NNE_Boggess_13H–Job Summary

27th June 2019

Prepared by:
Dmitry Avdeev

DRILLING **OPERATIONS** DRILLING **SOLUTIONS** DRILLING **EQUIPMENT**

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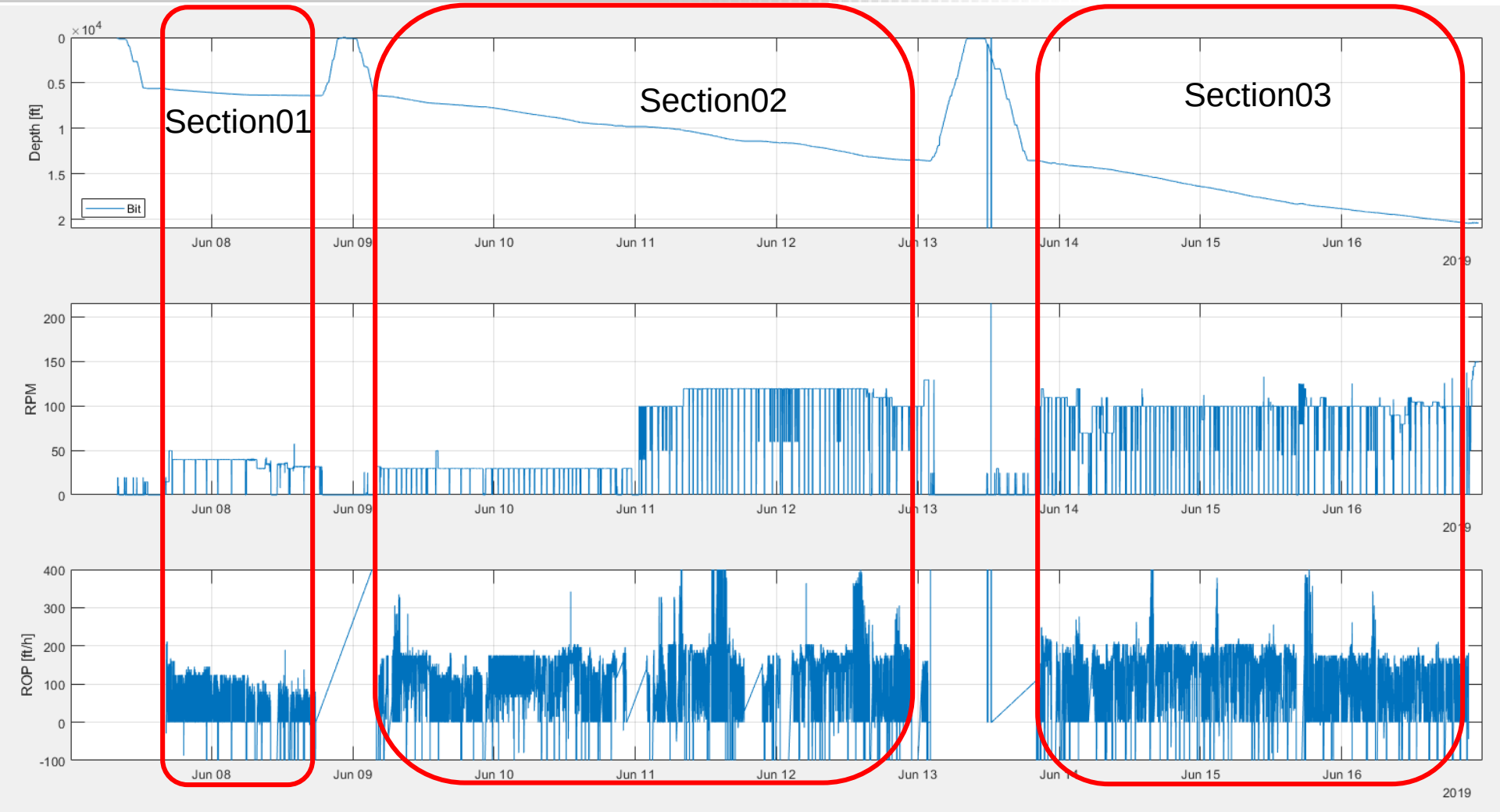
NNE_Boggess_13H– Job Summary. Outline. Sections & Passes

- **Section 01 (vertical)**
  - **Pass01 (drill)**
- **Section 02 (vertical, curve, lateral)**
  - **Pass01 (vertical+curve, drill)**
  - **Pass02 (lateral, drill)**
- **Section 03 (lateral)**
  - **Pass01 (lateral, drill)**
  - **Pass02 (lateral, drill)**

NNE_Boggess_13H– Job Summary. Sections.



Customer provided data, not acquired by PetroMar

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NNE_Boggess_13H– Job Summary. Section01.

- **Section 01 (vertical)**
  - **Pass01 (drill)**

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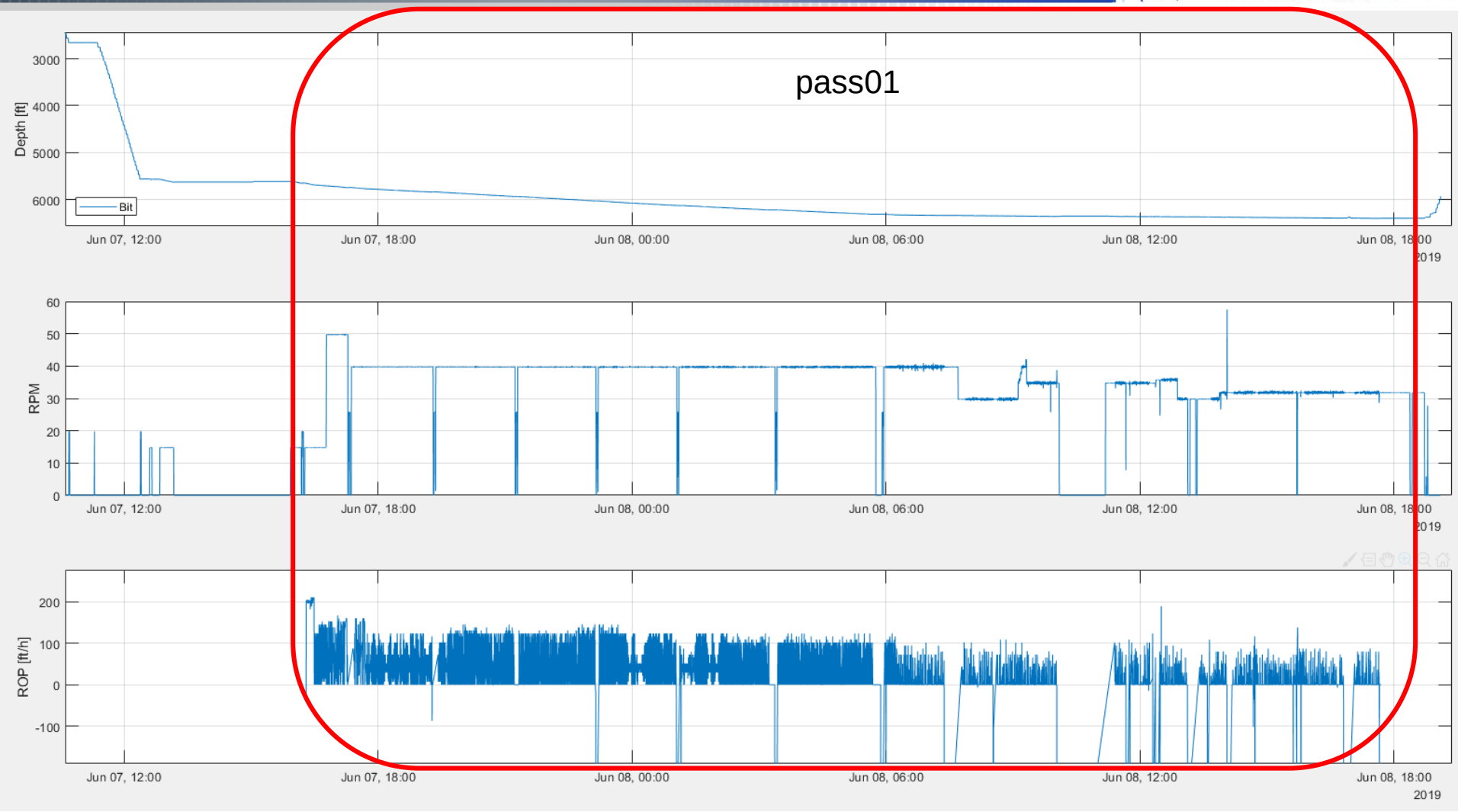
NNE_Boggess_13H– Job Summary. Section01. Pass01.



Customer provided data, not acquired by PetroMar

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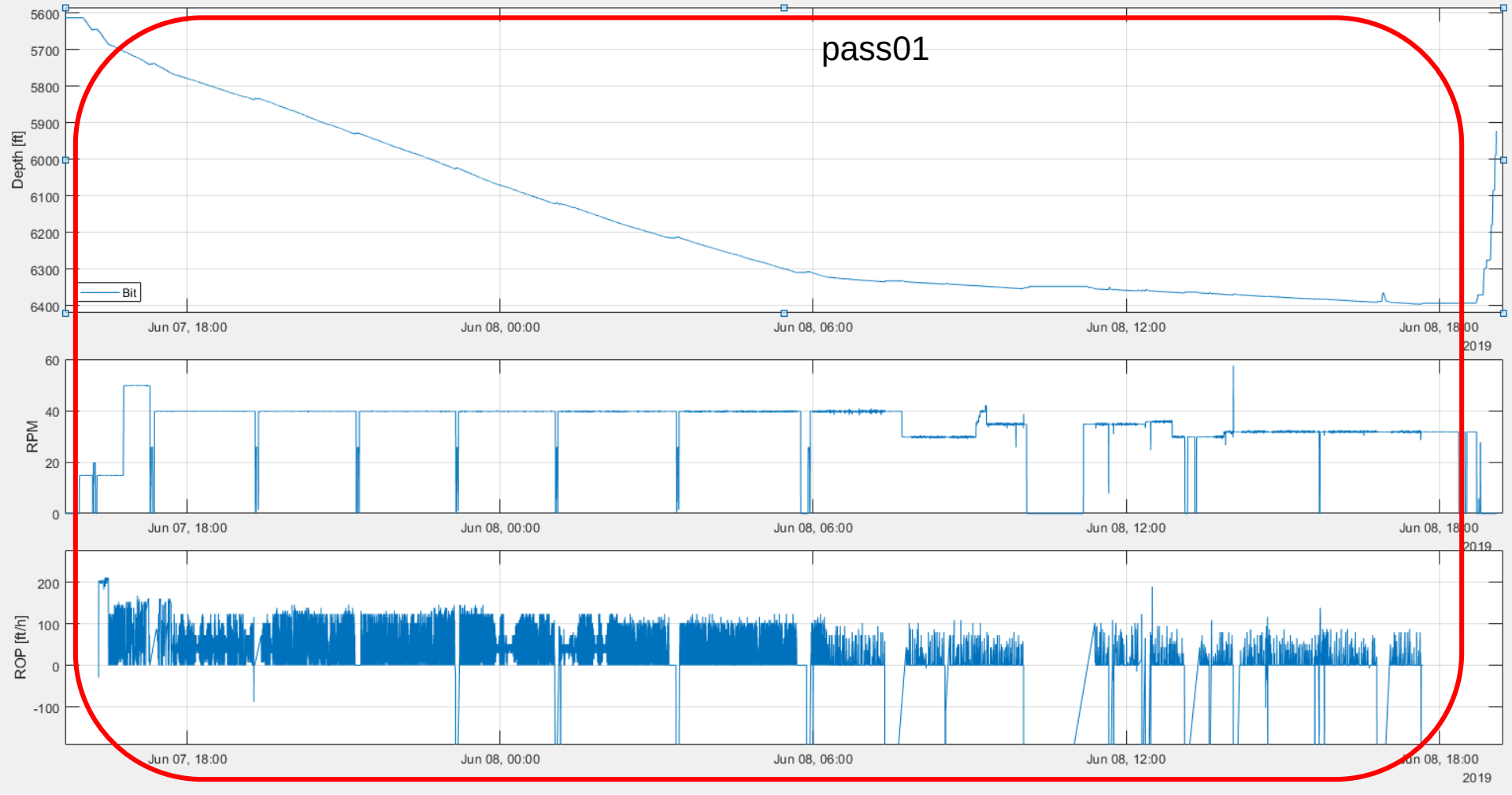
NNE_Boggess_13H– Job Summary. Section01. Pass01.



Customer provided data, not acquired by PetroMar

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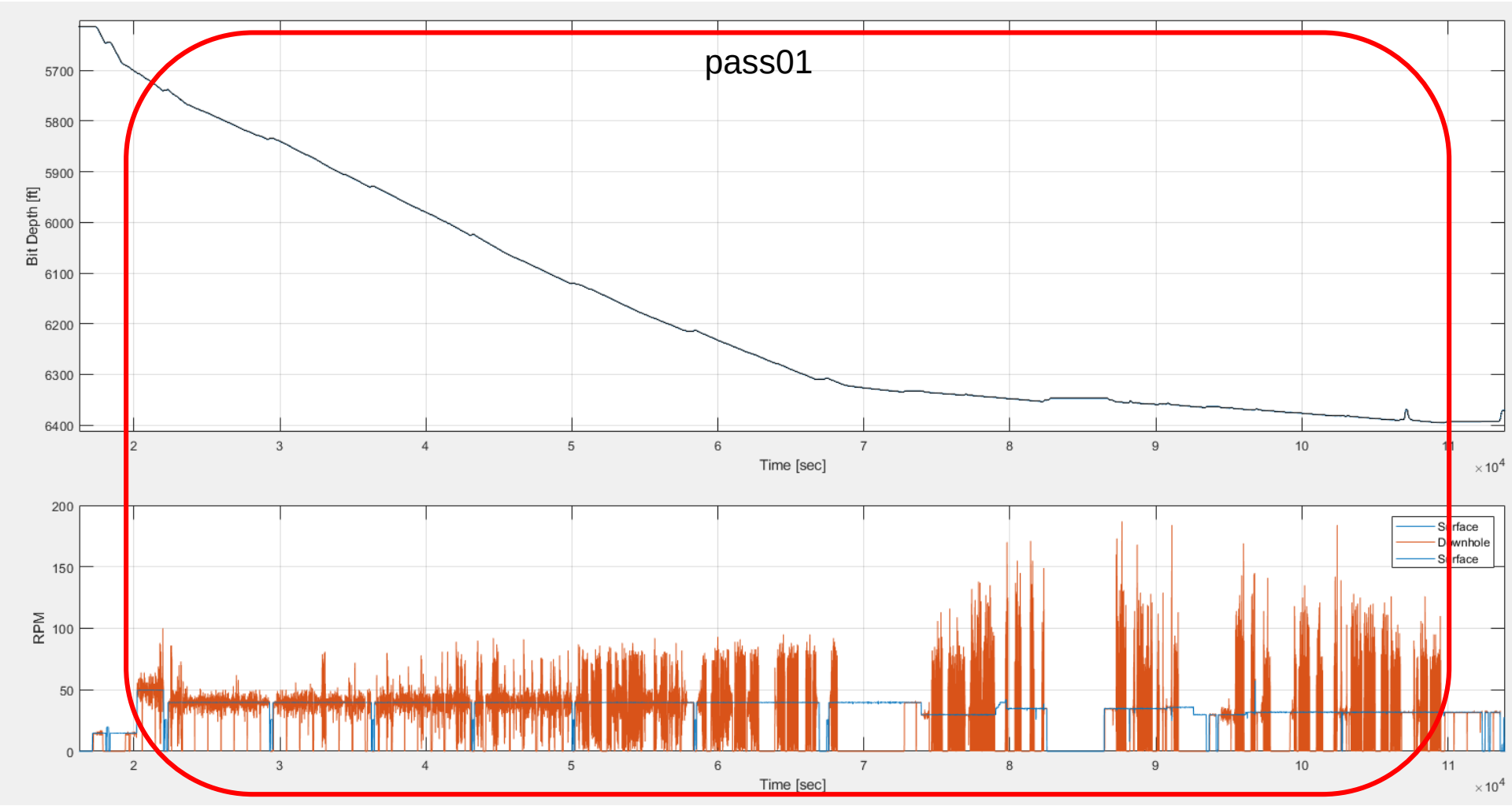
NNE_Boggess_13H– Job Summary. Section01. Pass01.



Customer provided data, not acquired by PetroMar, included

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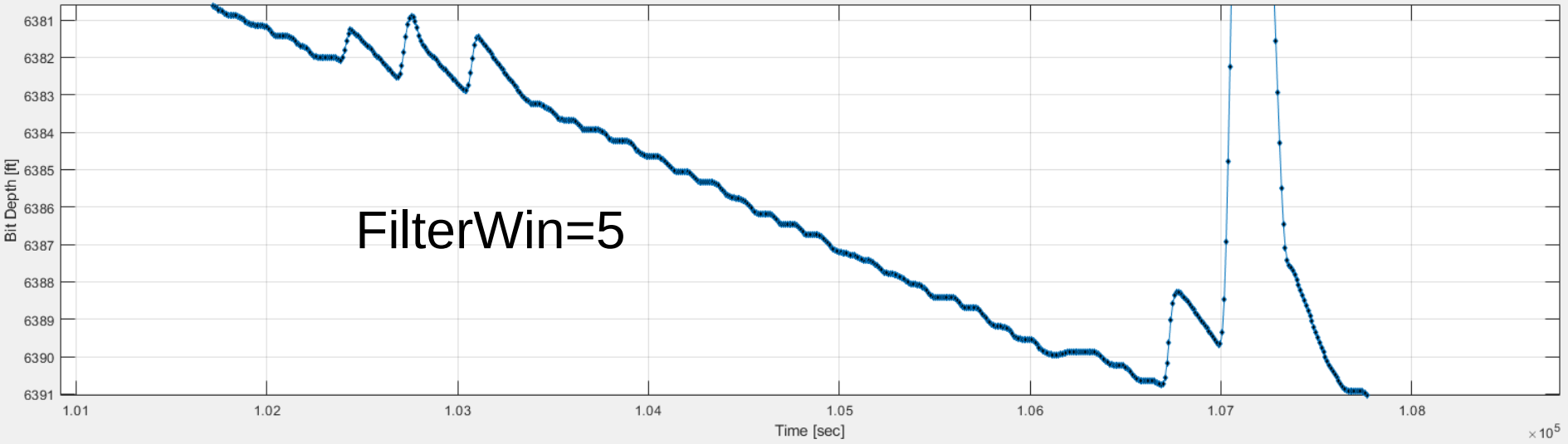
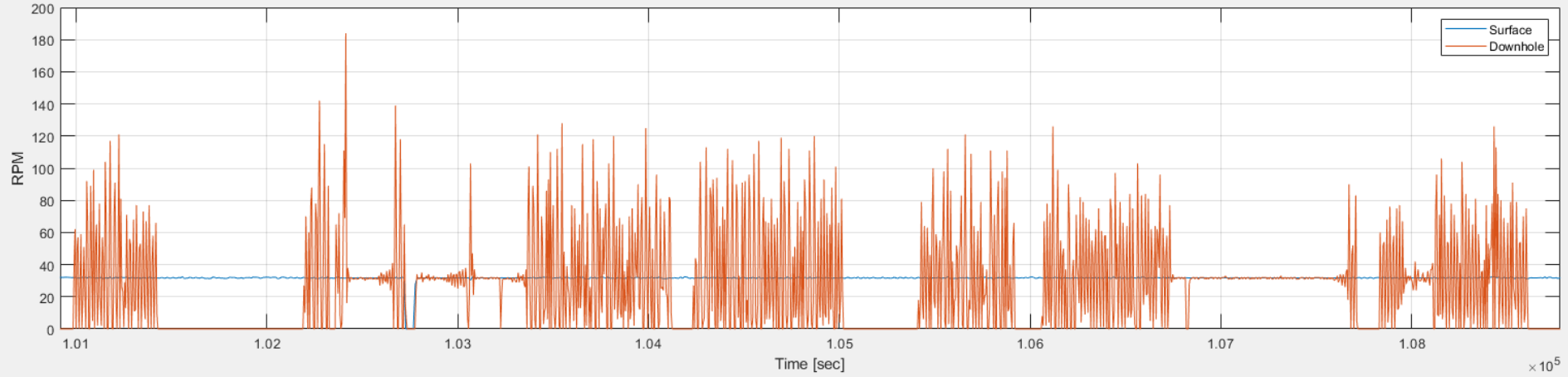
NNE_Boggess_13H– Job Summary. Section01. Pass01. Stair Casing.





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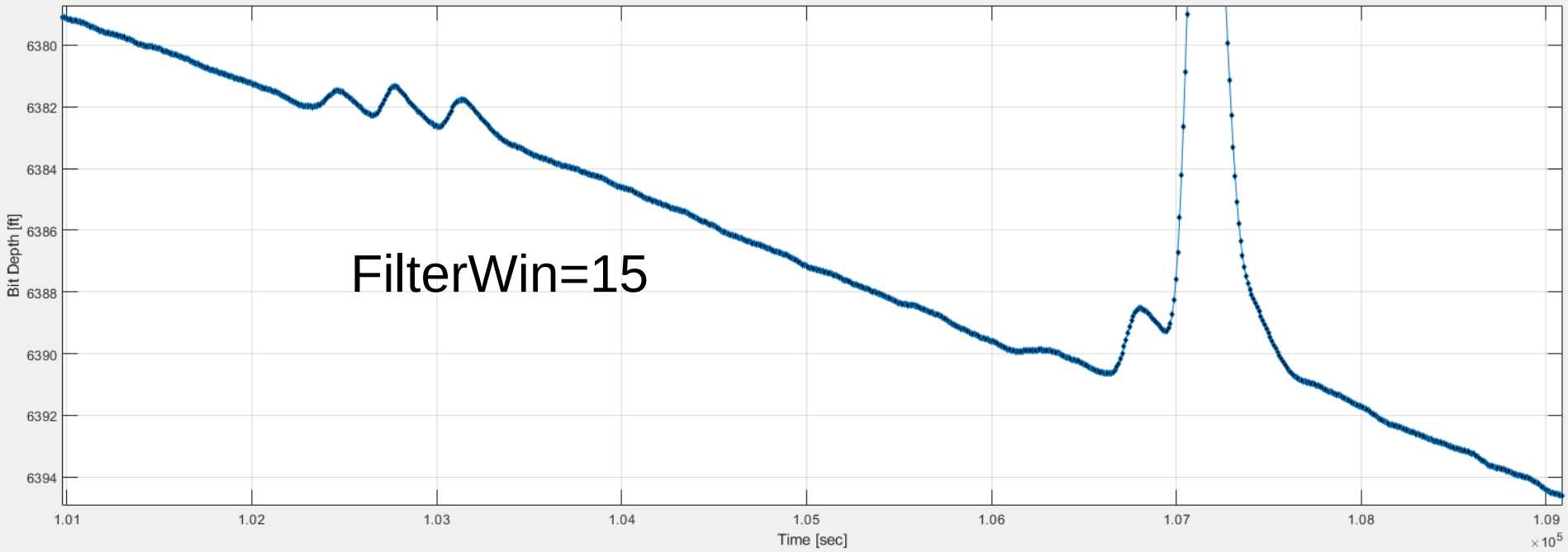
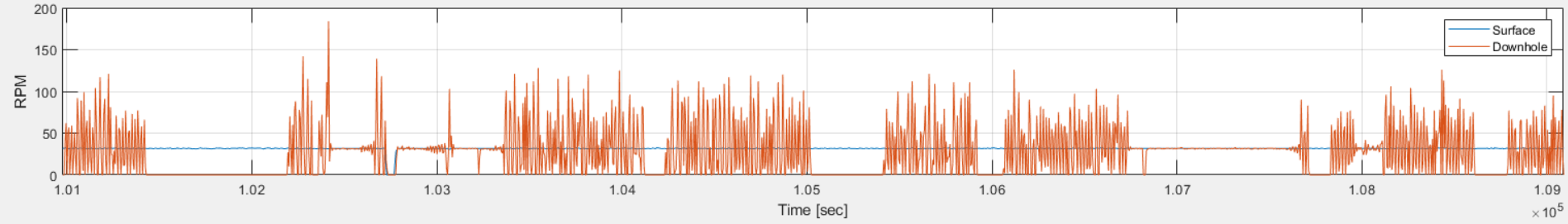
NNE_Boggess_13H– Job Summary. Section01. Pass01. Stair Casing.





Customer provided data, not acquired by PetroMar, included

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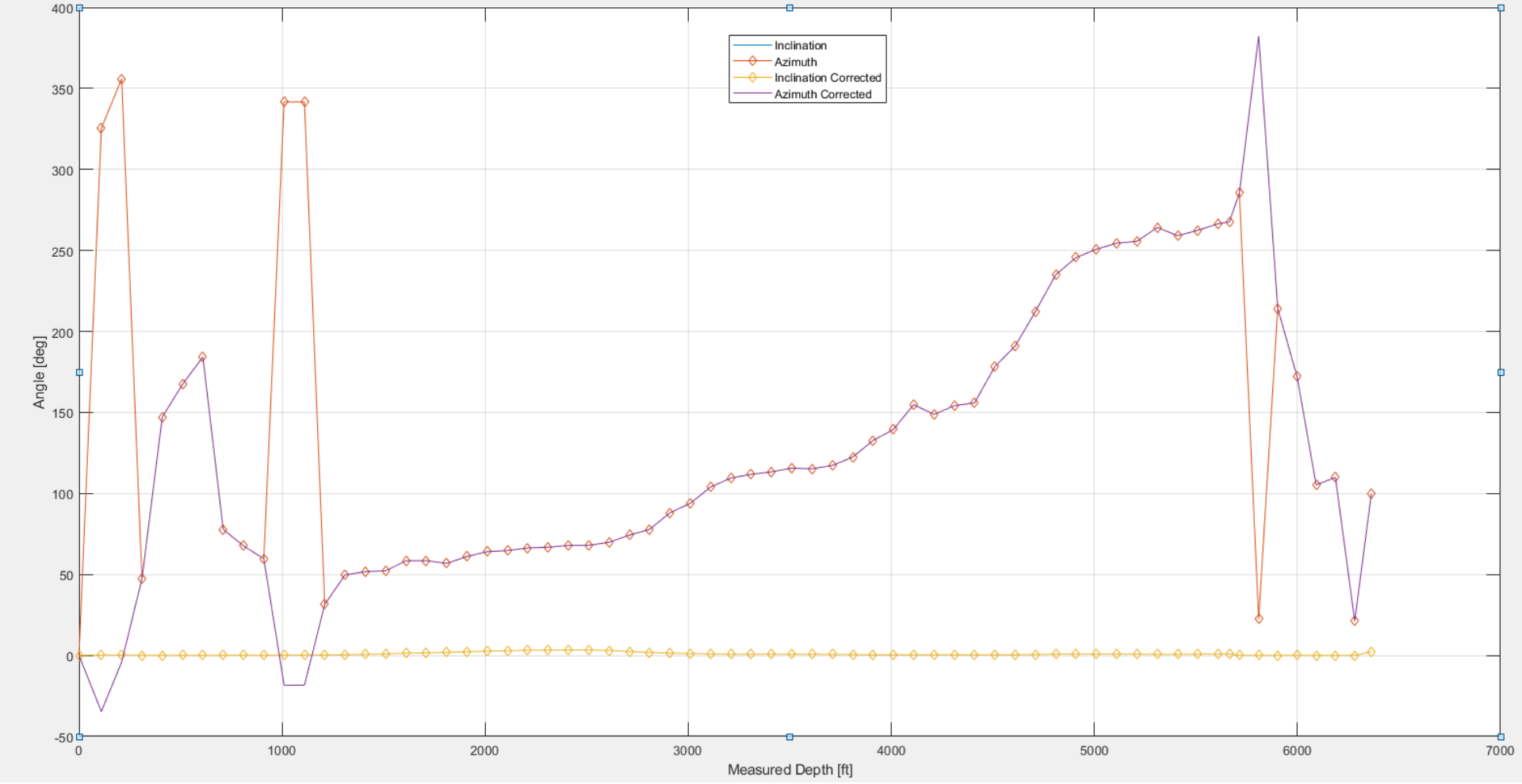
NNE_Boggess_13H– Job Summary.
Section01. Inclination & Azimuth.



Customer provided data, not acquired by PetroMar

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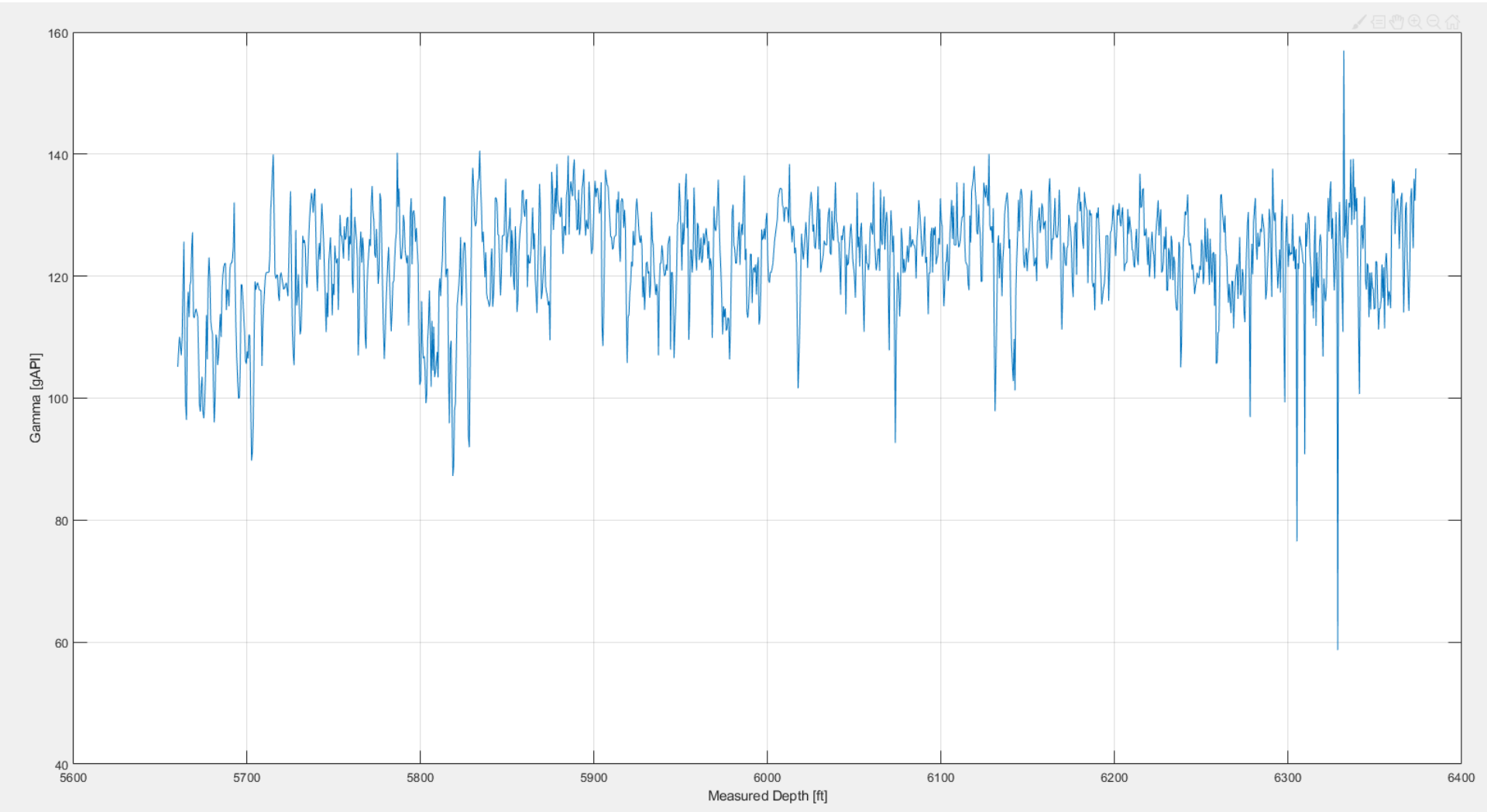
NNE_Boggess_13H– Job Summary. Section01. Gamma API (GRC_D).



Customer provided, not acquired by PetroMar

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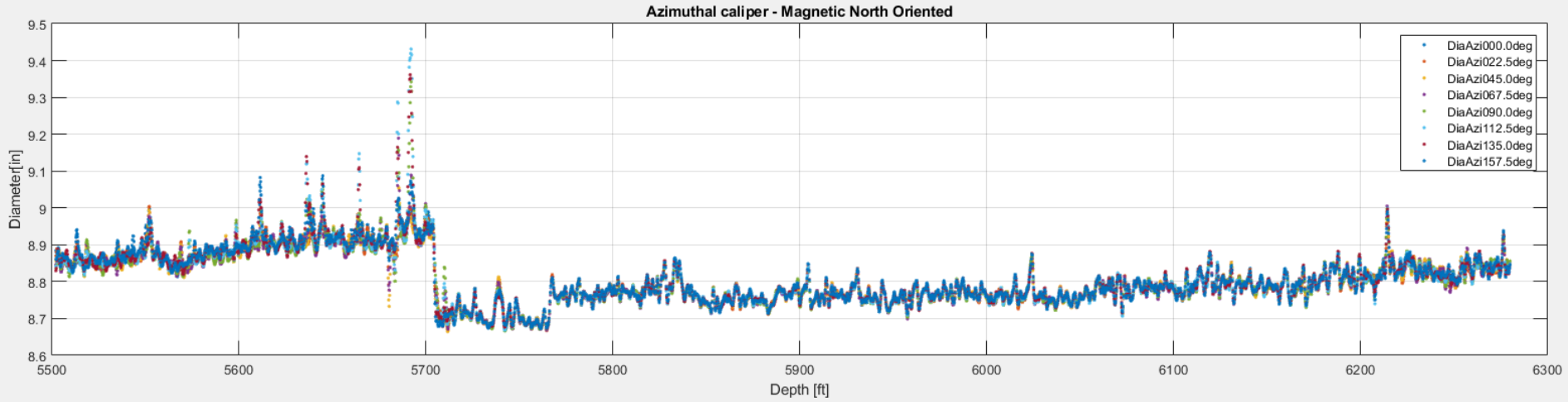
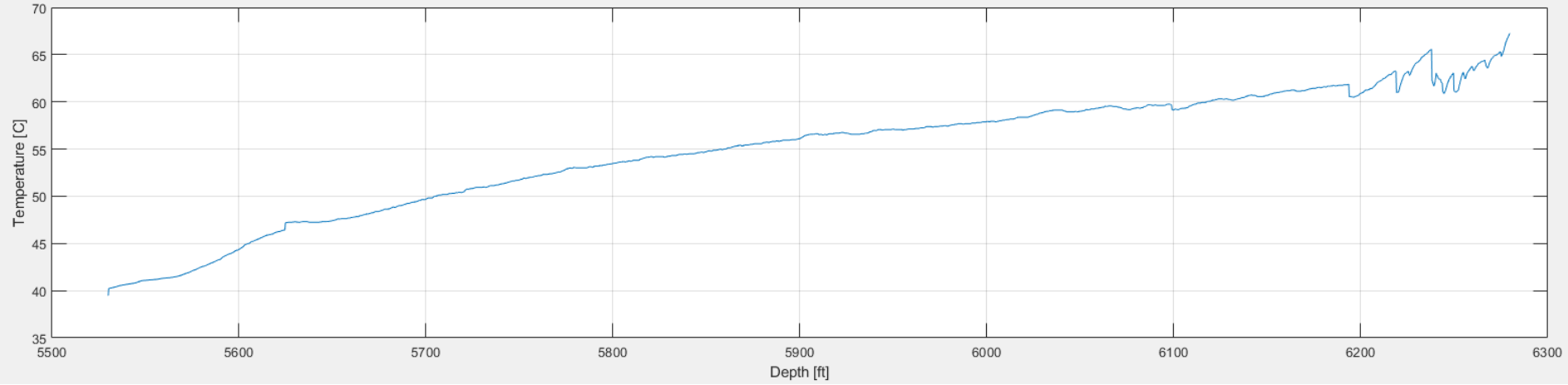
NNE_Boggess_13H– Job Summary.
Section 01. Pass01 (vertical, drill)

- **FV Sensor at 5,502 to 6,280 ft**
- **FV Sensor to Bit Distance ~ 115.8 ft**
- **Severe Stick-Slip**

NNE_Boggess_13H– Job Summary. Section01. Pass01. Azimuthal Calipers.





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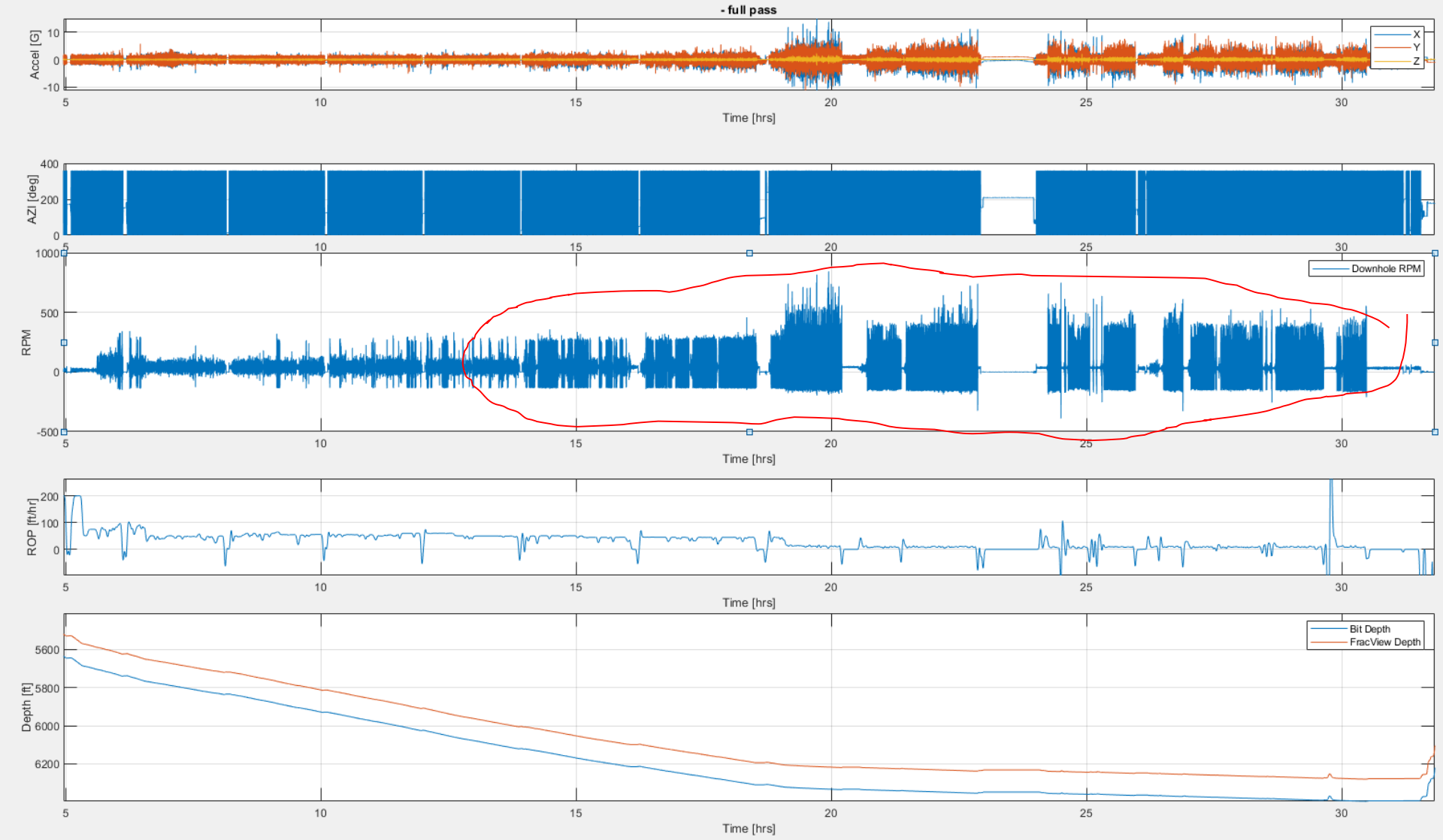
NNE_Boggess_13H– Job Summary. Section01. Pass01. Motion Dynamics.



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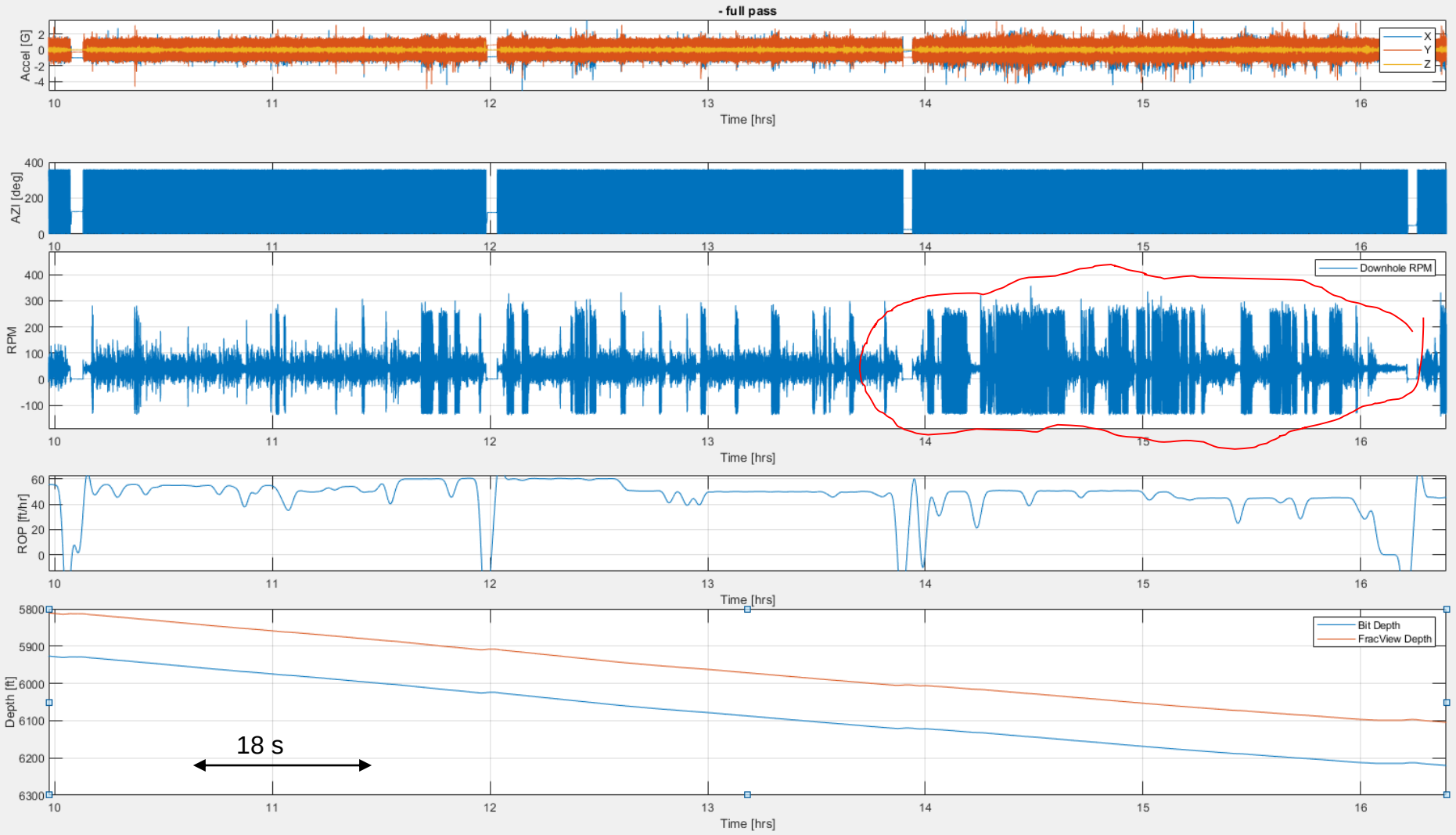
NNE_Boggess_13H– Job Summary.
Section01. Pass01. Motion Dynamics (Stick Slip - zoom).



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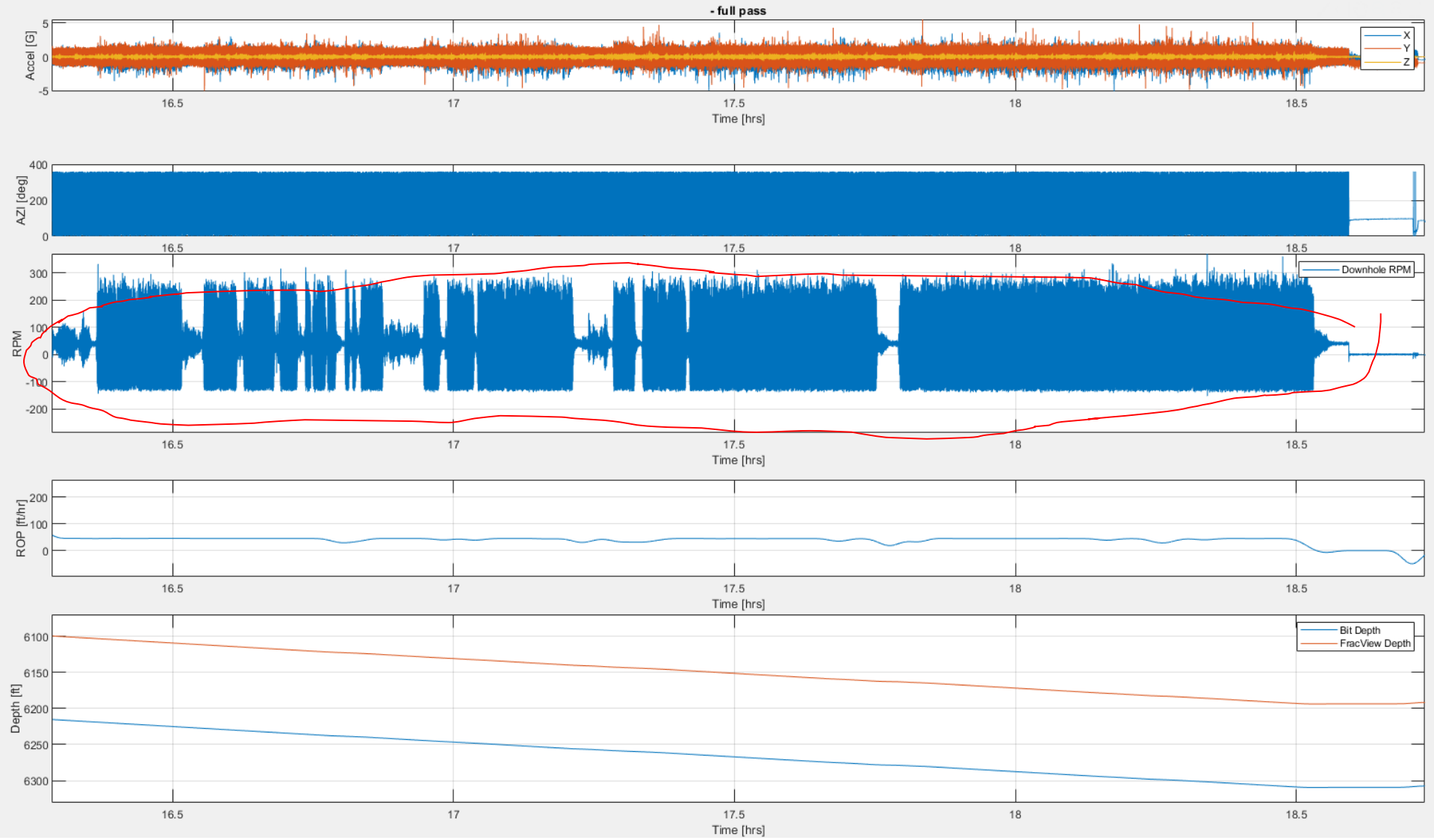
NNE_Boggess_13H– Job Summary.
Section01. Pass01. Motion Dynamics (Stick Slip - zoom).



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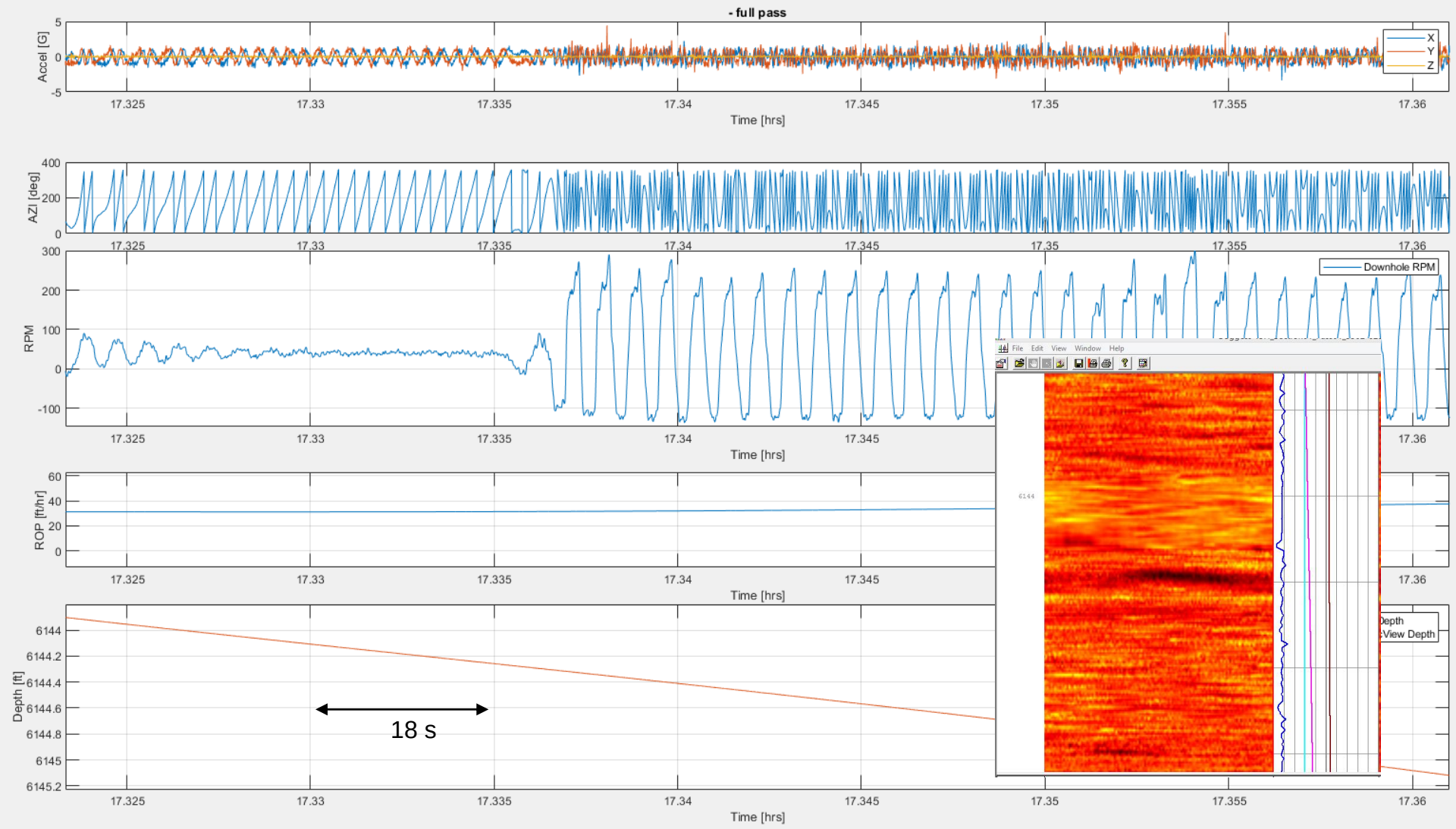
NNE_Boggess_13H– Job Summary.
Section01. Pass01. Motion Dynamics (Stick Slip_zoom1.



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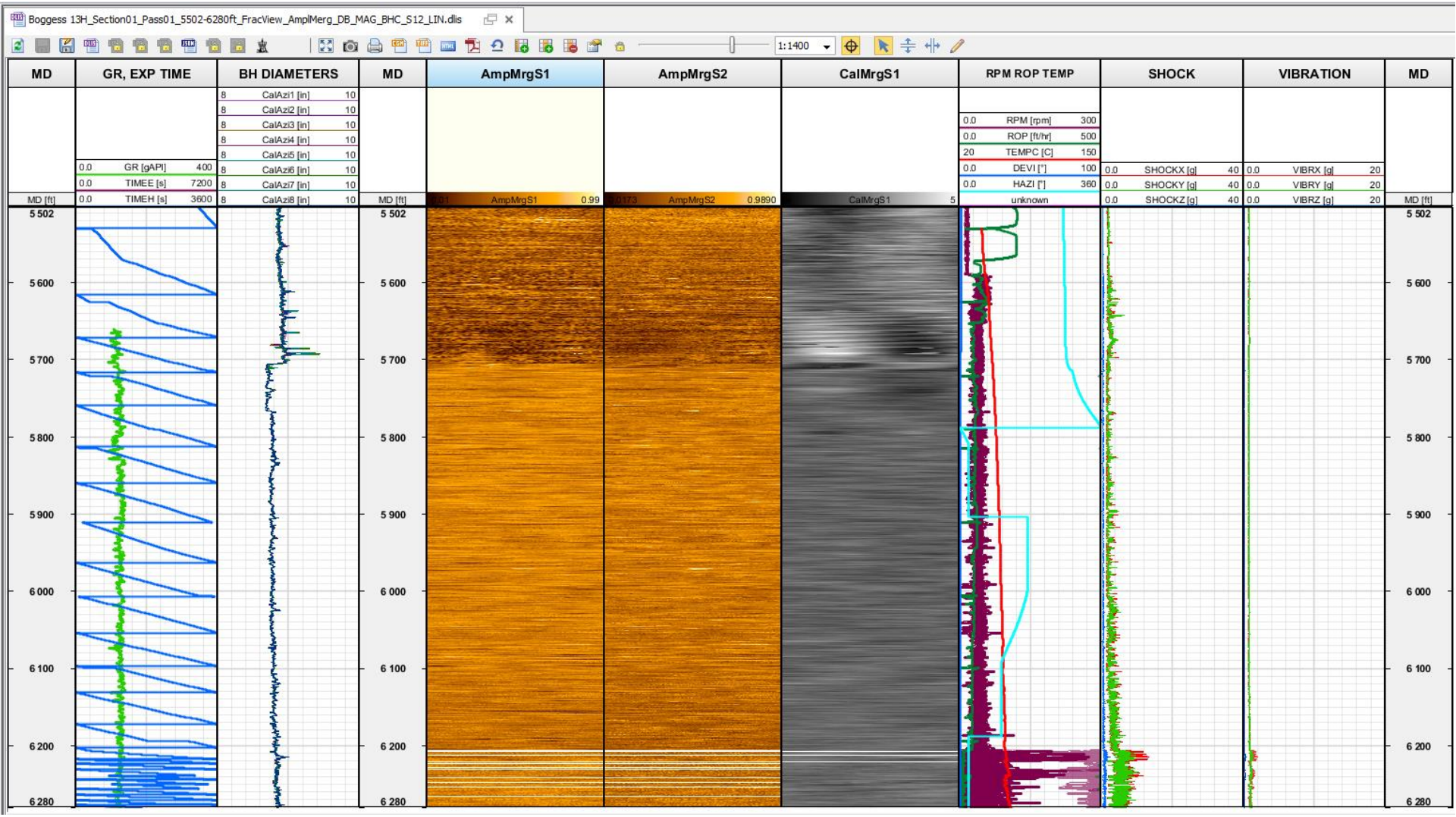
NNE_Boggess_13H– Job Summary. Section01. Pass01. BHC MAG S1 vs S2



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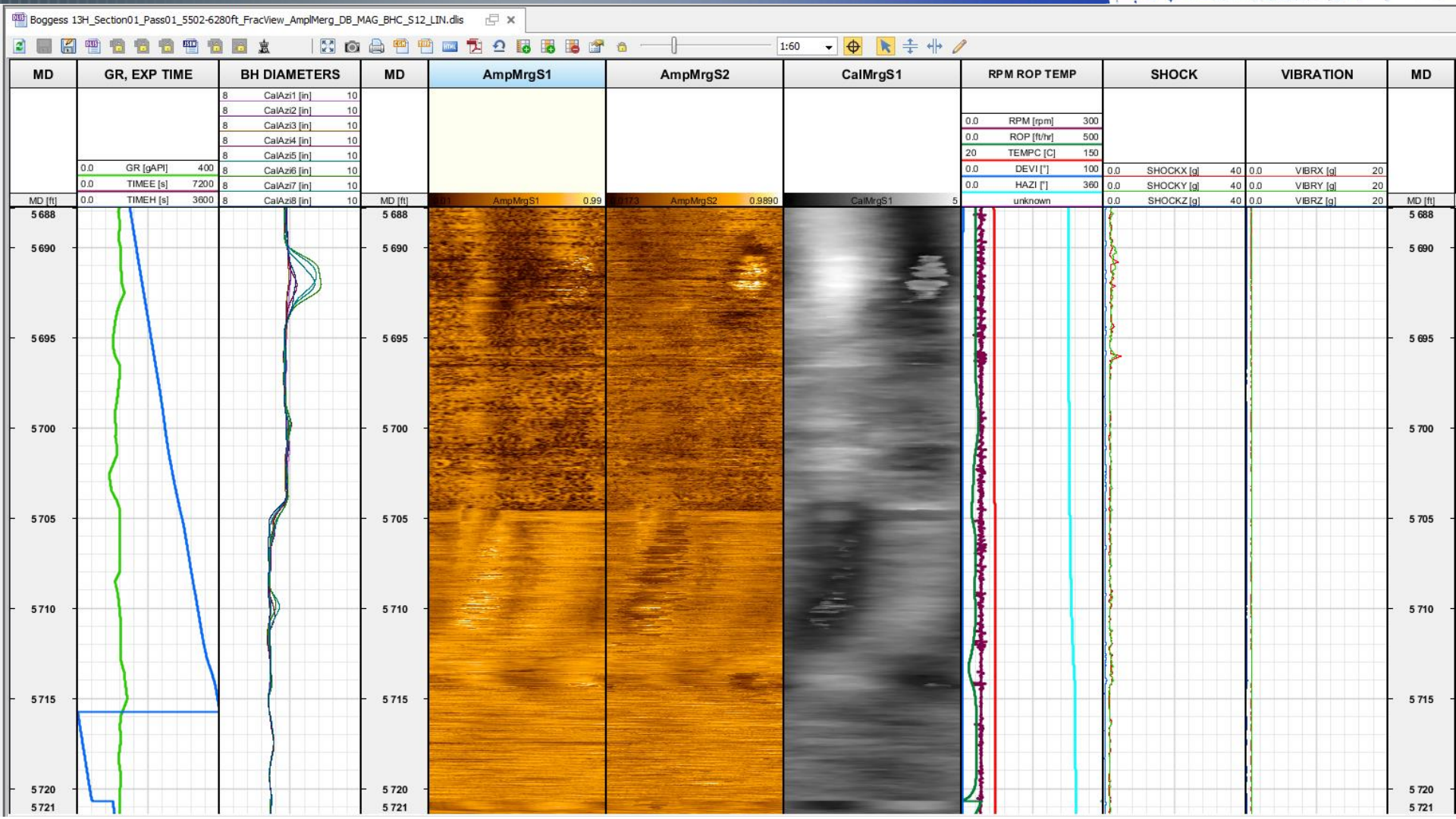
NNE_Boggess_13H– Job Summary. Section01. Pass01. BHC MAG S1 vs S2



5,688-5,721

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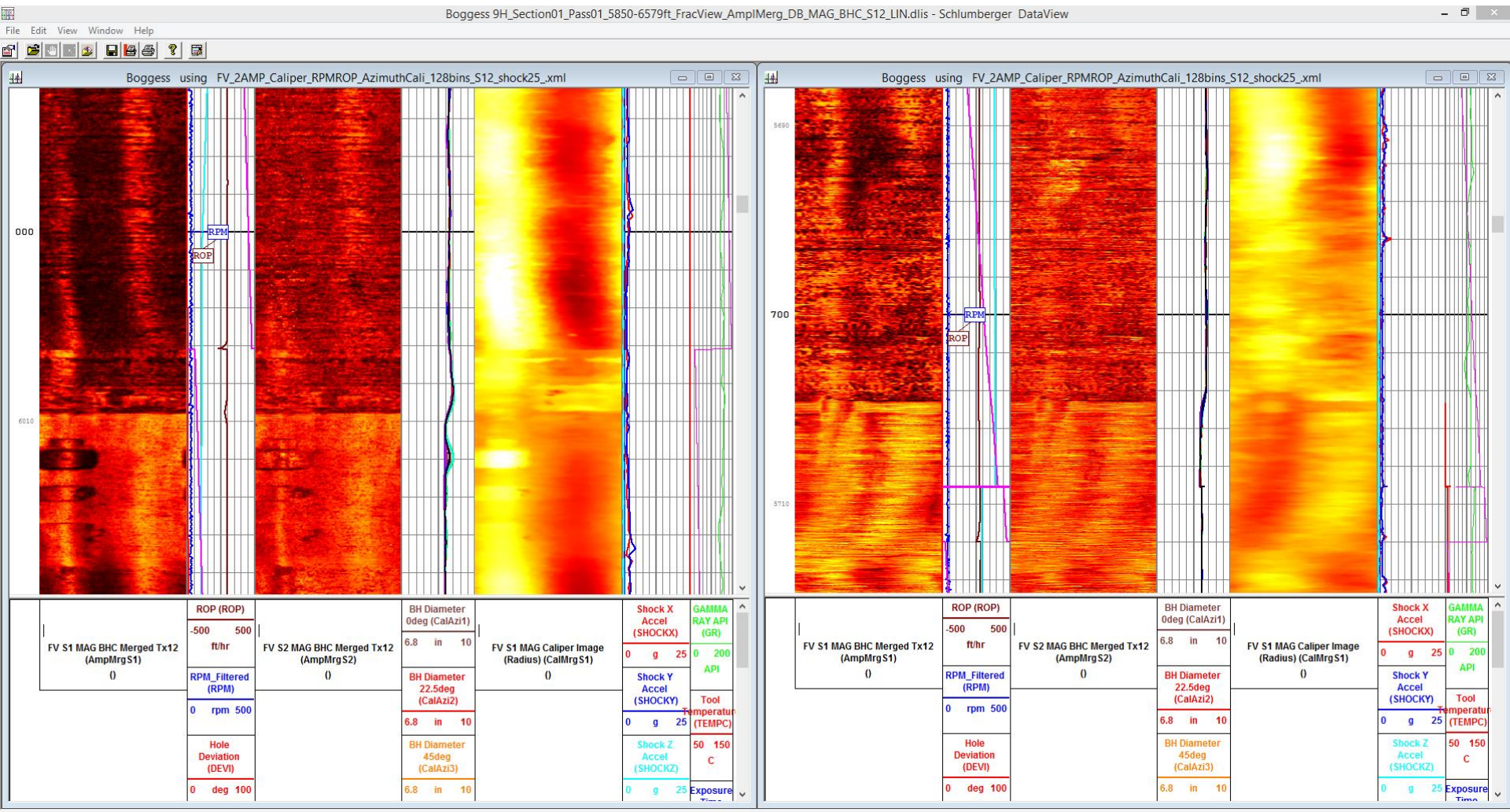
NNE_Boggess_13H– Job Summary. Section01. Pass01. 13H vs 9H



9H 13H

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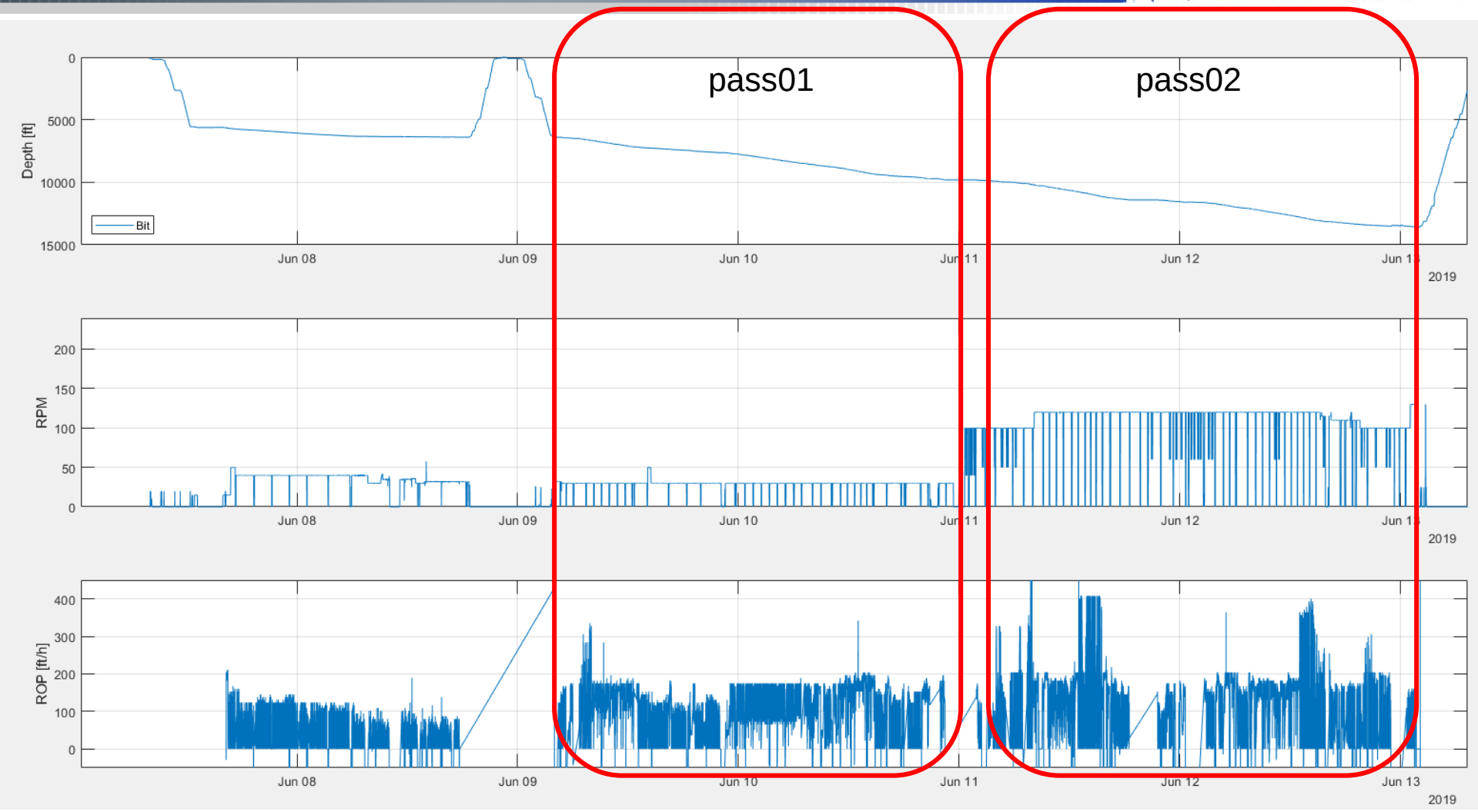
NNE_Boggess_13H– Job Summary. Section02.

- **Section 02 (vertical, curve, lateral)**
  - **Pass01 (vertical+curve, drill)**
  - **Pass02 (lateral, drill)**

NNE_Boggess_13H– Job Summary. Section02. Pass01 & 02



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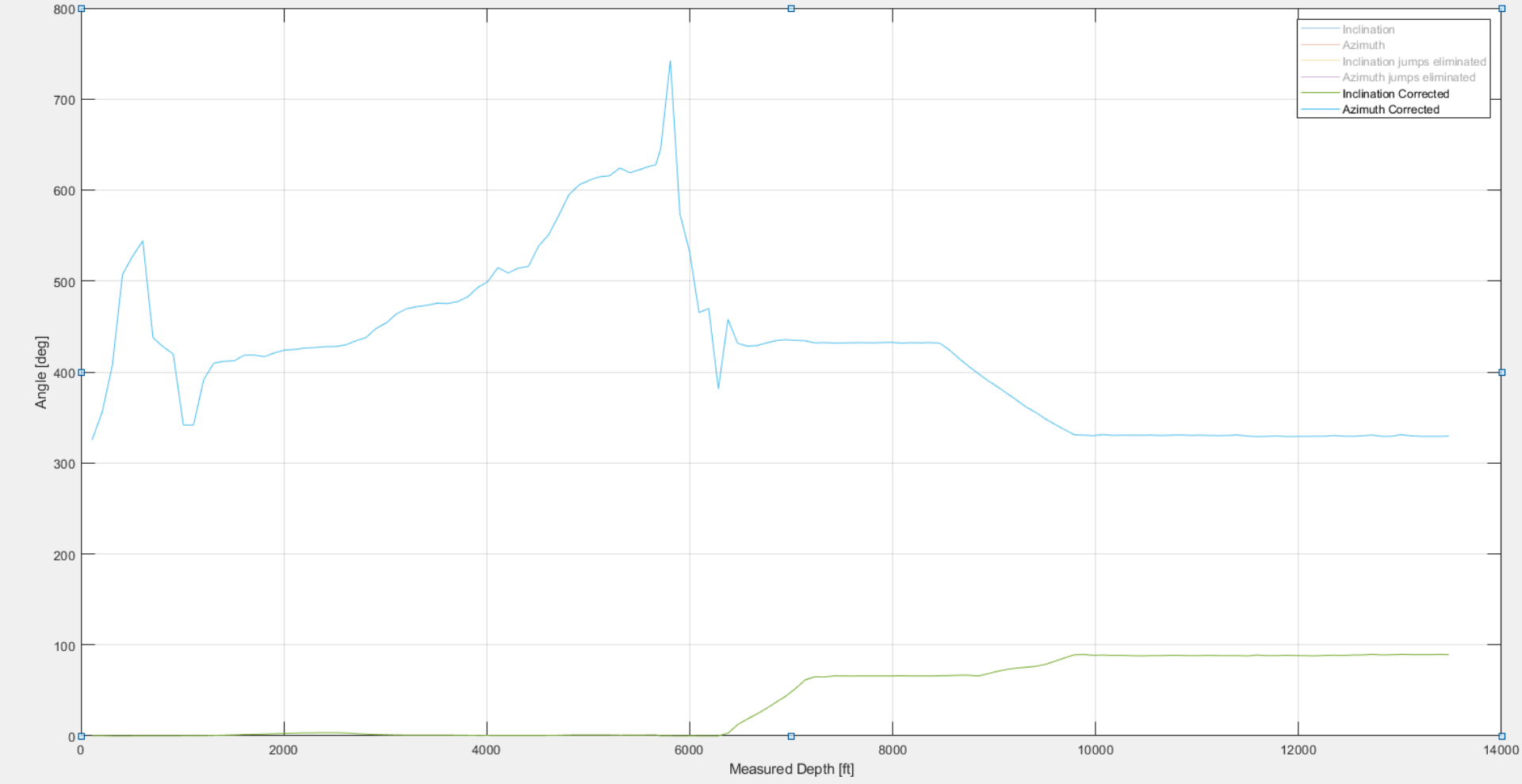
NNE_Boggess_13H– Job Summary. Section02. Inclination & Azimuth.



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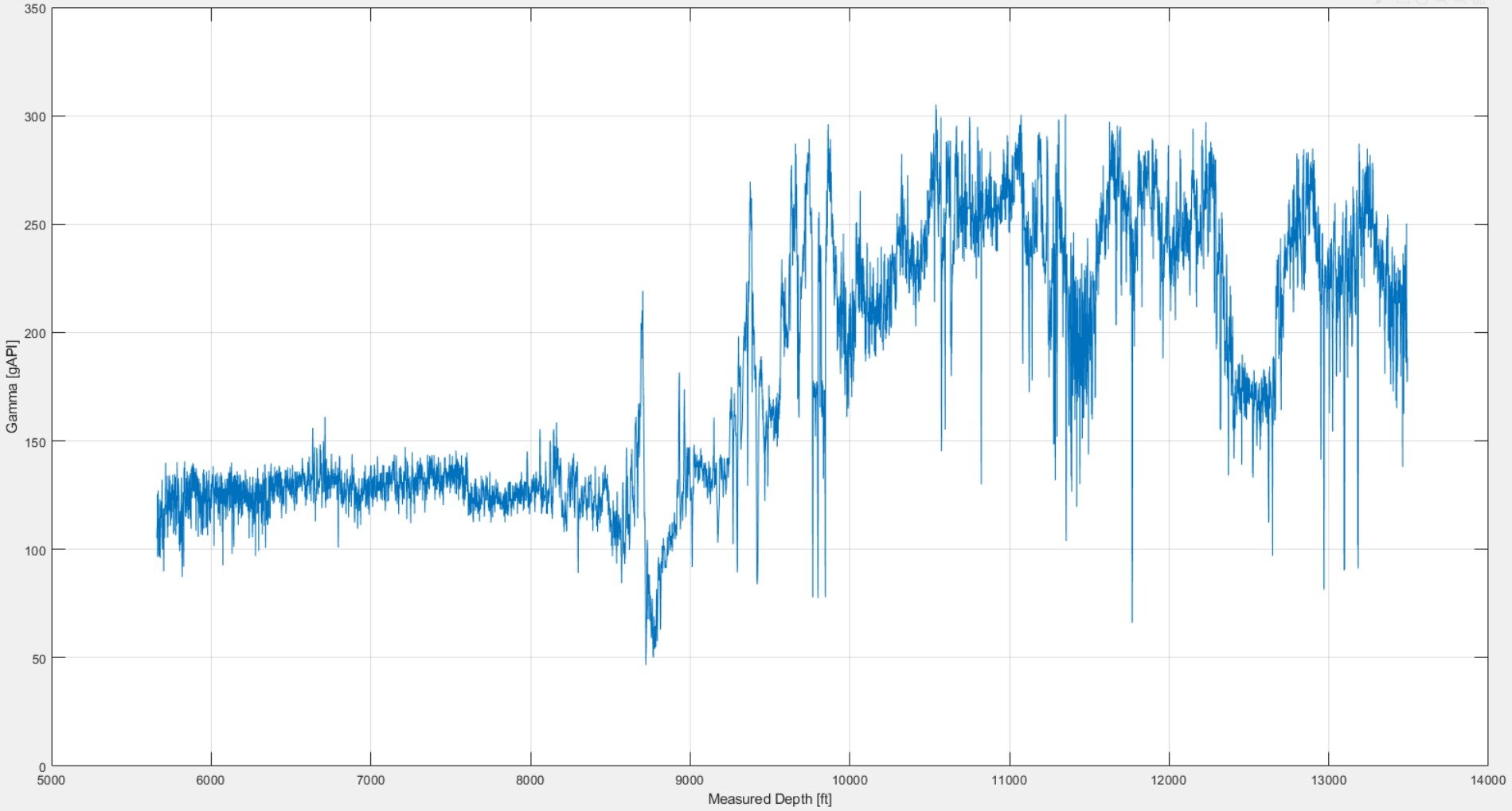
NNE_Boggess_13H– Job Summary. Section02. Gamma API (GRC_D).

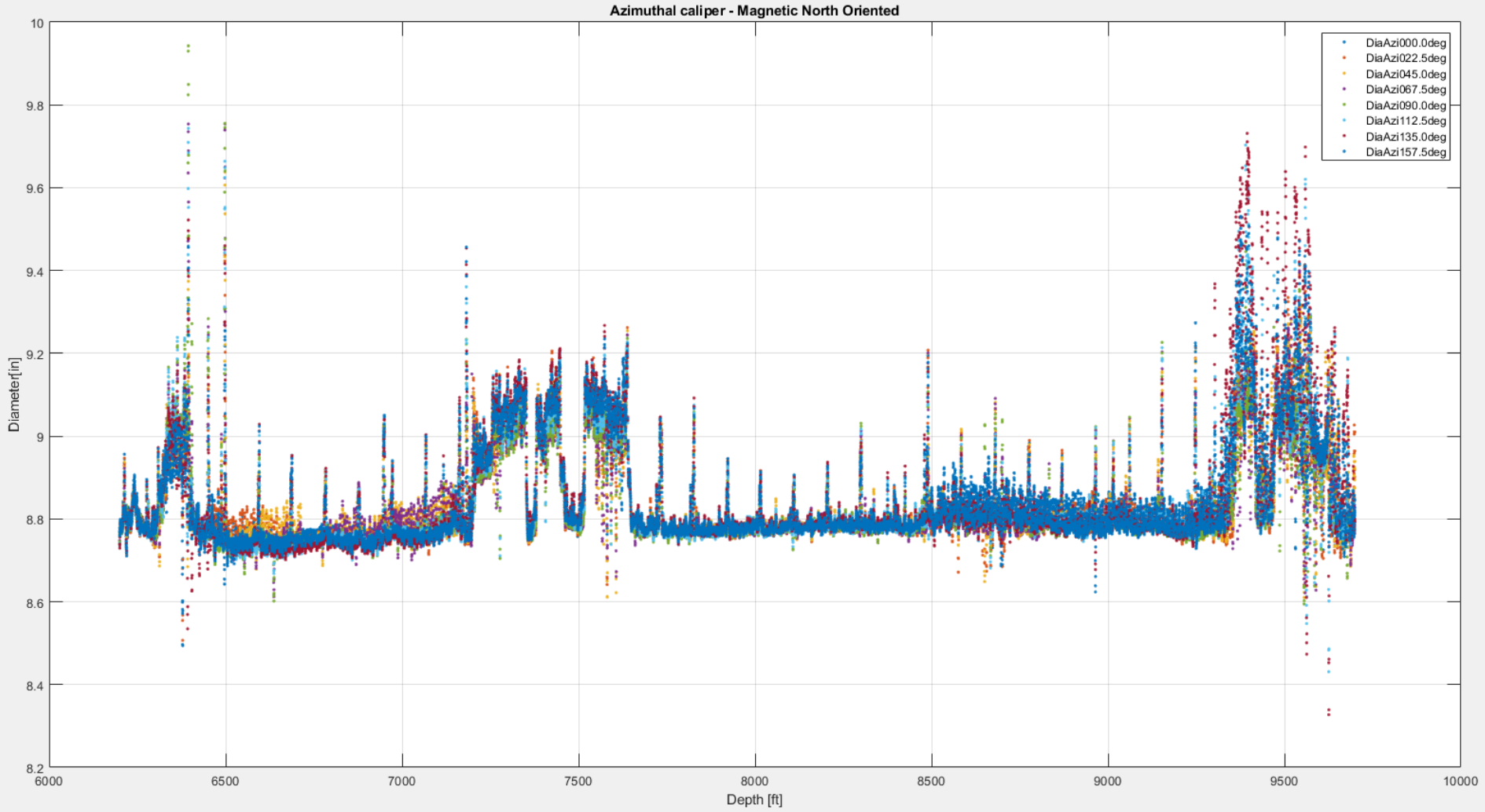


Customer provided, not acquired by PetroMar

NNE_Boggess_13H– Job Summary.
Section 02. Pass01 (vertical+curve, drill)

- **FV Sensor at 6,200 to 9,700 ft**
- **FV Sensor to Bit Distance ~ 115.85 ft**
- **Stick-Slip**

NNE_Boggess_13H– Job Summary. Section02. Pass01. Azimuthal Calipers.



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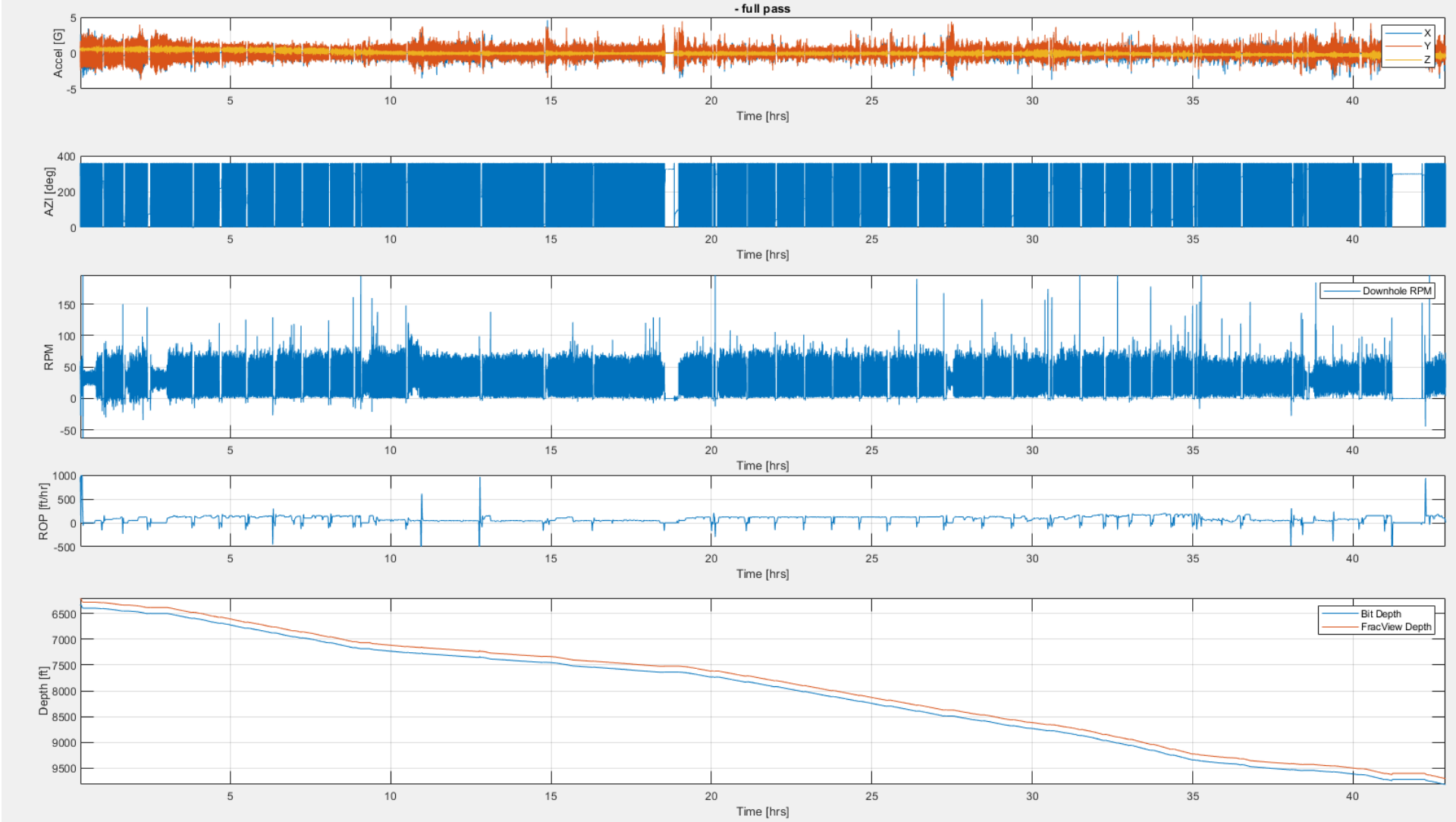
NNE_Boggess_13H– Job Summary.
Section02. Pass01. Motion Dynamics.



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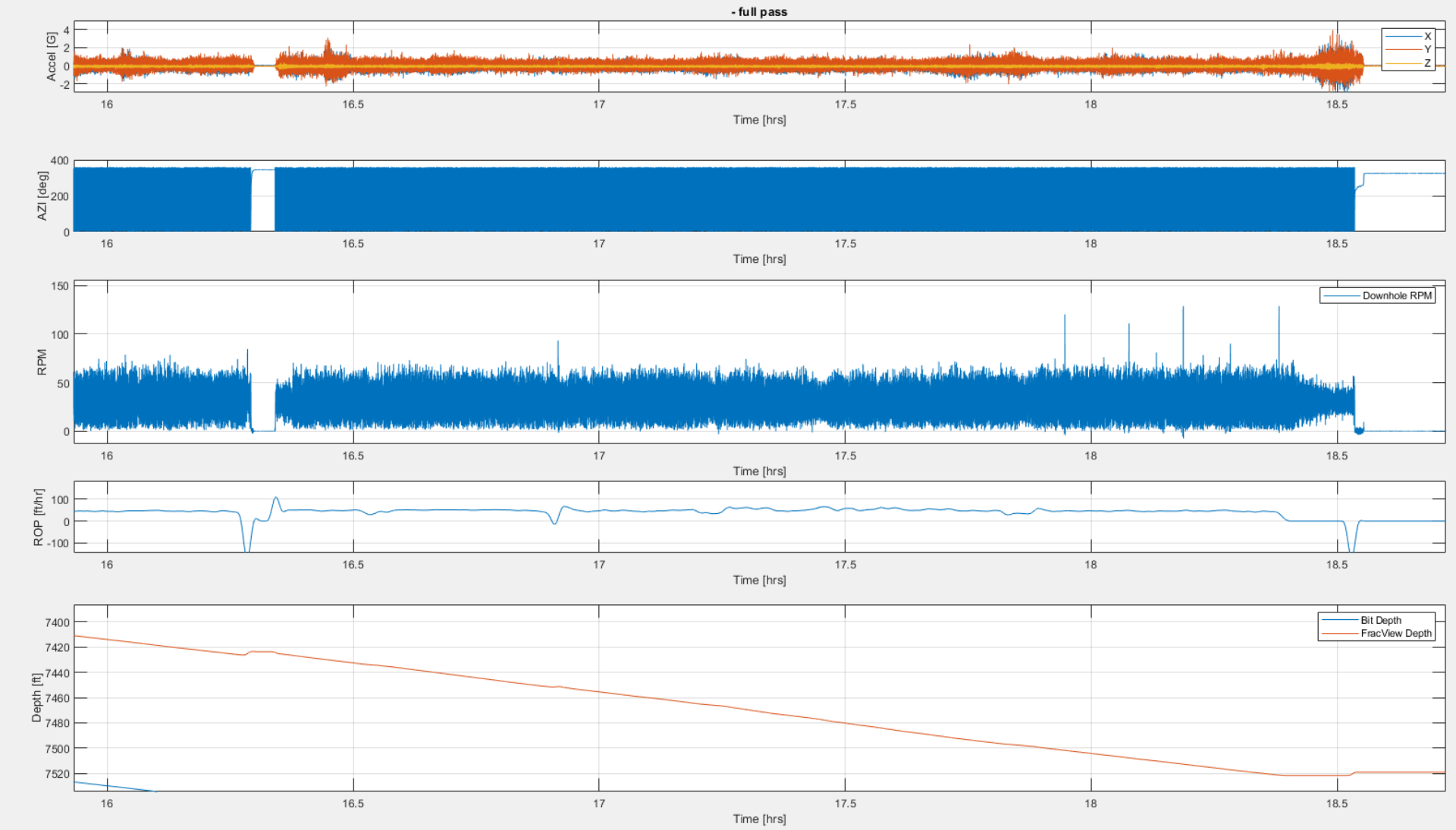
NNE_Boggess_13H– Job Summary.
Section02. Pass01. Motion Dynamics (zoom in)



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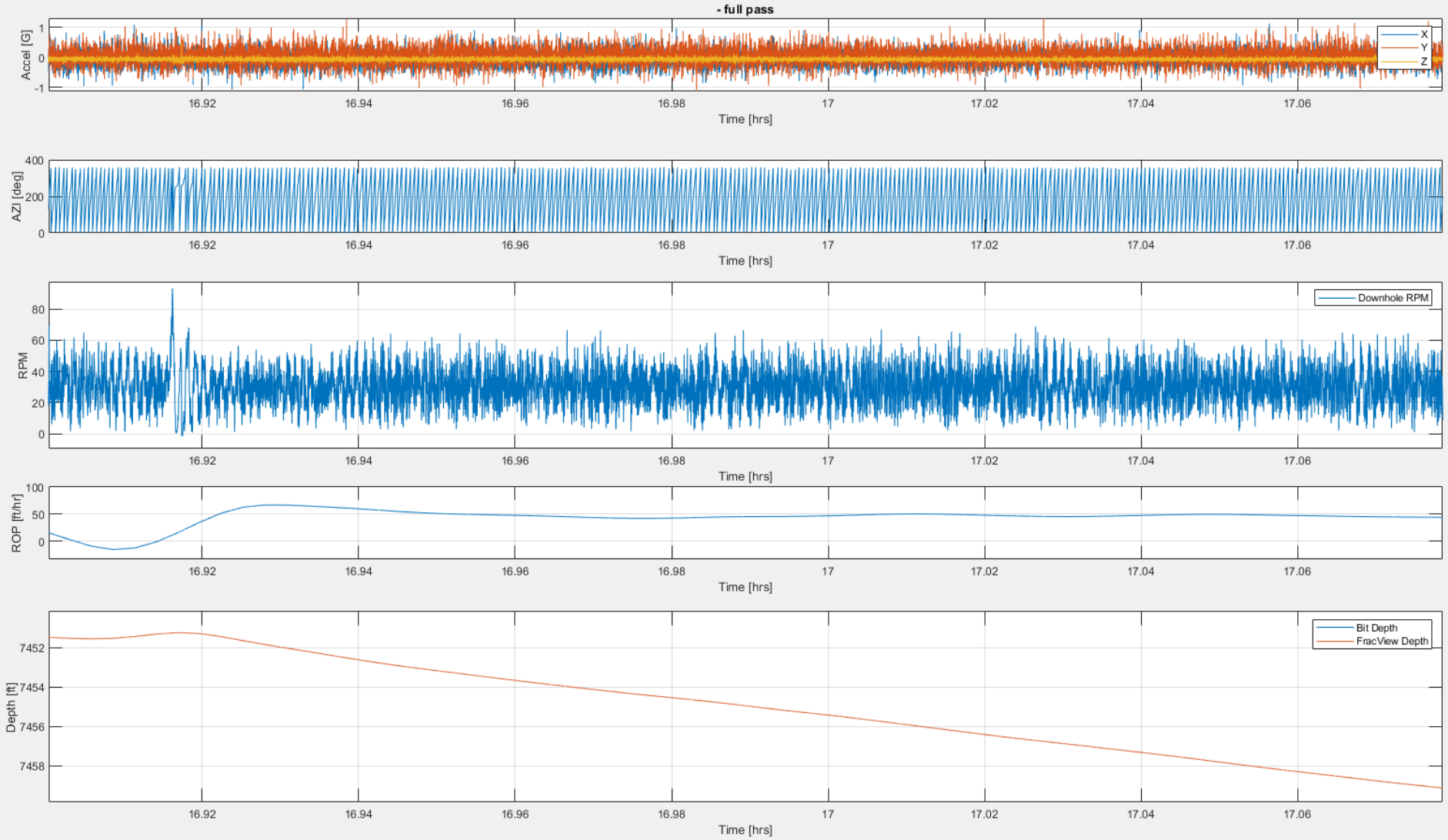
NNE_Boggess_13H– Job Summary.
Section02. Pass01. Motion Dynamics (zoom in)



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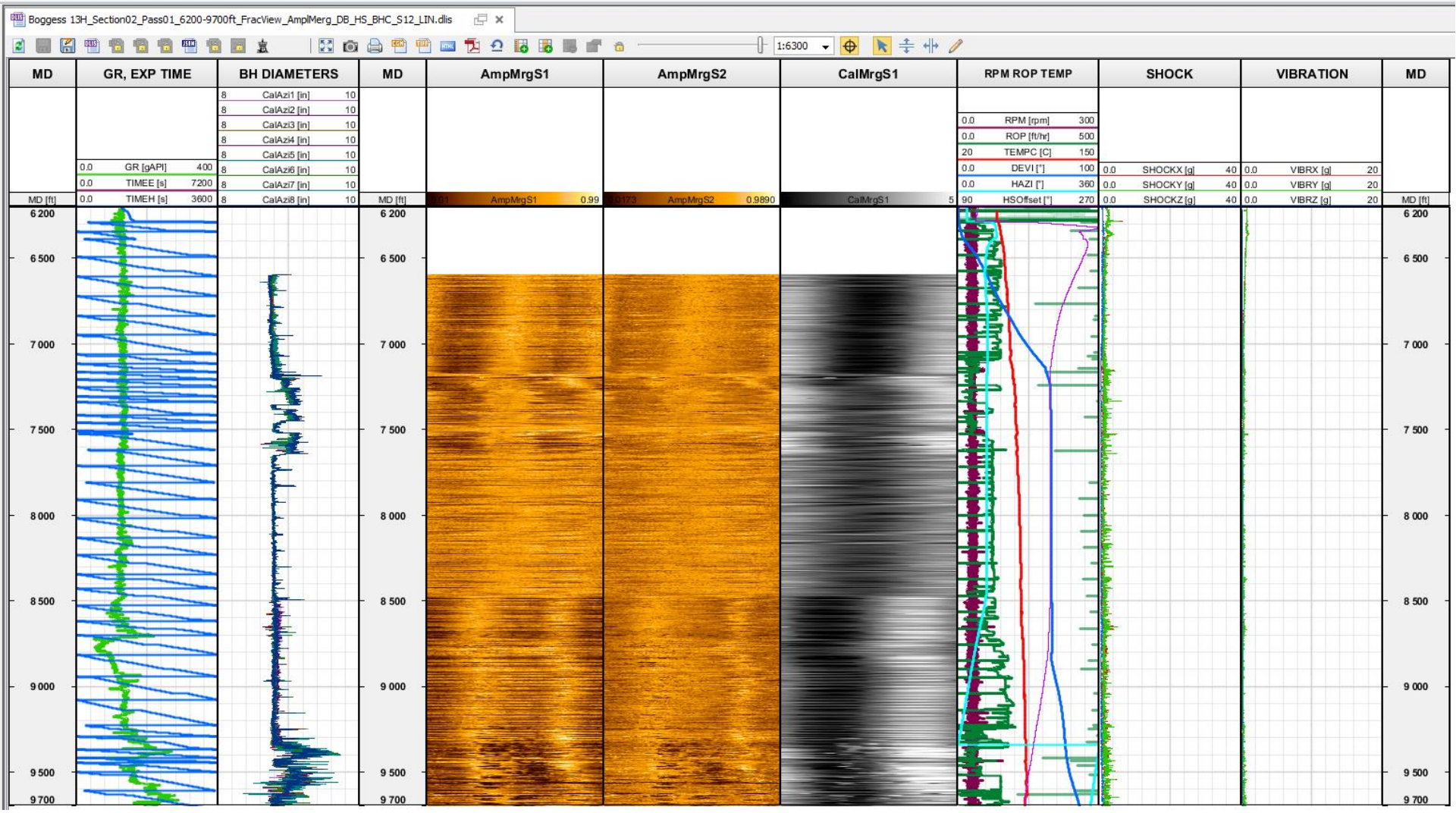
NNE_Boggess_13H– Job Summary. Section02. Pass01. BHC HS S1 vs S2



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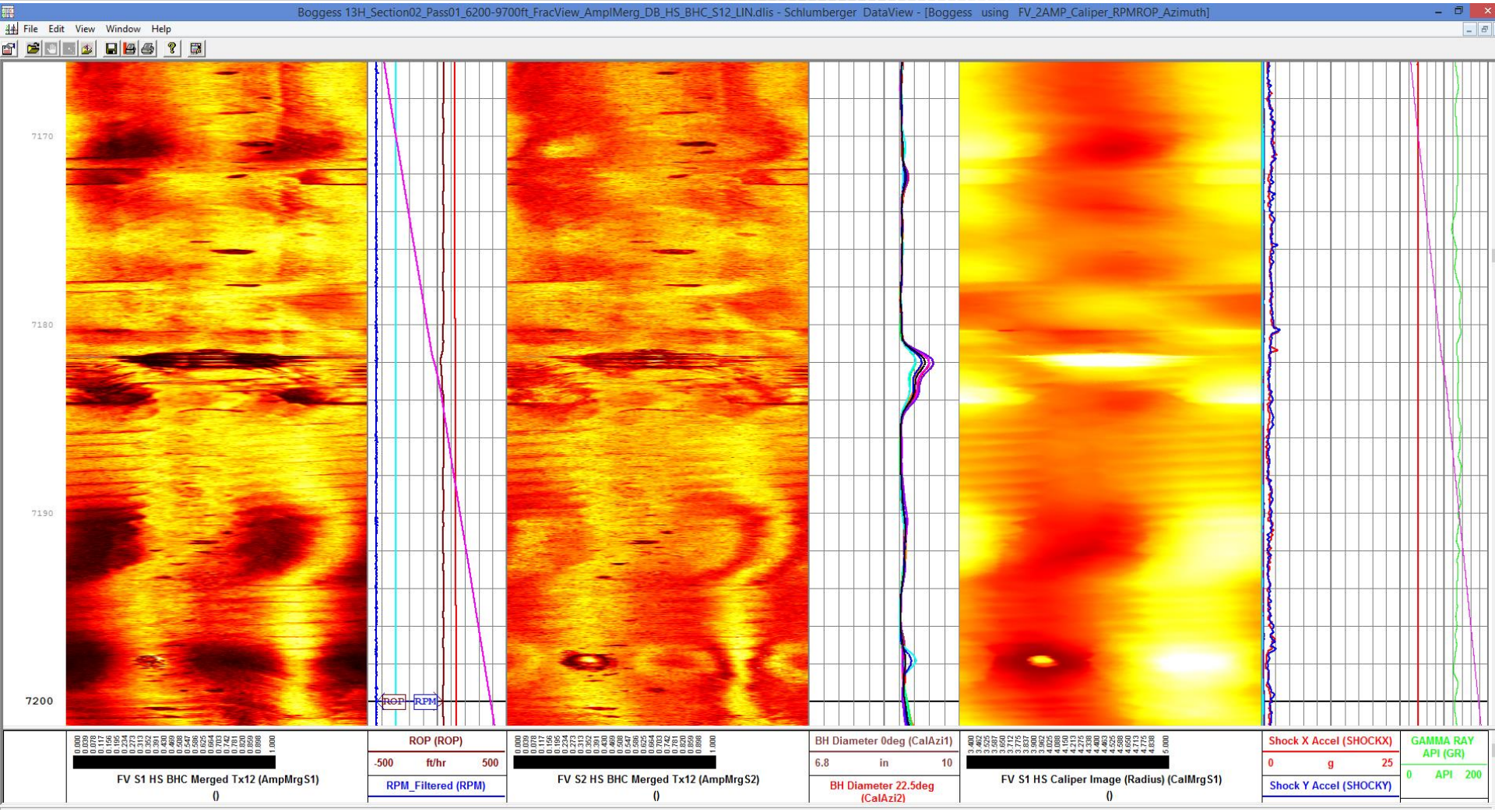
NNE_Boggess_13H– Job Summary. Section02. Pass01. BHC HS S1 vs S2



7,170-7,200

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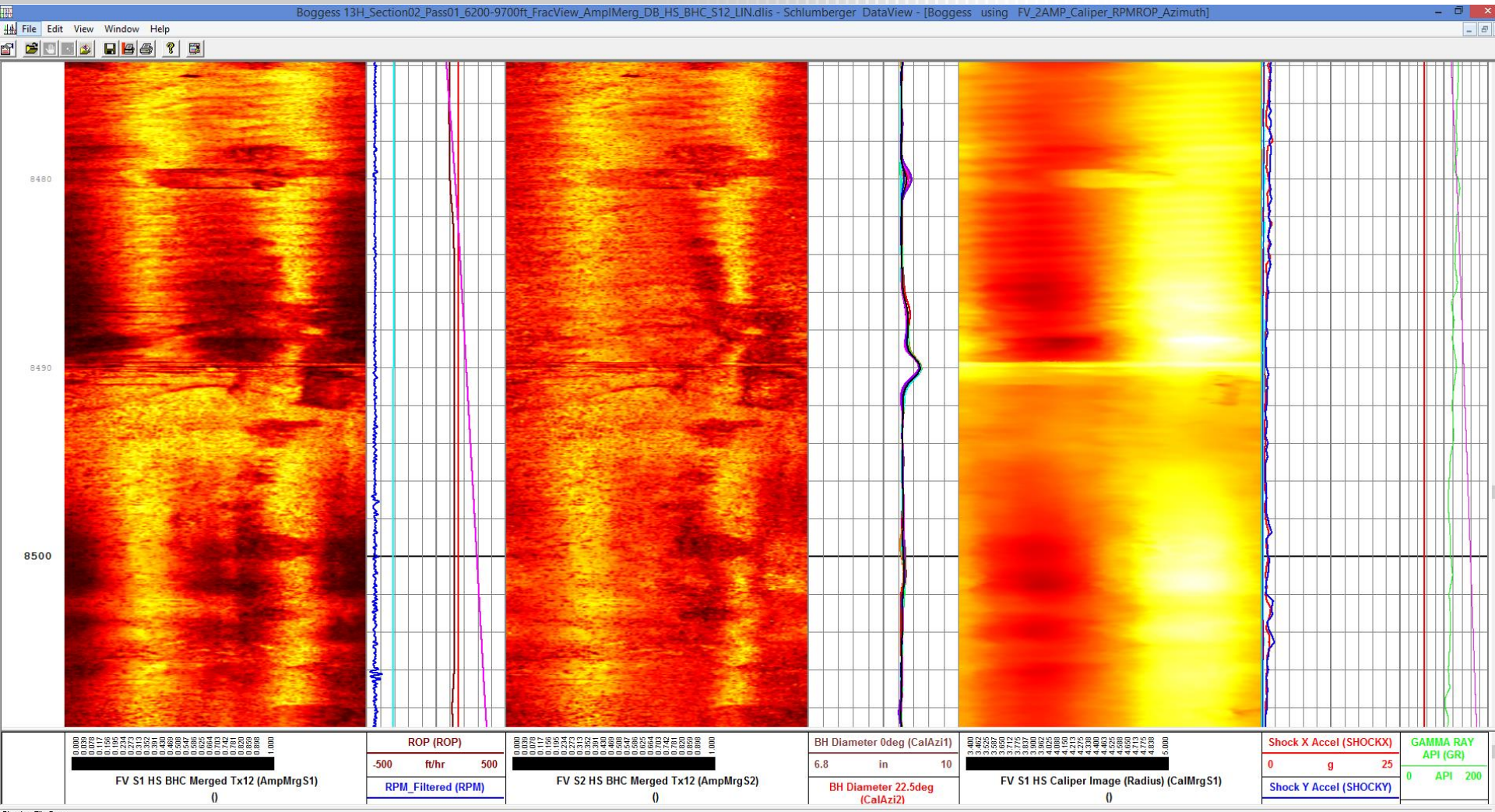
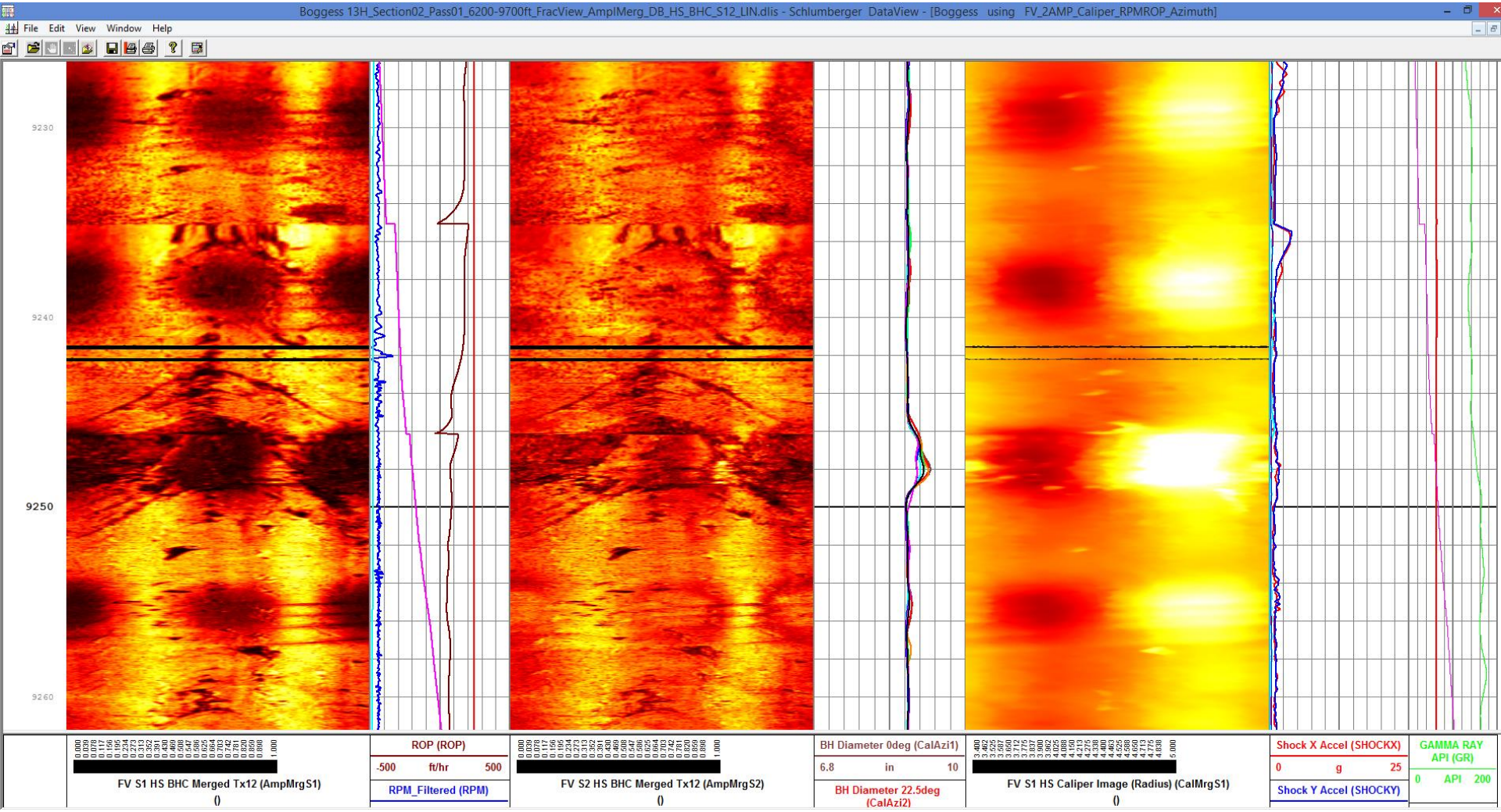
NNE_Boggess_13H– Job Summary. Section02. Pass01. BHC HS S1 vs S2



NNE_Boggess_13H– Job Summary. Section02. Pass01. BHC HS S1 vs S2



9,230-9,260

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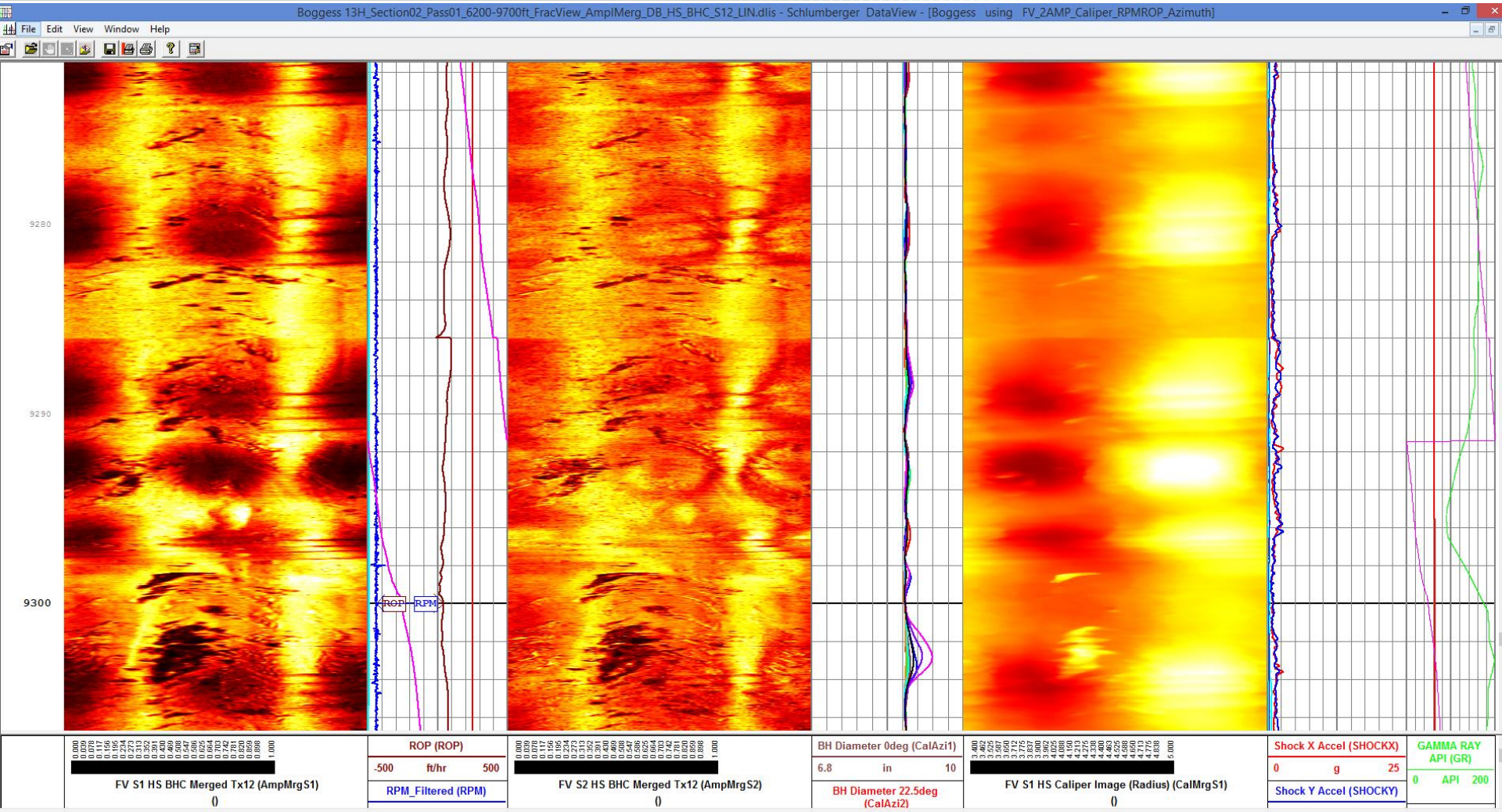
NNE_Boggess_13H– Job Summary. Section02. Pass01. BHC HS S1 vs S2



9,275-9,305

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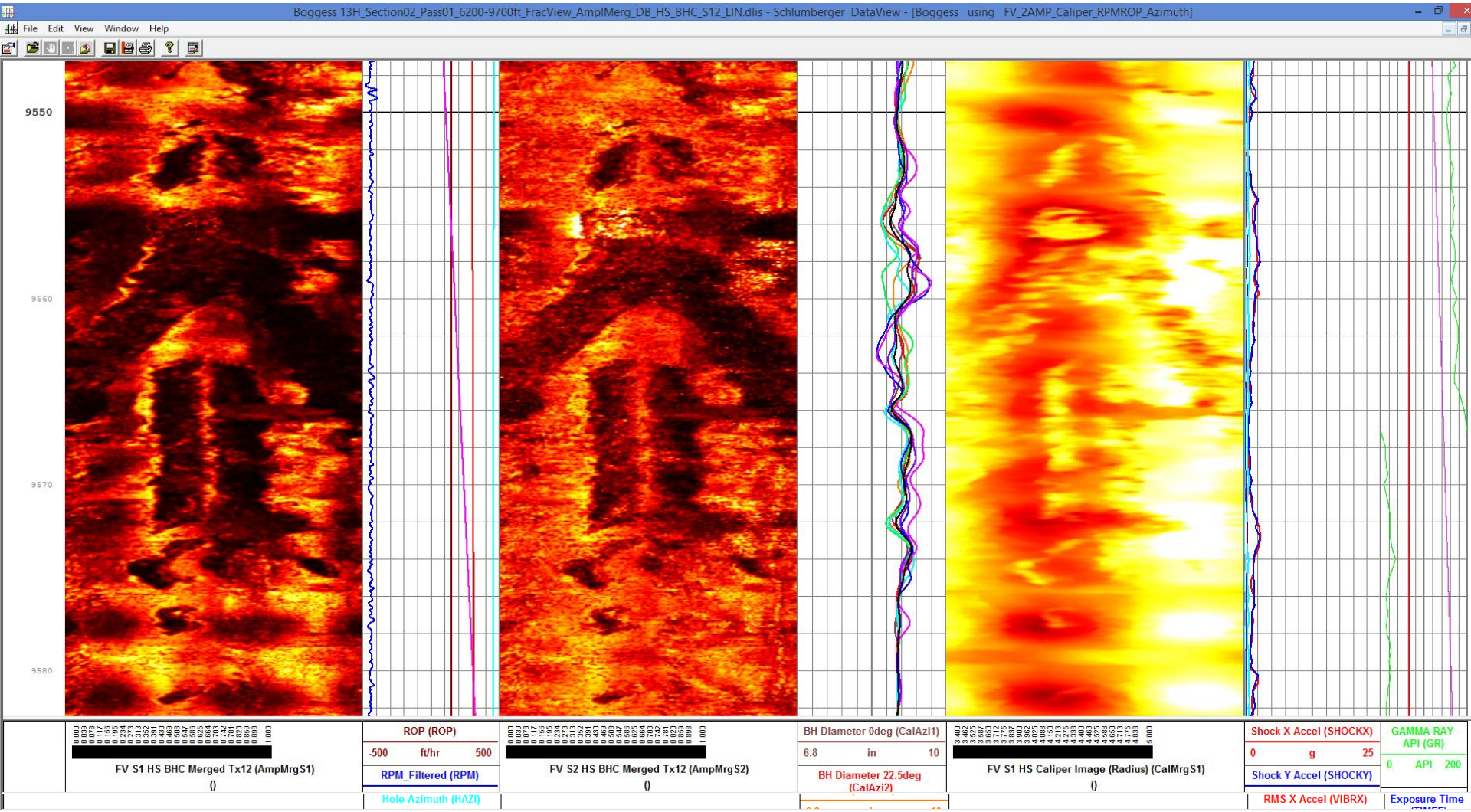
NNE_Boggess_13H– Job Summary. Section02. Pass01. BHC HS S1 vs S2



9,550-9,580

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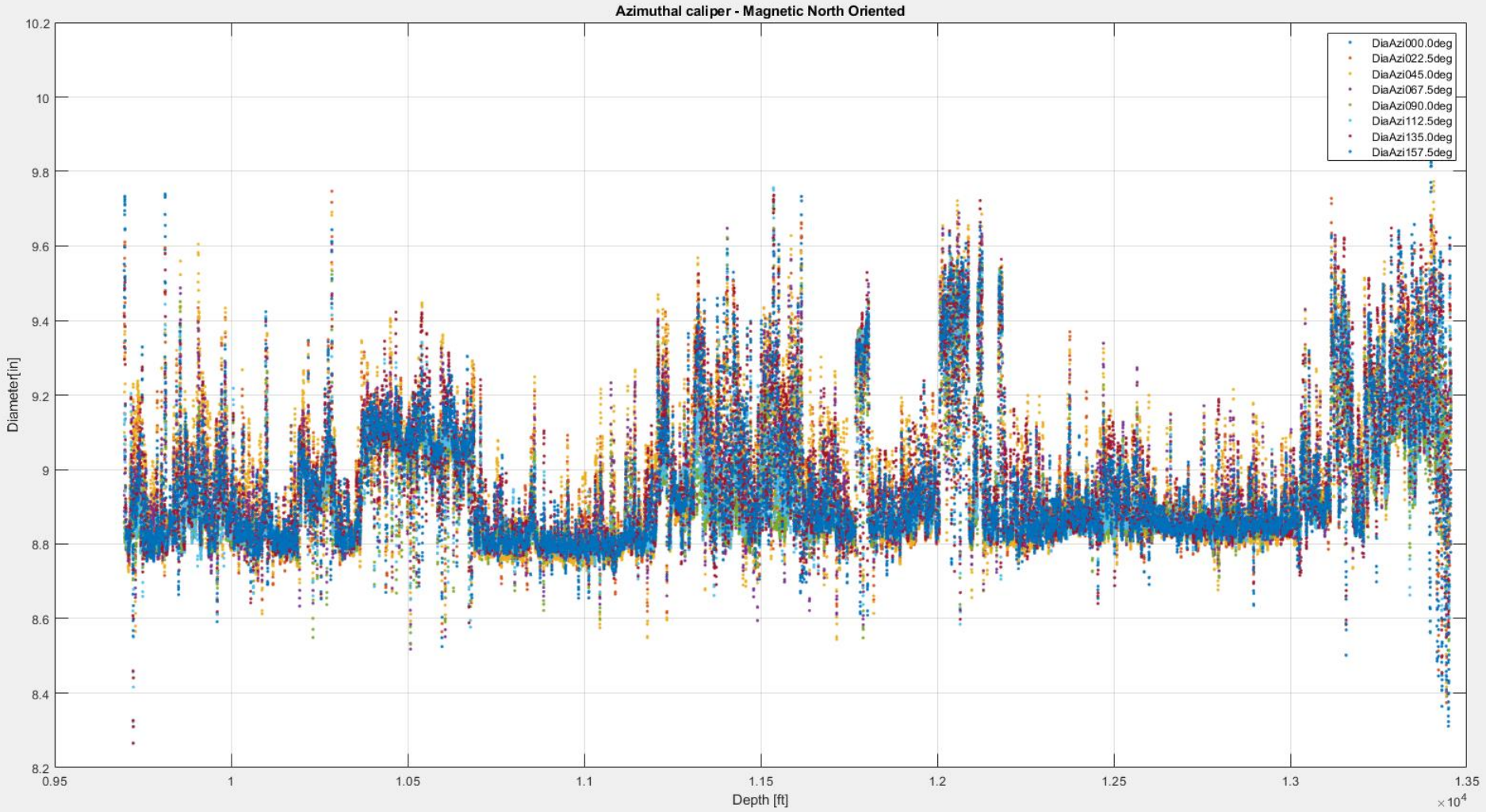
NNE_Boggess_13H– Job Summary. Section 02. Pass02 (lateral, drill)

- **FV Sensor at 9,697 to 13,456 ft**
- **FV Sensor to Bit Distance ~ 115.85 ft**
- **Some Stick-Slip**

NNE_Boggess_13H– Job Summary. Section02. Pass02. Azimuthal Calipers.



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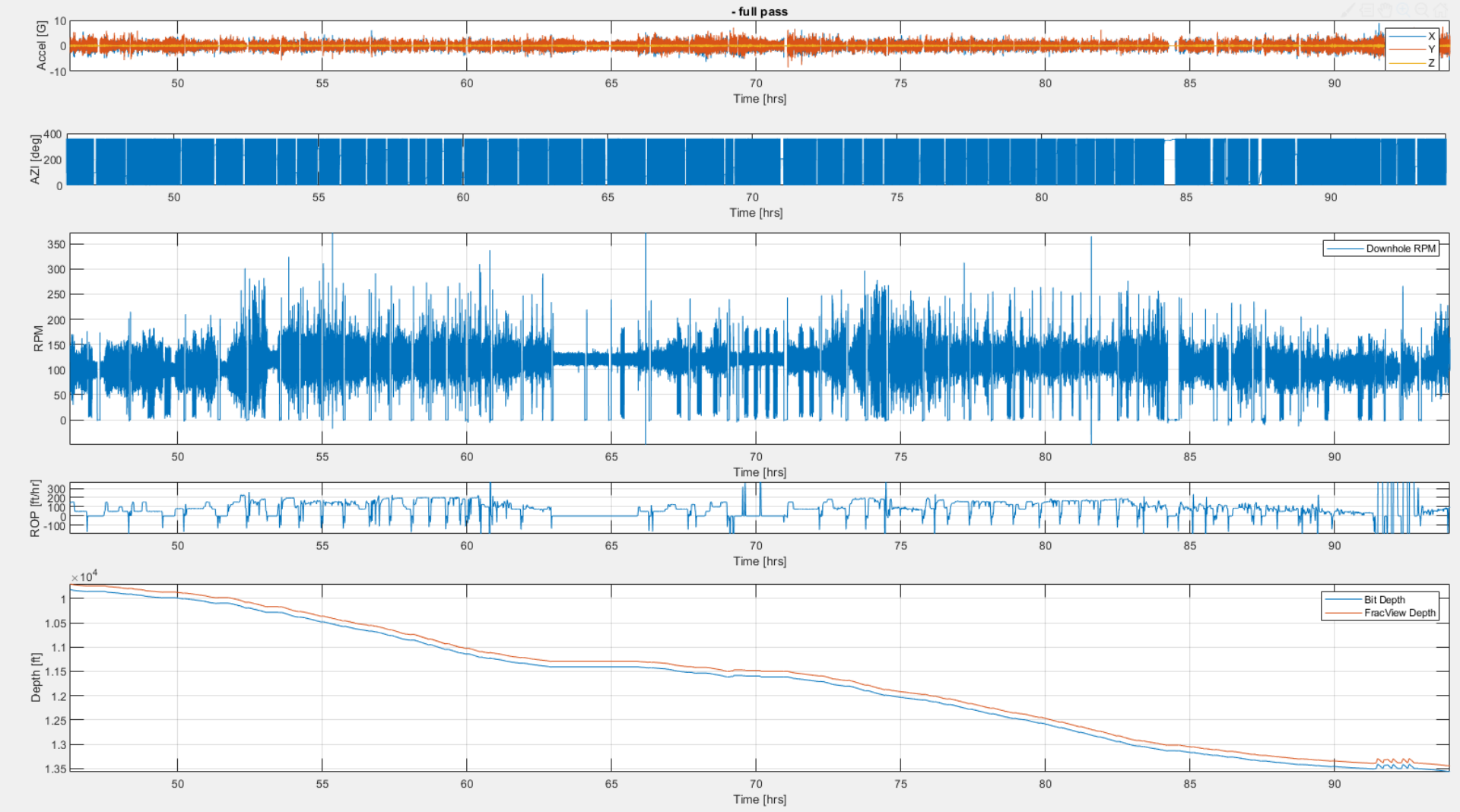
NNE_Boggess_13H– Job Summary. Section02. Pass02. Motion Dynamics.



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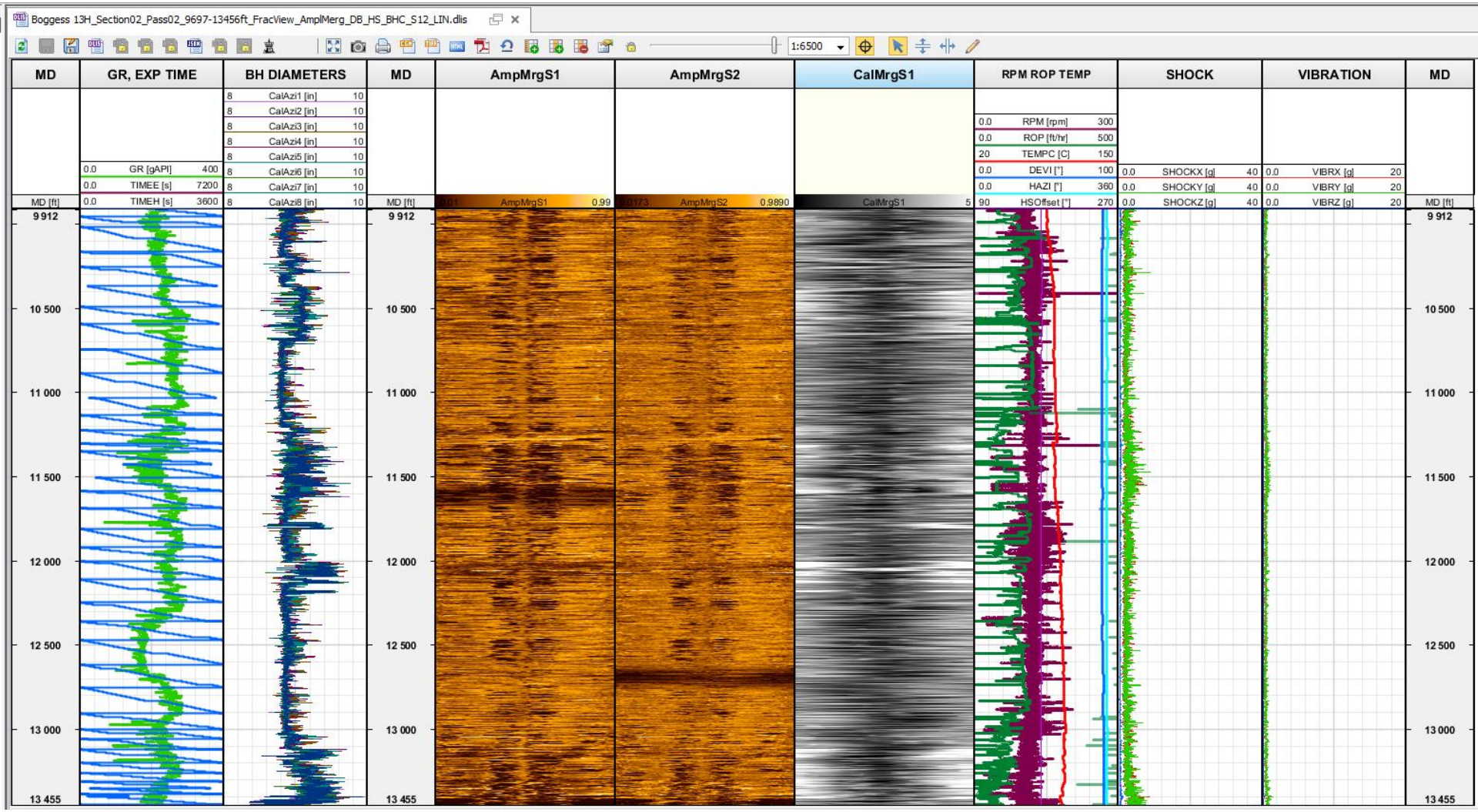
NNE_Boggess_13H– Job Summary. Section02. Pass02. BHC HS S1 vs S2



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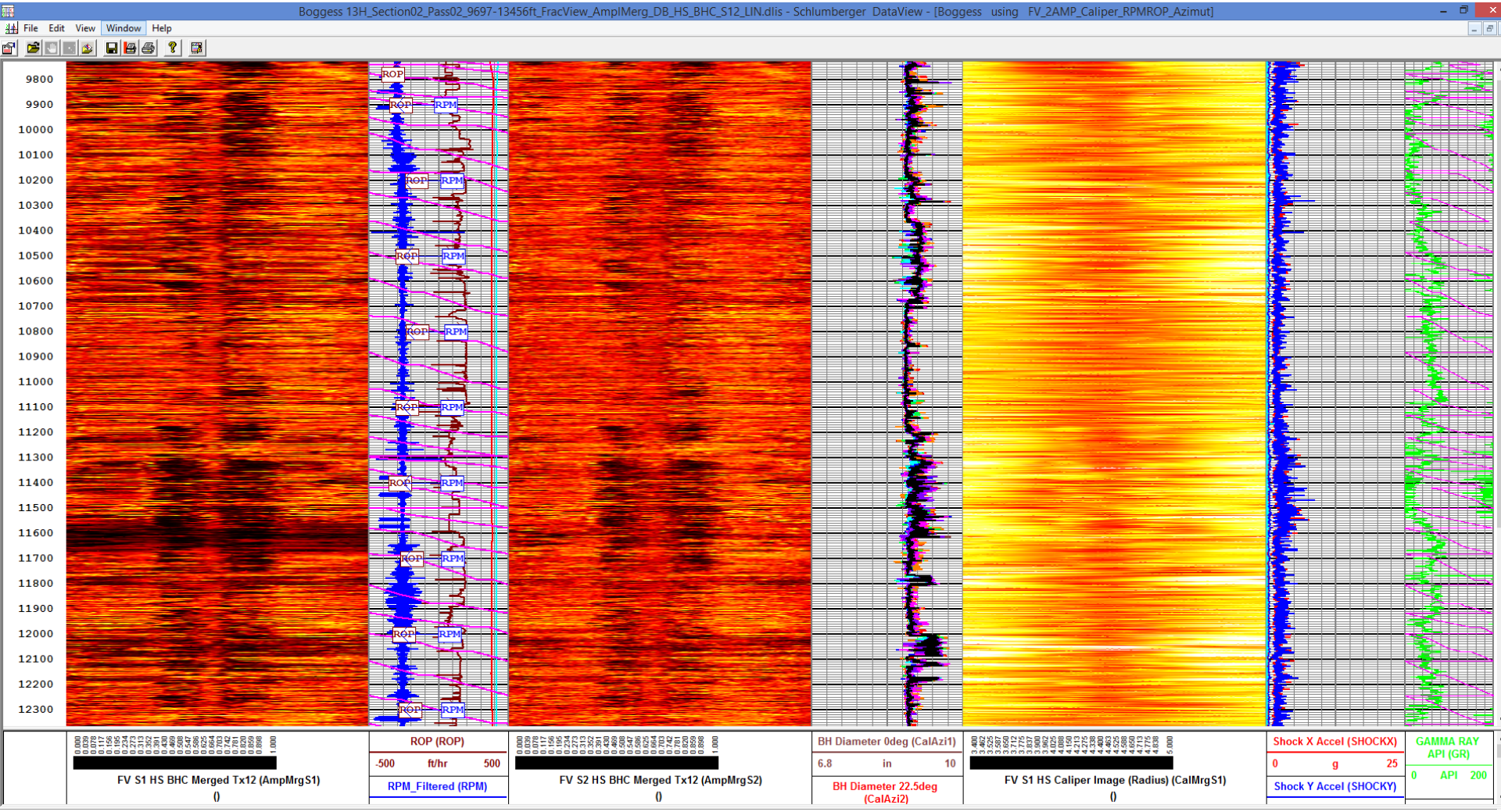
NNE_Boggess_13H– Job Summary. Section02. Pass02. BHC HS S1 vs S2



9,720-9,750

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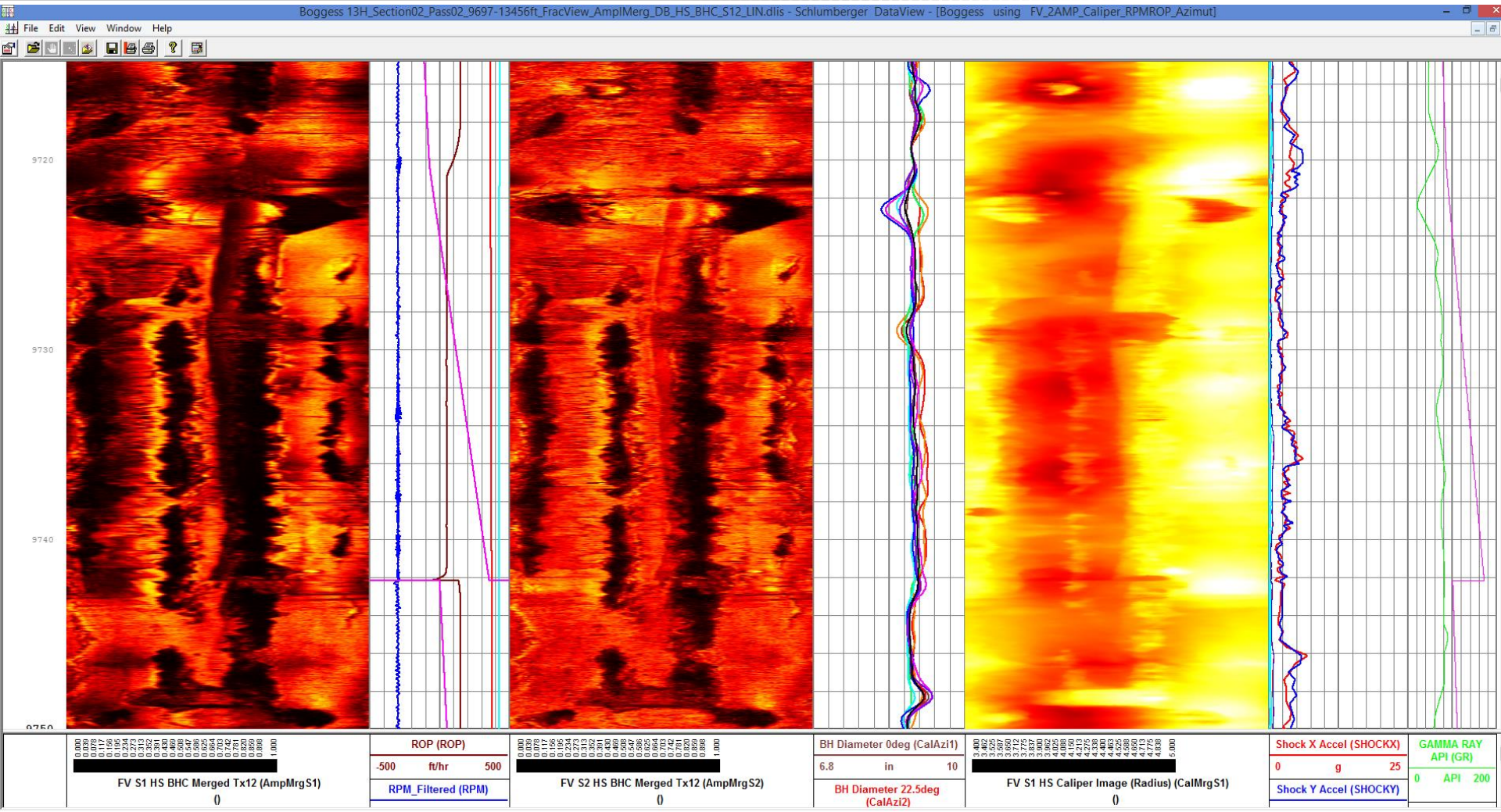
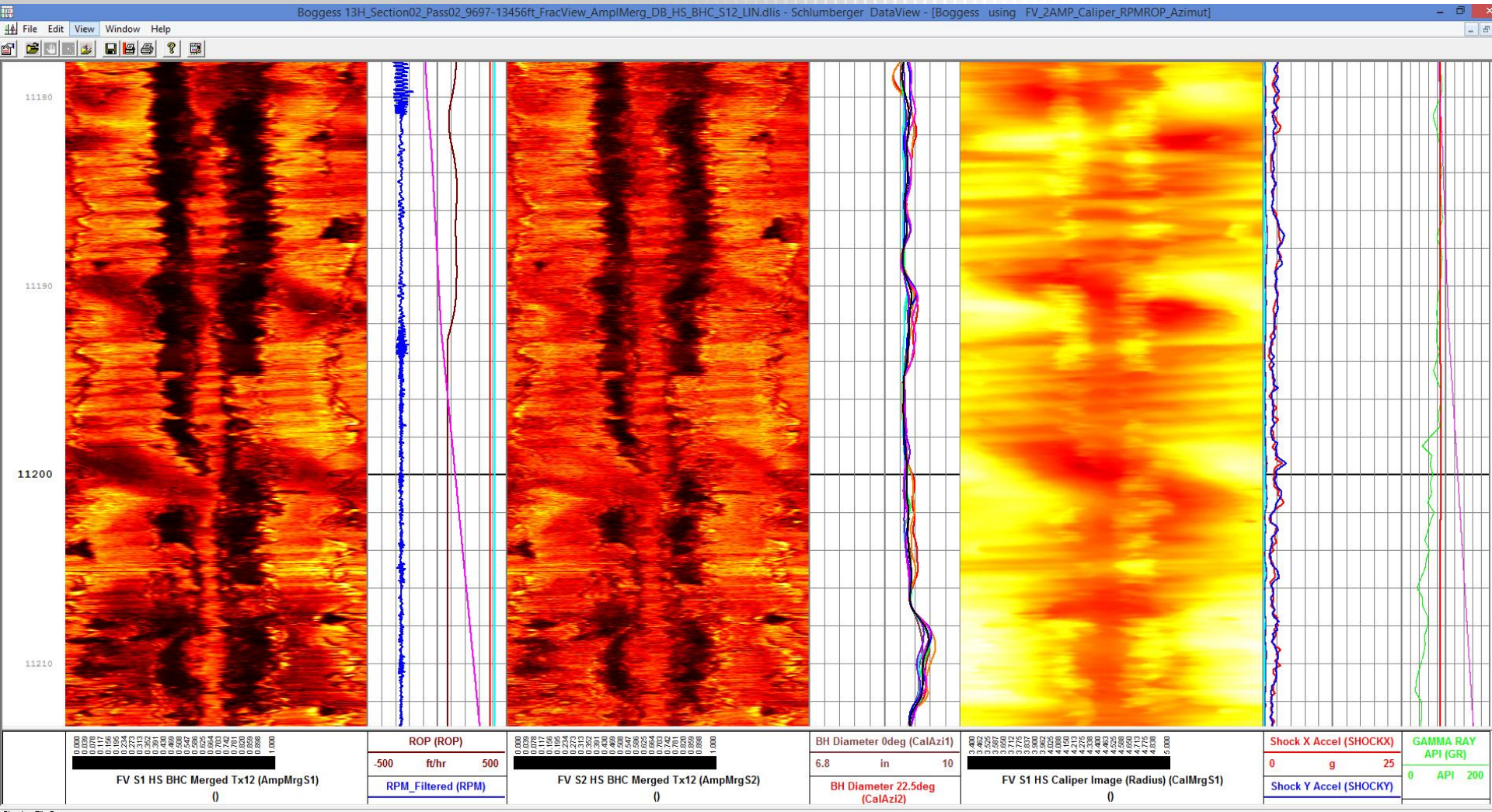
NNE_Boggess_13H– Job Summary. Section02. Pass02. BHC HS S1 vs S2



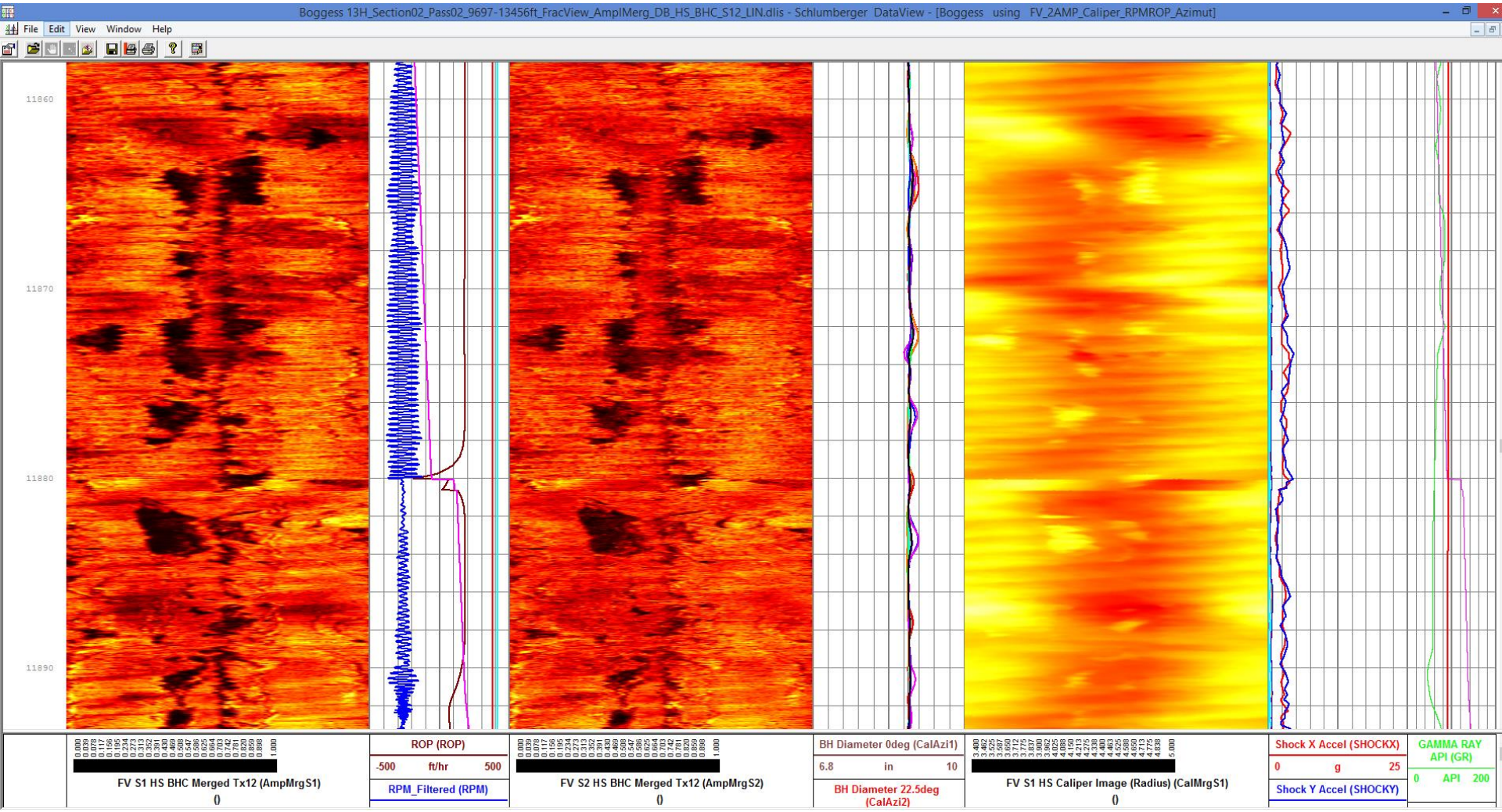
9,720-9,750

PetroMar A NABORS COMPANY

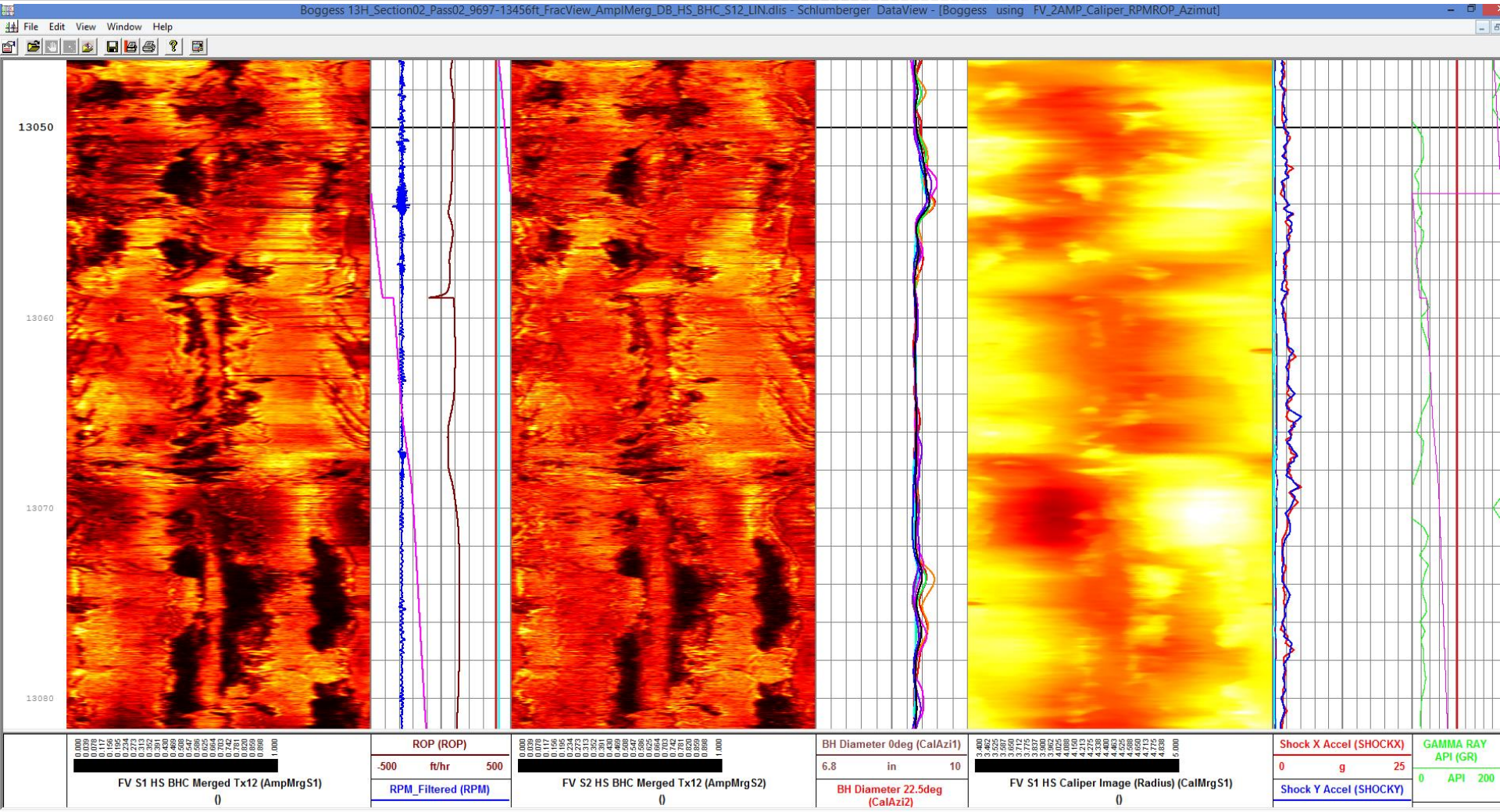
NNE_Boggess_13H– Job Summary. Section02. Pass02. BHC HS S1 vs S2



NNE_Boggess_13H– Job Summary. Section02. Pass02. BHC HS S1 vs S2



NNE_Boggess_13H– Job Summary. Section02. Pass02. BHC HS S1 vs S2



13,050-13,080

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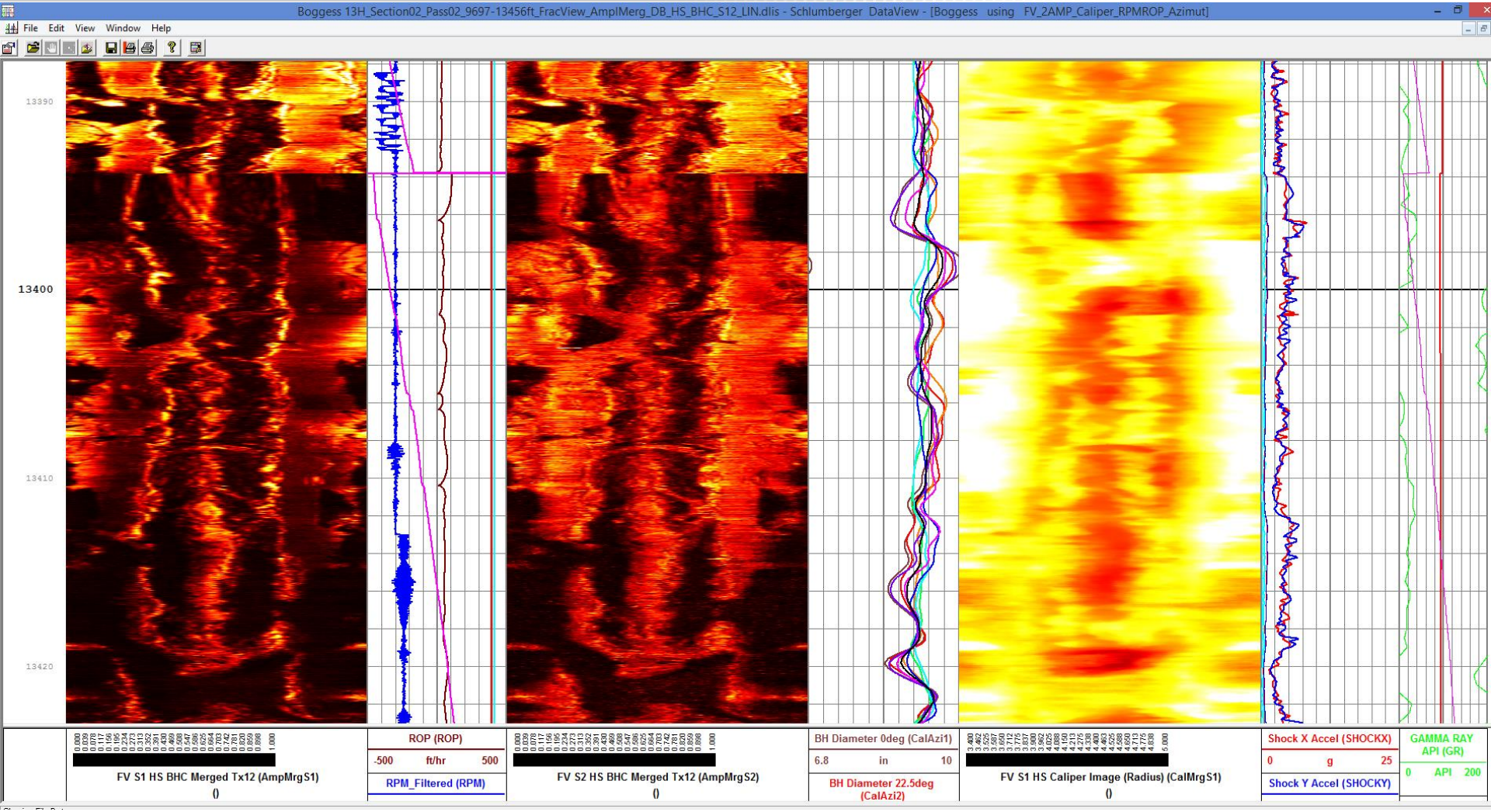
NNE_Boggess_13H– Job Summary. Section02. Pass02. BHC HS S1 vs S2



13,390-13,420

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NNE_Boggess_13H– Job Summary. Section03.

- **Section 03 (lateral)**
  - **Pass01 (drill)**
  - **Pass02 (drill)**

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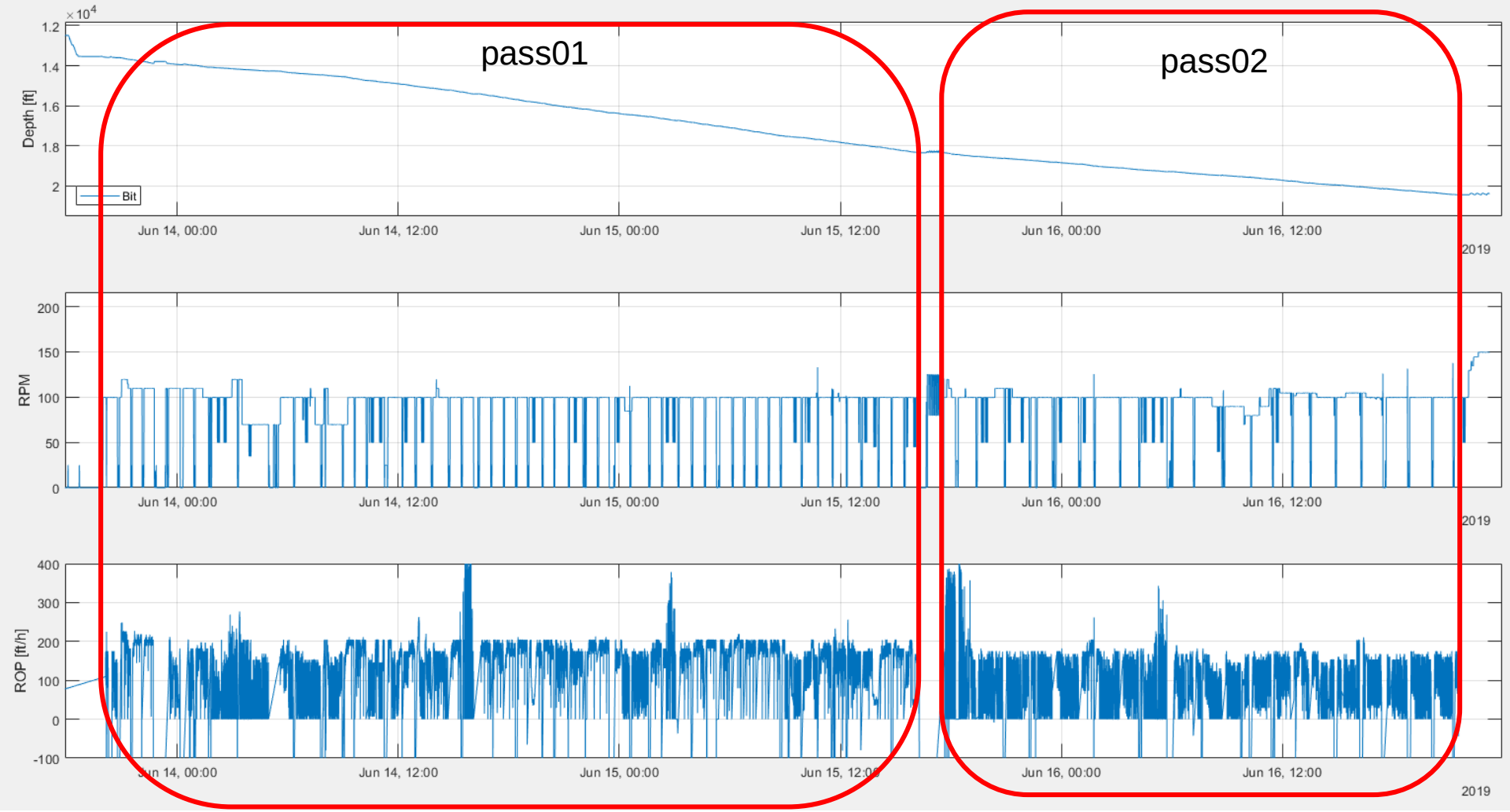
NNE_Boggess_13H– Job Summary. Section03. Pass01 & 02



Customer provided data, not acquired by PetroMar

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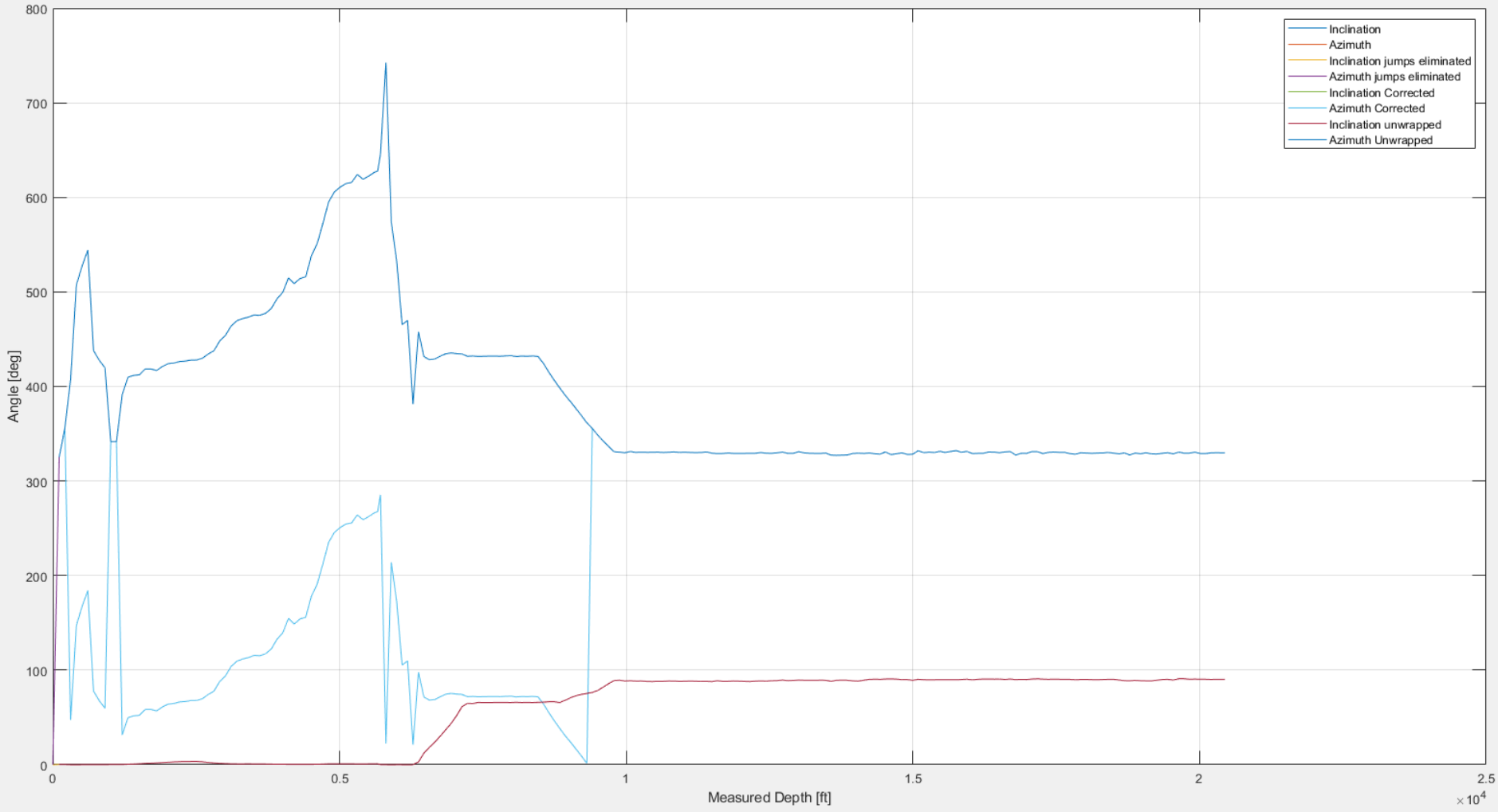
NNE_Boggess_13H– Job Summary. Section03. Inclination & Azimuth.



Customer provided data, not acquired by PetroMar

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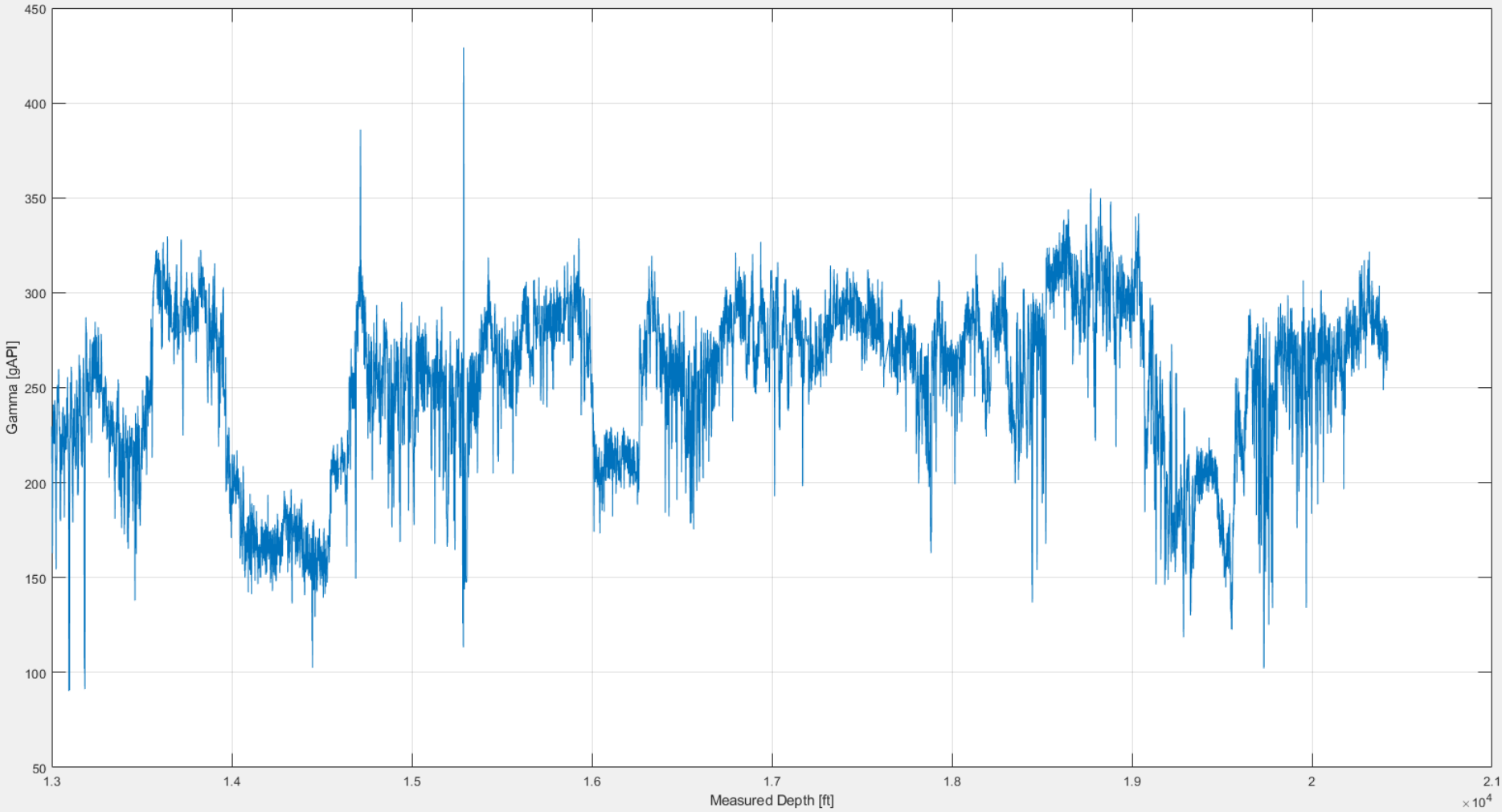
NNE_Boggess_13H– Job Summary. Section03. Gamma API (GRC_D).

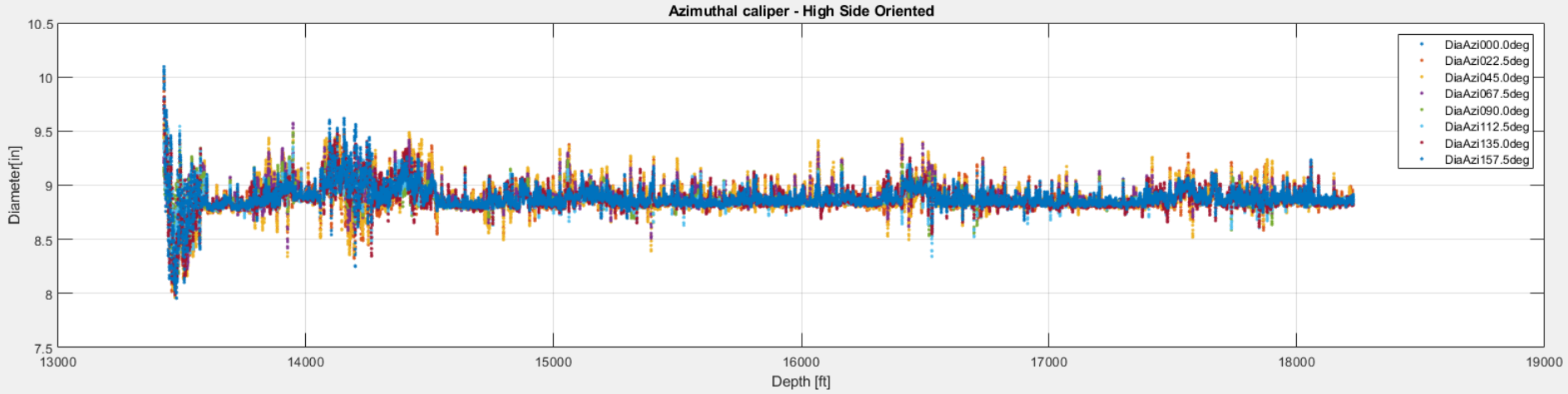


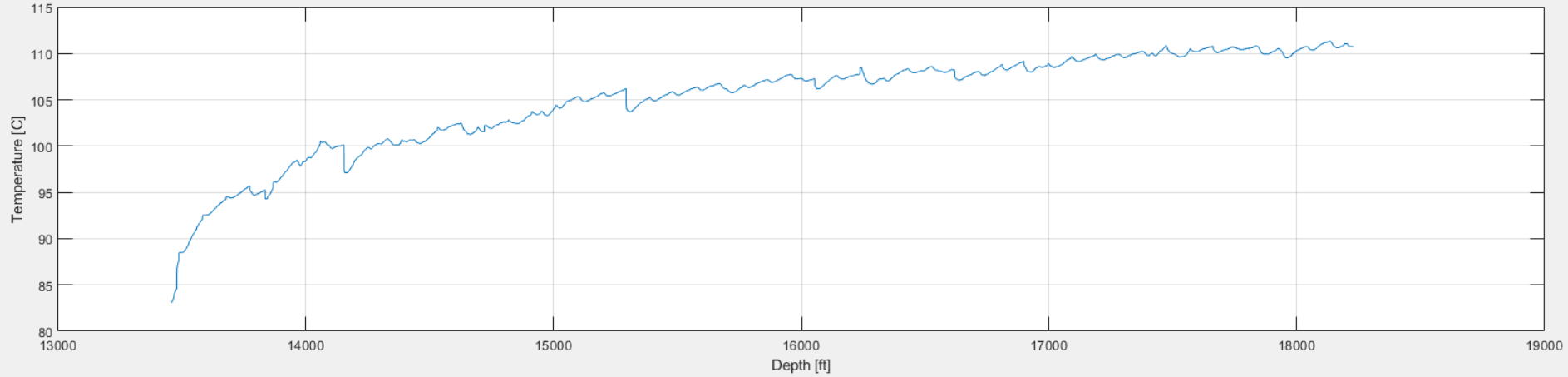
Customer provided, not acquired by PetroMar

NNE_Boggess_13H– Job Summary. Section 03. Pass01 (drill, lateral)

- **FV Sensor at 13,426 – 18,228 ft**
- **FV Sensor to Bit Distance ~ 111.8 ft**
- **Occasional Stick-Slip**

NNE_Boggess_13H– Job Summary. Section02. Pass01. Azimuthal Calipers.





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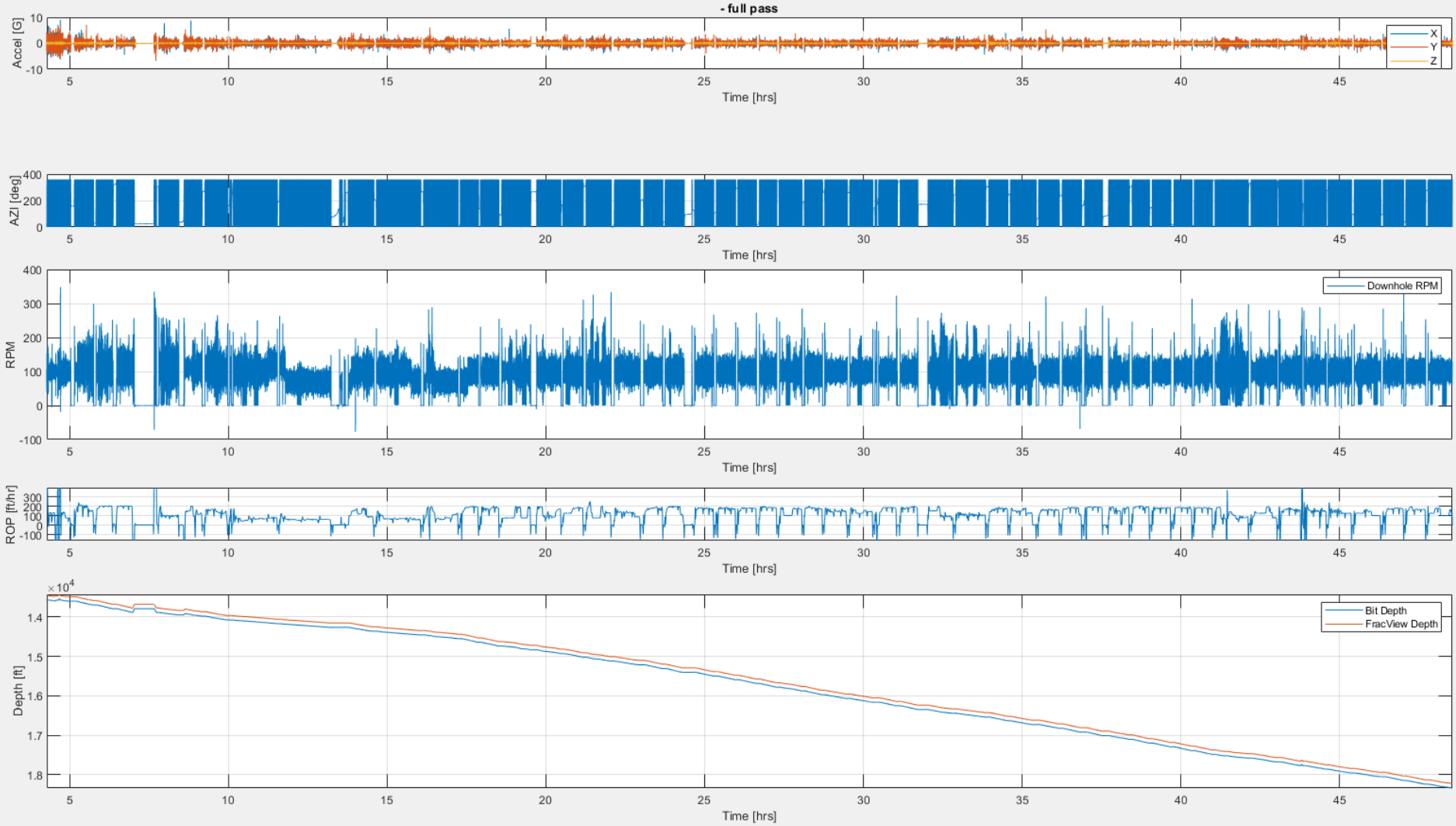
NNE_Boggess_13H– Job Summary. Section03. Pass01. Motion Dynamics.



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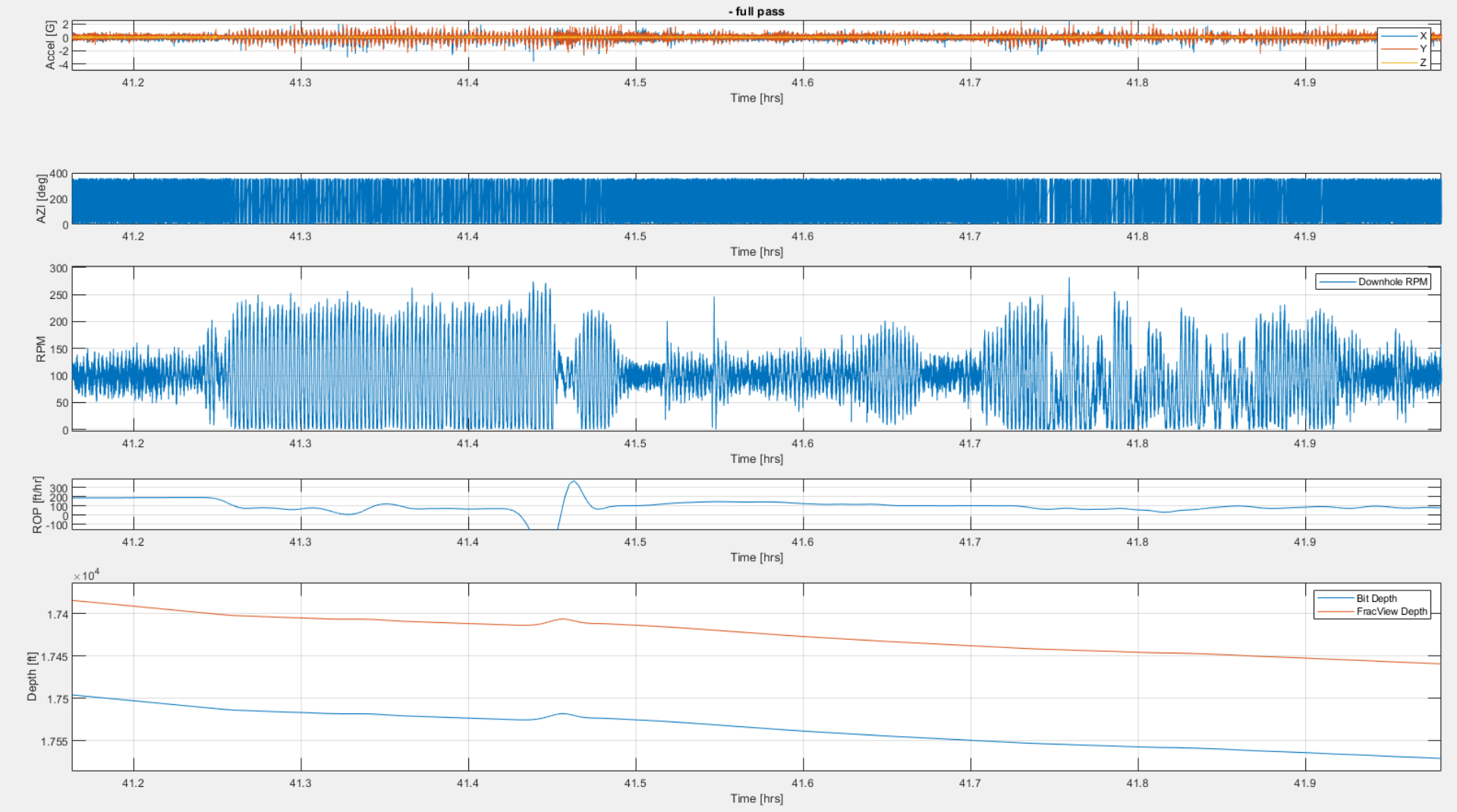
NNE_Boggess_13H– Job Summary.
Section03. Pass01. Motion Dynamics (zoom in)



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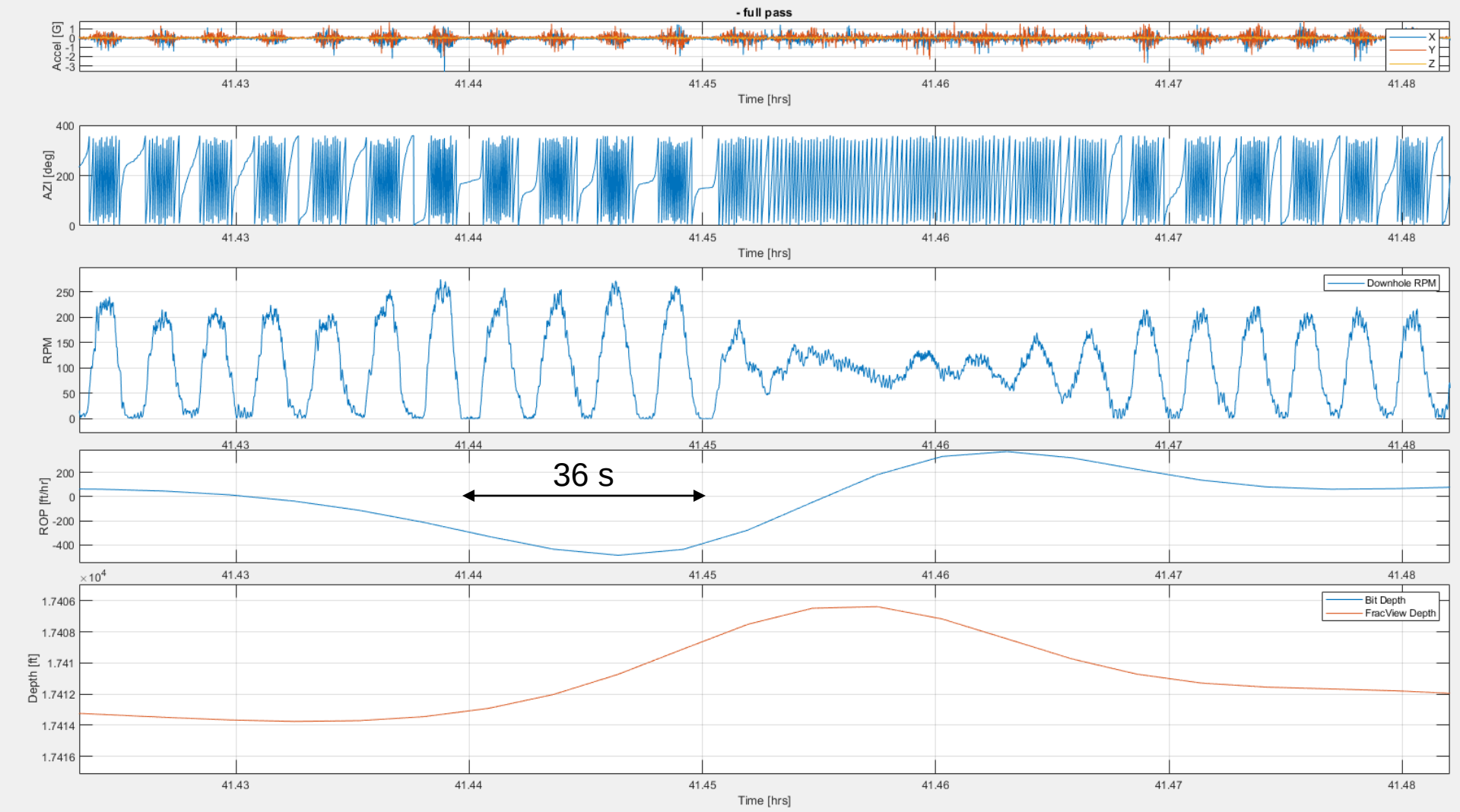
NNE_Boggess_13H– Job Summary.
Section03. Pass01. Motion Dynamics (zoom in)



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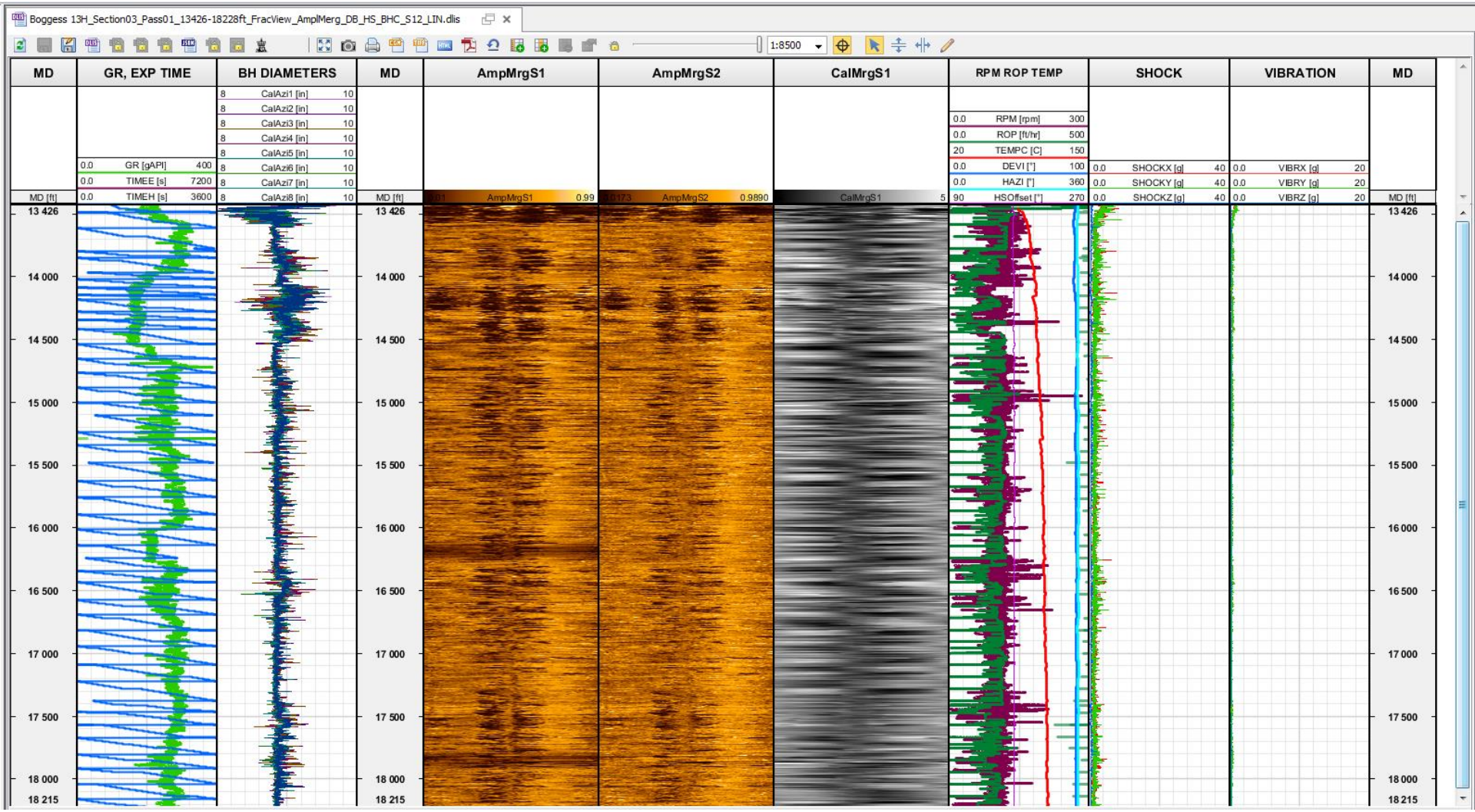
NNE_Boggess_13H– Job Summary. Section03. Pass01. BHC HS S1 vs S2



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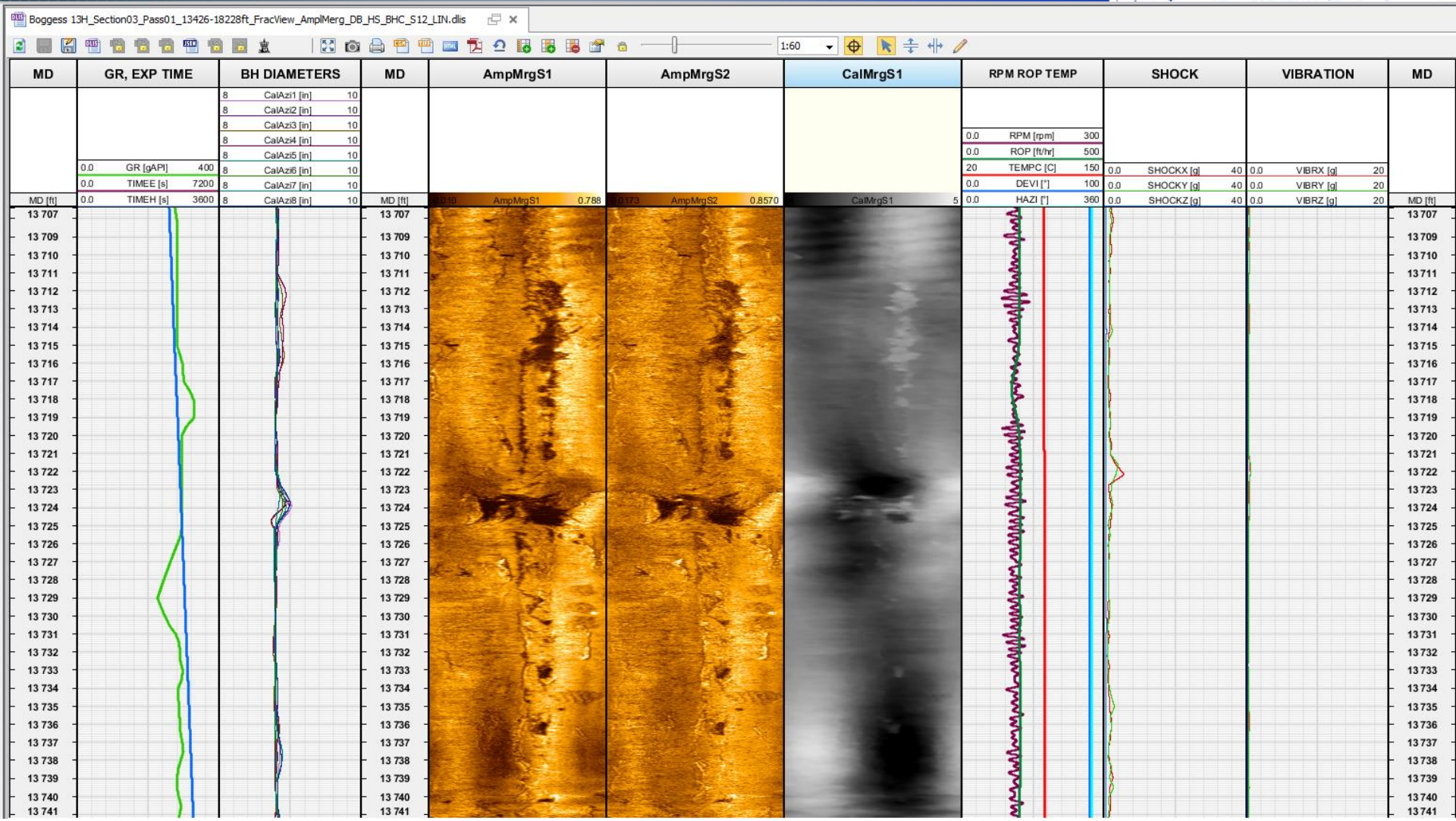
NNE_Boggess_13H– Job Summary. Section03. Pass01. BHC HS S1 vs S2



13,707-13,741

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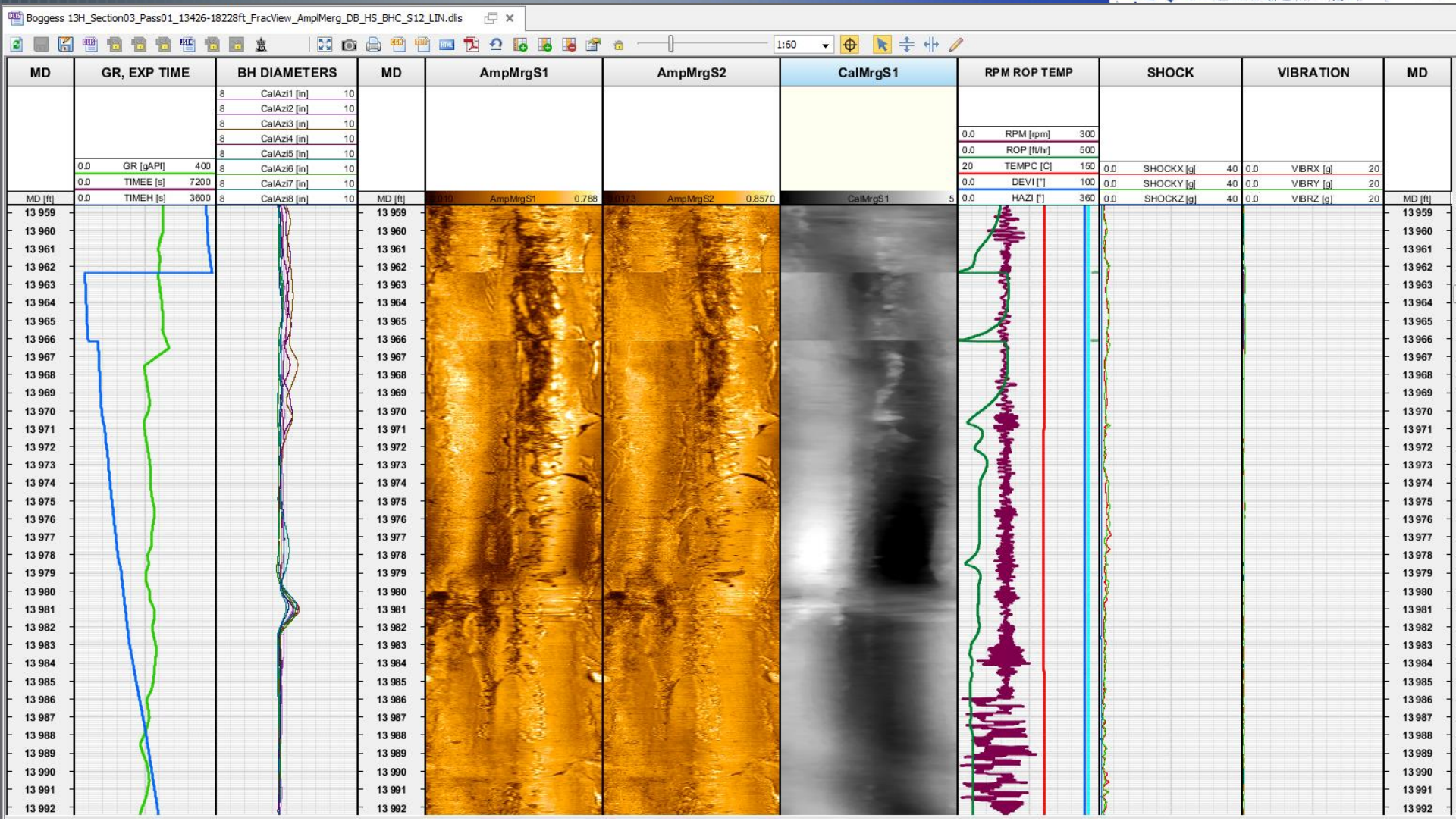
NNE_Boggess_13H– Job Summary. Section03. Pass01. BHC HS S1 vs S2



13,959-13,992

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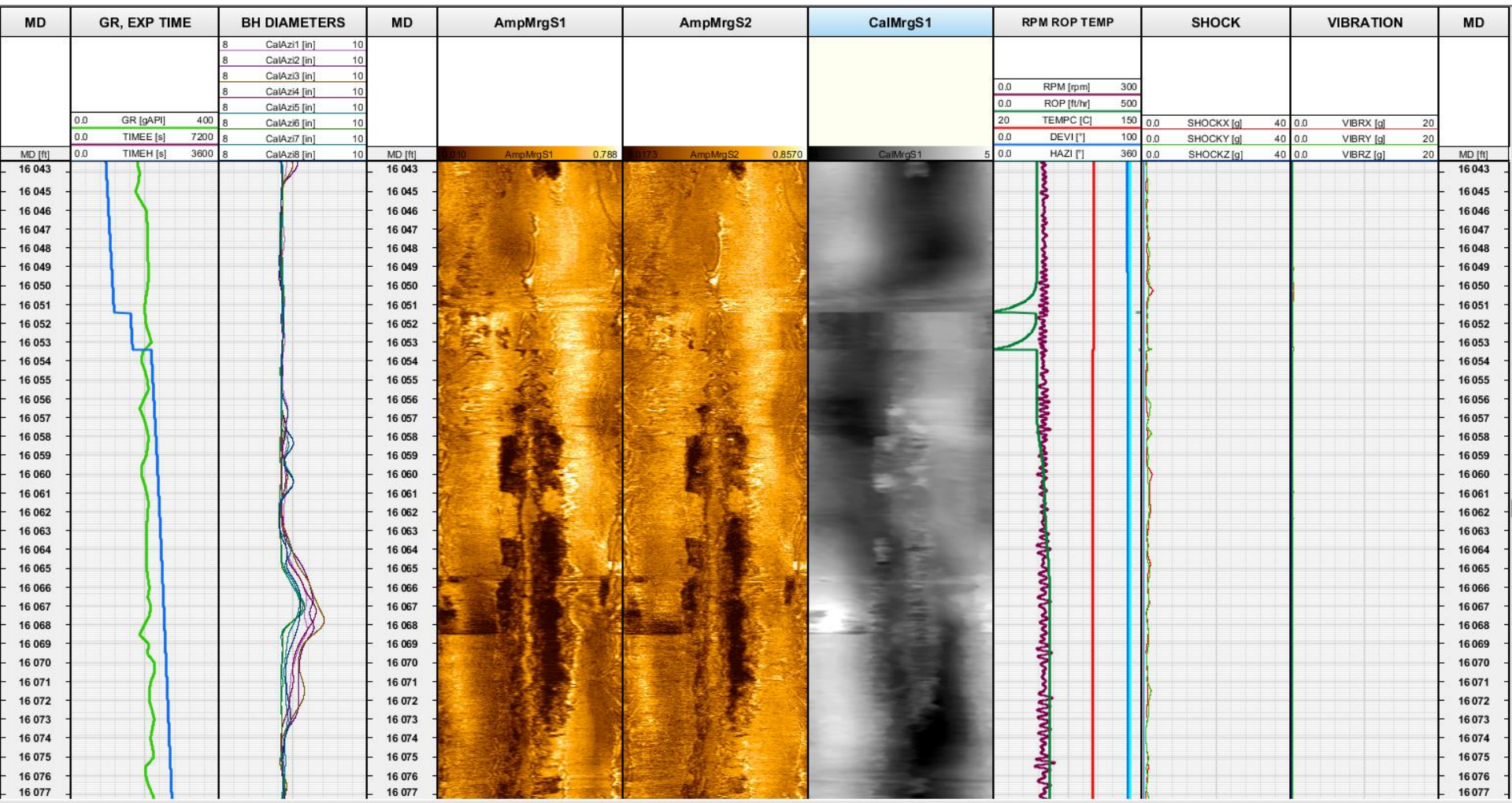
NNE_Boggess_13H– Job Summary. Section03. Pass01. BHC HS S1 vs S2



16,043-16,077

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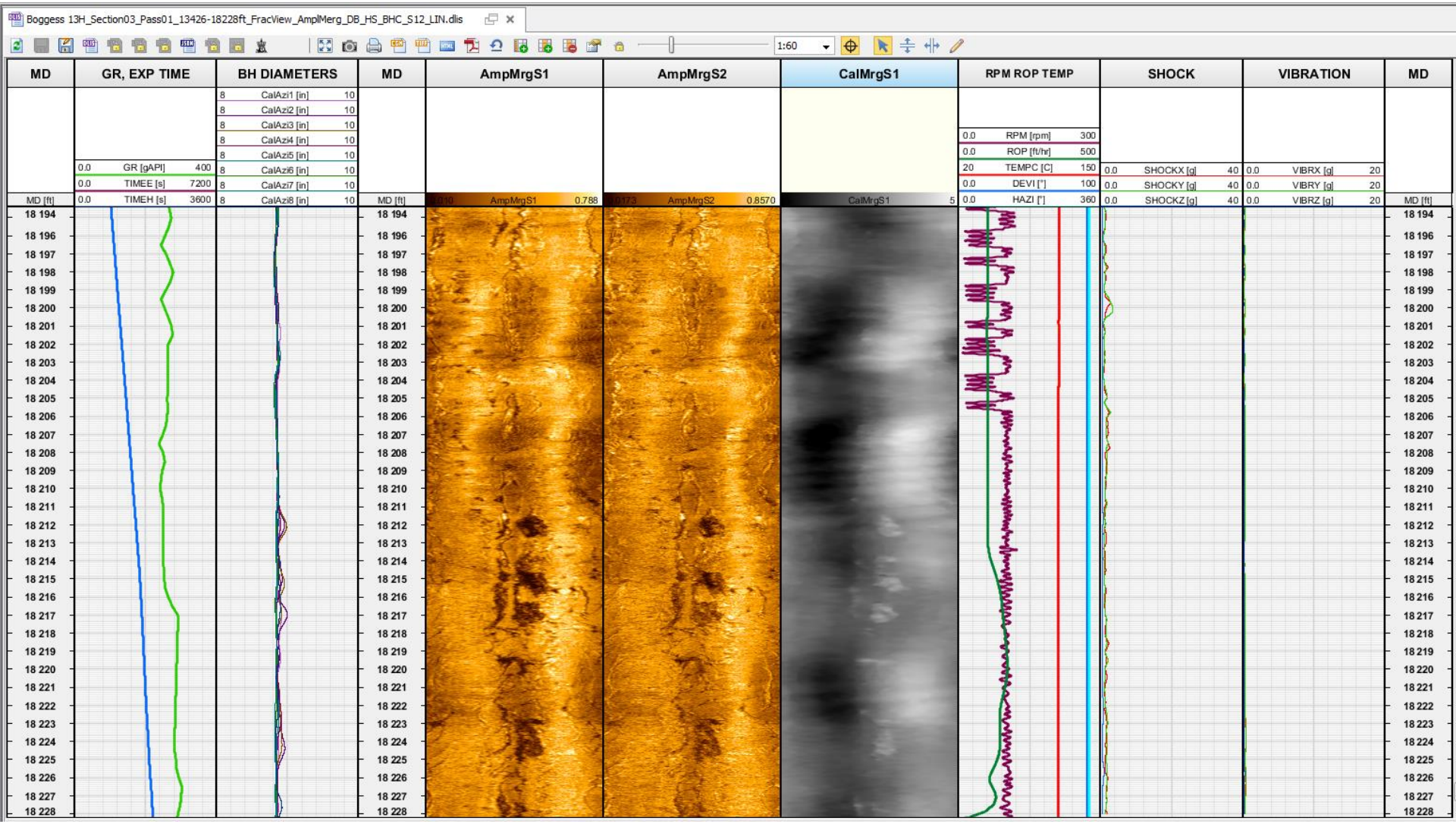
NNE_Boggess_13H– Job Summary. Section03. Pass01. BHC HS S1 vs S2



18,194-18,228

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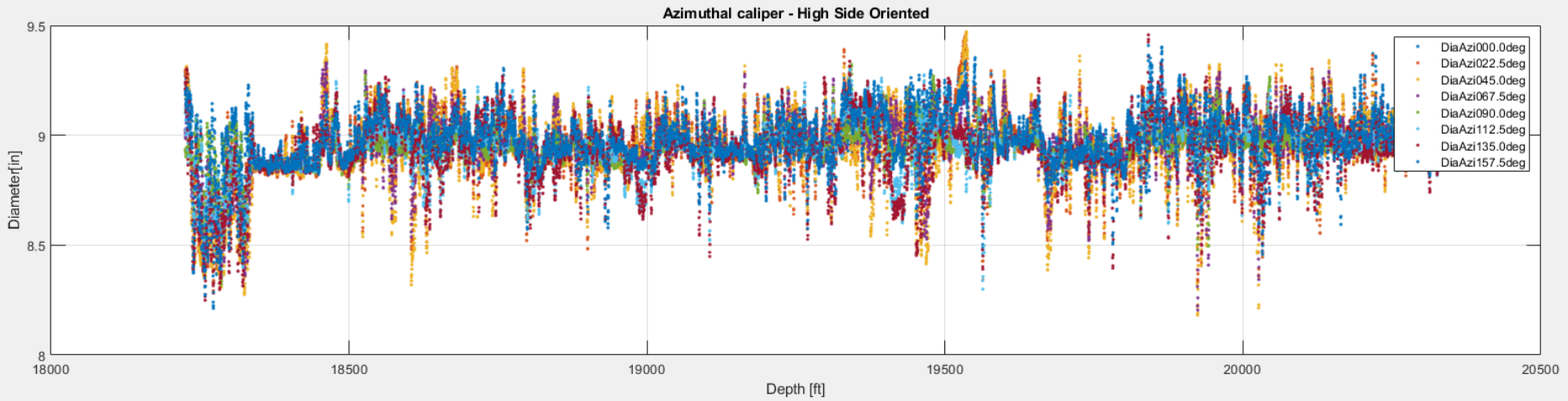
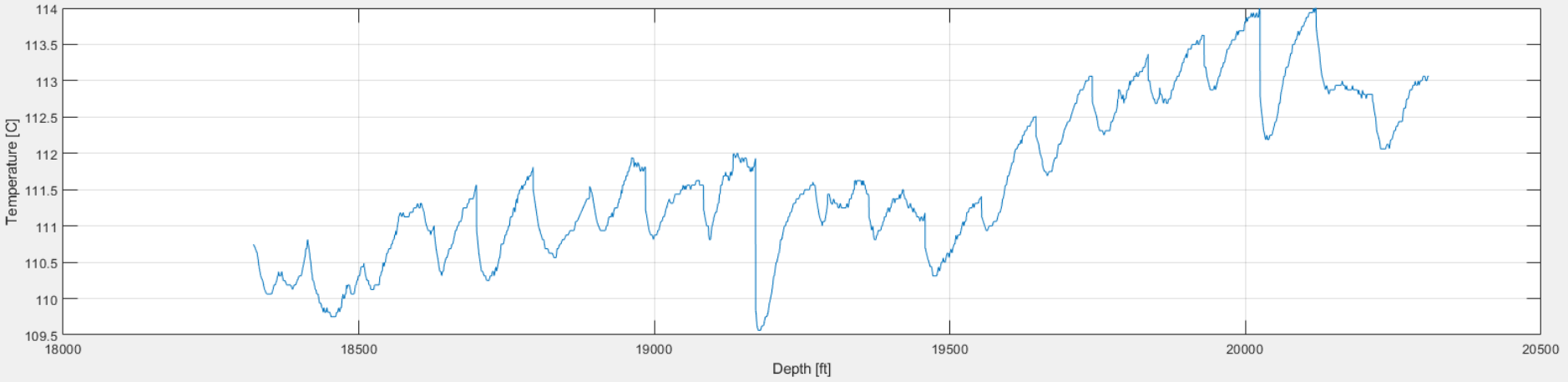
NNE_Boggess_13H– Job Summary. Section 03. Pass02 (drill, lateral)

- **FV Sensor at 18,225 – 20,328 ft**
- **FV Sensor to Bit Distance ~ 111.8 ft**
- **Occasional Stick-Slip**

NNE_Boggess_13H– Job Summary. Section03. Pass02. Azimuthal Calipers.





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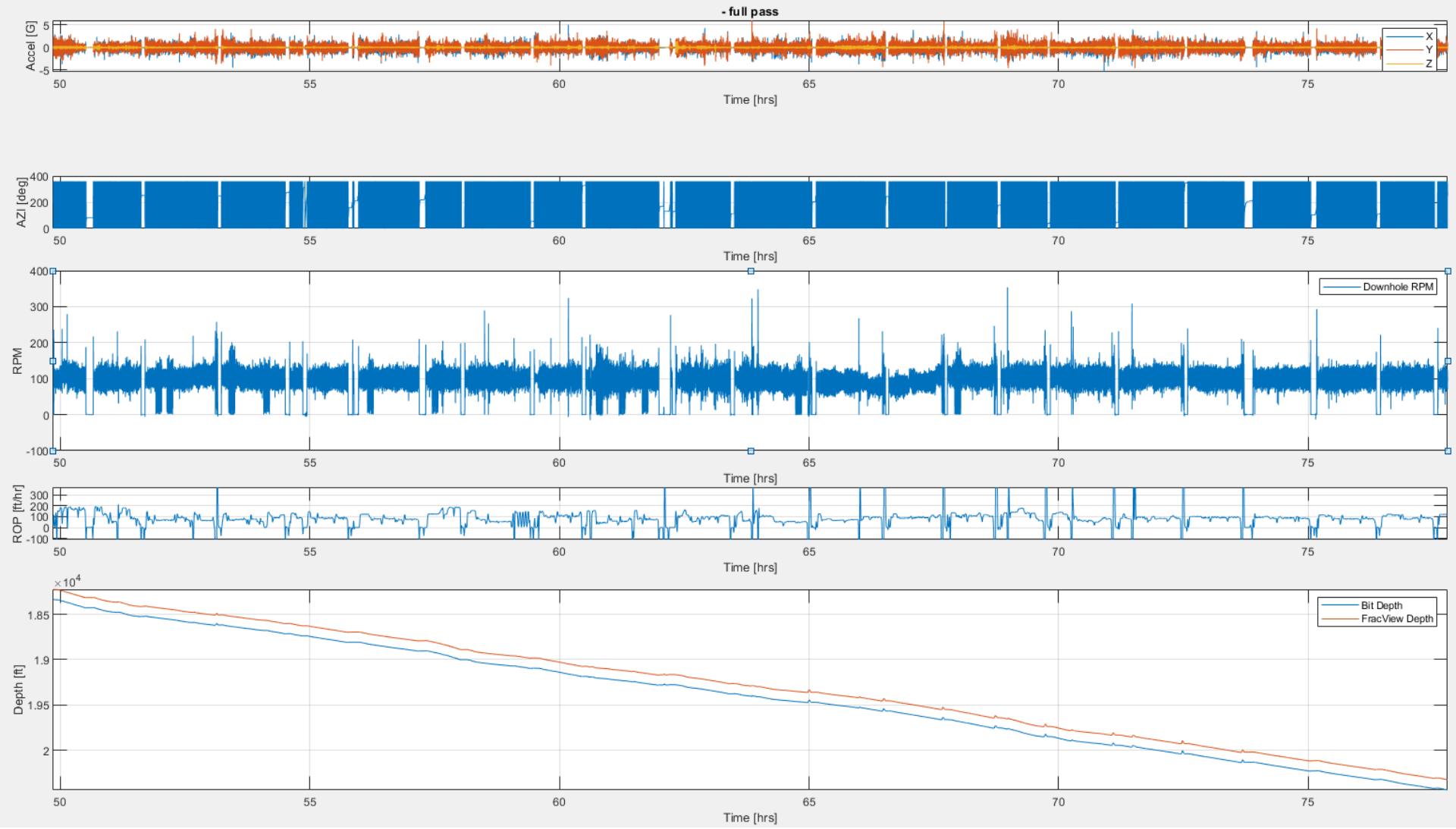
NNE_Boggess_13H– Job Summary. Section03. Pass02. Motion Dynamics.



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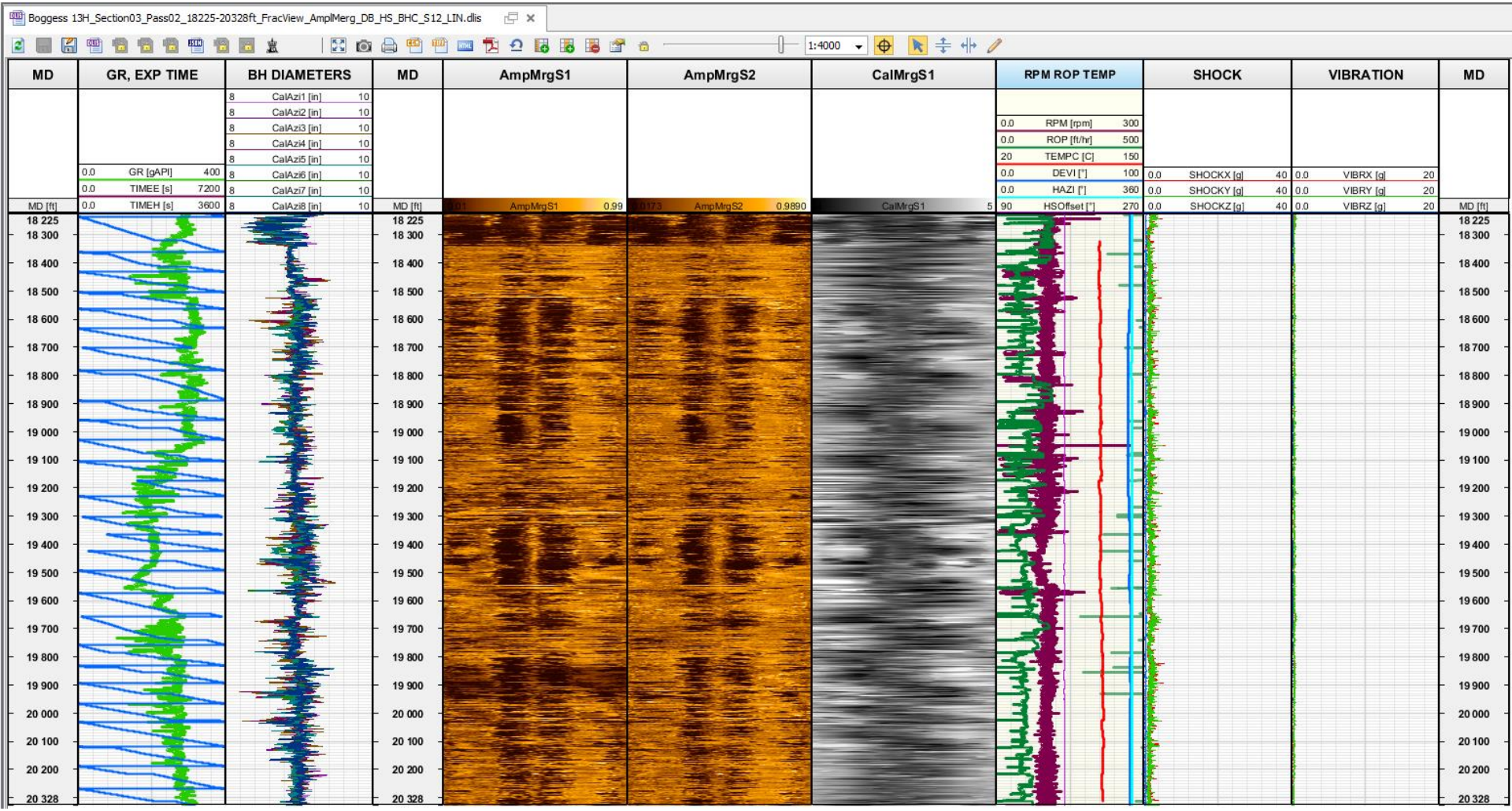
NNE_Boggess_13H– Job Summary. Section03. Pass02. BHC HS S1 vs S2



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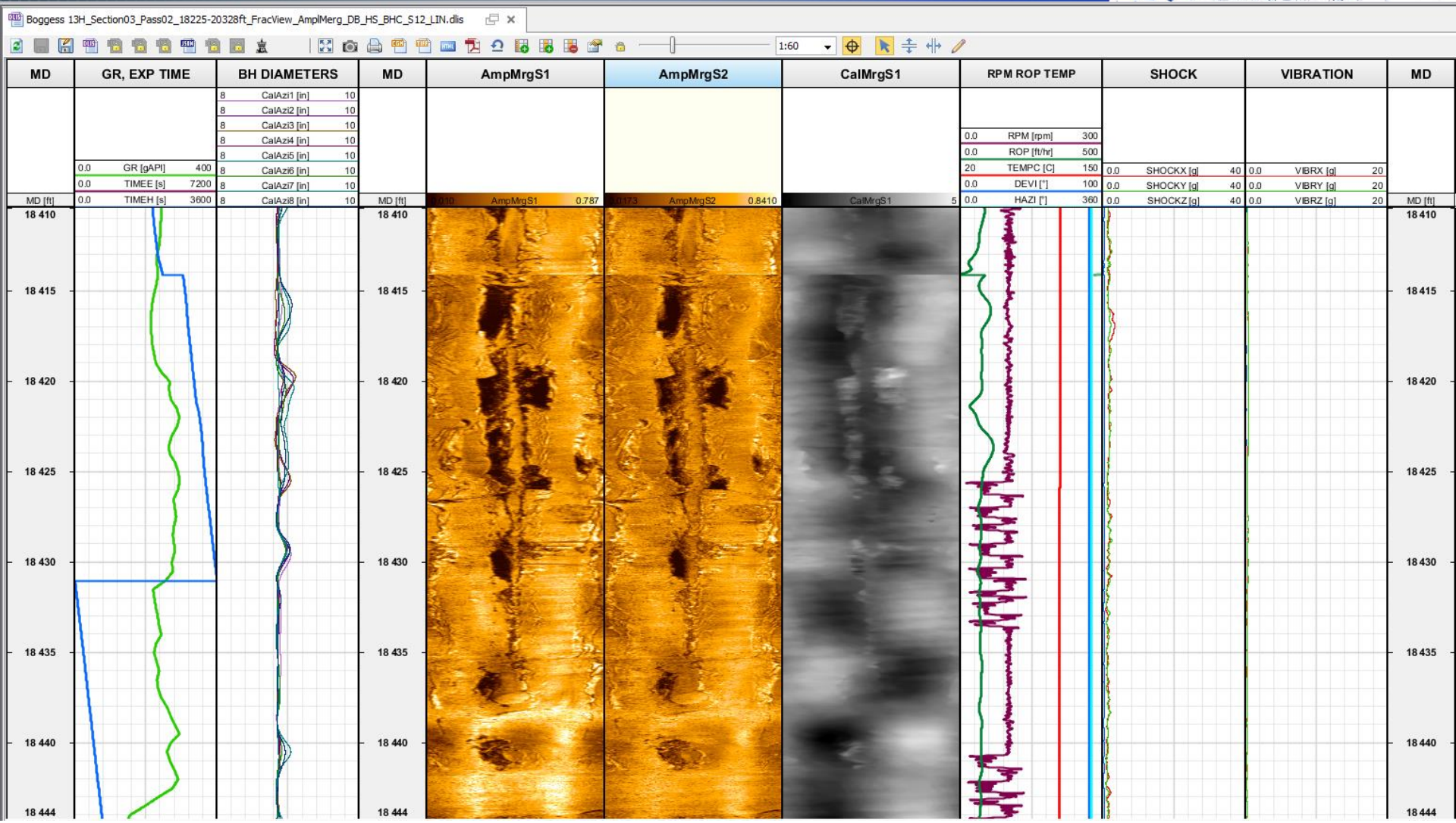
NNE_Boggess_13H– Job Summary. Section03. Pass02. BHC HS S1 vs S2



18,410-18,444

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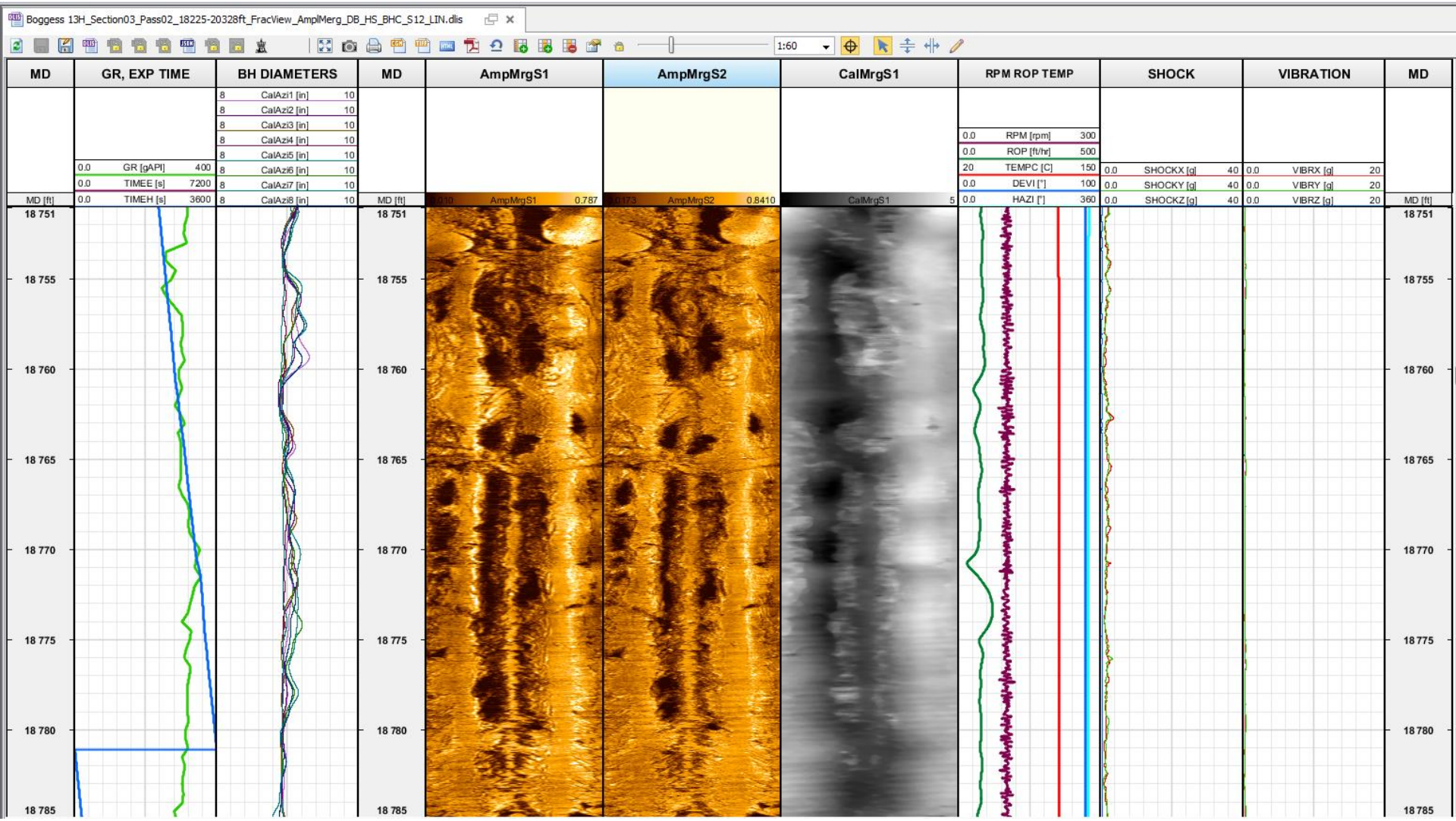
NNE_Boggess_13H– Job Summary. Section03. Pass02. BHC HS S1 vs S2



18,751-18,785

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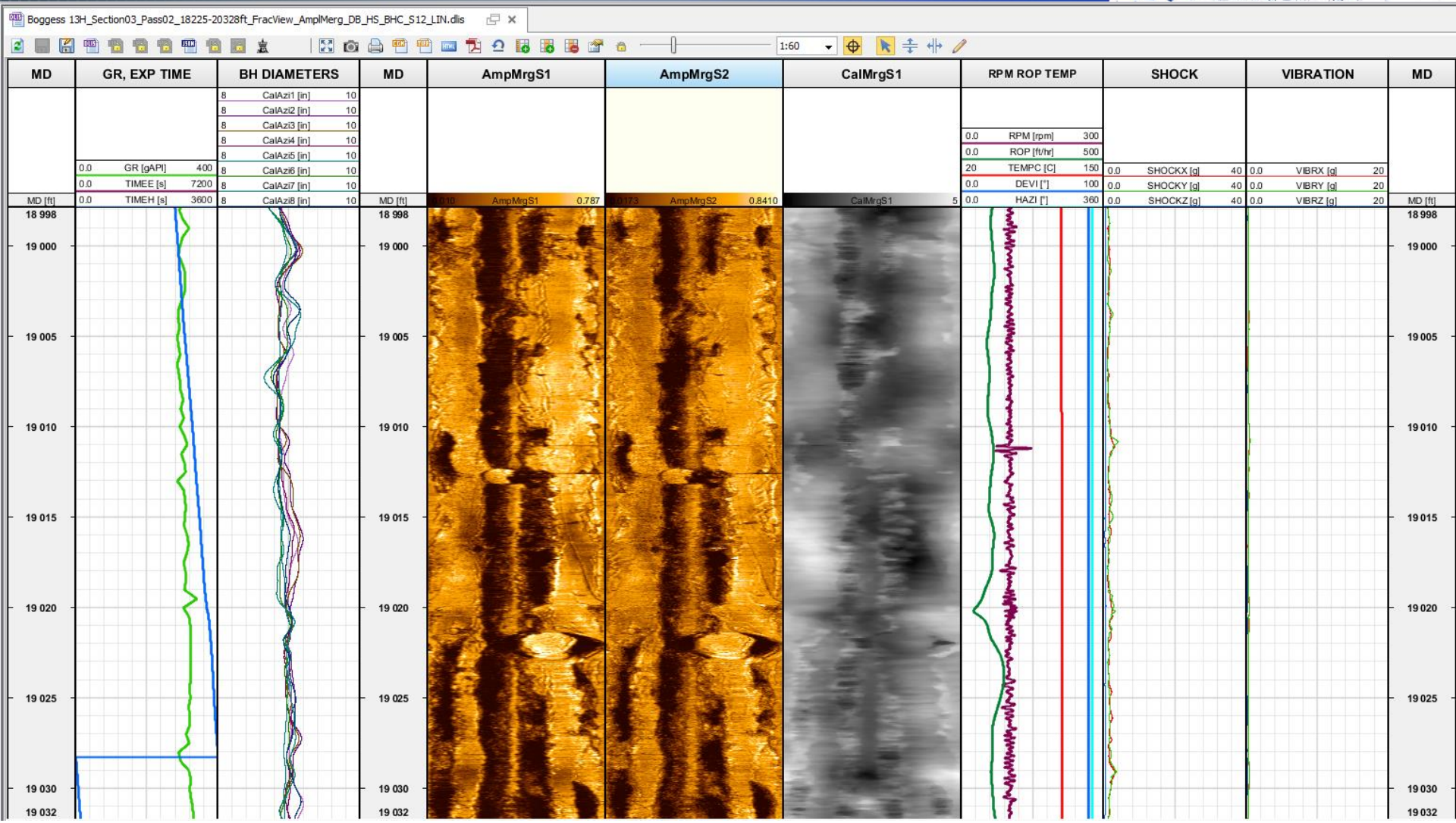
NNE_Boggess_13H– Job Summary. Section03. Pass02. BHC HS S1 vs S2



18,998-19,032

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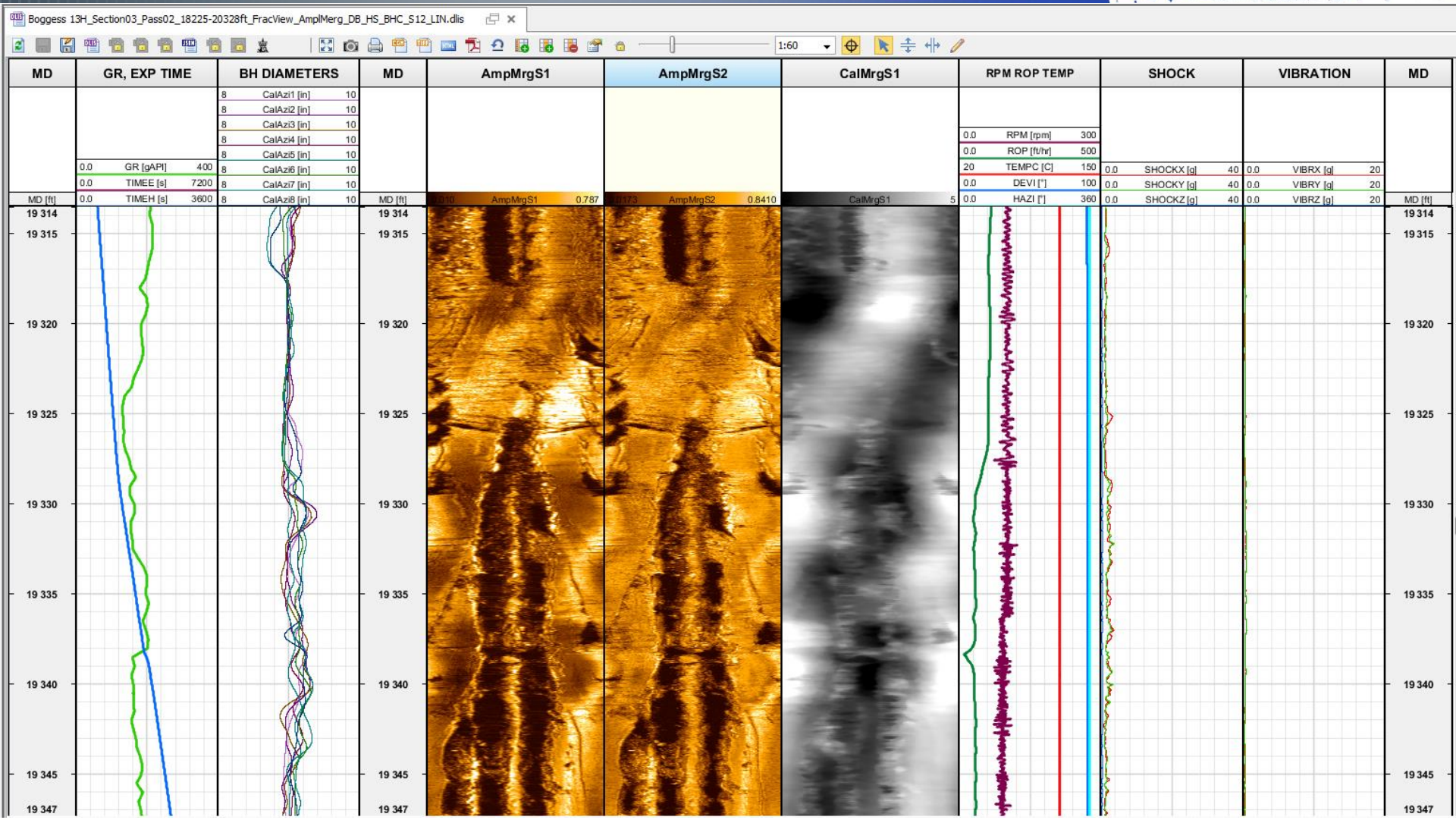
NNE_Boggess_13H– Job Summary. Section03. Pass02. BHC HS S1 vs S2



19,314-19,347

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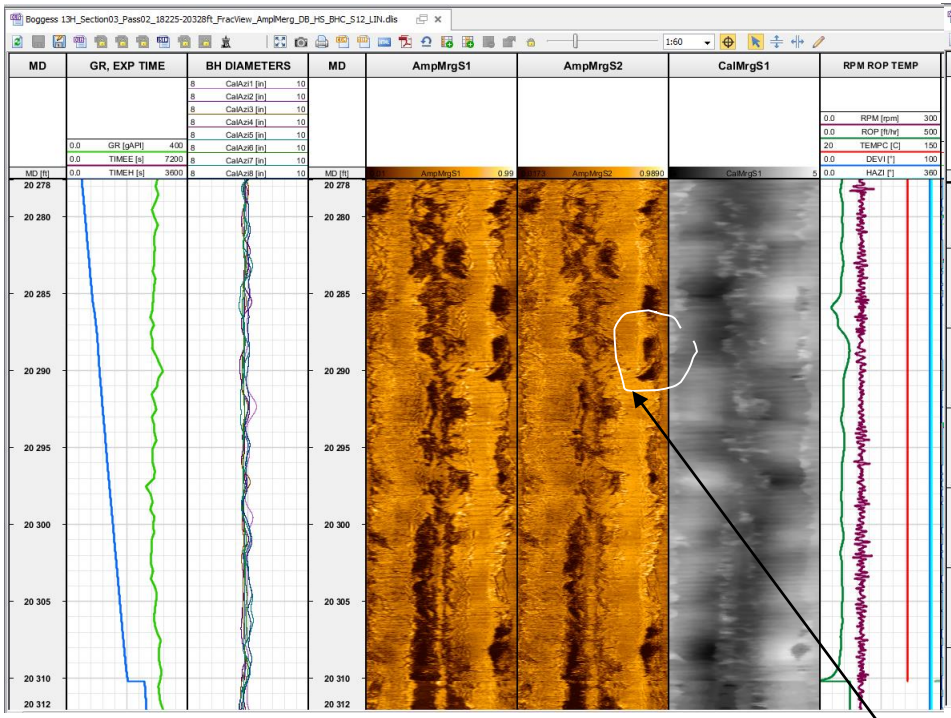
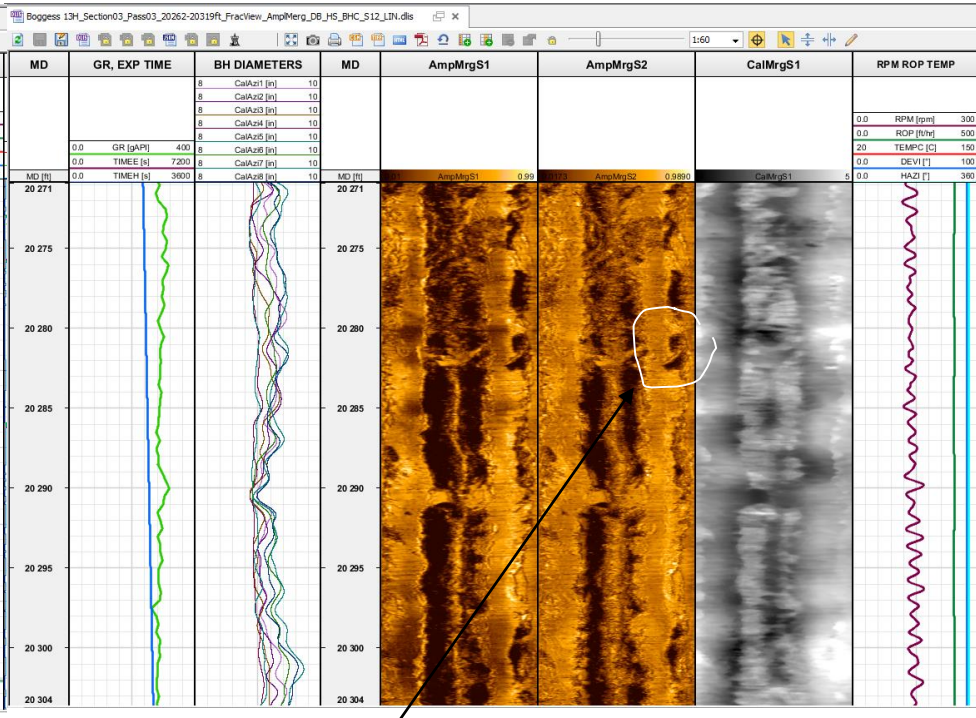
NNE_Boggess_13H– Job Summary. Section03. Pass03 vs Pass02



Pass02 (drill)



Pass03 (wipe down)

Shift ~6ft

20,271-20,304

NNE_Boggess_13H– Job Summary.

Thank You