

Well Name: BLACKROCK C	Well Location: T26N / R11W / SEC 21 / NENW / 36.477859 / -108.011963	County or Parish/State: SAN JUAN / NM
Well Number: 1	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078899A	Unit or CA Name: 1E BLACKROCK C, W2, GLLP, BLACKROCK	Unit or CA Number: NMNM121043, NMNM73583
US Well Number: 3004505780	Well Status: Producing Gas Well	Operator: MERRION OIL & GAS CORPORATION

Notice of Intent

Sundry ID: 2645476

Type of Submission: Notice of Intent	Type of Action: Plug and Abandonment
Date Sundry Submitted: 11/22/2021	Time Sundry Submitted: 03:40
Date proposed operation will begin: 11/29/2021	

Procedure Description: Merrion Oil & Gas proposes to plug and abandon the following well. See attached procedure.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

- Procedure Description
- Blackrockc1\_20211122153944.pdf
  - 2021\_11\_19\_Blackrock\_C1\_\_Plug\_Calcs\_\_20211122153933.pdf
  - 2021\_11\_19\_Blackrock\_C\_1\_\_Wellbore\_\_P\_A\_\_20211122153921.pdf
  - Blackrock\_C1\_Proposed\_P\_A\_\_\_Procedure\_20211122153912.pdf

<b>Well Name:</b> BLACKROCK C	<b>Well Location:</b> T26N / R11W / SEC 21 / NENW / 36.477859 / -108.011963	<b>County or Parish/State:</b> SAN JUAN / NM
<b>Well Number:</b> 1	<b>Type of Well:</b> CONVENTIONAL GAS WELL	<b>Allottee or Tribe Name:</b>
<b>Lease Number:</b> NMSF078899A	<b>Unit or CA Name:</b> 1E BLACKROCK C, W2, GLLP, BLACKROCK	<b>Unit or CA Number:</b> NMNM121043, NMNM73583
<b>US Well Number:</b> 3004505780	<b>Well Status:</b> Producing Gas Well	<b>Operator:</b> MERRION OIL & GAS CORPORATION

Conditions of Approval

Additional Reviews

2645746\_NOIA\_1\_3004505780\_KR\_11242021\_20211124165632.pdf

General\_Requirement\_PxA\_20211124165616.pdf

26N11W21CKd\_Blackrock\_C\_1\_20211124151714.pdf

Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

<b>Operator Electronic Signature:</b> PHILANA THOMPSON	<b>Signed on:</b> NOV 22, 2021 03:39 PM
<b>Name:</b> MERRION OIL & GAS CORPORATION	
<b>Title:</b> Regulatory Analyst	
<b>Street Address:</b> 610 REILLY AVENUE	
<b>City:</b> FARMINGTON	<b>State:</b> NM
<b>Phone:</b> (505) 324-5336	
<b>Email address:</b> PTHOMPSON@MERRION.BZ	

Field Representative

<b>Representative Name:</b>		
<b>Street Address:</b>		
<b>City:</b>	<b>State:</b>	<b>Zip:</b>
<b>Phone:</b>		
<b>Email address:</b>		

BLM Point of Contact

<b>BLM POC Name:</b> KENNETH G RENNICK	<b>BLM POC Title:</b> Petroleum Engineer
<b>BLM POC Phone:</b> 5055647742	<b>BLM POC Email Address:</b> krennick@blm.gov
<b>Disposition:</b> Approved	<b>Disposition Date:</b> 11/24/2021
<b>Signature:</b> Kenneth Rennick	

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. 30-045-05780
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Blackrock C
8. Well Number 1
9. OGRID Number 14634
10. Pool name or Wildcat Basin DK/ Gallegos Gallup
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6205 GL

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  
Merrion Oil & Gas Corporation

3. Address of Operator  
610 Reilly Ave Farmington, NM 87401

4. Well Location  
Unit Letter C: 990 feet from the North line and 1650 feet from the West line  
Section 21 Township 26N Range 11W NMPM County San Juan

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.

Merrion Oil & Gas proposes to plug the above mentioned well. The BLM approved the attached procedure on 11/24/2021. Merrion plans to begin plugging operations on Monday 11/29.

Spud Date:

Rig Release Date:

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

SIGNATURE Philana Thompson TITLE HSE & Regulatory Compliance Specialist DATE 11/24/2021

Type or print name \_\_\_\_\_ E-mail address: \_\_\_\_\_ PHONE: \_\_\_\_\_

**For State Use Only**

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Conditions of Approval (if any):

**Proposed P&A Procedure**

November 19, 2021

**Blackrock C1**

990' FNL and 160' FWL, Section 21, T-26-N, R-11-W  
San Juan County, NM, API 30-045-05780

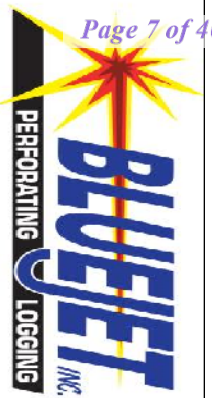
Note: All cement volumes use 100% excess outside pipe and 50' excess inside. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class B, mixed at 15.6 ppg with a 1.18 cf/sx yield.

1. This project requires a NMOCD C-144 CLEZ Closed-Loop System Permit for the use of a steel tank to handle waste fluids circulated from the well and cement wash up.
2. Rods: Yes ☐ No ☒ , Unknown ☐ ;  
Tubing: Yes ☒ No ☐ , Unknown ☐ , Size 2-3/8 , Length 6000' ;  
Packer: Yes ☐ No ☒ , Unknown ☐ , Type .
3. Remove existing piping on casing valve. RU blow down lines from casing valves and begin blowing down casing pressure. Kill well with 2% KCl as necessary. Ensure well is dead or on vacuum.
4. ND wellhead and NU BOPE. Pressure test and function test BOP. PU and remove tubing hanger. Tag fill; PU additional joints as needed. Drop standing valve and pressure test tubing. Record tag and advise Merrion engineer.
5. TOH with tubing. LD and replace any bad joints. Make note of corrosion, scale or paraffin and save sample as appropriate.
6. PU 5.5" casing scraper, roundtrip with scraper to ~6,000' KB. TOH and LD scraper.
7. **Plug #1 (Dakota perforations and top, 6040' – 6080')**: RIH and set 5.5" cement retainer at 5900'. Pressure test tubing to 1000 PSI. Load casing with water and circulate well clean. Pressure test casing to 800#. **Spot or tag subsequent plugs as appropriate according to CBL and pressure test results.** Circulate well clean. Mix 29 sxs Class B cement inside casing from CR to isolate the Dakota interval. PUH.
8. **Plug #2 (Gallup top, 4900' – 4950')**: RIH and set 5.5" cement retainer at 4950'. Mix and pump 12 sxs Class B cement inside casing from CR to isolate the Gallup interval. PUH.
9. **Plug #3 (Mancos top, 4105' – 42055')**: Mix and pump 18 sxs Class B cement and spot a balanced plug inside casing to cover the Mancos top. PUH. WOC to tag
10. **Plug #4 (Cliffhouse top, 2910' – 3010')**: Mix and pump 18 sxs Class B cement and spot a balanced plug inside casing to cover the Cliffhouse top. PUH. WOC to tag

- 11. Plug #5 (Chacra top, 2270' -2370'):** Mix and pump 18 sxs Class B cement and spot a balanced plug inside casing to cover the Chacra top. PUH.
- 12. Plug #6 (Pictured Cliffs and Fruitland tops, 1371' – 1484'):** Mix and pump 19 sxs Class B cement and spot a balanced plug inside casing to through the Pictured Cliffs and Fruitland tops. TOH.
- 13. Plug #7 Ojo Alamo and Kirtland tops, 330' – 545'):** RU Wireline and perforate squeeze holes at 545'. Establish injection rate. RIH and set CR at 515'. TIH with tubing and sting into CR. Establish injection rate. Mix and pump 95 sxs Class B cement, squeeze 64 sxs outside casing and leave 31 sxs inside casing. TOH and LD tubing.
- 14. Plug #8 (10.75" Surface casing shoe, 370' – 0'):** Perforate 3 squeeze holes at 286'. Establish circulation out bradenhead with water and circulate the BH annulus clean. Mix approximately 134 sxs Class B cement and pump down the 5.5" casing to circulate good cement out bradenhead. Shut in well and WOC.
- 15.** ND cementing valves and cut off wellhead. Fill annuli with cement as necessary. Install P&A marker to comply with regulations. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place. RD, MOL and cut off anchors. Restore location per BLM stipulations

## Blackrock C1

				Inside cu. Ft	Outside cu. Ft	50' inside	100% outside	sxs			
5.5 14# 0.0244 bbl/ft			<b>Plug 8</b>	286	0	286	39.18	55.0781	<b>40</b>	<b>94</b>	<b>134</b>
5.6146 cu. Ft/bbl	OJO/Kirt 380-515'		<b>Plug 7</b>	545	330	215	29.45	37.3006	<b>31</b>	<b>64</b>	<b>95</b>
Class B	FC/PC 1421'		<b>Plug 6</b>	1484	1371	113	15.48		<b>19</b>		<b>19</b>
15.6 lb/gal											
1.18 cu. Ft/sx	Chacra 2320		<b>Plug 5</b>	2370	2270	100	13.70		<b>18</b>		<b>18</b>
Suface to Production											
0.0343 bbl/ft	MV (Cliffhouse) 2960'		<b>Plug 4</b>	3010	2910	100	13.70		<b>18</b>		<b>18</b>
7-7/8 to 5.5											
0.0309 bbl/ft											
	Mancos 4155'		<b>Plug 3</b>	4205	4105	100	13.70		<b>18</b>		<b>18</b>
	Gallup 5000'		<b>Plug 2</b>	4950	4900	50	6.85		<b>12</b>		<b>12</b>
	Dakota 5995'		<b>Plug 1</b>	5900	5705	195	26.71		<b>29</b>		<b>29</b>



# CEMENT EVALUATION LOG RADII SECTOR TOOL FINAL PRINT

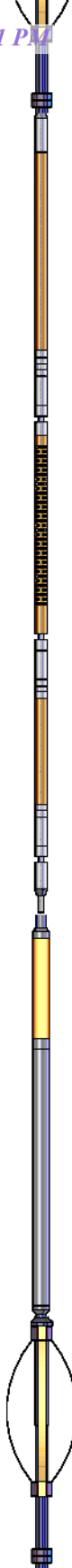
Company		MERRION OIL & GAS		Country	USA
Well		BLACKROCK C-1			
Field		DAKOTA/GALLUP			
County		SAN JUAN			
State		NEW MEXICO			
Location:		API #: 30-045-05780		Other Services	
SEC 21 TWP 26N RGE 11W		990' FNL & 1650' FWL			
Permanent Datum		GROUND LEVEL		Elevation 6214'	
Log Measured From		RKB 12'		K.B. 6226'	
Drilling Measured From		RIG KELLY BUSHING		D.F. 6225'	
				G.L. 6214'	
Date	Run Number	11/3/21	ONE		
Depth Driller	6130'				
Depth Logger	4973'				
Bottom Logged Interval	4973'				
Top Log Interval	SURF.				
Open Hole Size	7 7/8"				
Type Fluid	H2O				
Density / Viscosity	N/A				
Max. Recorded Temp.	N/A				
Estimated Cement Top	SEE LOG				
Time Well Ready	8:40 AM				
Time Logger on Bottom	9:10 AM				
Effluent Number	D-8/PROBE32/GR19				
Location	FARMINGTON				
Recorded By	S.HATCH				
Witnessed By	RYAN				
Borehole Record		Tubing Record			
Run Number	Bit	From	To	Size	Weight
					From To
Casing Record	Size	Wgt/Ft	Top	Bottom	
Surface String	8 5/8"	K-55	SURF.	236'	
Production String	5 1/2"	J-55 14#	SURF.	6130'	

&lt;&lt;&lt; Fold Here &gt;&gt;&gt;

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.


## Comments

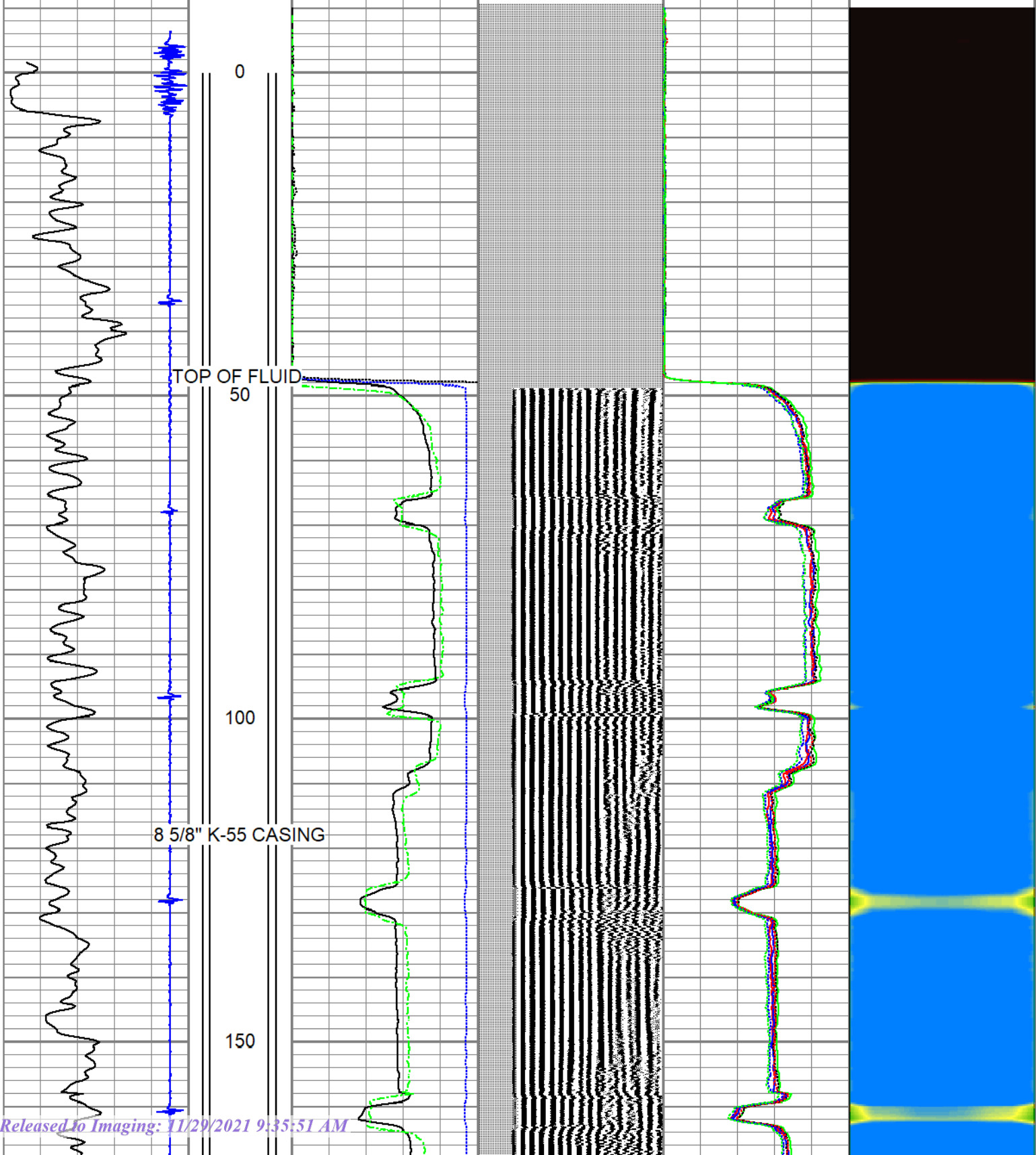
Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			CENT-Probe (PTS_MONO)	2.88	2.75	35.00

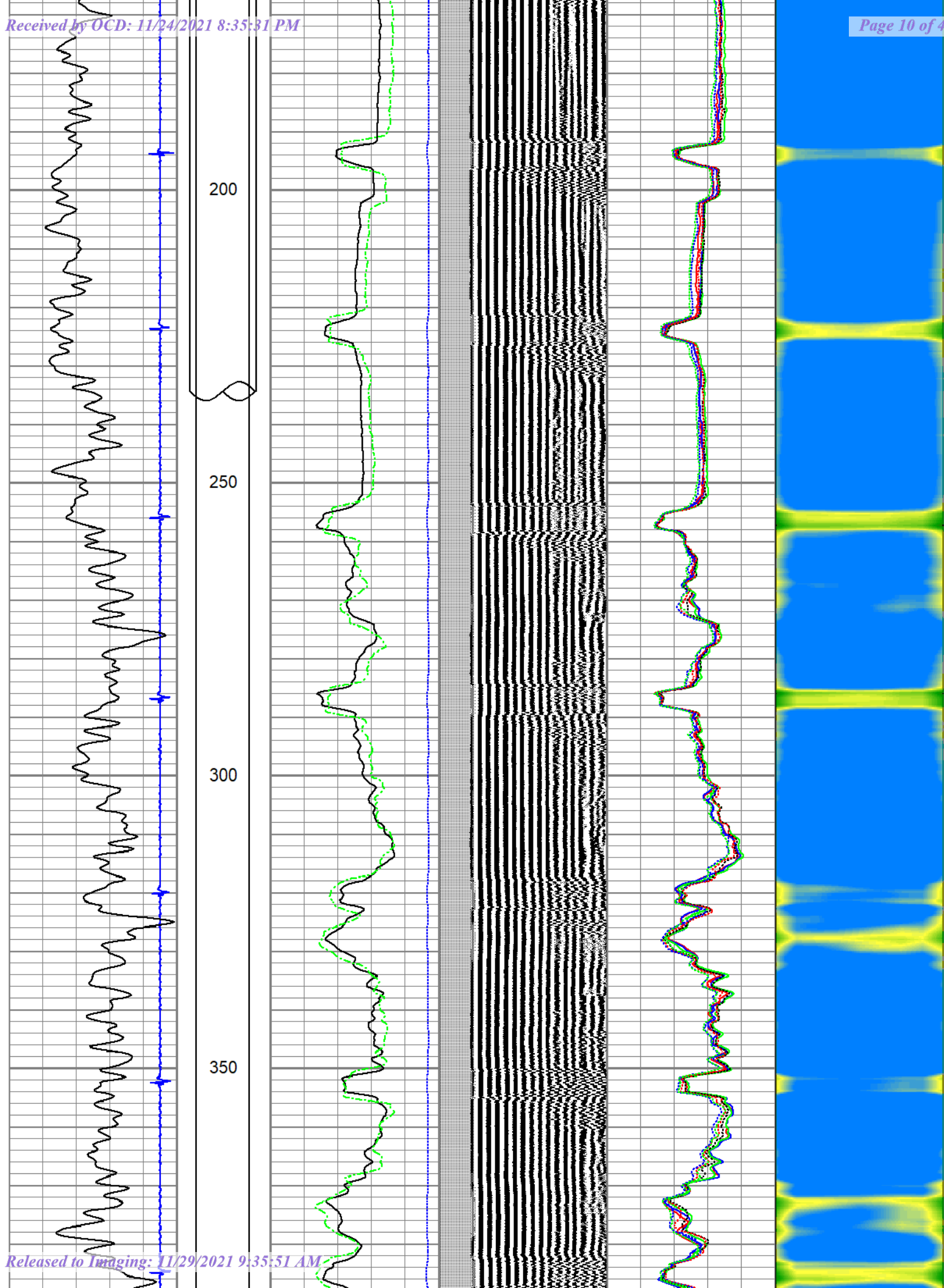
Received by OCD: 11/24/2021 8:35:31 PM				Page 8 of 4		
						
WVFS8	11.80		RBT-Probe (060632) Probe Radii Bond Tool with Digital Telemetry	9.17	2.75	90.00
WVFS7	11.80					
WVFS6	11.80					
WVFS5	11.80					
WVFS4	11.80					
WVFS3	11.80					
WVFS2	11.80					
WVFS1	11.80					
WVFCAL	11.80					
WVF3FT	11.80					
WVF5FT	10.72					
HEADVOLT	7.47					
CCL	6.52					
			GR-Probe (060719) Probe 2.75" 4 Channel Pulse	4.58	2.75	30.00
GR	3.78					
TEMP	2.88					
			CENT-Probe (PT_MONO2)	2.88	2.75	35.00
Dataset: blackrockc1.db: field/well/run1/merge1 Total length: 19.52 ft Total weight: 190.00 lb O.D.: 2.75 in						

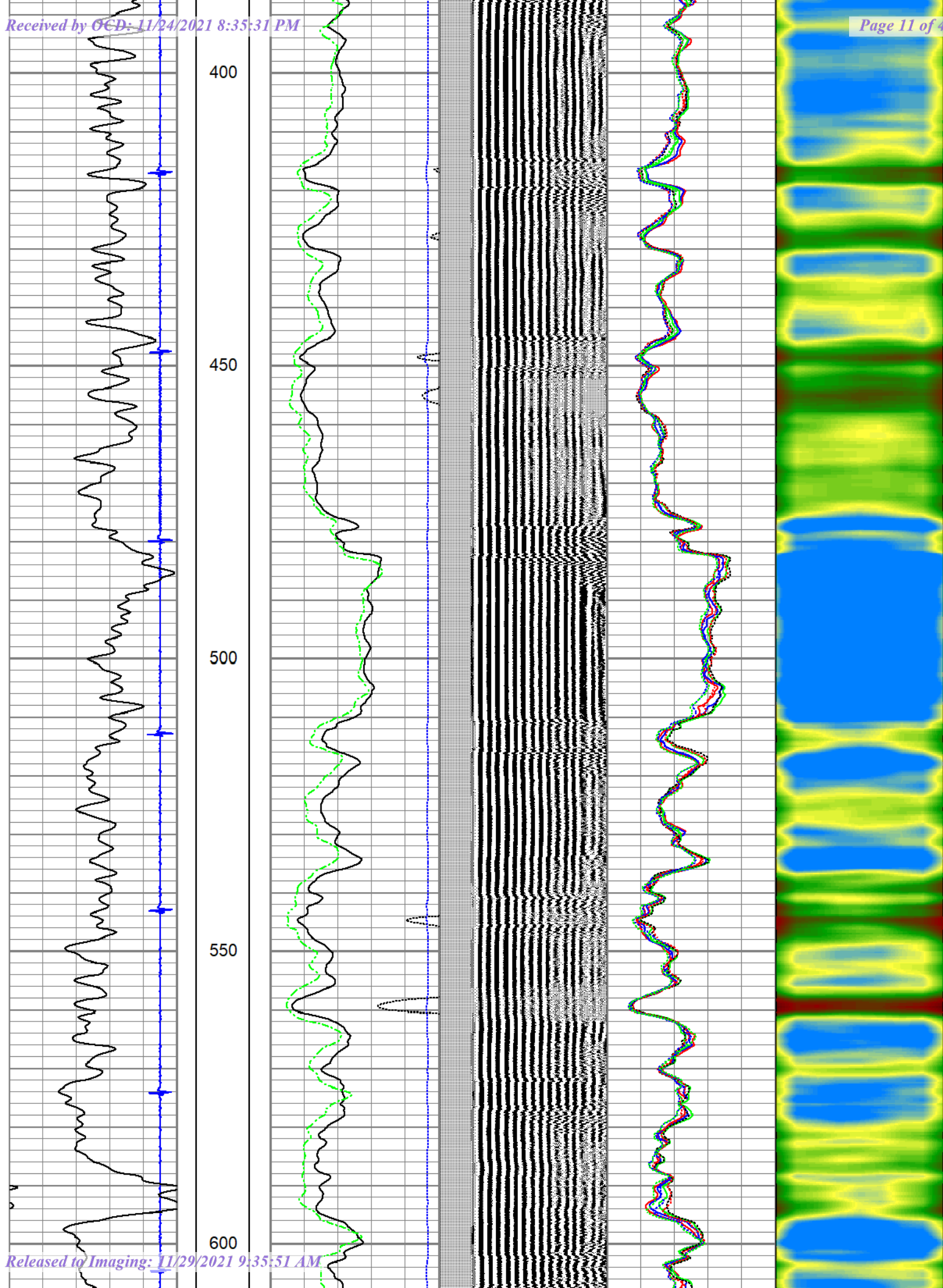
Database File blackrockc1.db  
 Dataset Pathname merge1  
 Presentation Format rst5inpl01  
 Dataset Creation Wed Nov 03 10:34:47 2021  
 Created By Dr. H. J. Frost, Inc. 11/24/2021



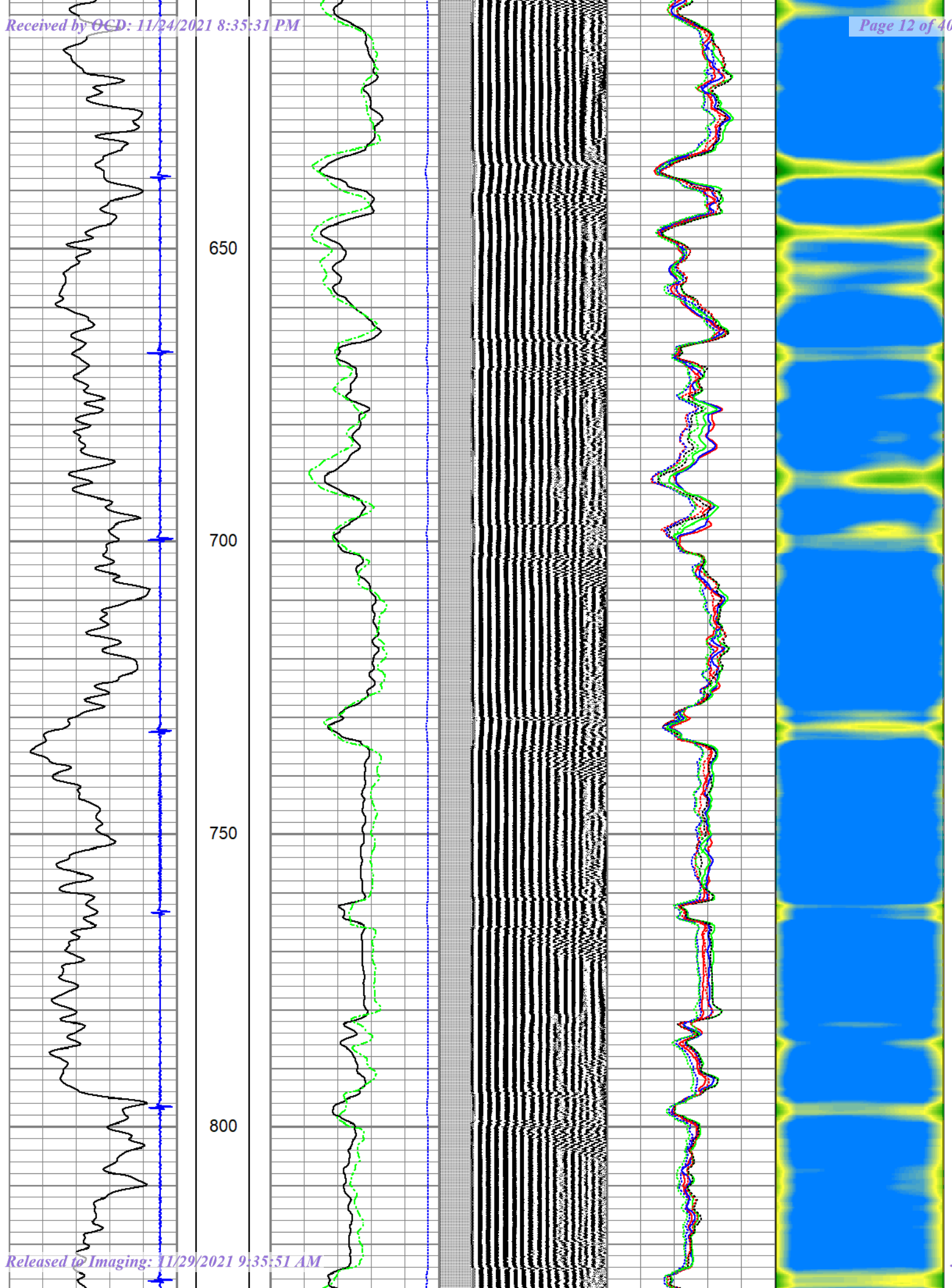
CASING COLLAR		3' AMPLITUDE		VDL		0	AMPS2	100	1	Cement Map	8
-9	1	0	(mV) 100	200	(usec) 1200	0	AMPS3	100			
GAMMA RAY		0	AMP X5 (mV) 20			0	AMPS4	100			
0	(GAPI) 200	5' AMPLITUDE				0	AMPS5	100			
		0	(mV) 100			0	AMPS6	100			
		Travel Time				0	AMPS7	100			
		1200	(usec) 200			0	AMPS8	100			

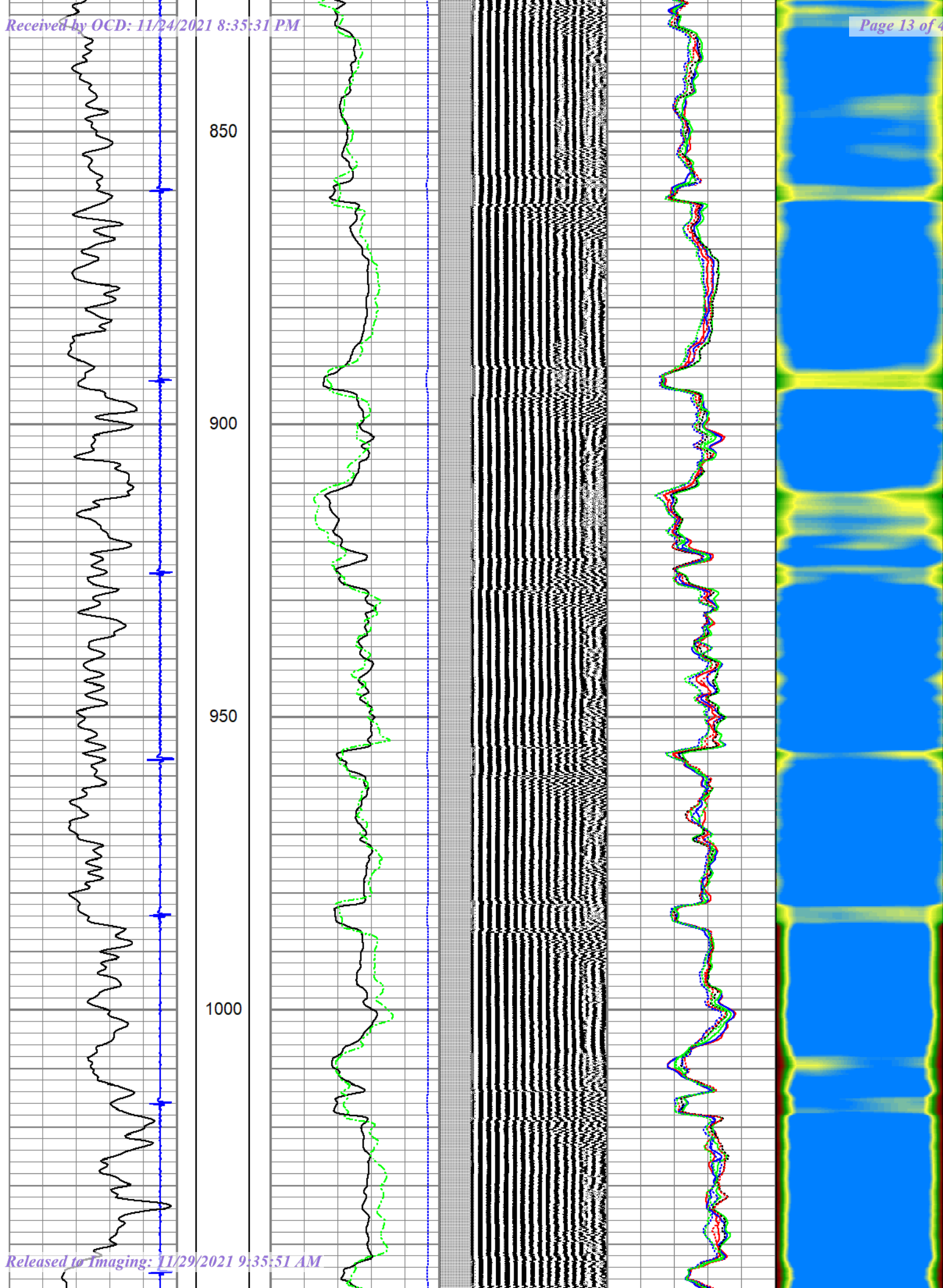


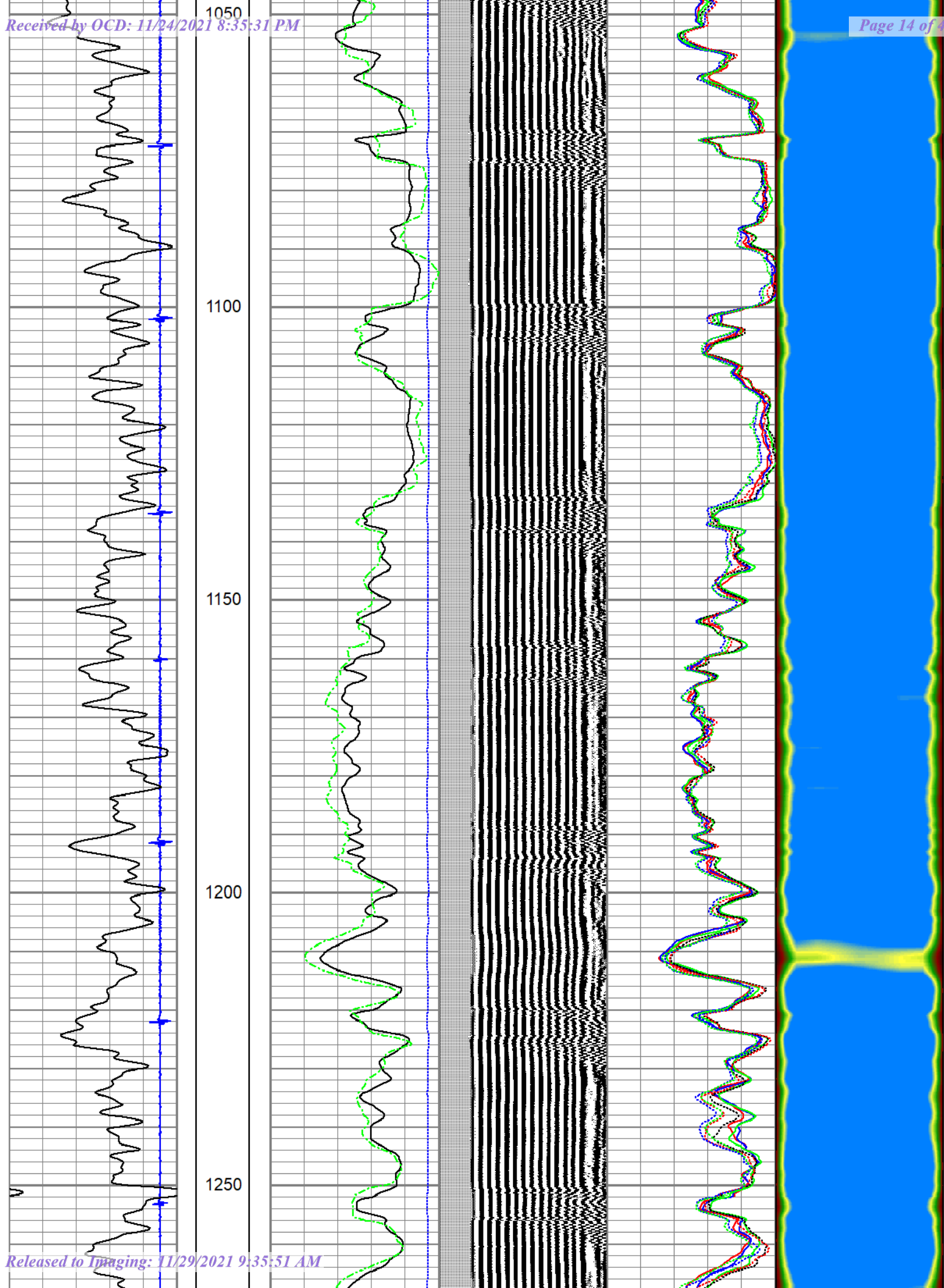




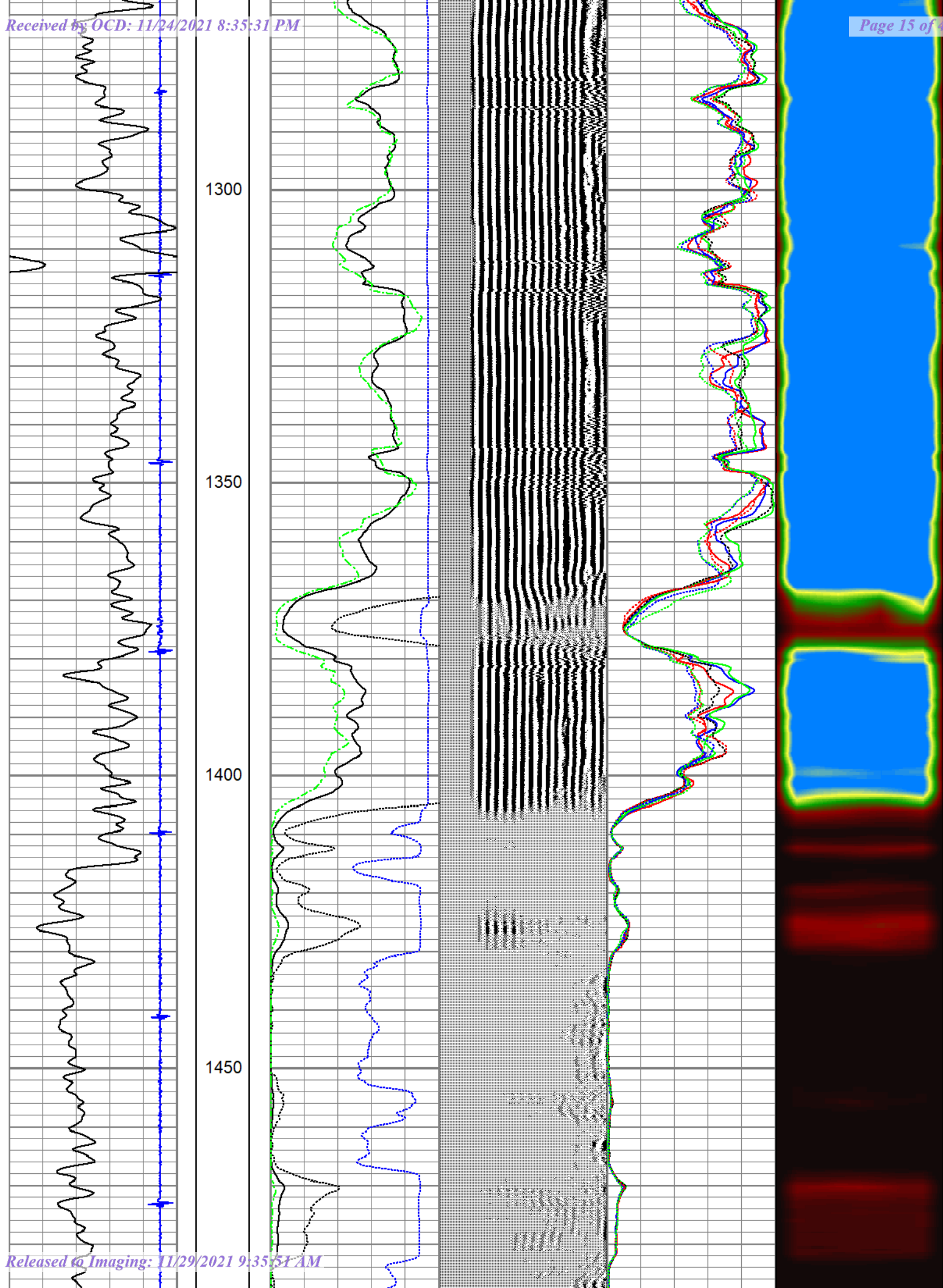


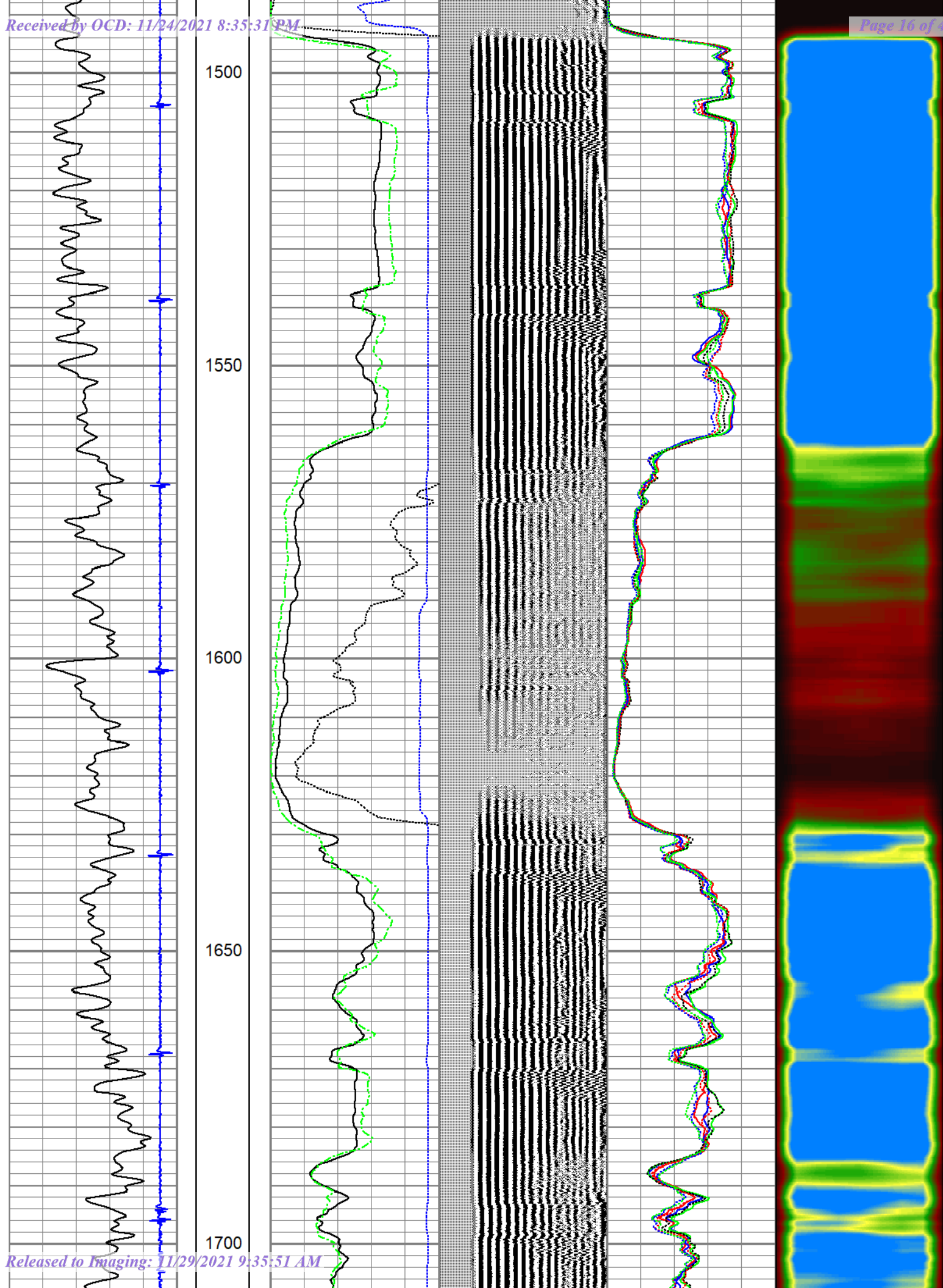




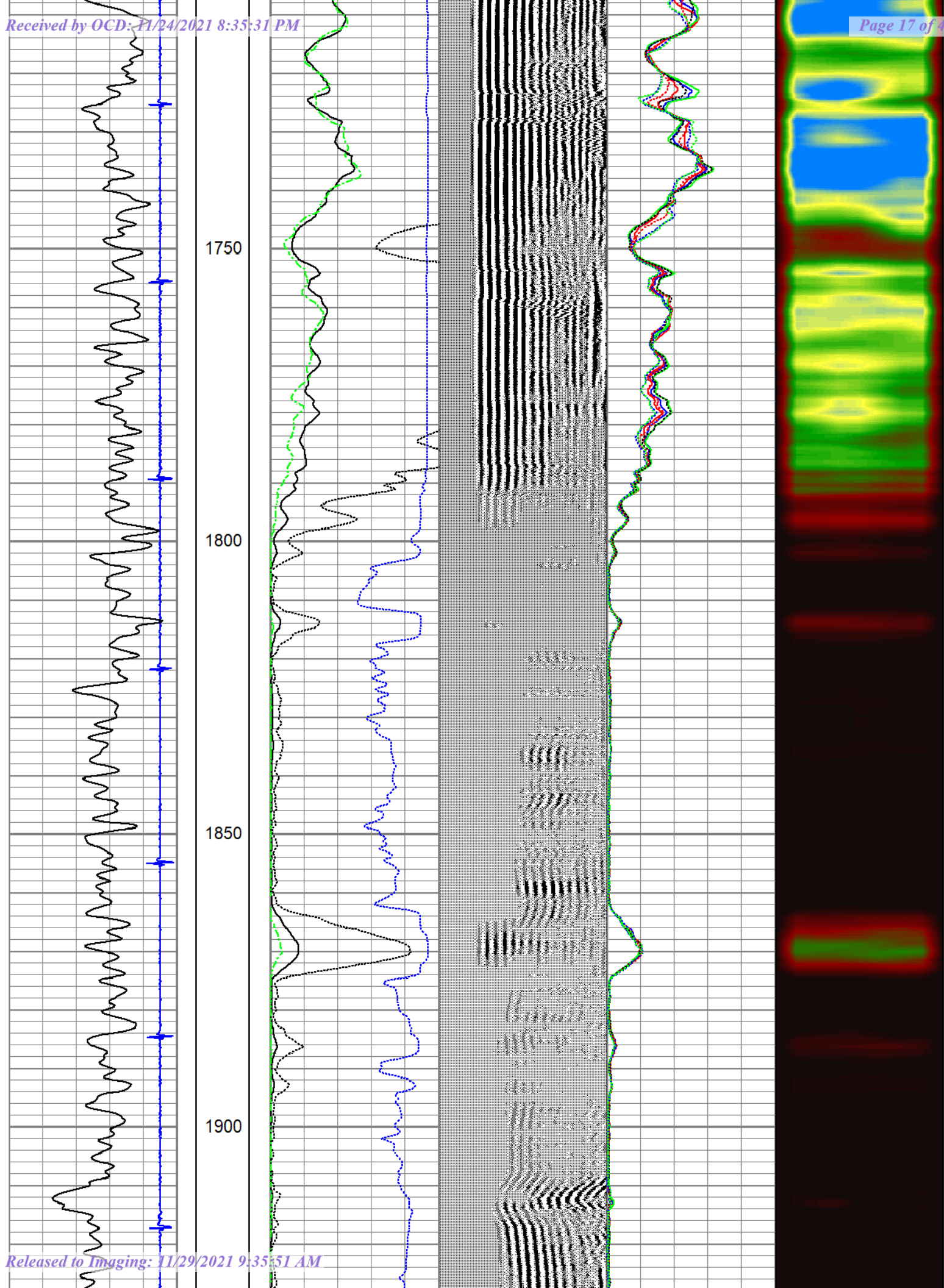


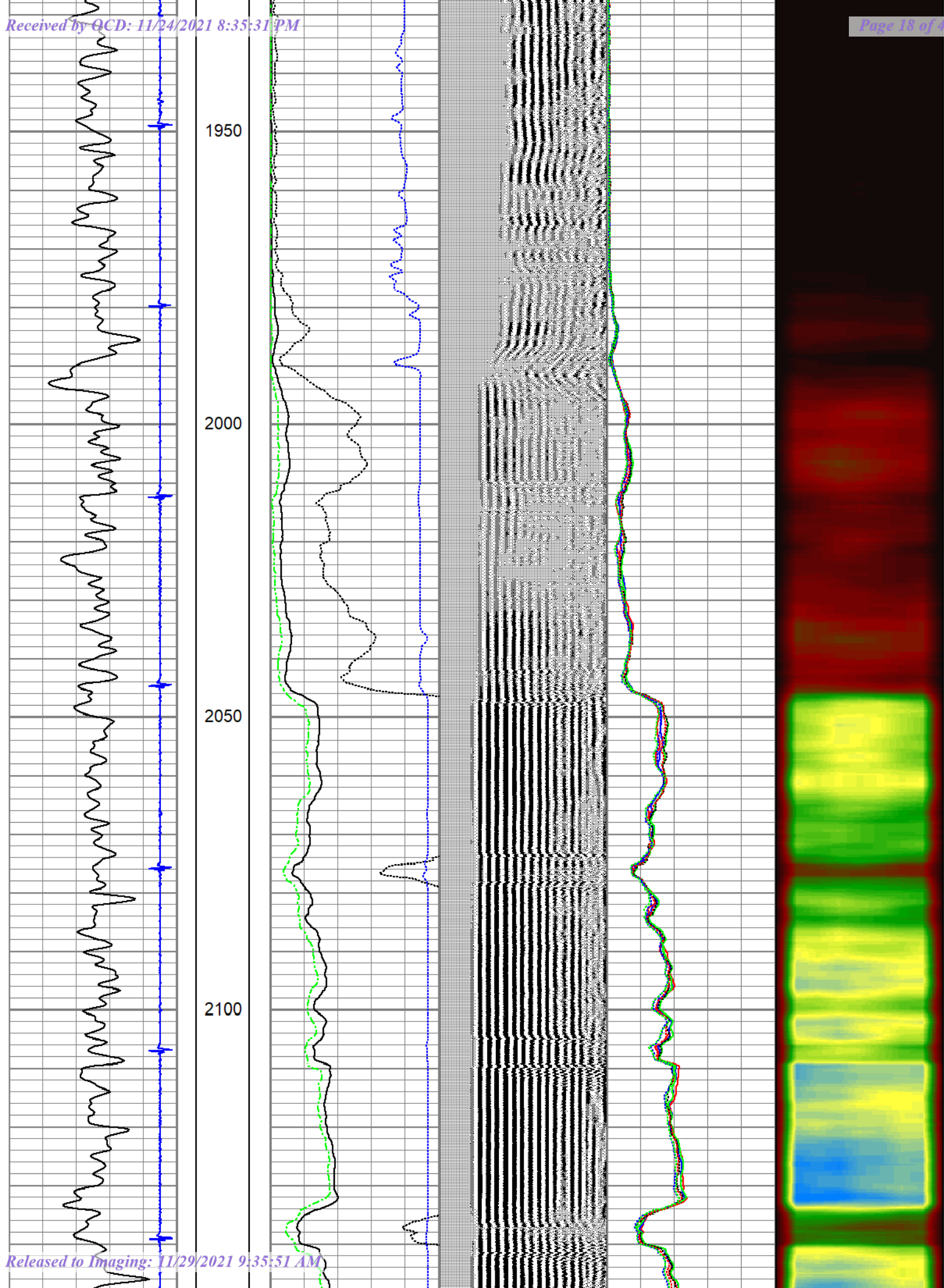




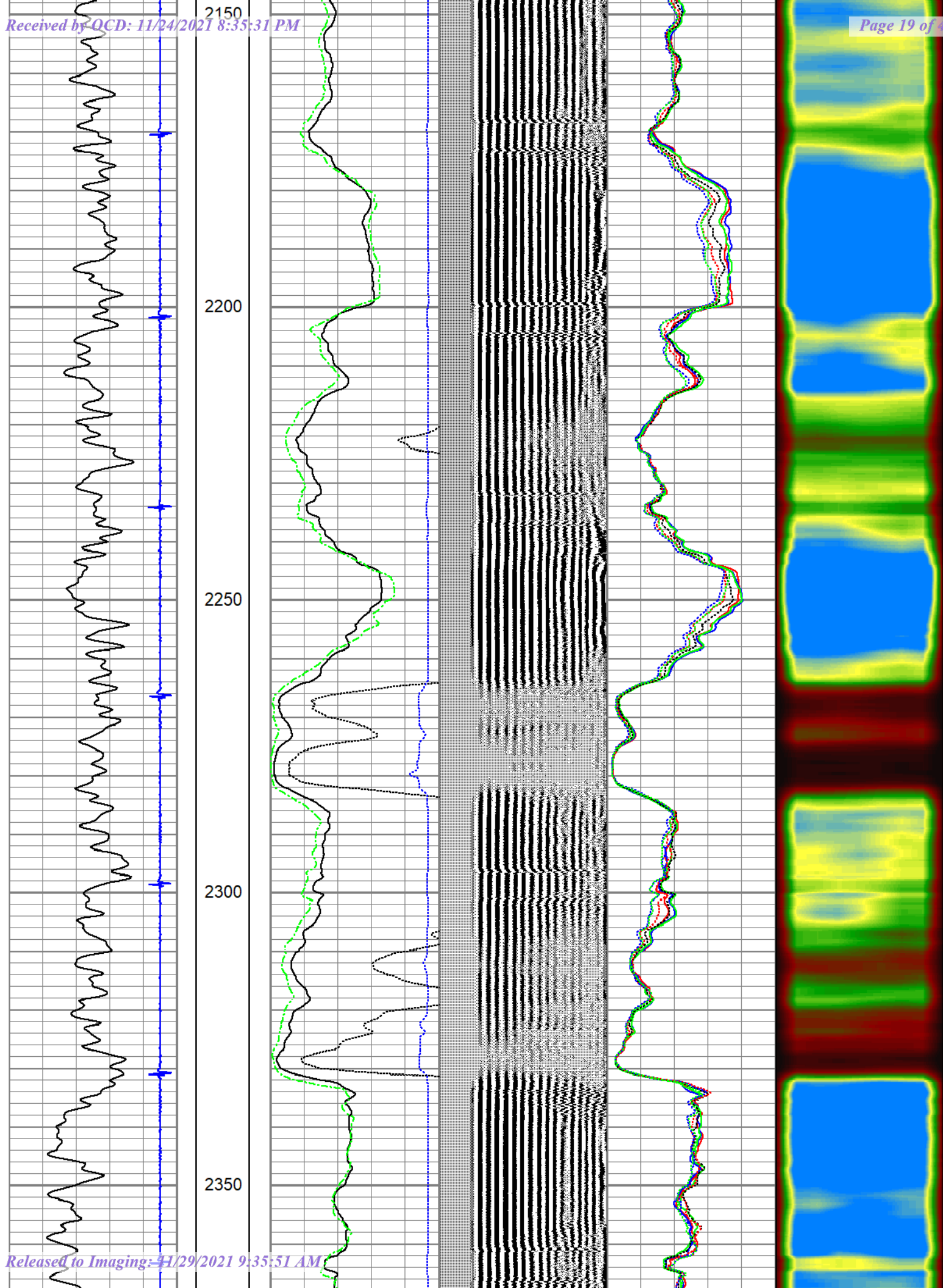


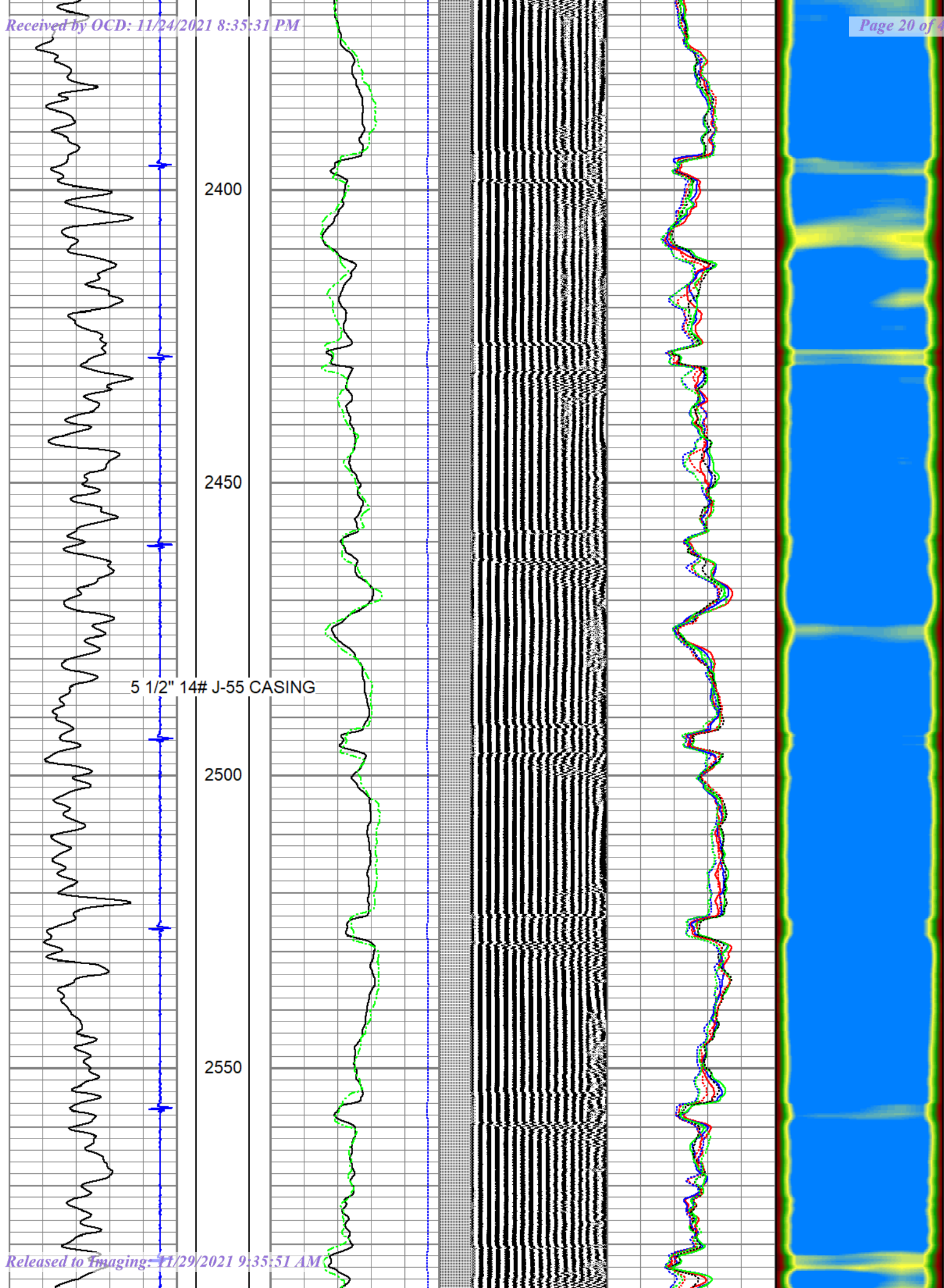


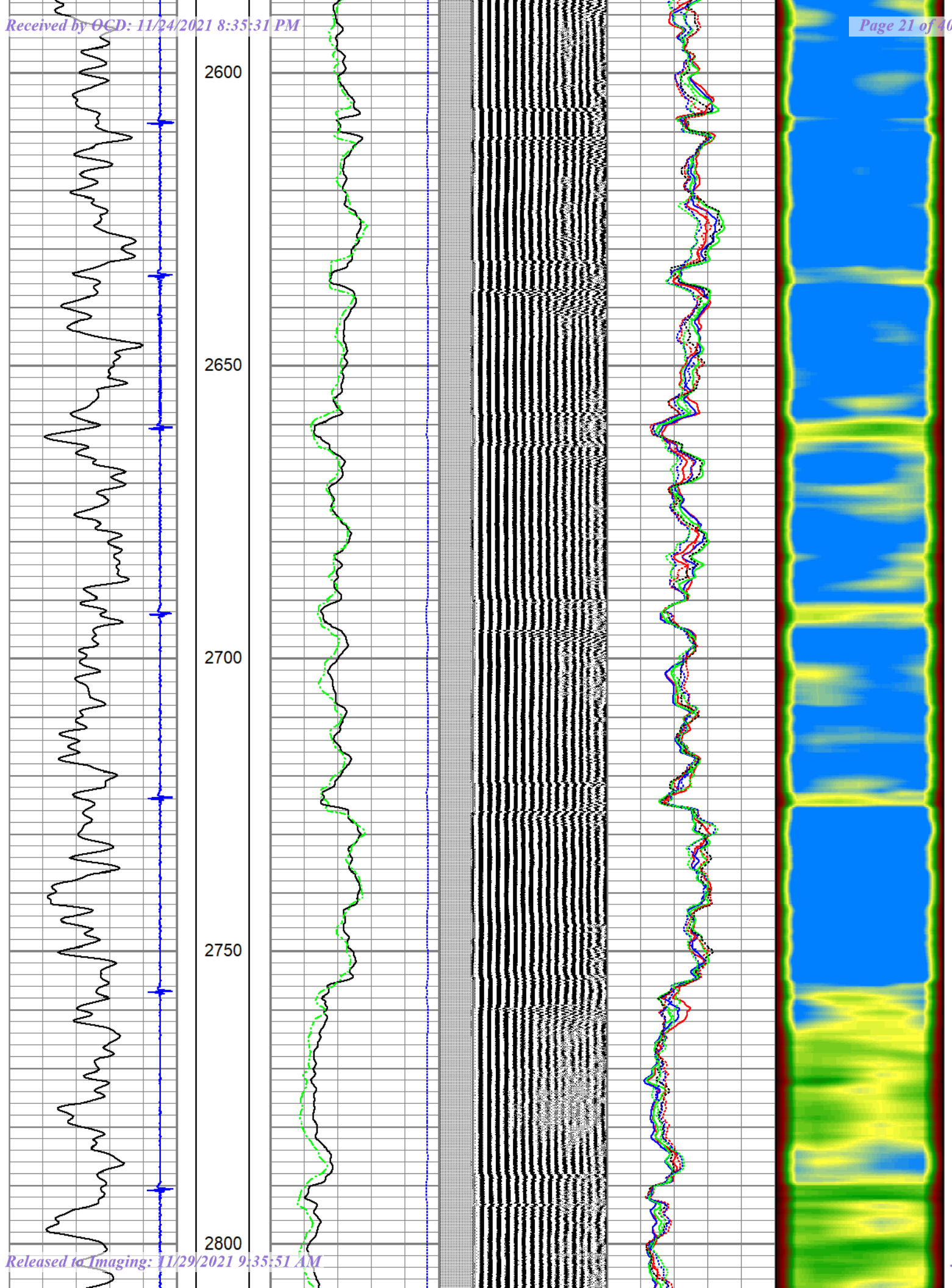




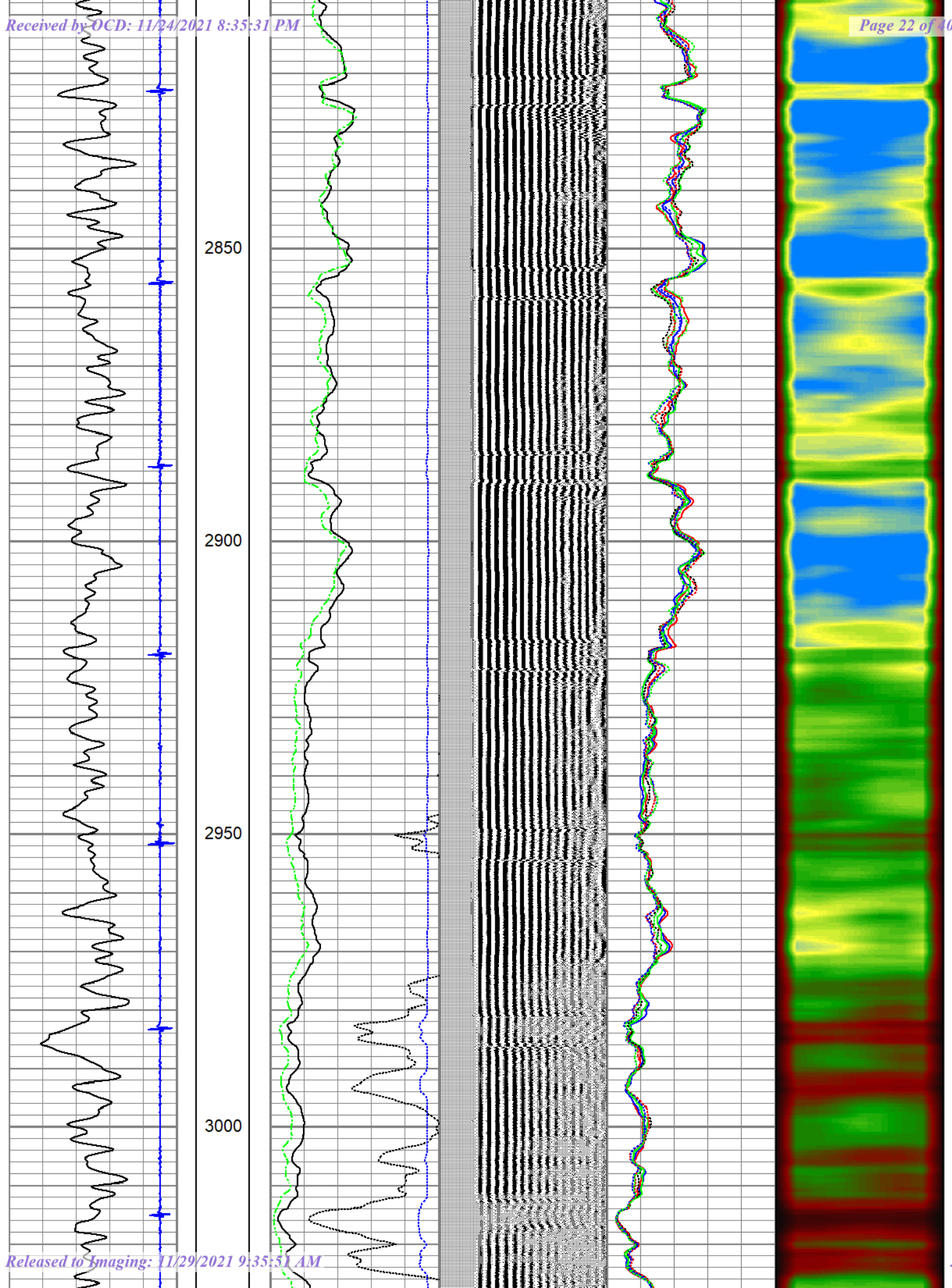


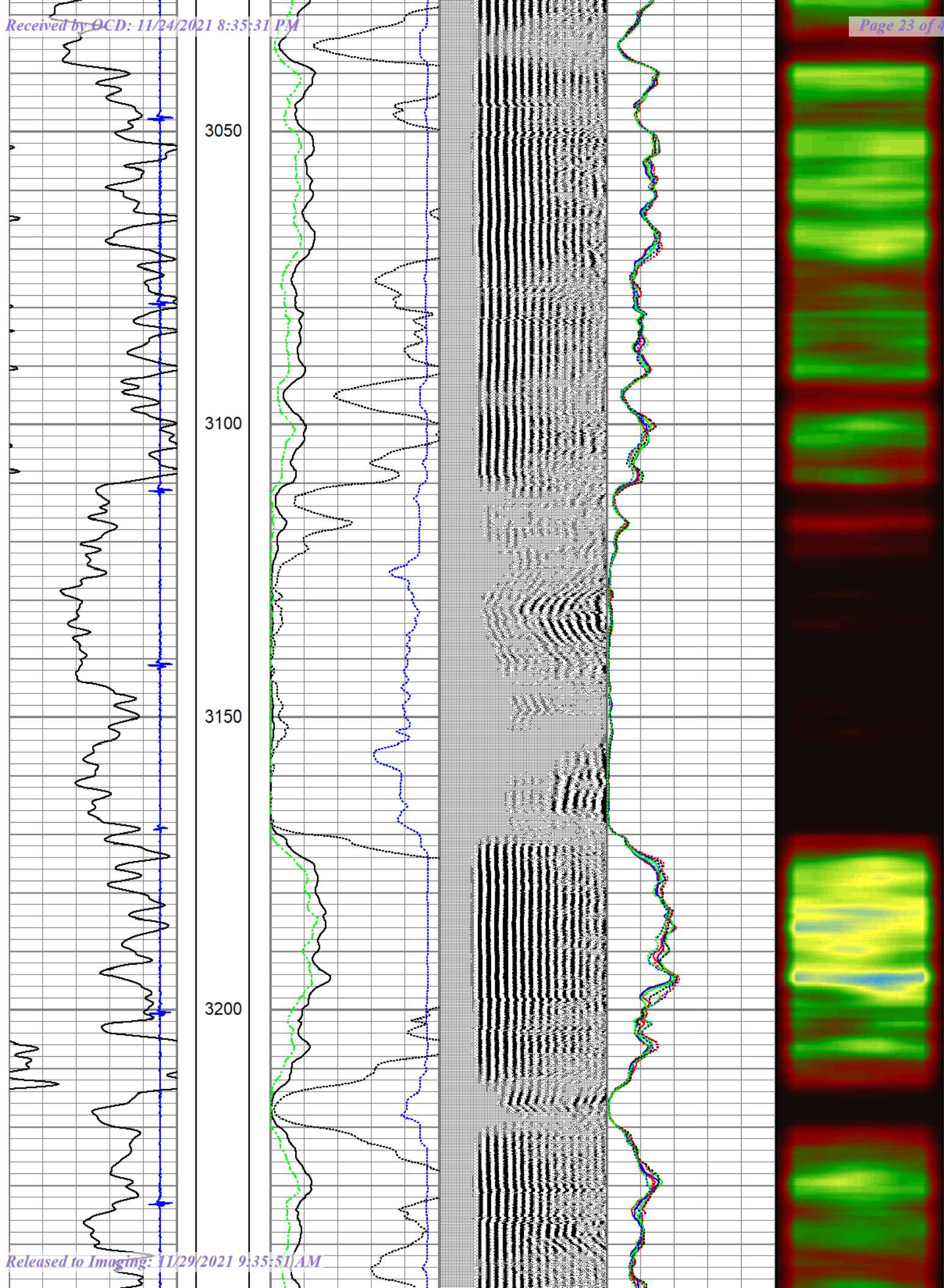




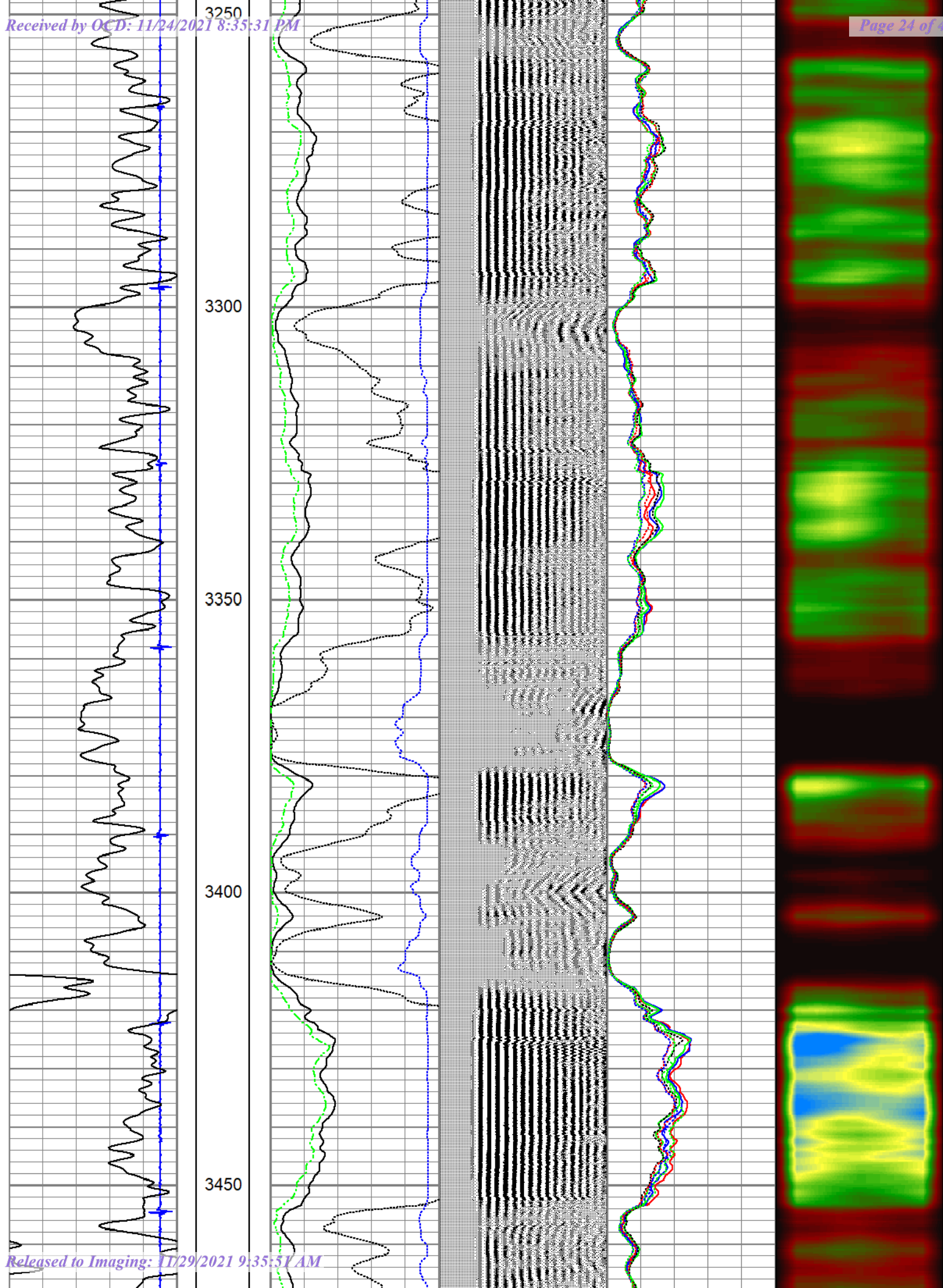




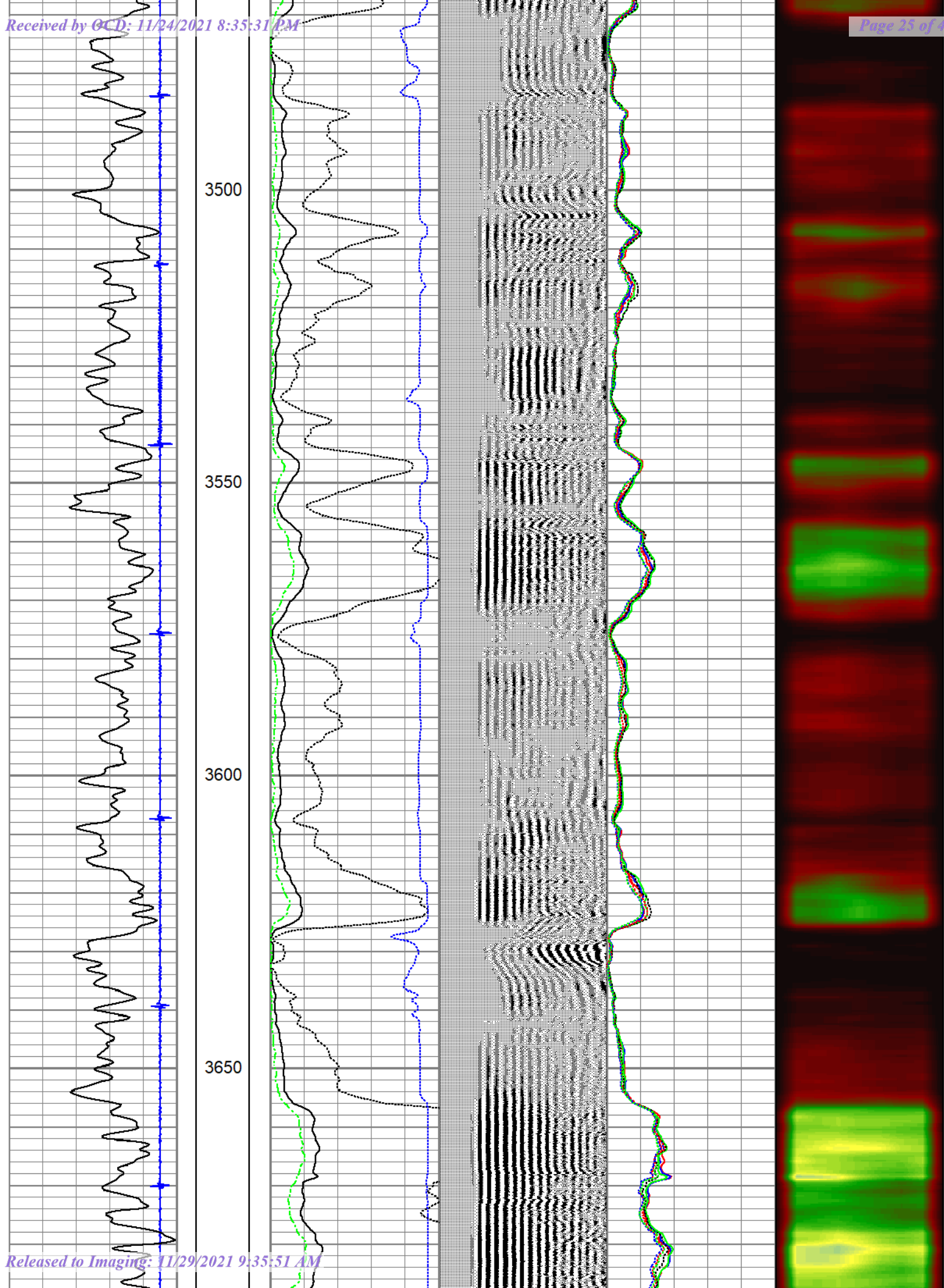


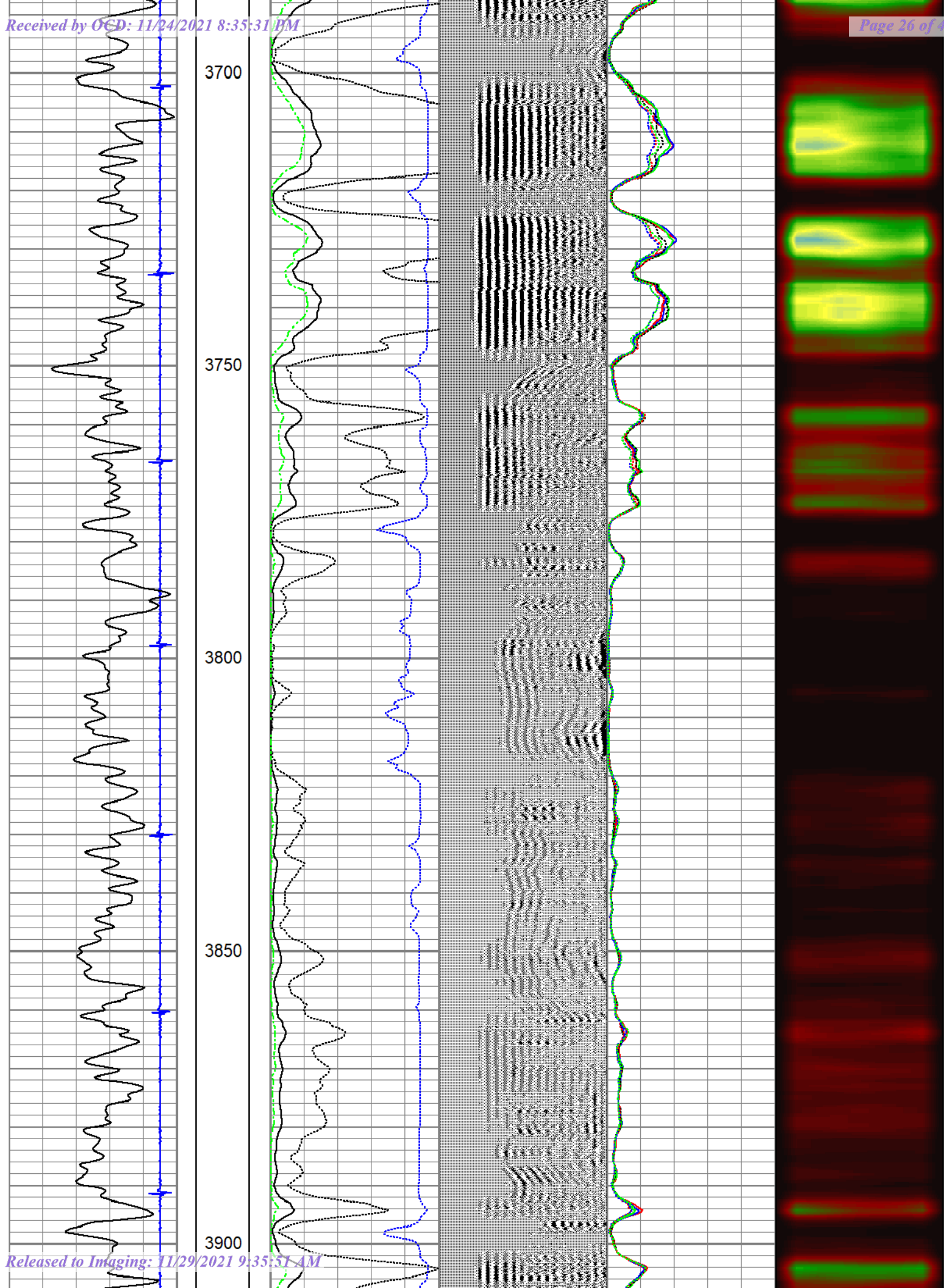




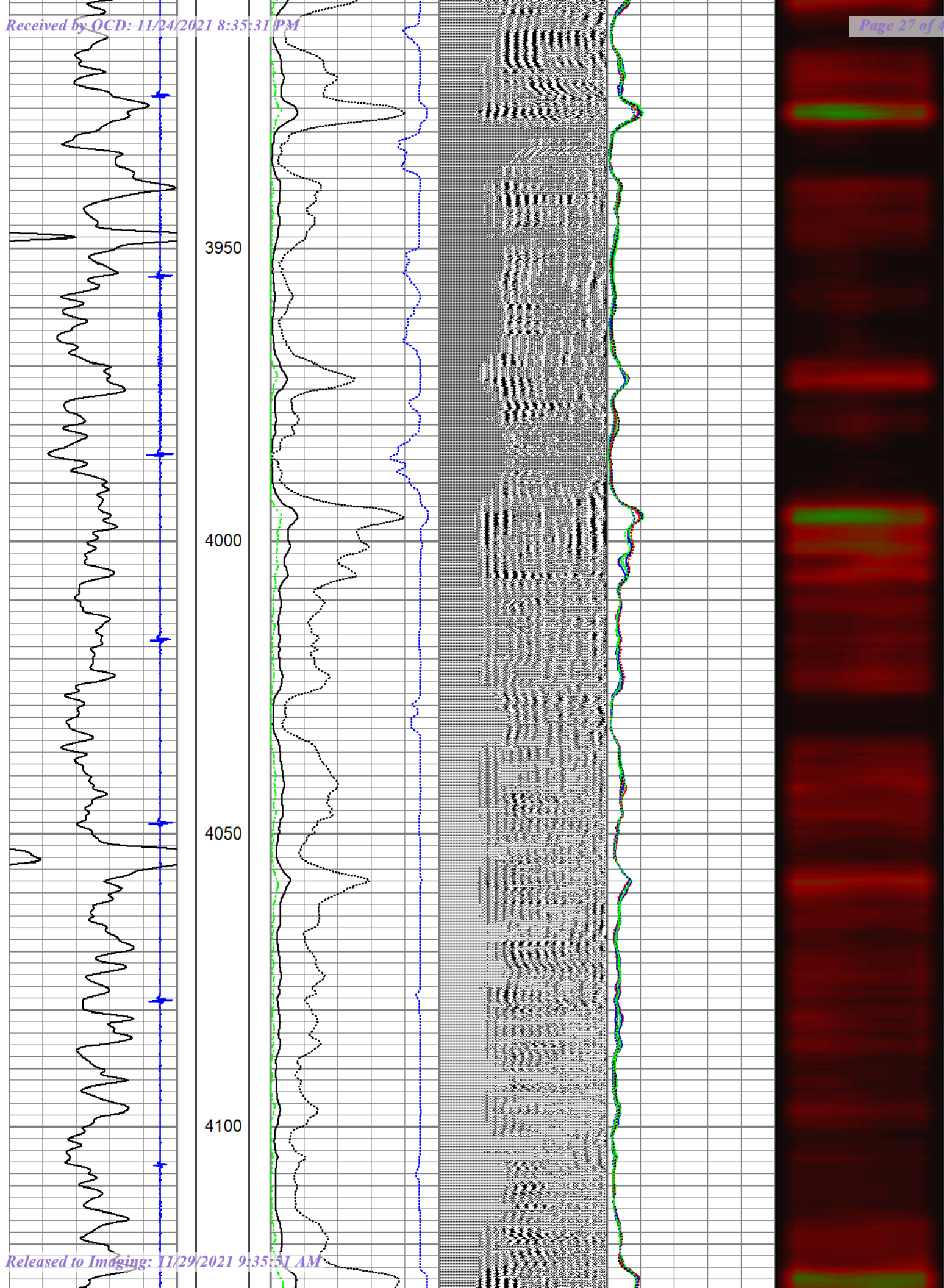


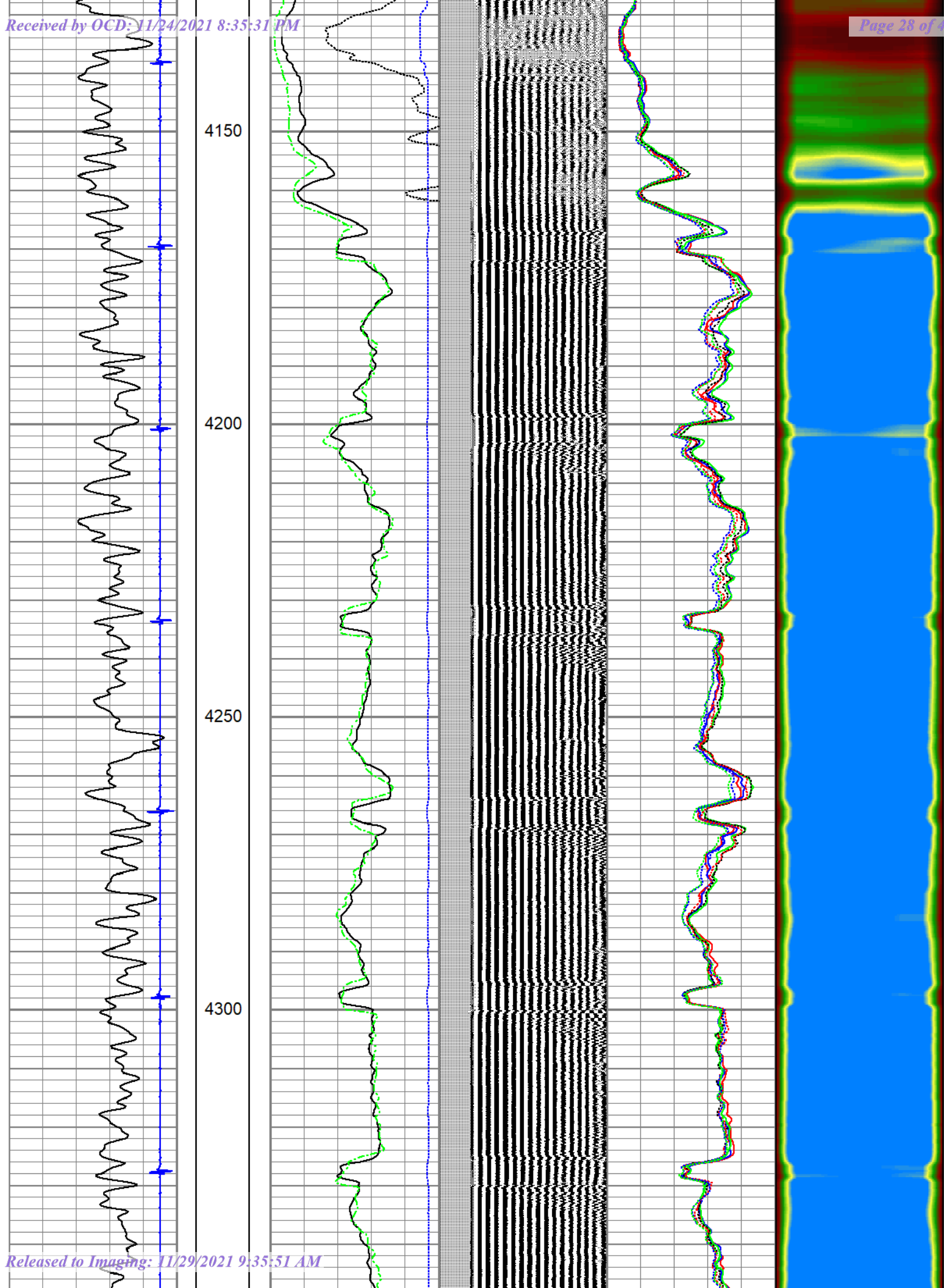


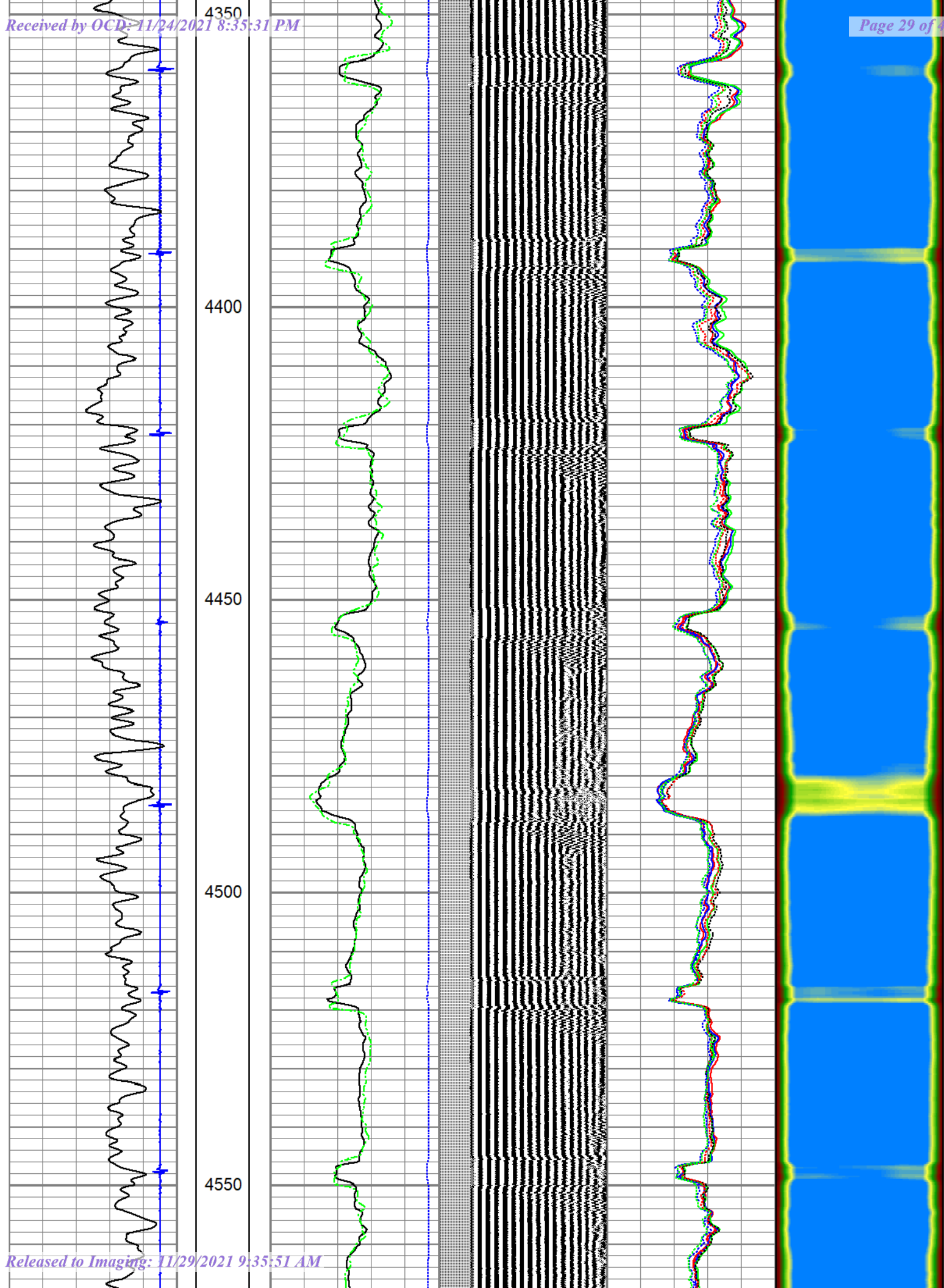




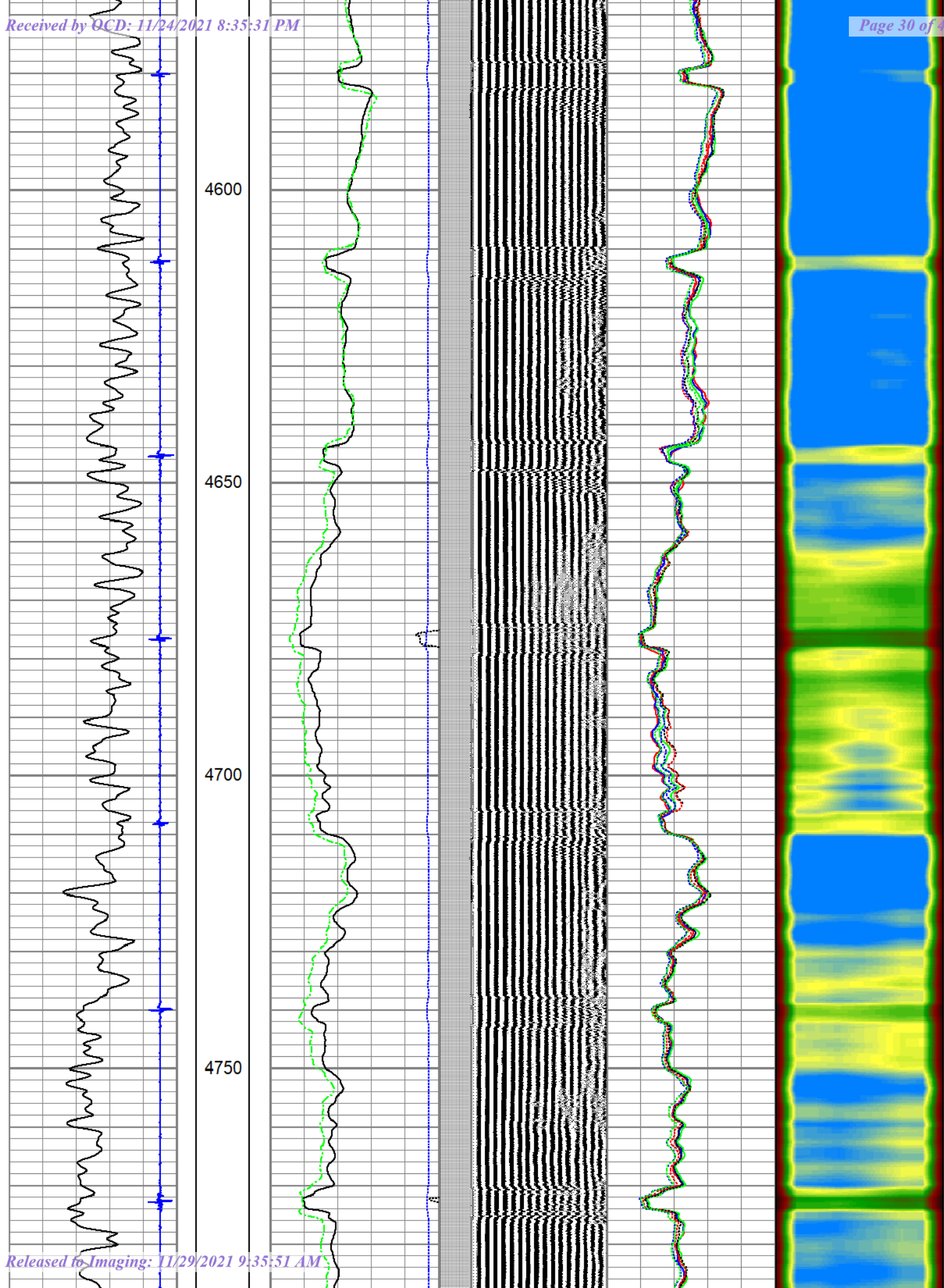


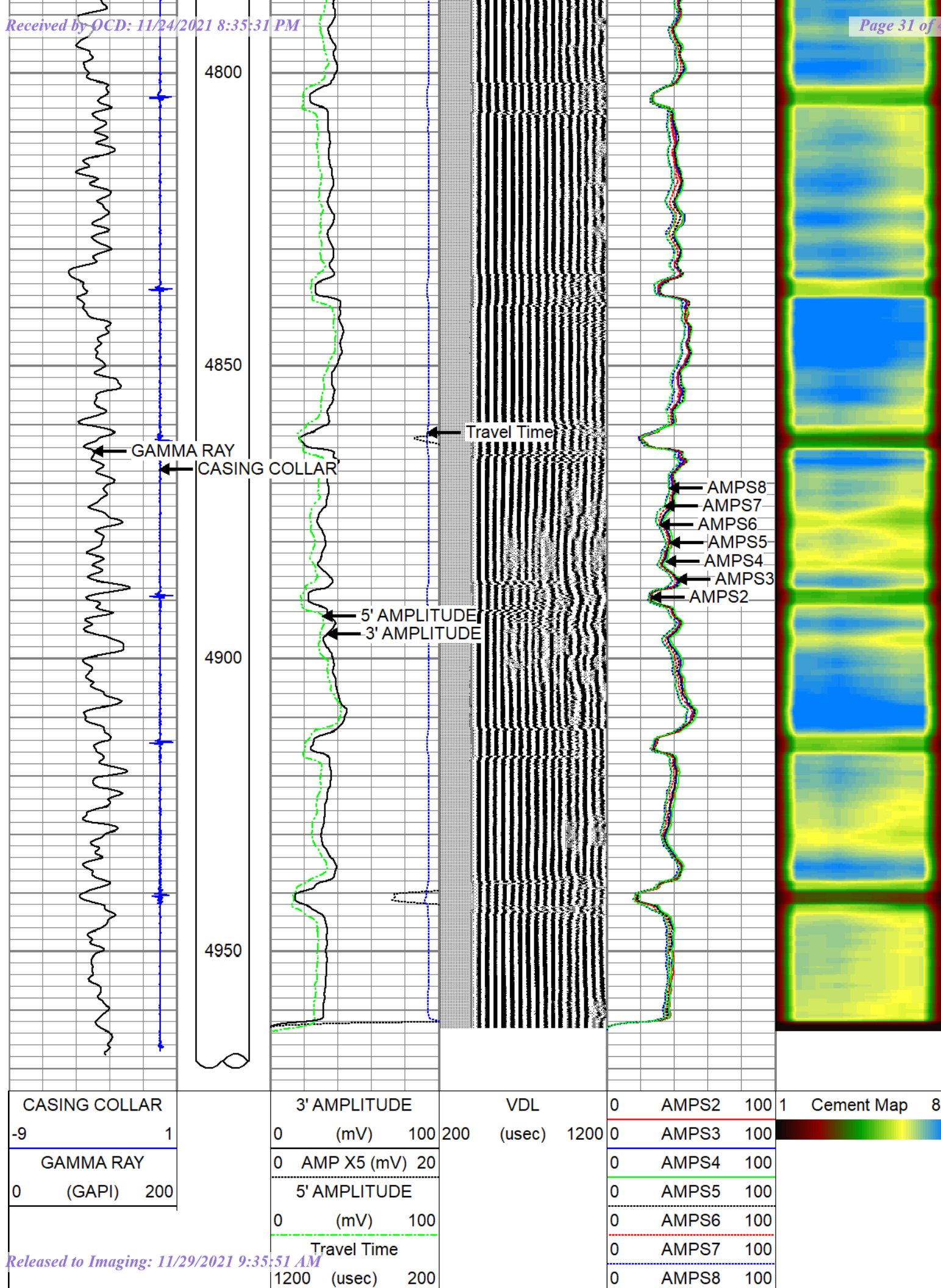












## Calibration Report

Database File      blackrockc1.db  
 Dataset Pathname   merge1  
 Dataset Creation    Wed Nov 03 10:34:47 2021

## Gamma Ray Calibration Report

Serial Number:            060719  
 Tool Model:              Probe  
 Performed:                Fri Jul 16 09:22:37 2021

Calibrator Value:            360.0                    GAPI

Background Reading:        0.0                      cps  
 Calibrator Reading:        360.0                    cps

Sensitivity:                1.0000                  GAPI/cps

## Temperature Calibration Report

Serial Number:            060719  
 Tool Model:              Probe  
 Performed:                (Not Performed)

	Reference	Reading
Low Reference:	0.00 degF	0.00 degF
High Reference:	1.00 degF	1.00 degF
Gain:	1.00	
Offset:	0.00	
Delta Spacing	1	

## Segmented Cement Bond Log Calibration Report

Serial Number:            060632  
 Tool Model:              Probe

Calibration Casing Diameter:    5.500                    in  
 Calibration Depth:            191.842                  ft

Master Calibration, performed Wed Nov 03 08:39:55 2021:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.006	0.521	0.450	91.000	175.774	-0.550
CAL	0.066	0.520				
5'	0.008	0.482	0.450	91.000	190.970	-1.035
SUM						
S1	0.004	0.529	0.000	91.000	173.269	-0.681
S2	-0.001	0.524	0.000	91.000	173.241	0.159
S3	-0.001	0.525	0.000	91.000	173.168	0.135
S4	-0.001	0.520	0.000	91.000	174.514	0.236
S5	-0.002	0.523	0.000	91.000	173.507	0.311
S6	-0.001	0.519	0.000	91.000	175.117	0.135
S7	-0.000	0.522	0.000	91.000	174.290	0.049
S8	-0.000	0.521	0.000	91.000	174.747	0.043



	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.066	0.520	1.000	0.000
Air Zero Calibration, performed Tue Oct 27 09:09:37 2020:						
	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.000		0.000		0.000	
5'	0.000		0.000		0.000	
SUM						
S1	0.000		0.000		0.000	
S2	0.000		0.000		0.000	
S3	0.000		0.000		0.000	
S4	0.000		0.000		0.000	
S5	0.000		0.000		0.000	
S6	0.000		0.000		0.000	
S7	0.000		0.000		0.000	
S8	0.000		0.000		0.000	

# Merrion Oil & Gas Corporation Wellbore Schematic

## Blackrock C-1

### Current Wellbore Configuration

Basin Dakota/ Devils Fork Gallup

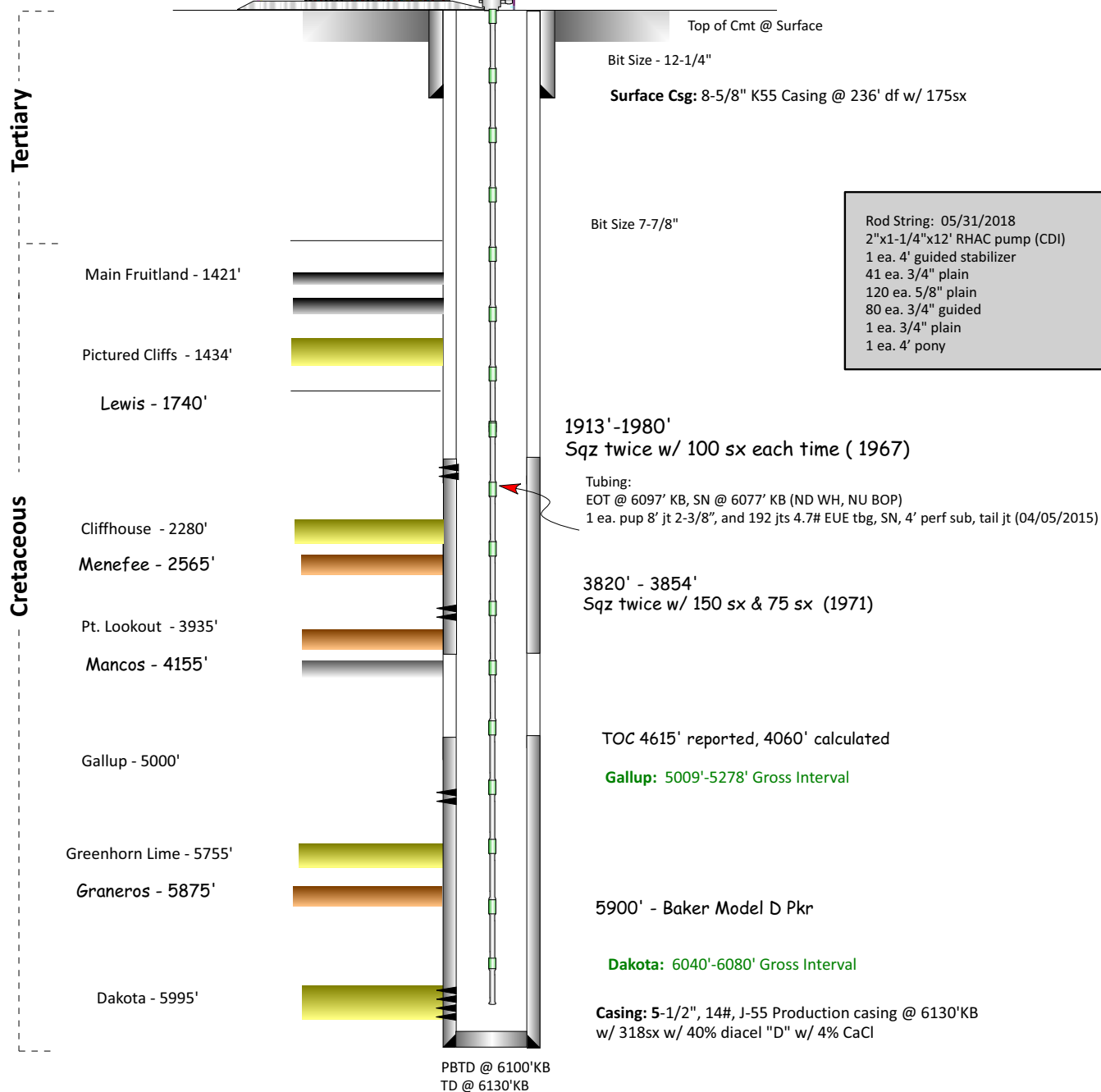
Location: 990' fnl, 1650' fwl  
Sec 21, T26N, R11W, NMPM  
San Juan Co, New Mexico

Elevation: 6214' DF

API No: 30-045-05780

By: J. Ryan Davis

Date: 02-Jun-2005  
Updated: 06/02/2020 ZIB



Tagged up with 14' of rat hole (05/15/2015)

# Merrion Oil & Gas Corporation Wellbore Schematic

## Blackrock C-1

### Proposed Wellbore Configuration

Basin Dakota/ Devils Fork Gallup

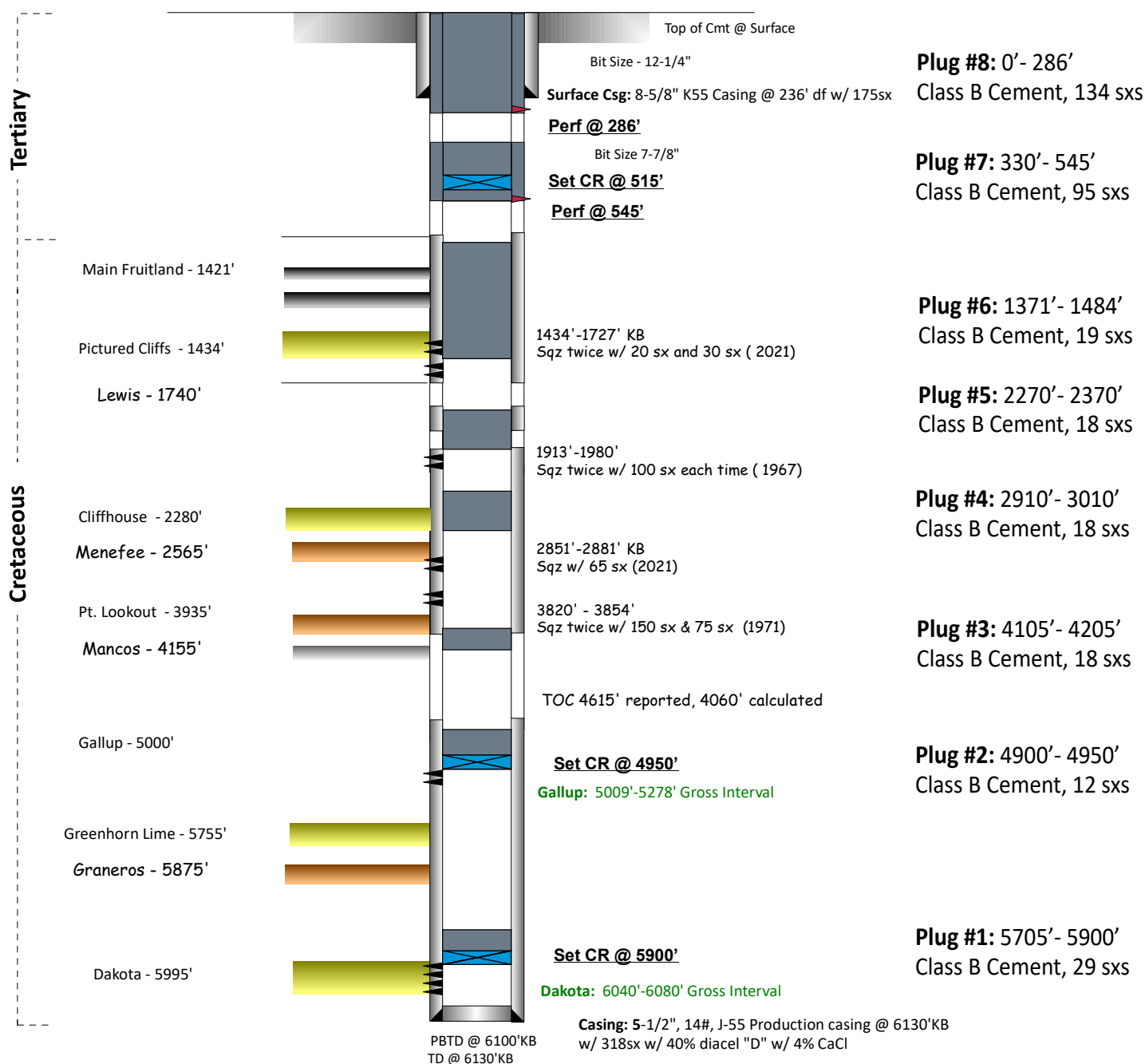
Location: 990' fnl, 1650' fwl  
Sec 21, T26N, R11W, NMPM  
San Juan Co, New Mexico

Elevation: 6214' DF

API No: 30-045-05780

By: J. Ryan Davis

Date: 02-Jun-2005  
Updated: 11/19/2021 JRD



**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
FARMINGTON DISTRICT OFFICE  
6251 COLLEGE BLVD.  
FARMINGTON, NEW MEXICO 87402**

Attachment to notice of  
Intention to Abandon

Re: Permanent Abandonment  
Well: Blackrock C 1

**CONDITIONS OF APPROVAL**

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
2. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.
3. The following modifications to your plugging program are to be made:
  - Plug #4 (Cliff House): BLM formation top does not match the Cliff House depth reported by the operator. Plug should be adjusted to cover Cliff House top at 2280 feet.
  - Plug #5 (Chacra): Does not cover BLM formation top estimate for the Chacra top at 1818 feet. Either the top of Plug #5 should be brought up to 1778 feet, or an additional plug should be pumped to cover BLM estimate at 1818 feet.
  - Plug #6 (Fruitland and Pictured Cliffs): Bring the top of plug up to 1070 feet or pump an additional plug to cover BLM estimate top for the Fruitland top at 1120 feet.

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

Office Hours: 7:45 a.m. to 4:30 p.m.

K. Rennick 11/24/2021

# BLM FLUID MINERALS P&A Geologic Report

**Date Completed:** 11/24/2021

Well No. Blackrock C #1 (API# 30-045-05780)	Location	990	FNL	&	1650	FWL
Lease No. NMSF-078899	Sec. 21	T26N			R11W	
Operator Merrion Oil & Gas Corp.	County	San Juan		State	New Mexico	
Total Depth 6130'	PBTD 6100'	Formation Gallup/Dakota				
Elevation (GL) 6214'		Elevation (KB) 6226'				

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					Surface/freshwater sands
Nacimiento Fm	Surface	380			Freshwater sands
Ojo Alamo Ss	380	500			Aquifer (freshwater)
Kirtland Shale	500	1120			
Fruitland Fm	1120	1434			Coal/Gas/Possible water
Pictured Cliffs Ss	1434	1740			Gas
Lewis Shale	1740	1818			
Chacra (La Ventana)	1818	2280			
Cliff House Ss	2280	2565			Water/Possible gas
Menefee Fm	2565	3935			Coal/Ss/Water/Possible O&G
Point Lookout Ss	3935	4155			Probable water/Possible O&G
Mancos Shale	4155	5000			
Gallup	5000	5755			O&G/Water
Greenhorn	5755	5875			
Graneros Shale	5875	5995			
Dakota Ss	5995	PBTD			O&G/Water

## Remarks:

### P & A

- Formation tops were estimated using logs from Reference Well #1.
- BLM estimate for the Chacra top varies from Operator submittal.
- Plug #4 (Cliff House) does not match the Cliff House depth reported by the operator. Plug should be adjusted to cover Cliff House top at 2280'.
- Plug #5 (Chacra) does not cover BLM estimate for the Chacra formation top @ 1818'. Either the top of Plug #5 should be brought up to 1778', or an additional plug should be pumped to cover BLM estimate at 1818'.
- Bring the top of Plug #6 (Fruitland and Pictured Cliffs) up to 1070', or pump an additional plug to cover BLM estimate for the Fruitland top at 1120'.
- The plugs proposed in the P&A procedure, with changes as recommended above, will adequately protect any freshwater sands in this well bore.
- Dakota perfs from 6040' – 6080'. Gallup perfs from 5009' – 5278'.

## Reference Well:

1) **Formation Tops**  
Tenneco Oil Co.  
W.O. Berger #1  
660' FNL, 1980' FEL  
Sec. 21, T26N, R11W  
6238' (GL)

**Prepared by:** Chris Wenman

**GENERAL REQUIREMENTS FOR  
PERMANENT ABANDONMENT OF WELLS ON FEDERAL AND INDIAN LEASES  
FARMINGTON FIELD OFFICE**

1.0 The approved plugging plans may contain variances from the following minimum general requirements.

1.1 Modification of the approved plugging procedure is allowed only with the prior approval of the Authorized Officer, Farmington Field Office.

1.2 Requirements may be added to address specific well conditions.

2.0 Materials used must be accurately measured. (densometer/scales)

3.0 A tank or lined pit must be used for containment of any fluids from the wellbore during plugging operations and all pits are to be fenced with woven wire. These pits will be fenced on three sides and once the rig leaves location, the fourth side will be fenced.

3.1 Pits are not to be used for disposal of any hydrocarbons. If hydrocarbons are present in the pit, the fluids must be removed prior to filling in.

4.0 All cement plugs are to be placed through a work string. Cement may be bull-headed down the casing with prior approval. Cement caps on top of bridge plugs or cement retainers may be placed by dump bailer.

4.1 The cement shall be as specified in the approved plugging plan.

4.2 All cement plugs placed inside casing shall have sufficient volume to fill a minimum of 100' of the casing, or annular void(s) between casings, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

4.3 Surface plugs may be no less than 50' in length.

4.4 All cement plugs placed to fill annular void(s) between casing and the formation shall be of sufficient volume to fill a minimum of 100' of the annular space plus 100% excess, calculated using the bit size, or 100' of annular capacity, determined from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

4.5 All cement plugs placed to fill an open hole shall be of sufficient volume to fill a minimum of 100' of hole, as calculated from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug. In the absence of a caliper log, an excess of 100% shall be required.

**4.6 A cement bond log or other accepted cement evaluation tool is required to be run if one had not been previously ran or cement did not circulate to surface during the original casing cementing job or subsequent cementing jobs.**

5.0 All cement plugs spotted across, or above, any exposed zone(s), when; the wellbore is not full of fluid or the fluid level will not remain static, and in the case of lost circulation or partial returns during cement placement, shall be tested by tagging with the work string.

- 5.1 The top of any cement plug verified by tagging must be at or above the depth specified in the approved plan, without regard to any excess.
- 5.2 Testing will not be required for any cement plug that is mechanically contained by use of a bridge plug and/or cement retainer, if casing integrity has been established.
- 5.3 Any cement plug which is the only isolating medium, for a fresh water interval or a zone containing a prospectively valuable deposit of minerals, shall be tested by tagging.
- 5.4 If perforations are required below the surface casing shoe, a 30 minute minimum wait time will be required to determine if gas and/or water flows are present. If flow is present, the well will be shut-in for a minimum of one hour and the pressure recorded. Short or long term venting may be necessary to evacuate trapped gas. **If only a water flow occurs with no associated gas, shut well in and record the pressures. Contact the Engineer as it may be necessary to change the cement weight and additives.**

6.0 Before setting any cement plugs the hole needs to be rolled. All wells are to be controlled by means of a fluid that is to be of a weight and consistency necessary to stabilize the wellbore. This fluid shall be left in place as filler between all plugs.

- 6.1 Drilling mud may be used as the wellbore fluid in open hole plugging operations.
- 6.2 The wellbore fluid used in cased holes shall be of sufficient weight to balance known pore pressures in all exposed formations.

7.0 A blowout preventer and related equipment (BOPE) shall be installed and tested prior to working in a wellbore with any exposed zone(s); (1) that are over pressured, (2) where the pressures are unknown, or (3) known to contain H<sub>2</sub>S.

8.0 Within 30 days after plugging work is completed, file a Sundry Notice, Subsequent Report of Abandonment (Form 3160-5), five copies, with the Field Manager, Bureau of Land Management, 6251 College Blvd., Suite A, Farmington, NM 87402. The report should show the manner in which the plugging work was carried out, the extent, by depth(s), of cement plugs placed, and the size and location, by depth(s), of casing left in the well. Show date well was plugged.

9.0 All permanently abandoned wells are to be marked with a permanent monument as specified in 43 CFR 3162.6(d). Unless otherwise approved.

10.0 If this well is located in a Specially Designated Area (SDA), compliance with the appropriate seasonal closure requirements will be necessary.

All of the above are minimum requirements. Failure to comply with the above conditions of approval may result in an assessment for noncompliance and/or a Shut-in Order being issued pursuant to 43 CFR 3163.1. You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.

**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 63712

**CONDITIONS**

Operator: MERRION OIL & GAS CORP 610 Reilly Avenue Farmington, NM 87401	OGRID: 14634
	Action Number: 63712
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

**CONDITIONS**

Created By	Condition	Condition Date
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	11/29/2021
kpickford	Adhere to BLM approved plugs and COAs (including those on GEO Report).	11/29/2021