



NNE Boggess 1H— Job Summary

30th April 2019

Prepared by:
Dmitry Avdeev

DRILLING
OPERATIONS

DRILLING
SOLUTIONS

DRILLING
EQUIPMENT

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NNE Boggess 1H– Job Summary. Outline.



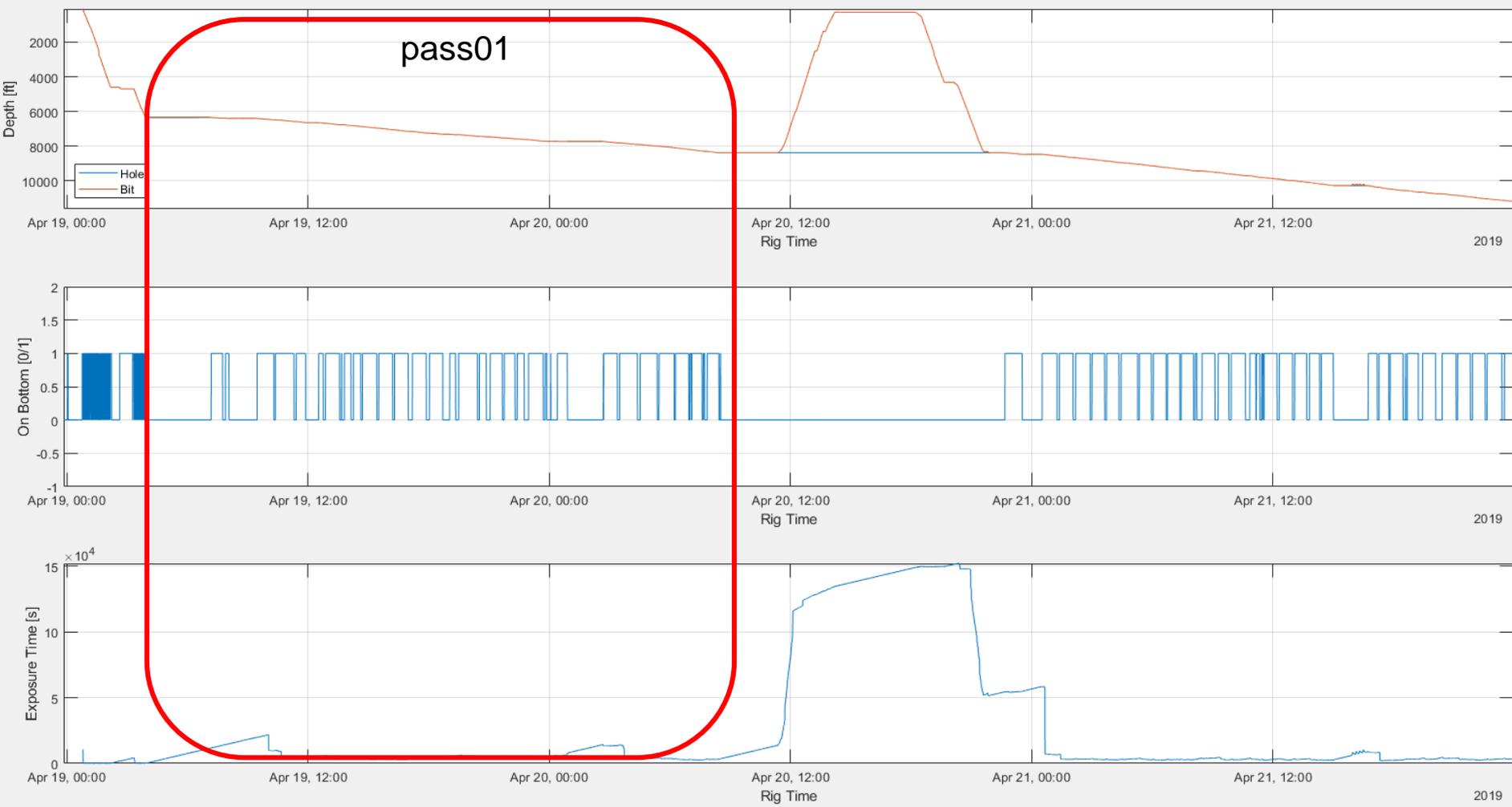
- FV650003
- **Section 01,**
 - **Pass01 (main drill)**
- **Section 02**
 - **Pass01 (main drill)**

NNE Boggess 1H– Job Summary. Outline.

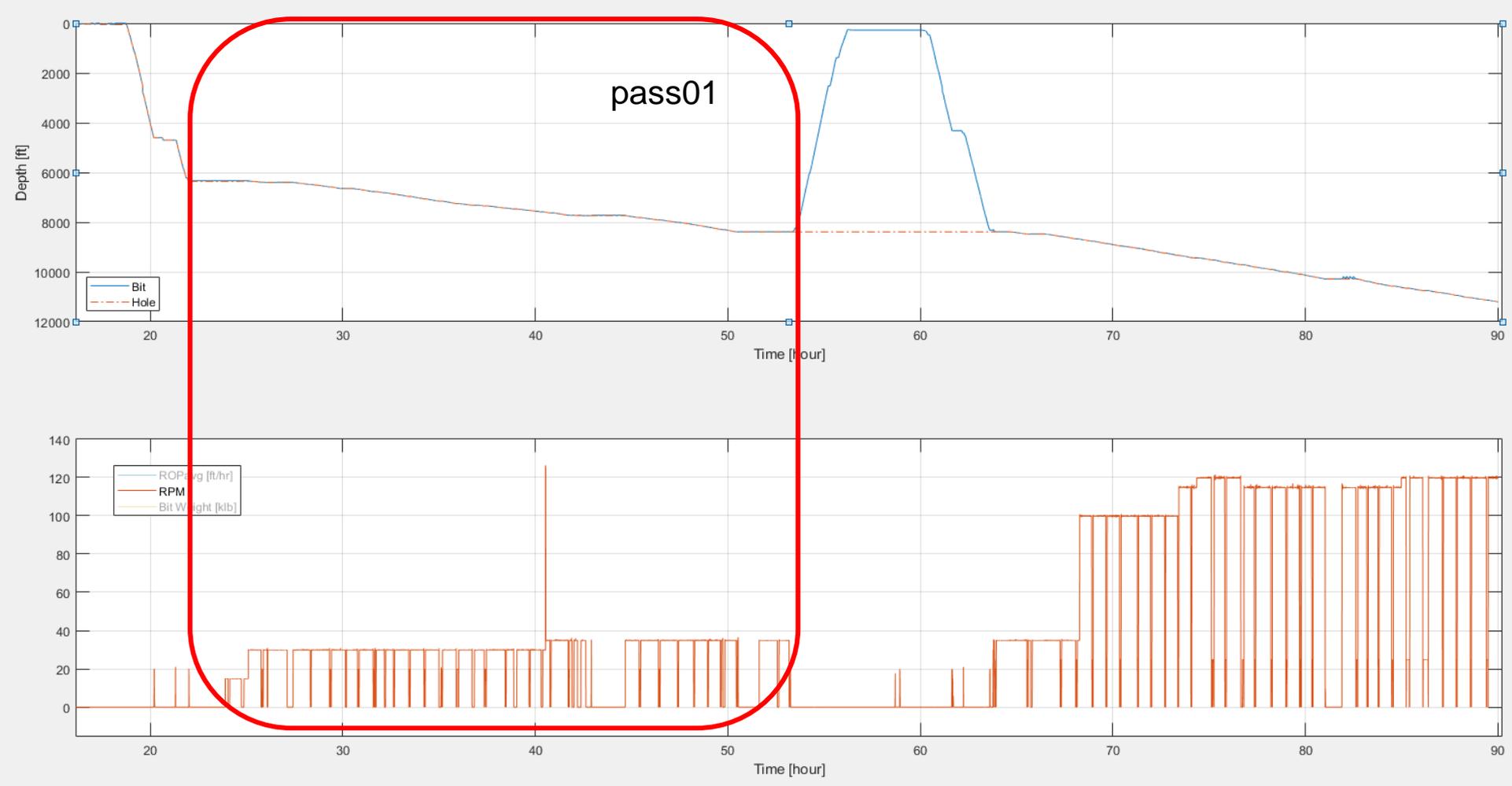


- **Section 01,**
 - **Pass01 (main drill)**

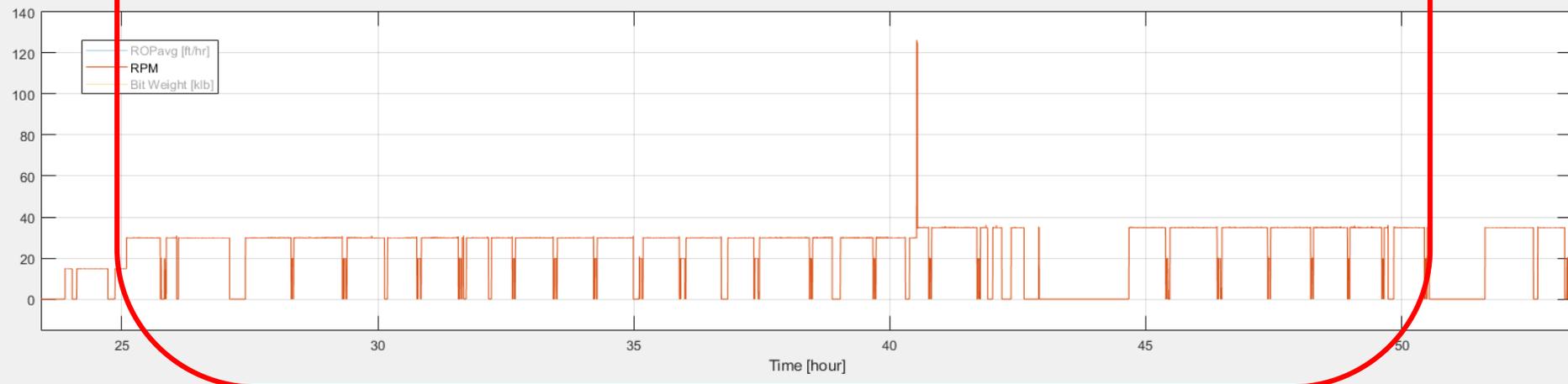
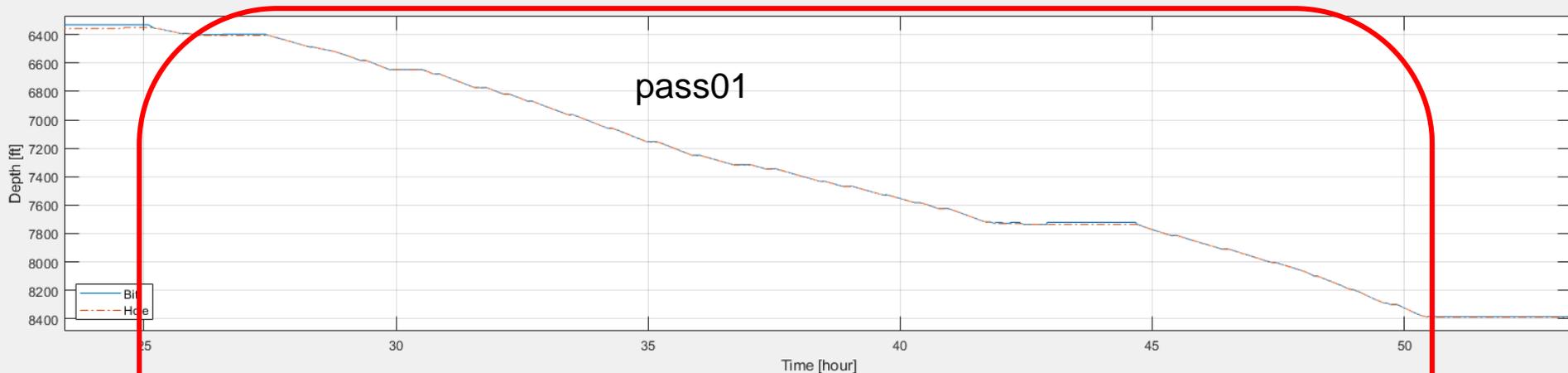
NNE Boggess 1H– Job Summary. Section01. Pason. On Bottom Status.



NNE Boggess 1H– Job Summary. Section01. Passes 01 (drill)

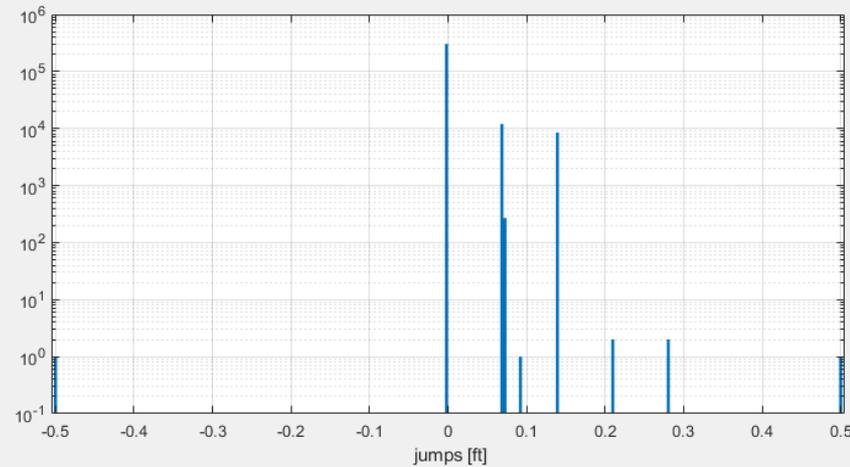
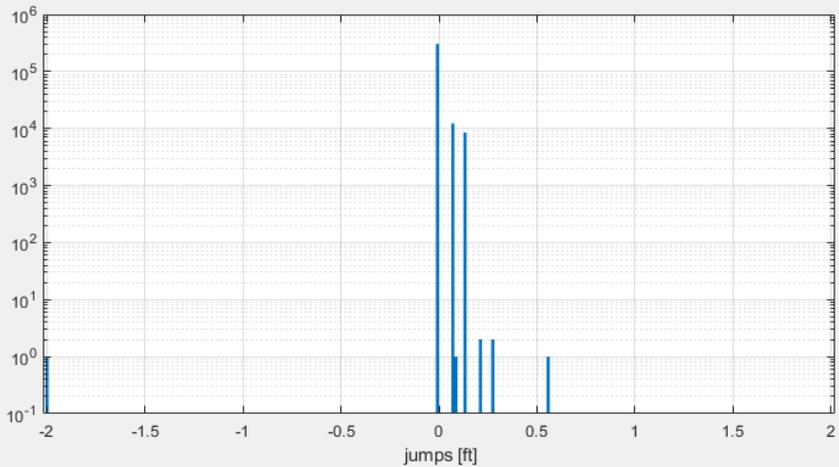
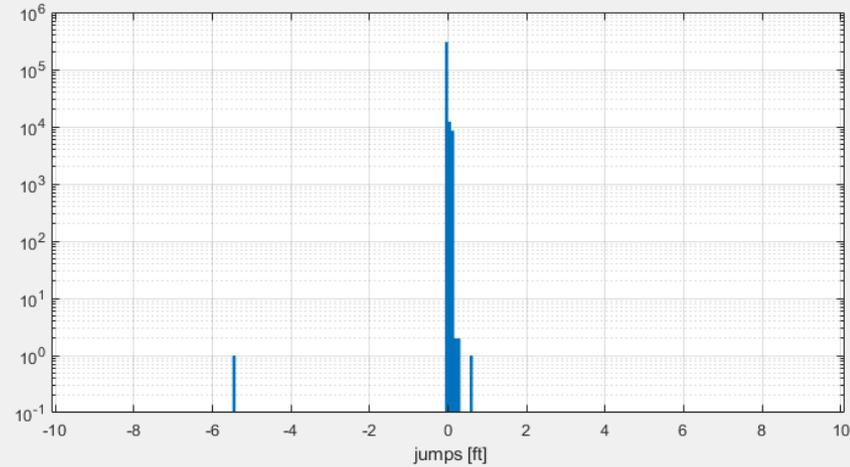
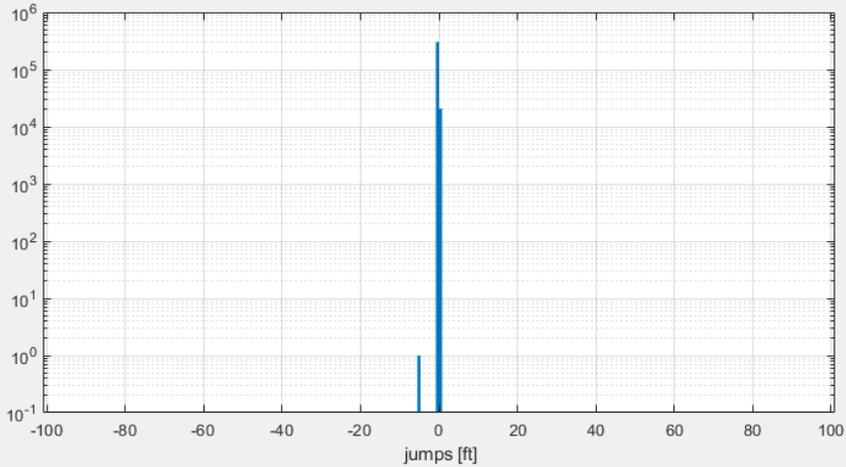


NNE Boggess 1H– Job Summary. Section01. Passes 01 (drill, zoom in)

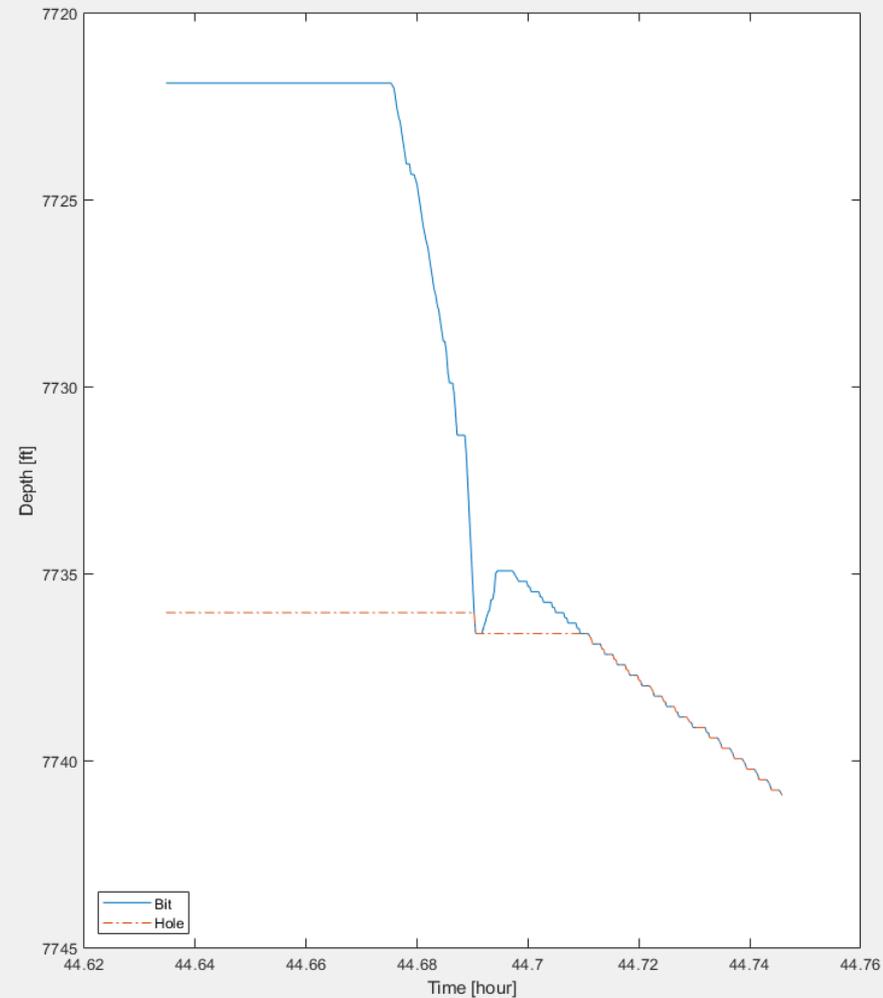
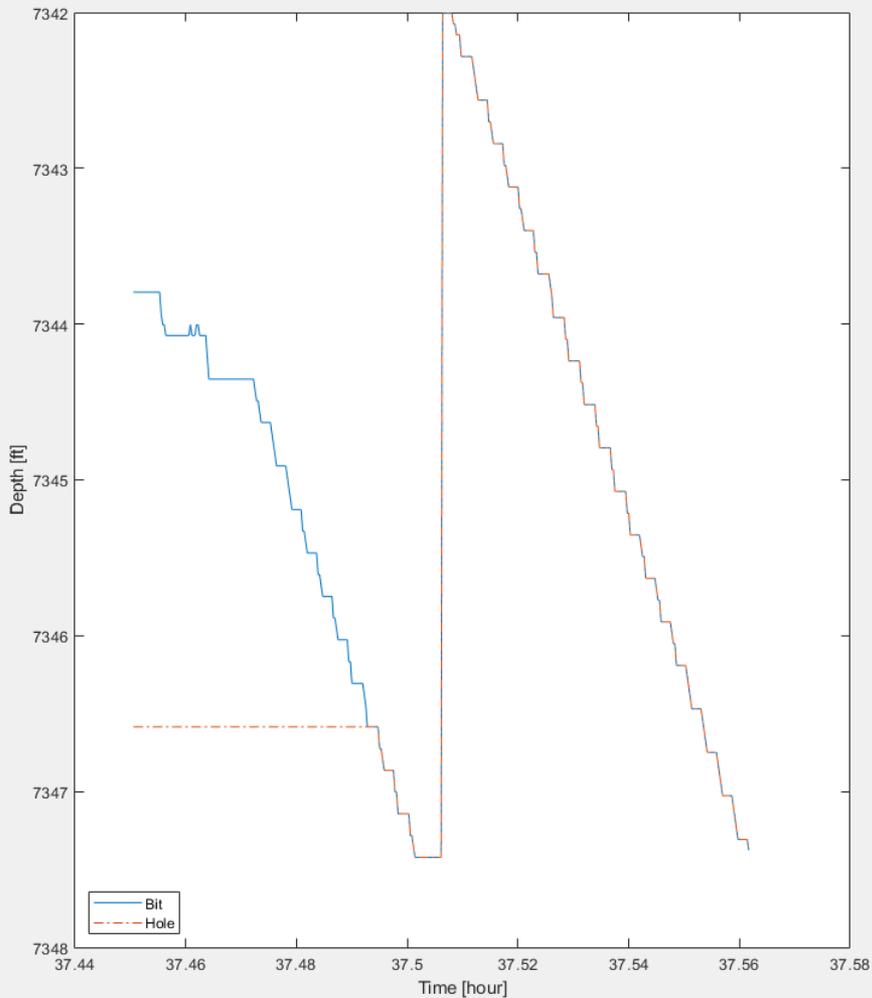


NNE Boggess 1H– Job Summary.

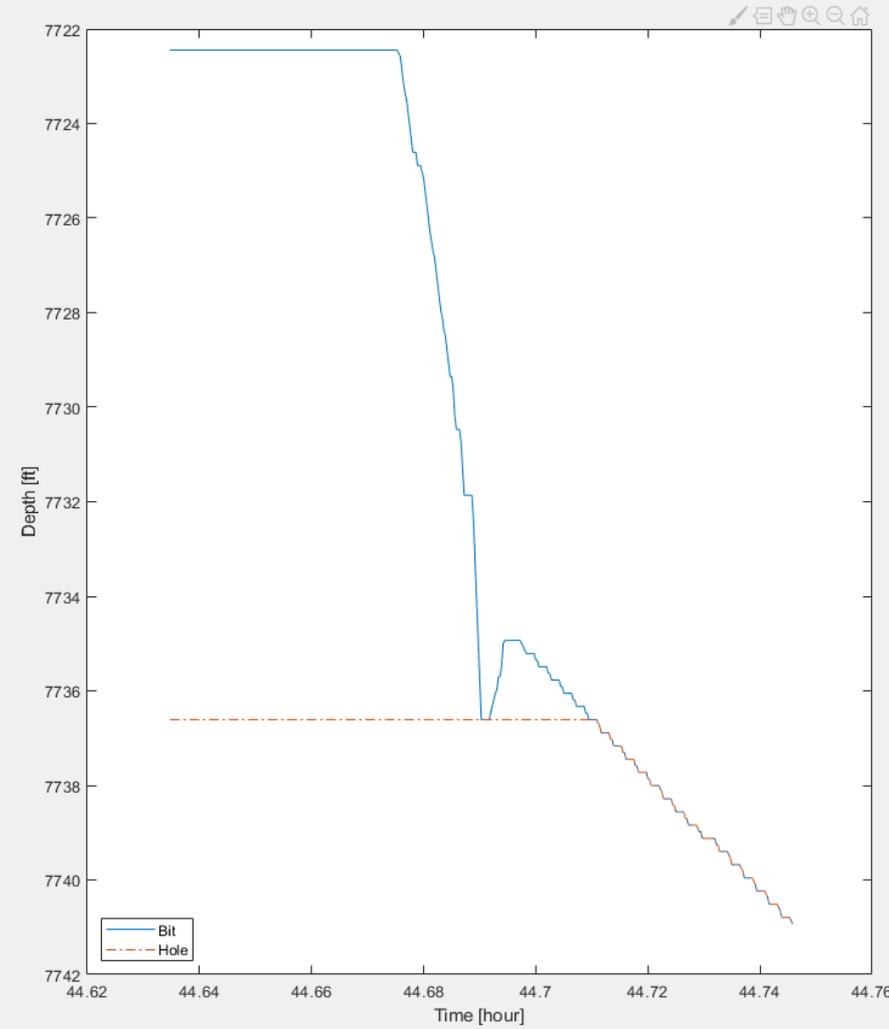
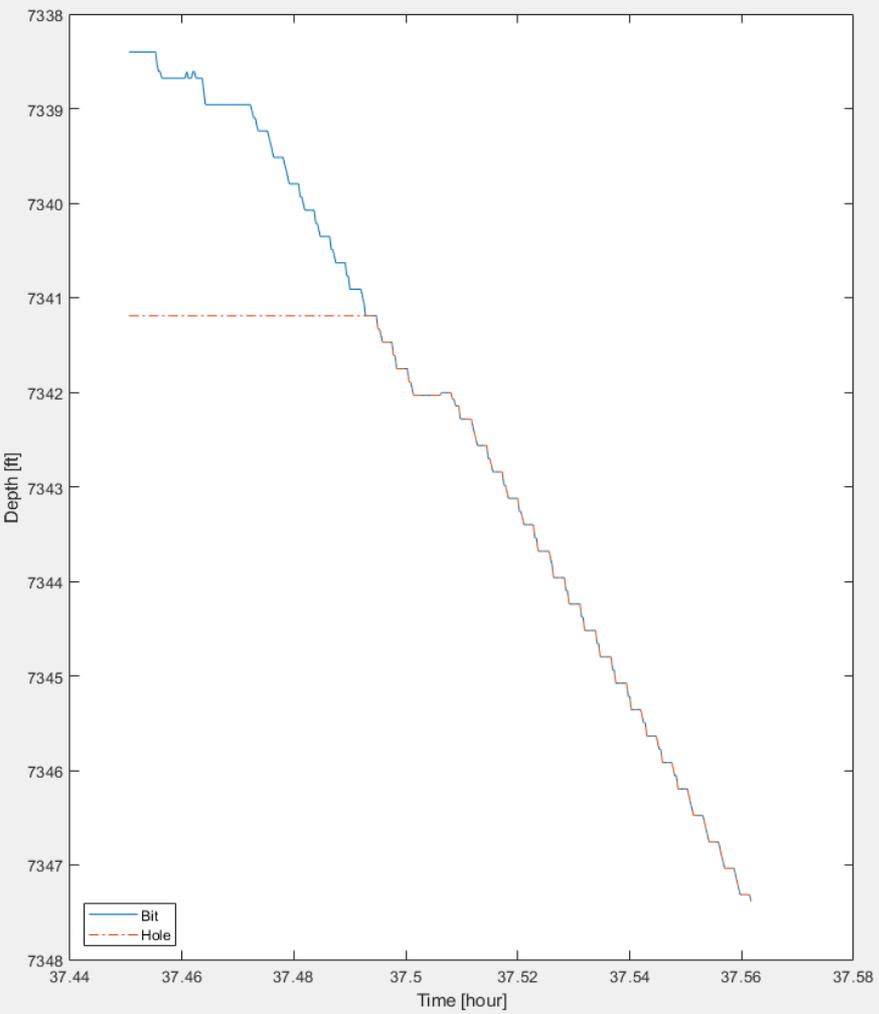
Section01. Pason. TD Hole Depth Jumps Histogram



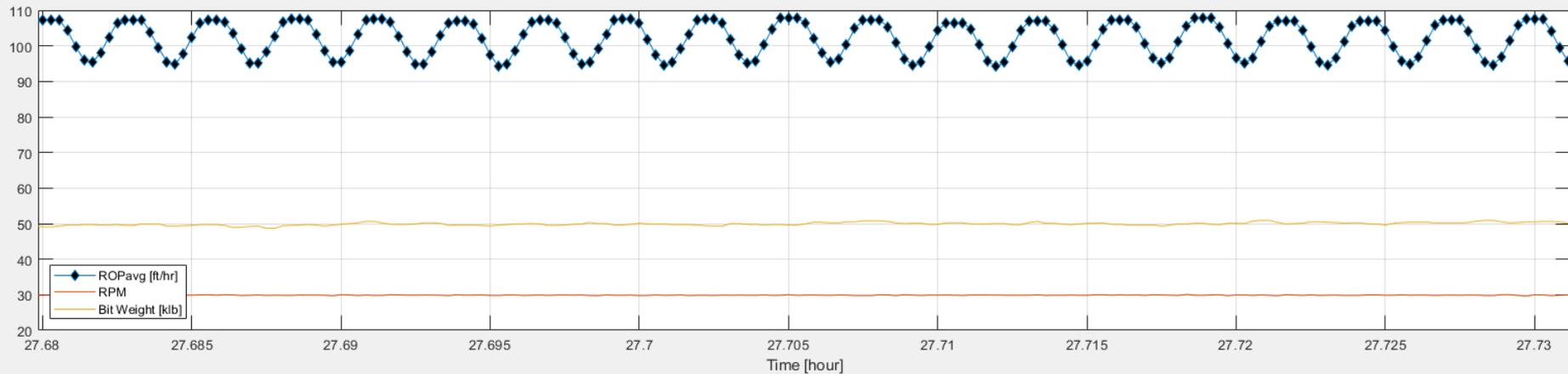
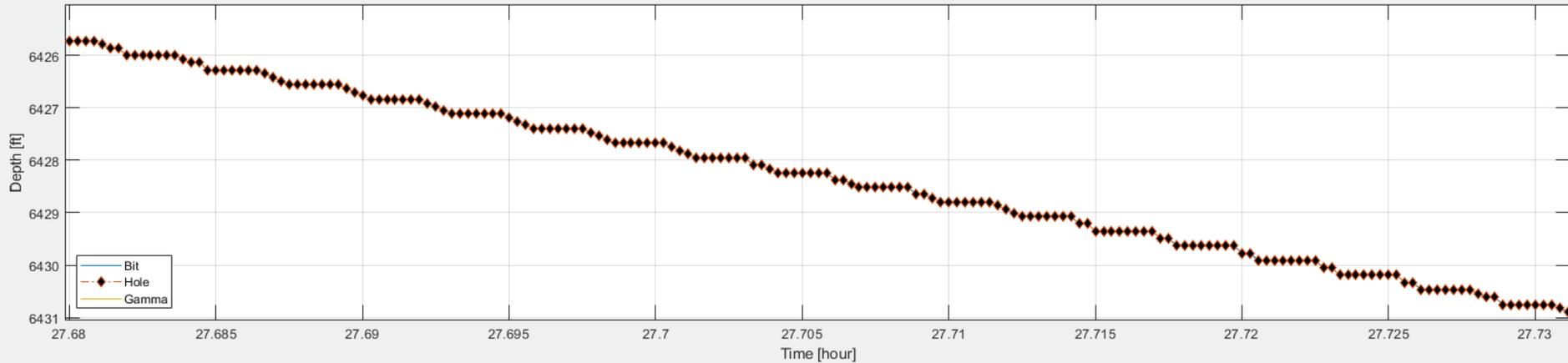
NNE Boggess 1H– Job Summary. Section01. Pason. Jumps >0.9 ft.



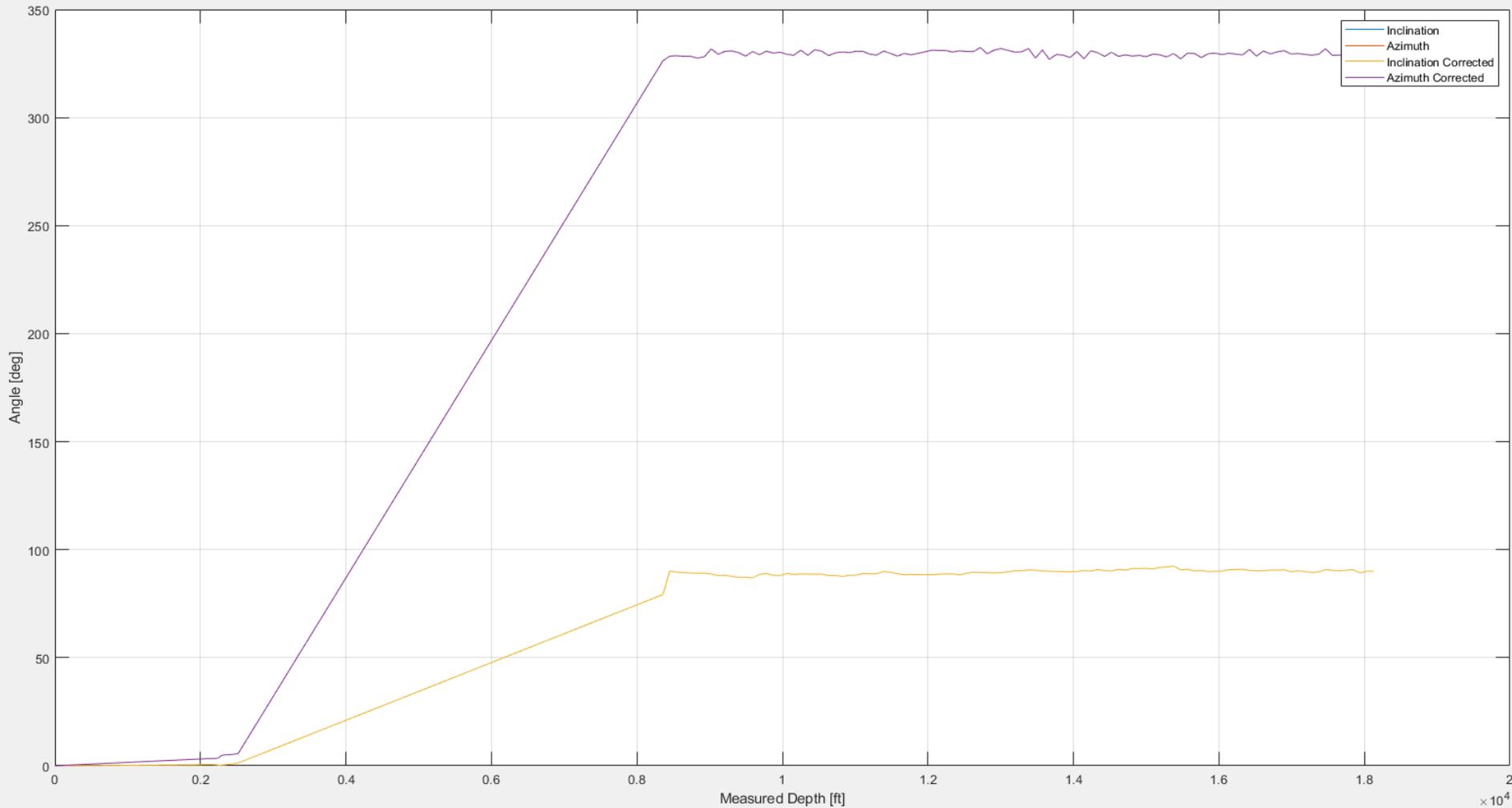
NNE Boggess 1H– Job Summary. Section01. Pason. Tracer Jumps Fixed.



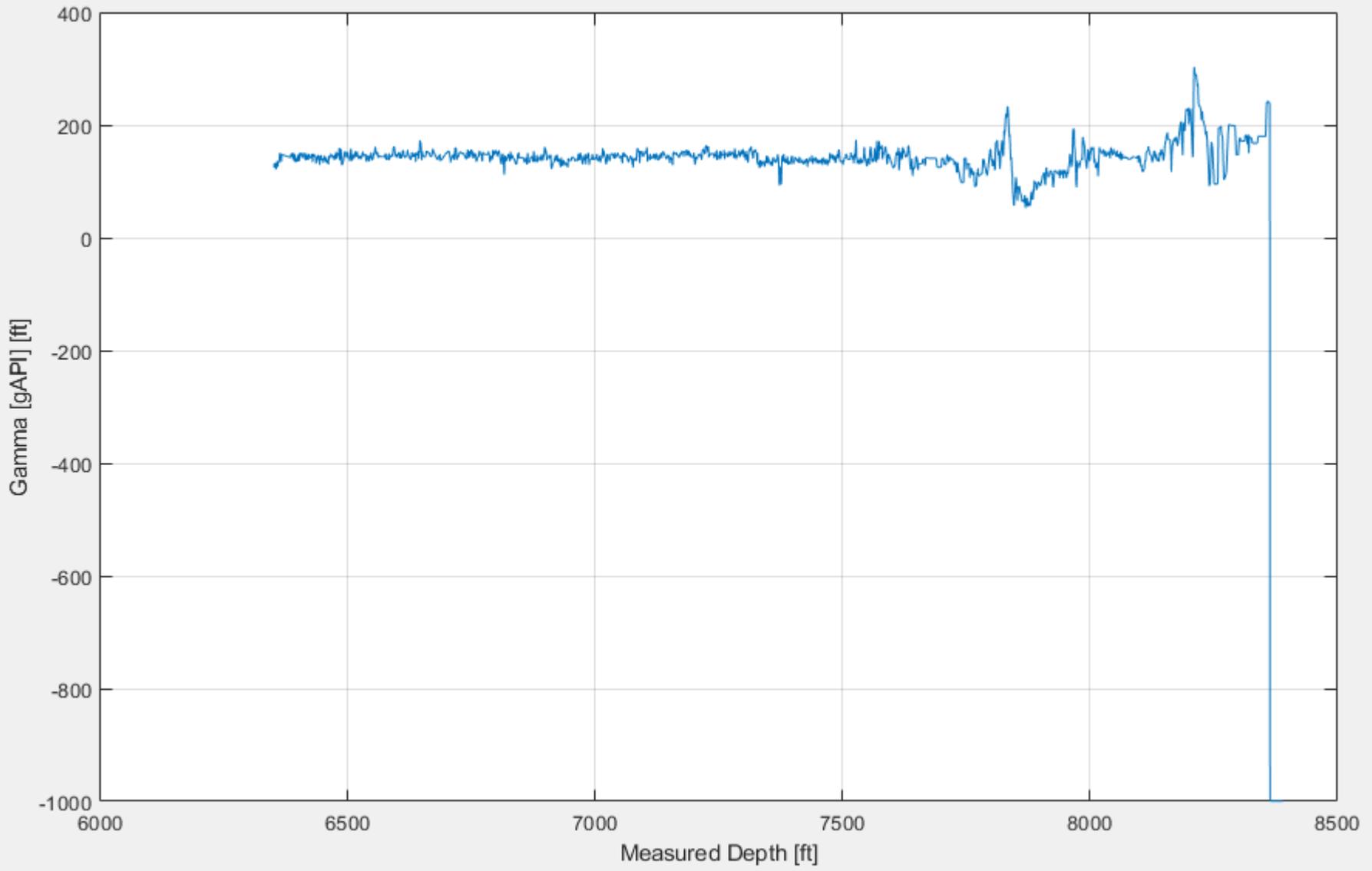
NNE Boggess 1H– Job Summary. Section01. 1-s TD curve Staircasing (Before Correction)



NNE Boggess 1H– Job Summary. Section01. WITS. Inclinacation & Azimuth.



NNE Boggess 1H– Job Summary. Section01. MWD. Gamma API.



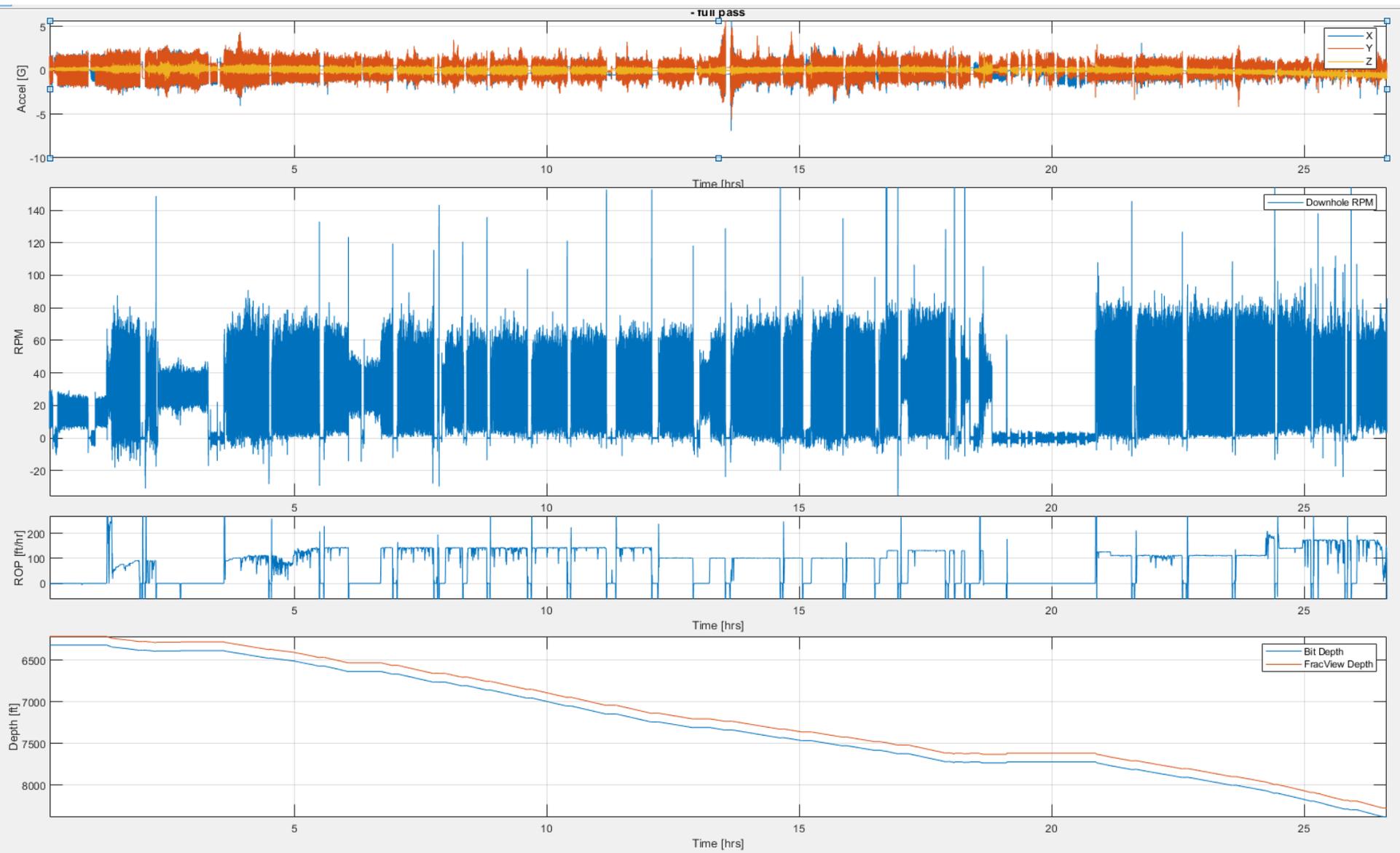
NNE Boggess 1H– Job Summary.

Section 01. Pass01 (main, drill)



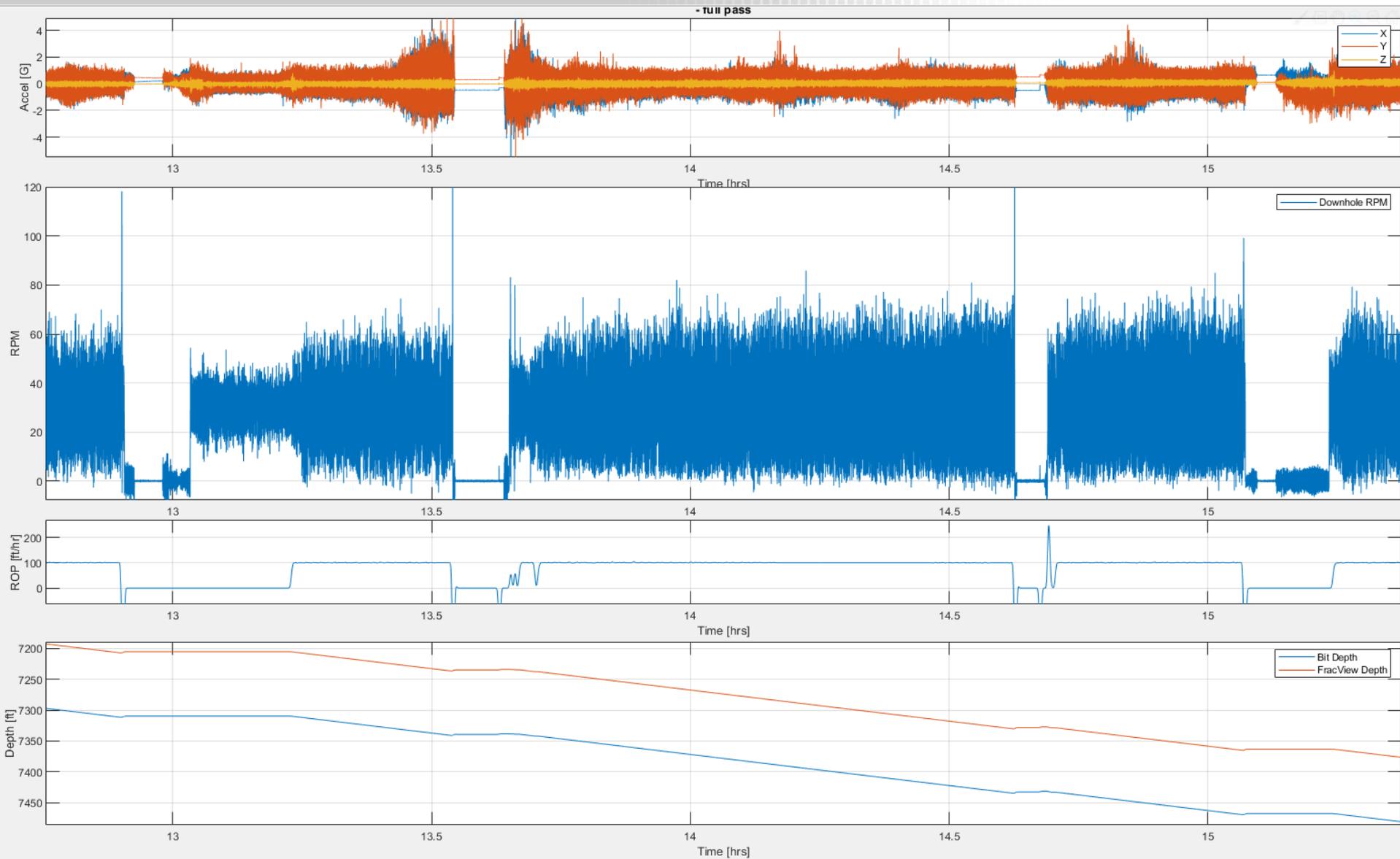
- **FV Sensor at 6,207 to 8,271 ft**
- **FV Sensor to Bit Distance ~115 ft**
- **Severe Stick Slip**

NE Boggess 1H- Job Summary. Section01. Pass01. Motion Dynamics. Stick-Slip



NE Boggess 1H- Job Summary.

Section01. Pass01. Motion Dynamics (zoom)

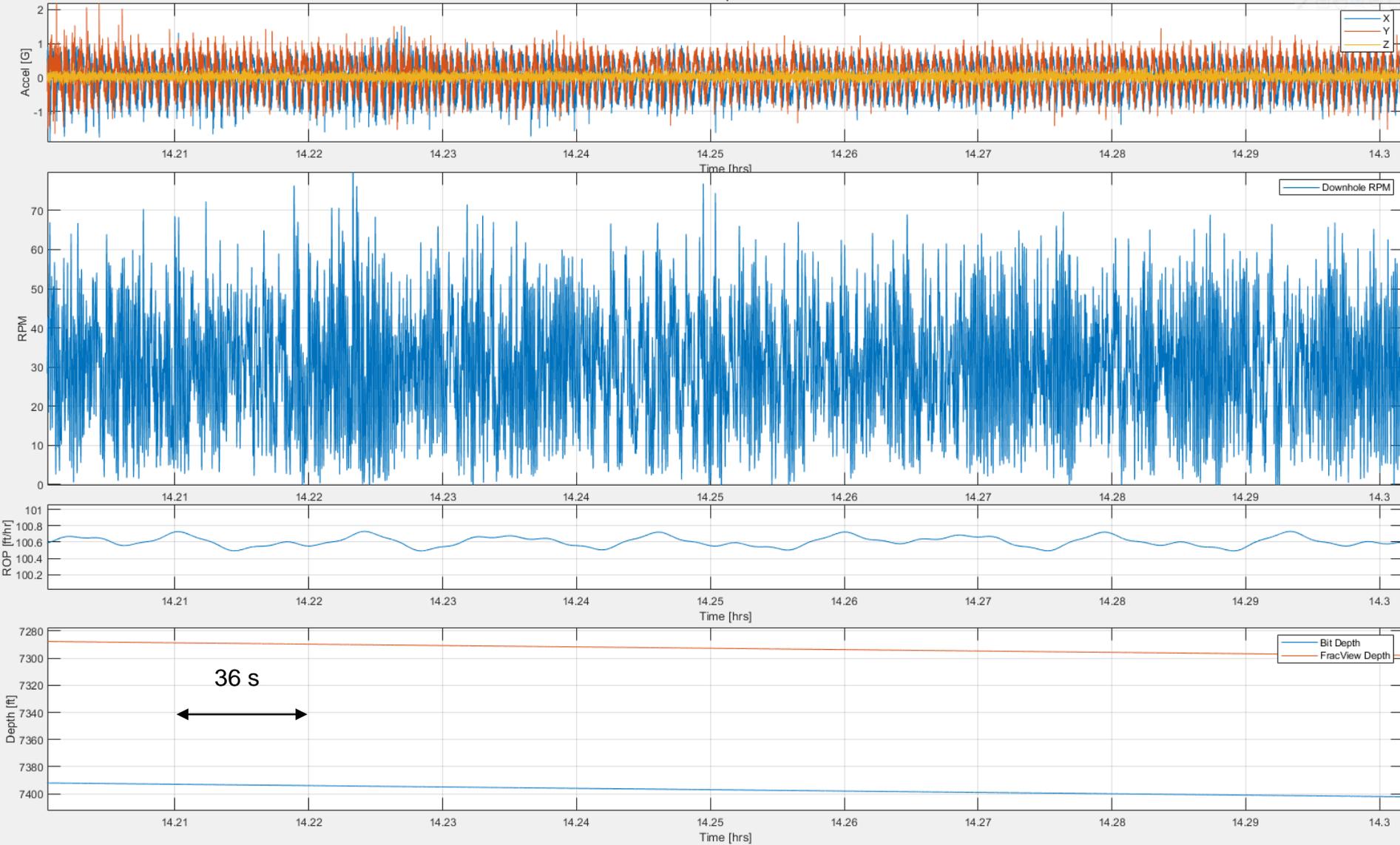


NE Boggess 1H- Job Summary.

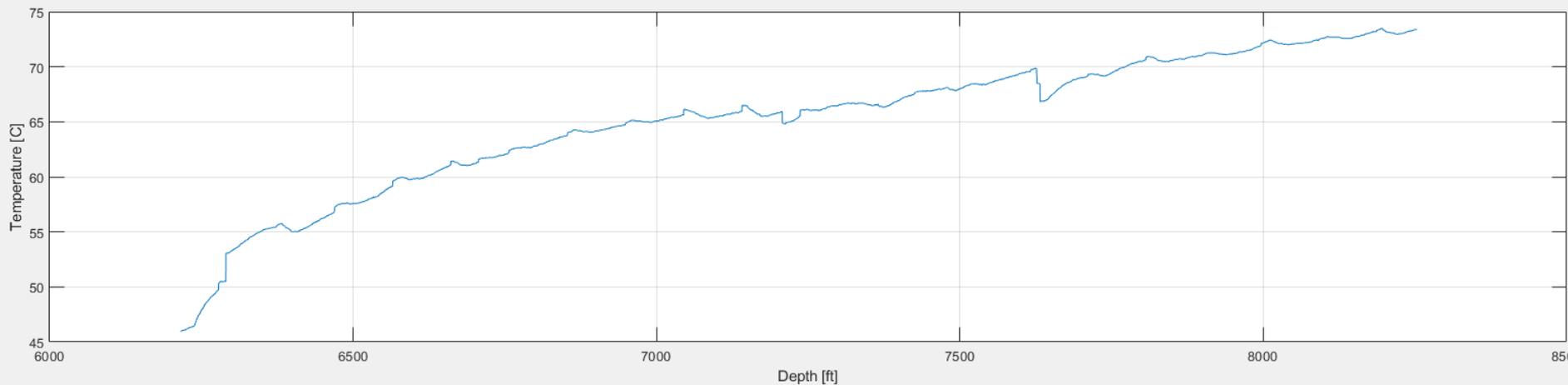
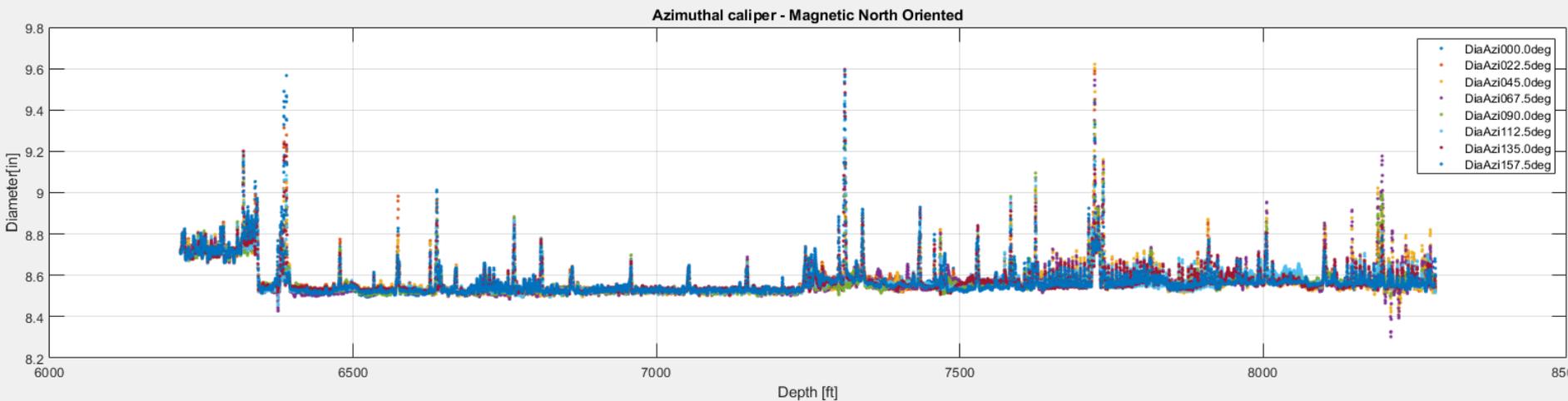
Section01. Pass01. Motion Dynamics (zoom)



- full pass



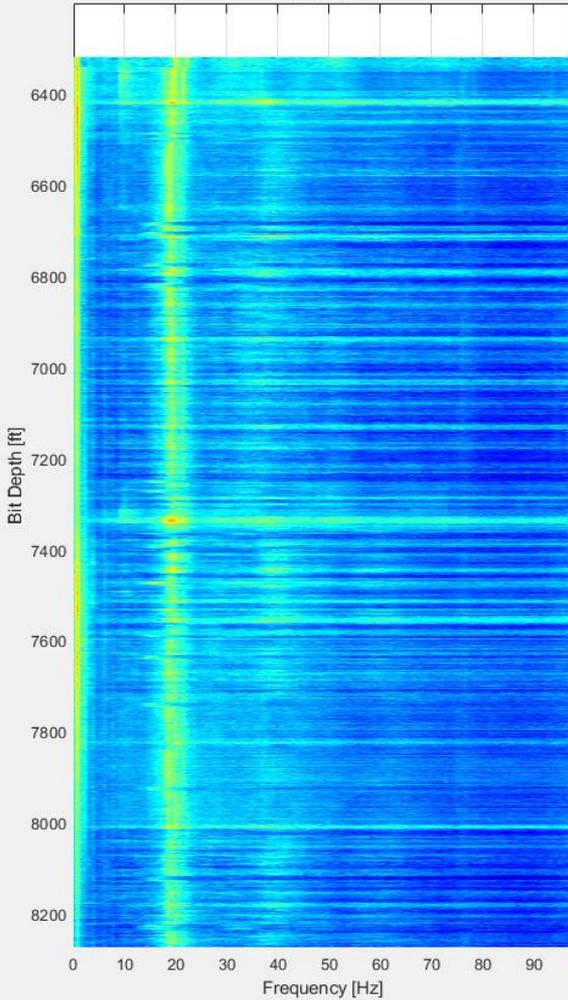
NE Boggess 1H– Job Summary. Section01. Pass01. Azimuthal Calipers.



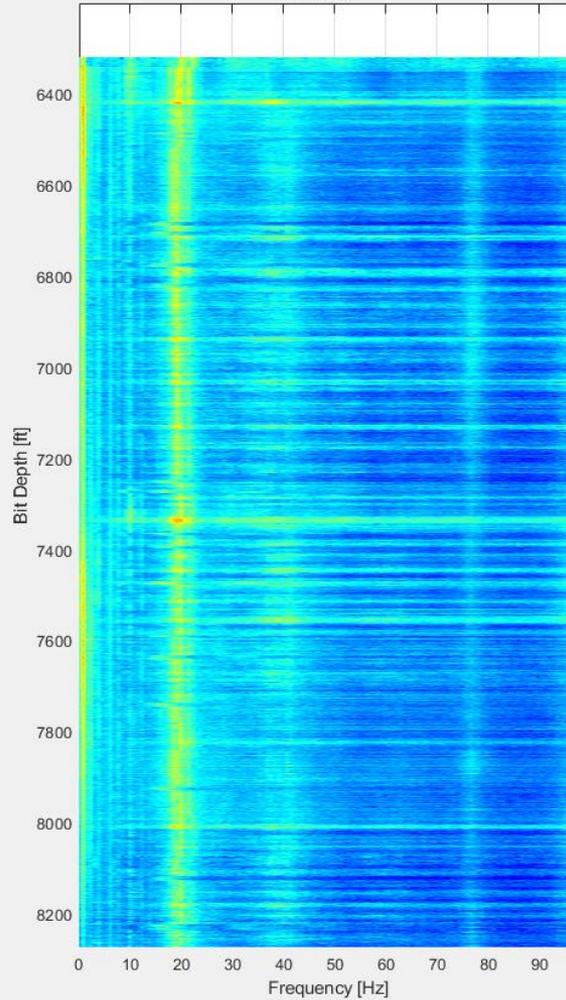
NNE Boggess 1H– Job Summary. Section01. Pass01. PSD



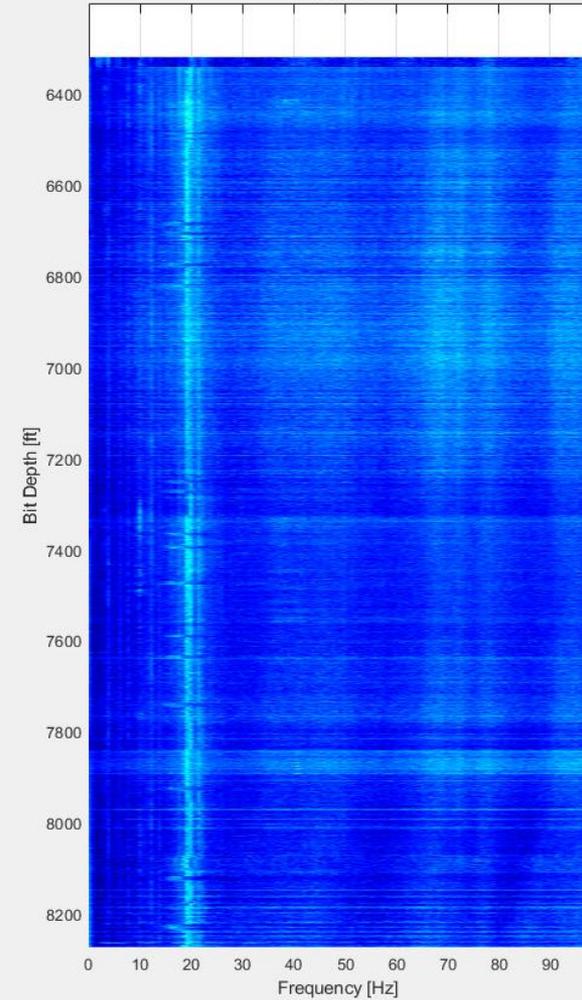
X accel



Y accel



Z accel



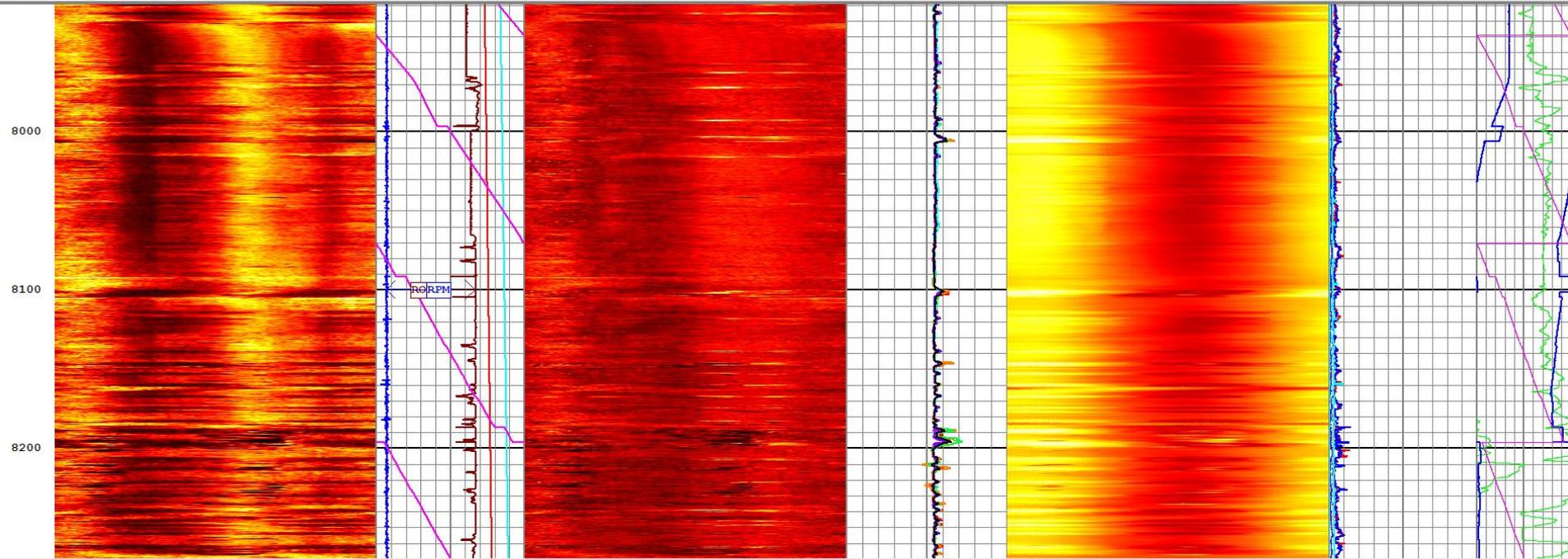
NE Boggress 1H– Job Summary.

Section01. Pass01. BHC HS S1 VS S2



Boggress 1H_Section01_Pass01FracView_AmplitudeMerged_DB_HS_BHC_S12_LIN_wAux.dlls - Schlumberger DataView - [Boggress using FV_2AMP_Caliper_RPMROP_AzimuthCa]

File Edit View Window Help



0.000	0.000
0.078	0.156
0.156	0.312
0.234	0.468
0.312	0.624
0.390	0.780
0.468	0.936
0.546	1.092
0.624	1.248
0.702	1.404
0.780	1.560
0.858	1.716
0.936	1.872
1.000	2.000

FV S1 HS BHC Merged Tx12 (AmpMrgS1)
0

ROP (ROP)		
-500	ft/hr	500
RPM_Filtered (RPM)		
0	rpm	500
Hole Deviation (DEVI)		
0	deg	100
Hole Azimuth (HAZI)		
0	deg	360
Time (UT)		

0.000	0.000
0.078	0.156
0.156	0.312
0.234	0.468
0.312	0.624
0.390	0.780
0.468	0.936
0.546	1.092
0.624	1.248
0.702	1.404
0.780	1.560
0.858	1.716
0.936	1.872
1.000	2.000

FV S2 HS BHC Merged Tx12 (AmpMrgS2)
0

BH Diameter 0deg (CalAzi1)		
6.8	in	10
BH Diameter 22.5deg (CalAzi2)		
6.8	in	10
BH Diameter 45deg (CalAzi3)		
6.8	in	10
BH Diameter 67.5deg (CalAzi4)		

0.000	0.000
0.078	0.156
0.156	0.312
0.234	0.468
0.312	0.624
0.390	0.780
0.468	0.936
0.546	1.092
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0.780	1.560
0.858	1.716
0.936	1.872
1.000	2.000

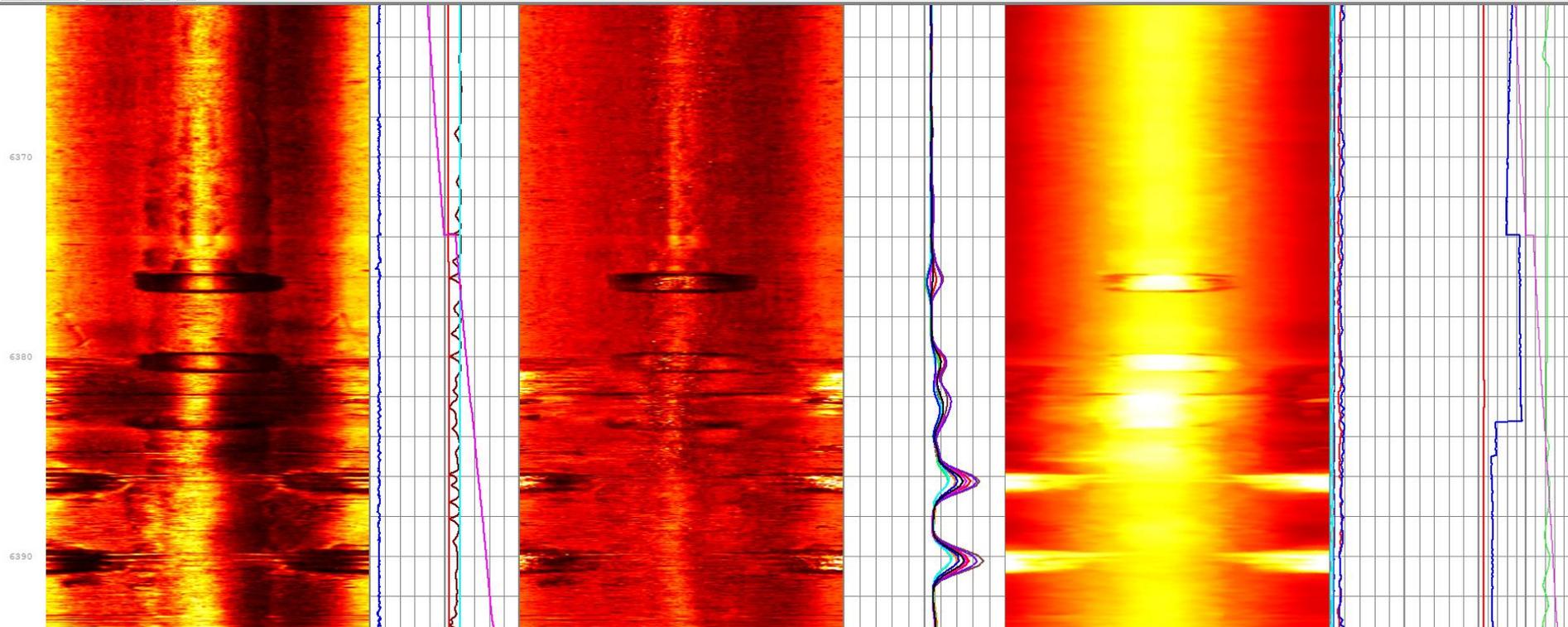
FV S1 HS Caliper Image (Radius) (CalMrgS1)
0

Shock X Accel (SHOCKX)		GAMMA RAY API (GR)	
0	g	25	0 API 200
Shock Y Accel (SHOCKY)		Tool Temperature (TEMPC)	
0	g	25	50 C 150
Shock Z Accel (SHOCKZ)		Exposure Time (TIMEE)	
0	g	25	1000 s 3000
RMS X Accel (VIBRX)			
0	g	25	
RMS Y Accel (VIBRY)			

NNE Boggess 1H– Job Summary. Section01. Pass01. BHC MAG S1 VS S2



Boggess 1H_Section01_Pass01FracView_AmplitudeMerged_DB_MAG_BHC_S12_LIN_wAux.dlis - Schlumberger DataView - [Boggess using FV_2AMP_Caliper_RPMROP_AzimuthC]



0.000	0.075	0.150	0.225	0.300	0.375	0.450	0.525	0.600	0.675	0.750	0.825	0.900	0.975	1.000
FV S1 MAG BHC Merged Tx12 (AmpMrgS1)														
0														

ROP (ROP)		
-500	ft/hr	500
RPM_Filtered (RPM)		
0	rpm	500
Hole Deviation (DEVI)		
0	deg	100

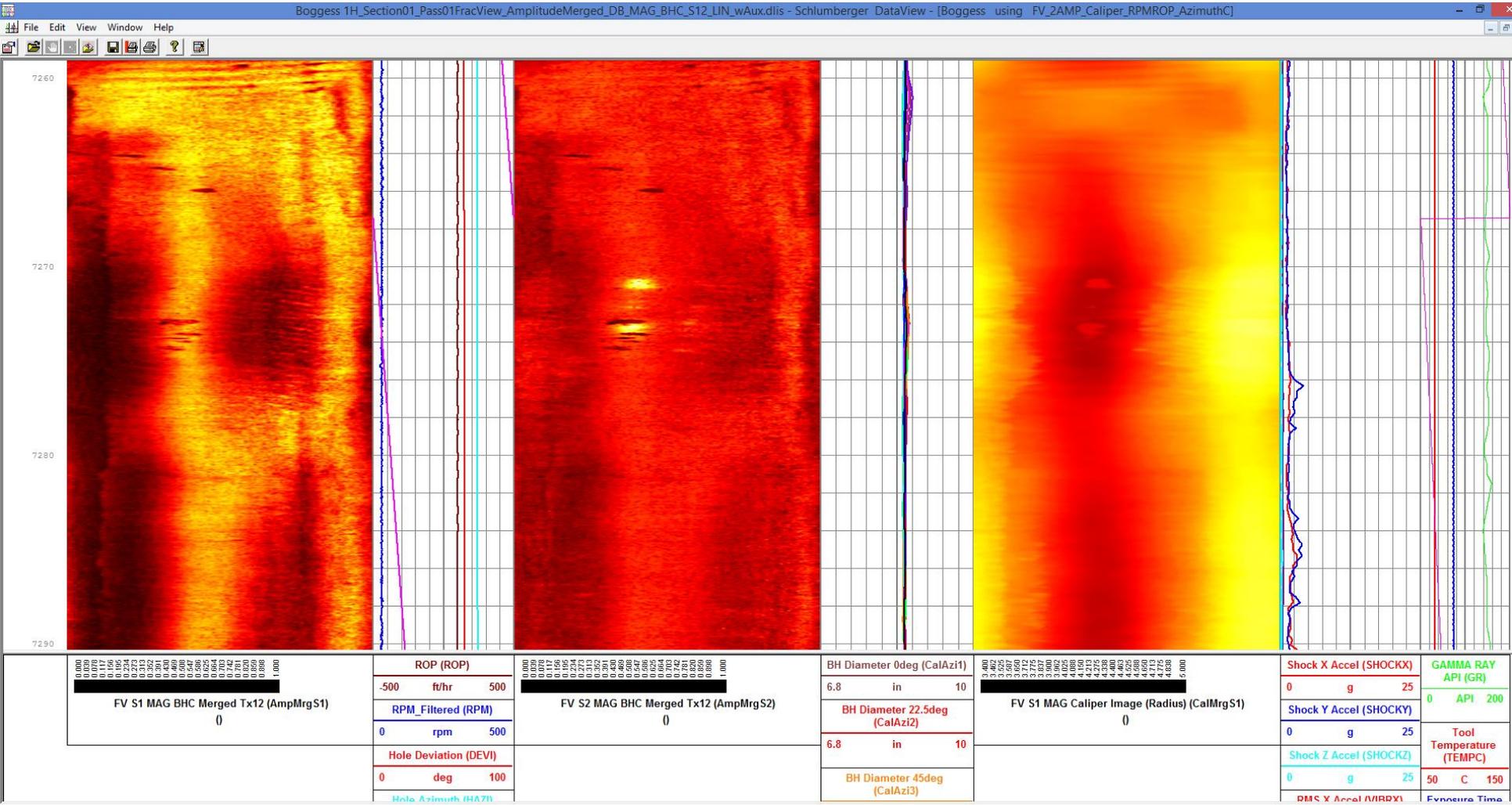
0.000	0.025	0.050	0.075	0.100	0.125	0.150	0.175	0.200	0.225	0.250	0.275	0.300	0.325	0.350	0.375	0.400	0.425	0.450	0.475	0.500	0.525	0.550	0.575	0.600	0.625	0.650	0.675	0.700	0.725	0.750	0.775	0.800	0.825	0.850	0.875	0.900	0.925	0.950	0.975	1.000
FV S2 MAG BHC Merged Tx12 (AmpMrgS2)																																								
0																																								

BH Diameter 0deg (CalAzi1)		
6.8	in	10
BH Diameter 22.5deg (CalAzi2)		
6.8	in	10
BH Diameter 45deg		

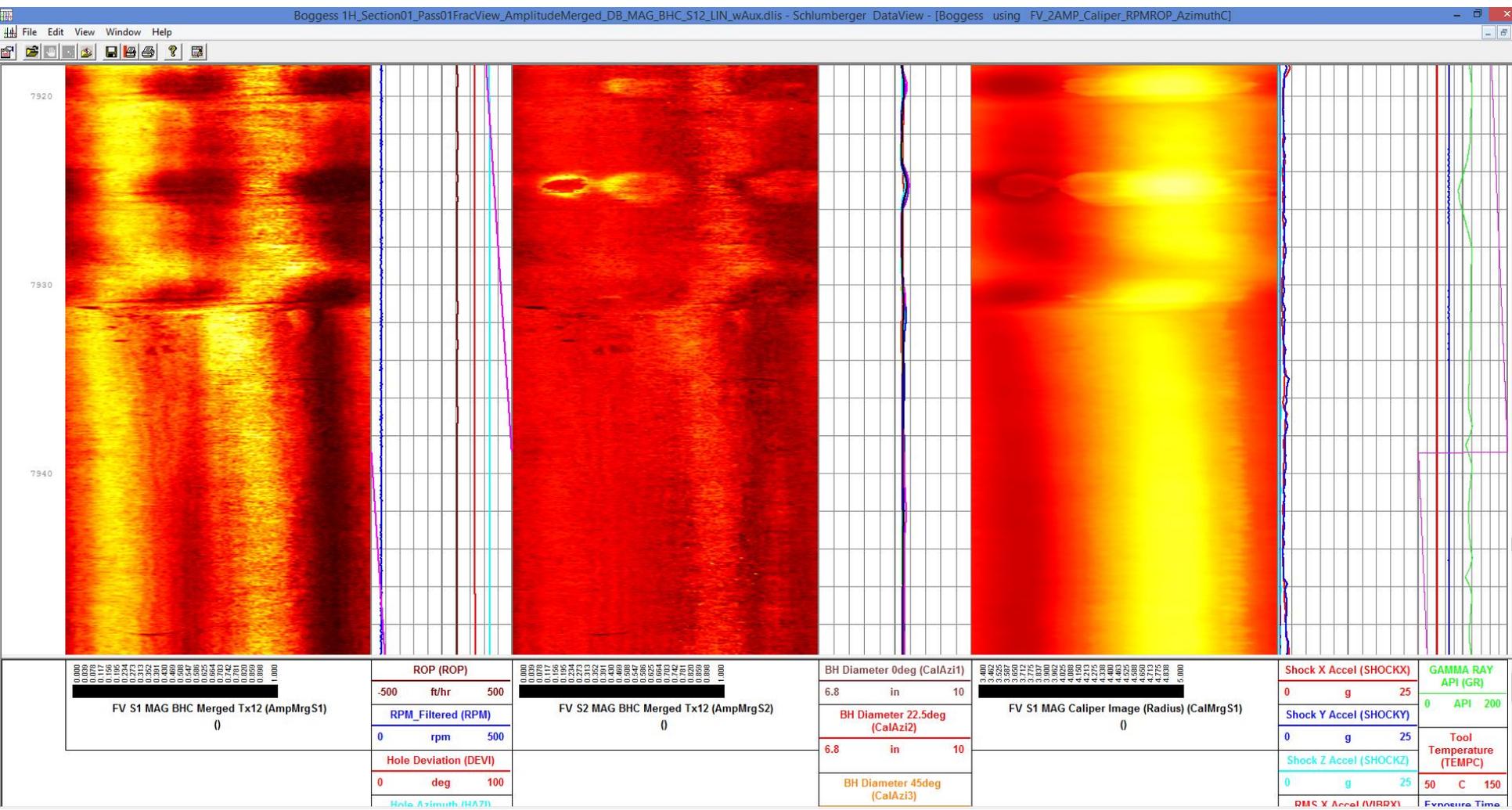
3.462	3.625	3.787	3.950	4.113	4.276	4.439	4.602	4.765	4.928	5.000
FV S1 MAG Caliper Image (Radius) (CalMrgS1)										
0										

Shock X Accel (SHOCKX)			GAMMA RAY API (GR)		
0	g	25	0	API	200
Shock Y Accel (SHOCKY)			Tool Temperature (TEMPC)		
0	g	25			
Shock Z Accel (SHOCKZ)					
0	g	25	50	C	150

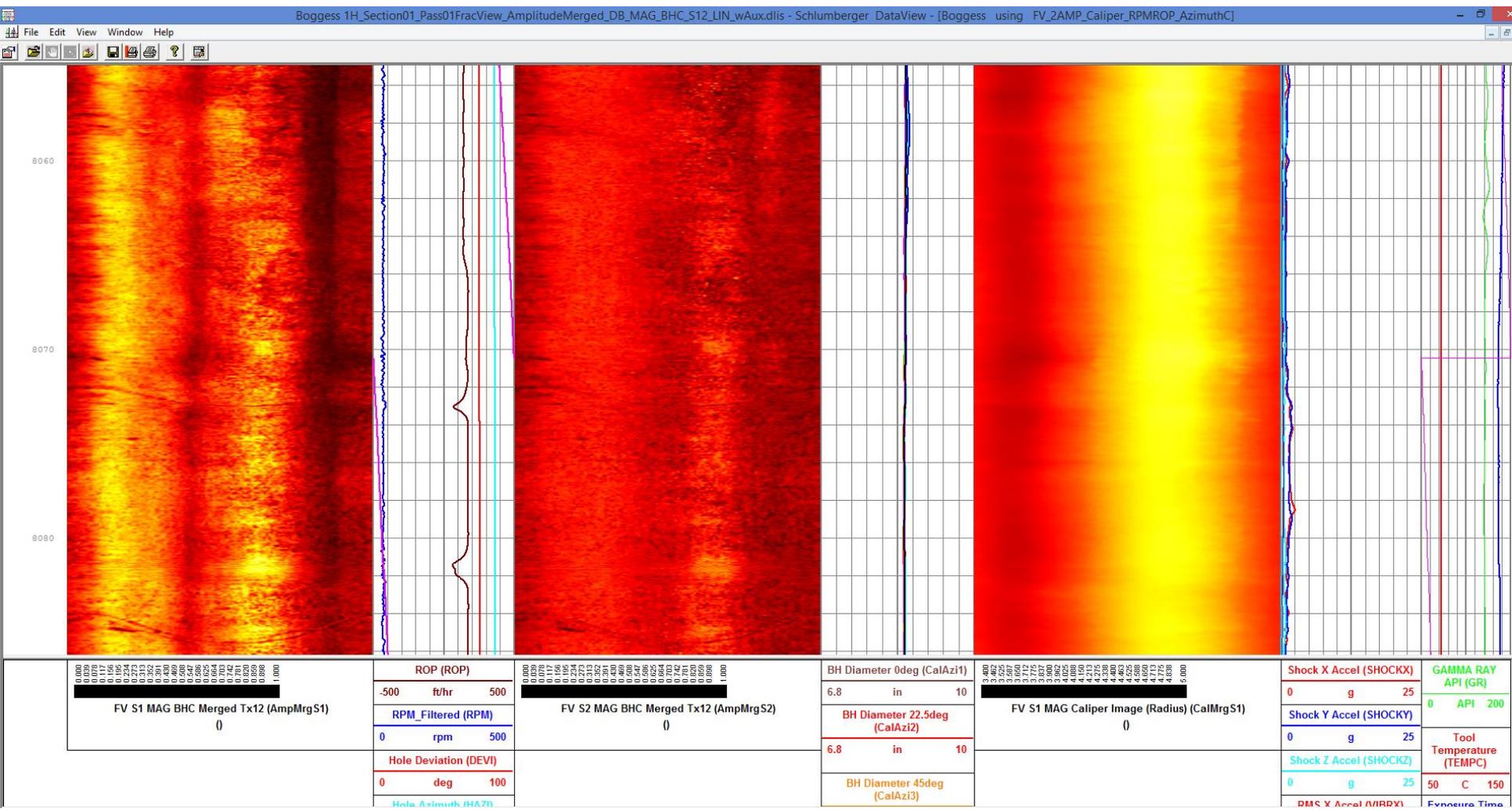
NE Boggess 1H– Job Summary. Section01. Pass01. BHC MAG S1 VS S2



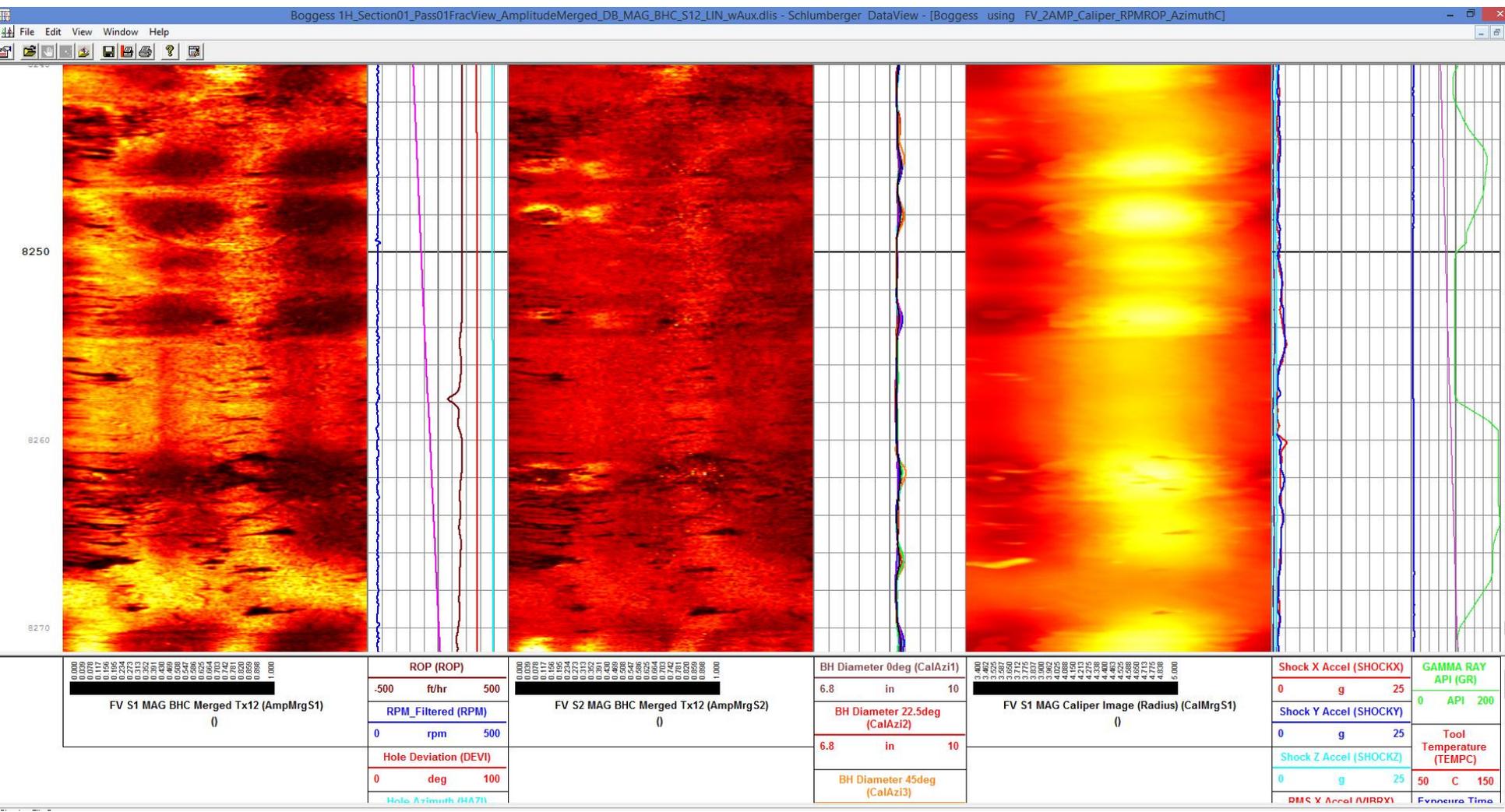
NE Boggess 1H- Job Summary. Section01. Pass01. BHC MAG S1 VS S2



NE Boggress 1H– Job Summary. Section01. Pass01. BHC MAG S1 VS S2



NNE Boggess 1H– Job Summary. Section01. Pass01. BHC MAG S1 VS S2

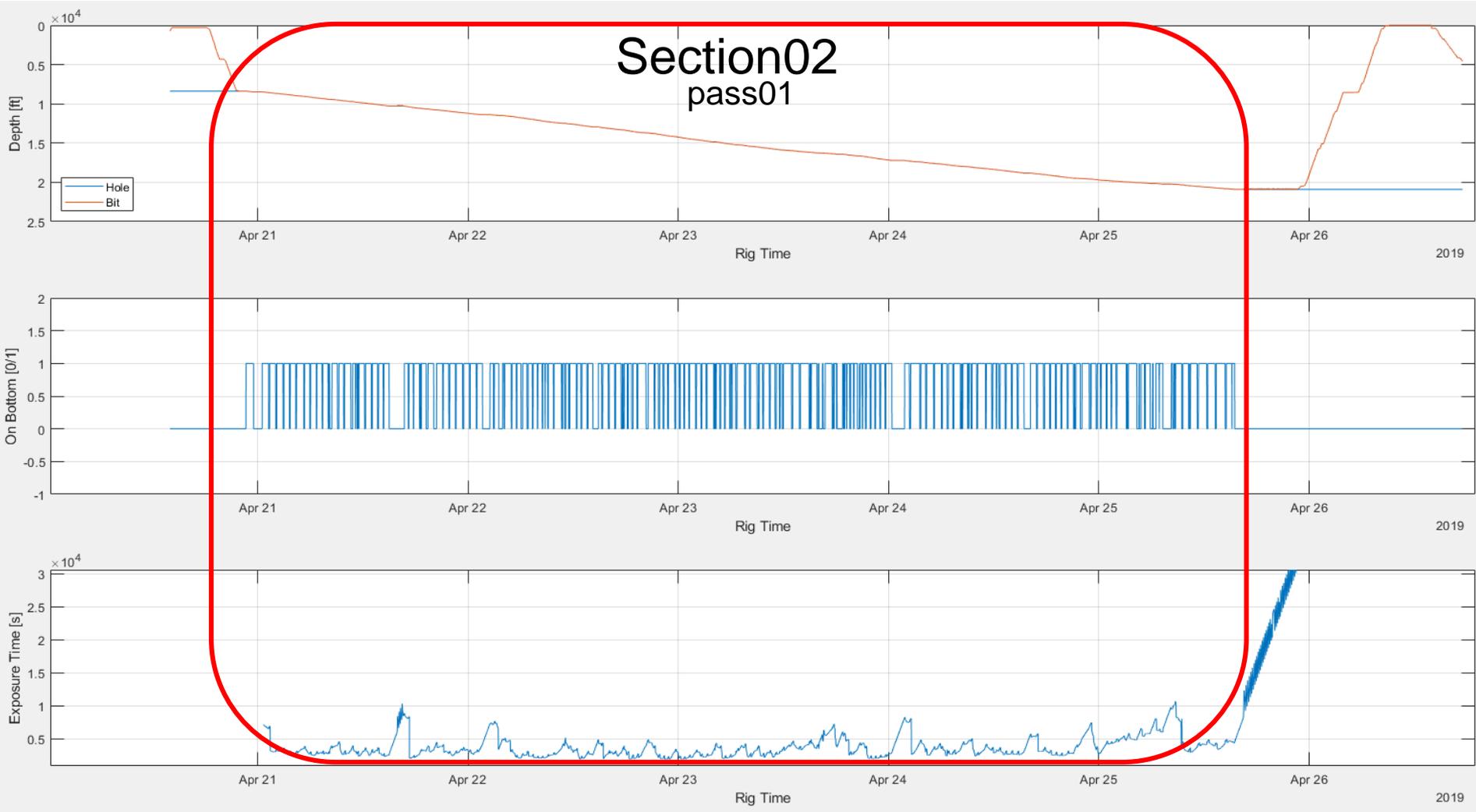


NNE Boggess 1H– Job Summary. Outline.

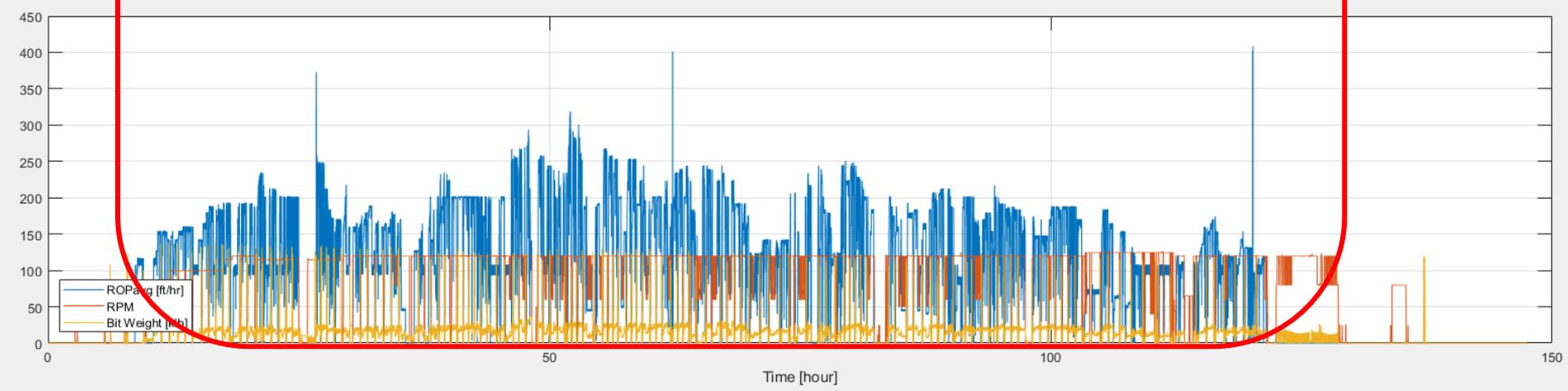
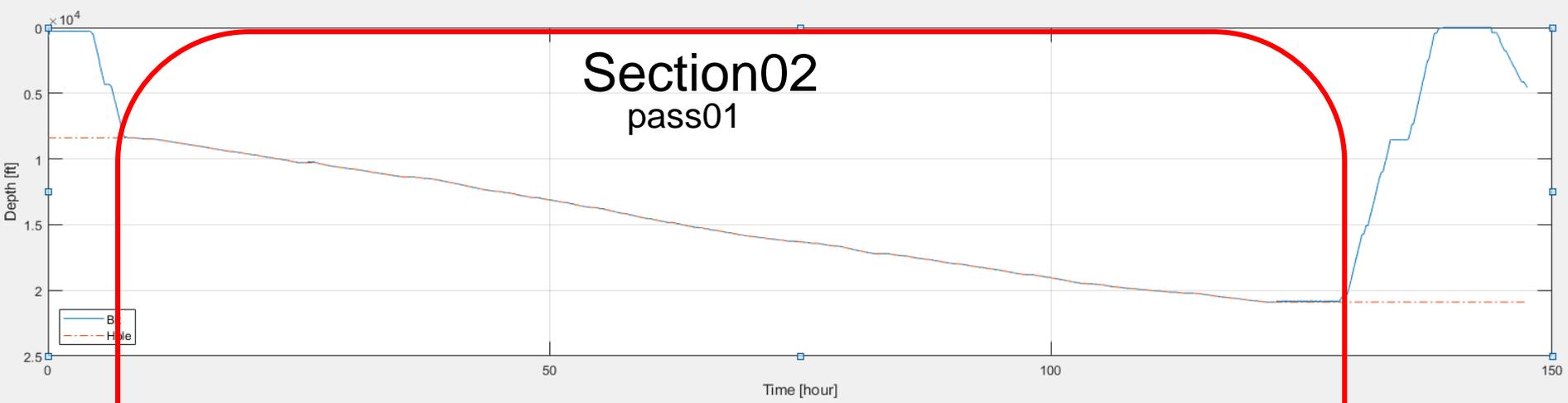


- **Section 02,**
 - **Pass01 (main drill)**

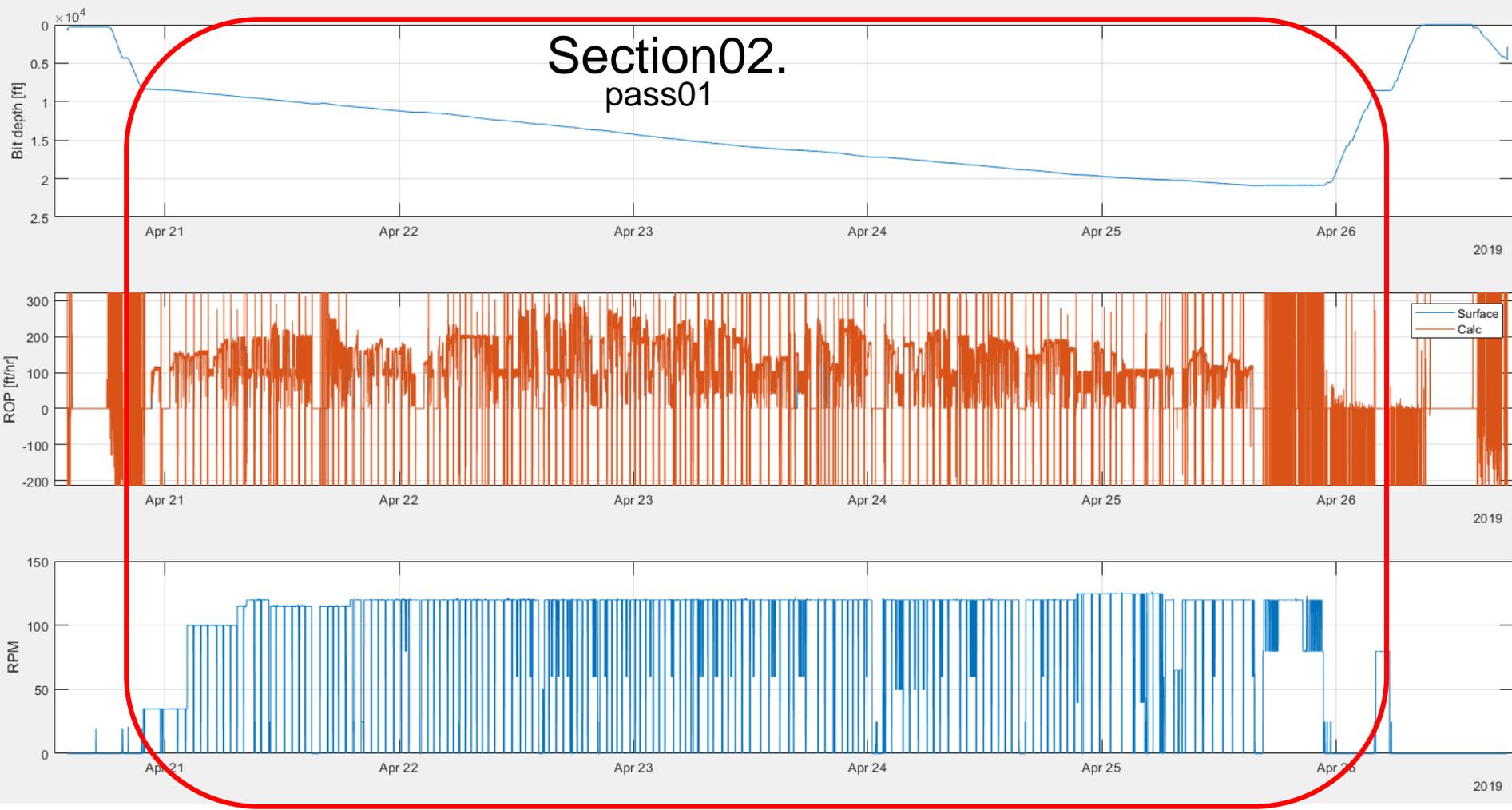
NNE Boggess 1H– Job Summary. Section02. Pason. On Bottom Status.



NNE Boggess 1H– Job Summary. Section02. Pass 01 (drill)

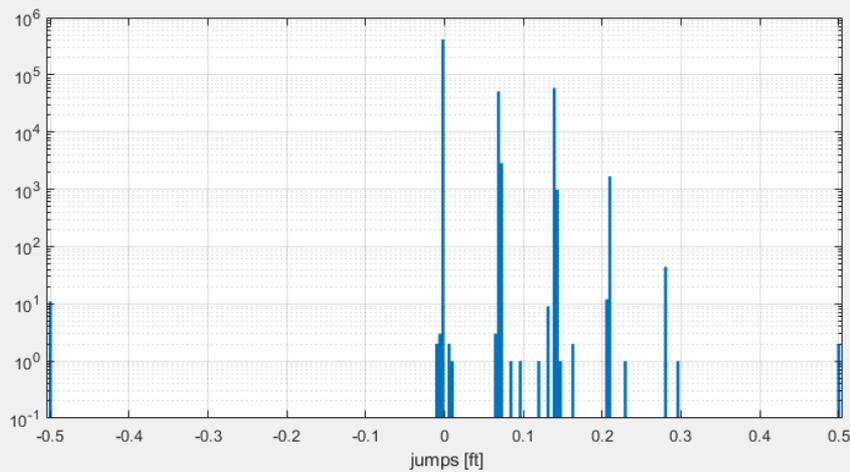
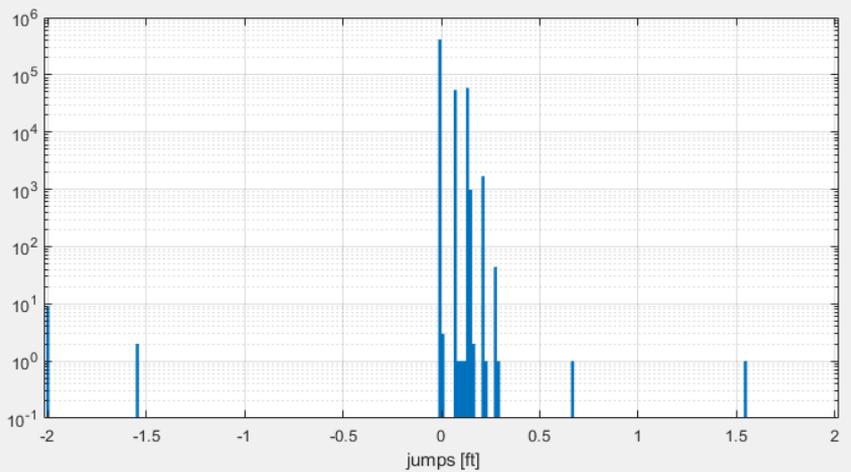
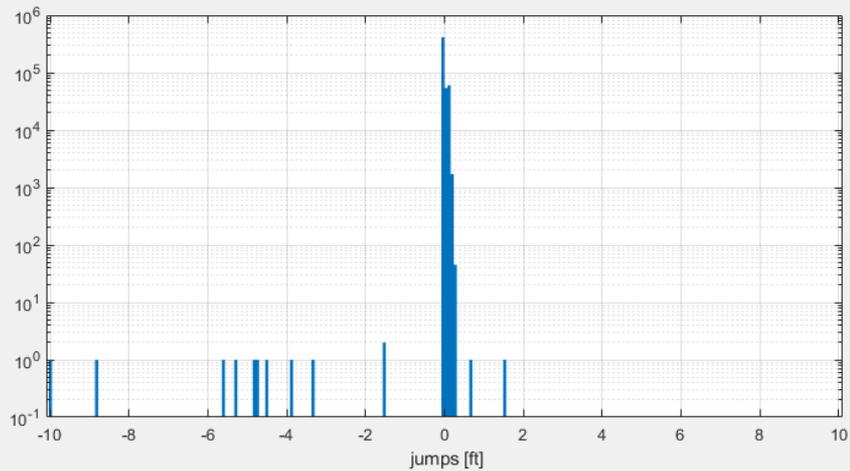
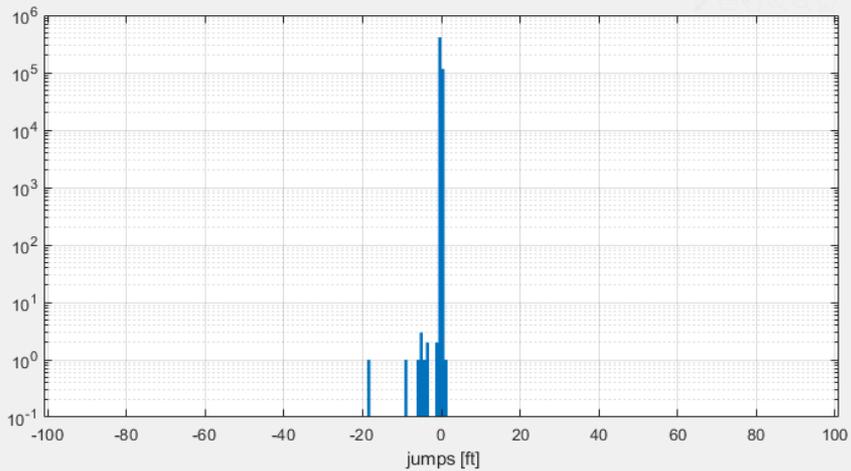


NE Boggess 1H– Job Summary. Section02. Pass 01 (drill)

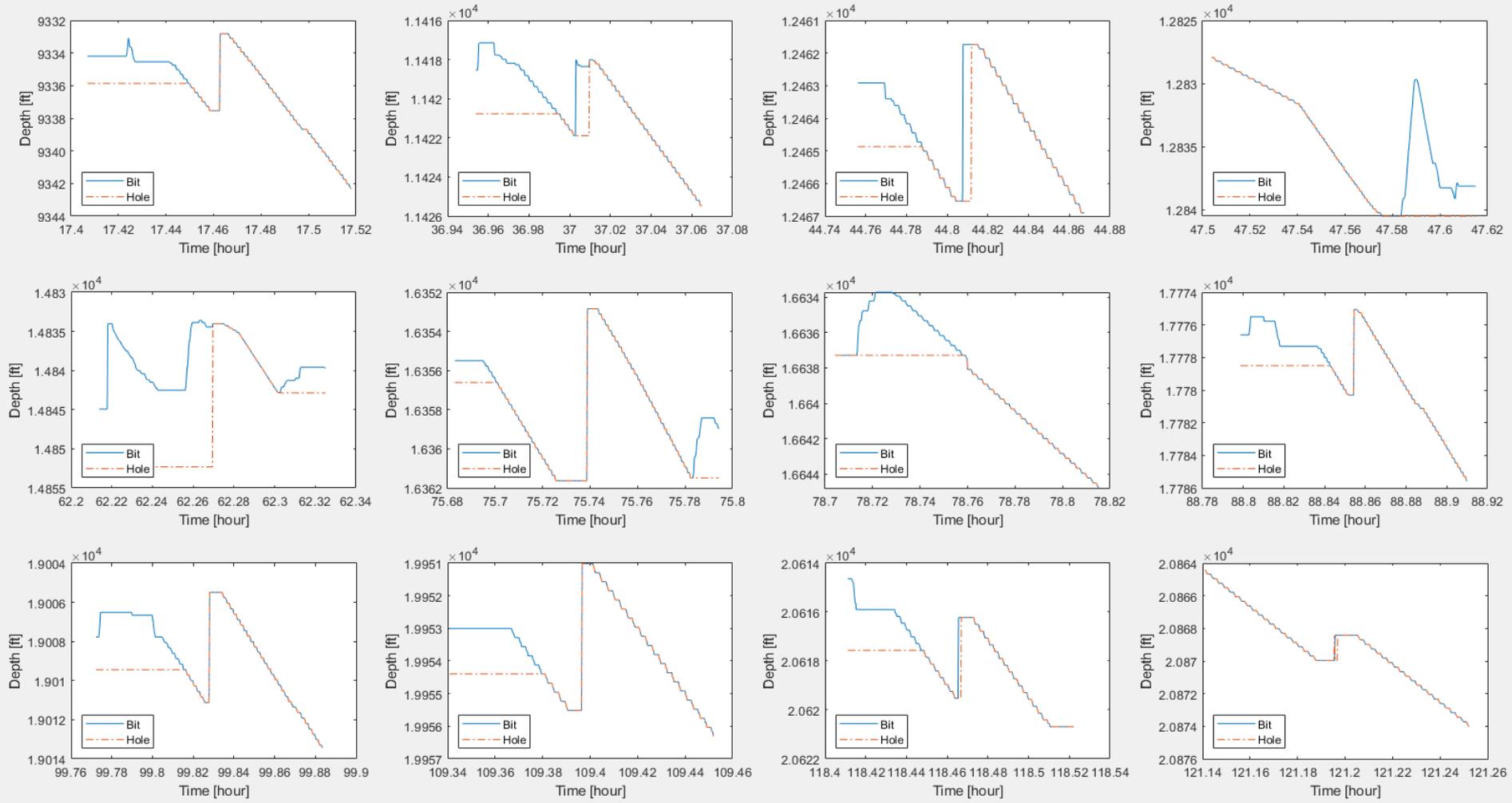


NEE Boggess 1H– Job Summary.

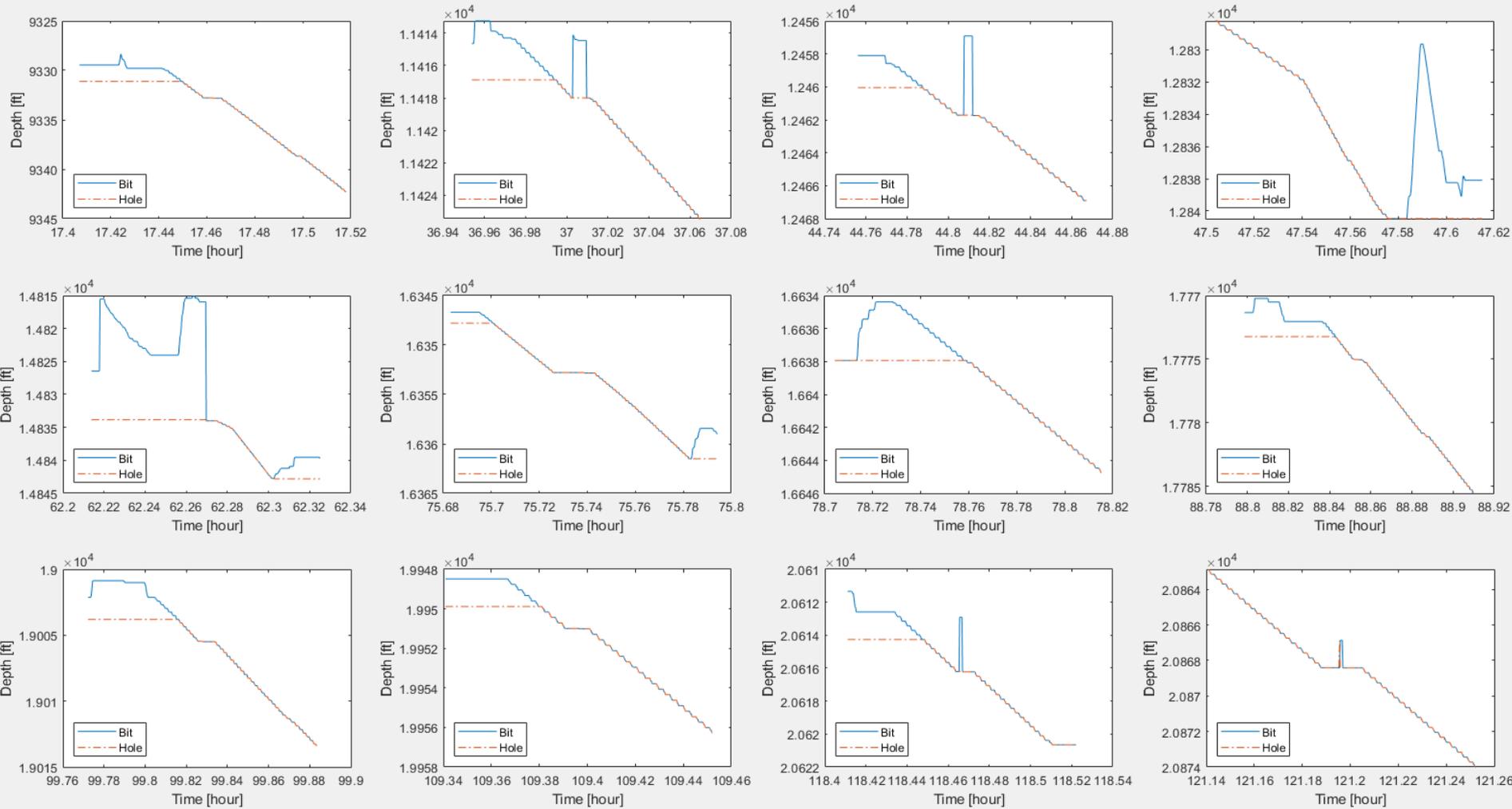
Section02. Pason. TD Hole Depth Jumps Histogram



NE Boggess 1H– Job Summary. Section02. Pason. Jumps >0.29 ft.

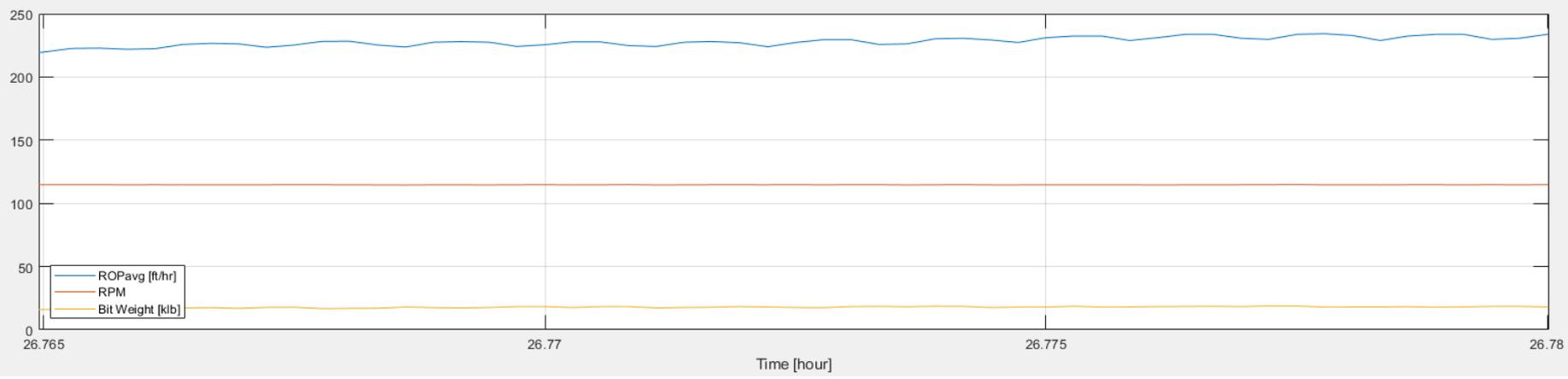
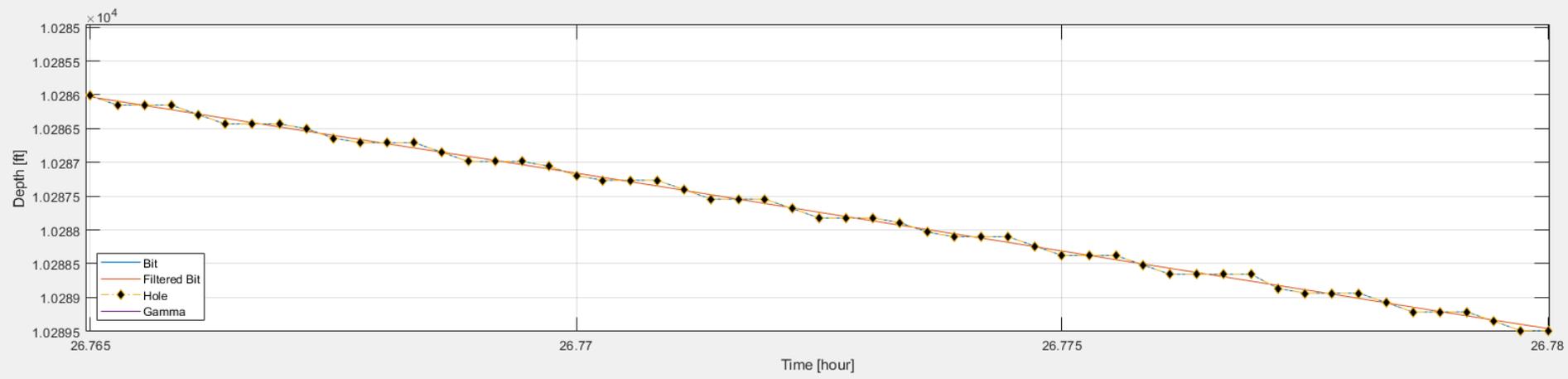


NE Boggess 1H– Job Summary. Section02. Pason. Tracer Jumps Fixed.



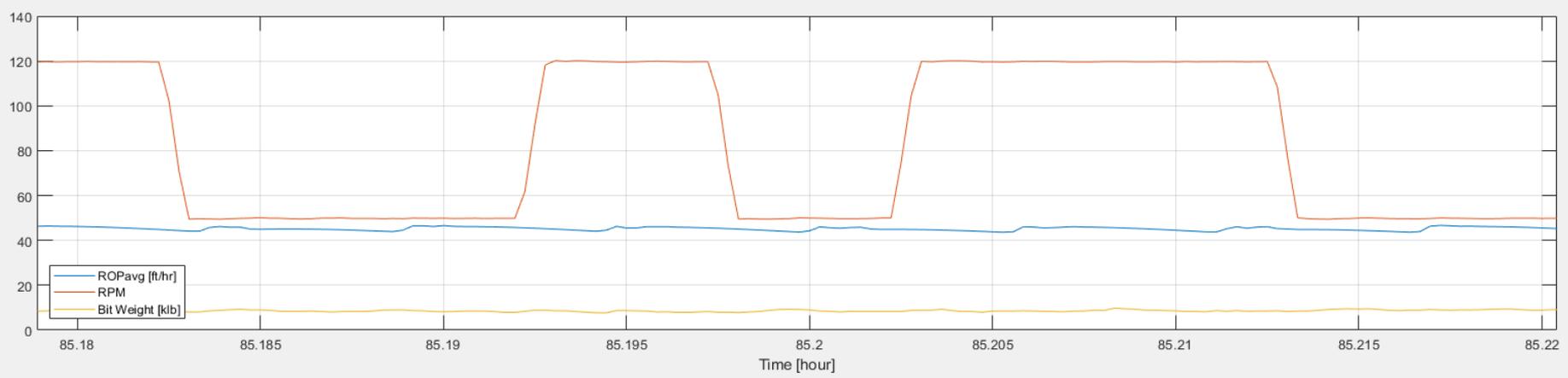
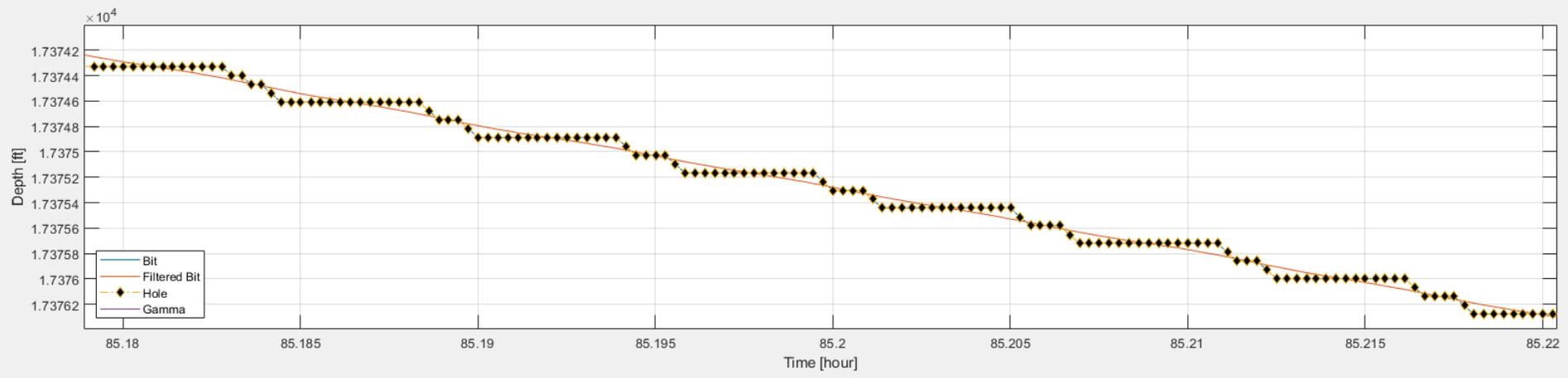
NNE Boggess 1H– Job Summary.

Section02. 1-s TD curve Staircasing (Before Correction)

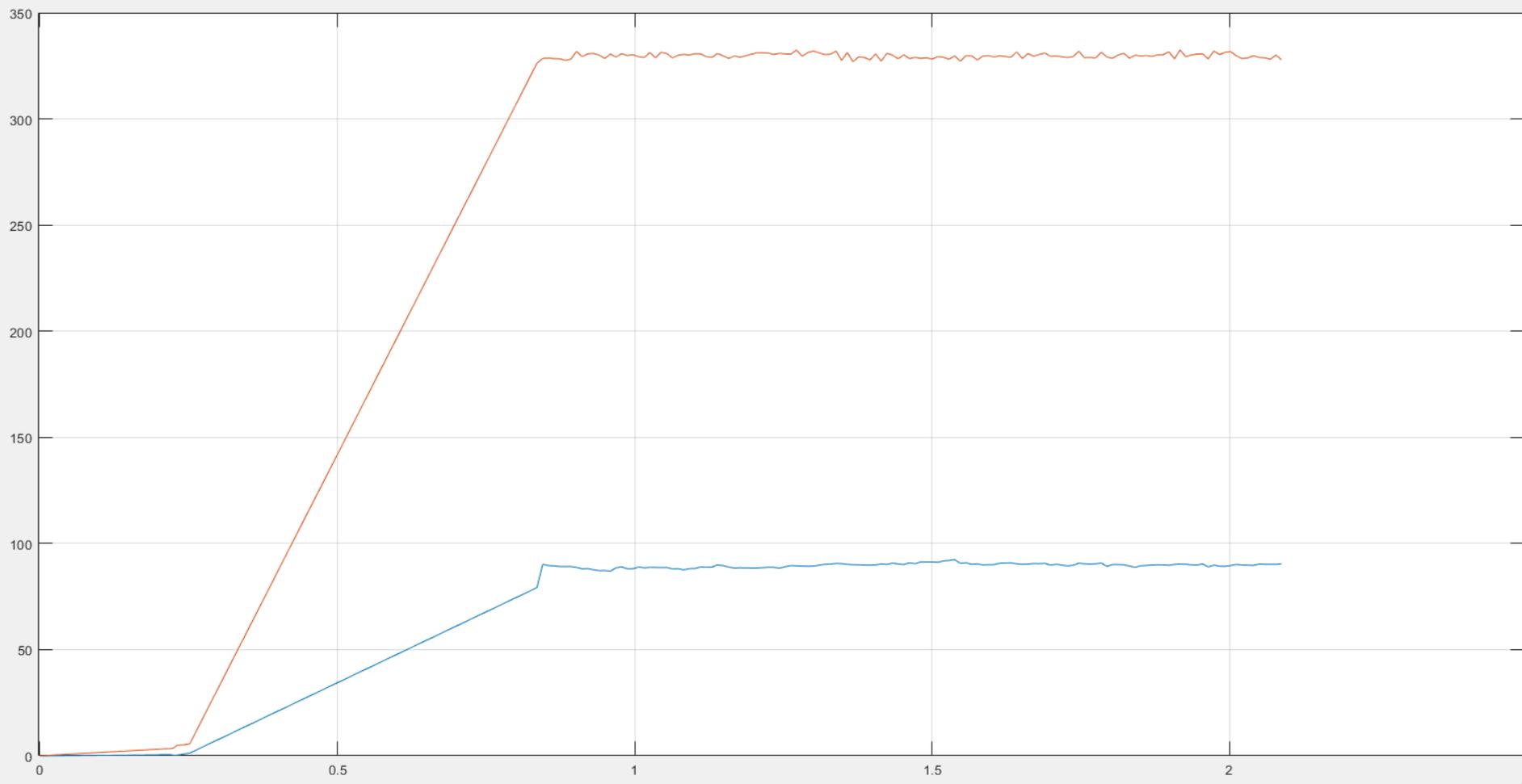


NNE Boggess 1H– Job Summary.

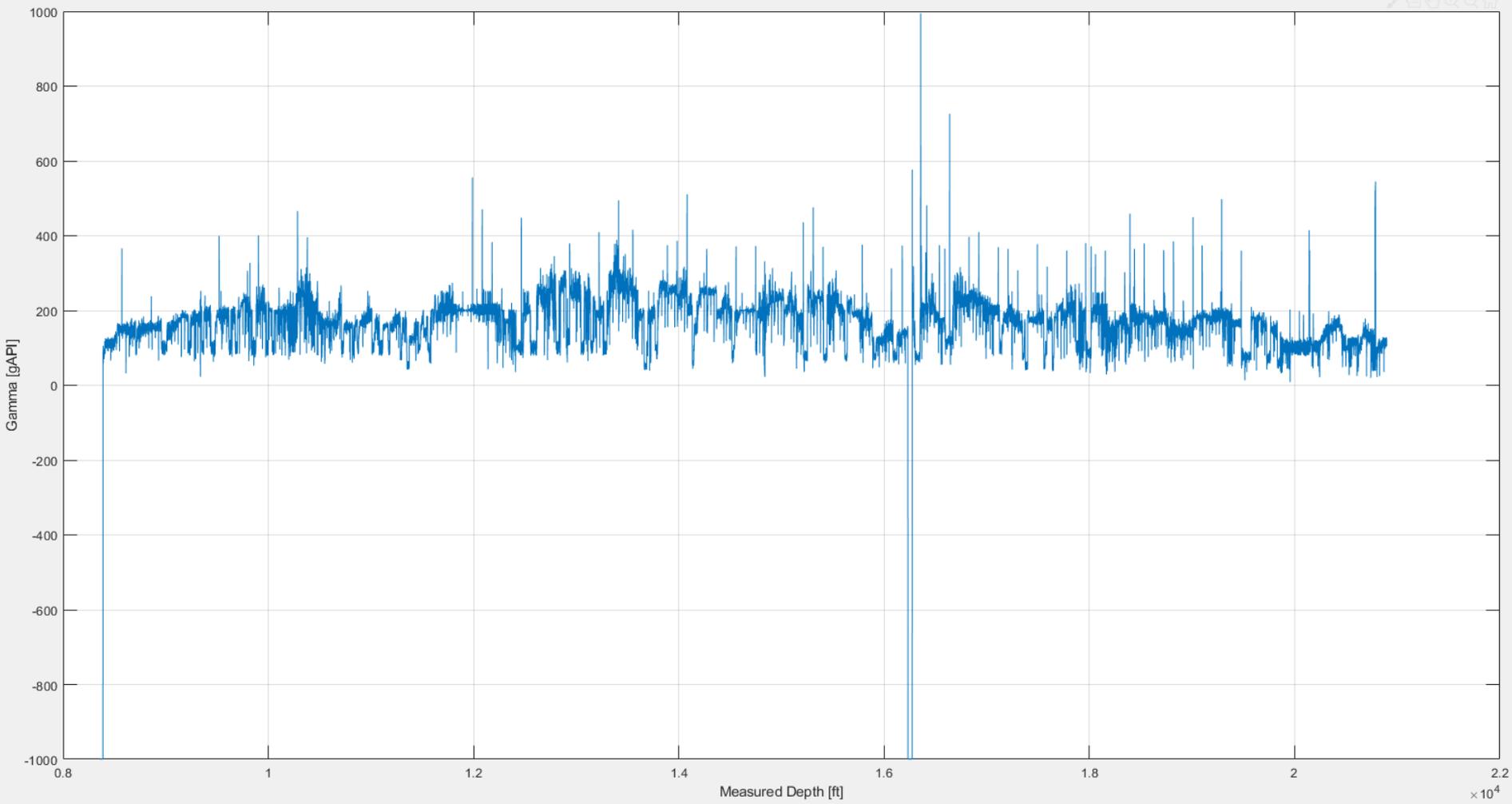
Section02. 1-s TD curve Staircasing (Before Correction)



NNE Boggess 1H– Job Summary. Section02. WITS. Inclination & Azimuth.



NNE Boggess 1H– Job Summary. Section02. MWD. Gamma API.



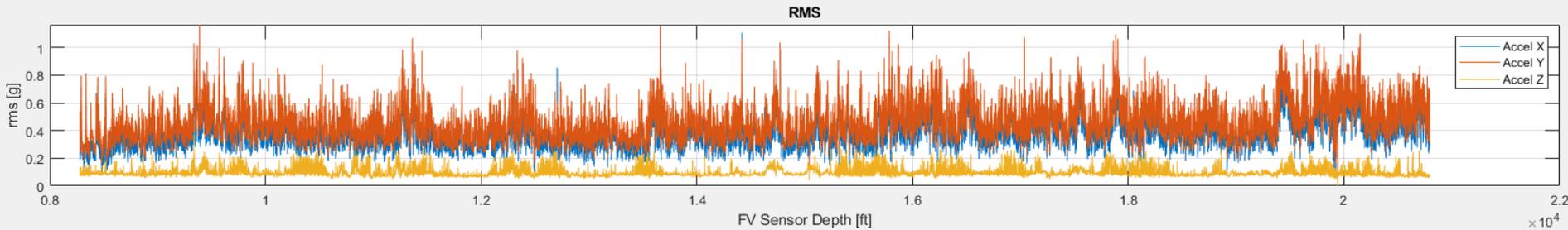
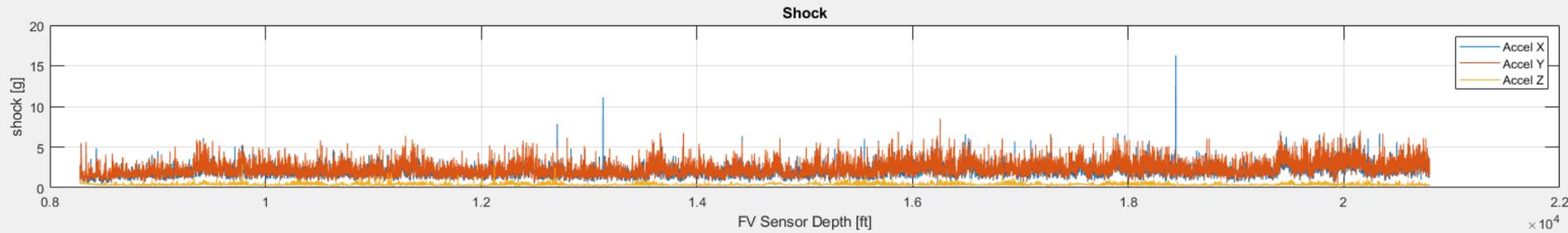
NNE Boggess 1H– Job Summary.

Section 02. Pass01 (main, drill)

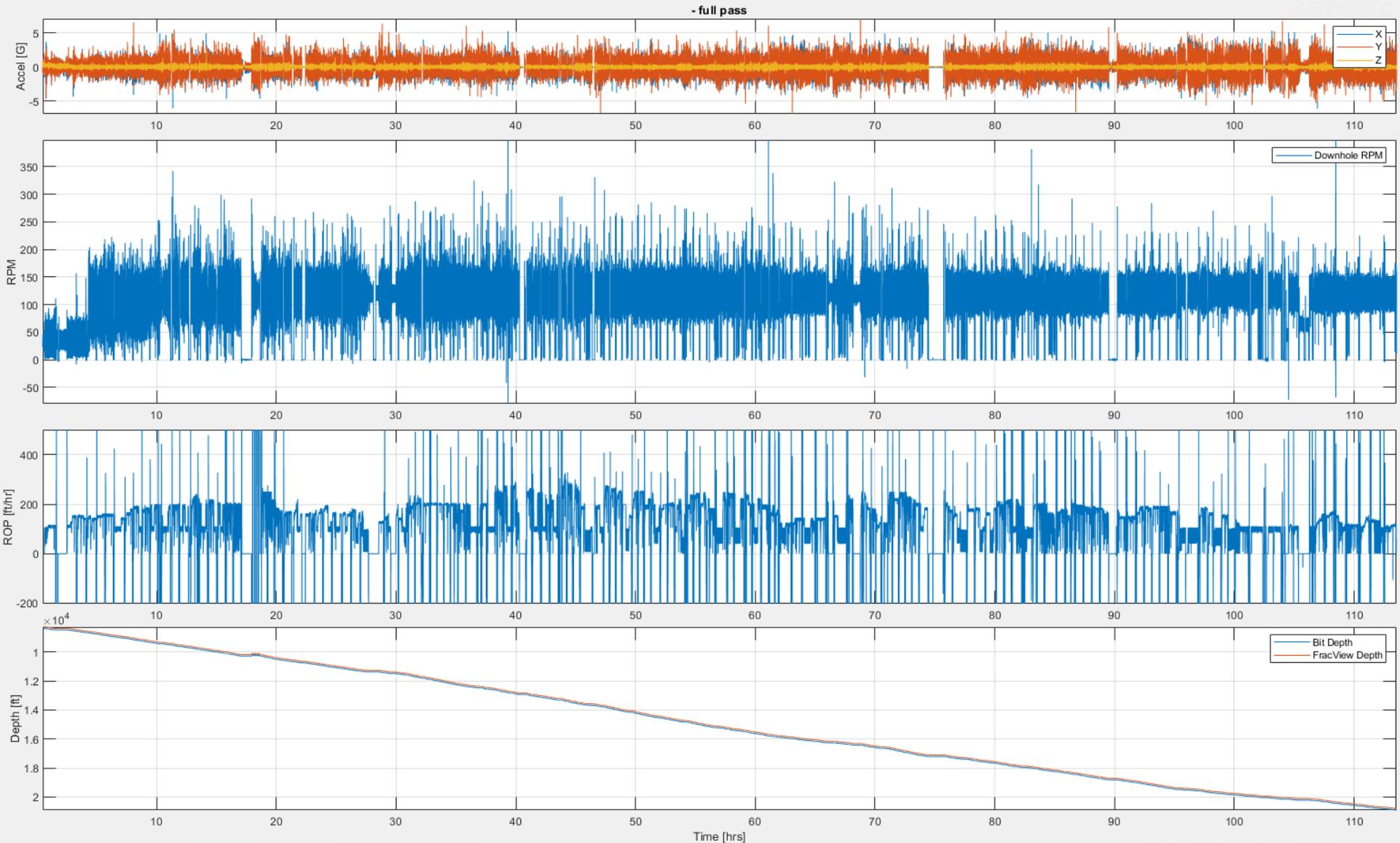


- **FV Sensor at 8,280 to 20,792 ft**
- **FV Sensor to Bit Distance ~104 ft**
- **Mild Stick Slip**

NNE Boggess 1H– Job Summary. Section02. Pass01. Shock& Vibe

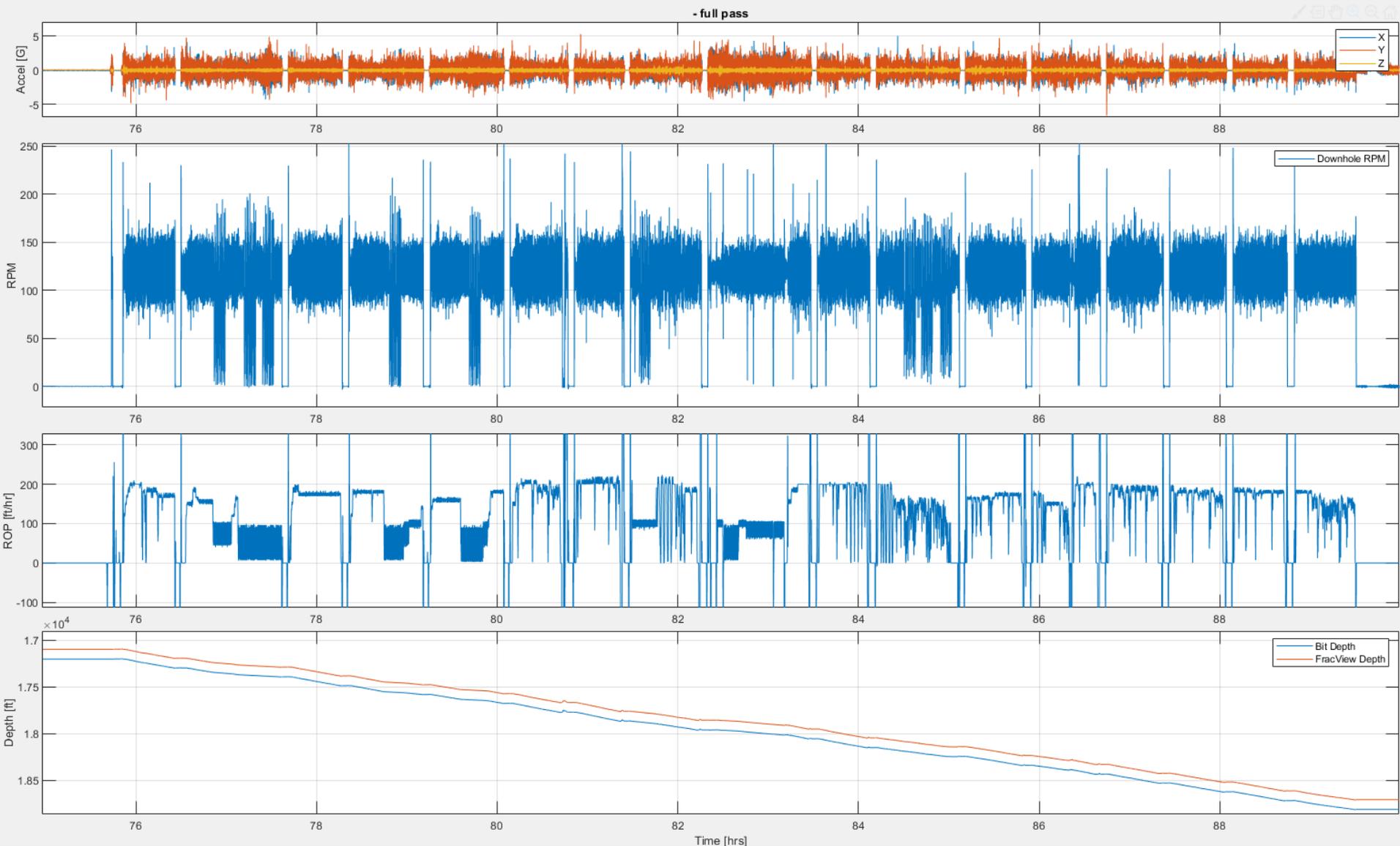


NE Boggess 1H– Job Summary. Section02. Pass01. Motion Dynamics.



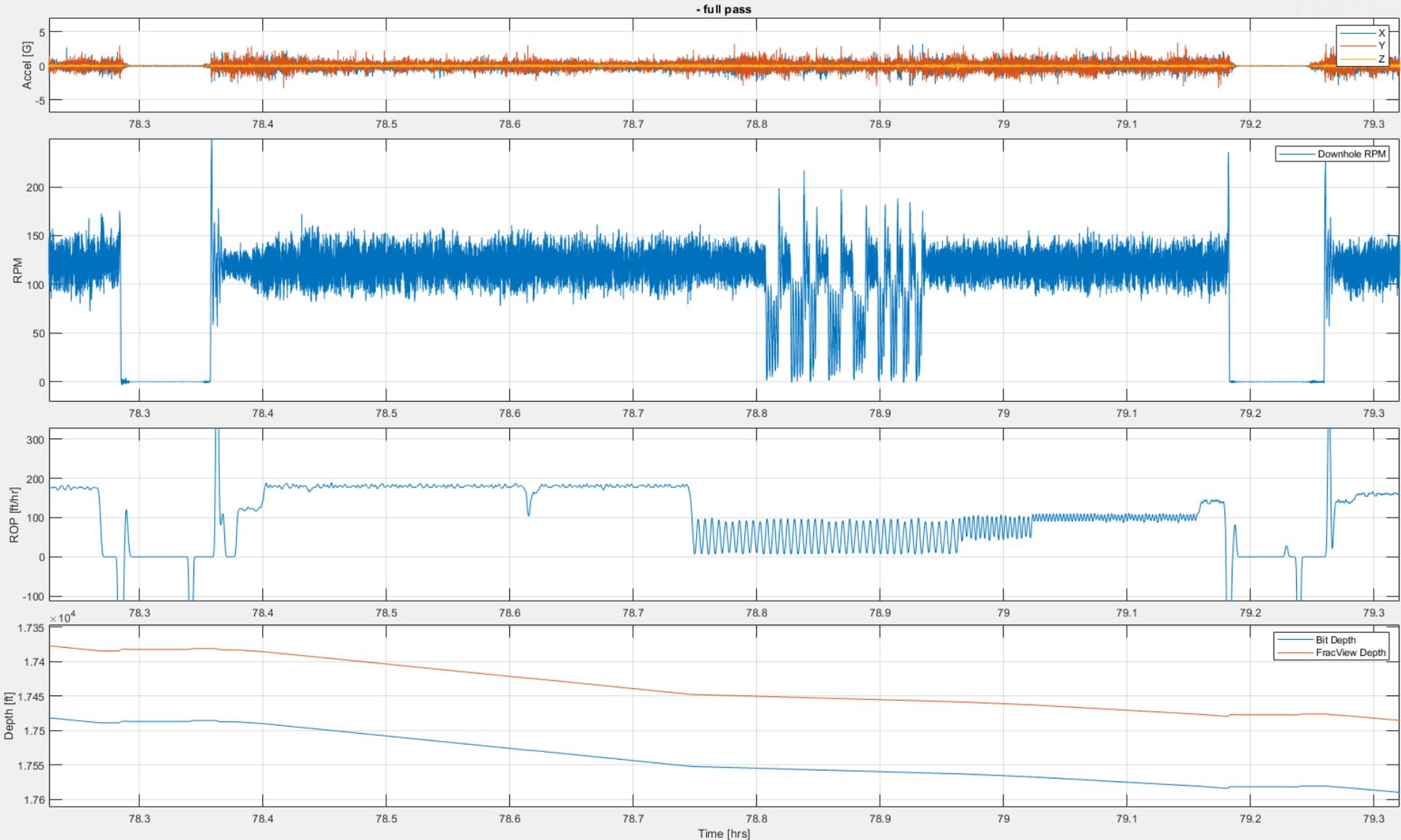
NEE Boggess 1H- Job Summary.

Section02. Pass01. Motion Dynamics (zoom)



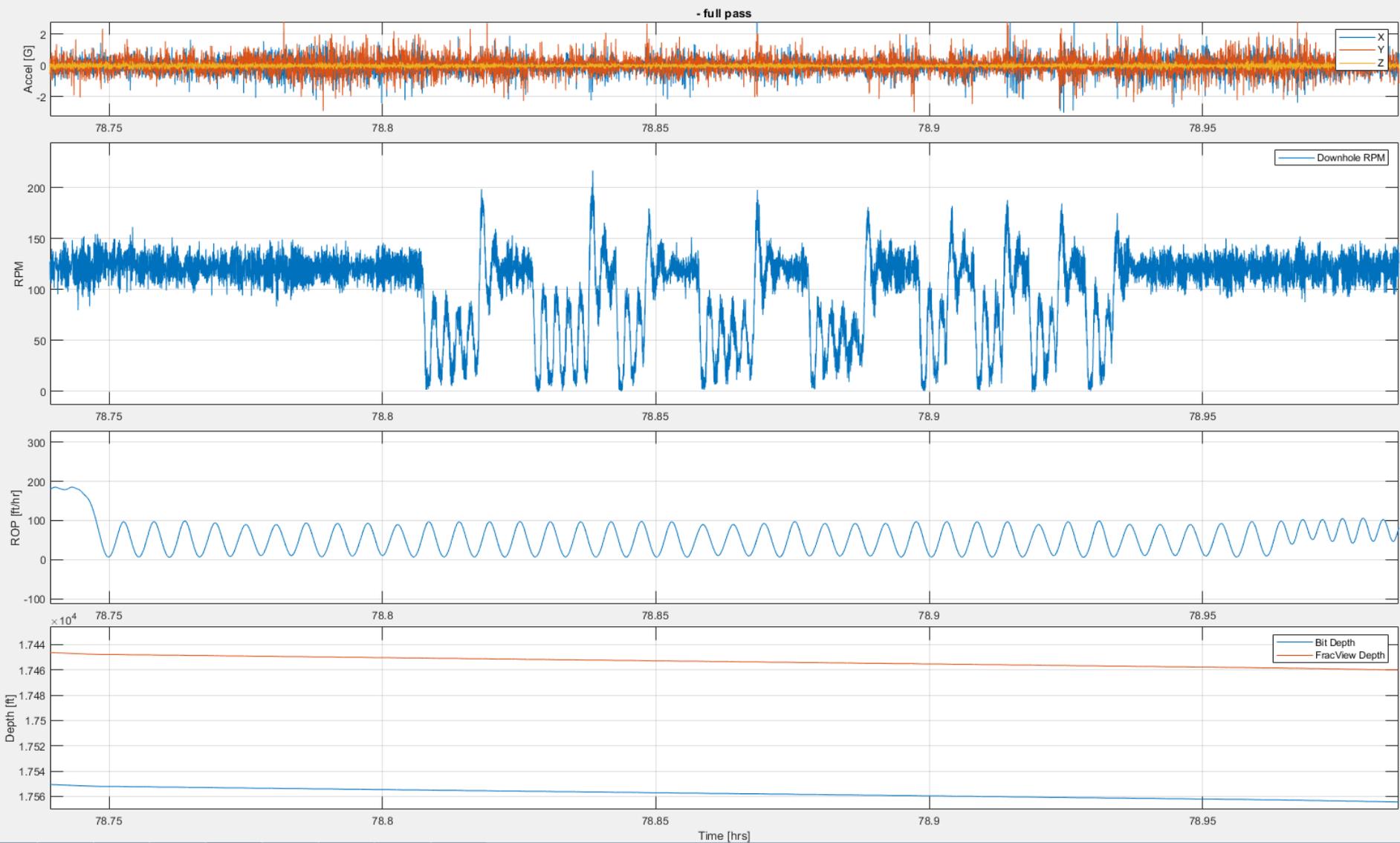
NE Bogges 1H– Job Summary.

Section02. Pass01. Motion Dynamics (zoom)

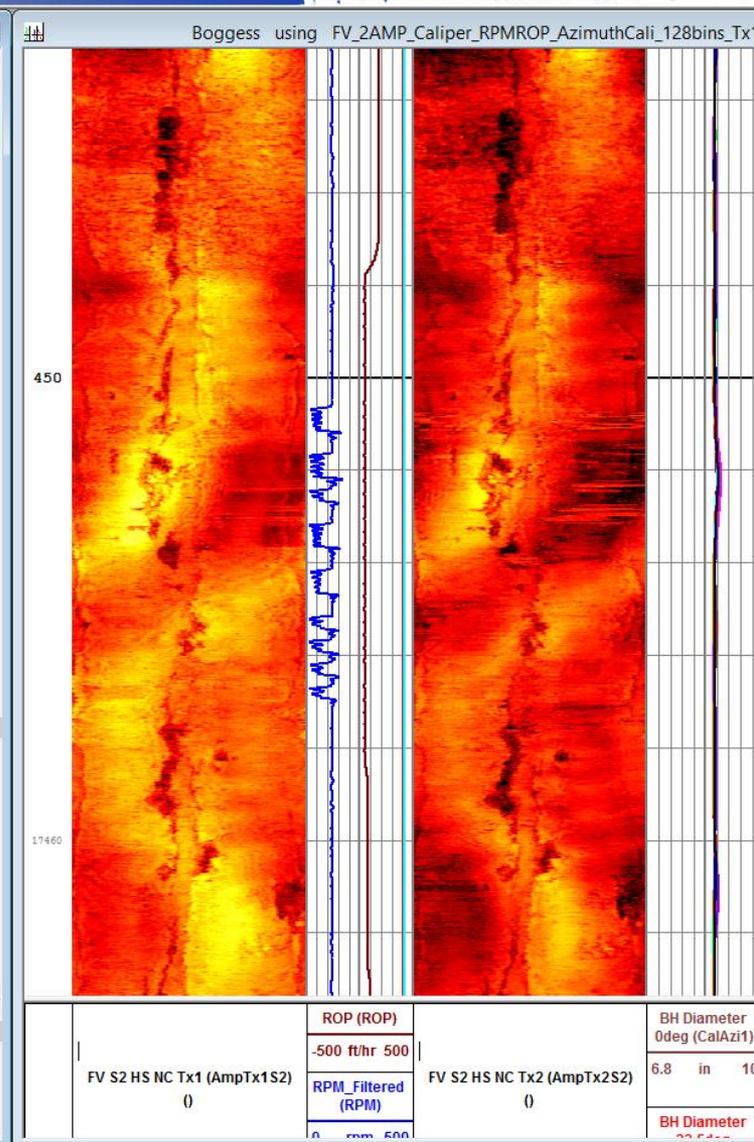
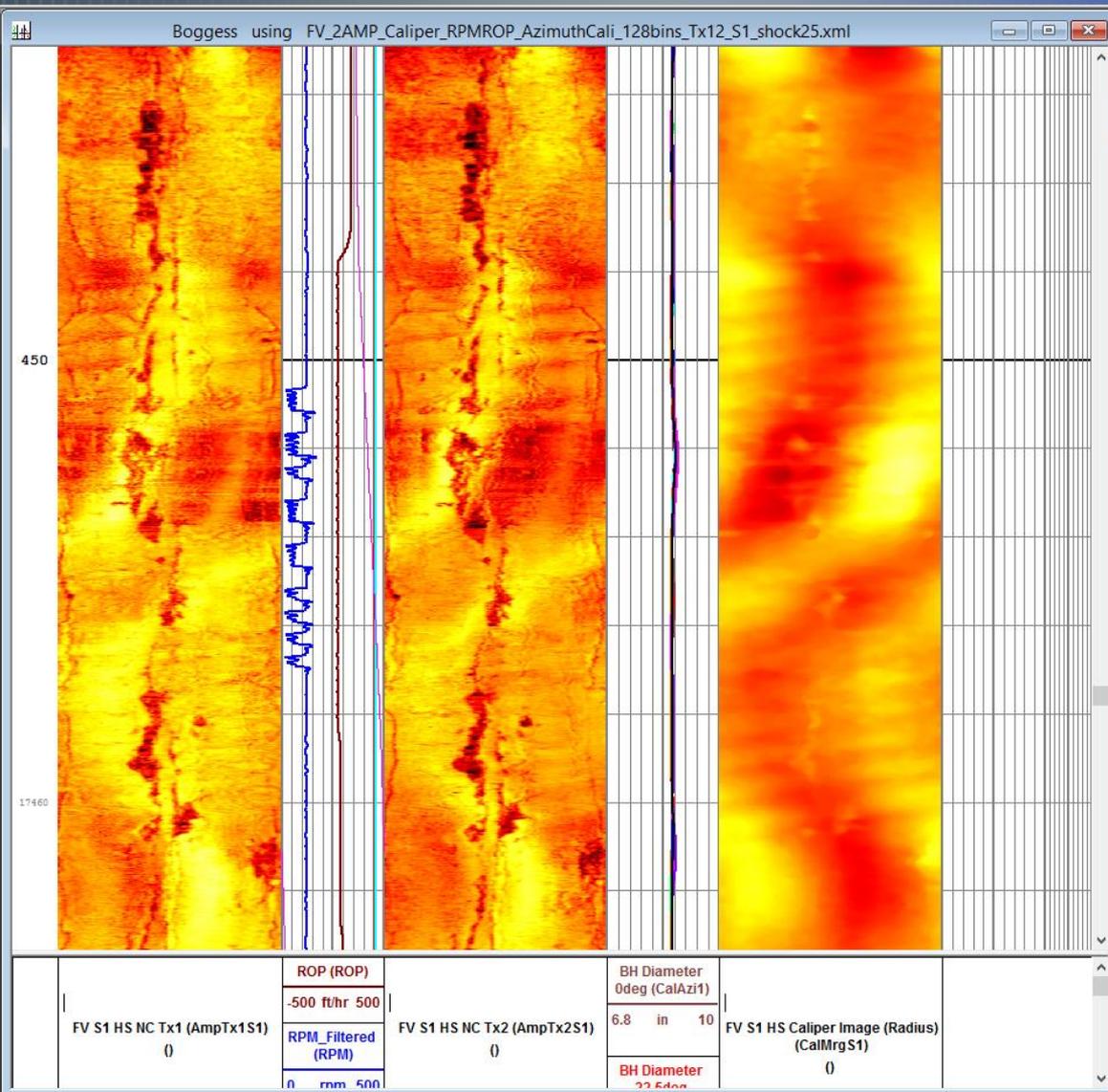


NE Boggess 1H– Job Summary.

Section02. Pass01. Motion Dynamics (zoom)



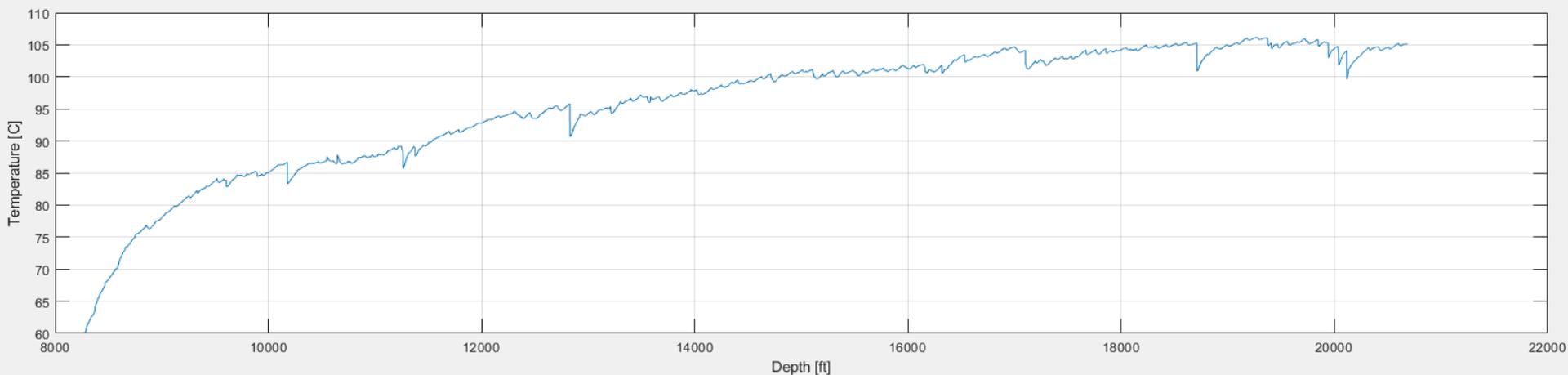
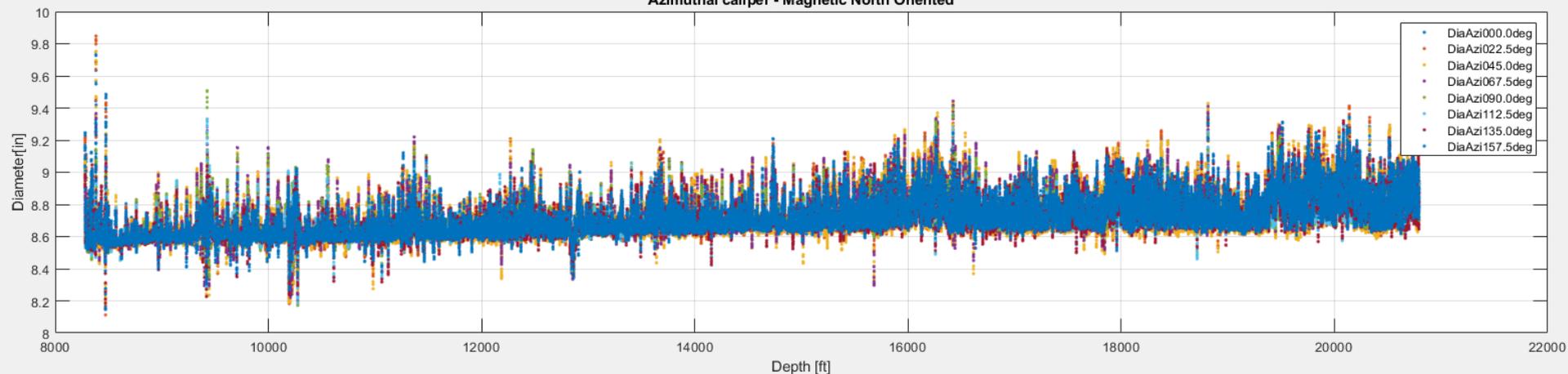
NNE Boggess 1H– Job Summary. Section02. Pass01. NC HS S1 VS S2



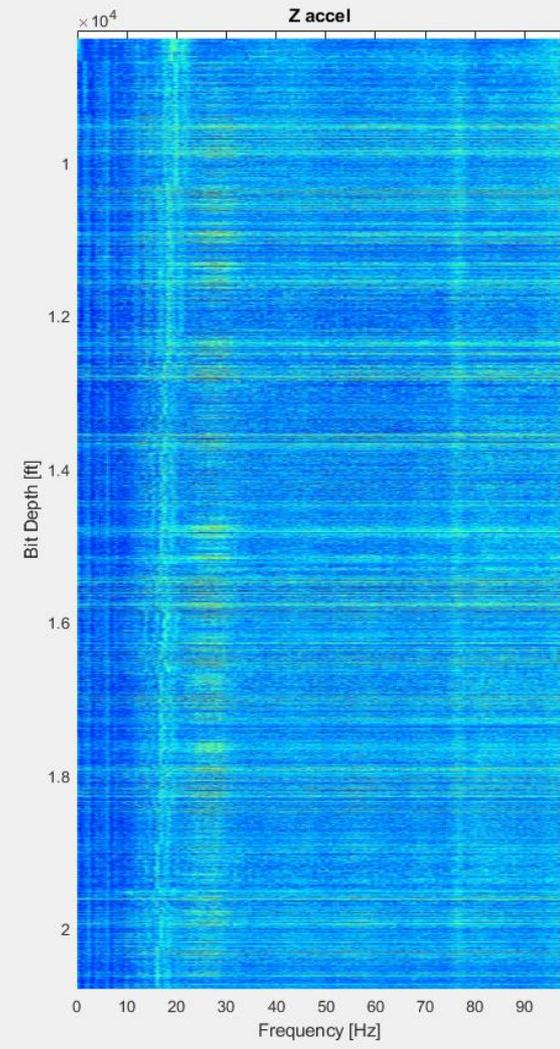
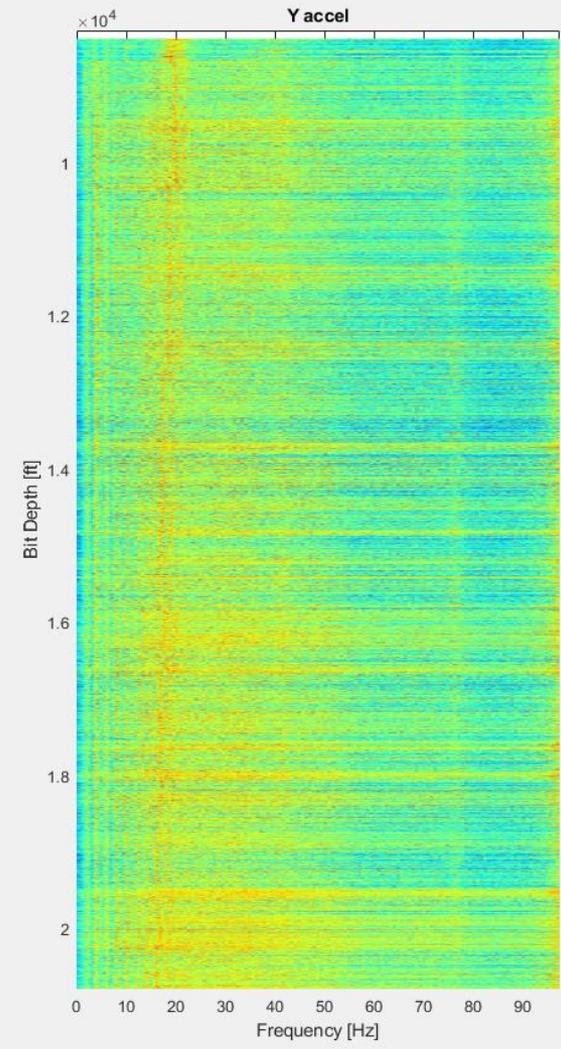
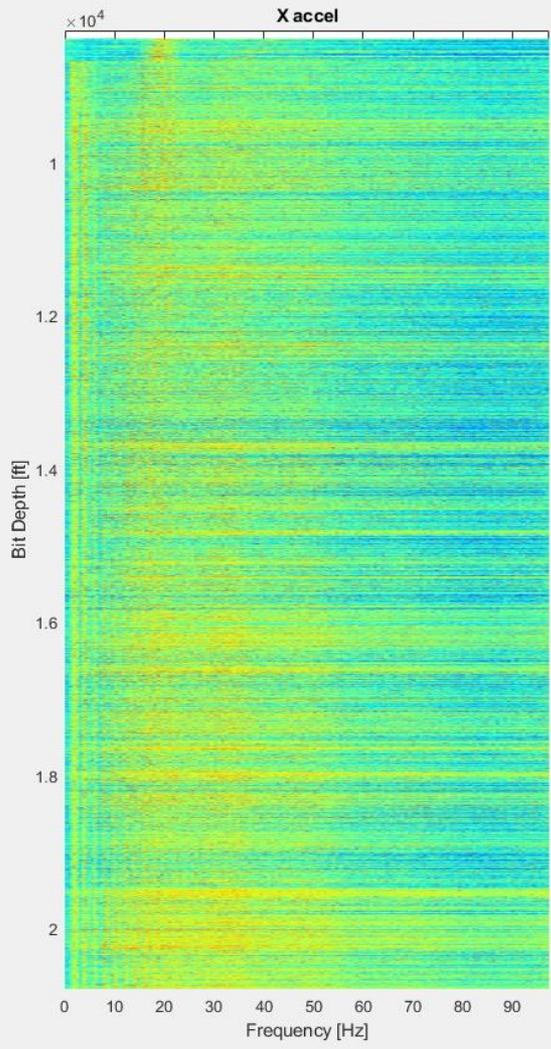
NE Boggess 1H– Job Summary. Section02. Pass01. Azimuthal Calipers.



Azimuthal caliper - Magnetic North Oriented



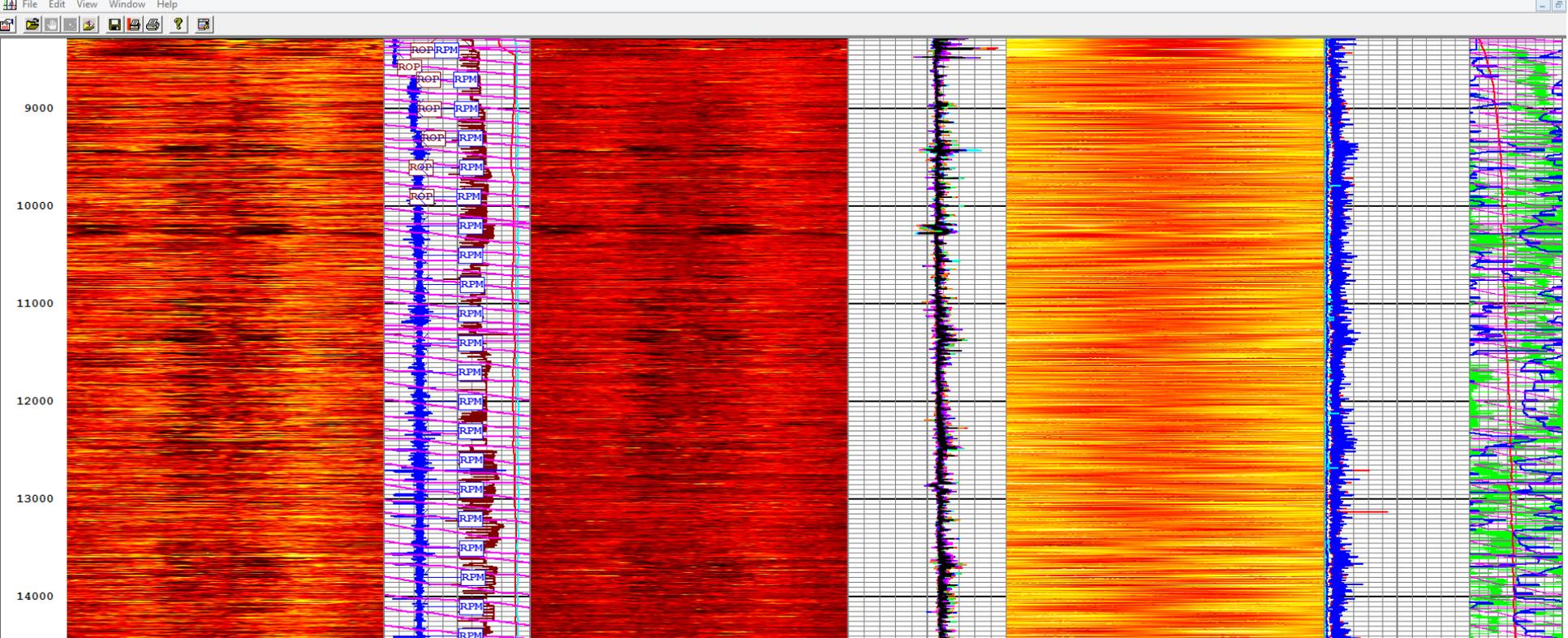
NNE Boggess 1H– Job Summary. Section02. Pass01. PSD



NNE Boggess 1H– Job Summary. Section02. Pass01. BHC HS S1 VS S2



Boggess 1H_Section02_Pass01FracView_AmplitudeMerged_DB_HS_BHC_S12_LIN_wAux.dlls - Schlumberger DataView - [Boggess using FV_2AMP_Caliper_RPMROP_AzimuthCa]



0.000	0.079	0.158	0.237	0.316	0.395	0.474	0.553	0.632	0.711	0.790	0.869	0.948	1.027	1.106
FV S1 HS BHC Merged Tx12 (AmpMrgS1)														

ROP (ROP)	ft/hr
-500	500
RPM_Filtered (RPM)	rpm
0	500
Hole Deviation (DEVI)	deg
0	100
Hole Azimuth (HAZI)	

0.000	0.079	0.158	0.237	0.316	0.395	0.474	0.553	0.632	0.711	0.790	0.869	0.948	1.027	1.106
FV S2 HS BHC Merged Tx12 (AmpMrgS2)														

BH Diameter 0deg (CalAzi1)	in
6.8	10
BH Diameter 22.5deg (CalAzi2)	in
6.8	10
BH Diameter 45deg (CalAzi3)	in
6.8	10

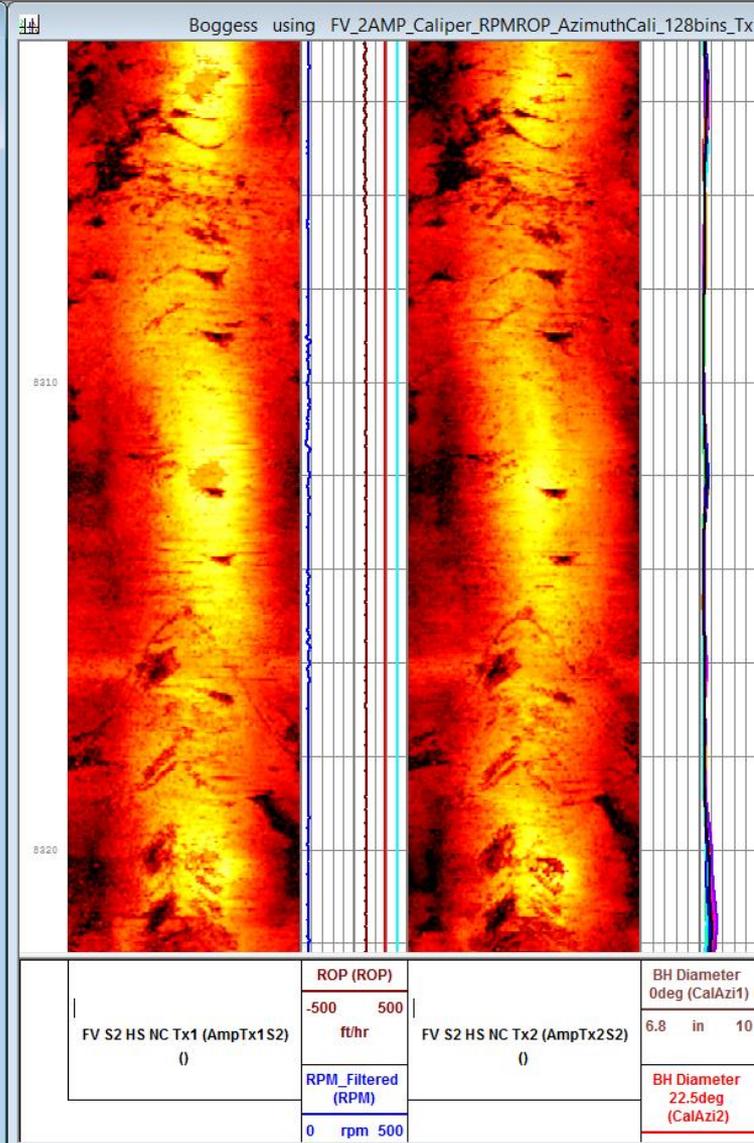
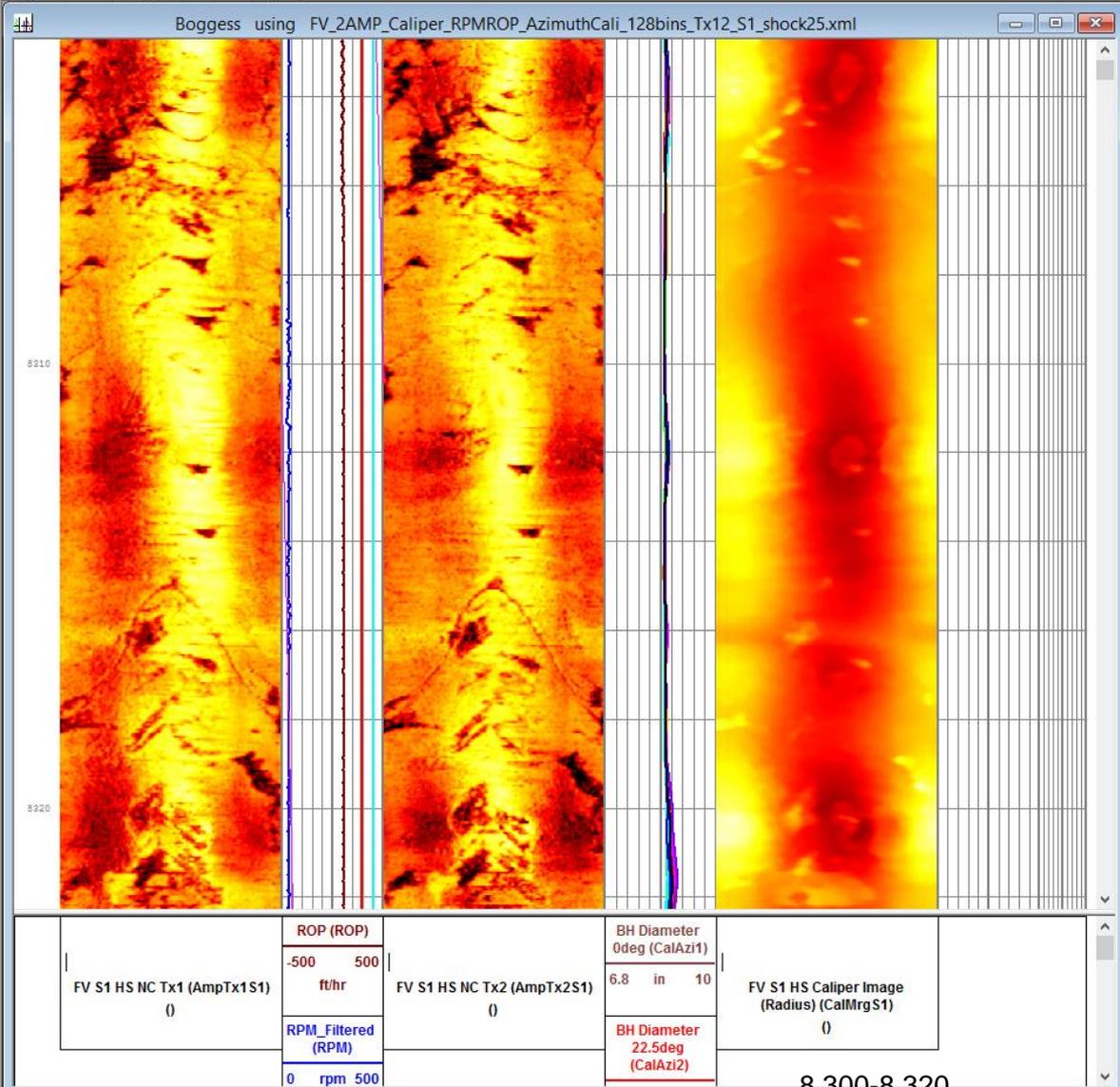
3.462	3.532	3.602	3.672	3.742	3.812	3.882	3.952	4.022	4.092	4.162	4.232	4.302	4.372	4.442	4.512	4.582	4.652	4.722	4.792	4.862	4.932	5.002	5.072	5.142	5.212	5.282	5.352	5.422	5.492	5.562	5.632	5.702	5.772	5.842	5.912	5.982	6.052	6.122	6.192	6.262	6.332	6.402	6.472	6.542	6.612	6.682	6.752	6.822	6.892	6.962	7.032	7.102	7.172	7.242	7.312	7.382	7.452	7.522	7.592	7.662	7.732	7.802	7.872	7.942	8.012	8.082	8.152	8.222	8.292	8.362	8.432	8.502	8.572	8.642	8.712	8.782	8.852	8.922	8.992	9.062	9.132	9.202	9.272	9.342	9.412	9.482	9.552	9.622	9.692	9.762	9.832	9.902	9.972	10.042	10.112	10.182	10.252	10.322	10.392	10.462	10.532	10.602	10.672	10.742	10.812	10.882	10.952	11.022	11.092	11.162	11.232	11.302	11.372	11.442	11.512	11.582	11.652	11.722	11.792	11.862	11.932	12.002	12.072	12.142	12.212	12.282	12.352	12.422	12.492	12.562	12.632	12.702	12.772	12.842	12.912	12.982	13.052	13.122	13.192	13.262	13.332	13.402	13.472	13.542	13.612	13.682	13.752	13.822	13.892	13.962	14.032	14.102	14.172	14.242	14.312	14.382	14.452	14.522	14.592	14.662	14.732	14.802	14.872	14.942	15.012	15.082	15.152	15.222	15.292	15.362	15.432	15.502	15.572	15.642	15.712	15.782	15.852	15.922	15.992	16.062	16.132	16.202	16.272	16.342	16.412	16.482	16.552	16.622	16.692	16.762	16.832	16.902	16.972	17.042	17.112	17.182	17.252	17.322	17.392	17.462	17.532	17.602	17.672	17.742	17.812	17.882	17.952	18.022	18.092	18.162	18.232	18.302	18.372	18.442	18.512	18.582	18.652	18.722	18.792	18.862	18.932	19.002	19.072	19.142	19.212	19.282	19.352	19.422	19.492	19.562	19.632	19.702	19.772	19.842	19.912	19.982	20.052	20.122	20.192	20.262	20.332	20.402	20.472	20.542	20.612	20.682	20.752	20.822	20.892	20.962	21.032	21.102	21.172	21.242	21.312	21.382	21.452	21.522	21.592	21.662	21.732	21.802	21.872	21.942	22.012	22.082	22.152	22.222	22.292	22.362	22.432	22.502	22.572	22.642	22.712	22.782	22.852	22.922	22.992	23.062	23.132	23.202	23.272	23.342	23.412	23.482	23.552	23.622	23.692	23.762	23.832	23.902	23.972	24.042	24.112	24.182	24.252	24.322	24.392	24.462	24.532	24.602	24.672	24.742	24.812	24.882	24.952	25.022	25.092	25.162	25.232	25.302	25.372	25.442	25.512	25.582	25.652	25.722	25.792	25.862	25.932	26.002	26.072	26.142	26.212	26.282	26.352	26.422	26.492	26.562	26.632	26.702	26.772	26.842	26.912	26.982	27.052	27.122	27.192	27.262	27.332	27.402	27.472	27.542	27.612	27.682	27.752	27.822	27.892	27.962	28.032	28.102	28.172	28.242	28.312	28.382	28.452	28.522	28.592	28.662	28.732	28.802	28.872	28.942	29.012	29.082	29.152	29.222	29.292	29.362	29.432	29.502	29.572	29.642	29.712	29.782	29.852	29.922	30.000
FV S1 HS Caliper Image (Radius) (CalMrgS1)																																																																																																																																																																																																																																																																																																																																																																																											

Shock X Accel (SHOCKX)	g	25	GAMMA RAY API (GR)	API
0	g	25	0	200
Shock Y Accel (SHOCKY)	g	25	Tool Temperature (TEMPC)	C
0	g	25	50	150
Shock Z Accel (SHOCKZ)	g	25	RMS X Accel (VIBRX)	Exposure Time
0	g	25		

NNE Boggess 1H- Job Summary. Section02. Pass01. NC HS S1 VS S2



File Edit View Window Help

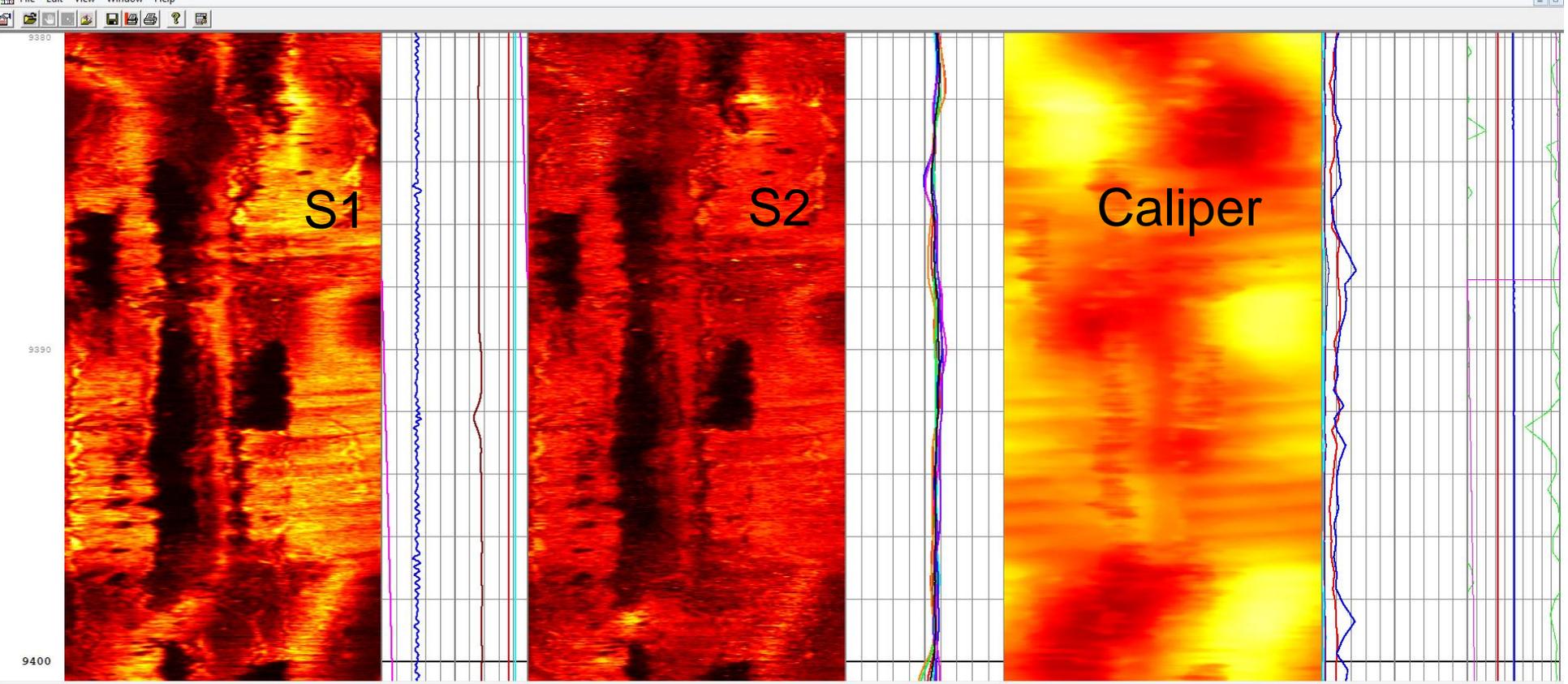


8,300-8,320

NNE Boggess 1H– Job Summary. Section02. Pass01. BHC HS S1 vs S2



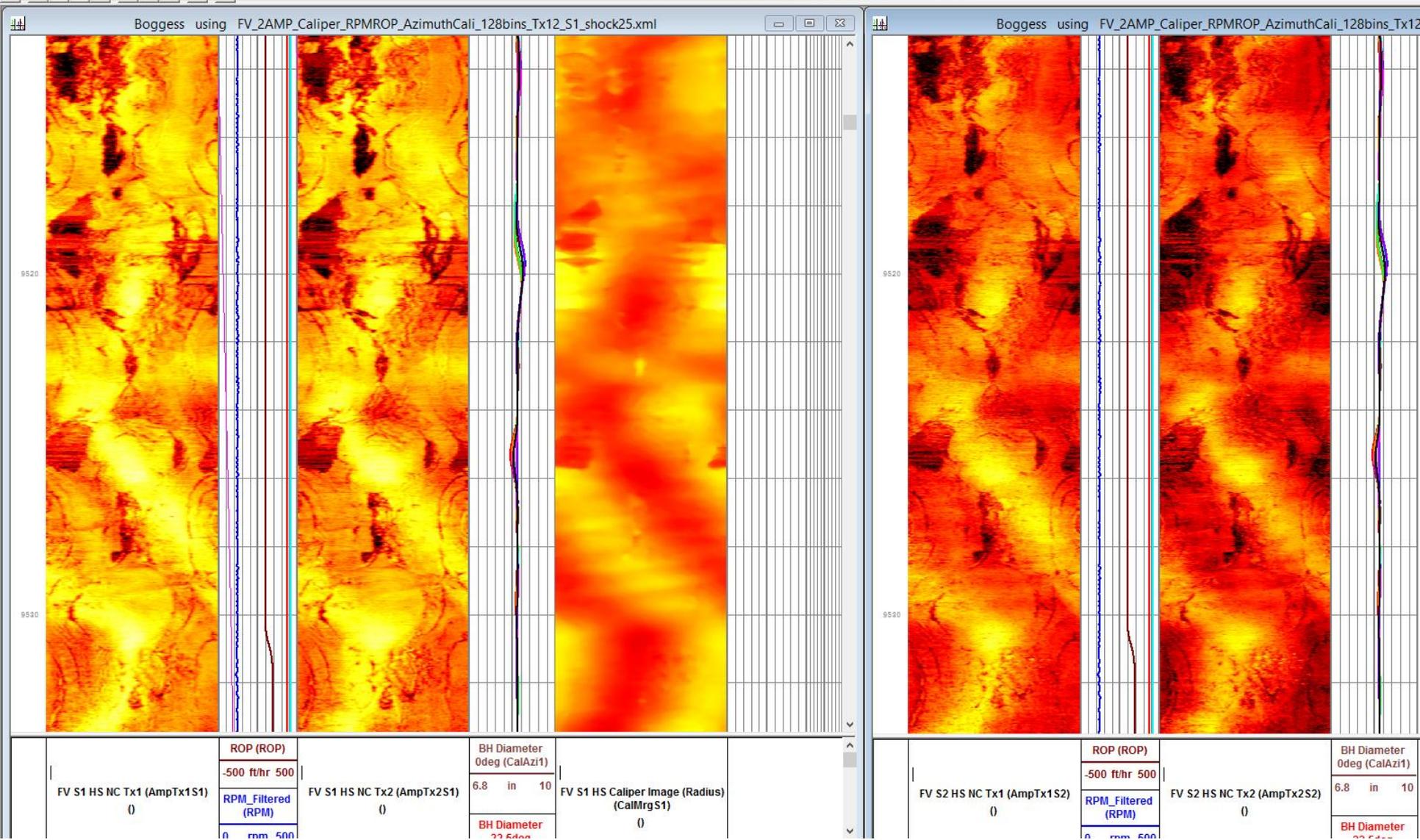
Boggess 1H_Section02_Pass01FracView_AmplitudeMerged_DB_HS_BHC_S12_LIN_wAux.dlls - Schlumberger DataView - [Boggess using FV_2AMP_Caliper_RPMROP_AzimuthCa]



0.000 0.030 0.117 0.156 0.234 0.273 0.342 0.430 0.469 0.506 0.586 0.742 0.781 0.850 0.898 1.000 FV S1 HS BHC Merged Tx12 (AmpMrgS1) ()	ROP (ROP) -500 ft/hr 500 RPM_Filtered (RPM) 0 rpm 500 Hole Deviation (DEVI)	0.000 0.078 0.116 0.195 0.213 0.391 0.430 0.508 0.586 0.625 0.742 0.850 0.898 1.000 FV S2 HS BHC Merged Tx12 (AmpMrgS2) ()	BH Diameter 0deg (CalAzi1) 6.8 in 10 BH Diameter 22.5deg (CalAzi2) 6.8 in 10	3.400 4.462 5.527 3.950 3.775 3.900 3.962 4.058 4.159 4.300 4.463 4.650 4.775 4.838 6.000 FV S1 HS Caliper Image (Radius) (CalMrgS1) ()	Shock X Accel (SHOCKX) 0 g 25 Shock Y Accel (SHOCKY) 0 g 25 Shock Z Accel (SHOCKZ)	GAMMA RAY API (GR) 0 API 200 Tool Temperature (TEMPC)
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9,380-9,400

NNE Boggess 1H– Job Summary. Section02. Pass01. NC HS S1 VS S2



9,515-9,535

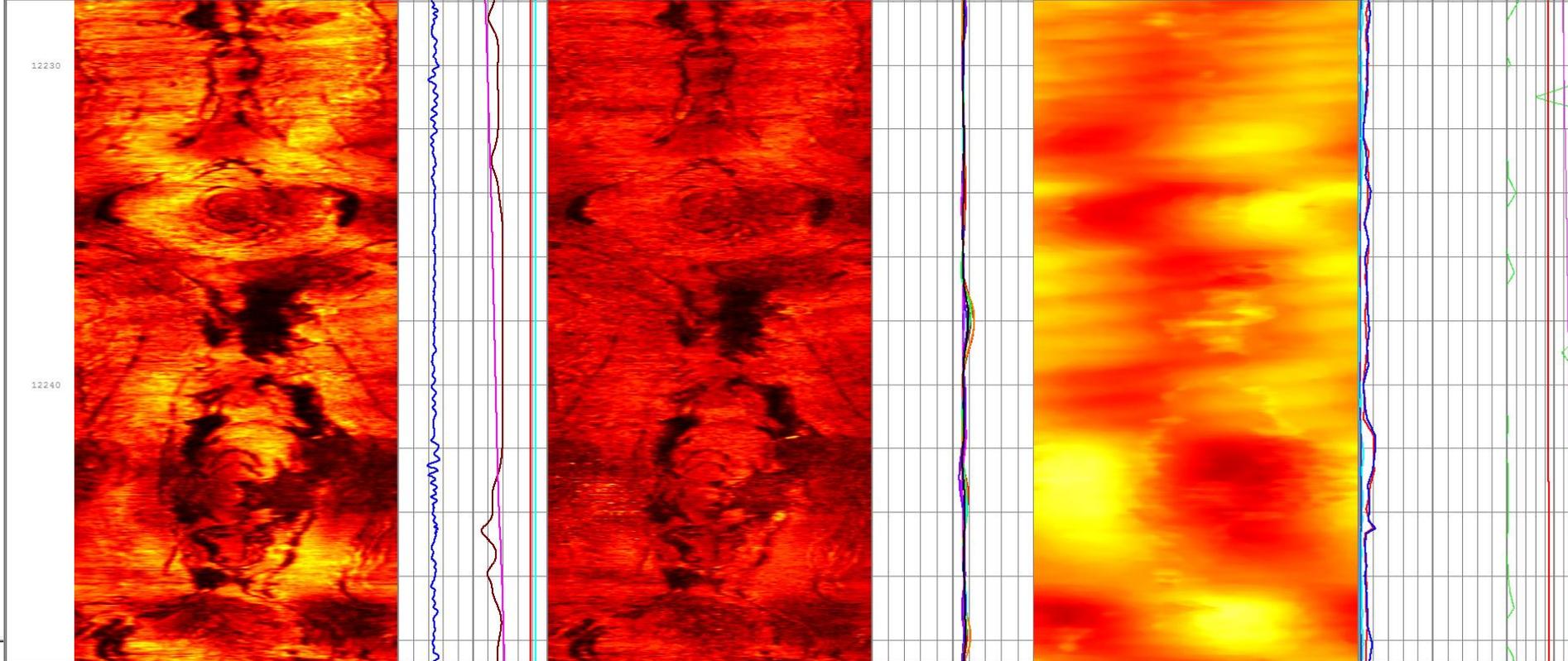
NNE Boggess 1H– Job Summary. Section02. Pass01. BHC HS S1 vs S2



Boggess 1H_Section02_Pass01FracView_AmplitudeMerged_DB_HS_BHC_S12_LIN_wAux.diiis - Schlumberger DataView - [Boggess using FV_2AMP_Caliper_RPMROP_AzimuthCa]

Boggess 1H_Section02_Pass01FracView_AmplitudeMerged_DB_HS_BHC_S12_LIN_wAux.diiis - Schlumberger DataView - [Boggess using FV_2AMP_Caliper_RPMROP_AzimuthCa]

File Edit View Window Help



0.000	0.000	0.000	0.000
0.078	0.009	0.009	0.009
0.156	0.017	0.017	0.017
0.195	0.026	0.026	0.026
0.234	0.035	0.035	0.035
0.273	0.044	0.044	0.044
0.312	0.053	0.053	0.053
0.351	0.062	0.062	0.062
0.390	0.071	0.071	0.071
0.429	0.080	0.080	0.080
0.468	0.089	0.089	0.089
0.507	0.098	0.098	0.098
0.546	0.107	0.107	0.107
0.585	0.116	0.116	0.116
0.625	0.125	0.125	0.125
0.664	0.134	0.134	0.134
0.703	0.143	0.143	0.143
0.742	0.152	0.152	0.152
0.781	0.161	0.161	0.161
0.820	0.170	0.170	0.170
0.859	0.179	0.179	0.179
0.898	0.188	0.188	0.188
0.937	0.197	0.197	0.197
0.976	0.206	0.206	0.206
1.000	0.215	0.215	0.215

FV S1 HS BHC Merged Tx12 (AmpMrgS1)

0

ROP (ROP)	
-500	500
ft/hr	
RPM_Filtered (RPM)	
0	500
rpm	
Hole Deviation (DEVI)	

0.000	0.000	0.000	0.000
0.009	0.009	0.009	0.009
0.017	0.017	0.017	0.017
0.026	0.026	0.026	0.026
0.035	0.035	0.035	0.035
0.044	0.044	0.044	0.044
0.053	0.053	0.053	0.053
0.062	0.062	0.062	0.062
0.071	0.071	0.071	0.071
0.080	0.080	0.080	0.080
0.089	0.089	0.089	0.089
0.098	0.098	0.098	0.098
0.107	0.107	0.107	0.107
0.116	0.116	0.116	0.116
0.125	0.125	0.125	0.125
0.134	0.134	0.134	0.134
0.143	0.143	0.143	0.143
0.152	0.152	0.152	0.152
0.161	0.161	0.161	0.161
0.170	0.170	0.170	0.170
0.179	0.179	0.179	0.179
0.188	0.188	0.188	0.188
0.197	0.197	0.197	0.197
0.206	0.206	0.206	0.206
0.215	0.215	0.215	0.215

FV S2 HS BHC Merged Tx12 (AmpMrgS2)

0

BH Diameter 0deg (CalAzi1)	
6.8	10
in	
BH Diameter 22.5deg (CalAzi2)	
6.8	10
in	

0.000	0.000	0.000	0.000
0.400	0.400	0.400	0.400
0.800	0.800	0.800	0.800
1.200	1.200	1.200	1.200
1.600	1.600	1.600	1.600
2.000	2.000	2.000	2.000
2.400	2.400	2.400	2.400
2.800	2.800	2.800	2.800
3.200	3.200	3.200	3.200
3.600	3.600	3.600	3.600
4.000	4.000	4.000	4.000
4.400	4.400	4.400	4.400
4.800	4.800	4.800	4.800
5.200	5.200	5.200	5.200
5.600	5.600	5.600	5.600
6.000	6.000	6.000	6.000

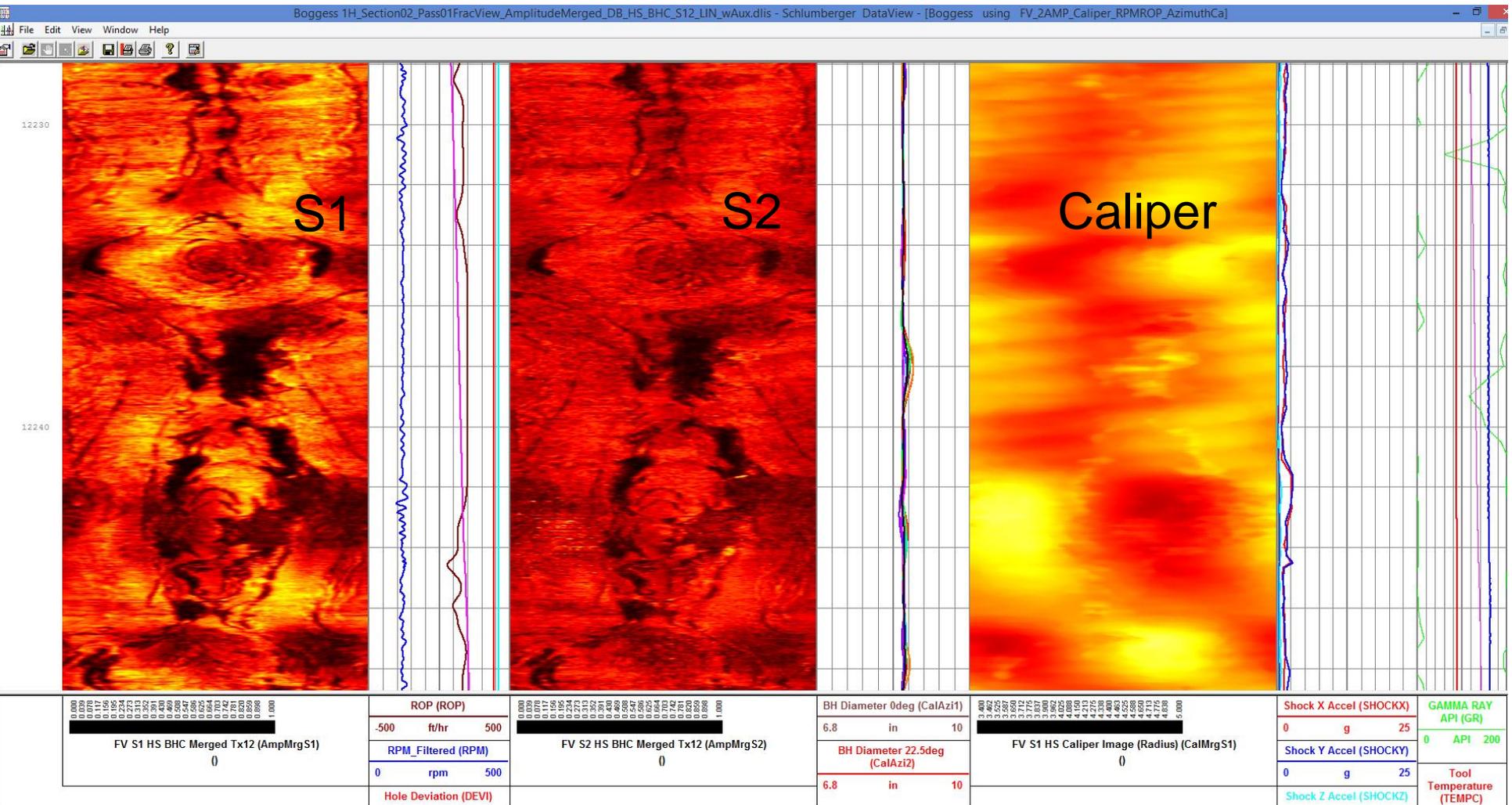
FV S1 HS Caliper Image (Radius) (CalMrgS1)

0

Shock X Accel (SHOCKX)	
0	25
g	
Shock Y Accel (SHOCKY)	
0	25
g	
Shock Z Accel (SHOCKZ)	

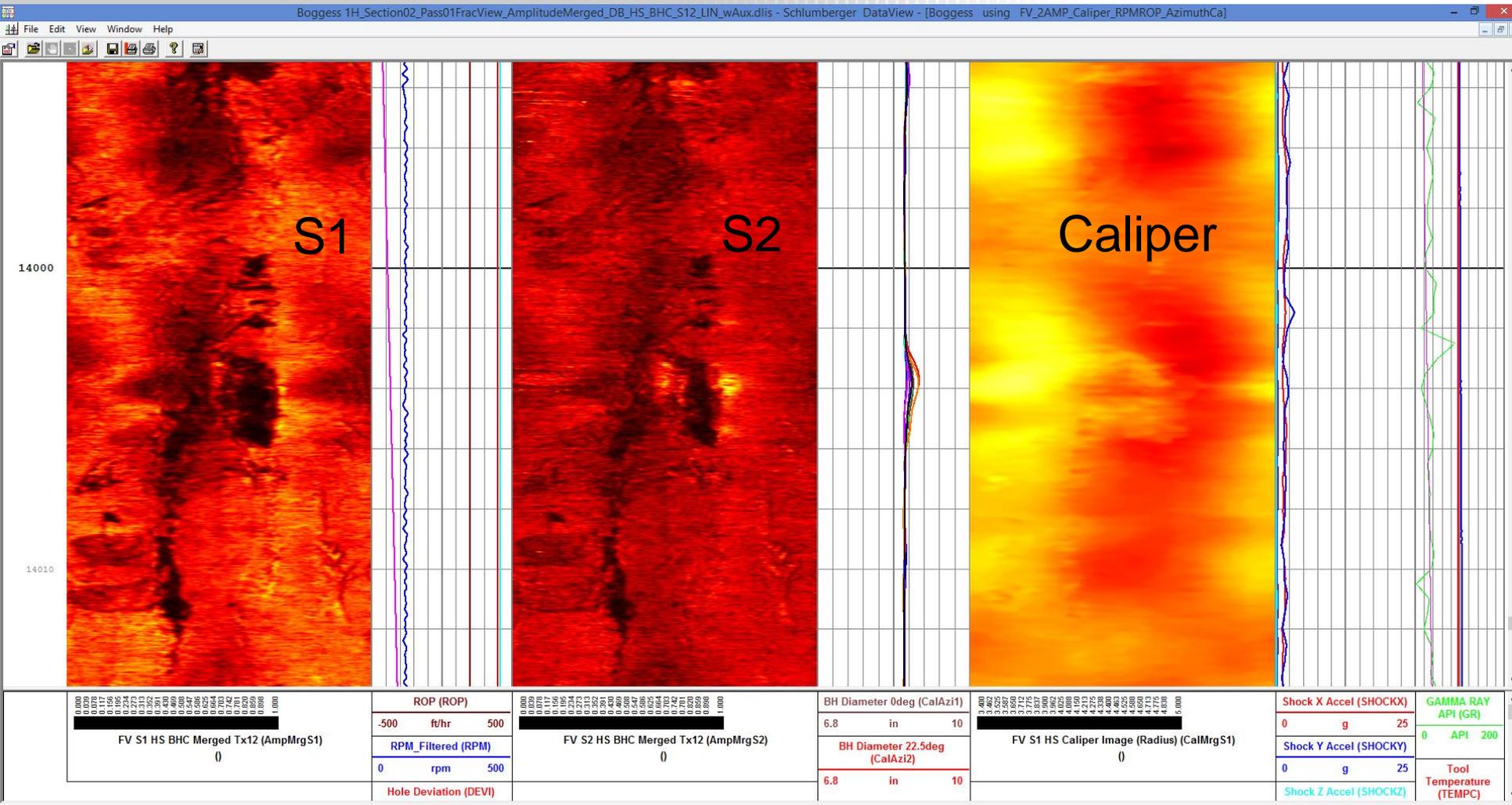
0	25
GAMMA RA	API (GR)
0	API
Tool Temperature (TEMPC)	

NNE Boggess 1H– Job Summary. Section02. Pass01. BHC HS S1 vs S2



12,230-12,250

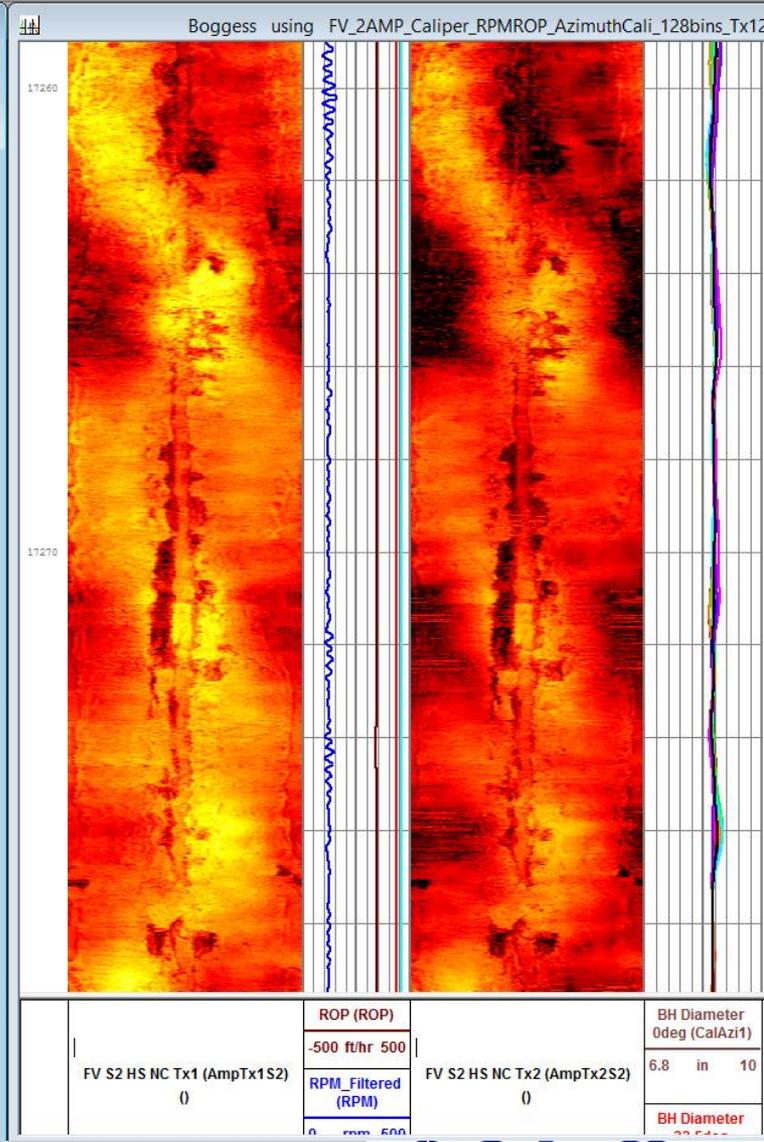
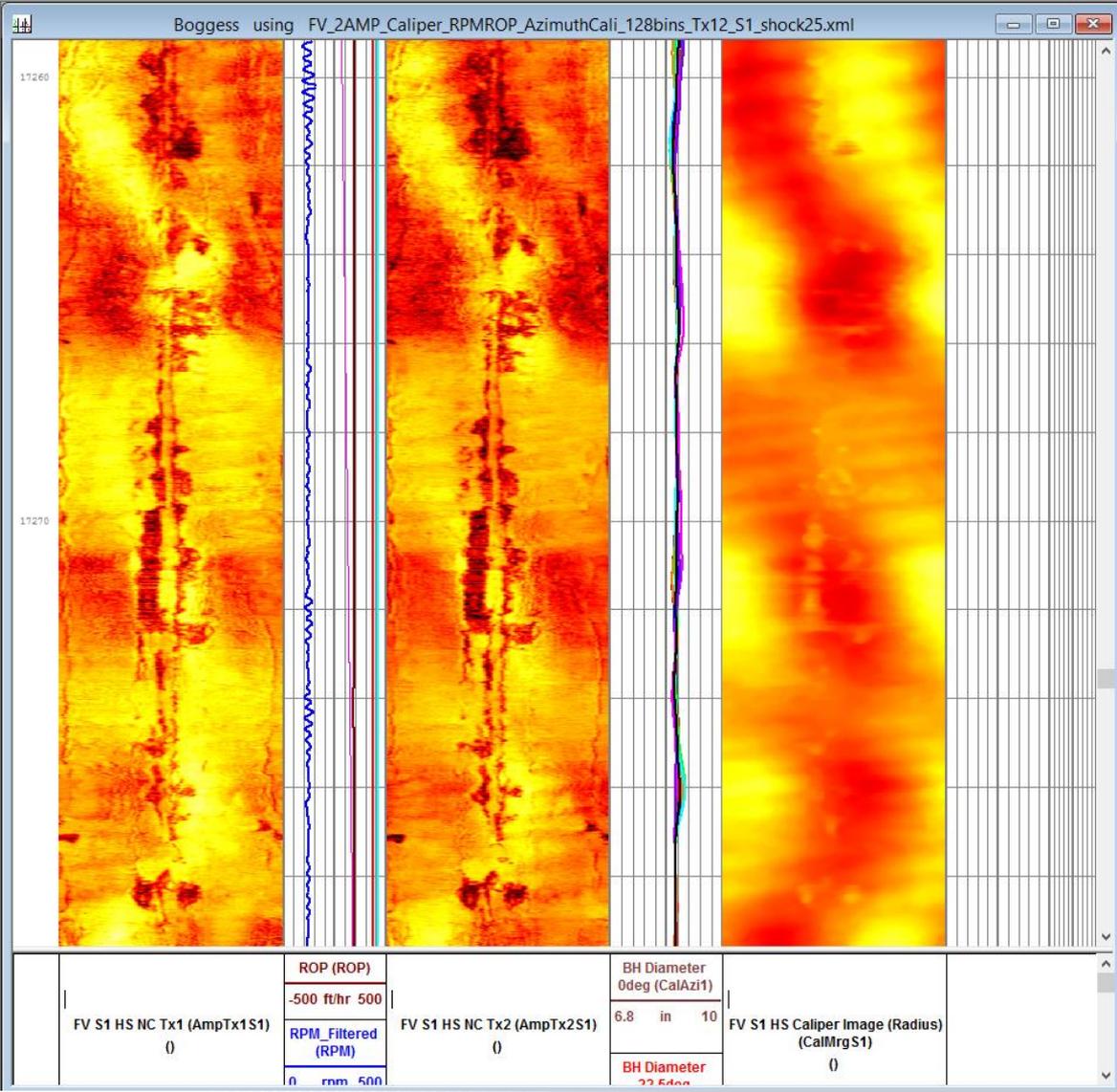
NE Boggess 1H– Job Summary. Section02. Pass01. BHC HS S1 vs S2



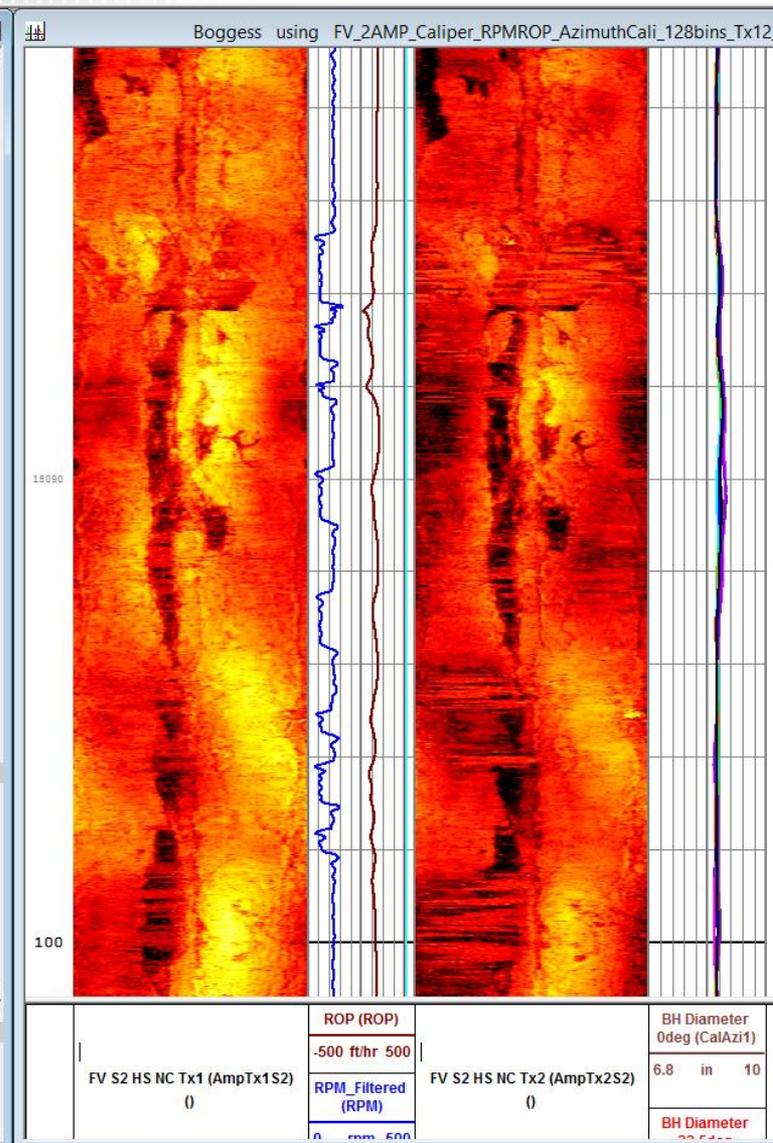
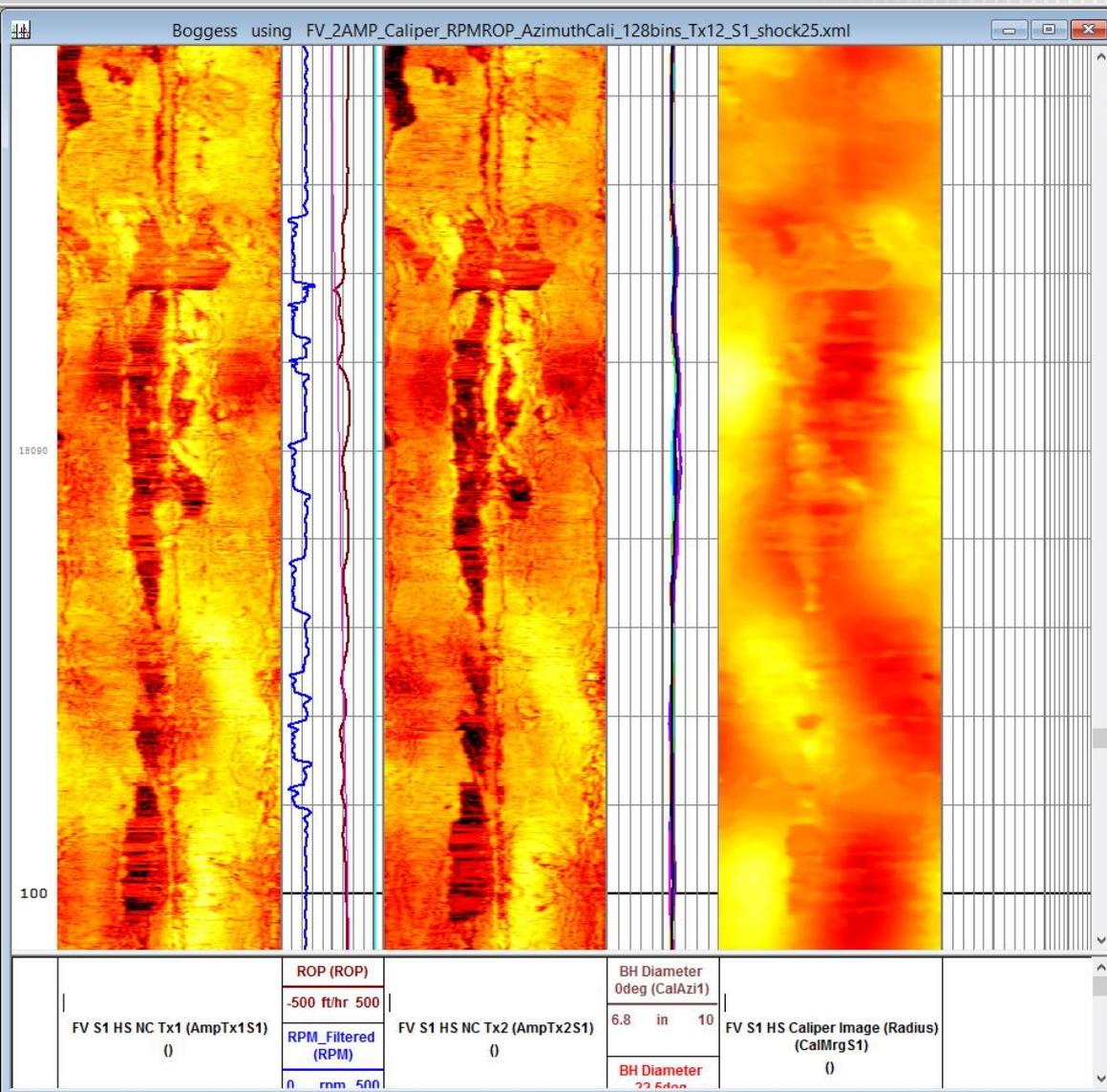
Ready

13,995-14,015

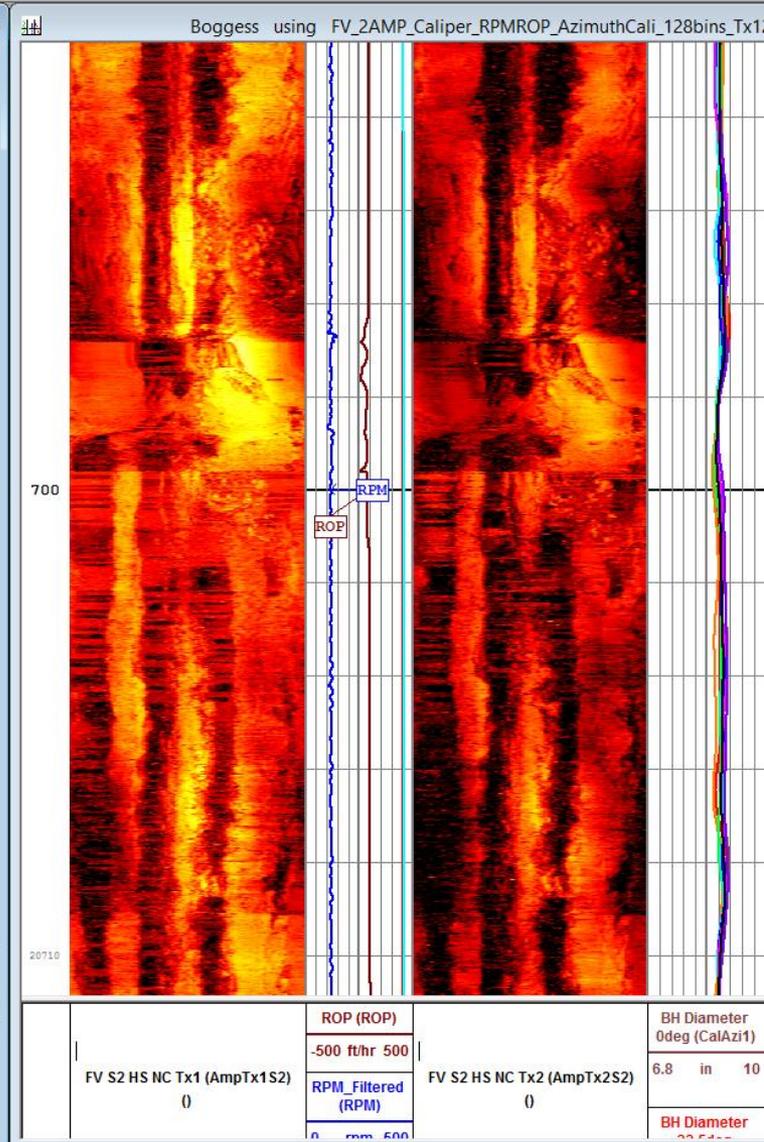
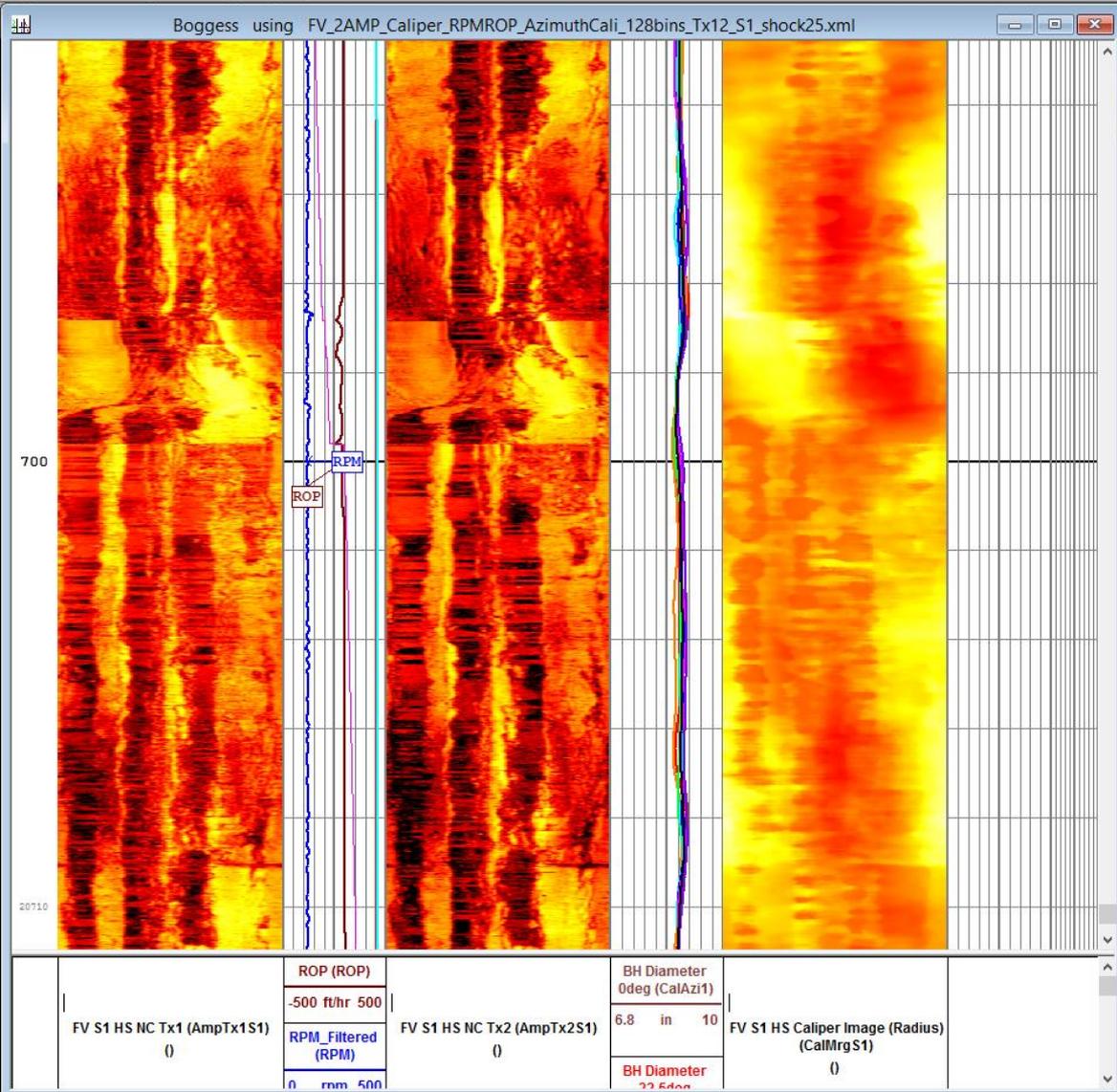
NNE Boggess 1H– Job Summary. Section02. Pass01. NC HS S1 VS S2



NNE Boggess 1H– Job Summary. Section02. Pass01. NC HS S1 VS S2



NNE Boggess 1H– Job Summary. Section02. Pass01. NC HS S1 VS S2



NNE Boggess 1H– Job Summary.



Thank You