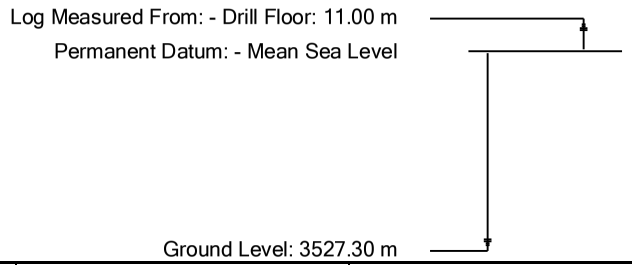
# EcoScope Service
# 1:240 Measured Depth
# Recorded Mode Data

Schlumberger

| | |
|---|---|
| Company: | IODP |
| Well: | U1520B |
| Field: | HSM-05A |
| Rig Name: | Joides Resolution |
| Expedition: | 372 |
| Country: | New Zealand |

| | | | |
|---|---|---|---|
| Latitude: | 38° 58' 9.84" S | UWID: | |
| Longitude: | 178° 7' 56.1" E | Rig Name: | Joides Resolution |
| Block: | EXP372 | Rig Type: | Drill Ship |

FL:
FL1:
FL2:




| | |
|---|---|
| Acquisition Dates: | 27-Dec-2017 -- 30-Dec-2017 |
| Log Interval: | 3530.00(m) -- 4288.00(m) |
| Index Types: | Measured Depth |
| Index Scales: | 1:240 |
| Depth Source: | Driller's Depth |
| Depth Sensor: | DES |
| Print Type: | Final |
| Spud Date: | 29-Dec-2017 |

Other Services:
SonicScope
proVISION Plus
geoVISION Images
StethoScope

## Disclaimer



Run 1

FINAL NEO LOG 1

## Software Version

| Acquisition System | Version |
|---|---|
| Maxwell 2017 SP3 | 7.3.92069.3100 |

| Computation | Description | Version |
|---|---|---|
| ECO6ResistivityComputation | Resistivity QC Processing, ECO 6.75 | 7.3.92069.3100 |
| ARCResistivity | ARC Resistivity Computation Package for ARC Tool Family | 7.3.92069.3100 |
| ECO6NeutronDensity | Neutron-Density Processing, ECO 6.75 | 7.3.92069.3100 |
| ECO6GammaRay | Natural Gamma Ray Processing, ECO 6.75 | 7.3.92069.3100 |
| ECO6UltrasonicComputation | Ultrasonic Processing, ECO6 6.75 | 7.3.92069.3100 |
| ECO6Neutron | Neutron Processing, ECO 6.75 | 7.3.92069.3100 |

| SoftwareVersion_Tool | SoftwareVersion_System Version | SoftwareVersion_Loaded Version |
|---|---|---|

Company: IODP
Well: U1520B
Field: HSM-05A
Rig Name: Joides Resolution
Expedition: 372
Country: New Zealand

| | | | |
|---|---|---|---|
| HSPM | 20.3c.062 | 7.3.92069.3100 | |
| **Tool Elements** | **Description** | **Software Version** | **Firmware Version** |
| DRILLING_SURFACE | DRILLING_SURFACE | 7.3.92069.3100 | |
| DVME | NeoScope 6.75 - Electronics Chassis | 7.3.92069.3100 | V5.300 |

## Pass Summary

| Run Name | Pass Objective | Direction | Top | Bottom | Start | Stop | Include Parallel Data |
|---|---|---|---|---|---|---|---|
| Run 1 | Drilling | Down | 3499.71 m | 4288.41 m | 27-Dec-2017 3:17:55 AM | 30-Dec-2017 5:41:59 PM | Yes |

All depths are referenced to toolstring zero

## Log

Company:IODP Well:U1520B

Run 1: Drilling:S011

Description: NeoScope Triple Combo Service Depth Without QC Format: Log ( FINAL ECO LOG 1 ) Index Scale: 1:240 Index Unit: m Index Type: Measured Depth Creation Date: 31-Dec-2017 19:29:50

TICK_GR - Gamma Ray Samples DV6MTN RM

TICK_NEU - Neutron Ticks, 0.1 ft DV6MTN RM

TICK_RHON - RHON Tick Marks DV6MTN RM

TICK_ARC_RES - ARC Resistivity Samples DV6MTN RM

Phase Shift Resistivity 16 inch Spacing at 2 MHz, Environmentally Corrected. (P16H) DV6MTN RM

0.2 ohm.m 2000

Phase Shift Resistivity 22 inch Spacing at 2 MHz, Environmentally Corrected. (P22H) DV6MTN RM

0.2 ohm.m 2000

Phase Shift Resistivity 28 inch Spacing at 2 MHz, Environmentally Corrected. (P28H) DV6MTN RM

0.2 ohm.m 2000

Phase Shift Resistivity 34 inch Spacing at 2 MHz, Environmentally Corrected. (P34H) DV6MTN RM

0.2 ohm.m 2000

Phase Shift Resistivity 40 inch Spacing at 2 MHz, Environmentally Corrected. (P40H) DV6MTN RM

0.2 ohm.m 2000

Attenuation Resistivity 28 inch Spacing at 2 MHz, Environmentally Corrected (A28H) DV6MTN RM

0.2 ohm.m 2000

Attenuation Resistivity 34 inch Spacing at 2 MHz, Environmentally Corrected (A34H) DV6MTN RM

0.2 ohm.m 2000

Attenuation Resistivity 40 inch Spacing at 2 MHz, Environmentally Corrected. (A40H) DV6MTN RM

0.2 ohm.m 2000

Ultrasonic Caliper Average (UCAV) DV6MTN RM

8 in 13

Gamma Ray (GR) DV6MTN RM

0 gAPI 150

Rate of penetration averaged over the last 5 ft (1.5 m) (ROP5) RT

100 m/h 0

Bit Size (BS)

8 in 13

Density Time After Bit (TAB_DEN) DV6MTN

0 h 10

Neutron Time After Bit (TAB_NEU) DV6MTN

0 h 10

Best Thermal Neutron Porosity, Average (BPHI) DV6MTN RM

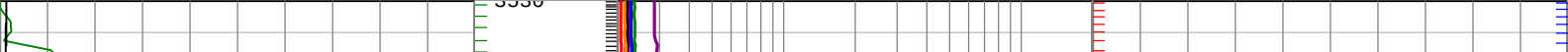
1 m3/m3 0

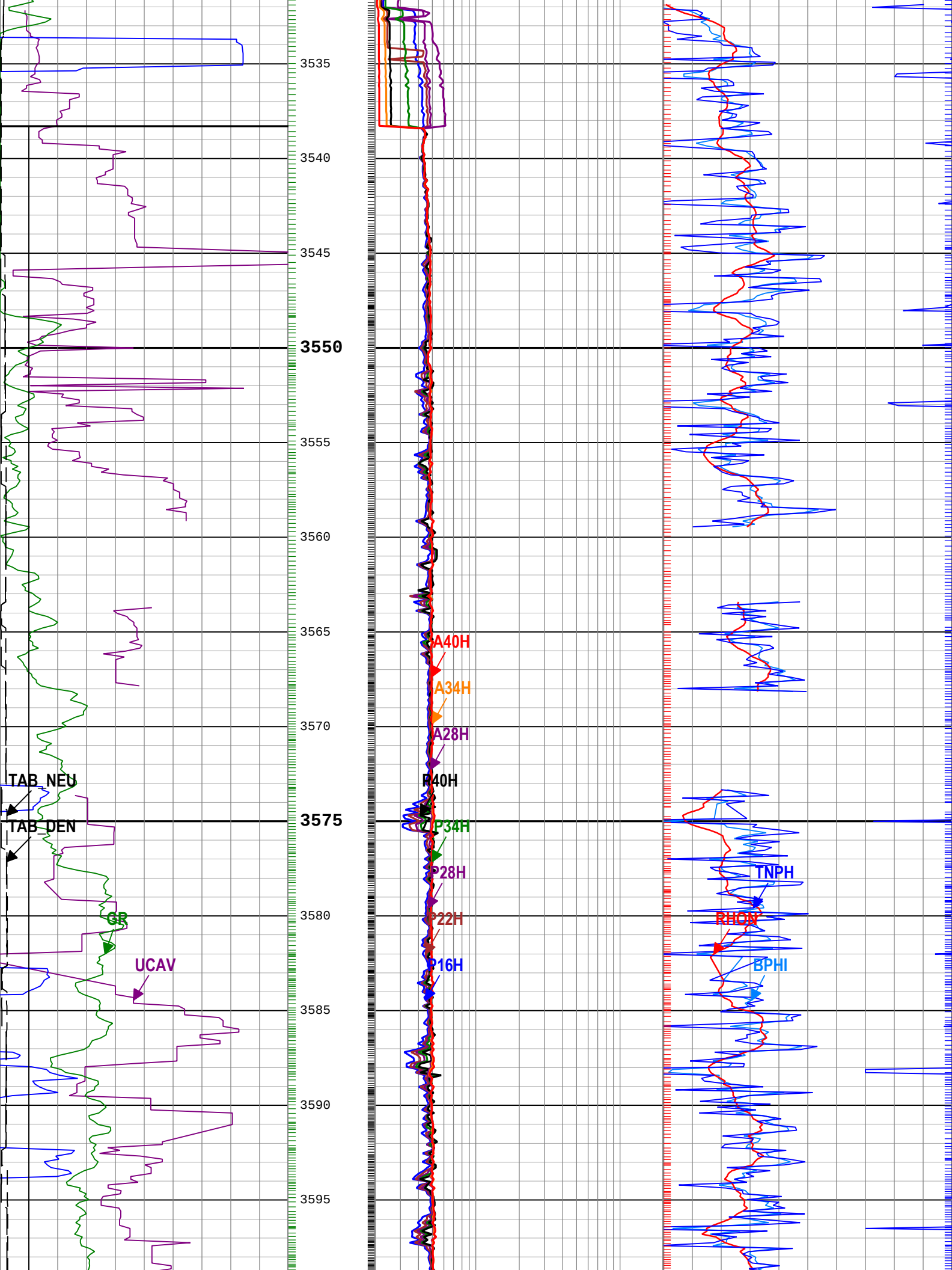
Bulk Density from Neutron, Average Filtered (RHON) DV6MTN RM

1 g/cm3 3

Thermal Neutron Porosity (Ratio Method) in Selected Lithology (TNPH) DV6MTN RM

1 m3/m3 0

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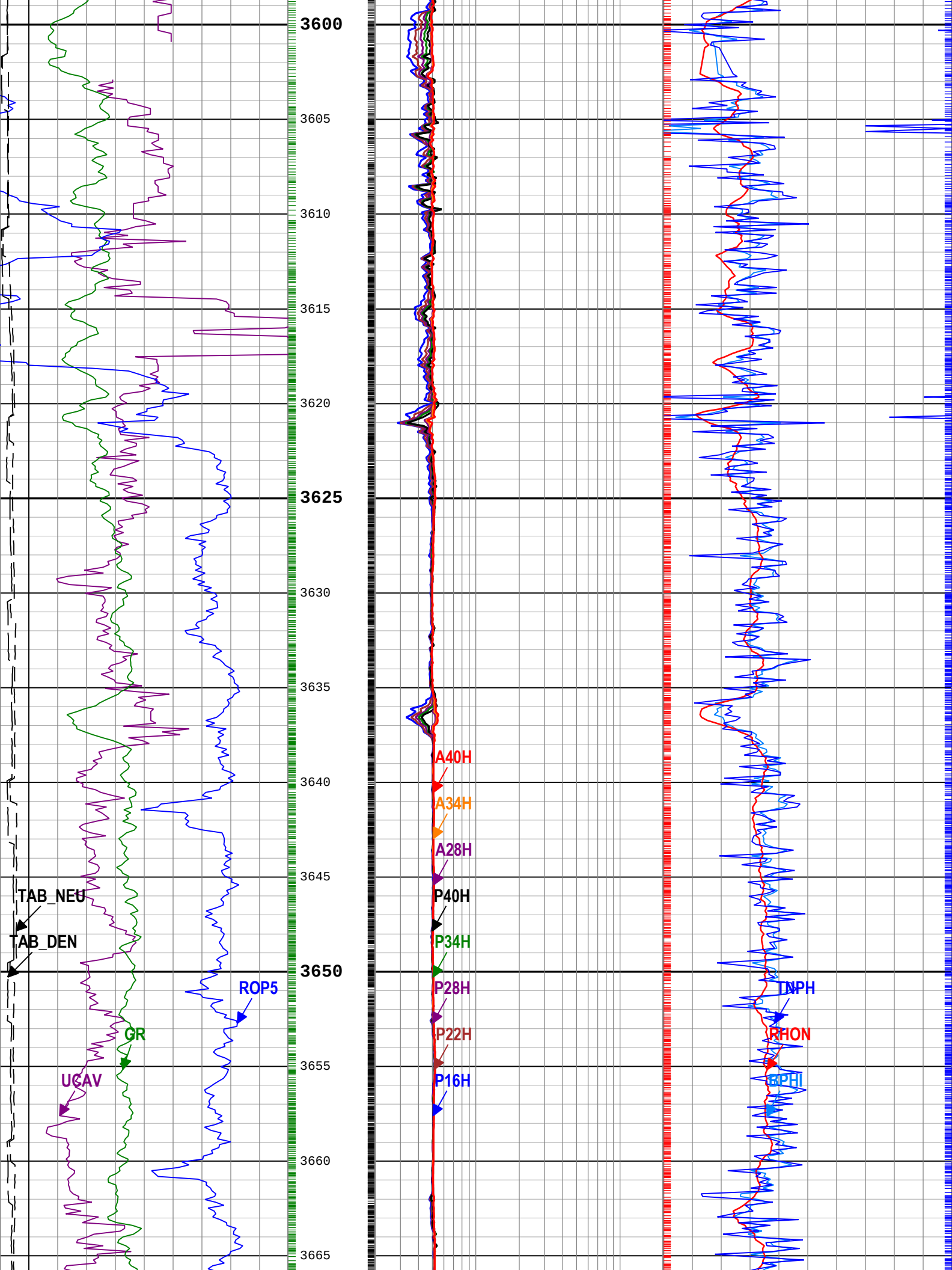
3595
TAB_NEU
TAB_DEN
GR
UCAV
A40H
A34H
A28H
P40H
P34H
P28H
P22H
P16H
TNPH
RHOM
BPHI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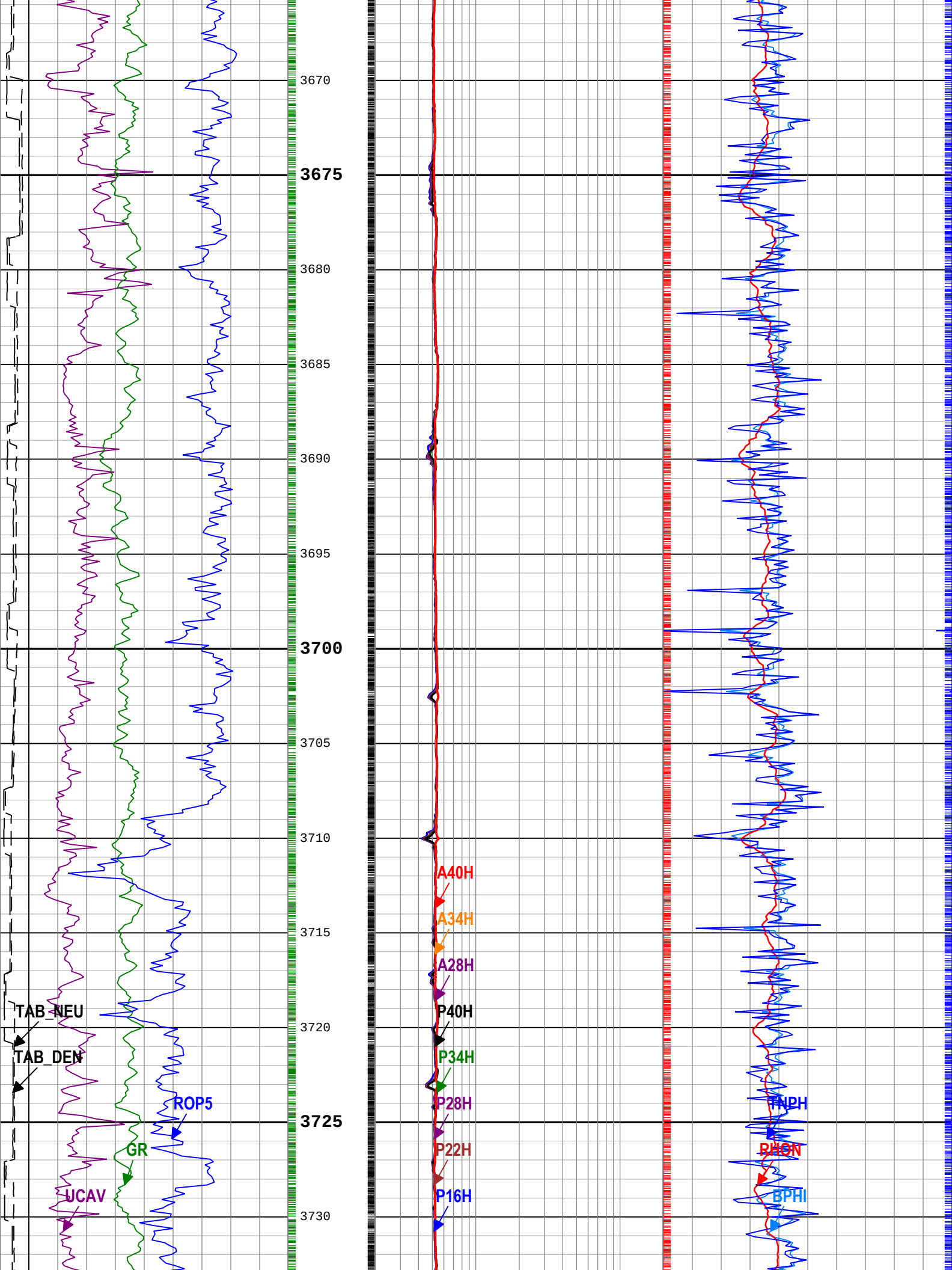
TAB_NEU
TAB_DEN
ROP5
GR
UCAV
A40H
A34H
A28H
P40H
P34H
P28H
P22H
P16H
TNPH
RHON
RPHI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ROP5
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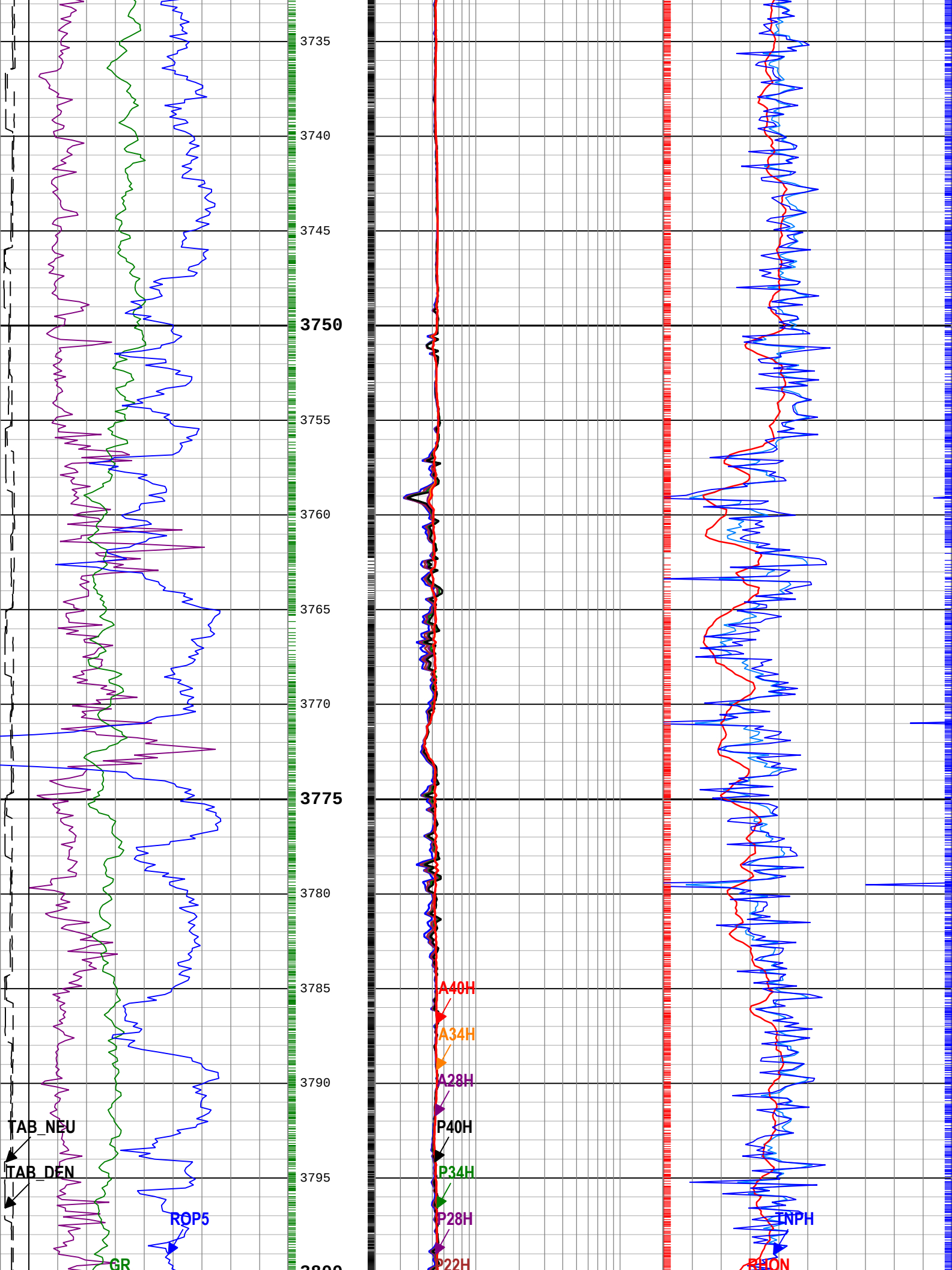
P16H
TNPH
RHOB
BPHI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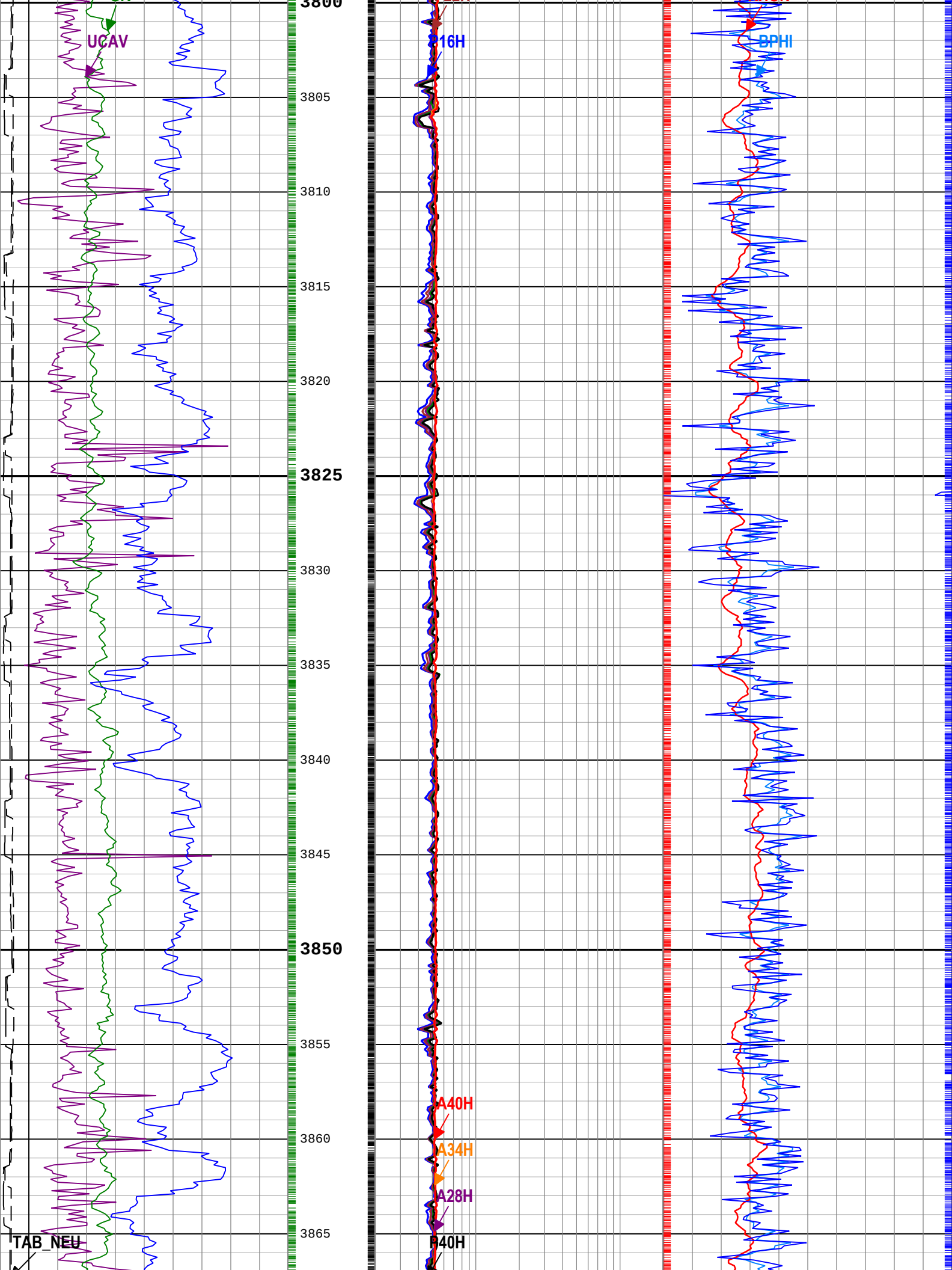
P40H
P34H
P28H
P22H
TNPH
RHON


UCAV
P16H
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3805
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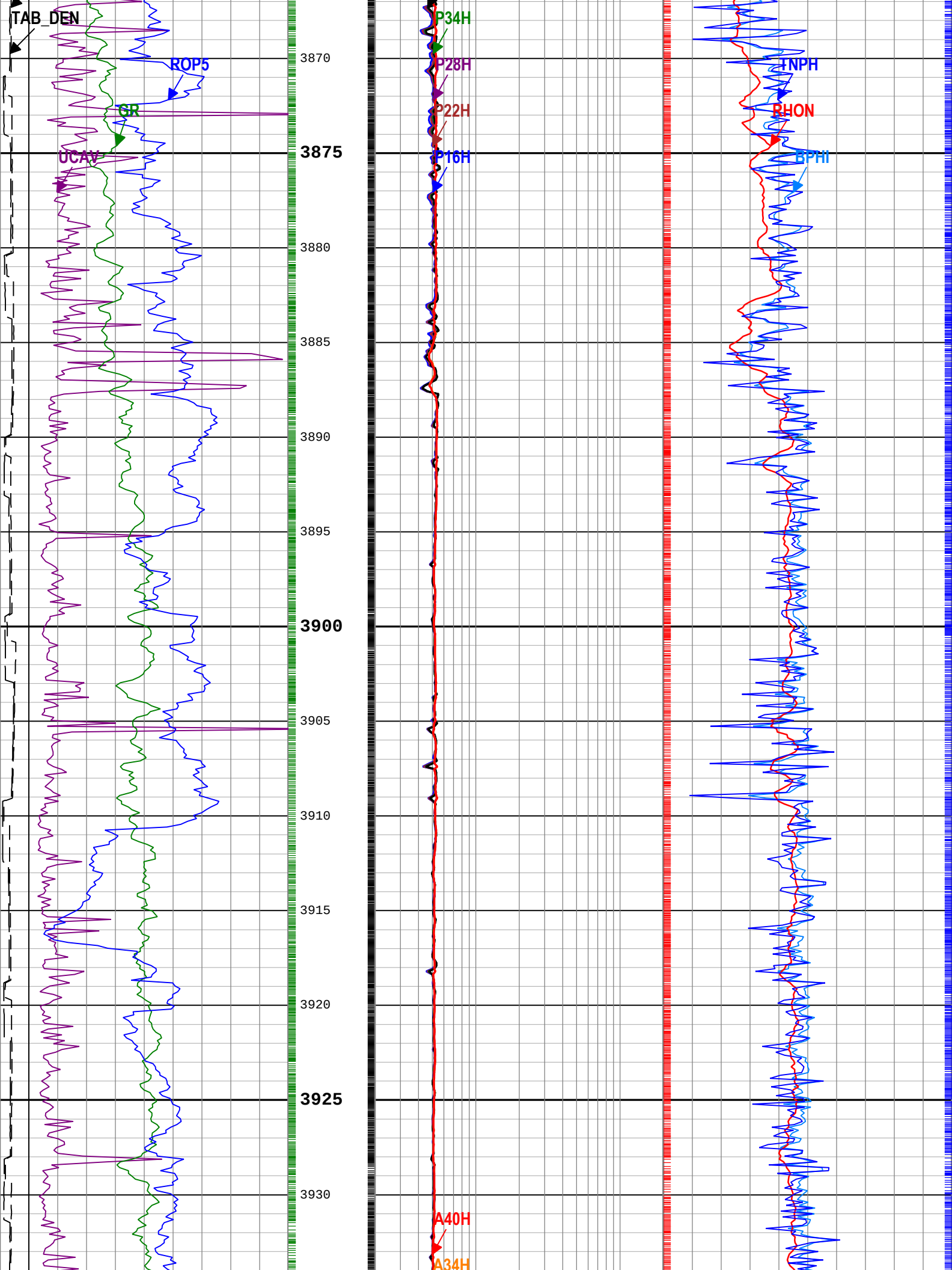
A40H
A34H
A28H
TAB_NEU
P40H


TAB_DEN
ROP5
GR
UCAV
P34H
P28H
P22H
P16H
TNPH
RHON
BPHI
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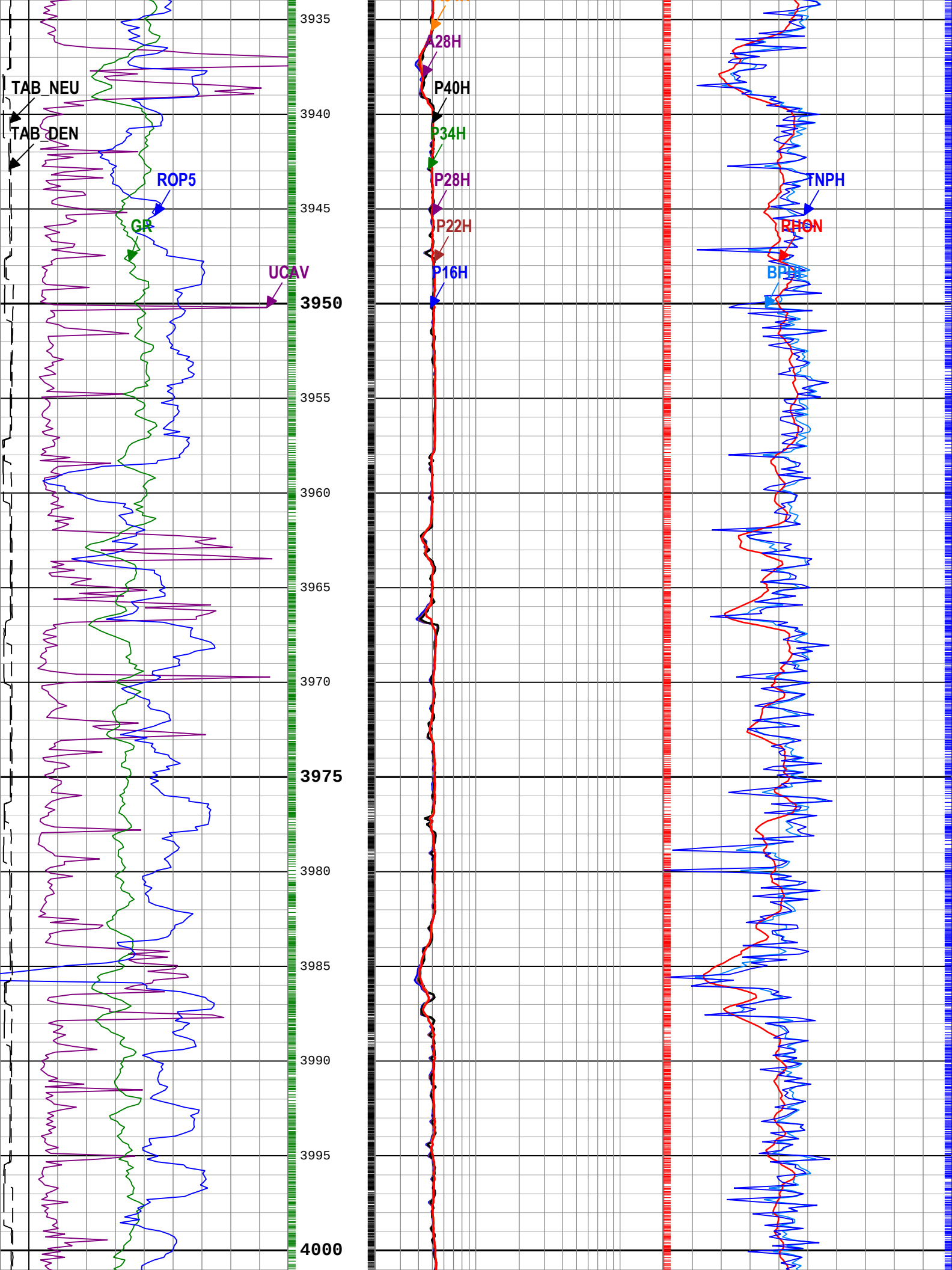
TAB_NEU
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3990
3995
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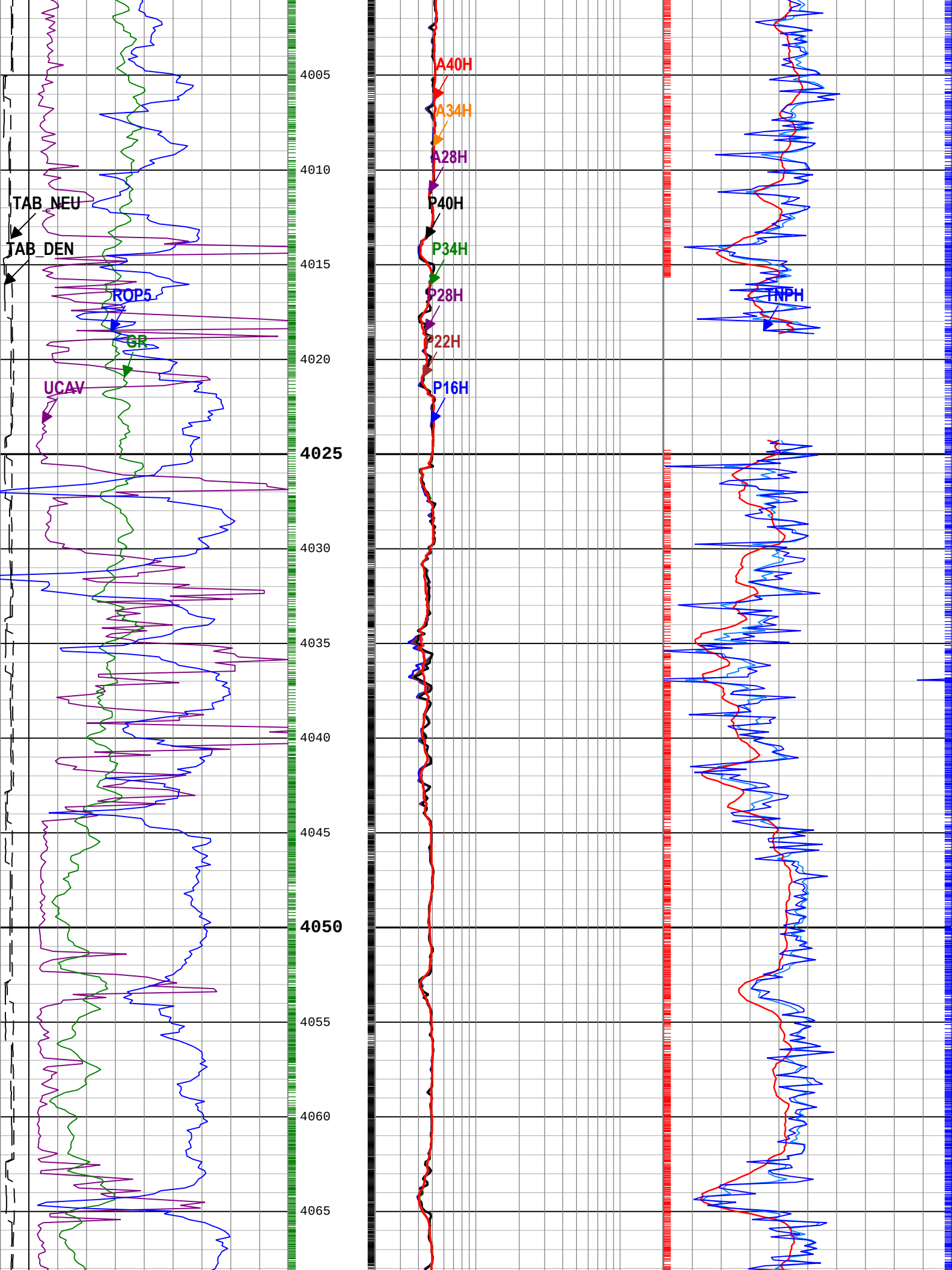
TAB_NEU
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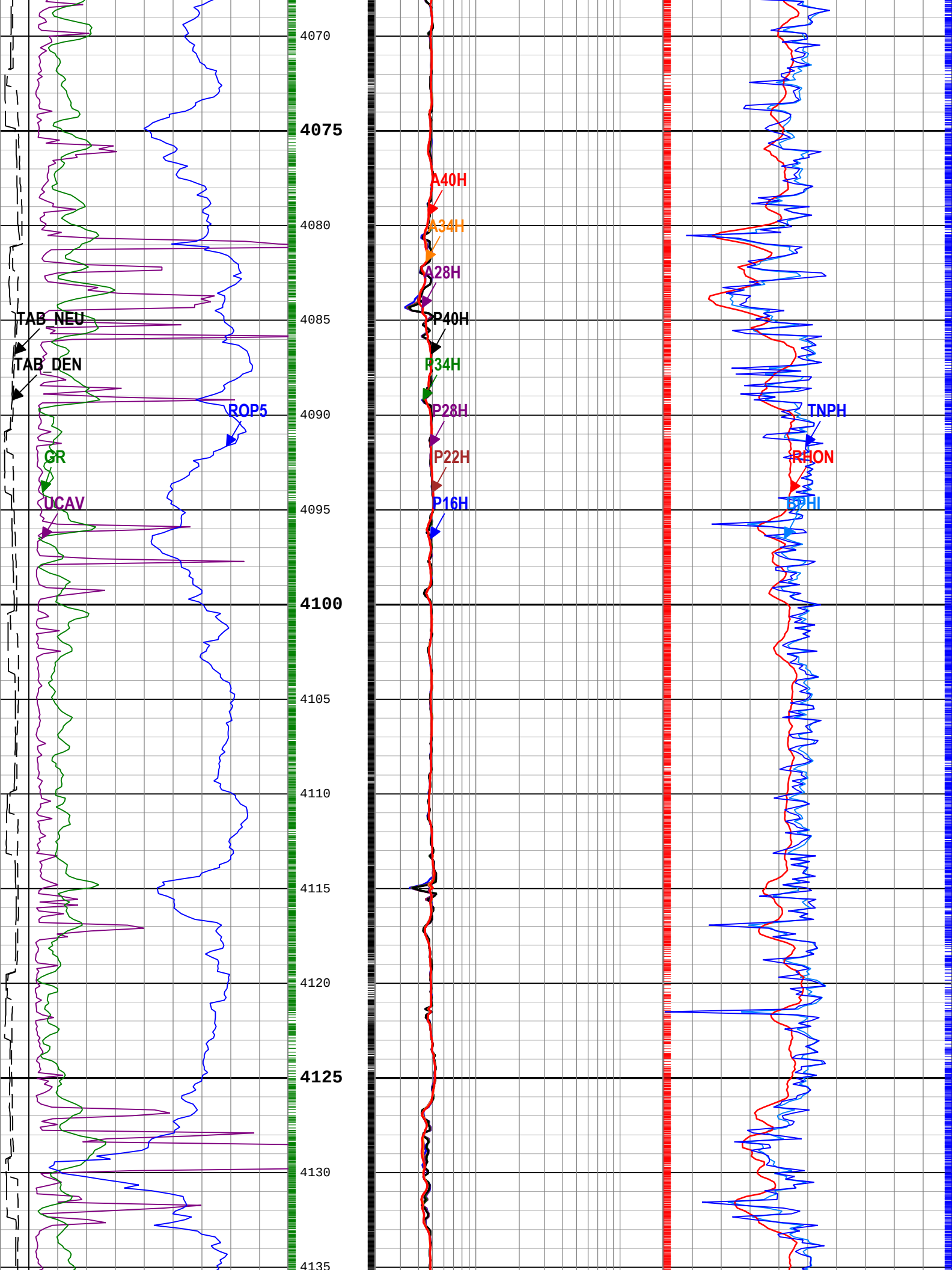
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TAB_NEU
TAB_DEN
ROP5
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A40H
A34H
A28H
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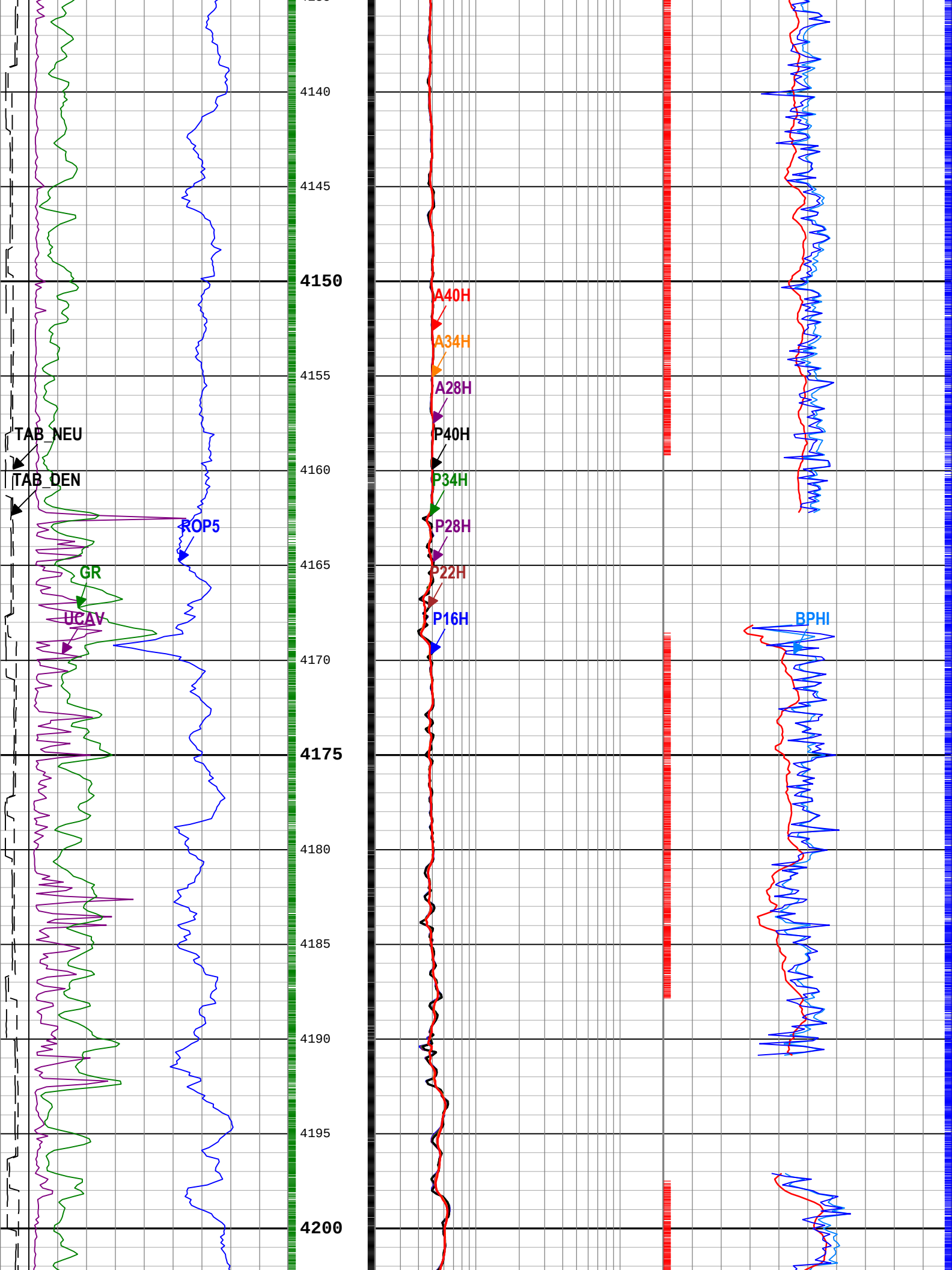
P34H
P28H
P22H
P16H
TNPH
RHON
RPHI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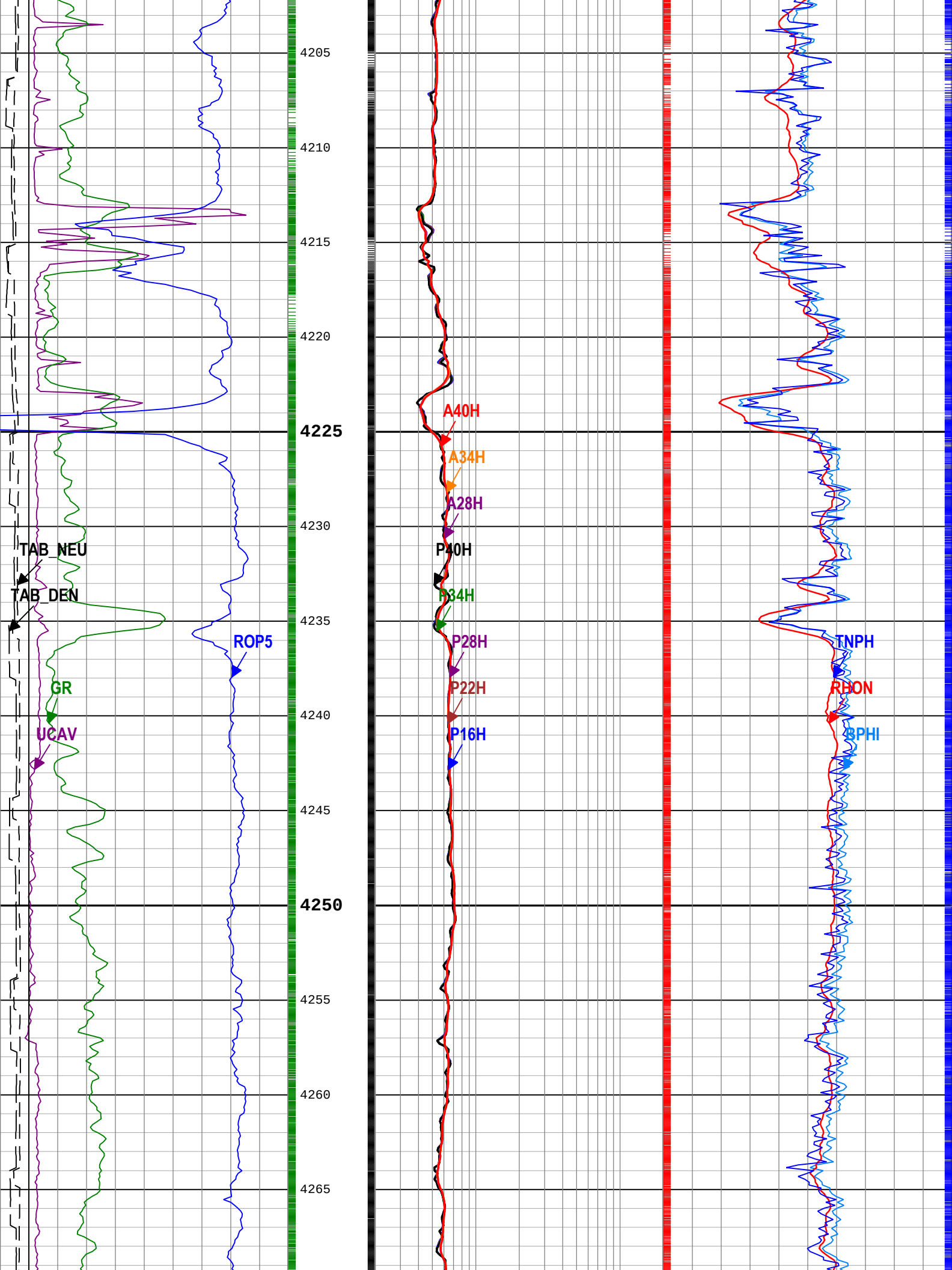
BPHI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TAB_NEU
TAB_DEN
ROP5
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UCAV
A40H
A34H
A28H
P40H
P34H
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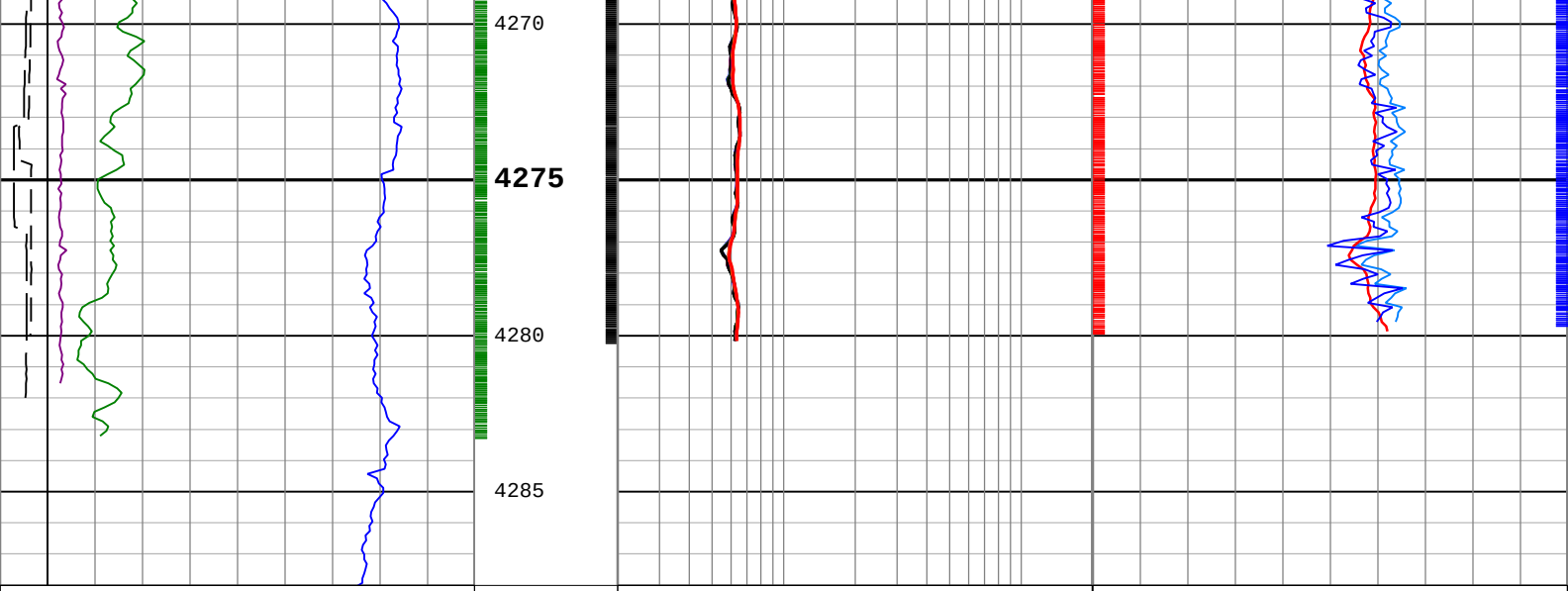
P16H
TNPH
RHON
BPHI




Ultrasonic Caliper Average (UCAV) DV6MTN RM

8 in 13

Gamma Ray (GR) DV6MTN RM

0 gAPI 150

Rate of penetration averaged over the last 5 ft (1.5 m) (ROP5) RT

100 m/h 0

Bit Size (BS)

8 in 13

Density Time After Bit (TAB_DEN) DV6MTN

0 h 10

Neutron Time After Bit (TAB_NEU) DV6MTN

0 h 10

Phase Shift Resistivity 16 inch Spacing at 2 MHz, Environmentally Corrected. (P16H) DV6MTN RM

0.2 ohm.m 2000

Phase Shift Resistivity 22 inch Spacing at 2 MHz, Environmentally Corrected. (P22H) DV6MTN RM

0.2 ohm.m 2000

Phase Shift Resistivity 28 inch Spacing at 2 MHz, Environmentally Corrected. (P28H) DV6MTN RM

0.2 ohm.m 2000

Phase Shift Resistivity 34 inch Spacing at 2 MHz, Environmentally Corrected. (P34H) DV6MTN RM

0.2 ohm.m 2000

Phase Shift Resistivity 40 inch Spacing at 2 MHz, Environmentally Corrected. (P40H) DV6MTN RM

0.2 ohm.m 2000

Attenuation Resistivity 28 inch Spacing at 2 MHz, Environmentally Corrected (A28H) DV6MTN RM

0.2 ohm.m 2000

Attenuation Resistivity 34 inch Spacing at 2 MHz, Environmentally Corrected (A34H) DV6MTN RM

0.2 ohm.m 2000

Attenuation Resistivity 40 inch Spacing at 2 MHz, Environmentally Corrected. (A40H) DV6MTN RM

0.2 ohm.m 2000

Best Thermal Neutron Porosity, Average (BPHI) DV6MTN RM

1 m3/m3 0

Bulk Density from Neutron, Average Filtered (RHON) DV6MTN RM

1 g/cm3 3

Thermal Neutron Porosity (Ratio Method) in Selected Lithology (TNPH) DV6MTN RM

1 m3/m3 0

TICK_ARC_RES - ARC Resistivity Samples DV6MTN RM

TICK_RHON - RHON Tick Marks DV6MTN RM

TICK_NEU - Neutron Ticks, 0.1 ft DV6MTN RM

TICK_GR - Gamma Ray Samples DV6MTN RM

Description: NeoScope Triple Combo Service Depth Without QC Format: Log ( FINAL ECO LOG 1 ) Index Scale: 1:240 Index Unit: m Index Type: Measured Depth Creation Date: 31-Dec-2017 19:29:50

# Channel Processing Parameters

## Run 1: Parameters

| Parameter | Description | Tool | Value | Unit |
|---|---|---|---|---|
| ABNT | Abnormal Transmitter Indicator | DV6MTN | NO_TX_FAILED | |
| BH_OPT | Borehole Effect Computation Option | DV6MTN | No | |
| BHK | Drilling Fluid Potassium Concentration | Borehole | 0 | % |
| BHT | Bottom Hole Temperature | Borehole | 7 | degC |
| BS | Bit Size | DNMSESSION | 8.5 | in |
| BSAL | Borehole Salinity | Borehole | 35000 | ppm |
| CALI_SEL_GR | Hole-Size Correction Source for Gamma-Ray Processing | DV6MTN | GCSE | |
| CALI_SEL_NEU | Hole-Size Correction Source for Neutron Processing | DV6MTN | GCSE | |
| CALI_SEL_NGD | Hole-Size Correction Source for Neutron Gamma Density Processing | DV6MTN | Ultrasonic | |
| CHI | Caliper High Limit from BS (RM) | DV6MTN | 10 | in |
| CLO | Caliper Low Limit from BS (RM) | DV6MTN | -5 | in |
| DEPTH_SEL | Depth Selection Parameter | DNMSESSION | Driller's Depth | |
| DFD | Drilling Fluid Density | Borehole | 8.6 | lbm/gal |
| DFT_CATEGORY | Drilling Fluid Type | Borehole | Water | |
| DTMD | Borehole Fluid Slowness | Borehole | 180 | us/ft |
| DTMD_DH | Delta-T for Mud Downhole | DV6MTN | 180 | us/ft |
| ERRCT | Percentage Error Cutoff | DV6MTN | 4.5 | % |
| FSAL | Formation Salinity | Borehole | 6126.75 | ppm |
| GCSE_RM | Generalized Caliper Selection for DnM recorded mode | Borehole | BS | |
| GR_O2COR_OPT | Enable Gamma Ray Oxygen Activation Correction | DV6MTN | Yes | |
| GRSE_RM | Generalized Mud Resistivity Selection for Recorded Mode | Borehole | REMS(RM) | |
| GRSH | Gamma Ray Shale | DV6MTN | 1000 | gAPI |
| GTSE_RM | Generalized Temperature Selection for Recorded Mode | Borehole | DHAT(RM) | |
| HIGH_BLEND | High Resistivity Threshold for Blending | DV6MTN | 2 | ohm.m |
| INVAS_OPT | Invasion Computation Option | DV6MTN | No | |
| LOW_BLEND | Low Resistivity Threshold for Blending | DV6MTN | 1 | ohm.m |
| MATR | Rock Matrix for Neutron Porosity Corrections | Borehole | LIMESTONE | |
| MST | Mud Sample Temperature | Borehole | 23.89 | degC |
| MSWS | ARCWizard Model Switch Window Size | DV6MTN | 152.4 | cm |
| MULTIEFF_OPT | Multi-effect Computation Option | DV6MTN | No | |
| NEU_FTUBE_OPT | Far Thermal Tube Selection | DV6MTN | Both | |
| NEU_NGDC_OPT | Neutron Density Correction Option | DV6MTN | Neutron | |
| OACF | O2 Activation Correction Factor (RM) | DV6MTN | 8 | |
| PRES_SEL_NEU | Pressure Correction Source for Neutron Processing | DV6MTN | Annular | |
| PRTD | ARCWizard Preferred Resistivty Log for Rt Display while Multi-Effects | DV6MTN | P34B | |
| RMS | Resistivity of Mud Sample | Borehole | 0.2 | ohm.m |
| STOH | Top of Hole Sector | DV6MTN | SECTOR_0 | |
| T1WM | ARCWizard Weight Multiplier to Measurements for Transmitter 1 | DV6MTN | 1 | |
| T2WM | ARCWizard Weight Multiplier to Measurements for Transmitter 2 | DV6MTN | 1 | |
| T3WM | ARCWizard Weight Multiplier to Measurements for Transmitter 3 | DV6MTN | 1 | |
| T4WM | ARCWizard Weight Multiplier to Measurements for Transmitter 4 | DV6MTN | 1 | |
| T5WM | ARCWizard Weight Multiplier to Measurements for Transmitter 5 | DV6MTN | 1 | |
| TEMP_SEL_ARC | ARC Temperature Selection | DV6MTN | Annular | |

| | | | | |
|---|---|---|---|---|
| TEMP_SEL_NEU | Temperature Correction Source for Neutron Processing | DV6MTN | GTSE | |
| UNIFORM_OPT | Uniform Rock Computation Option | DV6MTN | No | |

# Tool Control Parameters

## Run 1: Parameters

| Parameter | Description | Tool | Value | Unit |
|---|---|---|---|---|
| OFFBTM_TH | Threshold for deciding whether the bit is off bottom | DNMSESSION | Time Zoned | m |

## Time Zone Parameters

| Parameter | Value | Start Time | Stop Time | Start Depth ( m ) | Stop Depth ( m ) |
|---|---|---|---|---|---|
| OFFBTM_TH | 0.3 | 27-Dec-2017 03:17:55 | 29-Dec-2017 04:47:05 | 3499.71 | 3658.36 |
| OFFBTM_TH | 0.4 | 29-Dec-2017 04:47:05 | 30-Dec-2017 17:41:59 | 3658.36 | 4288.41 |

All depth are at tool zero.

**Company:** IODP

**Well:** U1520B

**Field:** HSM-05A

**Rig Name:** Joides Resolution

**Expedition:** 372

**Country:** New Zealand

Schlumberger

EcoScope Service

1:240 Measured Depth

Recorded Mode Data