

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Well Name: LINDRITH UNIT

Well Location: T24N / R2W / SEC 7 /
SWSW / 36.32008 / -107.096395

County or Parish/State: RIO
ARRIBA / NM

Well Number: 109

Type of Well: CONVENTIONAL GAS
WELL

Allottee or Tribe Name:

Lease Number: NMSF078908

Unit or CA Name: LINDRITH UNIT - PC

Unit or CA Number:
NMNM78399A

US Well Number: 300392302500S1

Well Status: Abandoned

Operator: MORNINGSTAR
OPERATING LLC

Subsequent Report

Sundry ID: 2693859

Type of Submission: Subsequent Report

Type of Action: Plug and Abandonment

Date Sundry Submitted: 09/21/2022

Time Sundry Submitted: 10:23

Date Operation Actually Began: 09/12/2022

Actual Procedure: MorningStar Operating LLC has plugged and abandoned the Lindrith Unit #109 as of 9/16/2022. Attached are the Daily and Cement Reports, Final WBD, and CBL.

SR Attachments

Actual Procedure

Subsequent_PA_Reports_Lindrith_Unit_109__combined__20220921102237.pdf

Well Name: LINDRITH UNIT

Well Location: T24N / R2W / SEC 7 / SWSW / 36.32008 / -107.096395

County or Parish/State: RIO ARRIBA / NM

Well Number: 109

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMSF078908

Unit or CA Name: LINDRITH UNIT - PC

Unit or CA Number: NMNM78399A

US Well Number: 300392302500S1

Well Status: Abandoned

Operator: MORNINGSTAR OPERATING LLC

Operator

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

Operator Electronic Signature: CONNIE BLAYLOCK

Signed on: SEP 21, 2022 10:22 AM

Name: MORNINGSTAR OPERATING LLC

Title: Regulatory Technician

Street Address: 400 W 7th St.

City: Forth Worth

State: TX

Phone: (817) 334-7882

Email address: CBLAYLOCK@MSPARTNERS.COM

Field

Representative Name: Amy Byars

Street Address:

City:

State:

Zip:

Phone:

Email address: abyars@mspartners.com

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5055647742

BLM POC Email Address: krennick@blm.gov

Disposition: Accepted

Disposition Date: 09/21/2022

Signature: Kenneth Rennick

Morningstar Operating LLC

Plug And Abandonment End Of Well Report

Lindrith Unit #109

795' FSL & 806' FWL, Section 71, 24N, 02W

Rio Arriba County, NM / API 30-039-23025

Work Summary:

- 9/11/22** Made BLM and NMOCD P&A operations notifications at 9:00 AM MST.
- 9/12/22** Arrived on location and held safety meeting. R/U P&A rig. Checked well pressures. Tubing 0 psi, Casing: 0 psi, Bradenhead: 0 psi. Bled down well. N/D wellhead. N/U BOP and function tested. Set up equipment for 1-1/4" tubing. L/D 98 joints of 1-1/4" tubing, seat nipple and L/D 1 additional 1-1/4" joint. Change out equipment for 2-3/8" work string. P/U 4-1/2" casing scraper and TIH to 3255'. TOO H. Remove casing scraper and P/U 4-1/2" CR. TIH and set at 3200'. R/U cementing services. Circulated hole with 13 bbls, pumped total of 30 bbls. Attempted to pressure test casing but was unsuccessful as fluid began coming out of Braden Head Valve. Pumped plug #1 from 3200' to 3050'. R/D cementing services. L/D 5 joints and TOO H. Secured and shut in well for the day.
- 9/13/22** Arrived on location and held safety meeting. Checked well pressures: Tubing 0 psi, Casing: 0 psi, Bradenhead: 0 psi. Bled down well. R/U wireline. RIH and logged well. R/D wireline. TIH and tagged top of plug #1 at 3012'. R/U cementing services. Attempted to pressure test casing, but casing failed. Continued pumping plug #1 from 3012' to approximately 2657' to cover the Pictured Cliffs perforations as well as the Fruitland and Kirtland formation tops. R/D cementing services. L/D 11 joints and TOO H. WOC 4 hours. TIH Tagged top of plug #1 at 2645'. LD 42 joints and TOO H. Secured and shut in well for the day.

- 9/15/22** Arrived on location and held safety meeting. Checked well pressures: Tubing 0 psi, Casing: 0 psi, Bradenhead: 0 psi. R/U wireline. Perforated at 1414'. R/D wireline. TIH with 4.5" packer and set at 1360'. Attempted to establish an injection rate but was unsuccessful, pressured up to 500 PSI. Unset packer and TOO. L/D packer. TIH to 1470'. R/U cementing services. Pumped Plug #2 from 1470' to approximately 1264' to cover the Nacimiento formation top. R/D cementing services. L/D 6 joints and TOO. WOC 4 hours. TIH tagged the top of plug #2 at 1310'. R/U cementers and continued pumping plug #2 from 1310' to approximately 1240'. R/D cementing services. L/D 3 joints and TOO. WOC overnight. Secured and shut in well for the day.
- 9/16/22** Arrived on location and held safety meeting. Checked well pressures: Tubing: 0 psi, Casing: 0 psi, Bradenhead: 0 psi. Bled down well. TIH and tagged top of Plug #2 at 1184'. L/D 30 joints and TOO. R/U wireline services. RIH and perforated at 188'. POOH and R/D wireline services. P/U 4.5" packer. TIH and set packer at 180'. Successfully circulated hole with 6 bbls of water through packer and out Braden Head valve. Unset Packer and TOO. L/D packer and P/U 4.5" CR. TIH and set CR at 180'. R/U Cementing services. Pumped cement through CR and out Braden Head valve. Stung out of CR and pumped cement to surface. R/D cementing services. L/D tubing, R/D floor, N/D BOP, and N/U WH. WOC 4 hours. Preformed WH cutoff and marker instillation per NMOCD regulations. Cement was 6' low in 4.5" casing and 12' low in 8.6" casing. R/U cementing services and pumped cement to surface in both casing strings. R/D cementing services and all equipment. MOL.

Plug Summary:

Plug #1: (Pictured Cliff Perforations. Pictured Cliffs, Kirtland, and Ojo Alamo formation top 3,200'-2,645', 33 Sacks Type III Cement)

Set CR at 3200'. R/U cementing services. Circulated hole with 13 bbls, pumped total of 30 bbls. Attempted to pressure test casing but was unsuccessful as fluid began coming out of Braden Head Valve. Pumped plug #1 from 3200' to 3050'. TIH and tagged top of plug #1 at 3012'. R/U cementing services. Attempted to pressure test casing, but casing failed. Continued pumping plug #1 from 3012' to approximately 2657' to cover the Pictured Cliffs perforations as well as the Fruitland and Kirtland formation tops. R/D cementing services. L/D 11 joints and TOO. WOC 4 hours. TIH Tagged top of plug #1 at 2645'.

Plug #2: (Nacimiento Formation Top 1,470'-1,184', 29 Sacks Type III Cement)

Perforated casing at 1414'. TIH with 4.5" packer and set at 1360'. Attempted to establish an injection rate but was unsuccessful, pressured up to 500 PSI. Unset packer and TOO. L/D packer. TIH to 1470'. R/U cementing services. Pumped Plug #2 from 1470' to approximately 1264' to cover the Nacimiento formation top. R/D cementing services. L/D 6 joints and TOO. WOC 4 hours. TIH tagged the top of plug #2 at 1310'. R/U cementers and continued pumping plug #2 from 1310' to approximately 1240'. WOC. TIH and tagged top of Plug #2 at 1184'

Plug #3: (Casing Shoe, 188' to Surface, 49 Sacks Type III Cement [3 Sacks for Top Off])

Perforated casing at 188'. P/U 4.5" packer. TIH and set packer at 180'. Successfully circulated hole with 6 bbls of water through packer and out Braden Head valve. Unset Packer and TOO. L/D packer and P/U 4.5" CR. TIH and set CR at 180'. R/U Cementing services. Pumped cement through CR and out Braden Head valve. Stung out of CR and pumped cement to surface. R/D cementing services. L/D tubing, R/D floor, N/D BOP, and N/U WH. WOC 4 hours. Performed WH cutoff and marker instillation per NMOCD regulations. Cement was 6' low in 4.5" casing and 12' low in 8.6" casing. R/U cementing services and pumped cement to surface in both casing strings.

P & A Daily Report



Company: Morningstar Operating
 Well Name: Lindrith Unit #109
 API #: 30-039-23025
 Date: 9/12/2022

PO Box 538 Farmington, NM 87499 505.327.7301

WORK SUMMARY

Arrived on location and held safety meeting. R/U P&A rig. Checked well pressures (see pressures below). Bled down well. N/D wellhead. N/U BOP and function tested. Set up equipment for 1-1/4" tubing. L/D 98 joints of 1-1/4" tubing, SN and 1 1-1/4" joint. Change out equipment for 2-3/8" work string. P/U 4-1/2" casing scraper and TIH to 3255'. TOOH. Remove casing scraper and P/U 4-1/2" CR. TIH and set at 3200'. R/U cementing services. Circulated hole with 13 bbls, pumped total of 30 bbls. Attempted to pressure test casing but was unsuccessful as fluid began coming out of Braden Head Valve. Pumped plug #1 from 3200' to 3050'. R/D cementing services. L/D 5 joints and TOOH. Secured and shut in well for the day.

PLUG SUMMARY

<u>Plug No</u>		<u>Plug Depth</u>		<u>Sacks of Cement Used</u>
Plug 1	<u>3200'</u>	To	<u>3050'</u>	<u>10 sx Type III Cement</u>
Plug 2	<u> </u>	To	<u> </u>	<u> </u>
Plug 3	<u> </u>	To	<u> </u>	<u> </u>
Plug 4	<u> </u>	To	<u> </u>	<u> </u>
Plug 5	<u> </u>	To	<u> </u>	<u> </u>
Plug 6	<u> </u>	To	<u> </u>	<u> </u>
Plug 7	<u> </u>	To	<u> </u>	<u> </u>
Plug 8	<u> </u>	To	<u> </u>	<u> </u>
Plug 9	<u> </u>	To	<u> </u>	<u> </u>

BRIDGE PLUG/CEMENT RETAINER SUMMARY

Depth Set
3200'

WELL PRESSURES

Tubing 0 psi
 Casing 0 psi
 Bradenhead 0 psi

P & A Daily Report



Company: Morningstar Operating
 Well Name: Lindrith Unit #109
 API #: 30-039-23025
 Date: 9/13/2022

PO Box 538 Farmington, NM 87499 505.327.7301

WORK SUMMARY

Arrived on location and held safety meeting. Checked well pressures (see pressures below). Bled down well. R/U wireline. RIH and logged well. R/D wireline. TIH and tagged top of plug #1 at 3012'. R/U cementing services. Attempted to pressure test casing, but casing failed. Continued pumping plug #1 from 3012' to approximately 2657' to cover the Pictured Cliffs perforations as well as the Fruitland and Kirtland formation tops. R/D cementing services. L/D 11 joints and TOO. WOC 4 hours. TIH Tagged top of plug #1 at 2645'. LD 42 joints and TOO. Secured and shut in well for the day.

PLUG SUMMARY

<u>Plug No</u>	<u>Plug Depth</u>	<u>Sacks of Cement Used</u>
Plug 1	3200' To 2645'	33 sx Type III Cement
Plug 2	To	
Plug 3	To	
Plug 4	To	
Plug 5	To	
Plug 6	To	
Plug 7	To	
Plug 8	To	
Plug 9	To	

BRIDGE PLUG/CEMENT RETAINER SUMMARY

Depth Set
 3200'

WELL PRESSURES

Tubing _____ 0 psi
 Casing _____ 0 psi
 Bradenhead _____ 0 psi

P & A Daily Report



Company: Morningstar Operating
 Well Name: Lindrith Unit #109
 API #: 30-039-23025
 Date: 9/16/2022

PO Box 538 Farmington, NM 87499 505.327.7301

WORK SUMMARY

Arrived on location and held safety meeting. Checked well pressures (see pressures below). Bled down well. TIH and tagged top of Plug #2 at 1184'. L/D 30 joints and TOO. R/U wireline services. RIH and perforated at 188'. POOH and R/D wireline services. P/U 4.5" packer. TIH and set packer at 180'. Successfully circulated hole with 6 bbls of water through packer and out Braden Head valve. Unset Packer and TOO. L/D packer and P/U 4.5" CR. TIH and set CR at 180'. R/U Cementing services. Pumped cement through CR and out Braden Head valve. Stung out of CR and pumped cement to surface. R/D cementing services. L/D tubing, R/D floor, N/D BOP, and N/U WH. WOC 4 hours. Performed WH cutoff and marker instillation per NMOCD regulations. Cement was 6' low in 4.5" casing and 12' low in 8.6" casing. R/U cementing services and pumped cement to surface in both casing strings. R/D cementing services and all equipment. MOL.

PLUG SUMMARY

<u>Plug No</u>	<u>Plug Depth</u>	<u>Sacks of Cement Used</u>
Plug 1 <u>3200'</u>	To <u>2645'</u>	<u>33 sx Type III Cement</u>
Plug 2 <u>1470'</u>	To <u>1184'</u>	<u>20 sx Type III Cement</u>
Plug 3 <u>188'</u>	To <u>surface</u>	<u>49 sx Type III Cement (3 sx for top off)</u>
Plug 4 _____	To _____	_____
Plug 5 _____	To _____	_____
Plug 6 _____	To _____	_____

BRIDGE PLUG/CEMENT RETAINER SUMMARY

<u>Depth Set</u>
<u>3200'</u>
<u>180'</u>

WELL PRESSURES

Tubing	<u>0 psi</u>
Casing	<u>0 psi</u>
Bradenhead	<u>0 psi</u>

**MorningStar
Operating, LLC**

P&A WBD

Prepared by: J. Ryza
Updated by: JRyza
Date: 09/21/2022

KB = 12'
GL = 7,112'
API# 30-039-23025

Spud Date: 06/27/1982
Date Completed: 08/08/1982

**Lindrith Unit 109
Rio Arriba County, NM**

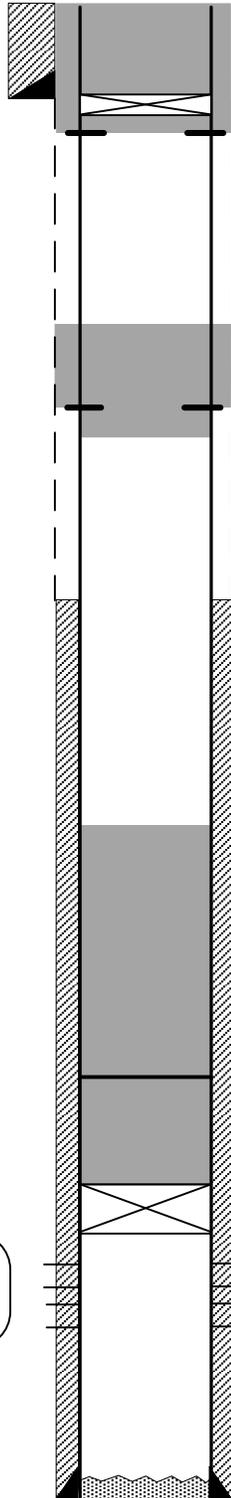
All depths include KB
TD - 3,409'; PBTD - 3,368'

Surface Csg: 3 jts 8 5/8" 24#
Setting Depth: 138'

Cement
90 sx Cement
Cmt circulated

Production Csg: 88 jts 4-1/2" 10.5# KS
Setting Depth: 3,405'

Cement:
140 sx cement



PLUG 3
Perf 4 1/2" casing at 188'
Set CICR @ 180'
49 sx cement 188' - surface

PLUG 2 (Nacimiento)
Perf 4 1/2" casing at 1,414'
29 sx cement 1,184' - 1,470'

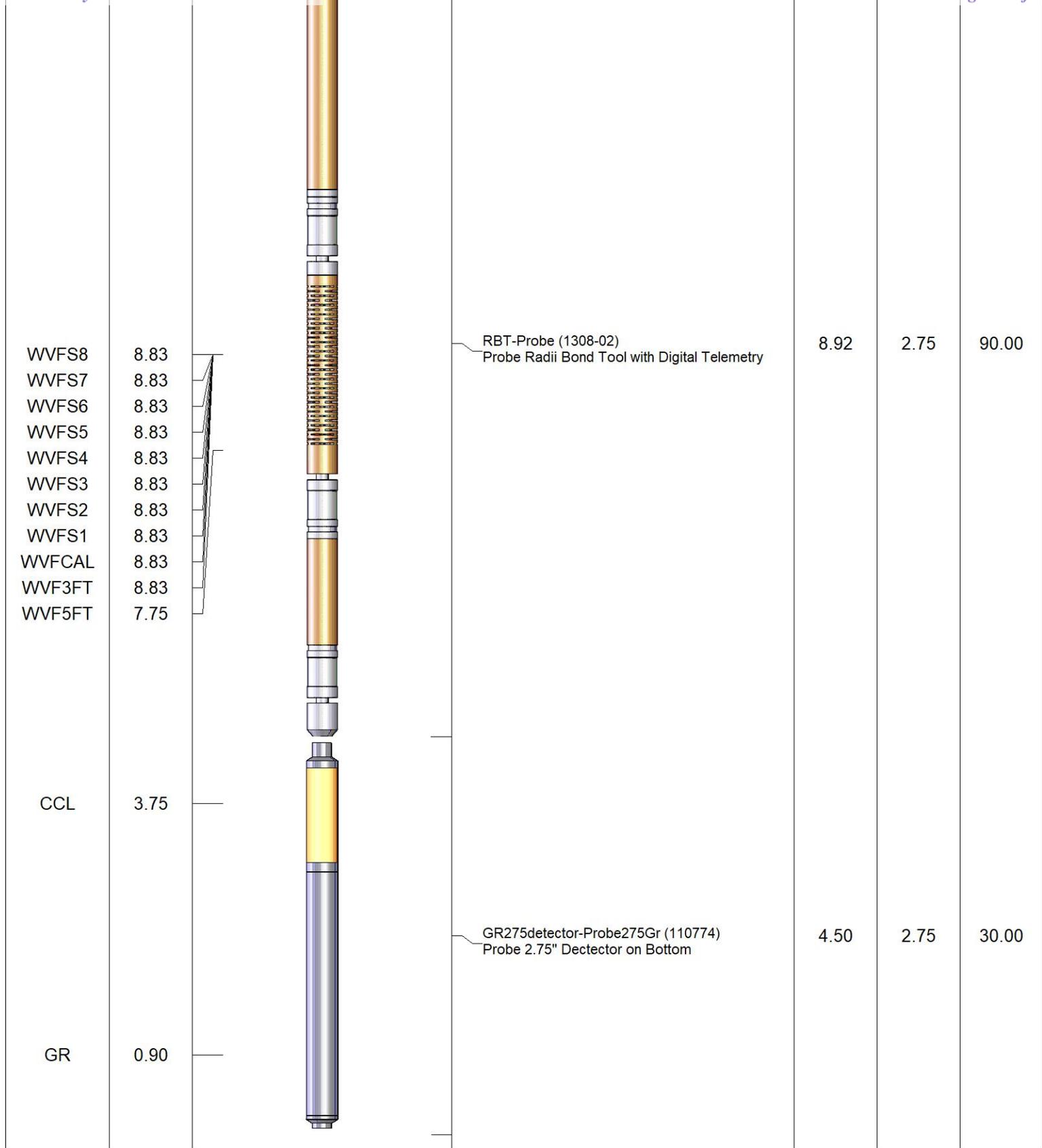
PLUG 1 & 1A (PC, Fruitland, Kirtland, Ojo Alamo)
33 sx cement 2,645' - 3,200'

CICR set @ 3,200'

Picture Cliffs Perfs (1982):
3,238' - 3,336'

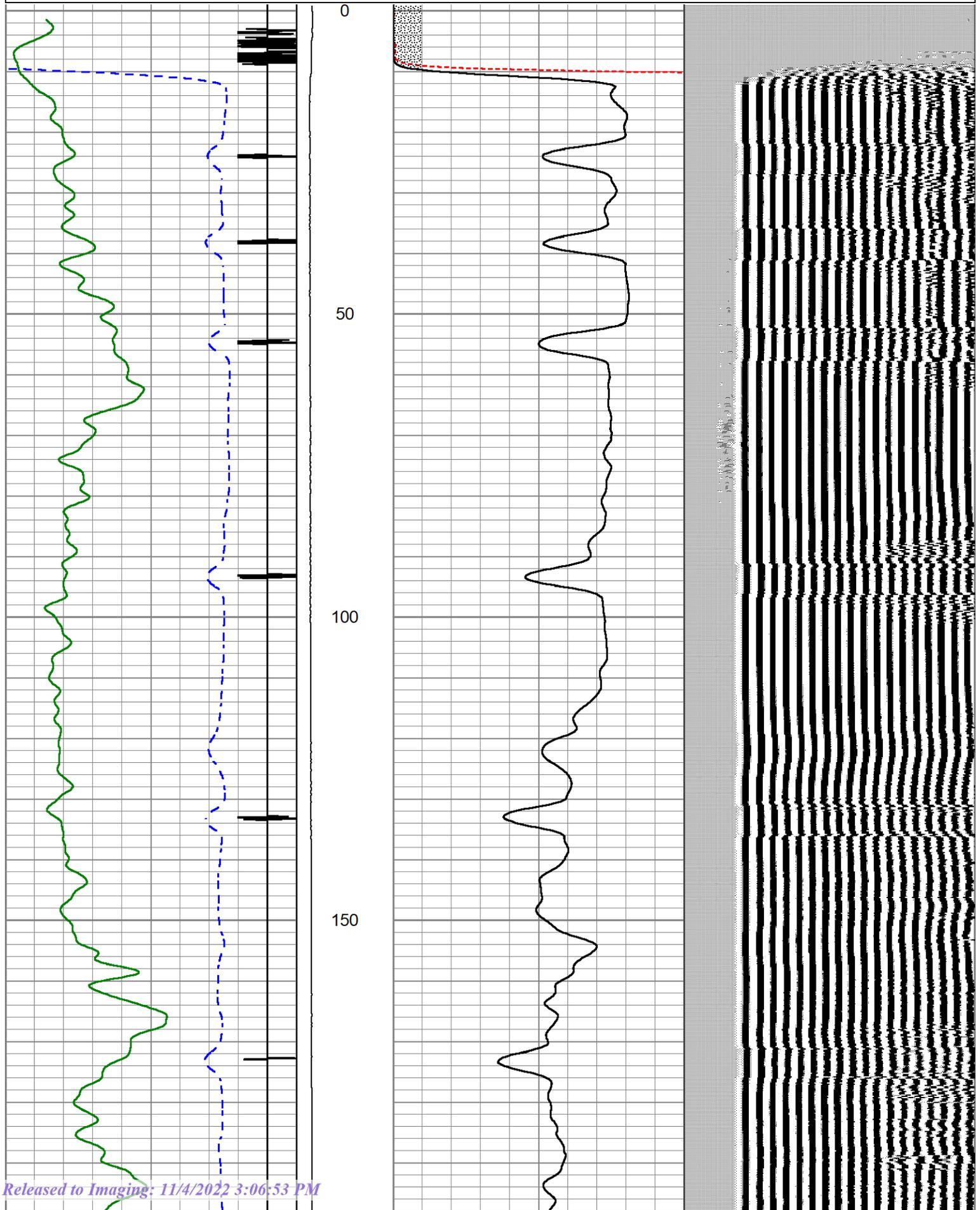
PBTD: 3,368'

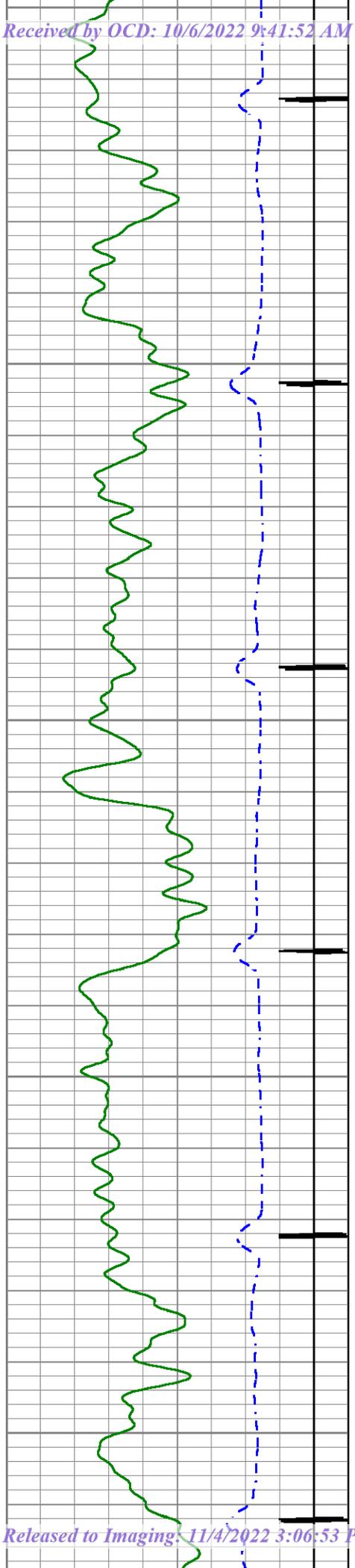
Nacimiento - 1,364'
Ojo Alamo - 2,757'
Kirtland - 2,928'
Fruitland - 2,959'
Picture Cliffs - 3,230'



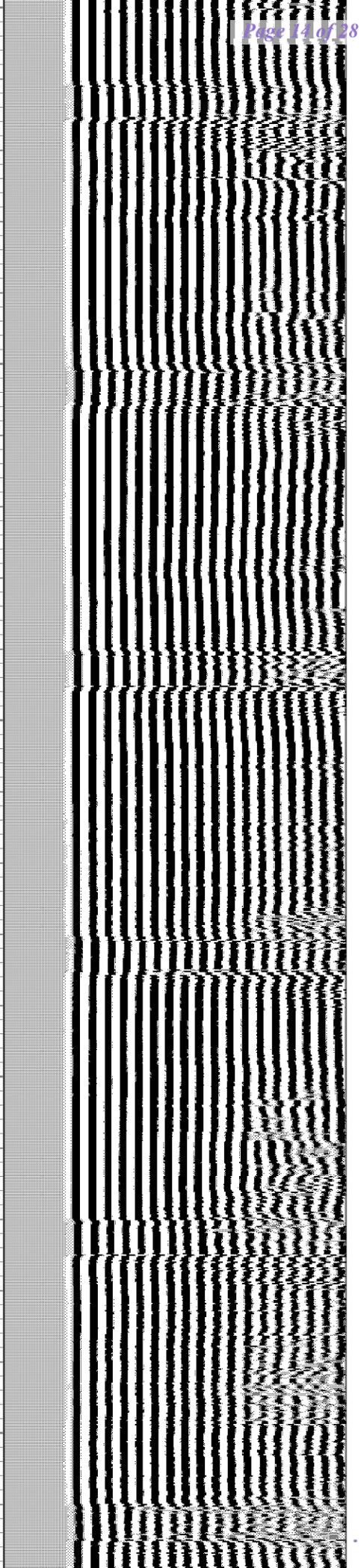
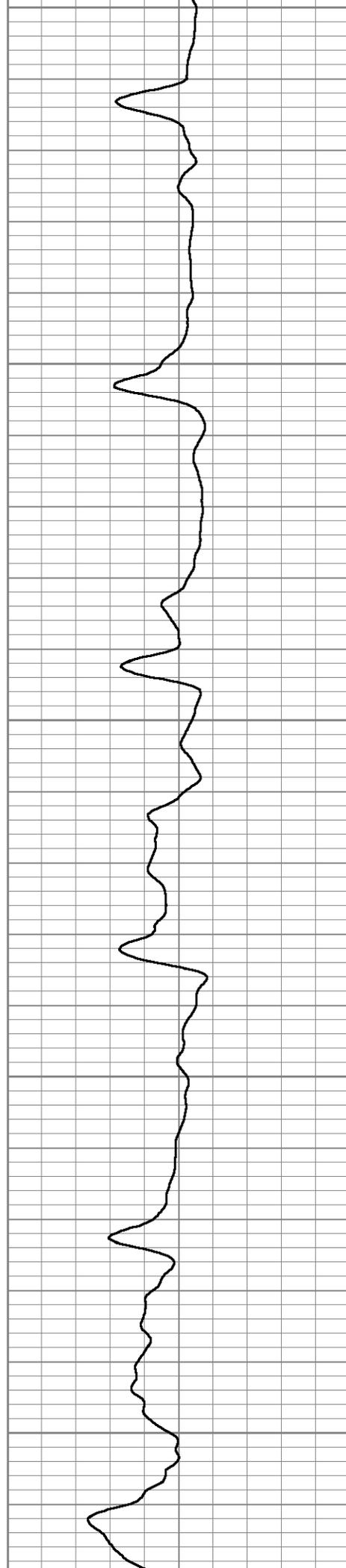
Dataset: lindrith unit no.db: field/well/run1/pass8.1
 Total length: 14.42 ft
 Total weight: 130.00 lb
 O.D.: 2.75 in

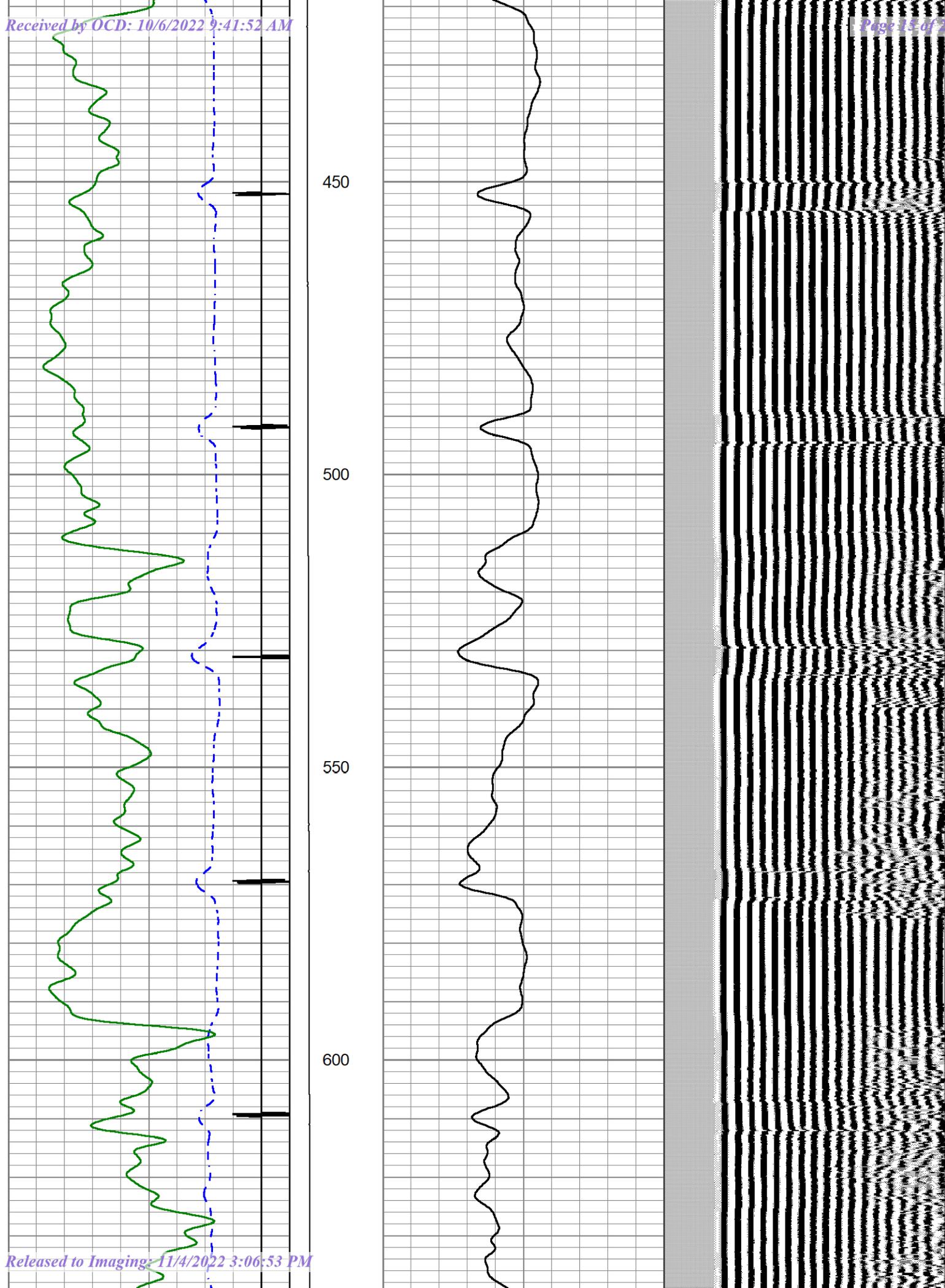
340	TRAVEL TIME (usec)	240	LTEN	0	AMP AMPLITUDE (mV)	20	200	VDL (usec)	1200
9	Collar Locator	-1	0	(lb 1500)	0	AMPLITUDE (mV)	100		
0	Gamma Ray (GAPI)	180							

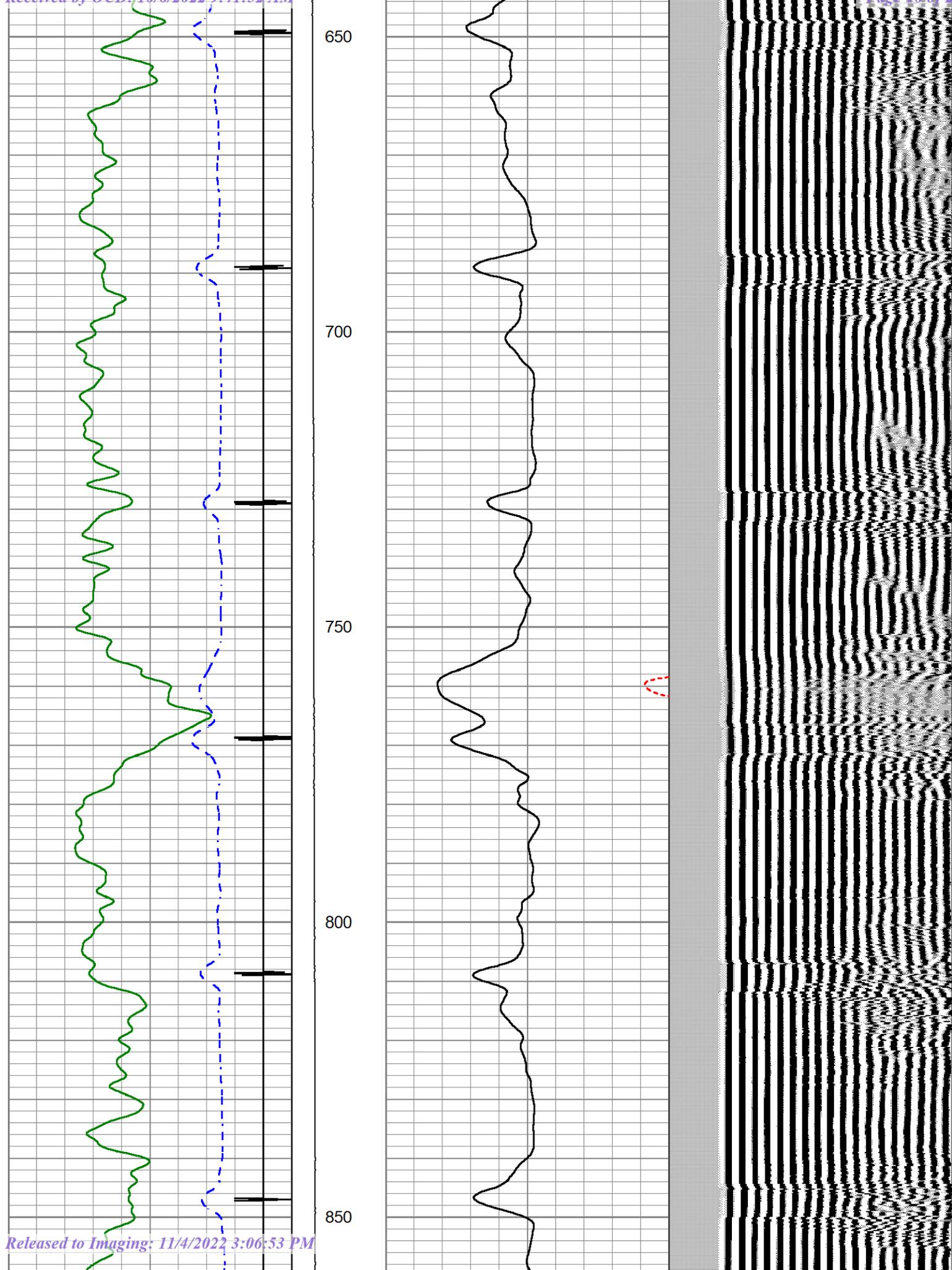


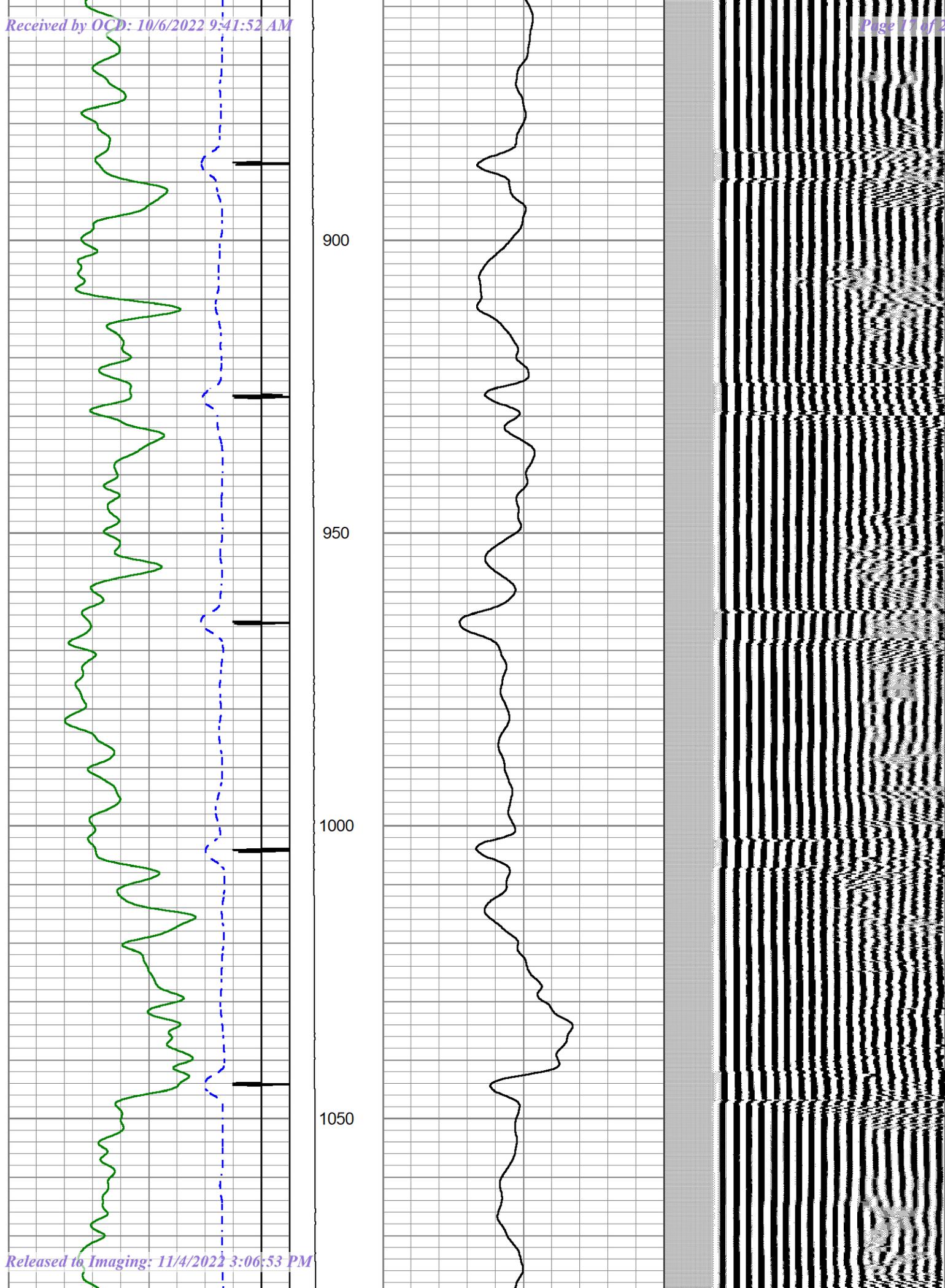


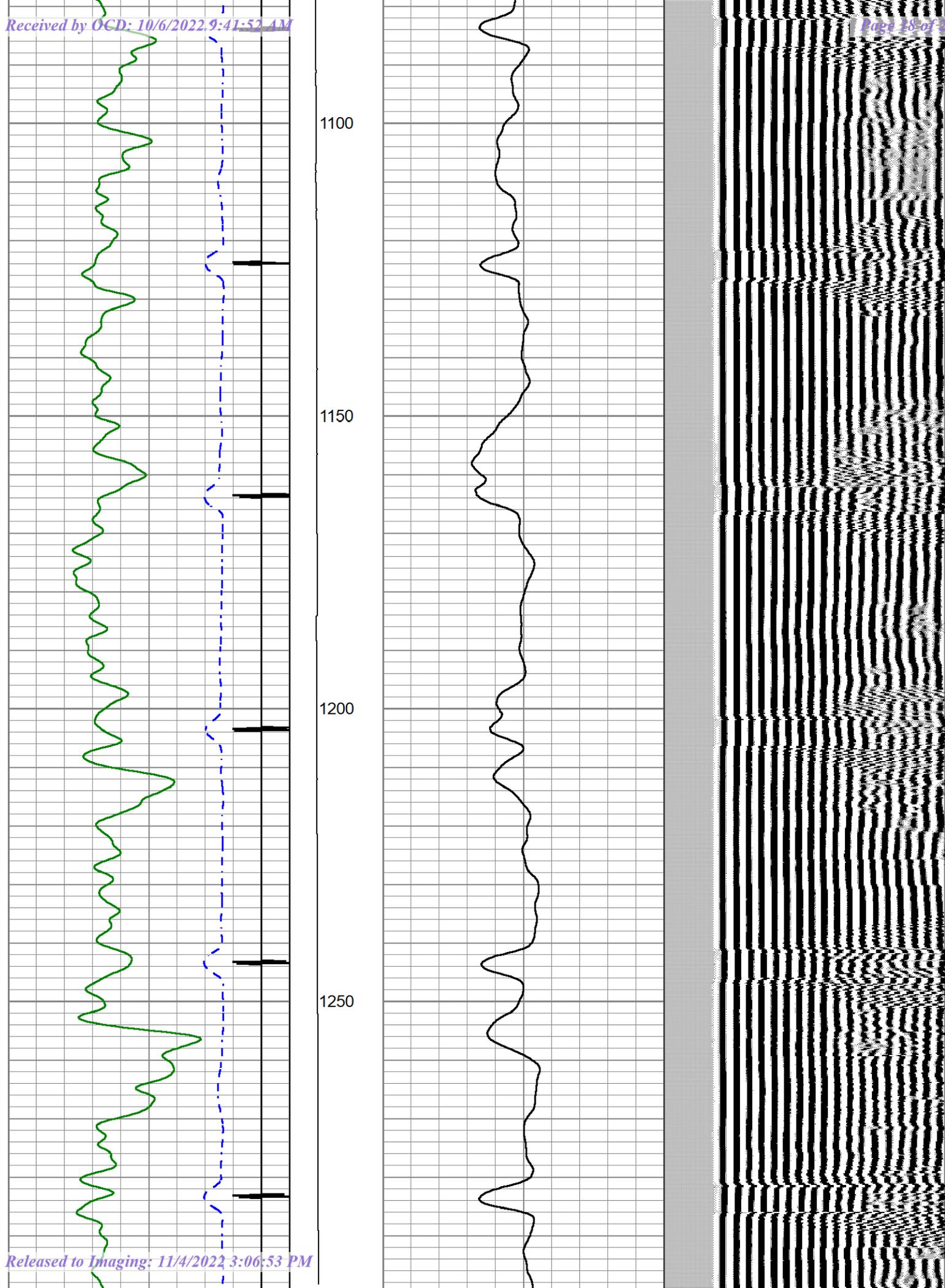
200
250
300
350
400

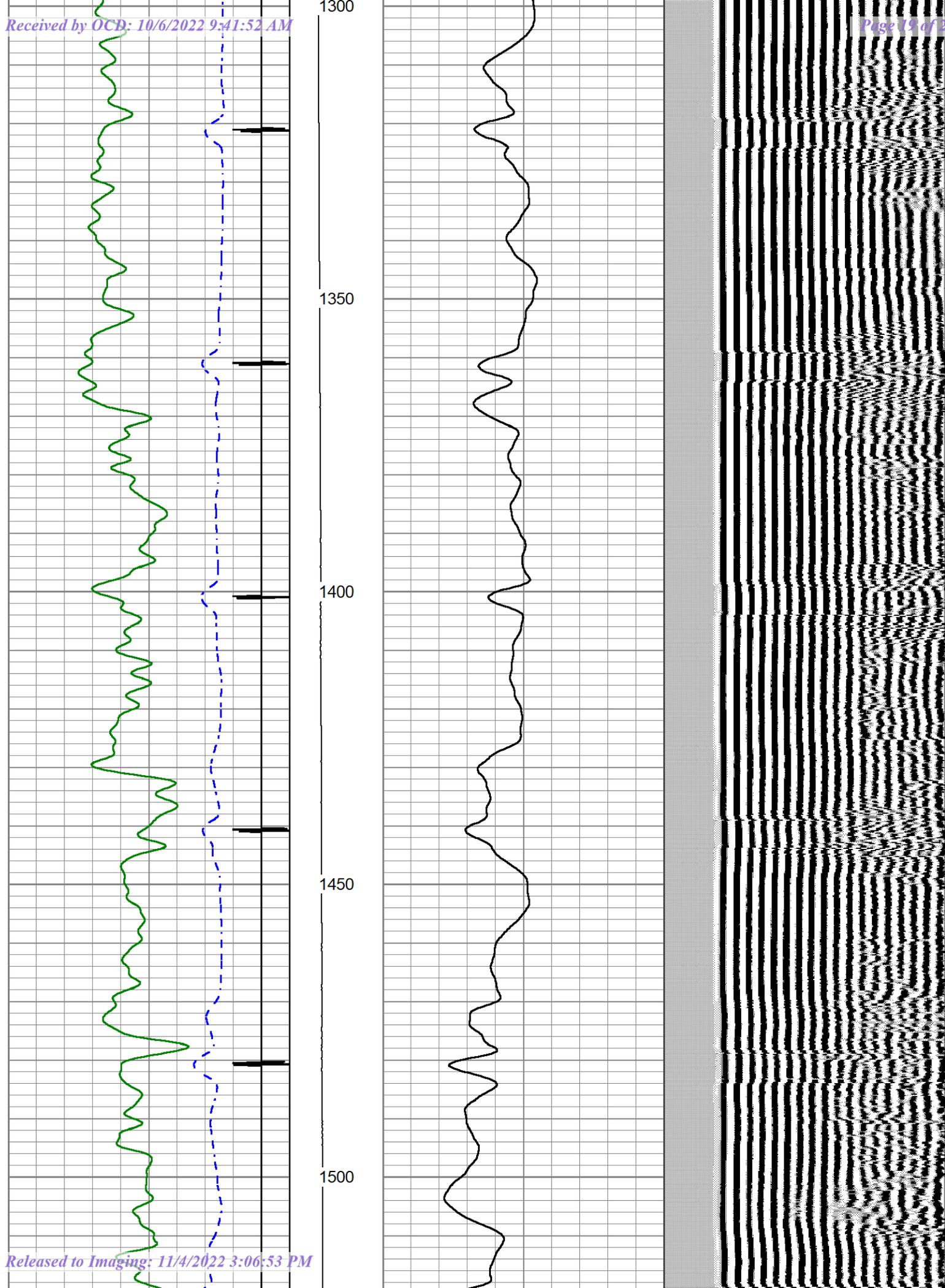


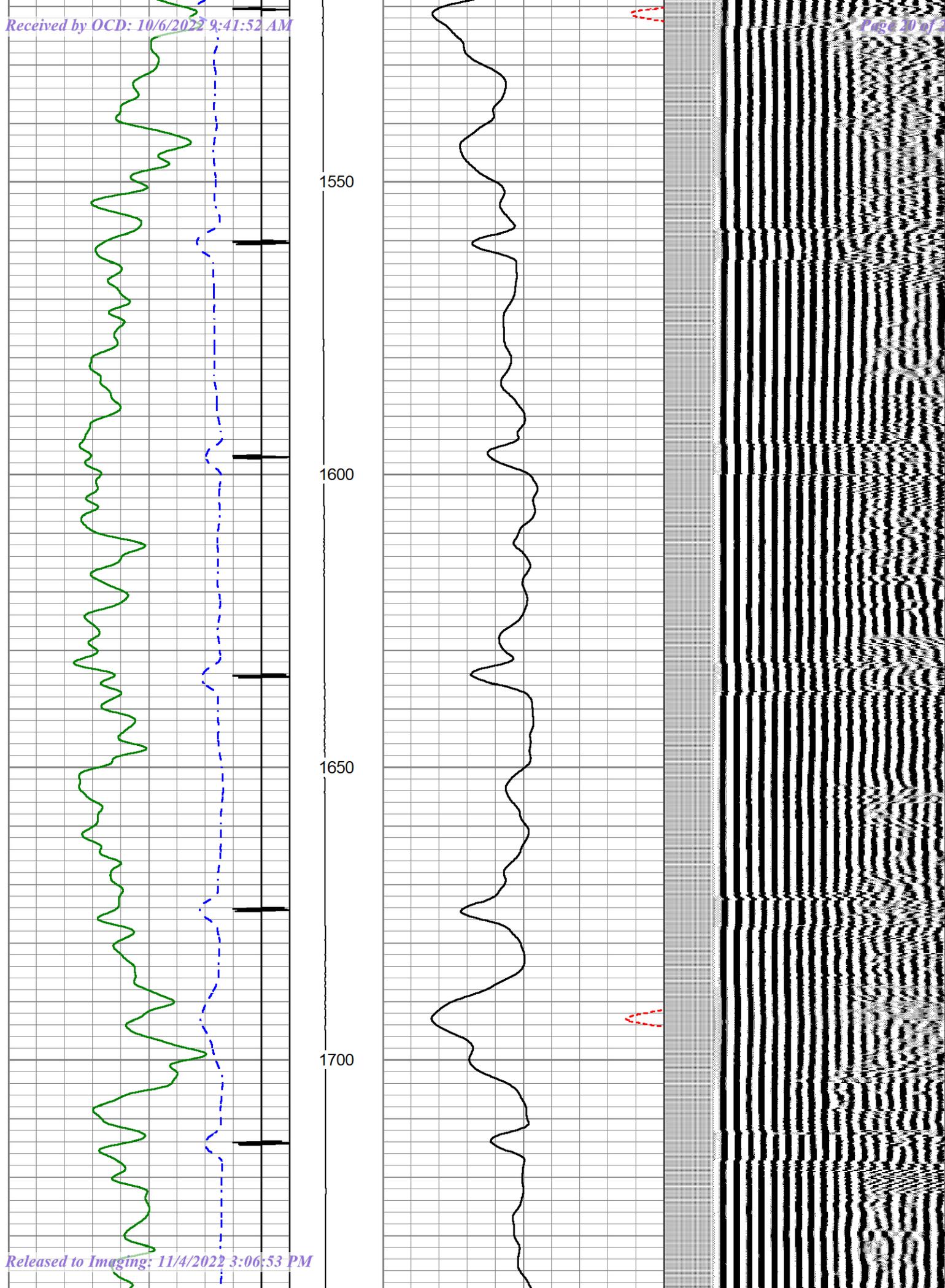


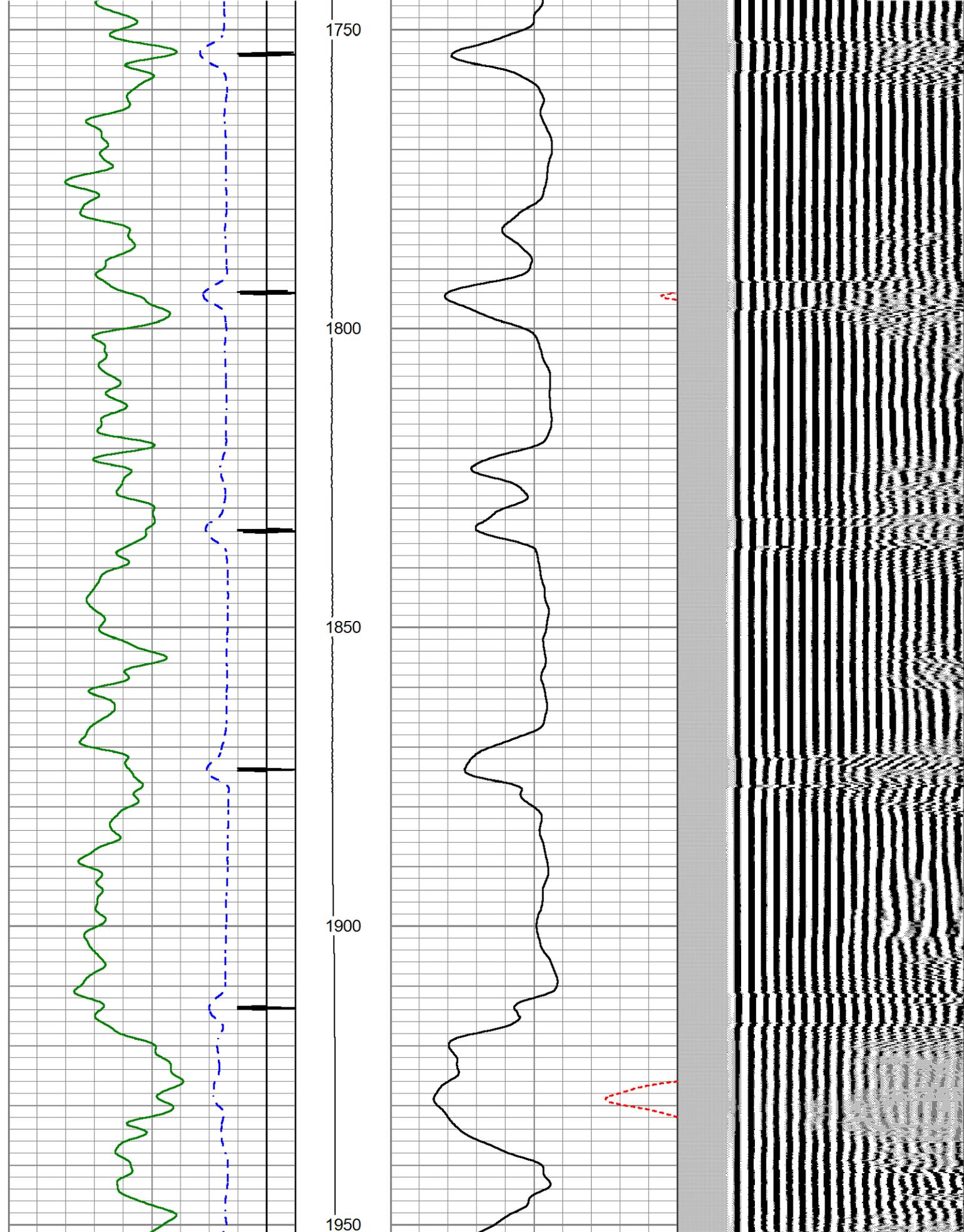


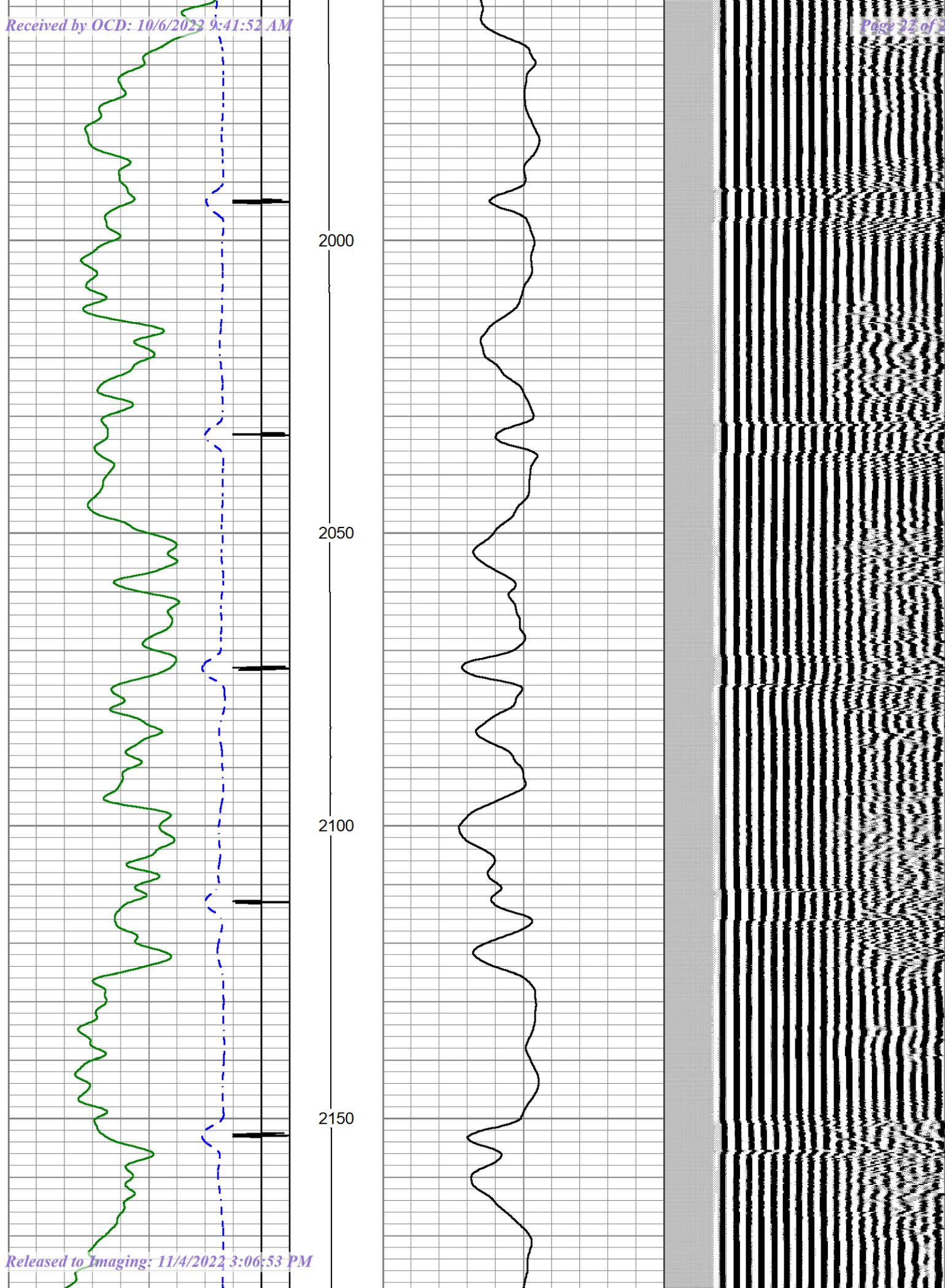


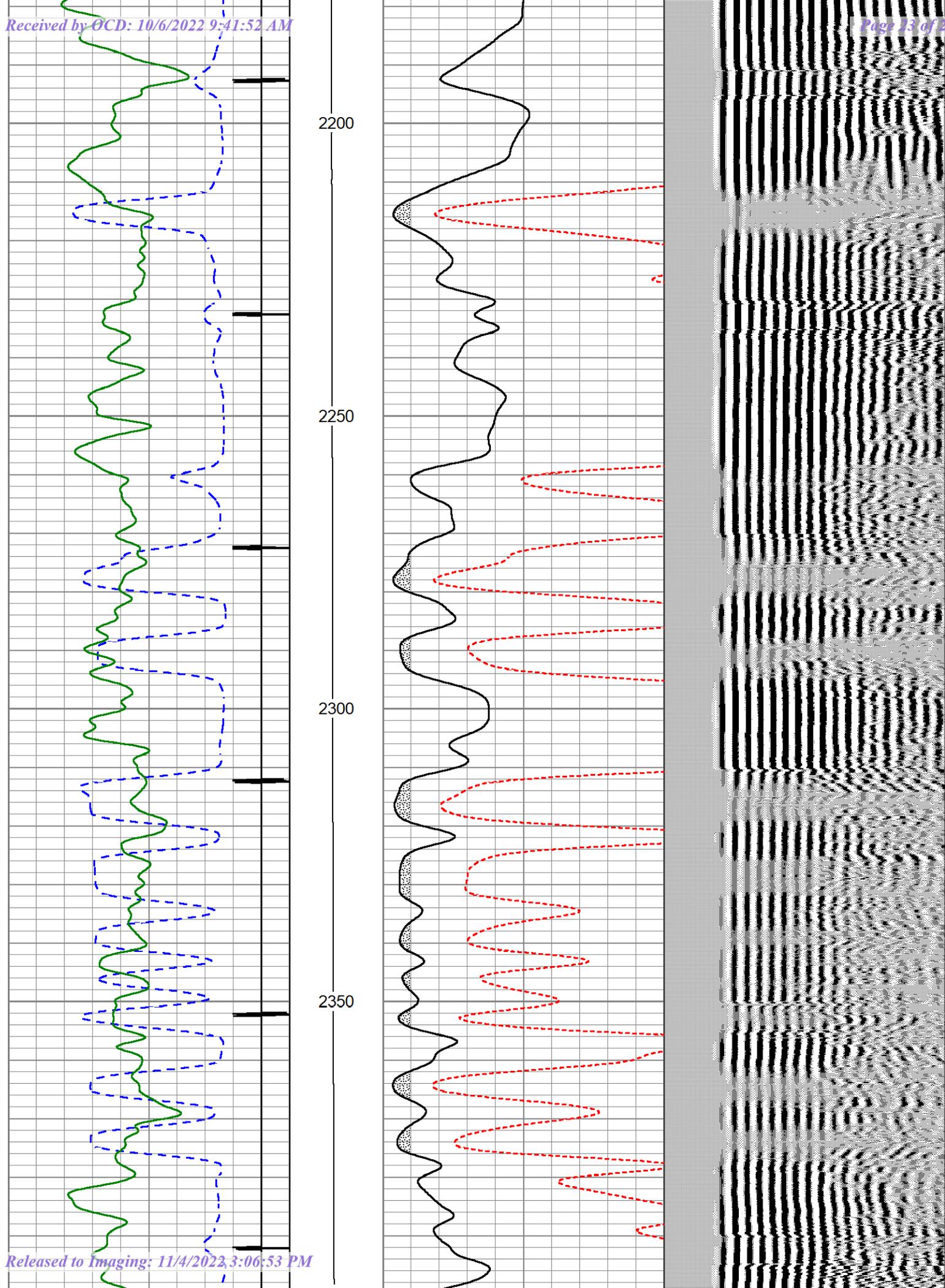


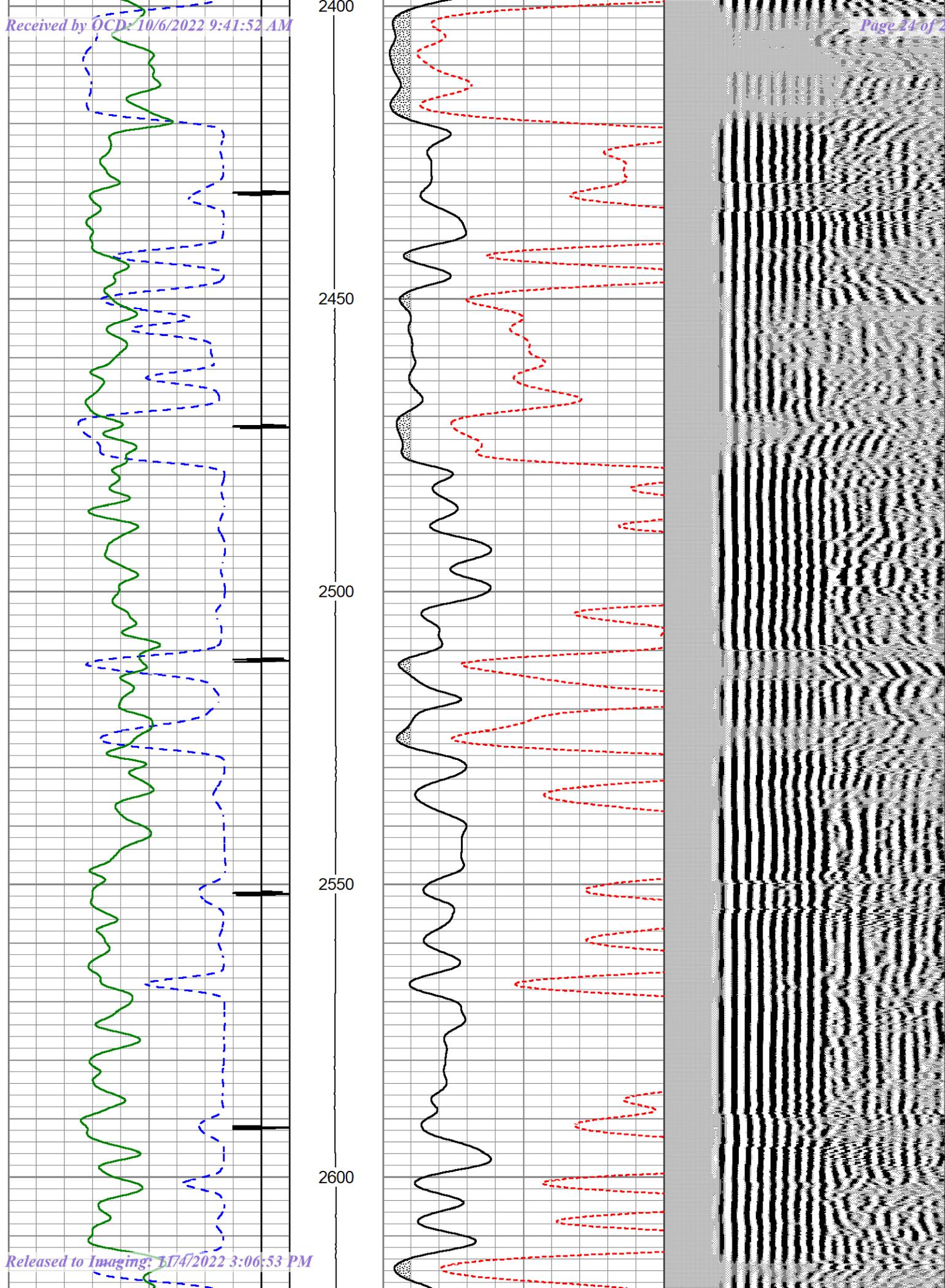


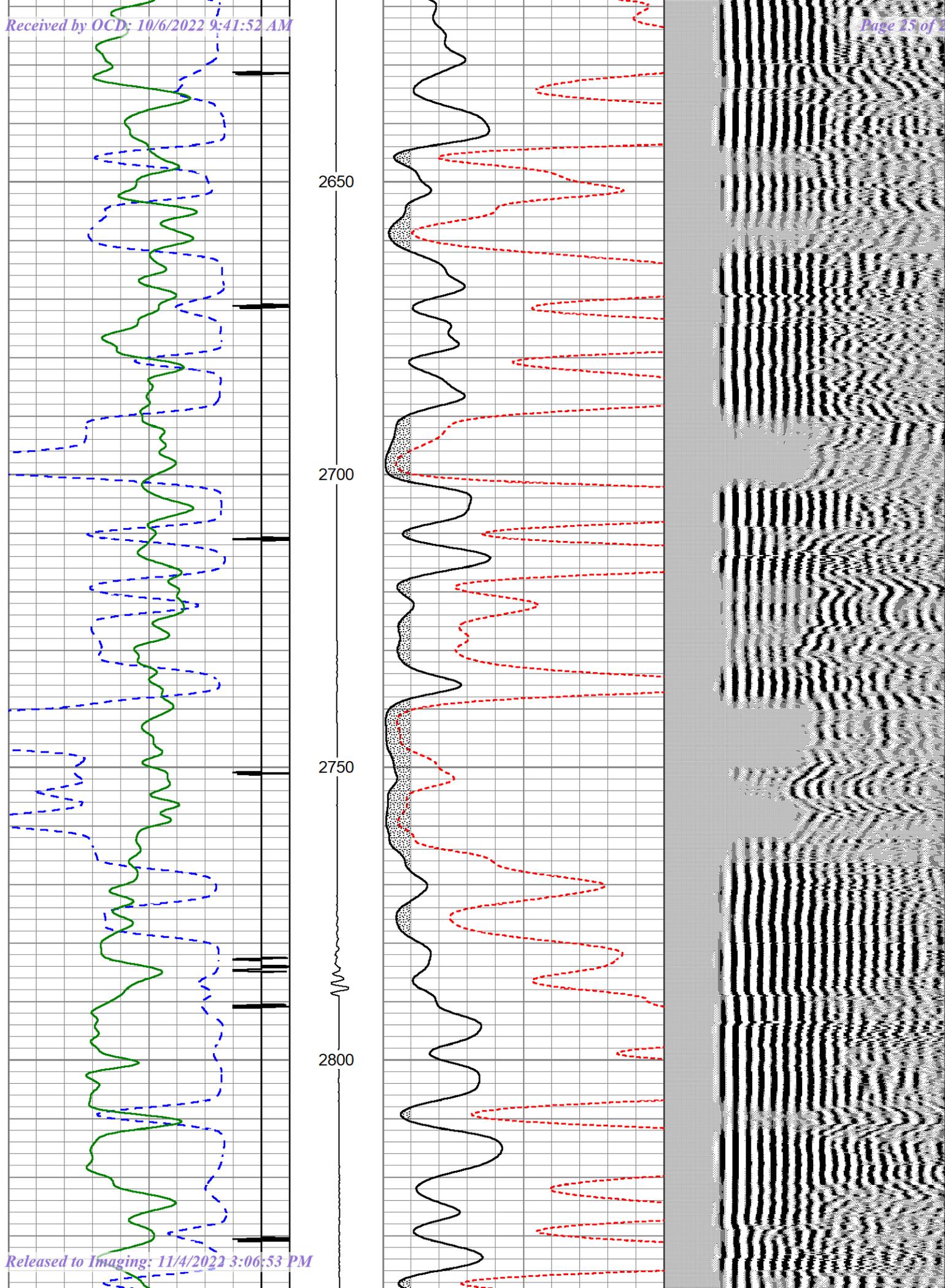


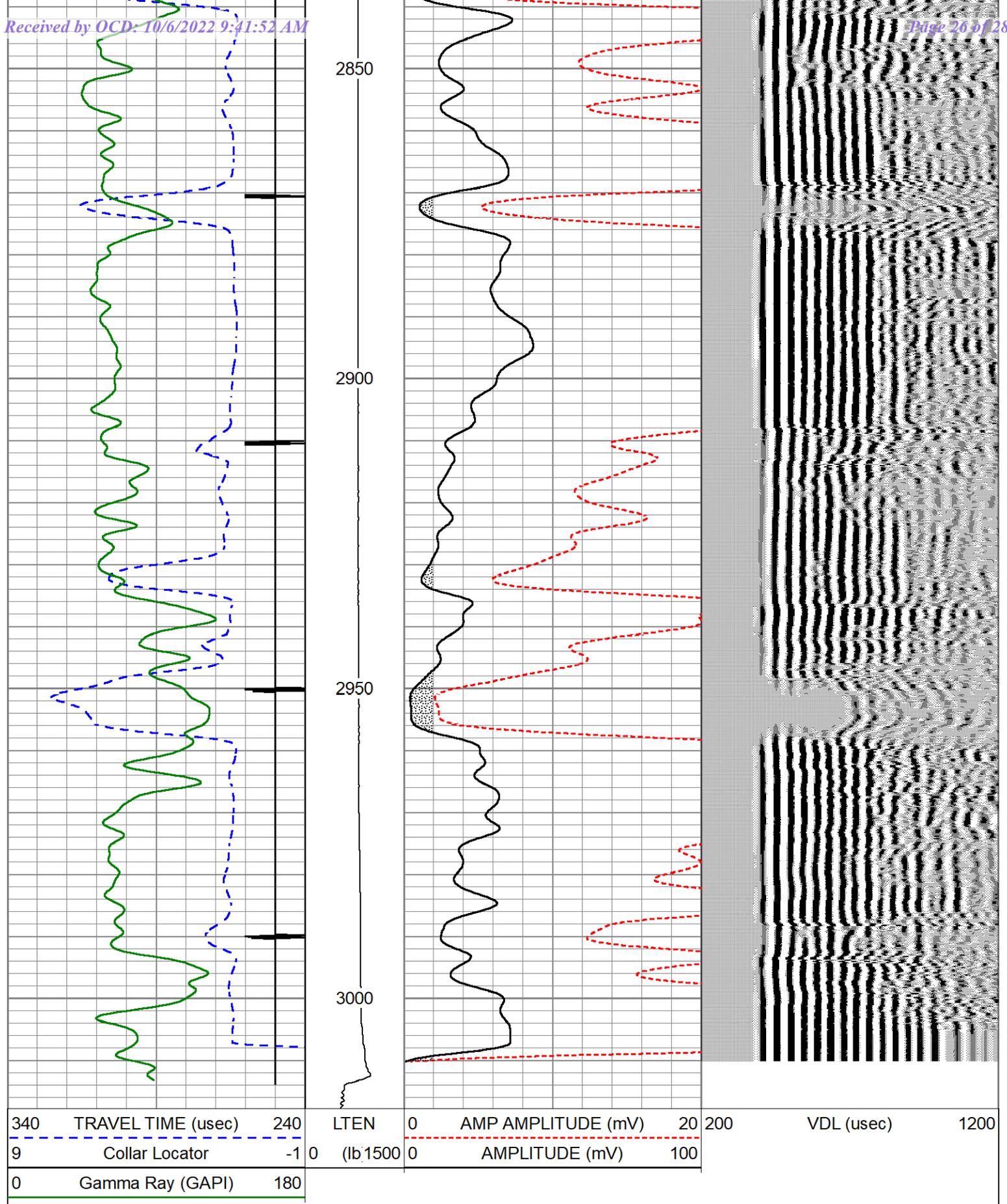












Calibration Report

Database File lindrith unit no.db
 Dataset Pathname pass8.1
 Dataset Creation Tue Sep 13 10:14:20 2022

Serial Number: 110774
 Tool Model: Probe275Gr
 Performed: Thu Jun 2 10:38:09 2022

 Calibrator Value: 1.0 GAPI

 Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

 Sensitivity: 0.7000 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 1308-02
 Tool Model: Probe

 Calibration Casing Diameter: 4.500 in
 Calibration Depth: 1042.158 ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.004	1.195	0.000	81.196	68.201	-0.296
CAL	0.003	1.249				
5'	0.006	0.951	0.000	81.196	85.924	-0.507
SUM						
S1	-0.005	1.117	0.000	100.000	89.113	0.440
S2	0.004	1.221	0.000	100.000	82.158	-0.319
S3	0.003	1.354	0.000	100.000	74.003	-0.232
S4	0.004	1.398	0.000	100.000	71.745	-0.281
S5	0.005	1.310	0.000	100.000	76.666	-0.407
S6	0.004	1.229	0.000	100.000	81.633	-0.344
S7	0.004	1.171	0.000	100.000	85.705	-0.354
S8	0.004	1.143	0.000	100.000	87.753	-0.324

Internal Reference Calibration, performed Wed Oct 5 11:57:18 2016:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.003	1.249	1.000	0.000

Air Zero Calibration, performed Mon Feb 11 11:45:57 2019:

	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	

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 149280

CONDITIONS

Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID: 330132
	Action Number: 149280
	Action Type: [C-103] Sub. Plugging (C-103P)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	well plugged 9/16/22 - log needs to be submitted through logging portal in epermitting	11/4/2022