

BAKER HUGHES

SIMULTANEOUS ACOUSTIC AND RESISTIVITY IMAGING LOG GAMMA RAY LOG

Baker Atlas

FILE NO:

COMPANY

SIERRA GEOTHERMAL POWER, INC.

API NO:

WELL

ALUM 25-29

27-008-80074

FIELD

ALUM

STATE NEVADA

Ver. 3.87

LOCATION:

2235.18' FSL & 938.11' PHL
SW/C

OTHER SERVICES
HDL
ZOL/CN
XMAC
OL

SEC 29

TWP 1N

RGE 38, SE

PERMANENT DATUM

G.L.

ELEVATION

4803.57 FT

LOG MEASURED FROM

K.B.

18.0 FT

ABOVE P.D.

DRILL MEAS. FROM

K.B.

KB

4919.57 FT

DF

4803.57 FT

DATE

15-NOV-2008

RUN

1

2

SERVICE ORDER

572896

DEPTH DRILLER

2300 FT

DEPTH LOGGER

2288 FT

BOTTOM LOGGED INTERVAL

2285 FT

TOP LOGGED INTERVAL

571 FT

CASING DRILLER

16.0 IN

571 FT

CASING LOGGER

571 FT

BIT SIZE

14.75 IN

TYPE OF FLUID IN HOLE

LSND

DENSITY

9.0 LB/G

54 S

PH

9.0

10.0 CS

SOURCE OF SAMPLE

FLOWLINE

RM AT MEAS. TEMP.

2.53 CHM

61 DEG

RM AT MEAS. TEMP.

2.36 CHM

80 DEG

RM AT MEAS. TEMP.

2.89 CHM

83 DEG

SOURCE OF RMF

MEASURED

MEASURED

RM AT BHT

1.08 CHM

152 DEG

TIME SINCE CIRCULATION

9.5 HOURS

MAX. RECORDED TEMP.

180 DEG

EQUIP. NO.

ML-4232

FALLON, NV

VERCI MAX

VERCI MAX

VERCI MAX

VERCI MAX

VERCI MAX

VERCI MAX

VERCI MAX

VERCI MAX

VERCI MAX

VERCI MAX

VERCI MAX

VERCI MAX

VERCI MAX

REMARKS

RUN 1 TRIP 2: CVOL COMPUTED USING 10.75' CASING (BVOL, CVOL UNITS IN CUBIC FEET)

THANKS FOR USING BAKER ATLAS
CREW: LAPOINT / HAYCOCK
RIG: ENSIGN 581

EQUIPMENT DATA

| RUN | TRIP | TOOL | SERIES NO. | SERIAL NO. | POSITION |
|-----|------|-----------|-----------------|---------------------|----------|
| 1 | 2 | PWR ADAPT | 4430KB | 10161078 | FREE |
| 1 | 2 | SWVL | 3844KD | 10201370 | FREE |
| 1 | 2 | TRM | 3881KB | 10203010 | FREE |
| 1 | 2 | WTS | 3514KB | 10200359 | FREE |
| 1 | 2 | GR | 1328KB | 10203000 | FREE |
| 1 | 2 | CAP SUB | 1022PA | 10565885 | FREE |
| 1 | 2 | STAR | 1038FA / 4238MA | 10482331 / 10488537 | 6-ARM |
| 1 | 2 | STAR | 3882PA | 10348282 | FREE |

| | | | | | |
|---|---|------|-----------------|-----------------|------|
| 1 | 2 | WCKL | 58392A | 10398278 | FREE |
| 1 | 2 | ORT | 4401XB | 10165246 | CENT |
| 1 | 2 | CBL | 1671EB / 1671MB | 183626 / 187248 | CENT |

MAIN LOG 25"/100FT SCALE

ECLIPS 6.01 Feb 21, 2008

Sun Nov 15 23:21:57 2009

Updates: 1

Perplt /main/62

Cplot

Pdf_Cpp /main/16

Fileview 5.42

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/575995/k837m04.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 568.625 ft BOTTOM DEPTH: 2293.300 ft

SYMMETRIC FILTER

| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | INTERVAL (ft) | |
|------------------|-------------|------------|-------|---------------|--------|
| SPEED | FILTER () | medium (1) | | TOP | BOTTOM |
| | FILTER (.h) | medium (1) | | " | " |
| TENSION OR | FILTER () | medium (1) | | " | " |
| | FILTER () | medium (1) | | " | " |
| | FILTER (.h) | medium (1) | | " | " |
| | FILTER (.l) | medium (1) | | " | " |

BOREHOLE & CEMENT

| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | INTERVAL (ft) | |
|------------------|-----------|--------|-------|---------------|--------|
| BIT SIZE | BIT SIZE | 14.750 | 1n | TOP | BOTTOM |

STAR/EART PROCESSING

| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | INTERVAL (ft) | |
|------------------|-------------------|---------------------------------------|-------|---------------|-------------|
| PAD TYPE | STAR OTHER PAD | USE OTHER PAD ID 1028BA - 8.25 1n. | | TOP " | BOTTOM " |

CURVE DESCRIPTION REPORT

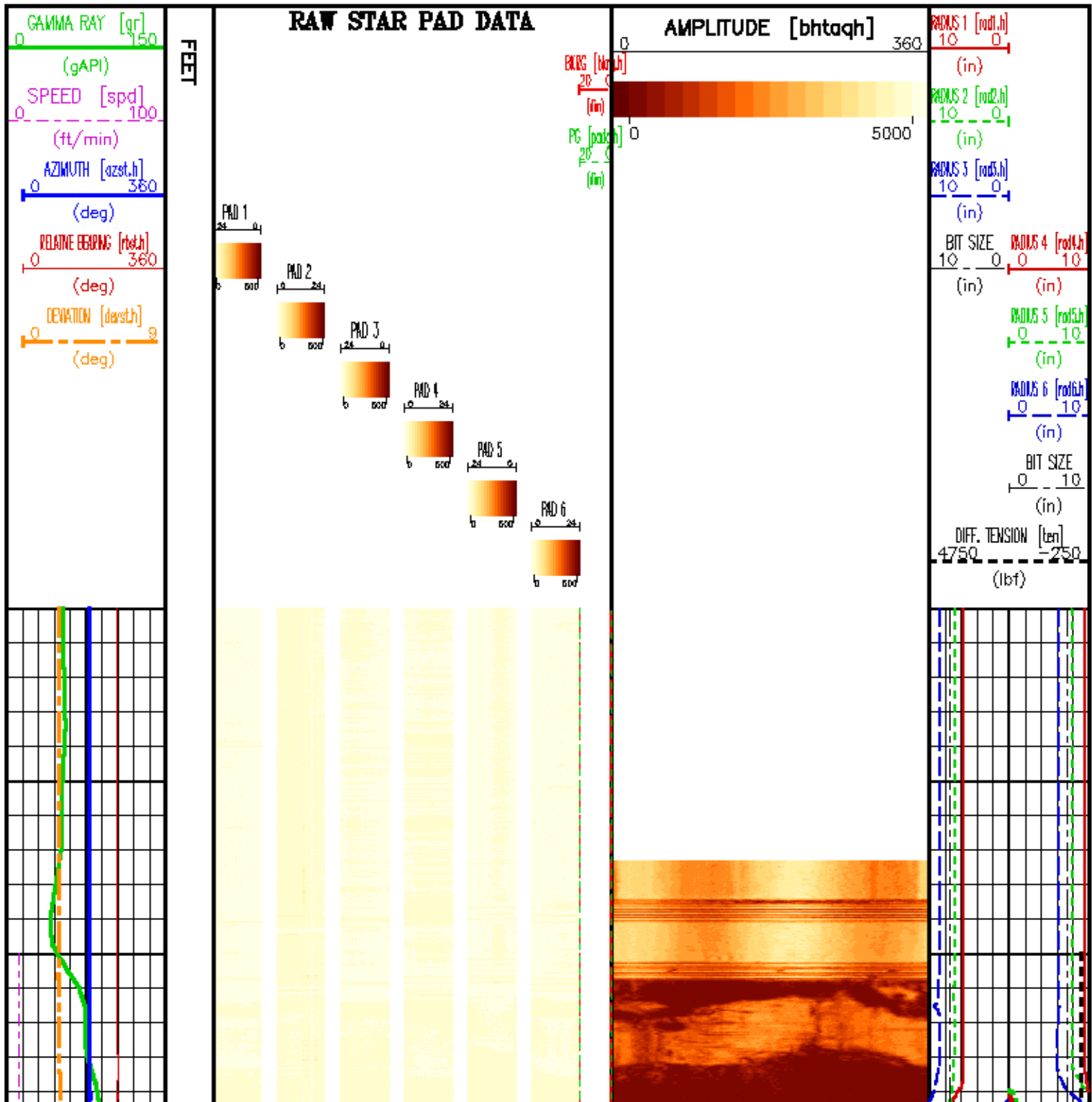
| CURVE NAME | CURVE ALIAS | CREATION DATE | CURVE DESCRIPTION |
|------------|-------------|----------------------|--|
| F1:AZSTQH | AZSTQH | Nov 15 18:52:31 2009 | AZIMUTH OF REFERENCE PAD |
| F1:BHTAQH | BHTA.H | Nov 15 18:52:31 2009 | REFLECTANCE PEAK VOLTS |
| F1:BKRQGH | BKRQGH | Nov 15 18:52:31 2009 | BUCKER DRIVER VALUE |
| F1:DEVSTQH | DEVSTQH | Nov 15 18:52:31 2009 | DEVIATION |
| F1:GR | GR | Nov 15 18:52:31 2009 | GAMMA RAY |
| F1:P18TNQH | P18TN.RES.H | Nov 15 18:52:31 2009 | PACKED PAD 1 BLOCK (BUTTONS 1-24) |
| F1:P28TNQH | P28TN.RES.H | Nov 15 18:52:31 2009 | PACKED PAD 2 BLOCK (BUTTONS 1-24) |
| F1:P38TNQH | P38TN.RES.H | Nov 15 18:52:31 2009 | PACKED PAD 3 BLOCK (BUTTONS 1-24) |
| F1:P48TNQH | P48TN.RES.H | Nov 15 18:52:31 2009 | PACKED PAD 4 BLOCK (BUTTONS 1-24) |
| F1:P58TNQH | P58TN.RES.H | Nov 15 18:52:31 2009 | PACKED PAD 5 BLOCK (BUTTONS 1-24) |
| F1:P68TNQH | P68TN.RES.H | Nov 15 18:52:31 2009 | PACKED PAD 6 BLOCK (BUTTONS 1-24) |
| F1:PADQGH | PADQGH | Nov 15 18:52:31 2009 | PAD GAIN CODE |
| F1:RAD1QH | RAD1QH | Nov 15 18:52:31 2009 | RADIUS, TOOL AXIS TO PAD 1 FACE |
| F1:RAD2QH | RAD2QH | Nov 15 18:52:31 2009 | RADIUS, TOOL AXIS TO PAD 2 FACE |
| F1:RAD3QH | RAD3QH | Nov 15 18:52:31 2009 | RADIUS, TOOL AXIS TO PAD 3 FACE |
| F1:RAD4QH | RAD4QH | Nov 15 18:52:31 2009 | RADIUS, TOOL AXIS TO PAD 4 FACE |
| F1:RAD5QH | RAD5QH | Nov 15 18:52:31 2009 | RADIUS, TOOL AXIS TO PAD 5 FACE |
| F1:RAD6QH | RAD6QH | Nov 15 18:52:31 2009 | RADIUS, TOOL AXIS TO PAD 6 FACE |
| F1:RB1T1 | RB1T1 | Nov 15 18:52:31 2009 | BIT RADIUS 1 |
| F1:RB1T4 | RB1T4 | Nov 15 18:52:31 2009 | BIT RADIUS 4 |
| F1:RBSTQH | RBSTQH | Nov 15 18:52:31 2009 | RELATIVE BEARING (RELATIVE TO HIGH SIDE OF BOREHOLE) |
| F1:SPD | SPD | Nov 15 18:52:31 2009 | SPEED |
| F1:TEN | TEN | Nov 15 18:52:31 2009 | DIFFERENTIAL TENSION |

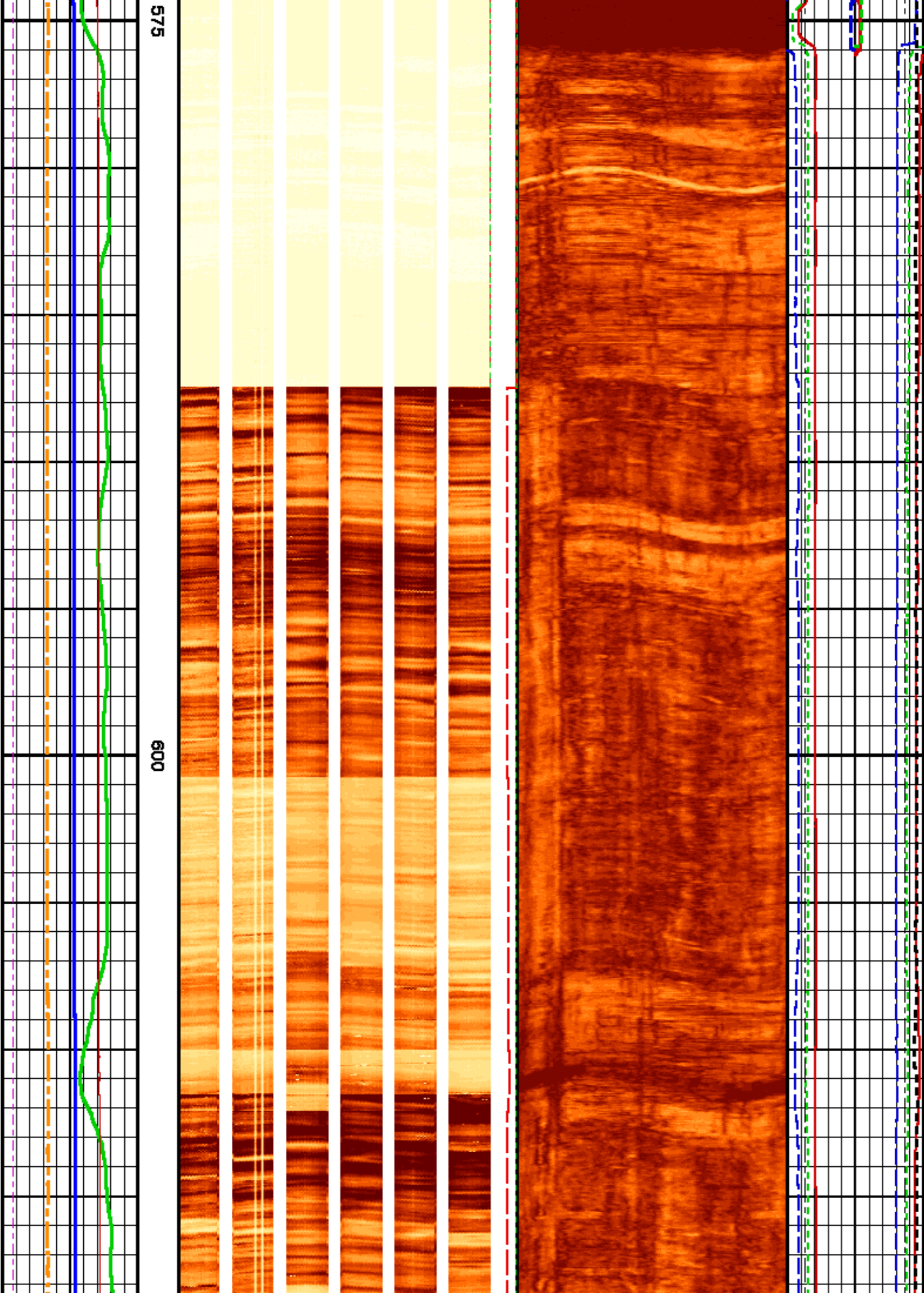
CURVE MEASURE POINT OFFSET

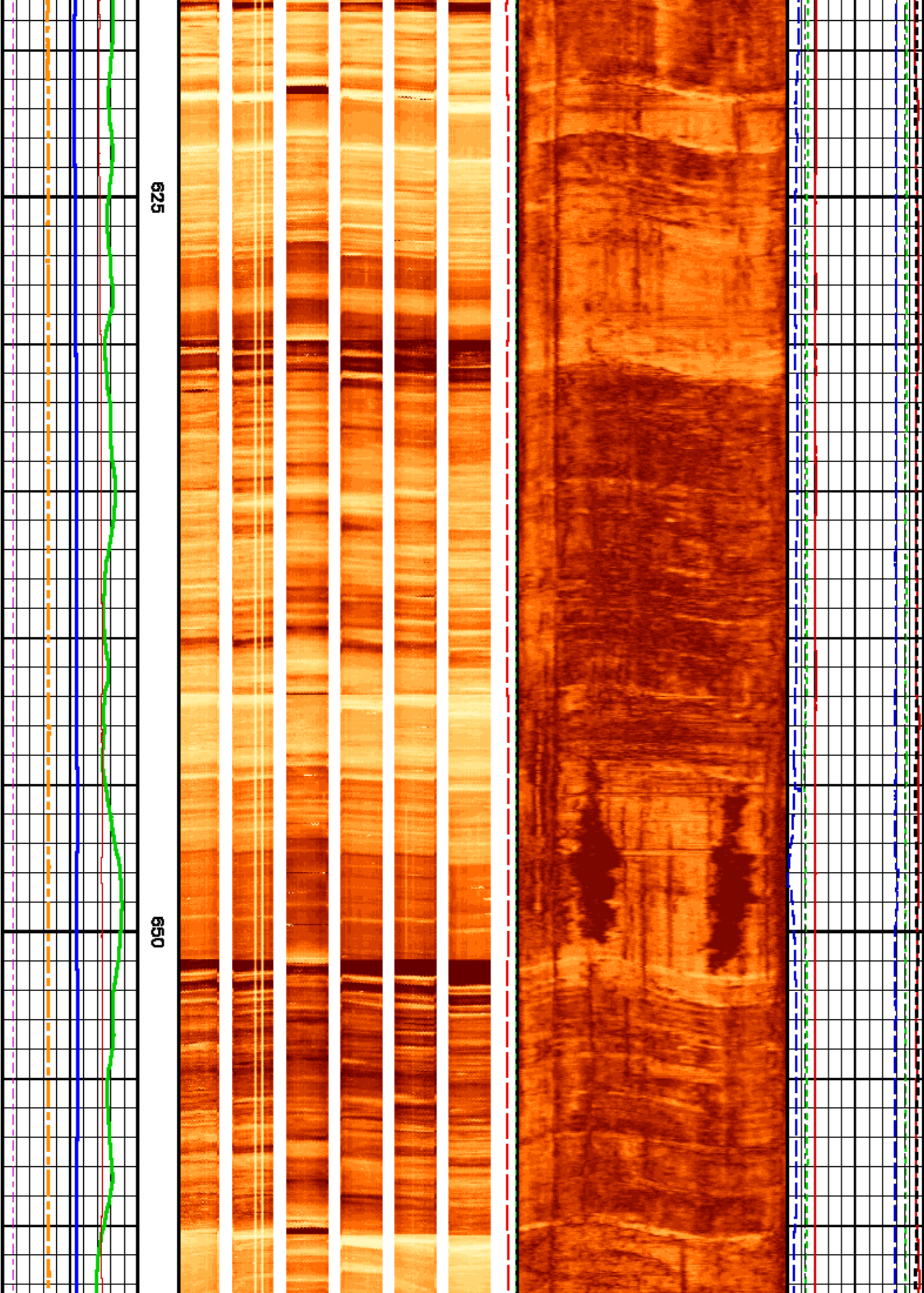
| CURVE | OFFSET (ft) | CURVE | OFFSET (ft) | CURVE | OFFSET (ft) | CURVE | OFFSET (ft) |
|---------|-------------|--------|-------------|--------|-------------|--------|-------------|
| AZSTQH | 36.15 | PADGQH | 36.15 | RAD4QH | 36.15 | RBIT4 | 36.15 |
| BKRGQH | 36.15 | RAD1QH | 36.15 | RAD5QH | 36.15 | RBSTQH | 36.15 |
| DEVSTQH | 36.15 | RAD2QH | 36.15 | RAD6QH | 36.15 | SPD | 0.00 |
| GR | 65.00 | RAD3QH | 36.15 | RBIT1 | 36.15 | TEN | 0.00 |

Presentation : c:\p1\data\575895\STAR_CBIL_MAIN.pdf [25"/100' Scale]
 Plot Interval : 580 - 2293.25 Feet

Data File 1 : F1 : c:\p1\data\575895\k837m04.aiff
 Created On : Nov 15 18:52:31 2008
 Company : SIERRA GEOTHERMAL POWER, INC.
 Well : ALUM 25-29
 Field : ALUM
 File Interval : 480.25 - 2293.25 Feet
 Oct : k837m

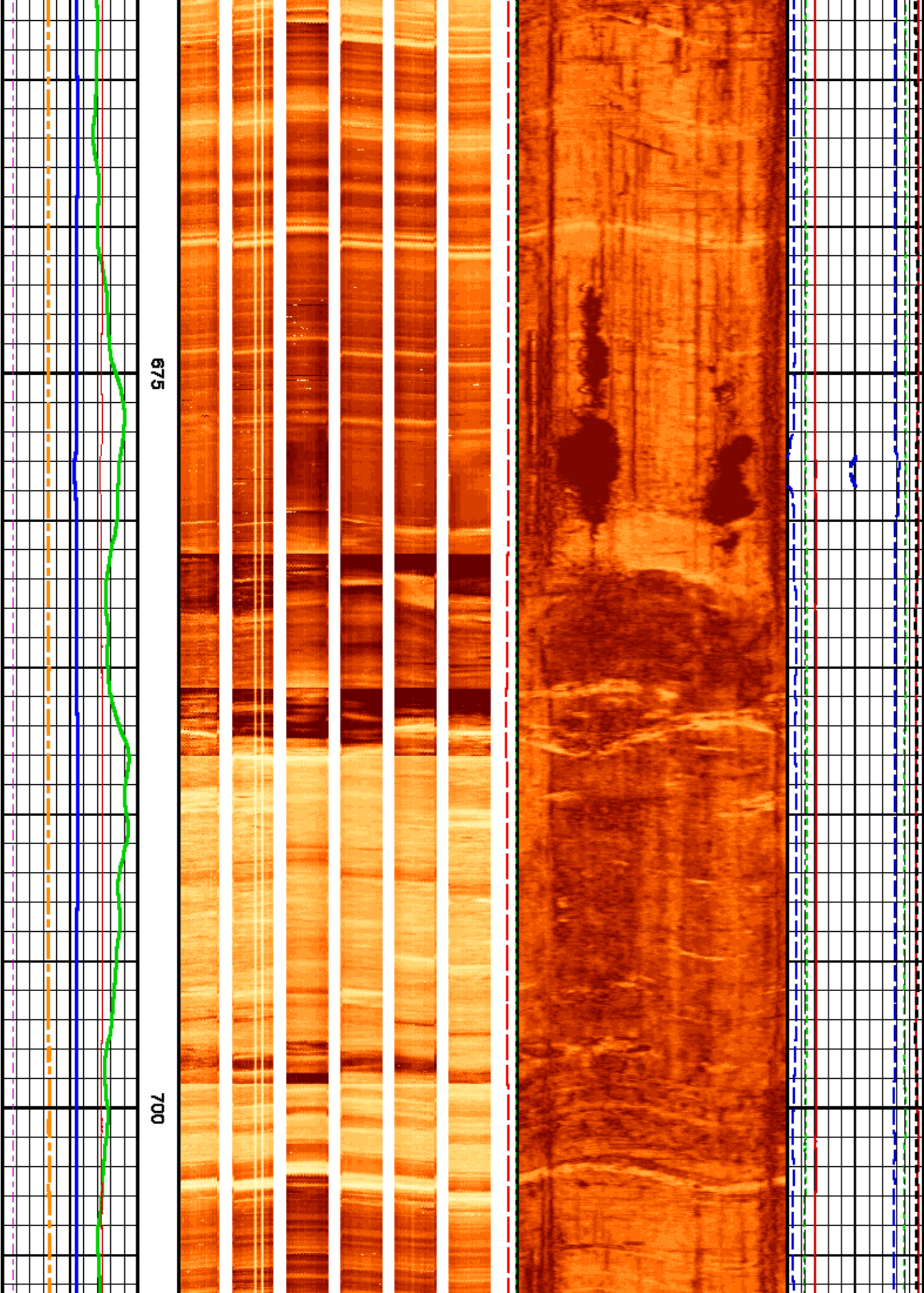


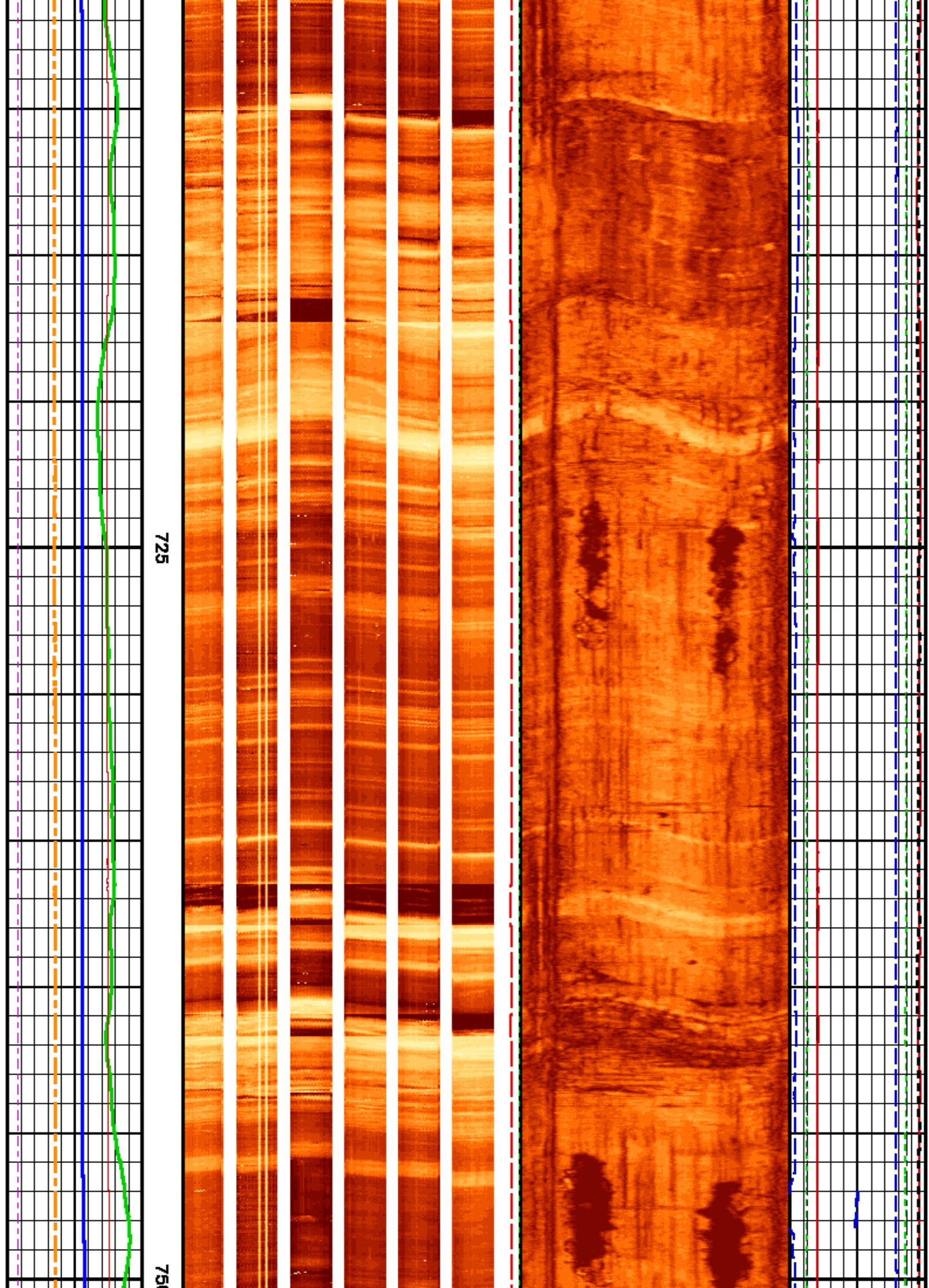


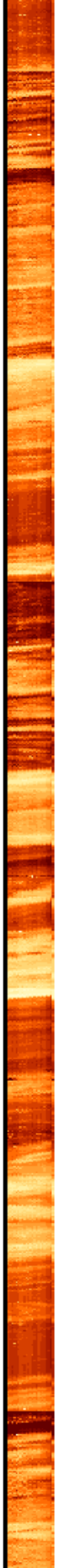
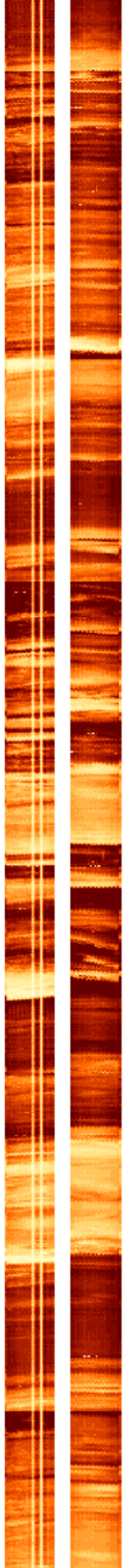
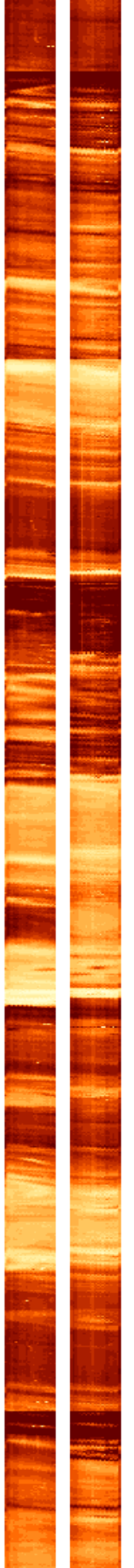
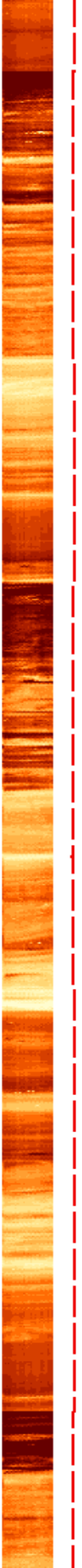
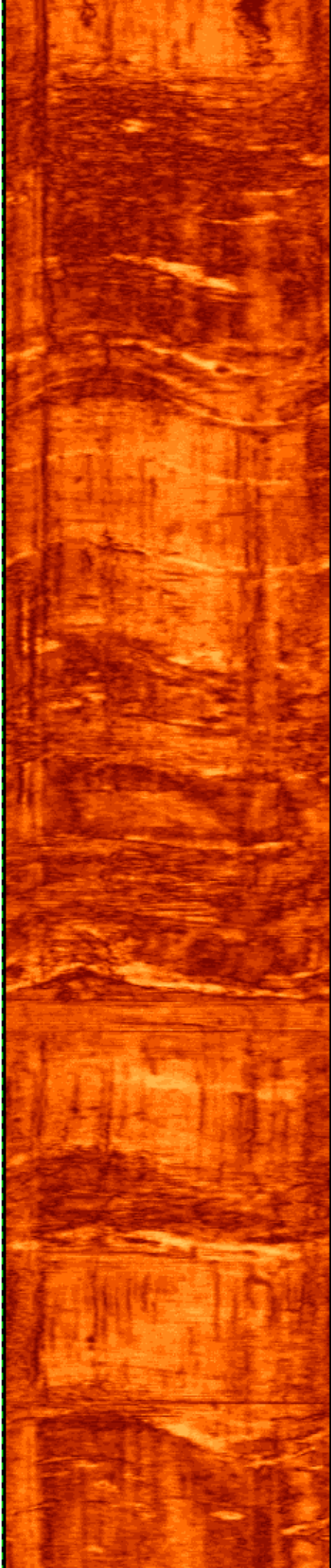
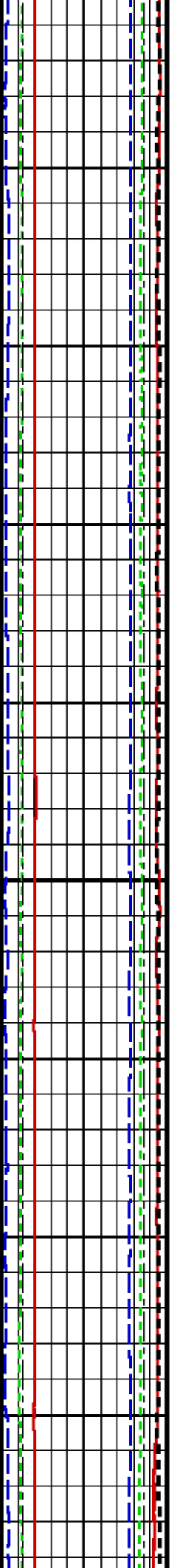


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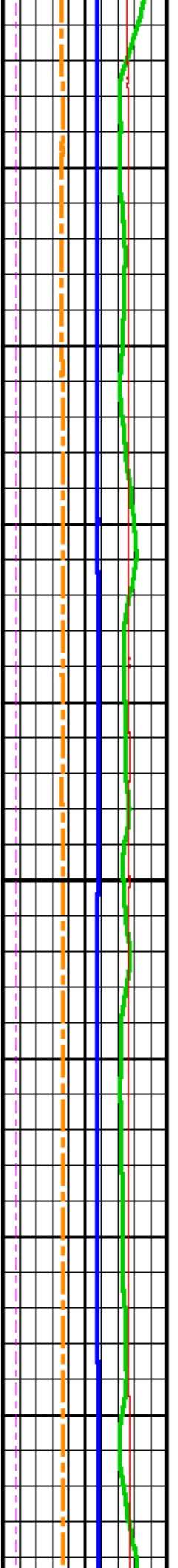
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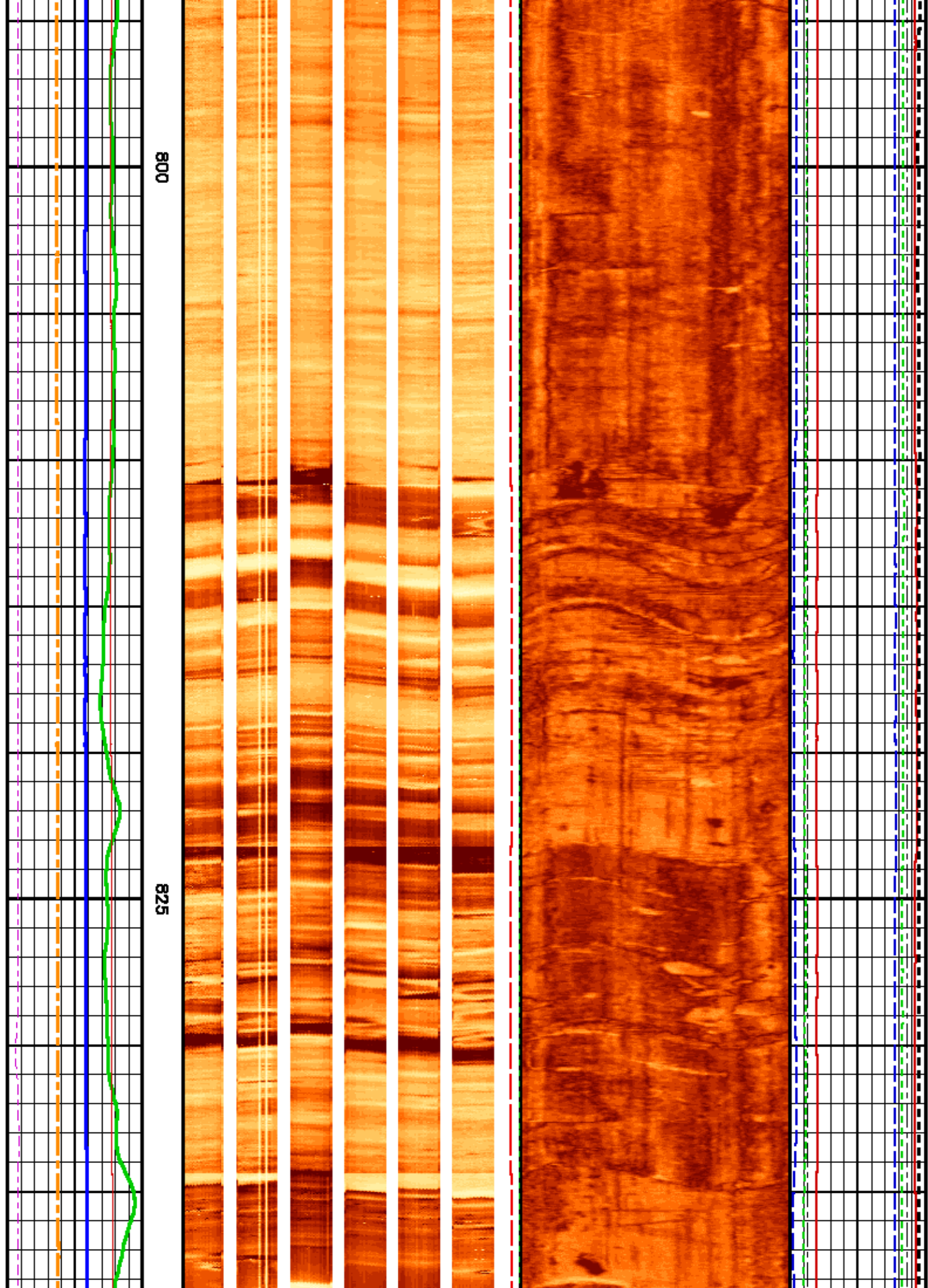


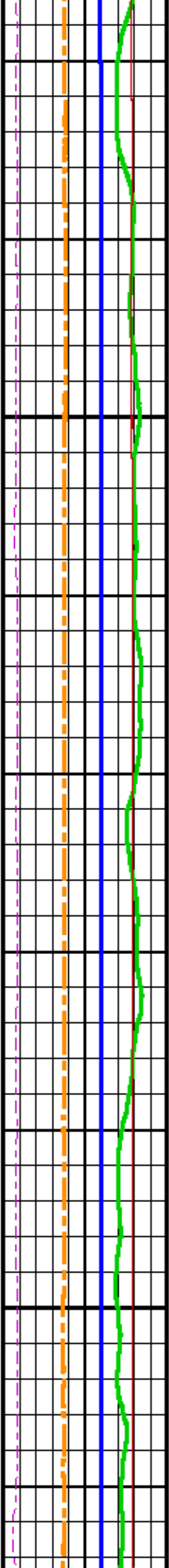




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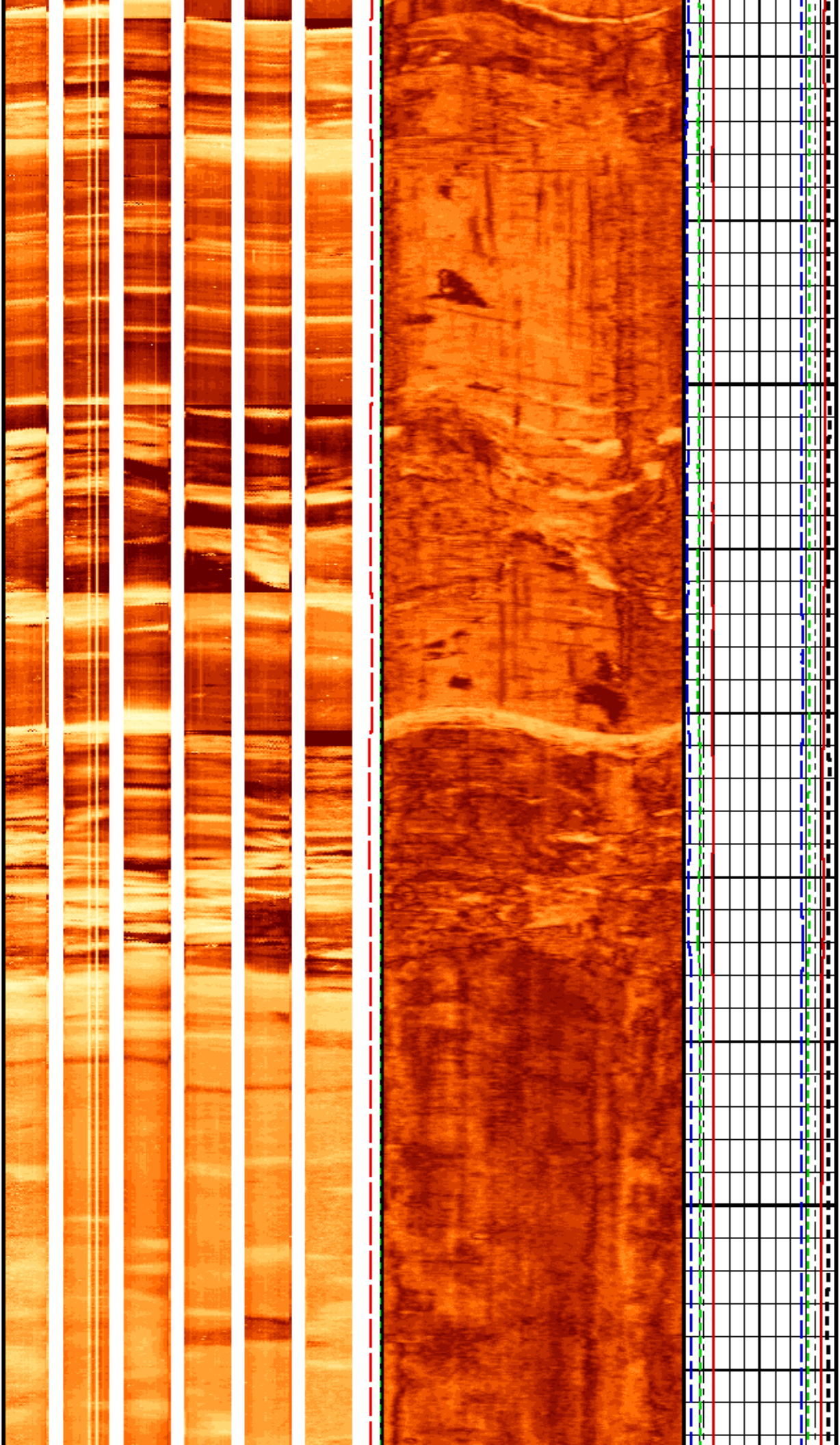


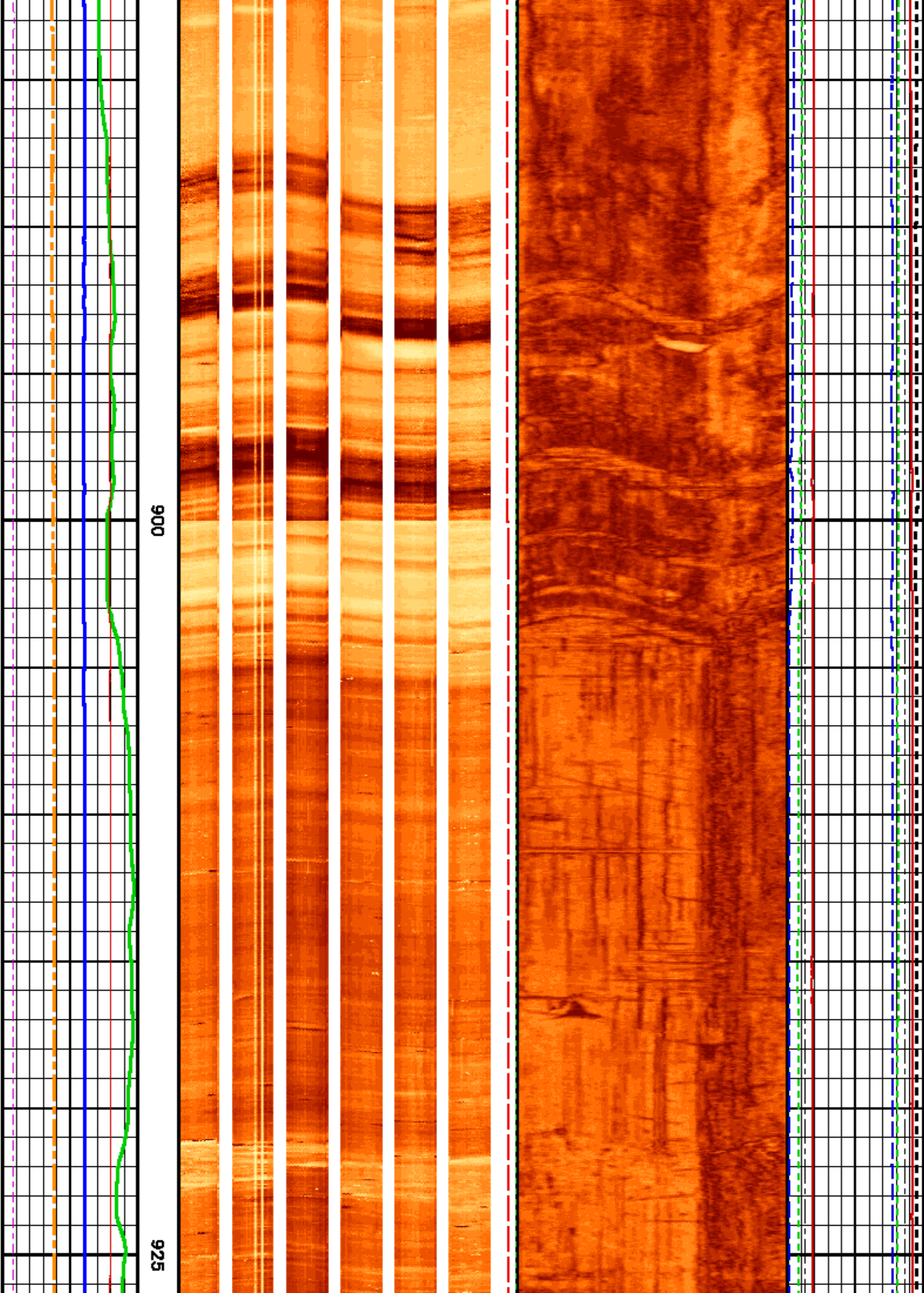


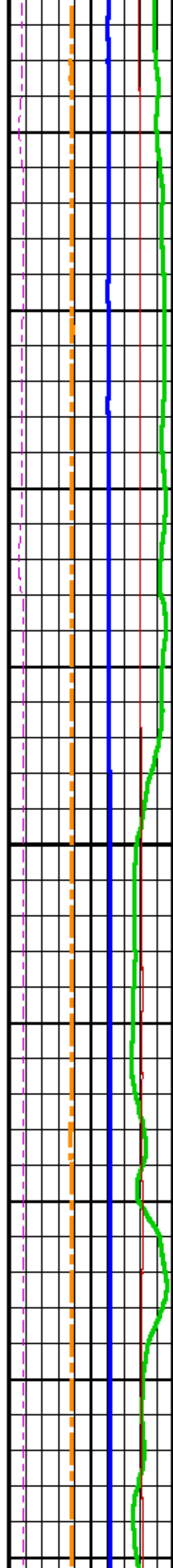


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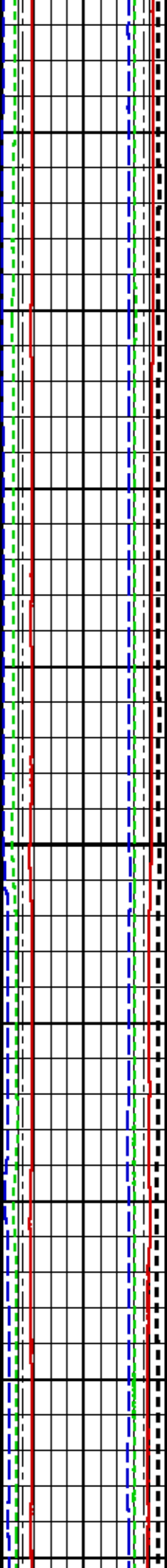
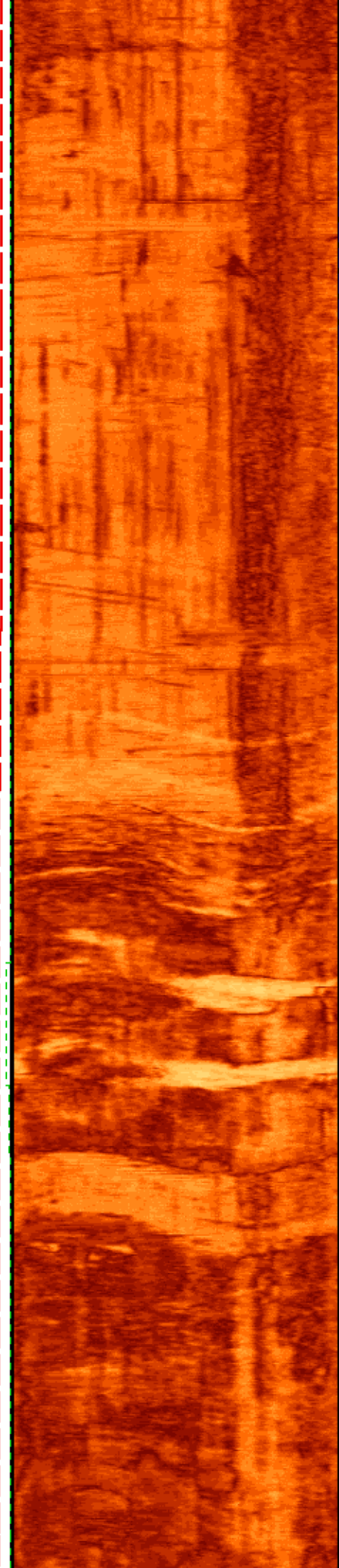
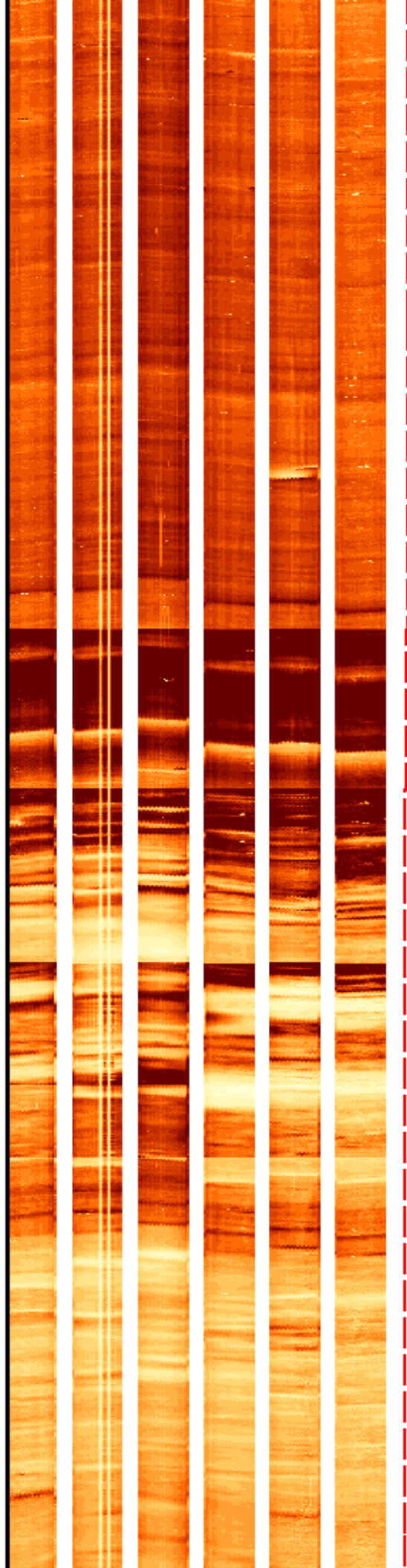
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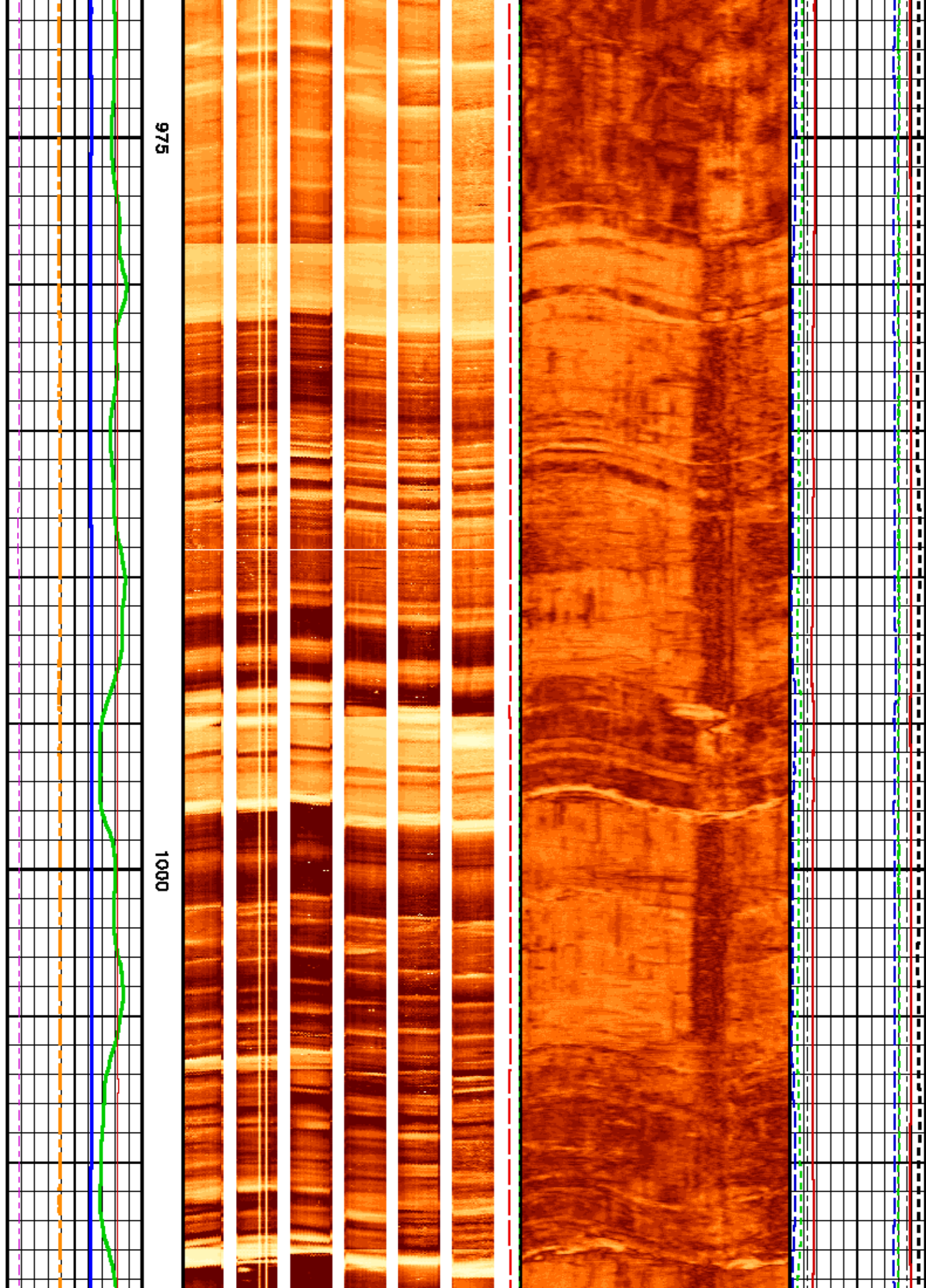


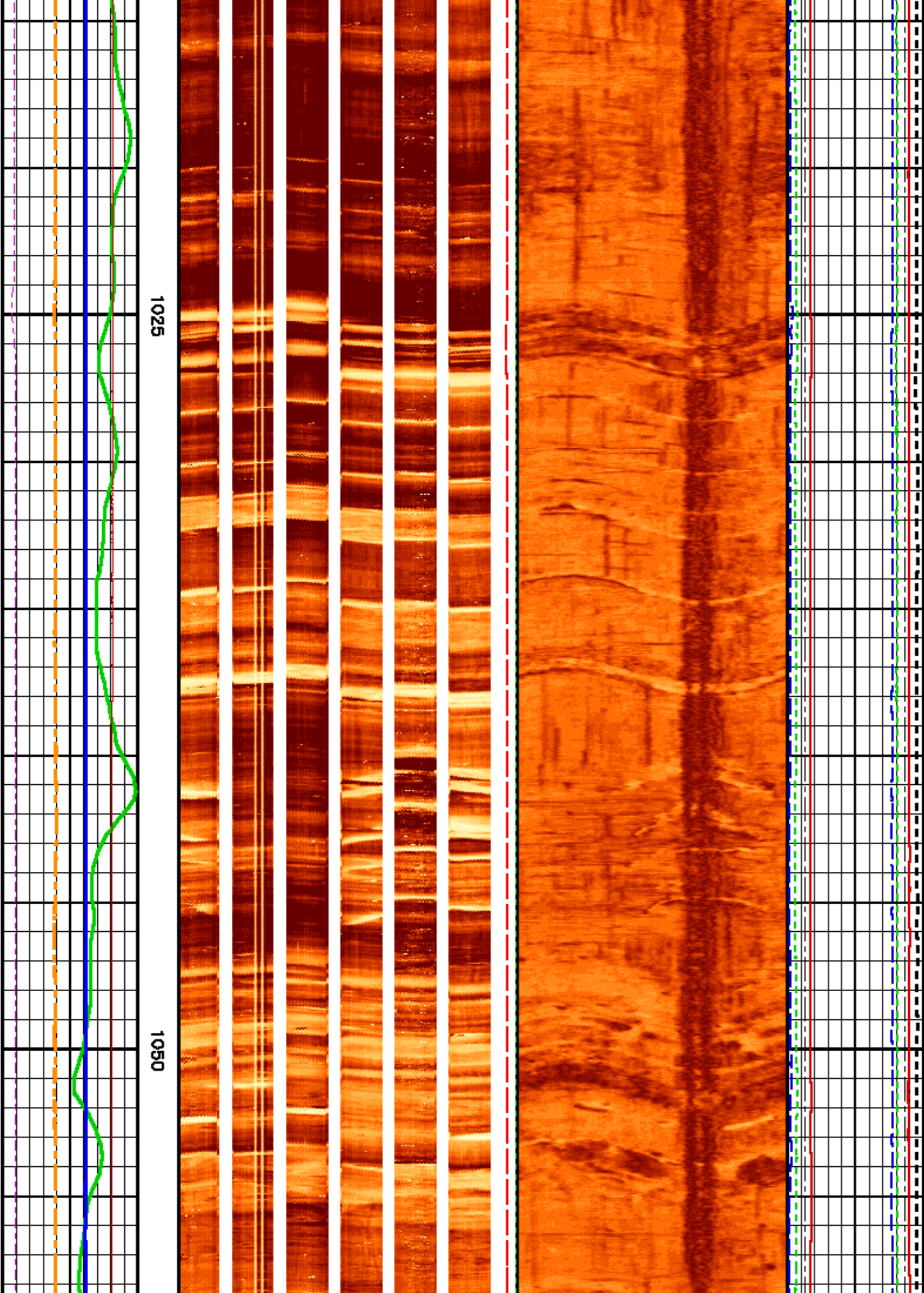


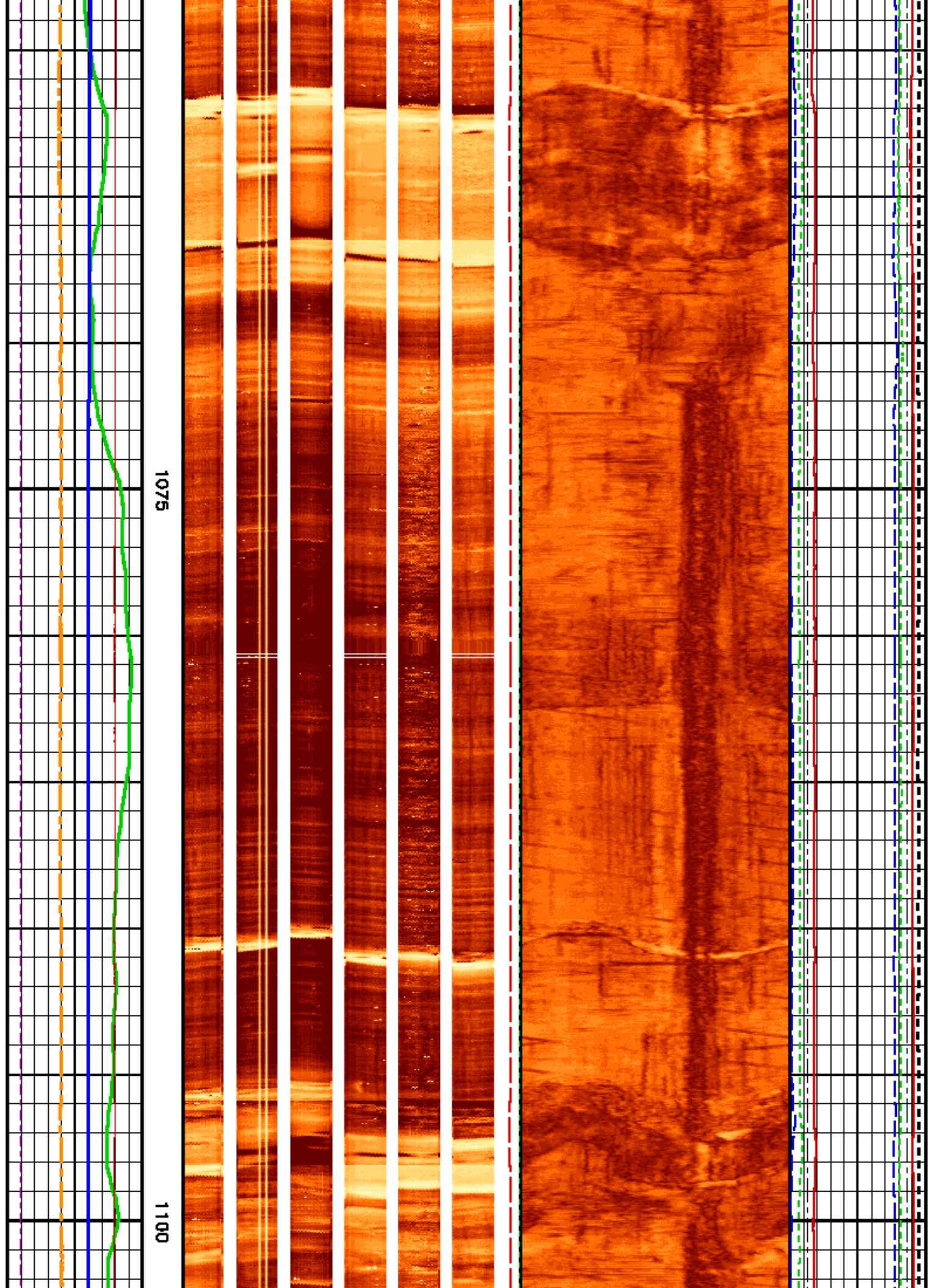


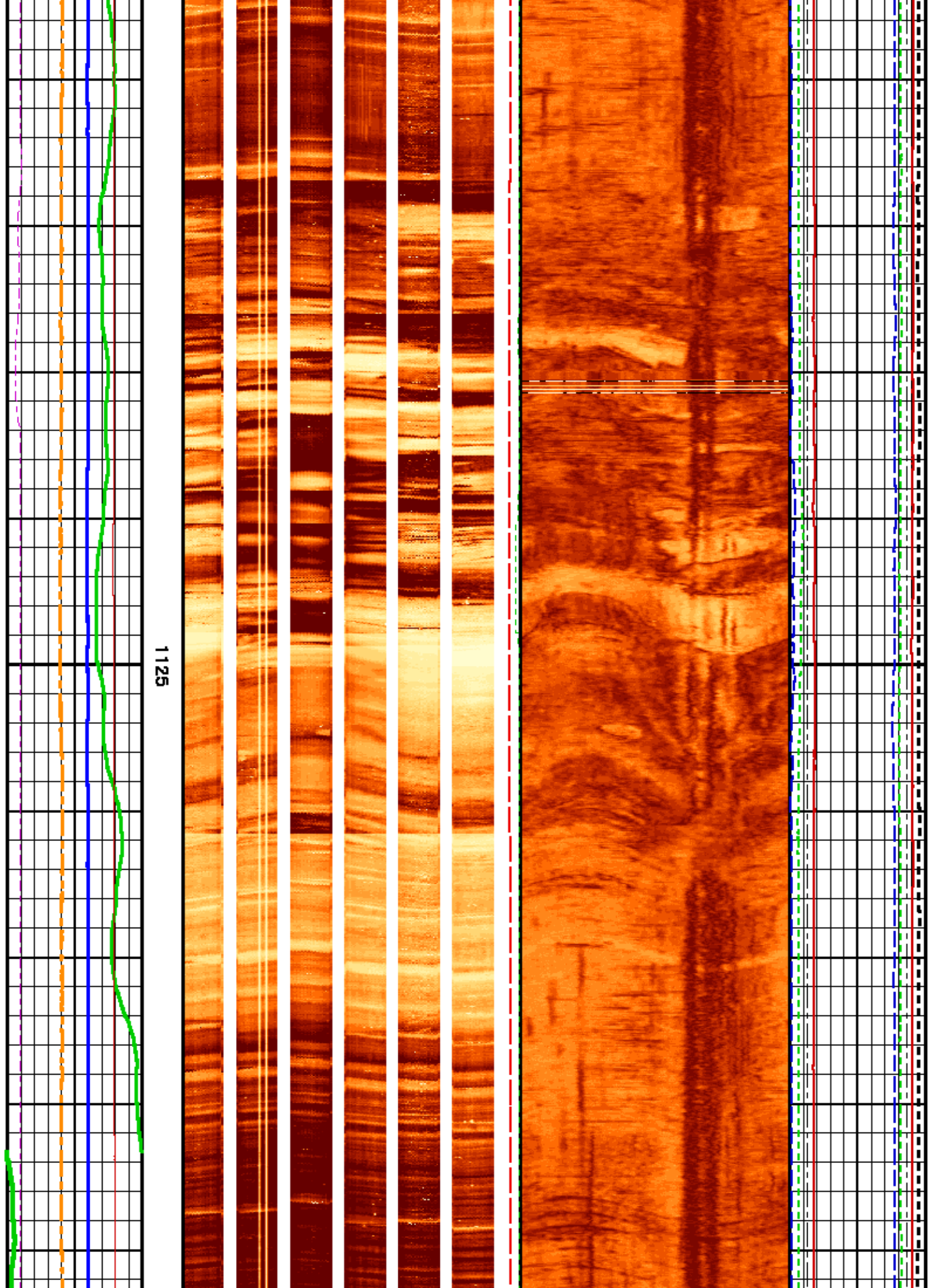
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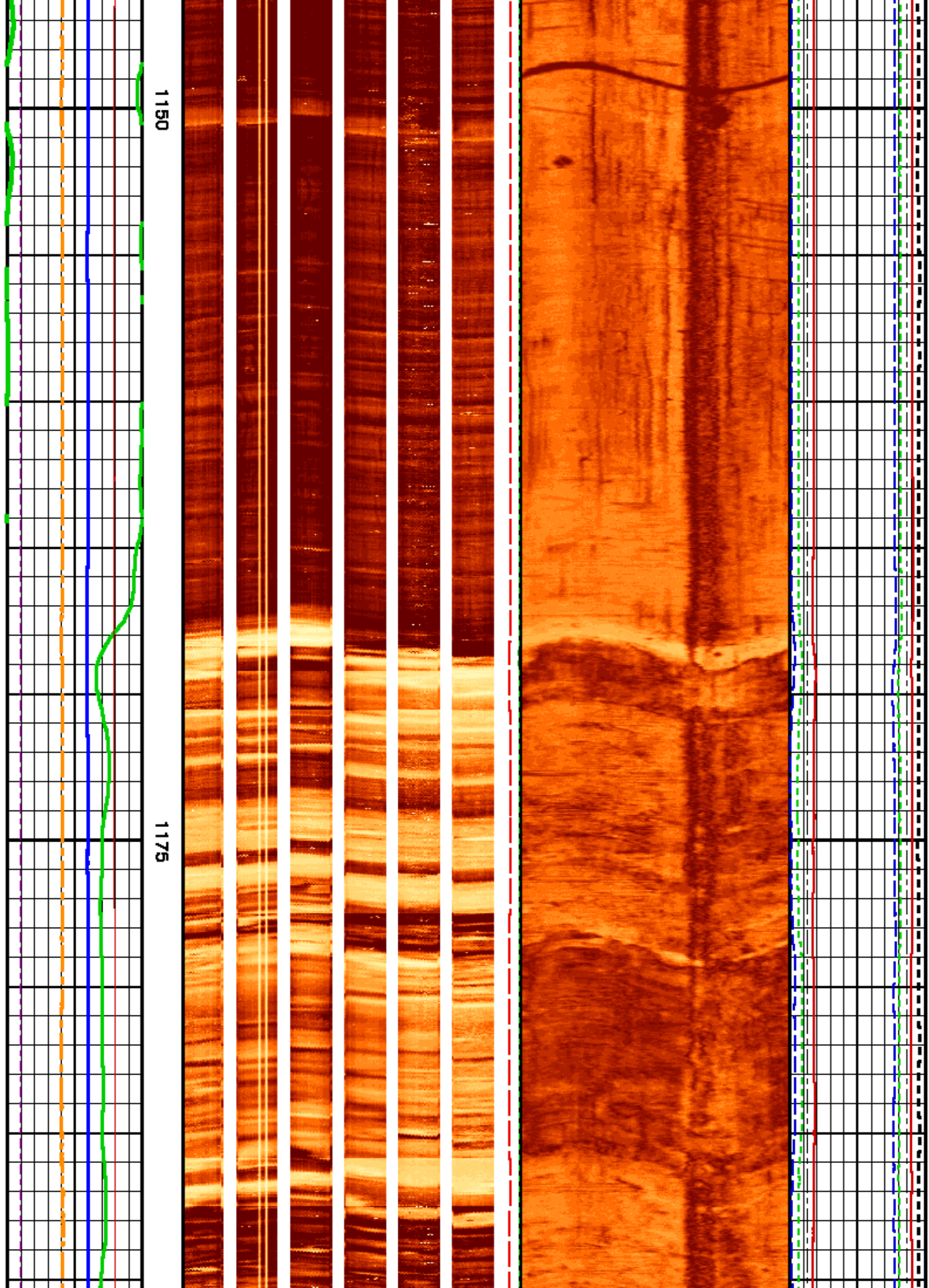


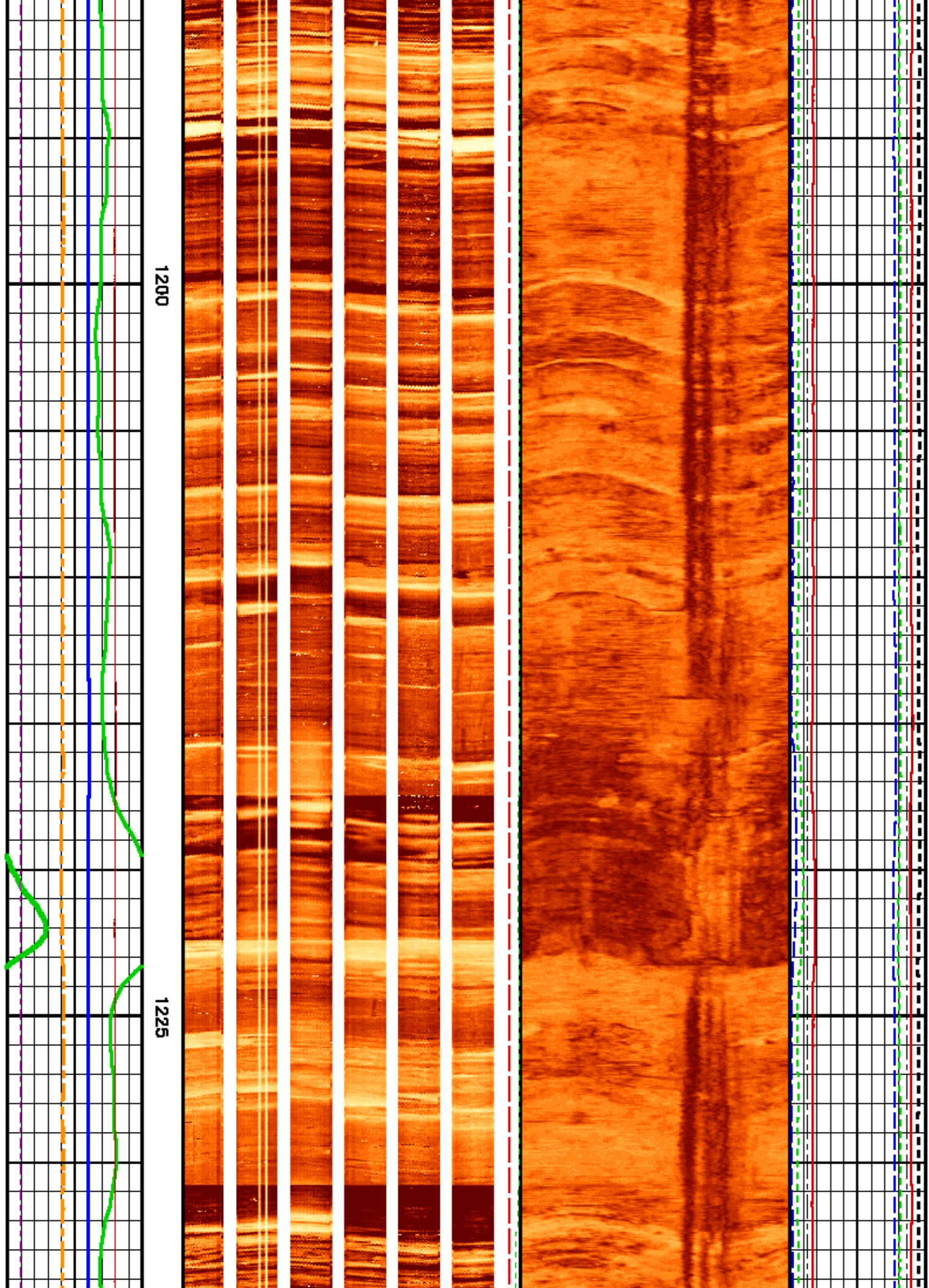


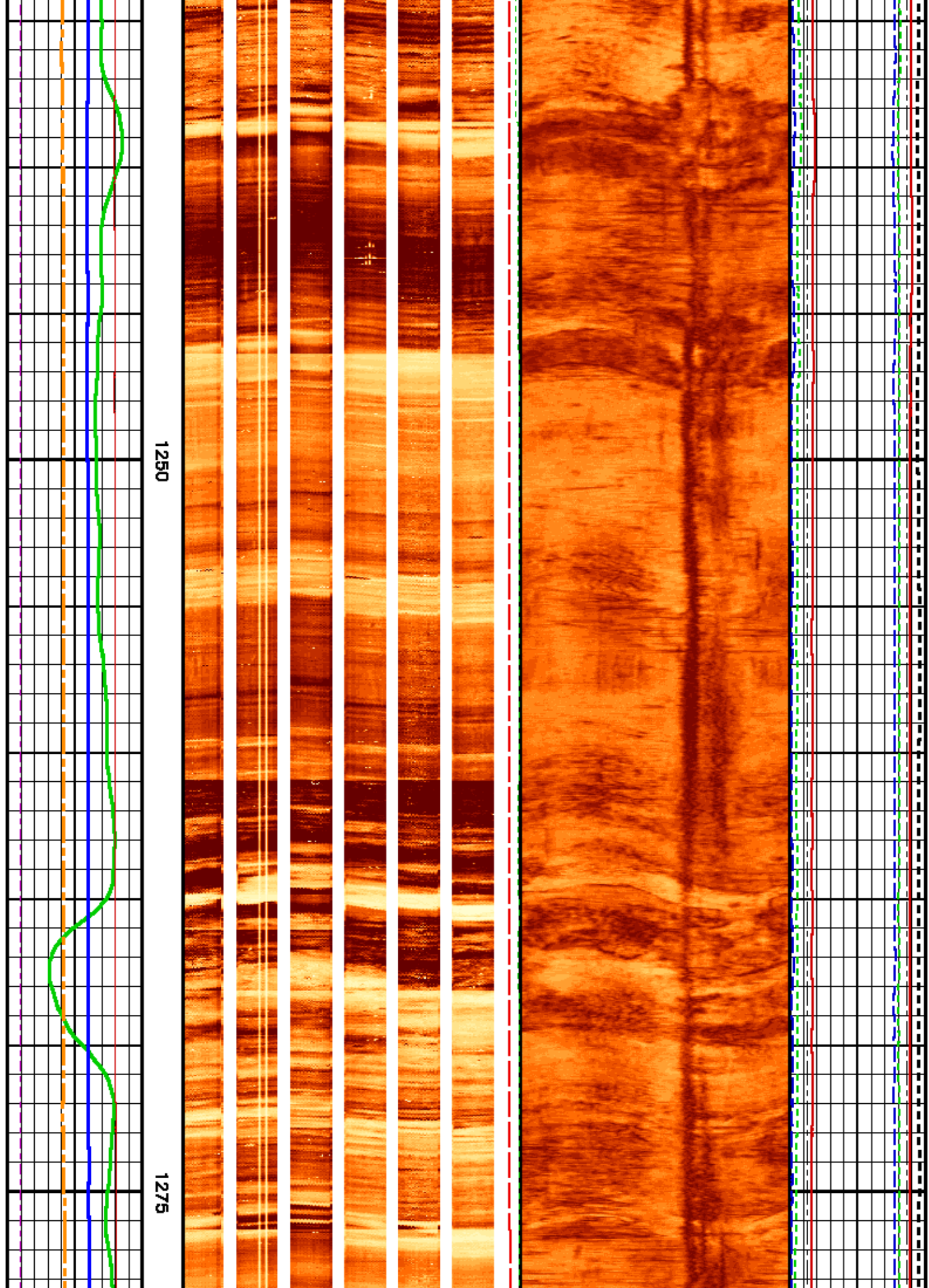


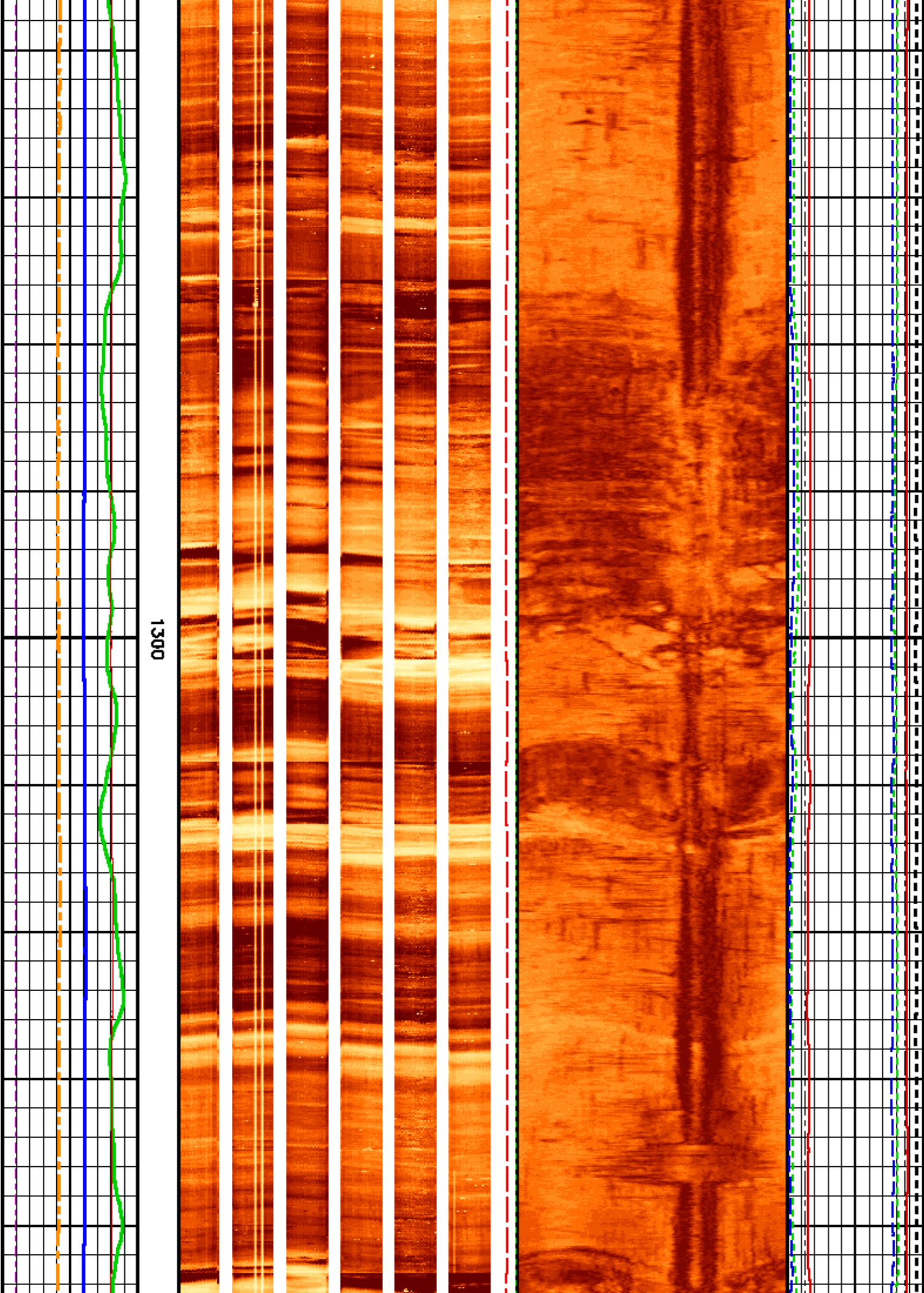




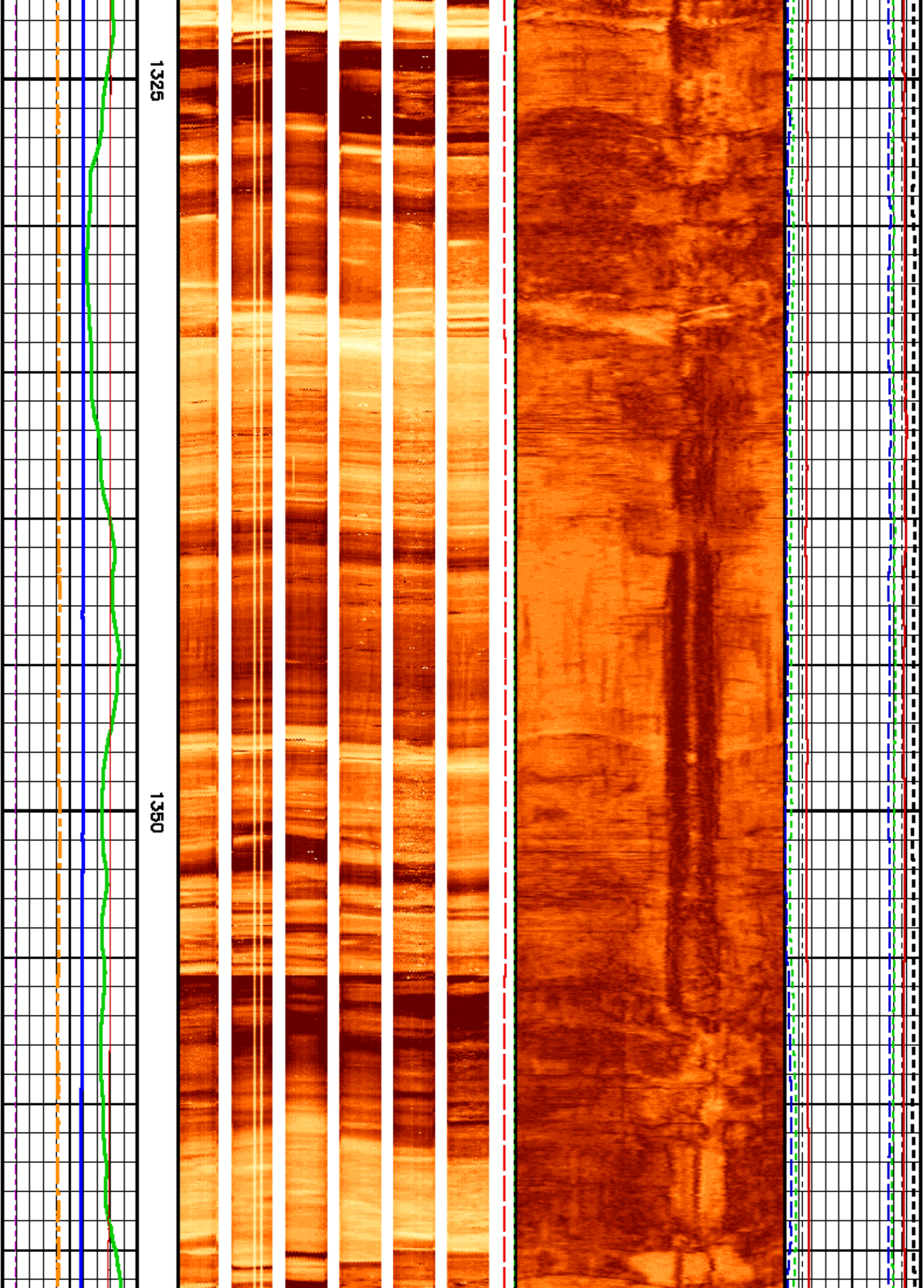


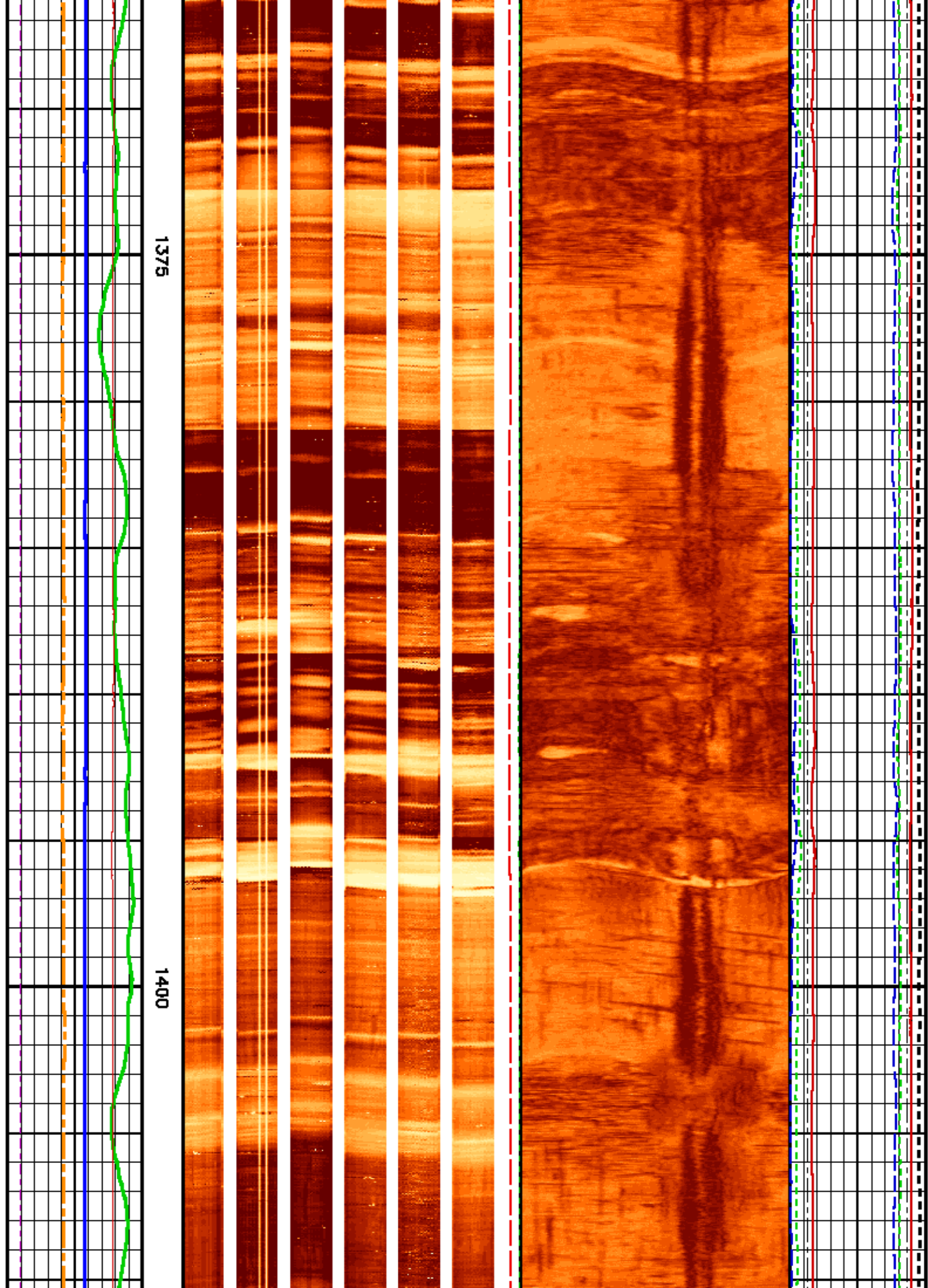


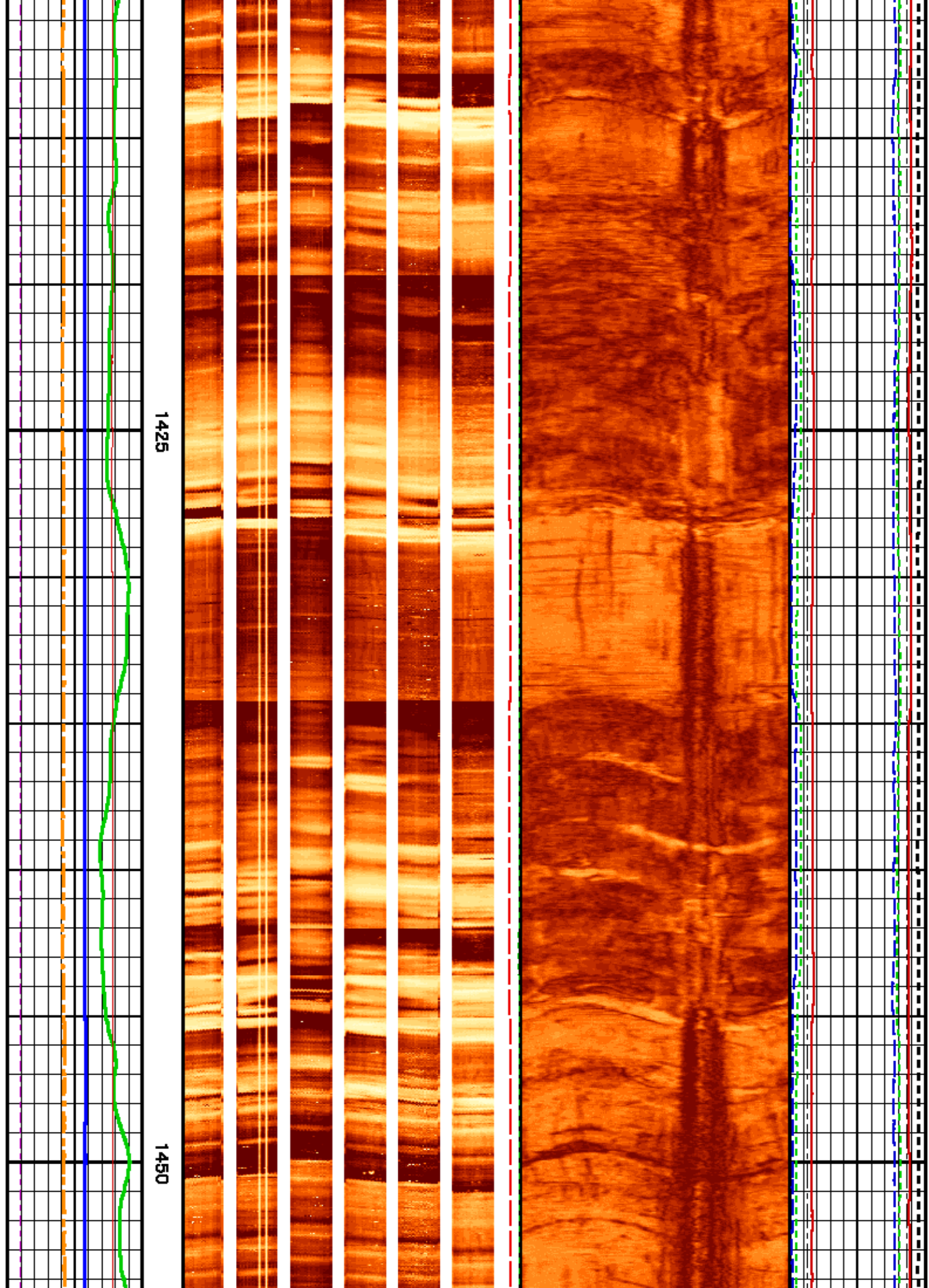


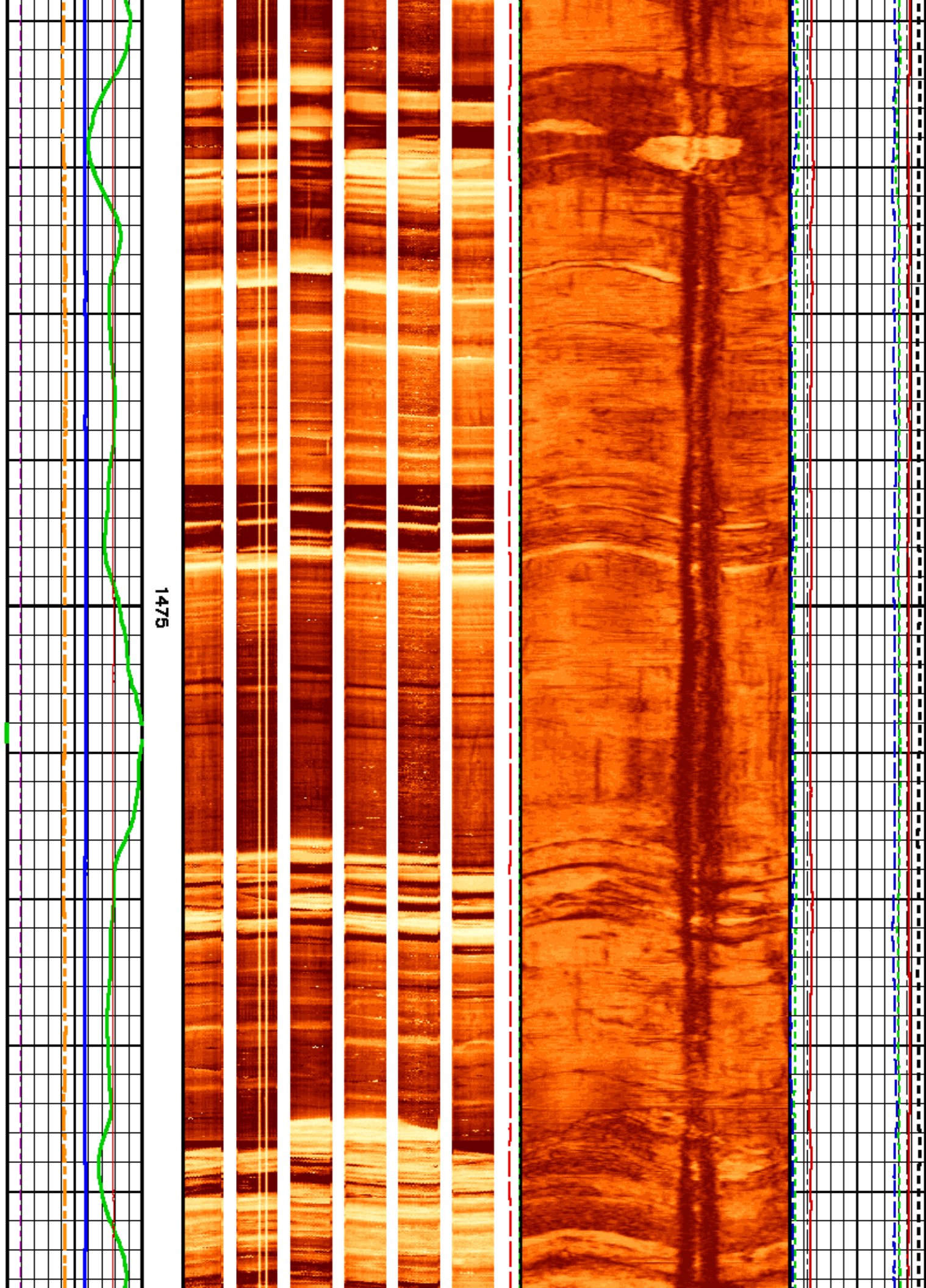


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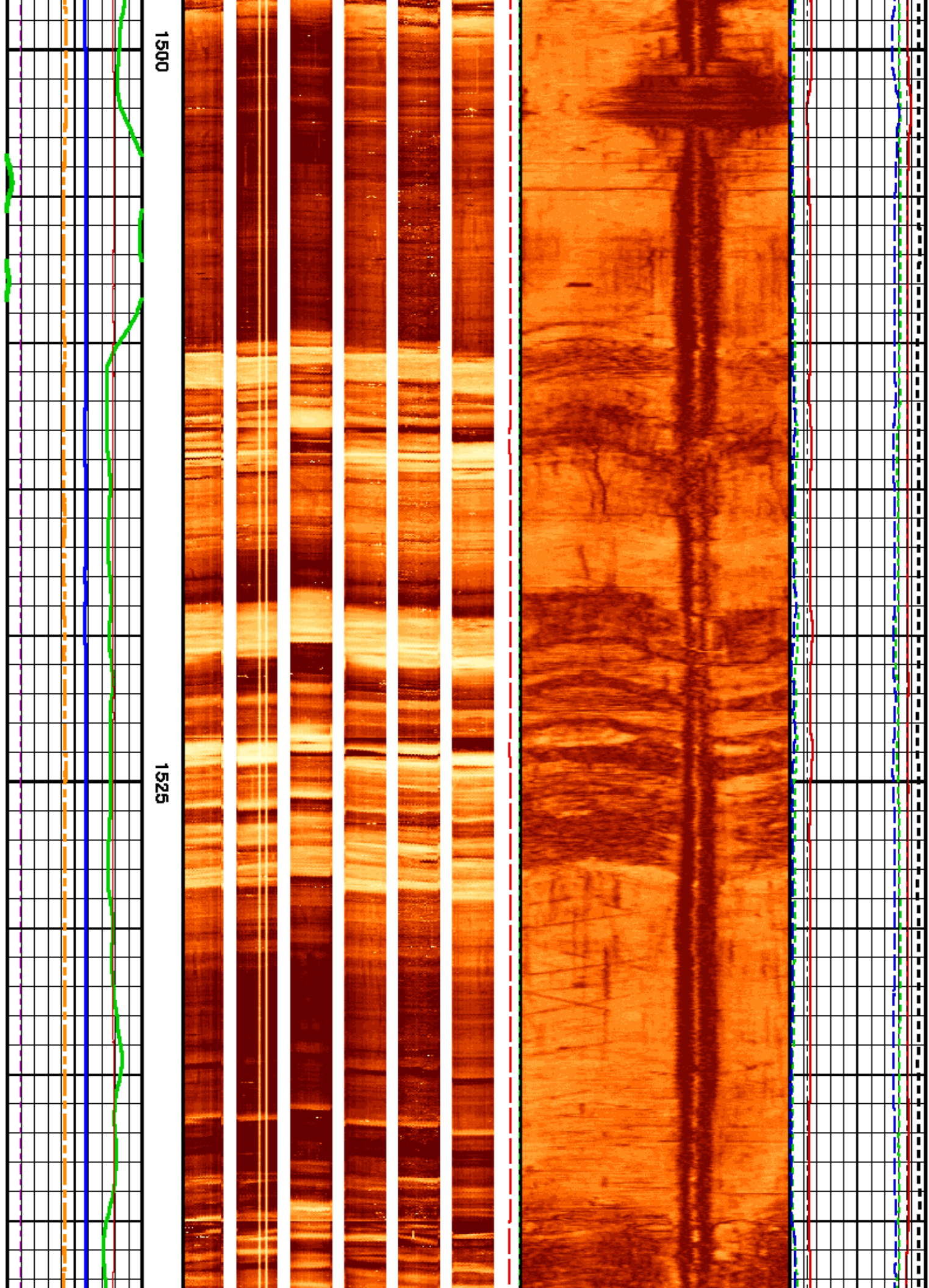


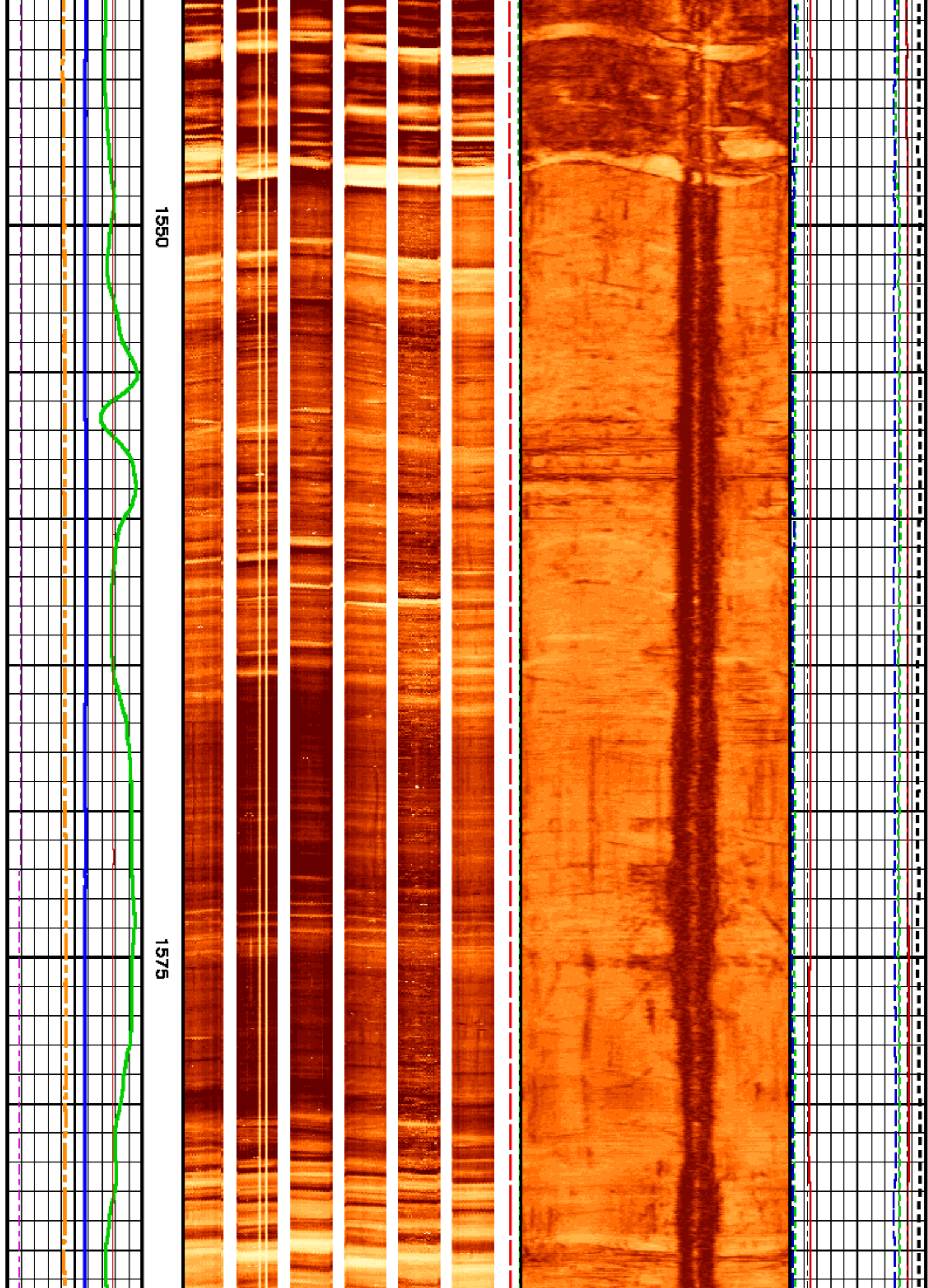


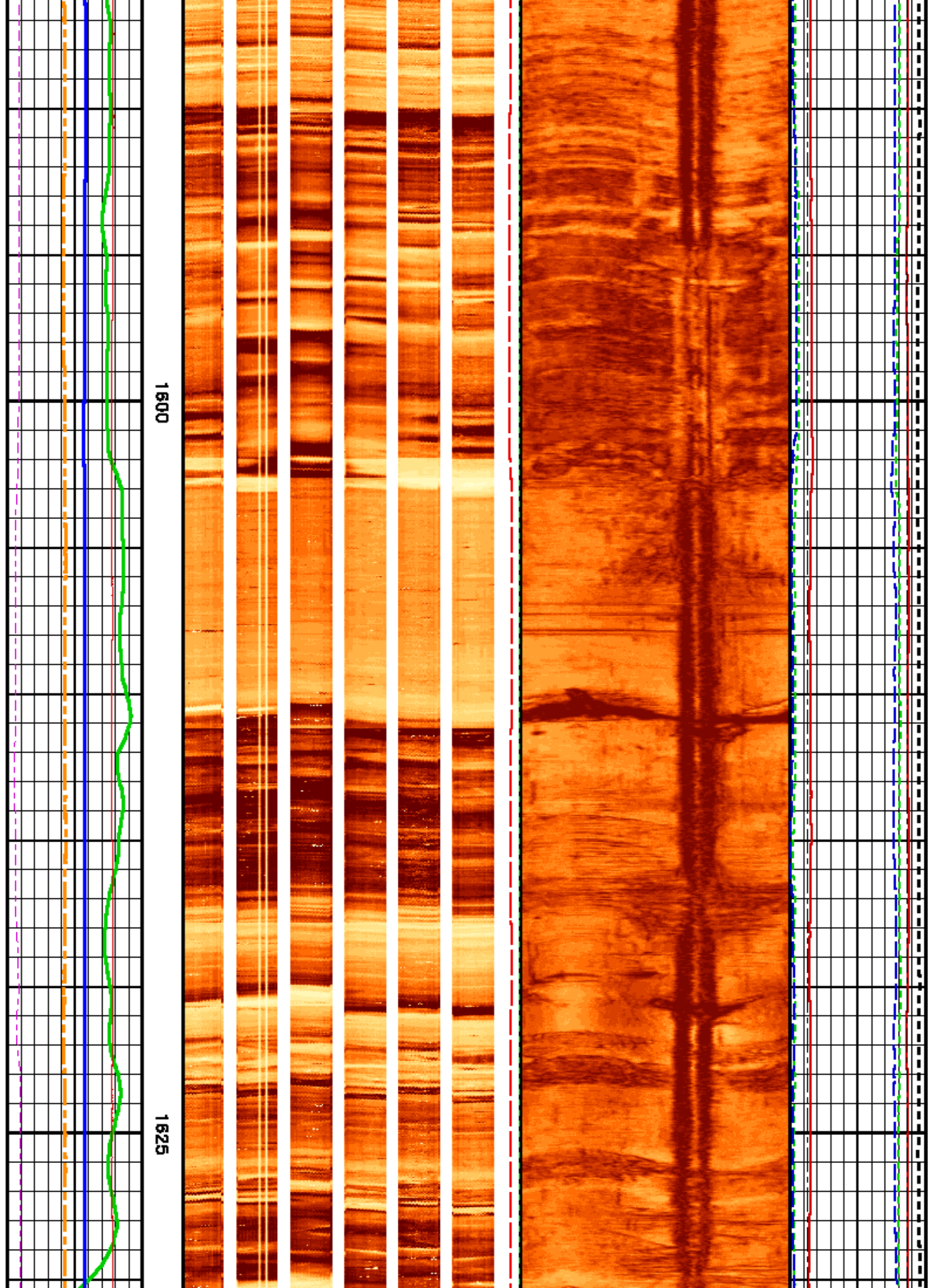


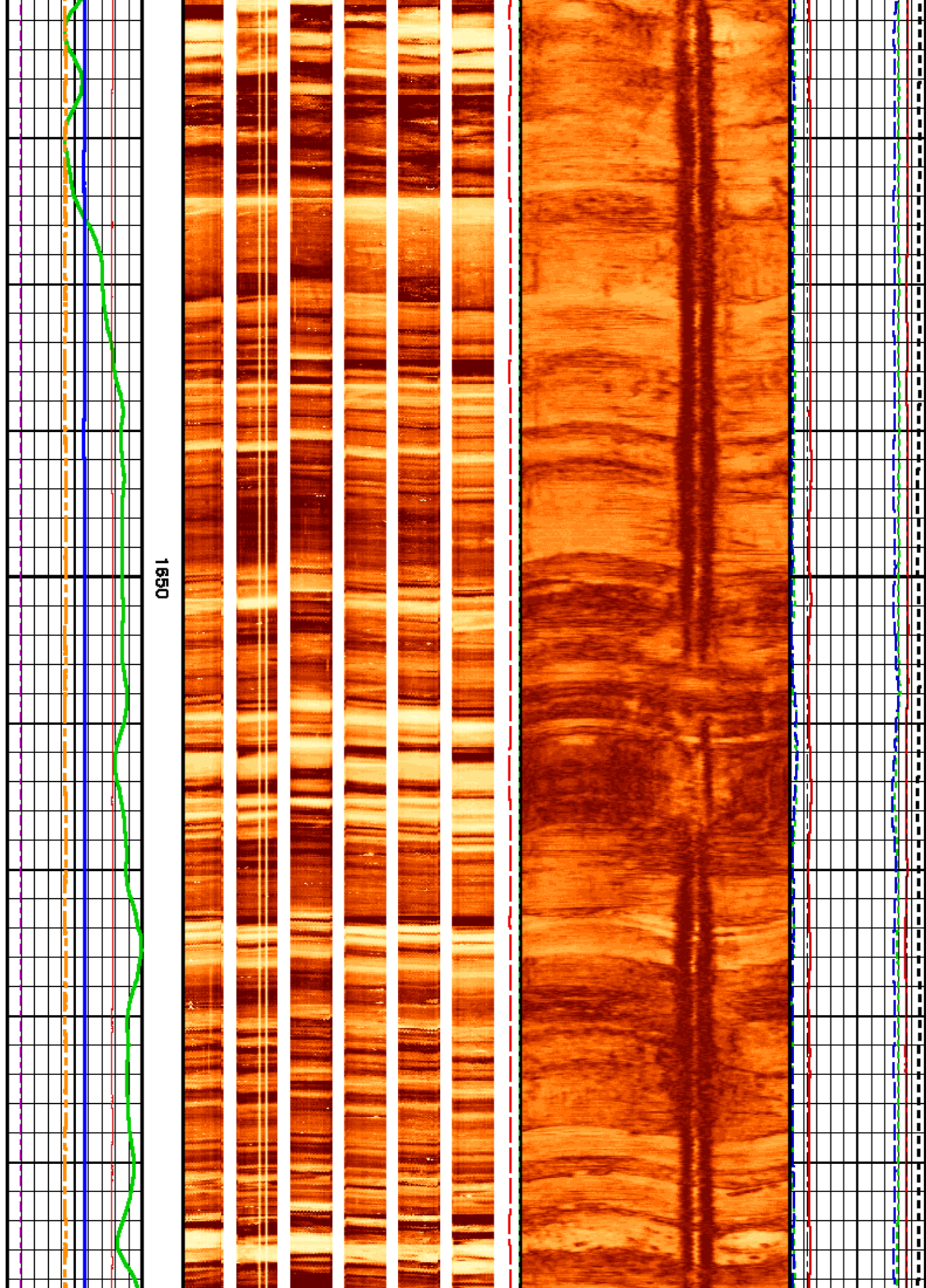


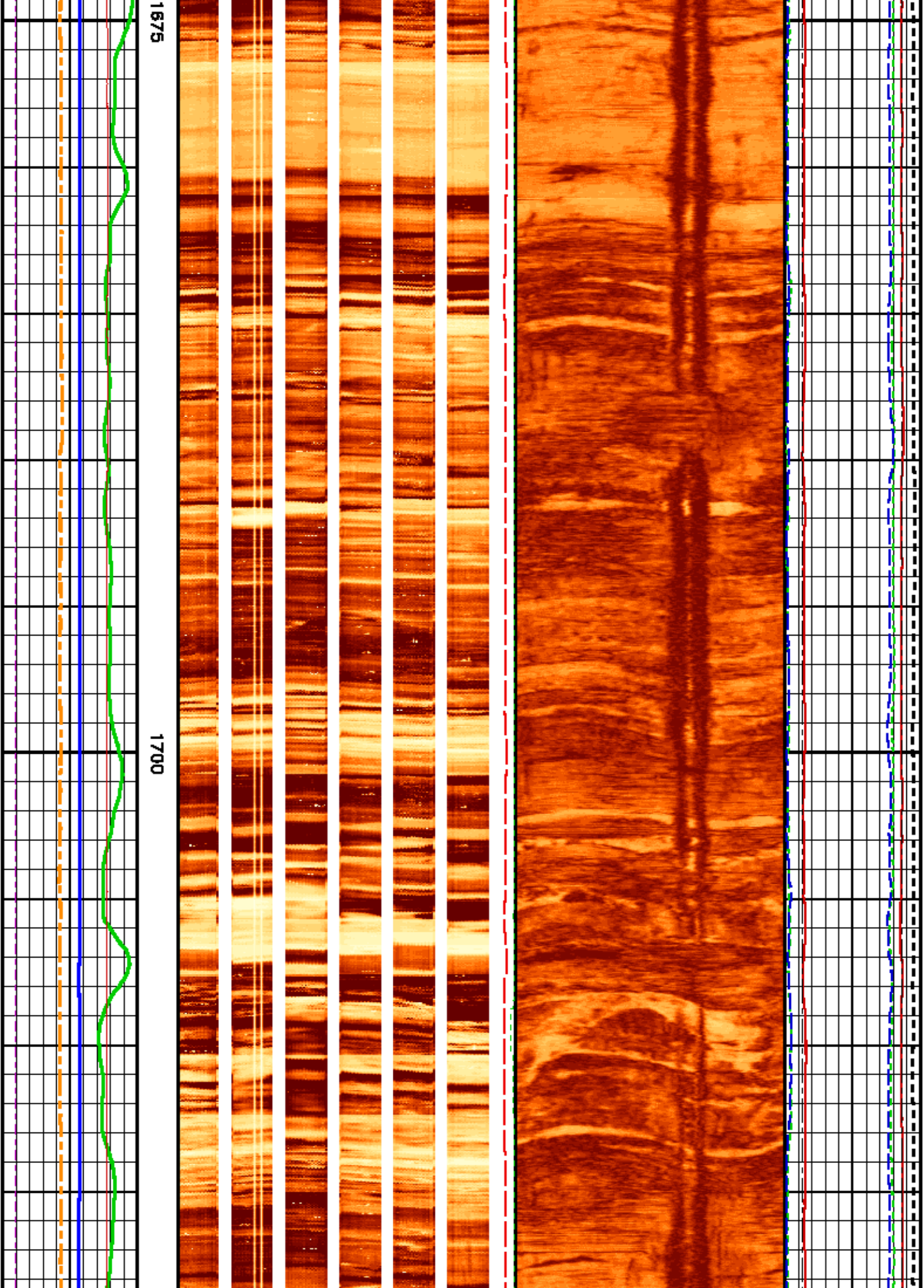
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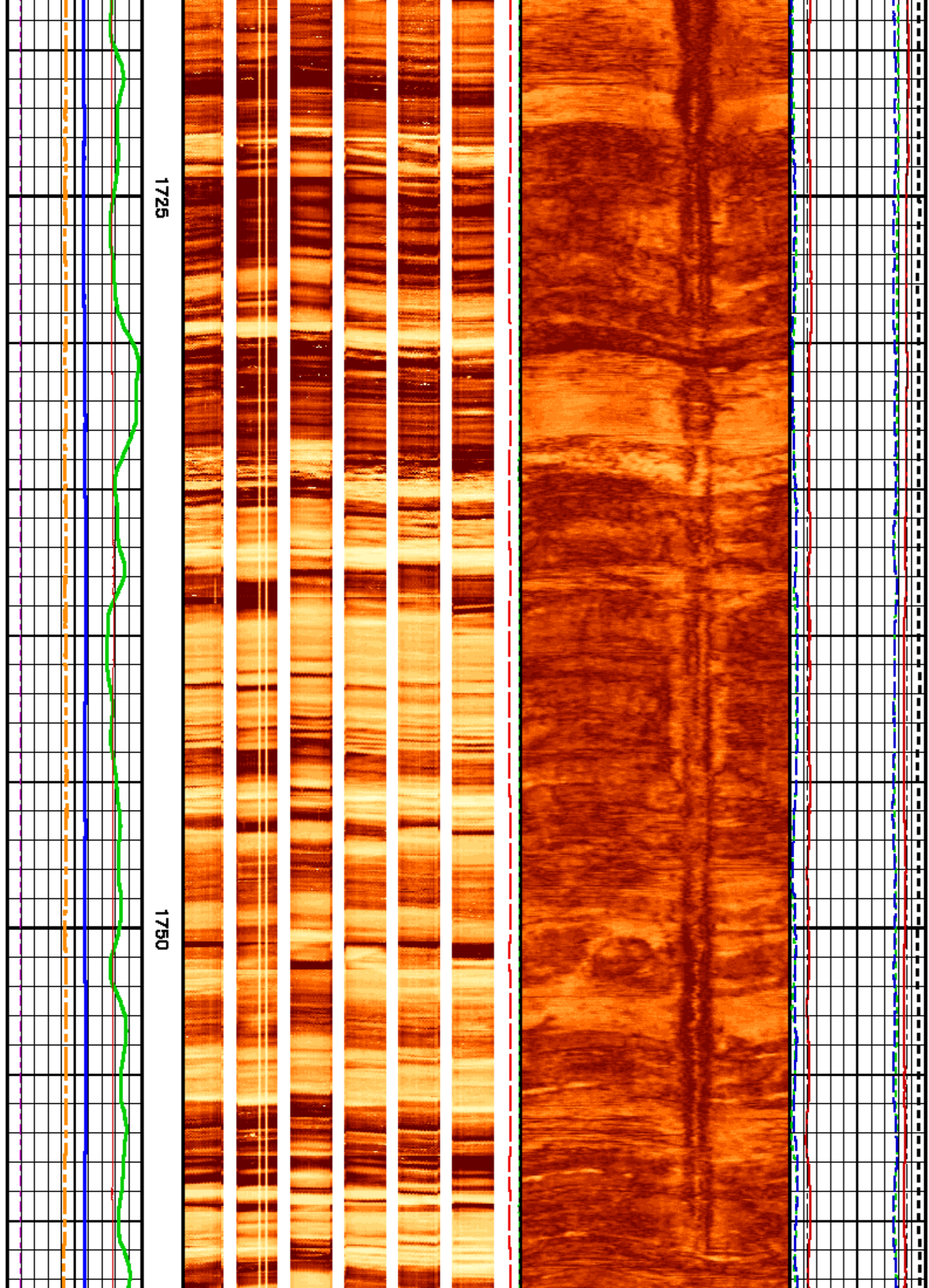


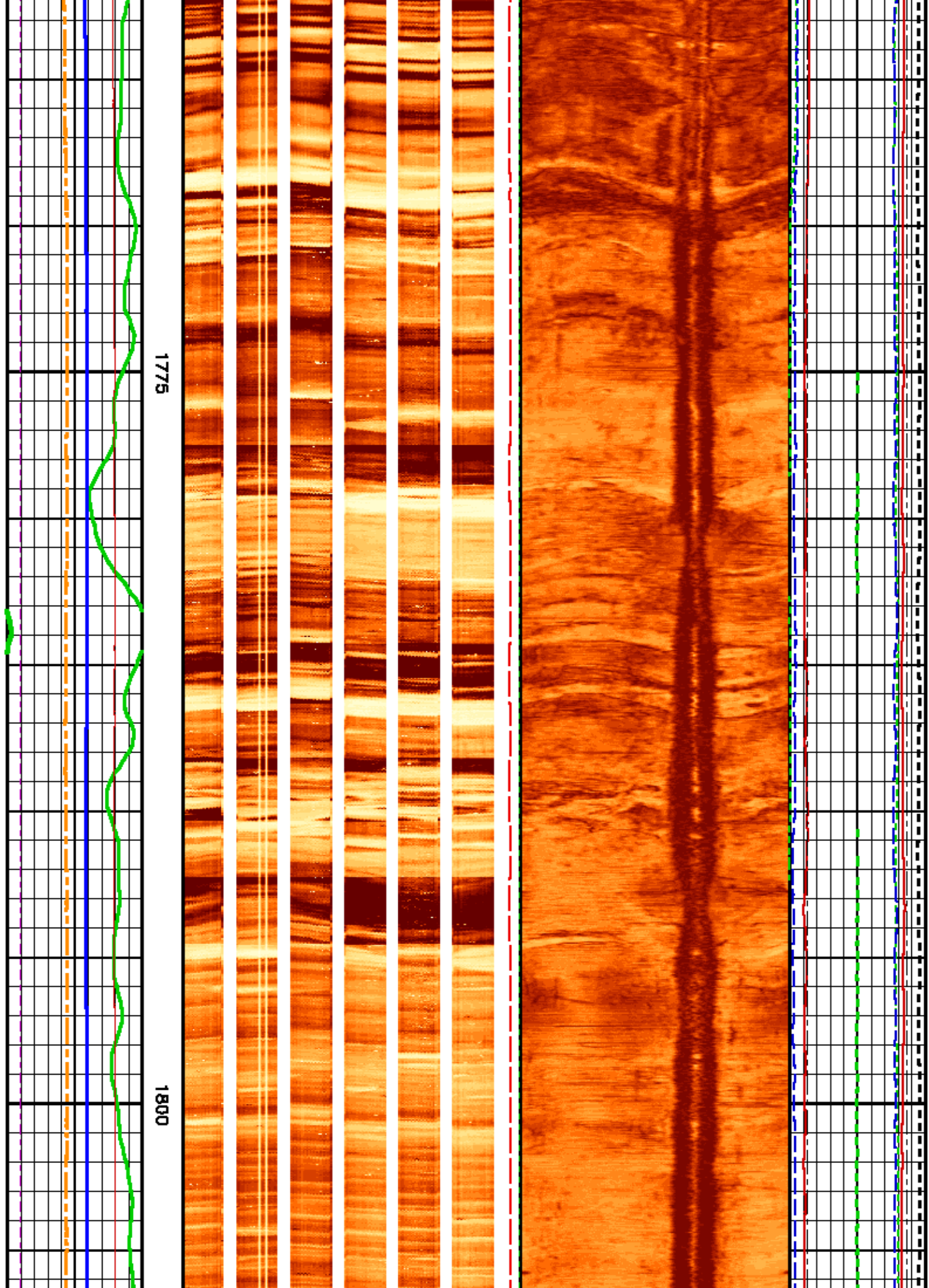


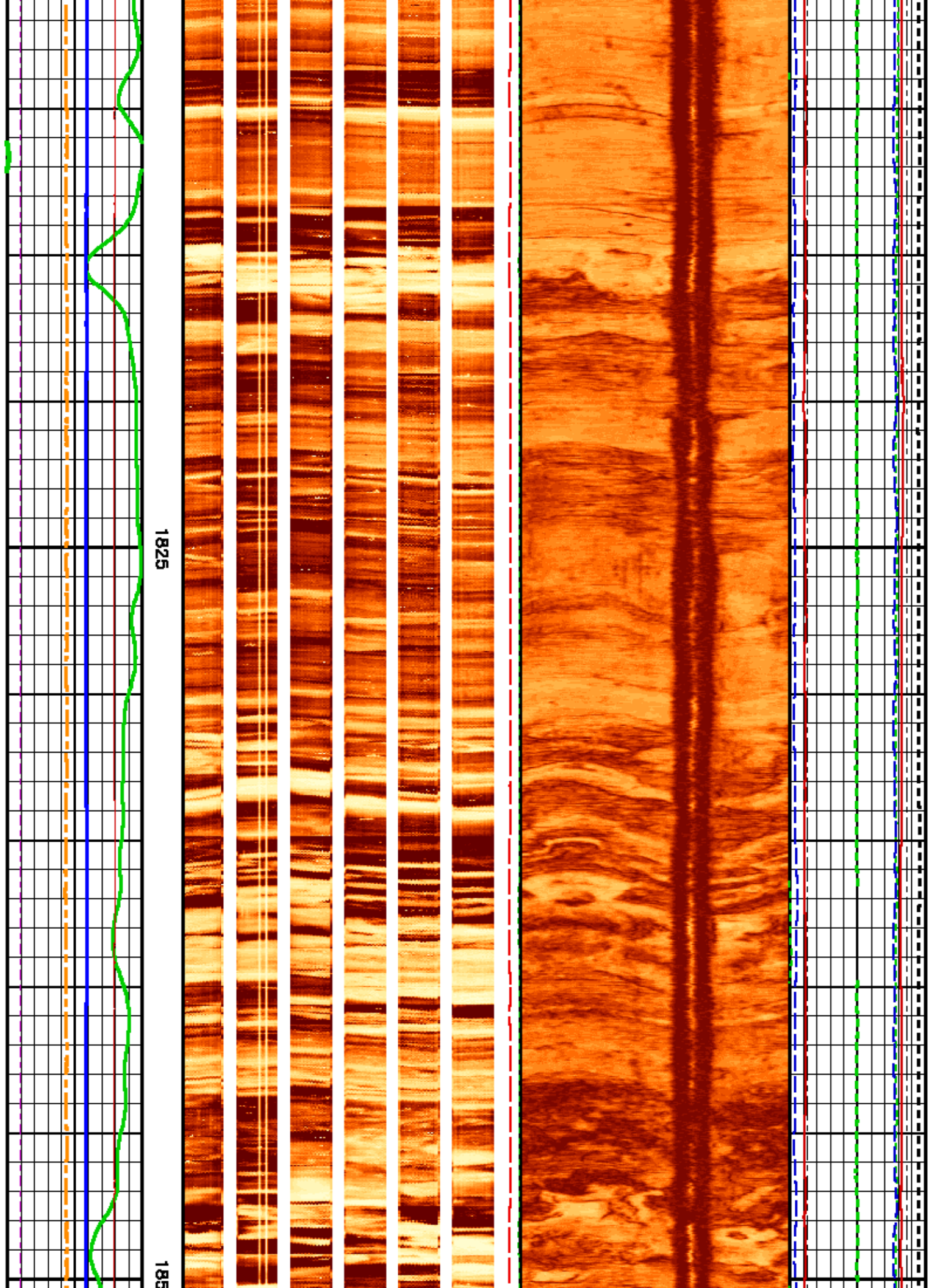


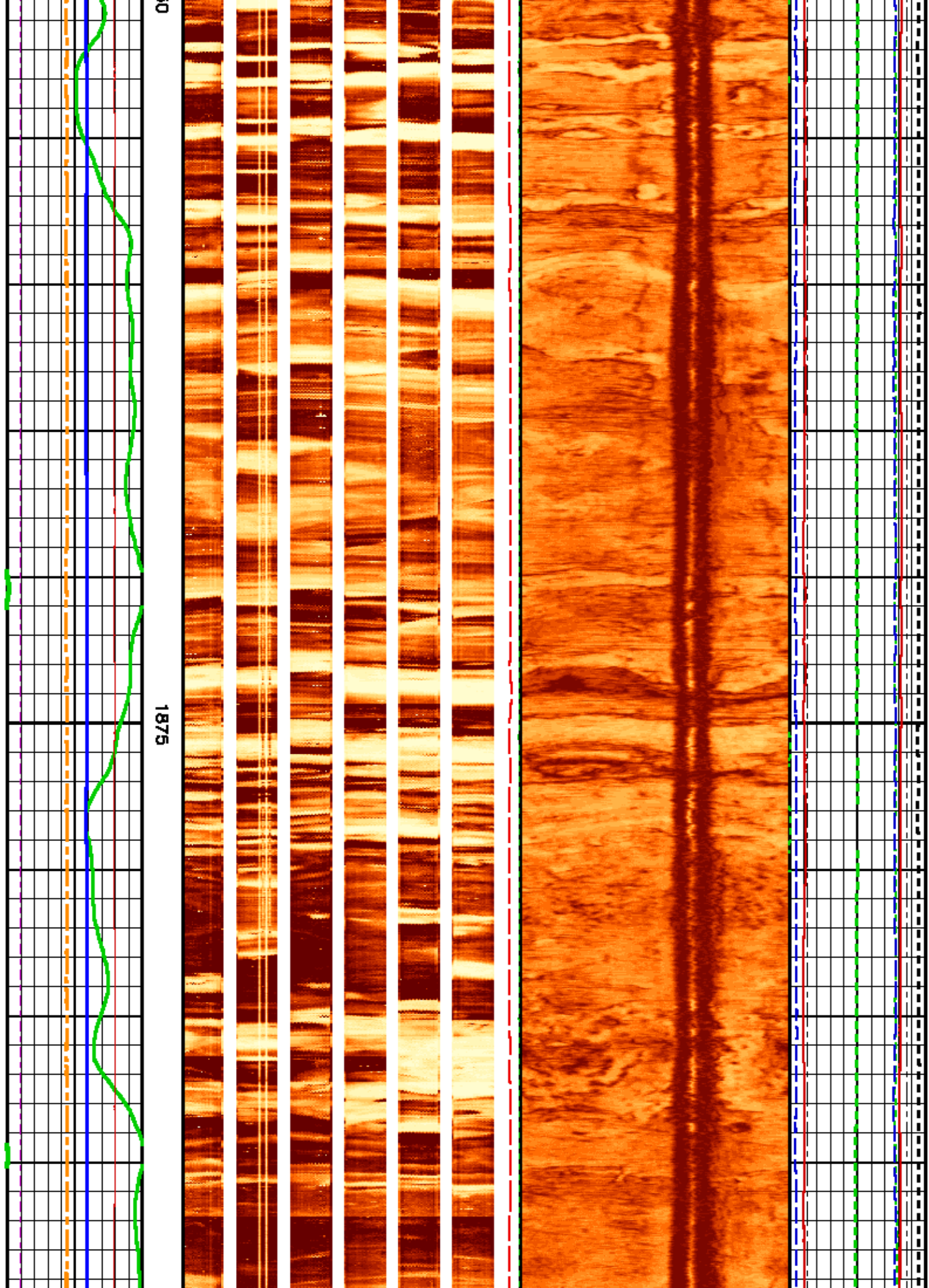


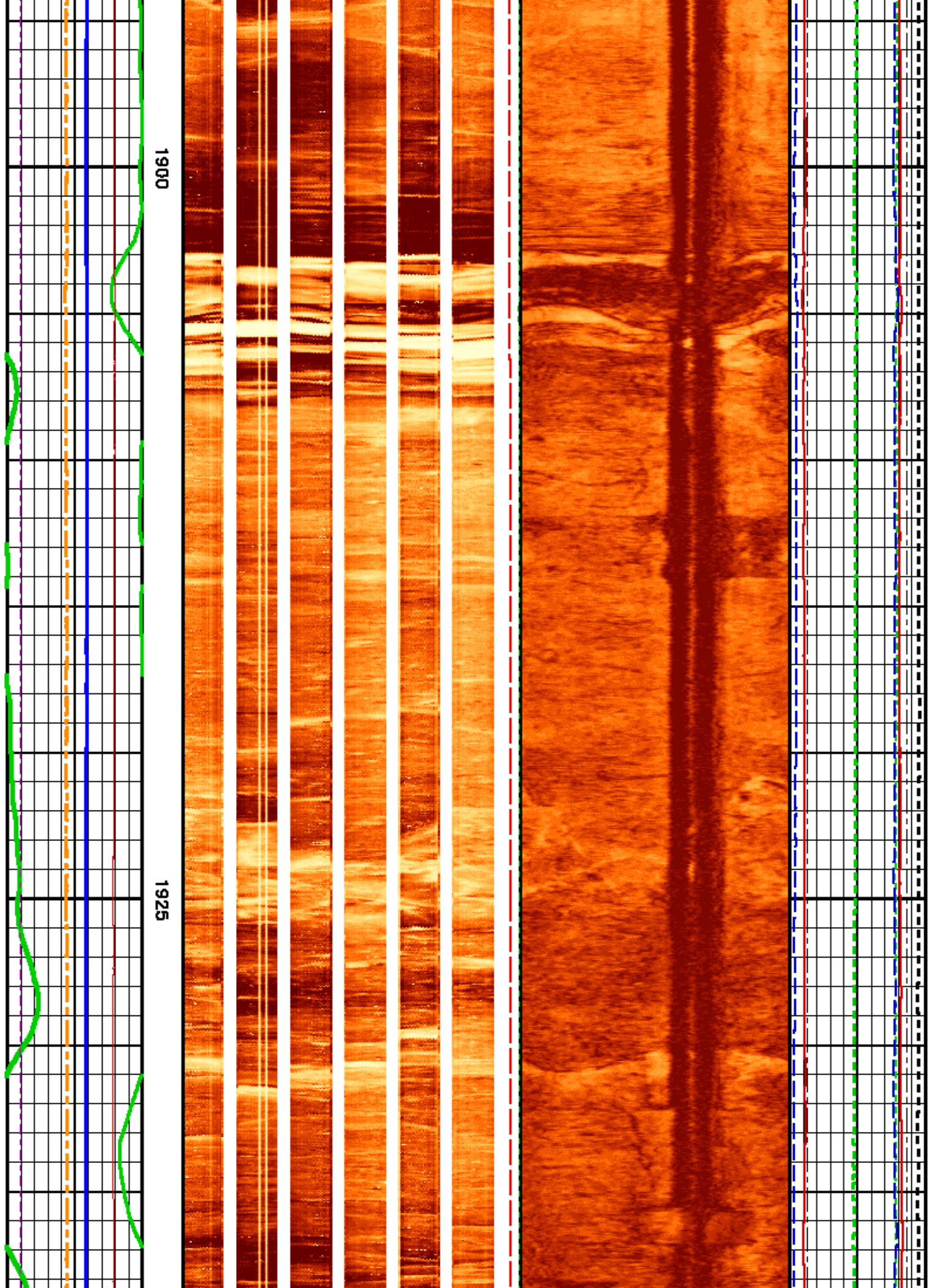


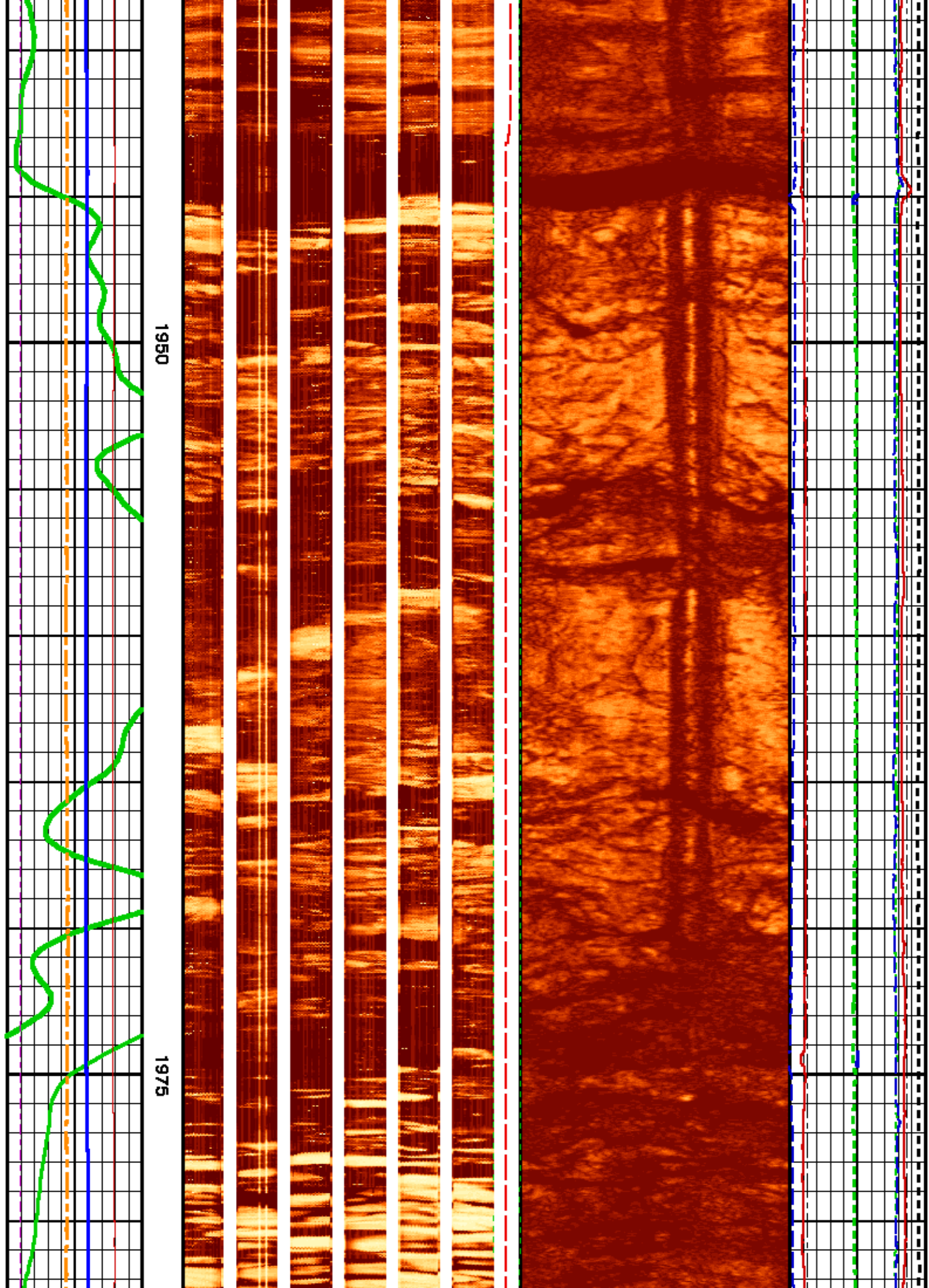


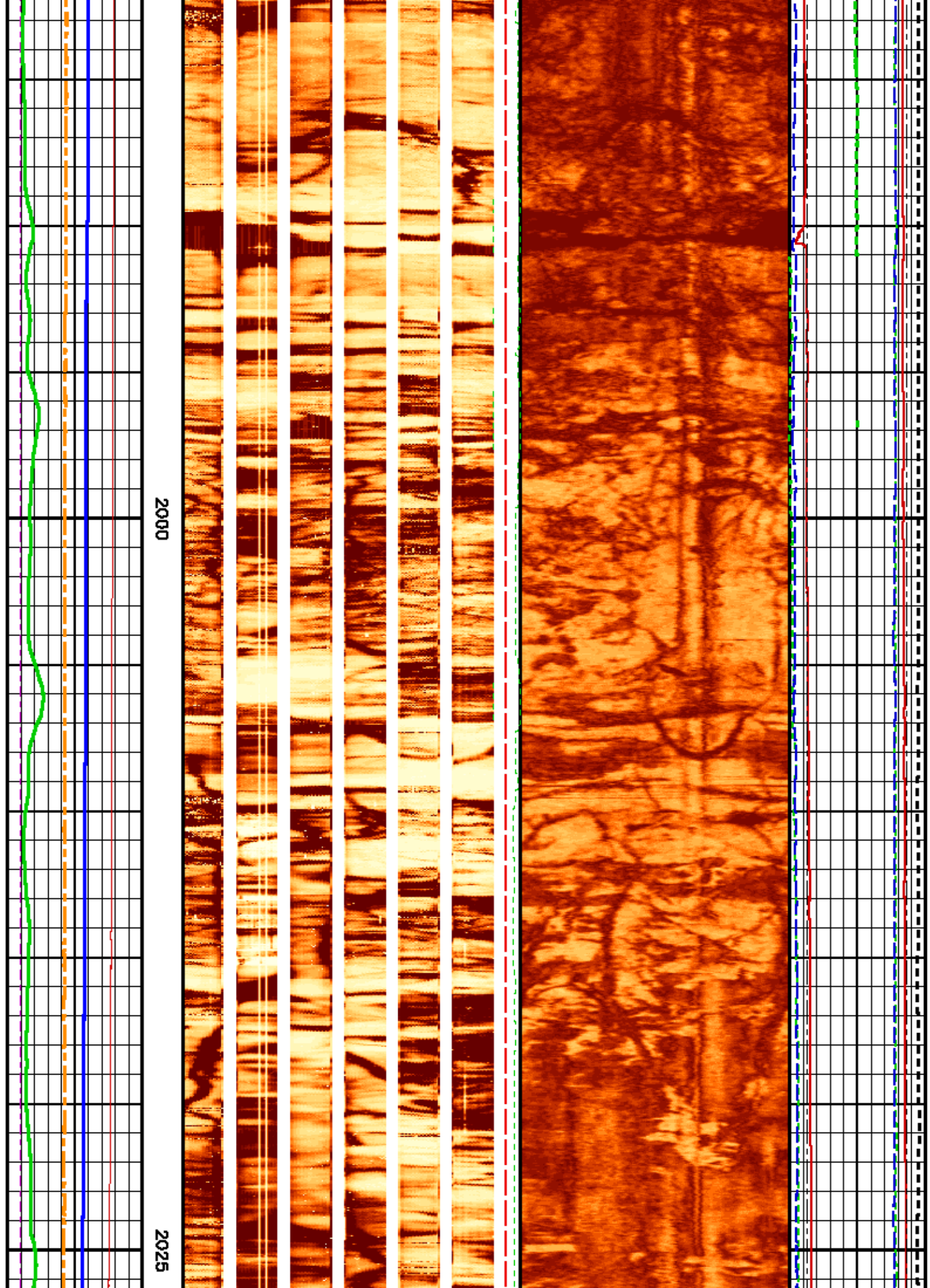


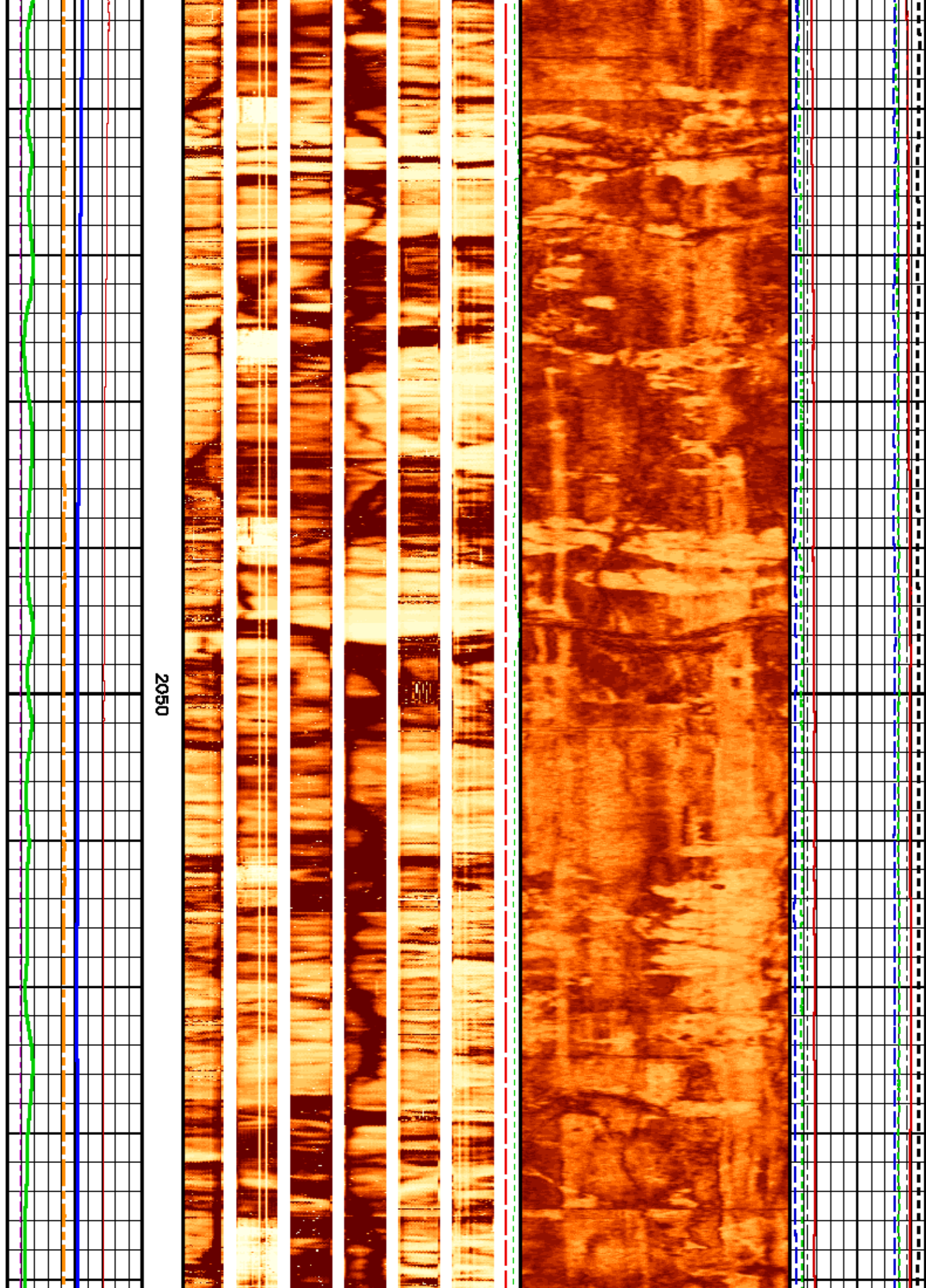


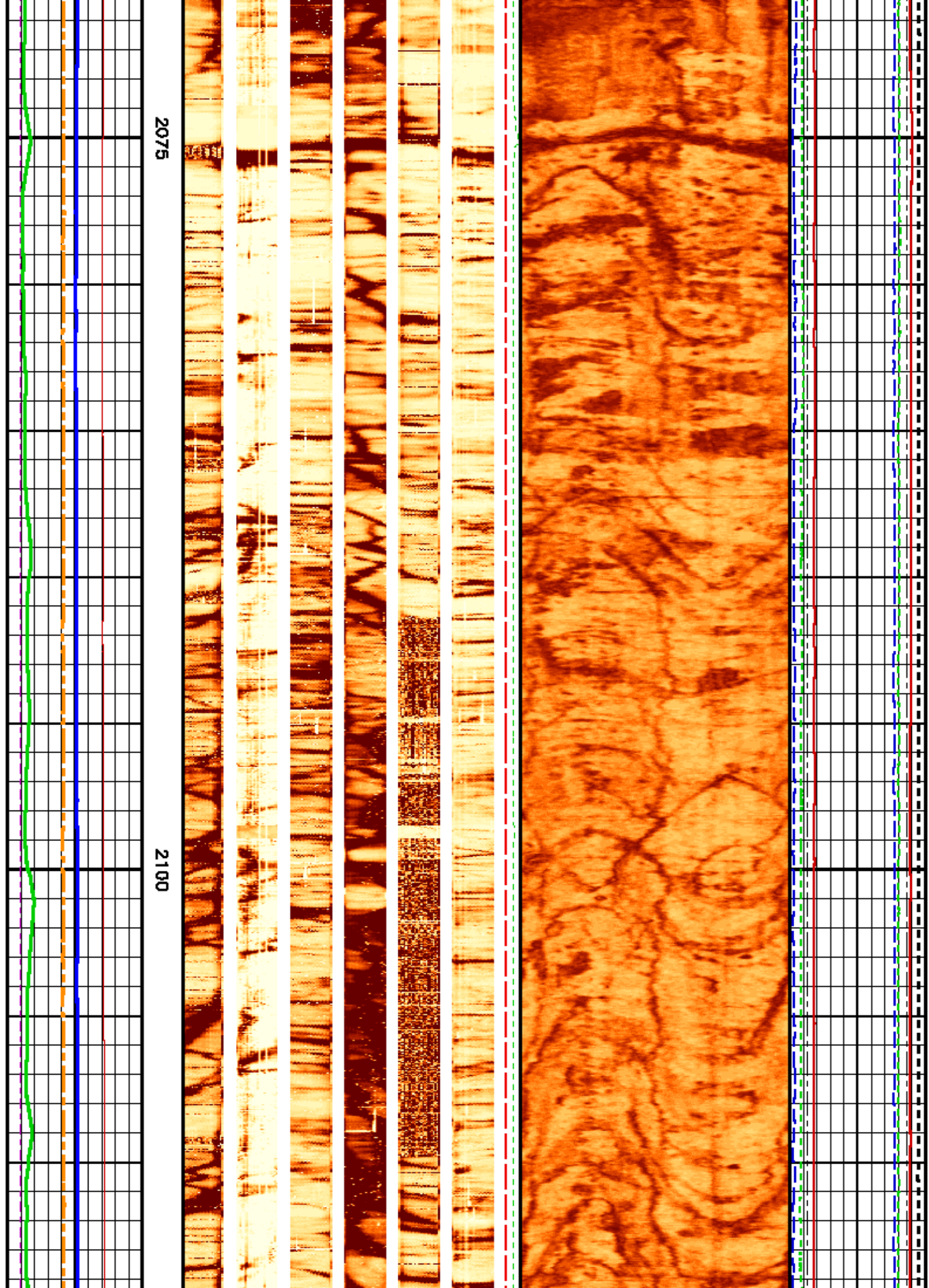


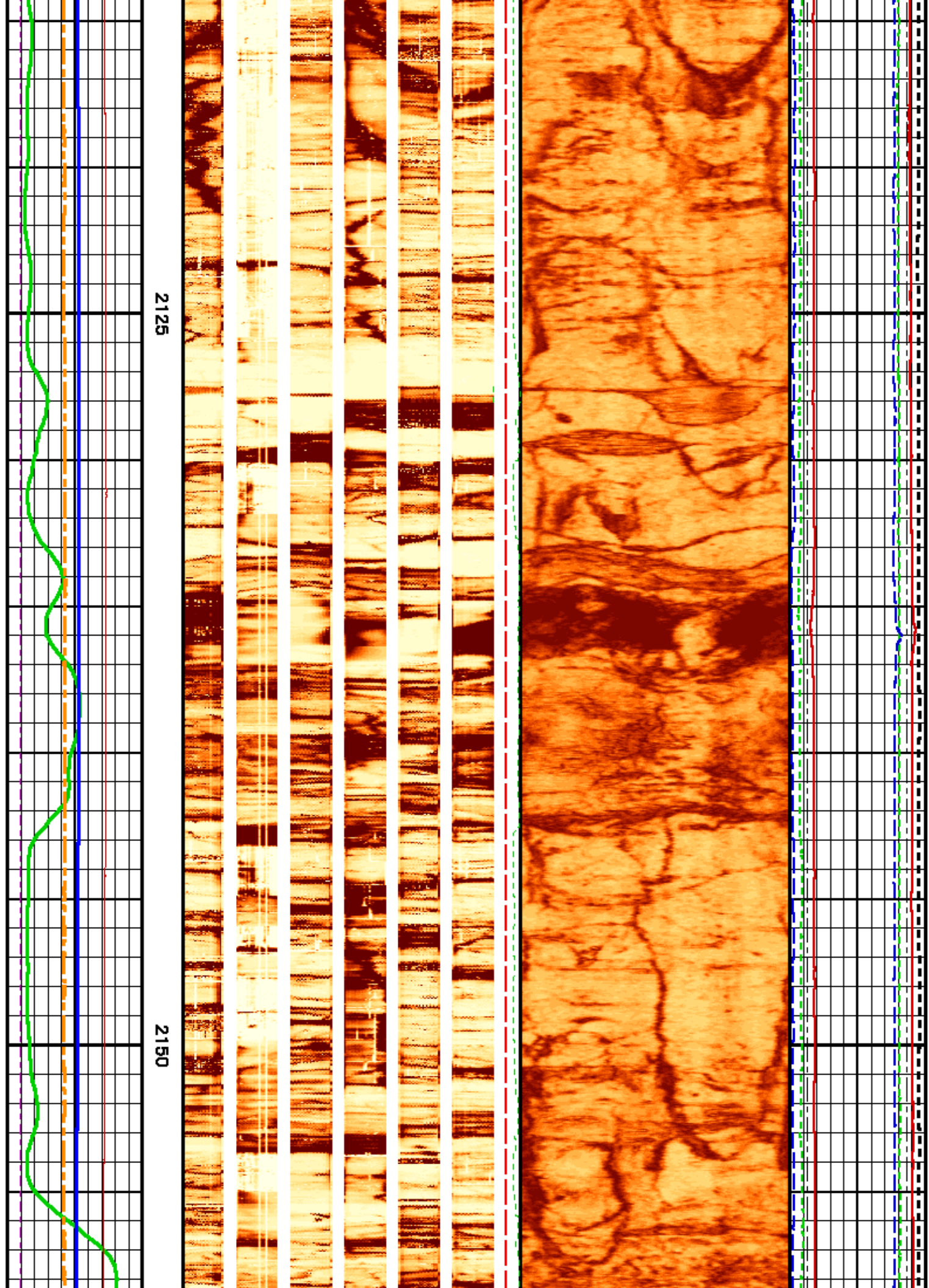


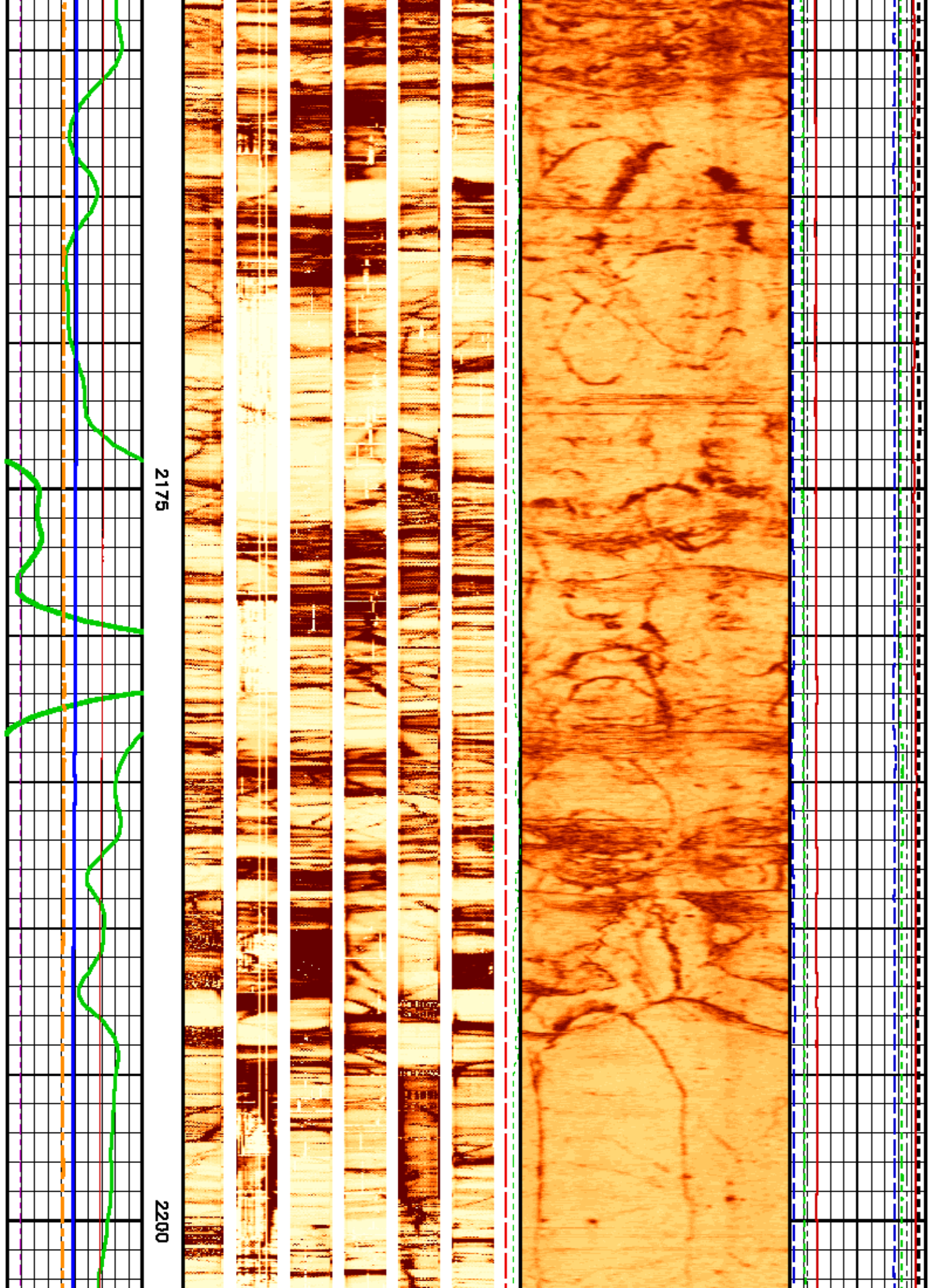


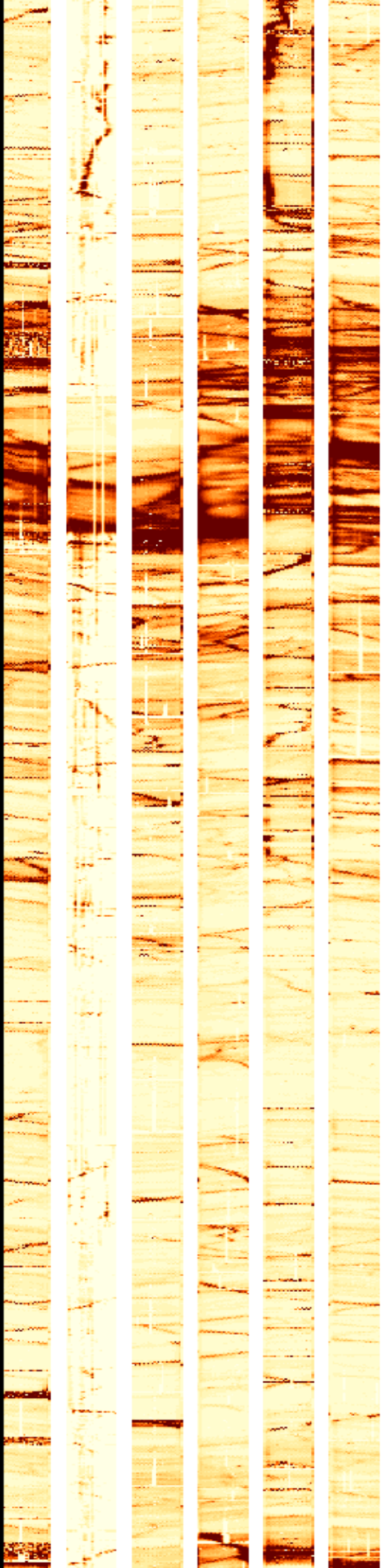
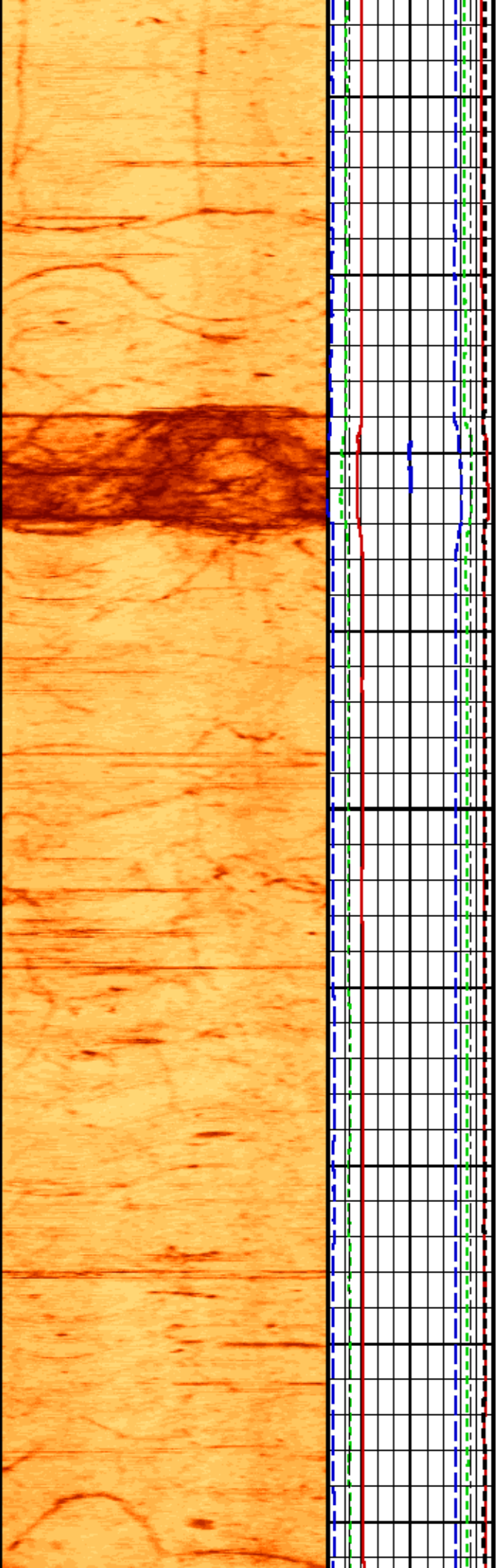




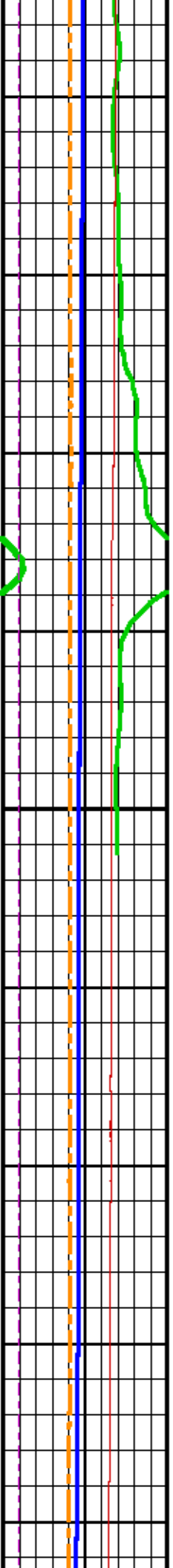


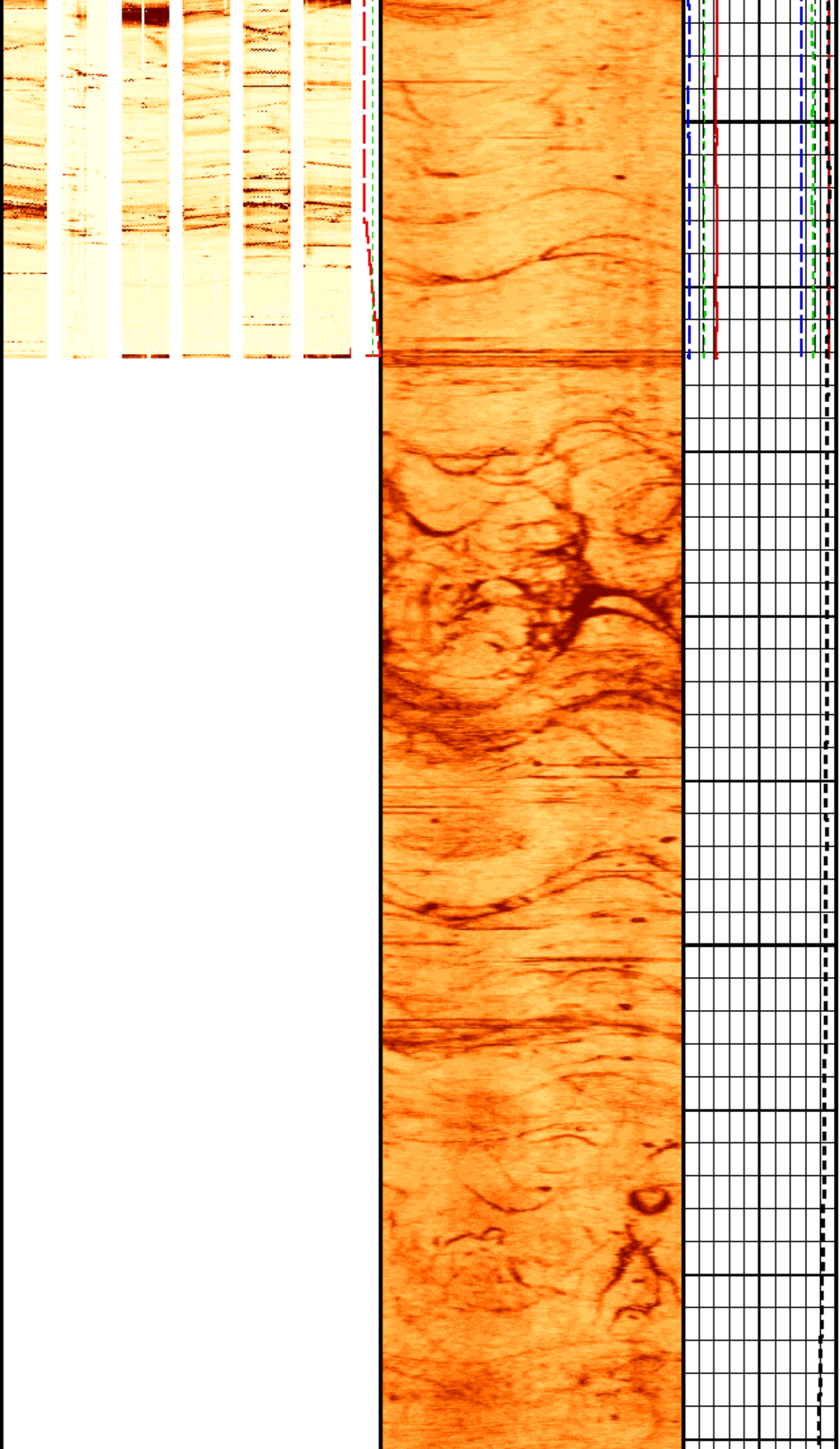






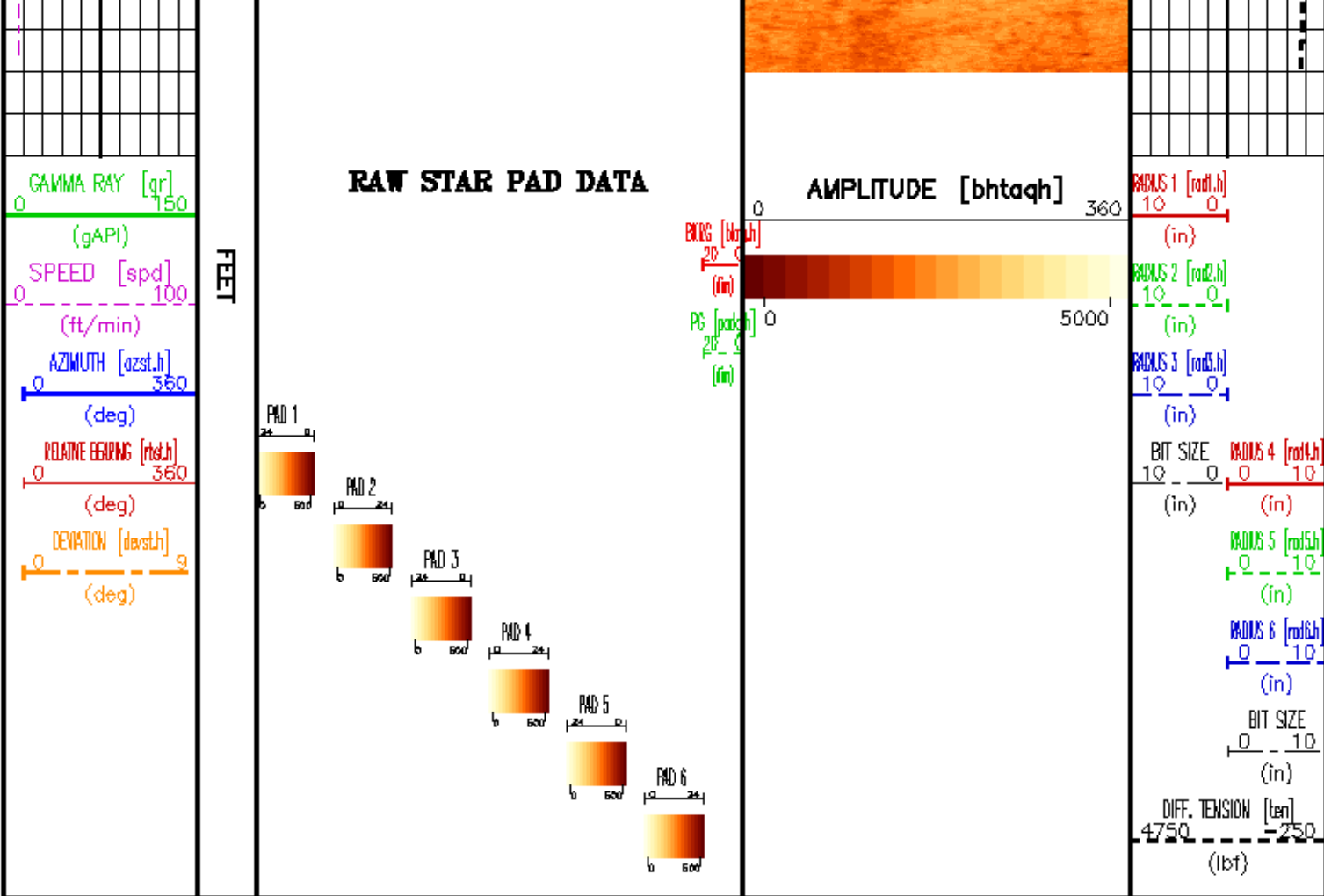
2225





2250

2275



REPEAT LOG

ECLIPS 6.01 Feb 21, 2008 Sun Nov 15 20:27:28 2009
Updates: 1

Perplot /main/62 Cplot Pdf_Cpp /main/16 Fileview 5.42

| PARAMETER AND FILTER SUMMARY REPORT | | | | | |
|--|-------------|------------|-------|---------------|--------|
| FILE: /dat1a/575885/k837r03.prm | | | | | |
| LOGGING MODE: DEPTH DIRECTION: UP | | | | | |
| TOP DEPTH: 2158.500 ft BOTTOM DEPTH: 2296.983 ft | | | | | |
| SYMMETRIC FILTER | | | | | |
| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | INTERVAL (ft) | |
| SPEED | FILTER () | medium (1) | | TOP | BOTTOM |
| | FILTER (.h) | medium (1) | | '' | '' |
| TENSION | FILTER () | medium (1) | | '' | '' |
| | FILTER (.h) | medium (1) | | '' | '' |
| | FILTER (.l) | medium (1) | | '' | '' |
| BOREHOLE & CEMENT | | | | | |
| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | INTERVAL (ft) | |
| BIT SIZE | BIT SIZE | 14.750 | 1in | TOP | BOTTOM |

STAR/EART PROCESSING

| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | INTERVAL (ft) |
|------------------|-------------------|---------------------------------------|-------|---------------------------|
| PAD TYPE | STAR OTHER PAD | USE OTHER PAD ID 1028BA - 8.25 in. | | TOP .. BOTTOM .. |

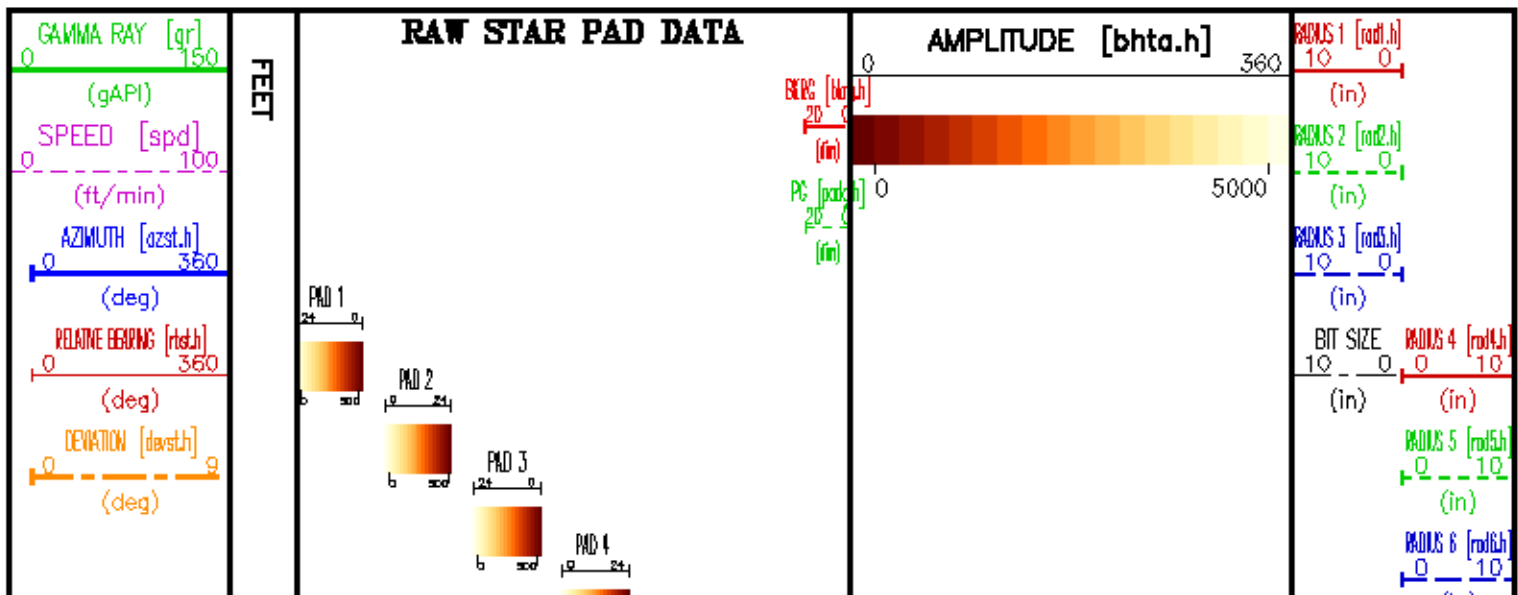
CURVE DESCRIPTION REPORT

| CURVE NAME | CURVE ALIAS | CREATION DATE | CURVE DESCRIPTION |
|------------|-------------|----------------------|--|
| F1:AZSTQH | AZSTQH | Nov 15 18:27:12 2009 | AZIMUTH OF REFERENCE PAD |
| F1:BHTAQH | BHTA.H | Nov 15 18:27:12 2009 | REFLECTANCE PEAK VOLTS |
| F1:BKRGQH | BKRGQH | Nov 15 18:27:12 2009 | BUCKER DRIVER VALUE |
| F1:DEVSTQH | DEVSTQH | Nov 15 18:27:12 2009 | DEVIATION |
| F1:GR | GR | Nov 15 18:27:12 2009 | GAMMA RAY |
| F1:P18TMQH | P18TM_RES.H | Nov 15 18:27:12 2009 | PACKED PAD 1 BLOCK (BUTTONS 1-24) |
| F1:P28TMQH | P28TM_RES.H | Nov 15 18:27:12 2009 | PACKED PAD 2 BLOCK (BUTTONS 1-24) |
| F1:P38TMQH | P38TM_RES.H | Nov 15 18:27:12 2009 | PACKED PAD 3 BLOCK (BUTTONS 1-24) |
| F1:P48TMQH | P48TM_RES.H | Nov 15 18:27:12 2009 | PACKED PAD 4 BLOCK (BUTTONS 1-24) |
| F1:P58TMQH | P58TM_RES.H | Nov 15 18:27:12 2009 | PACKED PAD 5 BLOCK (BUTTONS 1-24) |
| F1:P68TMQH | P68TM_RES.H | Nov 15 18:27:12 2009 | PACKED PAD 6 BLOCK (BUTTONS 1-24) |
| F1:PADGQH | PADGQH | Nov 15 18:27:12 2009 | PAD GAIN CODE |
| F1:RAD1QH | RAD1QH | Nov 15 18:27:12 2009 | RADIUS, TOOL AXIS TO PAD 1 FACE |
| F1:RAD2QH | RAD2QH | Nov 15 18:27:12 2009 | RADIUS, TOOL AXIS TO PAD 2 FACE |
| F1:RAD3QH | RAD3QH | Nov 15 18:27:12 2009 | RADIUS, TOOL AXIS TO PAD 3 FACE |
| F1:RAD4QH | RAD4QH | Nov 15 18:27:12 2009 | RADIUS, TOOL AXIS TO PAD 4 FACE |
| F1:RAD5QH | RAD5QH | Nov 15 18:27:12 2009 | RADIUS, TOOL AXIS TO PAD 5 FACE |
| F1:RAD6QH | RAD6QH | Nov 15 18:27:12 2009 | RADIUS, TOOL AXIS TO PAD 6 FACE |
| F1:RB1T1 | RB1T1 | Nov 15 18:27:12 2009 | BIT RADIUS 1 |
| F1:RB1T4 | RB1T4 | Nov 15 18:27:12 2009 | BIT RADIUS 4 |
| F1:RBSTQH | RBSTQH | Nov 15 18:27:12 2009 | RELATIVE BEARING (RELATIVE TO HIGH SIDE OF BOREHOLE) |
| F1:SPD | SPD | Nov 15 18:27:12 2009 | SPEED |
| F1:TEN | TEN | Nov 15 18:27:12 2009 | DIFFERENTIAL TENSION |

CURVE MEASURE POINT OFFSET

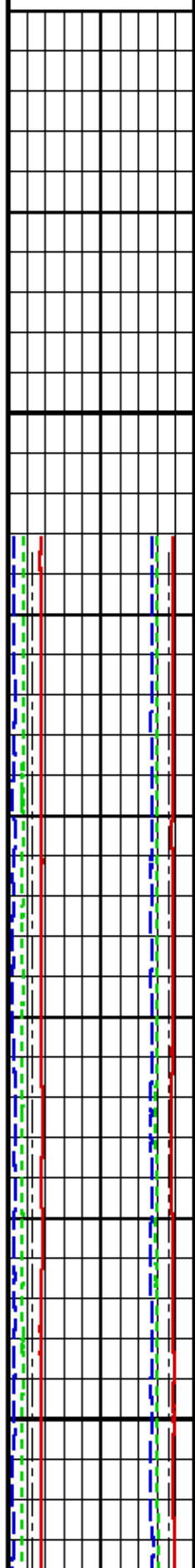
| CURVE | OFFSET (ft) | CURVE | OFFSET (ft) | CURVE | OFFSET (ft) | CURVE | OFFSET (ft) |
|---------|-------------|--------|-------------|--------|-------------|--------|-------------|
| AZSTQH | 38.15 | PADGQH | 38.15 | RAD4QH | 38.15 | RB1T4 | 38.15 |
| BKRGQH | 38.15 | RAD1QH | 38.15 | RAD5QH | 38.15 | RBSTQH | 38.15 |
| DEVSTQH | 38.15 | RAD2QH | 38.15 | RAD6QH | 38.15 | SPD | 0.00 |
| GR | 85.00 | RAD3QH | 38.15 | RB1T1 | 38.15 | TEN | 0.00 |

| | |
|---------------|---|
| Presentation | : opul:/dat1a/575995/STAR_CBL_REPEAT.pdf [25"/100' Scale] |
| Plot Interval | : 2090 - 2298.75 Feet |
| Data File 1 | : F1 : opul:/dat1a/575995/k837m03.aif |
| Created On | : Nov 15 18:27:12 2009 |
| Company | : SIERRA GEOTHERMAL POWER, INC. |
| Well | : ALLIM 25-29 |
| Field | : ALLIM |
| File Interval | : 2081 - 2298.75 Feet |
| Out | : k837m |



(in)
BIT SIZE
0 10
(in)

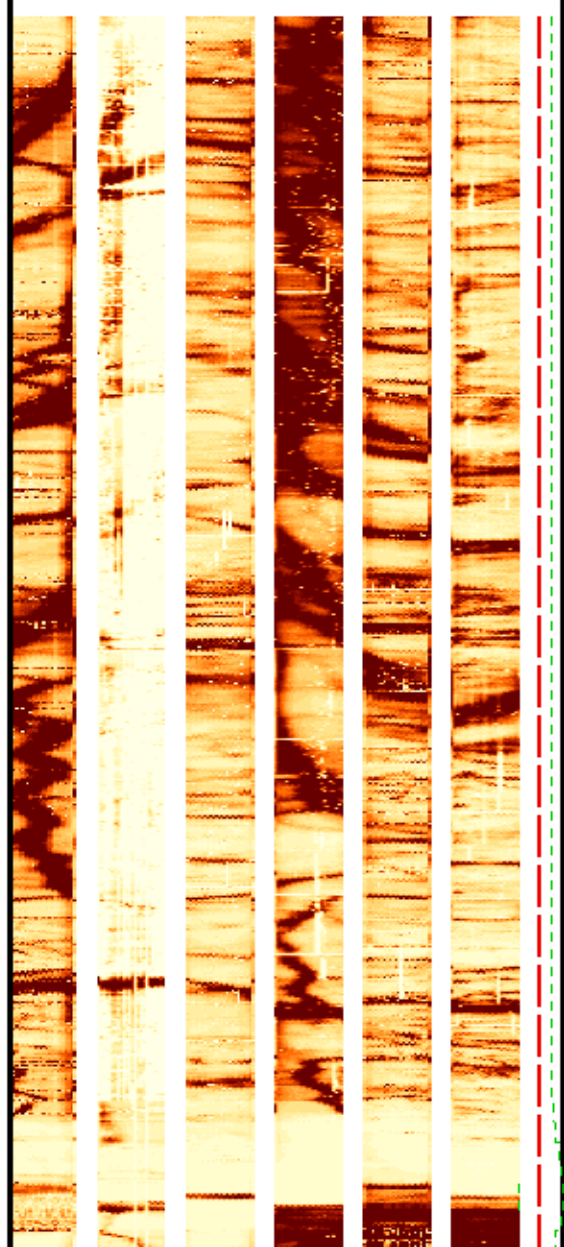
DIFF. TENSION [ten]
4750 250
(lbf)



PAD 6
0 500
1.2 2.4

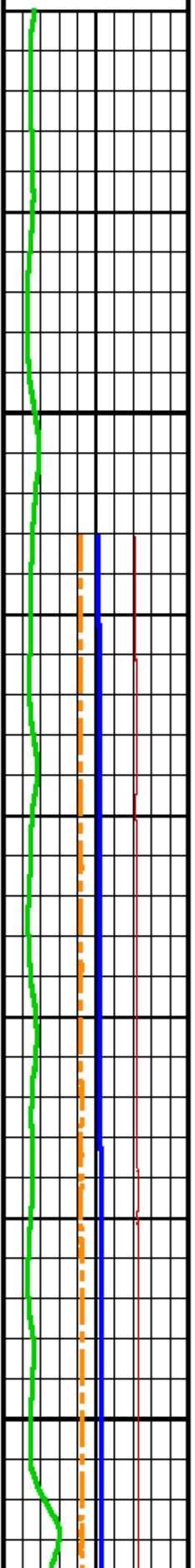
PAD 5
0 500
1.2 2.4

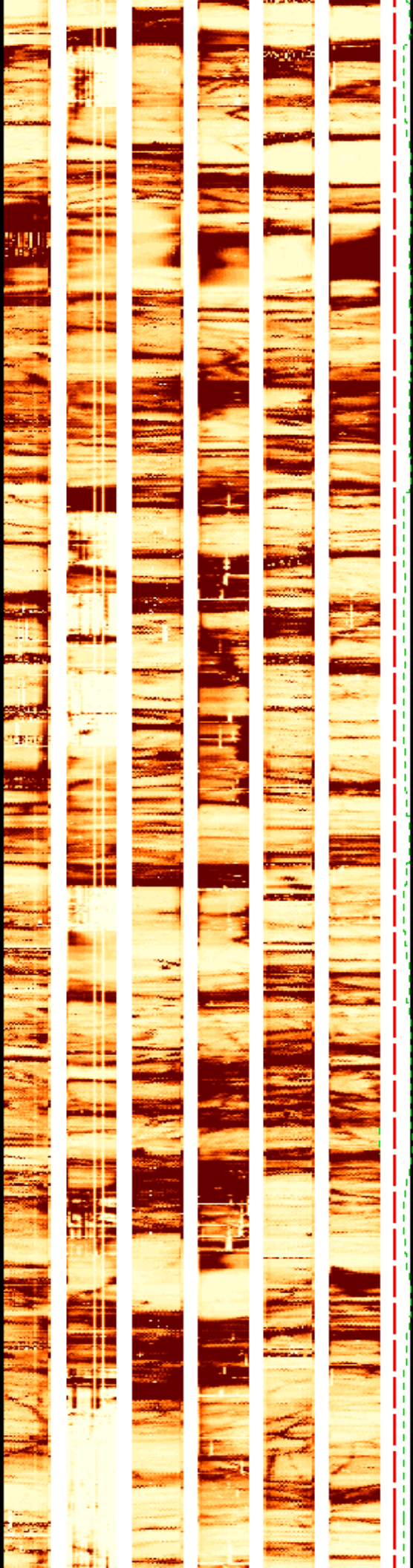
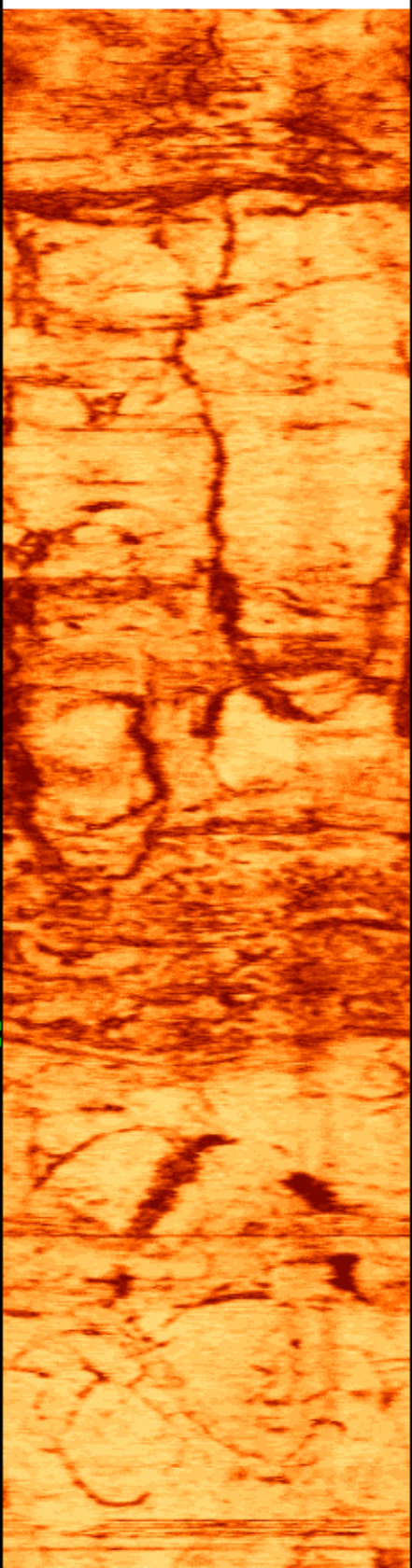
0 500



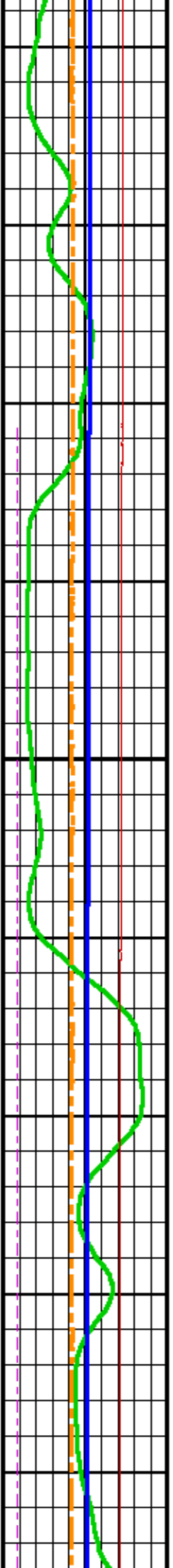
2100

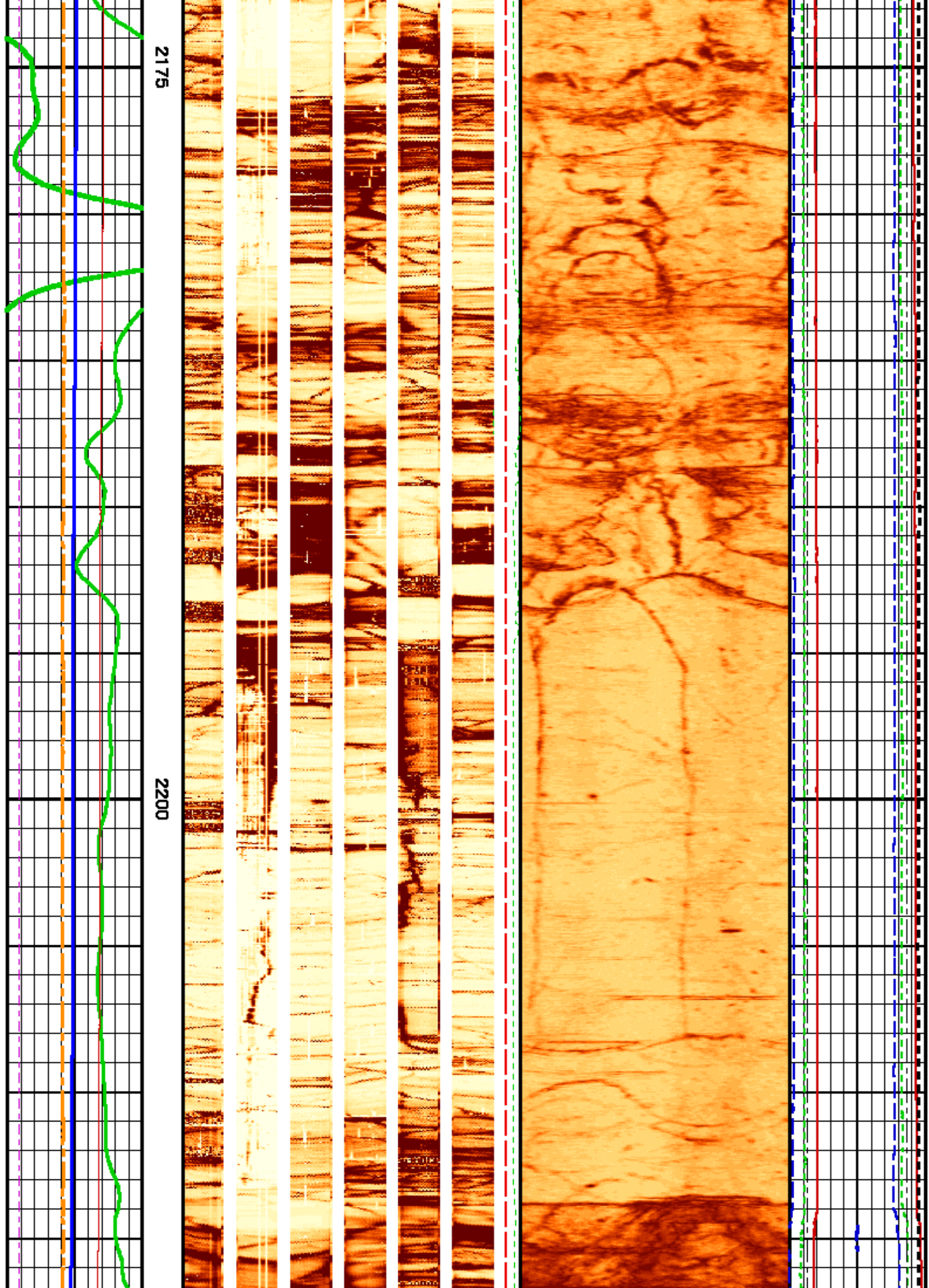
2125

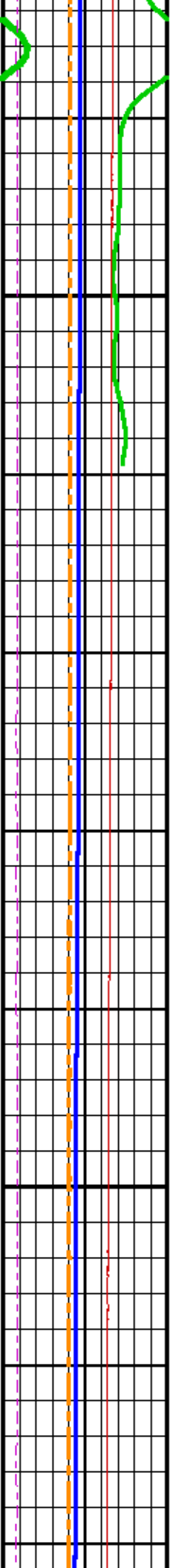
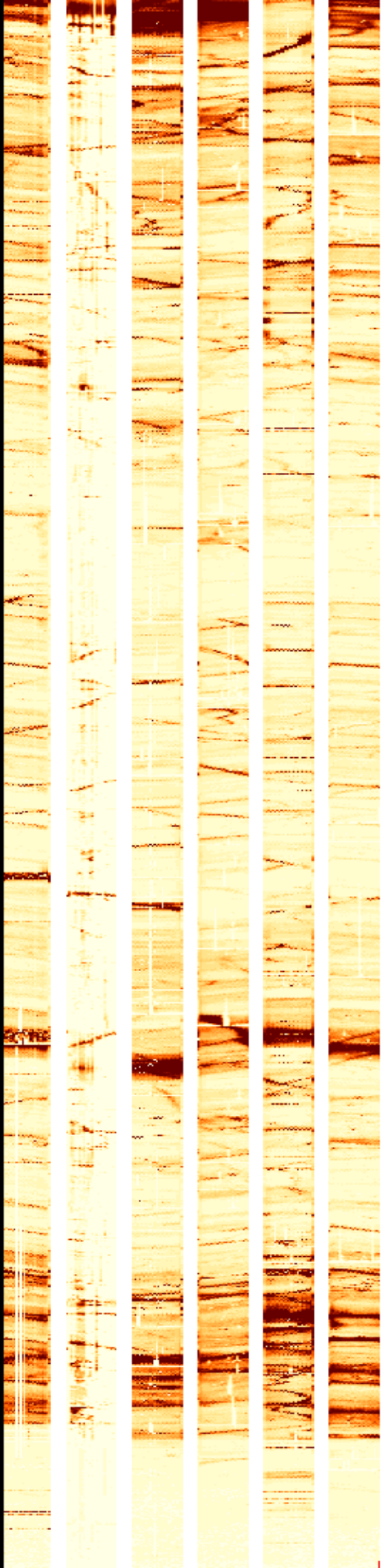
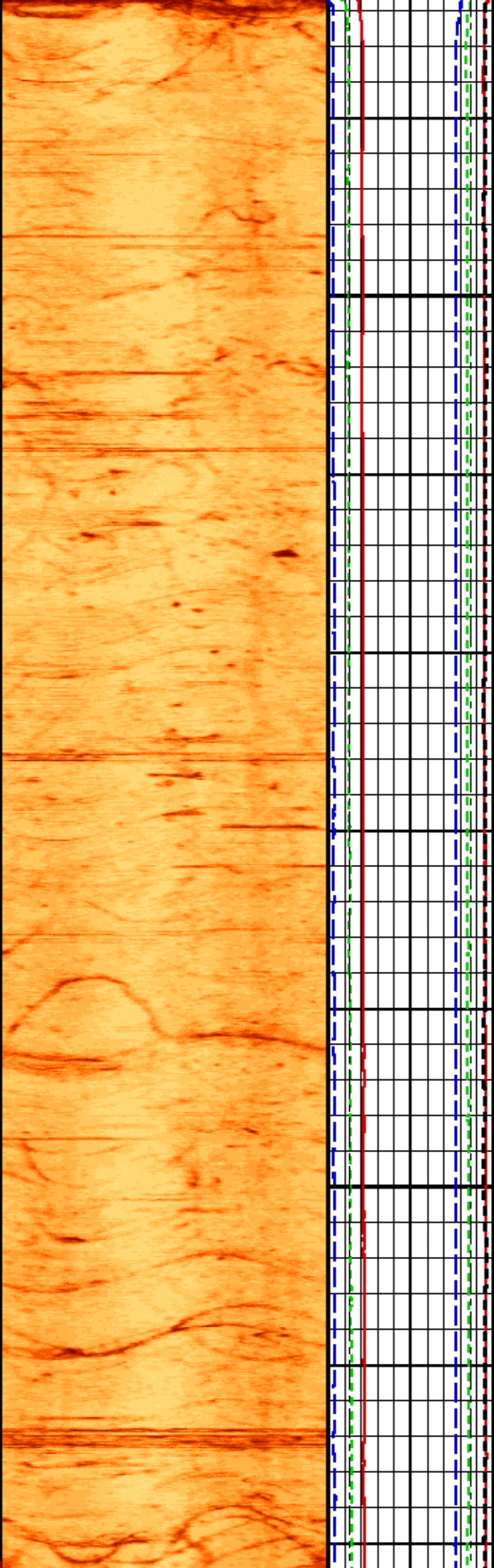




2150

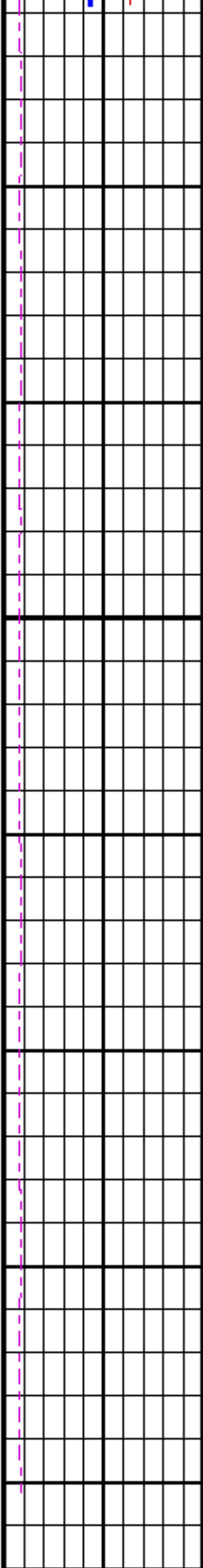






2225

2250

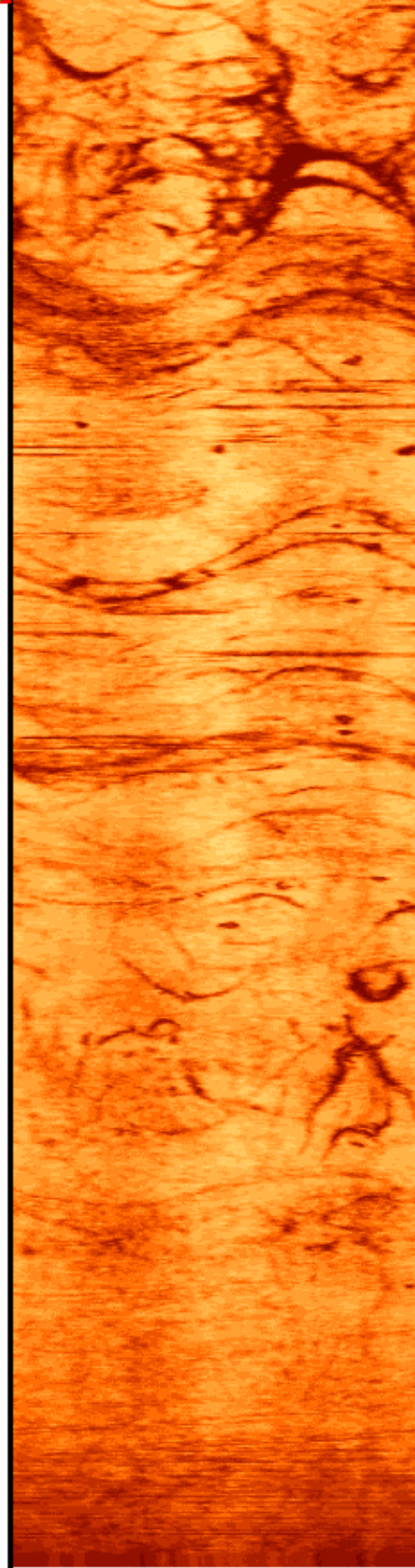


2275

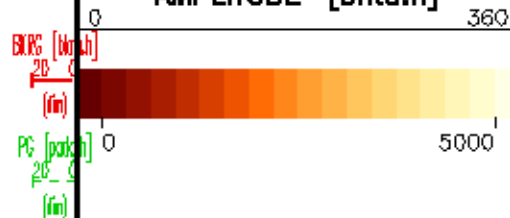
FEET

GAMMA RAY [gr]
0 150
(gAPI)
SPEED [spd]
0 100
(ft/min)
AZIMUTH [azst.h]
0 360
(deg)
RELATIVE BEARING [rlst.h]
0 360

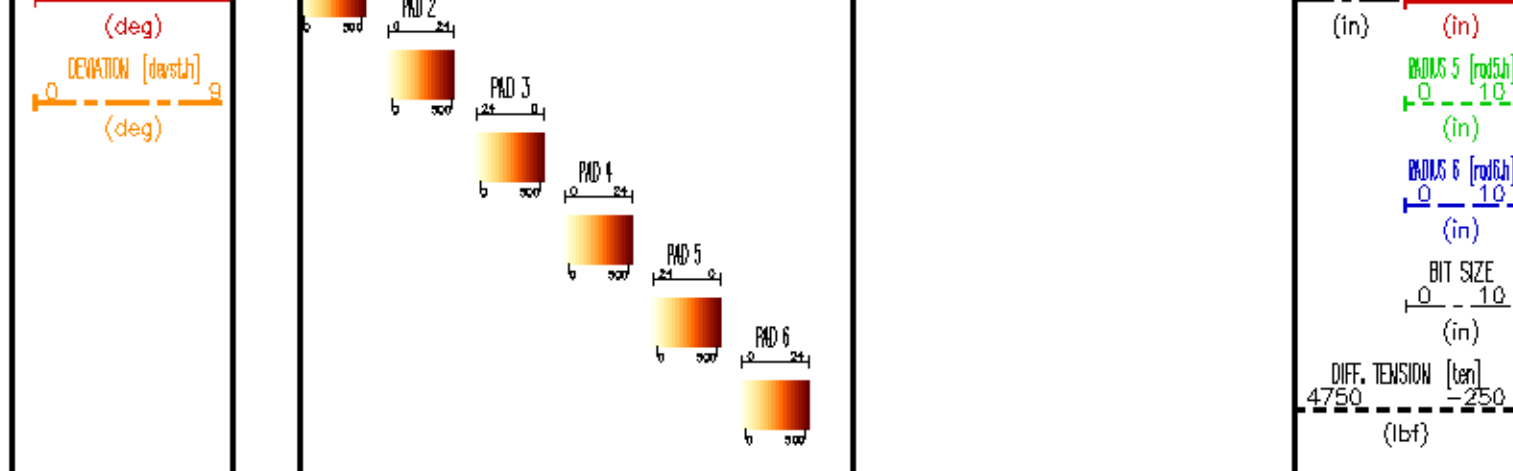
RAW STAR PAD DATA



AMPLITUDE [bhta.h]



RADIUS 1 [rad1.h]
10 0
(in)
RADIUS 2 [rad2.h]
10 0
(in)
RADIUS 3 [rad3.h]
10 0
(in)
BIT SIZE RADIUS 4 [rad4.h]
10 0 0 10



CALIBRATION / VERIFICATION SUMMARY

Source File /dcl/a/573085/1437m.a1

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1329XA 10203000

DATE/TIME PERFORMED: Sun Oct 25 14:28:31 2009

UNIT #: 3885TD ML4232

CALB JIG #: 4702NK DA-321

| | BACKGROUND (cts/s) | CALBRTR ON (cts/s) | CR DIFF (cts/s) | MULT | BACKGROUND (gAPI) | CALBRTR ON (gAPI) | CALBRTR (gAPI) |
|----|-----------------------|-----------------------|--------------------|-------|----------------------|----------------------|-------------------|
| GR | 269.02 | 1162.96 | 893.9 | 0.168 | 45.14 | 195.14 | 150 |
| | | | 830.0 960.0 | | | | |

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 1329XA 10203000

DATE/TIME PERFORMED: Sun Oct 25 14:33:28 2009

UNIT #: 3885TD ML4232

VERI JIG #: 4702NK DA-321

| | BACKGROUND (cts/s) | CALBRTR ON (cts/s) | MULT | BACKGROUND (gAPI) | CALBRTR ON (gAPI) | DIFF. (gAPI) |
|----|-----------------------|-----------------------|-------|----------------------|----------------------|-----------------|
| GR | 269.44 | 1191.73 | 0.168 | 45.21 | 199.97 | 154.76 |
| | | | | | | 140.00 160.00 |

GR BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1329XA 10203000

DATE/TIME PERFORMED: Tue Nov 10 11:49:43 2009

DAYS SINCE CAL: 15

UNIT #: 3885TD ML4232

VERI JIG #: 4702NK DA-321

| | BACKGROUND (cts/s) | CALBRTR ON (cts/s) | MULT | BACKGROUND (gAPI) | CALBRTR ON (gAPI) | DIFF. (gAPI) |
|----|-----------------------|-----------------------|-------|----------------------|----------------------|-----------------|
| GR | 341.58 | 1213.11 | 0.168 | 57.32 | 203.56 | 146.24 |
| | | | | | | 144.76 164.76 |

STARCAL PRIMARY CALIBRATION SUMMARY

TOOL #: 4238MA 10489537

DATE/TIME PERFORMED: Tue Nov 10 11:39:24 2009

UNIT #: 3885TD ML4232

| | SMALL RING (row) | LARGE RING (row) | MULT (in/row) | ADD (in) | SMALL RING (in) | LARGE RING (in) |
|----------|---------------------|---------------------|------------------|-------------|--------------------|--------------------|
| RADIUS 1 | 1225.6 | 2673.3 | 0.0021 | 1.4604 | 4.000 | 7.000 |

| | | | | | | |
|-----------|--------|--------|--------|--------|-------|--------|
| RADIUS 2 | 1191.4 | 2668.4 | 0.0020 | 1.5802 | 4.000 | 7.000 |
| RADIUS 3 | 1215.8 | 2685.5 | 0.0020 | 1.5183 | 4.000 | 7.000 |
| RADIUS 4 | 1203.6 | 2670.9 | 0.0020 | 1.5391 | 4.000 | 7.000 |
| RADIUS 5 | 1174.3 | 2641.6 | 0.0020 | 1.5990 | 4.000 | 7.000 |
| RADIUS 6 | 1254.9 | 2712.4 | 0.0021 | 1.4171 | 4.000 | 7.000 |
| CALIPER 1 | | | | | 8.000 | 14.000 |
| CALIPER 2 | | | | | 8.000 | 14.000 |
| CALIPER 3 | | | | | 8.000 | 14.000 |

SMALL RING LARGE RING

PAD FORCE % 1.237 1.343

DC MOTOR V 0.1 0.1

STARCAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 4236MA 10489537 DATE/TIME PERFORMED: Tue Nov 10 11:45:46 2009 DAYS SINCE CAL: 0

UNIT #: 3885TD ML4232

| | I.D. (raw) | MULT | ADD | I.D. (in pot V) | CASING SIZE (in) |
|------------|---------------|---------|---------|--------------------|---------------------|
| RADIUS 1 | 1242.7 | 0.00207 | 1.46037 | 4.035 | |
| RADIUS 2 | 1220.7 | 0.00203 | 1.58017 | 4.060 | |
| RADIUS 3 | 1228.0 | 0.00204 | 1.51827 | 4.025 | |
| RADIUS 4 | 1203.6 | 0.00204 | 1.53910 | 4.000 | |
| RADIUS 5 | 1181.6 | 0.00204 | 1.59900 | 4.015 | |
| RADIUS 6 | 1254.9 | 0.00206 | 1.41709 | 4.000 | |
| CALIPER 1 | | | | 8.035 | 8.000 |
| CALIPER 2 | | | | 8.074 | |
| CALIPER 3 | | | | 8.025 | |
| PAD FORCE | | | | 14.942 | |
| DC MOTOR V | | | | 0.1 | |

STAR_OR PRIMARY CALIBRATION SUMMARY

TOOL #: 102NBX 10489537 DATE/TIME PERFORMED: Tue Nov 10 11:31:16 2009

UNIT #: 3885TD ML4232 ORIENTATION #: 4401XB 10165246

| | DEV (deg) | QA (mG) | MEAS RB (deg) | RB OFFSET (deg) | ROTATED RB (deg) |
|------------------|--------------|--------------|------------------|--------------------|---------------------|
| ORIT TBM CHECK | 90.0 | 1000.2 | 0.7 | | |
| | | 990.0 1010.0 | | | |
| STAR ORIENTATION | | | 275.3 | 275.3 | 0.0 |

STAR_OR BEFORE LOG VERIFICATION SUMMARY

TOOL #: 102NBX 10489537 DATE/TIME PERFORMED: Tue Nov 10 11:31:38 2009 DAYS SINCE CAL: 0

UNIT #: 3885TD ML4232

| | DEV (deg) | QA (mG) | ROTATED RB (deg) |
|------------------|--------------|------------|---------------------|
| STAR ORIENTATION | 90.0 | 1001.1 | 0.0 |
| | 990.0 | 1010.8 | -1.5 |
| | | | 1.5 |

CBILB_OR PRIMARY CALIBRATION SUMMARY

TOOL #: 1671MB 167246 DATE/TIME PERFORMED: Tue Nov 10 11:27:32 2009
 UNIT #: 3885TD ML4232 ORIENTATION #: 4401XB 10165246

| | DEV (deg) | QA (mG) | MEAS RB (deg) | RB OFFSET (deg) | ROTATED RB (deg) |
|------------------|--------------|--------------|------------------|--------------------|---------------------|
| ORIT TBM CHECK | 90.0 | 1000.2 | 0.7 | | |
| | | 990.0 1010.0 | | | |
| CBIL ORIENTATION | | | 258.4 | 258.4 | 0.0 |

CBILB_OR BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1671MB 167246 DATE/TIME PERFORMED: Tue Nov 10 11:33:09 2009 DAYS SINCE CAL: 0
 UNIT #: 3885TD ML4232

| | DEV (deg) | QA (mG) | ROTATED RB (deg) |
|------------------|--------------|--------------|---------------------|
| CBIL ORIENTATION | 90.0 | 1001.9 | 1.5 |
| | | 990.0 1010.0 | -1.5 |
| | | | 1.5 |

INSTRUMENT CONFIGURATION

Source File: /dall/a/575885/k837m/C050-ldg

CABLEHEAD

Series : CABL338
 Mnemonic : CBLH
 Diameter : 3.38"
 Weight : 24 lbs
 Length : 5.50'

DOWNHOLE POWER ADAPTER

Series : 4430XB
 Mnemonic : DHPA
 Diameter : 3.62"
 Weight : 86 lbs
 Length : 5.27'

SWIVEL

Series : 3944XD
 Mnemonic : SWVL

TTRM SUB

Series : 3981XA
 Mnemonic : TTRM
 Diameter : 3.63"

WTS COMMON REMOTE

Series : 3514XB
 Mnemonic : WTS
 Diameter : 3.63"
 Weight : 126 lbs
 Length : 6.36'



95.40'

CABLEHEAD TOP 92.65'

TEMP MP 78.84'
 RM MP 78.59'

DIGITAL SPECTRALOG

Series : 1329XA
Mnemonic : DSL
Diameter : 3.63"
Weight : 130 lbs
Length : 7.31'

GR MP — 65.38'

CBPC IMAGER POWER SUPPLY

Series : 1022PA
Mnemonic : CBPC
Diameter : 3.62"
Weight : 116 lbs
Length : 9.08'

CBPC IMAGER ELECTRONICS

Series : 1036EA
Mnemonic : CBPC
Diameter : 3.62"
Weight : 94 lbs
Length : 9.08'

CBPC IMAGER MANDREL

Series : 4236MA
Mnemonic : CBPC
Diameter : 5.25"
Weight : 278 lbs
Length : 12.50'

PAD MP — 36.43'

ISOLATION RETURN SUB

Series : 3892XA

KNUCKLE JOINT (DOUBLE)

Series : 3838XA
Mnemonic : KJNT
Diameter : 3.38"
Weight : 90 lbs

DIGITAL ORIENTATION

Series : 4401XB
Mnemonic : ORIT
Diameter : 3.38"
Weight : 110 lbs
Length : 10.81'

ORIENT MP — 15.57'

DIGITAL CBIL ELECTRONICS

Series : 1671EB
Mnemonic : CBIL
Diameter : 3.38"
Weight : 120 lbs
Length : 7.48'

DIGITAL CBIL MANDREL

Series : 1671MB

Mnemonic : CBIL
Diameter : 3.63"
Weight : 150 lbs
Length : 7.81'



MUD MP 3.55'

IMAGE MP 1.81'

BULL PLUG 3 3/8

0.00'

TOTAL LENGTH: 95.40'
TOTAL WEIGHT: 1495 lbs
MAX DIAMETER: 0'5.25"



COMPANY SIERRA GEOTHERMAL POWER, INC.
WELL ALUM 25-29
FIELD ALUM
COUNTY ESMERALDA STATE NEVADA

FILE NO:

API NO:

27-009-90074

Baker Atlas



LOCATION:

2235.18' FSL & 938.11' FWL
SW/C

ELEVATIONS:

KB 4919.57 FT
DF
GL 4903.57 FT

SEC 29 TWP 1N RGE 3E

DATE 15-NOV-2009