C-108 APPLICATION FOR AUTHORIZATION TO INJECT
ADMINISTRATIVE COMPLETENESS FORM

Well Name: _____

Applicant: _____

PO Number: _____

Admin. App. No: _____

C-108 Item	Description of Required Content	Yes	No	
I. PURPOSE	Selection of proper application type.			
II. OPERATOR	Name; address; contact information.			
III. WELL DATA	Well name and number; STR location; footage location within section.			
	Each casing string to be used, including size, setting depth, sacks of cement, hole size, top of cement, and basis for determining top of cement.			
	Description of tubing to be used including size, lining material, and setting depth.			
	Name, model, and setting depth of packer to be used, or description of other seal system or assembly to be used.			
	Well diagram: Existing (if applicable).			
	Well diagram: Proposed (either Applicant's template or Division's Injection Well Data Sheet).			
IV. EXISTING PROJECT	For an expansion of existing well, Division order number authorizing existing well (if applicable).			N/A
V. LEASE AND WELL MAP	AOR map identifying all wells and leases within 2 mile radius of proposed well, and depicting a 1/2 mile radius circle around any another projected injection well and a 1 mile radius circle around any other projected injection well in the Devonian formation.			
VI. AOR WELLS	Tabulation of data for all wells of public record within AOR which penetrate the proposed injection zone, including well type, construction, date drilled, location, depth, and record of completion.			
	Schematic of each plugged well within AOR showing all plugging detail.			N/A
VII. PROPOSED OPERATION	Proposed average and maximum daily rate and volume of fluids to be injected.			
	Statement that the system is open or closed.			
	Proposed average and maximum injection pressure.			
	Sources and analysis of injection fluid, and compatibility with receiving formation if injection fluid is not produced water.			
	A chemical analysis of the disposal zone formation water if the injection is for disposal and oil or gas is not produced or cannot be produced from the formation within 1 mile of proposed well. Chemical analysis may be based on sample, existing literature, studies, or nearby well.			
VIII. GEOLOGIC DATA	Proposed injection interval, including appropriate lithologic detail, geologic name, thickness, and depth.			
	USDW of all aquifers overlying the proposed injection interval, including the geologic name and depth to bottom.			
	USDW of all aquifers underlying the proposed injection interval, including the geologic name and depth to bottom.			

C-108 (SWD) APPLICATION FOR AUTHORIZATION TO INJECT
ADMINISTRATIVE COMPLETENESS FORM

Well Name: _____

Applicant: _____

PO Number: _____

Admin. App. No: _____

C-108 Item	Description of Required Content	Yes	No
IX. PROPOSED STIMULATION	Description of stimulation process or statement that none will be conducted.		
X. LOGS/WELL TESTS	Appropriate logging and test data on the proposed well or identification of well logs already filed with OCD.		
XI. FRESH WATER	Chemical analysis of fresh water from two or more fresh water wells (if available and producing) within 1 mile of the proposed well, including location and sampling date(s).		
XII. AFFIRMATION STATEMENT	Statement of qualified person endorsing the application, including name, title, and qualifications.		
XIII. PROOF OF NOTICE	Identify of all "a*ffected persons*" identified on AOR map in Section V, including all affected persons within 1/2 mile radius circle around any another projected injection well and a 1 mile radius circle around any other projected injection well in the Devonian formation.		
	Identification and notification of all surface owners.		
	BLM and/or NMSLO notified per 19.15.2.7(A)(8)(d) NMAC.		
	Notice of publication in local newspaper in county where proposed well is located with the following specific content:		
	● Name, address, phone number, and contact party for Applicant;		
	● Intended purpose of proposed injection wel, including exact location of a single well, or the section, township, and range location of multiple wells;		
	● Formation name and depth, and expected maximum injection rates and pressures; and		
	● Notation that interested parties shall file objections or requests for hearing with OCD no later than 15 days after the admin completeness determination.		
XIV. CERTIFICATION	Signature by operator or designated agent, including date and contact information.		

N/A

Review Date*: **Reviewer:**

◯ **Administratively COMPLETE**

◯ **Administratively INCOMPLETE**

NOTES:

* The Review Date is the date of administrative completeness determination that commences the 15 day protest period in 19.15.26.8 (C)(2) NMAC.

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance ____X_____Disposal _____Storage
Application qualifies for administrative approval? _____Yes _____No

II. OPERATOR: Enduring Resources IV, LLC._____

ADDRESS: __200 Energy Court, Farmington, New Mexico 87401_____

CONTACT PARTY: ___Khem Suthiwan_____PHONE: ___303-350-5721_____

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? _____Yes ___X_____No
If yes, give the Division order number authorizing the project: _____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: _____Khem Suthiwan_____TITLE: _____Regulatory Manager_____

SIGNATURE: Khem Suthiwan DATE: 9/12/22

E-MAIL ADDRESS: ____ksuthiwan@enduringresources.com_____

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

Side 2

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

(3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: _____Enduring Resources IV, LLC_____

WELL NAME & NUMBER: _____SJ-4301 (WLU 2309-24N WSW_____

WELL LOCATION: __294' FSL, 2284' FWL_____N_____24_____23N_____9W_____
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: _____17.5"_____ Casing Size:___13 3/8" J55____

Cemented with: _____440 sx. ***or*** _____ ft^3

Top of Cement: _____Surface___ Method Determined: ___circ.____

Intermediate Casing

Hole Size: _____ Casing Size:_____

Cemented with: _____ sx. ***or*** _____ ft^3

Top of Cement: _____ Method Determined: _____

Production Casing

Hole Size: _____8.75"____ Casing Size:____7" L80____

Cemented with: ____945 sx. ***or*** _____ ft^3

Top of Cement: ____surface__ Method Determined: ____circ.__

Total Depth: ____7308 PBTD

Injection Interval

_____6851'_feet to_6990'___

(Perforated or Open Hole; indicate which) **Perforated**

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 4 ½”_____Lining Material: Internally coated corrosion resistant tubing_

Type of Packer: _____7” x 4 ½” AS1-Packer_____

Packer Setting Depth: ____6810’_____

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? _____Yes ___X____No

   If no, for what purpose was the well originally drilled? _____Water diversion for oil well fracturing_

   _____

2. Name of the Injection Formation: _____Entrada_____

3. Name of Field or Pool (if applicable): _____Entrada Pool 964360_____

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. _____No, N/A_____

   _____

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

   _____See attached geologic and reservoir information_____

   _____

   _____

III. Well Data

a) Tabular information
   i) Name: WLU 2309-24N WSW
   API: SJ-4301 POD3
   ULSTR: N-24-23N-09W
   Footages: 294' FNL 2284' FEL
   ii) Surface Casing: 13 3/8" outer diameter, 54.5#, J-55 Steel, set to 397.2 feet. Pump 20 barrels (bbls) FW spacer & 92.5 bbls Type G cmt (440 sxs) @ 15.8 PPG, drop plug & disp w/ 52. bbls H2O, bump plug @ 178 psi, circ 38 bbls good cmt to surface. Check float, Shut in cement head, floats wouldn't hold. Wait 3 hrs, check float, remove cement head, secure casing.
   iii) Production Casing: 7" outer diameter, 26#, L-80 Steel, set to 7,398 feet, plug back total depth 7,260 feet. Pumped 80 bbls tuned spacer and pumped 184 bbls (525 sks) of lead cement at 12.3 ppg, followed by 102 bbls (420 sks) of tail cement at 13.3 ppg. Dropped 1 top plugs. Displaced with 279 bbls freshwater (279 actual displacement at 2016 psi/7.9 BPM & pressured up to 2854 psi.) Maintained returns throughout cement job. Circulated 52 bbls of good cement to surface. Floats held. Injection Tubing: 4 1/2", EUE 6.5#, J-55, Internally plastic-coated set @ 3,932'
   iv) Packer: AS1-X Packer @ 6,810'.

b) Additional Information
   i) Injection Pool: Entrada
   ii) Injection Interval: 6,851' – 6990'
   iii) Original Purpose: The well, WLU 2309-24N WSW was originally used as a water diversion well for oil well fracturing.
   iv) Other Intervals: None, N/A
   v) Oil/Gas Zones: Top of the Entrada is at 6,250 feet. Bottom of the closest overlying productive formation is at 5,373 feet. There will be 1,476 feet between the highest perforation and the bottom of the Dakota. A current wellbore diagram is included as Enclosure B and proposed wellbore diagram as Enclosure C.

IV. Proof of Notice

Enduring is the only well owner/lease holder within the area of review. Notification of this application was given to the BLM via certified mail. In addition, the proof of publication is included as Enclosure I.

Part VII. Proposed Operation

1) The proposed injection well will be used to dispose of produced water from wellbores operated by Enduring Resources, LLC. Average injection rate will be 20,000 barrels of water per day (bwpd) with a maximum of 8,000 bwpd.
2) The system will be closed.
3) The proposed average and maximum injection pressure will be 800 pounds per square inch (psi) psi average, with a maximum of 1,370 psi.
4) Injection fluid will be from present and future Enduring Resources, LLC wells in the San Juan Basin. Water analysis is attached as Enclosure E.

5) The Entrada has not been proven productive within the area of review. In general, Entrada water near recharge zones (basin fringe) has a specific conductance of < 1,500 micro ohms (µmhos). Stone et all in *Hydrology and Water Resources of San Juan Basin, New Mexico* wrote, "Generally, however, water from the Entrada is not suitable for drinking, especially in deeper parts of the basin." Water sample analysis from the well formation is included as Enclosure F.

Part VIII. Geologic Data

The proposed injection interval is the Entrada sandstone; Entrada (96436) pool. Entrada is described as a fine to very fine-grained sandstone with fair to good porosity and permeability. The top of the Entrada is at 6,240 feet. The bottom of the closest overlying productive formation (Dakota) is at 5,375 feet. There will be 1,476 feet between the highest perforation and the bottom of the Dakota. The current wellbore diagram is included as Enclosure B and the proposed wellbore diagram is included as Enclosure C.

The Entrada sandstone is a very porous and permeable aeolian sandstone. It has produced oil elsewhere in the San Juan Basin (e.g. Eagle Mesa, Leggs, Media, Ojo Encino, Paper Wash, Snake Eyes Field). The closest producing water well (SJ-01710) is located approximately 0.77 miles from SJ-4301 POD3, with depth to water of approximately 173 feet below ground surface. No existing underground drinking water sources are below the Entrada within a 2-mile radius. Enclosure G includes state engineer water well record.

IX. Stimulation Program

There is no proposed stimulation record.

X. Logging and Test Data

A triple combo log is attached as Enclosure H.

XI. Fresh Water Wells

A search for freshwater wells within one mile of the proposed disposal well was conducted using the New Mexico Office of the State Engineer website at http://nmwrrs.ose.state.nm.us/nmwrrs/index.html. The search returned no freshwater wells within one mile of the SJ-4301 POD3. A map showing the locations of the nearest wells is included as Enclosure D.

XII. Statement of Geologic and Engineering Data

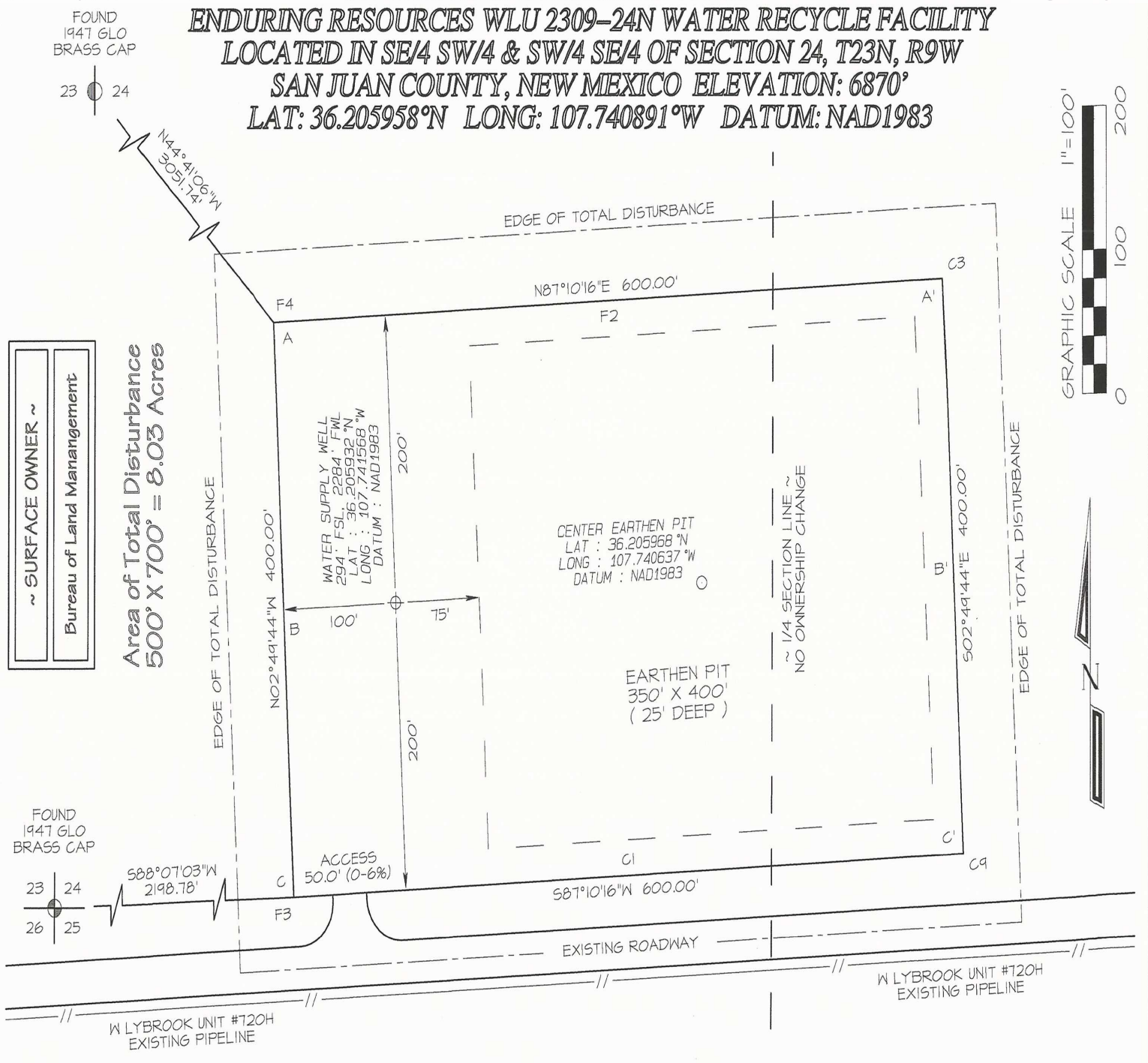
Enduring Resources, LLC is not aware of any geologic or engineering data that may indicate the Entrada is in hydrologic connection with any underground sources of water. There is a greater than 5,000 feet vertical separation and multiple shale zones between the top of the Entrada and the bottom of known existing water wells in the area. Closest Quaternary fault zone is miles to the east in the Rio Grande Valley. There are many injection and disposal wells active in the Entrada formation in New Mexico.

X

Costin McQueen
Program Geologist (Contractor)

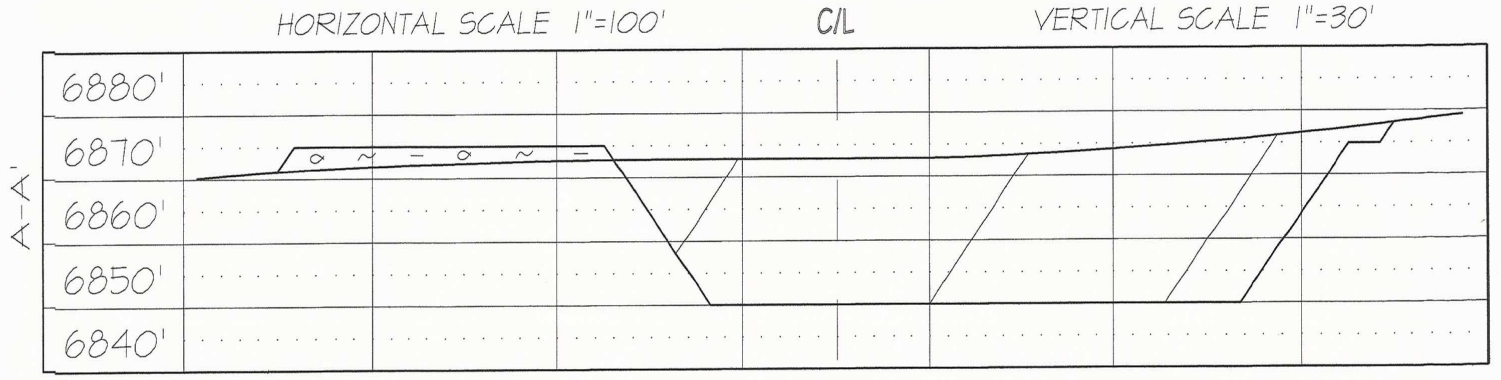
ENCLOSURE A: SURVEY PLAT

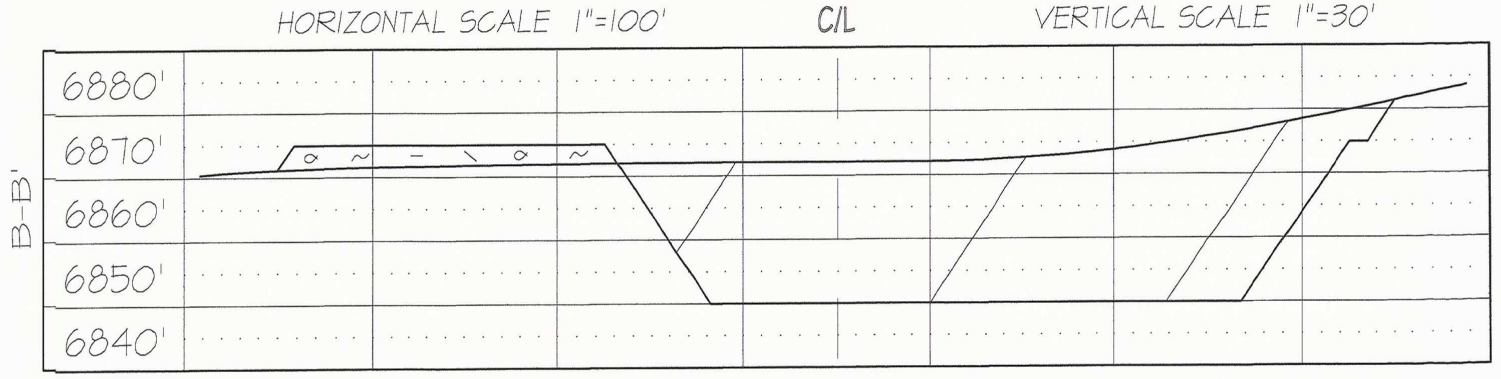
ENDURING RESOURCES WLU 2309-24N WATER RECYCLE FACILITY
LOCATED IN SE/4 SW/4 & SW/4 SE/4 OF SECTION 24, T23N, R9W
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6870'
LAT: 36.205958°N LONG: 107.740891°W DATUM: NAD1983

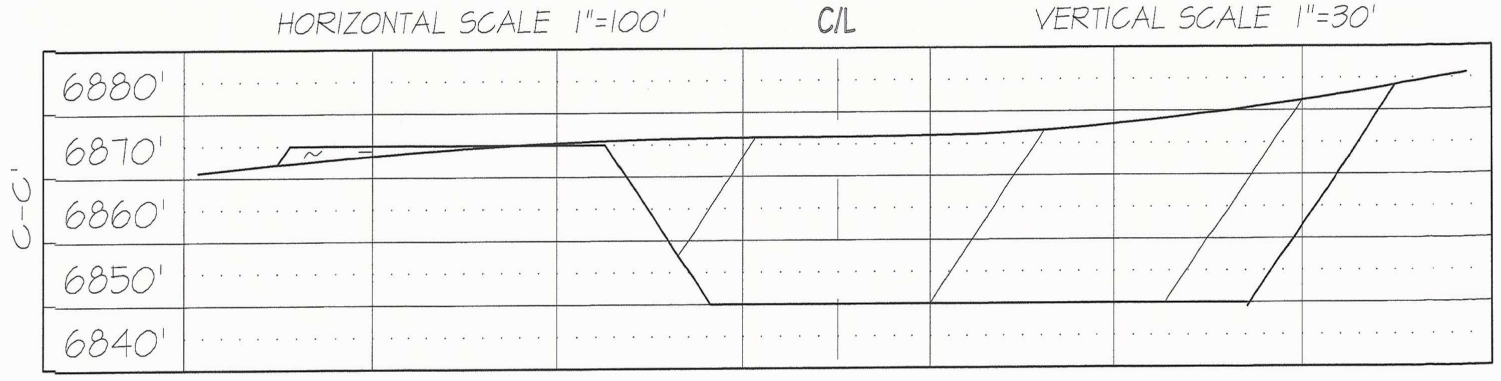


Steel T-Posts have been set to define Edge of Disturbance limits which are 50' offset from the edge of water recycle facility.

ENDURING RESOURCES WLU 2309-24N WATER RECYCLE FACILITY
LOCATED IN SE/4 SW/4 & SW/4 SE/4 OF SECTION 24, T23N, R9W
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6870'



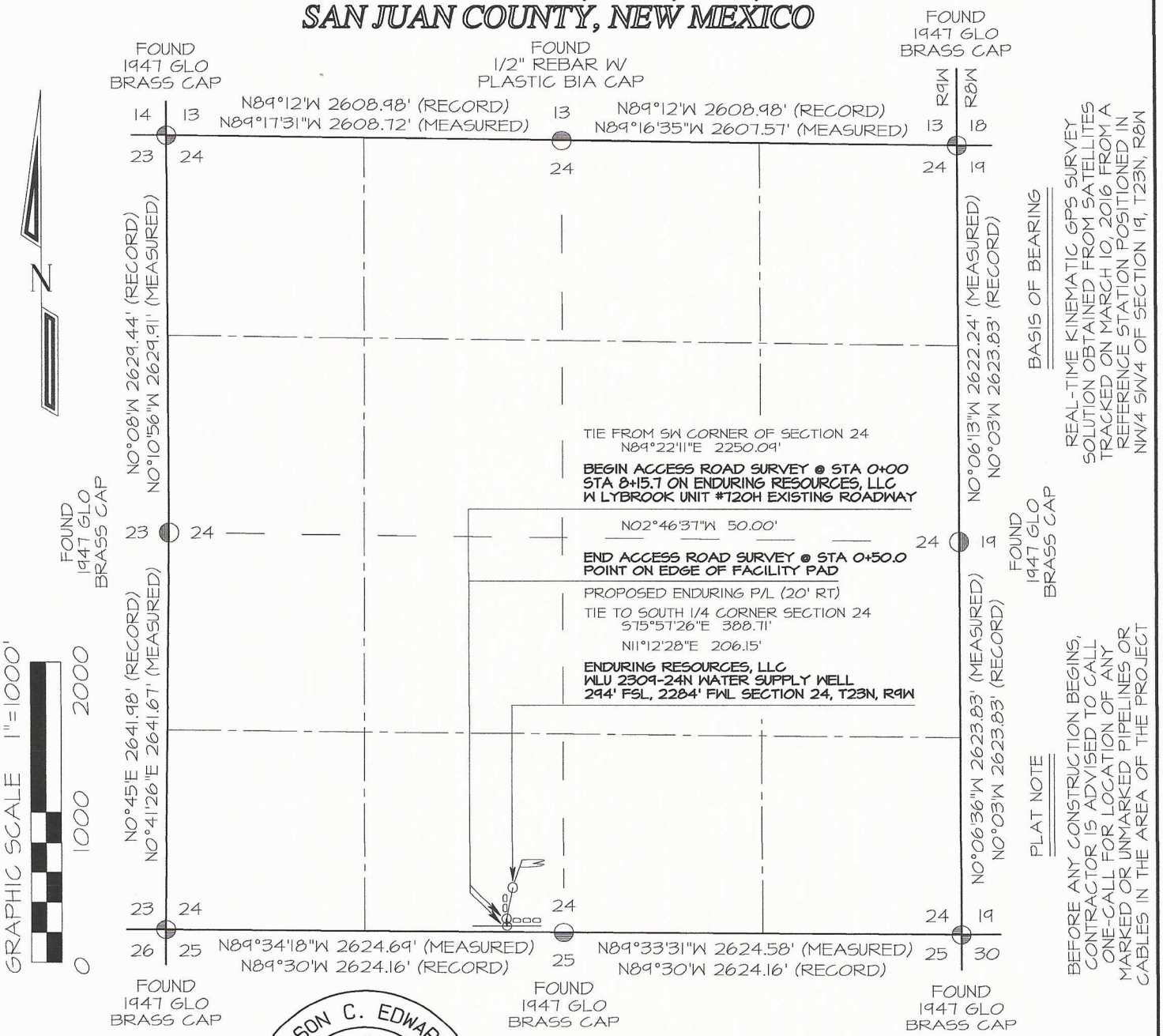




EDWARDS SURVEYING, INC. IS NOT LIABLE FOR LOCATION OF UNDERGROUND UTILITIES OR PIPELINES.

CONTRACTOR SHOULD CONTACT ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED UNDERGROUND UTILITIES OR PIPELINES ON WELLPAD AND/OR ACCESS ROAD AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION.

ENDURING RESOURCES WLU 2309-24N WATER RECYCLE FACILITY
PROPOSED ACCESS ROAD SURVEY LOCATED IN THE SE/4 SW/4 SECTION 24, T23N, R9W, NMPM SAN JUAN COUNTY, NEW MEXICO



~ SURFACE OWNERSHIP ~ Bureau of Land Management	
0+00 TO 0+50.0	50.0 FT / 3.0 RODS

JASON C. EDWARDS NEW MEXICO 15269 REGISTERED PROFESSIONAL SURVEYOR

I, Jason C. Edwards, a registered Professional Surveyor under the laws of the State of New Mexico, hereby certify that this plat was prepared from field notes of an actual survey meeting the minimum requirements of the standards for easement surveys and is true and correct to the best of my knowledge and belief.

JASON C. EDWARDS Date: June 6, 2018

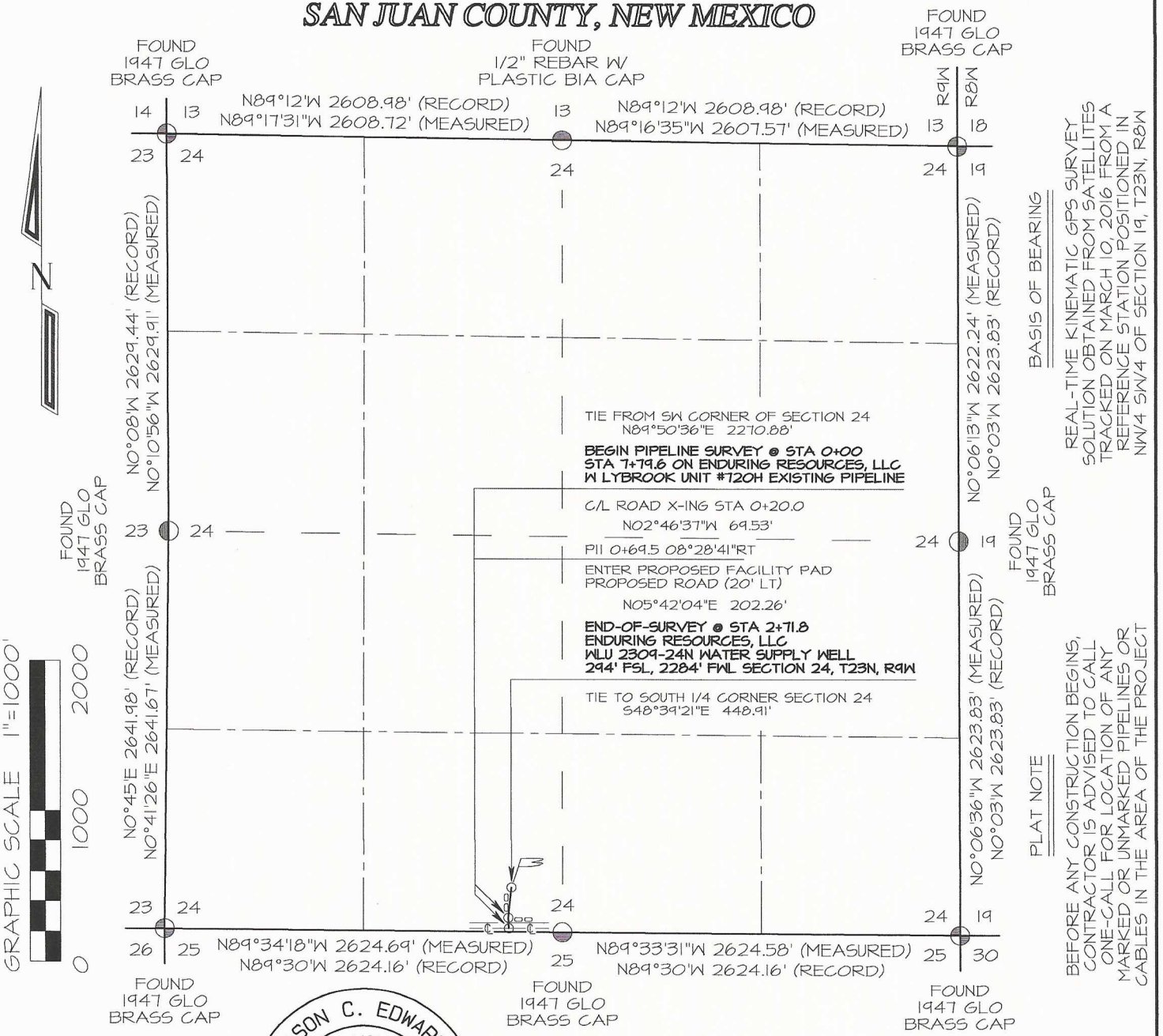
Jason C. Edwards, P.L.S.
New Mexico L.S. #15269

Prepared for:
ENDURING RESOURCES, LLC
332 ROAD 3100
AZTEC, NM 87410

N C E SURVEYS, INC.
Land Surveyor: Jason C. Edwards
Mailing Address: Post Office Box 6612 Farmington, NM 87499
Business Address: 111 East Pinon Street Farmington, NM 87402
(505) 486-1695 (Office)
ncesurveys@comcast.net

CHECKED BY: JCE
DRAWN BY: EDO
SHEET 3 OF 6
FILENAME: 23924AP

ENDURING RESOURCES WLU 2309-24N WATER RECYCLE FACILITY
PROPOSED PIPELINE SURVEY LOCATED IN THE SE/4 SW/4 SECTION 24, T23N, R9W, NMPM SAN JUAN COUNTY, NEW MEXICO



JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

~ SURFACE OWNERSHIP ~ Bureau of Land Management	
0+00 TO 2+71.8	271.8 FT / 16.5 RODS

I, Jason C. Edwards, a registered Professional Surveyor under the laws of the State of New Mexico, hereby certify that this plat was prepared from field notes of an actual survey meeting the minimum requirements of the standards for easement surveys and is true and correct to the best of my knowledge and belief.

JASON C. EDWARDS Date: June 6, 2018

Jason C. Edwards, P.L.S.
New Mexico L.S. #15269

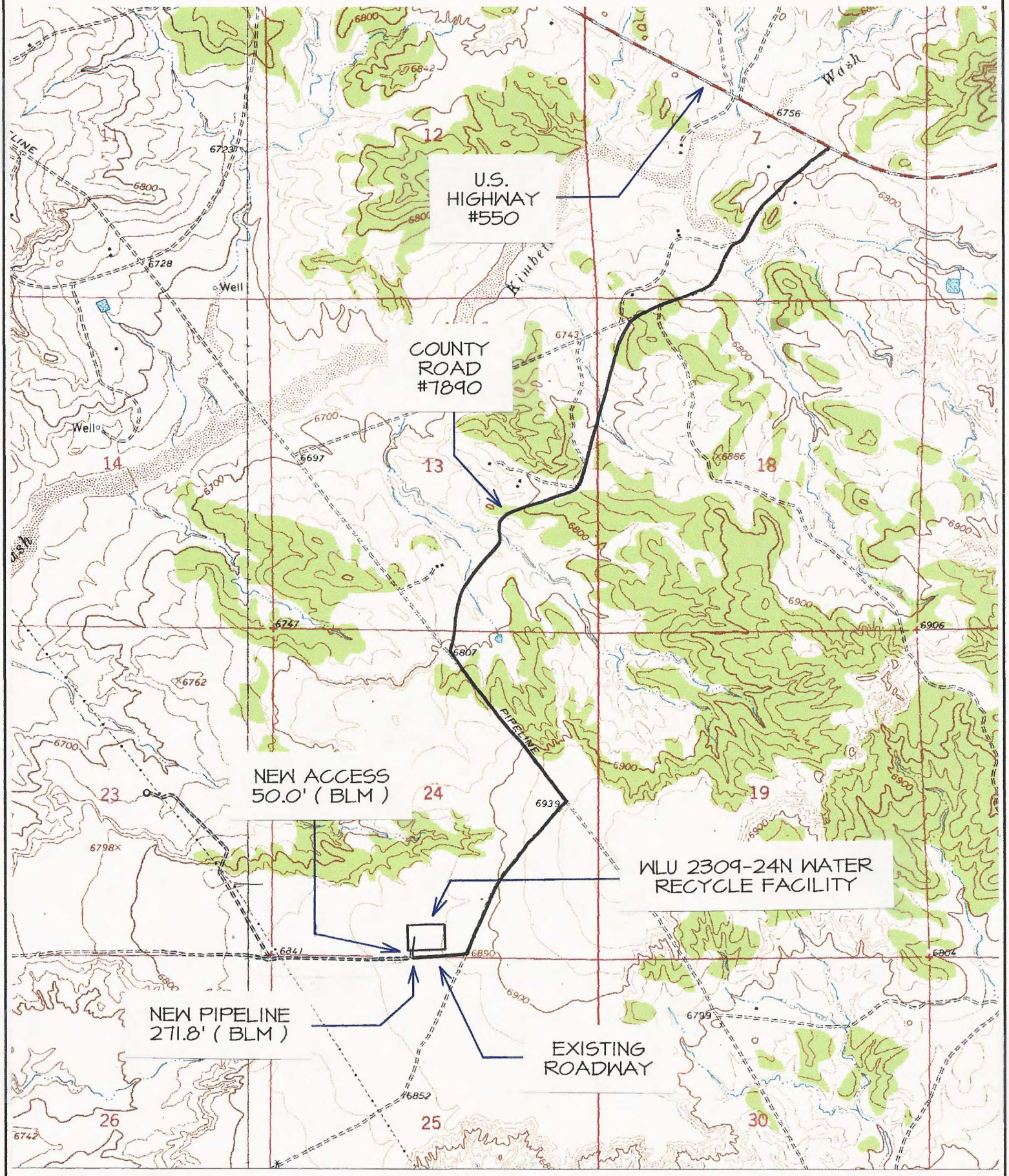
Prepared for:
ENDURING RESOURCES, LLC
332 ROAD 3100
AZTEC, NM 87410

Land Surveyor:
Jason C. Edwards
Mailing Address:
Post Office Box 6612
Farmington, NM 87499
Business Address:
111 East Pinon Street
Farmington, NM 87402
(505) 486-1695 (Office)
ncesurveys@comcast.net
NCE SURVEYS, INC.

CHECKED BY: JCE
DRAWN BY: EDO
SHEET 4 OF 6
FILENAME: 2394246P1

ENDURING RESOURCES, LLC WLU 2309-24N WATER RECYCLE FACILITY

LOCATED IN SE/4 SW/4 & SW/4 SE/4 SECTION 24, T23N, R9W
N.M.P.M., SAN JUAN COUNTY, NEW MEXICO



TOPO NAMES : KIMBETO & LYBROOK NW ⊕ PRODUCING WELL ⊗ PLUGGED & ABANDONED WELL

Directions from the Intersection of US Hwy 550 & US Hwy 64

in Bloomfield, NM to Enduring Resources, LLC WLU 2309-24N Water Recycle Facility

294' FSL & 2284' FWL, Section 24, T23N, R9W, N.M.P.M., San Juan County, NM

Latitude: 36.205932°N Longitude: 107.741568°W Datum: NAD1983

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Southerly on US Hwy 550 for 37.8 miles to Mile Marker 113.4;

Go Right (South-westerly) on County Road #7890 for 0.8 miles to fork in roadway;

Go Left (Southerly) remaining on County Road #7890 for 1.3 miles to 4-way intersection;

Go Left (South-easterly) remaining on County Road #7890 for 0.6 miles to fork in roadway;

Go Right (South-westerly) remaining on County Road #7890 for 0.5 miles to fork in roadway;

Go Right (Westerly) exiting County Road #7890 for 0.2 miles to begin access on right-hand side of existing roadway which continues for 50.0' to staked Enduring WLU 2309-24N Water Recycle Facility location.

ENCLOSURE B: CURRENT WELLBORE DIAGRAM

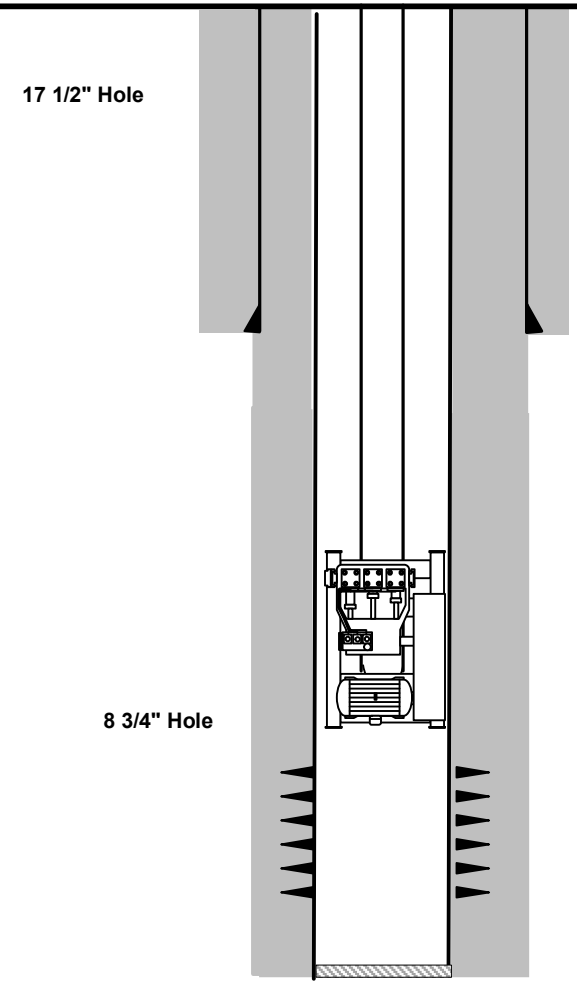
W Lybrook Unit 2309-24N WSW - Current

Spud Date: 01/03/19
Completion Date: 02/07/19

Lat: 36.205932 N Long: 107.741568 W
Entrada
SE/4, SW/4, Section 24, TWP 23N, Rng 09W
County: Sandoval NM
Elevation: 6893' KB

Created By: TJOYCE
Modified By: M WARP (8/19/19)
Modified By: M WARP (9/06/19)
Modified By: C Longwell (9/7/22)

Current Wellbore



13 3/8" Surface 54.5# J55 @ 397'.
Circulated cmt to surface w/ 440 sx
Type G cmt. BURST = 2730 psi.

7" Production 26# L-80 to 7,398' (LT&C).
PBTD = 7,307.6'. Displacement. Burst 7" 26# L-80 LT&C = 7240 psi burst.
Pumped 80 bbls tuned spacer & 184 bbls lead cmt (525 sxs) @ 12.3 PPG, followed by 102 bbls tail cmt @ 13.3 ppg. Dropped plug & disp w/ 279 bbls H2O, bumped plug, circ 52 bbls good cmt to surface. Floats held.

BHA Detail: (9/7/22)
83 jts 4 1/2" 11.6# P110 tbg
132' Electric Submersible Pump
EOT @ 3,543'

Perforations:
6851'-6856' (4 spf)
6895'-6900' (4 spf)
6912'-6917' (4 spf)
6953'-6958' (4 spf)
6985'-6990' (4 spf)
(100 total holes)

ENCLOSURE C: PROPOSED WELLBORE DIAGRAM

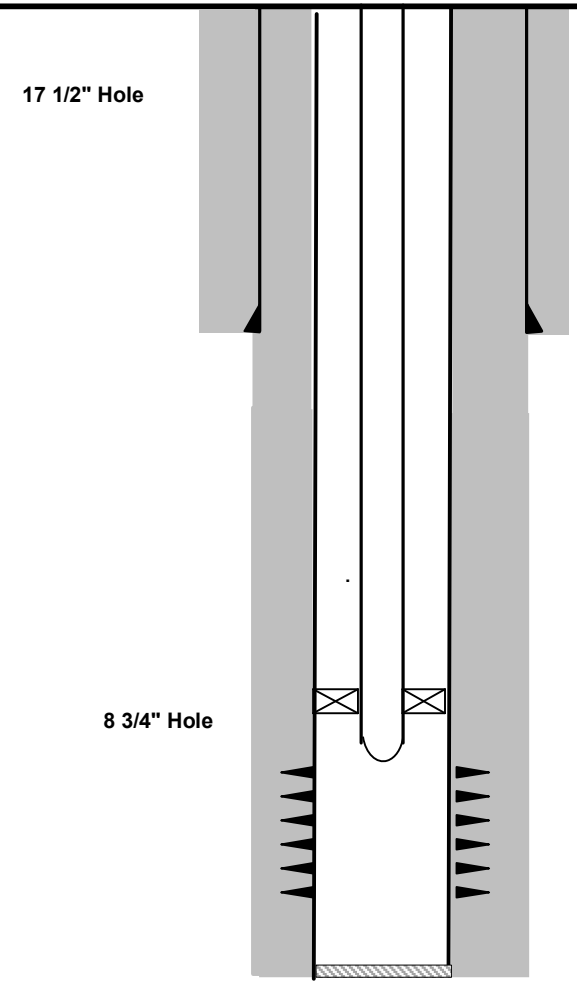
W Lybrook Unit 2309-24N Proposed

Spud Date: 01/03/19
Completion Date: 02/07/19

Lat: 36.205932 N Long: 107.741568 W
Entrada
SE/4, SW/4, Section 24, TWP 23N, Rng 09W
County: Sandoval NM
Elevation: 6893' KB

Created By: TJOYCE
Modified By: M WARP (8/19/19)
Modified By: M WARP (9/06/19)
Modified By: C Longwell (9/7/22)

Current Wellbore



13 3/8" Surface 54.5# J55 @ 397'. Circulated cmt to surface w/ 440 sx Type G cmt. BURST = 2730 psi.

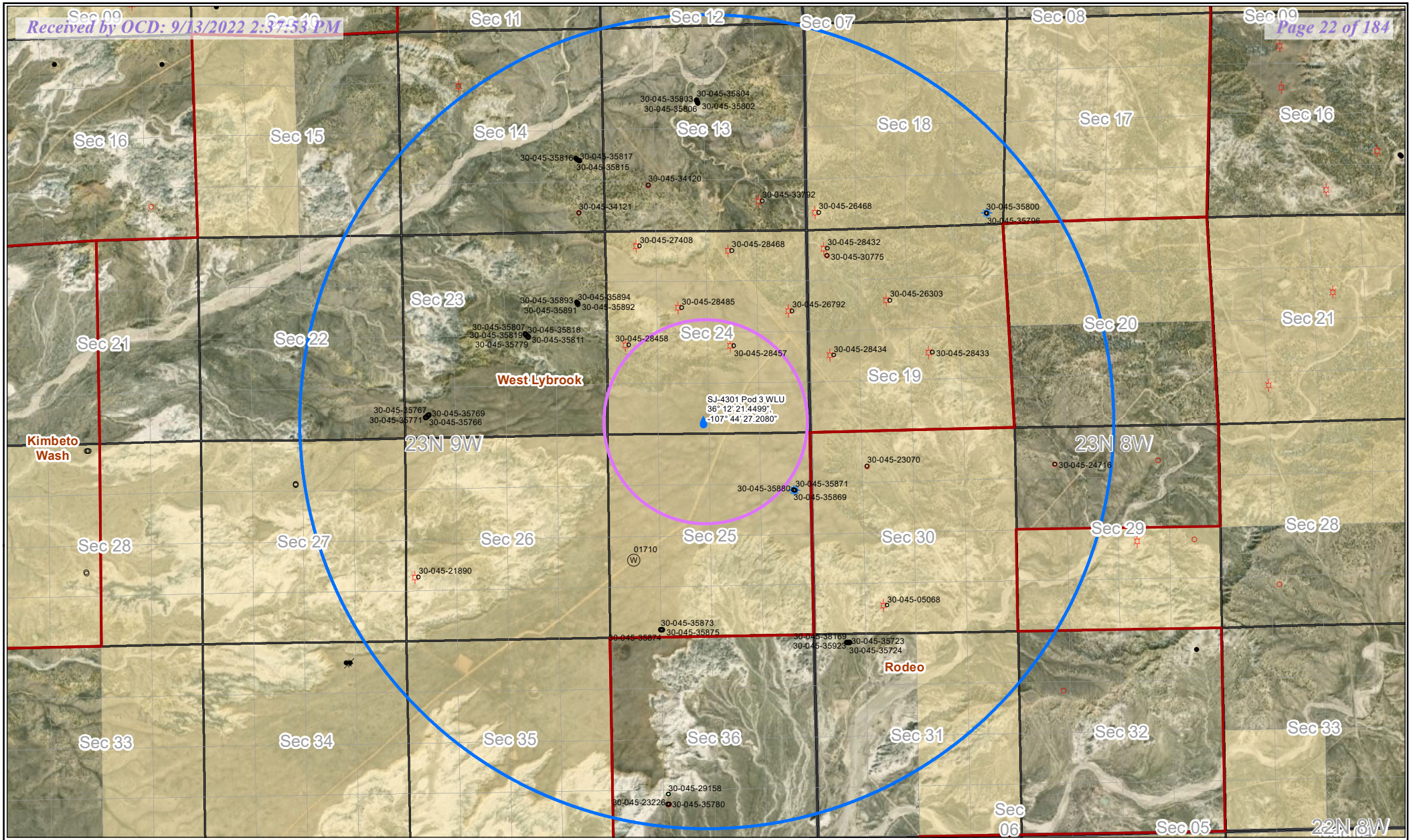
7" Production 26# L-80 to 7,398' (LT&C). **PBTD = 7,307.6'**. Displacement. Burst 7" 26# L-80 LT&C = 7240 psi burst. Pumped 80 bbls tuned spacer & 184 bbls lead cmt (525 sxs) @ 12.3 PPG, followed by 102 bbls tail cmt @ 13.3 ppg. Dropped plug & disp w/ 279 bbls H2O, bumped plug, circ 52 bbls good cmt to surface. Floats held.

BHA Detail: (9/30/2019)
4 ½" plastic lined tubing
7" x 4 ½" AS1-X Packer at 6,810'

Perforations:
6851'-6856' (4 spf)
6895'-6900' (4 spf)
6912'-6917' (4 spf)
6953'-6958' (4 spf)
6985'-6990' (4 spf)
(100 total holes)

ENCLOSURE D: WELL LOCATION FIGURE

Received by OCD: 9/13/2022 2:37:53 PM



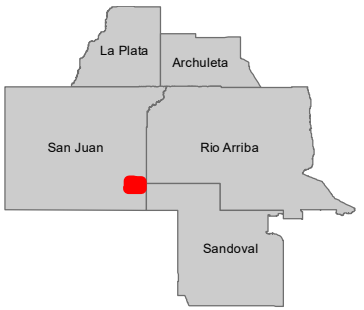
SJ-4301 POD 3 Map

Active Wells
- Gas
- Oil

Inactive Wells
- Cancelled
- New
- Plugged (site released)
- Temporary Abandonment
- Temporary Abandonment (expired)
- SJ-4301 POD 3 WLU
- NMOSE Water
- WLU 1/2 Mile Buffer
- WLU 2 Mile Buffer
- Unit Boundary
- PLSS_QtrQtr_SJB
- Section
- Township

Federal Minerals Ownership
- All Minerals

0 0.5 1 Miles 2



ENDURING RESOURCES, LLC

Data Source Statement:
BLM-FFO, Enduring Resources GIS, ESRI Inc., NCE Surveys, USGS

Author: drogers | Date: 2/24/2021

Released to Imaging: 9/30/2022 3:13:36 PM

ENCLOSURE E: SAMPLE INJECTION FLUID ANALYTICAL REPORTS

Enduring Resources

SEU 359 Pad

Water Analysis

Test:		North Escavada Pond
Temperature	(deg F)	64.5
Specific Gravity		1.029
pH		8.45
Sodium Na+	(mg/L)	13915
Magnesium Mg 2+	(mg/L)	80
Iron Fe2+	(mg/L)	<LOD
Total Iron Fe2+ & Fe3+	(mg/L)	6
Calcium Ca 2+	(mg/L)	394
Total Hardness as CaCO3	(mg/L)	1312
Chlorides CL-	(mg/L)	20945
Hydroxide OH-	(mg/L)	<LOD
Carbonate CO3(2-)	(mg/L)	96
Bicarbonates HCO3-	(mg/L)	708
Phosphates PO4(3-)	(mg/L)	6
Sulfates SO4(2-)	(mg/L)	1250
ORP	mV	10
TDS	(mg/L)	37400

*** <LOD indicates a result less than limit of detection.

HALLIBURTON

Water Analysis Report

30-045-33217
F-11-24n-11w

To:	Dugan Production	**Date:**	11/10/2005
Submitted by:	Halliburton Energy Services	**Date Rec:**	11/10/2005
Attention:	Darrin Steed	**Report #:**	FLMM5A44
Well Name:	Herry Monster #3 SWD	**Formation:**	Entrada/SWD

Specific Gravity	1.005	
pH	8.4	
Resistivity	0.89	@ 70° F
Iron (Fe)	0	Mg / L
Potassium (K)	200	Mg / L
Sodium (Na)	4165	Mg / L
Calcium (Ca)	176	Mg / L
Magnesium (Mg)	15	Mg / L
Chlorides (Cl)	2200	Mg / L
Sulfates (SO4)	2000	Mg / L
Carbonates (CO3)	40	Mg / L
Bicarbonates (HCO3)	5612	Mg / L
Total Dissolved Solids	14408	Mg / L

Respectfully: Bill Loughridge

Title: Senior Scientist

Location: Farmington, NM

EXHIBIT F

NOTICE: This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or its use.

ENCLOSURE F: ENTRADA FORMATION GROUNDWATER ANALYTICAL RESULTS

Analytical Report
Lab Order **1810596**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: John Shomaker & Assoc.
Client Sample ID: First Formation
Project: Enduring Resources
Collection Date: 10/9/2018 11:52:00 AM
Lab ID: 1810596-002 **Matrix:** AQUEOUS **Received Date:** 10/10/2018 12:40:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Fluoride	5.8	0.50	*	mg/L	5	10/10/2018 7:26:00 PM	R54788
Chloride	1400	100	*	mg/L	200	10/12/2018 3:31:22 AM	R54823
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	10/10/2018 7:26:00 PM	R54788
Bromide	1.5	0.50		mg/L	5	10/10/2018 7:26:00 PM	R54788
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	10/10/2018 7:26:00 PM	R54788
Phosphorus, Orthophosphate (As P)	ND	10		mg/L	20	10/10/2018 7:38:25 PM	R54788
Sulfate	6100	100	*	mg/L	200	10/12/2018 3:31:22 AM	R54823
SM2510B: SPECIFIC CONDUCTANCE						Analyst:	**MRA**
Conductivity	13000	10		µmhos/c	2	10/15/2018 3:53:19 PM	R54896
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst:	**KS**
Total Dissolved Solids	10200	200	*D	mg/L	1	10/15/2018 4:39:00 PM	40981
SM4500-H+B / 9040C: PH						Analyst:	**MRA**
pH	7.93		H	pH units	1	10/11/2018 3:01:50 PM	R54833
EPA METHOD 200.7: METALS						Analyst:	**JLF**
Calcium	1100	100		mg/L	100	10/16/2018 7:07:08 PM	40970
Magnesium	72	10		mg/L	10	10/16/2018 7:03:08 PM	40970
Potassium	320	10		mg/L	10	10/16/2018 7:03:08 PM	40970
Sodium	3300	100		mg/L	100	10/16/2018 7:07:08 PM	40970

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified

ENCLOSURE G: NMOSE POINT OF DIVERSIONS

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
SJ 01710	SJ	SJ		1	3	25	23N	09W	252985	4009203*	1239	550	173	377
SJ 00001	SJ	SJ		4	1	12	23N	09W	253534	4014427*	4150	695	630	65
SJ 01709	SJ	SJ		1	1	27	23N	08W	259451	4009831*	5865	317	225	92
SJ 01706	SJ	SJ		3	4	12	22N	09W	253627	4003944*	6333	762	362	400
SJ 03978 POD1	SJ	SJ	1	2	1	22	23N	08W	259816	4011541	6341	500	260	240
SJ 02686	SJ	SJ	3	4	2	32	24N	08W	257502	4017472*	8183	690	690	0
SJ 04195 POD1	SJ	SJ		1	3	11	23N	08W	261123	4013544	8200	700	290	410
SJ 01712	SJ	SJ		2	4	27	24N	09W	251195	4018933*	8983	528	515	13
SJ 00144	SJ	SJ	1	1	3	31	23N	09W	244786	4007922*	9125	100		

Average Depth to Water: **393 feet**

Minimum Depth: **173 feet**

Maximum Depth: **690 feet**

Record Count: 9

UTMNAD83 Radius Search (in meters):

Easting (X): 253602 **Northing (Y):** 4010277.51 **Radius:** 10000

***UTM location was derived from PLSS - see Help**

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

ENCLOSURE H: TRIPLE COMBO LOG

Page 31 of 184

ALLIED HORIZONTAL WIRELINE SERVICES

Composite Log

Company Enduring Resources
Well West Lybrook unit 2309-24N WSW
Field West Lybrook
County San Juan
State New Mexico

Company Enduring Resources

Well West Lybrook unit 2309-24N WSW

Field West Lybrook

County San Juan State New Mexico

Location: API # : SJ-4301 POD 3

Section 24, Township 23N, Range 09W

Other Services

IAT / SGR / MEL

Permanent Datum Ground Level Elevation 6870 ' ft.
Log Measured From KB , 17 ft. above perm. datum
Drilling Measured From Kelly Bushing

Elevation
K.B. 6887.5 ' ft.
D.F. 6886.5 ' ft.
G.L. 6870 ' ft.

Date	01/15/2019		
Run Number	One		
Depth Driller	7408 '		
Depth Logger	7403 '		
Bottom Logged Interval	7392 '		
Top Log Interval	406 '		
Casing Driller	13.375 " @ 406 '	@	@
Casing Logger	402 '		
Bit Size	8.750 "	@	@
Type Fluid in Hole	Brine		
Density / Viscosity	9.4 / 39		
pH / Fluid Loss	7 / 36		
Source of Sample	Mud Tank		
Rm @ Meas. Temp	.188 @ 75 ° F	@	@
Rmf @ Meas. Temp	.141 @ 75 ° F	@	@
Rmc @ Meas. Temp	.235 @ 75 ° F	@	@
Source of Rmf / Rmc	Calculated		
Rm @ BHT	.097 @ 152 ° F	@	@
Time Circulation Stopped	01/15/2019 @ 02:00		
Time Logger on Bottom	01/15/2019 @ 10:00		
Maximum Recorded Temperature	159 ° F		
Equipment Number	11007		
Location	Midland		
Recorded By	J. Trasti / A.DeLaGarza		
Witnessed By	A. Bridge		

Received by OCD: 9/13/2022 3:13:56 PM

Released to Imaging: 9/30/2022 3:13:56 PM

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Equipment and Log Data

Service Order:

	Gamma		Density		Neutron		Sonic		IAT/DLL	
Run No.	One		One		One		One		One	
Serial No.	2700		0872		2541				110	
O.D.	3.375 in.		4.5 in.		3.375 in.		3.375 in.		3.875 in.	
Logging Pass Data										
General		Gamma Scales		Density Scales		Neutron Scales		Sonic Scales		IAT/DLL Scales
Run	Depths	Left	Right	Left	Right	Matrix	Left	Right	Matrix	Left	Right	Matrix	Left	Right
One	0 7408	0	150	0.3	-0.1	2.71	0.3	-0.1	2.71				0.2	2000

	Gamma		Density		Neutron		Sonic		IAT/DLL	
Run No.	One		One		One		One		One	
Serial No.	2700		0872		2541				110	
O.D.	3.375 in.		4.5 in.		3.375 in.		3.375 in.		3.875 in.	

Logging Pass Data

General		Gamma Scales		Density Scales		Neutron Scales			Sonic Scales			IAT/DLL Scales		
Run	Depths	Left	Right	Left	Right	Matrix	Left	Right	Matrix	Left	Right	Matrix	Left	Right
One	0 7408	0	150	0.3	-0.1	2.71	0.3	-0.1	2.71				0.2	2000

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

Tools ran as per tool sketch
CNL ran eccentralized using bowspring
Annular Volume calculated using 7 in casing
10 in IAT curve affectd by Chlorides

Tight spot detected at 7325 '

YOUR CREW TODAY: Jeremy Trasti, Alejandro de la Garza, Thomas Melson, Kindle Burket
THANK YOU FOR CHOOSING ALLIED WIRELINE. Midland, TX. (432) 897-1528.

ALLIED HORIZONTAL WIRELINE SERVICES

Main Pass

Database File	enduringreswlybrook.db
Dataset Pathname	West_Lybrook/well/run1/main
Presentation Format	3com_iat
Dataset Creation	Tue Jan 15 15:23:37 2019
Charted by	Depth in Feet scaled 1:600

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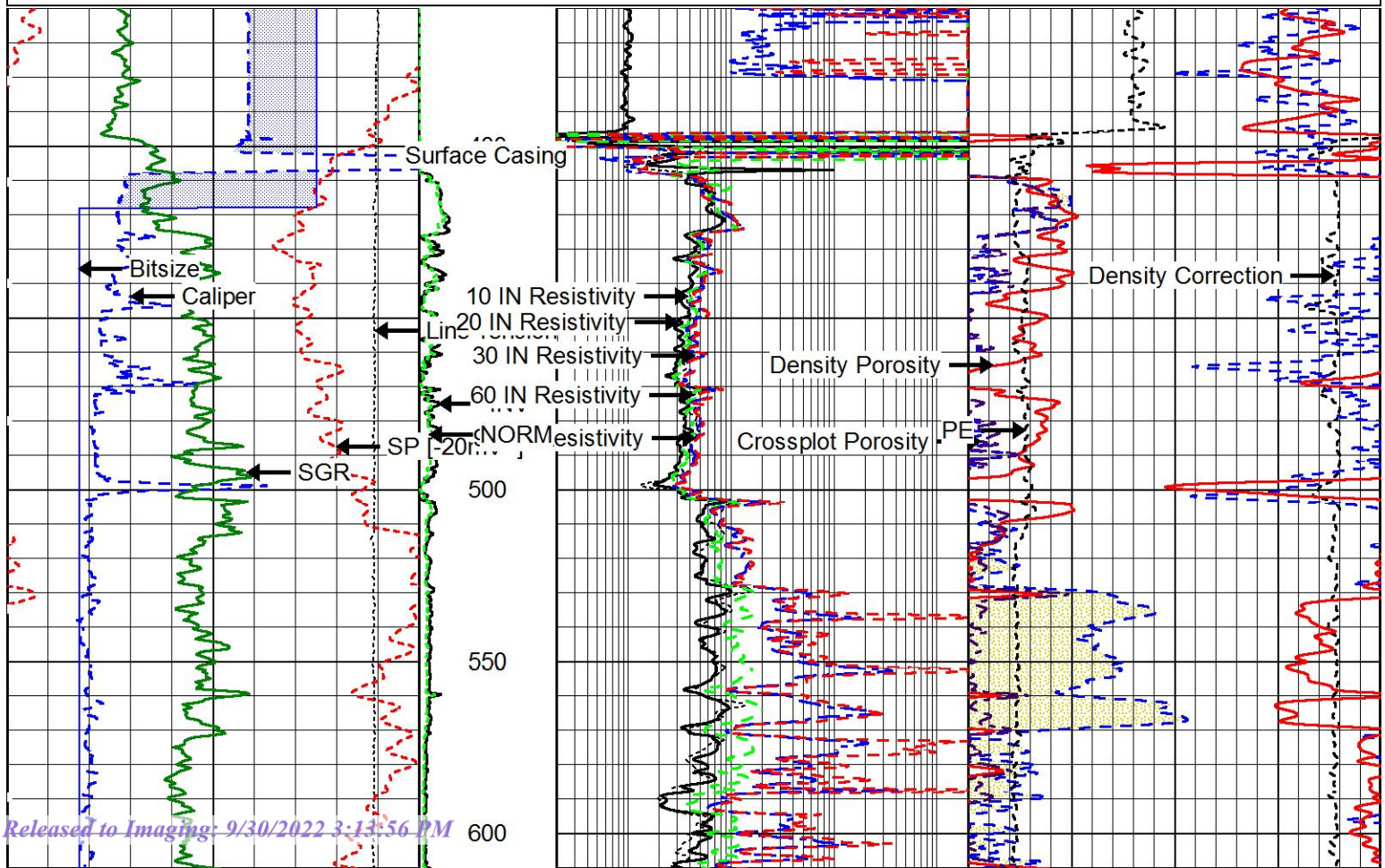
7	Caliper (in)	17	(Ohm-m)	0.2	20 IN Resistivity (Ohm-m)	2000	0.3	(Porosity Decimal Fraction)	-0.1
	SP [-20mV+]		0 20	0.2	30 IN Resistivity (Ohm-m)	2000	Density Porosity		
0	SGR (GAPI)	200	NORM	0.2	60 IN Resistivity (Ohm-m)	2000	0.3	(Porosity Decimal Fraction)	-0.1
	Line Tension		(Ohm-m)	0.2	90 IN Resistivity (Ohm-m)	2000	Crossplot Porosity		
	5000 (lb)	0	0 20				0.3	(Porosity Decimal Fraction)	-0.1
							0 PE 10	Density Correction	
								0.8 (g/cc)	-0.2



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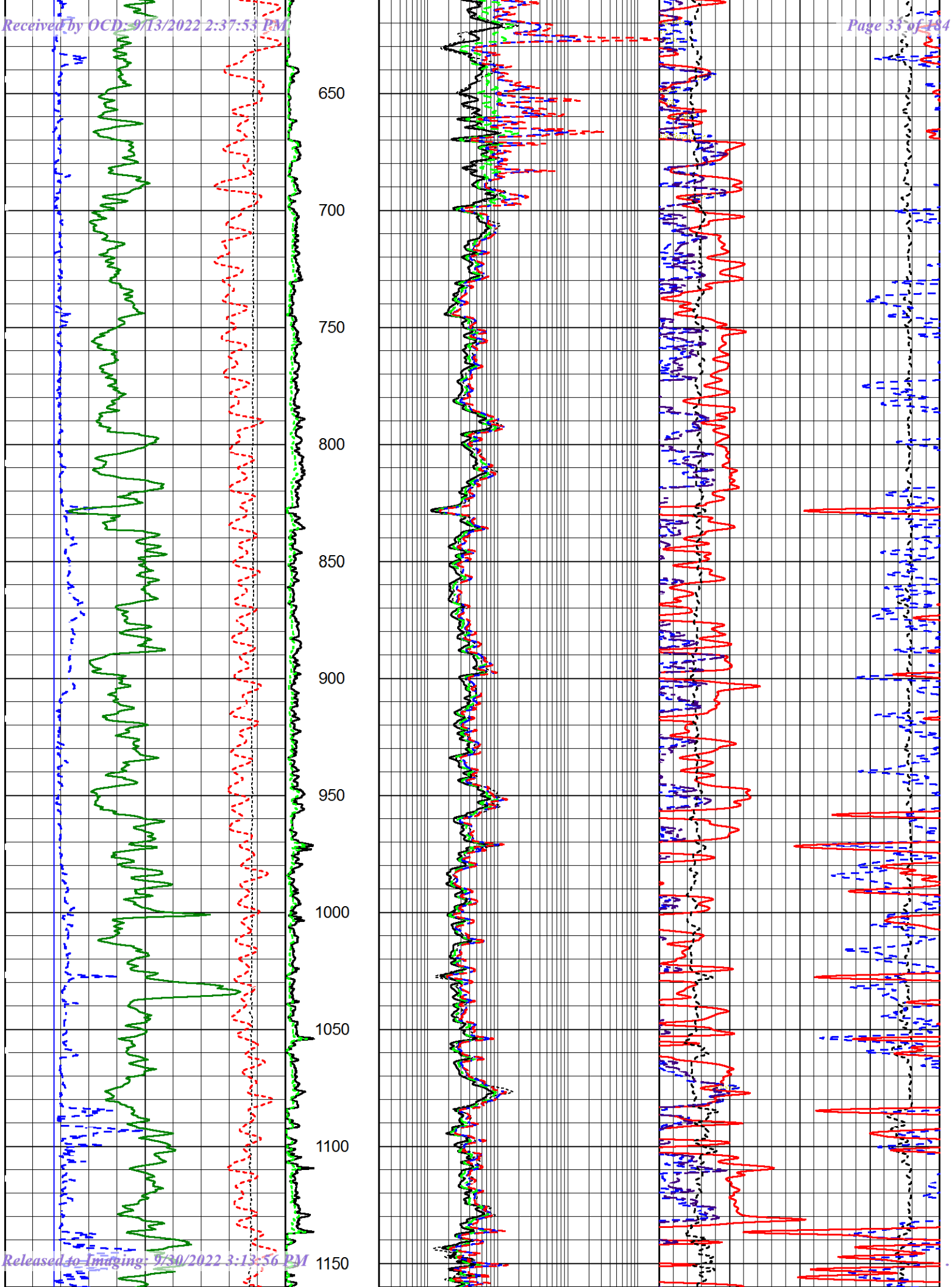

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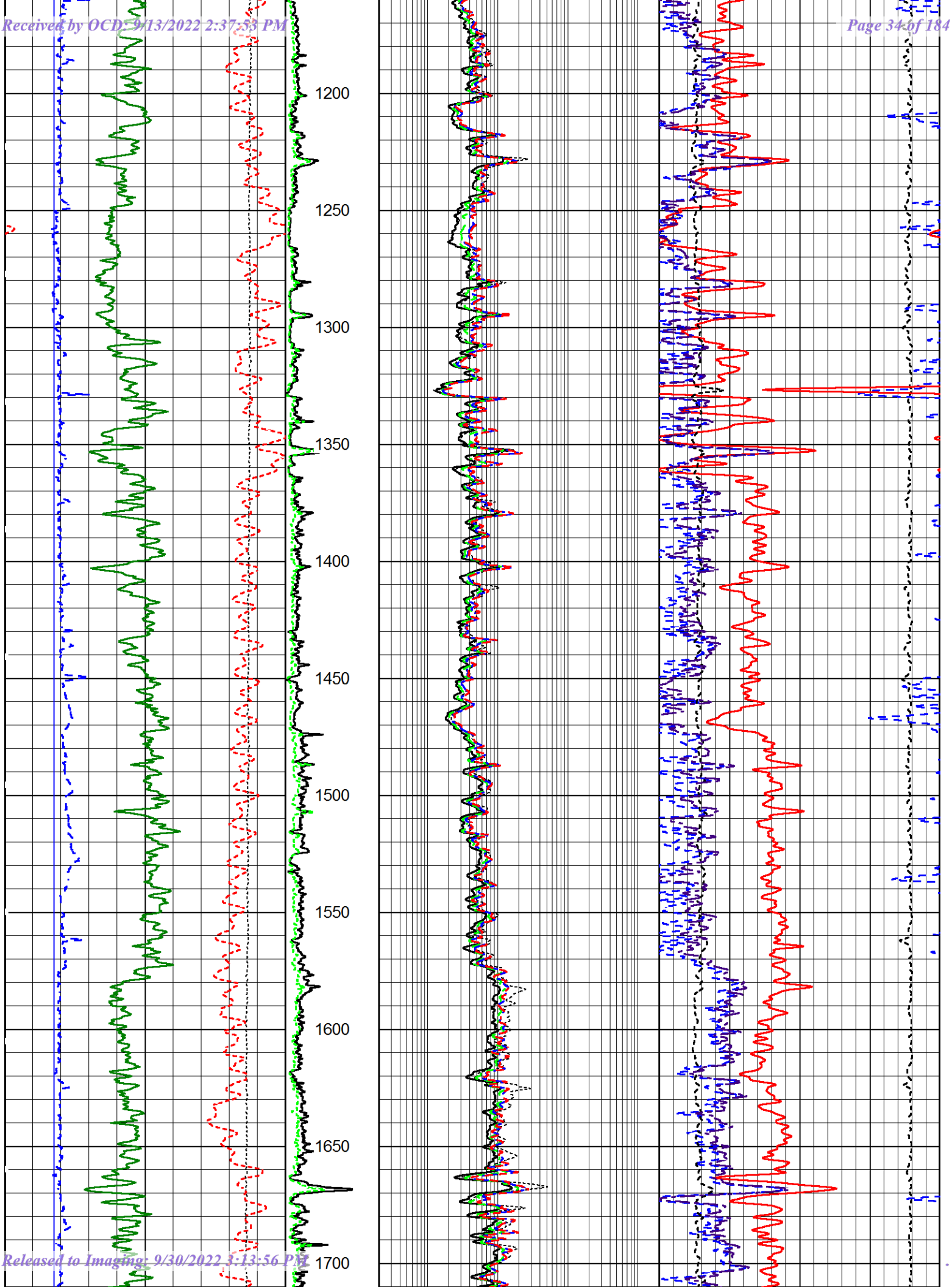
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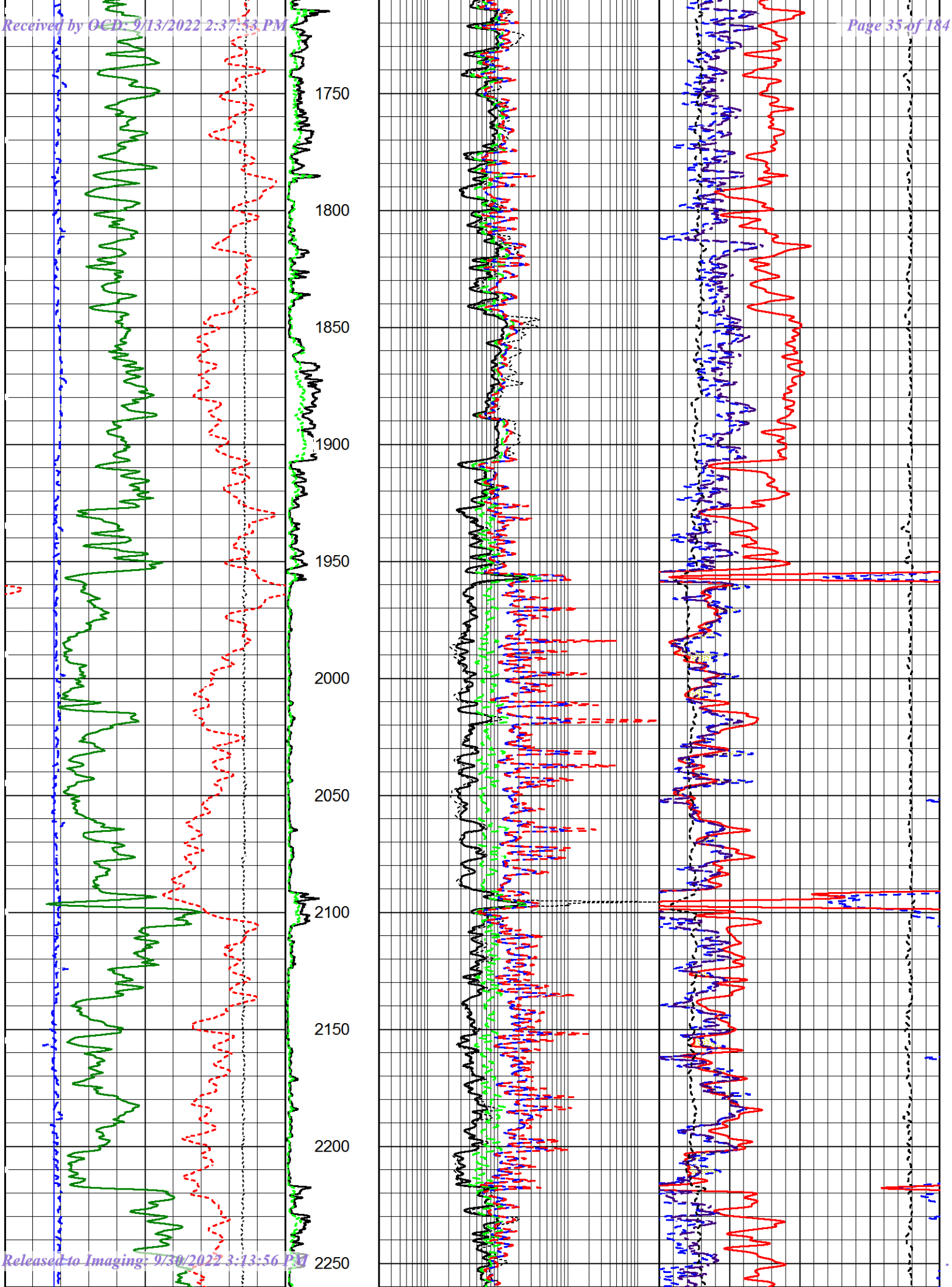
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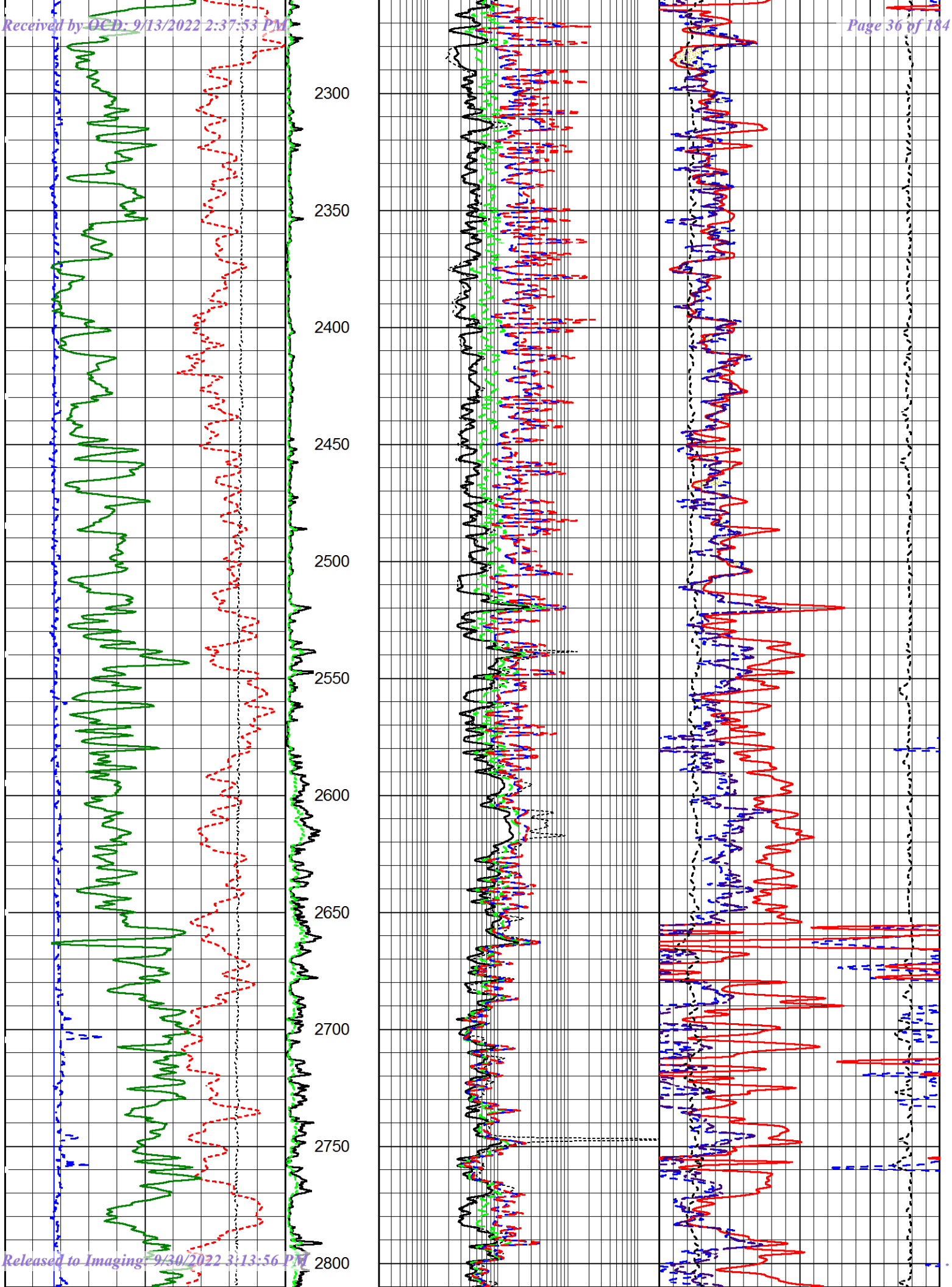
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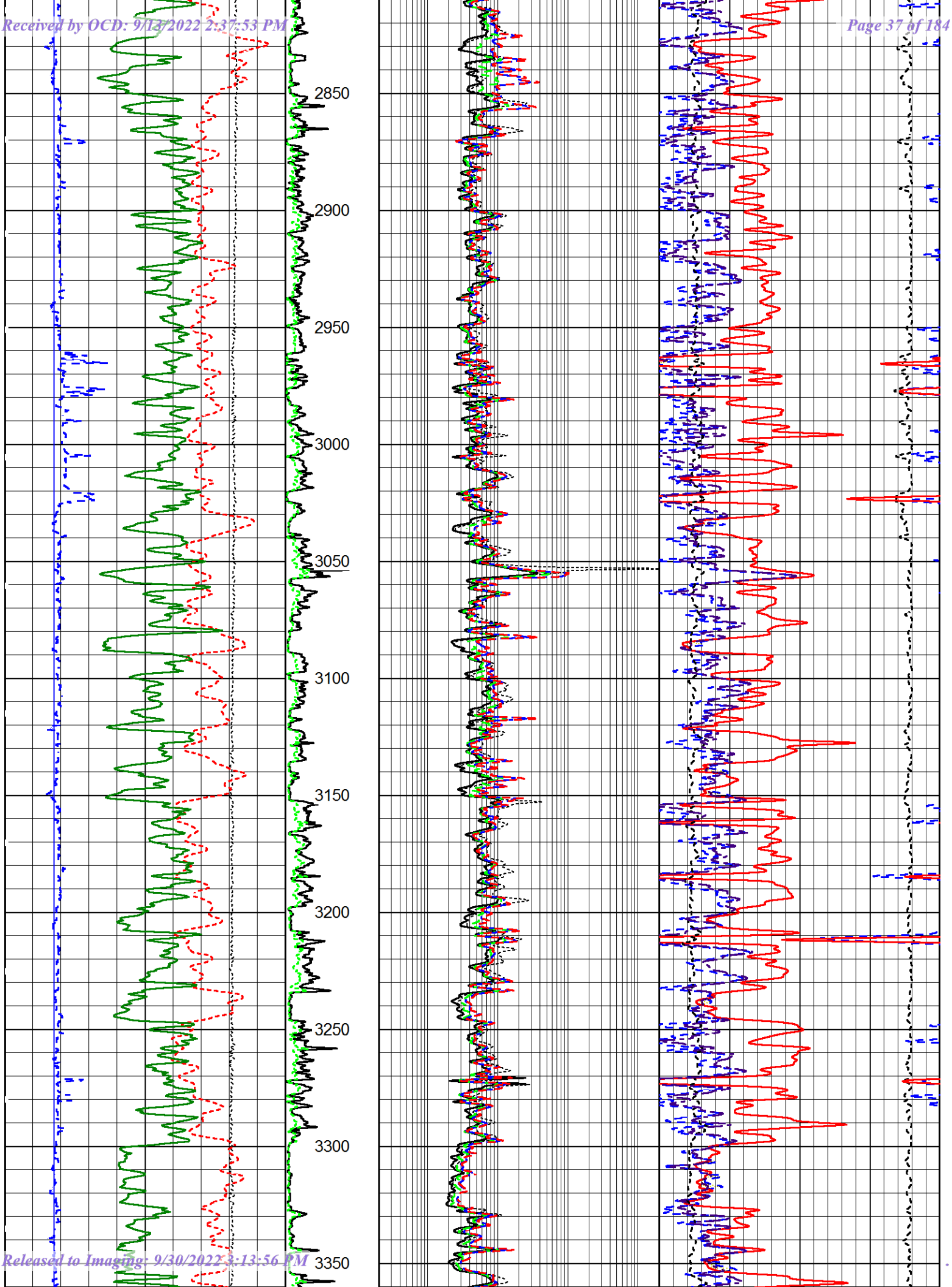
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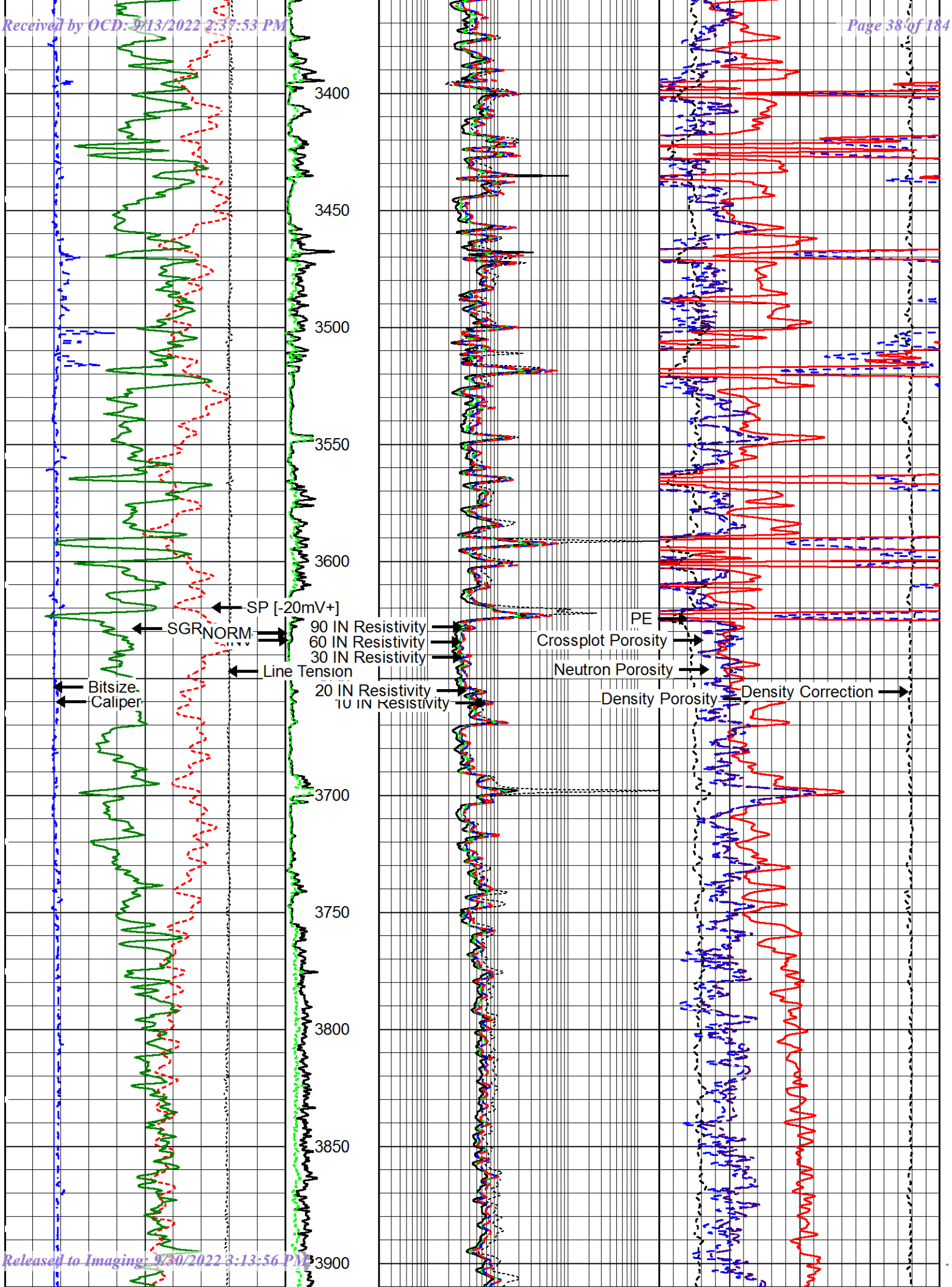
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SP [-20mV+]
SGR
NORM
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Bitsize
Caliper
90 IN Resistivity
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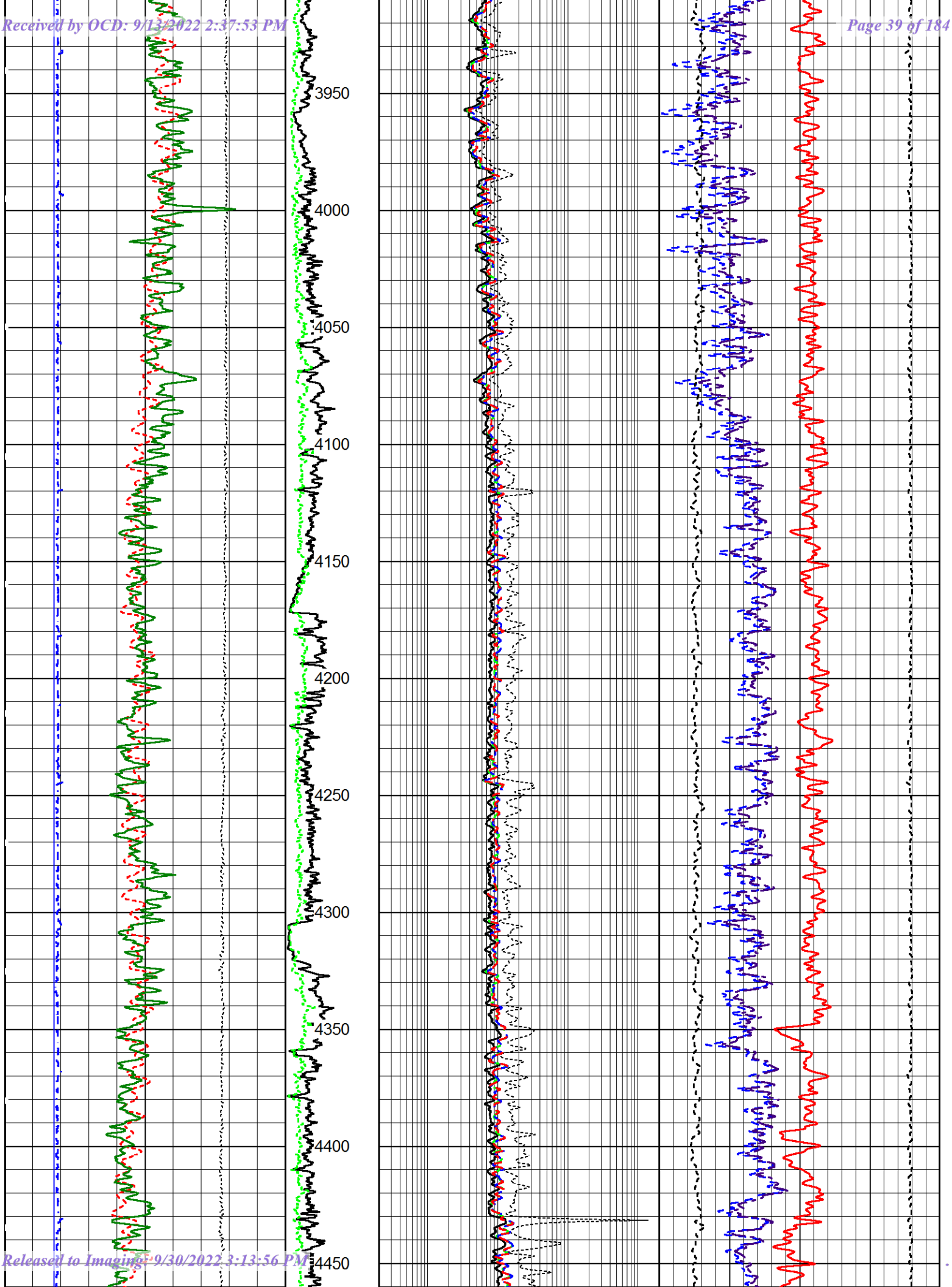
PE
Crossplot Porosity
Neutron Porosity
Density Porosity
Density Correction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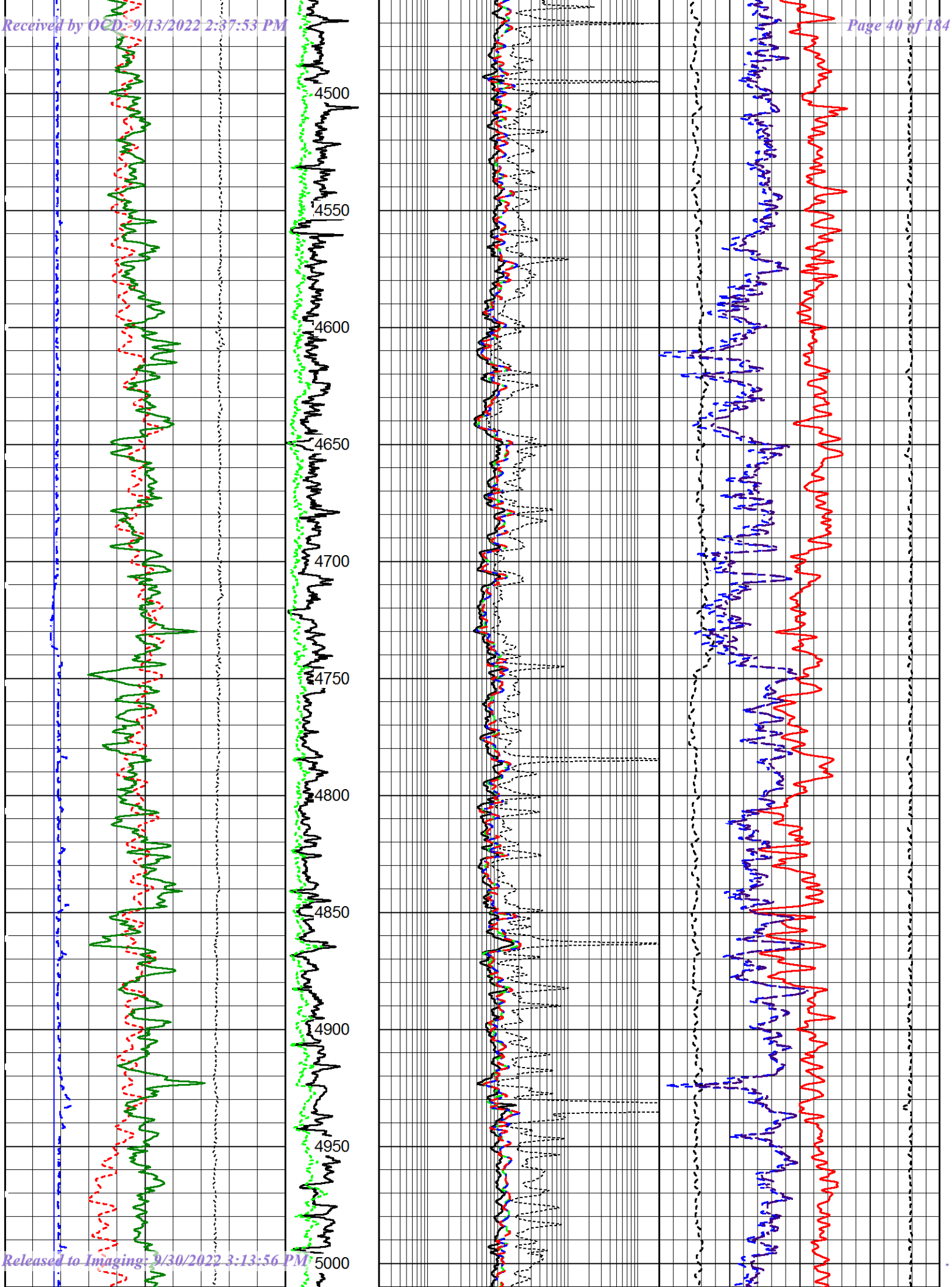
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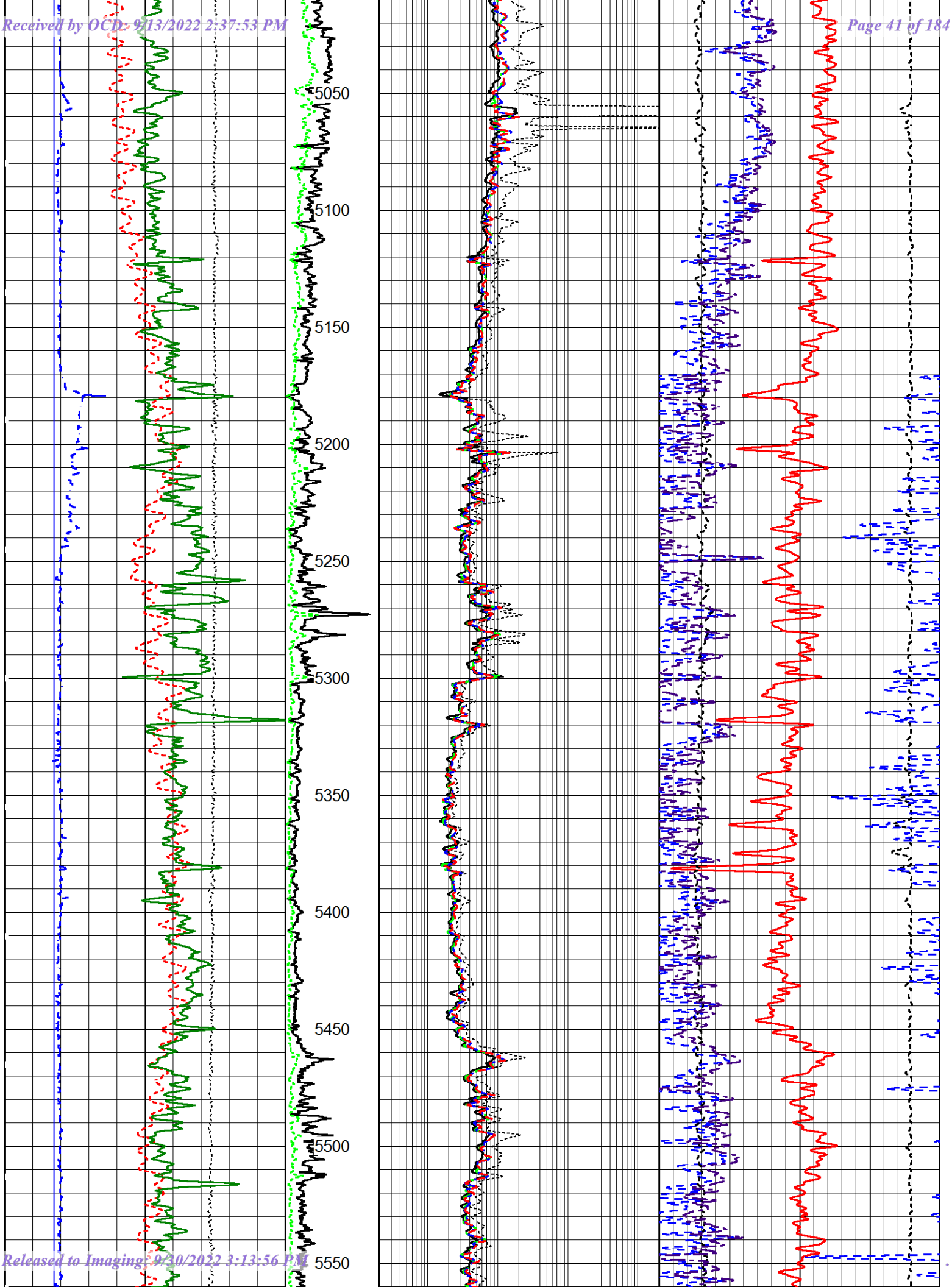
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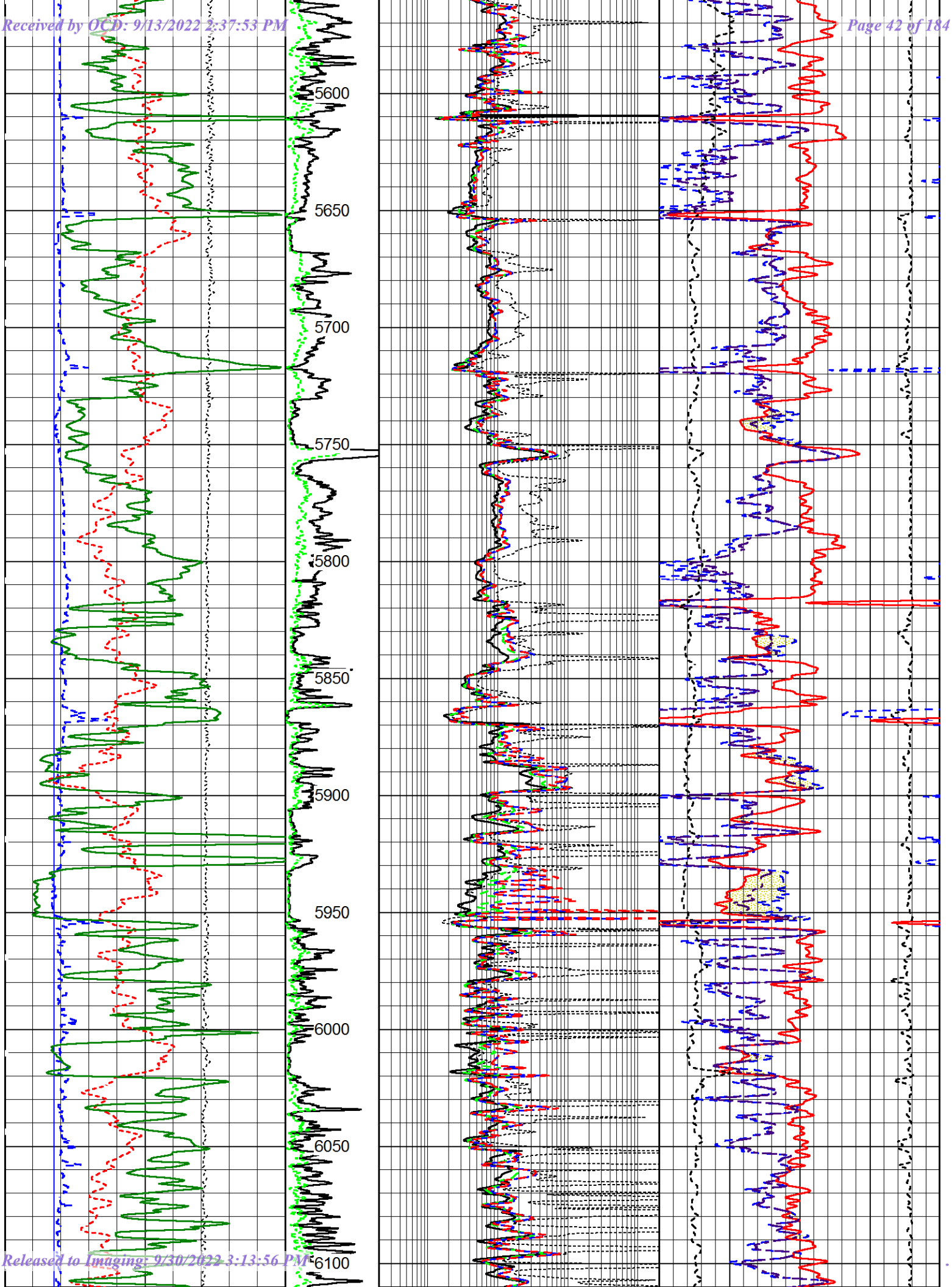
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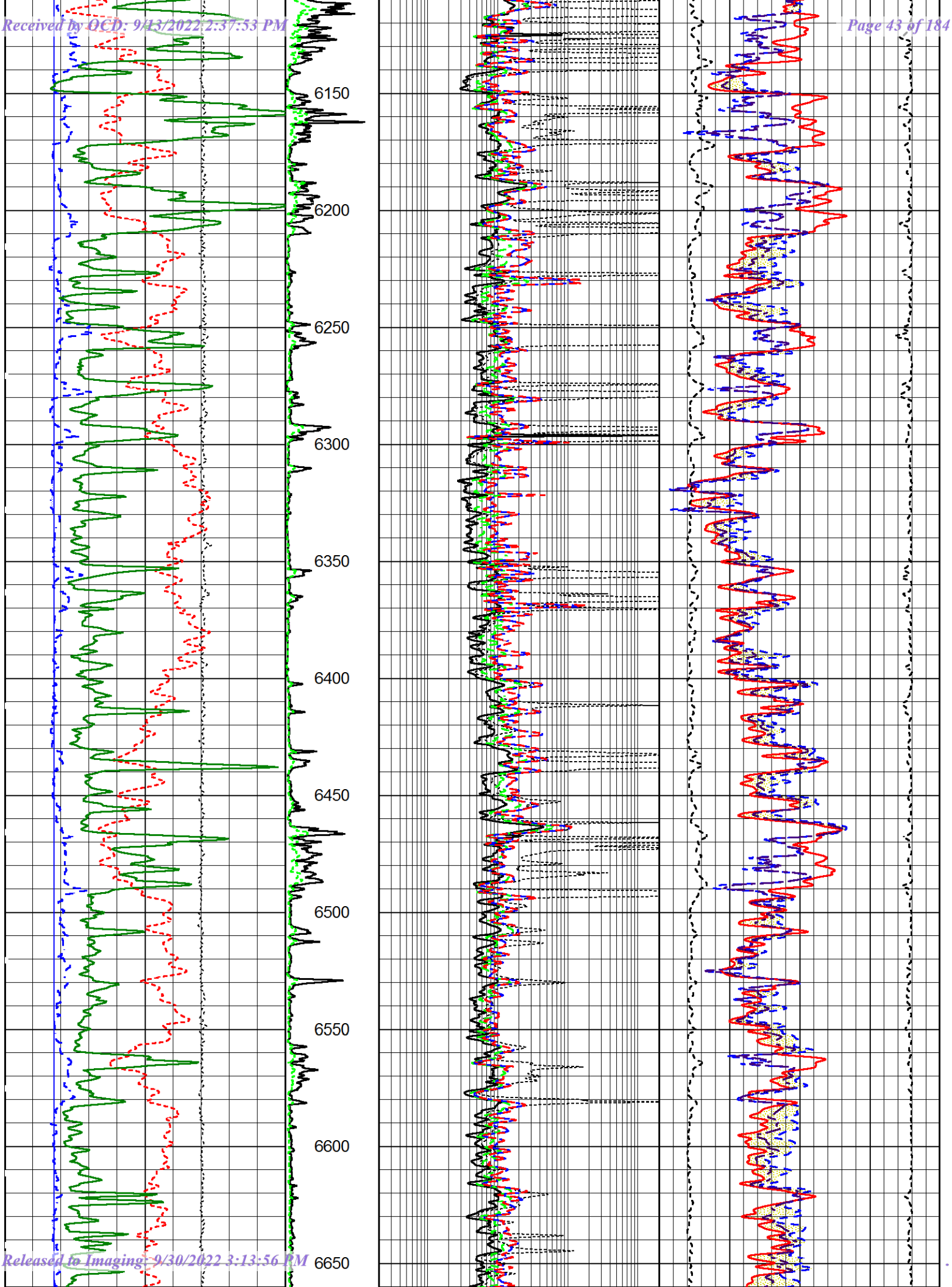
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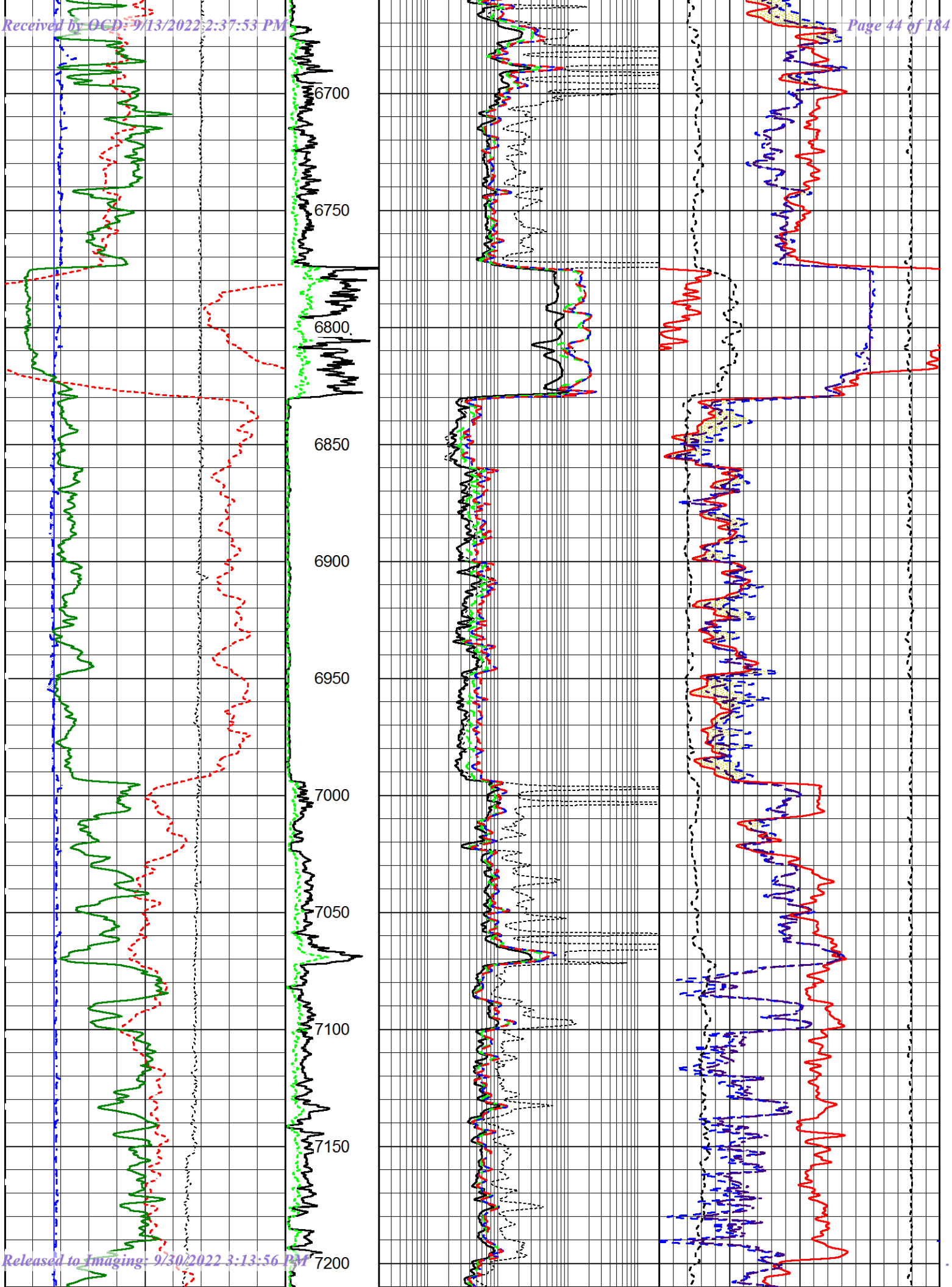
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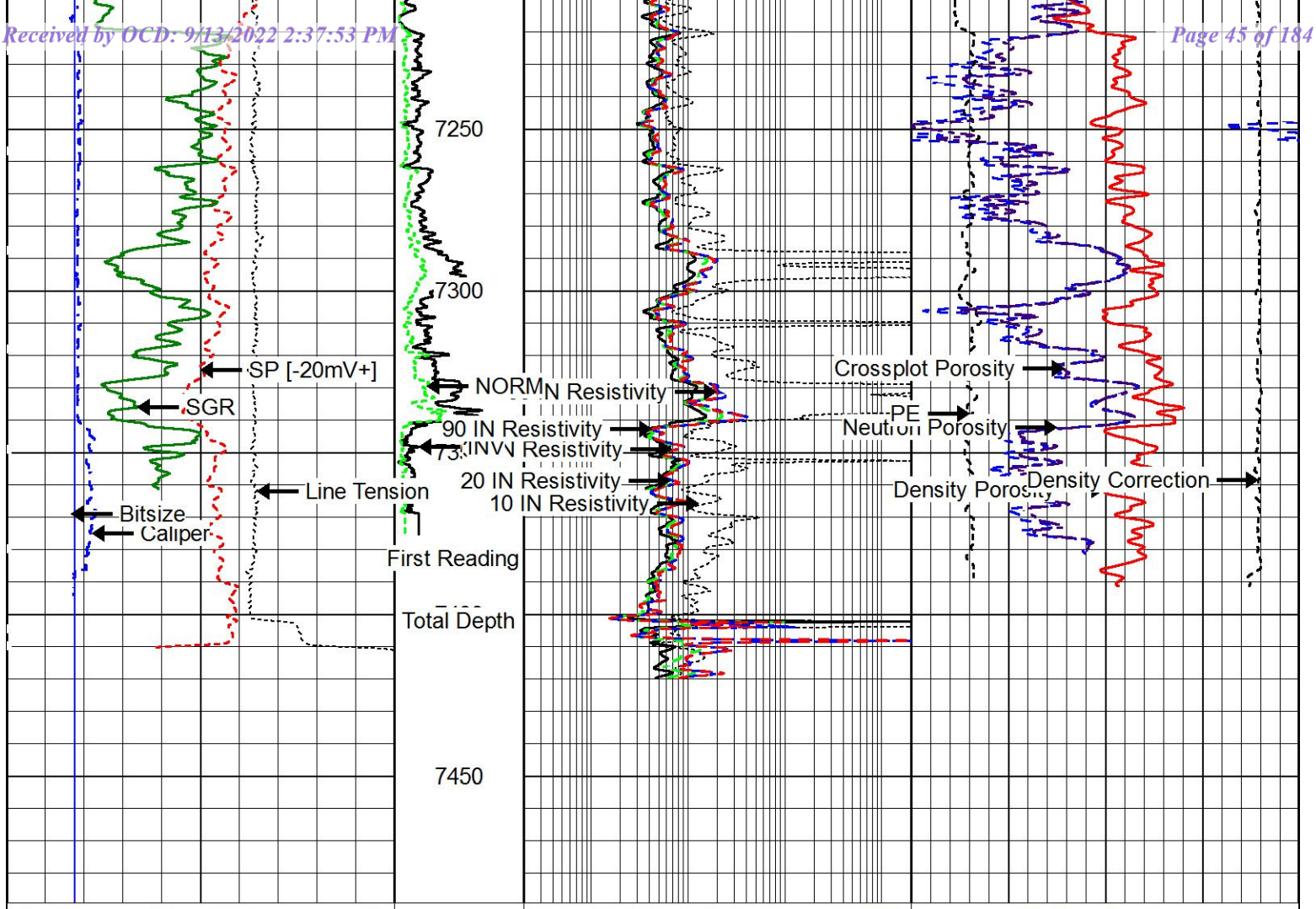

7 Bitsize (in) 17	INV	0.2 10 IN Resistivity (Ohm-m) 2000	Neutron Porosity		
7 Caliper (in) 17	(Ohm-m)	0.2 20 IN Resistivity (Ohm-m) 2000	0.3 (Porosity Decimal Fraction) -0.1		
SP [-20mV+]	0 20	0.2 30 IN Resistivity (Ohm-m) 2000	Density Porosity		
0 SGR (GAPI) 200	NORM	0.2 60 IN Resistivity (Ohm-m) 2000	0.3 (Porosity Decimal Fraction) -0.1		
Line Tension	(Ohm-m)	0.2 90 IN Resistivity (Ohm-m) 2000	Crossplot Porosity		
5000 (lb) 0	0 20		0.3 (Porosity Decimal Fraction) -0.1		
			0 PE 10	Density Correction	
				0.8 (g/cc) -0.2	

ALLIED HORIZONTAL WIRELINE SERVICES

Main Pass

ALLIED HORIZONTAL WIRELINE SERVICES

Main Pass

Database File	enduringreswlybrook.db
Dataset Pathname	West_Lybrook/well/run1/main
Presentation Format	3com_iat
Dataset Creation	Tue Jan 15 15:23:37 2019
Charted by	Depth in Feet scaled 1:240

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SP [-20mV+] | 0 20 | 0.2 30 IN Resistivity (Ohm-m) 2000 | Density Porosity
0 SGR (GAPI) 200 | NORM | 0.2 60 IN Resistivity (Ohm-m) 2000 | 0.3 (Porosity Decimal Fraction) -0.1
Line Tension | (Ohm-m) | 0.2 90 IN Resistivity (Ohm-m) 2000 | Crossplot Porosity
5000 (lb) 0 | 0 20 | | 0.3 (Porosity Decimal Fraction) -0.1
0 PE 10 | Density Correction
0.8 (g/cc) -0.2

Received by OCD: 9/13/2022 2:37:53 PM

7 Caliper (in) 17
SP [-20mV+]
0 SGR (GAPI) 200
Line Tension
5000 (lb) 0

INV
(Ohm-m)
0 20
NORM
(Ohm-m)
0 20

0.2 20 IN Resistivity (Ohm-m) 2000
0.2 30 IN Resistivity (Ohm-m) 2000
0.2 60 IN Resistivity (Ohm-m) 2000
0.2 90 IN Resistivity (Ohm-m) 2000

0.3 (Porosity Decimal Fraction) -0.1
Density Porosity
0.3 (Porosity Decimal Fraction) -0.1
Crossplot Porosity
0.3 (Porosity Decimal Fraction) -0.1
0 PE 10
Density Correction
0.8 (g/cc) -0.2

400
Surface Casing
Bitsize
Caliper
10 IN Resistivity
20 IN Resistivity
Line Tension
30 IN Resistivity
60 IN Resistivity
INV
NORM
SP [-20mV+]
SGR
500
Density Correction
Density Porosity
PE
Crossplot Porosity

Released to Imaging: 9/30/2022 3:13:56 PM

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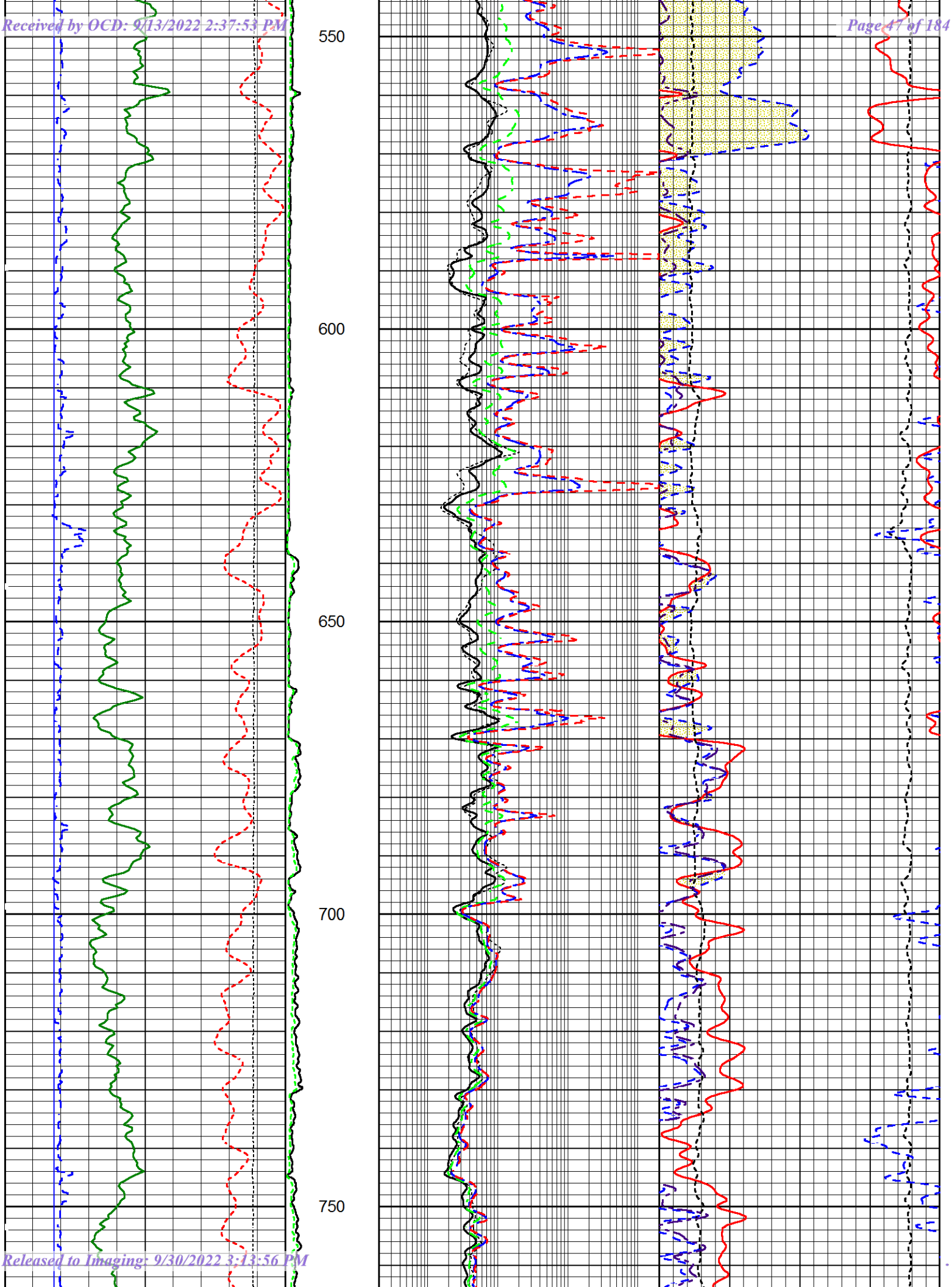

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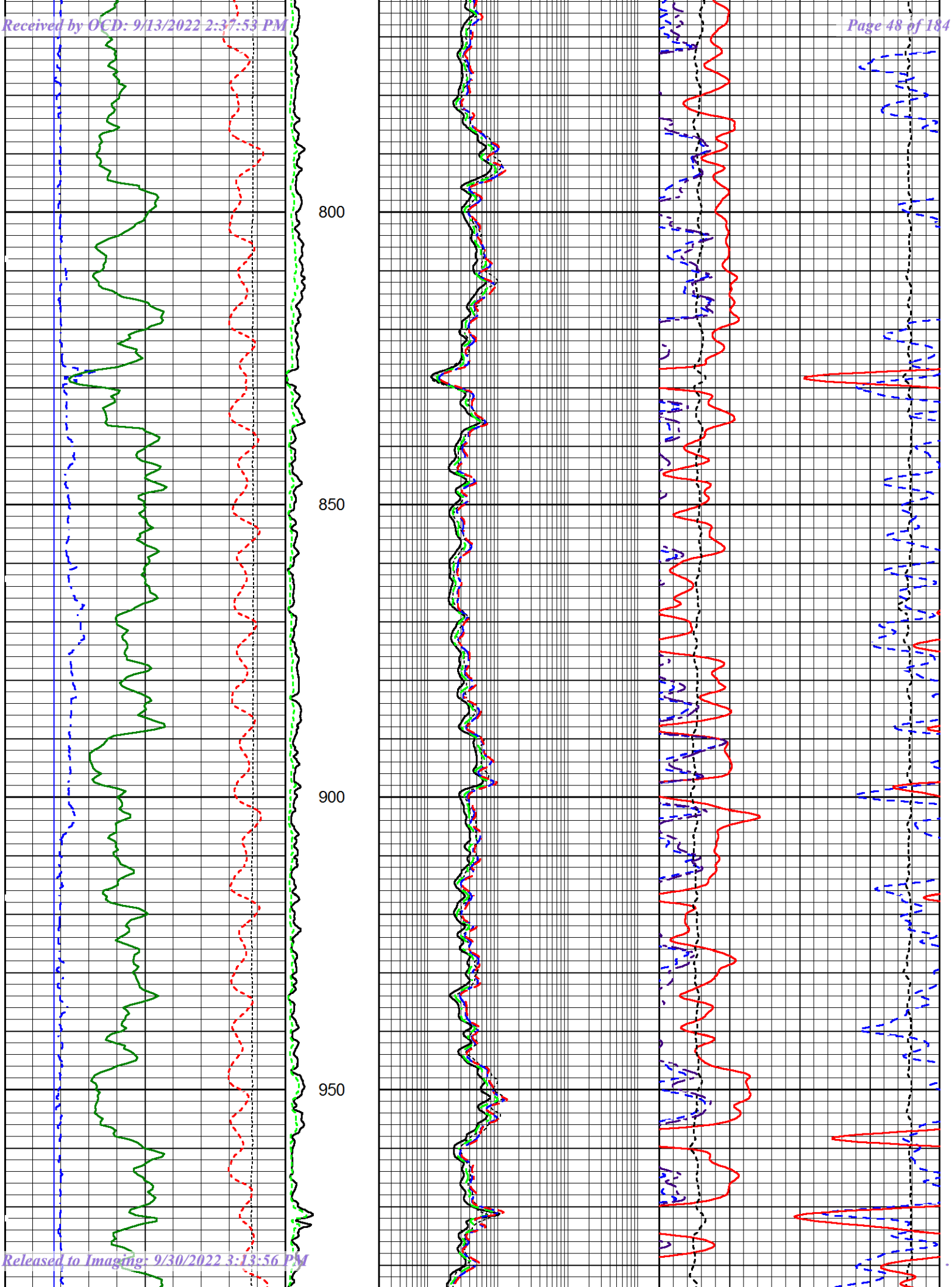
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850
900
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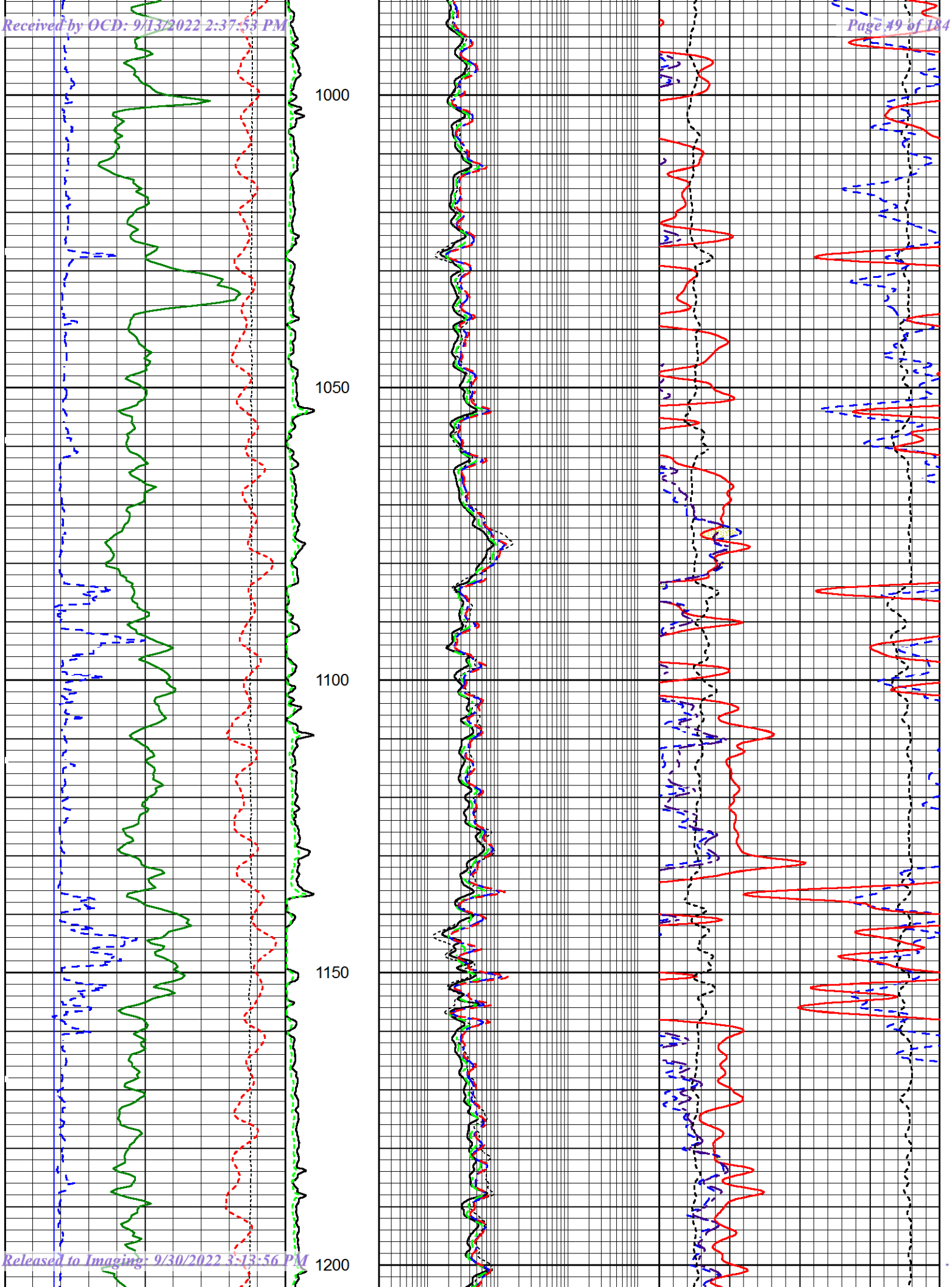

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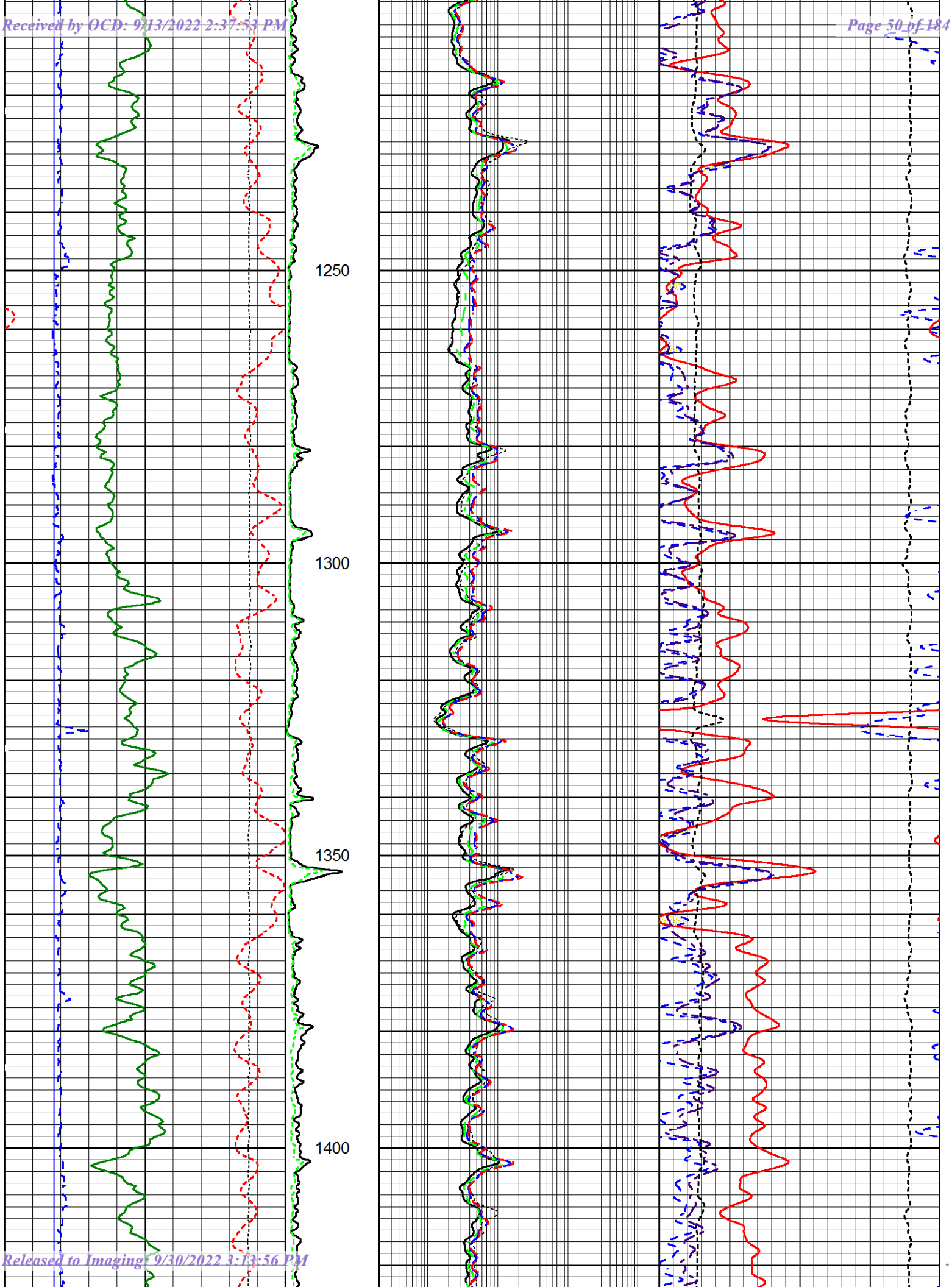
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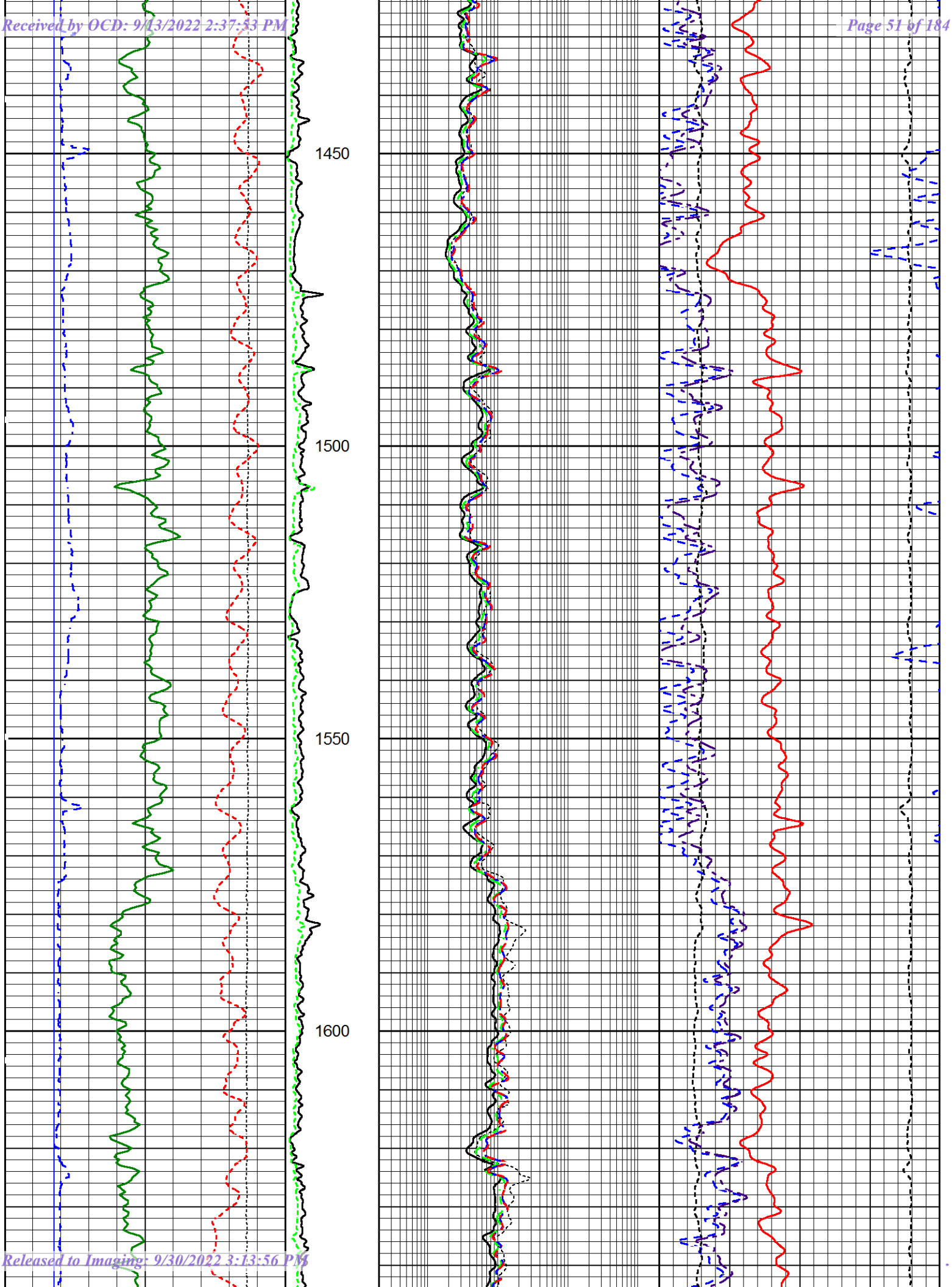
1300
1350
1400


1450
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1550
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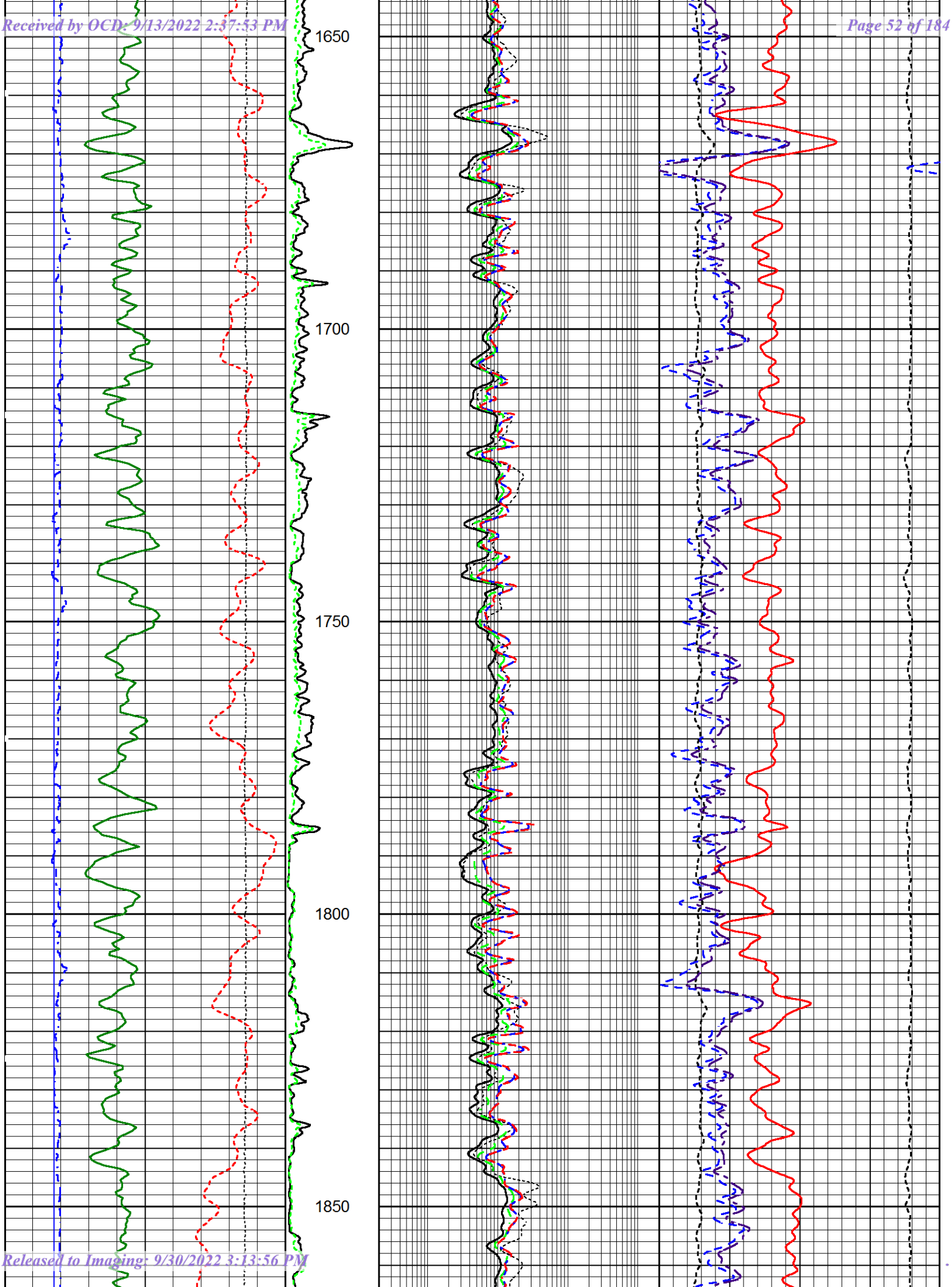

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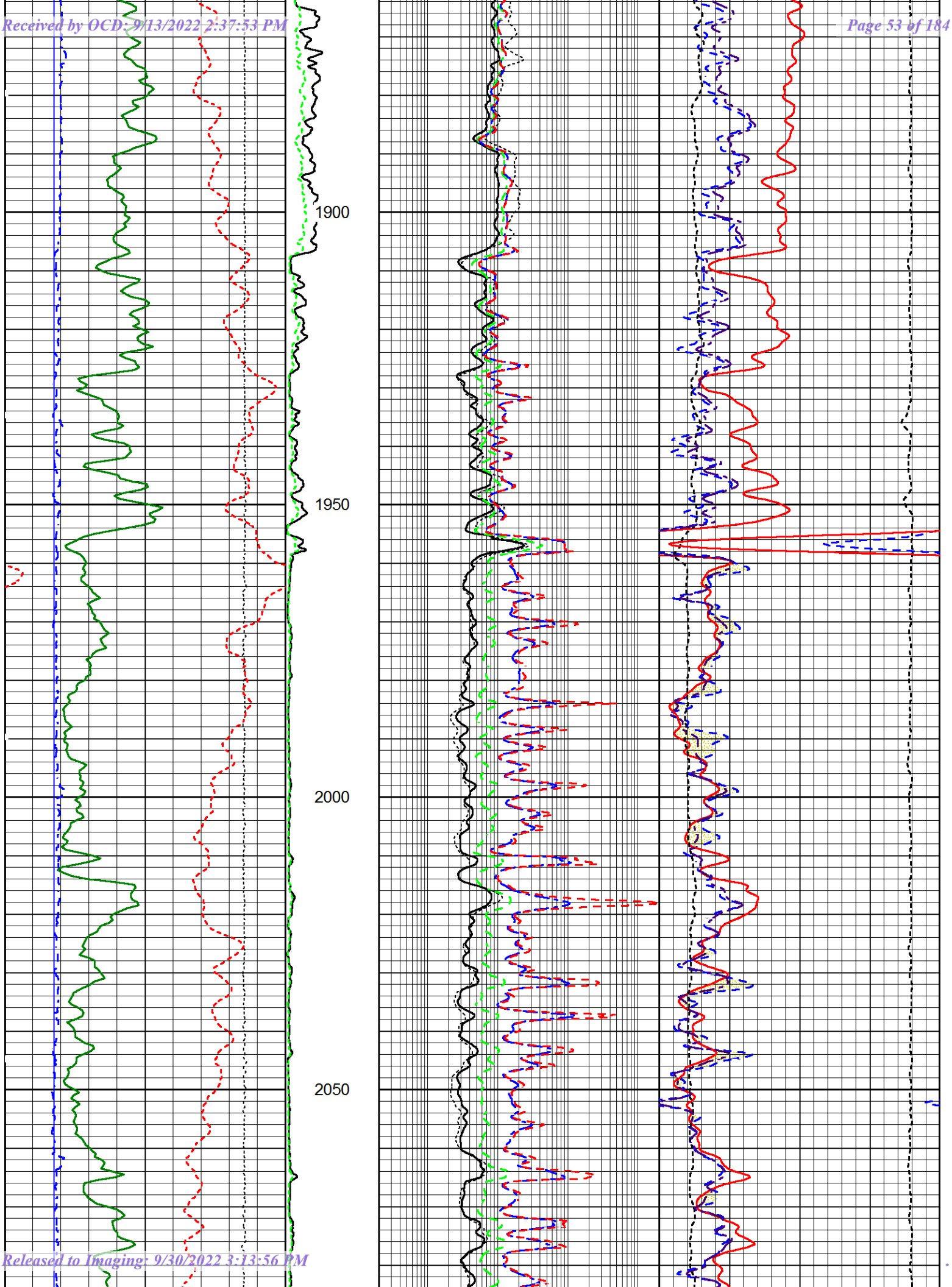
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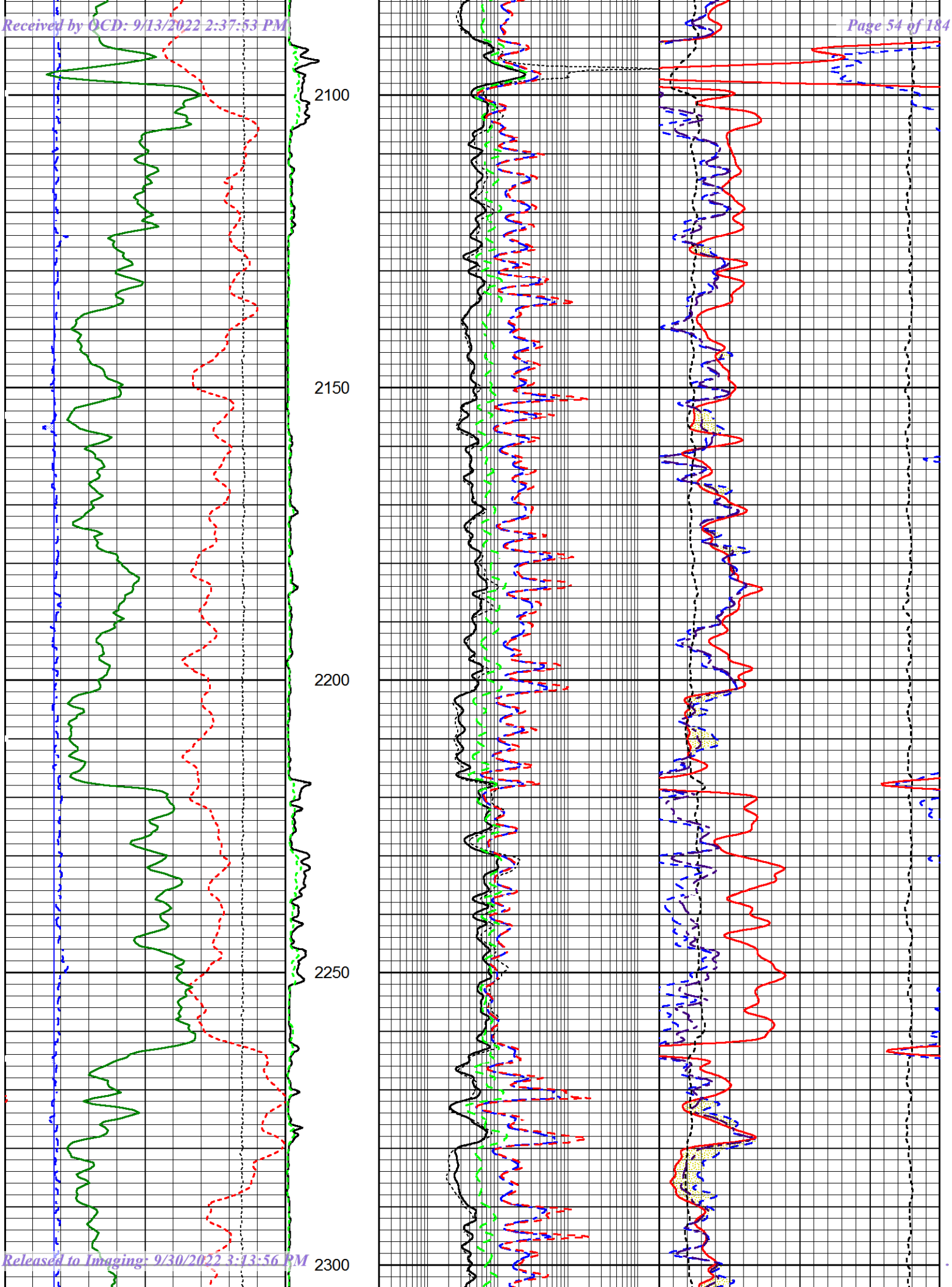
1950
2000
2050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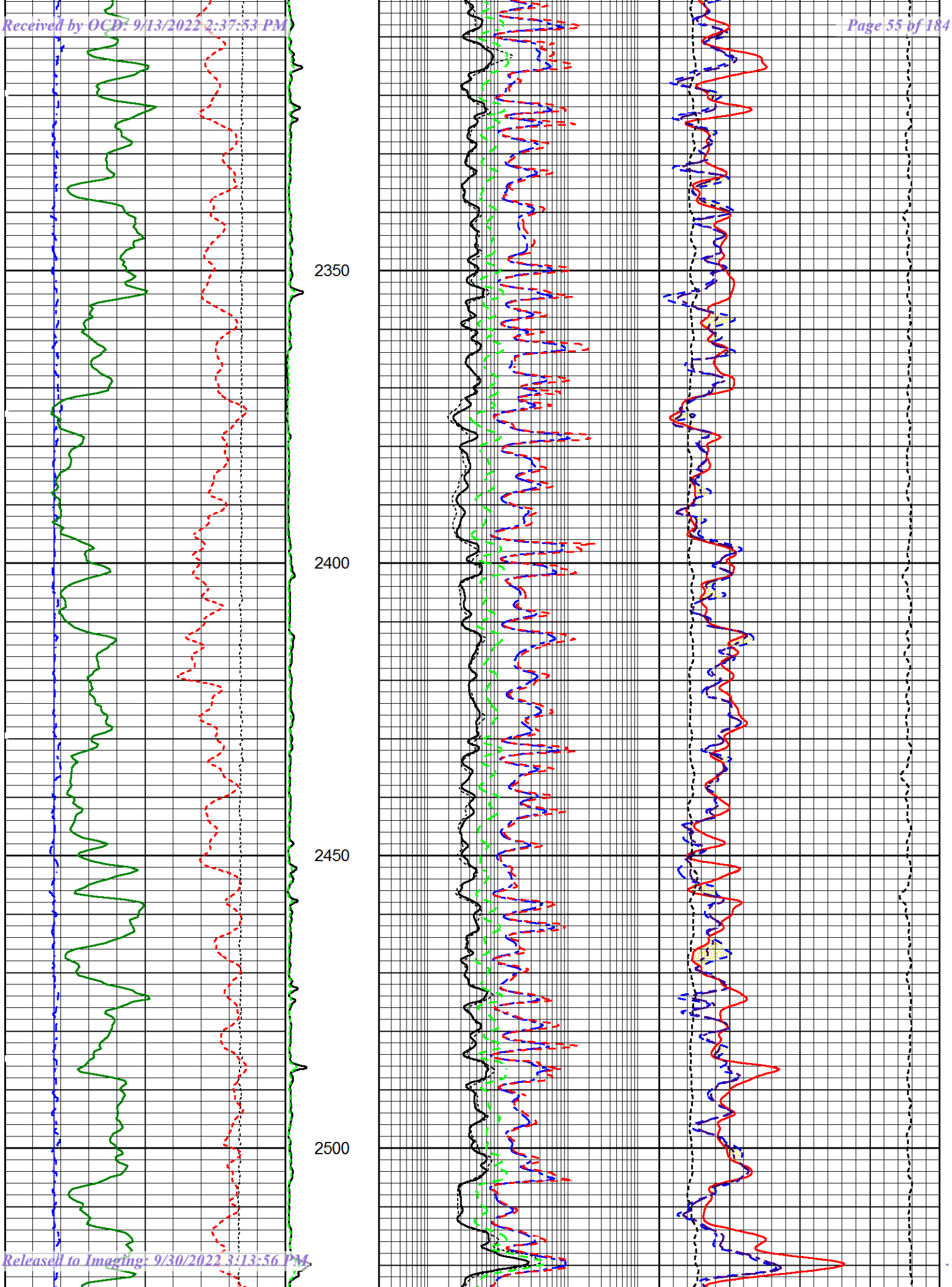
2150
2200
2250
2300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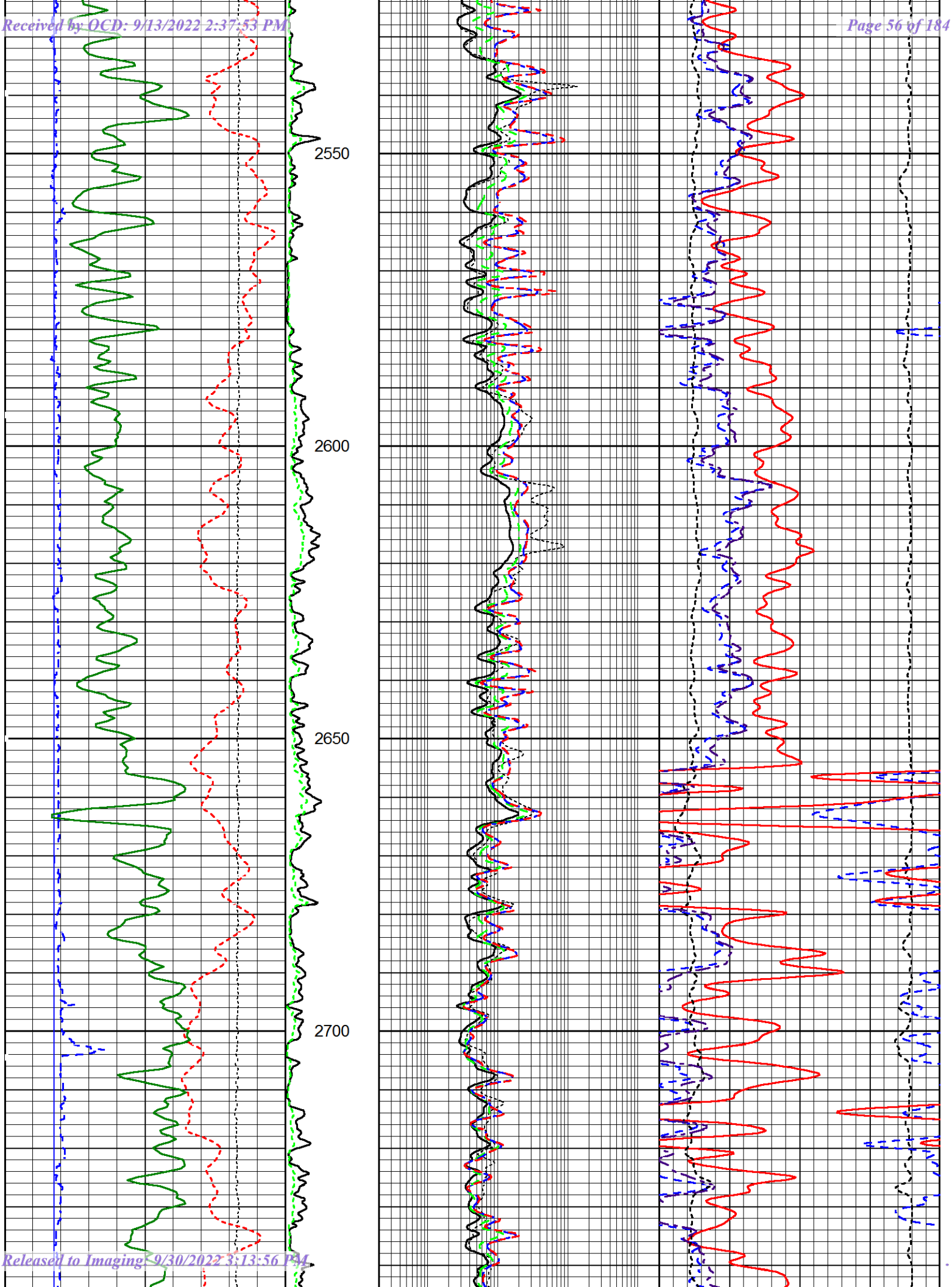
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2600
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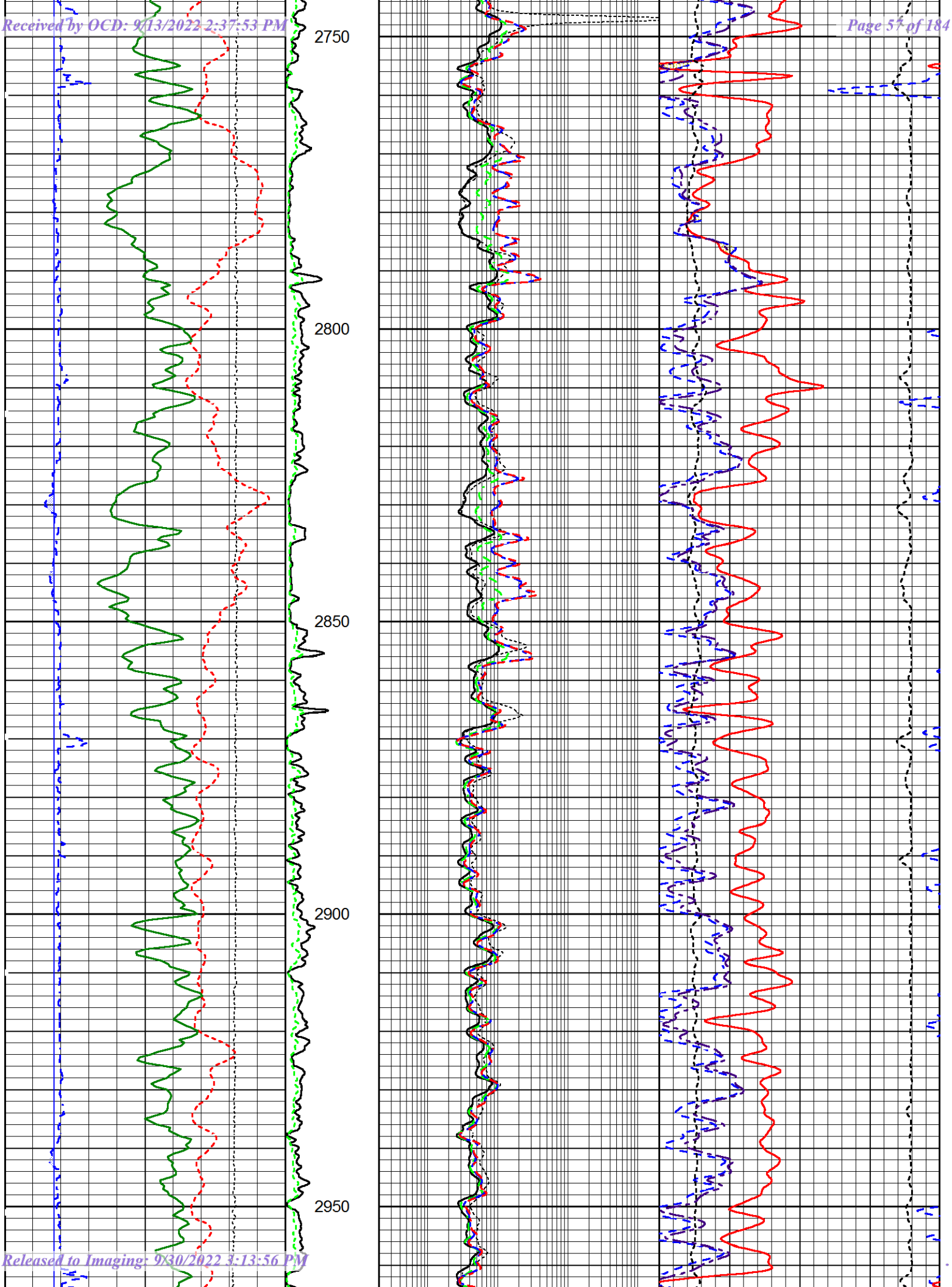
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2800
2850
2900
2950

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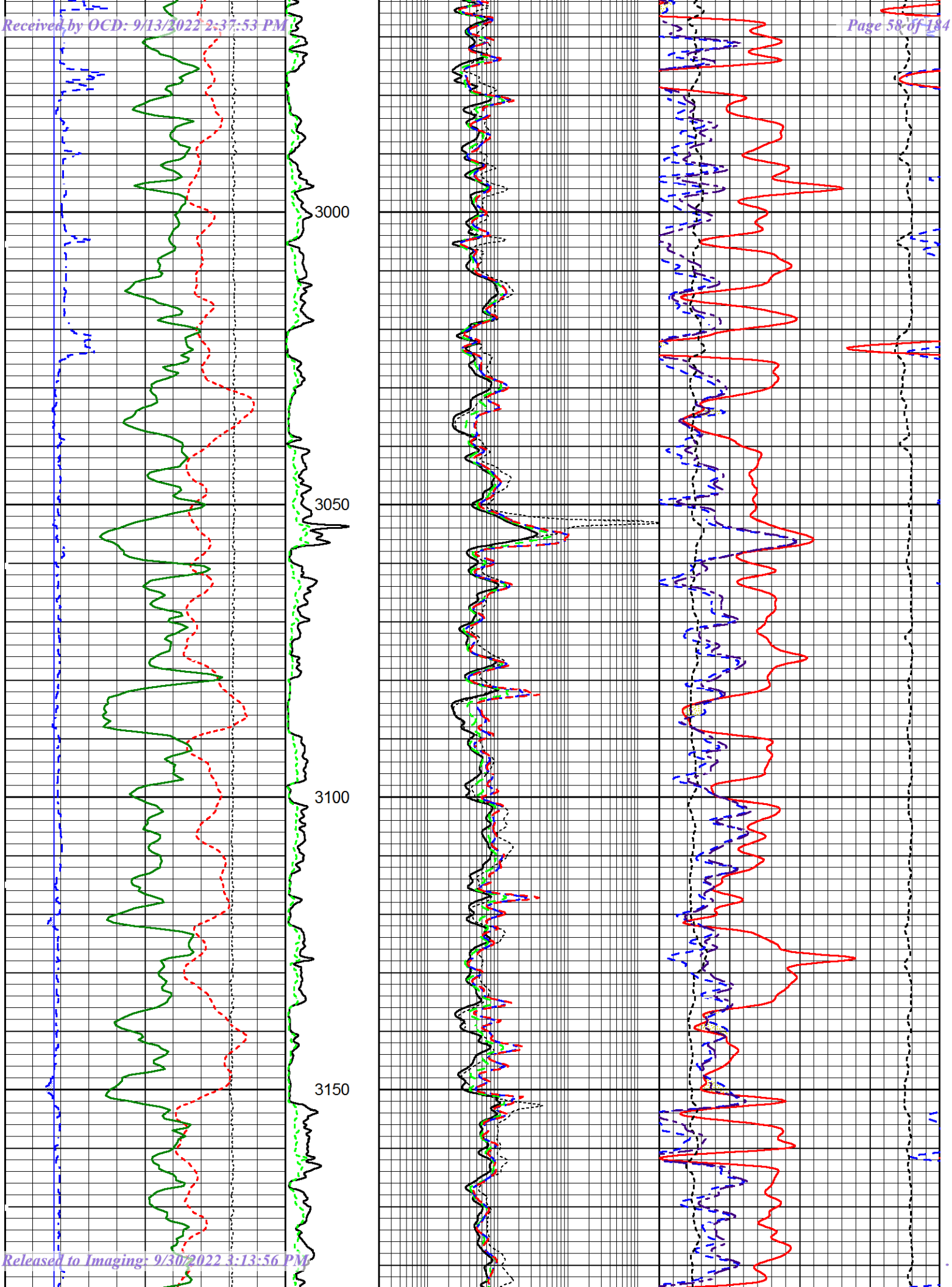

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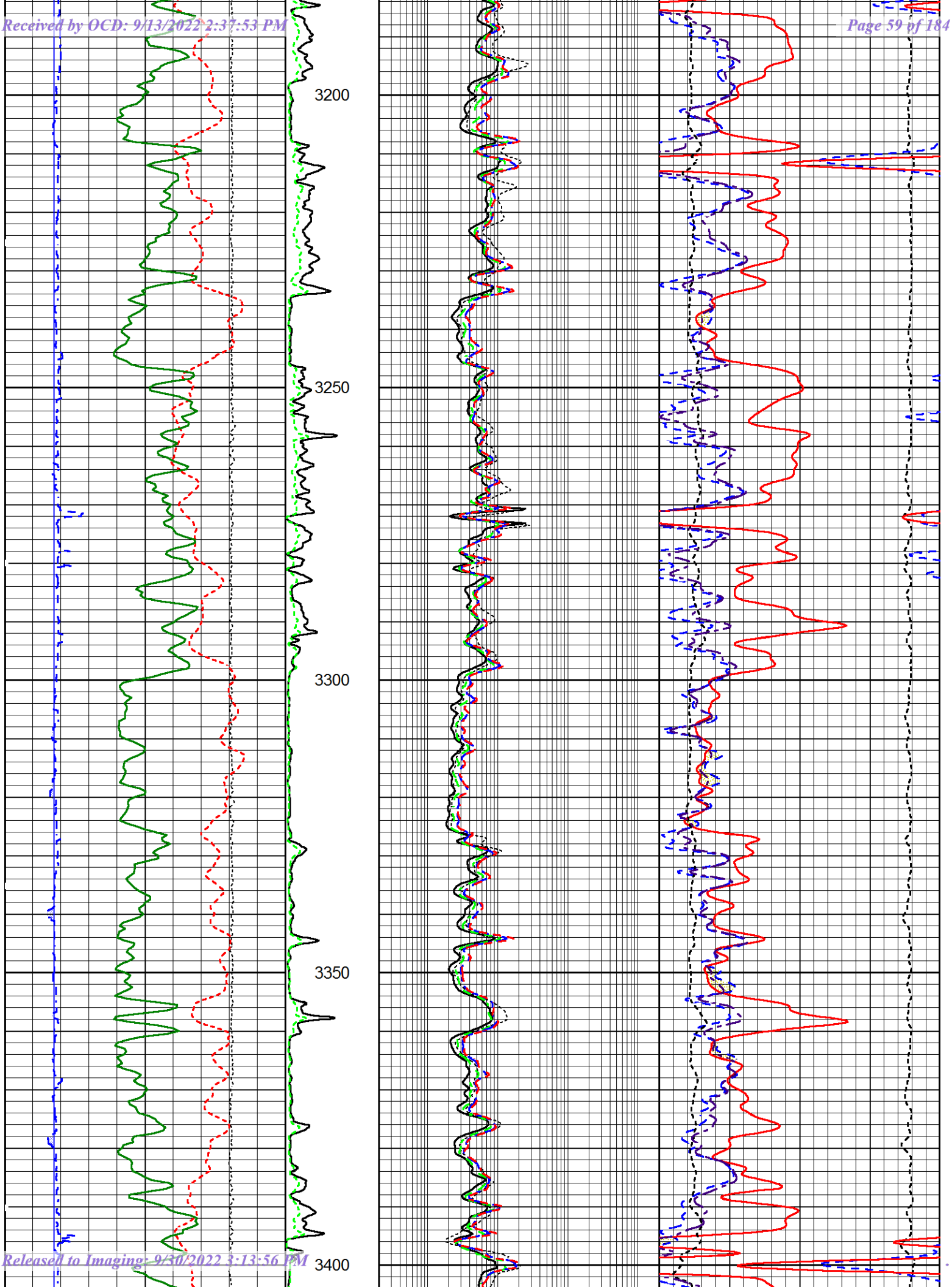
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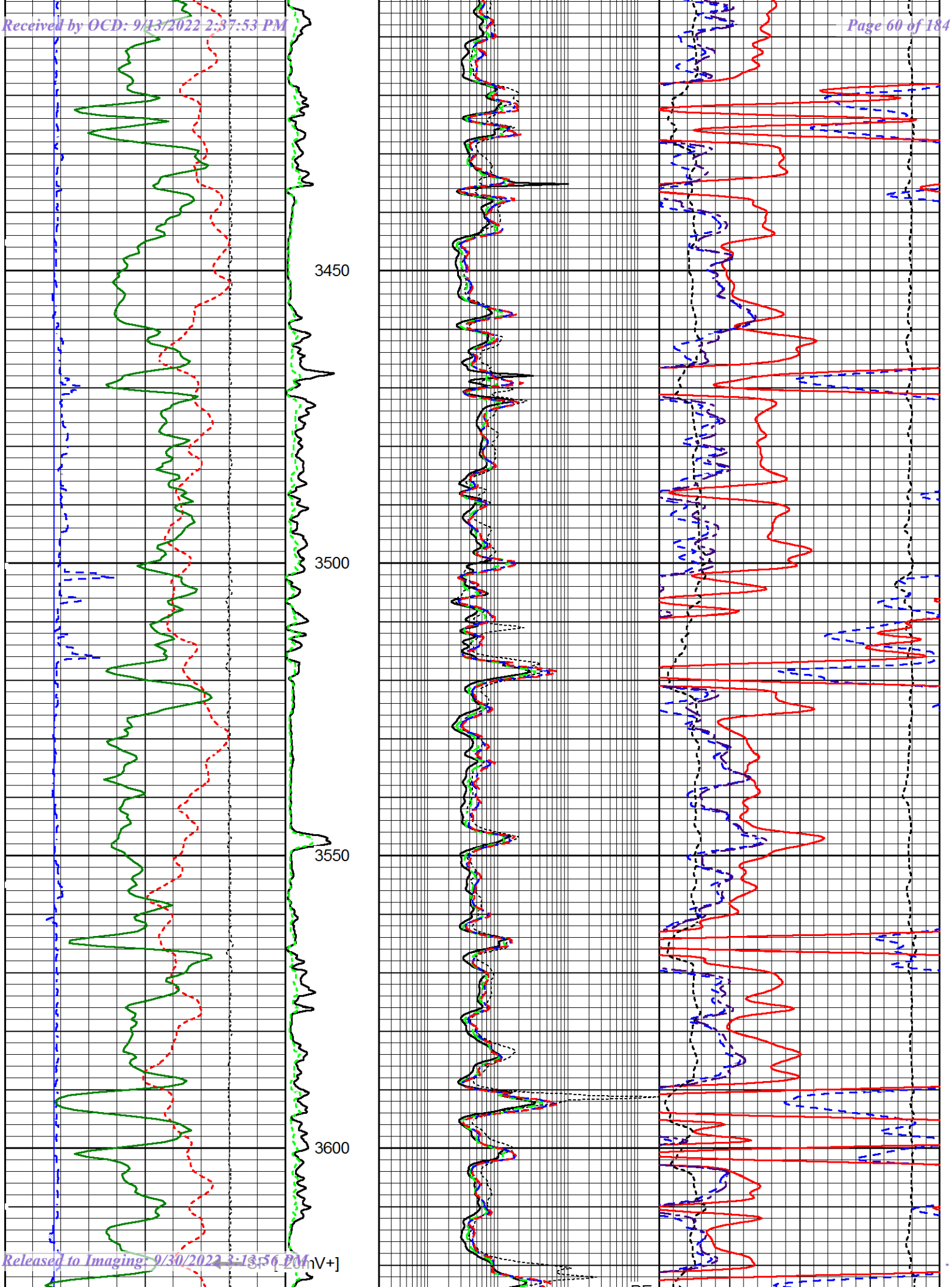
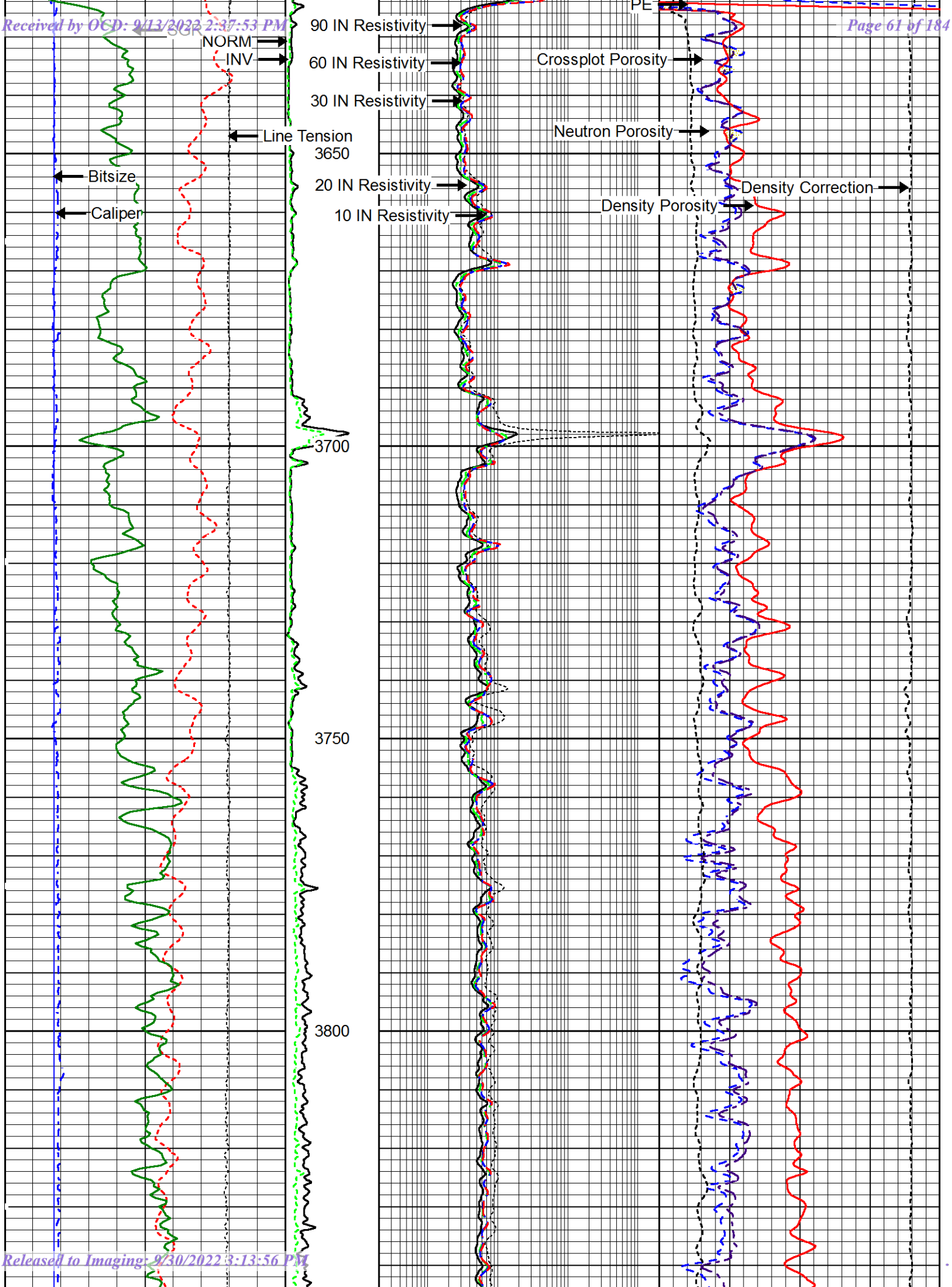
3250
3300
3350
3400


3450
3500
3550
3600
-20mV+]

Received by OCD: 9/13/2023 2:37:53 PM



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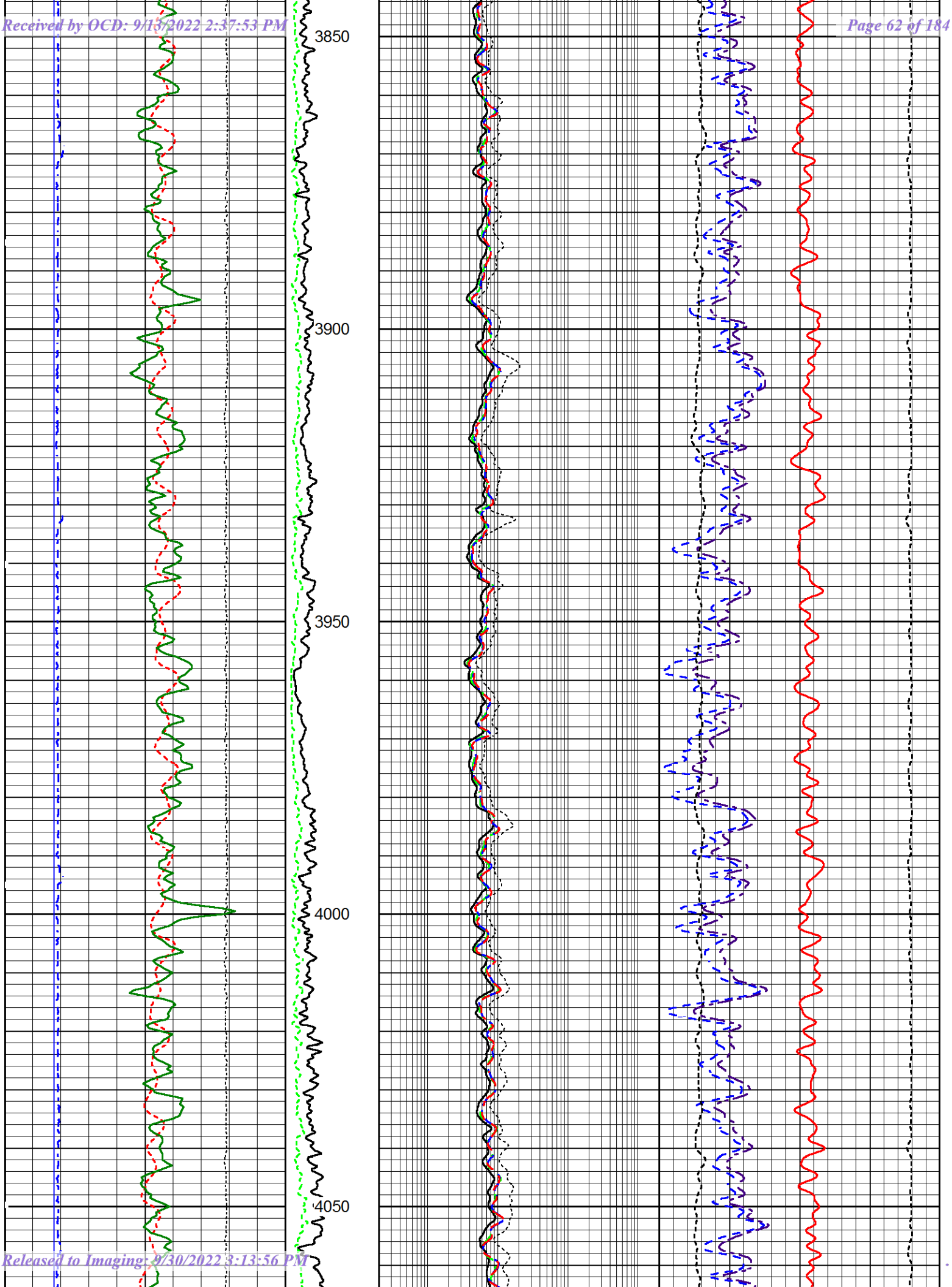
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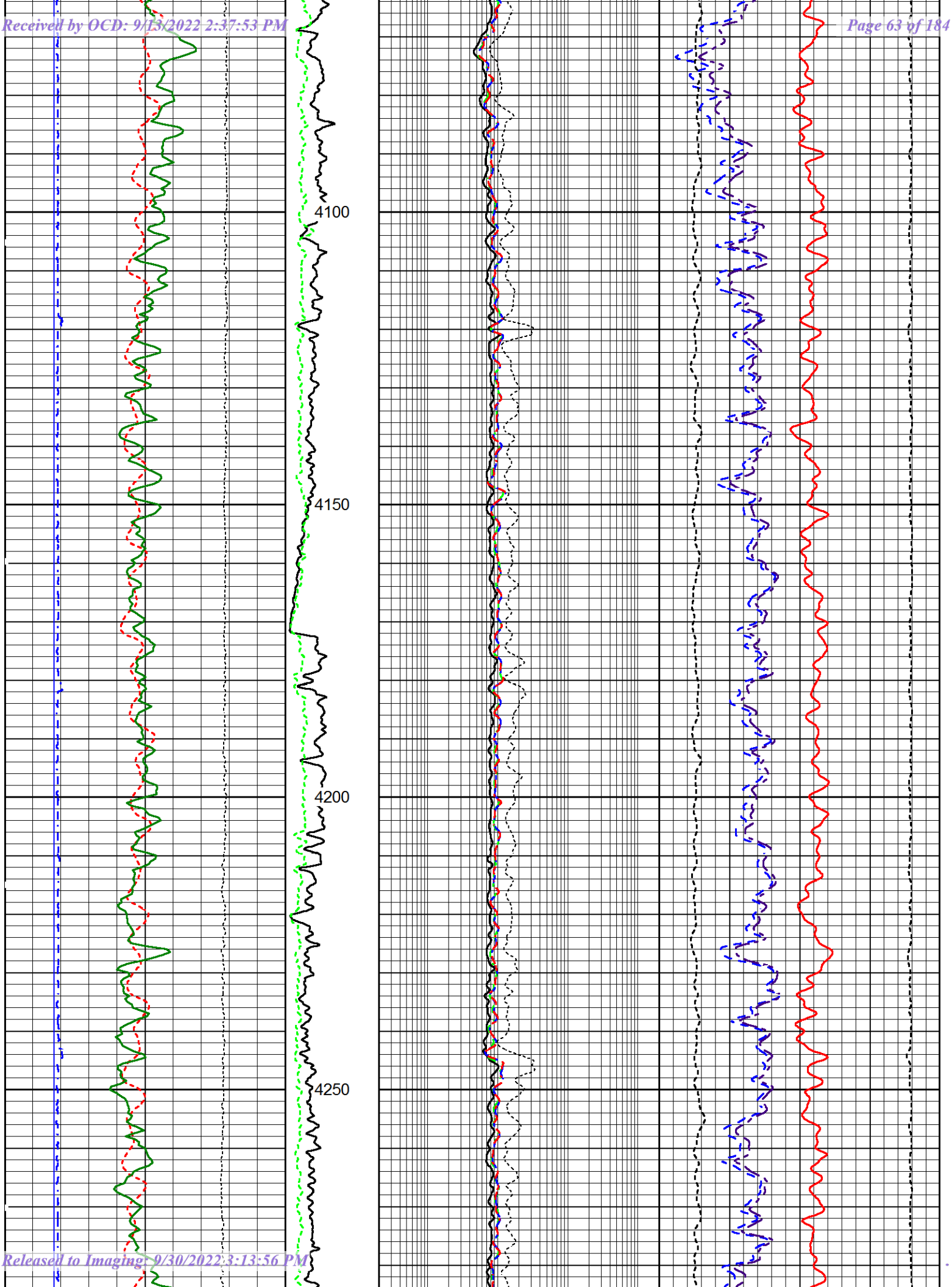
3900
3950
4000
4050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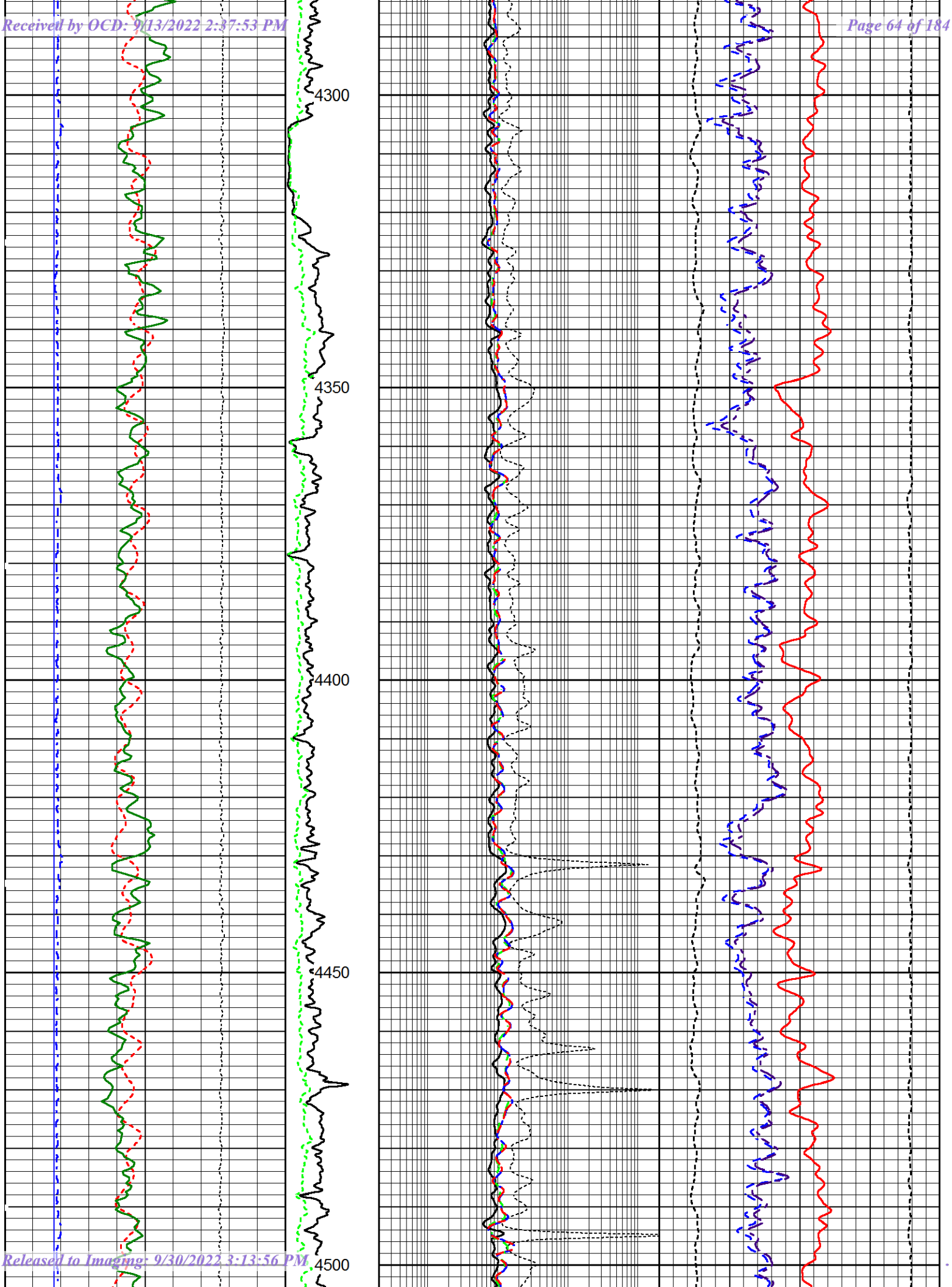
4150
4200
4250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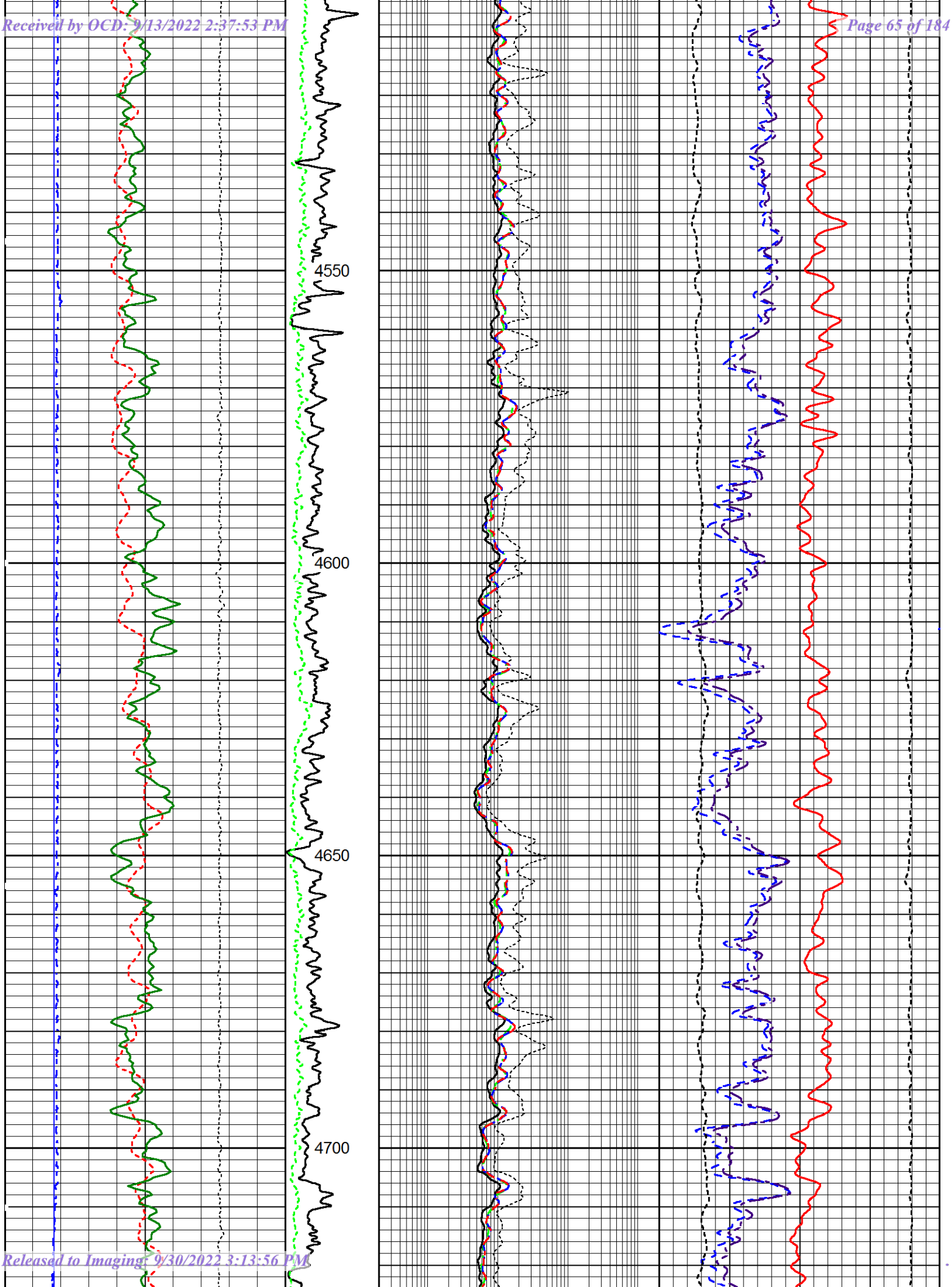
4400
4450
4500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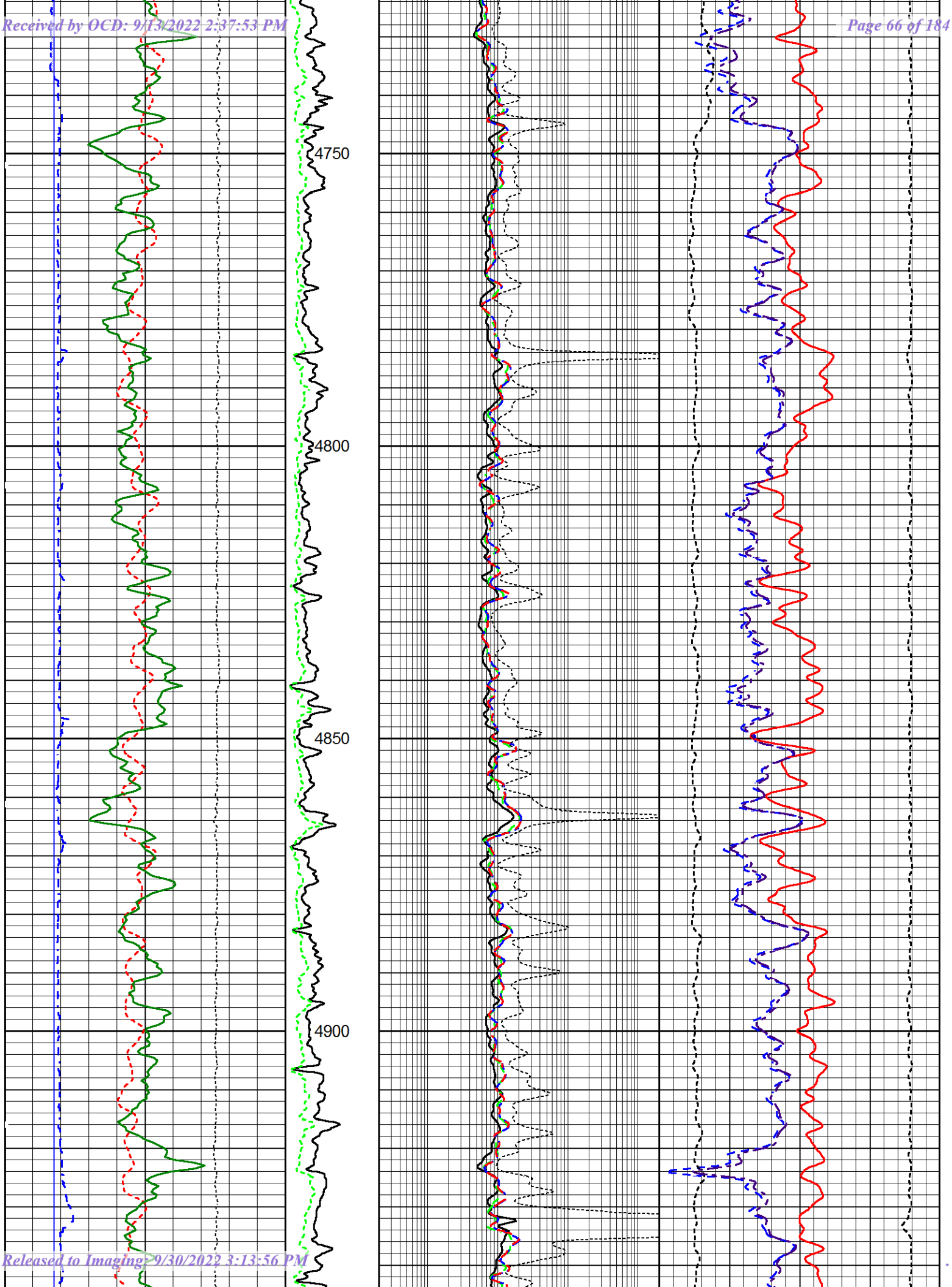
4600
4650
4700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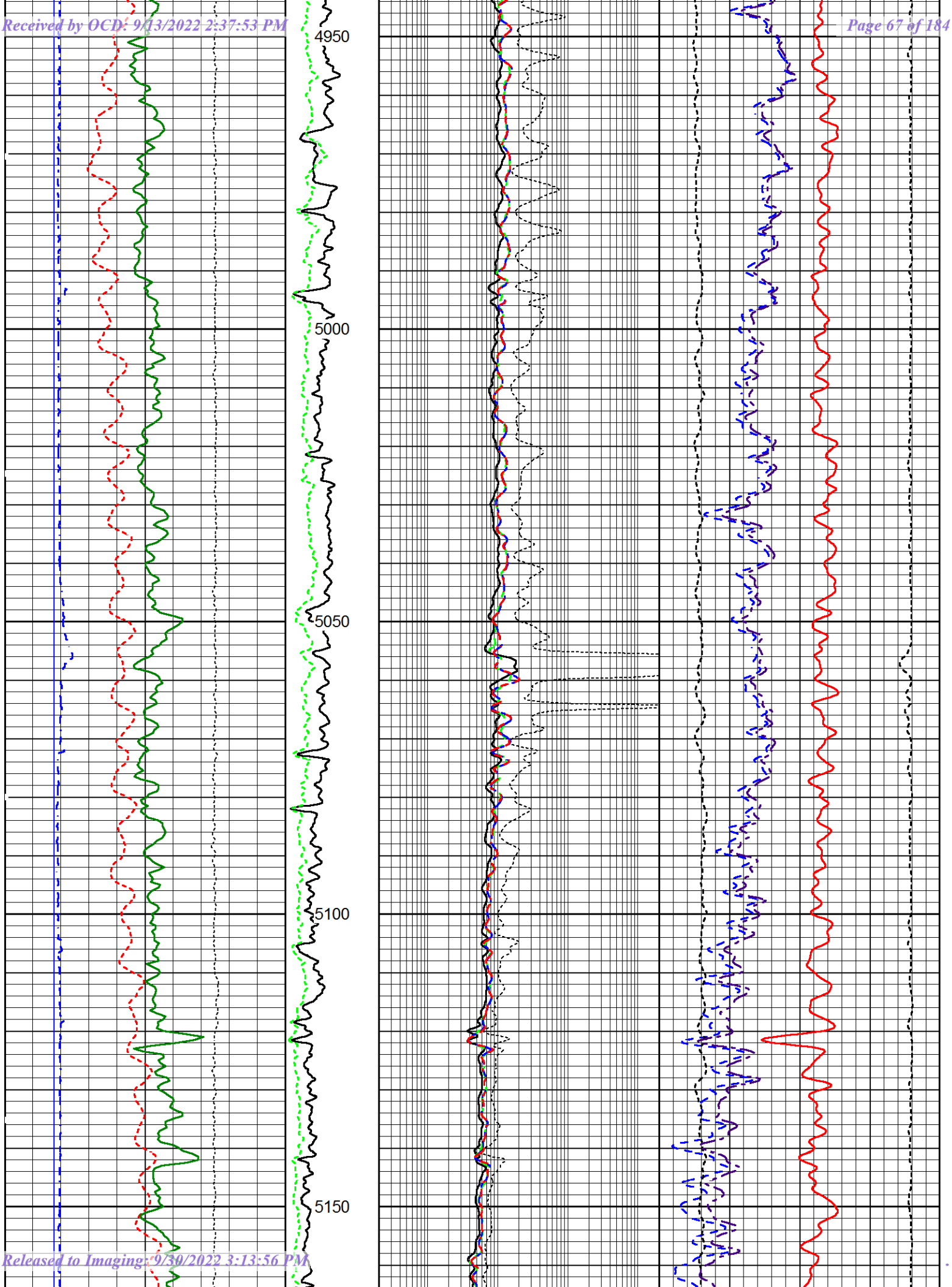
4800
4850
4900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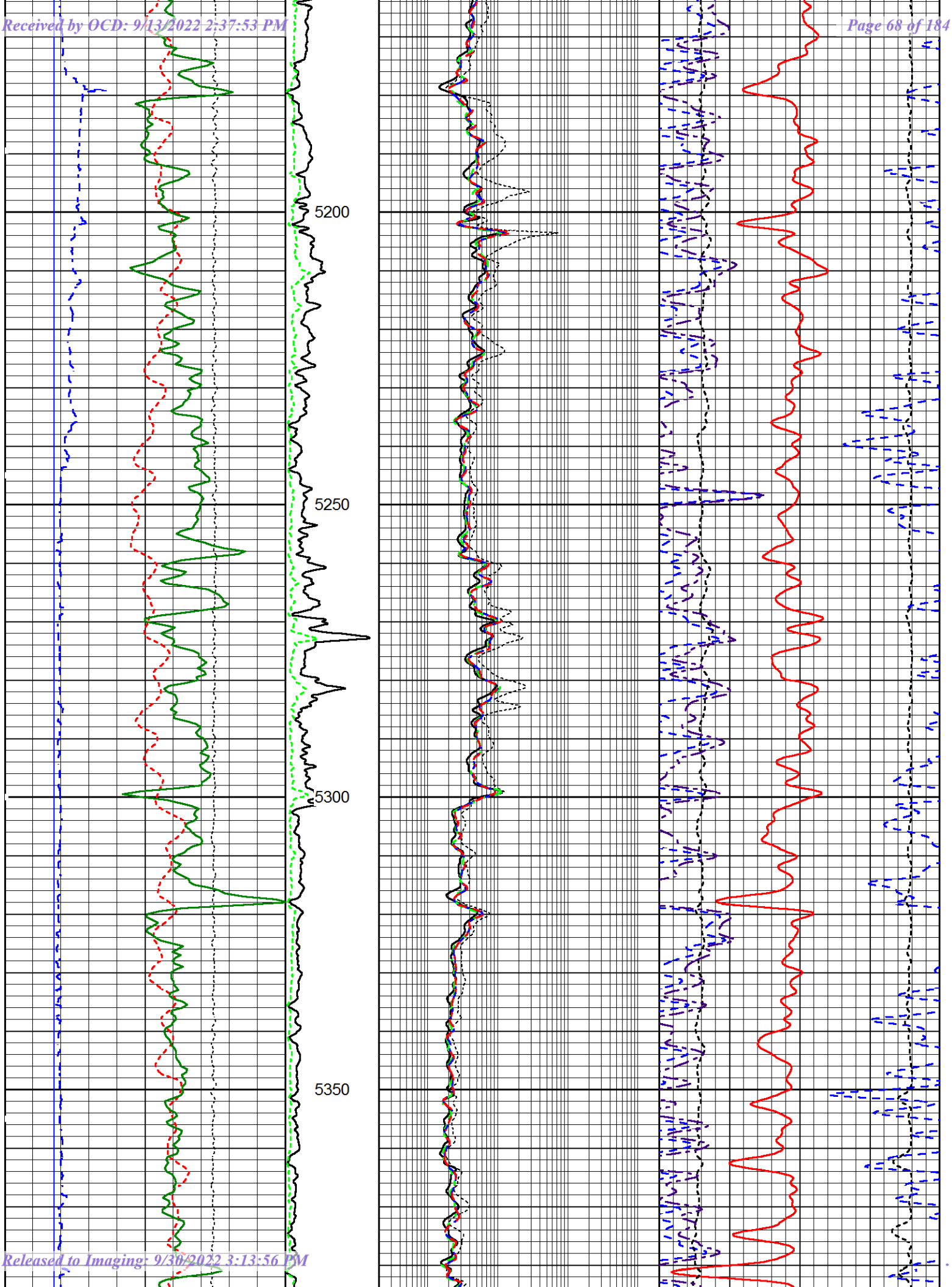
5000
5050
5100
5150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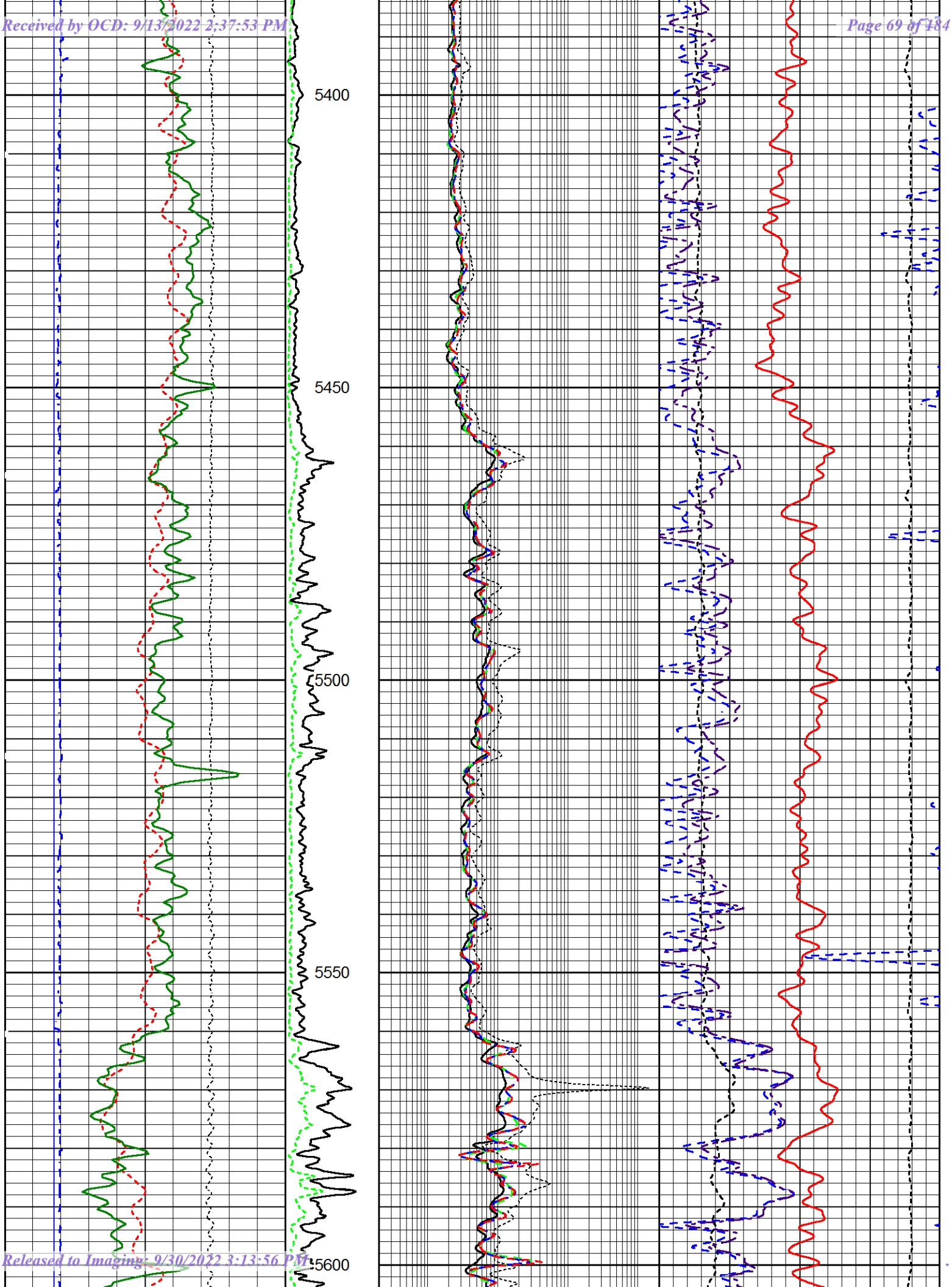
5350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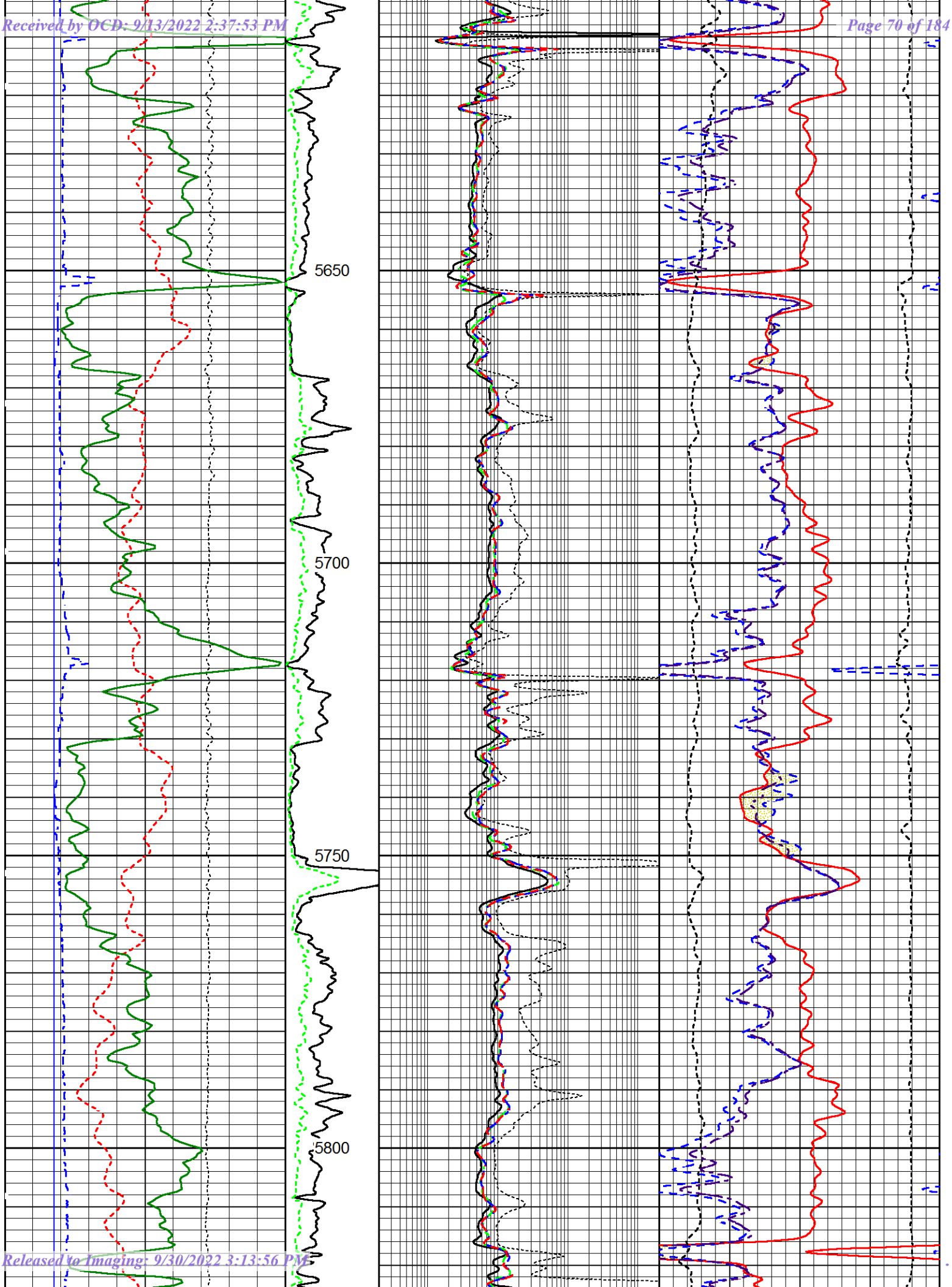
5600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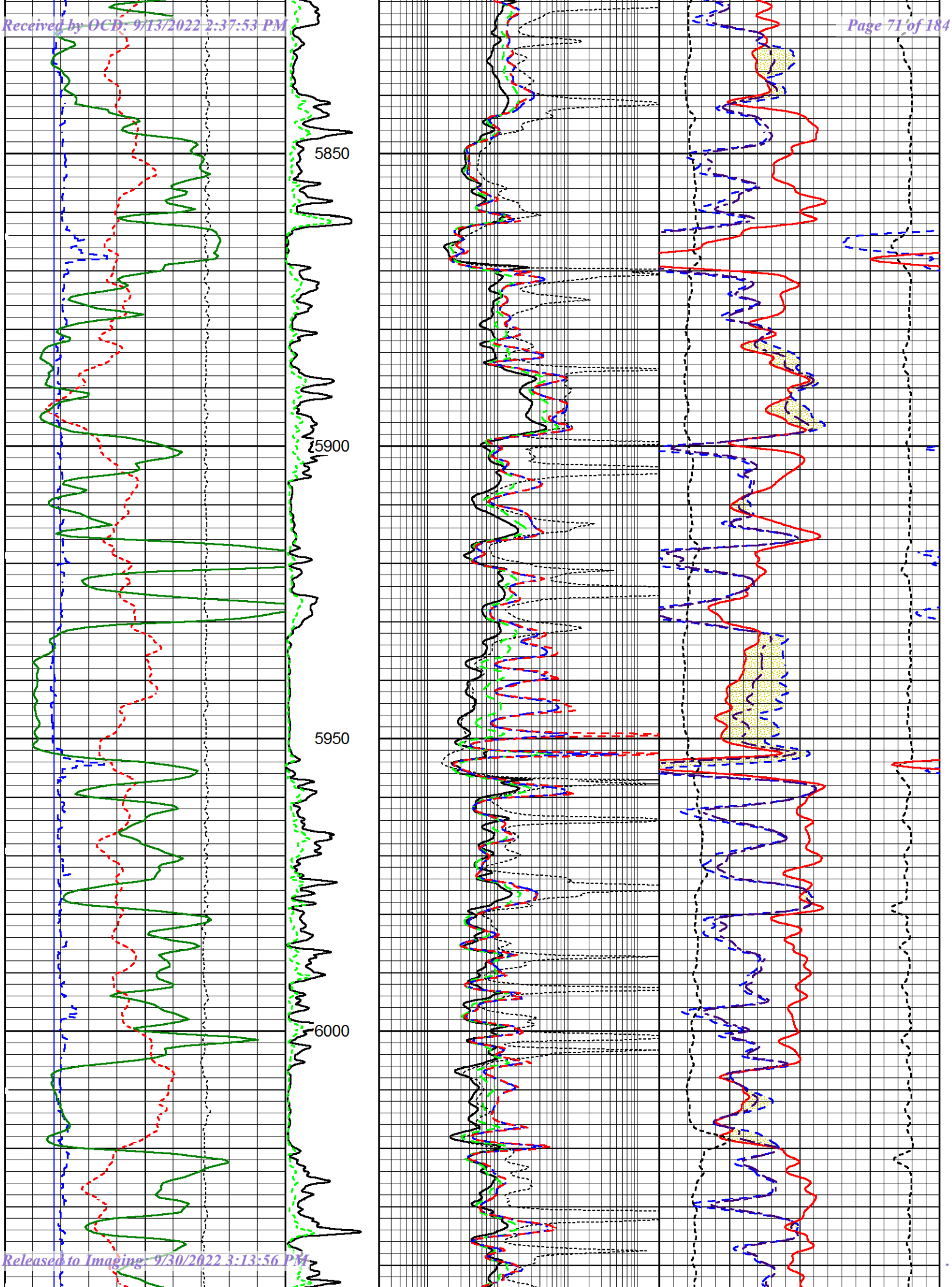

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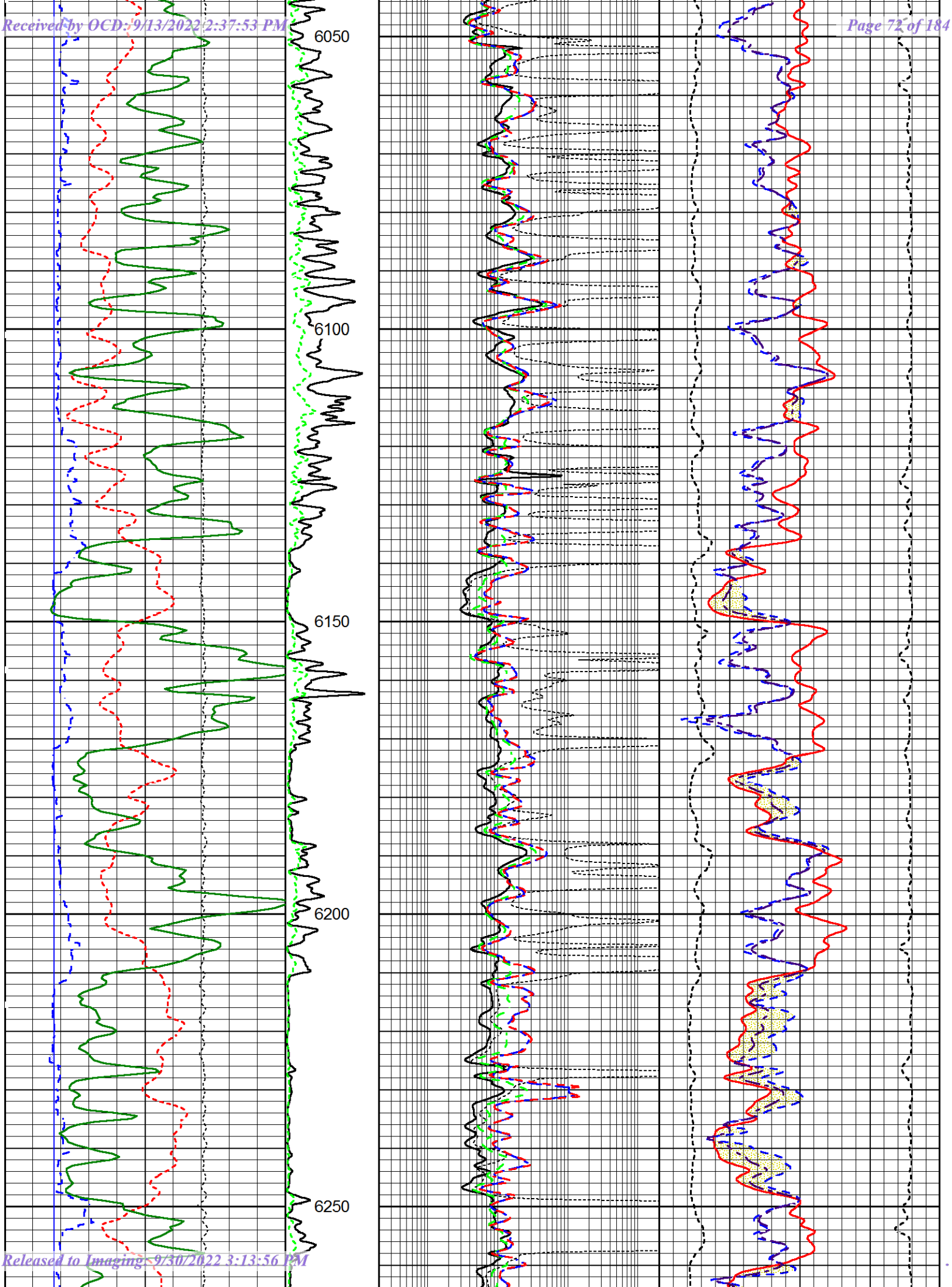
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6200
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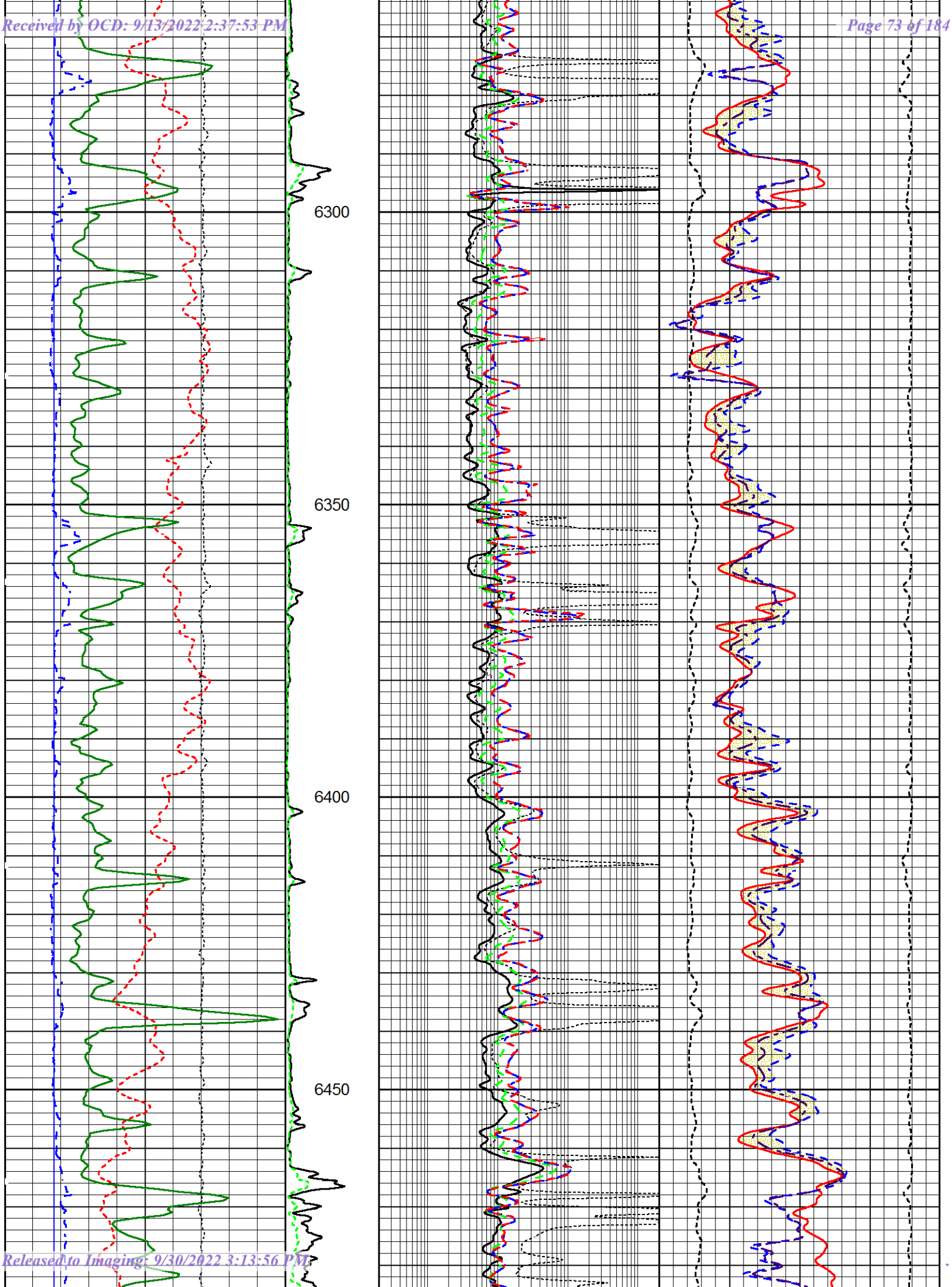
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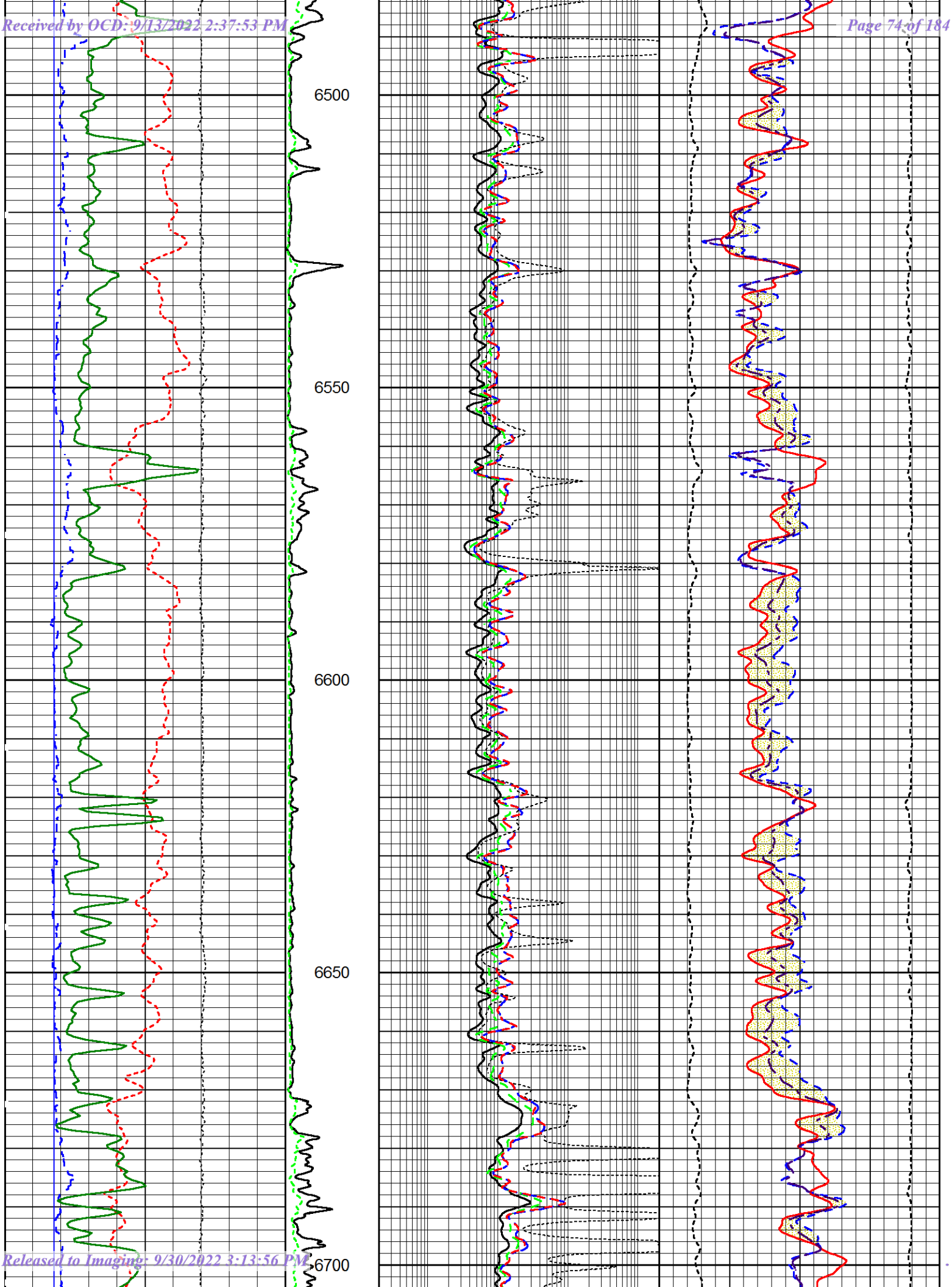
6450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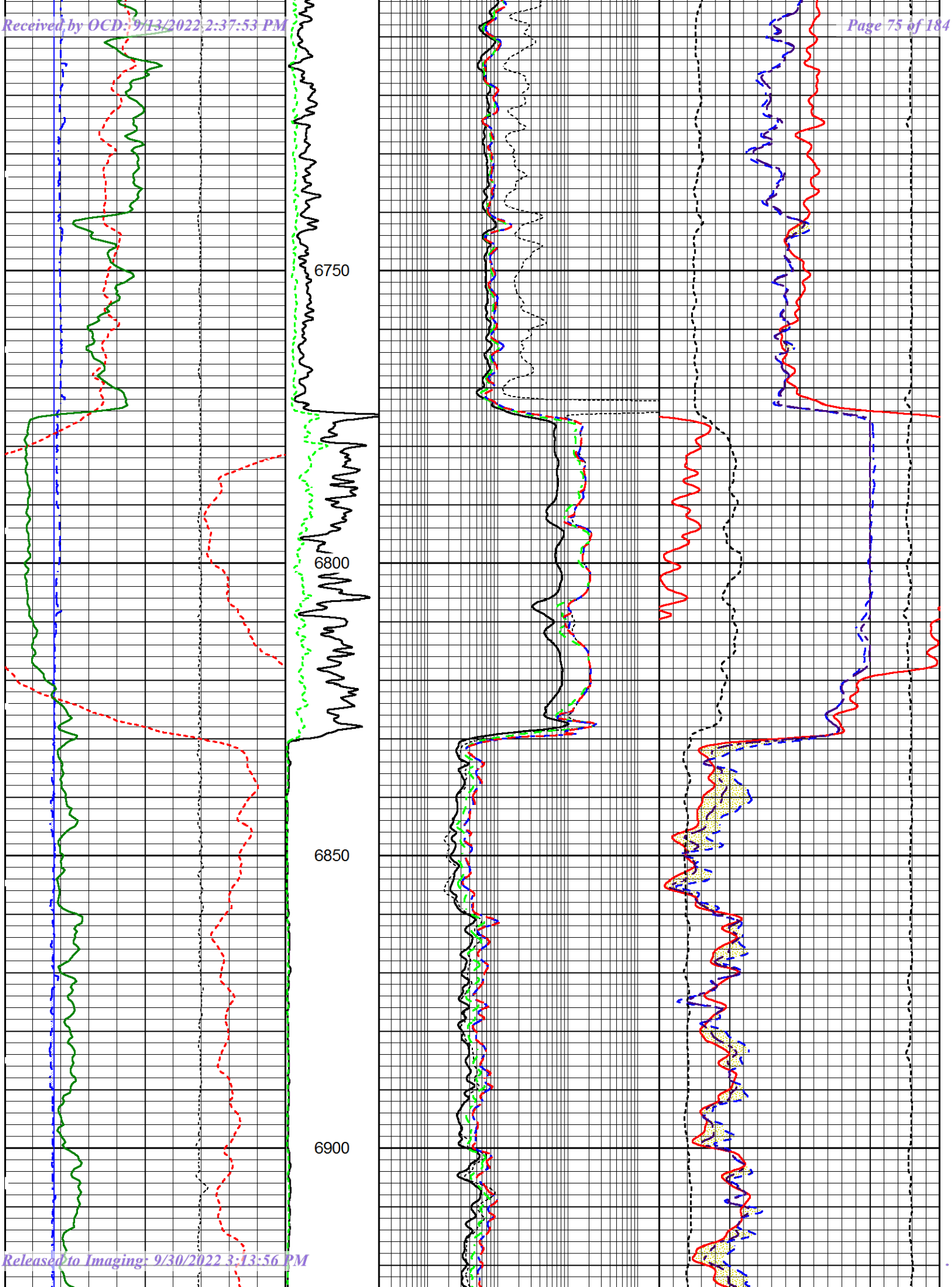
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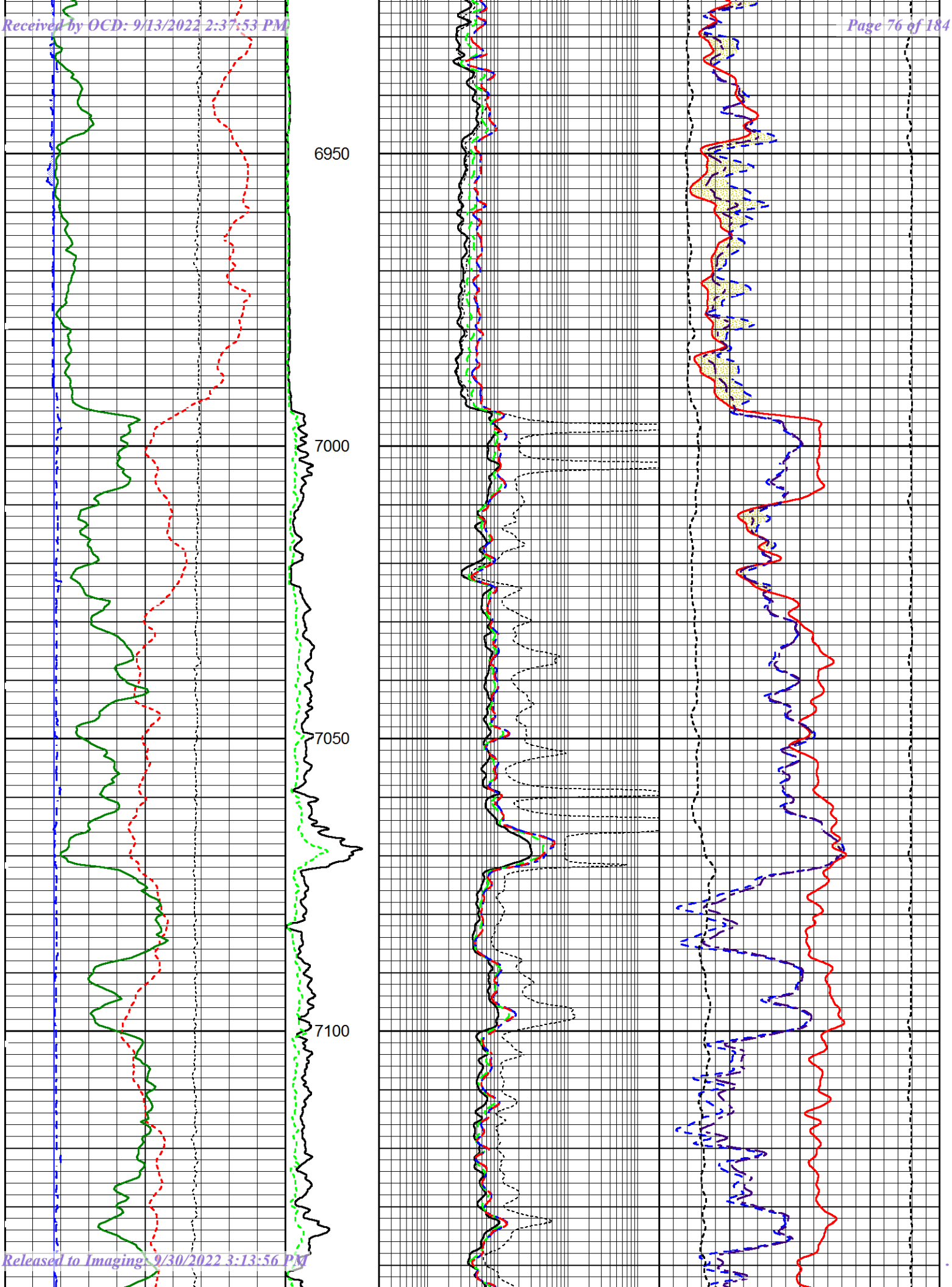
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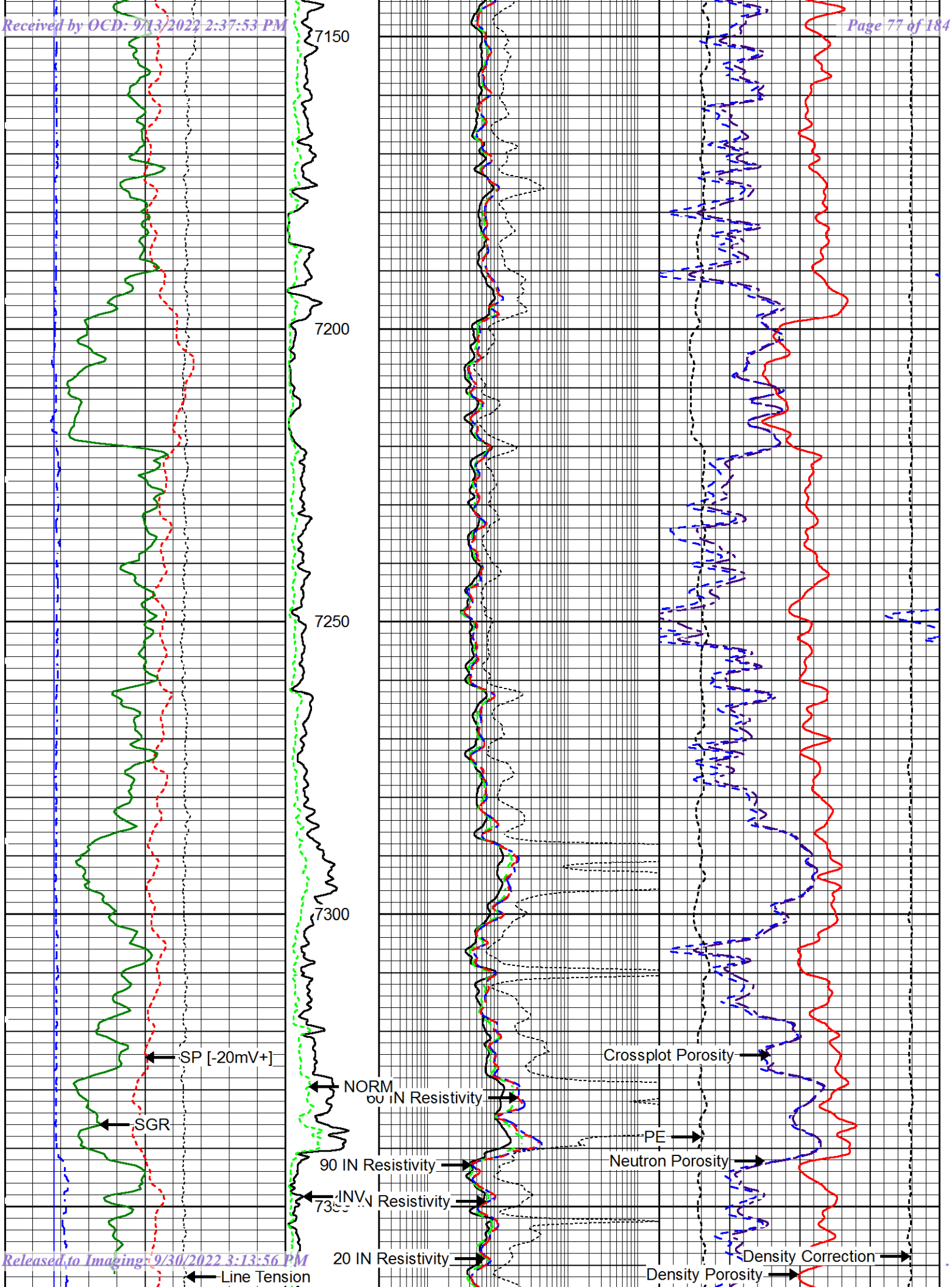
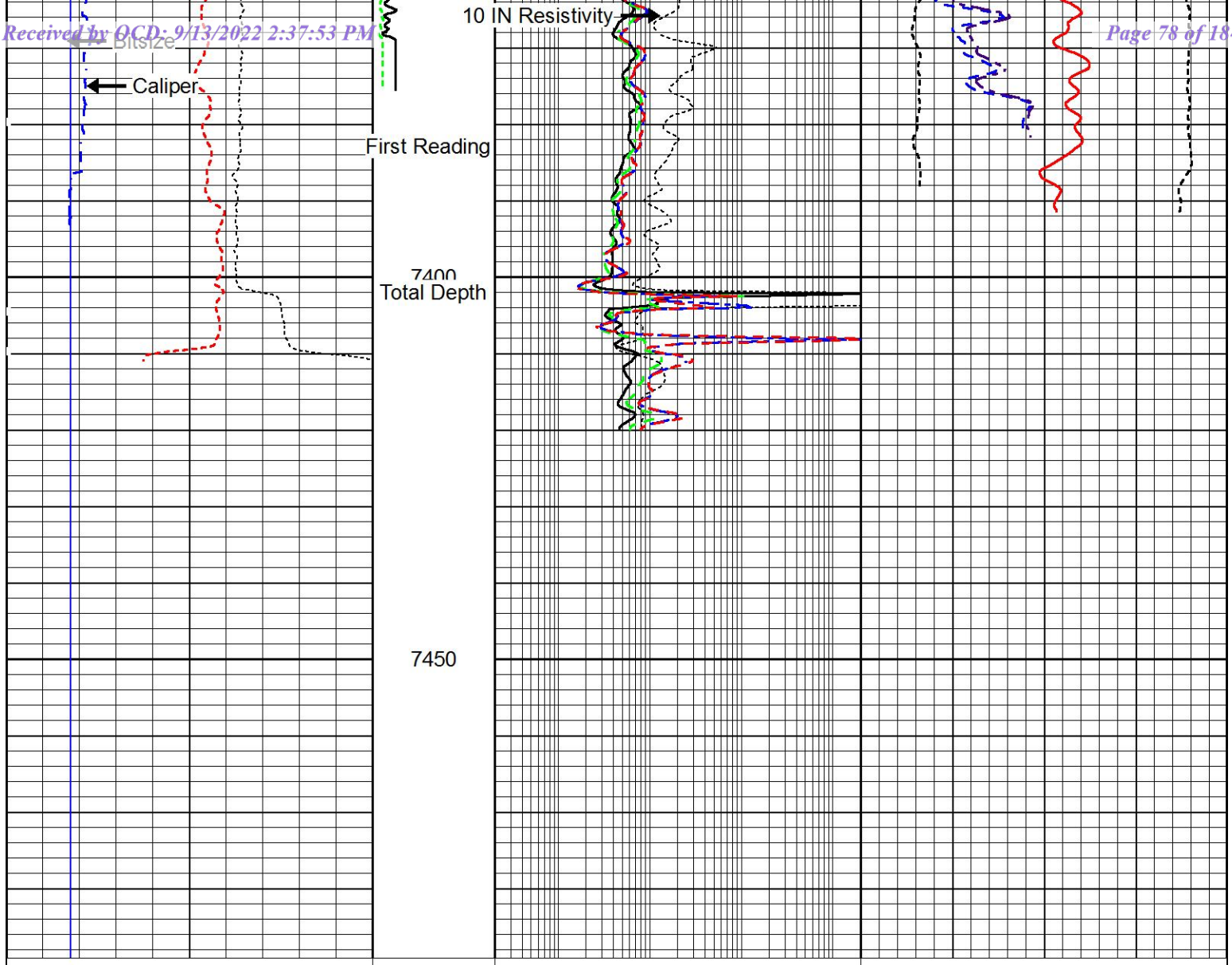
7000
7050
7100


7150
7200
7250
7300
SP [-20mV+]
SGR
Line Tension
NORM
60 IN Resistivity
90 IN Resistivity
INV
20 IN Resistivity
Crossplot Porosity
PE
Neutron Porosity
Density Correction
Density Porosity



7	Bitsize (in)	17	INV	0.2	10 IN Resistivity (Ohm-m)	2000	Neutron Porosity
7	Caliper (in)	17	(Ohm-m)	0.2	20 IN Resistivity (Ohm-m)	2000	0.3 (Porosity Decimal Fraction) -0.1
	SP [-20mV+]		0 20	0.2	30 IN Resistivity (Ohm-m)	2000	Density Porosity
0	SGR (GAPI)	200	NORM	0.2	60 IN Resistivity (Ohm-m)	2000	0.3 (Porosity Decimal Fraction) -0.1
	Line Tension		(Ohm-m)	0.2	90 IN Resistivity (Ohm-m)	2000	Crossplot Porosity
	5000 (lb)	0	0 20				0.3 (Porosity Decimal Fraction) -0.1
							0 PE 10 Density Correction
							0.8 (g/cc) -0.2

ALLIED HORIZONTAL WIRELINE SERVICES

Main Pass

ALLIED HORIZONTAL WIRELINE SERVICES

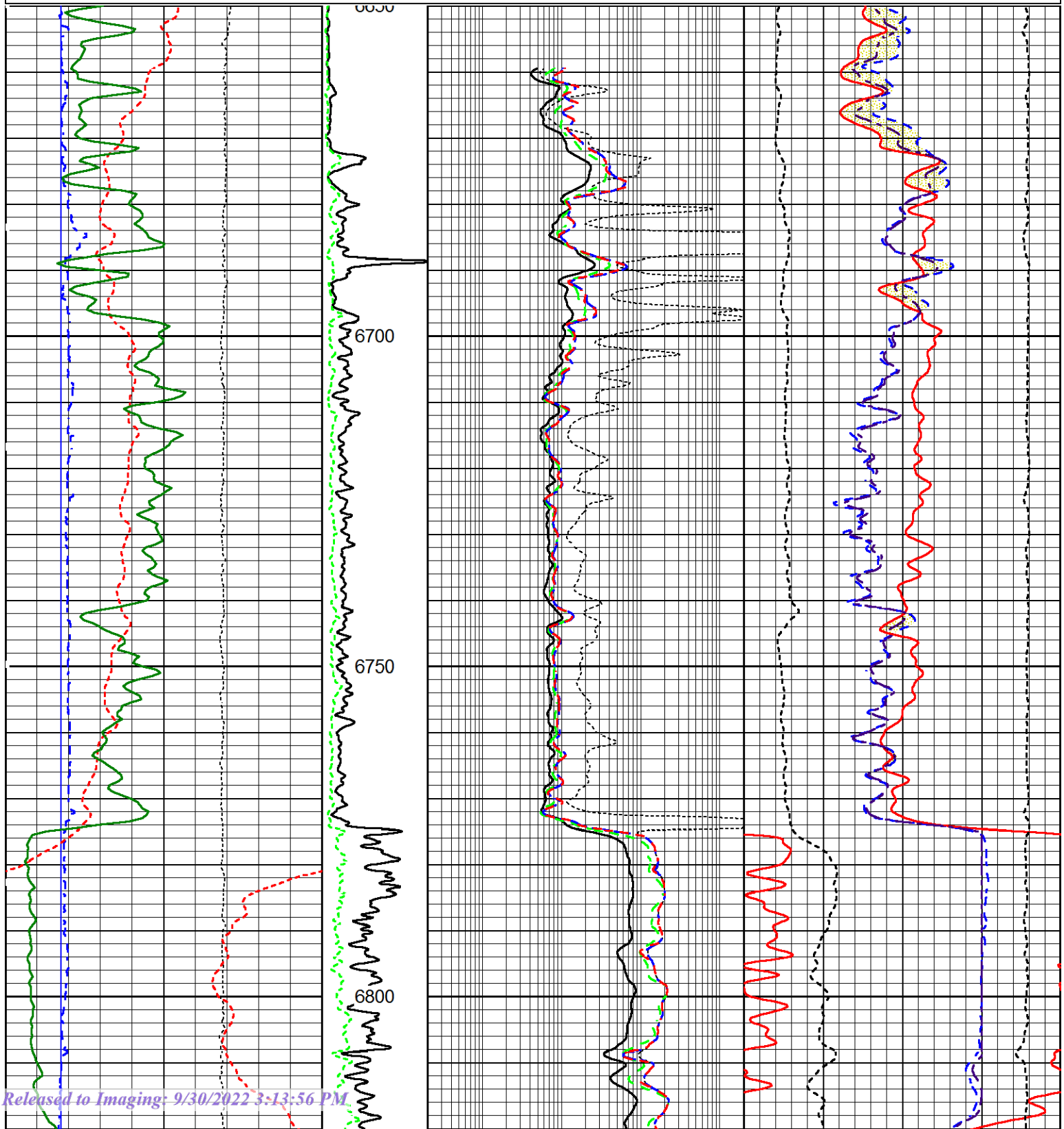
Repeat Pass

Database File	enduringreswlybrook.db
Dataset Pathname	West_Lybrook/well/run1/pass5
Presentation Format	3com_jat

Received by OCD: 9/13/2022 2:37:53 PM

Presentation Format 600m_lat
Dataset Creation Tue Jan 15 11:30:34 2019 by Log Sondex
Charted by Depth in Feet scaled 1:240

7 Bitsize (in) 17	INV (Ohm-m) 0 20	0.2 10 IN Resistivity (Ohm-m) 2000	Neutron Porosity 0.3 (Porosity Decimal Fraction) -0.1		
7 Caliper (in) 17		0.2 20 IN Resistivity (Ohm-m) 2000			
SP [-20mV+]		0.2 30 IN Resistivity (Ohm-m) 2000	Density Porosity 0.3 (Porosity Decimal Fraction) -0.1		
0 SGR (GAPI) 200	NORM (Ohm-m) 0 20	0.2 60 IN Resistivity (Ohm-m) 2000			
Line Tension 5000 (lb) 0		0.2 90 IN Resistivity (Ohm-m) 2000	Crossplot Porosity 0.3 (Porosity Decimal Fraction) -0.1	0 PE 10	Density Correction 0.8 (g/cc) -0.2



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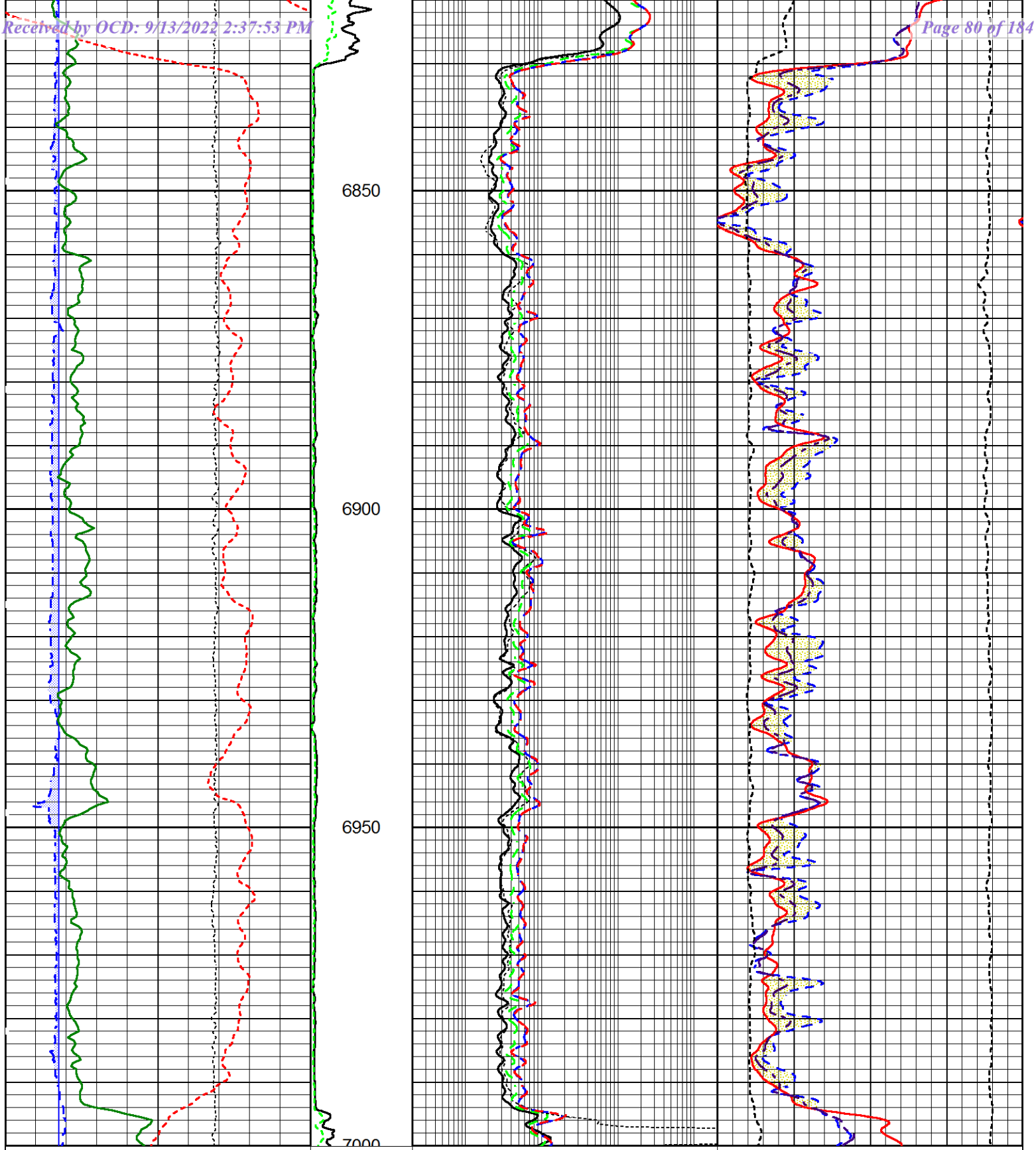


7 Bitsize (in) 17	INV (Ohm-m) 0 20	0.2 10 IN Resistivity (Ohm-m) 2000
7 Caliper (in) 17		0.2 20 IN Resistivity (Ohm-m) 2000
SP [-20mV+]		0.2 30 IN Resistivity (Ohm-m) 2000
0 SGR (GAPI) 200	NORM (Ohm-m) 0 20	0.2 60 IN Resistivity (Ohm-m) 2000
Line Tension 5000 (lb) 0		0.2 90 IN Resistivity (Ohm-m) 2000

Neutron Porosity 0.3 (Porosity Decimal Fraction) -0.1	
Density Porosity 0.3 (Porosity Decimal Fraction) -0.1	
Crossplot Porosity 0.3 (Porosity Decimal Fraction) -0.1	
0 PE 10	Density Correction 0.8 (g/cc) -0.2

ALLIED HORIZONTAL WIRELINE SERVICES

Repeat Pass

Log Variables

DatabaseC:\Sondex\Sondex Warrior\Data\enduringreswlybrook.db
Dataset West_Lybrook/well/run1/main/_vars_

Top - 417.97 ft

AIR_HOLE?	BOREID in	BOTTEMP degF	CASED?	CASEOD in	CASETHCK in	CASEWGHT lb/ft	DE-CENT
No	14.5	149	Yes	13.375	0	40	Yes

DEVI deg	FLUIDDEN g/cc	FRMSALIN kppm	MATRXDEN g/cc	MUDSALIN kppm	MudWgt lb/gal	NPORSEL	PERFS
0	1	0	2.71	0	9.4	Limestone	0

SO in	SPSHIFT mV	SRFTEMP degF	TDEPTH ft
0.5	0	68	7408

417.97 ft - Bottom

AIR_HOLE?	**BOREID in**	BOTTEMP degF	**CASED?**	**CASEOD in**	CASETHCK in	**CASEWGHT lb/ft**	DE-CENT
No	**8.75**	149	**No**	**7**	0	**26**	Yes

DEVI deg	FLUIDDEN g/cc	FRMSALIN kppm	MATRXDEN g/cc	MUDSALIN kppm	MudWgt lb/gal	NPORSEL	PERFS
0	1	0	2.71	0	9.4	Limestone	0

SO in	SPSHIFT mV	SRFTEMP degF	TDEPTH ft
0.5	0	68	7408

Calibration Report

Database File	enduringreswlybrook.db
Dataset Pathname	West_Lybrook/well/run1/pass5
Dataset Creation	Tue Jan 15 11:30:34 2019 by Log Sondex

Induction Array Tool Calibration Report

Serial Number:	B10110
Tool Model:	002
Master Calibration Performed:	Fri Oct 26 15:32:33 2018
Temperature:	94.8 degF

Sonde Error:

Array	1	2	3	4	5	6	7	
Real	192.0	-12.7	-40.5	-15.0	-2.0	2.3	2.9	mmho/m
Imaginary	-18.2	5.6	-8.9	-11.8	-22.5	-1.2	5.1	mmho/m

Loop Gain:

Array	1	2	3	4	5	6	7	
Loop (real)	537.7	678.5	1295.3	1394.1	1144.8	712.8	404.8	mmho/m
Loop (imaginary)	73.3	92.5	389.8	419.5	344.5	214.5	121.8	mmho/m
Real	754.6	727.3	1235.4	1365.6	1152.8	736.4	421.2	mmho/m
Imaginary	57.5	104.4	378.7	408.4	324.7	218.8	133.9	mmho/m
Gain (real)	0.956	0.917	1.015	1.010	0.991	0.971	0.968	

Gain (real)	0.956	0.917	1.015	1.010	0.991	0.971	0.968
Gain (imaginary)	0.967	0.936	1.006	0.998	0.992	0.975	0.945

Before Survey Verification Performed: Tue Jan 15 07:30:10 2019
Sonde 1 Temperature: 91.3 degF
Sonde 2 Temperature: 93.3 degF
Array 1 Temperature: 93.3 degF

Array	1	2	3	4	5	6	7
TxIR	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1
TxIX	0.0	0.0	0.2	0.2	0.2	0.2	0.2
Tx Magnitude	0.0	0.0	0.2	0.2	0.2	0.2	0.2
Gain	112.1	152.3	146.9	151.0	151.8	159.4	167.5
RxCR	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
RxCX	0.1	0.1	0.1	0.1	0.1	0.1	0.1
RxC Magnitude	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Tool Module Parameters

Software Version: 8.0.0.4
Borehole Size Source: CALI
Mud Resistivity Source: MUDRES
Mud Resistivity At Surface: N/A
Mud Resistivity Surface Temperature: N/A
Borehole Corrections: Automatic
Minimum Standoff: 0.4 in

Litho Density Tool Calibration Report

Serial Number: B0872S70997B
Tool Model: B10872

Caliper Calibration Performed: Mon Jan 07 16:48:54 2019

	Diameter		Reading	
Small Ring:	9.000	in	1709.800	cps
Large Ring:	13.000	in	2058.300	cps

Gain: 0.0115
Offset: -10.6247

Master Calibration Performed: Mon Jan 07 16:27:47 2019

Source Number: 70997B
Medium: Water
Al Block Density: 2.6002 g/cc

	Background	Al Block	Al Block + Fe	
SS1	677.4	4467.7	3791.9	cps
SS2	1927.0	30904.2	26367.3	cps
SSTOTAL	4505.5	49338.8	41684.1	cps
LITH	96.2	509.0	303.4	cps
LL	188.4	862.2	753.9	cps
LU	542.8	1119.9	1033.7	cps
LS	731.2	1982.1	1787.6	cps
LSTOTAL	1379.4	4808.5	3883.4	cps
SSHV	1468.8	1474.0	1474.3	V
LSHV	1414.7	1419.6	1421.4	V
SSFF	-0.011	0.005	0.006	
LSFF	0.005	0.002	-0.007	

Before Survey Verification Performed: Tue Jan 15 07:00:24 2019
After Survey Verification Performed: Tue Jan 15 15:30:24 2019

	Master Background	Before Survey Background	After Survey Background	
SS1	677.4	692.2	690.2	cps
SS2	1927.0	1946.8	1946.4	cps
SSTOTAL	4505.5	4577.9	4562.5	cps
LITH	96.2	98.4	95.6	cps
LL	188.4	188.2	186.7	cps
LU	542.8	548.0	551.3	cps
LS	731.2	736.1	738.0	cps
LSTOTAL	1379.4	1392.8	1389.2	cps
SSHV	1468.8	1461.4	1461.7	V
LSHV	1414.7	1407.4	1407.9	V
SSFF	-0.011	0.007	-0.014	
LSFF	0.005	0.016	0.003	

Tool Module Parameters

Software Version:	8.0.0.6
Borehole Size Source:	CALI
Pad Type:	2

Compensated Neutron Tool Calibration Report

Serial Number:	C2541S59796G
Tool Model:	009

Master Calibration Performed:	Thu Jan 03 15:00:01 2019	
Source Number:	59796G	
Short Spacing Counts:	4187.83	cps
Long Spacing Counts:	156.76	cps
High Voltage:	1367.67	V
Target Ratio:	26.6600	
Ratio:	26.7144	
K-Factor:	0.9980	

Before Survey Verification Performed:
After Survey Verification Performed:

Verifier Number: 6490NN

Verifier Values	Master Cal	Before Survey	After Survey	
Short Spacing Counts:	247.78			cps
Long Spacing Counts:	253.81			cps
High Voltage:	1367.62			V
Ratio:	0.9762			

Tool Module Parameters

Software Version:	8.0.0.5
Borehole Size Source:	CALI
Clip Crossplot Porosity:	YES

Lithology Identification Parameters:

	Calcite	Quartz	Dolomite	
Uma:	13.77	4.79	9.03	barns/cc
RHOma:	2.71	2.65	2.88	g/cc

Micro Electric Log Calibration Report

Serial Number:	002220331
Tool Model:	001

Caliper Calibration Performed: Thu Jan 10 10:00:24 2019

Caliper Calibration Performed: Thu Jan 10 10:00:24 2019

	Pad Arm			Backup Arm		
	Radius		Reading	Radius		Reading
Small Jig:	4.000	in	1353.200	4.000	in	1365.300
Large Jig:	6.000	in	1402.600	6.000	in	1410.500
Gain:			0.0405			0.0442
Offset:			-50.7854			-56.4115

Pad Calibration

	Inverse	Normal
Gain:	1.0000	1.0000
Offset:	0.0000	0.0000

Tool Module Parameters

Software Version: 8.0.0.4

Borehole Fluid Resistivity Calibration Report

Serial Number: 000001
Tool Model: 001

Master Calibration Performed: Thu Sep 16 10:07:52 2010

Resistivity Polynomial Equation:

$$0.2530x^2 + 0.5610x + 0.0310$$

Temperature Calibration:

Reference		Reading	
53.60	degF	846.40	bits
107.42	degF	919.20	bits

Spectral Gamma Ray Calibration Report

Serial Number: 10012700
Tool Model: 003

Performed: Thu Jan 10 12:00:24 2019

Source Number: #14
Calibrator Value: 207.0 API

Background Reading: 151.7 cps
Calibrator Reading: 1681.1 cps

Sensitivity: 0.135 API / cps

Perfomed: Fri Jan 11 11:30:32 2019

Verifier Number: 571

	K %	U ppm	T ppm
Concentrations	5.4	6.9	25.3

K Peak: Passed
U Peak:
T Peak:

Before Survey Verification Performed: Tue Jan 15 07:15:24 2019
After Survey Verification Performed: Tue Jan 15 15:35:24 2019

	Before Survey	After Survey	
Background Reading:	154.5	152.8	cps
Verifier Reading:	1207.5	1184.5	cps

K Peak:	Passed	Passed	
U Peak:	Passed	Passed	
T Peak:	Passed	Passed	

Tool Module Parameters

Software Version:	8.0.0.5
Borehole Correction:	No
Stand Off:	N/A
Mud Type:	N/A
Borehole Size Source:	N/A

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
CHD	53.66		CHD-001 (10012297) Cable Head	2.19	3.38	35.00
			XTU-008 (C10001400) Crossover Ultrawire Toolbus to Ultralink	2.08	3.38	47.00
SGR	46.32		SGR-003 (10012700) Spectral Gamma Ray Tool	4.94	3.88	120.00
BFR	42.65		BFR-001 (000001) Borehole Fluid Resitivity	3.80	3.38	75.00
Overbody	38.20		Overbody-Over-cen Overbody Centralizer	3.00	3.38	10.00
			MEL-001 (002220331) Micro Electric Log	9.17	3.38	190.00
MEL	33.28					
KJT	31.49		KJT-001 (10010515) Knuckle Joint	2.86	3.38	72.00
CNLSC	25.59		CNL-009 (C2541S59796G) Compensated Neutron Logging Tool	5.28	3.38	100.00
CNSSC	25.09					
			LDT-B10872 (B0872S70997B) Litho Density Tool	9.75	4.50	310.00
LDT	15.44					
IAT	8.44					

Received by OCD: 9/13/2022 2:37:53 PM

			IAT-002 (B10110) Induction Array Tool	13.22	3.88	196.00
SP	0.43					
BN	0.38		BN-SOFF (000001) Bottom Nose Standoff	0.38	6.88	6.00

Dataset: enduringreswlybrook.db: West_Lybrook/well/run1/main
Total length: 53.66 ft
Total weight: 1161.00 lb
O.D.: 6.88 in

ALLIED HORIZONTAL WIRELINE SERVICES

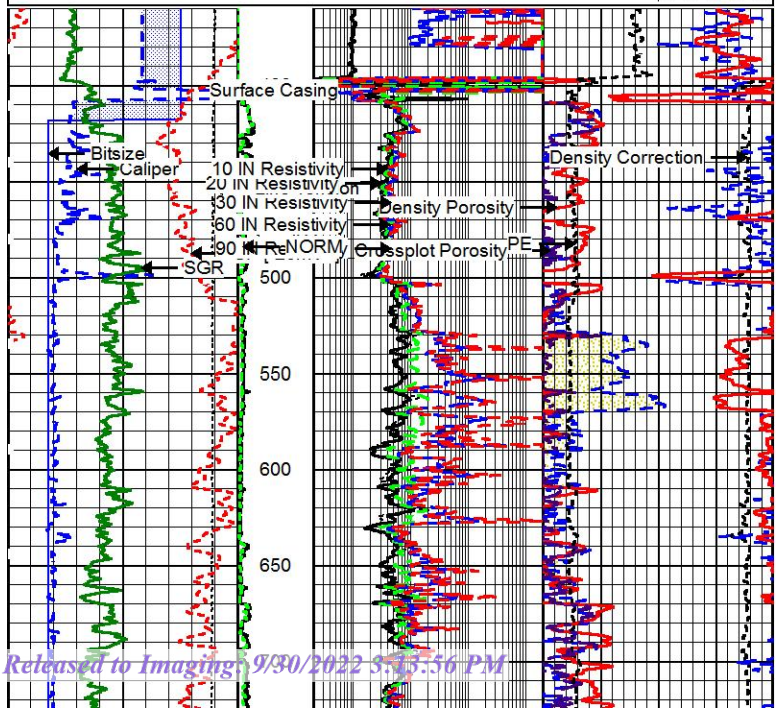
Company: Enduring Resources
Well: West Lybrook Unit 2309-24 N WSW
Field: West Lybrook
State: New Mexico

ALLIED HORIZONTAL WIRELINE SERVICES

Main Pass

Database File	enduringreswlybrook.db
Dataset Pathname	West_Lybrook/well/run1/main
Presentation Format	3com_iat
Dataset Creation	Tue Jan 15 15:23:37 2019
Charted by	Depth in Feet scaled 1:1200

7	Bitsize (in)	17	INV	10 IN Resistivity			Neutron Porosity		
7	Caliper (in)	17	Ohm-m	0.2	(Ohm-m)	2000	(Porosity Decimal Fraction)		
	SP [-20mV+]		0 20	20 IN Resistivity			0.3		-0.1
0	SGR (GAPI)	200	NORM	0.2	(Ohm-m)	2000	Density Porosity		
	Line Tension		Ohm-m	30 IN Resistivity			(Porosity Decimal Fraction)		
	5000lb)	0	0 20	0.2	(Ohm-m)	2000	0.3		-0.1
				60 IN Resistivity			Crossplot Porosity		
				0.2	(Ohm-m)	2000	(Porosity Decimal Fraction)		
				90 IN Resistivity			0.3		-0.1
				0.2	(Ohm-m)	2000	0 PE 10	nsity Correcti	
								(g/cc)	
								0.8	-0.2



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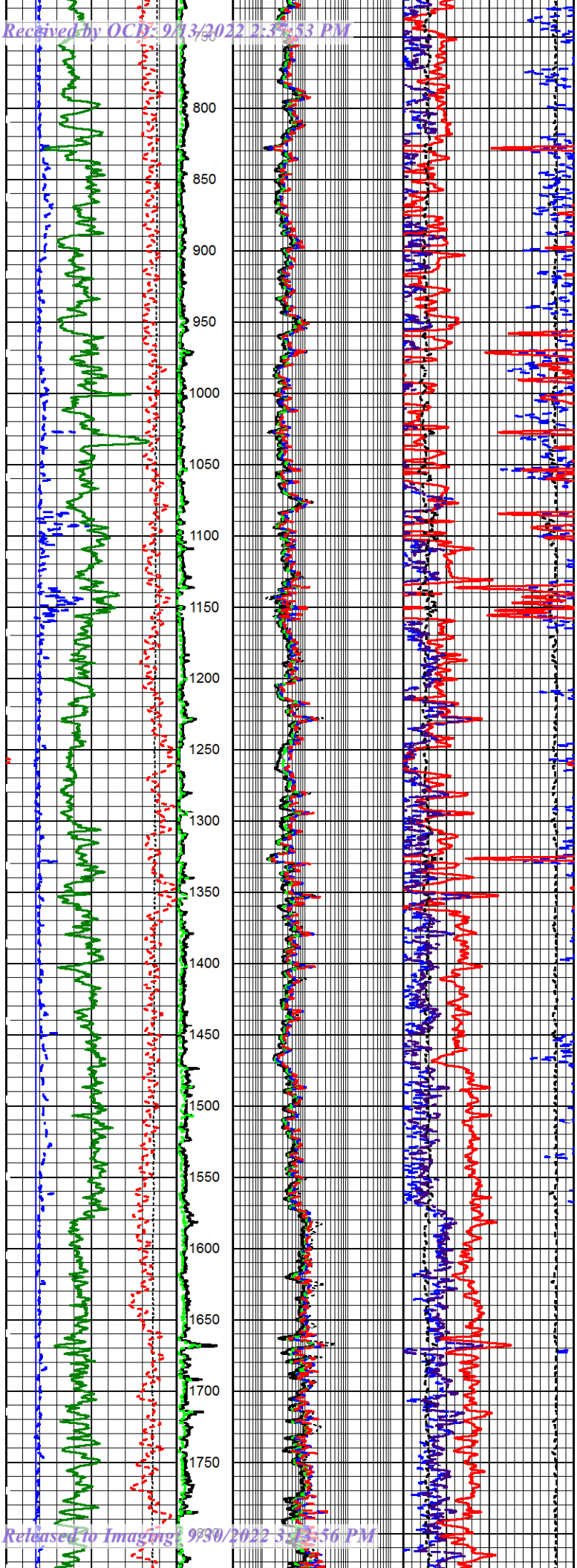
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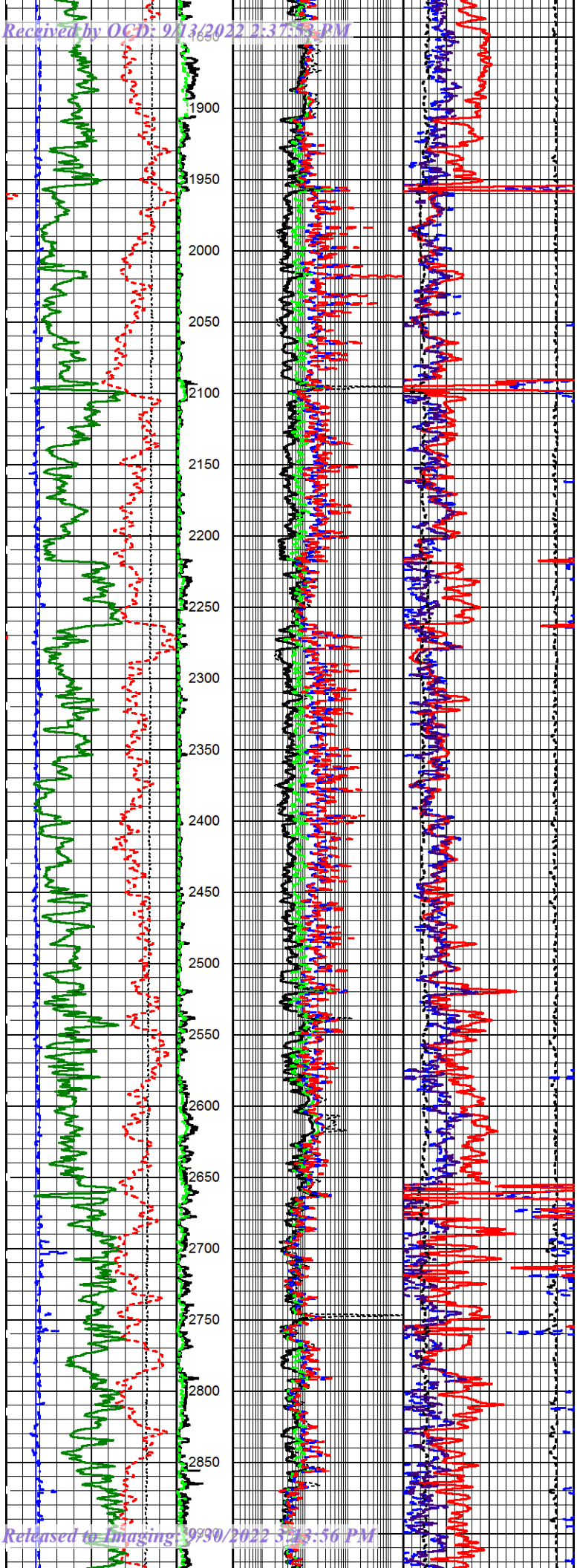
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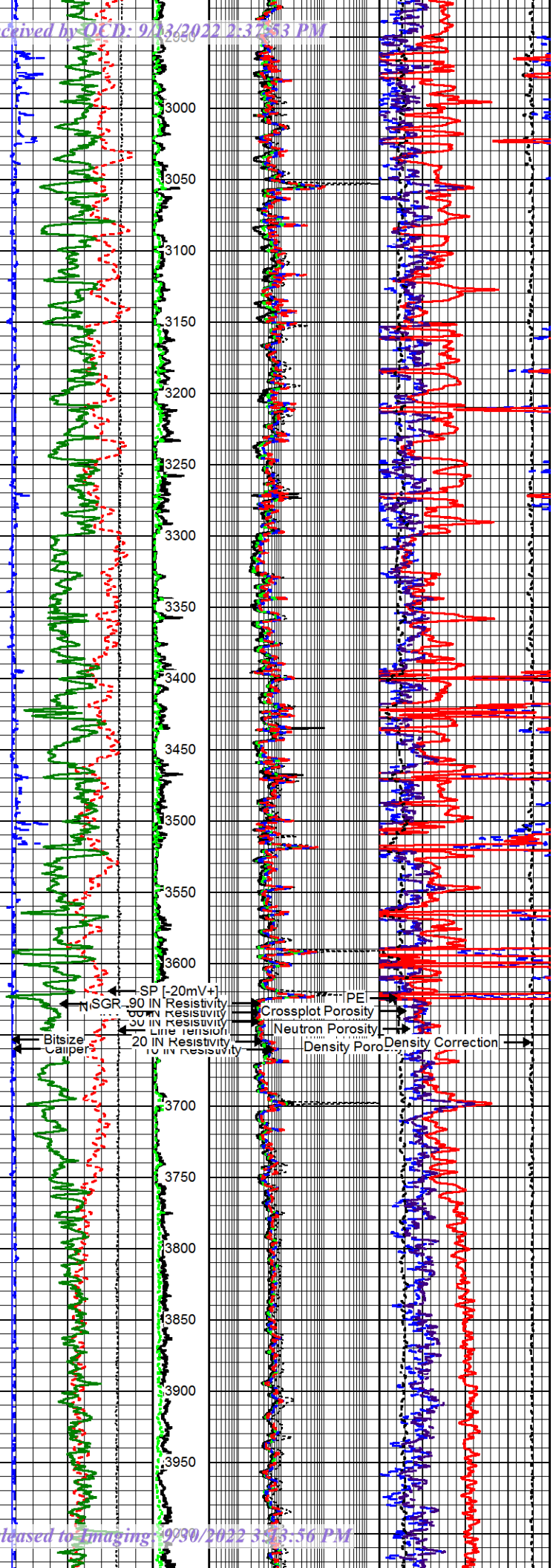
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Neutron Porosity
Density Correction
Bitsize
Caliper
20 IN Resistivity
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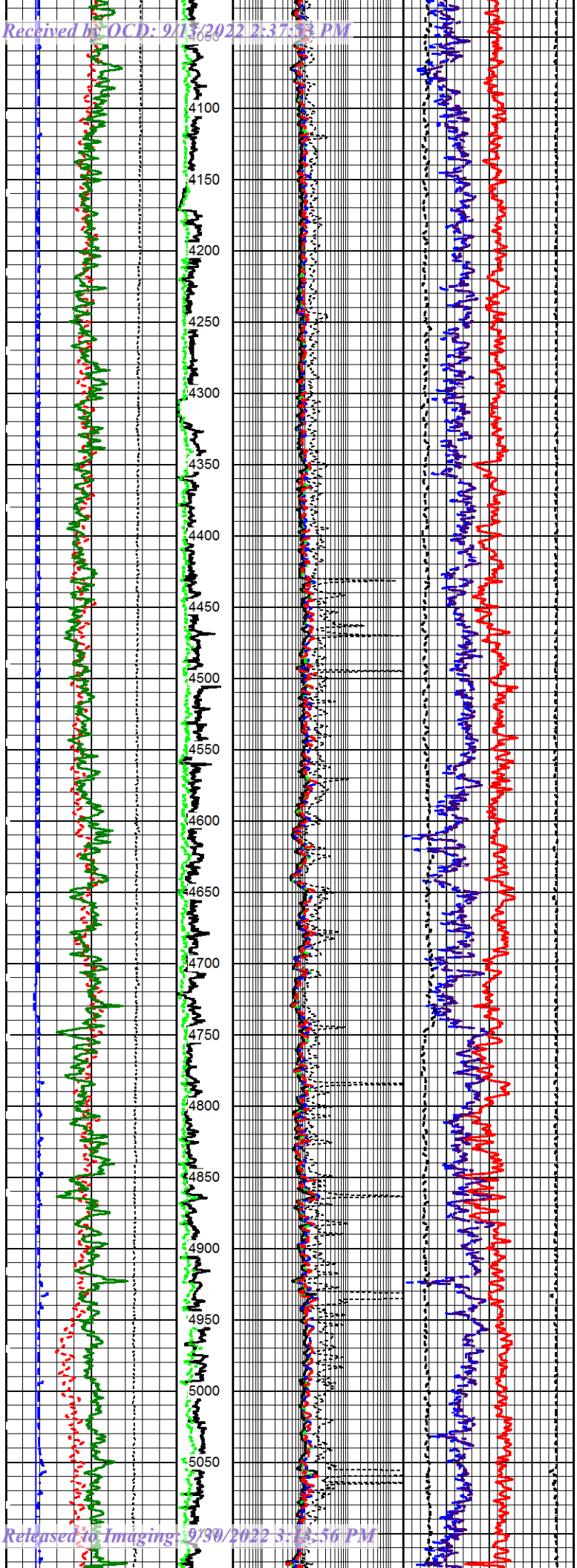
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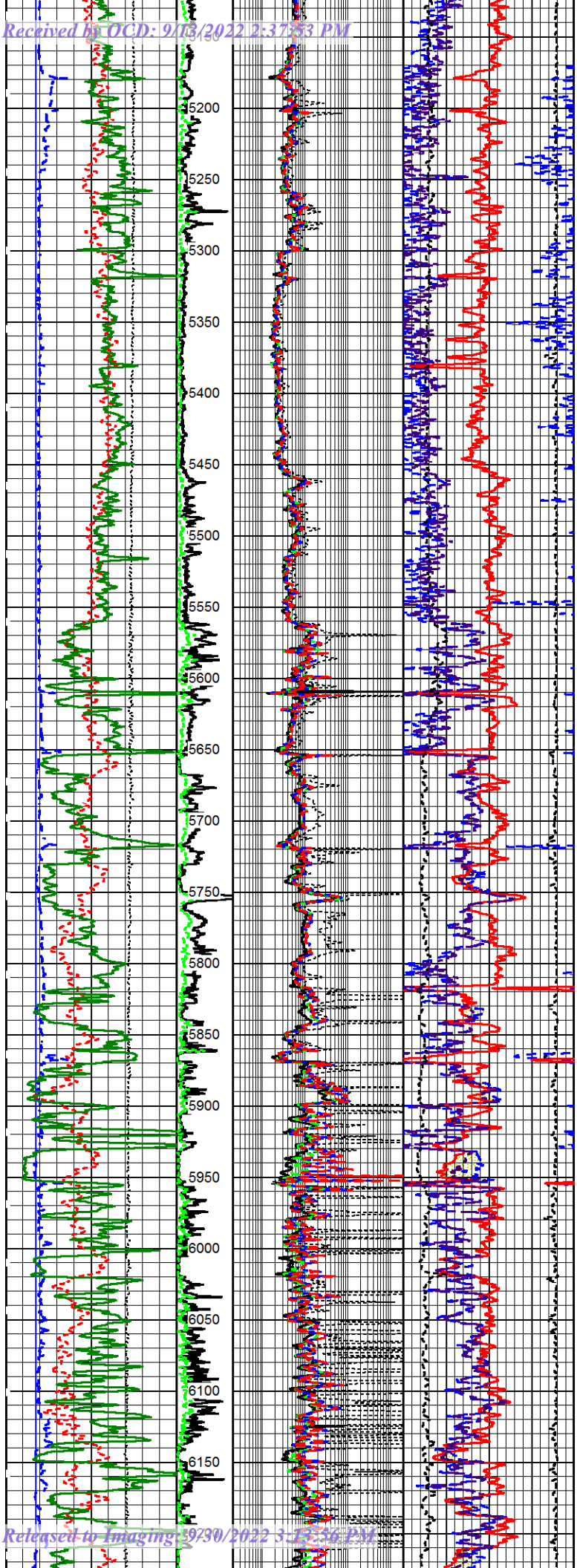
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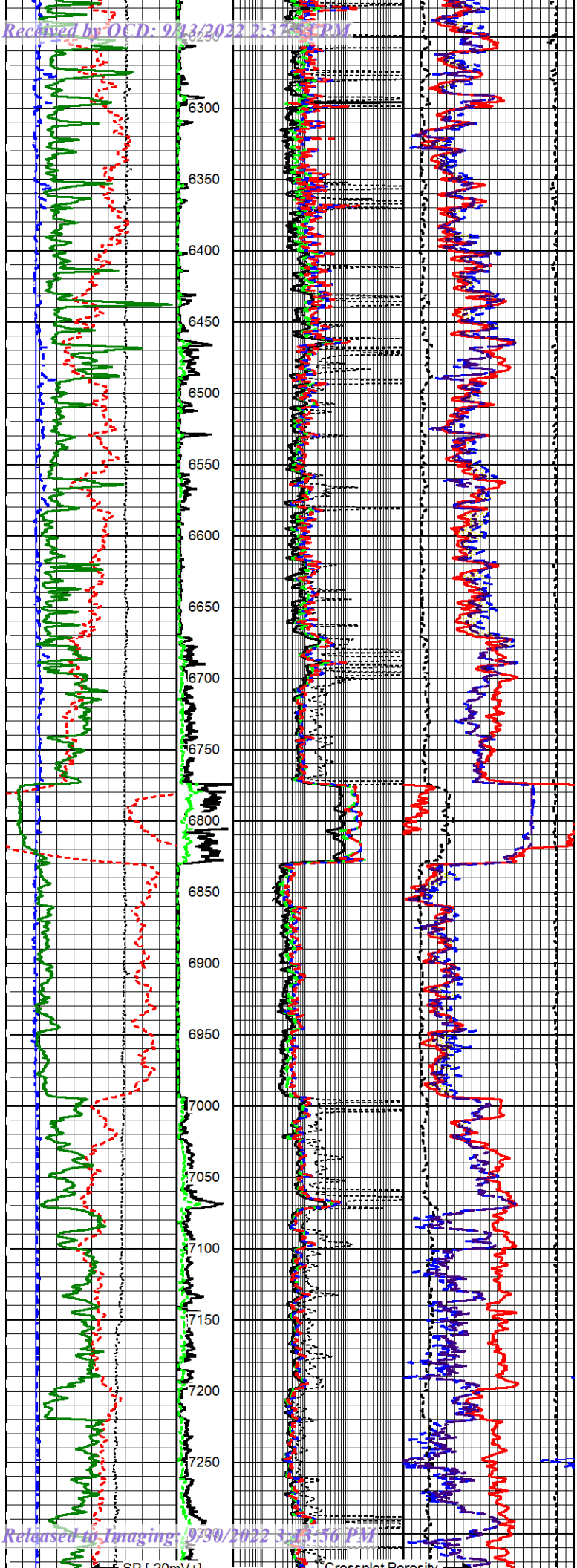
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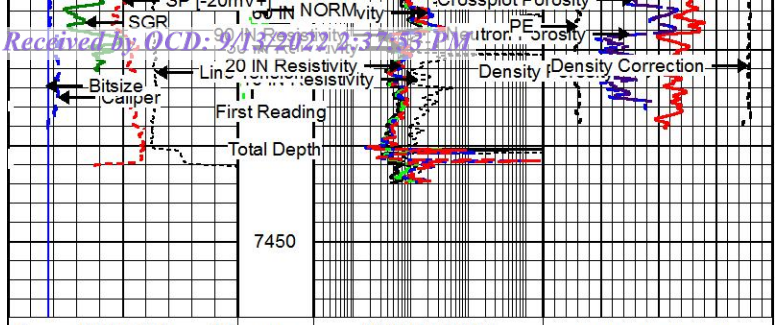

7 Bitsize (in) 17		INV	10 IN Resistivity		Neutron Porosity		
7 Caliper (in) 17		Ohm-m	0.2 (Ohm-m) 2000		(Porosity Decimal Fraction)		
SP [-20mV+]		0 20	20 IN Resistivity		0.3 -0.1		
0 SGR (GAPI) 200		NORM	0.2 (Ohm-m) 2000		Density Porosity		
	Line Tension	Ohm-m	30 IN Resistivity		(Porosity Decimal Fraction)		
	5000lb) 0	0 20	0.2 (Ohm-m) 2000		0.3 -0.1		
			60 IN Resistivity		Crossplot Porosity		
			0.2 (Ohm-m) 2000		(Porosity Decimal Fraction)		
			90 IN Resistivity		0.3 -0.1		
			0.2 (Ohm-m) 2000		0 PE 10	nsity Correcti	
						(g/cc)	
						0.8 -0.2	

ALLIED HORIZONTAL WIRELINE SERVICES

Main Pass

ENCLOSURE I: PROOF OF NOTIFICATION

Well Name: W LYBROOK UNIT

Well Location: T23N / R9W / SEC 23 / SWSW / 36.206767 / -107.765027

County or Parish/State: SAN JUAN / NM

Well Number: 726Y

Type of Well: OIL WELL

Allottee or Tribe Name: EASTERN NAVAJO

Lease Number: N0G13121863

Unit or CA Name:

Unit or CA Number: NMNM135216A, NMNM135216X

US Well Number: 3004535769

Well Status: Plugged and Abandoned

Operator: ENDURING RESOURCES LLC

Notice of Intent

Sundry ID: 2691566

Type of Submission: Notice of Intent

Type of Action: Convert to Injection or Disposal Well

Date Sundry Submitted: 09/09/2022

Time Sundry Submitted: 08:53

Date proposed operation will begin: 09/19/2022

Procedure Description: Enduring Resources IV, LLC (Enduring) is requesting permission from the BLM to convert an existing facility containing a water supply well located on BLM-owned surface, WLU 2309-24N (NMOSE well SJ-4301 POD3), to an injection well for recovered fracturing water from production well completions. The existing well is completed in the Entrada Formation, with water currently extracted for use in production well completions. The Entrada formation contains low quality water and the formation is commonly used for both extraction and injection purposes in the San Juan Basin. The proposed injected water would be of similar quality to the existing water present in the Entrada Formation. Currently, the New Mexico Oil Conservation Division (NMOCD) has jurisdiction for permitting salt-water disposal wells (Class II Injection wells) and requires that surface owners grant permission for such use. Please see attached procedure.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

WLU_2309_24N___Disposal_Conversion_Procedure_20220909085251.pdf

Released to Imaging: 9/30/2022 3:13:56 PM

Well Name: W LYBROOK UNIT

Well Location: T23N / R9W / SEC 23 / SWSW / 36.206767 / -107.765027

County or Parish/State: SAN JUAN / NM

Well Number: 726Y

Type of Well: OIL WELL

Allottee or Tribe Name: EASTERN NAVAJO

Lease Number: N0G13121863

Unit or CA Name:

Unit or CA Number: NMNM135216A, NMNM135216X

US Well Number: 3004535769

Well Status: Plugged and Abandoned

Operator: ENDURING RESOURCES 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: KHEM SUTHIWAN

Signed on: SEP 09, 2022 08:52 AM

Name: ENDURING RESOURCES LLC

Title: Regulatory Manager

Street Address: 6300 S WAY SUITE 525

City: DENVER **State:** CO

Phone: (303) 350-5721

Email address: KSUTHIWAN@ENDURINGRESOURCES.COM

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

CONFIDENTIAL

WLU 2309-24N

San Juan Co., NM
294’ FSL, 2284’ FWL, Sec. 24, T23N, R00W
36.205932°N, 107.741568°W
CONVERSION TO SALTWATER DISPOSAL

ENDURING RESOURCES, LLC

PROCEDURE:

1. Hold PJSM prior to beginning any operations. Ensure all onsite personnel abide by Enduring HSE protocol.
2. Comply with all NMOCD and BLM safety and environmental regulations.
3. Conduct safety meeting with all personnel and MIRU rig & spooling unit
4. NU BOPE and test.
5. Remove 4 ½” tubing and ESP from well
6. Unload and tally 4 ½” plastic lined tubing
7. PU AS1-X packer and RIH with 4-1/2” tubing with sub, packer, on/off tool and land packer at 6,810’ MD
8. Set packer and test tubing/casing annulus to 500 psi for 10 minutes. Bleed casing pressure.
9. Pull out of on/off tool and displace wellbore with packer fluid.
10. Latch onto on/off tool and chart official MIT with NMOCD witness on-site (provide inspector with 24 hour notification prior to chart recording).
11. NDBOP, NUWH and set tree for injection.
12. Establish initial injection rate to ensure well is taking fluid using no more than 50 bbl.
13. RDMO

Farmington Daily Times
PART OF THE USA TODAY NETWORK

Affidavit of Publication

Ad # 0005408056

This is not an invoice

SUTHIWAN KHEM
6300 S SYRACUSE WAY
SUITE 525
CENTENNIAL, CO 80111

I, being duly sworn say: **Farmington Daily Times**, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newsaper duly qualified for the purpose within the State of New Mexico for publication and appeared in the internet at The Daily Times web site on the following days(s):

09/12/2022

Legal Clerk

Subscribed and sworn before me this September 12, 2022:

State of WI, County of Brown
NOTARY PUBLIC

1-7-25

My commission expires

KATHLEEN ALLEN
Notary Public
State of Wisconsin

Enduring Resources, LLC, 6300 S Syracuse Way, Suite 525, Centennial, Colorado 80111, Attention: Khem Suthiwan, (303) 350-5721, is filing Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division for administrative approval for its saltwater disposal well W Lybrook Unit 2309-24N (OSE Pod No. SJ 4301 POD 3). The proposed well is located at approximately 294' feet FSL and 2284 feet FWL in Section 24, Lot N, Township 23N, Range 9W in San Juan County, New Mexico. Disposal water will be sourced from area production and will be injected into the Entrada formation at a depth of 6,851 ft to 6,990 ft below ground level and at an expected maximum injection rate of 20,000 bbls water per day and pressure of 1,370 psi. Interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.
#5408056, Daily Times, Sept.12, 2022

Ad # 0005408056
PO #: Public Notice
# of Affidavits: 1

This is not an invoice

Page 99 of 184

ENDURING RESOURCES
6300 S Syracuse Way, Suite 525 • Centennial, CO 80111
Telephone (303) 573-1222

September 12, 2022

Via Certified Mail (Article No. 7020 2450 0001 1930 9979)

Bureau of Land Management
Farmington Field Office
6251 College Blvd, Suite A
Farmington, NM 87402

Re: W Lybrook Unit 2309-24N
OSE Pod No. SJ-4301 POD 3
San Juan County, NM

All Affected Parties:

Enduring Resources, LLC (Enduring) is applying (C-108 Application Enclosed) to convert its W Lybrook Unit 2309-24N (SJ-4301 POD 3) Water Supply Well into a Salt Water Disposal Well. The subject well was initially drilled in 2019 by Enduring to target the Entrada Formation.

Pursuant to Section 19,15,26 of the New Mexico Administrative Code, this letter serves as formal notice of the SWD conversion. No action is needed unless you have any questions or objections.

- Well Name: W Lybrook Unit 2309-24N
- OSE Pod No: SJ-4301 POD 3
- Location: N-Section 23, T23N-R09W
- Injection Interval: 6,851' to 6,990'
- Proposed Disposal Zone: Entrada (Pool Code: 96436)
- Applicant Name: Enduring Resources, LLC
- Applicant Address: 6300 S Syracuse Way, Suite 525 Centennial, CO 80111

If you have any questions or concerns, please contact the undersigned using the information provided below.

Sincerely,

Khem Suthiwan
Regulatory Manager

Enduring Resources, LLC
6300 S Syracuse Way, Suite 525
Centennial, CO 80111
Direct: (720) 350-5721
Email: ksuthiwan@enduringresources.com

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Released to Imaging: 9/30/2022 3:13:56 PM
Received by OCD: 9/13/2022 2:37:53 PM

WLU 2309-24N SWD notice

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Bureau of Land Management
Farmington Field Office
6251 College Blvd, Suite A
Farmington, NM 87402

9590 9402 6590 1028 9635 73

2. Article Number *(Transfer from service label)*

7020 2450 0001 1930 9979

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

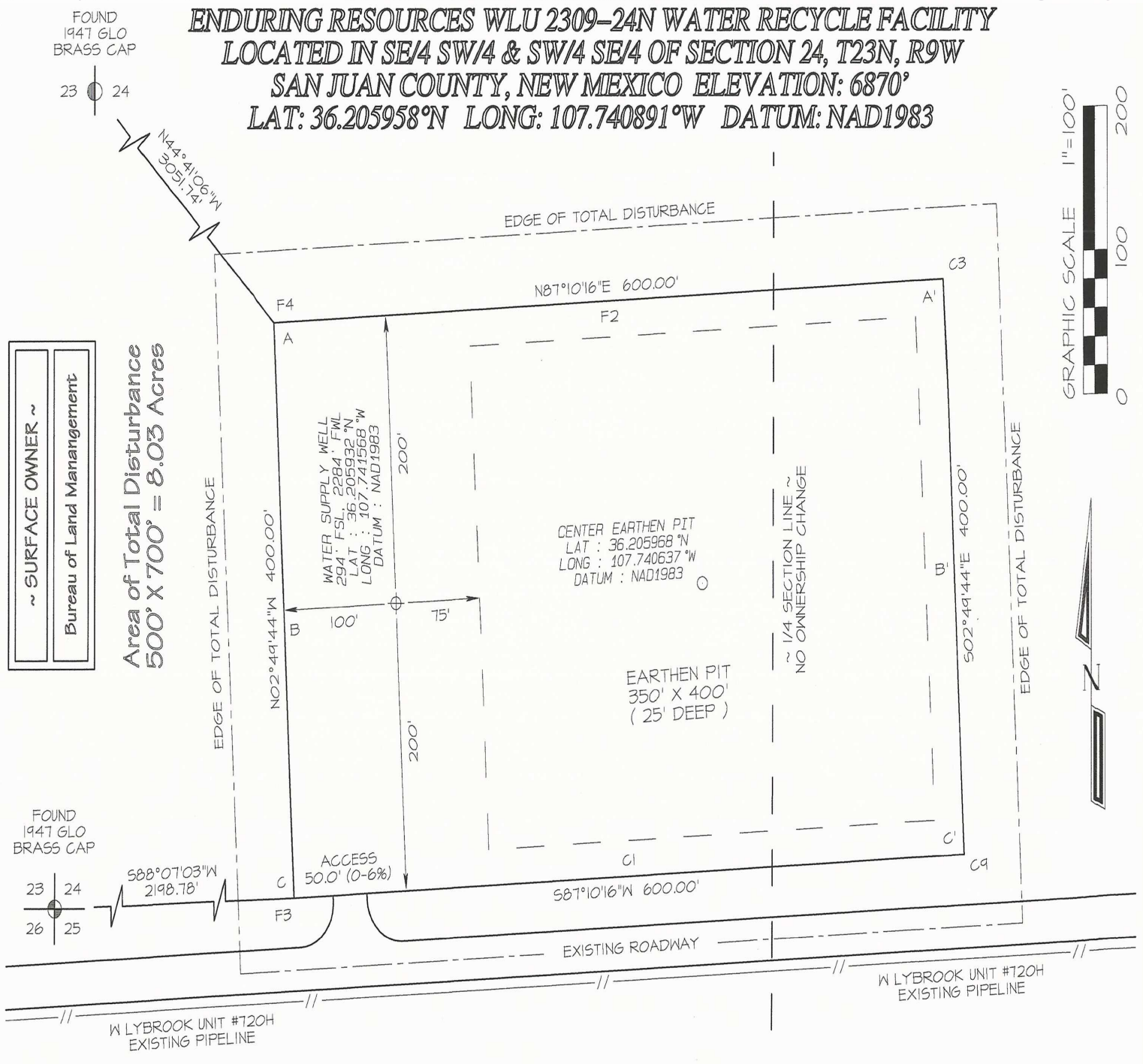
3. Service Type

- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

ail Restricted Delivery
0)

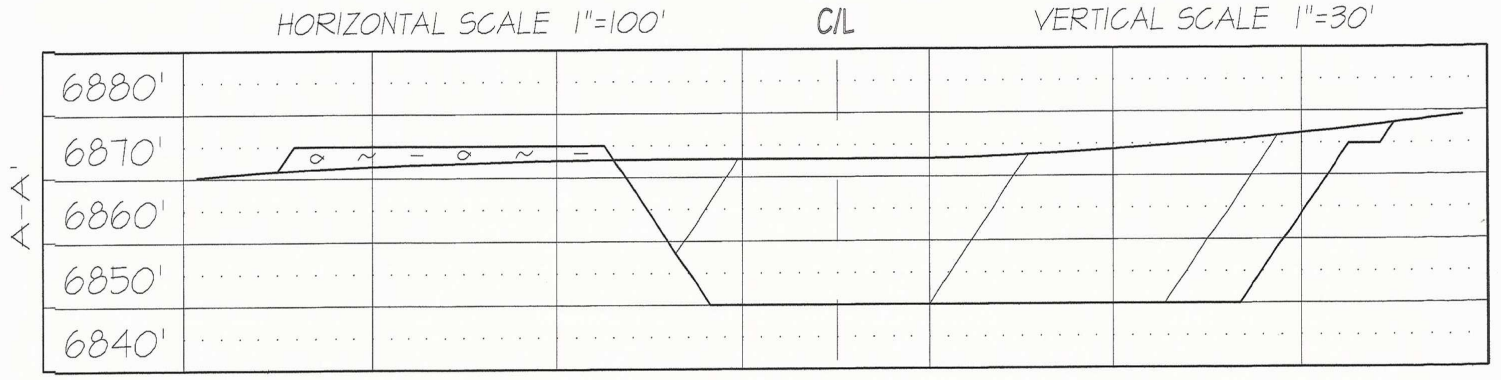
PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

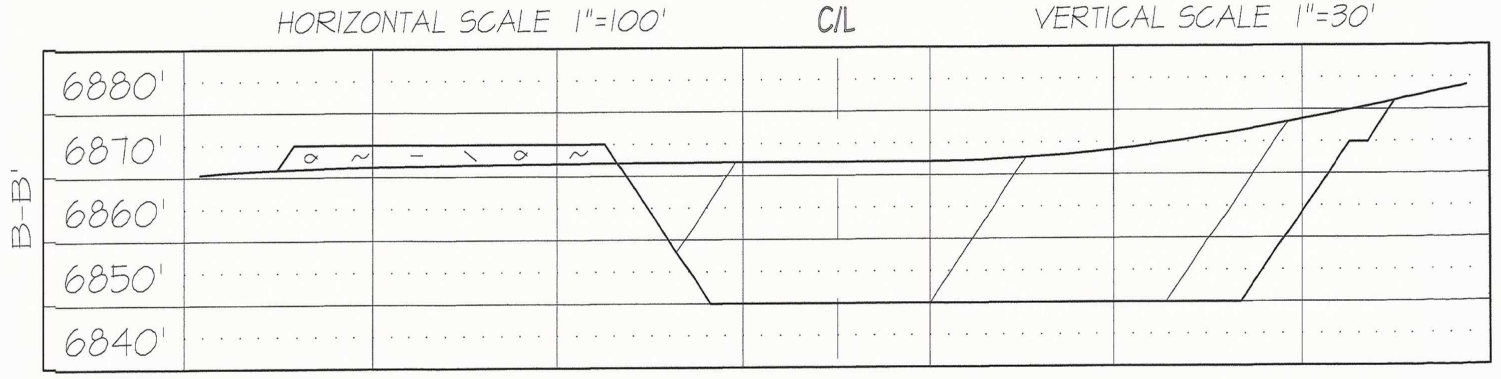
ENDURING RESOURCES WLU 2309-24N WATER RECYCLE FACILITY
LOCATED IN SE/4 SW/4 & SW/4 SE/4 OF SECTION 24, T23N, R9W
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6870'
LAT: 36.205958°N LONG: 107.740891°W DATUM: NAD1983

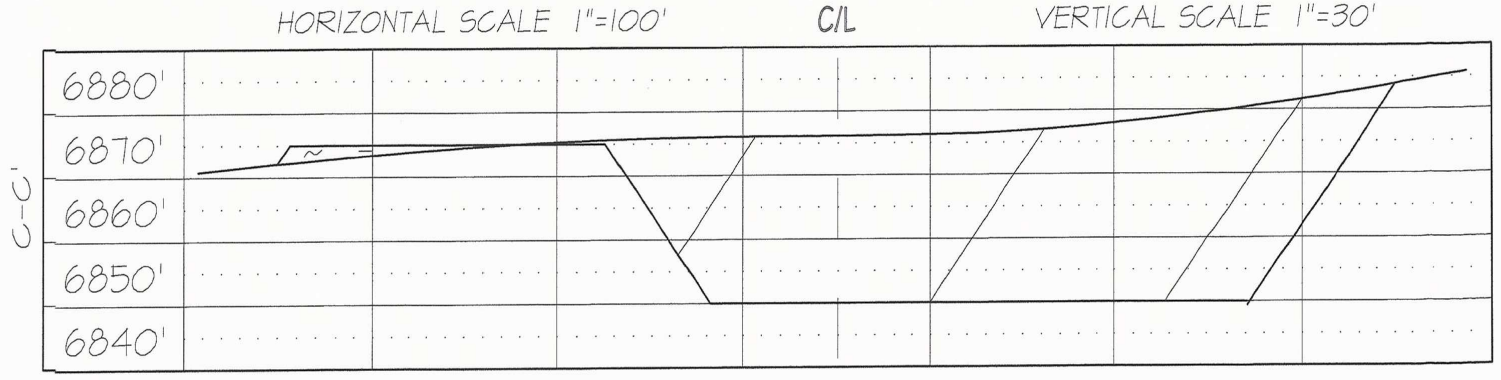


Steel T-Posts have been set to define Edge of Disturbance limits which are 50' offset from the edge of water recycle facility.

ENDURING RESOURCES WLU 2309–24N WATER RECYCLE FACILITY
LOCATED IN SE/4 SW/4 & SW/4 SE/4 OF SECTION 24, T23N, R9W
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6870'



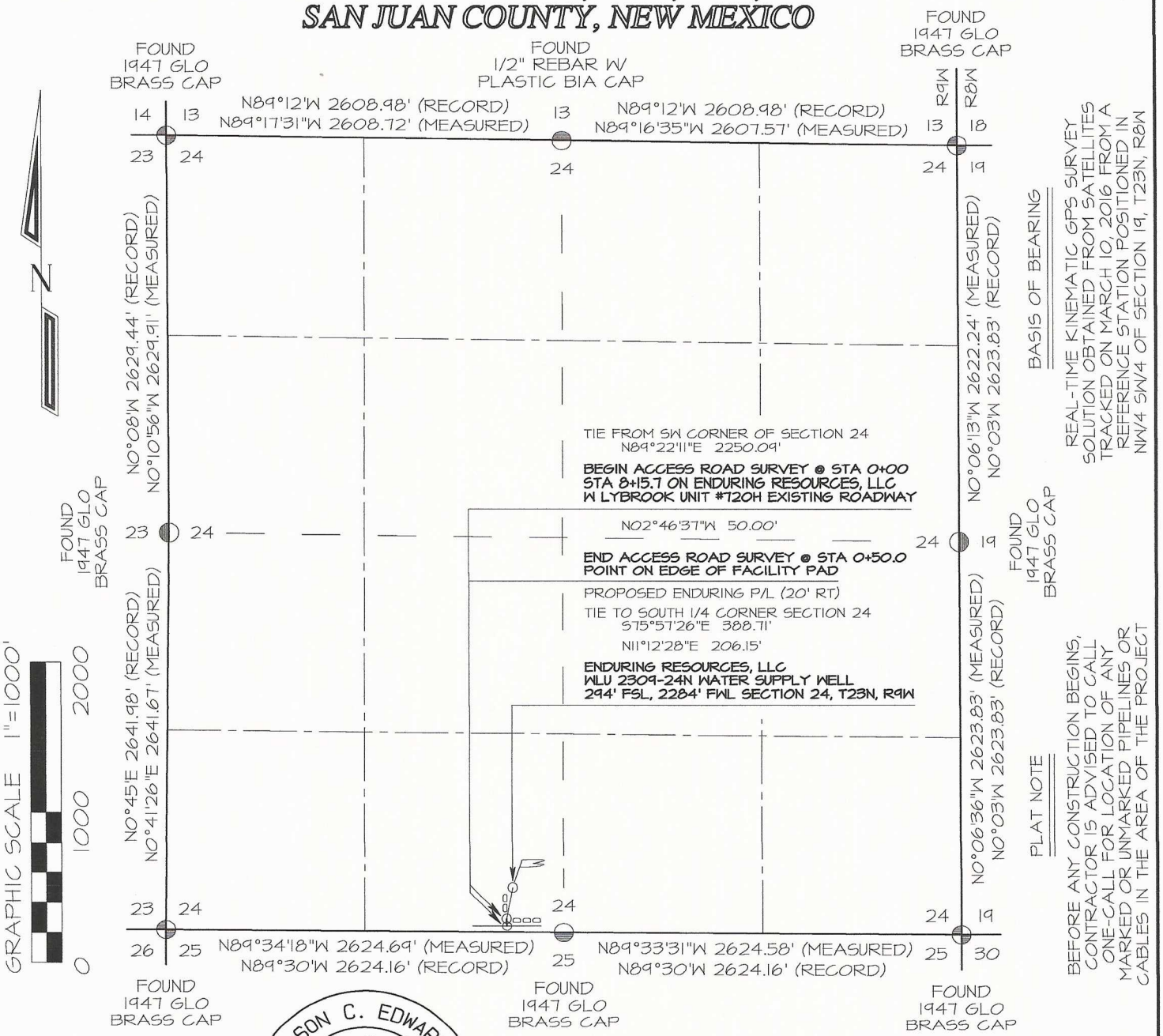




EDWARDS SURVEYING, INC. IS NOT LIABLE FOR LOCATION OF UNDERGROUND UTILITIES OR PIPELINES.

CONTRACTOR SHOULD CONTACT ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED UNDERGROUND UTILITIES OR PIPELINES ON WELLPAD AND/OR ACCESS ROAD AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION.

ENDURING RESOURCES WLU 2309-24N WATER RECYCLE FACILITY
PROPOSED ACCESS ROAD SURVEY LOCATED IN THE SE/4 SW/4 SECTION 24, T23N, R9W, NMPM SAN JUAN COUNTY, NEW MEXICO



~ SURFACE OWNERSHIP ~ Bureau of Land Management	
0+00 TO 0+50.0	50.0 FT / 3.0 RODS

JASON C. EDWARDS NEW MEXICO 15269 REGISTERED PROFESSIONAL SURVEYOR

I, Jason C. Edwards, a registered Professional Surveyor under the laws of the State of New Mexico, hereby certify that this plat was prepared from field notes of an actual survey meeting the minimum requirements of the standards for easement surveys and is true and correct to the best of my knowledge and belief.

JASON C. EDWARDS Date: June 6, 2018

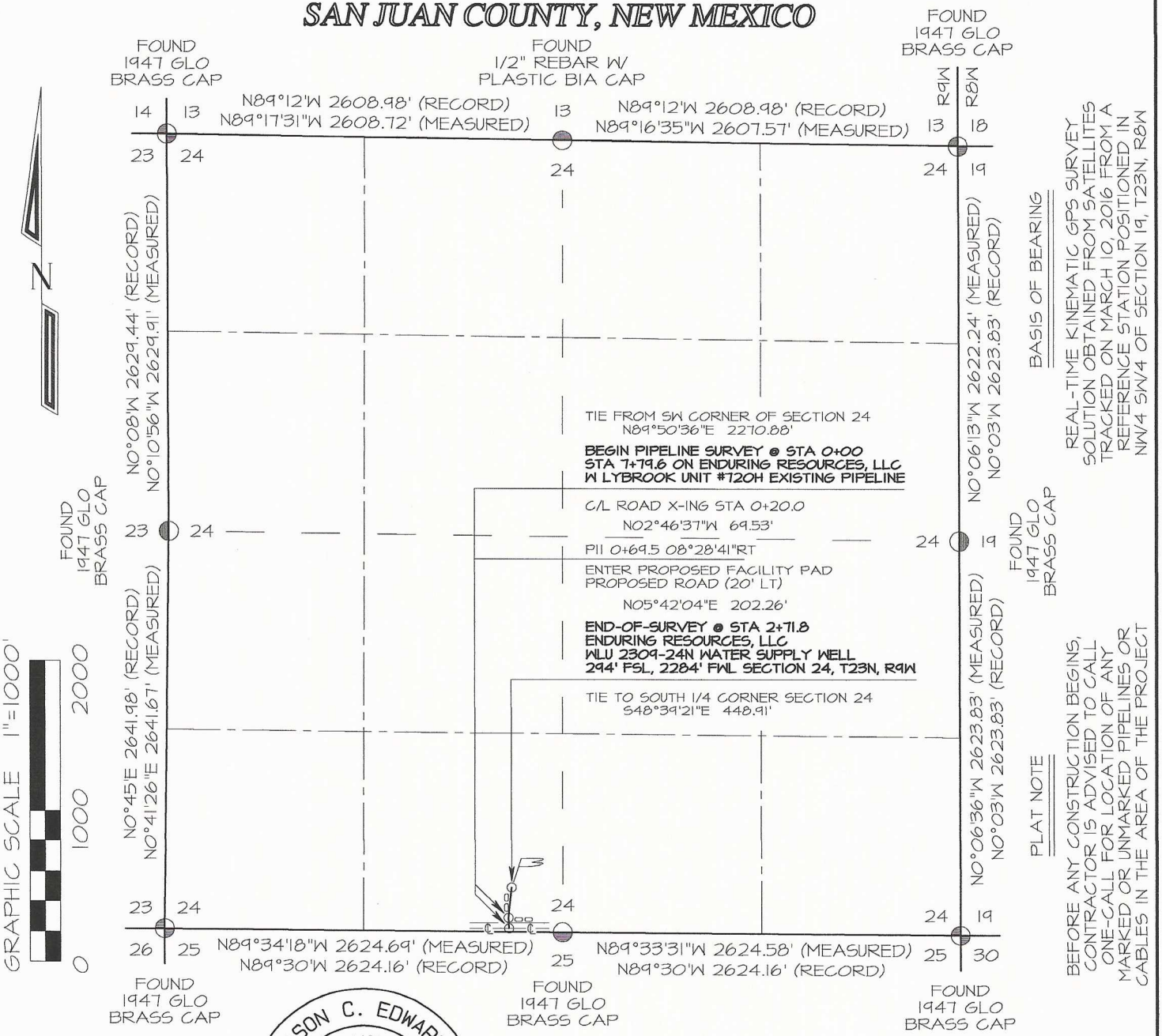
Jason C. Edwards, P.L.S.
New Mexico L.S. #15269

Prepared for:
ENDURING RESOURCES, LLC
332 ROAD 3100
AZTEC, NM 87410

N C E SURVEYS, INC.
Land Surveyor: Jason C. Edwards
Mailing Address: Post Office Box 6612 Farmington, NM 87499
Business Address: 111 East Pinon Street Farmington, NM 87402
(505) 486-1695 (Office)
ncesurveys@comcast.net

CHECKED BY: JCE
DRAWN BY: EDO
SHEET 3 OF 6
FILENAME: 23924AP

ENDURING RESOURCES WLU 2309-24N WATER RECYCLE FACILITY
PROPOSED PIPELINE SURVEY LOCATED IN THE SE/4 SW/4 SECTION 24, T23N, R9W, NMPM SAN JUAN COUNTY, NEW MEXICO



JASON C. EDWARDS NEW MEXICO 15269 REGISTERED PROFESSIONAL SURVEYOR

~ SURFACE OWNERSHIP ~ Bureau of Land Management	
0+00 TO 2+71.8	271.8 FT / 16.5 RODS

I, Jason C. Edwards, a registered Professional Surveyor under the laws of the State of New Mexico, hereby certify that this plat was prepared from field notes of an actual survey meeting the minimum requirements of the standards for easement surveys and is true and correct to the best of my knowledge and belief.

JASON C. EDWARDS Date: June 6, 2018

Jason C. Edwards, P.L.S.
New Mexico L.S. #15269

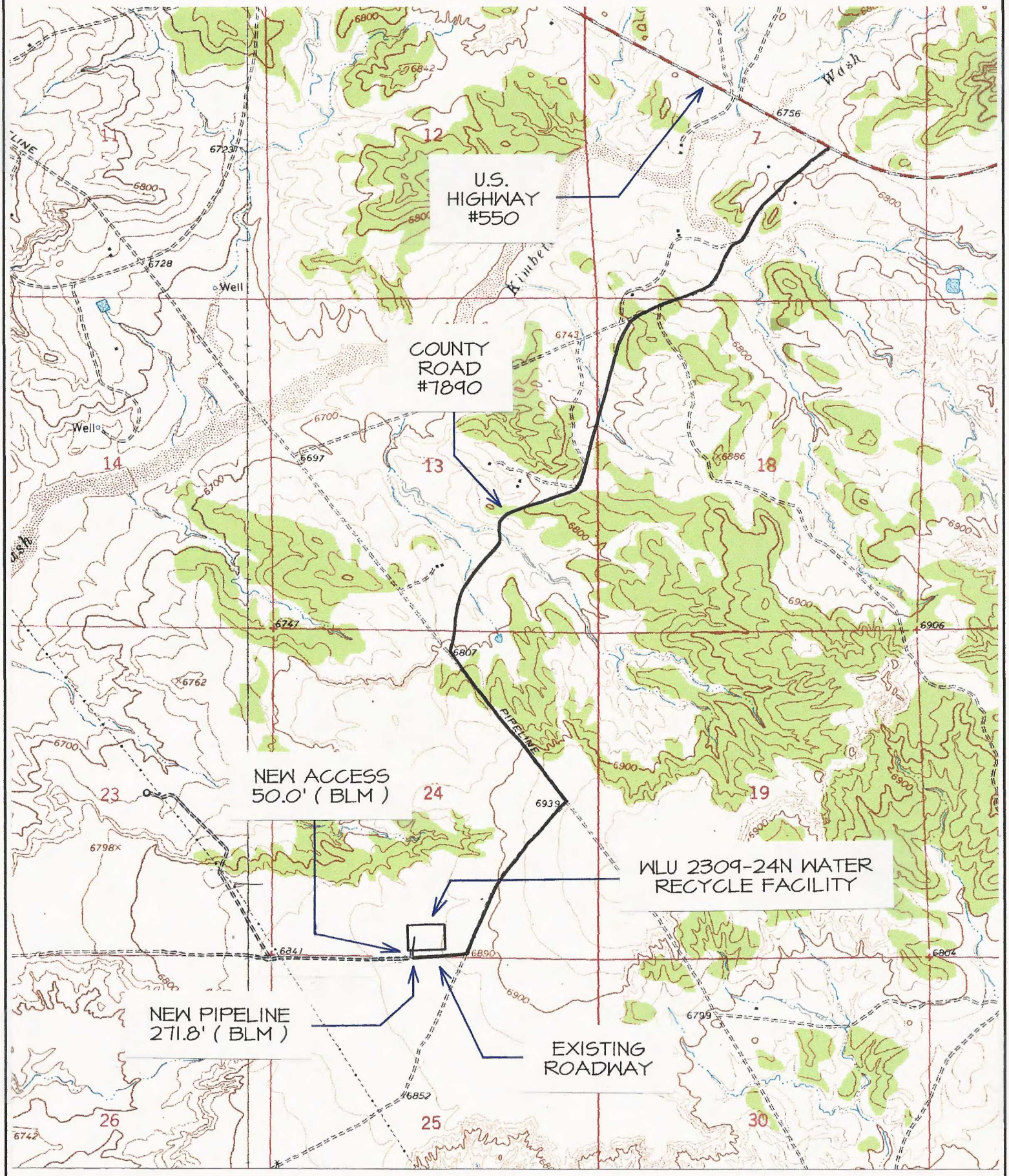
Prepared for:
ENDURING RESOURCES, LLC
332 ROAD 3100
AZTEC, NM 87410

Land Surveyor:
Jason C. Edwards
Mailing Address:
Post Office Box 6612
Farmington, NM 87499
Business Address:
111 East Pinon Street
Farmington, NM 87402
(505) 486-1695 (Office)
ncesurveys@comcast.net
NCE SURVEYS, INC.

SHEET 4 OF 6 | FILENAME: 2392465P | CHECKED BY: JCE | DRAWN BY: EDO

ENDURING RESOURCES, LLC WLU 2309-24N WATER RECYCLE FACILITY

LOCATED IN SE/4 SW/4 & SW/4 SE/4 SECTION 24, T23N, R9W
N.M.P.M., SAN JUAN COUNTY, NEW MEXICO



TOPO NAMES : KIMBETO & LYBROOK NW ⊕ PRODUCING WELL ⊗ PLUGGED & ABANDONED WELL

Directions from the Intersection of US Hwy 550 & US Hwy 64

in Bloomfield, NM to Enduring Resources, LLC WLU 2309-24N Water Recycle Facility

294' FSL & 2284' FWL, Section 24, T23N, R9W, N.M.P.M., San Juan County, NM

Latitude: 36.205932°N Longitude: 107.741568°W Datum: NAD1983

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Southerly on US Hwy 550 for 37.8 miles to Mile Marker 113.4;

Go Right (South-westerly) on County Road #7890 for 0.8 miles to fork in roadway;

Go Left (Southerly) remaining on County Road #7890 for 1.3 miles to 4-way intersection;

Go Left (South-easterly) remaining on County Road #7890 for 0.6 miles to fork in roadway;

Go Right (South-westerly) remaining on County Road #7890 for 0.5 miles to fork in roadway;

Go Right (Westerly) exiting County Road #7890 for 0.2 miles to begin access on right-hand side of existing roadway which continues for 50.0' to staked Enduring WLU 2309-24N Water Recycle Facility location.

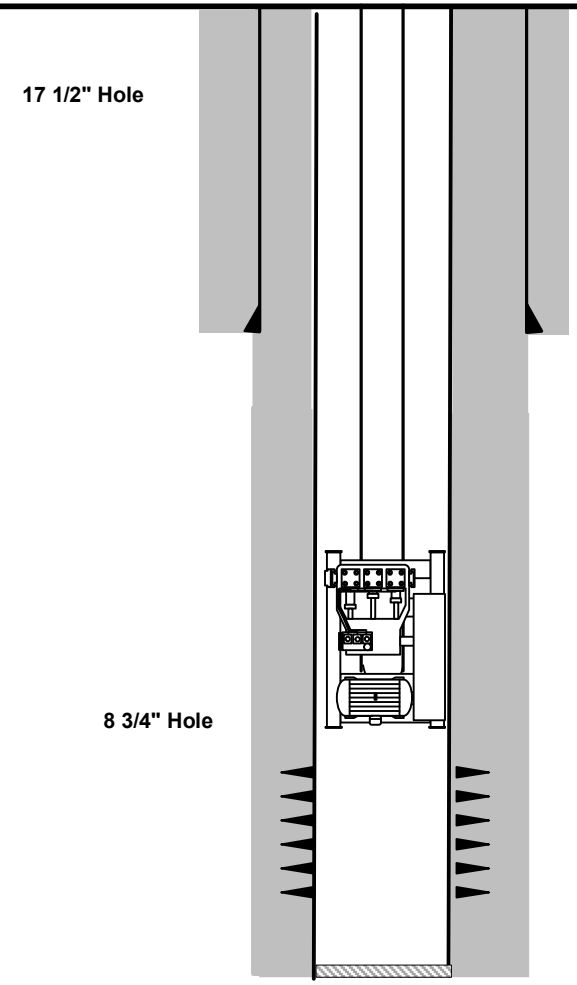
W Lybrook Unit 2309-24N WSW - Current

Spud Date: 01/03/19
Completion Date: 02/07/19

Lat: 36.205932 N Long: 107.741568 W
Entrada
SE/4, SW/4, Section 24, TWP 23N, Rng 09W
County: Sandoval NM
Elevation: 6893' KB

Created By: TJOYCE
Modified By: M WARP (8/19/19)
Modified By: M WARP (9/06/19)
Modified By: C Longwell (9/7/22)

Current Wellbore



13 3/8" Surface 54.5# J55 @ 397'.
Circulated cmt to surface w/ 440 sx
Type G cmt. BURST = 2730 psi.

7" Production 26# L-80 to 7,398' (LT&C).
PBTD = 7,307.6'. Displacement. Burst 7" 26# L-80 LT&C = 7240 psi burst.
Pumped 80 bbls tuned spacer & 184 bbls lead cmt (525 sxs) @ 12.3 PPG, followed by 102 bbls tail cmt @ 13.3 ppg. Dropped plug & disp w/ 279 bbls H2O, bumped plug, circ 52 bbls good cmt to surface. Floats held.

BHA Detail: (9/7/22)
83 jts 4 1/2" 11.6# P110 tbg
132' Electric Submersible Pump
EOT @ 3,543'

Perforations:
6851'-6856' (4 spf)
6895'-6900' (4 spf)
6912'-6917' (4 spf)
6953'-6958' (4 spf)
6985'-6990' (4 spf)
(100 total holes)

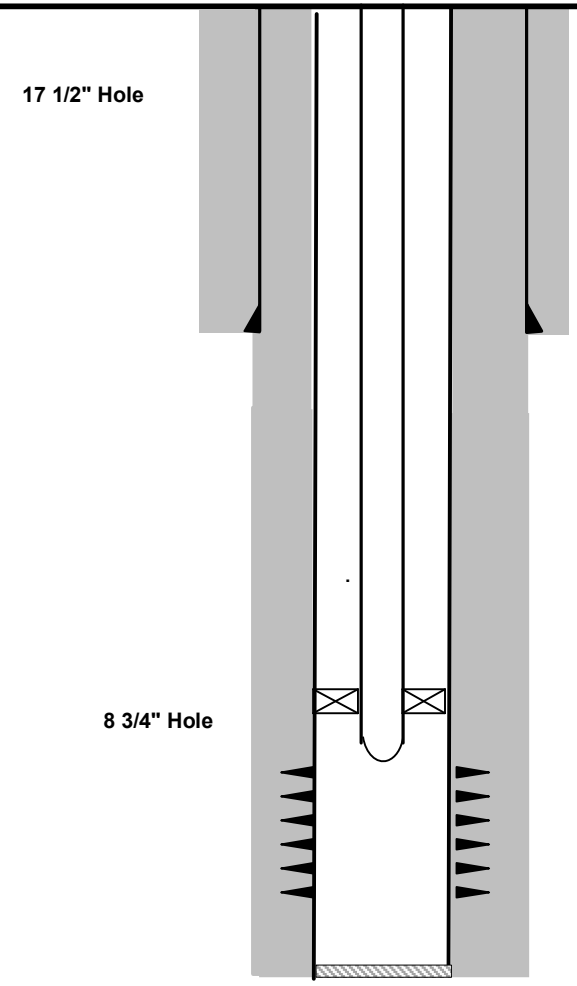
W Lybrook Unit 2309-24N Proposed

Spud Date: 01/03/19
Completion Date: 02/07/19

Lat: 36.205932 N Long: 107.741568 W
Entrada
SE/4, SW/4, Section 24, TWP 23N, Rng 09W
County: Sandoval NM
Elevation: 6893' KB

Created By: TJOYCE
Modified By: M WARP (8/19/19)
Modified By: M WARP (9/06/19)
Modified By: C Longwell (9/7/22)

Current Wellbore



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7" Production 26# L-80 to 7,398' (LT&C). **PBTD = 7,307.6'**. Displacement. Burst 7" 26# L-80 LT&C = 7240 psi burst. Pumped 80 bbls tuned spacer & 184 bbls lead cmt (525 sxs) @ 12.3 PPG, followed by 102 bbls tail cmt @ 13.3 ppg. Dropped plug & disp w/ 279 bbls H2O, bumped plug, circ 52 bbls good cmt to surface. Floats held.

BHA Detail: (9/30/2019)
4 ½" plastic lined tubing
7" x 4 ½" AS1-X Packer at 6,810'

Perforations:
6851'-6856' (4 spf)
6895'-6900' (4 spf)
6912'-6917' (4 spf)
6953'-6958' (4 spf)
6985'-6990' (4 spf)
(100 total holes)

Farmington Daily Times
PART OF THE USA TODAY NETWORK

Affidavit of Publication

Ad # 0005408056

This is not an invoice

SUTHIWAN KHEM
6300 S SYRACUSE WAY
SUITE 525
CENTENNIAL, CO 80111

I, being duly sworn say: **Farmington Daily Times**, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newsaper duly qualified for the purpose within the State of New Mexico for publication and appeared in the internet at The Daily Times web site on the following days(s):

09/12/2022

Legal Clerk

Subscribed and sworn before me this September 12, 2022:

State of WI, County of Brown
NOTARY PUBLIC

1-7-25

My commission expires

KATHLEEN ALLEN
Notary Public
State of Wisconsin

Enduring Resources, LLC, 6300 S Syracuse Way, Suite 525, Centennial, Colorado 80111, Attention: Khem Suthiwan, (303) 350-5721, is filing Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division for administrative approval for its saltwater disposal well W Lybrook Unit 2309-24N (OSE Pod No. SJ 4301 POD 3). The proposed well is located at approximately 294' feet FSL and 2284 feet FWL in Section 24, Lot N, Township 23N, Range 9W in San Juan County, New Mexico. Disposal water will be sourced from area production and will be injected into the Entrada formation at a depth of 6,851 ft to 6,990 ft below ground level and at an expected maximum injection rate of 20,000 bbls water per day and pressure of 1,370 psi. Interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.
#5408056, Daily Times, Sept.12, 2022

Ad # 0005408056
PO #: Public Notice
# of Affidavits: 1

This is not an invoice

Page 110 of 184

ENDURING RESOURCES
6300 S Syracuse Way, Suite 525 • Centennial, CO 80111
Telephone (303) 573-1222

September 12, 2022

Via Certified Mail (Article No. 7020 2450 0001 1930 9979)

Bureau of Land Management
Farmington Field Office
6251 College Blvd, Suite A
Farmington, NM 87402

Re: W Lybrook Unit 2309-24N
OSE Pod No. SJ-4301 POD 3
San Juan County, NM

All Affected Parties:

Enduring Resources, LLC (Enduring) is applying (C-108 Application Enclosed) to convert its W Lybrook Unit 2309-24N (SJ-4301 POD 3) Water Supply Well into a Salt Water Disposal Well. The subject well was initially drilled in 2019 by Enduring to target the Entrada Formation.

Pursuant to Section 19,15,26 of the New Mexico Administrative Code, this letter serves as formal notice of the SWD conversion. No action is needed unless you have any questions or objections.

- Well Name: W Lybrook Unit 2309-24N
- OSE Pod No: SJ-4301 POD 3
- Location: N-Section 23, T23N-R09W
- Injection Interval: 6,851' to 6,990'
- Proposed Disposal Zone: Entrada (Pool Code: 96436)
- Applicant Name: Enduring Resources, LLC
- Applicant Address: 6300 S Syracuse Way, Suite 525 Centennial, CO 80111

If you have any questions or concerns, please contact the undersigned using the information provided below.

Sincerely,

Khem Suthiwan
Regulatory Manager

Enduring Resources, LLC
6300 S Syracuse Way, Suite 525
Centennial, CO 80111
Direct: (720) 350-5721
Email: ksuthiwan@enduringresources.com

Received by OCD: 9/13/2022 2:37:53 PM

Released to Imaging: 9/30/2022 3:13:56 PM

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

Sundry Print Report

09/09/2022

Well Name: W LYBROOK UNIT	**Well Location:** T23N / R9W / SEC 23 / SWSW / 36.206767 / -107.765027	**County or Parish/State:** SAN JUAN / NM
Well Number: 726Y	**Type of Well:** OIL WELL	**Allottee or Tribe Name:** EASTERN NAVAJO
Lease Number: N0G13121863	**Unit or CA Name:**	**Unit or CA Number:** NMNM135216A, NMNM135216X
US Well Number: 3004535769	**Well Status:** Plugged and Abandoned	**Operator:** ENDURING RESOURCES LLC

Notice of Intent

Sundry ID: 2691566

Type of Submission: Notice of Intent

Type of Action: Convert to Injection or Disposal Well

Date Sundry Submitted: 09/09/2022

Time Sundry Submitted: 08:53

Date proposed operation will begin: 09/19/2022

Procedure Description: Enduring Resources IV, LLC (Enduring) is requesting permission from the BLM to convert an existing facility containing a water supply well located on BLM-owned surface, WLU 2309-24N (NMOSE well SJ-4301 POD3), to an injection well for recovered fracturing water from production well completions. The existing well is completed in the Entrada Formation, with water currently extracted for use in production well completions. The Entrada formation contains low quality water and the formation is commonly used for both extraction and injection purposes in the San Juan Basin. The proposed injected water would be of similar quality to the existing water present in the Entrada Formation. Currently, the New Mexico Oil Conservation Division (NMOCD) has jurisdiction for permitting salt-water disposal wells (Class II Injection wells) and requires that surface owners grant permission for such use. Please see attached procedure.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

WLU_2309_24N___Disposal_Conversion_Procedure_20220909085251.pdf

Released to Imaging: 9/30/2022 3:13:56 PM

Well Name: W LYBROOK UNIT

Well Location: T23N / R9W / SEC 23 / SWSW / 36.206767 / -107.765027

County or Parish/State: SAN JUAN / NM

Well Number: 726Y

Type of Well: OIL WELL

Allottee or Tribe Name: EASTERN NAVAJO

Lease Number: N0G13121863

Unit or CA Name:

Unit or CA Number: NMNM135216A, NMNM135216X

US Well Number: 3004535769

Well Status: Plugged and Abandoned

Operator: ENDURING RESOURCES 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: KHEM SUTHIWAN

Signed on: SEP 09, 2022 08:52 AM

Name: ENDURING RESOURCES LLC

Title: Regulatory Manager

Street Address: 6300 S WAY SUITE 525

City: DENVER **State:** CO

Phone: (303) 350-5721

Email address: KSUTHIWAN@ENDURINGRESOURCES.COM

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

CONFIDENTIAL

Released to Imaging: 9/30/2022 3:13:56 PM
Received by OCD: 9/13/2022 2:37:53 PM

WLH 2309-24N SWD notice

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Bureau of Land Management
Farmington Field Office
6251 College Blvd, Suite A
Farmington, NM 87402

9590 9402 6590 1028 9635 73

2. Article Number *(Transfer from service label)*

7020 2450 0001 1930 9979

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

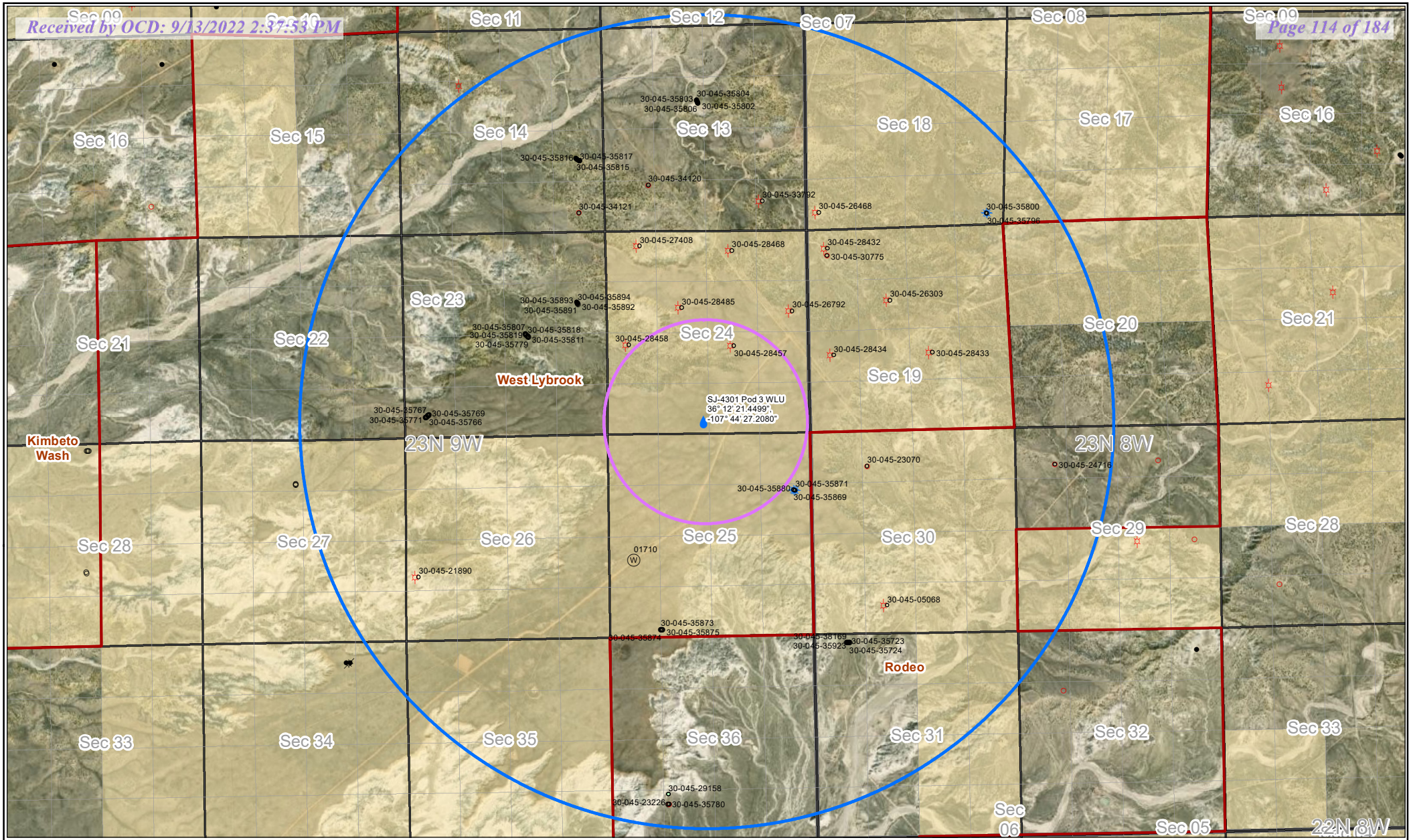
D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

Received by OCD: 9/13/2022 2:37:53 PM



SJ-4301 POD 3 Map

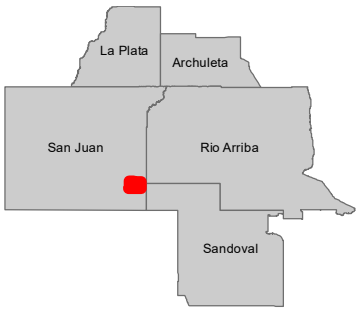
Active Wells
- Gas
- Oil

Inactive Wells
- Cancelled
- New

- Plugged (site released)
- Temporary Abandonment
- Temporary Abandonment (expired)
- SJ-4301 POD 3 WLU
- NMOSE Water
- WLU 1/2 Mile Buffer
- WLU 2 Mile Buffer
- Unit Boundary
- PLSS_QtrQtr_SJB
- Section
- Township

Federal Minerals Ownership
- All Minerals

Miles
0 0.5 1 2



ENDURING RESOURCES, LLC

Data Source Statement:
BLM-FFO, Enduring Resources GIS, ESRI Inc., NCE Surveys, USGS

Author: drogers | Date: 2/24/2021

Released to Imaging: 9/30/2022 3:13:36 PM

Form C-108
WLU 2309-24N (SJ-4301 POD 3)
San Juan County, New Mexico

API/Lease Number	Operator	Well	Unit Section T23N R9W	True Vertical Depth	Pool	Status
BLM Lease NMNM 057164	Enduring Resources IV, LLC	N/A	N/A	N/A	N/A	N/A
BLM Lease NMNM 036949	Enduring Resources IV, LLC	N/A	N/A	N/A	N/A	N/A

Enduring Resources

SEU 359 Pad

Water Analysis

Test:		North Escavada Pond
Temperature	(deg F)	64.5
Specific Gravity		1.029
pH		8.45
Sodium Na+	(mg/L)	13915
Magnesium Mg 2+	(mg/L)	80
Iron Fe2+	(mg/L)	<LOD
Total Iron Fe2+ & Fe3+	(mg/L)	6
Calcium Ca 2+	(mg/L)	394
Total Hardness as CaCO3	(mg/L)	1312
Chlorides CL-	(mg/L)	20945
Hydroxide OH-	(mg/L)	<LOD
Carbonate CO3(2-)	(mg/L)	96
Bicarbonates HCO3-	(mg/L)	708
Phosphates PO4(3-)	(mg/L)	6
Sulfates SO4(2-)	(mg/L)	1250
ORP	mV	10
TDS	(mg/L)	37400

*** <LOD indicates a result less than limit of detection.

HALLIBURTON

Water Analysis Report

30-045-33217
F-11-24n-11w

To:	Dugan Production	Date:	11/10/2005
Submitted by:	Halliburton Energy Services	Date Rec:	11/10/2005
Attention:	Darrin Steed	Report #:	FLMM5A44
Well Name:	Herry Monster #3 SWD	Formation:	Entrada/SWD

Specific Gravity	1.005	
pH	8.4	
Resistivity	0.89	@ 70° F
Iron (Fe)	0	Mg / L
Potassium (K)	200	Mg / L
Sodium (Na)	4165	Mg / L
Calcium (Ca)	176	Mg / L
Magnesium (Mg)	15	Mg / L
Chlorides (Cl)	2200	Mg / L
Sulfates (SO4)	2000	Mg / L
Carbonates (CO3)	40	Mg / L
Bicarbonates (HCO3)	5612	Mg / L
Total Dissolved Solids	14408	Mg / L

Respectfully: Bill Loughridge
Title: Senior Scientist
Location: Farmington, NM

EXHIBIT F

NOTICE: This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or its use.

Analytical Report
Lab Order **1810596**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: John Shomaker & Assoc.
Client Sample ID: First Formation
Project: Enduring Resources
Collection Date: 10/9/2018 11:52:00 AM
Lab ID: 1810596-002 **Matrix:** AQUEOUS **Received Date:** 10/10/2018 12:40:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Fluoride	5.8	0.50	*	mg/L	5	10/10/2018 7:26:00 PM	R54788
Chloride	1400	100	*	mg/L	200	10/12/2018 3:31:22 AM	R54823
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	10/10/2018 7:26:00 PM	R54788
Bromide	1.5	0.50		mg/L	5	10/10/2018 7:26:00 PM	R54788
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	10/10/2018 7:26:00 PM	R54788
Phosphorus, Orthophosphate (As P)	ND	10		mg/L	20	10/10/2018 7:38:25 PM	R54788
Sulfate	6100	100	*	mg/L	200	10/12/2018 3:31:22 AM	R54823
SM2510B: SPECIFIC CONDUCTANCE						Analyst:	**MRA**
Conductivity	13000	10		µmhos/c	2	10/15/2018 3:53:19 PM	R54896
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst:	**KS**
Total Dissolved Solids	10200	200	*D	mg/L	1	10/15/2018 4:39:00 PM	40981
SM4500-H+B / 9040C: PH						Analyst:	**MRA**
pH	7.93		H	pH units	1	10/11/2018 3:01:50 PM	R54833
EPA METHOD 200.7: METALS						Analyst:	**JLF**
Calcium	1100	100		mg/L	100	10/16/2018 7:07:08 PM	40970
Magnesium	72	10		mg/L	10	10/16/2018 7:03:08 PM	40970
Potassium	320	10		mg/L	10	10/16/2018 7:03:08 PM	40970
Sodium	3300	100		mg/L	100	10/16/2018 7:07:08 PM	40970

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Received by OCD: 9/13/2022 2:37:53 PM

ALLIED HORIZONTAL WIRELINE SERVICES

Composite Log

Company Enduring Resources
Well West Lybrook unit 2309-24N WSW
Field West Lybrook
County San Juan
State New Mexico
Location: Section 24, Township 23N, Range 09W
API # : SJ-4301 POD 3
Other Services: IAT / SGR / MEL

Permanent Datum	Ground Level	Elevation	6870 ' ft.
Log Measured From	KB	, 17 ft. above perm. datum	
Drilling Measured From	Kelly Bushing		

Elevation		
K.B.	6887.5 '	ft.
D.F.	6886.5 '	ft.
G.L.	6870 '	ft.

Date	01/15/2019			
Run Number	One			
Depth Driller	7408 '			
Depth Logger	7403 '			
Bottom Logged Interval	7392 '			
Top Log Interval	406 '			
Casing Driller	13.375 " @ 406 '	@	@	@
Casing Logger	402 '			
Bit Size	8.750 "	@	@	@
Type Fluid in Hole	Brine			
Density / Viscosity	9.4 / 39			
pH / Fluid Loss	7 / 36			
Source of Sample	Mud Tank			
Rm @ Meas. Temp	.188 @ 75 °F	@	@	@
Rmf @ Meas. Temp	.141 @ 75 °F	@	@	@
Rmc @ Meas. Temp	.235 @ 75 °F	@	@	@
Source of Rmf / Rmc	Calculated			
Rm @ BHT	.097 @ 152 °F	@	@	@
Time Circulation Stopped	01/15/2019 @ 02:00			
Time Logger on Bottom	01/15/2019 @ 10:00			
Maximum Recorded Temperature	159 °F			
Equipment Number	11007			
Location	Midland			
Recorded By	J. Trasti / A.DeLaGarza			
Witnessed By	A. Bridge			

<<< Fold Here >>>

Equipment and Log Data

Service Order:

Gamma		Density		Neutron		Sonic		IAT/DLL	
Run No.	One	Run No.	One	Run No.	One	Run No.	One	Run No.	One
Serial No.	2700	Serial No.	0872	Serial No.	2541	Serial No.		Serial No.	110
O.D.	3.375 in.	Source No.	70997B	Source No.	59796G	Centralizers		Standoffs	@
		O.D.	4.5 in.	O.D.	3.375 in.	O.D.	3.375 in.	O.D	3.875 in.

Logging Pass Data

General			Gamma		Density			Neutron			Sonic			IAT/DLL	
			Scales		Scales			Scales			Scales			Scales	
Run	Depths		Left	Right	Left	Right	Matrix	Left	Right	Matrix	Left	Right	Matrix	Left	Right
One	0	7408	0	150	0.3	-0.1	2.71	0.3	-0.1	2.71				0.2	2000

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

Tools ran as per tool sketch
CNL ran eccentralized using bowspring
Annular Volume calculated using 7 in casing
Chlorides reported at 29000 PPM
10 in IAT curve affectd by Chlorides

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Tight spot detected at 7325 '

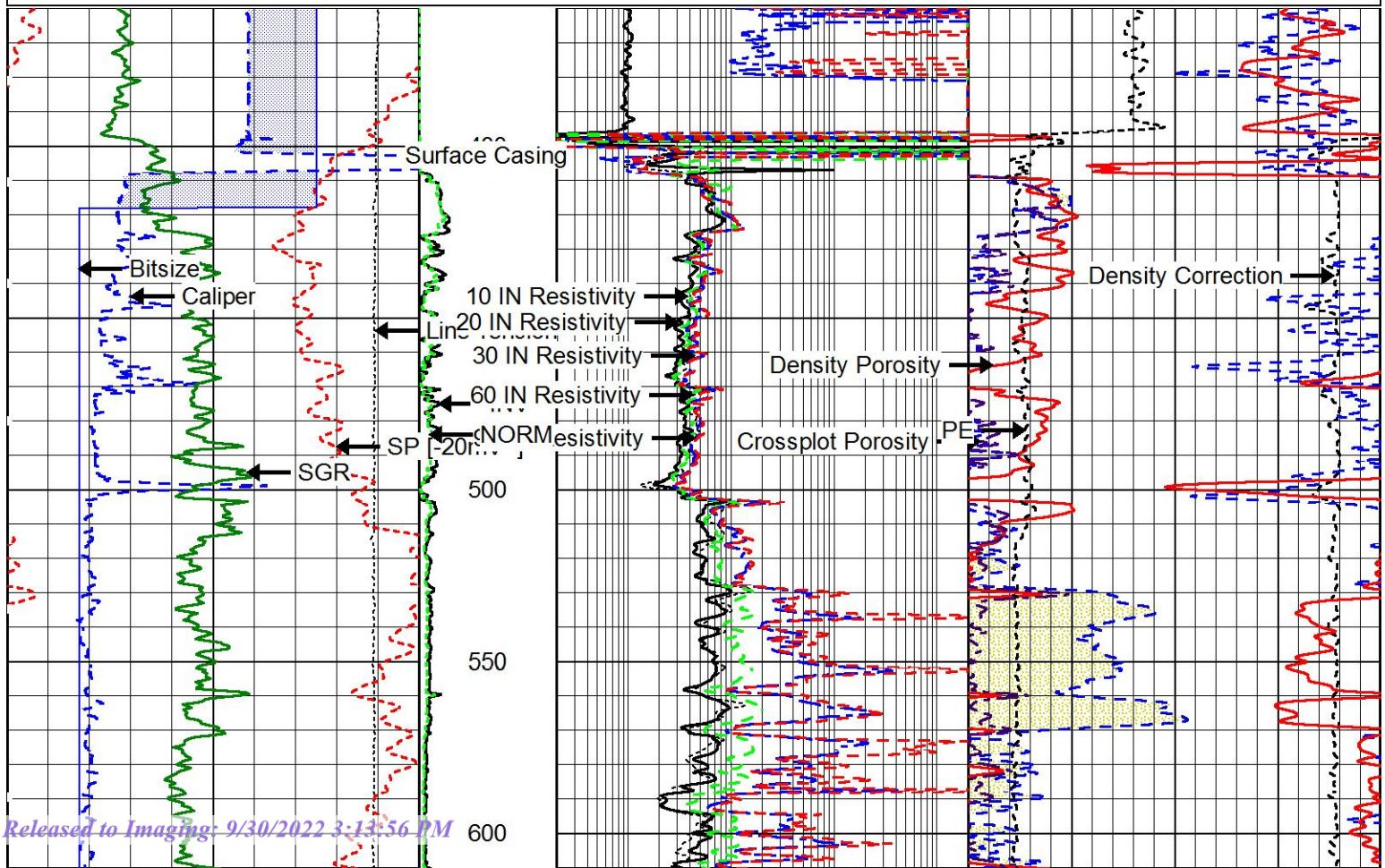
YOUR CREW TODAY: Jeremy Trasti, Alejandro de la Garza, Thomas Melson, Kindle Burket
THANK YOU FOR CHOOSING ALLIED WIRELINE. Midland, TX. (432) 897-1528.

ALLIED HORIZONTAL WIRELINE SERVICES

Main Pass

Database File	enduringreswlybrook.db
Dataset Pathname	West_Lybrook/well/run1/main
Presentation Format	3com_iat
Dataset Creation	Tue Jan 15 15:23:37 2019
Charted by	Depth in Feet scaled 1:600

7	Bitsize (in)	17	INV (Ohm-m)	0.2	10 IN Resistivity (Ohm-m)	2000	Neutron Porosity		
7	Caliper (in)	17		0.2	20 IN Resistivity (Ohm-m)	2000	0.3 (Porosity Decimal Fraction)	-0.1	
	SP [-20mV+]		0 20	0.2	30 IN Resistivity (Ohm-m)	2000	Density Porosity		
0	SGR (GAPI)	200	NORM (Ohm-m)	0.2	60 IN Resistivity (Ohm-m)	2000	0.3 (Porosity Decimal Fraction)	-0.1	
	Line Tension			0.2	90 IN Resistivity (Ohm-m)	2000	Crossplot Porosity		
	5000 (lb)	0	0 20				0.3 (Porosity Decimal Fraction)	-0.1	
							0 PE 10	Density Correction	
								0.8 (g/cc)	-0.2



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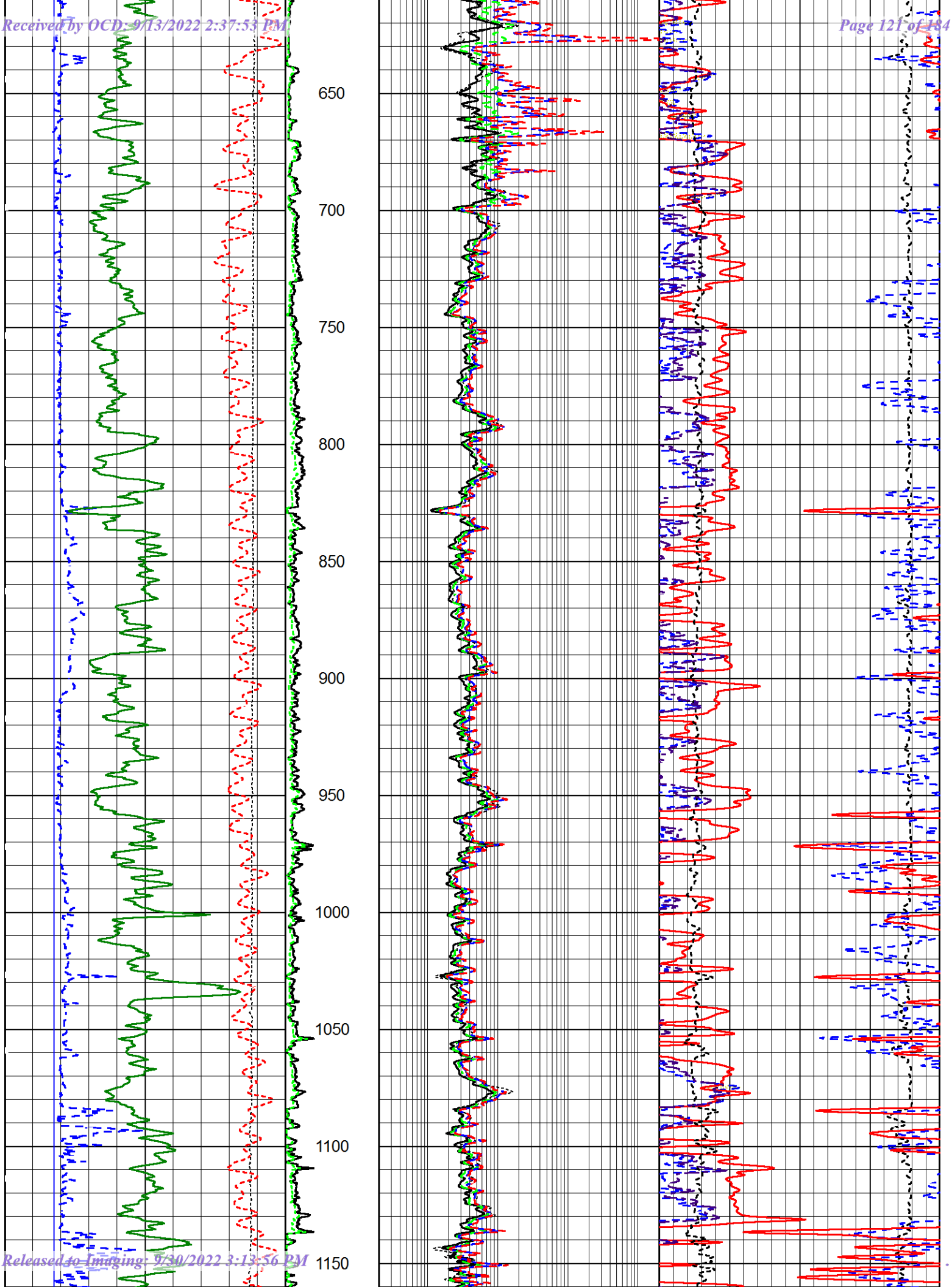

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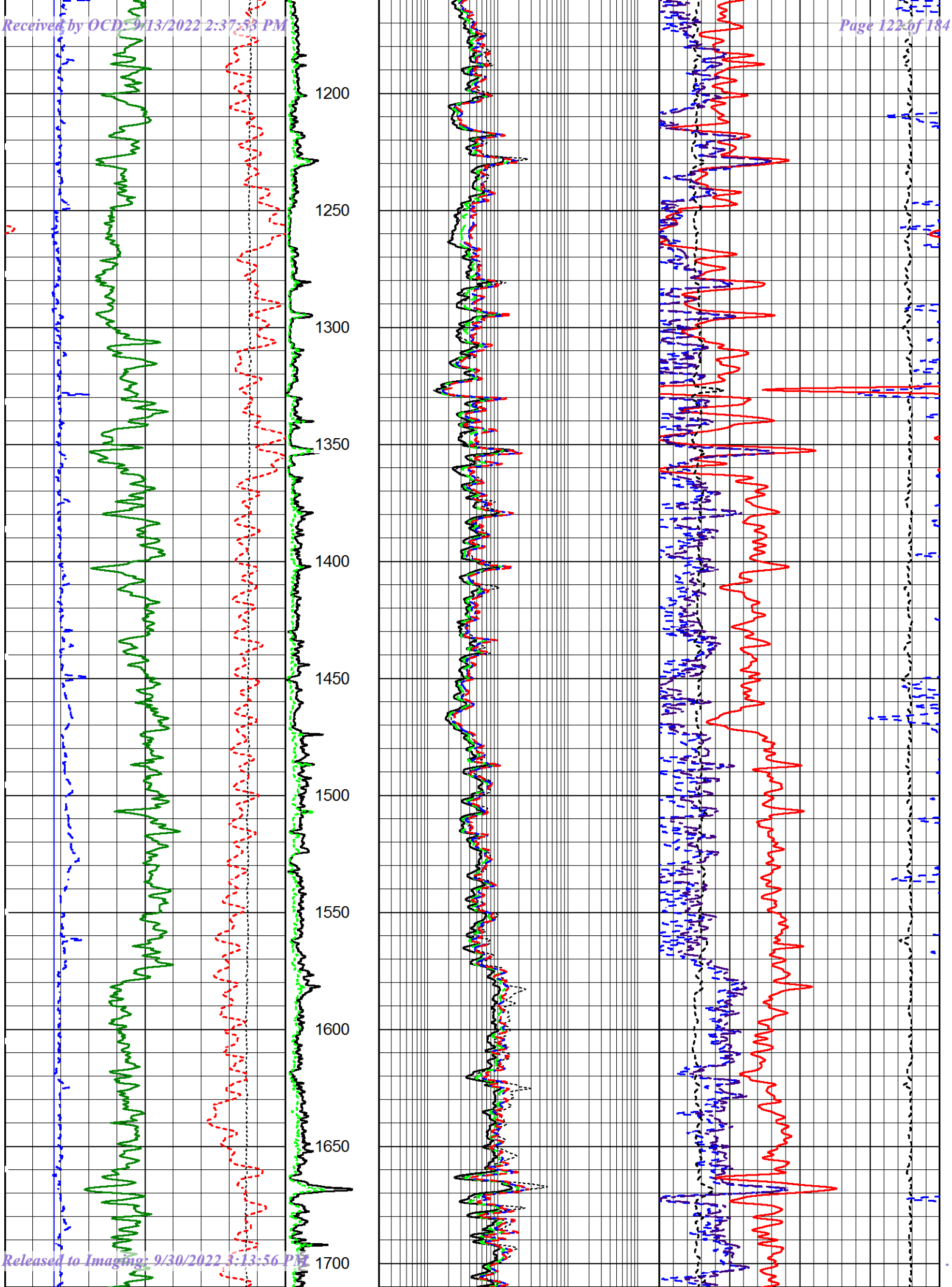
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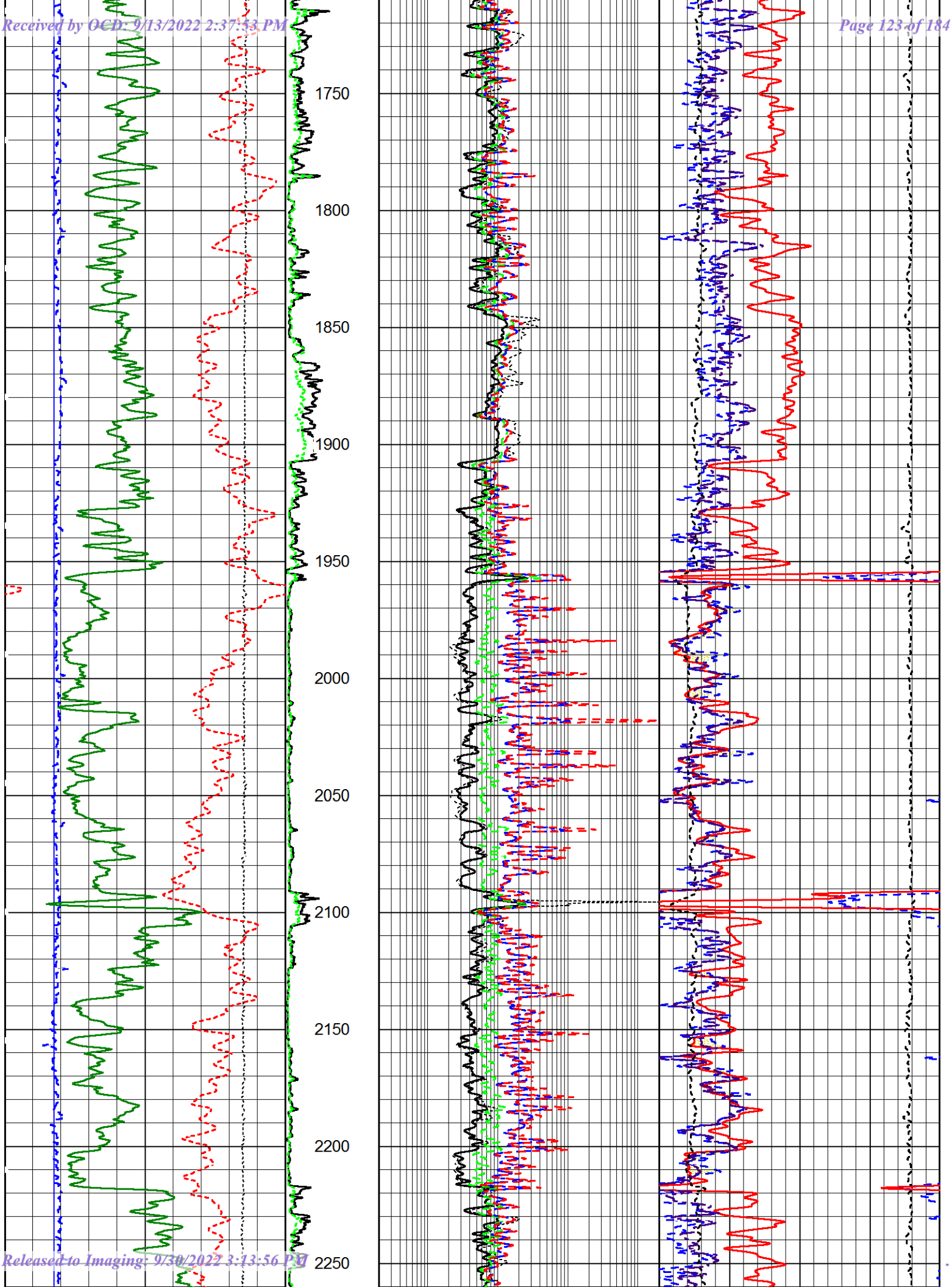
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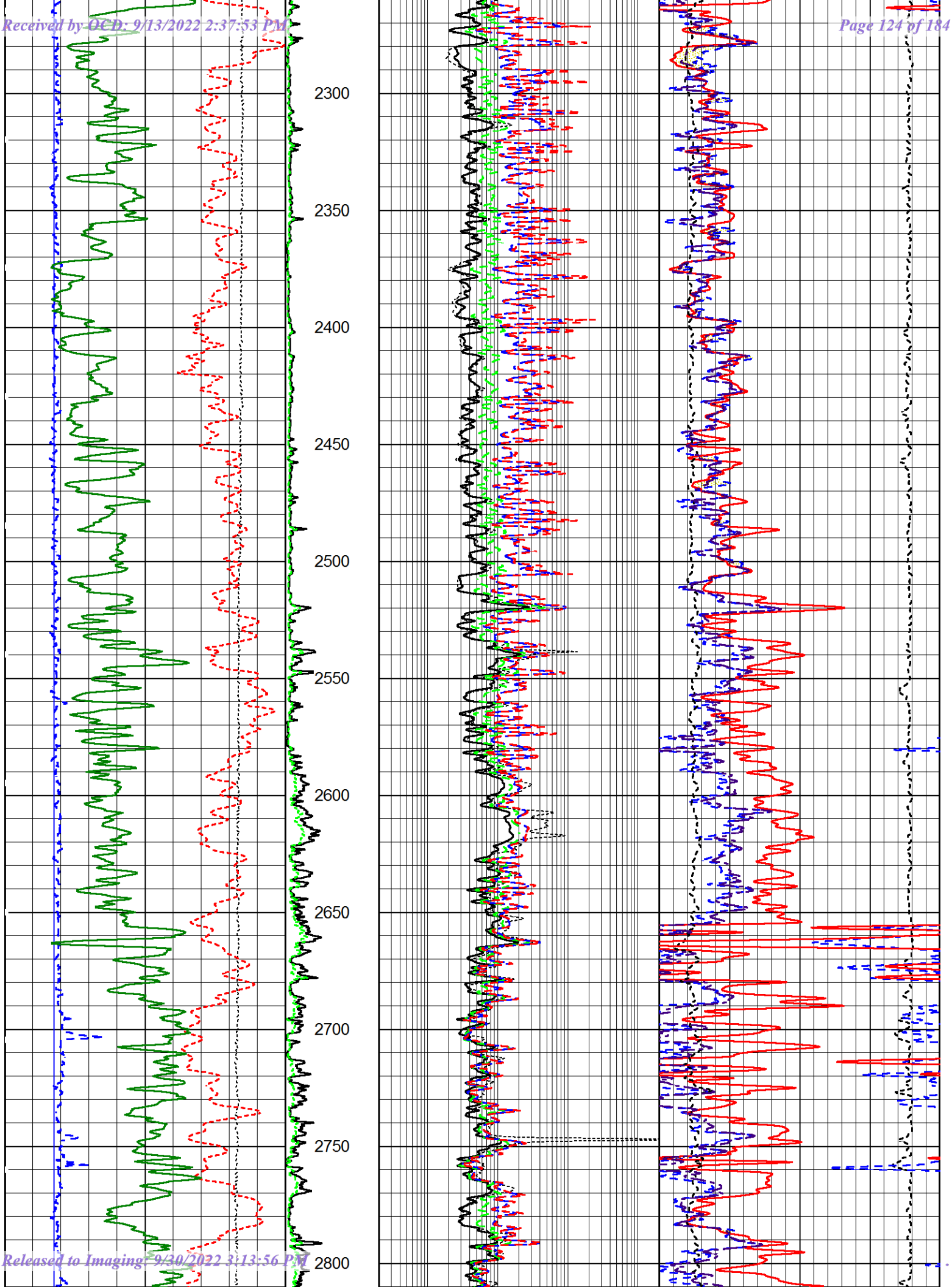
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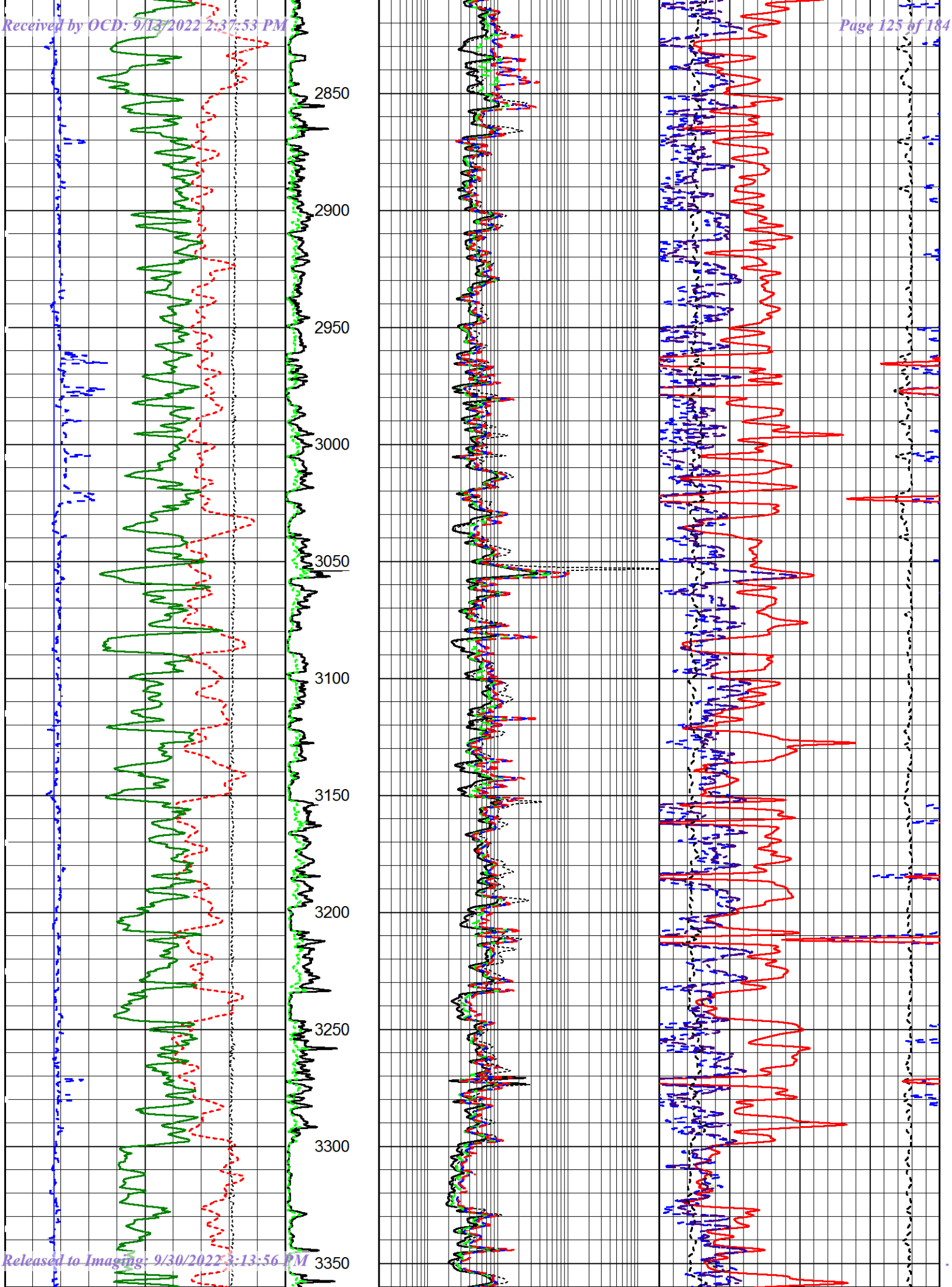
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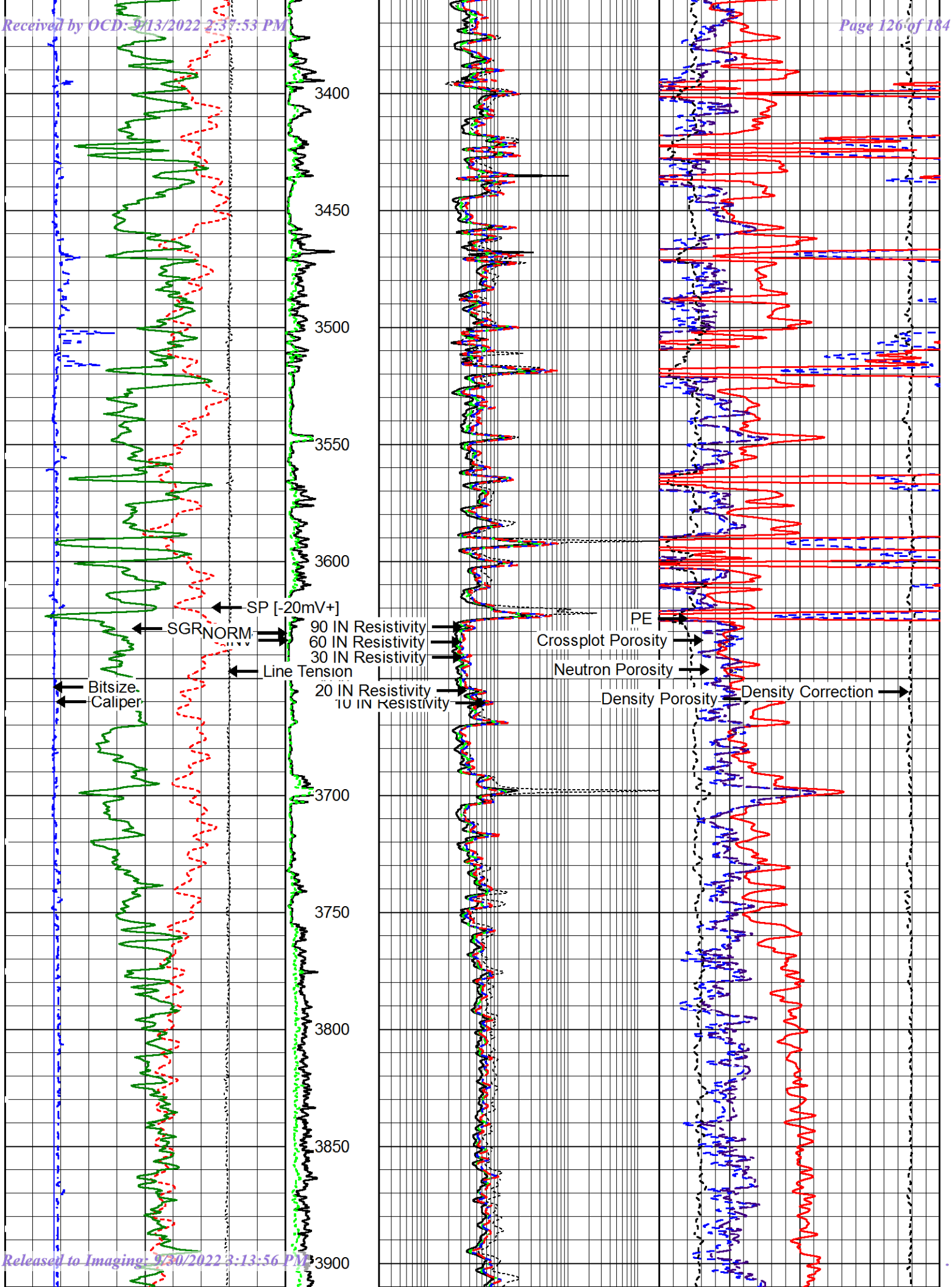
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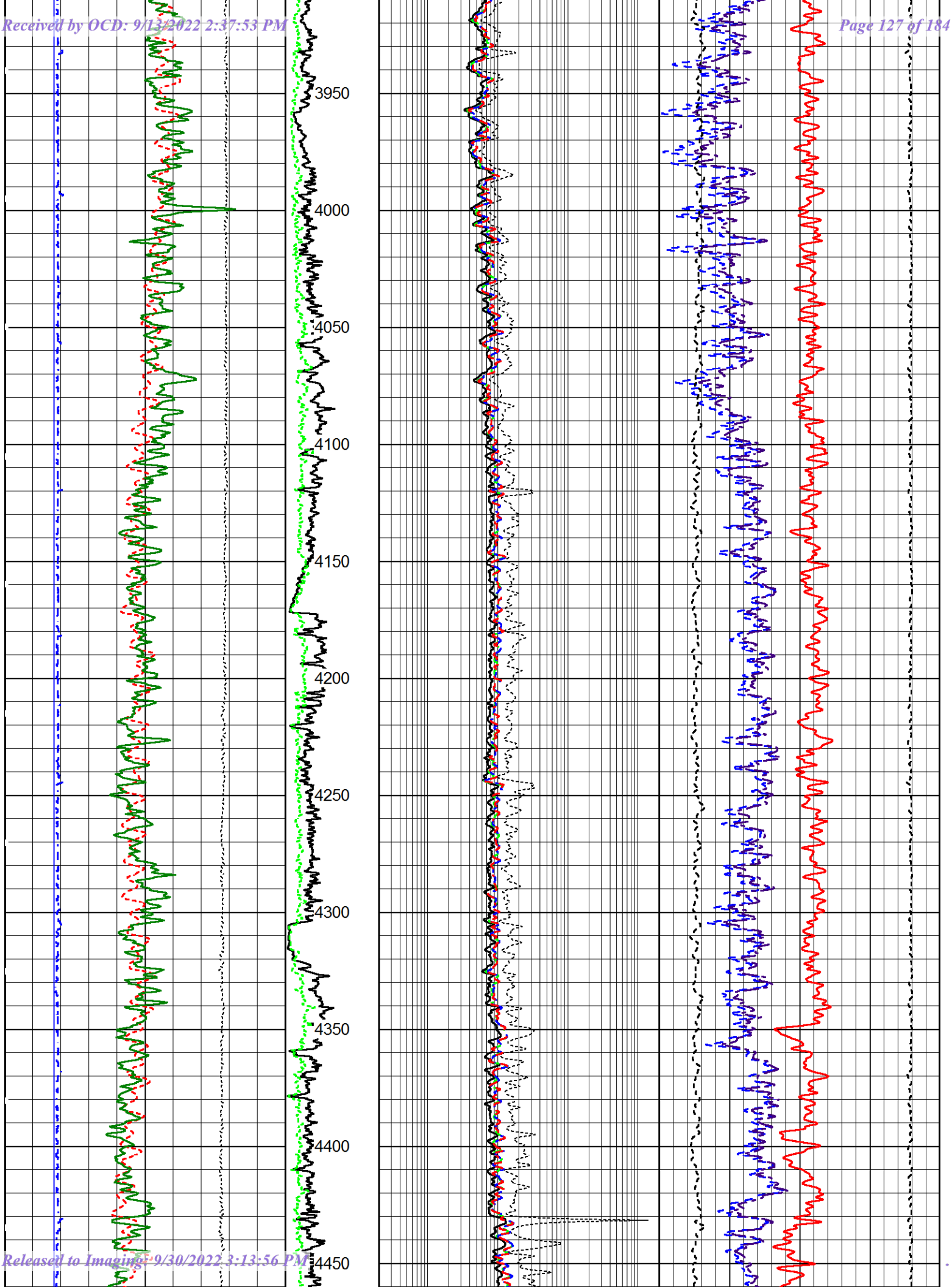
SGR
NORM
Line Tension
Bitsize
Caliper
90 IN Resistivity
60 IN Resistivity
30 IN Resistivity
20 IN Resistivity
10 IN Resistivity
PE
Crossplot Porosity
Neutron Porosity
Density Porosity
Density Correction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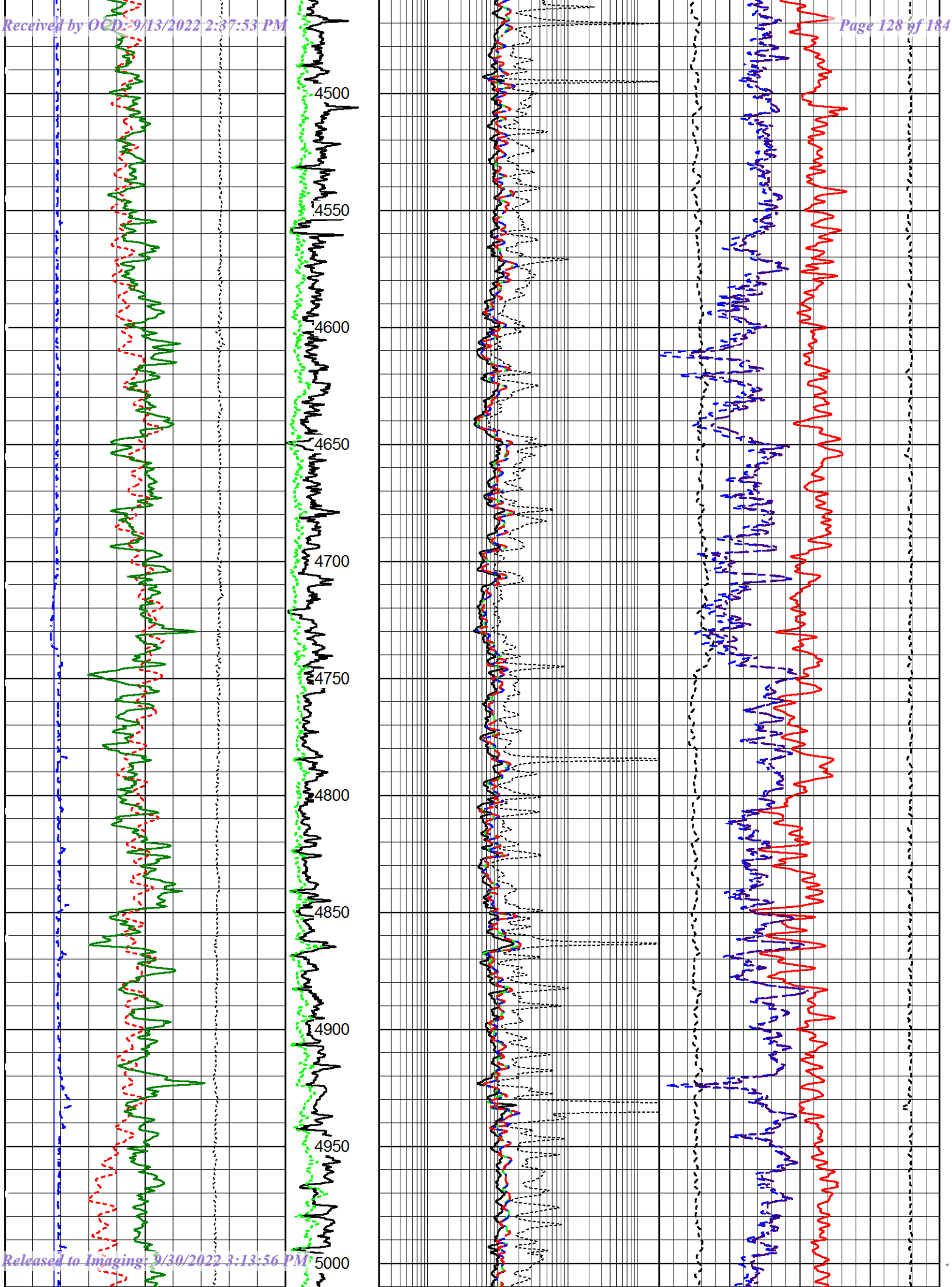
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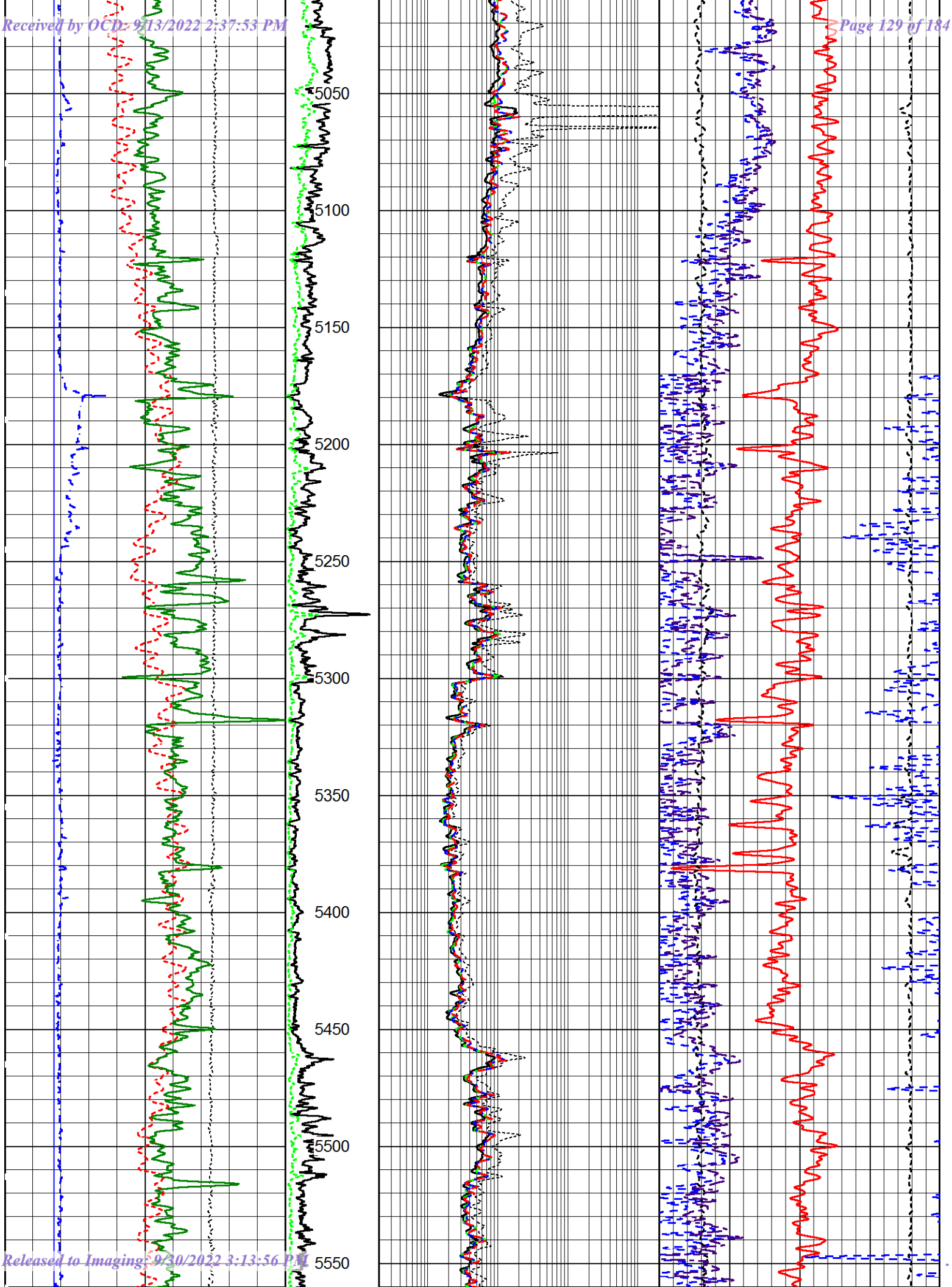
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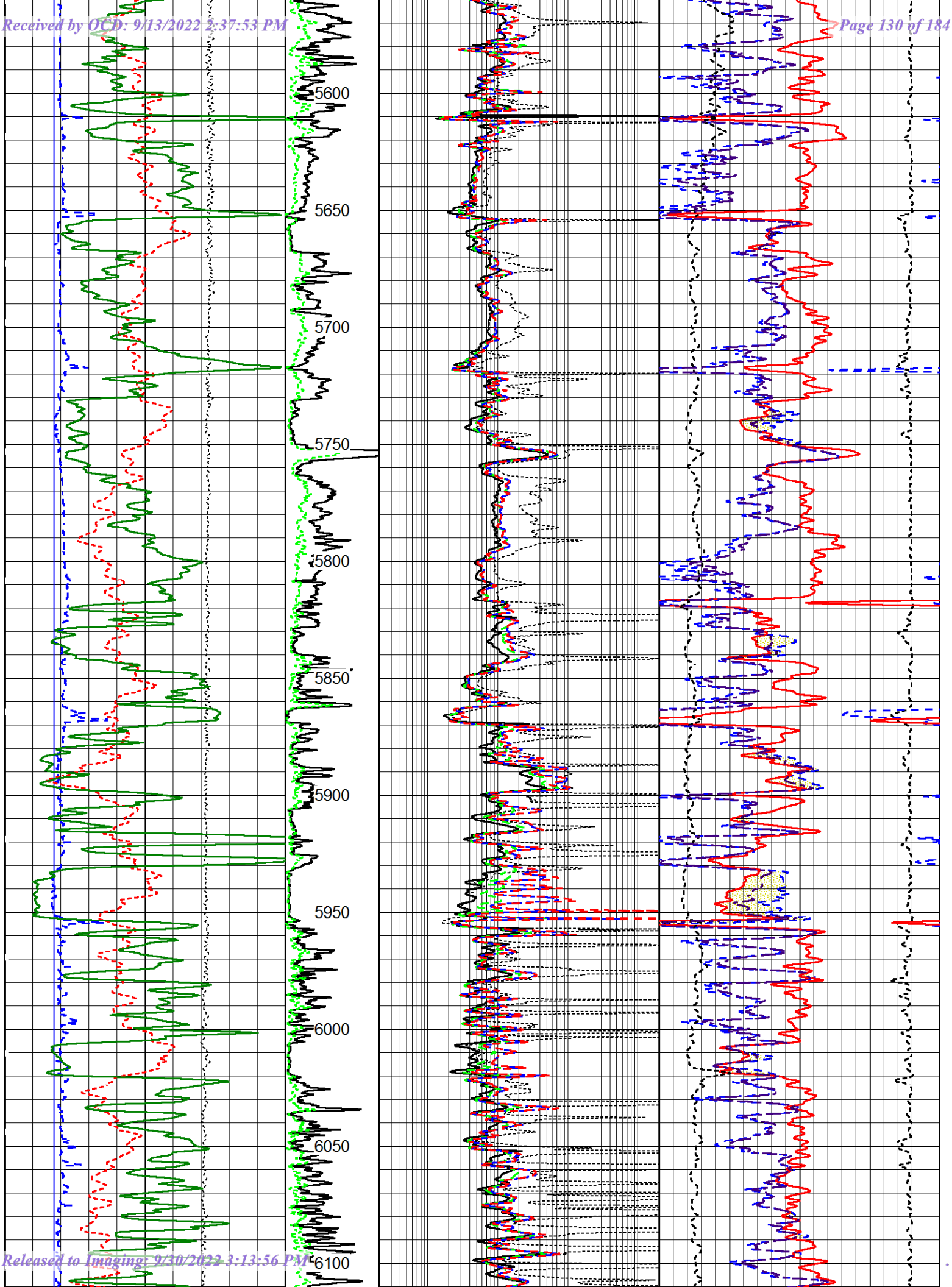
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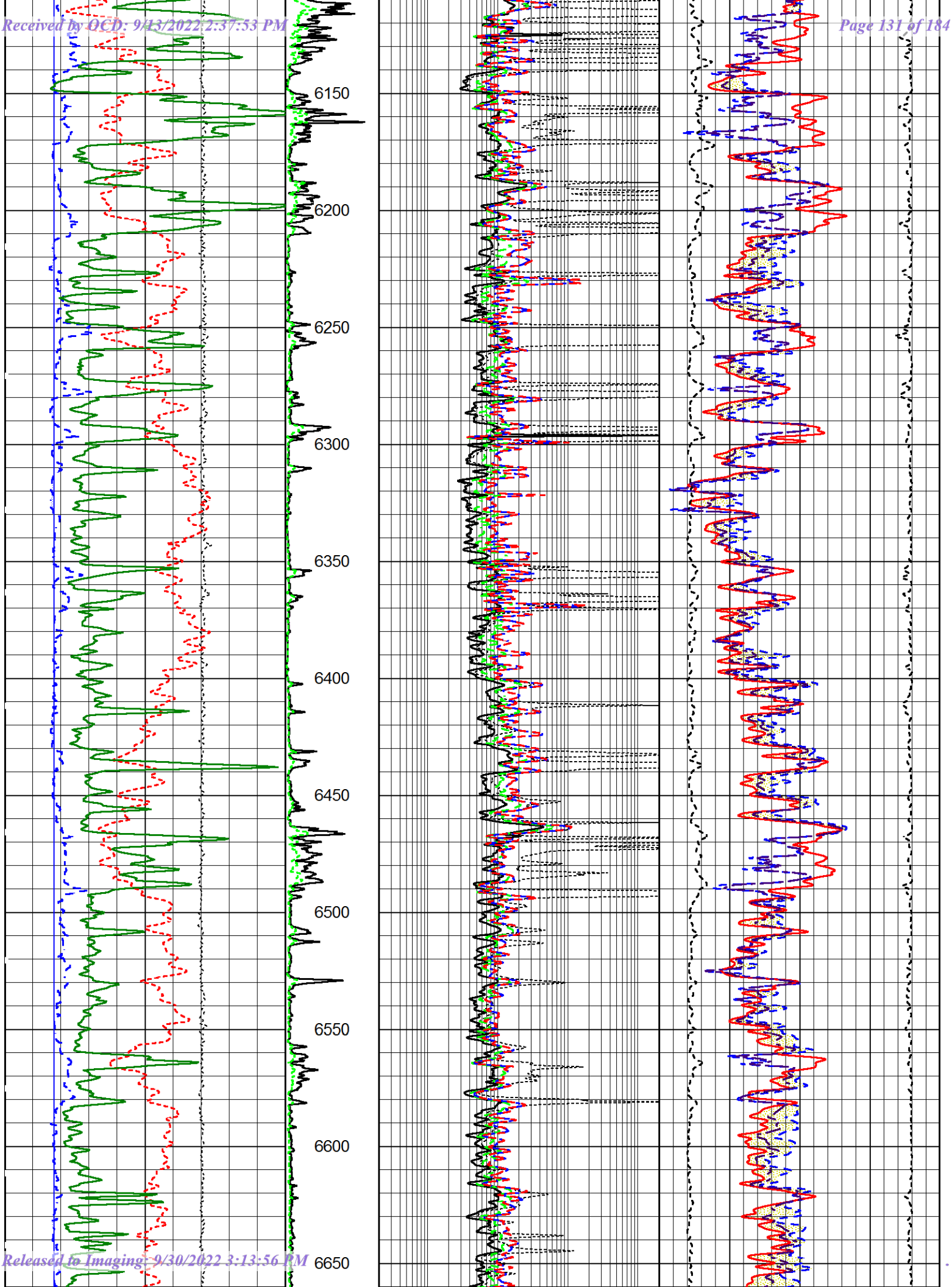
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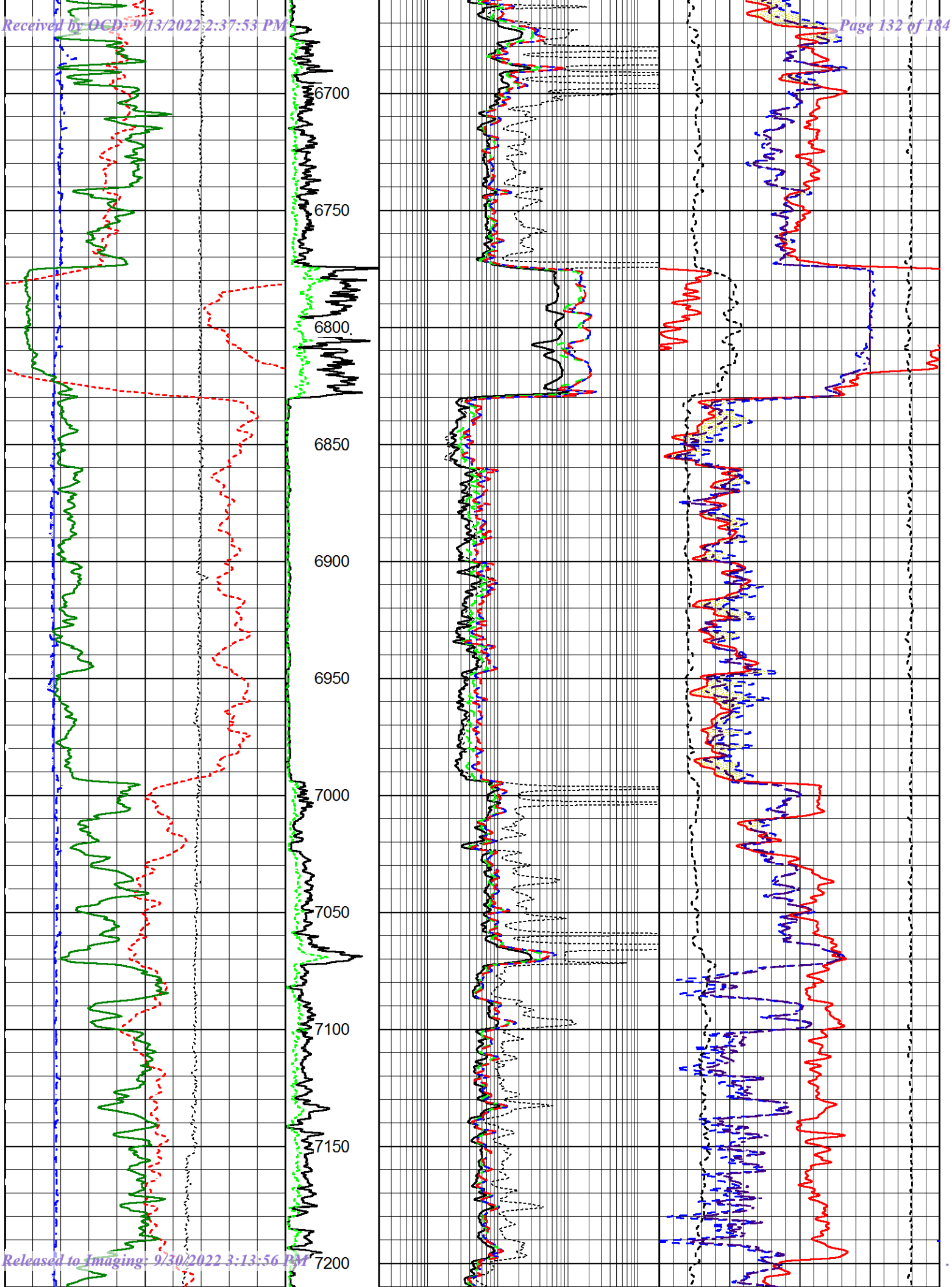
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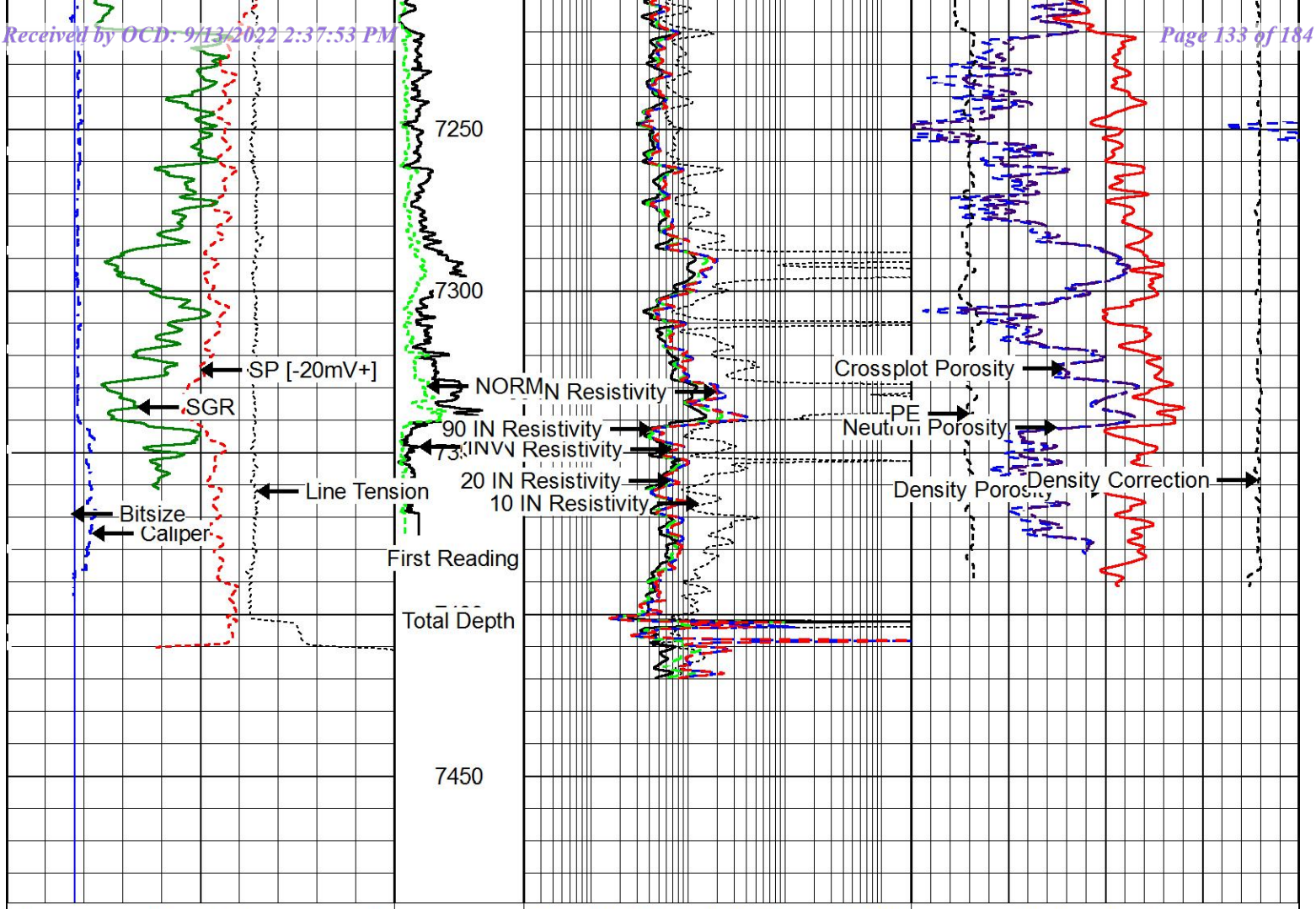

7 Bitsize (in) 17	INV	0.2 10 IN Resistivity (Ohm-m) 2000	Neutron Porosity		
7 Caliper (in) 17	(Ohm-m)	0.2 20 IN Resistivity (Ohm-m) 2000	0.3 (Porosity Decimal Fraction) -0.1		
SP [-20mV+]	0 20	0.2 30 IN Resistivity (Ohm-m) 2000	Density Porosity		
0 SGR (GAPI) 200	NORM	0.2 60 IN Resistivity (Ohm-m) 2000	0.3 (Porosity Decimal Fraction) -0.1		
Line Tension	(Ohm-m)	0.2 90 IN Resistivity (Ohm-m) 2000	Crossplot Porosity		
5000 (lb) 0	0 20		0.3 (Porosity Decimal Fraction) -0.1		
			0 PE 10	Density Correction	
				0.8 (g/cc) -0.2	

ALLIED HORIZONTAL WIRELINE SERVICES

Main Pass

ALLIED HORIZONTAL WIRELINE SERVICES

Main Pass

Database File	enduringreswlybrook.db
Dataset Pathname	West_Lybrook/well/run1/main
Presentation Format	3com_iat
Dataset Creation	Tue Jan 15 15:23:37 2019
Charted by	Depth in Feet scaled 1:240

7 Bitsize (in) 17 | INV | 0.2 10 IN Resistivity (Ohm-m) 2000 | Neutron Porosity
7 Caliper (in) 17 | (Ohm-m) | 0.2 20 IN Resistivity (Ohm-m) 2000 | 0.3 (Porosity Decimal Fraction) -0.1
SP [-20mV+] | 0 20 | 0.2 30 IN Resistivity (Ohm-m) 2000 | Density Porosity
0 SGR (GAPI) 200 | NORM | 0.2 60 IN Resistivity (Ohm-m) 2000 | 0.3 (Porosity Decimal Fraction) -0.1
Line Tension | (Ohm-m) | 0.2 90 IN Resistivity (Ohm-m) 2000 | Crossplot Porosity
5000 (lb) 0 | 0 20 | | 0.3 (Porosity Decimal Fraction) -0.1
0 PE 10 | Density Correction
0.8 (g/cc) -0.2

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7 Caliper (in) 17
SP [-20mV+]
0 SGR (GAPI) 200
Line Tension
5000 (lb) 0

INV
(Ohm-m)
0 20
NORM
(Ohm-m)
0 20

0.2 20 IN Resistivity (Ohm-m) 2000
0.2 30 IN Resistivity (Ohm-m) 2000
0.2 60 IN Resistivity (Ohm-m) 2000
0.2 90 IN Resistivity (Ohm-m) 2000

0.3 (Porosity Decimal Fraction) -0.1
Density Porosity
0.3 (Porosity Decimal Fraction) -0.1
Crossplot Porosity
0.3 (Porosity Decimal Fraction) -0.1
0 PE 10
Density Correction
0.8 (g/cc) -0.2

400
Surface Casing
Bitsize
Caliper
10 IN Resistivity
20 IN Resistivity
Line Tension
30 IN Resistivity
60 IN Resistivity
INV
NORM
SP [-20mV+]
SGR
500
Density Correction
Density Porosity
PE
Crossplot Porosity

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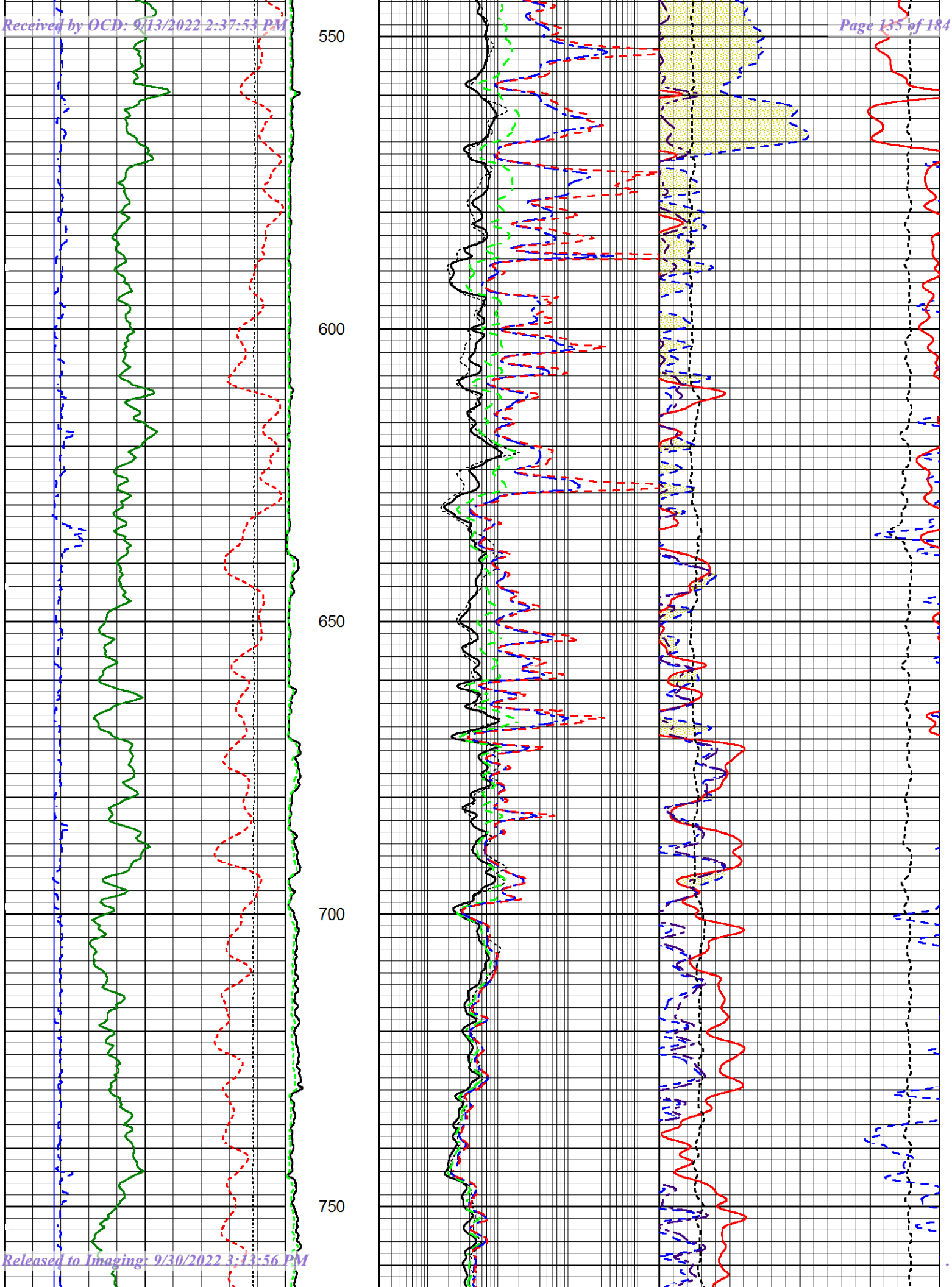

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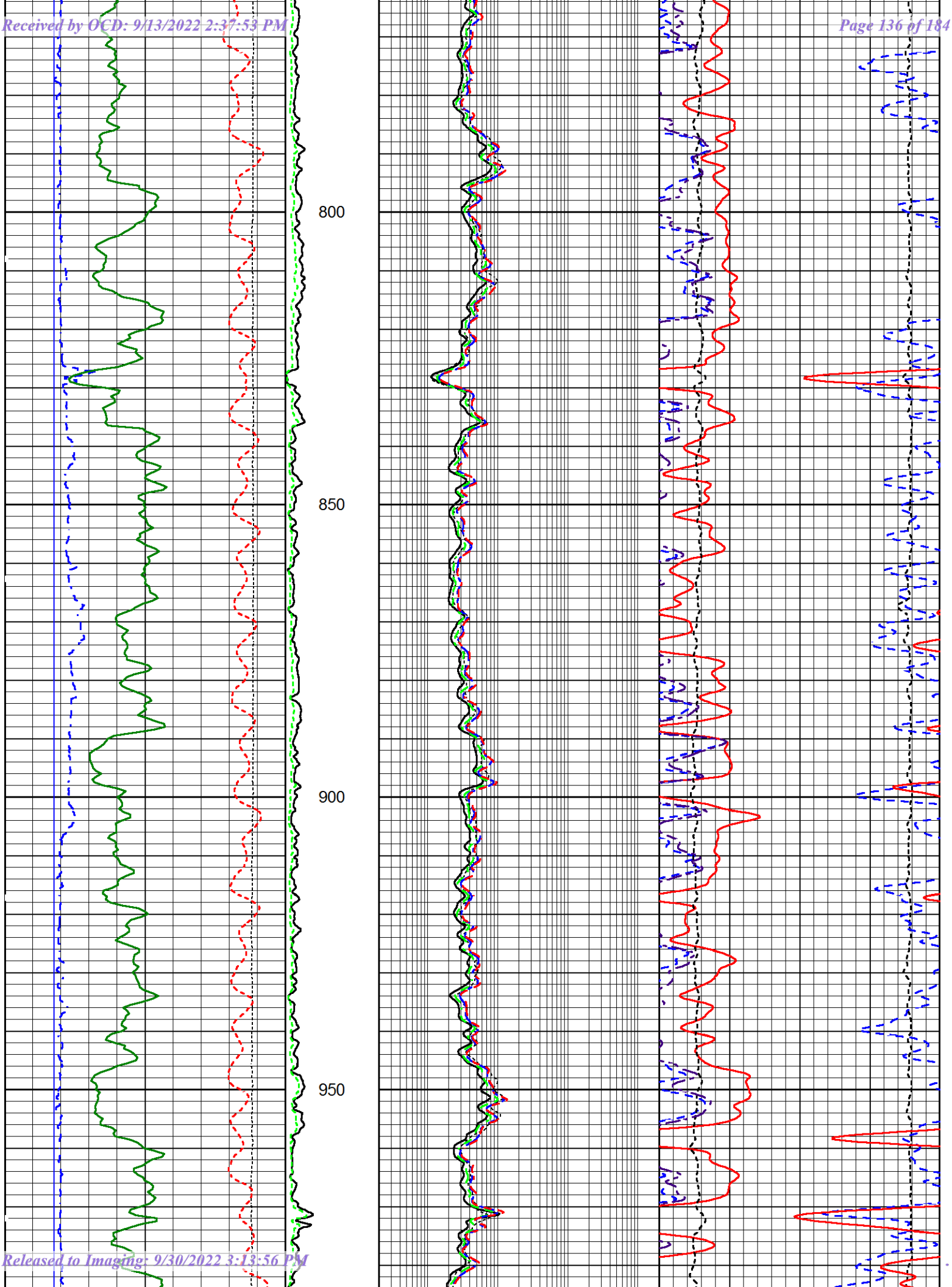

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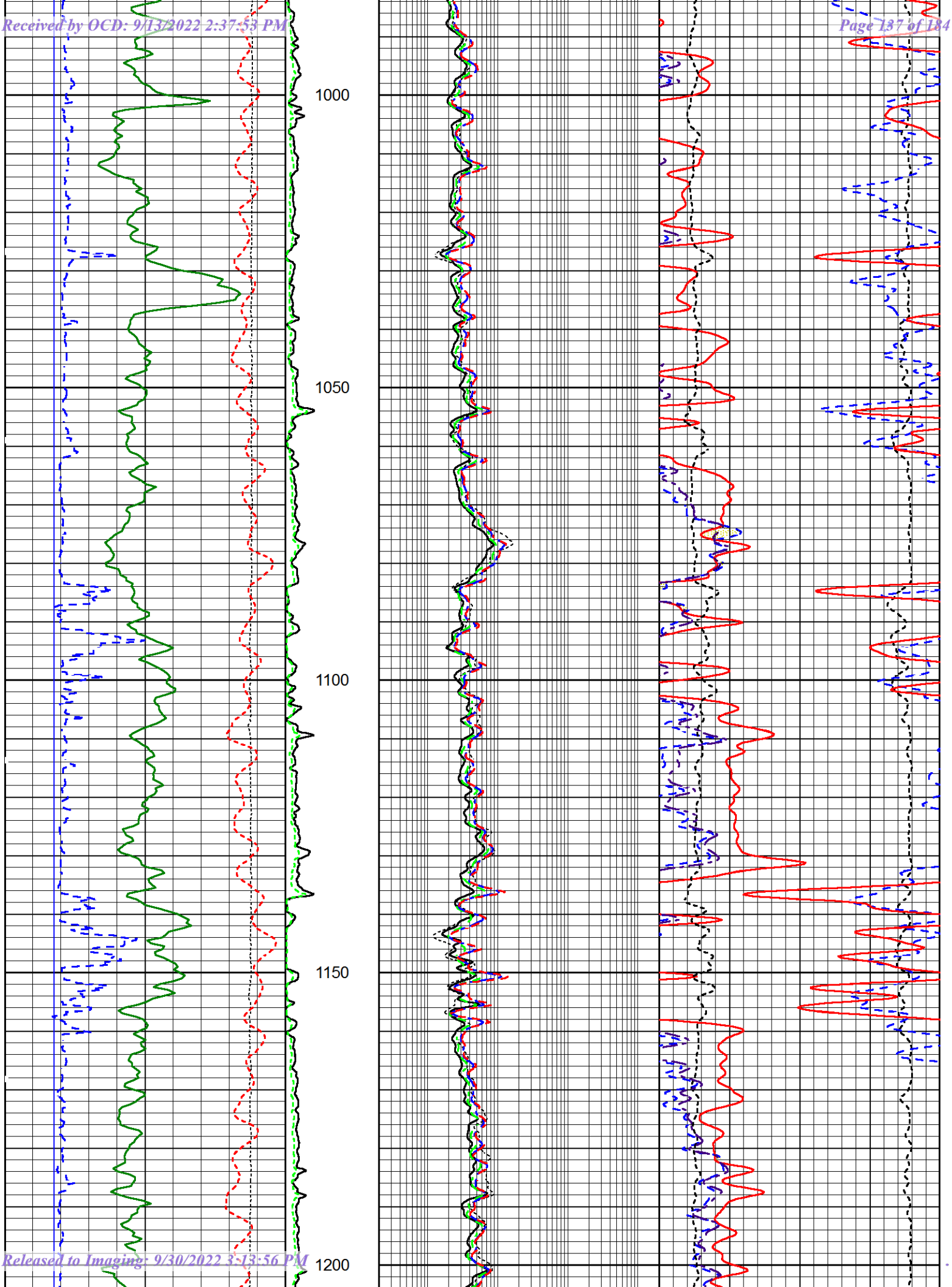

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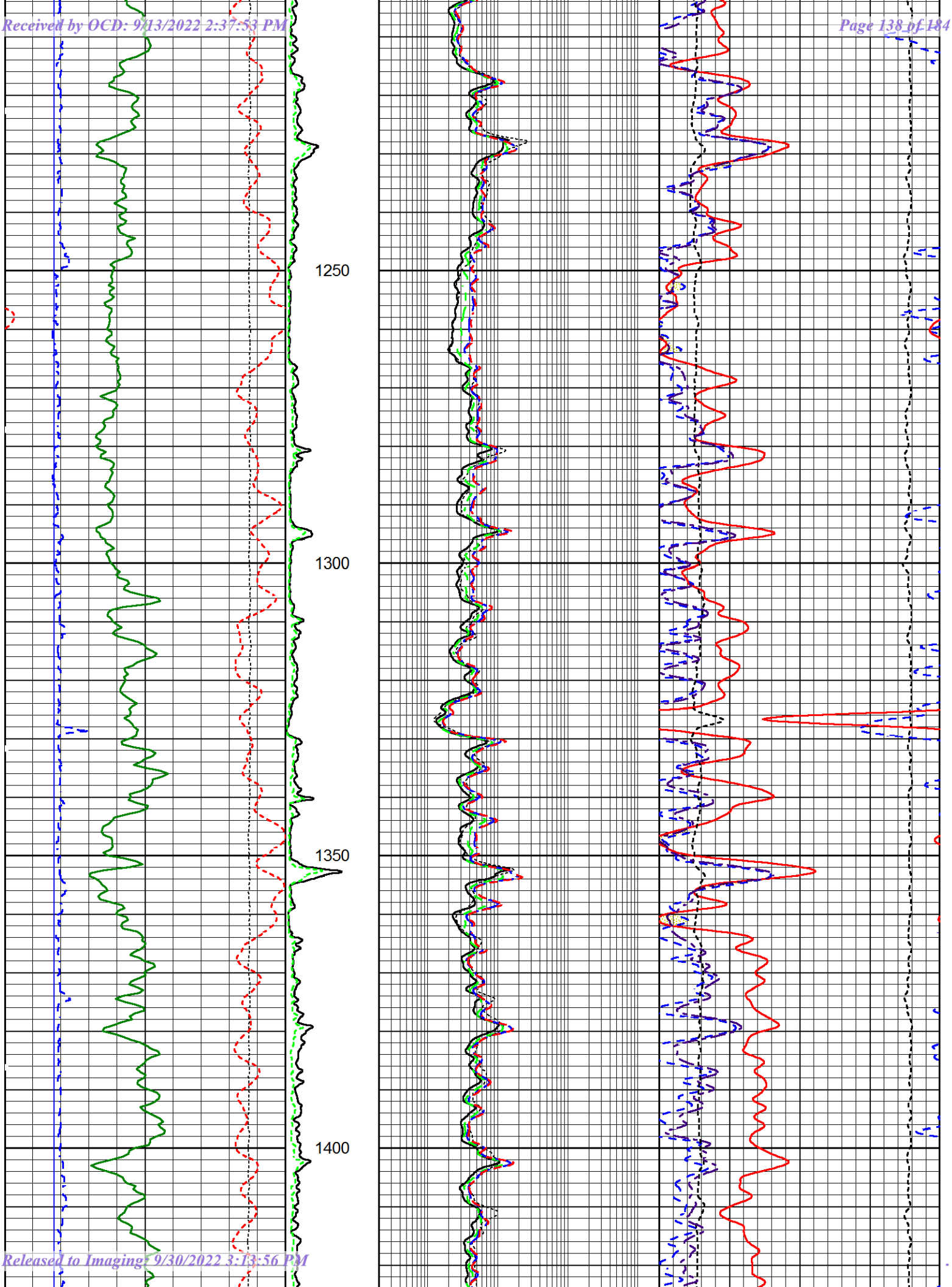
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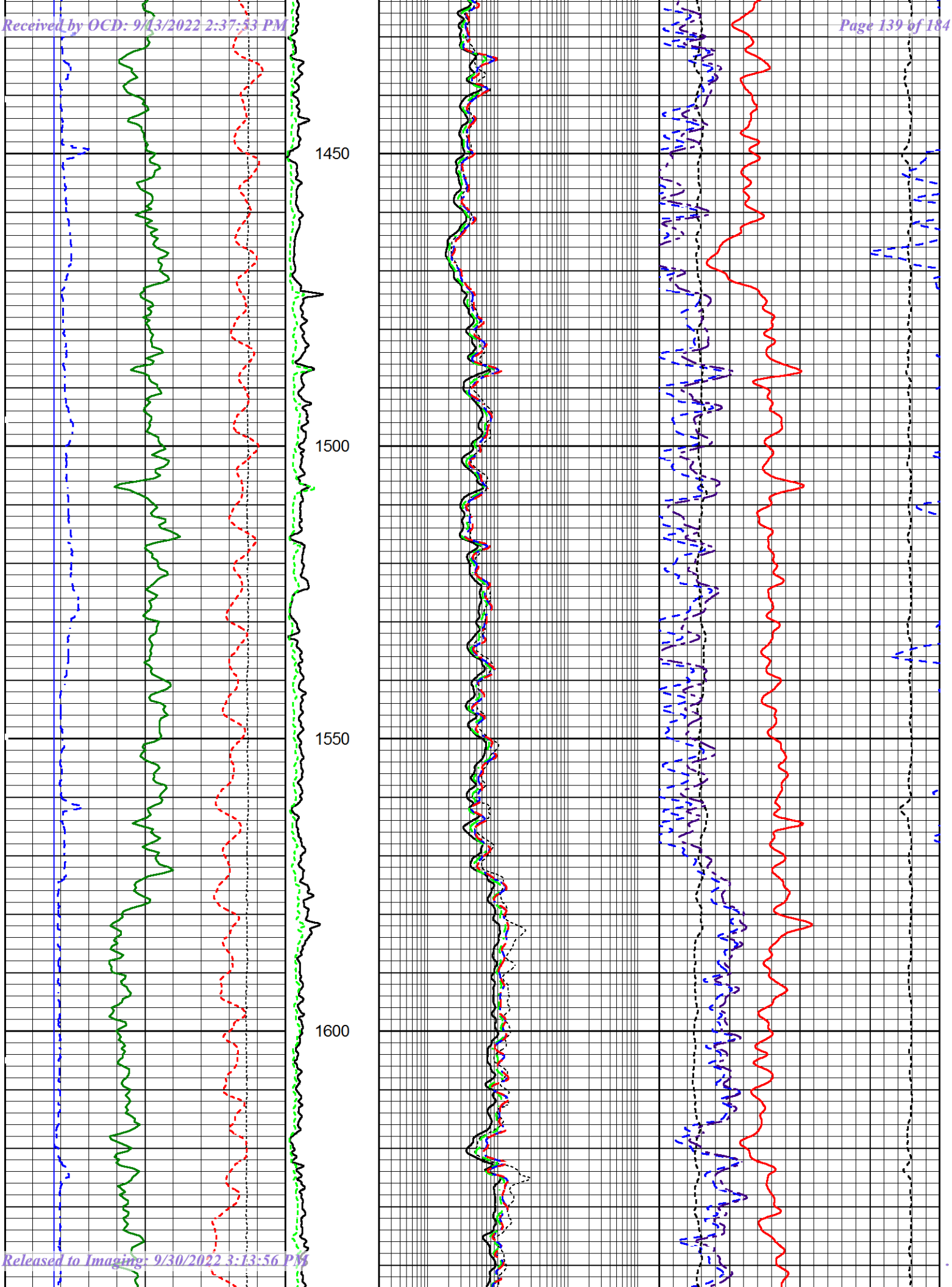
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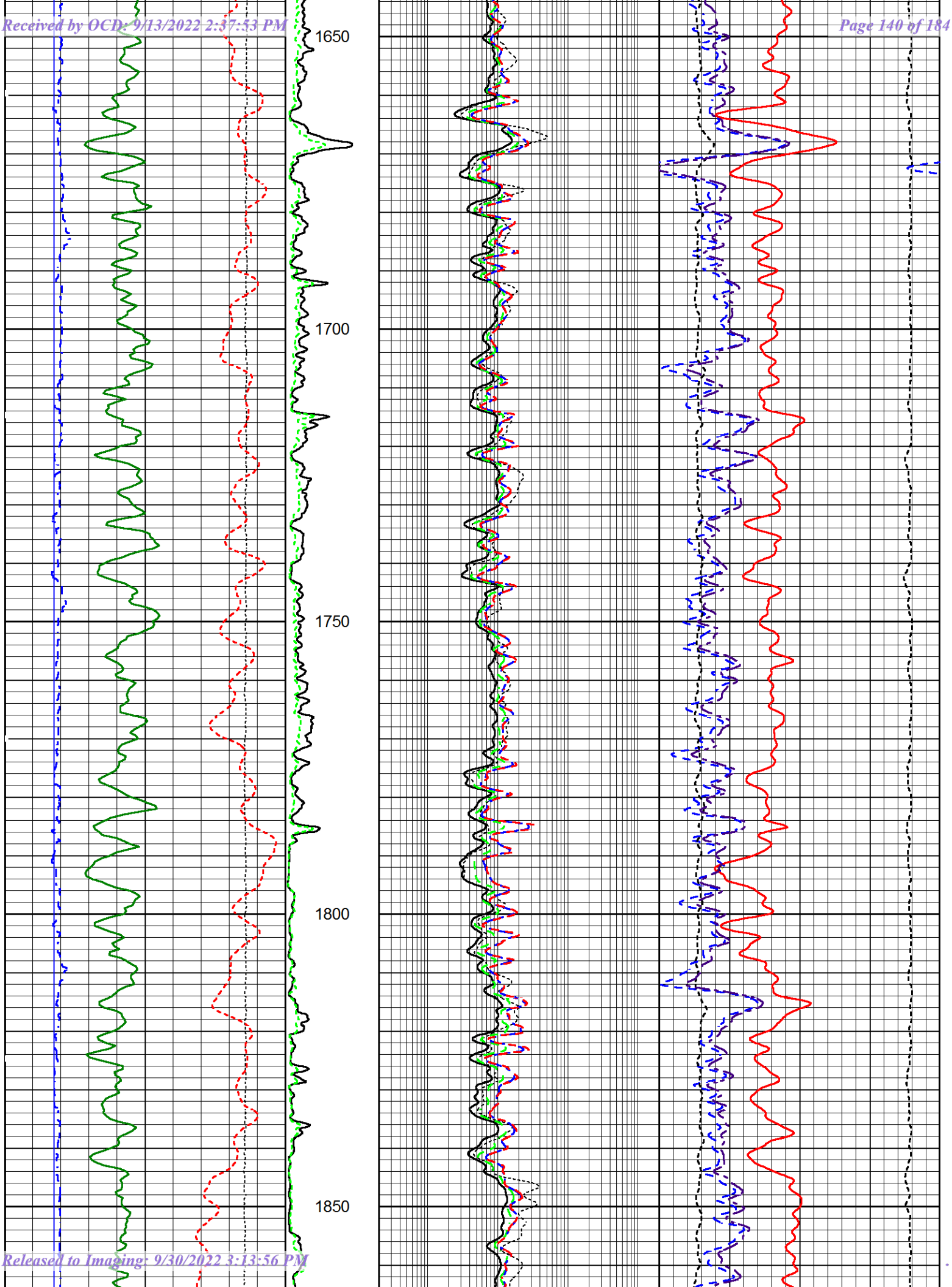

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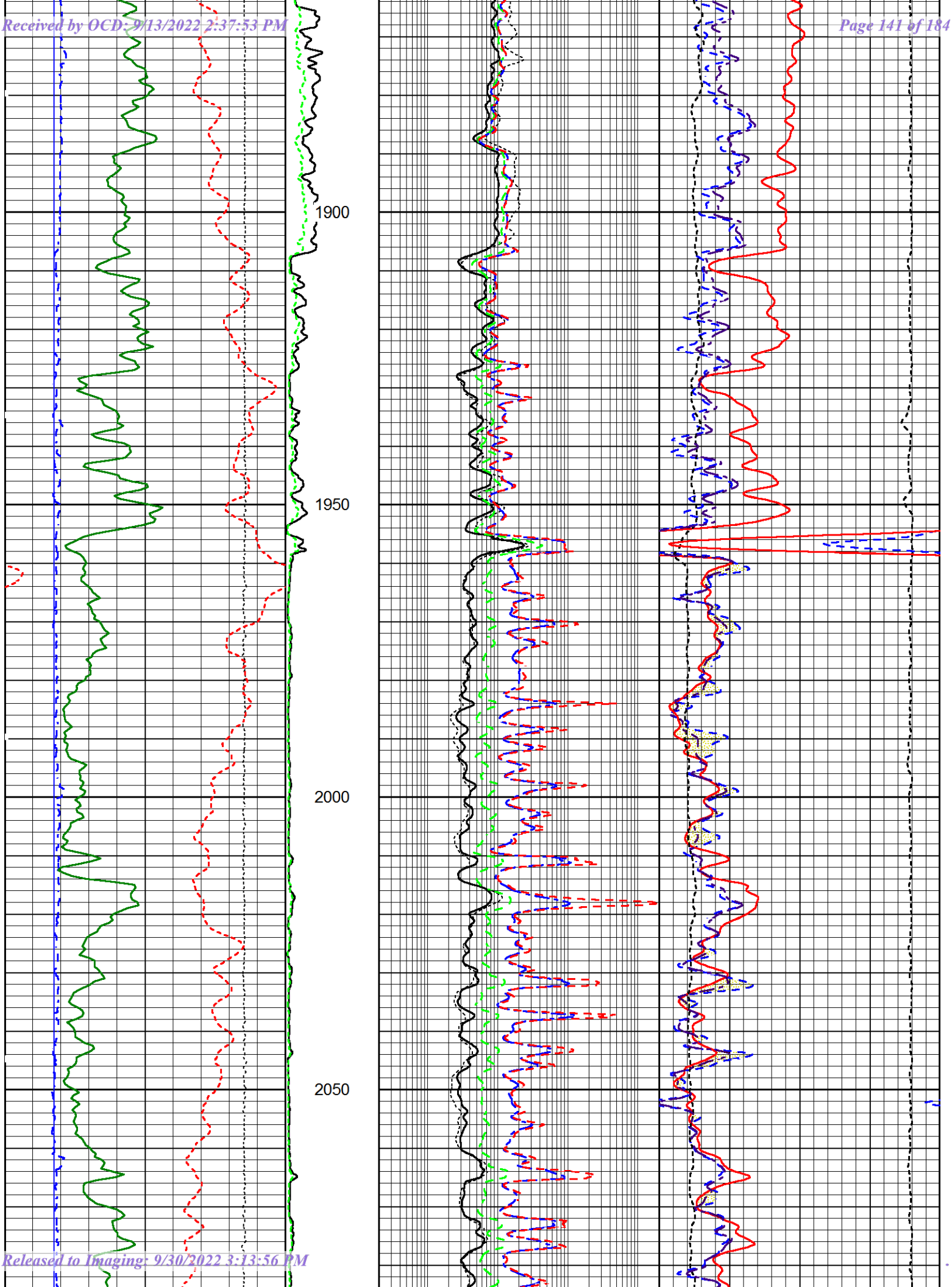

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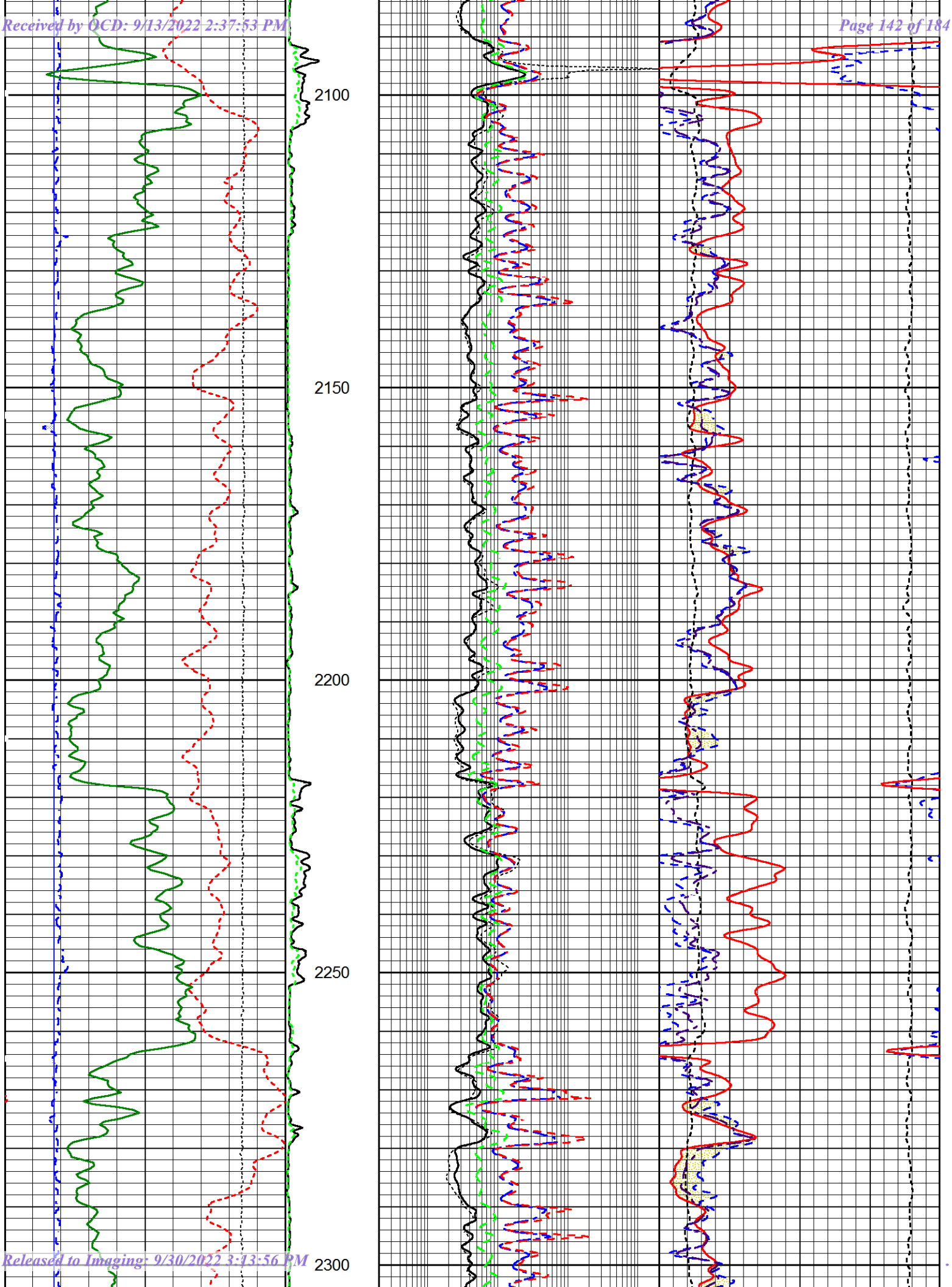

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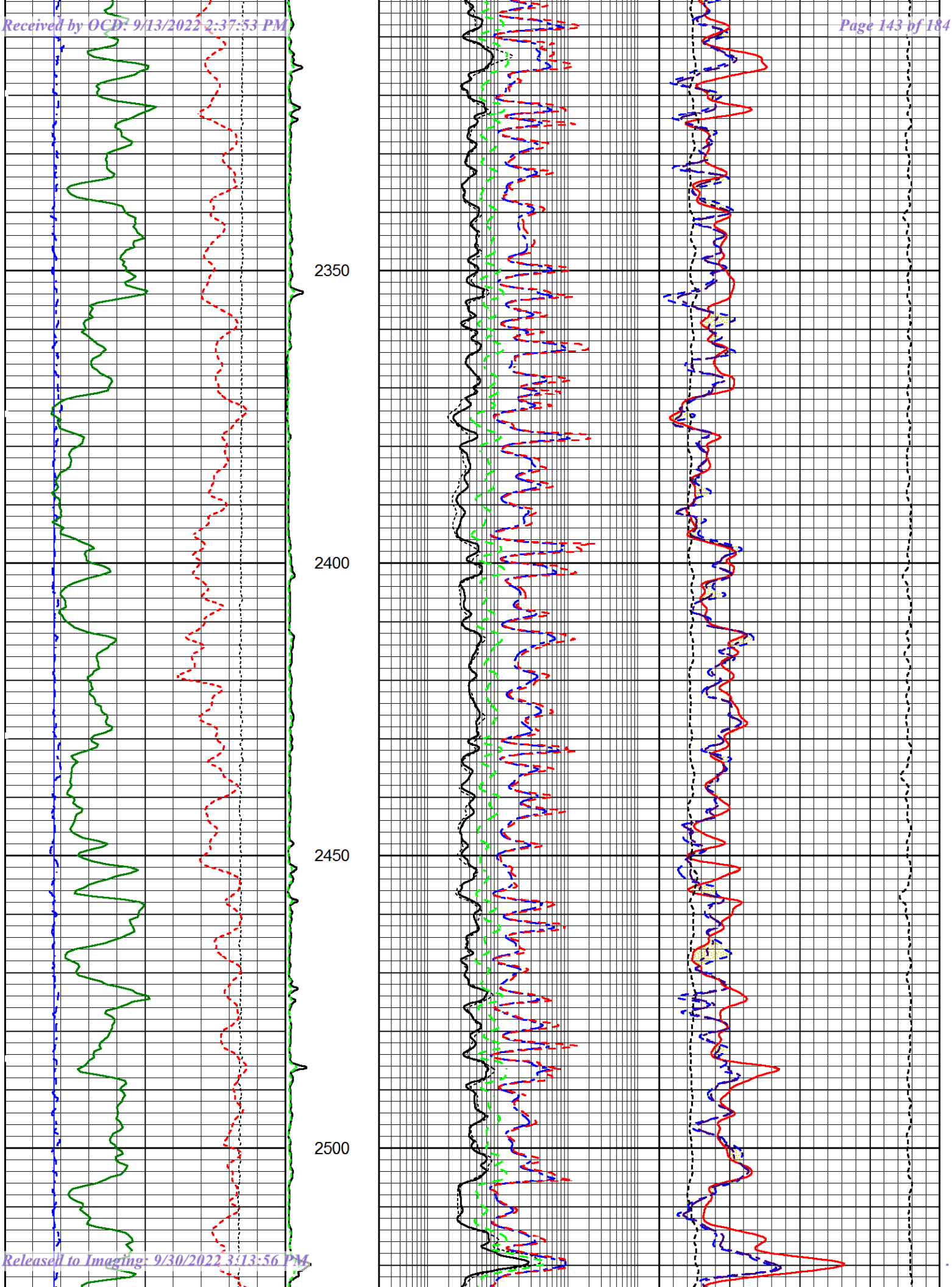

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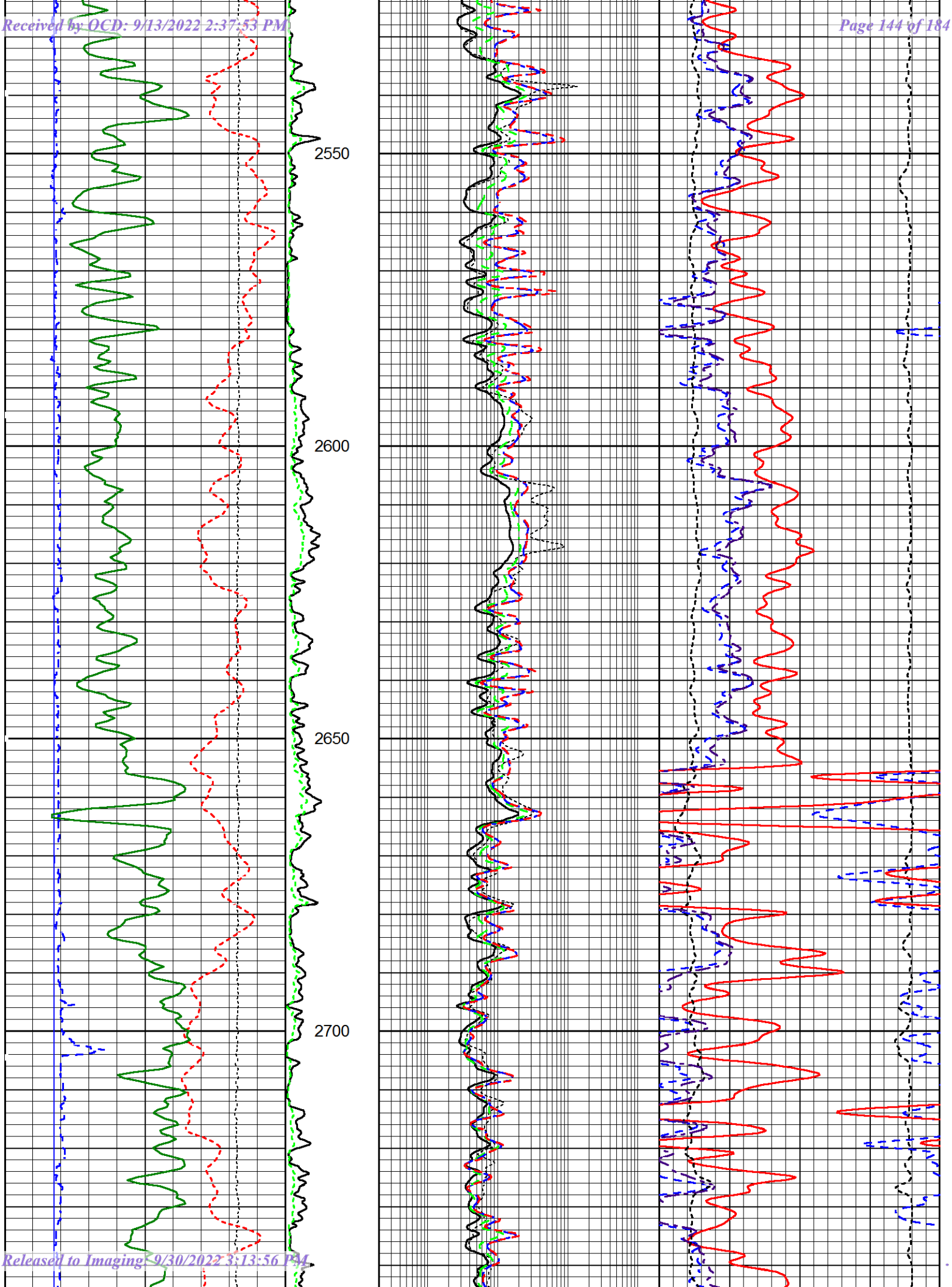

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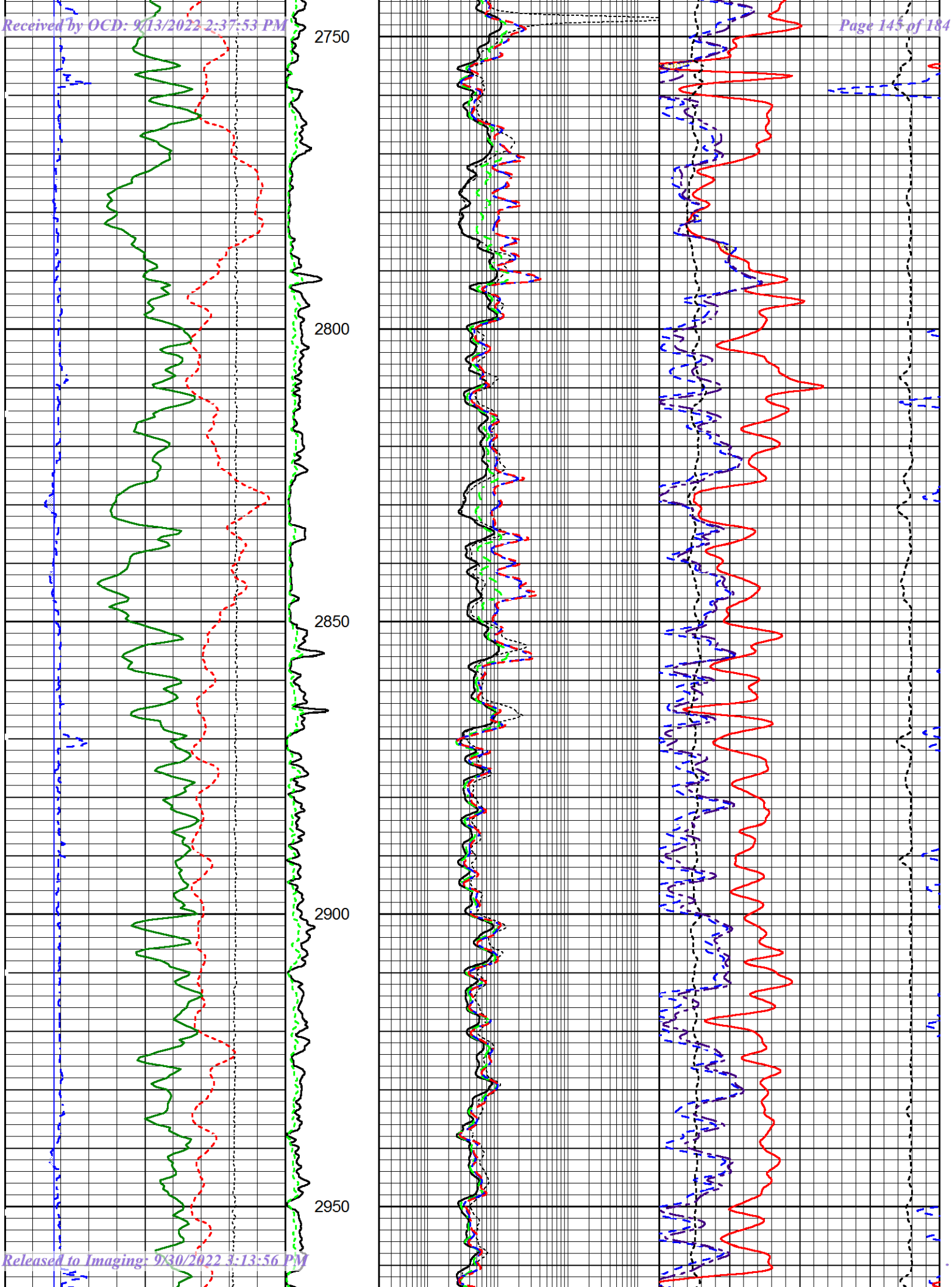

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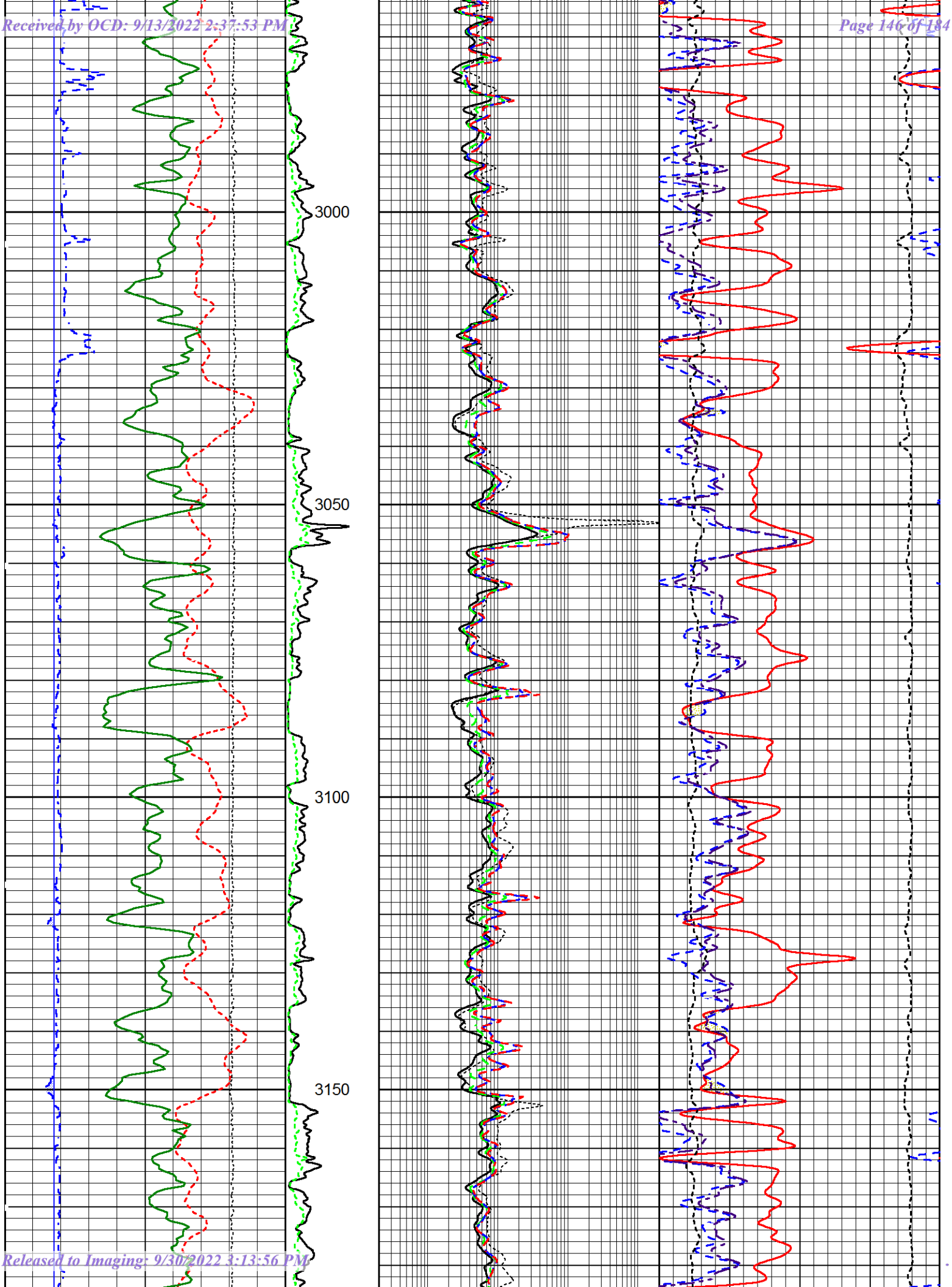

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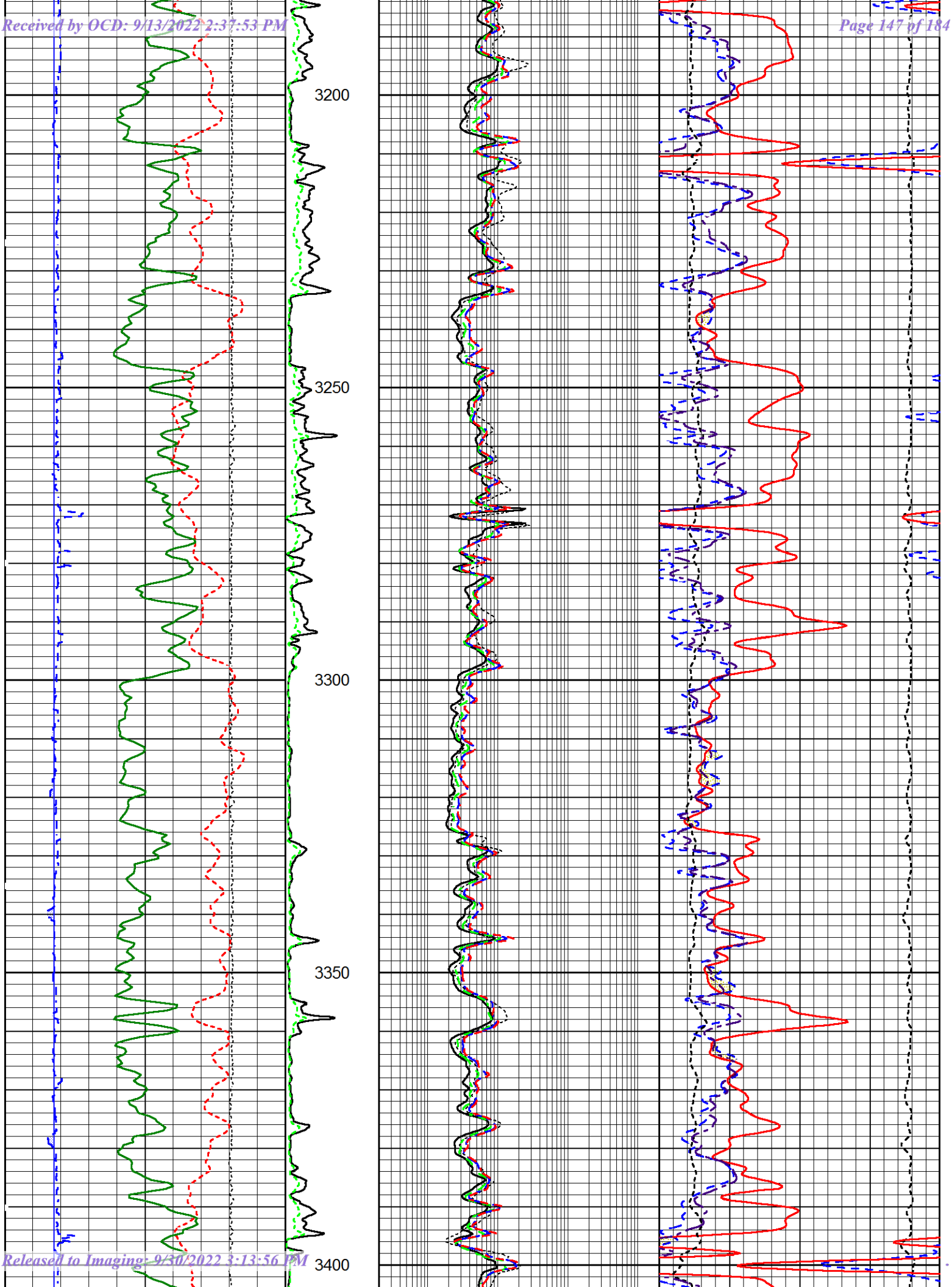

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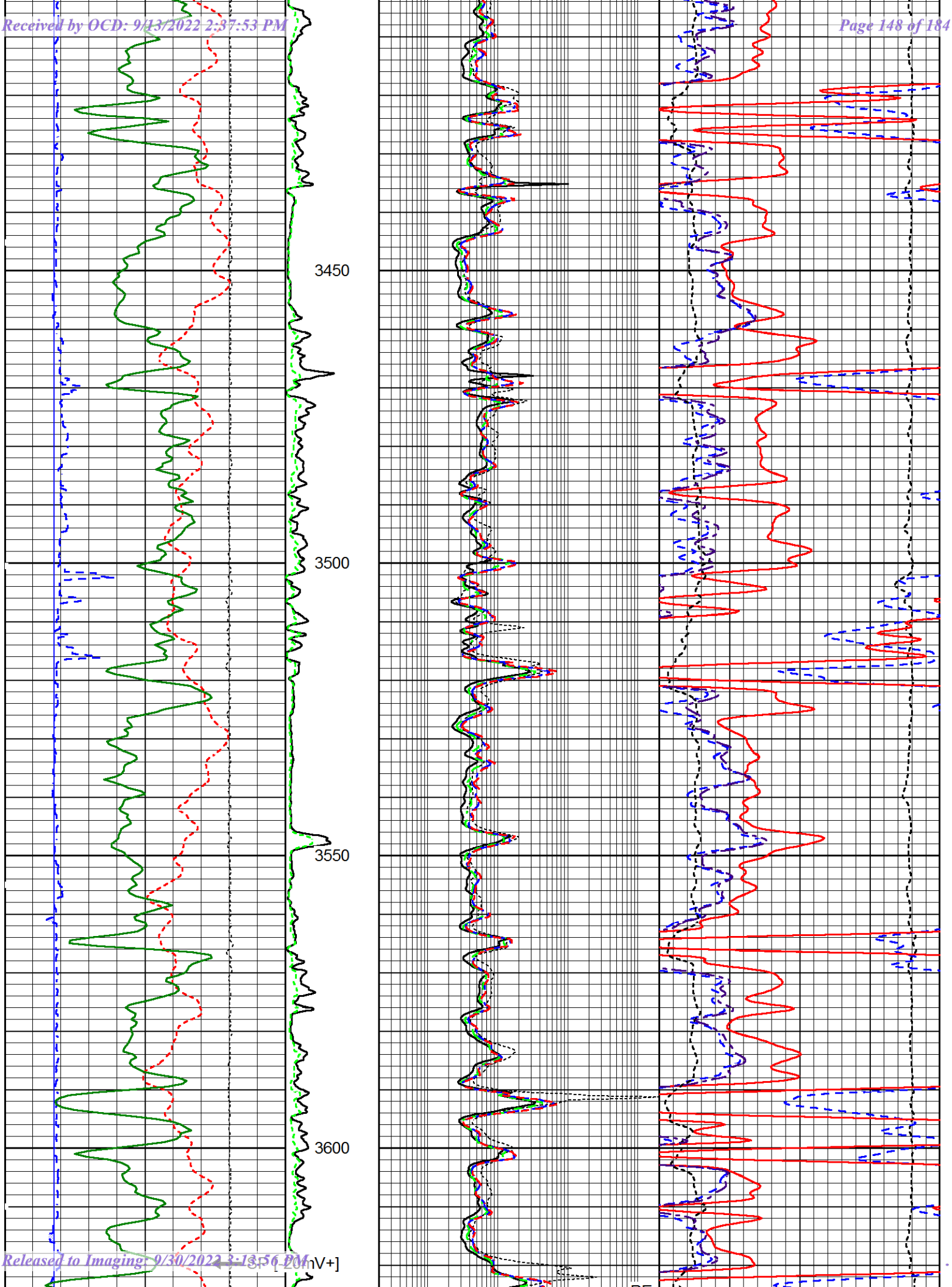

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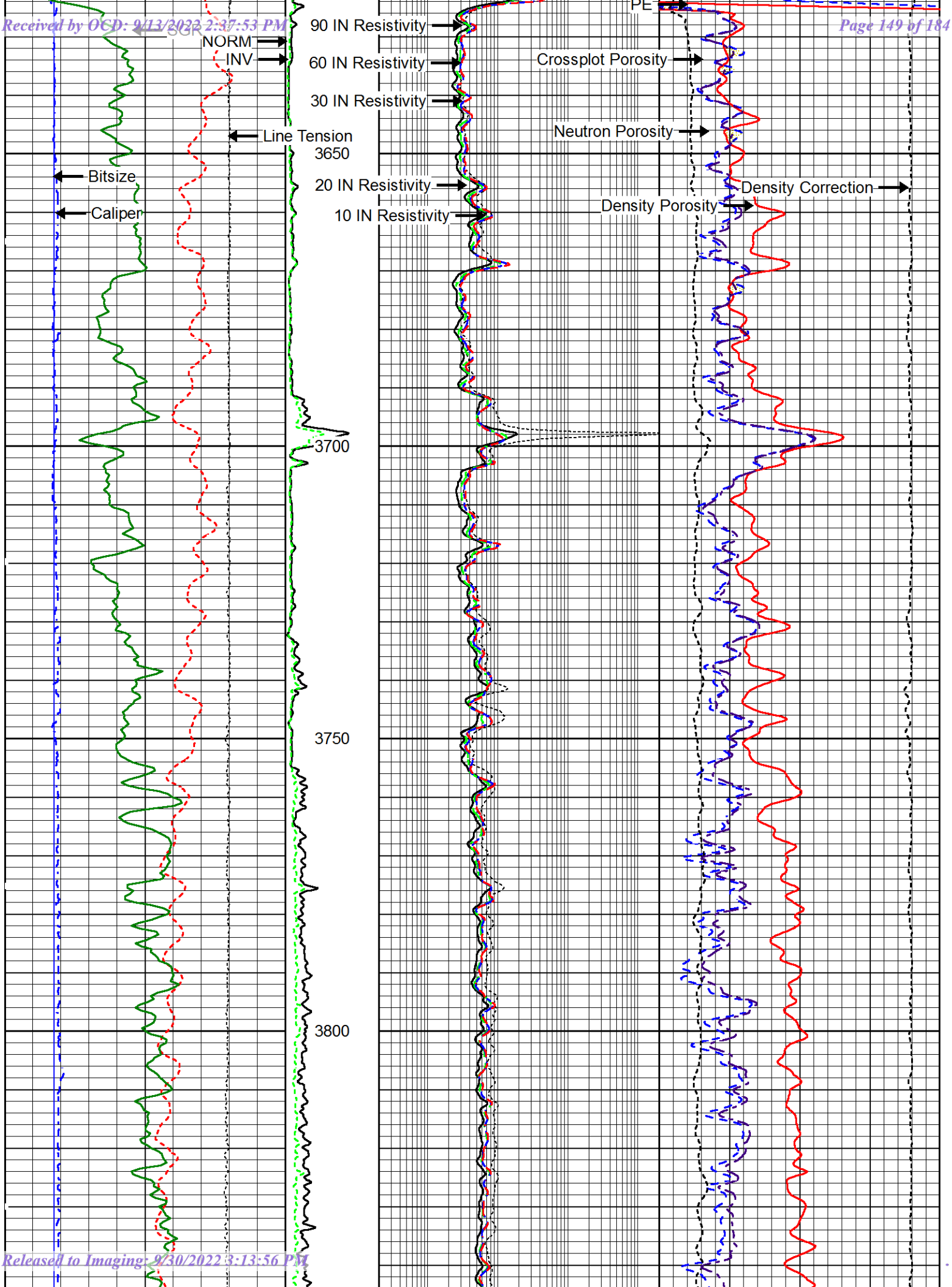

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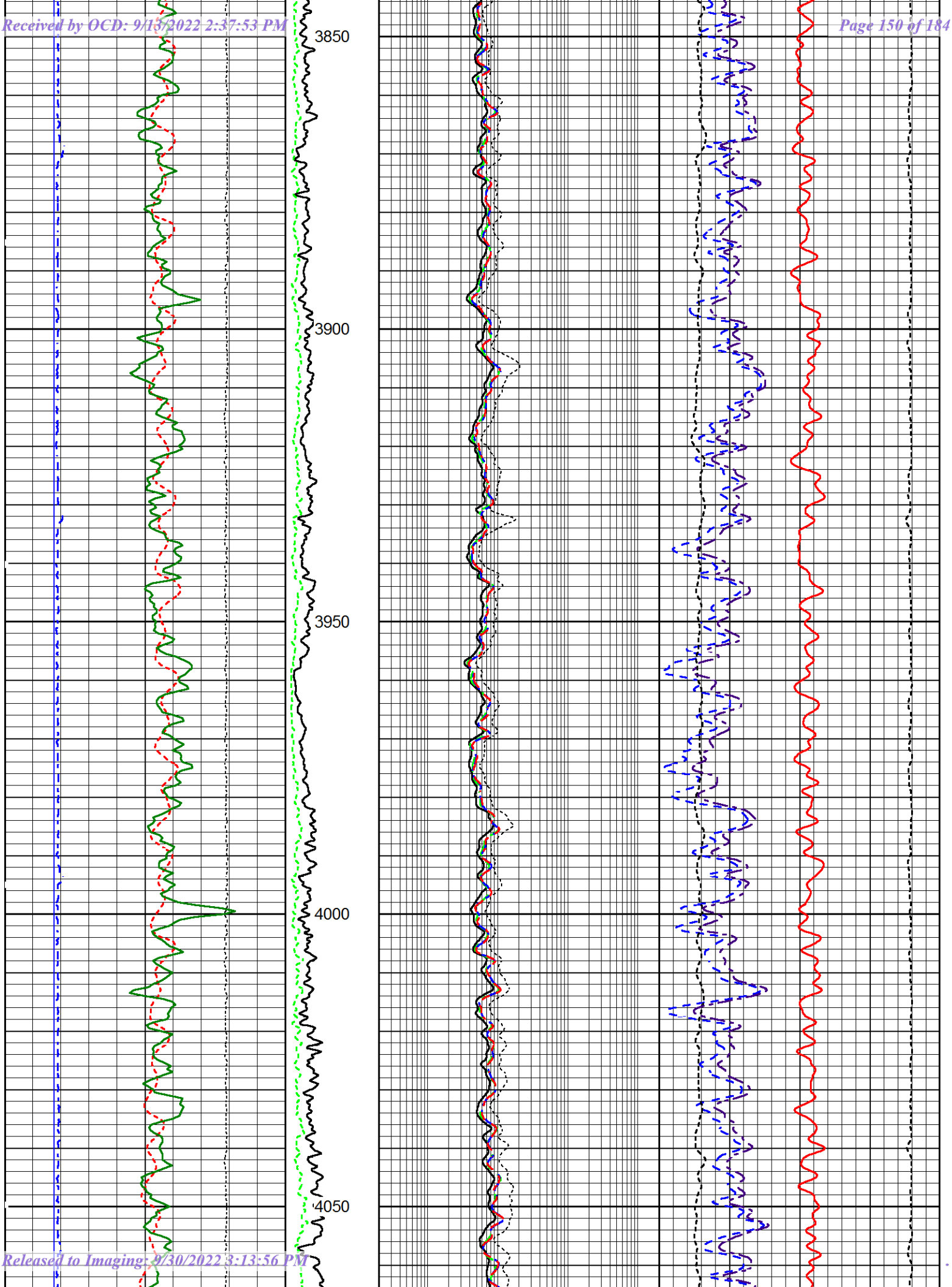
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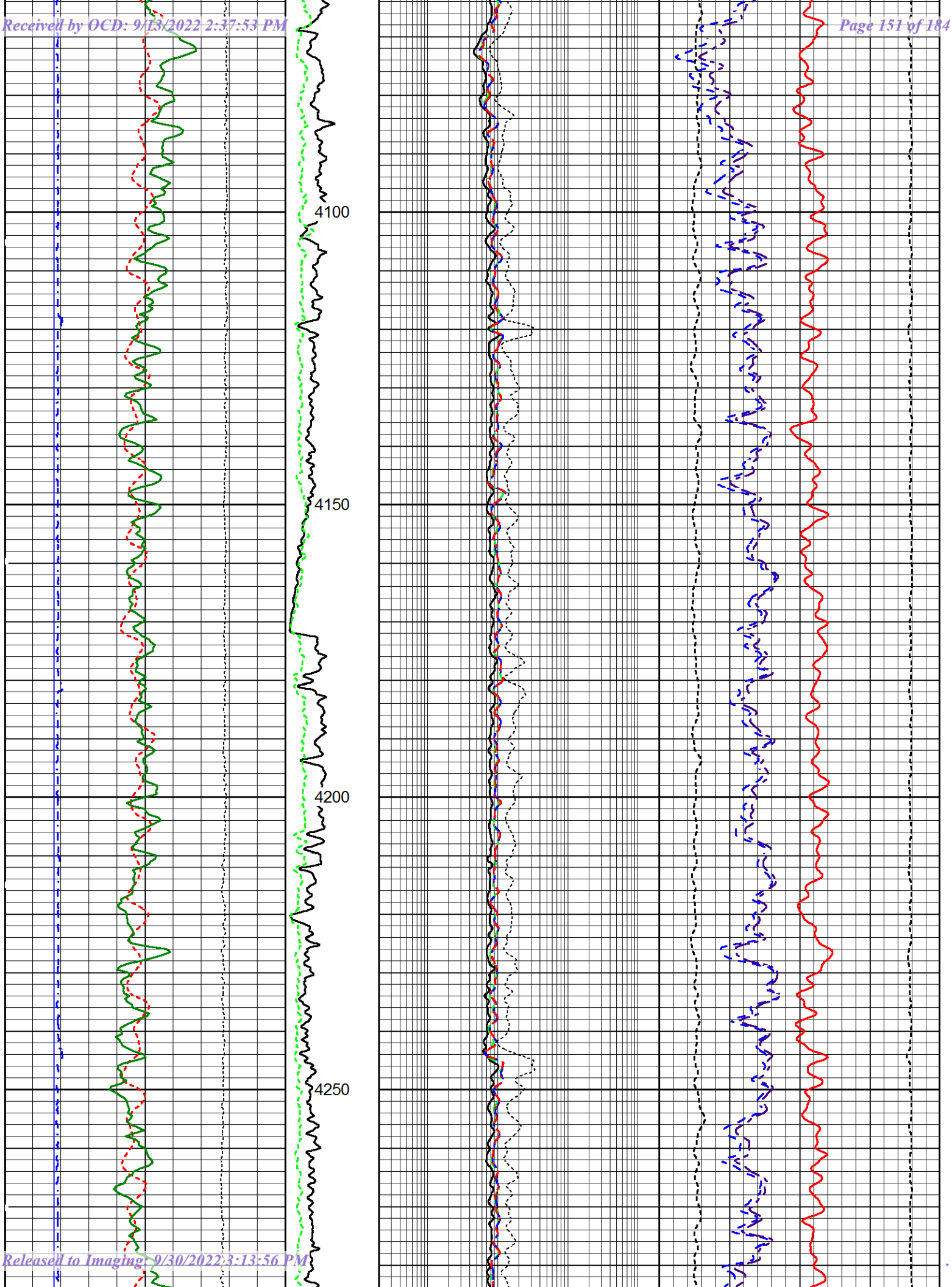
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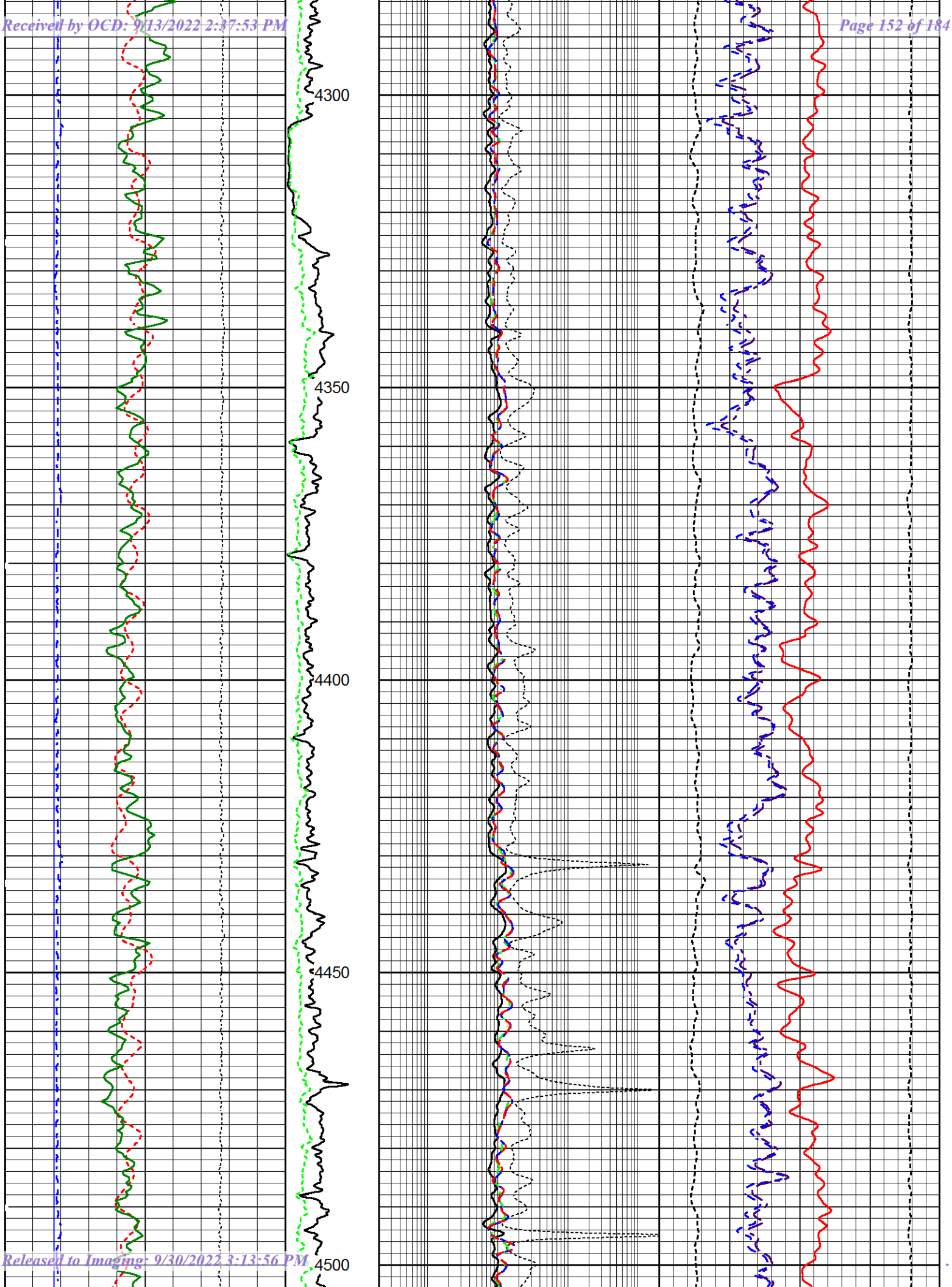
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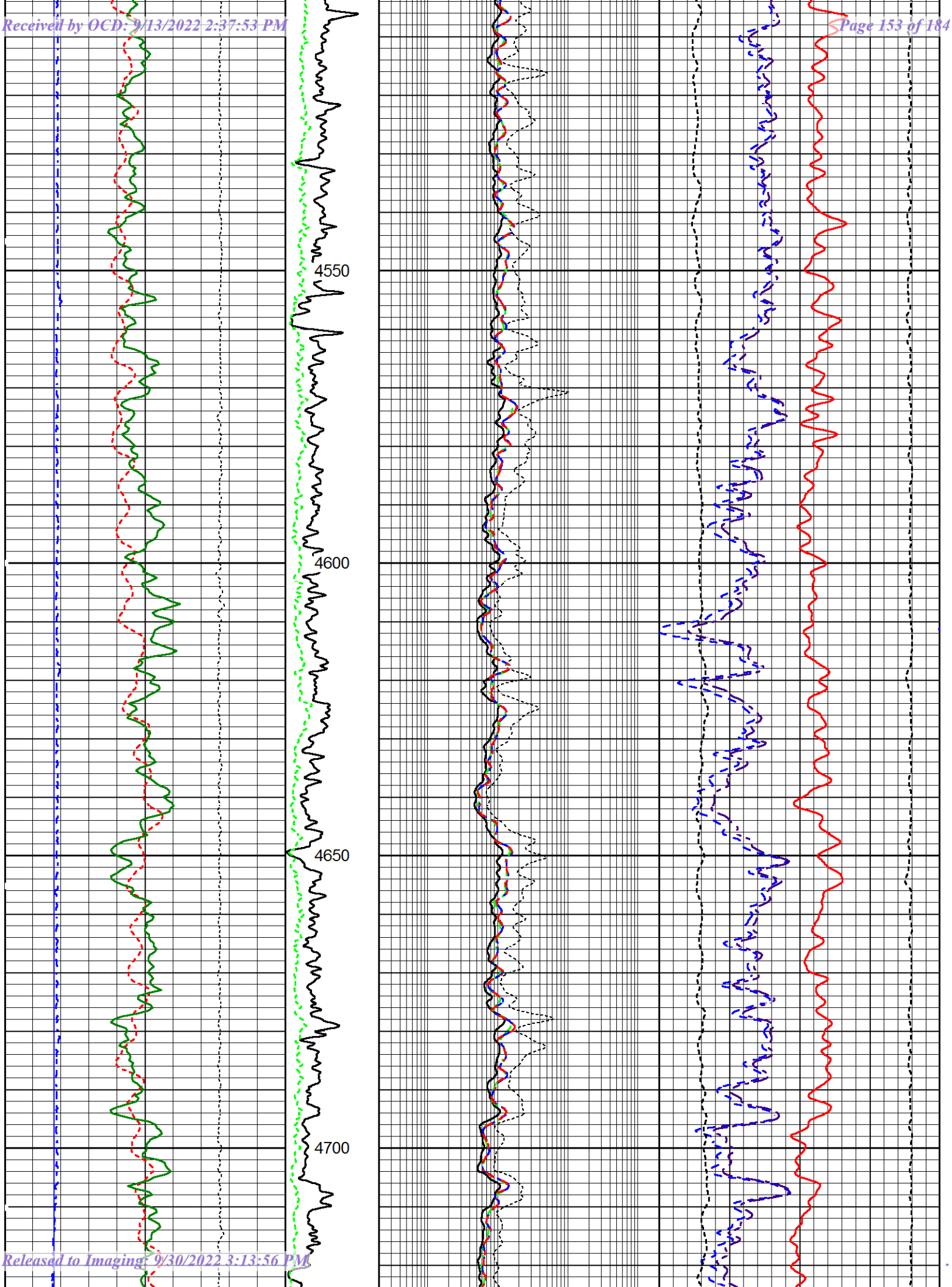
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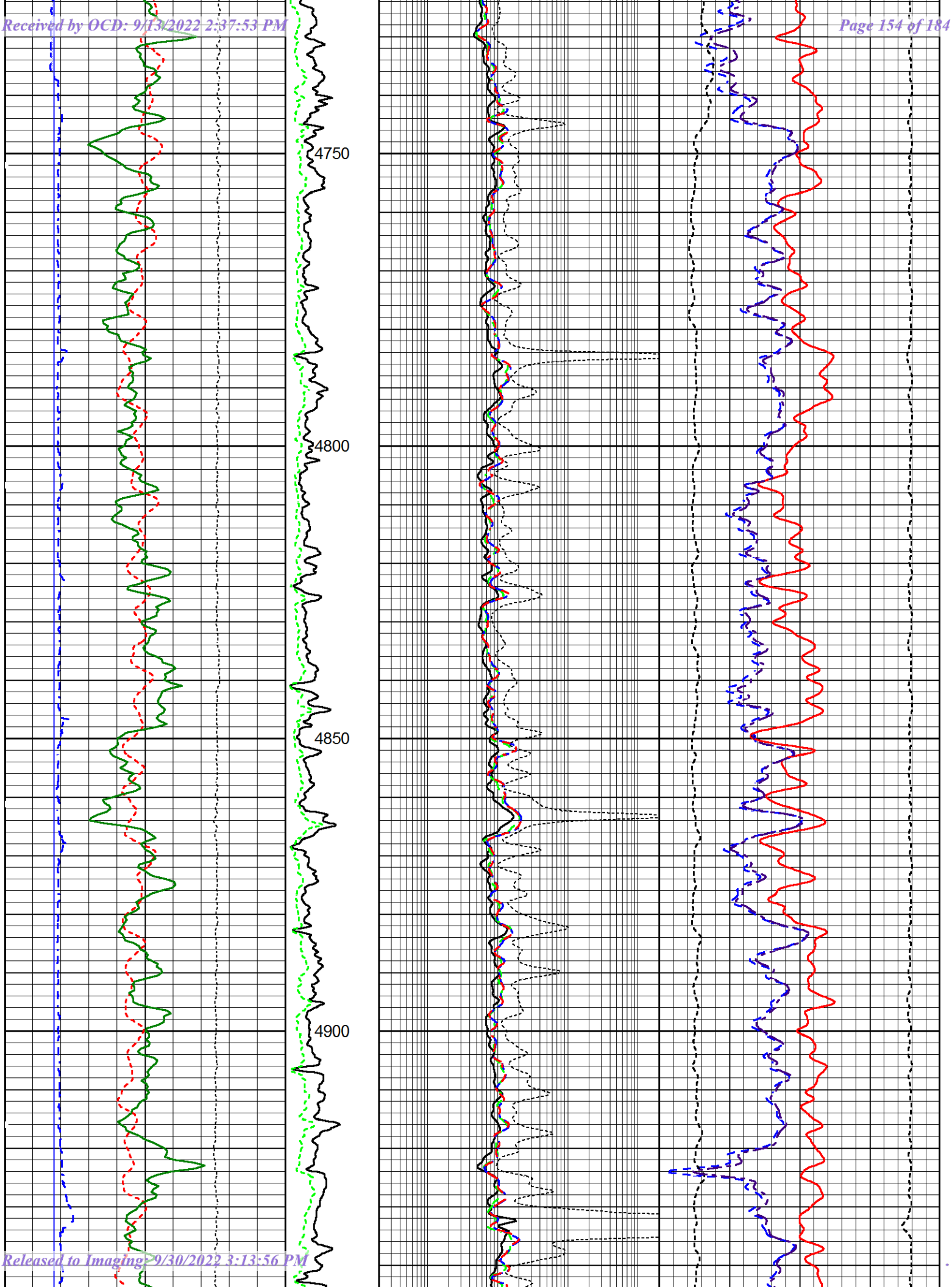
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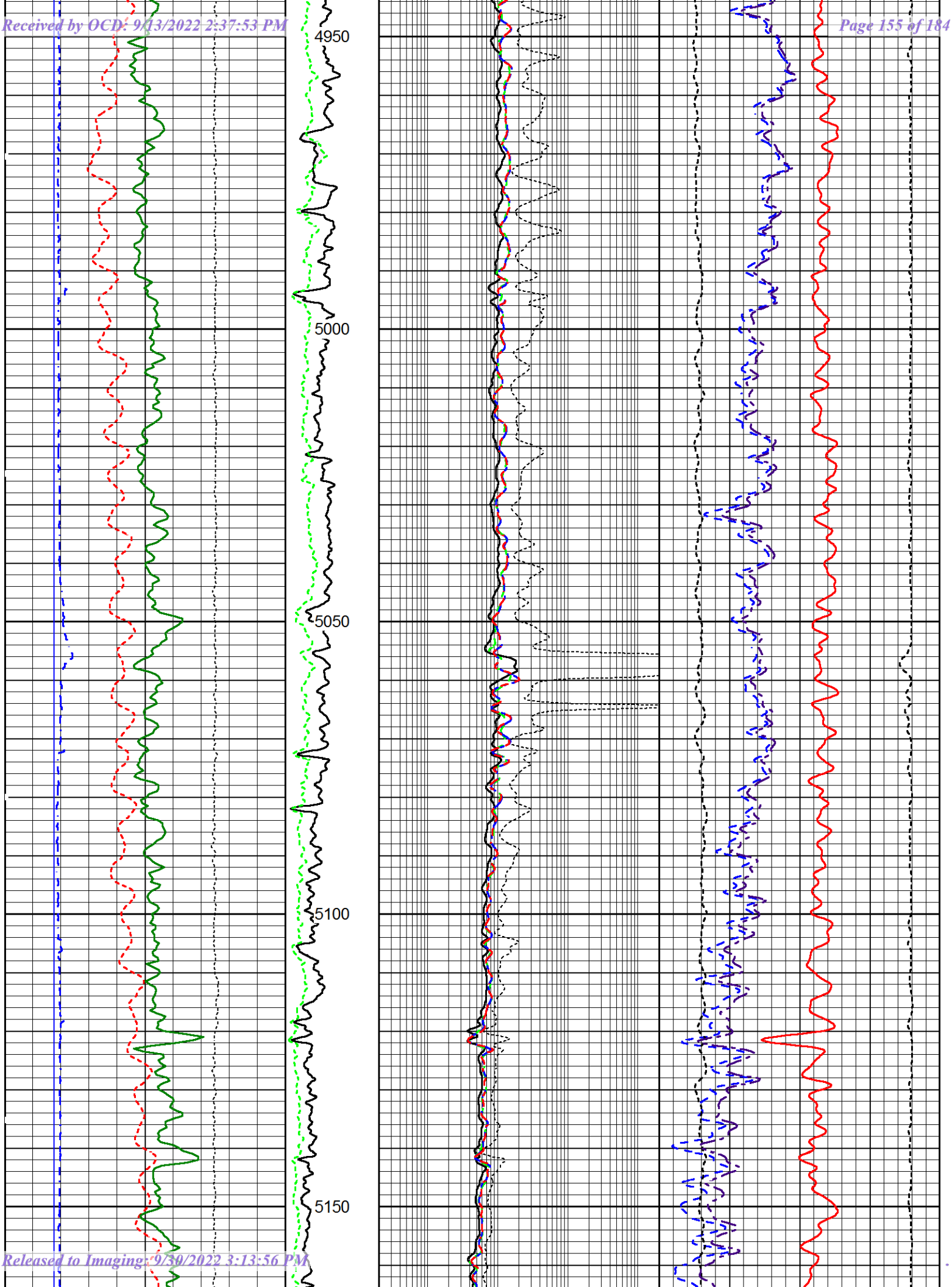
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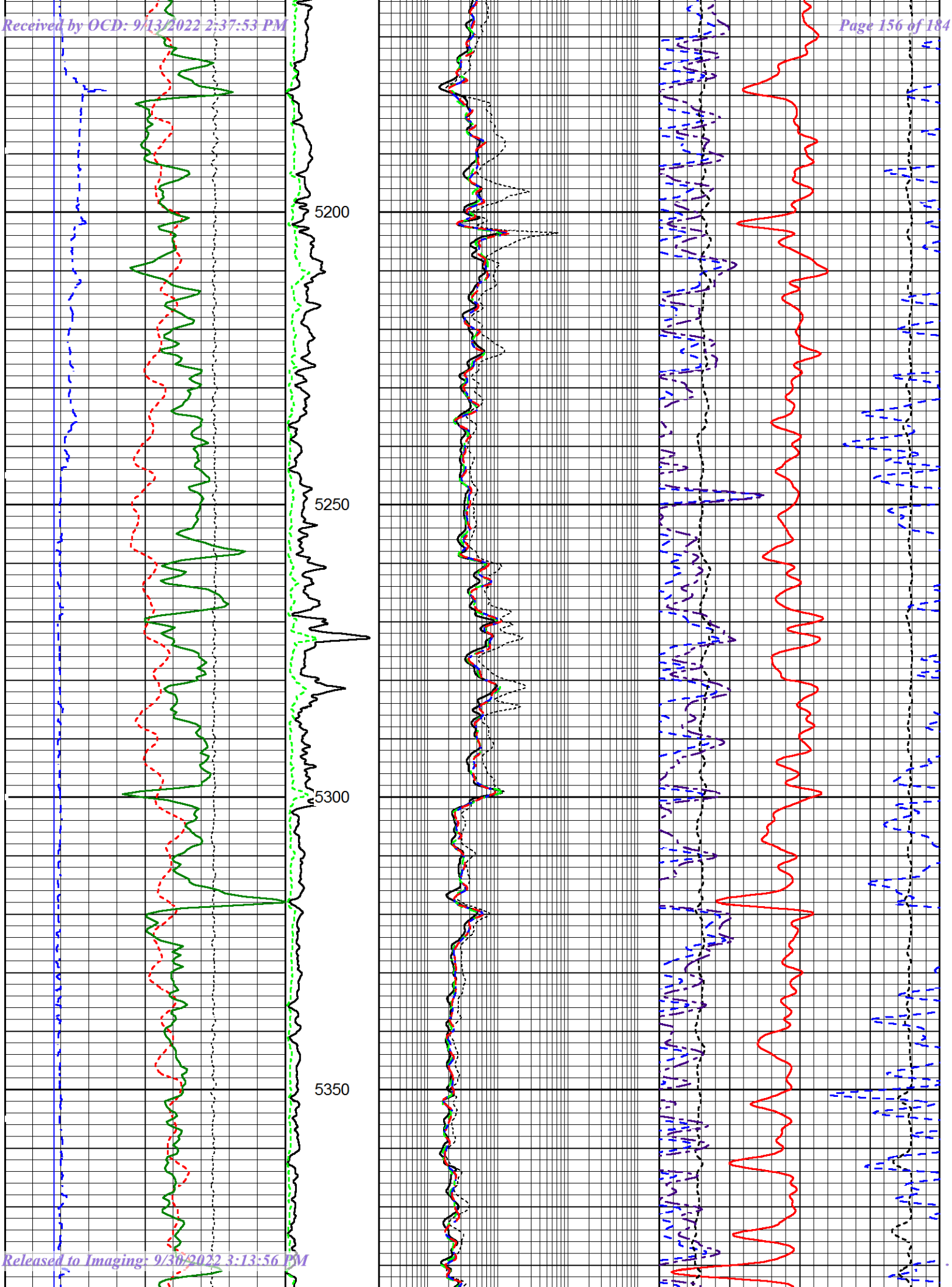

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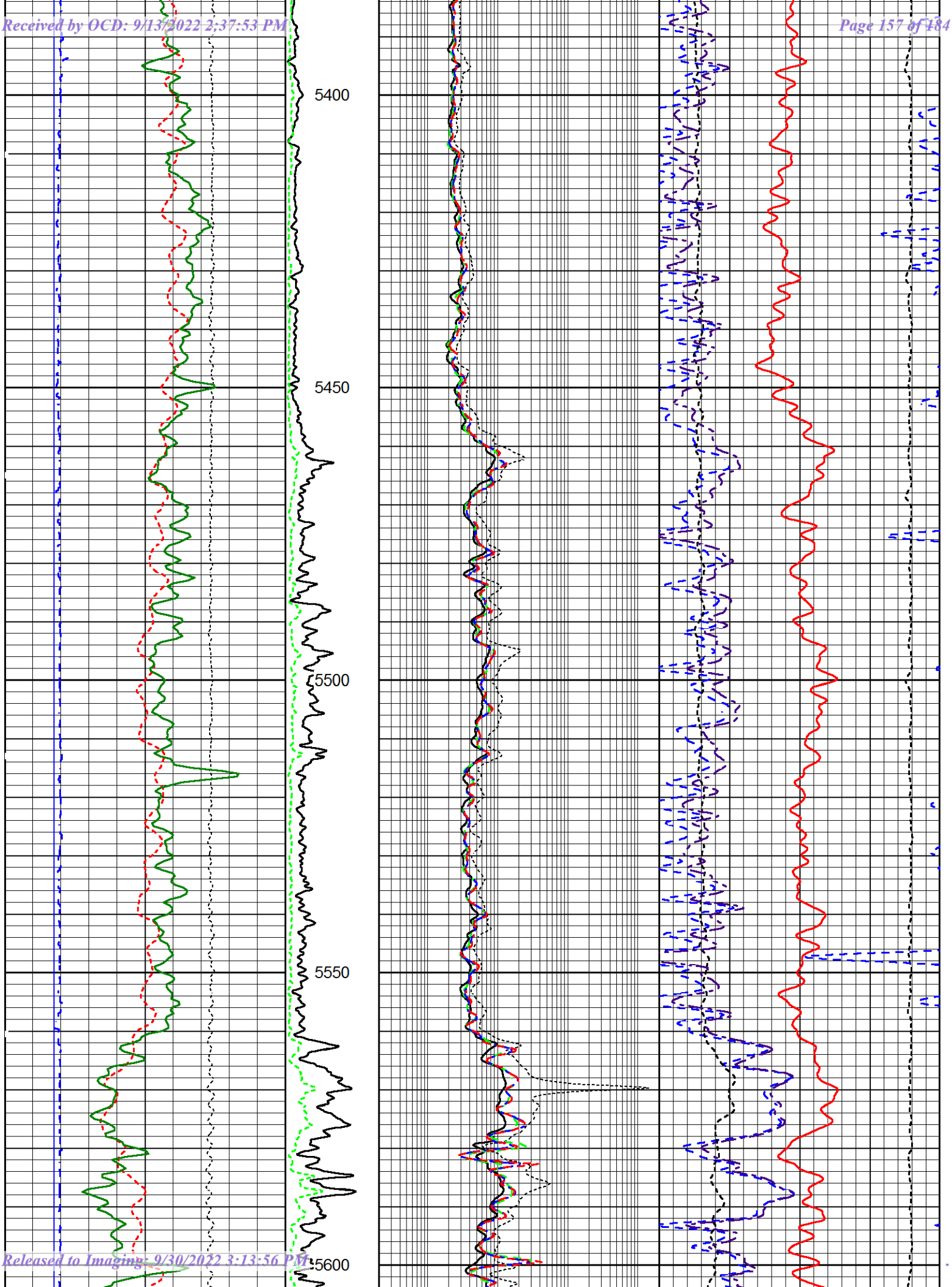
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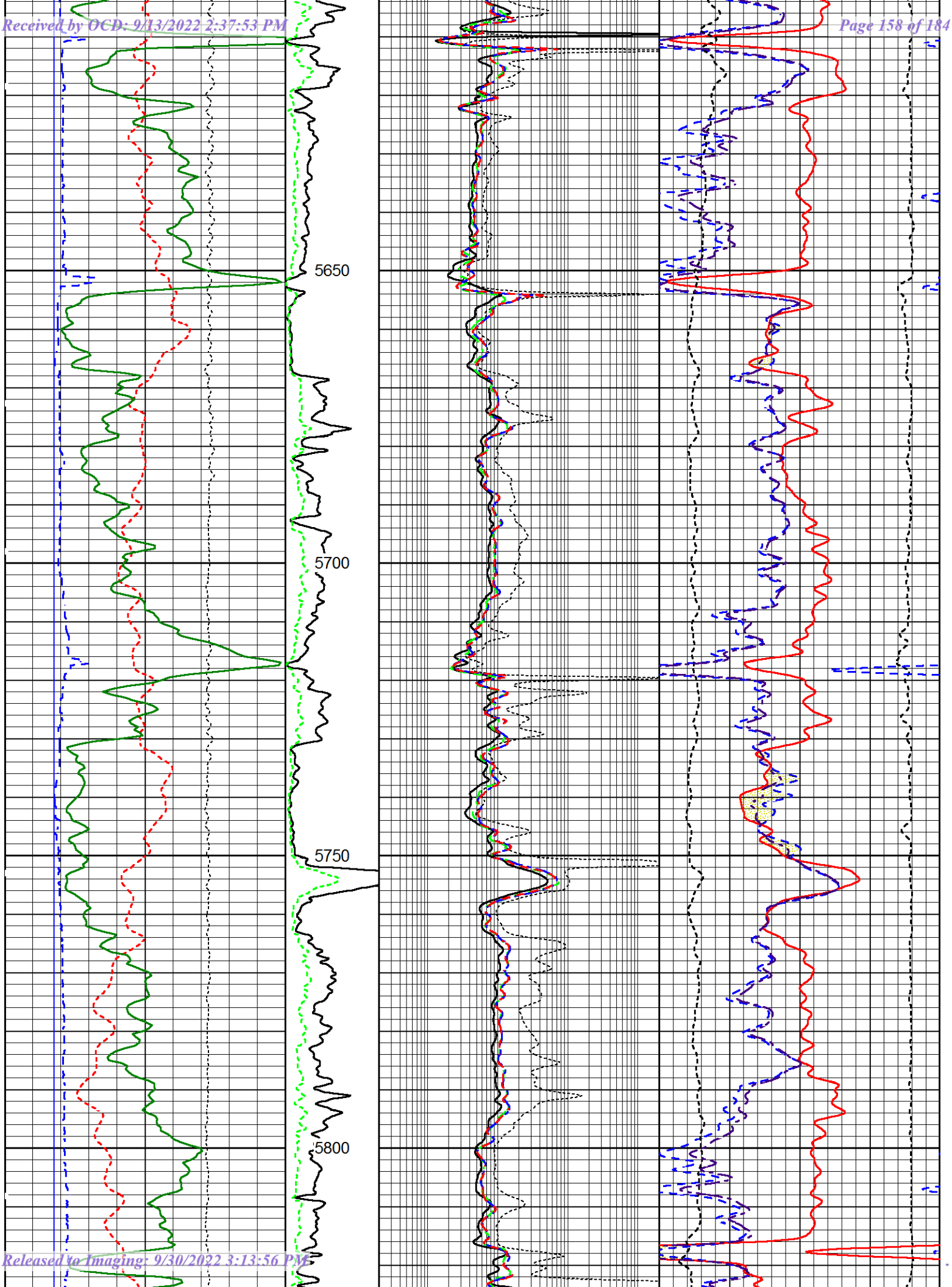
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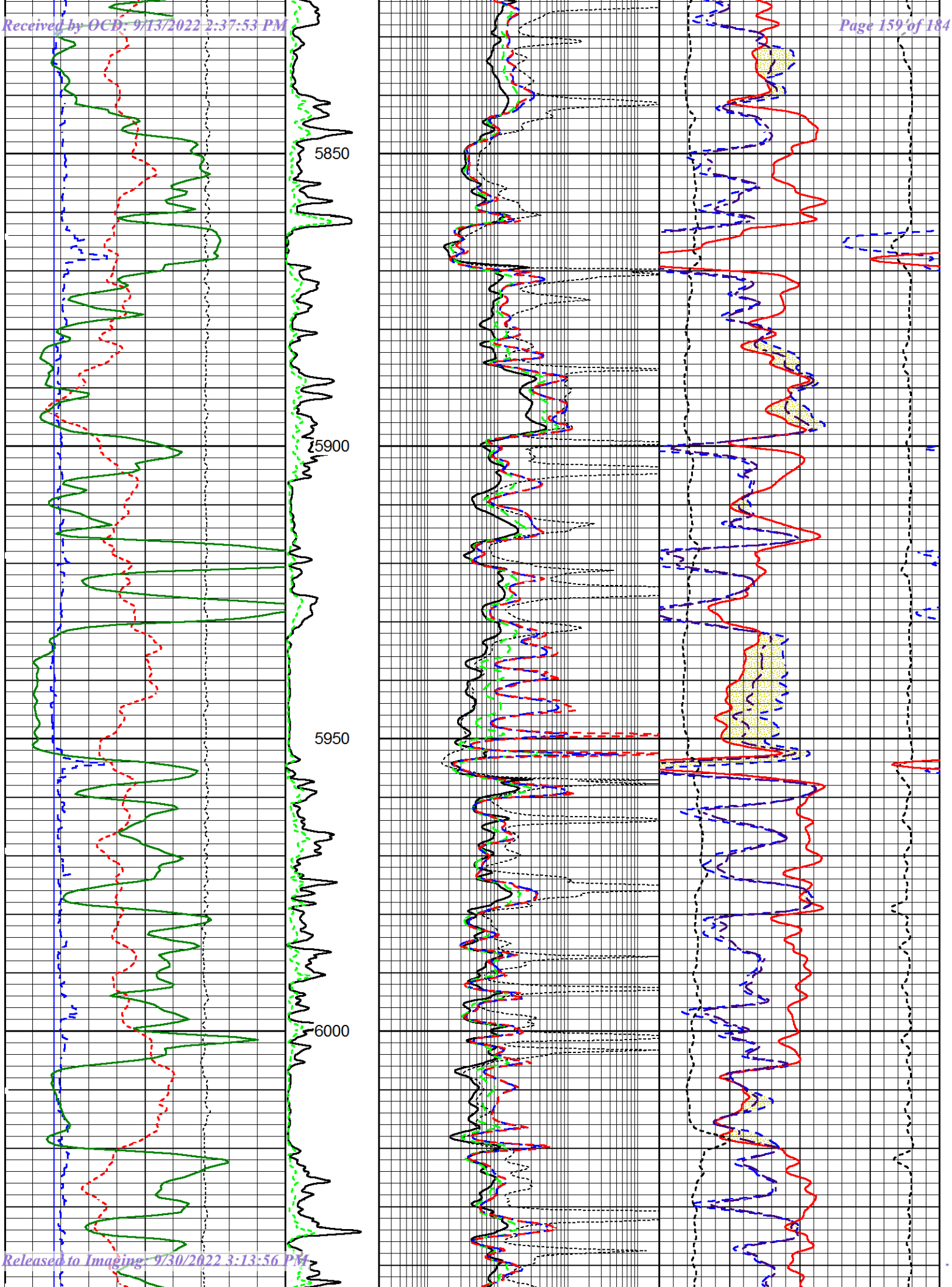

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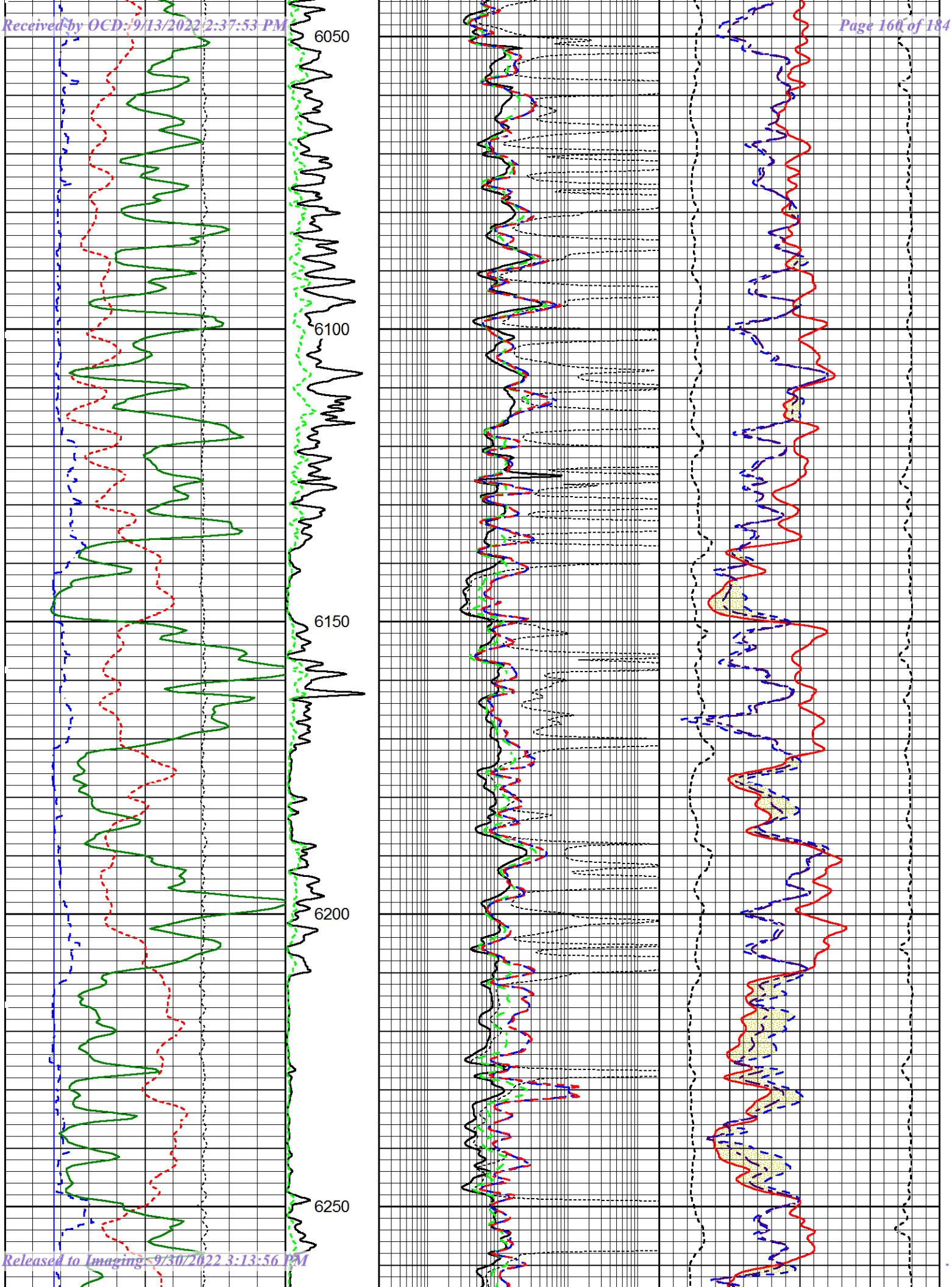
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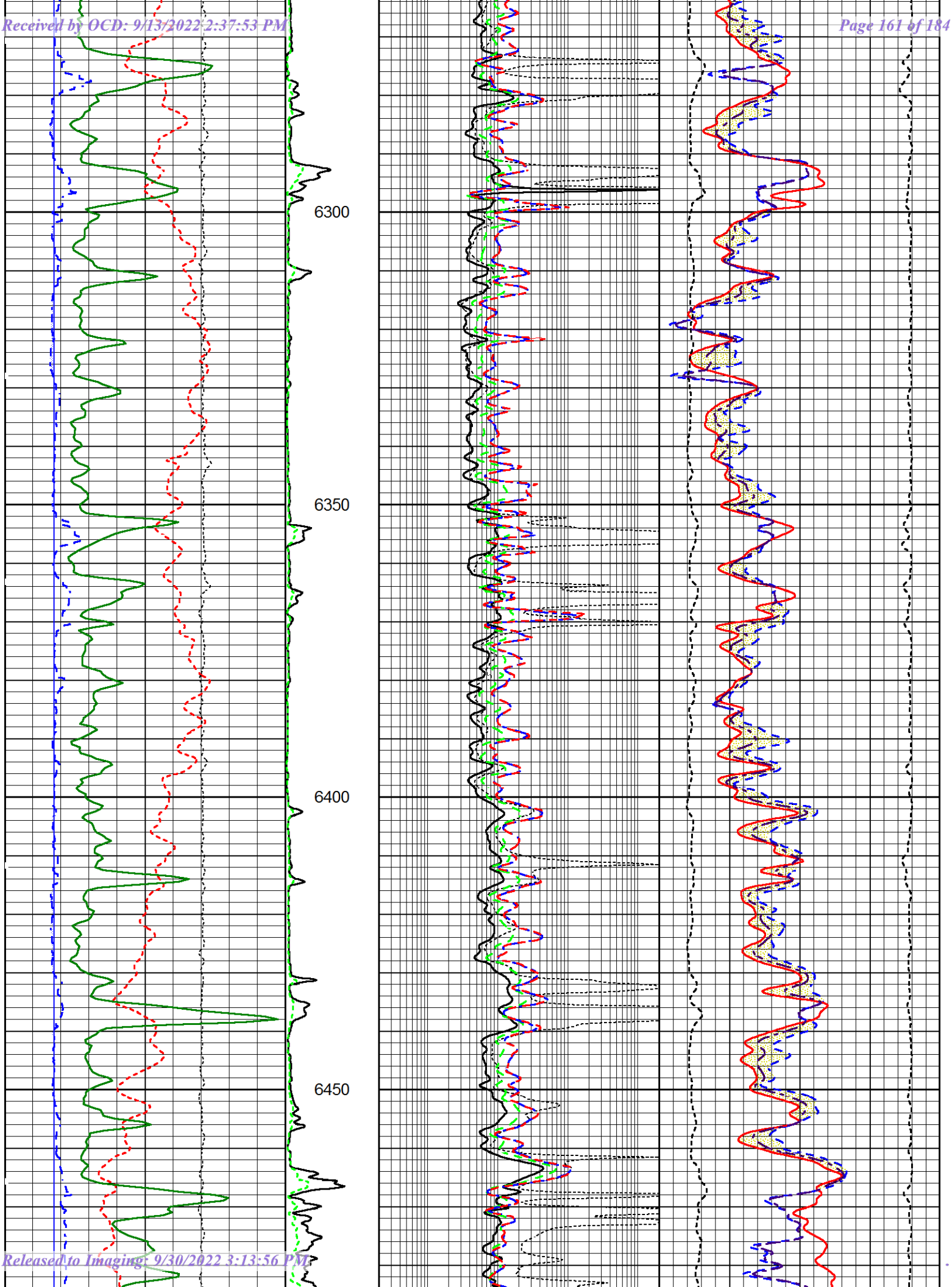
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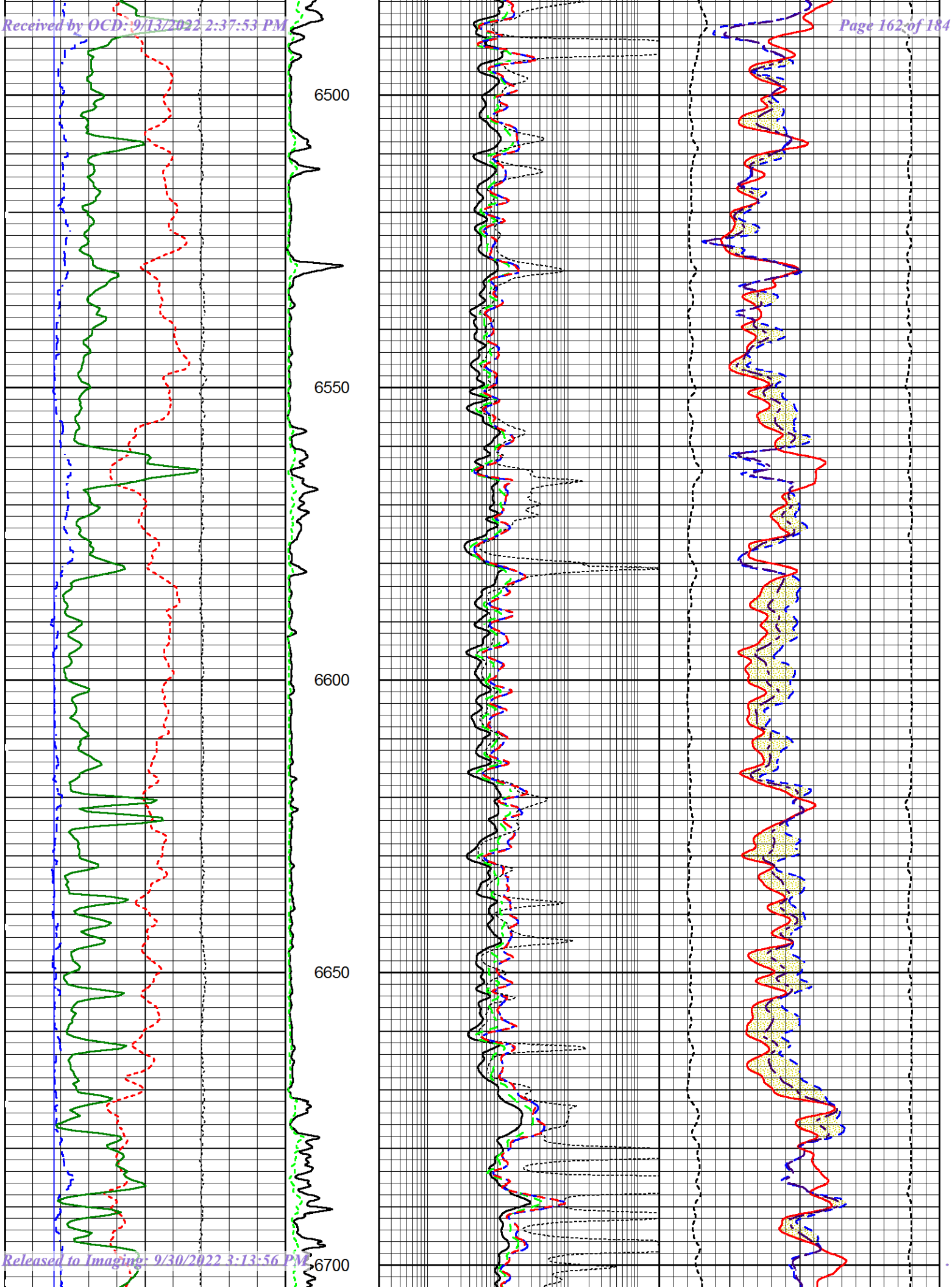
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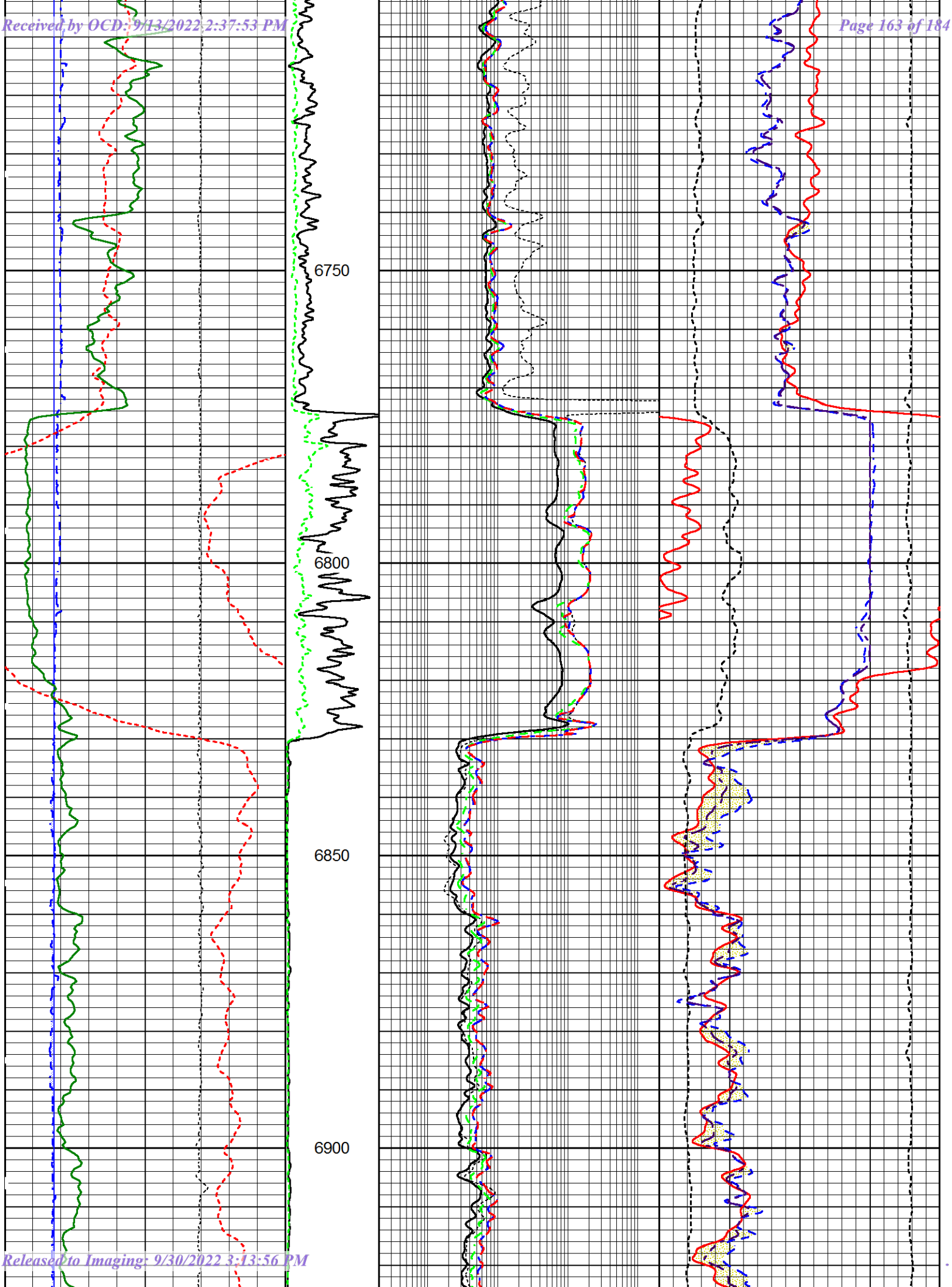
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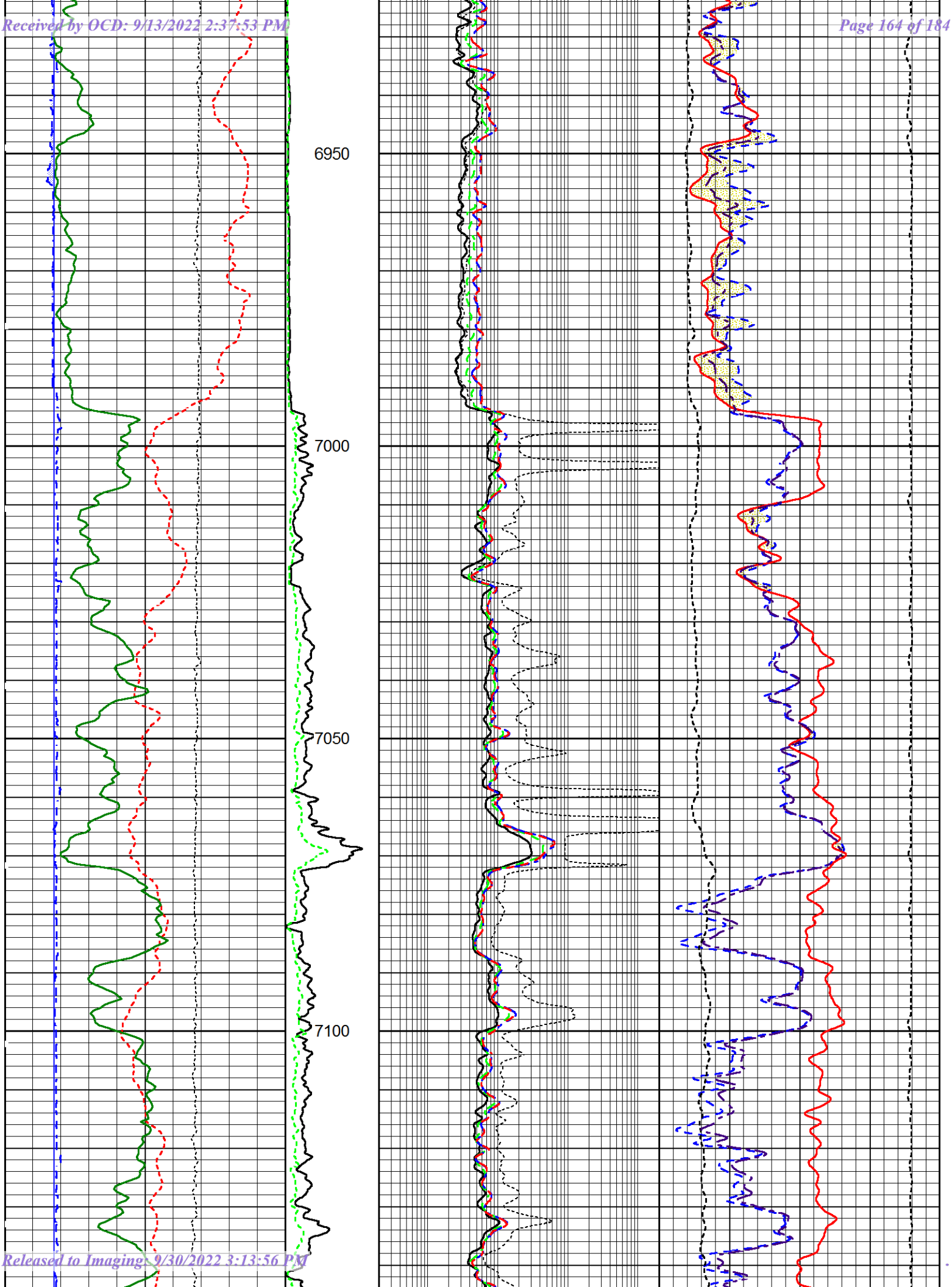
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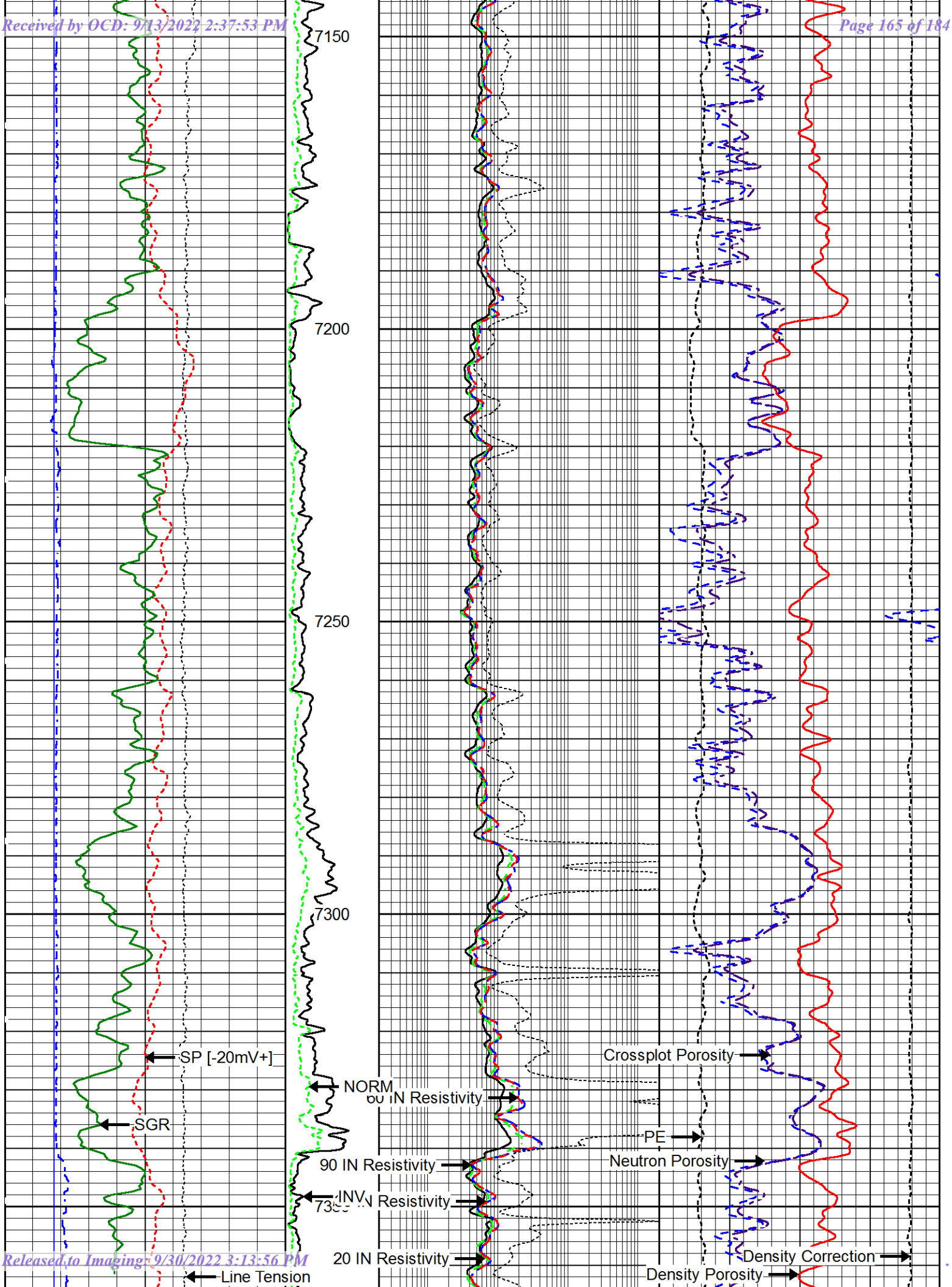
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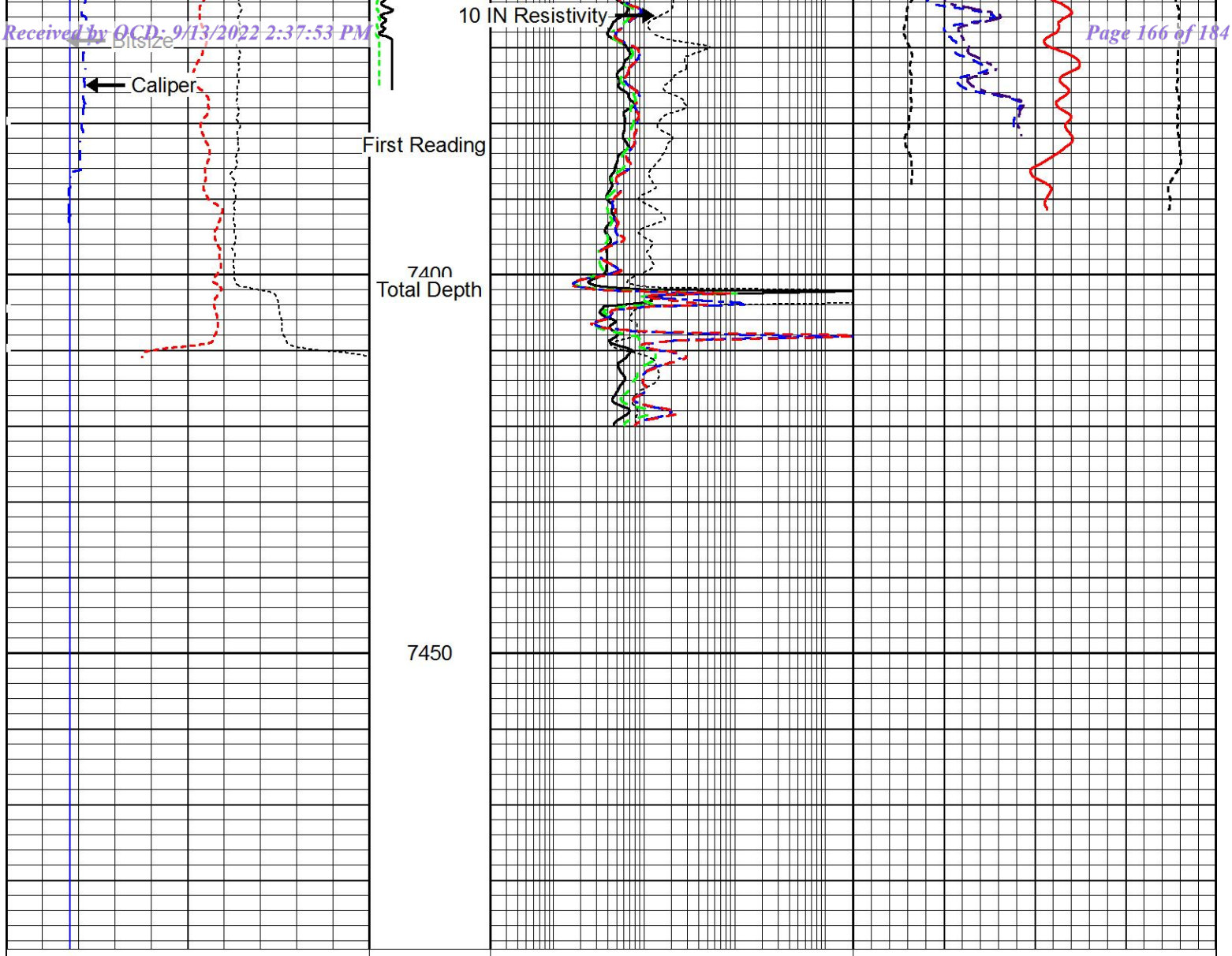
7300
SP [-20mV+]
SGR
NORM
60 IN Resistivity
90 IN Resistivity
INV
20 IN Resistivity
Line Tension
Crossplot Porosity
PE
Neutron Porosity
Density Correction
Density Porosity

Received by OCD: 9/13/2022 2:37:53 PM



7	Bitsize (in)	17	INV	0.2	10 IN Resistivity (Ohm-m)	2000	Neutron Porosity
7	Caliper (in)	17	(Ohm-m)	0.2	20 IN Resistivity (Ohm-m)	2000	0.3 (Porosity Decimal Fraction) -0.1
	SP [-20mV+]		0 20	0.2	30 IN Resistivity (Ohm-m)	2000	Density Porosity
0	SGR (GAPI)	200	NORM	0.2	60 IN Resistivity (Ohm-m)	2000	0.3 (Porosity Decimal Fraction) -0.1
	Line Tension		(Ohm-m)	0.2	90 IN Resistivity (Ohm-m)	2000	Crossplot Porosity
	5000 (lb)	0	0 20				0.3 (Porosity Decimal Fraction) -0.1
							0 PE 10 Density Correction
							0.8 (g/cc) -0.2

ALLIED HORIZONTAL WIRELINE SERVICES

Main Pass

ALLIED HORIZONTAL WIRELINE SERVICES

Repeat Pass

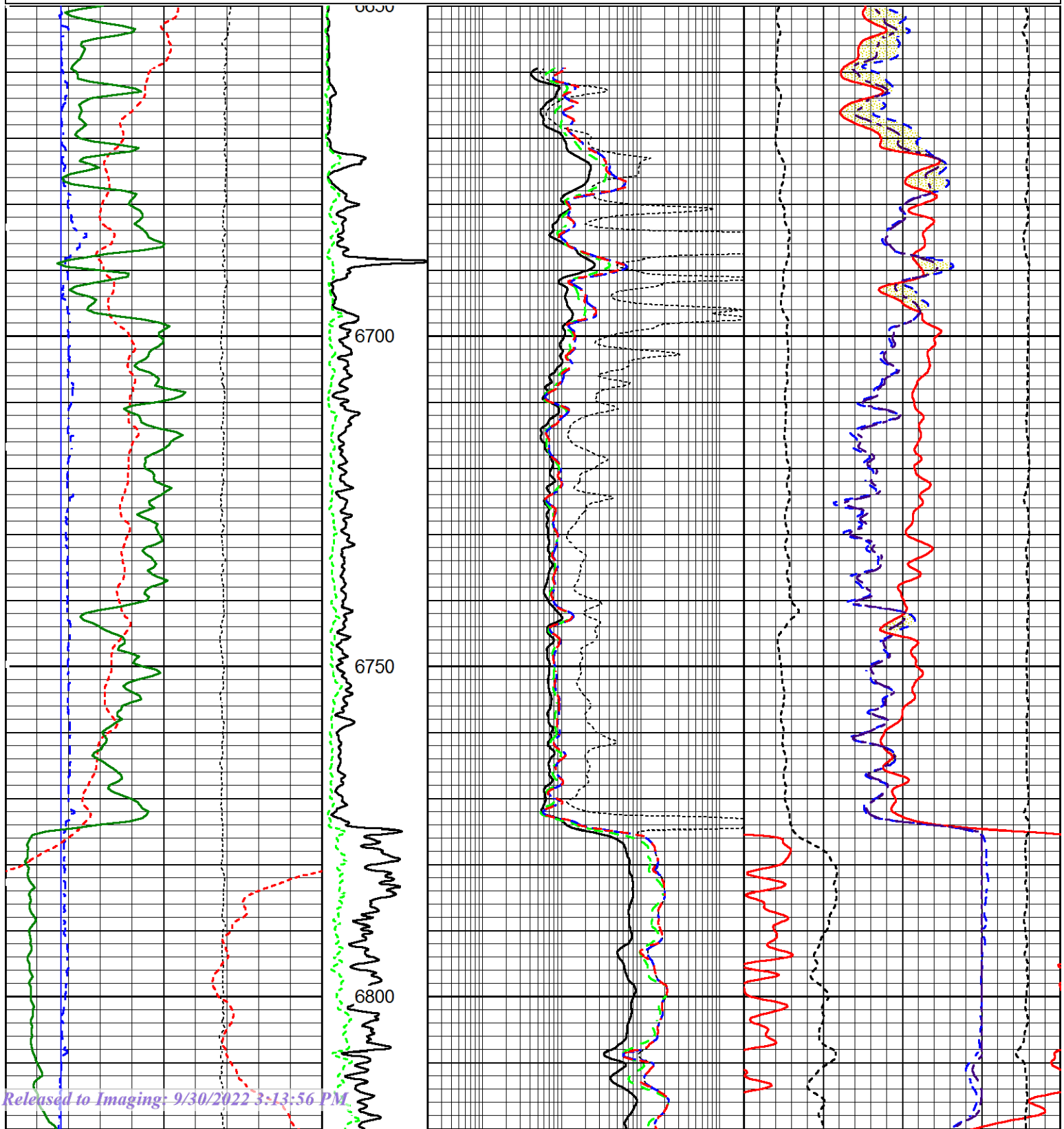
Database File	enduringreswlybrook.db
Dataset Pathname	West_Lybrook_Well/run1/pass5
Presentation Format	3com_jat

Released to Imaging: 9/30/2022 3:13:56 PM

Received by OCD: 9/13/2022 2:37:53 PM

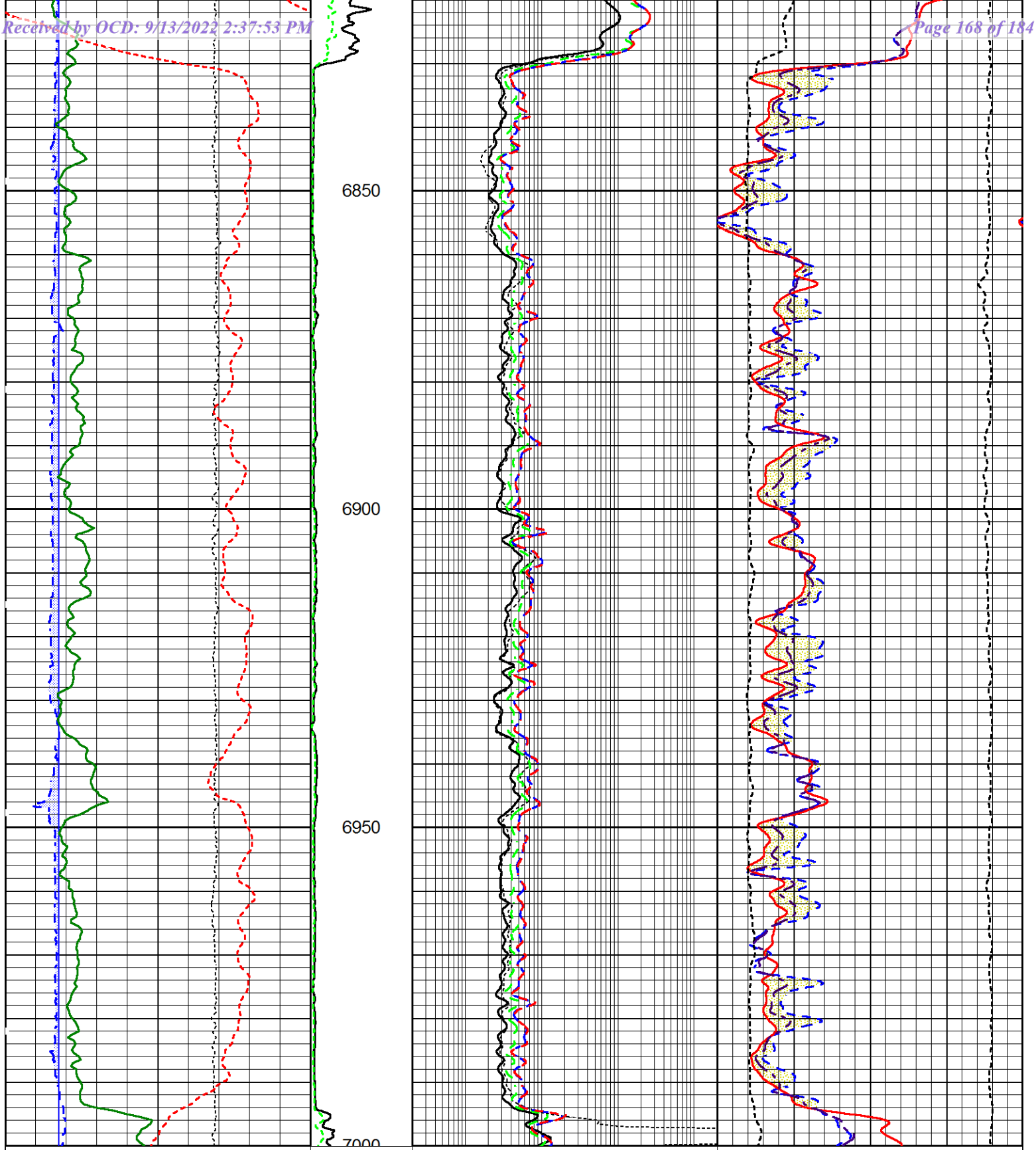
Dataset Creation Tue Jan 15 11:30:34 2019 by Log Sondex
Charted by Depth in Feet scaled 1:240

7 Bitsize (in) 17	INV (Ohm-m) 0 20	0.2 10 IN Resistivity (Ohm-m) 2000	Neutron Porosity 0.3 (Porosity Decimal Fraction) -0.1		
7 Caliper (in) 17		0.2 20 IN Resistivity (Ohm-m) 2000			
SP [-20mV+]		0.2 30 IN Resistivity (Ohm-m) 2000	Density Porosity 0.3 (Porosity Decimal Fraction) -0.1		
0 SGR (GAPI) 200	NORM (Ohm-m) 0 20	0.2 60 IN Resistivity (Ohm-m) 2000			
Line Tension 5000 (lb) 0		0.2 90 IN Resistivity (Ohm-m) 2000	Crossplot Porosity 0.3 (Porosity Decimal Fraction) -0.1	0 PE 10	Density Correction 0.8 (g/cc) -0.2



Released to Imaging: 9/30/2022 3:13:56 PM

Received by OCD: 9/13/2022 2:37:53 PM



7 Bitsize (in) 17	INV (Ohm-m) 0 20	0.2 10 IN Resistivity (Ohm-m) 2000
7 Caliper (in) 17		0.2 20 IN Resistivity (Ohm-m) 2000
SP [-20mV+]		0.2 30 IN Resistivity (Ohm-m) 2000
0 SGR (GAPI) 200	NORM (Ohm-m) 0 20	0.2 60 IN Resistivity (Ohm-m) 2000
Line Tension 5000 (lb) 0		0.2 90 IN Resistivity (Ohm-m) 2000

Neutron Porosity 0.3 (Porosity Decimal Fraction) -0.1	
Density Porosity 0.3 (Porosity Decimal Fraction) -0.1	
Crossplot Porosity 0.3 (Porosity Decimal Fraction) -0.1	
0 PE 10	Density Correction 0.8 (g/cc) -0.2

Released to Imaging: 9/30/2022 3:13:56 PM

ALLIED HORIZONTAL WIRELINE SERVICES

Repeat Pass

Log Variables

DatabaseC:\Sondex\Sondex Warrior\Data\enduringreswlybrook.db
Dataset West_Lybrook/well/run1/main/_vars_

Top - 417.97 ft

AIR_HOLE?	BOREID in	BOTTEMP degF	CASED?	CASEOD in	CASETHCK in	CASEWGHT lb/ft	DE-CENT
No	14.5	149	Yes	13.375	0	40	Yes

DEVI deg	FLUIDDEN g/cc	FRMSALIN kppm	MATRXDEN g/cc	MUDSALIN kppm	MudWgt lb/gal	NPORSEL	PERFS
0	1	0	2.71	0	9.4	Limestone	0

SO in	SPSHIFT mV	SRFTEMP degF	TDEPTH ft
0.5	0	68	7408

417.97 ft - Bottom

AIR_HOLE?	**BOREID in**	BOTTEMP degF	**CASED?**	**CASEOD in**	CASETHCK in	**CASEWGHT lb/ft**	DE-CENT
No	**8.75**	149	**No**	**7**	0	**26**	Yes

DEVI deg	FLUIDDEN g/cc	FRMSALIN kppm	MATRXDEN g/cc	MUDSALIN kppm	MudWgt lb/gal	NPORSEL	PERFS
0	1	0	2.71	0	9.4	Limestone	0

SO in	SPSHIFT mV	SRFTEMP degF	TDEPTH ft
0.5	0	68	7408

Calibration Report

Database File	enduringreswlybrook.db
Dataset Pathname	West_Lybrook/well/run1/pass5
Dataset Creation	Tue Jan 15 11:30:34 2019 by Log Sondex

Induction Array Tool Calibration Report

Serial Number:	B10110
Tool Model:	002
Master Calibration Performed:	Fri Oct 26 15:32:33 2018
Temperature:	94.8 degF

Sonde Error:

Array	1	2	3	4	5	6	7	
Real	192.0	-12.7	-40.5	-15.0	-2.0	2.3	2.9	mmho/m
Imaginary	-18.2	5.6	-8.9	-11.8	-22.5	-1.2	5.1	mmho/m

Loop Gain:

Array	1	2	3	4	5	6	7	
Loop (real)	537.7	678.5	1295.3	1394.1	1144.8	712.8	404.8	mmho/m
Loop (imaginary)	73.3	92.5	389.8	419.5	344.5	214.5	121.8	mmho/m
Real	754.6	727.3	1235.4	1365.6	1152.8	736.4	421.2	mmho/m
Imaginary	57.5	104.4	378.7	408.4	324.7	218.8	133.9	mmho/m
Gain (real)	0.956	0.917	1.015	1.010	0.991	0.971	0.968	

Received by OCD: 9/13/2022 2:37:53 PM

Gain (real)	0.956	0.917	1.015	1.010	0.991	0.971	0.968
Gain (imaginary)	0.967	0.936	1.006	0.998	0.992	0.975	0.945

Before Survey Verification Performed: Tue Jan 15 07:30:10 2019
Sonde 1 Temperature: 91.3 degF
Sonde 2 Temperature: 93.3 degF
Array 1 Temperature: 93.3 degF

Array	1	2	3	4	5	6	7
TxIR	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1
TxIX	0.0	0.0	0.2	0.2	0.2	0.2	0.2
Tx Magnitude	0.0	0.0	0.2	0.2	0.2	0.2	0.2
Gain	112.1	152.3	146.9	151.0	151.8	159.4	167.5
RxCR	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
RxCX	0.1	0.1	0.1	0.1	0.1	0.1	0.1
RxC Magnitude	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Tool Module Parameters

Software Version: 8.0.0.4
Borehole Size Source: CALI
Mud Resistivity Source: MUDRES
Mud Resistivity At Surface: N/A
Mud Resistivity Surface Temperature: N/A
Borehole Corrections: Automatic
Minimum Standoff: 0.4 in

Litho Density Tool Calibration Report

Serial Number: B0872S70997B
Tool Model: B10872

Caliper Calibration Performed: Mon Jan 07 16:48:54 2019

	Diameter		Reading	
Small Ring:	9.000	in	1709.800	cps
Large Ring:	13.000	in	2058.300	cps

Gain: 0.0115
Offset: -10.6247

Master Calibration Performed: Mon Jan 07 16:27:47 2019

Source Number: 70997B
Medium: Water
Al Block Density: 2.6002 g/cc

	Background	Al Block	Al Block + Fe	
SS1	677.4	4467.7	3791.9	cps
SS2	1927.0	30904.2	26367.3	cps
SSTOTAL	4505.5	49338.8	41684.1	cps
LITH	96.2	509.0	303.4	cps
LL	188.4	862.2	753.9	cps
LU	542.8	1119.9	1033.7	cps
LS	731.2	1982.1	1787.6	cps
LSTOTAL	1379.4	4808.5	3883.4	cps
SSHV	1468.8	1474.0	1474.3	V
LSHV	1414.7	1419.6	1421.4	V
SSFF	-0.011	0.005	0.006	
LSFF	0.005	0.002	-0.007	

Before Survey Verification Performed: Tue Jan 15 07:00:24 2019
After Survey Verification Performed: Tue Jan 15 15:30:24 2019

Released to Imaging: 9/30/2022 3:15:56 PM

	Master Background	Before Survey Background	After Survey Background	
SS1	677.4	692.2	690.2	cps
SS2	1927.0	1946.8	1946.4	cps
SSTOTAL	4505.5	4577.9	4562.5	cps
LITH	96.2	98.4	95.6	cps
LL	188.4	188.2	186.7	cps
LU	542.8	548.0	551.3	cps
LS	731.2	736.1	738.0	cps
LSTOTAL	1379.4	1392.8	1389.2	cps
SSHV	1468.8	1461.4	1461.7	V
LSHV	1414.7	1407.4	1407.9	V
SSFF	-0.011	0.007	-0.014	
LSFF	0.005	0.016	0.003	

Tool Module Parameters

Software Version:	8.0.0.6
Borehole Size Source:	CALI
Pad Type:	2

Compensated Neutron Tool Calibration Report

Serial Number:	C2541S59796G
Tool Model:	009

Master Calibration Performed:	Thu Jan 03 15:00:01 2019	
Source Number:	59796G	
Short Spacing Counts:	4187.83	cps
Long Spacing Counts:	156.76	cps
High Voltage:	1367.67	V
Target Ratio:	26.6600	
Ratio:	26.7144	
K-Factor:	0.9980	

Before Survey Verification Performed:
After Survey Verification Performed:

Verifier Number: 6490NN

Verifier Values	Master Cal	Before Survey	After Survey	
Short Spacing Counts:	247.78			cps
Long Spacing Counts:	253.81			cps
High Voltage:	1367.62			V
Ratio:	0.9762			

Tool Module Parameters

Software Version:	8.0.0.5
Borehole Size Source:	CALI
Clip Crossplot Porosity:	YES

Lithology Identification Parameters:

	Calcite	Quartz	Dolomite	
Uma:	13.77	4.79	9.03	barns/cc
RHOma:	2.71	2.65	2.88	g/cc

Micro Electric Log Calibration Report

Serial Number:	002220331
Tool Model:	001

Caliper Calibration Performed: Thu Jan 10 10:00:24 2019

Caliper Calibration Performed: Thu Jan 10 10:00:24 2019

	Pad Arm			Backup Arm		
	Radius		Reading	Radius		Reading
Small Jig:	4.000	in	1353.200	4.000	in	1365.300
Large Jig:	6.000	in	1402.600	6.000	in	1410.500
Gain:			0.0405			0.0442
Offset:			-50.7854			-56.4115

Pad Calibration

	Inverse	Normal
Gain:	1.0000	1.0000
Offset:	0.0000	0.0000

Tool Module Parameters

Software Version: 8.0.0.4

Borehole Fluid Resistivity Calibration Report

Serial Number: 000001
Tool Model: 001

Master Calibration Performed: Thu Sep 16 10:07:52 2010

Resistivity Polynomial Equation:

$$0.2530x^2 + 0.5610x + 0.0310$$

Temperature Calibration:

Reference		Reading	
53.60	degF	846.40	bits
107.42	degF	919.20	bits

Spectral Gamma Ray Calibration Report

Serial Number: 10012700
Tool Model: 003

Performed: Thu Jan 10 12:00:24 2019

Source Number: #14
Calibrator Value: 207.0 API

Background Reading: 151.7 cps
Calibrator Reading: 1681.1 cps

Sensitivity: 0.135 API / cps

Perfomed: Fri Jan 11 11:30:32 2019

Verifier Number: 571

	K %	U ppm	T ppm
Concentrations	5.4	6.9	25.3

K Peak: Passed
U Peak:
T Peak:

Before Survey Verification Performed: Tue Jan 15 07:15:24 2019
After Survey Verification Performed: Tue Jan 15 15:35:24 2019

	Before Survey	After Survey	
Background Reading:	154.5	152.8	cps
Verifier Reading:	1207.5	1184.5	cps

K Peak:	Passed	Passed	
U Peak:	Passed	Passed	
T Peak:	Passed	Passed	

Tool Module Parameters

Software Version:	8.0.0.5
Borehole Correction:	No
Stand Off:	N/A
Mud Type:	N/A
Borehole Size Source:	N/A

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
CHD	53.66		CHD-001 (10012297) Cable Head	2.19	3.38	35.00
			XTU-008 (C10001400) Crossover Ultrawire Toolbus to Ultralink	2.08	3.38	47.00
SGR	46.32		SGR-003 (10012700) Spectral Gamma Ray Tool	4.94	3.88	120.00
BFR	42.65		BFR-001 (000001) Borehole Fluid Resitivity	3.80	3.38	75.00
Overbody	38.20		Overbody-Over-cen Overbody Centralizer	3.00	3.38	10.00
			MEL-001 (002220331) Micro Electric Log	9.17	3.38	190.00
MEL	33.28					
KJT	31.49		KJT-001 (10010515) Knuckle Joint	2.86	3.38	72.00
CNLSC	25.59		CNL-009 (C2541S59796G) Compensated Neutron Logging Tool	5.28	3.38	100.00
CNSSC	25.09					
			LDT-B10872 (B0872S70997B) Litho Density Tool	9.75	4.50	310.00
LDT	15.44					
IAT	5.44		IAT-002 (B10110)	10.00	3.38	190.00

			IAT-002 (B10110) Induction Array Tool	13.22	3.88	196.00
SP	0.43					
BN	0.38		BN-SOFF (000001) Bottom Nose Standoff	0.38	6.88	6.00

Dataset: enduringreswlybrook.db: West_Lybrook/well/run1/main
Total length: 53.66 ft
Total weight: 1161.00 lb
O.D.: 6.88 in

ALLIED HORIZONTAL WIRELINE SERVICES

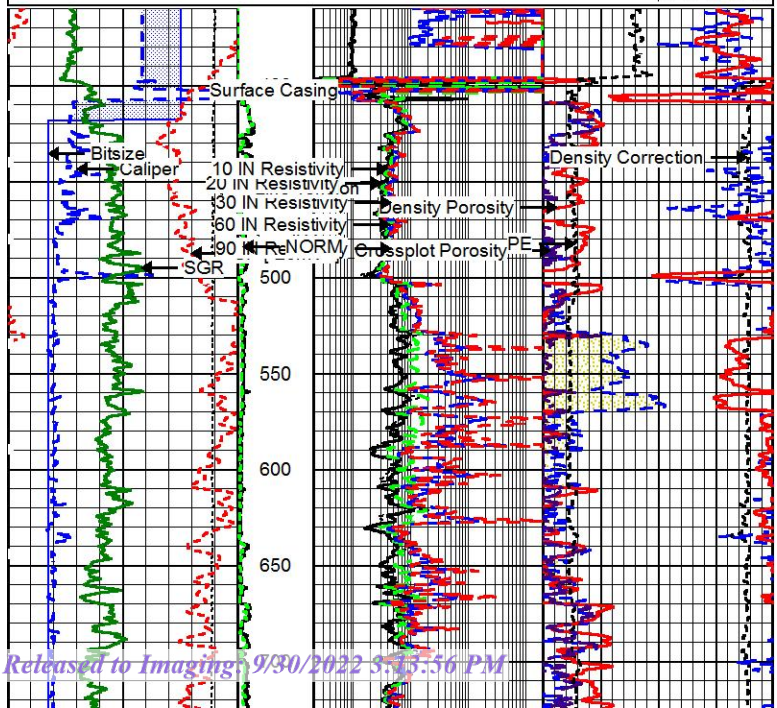
Company: Enduring Resources
Well: West Lybrook Unit 2309-24 N WSW
Field: West Lybrook
State: New Mexico

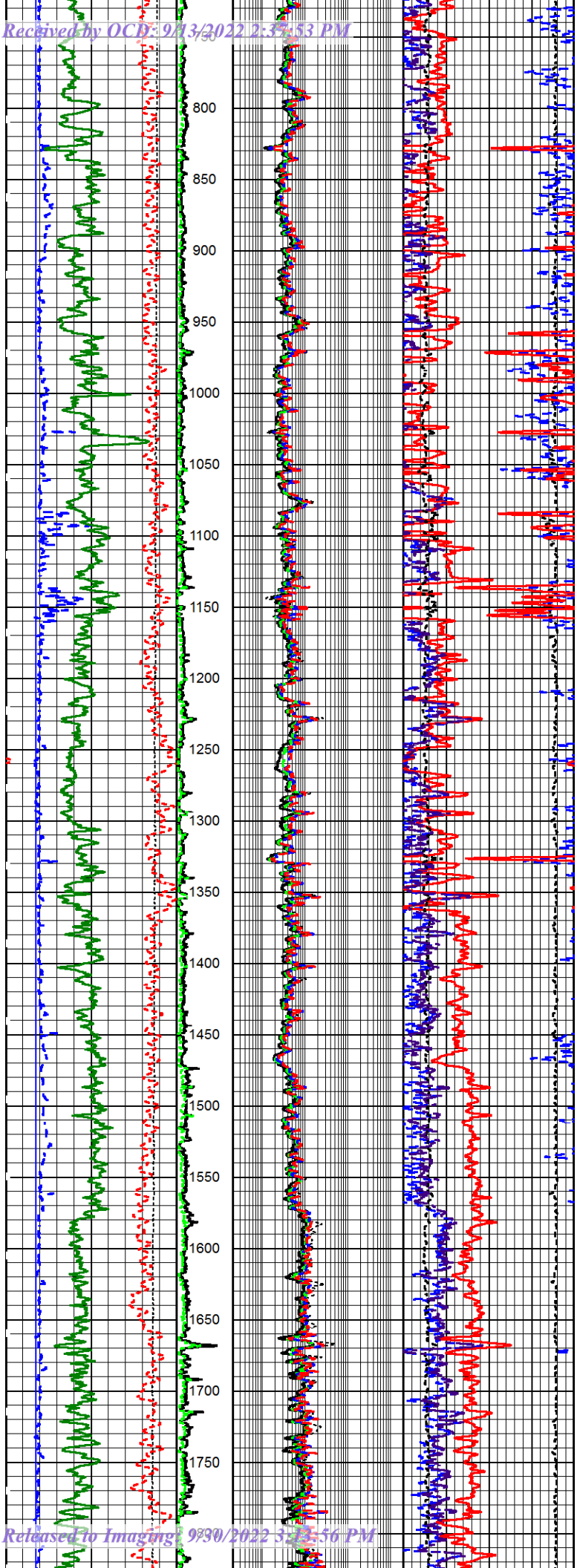
ALLIED HORIZONTAL WIRELINE SERVICES

Main Pass

Database File	enduringreswlybrook.db
Dataset Pathname	West_Lybrook/well/run1/main
Presentation Format	3com_iat
Dataset Creation	Tue Jan 15 15:23:37 2019
Charted by	Depth in Feet scaled 1:1200

7 Bitsize (in) 17	INV	10 IN Resistivity	Neutron Porosity
7 Caliper (in) 17	Ohm-m	0.2 (Ohm-m) 2000	(Porosity Decimal Fraction)
SP [-20mV+]	0 20	20 IN Resistivity	0.3 -0.1
0 SGR (GAPI) 200	NORM	0.2 (Ohm-m) 2000	Density Porosity
Line Tension	Ohm-m	30 IN Resistivity	(Porosity Decimal Fraction)
5000lb) 0	0 20	0.2 (Ohm-m) 2000	0.3 -0.1
		60 IN Resistivity	Crossplot Porosity
		0.2 (Ohm-m) 2000	(Porosity Decimal Fraction)
		90 IN Resistivity	0.3 -0.1
		0.2 (Ohm-m) 2000	0 PE 10 nsity Correcti
			(g/cc)
			0.8 -0.2

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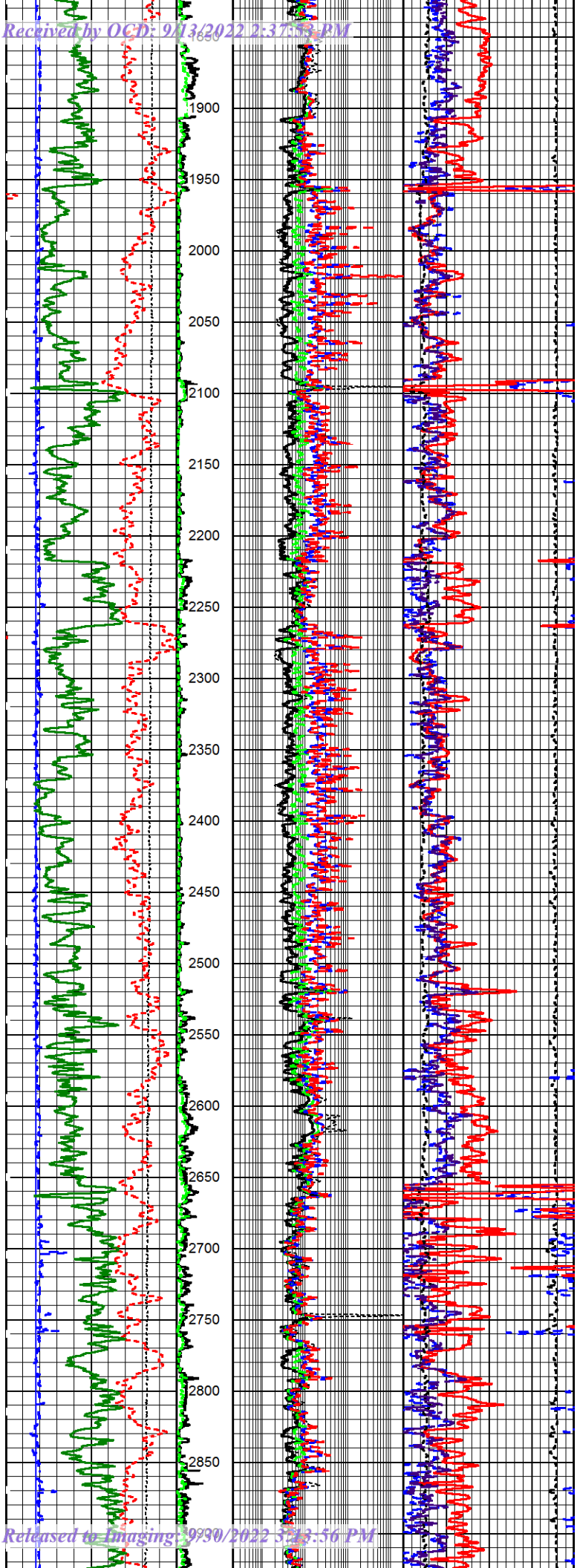
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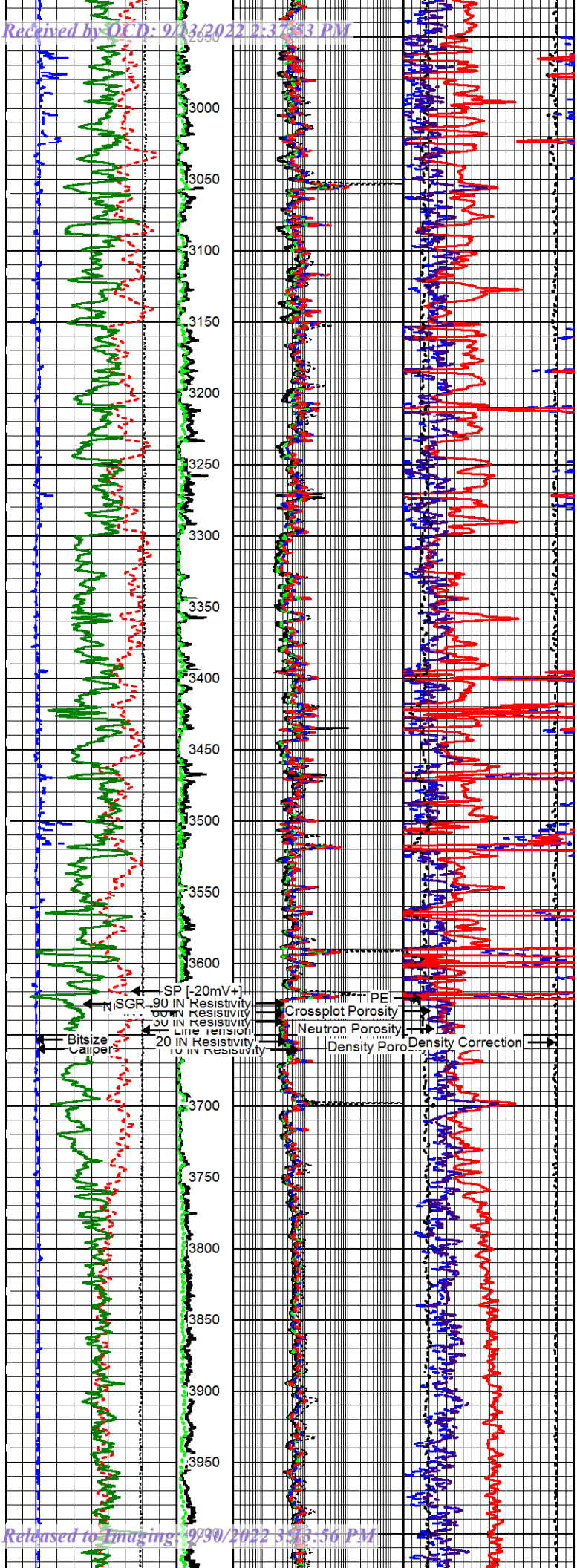
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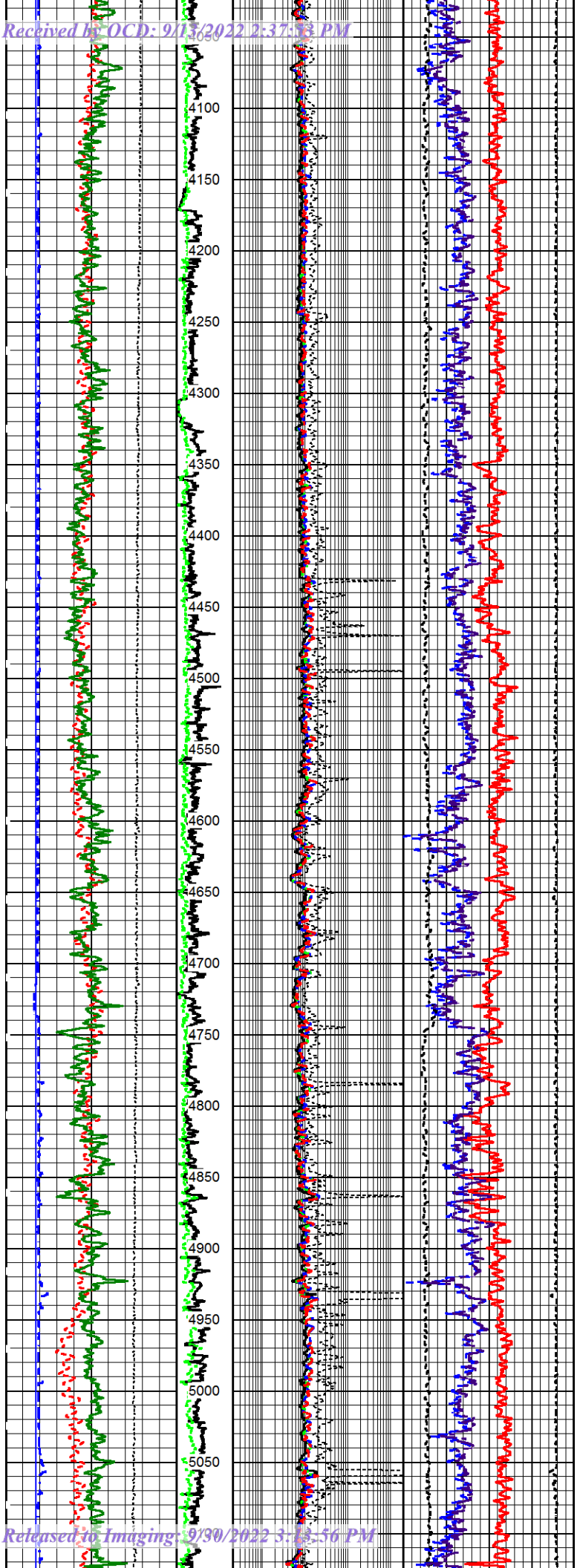
SP [-20mV+]
SGR
90 IN Resistivity
Crossplot Porosity
Neutron Porosity
Density Correction
Bitsize
Caliper
20 IN Resistivity
PE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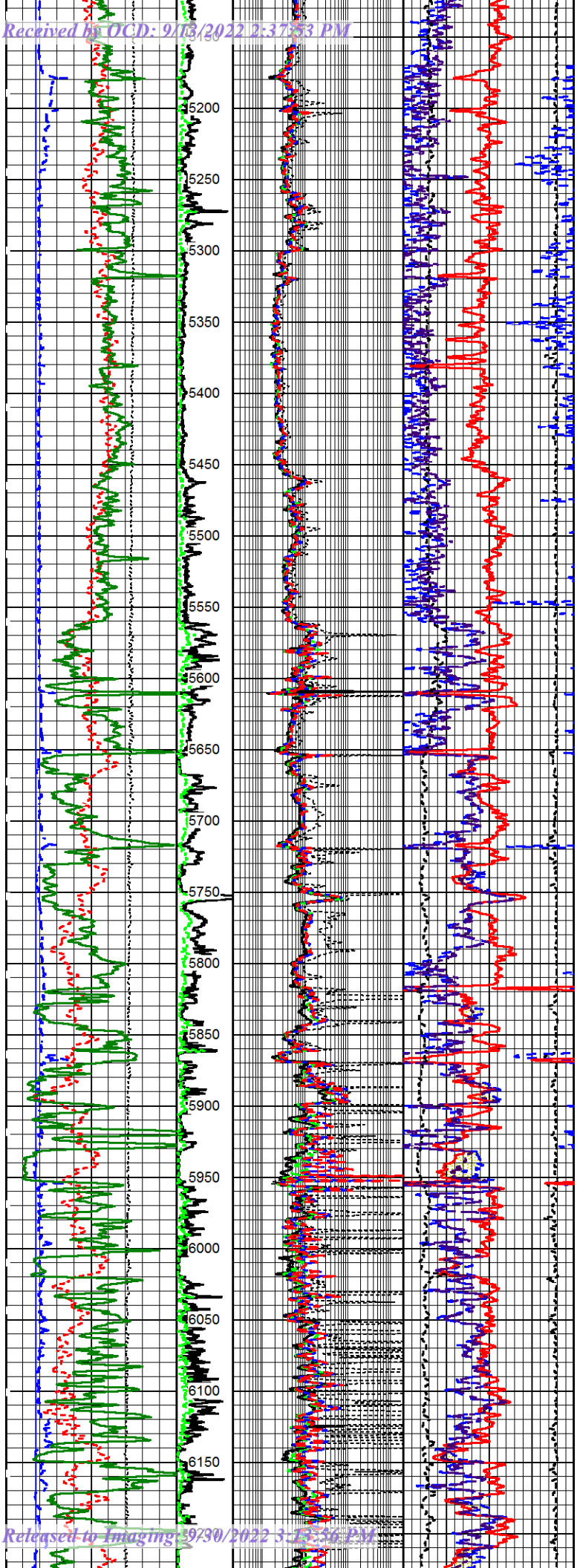
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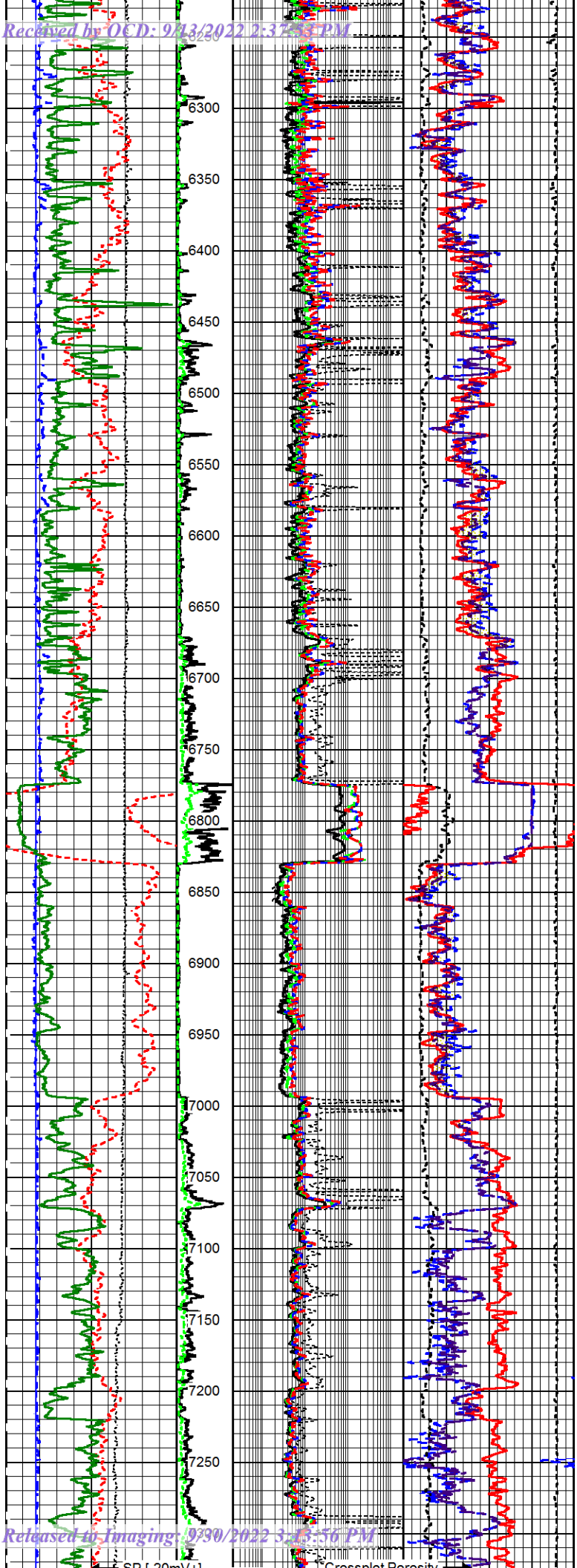
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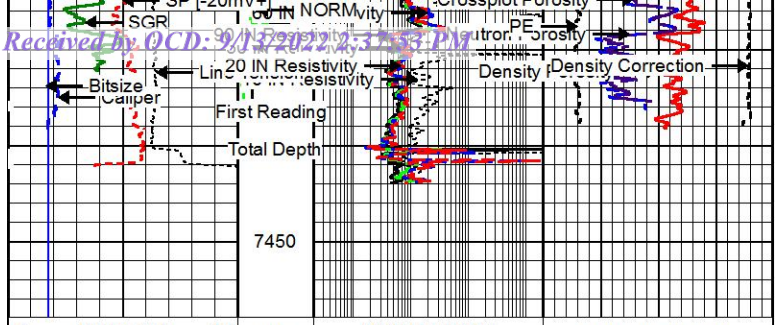

7 Bitsize (in) 17		INV	10 IN Resistivity		Neutron Porosity		
7 Caliper (in) 17		Ohm-m	0.2 (Ohm-m) 2000		(Porosity Decimal Fraction)		
SP [-20mV+]		0 20	20 IN Resistivity		0.3 -0.1		
0 SGR (GAPI) 200		NORM	0.2 (Ohm-m) 2000		Density Porosity		
	Line Tension	Ohm-m	30 IN Resistivity		(Porosity Decimal Fraction)		
	5000lb) 0	0 20	0.2 (Ohm-m) 2000		0.3 -0.1		
			60 IN Resistivity		Crossplot Porosity		
			0.2 (Ohm-m) 2000		(Porosity Decimal Fraction)		
			90 IN Resistivity		0.3 -0.1		
			0.2 (Ohm-m) 2000		0 PE 10	nsity Correcti	
						(g/cc)	
						0.8 -0.2	

ALLIED HORIZONTAL WIRELINE SERVICES

Main Pass

WLU 2309-24N

San Juan Co., NM
294’ FSL, 2284’ FWL, Sec. 24, T23N, R00W
36.205932°N, 107.741568°W
CONVERSION TO SALTWATER DISPOSAL

ENDURING RESOURCES, LLC

PROCEDURE:

1. Hold PJSM prior to beginning any operations. Ensure all onsite personnel abide by Enduring HSE protocol.
2. Comply with all NMOCD and BLM safety and environmental regulations.
3. Conduct safety meeting with all personnel and MIRU rig & spooling unit
4. NU BOPE and test.
5. Remove 4 ½” tubing and ESP from well
6. Unload and tally 4 ½” plastic lined tubing
7. PU AS1-X packer and RIH with 4-1/2” tubing with sub, packer, on/off tool and land packer at 6,810’ MD
8. Set packer and test tubing/casing annulus to 500 psi for 10 minutes. Bleed casing pressure.
9. Pull out of on/off tool and displace wellbore with packer fluid.
10. Latch onto on/off tool and chart official MIT with NMOCD witness on-site (provide inspector with 24 hour notification prior to chart recording).
11. NDBOP, NUWH and set tree for injection.
12. Establish initial injection rate to ensure well is taking fluid using no more than 50 bbl.
13. RDMO

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

COMMENTS

Action 142953

COMMENTS

Operator: ENDURING RESOURCES, LLC 6300 S Syracuse Way, Suite 525 Centennial, CO 80111	OGRID: 372286
	Action Number: 142953
	Action Type: [C-108] Fluid Injection Well (C-108)

COMMENTS

Created By	Comment	Comment Date
drose	OSE water well applying for Class II injection authority	9/19/2022

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CONDITIONS

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	Action Number: 142953
	Action Type: [C-108] Fluid Injection Well (C-108)

CONDITIONS

Created By	Condition	Condition Date
aschaefer	None	9/30/2022