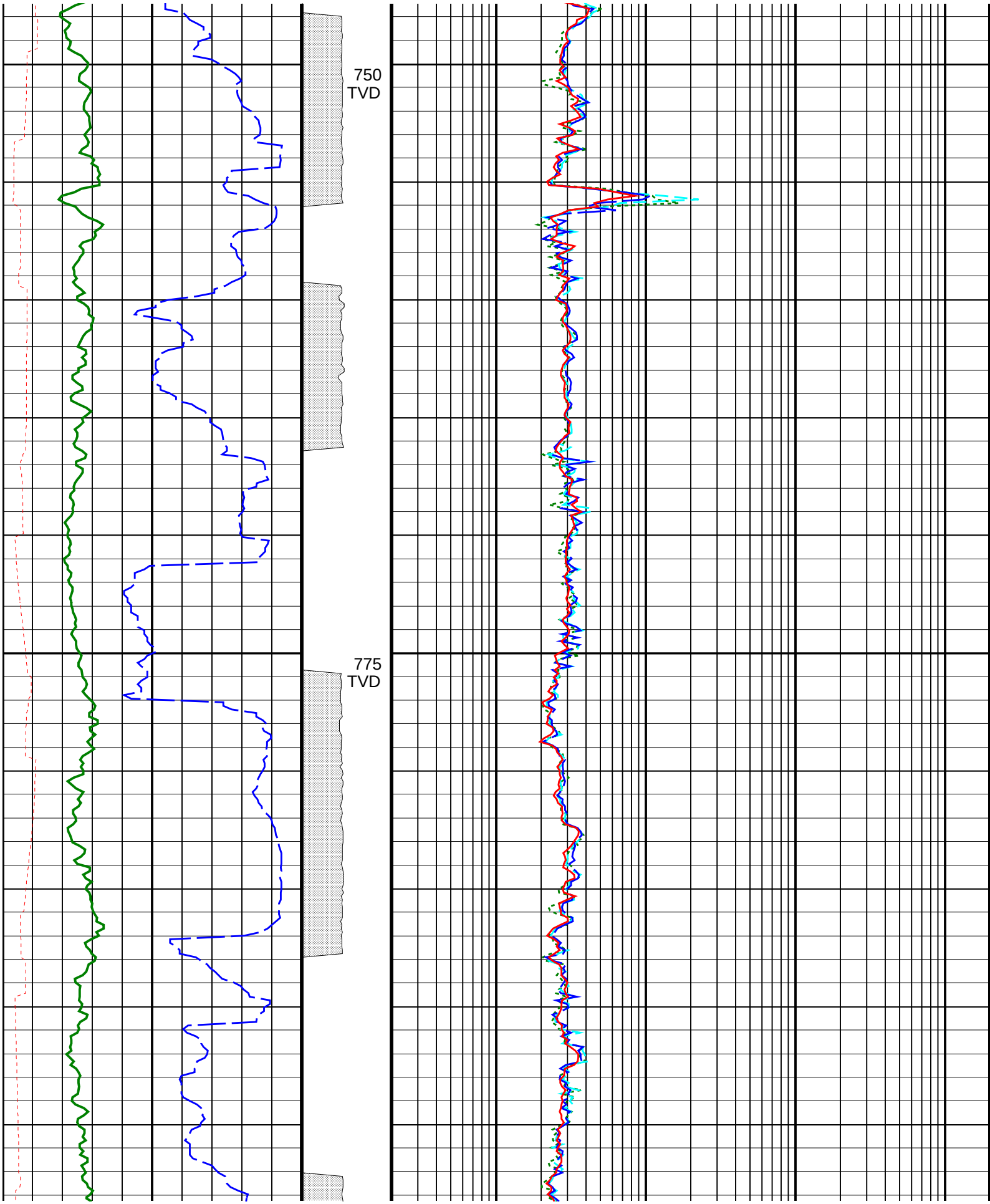
Ring Resistivity (RES_RING)

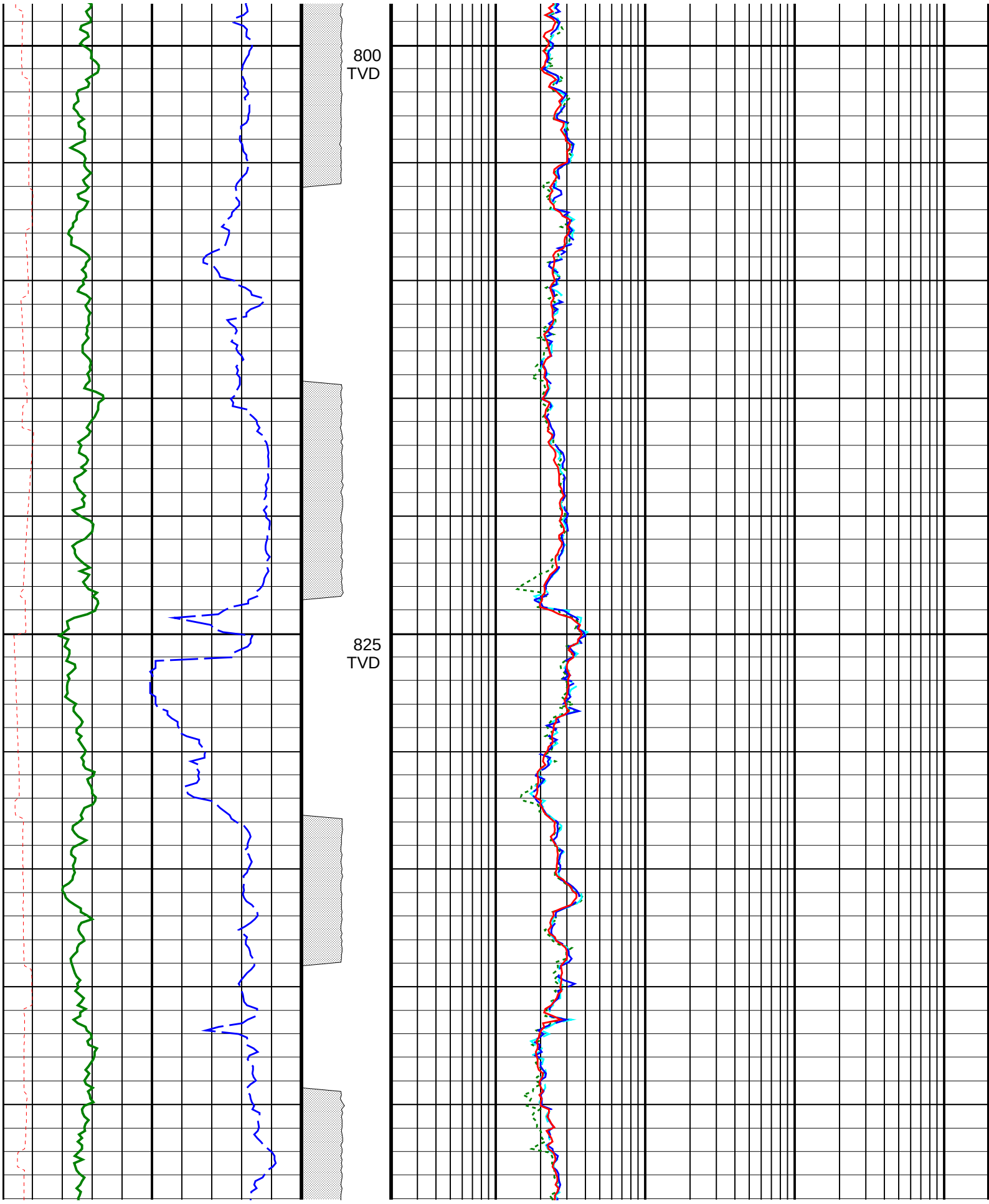
0.2 **(OHMM)** **2000**

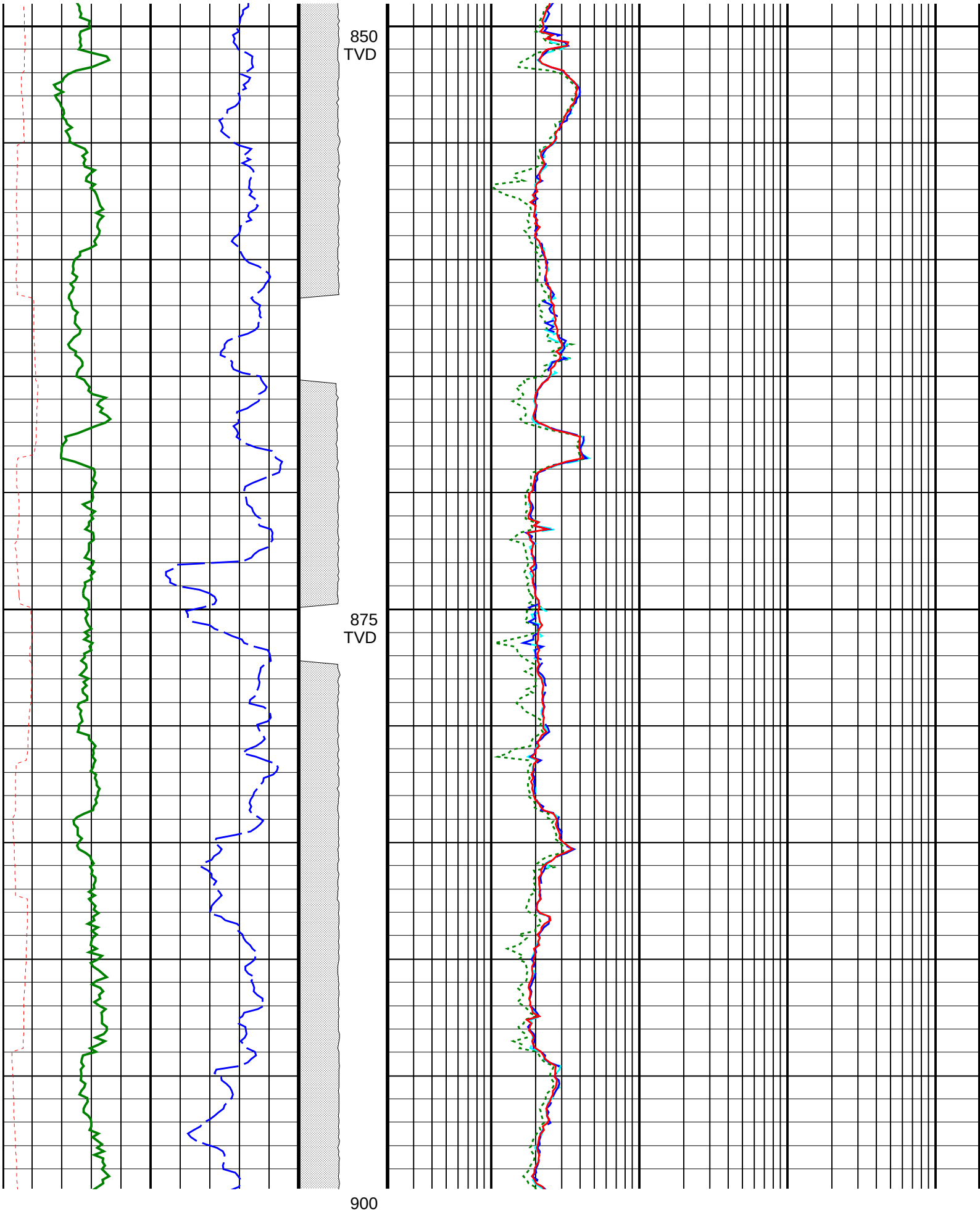

Ring Resistivity (RES_RING)
0.2
(OHMM)
2000
Ring Resistivity Time After Bit (TAB_RAB_RING)
0
(HR)
10
Deep Button Resistivity (RES_BD)
0.2
(OHMM)
2000
RAB Gamma Ray (GR_RAB)
0
(GAPI)
200
Medium Button Resistivity (RES_BM)
0.2
(OHMM)
2000
ROP: 5 Feet Average (ROP5_RM)
200
(M/HR)
0
RAB Rotational Speed (RPM_RAB) (RPM)
0
200
Shallow Button Resistivity (RES_BS)
0.2
(OHMM)
2000
GR_RAB splice
RES splice
Run 1
647 MD
Run 2
625
TVD

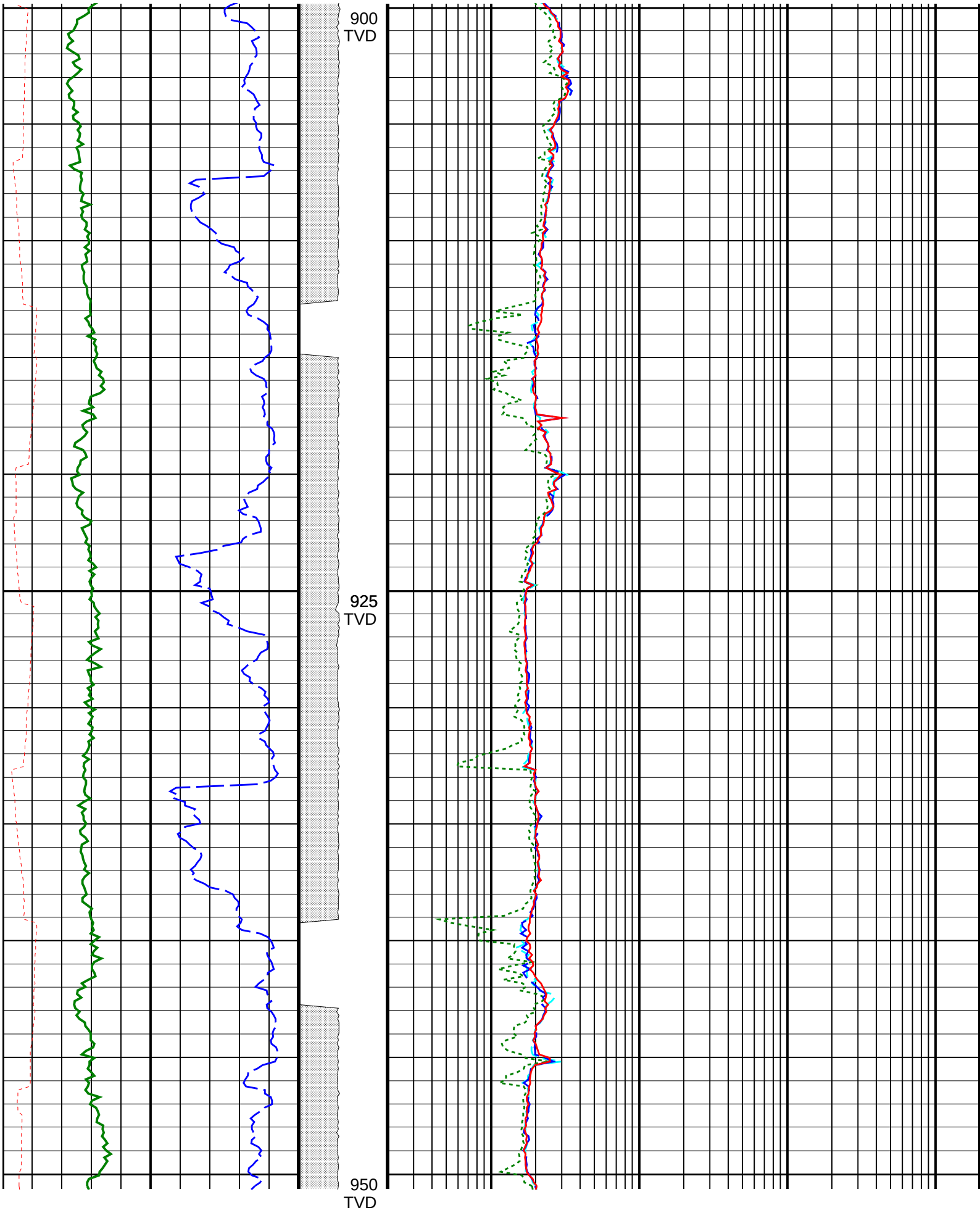

650
TVD
675
TVD

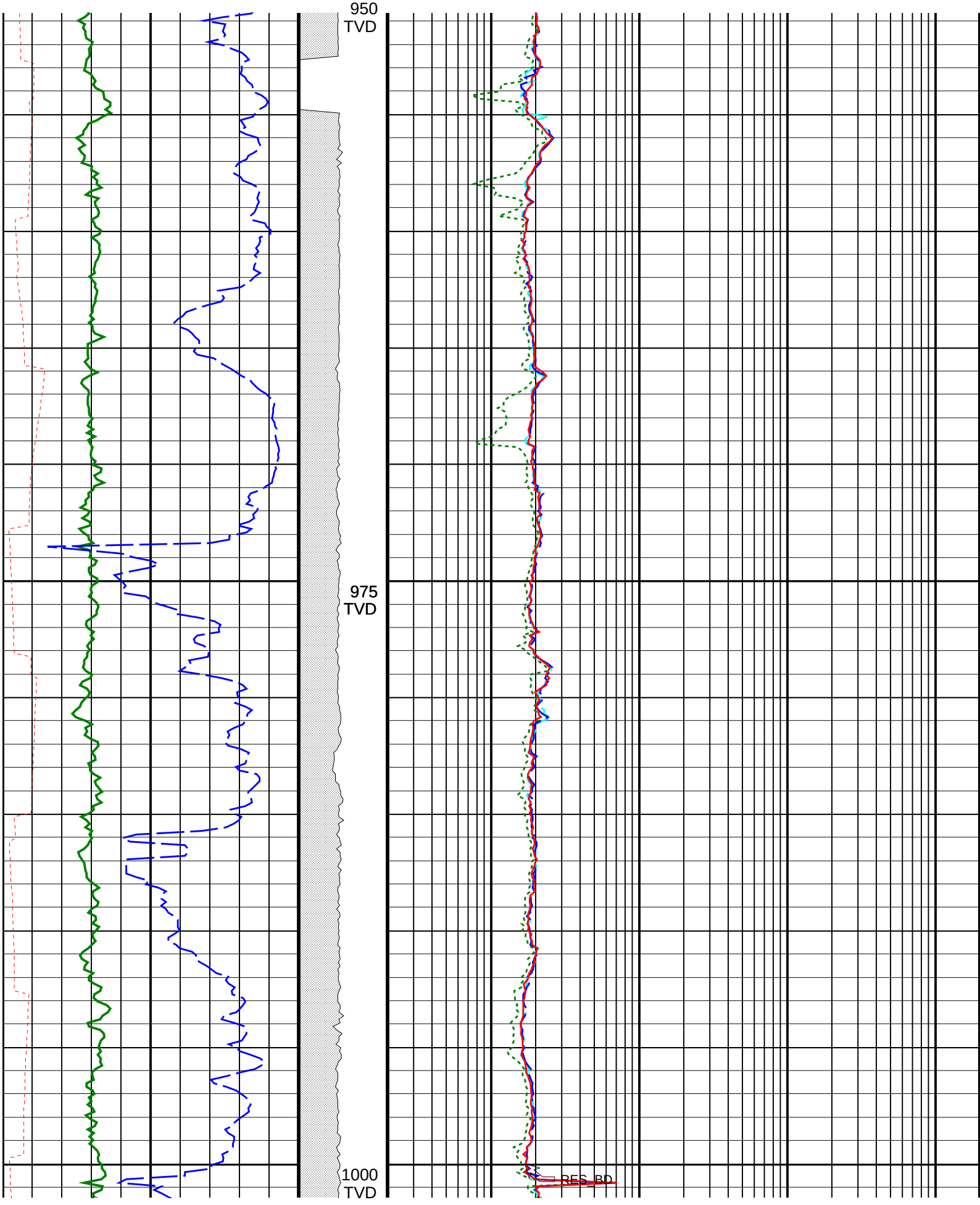

GR_RAB
ROP5_RM
TAB_RAB_RING
700
TVD
725
TVD
RES_BD
RES_BM
RES_BS
RES_RING

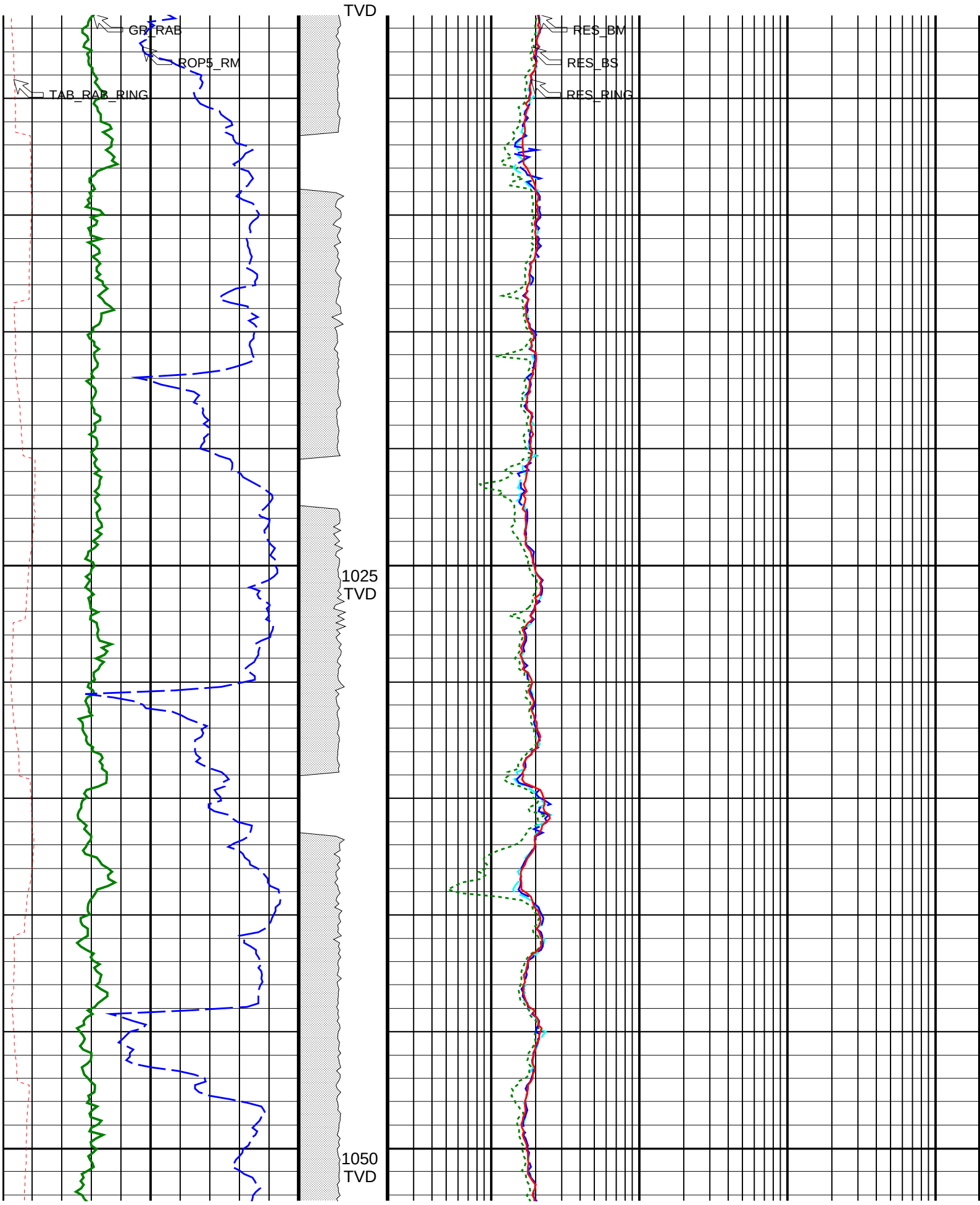

750
TVD
775
TVD

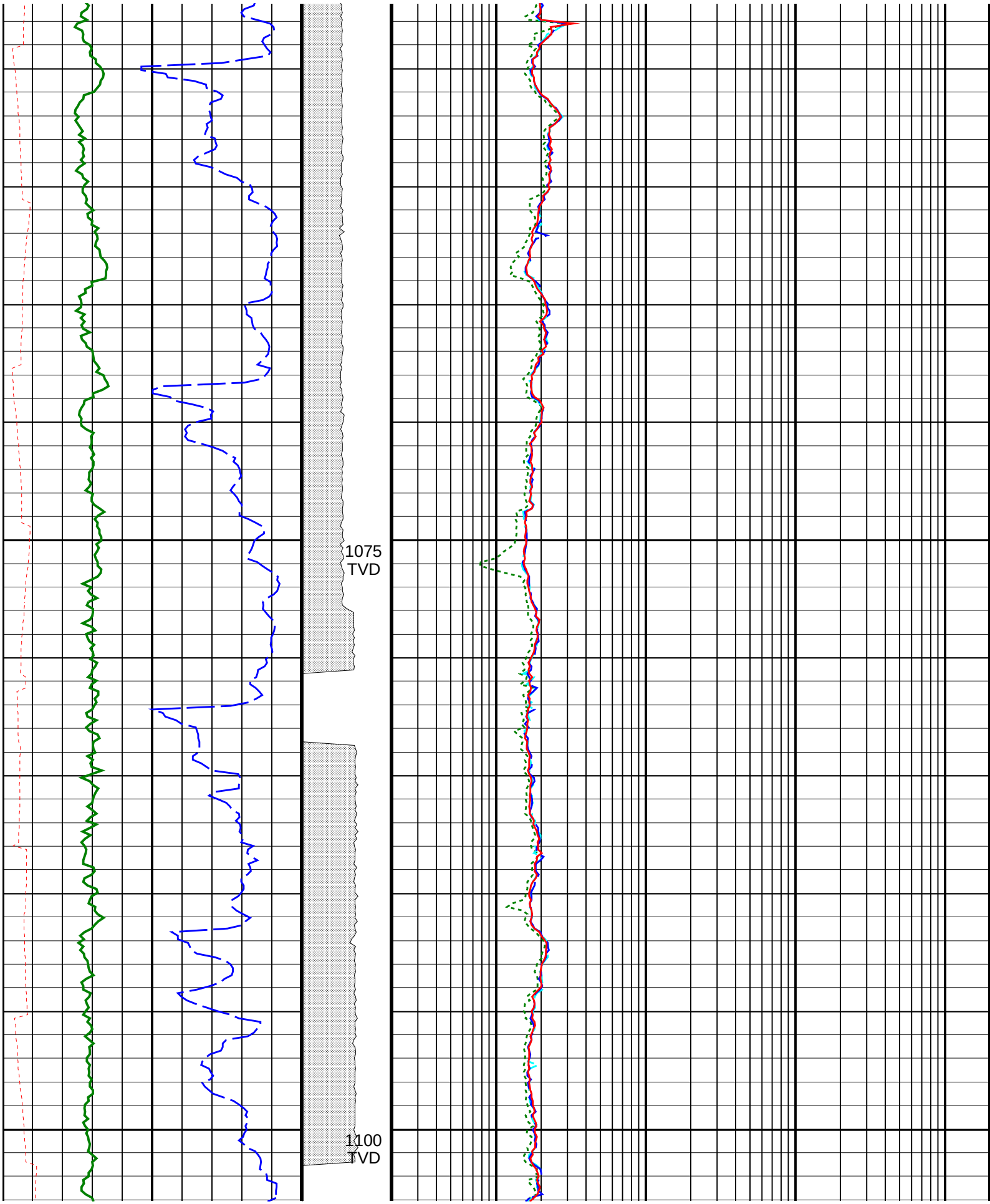

800
TVD
825
TVD

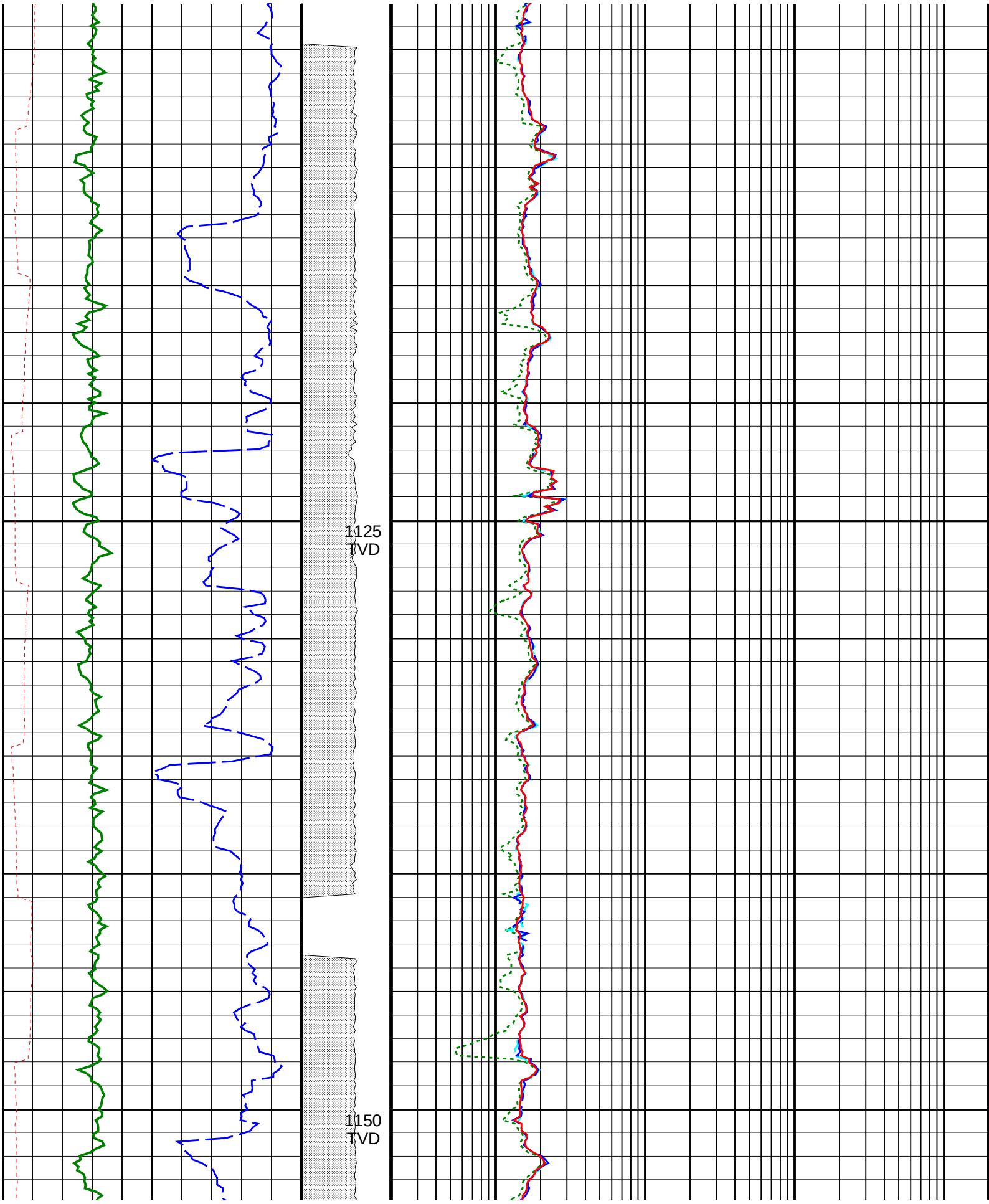

850
TVD
875
TVD
900

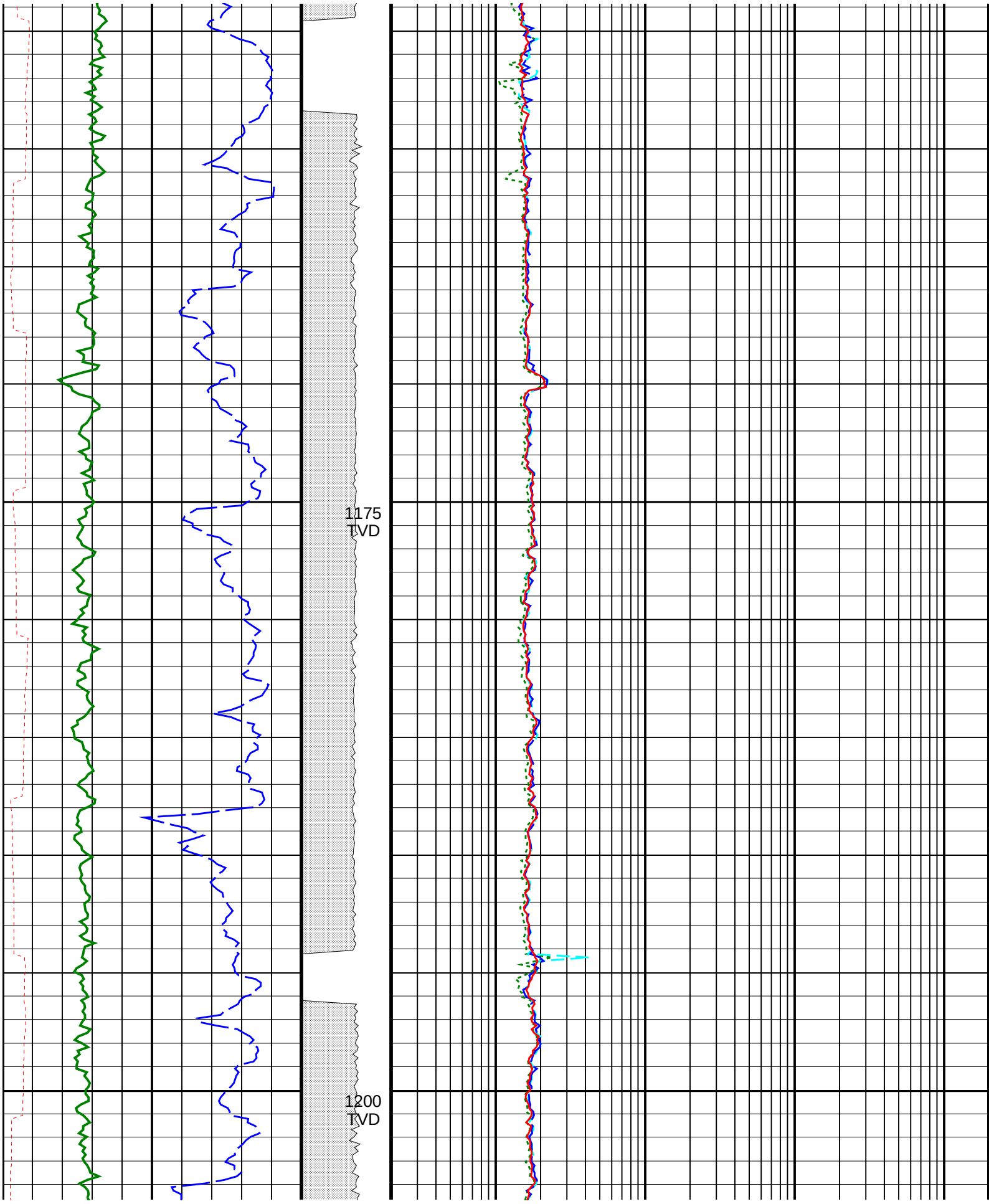

900
TVD
925
TVD
950
TVD

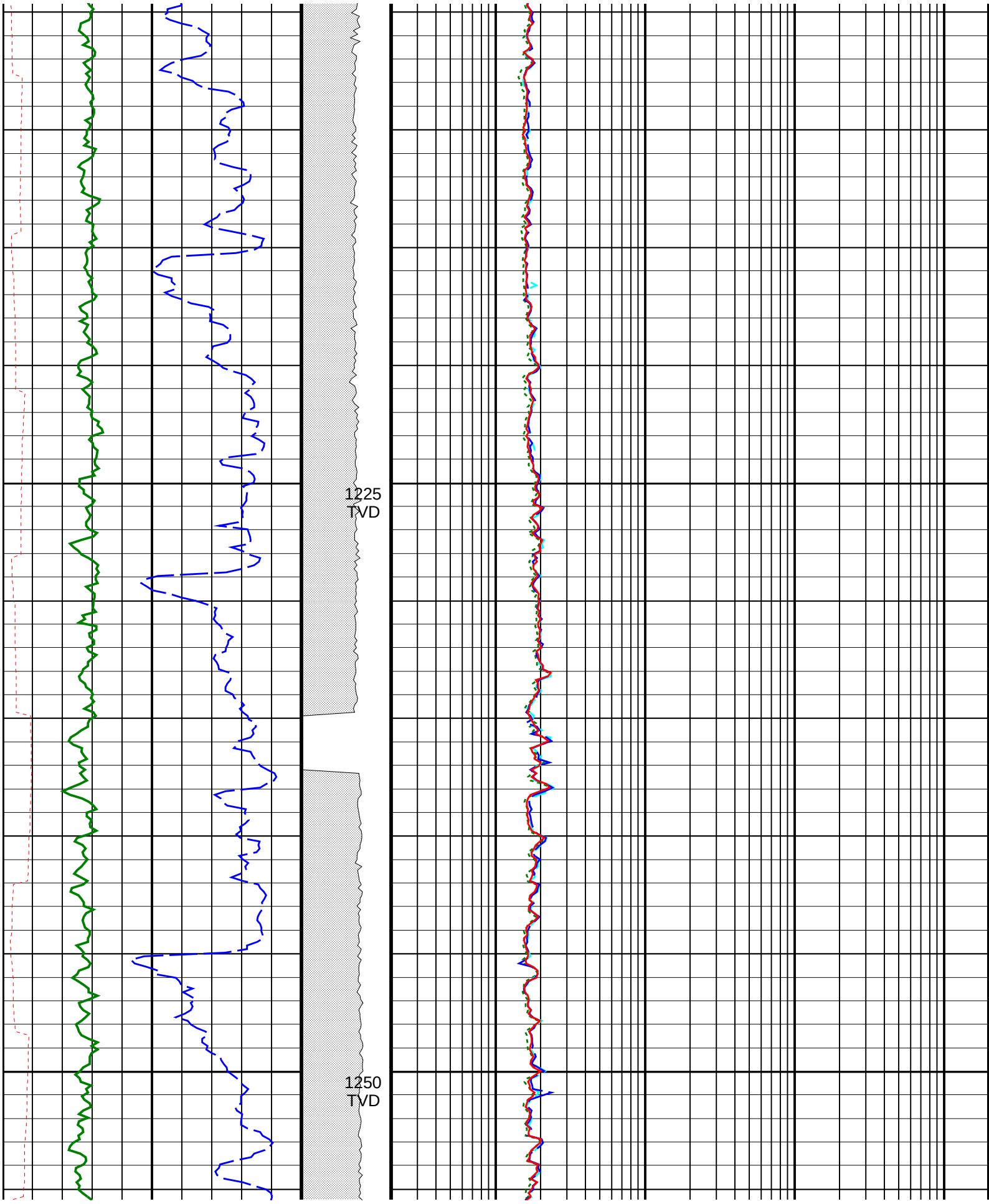

950
TVD
975
TVD
1000
TVD
RES_BD
GR_RAB
RES_BM

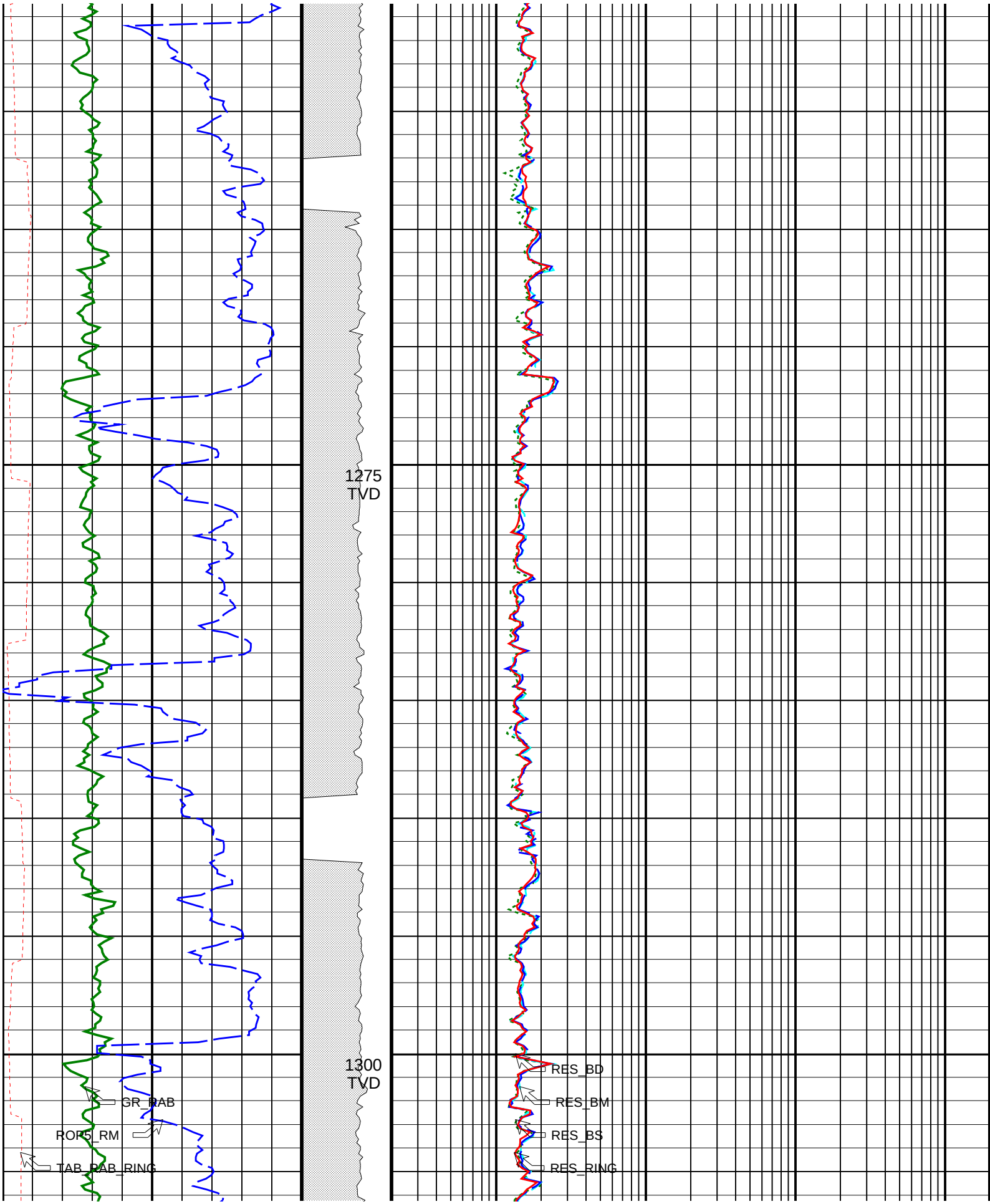

TVD
GR_RAB
ROP5_RM
TAB_RAB_RING
RES_BM
RES_BS
RES_RING
1025
TVD
1050
TVD

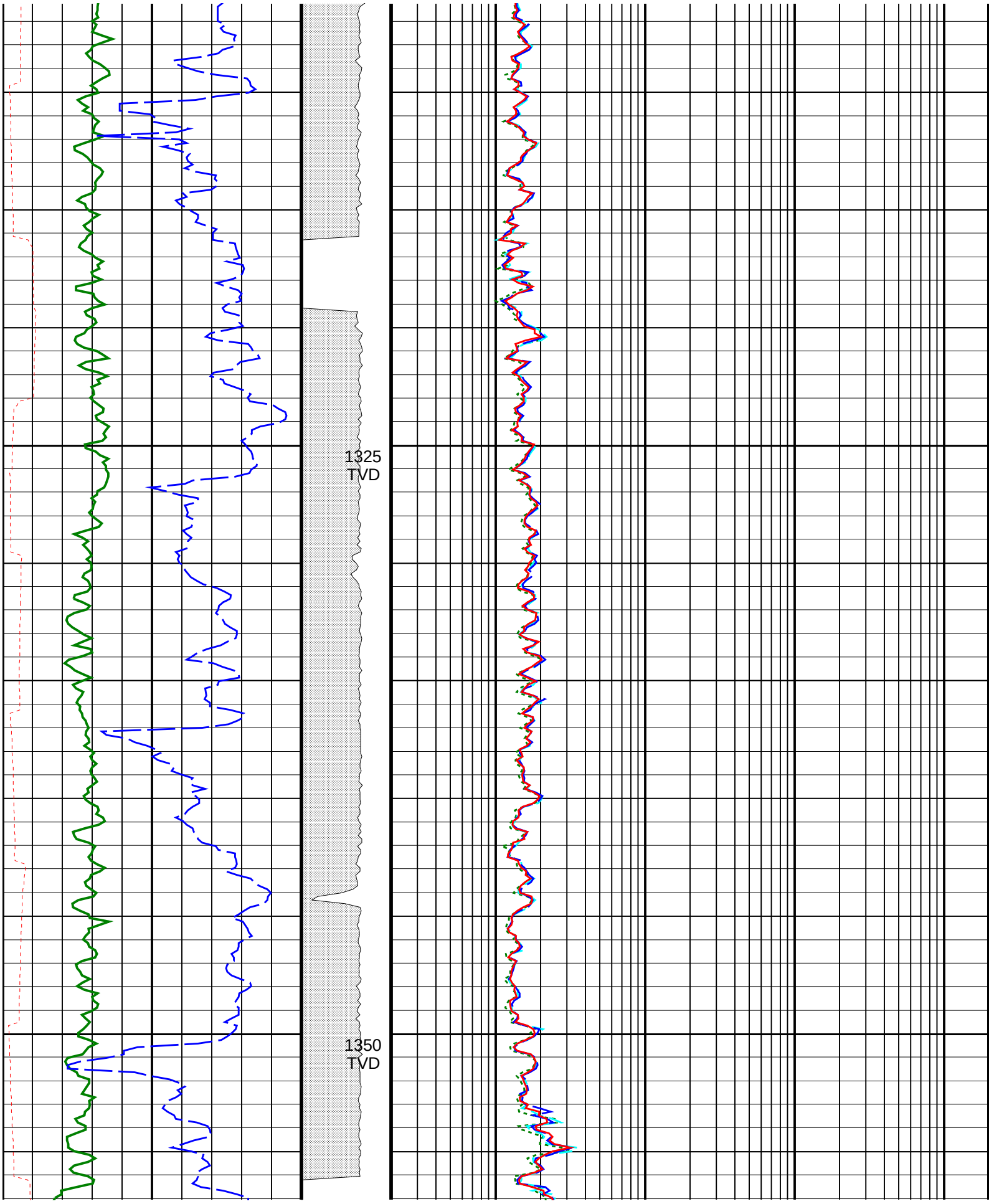

1075
TVD
1100
TVD

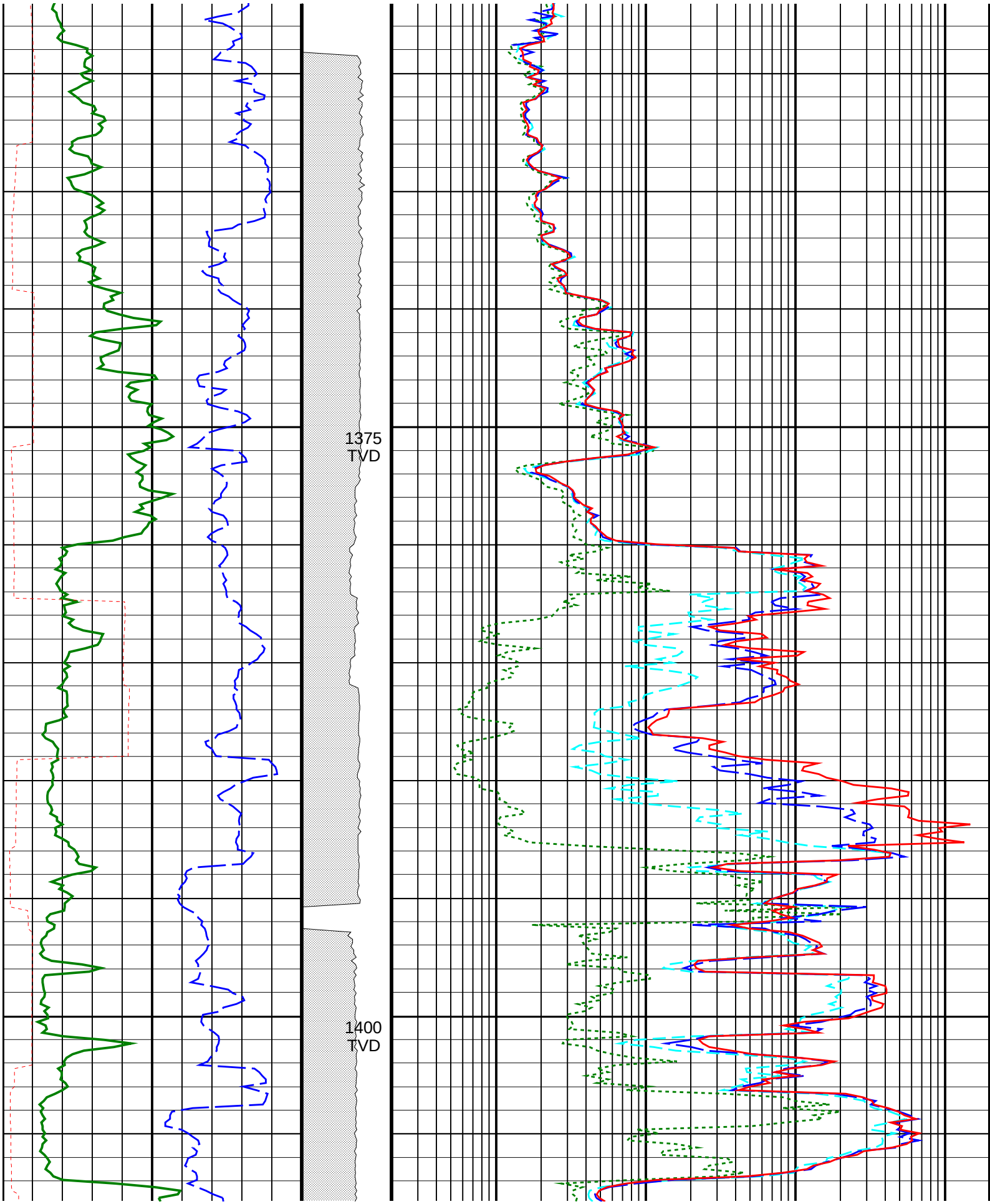

1125
TVD
1150
TVD

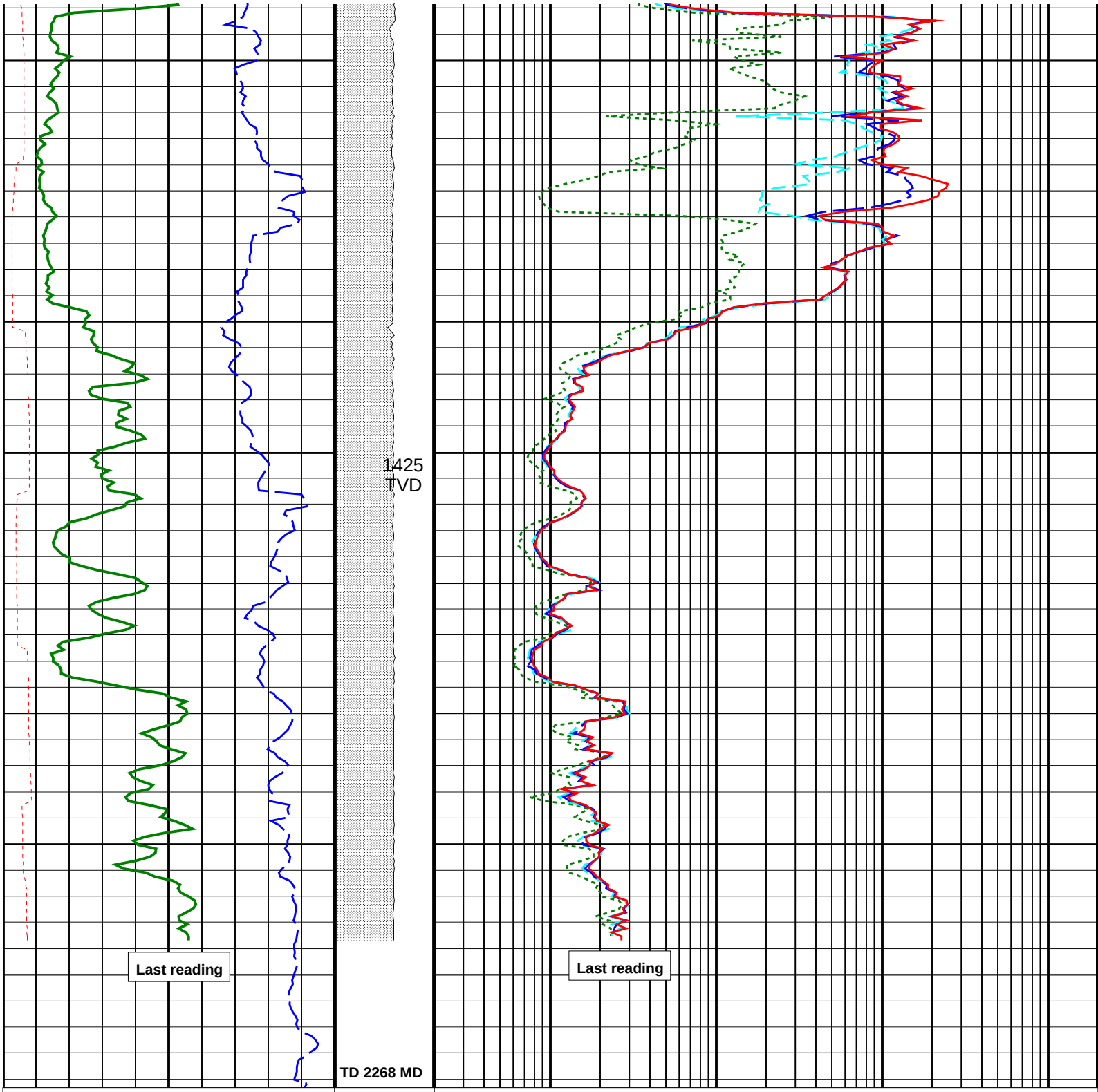

1175
TVD
1200
TVD


1225
TVD
1250
TVD


1275
TVD
1300
TVD
GR_RAB
ROP5_RM
TAB_RAB_RING
RES_BD
RES_BM
RES_BS
RES_RING


1325
TVD
1350
TVD


1375
TVD
1400
TVD



ROP: 5 Feet Average (ROP5_RM)
200 (M/HR) 0

RAB Rotational Speed (RPM_RAB) (RPM)
0 200

Shallow Button Resistivity (RES_BS)
0.2 (OHMM) 2000

RAB Gamma Ray (GR_RAB)
0 (GAPI) 200

Medium Button Resistivity (RES_BM)
0.2 (OHMM) 2000

Ring Resistivity Time After Bit (TAB_RAB_RING)
0 (HR) 10

Deep Button Resistivity (RES_BD)
0.2 (OHMM) 2000

RAB_RING)

0 (HR) 10

0.2 (OHMM) 2000

Ring Resistivity (RES_RING)

0.2 (OHMM) 2000

IDEAL Version: ID6_1C_10

IDF

RAB	**id6_1c_10**	**MWD_10**	**id6_1c_10**
ADN	**id6_1c_10**		

True Vertical Depth Log

6.75−in. Resistivity At−the−Bit / Equipment Identification

Primary Equipment:

Tool Name and Serial Number	RAB6 − CA	125
Calibration Status	Valid	

Master: Calibration out of date 20−MAY−2001 9:46

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		1.001	Master		0.9962	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	**M0/T2 factor**	**Value**	**Phase**	**M2/T1 factor**	**Value**	**Phase**	**M2/T2 factor**	**Value**
Master		0.9992	Master		0.9975	Master		0.9926
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		0.9987	Master		1.006
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		1.001	Master		1.005	Master		1.000
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: Calibration out of date 20−MAY−2001 9:46

6.75−in. Resistivity At−the−Bit Calibration

Gamma Ray: Blanket

Phase	Gamma ray factor	Value
Master		0.8812
0.7500 (Minimum)	1.000 (Nominal)	1.250 (Maximum)

ANADRILL

SCHLUMBERGER

Survey report 24-Jan-2002 04:41:48 Page 1 of 3

Client.....: ESSO Australia Ltd.
Field.....: Tuna

Well.....: WTN-W48 A
API number.....:
Engineer.....: T.Sims

Rig:.....: NABORS 453
STATE:.....: Victoria

Spud date.....: 19-Jan-02
Last survey date.....: 24-Jan-02
Total accepted surveys...: 59
MD of first survey.....: 628.00 m
MD of last survey.....: 2268.00 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.....: -61.00 m
KB above permanent.....: 34.70 m
DF above permanent.....: 34.70 m

----- Vertical section origin-----
Latitude (+N/S-).....: 0.00 m
Departure (+E/W-).....: 0.00 m

----- Platform reference point-----
Latitude (+N/S-).....: -5.06 m
Departure (+E/W-).....: 55.86 m

Azimuth from rotary table to target: 64.64 degrees

----- Geomagnetic data -----
Magnetic model.....: BGGM version 2000
Magnetic date.....: 31-Dec-2001
Magnetic field strength..: 1200.65 HCNT
Magnetic dec (+E/W-).....: 13.18 degrees
Magnetic dip.....: -68.71 degrees

----- MWD survey Reference Criteria -----
Reference G.....: 1000.02 mGal
Reference H.....: 1200.65 HCNT
Reference Dip.....: -68.71 degrees
Tolerance of G.....: (+/-) 2.50 mGal
Tolerance of H.....: (+/-) 6.00 HCNT
Tolerance of Dip.....: (+/-) 0.45 degrees

----- Corrections -----
Magnetic dec (+E/W-).....: 13.18 degrees
Grid convergence (+E/W-).: -0.86 degrees
Total az corr (+E/W-)....: 14.04 degrees
(Total az corr = magnetic dec - grid conv)
Sag applied (Y/N).....: No degree: 0.00

[(c)2002 Anadrill IDEAL ID6_1C_10]

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 qual type
1	628.00	25.50	95.71	0.00	607.03	144.98	-32.99	176.08	179.14	100.61	0.00	TIP	-
2	637.42	25.67	90.66	9.42	615.53	148.55	-33.22	180.14	183.17	100.45	2.32	MWD	6-axis
3	665.50	32.04	84.68	28.08	640.11	161.03	-32.59	193.65	196.38	99.55	2.49	MWD	6-axis
4	695.37	33.51	81.07	29.87	665.23	176.39	-30.58	209.69	211.91	98.30	0.82	MWD	6-axis
5	723.88	36.79	76.42	28.51	688.54	192.30	-27.35	225.77	227.42	96.91	1.48	MWD	6-axis
6	751.52	38.73	72.29	27.64	710.40	208.97	-22.78	242.06	243.13	95.38	1.15	MWD	6-axis
7	780.30	38.69	71.34	28.78	732.85	226.83	-17.16	259.16	259.72	93.79	0.21	MWD	6-axis
8	808.87	43.85	69.48	28.57	754.32	245.57	-10.83	276.90	277.11	92.24	1.86	MWD	6-axis
9	837.41	45.97	69.57	28.54	774.53	265.65	-3.78	295.77	295.80	90.73	0.74	MWD	6-axis
10	865.79	48.92	67.80	28.38	793.72	286.50	3.82	315.24	315.26	89.31	1.14	MWD	6-axis
11	893.98	52.42	65.60	28.19	811.59	308.29	12.46	335.26	335.49	87.87	1.38	MWD	6-axis
12	923.17	55.44	63.56	29.19	828.78	331.87	22.59	356.56	357.28	86.38	1.18	MWD	6-axis
13	952.07	59.26	60.72	28.90	844.37	356.18	33.97	378.06	379.58	84.87	1.56	MWD	6-axis
14	980.67	61.56	59.44	28.60	858.49	380.96	46.37	399.61	402.29	83.38	0.89	MWD	6-axis
15	1009.06	62.87	59.54	28.39	871.72	405.98	59.12	421.25	425.38	82.01	0.46	MWD	6-axis
16	1037.57	64.15	59.67	28.51	884.44	431.40	72.03	443.26	449.07	80.77	0.45	MWD	6-axis
17	1066.26	63.79	59.11	28.69	897.03	457.07	85.16	465.45	473.17	79.63	0.22	MWD	6-axis
18	1094.51	63.16	58.43	28.25	909.64	482.21	98.27	487.06	496.87	78.59	0.31	MWD	6-axis
19	1122.19	61.98	59.38	27.68	922.40	506.66	110.95	508.10	520.07	77.68	0.52	MWD	6-axis
20	1150.39	61.14	59.16	28.20	935.83	531.34	123.63	529.41	543.65	76.86	0.31	MWD	6-axis
21	1178.94	62.03	60.19	28.55	949.41	556.36	136.30	551.09	567.69	76.11	0.44	MWD	6-axis
22	1207.15	63.15	60.28	28.21	962.40	581.33	148.73	572.83	591.82	75.44	0.40	MWD	6-axis
23	1236.27	62.43	59.97	29.12	975.71	607.15	161.63	595.28	616.83	74.81	0.26	MWD	6-axis
24	1265.12	62.15	59.81	28.85	989.13	632.60	174.45	617.38	641.55	74.22	0.11	MWD	6-axis
25	1293.99	61.08	59.79	28.87	1002.85	657.91	187.22	639.33	666.18	73.68	0.37	MWD	6-axis
26	1323.58	61.56	59.93	29.59	1017.05	683.78	200.26	661.78	691.41	73.16	0.17	MWD	6-axis

26	1323.58	61.56	59.93	29.59	1017.05	683.78	200.26	661.78	691.41	73.16	0.17	MWD	6-axis
27	1351.66	61.96	60.22	28.08	1030.34	708.44	212.60	683.22	715.53	72.72	0.17	MWD	6-axis
28	1380.99	62.87	60.44	29.33	1043.92	734.36	225.47	705.80	740.94	72.28	0.32	MWD	6-axis
29	1410.08	62.26	60.33	29.09	1057.32	760.10	238.22	728.25	766.22	71.89	0.21	MWD	6-axis
30	1439.00	62.01	60.44	28.92	1070.84	785.60	250.86	750.48	791.29	71.52	0.09	MWD	6-axis

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 qual type
31	1468.28	60.88	60.22	29.28	1084.84	811.25	263.59	772.82	816.54	71.17	0.39	MWD	6-axis
32	1496.90	62.33	59.64	28.62	1098.45	836.34	276.20	794.61	841.25	70.83	0.54	MWD	6-axis
33	1525.62	63.33	59.19	28.72	1111.56	861.78	289.21	816.61	866.31	70.50	0.38	MWD	6-axis
34	1554.18	62.76	59.51	28.56	1124.51	887.13	302.18	838.51	891.30	70.18	0.22	MWD	6-axis
35	1583.01	62.03	59.58	28.83	1137.87	912.58	315.13	860.53	916.42	69.89	0.25	MWD	6-axis
36	1612.06	62.03	59.85	29.05	1151.49	938.14	328.07	882.68	941.68	69.61	0.08	MWD	6-axis
37	1641.08	63.64	58.36	29.02	1164.74	963.84	341.33	904.84	967.08	69.33	0.72	MWD	6-axis
38	1670.28	63.05	58.63	29.20	1177.84	989.78	354.97	927.09	992.72	69.05	0.22	MWD	6-axis
39	1699.28	62.23	58.75	29.00	1191.17	1015.40	368.35	949.09	1018.07	68.79	0.29	MWD	6-axis
40	1728.42	62.83	59.01	29.14	1204.61	1041.12	381.71	971.23	1043.54	68.54	0.22	MWD	6-axis
41	1757.48	62.30	59.03	29.06	1218.00	1066.79	394.99	993.34	1068.99	68.32	0.18	MWD	6-axis
42	1785.41	61.38	59.30	27.93	1231.18	1091.30	407.61	1014.48	1093.31	68.11	0.34	MWD	6-axis
43	1814.52	61.98	59.01	29.11	1244.99	1116.81	420.75	1036.48	1118.63	67.91	0.22	MWD	6-axis
44	1843.43	61.56	59.12	28.91	1258.66	1142.16	433.84	1058.33	1143.80	67.71	0.15	MWD	6-axis
45	1871.96	62.19	59.37	28.53	1272.11	1167.21	446.71	1079.95	1168.69	67.53	0.23	MWD	6-axis
46	1900.95	61.63	59.56	28.99	1285.76	1192.68	459.70	1101.98	1194.02	67.36	0.20	MWD	6-axis
47	1929.89	62.51	59.14	28.94	1299.32	1218.14	472.74	1123.98	1219.35	67.19	0.33	MWD	6-axis
48	1958.60	61.74	59.42	28.71	1312.74	1243.41	485.70	1145.79	1244.49	67.03	0.28	MWD	6-axis
49	1987.71	62.93	59.29	29.11	1326.26	1269.08	498.85	1167.98	1270.04	66.87	0.41	MWD	6-axis
50	2016.29	62.64	59.41	28.58	1339.33	1294.39	511.80	1189.84	1295.25	66.73	0.11	MWD	6-axis
51	2045.59	61.94	59.77	29.30	1352.95	1320.23	524.93	1212.21	1320.99	66.59	0.26	MWD	6-axis
52	2074.80	63.76	59.47	29.21	1366.28	1346.12	538.08	1234.63	1346.79	66.45	0.63	MWD	6-axis
53	2103.81	63.69	60.18	29.01	1379.12	1372.04	551.15	1257.12	1372.63	66.33	0.22	MWD	6-axis
54	2130.96	62.44	60.29	27.15	1391.42	1396.17	563.17	1278.13	1396.70	66.22	0.46	MWD	6-axis
55	2160.05	63.95	59.90	29.09	1404.54	1422.05	576.11	1300.64	1422.52	66.11	0.53	MWD	6-axis
56	2189.53	64.50	59.77	29.48	1417.36	1448.51	589.45	1323.59	1448.91	65.99	0.19	MWD	6-axis
57	2218.85	65.72	59.79	29.32	1429.70	1475.01	602.84	1346.57	1475.35	65.88	0.42	MWD	6-axis
58	**2243.88**	**66.47**	**59.87**	**25.03**	**1439.84**	**1497.81**	**614.34**	**1366.35**	**1498.11**	**65.79**	**0.30**	**MWD**	**6-axis**
59	**2268.00**	**66.50**	**59.90**	**24.12**	**1449.46**	**1519.85**	**625.44**	**1385.49**	**1520.11**	**65.70**	**0.02**	**MWD**	**Projection**

Company: ESSO Australia Ltd.

Well: WTN-W48 A

Field: Tuna

Rig: NABORS 453

State: Victoria

IDEAL services from **Anadrill**

GeoVISION Resistivity
1 : 200 True Vertical Depth
Recorded Mode

Schlumberger