

Submit a Copy To Appropriate District Office
District I – (575) 393-6161
 1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
 811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
 1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised July 18, 2013

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

WELL API NO. 30-015-49643
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Mad River 13 State Com
8. Well Number 10H
9. OGRID Number 249099
10. Pool name or Wildcat Purple Sage; Wolfcamp
4. Well Location Unit Letter P ; 602 feet from the south line and 235 feet from the East line Section 13 Township 24S Range 27E NMPM County Eddy
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3103'GR

SUNDRY NOTICES AND REPORTS ON WELLS
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐

2. Name of Operator
Caza Oil and Gas, Inc

3. Address of Operator
200 N. Lorraine St #1550., Midland, TX 79701

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
 DOWNHOLE COMMINGLE ☐
 CLOSED-LOOP SYSTEM ☐
 OTHER: ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/CEMENT JOB ☒
 OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

9/20/2022 - Intermediate casing was set at 7,912'MD. A CBL was run on the production casing which is set at 14,996'MD. The CBL determined that TOC for the production casing is at 4,350'MD which is 3,562' inside the intermediate casing. Caza proposes to frack the well and when the well is to be put on artificial lift the production casing will be perforated at 4,325' and cemented through the perforations to surface. This will keep the production casing integrity during the frack.

Spud Date:

7/18/2022

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE



TITLE

Engineer

DATE

9/22/2022

Type or print name

Steve Morris

E-mail address:

steve.morris@morcoreengineering.com

PHONE:

985-415-9729

For State Use Only

APPROVED BY:

John Garcia

TITLE

Petroleum Engineer

DATE

9/30/2022

Conditions of Approval (if any):

Company: Caza Operating LLC

Well: Mad River 13 State Com 010H

Field: Wolfcamp

County: Eddy Country: United States of America

County: Eddy
Field: Wolfcamp
Location: Section: 13, Township: 24S , Range: 27E
Well: Mad River 13 State Com 010H
Company: Caza Operating LLC

Cement Bond Log
Variable Density Log
Gamma Ray - CCL

Location:		Section: 13, Township: 24S , Range: 27E 602' FSL & 235' FEL	Elev.: K.B. 3126.60 ft G.L. 3103.00 ft D.F. 3125.60 ft
Permanent Datum:	Ground Level	Kelly Bushing	Elev.: 3103.00 f
Log Measured From:	Kelly Bushing 23.60 ft above Perm.Datum		
Drilling Measured From:	Kelly Bushing		
API Serial No. 30-015-49643	Max.Hole Deviation 0 deg	Longitude: -104.13626 degrees	Latitude: 32.212022 degrees

Logging Date	20-Sep-2022
Run Number	1B
Depth Driller	14910.00 ft
Schlumberger Depth	14910.00 ft
Bottom Log Interval	
Top Log Interval	
Casing Fluid Type	Water
Spicity	
Density	8.7 lbm/gal
Fluid Level	8.00 ft
BH CASING/TUBING STRING	
Bit Size	8.50 in
Flow	7948.00 ft
T	14910.00 ft
Casing/Tubing Size	5.5 in
Weight	20 lbm/ft
Gauge	P110
Flow	0.00 ft
Tool	14893.00 ft
Recorded Temperatures	
Meas on Bottom	20-Sep-2022 20:58:00
Un Number	9103
Recorded By	F. Richardson/R. Kennedy
Witnessed By	Wes Rogers

Disclaimer

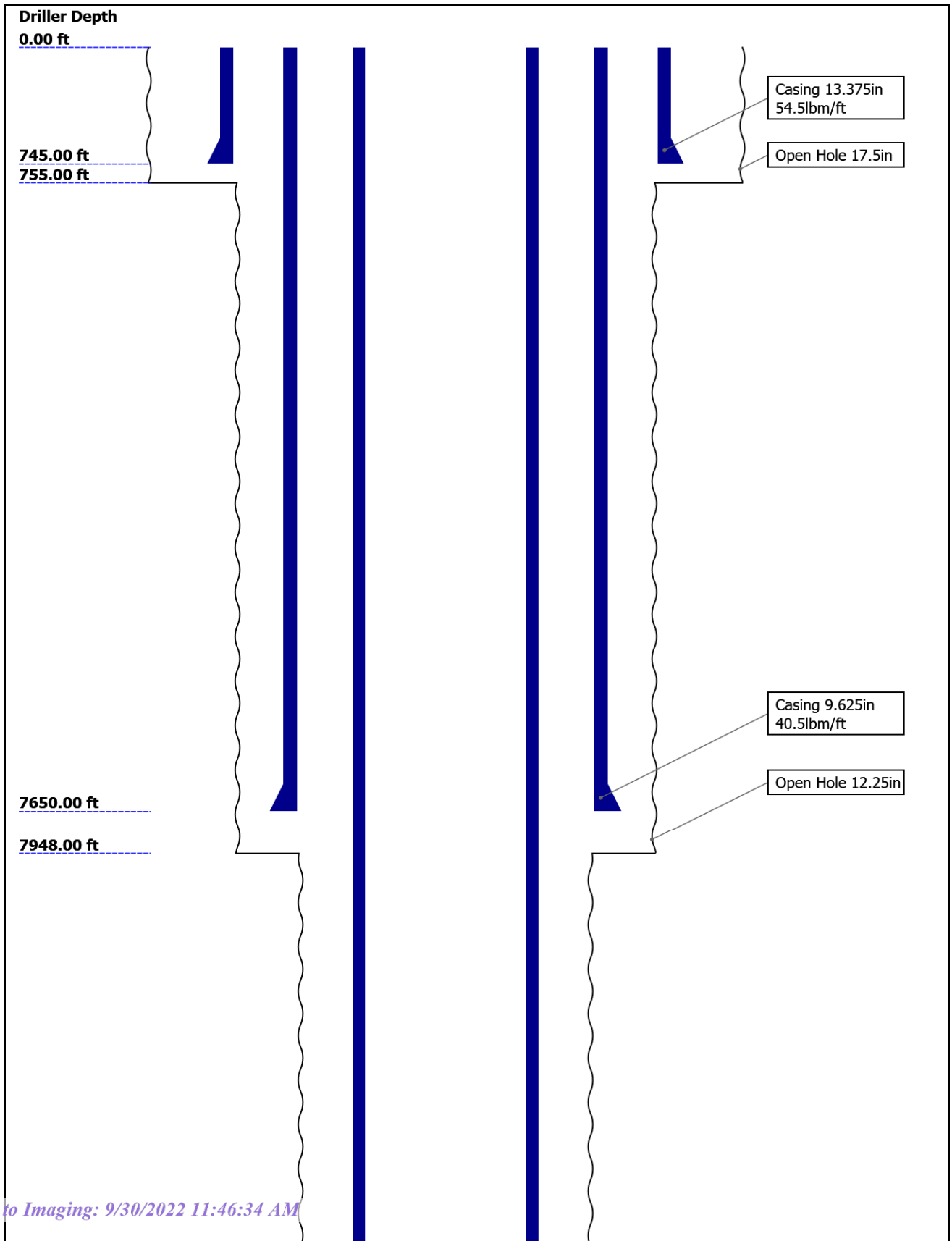
THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

Contents

- 1. Header
- 2. Disclaimer
- 3. Contents
- 4. Well Sketch
- 5. Borehole Size/Casing/Tubing Record
- 6. Remarks and Equipment Summary
- 7. Depth Summary
- 8. 1B
 - 8.1 Integration Summary
 - 8.2 Software Version
 - 8.3 Composite Summary
 - 8.4 Log (DSLT ASLT_CBL-VDL)
 - 8.5 Parameter Listing
- 9. 1B
 - 9.1 Integration Summary
 - 9.2 Software Version
 - 9.3 Composite Summary

10. Tail

Well Sketch



14893.00 ft

14910.00 ft

Casing 5.5in
20lbm/ft

Open Hole 8.5in

Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	17.5	12.25	8.5			
Top Driller (ft)	0	755	7948			
Top Logger (ft)	0	755	7948			
Bottom Driller (ft)	755	7948	14910			
Bottom Logger (ft)	755	7948	14910			
Casing						
Size (in)	13.375	9.625	5.5			
Weight (lbm/ft)	54.5	40.5	20			
Inner Diameter (in)	12.615	8.821	4.778			
Grade	J55	N/A	P110			
Top Driller (ft)	0	0	0			
Top Logger (ft)	0	0	0			
Bottom Driller (ft)	745	7650	14893			
Bottom Logger (ft)	745	7650	14893			

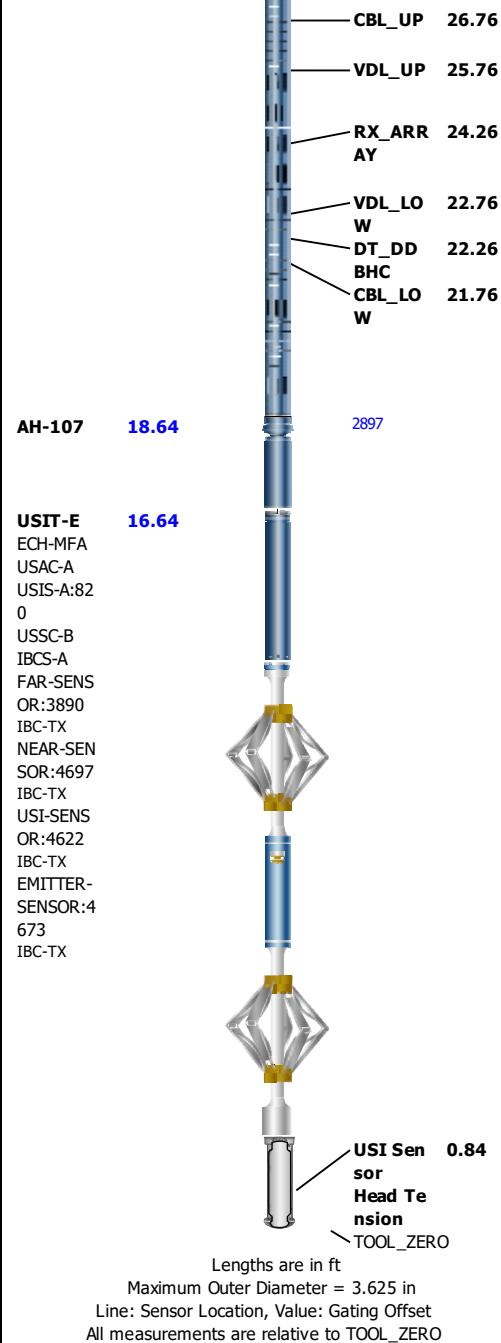
Remarks and Equipment Summary

1B: Toolstring	1B: Remarks
Equip name Length LEH-QT 48.78 LEH-QT EDTC-B:8 45.29 220 EDTH-B:93 73 EDTG-A:7 7125 EDTC-B:82 20 CAL-YA:9 38.79 39 CAL-YA:93 9 AH-320 35.29 ASLT-B:e 33.29 n p 1 ASLT-BB:e m 12	Main Pass loggd @1000psi, Repeat @0psi, as per clients request.
	Log Correlated to MJ @ 9693'.
	Tool was run as per tool sketch
	All logging intervals as per client request

CTEM 41.79
 ACCZ 0.00
 HV 0.00
 Gamma 39.92
 Ray
 TelStatu 38.79
 s

CCL 38.00

749



Depth Summary

1B

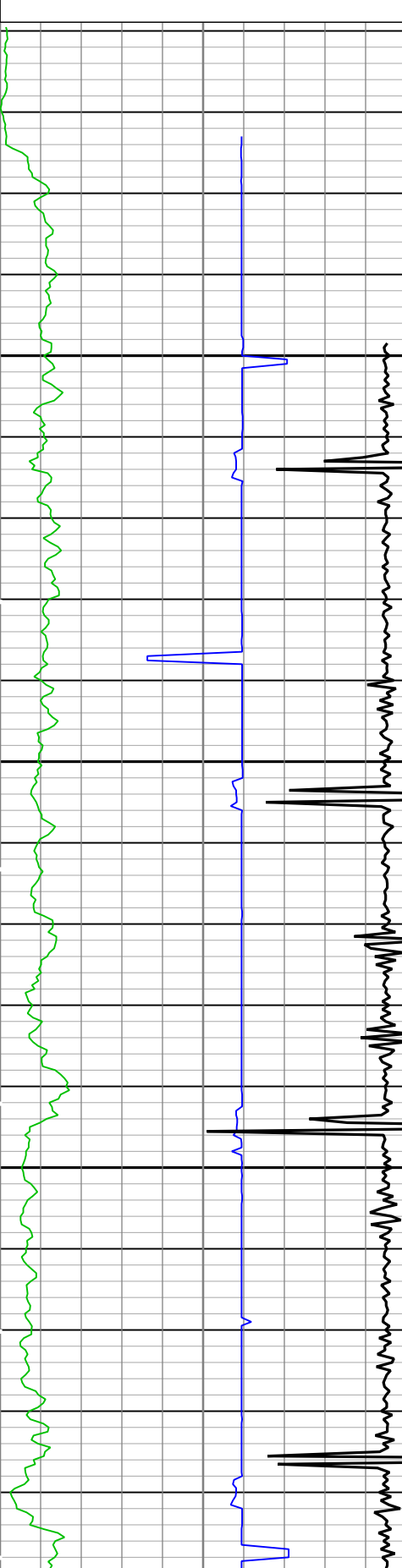
Depth Measuring Device

Type	IDW-JA
Serial Number	6443
Calibration Date	22-Sep-2021
Calibrator Serial Number	57
Calibration Cable Type	7-32AS-XS
Wheel Correction 1	-3
Wheel Correction 2	-2

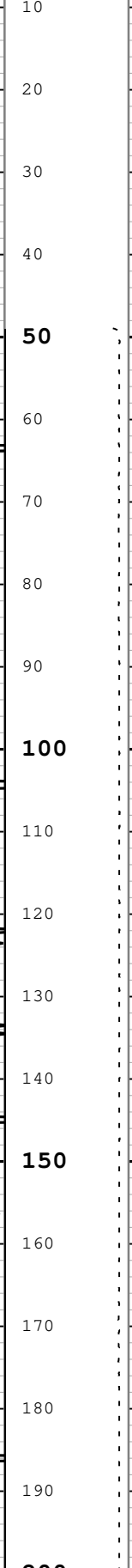
Tension Device

Casing Collar Locator Ultrasonic (CCLU)
USIT-E

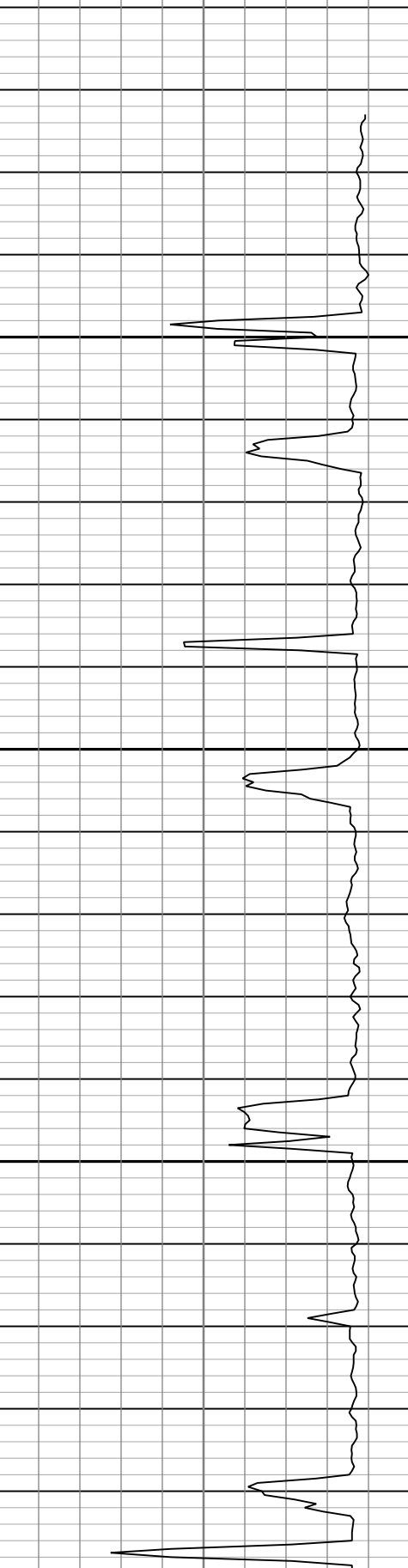
-19 in 1



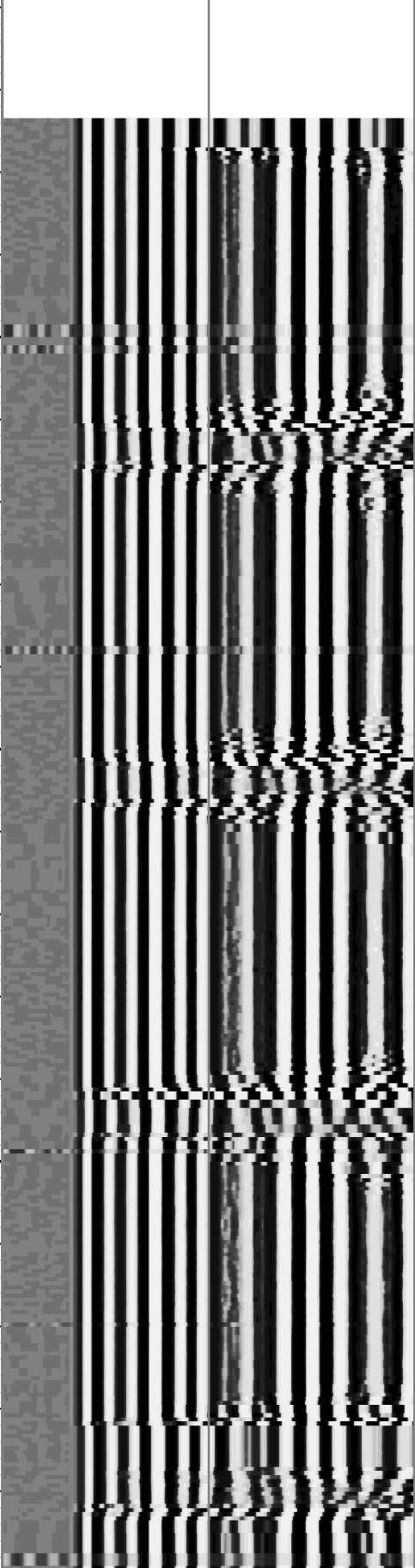
Cable Drag
Tool Tot.
Drag

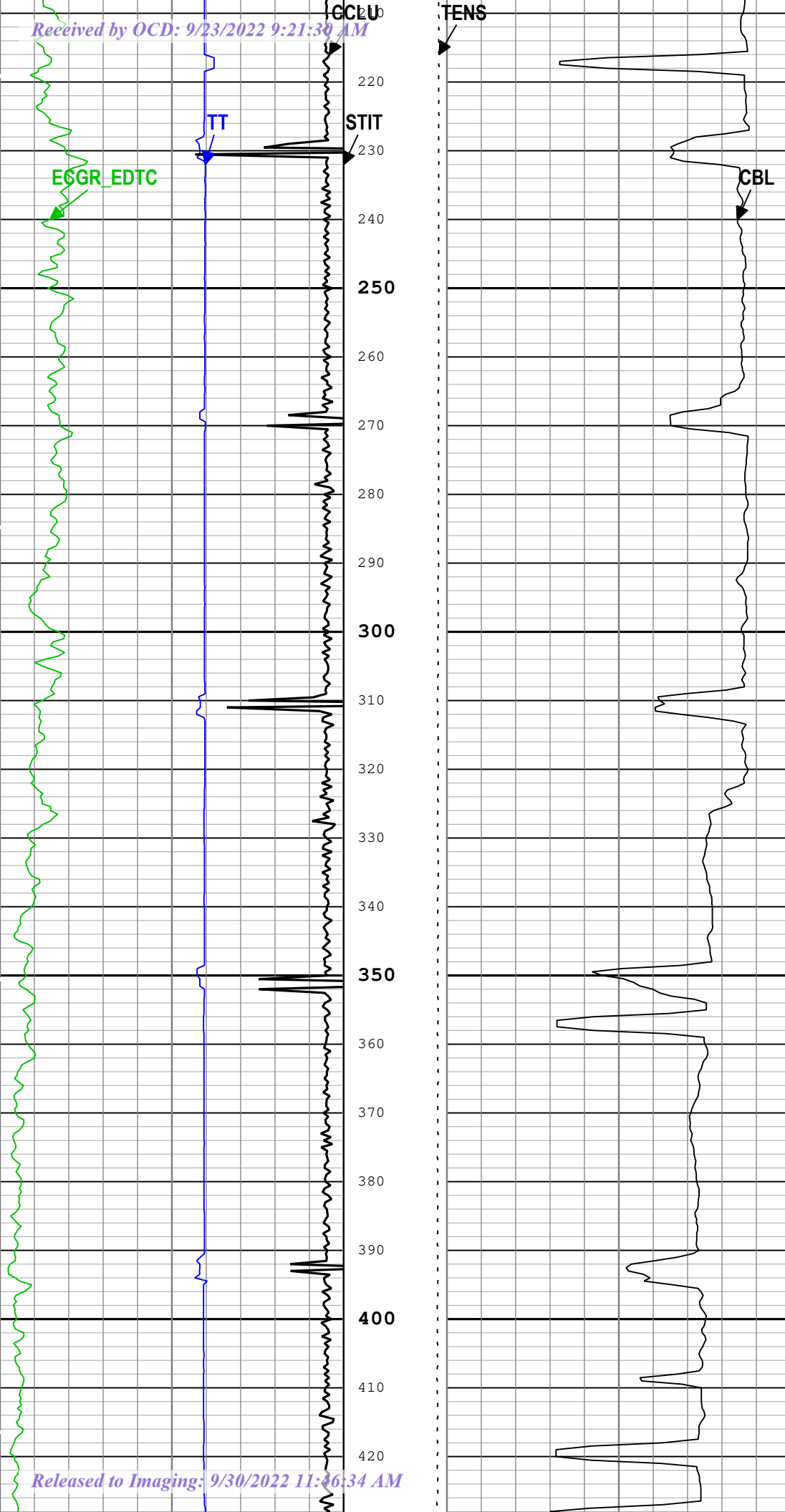


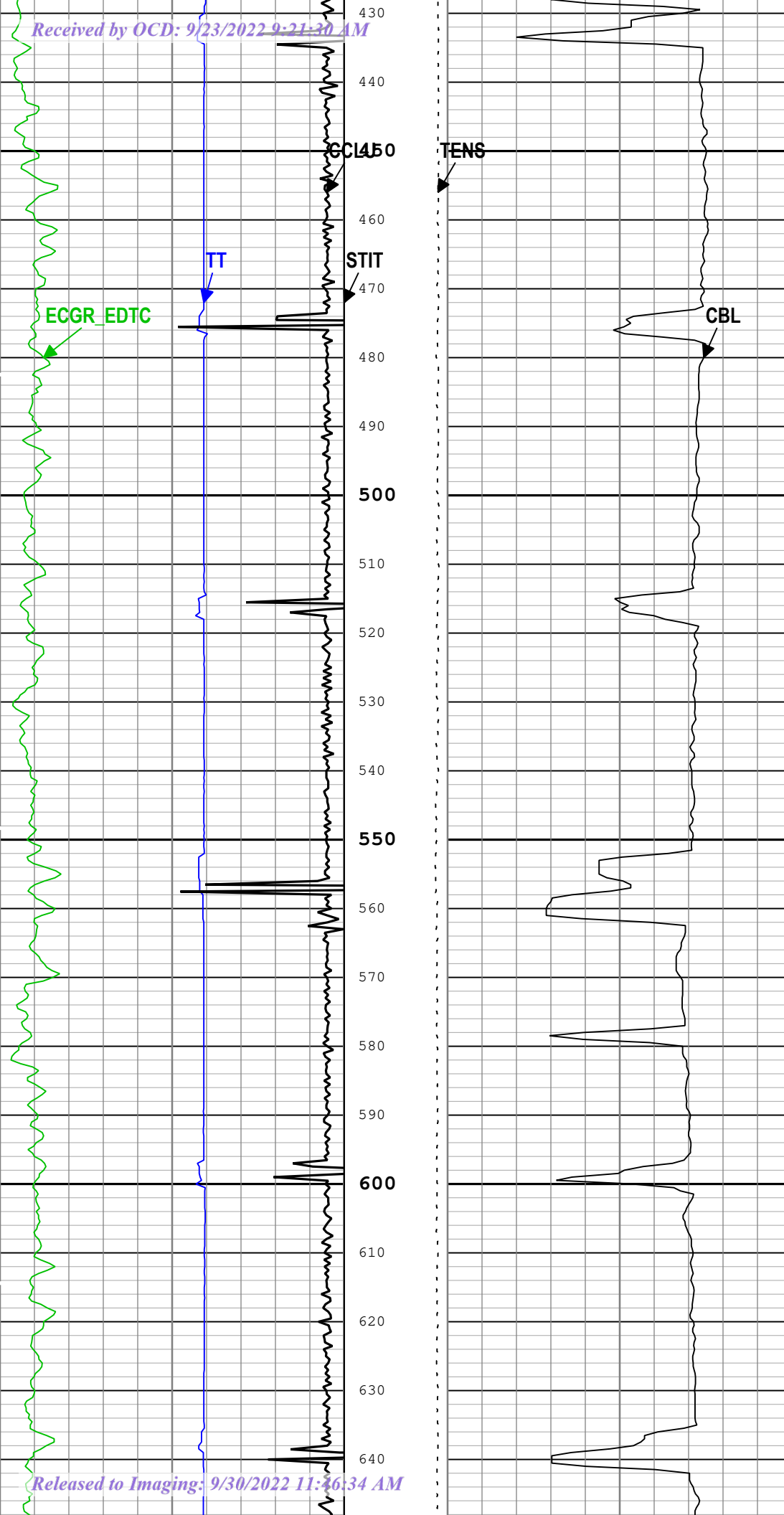
CBL Amplitude (CBL) ASLT-B
mV
CBL Amplitude (CBL) ASLT-B
mV

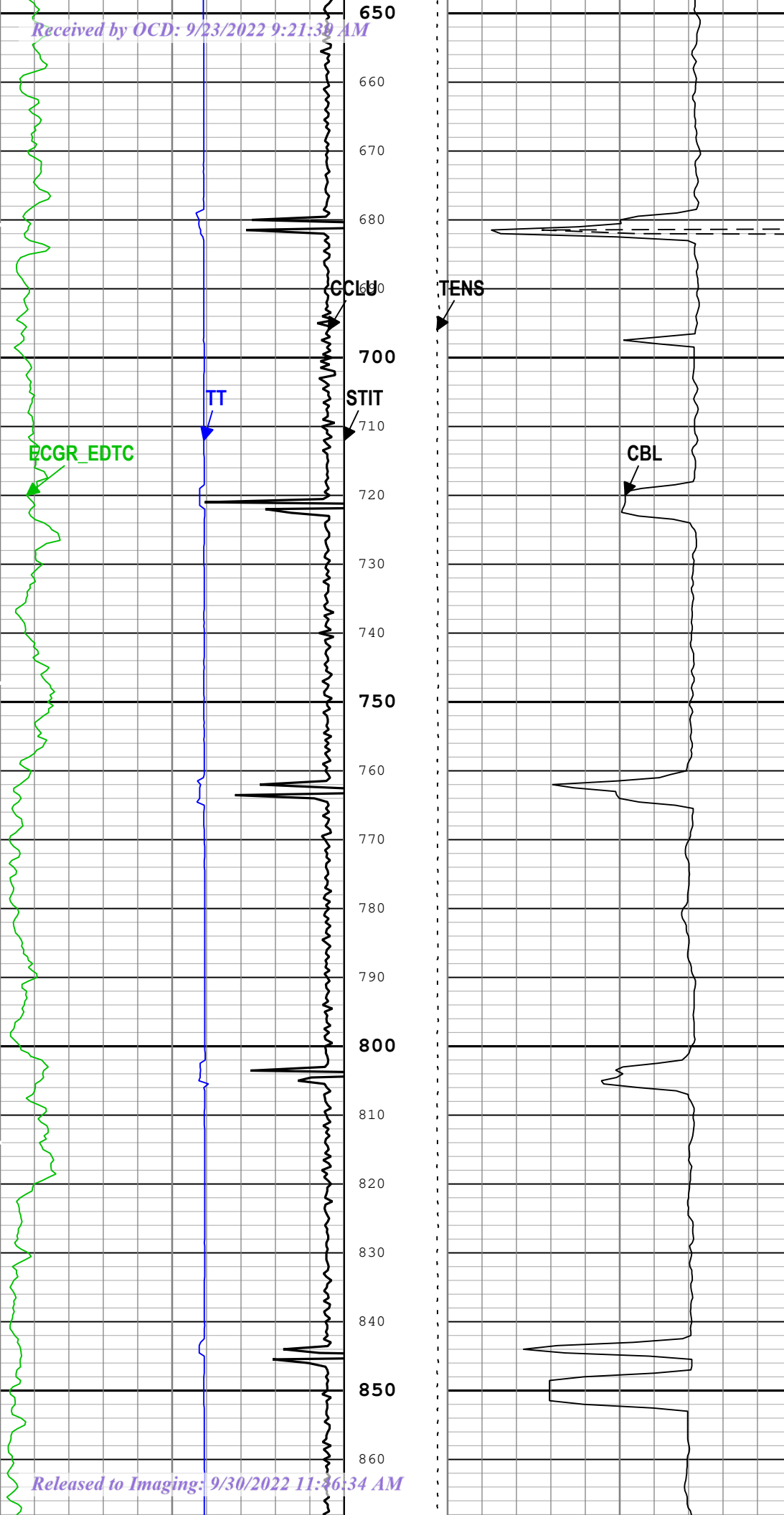


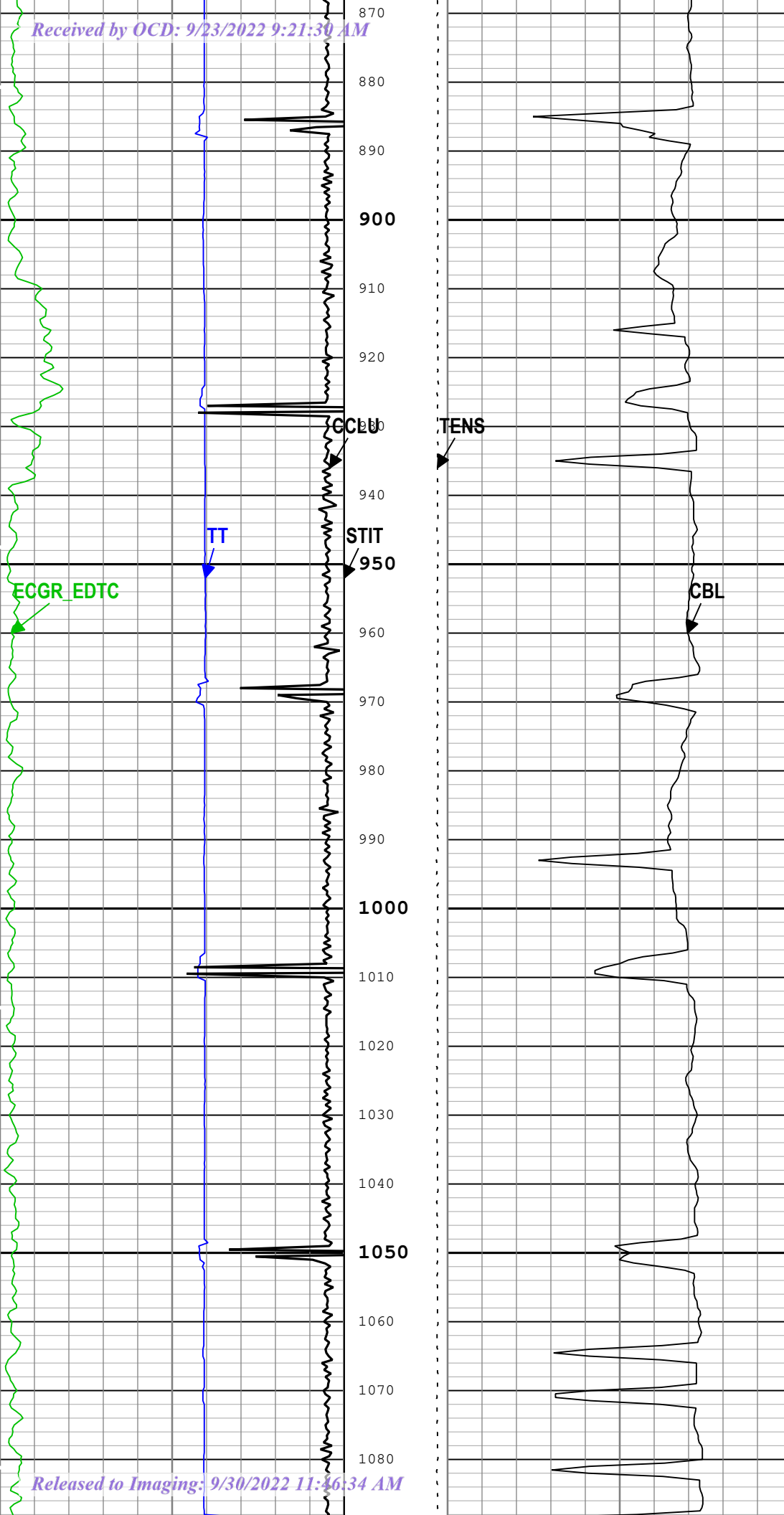
Min Amplitude Max
VDL VariableDensity (VDL) ASLT-B
us

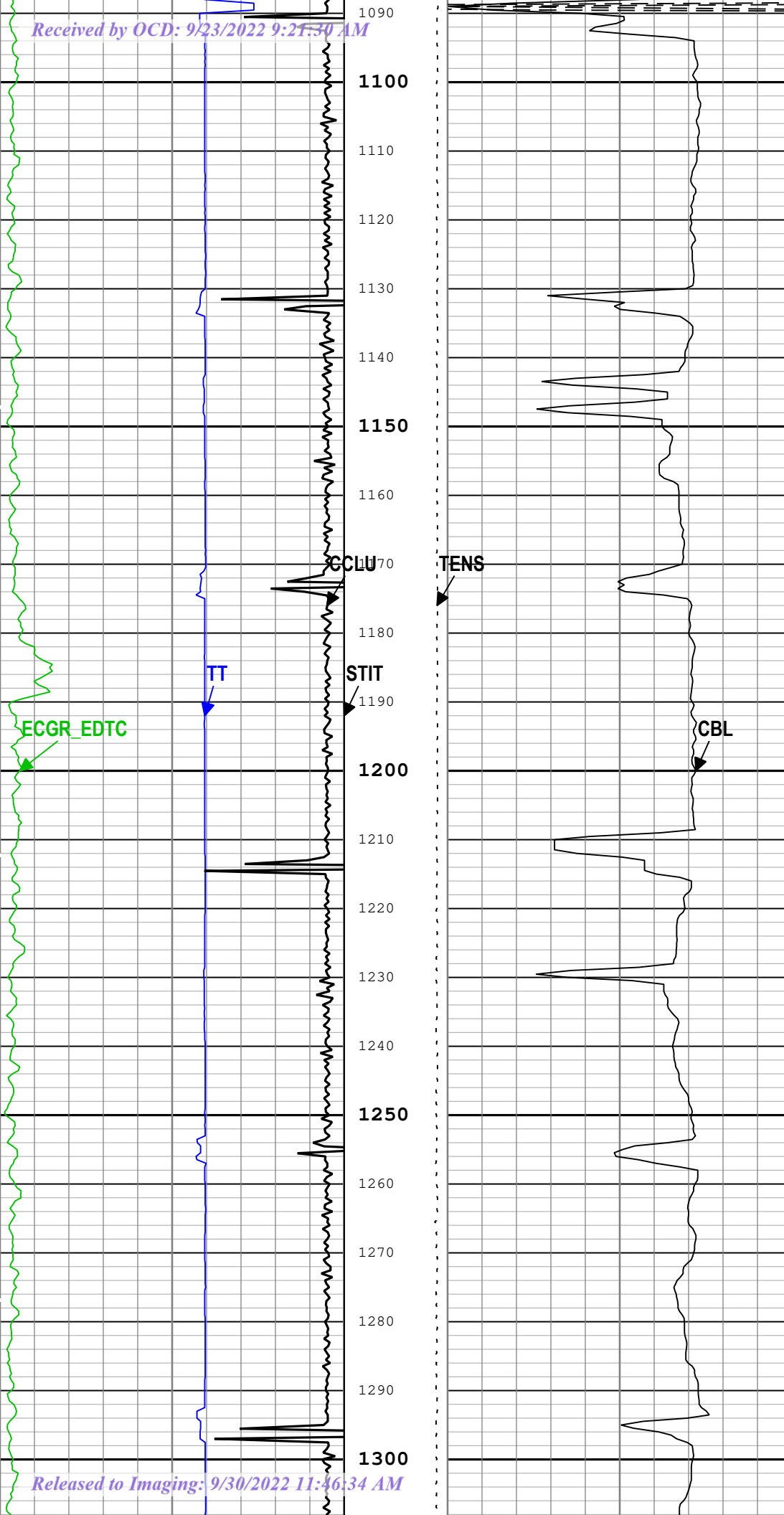


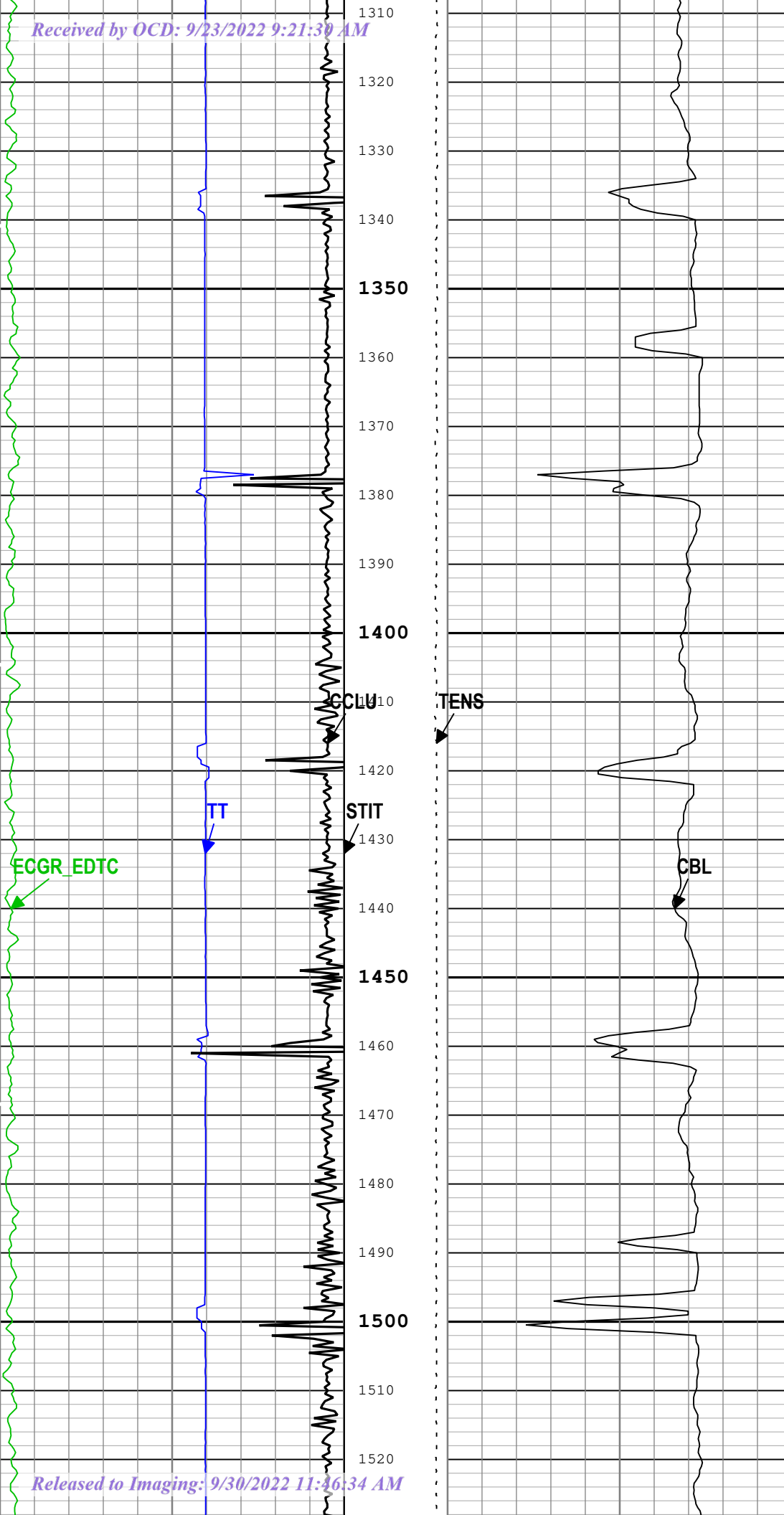


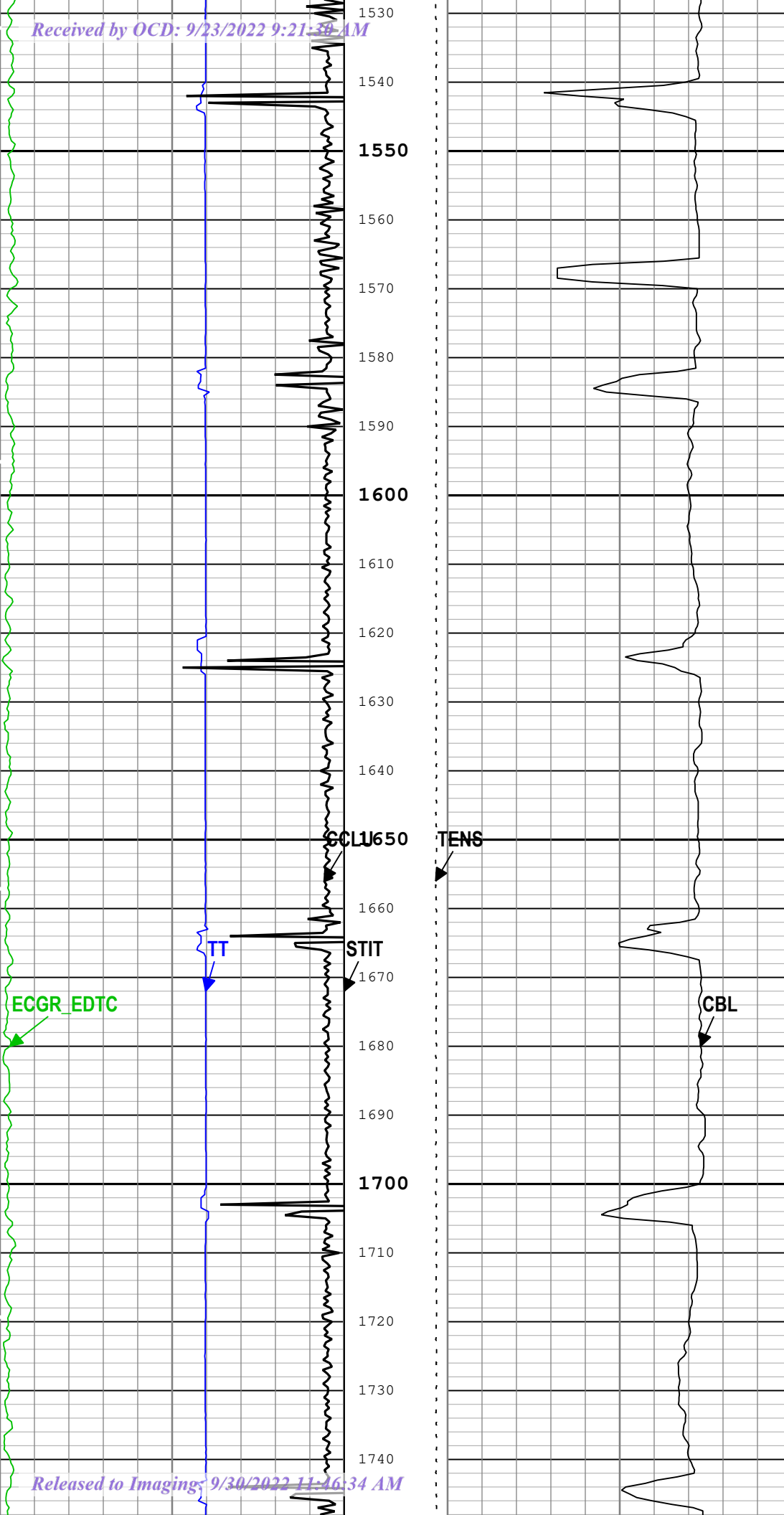


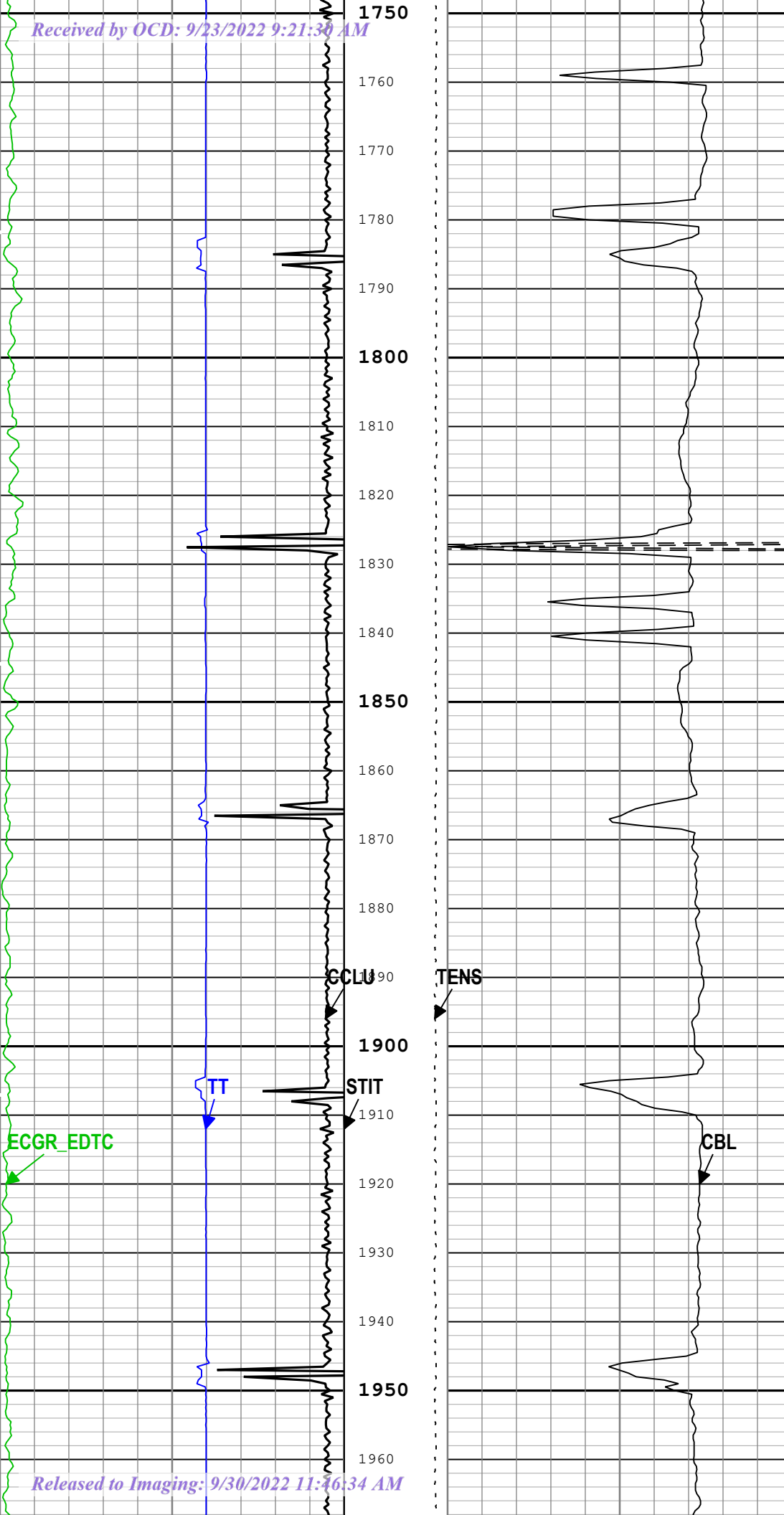




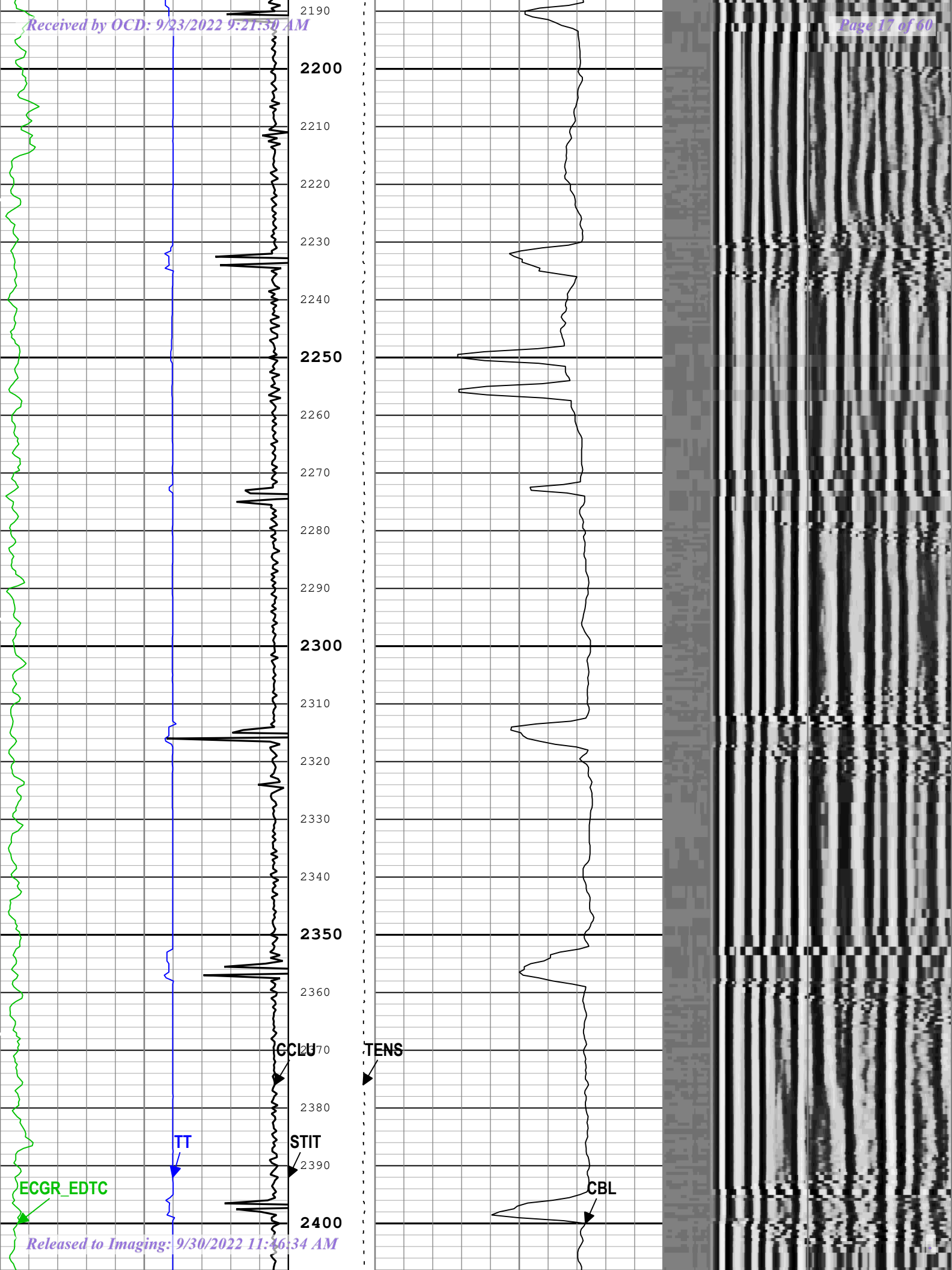


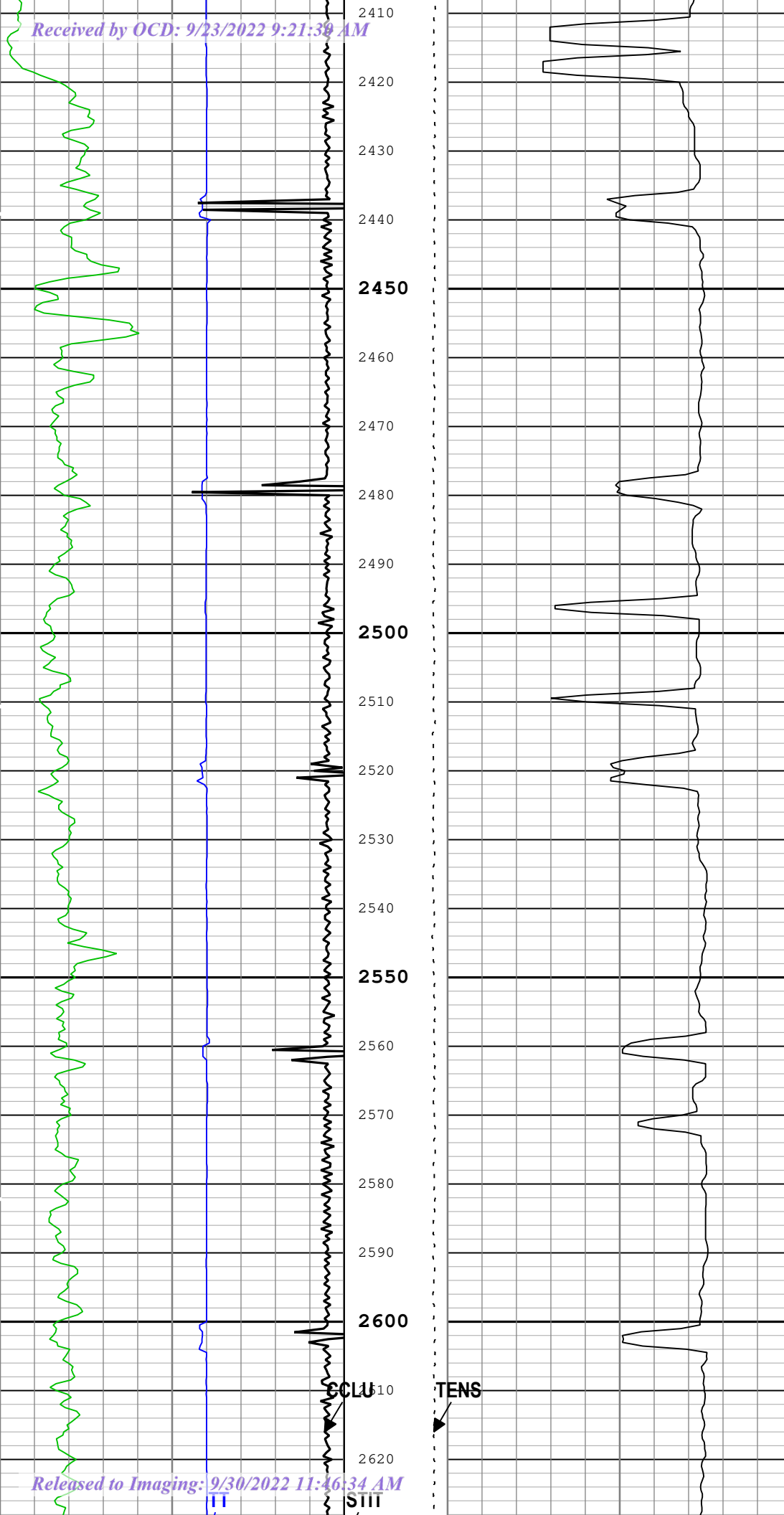






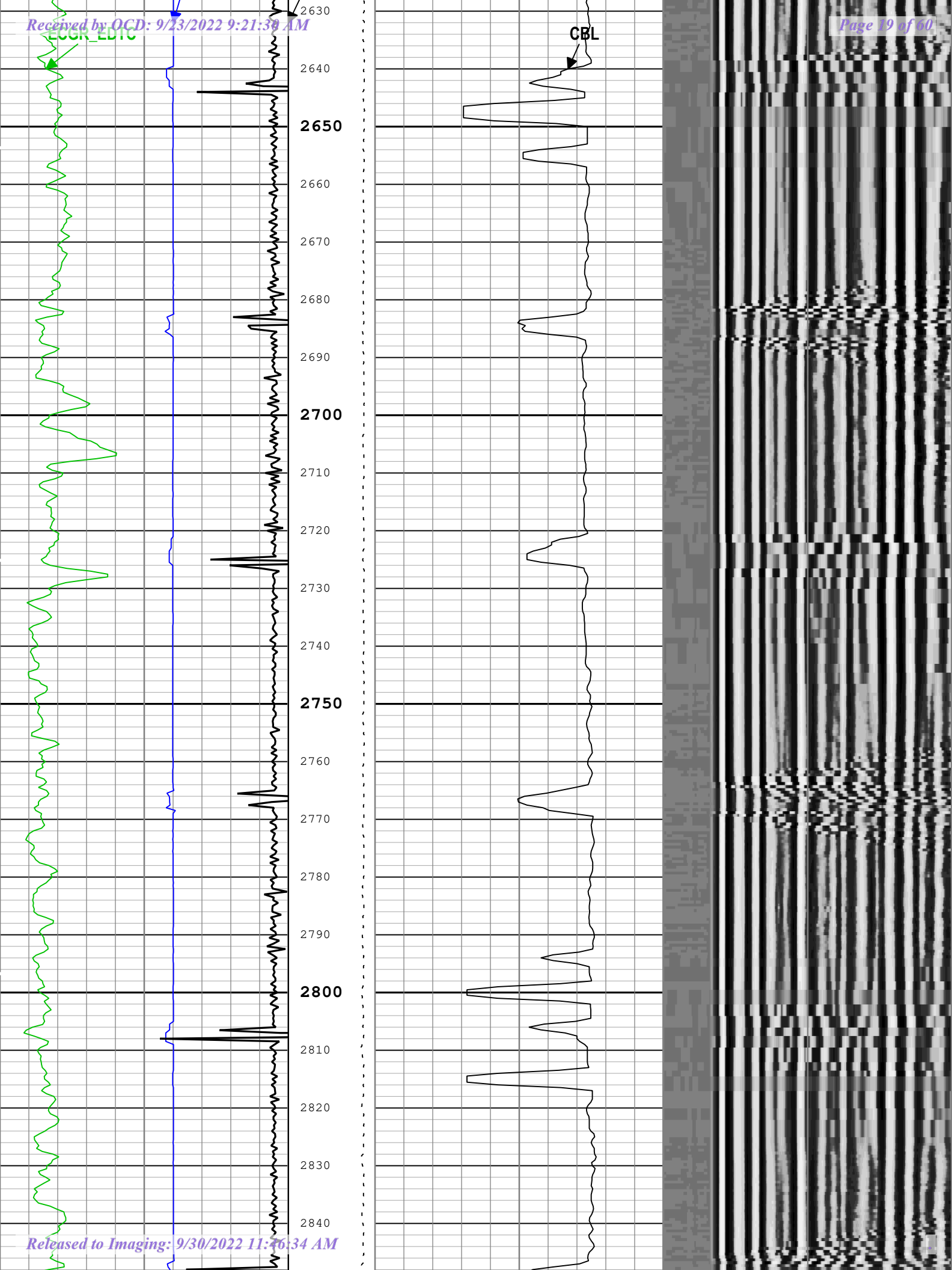


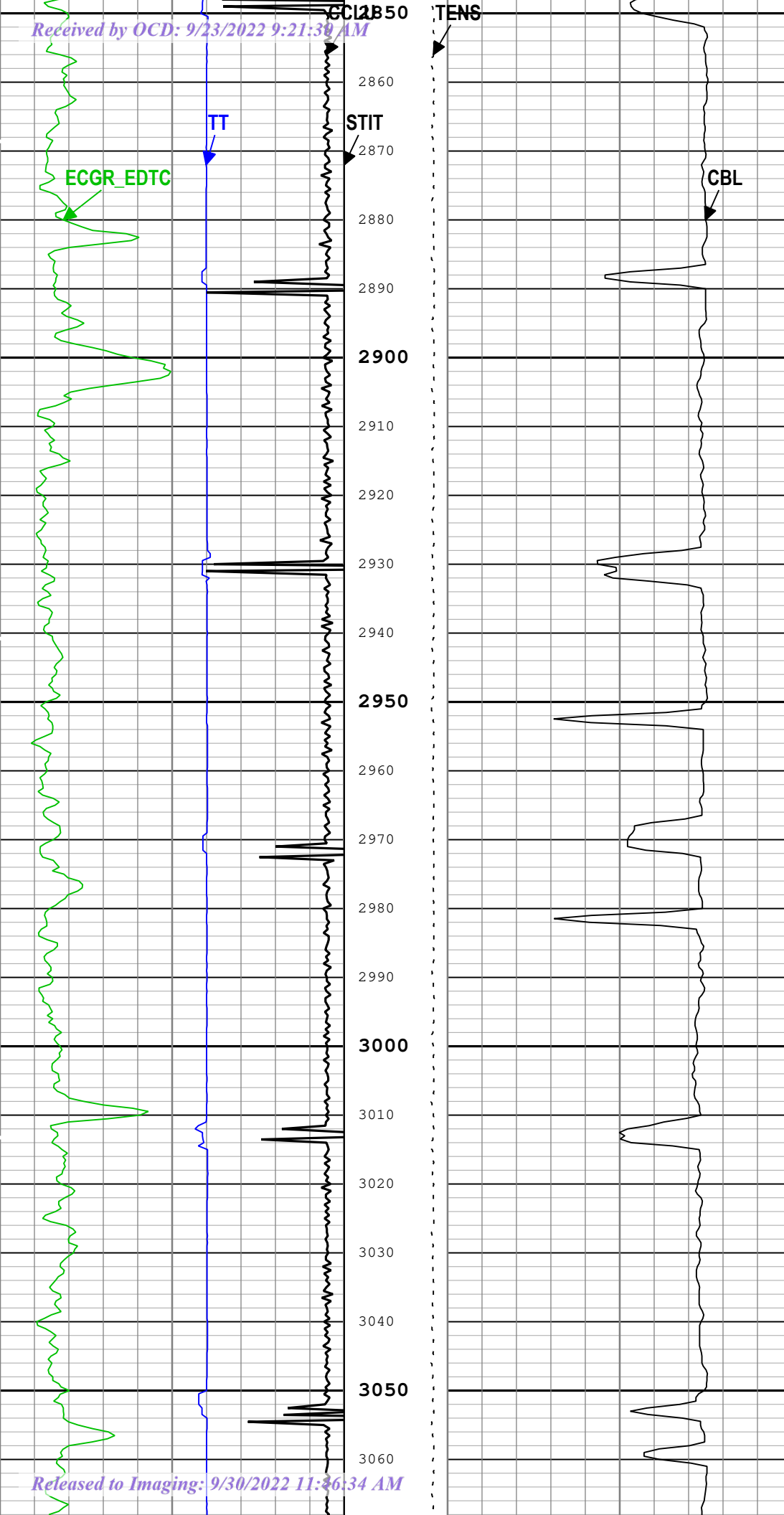


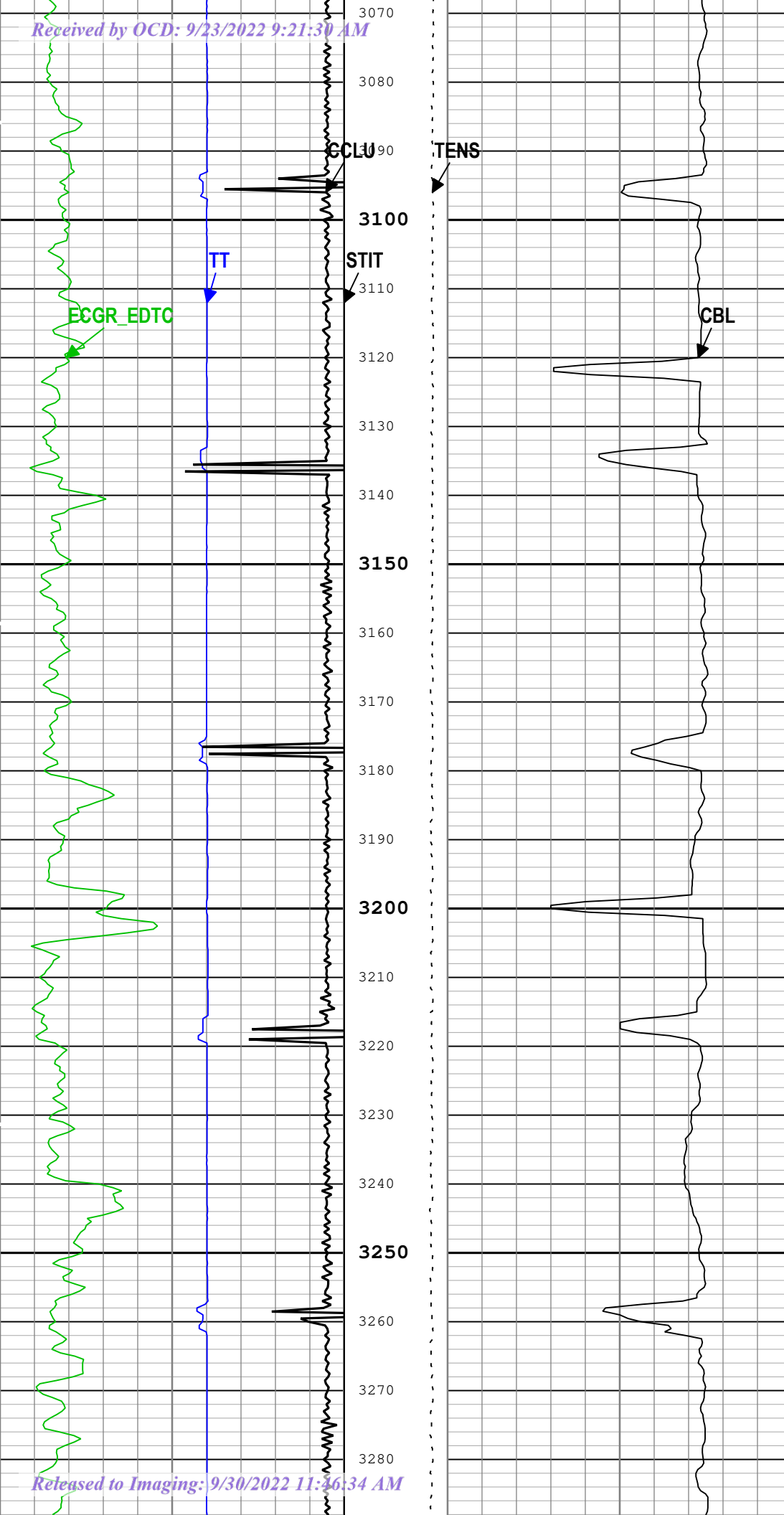


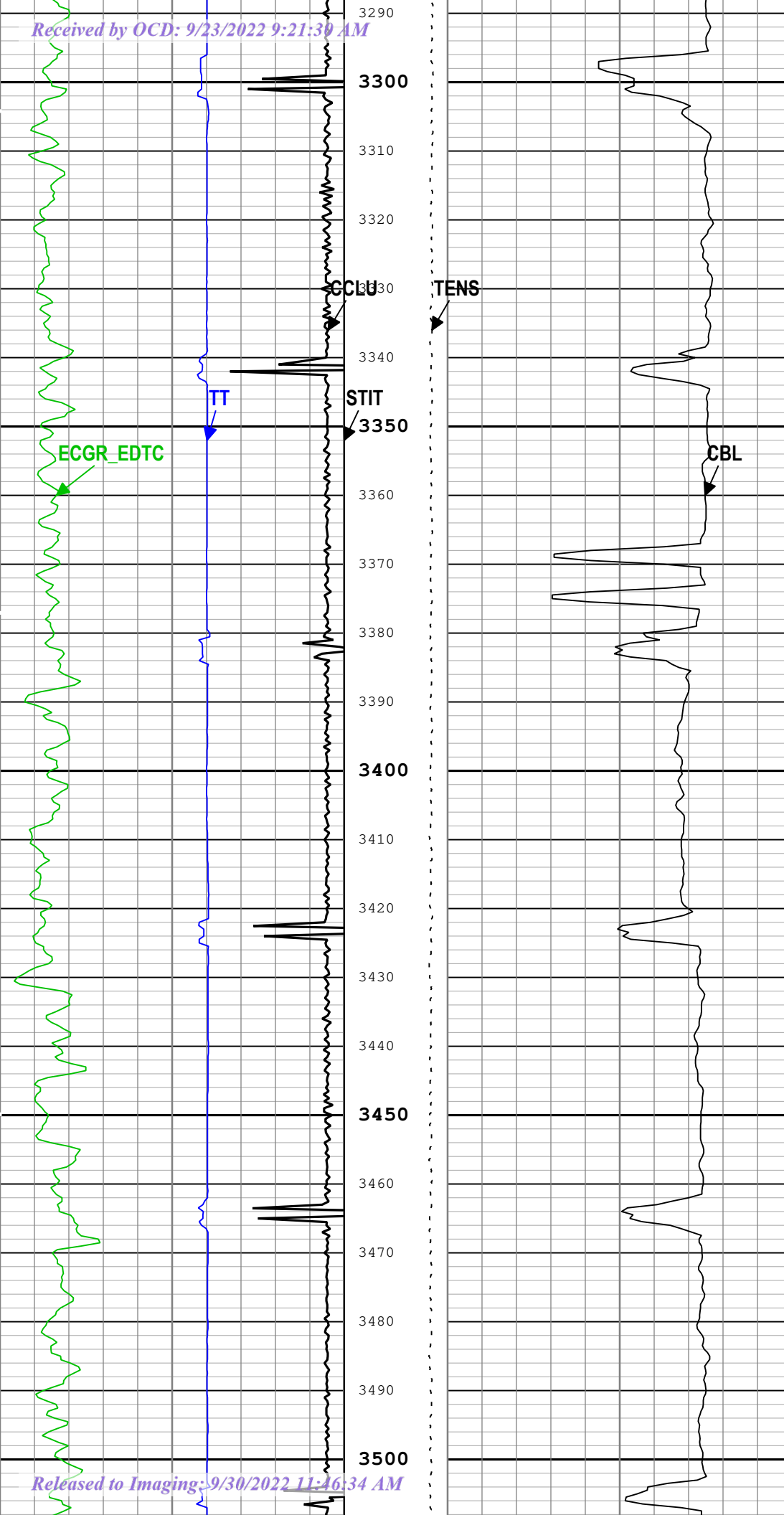
TENS

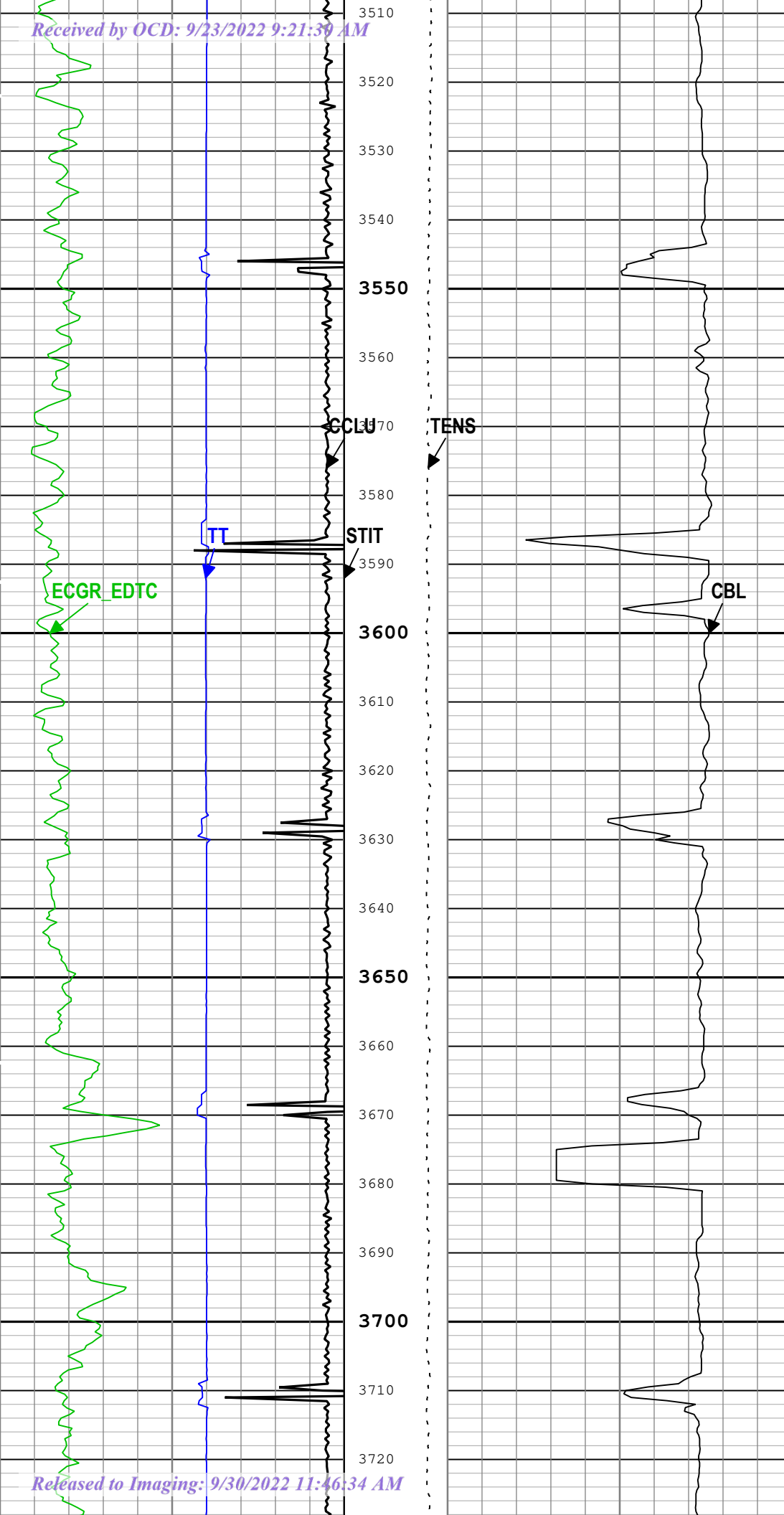


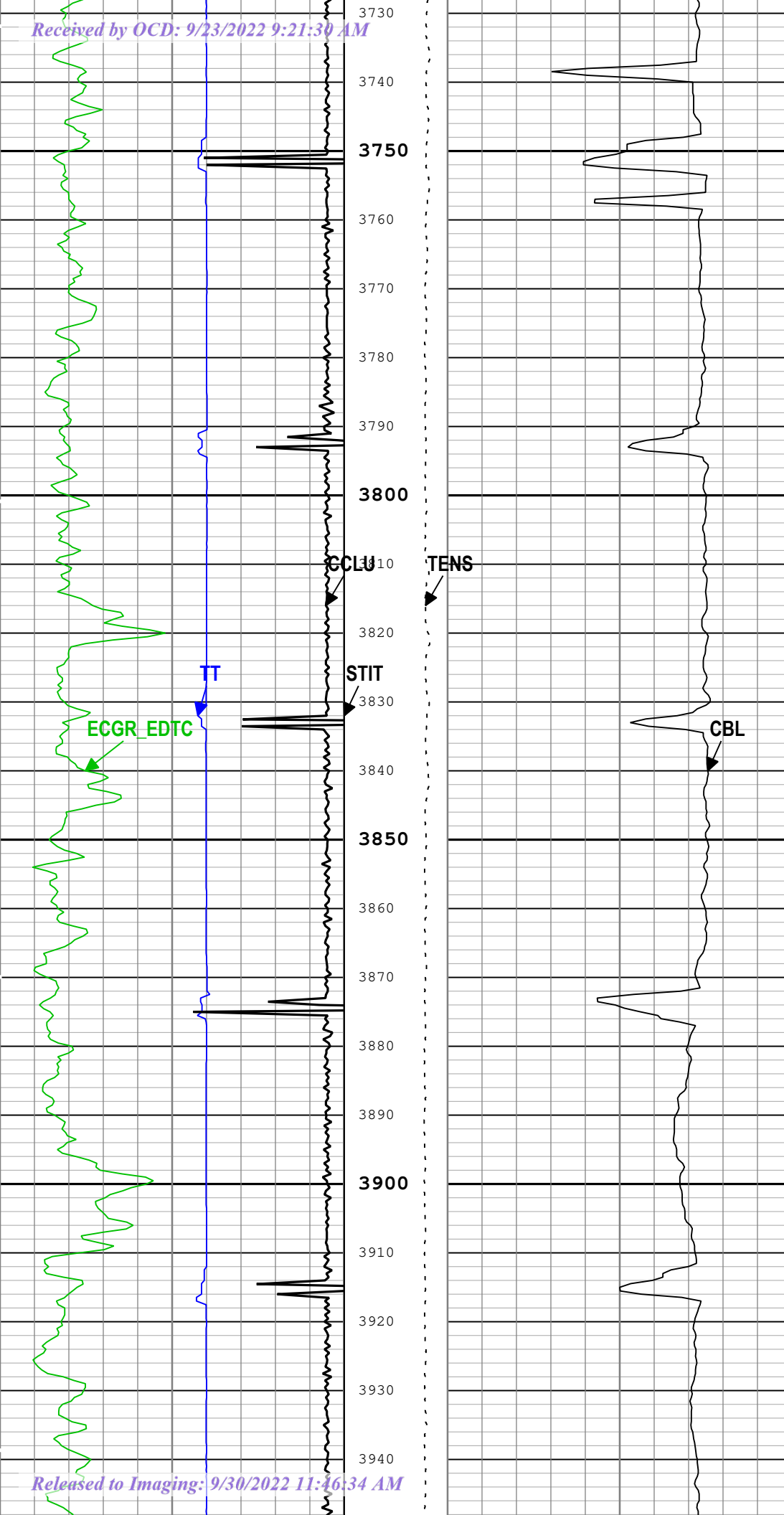


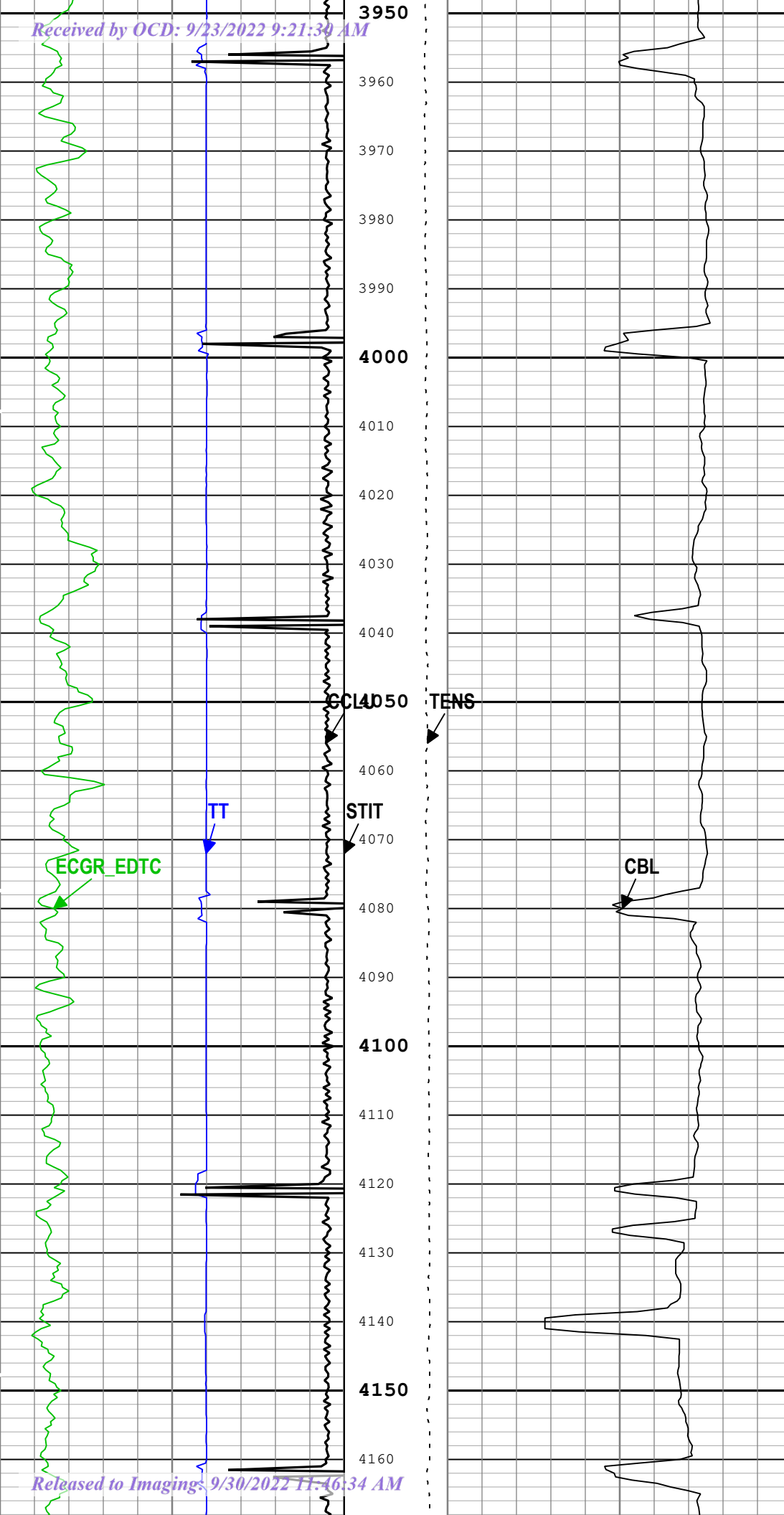


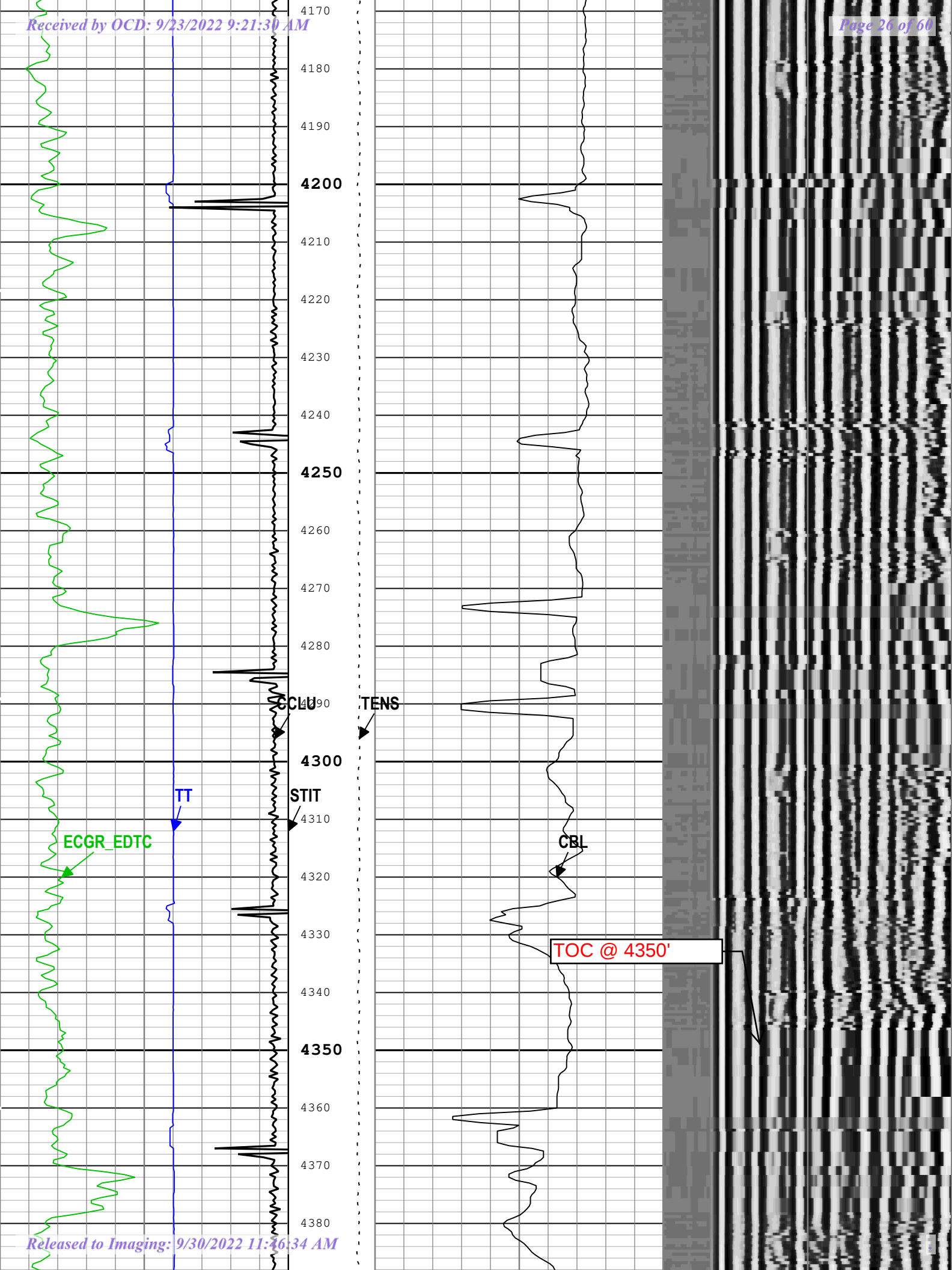


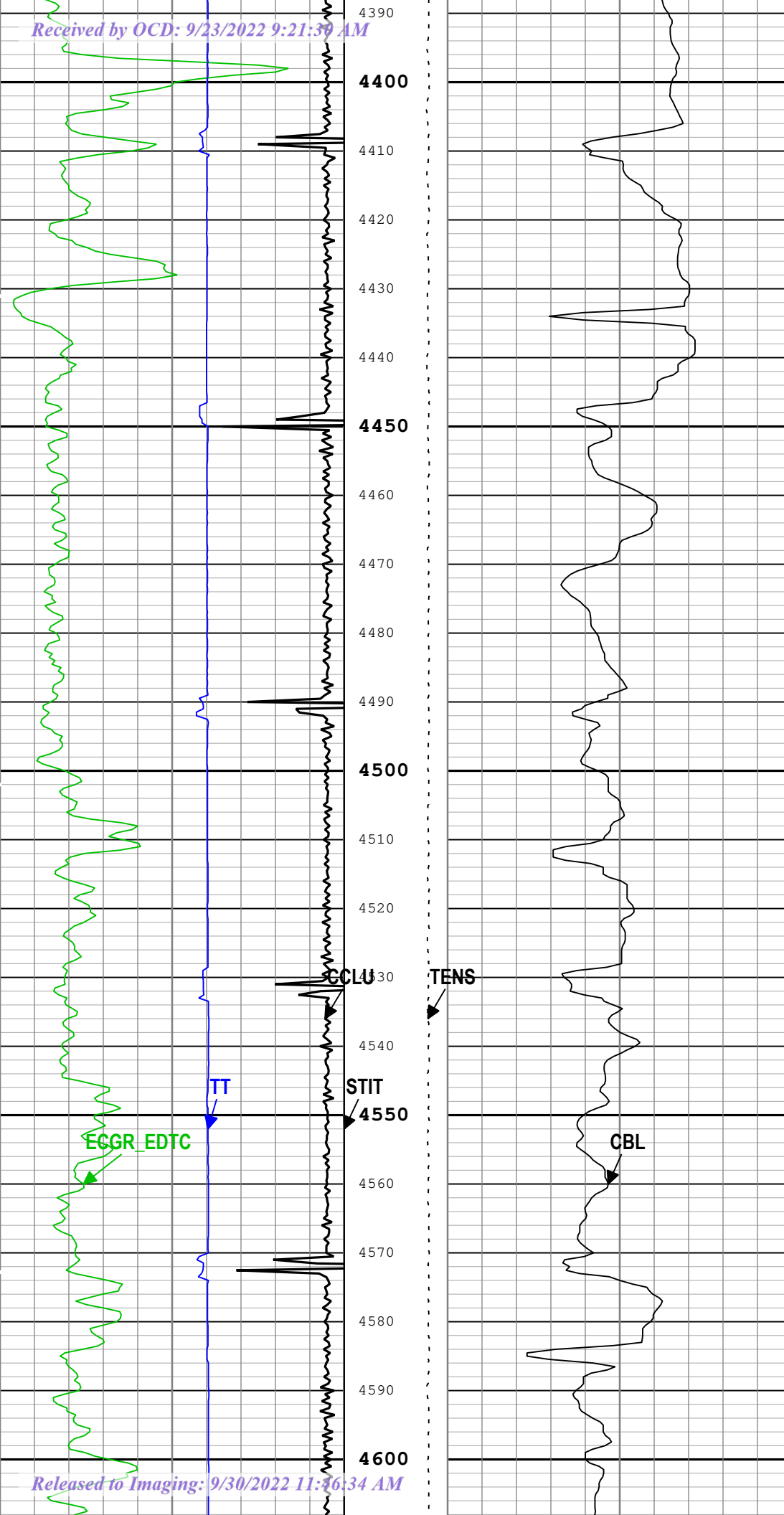


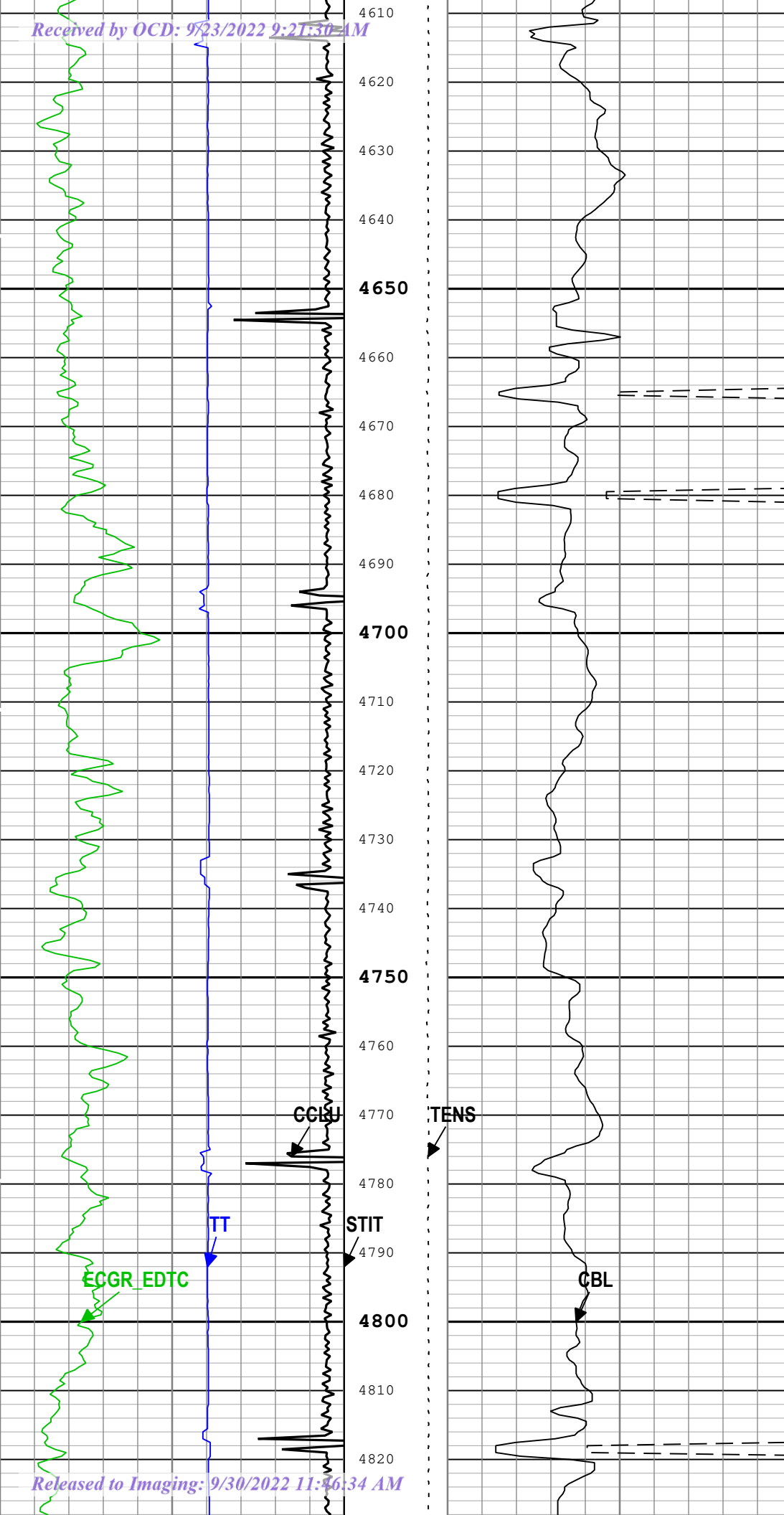


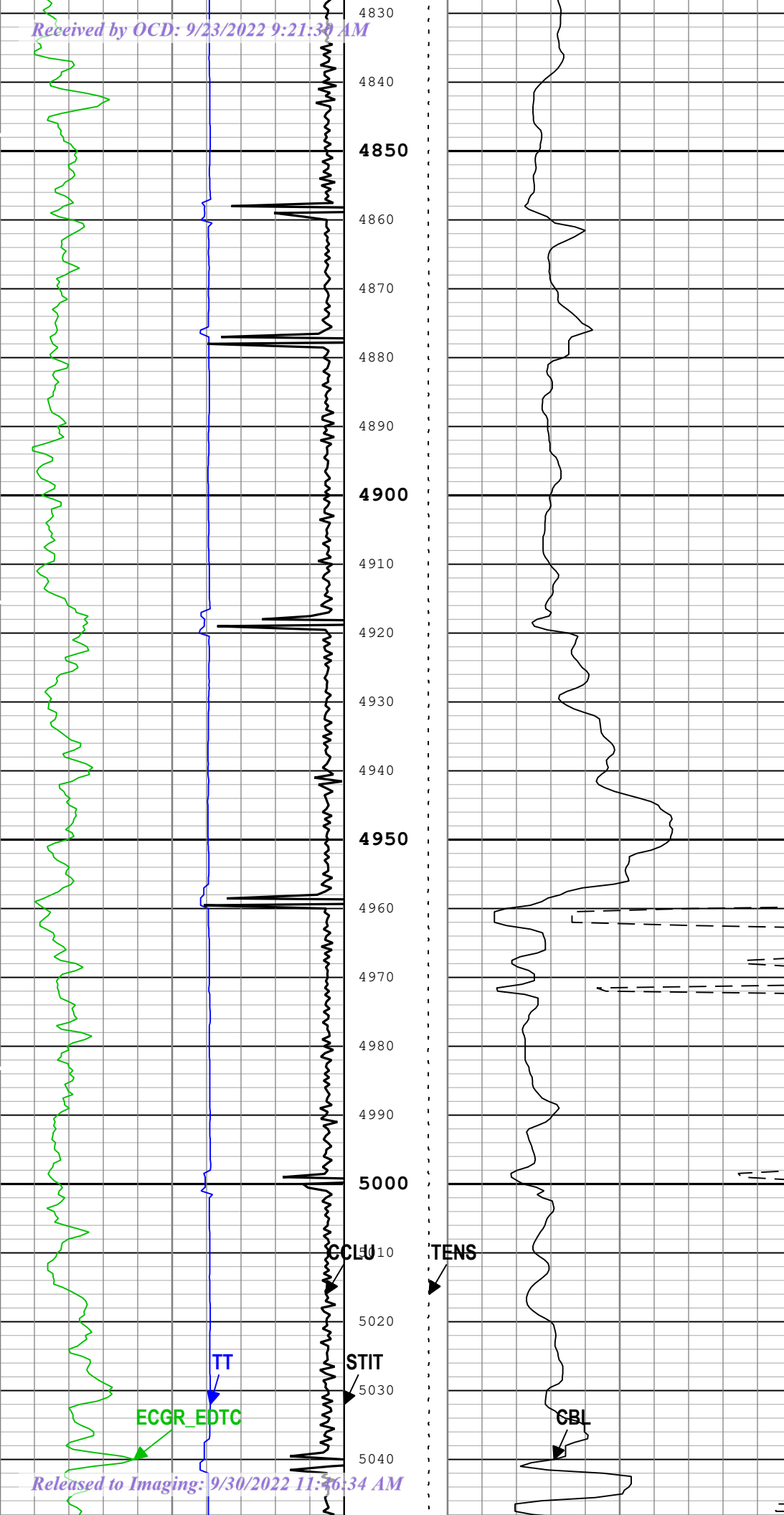


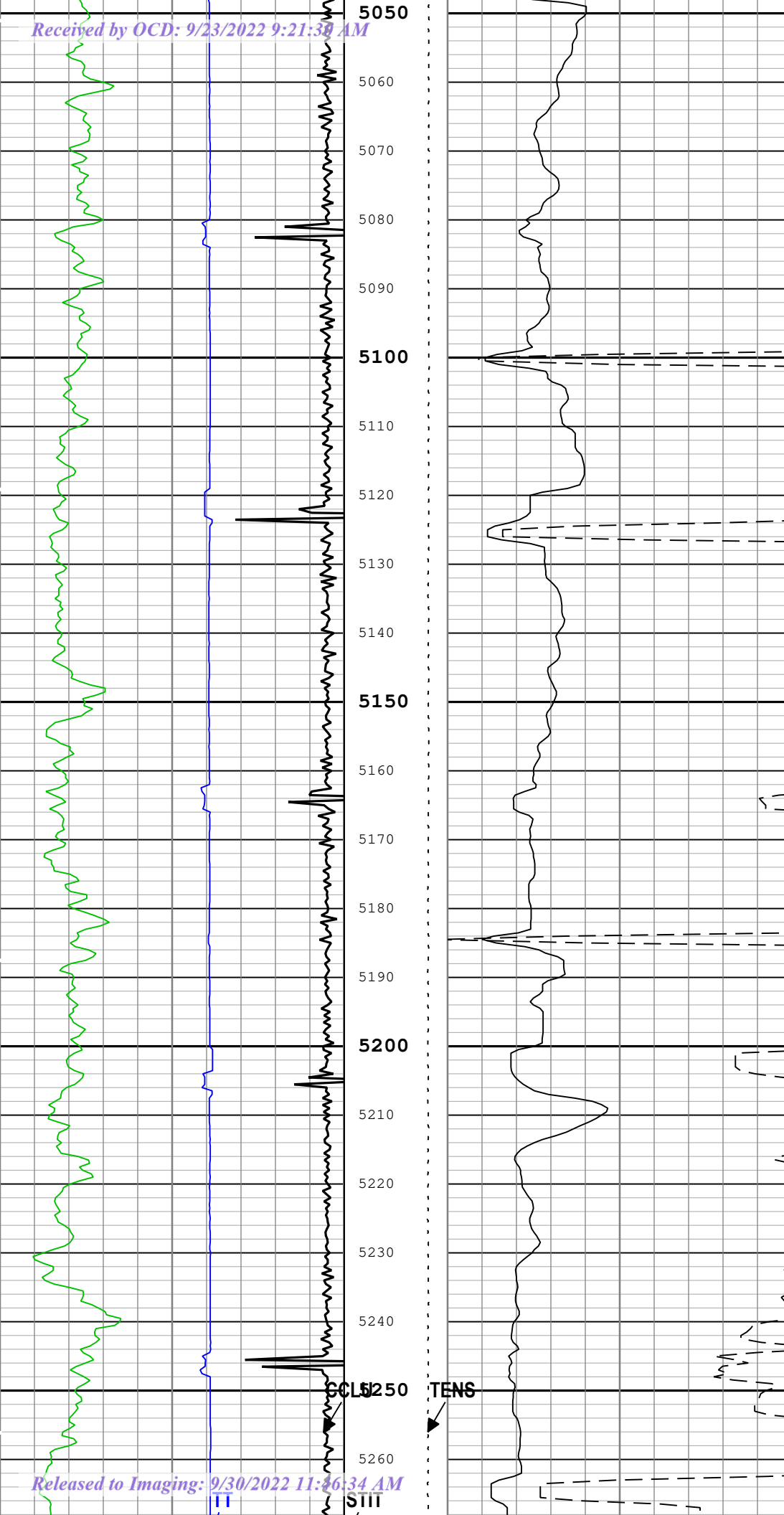






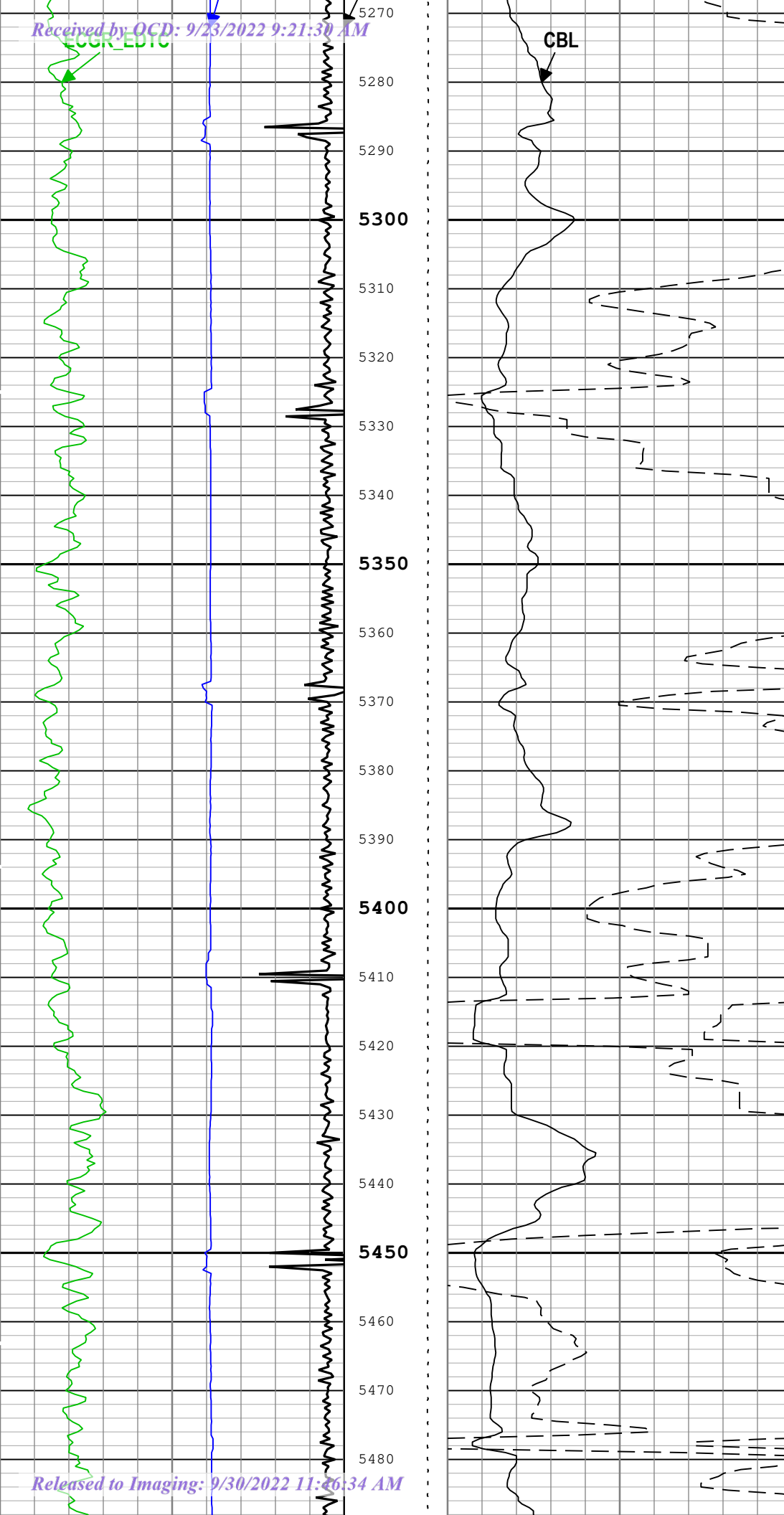


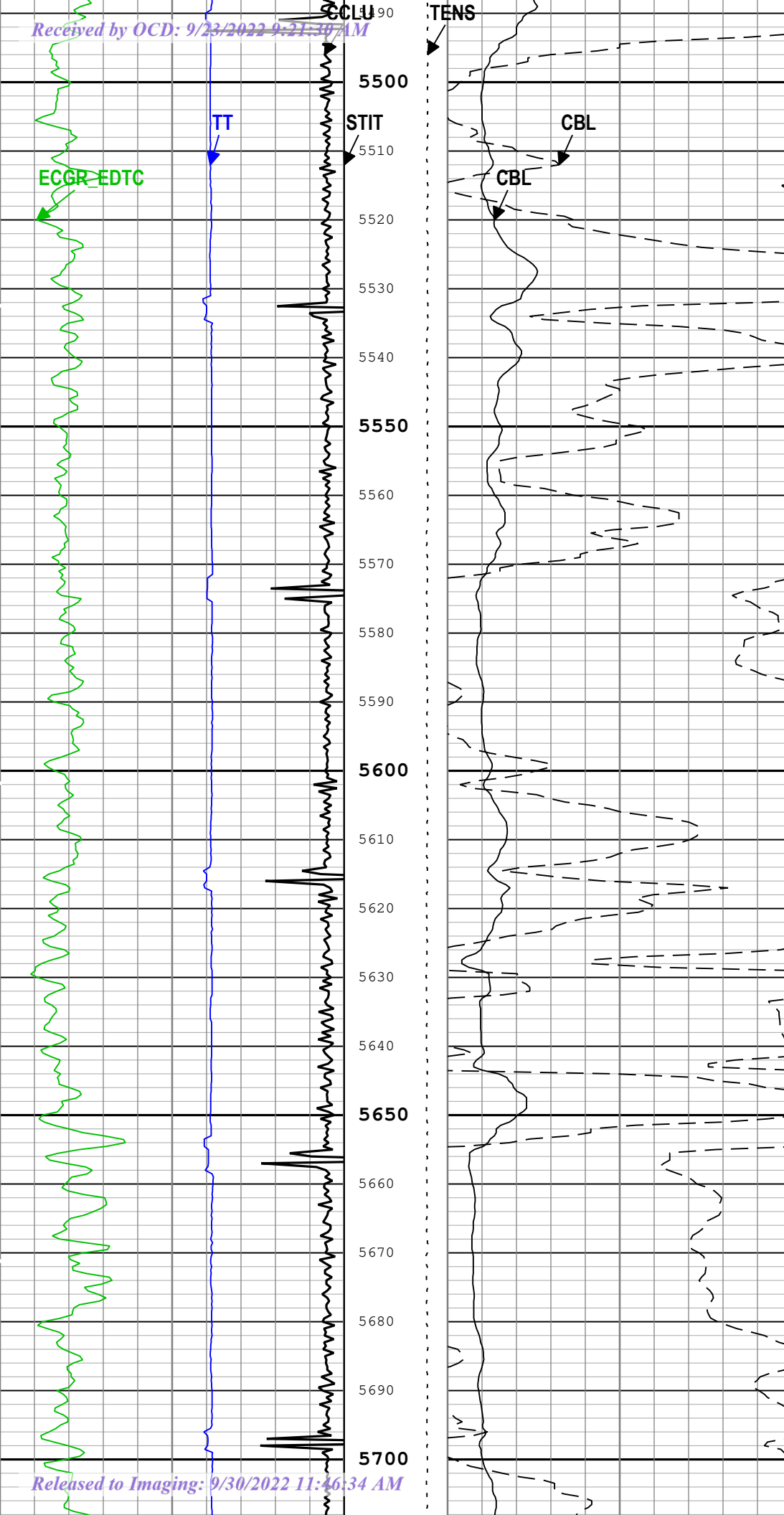


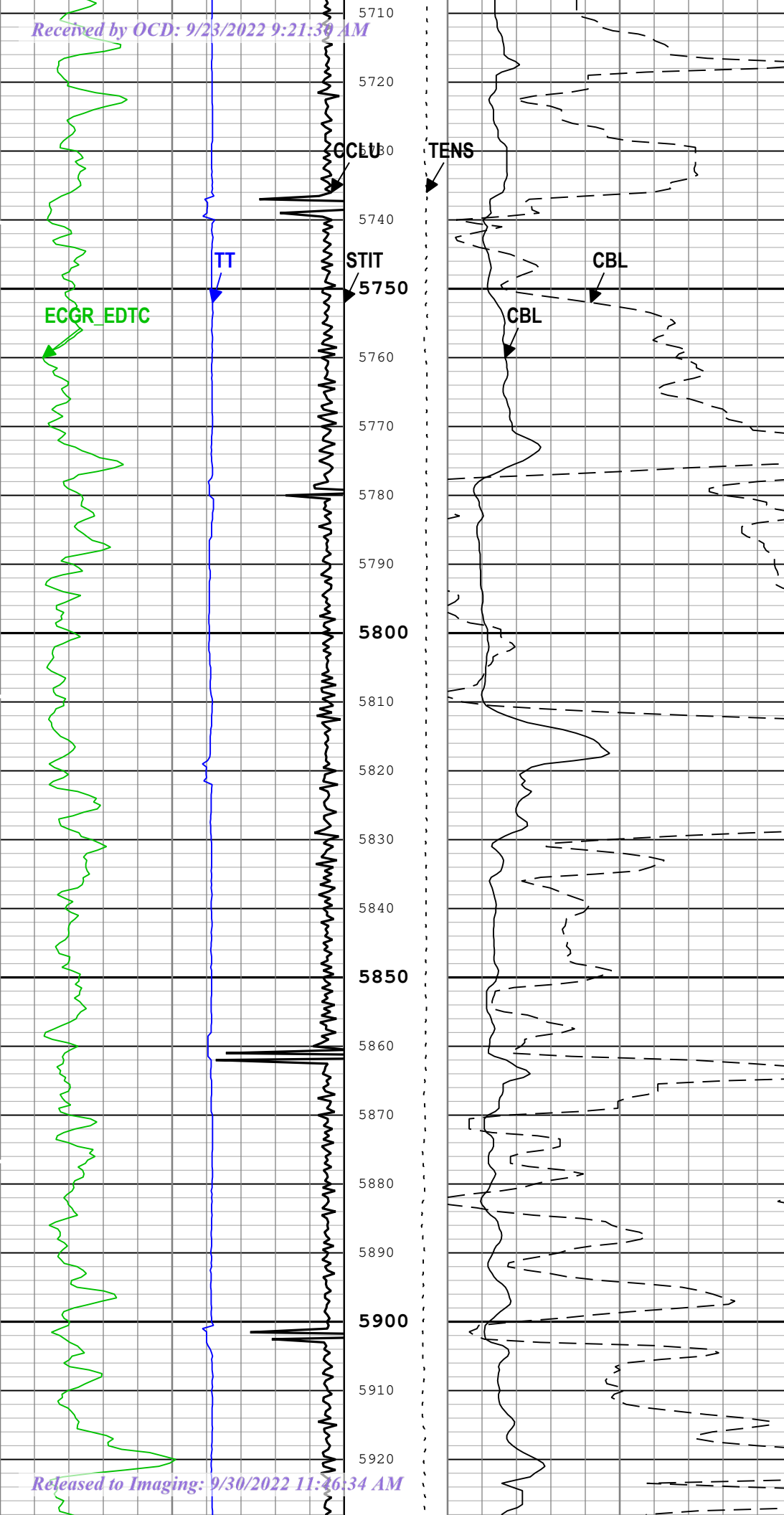


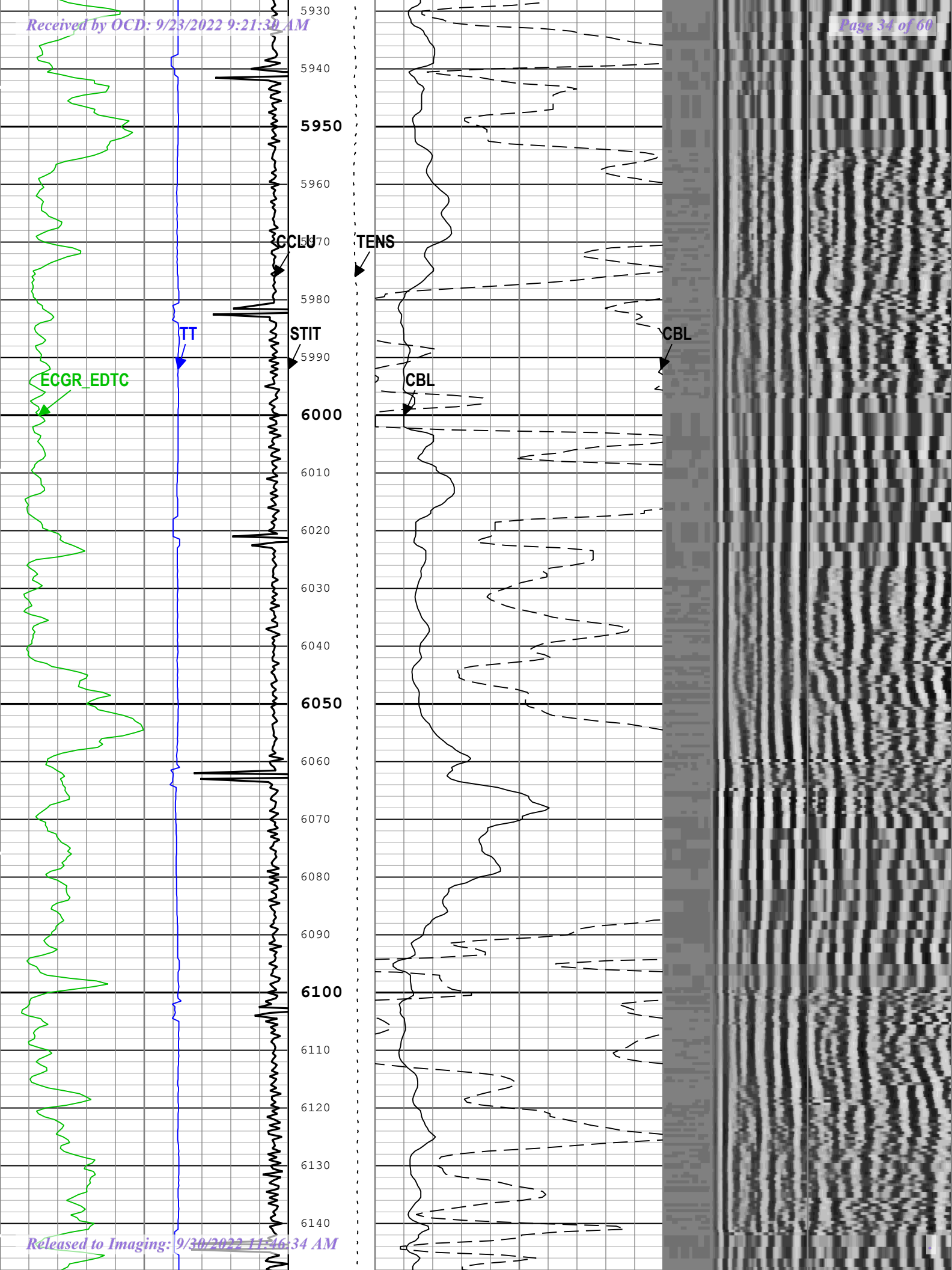
CL5250 TENS

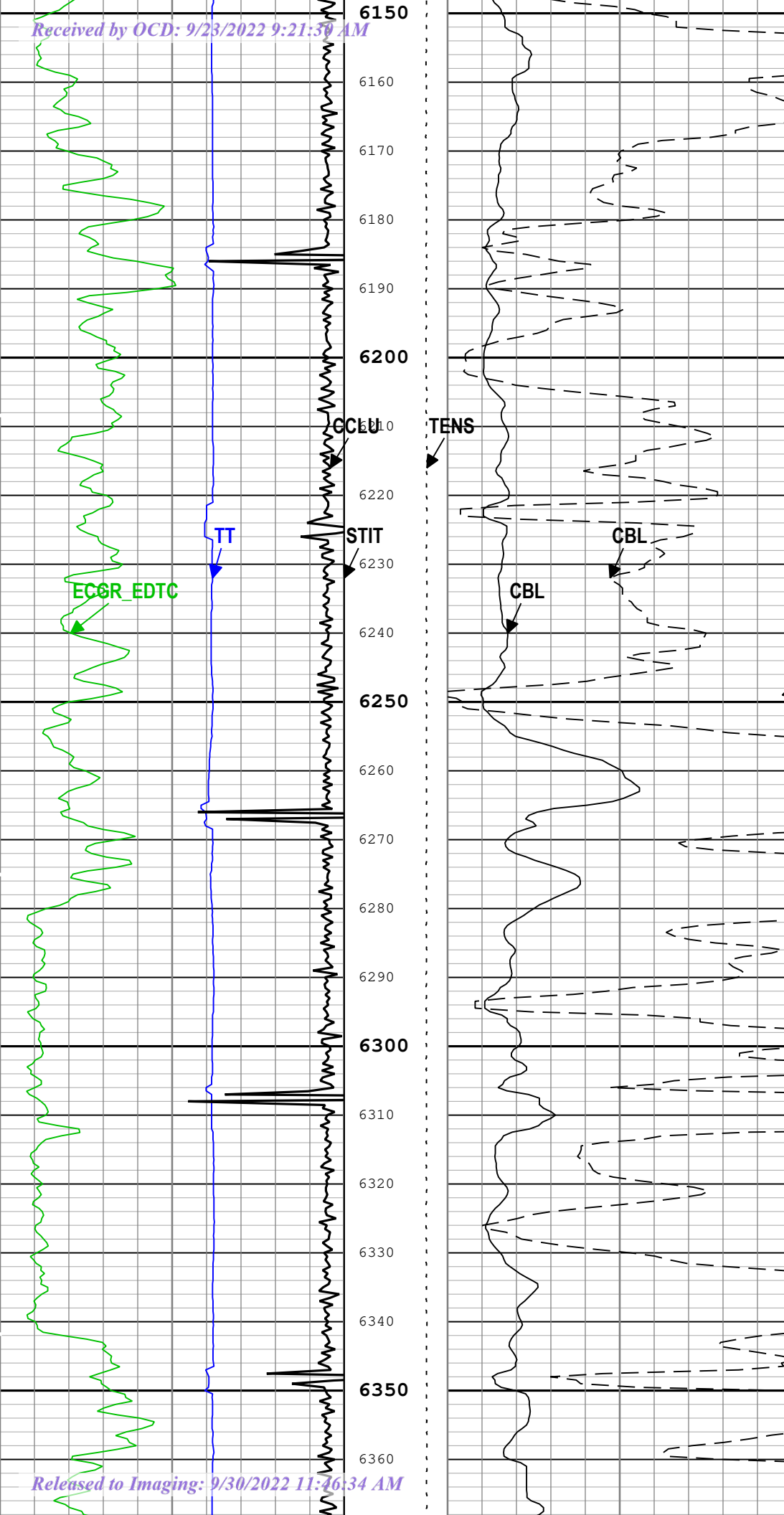
STII

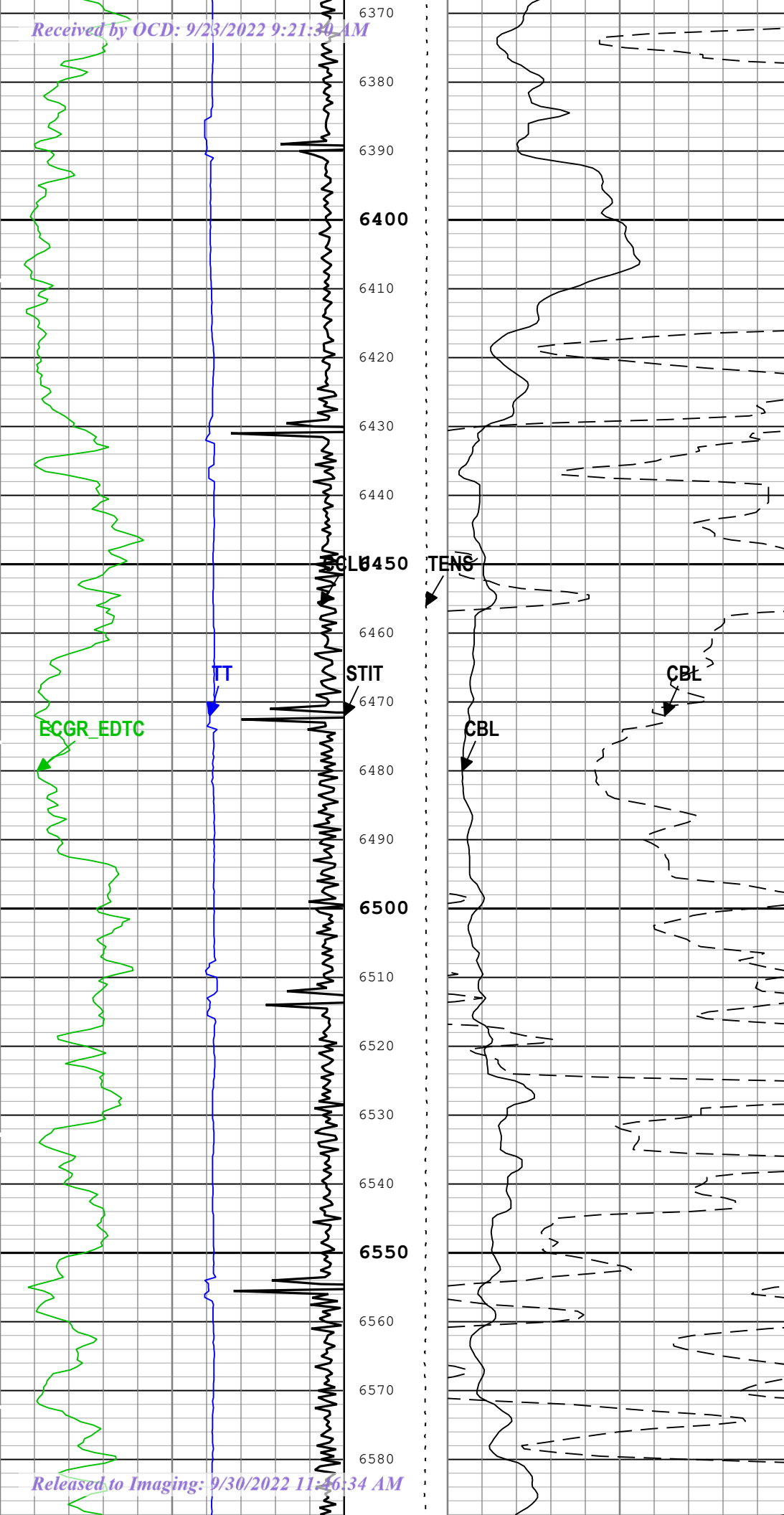


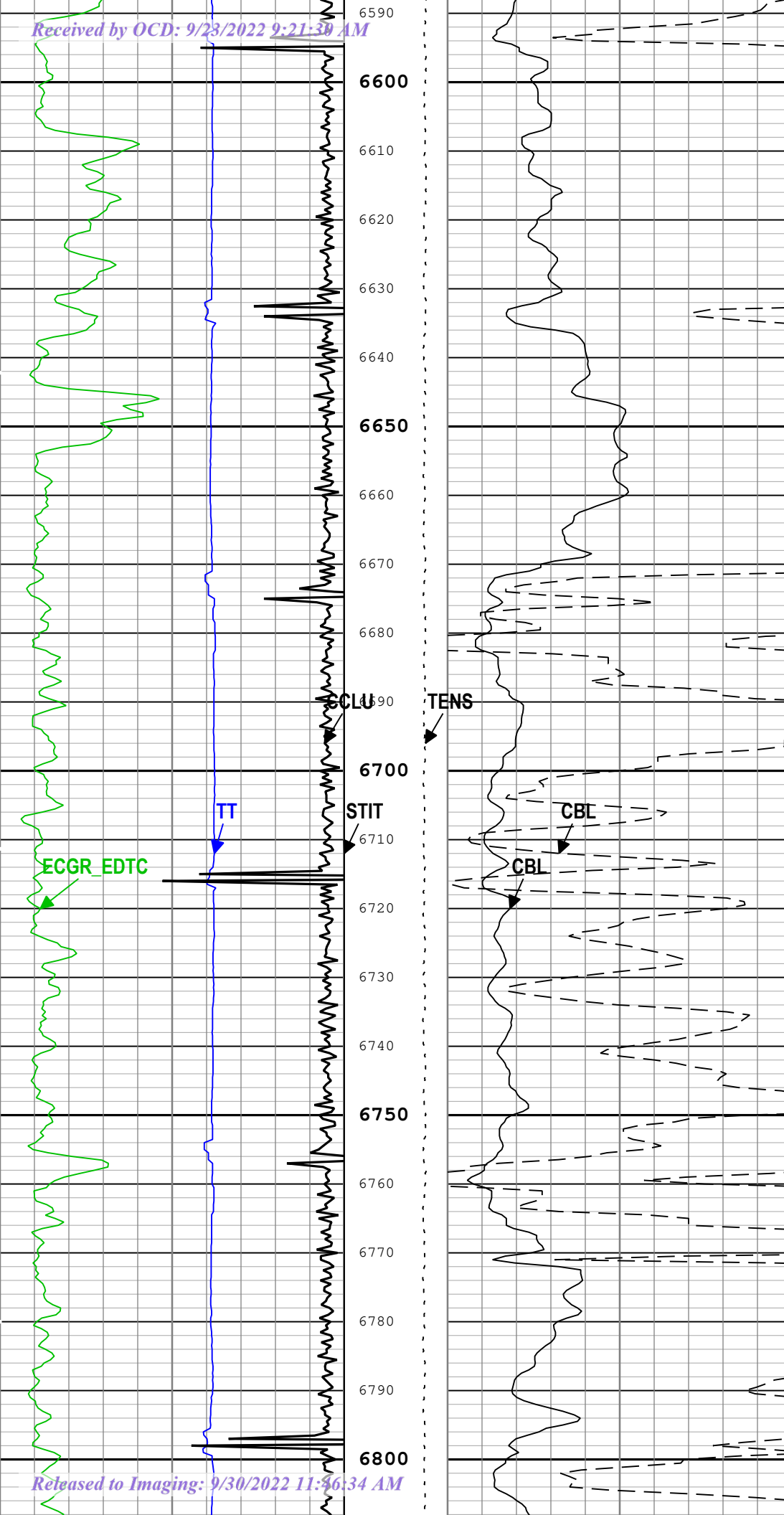


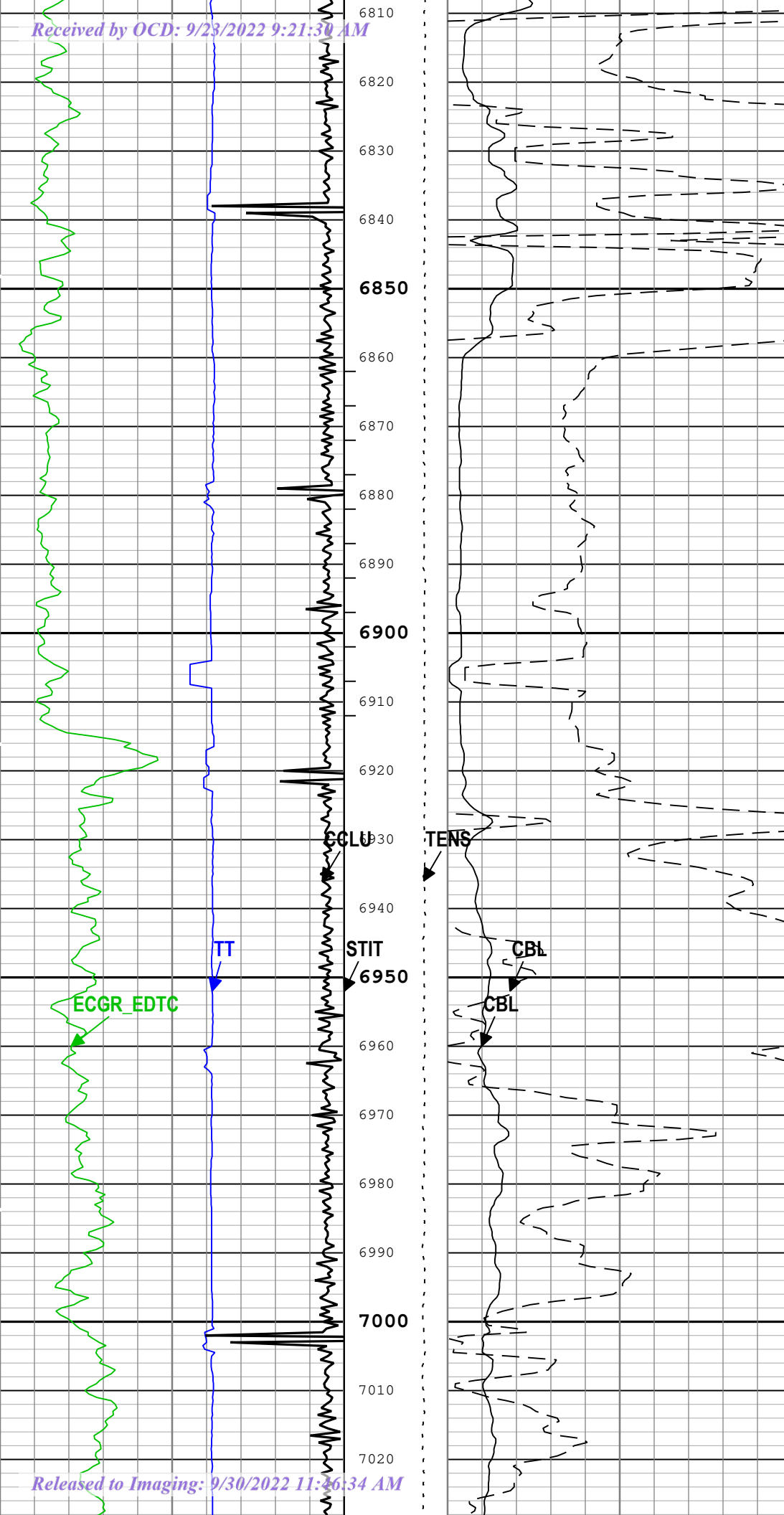


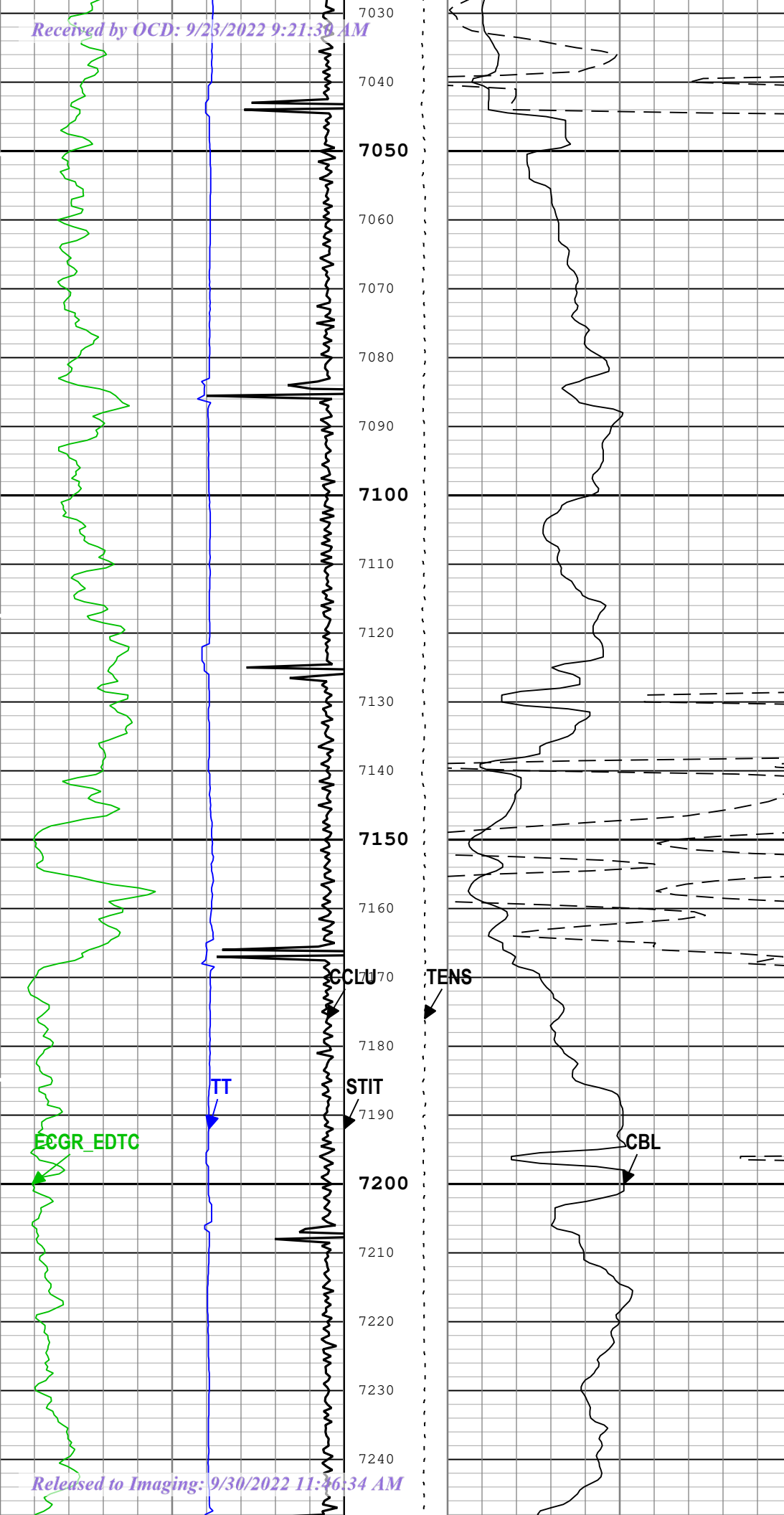


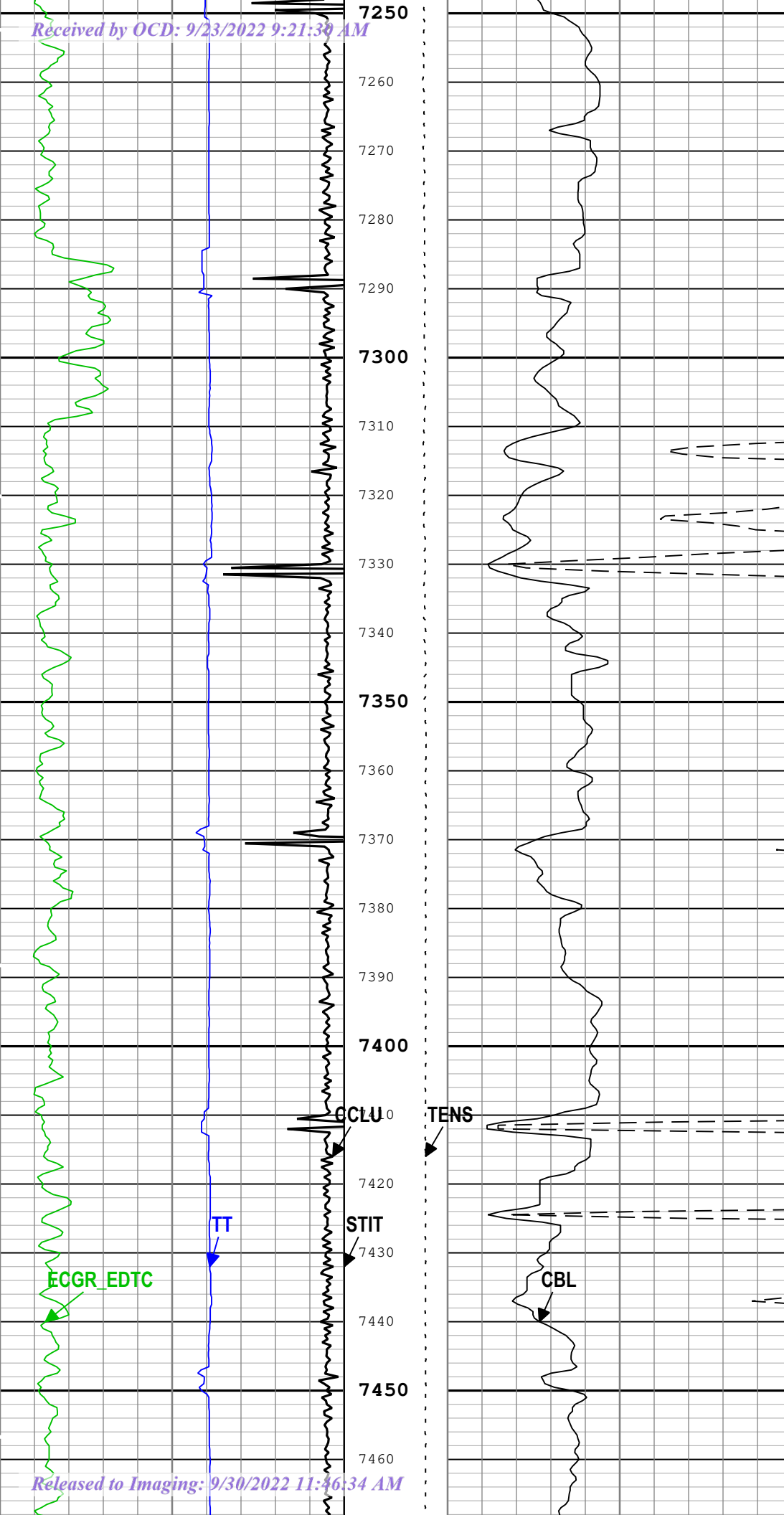


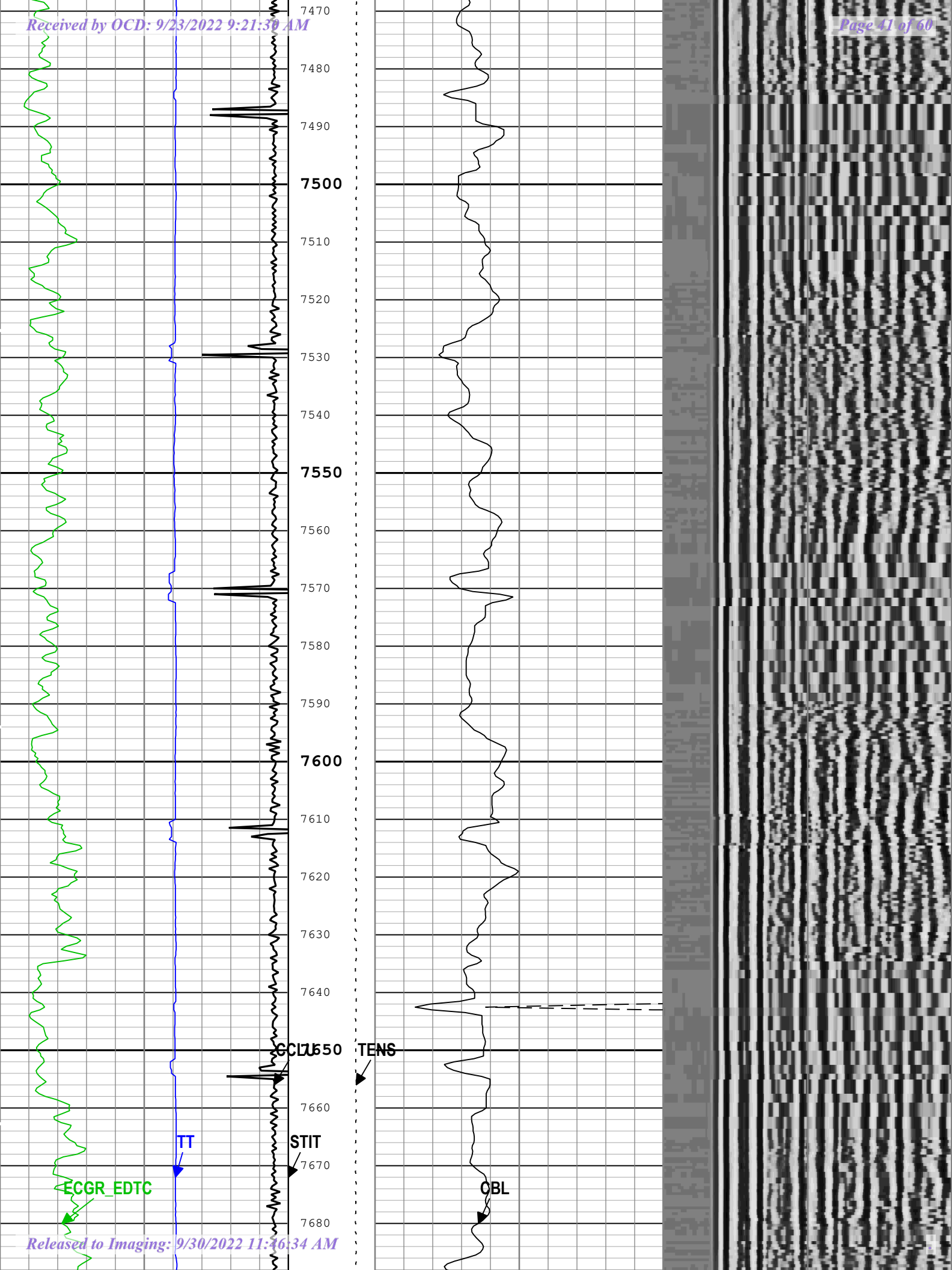


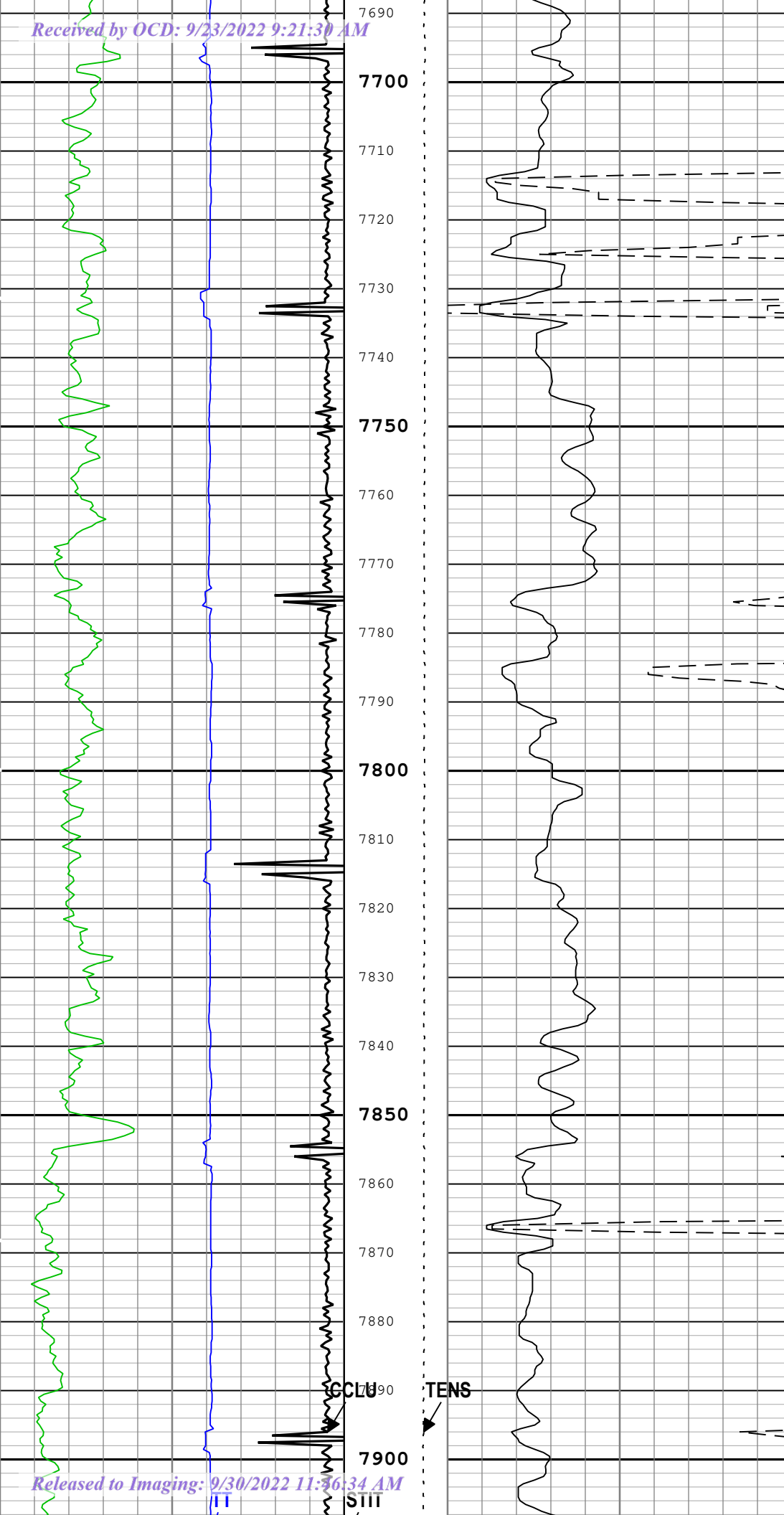


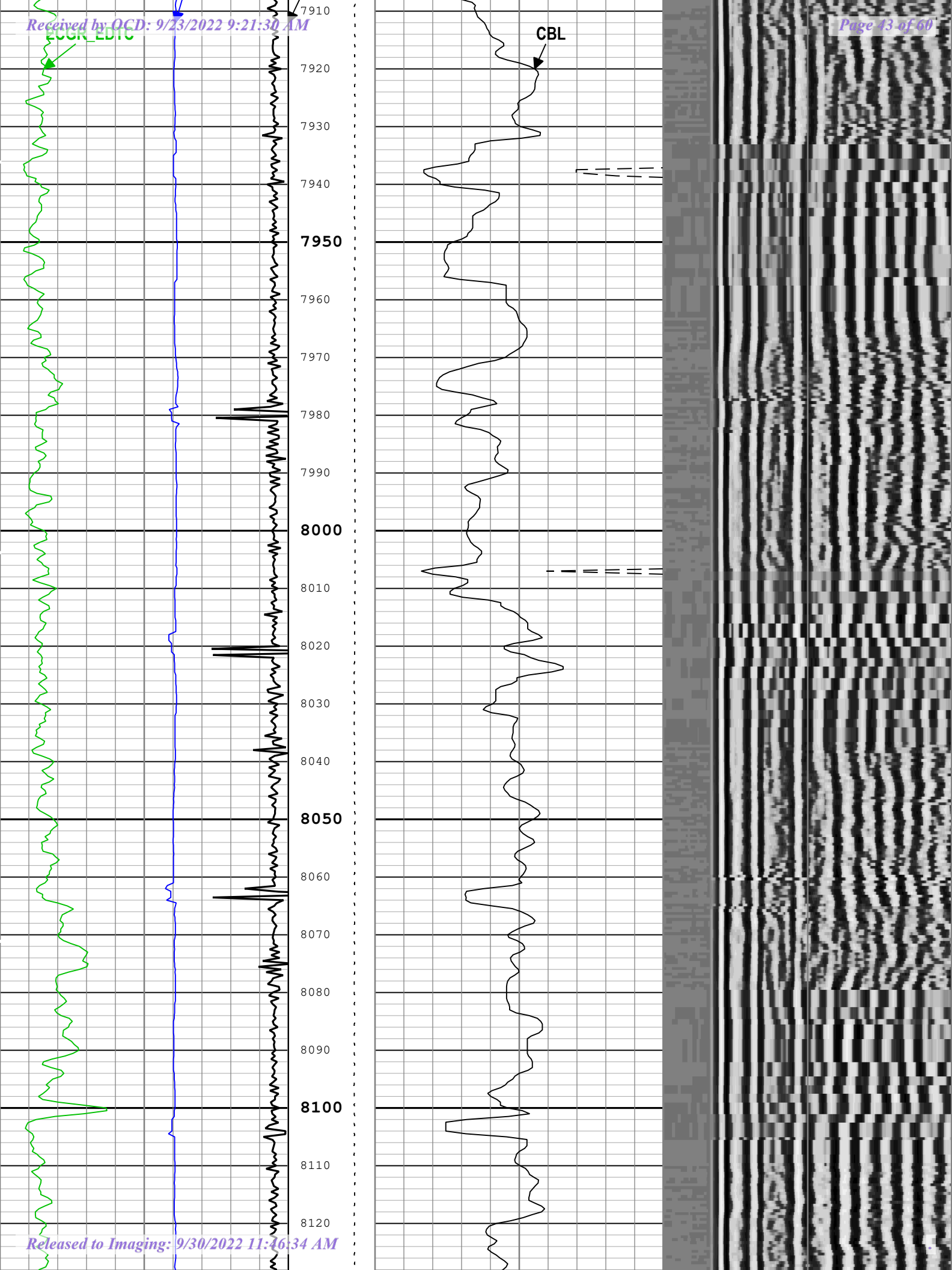


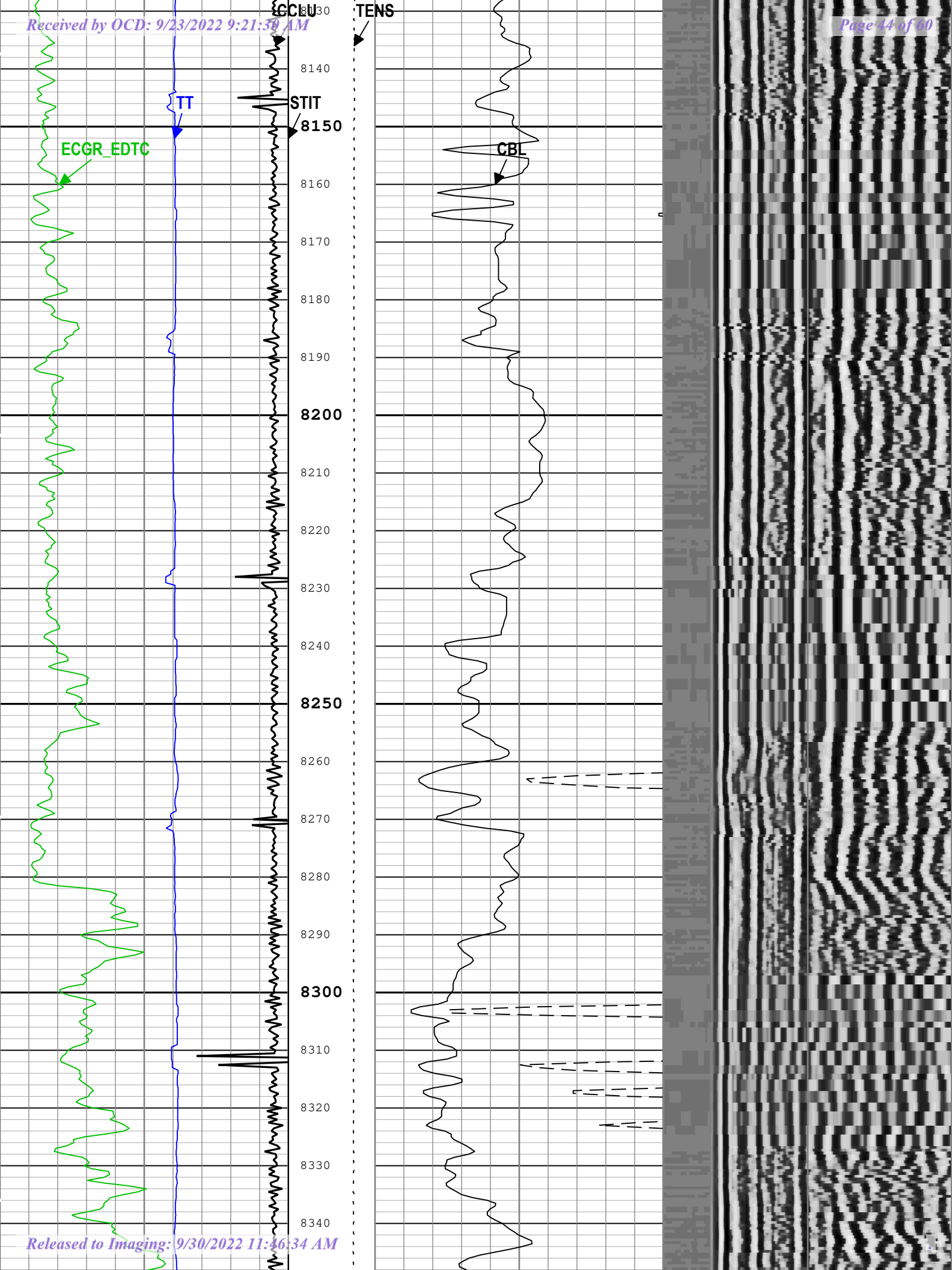


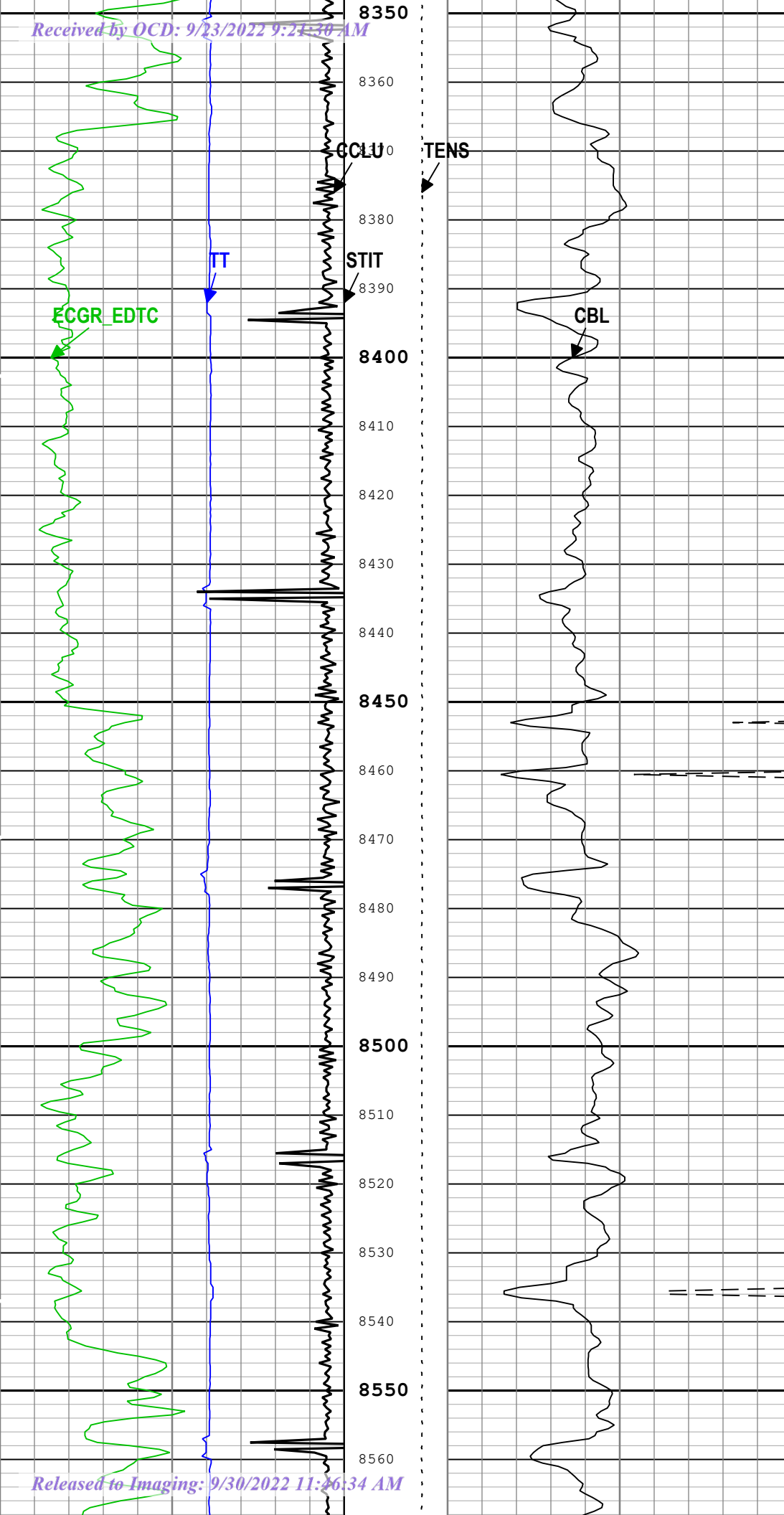


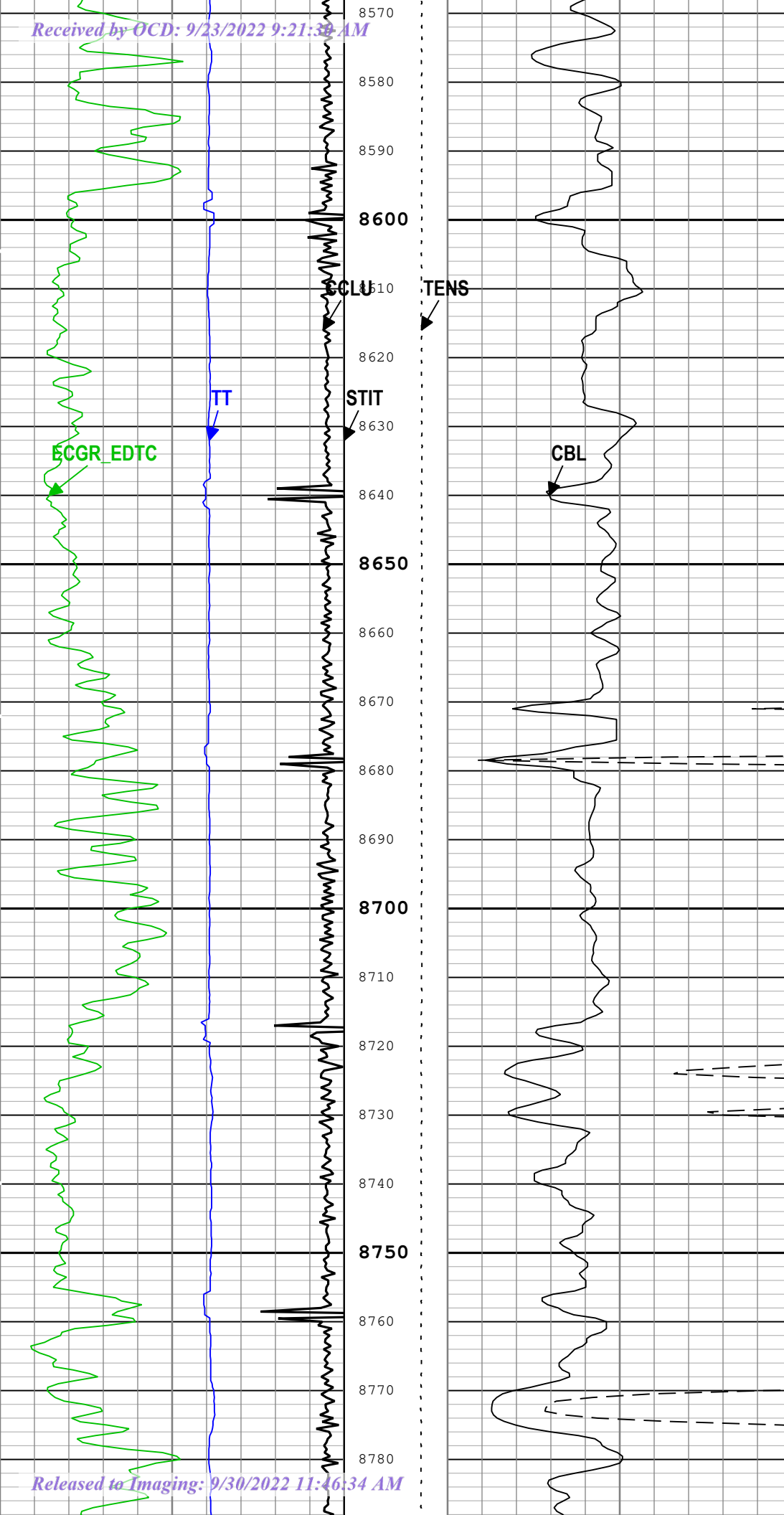


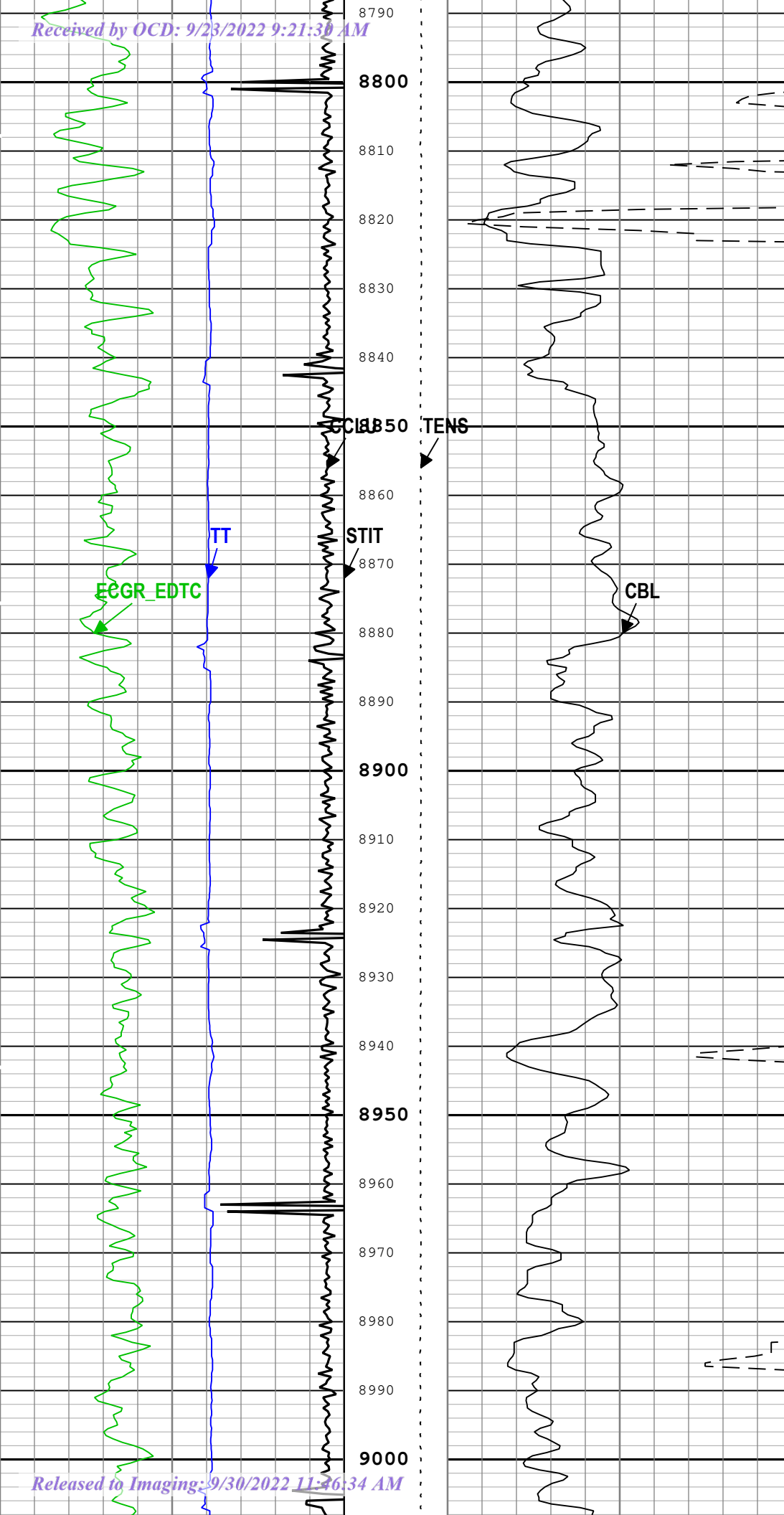


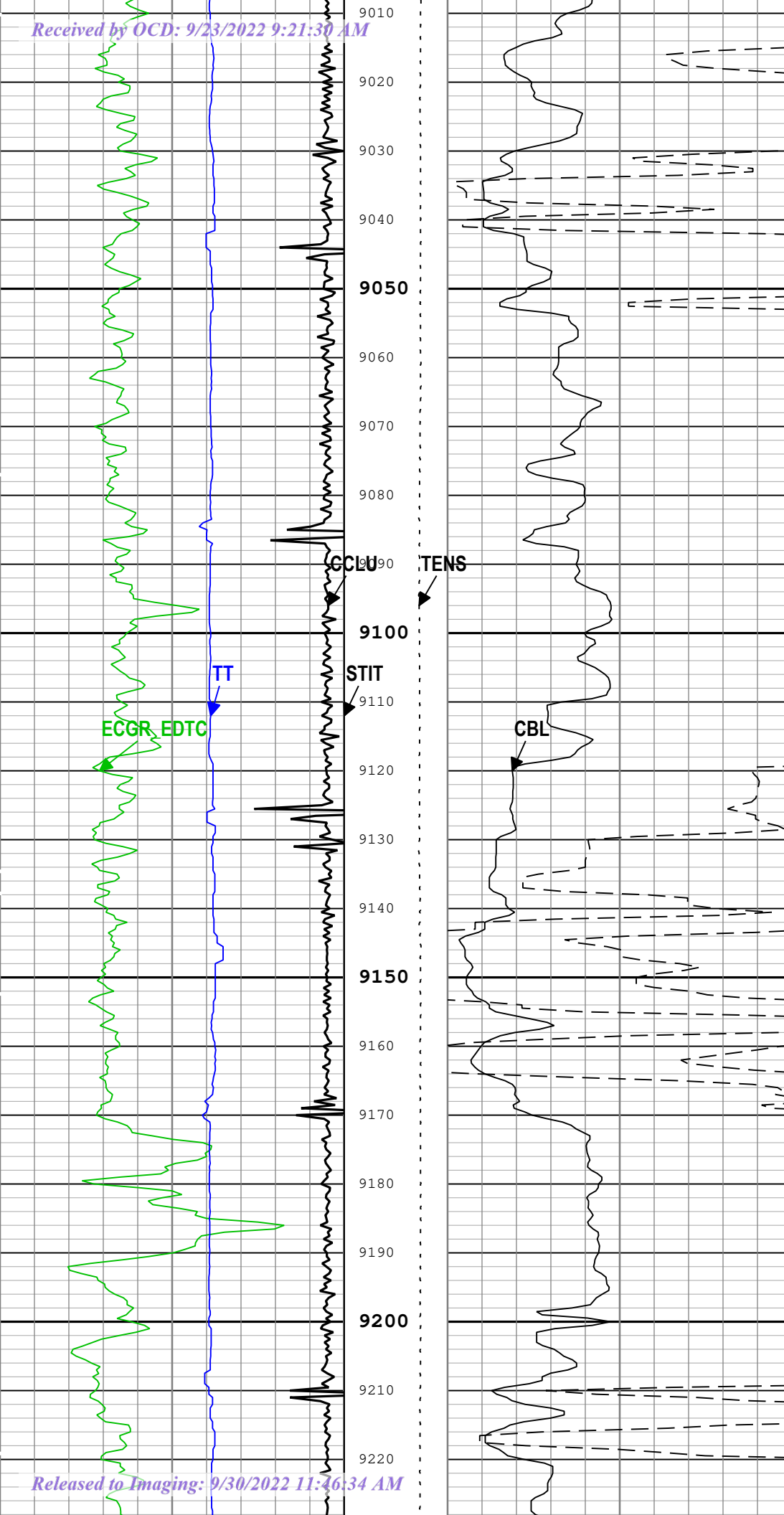


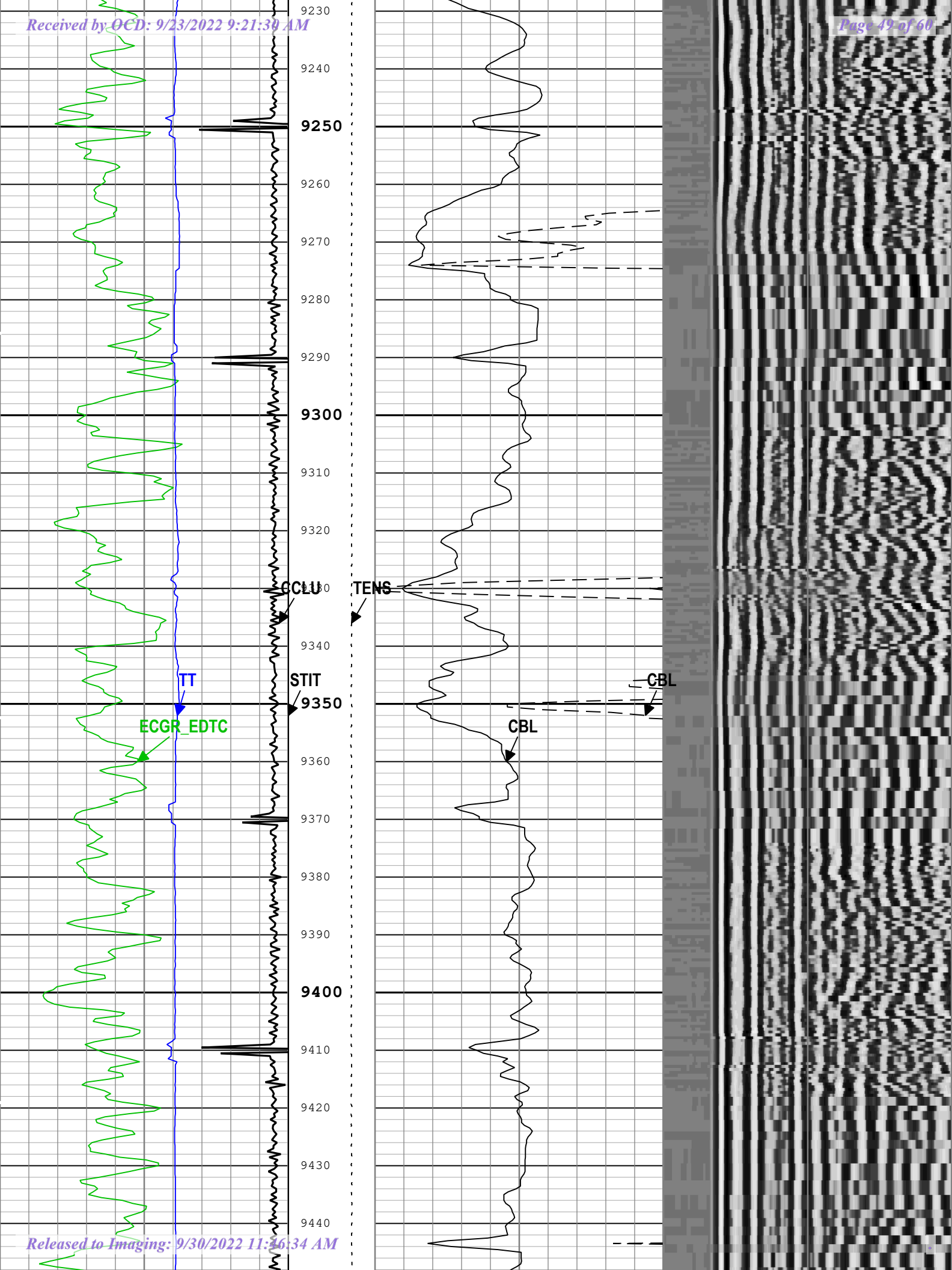


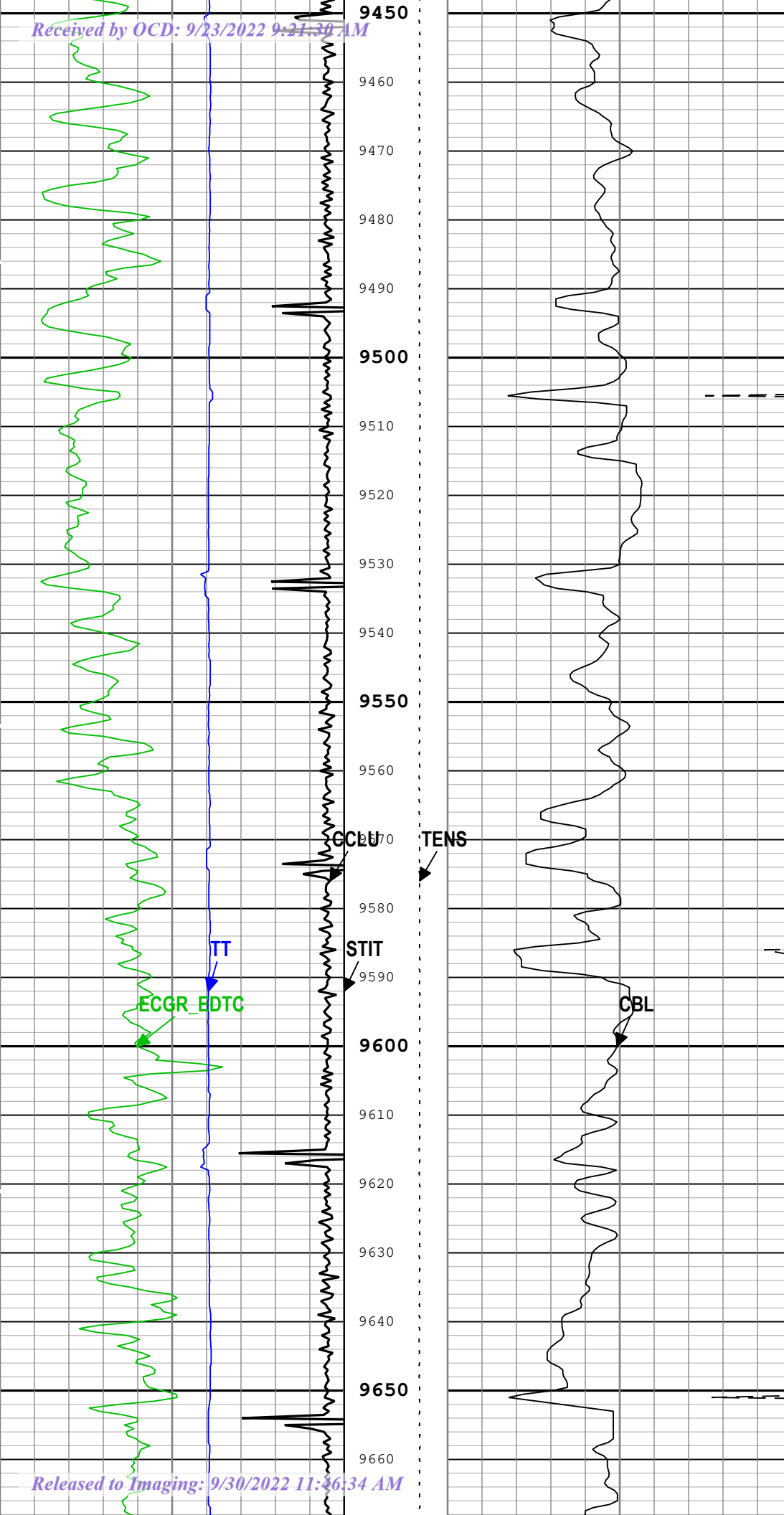


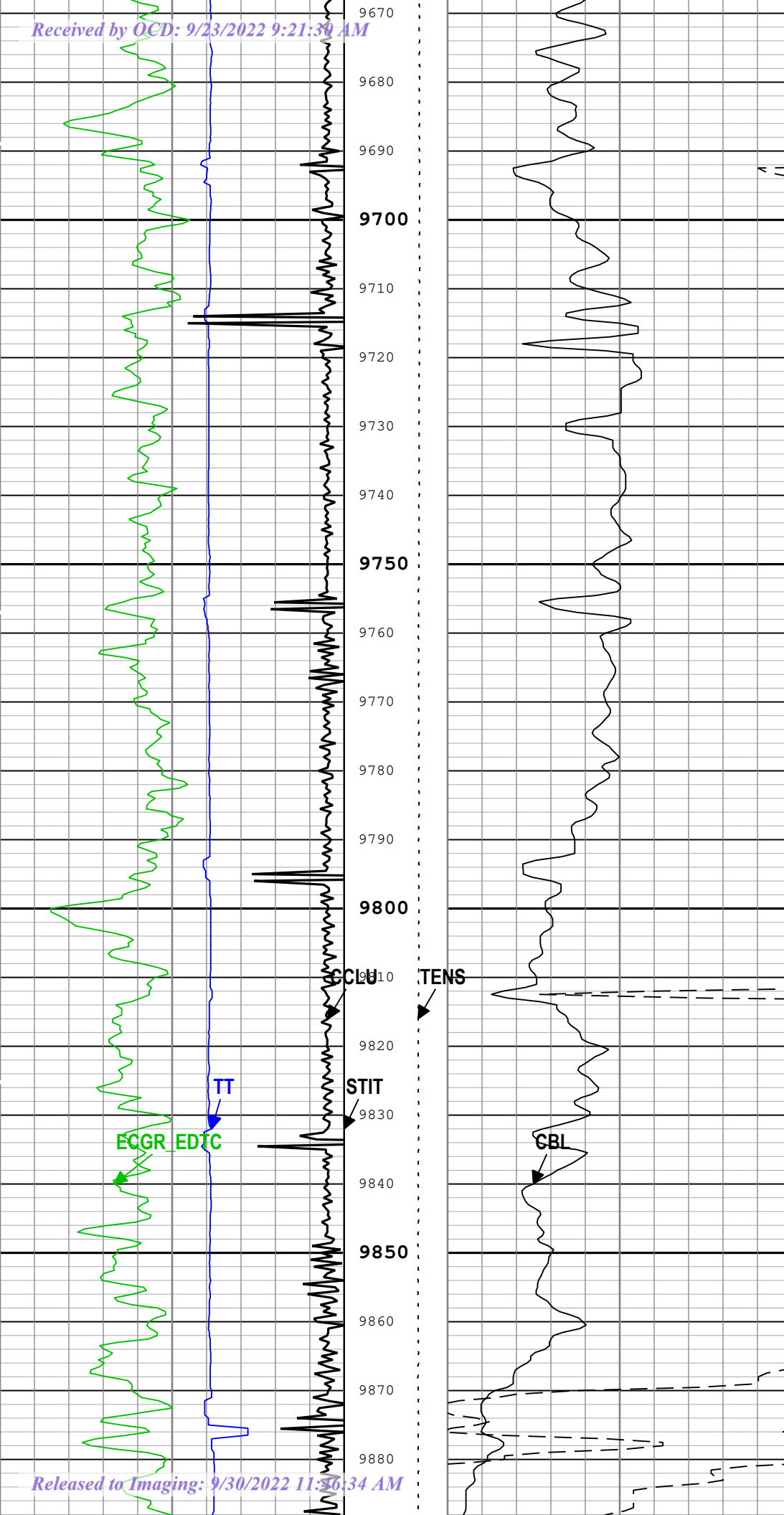


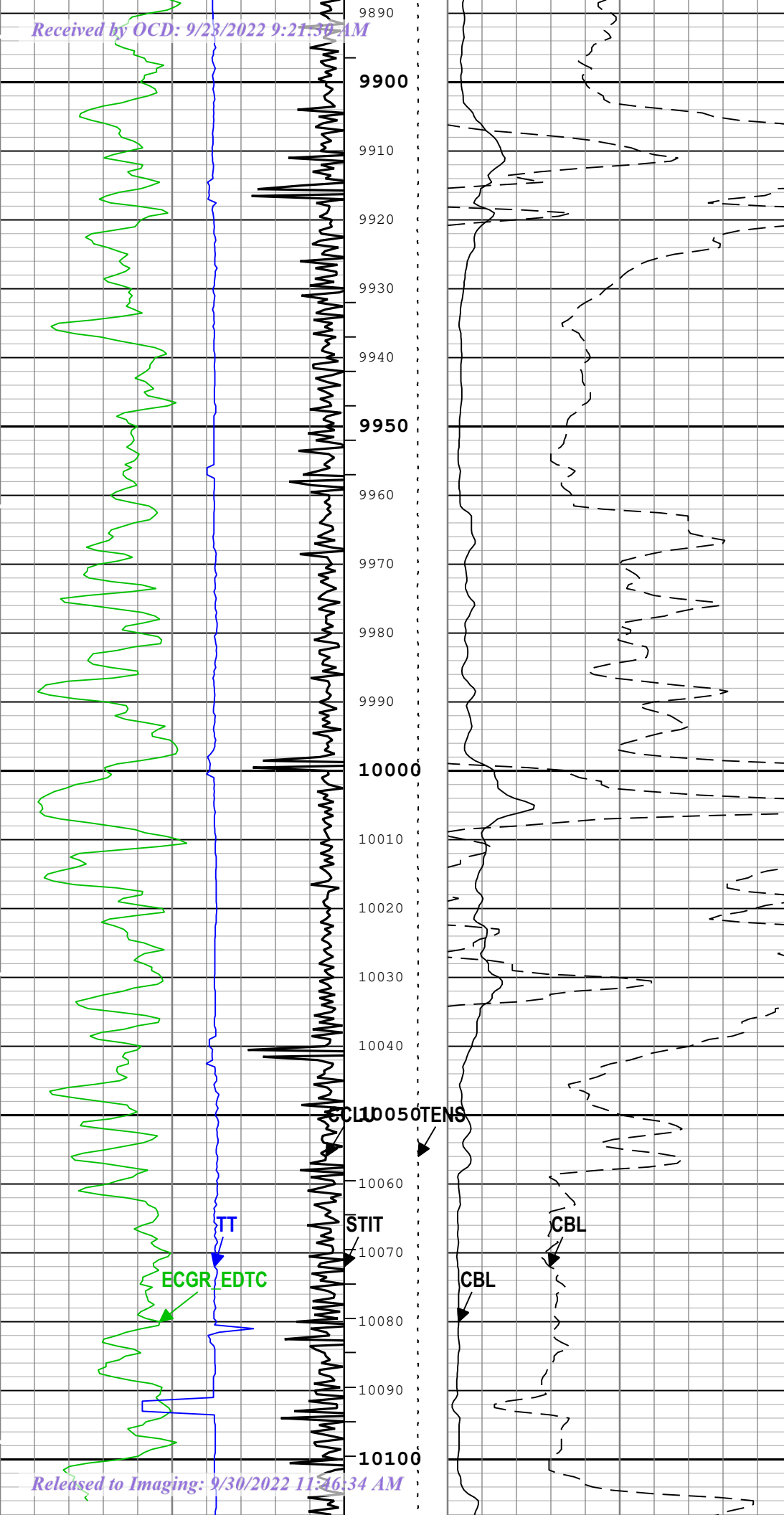


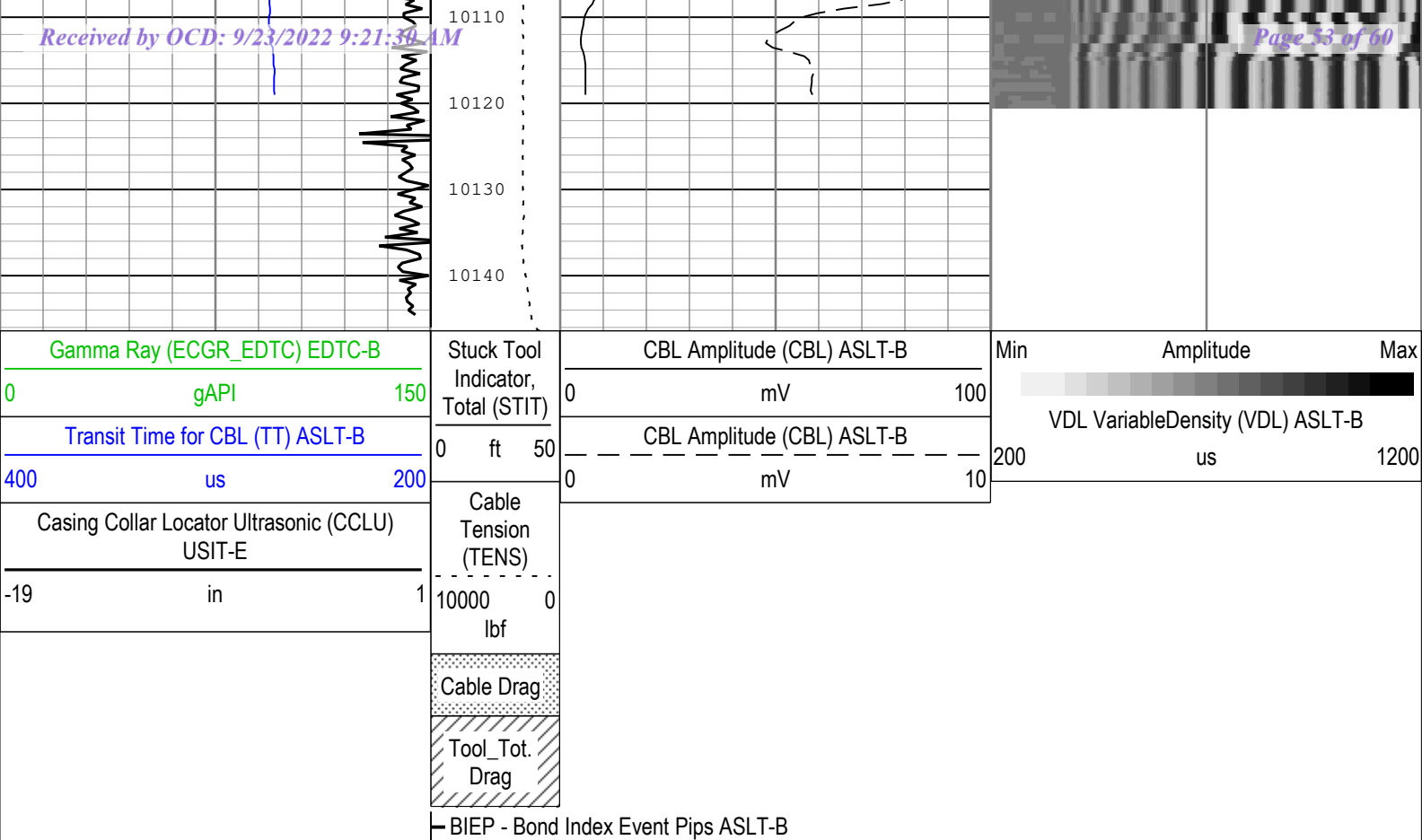












TIME_1900 - Time Marked every 60.00 (s)

Description: CBL_VDL Format: Log (DSLT ASLT_CBL-VDL) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 21-Sep-2022 00:27:28

Channel Processing Parameters

1B: Parameters

Parameter	Description	Tool	Value	Unit
BARI(ISSBAR)	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Cased	
BS	Bit Size	WLSESSION	Depth Zoned	in
CBAF_D	CBL Adjustment Factor	ASLT-B	1	
CBLO	Casing Bottom (Logger)	WLSESSION	14893	ft
CBRA	CBL LQC Reference Amplitude in Free Pipe	ASLT-B	72	mV
CDEN	Cement Density	USIT-E	0	g/cm3
CDEN	Cement Density	EDTC-B	2	g/cm3
CMTY(U-USIT_CEMT)	Cement Type	USIT-E	Regular Cement	
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	8.7	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
FD	Fluid Density	USIT-E	1.2	g/cm3
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS(RT)	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	BS(RT)	
GOBO	Good Bond	ASLT-B	4.3	mV
GOBO_CURR	Good Bond in Arbitrary Cement	ASLT-B	4.3	mV
HEMA	Hematite Presence Flag	Borehole	No	
IBC_FVEL_SEL	IBC Fluid Velocity Selection	USIT-E	Automatic	
IBC_OFFSET_SEL	IBC Flexural Offset Selector	USIT-E	UFAO	

IBC_ZMUD_SEL	IBC Mud Impedance Selection	USIT-E	Inversion Norm.	
IMAR	Image Rotation	USIT-E	Off	
MATT_CURR	Maximum Attenuation in Arbitrary Cement	ASLT-B	11.85	dB/ft
MCI	Minimum Cemented Interval for Isolation	ASLT-B	4.75	ft
MEAS_WLEN	Tcube Processing Window Length in Measurement Mode	USIT-E	22.44	us
MSA	Minimum Sonic Amplitude	ASLT-B	2.12	mV
MSA_CURR	Minimum Sonic Amplitude in Arbitrary Cement	ASLT-B	2.12	mV
MUD_N_INV	IBC Inversion Mud Normalization Factor	USIT-E	1.24	
RUN_SNUM	Run Sequence Number	WSDRUN	2	
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	USIT-E	1.99	Mrayl
U-USIT_UFAO	USIT Flexural Attenuation Offset	USIT-E	21.6	dB/m
UFSFILT	Ultrasonic Flexural Surface Filter	USIT-E	LPF 250k	
U-USIT_UIAP	IBC Answer Product Enabled	USIT-E	SolidLiquidGasMap	
ZMUD	Acoustic Impedance of Mud	Borehole	1.7	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.6	Mrayl
ZTGS	Acoustic Impedance Threshold for Gas	USIT-E	0.3	Mrayl

Depth Zone Parameters			
Parameter	Value	Start (ft)	Stop (ft)
BS	17.5	9	755
BS	12.25	755	7948
BS	8.5	7948	10146.42

All depth are actual.

Tool Control Parameters				
1B: Parameters				
Parameter	Description	Tool	Value	Unit
AGMN	Minimum Gain of Cartridge	USIT-E	-12	dB
AGMX	Maximum Gain of Cartridge	USIT-E	54	dB
EMXV	EMEX Voltage	USIT-E	90	V
IBC_ACQTYPE	IBC Acquisition type	USIT-E	1 MHz	
IBC_FLEXDBP	IBC Flex Duration Before Peak	USIT-E	30	us
ICE2_ACQ	Ultrasonic ICE2 Acquisition	USIT-E	Yes	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	4408.8	ft/h
MODE	SSLT Firing Mode	ASLT-B	CBL	
RATE	Firing Rate	ASLT-B	4.46	Hz
UPAT	USIT Emission Pattern	USIT-E	Pattern 375 KHz	
UWKM	USIT Working Mode	USIT-E	10 deg at 6.0 in	
U-USIT_UTAN	Transducer Angles	USIT-E	33_DEG	
VDM	SSLT VDL Display Mode	ASLT-B	R5	
VRES	Vertical Resolution	USIT-E	6.0 in	

1B									

Software Version									
Acquisition System						Version			
Maxwell 2022.1						12.1.217729.3100			
Application Patch						Wireline_Hotfix-Mandatory-2022.1_12.1.219156			

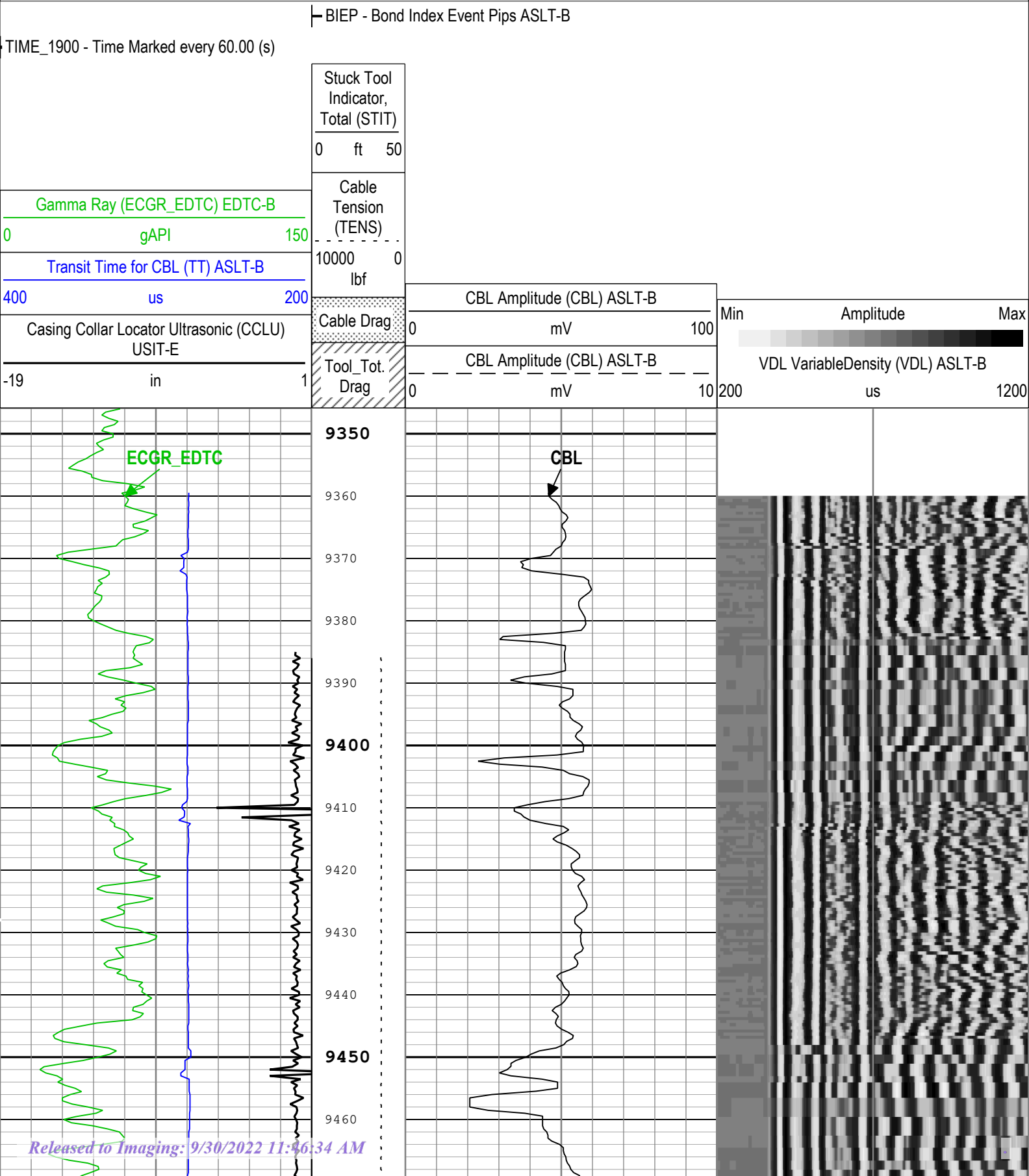
Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include

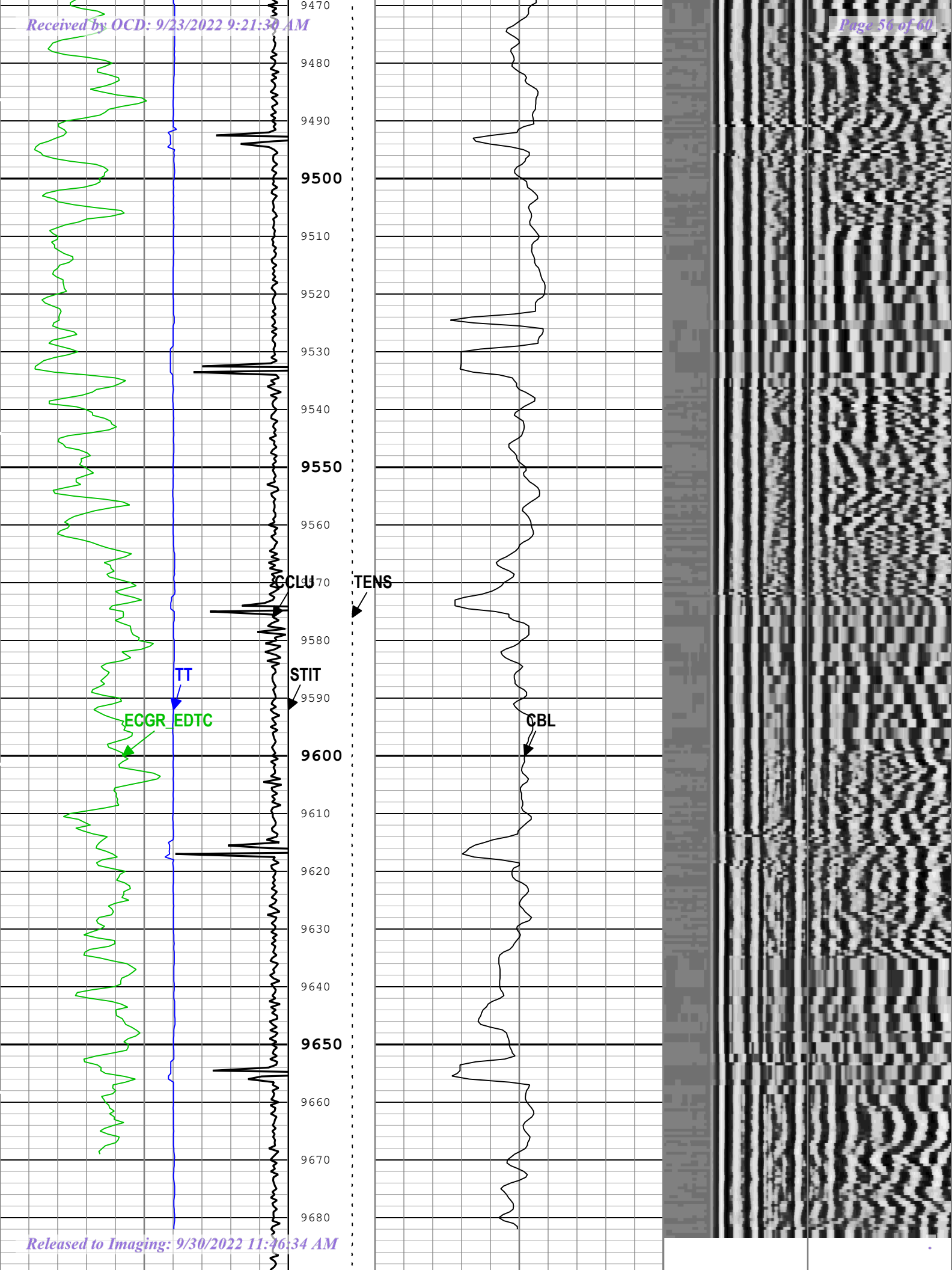
Run Name	Task Objective	Direction	Top	Bottom	Start	Stop	DOB Mode	Depth Unit	Include Parallel Data
1B	Repeat[5]:Up	Up	9385.57 ft	9709.41 ft	20-Sep-2022 8:44:42 PM	20-Sep-2022 8:50:43 PM	ON	7.16 ft	No

All depths are referenced to toolstring zero

Log	Company:Caza Operating LLC	Well:Mad River 13 State Com 010H
		1B: Repeat[5]:Up:S006

Description: CBL_VDL Format: Log (DSLT ASLT_CBL-VDL) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 21-Sep-2022 00:27:46





Received by OCD: 9/23/2022 9:21:30 AM

9690

9700

Page 57 of 60

Gamma Ray (ECGR_EDTC) EDTC-B

0gAPI150

Transit Time for CBL (TT) ASLT-B

400us200

Casing Collar Locator Ultrasonic (CCLU) USIT-E

-19in1

Stuck Tool Indicator, Total (STIT)

0ft50

Cable Tension (TENS)

100000lbf

Cable Drag

Tool_Tot. Drag

CBL Amplitude (CBL) ASLT-B

0mV100

CBL Amplitude (CBL) ASLT-B

0mV10

MinAmplitudeMax

VDL VariableDensity (VDL) ASLT-B

200us1200

TIME_1900 - Time Marked every 60.00 (s)

BIEP - Bond Index Event Pips ASLT-B

Description: CBL_VDL Format: Log (DSLT ASLT_CBL-VDL) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 21-Sep-2022 00:27:46

Channel Processing Parameters				
1B: Parameters				
Parameter	Description	Tool	Value	Unit
BARI(ISSBAR)	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Cased	
BS	Bit Size	WLSESSION	8.5	in
CBAF_D	CBL Adjustment Factor	ASLT-B	1	
CBLO	Casing Bottom (Logger)	WLSESSION	14893	ft
CBRA	CBL LQC Reference Amplitude in Free Pipe	ASLT-B	72	mV
CDEN	Cement Density	USIT-E	0	g/cm3
CDEN	Cement Density	EDTC-B	2	g/cm3
CMTY(U-USIT_CEMT)	Cement Type	USIT-E	Regular Cement	
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	8.7	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
FD	Fluid Density	USIT-E	1.2	g/cm3
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS(RT)	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	BS(RT)	
GOBO	Good Bond	ASLT-B	4.3	mV
GOBO_CURR	Good Bond in Arbitrary Cement	ASLT-B	4.3	mV
HEMA	Hematite Presence Flag	Borehole	No	
IBC_FVEL_SEL	IBC Fluid Velocity Selection	USIT-E	Automatic	
IBC_OFFSET_SEL	IBC Flexural Offset Selector	USIT-E	UFAO	
IBC_ZMUD_SEL	IBC Mud Impedance Selection	USIT-E	Inversion Norm.	
IMAR	Image Rotation	USIT-E	Off	
MATT_CURR	Maximum Attenuation in Arbitrary Cement	ASLT-B	11.85	dB/ft
MCI	Minimum Cemented Interval for Isolation	ASLT-B	4.75	ft

Received by OCD: 9/23/2022 9:21:30 AM

Page 58 of 60

MEAS_WLEN	Tcube Processing Window Length in Measurement Mode	USIT-E	22.44	us
MSA	Minimum Sonic Amplitude	ASLT-B	2.12	mV
MSA_CURR	Minimum Sonic Amplitude in Arbitrary Cement	ASLT-B	2.12	mV
MUD_N_INV	IBC Inversion Mud Normalization Factor	USIT-E	1.24	
RUN_SNUM	Run Sequence Number	WSDRUN	2	
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	USIT-E	1.99	Mrayl
U-USIT_UFAO	USIT Flexural Attenuation Offset	USIT-E	21.6	dB/m
UFSFILT	Ultrasonic Flexural Surface Filter	USIT-E	LPF 250k	
U-USIT_UIAP	IBC Answer Product Enabled	USIT-E	SolidLiquidGasMap	
ZMUD	Acoustic Impedance of Mud	Borehole	1.7	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.6	Mrayl
ZTGS	Acoustic Impedance Threshold for Gas	USIT-E	0.3	Mrayl

Tool Control Parameters

1B: Parameters

Parameter	Description	Tool	Value	Unit
AGMN	Minimum Gain of Cartridge	USIT-E	-12	dB
AGMX	Maximum Gain of Cartridge	USIT-E	54	dB
EMXV	EMEX Voltage	USIT-E	90	V
IBC_ACQTYPE	IBC Acquisition type	USIT-E	1 MHz	
IBC_FLEXDBP	IBC Flex Duration Before Peak	USIT-E	30	us
ICE2_ACQ	Ultrasonic ICE2 Acquisition	USIT-E	Yes	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	4408.8	ft/h
MODE	SSLT Firing Mode	ASLT-B	CBL	
RATE	Firing Rate	ASLT-B	4.46	Hz
UPAT	USIT Emission Pattern	USIT-E	Pattern 375 KHz	
UWKM	USIT Working Mode	USIT-E	10 deg at 6.0 in	
U-USIT_UTAN	Transducer Angles	USIT-E	33_DEG	
VDM	SSLT VDL Display Mode	ASLT-B	R5	
VRES	Vertical Resolution	USIT-E	6.0 in	

Company:	Caza Operating LLC	Schlumberger
Well:	Mad River 13 State Com 010H	
Field:	Wolfcamp	
County:	Eddy	
Country:	United States of America	
Cement Bond Log		
Variable Density Log		
Gamma Ray - CCL		

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 145764

CONDITIONS

Operator: CAZA OPERATING, LLC 200 N Loraine St Midland, TX 79701	OGRID: 249099
	Action Number: 145764
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
jagarcia	Submit a C-103N after Squeeze job has been completed and tested.	9/30/2022