Country: Australia
State: Tasmania
Rig Name: Ocean Patriot
Field: Exploration
Well: Spikey Beach-1
Company: Beach Petroleum Ltd

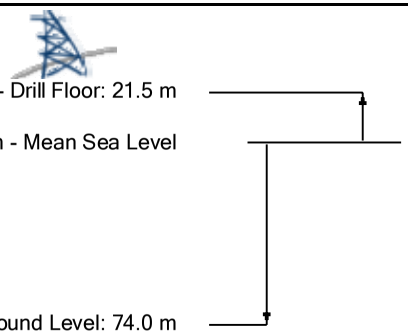
Schlumberger

VISION Service
1:200 Measured Depth
Recorded Mode Log

Company:	Beach Petroleum Ltd
Well:	Spikey Beach-1
Field:	Exploration
Rig Name:	Ocean Patriot
State:	Tasmania
Country:	Australia

Latitude:	40° 28' 53.9" S	Custom:	
Longitude:	145° 52' 24.71" E	Rig Name:	Ocean Patriot
Block:		Rig Type:	Semi Submersible

FL:	Exploration
FL1:	
FL2:	



Acquisition Dates:	11 Sep 09 to 13 Sep 09
Print Interval:	775.1(m) to 2100.2(m)
Index Types:	Measured Depth
Index Scales:	1:200
Depth Source:	Driller's Depth
Depth Sensor:	DES
Conveyance:	Drill Pipe
Print Type:	Field
Spud Date:	05-Sep-2009

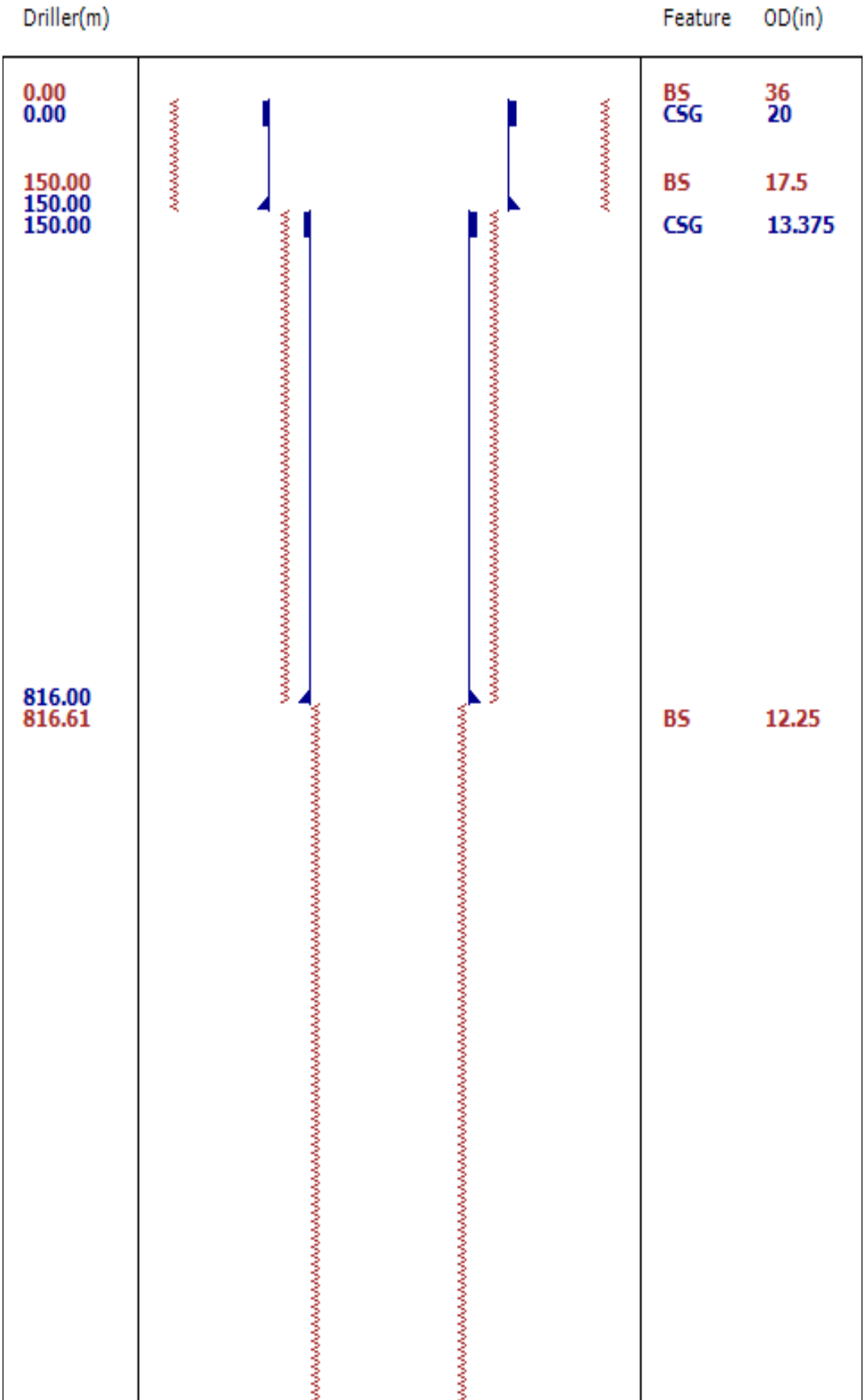
Other Services:

Directional Surveys

Disclaimer

Contents

Well Sketch


Driller(m)
Feature
OD(in)
0.00
0.00
BS
36
CSG
20
150.00
150.00
150.00
BS
17.5
CSG
13.375
816.00
816.61
BS
12.25

Borehole Size/Casing Record

Bit						
Bit Size (in)	36	17.5	12.25			
Bottom Driller (m)	150	816.61	2100.35			
Casing						
Size (in)	20	13.375				
Weight (kg/m)	169.65	197.9				
Inner Diameter (in)	18.928	11.41				
Grade	H50	F25				
Top Driller (m)	0	150				
Bottom Driller (m)	150	816				

Operational Run Summary

Parameter (unit)	**Run 2**					
Date Log Started	10-Sep-2009					
Time Log Started	19:59:13					
Date Log Finished	13-Sep-2009					
Time Log Finished	15:53:56					
Bit Size (in)	12.250					
Bit Start Depth (m)	804.72					
Bit Stop Depth (m)	2100.35					
Top Log Interval (m)	NaN					
Bottom Log Interval (m)	NaN					
Max Hole Deviation (deg)	0.73					
Azimuth of Max Deviation (deg)	105.25					
Logging Unit Number	OLU-KC-0702					
Logging Unit Location						
Recorded By						
Witnessed By						
Service Order Number	09ASQ0029					

Borehole Fluids

Parameter (unit)	**Run 2**					
Type Fluid	Water					
Max Recorded Temperature (degC)						
Source of Sample	Active Tank					
Salinity (ppm)	Zoned					
Density (lbm/gal)	Zoned					

Viscosity (s)	Zoned					
Fluid Loss (cm3)						
pH	Zoned					
Source Rmf						
Source Rmc	Pressed					
Rm @ Meas Temp (ohm.m@degC)	Zoned					
Rmf @ Meas Temp (ohm.m@degC)	Zoned					
Rmc @ Meas Temp (ohm.m@degC)	Zoned					
Rm @ BHT (ohm.m@degC)	Zoned					
Rmf @ BHT (ohm.m@degC)	Zoned					
Rmc @ BHT (ohm.m@degC)	Zoned					

Zoned Borehole Fluids

Run 2

Parameter	Value	Start
Salinity	117818.2	9/10/2009 7:59:12 PM
Salinity	102066.1	9/11/2009 11:30:28 AM
Salinity	98242.83	9/12/2009 2:00:00 AM
Density	9	9/10/2009 7:59:12 PM
Density	9.10	9/11/2009 11:30:28 AM
Density	9.5	9/12/2009 2:00:00 AM
Viscosity	43	9/10/2009 7:59:12 PM
Viscosity	52	9/11/2009 11:30:28 AM
Viscosity	59	9/12/2009 2:00:00 AM
pH	9	9/10/2009 7:59:12 PM
pH	9.5	9/11/2009 11:30:28 AM
Meas Temp	17.9	9/10/2009 7:59:12 PM
Meas Temp	20.9	9/11/2009 7:28:28 PM
Meas Temp	22.4	9/12/2009 7:30:04 PM
Meas Temp	18.6	9/10/2009 7:59:12 PM
Meas Temp	21	9/11/2009 7:28:28 PM
Meas Temp	22.8	9/12/2009 7:30:04 PM
Meas Temp	20.1	9/10/2009 7:59:12 PM
Meas Temp	21.3	9/11/2009 7:28:28 PM
Meas Temp	22.1	9/12/2009 7:30:04 PM
Rm @ Meas Temp	0.07 @ 17.9	9/10/2009 7:59:12 PM
Rm @ Meas Temp	0.08 @ 20.9	9/11/2009 7:28:28 PM
Rm @ Meas Temp	0.07 @ 22.4	9/12/2009 7:30:04 PM
Rmf @ Meas Temp	0.07 @ 18.6	9/10/2009 7:59:12 PM
Rmf @ Meas Temp	0.07 @ 21	9/11/2009 7:28:28 PM
Rmf @ Meas Temp	0.06 @ 22.8	9/12/2009 7:30:04 PM
Rmc @ Meas Temp	0.08 @ 20.1	9/10/2009 7:59:12 PM
Rmc @ Meas Temp	0.34 @ 22.1	9/12/2009 7:30:04 PM
Rm @ BHT	0.03 @ 68	9/10/2009 7:59:12 PM
Rm @ BHT	0.05 @ 68	9/12/2009 7:30:04 PM
Rm @ BHT	0.05 @ 68	9/12/2009 10:53:04 PM
Rmf @ BHT	0.03 @ 68	9/10/2009 7:59:12 PM
Rmf @ BHT	0.04 @ 68	9/11/2009 7:28:28 PM
Rmf @ BHT	0.04 @ 68	9/12/2009 7:30:04 PM

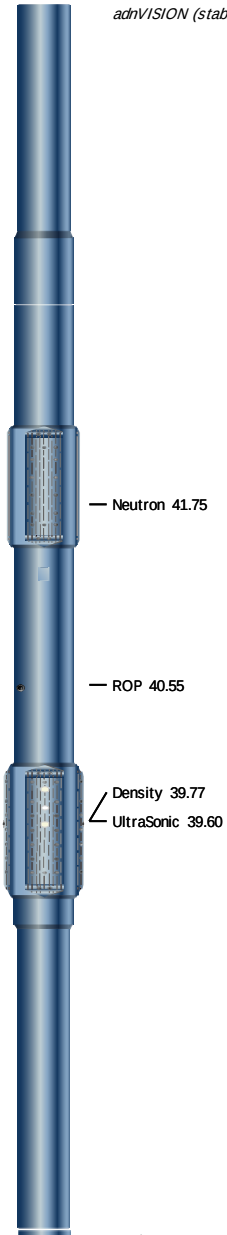
Rmc @ BHT	0.04 @ 68	9/10/2009 7:59:12 PM
Rmc @ BHT	0.05 @ 68	9/11/2009 7:28:28 PM
Rmc @ BHT	0.17 @ 68	9/12/2009 7:30:04 PM

Remarks and Equipment Summary

Run 2: Toolstring

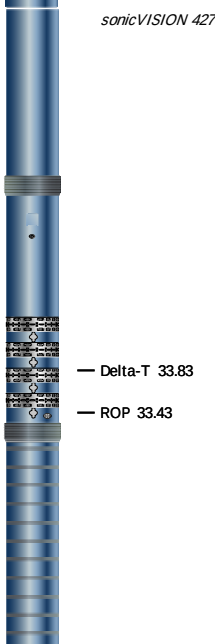
Cum. Length 45.61
SADN8

adnVISION (stabilized) 43225

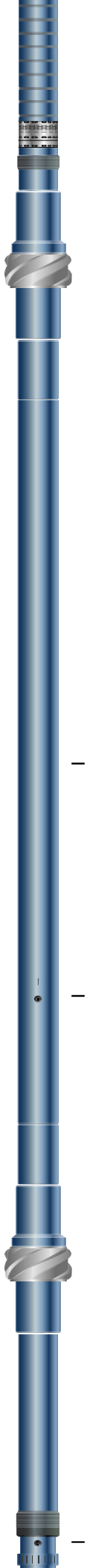


Cum. Length 36.44
SONICVISION8

sonicVISION 42784



Run 2: Remarks



Cum. Length 29.58
Stab: 9"

sonicVISION NM-ILS

Cum. Length 28.73
TELE825

TeleScope ZH22

— D&I 24.45

— ROP 22.10

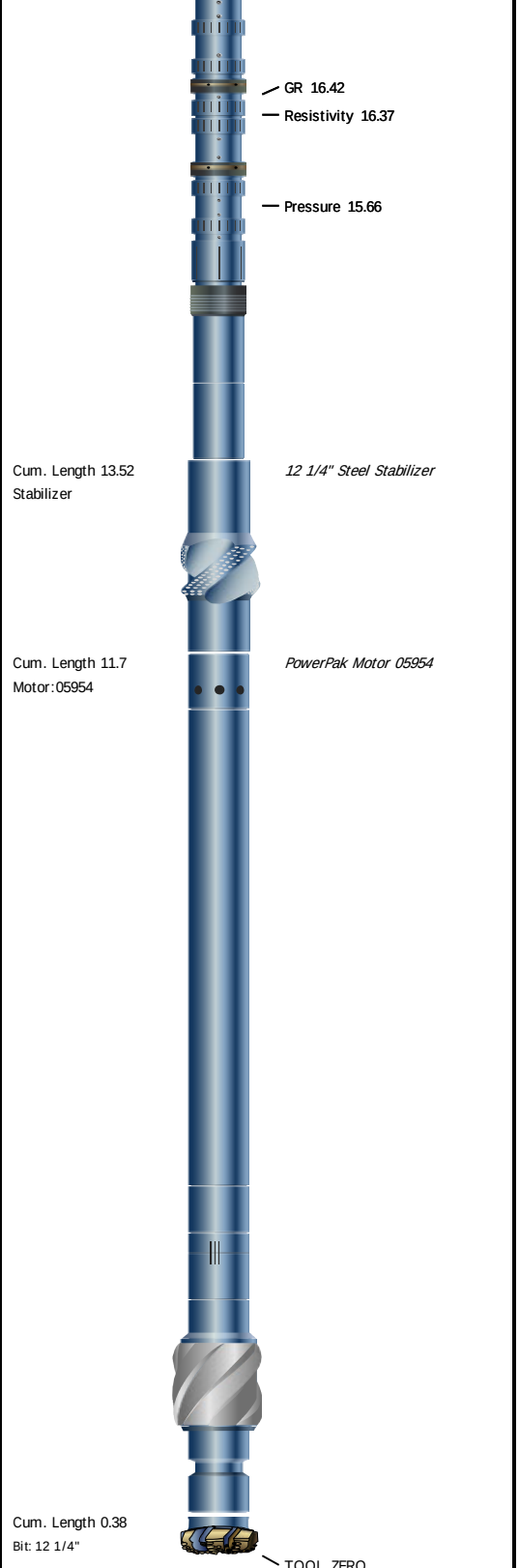
Cum. Length 20.67
Stab: 9"

TeleScope NM-ILS

Cum. Length 19.76
ARC8

arcVISION 1216

— ROP 17.49



Lengths are in m
Maximum Outer Diameter = 12.250 in
Line: Sensor Location, Value: Gating Offset
All measurements are relative to TOOL_ZERO

Run 2

Software Version

Acquisition System	Version
MaxWell	1.2.8706.0
Framework Patch	FWK-BGC-20090709-1.2.8706.1016
Application Patch	APL-BGC-DnM-1.2.8706.1021

Computation	Description	Version

Computation	Description	Version
ULTRASON_PROC	Ultrasonic Processing, ADN	1.2.8706.0
NEUTRON_PROC	Neutron Processing, ADN	1.2.8706.0
ARC8GammaRayComputation	ARC8 Gamma Ray Computation Package for both Real-time and Recorded Mode	1.2.8706.1021
DENSITY_PROC	Density Processing, ADN	1.2.8706.0
ARCResistivity	ARC Resistivity Computation Package for ARC Tool Family	1.2.8706.1021

Tool Elements	Description	Software Version	Firmware Version
ARDC	ARC 8.25 Inch Tool Drilling Collar	1.2.8706.1021	V9.4B
DRILLING_SURFACE	DRILLING_SURFACE	1.2.8706.1016	
ADNP	Azimuth Neutron Detector Package	1.2.8706.0	V8.3A
NDUS	Azimuth Uson Detector Package	1.2.8706.0	V8.3A
ADDP	Azimuth Density Detector Package	1.2.8706.0	V8.3A

Composite Summary

Run Name	Pass Objective	Direction	Top	Bottom	Acquisition Start Date	Acquisition Start Time
Run 2	Drilling	Down	804.72 m	2100.35 m	11-Sep-2009	01:32:19
Run 2	Ream Up 1	Up	808.84 m	2091.26 m	13-Sep-2009	09:45:06

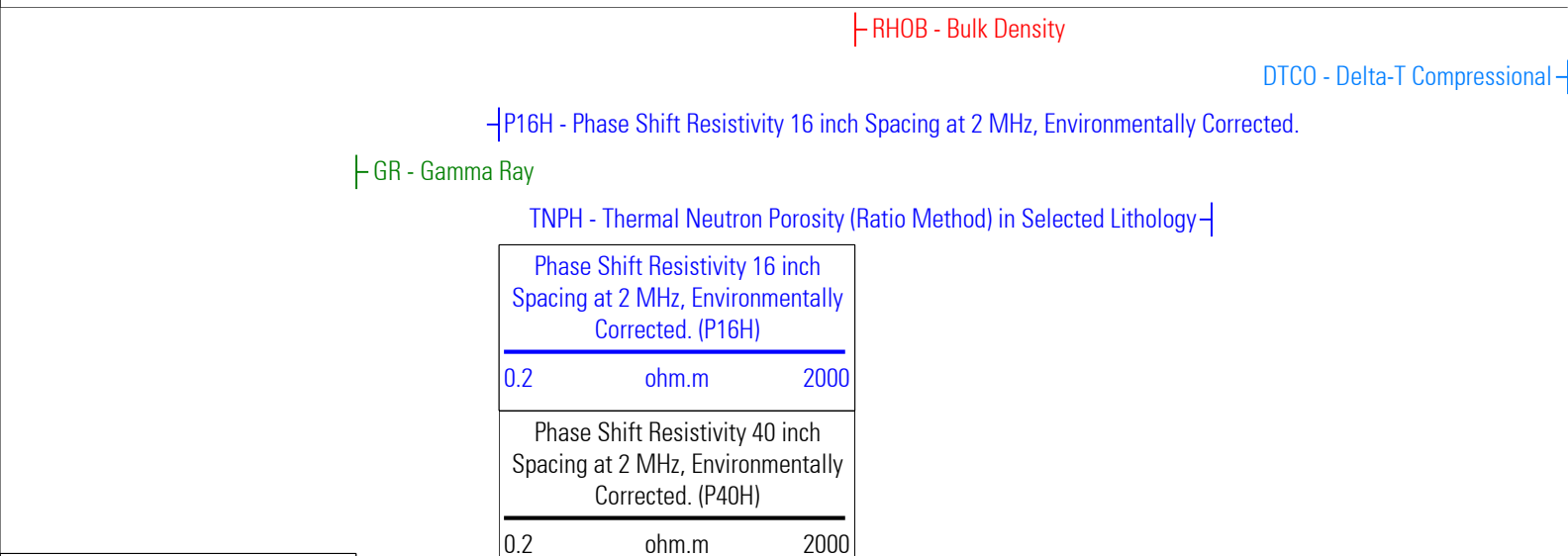
All depths are referenced to toolstring zero

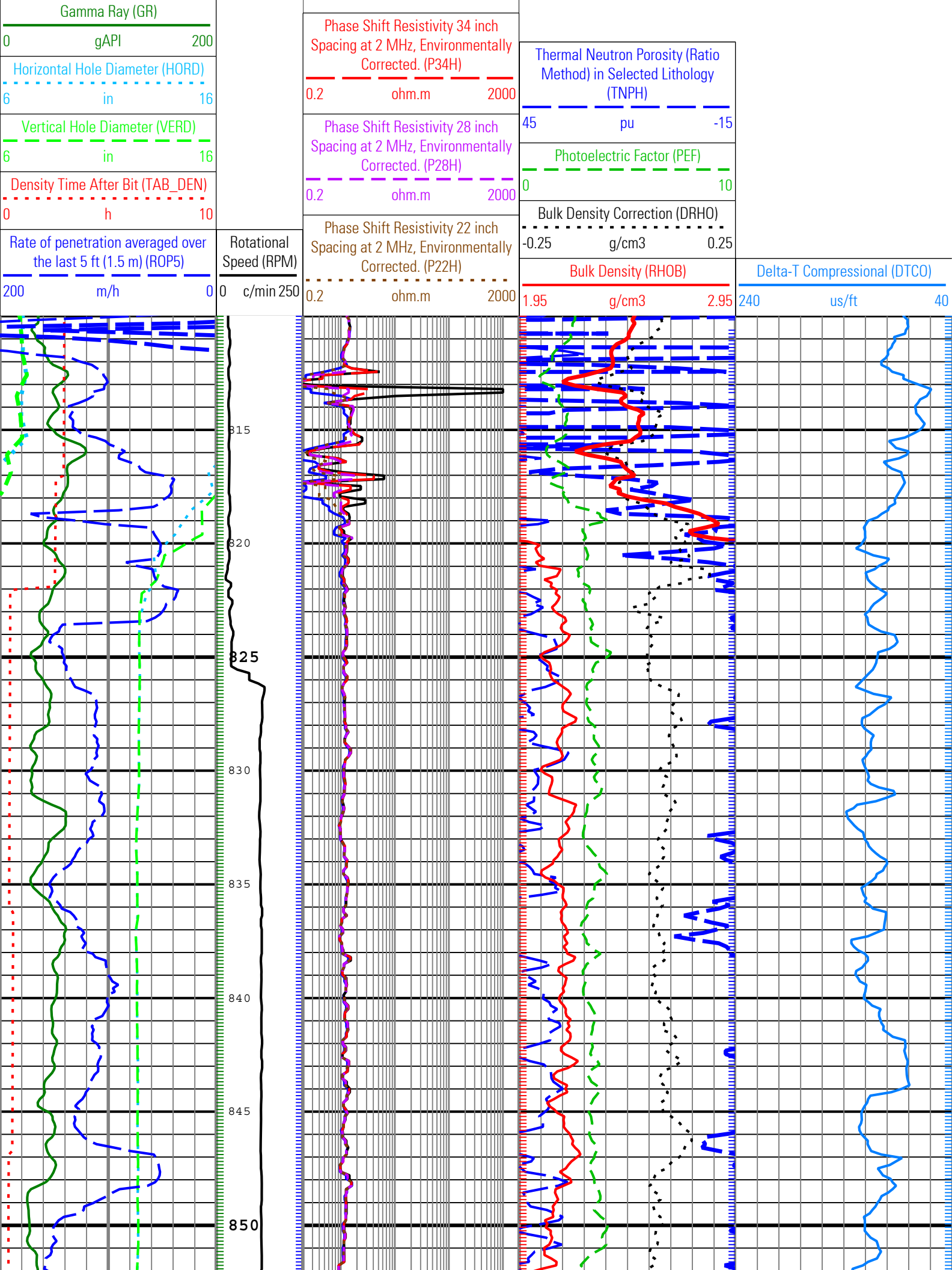
Log

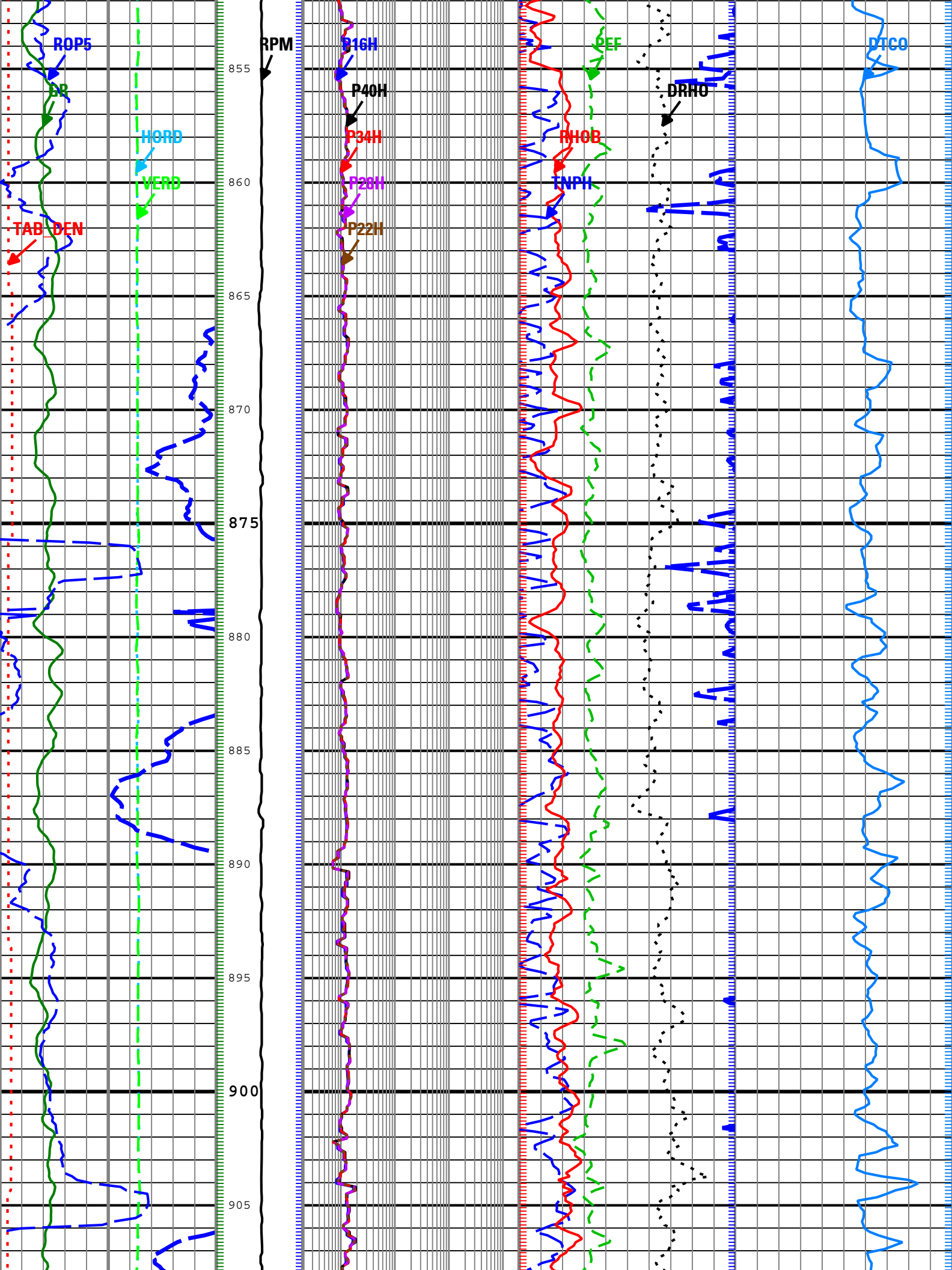
Composite 1 6339D5C2-242F-46AB-AADA-B01DD00FAEB8

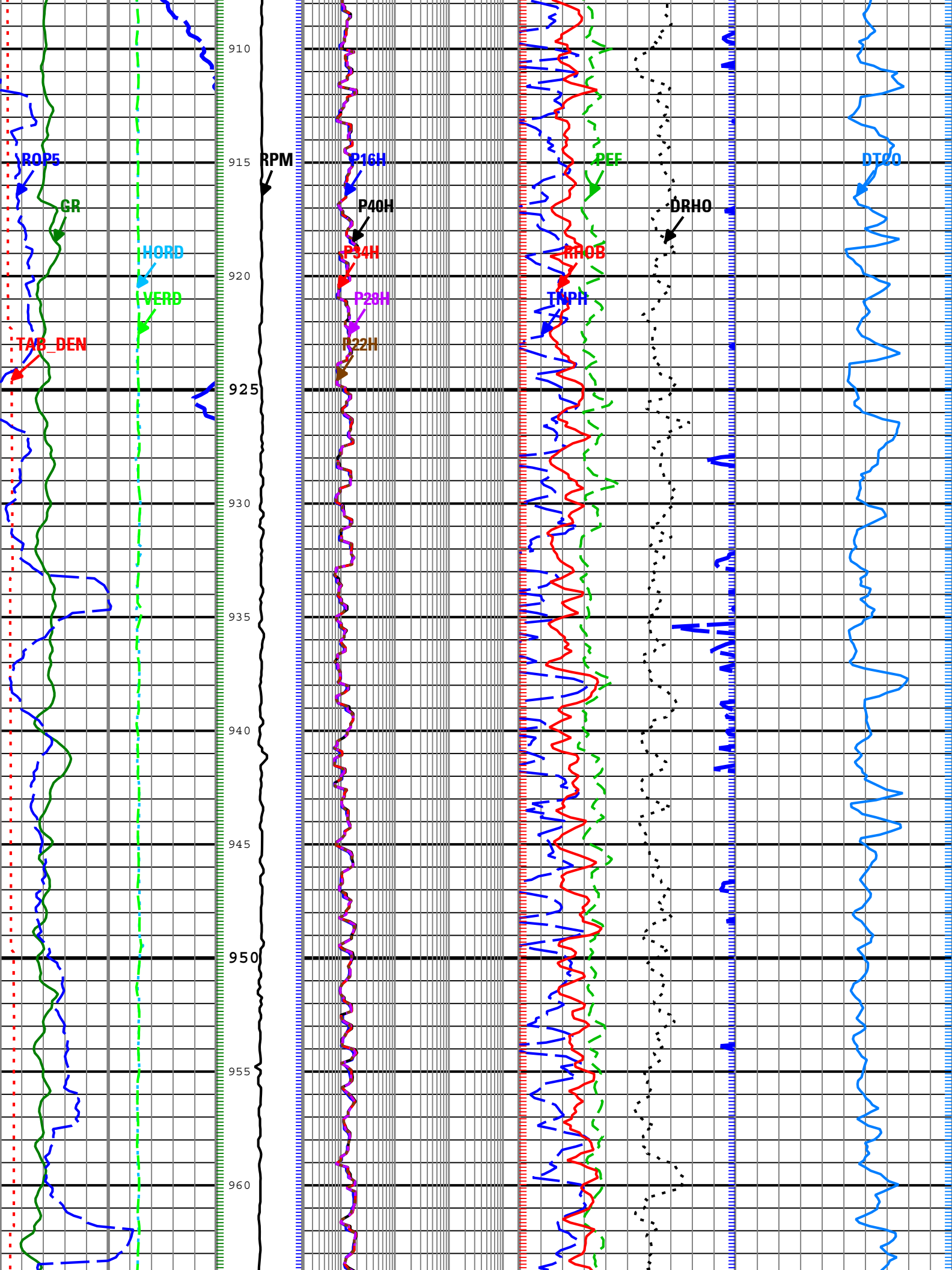
Description: ARC Dual Frequency Resistivity RT Format: Log (Quad Combo RM VISION Service) Index Scale: 1:200 Index Unit: m Index Type: Measured Depth
Creation Date: 14-Sep-2009 02:37:33

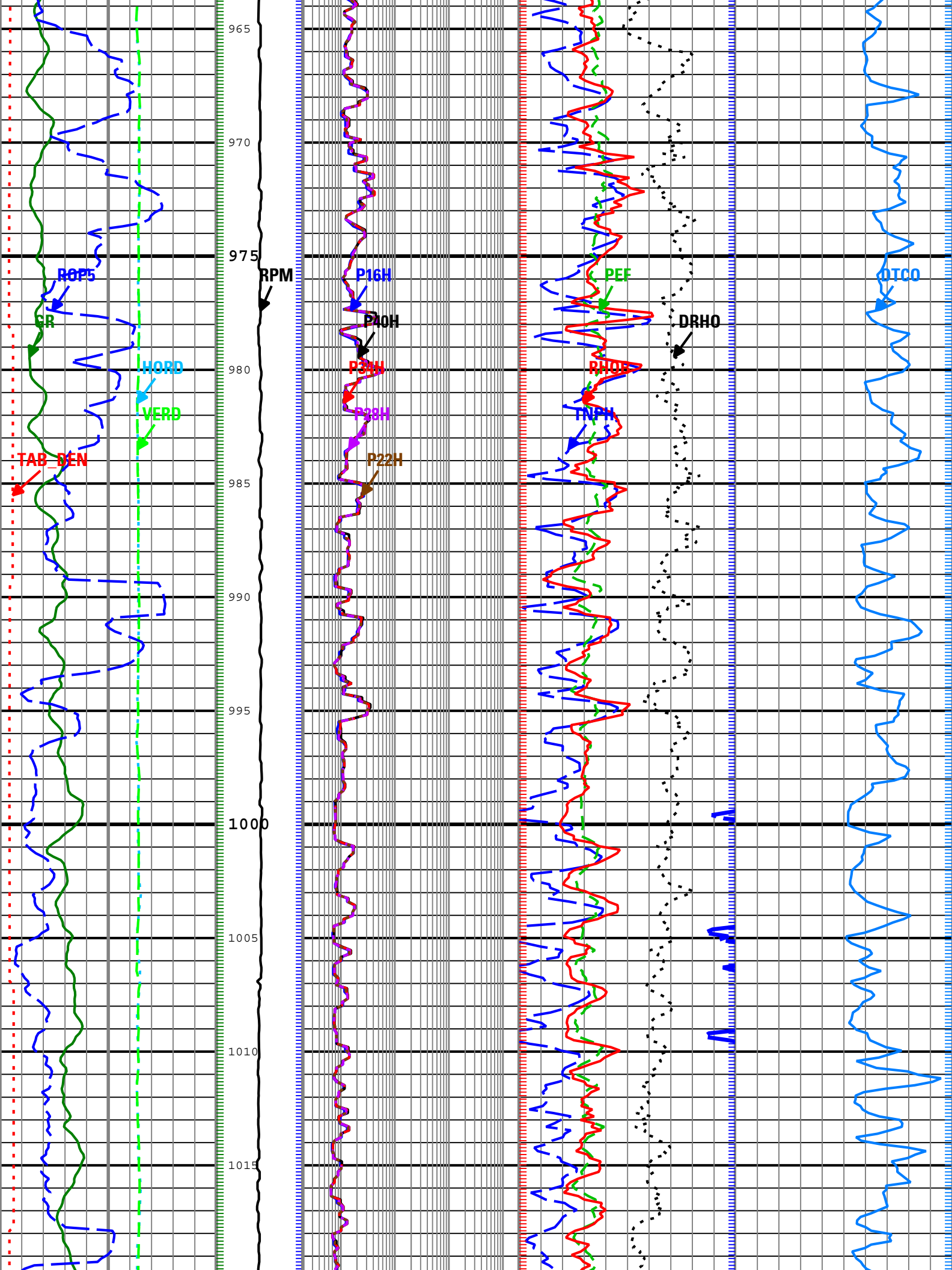
DRHO	ADN[1]:ADN[1]:ADN[1]	6in - RM
DTCO	sonicVISION[1]:sonicVISION[1]	6in - RM
GR	ARC[1]:ARC[1]:ARDC[1]	6in - RM
HORD	ADN[1]:ADN[1]:ADN[1]	6in - RM
P16H	ARC[1]:ARC[1]:ARDC[1]	6in - RM
P22H	ARC[1]:ARC[1]:ARDC[1]	6in - RM
P28H	ARC[1]:ARC[1]:ARDC[1]	6in - RM
P34H	ARC[1]:ARC[1]:ARDC[1]	6in - RM
P40H	ARC[1]:ARC[1]:ARDC[1]	6in - RM
PEF	ADN[1]:ADN[1]:ADN[1]	6in - RM
RHOB	ADN[1]:ADN[1]:ADN[1]	6in - RM
ROP5	DRILLING_SURFACE	6in - RT
RPM	ADN[1]:ADN[1]	6in - RM
TAB_DEN	ADN[1]:ADN[1]:ADN[1]	6in
TNPH	ADN[1]:ADN[1]:ADN[1]	6in - RM
VERD	ADN[1]:ADN[1]:ADN[1]	6in - RM

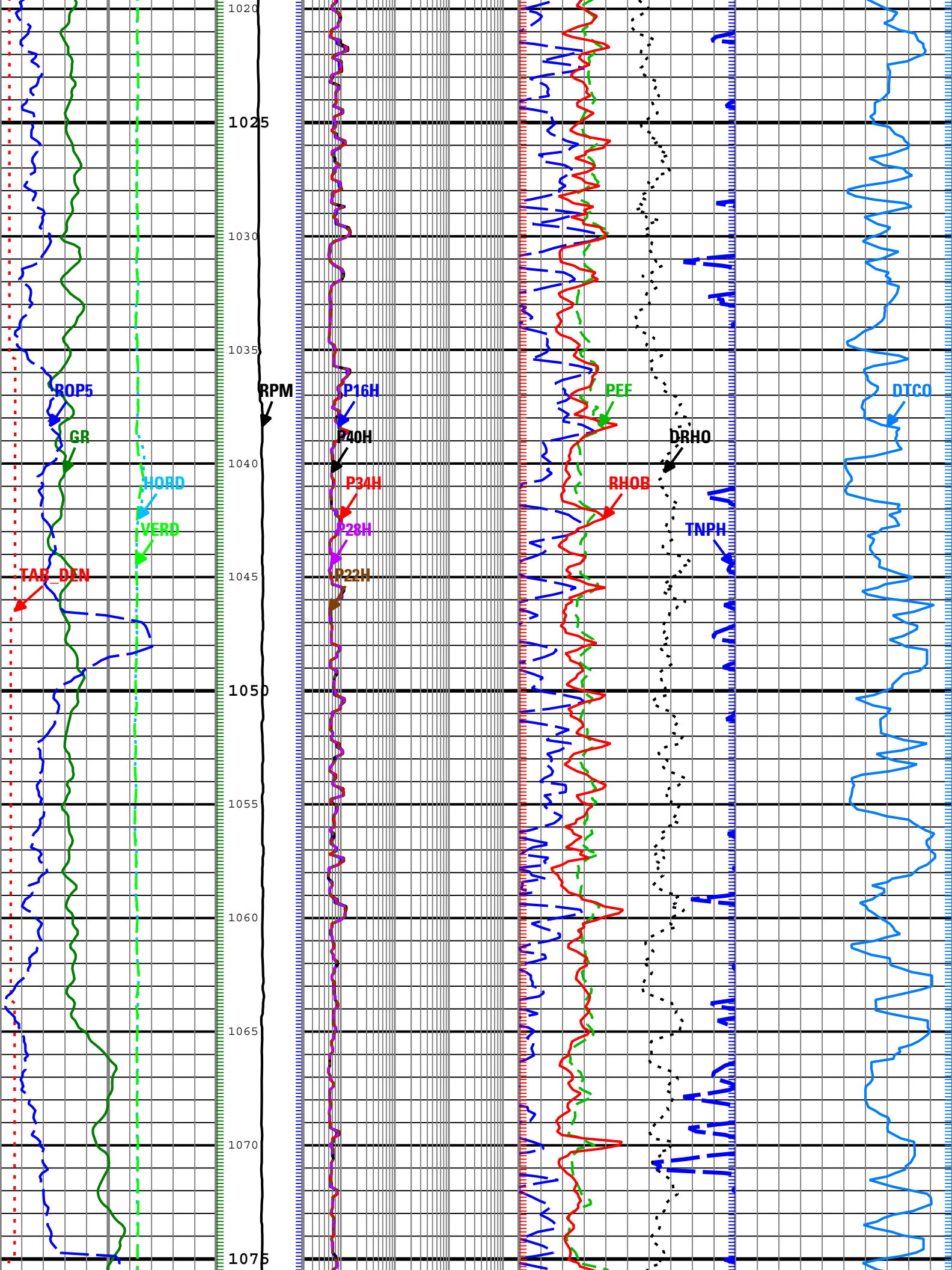



Gamma Ray (GR)
0
gAPI
200
Horizontal Hole Diameter (HORD)
6
in
16
Vertical Hole Diameter (VERD)
6
in
16
Density Time After Bit (TAB_DEN)
0
h
10
Rate of penetration averaged over the last 5 ft (1.5 m) (ROP5)
200
m/h
0
Rotational Speed (RPM)
0
c/min
250
Phase Shift Resistivity 34 inch Spacing at 2 MHz, Environmentally Corrected. (P34H)
0.2
ohm.m
2000
Phase Shift Resistivity 28 inch Spacing at 2 MHz, Environmentally Corrected. (P28H)
0.2
ohm.m
2000
Phase Shift Resistivity 22 inch Spacing at 2 MHz, Environmentally Corrected. (P22H)
0.2
ohm.m
2000
Thermal Neutron Porosity (Ratio Method) in Selected Lithology (TNPH)
45
pu
-15
Photoelectric Factor (PEF)
0
10
Bulk Density Correction (DRHO)
-0.25
g/cm3
0.25
Bulk Density (RHOB)
1.95
g/cm3
2.95
Delta-T Compressional (DTCO)
240
us/ft
40
815
820
825
830
835
840
845
850


ROP5
GR
HORD
VERD
TAB_DEN
RPM
P16H
P40H
P34H
P28H
P22H
PEF
RHOB
TNPH
DRHO
DTCO
855
860
865
870
875
880
885
890
895
900
905


ROP5
GR
HORD
VERD
TAB_DEN
RPM
P16H
P40H
P34H
P28H
P22H
PEF
DRHO
RHOB
TNPH
DTCO
910
915
920
925
930
935
940
945
950
955
960


965
970
975
980
985
990
995
1000
1005
1010
1015
ROP5
GR
HORD
VERD
TAB_DEN
RPM
P16H
P40H
P34H
P28H
P22H
PEF
DRHO
RHOB
TNPH
DTCO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1065
1070
1075
ROP5
GB
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VERD
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RPM
P16H
P40H
P34H
P28H
P22H
PEF
DRHO
RHOB
TNPH
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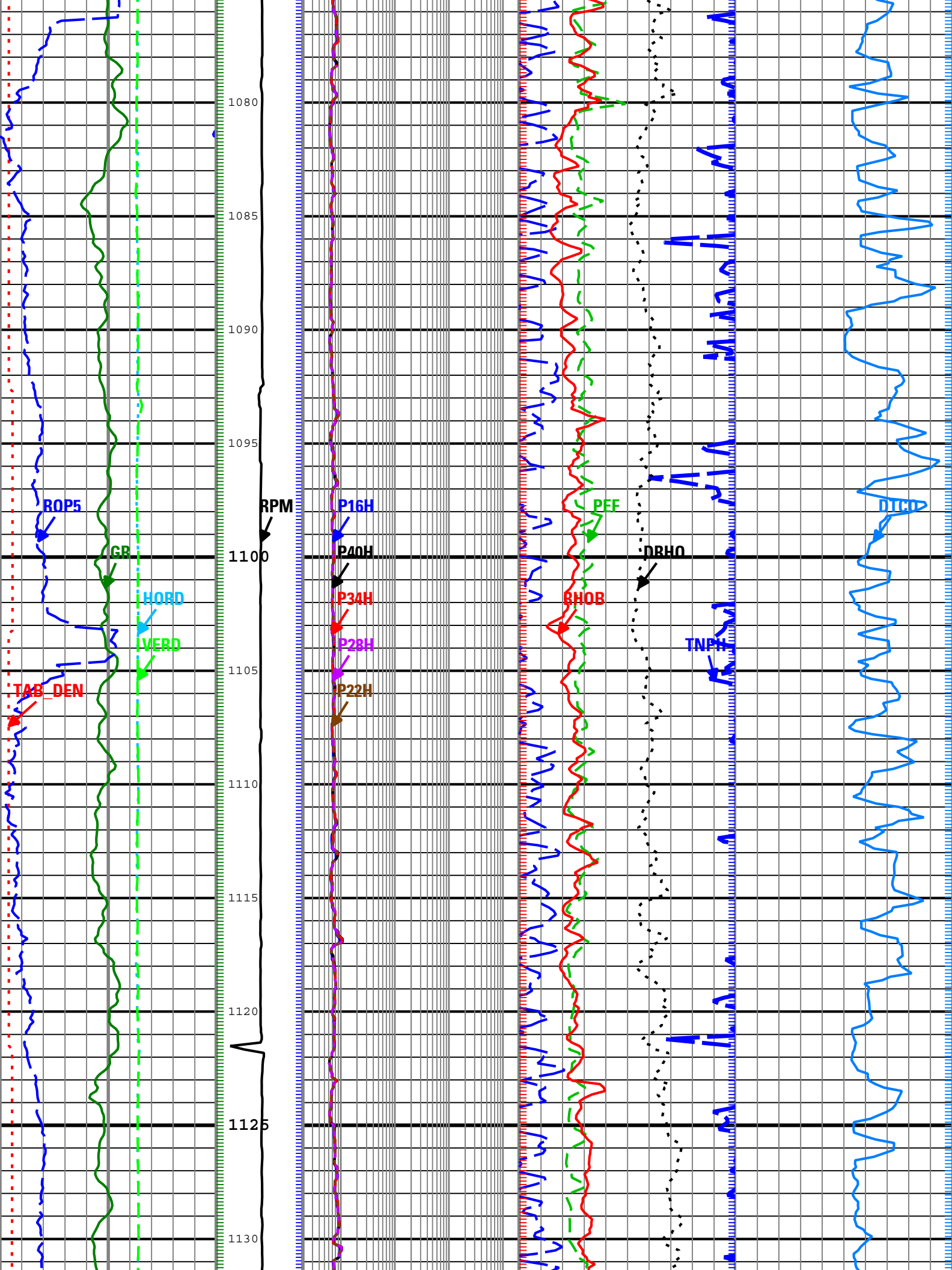
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P28H
P22H
PEF
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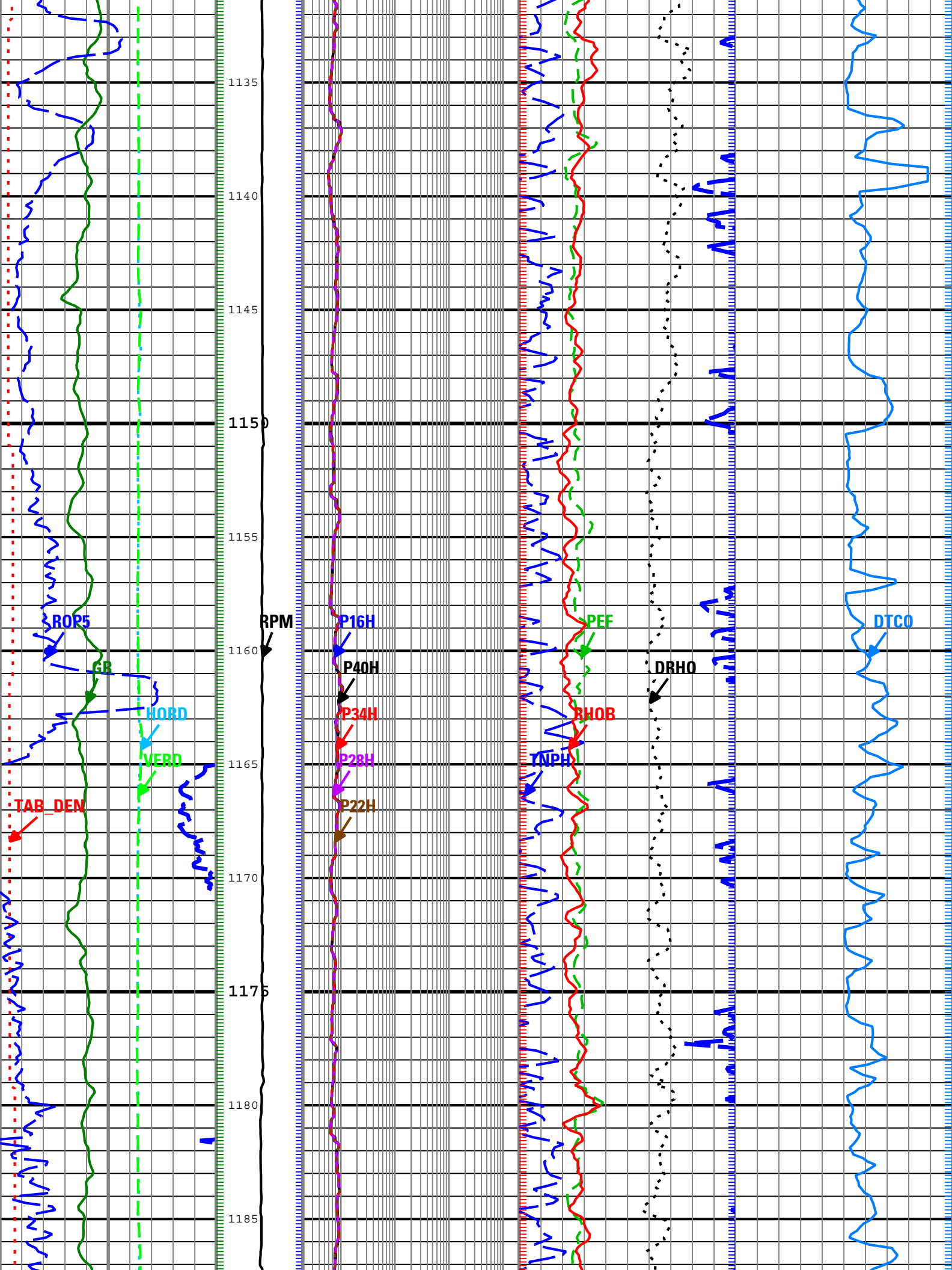
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1180
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GR
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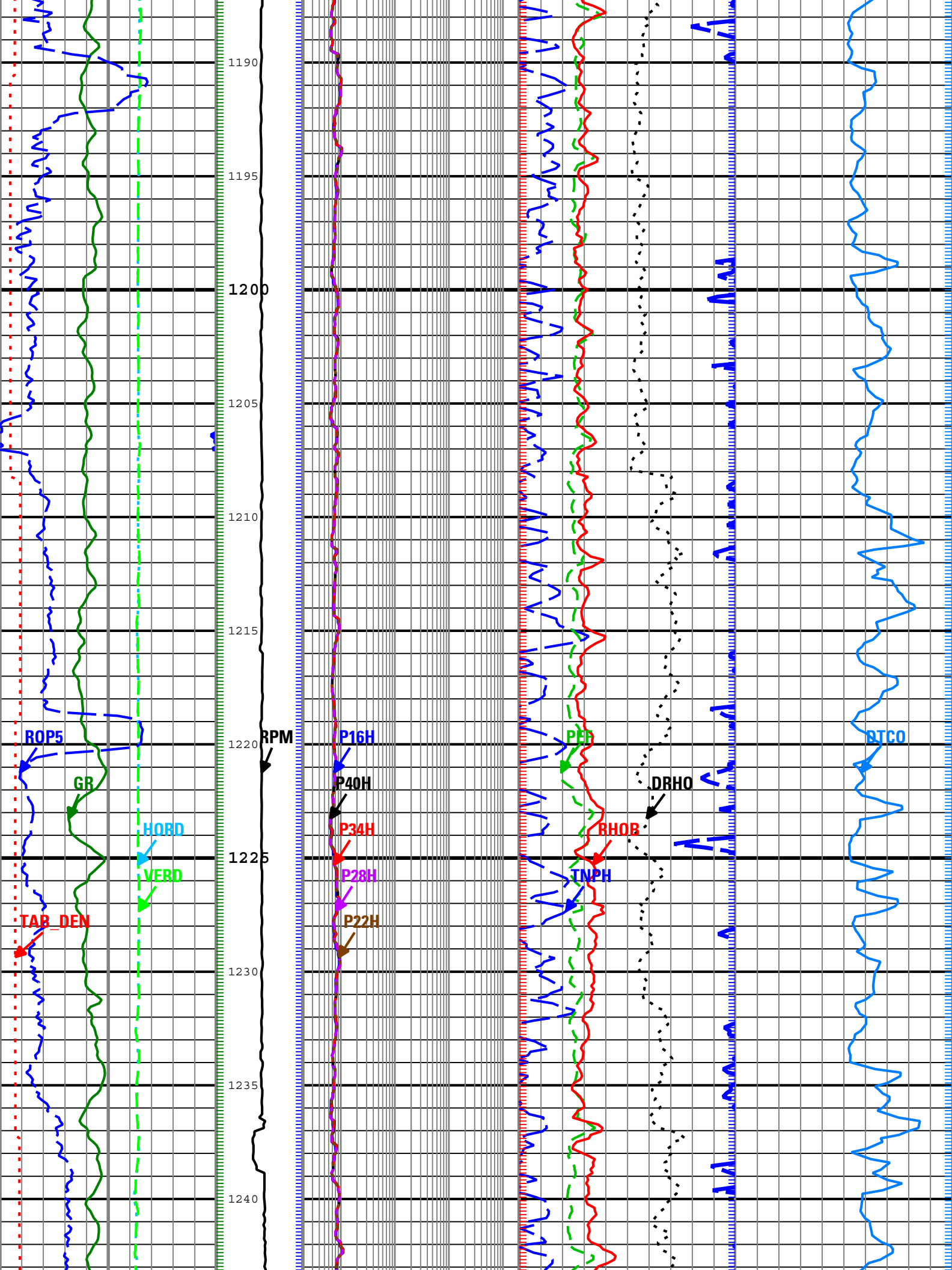
TAB_DEN
RPM
P16H
P40H
P34H
P28H
P22H
PEF
RHOB
TNPH
DRHO
DTCO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1195
1200
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1210
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1220
1225
1230
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1240
ROP5
GR
HORD
VERD
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RPM
P16H
P40H
P34H
P28H
P22H
PEF
DRHO
RHOB
TNPH
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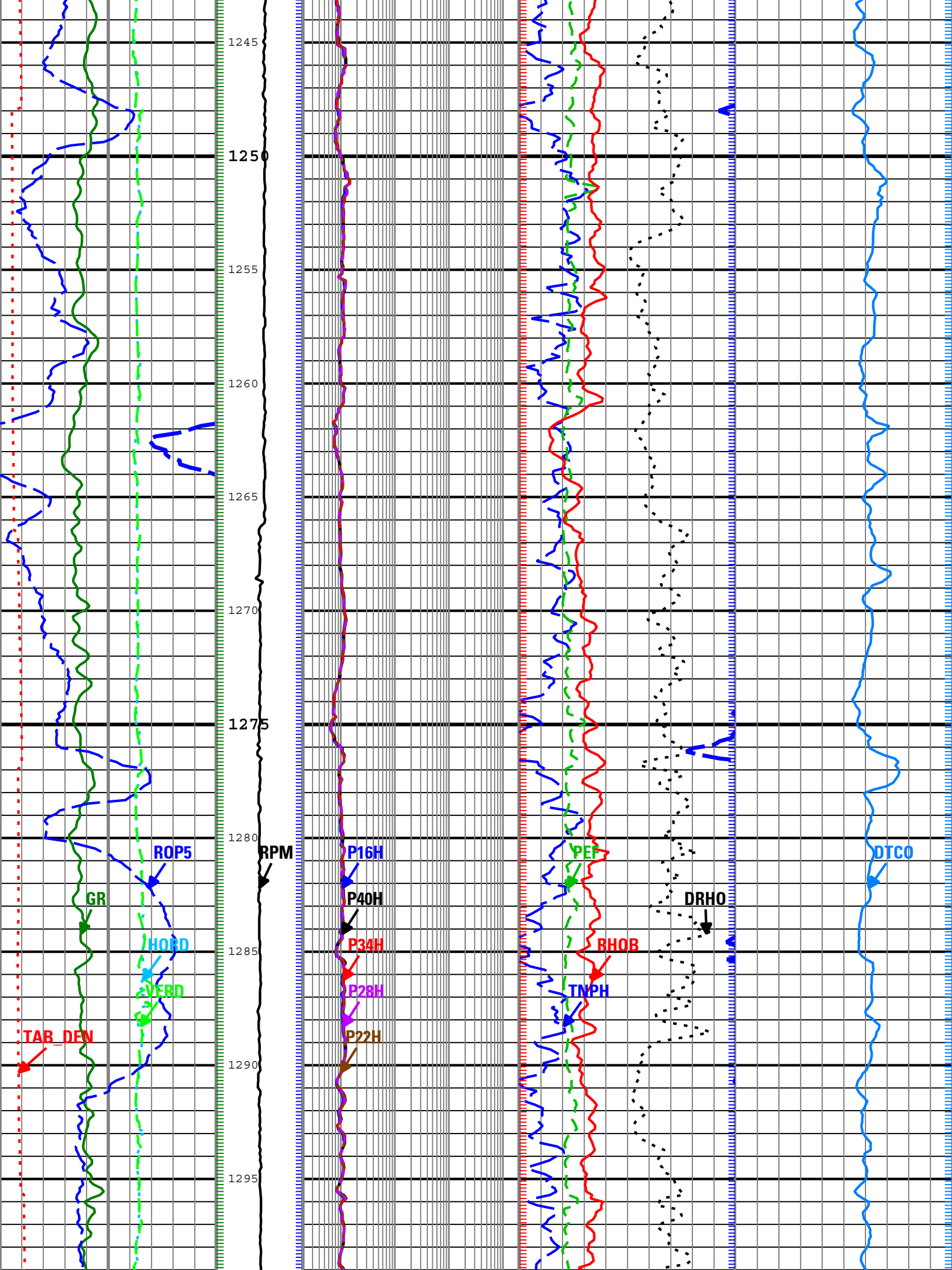
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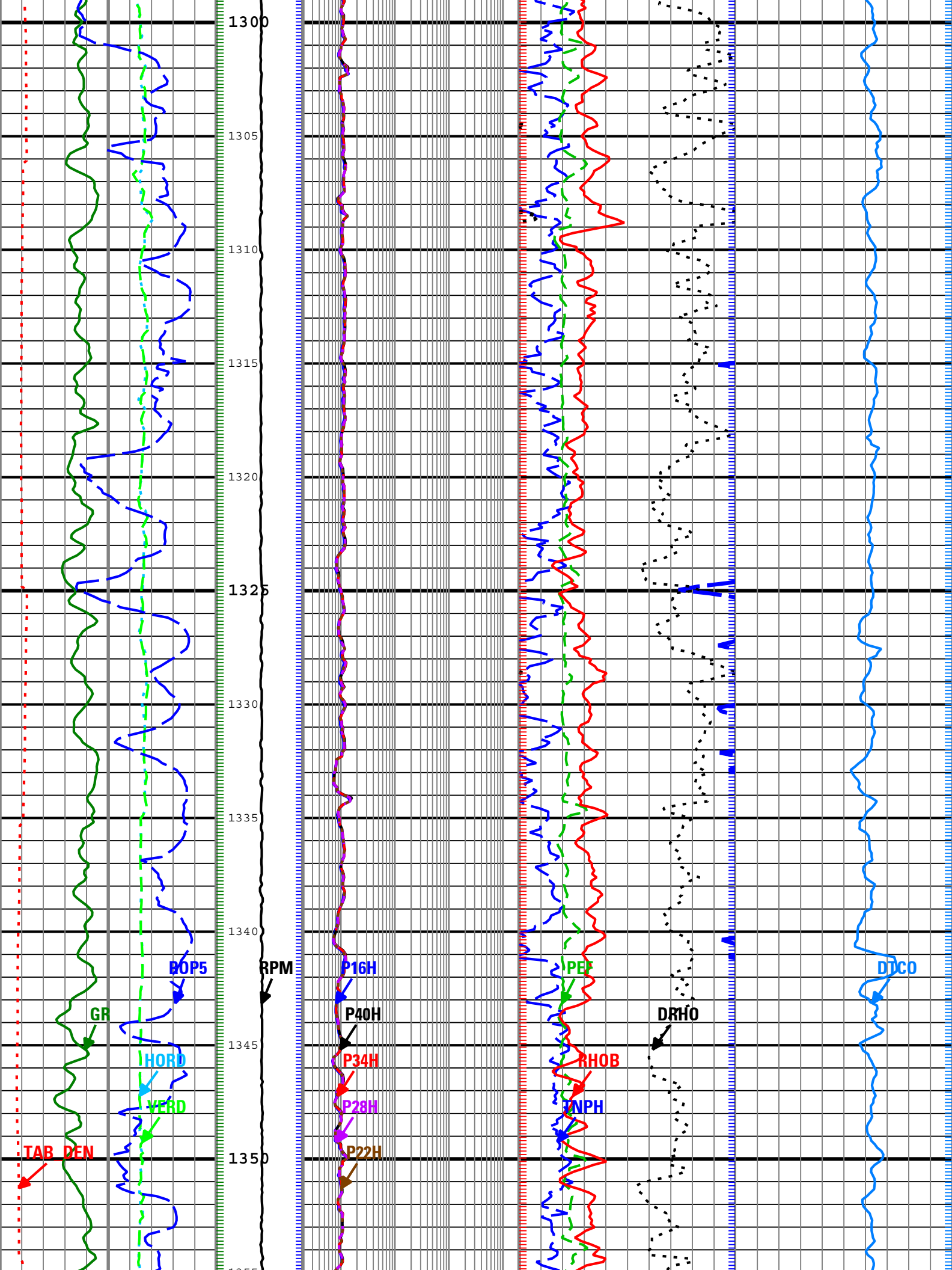
1300
1305
1310
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1320
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RPM
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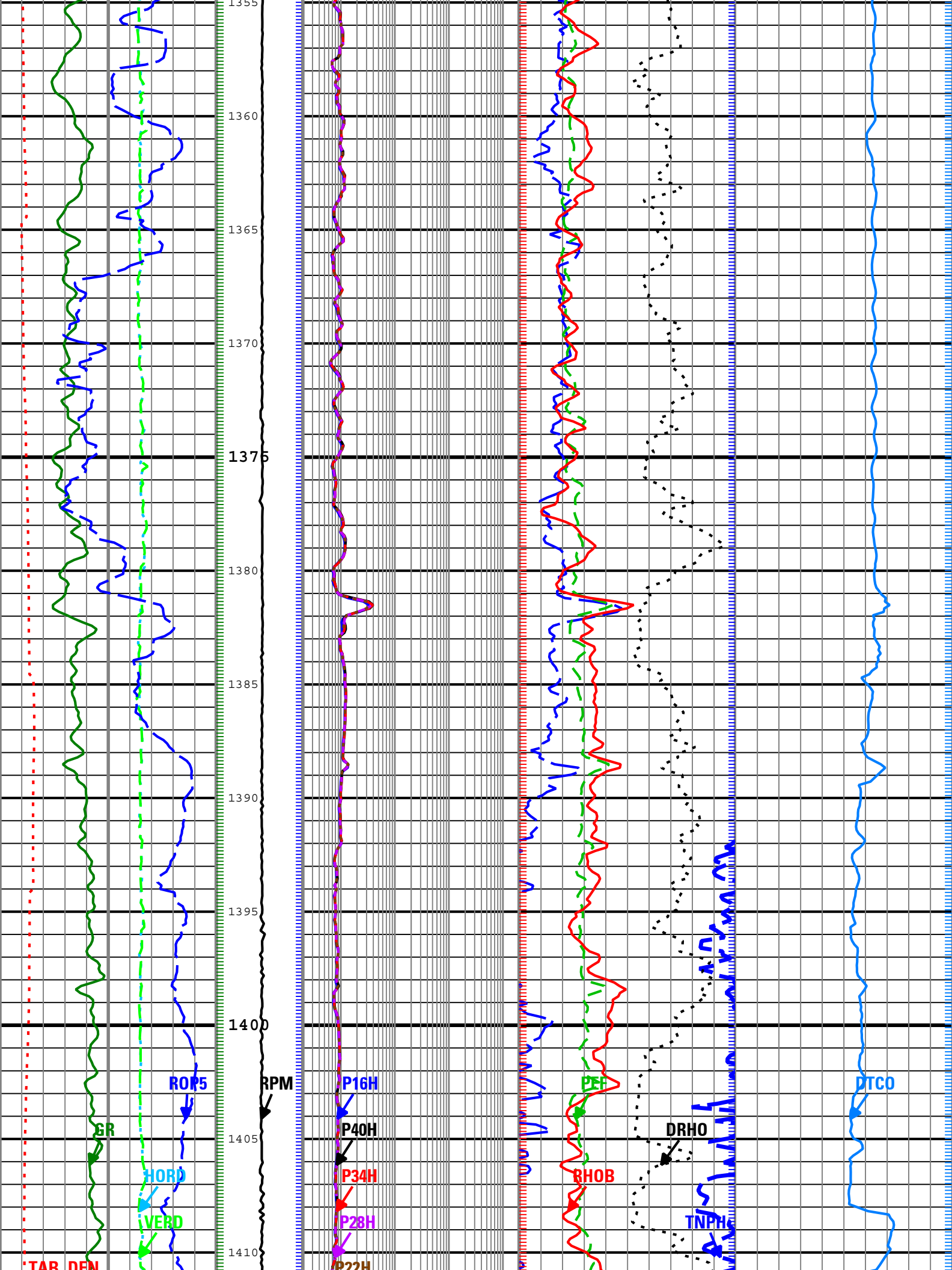
RHOB
VERD
P28H
TNPH
TAB_DEN
P22H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VERD
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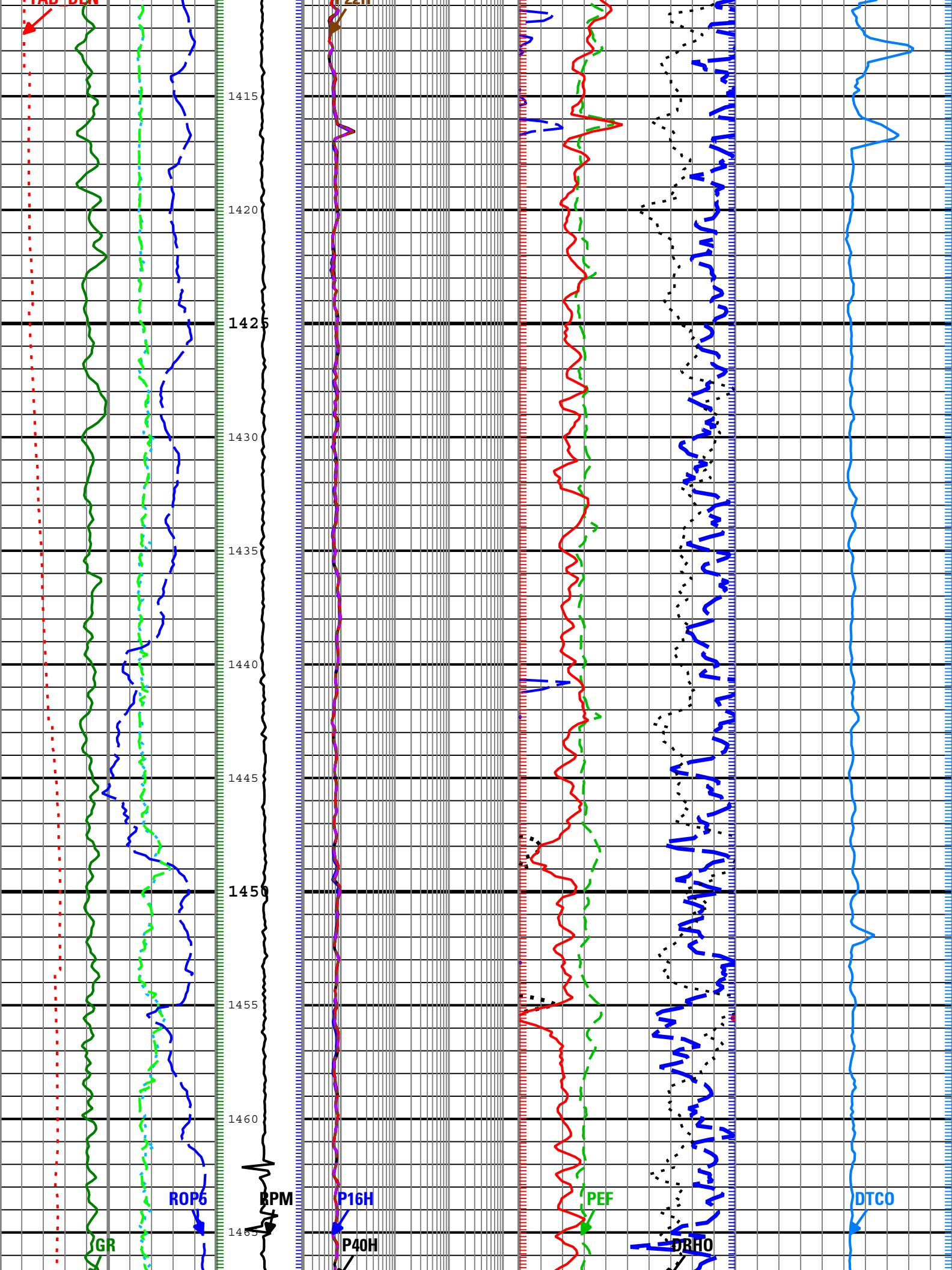
TAB_DEN
P22H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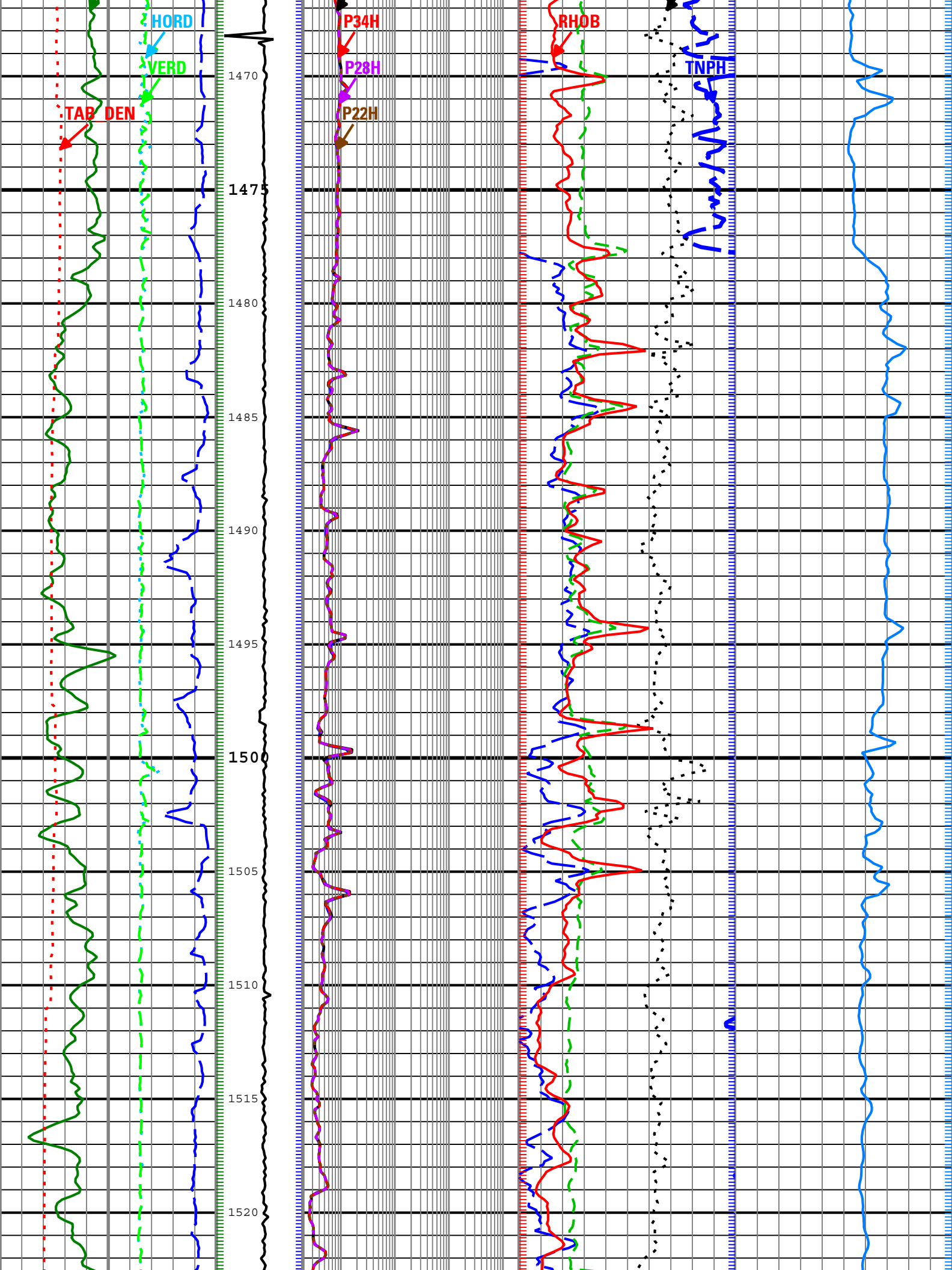
GR
P40H
DRHO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VERD
TAB_DEN
P34H
P28H
P22H
RHOB
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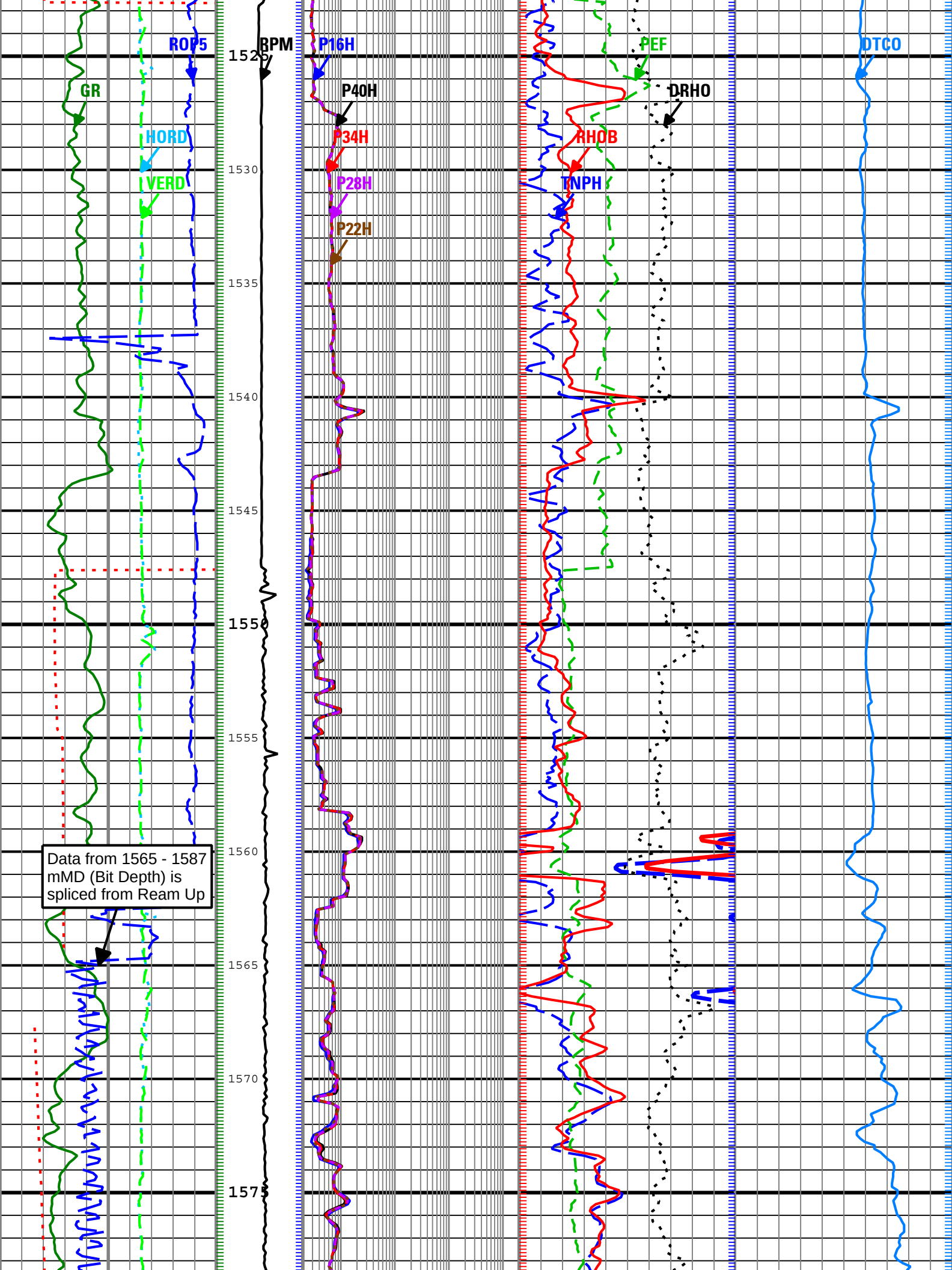
1510
1515
1520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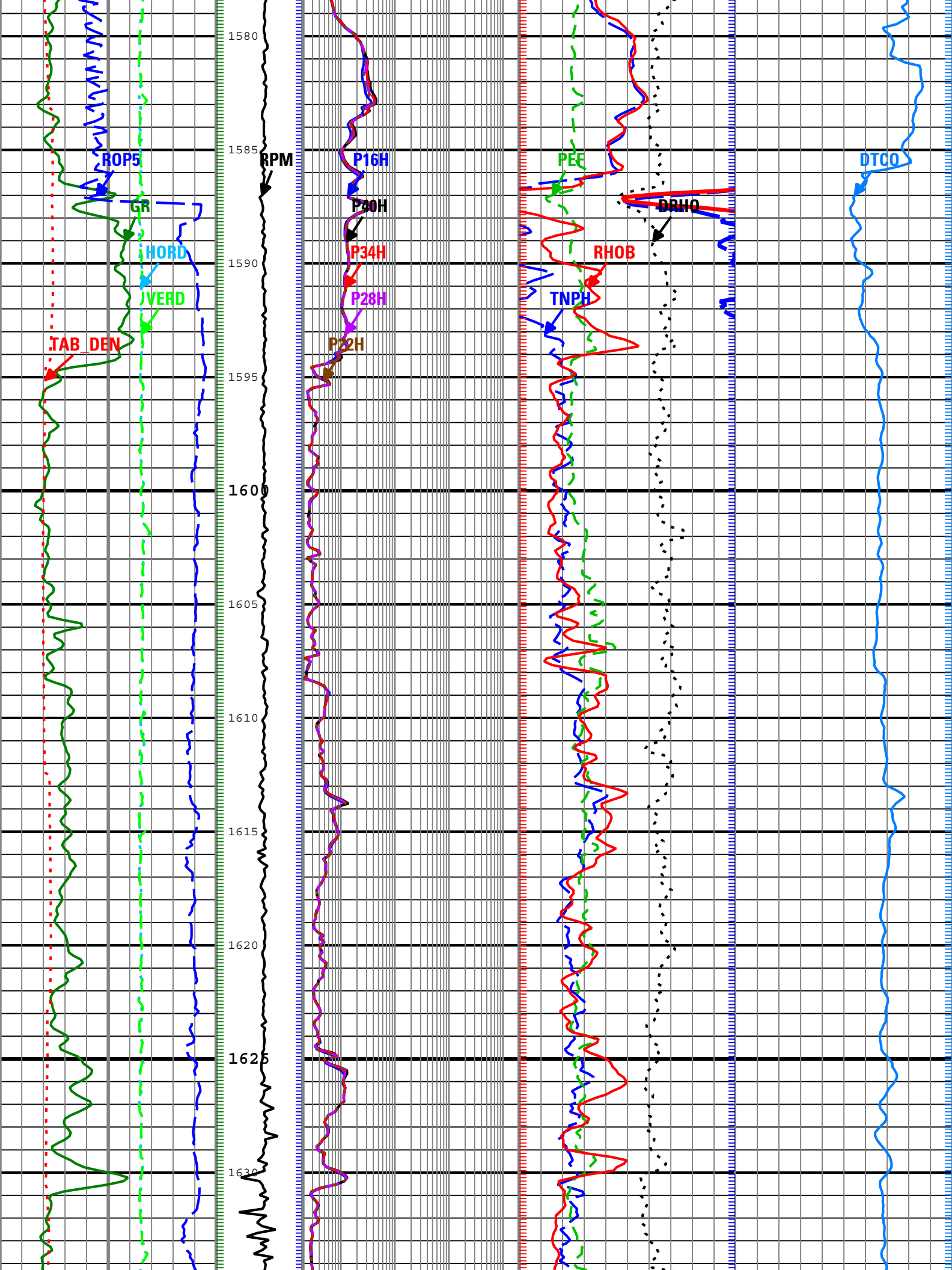
RPM
P16H
PEF
DTCO
GR
P40H
DRHO
HORD
P34H
RHOB
VERD
P28H
TNPH
P22H
1525
1530
1535
1540
1545
1550
1555
1560
1565
1570
1575
Data from 1565 - 1587 mMD (Bit Depth) is spliced from Ream Up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1585
1590
1595
1600
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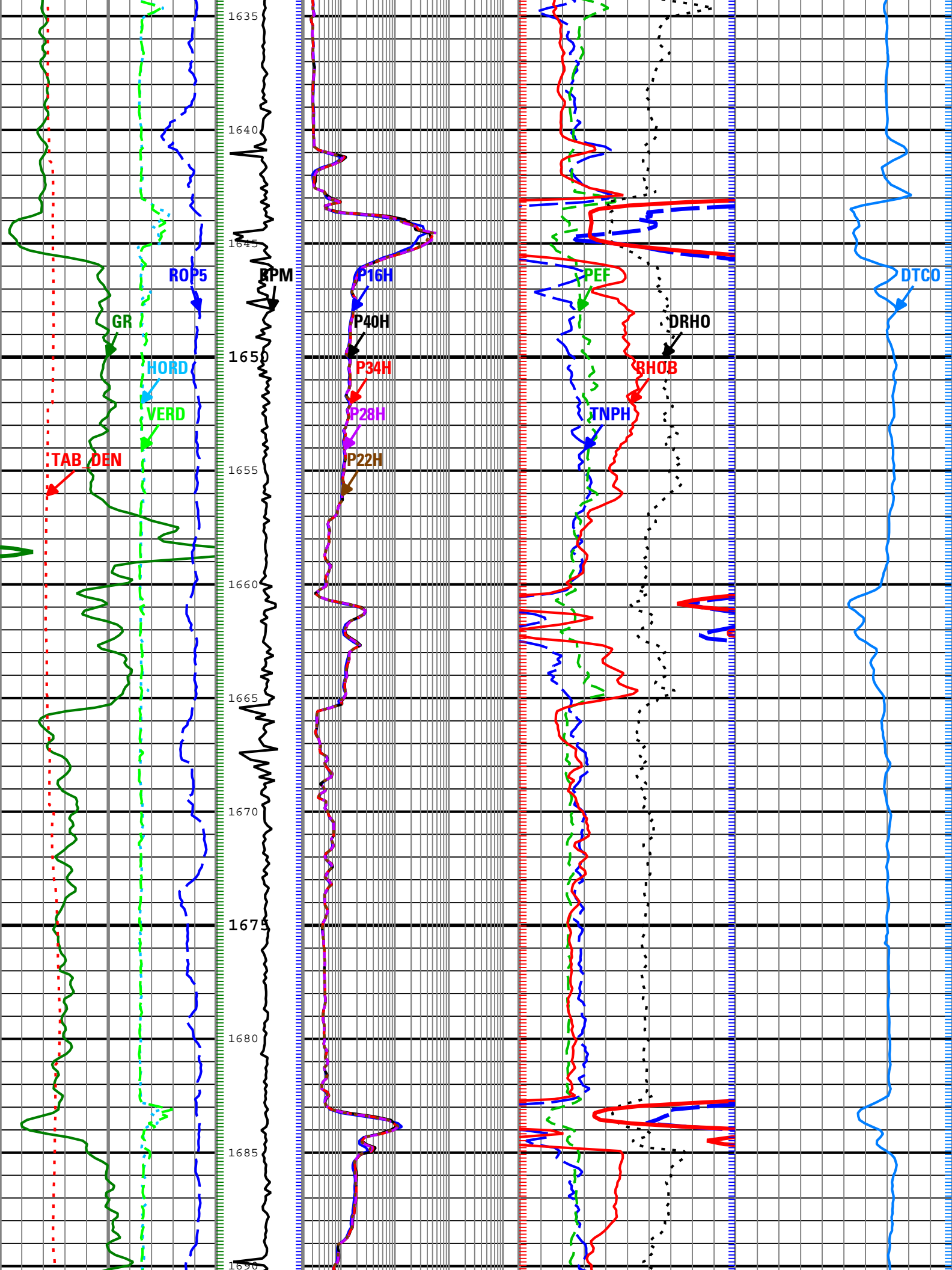
1610
1615
1620
1625
1630
ROP5
GR
HORD
JVERD
TAB_DEN
RPM
P16H
P40H
P34H
P28H
P22H
PEF
DRHO
RHOB
TNPH
DTCO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1645
1650
1655
1660
1665
1670
1675
1680
1685
1690
ROP5
RPM
GR
HORD
VERD
TAB_DEN
P16H
P40H
P34H
P28H
P22H
PEF
DRHO
RHOB
TNPH
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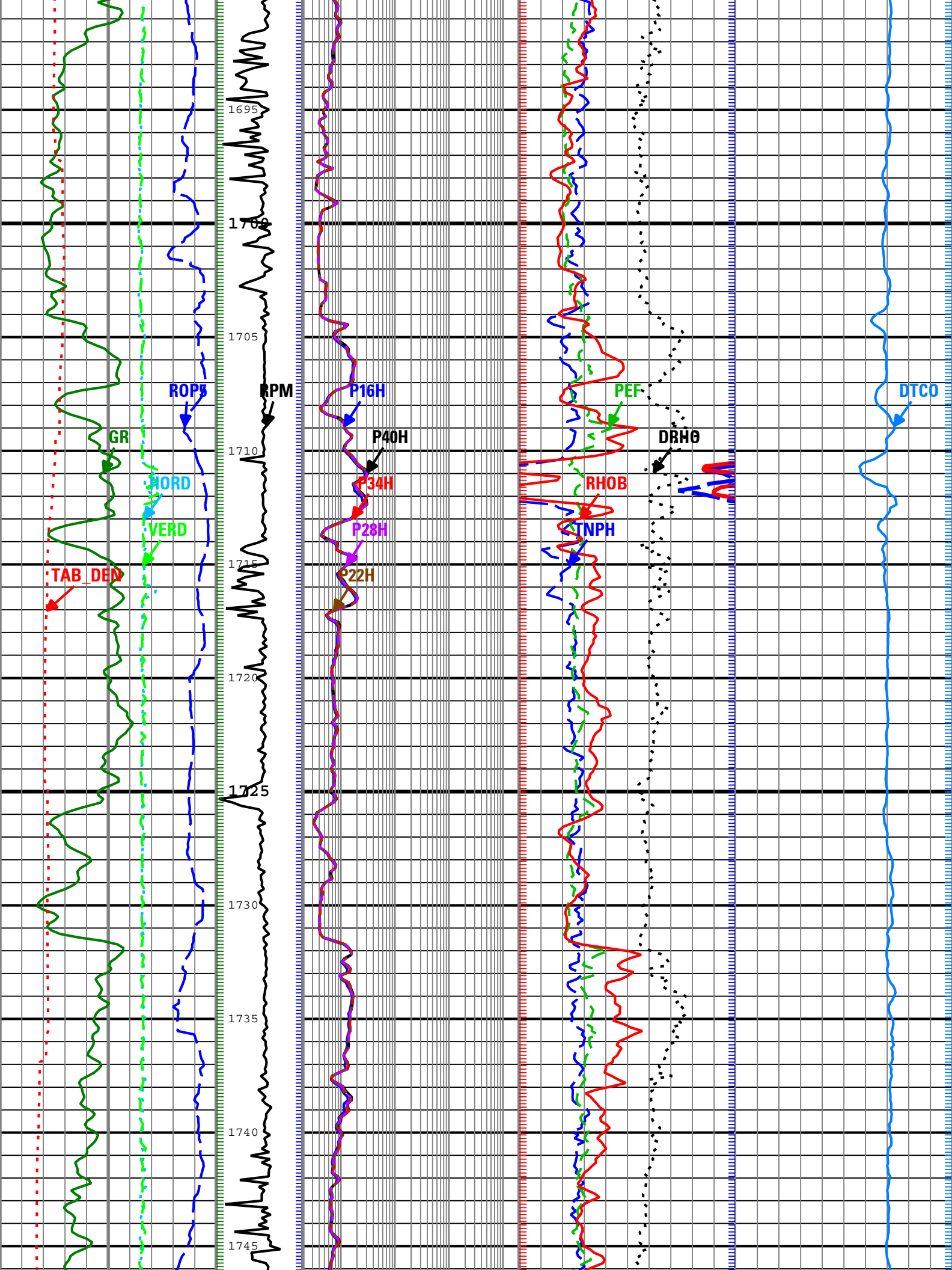
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1735
1740
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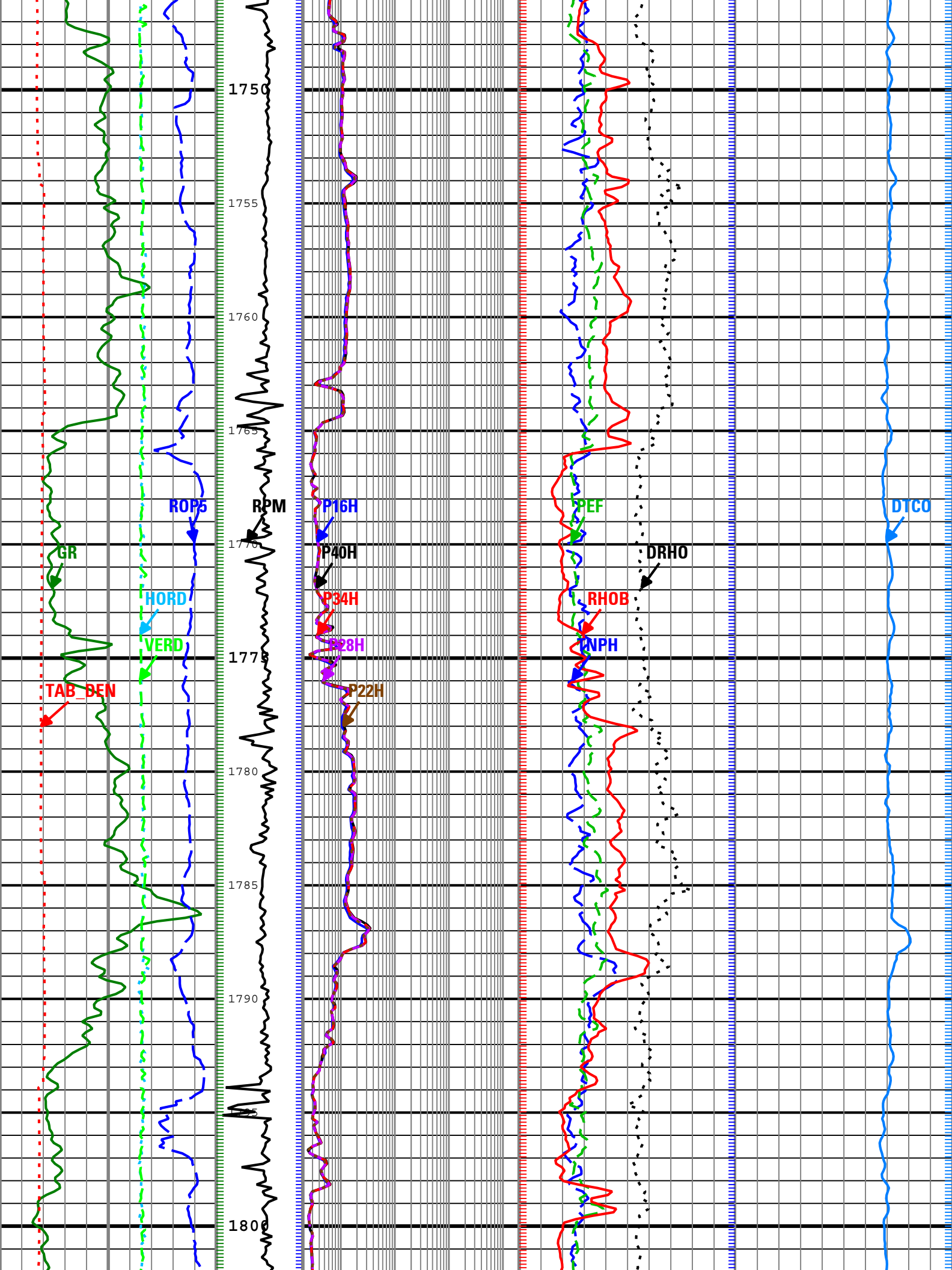
TAB_DEN
PEF
DRHO
RHOB
TNPH
DTCO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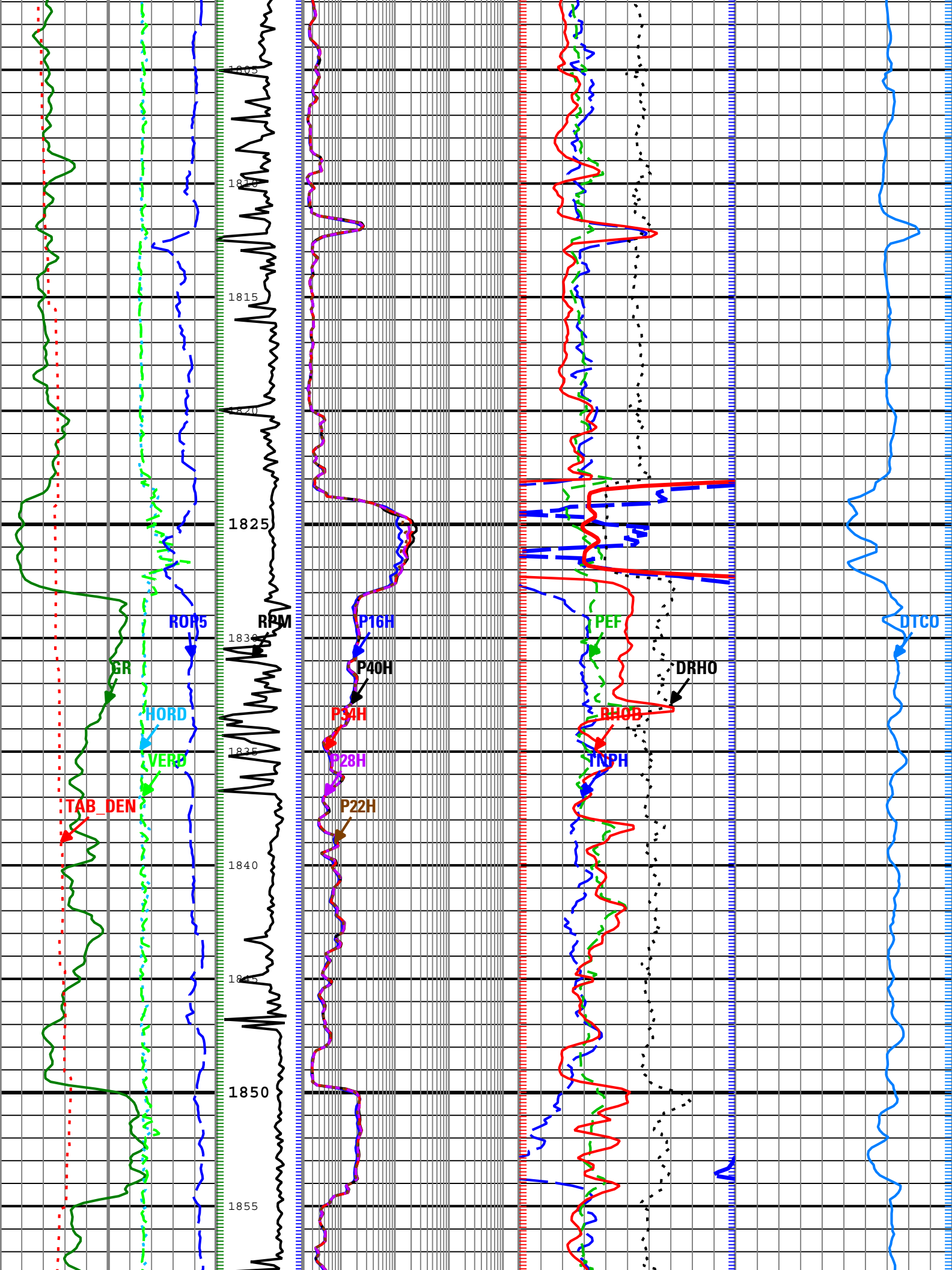
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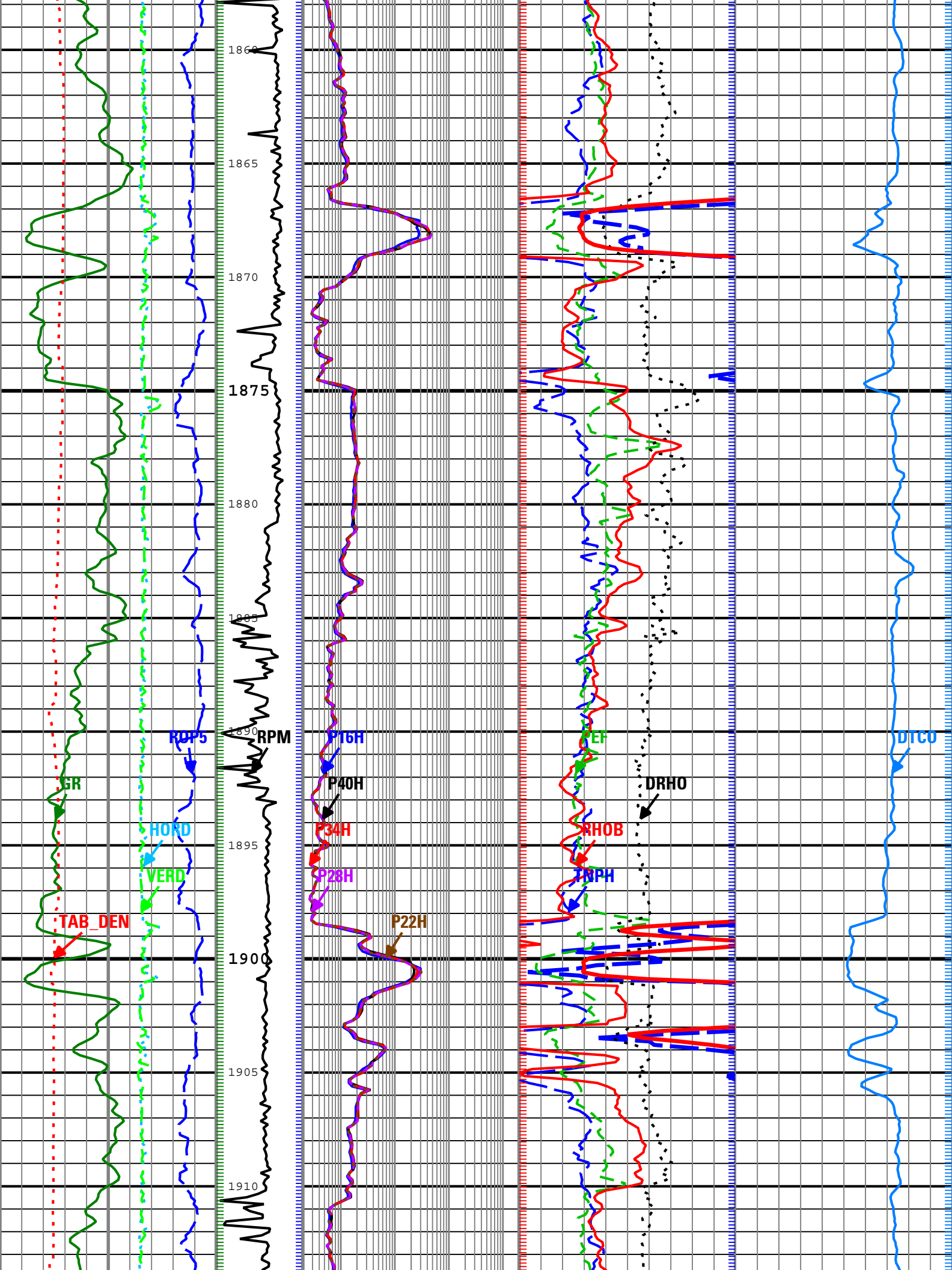
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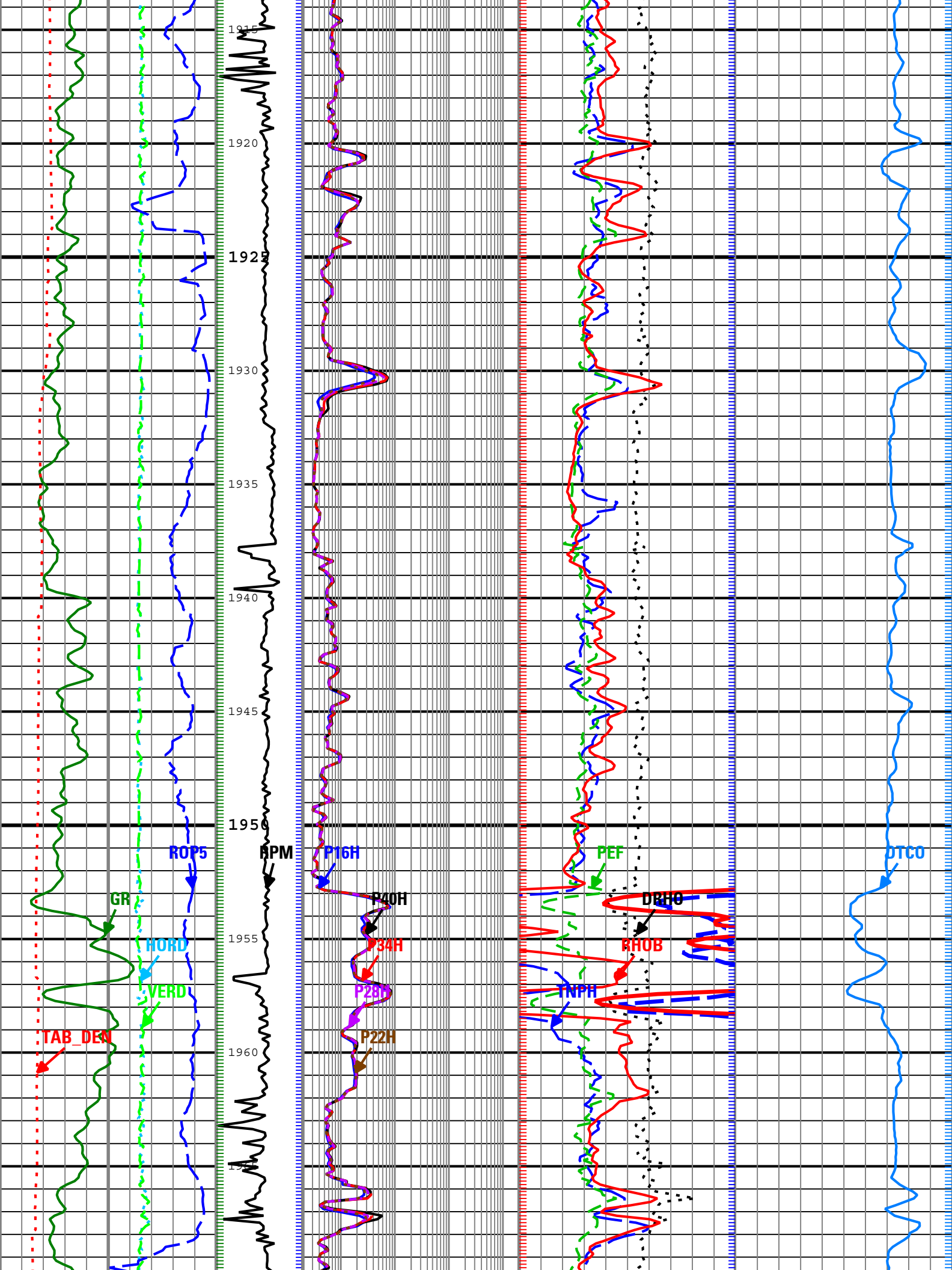
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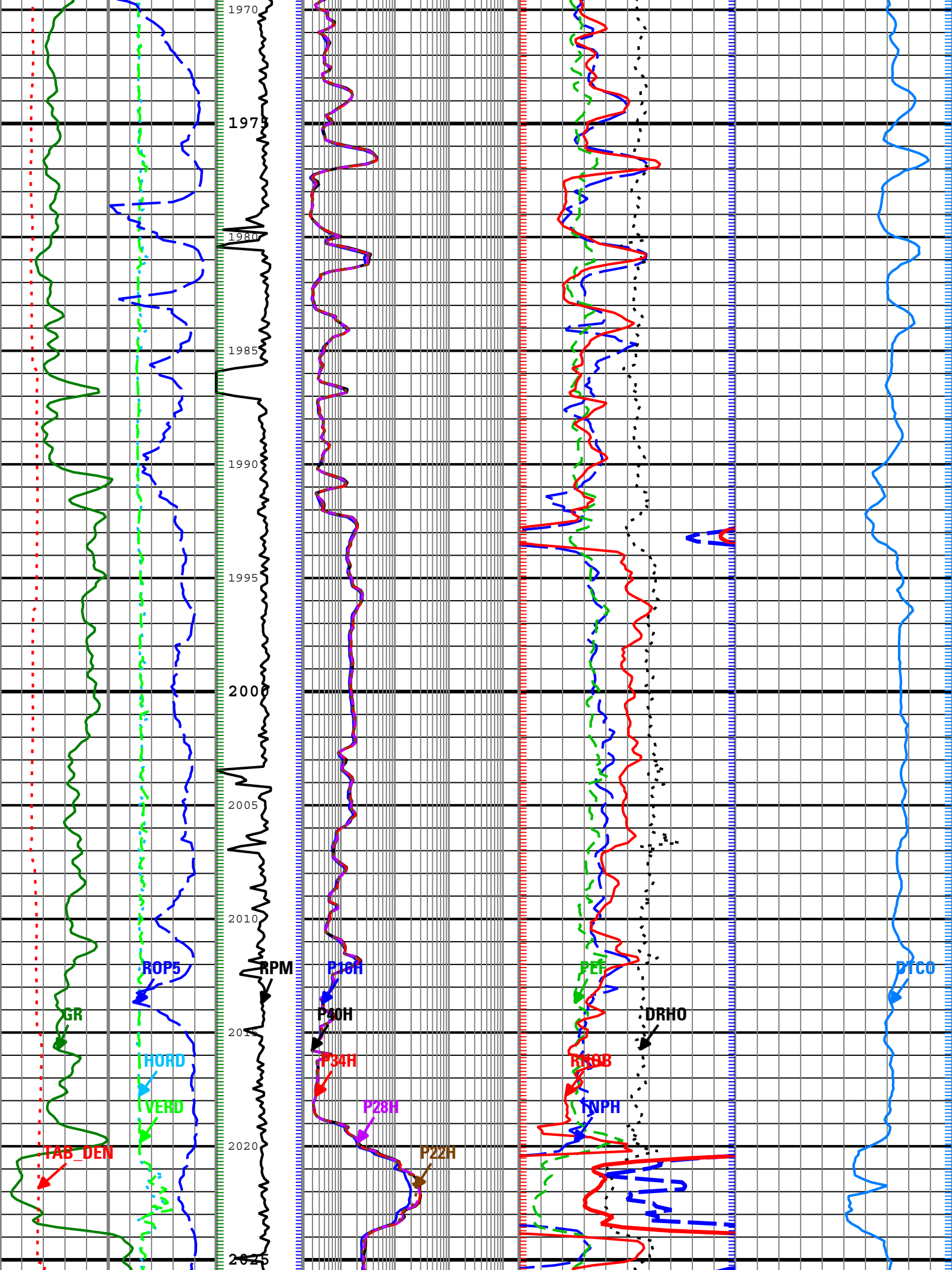
P22H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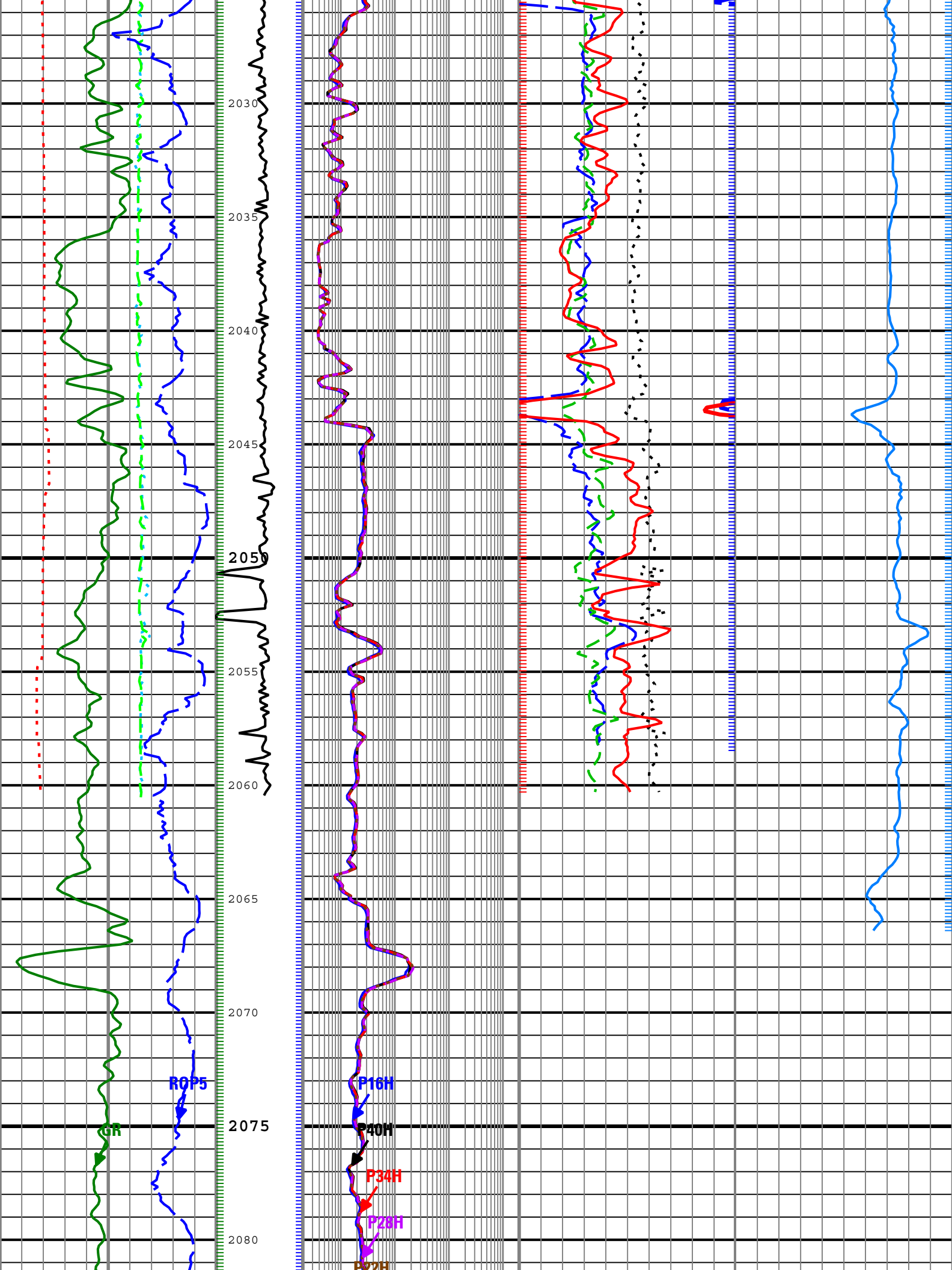
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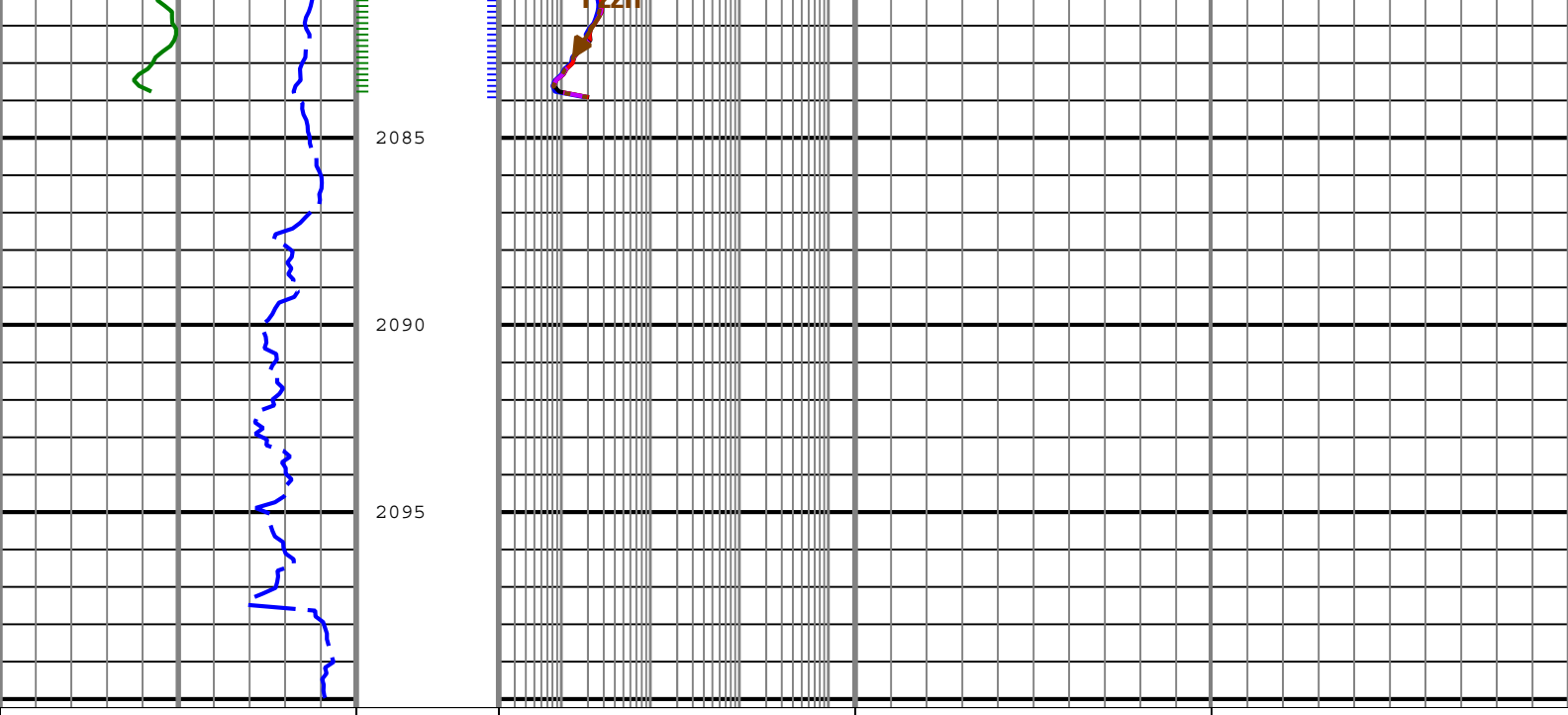

Gamma Ray (GR)	Rotational Speed (RPM)	Phase Shift Resistivity 16 inch Spacing at 2 MHz, Environmentally Corrected. (P16H)	Thermal Neutron Porosity (Ratio Method) in Selected Lithology (TNPH)	Delta-T Compressional (DTCO)
0 gAPI 200	0 c/min 250	0.2 ohm.m 2000	45 pu -15	240 us/ft 40
Horizontal Hole Diameter (HORD)		Phase Shift Resistivity 40 inch Spacing at 2 MHz, Environmentally Corrected. (P40H)	Photoelectric Factor (PEF)	
6 in 16		0.2 ohm.m 2000	0 10	
Vertical Hole Diameter (VERD)		Phase Shift Resistivity 34 inch Spacing at 2 MHz, Environmentally Corrected. (P34H)	Bulk Density Correction (DRHO)	
6 in 16		0.2 ohm.m 2000	-0.25 g/cm3 0.25	
Density Time After Bit (TAB_DEN)		Phase Shift Resistivity 28 inch Spacing at 2 MHz, Environmentally Corrected. (P28H)	Bulk Density (RHOB)	
0 h 10		0.2 ohm.m 2000	1.95 g/cm3 2.95	
Rate of penetration averaged over the last 5 ft (1.5 m) (ROP5)		Phase Shift Resistivity 22 inch Spacing at 2 MHz, Environmentally Corrected. (P22H)		
200 m/h 0		0.2 ohm.m 2000		

TNPH - Thermal Neutron Porosity (Ratio Method) in Selected Lithology

GR - Gamma Ray

P16H - Phase Shift Resistivity 16 inch Spacing at 2 MHz, Environmentally Corrected.

DTCO - Delta-T Compressional

RHOB - Bulk Density

Description: ARC Dual Frequency Resistivity RT Format: Log (Quad Combo RM VISION Service) Index Scale: 1:200 Index Unit: m Index Type: Measured Depth
Creation Date: 14-Sep-2009 02:37:33

Channel Processing Parameters

Run 2: Parameters

Parameter	Description	ToolPath	Value	Unit
BHK	Drilling Fluid Potassium Concentration	Borehole	Time Zoned	%
BHT	Bottom Hole Temperature	Borehole	68	degC

BS	Bit Size	COMPLETION	Depth Zoned	in
BSAL	Borehole Salinity	Borehole	Time Zoned	ppm
CDTS	Correction for Delta-T Shale, Empirical	Borehole	100	us/ft
COLL	Label Slowness Lower Limit - Monopole P&S Compressional	SONICVISION8:SONICVISION8	40	us/ft
COUL	Label Slowness Upper Limit - Monopole P&S Compressional	SONICVISION8:SONICVISION8	140	us/ft
DDEL	Digitizing Delay	SONICVISION8:SONICVISION8	400	us
DFD	Drilling Fluid Density	Borehole	Time Zoned	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DTF	Delta-T Fluid	Borehole	189	us/ft
DTM	Delta-T Matrix	Borehole	56	us/ft
DTMD	Borehole Fluid Slowness	Borehole	220	us/ft
GGRD	Geothermal Gradient	Borehole	18.23	degC/km
GRSE	Generalized Mud Resistivity Selection	Borehole	Computed (GEN-9)	
GTSE	Generalized Temperature Selection	Borehole	Gradient From Surface	
ITT_OFFSET	Integrated Transit Time Offset	SONICVISION8:SONICVISION8	0	ms
MATR	Rock Matrix for Neutron Porosity Corrections	Borehole	LIMESTONE	
MST	Mud Sample Temperature	Borehole	Time Zoned	degC
NWED	Noise Window End	SONICVISION8:SONICVISION8	2200	us
NWST	Noise Window Start	SONICVISION8:SONICVISION8	600	us
RMS	Resistivity of Mud Sample	Borehole	Time Zoned	ohm.m
SHLL	Label Slowness Lower Limit - Monopole P&S Shear	SONICVISION8:SONICVISION8	75	us/ft
SHT	Surface Hole Temperature	Borehole	15	degC
SHUL	Label Slowness Upper Limit - Monopole P&S Shear	SONICVISION8:SONICVISION8	240	us/ft
SIGE	Waveform Signal End Time	SONICVISION8:SONICVISION8	2000	us
SIGM	Waveform Signal Move Out	SONICVISION8:SONICVISION8	130	us/ft
SIGST	Waveform Signal Start Time	SONICVISION8:SONICVISION8	1500	us
SPFS	Sonic Porosity Formula	Borehole	Raymer-Hunt	
SPSO_LWD	Sonic Porosity Source Logging While Drilling	SONICVISION8:SONICVISION8	DTRA	
SWD_FIL_HIGH	Pre-STC filter high frequency cuttoff (in kHz)	SONICVISION8:SONICVISION8	0	kHz
SWD_FIL_LENG	Pre-STC filter length	SONICVISION8:SONICVISION8	1	
SWD_FIL_LOW	Pre-STC filter low frequency cuttoff (in kHz)	SONICVISION8:SONICVISION8	0	kHz
SWD_FILTER	Pre-STC Filter Selection	SONICVISION8:SONICVISION8	No Filter	
SWD_PR_SEL	Sonic Processing Option	SONICVISION8:SONICVISION8	Both	
TEMP_SEL_ARC	ARC Temperature Selection	ARC8:ARC8:ARDC	Annular	

Run 2 : Depth Zoned Parameters

Parameter	Value	Start (m)	Stop (m)
BS	17.5	810	816.61
BS	12.25	816.61	2100.22

All depth are actual.

Run 2 : Time Zoned Parameters

Pass Drilling

Parameter	Value	Start Time	Stop Time	Start Depth (m)	Stop Depth (m)
BHK	5.77	11-Sep-2009 01:32:19	11-Sep-2009 11:30:28	804.72	1000.33
BHK	4.98	11-Sep-2009 11:30:28	12-Sep-2009 02:00:00	1000.33	1545.64
BHK	4.72	12-Sep-2009 02:00:00	13-Sep-2009 15:53:56	1545.64	2100.35

BSAL	117818.22	11-Sep-2009 01:32:19	11-Sep-2009 11:30:28	804.72	1000.33
BSAL	102066.07	11-Sep-2009 11:30:28	12-Sep-2009 02:00:00	1000.33	1545.64
BSAL	98242.83	12-Sep-2009 02:00:00	13-Sep-2009 15:53:56	1545.64	2100.35
DFD	9	11-Sep-2009 01:32:19	11-Sep-2009 11:30:28	804.72	1000.33
DFD	9.1	11-Sep-2009 11:30:28	12-Sep-2009 02:00:00	1000.33	1545.64
DFD	9.5	12-Sep-2009 02:00:00	13-Sep-2009 15:53:56	1545.64	2100.35
MST	17.9	11-Sep-2009 01:32:19	11-Sep-2009 19:28:28	804.72	1428.19
MST	20.9	11-Sep-2009 19:28:28	12-Sep-2009 19:30:04	1428.19	1851.41
MST	22.4	12-Sep-2009 19:30:04	13-Sep-2009 15:53:56	1851.41	2100.35
RMS	0.07	11-Sep-2009 01:32:19	11-Sep-2009 19:28:28	804.72	1428.19
RMS	0.08	11-Sep-2009 19:28:28	12-Sep-2009 19:30:04	1428.19	1851.41
RMS	0.07	12-Sep-2009 19:30:04	13-Sep-2009 15:53:56	1851.41	2100.35

Pass Ream Up 1

BHK	4.72	13-Sep-2009 13:03:08	13-Sep-2009 15:53:56	1587.31	1562.55
BSAL	98242.83	13-Sep-2009 13:03:08	13-Sep-2009 15:53:56	1587.31	1562.55
DFD	9.5	13-Sep-2009 13:03:08	13-Sep-2009 15:53:56	1587.31	1562.55
MST	22.4	13-Sep-2009 13:03:08	13-Sep-2009 15:53:56	1587.31	1562.55
RMS	0.07	13-Sep-2009 13:03:08	13-Sep-2009 15:53:56	1587.31	1562.55

All depth are at tool zero.

Tool Control Parameters

Run 2: Parameters

Parameter	Description	ToolPath	Value	Unit
OFFBTM_TH	Threshold for deciding whether the bit is off bottom	DnMWorkflow	0.4	m

Survey Record

Survey Calculation

Method :	Minimum Radius of Curvature	DLS Method :	Lubinski
North Reference :	Grid North	Total Correction Formula :	Magnetic Dec - Grid Convergence
Grid Convergence :	0.73 deg		

Rig Location

Latitude :	40° 28' 53.9" S	Longitude :	145° 52' 24.71" E

Tie In Point

Measured Depth:	0.00 m	Inclination:	0.00 deg	Azimuth:	0.00 deg
True Vertical Depth:	0.00 m	North Displacement:	0.00 m	East Displacement:	0.00 m
N/-S VSec Origin:	0.00 m	E/-W VSec Origin:	0.00 m	Vertical Section Azimuth:	0.00 deg

D&I Inits Computed and Values Used - Run 1

Geomagnetic Model :	BGGM 2009	Geomagnetic Date :	07-Sep-2009
Computed Location B :	61230.34 nT +/- 300.00nT	Used Location B :	61230.34 nT +/- 300.00nT
Computed Location G :	999.55 mgn +/- 2.50mgn	Used Location G :	999.55 mgn +/- 2.50mgn
Computed Magnetic Dip :	-70.91 deg +/- 0.45deg	Used Magnetic Dip :	-70.91 deg +/- 0.45deg
Computed Magnetic Dec :	12.97 deg	Used Magnetic Dec :	12.97 deg
Computed Total Correction :	12.24 deg	Used Total Correction :	12.24 deg

D&I Inits Computed and Values Used - Run 2

Geomagnetic Model :	BGGM 2009	Geomagnetic Date :	10-Sep-2009
Computed Location B :	61230.23 nT +/- 300.00nT	Used Location B :	61230.23 nT +/- 300.00nT
Computed Location G :	999.55 mgn +/- 2.50mgn	Used Location G :	999.55 mgn +/- 2.50mgn

Computed Magnetic Dip :	-70.91 deg +/- 0.45deg	Used Magnetic Dip :	-70.91 deg +/- 0.45deg
Computed Magnetic Dec :	12.97 deg	Used Magnetic Dec :	12.97 deg
Computed Total Correction :	12.24 deg	Used Total Correction :	12.24 deg

Survey Quality Index

0 : Long, passed all criteria 10 : DMAG-Corrected

Survey Correction Index

0 : No correction

Seq	MD (m)	Incl (deg)	Azim (deg)	Course (m)	TVD (m)	V Sec (m)	N/ -S (m)	E/ -W (m)	Closure (m)	at Azi (deg)	DLS deg/30m	Tool Type	QI	CI
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	TIP		
2	179.35	0.24	83.43	179.35	179.35	0.04	0.04	0.37	0.38	83.43	0.04	Manual	10	
3	206.93	0.26	39.46	27.58	206.93	0.10	0.10	0.47	0.48	78.24	0.20	Manual	10	
4	294.67	0.38	50.78	87.74	294.67	0.44	0.44	0.82	0.93	62.09	0.05	Manual	10	
5	338.42	0.10	101.79	43.75	338.42	0.52	0.52	0.97	1.10	61.88	0.22	Manual	10	
6	352.67	0.17	96.28	14.25	352.67	0.51	0.51	1.01	1.13	62.89	0.15	Manual	10	
7	382.26	0.19	46.93	29.59	382.26	0.54	0.54	1.08	1.21	63.39	0.15	Manual	10	
8	468.33	0.04	58.55	86.07	468.33	0.66	0.66	1.21	1.38	61.61	0.05	Manual	10	
9	514.50	0.11	259.09	46.17	514.50	0.66	0.66	1.18	1.35	61.01	0.10	Manual	10	
10	556.06	0.15	278.41	41.56	556.06	0.66	0.66	1.09	1.27	58.97	0.04	Manual	10	
11	642.56	0.27	259.95	86.50	642.56	0.64	0.64	0.78	1.01	50.69	0.05	Manual	10	
12	727.80	0.26	253.63	85.24	727.80	0.55	0.55	0.40	0.68	35.82	0.01	Manual	10	
13	755.00	0.16	261.45	27.20	755.00	0.53	0.53	0.30	0.60	29.65	0.11	Manual	10	
14	786.24	0.17	243.78	31.24	786.24	0.50	0.50	0.21	0.54	23.27	0.05	Manual	10	
15	803.80	0.17	265.12	17.56	803.80	0.48	0.48	0.16	0.51	18.80	0.11	Manual	10	
16	879.04	0.43	77.12	75.24	879.04	0.54	0.54	0.33	0.63	31.58	0.24	TeleScope	0	0
17	990.83	0.34	90.11	111.78	990.82	0.63	0.63	1.08	1.25	59.64	0.03	TeleScope	0	0
18	1078.27	0.31	90.35	87.44	1078.26	0.63	0.63	1.58	1.70	68.28	0.01	TeleScope	0	0
19	1164.94	0.40	84.09	86.67	1164.93	0.66	0.66	2.12	2.22	72.71	0.03	TeleScope	0	0
20	1221.27	0.44	97.02	56.33	1221.26	0.65	0.65	2.53	2.61	75.53	0.06	TeleScope	0	0
21	1338.66	0.51	93.25	117.39	1338.64	0.57	0.57	3.51	3.55	80.80	0.02	TeleScope	0	0
22	1367.75	0.54	94.83	29.09	1367.73	0.55	0.55	3.77	3.81	81.72	0.03	TeleScope	0	0
23	1456.65	0.52	105.25	88.90	1456.63	0.41	0.41	4.57	4.59	84.89	0.03	TeleScope	0	0
24	1530.18	0.55	90.58	73.53	1530.15	0.32	0.32	5.25	5.26	86.53	0.06	TeleScope	0	0
25	1596.34	0.49	77.67	66.16	1596.31	0.38	0.38	5.84	5.86	86.33	0.06	TeleScope	0	0
26	1625.50	0.47	69.82	29.16	1625.47	0.44	0.44	6.08	6.09	85.83	0.07	TeleScope	0	0
27	1682.67	0.41	85.01	57.16	1682.63	0.54	0.54	6.50	6.53	85.24	0.07	TeleScope	0	0
28	1767.94	0.46	80.24	85.27	1767.90	0.63	0.63	7.14	7.17	84.99	0.02	TeleScope	0	0
29	1858.33	0.33	65.19	90.39	1858.29	0.80	0.80	7.73	7.77	84.13	0.06	TeleScope	0	0
30	1913.35	0.48	64.16	55.02	1913.31	0.96	0.96	8.08	8.14	83.22	0.08	TeleScope	0	0
31	1941.91	0.47	69.15	28.56	1941.87	1.05	1.05	8.30	8.36	82.76	0.04	TeleScope	0	0
32	2028.47	0.60	92.17	86.56	2028.43	1.16	1.16	9.08	9.15	82.71	0.09	TeleScope	0	0
33	2076.18	0.73	87.08	47.71	2076.13	1.17	1.17	9.63	9.71	83.09	0.09	TeleScope	0	0

Detailed Calibration Record

Run 2: ARC8 : Calibration Resistivity

Primary Set Components	Description	Tool Element	Serial Number
	DC with AIM	ARDC	

Calibration Dates	Shop Calibration		
Date & Time / Date Validity	04-Sep-2009 10:51:30 AM - Valid		
Calibration Source	Time Frame File		

Calibration Type: Resistivity: Air

Description	Min/Nominal/Max	Shop	Unit

ATT1F2AIR Attenuation T1 at 2 MHz	6.500 / 8.500 / 10.500	8.079	dB
ATT2F2AIR Attenuation T2 at 2 MHz	4.500 / 6.500 / 8.500	6.594	dB
ATT3F2AIR Attenuation T3 at 2 MHz	2.500 / 4.500 / 6.500	4.786	dB
ATT4F2AIR Attenuation T4 at 2 MHz	2.600 / 4.600 / 6.600	4.546	dB
ATT5F2AIR Attenuation T5 at 2 MHz	1.600 / 3.600 / 5.600	3.373	dB
PST1F2AIR Phase Shift T1 at 2 MHz	-3.900 / 0.100 / 4.100	-0.298	deg
PST2F2AIR Phase Shift T2 at 2 MHz	-3.900 / 0.100 / 4.100	0.371	deg
PST3F2AIR Phase Shift T3 at 2 MHz	-3.900 / 0.100 / 4.100	-0.408	deg
PST4F2AIR Phase Shift T4 at 2 MHz	-3.900 / 0.100 / 4.100	0.352	deg
PST5F2AIR Phase Shift T5 at 2 MHz	-3.900 / 0.100 / 4.100	-0.404	deg
ATT1F4AIR Attenuation T1 at 400 KHz	6.500 / 8.500 / 10.500	8.139	dB
ATT2F4AIR Attenuation T2 at 400 KHz	4.500 / 6.500 / 8.500	6.536	dB
ATT3F4AIR Attenuation T3 at 400 KHz	2.500 / 4.500 / 6.500	4.844	dB
ATT4F4AIR Attenuation T4 at 400 KHz	2.600 / 4.600 / 6.600	4.490	dB
ATT5F4AIR Attenuation T5 at 400 KHz	1.600 / 3.600 / 5.600	3.445	dB
PST1F4AIR Phase Shift T1 at 400 KHz	-3.900 / 0.100 / 4.100	0.107	deg
PST2F4AIR Phase Shift T2 at 400 KHz	-3.900 / 0.100 / 4.100	-0.147	deg
PST3F4AIR Phase Shift T3 at 400 KHz	-3.900 / 0.100 / 4.100	0.125	deg
PST4F4AIR Phase Shift T4 at 400 KHz	-3.900 / 0.100 / 4.100	-0.186	deg
PST5F4AIR Phase Shift T5 at 400 KHz	-3.900 / 0.100 / 4.100	0.094	deg

Run 2: ARC8 : Calibration Gamma Ray

Primary Set Components	Description	Tool Element	Serial Number
	DC with AIM	ARDC	

Calibration Dates	Shop Calibration		
Date & Time / Date Validity	03-Sep-2009 04:16:18 PM - Valid		
Calibration Source	Time Frame File		

Calibration Type: Gamma Ray: Blanket

Description	Min/Nominal/Max	Shop	Unit
GR_GAIN Gamma Ray Calibration Gain	0.580 / 1.000 / 1.250	1.049	

Run 2: SADN8 : 8.25-in. Stabilized Azimuthal Density Neutron Calibration Density LS Window 3 Calibration

Primary Set Components	Description	Tool Element	Serial Number
	Chassis	ADSE	
	Density Blade	ADBD	
	Retrievable Neutron Gamma Src	RNGS	

Calibration Dates	Shop Calibration		
Date & Time / Date Validity	29-Aug-2009 12:14:05 AM - Valid		
Calibration Source	Time Frame File		

Calibration Type: Density: LS Window 3

Description	Min/Nominal/Max	Shop	Unit
LSW3_BG LS window 3 - Background	17.0 / 90.0 / 170.0	64.5	1/s
LSW3_AL LS window 3 - Al	10.0 / 110.0 / 200.0	144.7	1/s
LSW3_MG	40.0 / 700.0 / 1400.0	913.1	1/s

LS window 3 - Mg			
RHOL_H2O Long spacing water density	1.047 / 1.062 / 1.077	1.063	g/cm3

Run 2: SADN8 : 8.25-in. Stabilized Azimuthal Density Neutron Calibration Density SS Window 1 Calibration

Primary Set Components	Description	Tool Element	Serial Number
	Chassis	ADSE	

Calibration Dates	Shop Calibration
Date & Time / Date Validity	29-Aug-2009 12:14:05 AM - Valid
Calibration Source	Time Frame File

Calibration Type: Density: SS Window 1

Description	Min/Nominal/Max	Shop	Unit
SSW1_BG SS window 1 - Background	20.0 / 120.0 / 200.0	114.9	1/s
SSW1_AL SS window 1 - Al	200.0 / 1650.0 / 3000.0	2072.0	1/s
SSW1_MG SS window 1 - Mg	300.0 / 3620.0 / 7000.0	4388.8	1/s

Run 2: SADN8 : 8.25-in. Stabilized Azimuthal Density Neutron Calibration Density SS Window 3 Calibration

Primary Set Components	Description	Tool Element	Serial Number
	Chassis	ADSE	

Calibration Dates	Shop Calibration
Date & Time / Date Validity	29-Aug-2009 12:14:05 AM - Valid
Calibration Source	Time Frame File

Calibration Type: Density: SS Window 3

Description	Min/Nominal/Max	Shop	Unit
SSW3_BG SS window 3 - Background	50.0 / 260.0 / 500.0	254.2	1/s
SSW3_AL SS window 3 - Al	200.0 / 1930.0 / 4000.0	2484.4	1/s
SSW3_MG SS window 3 - Mg	300.0 / 2880.0 / 5000.0	3796.2	1/s
RHOS_H2O Short spacing water density	1.336 / 1.393 / 1.450	1.387	g/cm3

Run 2: SADN8 : 8.25-in. Stabilized Azimuthal Density Neutron Calibration Neutron Far Tube 1 Calibration

Primary Set Components	Description	Tool Element	Serial Number
	Chassis	ADSE	
	Neutron Blade	NDBN	

Calibration Dates	Shop Calibration
Date & Time / Date Validity	29-Aug-2009 12:14:05 AM - Valid
Calibration Source	Time Frame File

Calibration Type: Neutron: Far tube 1

Description	Min/Nominal/Max	Shop	Unit
FAZ1_AIR Far tube 1 - Air	100.000 / 152.100 / 190.000	142.838	1/s
FAZ1_ROD Far tube 1 - Rod	35.000 / 55.328 / 69.000	51.169	1/s
FAZ1_H2O Far tube 1 - Water	13.000 / 20.136 / 25.000	18.396	1/s

Run 2: SADN8 : 8.25-in. Stabilized Azimuthal Density Neutron Calibration Neutron Far Tube 2 Calibration

Primary Set Components	Description	Tool Element	Serial Number
	Chassis	ADSE	

Calibration Dates	Shop Calibration
Date & Time / Date Validity	29-Aug-2009 12:14:05 AM - Valid
Calibration Source	Time Frame File

Calibration Type: Neutron: Far tube 2

Description	Min/Nominal/Max	Shop	Unit
FAZ2_AIR Far tube 2 - Air	100.000 / 152.100 / 190.000	149.790	1/s
FAZ2_ROD Far tube 2 - Rod	35.000 / 55.328 / 69.000	55.739	1/s
FAZ2_H2O Far tube 2 - Water	13.000 / 20.136 / 25.000	19.280	1/s

Run 2: SADN8 : 8.25-in. Stabilized Azimuthal Density Neutron Calibration Neutron Far Tube 3 Calibration

Primary Set Components	Description	Tool Element	Serial Number
	Chassis	ADSE	

Calibration Dates	Shop Calibration
Date & Time / Date Validity	29-Aug-2009 12:14:05 AM - Valid
Calibration Source	Time Frame File

Calibration Type: Neutron: Far tube 3

Description	Min/Nominal/Max	Shop	Unit
FAZ3_AIR Far tube 3 - Air	100.000 / 152.100 / 190.000	145.958	1/s
FAZ3_ROD Far tube 3 - Rod	35.000 / 55.328 / 69.000	54.980	1/s
FAZ3_H2O Far tube 3 - Water	13.000 / 20.136 / 25.000	19.033	1/s
NEUT_PORO_H2O_FAR Far Neutron Water Porosity	0.60000 / 1.00000 / 1.20000	1.18013	m3/m3

Run 2: SADN8 : 8.25-in. Stabilized Azimuthal Density Neutron Calibration Neutron Near Tube 1 Calibration

Primary Set Components	Description	Tool Element	Serial Number
	Chassis	ADSE	

Calibration Dates	Shop Calibration
Date & Time / Date Validity	29-Aug-2009 12:14:05 AM - Valid
Calibration Source	Time Frame File

Calibration Type: Neutron: Near tube 1

Description	Min/Nominal/Max	Shop	Unit
NAZ1_AIR Near tube 1 - Air	1100.000 / 1462.100 / 2000.000	1460.020	1/s
NAZ1_ROD Near tube 1 - Rod	1200.000 / 1518.800 / 2000.000	1508.500	1/s
NAZ1_H2O Near tube 1 - Water	640.000 / 801.530 / 1100.000	786.185	1/s

Run 2: SADN8 : 8.25-in. Stabilized Azimuthal Density Neutron Calibration Neutron Near Tube 2 Calibration

Primary Set Components	Description	Tool Element	Serial Number
	Chassis	ADSE	

Calibration Dates	Shop Calibration
Date & Time / Date Validity	29-Aug-2009 12:14:05 AM - Valid
Calibration Source	Time Frame File

Calibration Type: Neutron: Near tube 2

Description	Min/Nominal/Max	Shop	Unit
NAZ2_AIR Near tube 2 - Air	1100.000 / 1462.100 / 2000.000	1485.040	1/s
NAZ2_ROD Near tube 2 - Rod	1200.000 / 1518.800 / 2000.000	1540.790	1/s
NAZ2_H2O Near tube 2 - Water	640.000 / 801.530 / 1100.000	800.370	1/s

Run 2: SADN8 : 8.25-in. Stabilized Azimuthal Density Neutron Calibration Neutron Near Tube 3 Calibration

Primary Set Components	Description	Tool Element	Serial Number
	Chassis	ADSE	

Calibration Dates	Shop Calibration
Date & Time / Date Validity	29-Aug-2009 12:14:05 AM - Valid
Calibration Source	Time Frame File

Calibration Type: Neutron: Near tube 3

Description	Min/Nominal/Max	Shop	Unit
NAZ3_AIR Near tube 3 - Air	1100.000 / 1462.100 / 2000.000	1495.020	1/s
NAZ3_ROD Near tube 3 - Rod	1200.000 / 1518.800 / 2000.000	1544.740	1/s
NAZ3_H2O Near tube 3 - Water	640.000 / 801.530 / 1100.000	805.792	1/s

Company: Beach Petroleum Ltd

Well: Spikey Beach-1

Field: Exploration

Rig Name: Ocean Patriot

State: Tasmania

Country: Australia

Schlumberger

VISION Service

1:200 Measured Depth

Recorded Mode Log