Borehole Geophysical Logging Results
Crescent Junction Disposal Site
Crescent Junction, Utah

Prepared for
S.M. Stoller
January 26, 2006

Prepared by
COLOG Division of Layne Christensen Company
810 Quail St. Suite E, Lakewood, CO 80215
Phone: (303) 279-0171 Fax: (303) 278-0135

Prepared By:

Summer Montgomery
Geophysical Engineer

Reviewed By:

Nathan O. Davis
Geophysical Engineer

Table of Contents

Geophysical Logging Results,
Crescent Junction Disposal Site, Crescent Junction, Utah

I. Introduction

II. Methodology

- **A. Optical Televiewer**
- **B. Acoustic Televiewer**
- **C. Caliper Measurements**
- **D. Compensated Density**
- **E. Neutron Logs**
- **F. Induction Resistivity**
- **G. Natural Gamma**
- **H. Rock Quality Designation**

III. Geophysical Logging Results

A. Well CH-0210 Logging Results
CH0210 – Geophysical Summary Plots

B. Well CH-0209 Logging Results
CH0209 – Geophysical Summary Plots

C. Well CH-0208 Logging Results
CH0208 – Geophysical Summary Plots

D. Well CH-0207 Logging Results
CH0207 – Geophysical Summary Plots

E. Well CH-0206 Logging Results
CH0206 – Geophysical Summary Plots

F. Well CH-0205 Logging Results
CH0205 – Geophysical Summary Plots

G. Well CH-0204 Logging Results
CH0204 – Geophysical Summary Plots

H. Well CH-0203 Logging Results
CH0203 – Geophysical Summary Plots

I. Well CH-0202 Logging Results
CH0202 – Geophysical Summary Plots

J. Well CH-0201 Logging Results
CH02101 – Geophysical Summary Plots

Appendices:

Appendix A: Optical and Acoustic Televiewer Logs

Appendix B: Orientation Summary Tables

Appendix C: Rock Quality Designation Tables

Appendix C: Limitations

Geophysical Logging Results
Crescent Junction Disposal Site, Crescent Junction, Utah

I. Introduction

This document is prepared for S.M. Stoller, as the Technical Assistance Contractor to the U.S. Department of Energy, to report on the geophysical data collected at the proposed Crescent Junction Disposal Site, Utah.

In accordance with COLOG's proposal, dated November 3, 2005, as specified by the SOW of DOE RFP-1730, COLOG has logged nine boreholes with optical televiewer, compensated density, neutron, gamma, caliper, and induction tools. Acoustic televiewer images were logged below fluid level, where possible. Due to equipment issues, the tenth borehole (CH-0201) was only logged with optical/acoustic televiewer and induction tools.

The objectives of the investigation were to:
1) Identify relative shale or clay content
2) Identify dip and dip direction of bedding
3) Identify dip and dip direction of fractures
4) Establish rock quality designation values
5) Identify relative moisture content or water saturation

The boreholes tested are: CH-0210, CH-0209, CH-0208, CH-0207, CH-0206, CH-0205, CH-0204, CH-0203, CH-0202, and CH-0201 (incomplete).

COLOG's logging of the ten subject wellbores was performed over the period of December 6th through December 13th, 2005.

II. Methodology

A. Optical Televiewer (Advanced Logic Technologies, OBI-40)

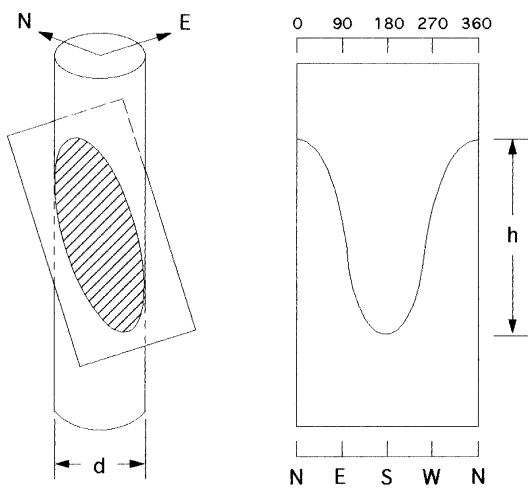
Optical televiewer technology is based on direct optical observation of the borehole wall face. Precise measurements of dip angle and direction of bedding and joint planes, along with other geological analyses, are possible in both air and clear fluid filled boreholes.

Theory of Operation

A ring of small lights illuminates the borehole wall allowing a camera to directly image the borehole wall face. A conical mirror housed in a clear cylindrical window focuses a 360° optical "slice" of the borehole wall into the camera's lens. As the OBI tool is lowered down the hole, the raw analog video signal from this camera is digitized and transmitted uphole via wireline to the surface instrumentation.

The digitized signal captures 180, 360, or 720 pixels around a 1 mm ring from the conical image. The rings are stacked and unwrapped to a 2-D image of the borehole wall. A digital fluxgate magnetometer is used to determine the orientation of the digital image.

The OBI image is an oriented, 2-D picture of the borehole wall unwrapped from north to north. Planar features that intersect the borehole appear to be sinusoids on the unwrapped image. To



Dip Direction = Orientation of Sinusoid Minimum
Dip Angle = ArcTan h/d
where: h = height of sinusoid
d = borehole diameter

calculate the dip angle of a fracture or bedding feature the amplitude of the sinusoid (h) and the borehole diameter (d) are required. The angle of dip is equal to the arc tangent of h/d, and the dip direction is picked at the trough of the sinusoid (Figure 1).

Dip Direction = Orientation of Sinusoid Minimum

Dip Angle = ArcTan h/d
where: h = height of sinusoid
d = borehole diameter

Figure 1: Geometric representation of a north dipping fracture plane and corresponding OBI log.

Sinusoidal features were picked throughout wells by visual inspection of the digital images using interactive software. The software performed the orientation calculations and assigned depths to the fractures or bedding features at the inflection points (middles) of the sinusoids. Features were subjectively ranked for flow potential using COLOG's Ranking System for Optical Features. Orientations are based on magnetic north and were not corrected for declination. Repeat logging of the Optical Televiewer is typically impractical due to the turbidity caused by logging down the hole, or because the optical window becomes coated with mud when it reaches the bottom of the hole.

B. Acoustic Televiewer (Advanced Logic Technologies, FAC-40 ATV)

The FAC-40 ATV provides a detailed, oriented image of acoustic reflections from the borehole wall. A unique focusing system resolves bedding features as small as 2 mm and is capable of detecting fractures with apertures as small as 0.1 mm. The acoustic image is precisely oriented using a 3-axis magnetometer with dual accelerometers, which also combine to measure deviation (or drift) of the borehole trajectory.

Theory

The FAC-40 transmits ultrasonic pulses from a rotating sensor and records the signals reflected from the interface between the borehole fluid and the borehole wall (Figure 2). The amplitude of these reflections is representative of the hardness of the formation surrounding the borehole, while the travel time represents the borehole shape and diameter. As many as 288 reflections may be recorded per revolution at up to 12 revolutions per second. The digital amplitude or travel time data are presented using a variety of color schemes that represent the borehole wall.

This ATV image is an oriented, 2-D picture of the borehole wall unwrapped from north to north (Figure 2). Planar features that intersect the borehole appear to be sinusoids on the unwrapped image· To calculate the dip angle of a fracture or bedding feature the amplitude of the sinusoid (h) and the borehole diameter (d) are required. The angle of dip is equal to the arc tangent of h/d, and the dip direction is picked at the trough of the sinusoid (Figure 2).

Sinusoidal features are picked by visual inspection of the amplitude and travel time images using interactive software. The software performs the orientation calculations and assigns a depth to the fracture or bedding feature at the inflection point (middle) of the sinusoid. Features may be subjectively ranked for flow potential using the system in Table 1.

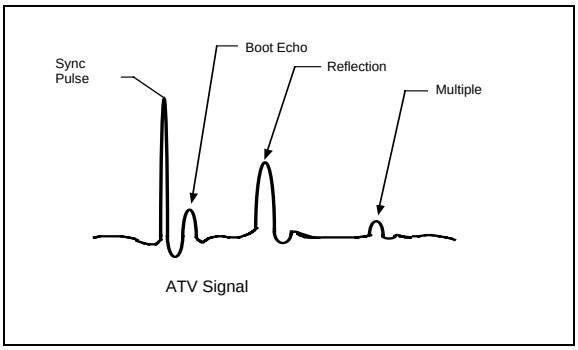


Figure 1: Returned signal.

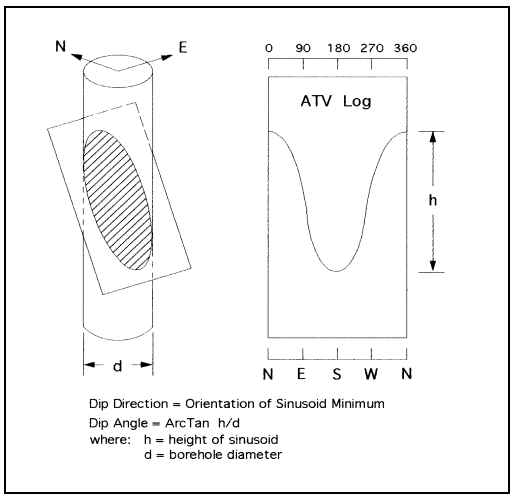


Figure2: Geometric representation of a fracture plane and corresponding ATV log.

C. Caliper Measurement (Mount Sopris Instruments, CLP-2380)

The caliper log represents the average borehole diameter determined by the extension of 3 spring-loaded arms. The measurement of the borehole diameter is determined by the change in the variable pot resistors in the probe, which are internally connected to the caliper arms.

COLOG records the caliper log with a stand-alone three-arm caliper. Calibrations of the probe are done routinely on the bench and in the field directly before the tool is placed into the borehole. Calibration standards consist of rings of known diameters that are placed over the extended arms, as the tool response at these diameters is recorded.

D. Compensated Density (Mount Sopris Instruments, 2GDA-1000)

The principle behind density logging is the detection of Compton-scattered gamma rays that originate from a small radioactive source, housed in the probe, Figure B-1. The intensity of the radiation reflected back to the detectors is primarily a function of the bulk density of the media in which the gamma rays are introduced and scattered.

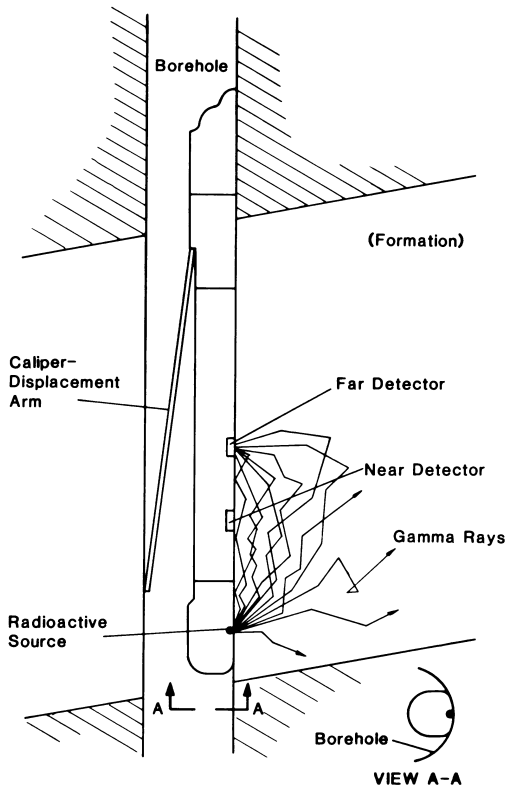


Figure B-1: Probe schematic in the borehole for the dual density (focused) probe.

Compensation is necessary to correct for conditions where the tool is not perfectly flush with the borehole wall (because the borehole is not perfectly smooth), the hole wall is coated with mudcake, or casing material is present between the probe and the formation. When calibrated correctly, compensated measurements made with this tool can be accurate to within 1% of the true bulk density. The density compensation algorithm corrects the long-spaced detector measurement for near-borehole effects that are measured by the short-spaced detector.

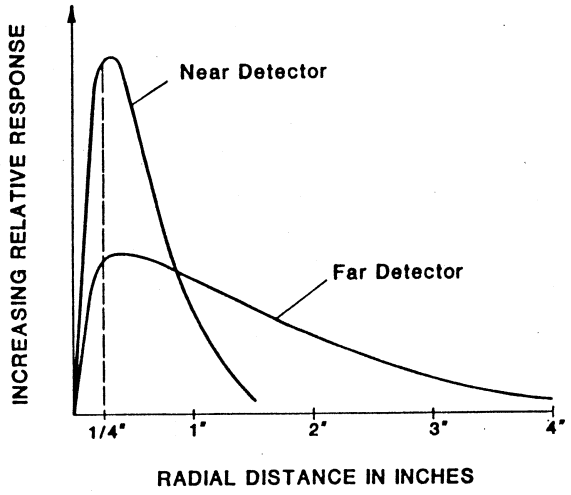


Figure B-2. Estimated depths of investigation for the near and far density detectors (based on physical modeling).

The algorithm COLOG uses was empirically derived specifically for the Mt. Sopris density probes (Scott et al, 1988)[i]. A graph of empirical data that illustrates the compensation is shown in Figure B-3. A caliper log, that measures borehole diameter in inches, is always acquired with the density log.

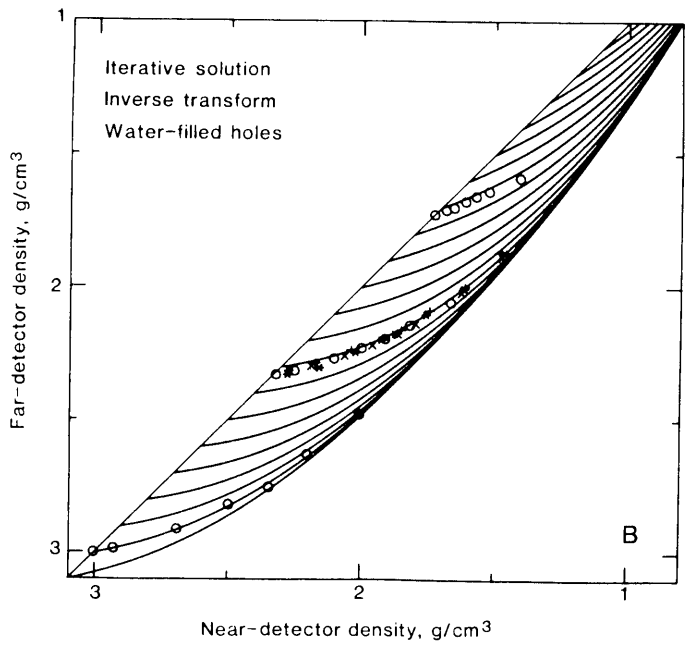


Figure B-3: Compensation curves for the Mt Sopris dual detector density probes. The circles and X's represent actual empirical data from known-density calibration test-holes measured at various standoffs. A polynomial regression corrects values back to the straight line that represents bulk density measured under perfect borehole conditions.

Calibration of the density tool is accomplished by measuring the reflected gamma radiation from materials of known densities. COLOG routinely performs shop calibrations using Lucite® acrylic and aluminum blocks, and periodically checks those calibrations in the USBM calibration test holes, at the Denver Federal Center, Colorado (Figure B-4). Further discussion concerning this calibration method can be found in (Keys 1989)[ii] and (Hearst and Nelson 1985)[iii].

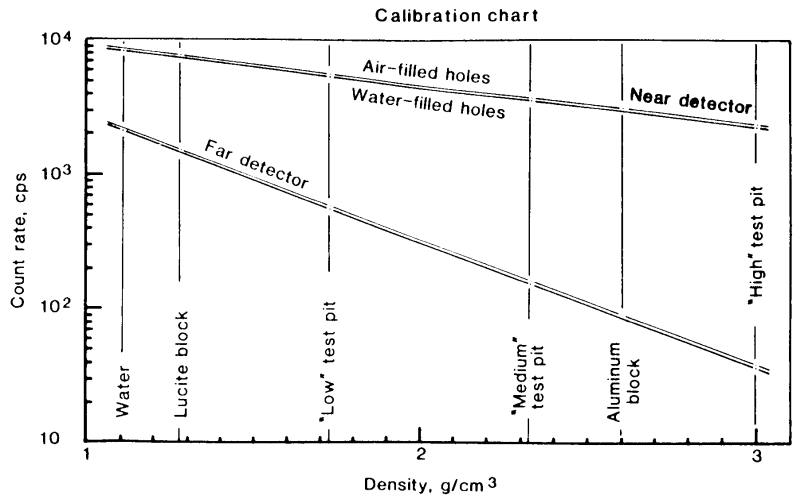


Figure B-4: Calibration chart showing count rate (log scale) from the near and far detectors plotted vs. density (linear scale) for various calibration media (Scott et al, 1988).

Porosity can be derived from compensated bulk densities if the grain density for the rock, and a fluid density for the fluid in the pore space, is known or assumed (Hearst and Nelson, 1985, p. 389). Fluid density rarely deviates much from 1.00 g/cc, and in the lack of core analysis a grain density for clastic sedimentary rock of 2.65 g/cc is often assumed (the density of quartz). However, limestone commonly has matrix densities of 2.70 g/cc or higher, causing the calculated porosities, based on 2.65 g/cc, to be negative. The present of some cementation minerals such as calcite (2.71 g/cc) and siderite (3.94 g/cc) also result in negative porosities. Though deviation of grain densities from the assumed 2.65 g/cc results in calculated porosities that are in error, the occurrence of negative porosities can provide an indication of the presence of these heavier minerals.

E. Neutron Logs (Mount Sopris Instruments, LLP-2676)

High energy neutrons are generated by a 3 curie Am^{241}-Be radioactive source, housed in the probe. These neutrons interact with the media, in a spherical volume, that surrounds the probe, including the borehole fluid and formation. The significant aspects of that interaction are the loss of energy due to collisions with hydrogen atoms and the subsequent capture of the neutrons by various nuclei (including hydrogen). The detector in the neutron tool is spaced 14" from source and counts only the low energy (thermal) neutrons that have not been captured. Within a certain (unspecified) range the thermal neutron count rate is inversely proportional to the population of hydrogen atoms surrounding the tool. Therefore, for a constant borehole size, the neutron count rate can be related to total water content surrounding the tool, registering higher counts for lower water content. The inverse counts vs. water content relationship can be explained in terms of the degree of neutron capture that occurs. For example, lower water content captures fewer low energy neutrons and results in a higher neutron count rate at the detector.

Total water content in a saturated formation is affected by the clay content, because clay minerals contain a significant volume of bound water. In view of the inverse relationship described above, this means that lower neutron count rates are also associated with higher clay content.

F. Induction Resistivity (Advanced Logic Technologies, DIL-45)

The induction measurement is made by using a magnetic field to induce electric currents in the material being surveyed. Because the magnitude of these electric currents is proportional to the conductivity of the media being measured, the magnetic field generated by the induced electric current is measured.

Induction measurements were made with an ALT model DIL-45 induction probe. The tool is designed to measure formation conductivity in millisiemens per meter (mS/m) which is converted to resistivity in software.

The induction probe used at this site contains a transmitter coil that emits a continuous wave of electromagnetic (EM) signal at 25.6 kHz, which produces a primary field in the formation around the borehole. A secondary field produced by the primary field is proportional to the conductivity of the formation and is sensed at the receiver coil located in the probe 83cm from the transmitter coil. A second coil cancels the primary field in the vicinity of the borehole and allows horizontal focusing to reduce or eliminate borehole effects.

This inner radius of investigation and toroidal shape of the induced field makes the EM induction probe an excellent tool for lithologic investigation with little completion induced effects. Induction conductivity measurements with the EMP gives a resistivity measurement (resistivity = 1/conductivity) which is very similar to a 64-inch long normal resistivity log. Because the measurement is obtained electro-magnetically, it can be collected through non-conductive (PVC or fiberglass) casing and in the wet or dry portion of these wells.

G. Natural Gamma (Mount Sopris Instruments, 2SNA-1000)

The natural gamma log (also known as gamma or gamma ray log) provides a measurement recorded in counts per second (CPS), that is proportional to the natural radioactivity of the formation. Actual counts depend upon the detector size and efficiency. The depth of investigation for the Gamma log is typically 10 to 12 inches. This log is used principally for lithologic identification and stratigraphic correlation.

Gamma radiation is measured with scintillation NaI detectors. The gamma-emitting radioisotopes that naturally occur in geologic materials are Potassium^{40} and nuclides in the Uranium^{238} and Thorium^{232} decay series. Potassium^{40} occurs with all potassium minerals, including potassium feldspars. Uranium^{238} is typically associated with dark shales and uranium mineralization. Thorium^{232} is typically associated with biotite, sphene, zircon and other heavy minerals.

The usual interpretation of the gamma log, for hydrogeology applications, is that measured counts are proportional to the quantity of clay minerals present. This assumes that the natural radioisotopes of potassium, uranium, and thorium occur in exchange ions, which are attached to the clay particles. Thus, the correlation is between gamma counts and the cation exchange capacity (CEC). Usually gamma logs show an inverse linear correlation between gamma counts and the average grain size (higher counts indicate smaller grain size, lower counts indicate larger grain size). This relation can become invalid if there are radioisotopes in the mineral grains themselves (immature sandstones or

arkose), and if there are differences in the CEC of clay minerals in the different parts of the formation. Both of these situations are possible in many environments. The former situation would most likely occur in basal conglomerates composed of granitic debris, and the latter where clay occurs as a primary sediment in shale and another as an authigenic mineral deposited in pore spaces during diagenesis.

While spectral-gamma probes are calibrated in physical models with known quantities of specific isotopes, calibration of the standard gamma logging tool is usually performed in large physical models such as the API test pits in Houston, or against a qualitative check-source. In hydrogeology, the gamma measurement is usually a relative log and quantitative calibrations are not routinely performed. However, the stability and repeatability of the natural gamma measurement is routinely checked with a sleeve of known radioactivity. It is also common to routinely check the gamma log by repeat logging a section of a well. Natural radioactive decay follows a Gaussian distribution; that is, approximately 67% of the radioactive response occurs within ± the square root of the count rate. For instance, if a background radiation of 100 CPS is being measured, there is approximately ± 10 CPS variability.

H. Rock Quality Designation

The rock quality designation, RQD, gives a quantitative classification of rock mass solidarity. It is generally estimated using physical rock core in the field, but can be estimated using optical log image features. The RQD is defined as the cumulative length of core pieces longer than 10 centimeters in a run, divided by the total length of the core run. The length of the core run includes all lost sections.

RQD = (Sum of lengths of core sticks > 10 cm long x 100) / (Total length of core run)

RQD	Rock Quality Classification
< 25%	Very Poor
25-50%	Poor
50-75%	Fair
75-90%	Good
90-100%	Excellent

In Appendix C, the RQD is estimated using the following method: Images features were chosen on the optical logs. All features designated as bedding, or non-flow features (rank = 0) were thrown out. All remaining image features were ordered by depth and grouped into 10-foot intervals. The depth difference between each feature was calculated (see column “Delta Depth” on the RQD Tables). Each delta depth greater than 10 centimeters between image features was summed together within each 10-foot interval. If the delta depth between image features was less than 10 centimeters it was marked as 0.0 in the “delta depth” column and not summed. Using the formula above, the RQD was then estimated.

III. Geophysical Logging Results

A. Well CH-0210 Logging Results

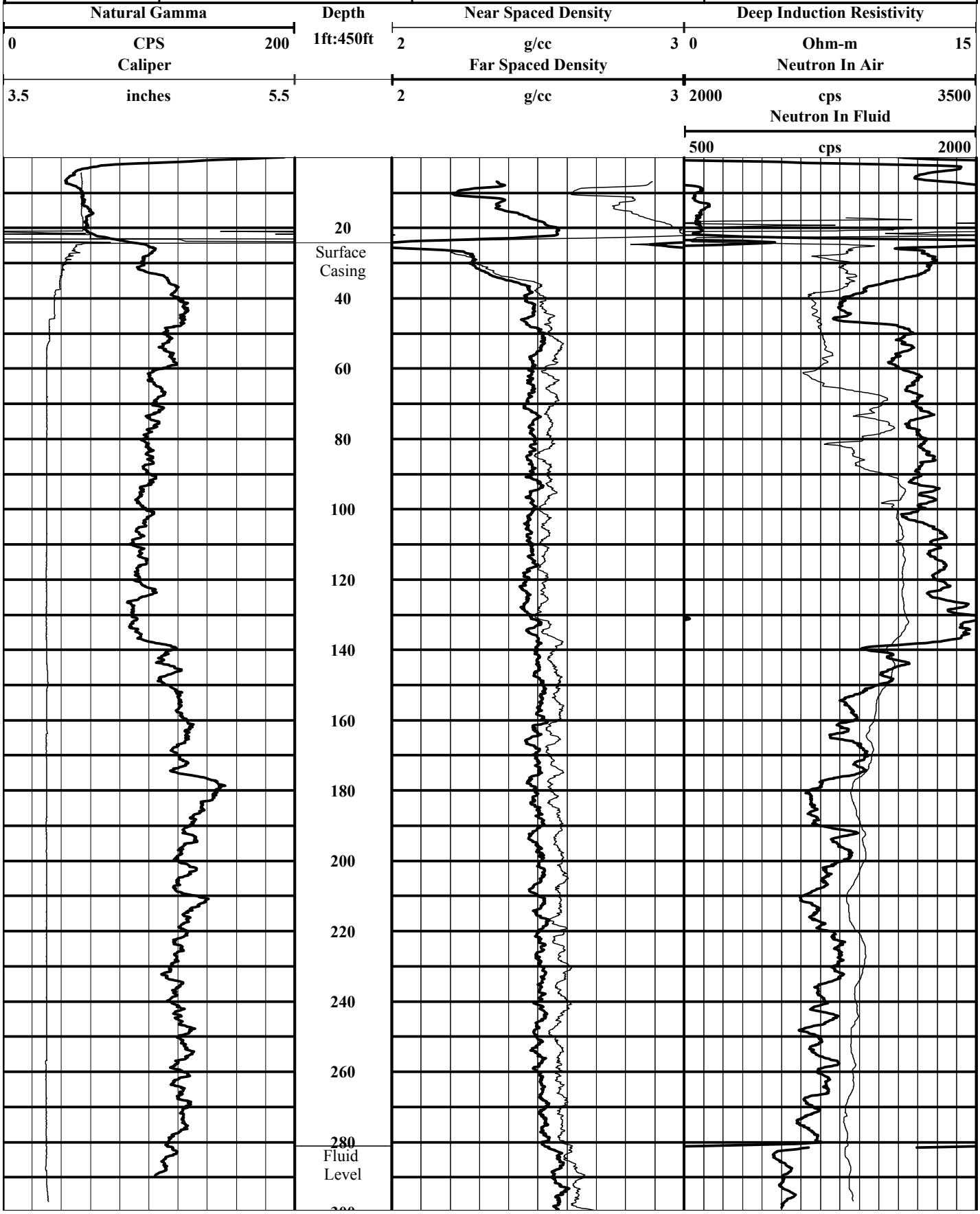
At 0800 hours on December 6, 2005, logging of borehole CH-0210 commenced. Logging was complete at 1430 hours the same day.

The geophysical logs within this borehole are fairly consistent, overall. Fluid filled the borehole to 182 feet, at the time of logging. Unusually high neutron counts were observed above 139 feet, with respect to most of the boreholes logged for this project, specifically from the bottom of casing to about 35 feet and from 47 to 139 feet. Similar anomalous values were also encountered in CH0208. Methane was noted in CH0208, but not noted in this borehole, though the optical televiewer captured a foggy image above about 60 feet. These encounters with borehole gasses may be related to the elevated neutron count rate. However, concentrated hydrocarbons, including methane, should slow and absorb neutron particles. The increased natural gamma counts, decreased neutron counts, and decreased resistivity from about 176 to 191 feet, indicate a layer with relatively more clay content, and more clay-bound water. The thin layer at about 211 feet exhibits similar properties, as does the layer from about 235 feet to borehole total depth. Water bound in such clayey layers is not likely to permeate into the borehole. Rock density is consistent, except in fractured zones. Air-filled fractures create the low-density anomalies from the bottom of casing to about 36 feet. Geophysical logs are presented above the casing level, but are not discussed in this report. There appears to be no highly fractured zone within this borehole. Fractures are most abundant on the televiewer logs above 38 feet. Other fractures are evident at about 46, 164, and 176 feet. All fractures and identified bedding planes are listed in Appendix B: Orientation Summary Tables. Calculated RQD values, at 10-foot increments, are listed in the Appendix C: Rock Quality Designation Tables.

Geophysical Summary Plot

COMPANY: Stoller	PROJECT: Crescent Junction Disposal Site
DATE LOGGED: 06 December 2005	WELL: CH-0210

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com



Geophysical Summary Plot

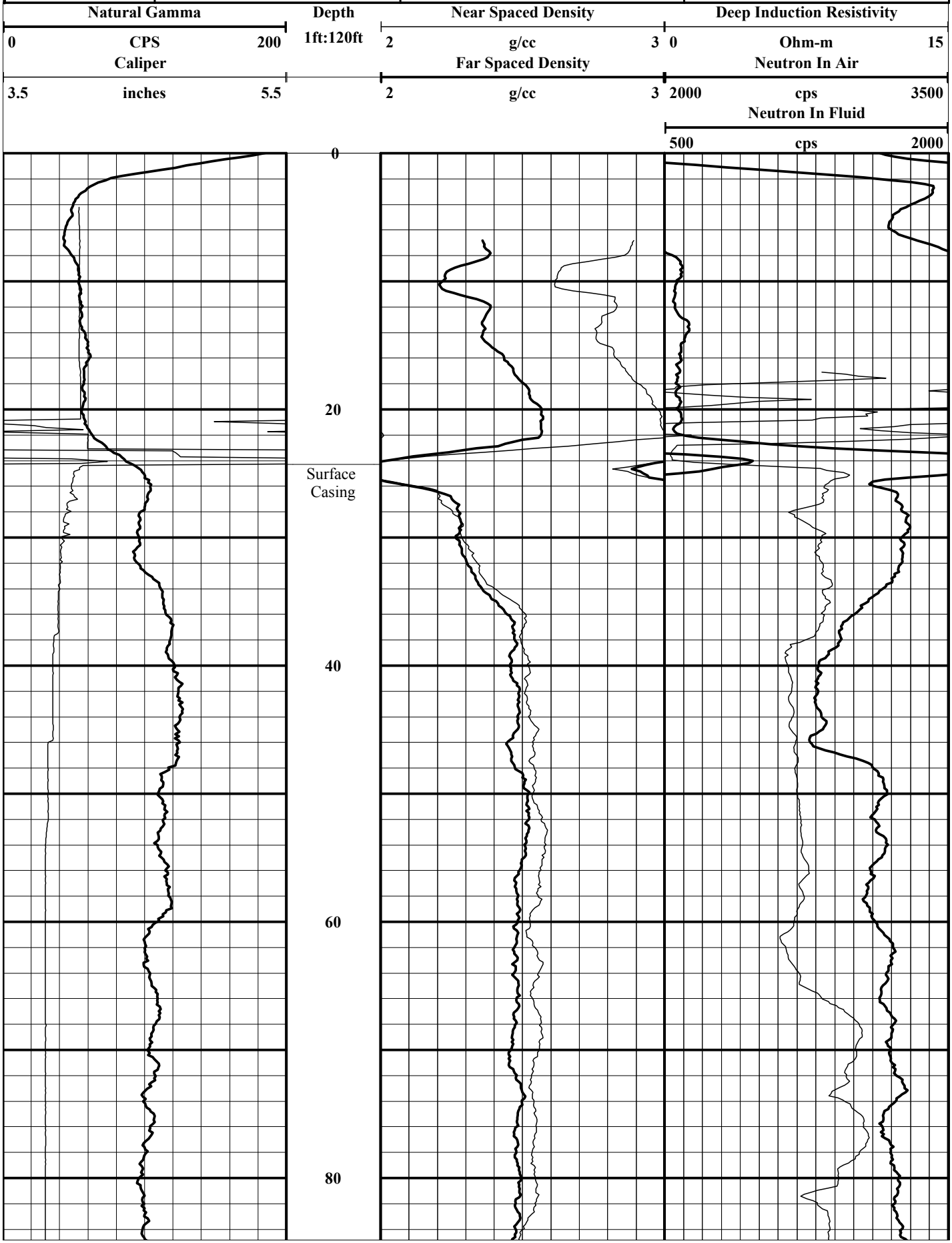
COMPANY: Stoller

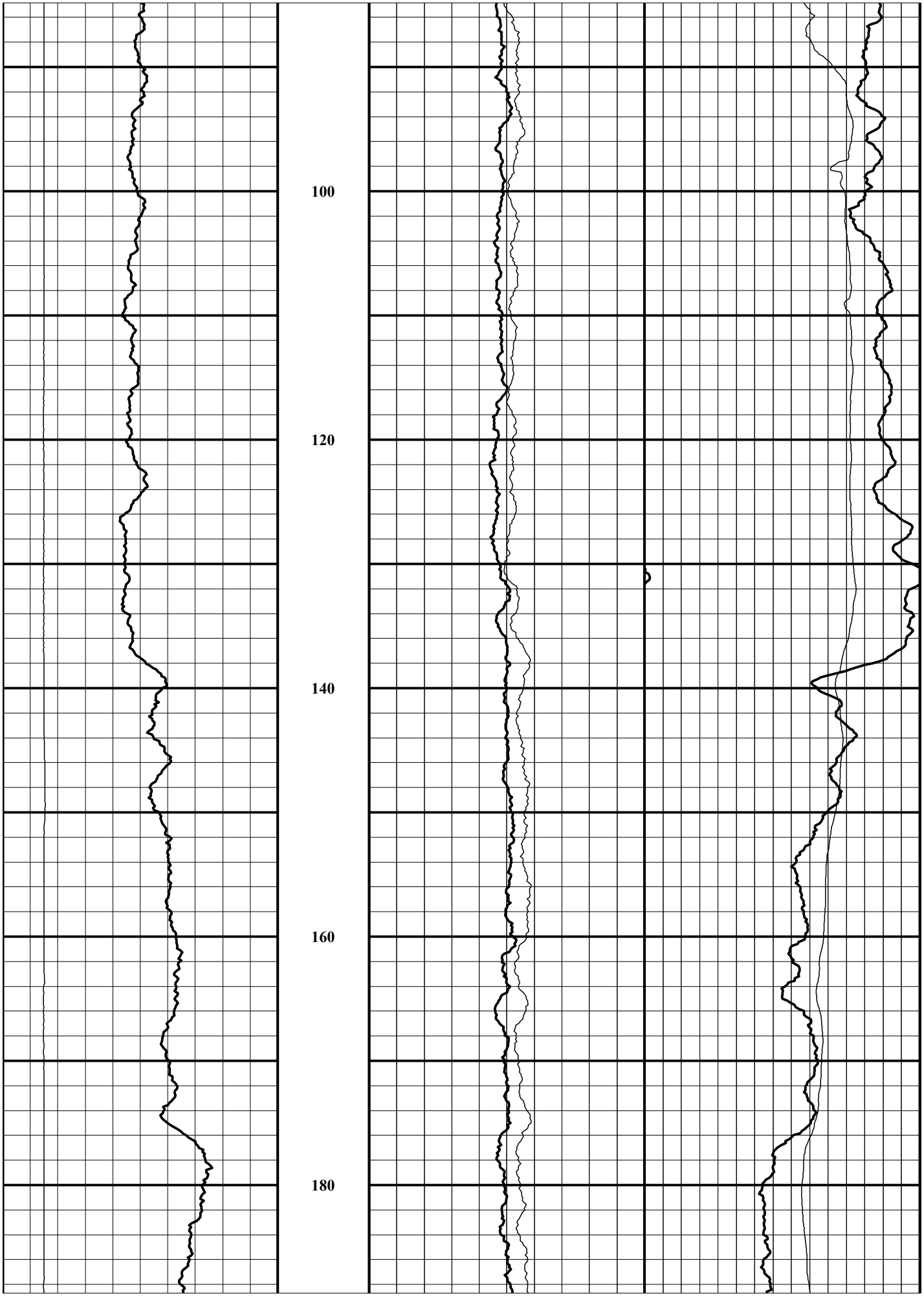
PROJECT: Crescent Junction Disposal Site

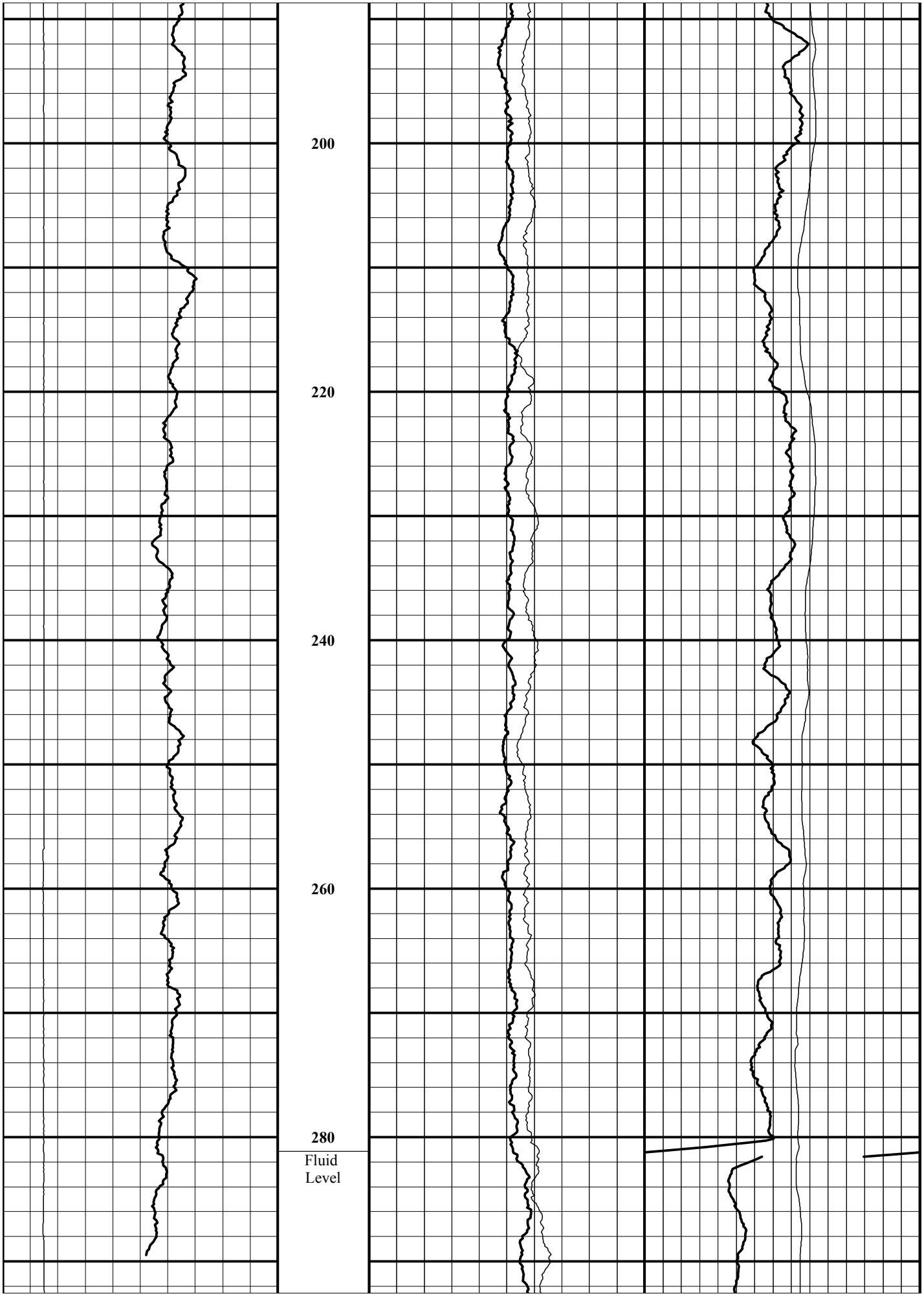
DATE LOGGED: 06 December 2005

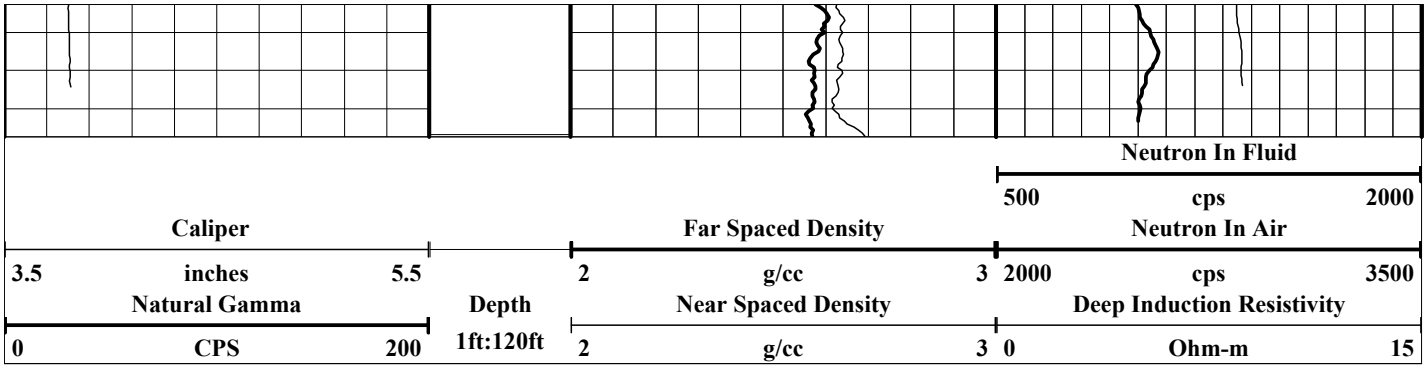
WELL: CH-0210

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com




100
120
140
160
180


200
220
240
260
280
Fluid
Level


Neutron In Fluid
500
cps
2000
Caliper
Far Spaced Density
Neutron In Air
3.5
inches
5.5
2
g/cc
3
2000
cps
3500
Natural Gamma
Depth
Near Spaced Density
Deep Induction Resistivity
0
CPS
200
1ft:120ft
2
g/cc
3
0
Ohm-m
15

B. Well CH-0209 Logging Results

At 1730 hours on December 6, 2005, logging of borehole CH-0209 commenced. An optical televiewer log was recorded and logging finished for the day at 1830. Logging recommenced December 7, 2005 at 0700 hours and was complete at 1100 hours the same day.

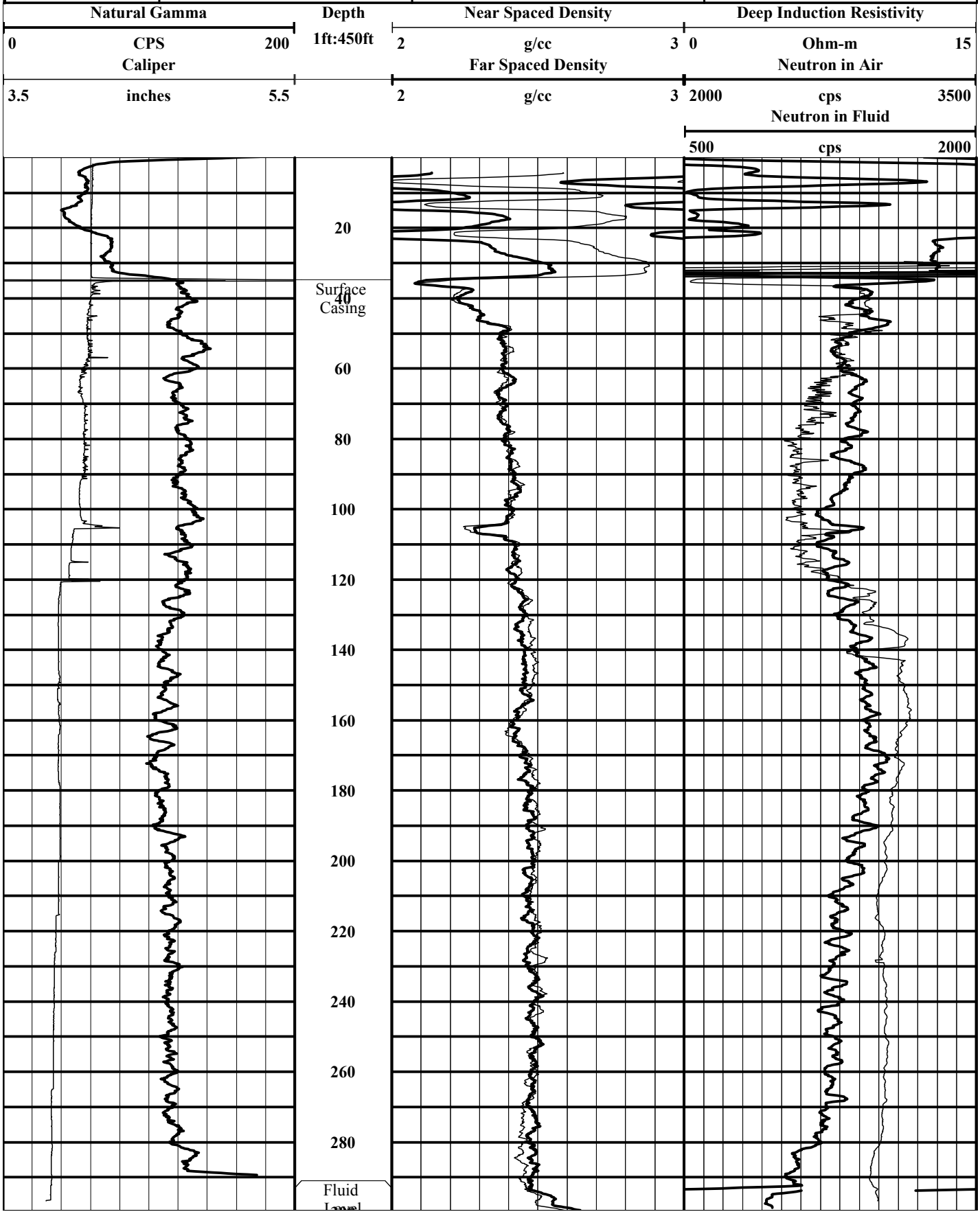
The geophysical logs within this borehole are highly consistent, overall. Fluid filled the borehole to only 293 feet, at the time of logging. The increased natural gamma counts, decreased neutron counts, and decreased resistivity from about 282 feet to borehole total depth, indicate a layer with relatively more clay content, and more clay-bound water. Water bound in such clayey layers is not likely to permeate into the borehole. Rock density is consistent, except in fractured zones. Air-filled fractures create the low-density anomalies above about 47 feet, and at 105 feet. Geophysical logs are presented above the casing level, but are not discussed in this report. Fractures are most abundant on the televiewer logs above 57 feet. Other fractures are evident at about 60, 94, 97, and 102 feet, from 103 to 106 feet, and at about 116, 121, 134, 216, 226, and 265 feet. All fractures and identified bedding planes are listed in Appendix B: Orientation Summary Tables. Calculated RQD values, at 10-foot increments, are listed in Appendix C: Rock Quality Designation Tables.

Geophysical Summary Plot

COMPANY: Stoller | PROJECT: Crescent Junction Disposal Site

DATE LOGGED: 07 December 2005 | WELL: CH-0209

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com



Geophysical Summary Plot

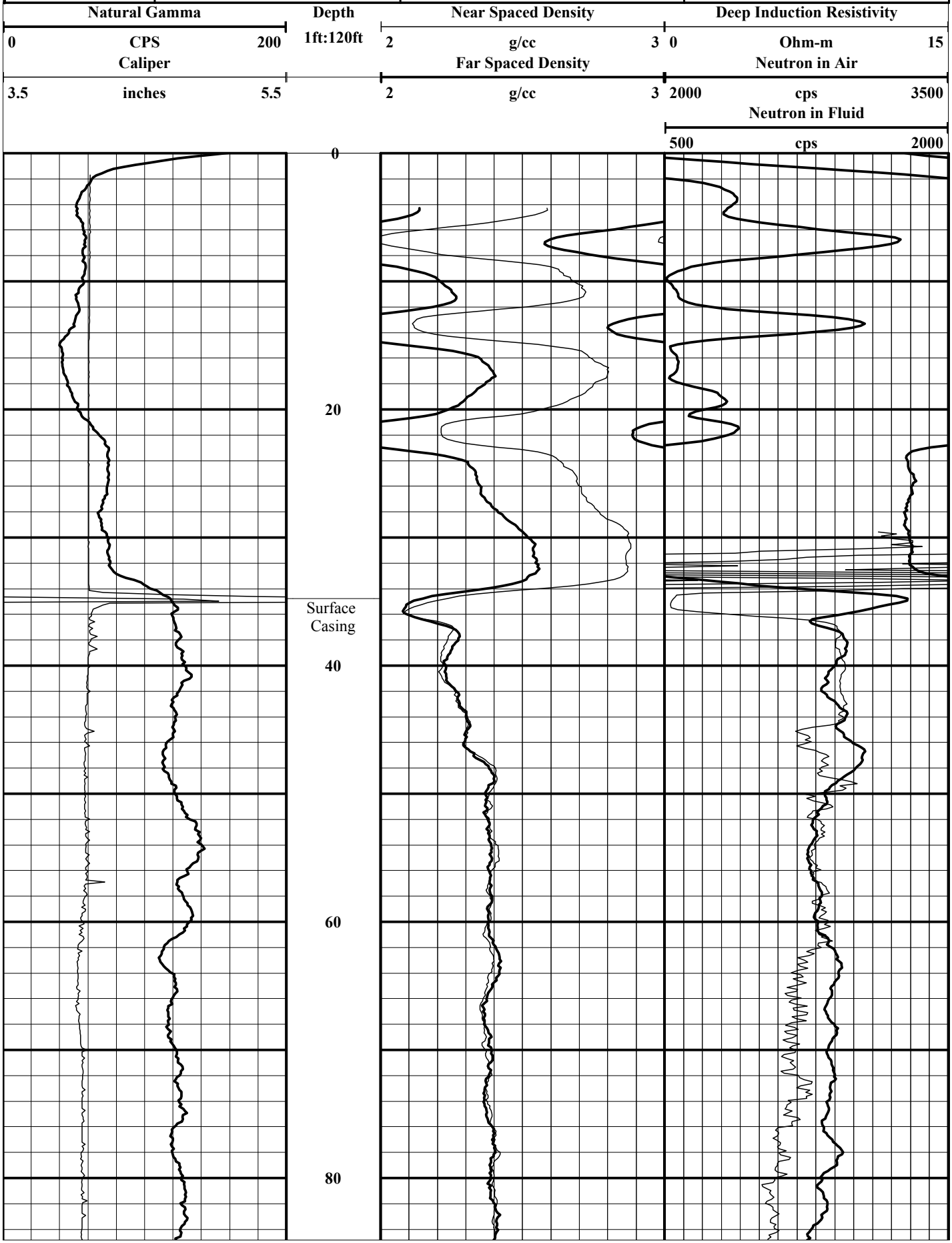
COMPANY: Stoller

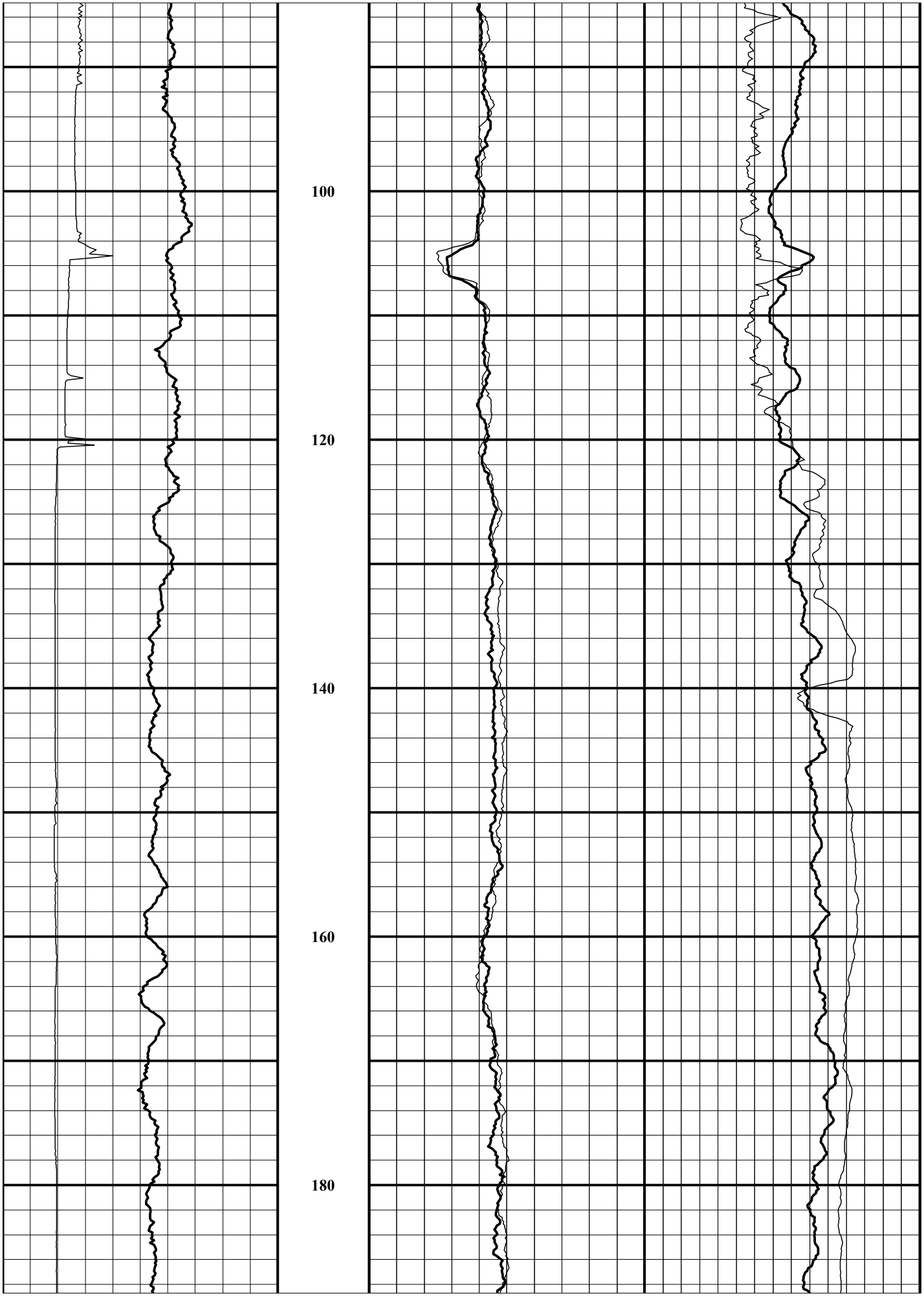
PROJECT: Crescent Junction Disposal Site

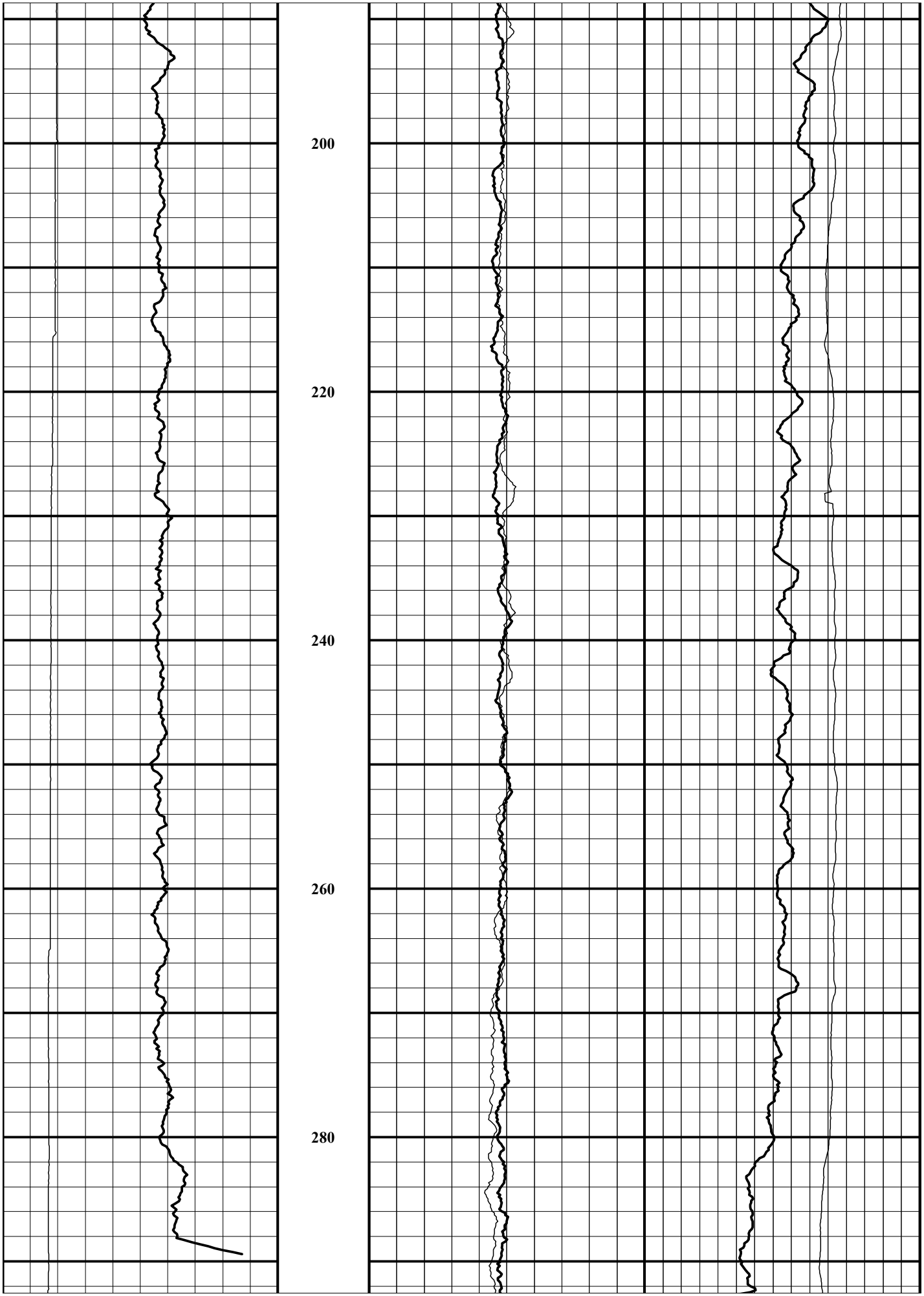
DATE LOGGED: 07 December 2005

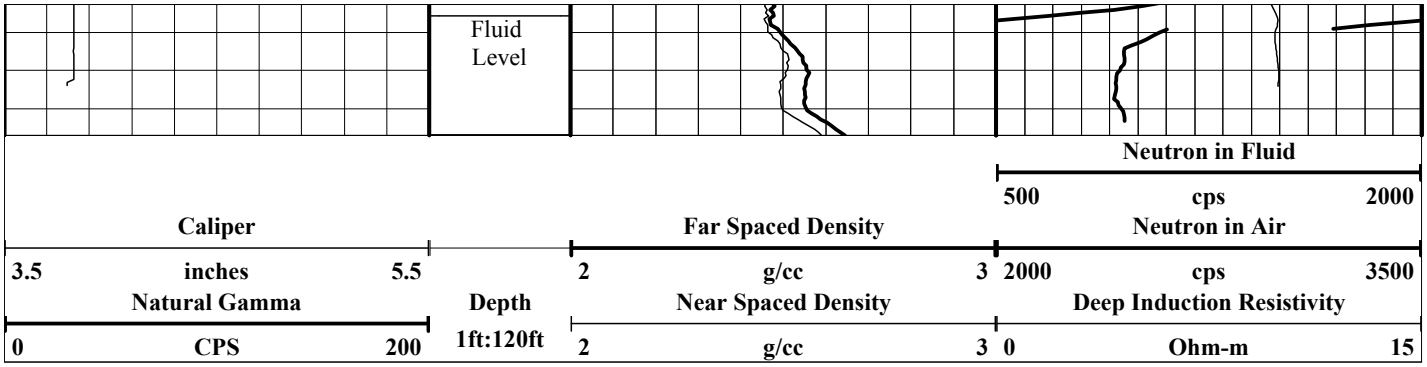
WELL: CH-0209

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com




100
120
140
160
180


200
220
240
260
280


Fluid
Level
Neutron in Fluid
500
cps
2000
Caliper
Far Spaced Density
Neutron in Air
3.5
inches
5.5
2
g/cc
3
2000
cps
3500
Natural Gamma
Depth
Near Spaced Density
Deep Induction Resistivity
0
CPS
200
1ft:120ft
2
g/cc
3
0
Ohm-m
15

C. Well CH-0208 Logging Results

At 1100 hours on December 7, 2005, logging of borehole CH-0208 commenced. Logging was complete at 1730 hours the same day.

The geophysical logs within this borehole are fairly consistent, overall. Fluid filled the borehole to 187 feet, at the time of logging. Unusually high neutron counts were observed above 102 feet, with respect to most of the boreholes logged for this project, especially from the bottom of casing to about 70 feet. Similar anomalous values were also encountered in CH0210. Methane was noted in this borehole, but not noted in CH0210, though the optical televiewer captured a foggy image within that borehole. These encounters with borehole gasses may be related to the elevated neutron count rate. However, concentrated hydrocarbons, including methane, should slow and absorb neutron particles. The increased natural gamma counts, decreased neutron counts, and decreased resistivity from about 136 to 146 feet, indicate a layer with relatively more clay content, and more clay-bound water. The layer from about 159 to 171 feet exhibits similar properties, as does a thin layer at about 215 feet, below which the clay content decreases gradually, until it reaches to its lowest levels at about 282 feet. Water bound in such clayey layers is not likely to permeate into the borehole. Rock density is consistent, with few air-filled fractures to decrease the values. There are higher density anomalies on the near-spaced detector from about 194 to 214 feet and about 224 feet to the borehole total depth. Because these anomalies are not observed on the far detector, they may be caused by shallow fluid intrusion into the borehole wall, indicating moderate porosity in these zones, relative to the apparent low porosity of the majority of this formation. The intrusion is not deep enough to affect the far detector. Geophysical logs are presented above the casing level, but are not discussed in this report. There appears to be no highly fractured zone within this borehole. Notable fractures were observed at 45, 55, 57, 59, 67, 79, 124, 137, 188, 202, 208, 211, 228, 231, 246, 251, and 257 feet. All fractures and identified bedding planes are listed in Appendix B: Orientation Summary Table. Calculated RQD values, at 10-foot increments, are listed in Appendix C: Rock Quality Designation Tables.

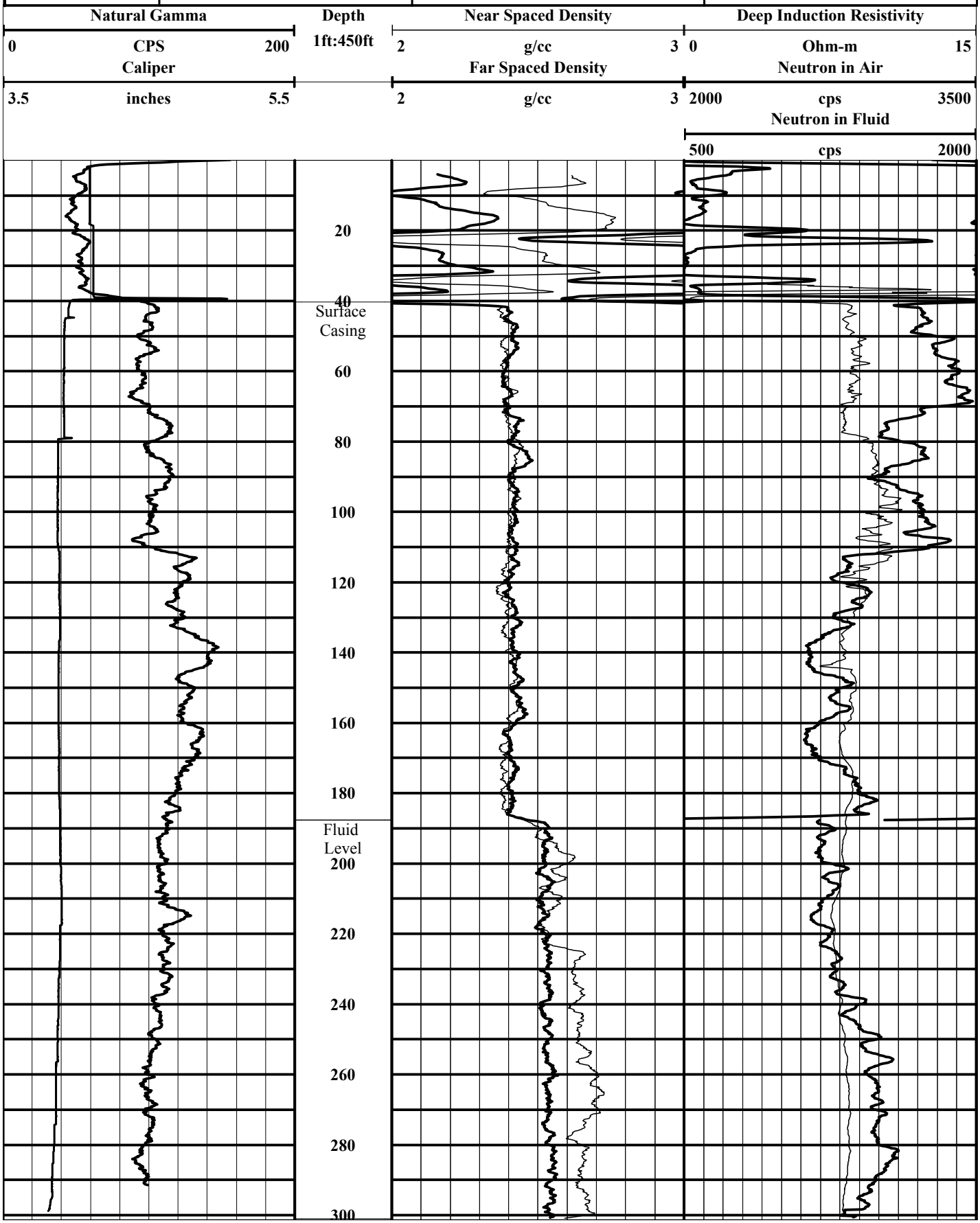
Geophysical Summary Plot

COLOG

BOREHOLE GEOPHYSICS & HYDROPHYSICS — A DIVISION OF LAYNE CHRISTENSEN COMPANY

COMPANY: Stoller	PROJECT: Crescent Junction Disposal Site
DATE LOGGED: 07 December 2005	WELL: CH-0208

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com



Geophysical Summary Plot

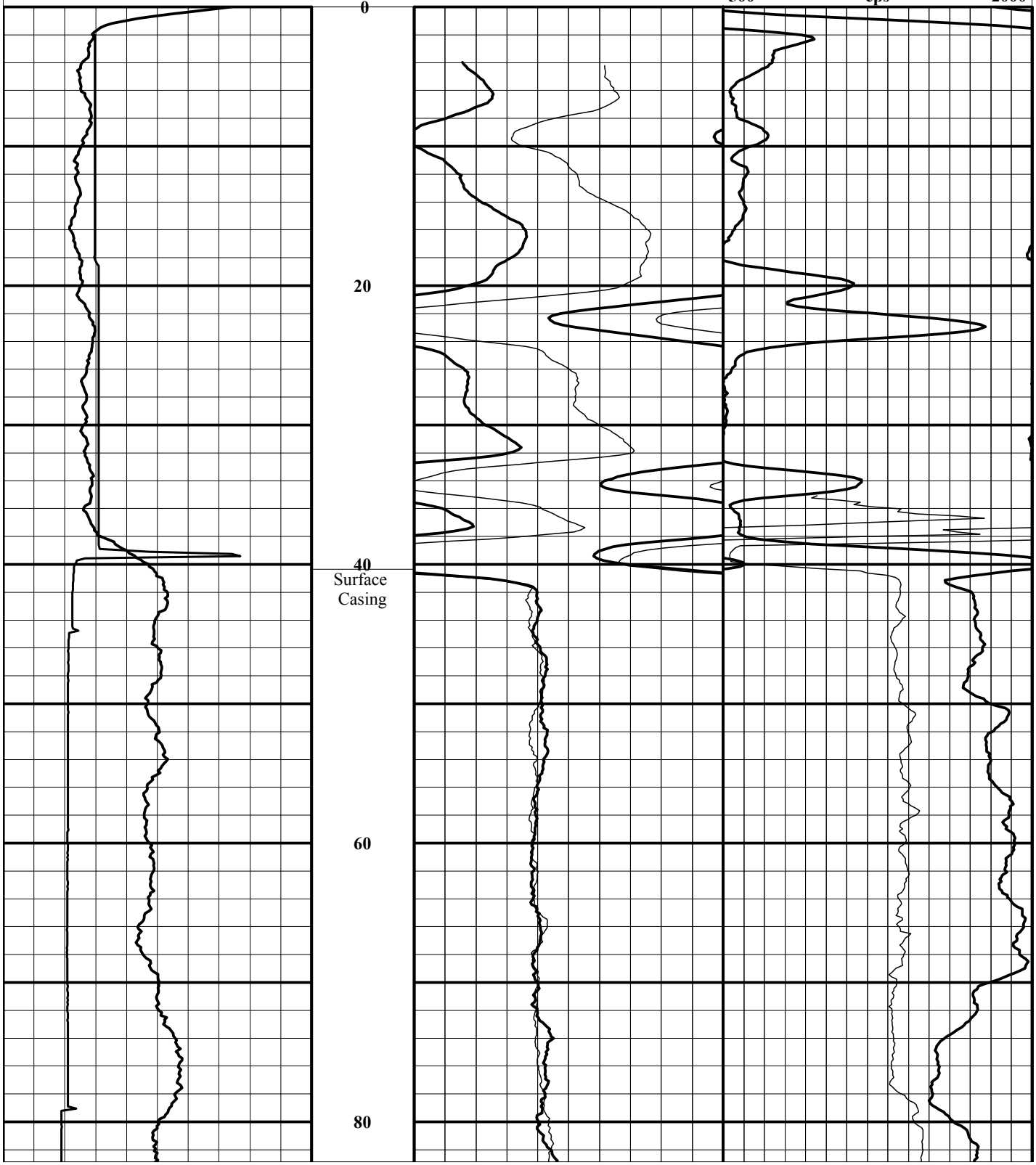
COLOG

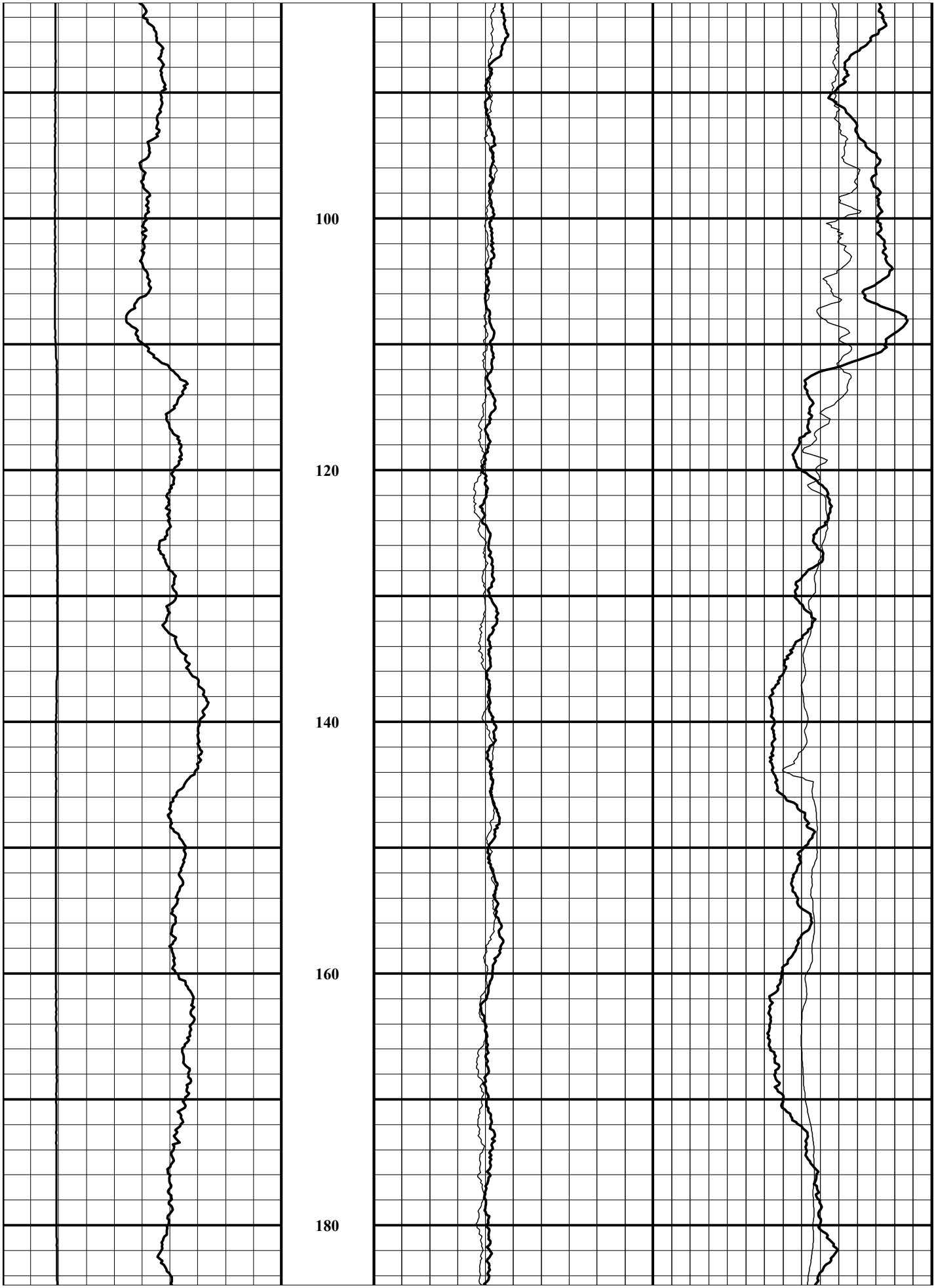
BOREHOLE GEOPHYSICS & HYDROPHYSICS — A DIVISION OF LAYNE CHRISTENSEN COMPANY

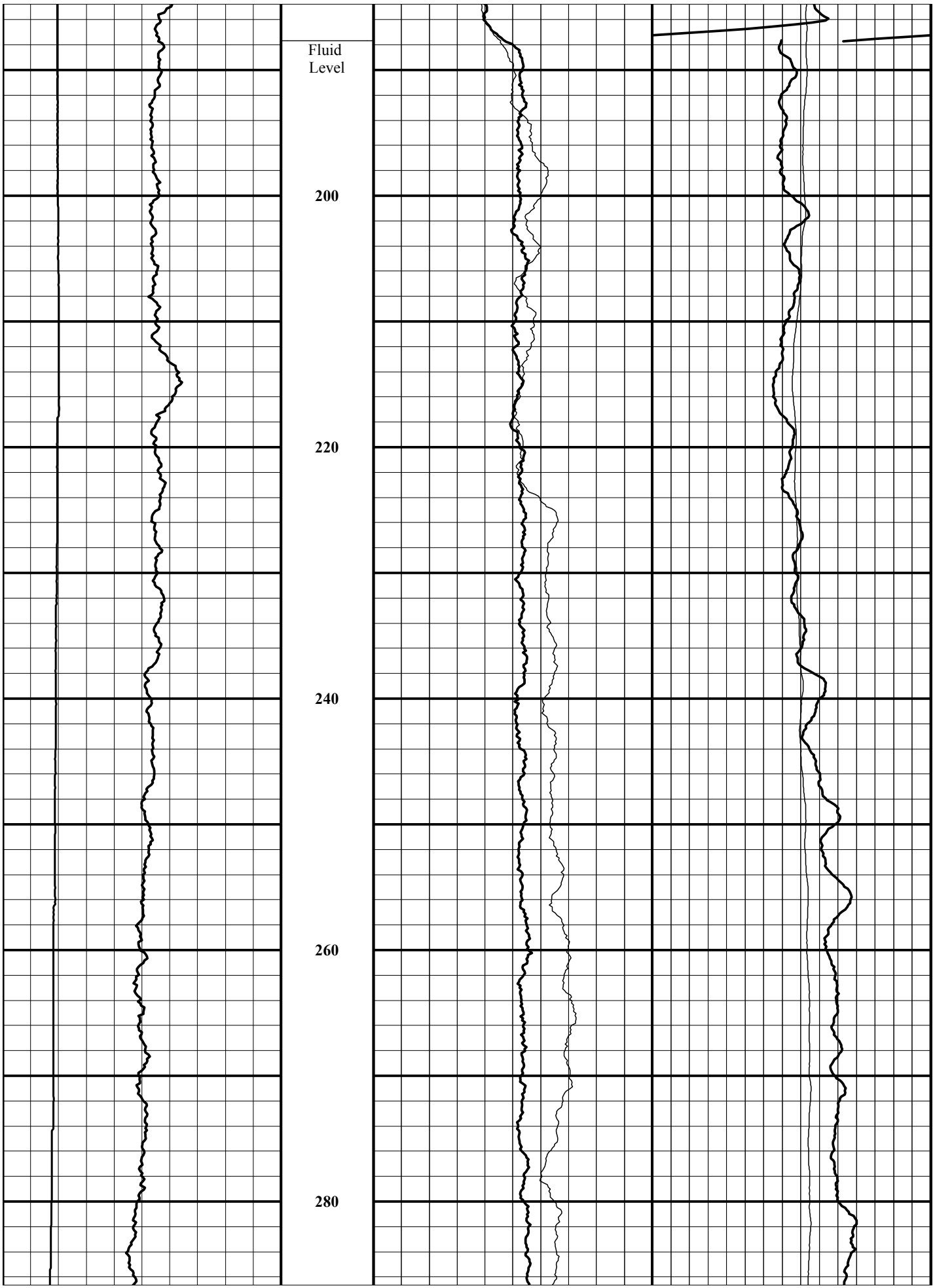
COMPANY: Stoller	PROJECT: Crescent Junction Disposal Site
DATE LOGGED: 07 December 2005	WELL: CH-0208

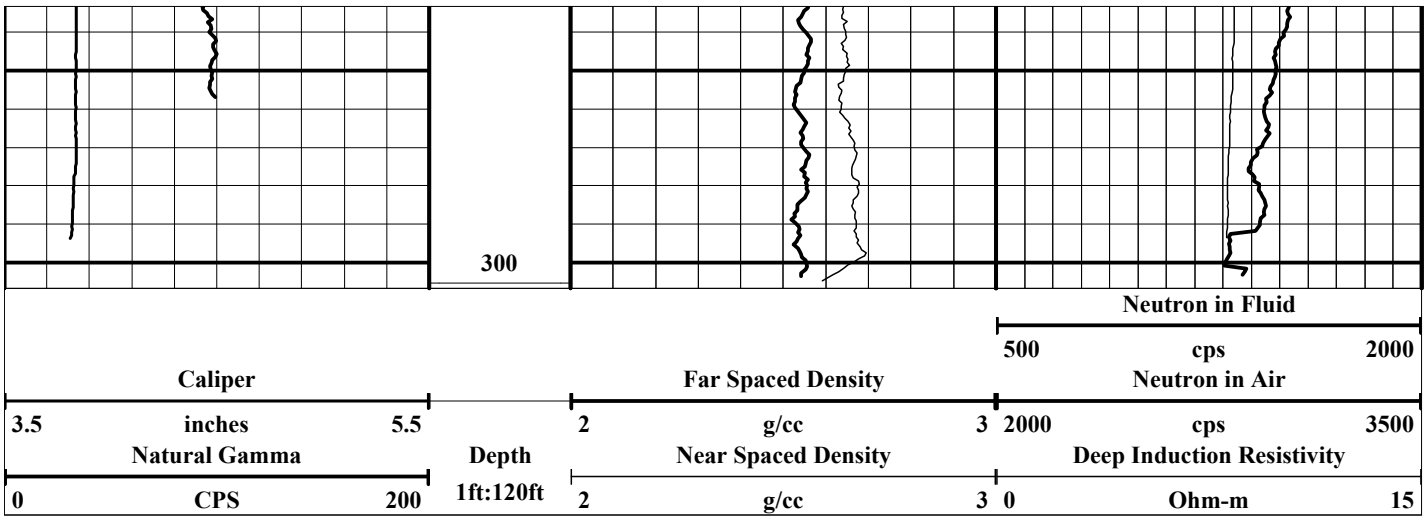
COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com

Natural Gamma	Depth	Near Spaced Density	Deep Induction Resistivity
0 CPS 200	1ft:120ft	2 g/cc 3	0 Ohm-m 15
Caliper		Far Spaced Density	Neutron in Air
3.5 inches 5.5		2 g/cc 3	2000 cps 3500
			Neutron in Fluid
			500 cps 2000




100
120
140
160
180


Fluid
Level
200
220
240
260
280


300
Neutron in Fluid
500
cps
2000
Caliper
Far Spaced Density
Neutron in Air
3.5
inches
5.5
2
g/cc
3
2000
cps
3500
Natural Gamma
Depth
Near Spaced Density
Deep Induction Resistivity
0
CPS
200
1ft:120ft
2
g/cc
3
0
Ohm-m
15

D. Well CH-0207 Logging Results

At 0700 hours on December 8, 2005, logging of borehole CH-0207 commenced. Logging was complete at 1330 hours the same day.

The geophysical logs within this borehole are fairly consistent, overall. Fluid filled the borehole to only 298 feet, at the time of logging. The increased natural gamma counts, decreased neutron counts, and decreased resistivity from about 40 to 61 feet, indicate a layer with relatively more clay content, and more clay-bound water. The layer from about 130 feet exhibits similar properties, to about 231 feet, where the clay content decreases gradually, until it reaches to its lowest levels at about 298 feet. Water bound in such clayey layers is not likely to permeate into the borehole. Rock density is consistent, except in fractured zones. Air-filled fractures create the low-density anomalies above about 40 feet and from about 59 to 66 feet. Geophysical logs are presented above the casing level, but are not discussed in this report. Fractures are most abundant on the televiewer logs above 69 feet, specifically above 44 feet. Other fractures are evident at about 110, 140, and 215 feet. All fractures and identified bedding planes are listed in Appendix B: Orientation Summary Table. Calculated RQD values, at 10-foot increments, are listed in Appendix C: Rock Quality Designation Table.

Geophysical Summary Plot

COMPANY: Stoller

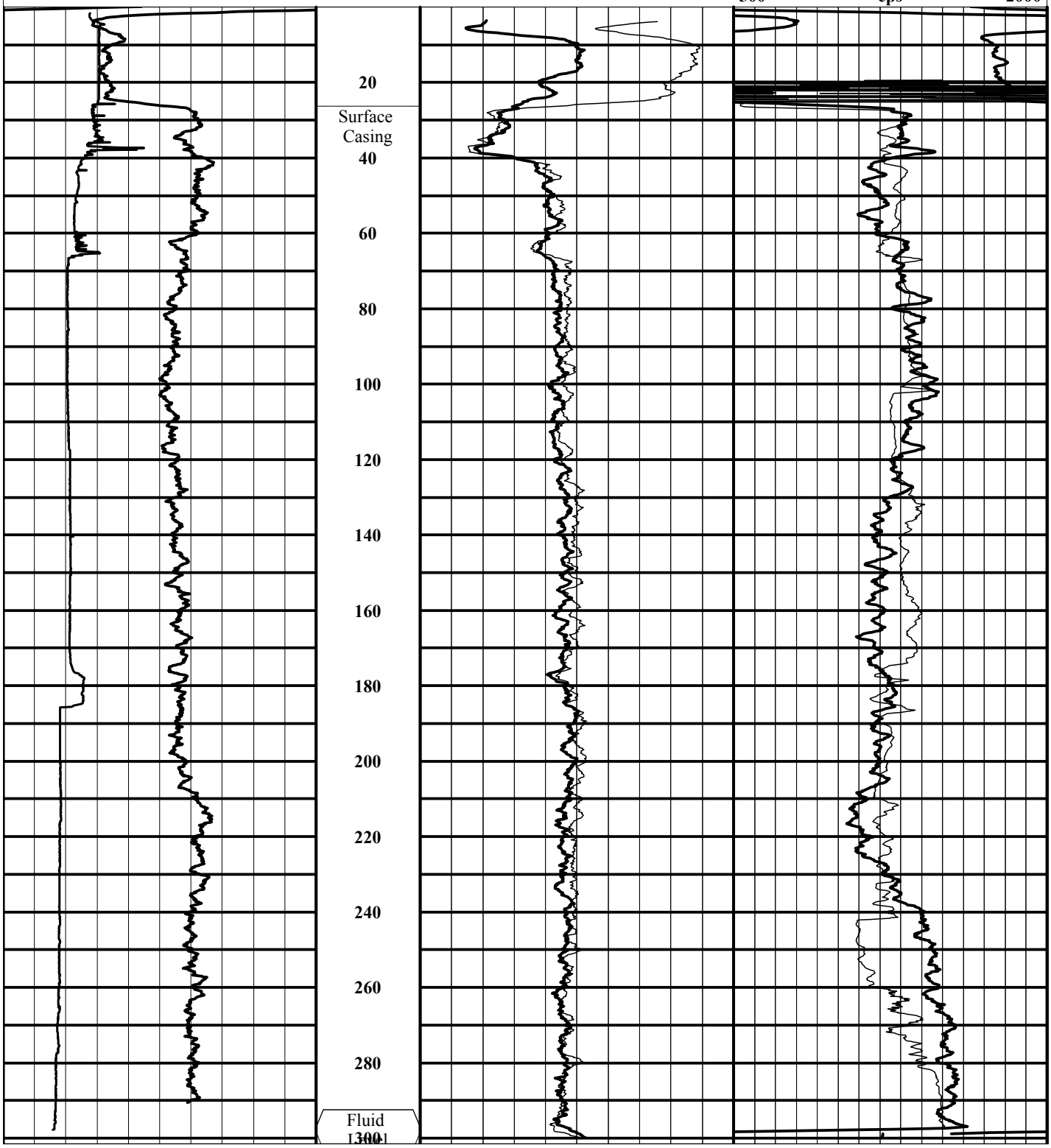
PROJECT: Crescent Junction Disposal Site

DATE LOGGED: 08 December 2005

WELL: CH-0207

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com

Natural Gamma	Depth	Near Spaced Density	Deep Induction Resistivity
0 CPS 200	1ft:450ft	2 g/cc 3	0 Ohm-m 15
Caliper		Far Spaced Density	Neutron in Air
3.5 inches 5.5		2 g/cc 3	2000 cps 3500
			Neutron in Fluid
			500 cps 2000



Geophysical Summary Plot

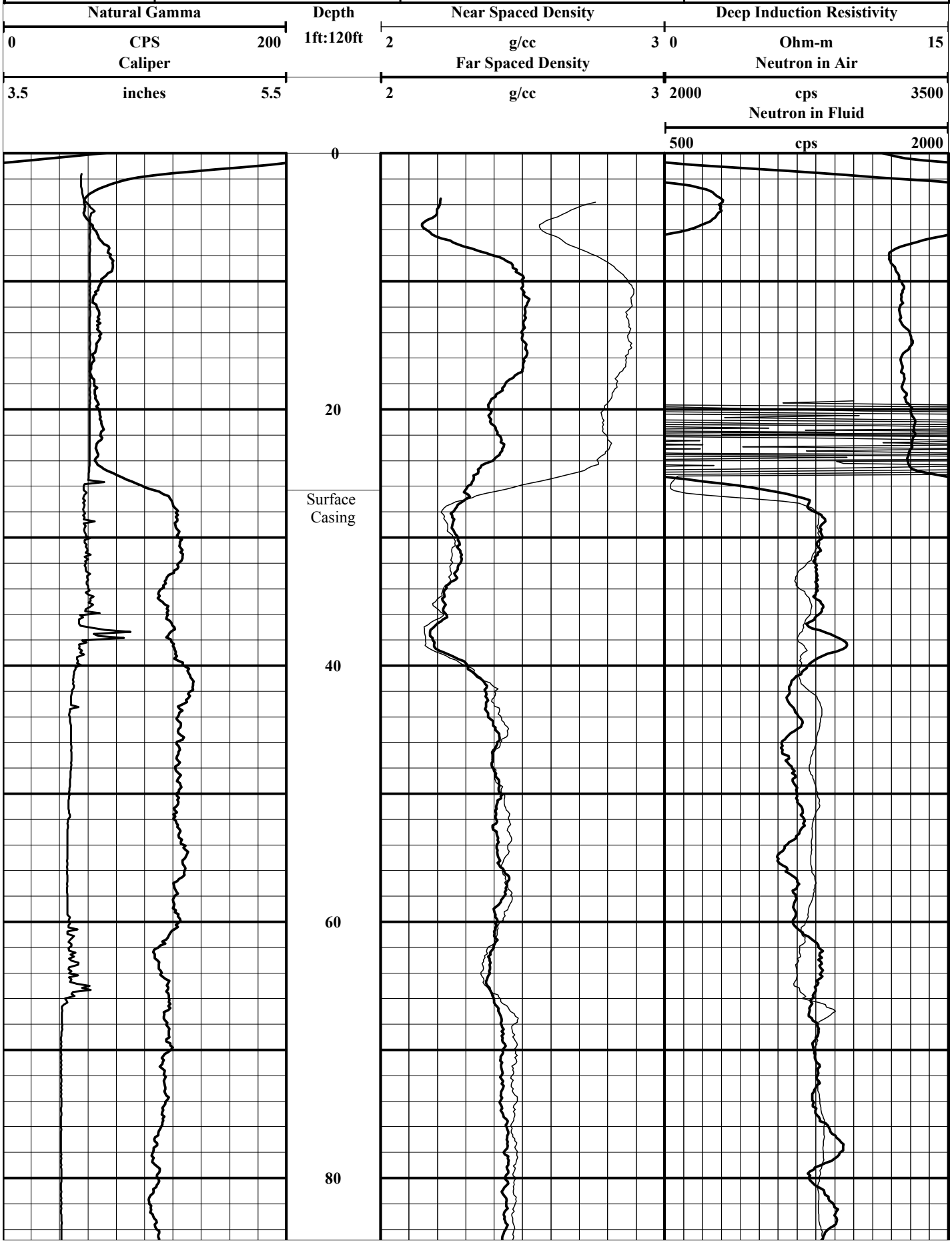
COMPANY: Stoller

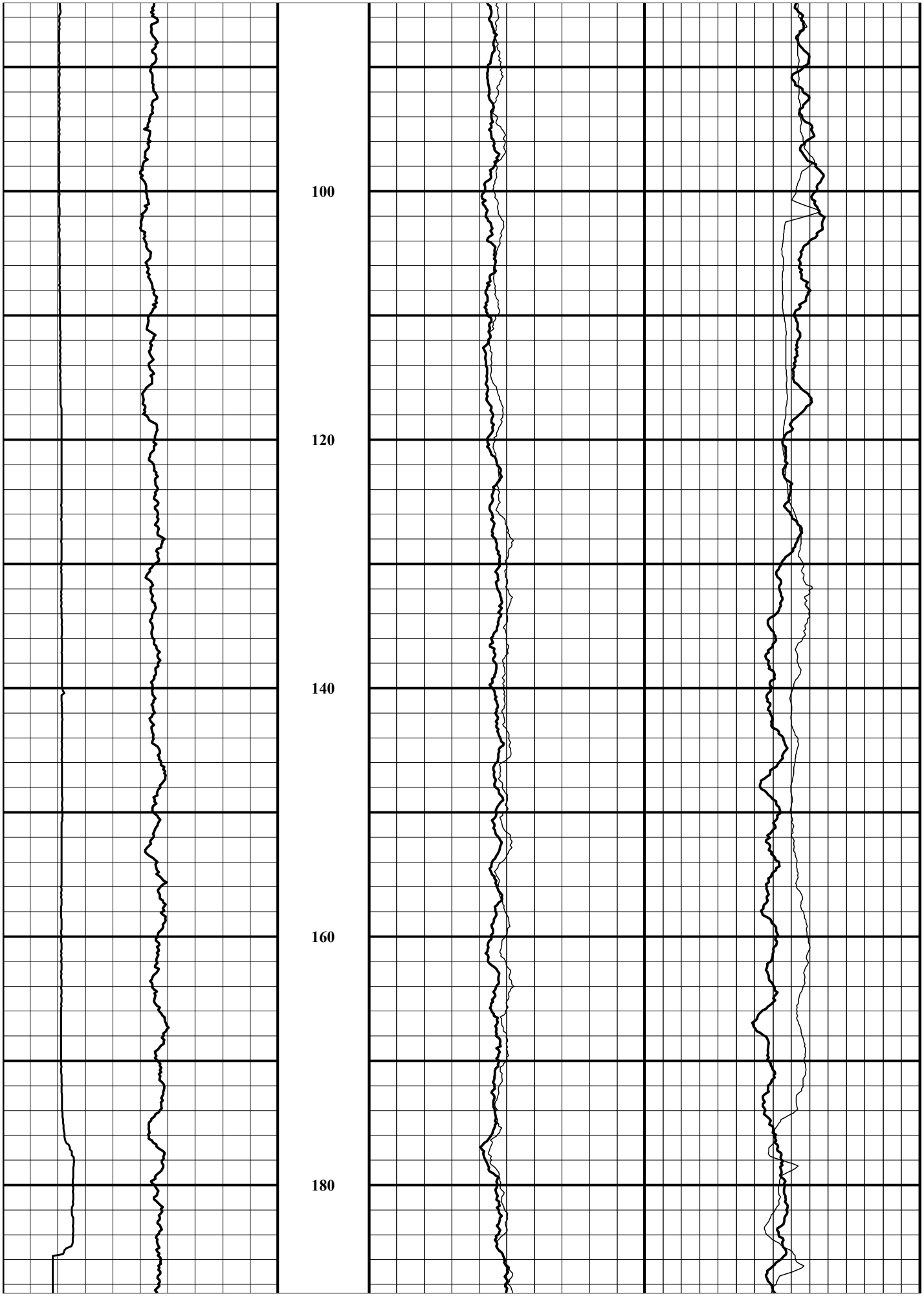
PROJECT: Crescent Junction Disposal Site

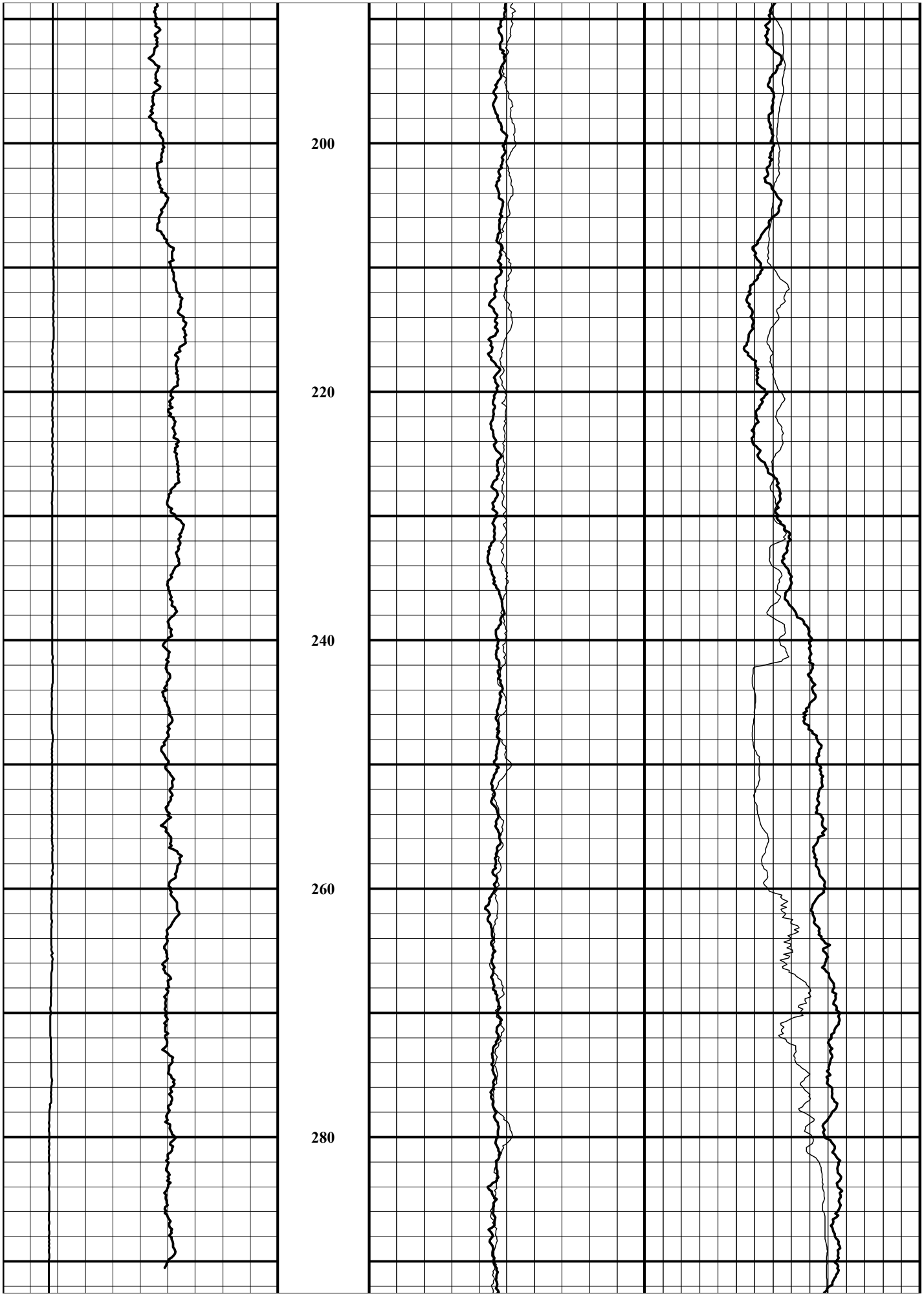
DATE LOGGED: 08 December 2005

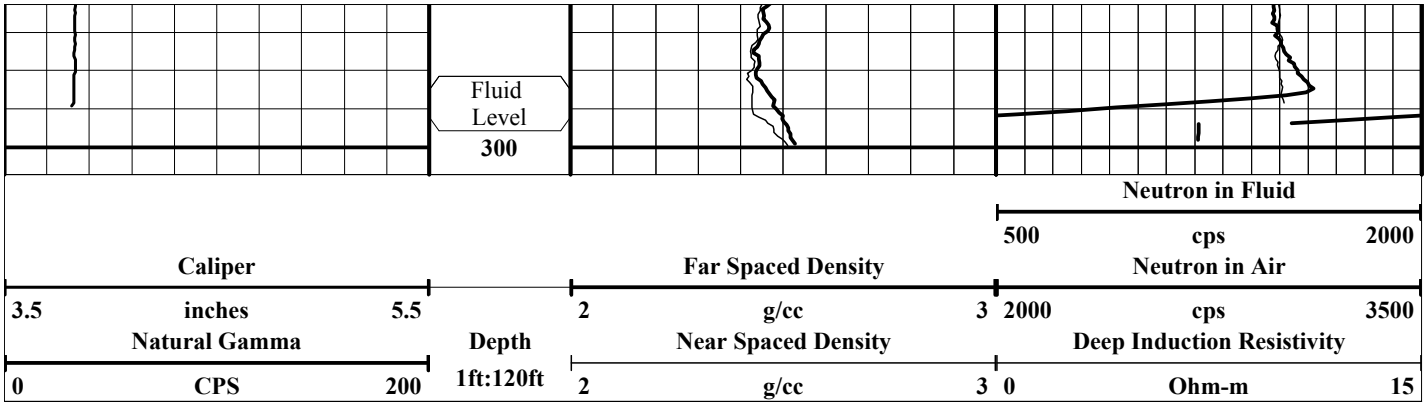
WELL: CH-0207

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com




100
120
140
160
180


200
220
240
260
280


Fluid
Level
300
Neutron in Fluid
500
cps
2000
Caliper
Far Spaced Density
Neutron in Air
3.5
inches
5.5
2
g/cc
3
2000
cps
3500
Natural Gamma
Depth
Near Spaced Density
Deep Induction Resistivity
0
CPS
200
1ft:120ft
2
g/cc
3
0
Ohm-m
15

E. Well CH-0206 Logging Results

At 1330 hours on December 8, 2005, logging of borehole CH-0206 commenced. Logging was complete at 1800 hours the same day.

The geophysical logs within this borehole are fairly consistent, overall. No fluid was encountered in this borehole at the time of logging. The increased natural gamma counts, decreased neutron counts, and decreased resistivity from about 63 to 79 feet, indicate a layer with relatively more clay content, and more clay-bound water. The layer from about 107 feet to the bottom of the borehole exhibits similar properties, especially from 140 to about 222 feet. Water bound in such clayey layers is not likely to permeate into the borehole. Rock density is consistent, except in fractured zones. Air-filled fractures create the low-density anomaly above about 32 feet. The apparently low near-spaced density values, below about 255 feet, are likely the result of a small gap between the probe face and the borehole wall, possibly caused by dragging some debris up from the bottom of the hole. The gap is not large enough to affect the far-spaced density, and disappears as debris is lost, on the way up the borehole. Geophysical logs are presented above the casing level, but are not discussed in this report. Fractures are most abundant on the televiewer logs above 64 feet, specifically above 45 feet. Other fractures are evident at about 73, 124, 126, 164, 181, 199 to 201, 214, and 217 feet. All fractures and identified bedding planes are listed in Appendix B: Orientation Summary Tables. Calculated RQD values, at 10-foot increments, are listed in Appendix C: Rock Quality Designation Tables.

Geophysical Summary Plot

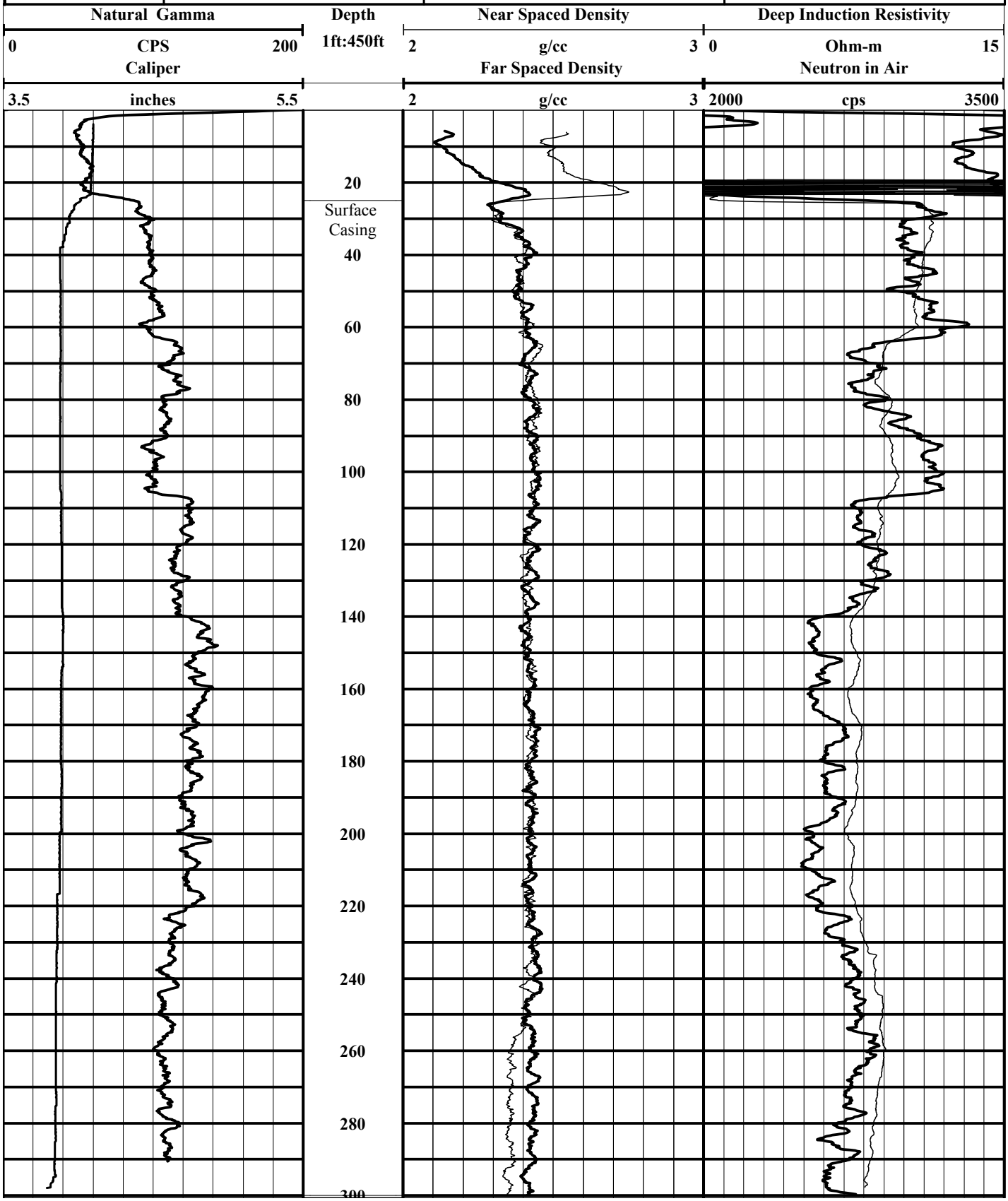
COMPANY: Stoller

PROJECT: Crescent Junction Disposal Site

DATE LOGGED: 08 December 2005

WELL: CH-0206

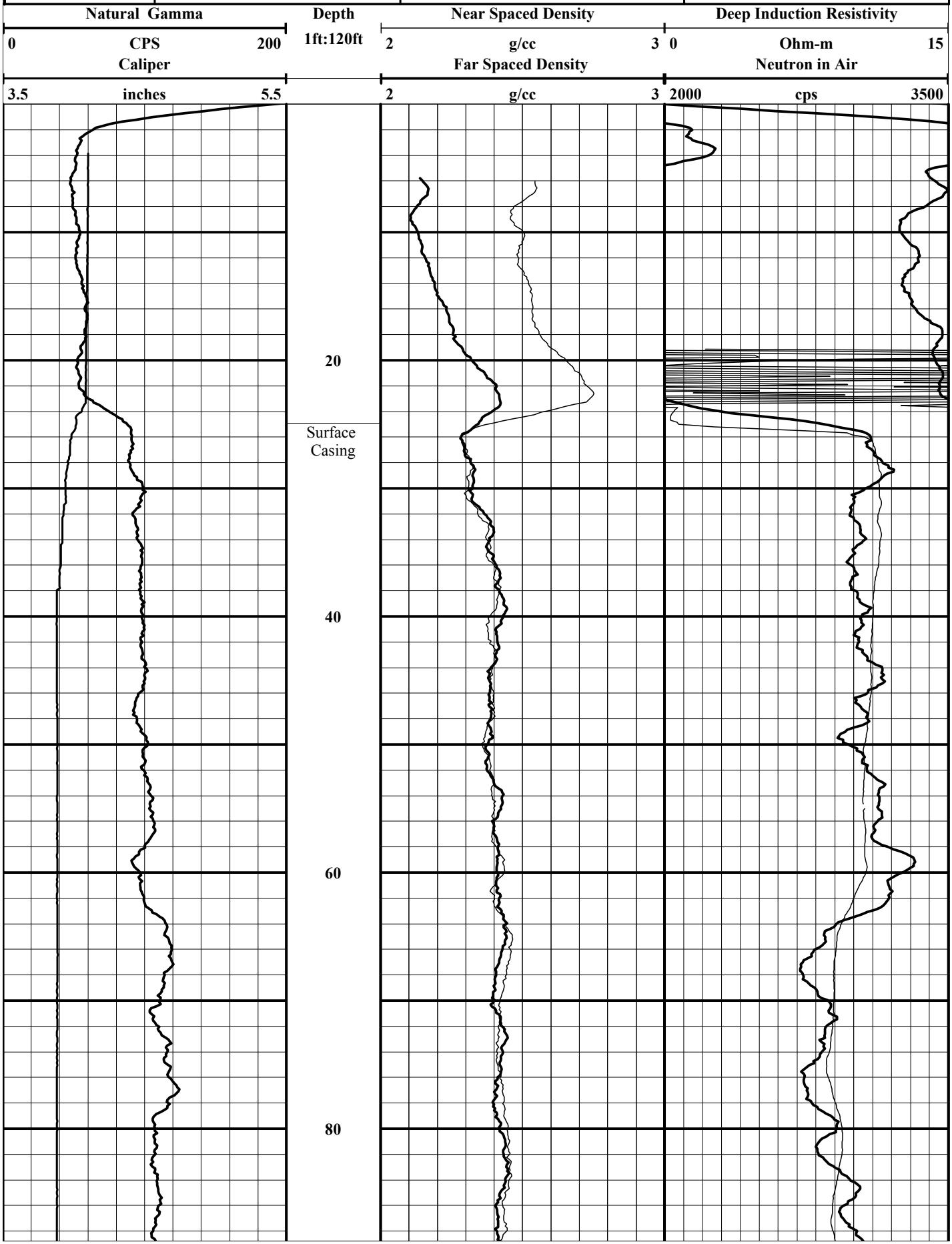
COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com

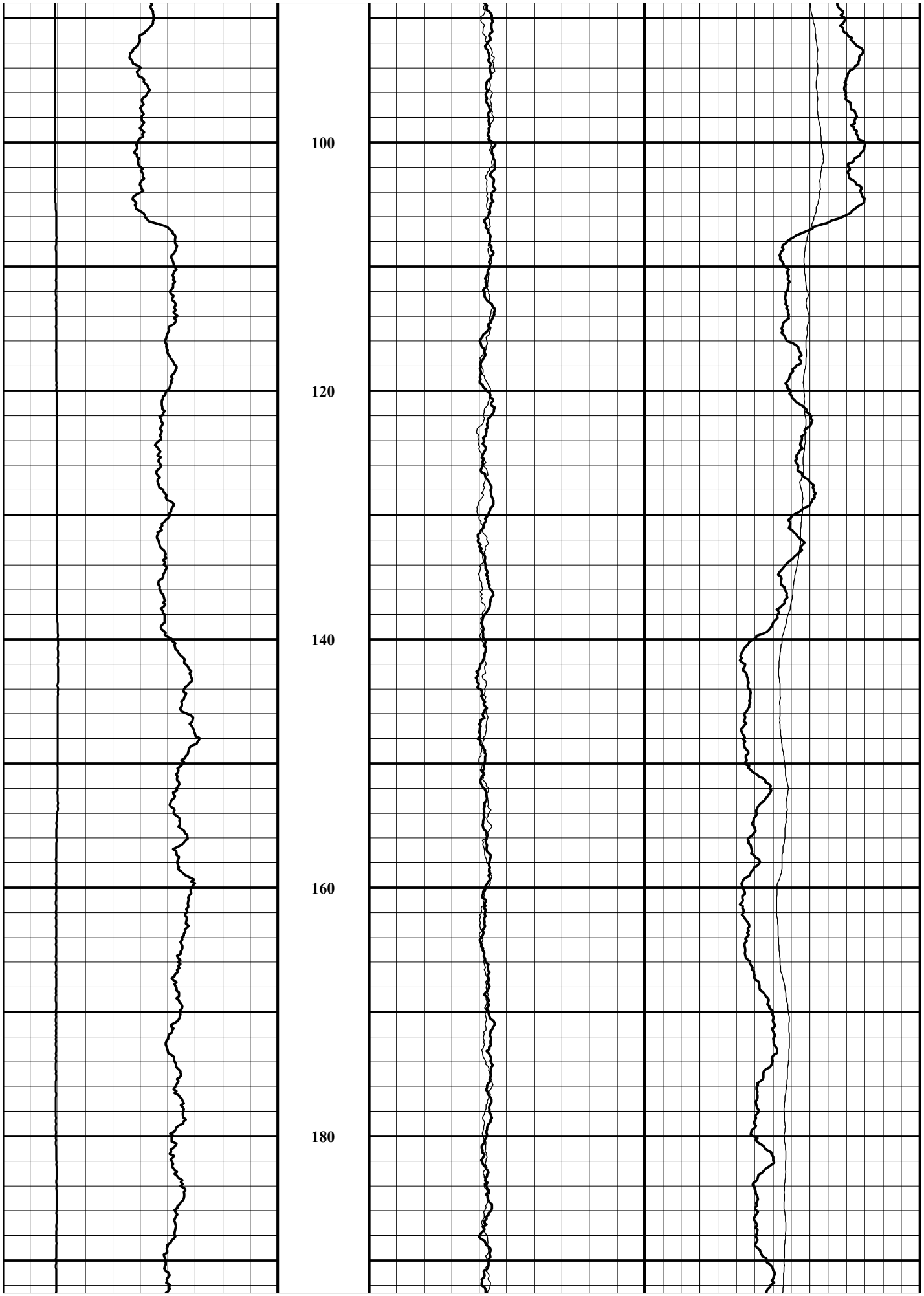


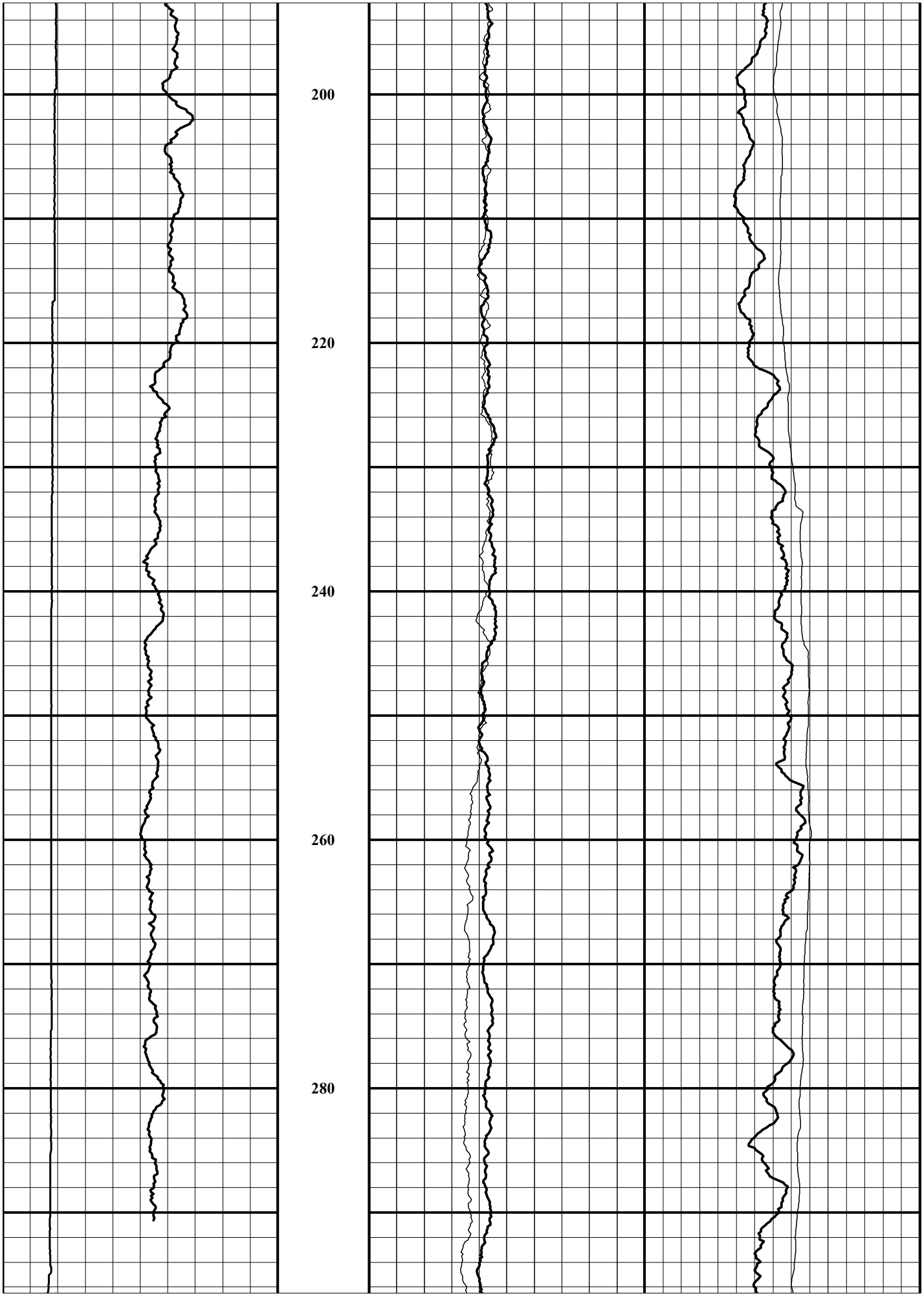
Geophysical Summary Plot

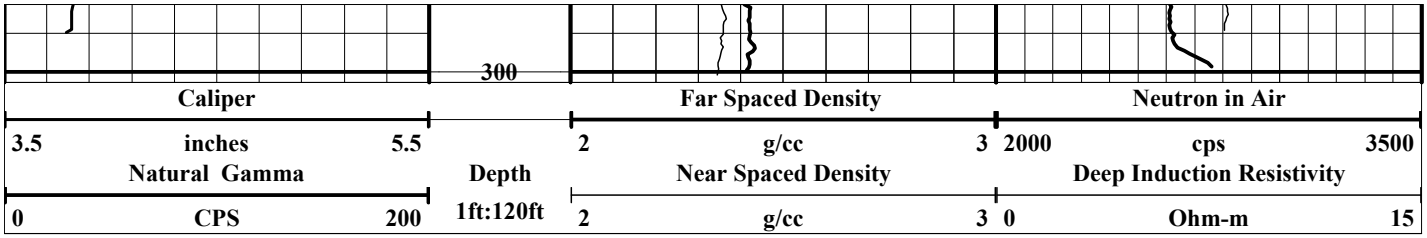
COMPANY: Stoller	PROJECT: Crescent Junction Disposal Site
DATE LOGGED: 08 December 2005	WELL: CH-0206

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com




100
120
140
160
180


200
220
240
260
280


300
Caliper
3.5 inches 5.5
Natural Gamma
0 CPS 200
Depth
1ft:120ft
Far Spaced Density
2 g/cc 3
Near Spaced Density
2 g/cc 3
Neutron in Air
2000 cps 3500
Deep Induction Resistivity
0 Ohm-m 15

F. Well CH-0205 Logging Results

At 0700 hours on December 9, 2005, logging of borehole CH-0205 commenced. Logging was complete at 1330 hours the same day.

The geophysical logs within this borehole are fairly consistent, overall. Fluid filled the borehole to 279 feet, at the time of logging. The increased natural gamma counts, decreased neutron counts, and decreased resistivity from about 80 to 103 feet, indicate a layer with relatively more clay content, and more clay-bound water. The layer from about 129 to 177 feet exhibits similar properties, as does the layer from 191 to about 240 feet, where the clay content decreases gradually, until it returns to its lowest levels at about 275 feet. Water bound in such clayey layers is not likely to permeate into the borehole. Rock density is consistent, except in fractured zones. Air-filled fractures create the low-density anomalies above about 42 feet. The apparently low near-spaced density values, below about 272 feet, are likely the result of a small gap between the probe face and the borehole wall, possibly caused by dragging some debris up from the bottom of the hole. The gap is not large enough to affect the far-spaced density, and disappears as debris is lost, on the way up the borehole. Geophysical logs are presented above the casing level, but are not discussed in this report. Fractures are most abundant on the televiewer logs above 48 feet, specifically above 42 feet. No other notable fractures are evident. All fractures and identified bedding planes are listed in Appendix B: Orientation Summary Table. Calculated RQD values, at 10-foot increments, are listed in Appendix C: Rock Quality Designation Table.

Geophysical Summary Plot

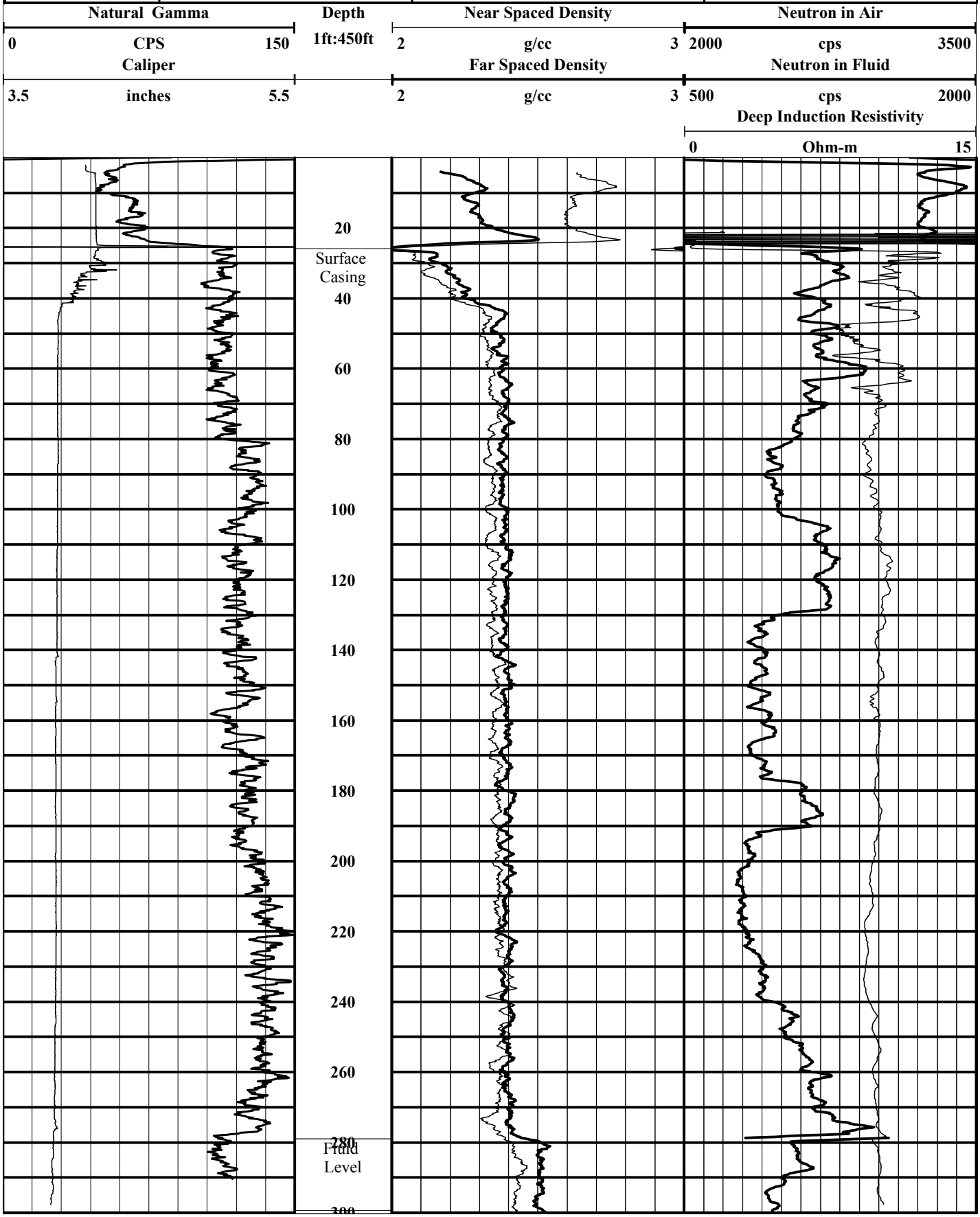
COMPANY: Stoller

PROJECT: Crescent Junction Disposal Site

DATE LOGGED: 9 December 2005

WELL: CH-0205

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com



Geophysical Summary Plot

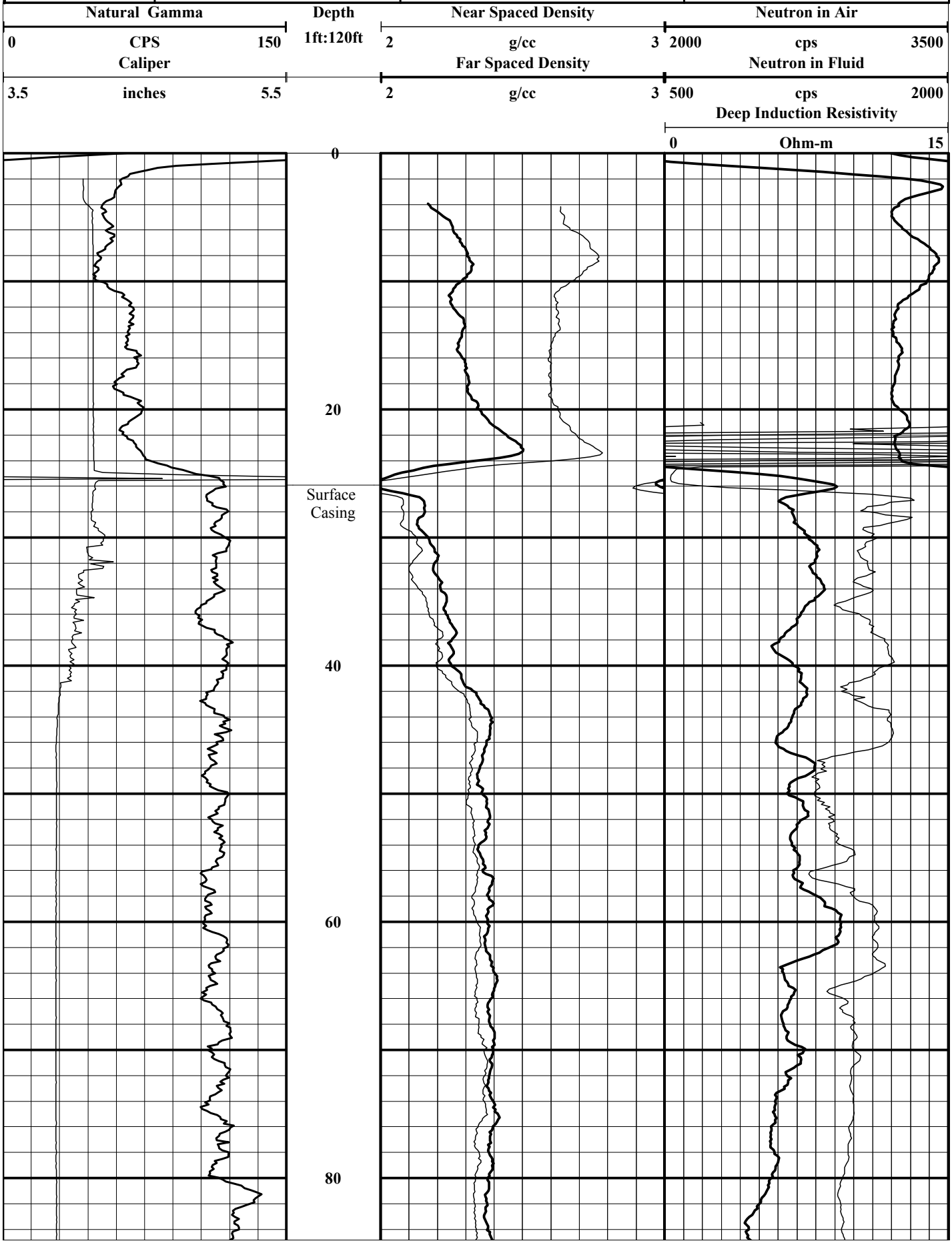
COMPANY: Stoller

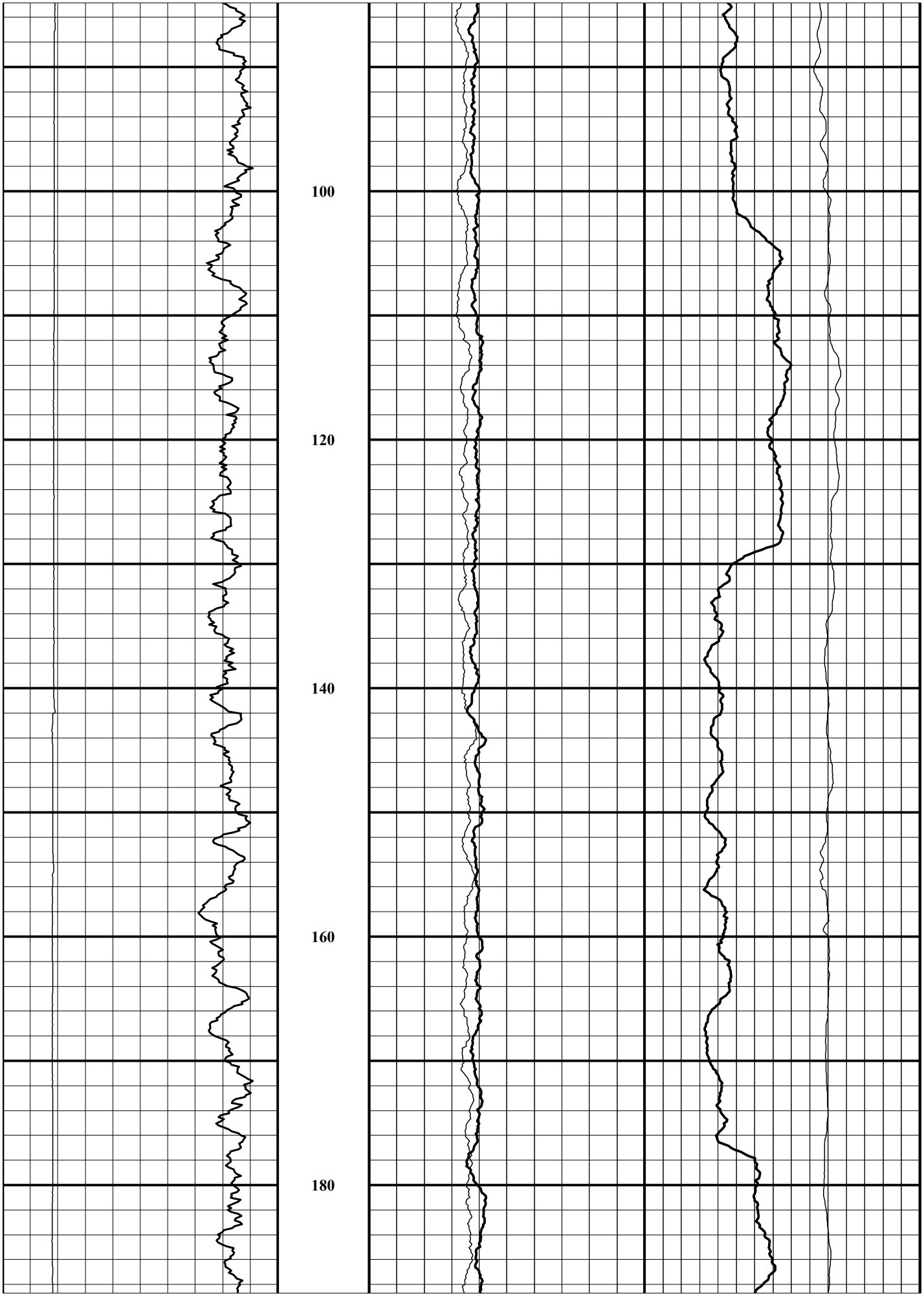
PROJECT: Crescent Junction Disposal Site

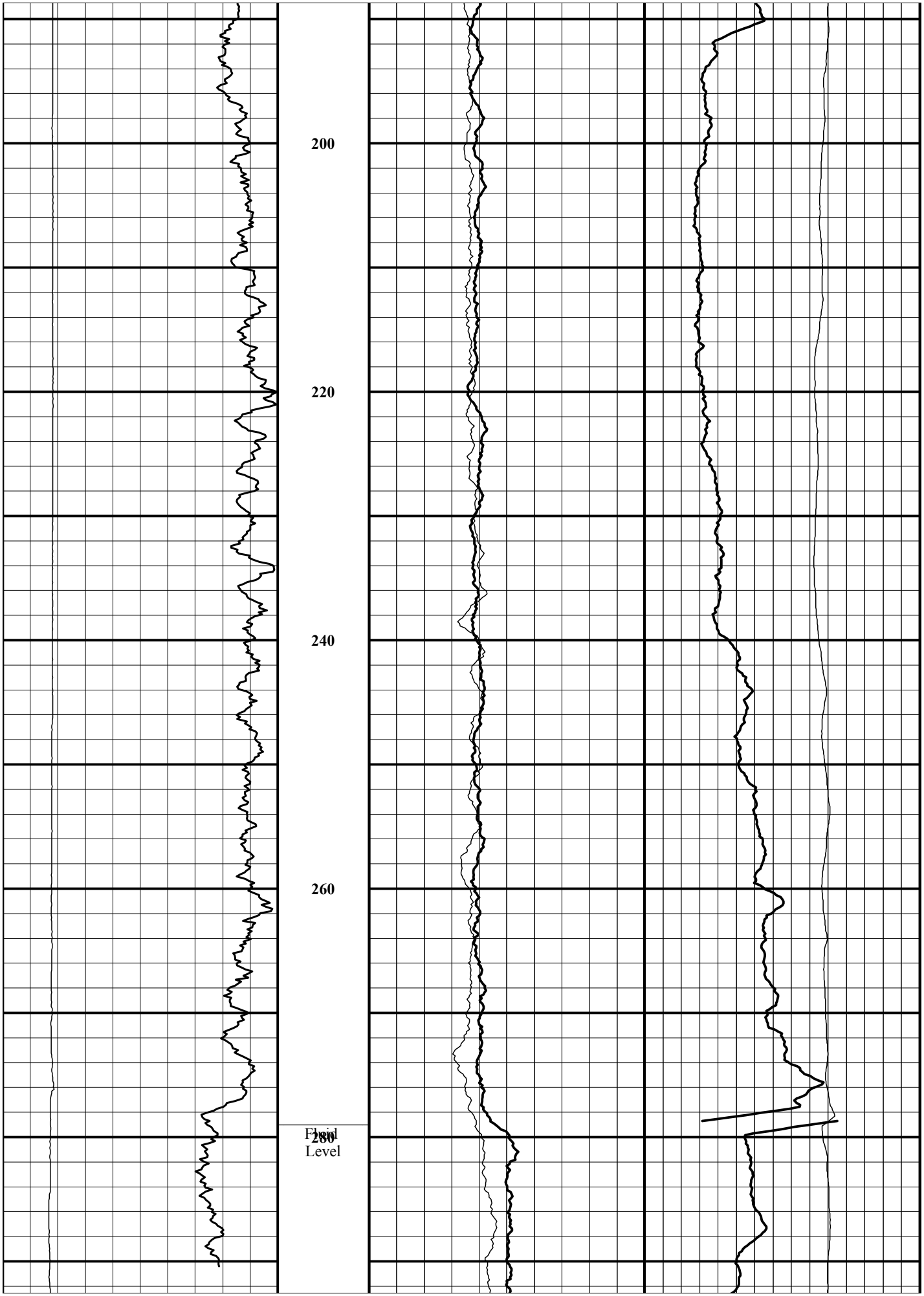
DATE LOGGED: 9 December 2005

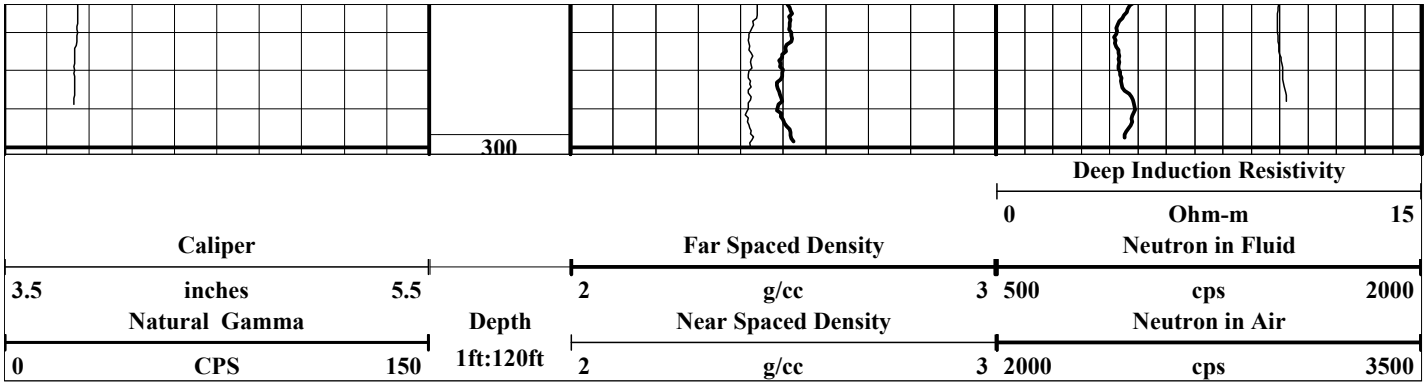
WELL: CH-0205

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com




100
120
140
160
180


200
220
240
260
280
Fluid
Level


300
Deep Induction Resistivity
0
Ohm-m
15
Caliper
Far Spaced Density
Neutron in Fluid
3.5
inches
5.5
2
g/cc
3
500
cps
2000
Natural Gamma
Depth
Near Spaced Density
Neutron in Air
0
CPS
150
1ft:120ft
2
g/cc
3
2000
cps
3500

G. Well CH-0204 Logging Results

At 1330 hours on December 9, 2005, logging of borehole CH-0204 commenced. Optical televiewer and induction logs were recorded and logging finished for the day at 1700 hours. Logging recommenced December 10, 2005 at 0700 hours and was complete at 1100 hours the same day.

The geophysical logs within this borehole are fairly consistent, overall. Fluid filled the borehole to 210 feet, at the time of logging. The increased natural gamma counts, decreased neutron counts, and decreased resistivity from about 52 to 134 feet, indicate a layer with relatively more clay content, and more clay-bound water. The layer from about 261 feet exhibits similar properties, to about 279 feet, where the clay content decreases gradually, until it returns to its lowest levels at about 293 feet. Water bound in such clayey layers is not likely to permeate into the borehole. Rock density is consistent, except in fractured zones. Air-filled fractures create the low-density anomalies above about 46 feet. There are higher density anomalies on the near spaced detector from about 256 to 266 feet. Because these anomalies are not observed on the far detector, they may be caused by shallow fluid intrusion into the borehole wall, indicating moderate porosity in these zones, relative to the apparent low porosity of the majority of this formation. The intrusion is not deep enough to affect the far detector. The apparently low near-spaced density values, below about 266 feet, are likely the result of a small gap between the probe face and the borehole wall, possibly caused by dragging some debris up from the bottom of the hole. The gap is not large enough to affect the far-spaced density, and disappears as debris is lost, on the way up the borehole. Geophysical logs are presented above the casing level, but are not discussed in this report. Fractures are most abundant on the televiewer logs above 55 feet, specifically above 46 feet. Other fractures are evident at about 127 and 230 feet and from 250 to 255 feet. All fractures and identified bedding planes are listed in Appendix B: Orientation Summary Tables. Calculated RQD values, at 10-foot increments, are listed in Appendix C: Rock Quality Designation Tables.

Geophysical Summary Plot

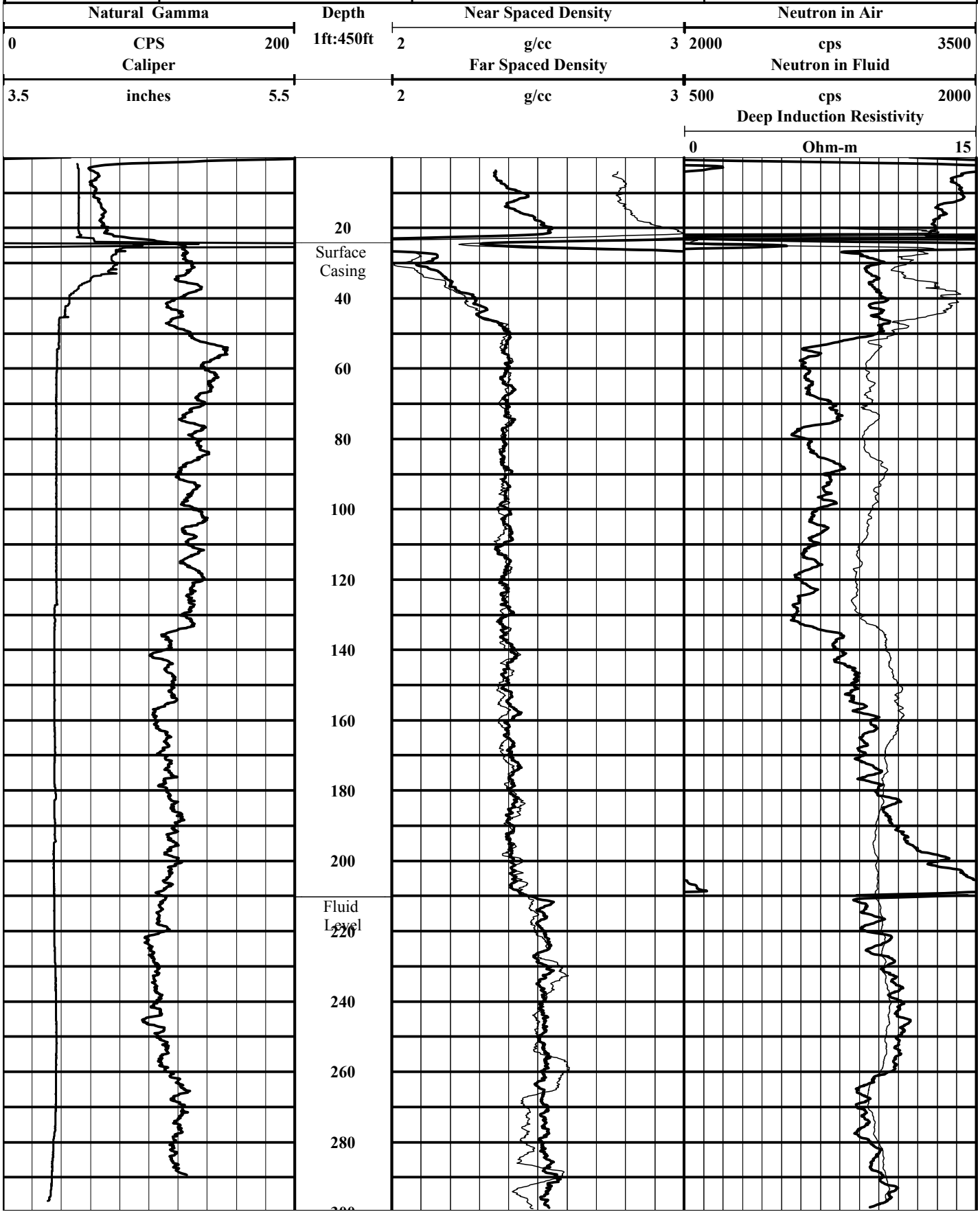
COMPANY: Stoller

PROJECT: Crescent Junction Disposal Site

DATE LOGGED: 9 December 2005

WELL: CH-0204

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com

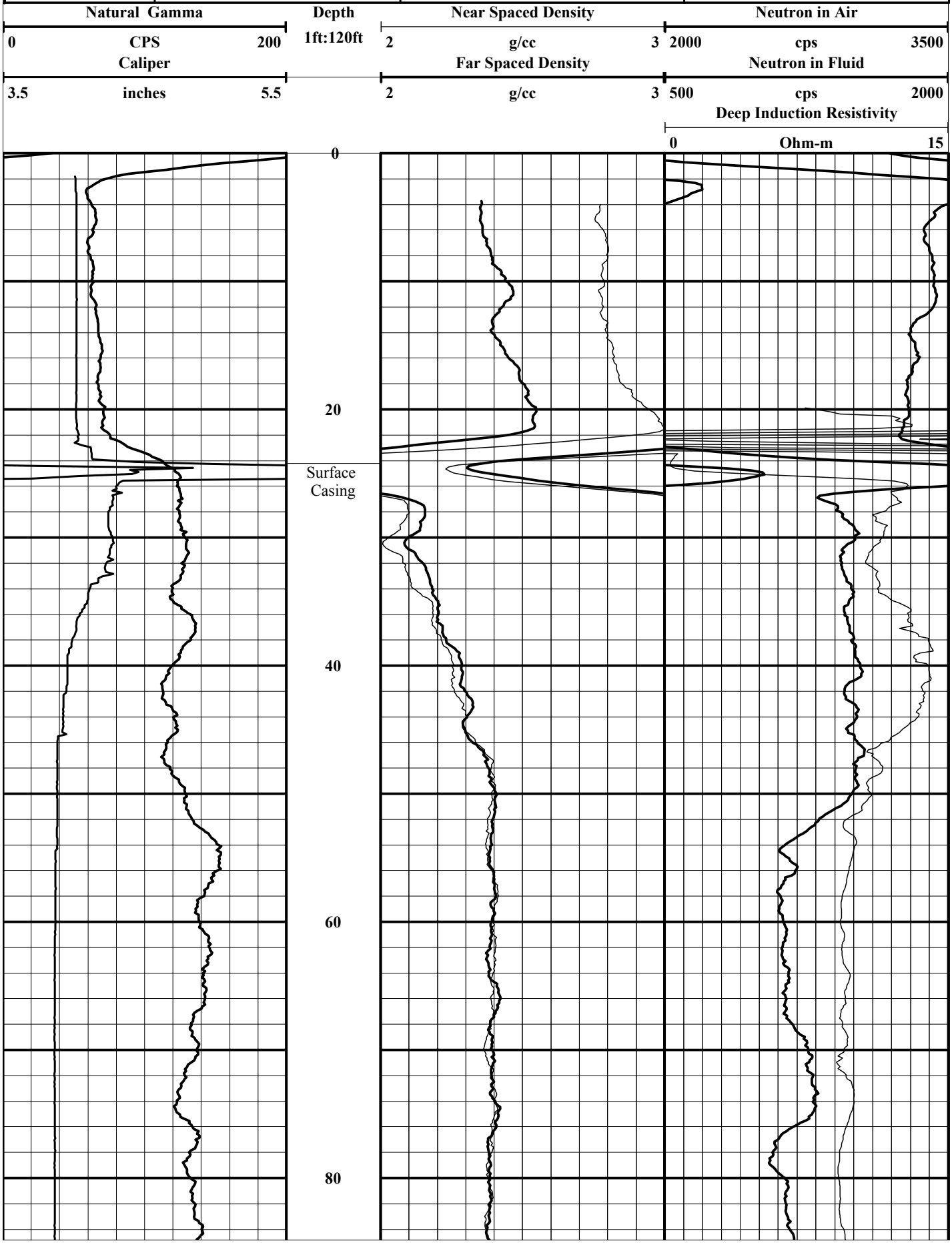


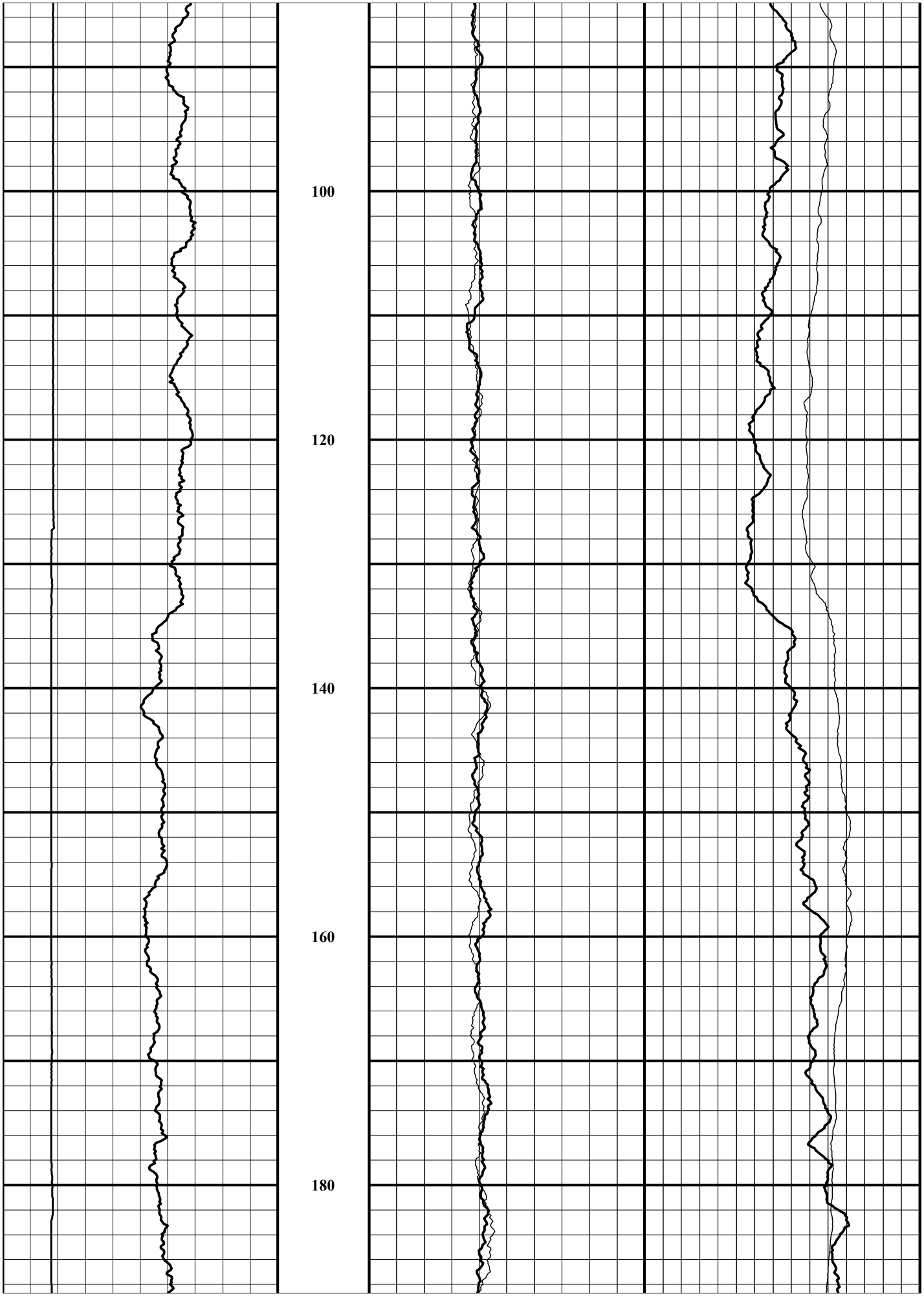
Geophysical Summary Plot

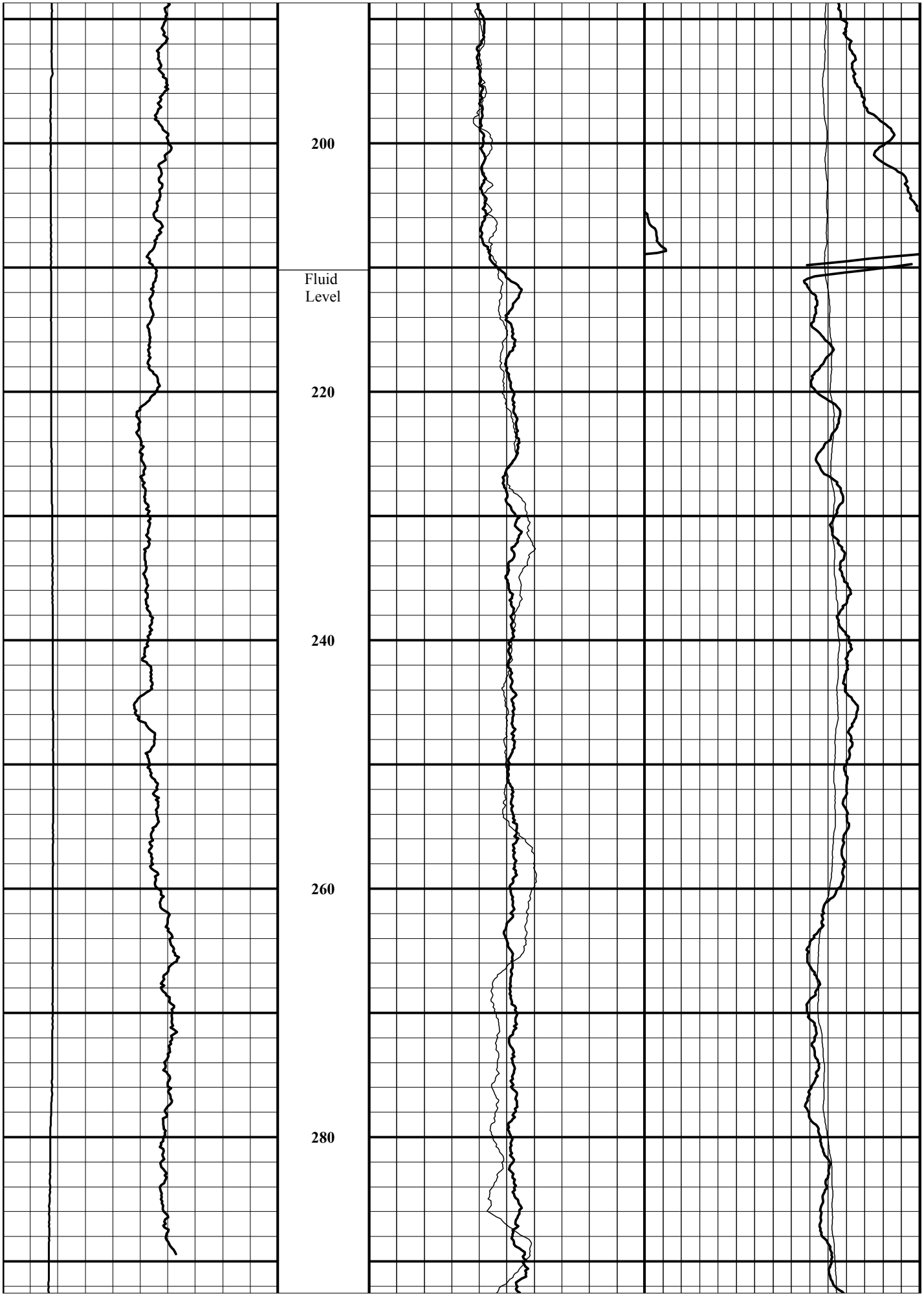
COLOG

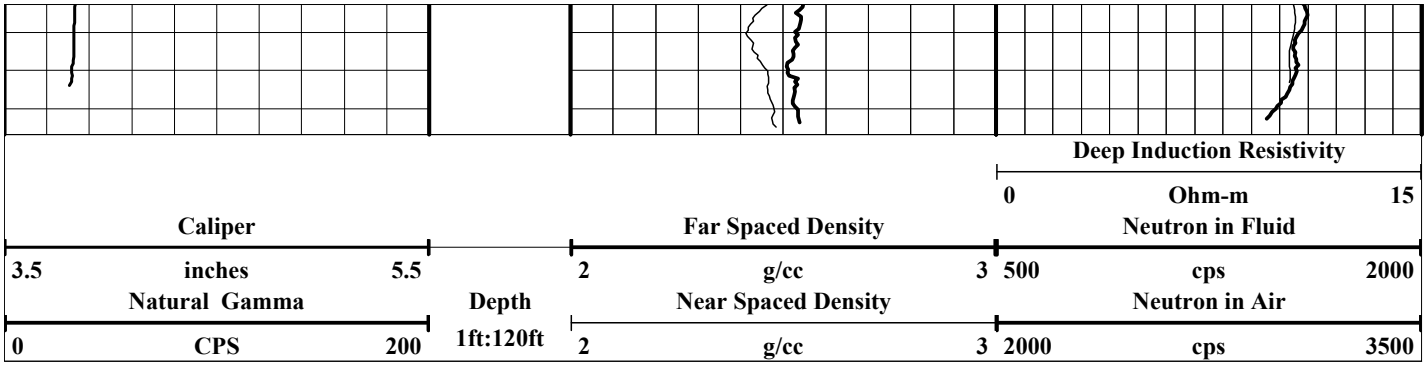
COMPANY: Stoller	PROJECT: Crescent Junction Disposal Site
DATE LOGGED: 9 December 2005	WELL: CH-0204

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com




100
120
140
160
180


200
Fluid
Level
220
240
260
280


Deep Induction Resistivity
0
Ohm-m
15
Caliper
Far Spaced Density
Neutron in Fluid
3.5
inches
5.5
2
g/cc
3
500
cps
2000
Natural Gamma
Depth
Near Spaced Density
Neutron in Air
0
CPS
200
1ft:120ft
2
g/cc
3
2000
cps
3500

H. Well CH-0203 Logging Results

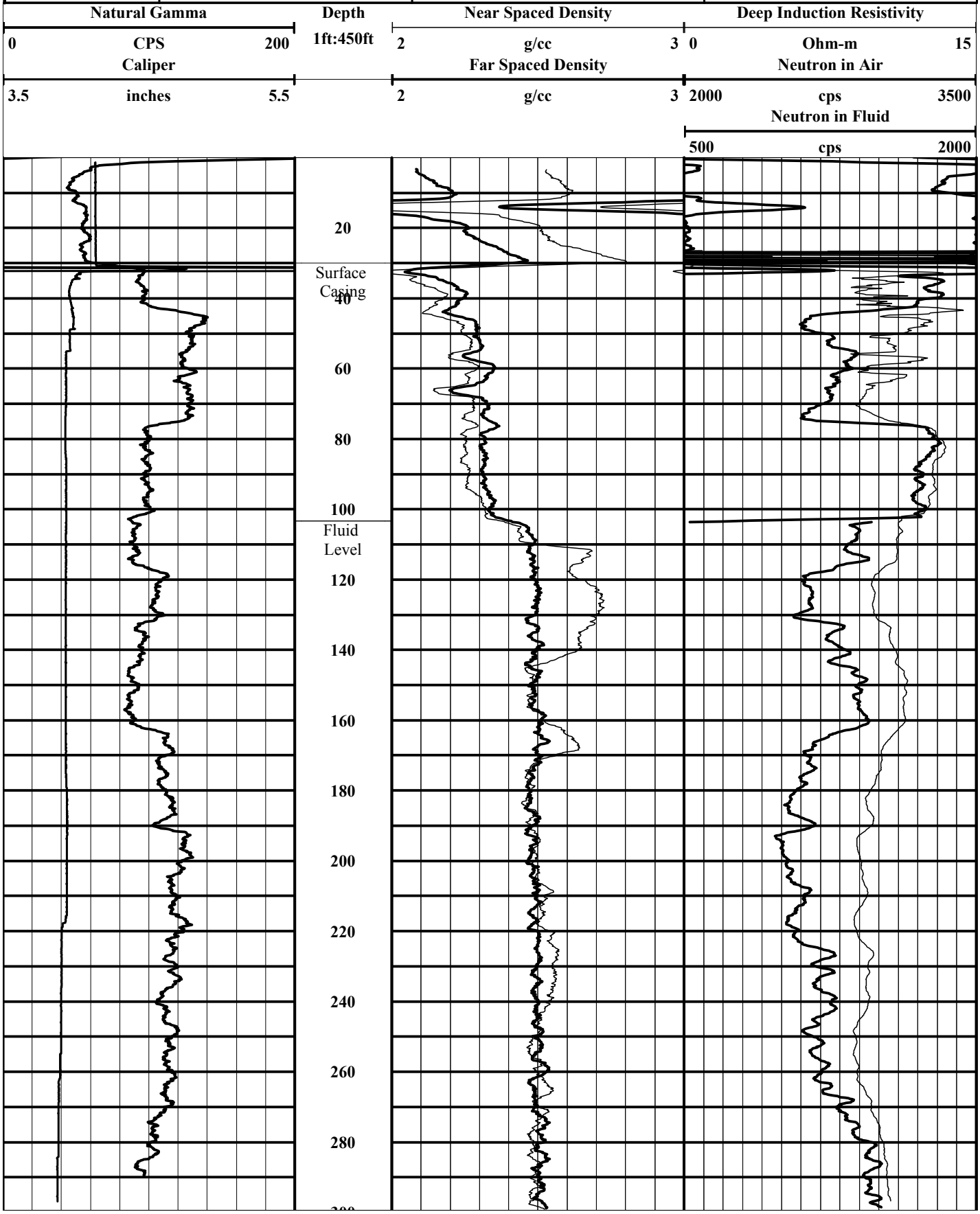
At 1100 hours on December 10, 2005, logging of borehole CH-0204 commenced. Logging was complete at 1600 hours the same day.

The geophysical logs within this borehole are fairly consistent, overall. Fluid filled the borehole to 103 feet, at the time of logging. The increased natural gamma counts, decreased neutron counts, and decreased resistivity from about 43 to 76 feet, indicate a layer with relatively more clay content, and more clay-bound water. The layer from about 117 to 132 feet exhibits similar properties, as does the layer from about 162 feet to about 261 feet, where the clay content decreases gradually, until it returns to its lowest levels at about 280 feet. Water bound in such clayey layers is not likely to permeate into the borehole. Rock density is consistent, except in fractured zones. Air-filled fractures create the low-density anomalies near 44, 56, and 66 feet. There are higher density anomalies on the near spaced detector from about 110 to 144 feet and about 161 to 171 feet. Because these anomalies are not observed on the far detector, they may be caused by shallow fluid intrusion into the borehole wall, indicating moderate porosity in these zones, relative to the apparent low porosity of the majority of this formation. The intrusion is not deep enough to affect the far detector. Geophysical logs are presented above the casing level, but are not discussed in this report. Fractures are most abundant on the televiewer logs above 74 feet, specifically between 42 and 50 feet and at 56 and 68 feet. Other fractures are evident at about 185, 222, 236, 255, and 262 feet. All fractures and identified bedding planes are listed in Appendix B: Orientation Summary Tables. Calculated RQD values, at 10-foot increments, are listed in Appendix C: Rock Quality Designation Tables.

Geophysical Summary Plot

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com

COMPANY: Stoller
PROJECT: Crescent Junction Disposal Site
DATE LOGGED: 10 December 2005
WELL: CH-0203



Geophysical Summary Plot

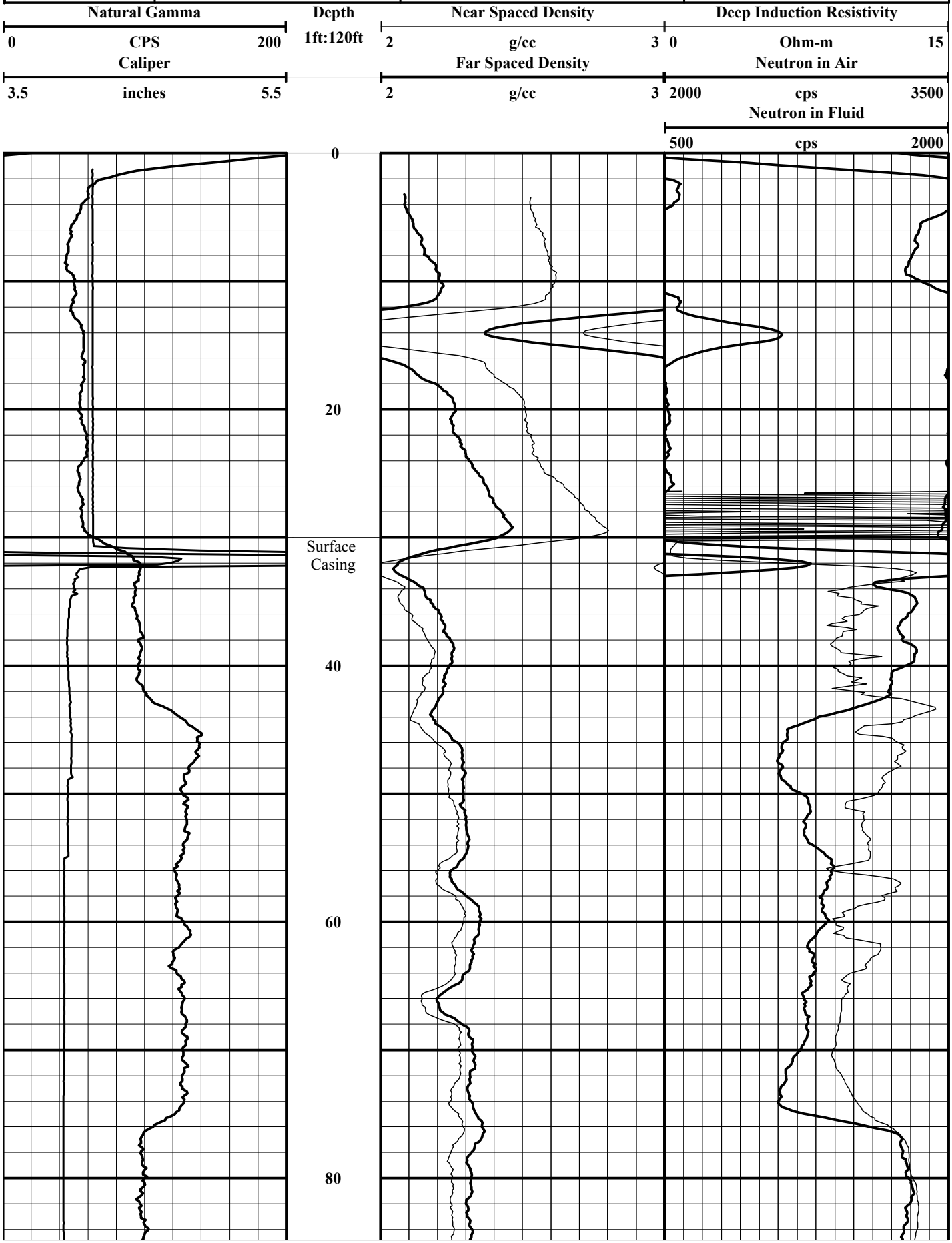
COMPANY: Stoller

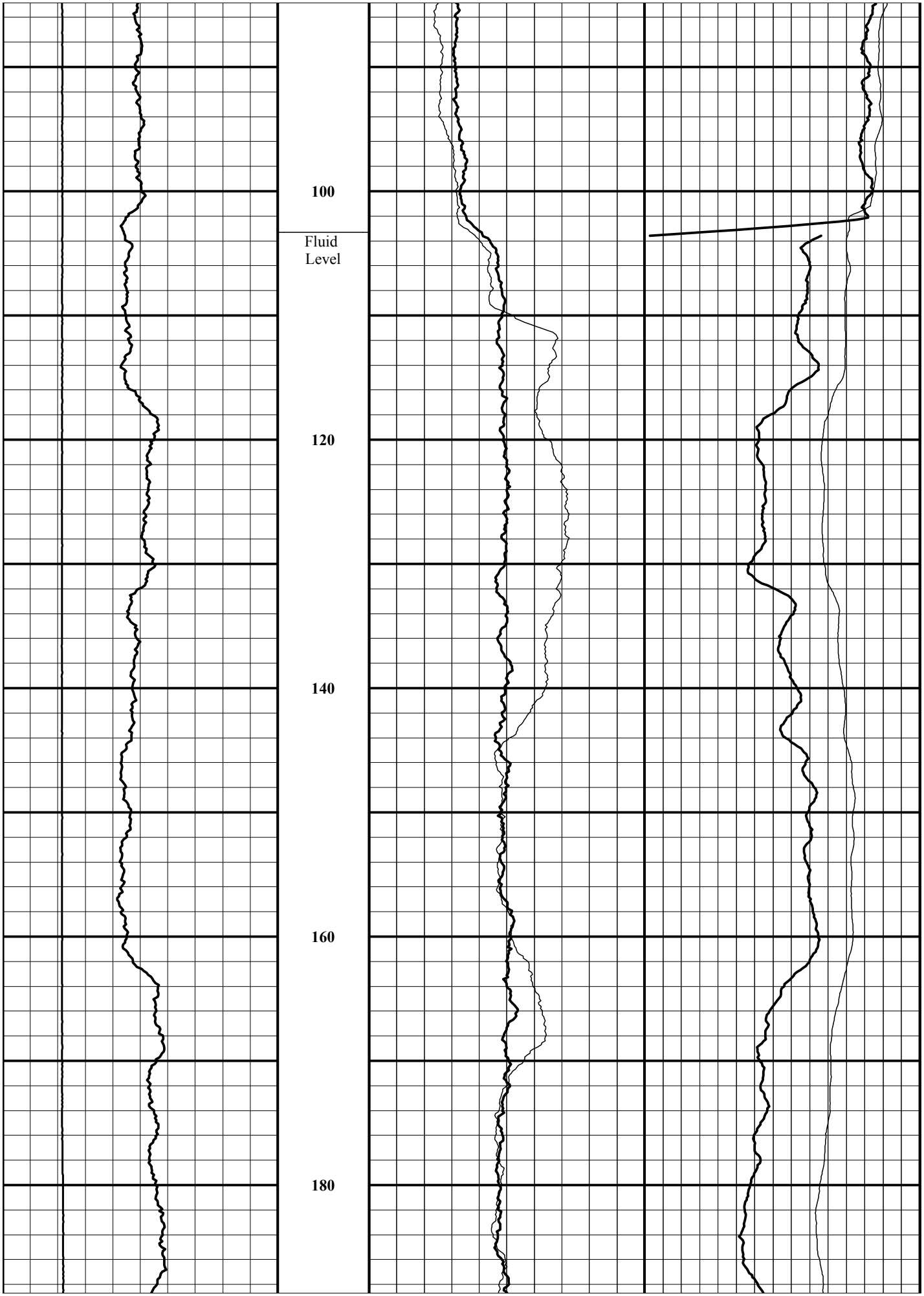
PROJECT: Crescent Junction Disposal Site

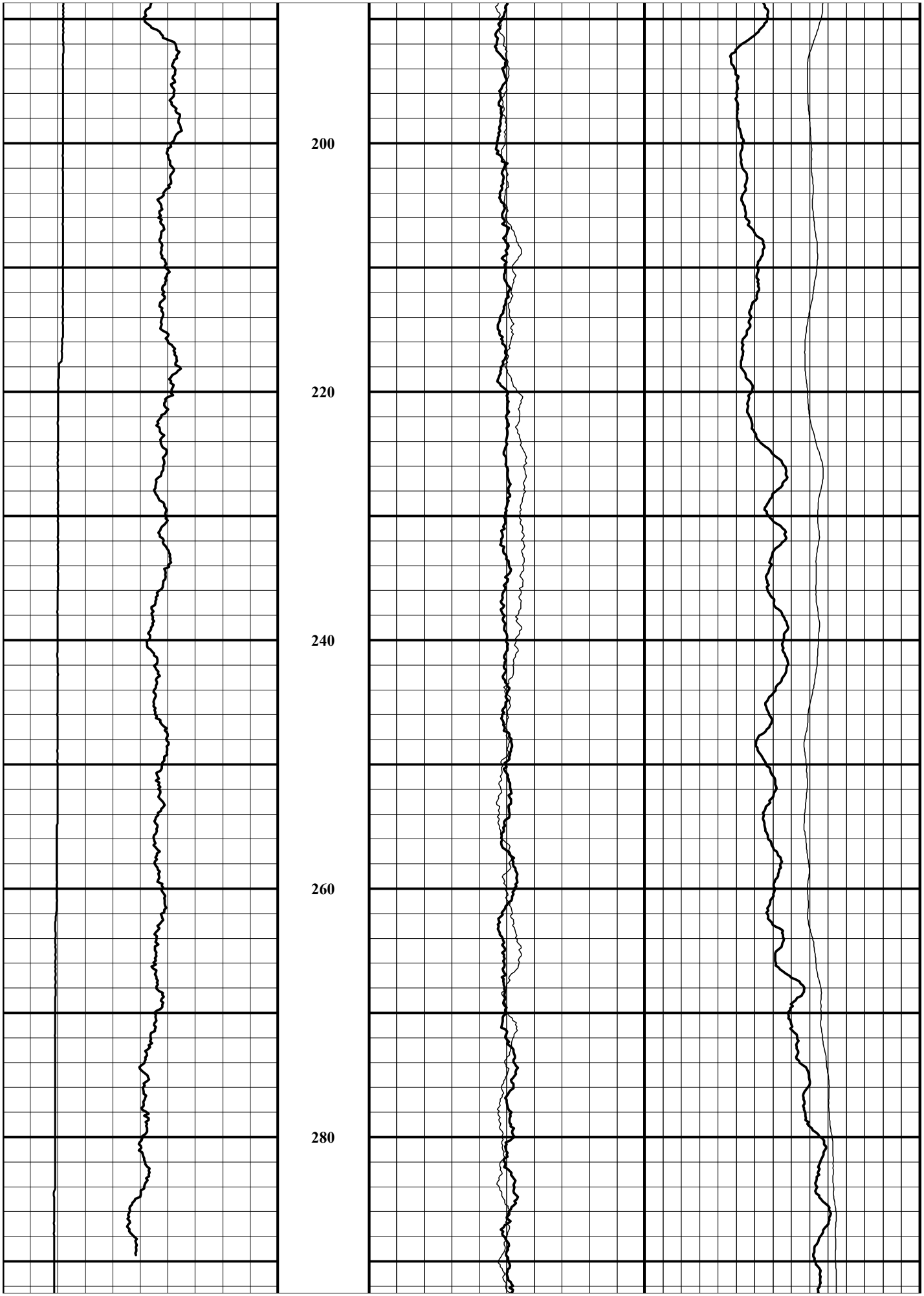
DATE LOGGED: 10 December 2005

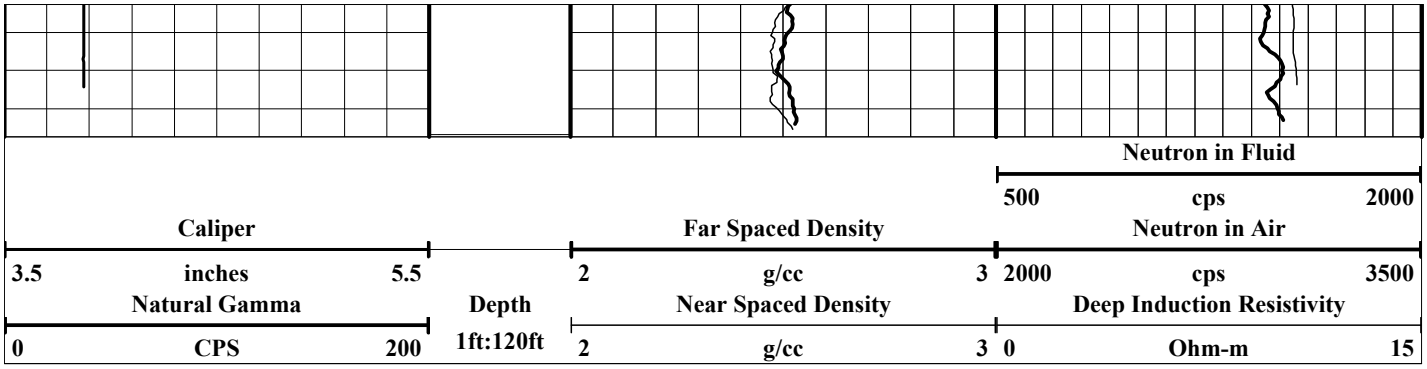
WELL: CH-0203

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com




100
Fluid
Level
120
140
160
180


200
220
240
260
280


Neutron in Fluid
500
cps
2000
Caliper
Far Spaced Density
Neutron in Air
3.5
inches
5.5
2
g/cc
3
2000
cps
3500
Natural Gamma
Depth
Near Spaced Density
Deep Induction Resistivity
0
CPS
200
1ft:120ft
2
g/cc
3
0
Ohm-m
15

I. Well CH-0202 Logging Results

At 1600 hours on December 10, 2005.logging of borehole CH-0204 commenced. The acoustic televiewer log was recorded and logging finished for the day at 1800 hours. Logging recommenced December 11, 2005 at 0700 hours. All other logs except optical televiewer were recorded and logging finished for the day at 1030 hours. Logging recommenced December 13, 2005 at 0930 hours. The optical televiewer log was recorded and logging finished for the day at 1100 hours.

The geophysical logs within this borehole are fairly consistent, overall. Fluid filled the borehole to 128 feet, at the time of logging. Based on the natural gamma counts, the clay content within this borehole appears to be nearly constant. The decreased neutron counts, and decreased resistivity from about 58 to 244 feet, indicate a layer with relatively more clay-bound water. Below 244 feet the water content decreases gradually, until it returns to its lowest levels at about 280 feet. Water bound in such clayey layers is not likely to permeate into the borehole. Rock density is consistent, except in fractured zones. Air-filled fractures create the low-density anomalies from 30 to 44 feet and at about 65 feet. There are higher density anomalies on the near spaced detector from about 207 to 249 feet. Because these anomalies are not observed on the far detector, they may be caused by shallow fluid intrusion into the borehole wall, indicating moderate porosity in these zones, relative to the apparent low porosity of the majority of this formation. The intrusion is not deep enough to affect the far detector. Geophysical logs are presented above the casing level, but are not discussed in this report. Fractures are most abundant on the televiewer logs above 106 feet, specifically above 44 feet, and at 65, 67, and 101 feet. Other fractures are evident at about 143, 161, 216, 238, 249, and 255 feet. All fractures and identified bedding planes are listed in Appendix B: Orientation Summary Tables. Calculated RQD values, at 10-foot increments, are listed in Appendix C: Rock Quality Designation Tables.

Geophysical Summary Plot

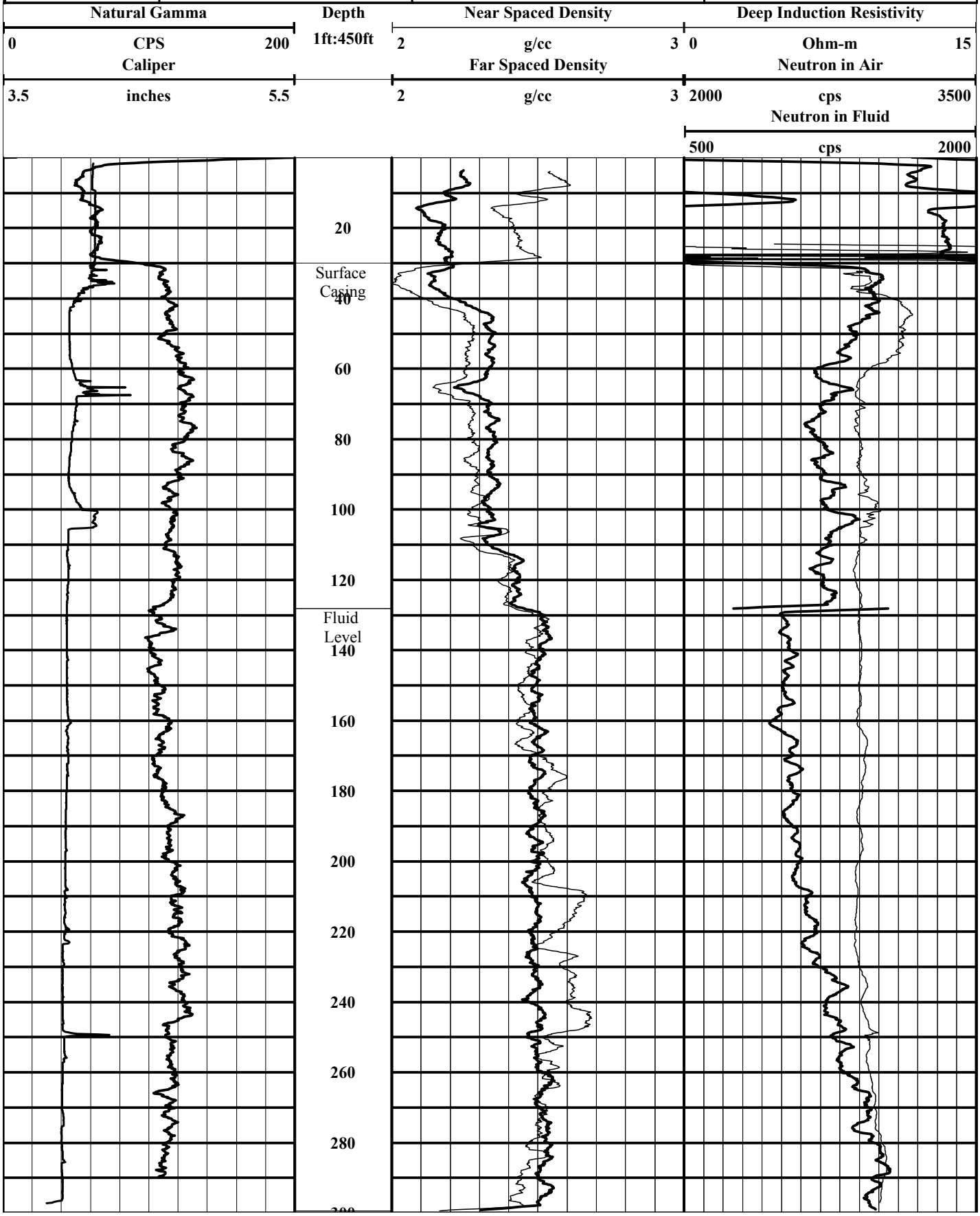
COMPANY: Stoller

PROJECT: Crescent Junction Disposal Site

DATE LOGGED: 10 December 2005

WELL: CH-0202

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com



Geophysical Summary Plot

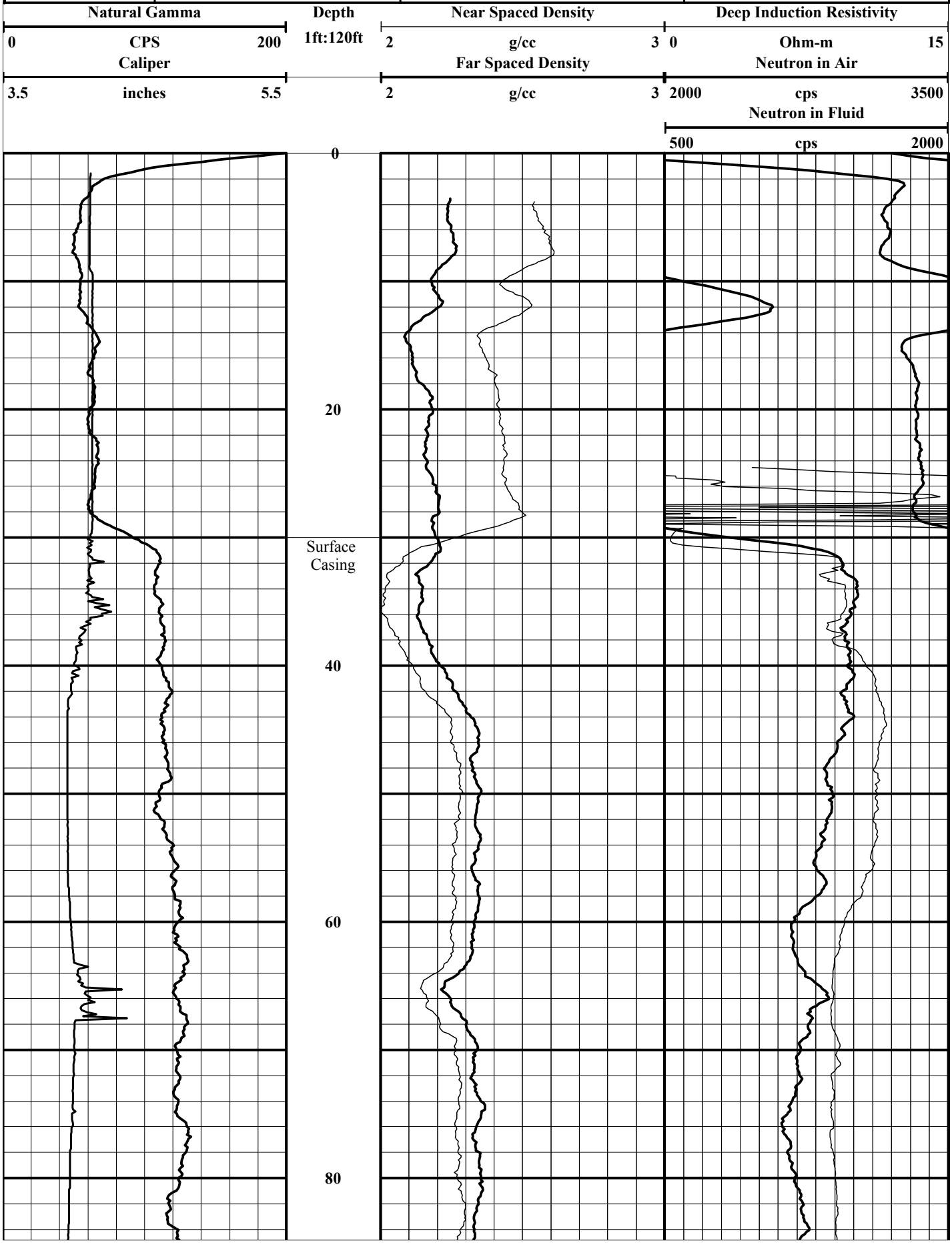
COMPANY: Stoller

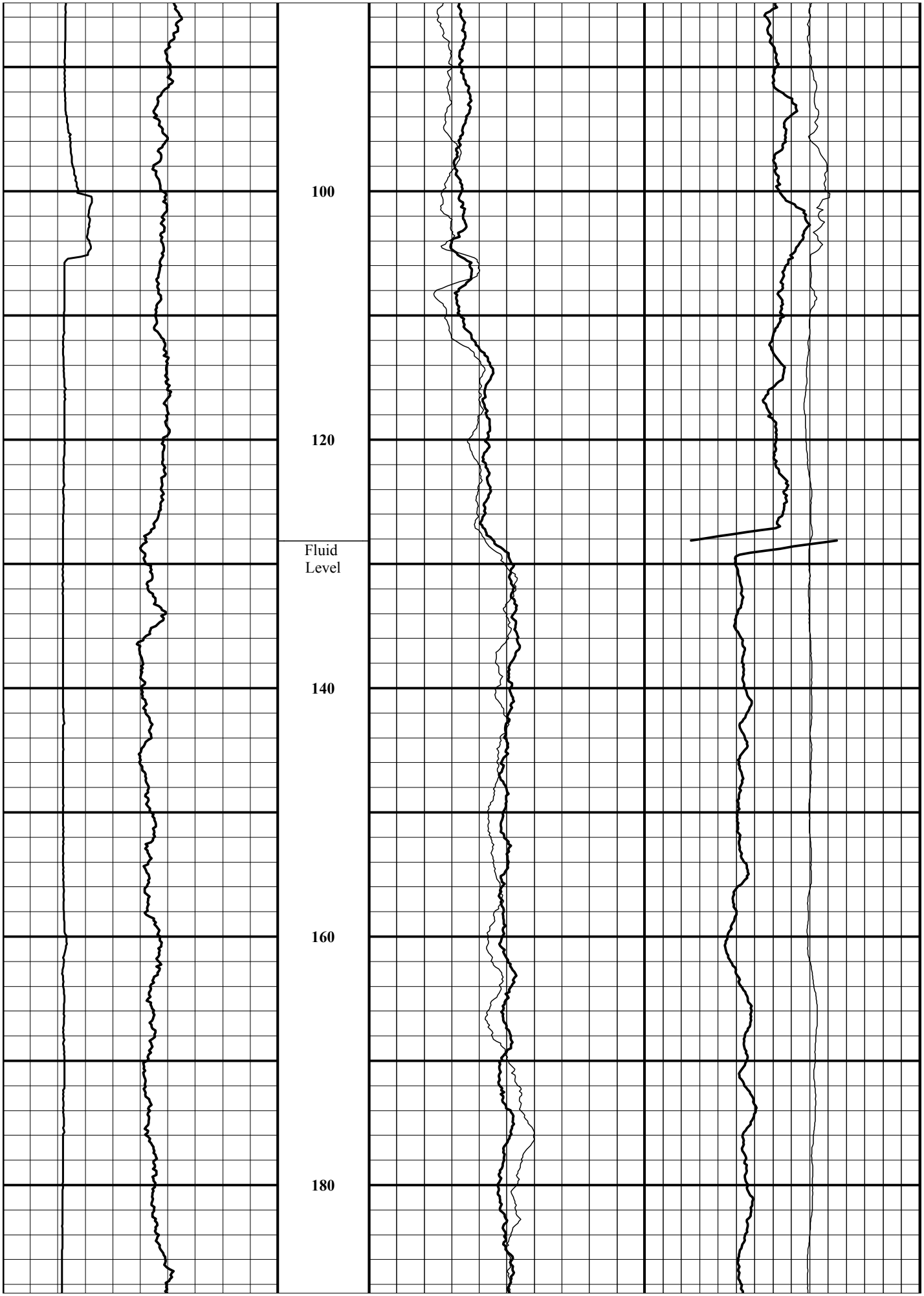
PROJECT: Crescent Junction Disposal Site

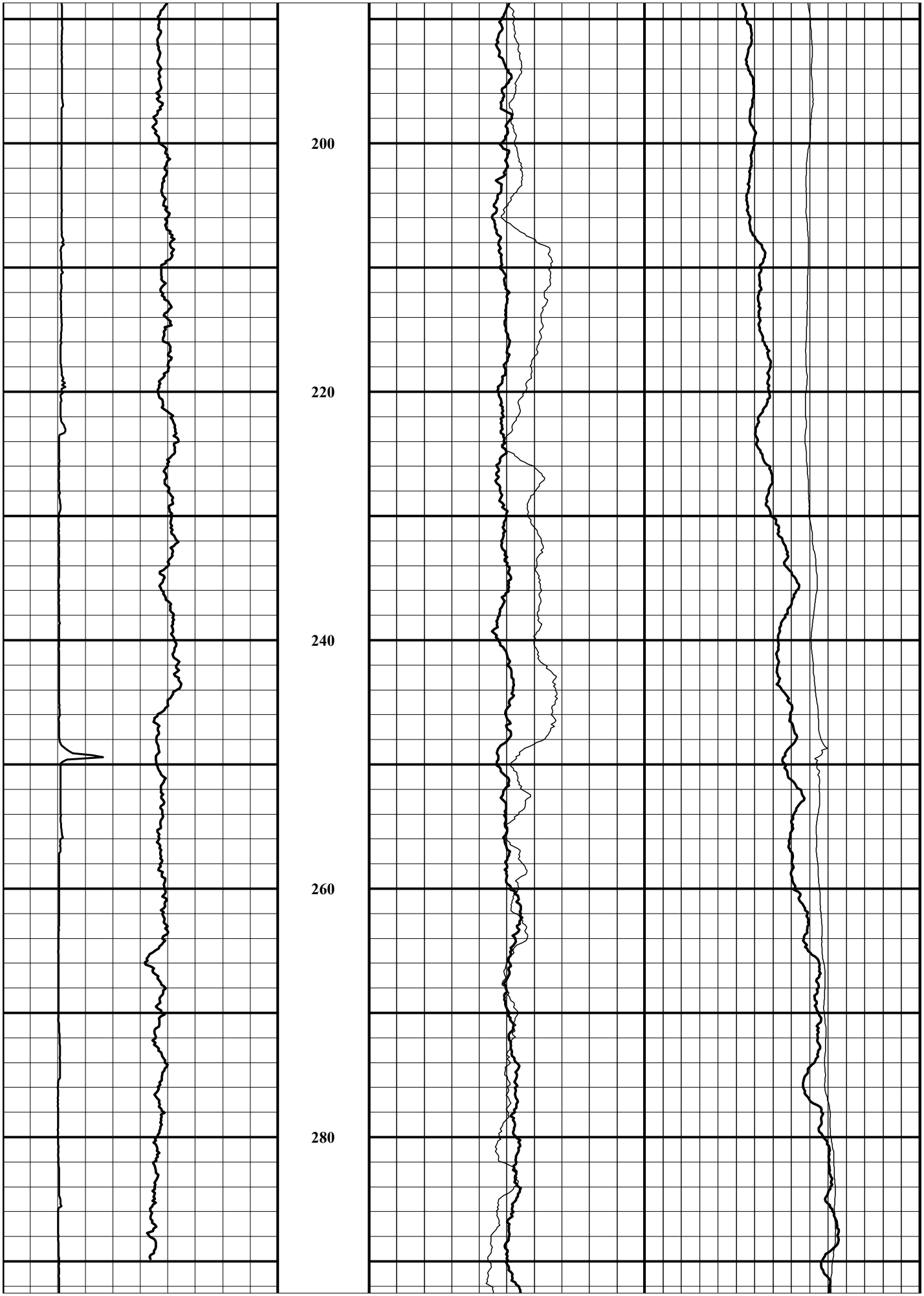
DATE LOGGED: 10 December 2005

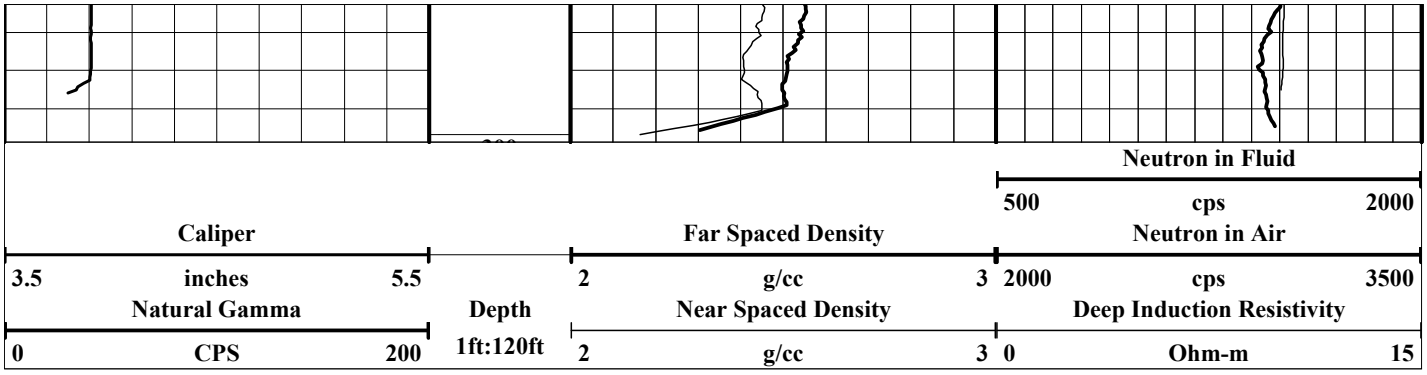
WELL: CH-0202

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com




100
120
Fluid
Level
140
160
180


200
220
240
260
280


Neutron in Fluid
500
cps
2000
Caliper
Far Spaced Density
Neutron in Air
3.5
inches
5.5
2
g/cc
3
2000
cps
3500
Natural Gamma
Depth
Near Spaced Density
Deep Induction Resistivity
0
CPS
200
1ft:120ft
2
g/cc
3
0
Ohm-m
15

J. Well CH-0201 Logging Results

At 1330 hours on December 11, 2005, logging of borehole CH-0201 commenced. An induction and optical televiewer log were recorded and logging finished for the day at 1600. Logging recommenced at 1100 hours on December 13, 2005 and the acoustic televiewer log was recorded.

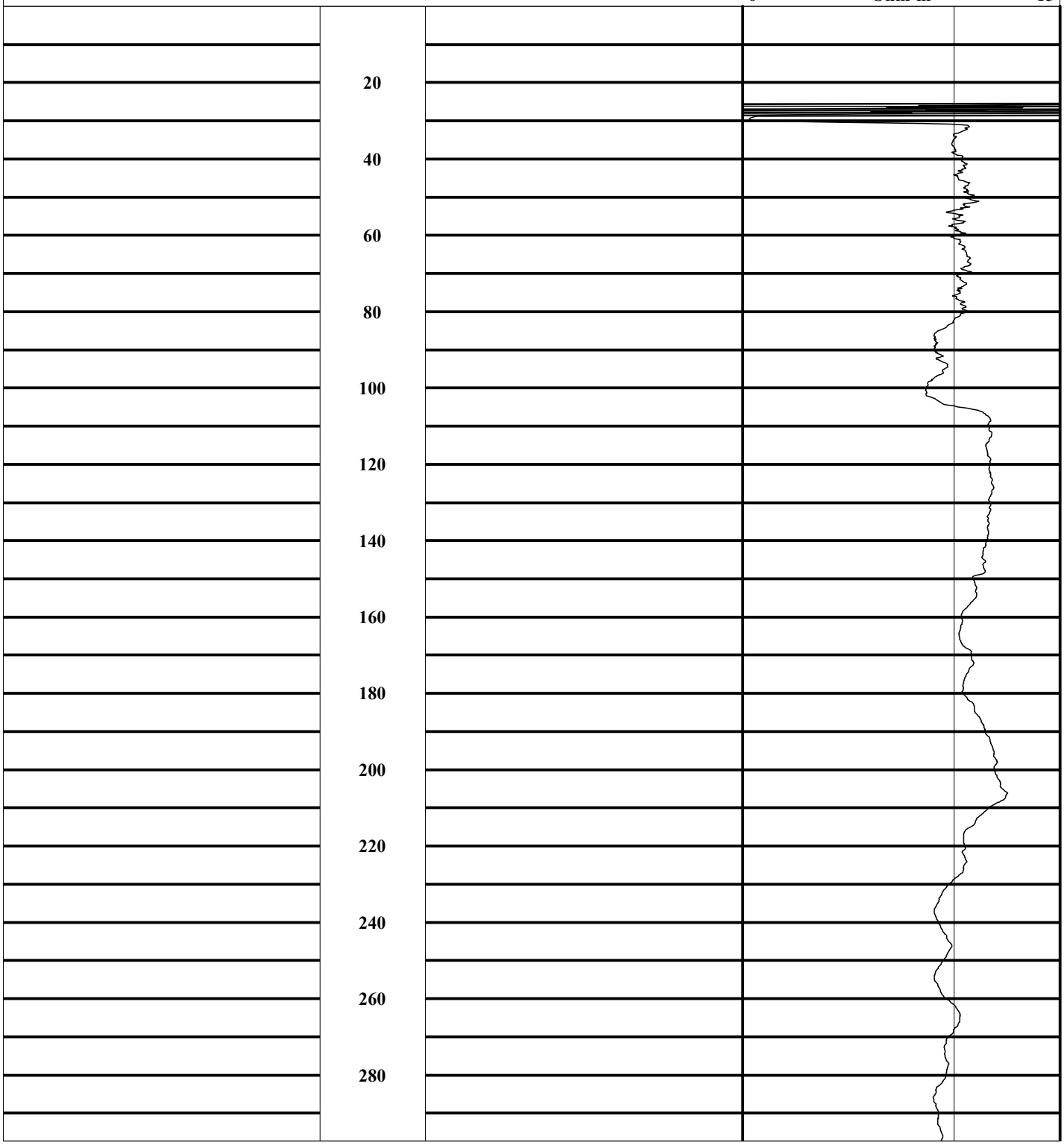
Geophysical Summary Plot

COMPANY: Stoller	PROJECT: Crescent Junction Disposal Site
DATE LOGGED: 13 December 2005	WELL: CH-0201

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com

Depth
1ft:450ft

Deep Induction Resistivity
0 Ohm-m 15



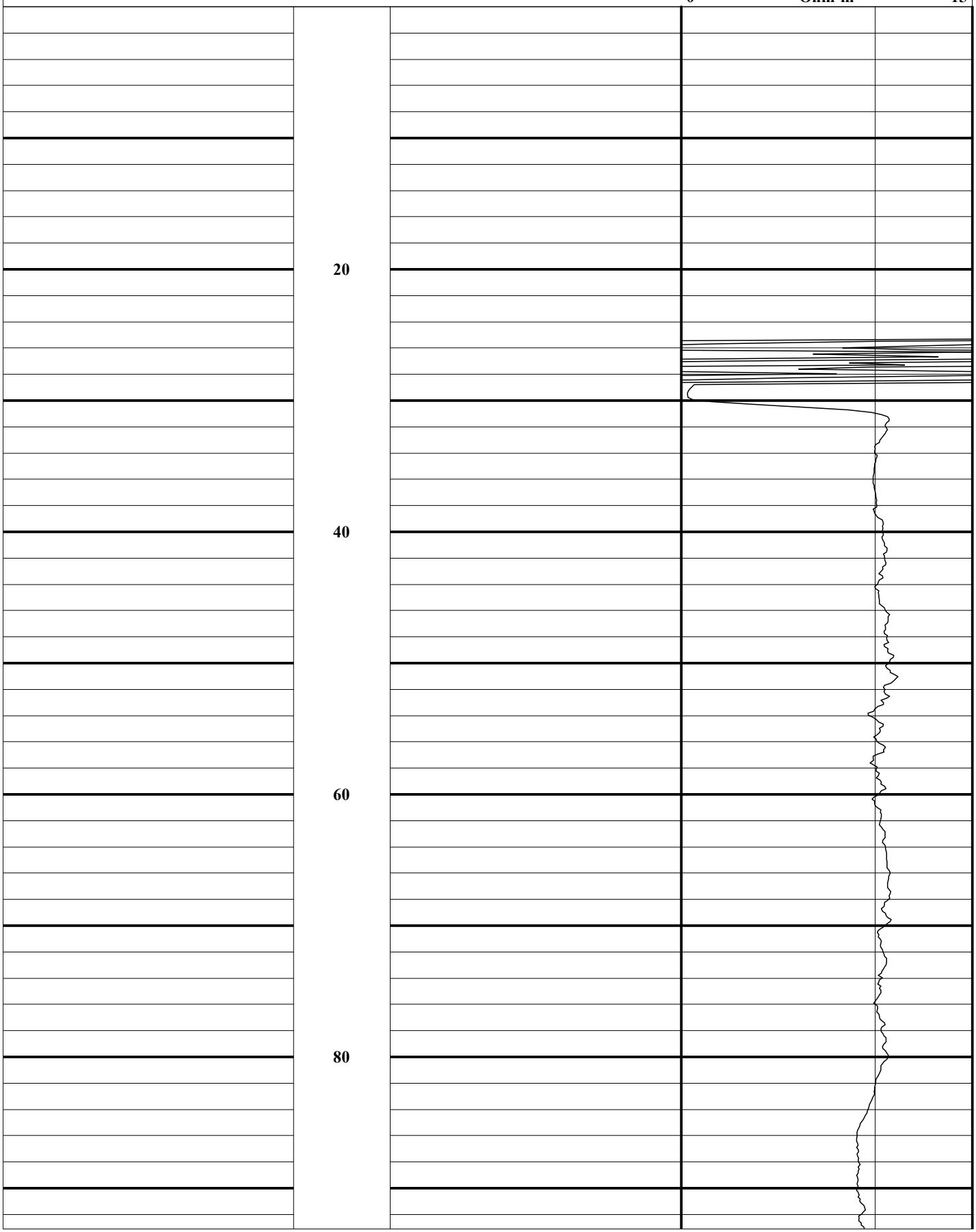
Geophysical Summary Plot

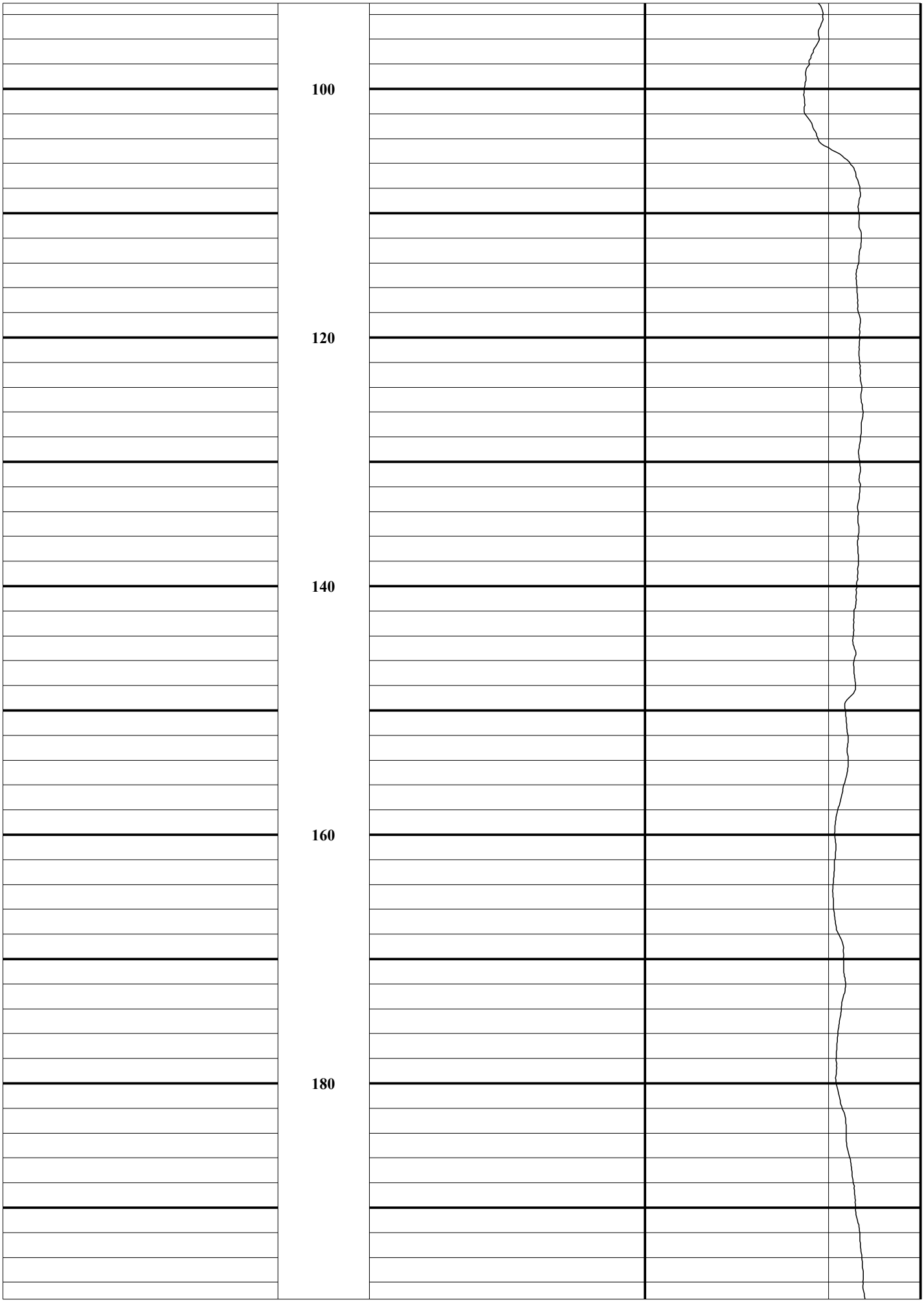
COMPANY: Stoller	PROJECT: Crescent Junction Disposal Site
DATE LOGGED: 13 December 2005	WELL: CH-0201

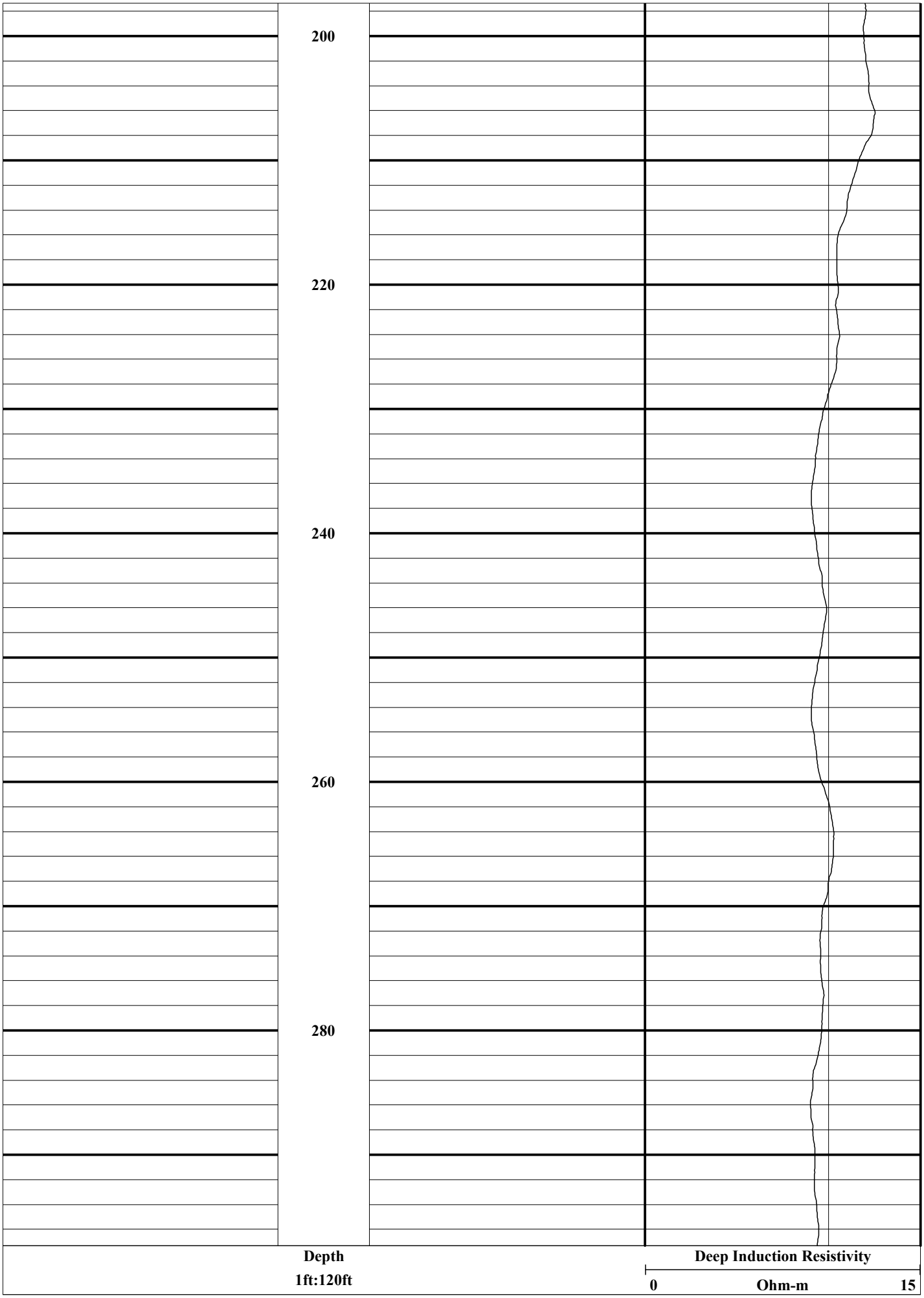
COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com

Depth
1ft:120ft

Deep Induction Resistivity
0 Ohm-m 15




100
120
140
160
180


200
220
240
260
280
Depth
1ft:120ft
Deep Induction Resistivity
0
Ohm-m
15

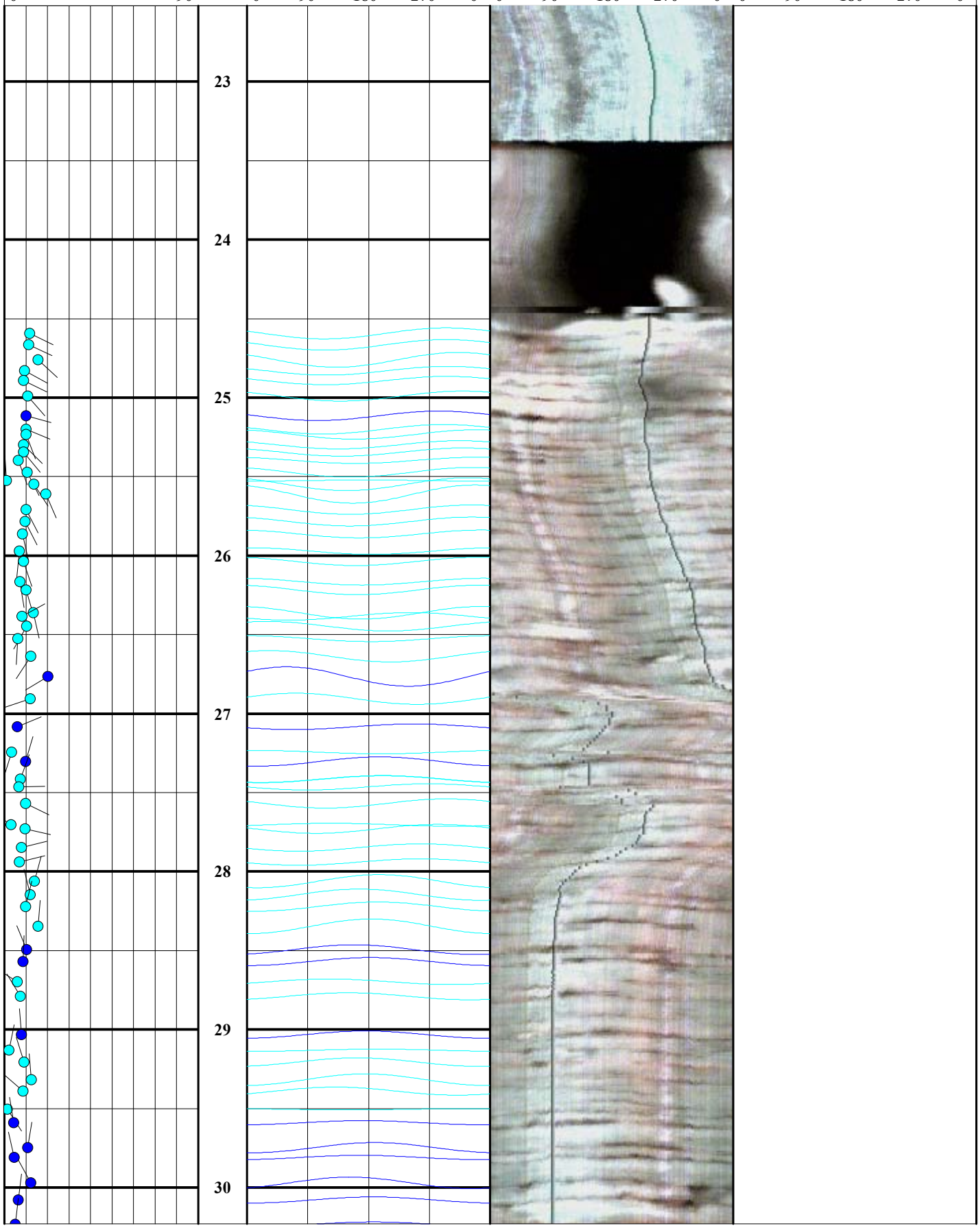
APPENDIX A

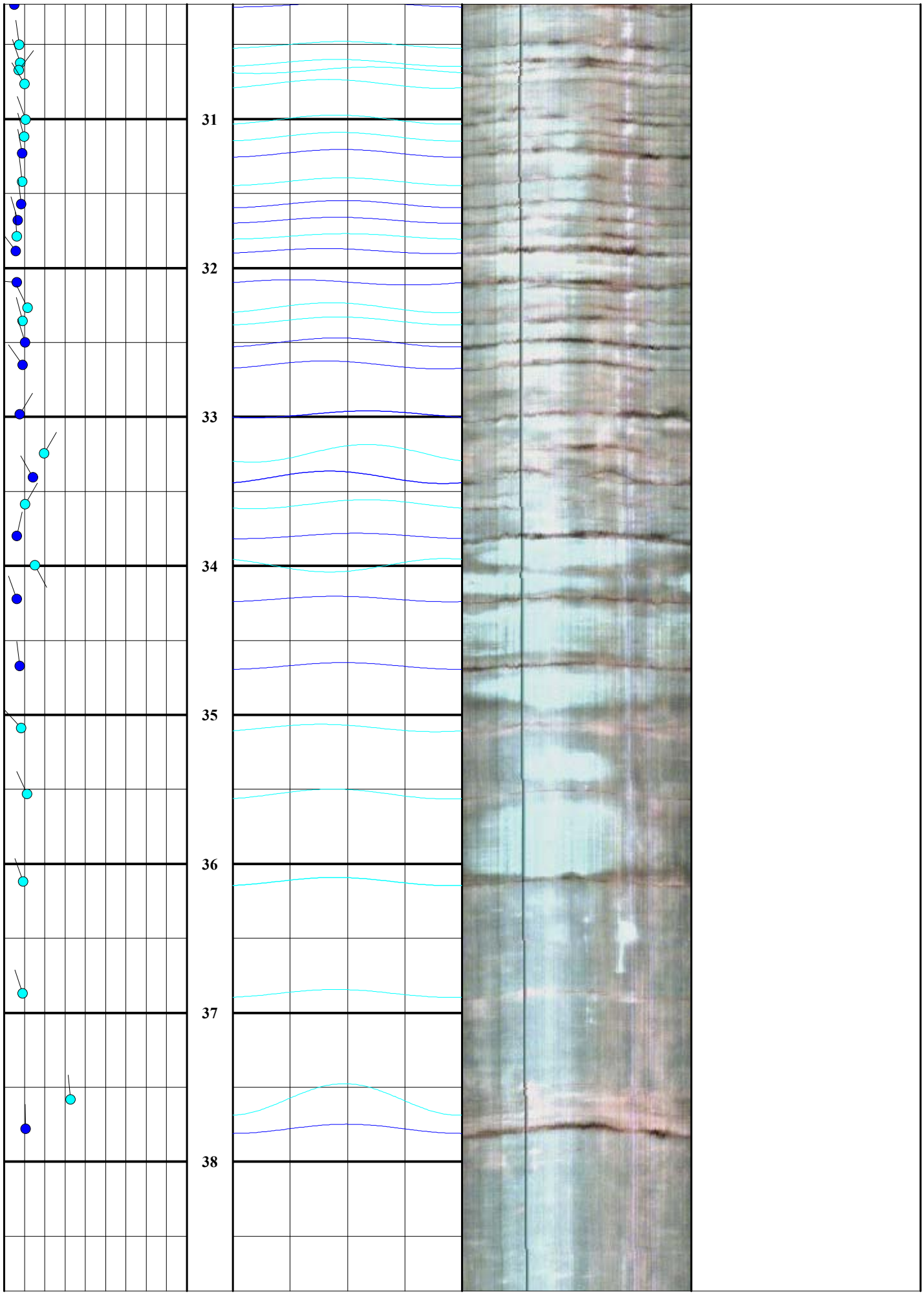
OPTICAL AND ACOUSTIC TELEVIEWER LOGS

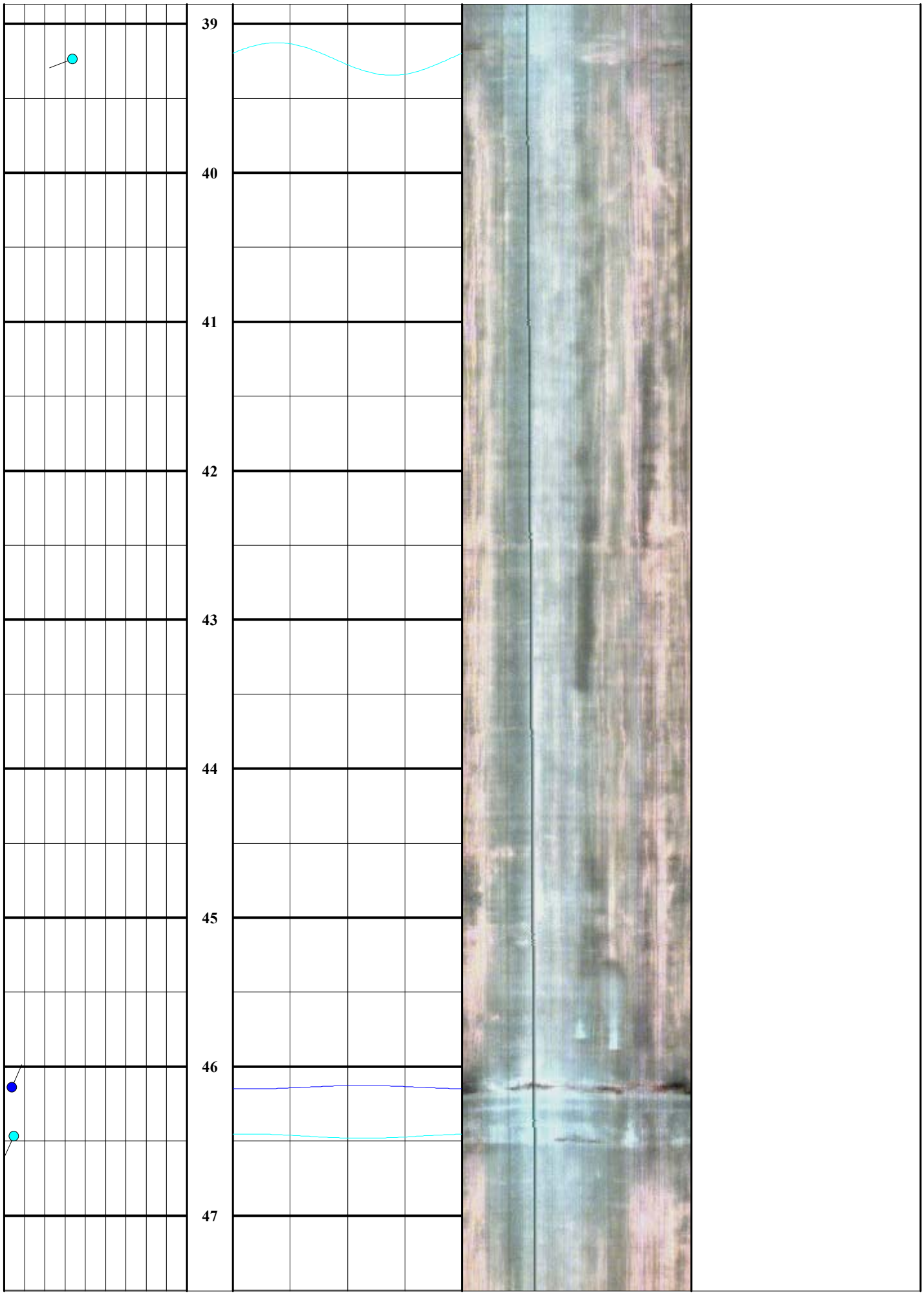
Optical/Acoustic Borehole Image Plot

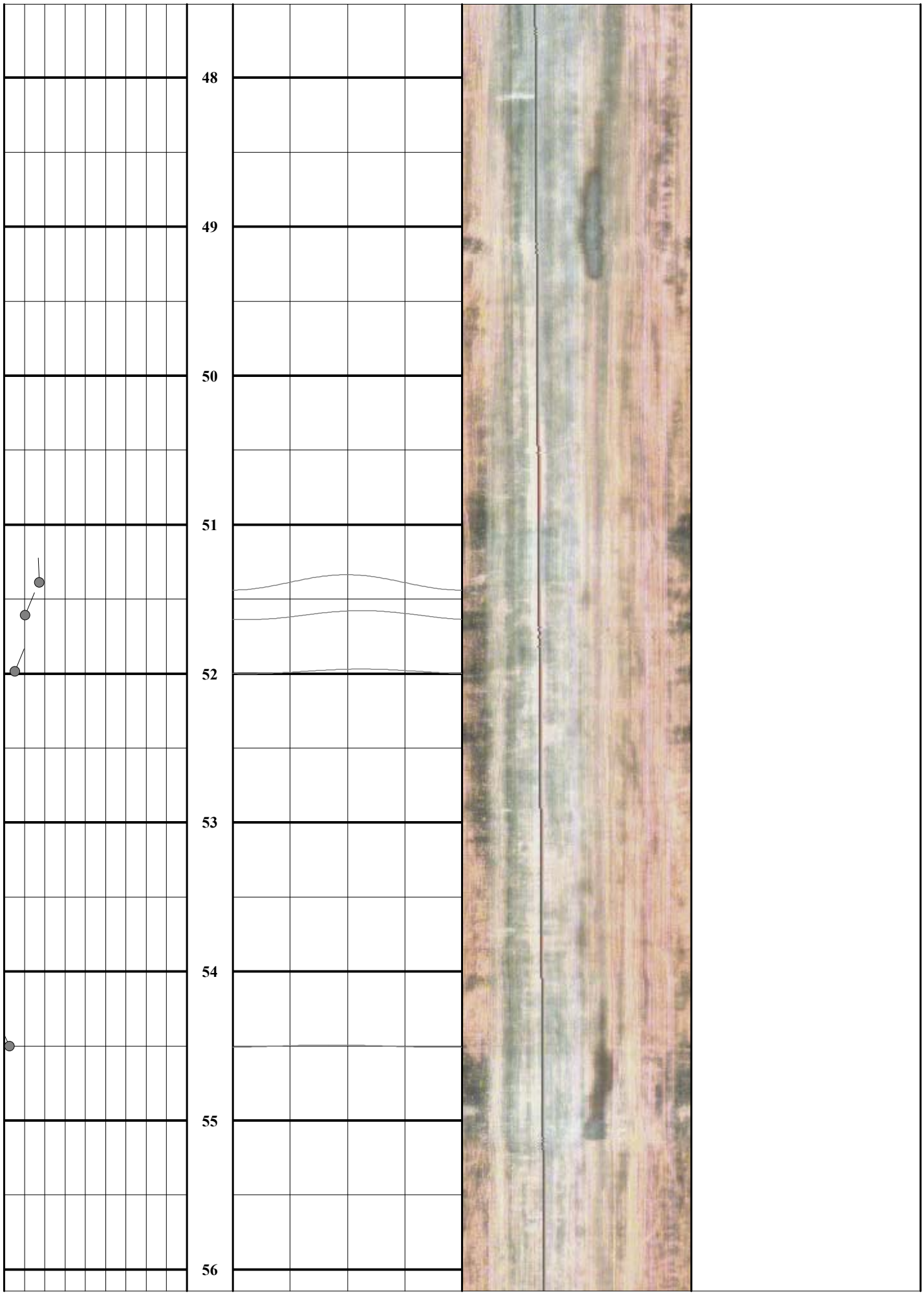
COMPANY: S. M. Stoller Corp.	PROJECT: Crescent Junction
DATE LOGGED: 6 December 2005	WELL: CH-0210

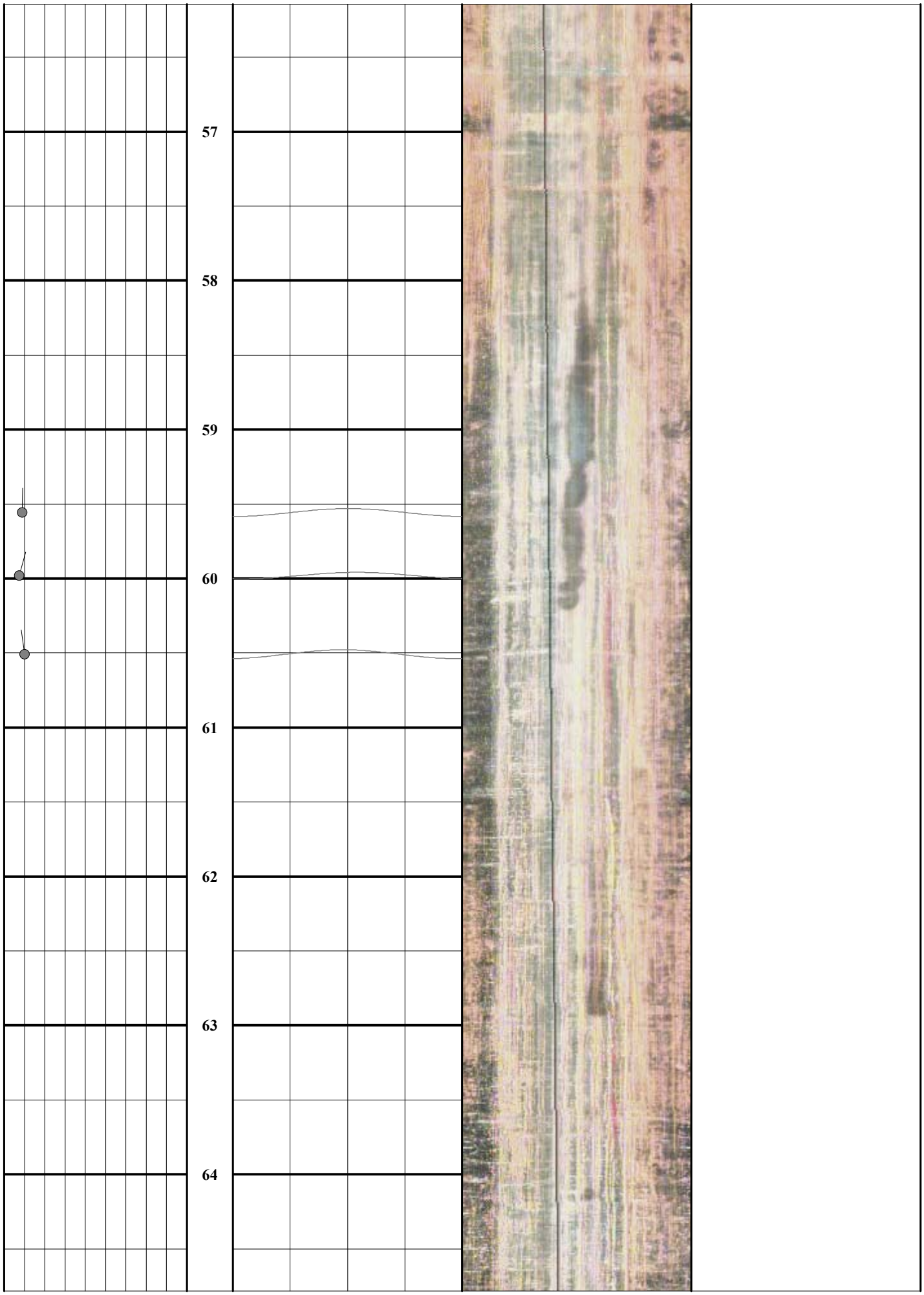
COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com




31
32
33
34
35
36
37
38


39
40
41
42
43
44
45
46
47


48
49
50
51
52
53
54
55
56


57
58
59
60
61
62
63
64

65

66

67

68

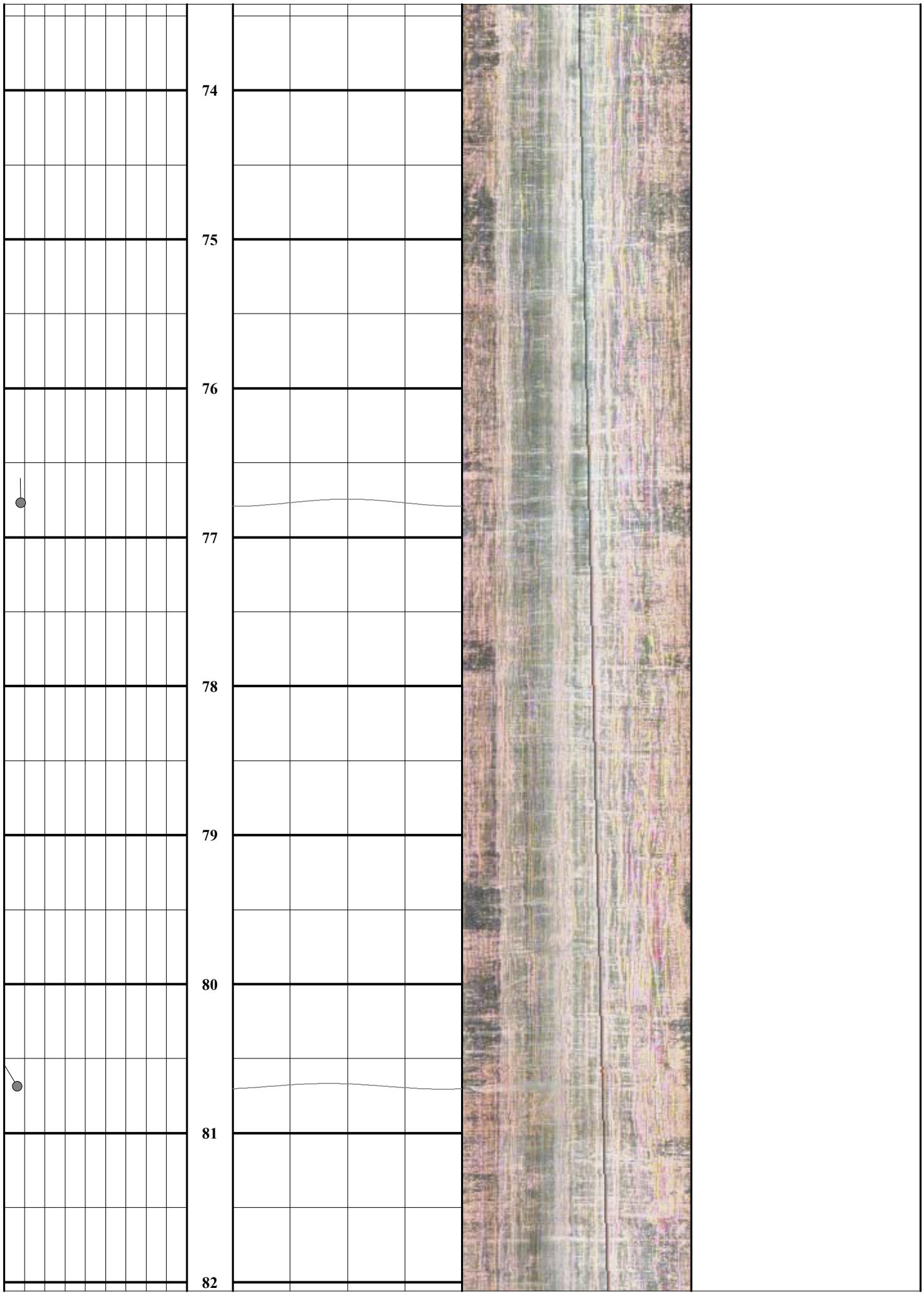
69

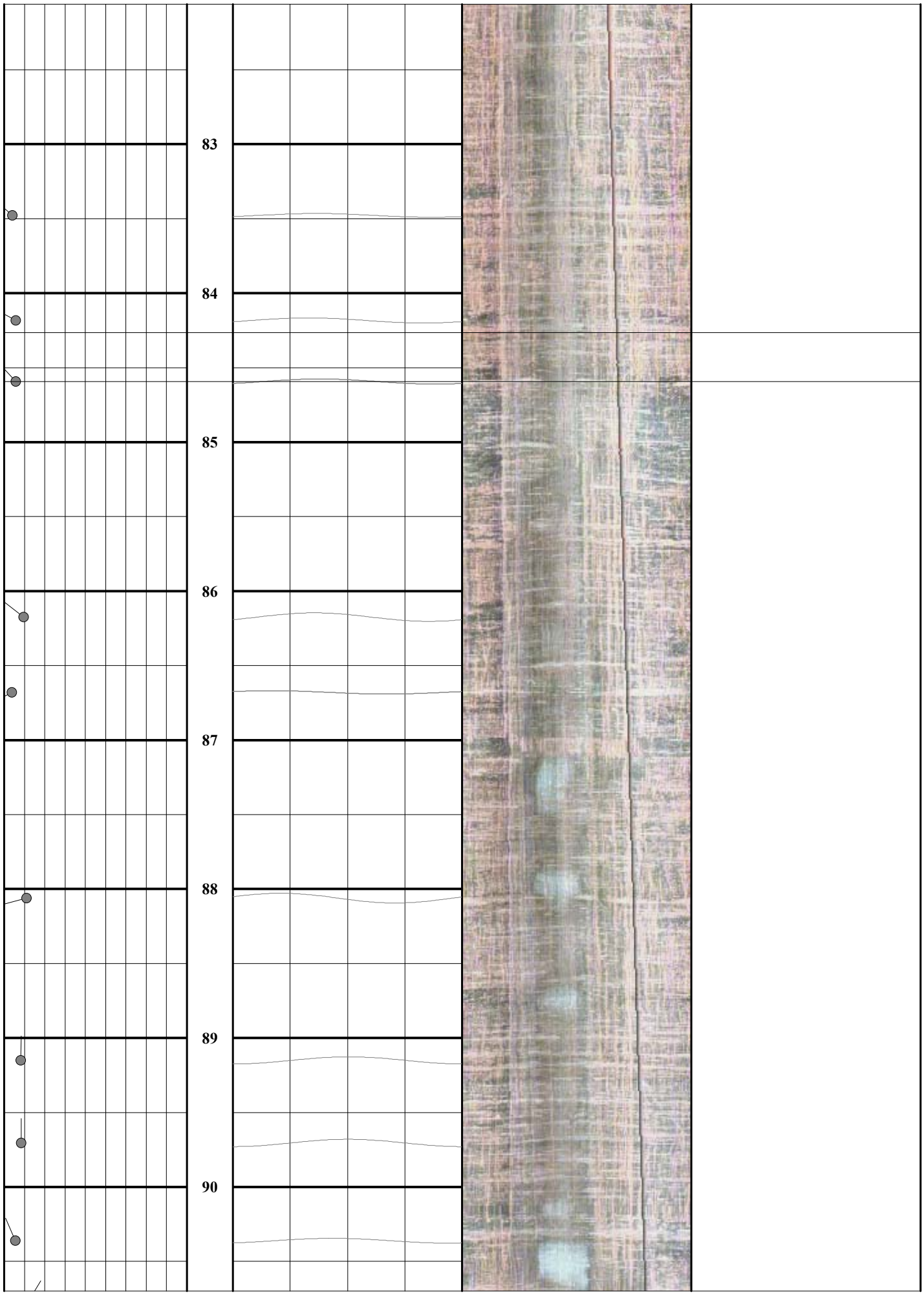
70

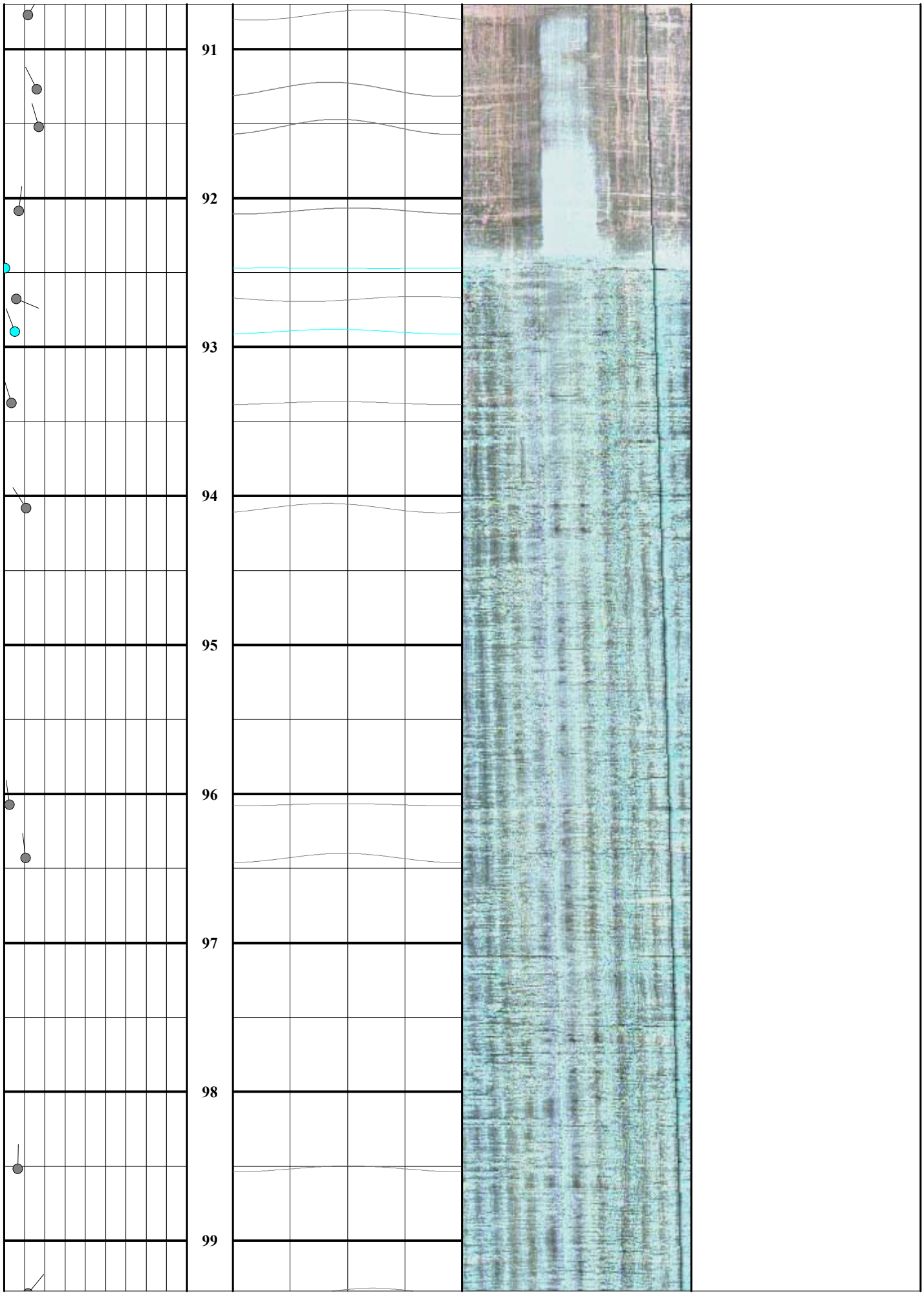
71

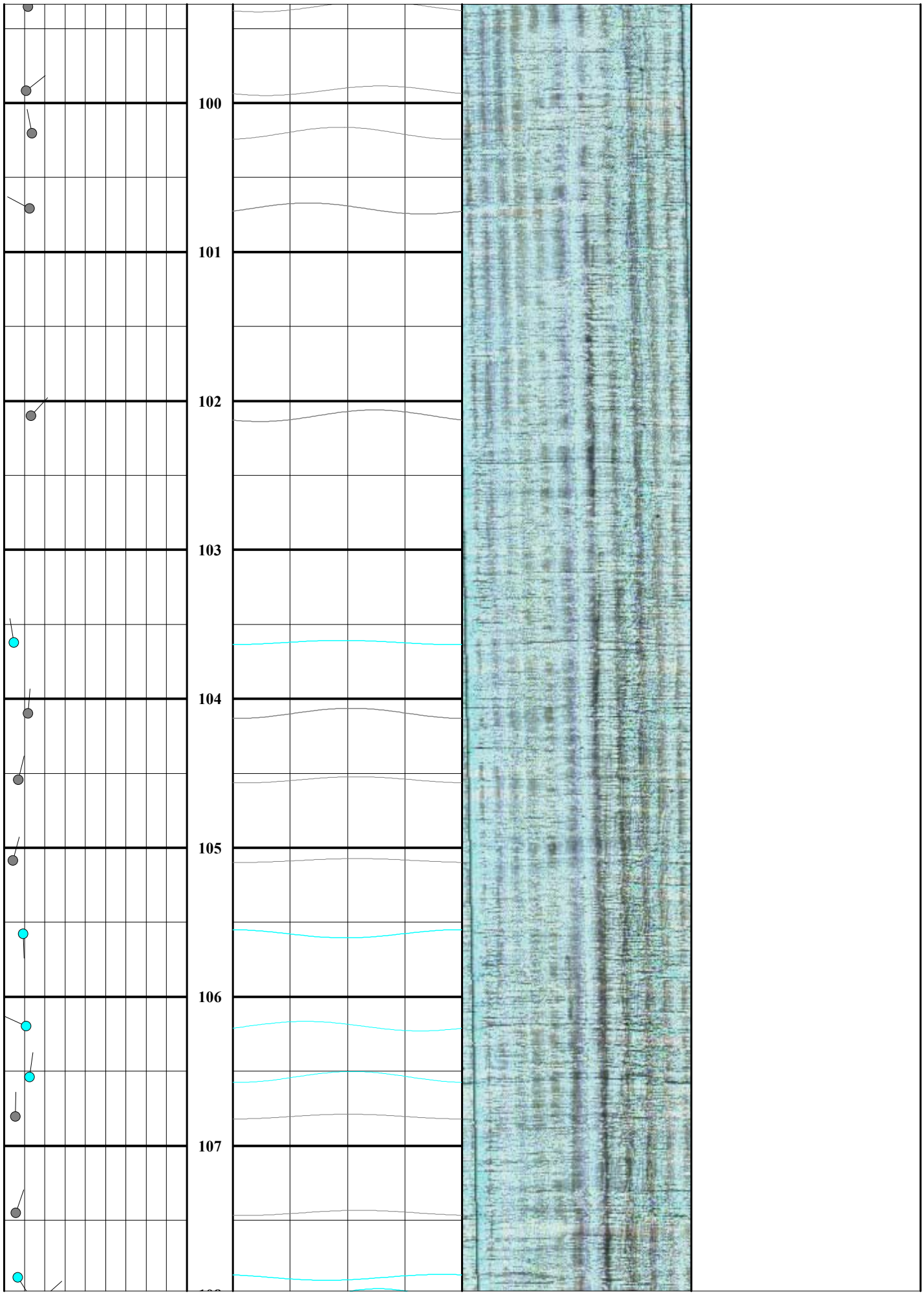
72

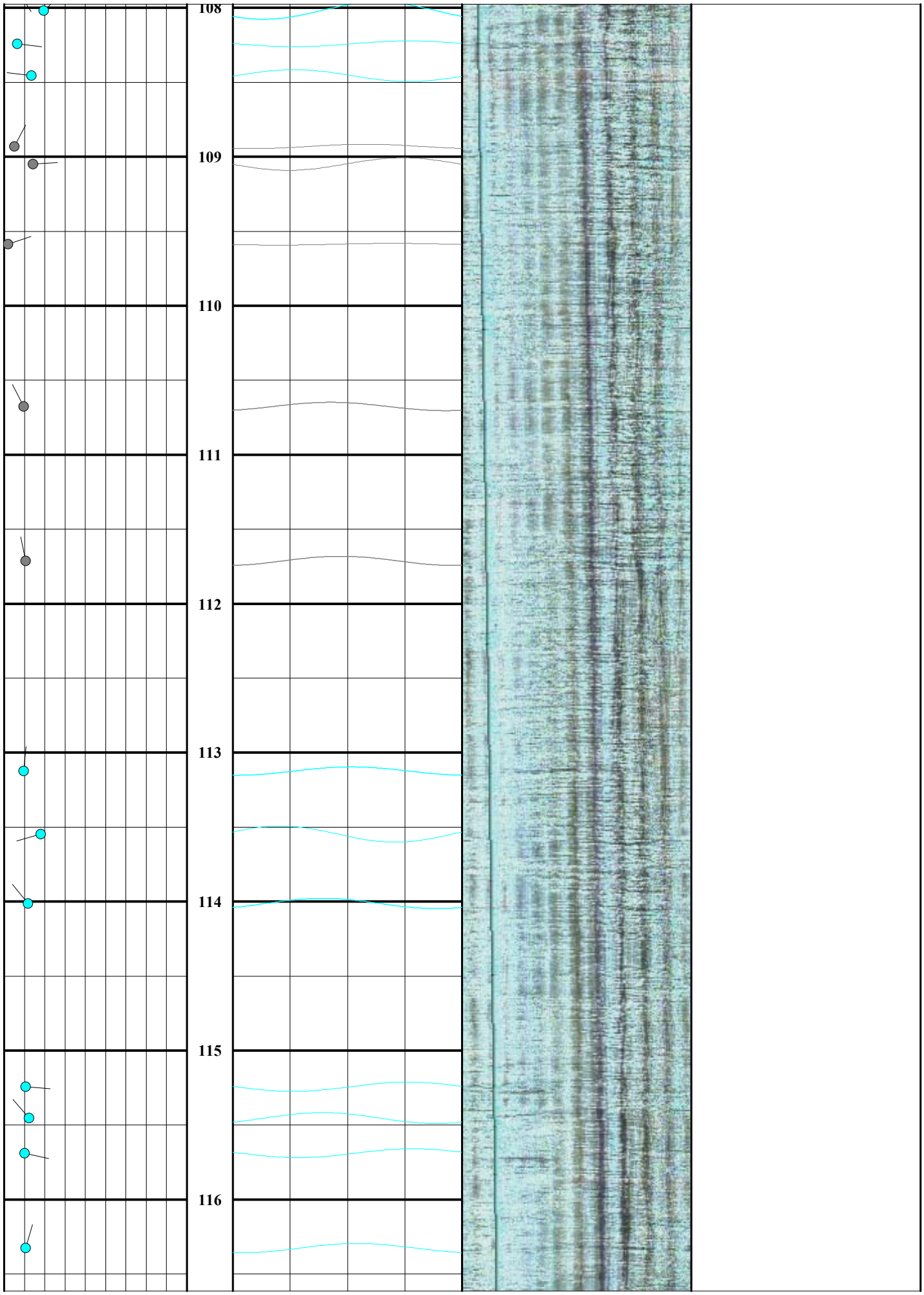
73

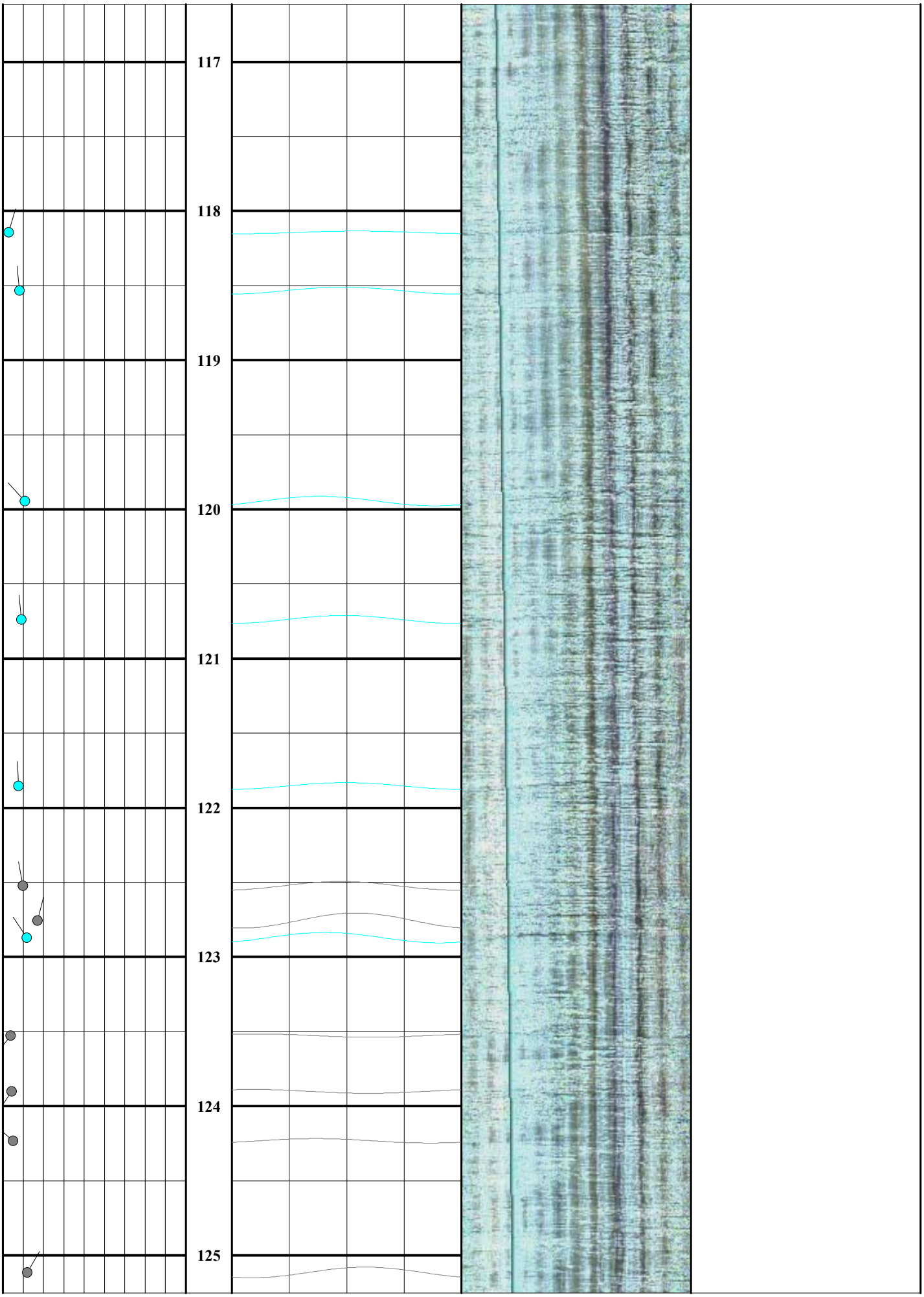

74
75
76
77
78
79
80
81
82

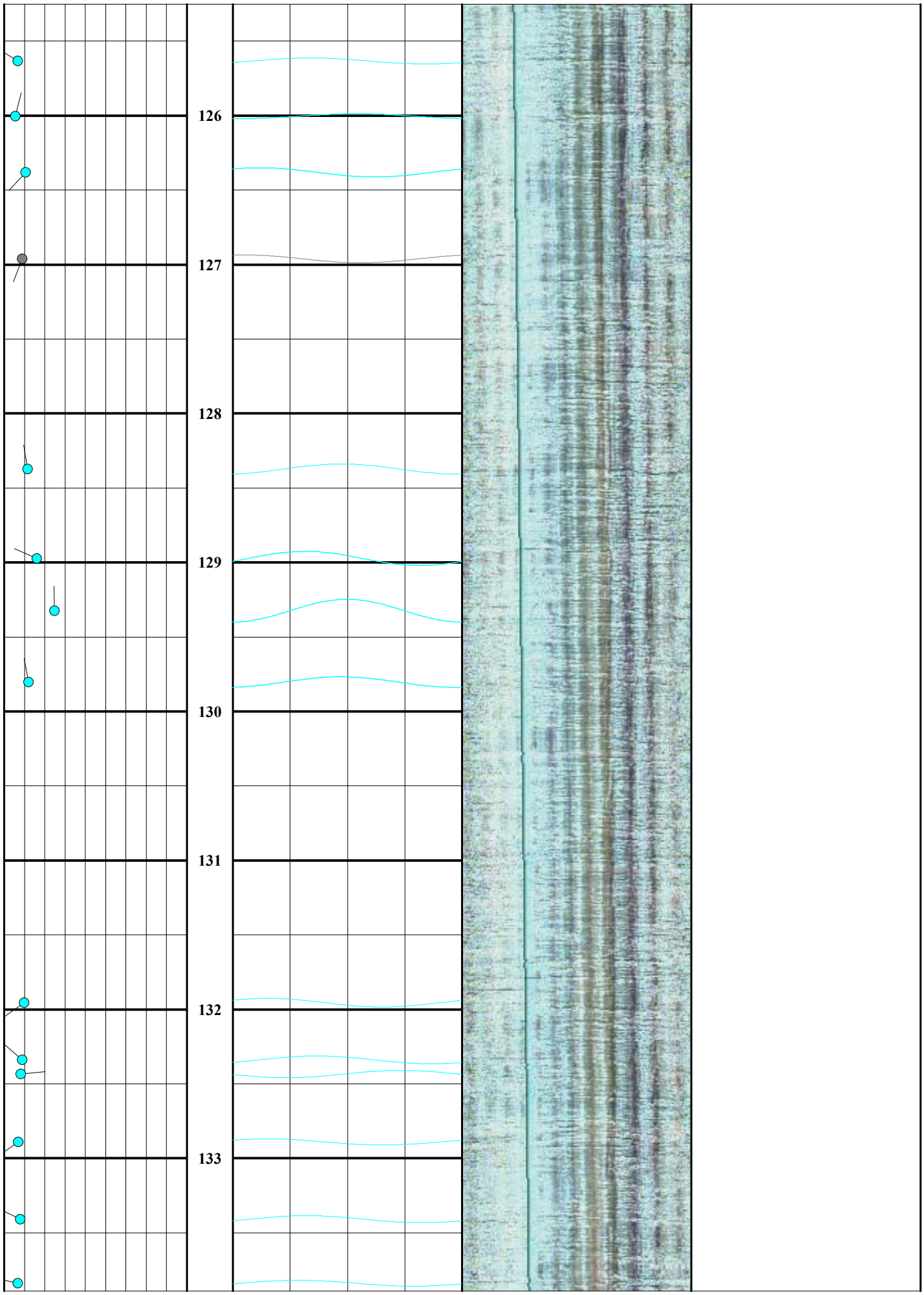

83
84
85
86
87
88
89
90

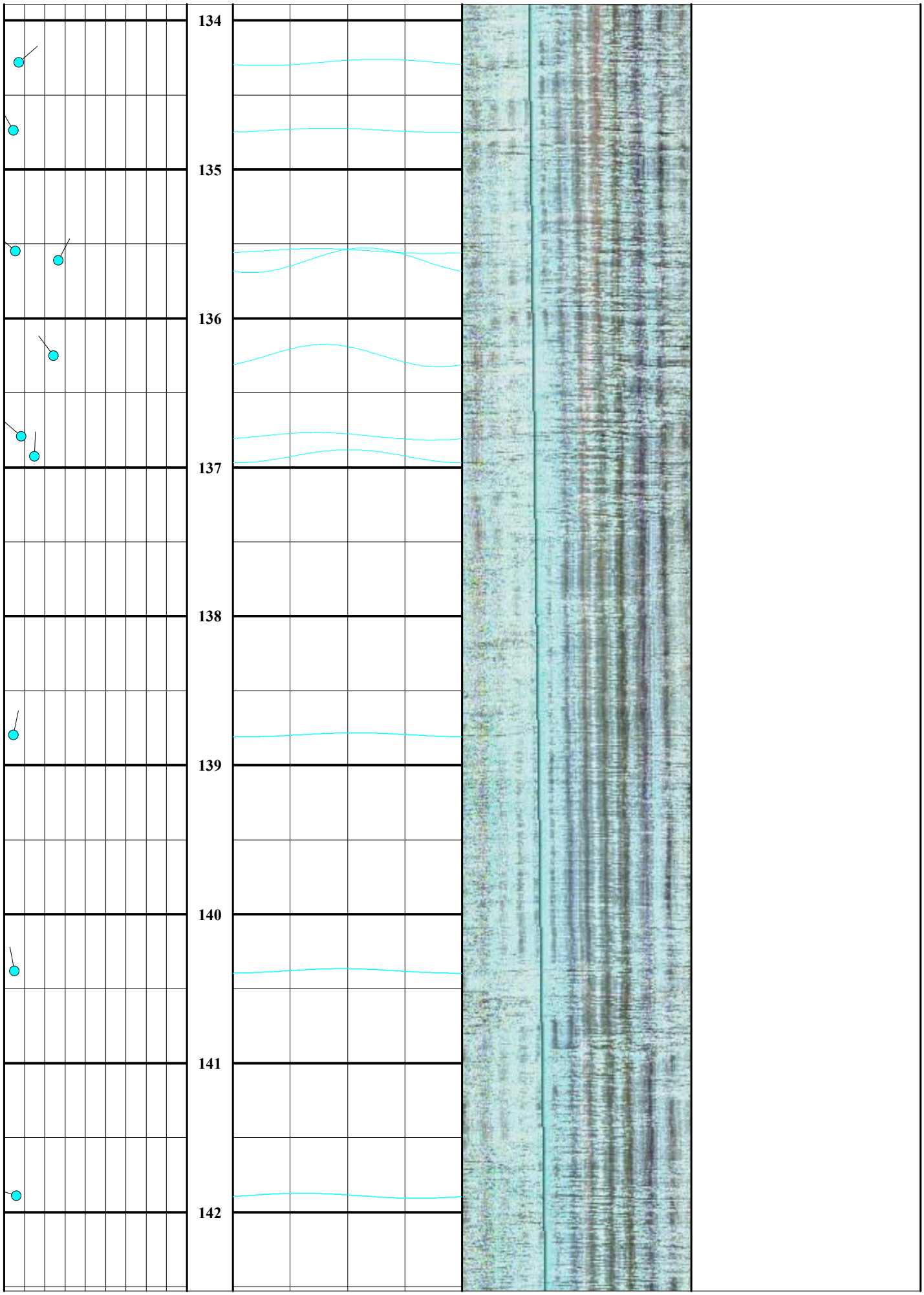

91
92
93
94
95
96
97
98
99

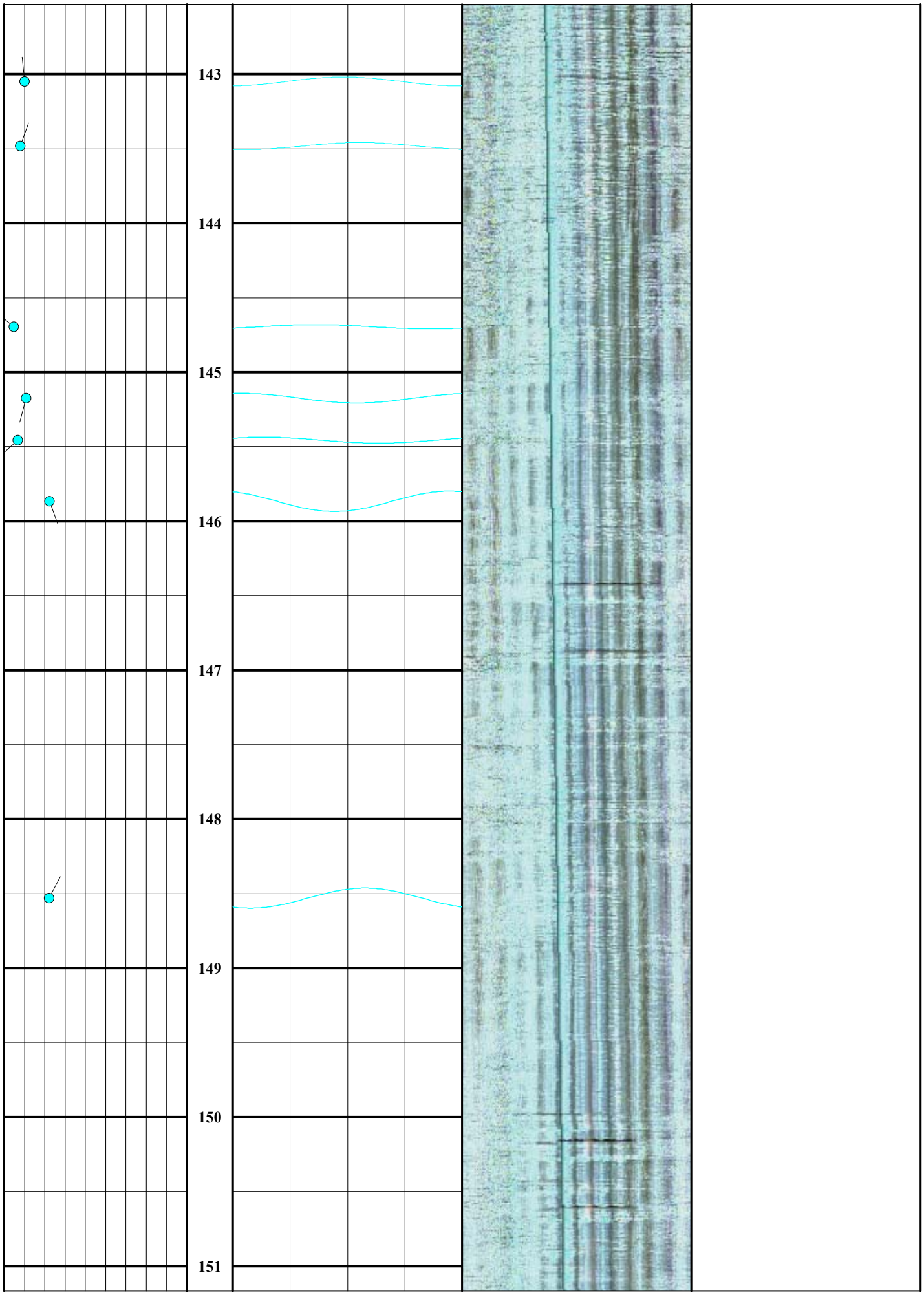

100
101
102
103
104
105
106
107

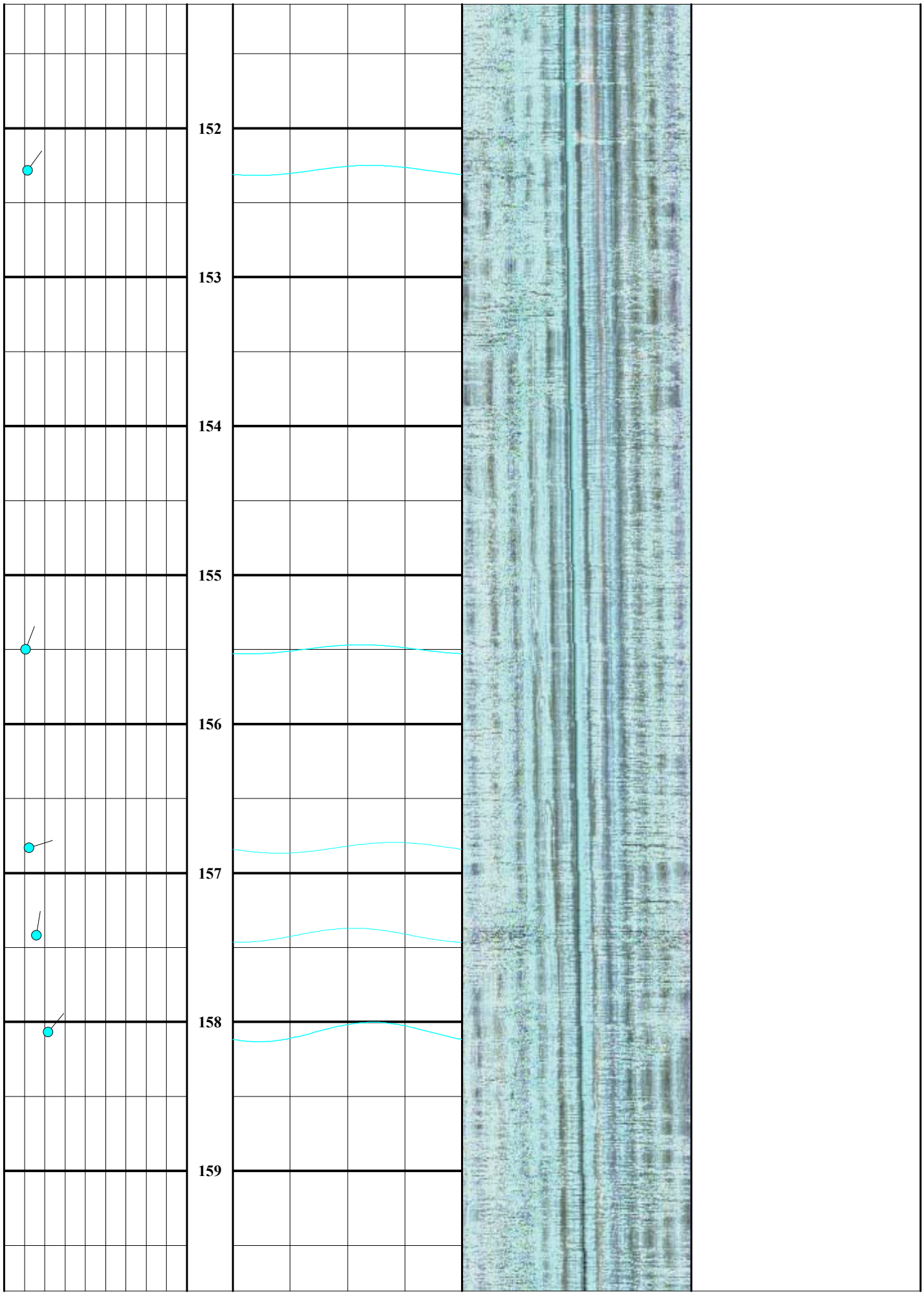

108
109
110
111
112
113
114
115
116

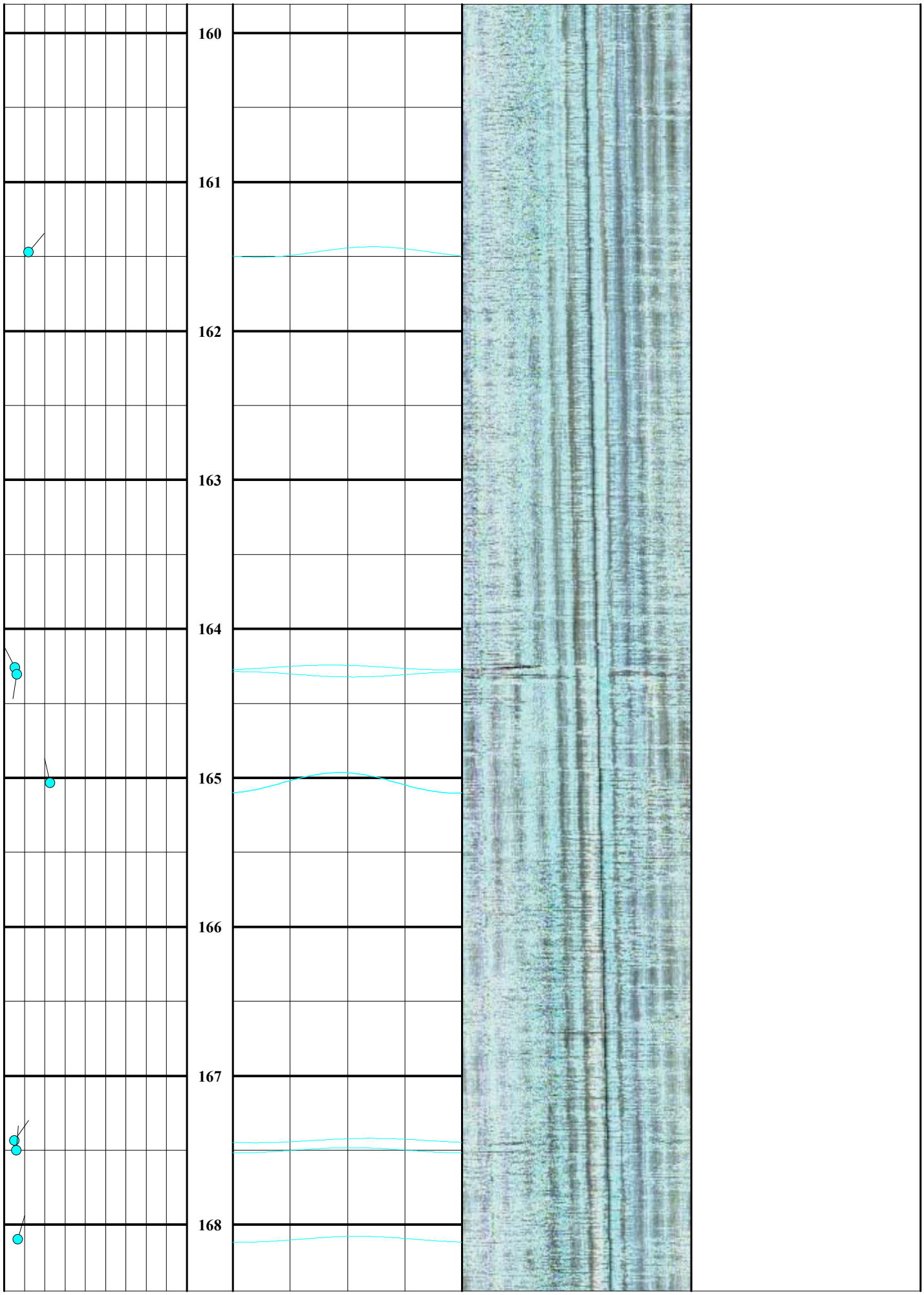

117
118
119
120
121
122
123
124
125

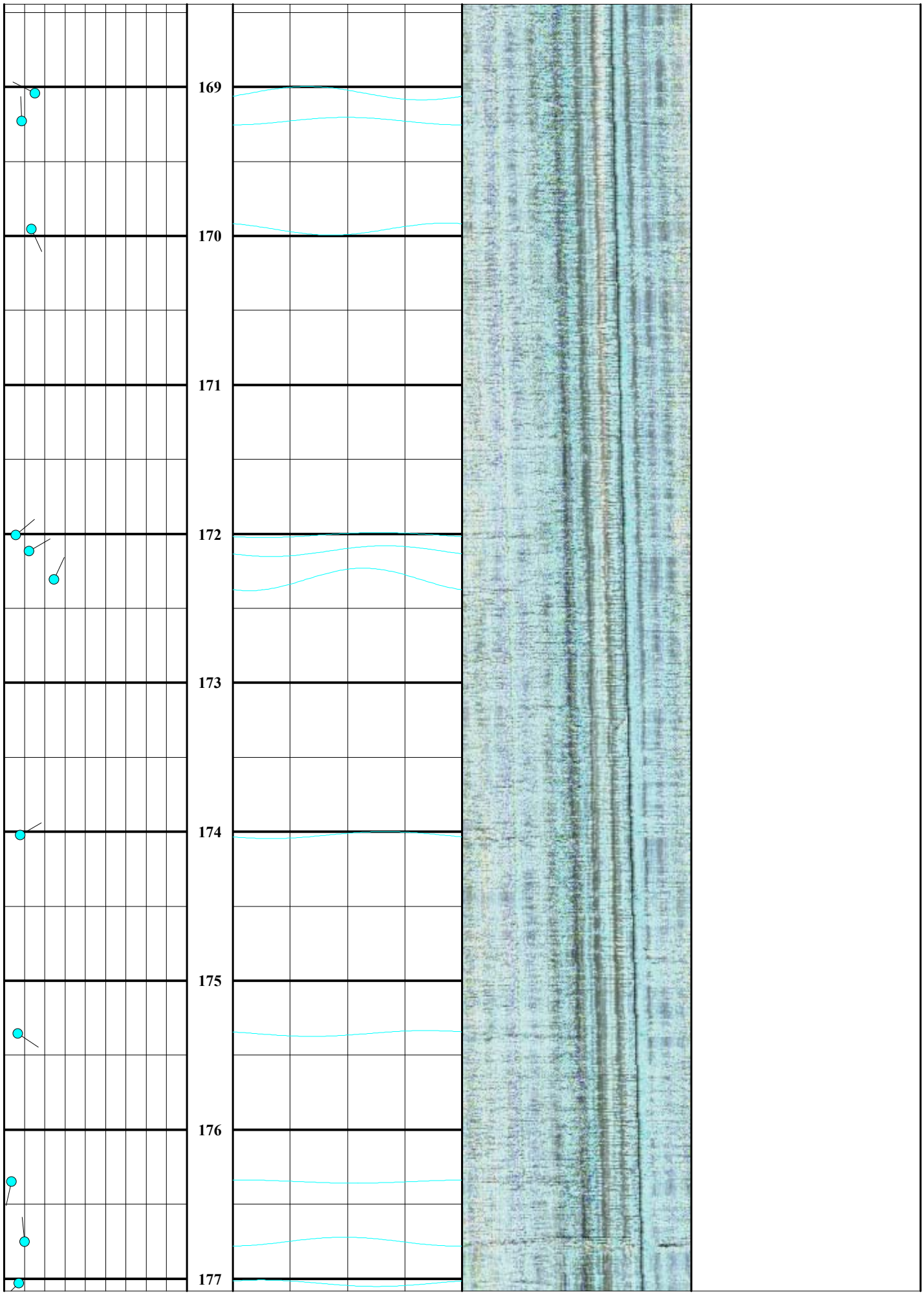

126
127
128
129
130
131
132
133

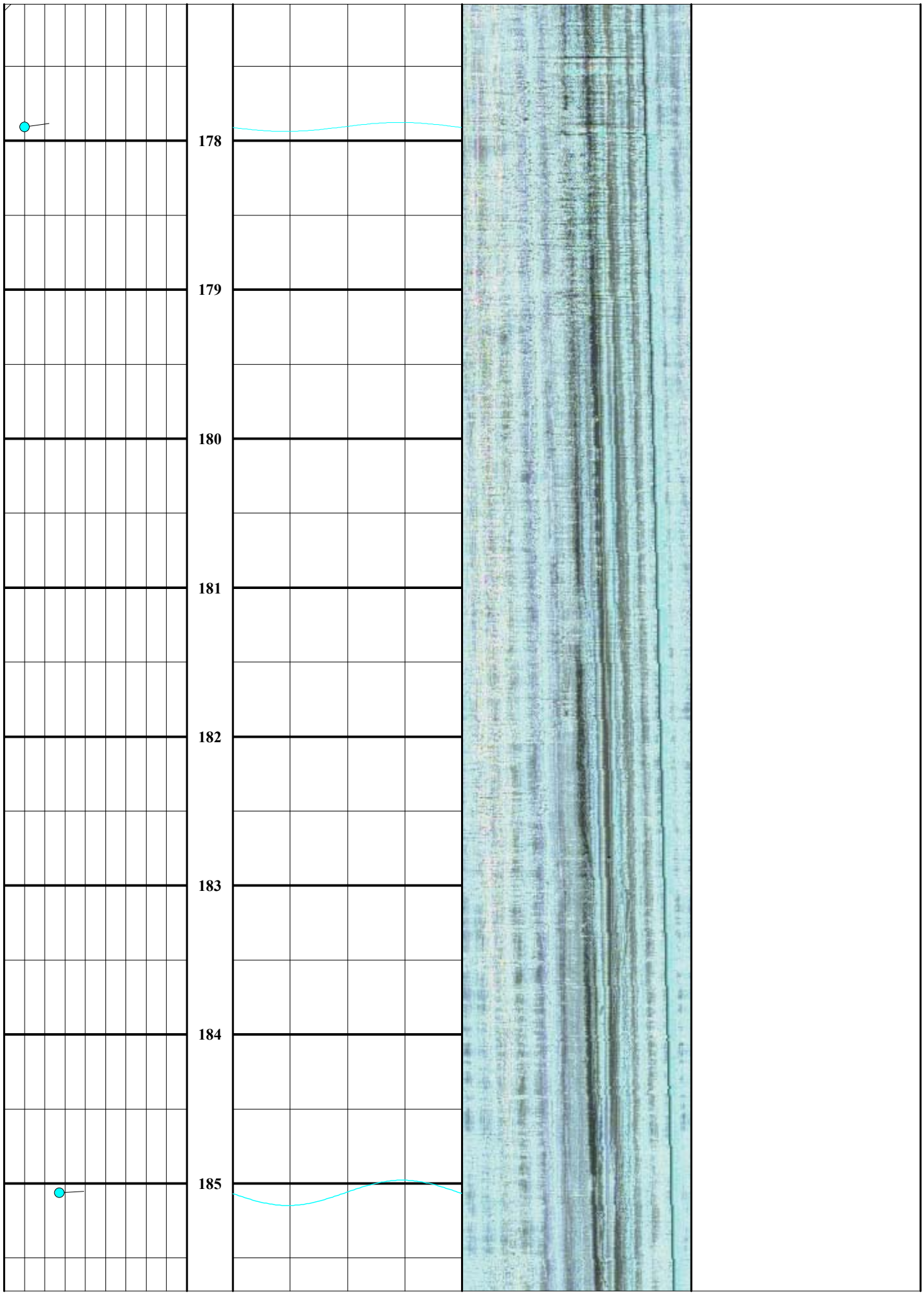

134
135
136
137
138
139
140
141
142

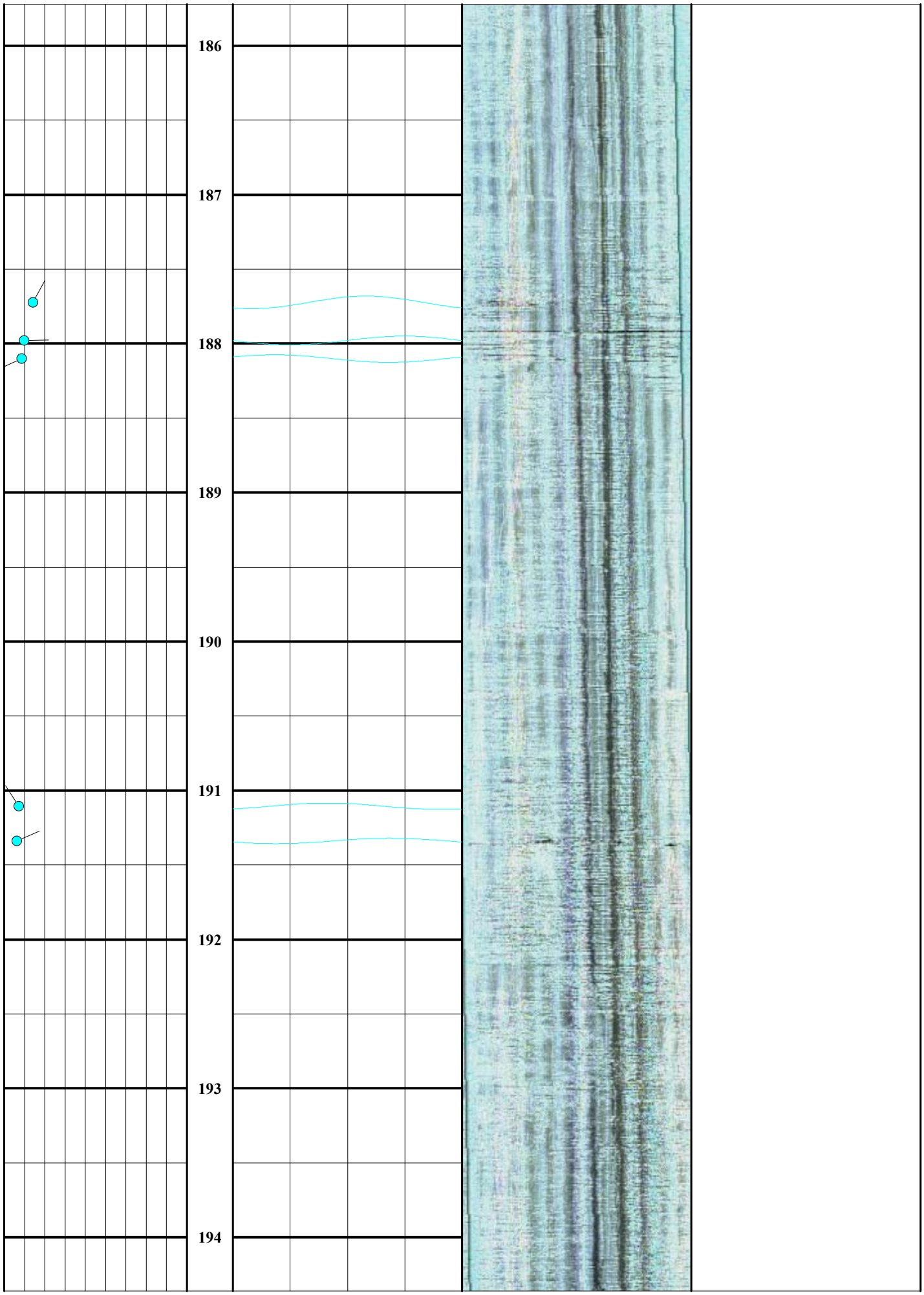

143
144
145
146
147
148
149
150
151

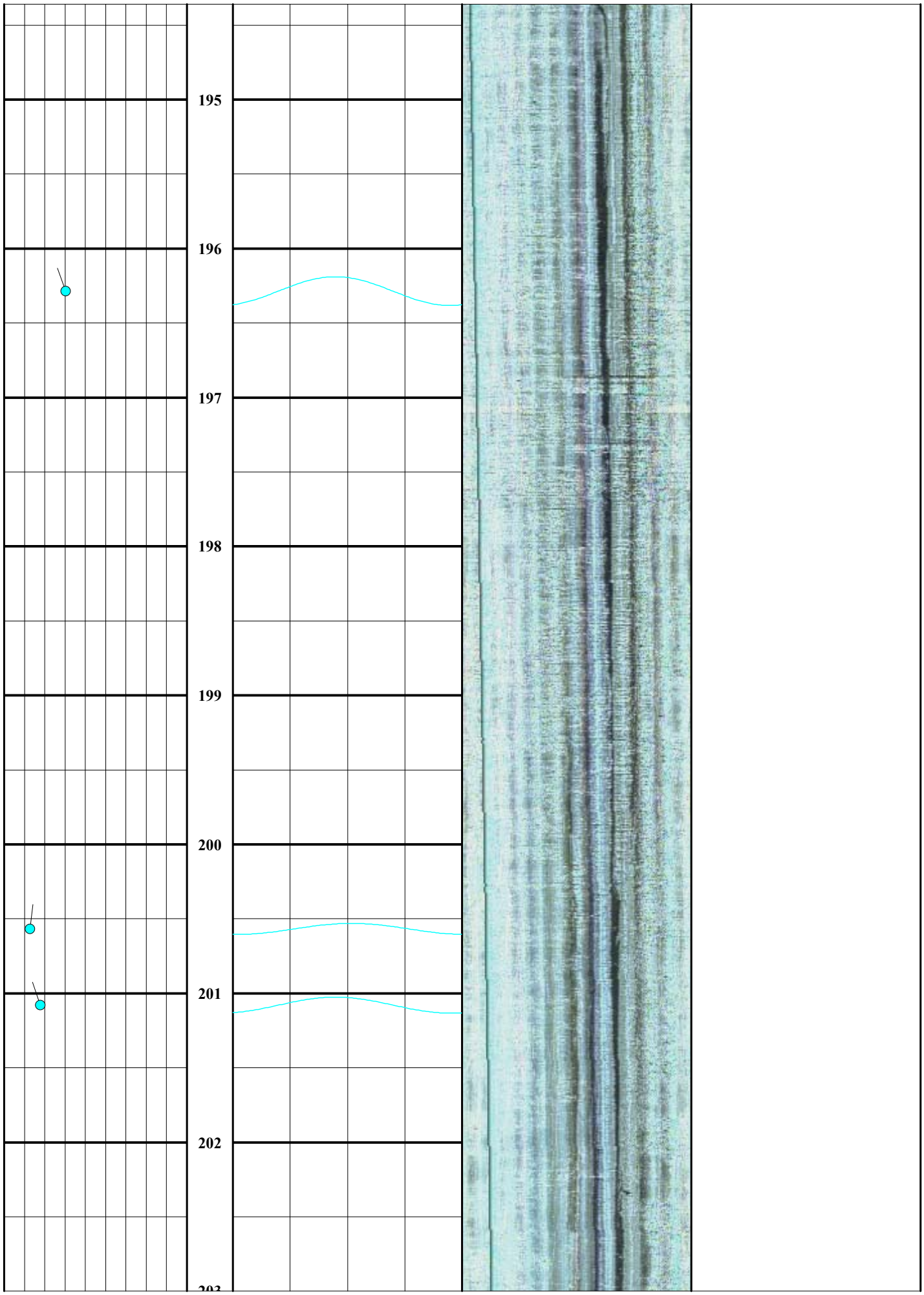

152
153
154
155
156
157
158
159

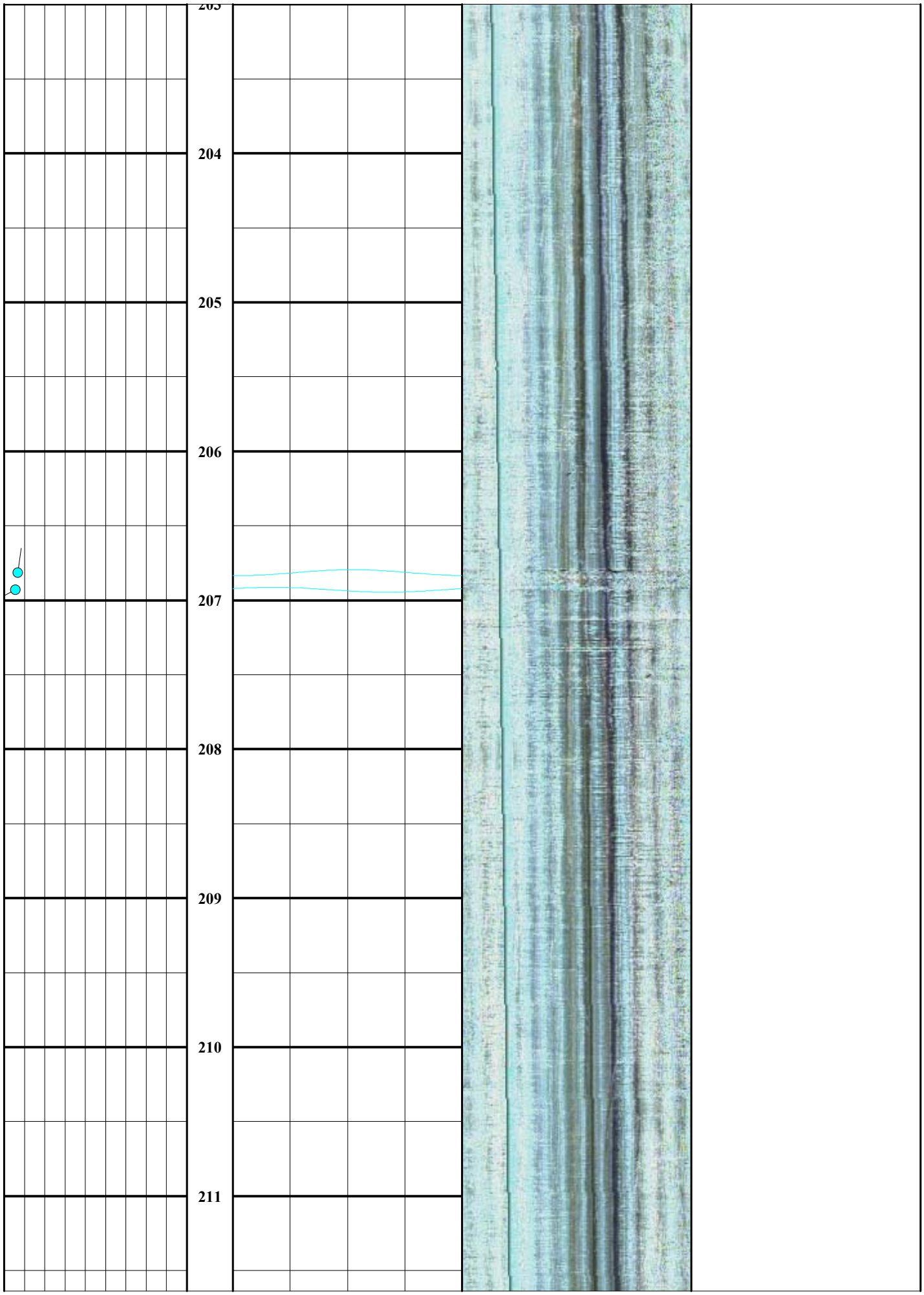

160
161
162
163
164
165
166
167
168

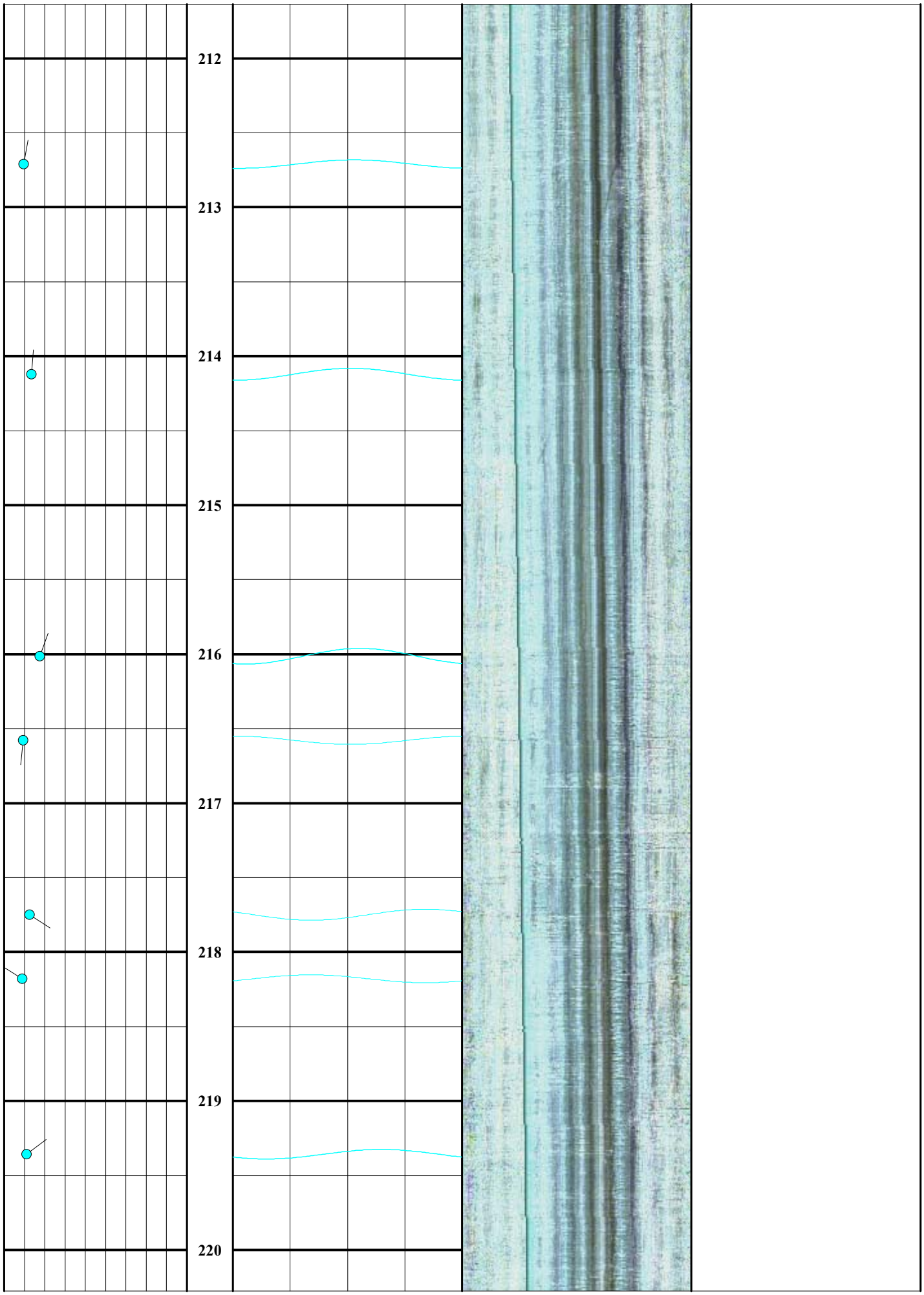

169
170
171
172
173
174
175
176
177

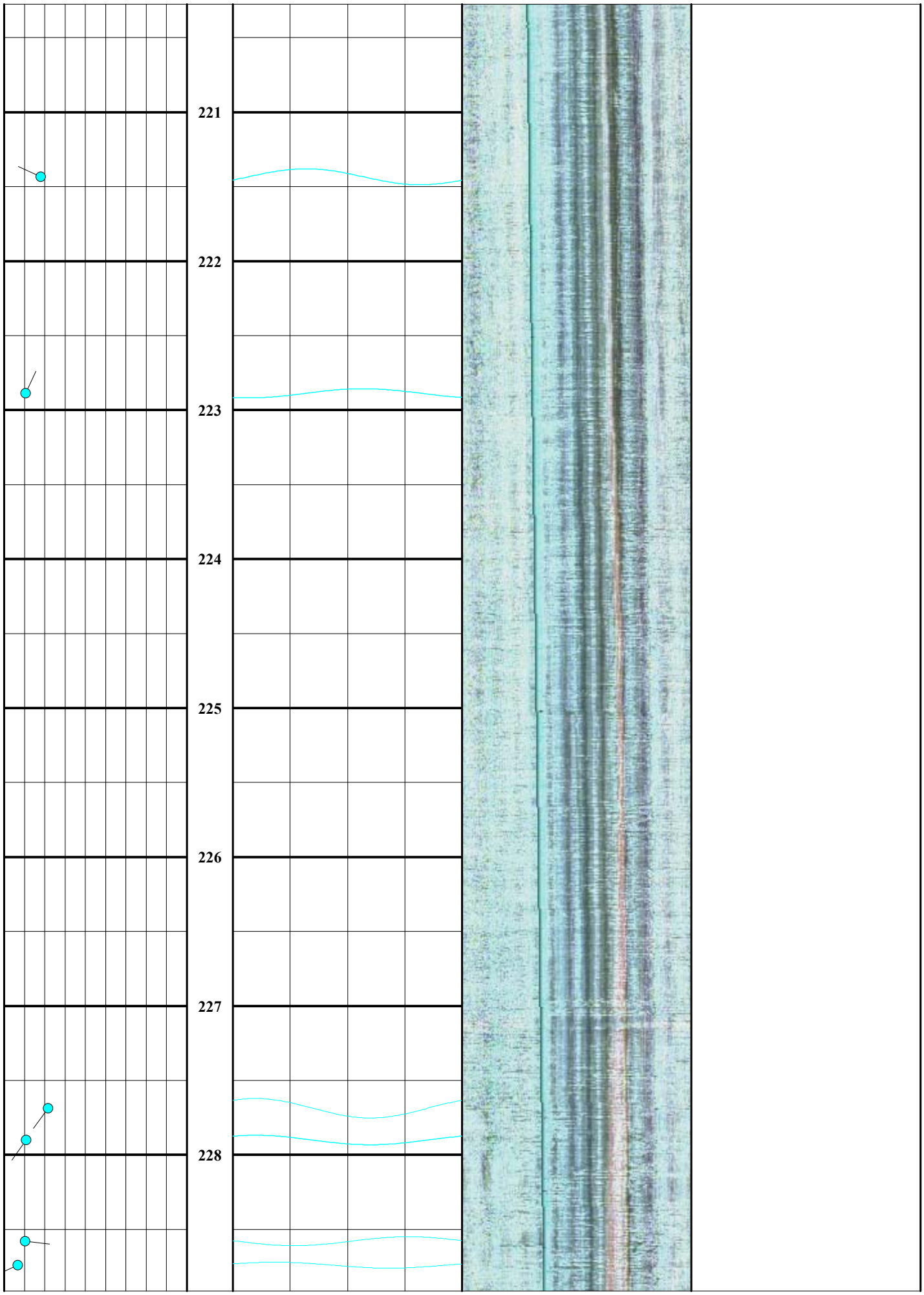

178
179
180
181
182
183
184
185

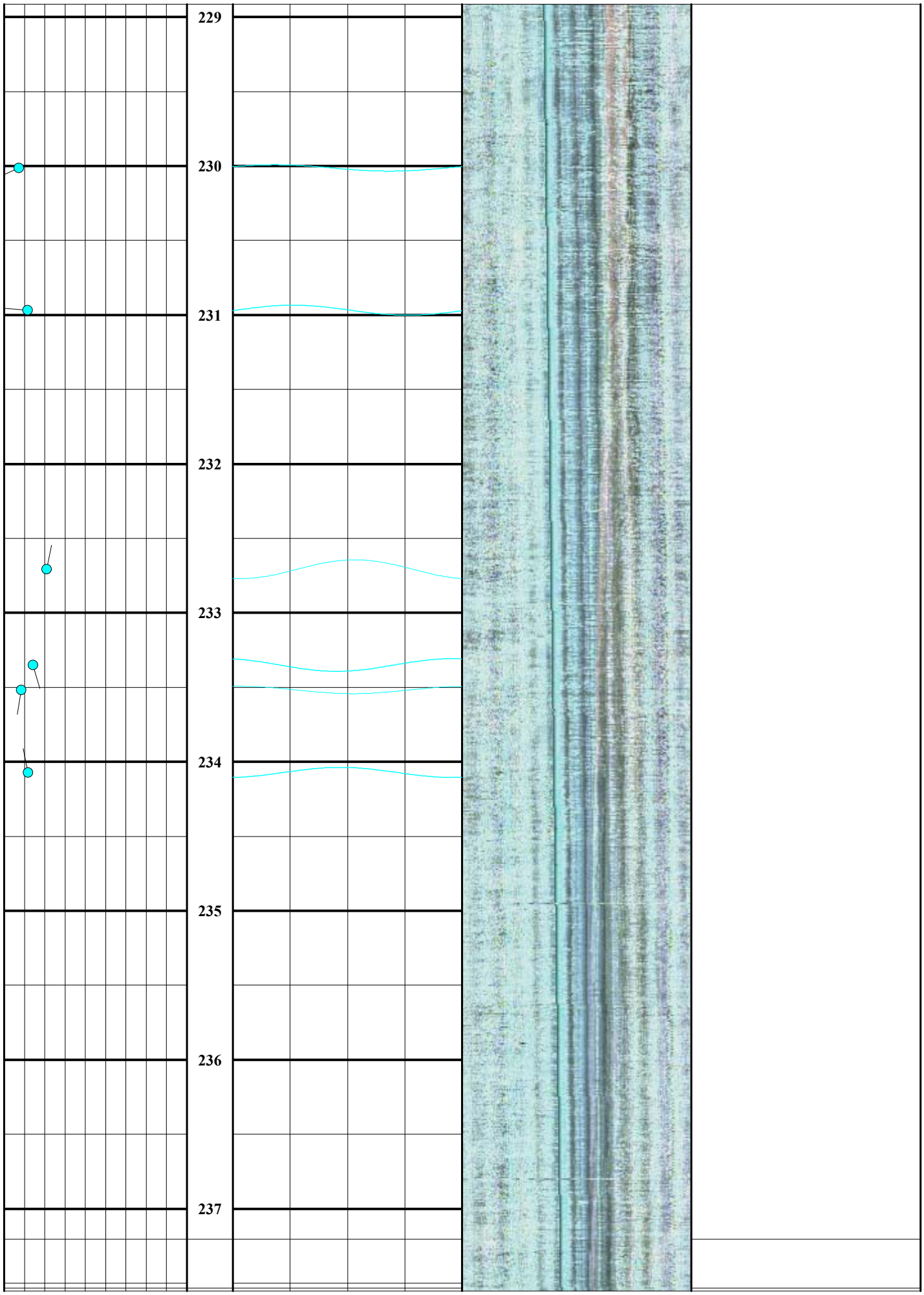

186
187
188
189
190
191
192
193
194

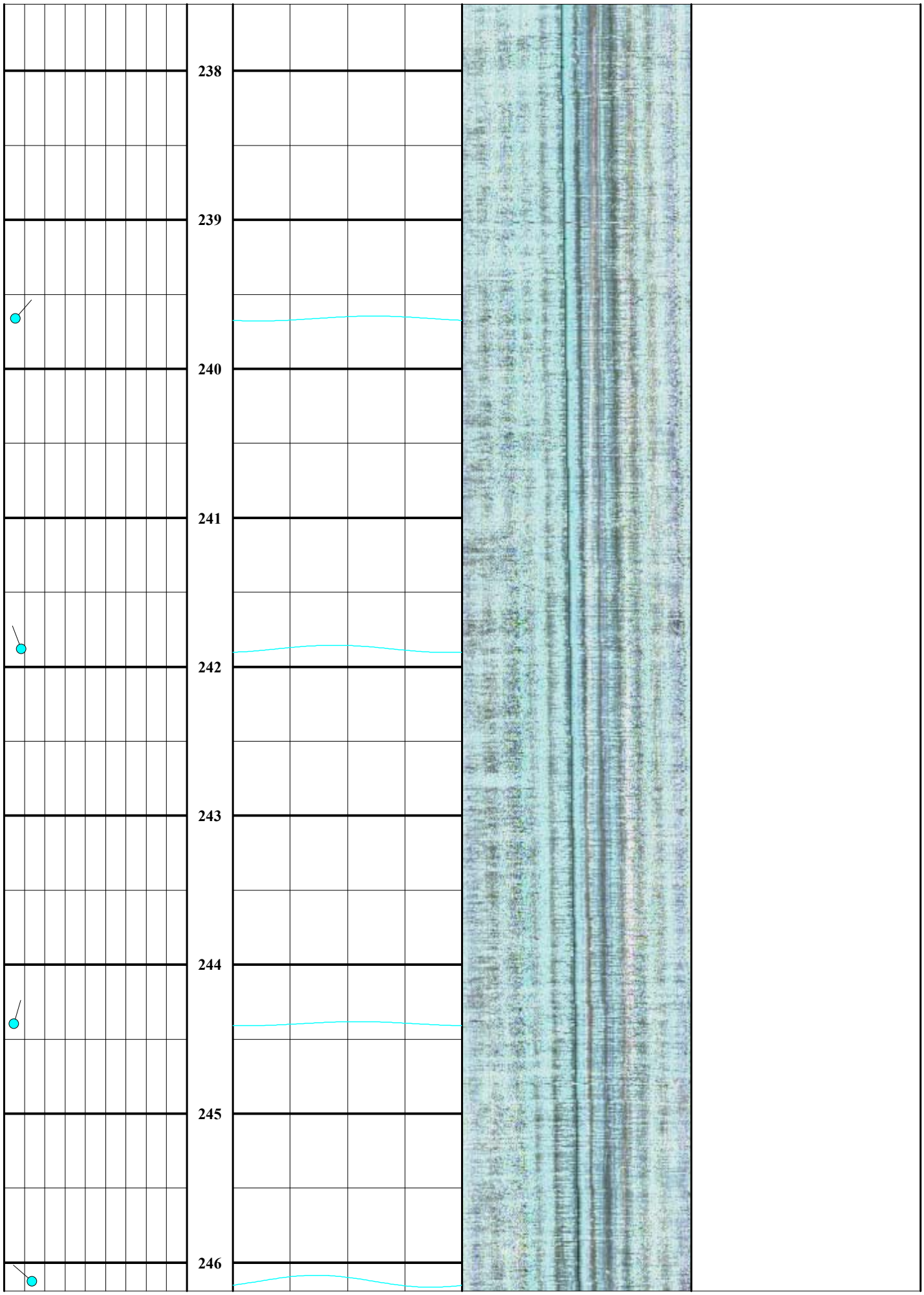

195
196
197
198
199
200
201
202
203

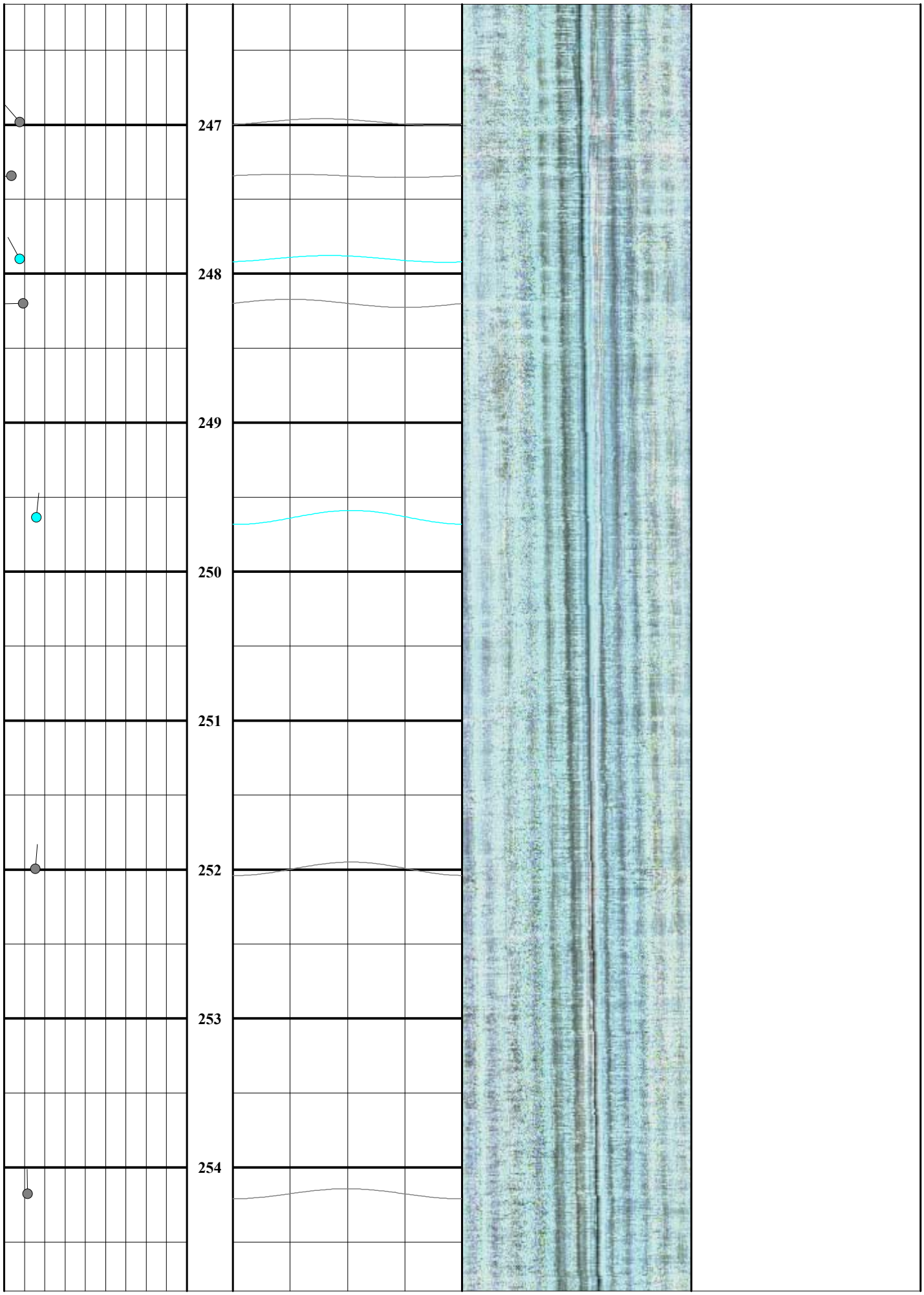

203
204
205
206
207
208
209
210
211

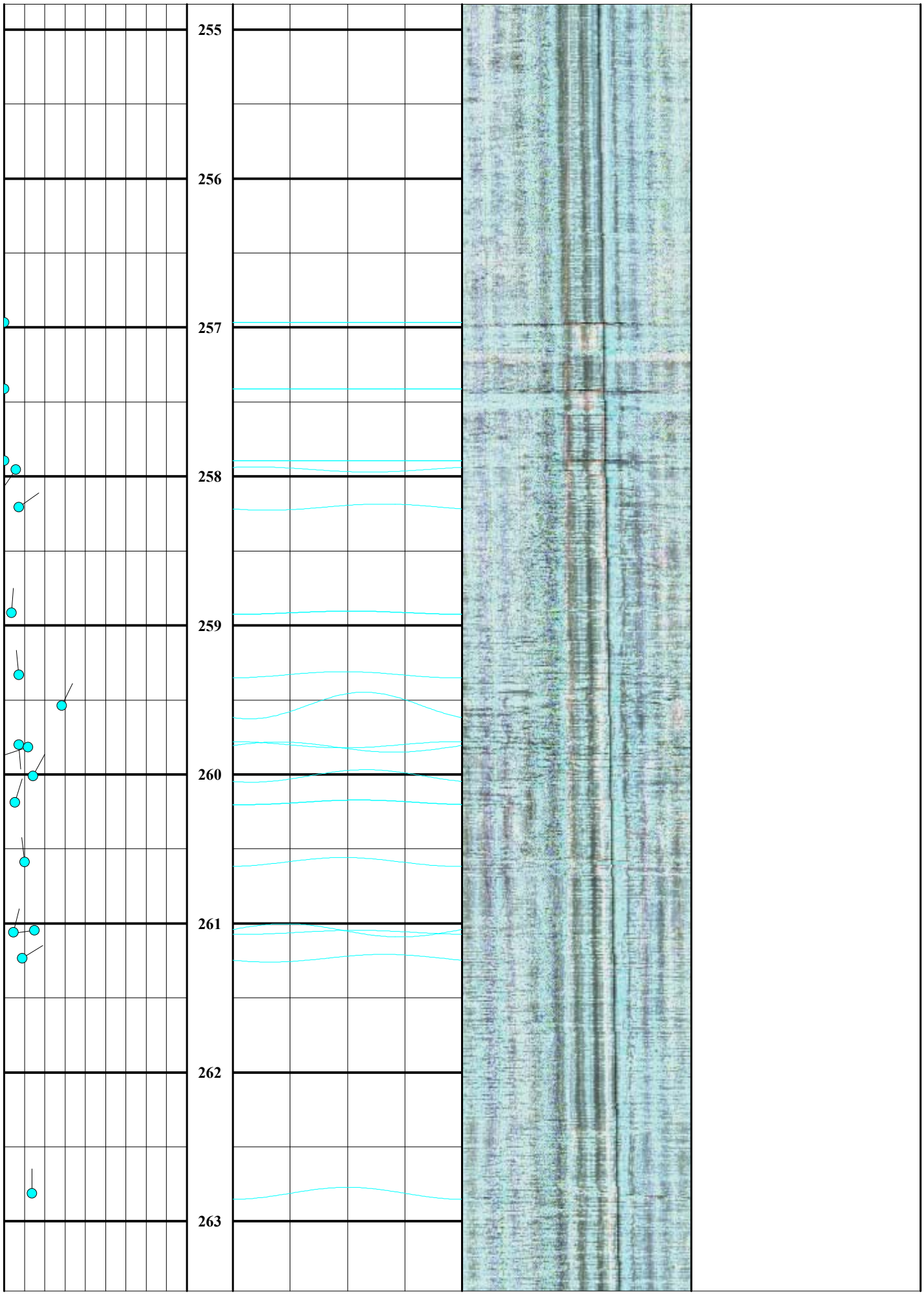

212
213
214
215
216
217
218
219
220

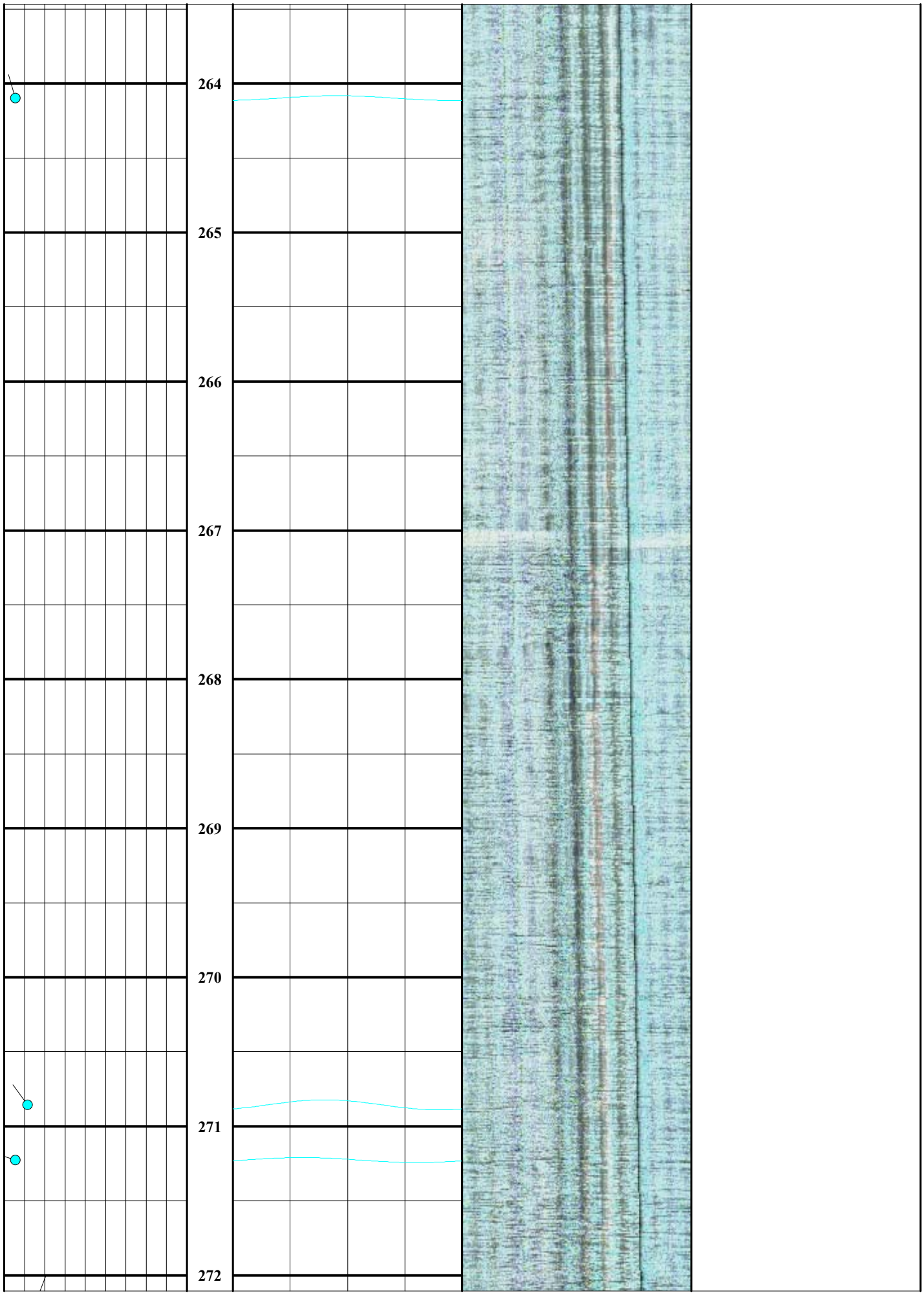

221
222
223
224
225
226
227
228

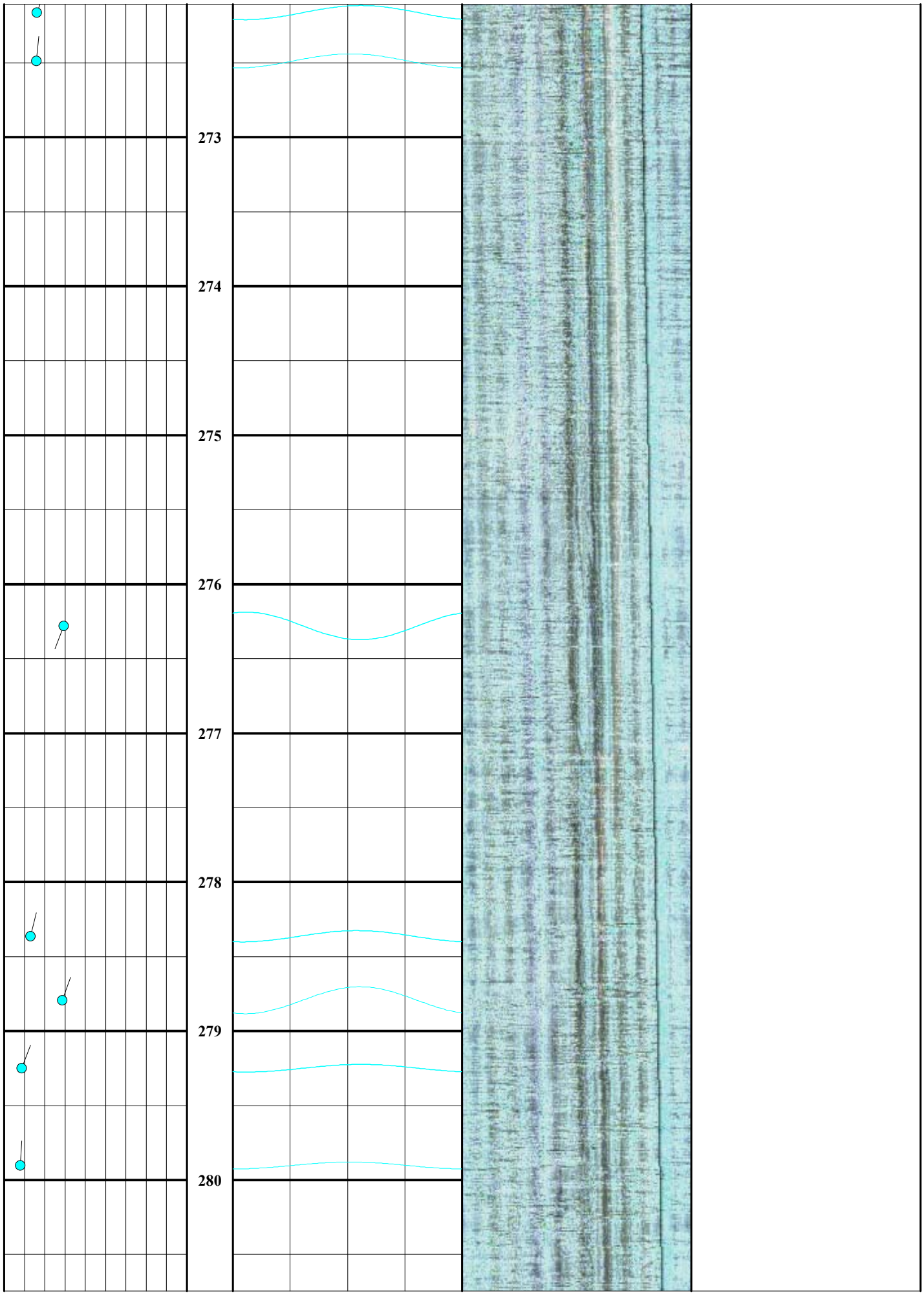

229
230
231
232
233
234
235
236
237

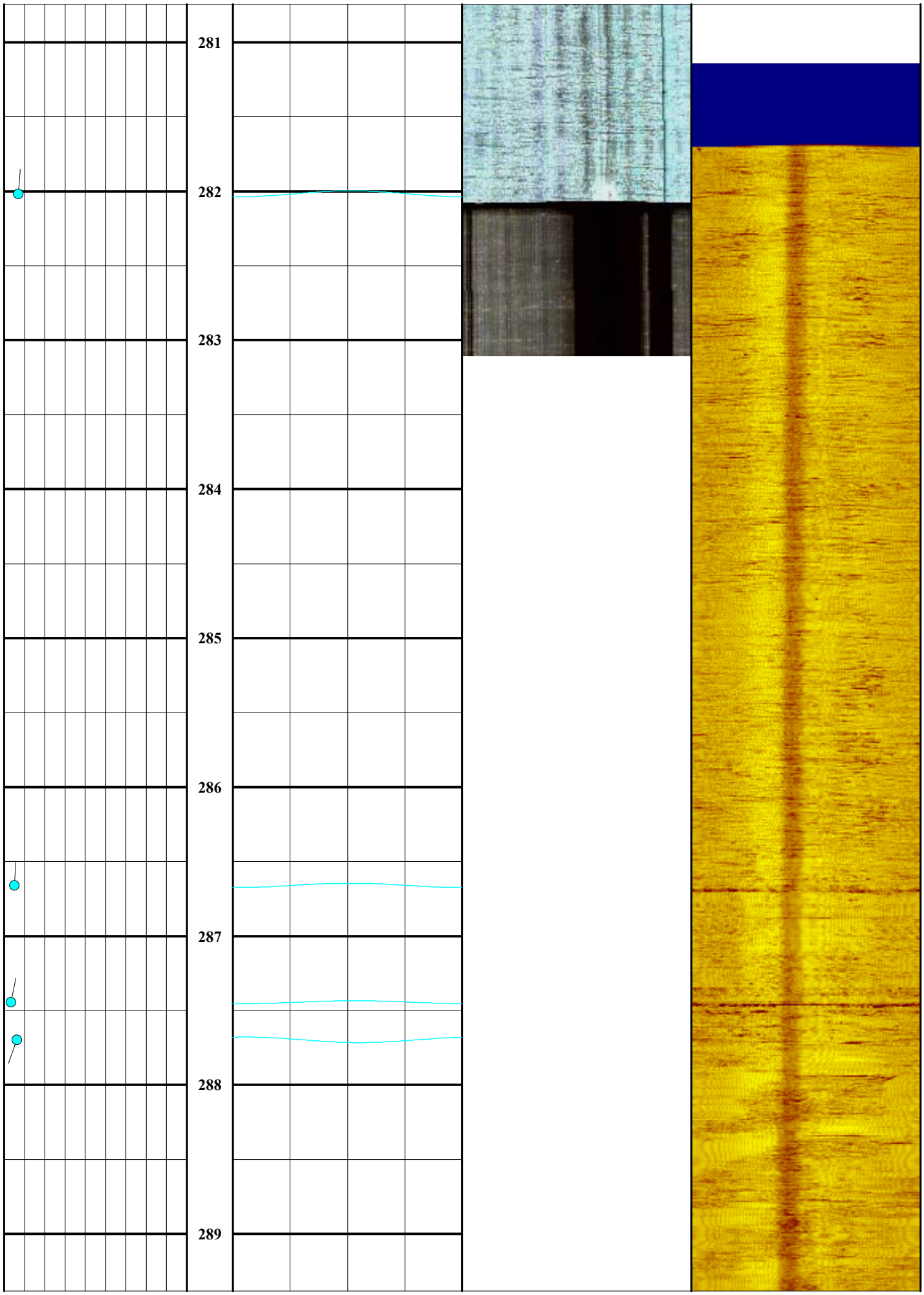

238
239
240
241
242
243
244
245
246

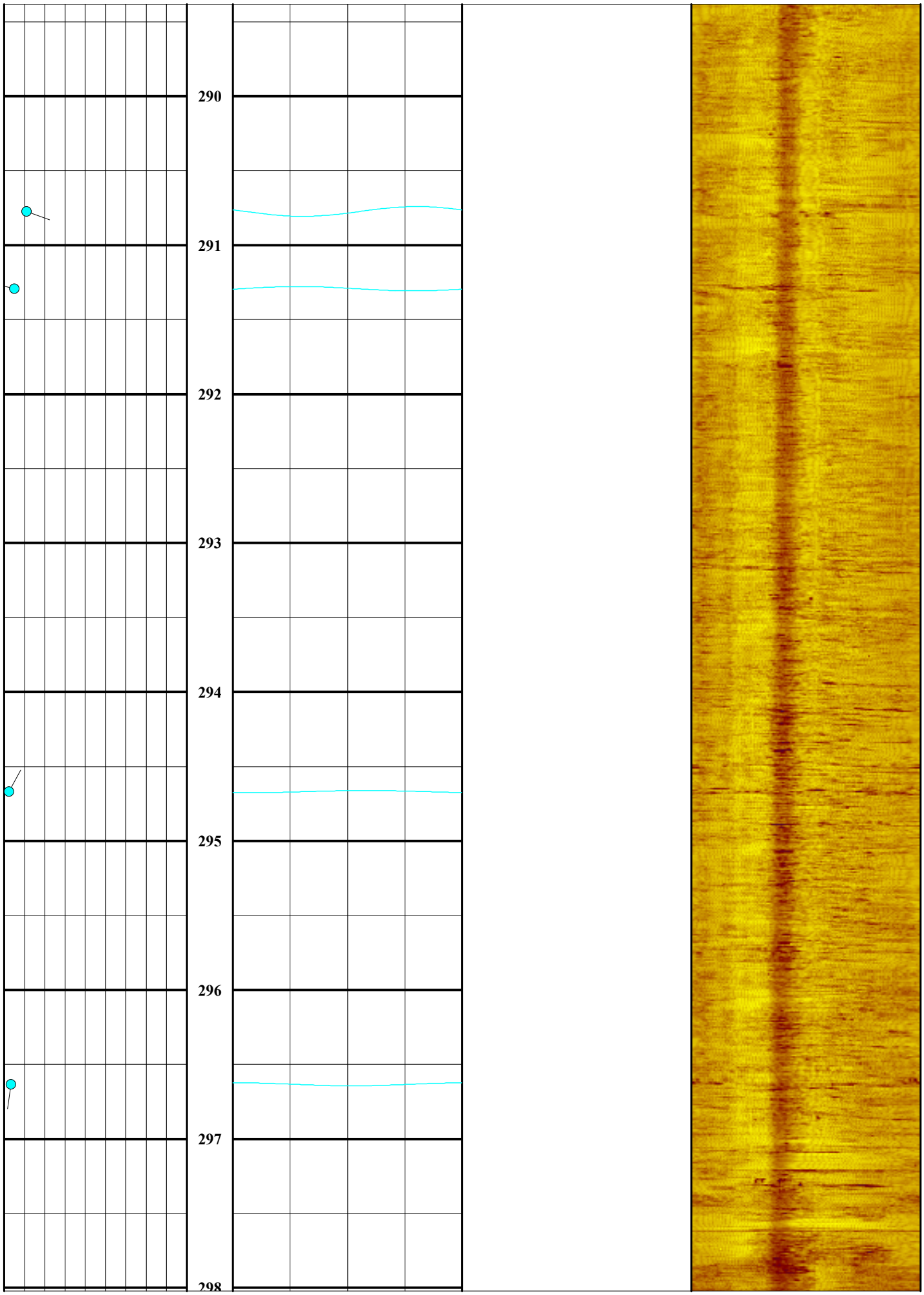

247
248
249
250
251
252
253
254

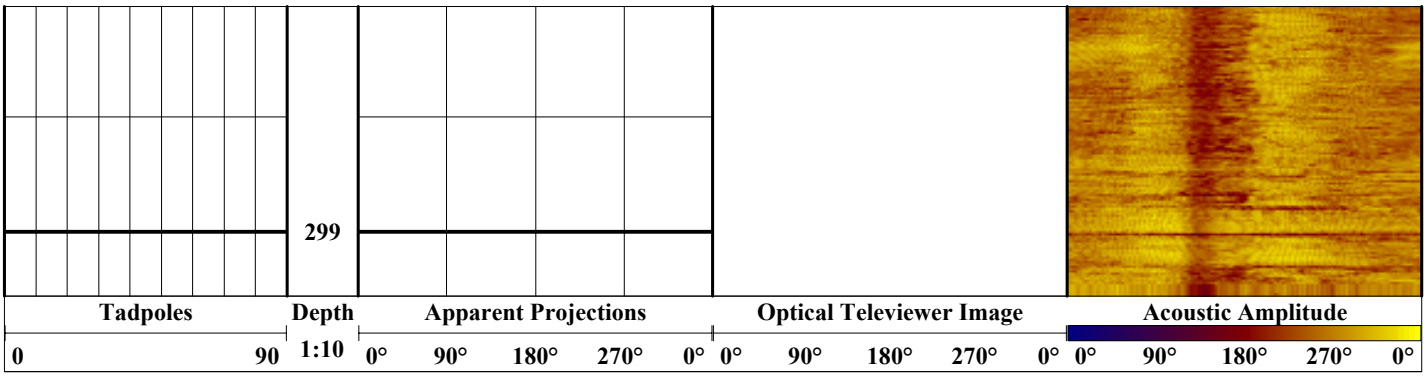

255
256
257
258
259
260
261
262
263


264
265
266
267
268
269
270
271
272


273
274
275
276
277
278
279
280


281
282
283
284
285
286
287
288
289

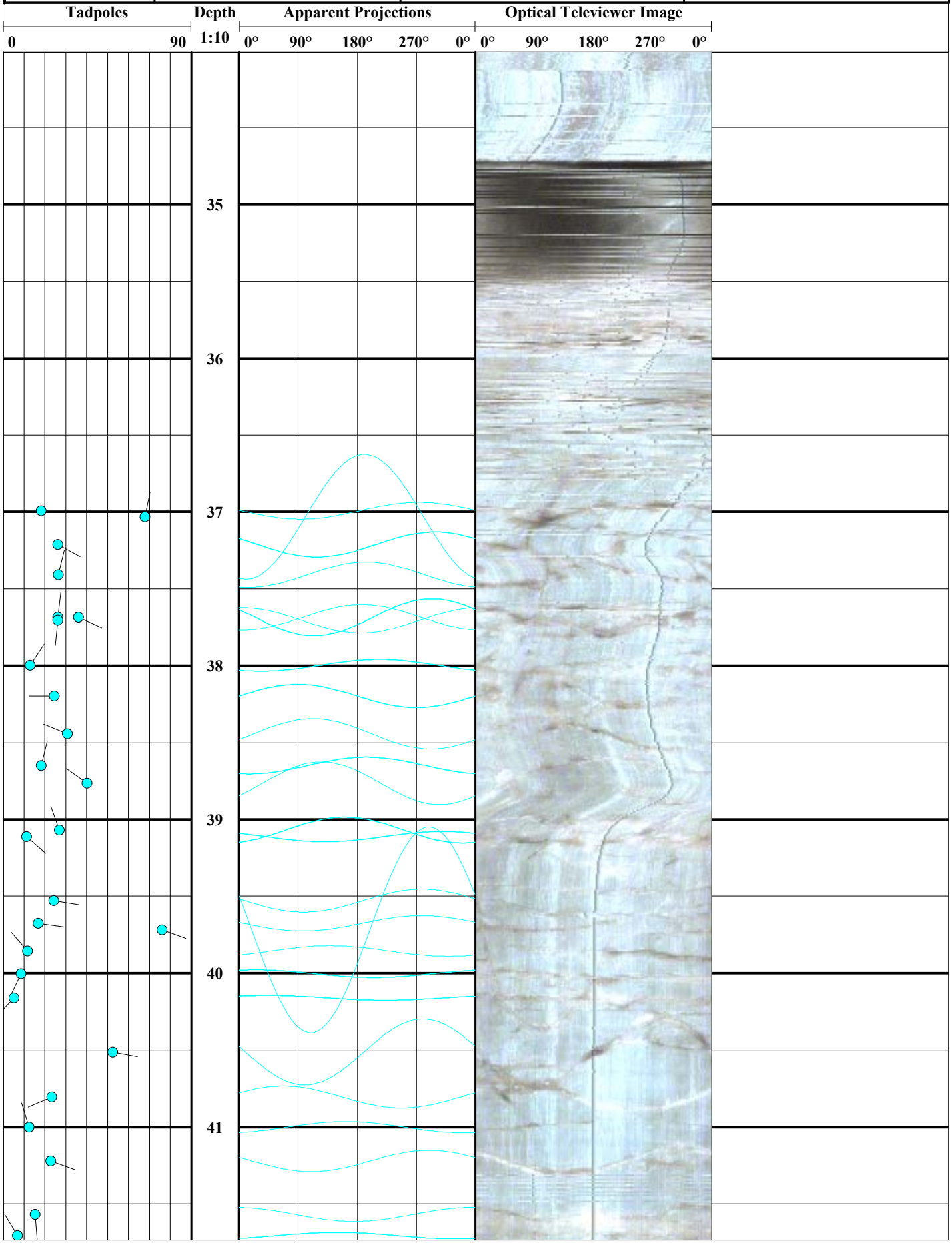

290
291
292
293
294
295
296
297
298

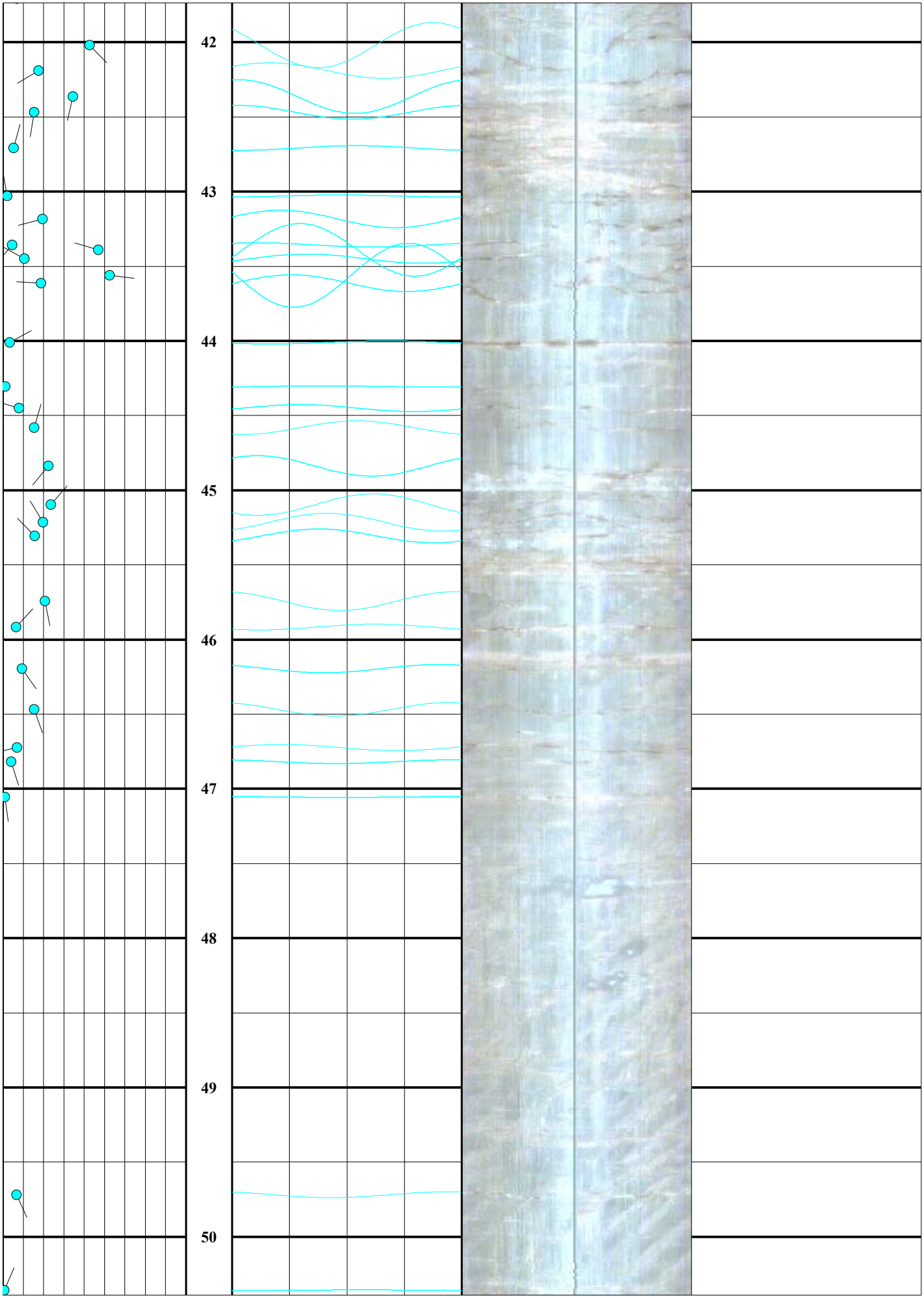

299
Tadpoles
Depth
Apparent Projections
Optical Televiewer Image
Acoustic Amplitude
0
90
1:10
0°
90°
180°
270°
0°
0°
90°
180°
270°
0°
0°
90°
180°
270°
0°

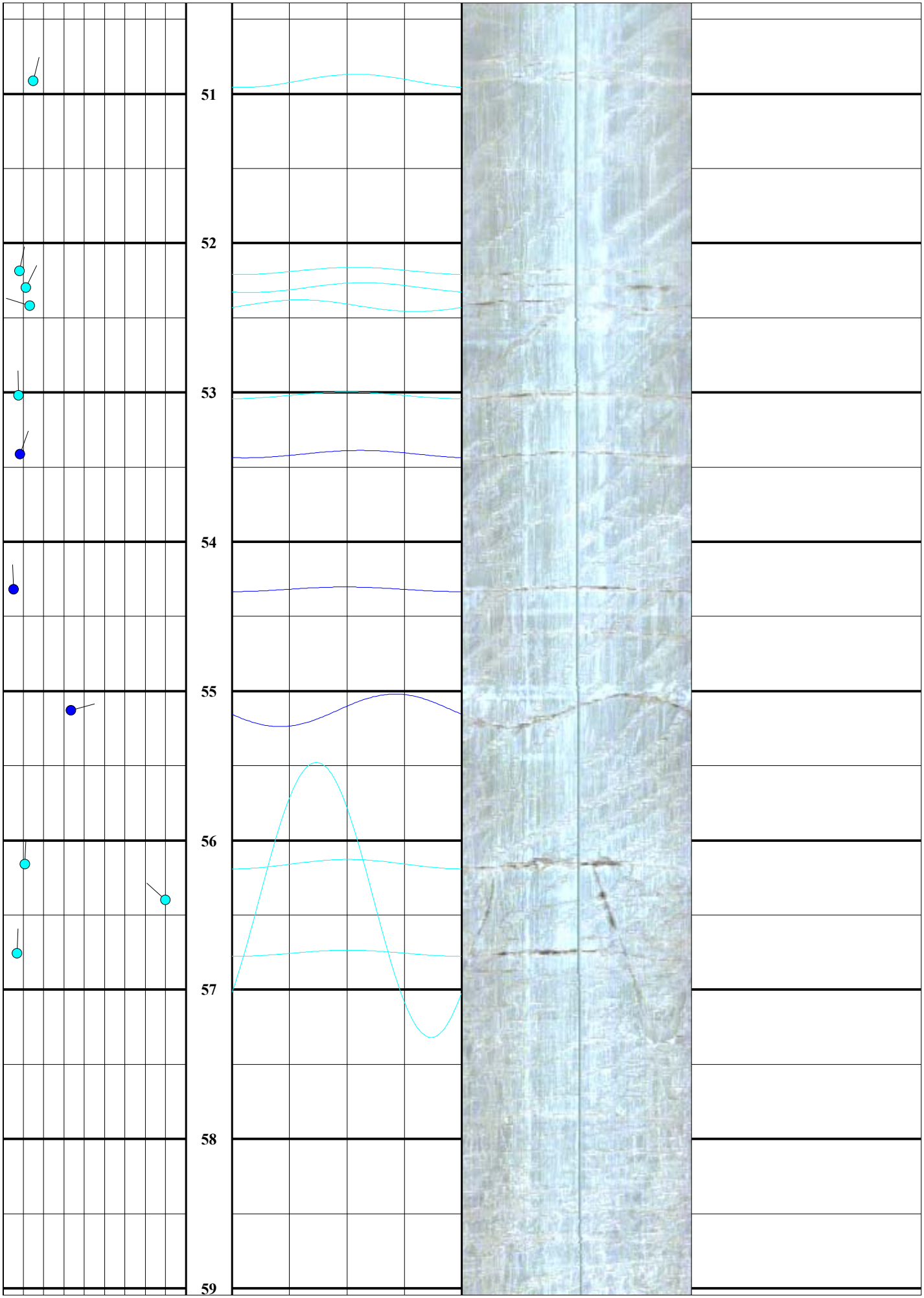
Optical/Acoustic Borehole Image Plot

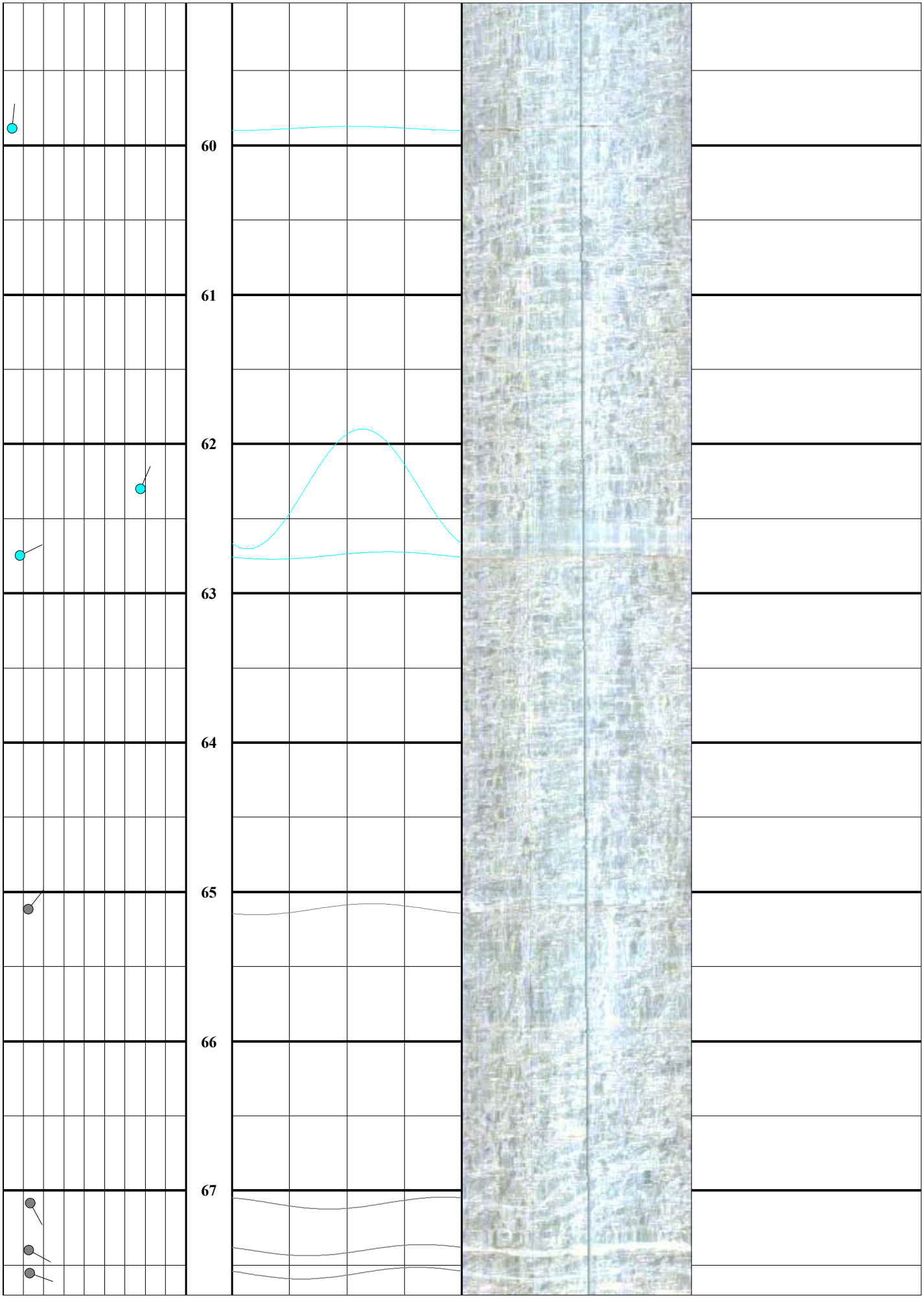
COMPANY: S. M. Stoller Corp.	PROJECT: Crescent Junction
DATE LOGGED: 6 December 2005	WELL: CH-0209

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com




42
43
44
45
46
47
48
49
50


51
52
53
54
55
56
57
58
59


60
61
62
63
64
65
66
67

68

69

70

71

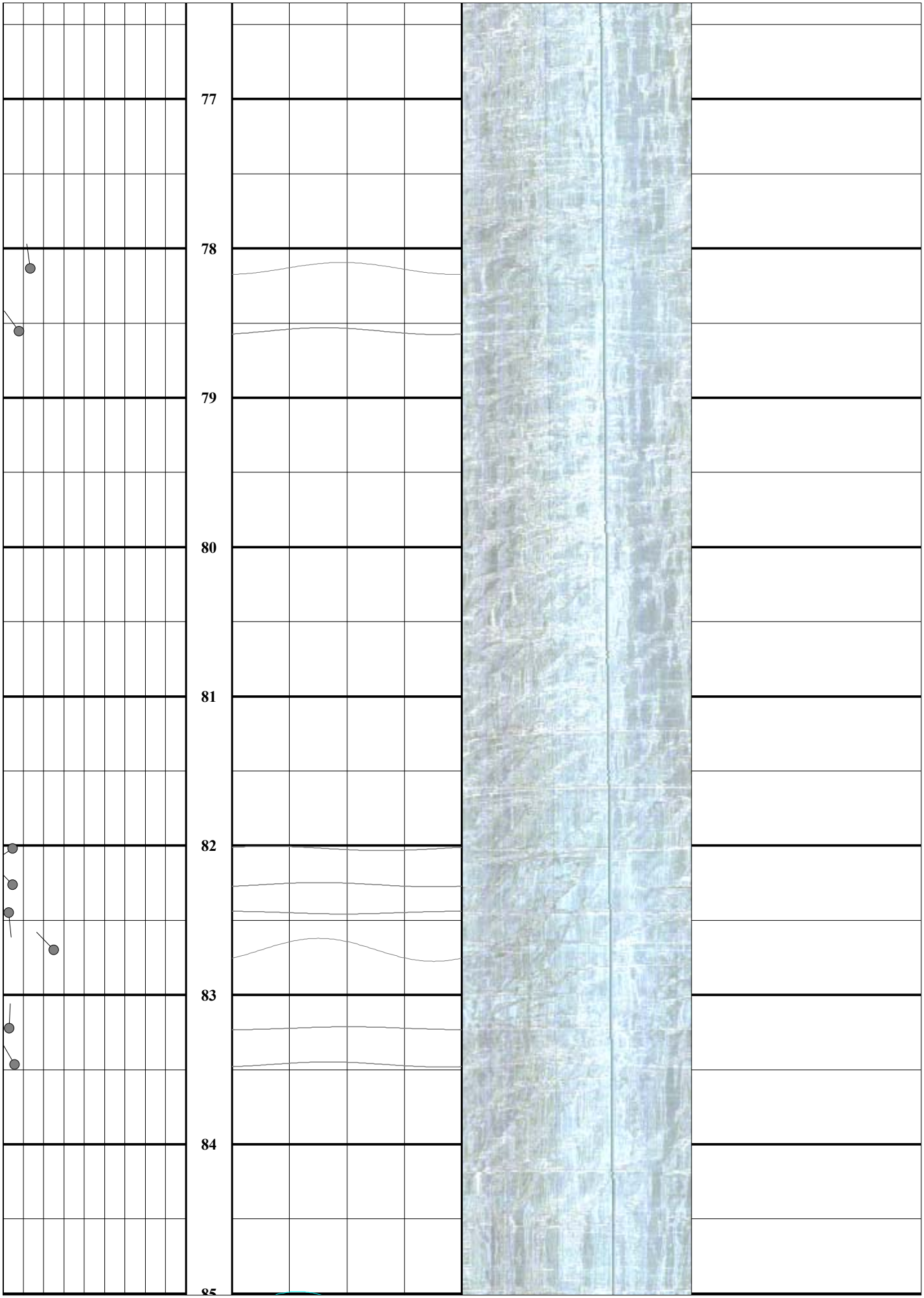
72

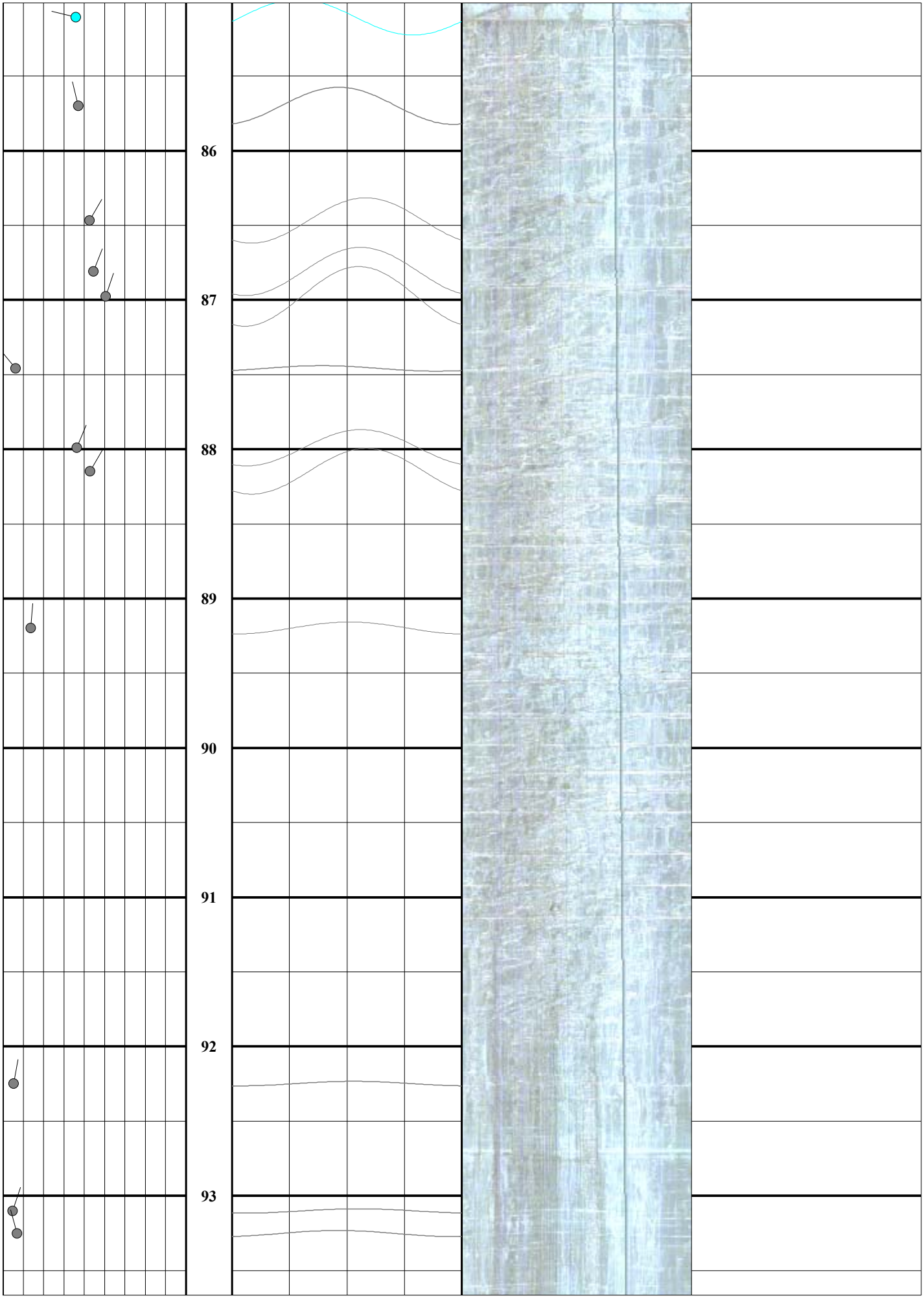
73

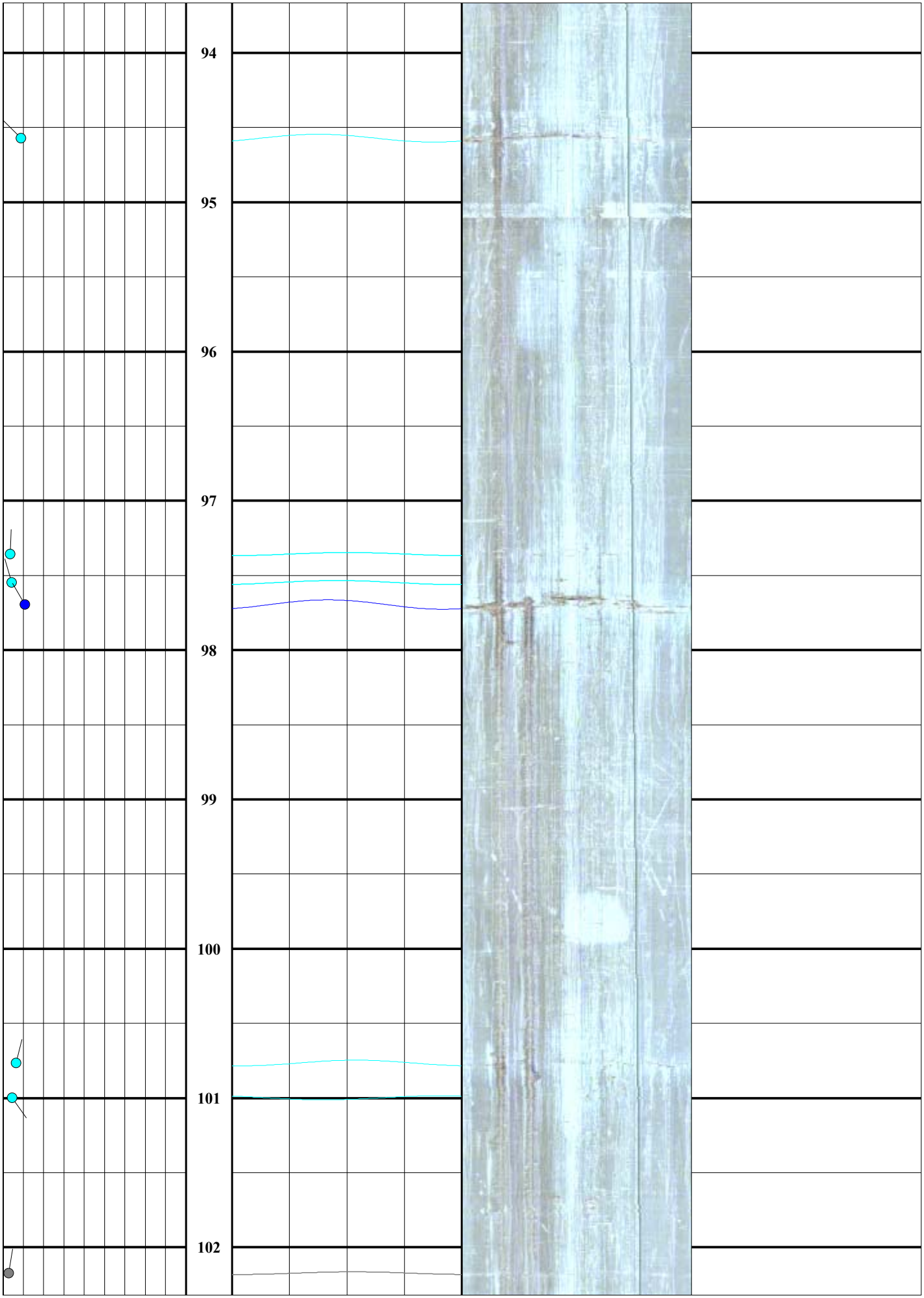
74

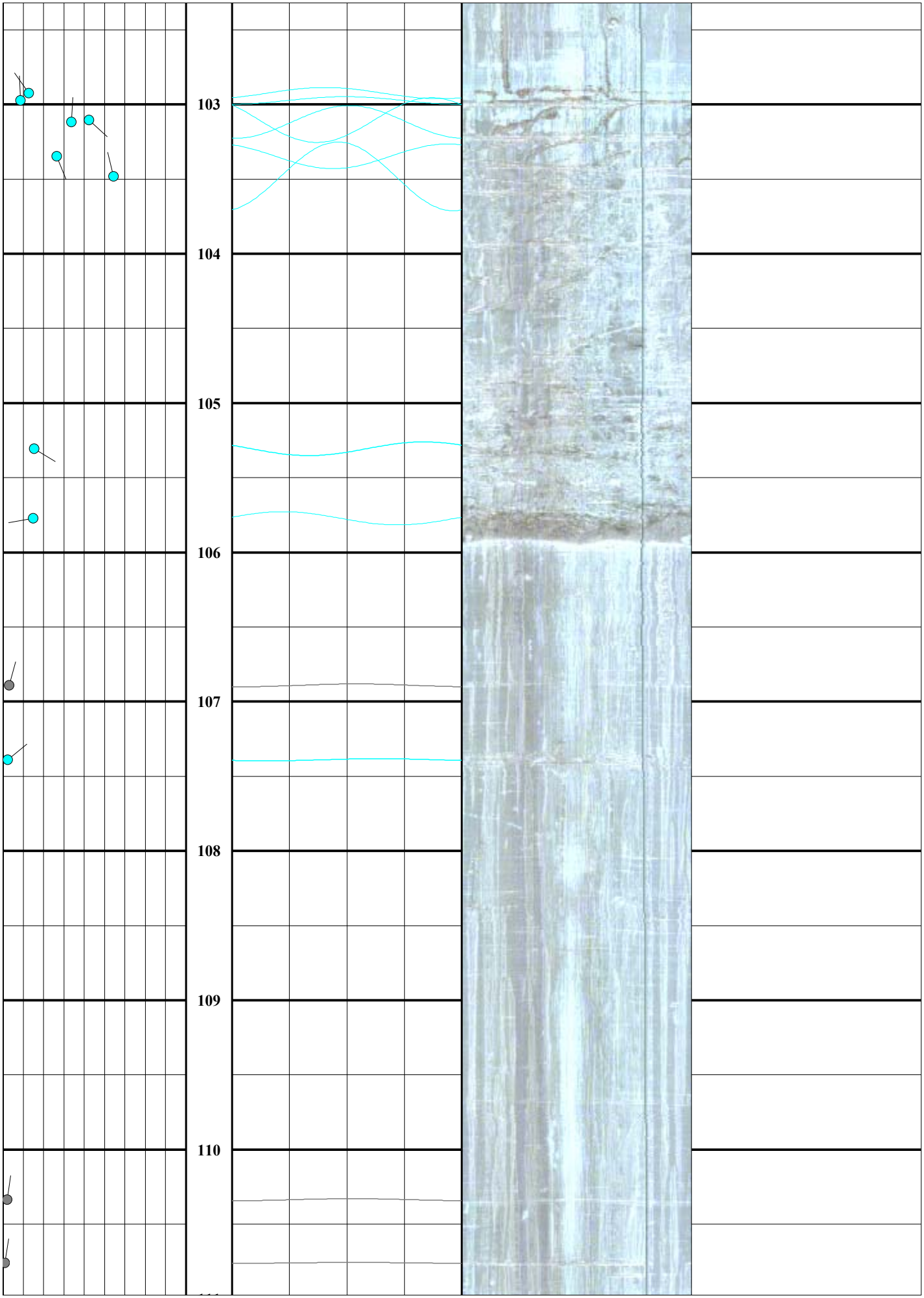
75

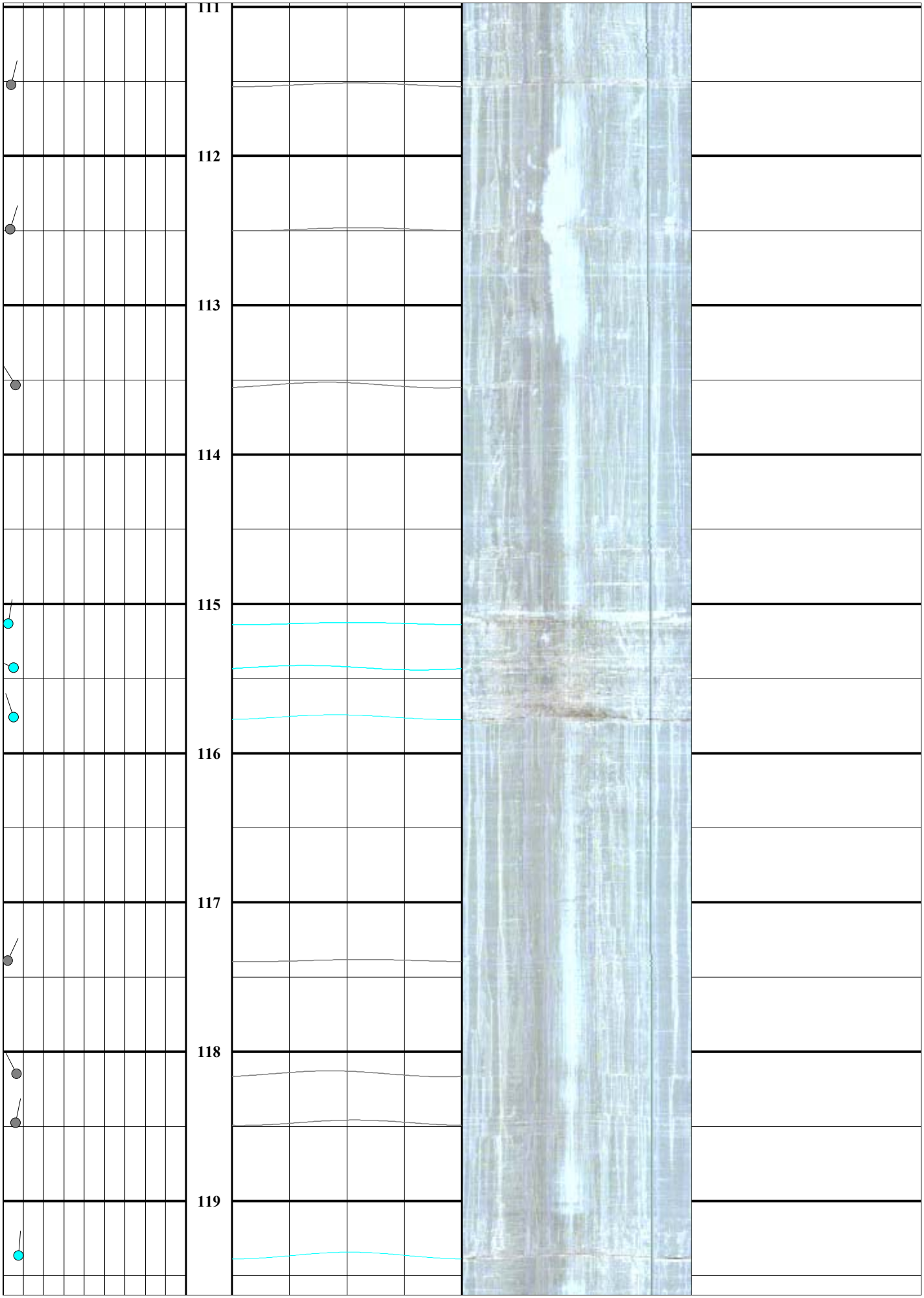
76

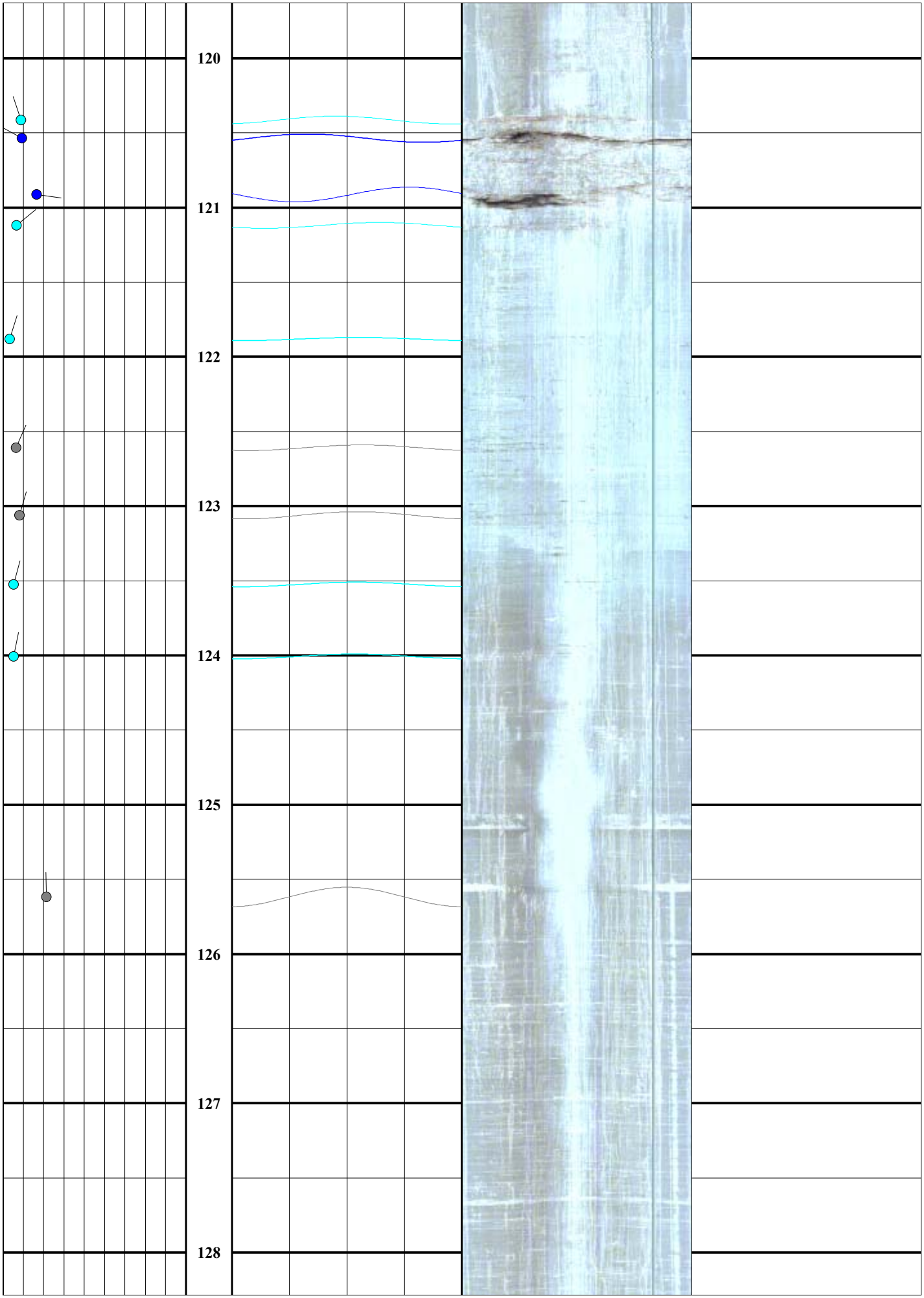

77
78
79
80
81
82
83
84
85

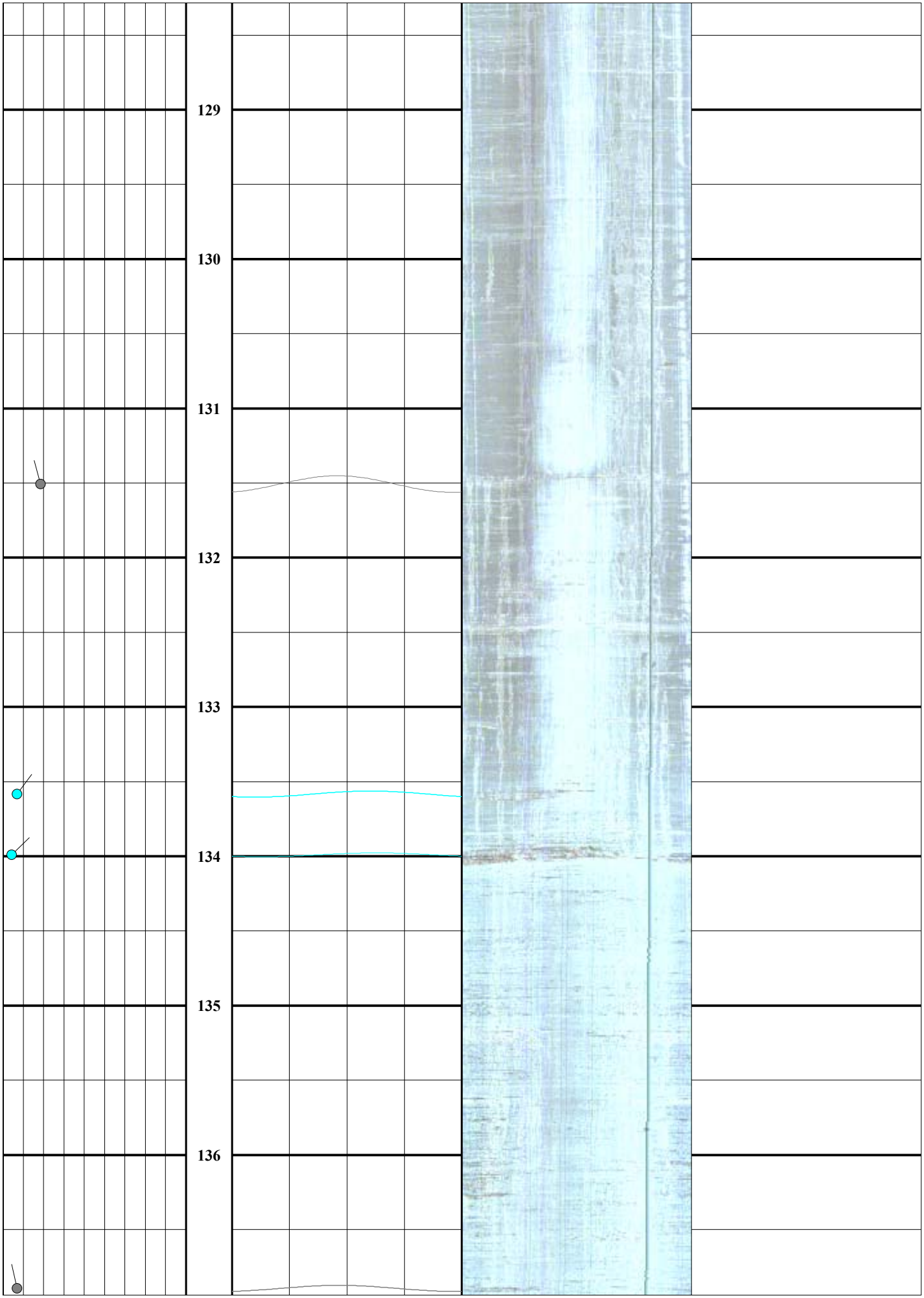

86
87
88
89
90
91
92
93

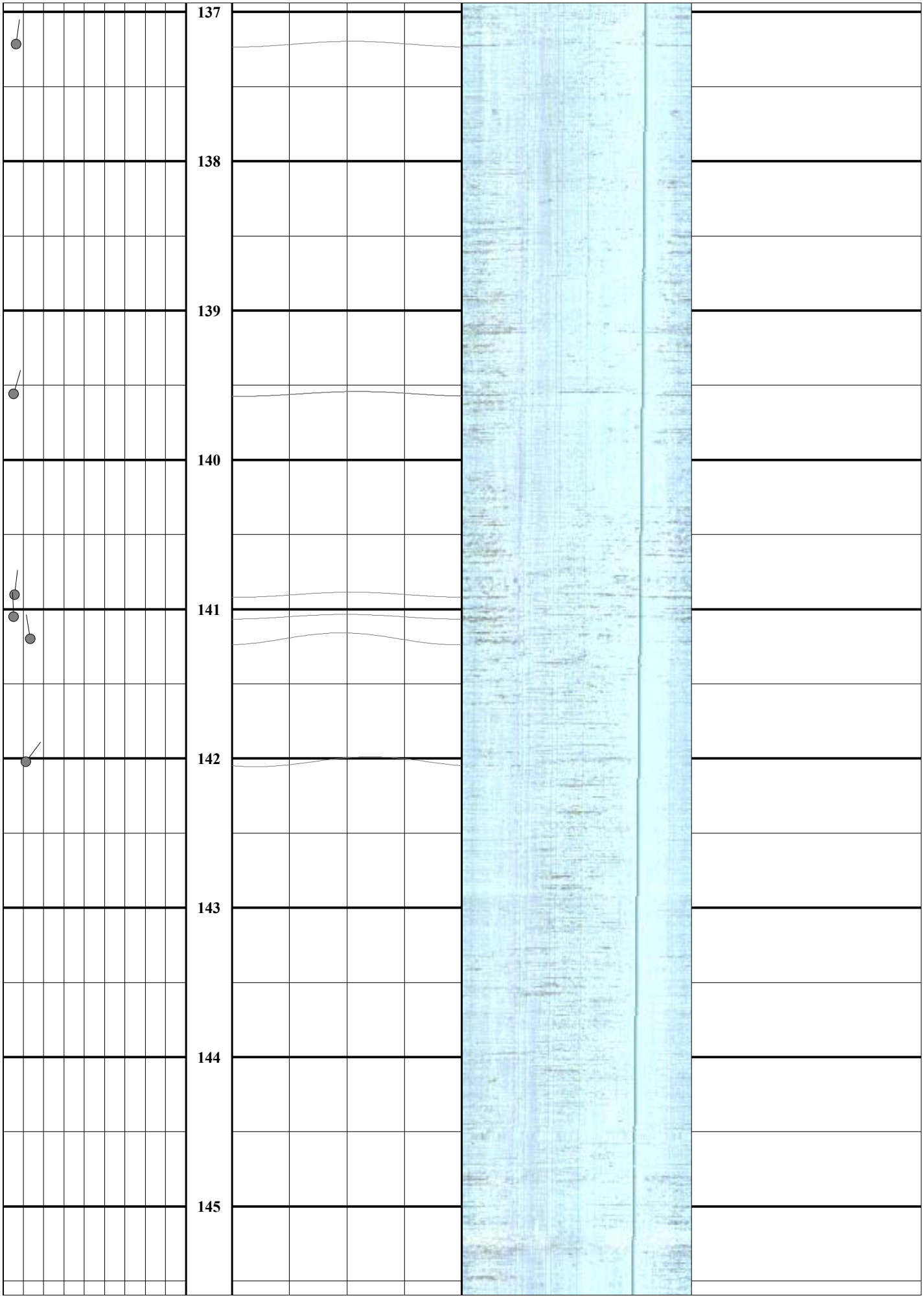

94
95
96
97
98
99
100
101
102

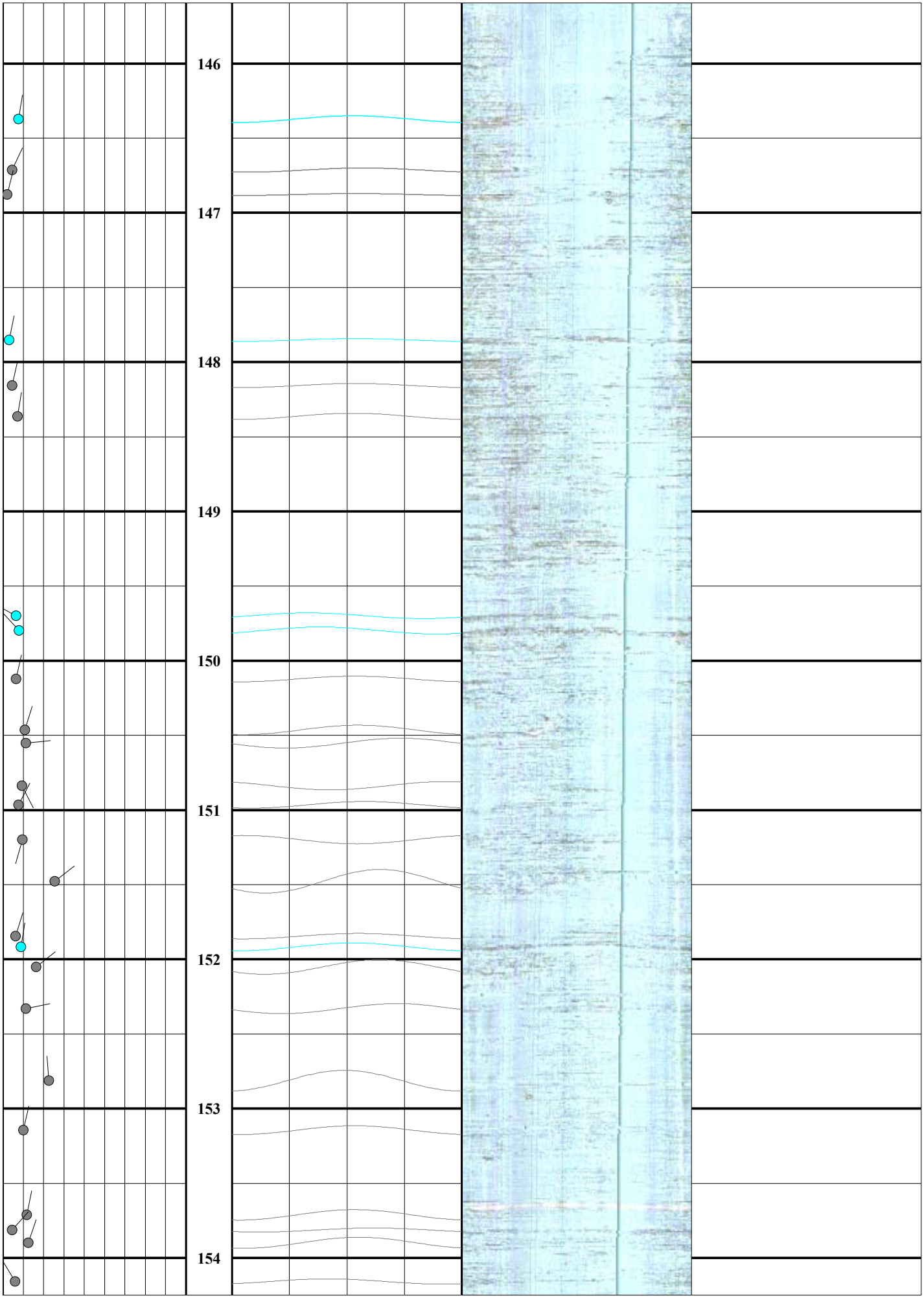

103
104
105
106
107
108
109
110

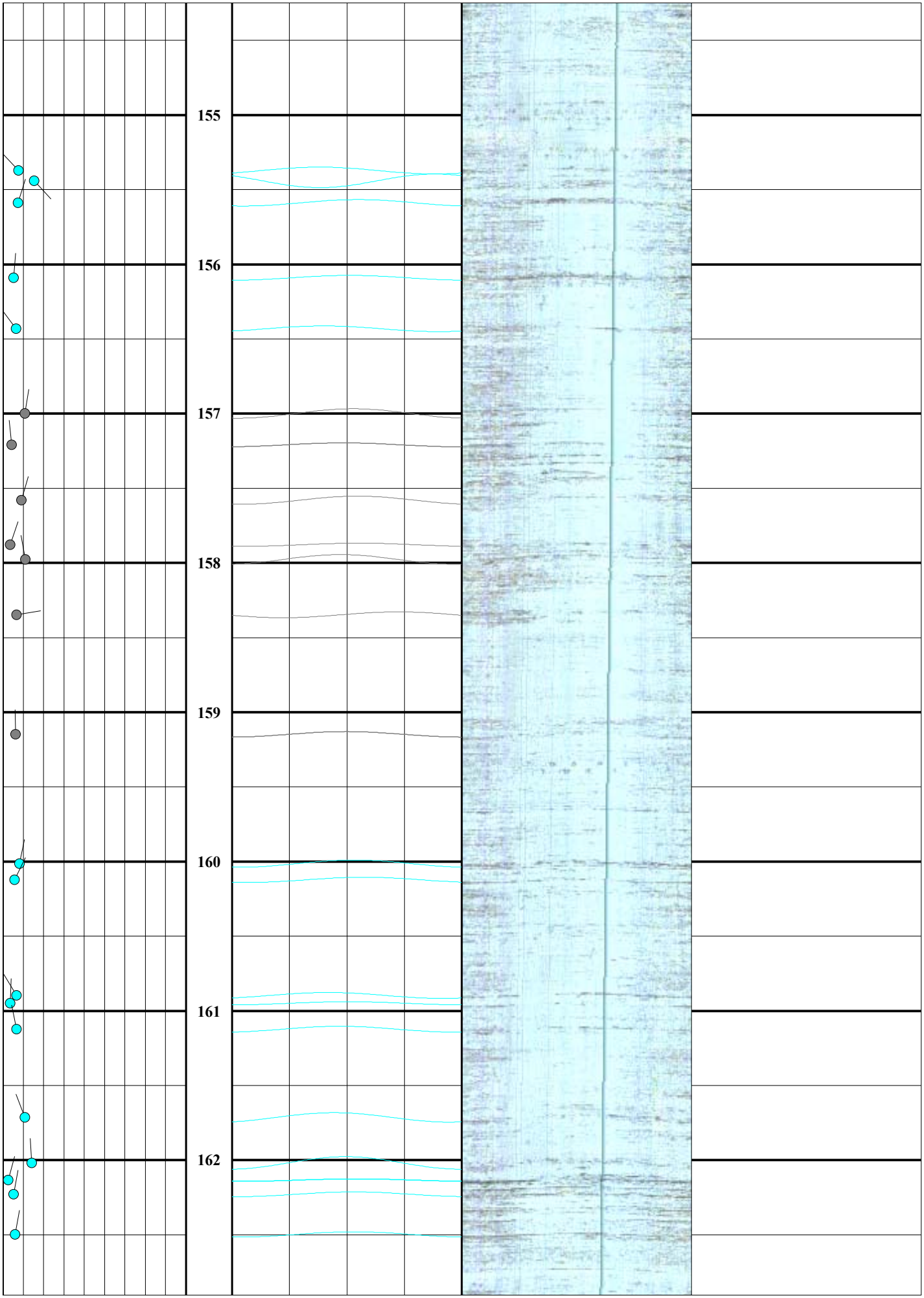

111
112
113
114
115
116
117
118
119

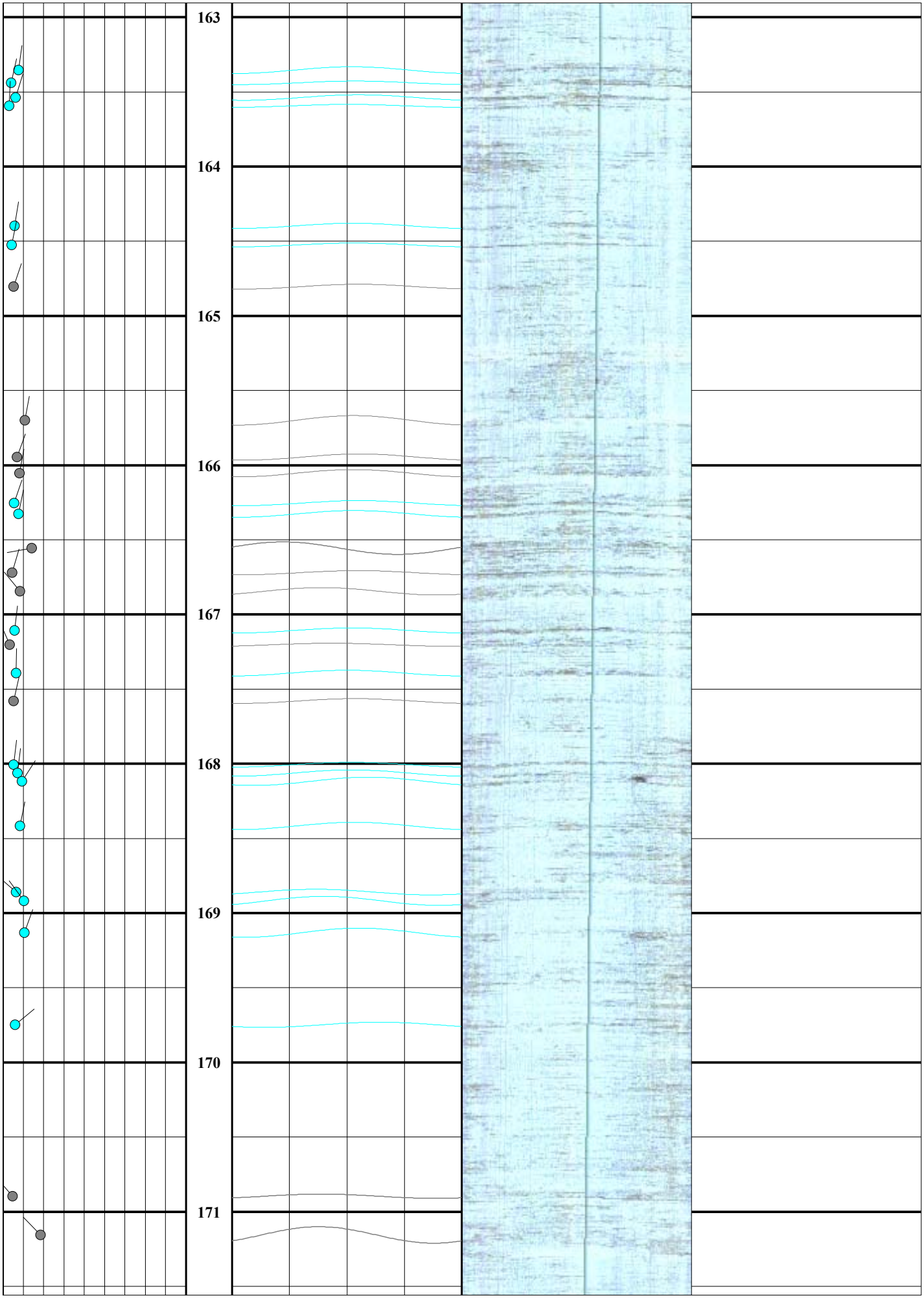

120
121
122
123
124
125
126
127
128

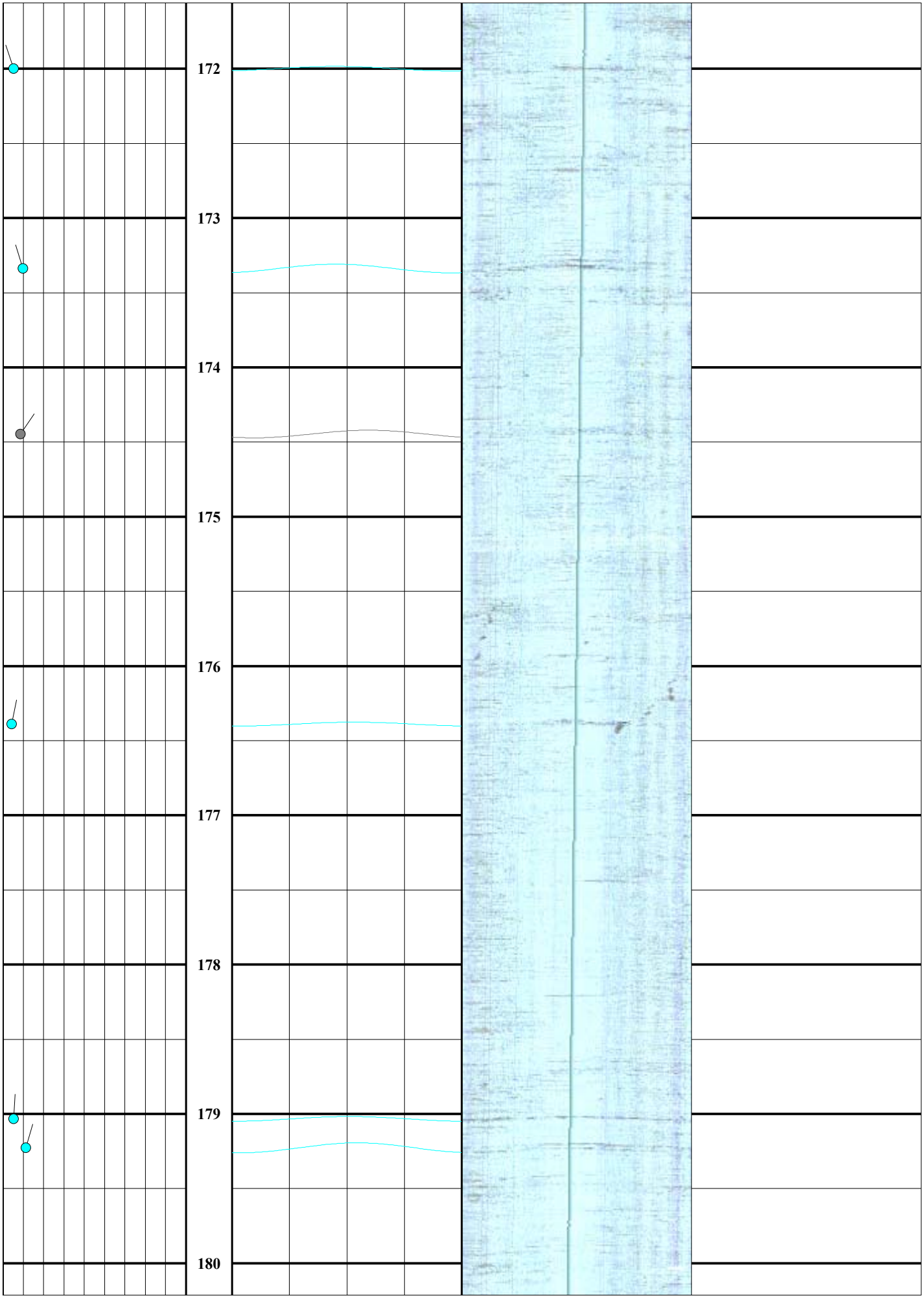

129
130
131
132
133
134
135
136

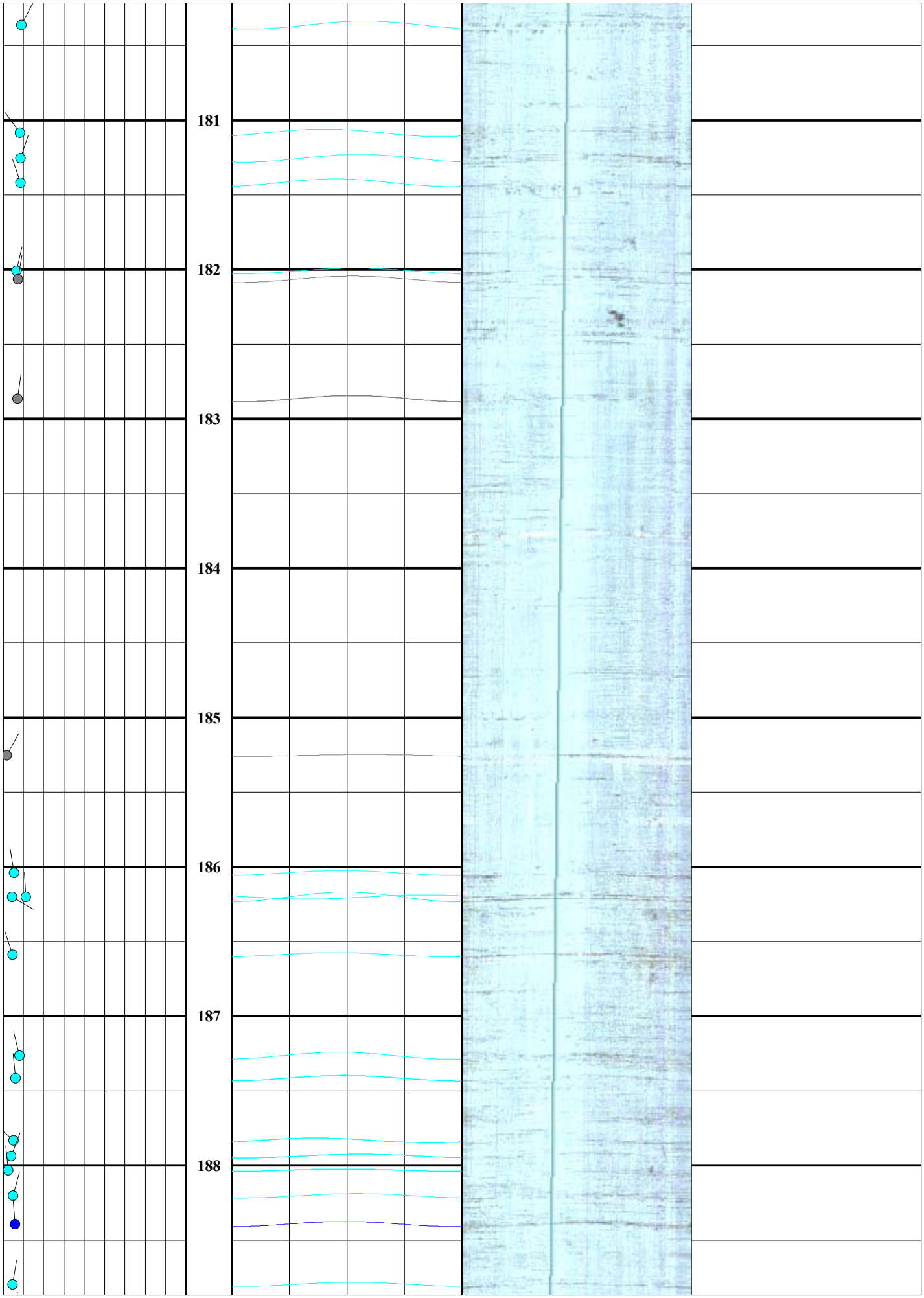

137
138
139
140
141
142
143
144
145

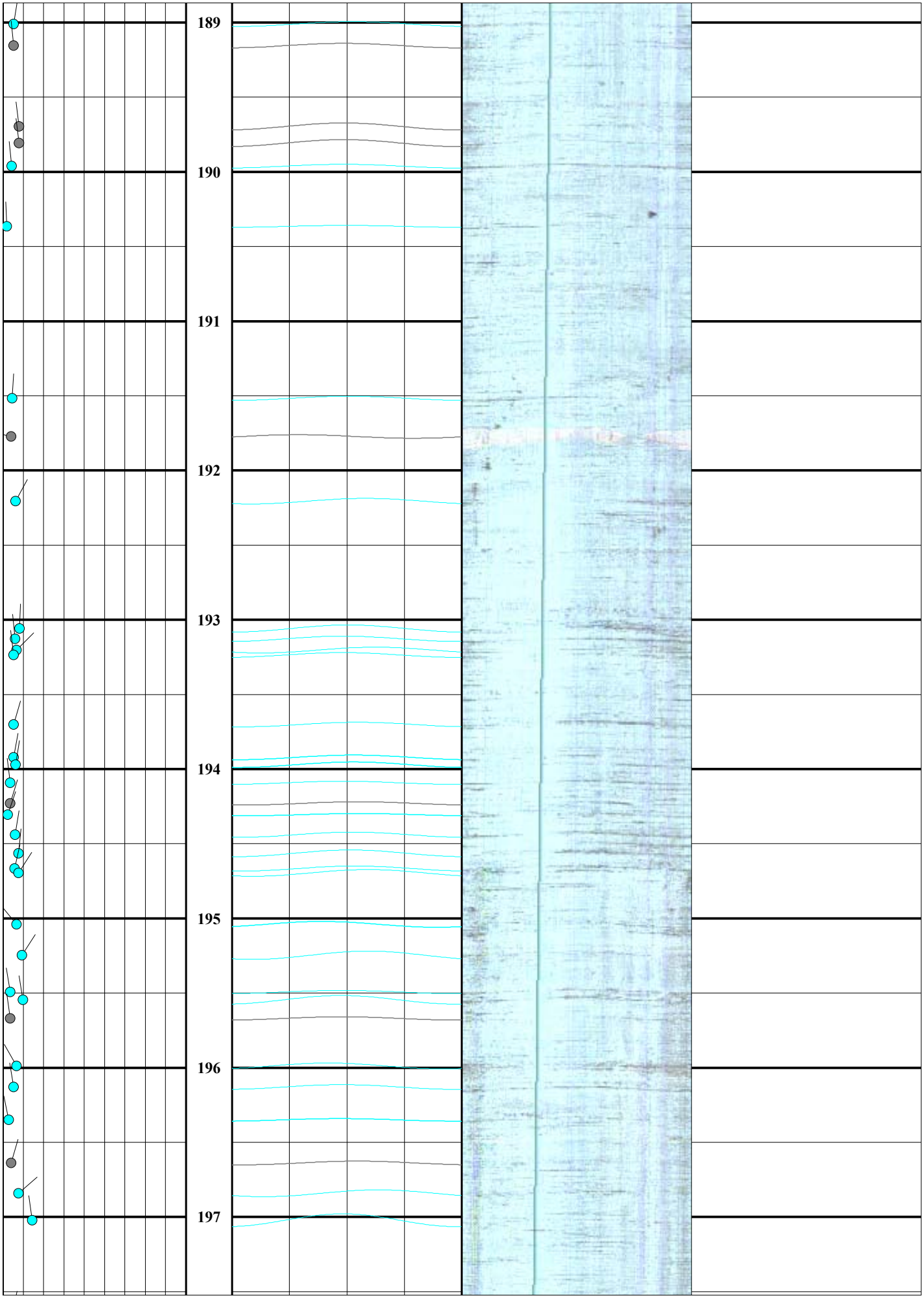

146
147
148
149
150
151
152
153
154

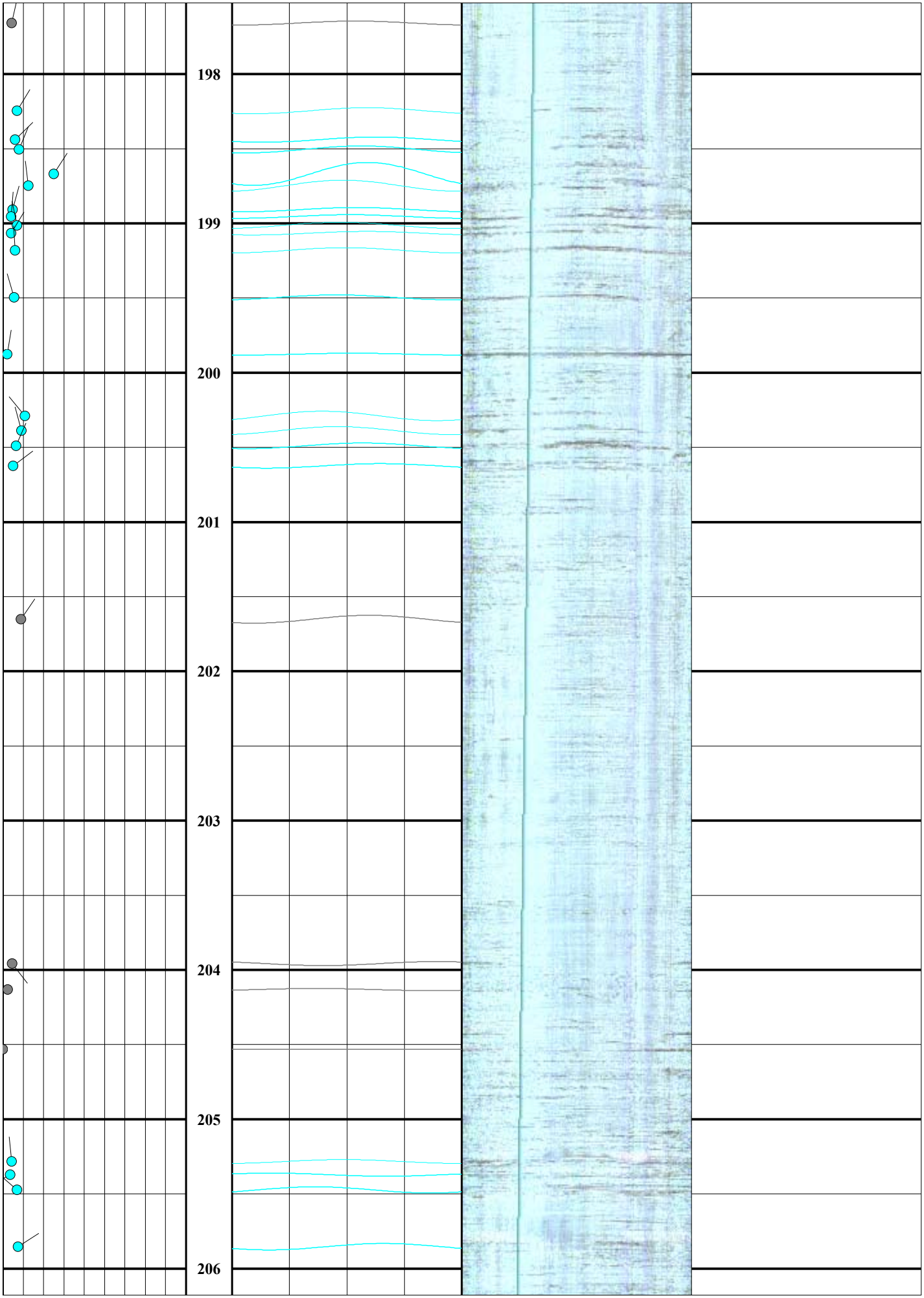

155
156
157
158
159
160
161
162

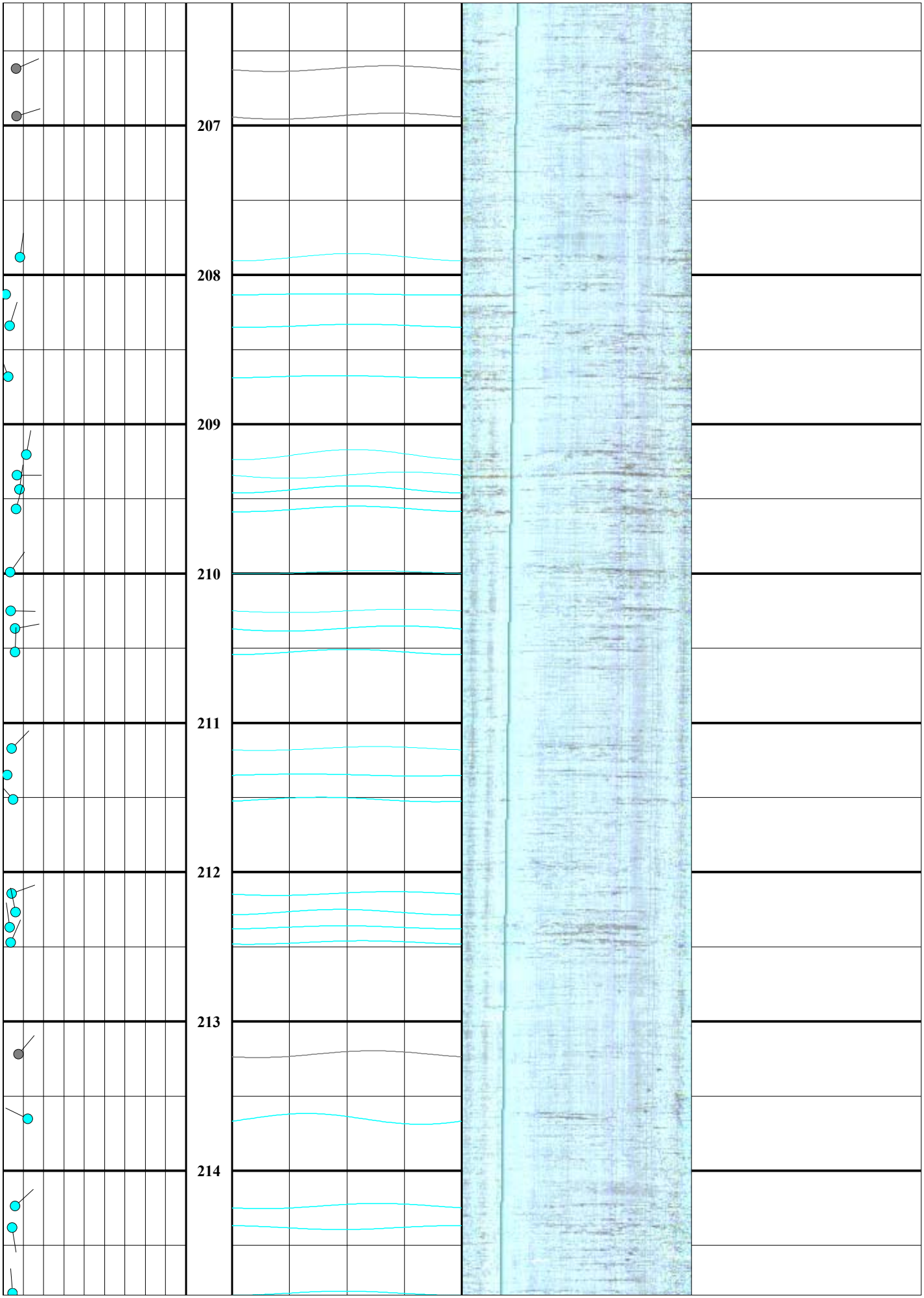

163
164
165
166
167
168
169
170
171

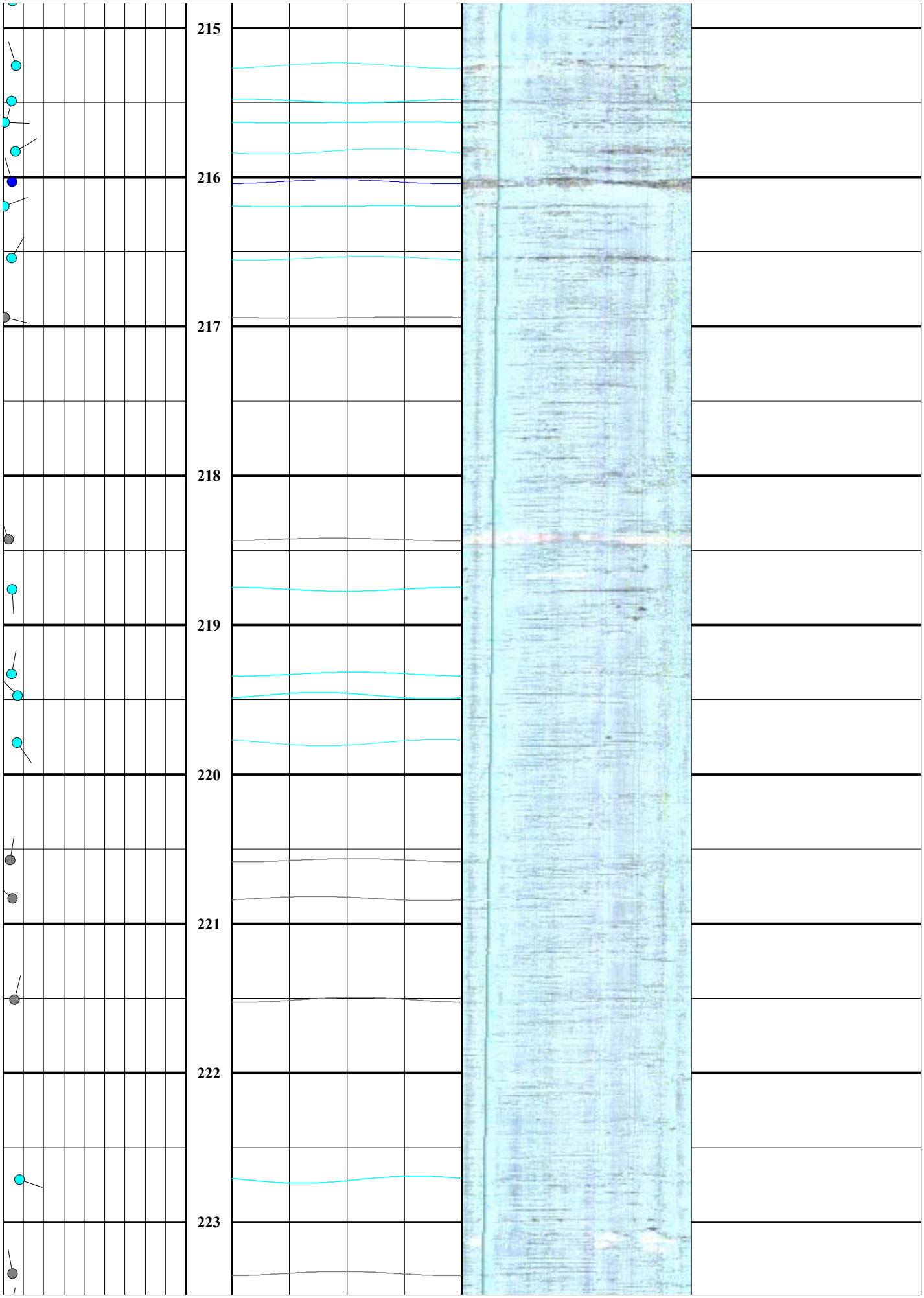

172
173
174
175
176
177
178
179
180

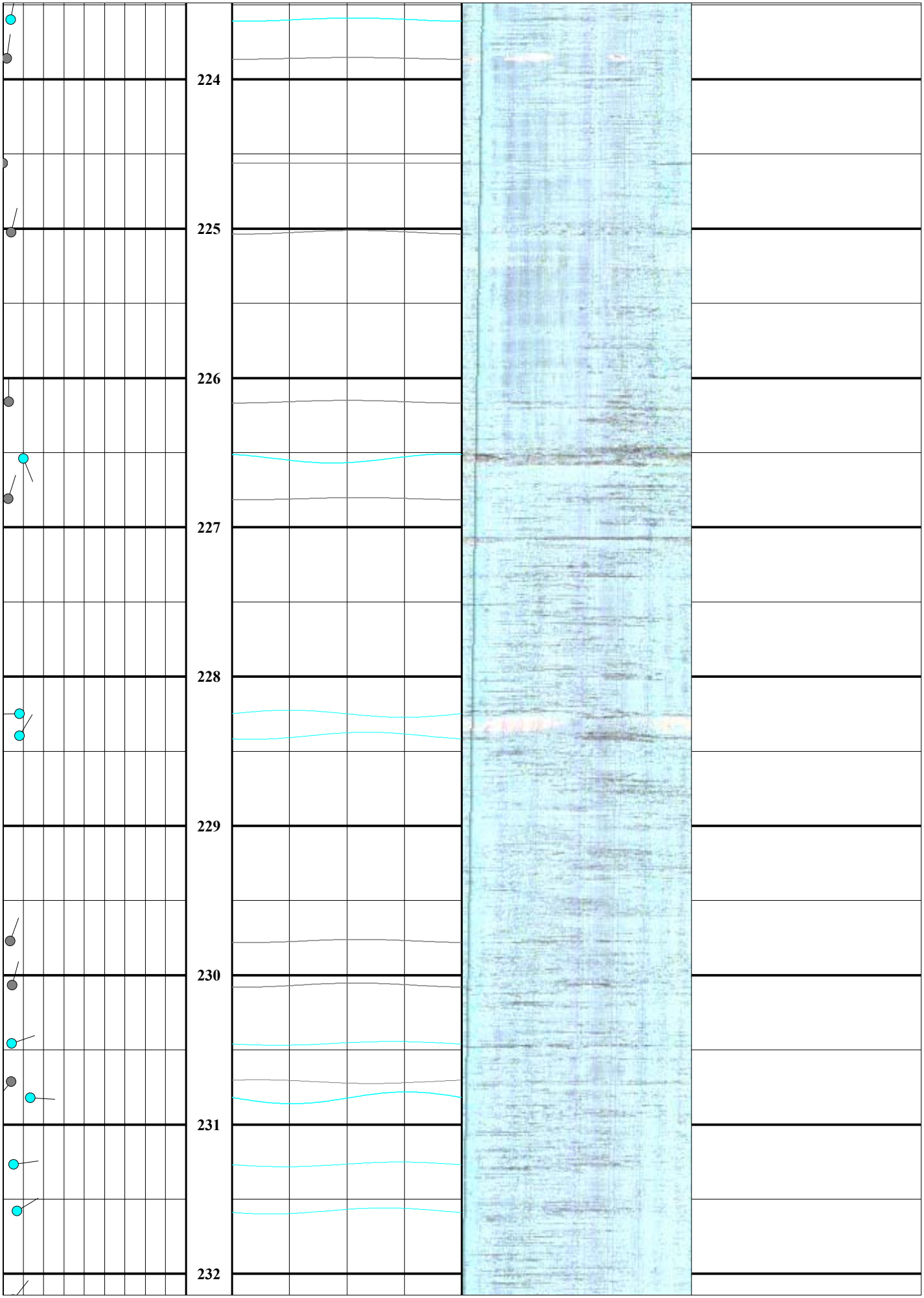

181
182
183
184
185
186
187
188

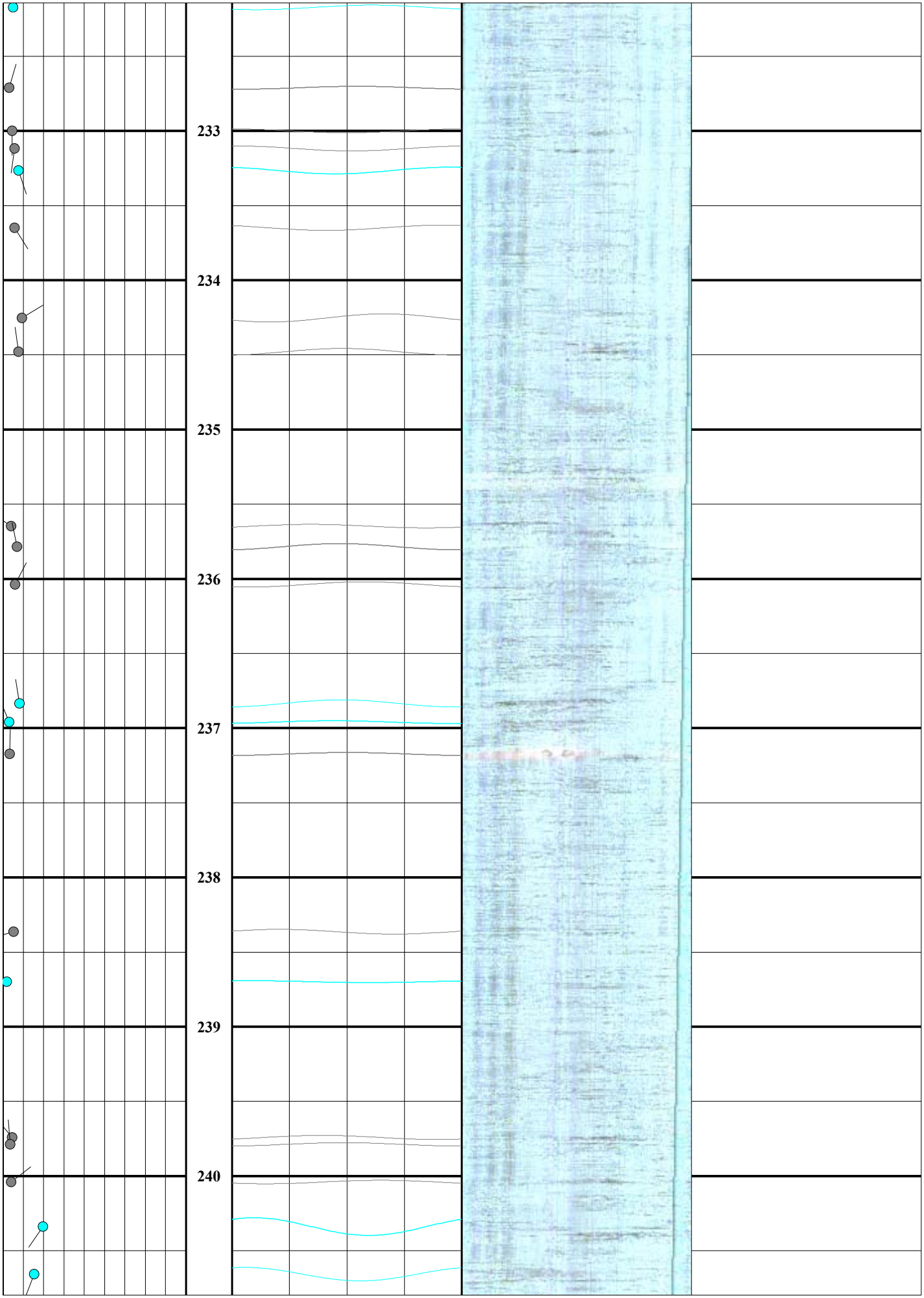

189
190
191
192
193
194
195
196
197

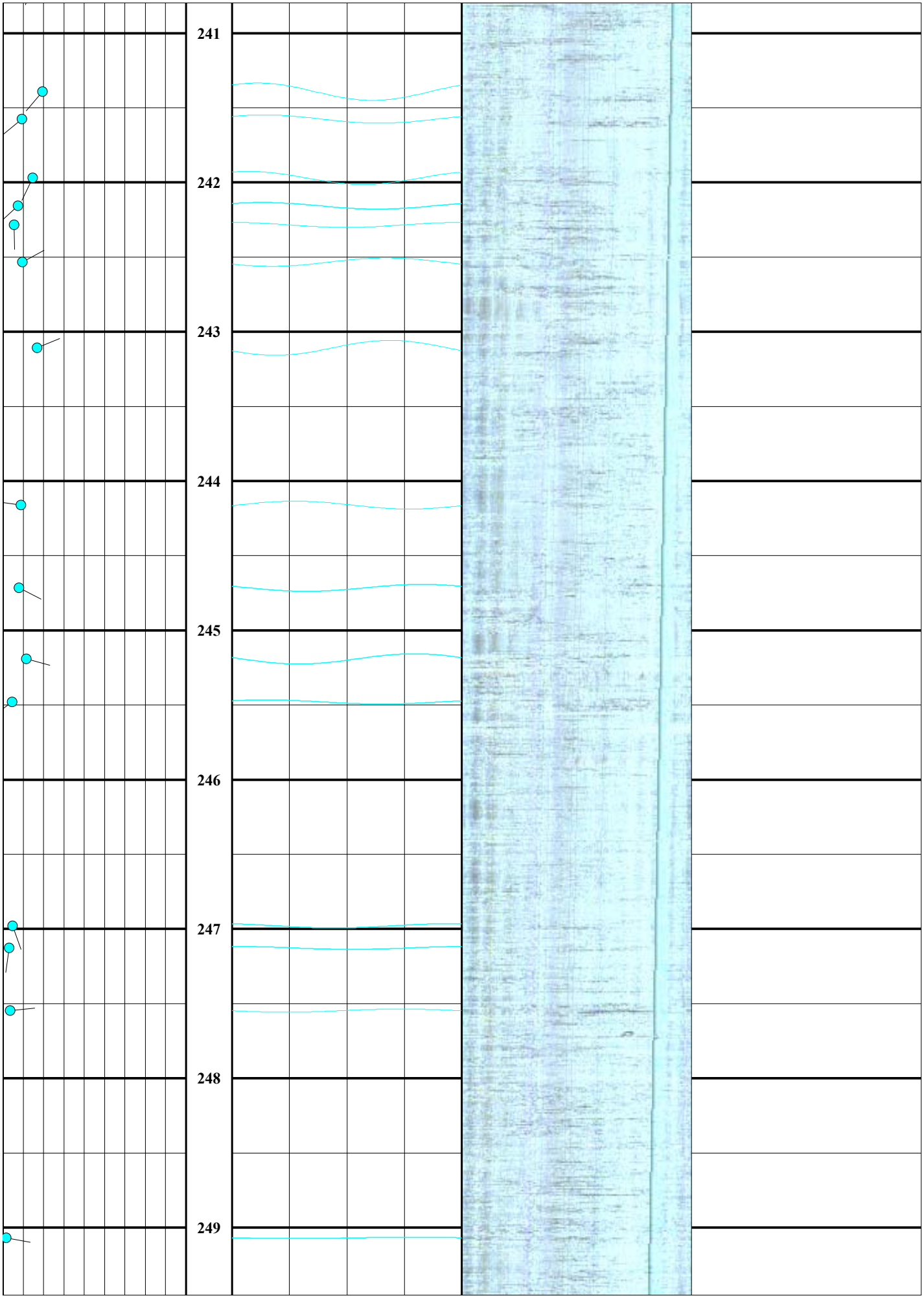

198
199
200
201
202
203
204
205
206

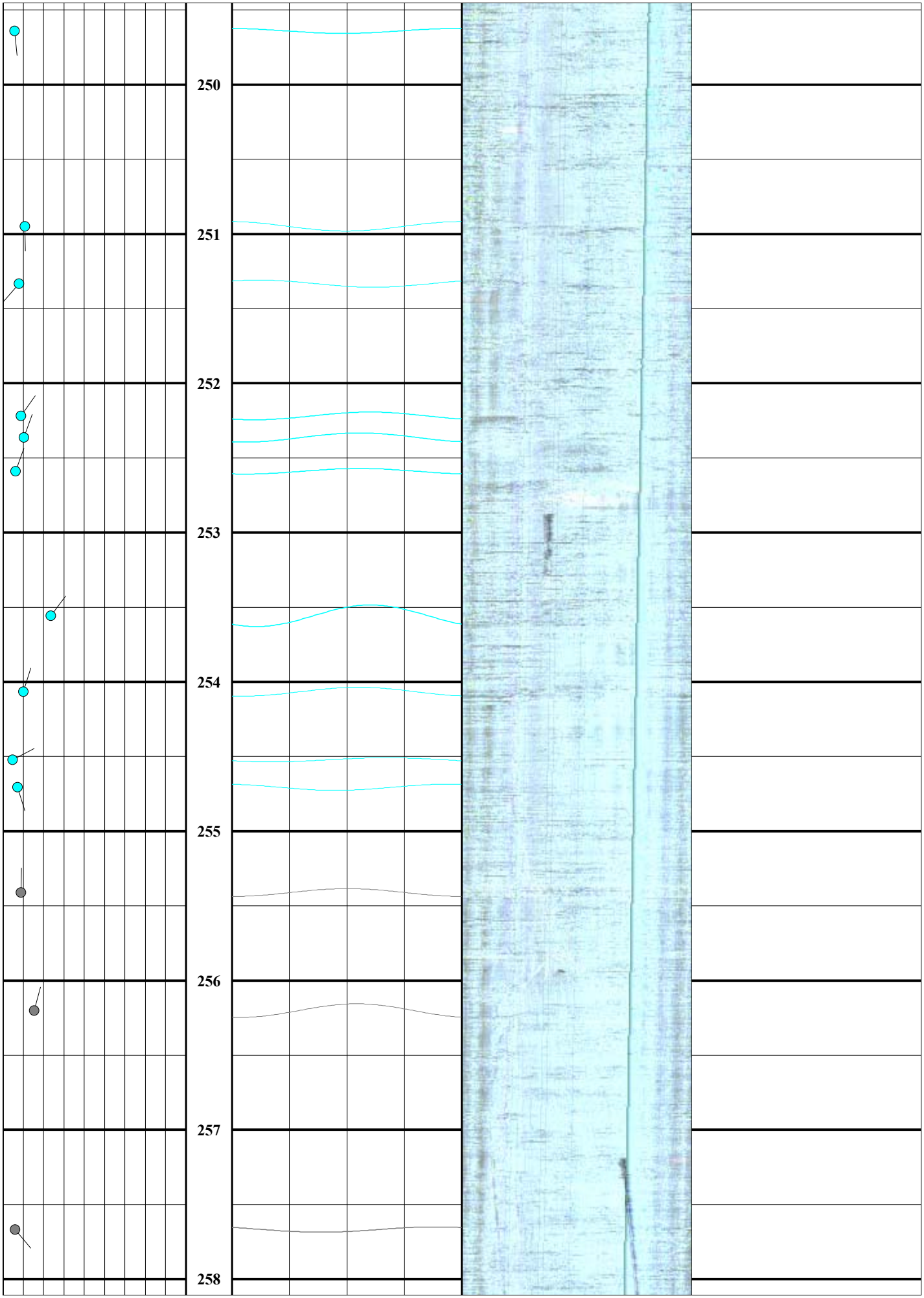

207
208
209
210
211
212
213
214

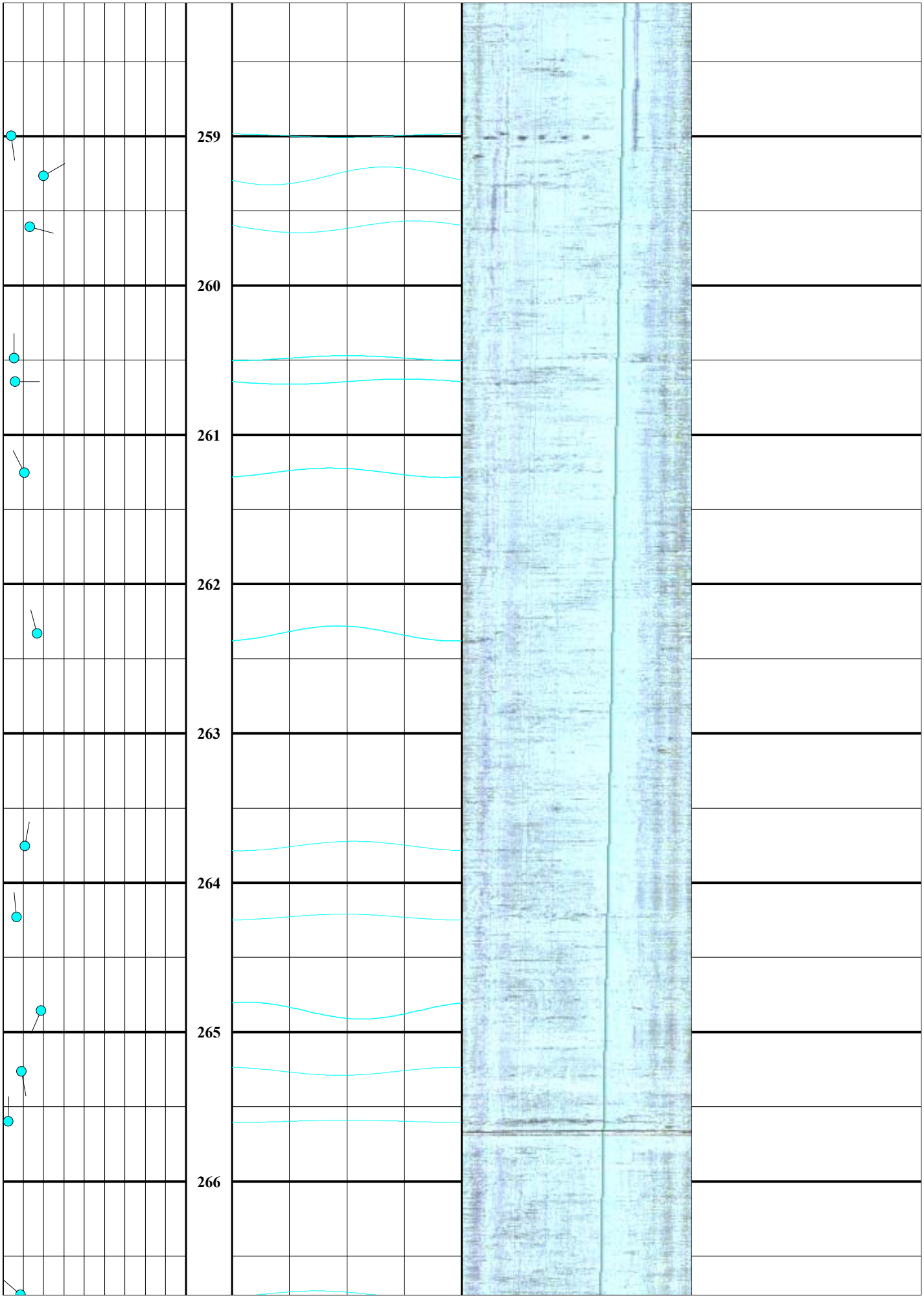

215
216
217
218
219
220
221
222
223

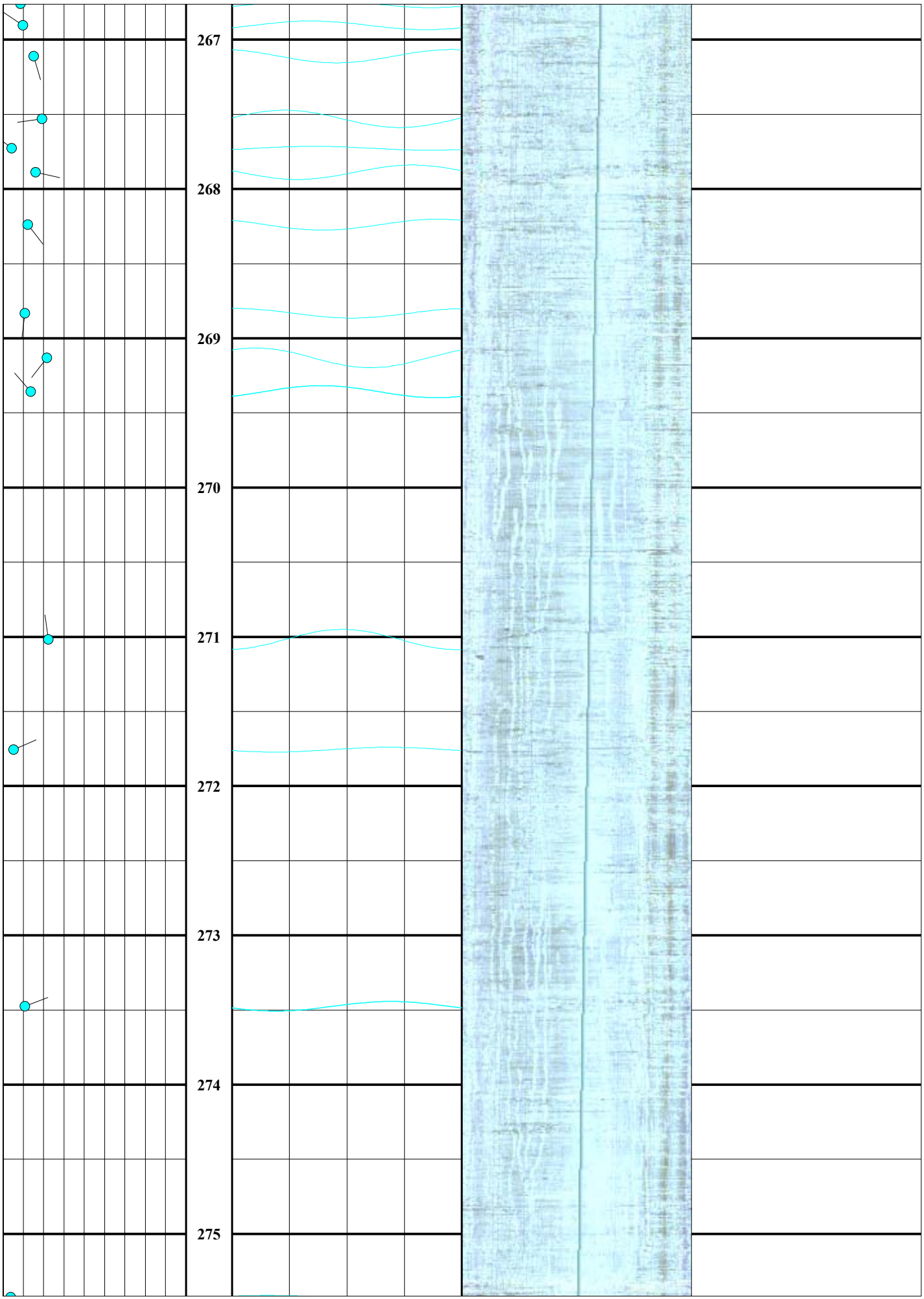

224
225
226
227
228
229
230
231
232

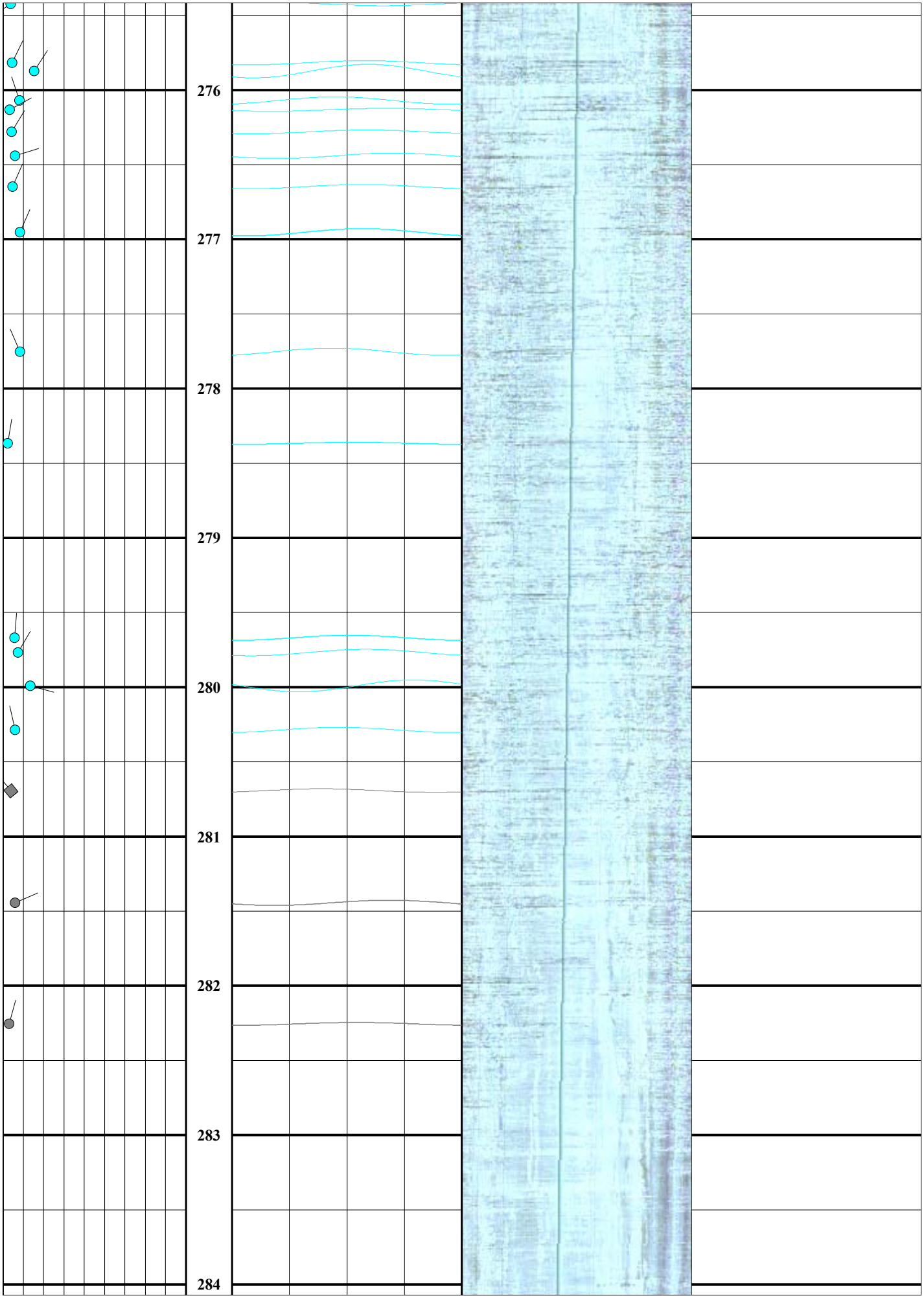

233
234
235
236
237
238
239
240

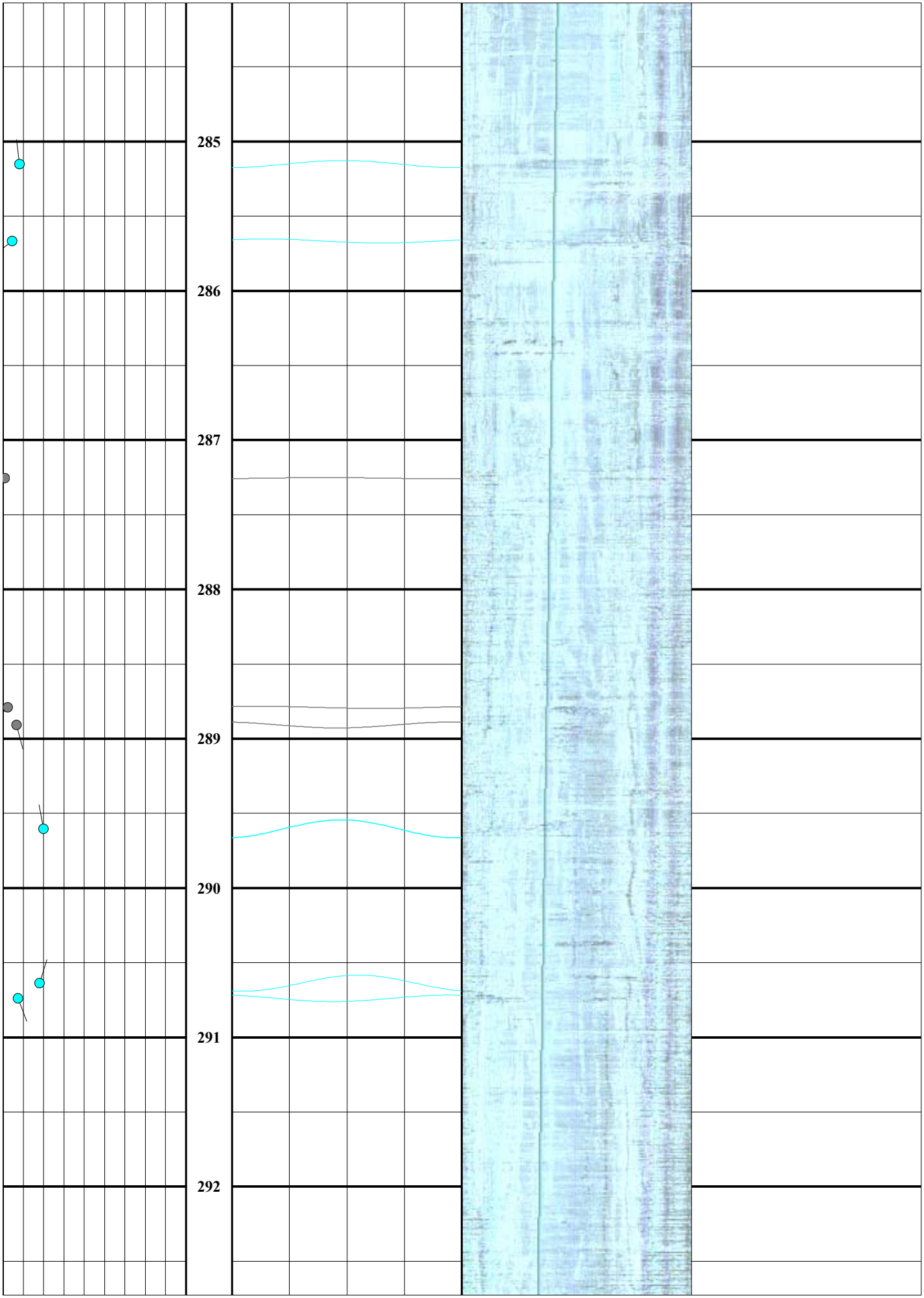

241
242
243
244
245
246
247
248
249

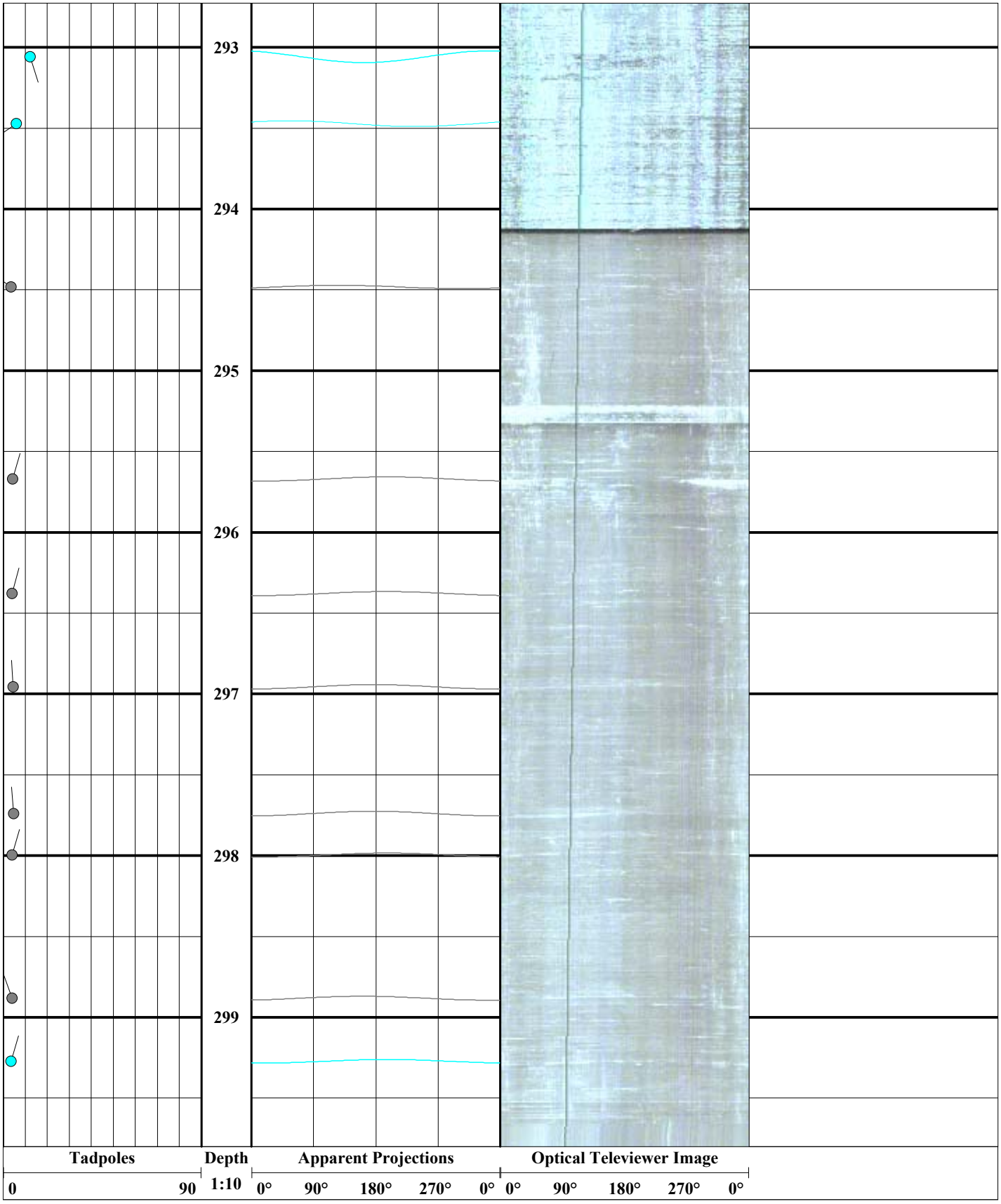

250
251
252
253
254
255
256
257
258


259
260
261
262
263
264
265
266


267
268
269
270
271
272
273
274
275


276
277
278
279
280
281
282
283
284

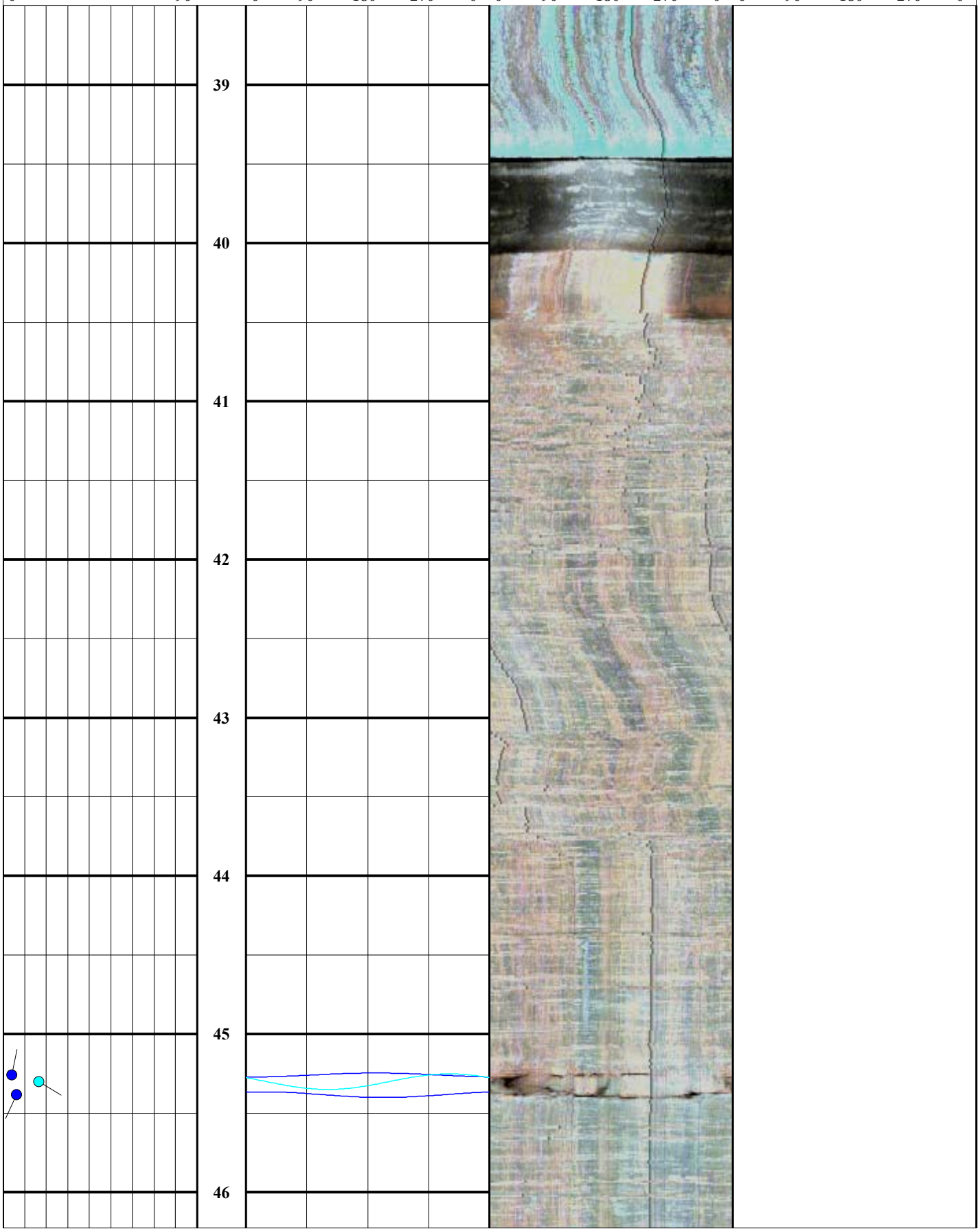

285
286
287
288
289
290
291
292

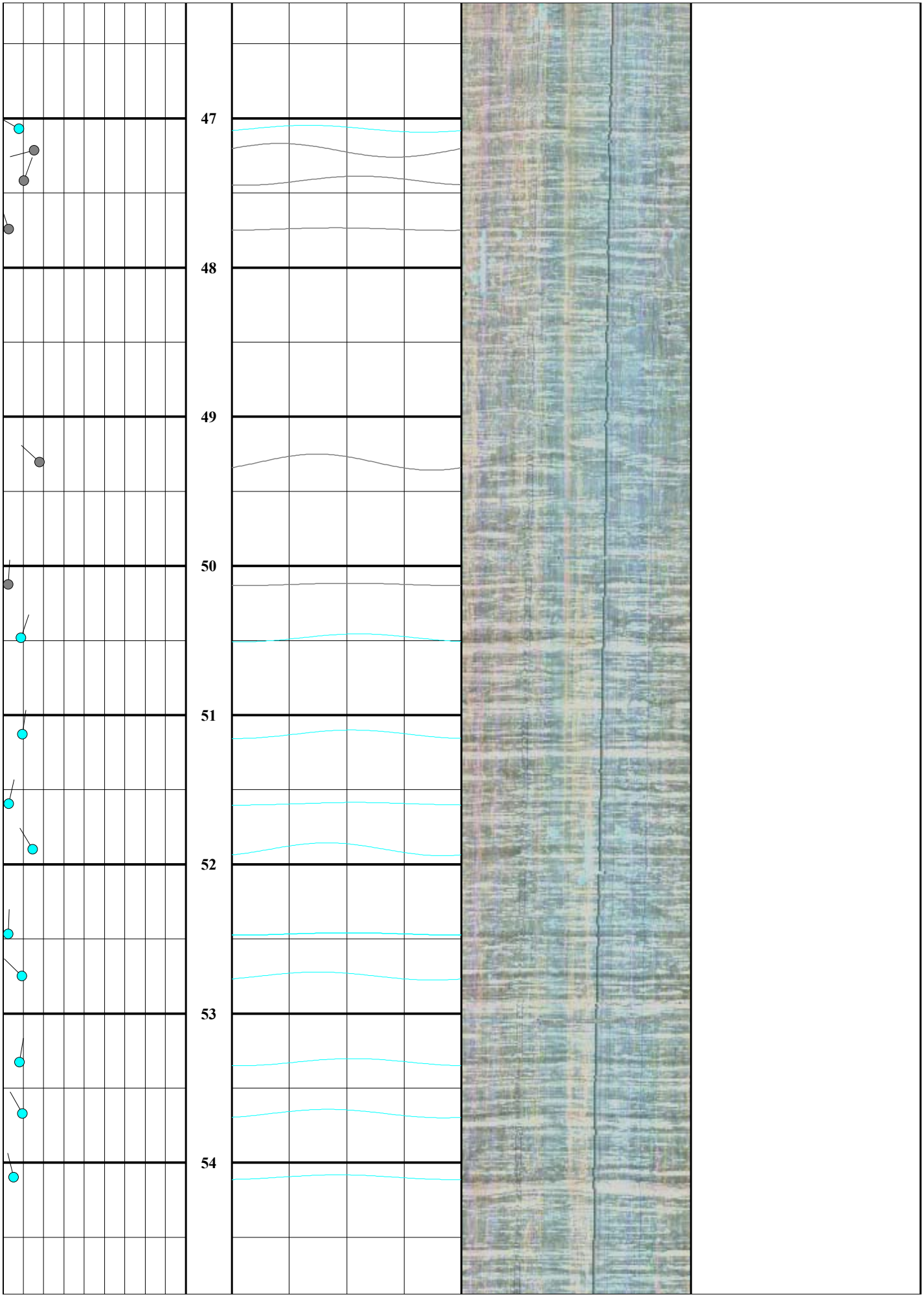

293
294
295
296
297
298
299
Tadpoles
0
90
Depth
1:10
Apparent Projections
0°
90°
180°
270°
0°
Optical Televiewer Image
0°
90°
180°
270°
0°

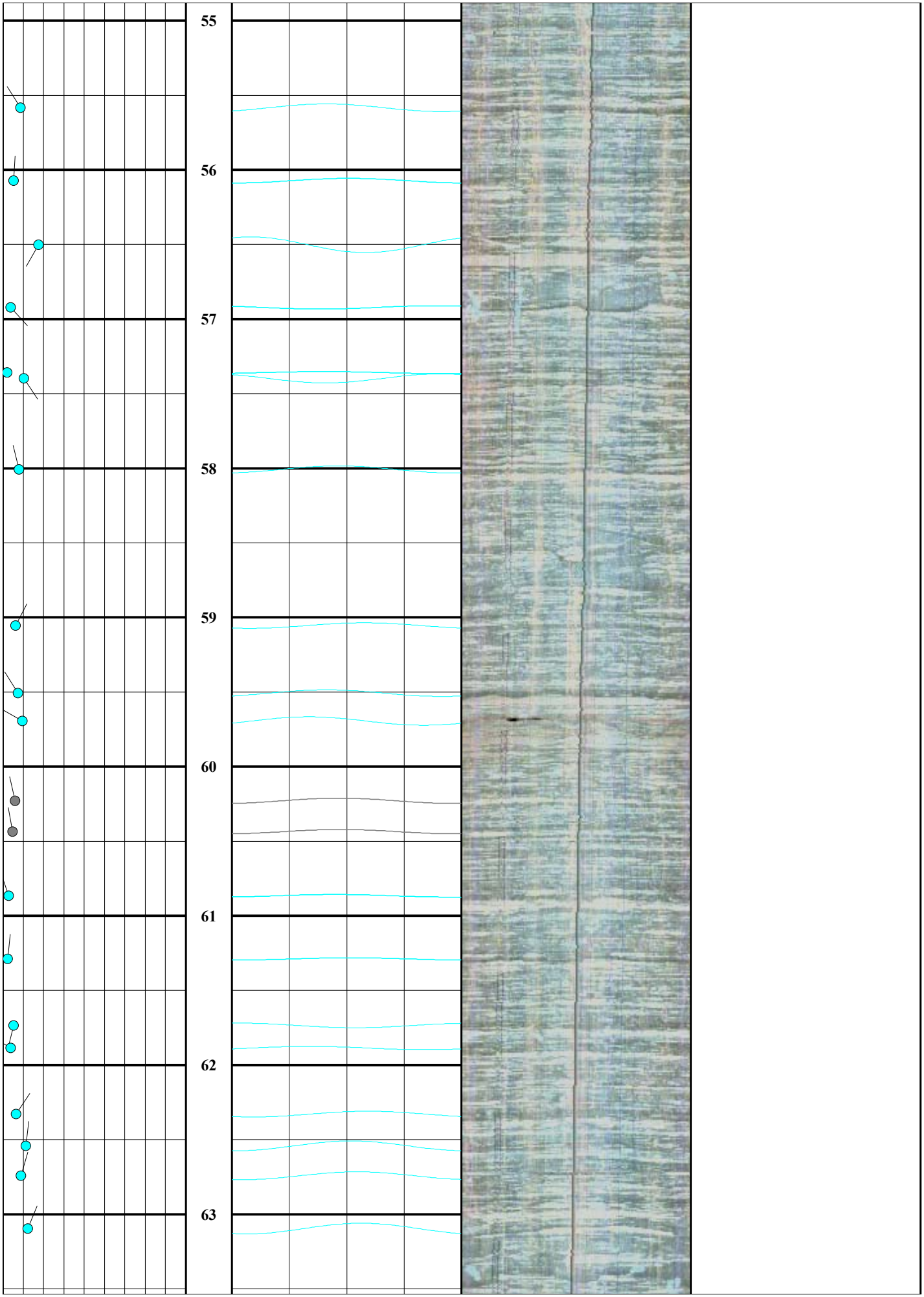
Optical/Acoustic Borehole Image Plot

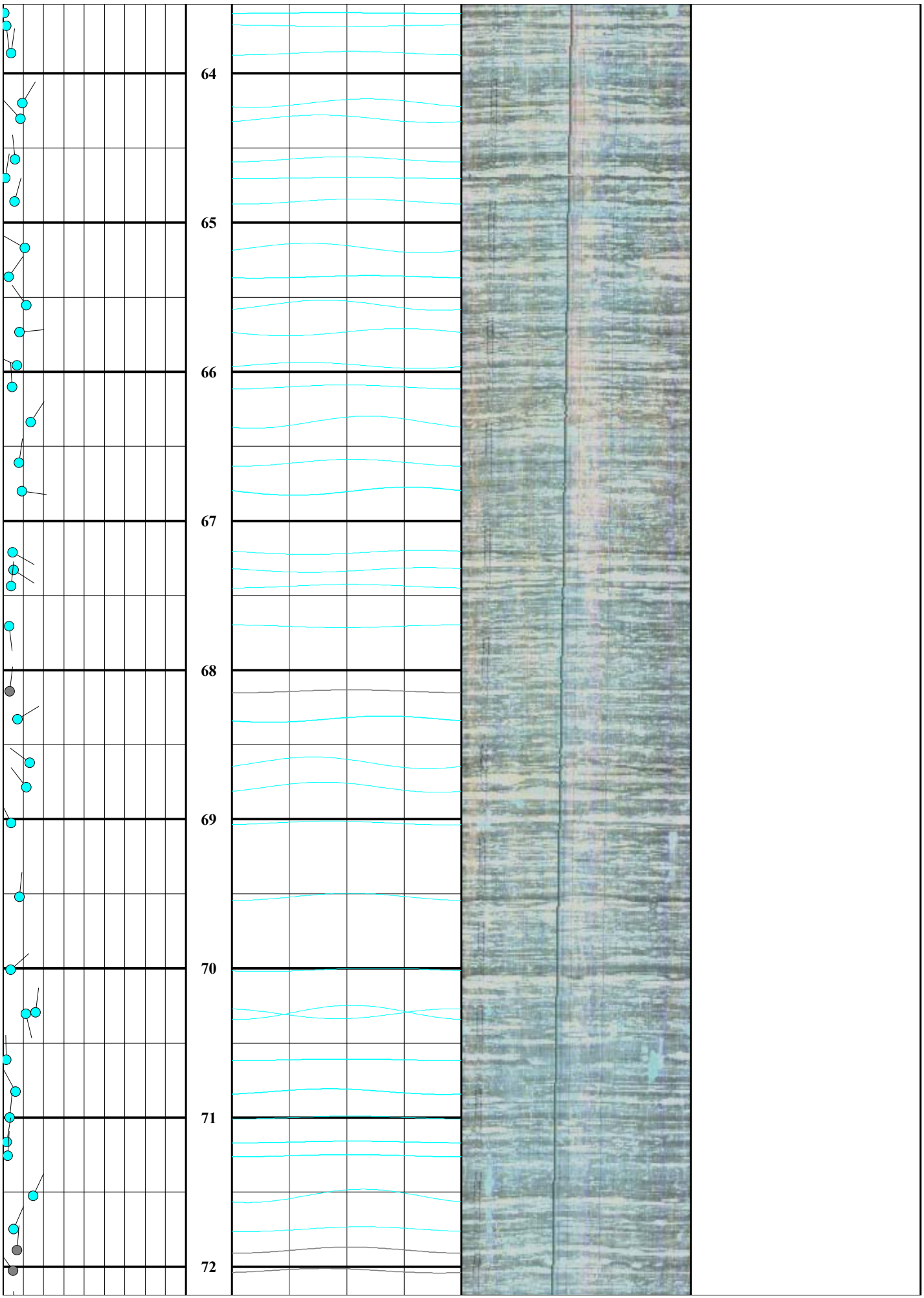
COMPANY: S. M. Stoller Corp.	PROJECT: Crescent Junction
DATE LOGGED: 7 December 2005	WELL: CH-0208

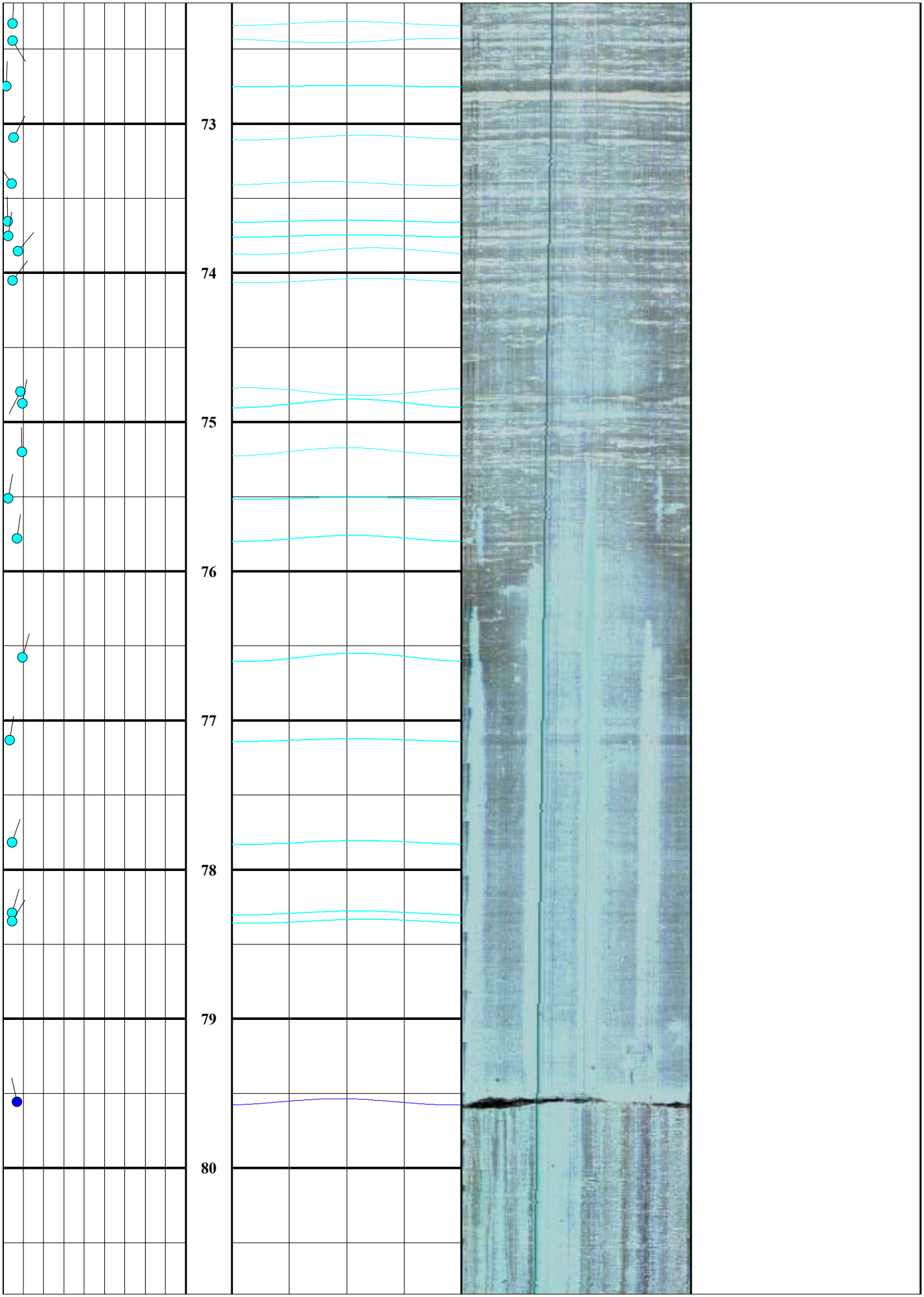
COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com

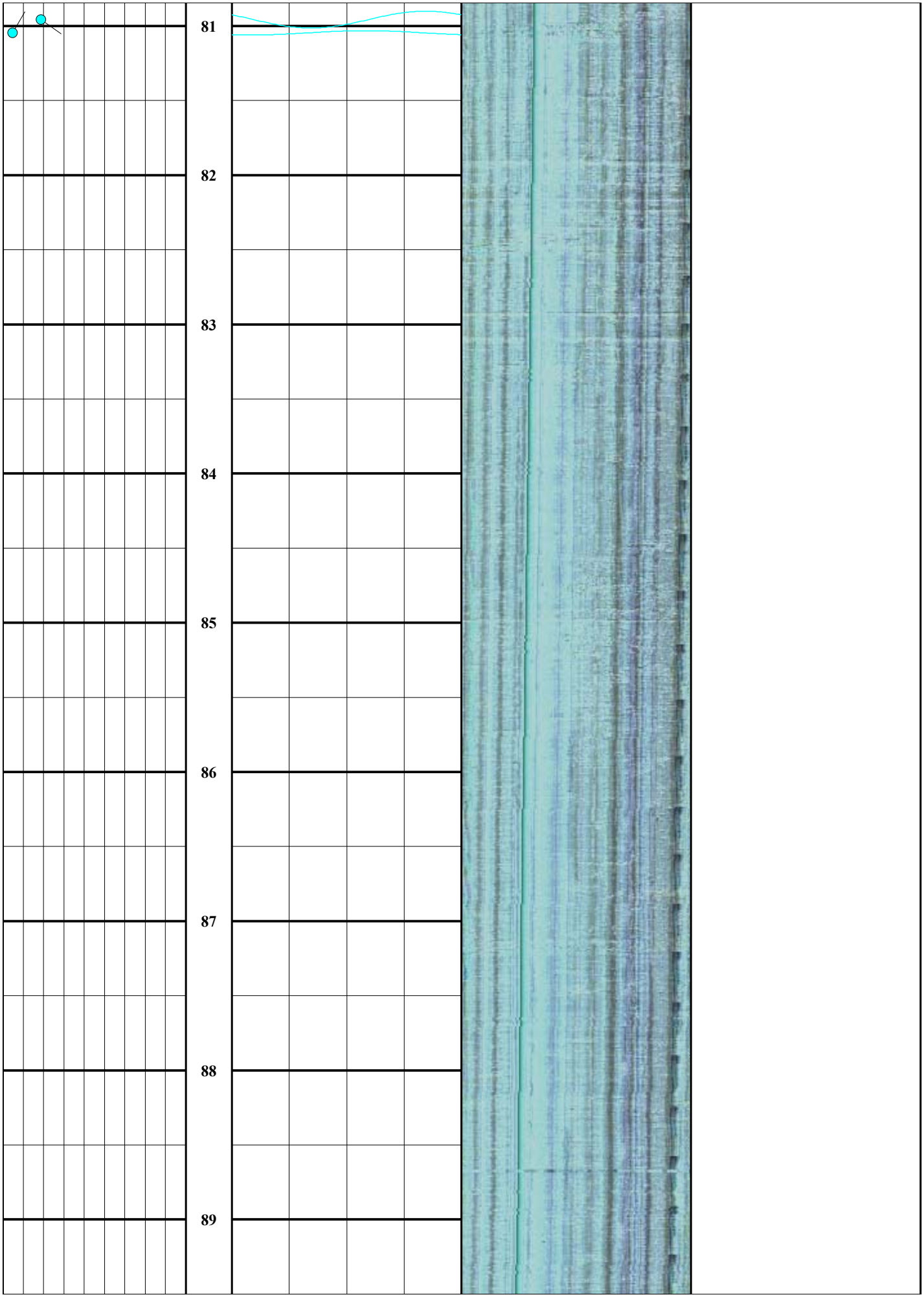


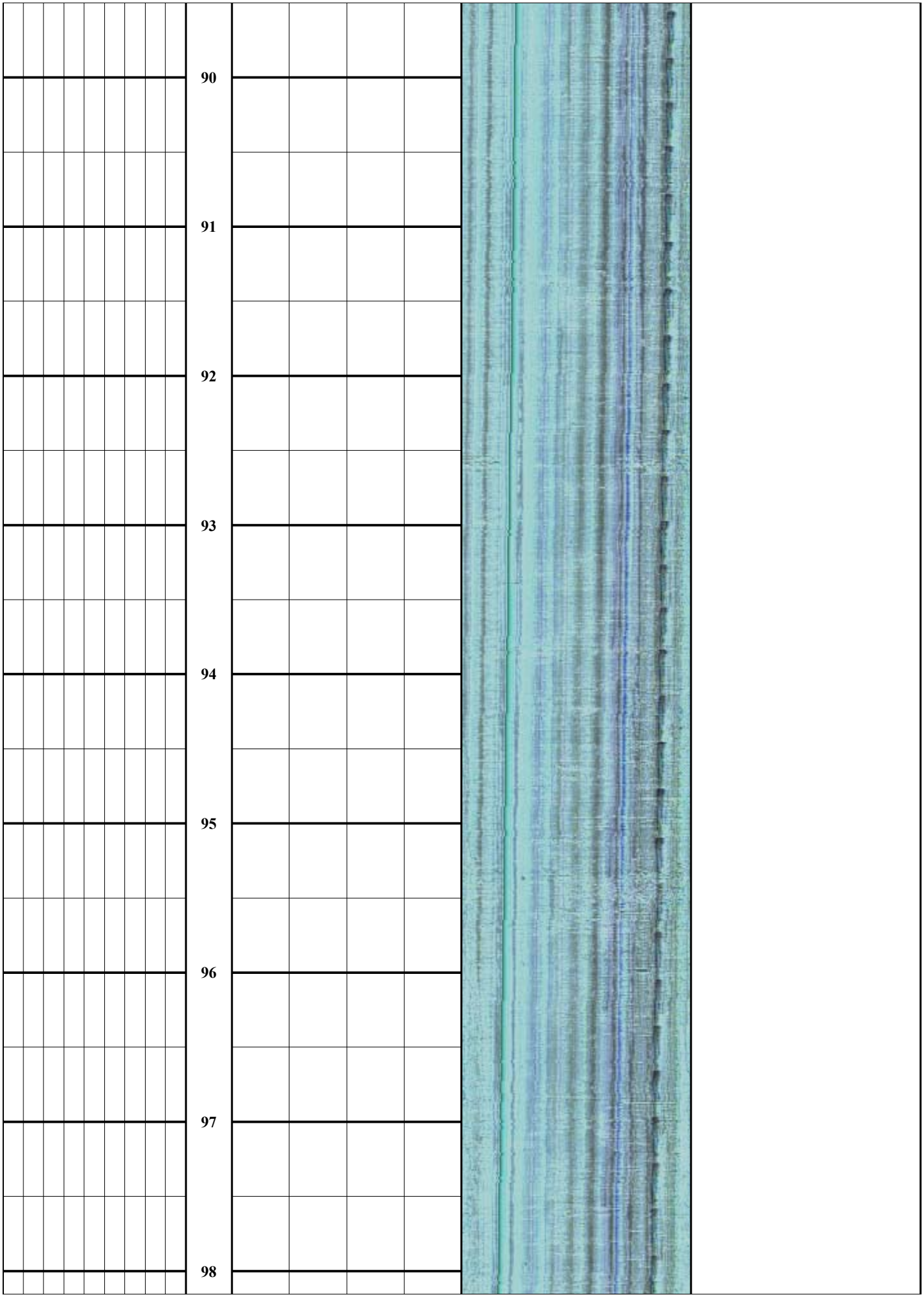

47
48
49
50
51
52
53
54

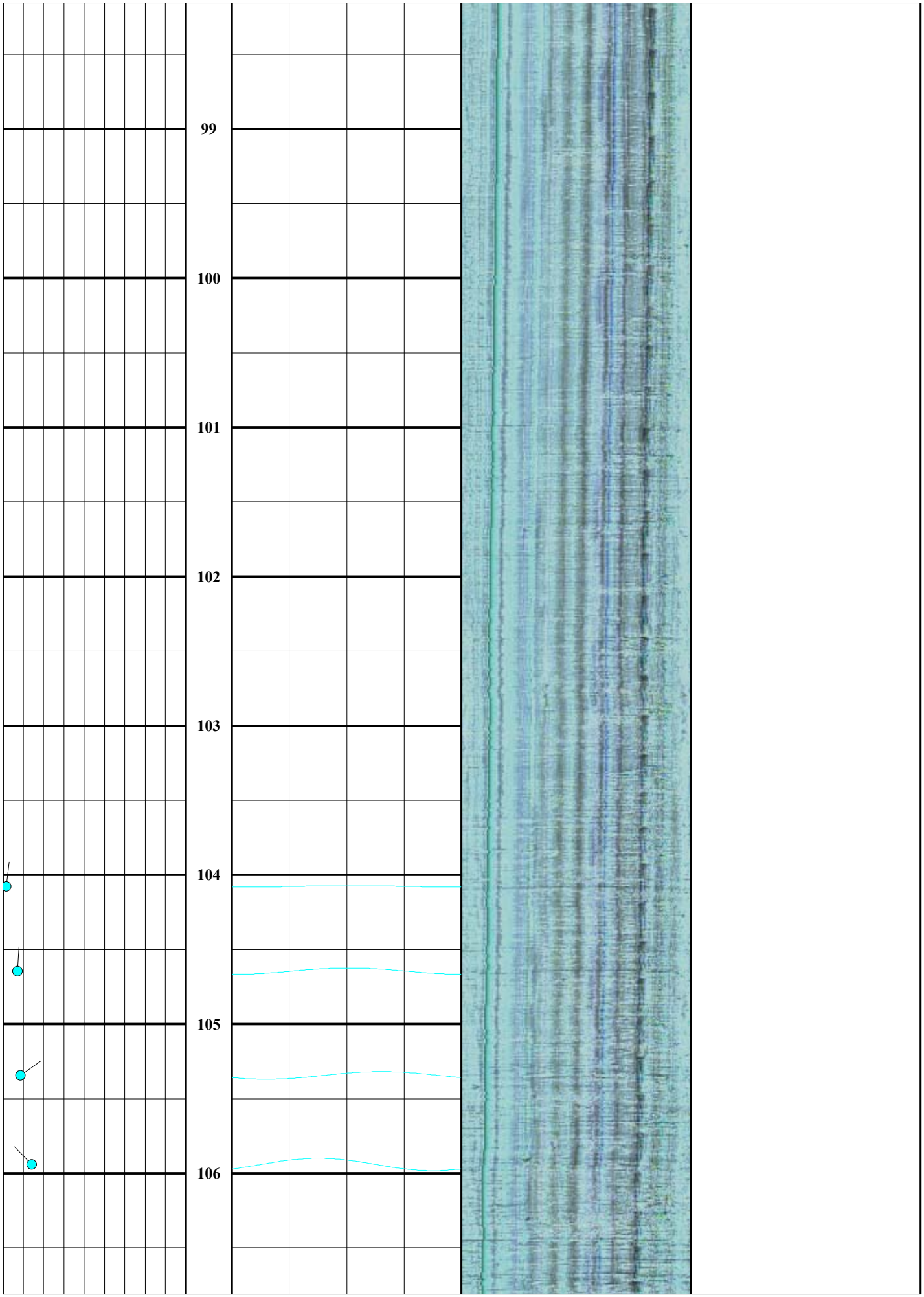

55
56
57
58
59
60
61
62
63

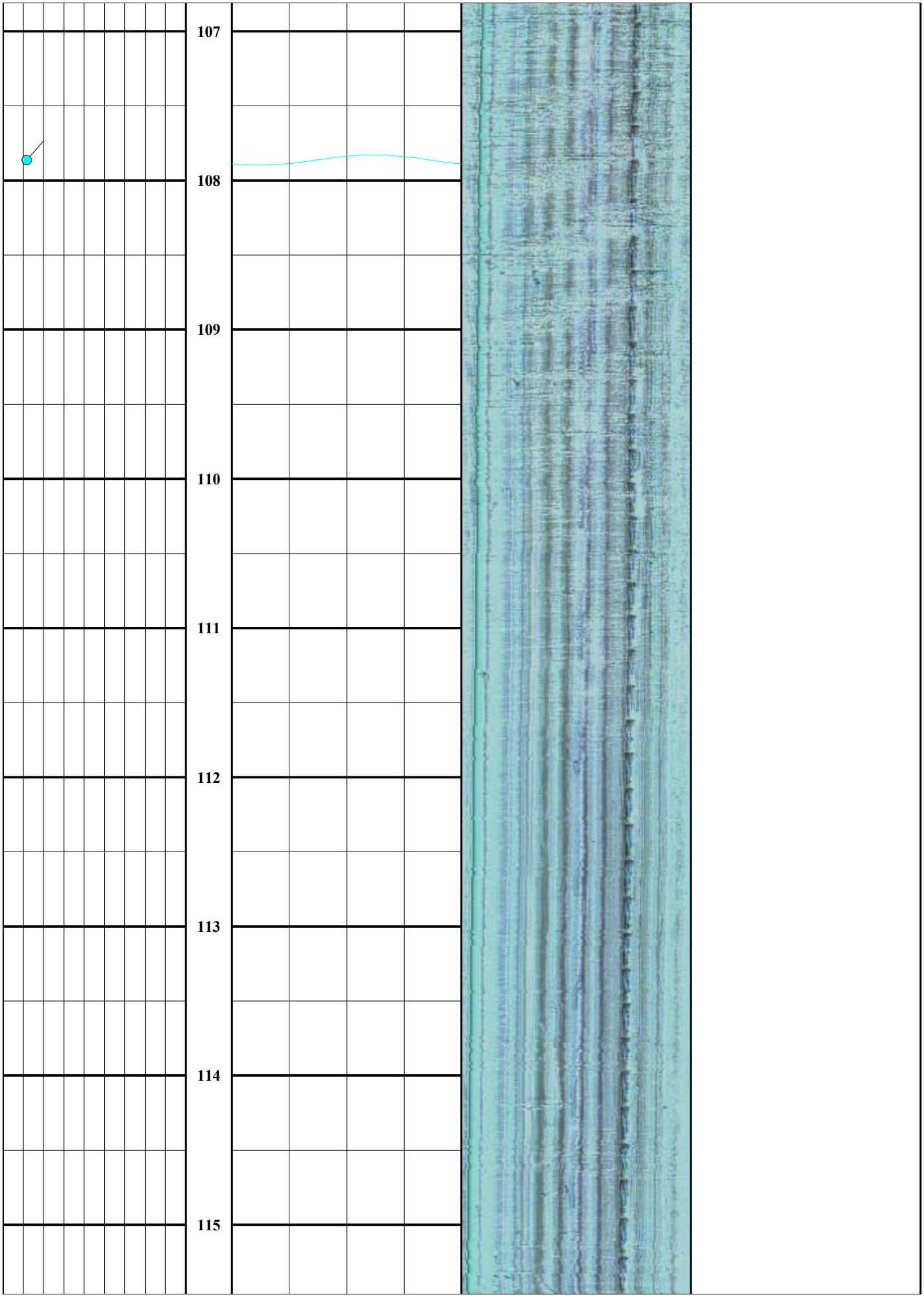

64
65
66
67
68
69
70
71
72

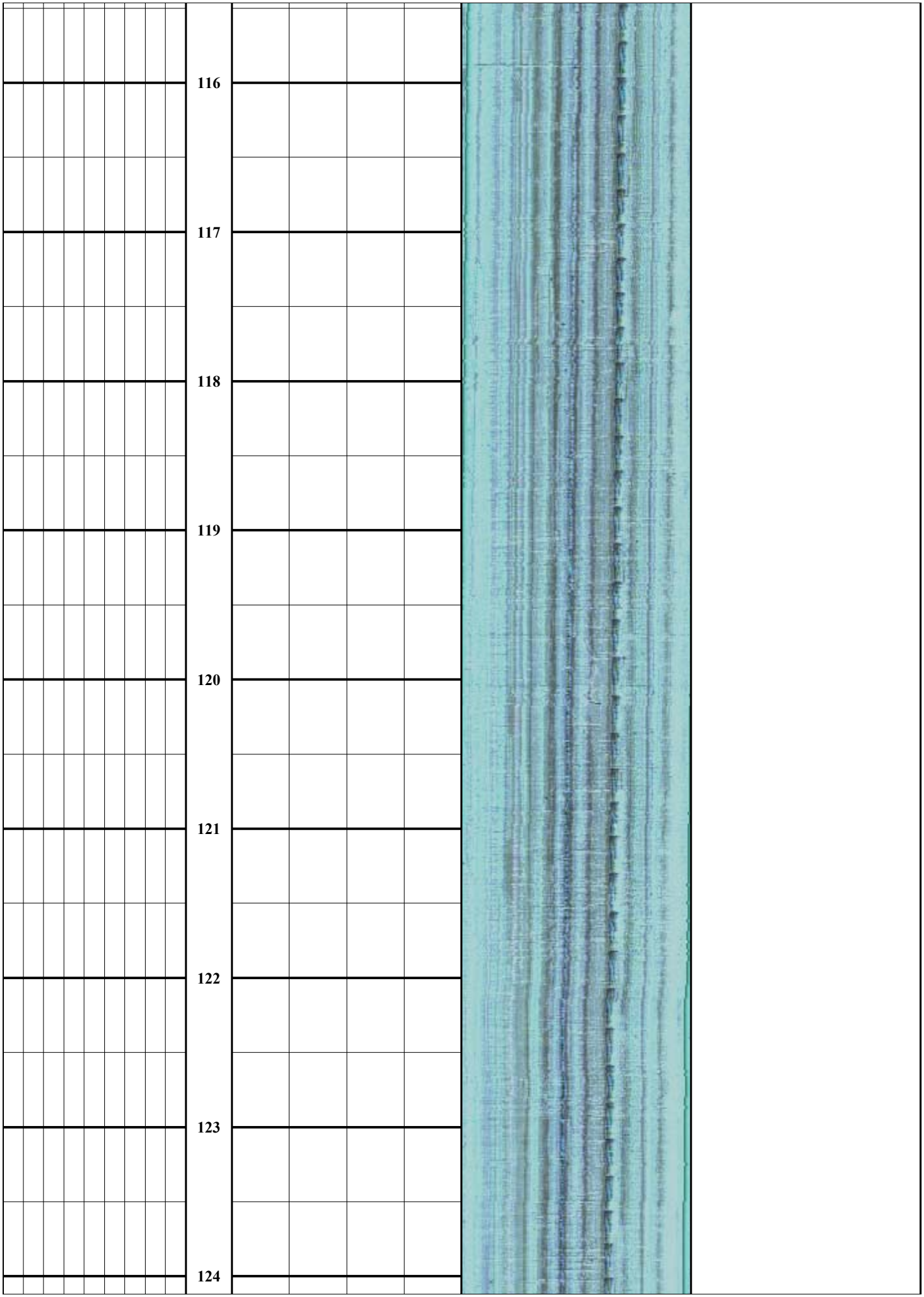

73
74
75
76
77
78
79
80

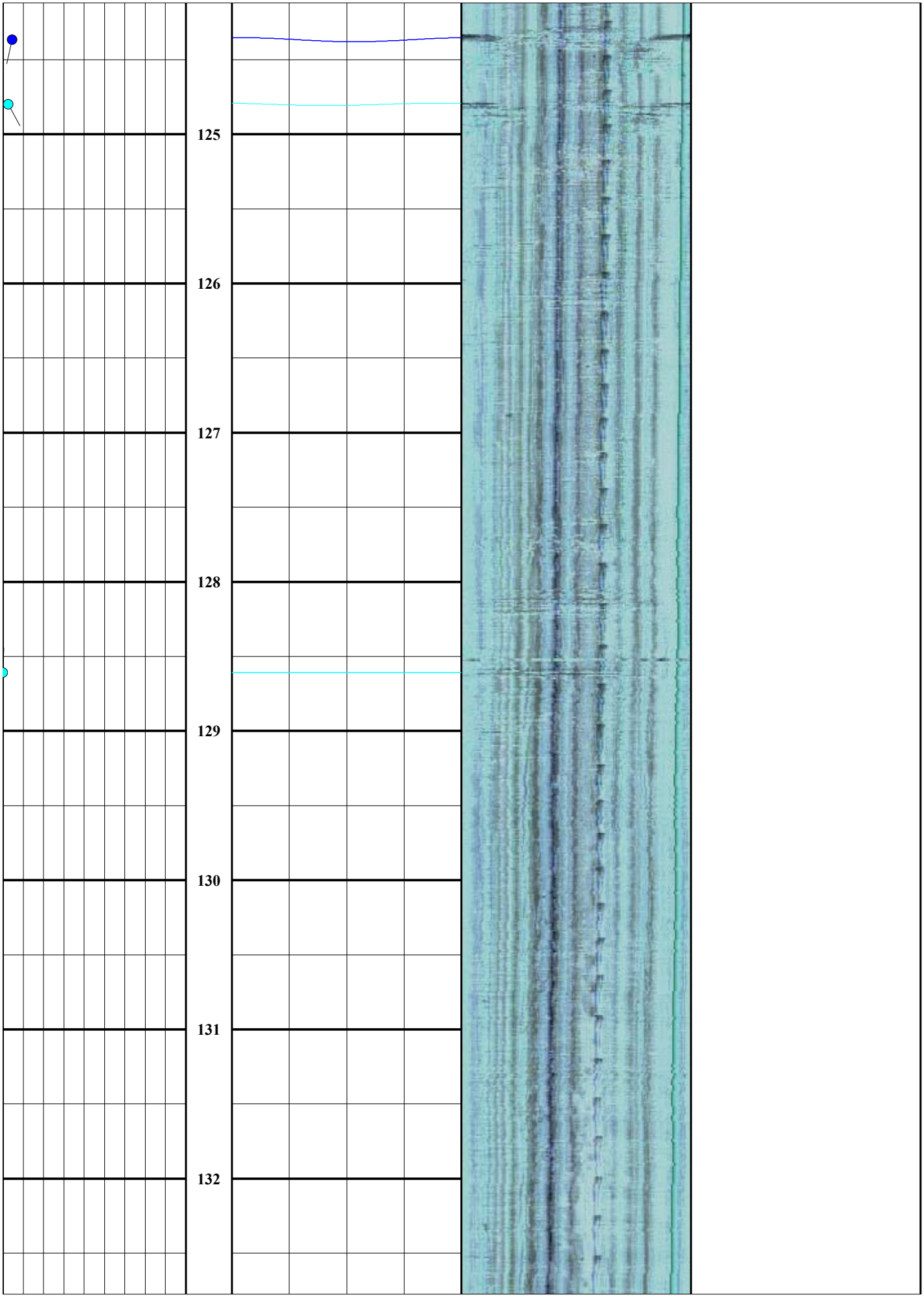

81
82
83
84
85
86
87
88
89

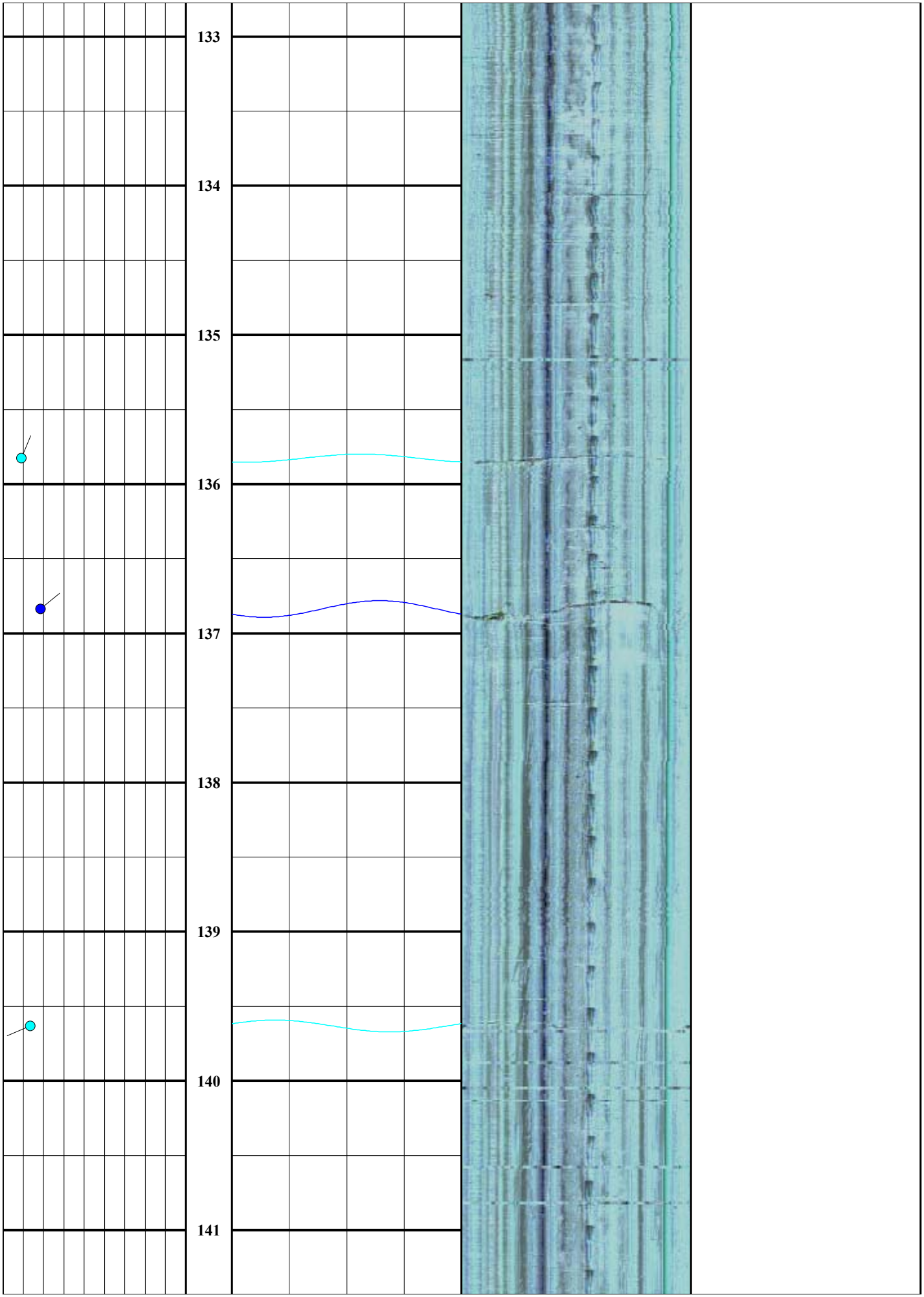

90
91
92
93
94
95
96
97
98

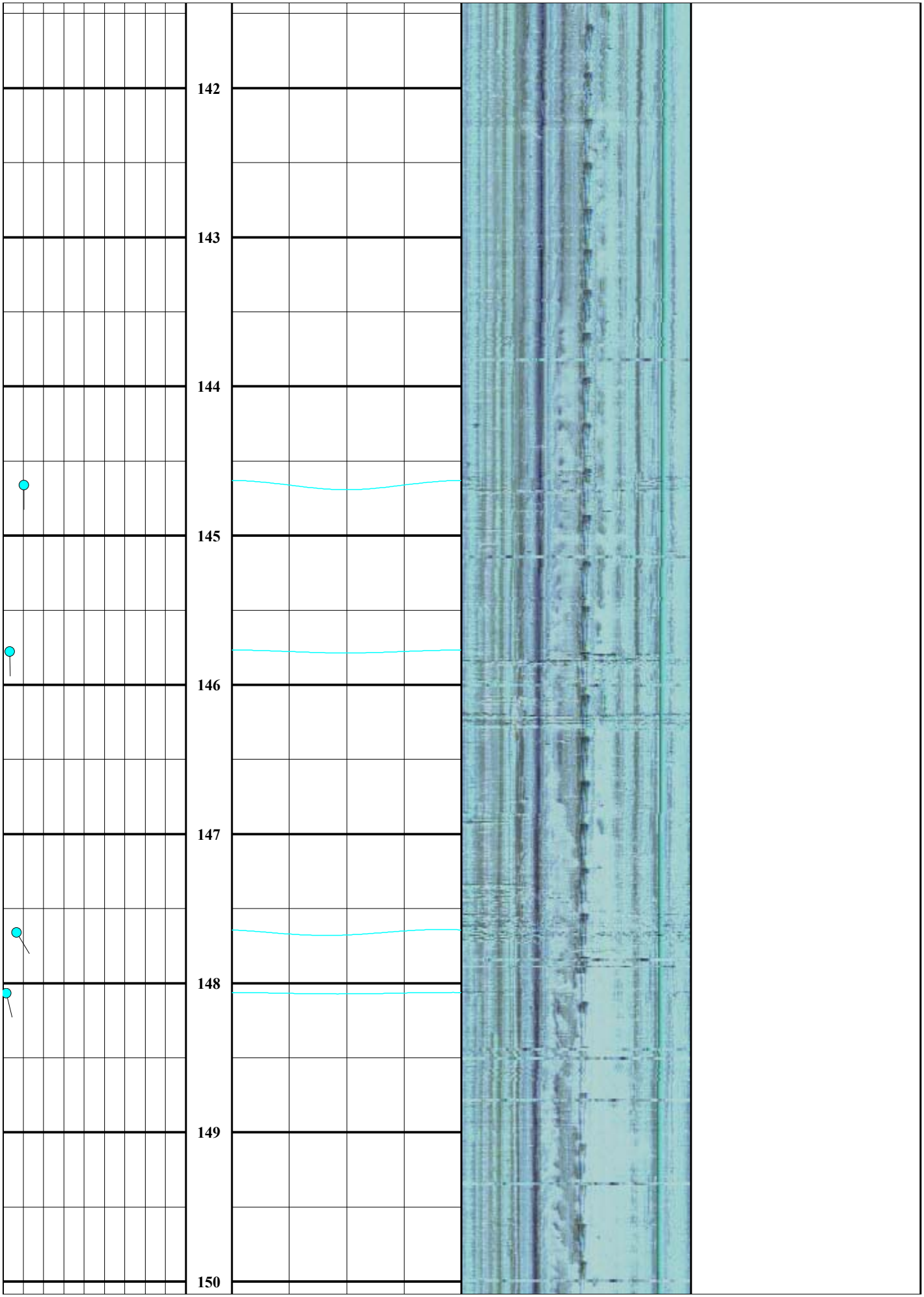

99
100
101
102
103
104
105
106

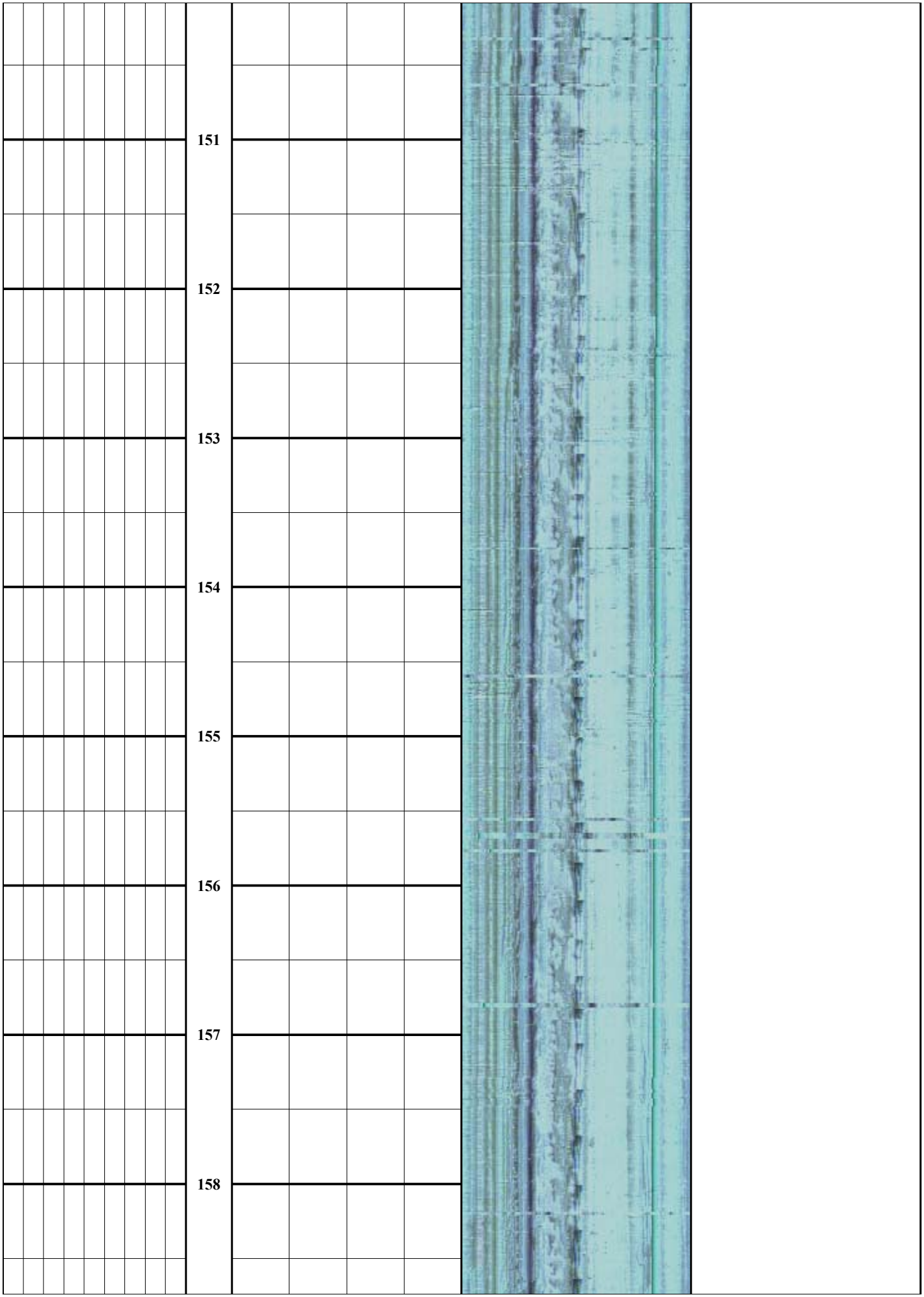

107
108
109
110
111
112
113
114
115


116
117
118
119
120
121
122
123
124


125
126
127
128
129
130
131
132


133
134
135
136
137
138
139
140
141


142
143
144
145
146
147
148
149
150


151
152
153
154
155
156
157
158

159

160

161

162

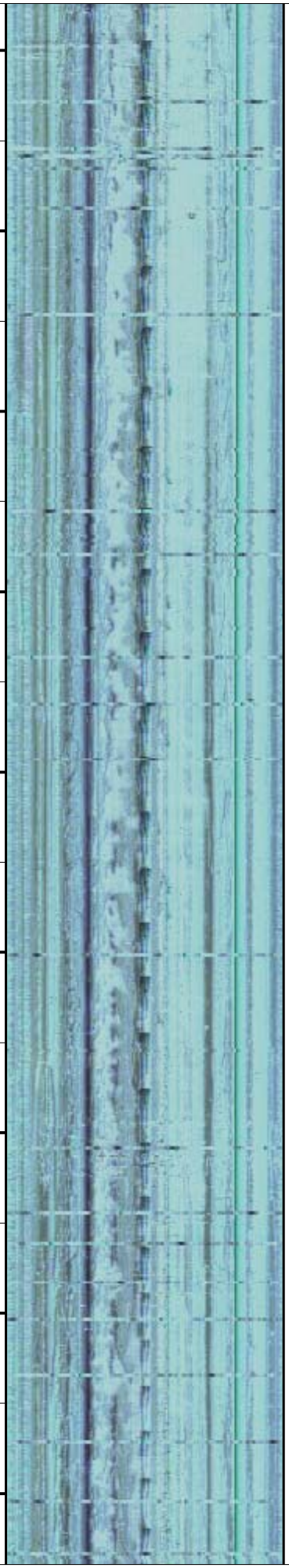
163

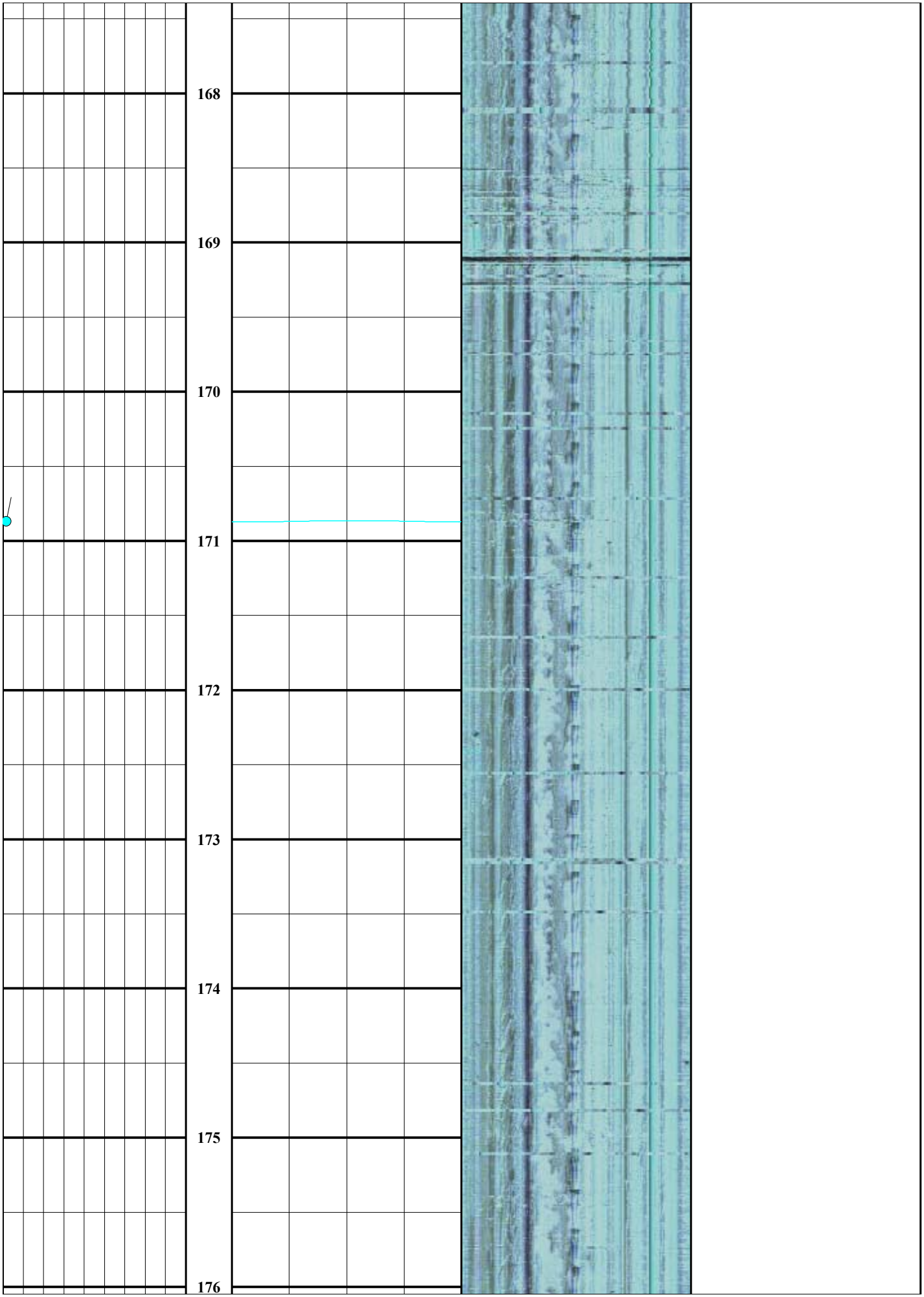
164

165

166

167




168
169
170
171
172
173
174
175
176

177

178

179

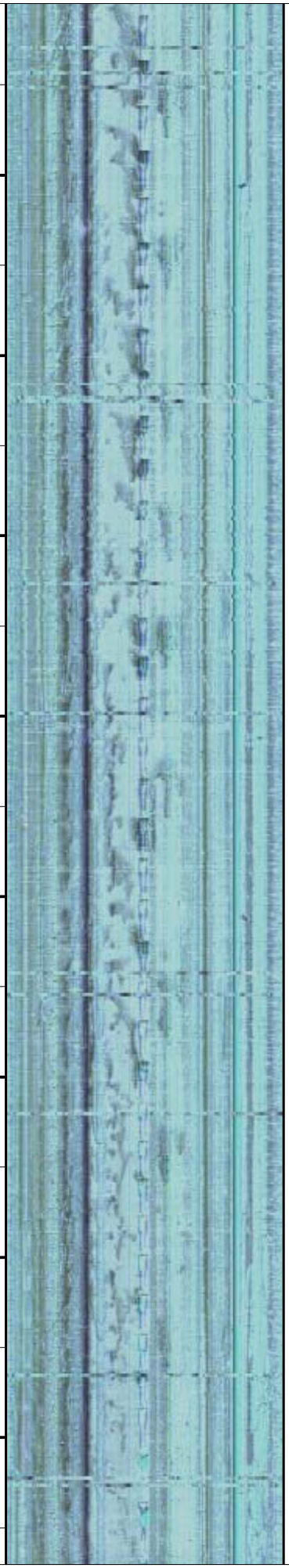
180

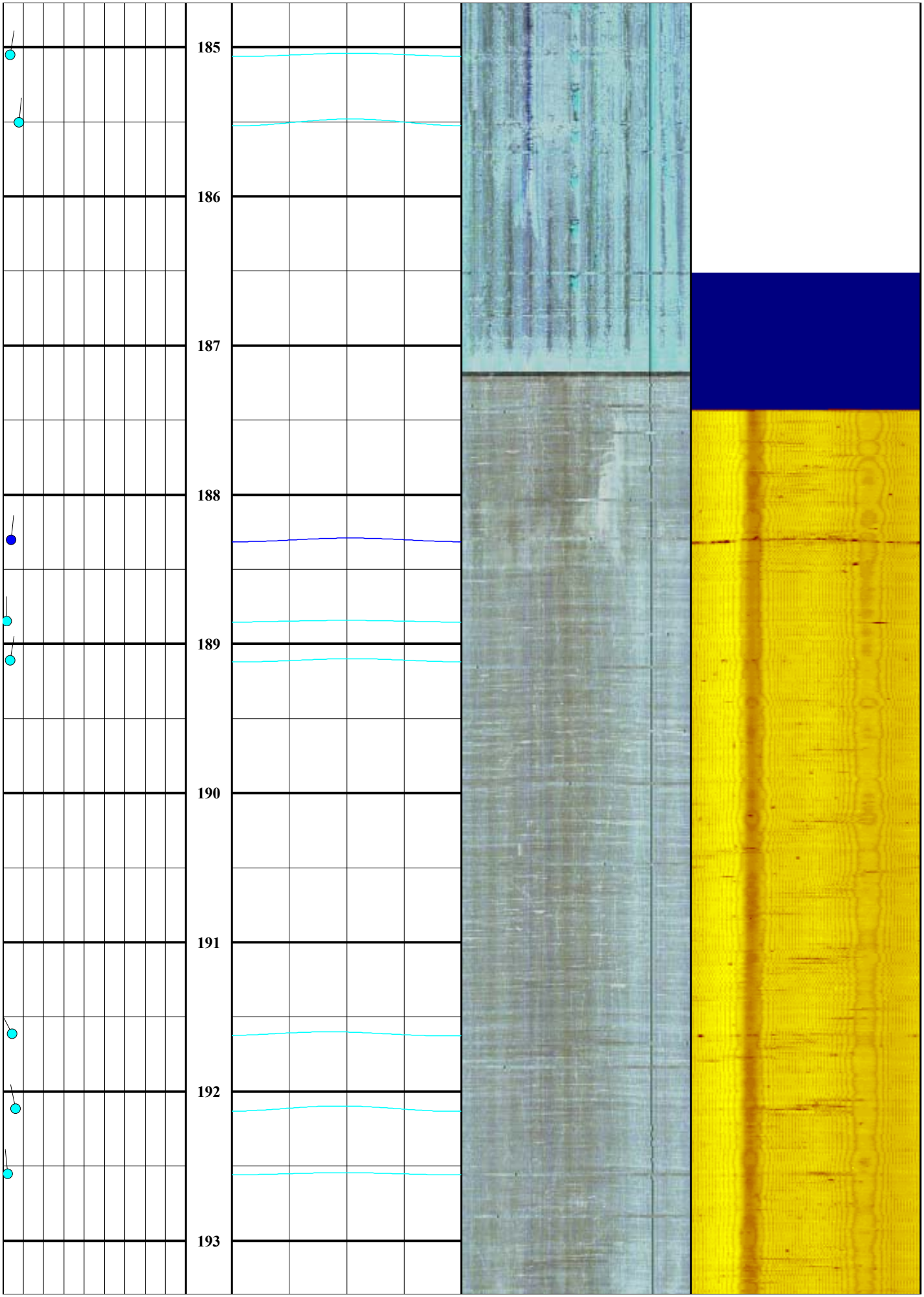
181

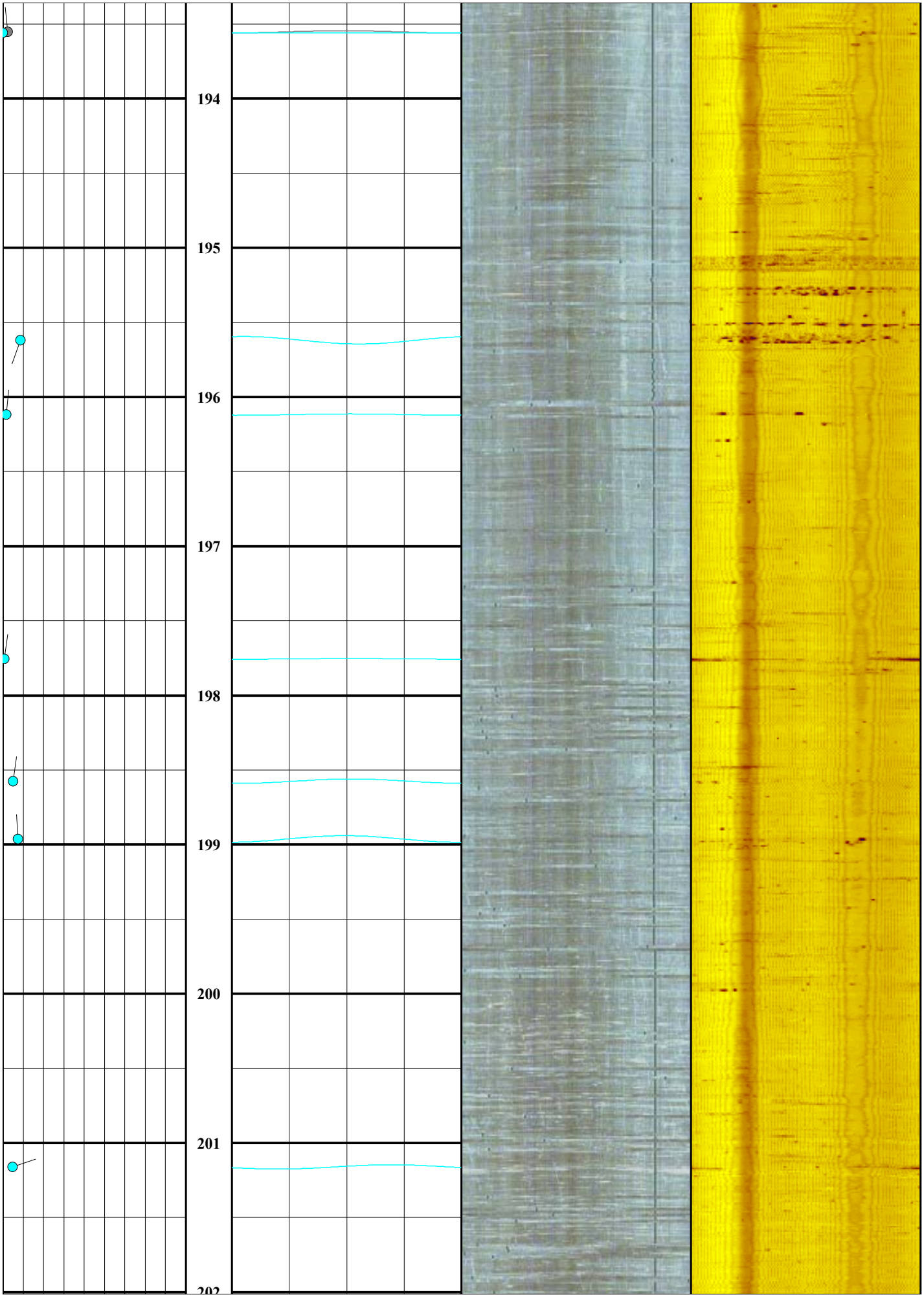
182

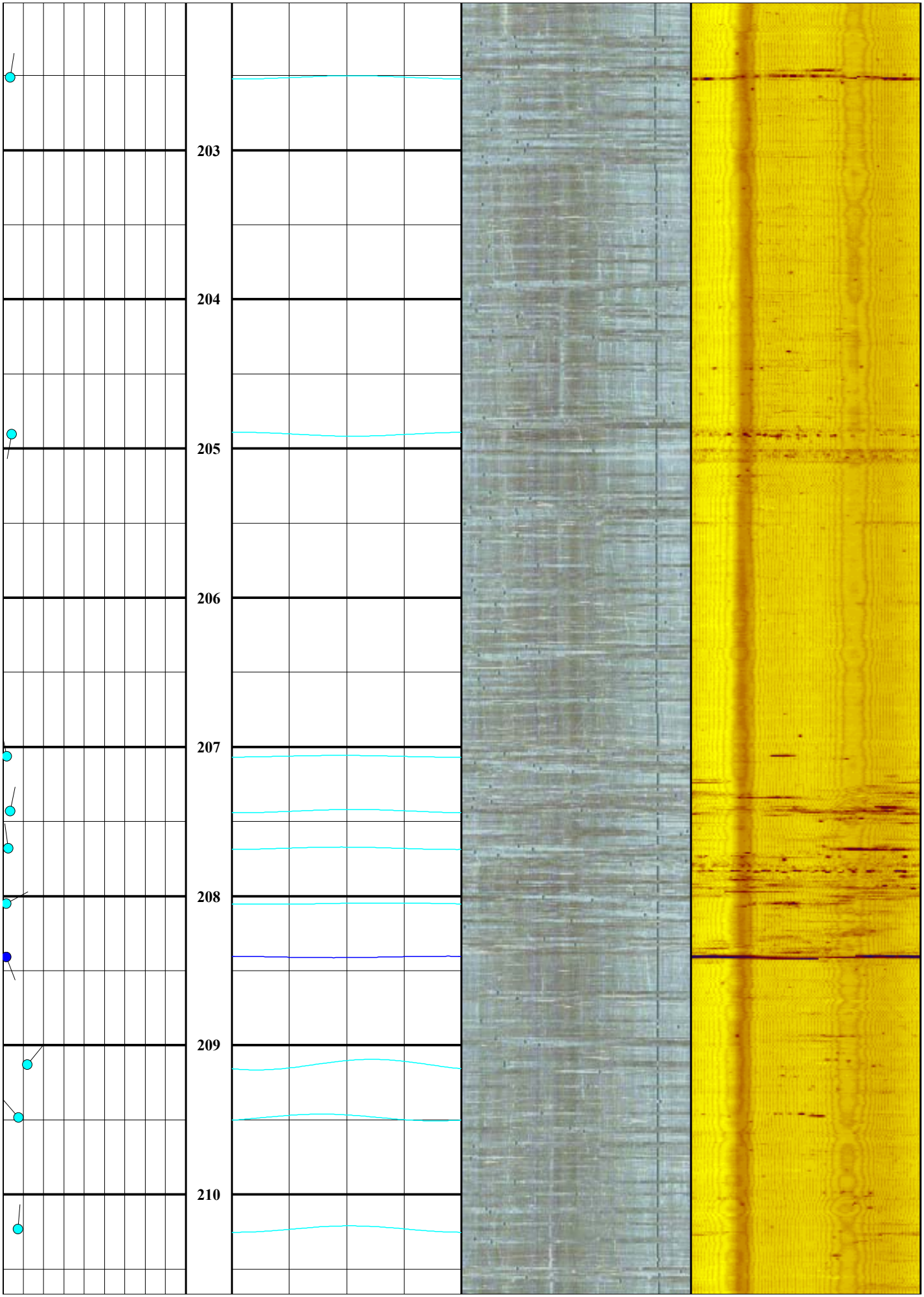
183

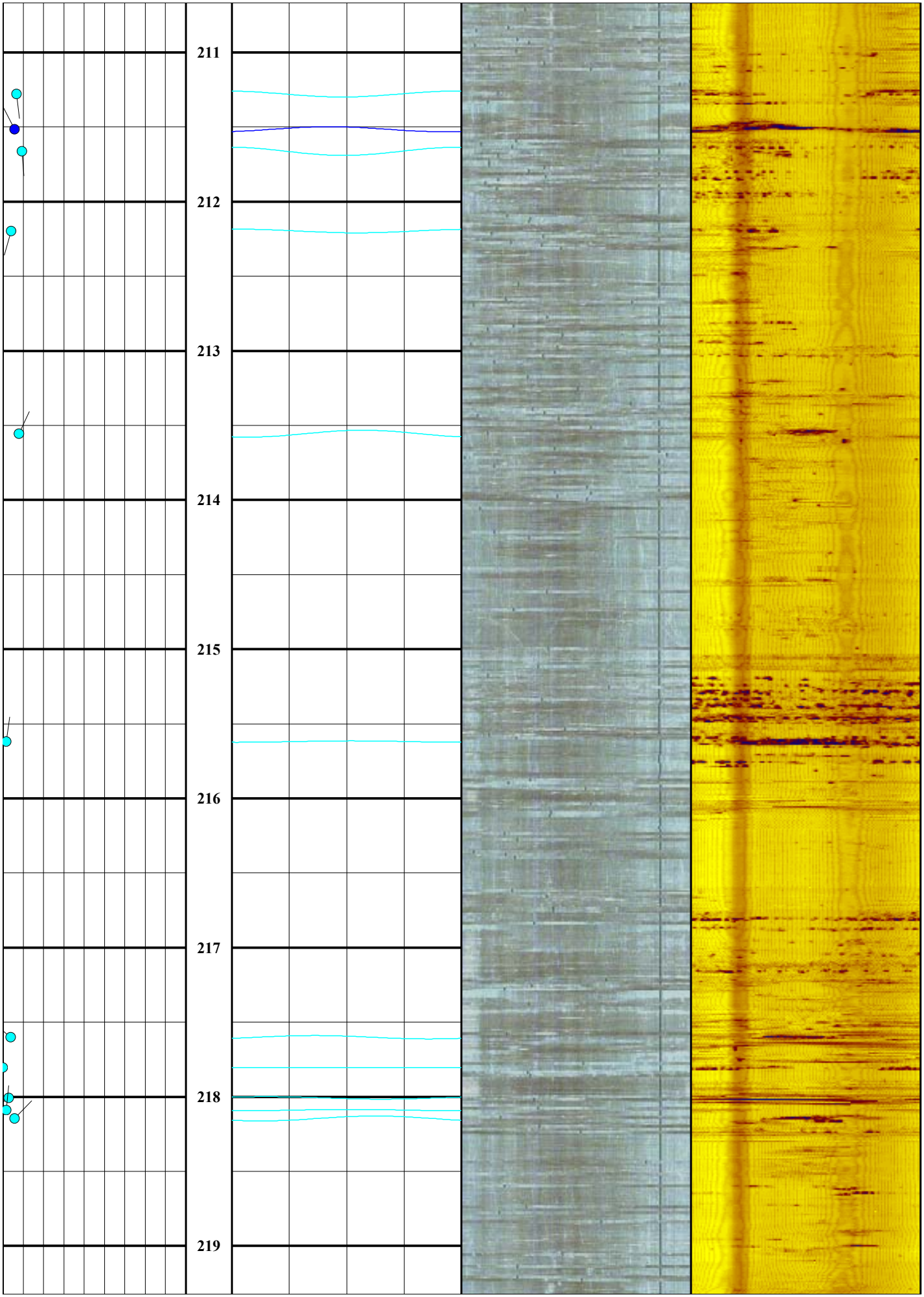
184

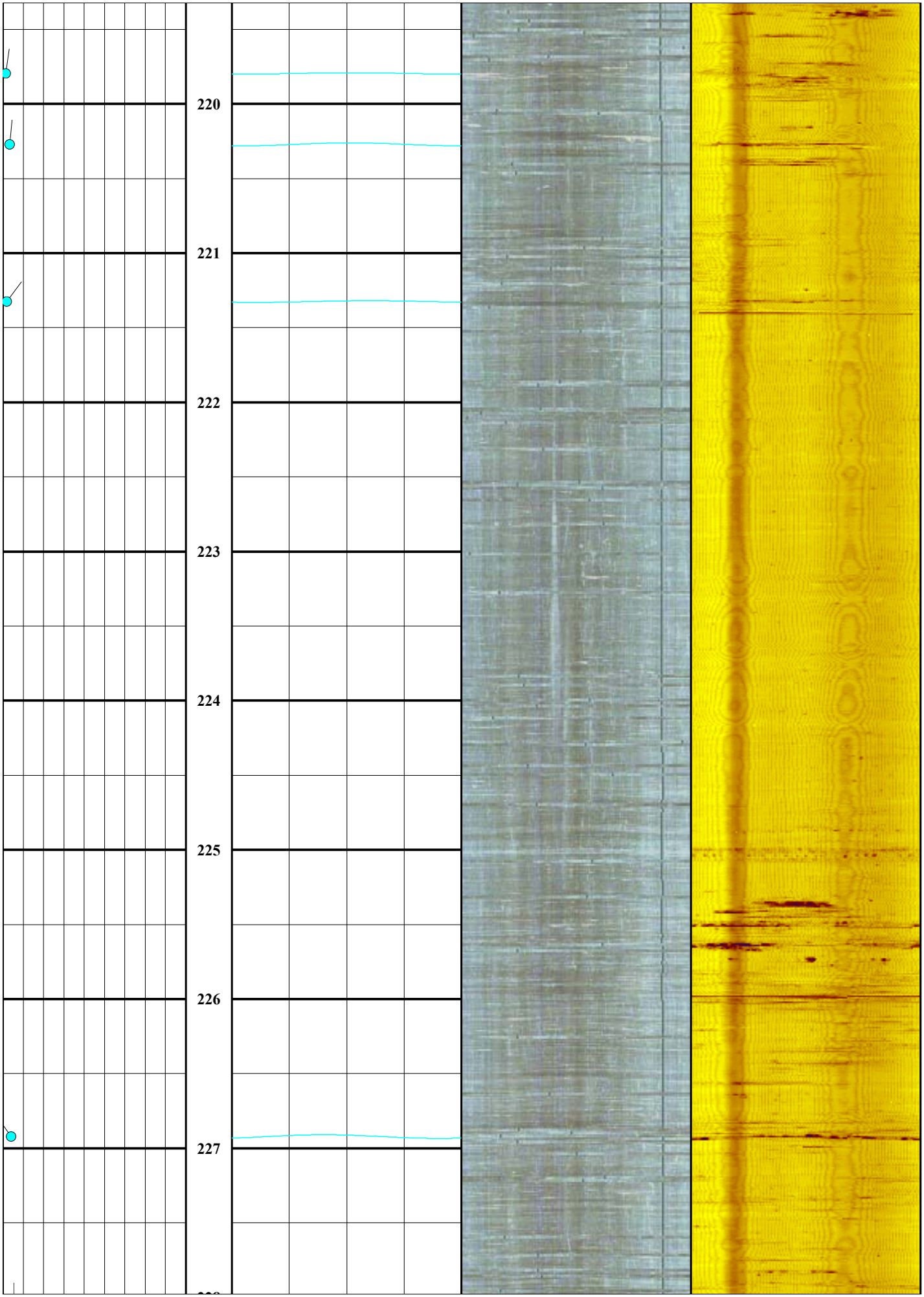


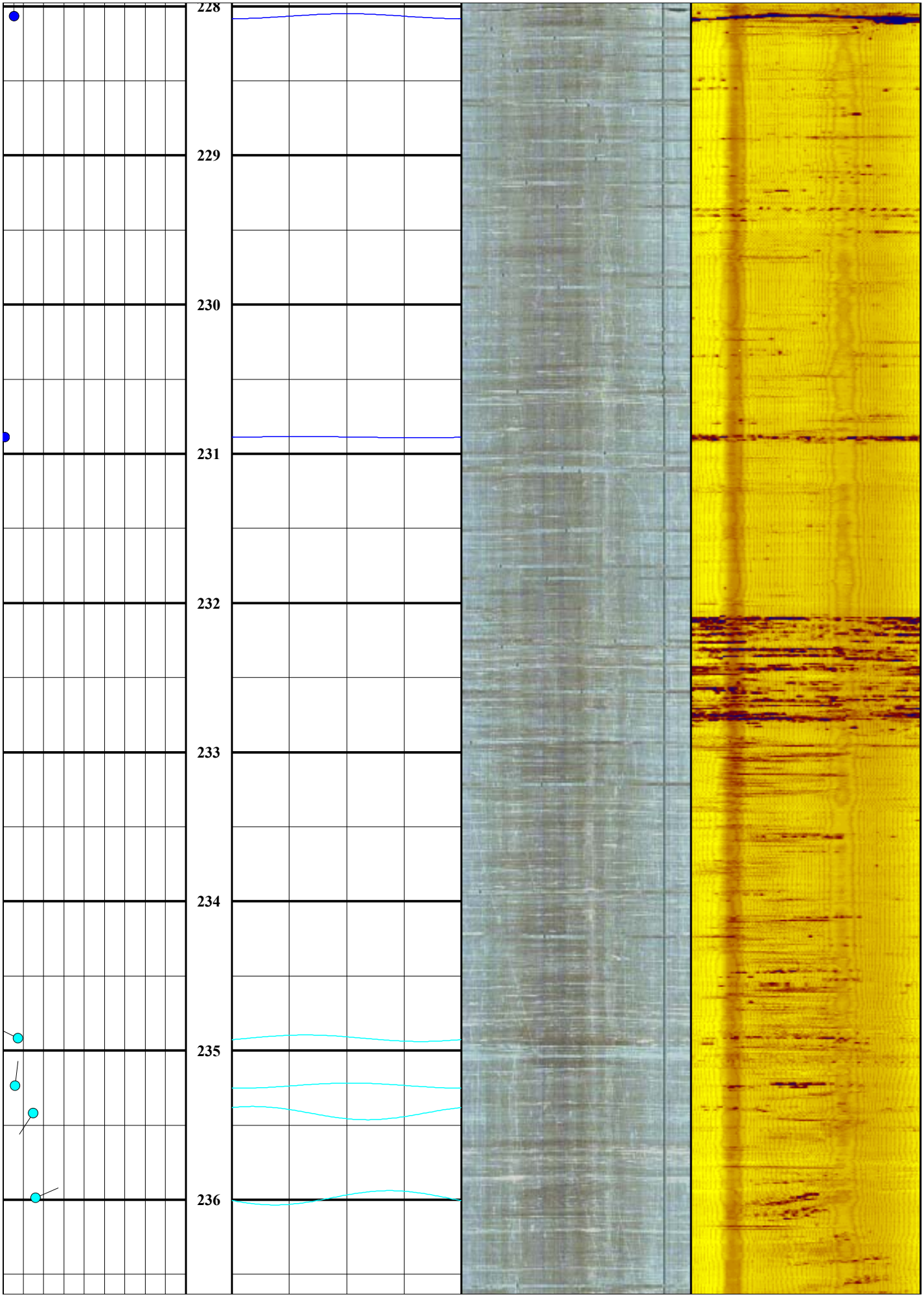

185
186
187
188
189
190
191
192
193

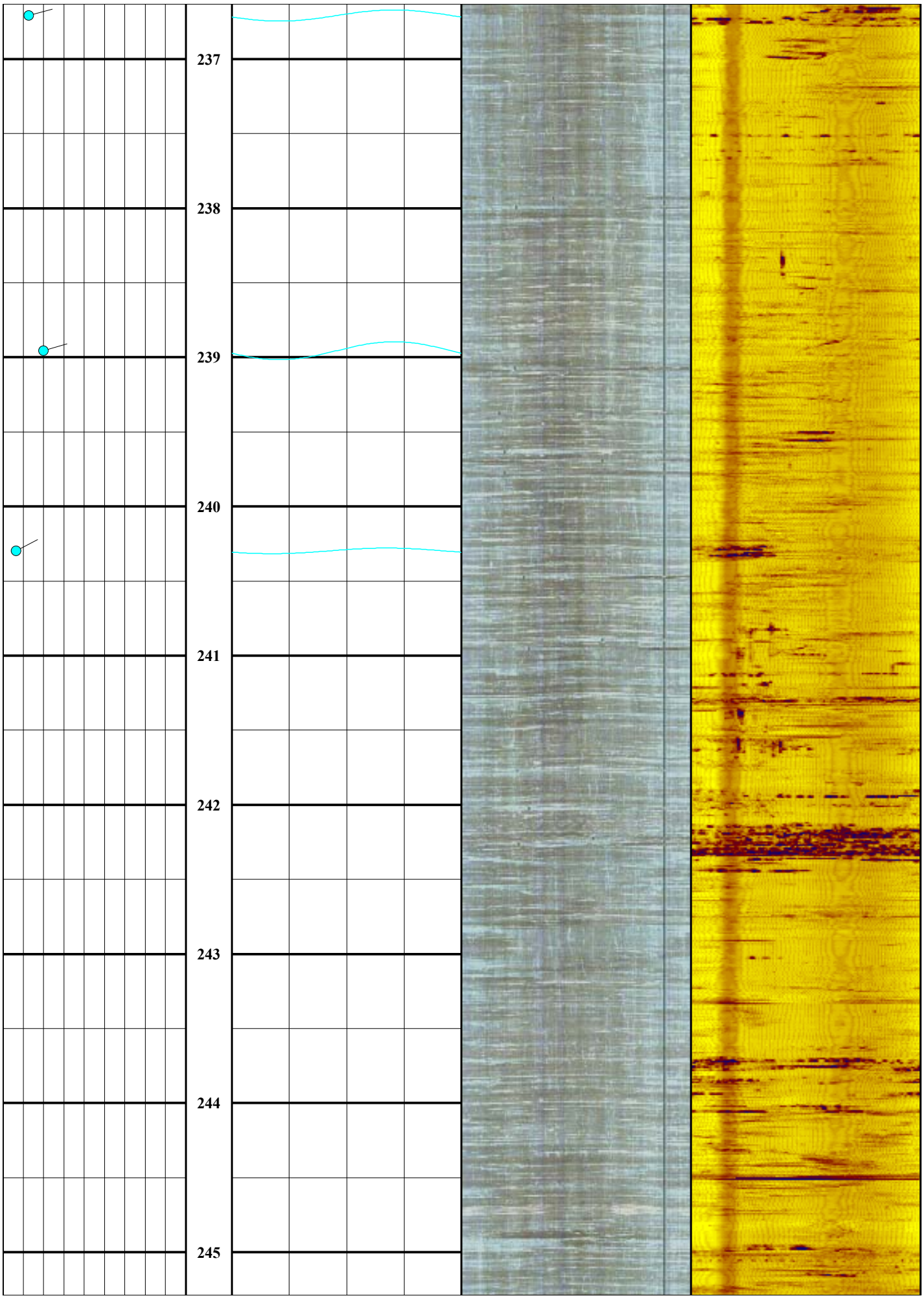

194
195
196
197
198
199
200
201
202

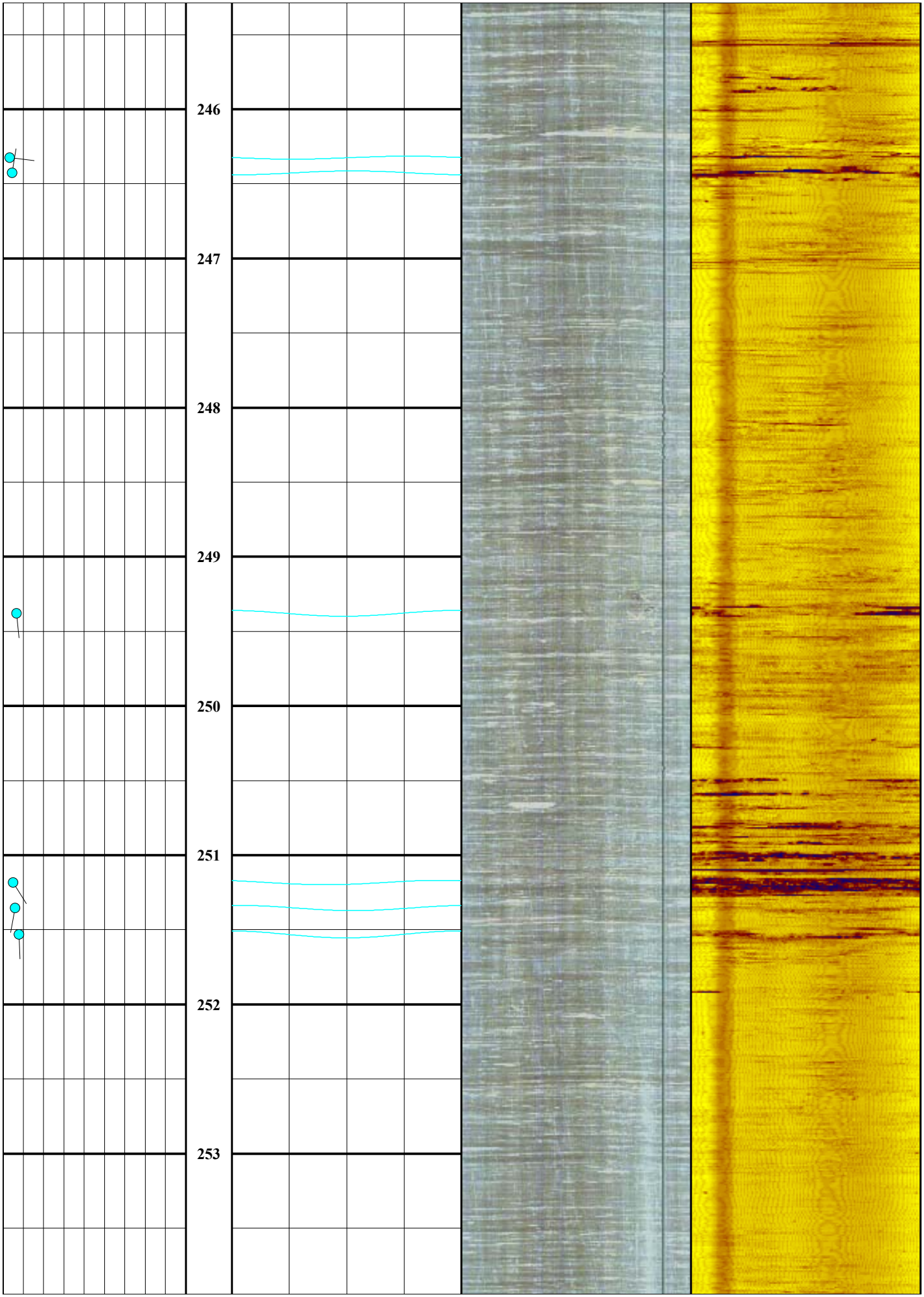

203
204
205
206
207
208
209
210

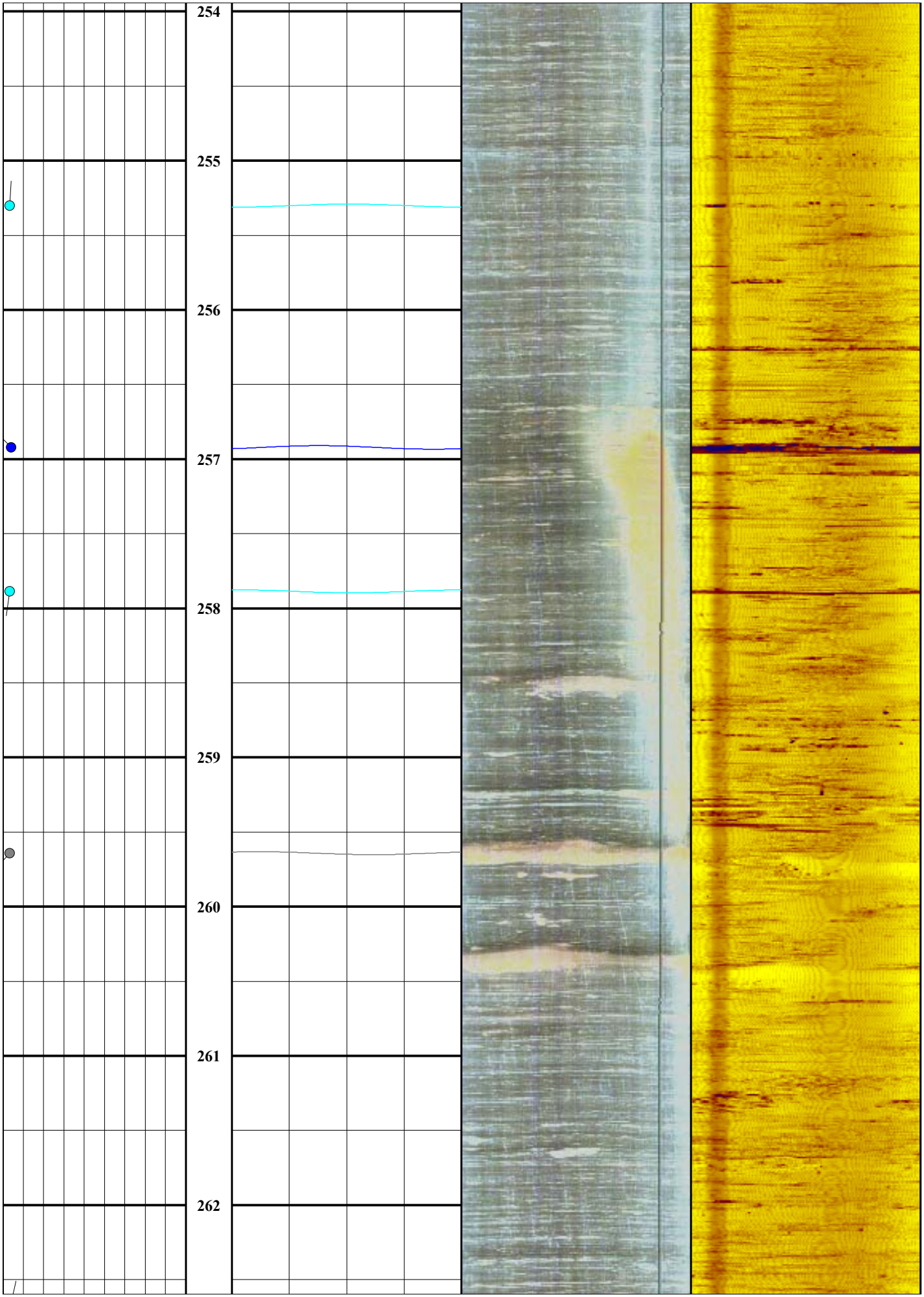

211
212
213
214
215
216
217
218
219

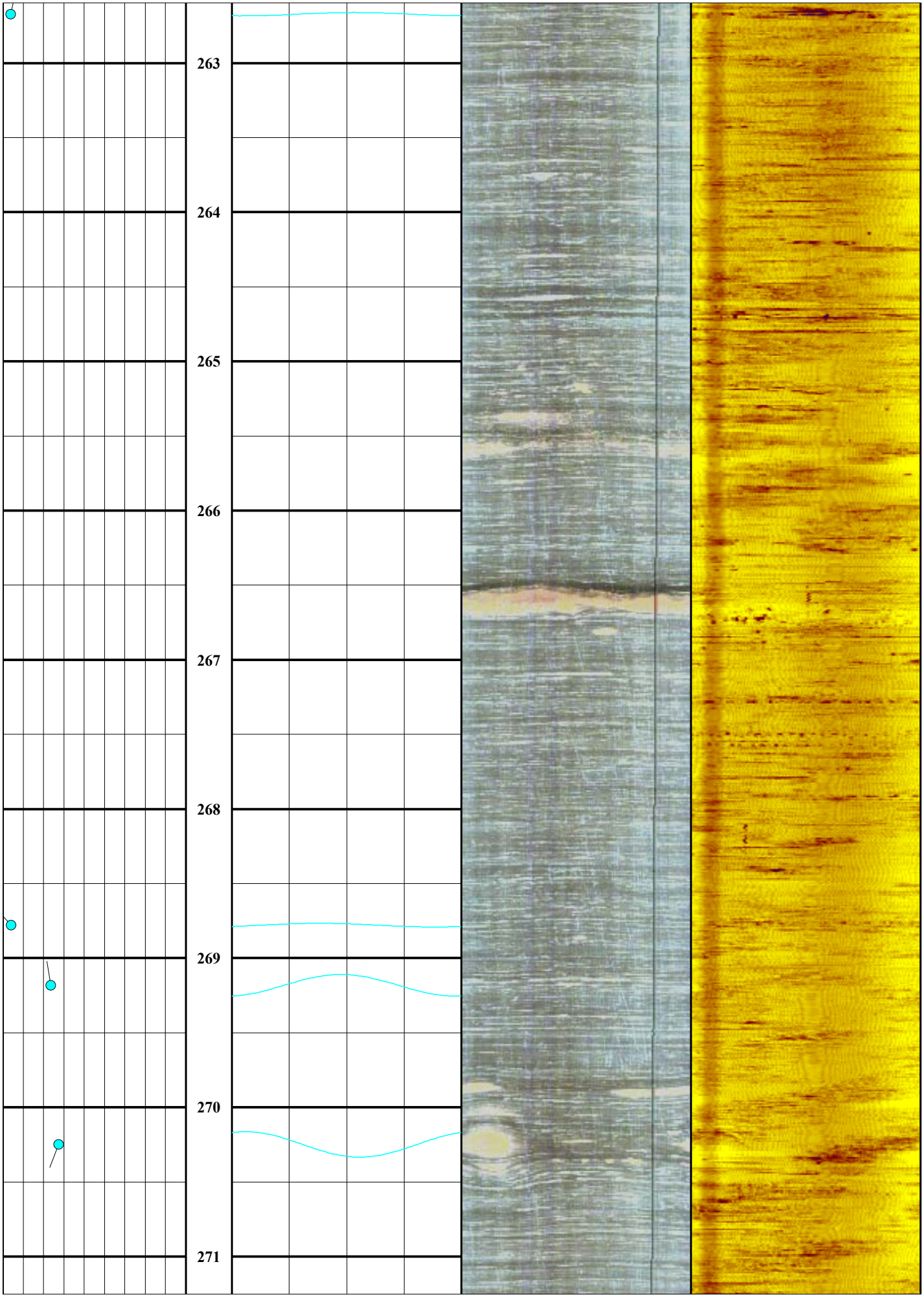

220
221
222
223
224
225
226
227

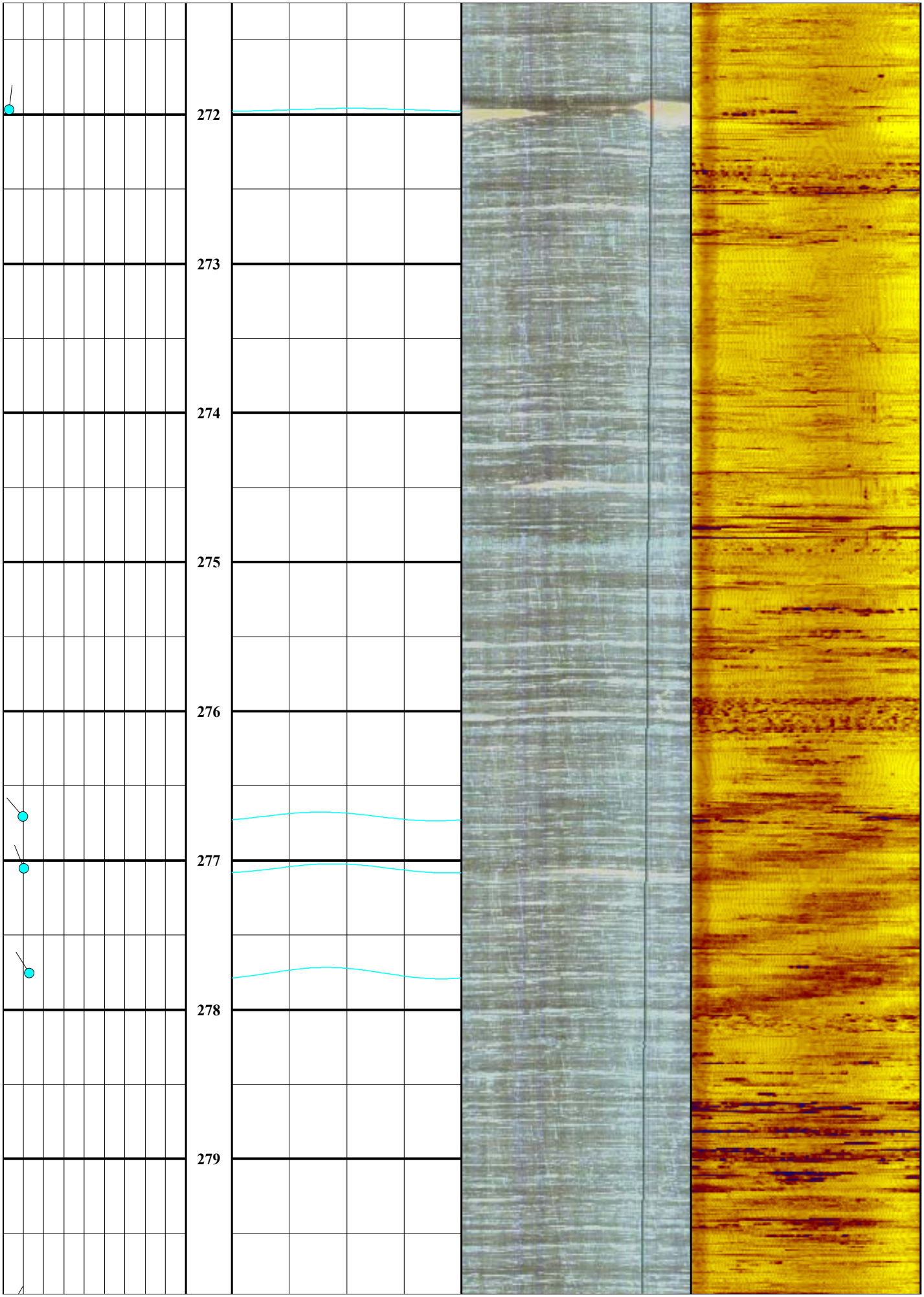

228
229
230
231
232
233
234
235
236

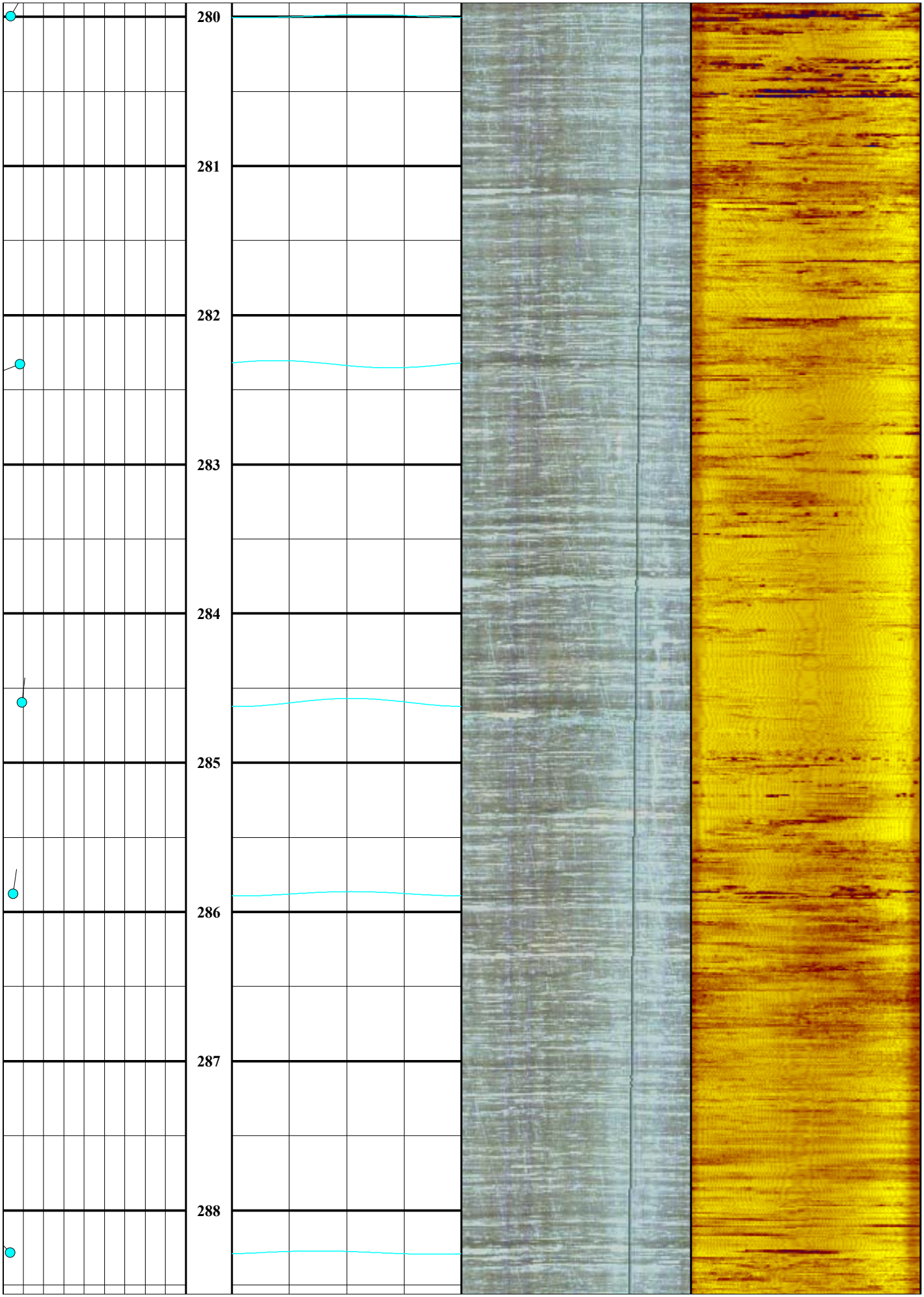

237
238
239
240
241
242
243
244
245

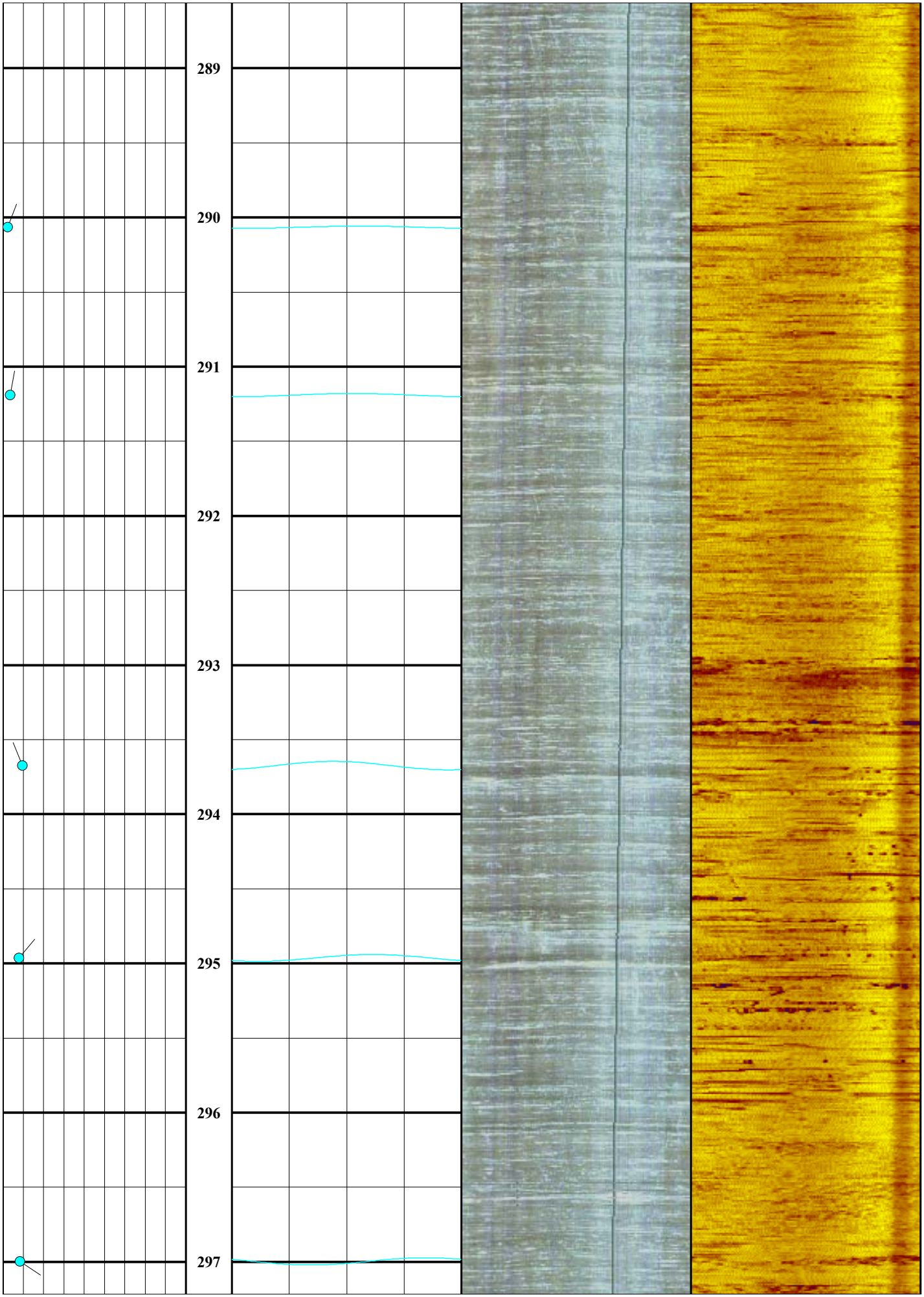

246
247
248
249
250
251
252
253

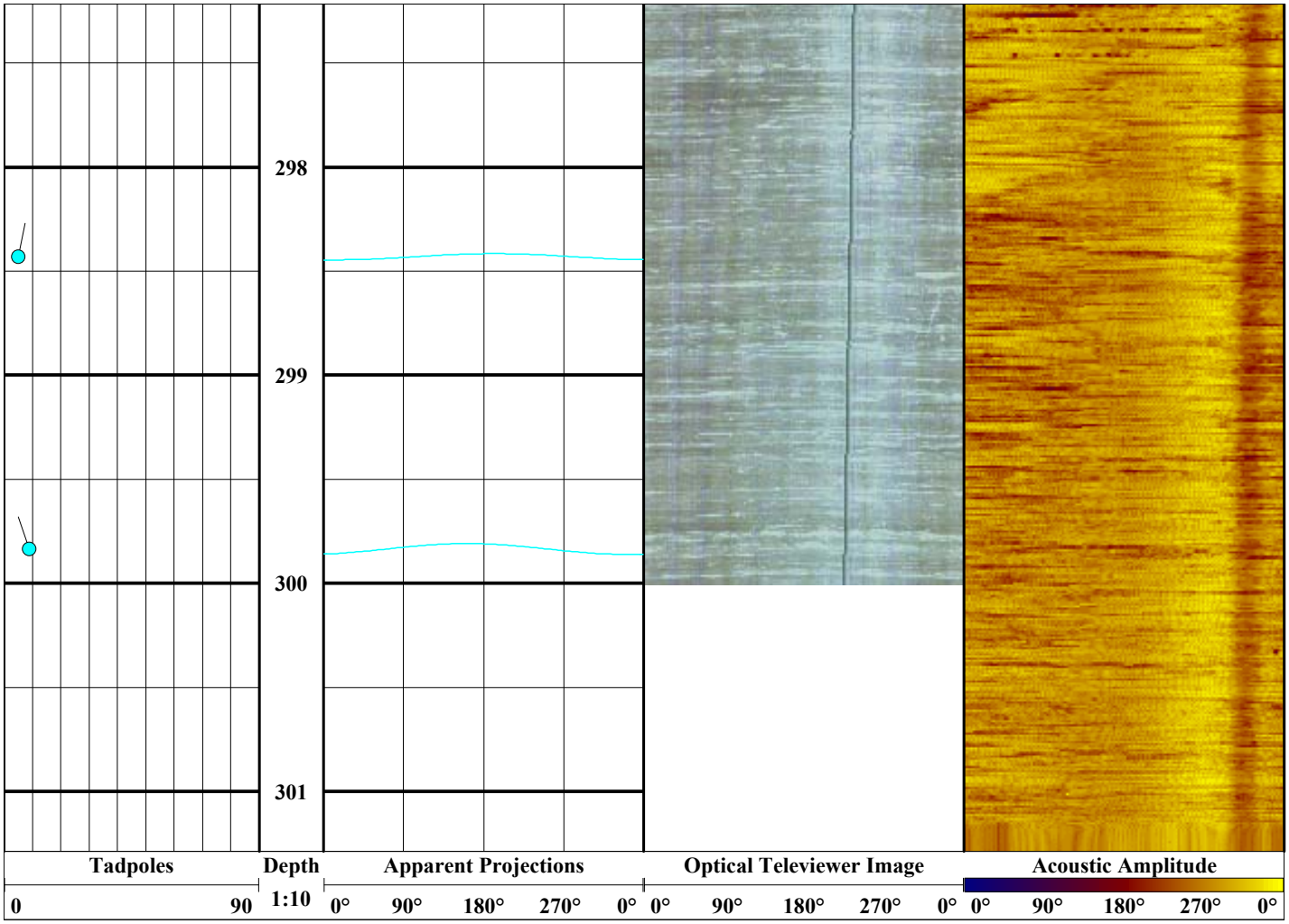

254
255
256
257
258
259
260
261
262


263
264
265
266
267
268
269
270
271


272
273
274
275
276
277
278
279


280
281
282
283
284
285
286
287
288

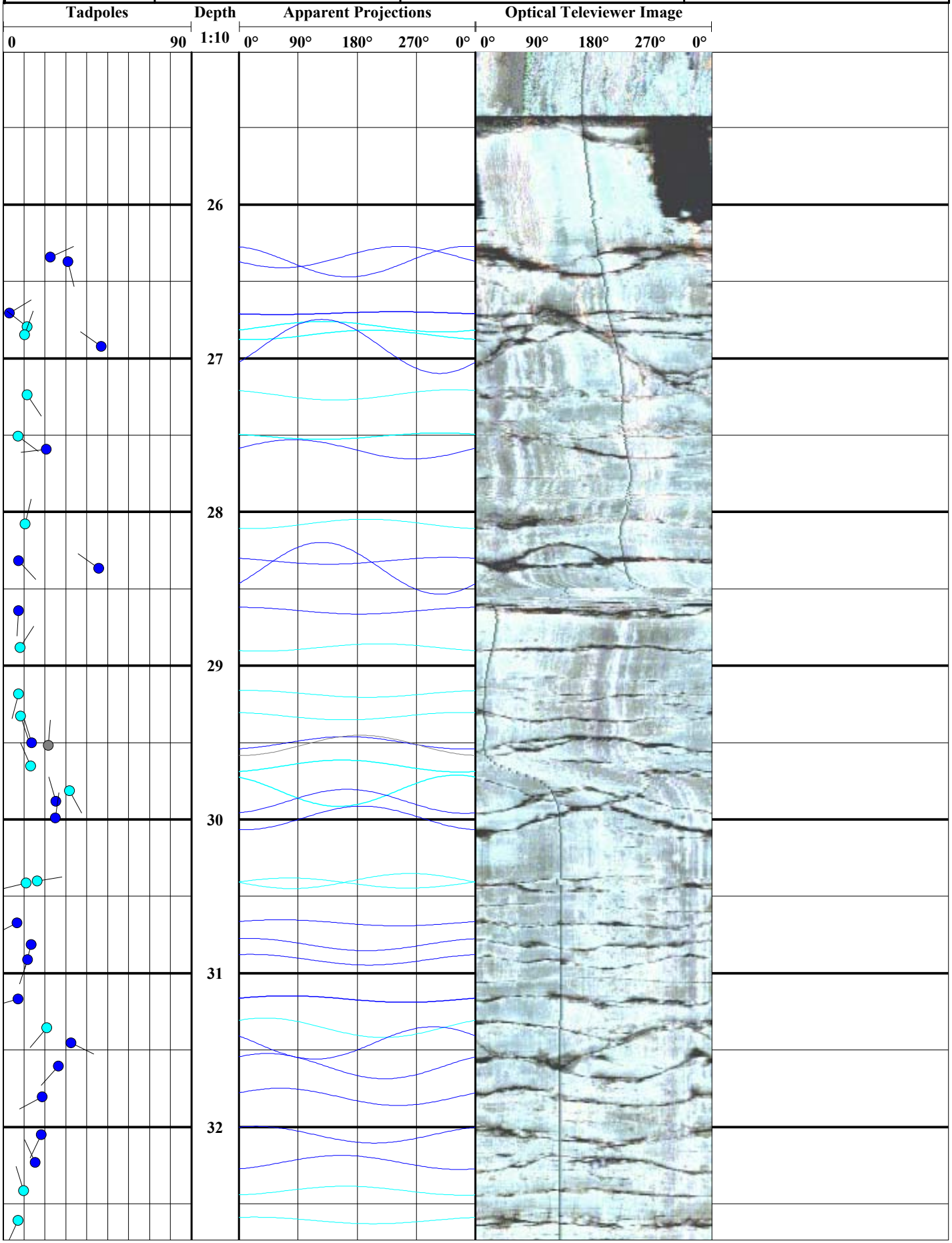

289
290
291
292
293
294
295
296
297

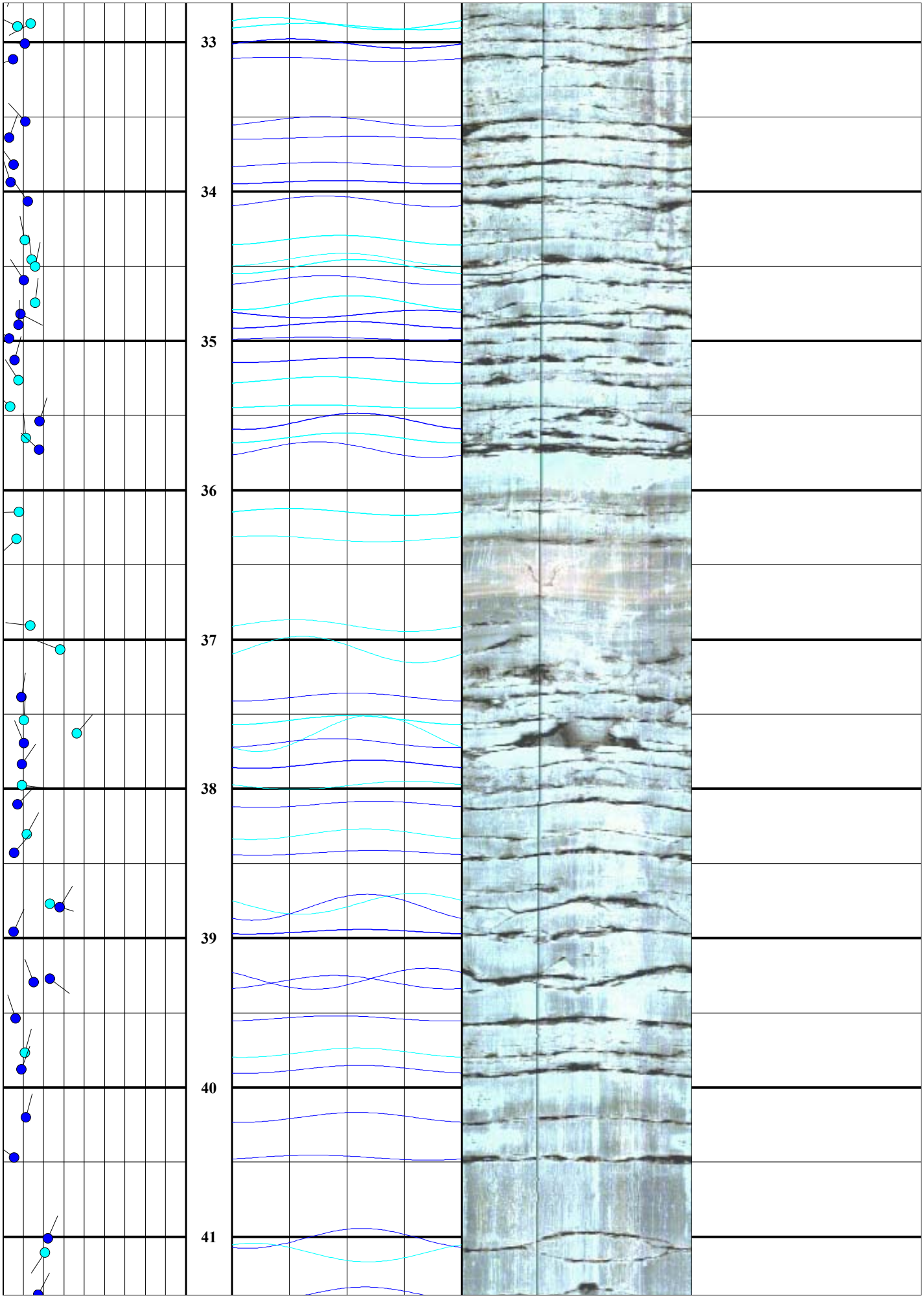

298
299
300
301
Tadpoles
Depth
1:10
Apparent Projections
Optical Televiewer Image
Acoustic Amplitude
0
90
0°
90°
180°
270°
0°
0°
90°
180°
270°
0°
0°
90°
180°
270°
0°

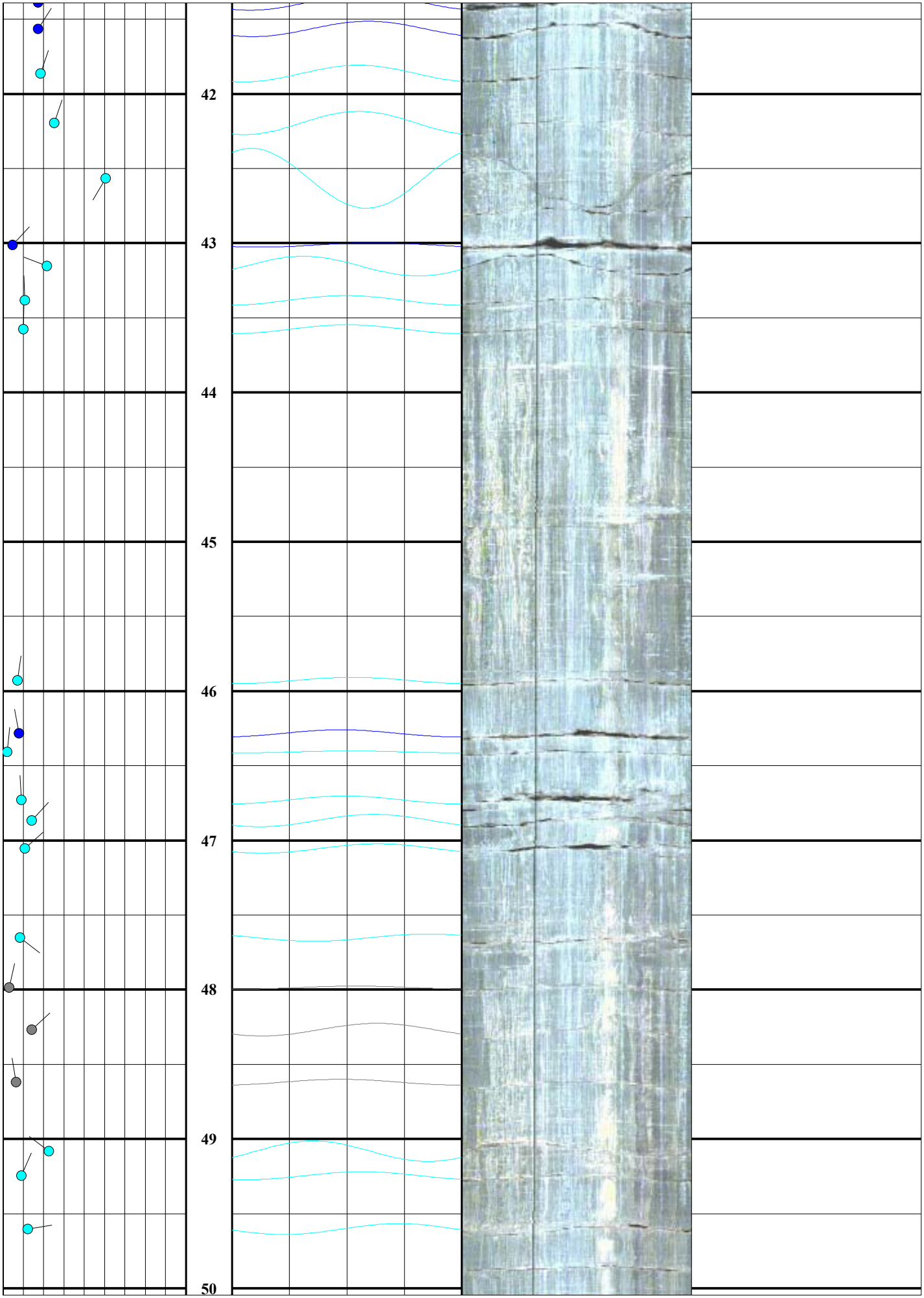
Optical/Acoustic Borehole Image Plot

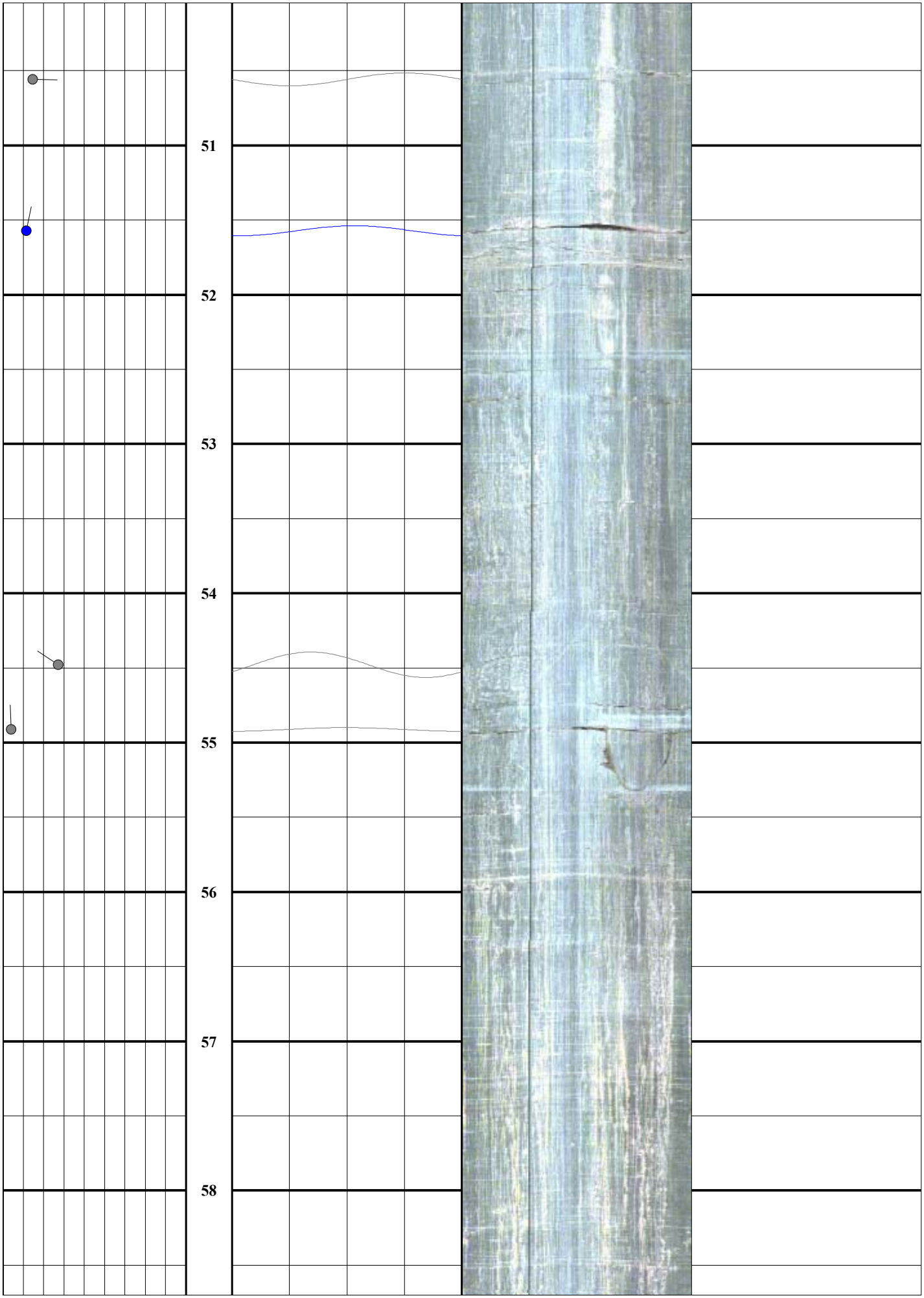
COMPANY: S. M. Stoller Corp.	PROJECT: Crescent Junction
DATE LOGGED: 8 December 2005	WELL: CH-0207

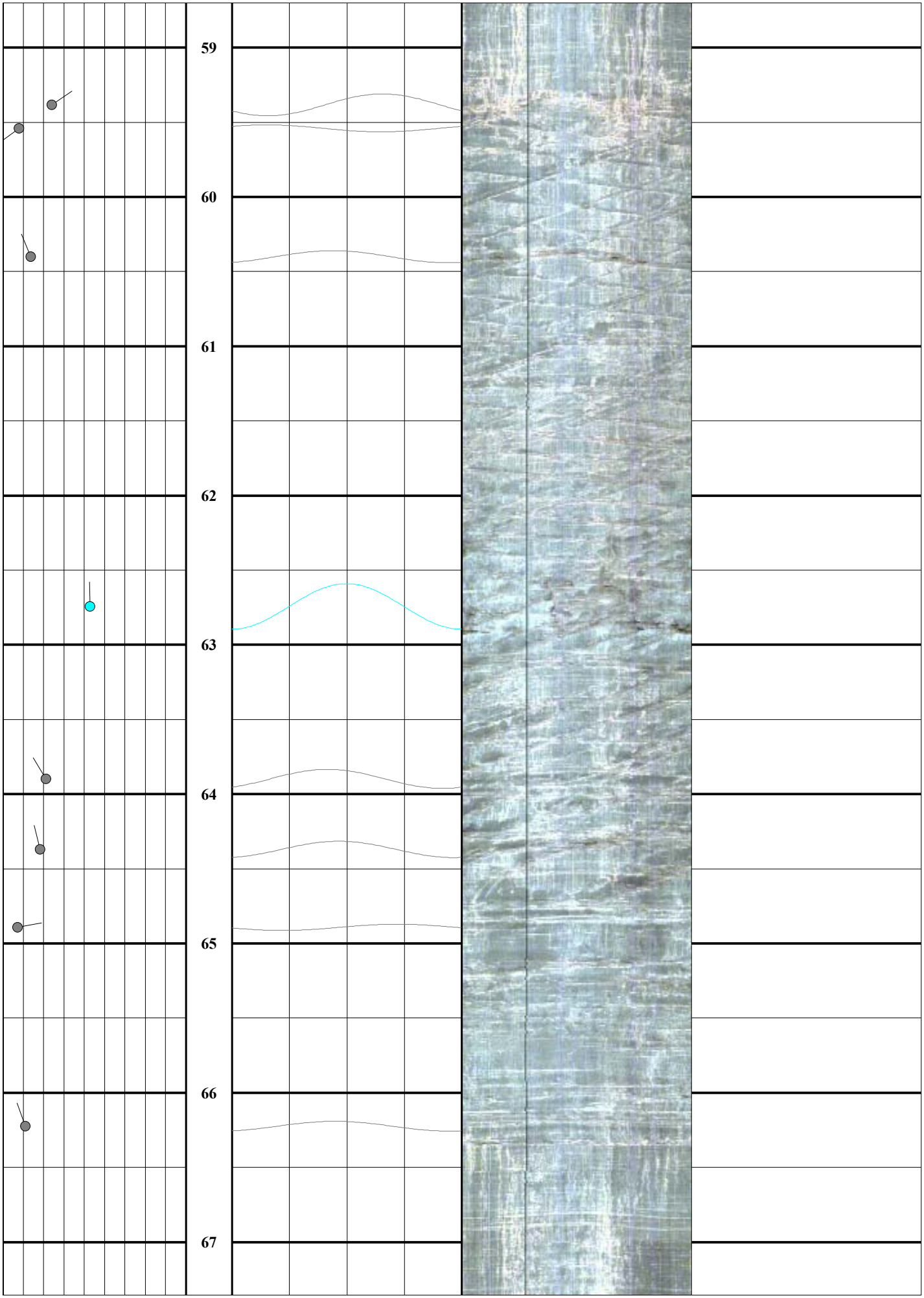
COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com

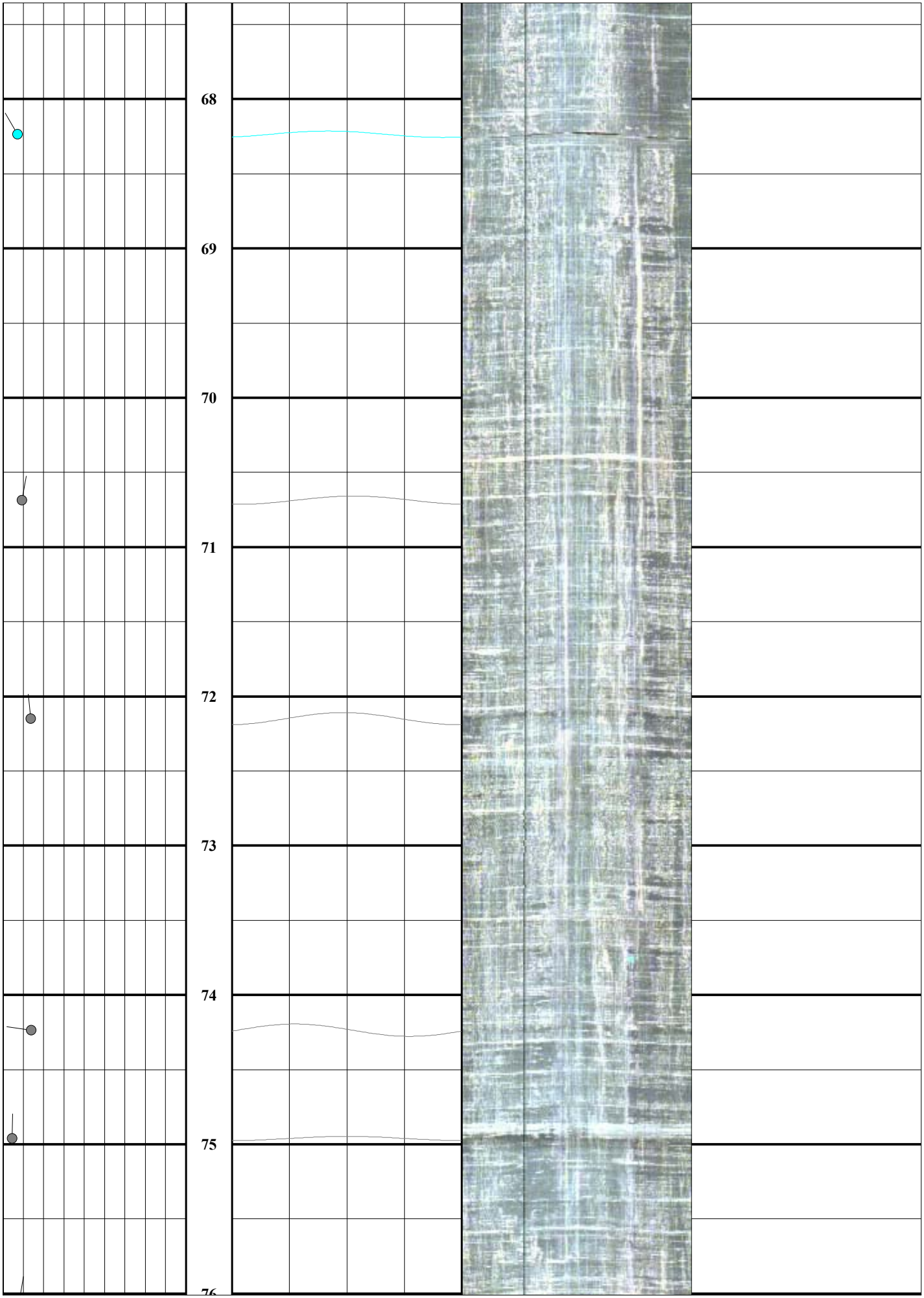


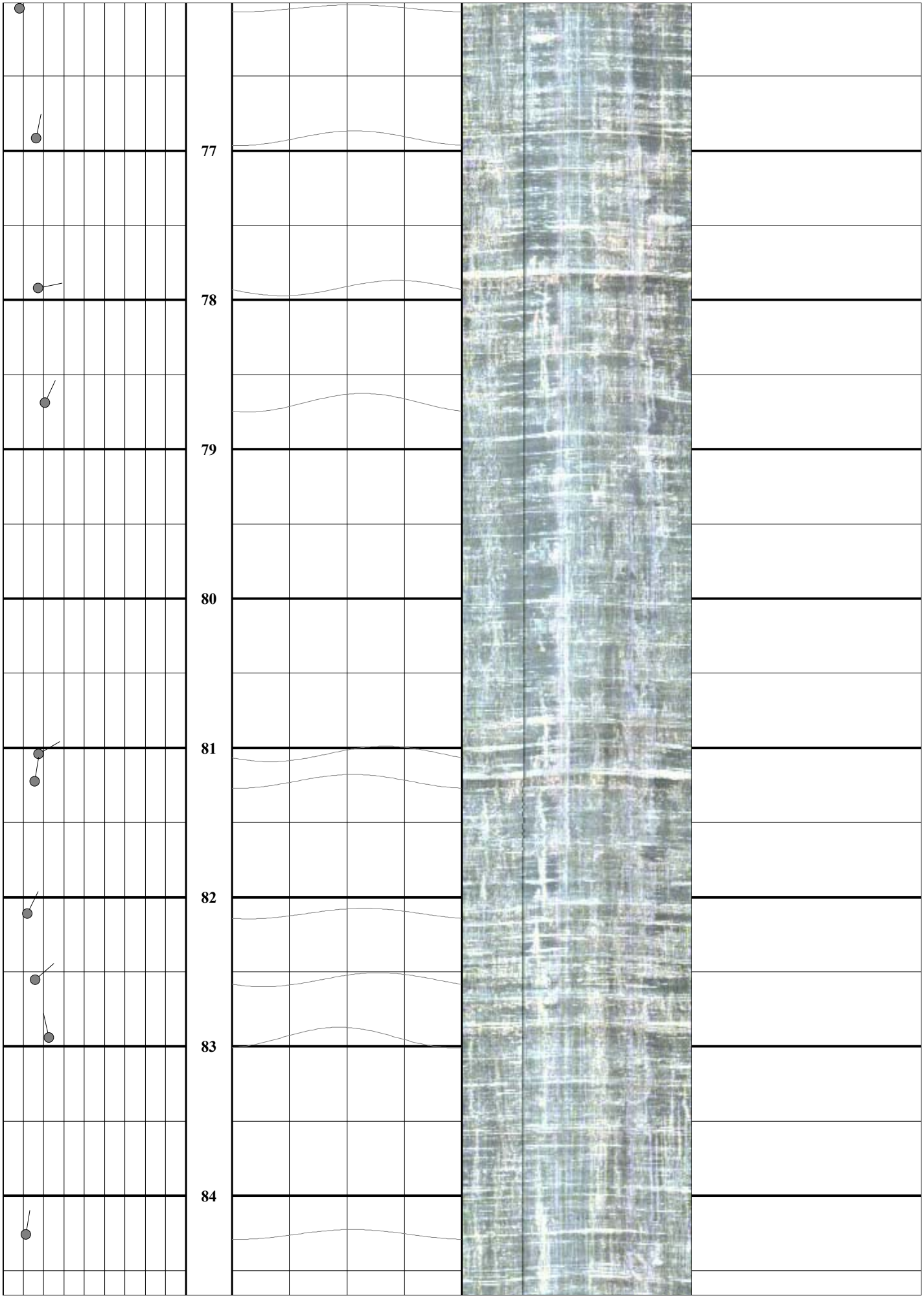

33
34
35
36
37
38
39
40
41

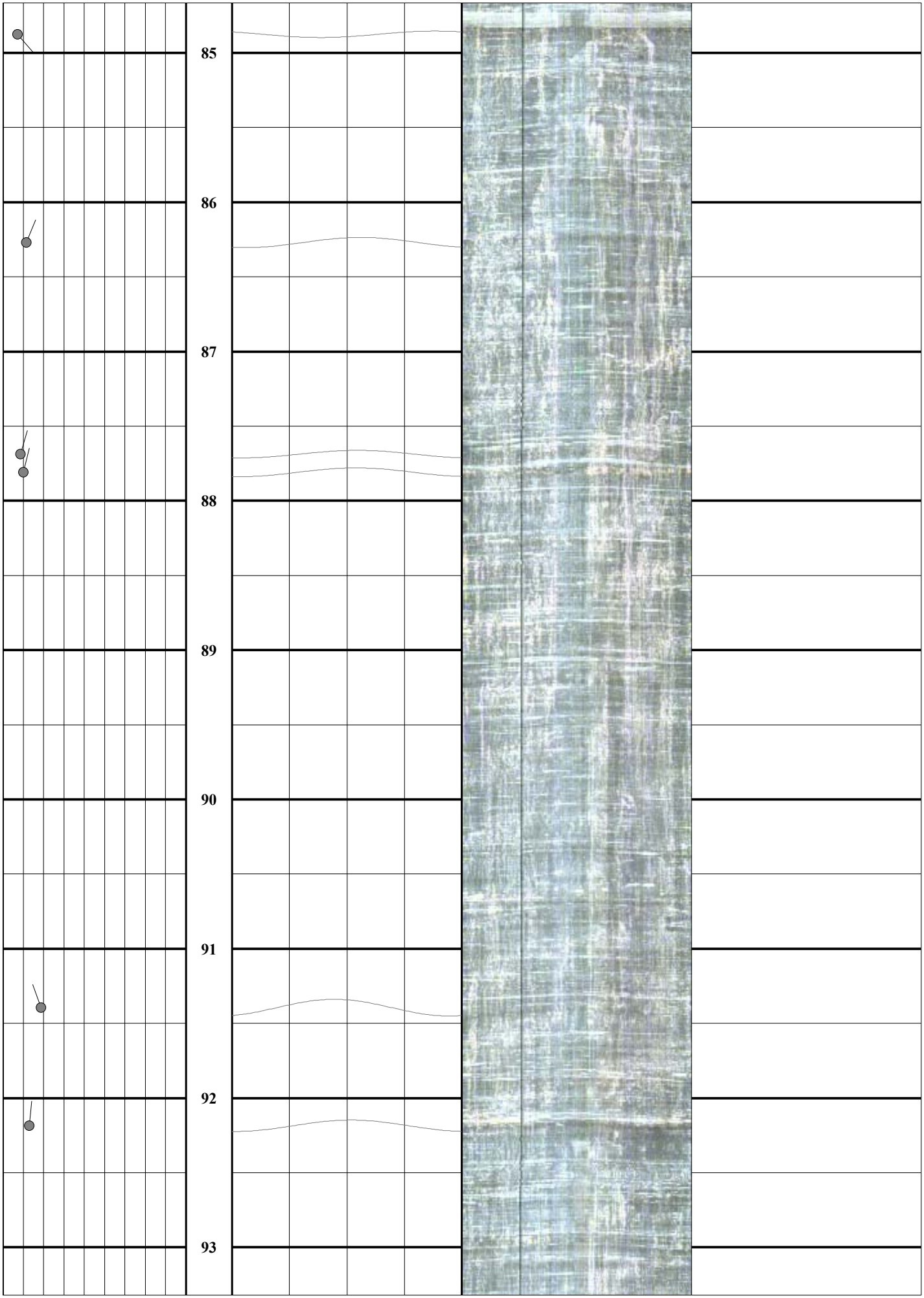

42
43
44
45
46
47
48
49
50

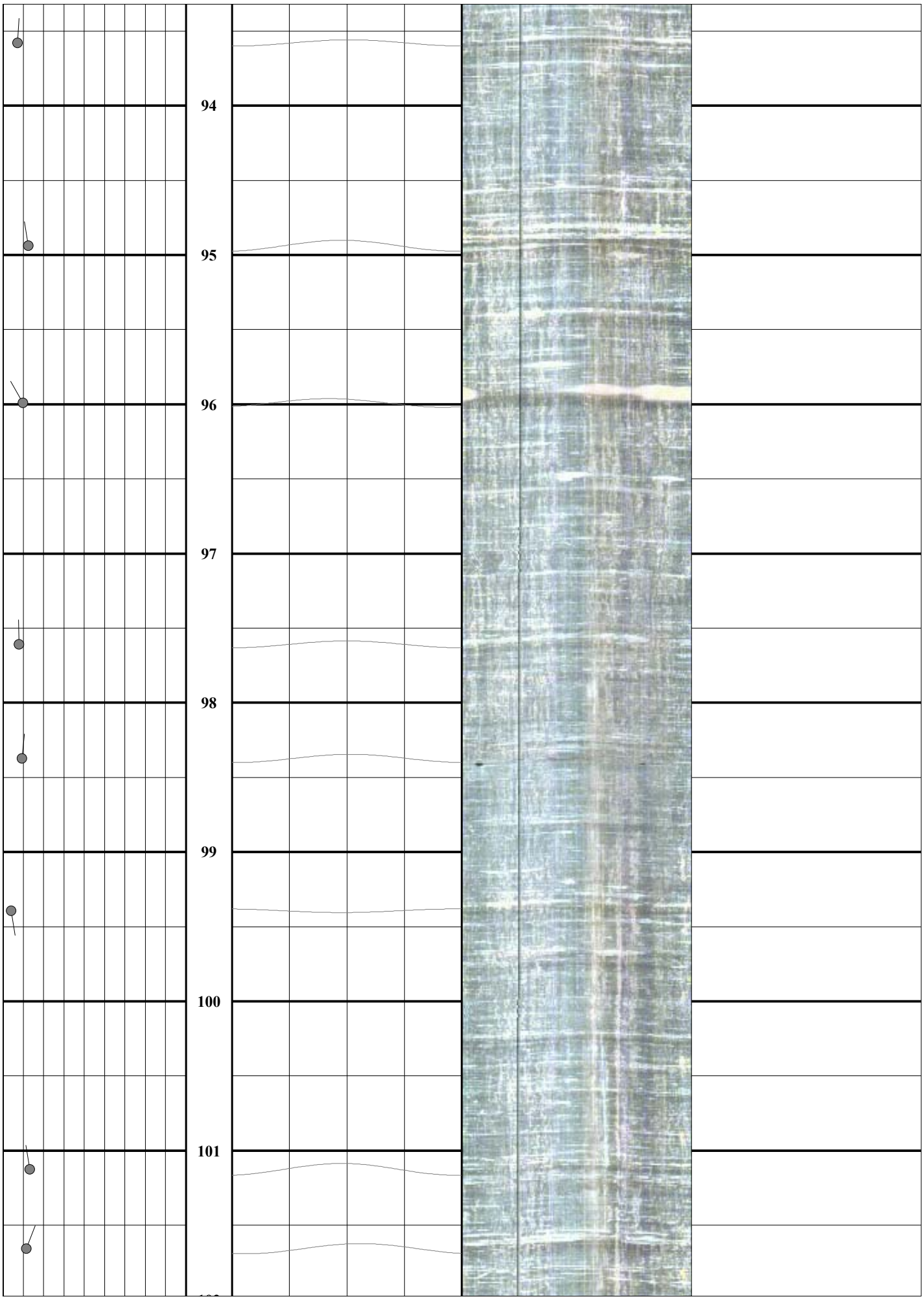

51
52
53
54
55
56
57
58

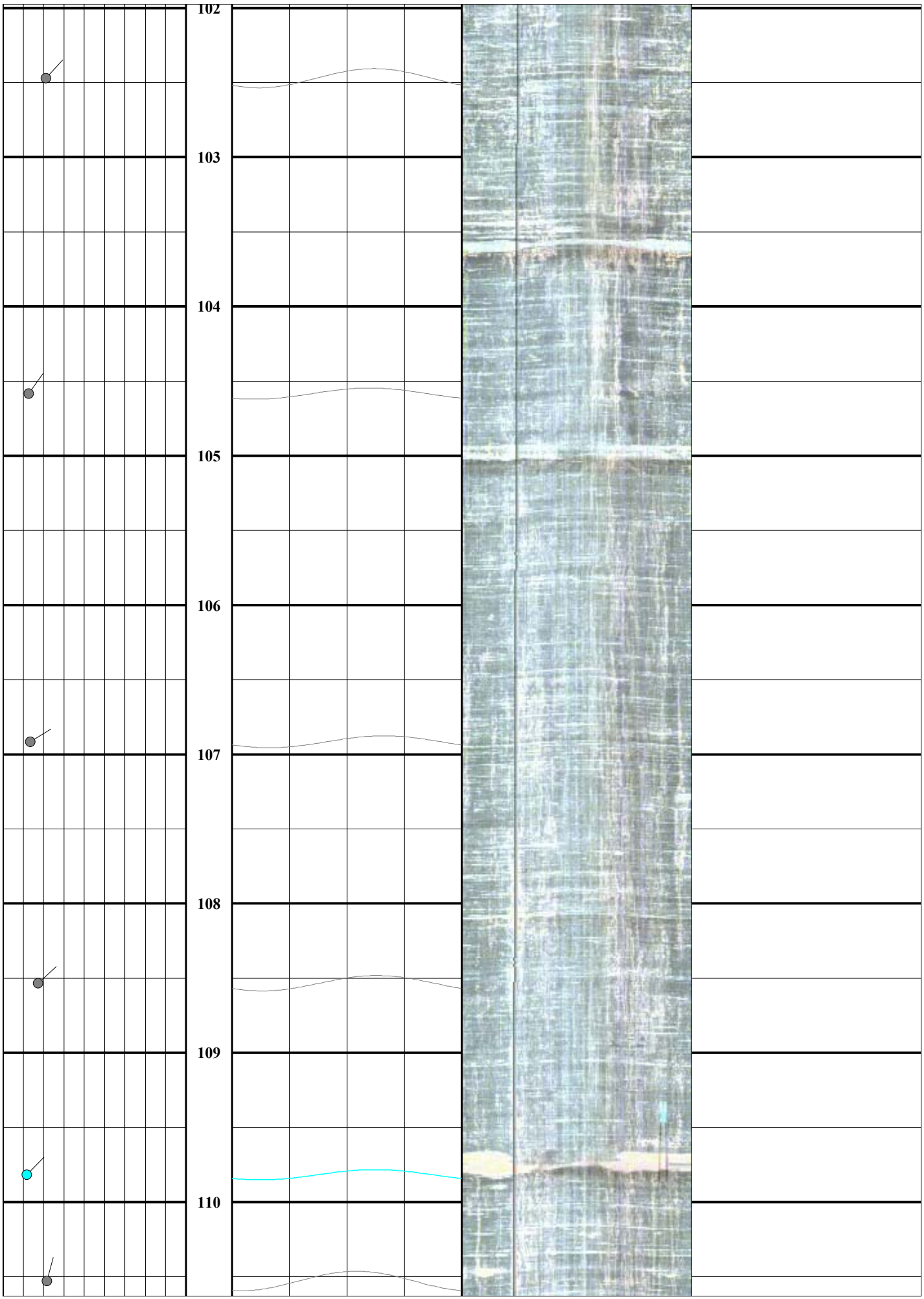

59
60
61
62
63
64
65
66
67

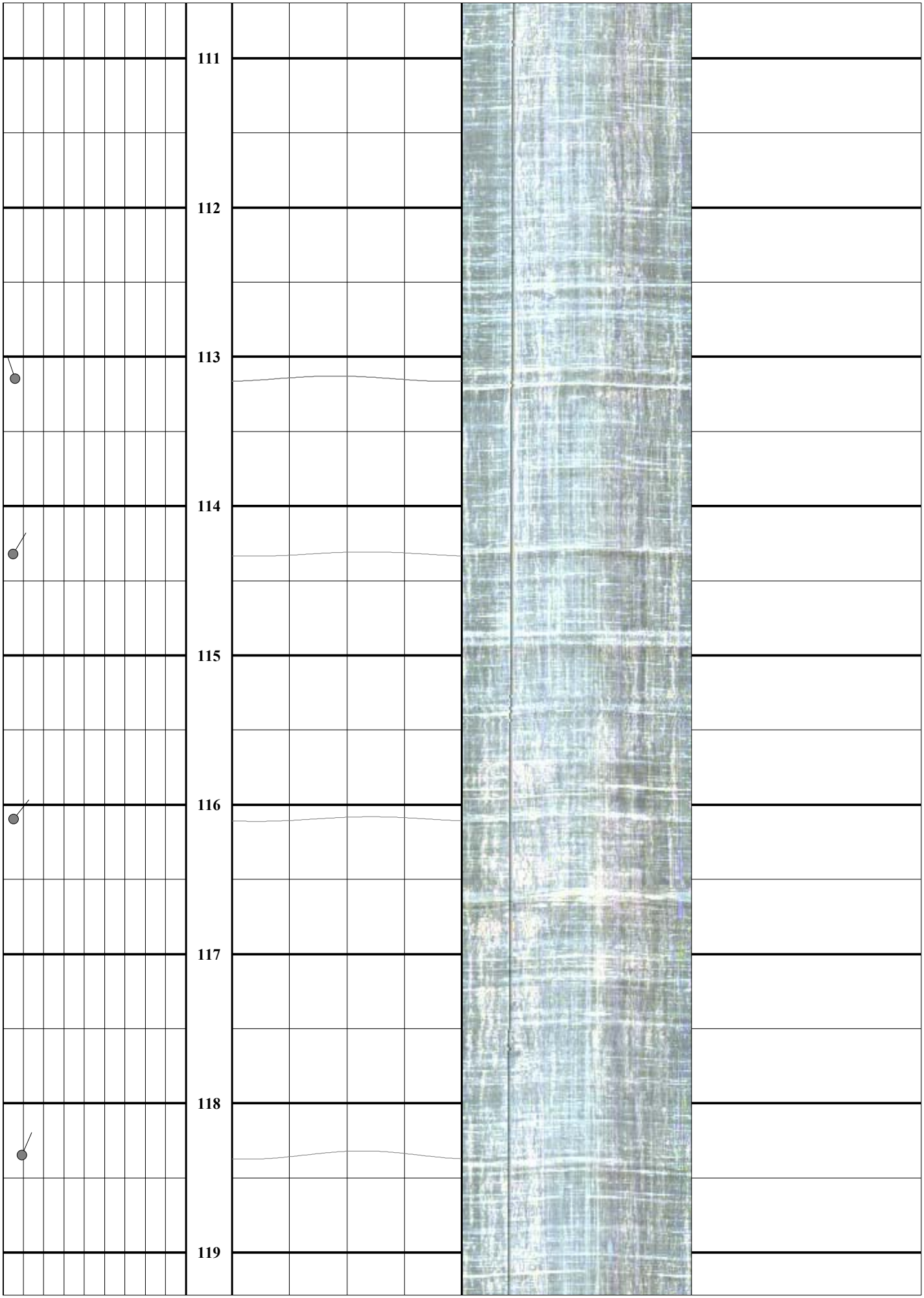

68
69
70
71
72
73
74
75
76

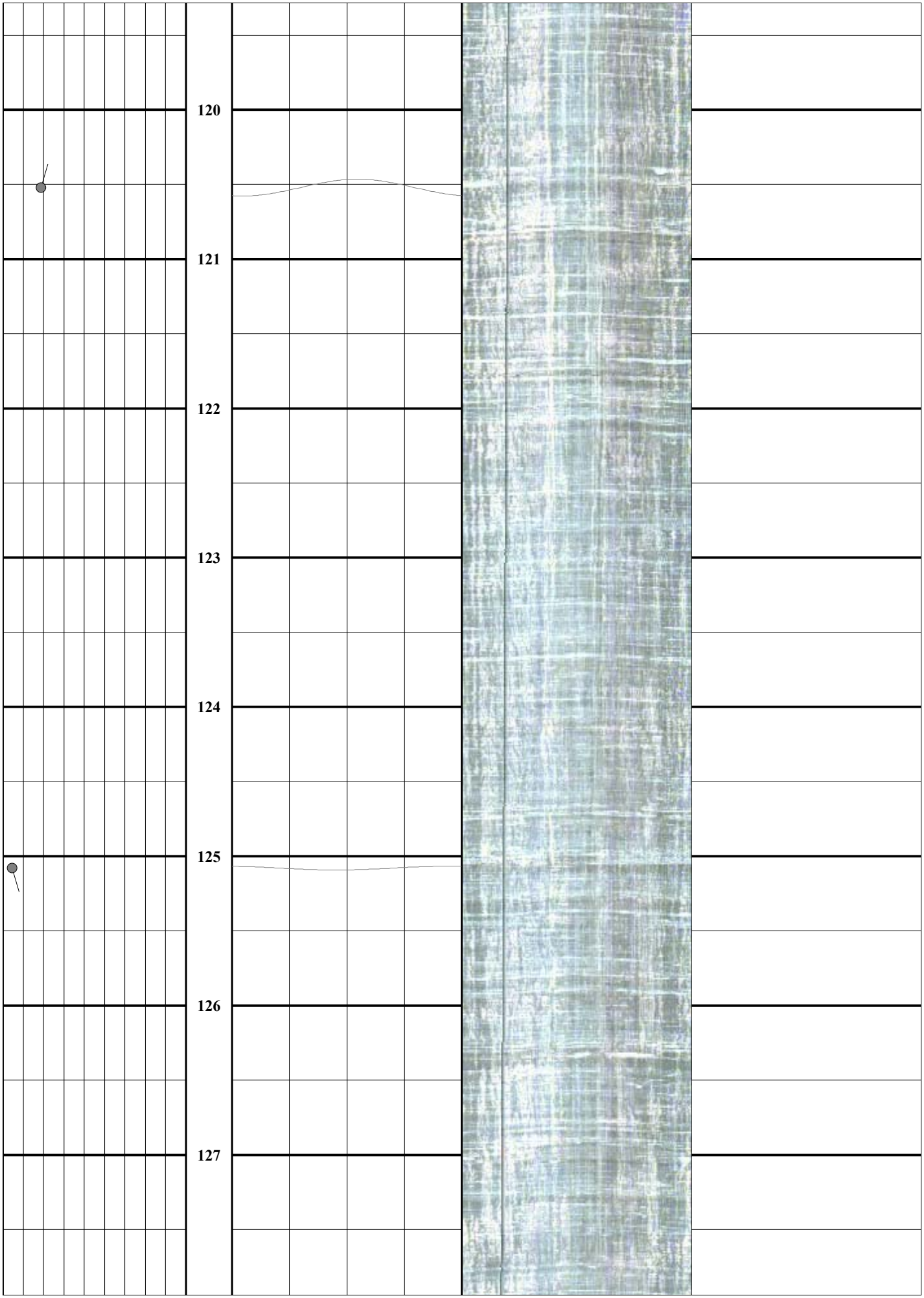

77
78
79
80
81
82
83
84

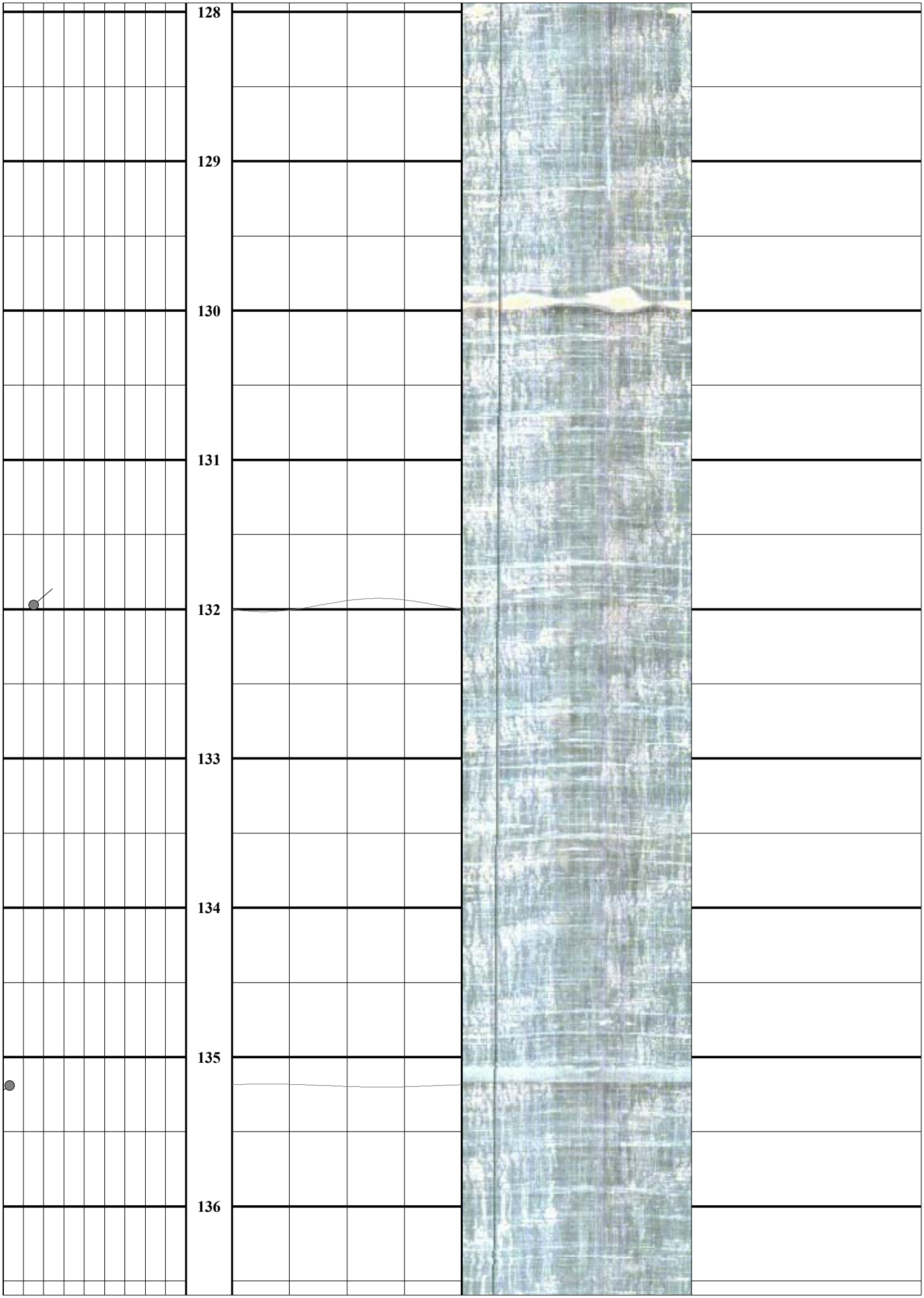

85
86
87
88
89
90
91
92
93

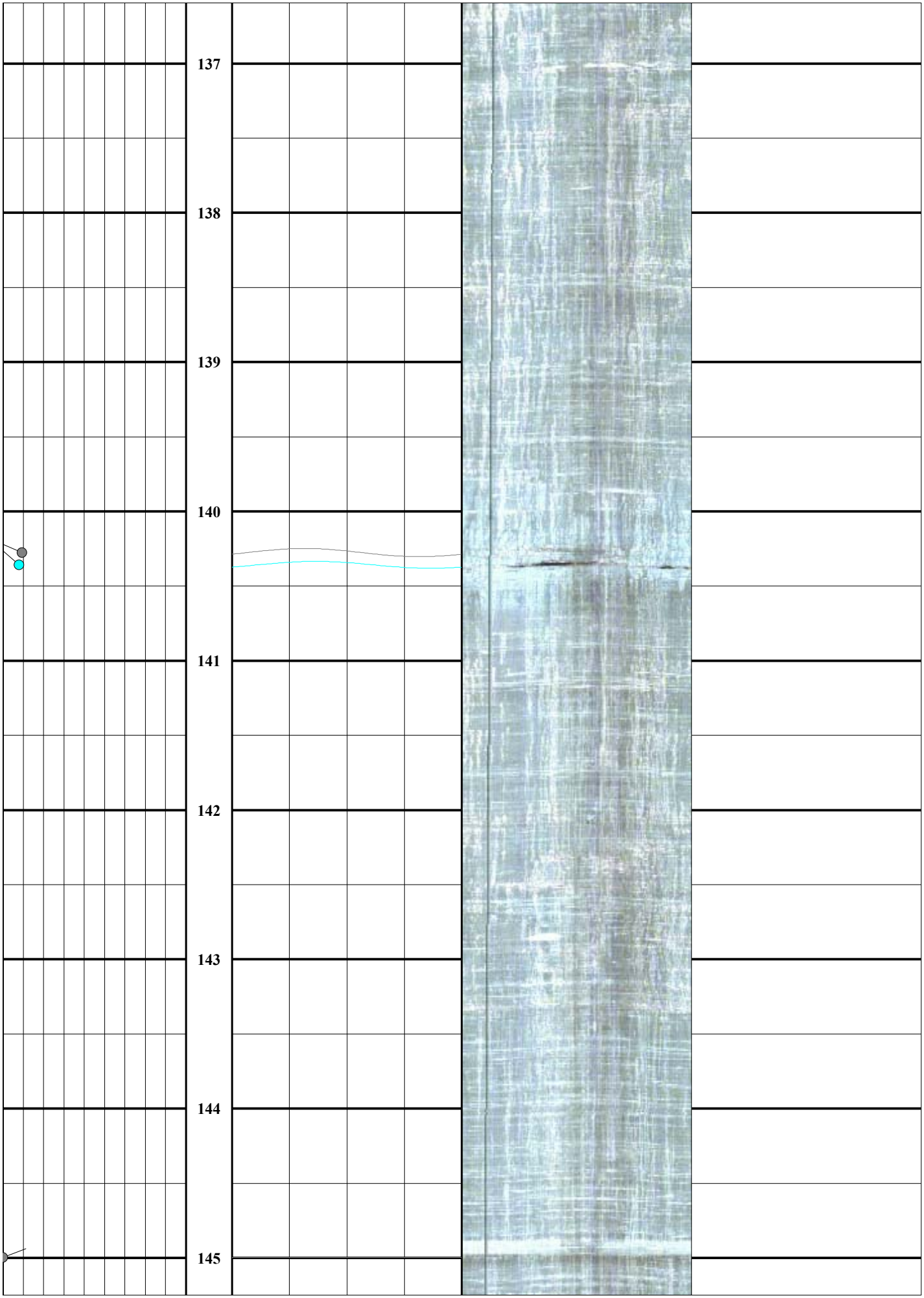

94
95
96
97
98
99
100
101

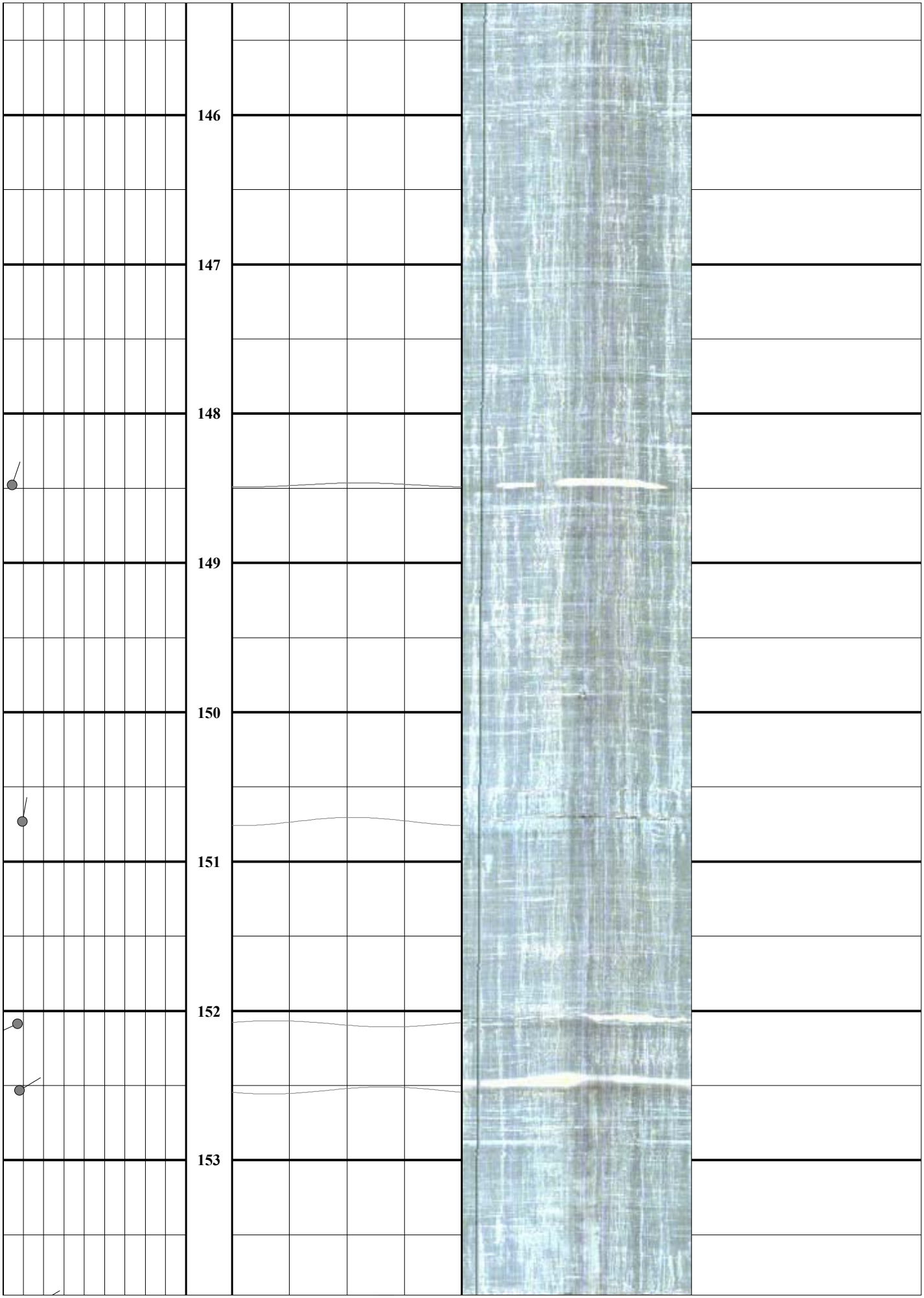

102
103
104
105
106
107
108
109
110

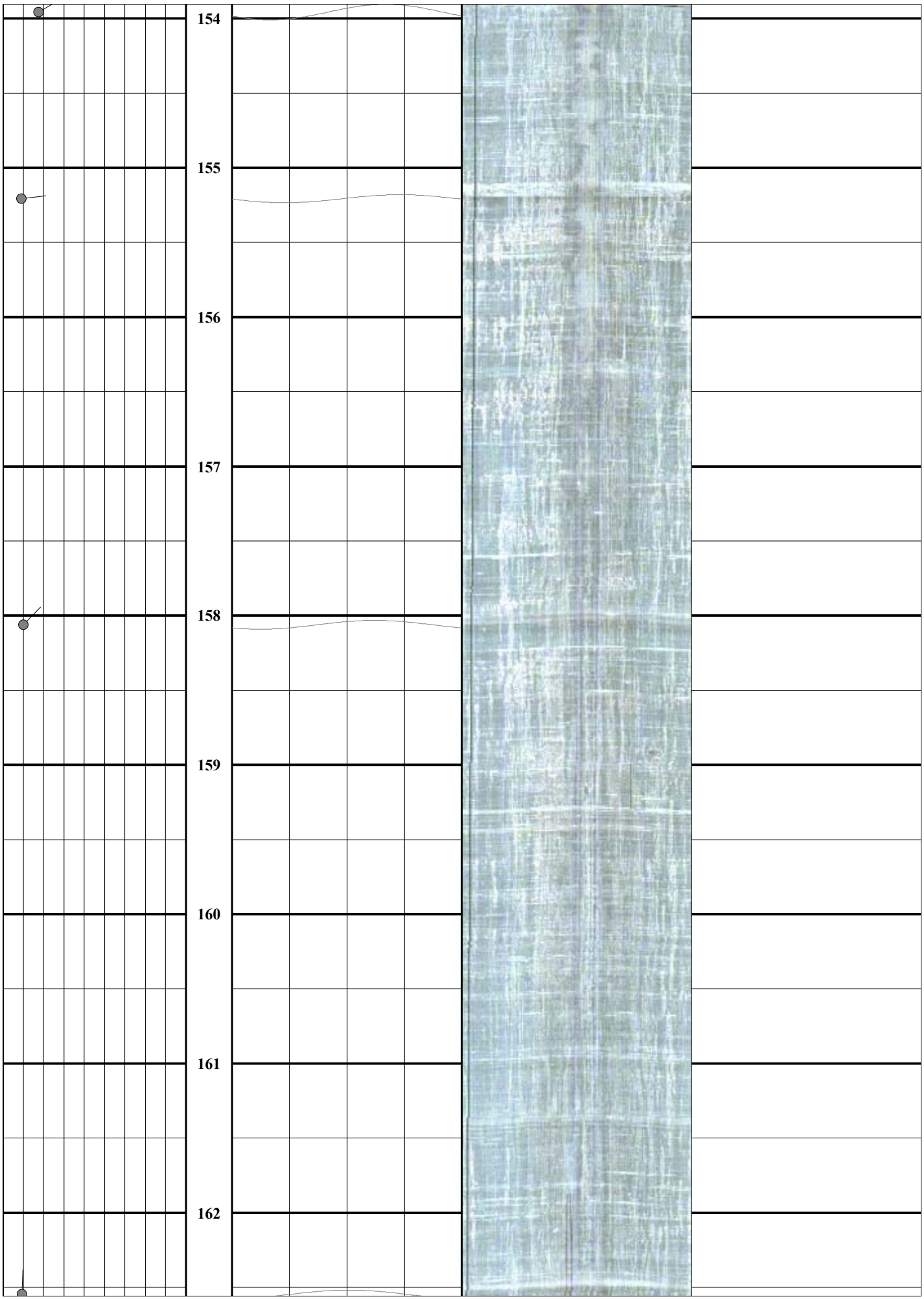

111
112
113
114
115
116
117
118
119

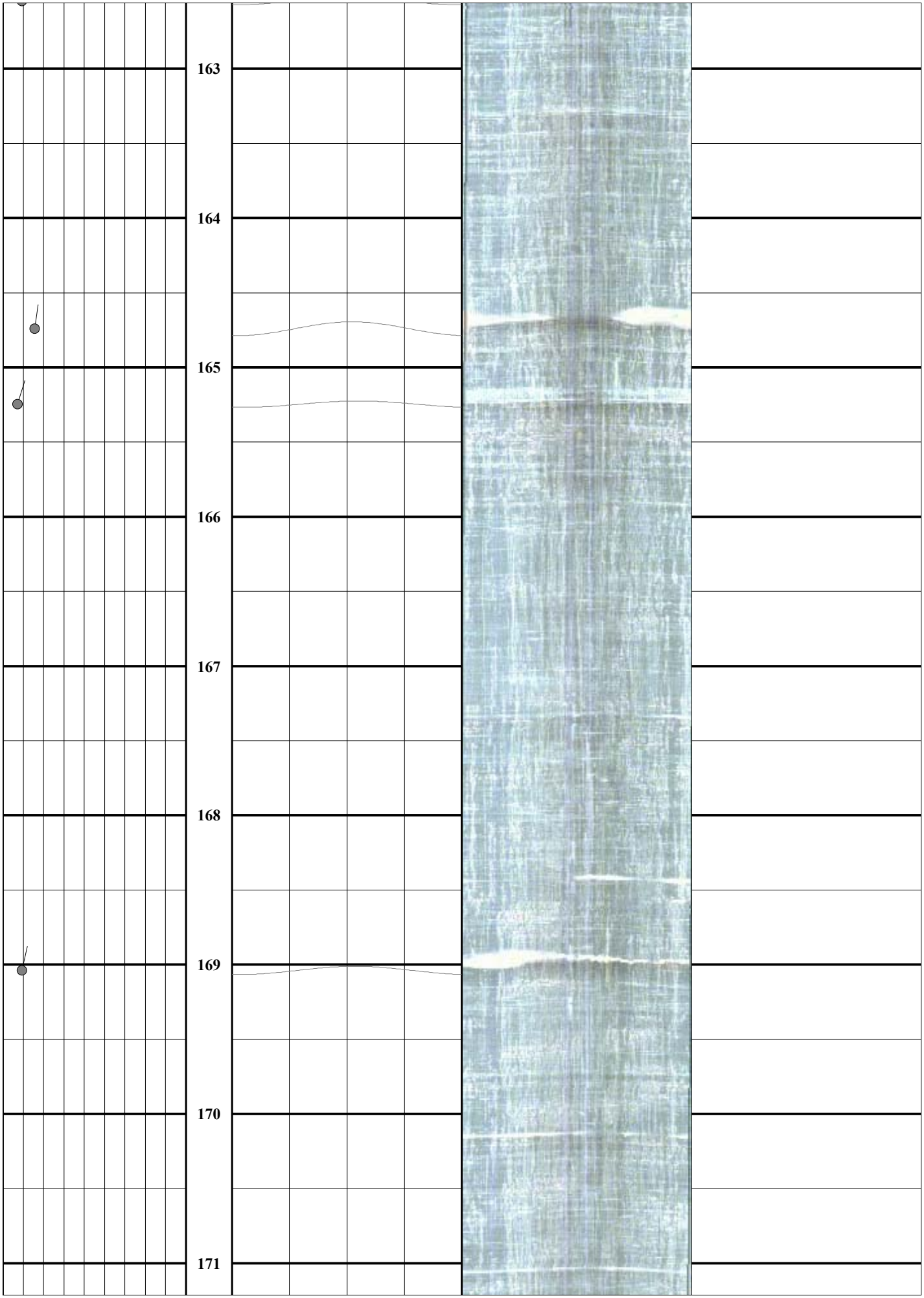

120
121
122
123
124
125
126
127

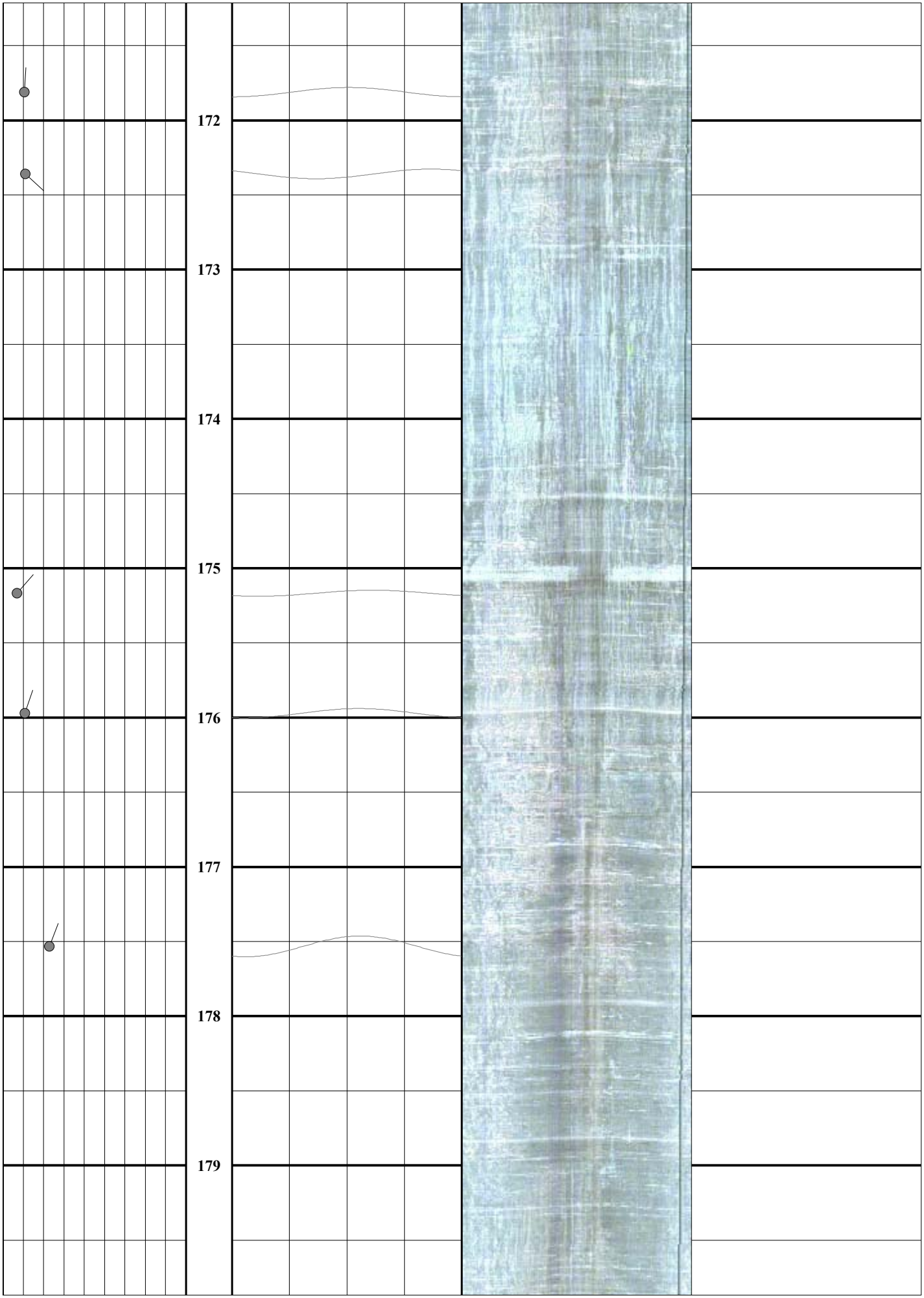

128
129
130
131
132
133
134
135
136

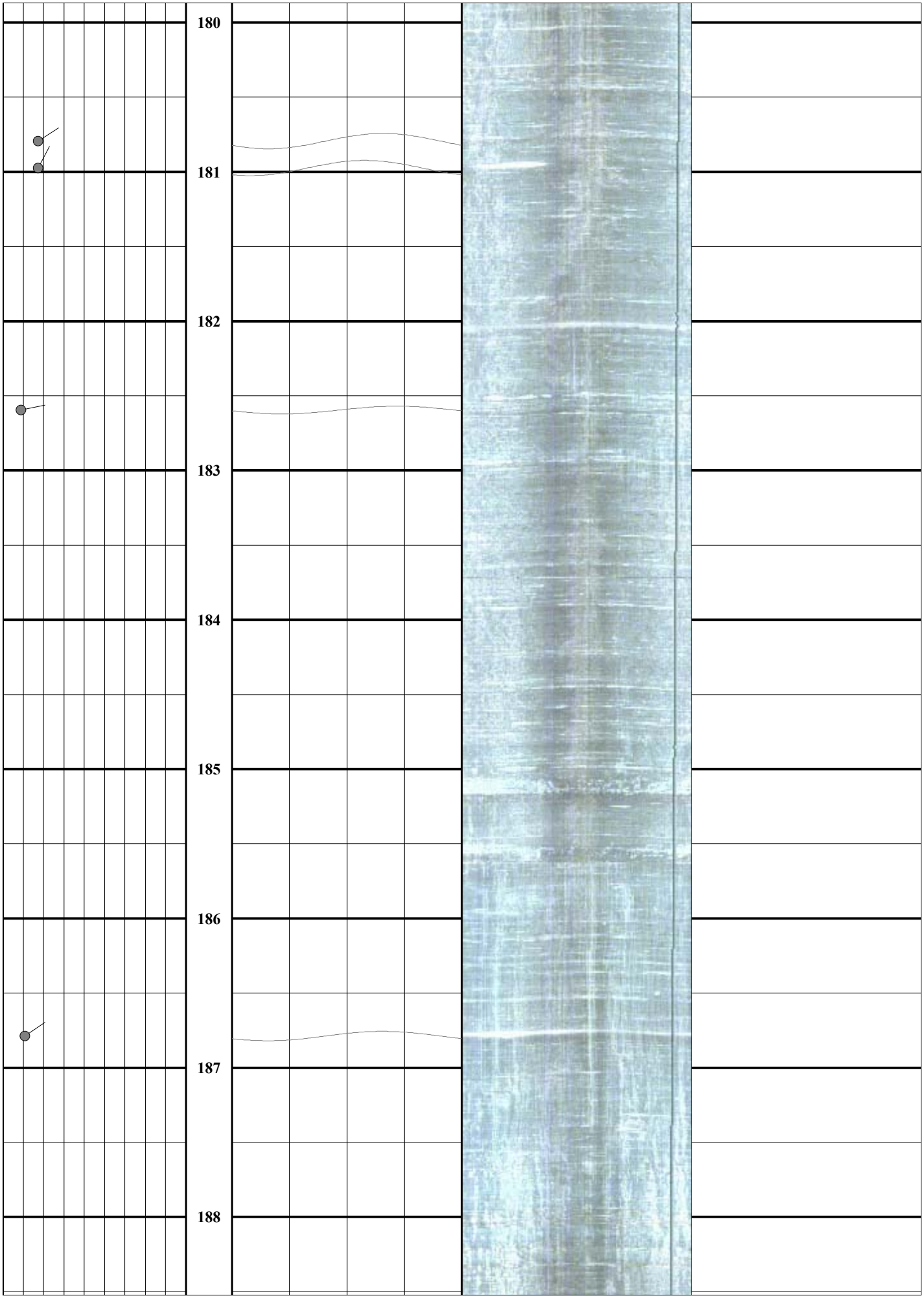

137
138
139
140
141
142
143
144
145

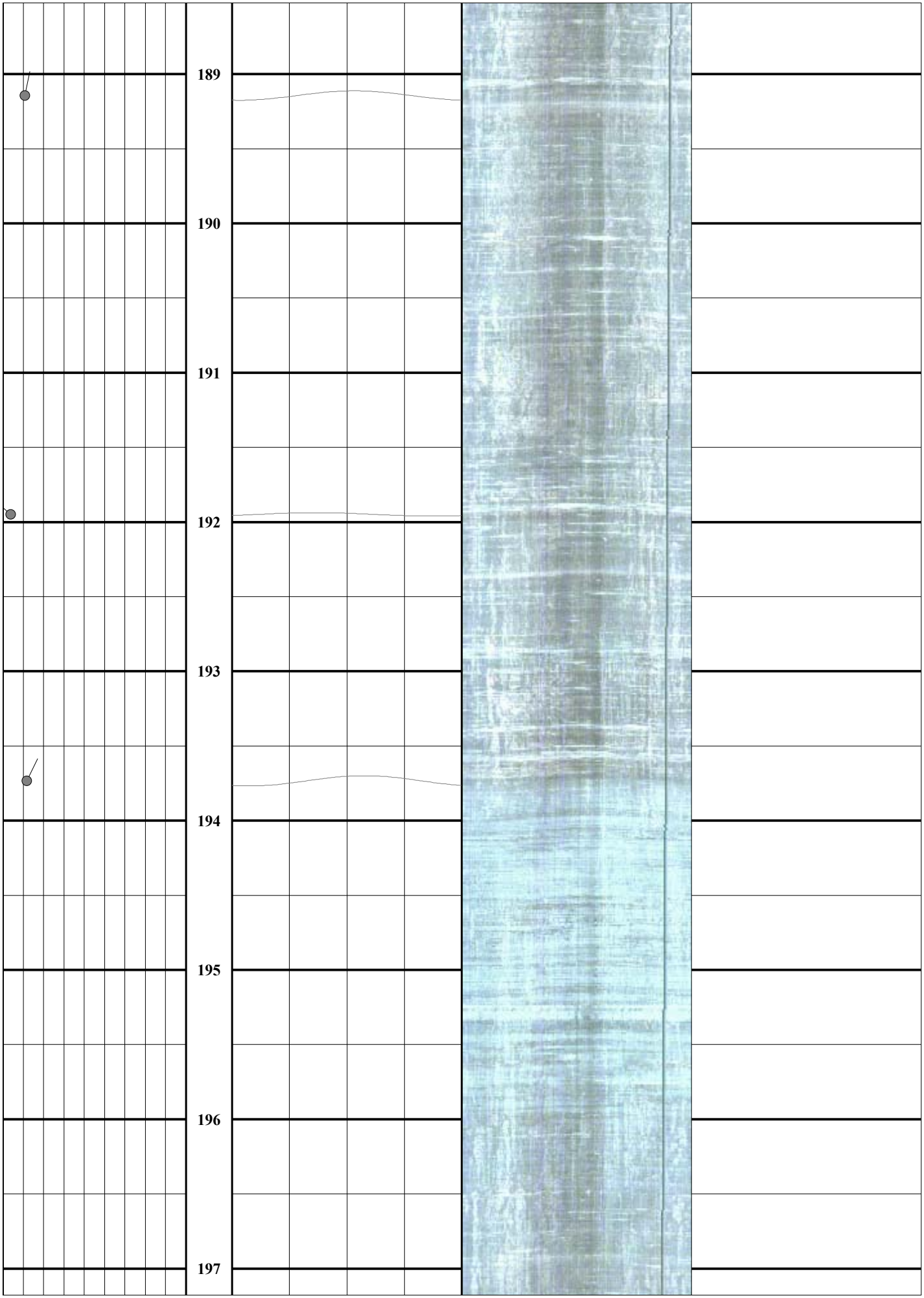

146
147
148
149
150
151
152
153

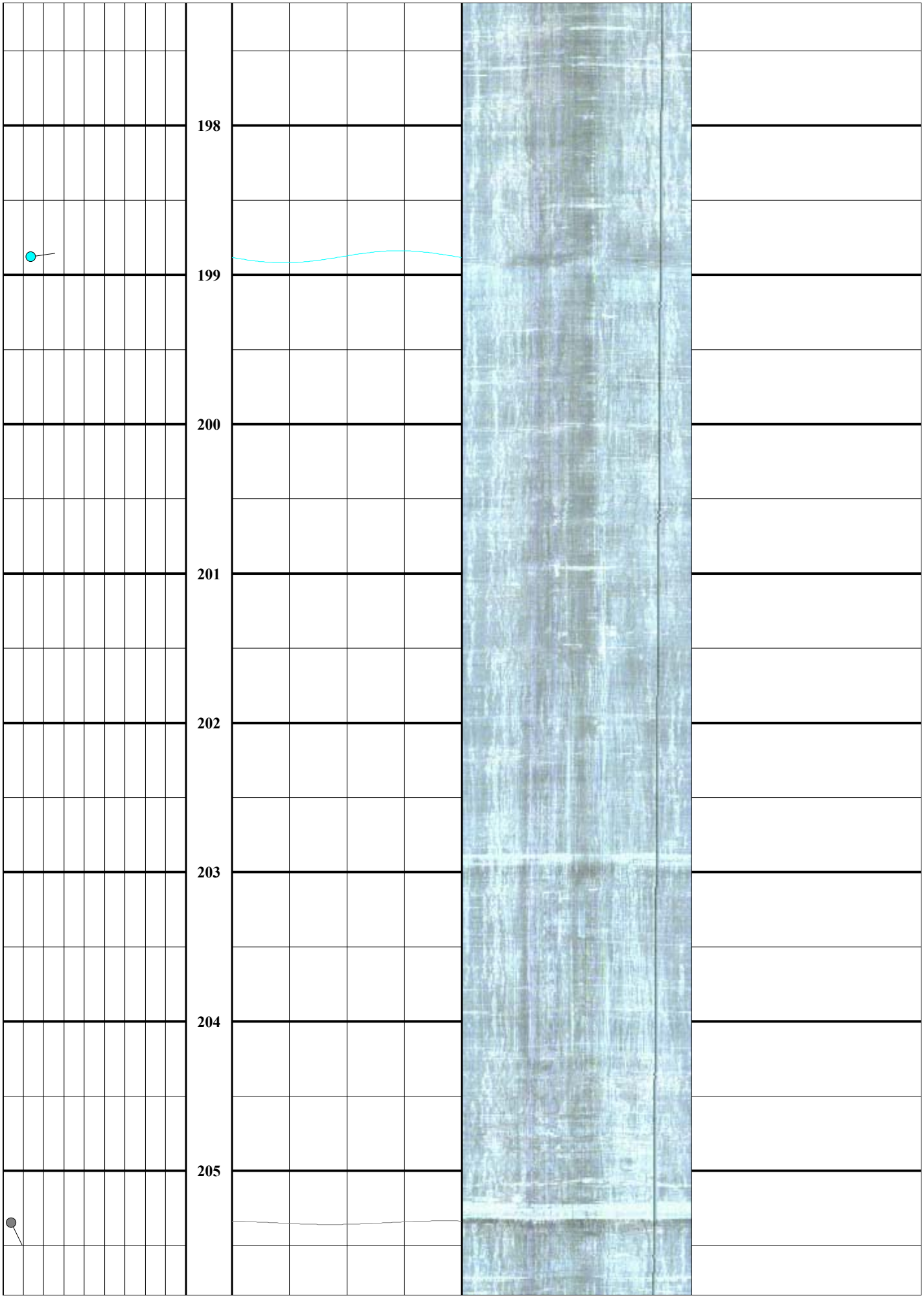

154
155
156
157
158
159
160
161
162

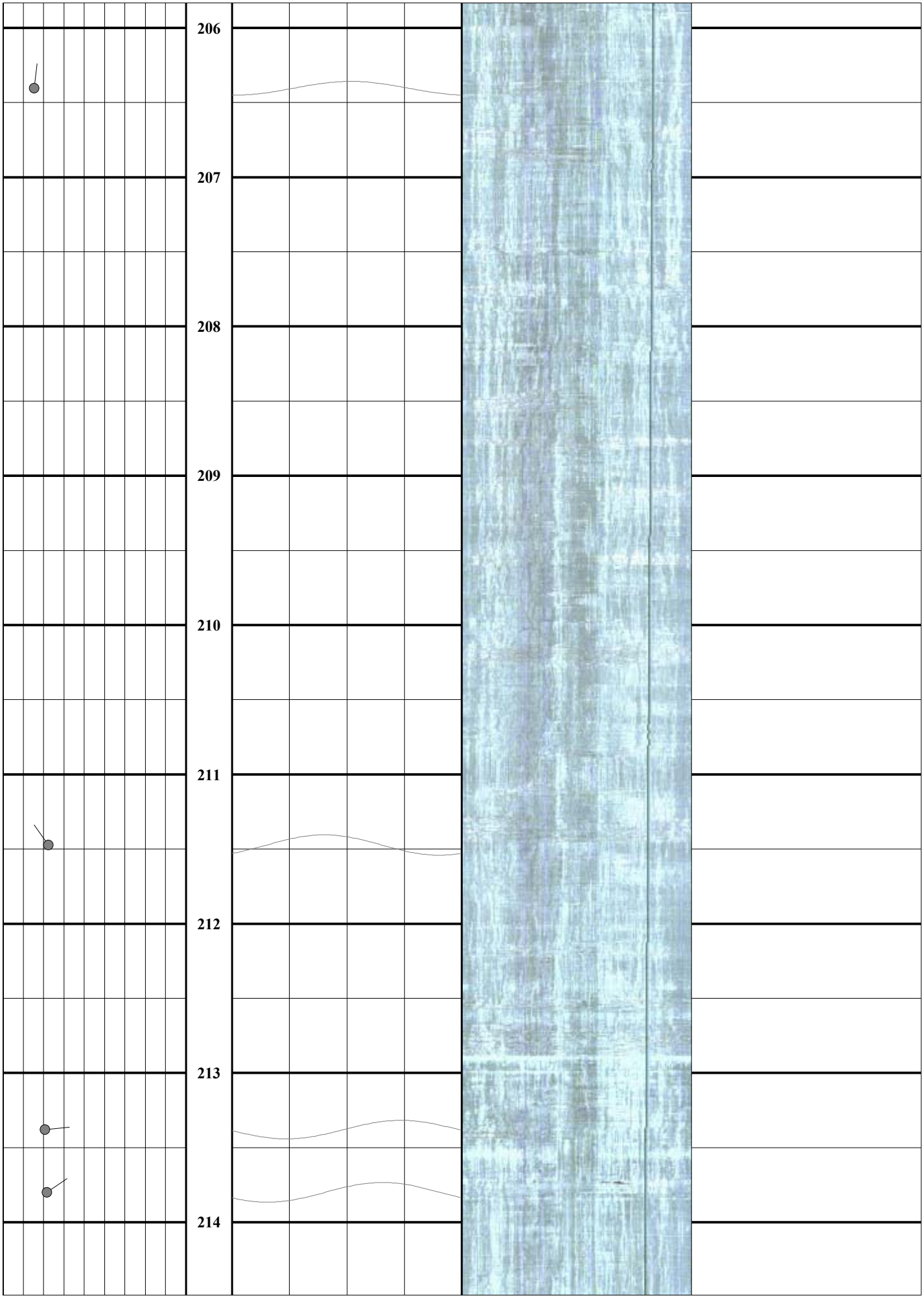

163
164
165
166
167
168
169
170
171

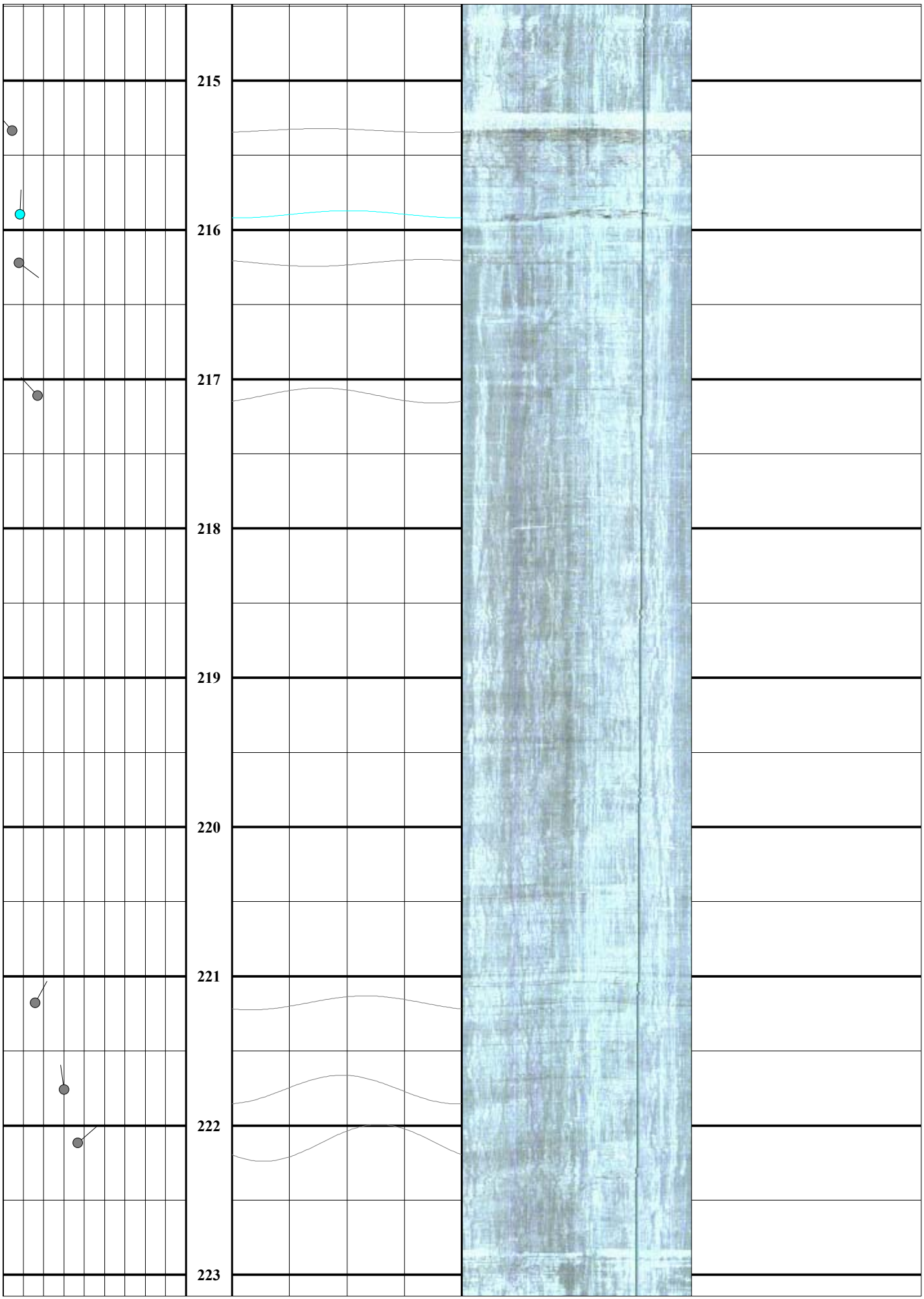

172
173
174
175
176
177
178
179

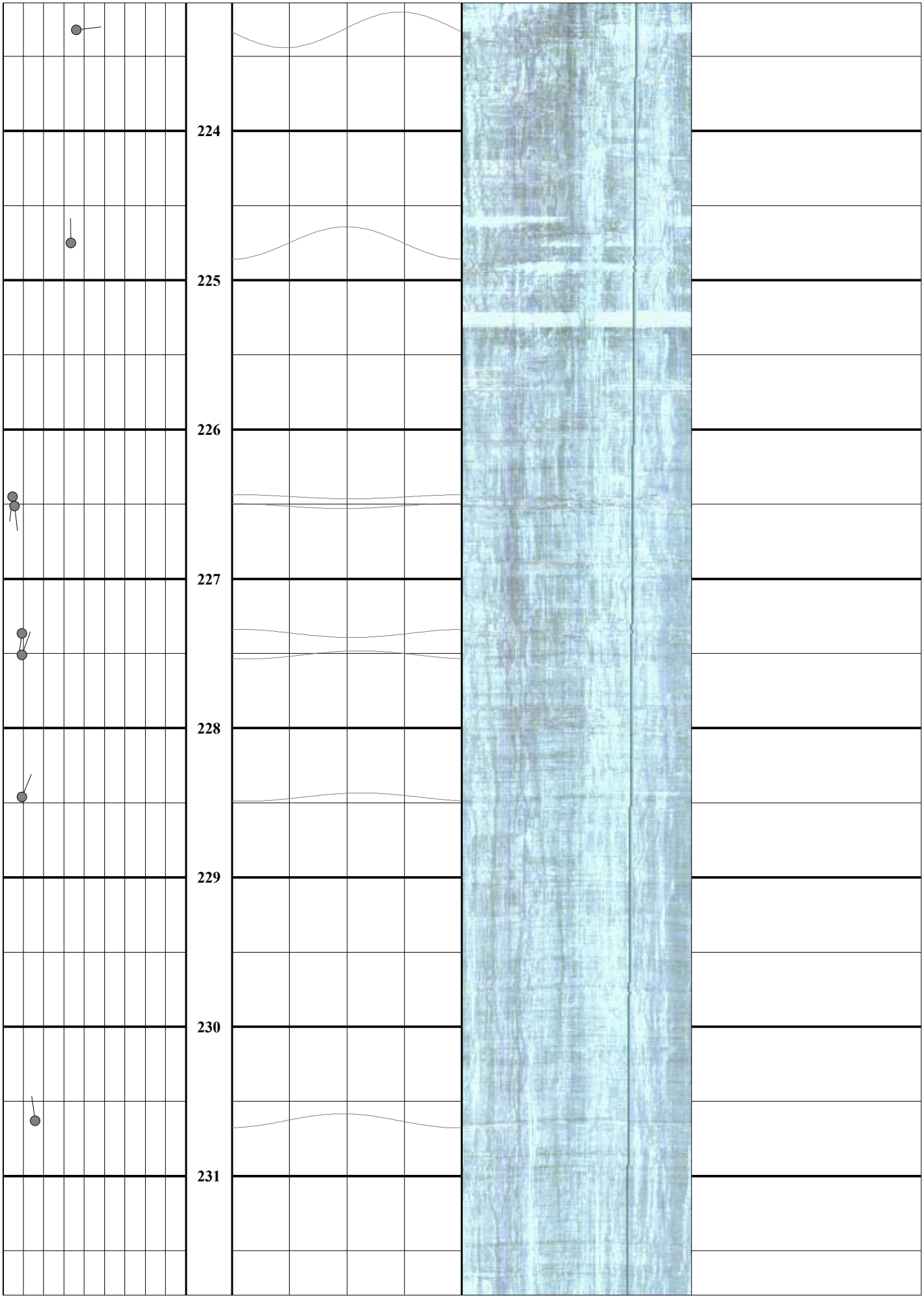

180
181
182
183
184
185
186
187
188

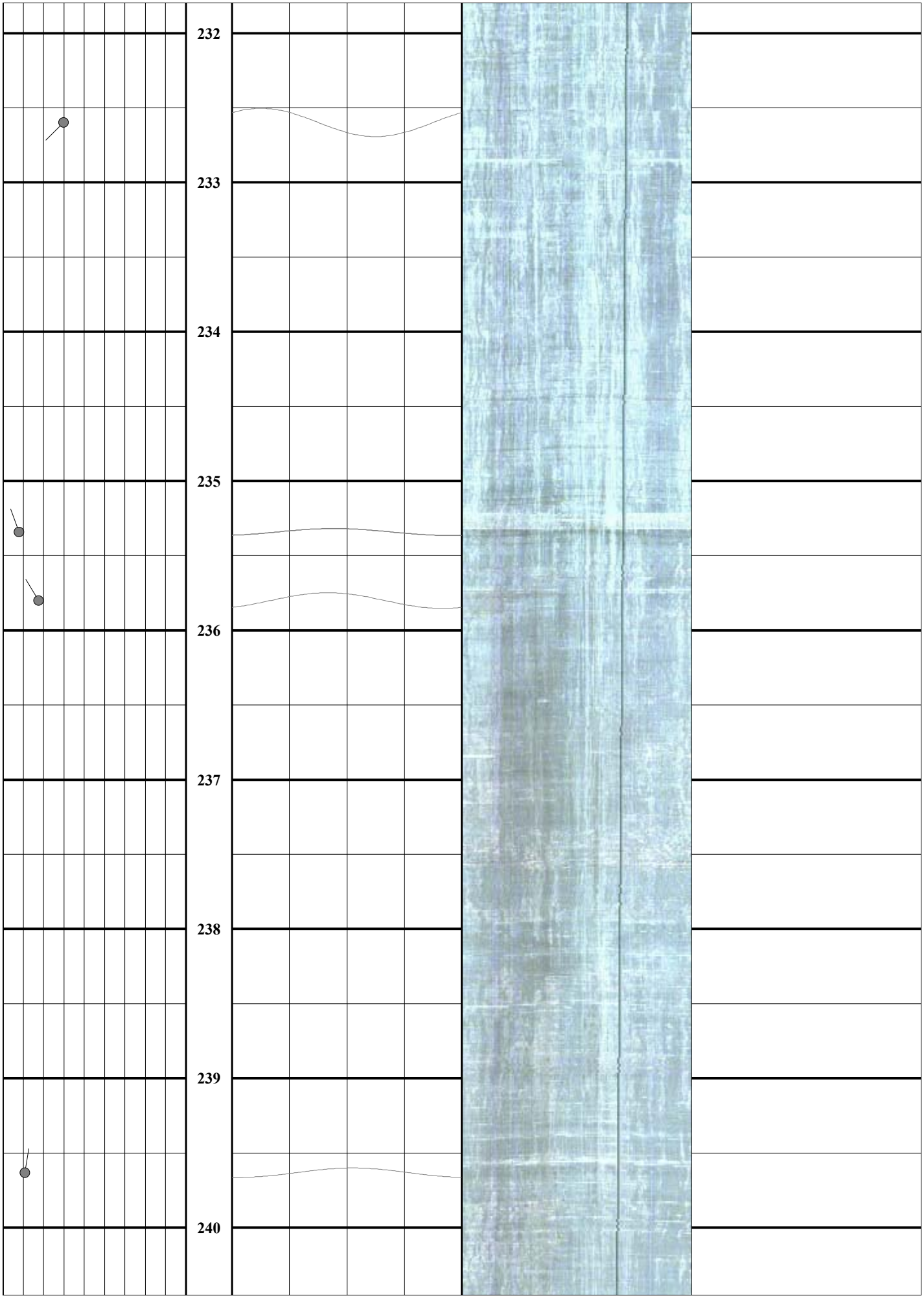

189
190
191
192
193
194
195
196
197

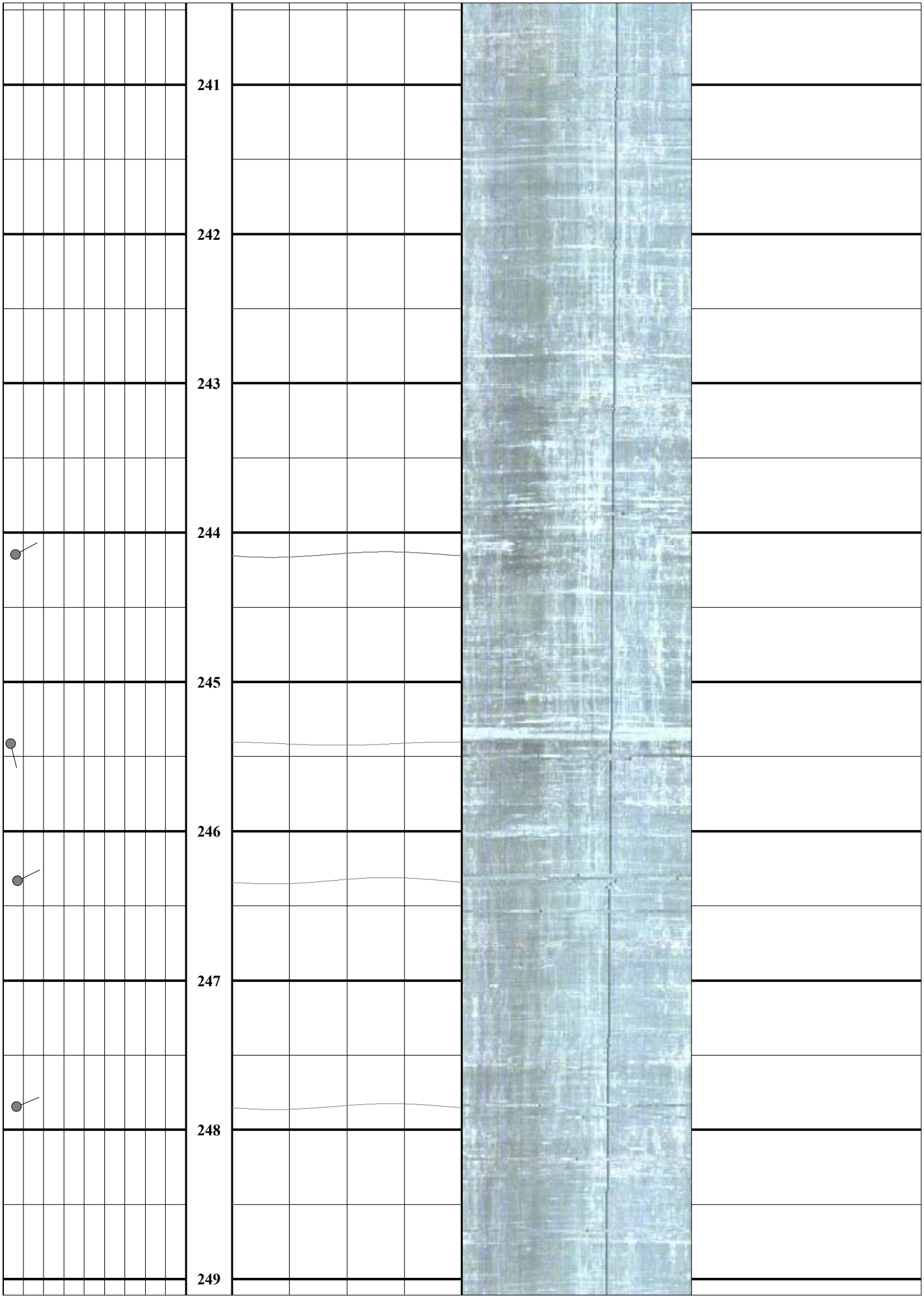

198
199
200
201
202
203
204
205

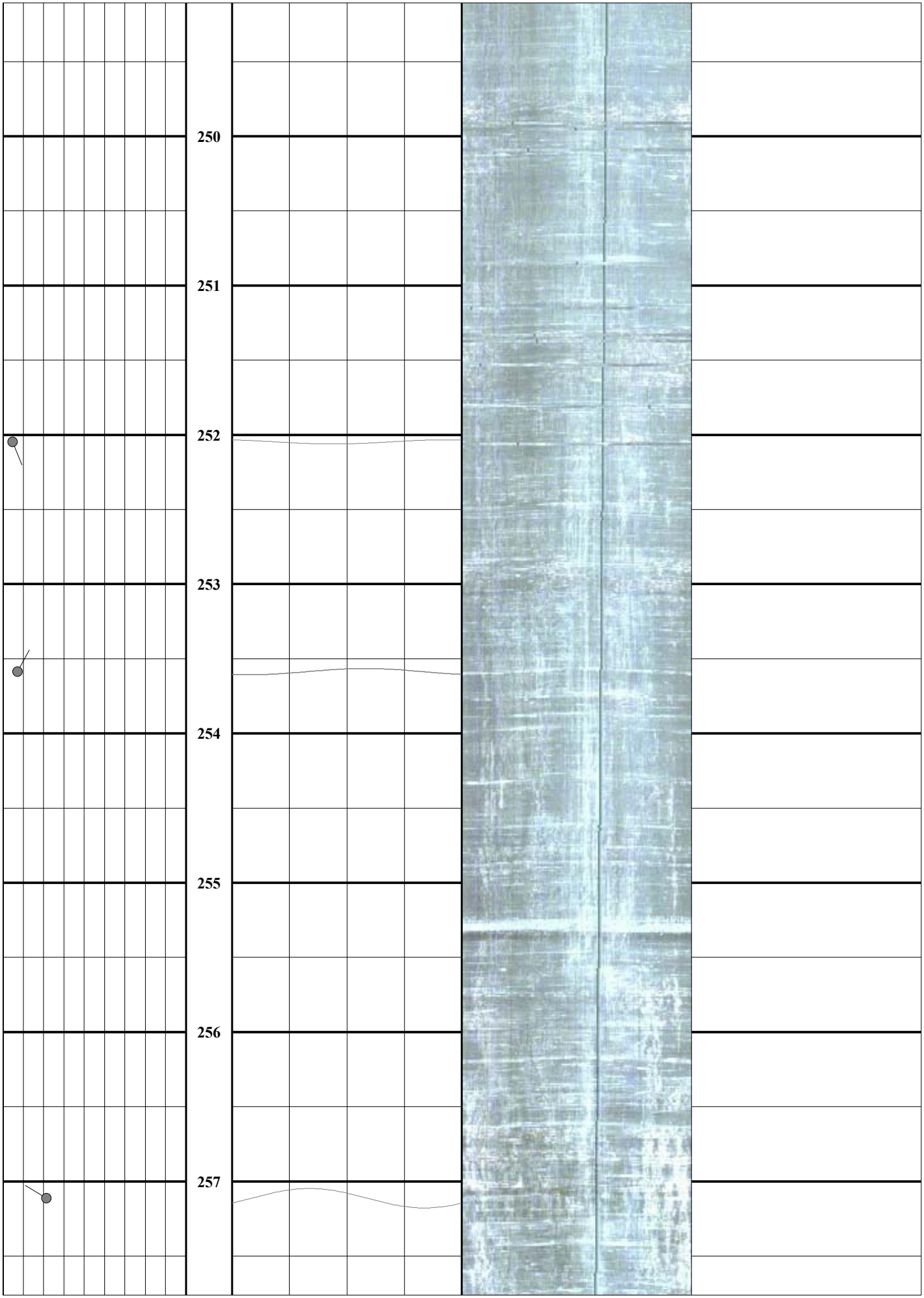

206
207
208
209
210
211
212
213
214

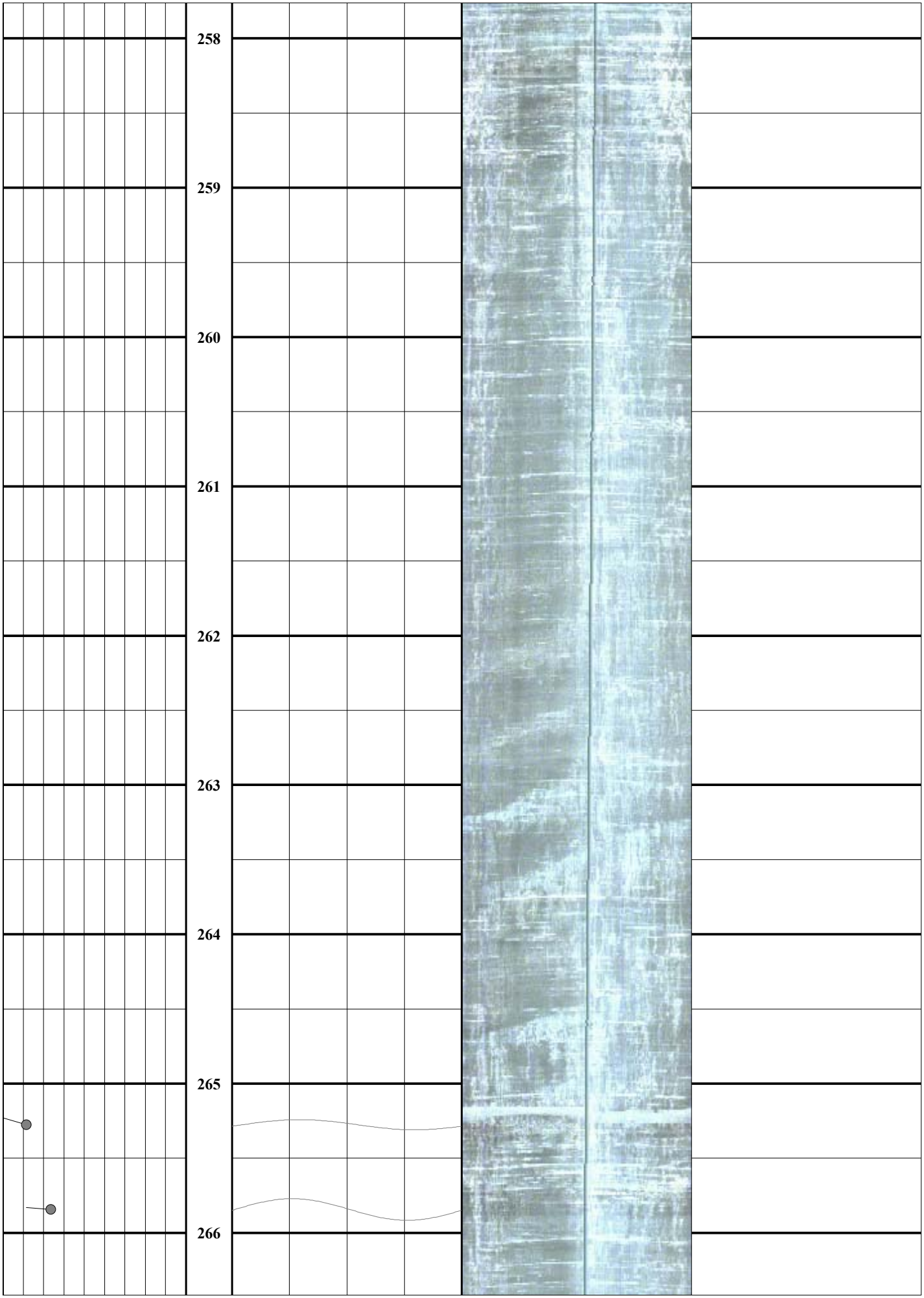

215
216
217
218
219
220
221
222
223

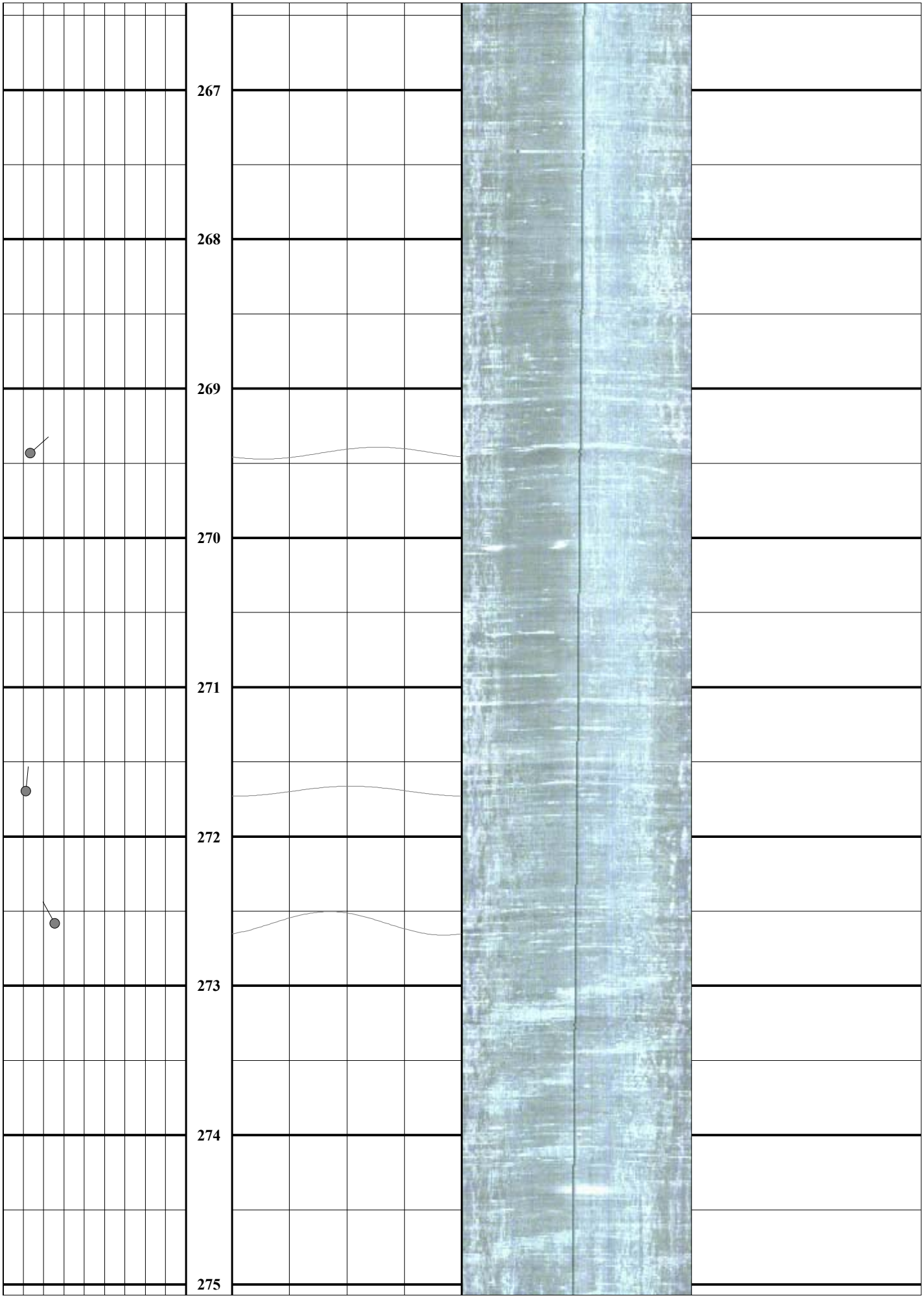

224
225
226
227
228
229
230
231

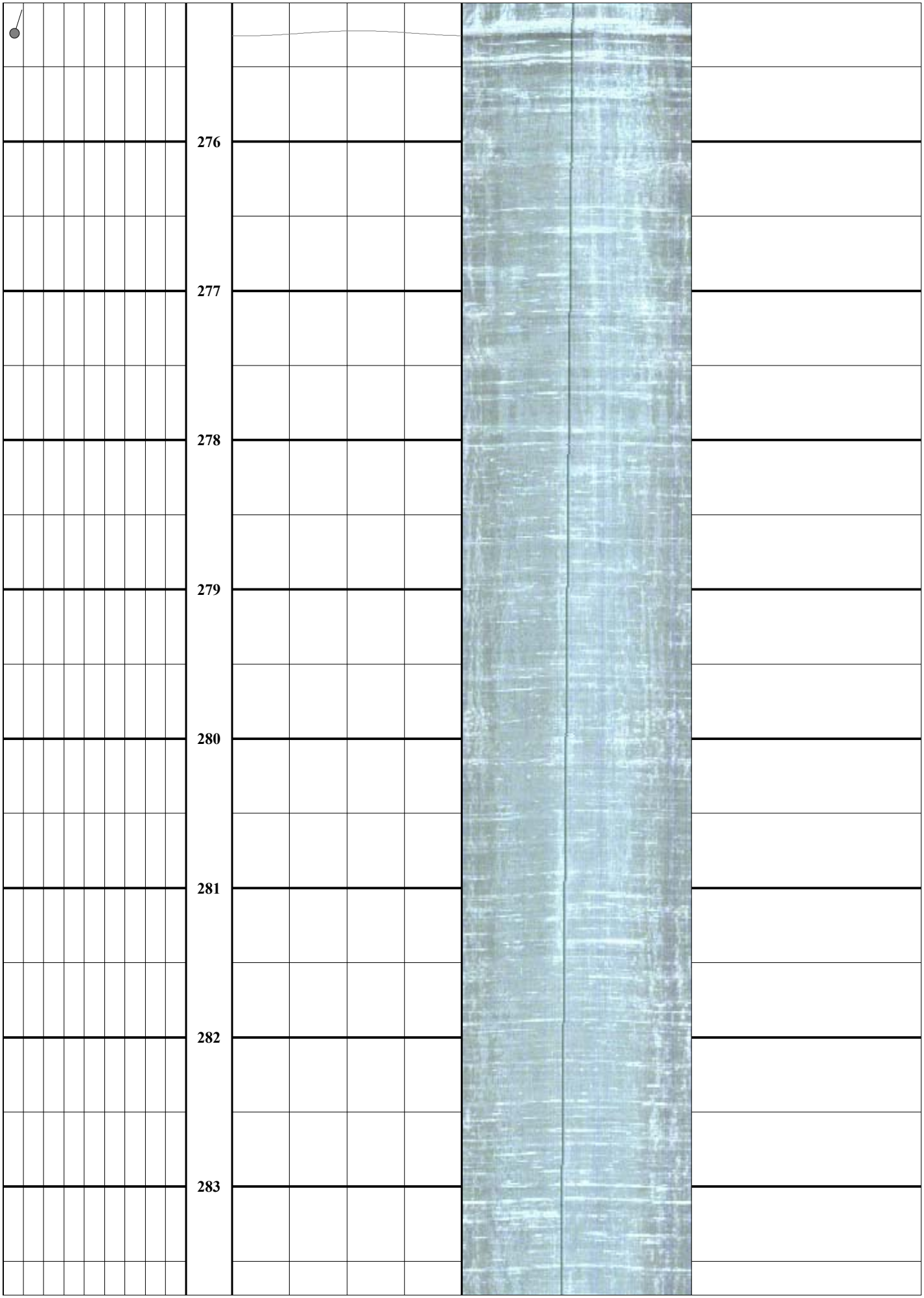

232
233
234
235
236
237
238
239
240

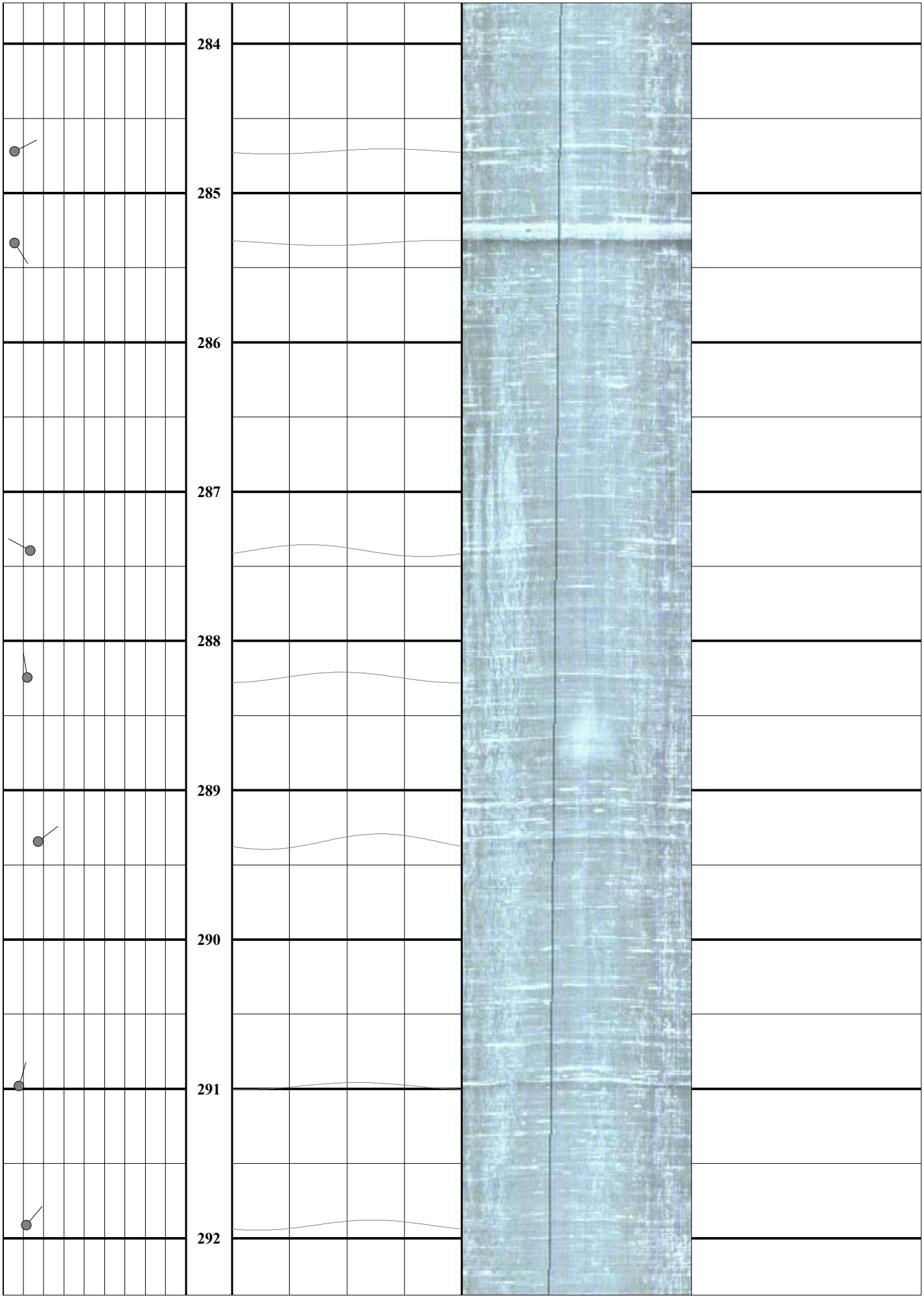

241
242
243
244
245
246
247
248
249

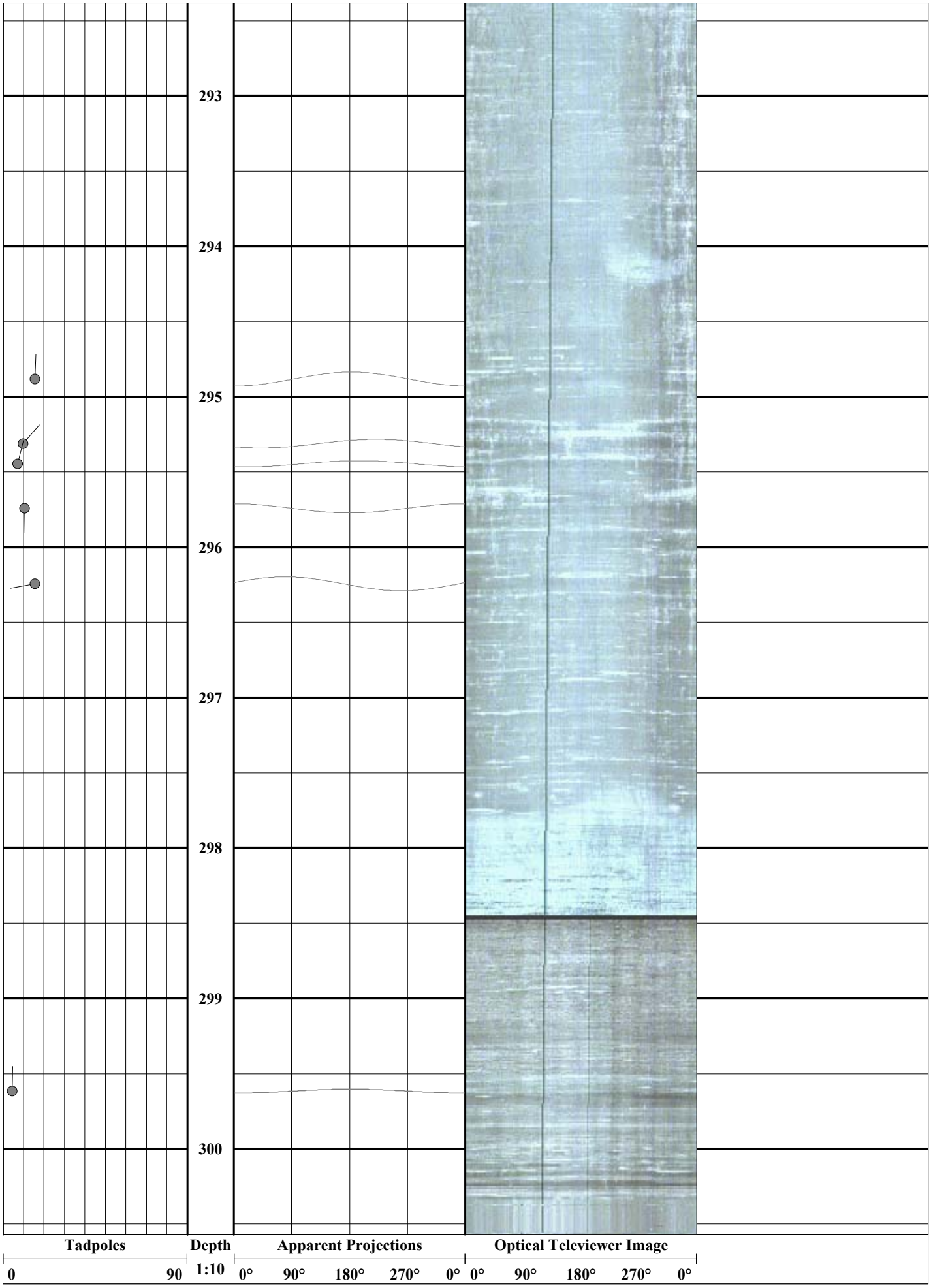

250
251
252
253
254
255
256
257


258
259
260
261
262
263
264
265
266


267
268
269
270
271
272
273
274
275


276
277
278
279
280
281
282
283

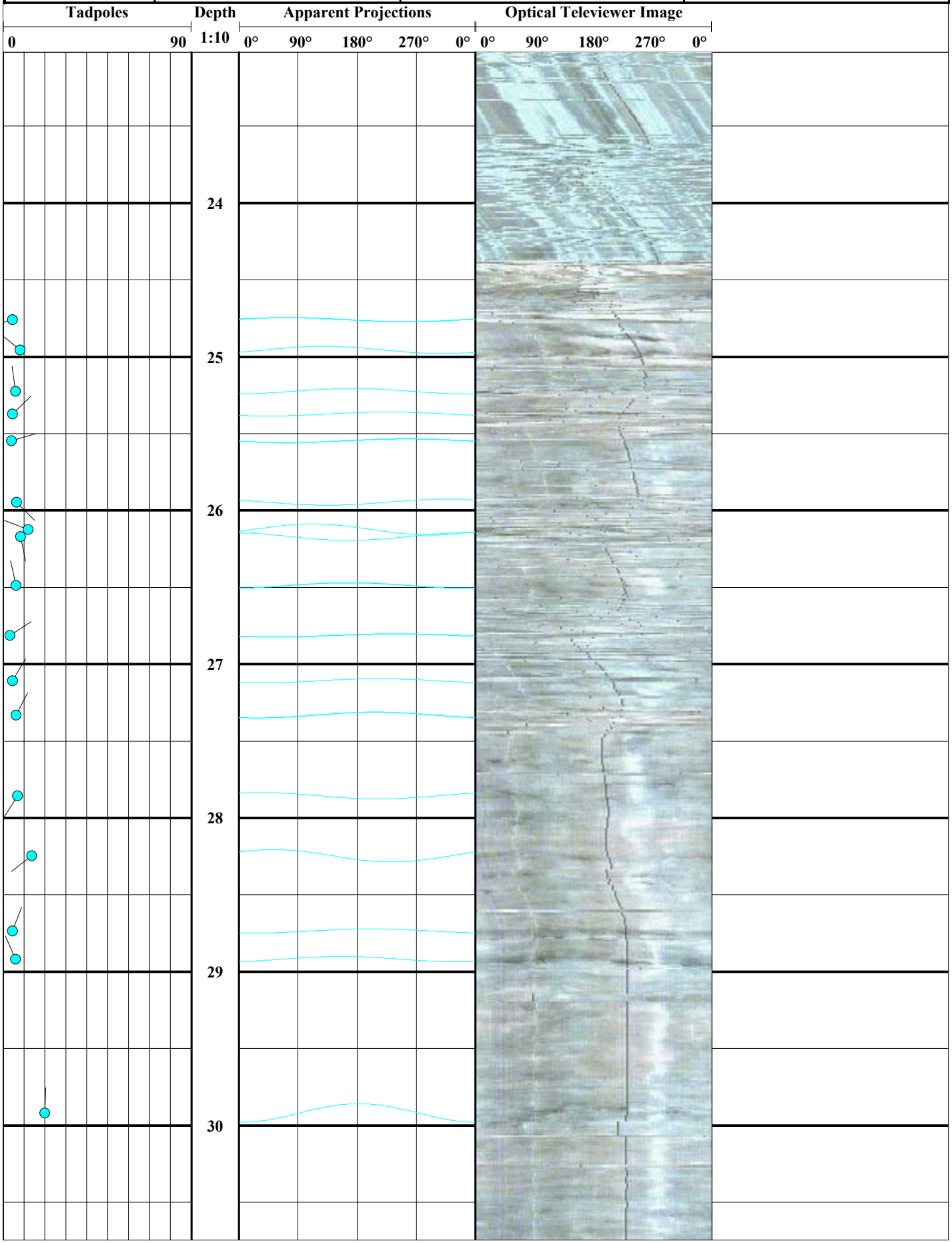

284
285
286
287
288
289
290
291
292

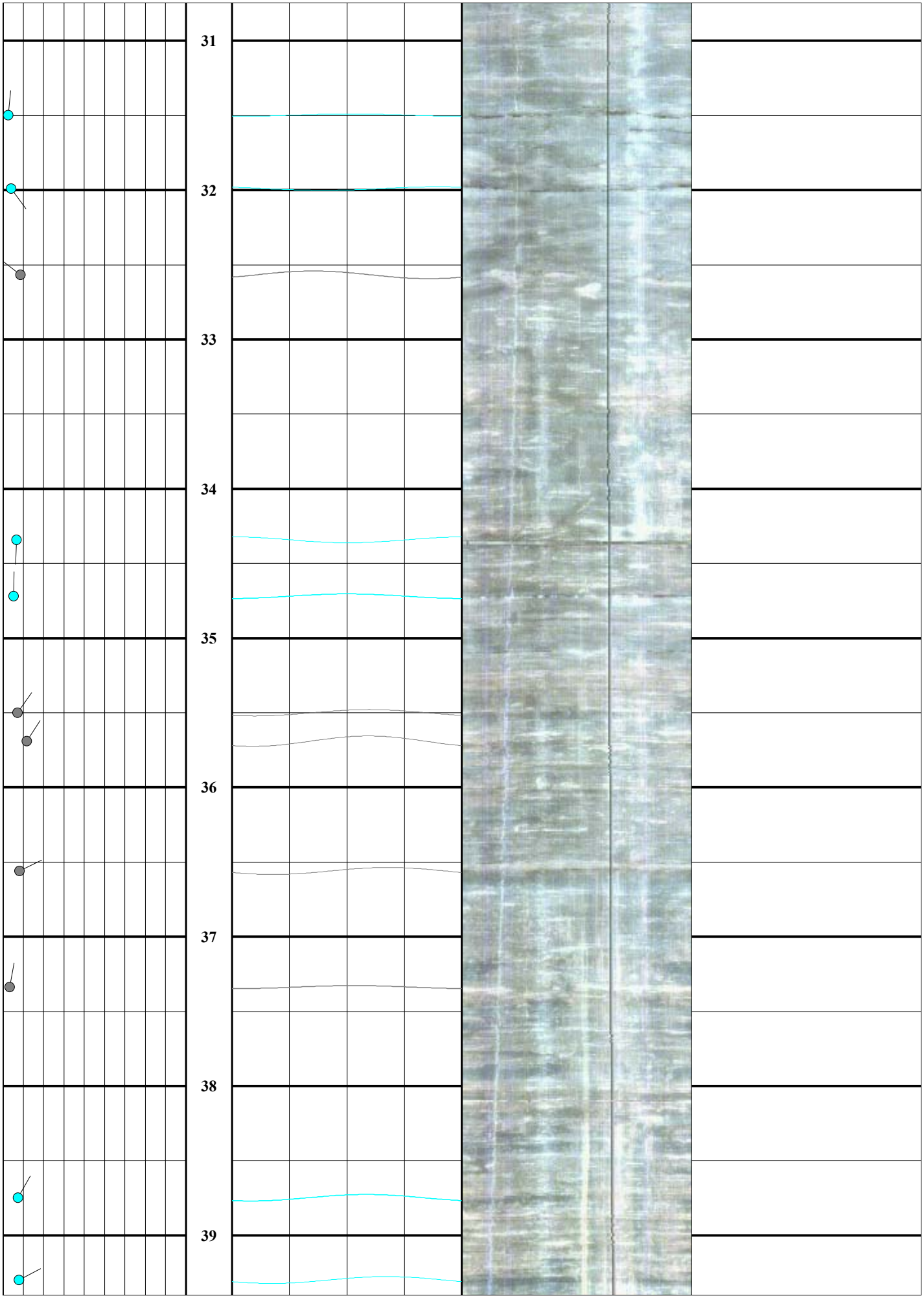

293
294
295
296
297
298
299
300
Tadpoles
0
90
Depth
1:10
Apparent Projections
0°
90°
180°
270°
0°
Optical Televiewer Image
0°
90°
180°
270°
0°

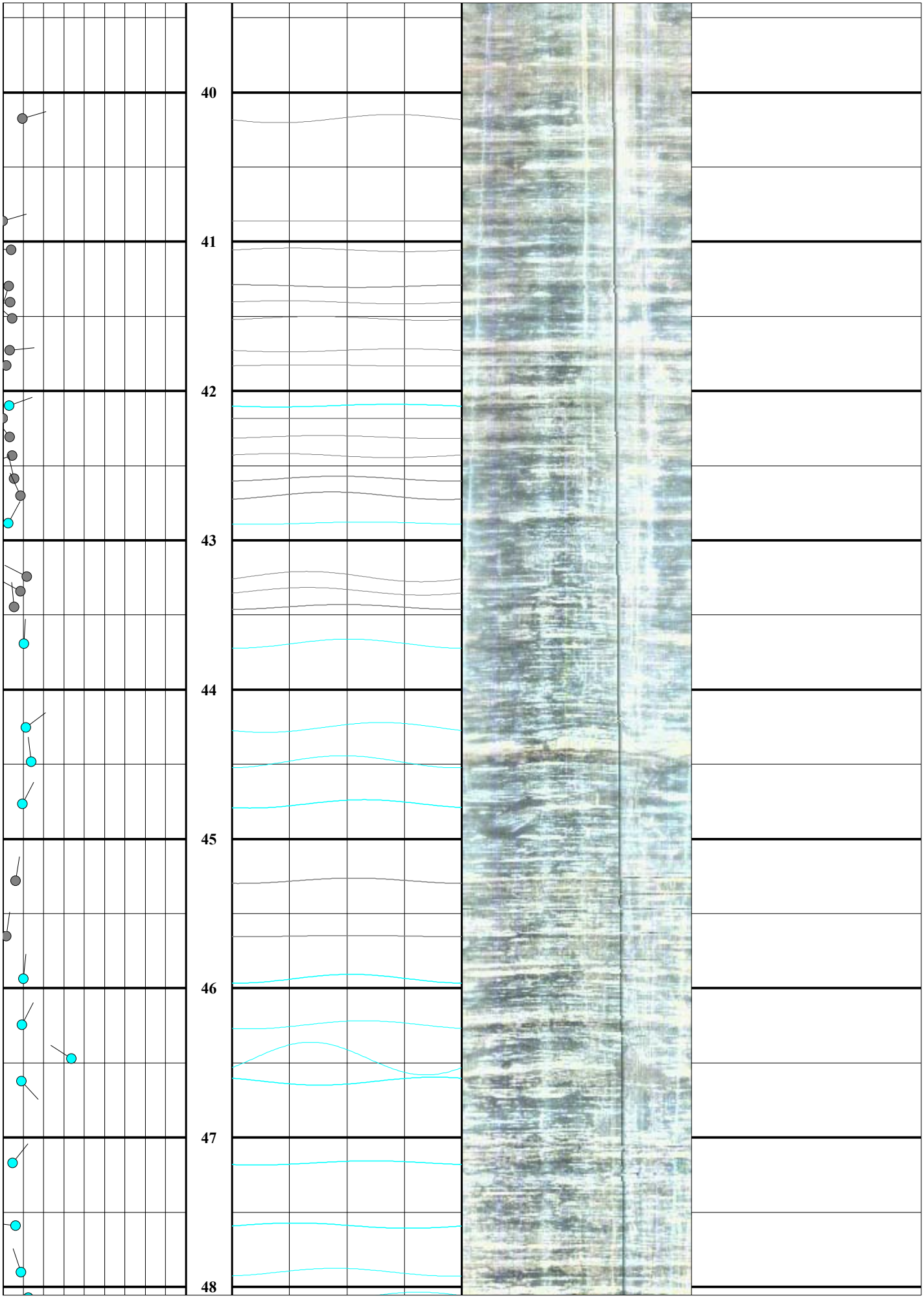
Optical/Acoustic Borehole Image Plot

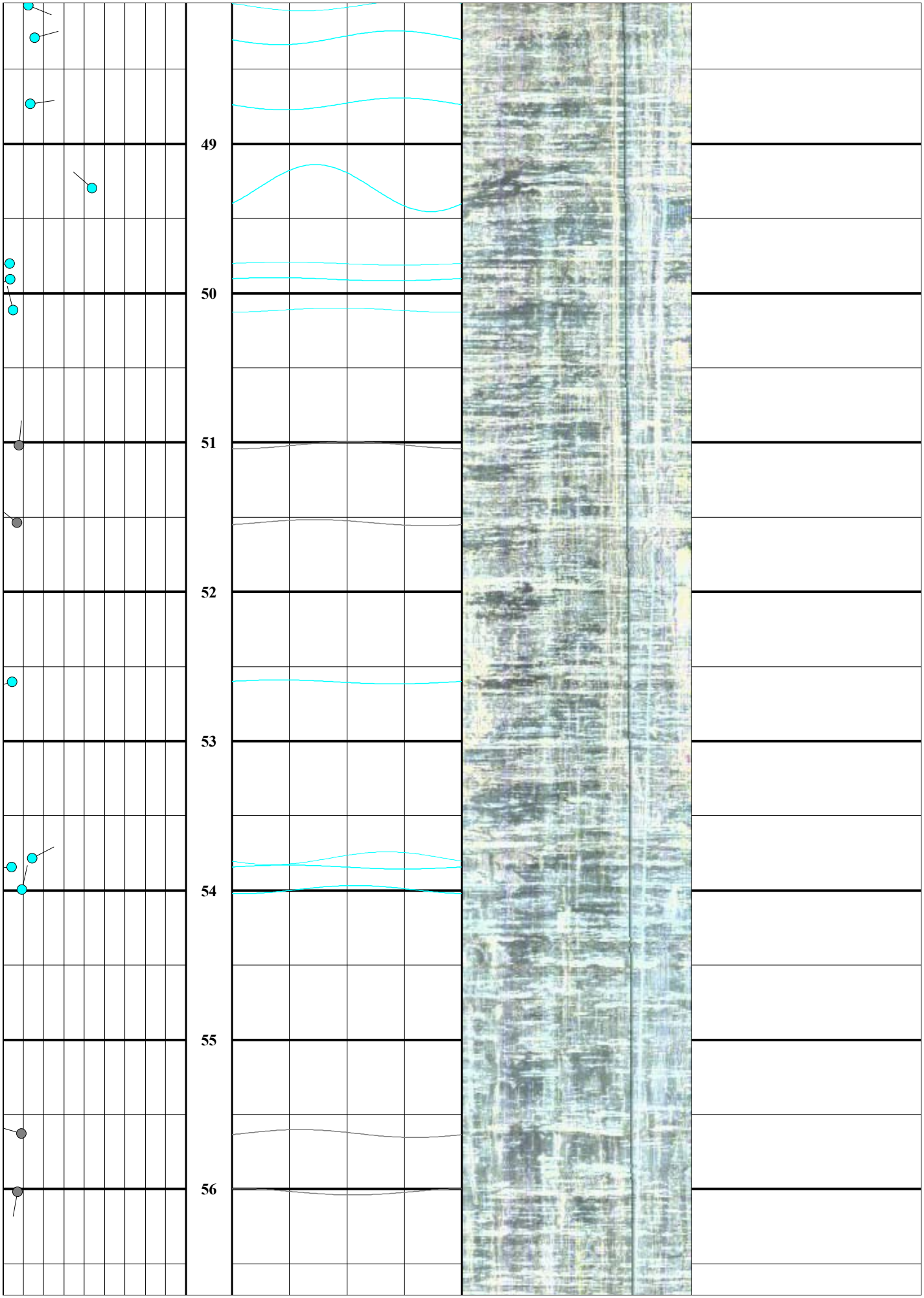
COMPANY: S. M. Stoller Corp.	PROJECT: Crescent Junction
DATE LOGGED: 8 December 2005	WELL: CH-0206

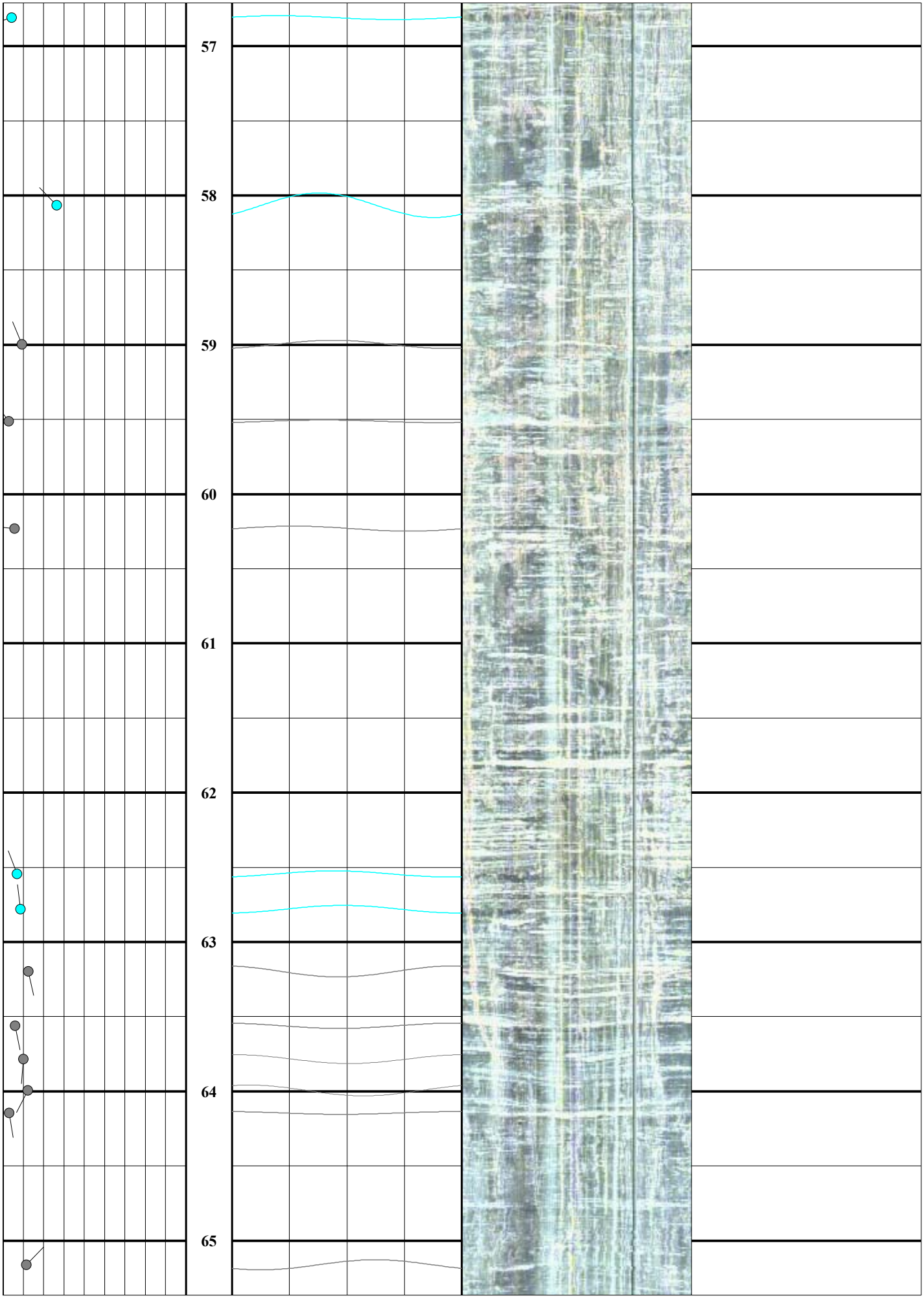
COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com

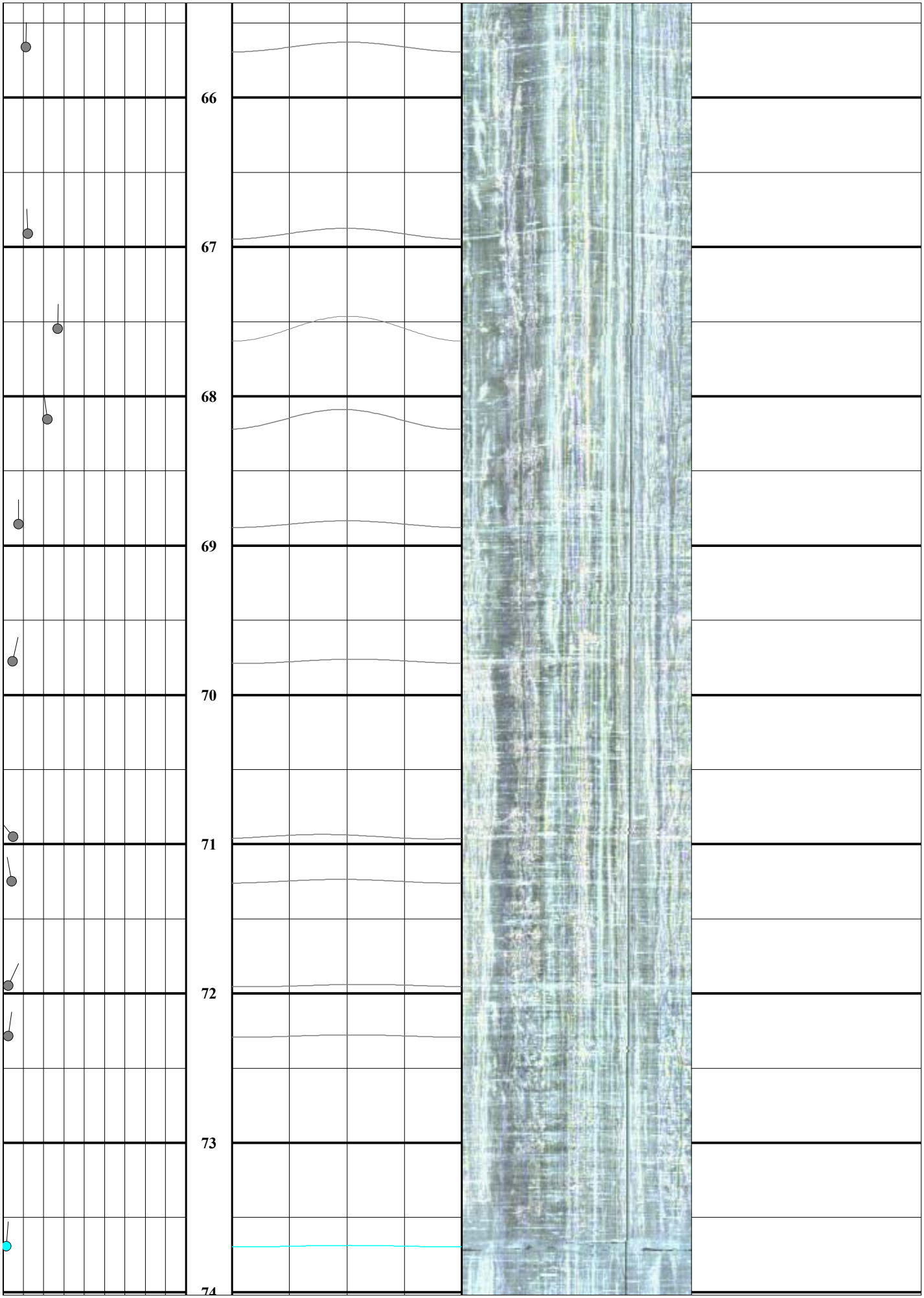


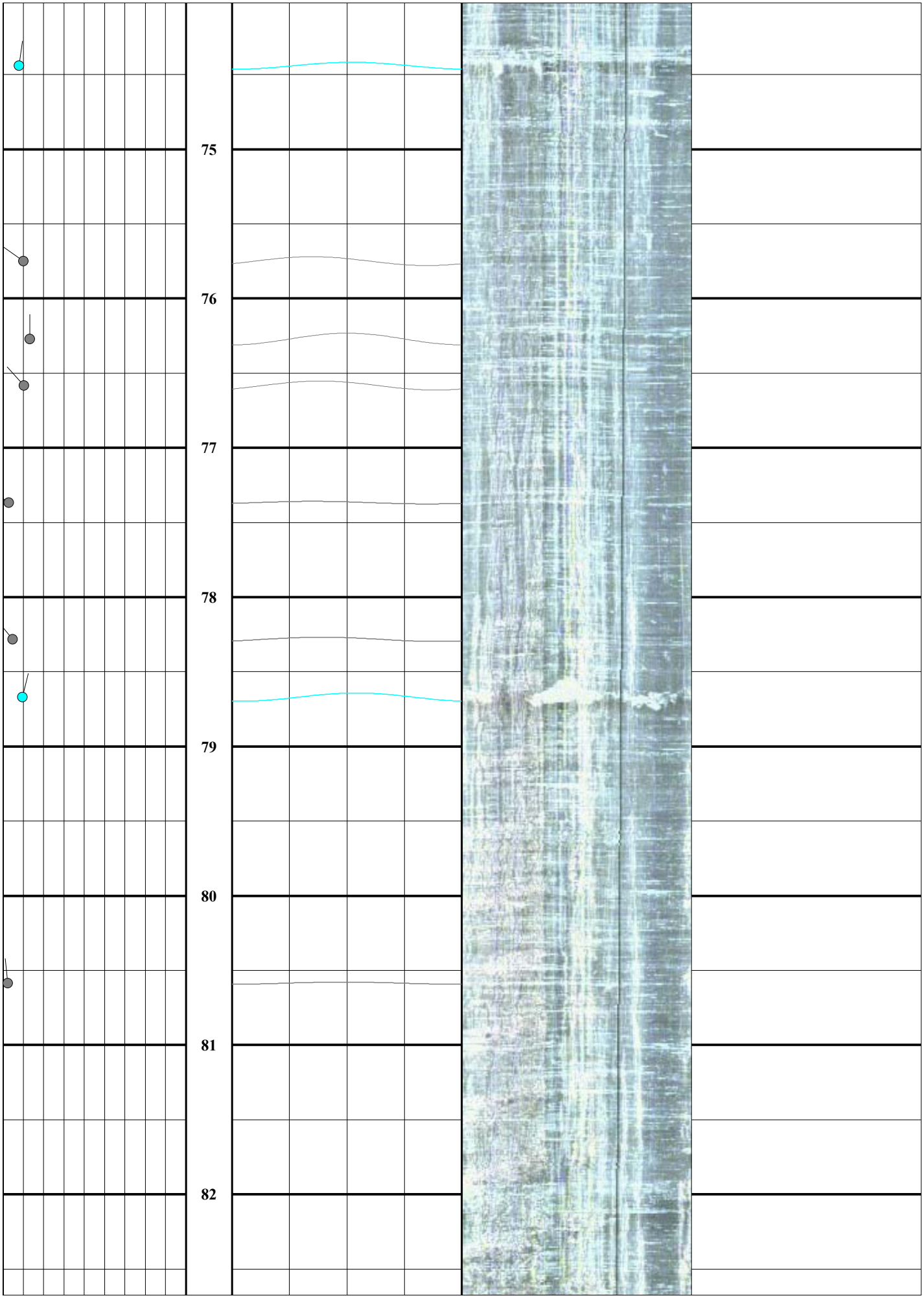

31
32
33
34
35
36
37
38
39

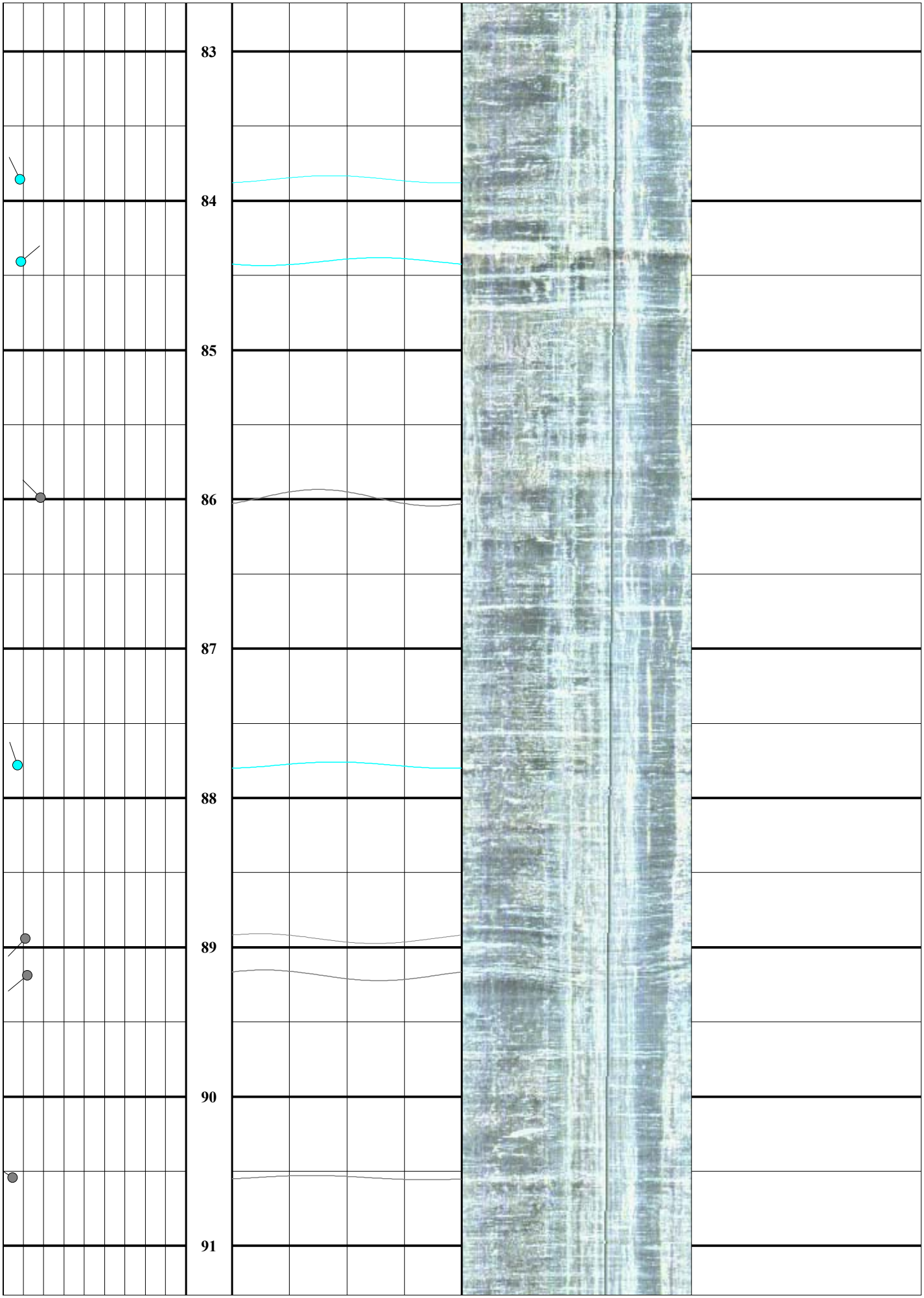

40
41
42
43
44
45
46
47
48

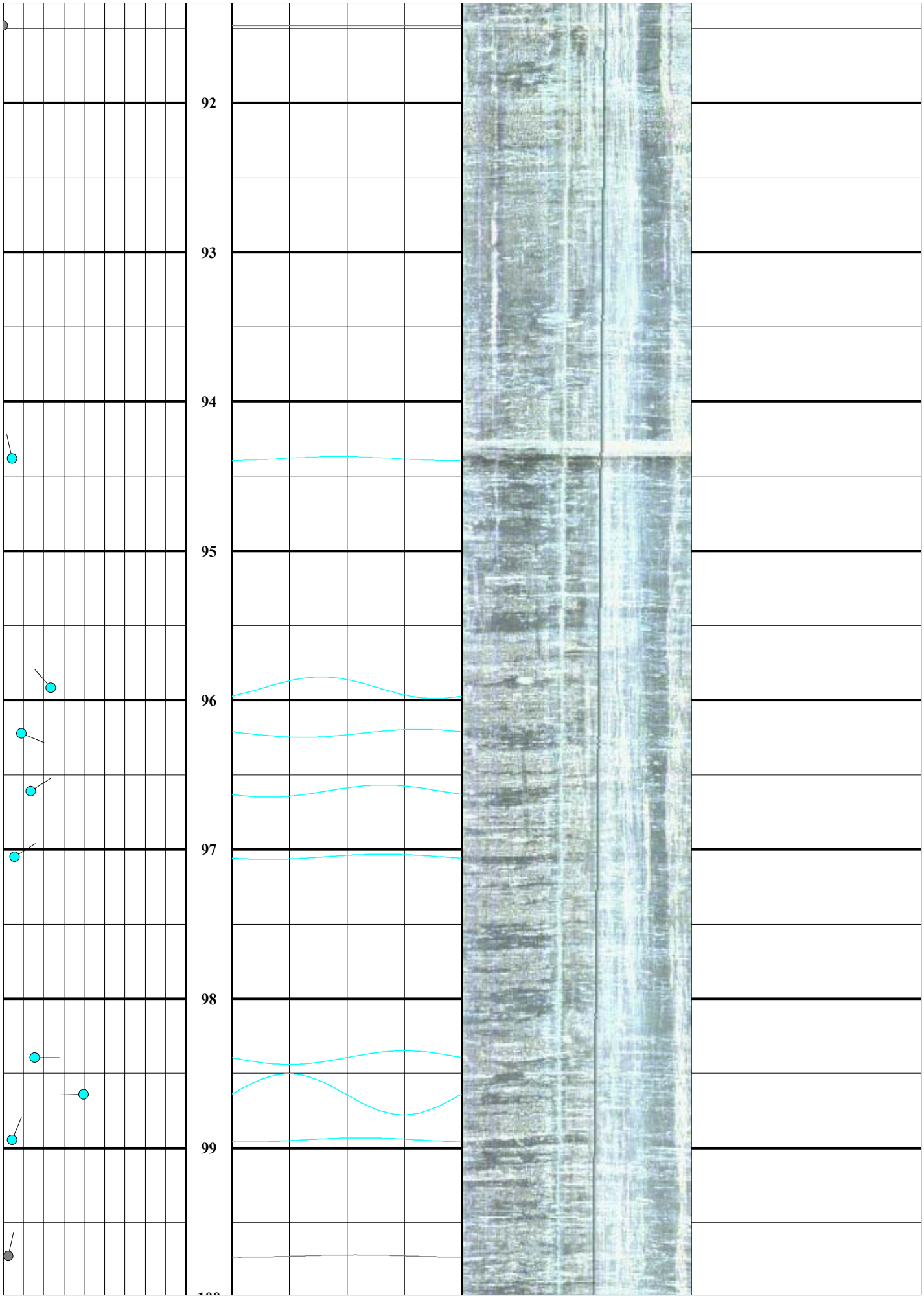

49
50
51
52
53
54
55
56

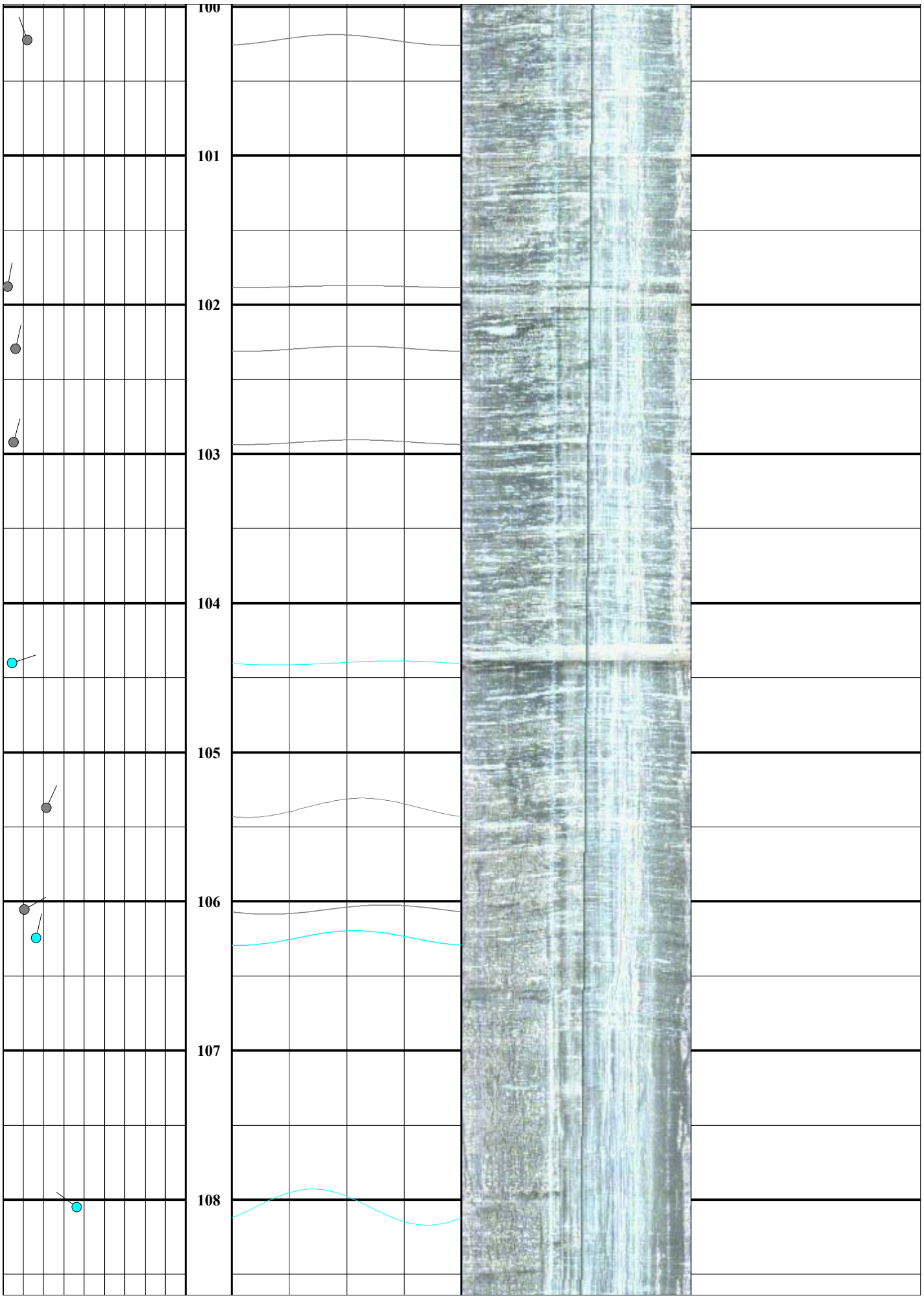

57
58
59
60
61
62
63
64
65

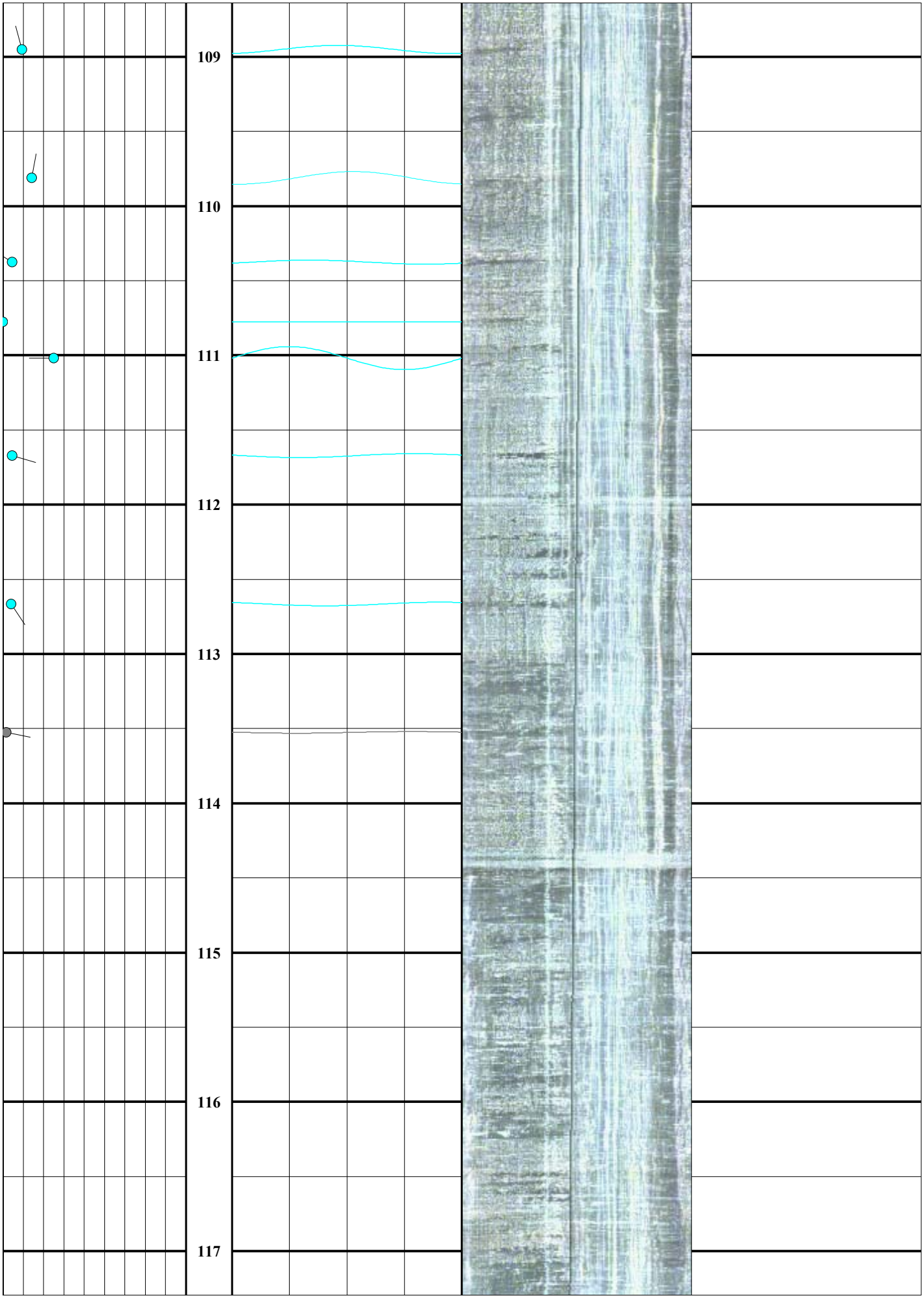

66
67
68
69
70
71
72
73
74

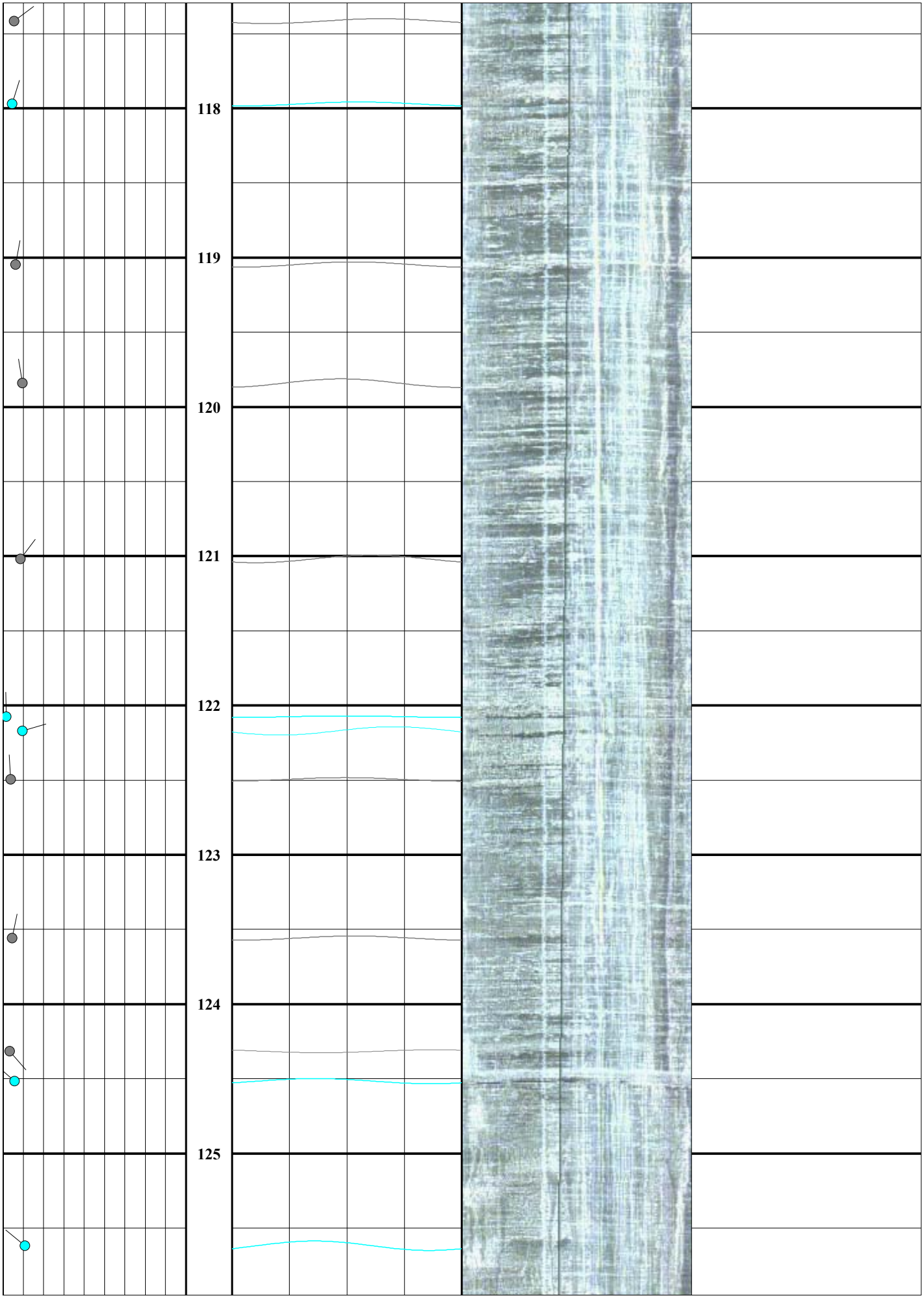

75
76
77
78
79
80
81
82

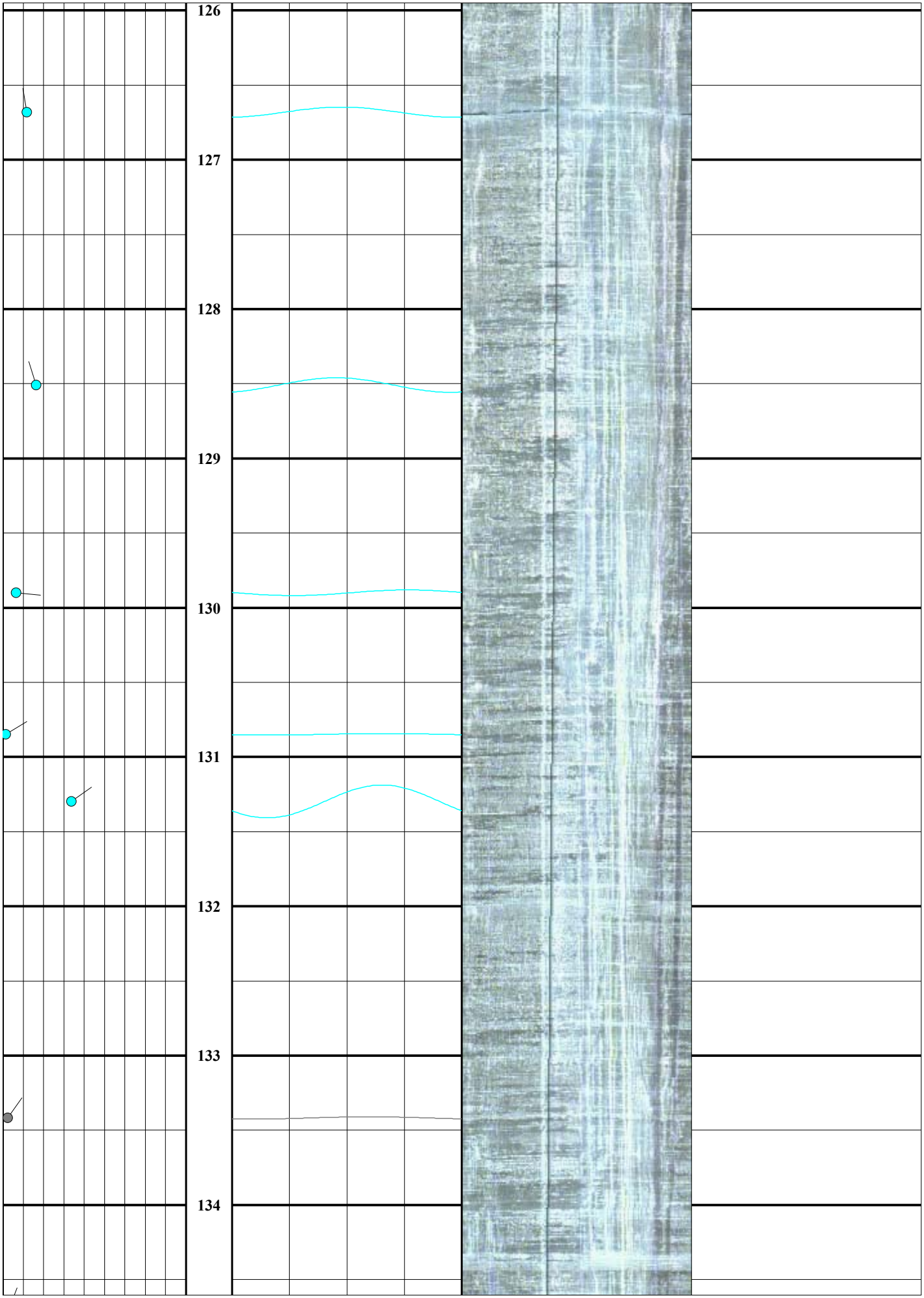

83
84
85
86
87
88
89
90
91

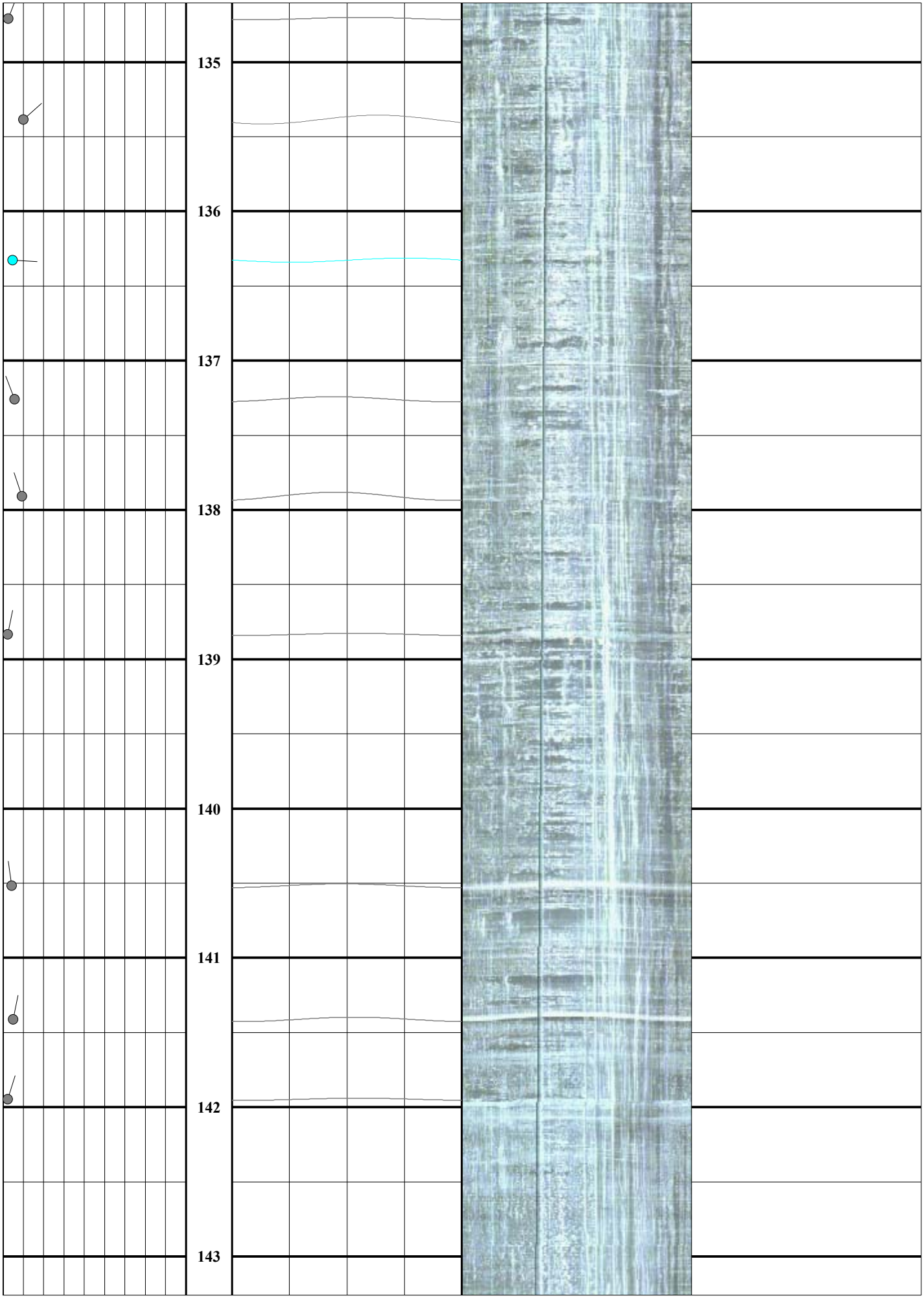

92
93
94
95
96
97
98
99

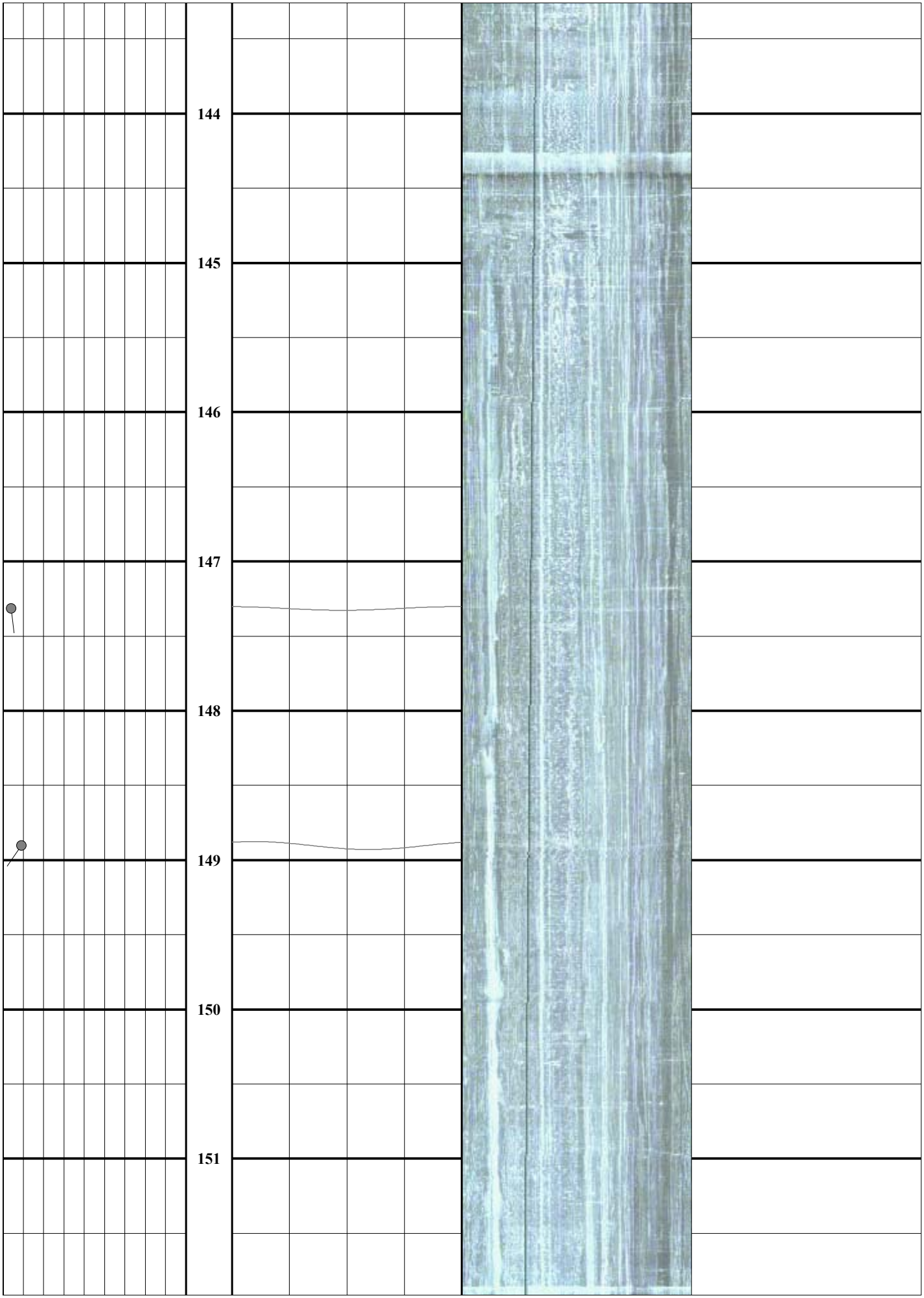

100
101
102
103
104
105
106
107
108

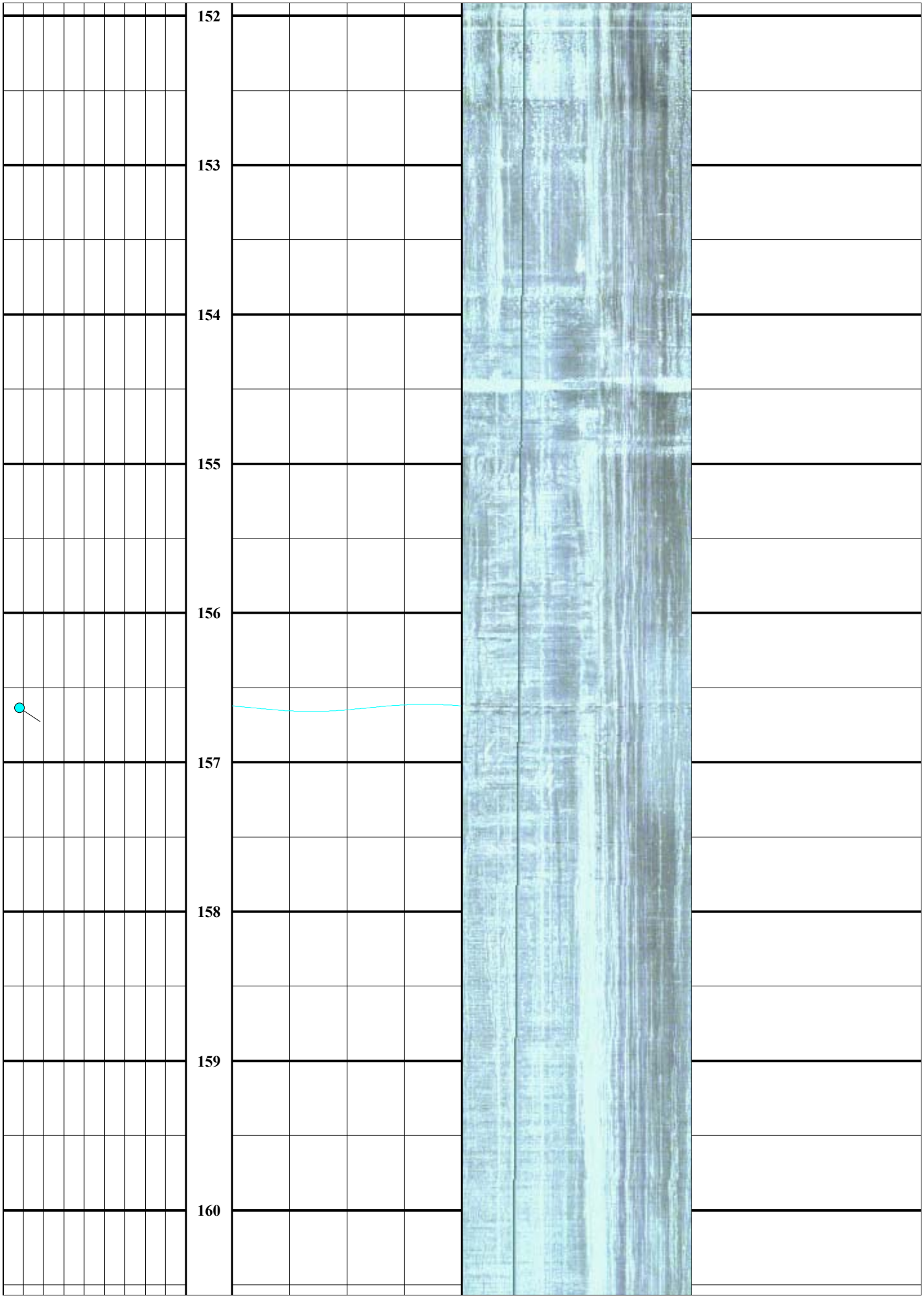

109
110
111
112
113
114
115
116
117

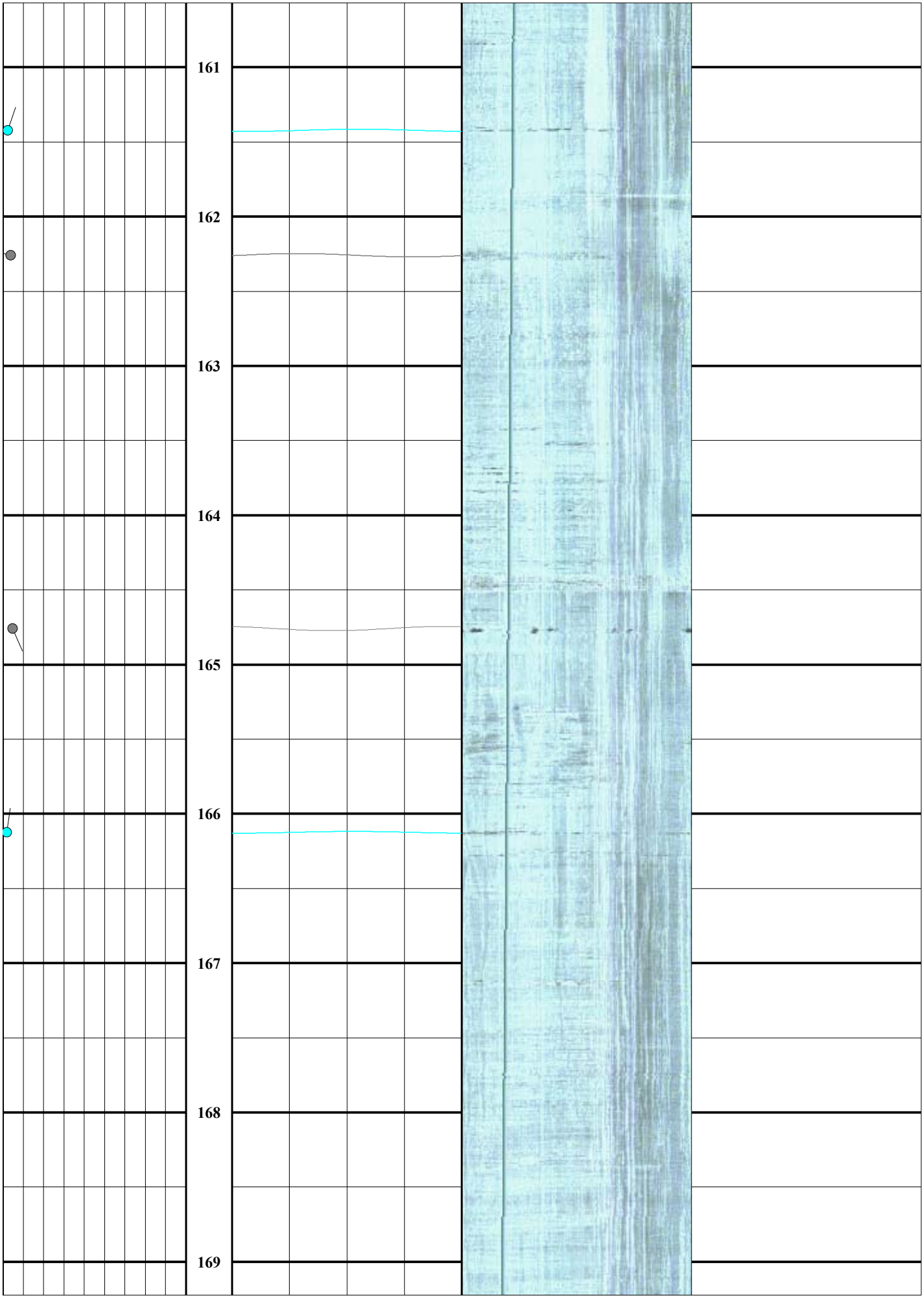

118
119
120
121
122
123
124
125

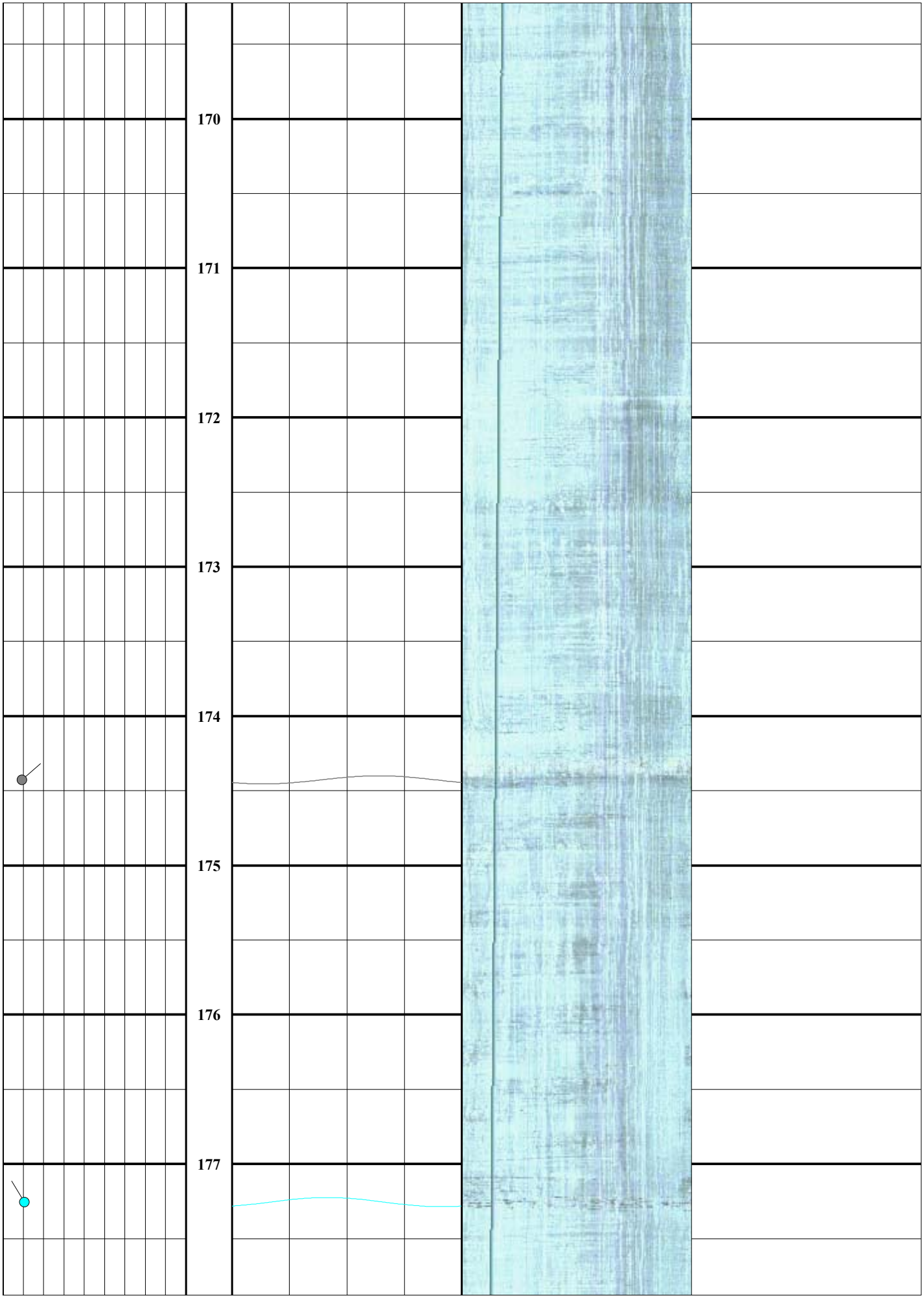

126
127
128
129
130
131
132
133
134

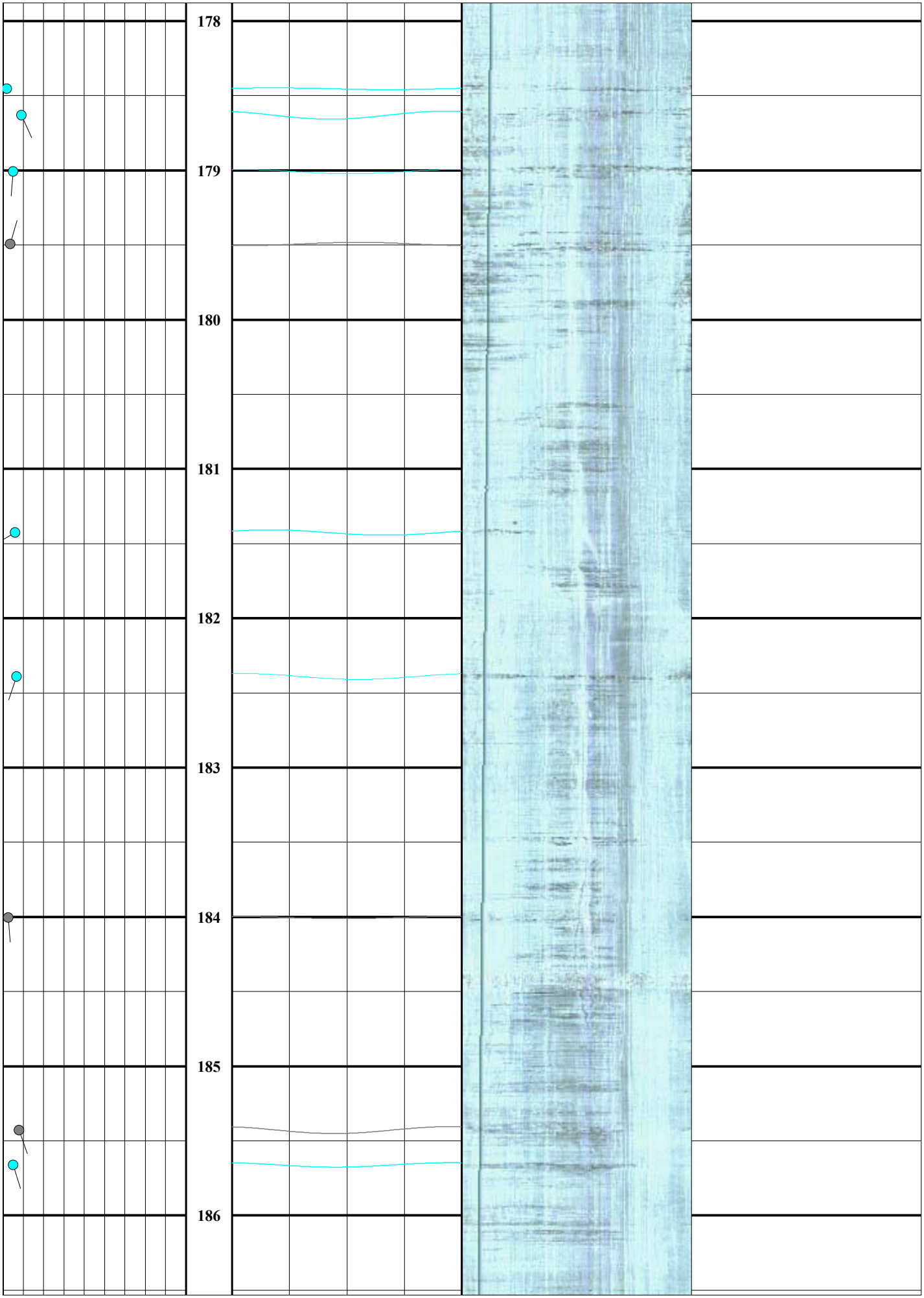

135
136
137
138
139
140
141
142
143

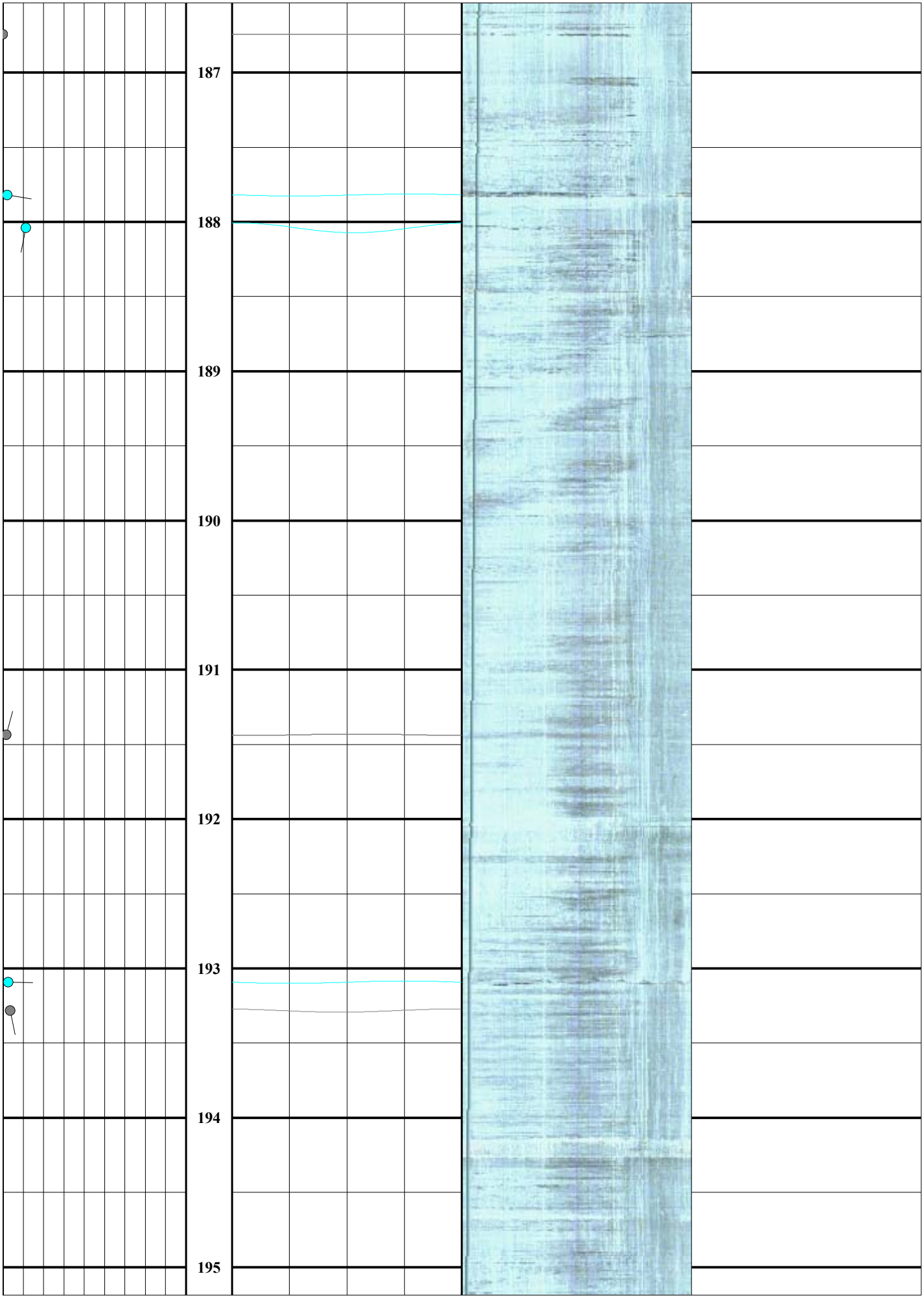

144
145
146
147
148
149
150
151

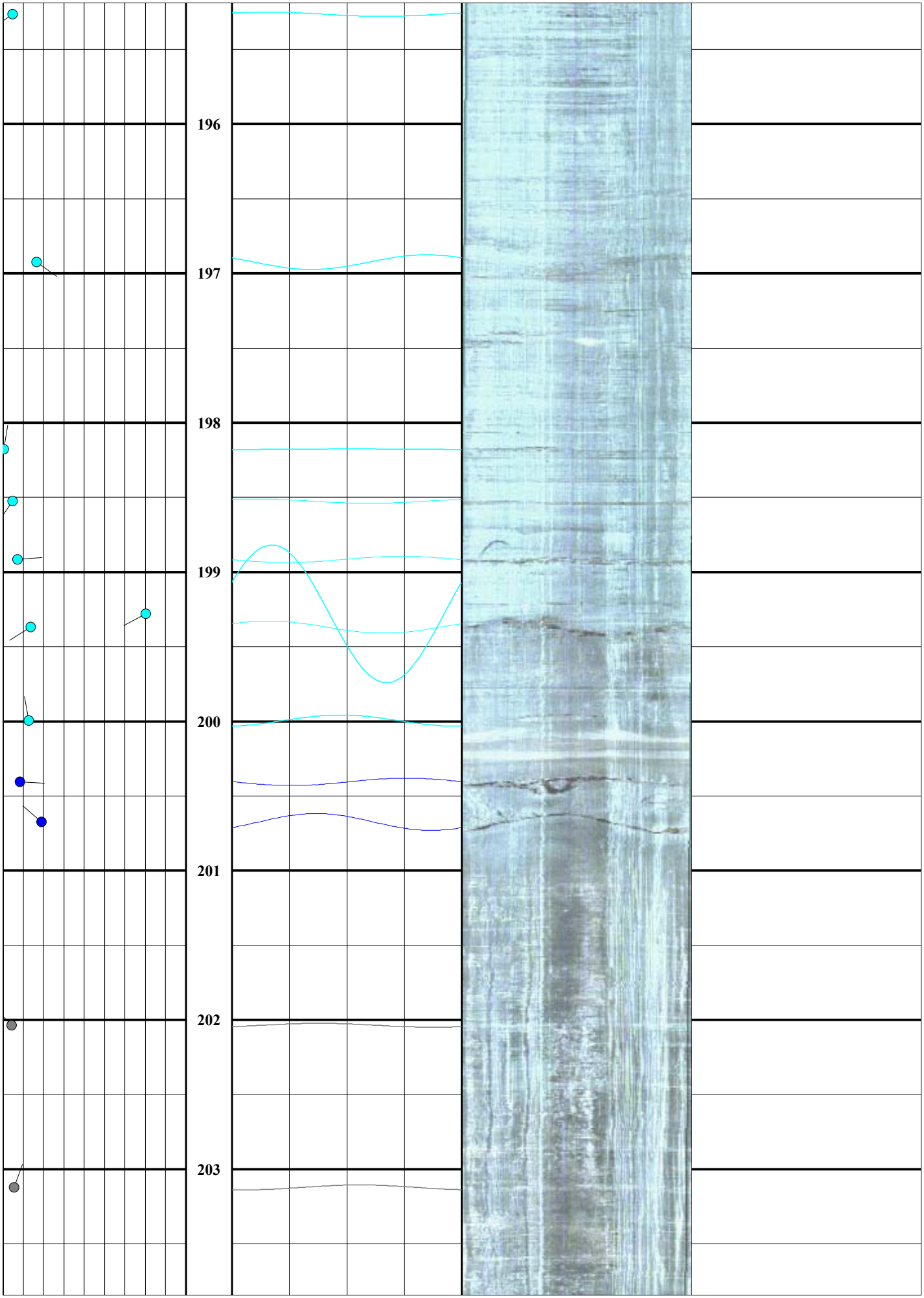

152
153
154
155
156
157
158
159
160

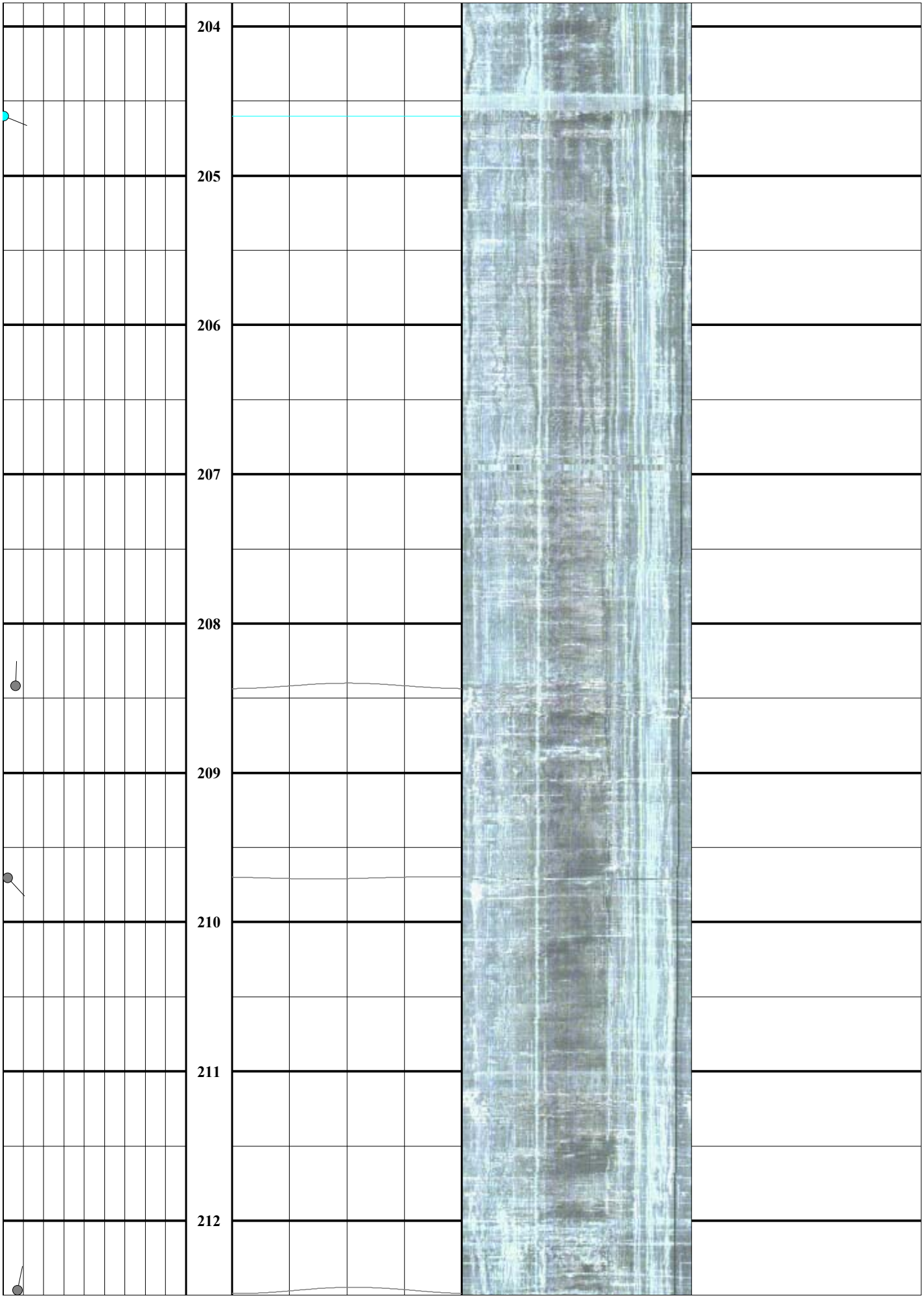

161
162
163
164
165
166
167
168
169

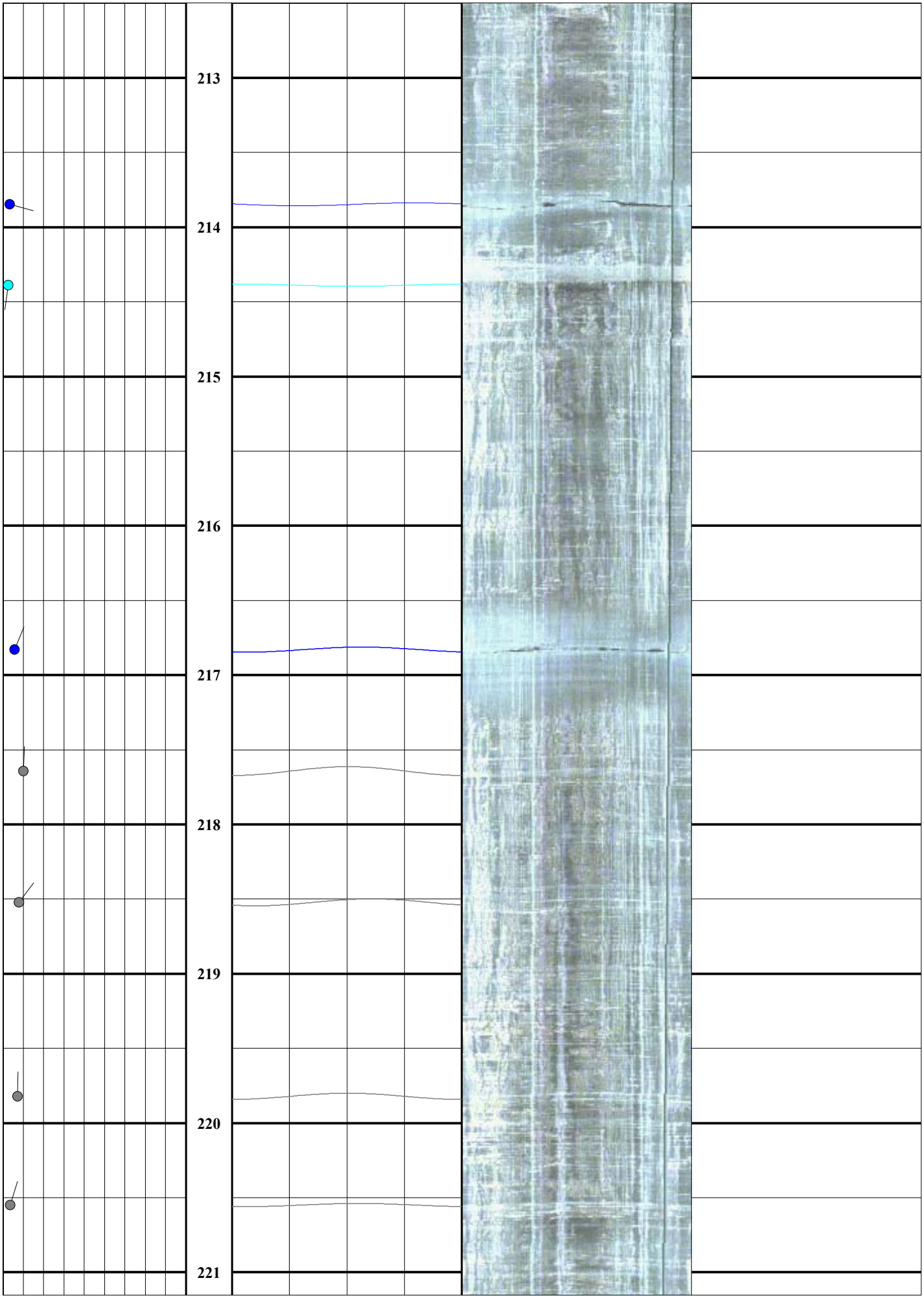

170
171
172
173
174
175
176
177

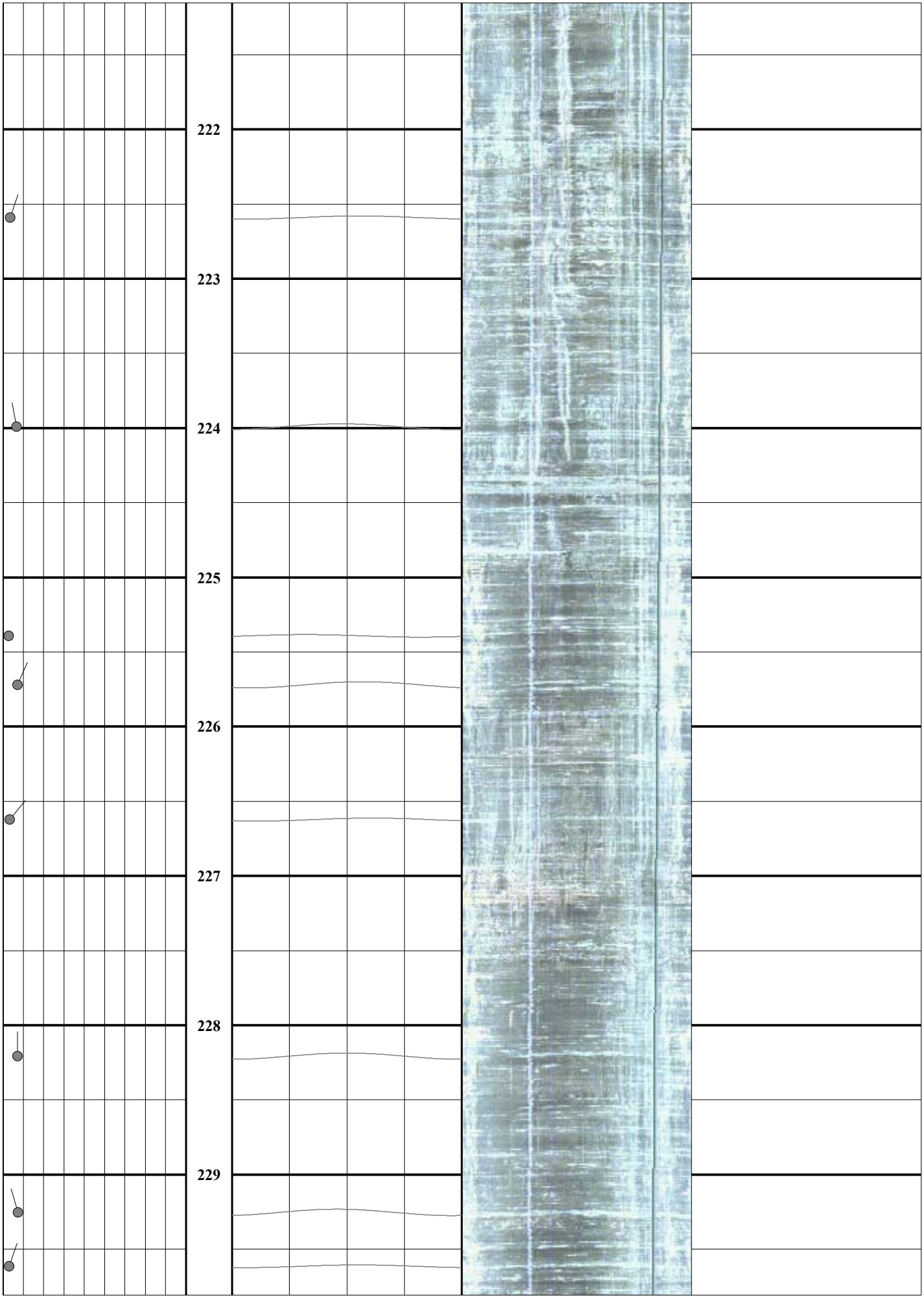

178
179
180
181
182
183
184
185
186

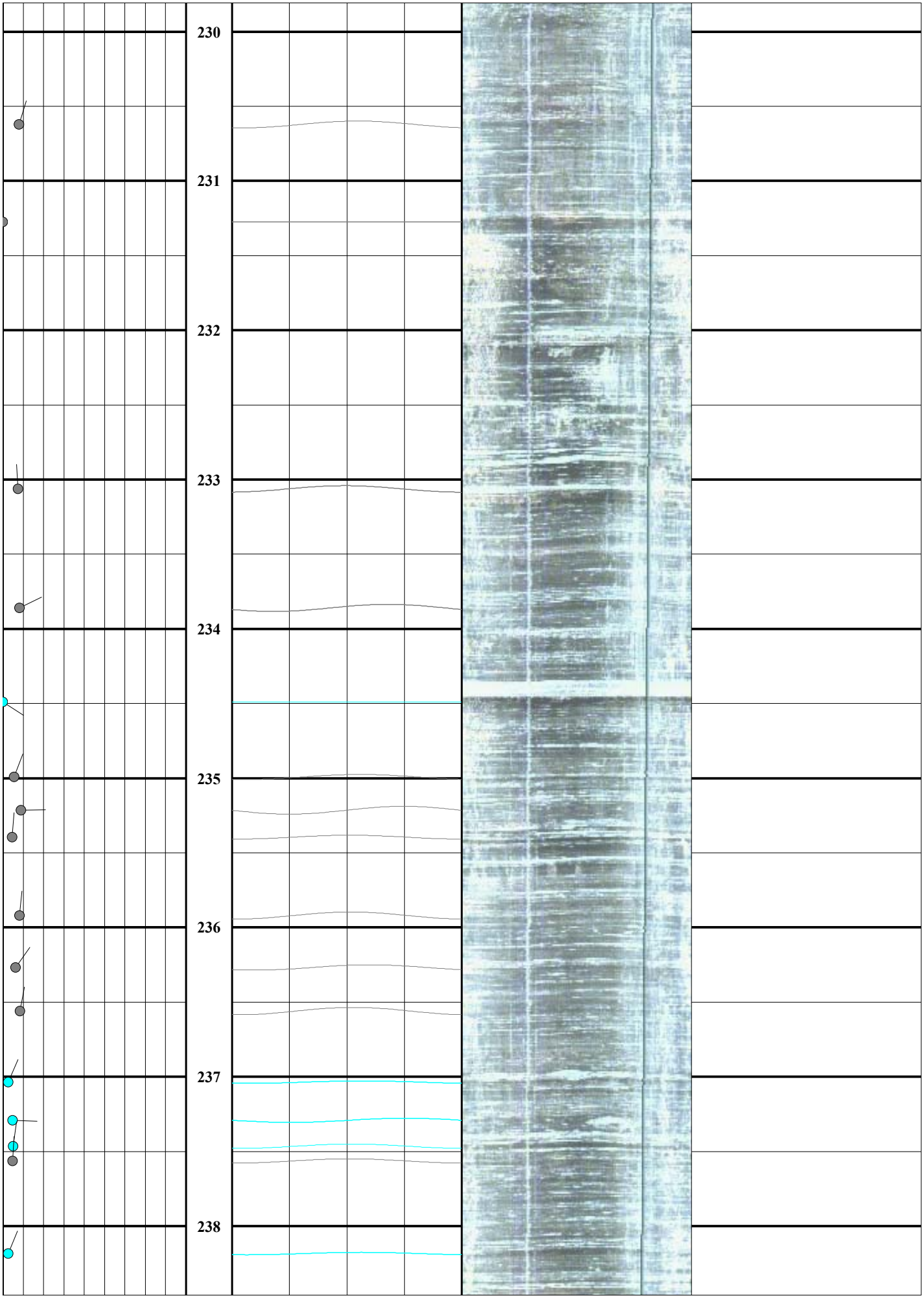

187
188
189
190
191
192
193
194
195

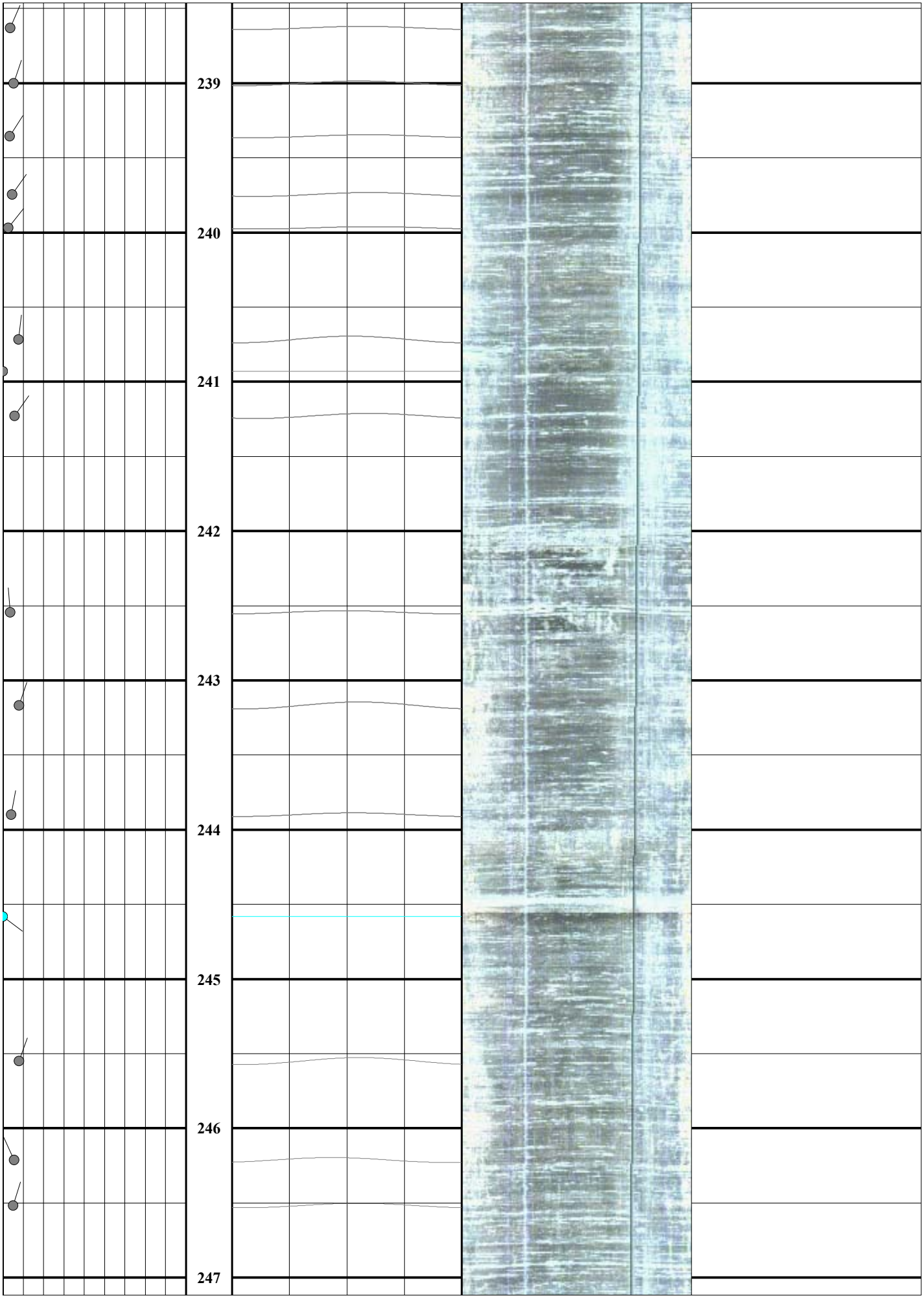

196
197
198
199
200
201
202
203

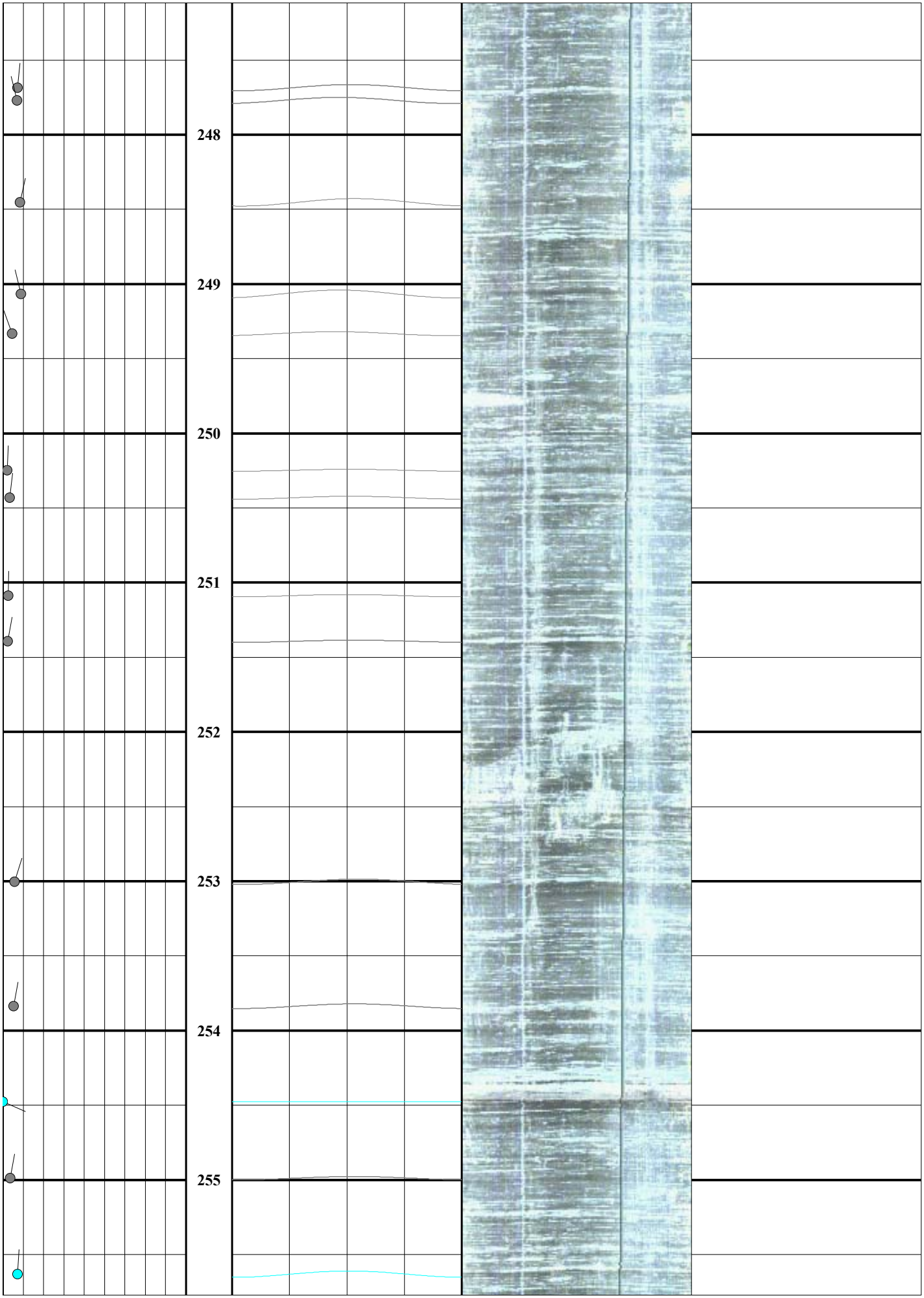

204
205
206
207
208
209
210
211
212

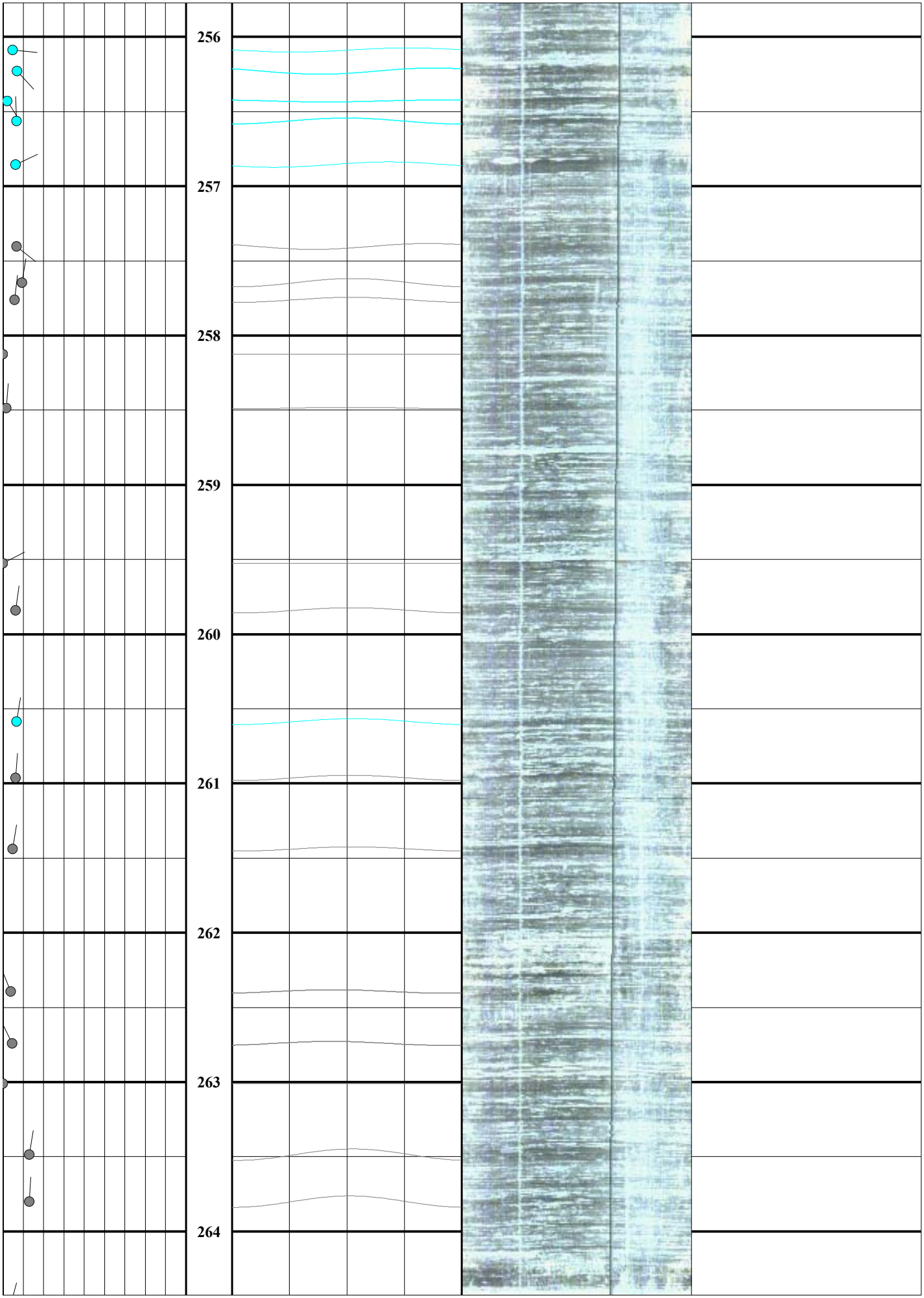

213
214
215
216
217
218
219
220
221

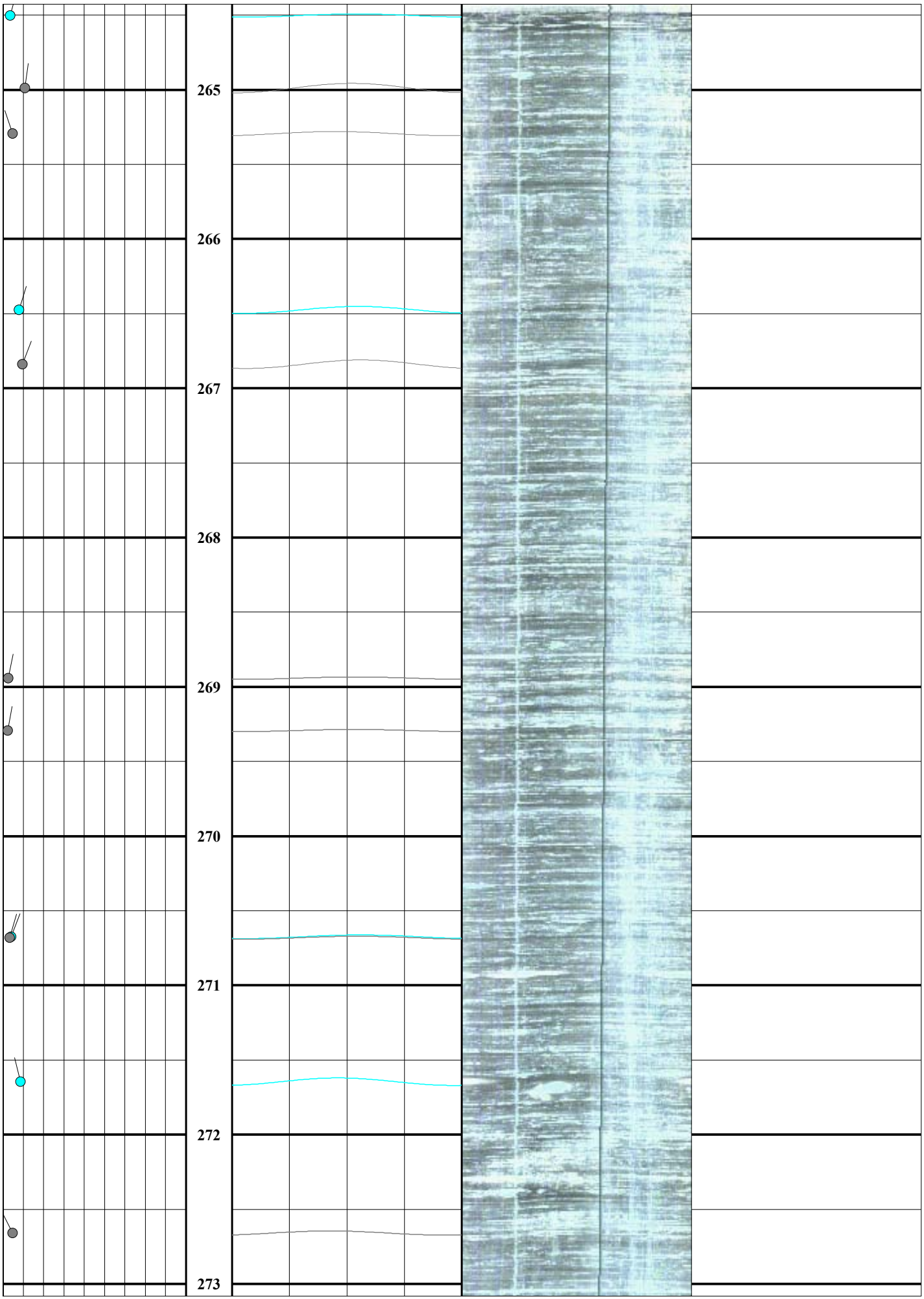

222
223
224
225
226
227
228
229

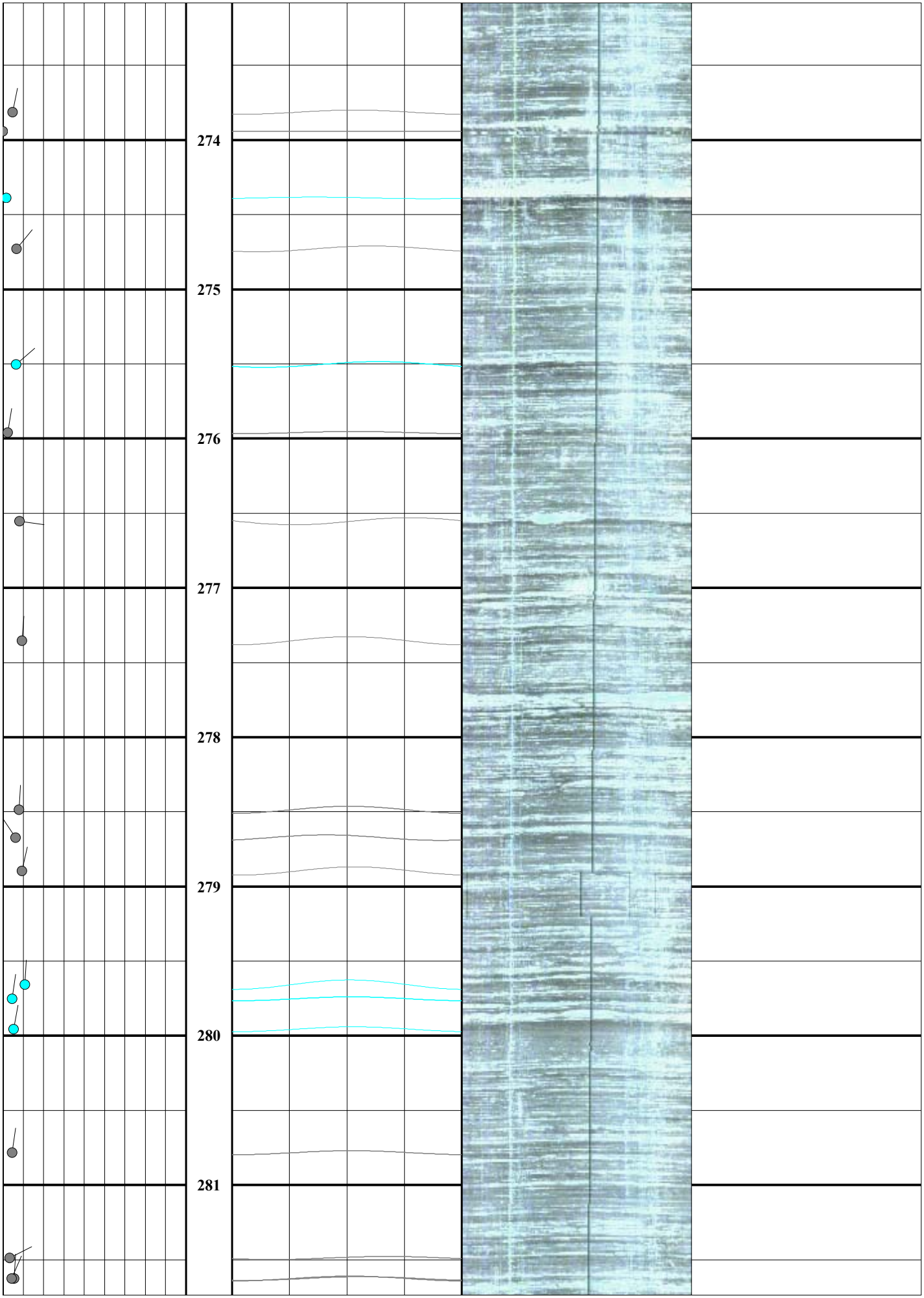

230
231
232
233
234
235
236
237
238

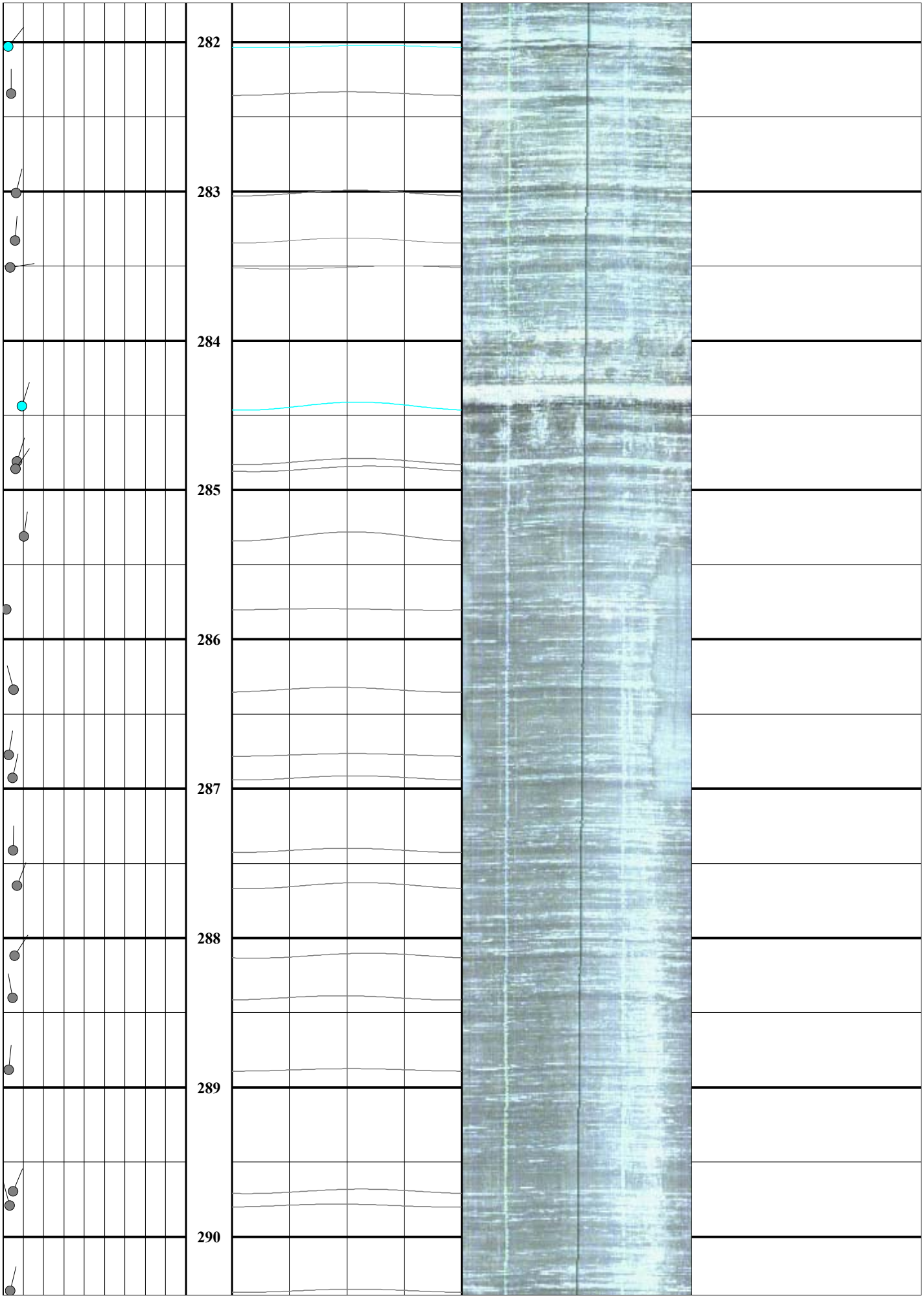

239
240
241
242
243
244
245
246
247

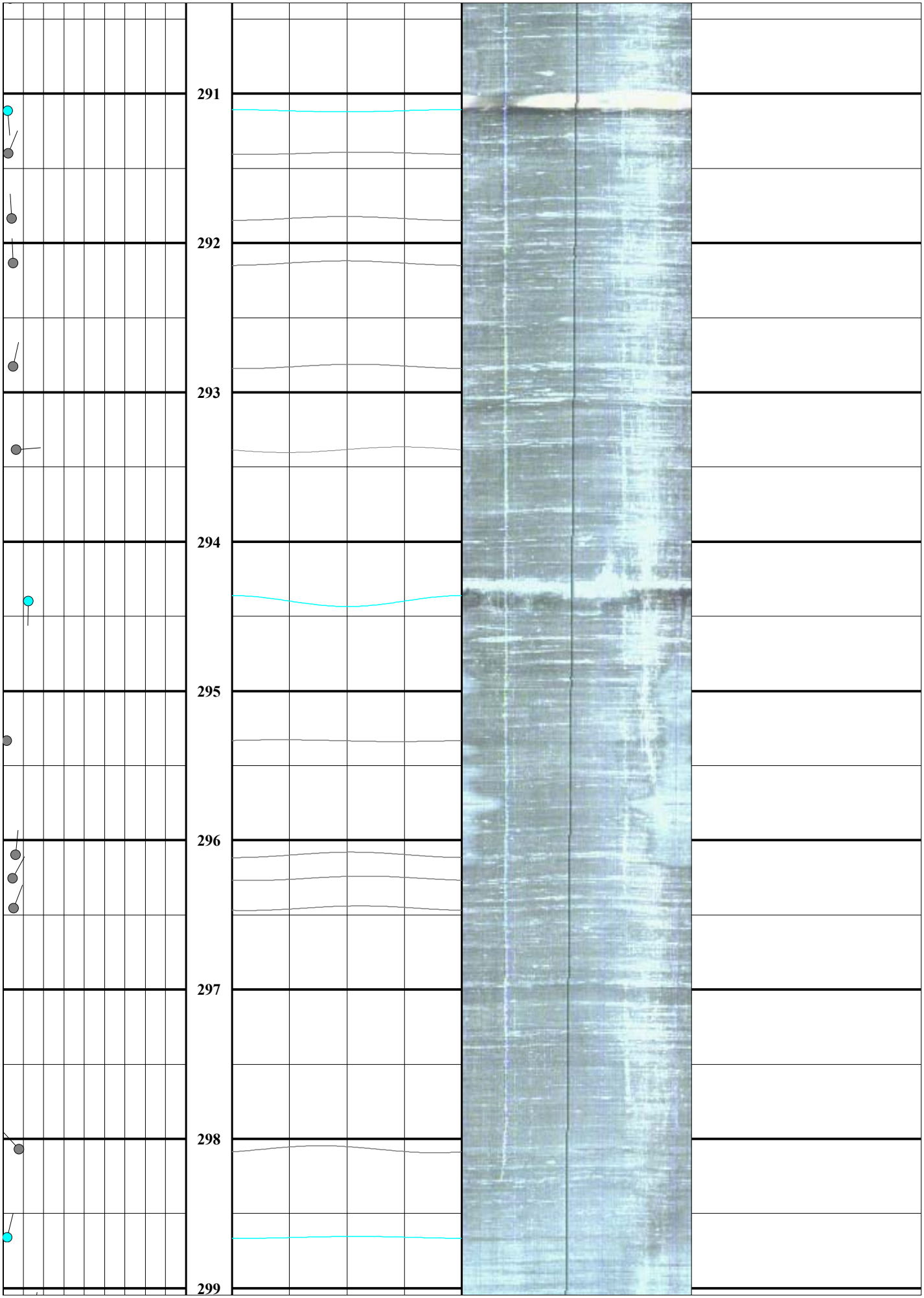

248
249
250
251
252
253
254
255

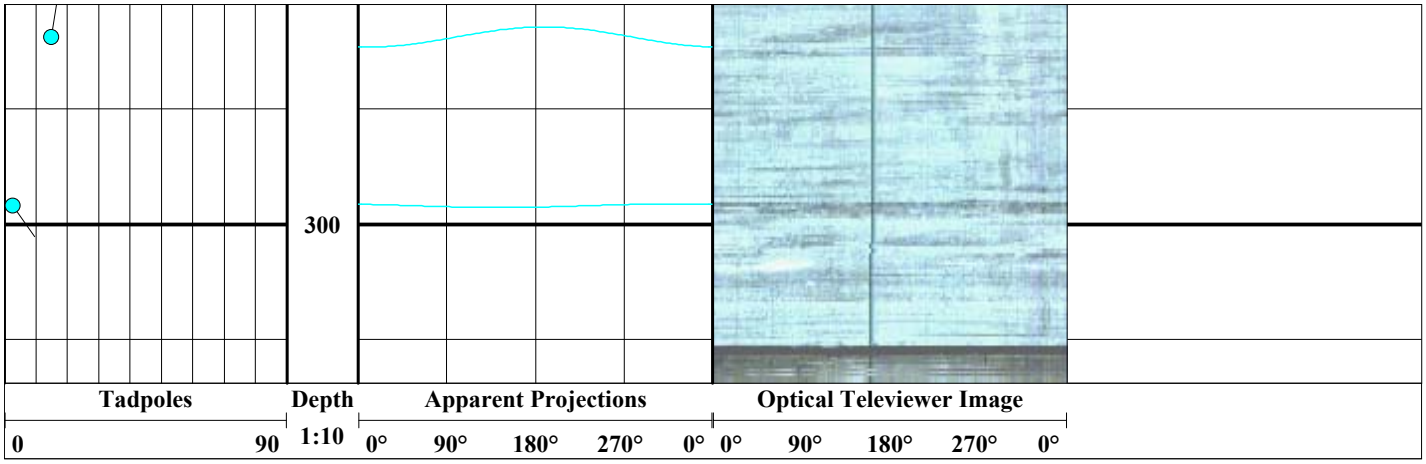

256
257
258
259
260
261
262
263
264


265
266
267
268
269
270
271
272
273


274
275
276
277
278
279
280
281


282
283
284
285
286
287
288
289
290

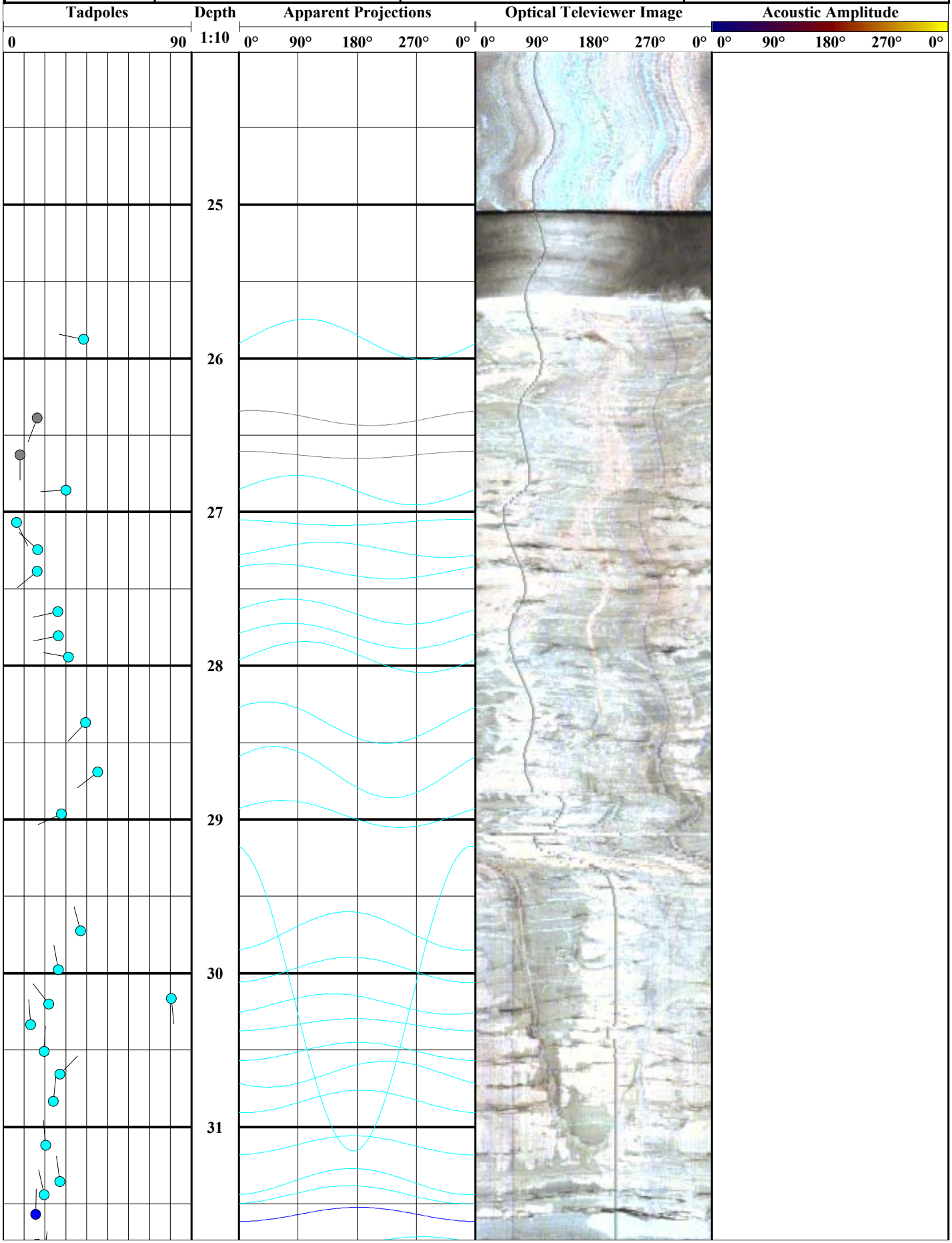

291
292
293
294
295
296
297
298
299

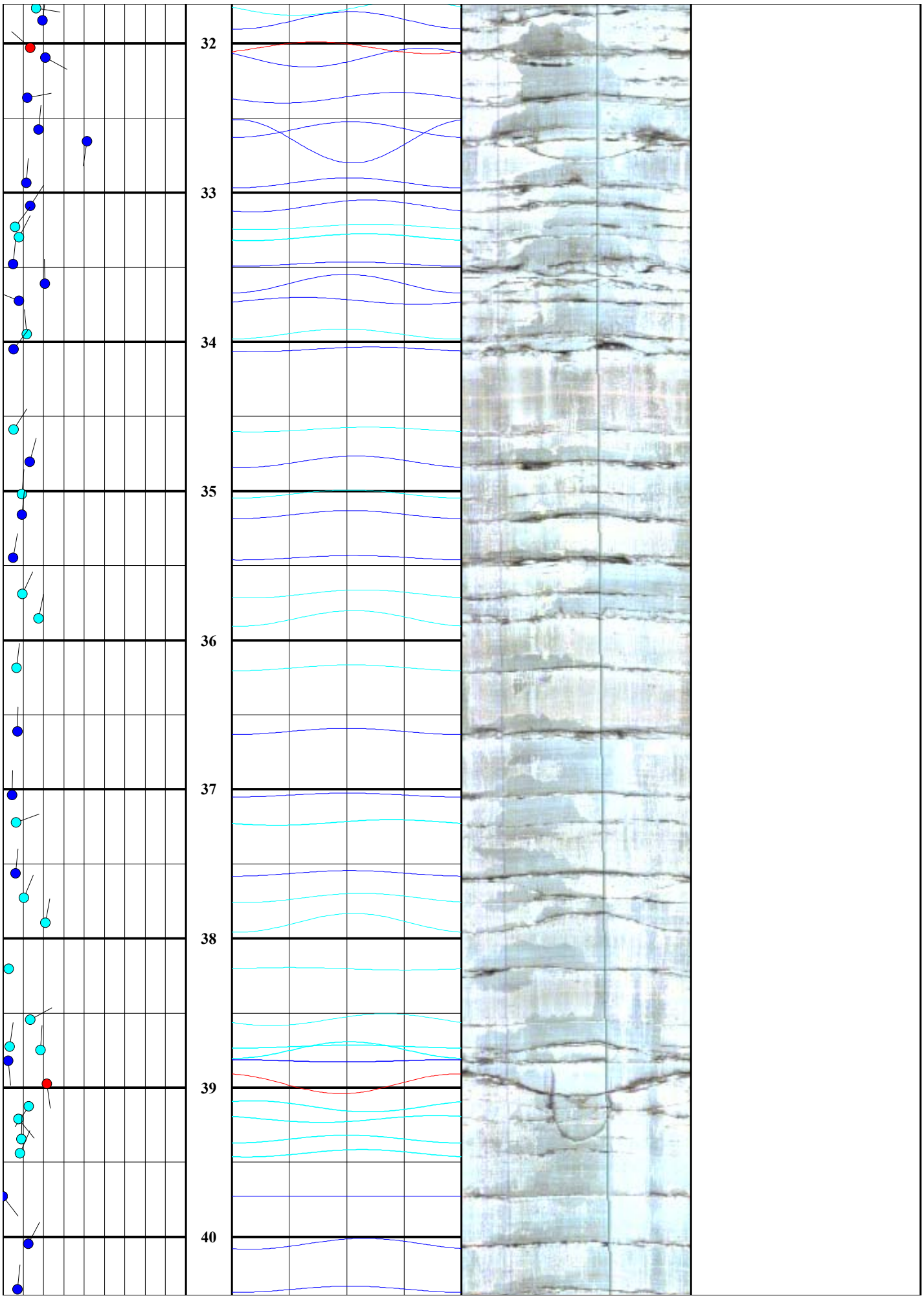

300
Tadpoles
Depth
Apparent Projections
Optical Televiewer Image
0
90
1:10
0°
90°
180°
270°
0°
0°
90°
180°
270°
0°

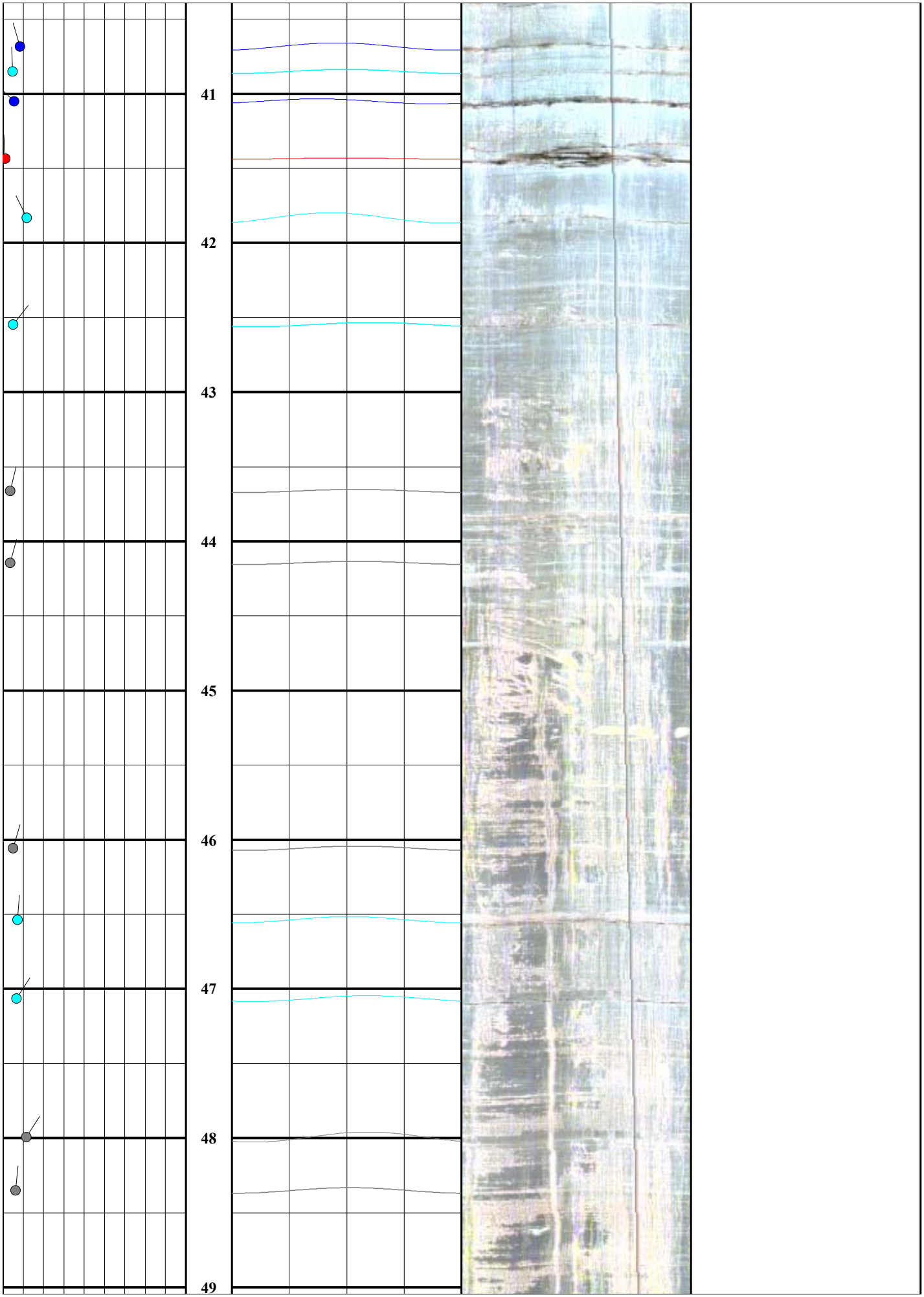
Optical/Acoustic Borehole Image Plot

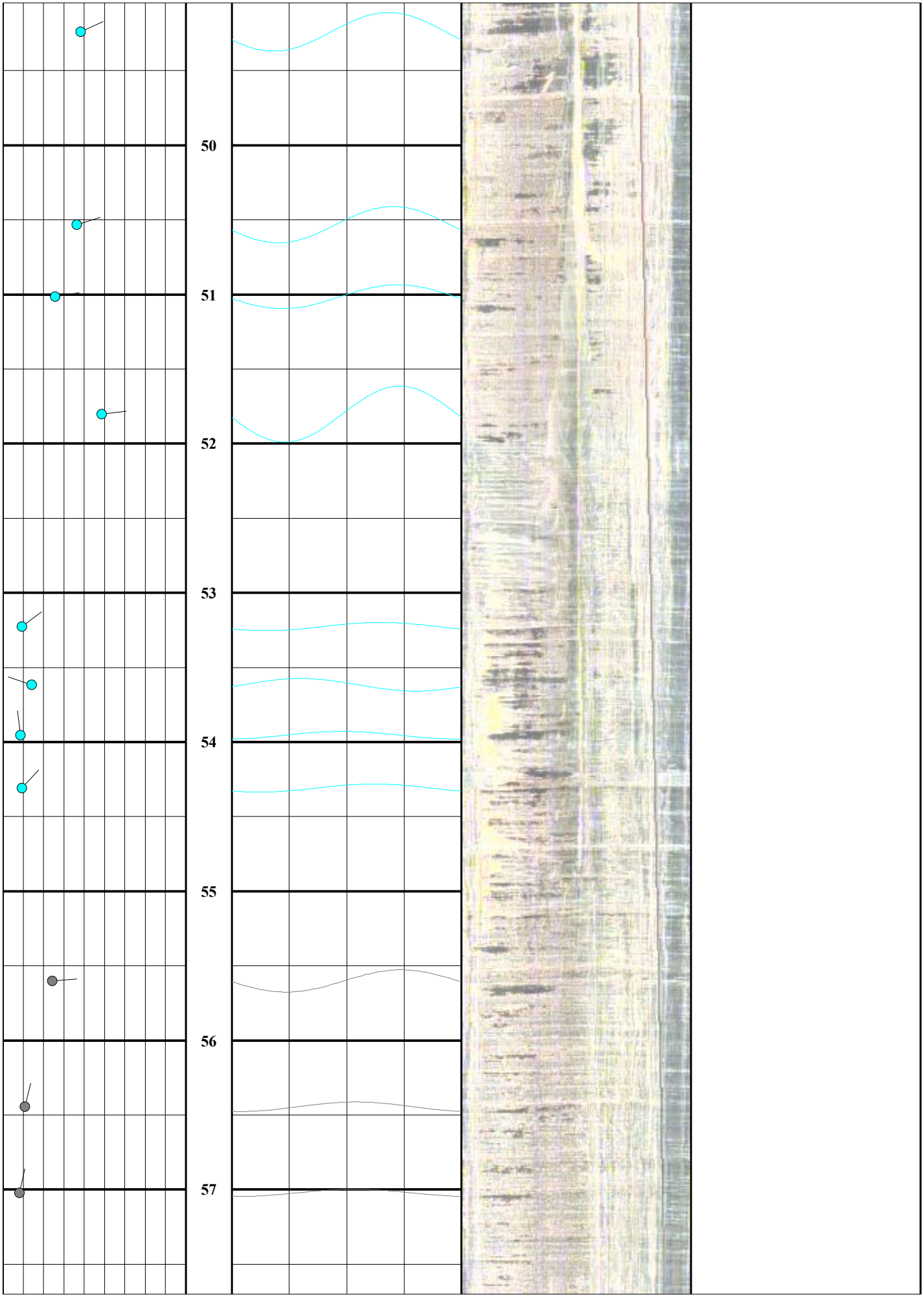
COMPANY: S. M. Stoller Corp.	PROJECT: Crescent Junction
DATE LOGGED: 9 December 2005	WELL: CH-0205

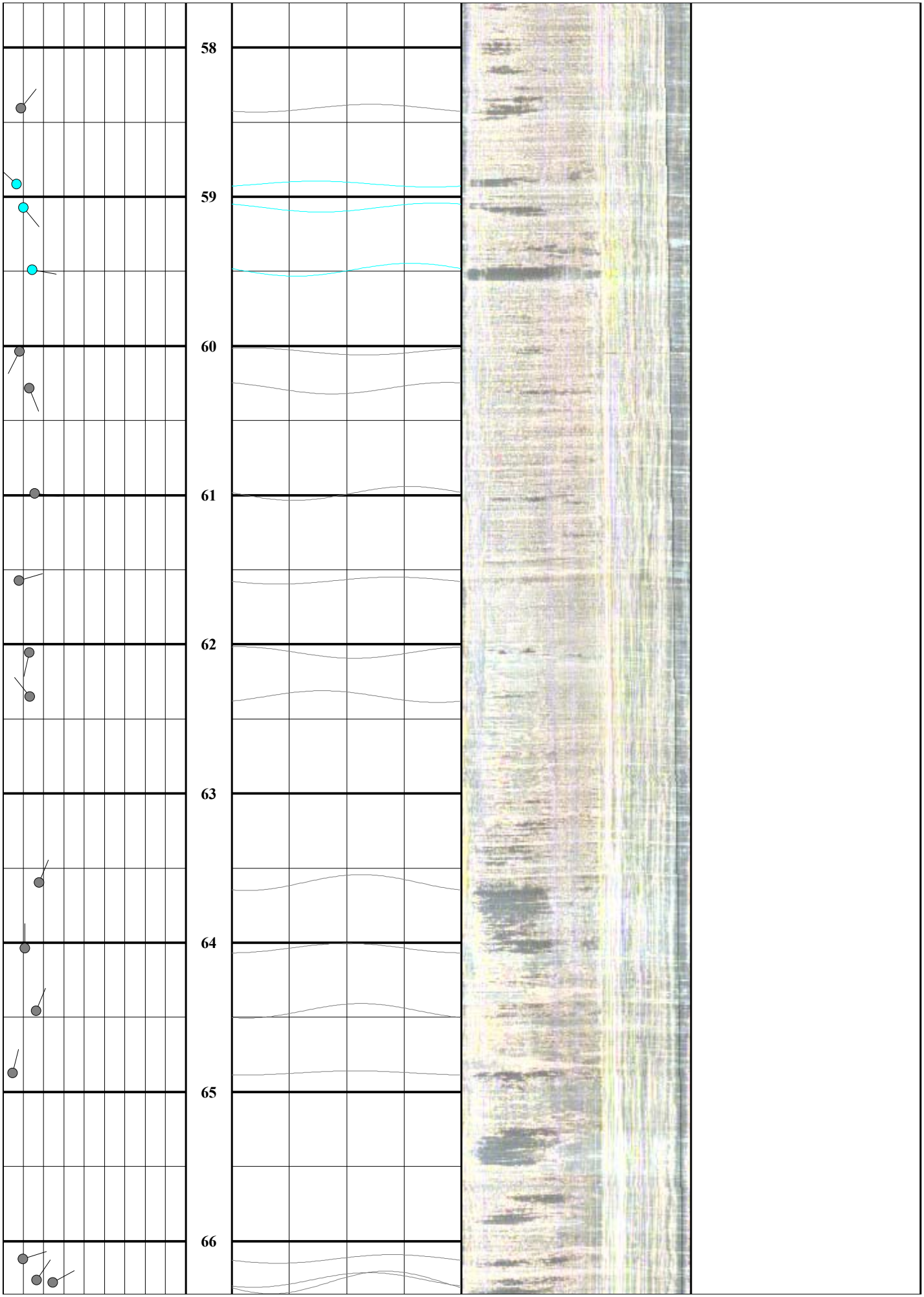
COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com

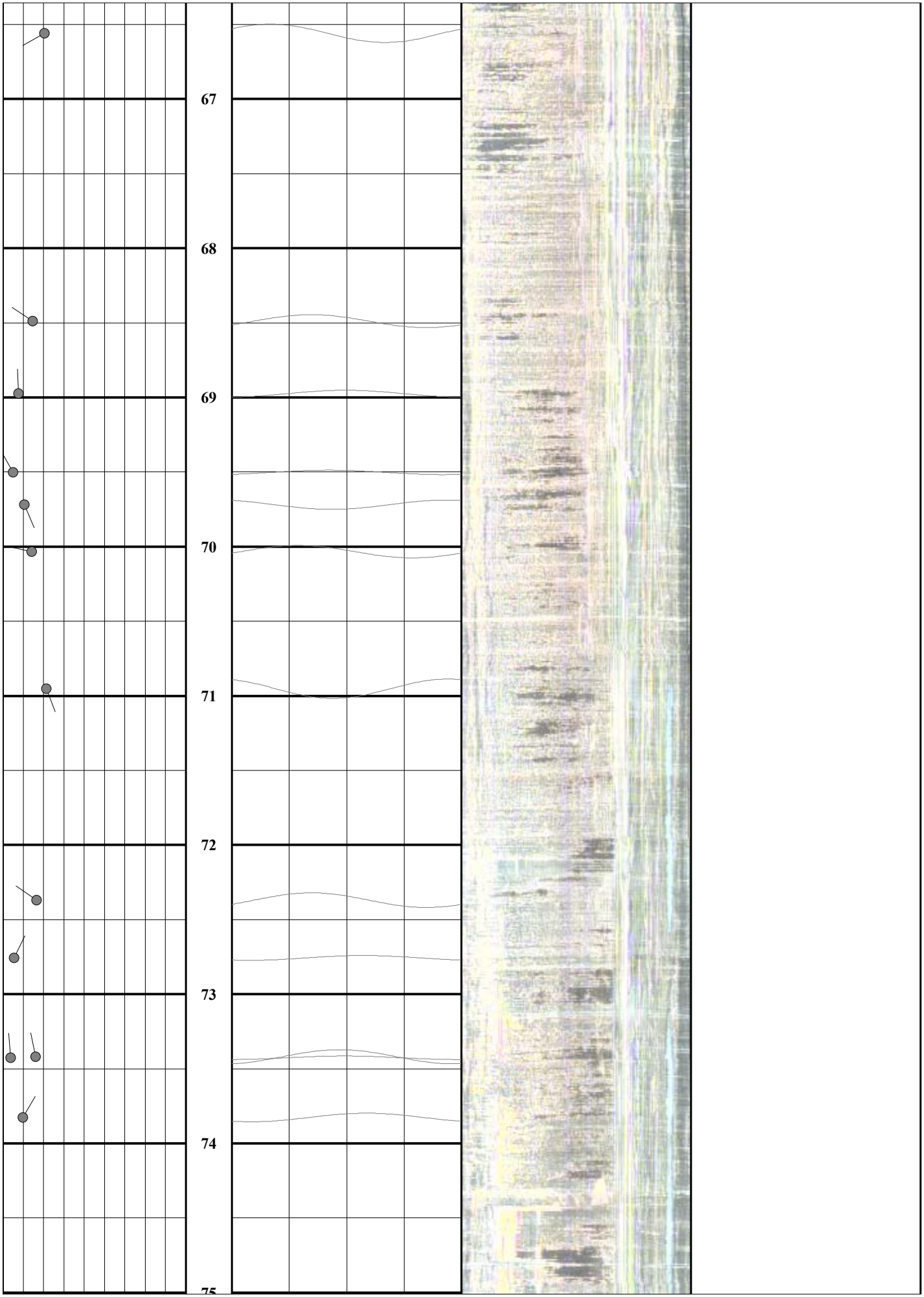


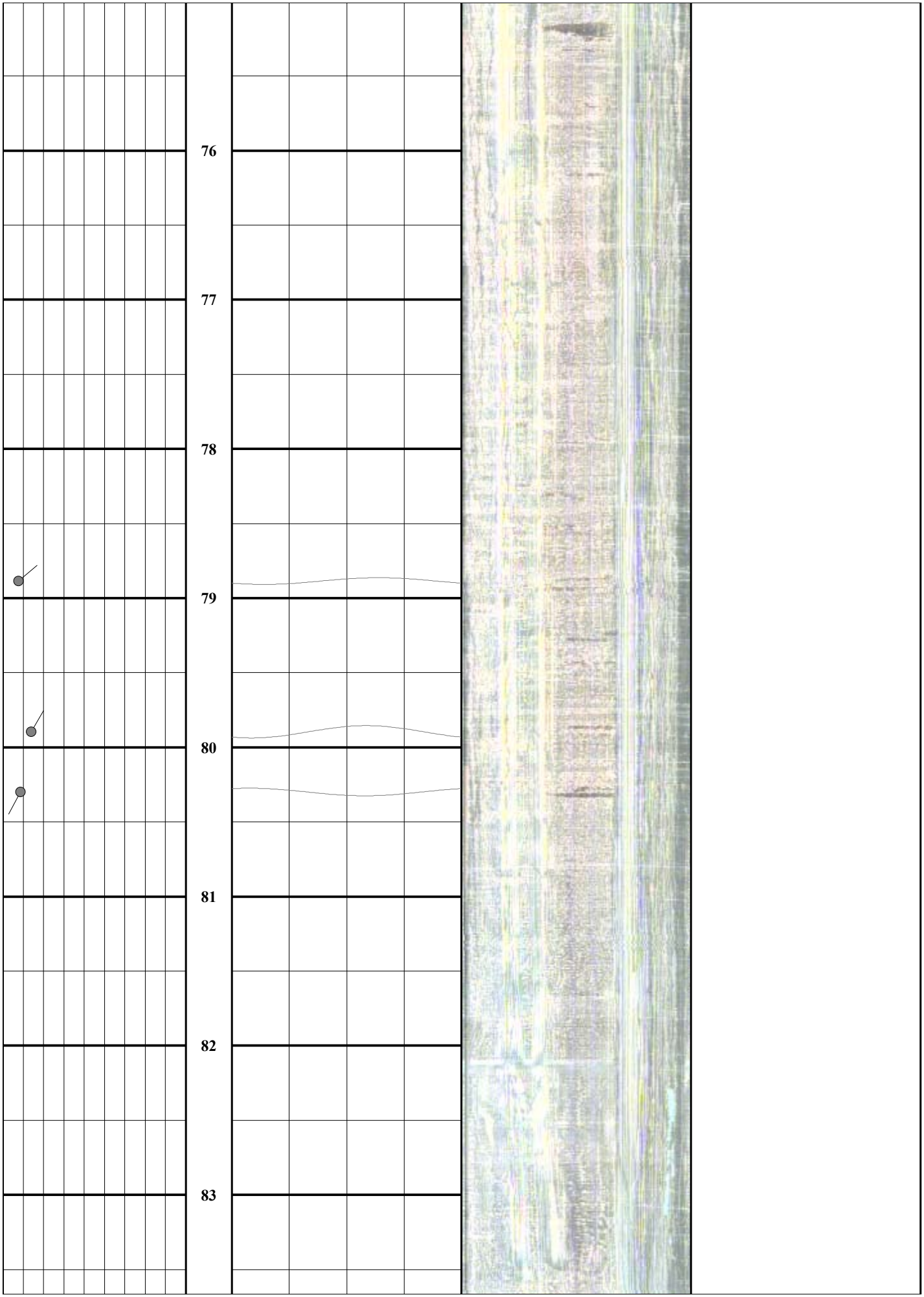

32
33
34
35
36
37
38
39
40

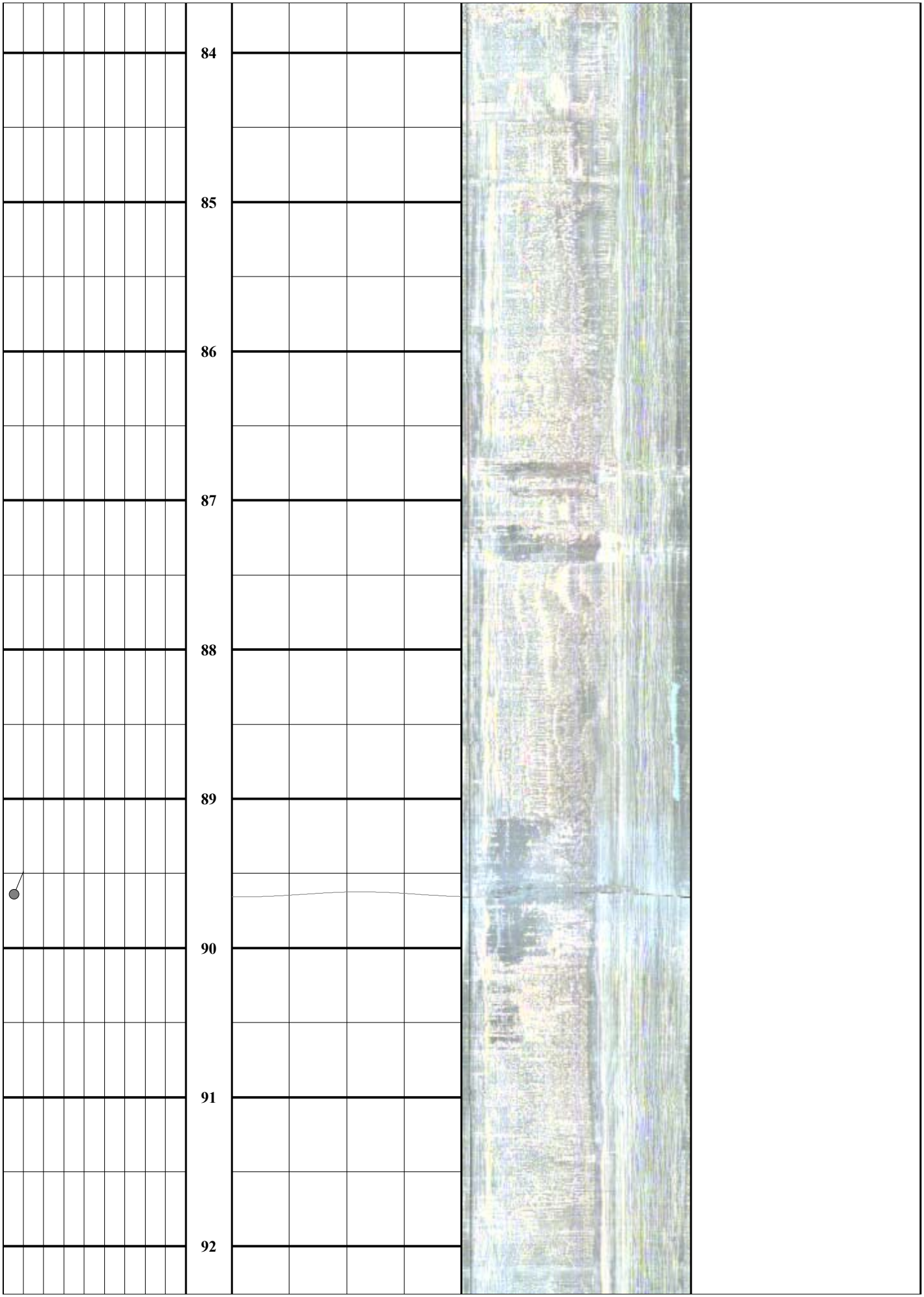

41
42
43
44
45
46
47
48
49


50
51
52
53
54
55
56
57


58
59
60
61
62
63
64
65
66


67
68
69
70
71
72
73
74
75


76
77
78
79
80
81
82
83


84
85
86
87
88
89
90
91
92

93

94

95

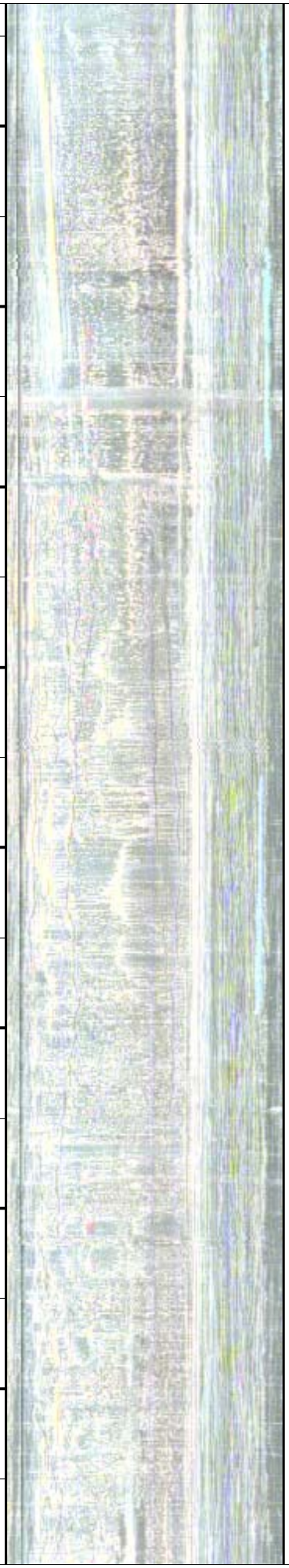
96

97

98

99

100



101

102

103

104

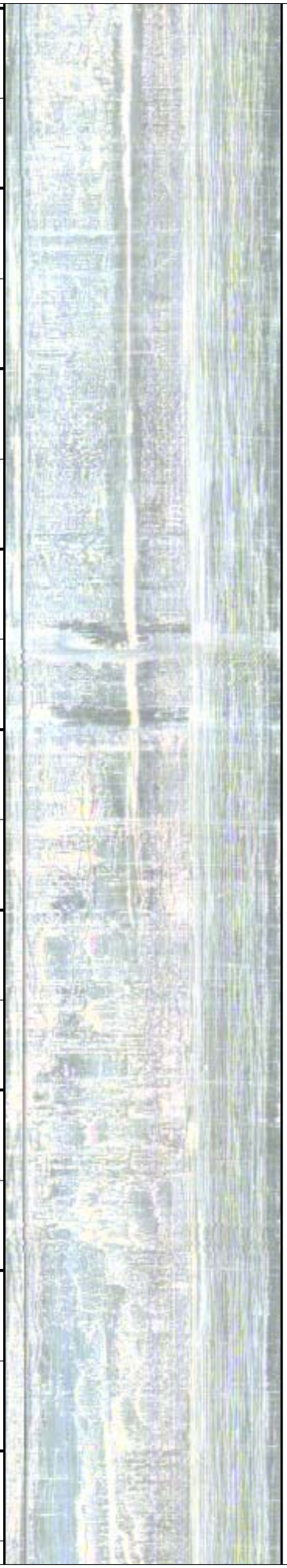
105

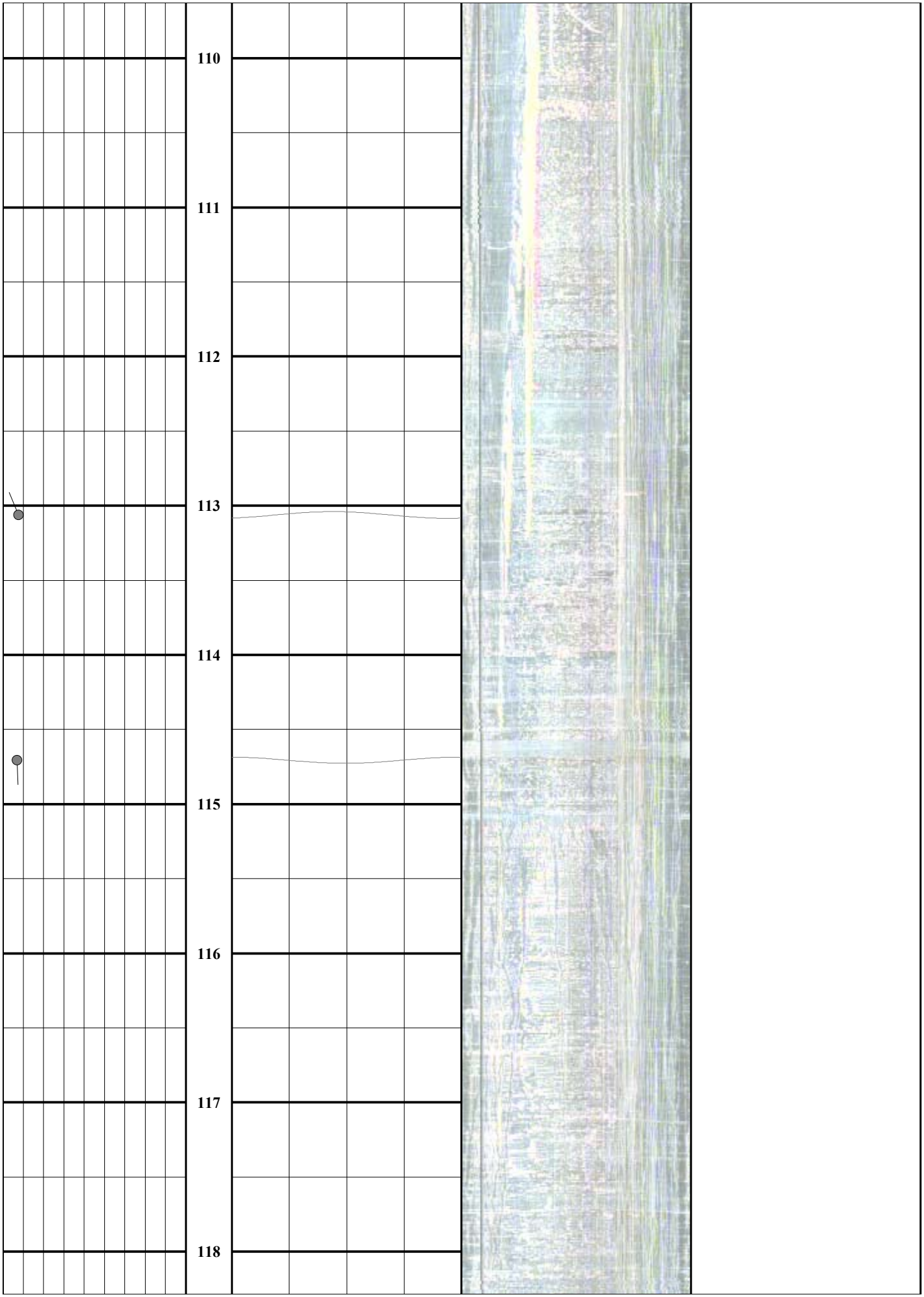
106

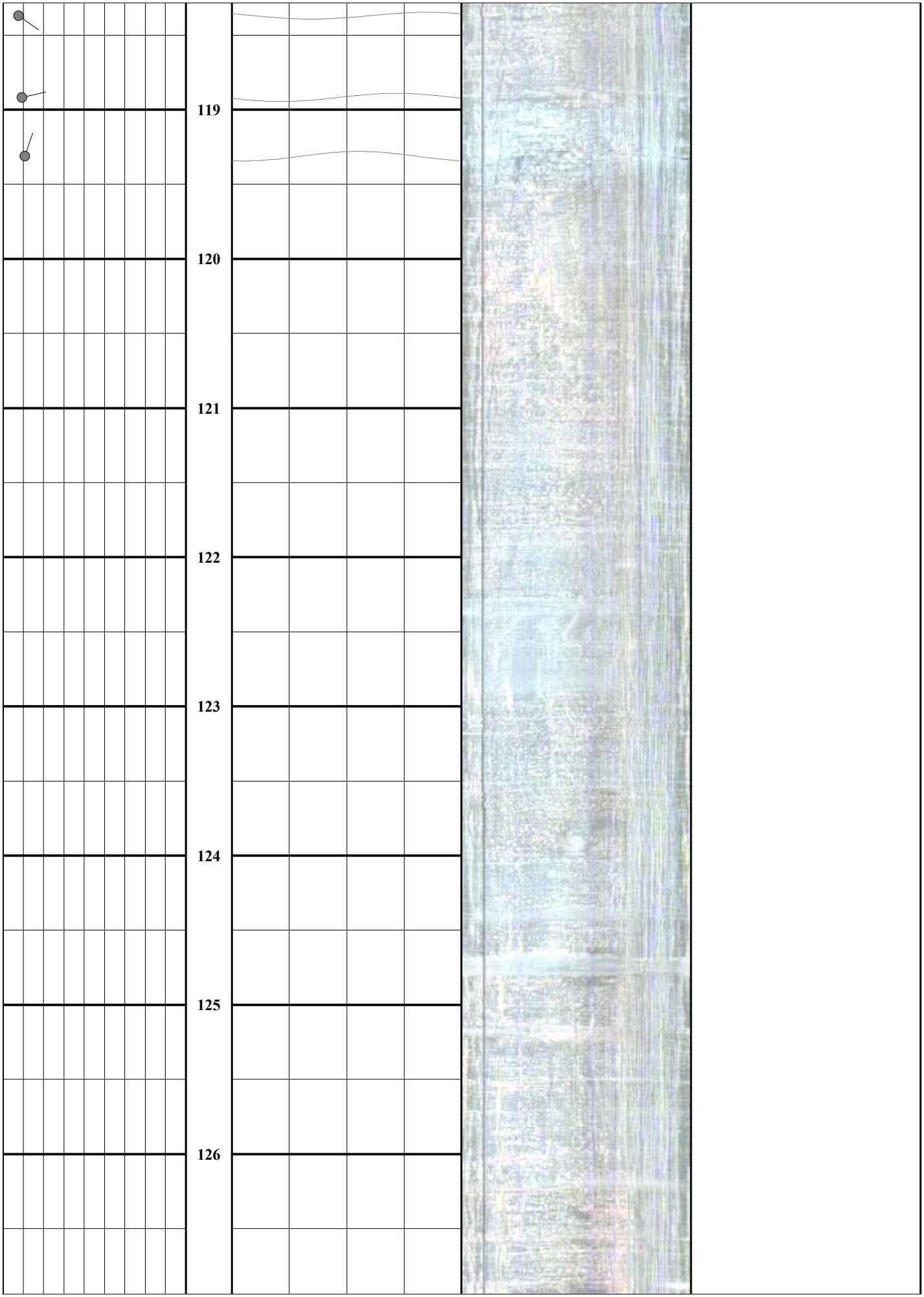
107

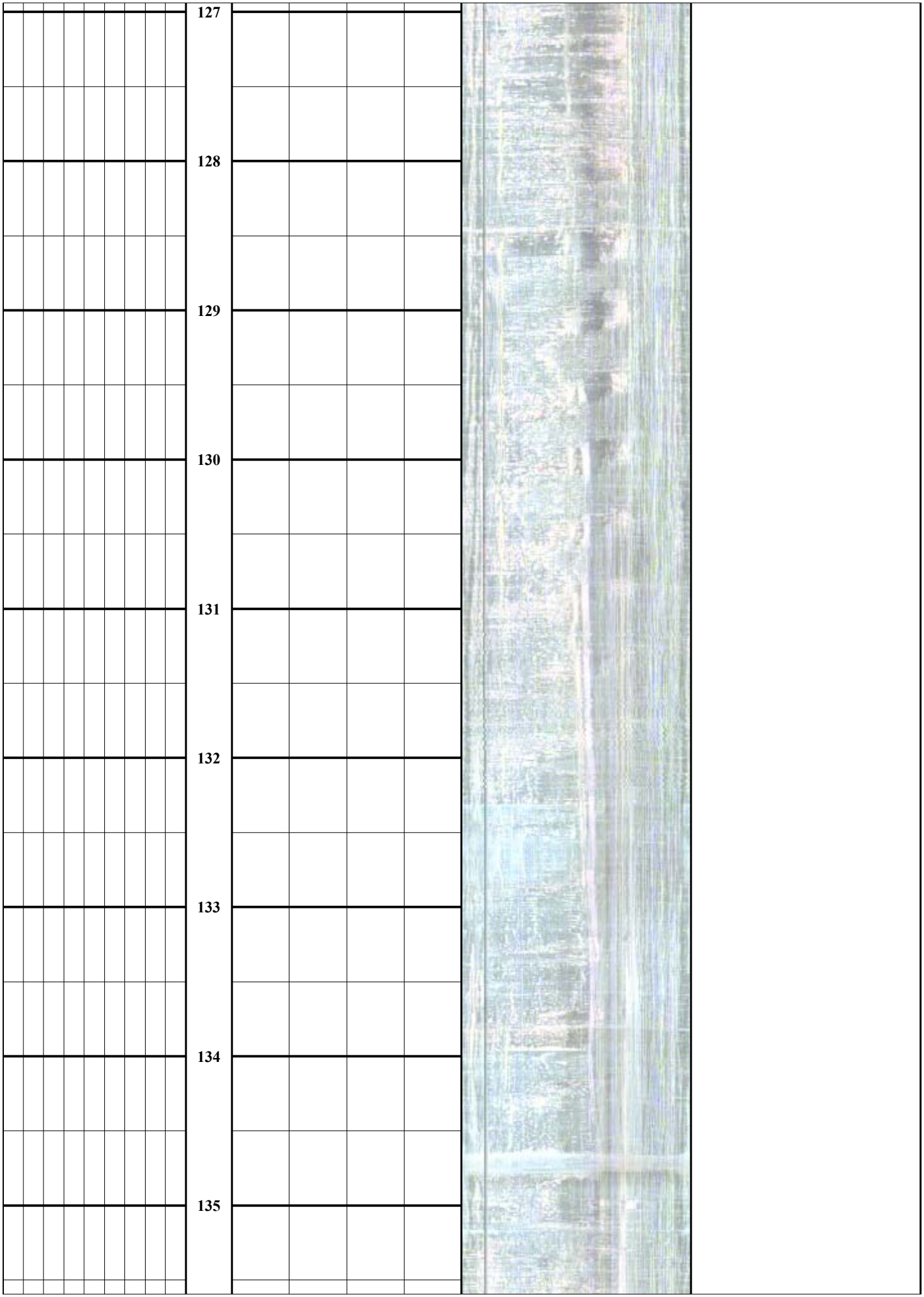
108

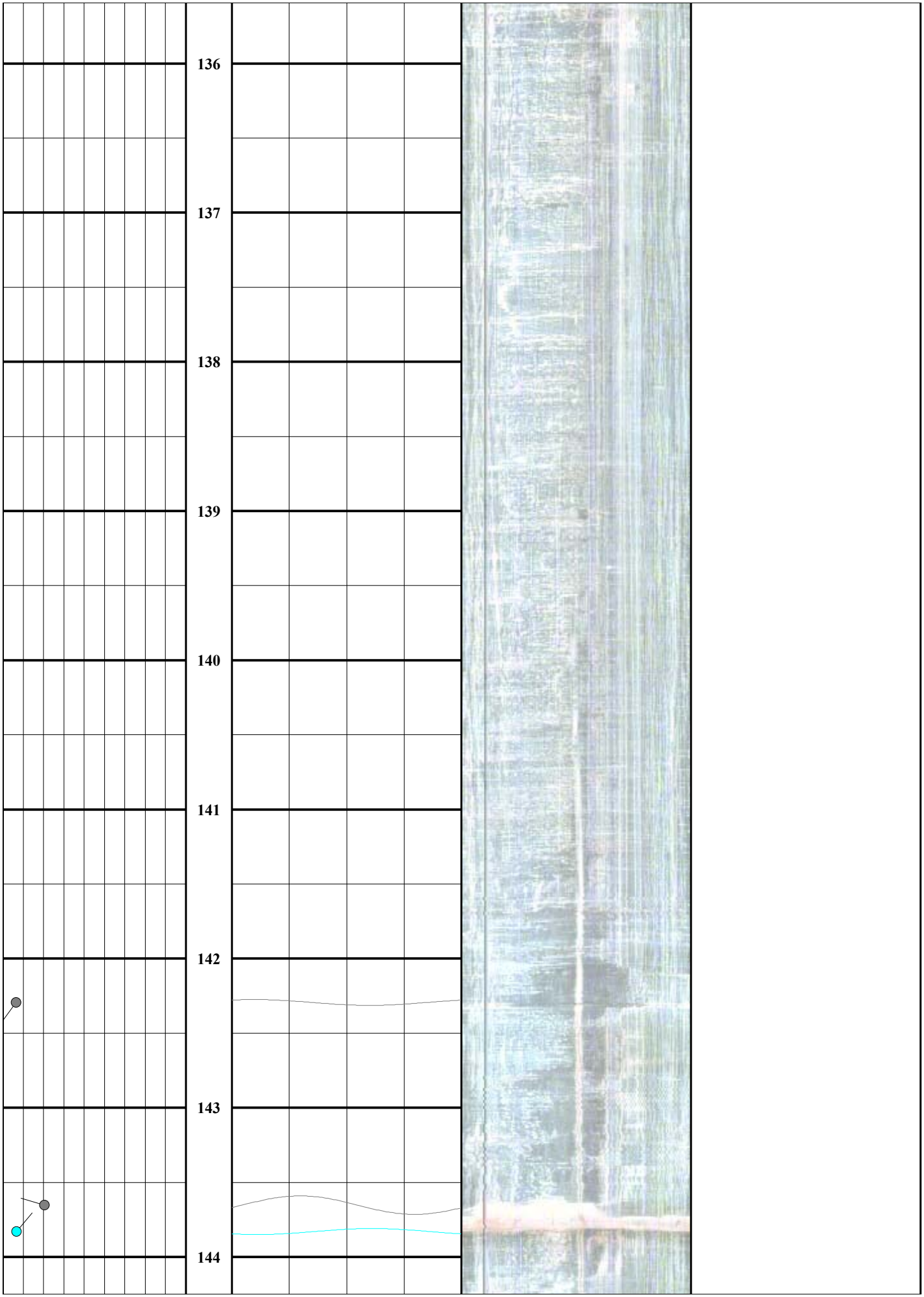
109




110
111
112
113
114
115
116
117
118


119
120
121
122
123
124
125
126


127
128
129
130
131
132
133
134
135


136
137
138
139
140
141
142
143
144

145

146

147

148

149

150

151

152

153

154

155

156

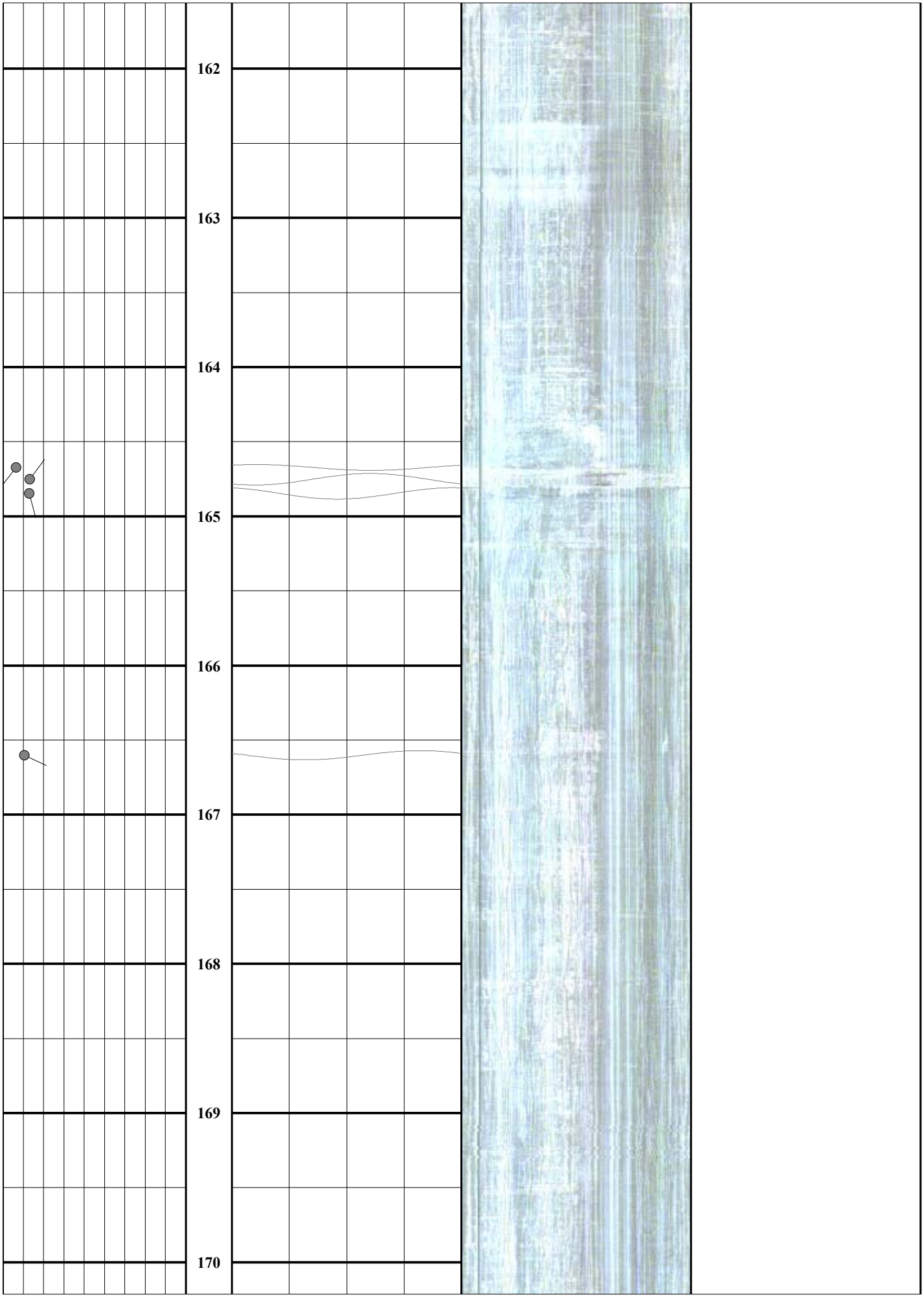
157

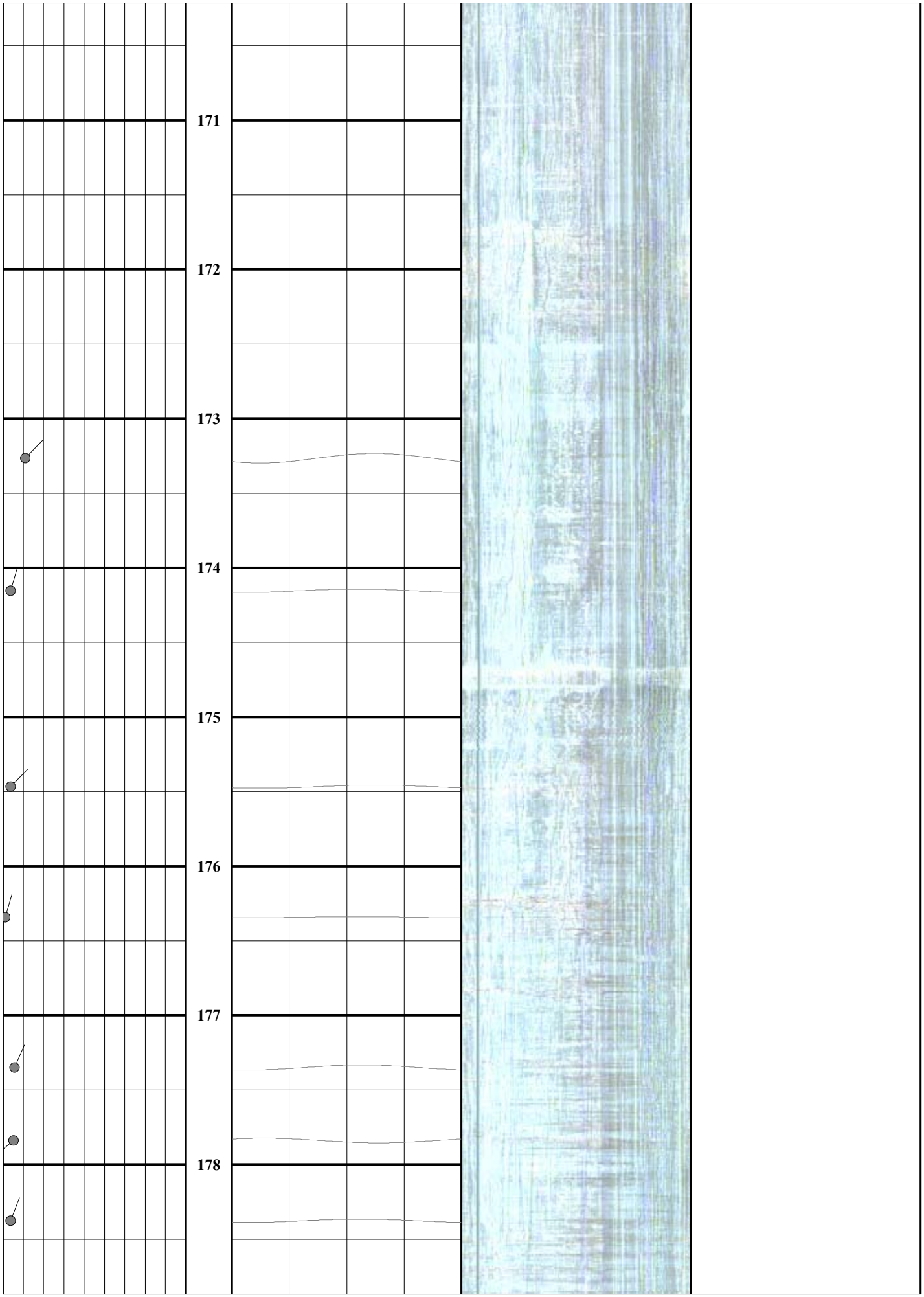
158

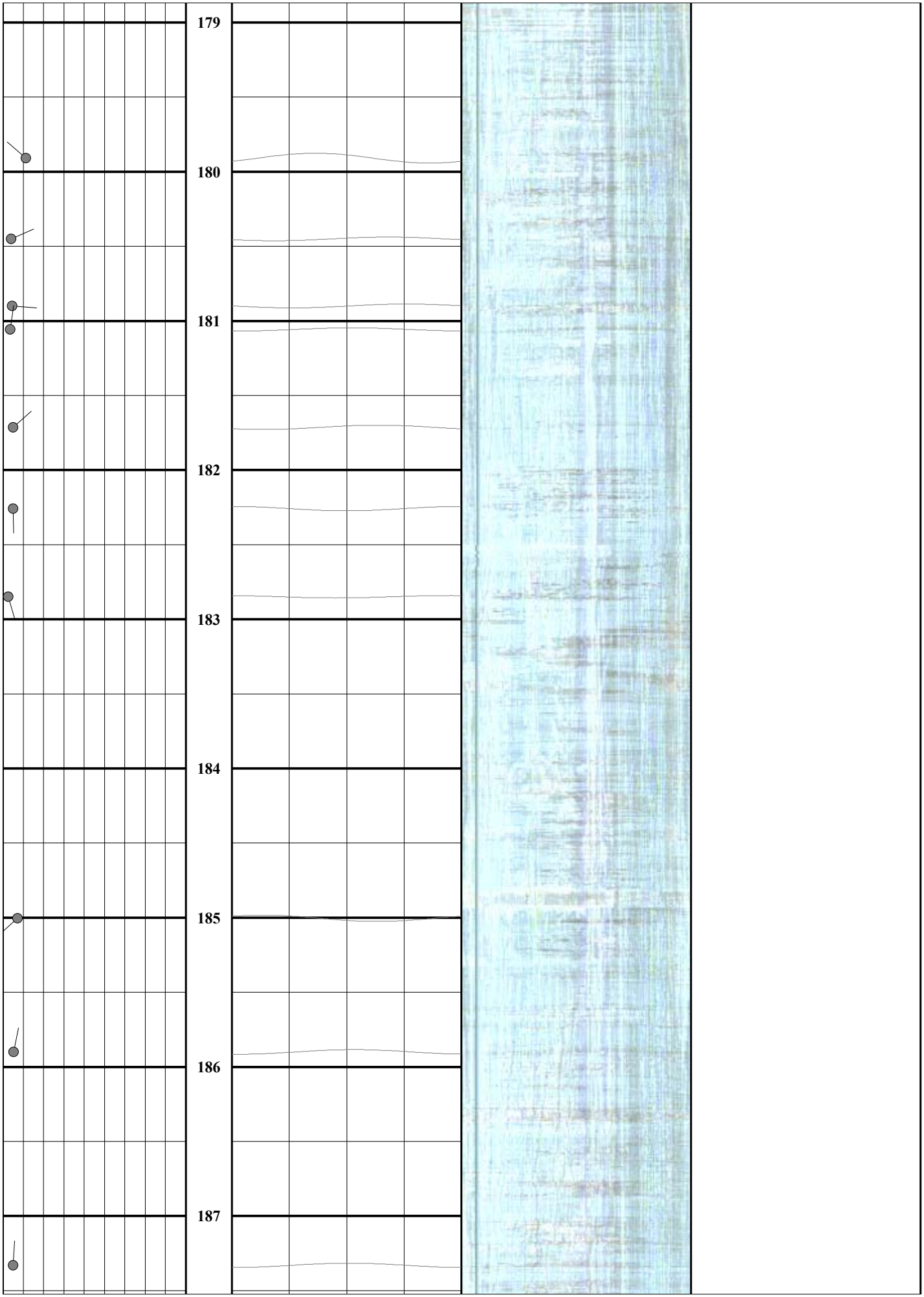
159

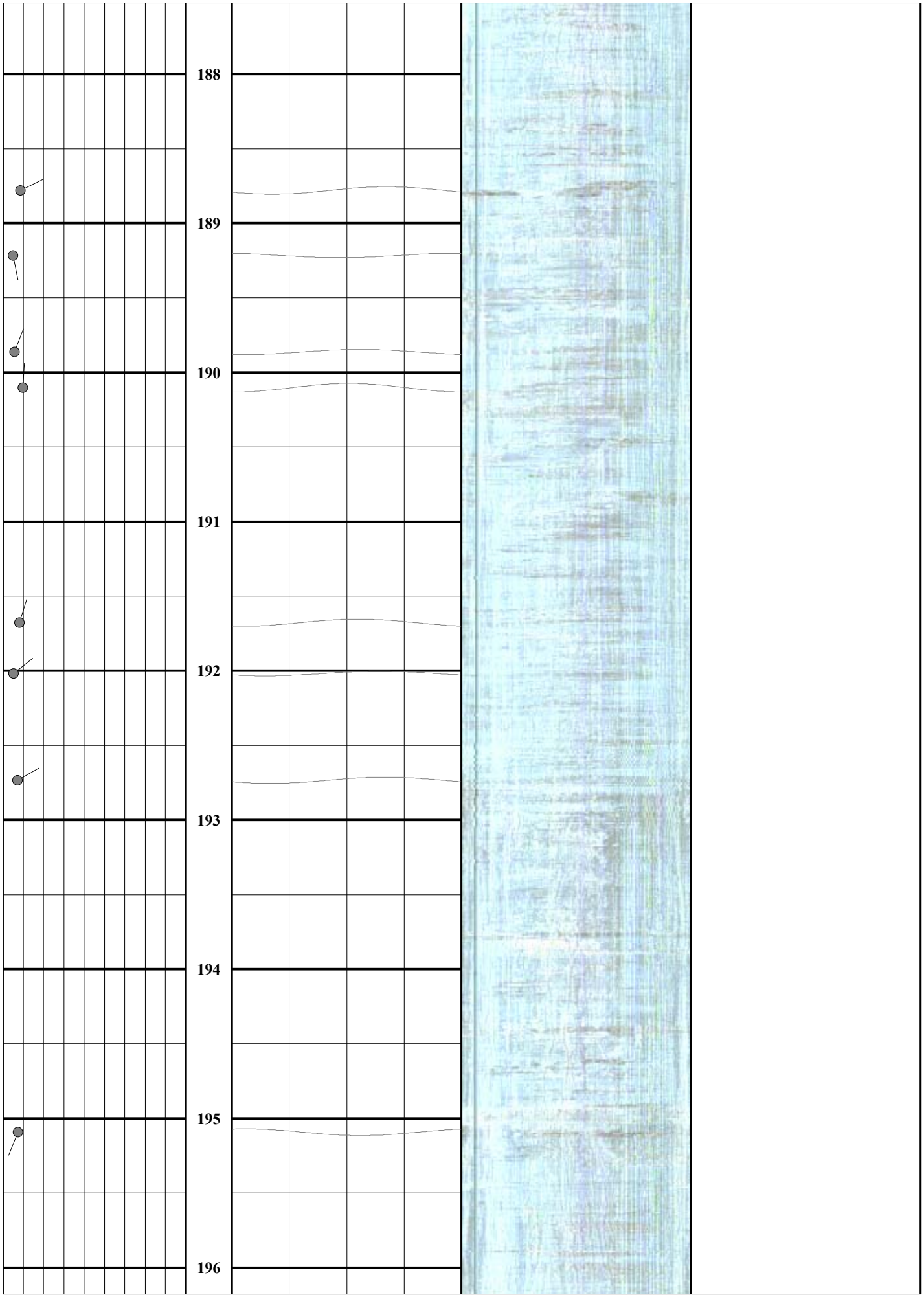
160

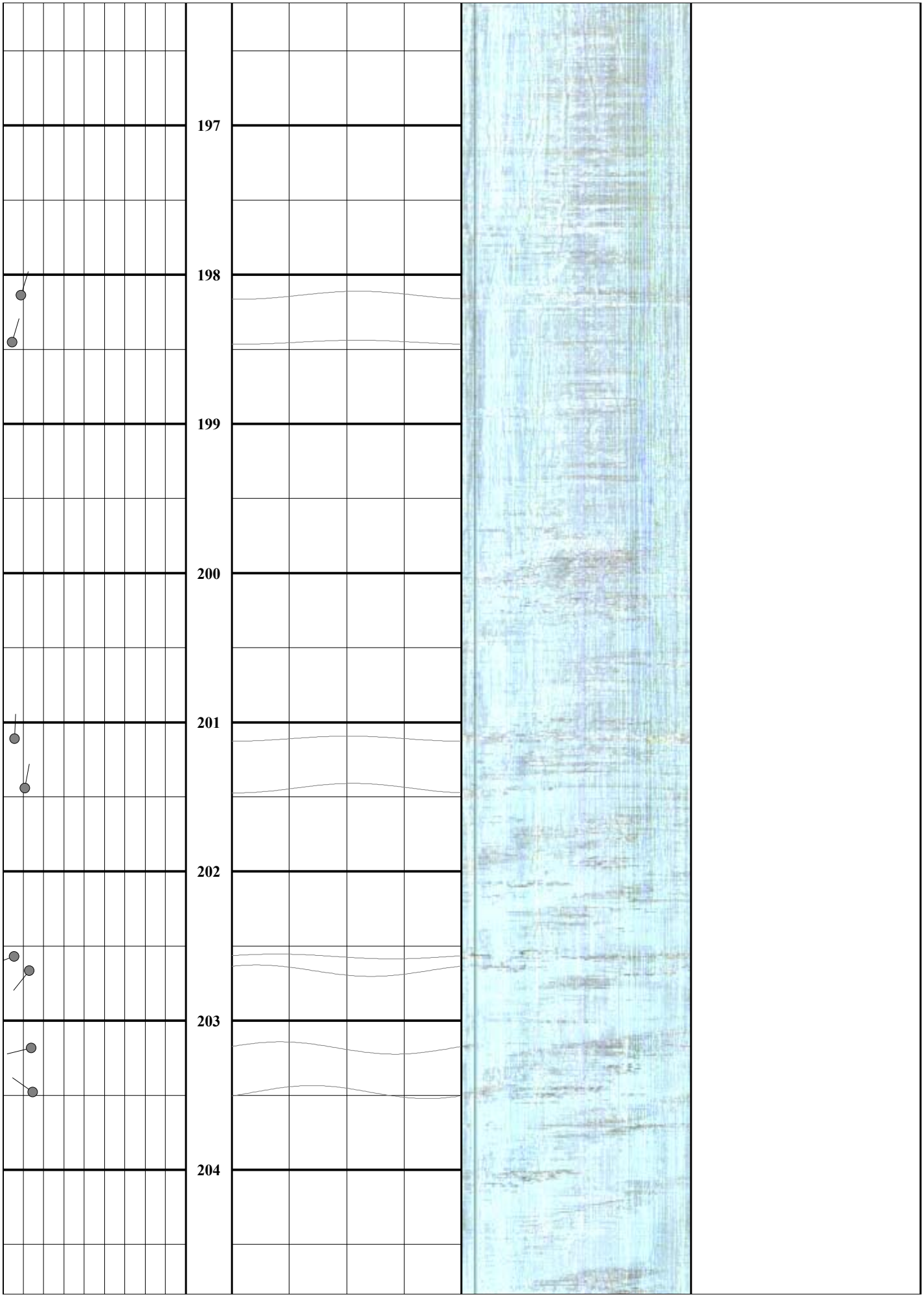
161

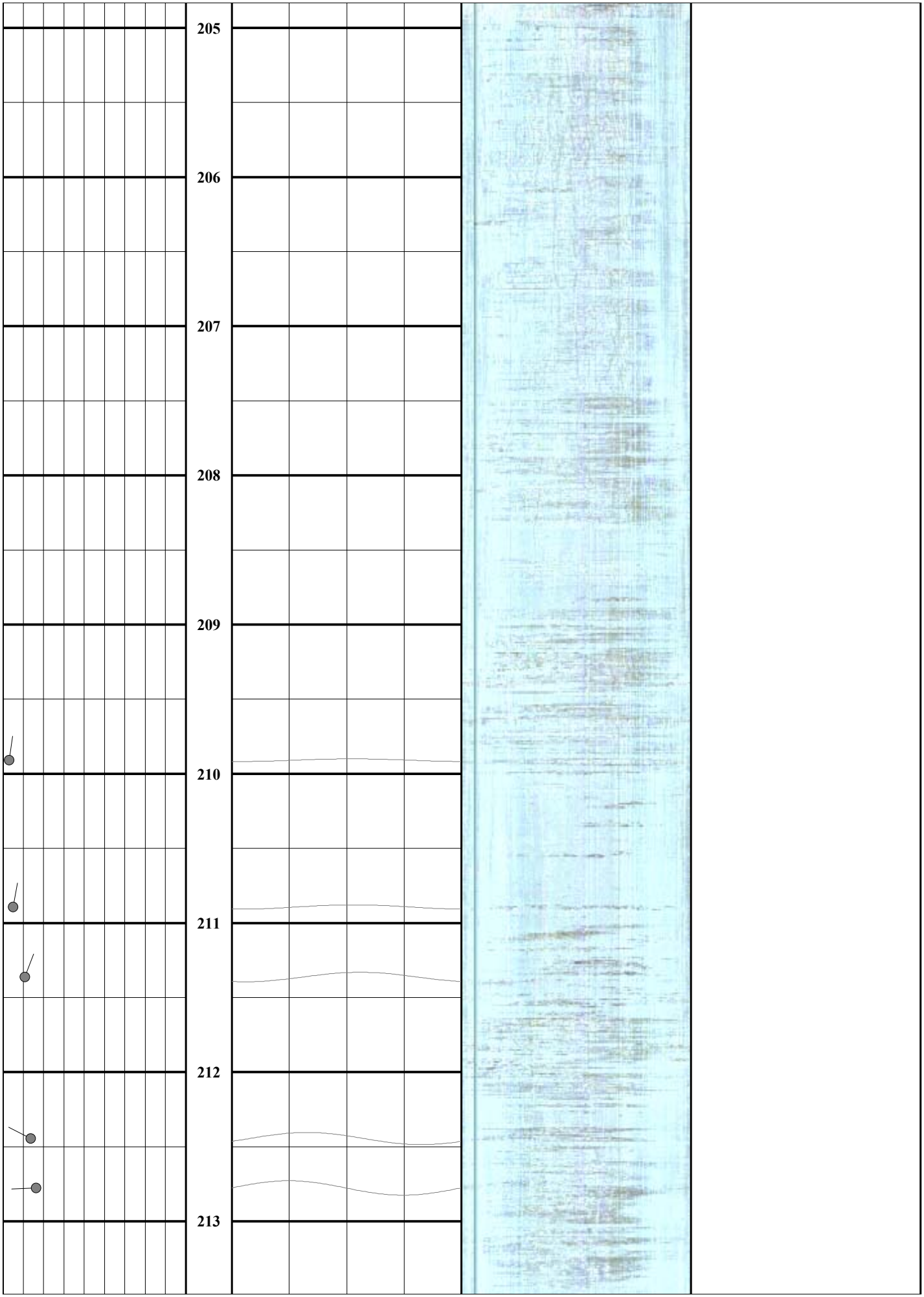

162
163
164
165
166
167
168
169
170

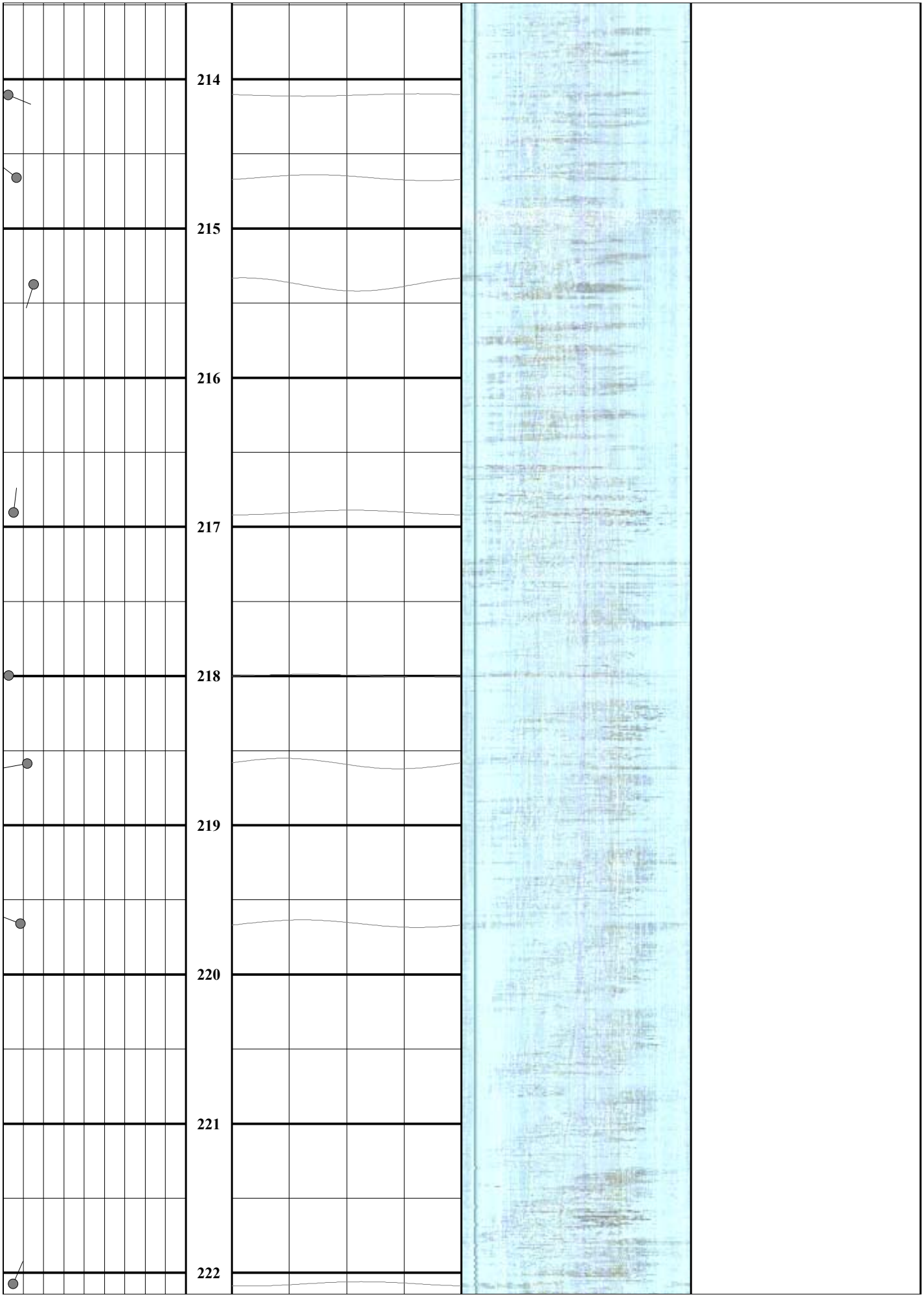

171
172
173
174
175
176
177
178

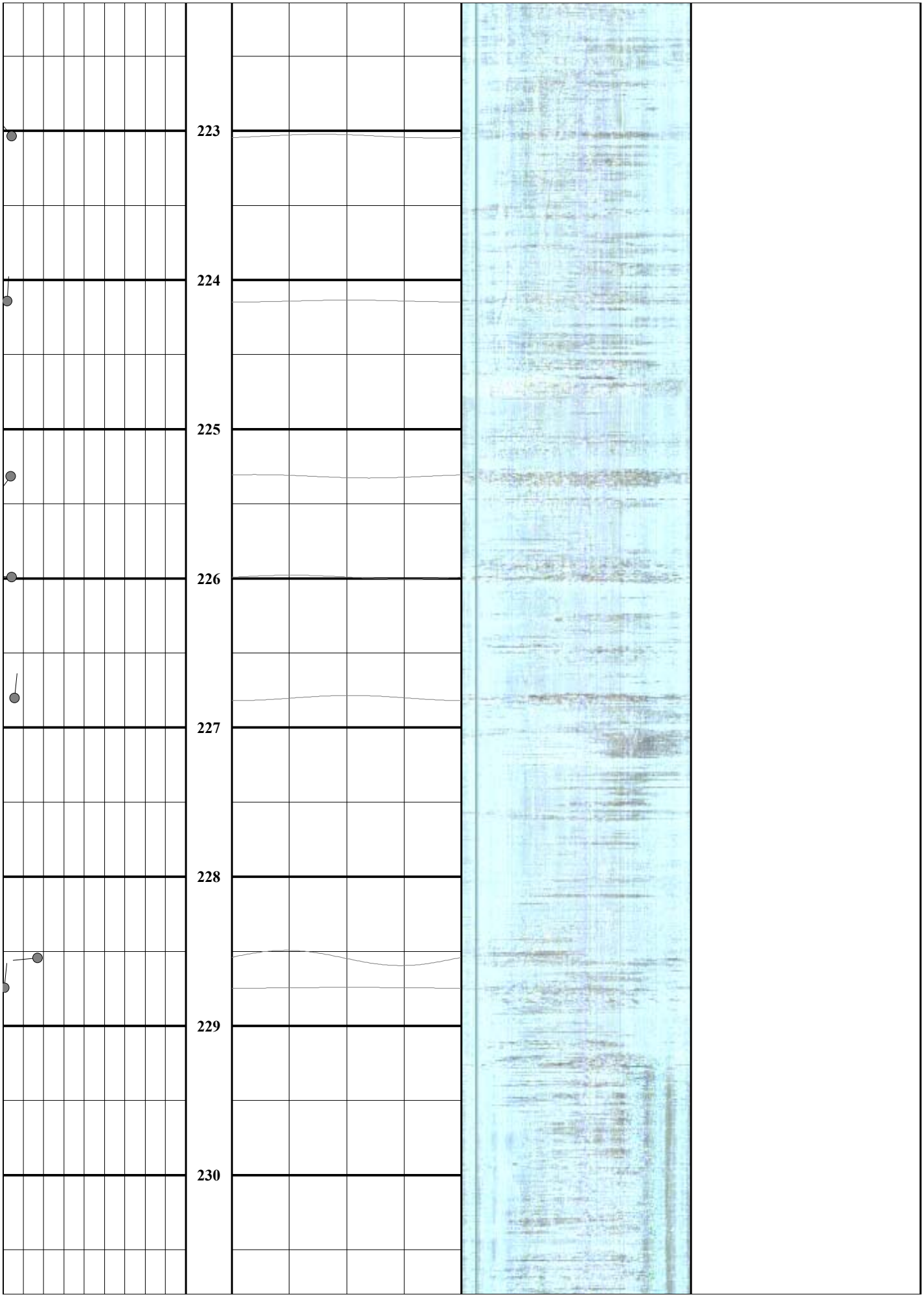

179
180
181
182
183
184
185
186
187

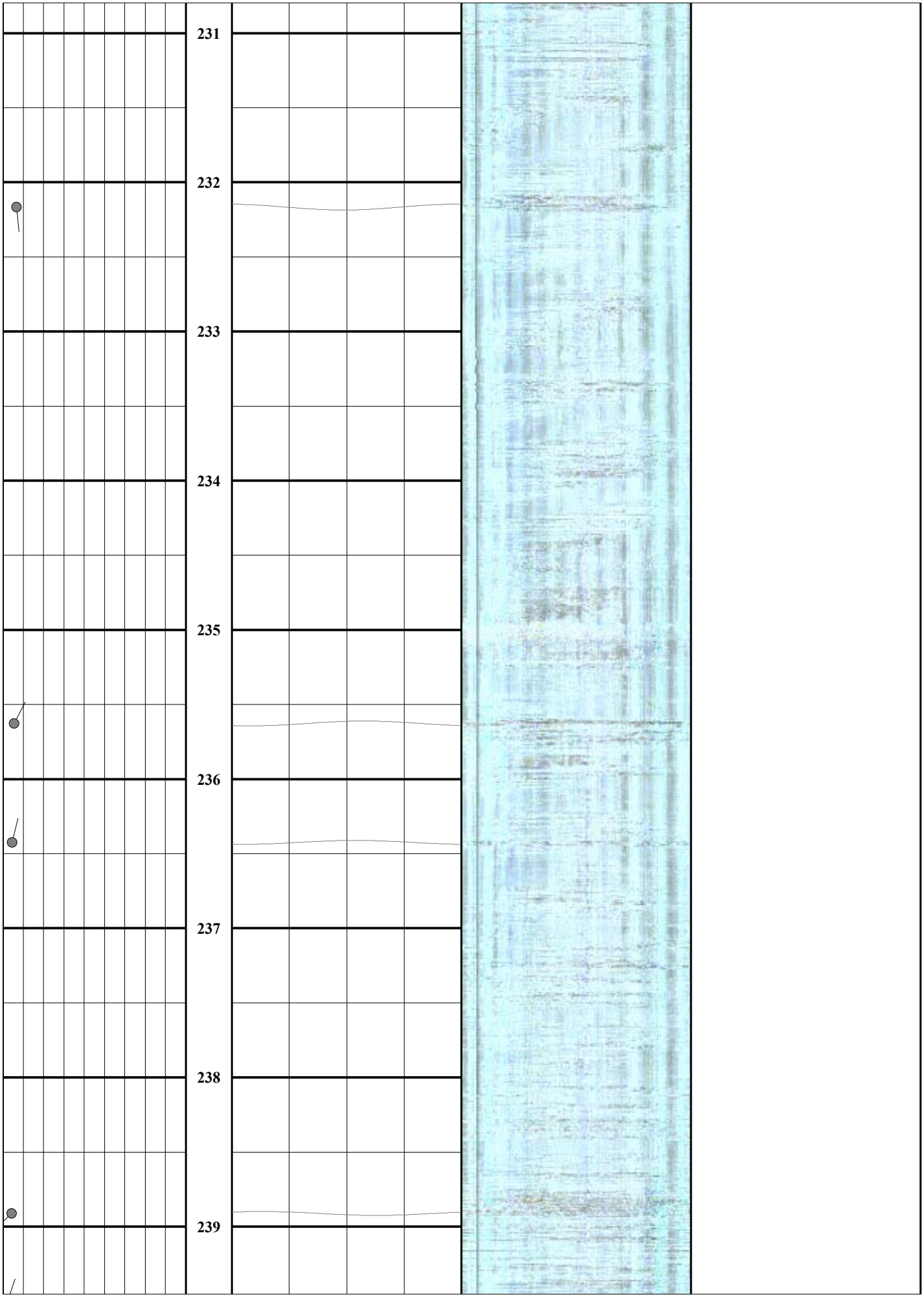

188
189
190
191
192
193
194
195
196

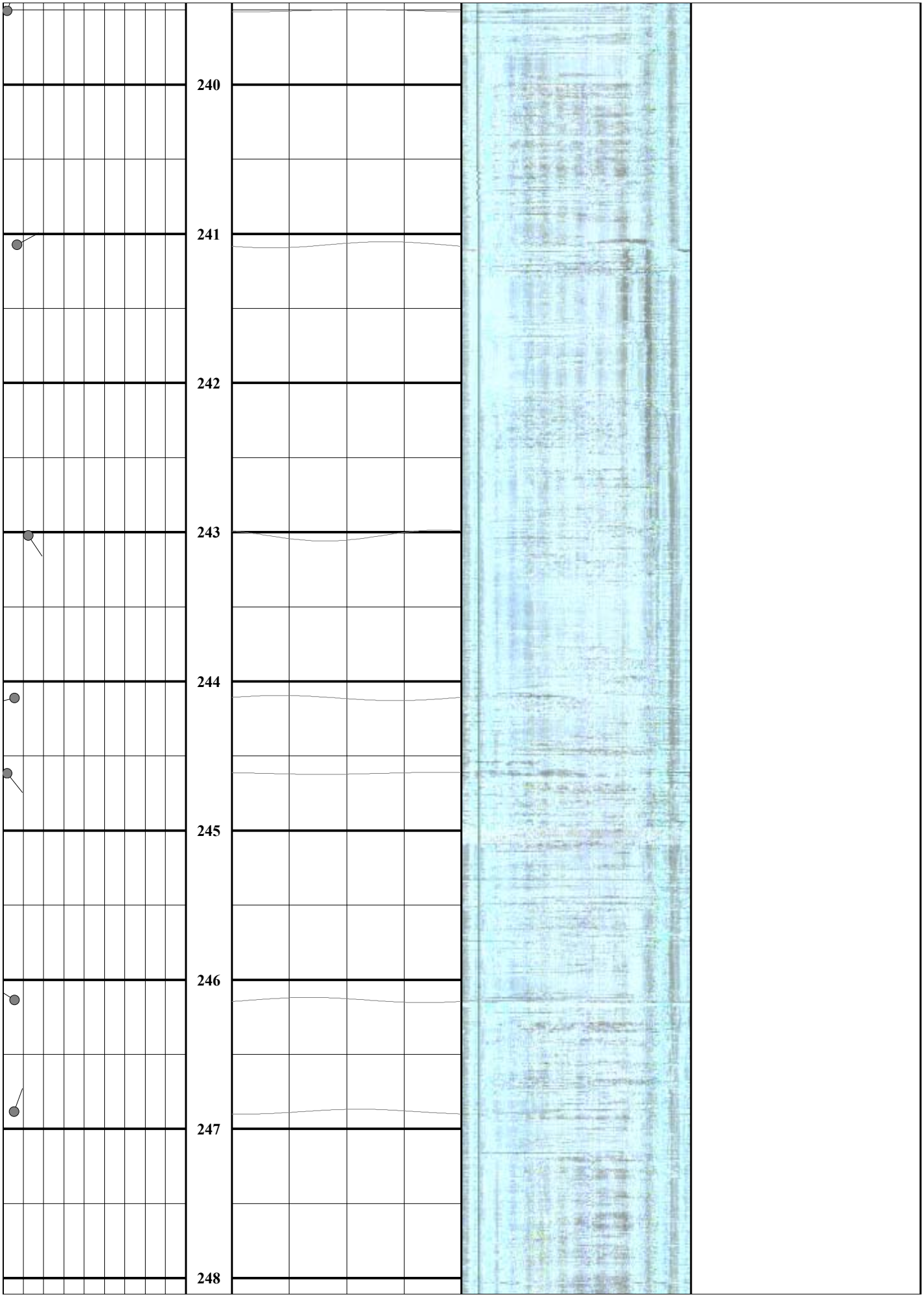

197
198
199
200
201
202
203
204

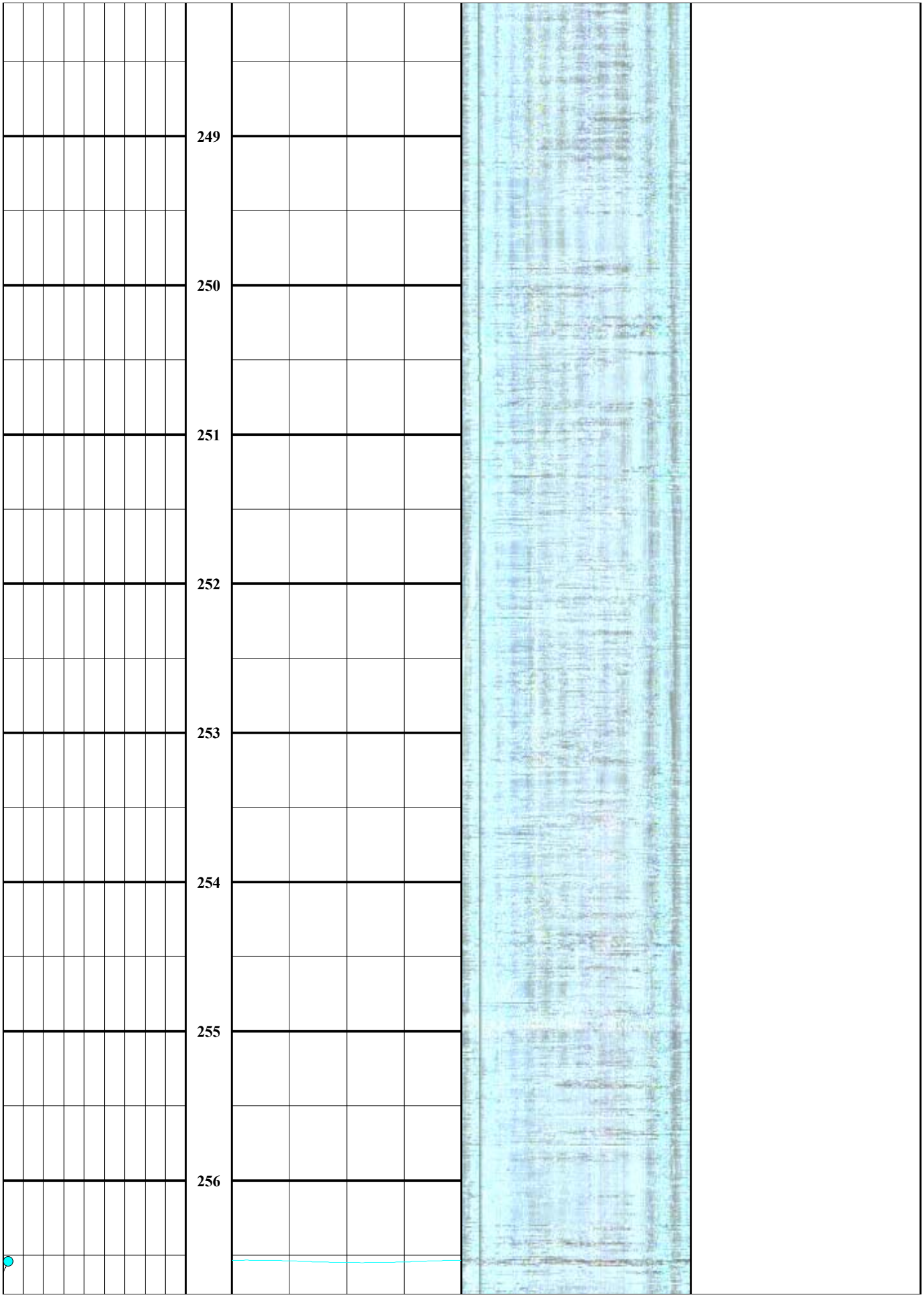

205
206
207
208
209
210
211
212
213

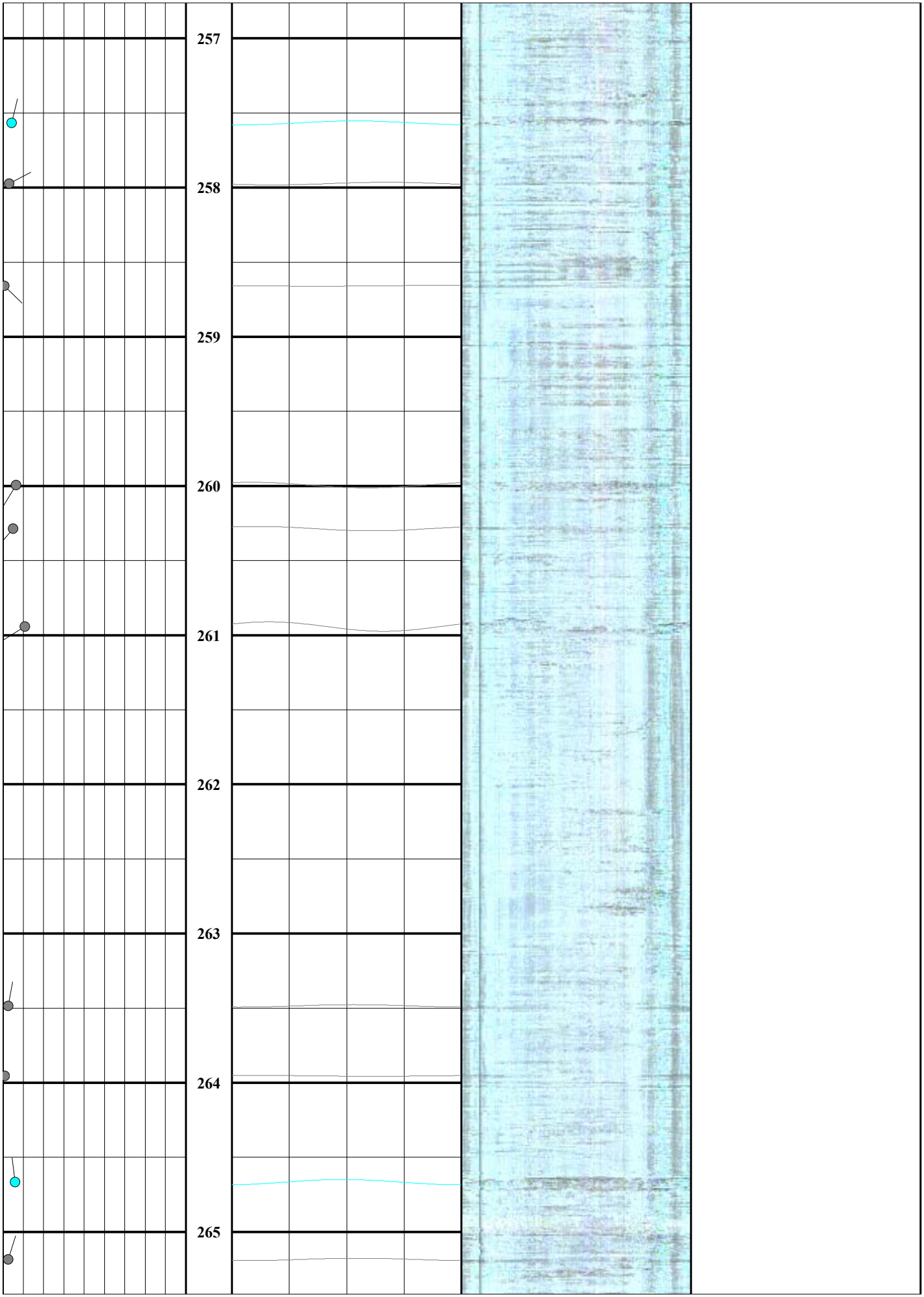

214
215
216
217
218
219
220
221
222

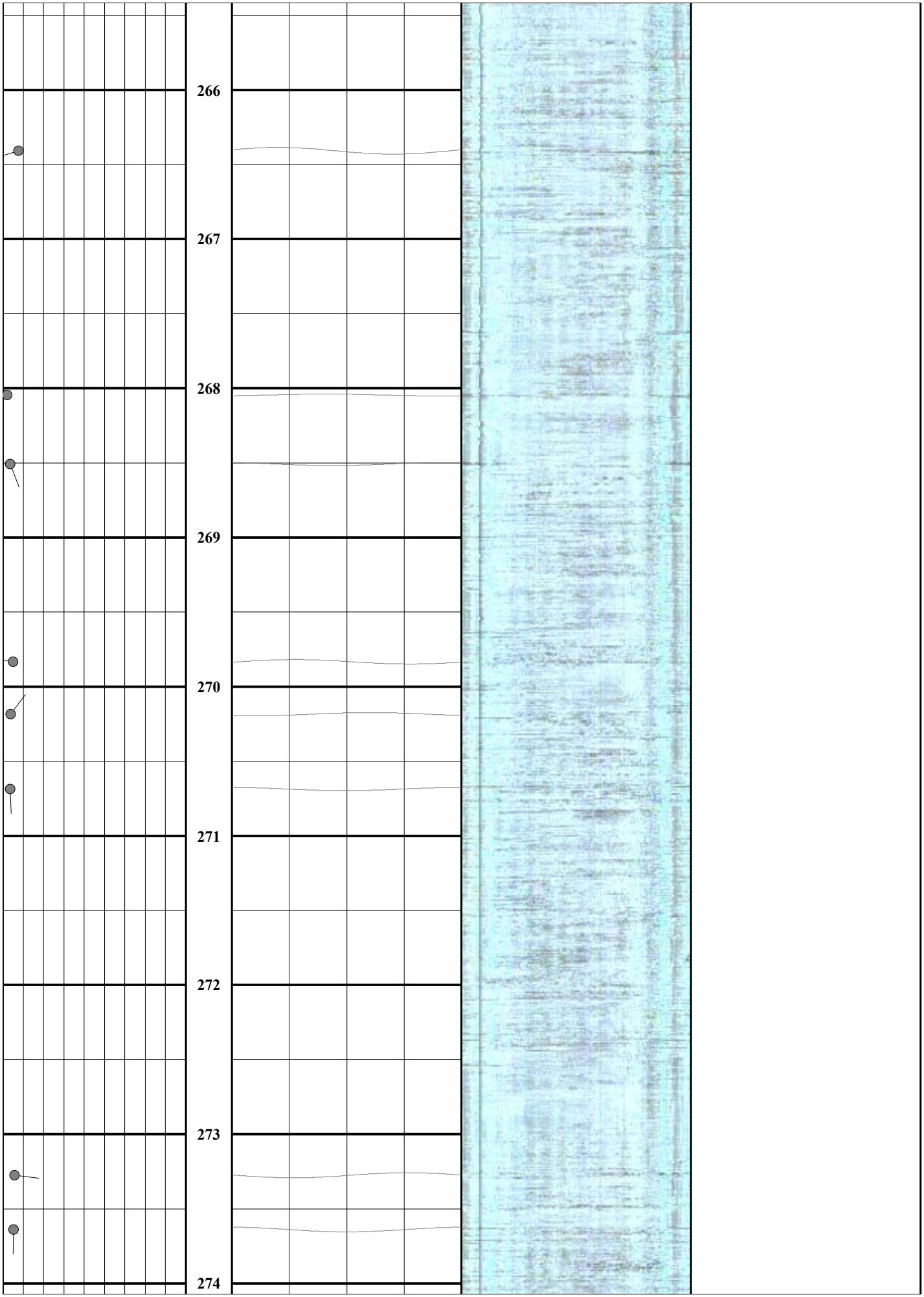

223
224
225
226
227
228
229
230

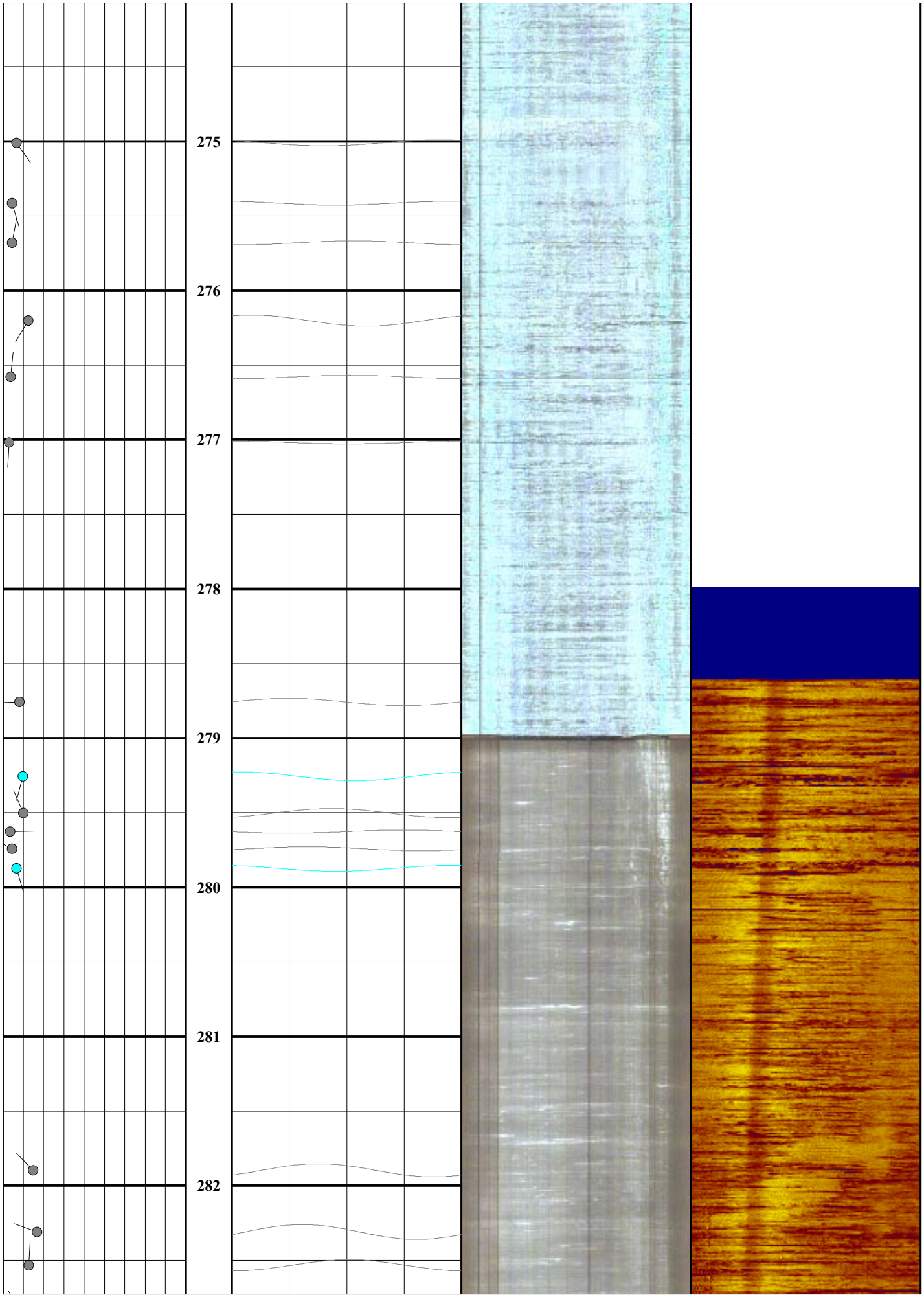

231
232
233
234
235
236
237
238
239

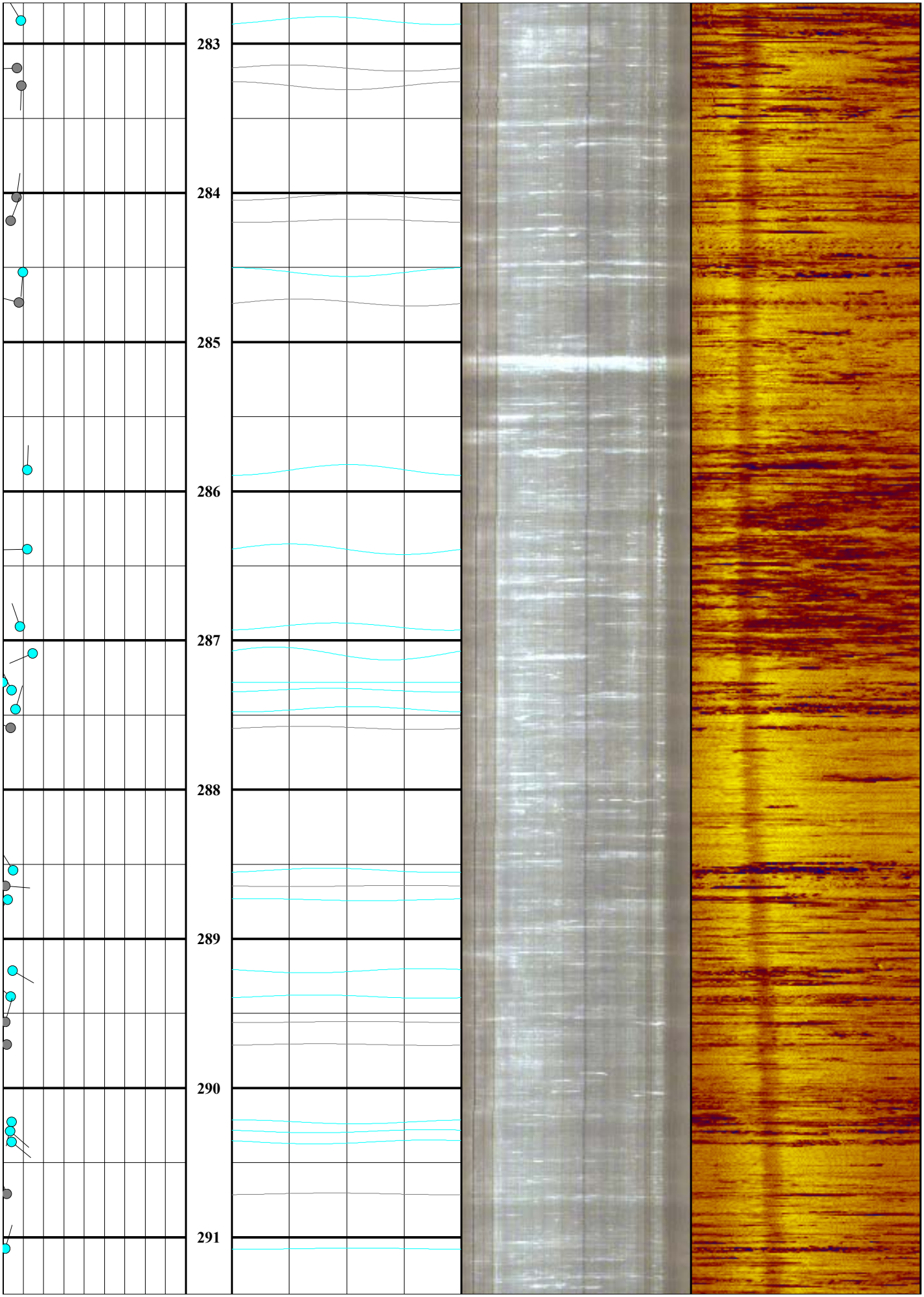

240
241
242
243
244
245
246
247
248

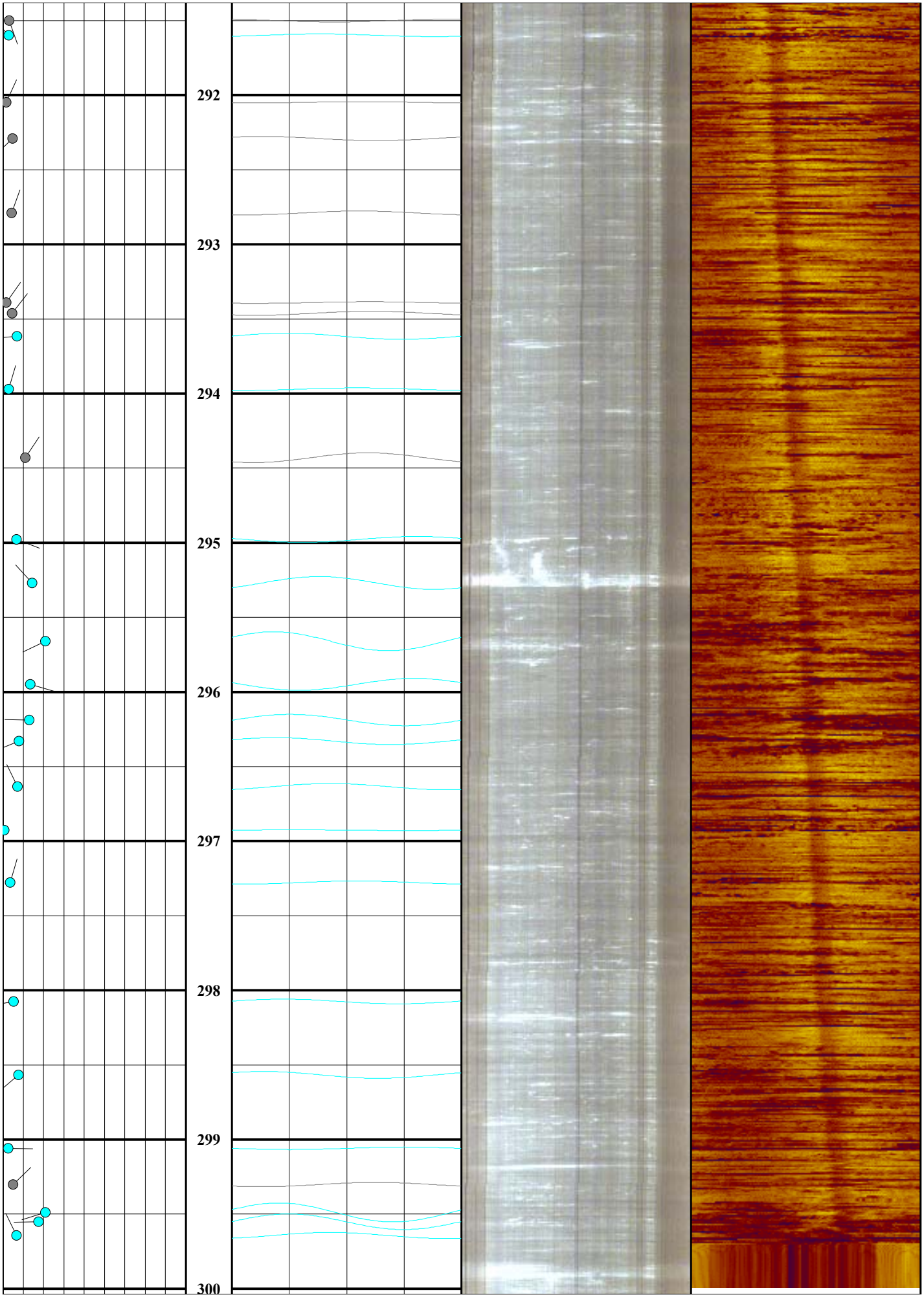

249
250
251
252
253
254
255
256

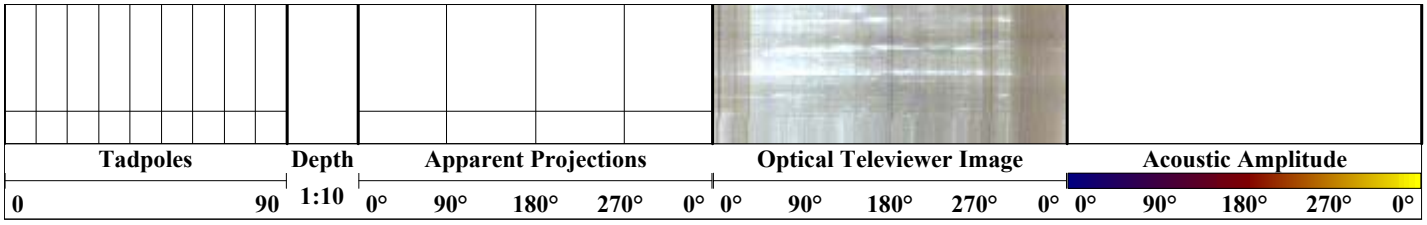

257
258
259
260
261
262
263
264
265


266
267
268
269
270
271
272
273
274


275
276
277
278
279
280
281
282


283
284
285
286
287
288
289
290
291

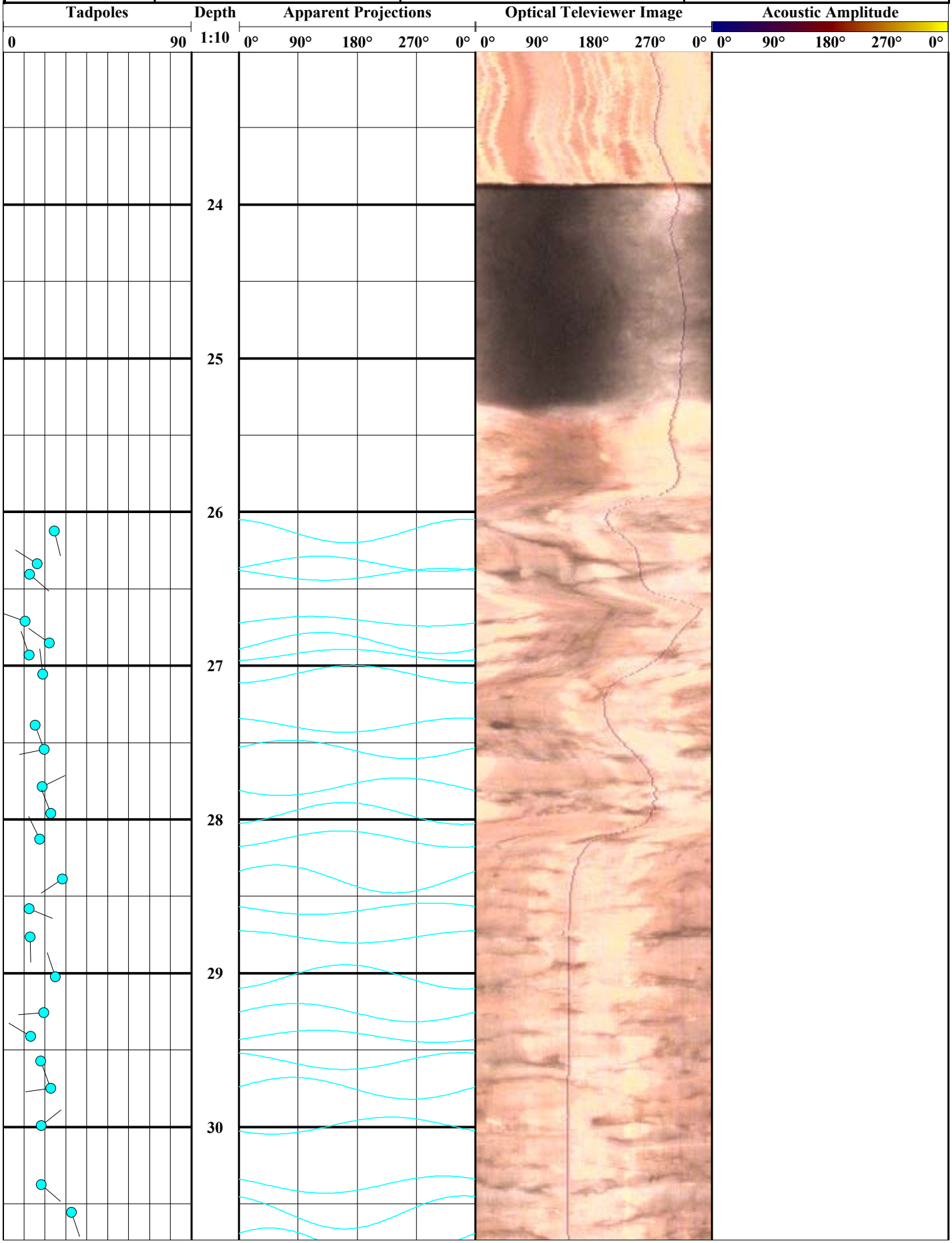

292
293
294
295
296
297
298
299
300

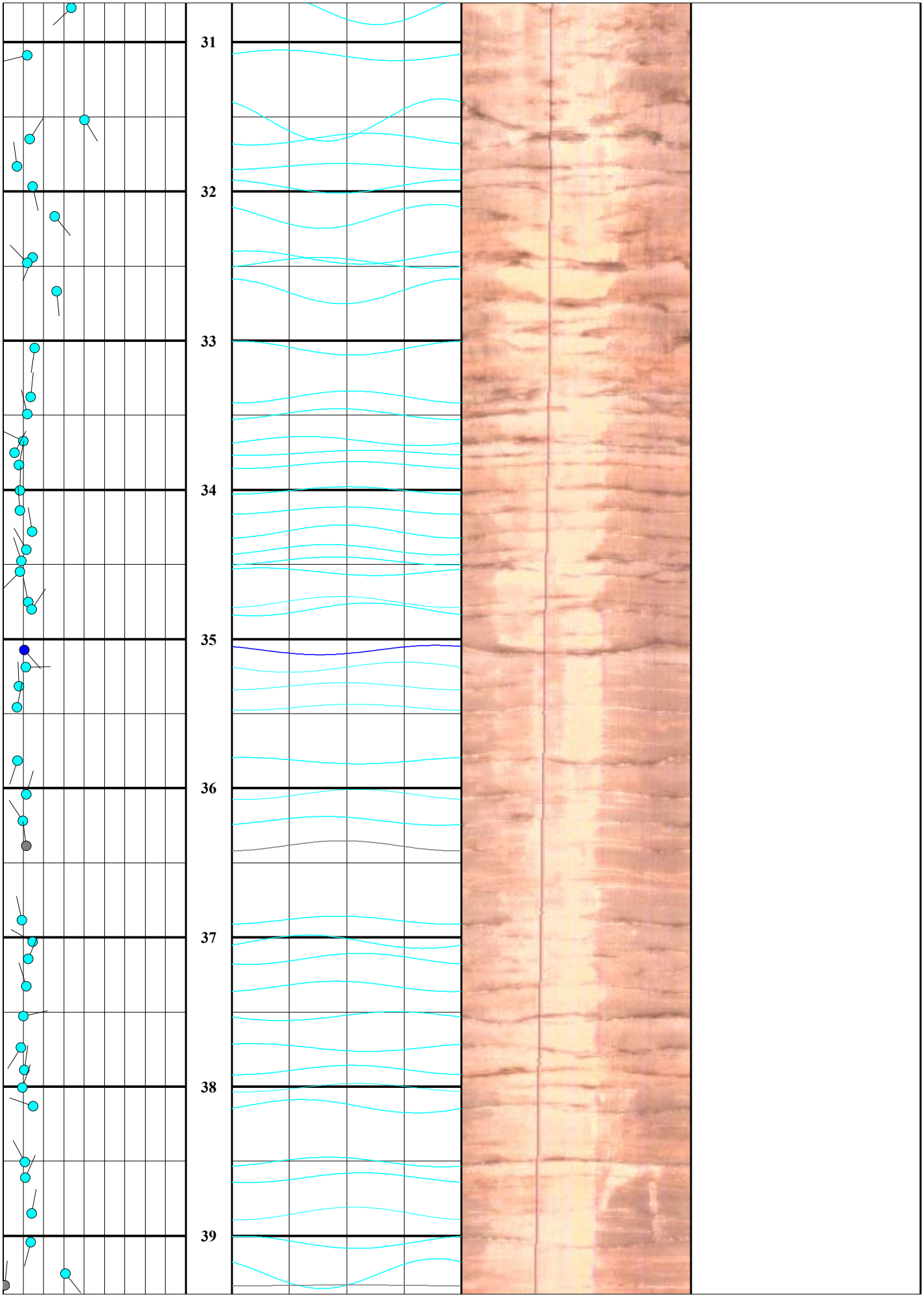

Tadpoles
Depth
Apparent Projections
Optical Televiewer Image
Acoustic Amplitude
0
90
1:10
0°
90°
180°
270°
0°
0°
90°
180°
270°
0°
0°
90°
180°
270°
0°

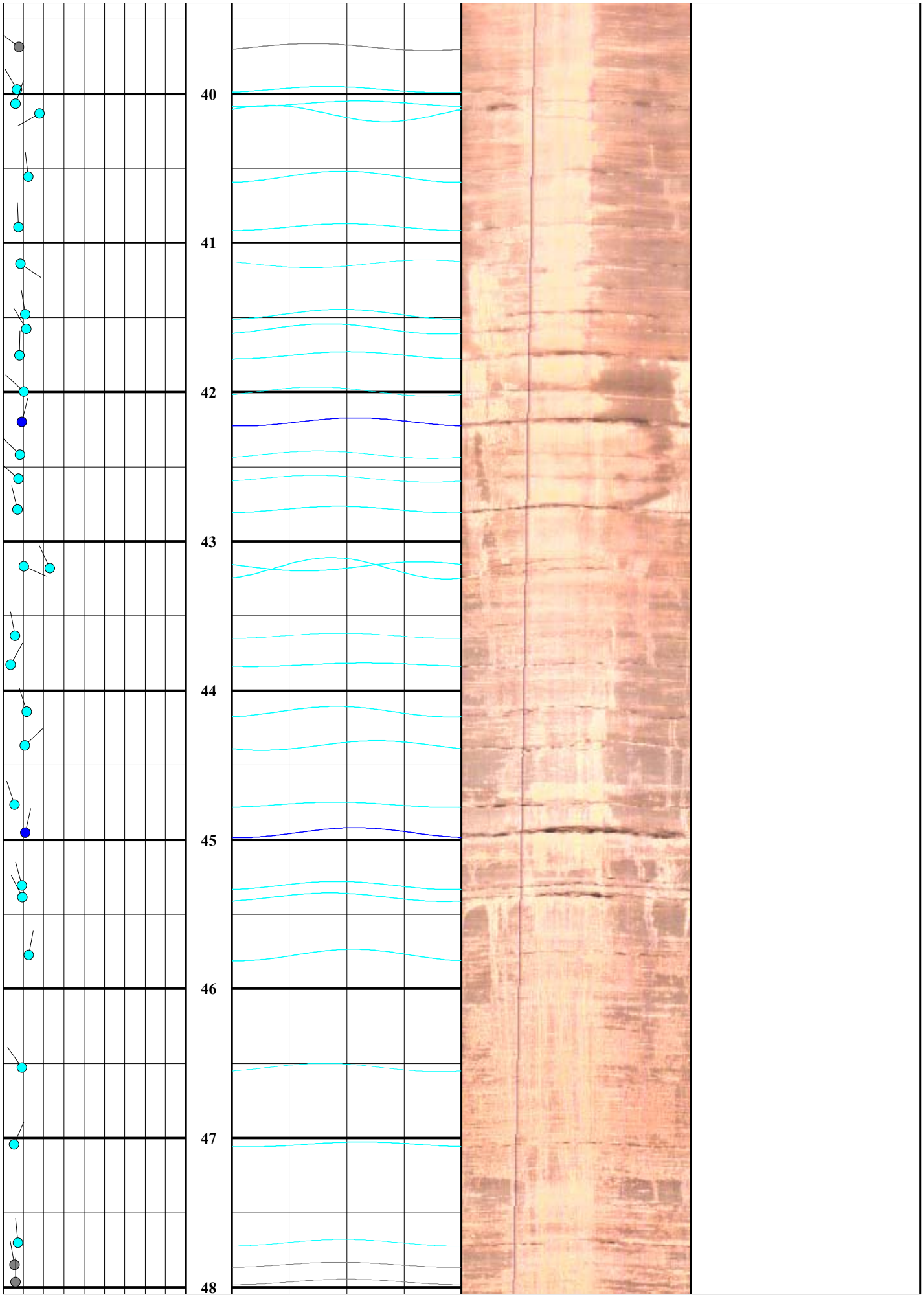
Optical/Acoustic Borehole Image Plot

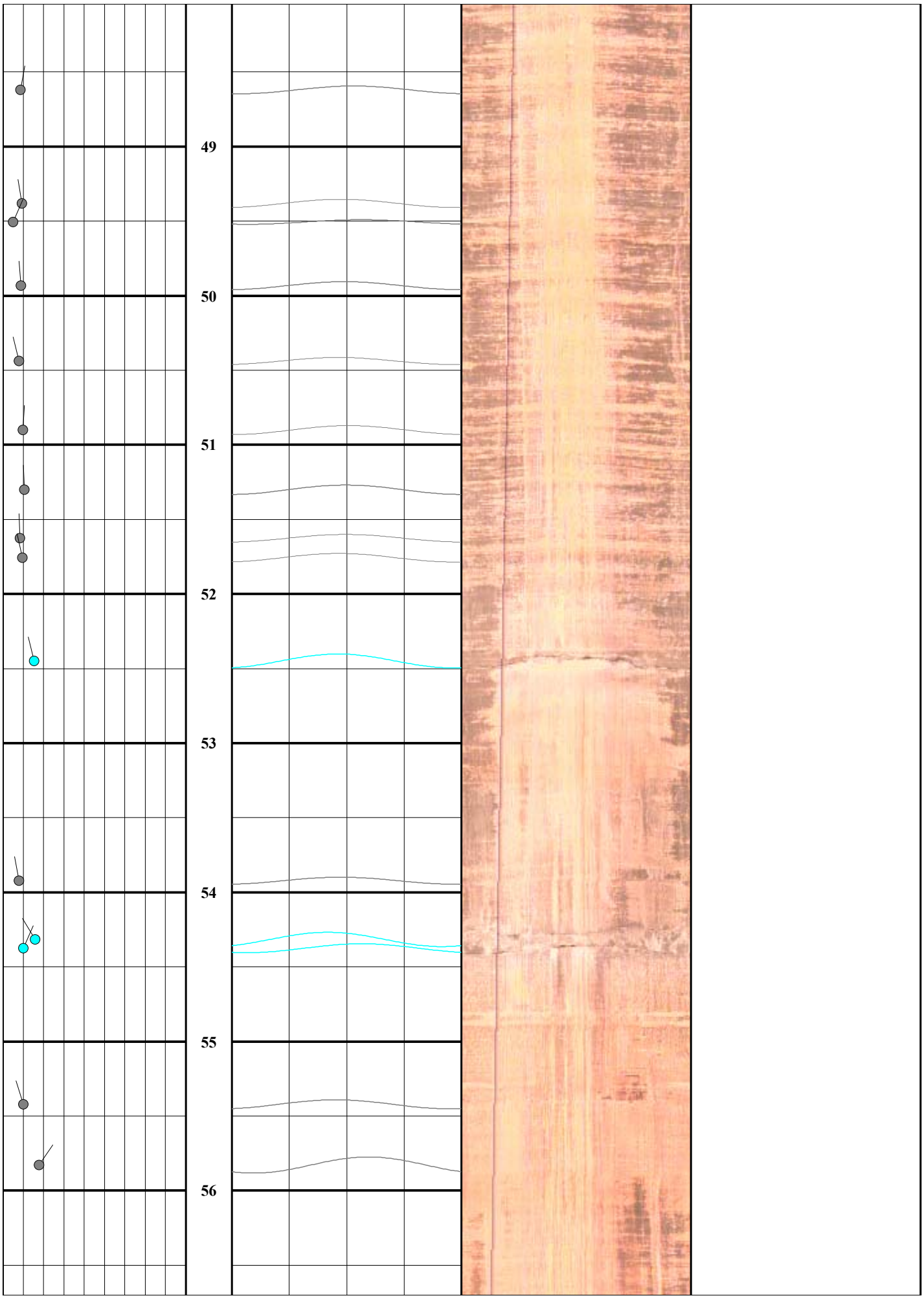
COMPANY: S. M. Stoller Corp.	PROJECT: Crescent Junction
DATE LOGGED: 10 December 2005	WELL: CH-0204

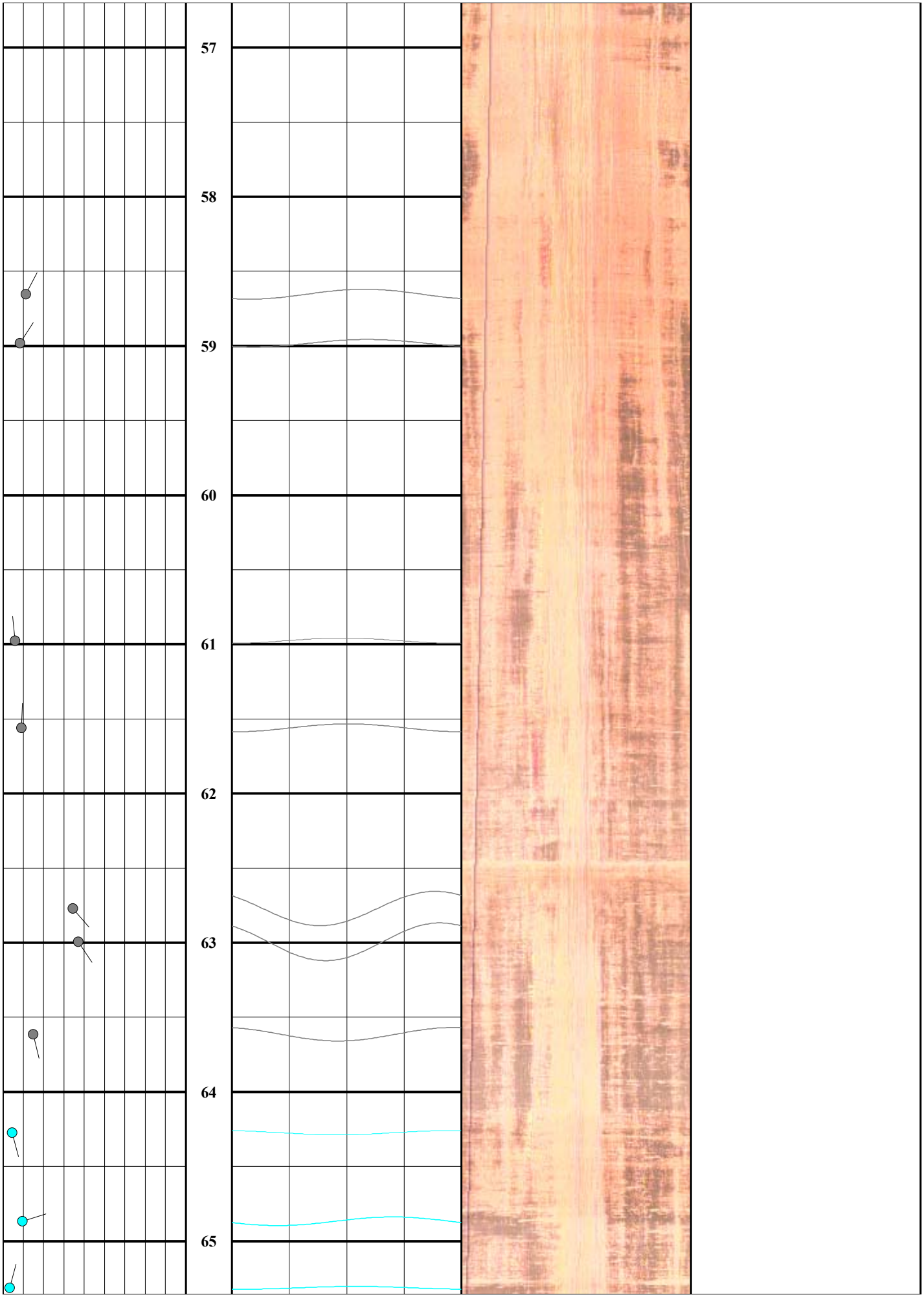
COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com

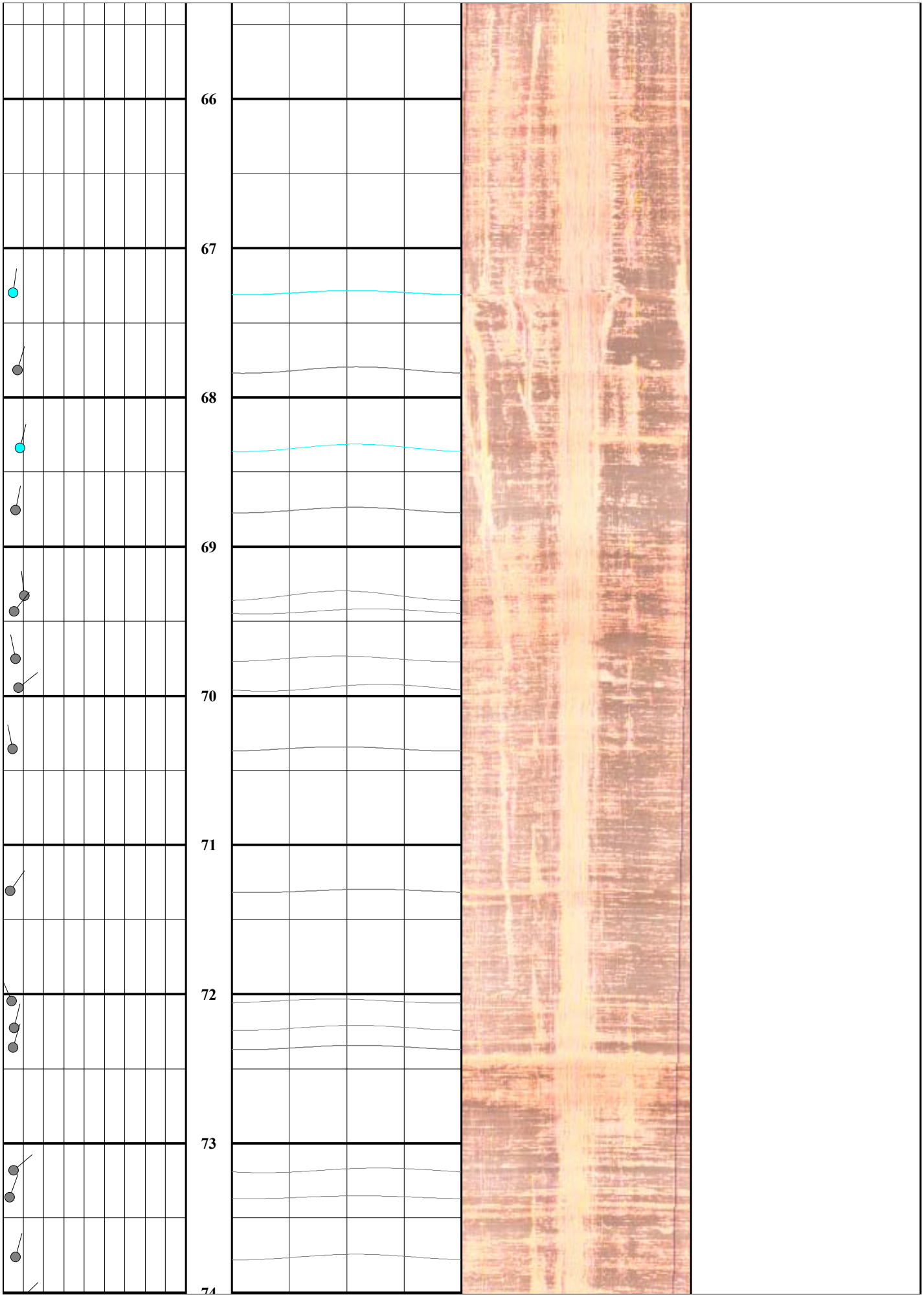


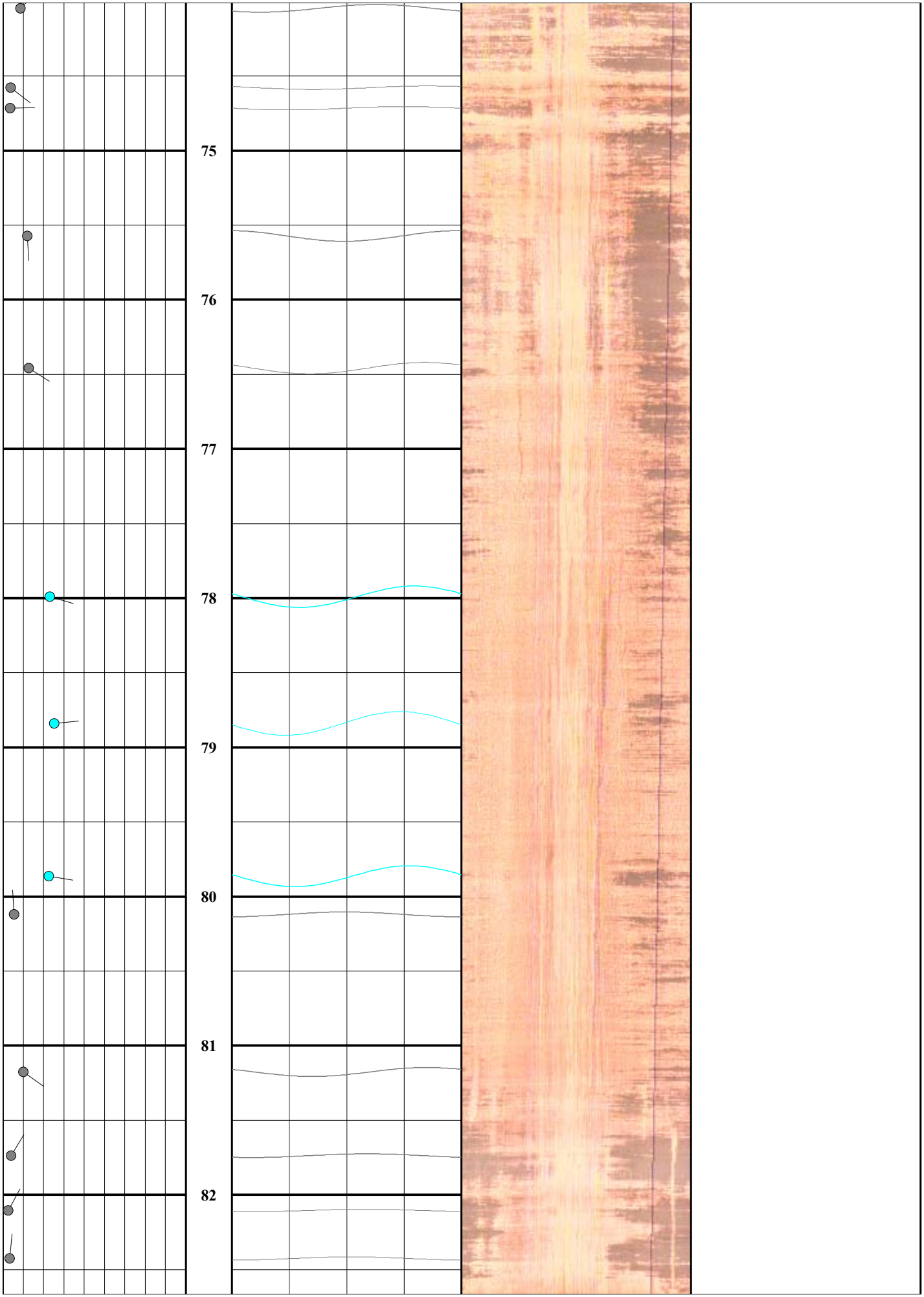

31
32
33
34
35
36
37
38
39

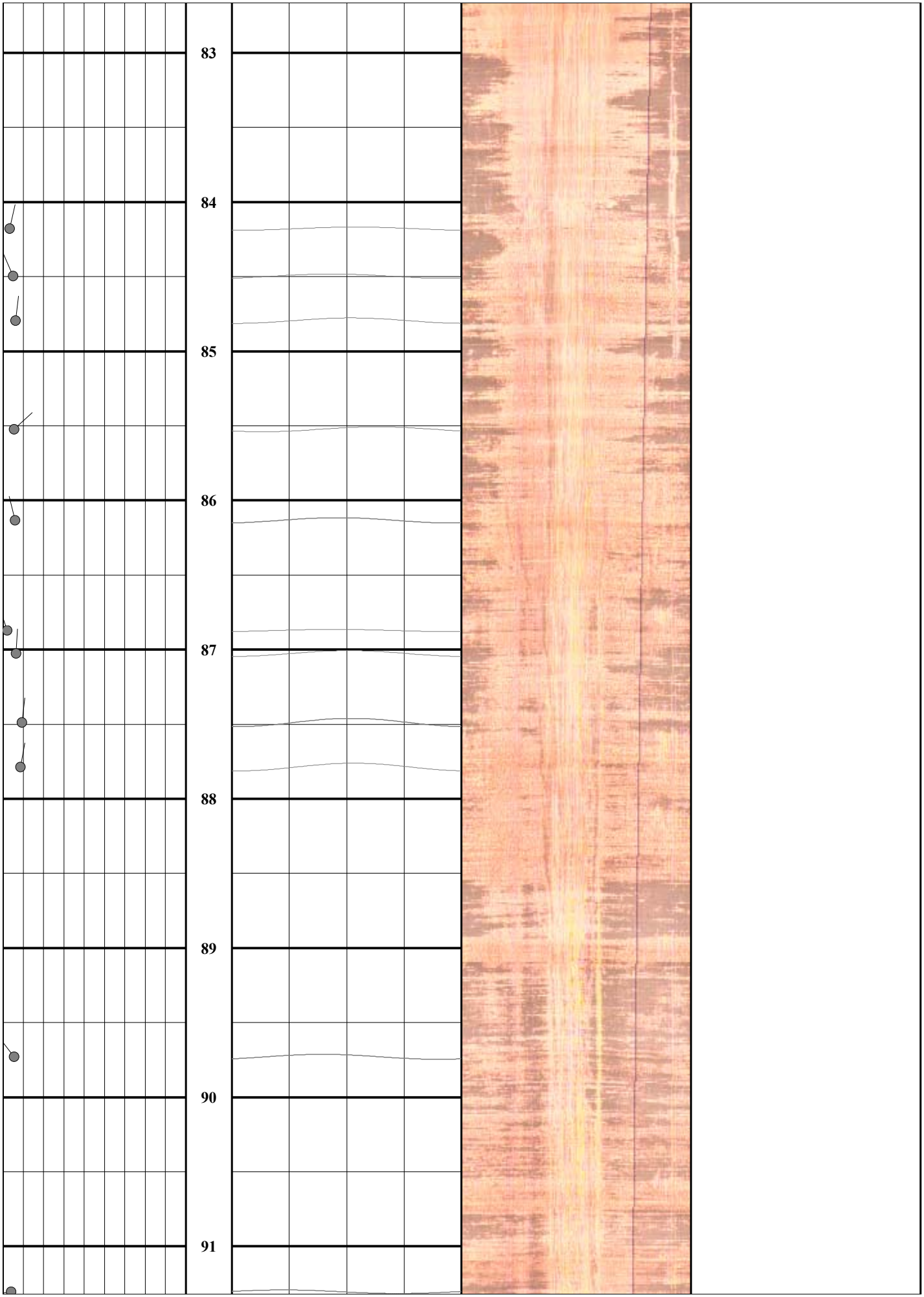

40
41
42
43
44
45
46
47
48

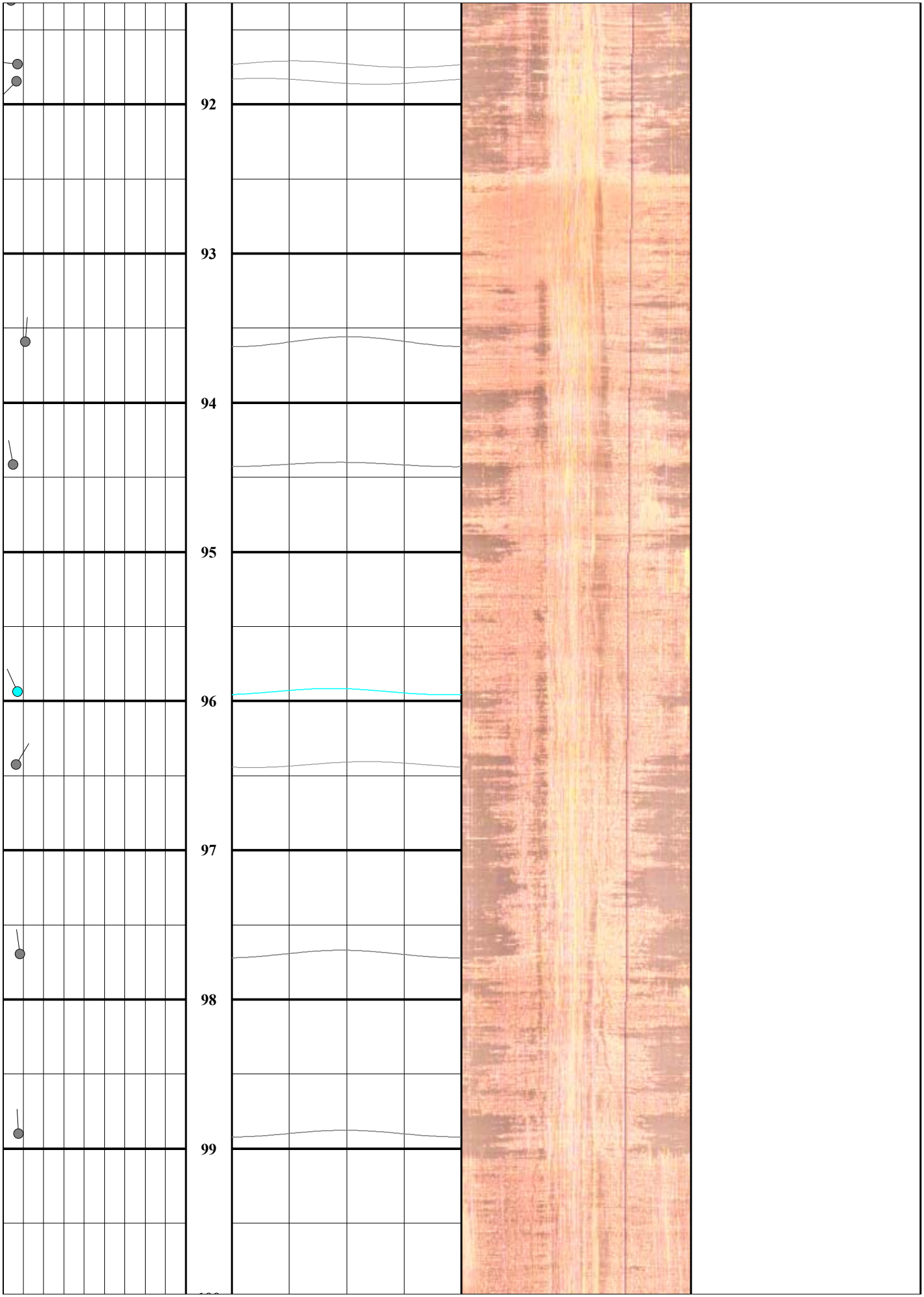

49
50
51
52
53
54
55
56

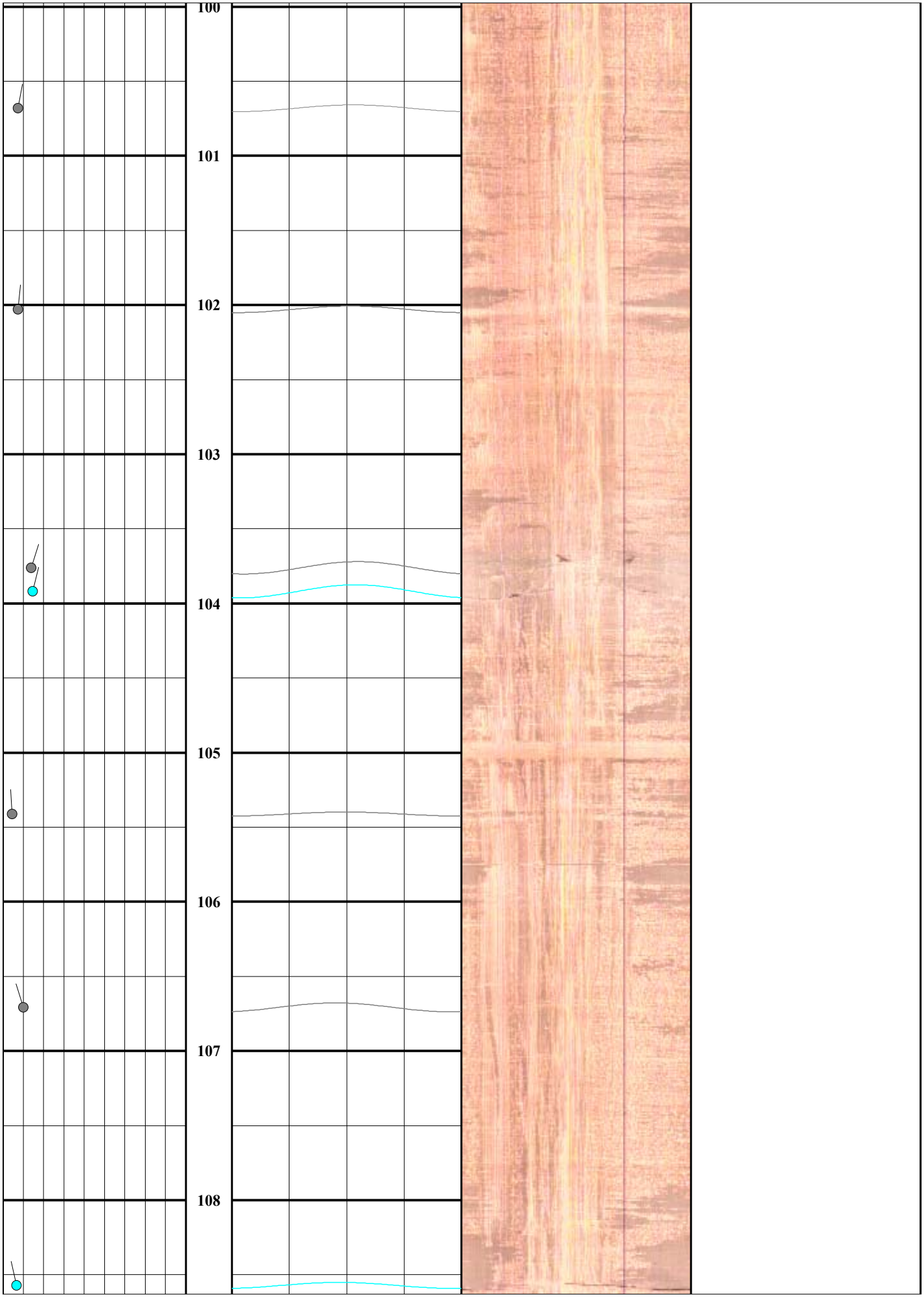

57
58
59
60
61
62
63
64
65

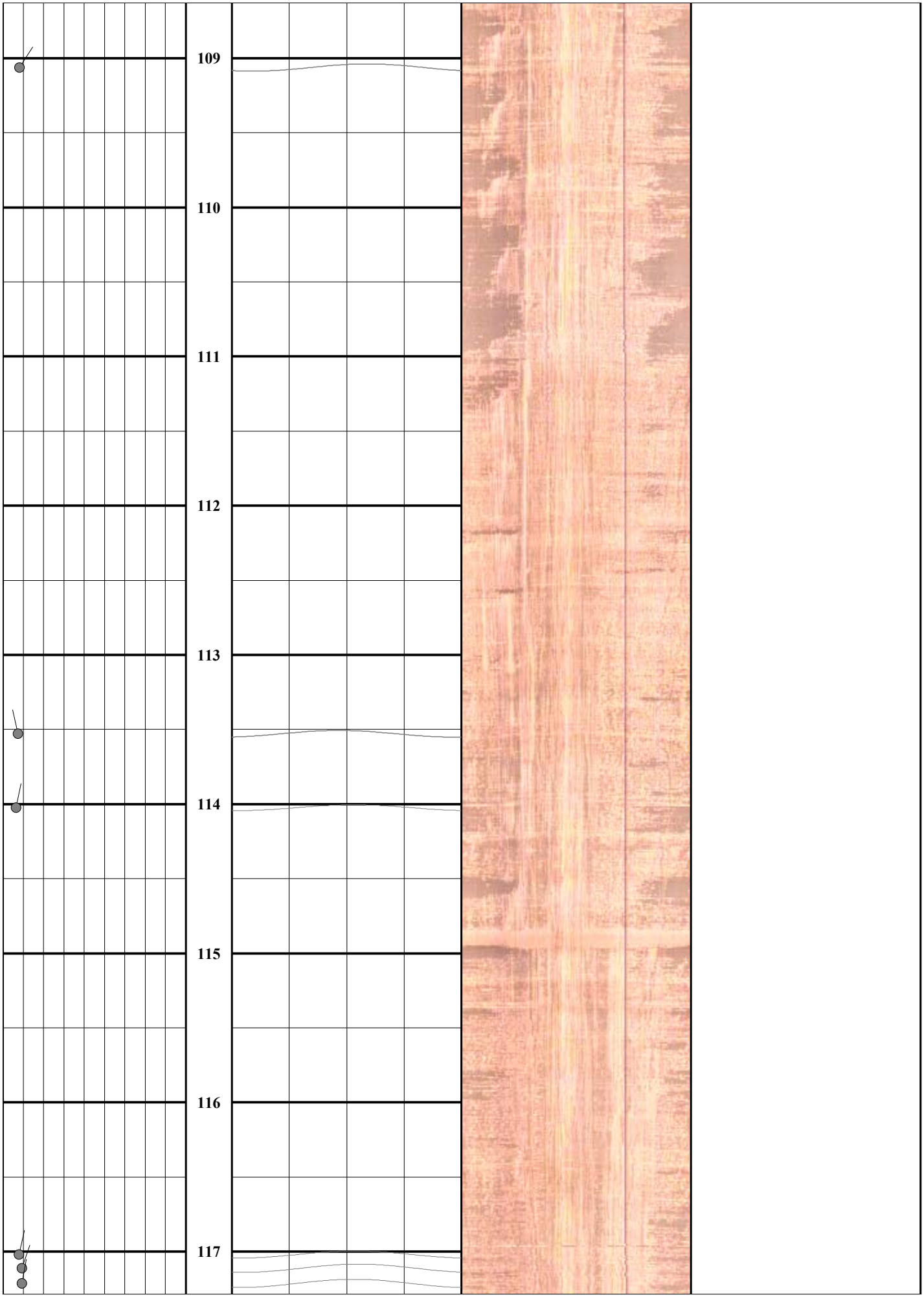

66
67
68
69
70
71
72
73
74

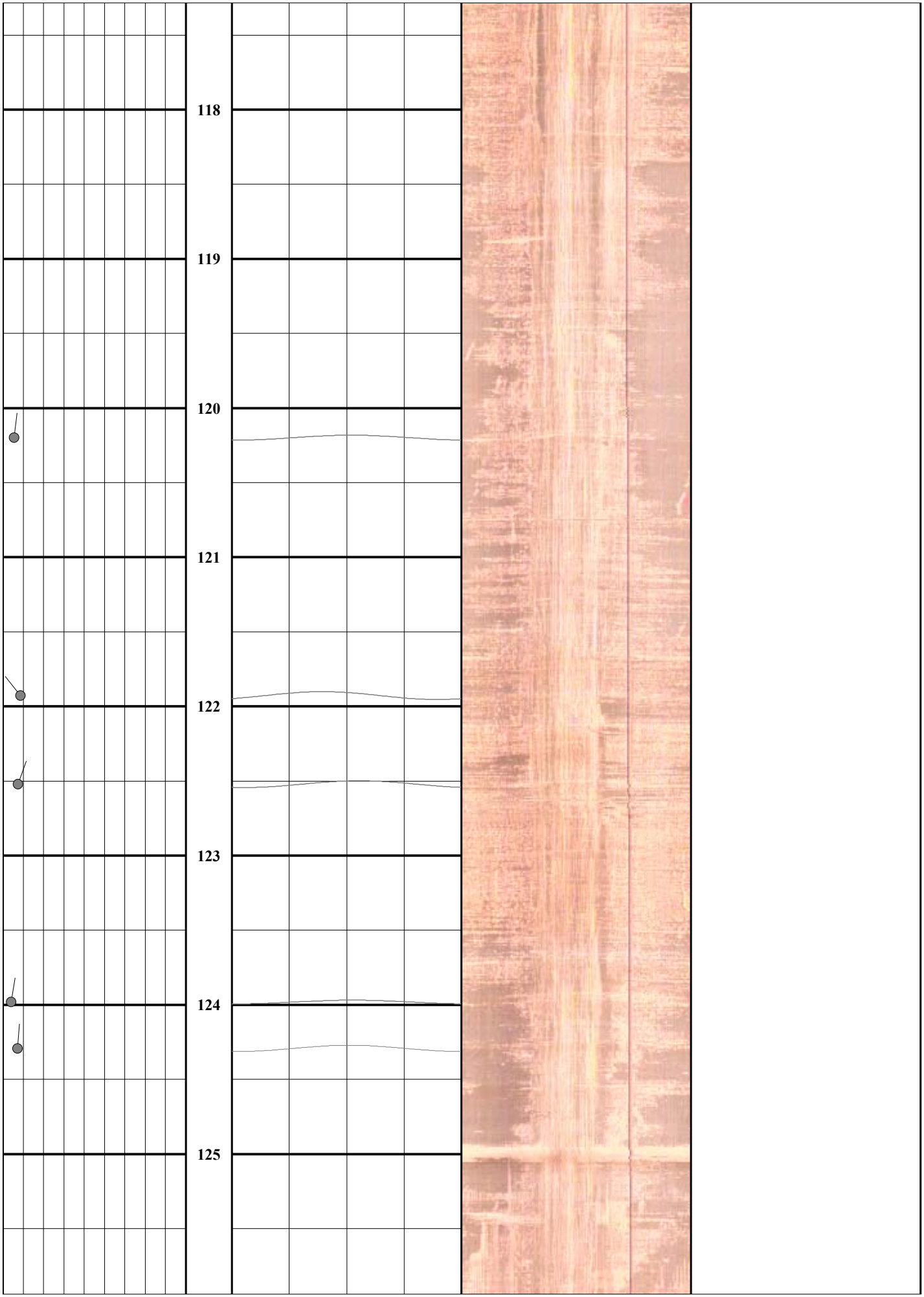

75
76
77
78
79
80
81
82

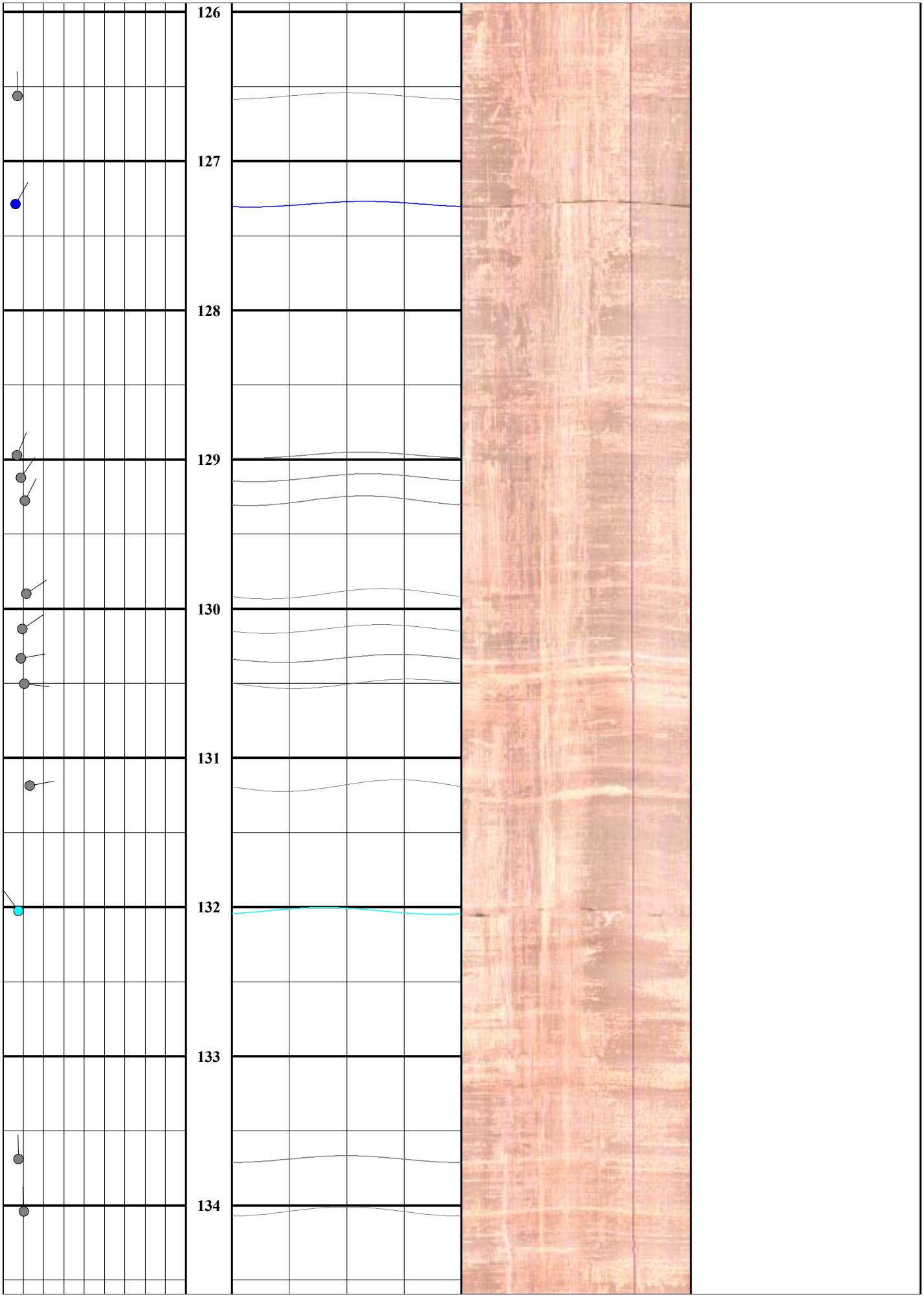

83
84
85
86
87
88
89
90
91

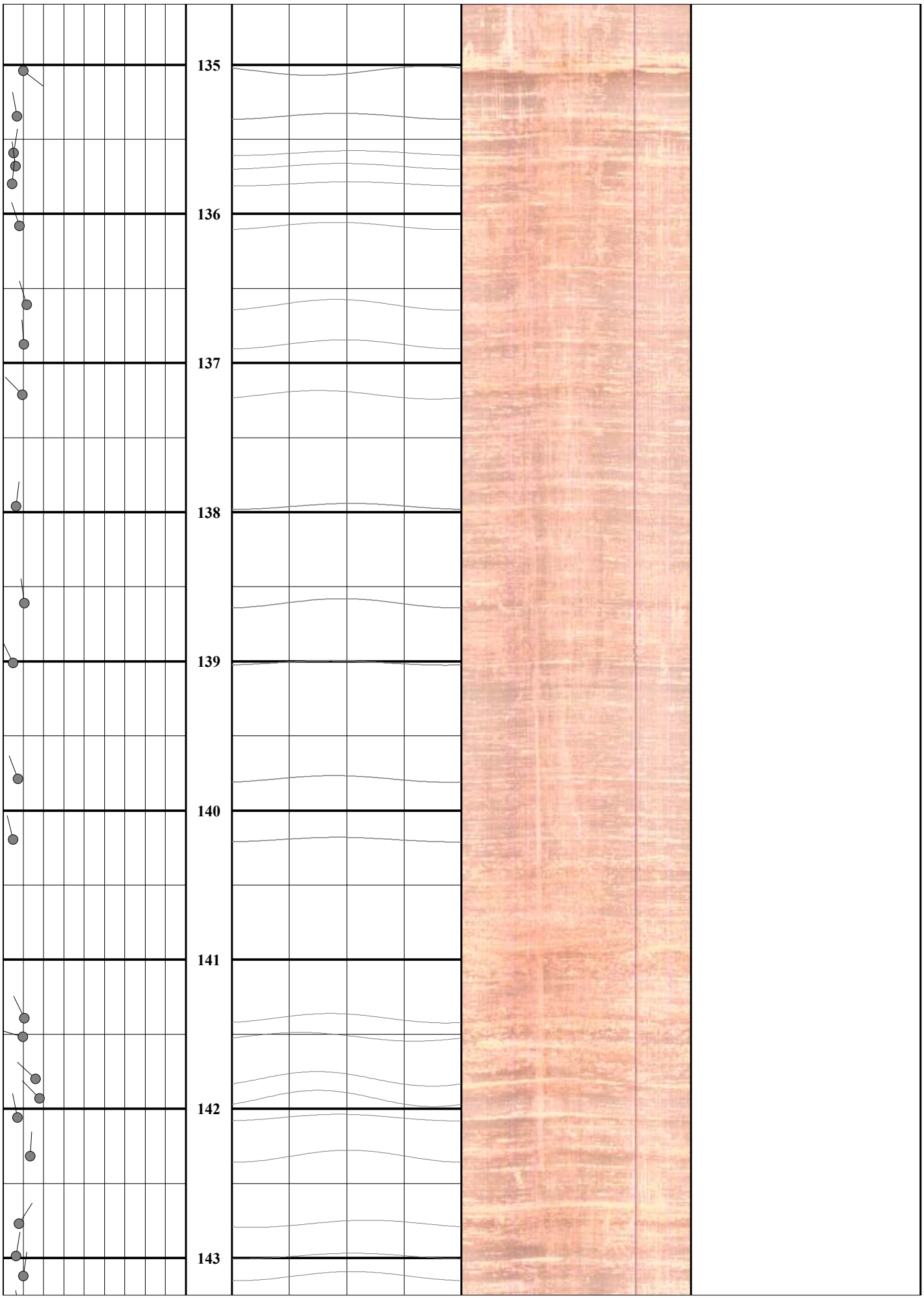

92
93
94
95
96
97
98
99

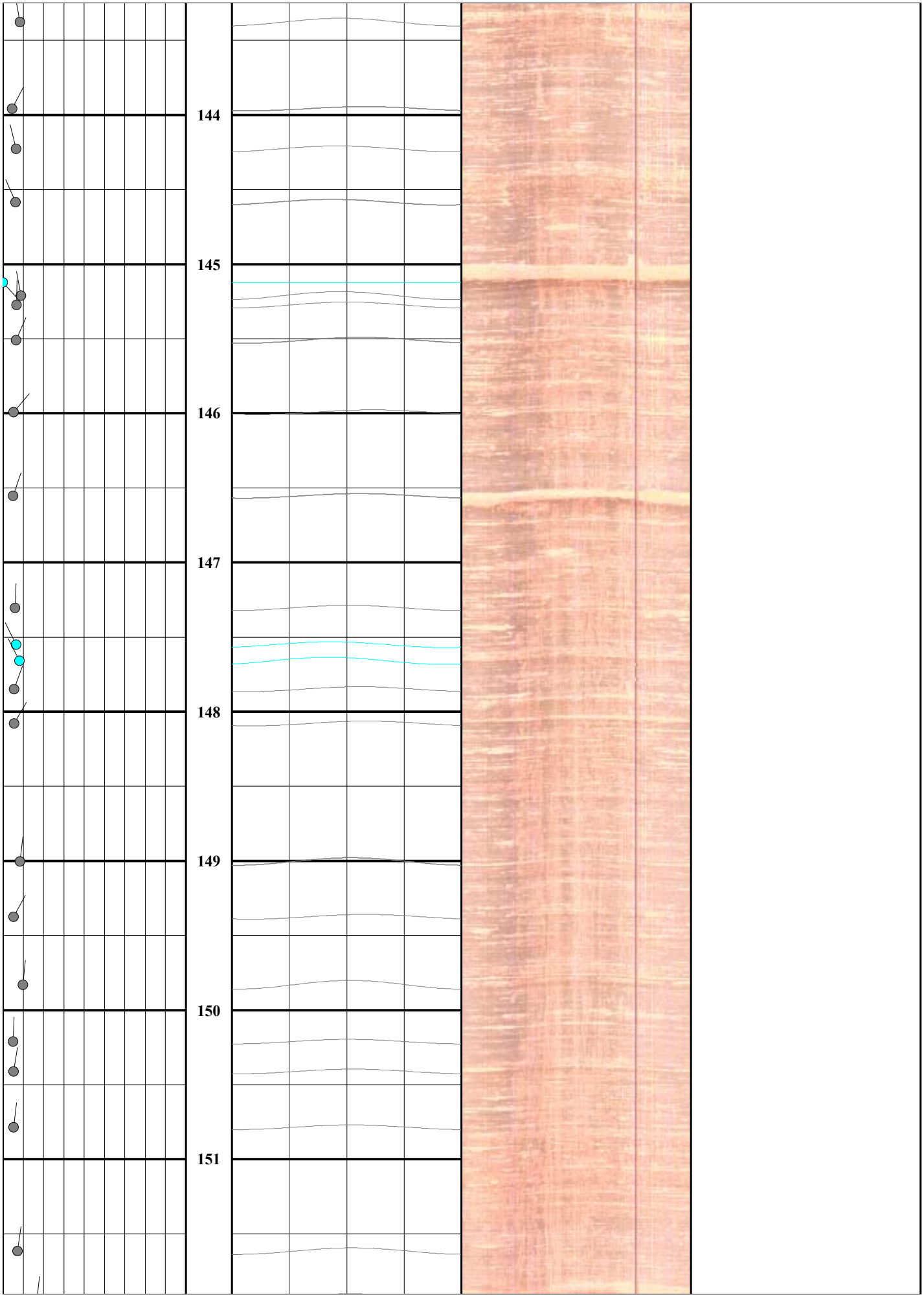

100
101
102
103
104
105
106
107
108

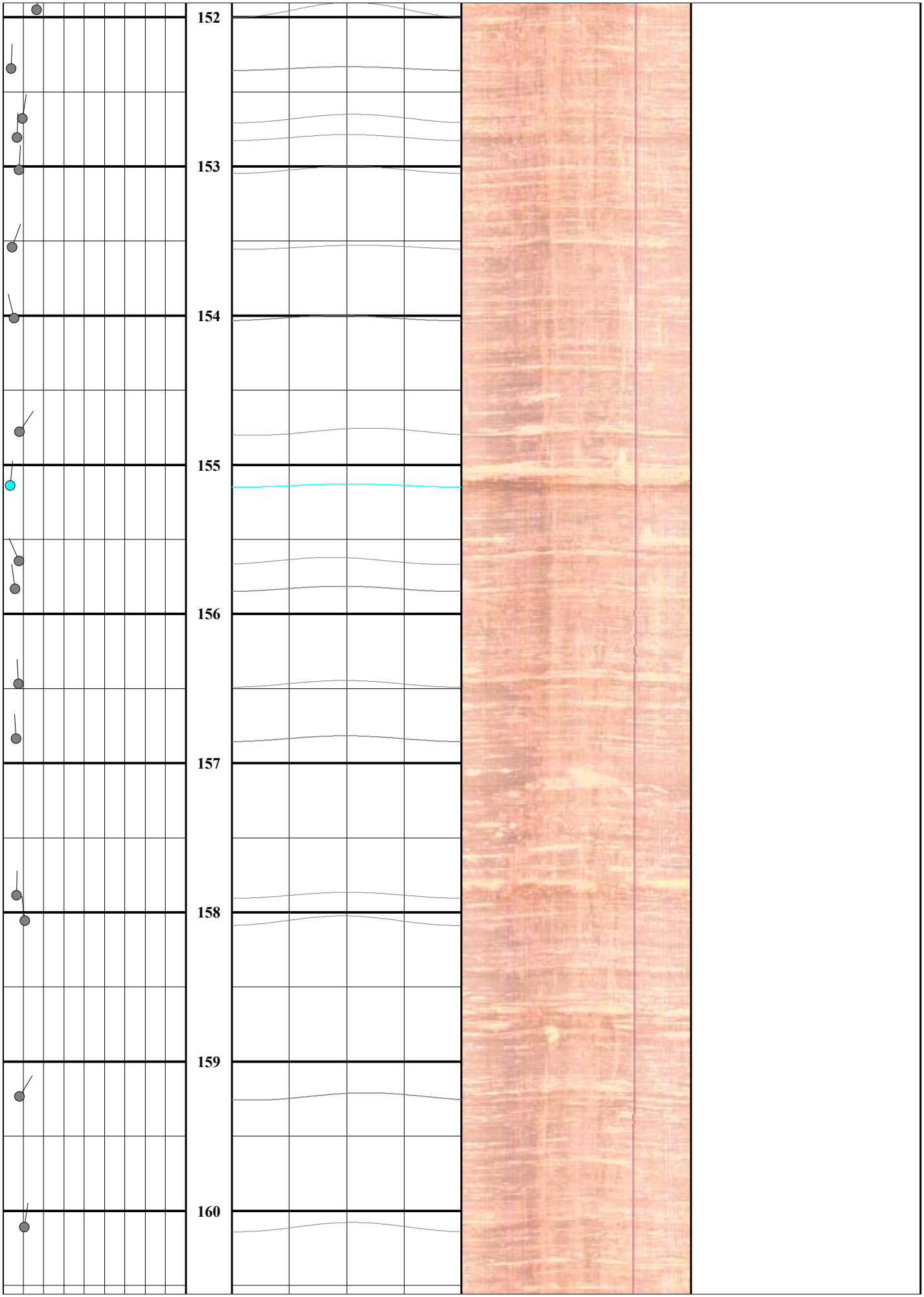

109
110
111
112
113
114
115
116
117

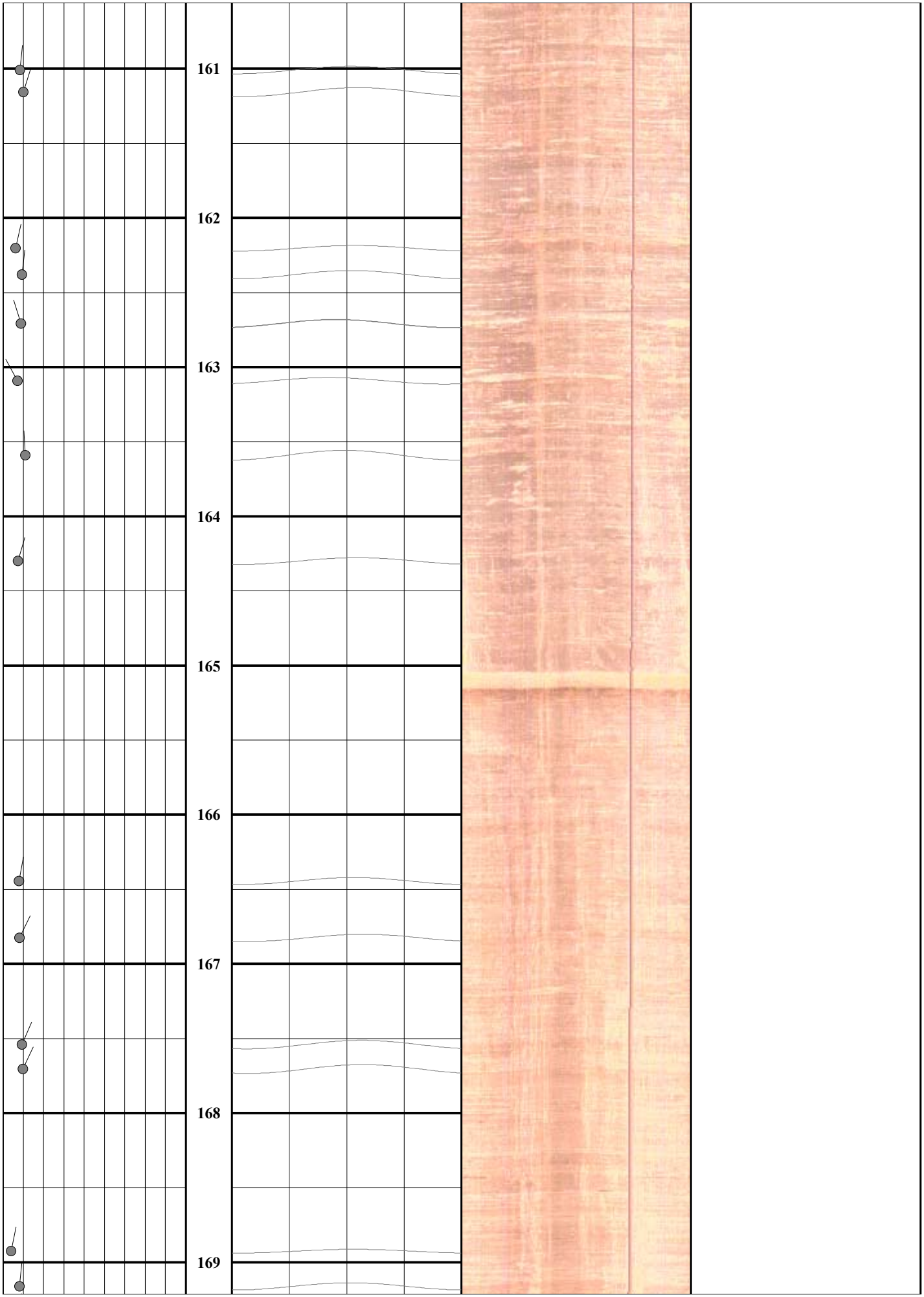

118
119
120
121
122
123
124
125

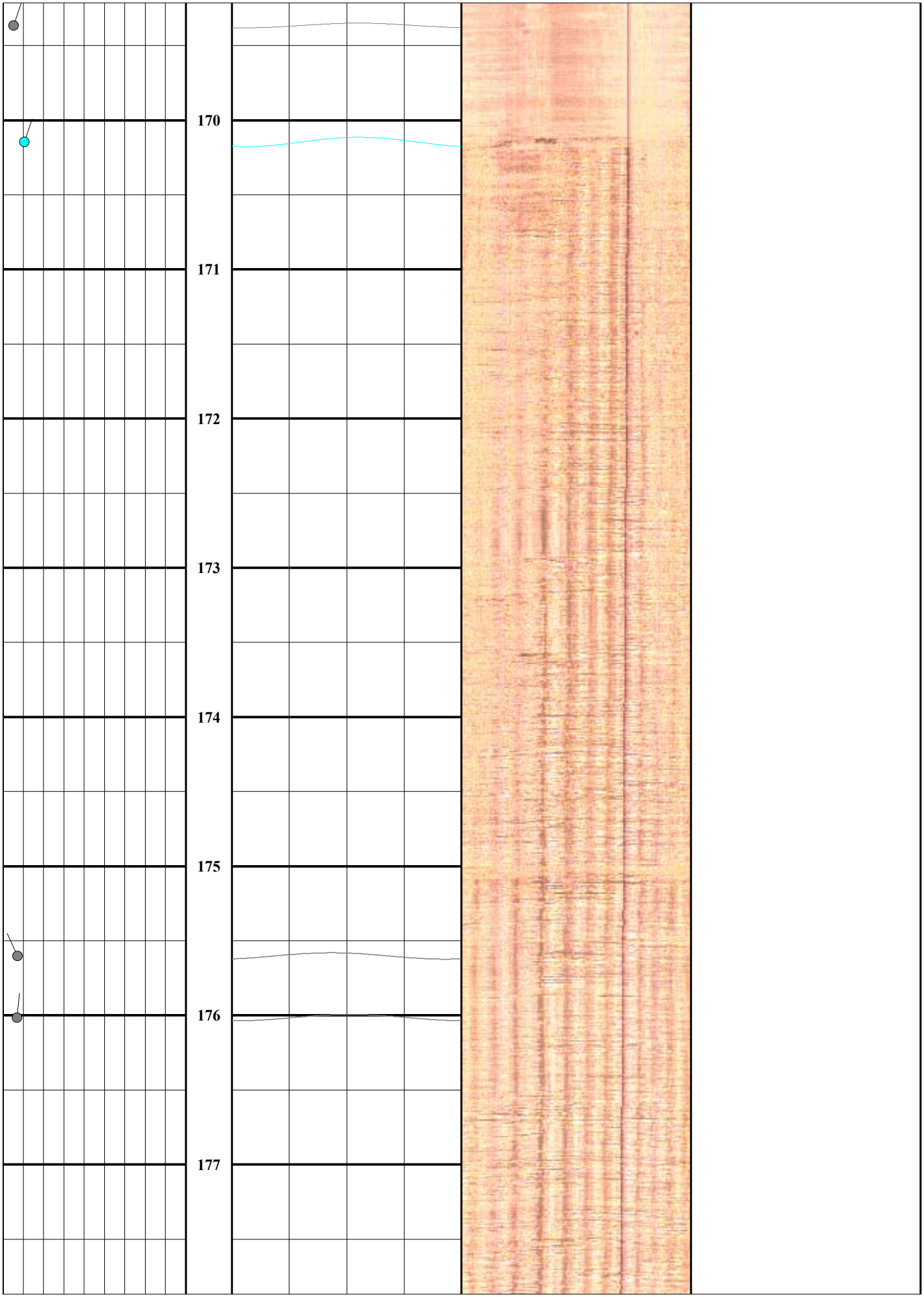

126
127
128
129
130
131
132
133
134

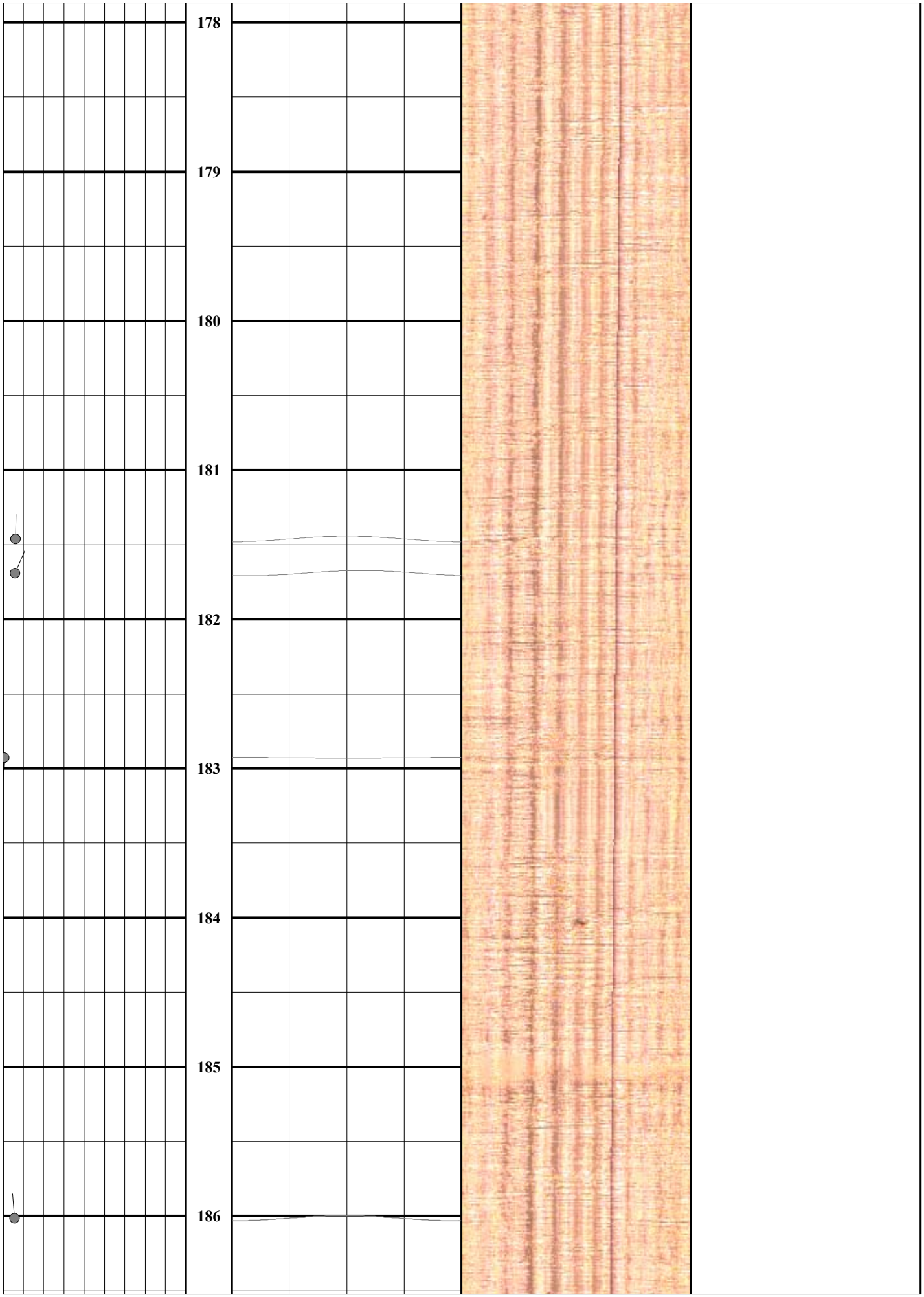

135
136
137
138
139
140
141
142
143

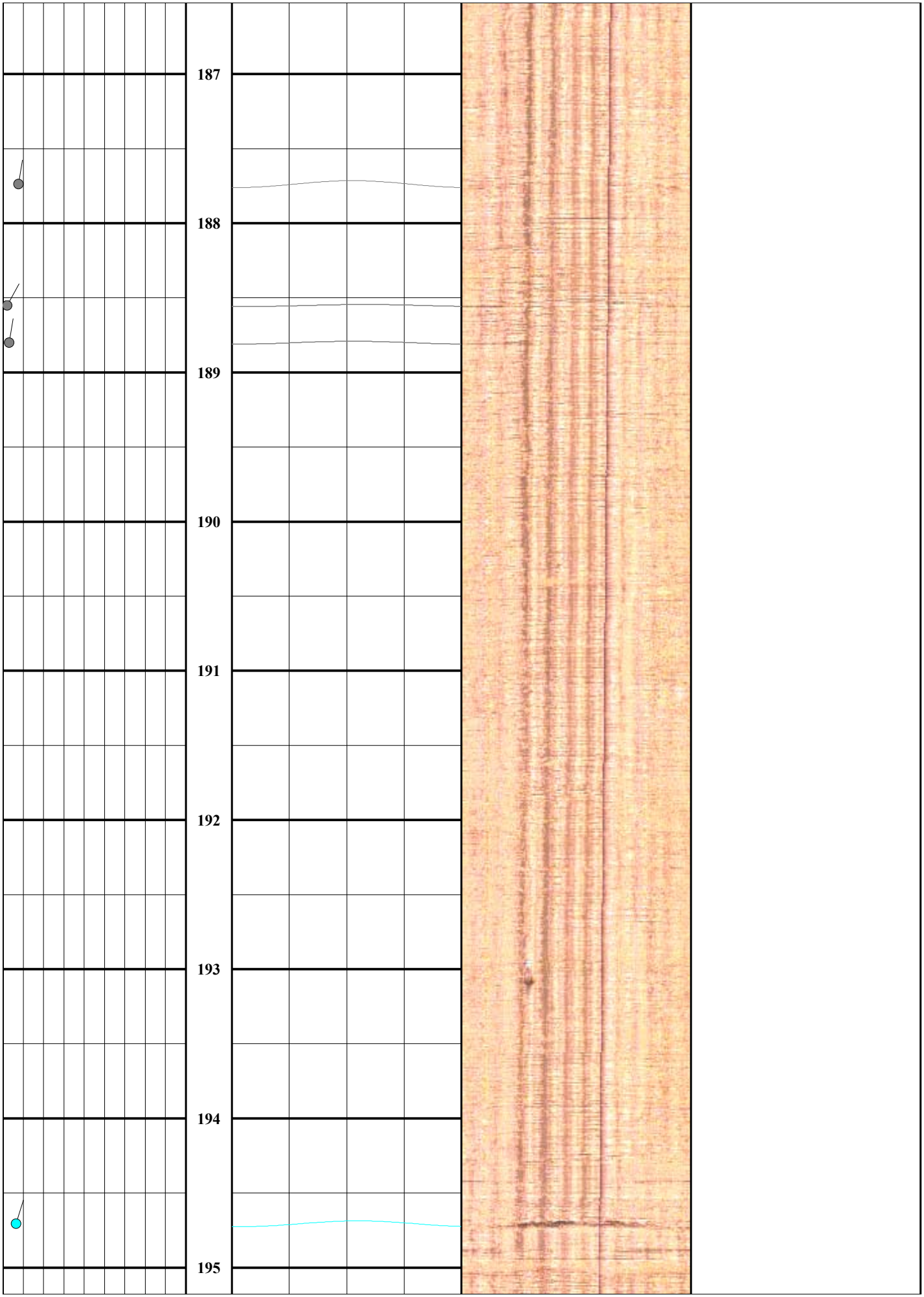

144
145
146
147
148
149
150
151

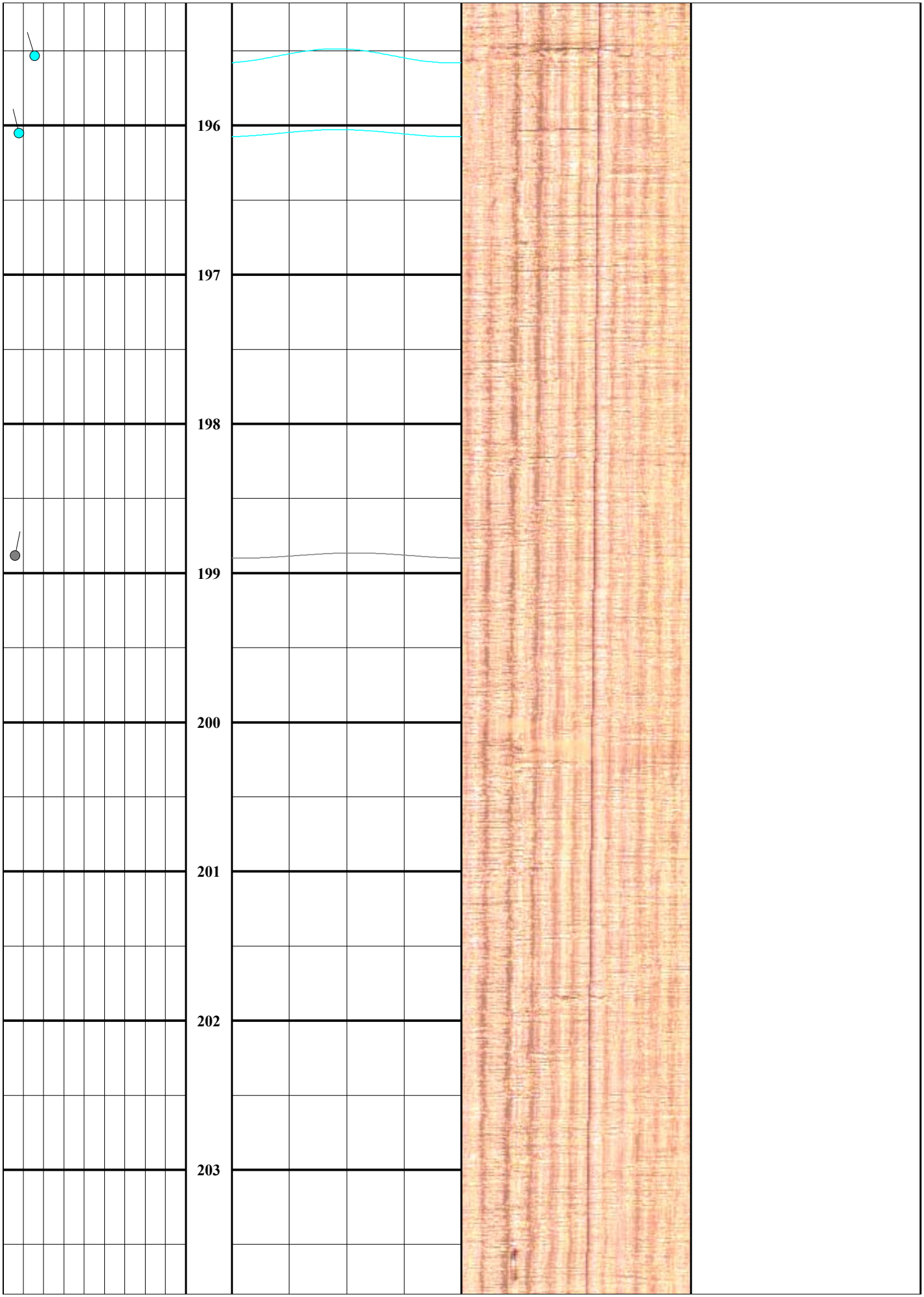

152
153
154
155
156
157
158
159
160

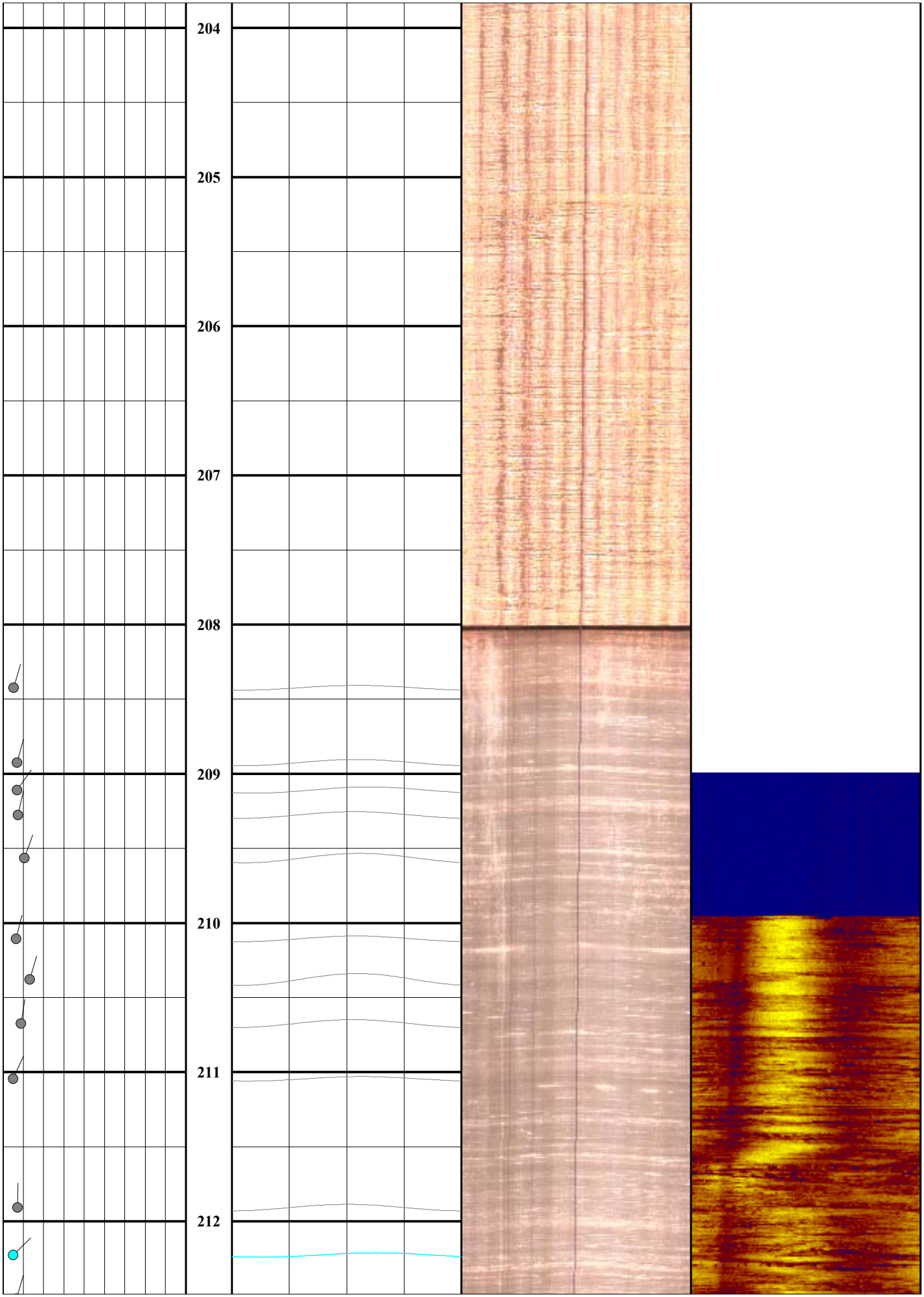

161
162
163
164
165
166
167
168
169

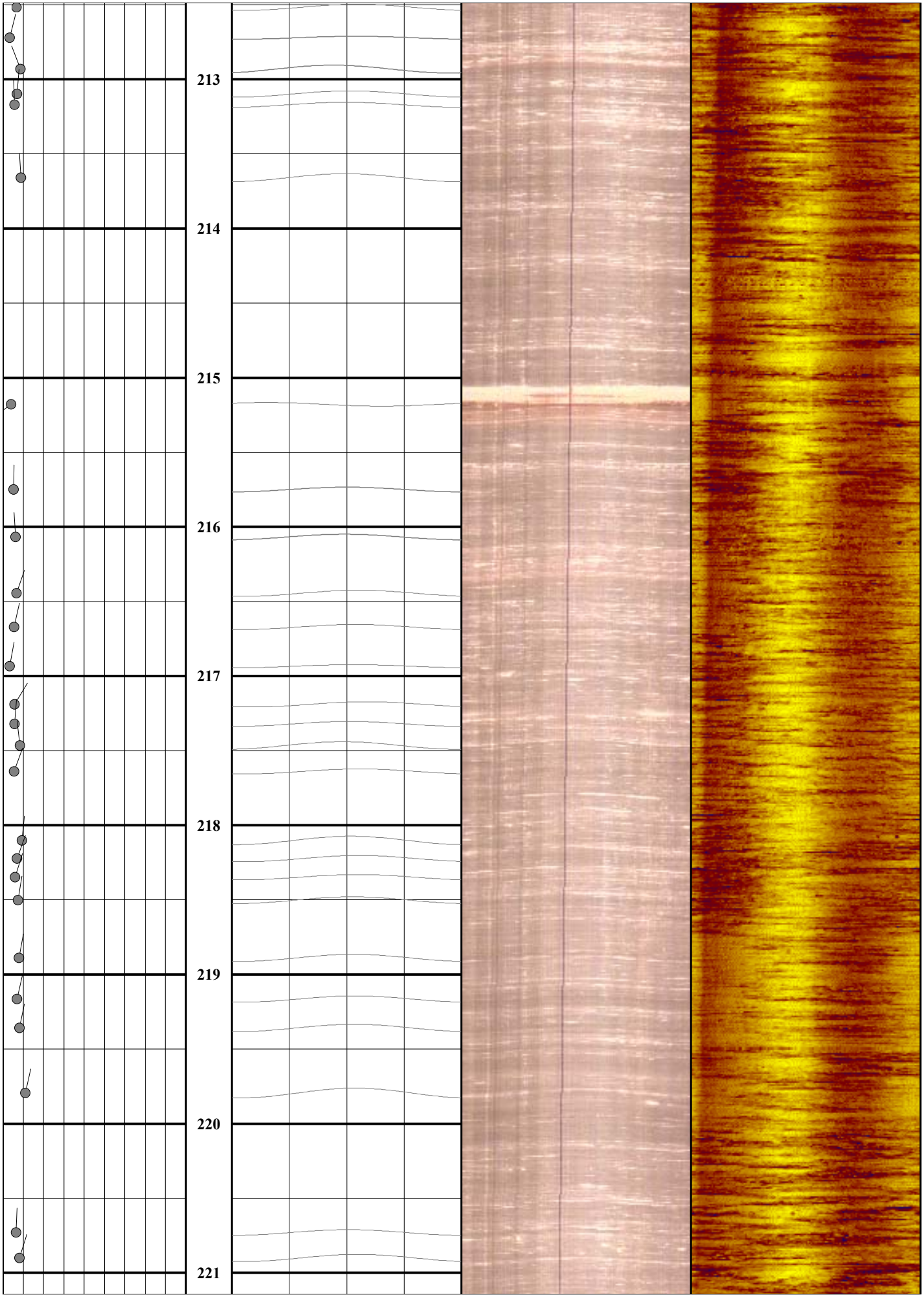

170
171
172
173
174
175
176
177

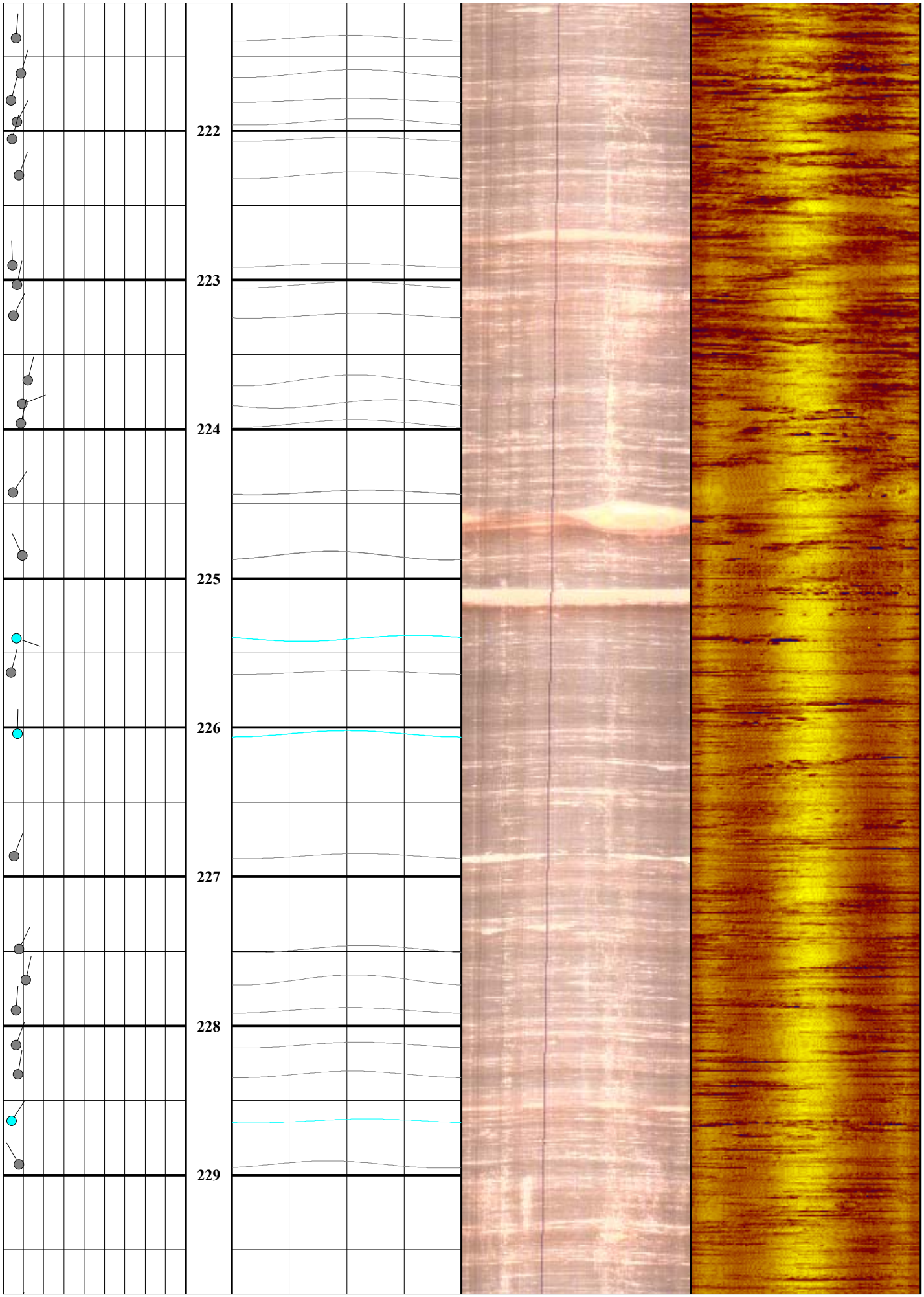

178
179
180
181
182
183
184
185
186

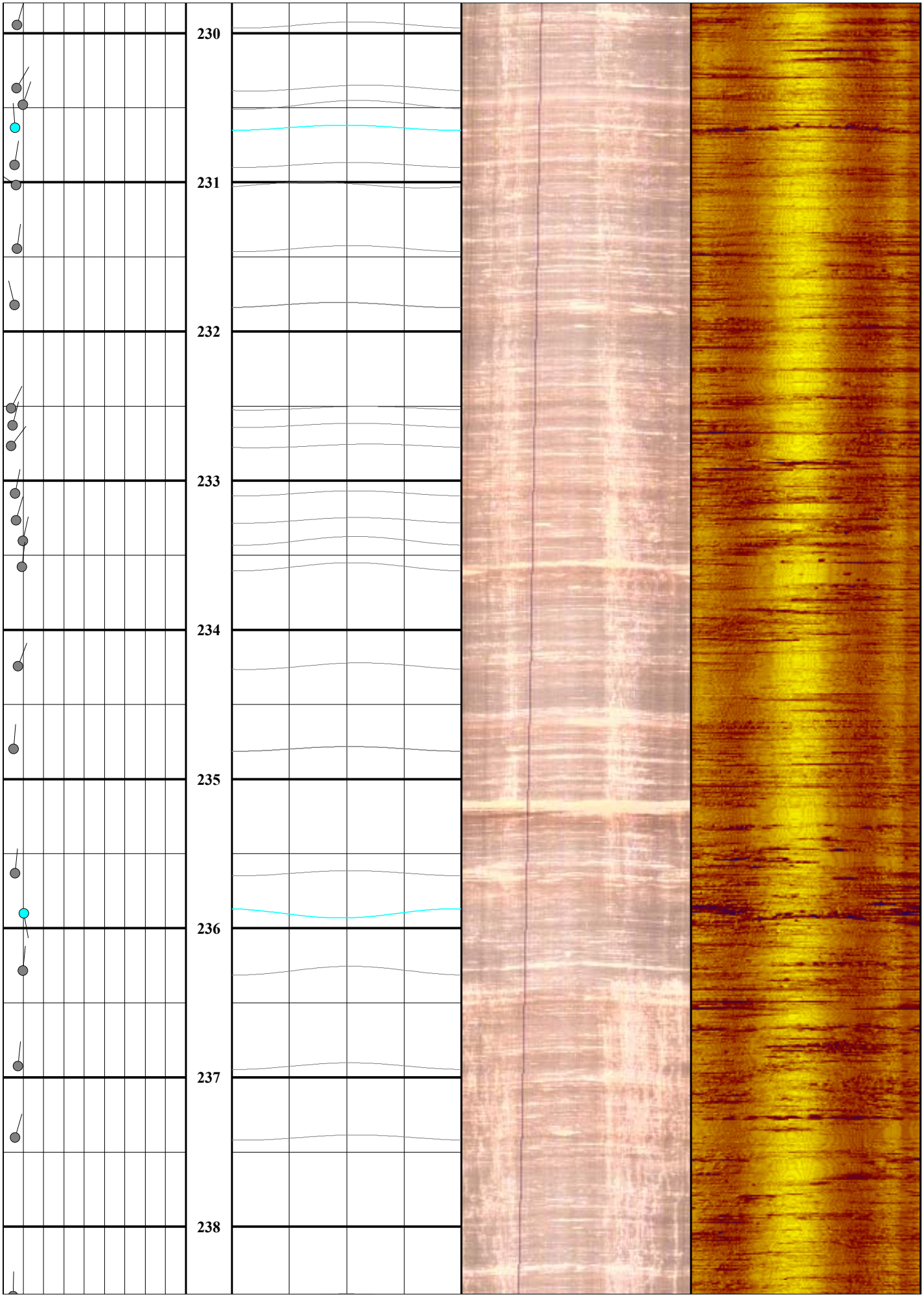

187
188
189
190
191
192
193
194
195

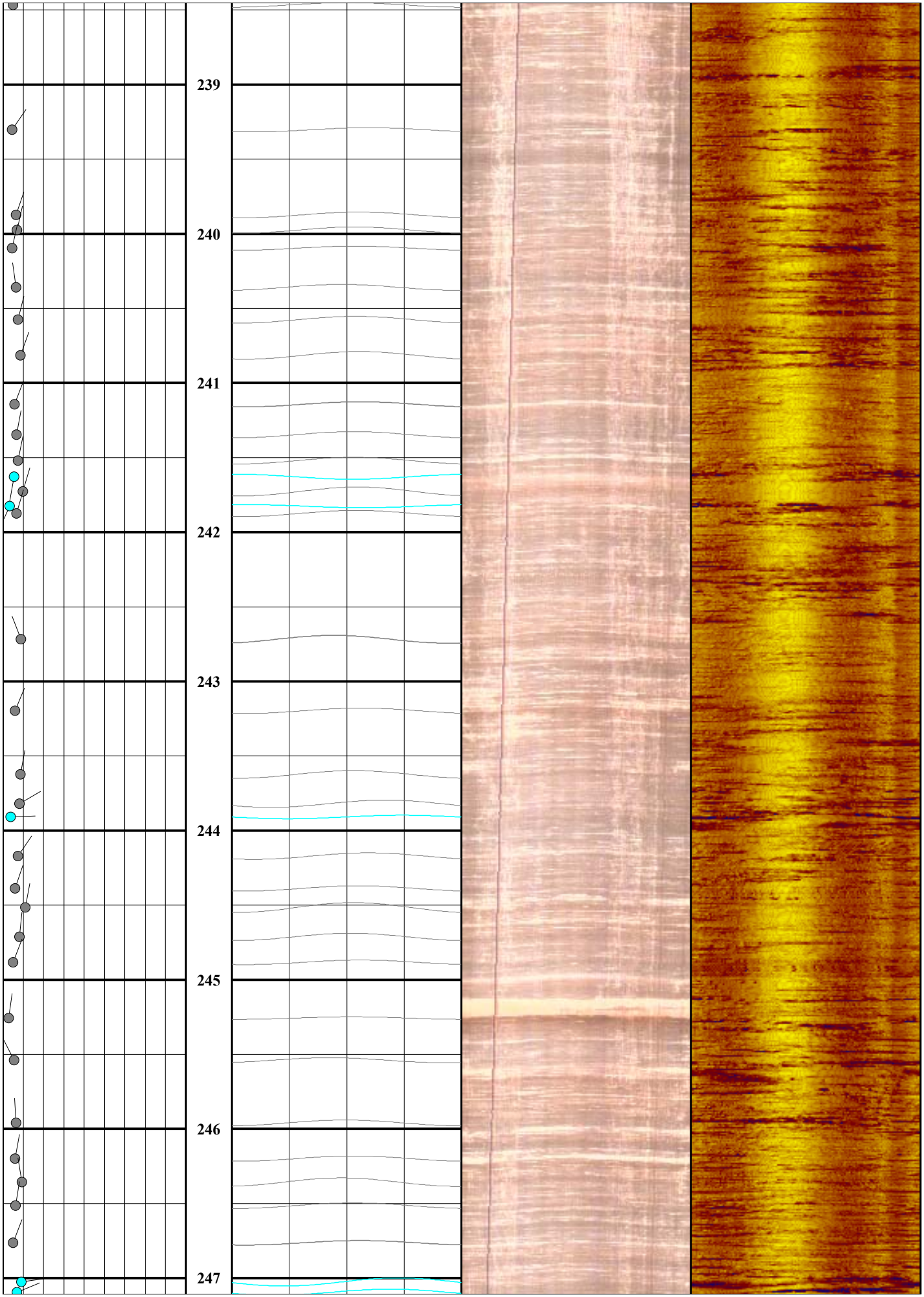

196
197
198
199
200
201
202
203

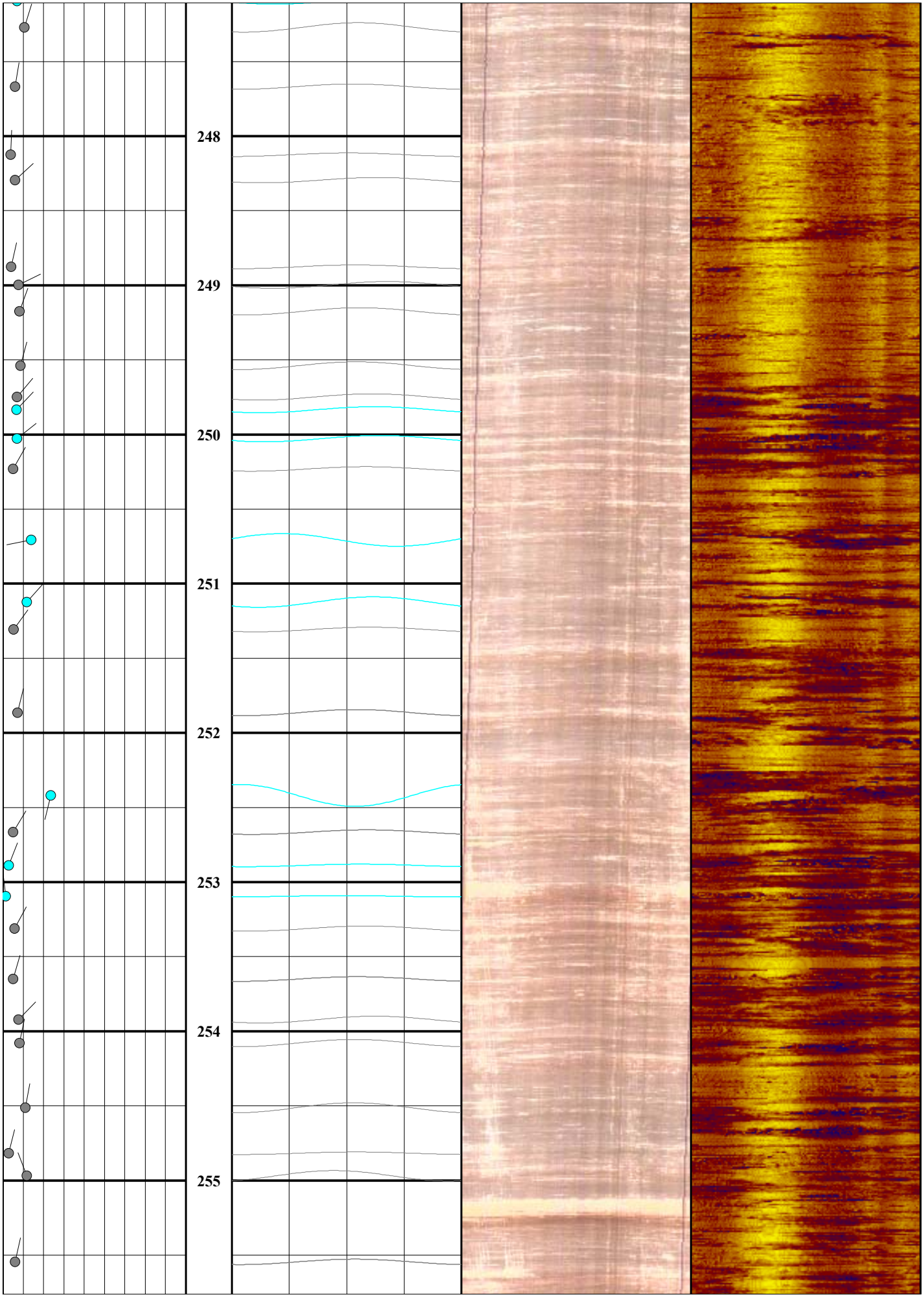

204
205
206
207
208
209
210
211
212

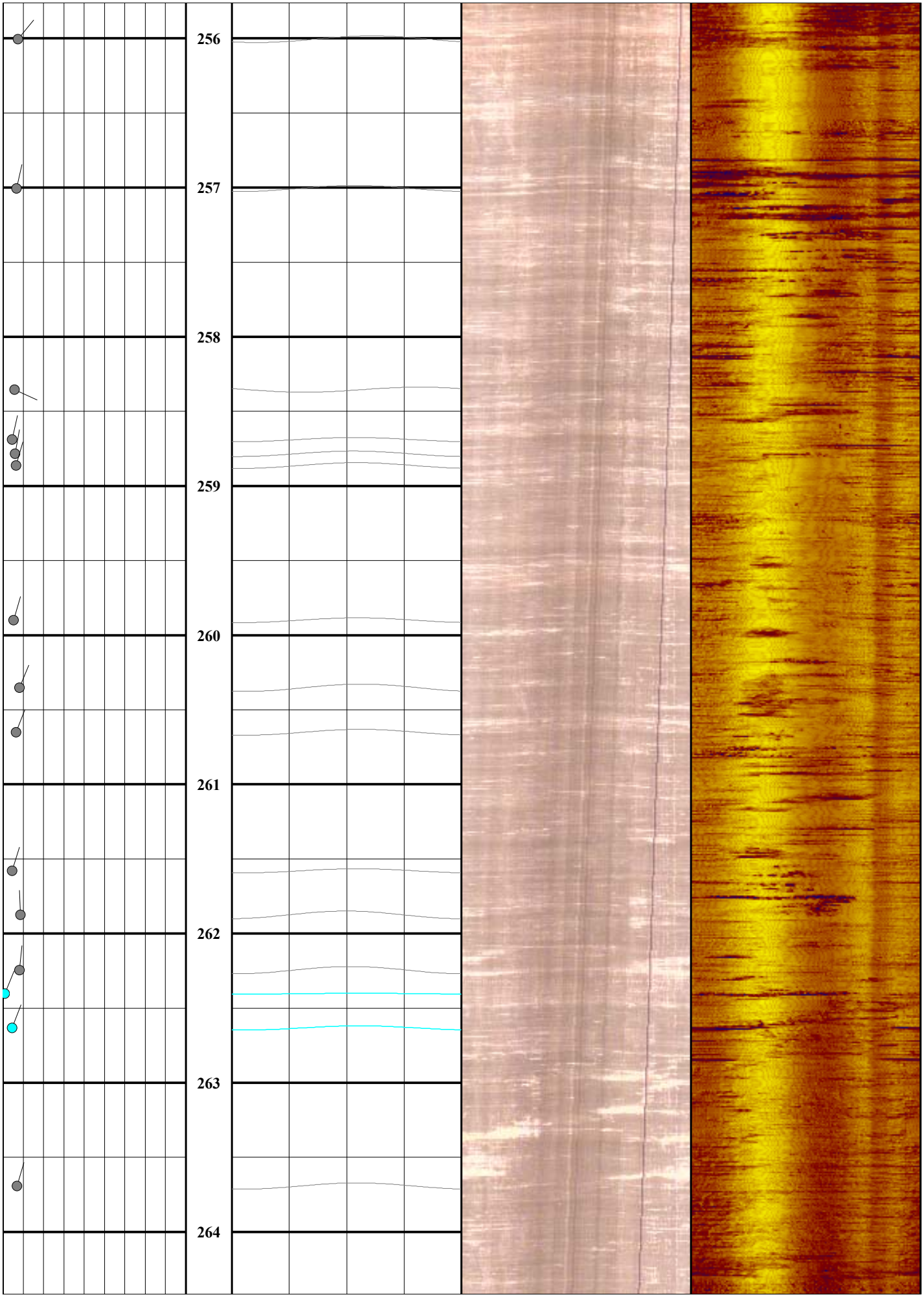

213
214
215
216
217
218
219
220
221

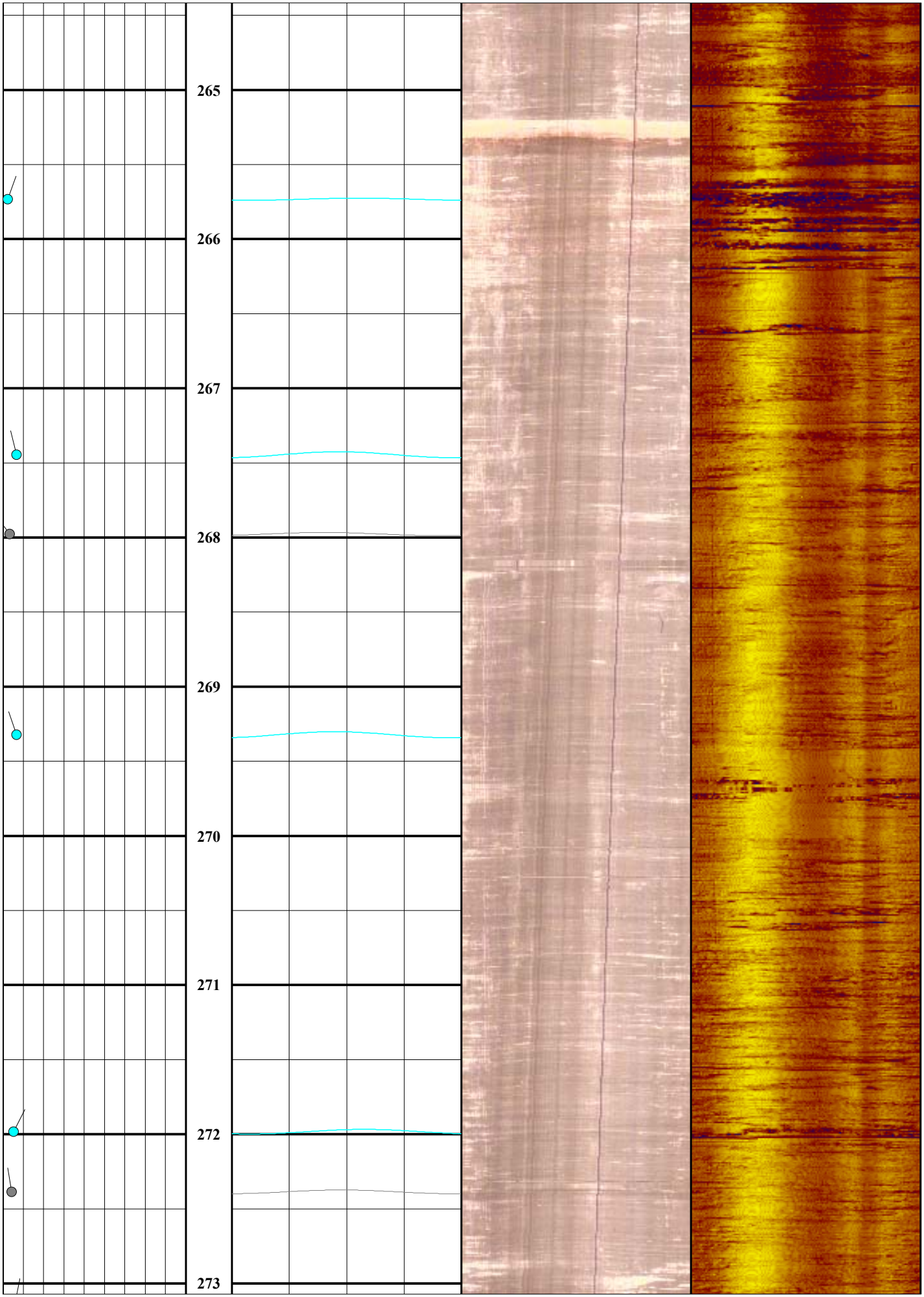

222
223
224
225
226
227
228
229

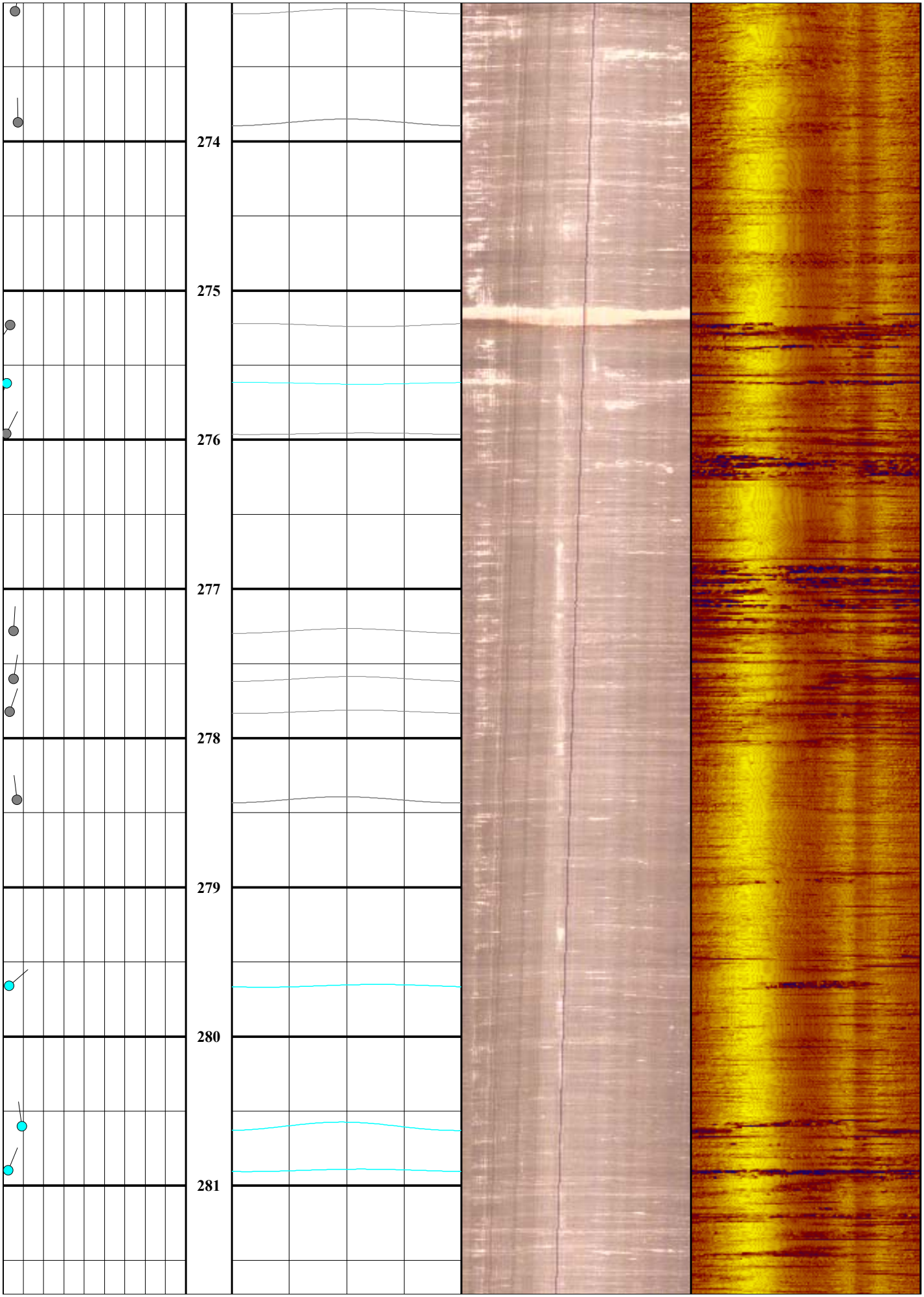

230
231
232
233
234
235
236
237
238

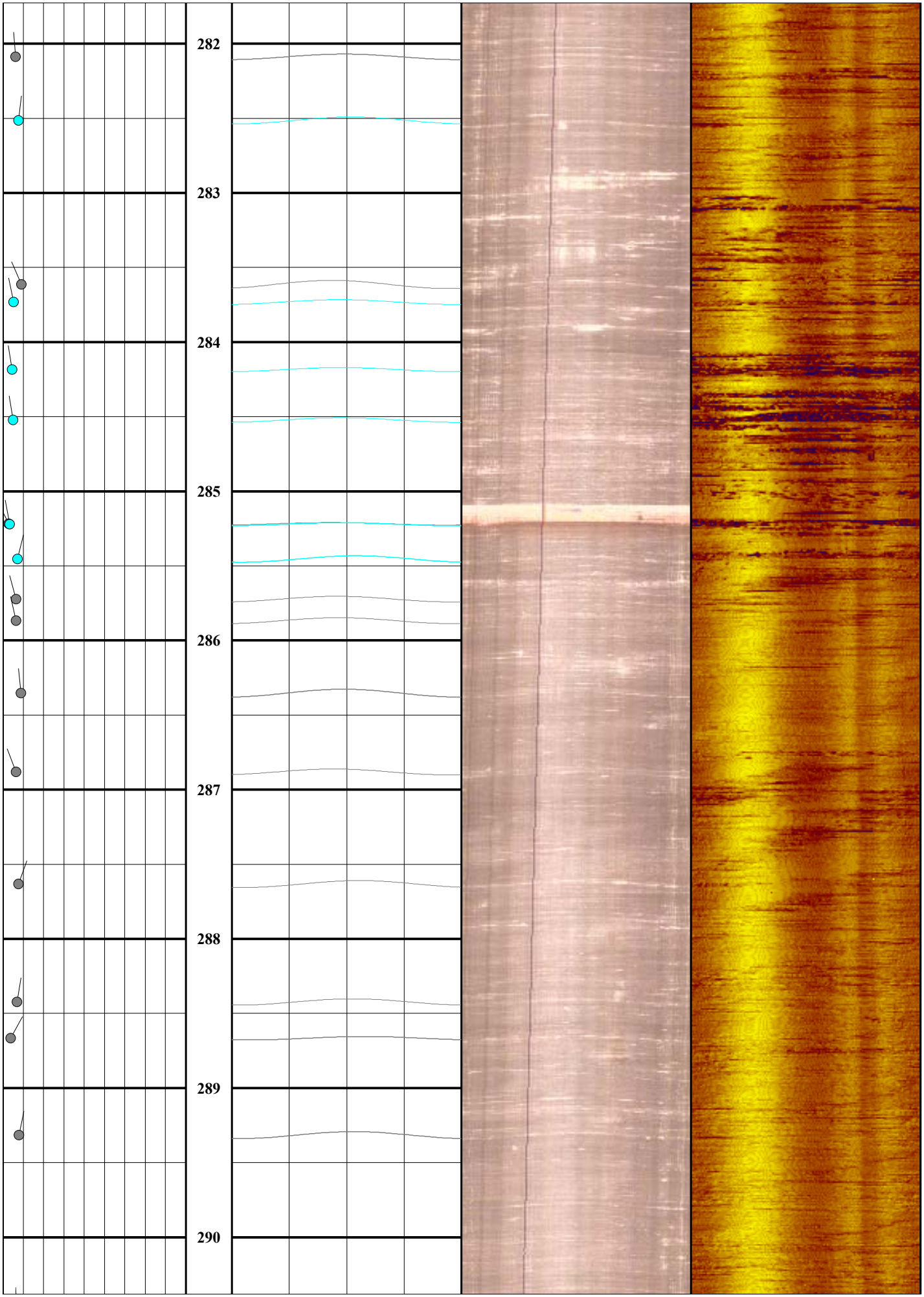

239
240
241
242
243
244
245
246
247

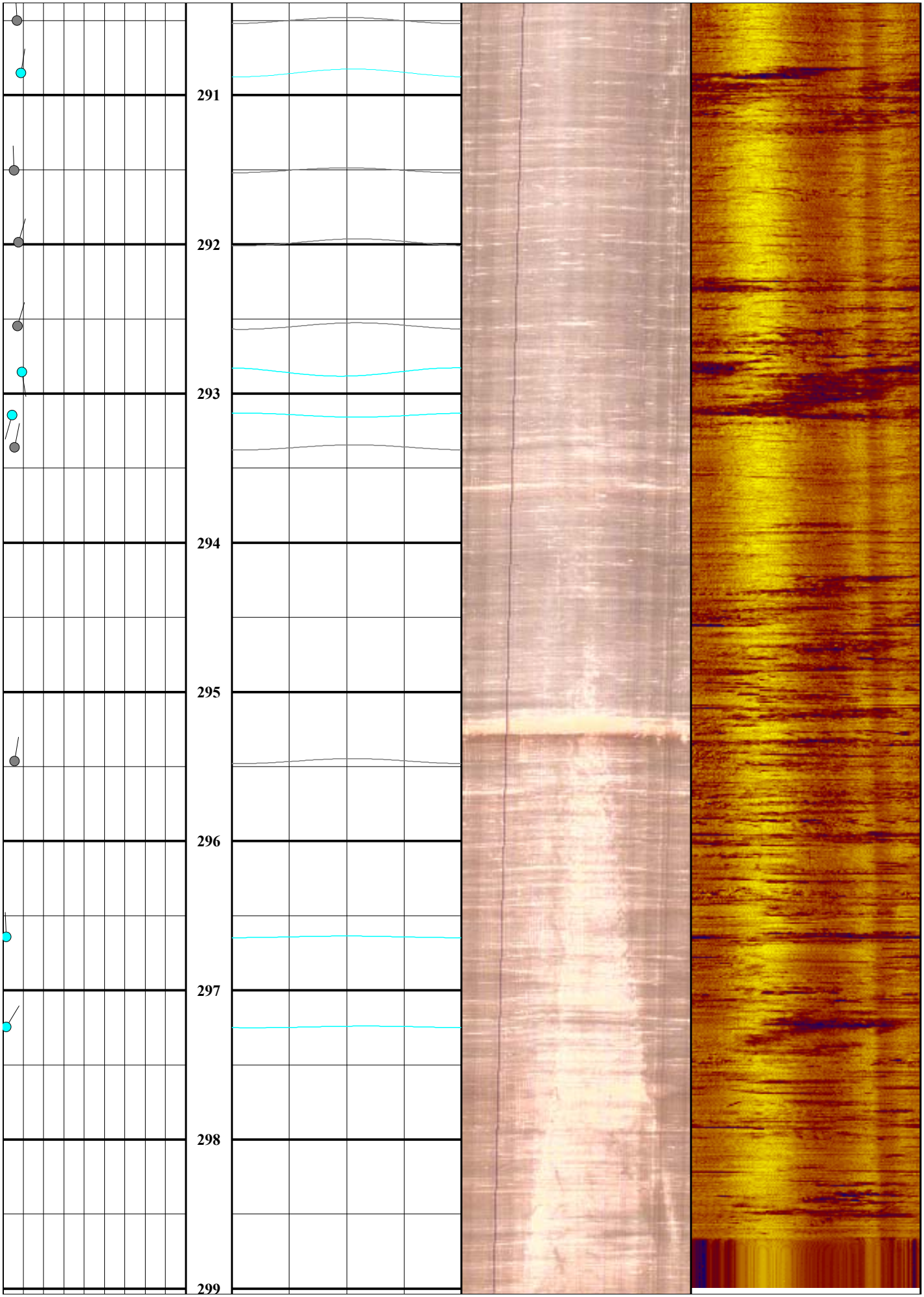

248
249
250
251
252
253
254
255

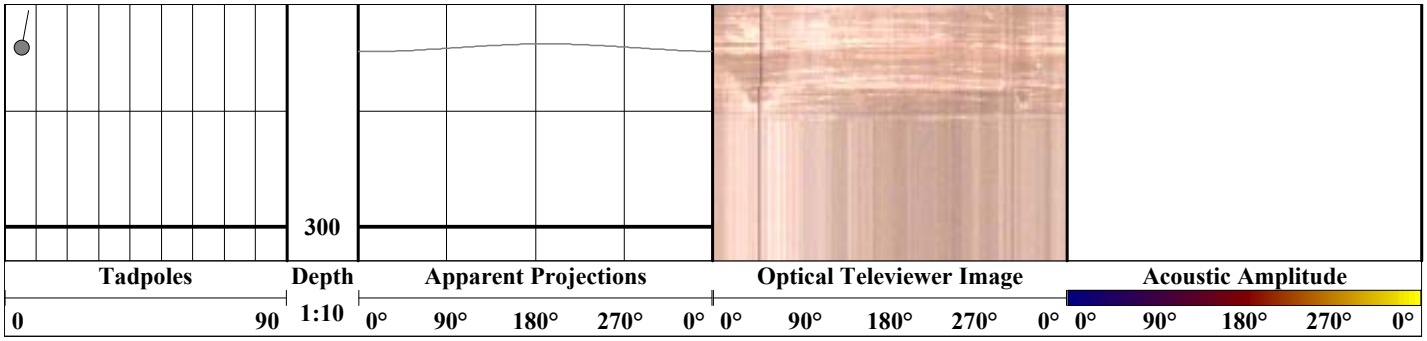

256
257
258
259
260
261
262
263
264


265
266
267
268
269
270
271
272
273


274
275
276
277
278
279
280
281


282
283
284
285
286
287
288
289
290

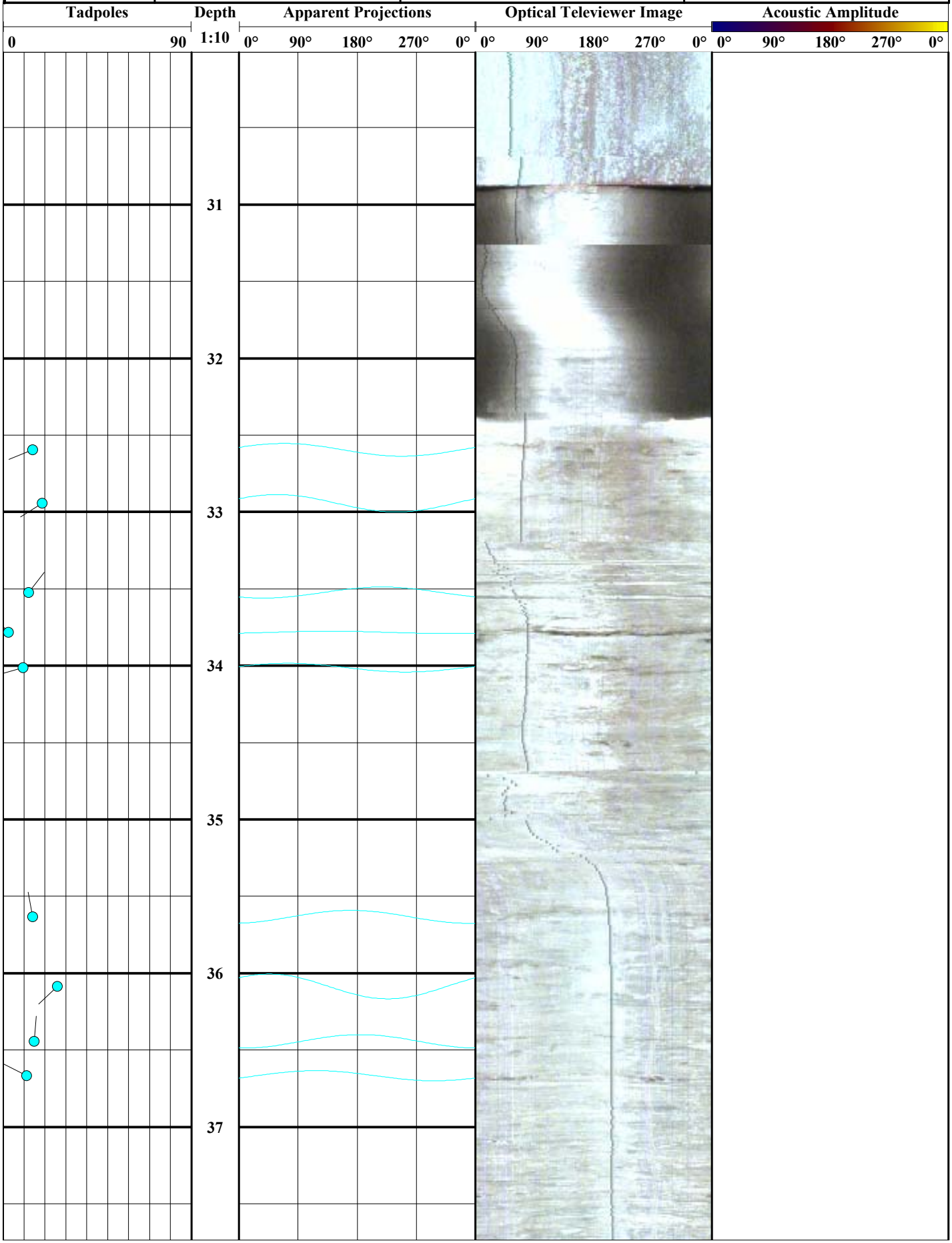

291
292
293
294
295
296
297
298
299

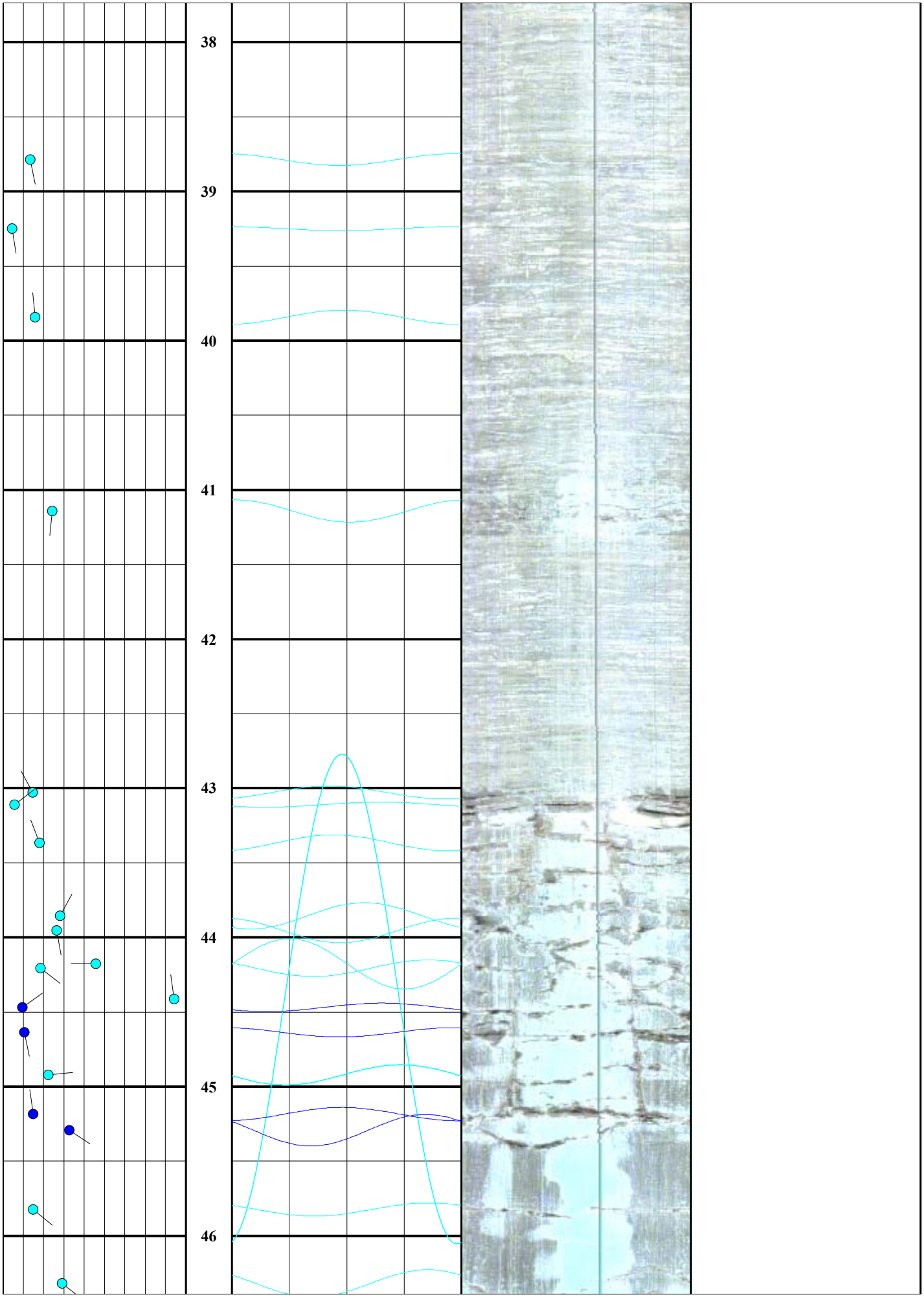

300
Tadpoles
Depth
Apparent Projections
Optical Televiewer Image
Acoustic Amplitude
0
90
1:10
0°
90°
180°
270°
0°
0°
90°
180°
270°
0°
0°
90°
180°
270°
0°

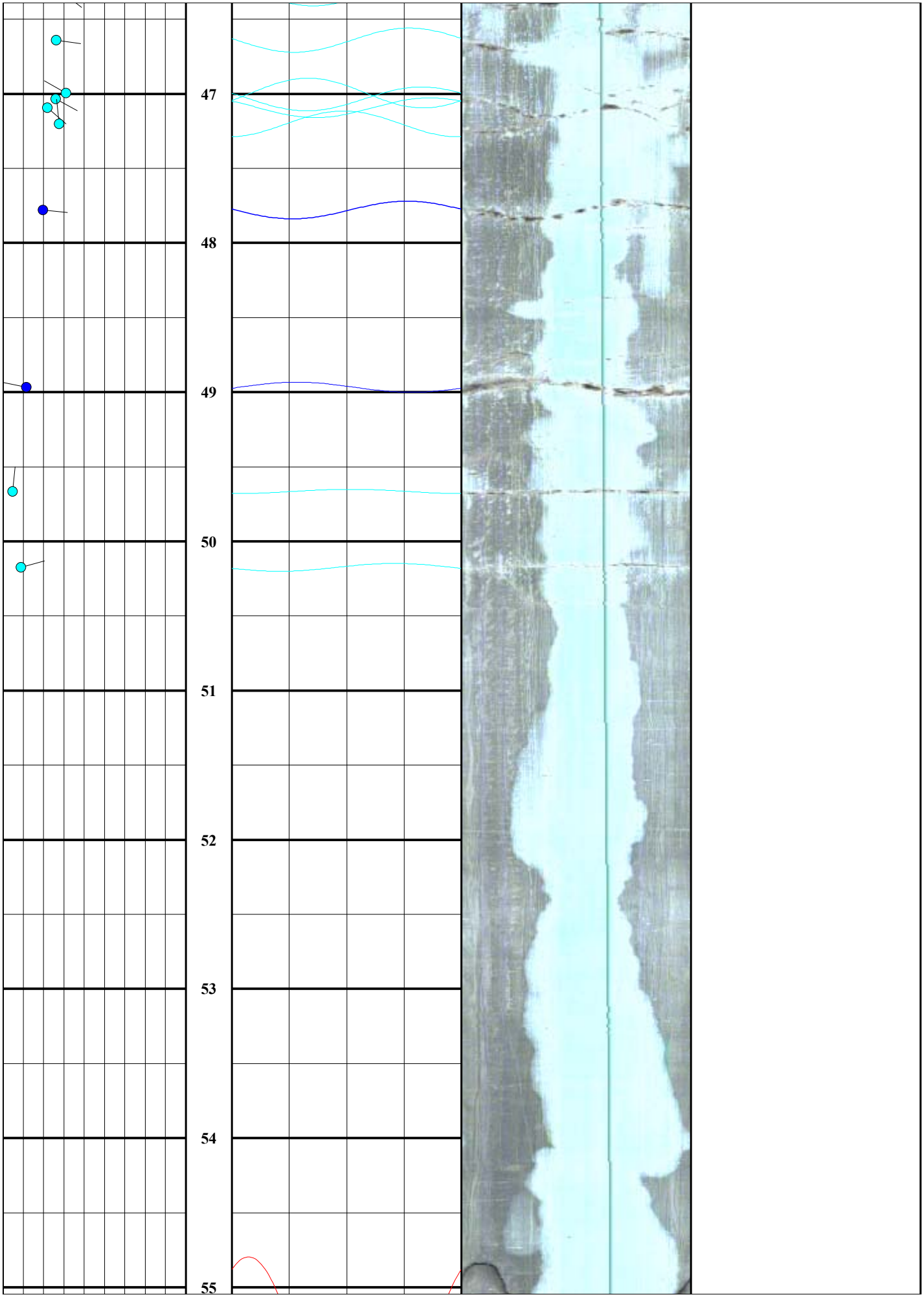
Optical/Acoustic Borehole Image Plot

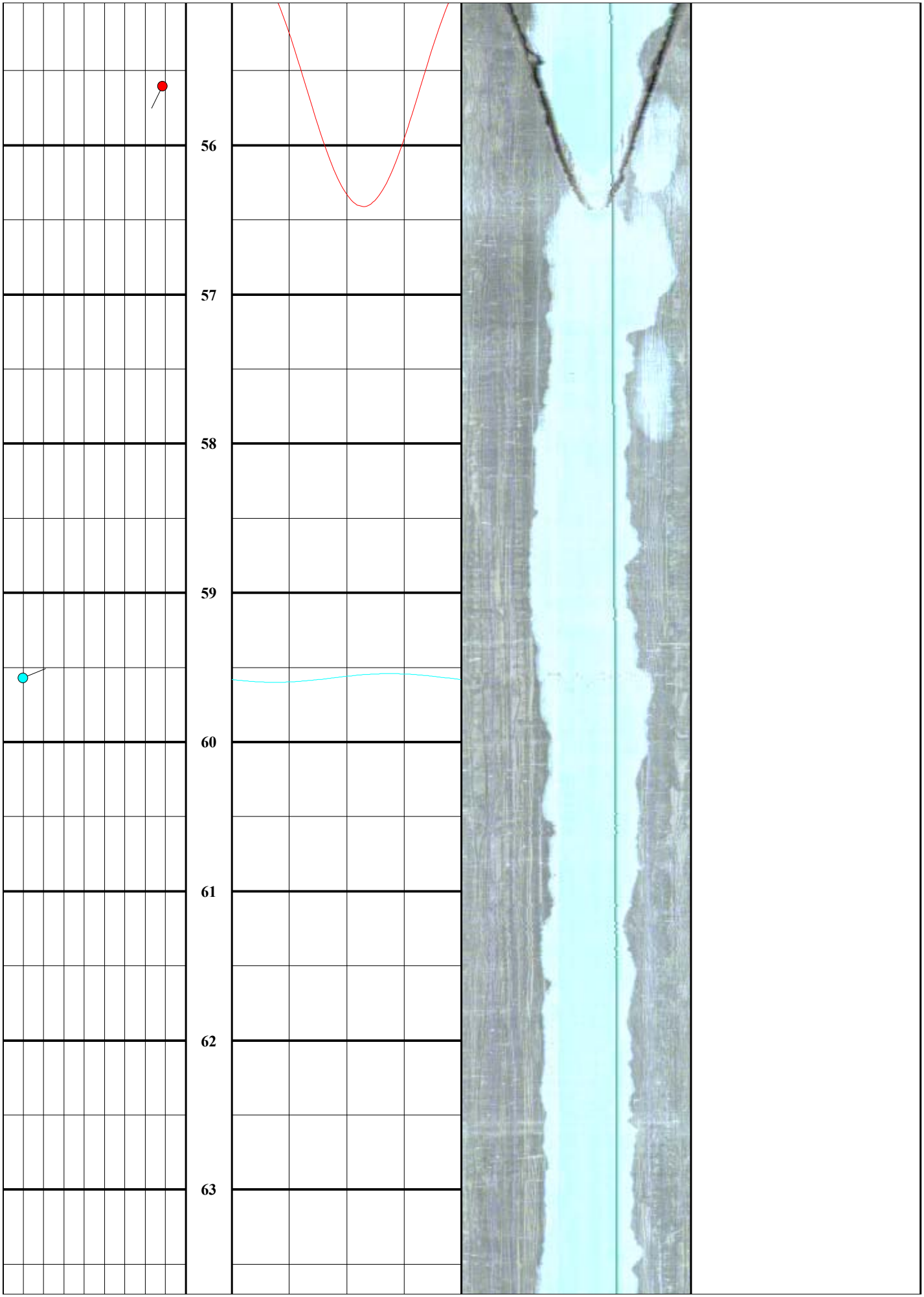
COMPANY: S. M. Stoller Corp.
PROJECT: Crescent Junction
DATE LOGGED: 10 December 2005
WELL: CH-0203

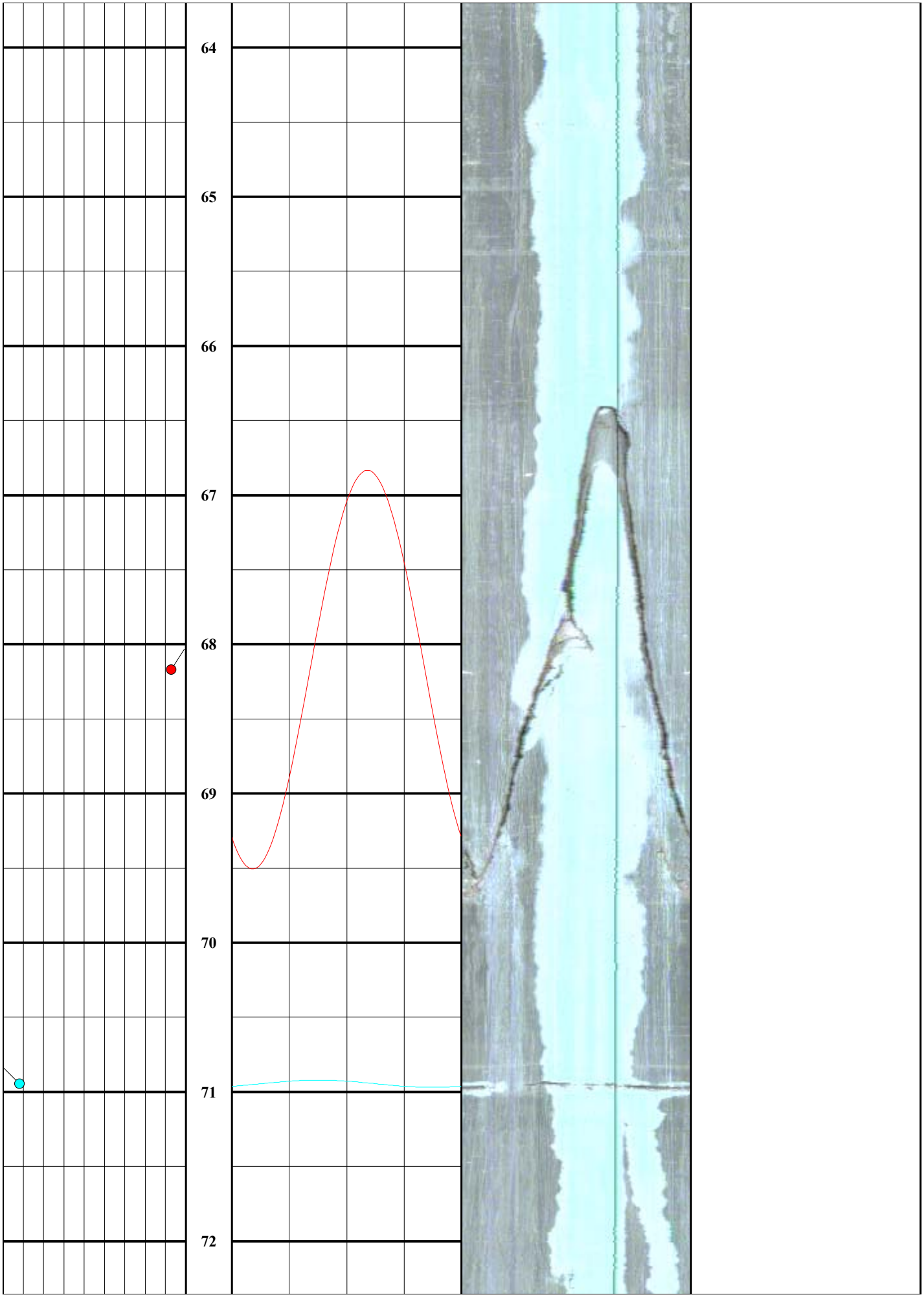
COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com

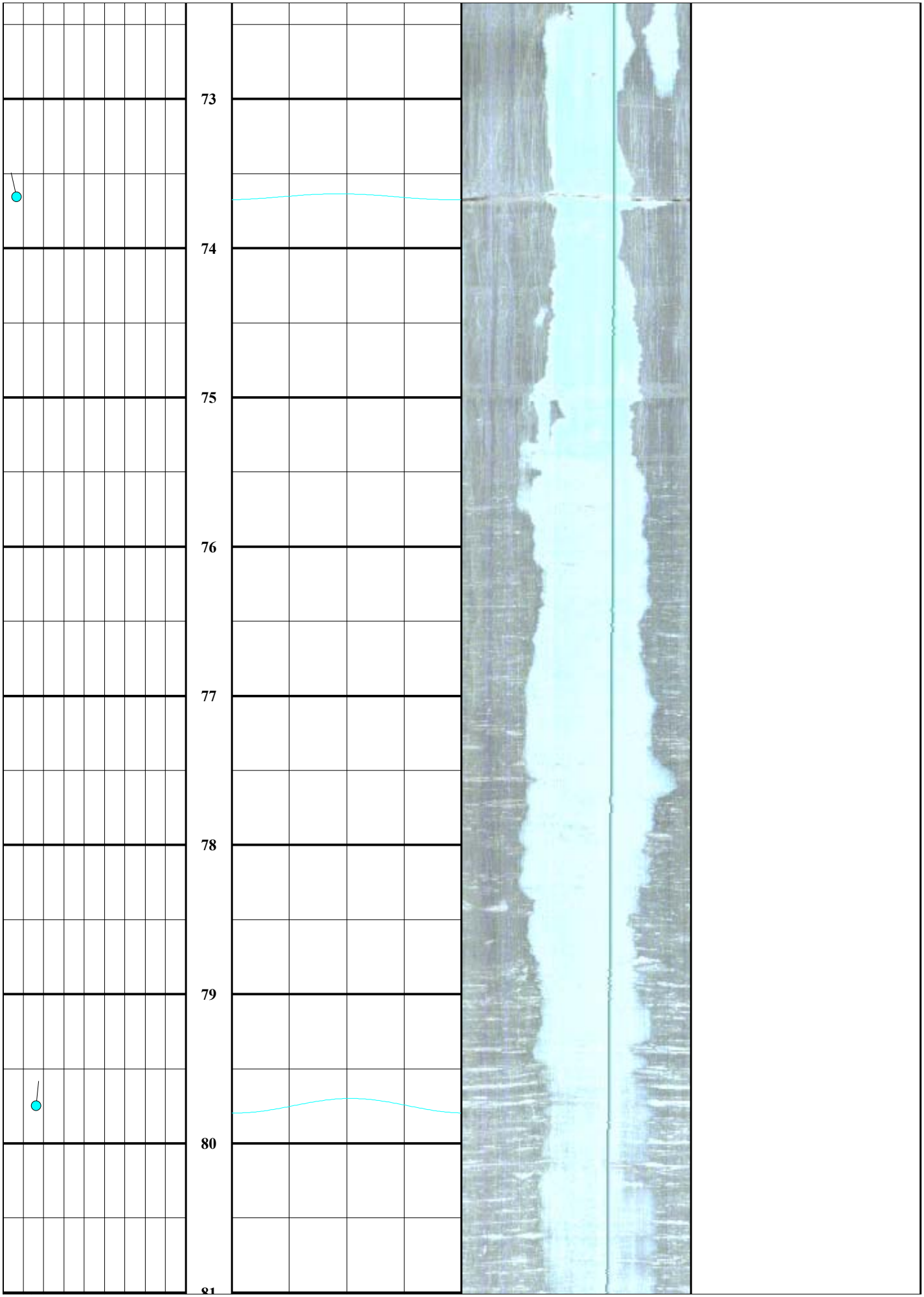


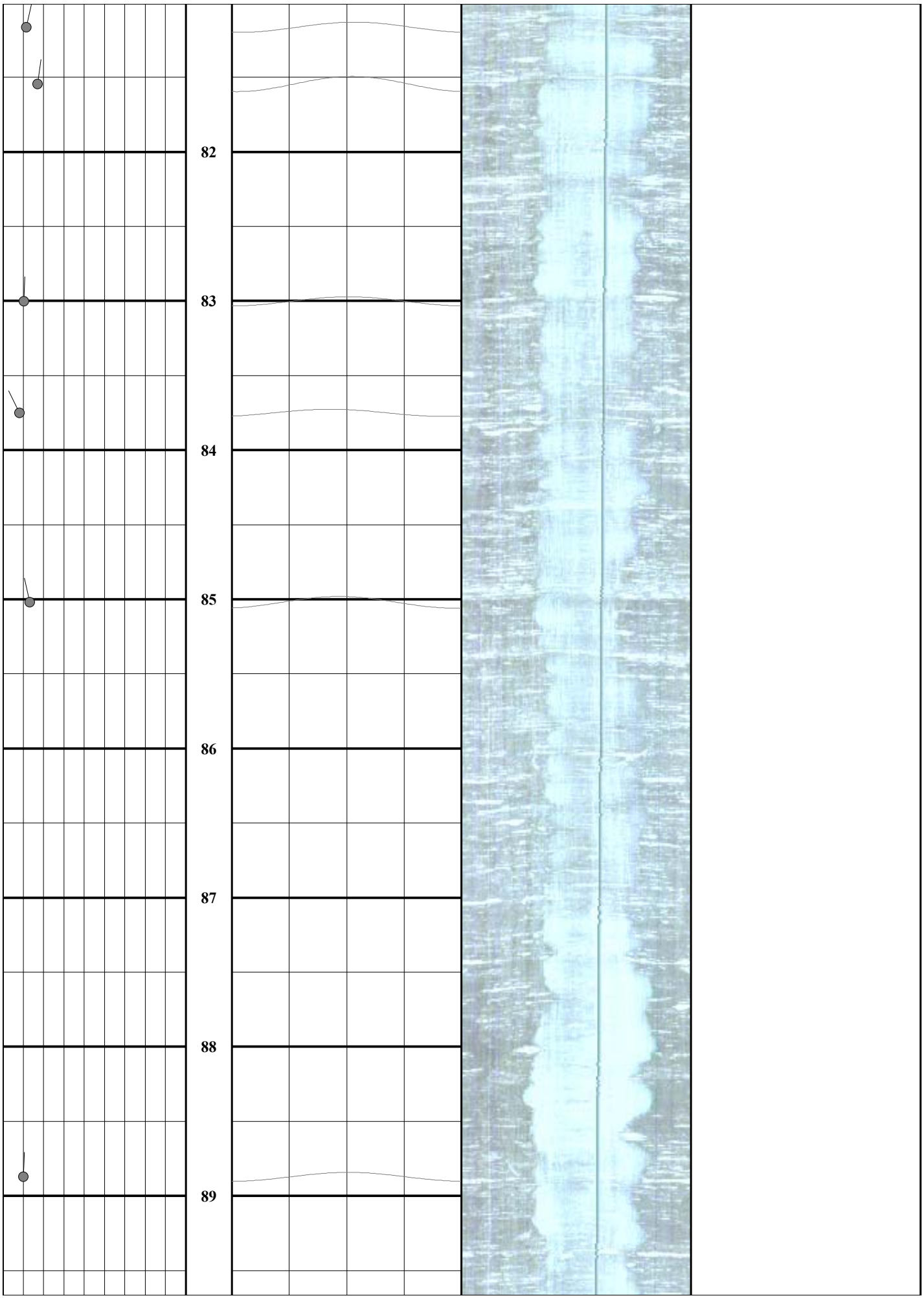

38
39
40
41
42
43
44
45
46

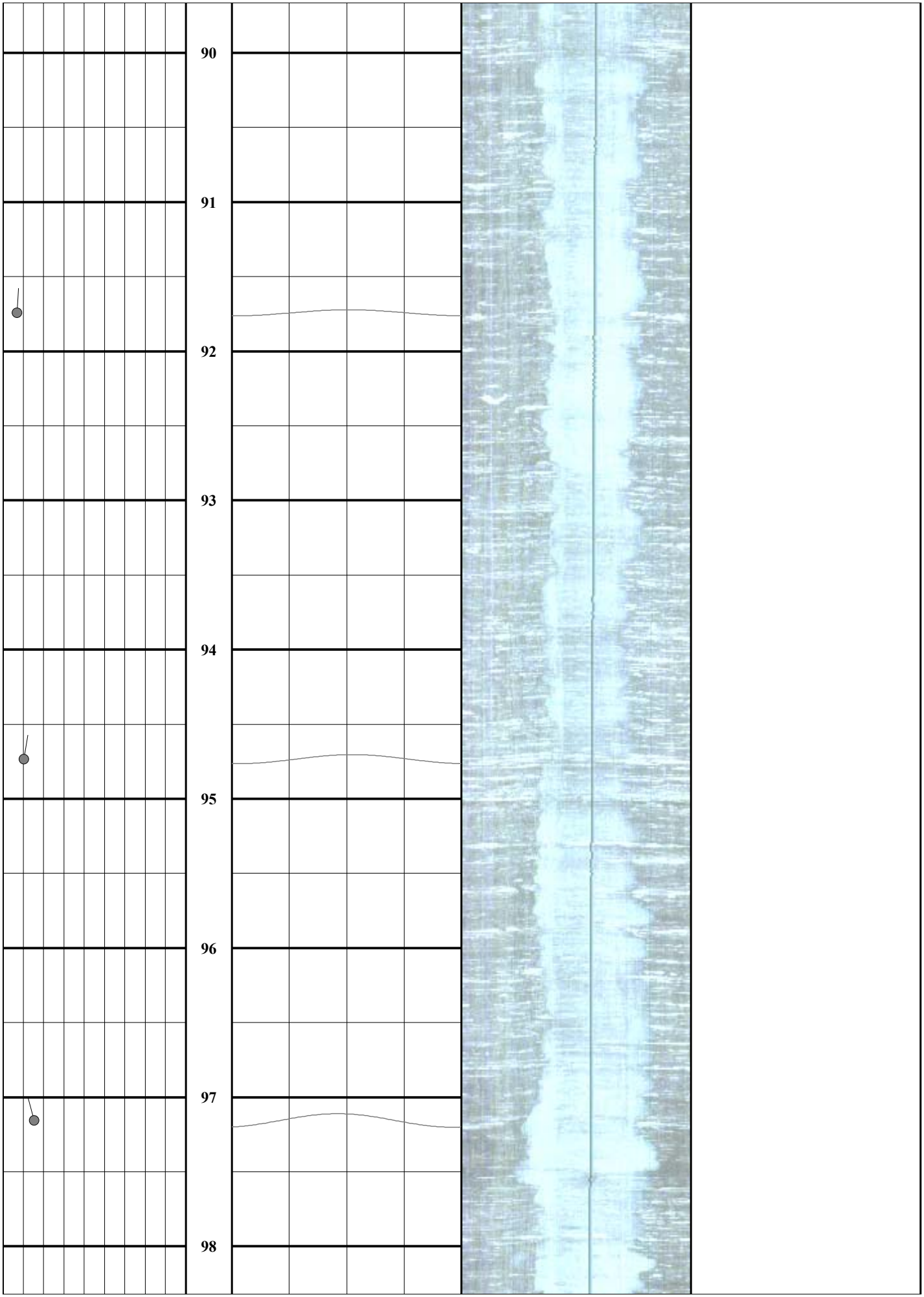

47
48
49
50
51
52
53
54
55

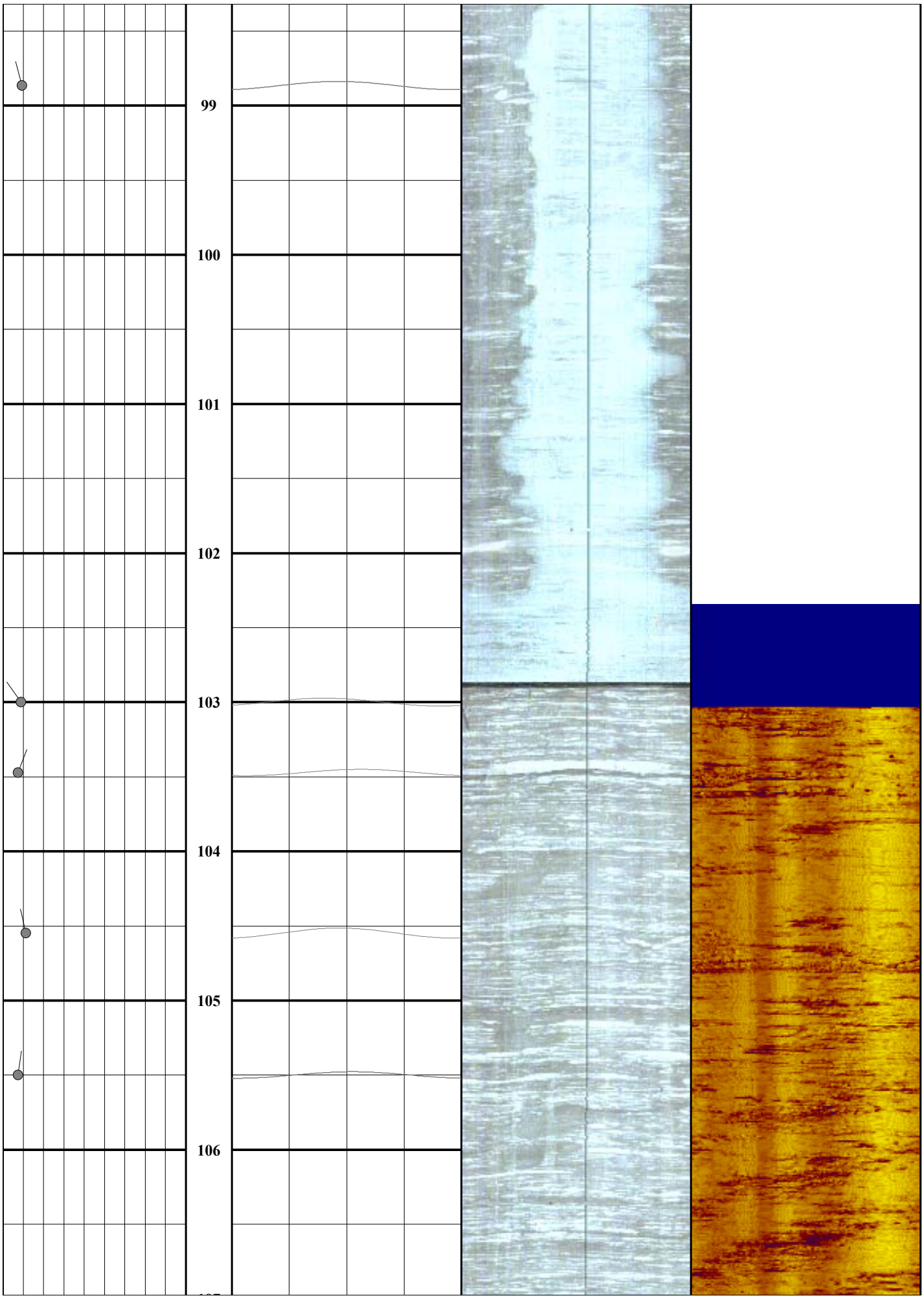

56
57
58
59
60
61
62
63

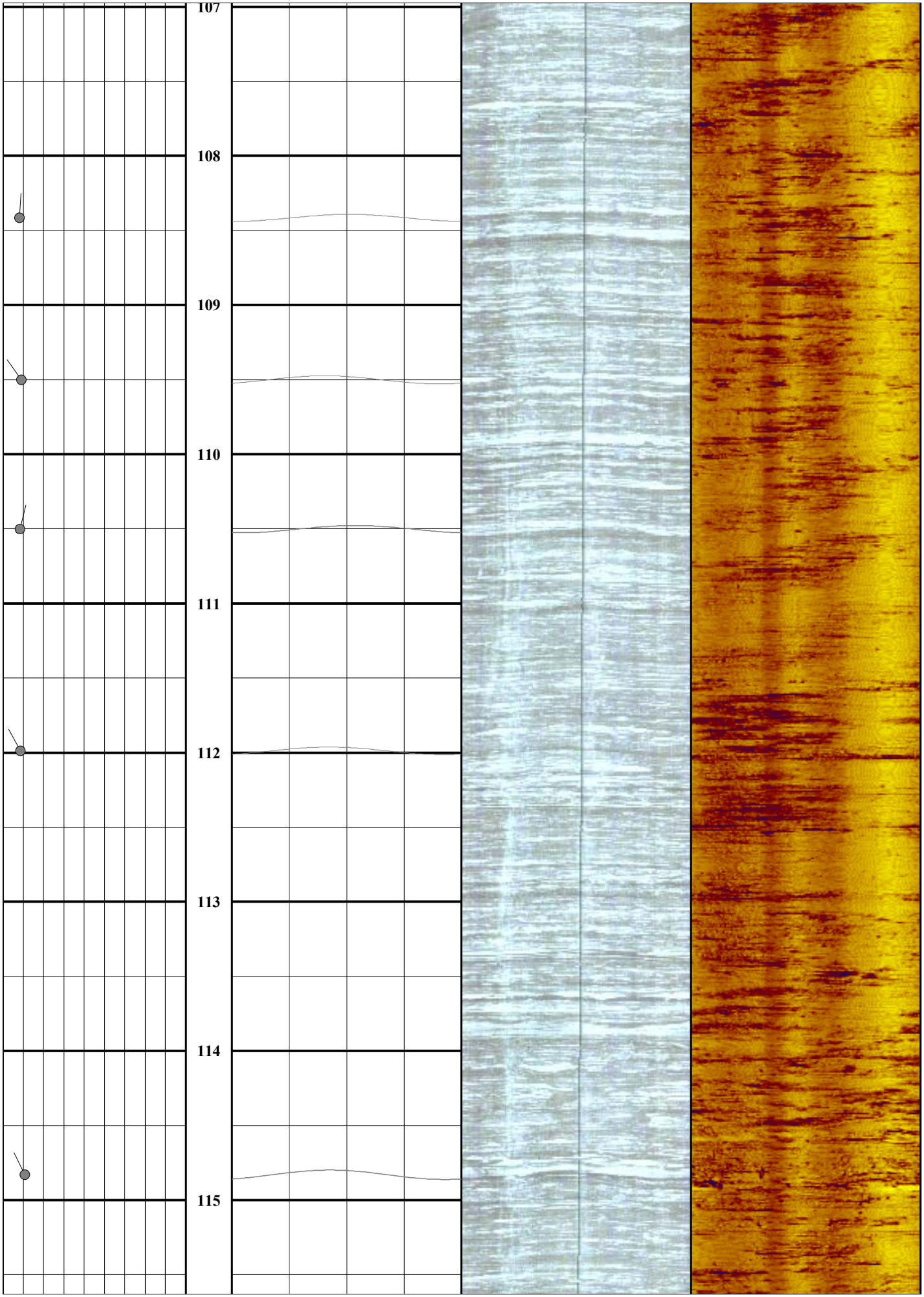

64
65
66
67
68
69
70
71
72

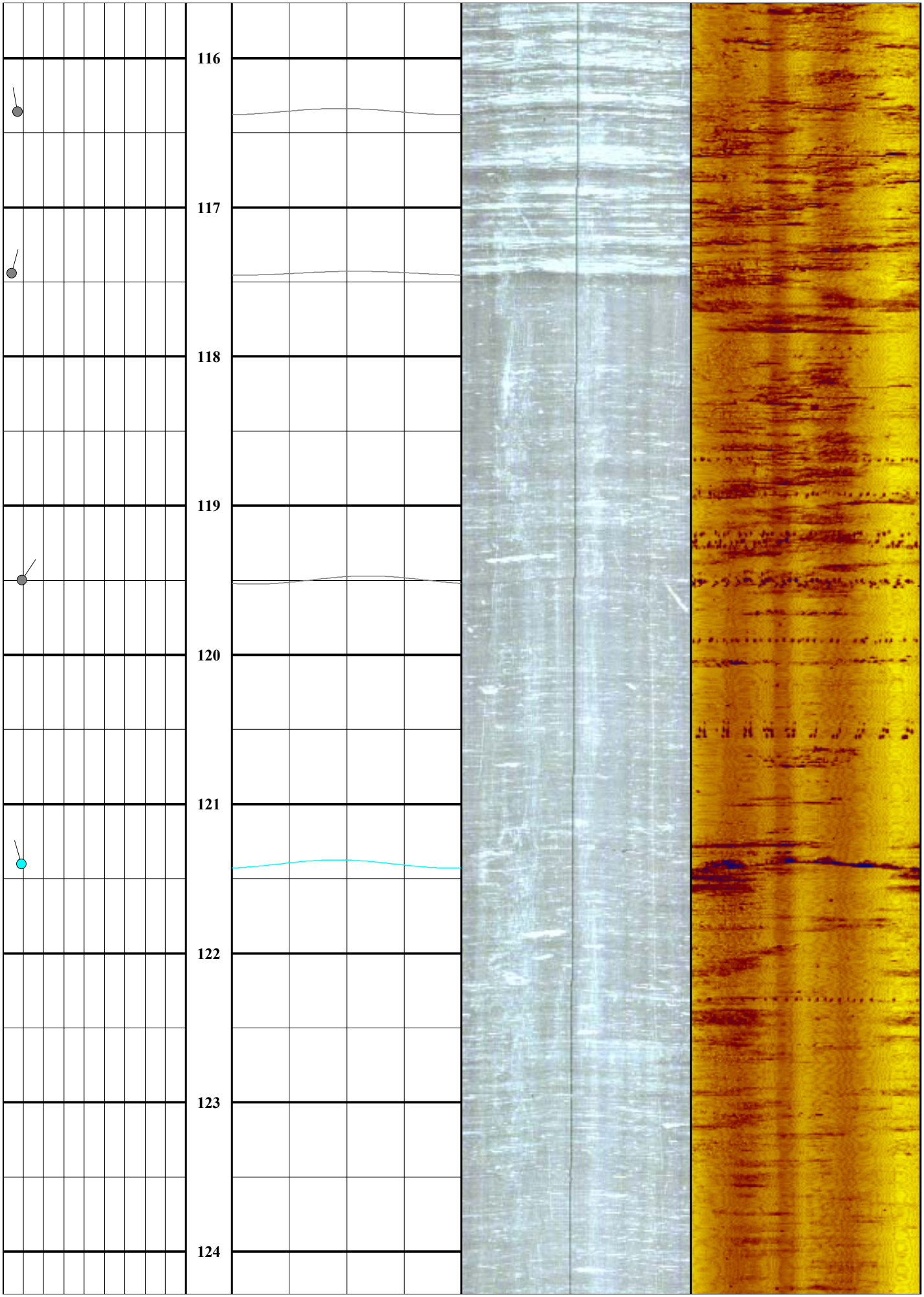

73
74
75
76
77
78
79
80
81

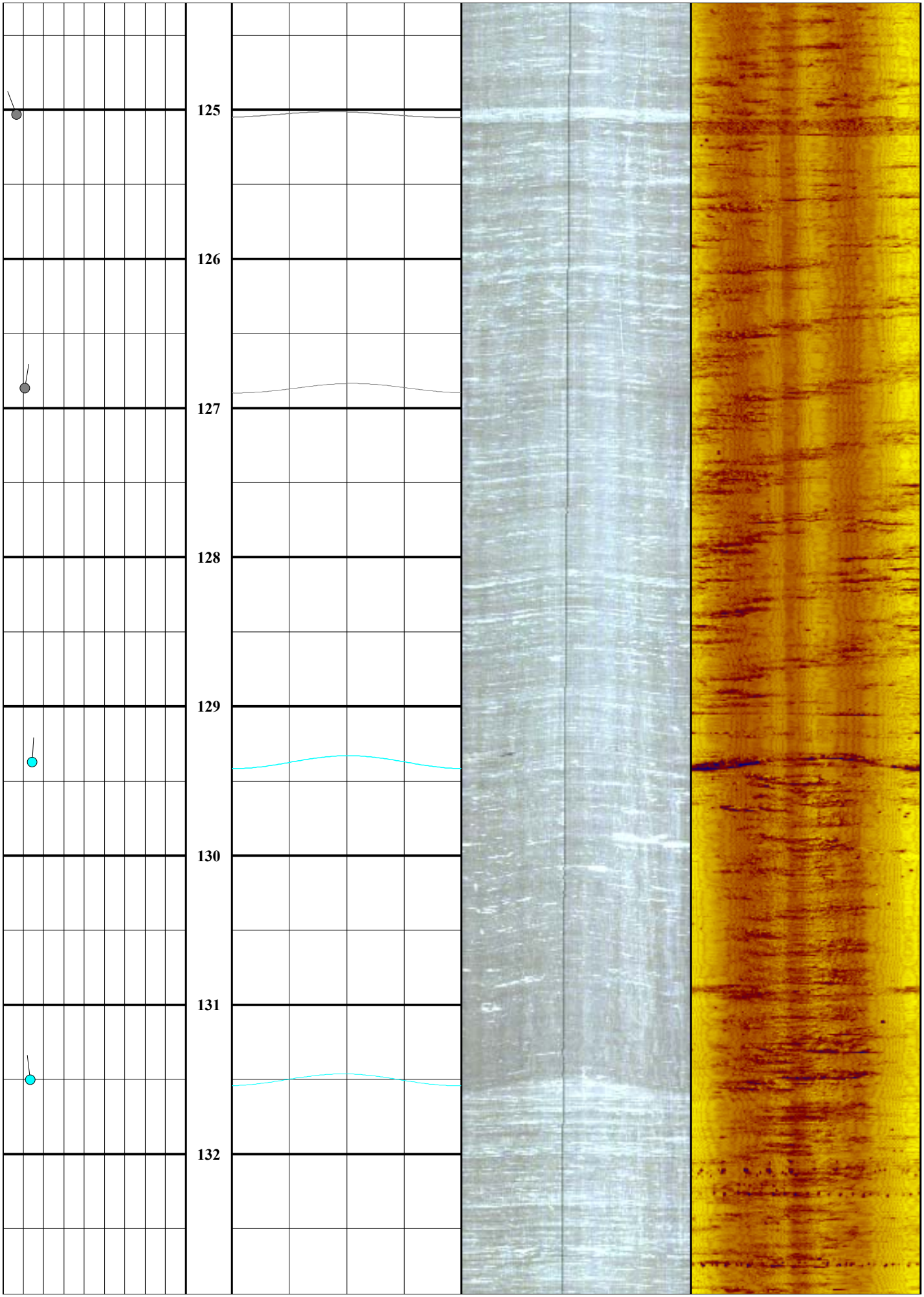

82
83
84
85
86
87
88
89

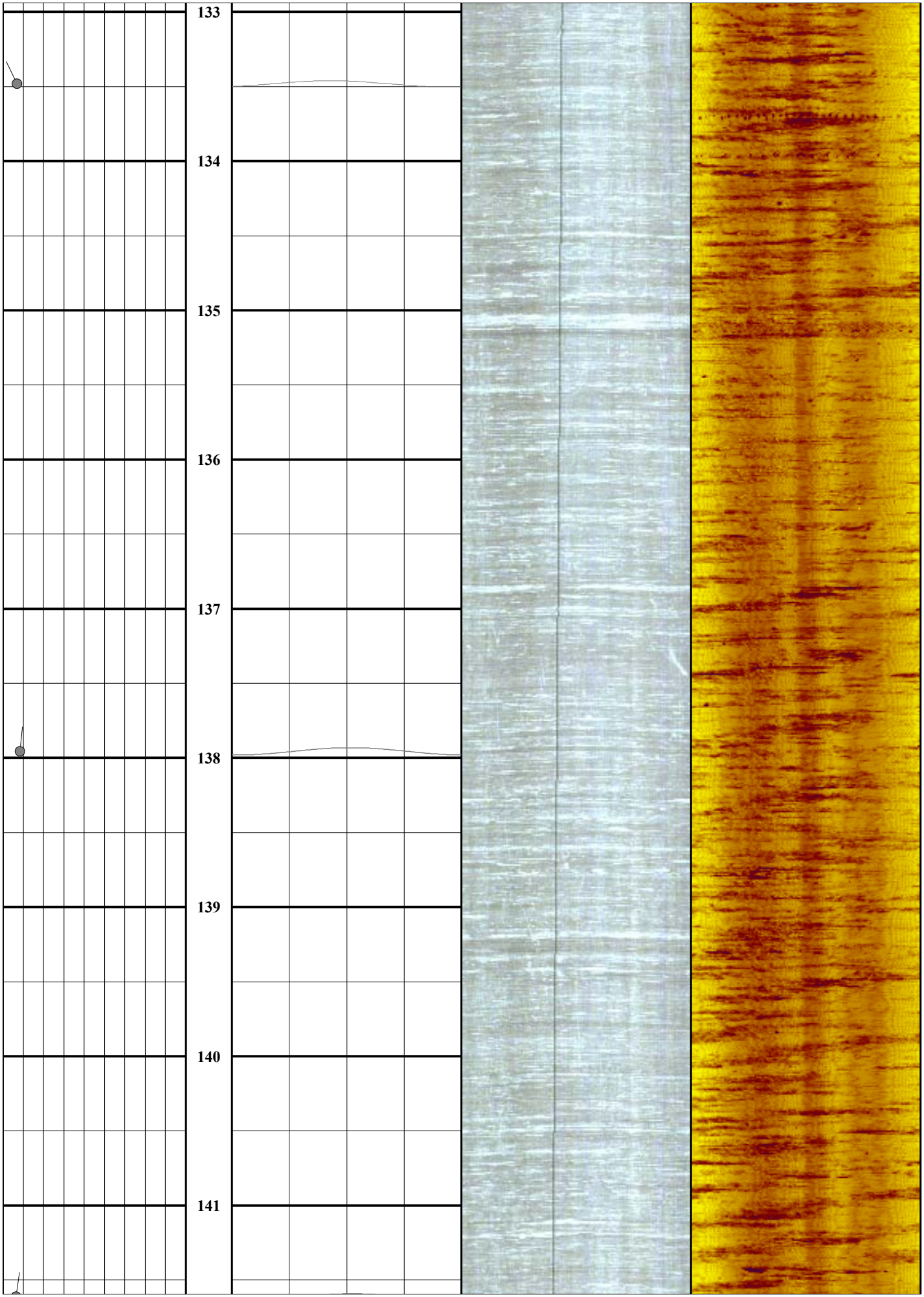

90
91
92
93
94
95
96
97
98

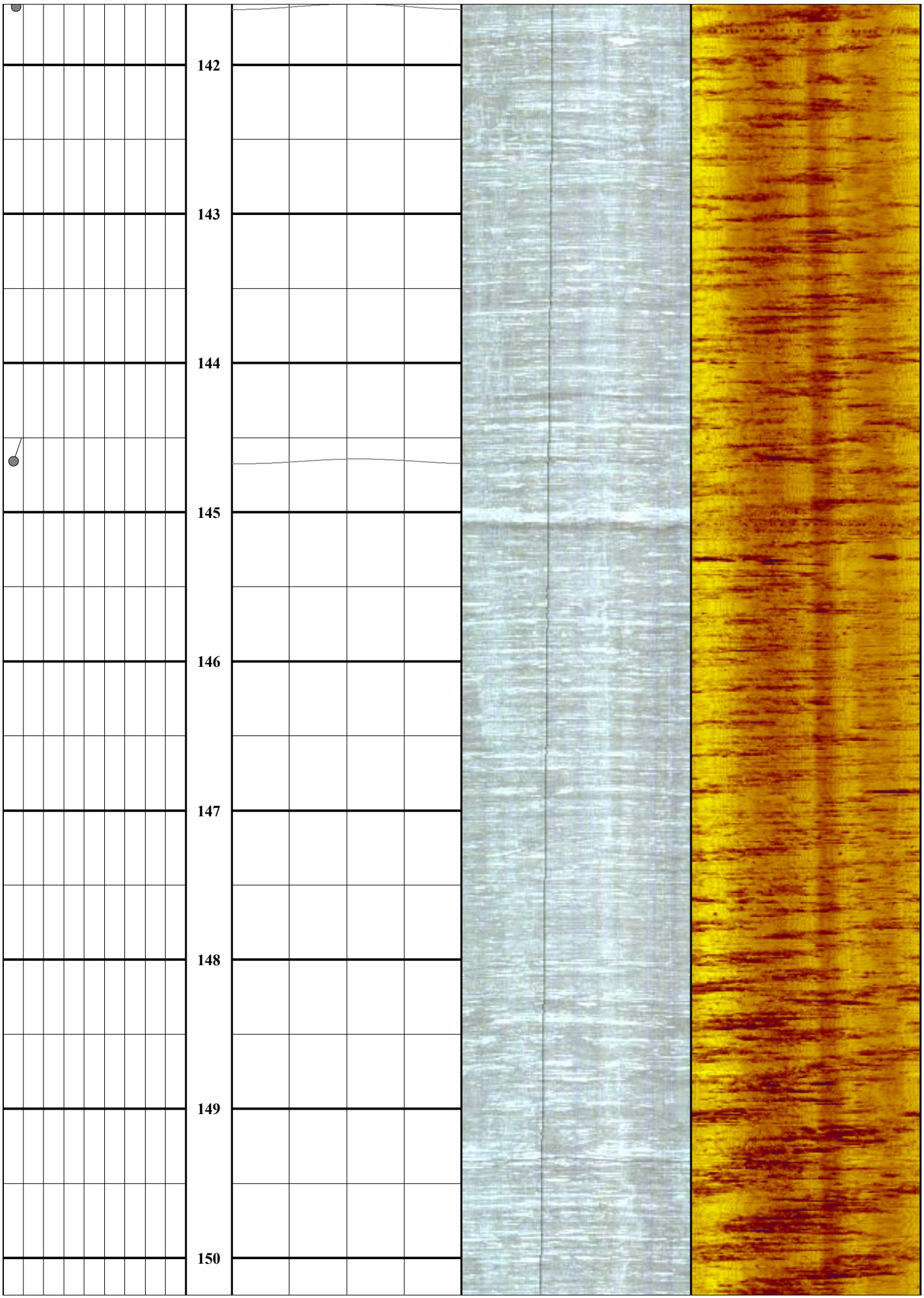

99
100
101
102
103
104
105
106

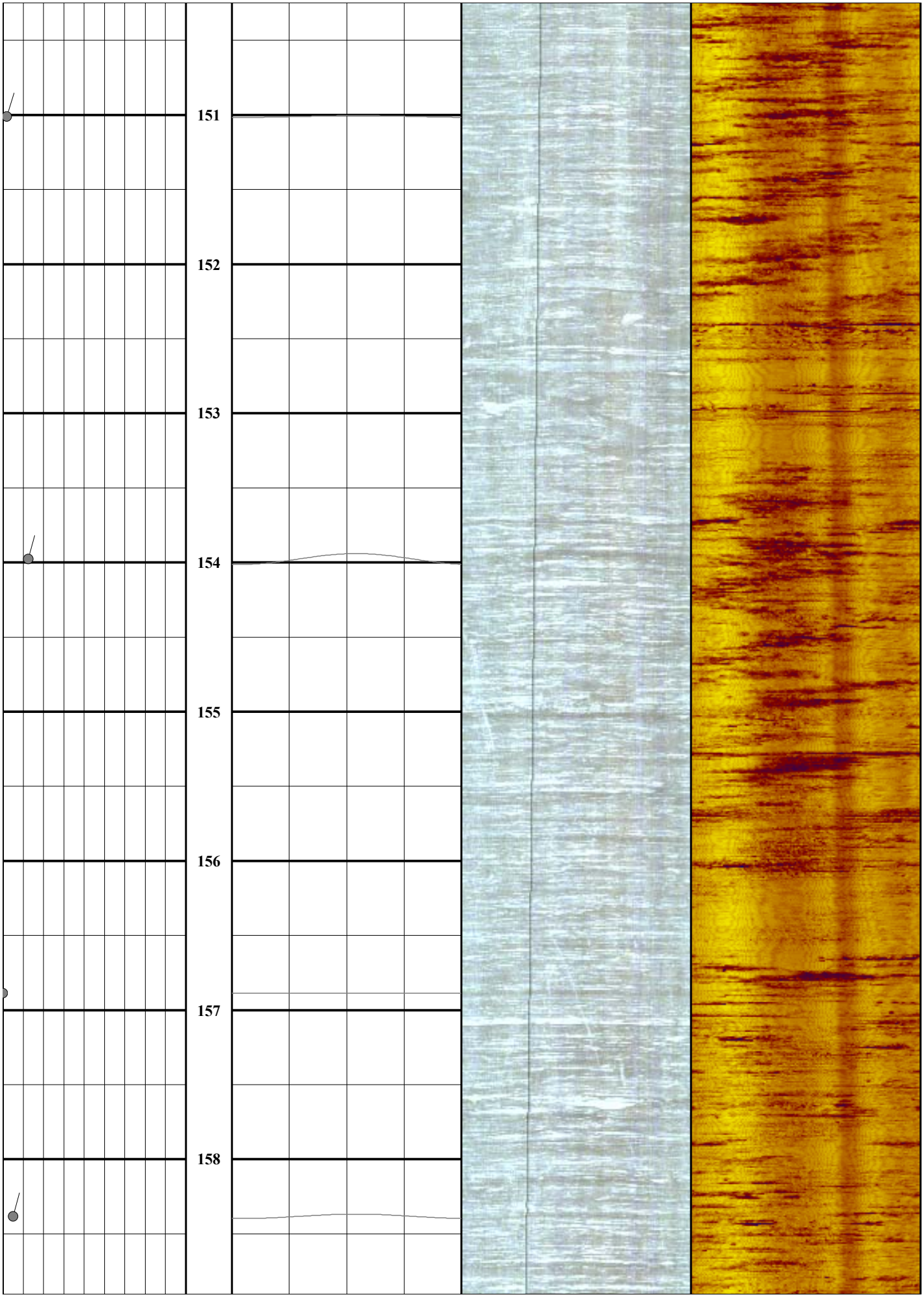

107
108
109
110
111
112
113
114
115

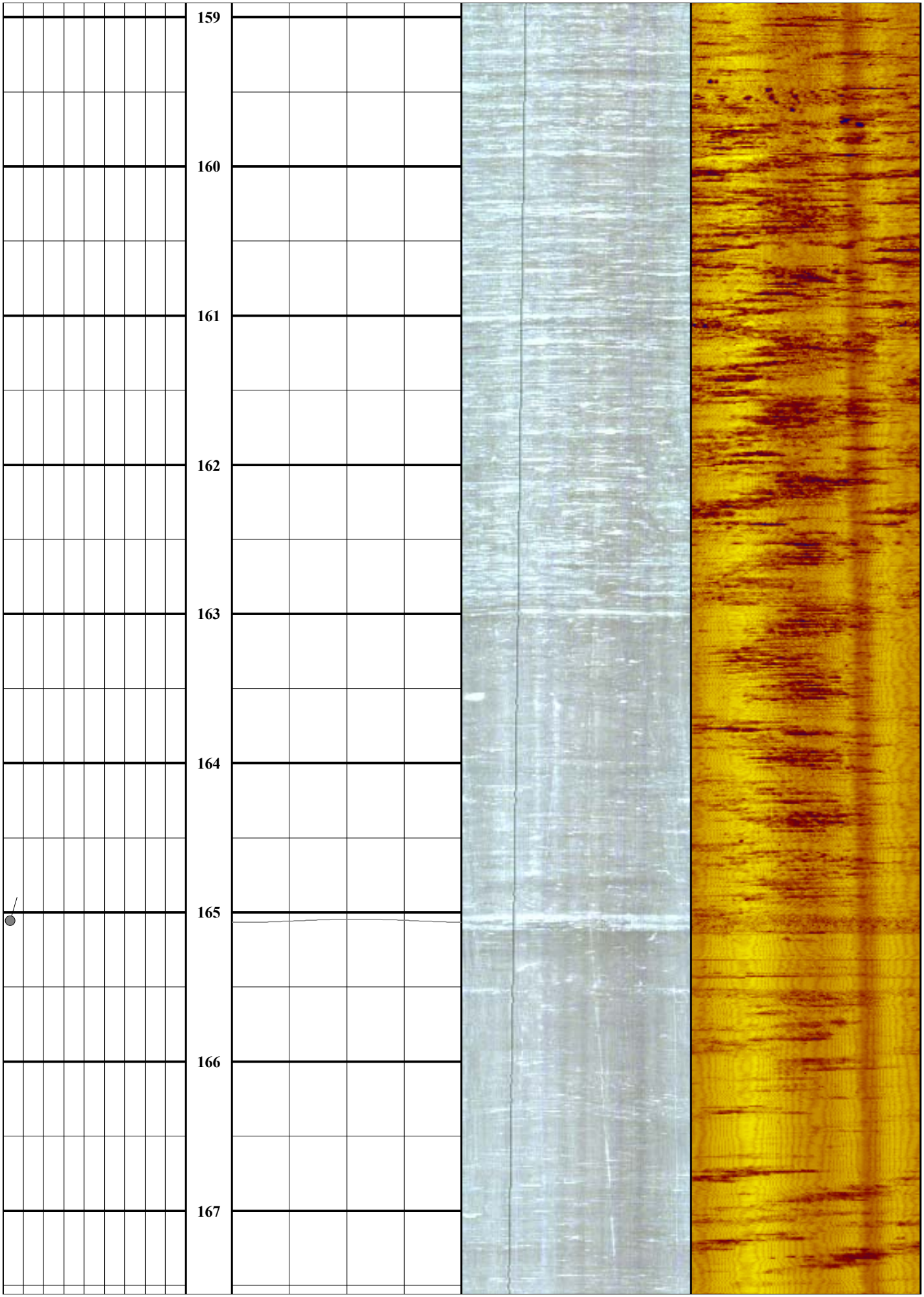

116
117
118
119
120
121
122
123
124

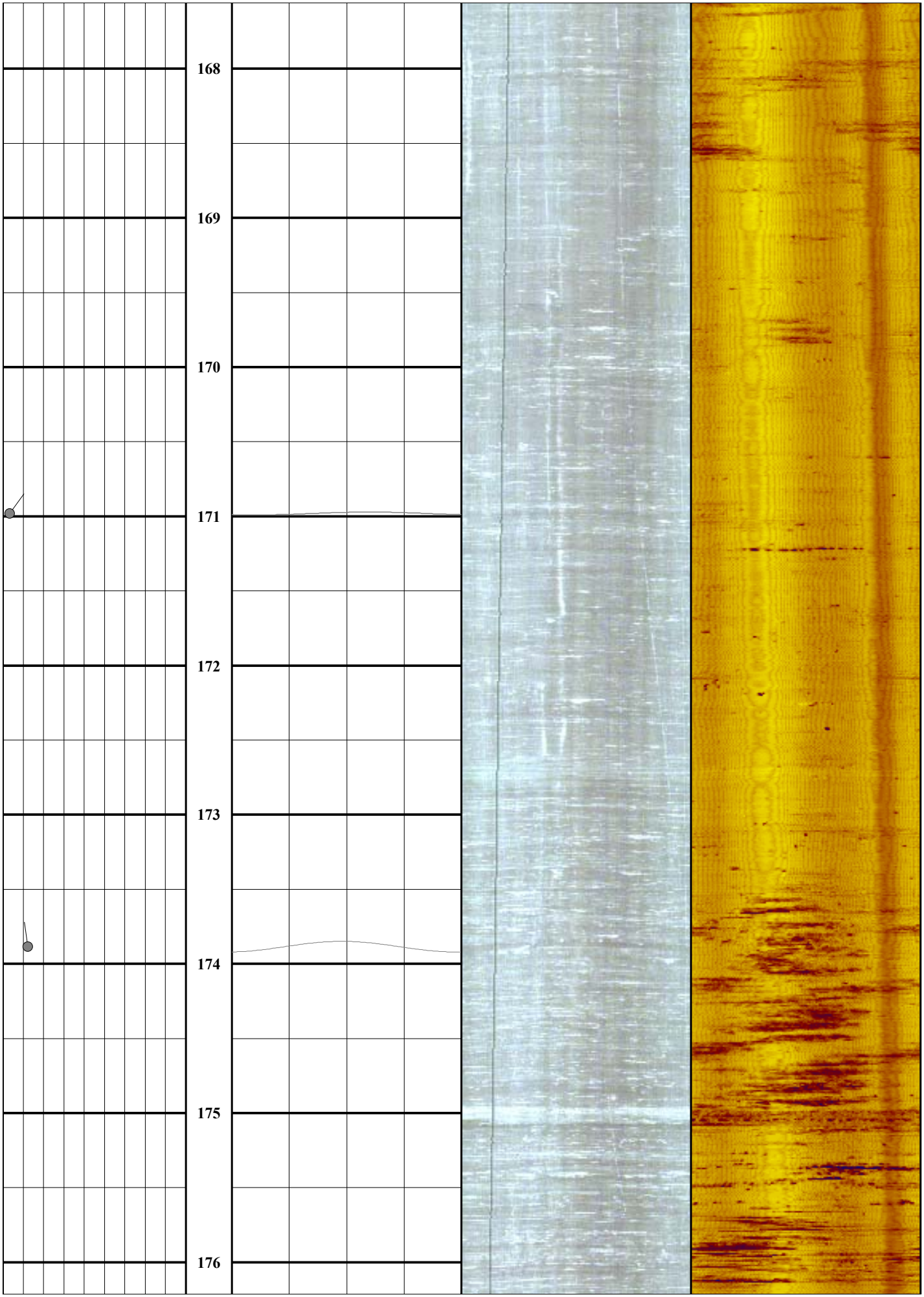

125
126
127
128
129
130
131
132

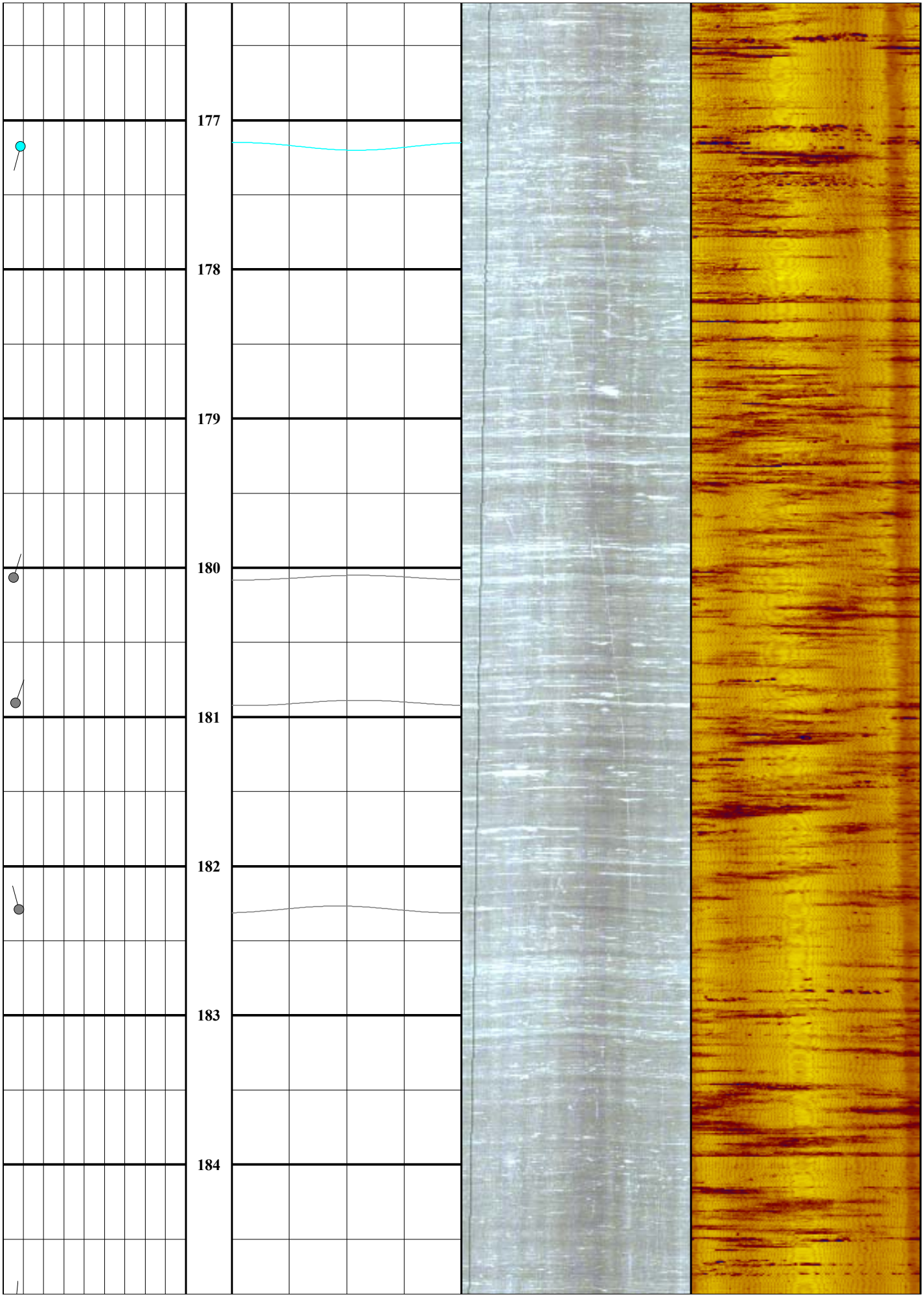

133
134
135
136
137
138
139
140
141

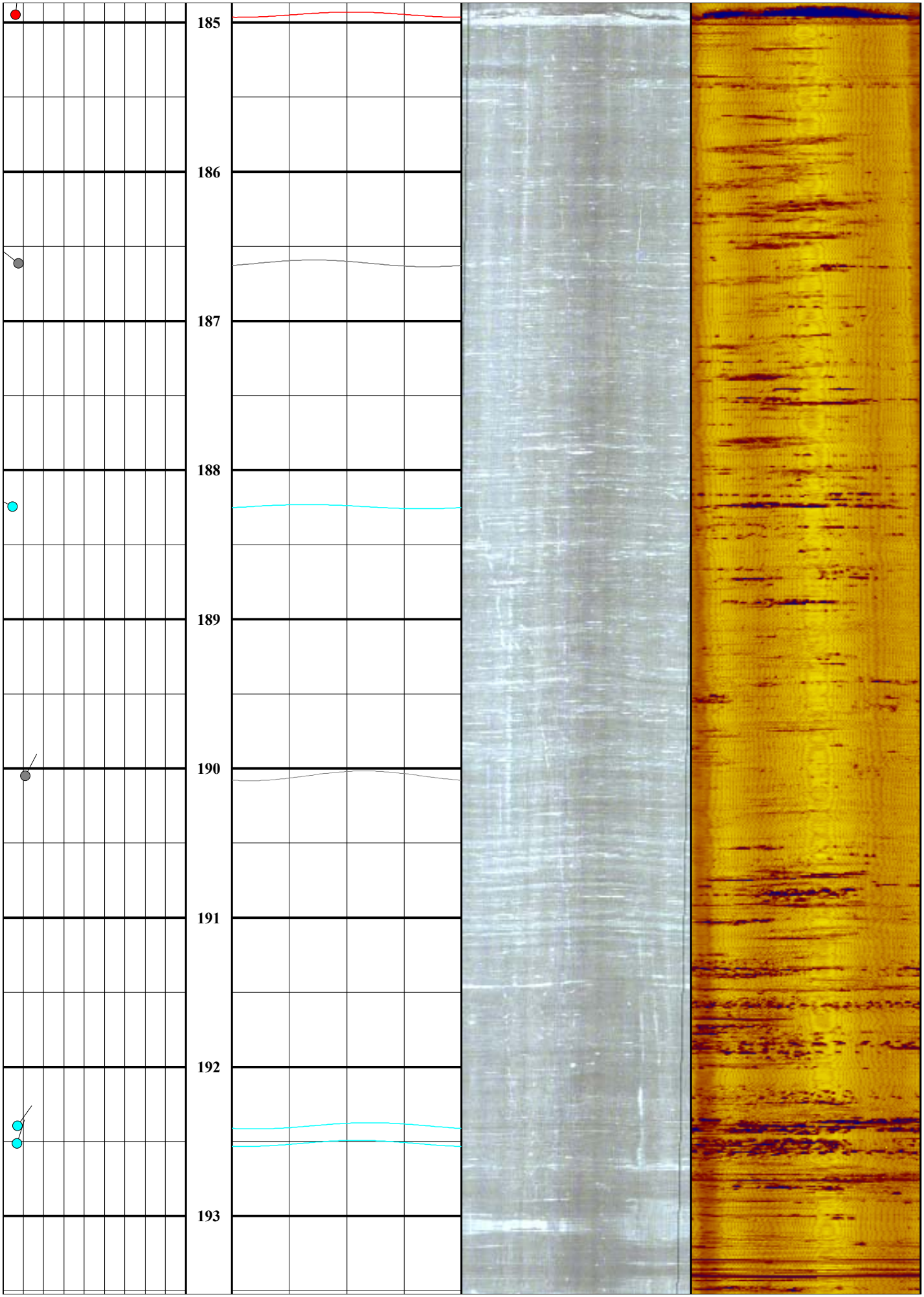

142
143
144
145
146
147
148
149
150

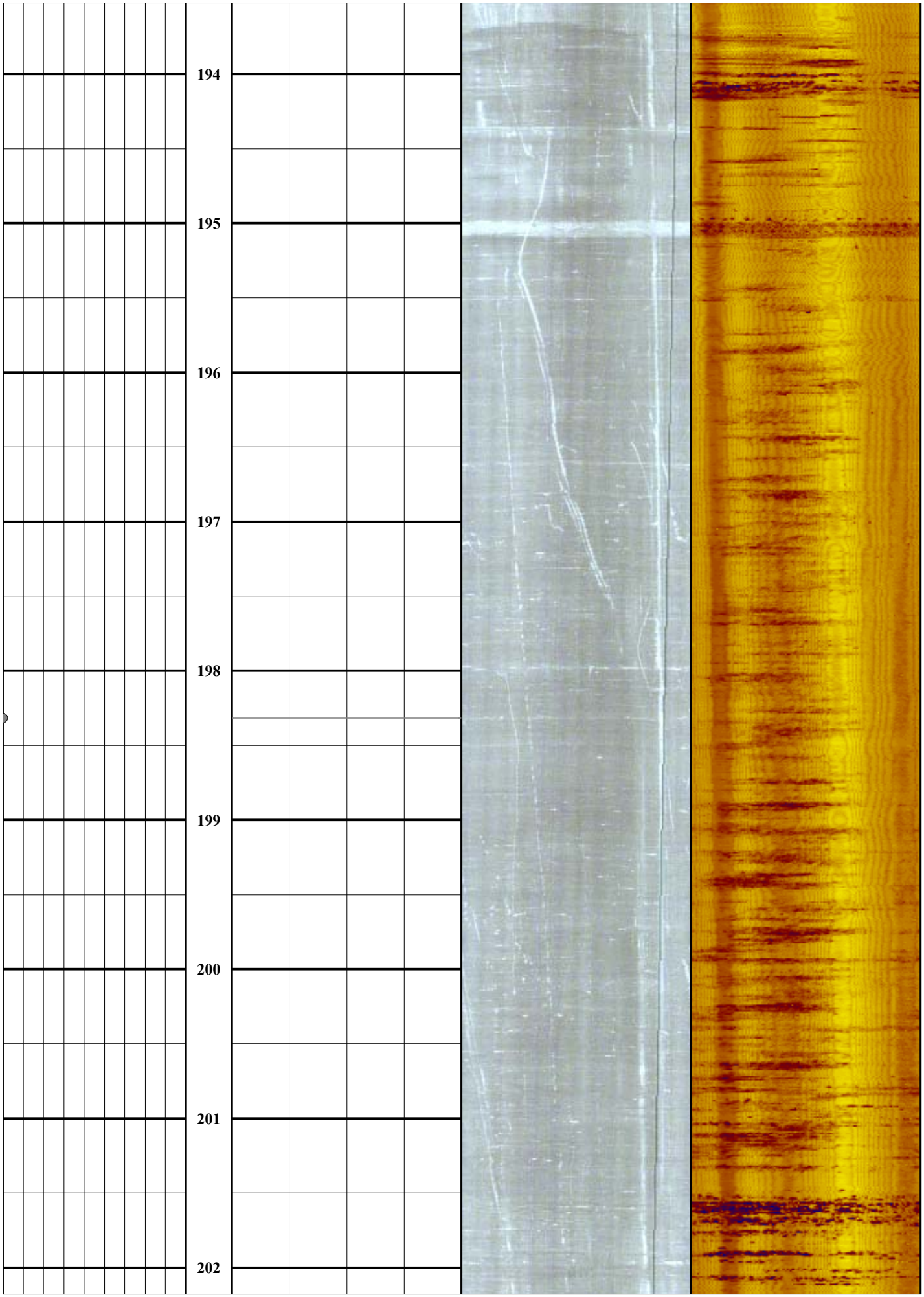

151
152
153
154
155
156
157
158

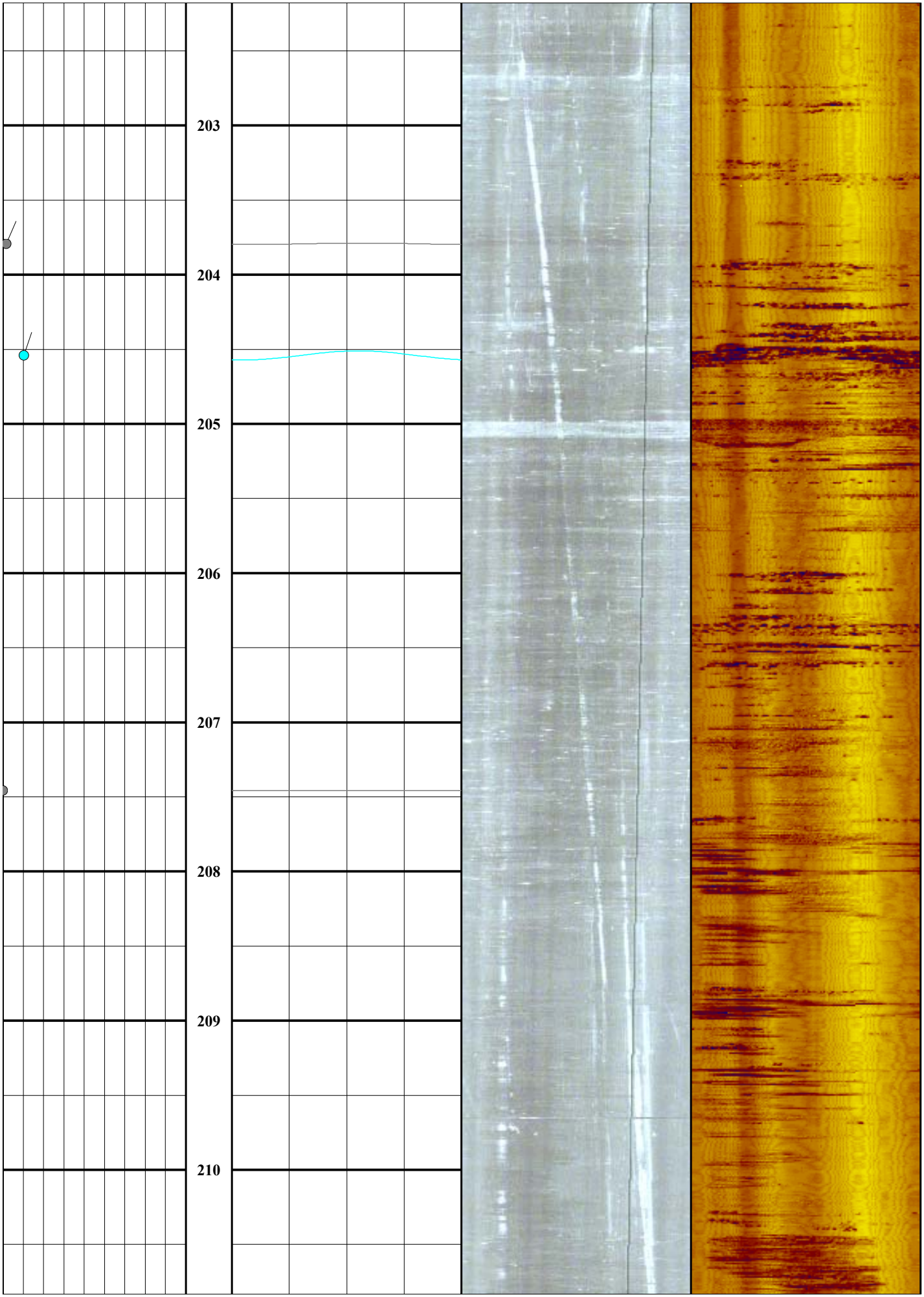

159
160
161
162
163
164
165
166
167

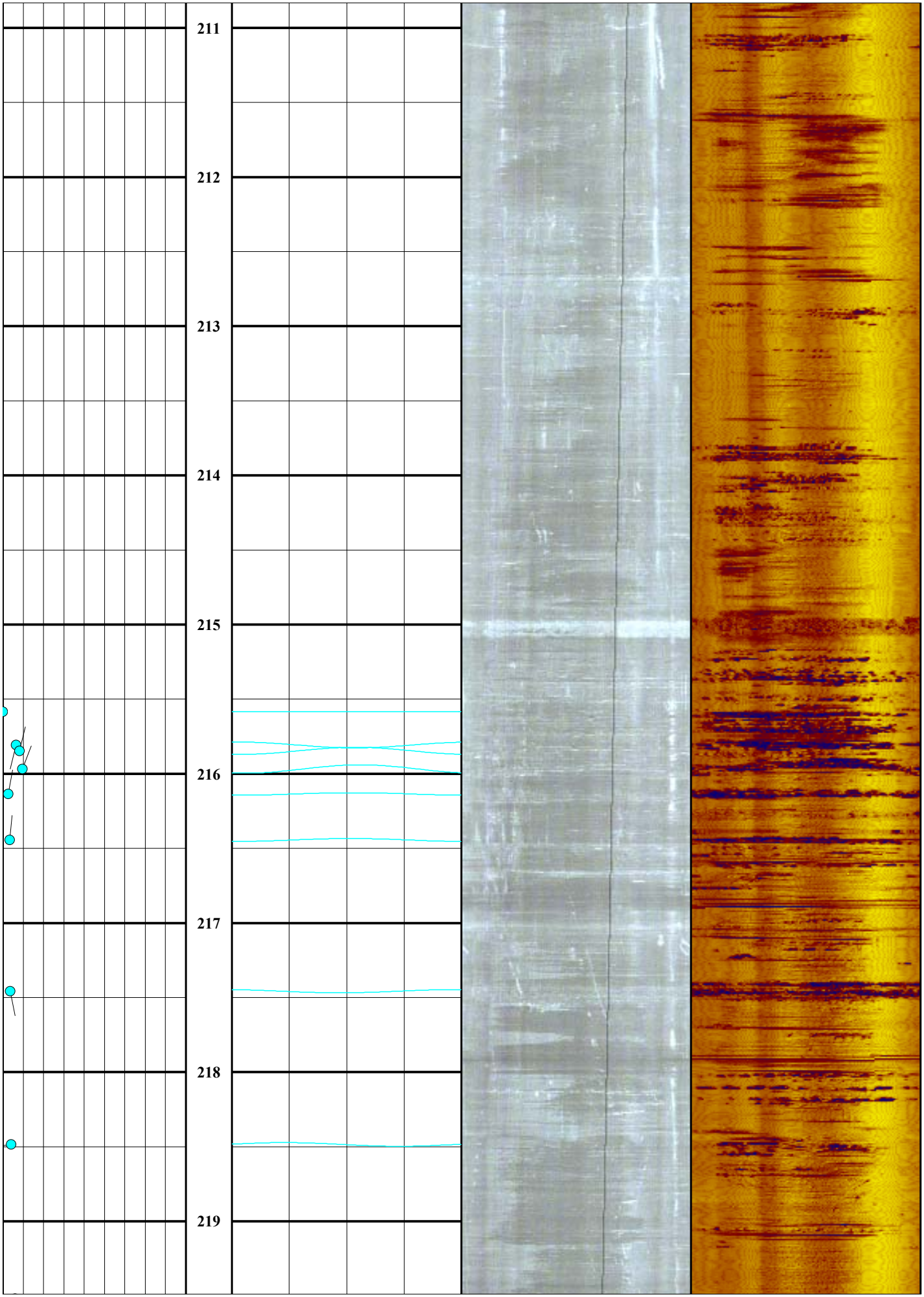

168
169
170
171
172
173
174
175
176

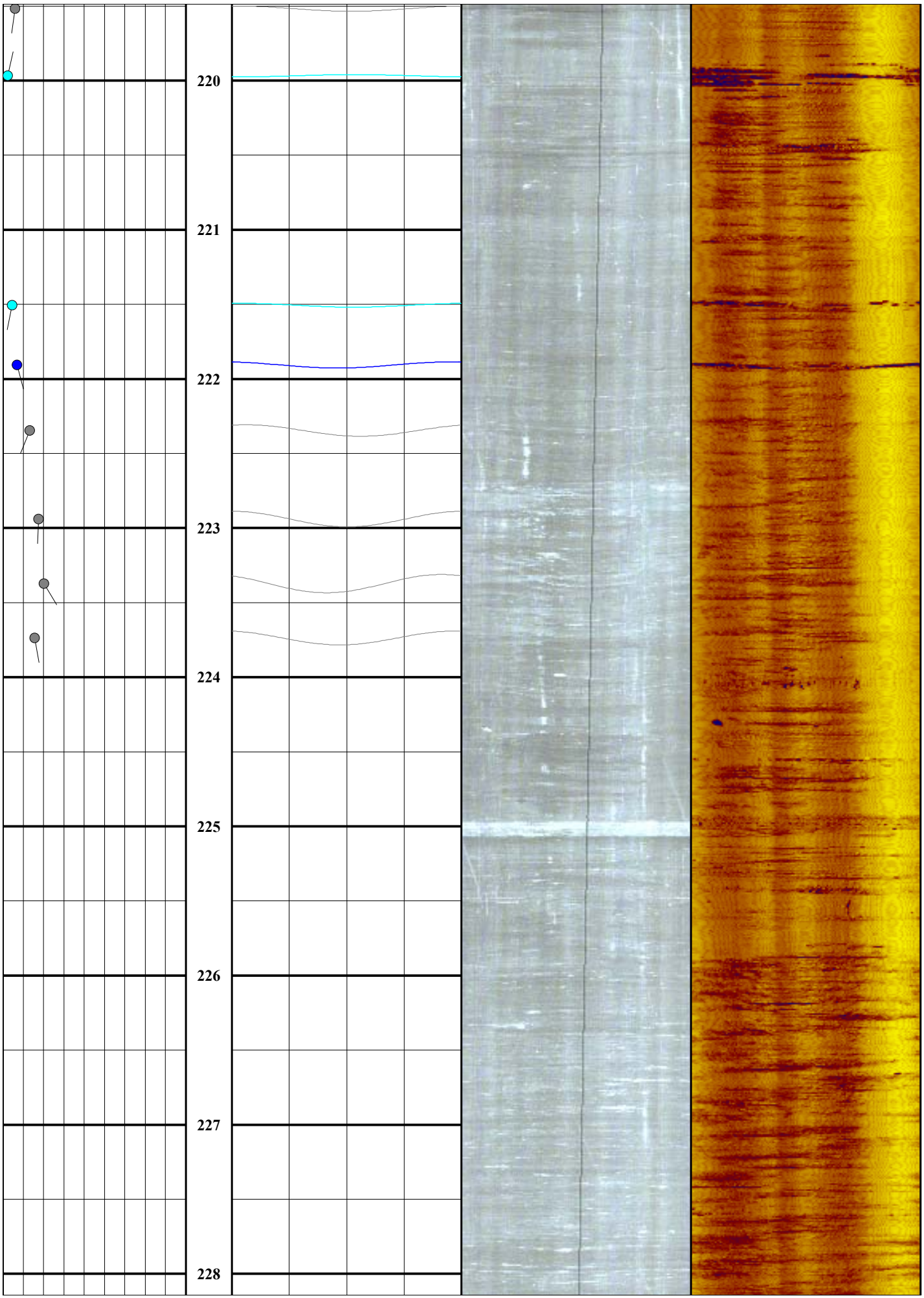

177
178
179
180
181
182
183
184

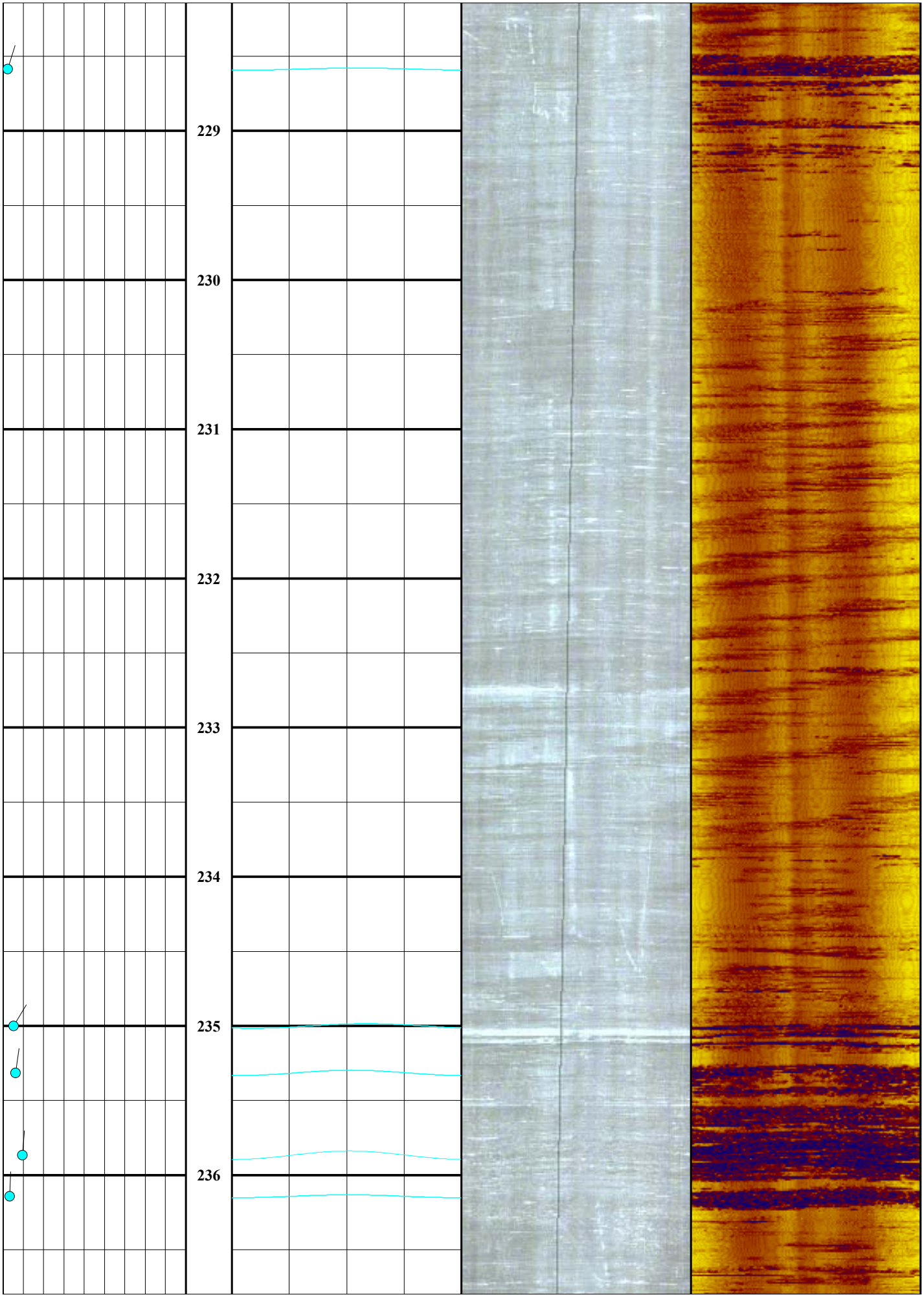

185
186
187
188
189
190
191
192
193

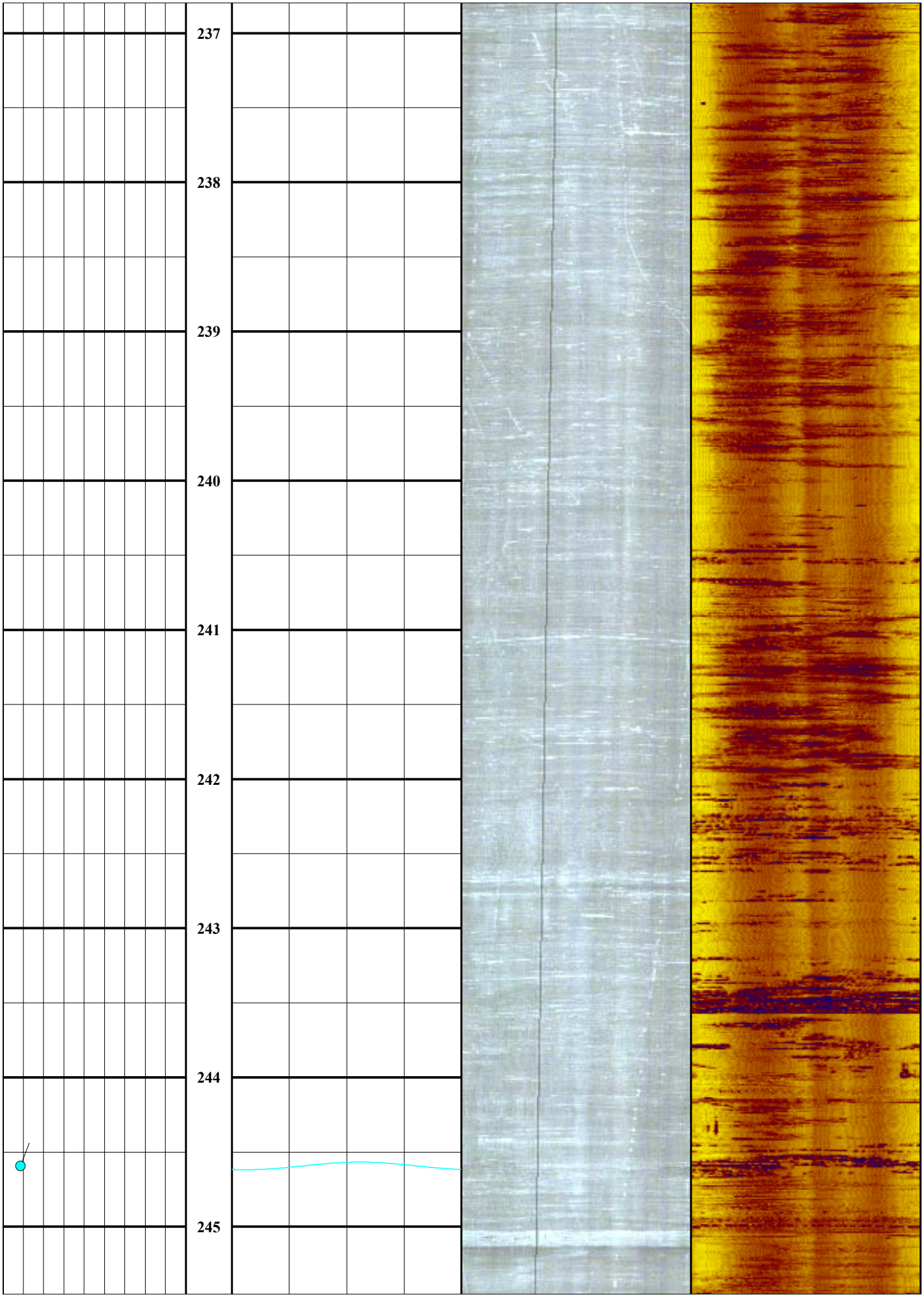

194
195
196
197
198
199
200
201
202

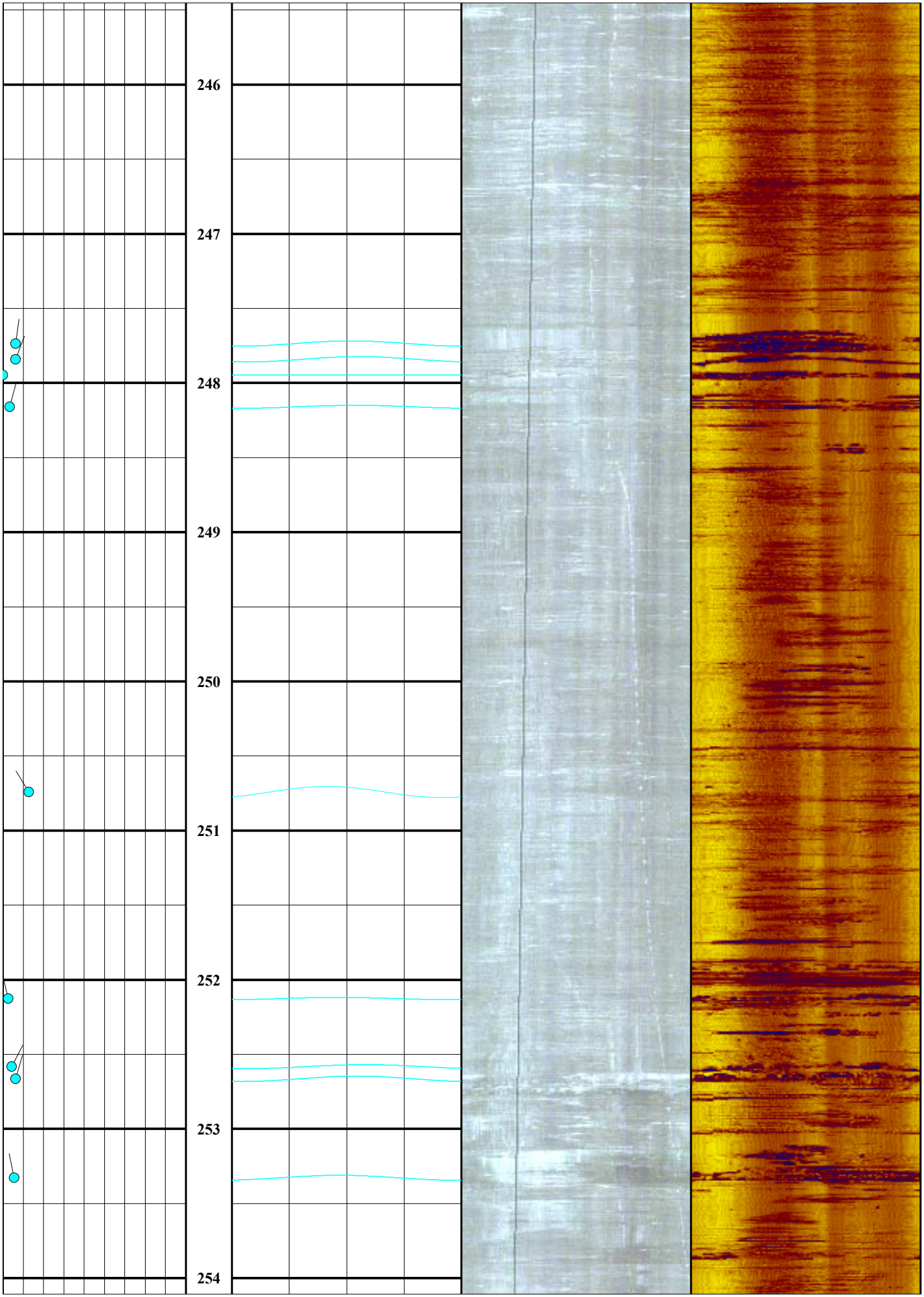

203
204
205
206
207
208
209
210

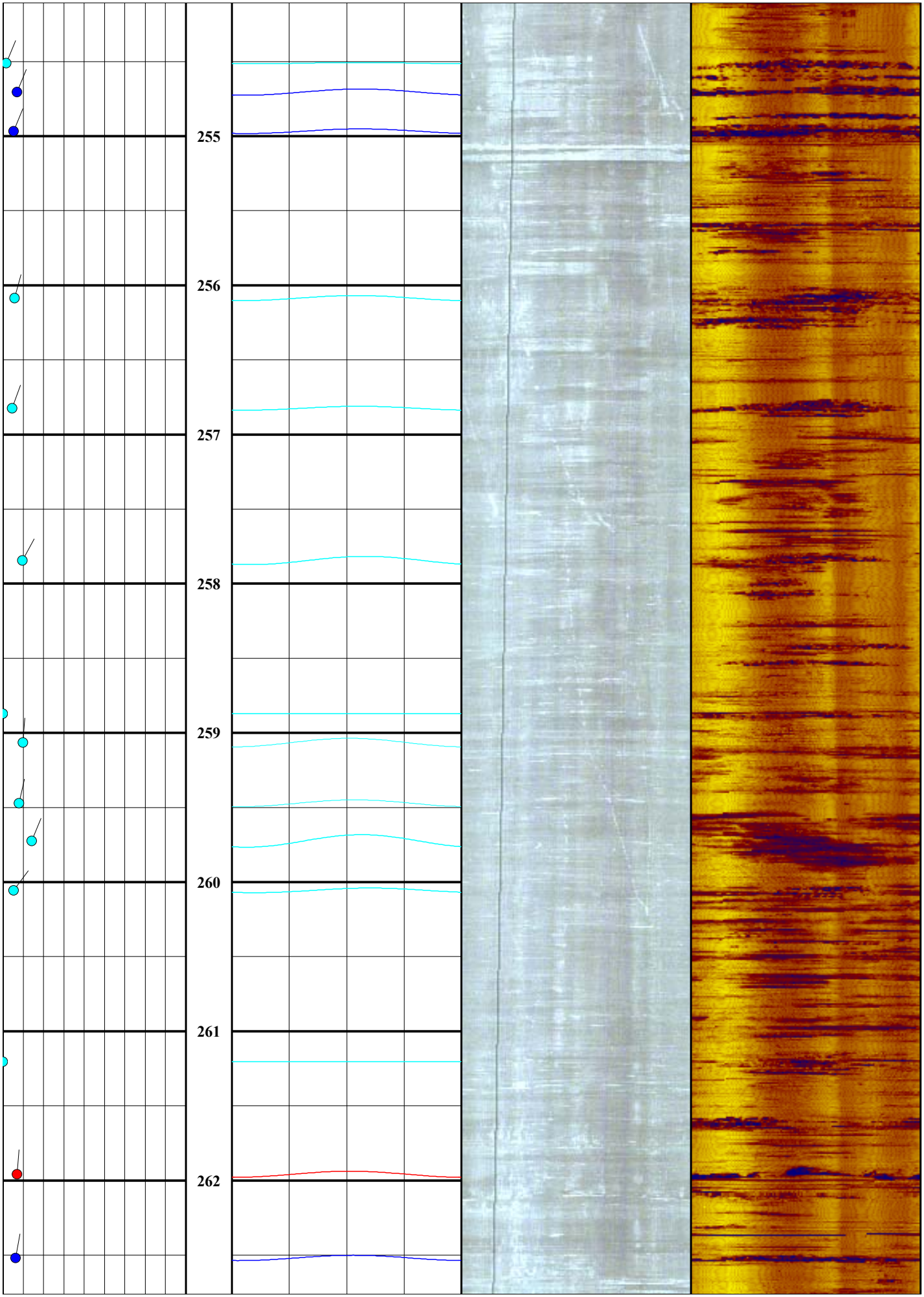

211
212
213
214
215
216
217
218
219

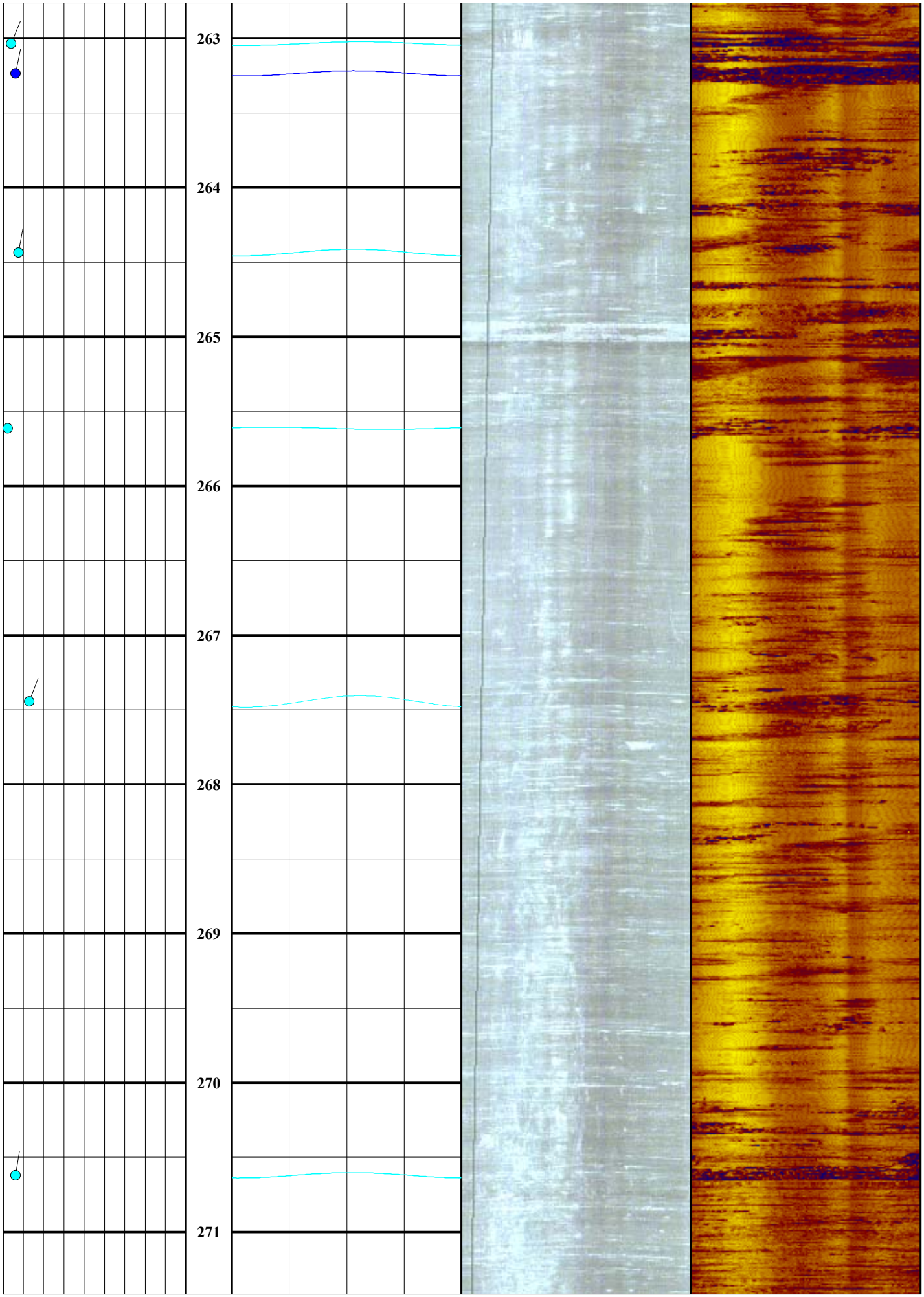

220
221
222
223
224
225
226
227
228

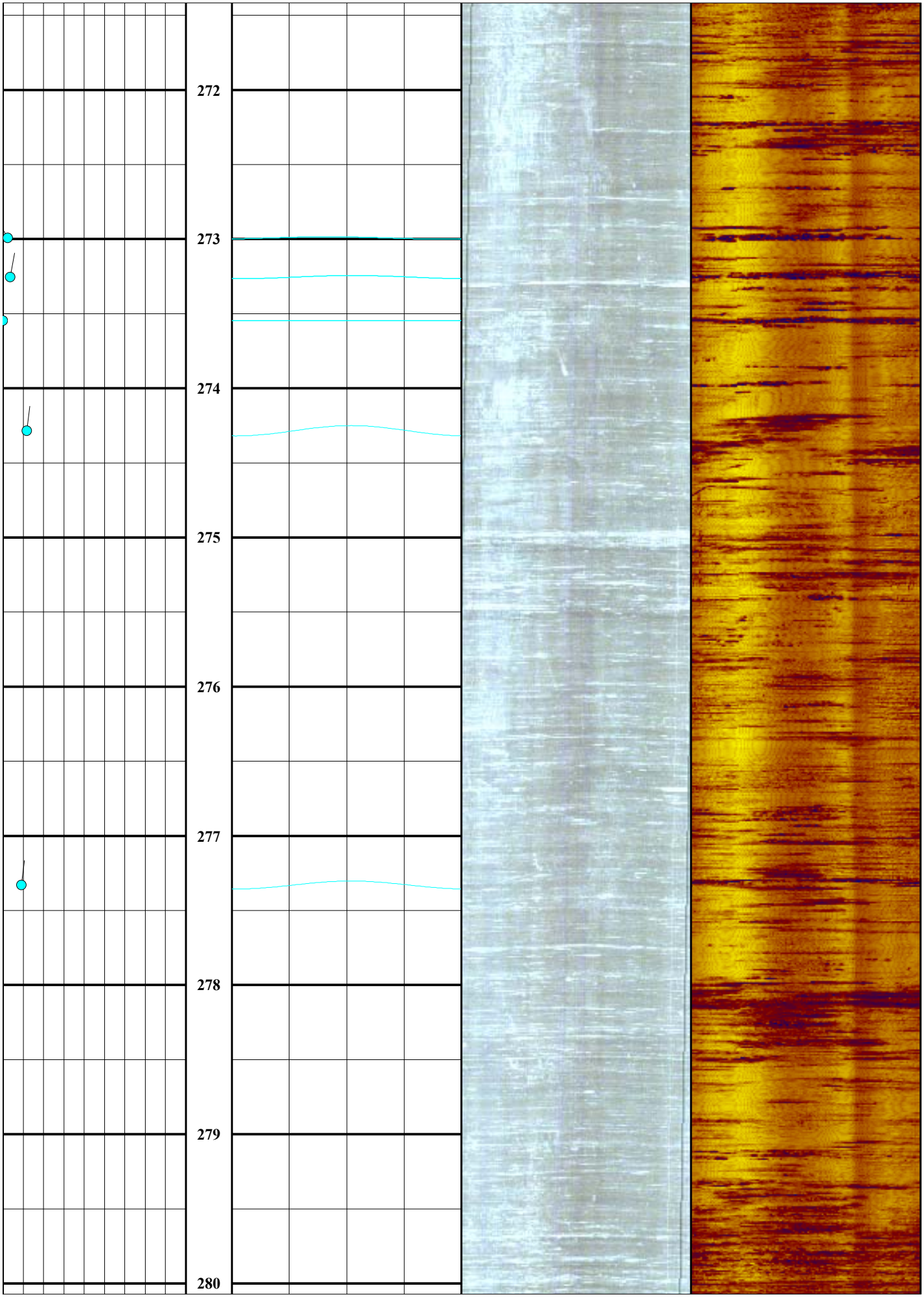

229
230
231
232
233
234
235
236

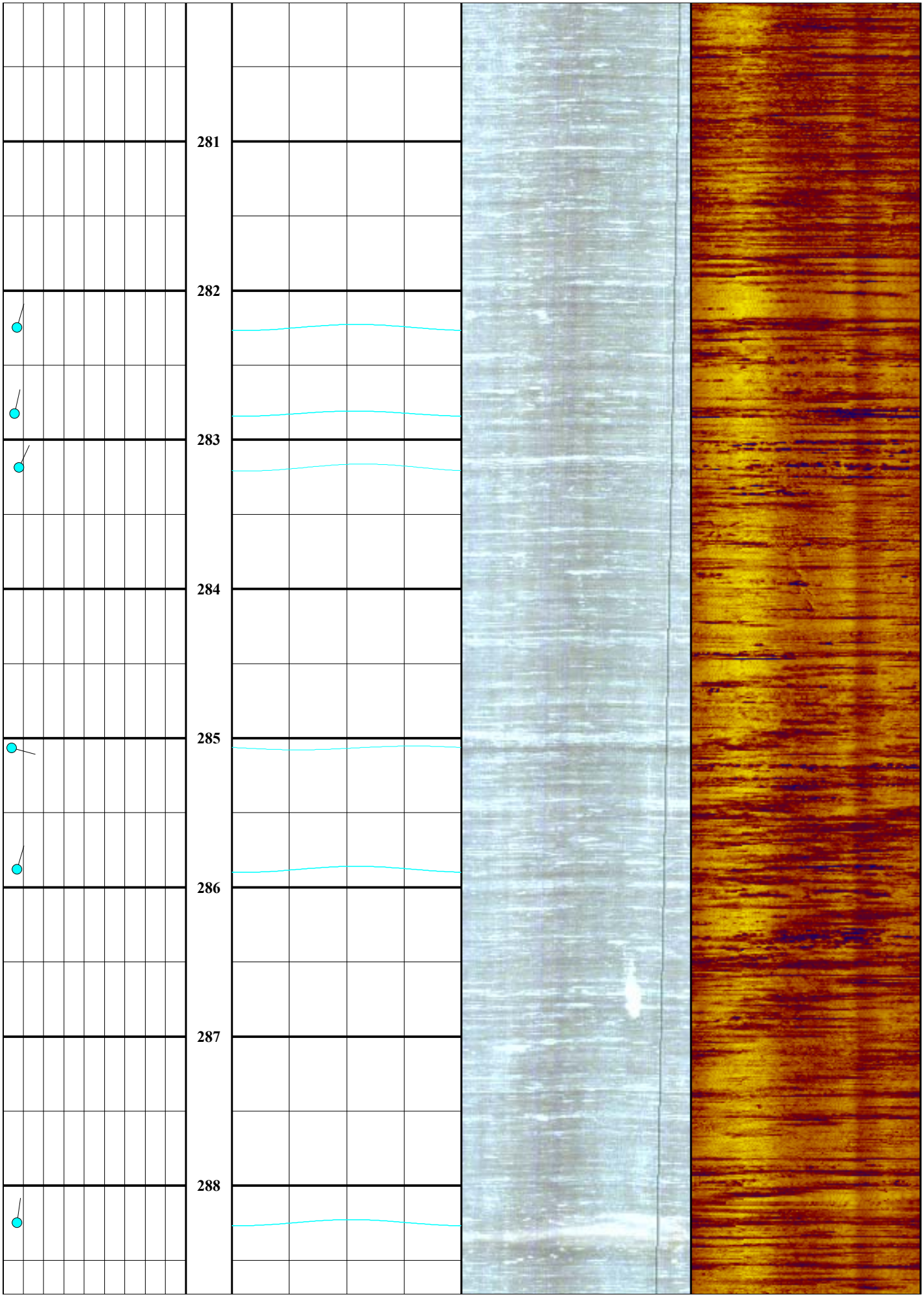

237
238
239
240
241
242
243
244
245

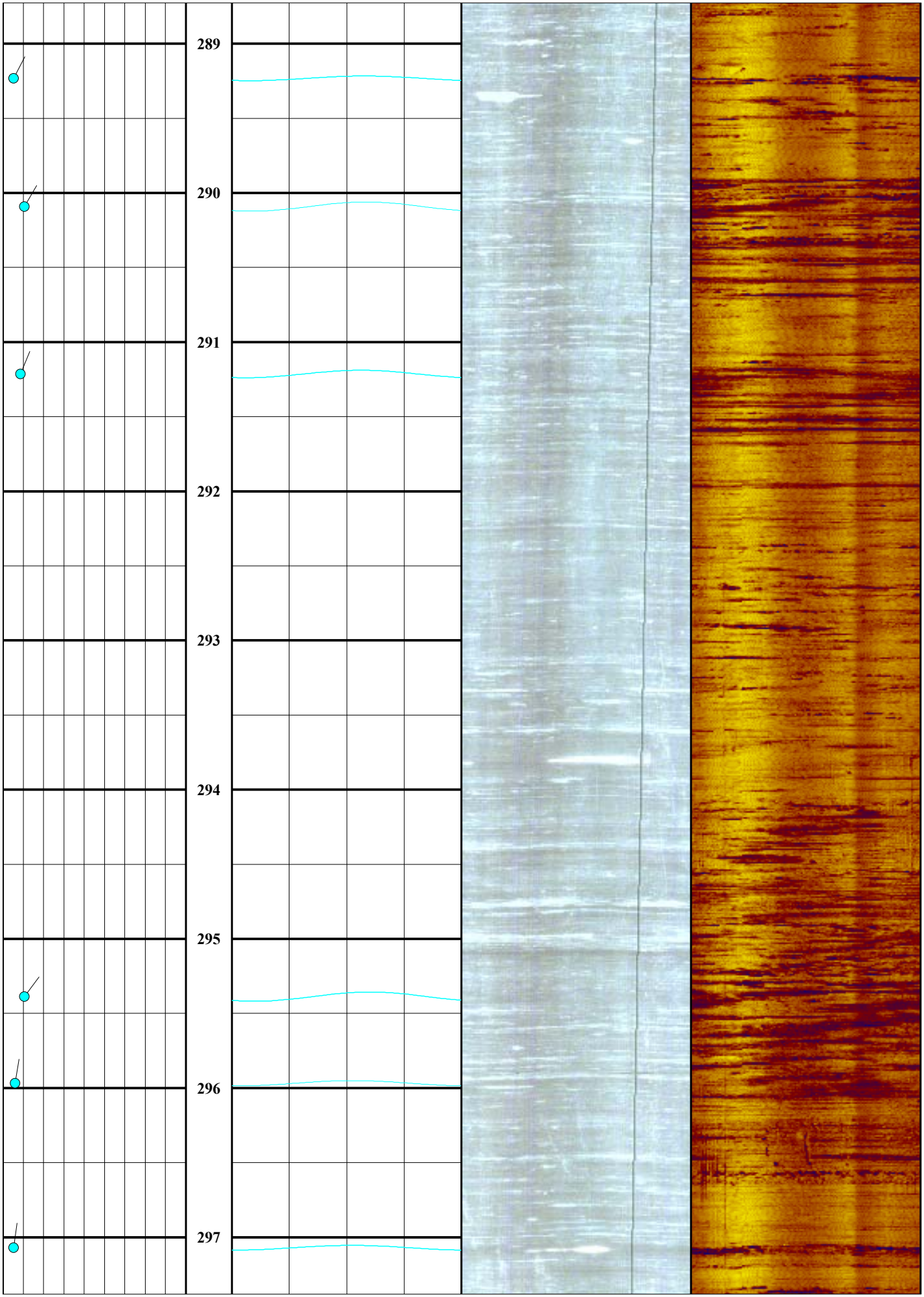

246
247
248
249
250
251
252
253
254

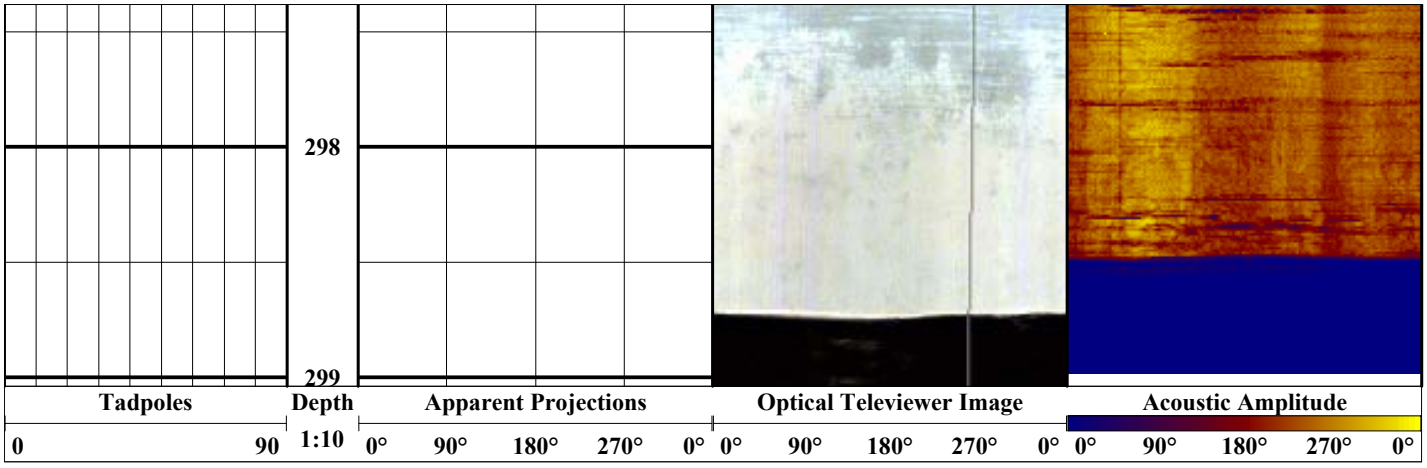

255
256
257
258
259
260
261
262


263
264
265
266
267
268
269
270
271


272
273
274
275
276
277
278
279
280


281
282
283
284
285
286
287
288

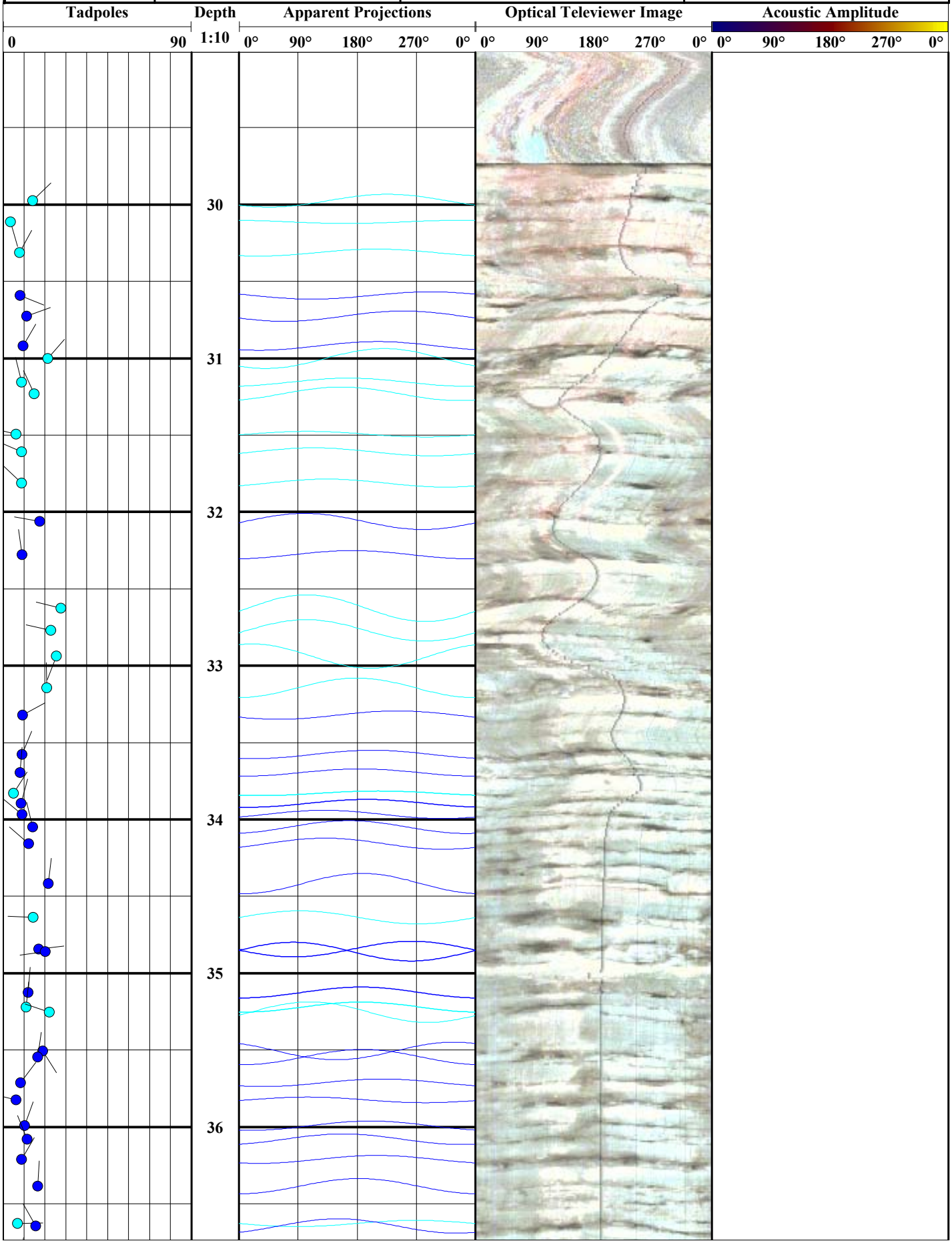

289
290
291
292
293
294
295
296
297

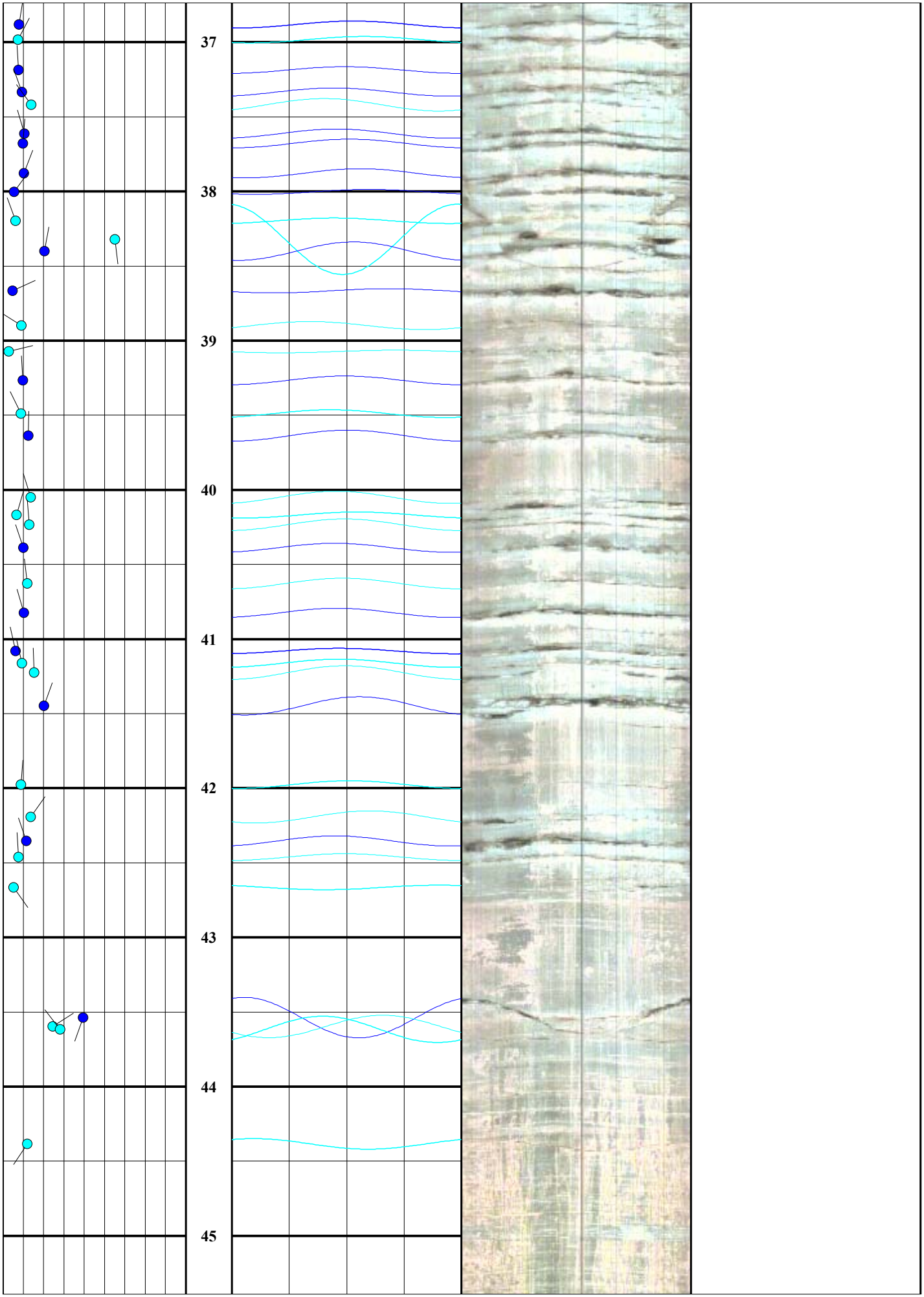

298
299
Tadpoles
Depth
Apparent Projections
Optical Televiewer Image
Acoustic Amplitude
0
90
1:10
0°
90°
180°
270°
0°
0°
90°
180°
270°
0°
0°
90°
180°
270°
0°

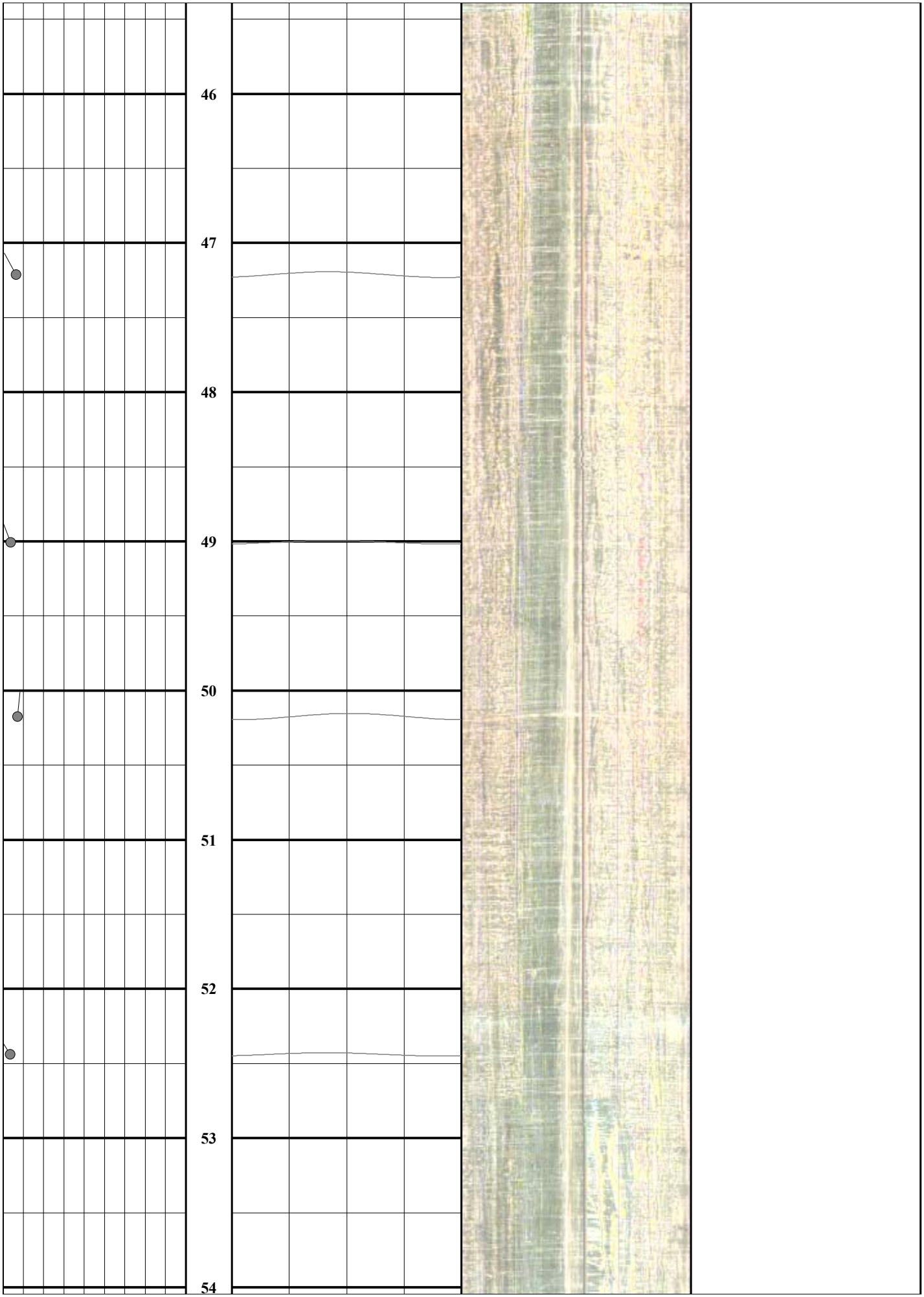
Optical/Acoustic Borehole Image Plot

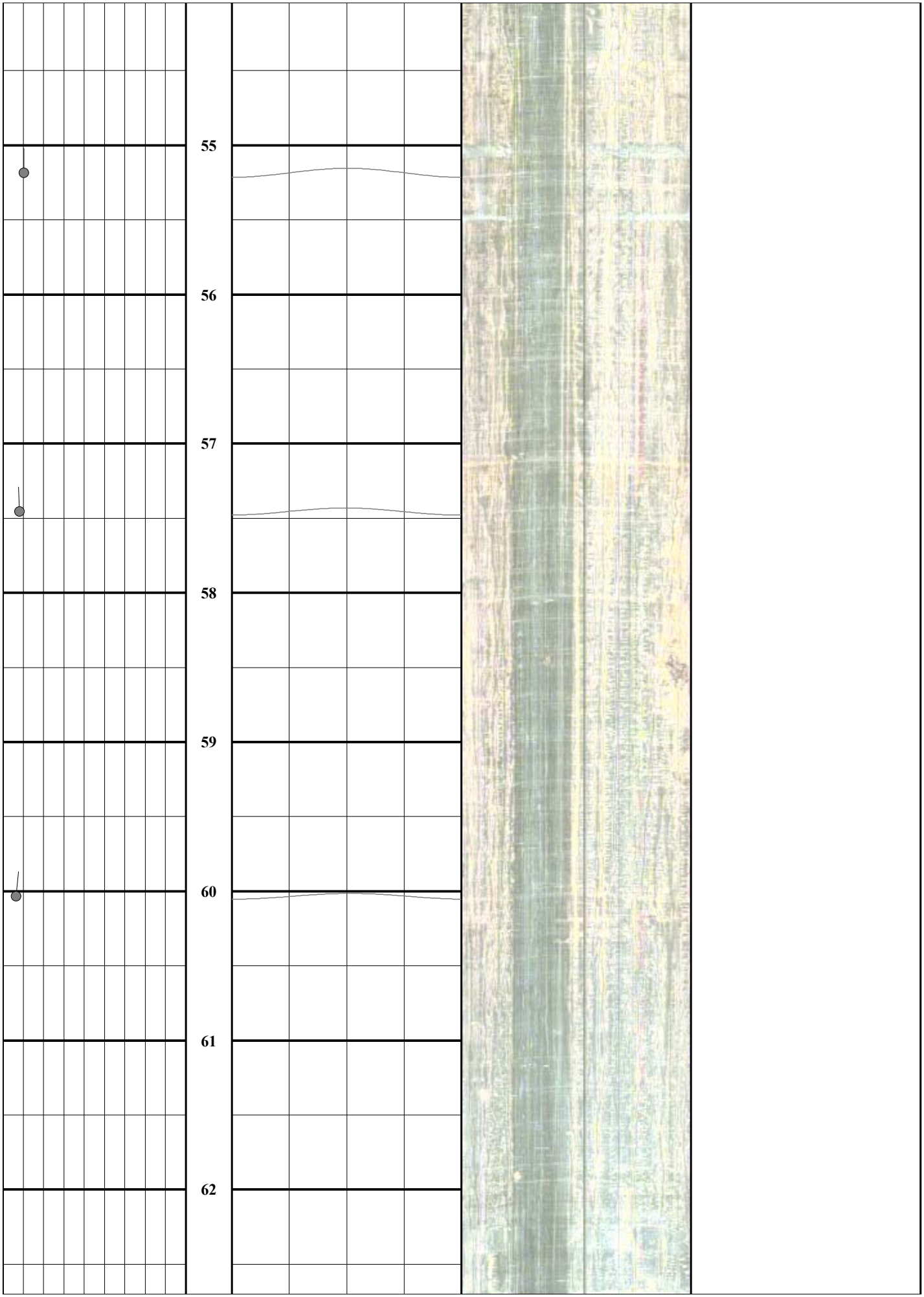
COMPANY: S. M. Stoller Corp.	PROJECT: Crescent Junction
DATE LOGGED: 13 December 2005	WELL: CH-0202

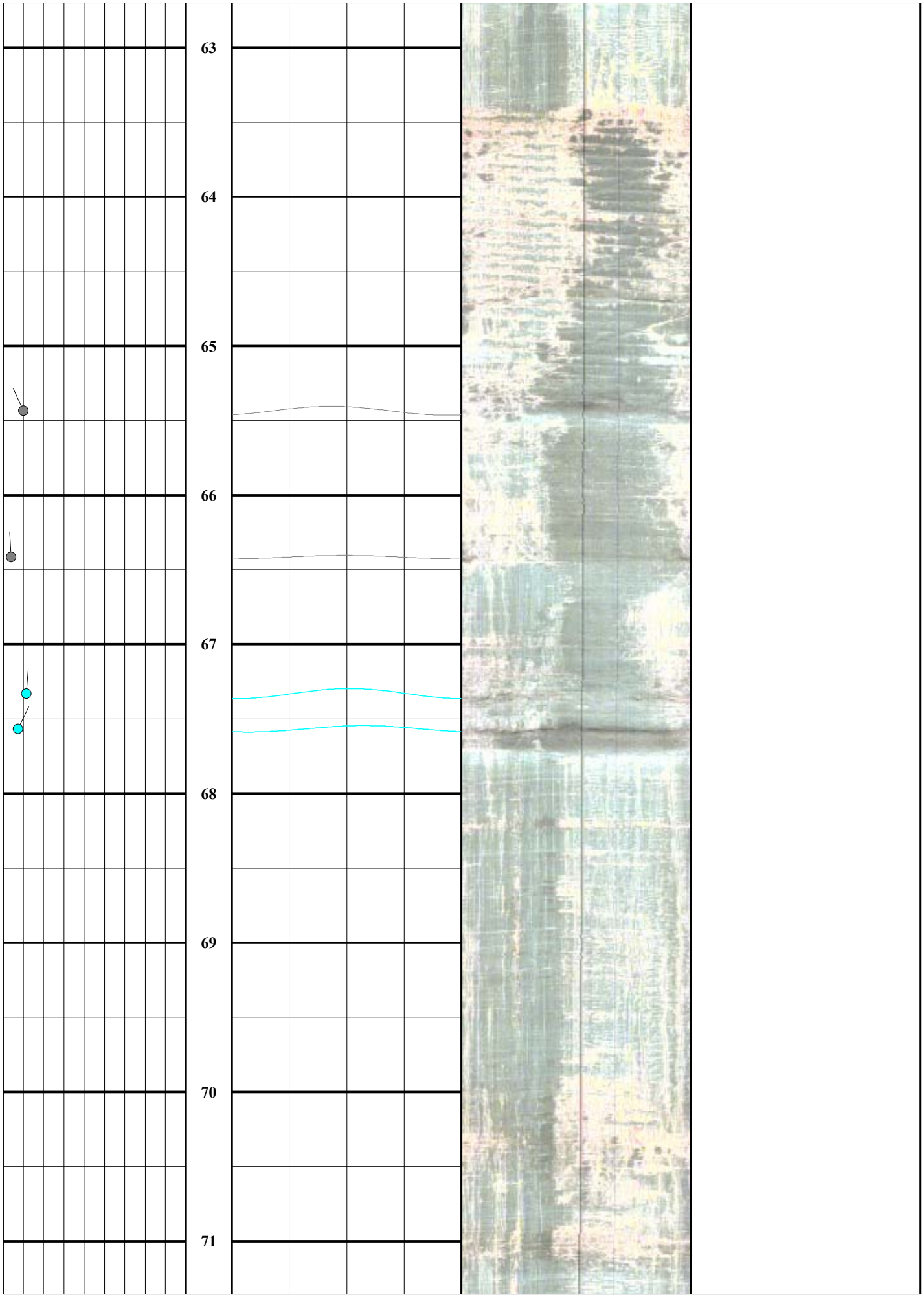
COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com

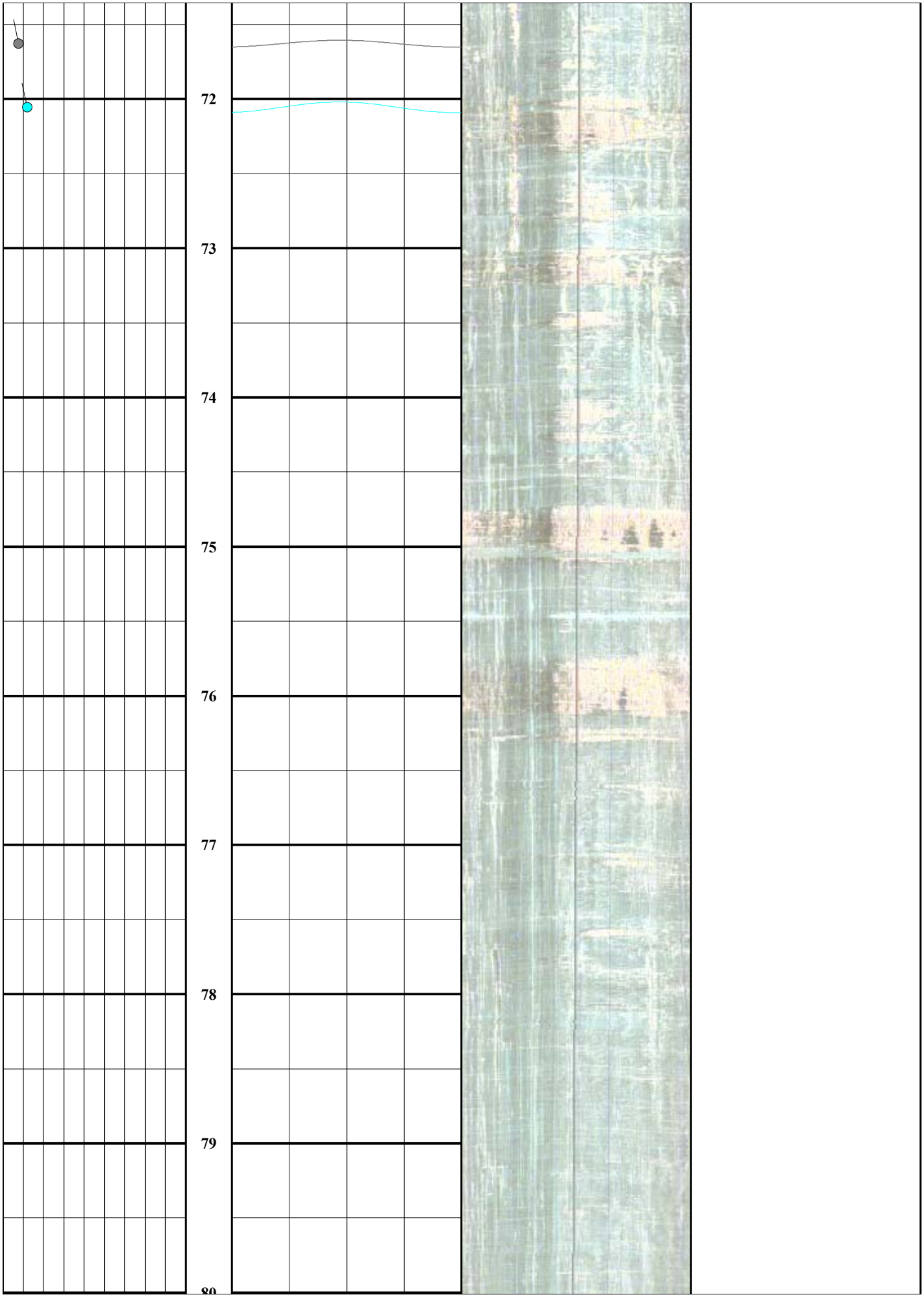


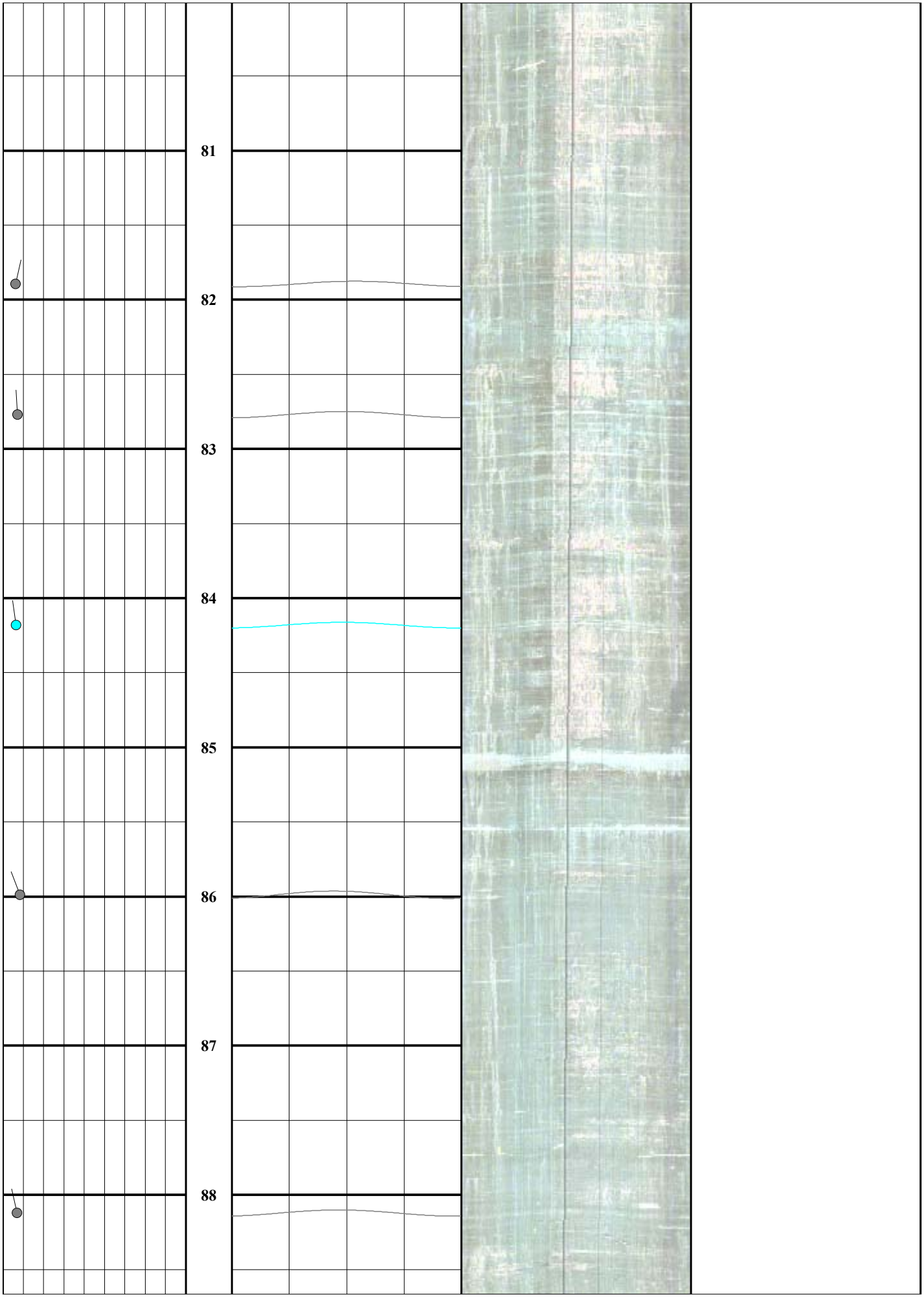

37
38
39
40
41
42
43
44
45

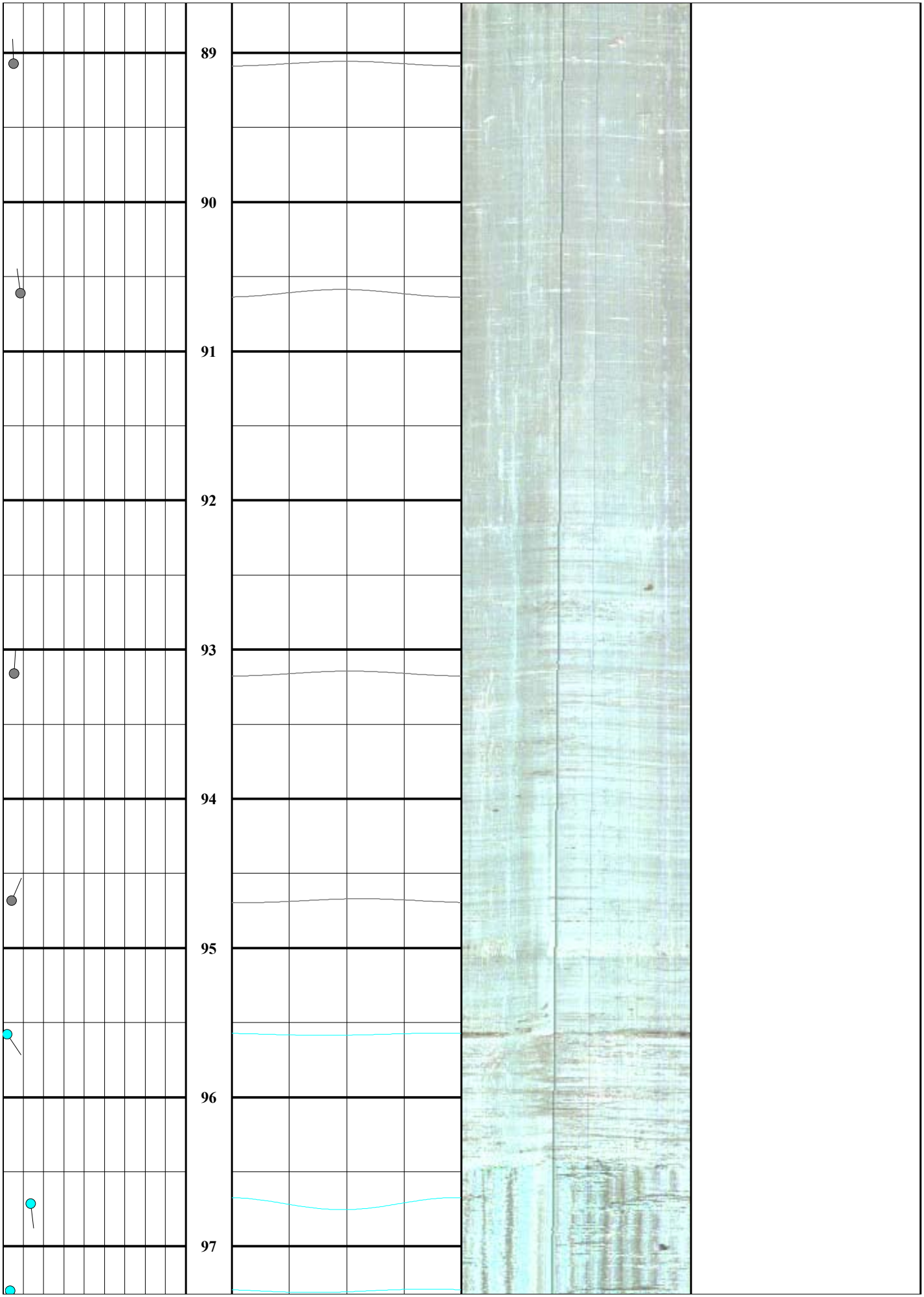

46
47
48
49
50
51
52
53
54

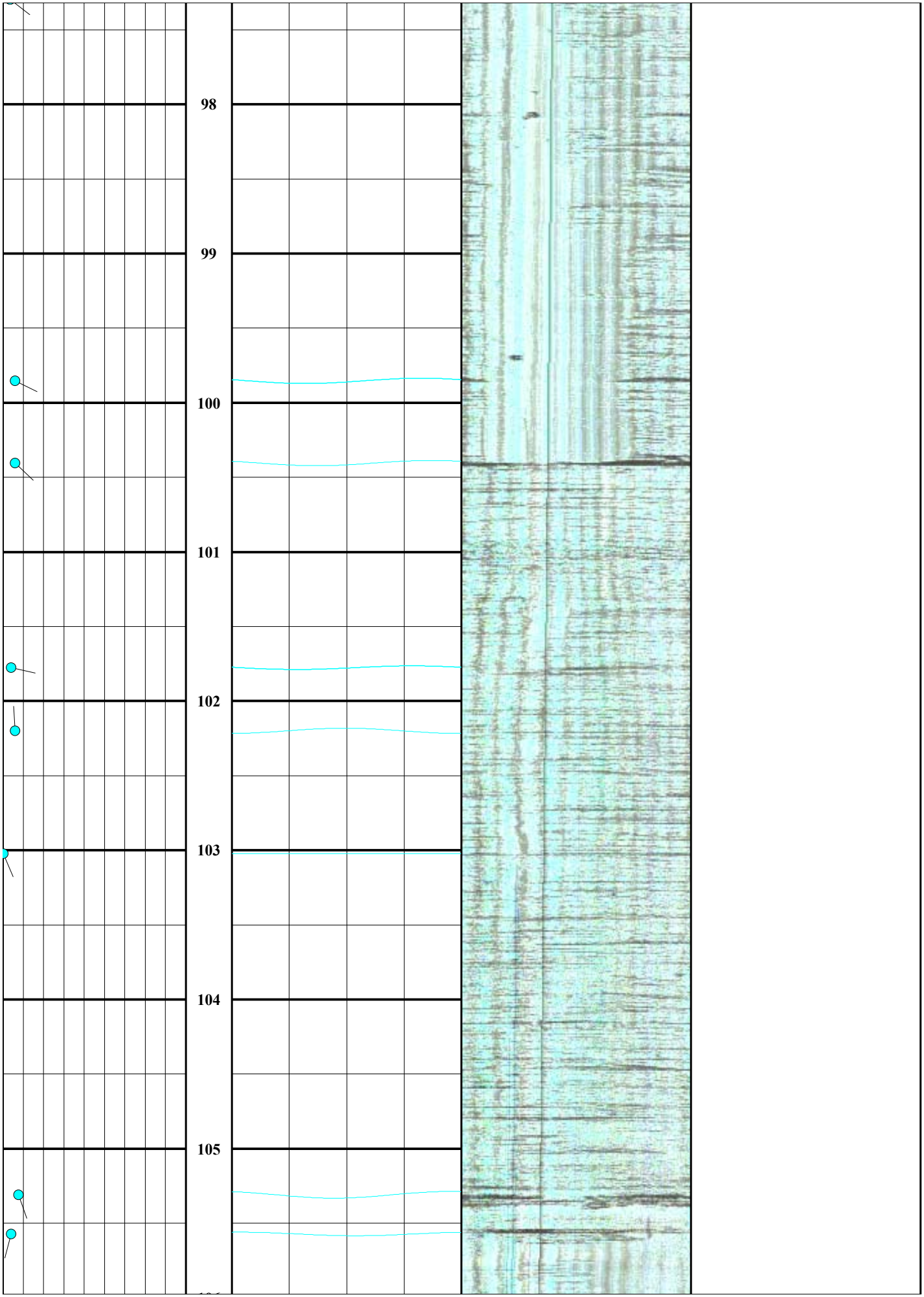

55
56
57
58
59
60
61
62

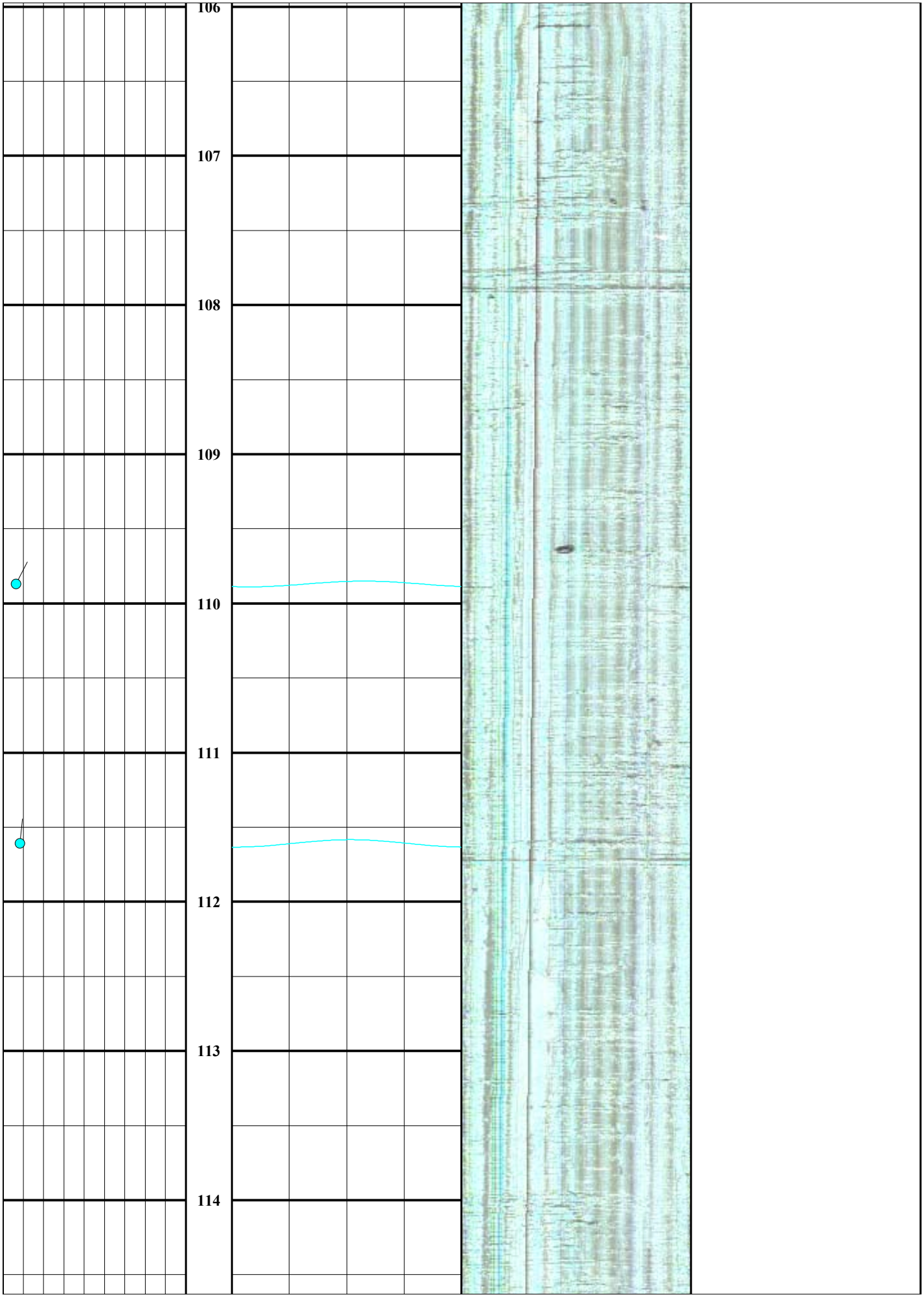

63
64
65
66
67
68
69
70
71

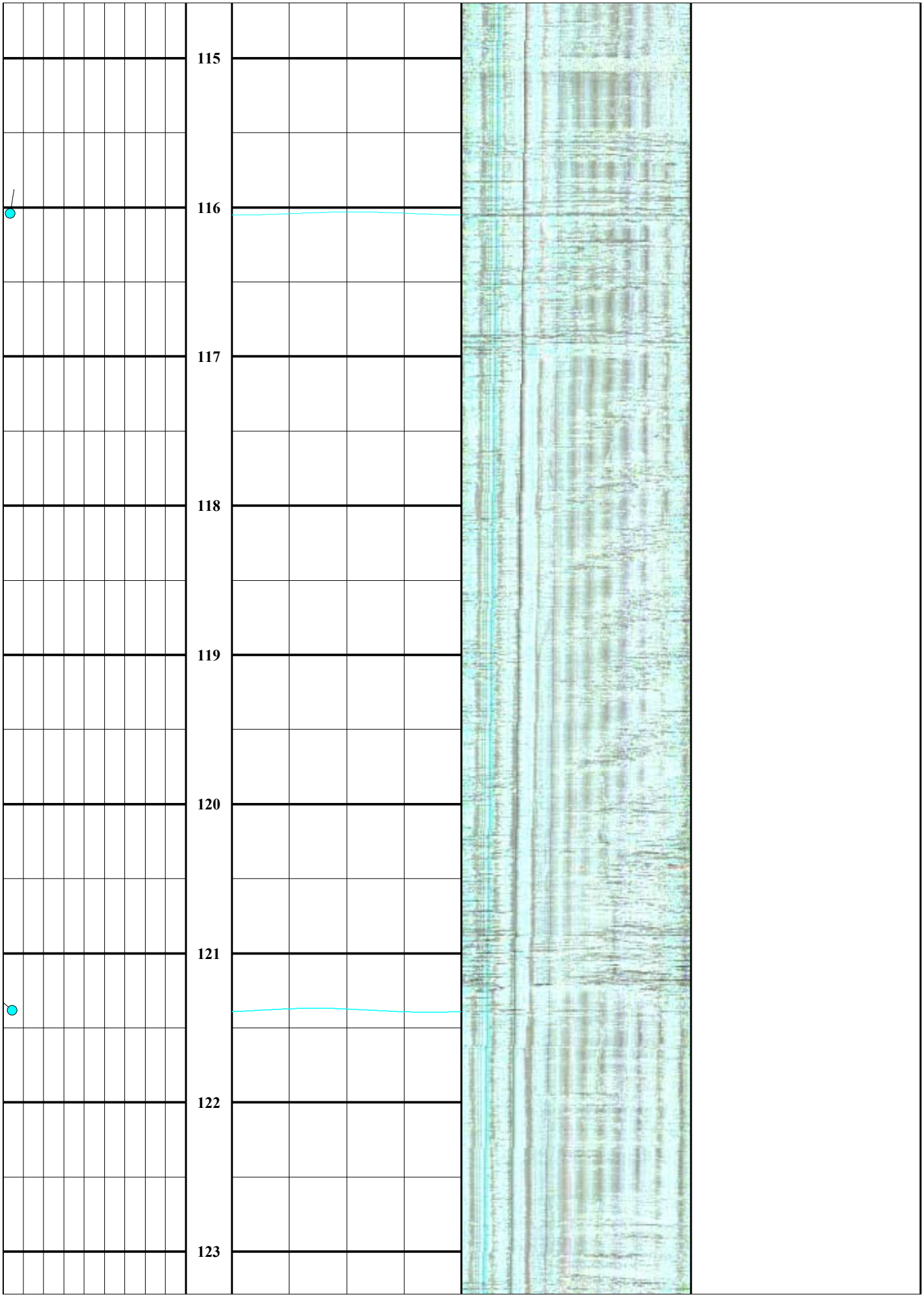

72
73
74
75
76
77
78
79
80

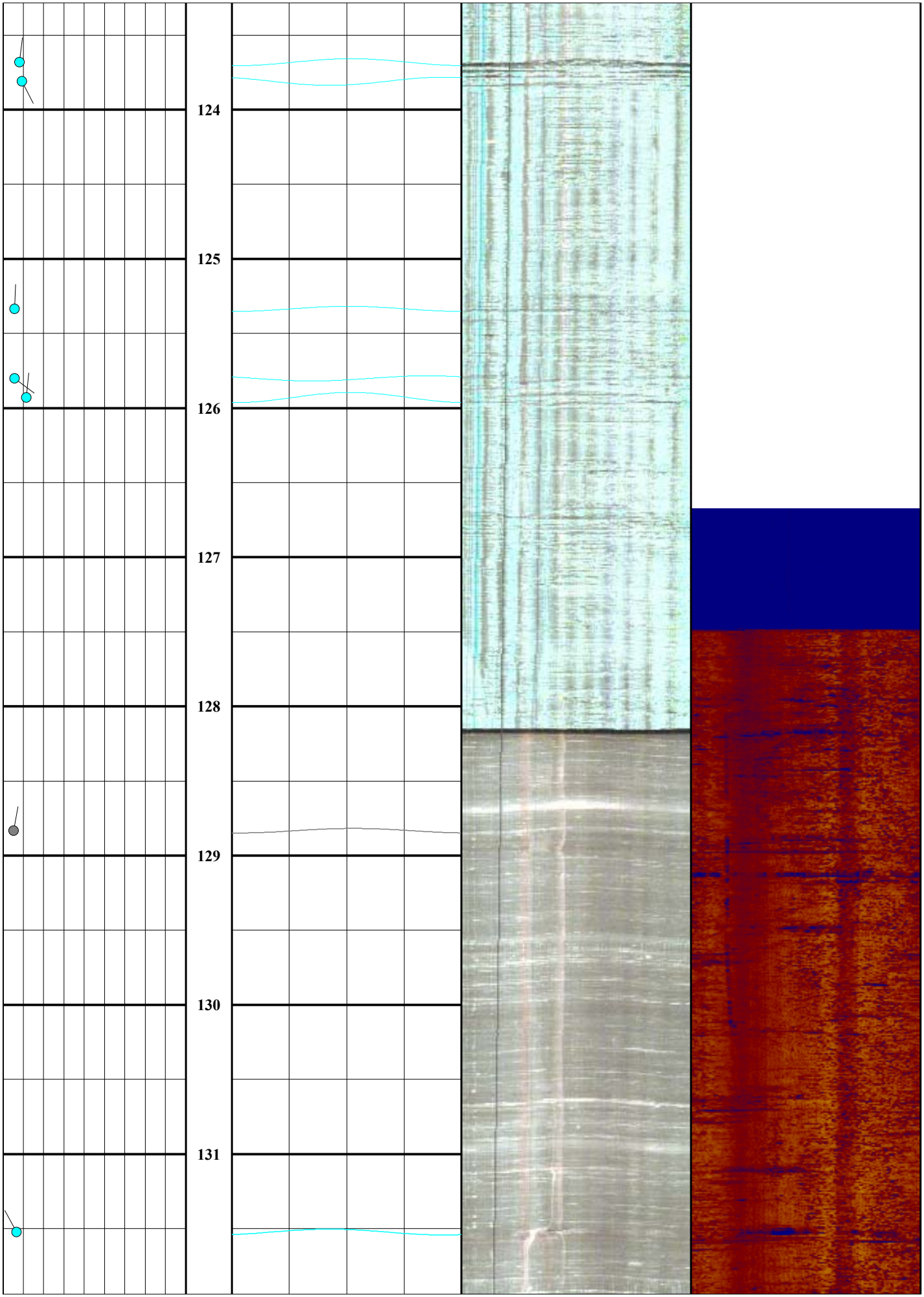

81
82
83
84
85
86
87
88

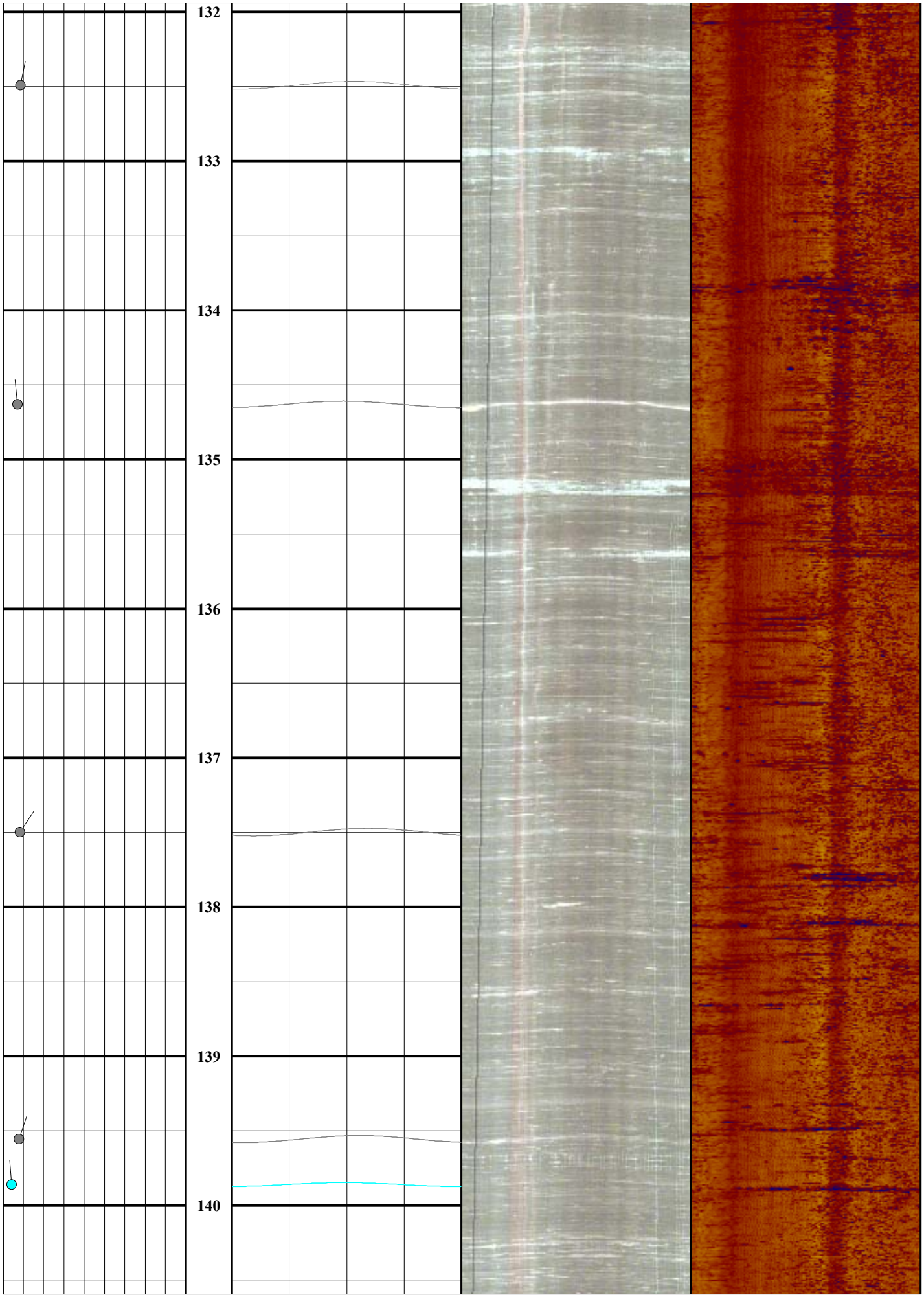

89
90
91
92
93
94
95
96
97

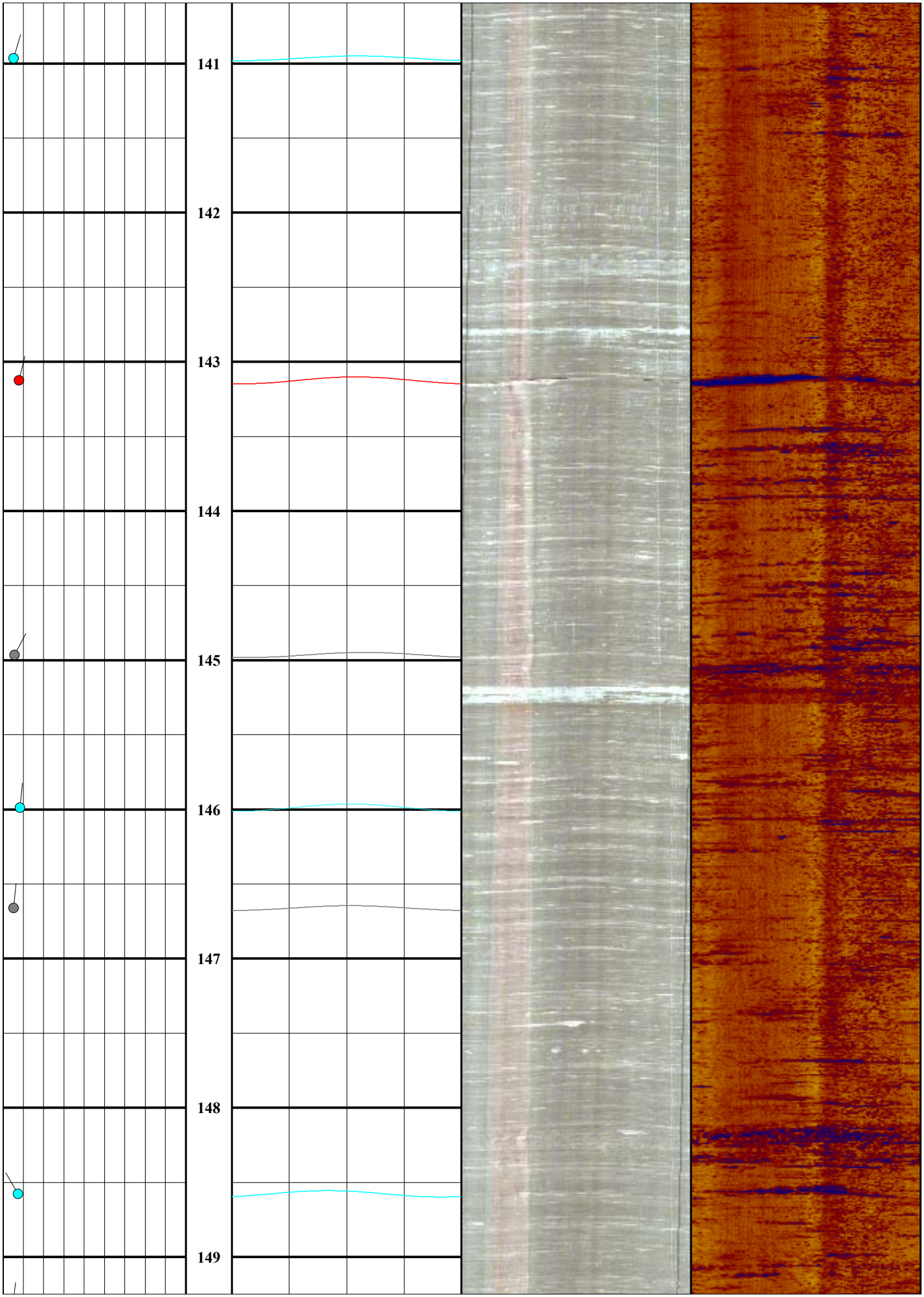

98
99
100
101
102
103
104
105

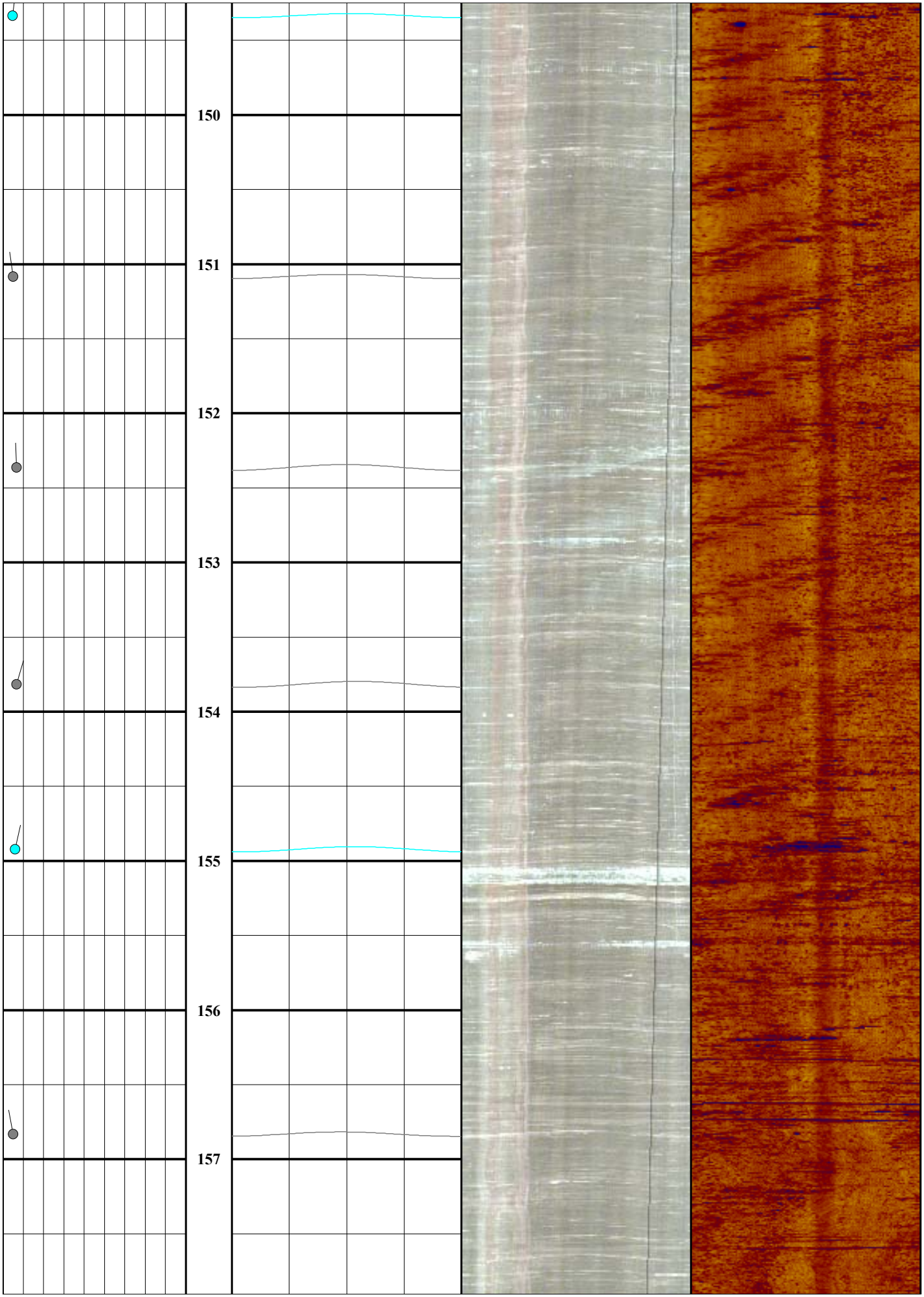

106
107
108
109
110
111
112
113
114

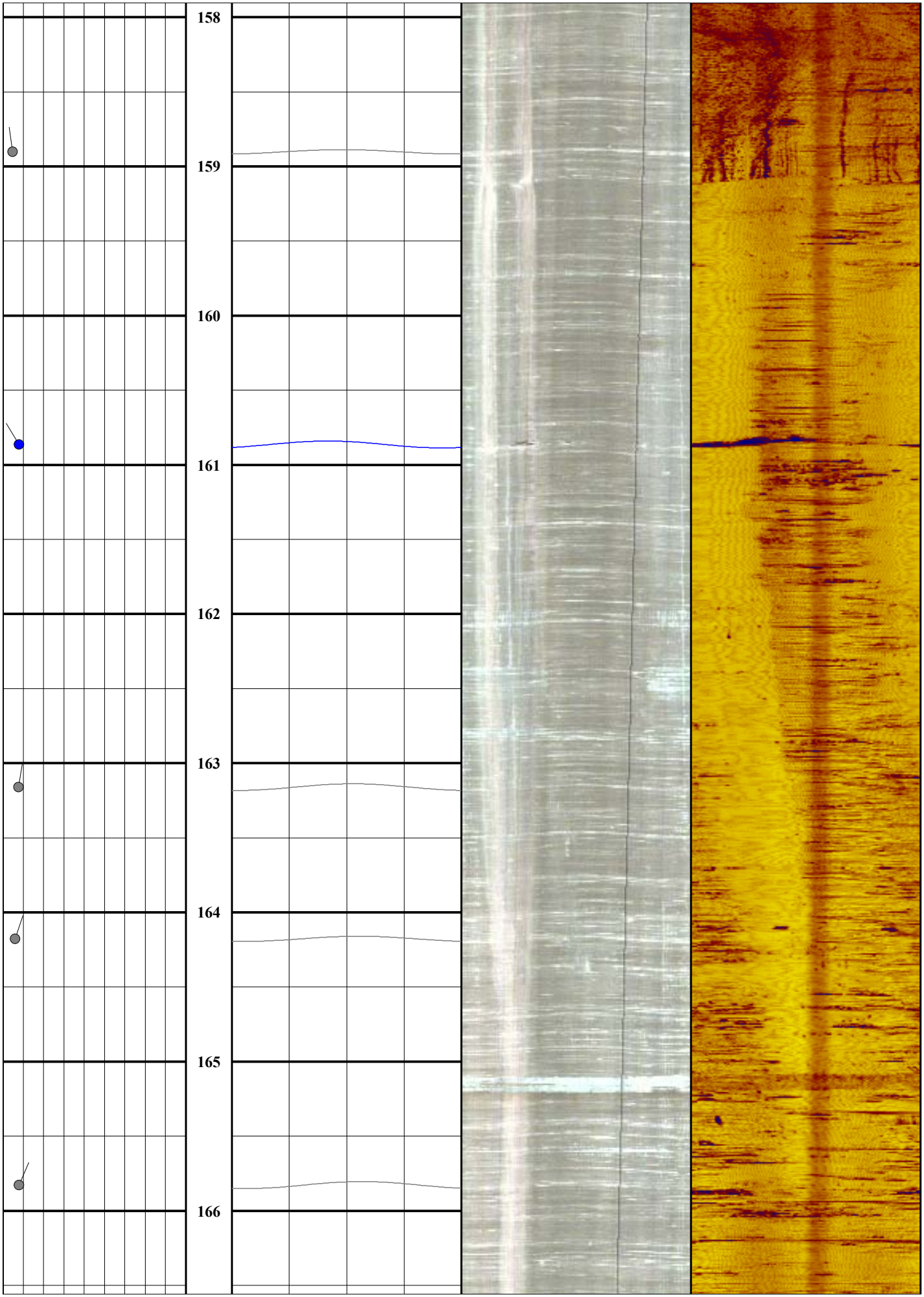

115
116
117
118
119
120
121
122
123

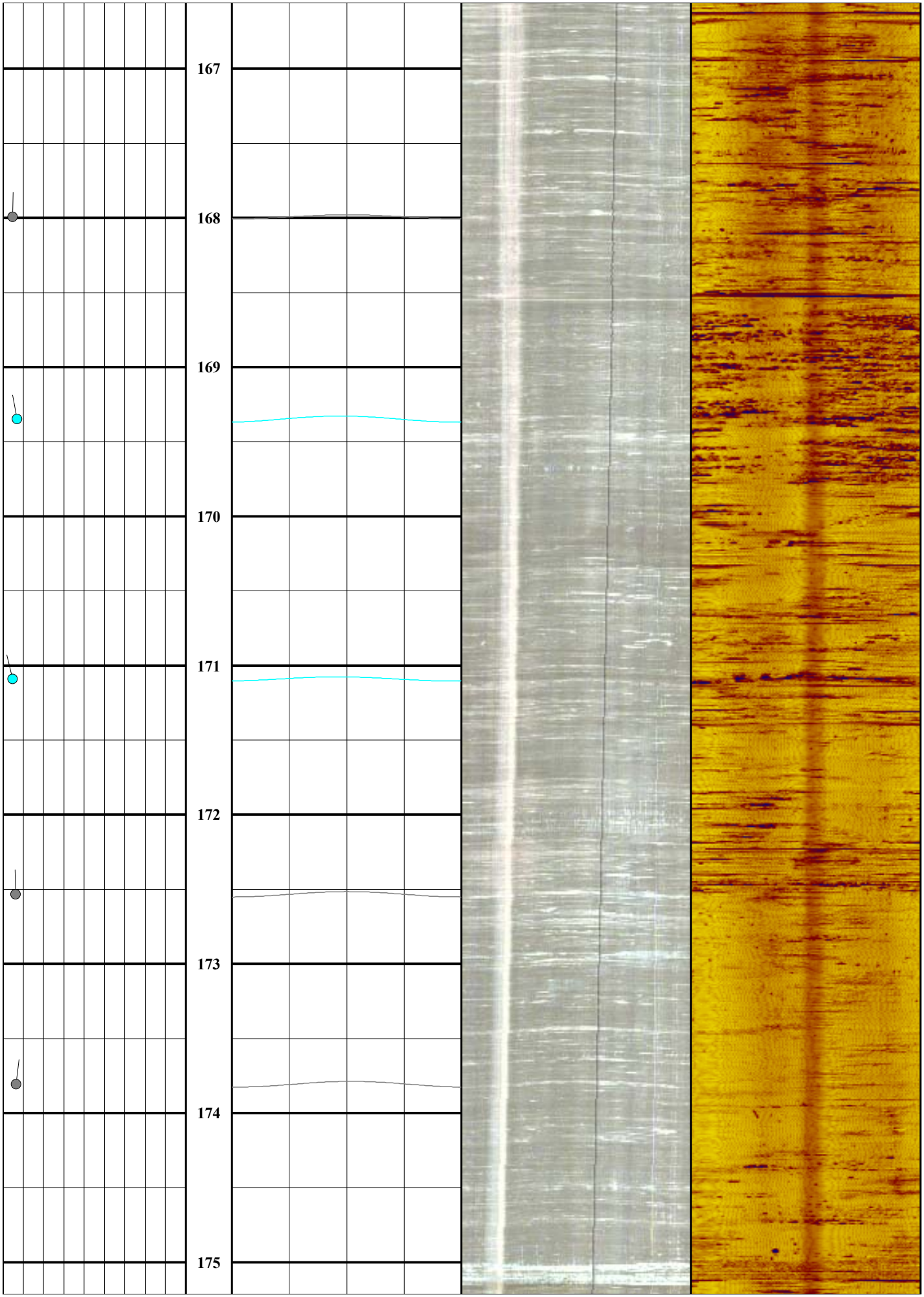

124
125
126
127
128
129
130
131

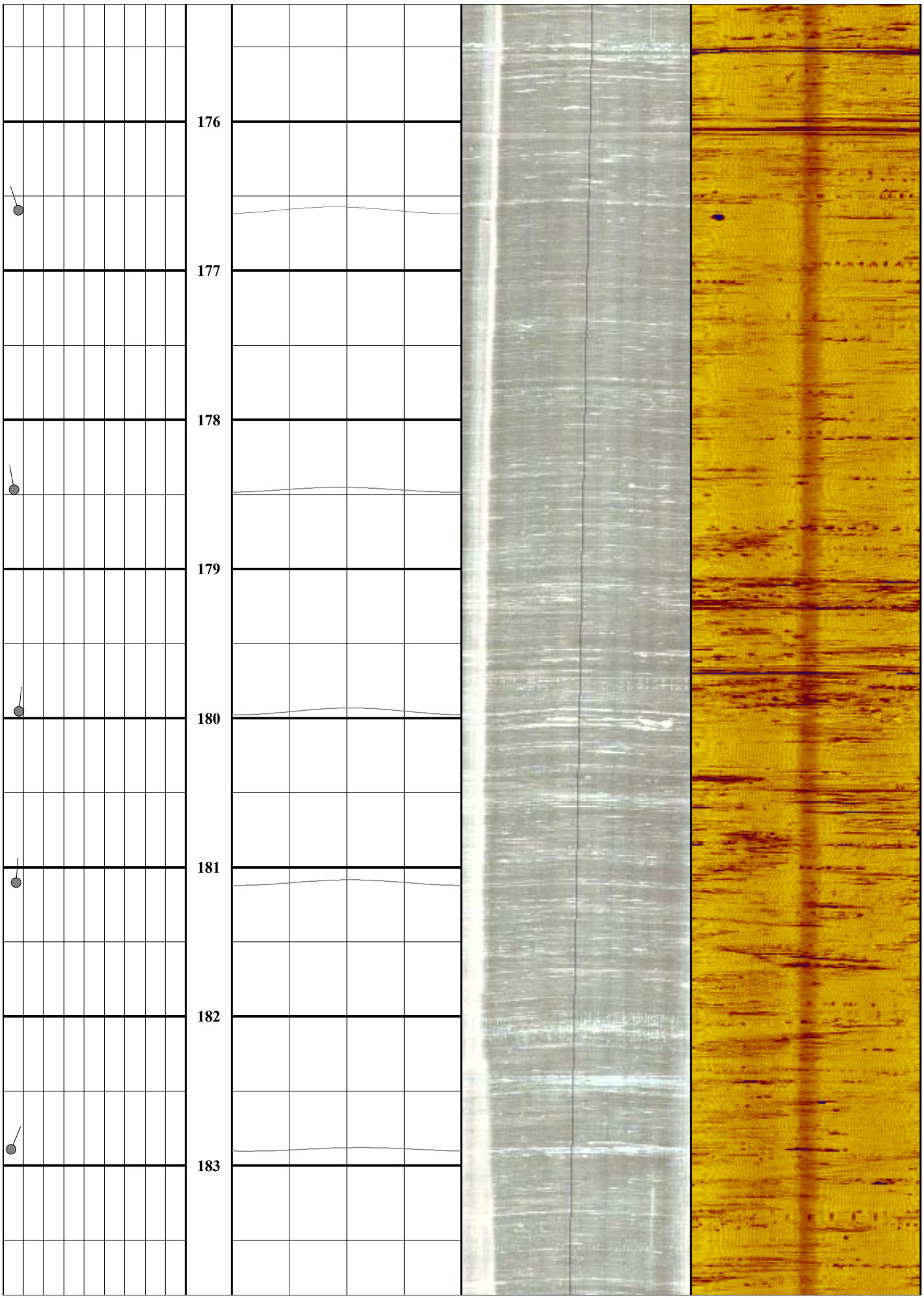

132
133
134
135
136
137
138
139
140

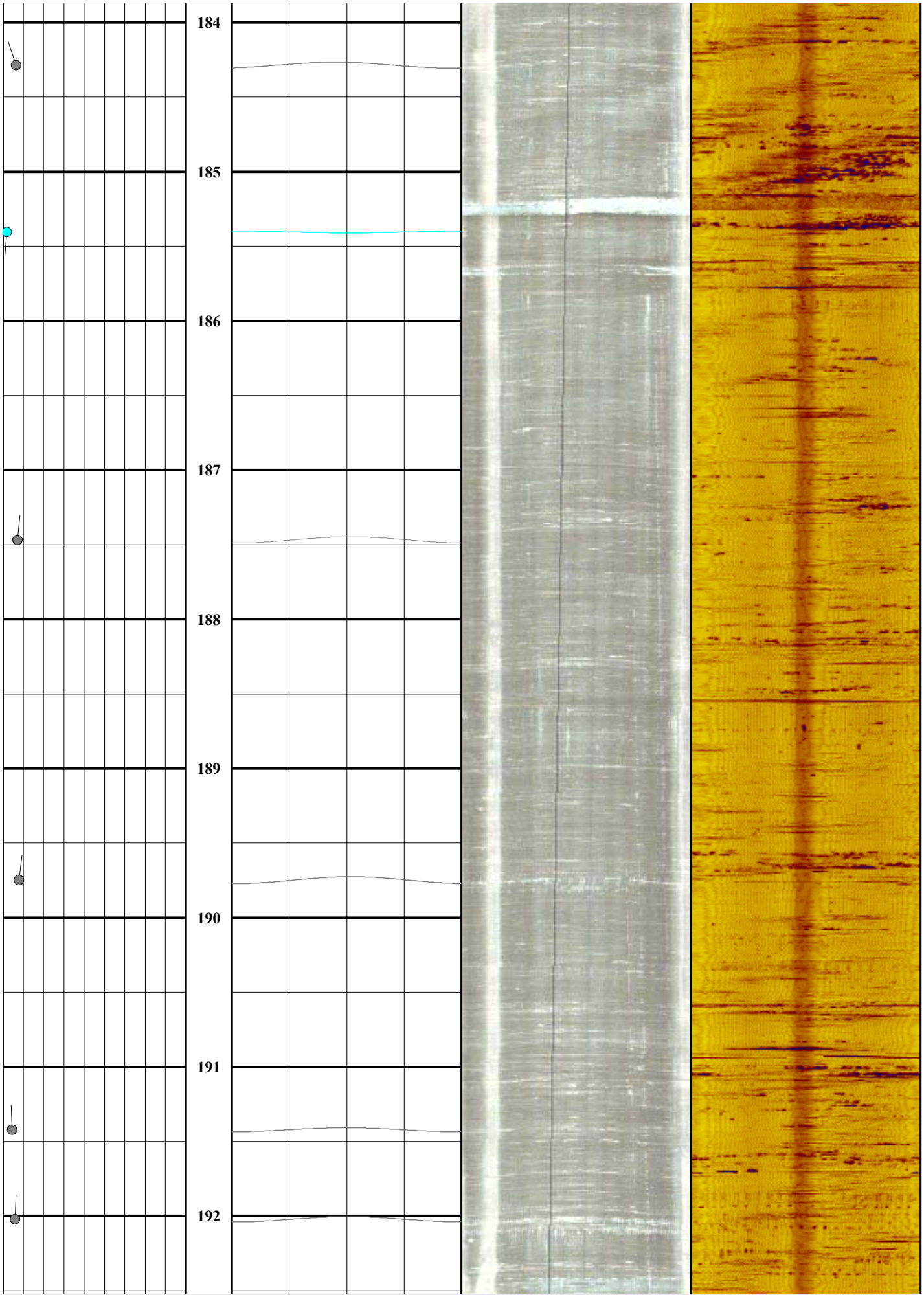

141
142
143
144
145
146
147
148
149

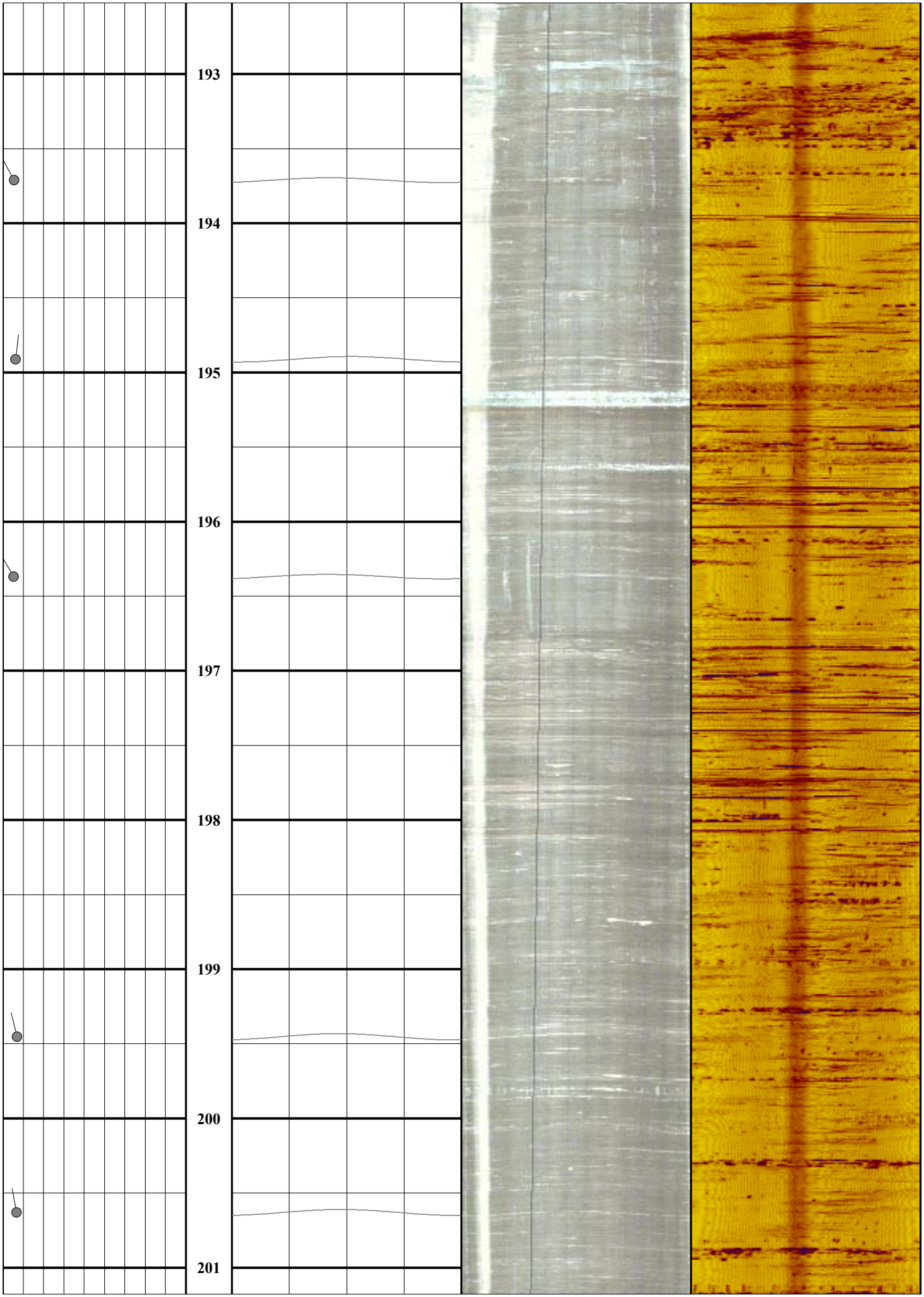

150
151
152
153
154
155
156
157

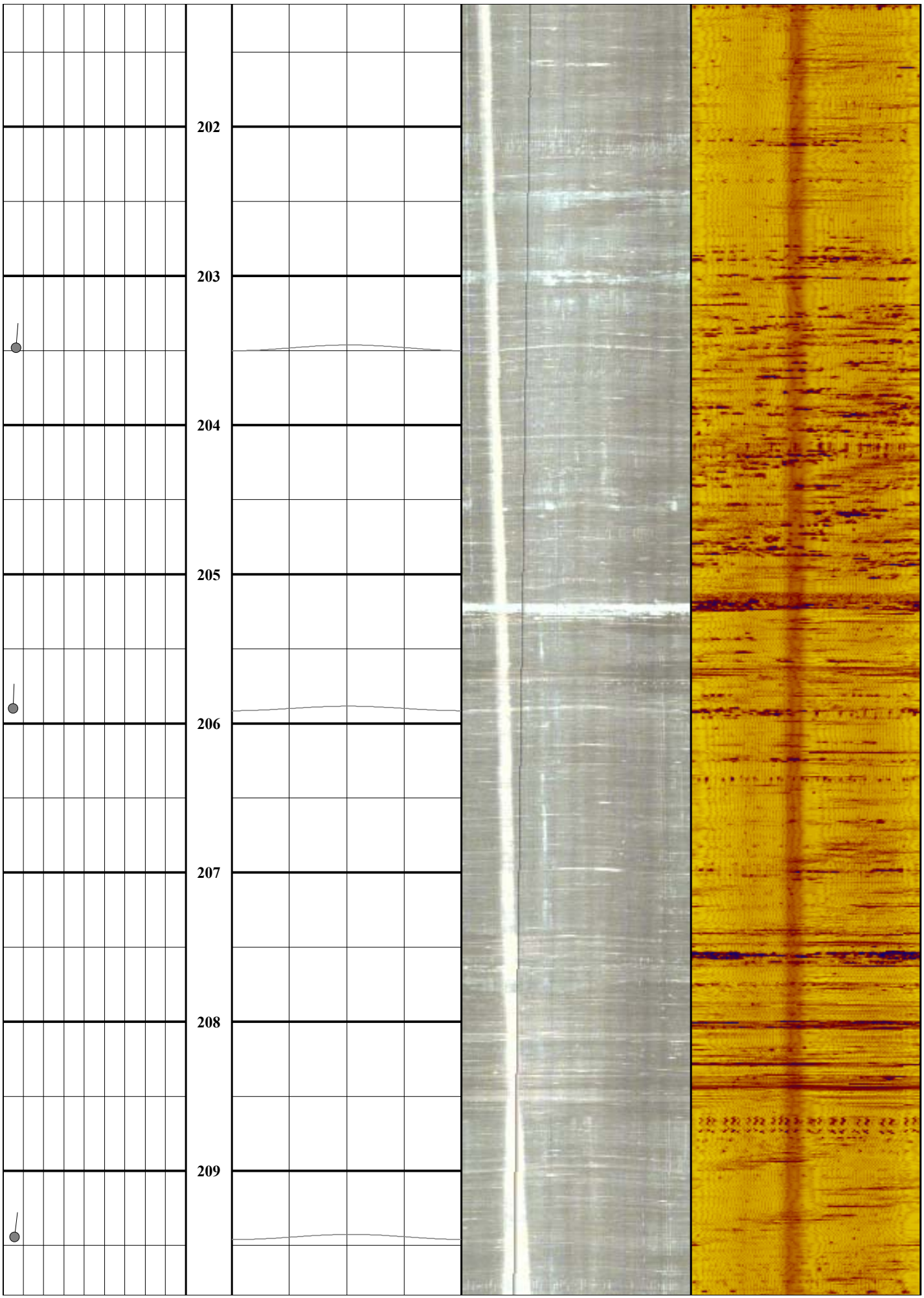

158
159
160
161
162
163
164
165
166

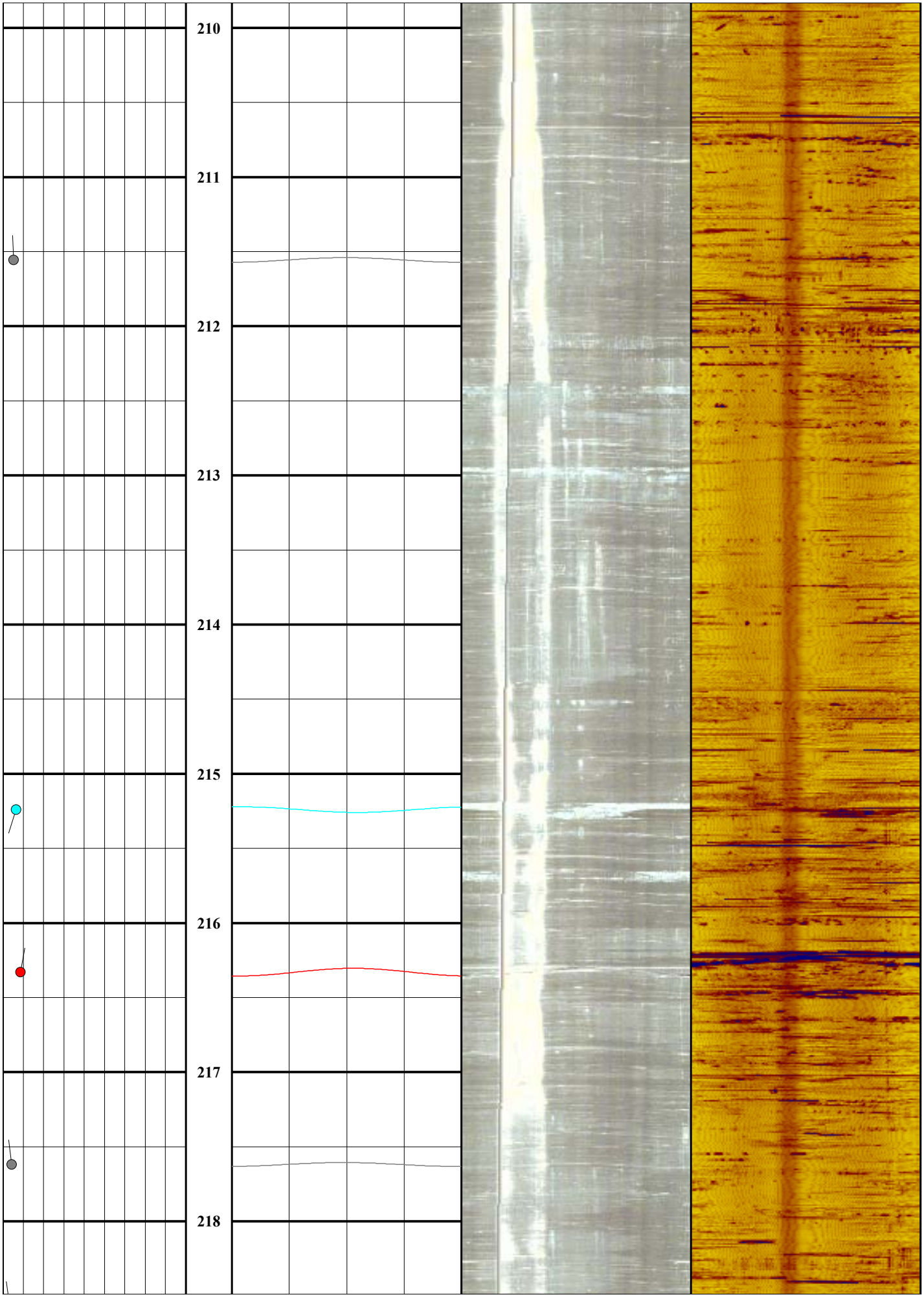

167
168
169
170
171
172
173
174
175

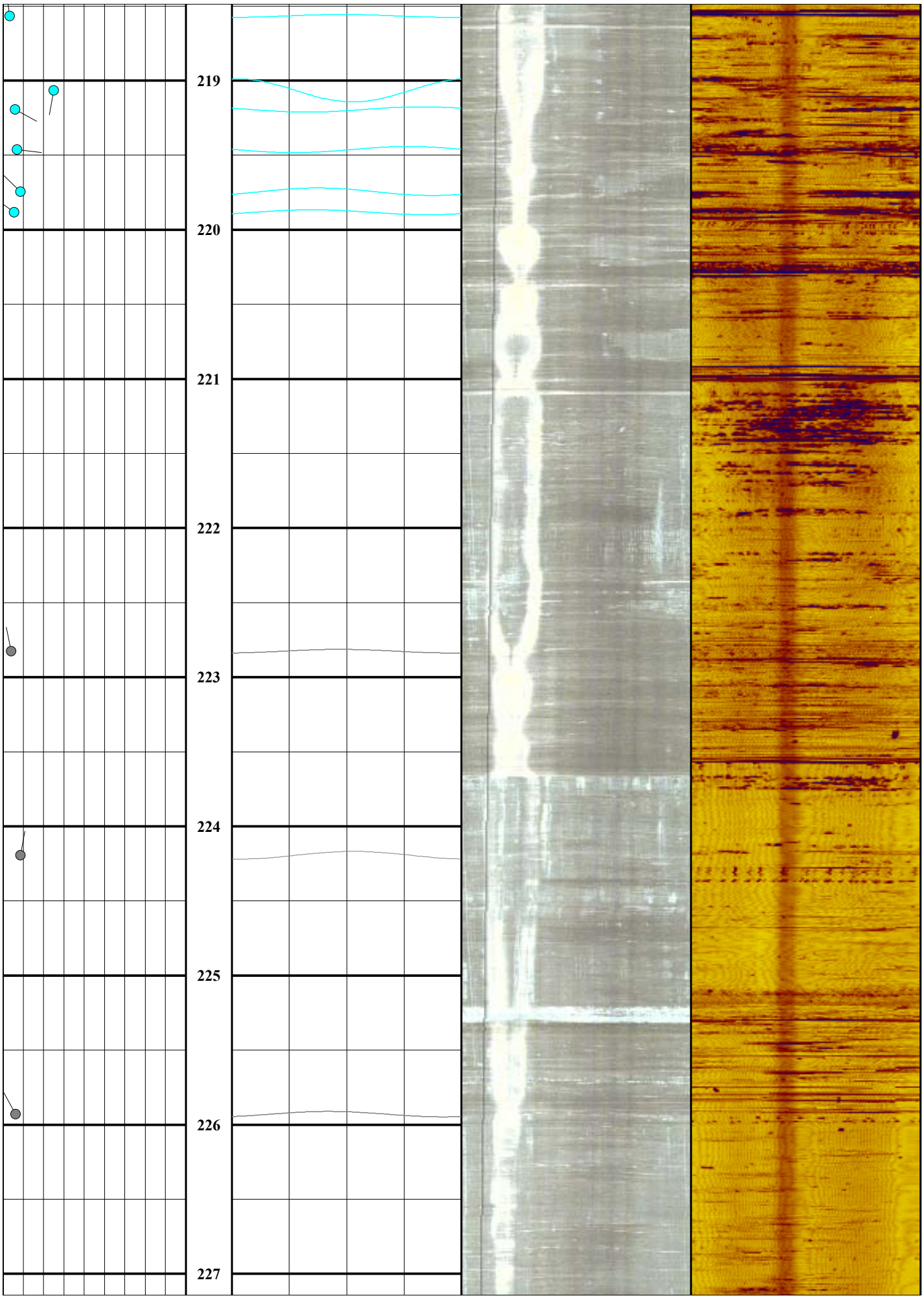

176
177
178
179
180
181
182
183

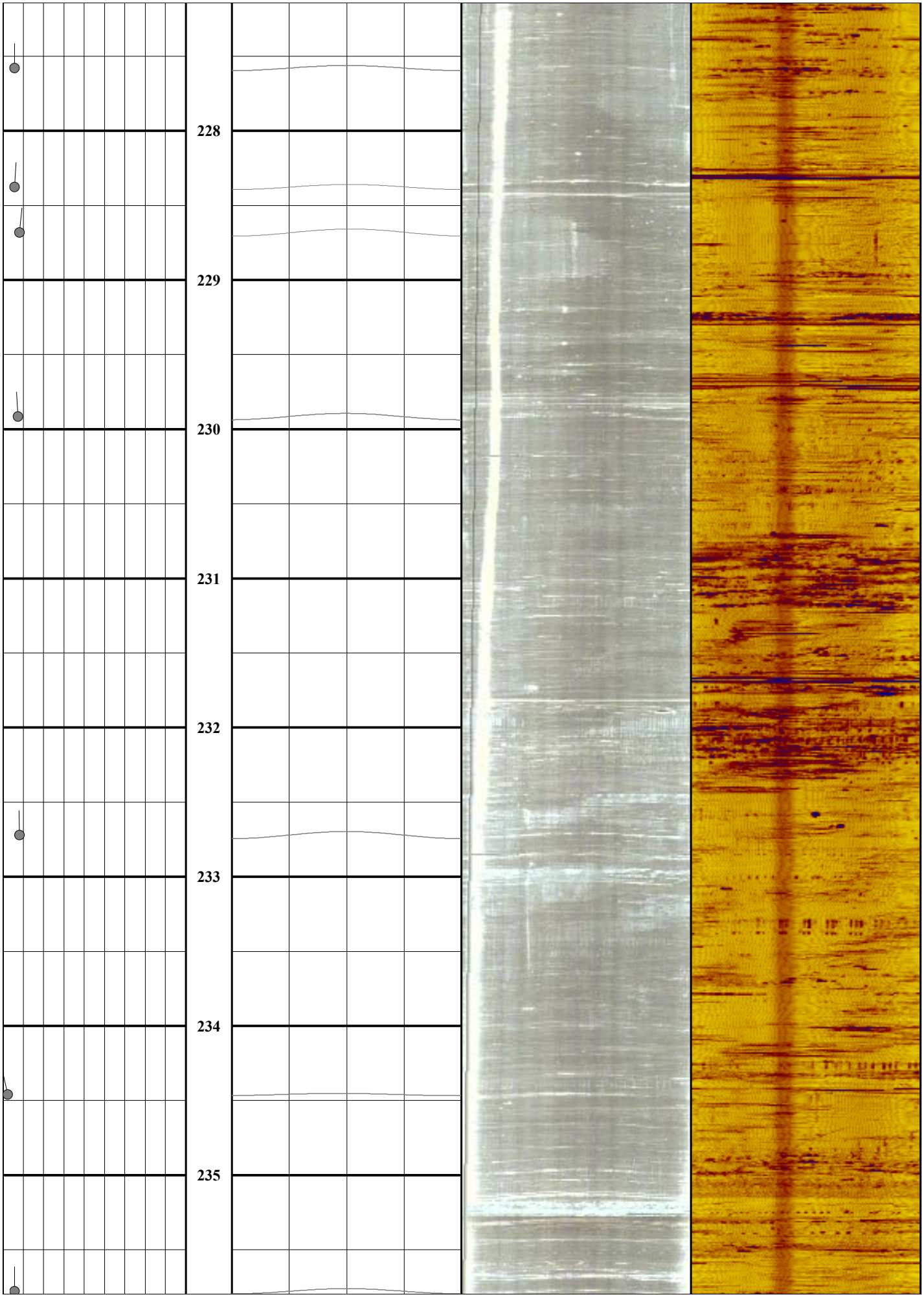

184
185
186
187
188
189
190
191
192

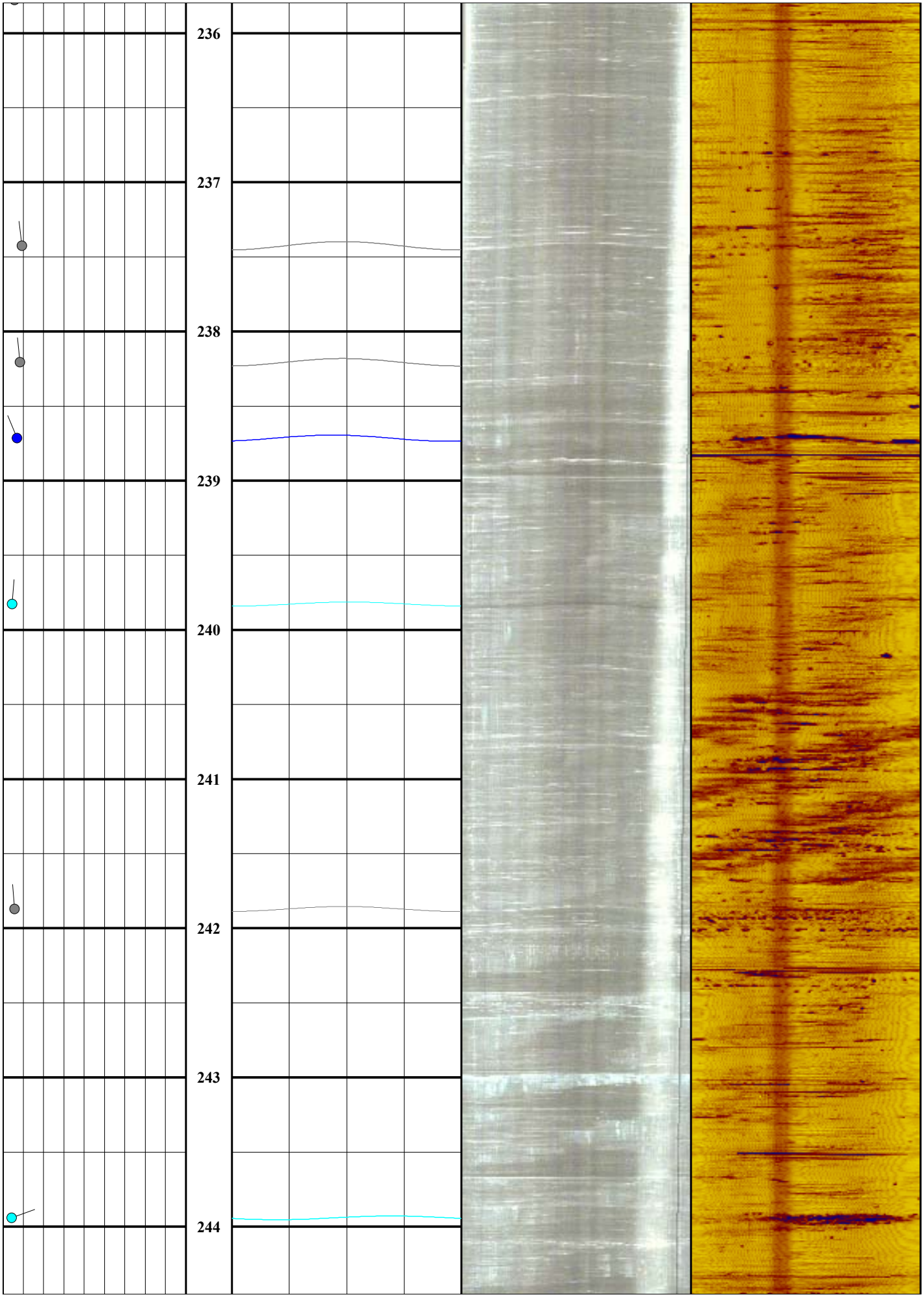

193
194
195
196
197
198
199
200
201

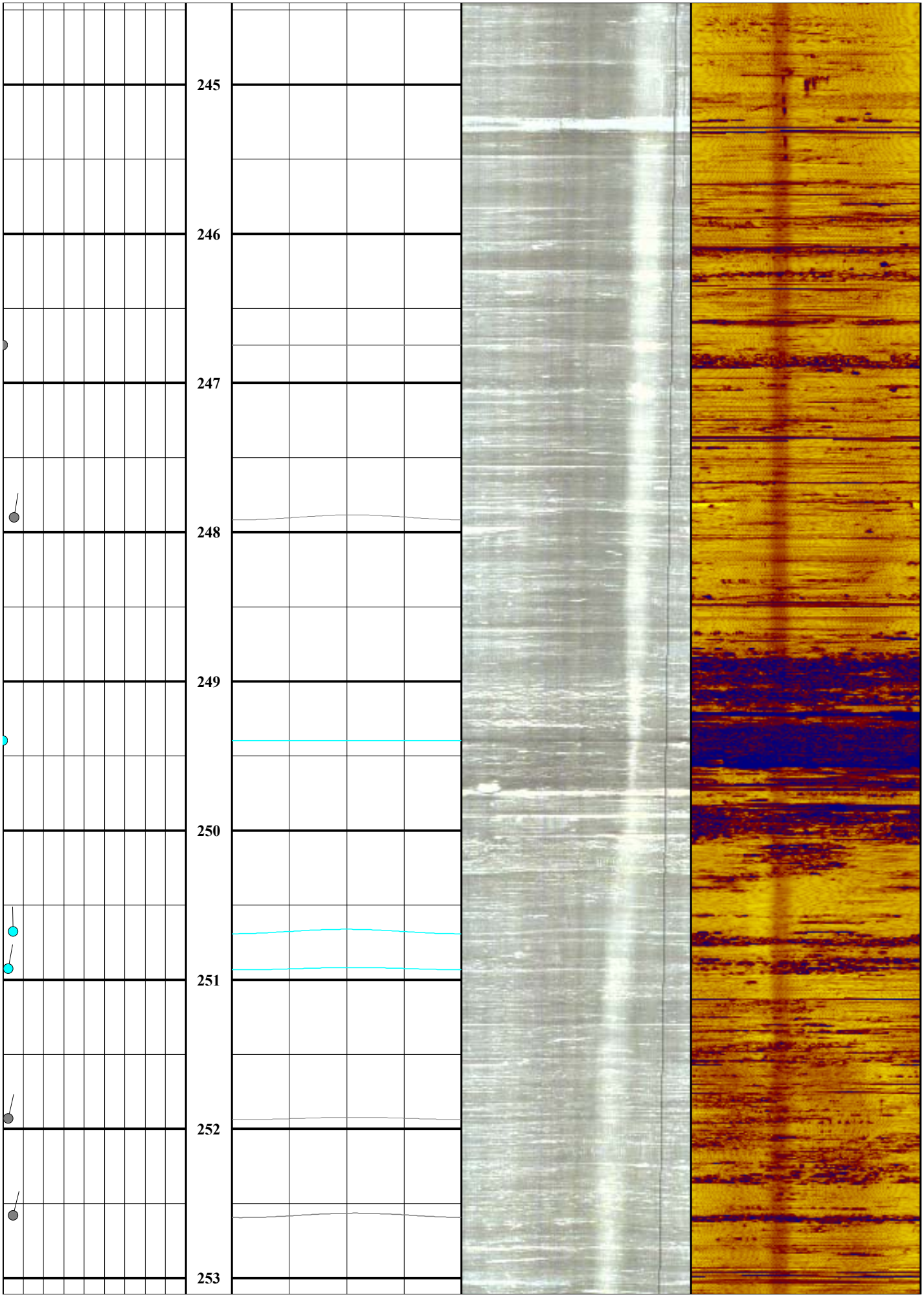

202
203
204
205
206
207
208
209

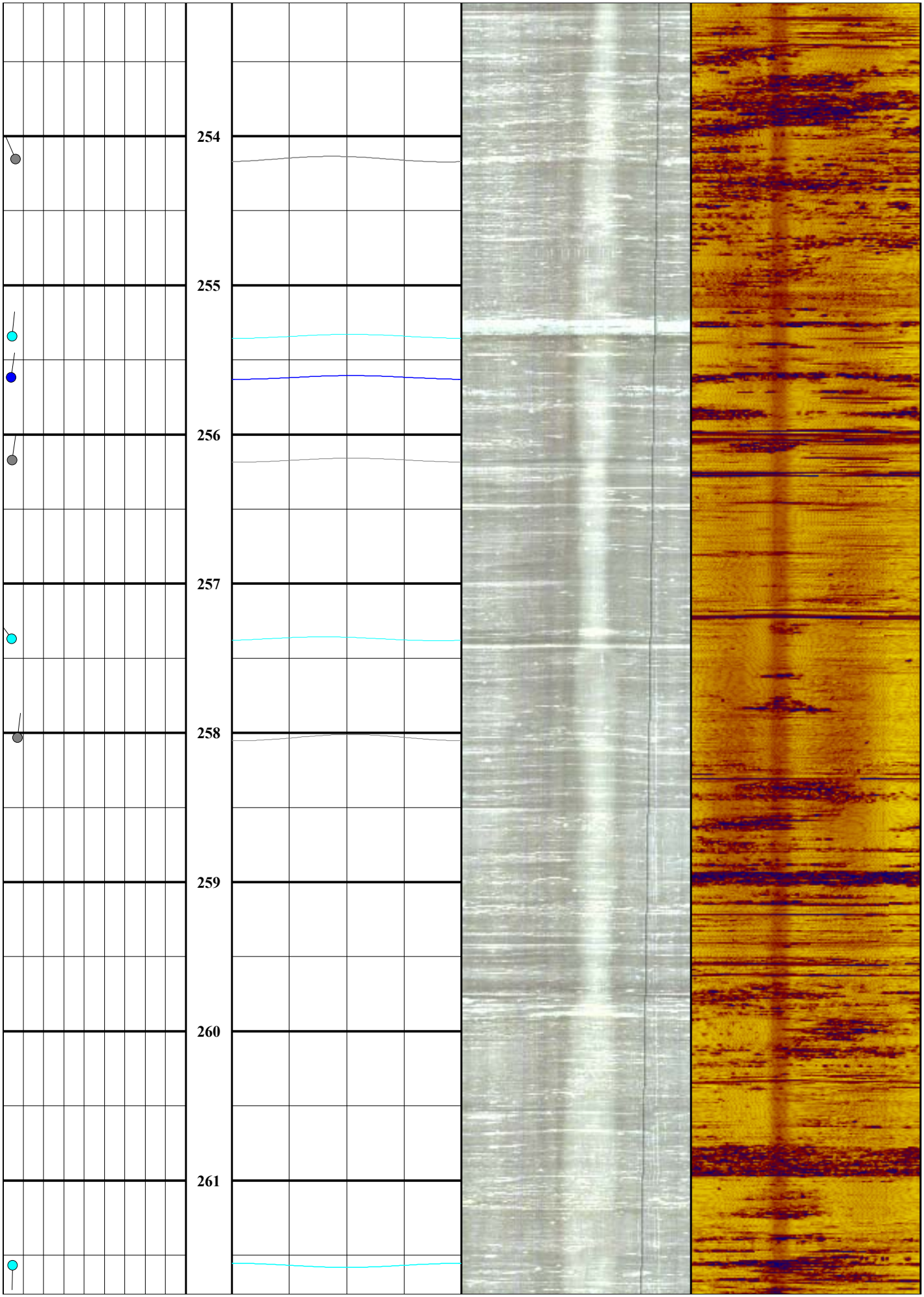

210
211
212
213
214
215
216
217
218

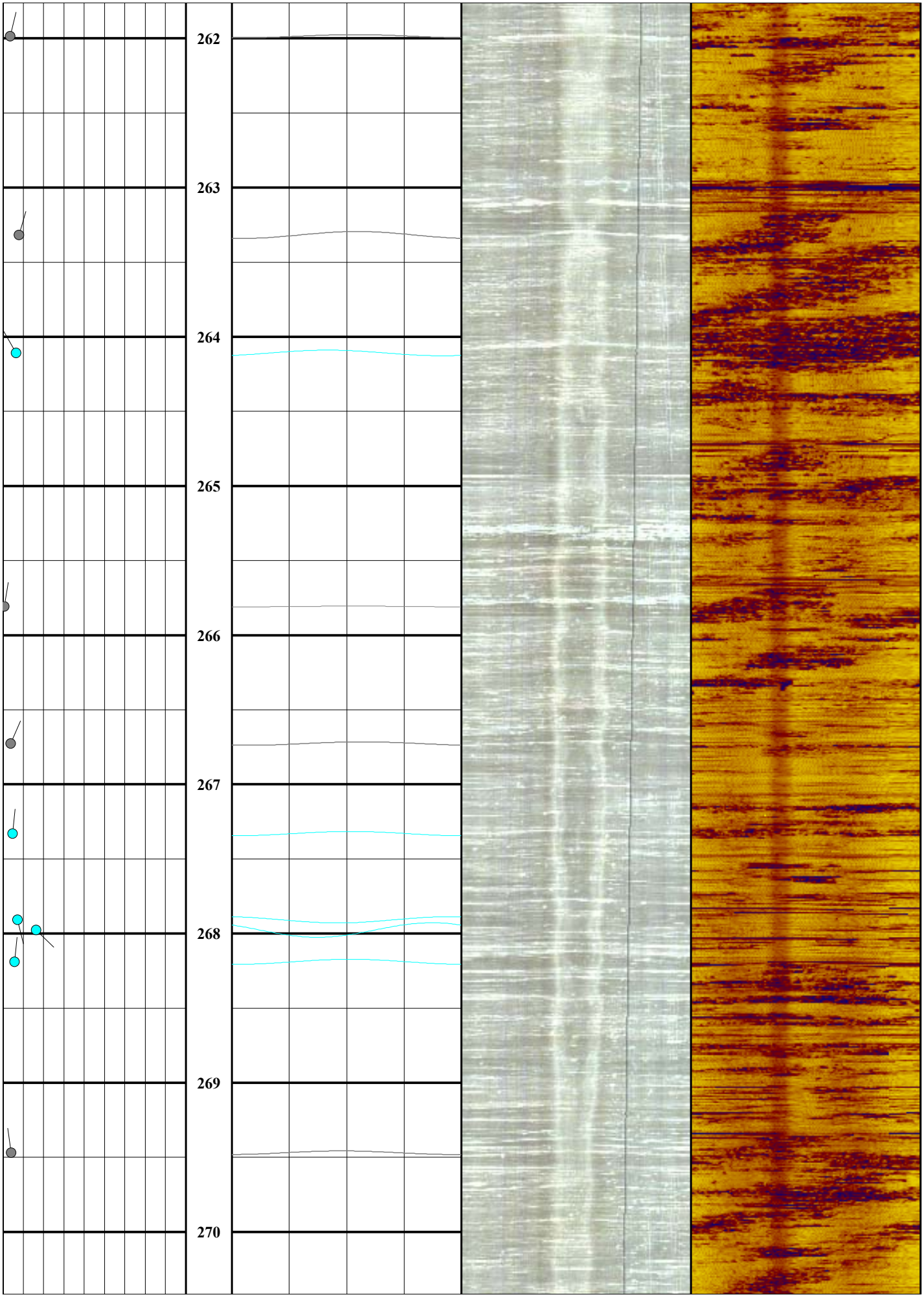

219
220
221
222
223
224
225
226
227

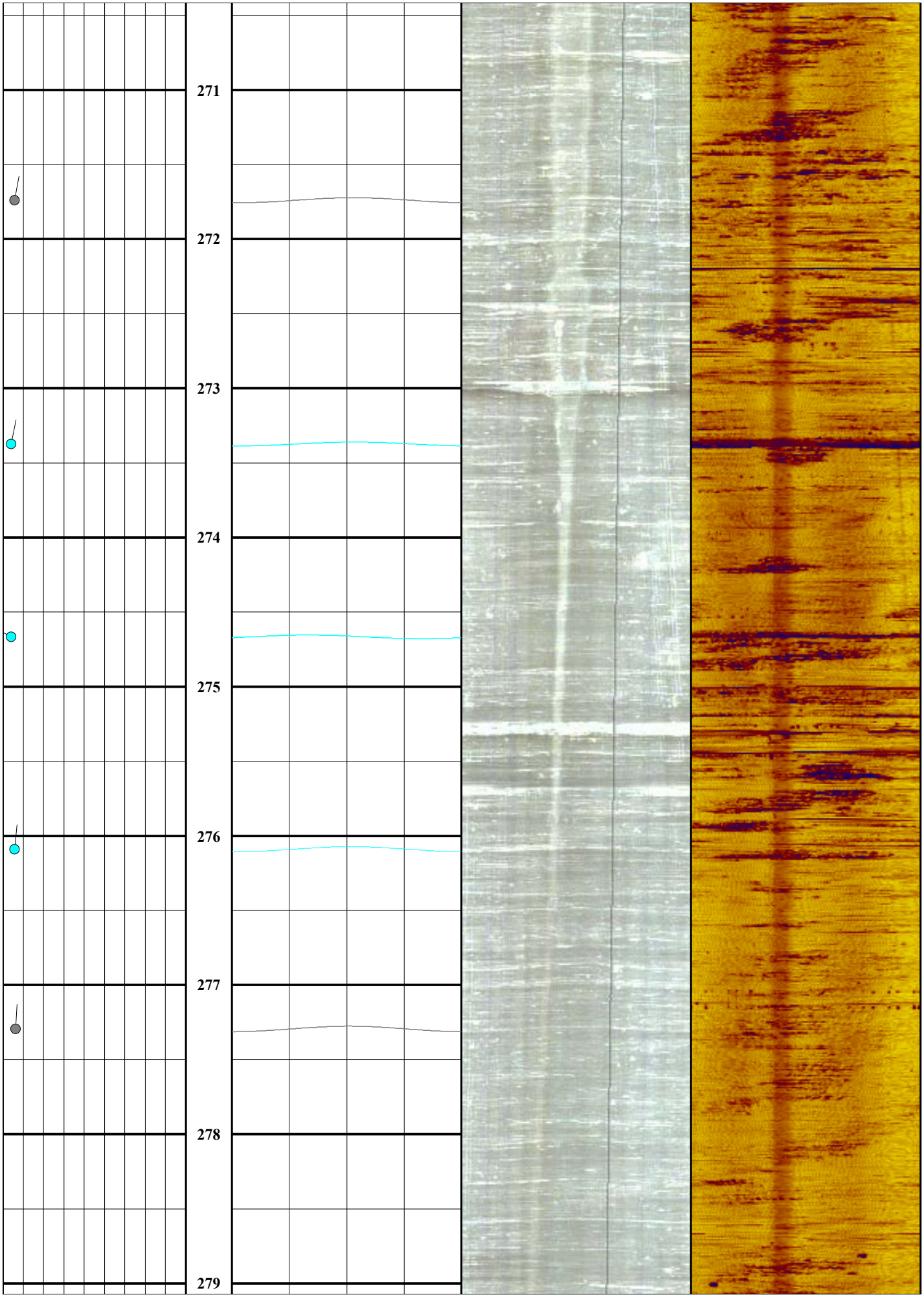

228
229
230
231
232
233
234
235

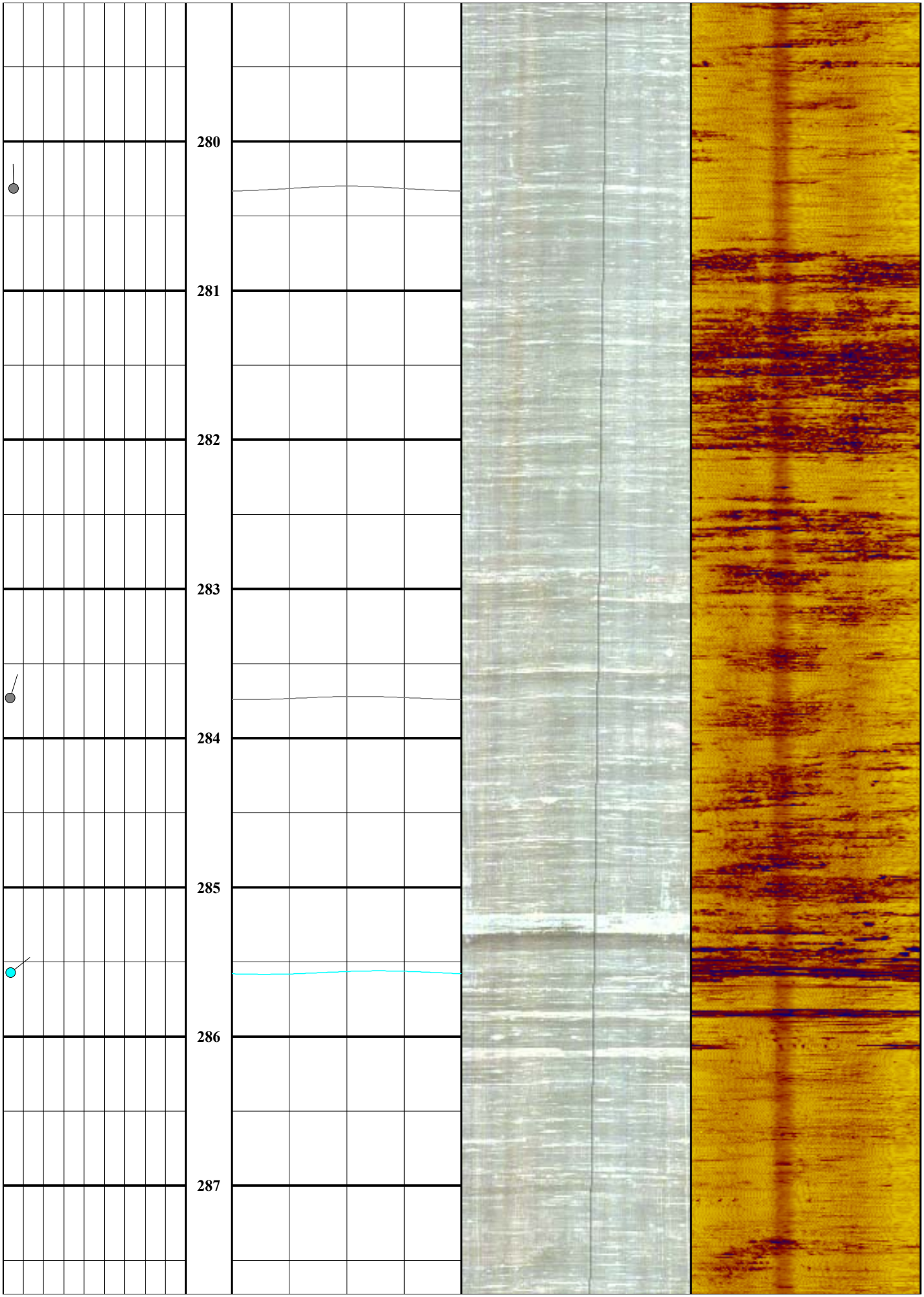

236
237
238
239
240
241
242
243
244

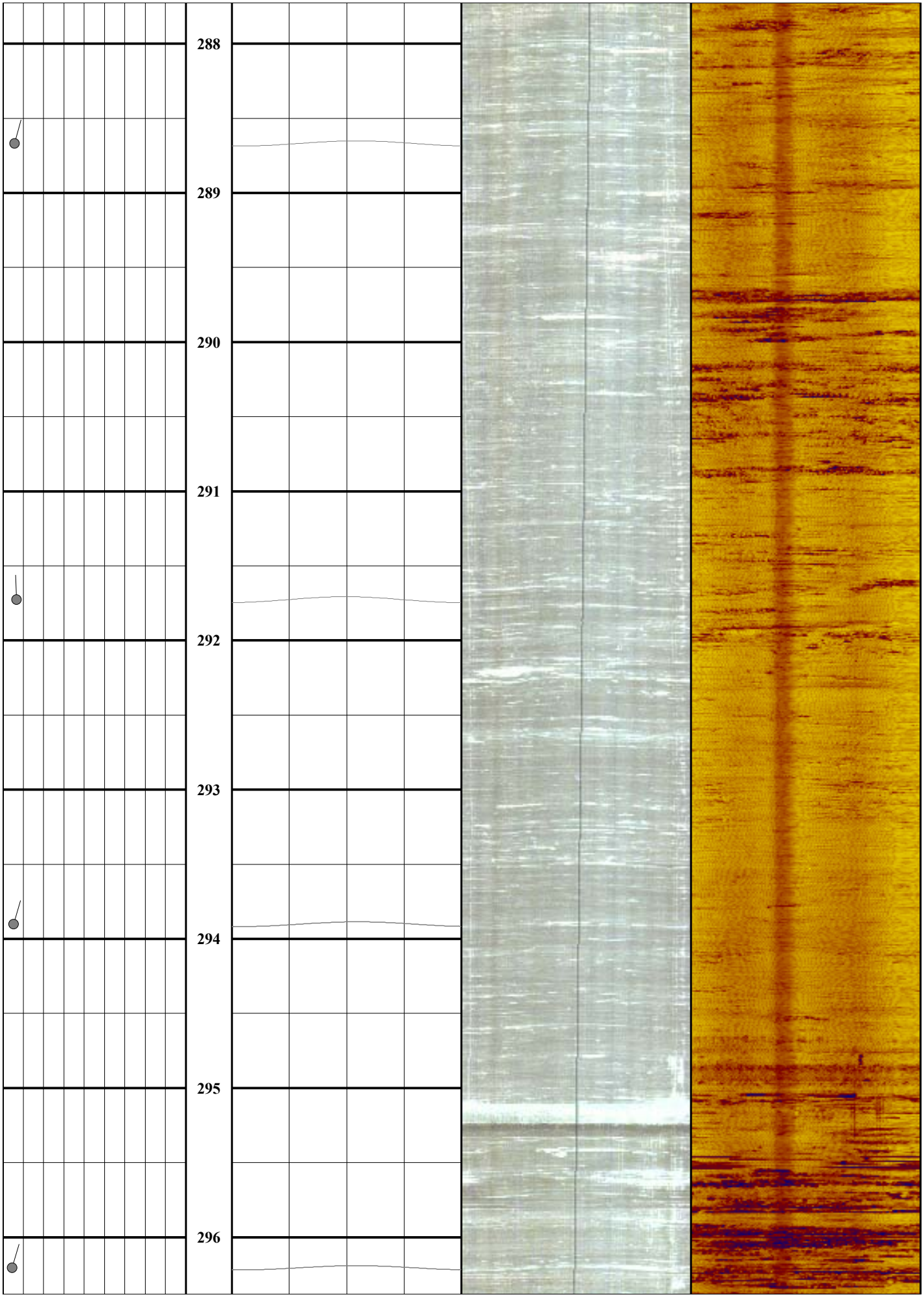

245
246
247
248
249
250
251
252
253

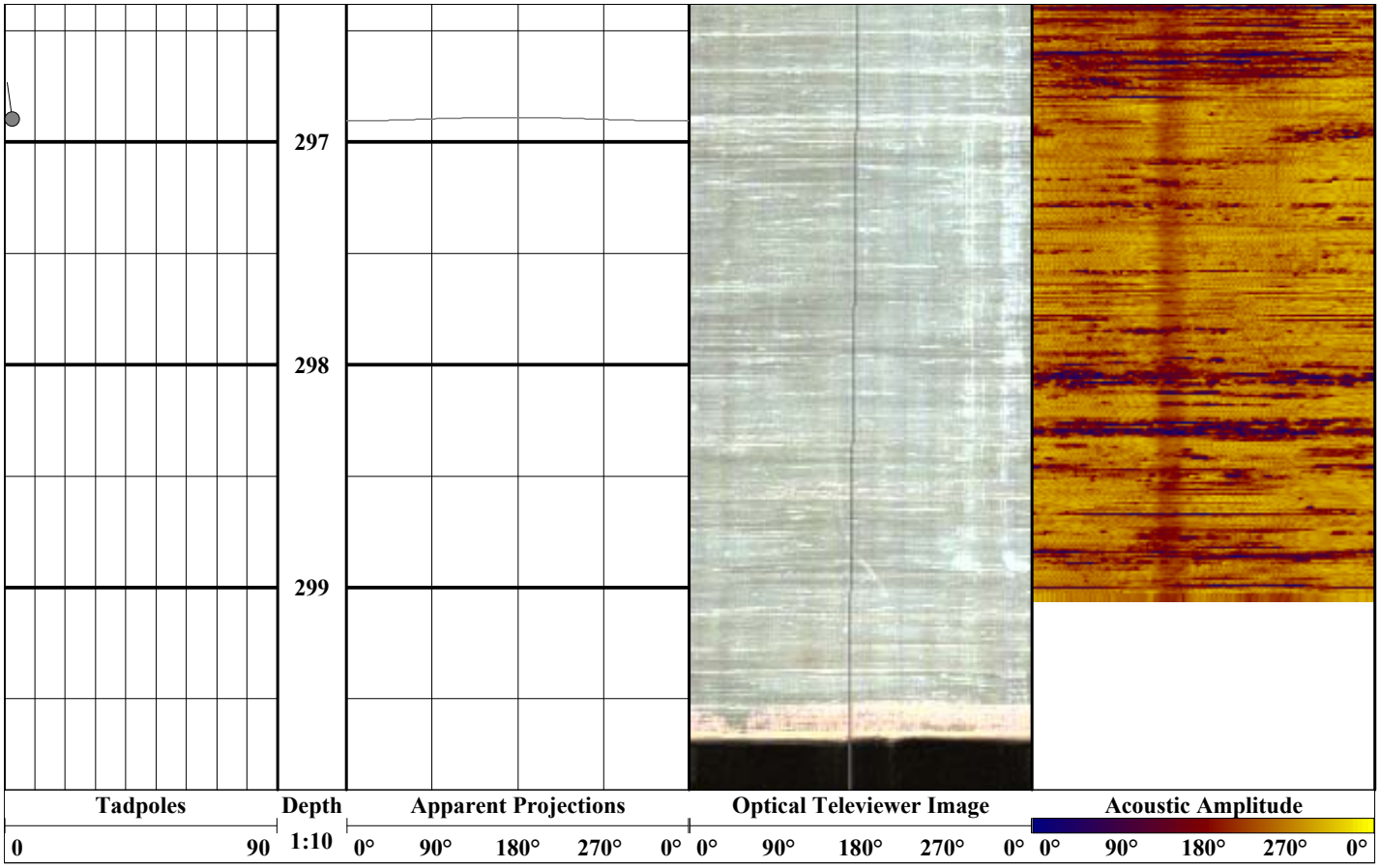

254
255
256
257
258
259
260
261


262
263
264
265
266
267
268
269
270


271
272
273
274
275
276
277
278
279


280
281
282
283
284
285
286
287

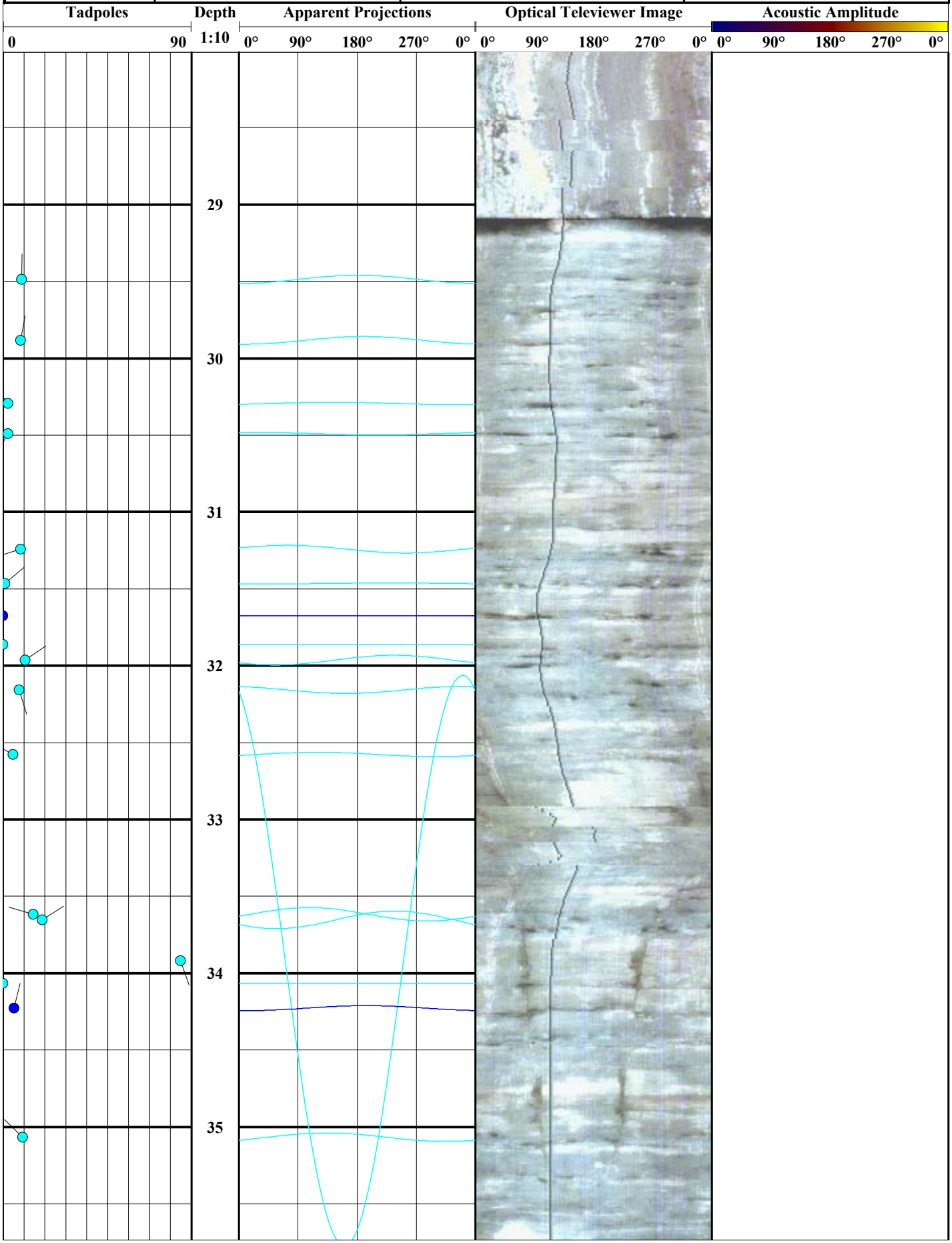

288
289
290
291
292
293
294
295
296

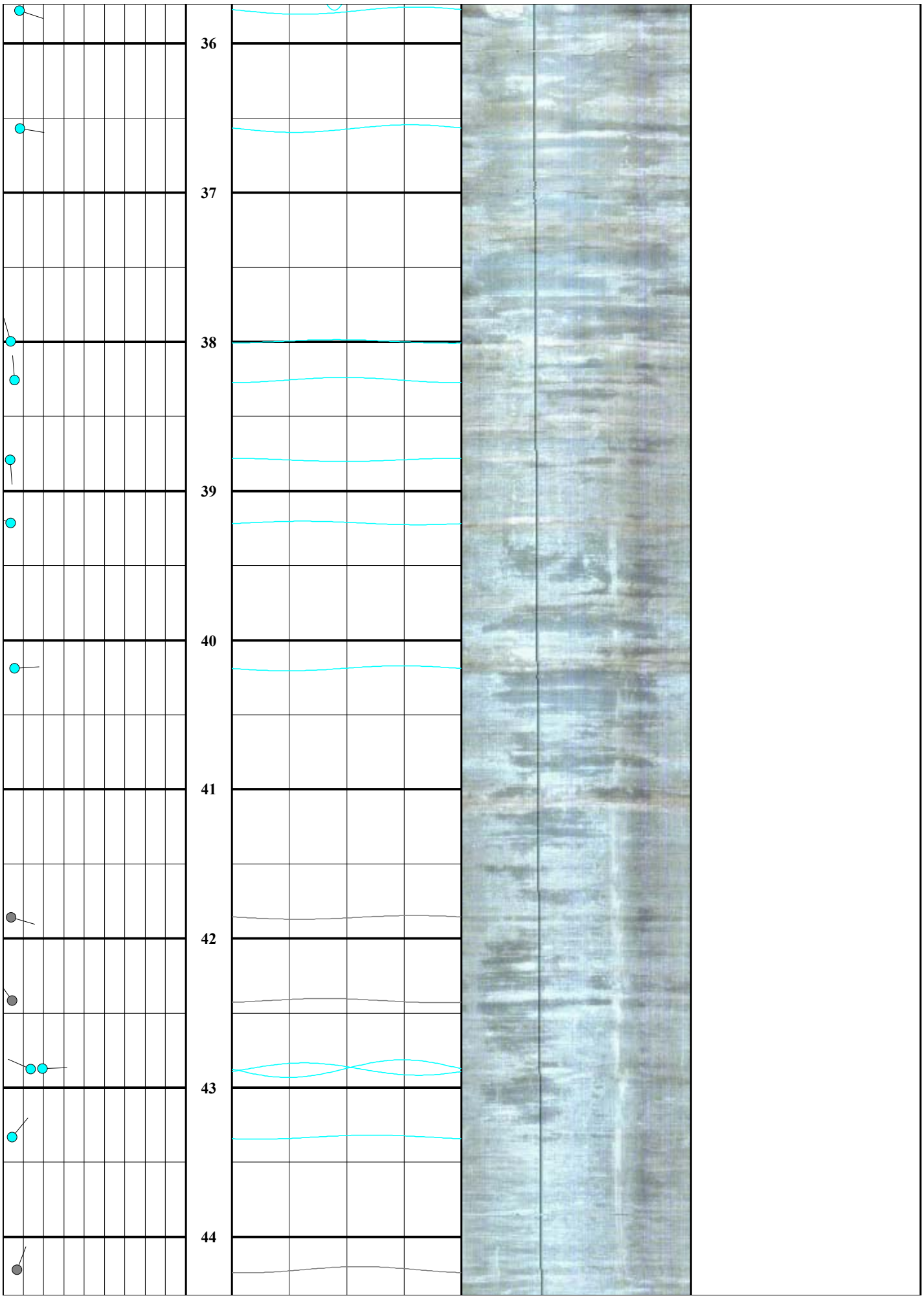

297
298
299
Tadpoles
Depth
Apparent Projections
Optical Televiewer Image
Acoustic Amplitude
0
90
1:10
0°
90°
180°
270°
0°
0°
90°
180°
270°
0°
0°
90°
180°
270°
0°

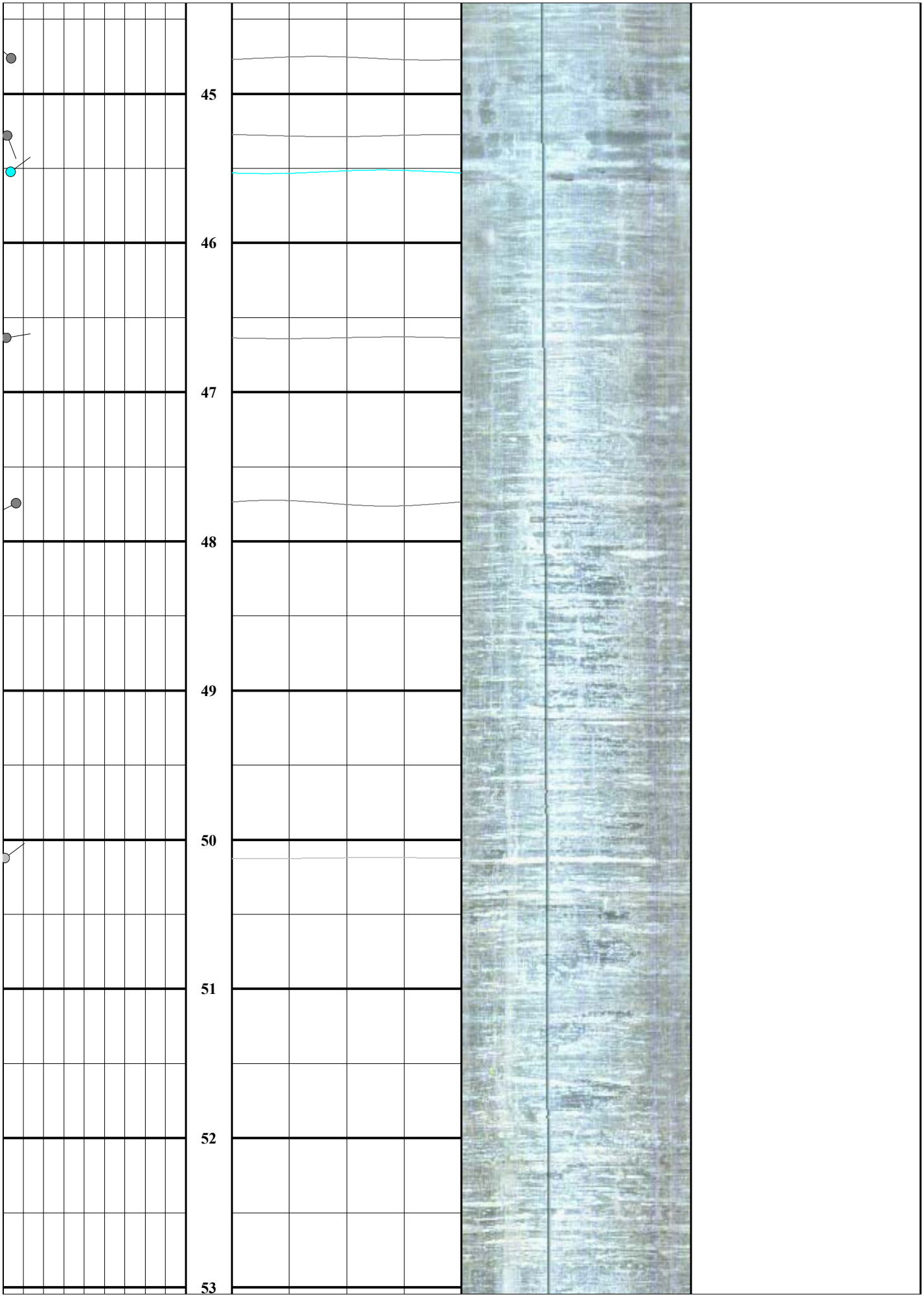
Optical/Acoustic Borehole Image Plot

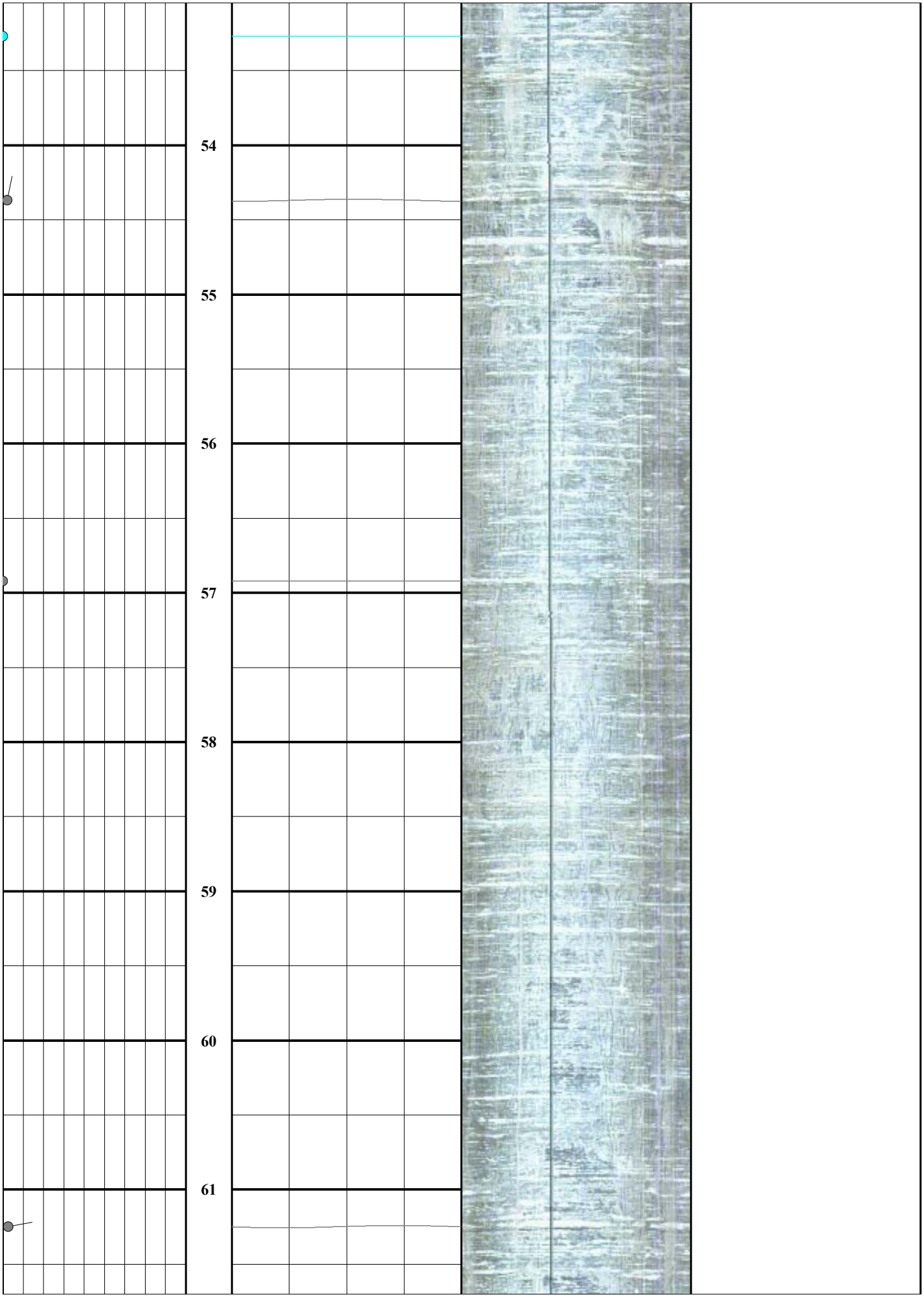
COMPANY: S. M. Stoller Corp.	PROJECT: Crescent Junction
DATE LOGGED: 13 December 2005	WELL: CH-0201

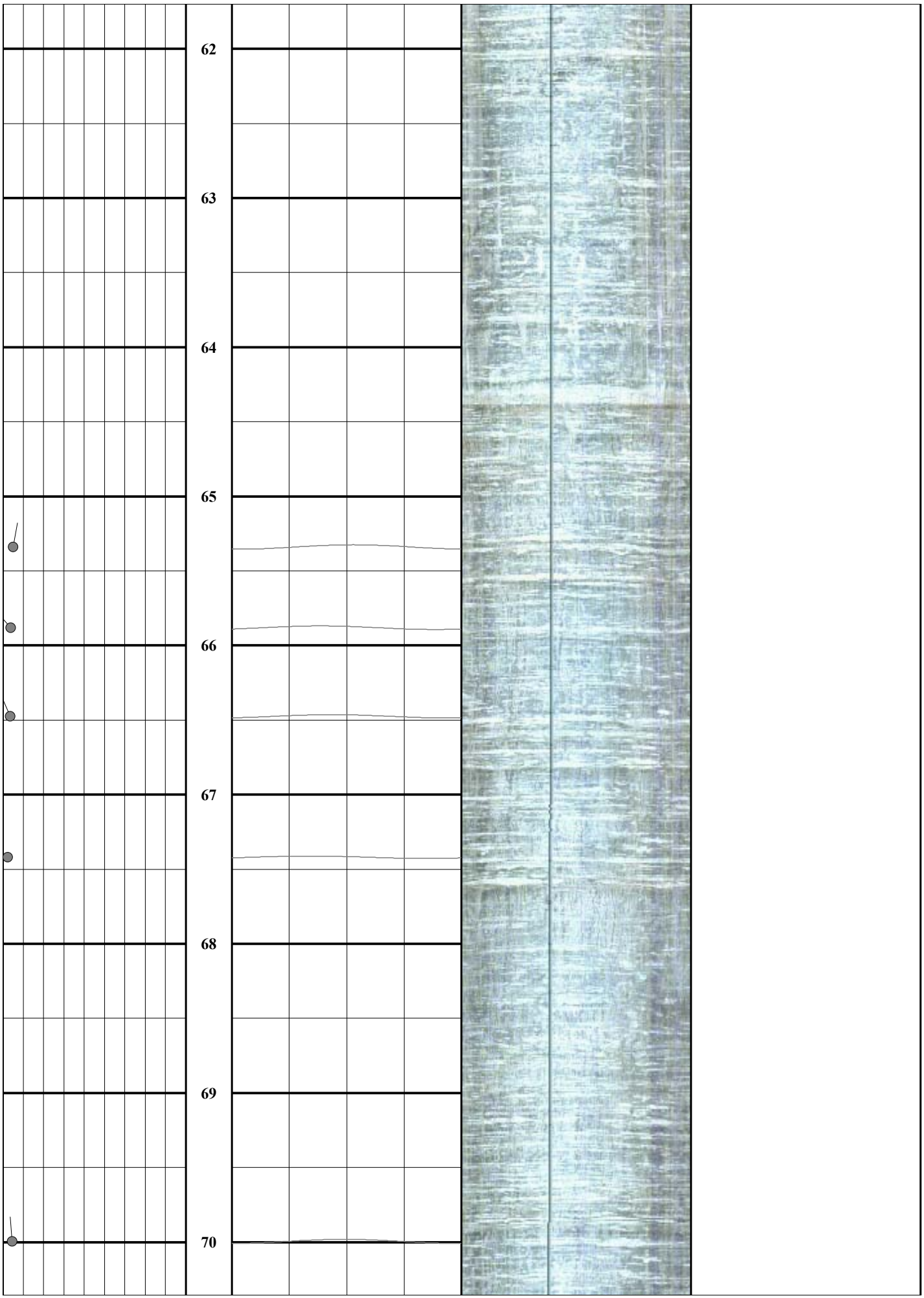
COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
Phone: (303) 279-0171, Fax: (303) 278-0135
www.colog.com

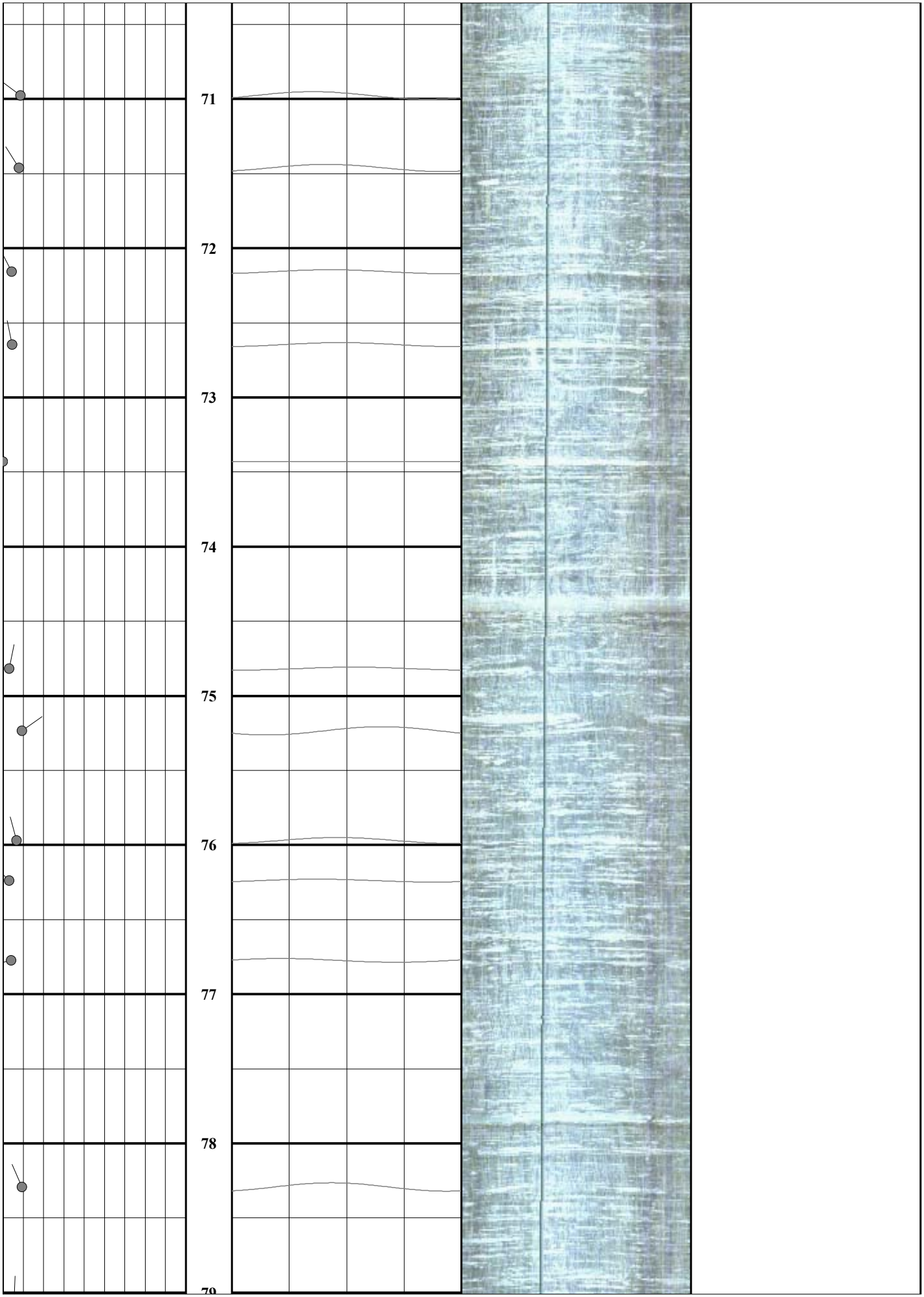


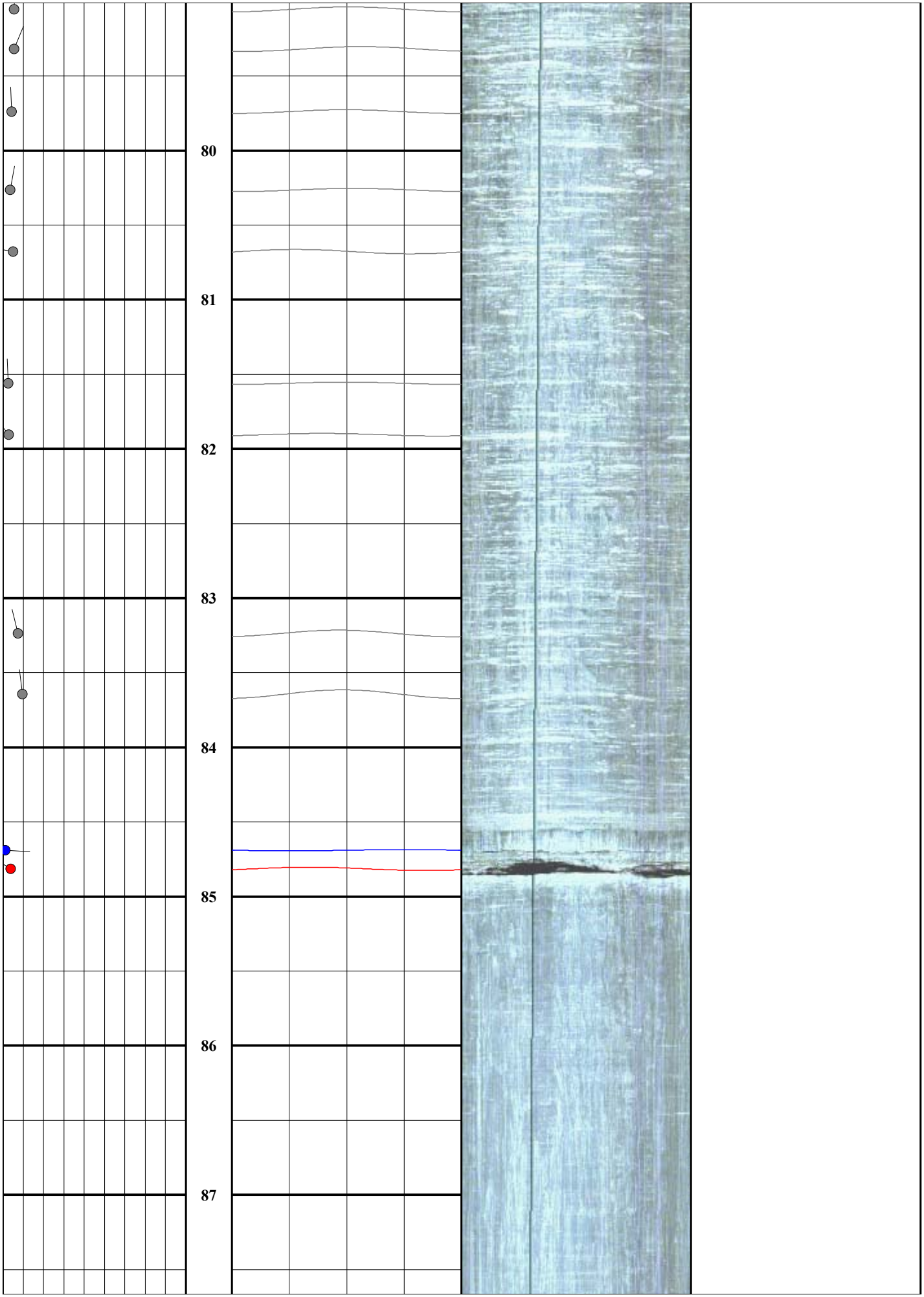

36
37
38
39
40
41
42
43
44


45
46
47
48
49
50
51
52
53


54
55
56
57
58
59
60
61


62
63
64
65
66
67
68
69
70


71
72
73
74
75
76
77
78
79


80
81
82
83
84
85
86
87

88

89

90

91

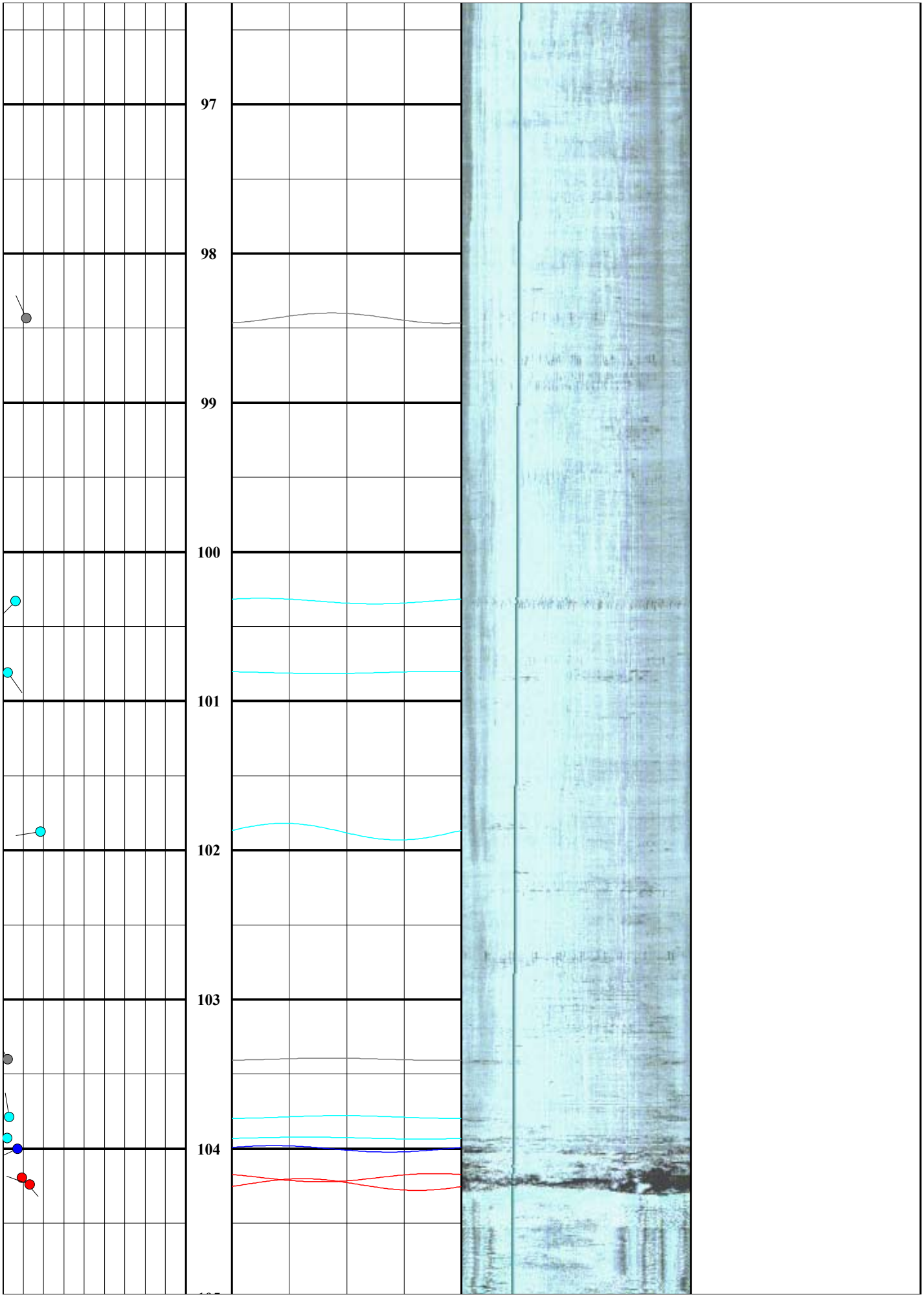
92

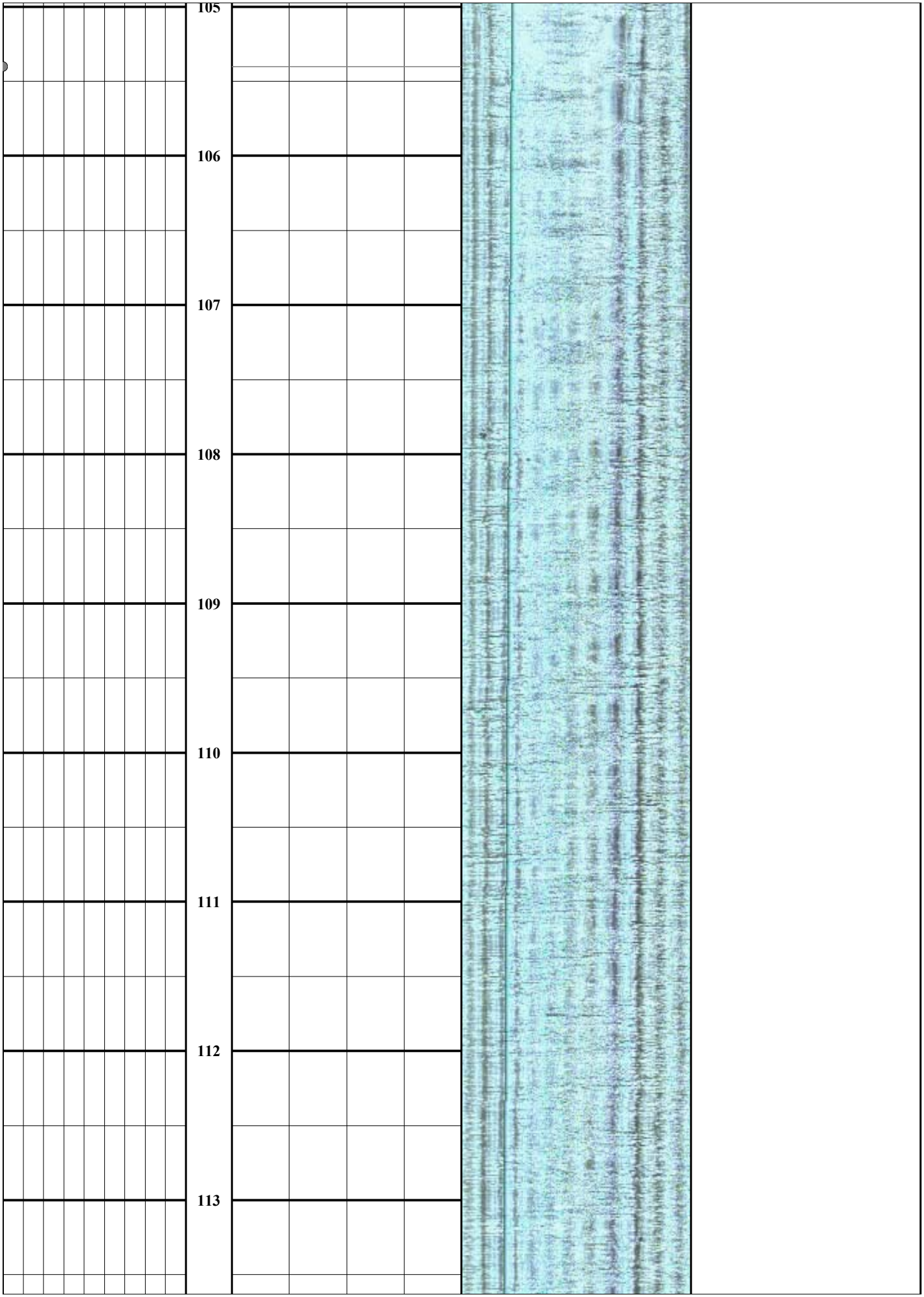
93

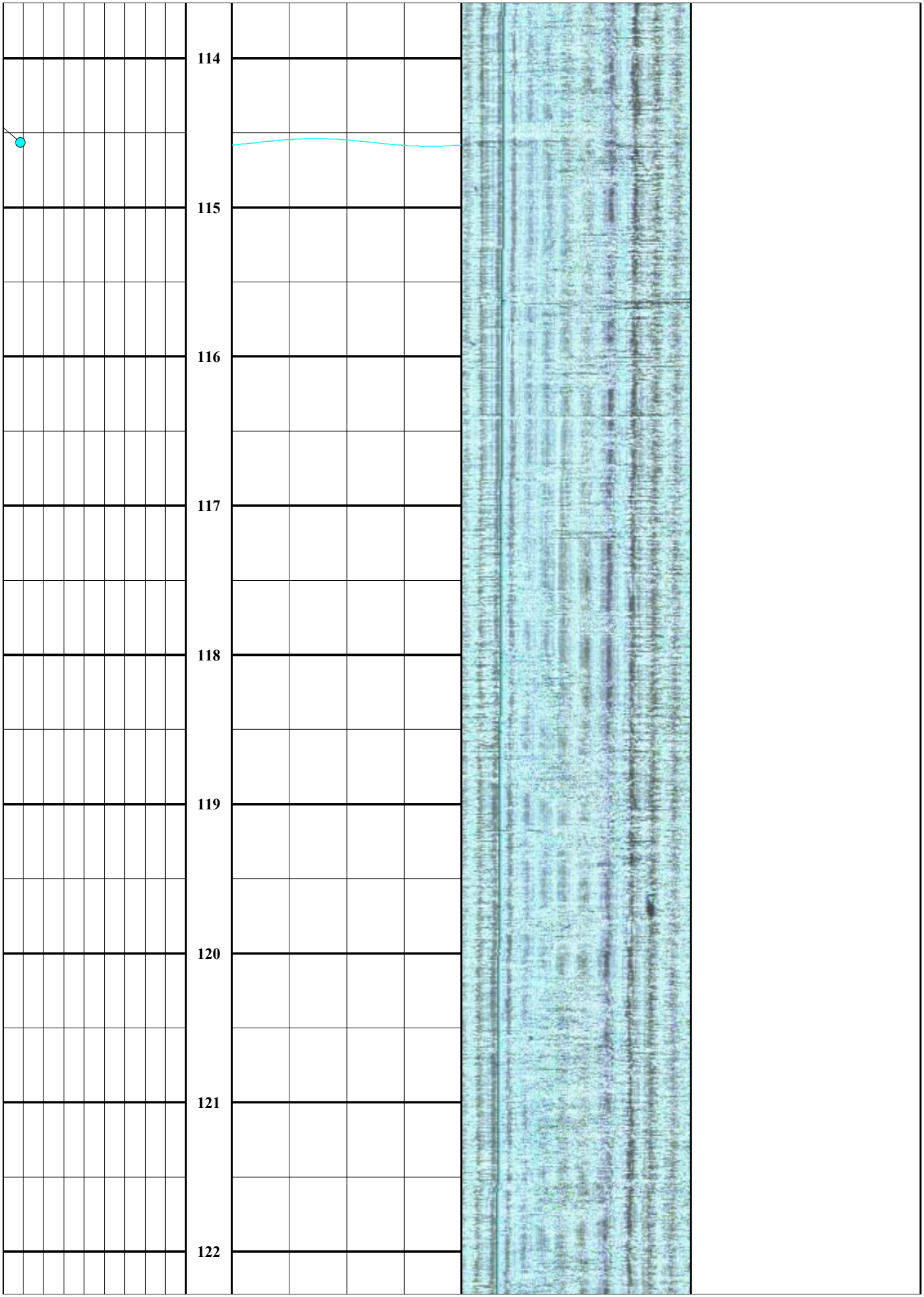
94

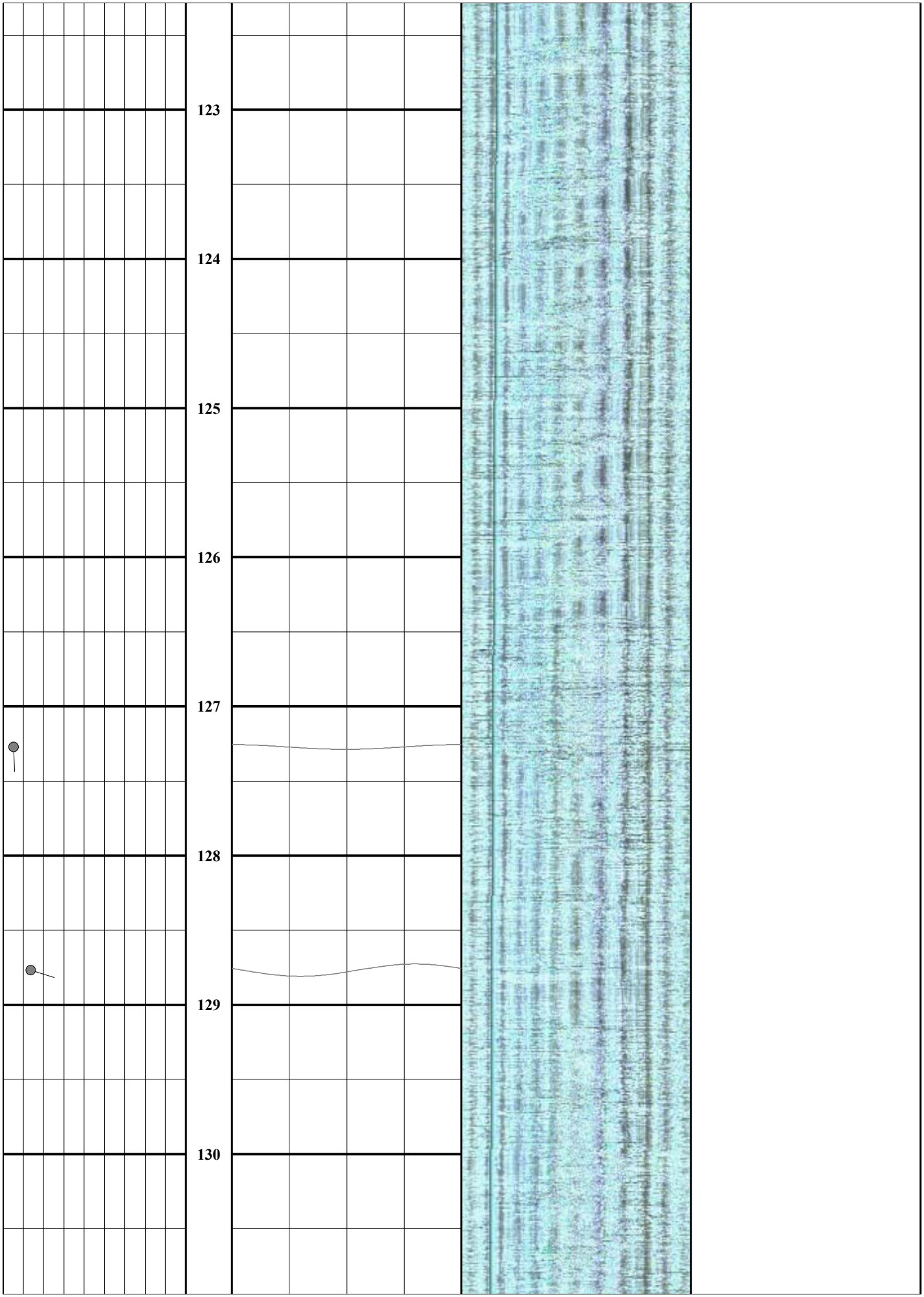
95

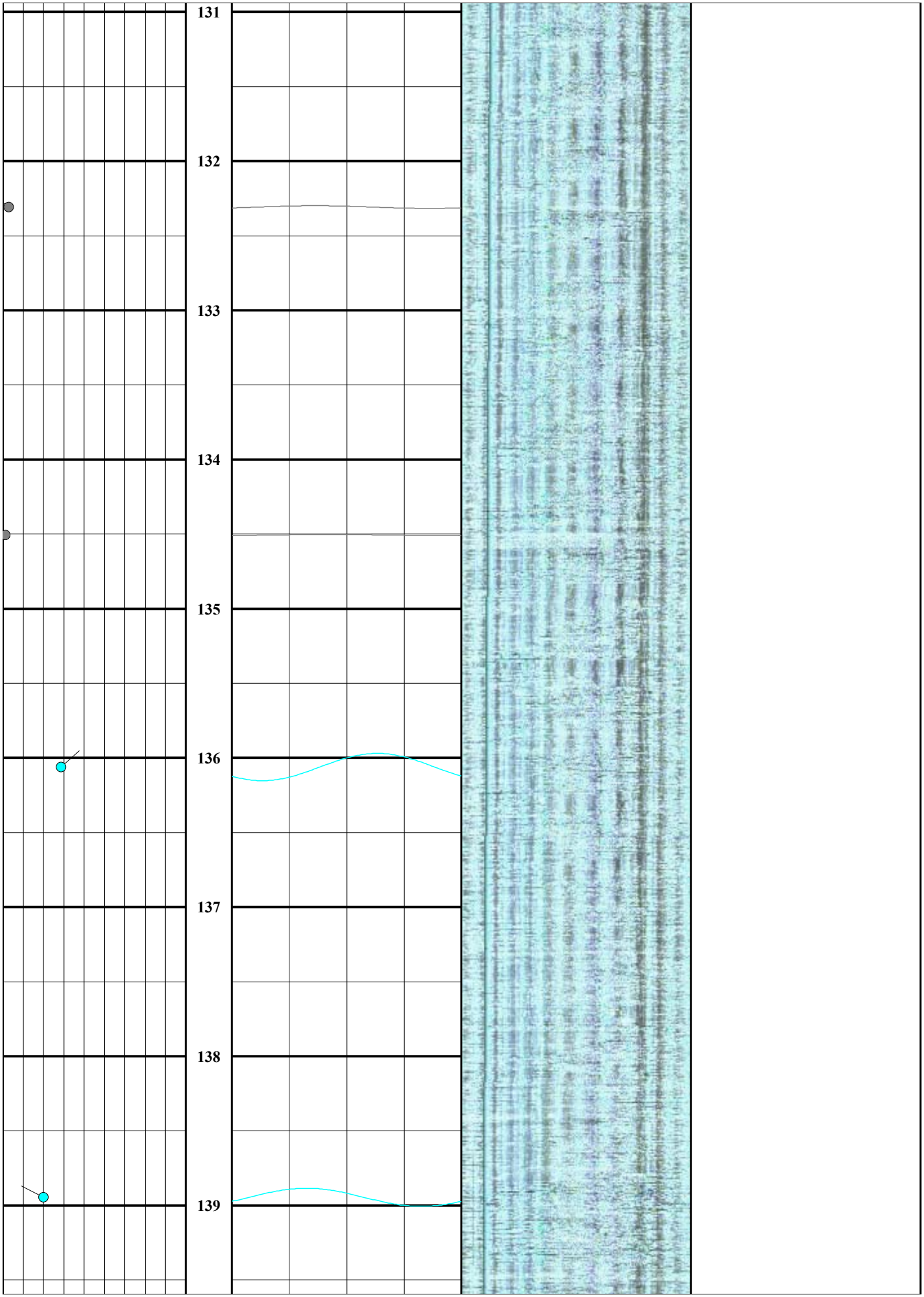
96

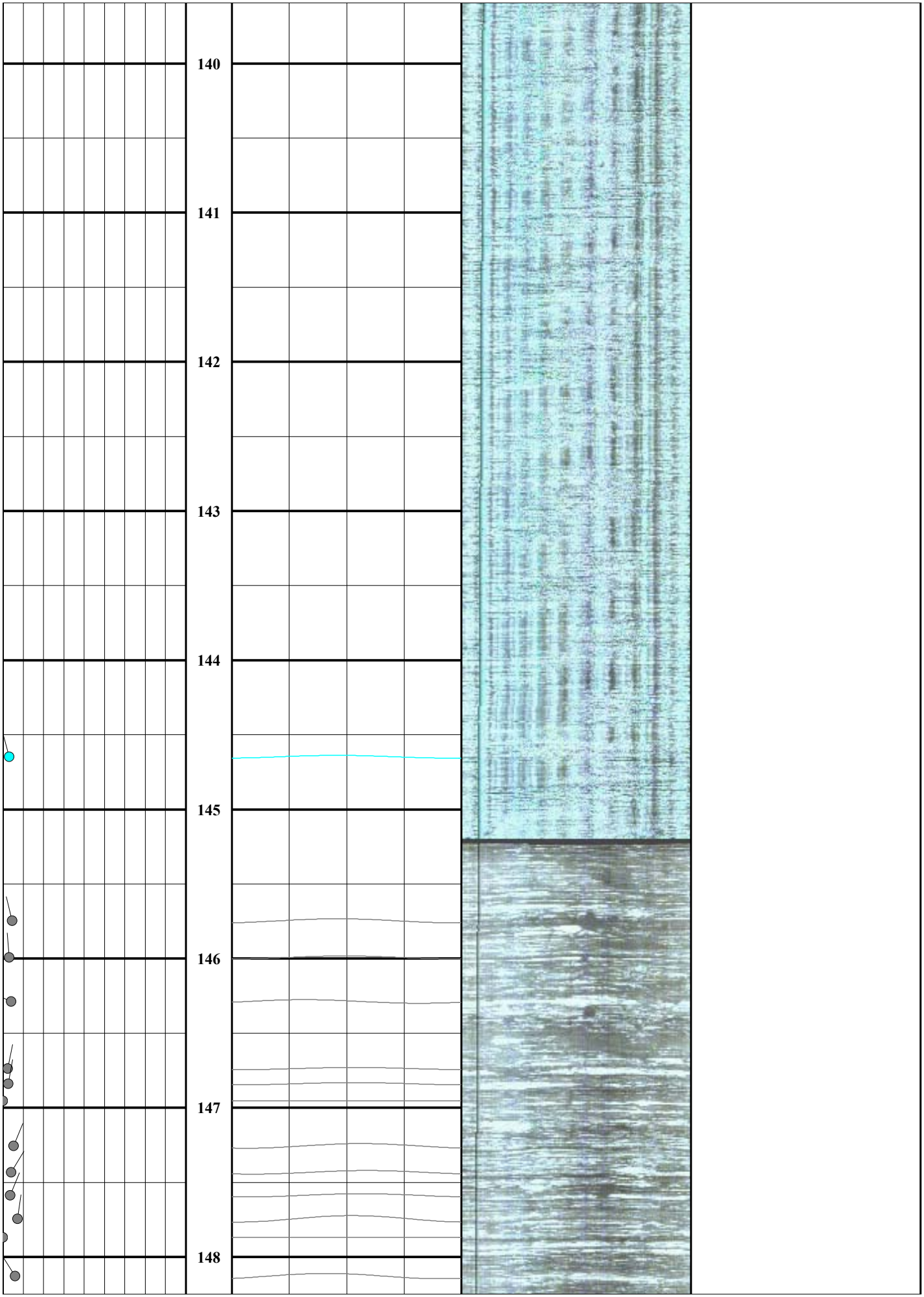

97
98
99
100
101
102
103
104

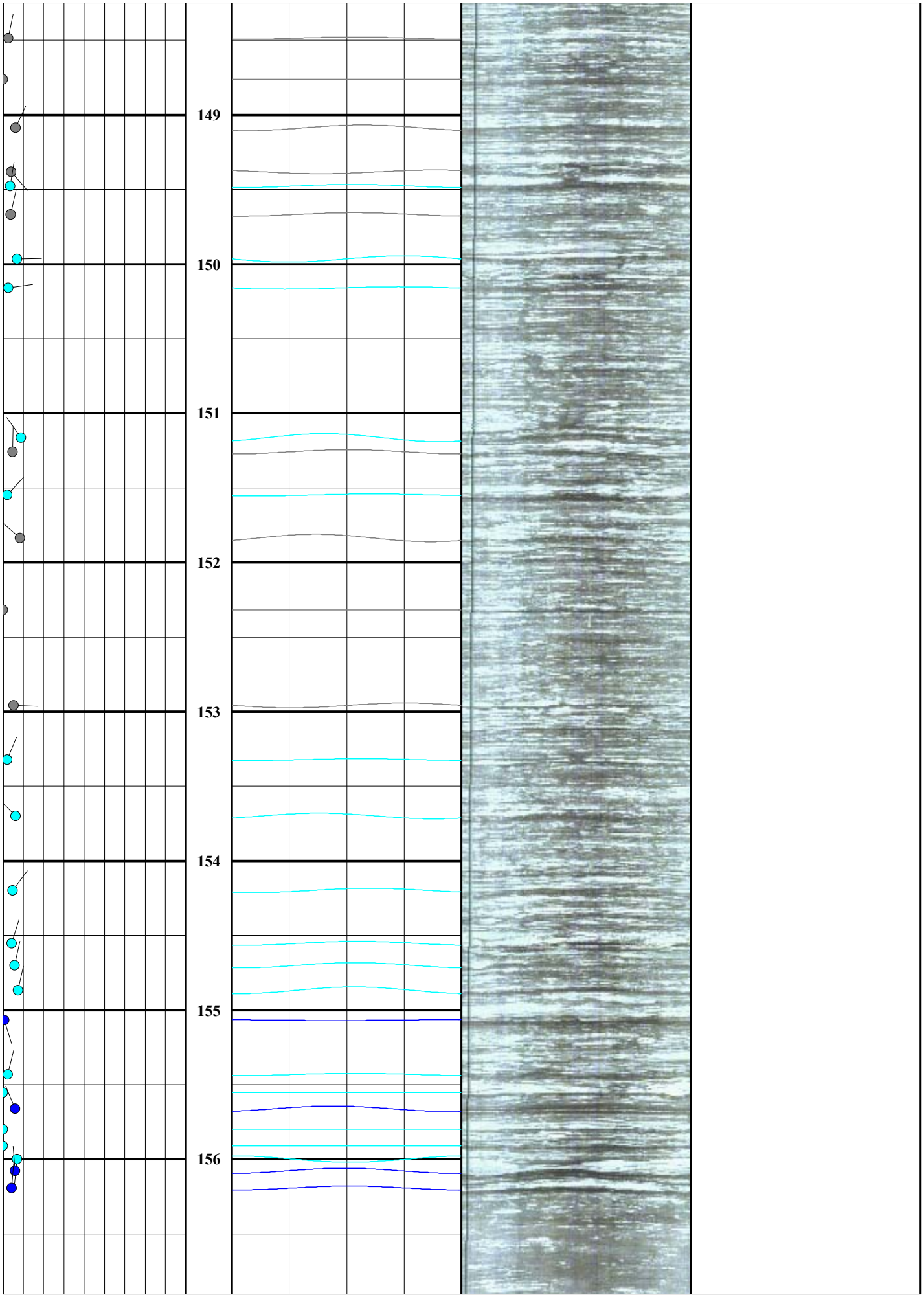

105
106
107
108
109
110
111
112
113

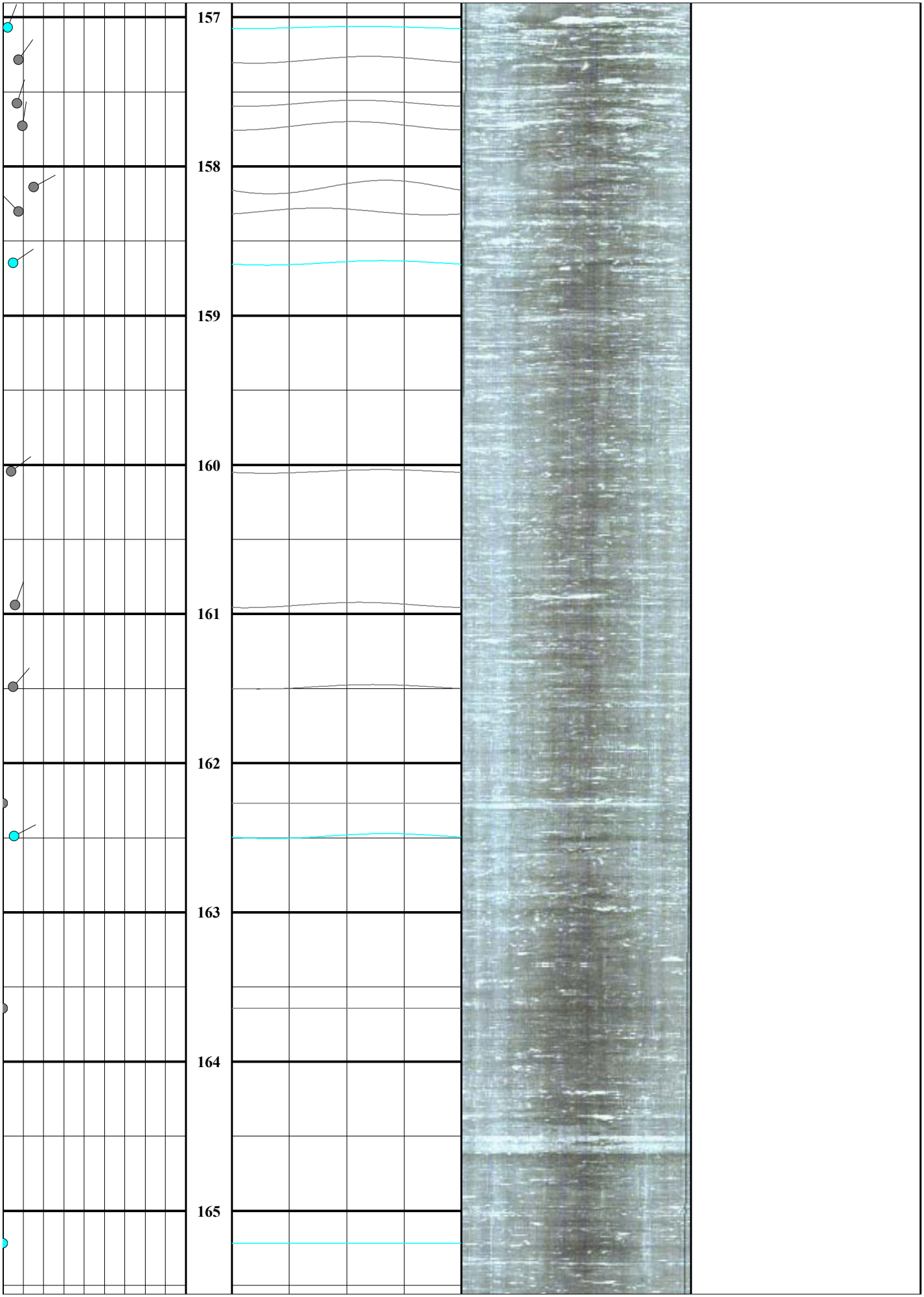

114
115
116
117
118
119
120
121
122

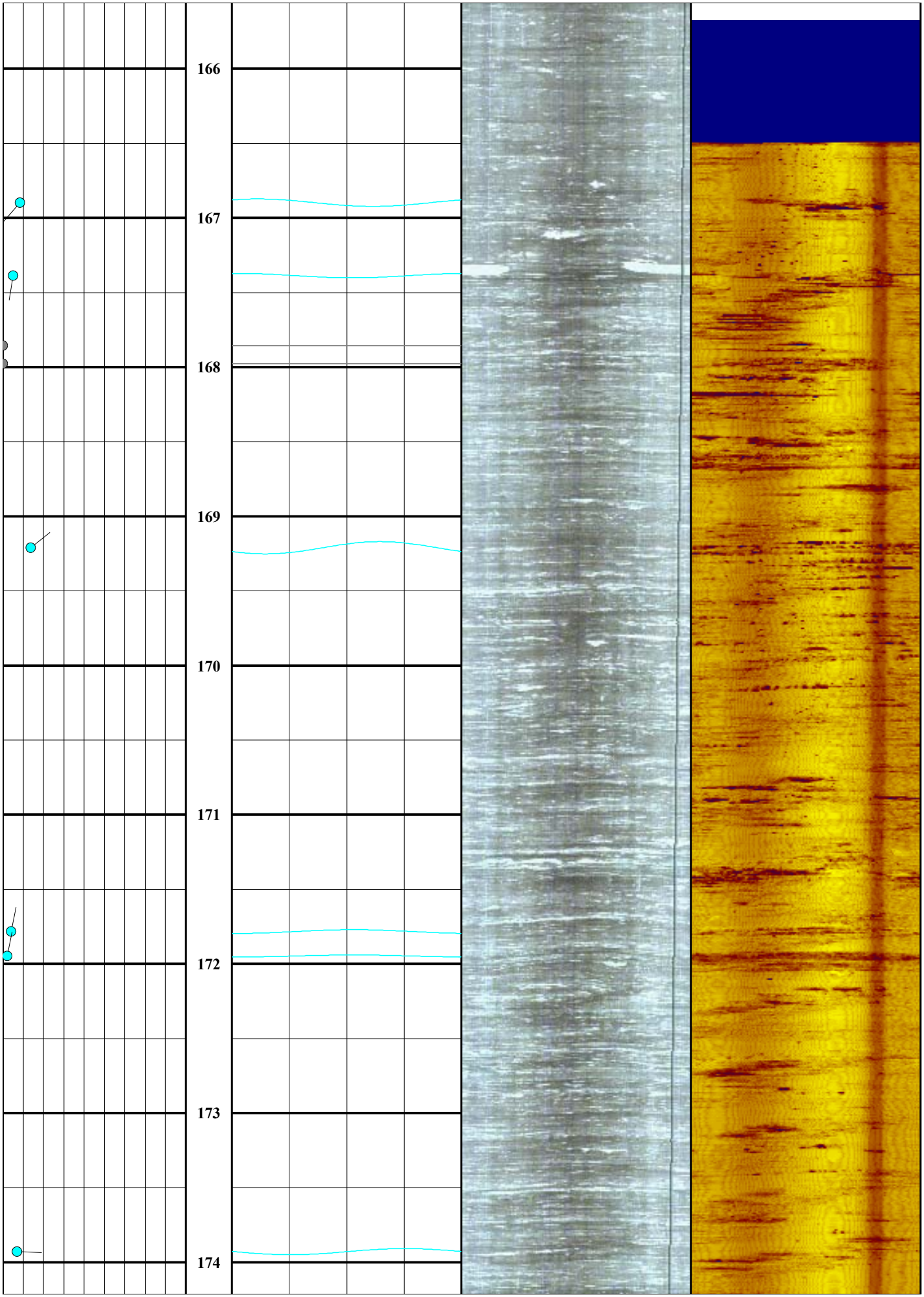

123
124
125
126
127
128
129
130

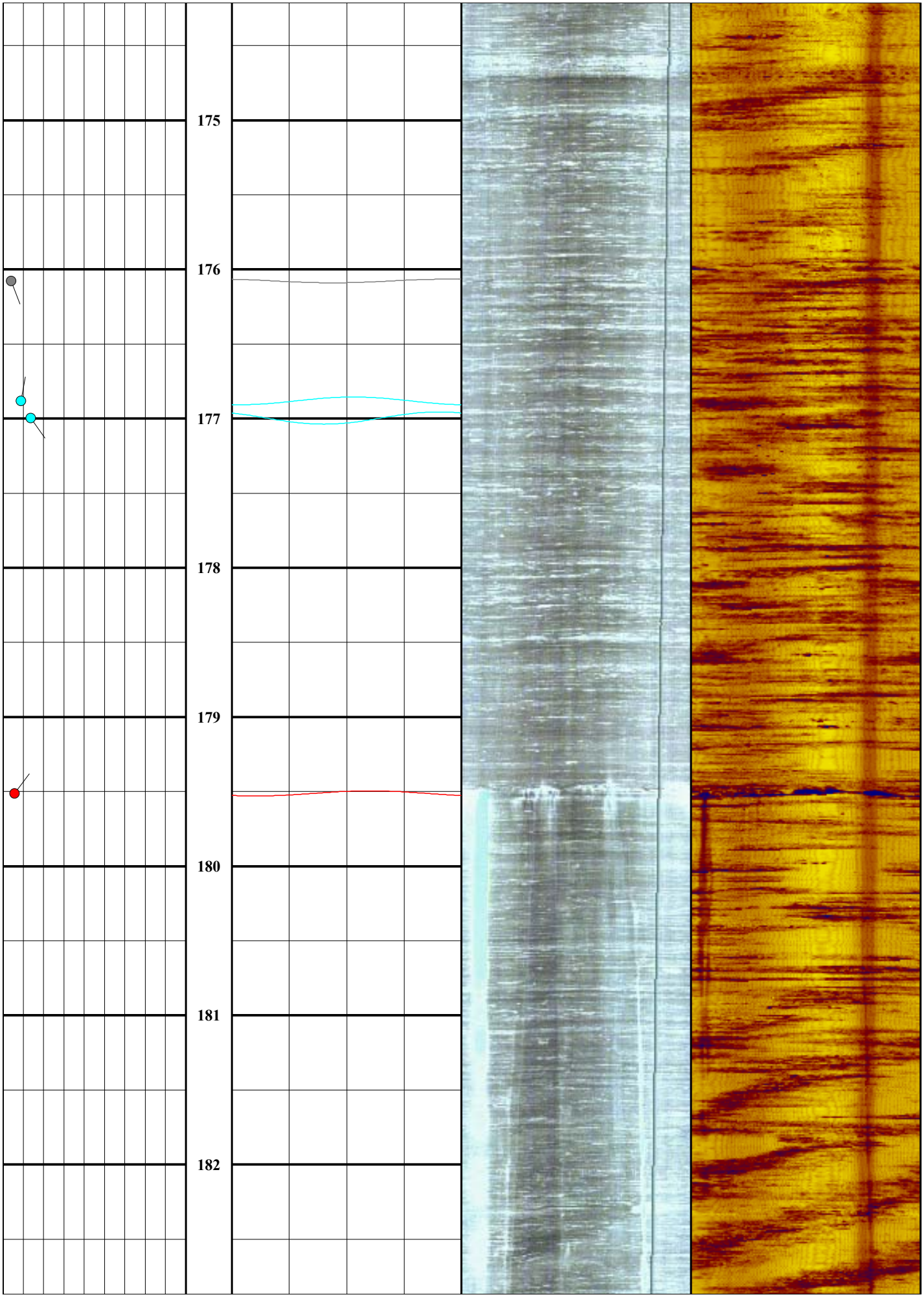

131
132
133
134
135
136
137
138
139

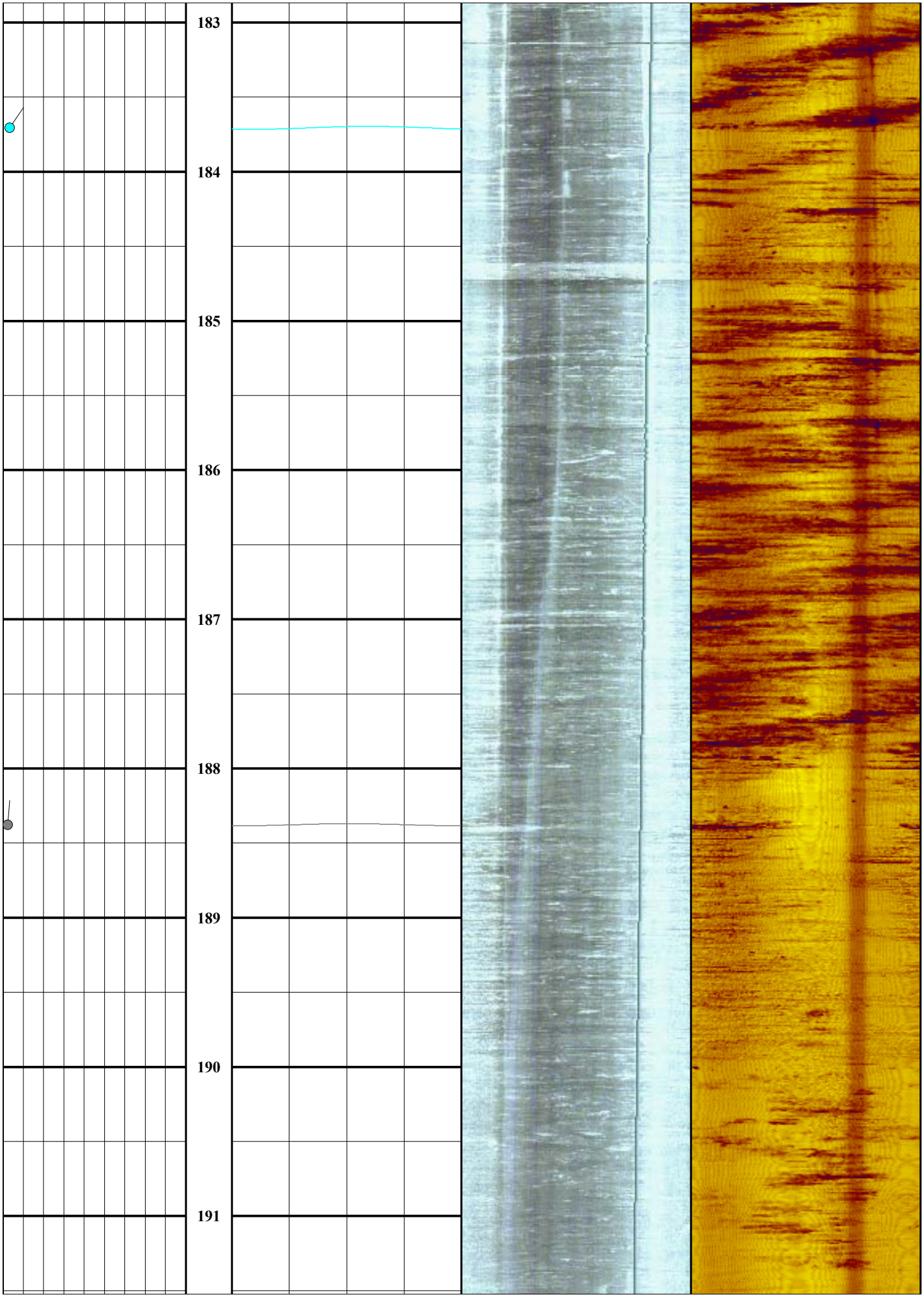

140
141
142
143
144
145
146
147
148

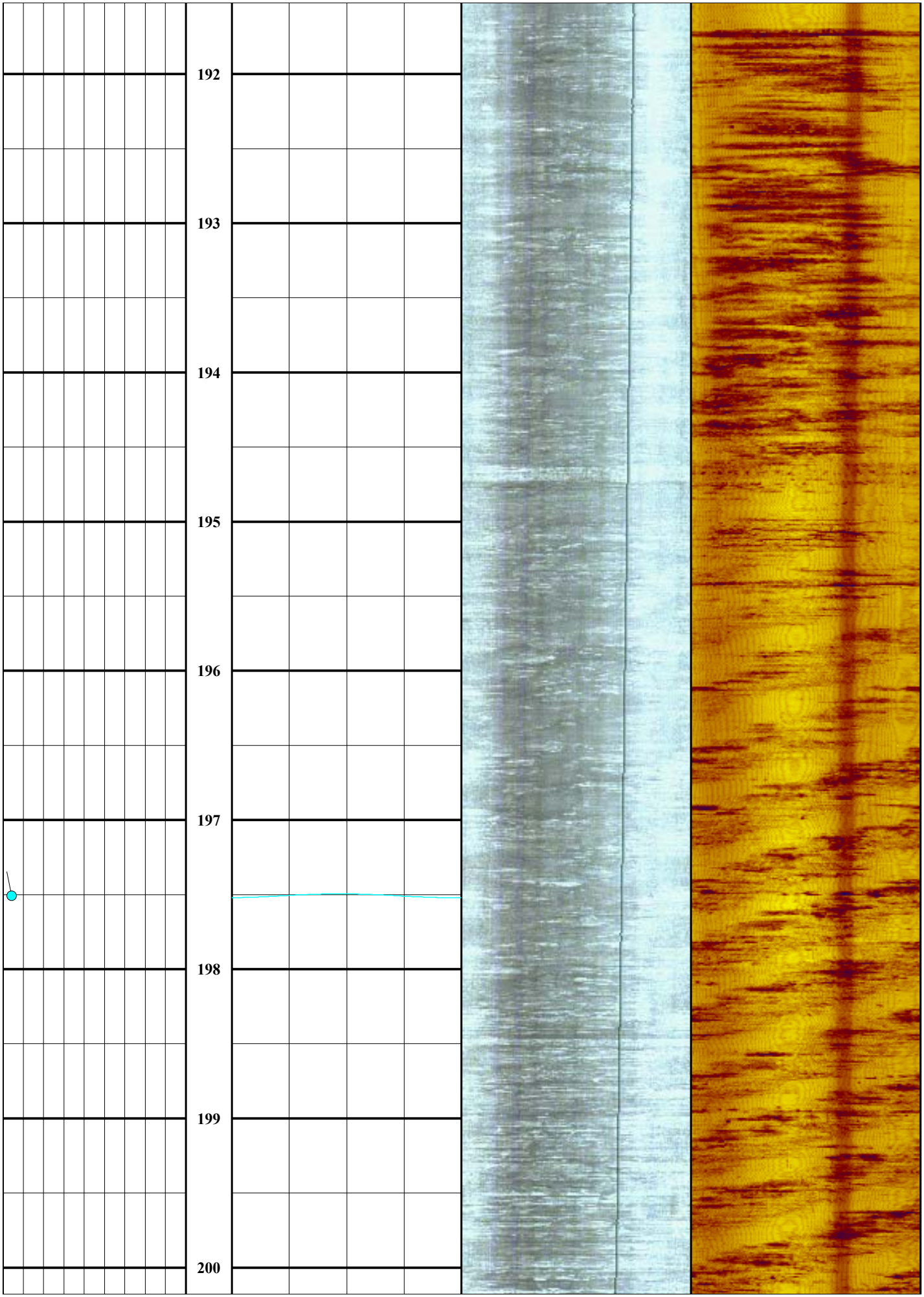

149
150
151
152
153
154
155
156

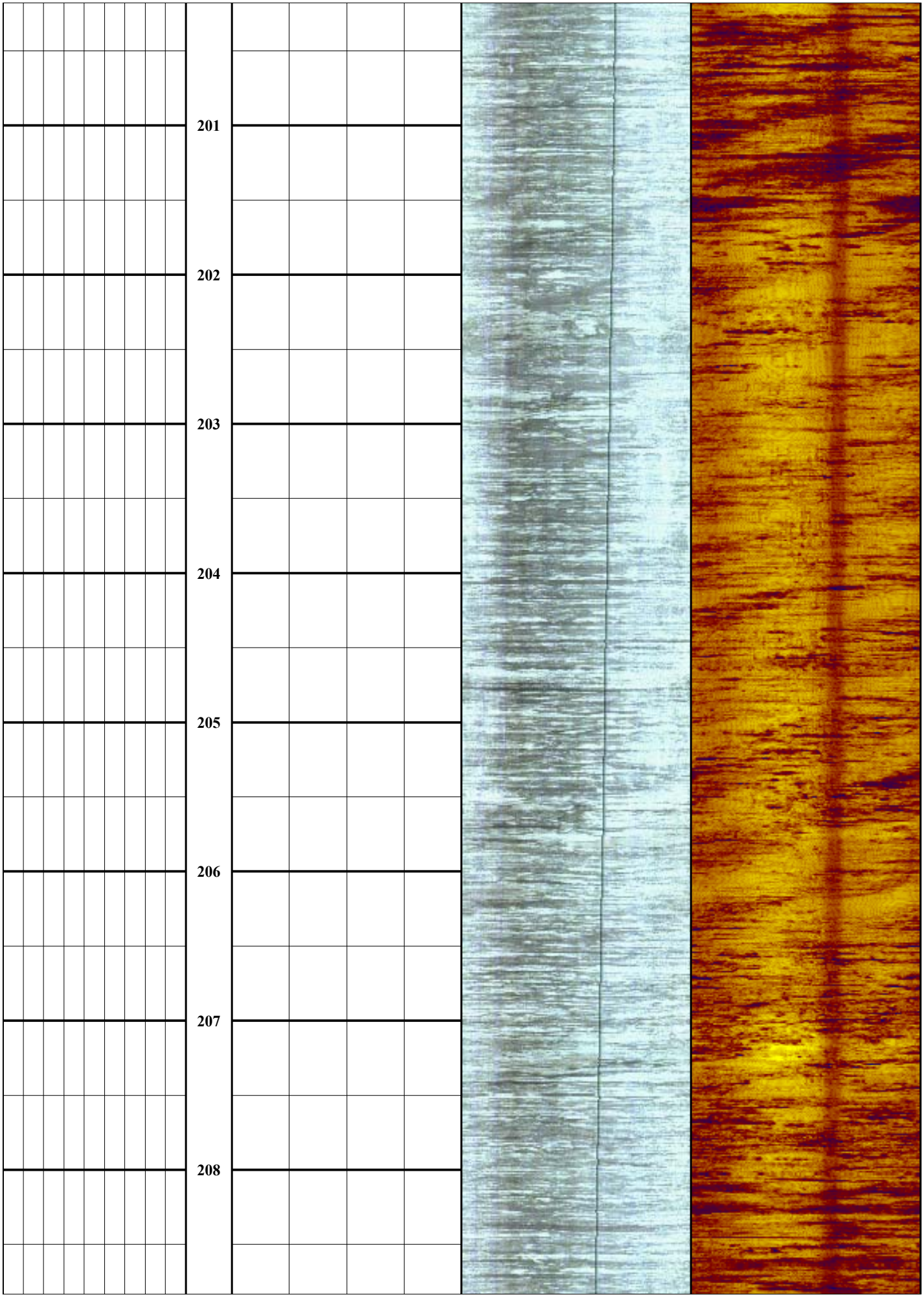

157
158
159
160
161
162
163
164
165

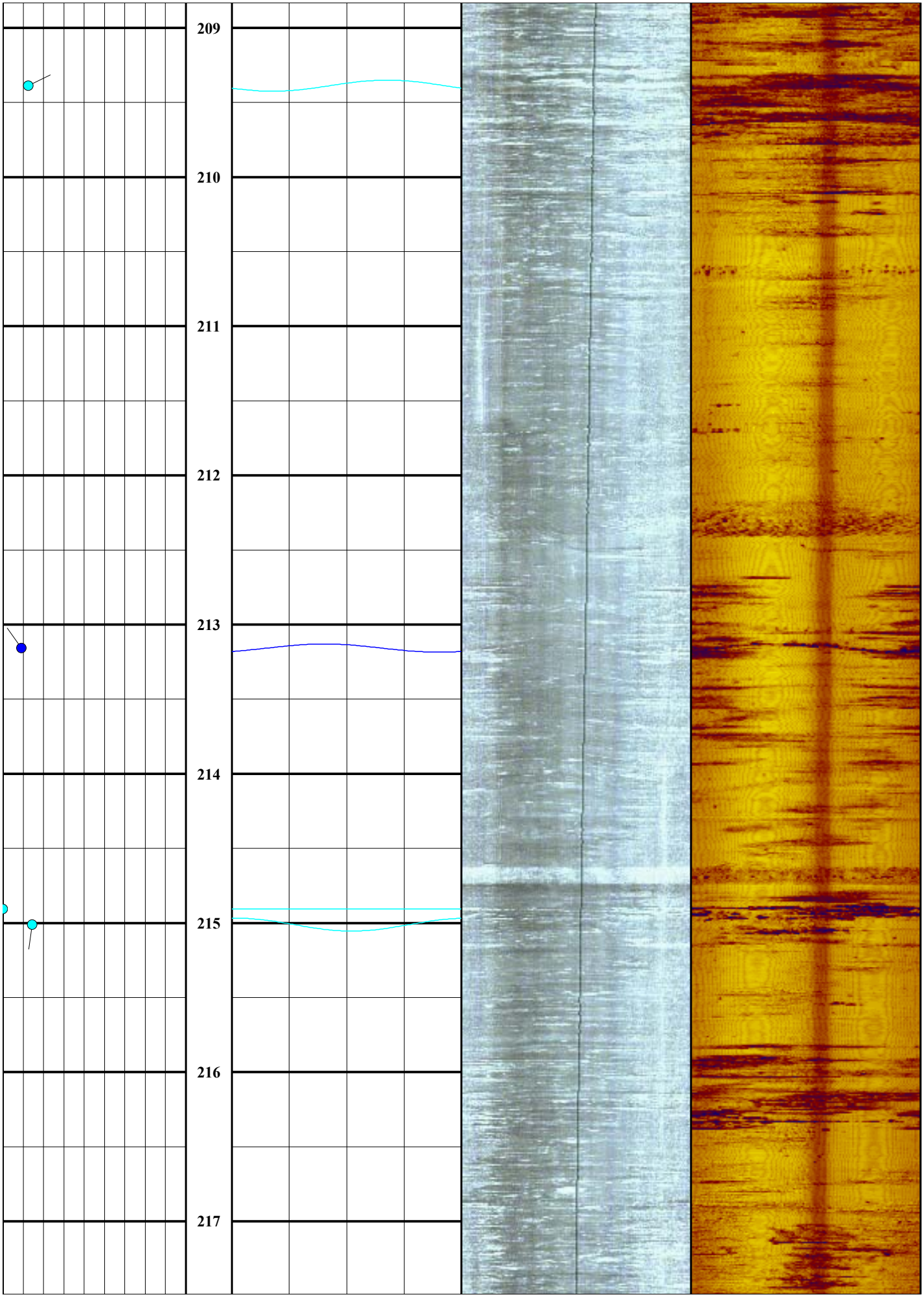

166
167
168
169
170
171
172
173
174

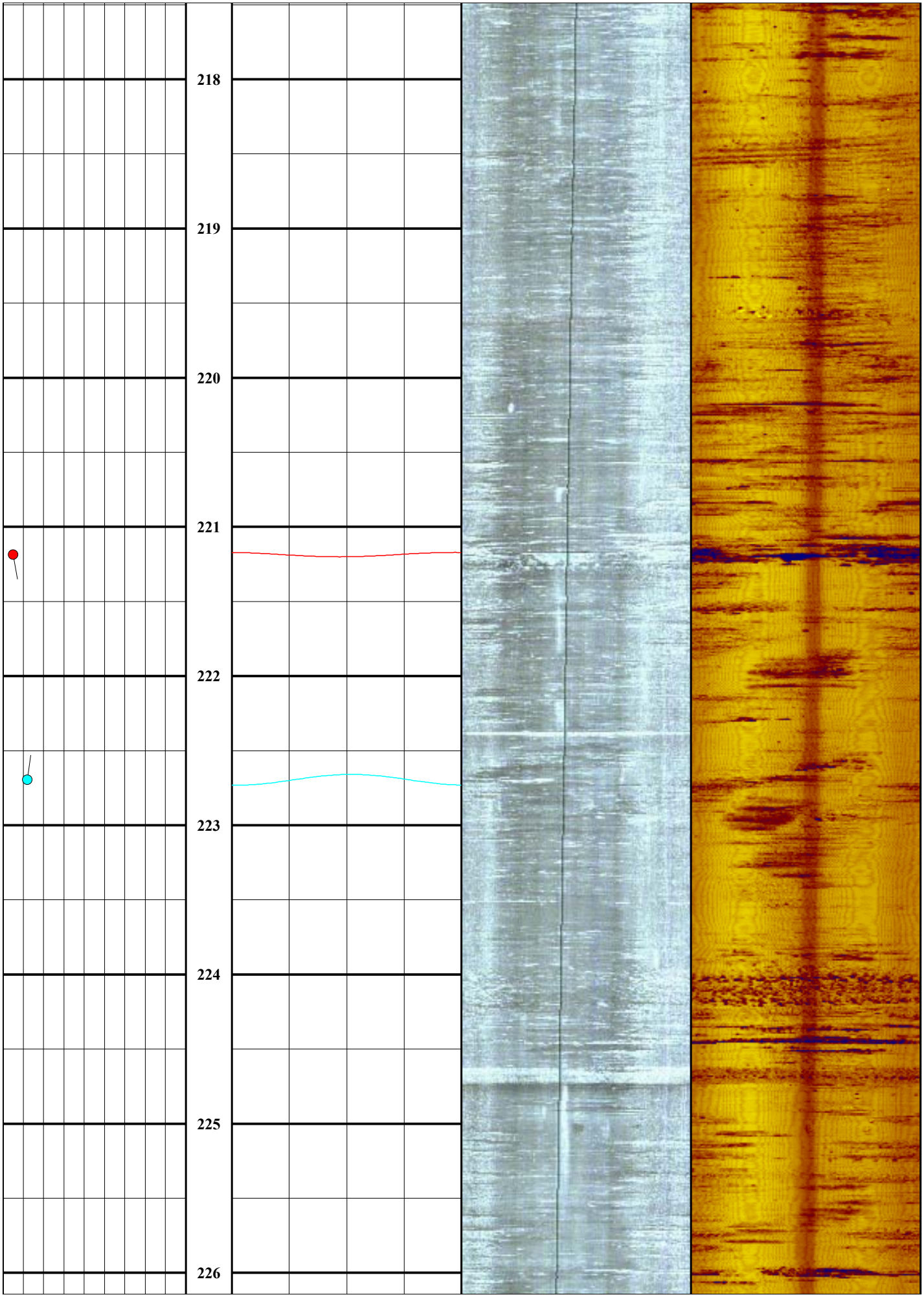

175
176
177
178
179
180
181
182

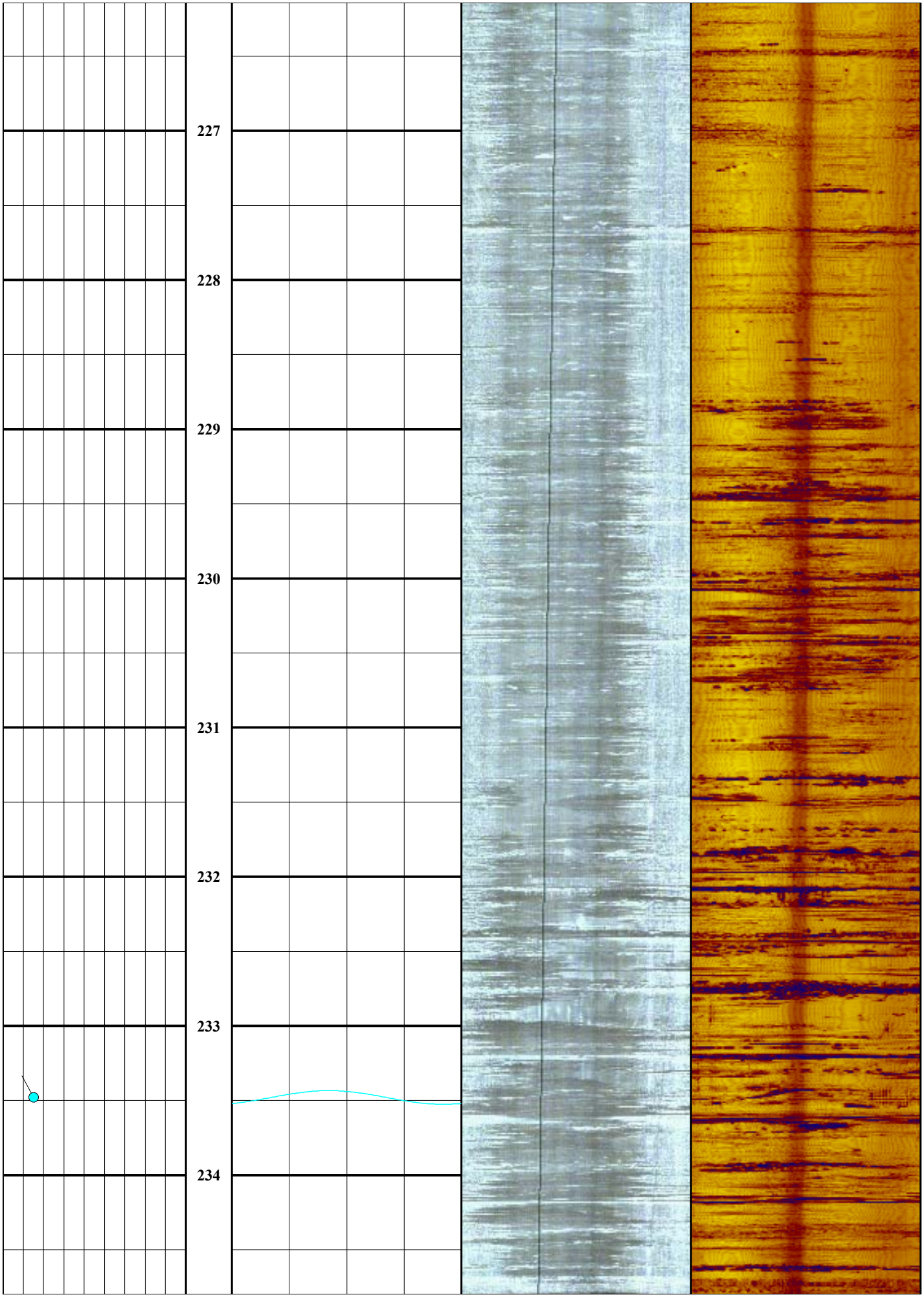

183
184
185
186
187
188
189
190
191

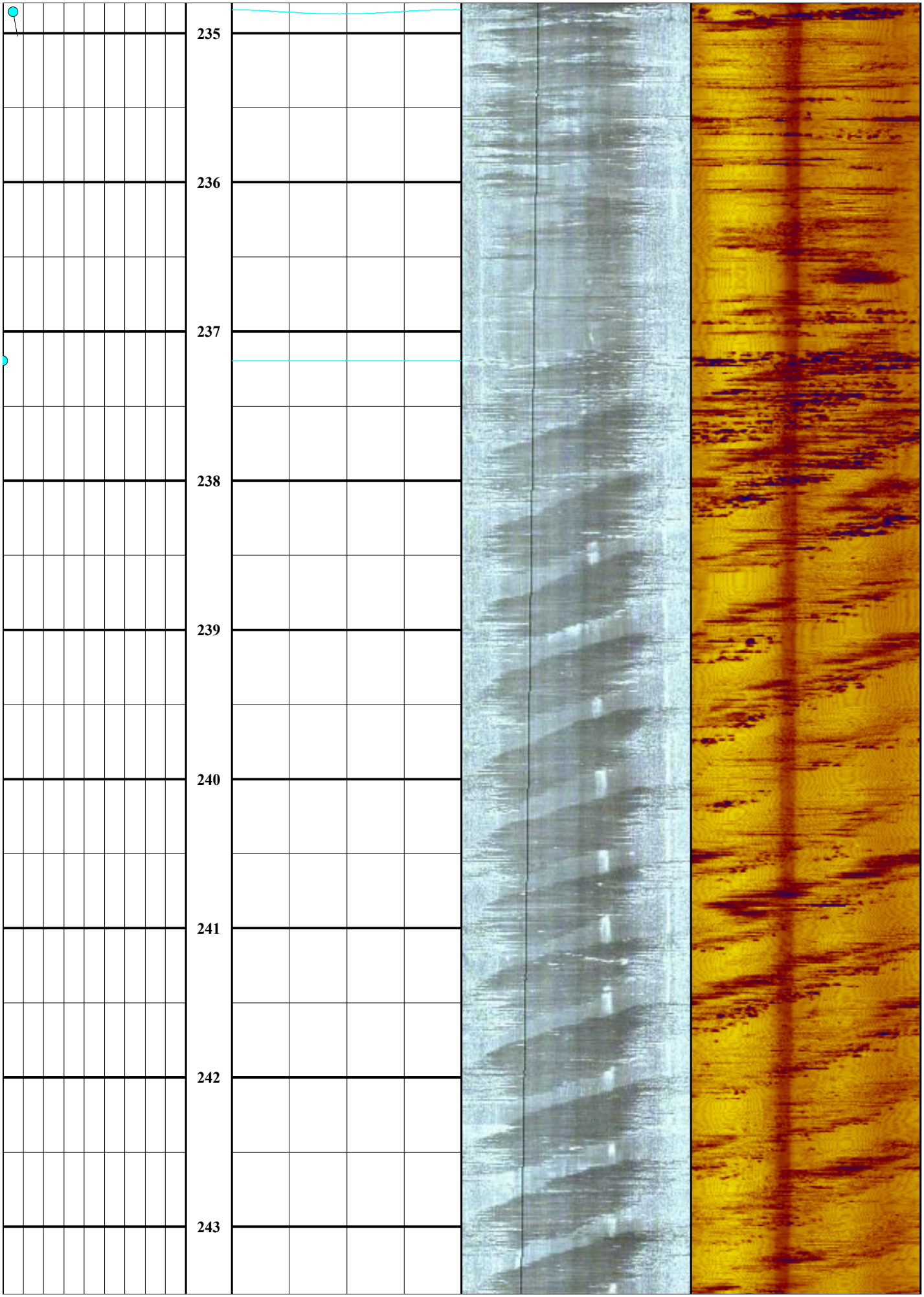

192
193
194
195
196
197
198
199
200

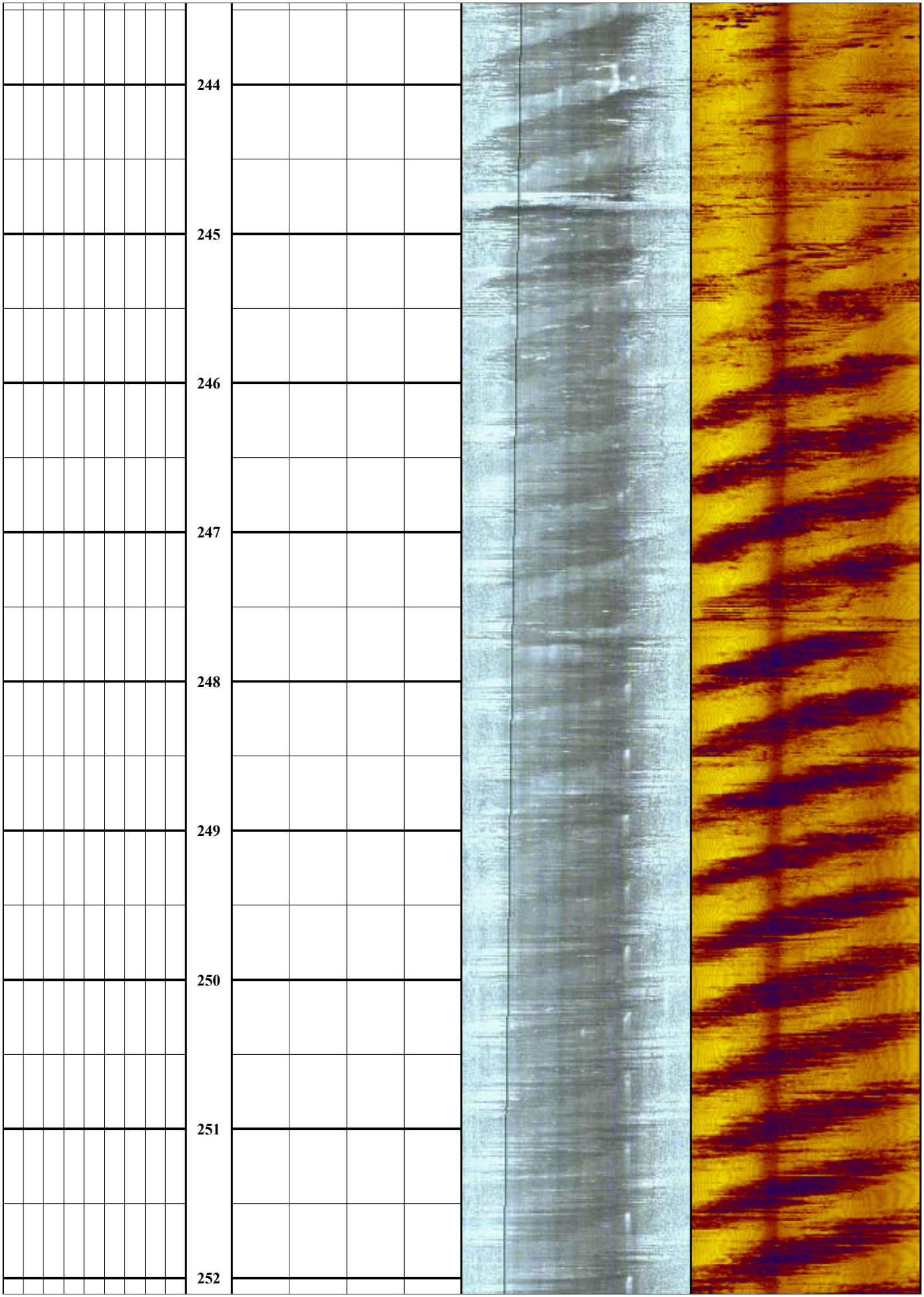

201
202
203
204
205
206
207
208

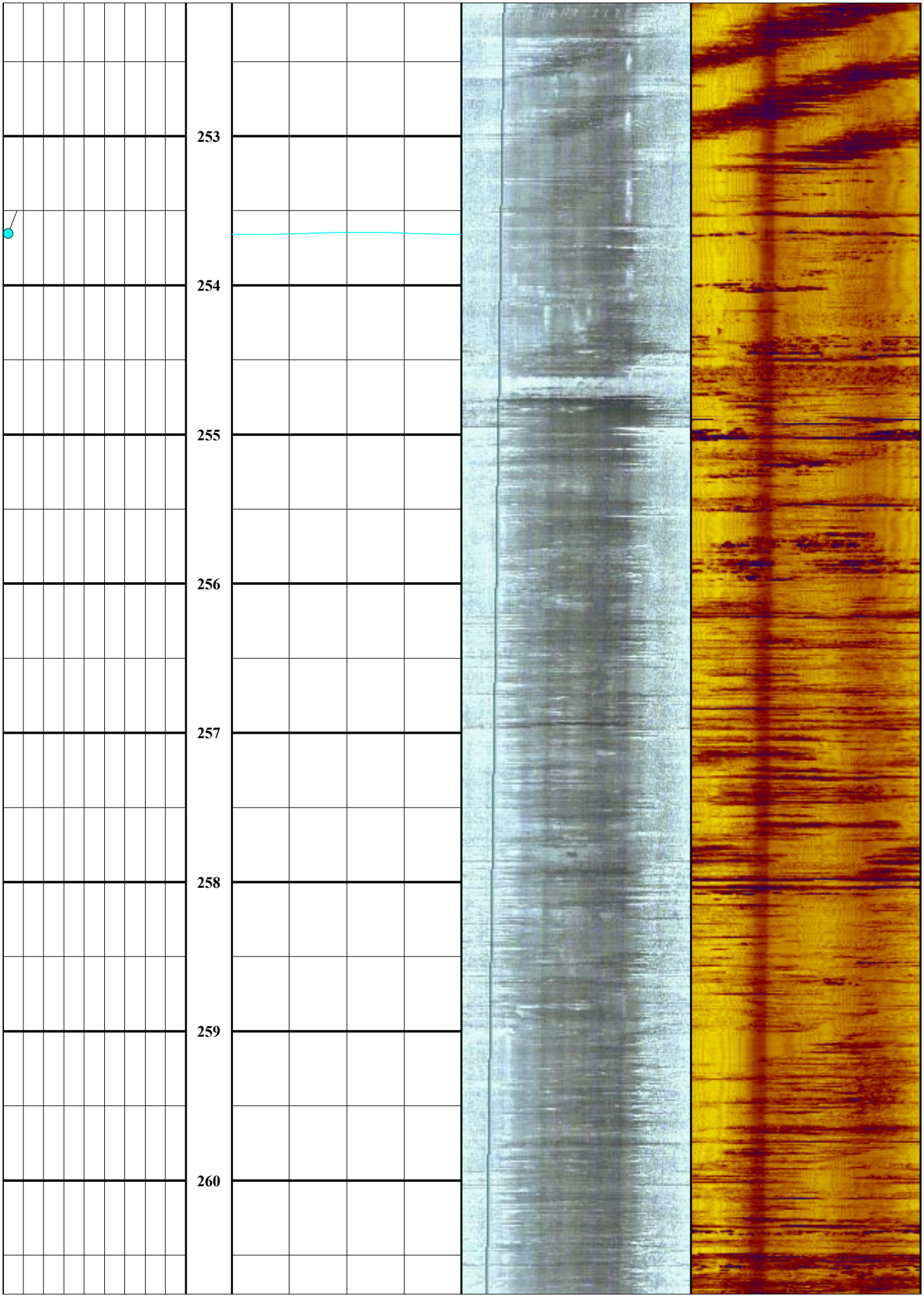

209
210
211
212
213
214
215
216
217

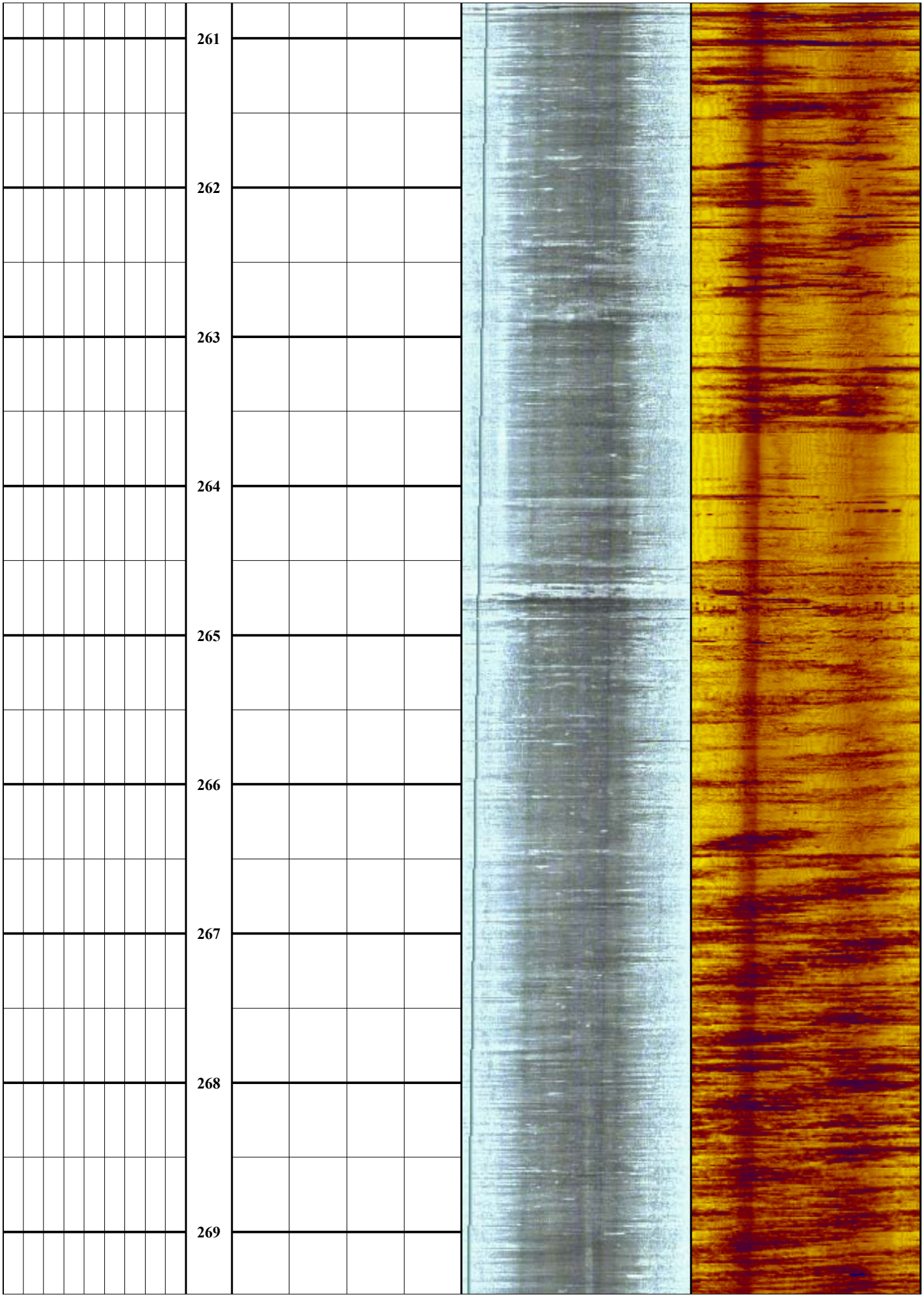

218
219
220
221
222
223
224
225
226

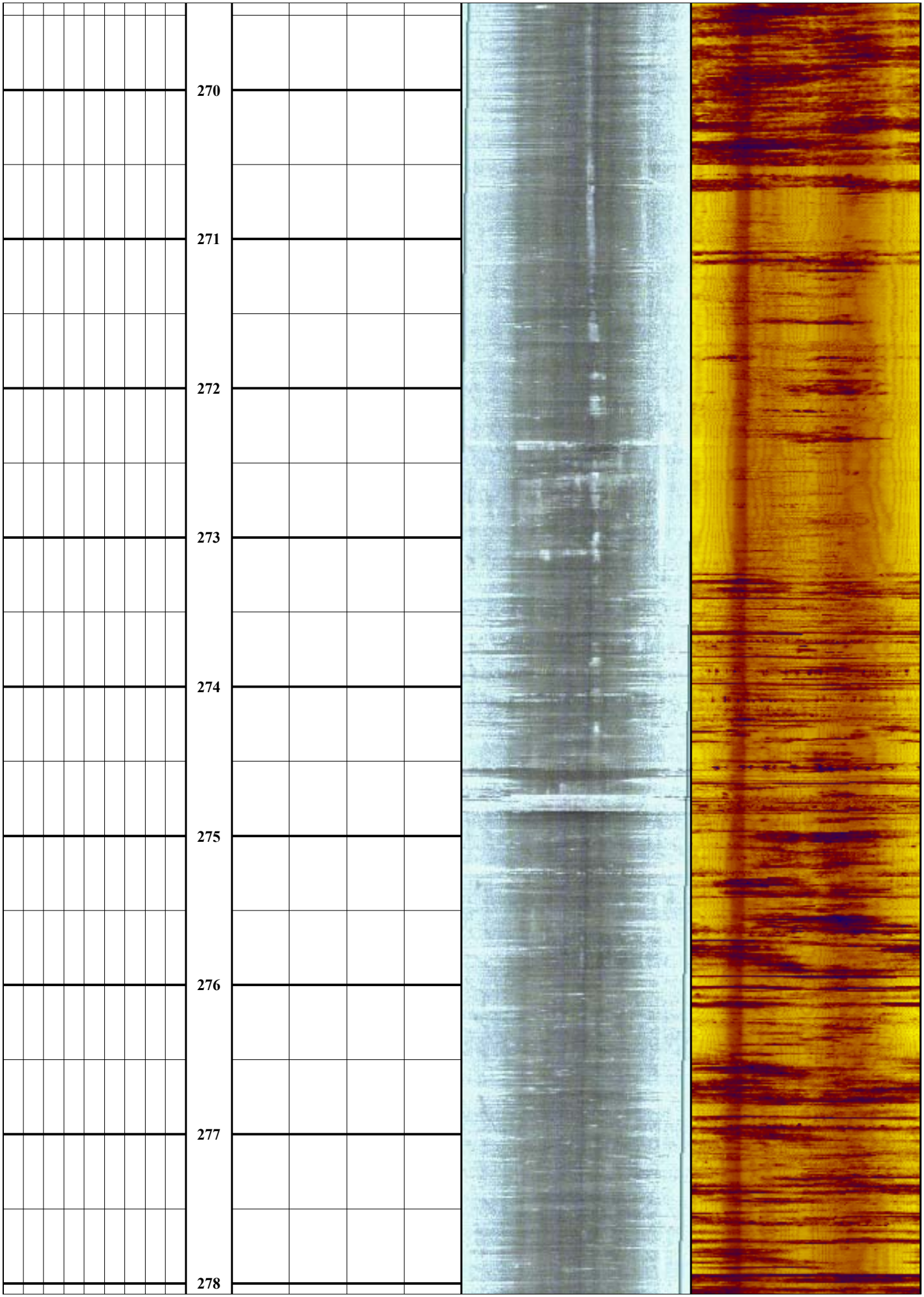

227
228
229
230
231
232
233
234

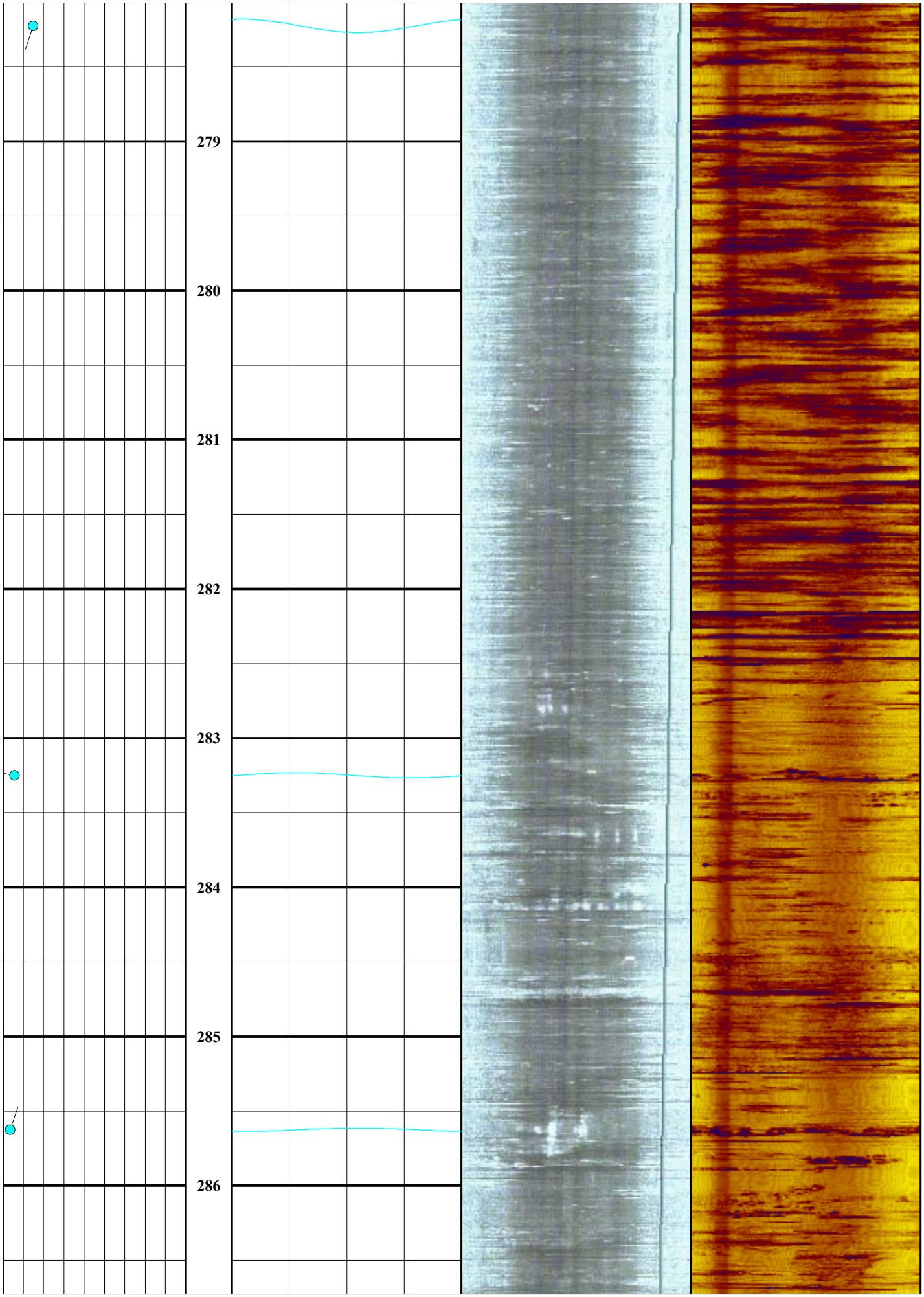

235
236
237
238
239
240
241
242
243

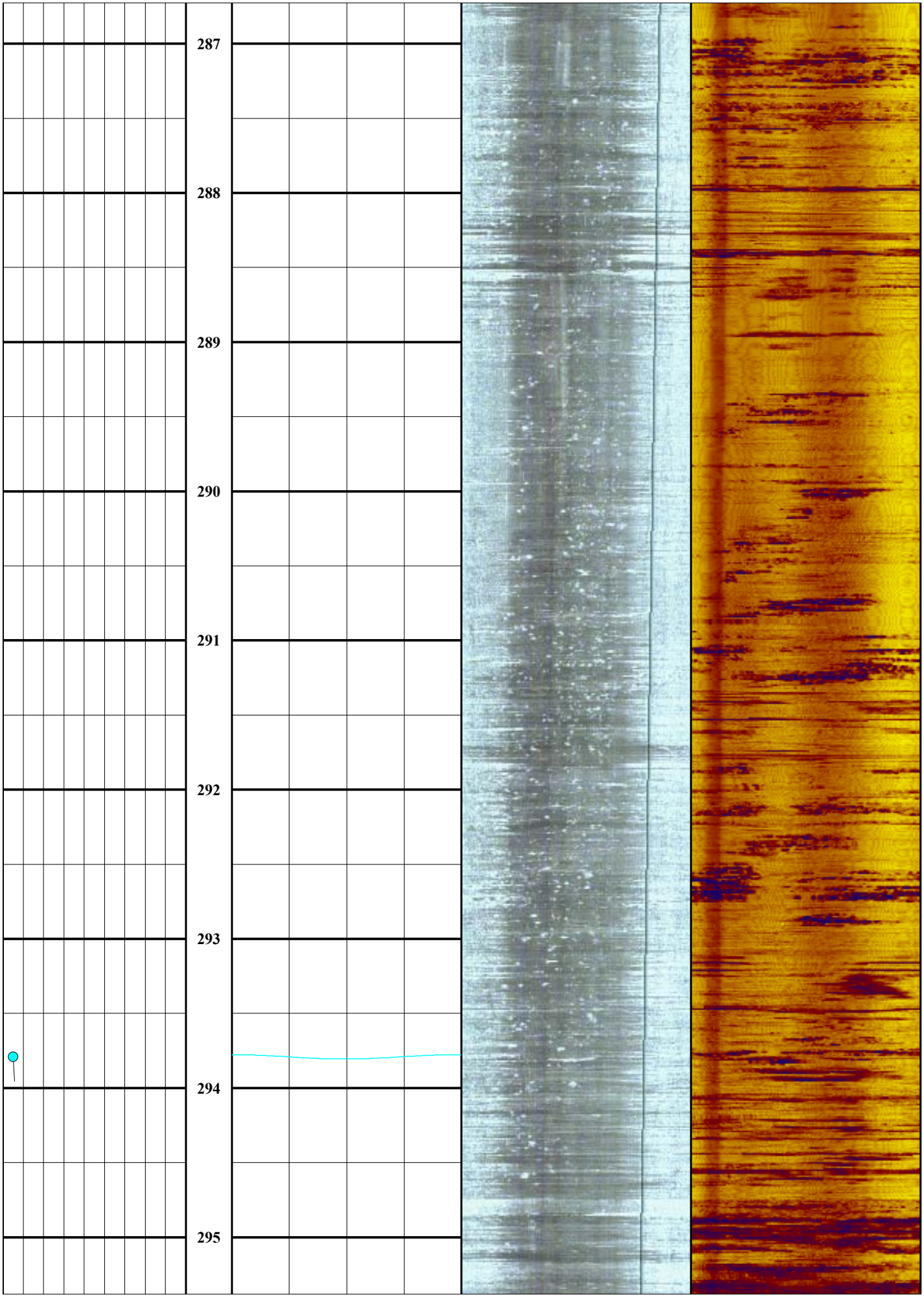

244
245
246
247
248
249
250
251
252

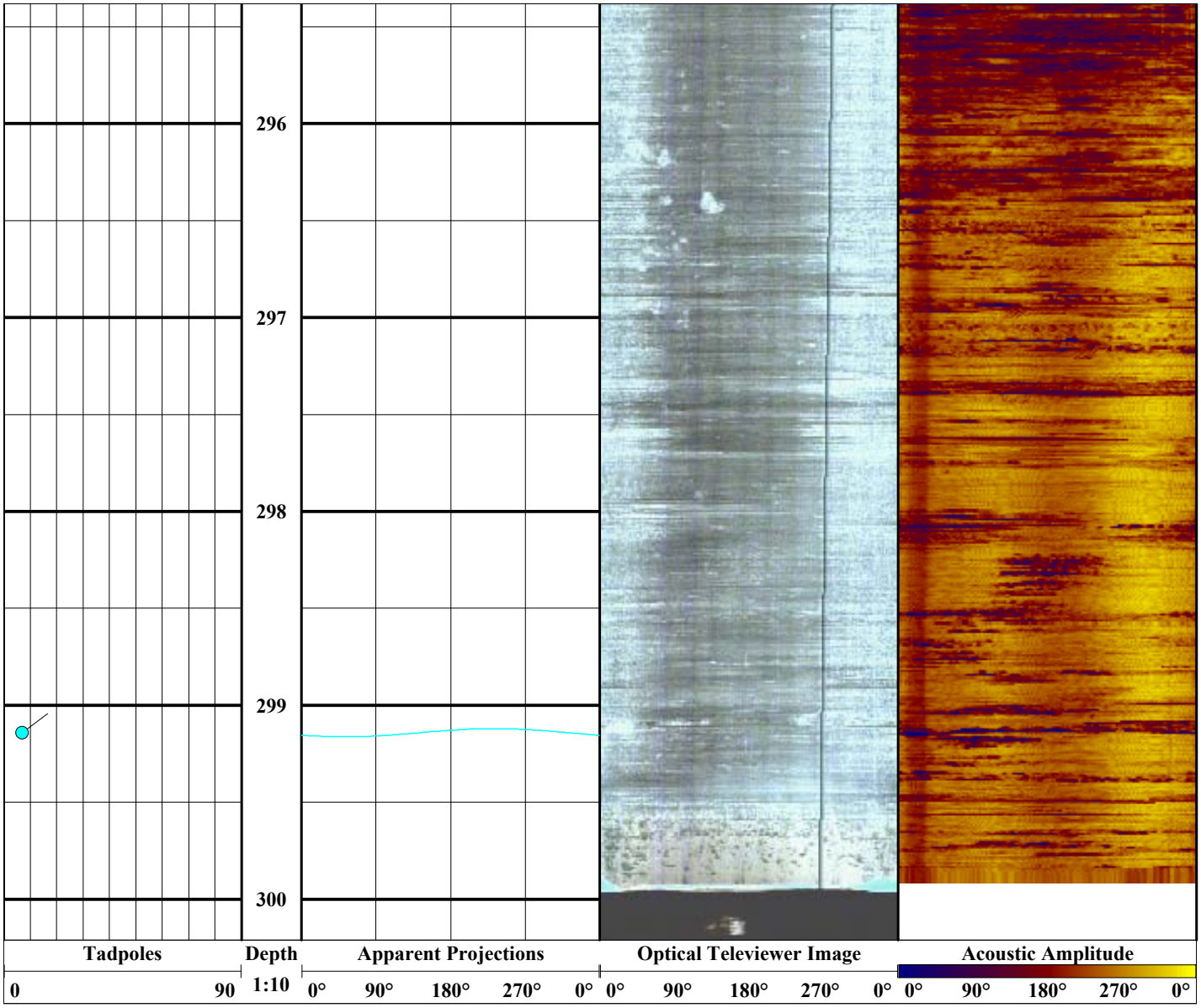

253
254
255
256
257
258
259
260


261
262
263
264
265
266
267
268
269


270
271
272
273
274
275
276
277
278


279
280
281
282
283
284
285
286


287
288
289
290
291
292
293
294
295


296
297
298
299
300
Tadpoles
0
90
Depth
1:10
Apparent Projections
0°
90°
180°
270°
0°
Optical Televiewer Image
0°
90°
180°
270°
0°
Acoustic Amplitude
0°
90°
180°
270°
0°

APPENDIX B

ORIENTATION SUMMARY TABLES
IMAGE FEATURES

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0210
Stoller
Dec 6, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
1	7.50	24.6	115	12	1
2	7.52	24.7	115	11	1
3	7.55	24.8	133	16	1
4	7.57	24.8	118	10	1
5	7.59	24.9	116	9	1
6	7.62	25.0	139	11	1
7	7.65	25.1	104	10	2
8	7.68	25.2	112	10	1
9	7.69	25.2	159	10	1
10	7.71	25.3	135	9	1
11	7.72	25.3	140	9	1
12	7.74	25.4	160	7	1
13	7.76	25.5	153	11	1
14	7.78	25.5	357	1	1
15	7.79	25.6	147	14	1
16	7.81	25.6	157	19	1
17	7.84	25.7	153	10	1
18	7.86	25.8	152	10	1
19	7.88	25.9	167	9	1
20	7.92	26.0	185	7	1
21	7.94	26.0	161	9	1
22	7.98	26.2	171	7	1
23	7.99	26.2	163	10	1
24	8.03	26.4	168	14	1
25	8.04	26.4	62	8	1
26	8.06	26.5	209	10	1
27	8.09	26.5	183	6	1
28	8.12	26.6	213	12	1
29	8.16	26.8	239	20	2
30	8.20	26.9	252	12	1
31	8.25	27.1	68	6	2
32	8.30	27.2	197	4	1
33	8.32	27.3	16	10	2
34	8.35	27.4	20	8	1
35	8.37	27.5	89	7	1
36	8.40	27.6	116	10	1
37	8.44	27.7	304	3	1
38	8.45	27.7	102	10	1
39	8.49	27.9	77	8	1
40	8.52	27.9	76	7	1
41	8.55	28.1	15	14	1
42	8.58	28.2	346	12	1
43	8.60	28.2	14	10	1
44	8.64	28.4	4	16	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0210
Stoller
Dec 6, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
45	8.68	28.5	338	11	2
46	8.71	28.6	3	9	2
47	8.75	28.7	303	6	1
48	8.78	28.8	330	8	1
49	8.85	29.0	356	8	2
50	8.88	29.1	12	2	1
51	8.90	29.2	344	9	1
52	8.94	29.3	355	13	1
53	8.96	29.4	312	9	1
54	8.99	29.5	147	2	1
55	9.02	29.6	351	5	2
56	9.07	29.8	9	11	2
57	9.09	29.8	348	5	2
58	9.13	30.0	332	12	2
59	9.17	30.1	7	7	2
60	9.21	30.2	7	5	2
61	9.30	30.5	352	8	1
62	9.33	30.6	342	8	1
63	9.35	30.7	37	7	1
64	9.38	30.8	329	10	1
65	9.45	31.0	341	11	1
66	9.49	31.1	346	10	1
67	9.52	31.2	350	9	2
68	9.58	31.4	354	9	1
69	9.62	31.6	353	8	2
70	9.66	31.7	344	7	2
71	9.69	31.8	357	6	1
72	9.72	31.9	323	6	2
73	9.78	32.1	275	6	2
74	9.84	32.3	334	12	1
75	9.86	32.4	346	9	1
76	9.91	32.5	343	10	2
77	9.95	32.7	325	9	2
78	10.05	33.0	31	8	2
79	10.13	33.3	30	20	1
80	10.18	33.4	331	14	2
81	10.24	33.6	30	10	1
82	10.30	33.8	13	6	2
83	10.36	34.0	152	15	1
84	10.43	34.2	341	6	2
85	10.57	34.7	354	8	2
86	10.70	35.1	318	9	1
87	10.83	35.5	336	11	1
88	11.01	36.1	340	9	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0210
Stoller
Dec 6, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
89	11.24	36.9	342	9	1
90	11.45	37.6	355	33	1
91	11.52	37.8	359	11	2
92	11.96	39.2	249	34	1
93	14.06	46.1	23	4	2
94	14.16	46.5	204	5	1
95	15.66	51.4	359	18	0
96	15.73	51.6	22	11	0
97	15.85	52.0	22	5	0
98	16.61	54.5	336	3	0
99	18.15	59.6	1	9	0
100	18.28	60.0	15	8	0
101	18.44	60.5	353	10	0
102	23.40	76.8	359	8	0
103	24.59	80.7	330	7	0
104	25.44	83.5	311	4	0
105	25.66	84.2	299	6	0
106	25.78	84.6	318	6	0
107	26.27	86.2	308	10	0
108	26.42	86.7	242	4	0
109	26.84	88.1	255	11	0
110	27.17	89.2	1	8	0
111	27.34	89.7	1	9	0
112	27.54	90.4	337	6	0
113	27.67	90.8	32	12	0
114	27.82	91.3	333	16	0
115	27.90	91.5	344	17	0
116	28.07	92.1	7	7	0
117	28.18	92.5	237	1	1
118	28.25	92.7	112	6	0
119	28.32	92.9	340	5	1
120	28.46	93.4	343	4	0
121	28.68	94.1	328	11	0
122	29.28	96.1	352	3	0
123	29.39	96.4	353	11	0
124	30.03	98.5	1	7	0
125	30.28	99.4	40	12	0
126	30.46	99.9	52	11	0
127	30.54	100.2	349	14	0
128	30.70	100.7	298	13	0
129	31.12	102.1	43	13	0
130	31.58	103.6	352	5	1
131	31.73	104.1	5	12	0
132	31.86	104.5	14	7	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0210
Stoller
Dec 6, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
133	32.03	105.1	15	4	0
134	32.18	105.6	177	10	1
135	32.37	106.2	294	11	1
136	32.47	106.5	8	13	1
137	32.55	106.8	1	6	0
138	32.75	107.5	18	6	0
139	32.88	107.9	148	7	1
140	32.92	108.0	49	20	1
141	32.99	108.2	97	7	1
142	33.06	108.5	276	14	1
143	33.20	108.9	28	5	0
144	33.24	109.1	87	14	0
145	33.40	109.6	71	2	0
146	33.74	110.7	333	10	0
147	34.05	111.7	349	11	0
148	34.48	113.1	6	10	1
149	34.61	113.6	254	18	1
150	34.75	114.0	321	12	1
151	35.13	115.2	94	11	1
152	35.19	115.5	320	12	1
153	35.26	115.7	102	10	1
154	35.46	116.3	16	11	1
155	36.01	118.1	16	3	1
156	36.13	118.5	355	8	1
157	36.56	120.0	317	11	1
158	36.80	120.7	355	9	1
159	37.14	121.9	358	8	1
160	37.34	122.5	351	10	0
161	37.42	122.8	14	17	0
162	37.45	122.9	326	12	1
163	37.65	123.5	218	4	0
164	37.76	123.9	213	4	0
165	37.87	124.2	312	5	0
166	38.13	125.1	30	12	0
167	38.29	125.6	302	7	1
168	38.40	126.0	14	6	1
169	38.52	126.4	222	11	1
170	38.70	127.0	200	9	0
171	39.13	128.4	351	12	1
172	39.31	129.0	294	16	1
173	39.42	129.3	359	25	1
174	39.56	129.8	350	12	1
175	40.22	132.0	235	10	1
176	40.34	132.3	311	9	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0210
Stoller
Dec 6, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
177	40.36	132.4	84	8	1
178	40.50	132.9	236	7	1
179	40.66	133.4	296	8	1
180	40.79	133.8	283	7	1
181	40.93	134.3	49	7	1
182	41.07	134.7	330	5	1
183	41.32	135.6	312	6	1
184	41.33	135.6	28	27	1
185	41.53	136.3	324	25	1
186	41.69	136.8	311	9	1
187	41.74	136.9	2	15	1
188	42.31	138.8	12	5	1
189	42.79	140.4	351	5	1
190	43.25	141.9	289	6	1
191	43.60	143.1	354	10	1
192	43.73	143.5	20	8	1
193	44.10	144.7	310	5	1
194	44.25	145.2	195	11	1
195	44.34	145.5	229	7	1
196	44.46	145.9	160	23	1
197	45.27	148.5	27	22	1
198	46.41	152.3	36	12	1
199	47.40	155.5	21	11	1
200	47.80	156.8	73	12	1
201	47.98	157.4	10	16	1
202	48.18	158.1	40	22	1
203	49.22	161.5	40	12	1
204	50.07	164.3	333	6	1
205	50.08	164.3	188	6	1
206	50.30	165.0	348	23	1
207	51.03	167.4	35	5	1
208	51.05	167.5	5	6	1
209	51.24	168.1	16	7	1
210	51.52	169.0	297	15	1
211	51.58	169.2	358	9	1
212	51.80	170.0	155	14	1
213	52.43	172.0	50	6	1
214	52.46	172.1	60	12	1
215	52.52	172.3	25	25	1
216	53.04	174.0	59	8	1
217	53.45	175.4	124	7	1
218	53.75	176.4	192	4	1
219	53.87	176.8	355	10	1
220	53.96	177.0	225	7	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0210
Stoller
Dec 6, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
221	54.23	177.9	82	10	1
222	56.41	185.1	86	27	1
223	57.22	187.7	29	14	1
224	57.30	188.0	89	10	1
225	57.33	188.1	245	9	1
226	58.25	191.1	328	7	1
227	58.32	191.3	67	6	1
228	59.83	196.3	341	30	1
229	61.13	200.6	7	13	1
230	61.29	201.1	342	18	1
231	63.04	206.8	8	7	1
232	63.07	206.9	242	6	1
233	64.83	212.7	11	10	1
234	65.26	214.1	5	14	1
235	65.84	216.0	20	18	1
236	66.01	216.6	185	10	1
237	66.37	217.8	122	13	1
238	66.50	218.2	302	9	1
239	66.86	219.4	53	11	1
240	67.49	221.4	295	18	1
241	67.94	222.9	25	11	1
242	69.40	227.7	216	22	1
243	69.46	227.9	215	11	1
244	69.67	228.6	96	10	1
245	69.72	228.7	246	7	1
246	70.11	230.0	246	7	1
247	70.40	231.0	275	12	1
248	70.93	232.7	11	21	1
249	71.13	233.4	164	14	1
250	71.18	233.5	189	9	1
251	71.34	234.1	349	12	1
252	73.05	239.7	41	6	1
253	73.73	241.9	339	9	1
254	74.49	244.4	16	5	1
255	75.02	246.1	311	14	1
256	75.28	247.0	320	8	0
257	75.39	247.3	266	4	0
258	75.56	247.9	332	8	1
259	75.65	248.2	270	9	0
260	76.09	249.6	6	16	1
261	76.81	252.0	5	15	0
262	77.47	254.2	359	12	0
263	78.32	257.0	0	0	1
264	78.46	257.4	0	0	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0210
Stoller
Dec 6, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
265	78.60	257.9	0	0	1
266	78.62	258.0	215	6	1
267	78.70	258.2	55	7	1
268	78.92	258.9	5	4	1
269	79.04	259.3	354	7	1
270	79.11	259.5	26	29	1
271	79.19	259.8	175	7	1
272	79.19	259.8	252	12	1
273	79.25	260.0	29	14	1
274	79.31	260.2	18	5	1
275	79.43	260.6	354	10	1
276	79.57	261.1	263	15	1
277	79.57	261.1	14	5	1
278	79.62	261.2	58	9	1
279	80.10	262.8	0	14	1
280	80.50	264.1	344	6	1
281	82.56	270.9	324	12	1
282	82.67	271.2	289	6	1
283	82.95	272.2	21	16	1
284	83.05	272.5	5	16	1
285	84.21	276.3	200	29	1
286	84.84	278.4	14	13	1
287	84.98	278.8	19	29	1
288	85.12	279.3	21	9	1
289	85.31	279.9	4	8	1
290	85.96	282.0	5	7	1
291	87.37	286.7	4	5	1
292	87.61	287.4	12	3	1
293	87.69	287.7	199	6	1
294	88.63	290.8	110	11	1
295	88.79	291.3	284	5	1
296	89.82	294.7	29	3	1
297	90.41	296.6	187	3	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
1	11.27	37.0	94	18	1
2	11.29	37.0	11	68	1
3	11.34	37.2	118	26	1
4	11.40	37.4	13	27	1
5	11.48	37.7	114	36	1
6	11.48	37.7	7	26	1
7	11.49	37.7	185	26	1
8	11.58	38.0	34	13	1
9	11.64	38.2	270	25	1
10	11.72	38.4	292	31	1
11	11.78	38.7	14	18	1
12	11.81	38.8	306	40	1
13	11.91	39.1	341	27	1
14	11.92	39.1	131	11	1
15	12.05	39.5	99	24	1
16	12.09	39.7	97	17	1
17	12.11	39.7	109	76	1
18	12.15	39.9	319	12	1
19	12.19	40.0	205	9	1
20	12.24	40.2	223	5	1
21	12.35	40.5	100	53	1
22	12.44	40.8	247	24	1
23	12.50	41.0	343	13	1
24	12.56	41.2	110	23	1
25	12.67	41.6	175	15	1
26	12.71	41.7	330	7	1
27	12.81	42.0	135	43	1
28	12.86	42.2	239	18	1
29	12.91	42.4	192	34	1
30	12.94	42.5	189	16	1
31	13.02	42.7	15	5	1
32	13.12	43.0	350	2	1
33	13.16	43.2	256	20	1
34	13.22	43.4	221	5	1
35	13.23	43.4	286	47	1
36	13.24	43.5	299	11	1
37	13.28	43.6	96	53	1
38	13.29	43.6	273	19	1
39	13.41	44.0	62	3	1
40	13.50	44.3	322	1	1
41	13.55	44.5	286	8	1
42	13.59	44.6	16	15	1
43	13.67	44.8	219	23	1
44	13.75	45.1	41	24	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
45	13.78	45.2	329	20	1
46	13.81	45.3	316	16	1
47	13.94	45.7	169	21	1
48	14.00	45.9	42	7	1
49	14.08	46.2	144	10	1
50	14.16	46.5	160	15	1
51	14.24	46.7	258	7	1
52	14.27	46.8	163	4	1
53	14.34	47.1	172	1	1
54	15.15	49.7	156	7	1
55	15.35	50.4	23	1	1
56	15.52	50.9	14	15	1
57	15.91	52.2	11	8	1
58	15.94	52.3	27	11	1
59	15.98	52.4	287	13	1
60	16.16	53.0	360	8	1
61	16.28	53.4	20	9	2
62	16.56	54.3	358	5	2
63	16.80	55.1	75	34	2
64	17.12	56.2	2	11	1
65	17.19	56.4	312	80	1
66	17.30	56.8	2	7	1
67	18.25	59.9	6	5	1
68	18.99	62.3	24	68	1
69	19.13	62.8	63	9	1
70	19.85	65.1	38	13	0
71	20.45	67.1	152	14	0
72	20.54	67.4	118	13	0
73	20.59	67.6	110	13	0
74	23.81	78.1	352	14	0
75	23.94	78.6	325	8	0
76	25.00	82.0	236	5	0
77	25.07	82.3	317	5	0
78	25.13	82.5	175	3	0
79	25.21	82.7	316	25	0
80	25.37	83.2	2	3	0
81	25.44	83.5	330	6	0
82	25.94	85.1	283	36	1
83	26.12	85.7	347	37	0
84	26.36	86.5	30	43	0
85	26.46	86.8	22	45	0
86	26.51	87.0	19	51	0
87	26.66	87.5	320	6	0
88	26.82	88.0	22	37	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
89	26.87	88.2	31	43	0
90	27.19	89.2	4	14	0
91	28.12	92.3	11	5	0
92	28.38	93.1	18	5	0
93	28.42	93.3	346	7	0
94	28.82	94.6	315	9	1
95	29.68	97.4	2	4	1
96	29.73	97.6	344	5	1
97	29.78	97.7	330	11	2
98	30.71	100.8	14	7	1
99	30.78	101.0	144	5	1
100	31.14	102.2	10	3	0
101	31.37	102.9	326	13	1
102	31.39	103.0	358	9	1
103	31.42	103.1	133	42	1
104	31.43	103.1	4	34	1
105	31.50	103.4	158	27	1
106	31.54	103.5	346	55	1
107	32.10	105.3	121	16	1
108	32.24	105.8	260	15	1
109	32.58	106.9	15	3	0
110	32.73	107.4	51	3	1
111	33.63	110.3	8	2	0
112	33.76	110.8	10	1	0
113	33.99	111.5	13	4	0
114	34.29	112.5	18	4	0
115	34.60	113.5	329	6	0
116	35.09	115.1	9	3	1
117	35.18	115.4	293	5	1
118	35.28	115.8	342	5	1
119	35.78	117.4	25	3	0
120	36.01	118.2	333	7	0
121	36.11	118.5	12	6	0
122	36.38	119.4	4	8	1
123	36.70	120.4	342	9	1
124	36.74	120.5	299	10	2
125	36.85	120.9	97	17	2
126	36.92	121.1	51	7	1
127	37.15	121.9	17	4	1
128	37.37	122.6	24	7	0
129	37.51	123.1	16	8	0
130	37.65	123.5	15	5	1
131	37.80	124.0	12	5	1
132	38.29	125.6	360	22	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
133	40.08	131.5	345	19	0
134	40.72	133.6	36	7	1
135	40.84	134.0	46	4	1
136	41.72	136.9	347	7	0
137	41.82	137.2	8	7	0
138	42.54	139.6	17	5	0
139	42.95	140.9	7	6	0
140	42.99	141.1	358	5	0
141	43.04	141.2	351	14	0
142	43.29	142.0	37	11	0
143	44.61	146.4	9	8	1
144	44.72	146.7	25	5	0
145	44.77	146.9	13	2	0
146	45.06	147.9	12	3	1
147	45.16	148.2	13	5	0
148	45.22	148.4	9	7	0
149	45.63	149.7	299	7	1
150	45.66	149.8	318	8	1
151	45.76	150.1	12	7	0
152	45.86	150.5	17	11	0
153	45.89	150.6	84	11	0
154	45.98	150.8	153	9	0
155	46.01	151.0	28	8	0
156	46.09	151.2	196	10	0
157	46.17	151.5	52	26	0
158	46.28	151.8	17	6	0
159	46.31	151.9	9	9	1
160	46.34	152.1	51	17	0
161	46.43	152.3	78	12	0
162	46.58	152.8	356	23	0
163	46.68	153.1	12	10	0
164	46.85	153.7	11	12	0
165	46.88	153.8	42	5	0
166	46.91	153.9	18	13	0
167	46.99	154.2	330	6	0
168	47.36	155.4	317	8	1
169	47.38	155.4	138	16	1
170	47.42	155.6	17	8	1
171	47.58	156.1	4	5	1
172	47.68	156.4	324	7	1
173	47.85	157.0	10	11	0
174	47.92	157.2	354	4	0
175	48.03	157.6	16	9	0
176	48.12	157.9	18	4	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
177	48.15	158.0	350	11	0
178	48.27	158.4	80	7	0
179	48.51	159.2	359	6	0
180	48.77	160.0	11	8	1
181	48.80	160.1	26	6	1
182	49.04	160.9	330	7	1
183	49.06	161.0	2	4	1
184	49.11	161.1	349	7	1
185	49.29	161.7	340	11	1
186	49.38	162.0	358	14	1
187	49.42	162.1	15	3	1
188	49.45	162.2	11	5	1
189	49.53	162.5	11	6	1
190	49.79	163.4	8	8	1
191	49.82	163.4	13	4	1
192	49.85	163.5	18	6	1
193	49.86	163.6	3	3	1
194	50.11	164.4	10	6	1
195	50.15	164.5	11	4	1
196	50.23	164.8	18	5	0
197	50.51	165.7	11	11	0
198	50.58	166.0	20	7	0
199	50.61	166.1	11	8	0
200	50.67	166.3	19	6	1
201	50.69	166.3	11	8	1
202	50.76	166.6	260	14	0
203	50.82	166.7	17	5	0
204	50.85	166.8	321	9	0
205	50.94	167.1	7	6	1
206	50.96	167.2	337	3	0
207	51.02	167.4	1	7	1
208	51.08	167.6	13	5	0
209	51.21	168.0	7	5	1
210	51.22	168.1	7	7	1
211	51.24	168.1	33	10	1
212	51.33	168.4	11	8	1
213	51.47	168.9	311	7	1
214	51.49	168.9	324	10	1
215	51.55	169.1	19	11	1
216	51.74	169.8	51	6	1
217	52.09	170.9	320	5	0
218	52.17	171.2	316	19	0
219	52.43	172.0	342	5	1
220	52.83	173.3	343	10	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
221	53.17	174.5	34	9	0
222	53.76	176.4	11	4	1
223	54.57	179.0	4	5	1
224	54.63	179.2	16	11	1
225	54.97	180.4	28	9	1
226	55.19	181.1	324	9	1
227	55.25	181.3	19	9	1
228	55.30	181.4	342	9	1
229	55.48	182.0	13	7	1
230	55.49	182.1	9	8	0
231	55.74	182.9	8	7	0
232	56.46	185.3	29	2	0
233	56.70	186.0	351	6	1
234	56.75	186.2	357	11	1
235	56.75	186.2	120	5	1
236	56.87	186.6	342	5	1
237	57.08	187.3	346	8	1
238	57.13	187.4	355	6	1
239	57.25	187.8	311	6	1
240	57.28	187.9	21	4	1
241	57.31	188.0	355	3	1
242	57.36	188.2	15	5	1
243	57.42	188.4	356	6	2
244	57.55	188.8	9	5	1
245	57.61	189.0	9	6	1
246	57.66	189.2	355	5	0
247	57.82	189.7	354	8	0
248	57.85	189.8	354	8	0
249	57.90	190.0	354	4	1
250	58.02	190.4	358	2	1
251	58.38	191.5	4	5	1
252	58.45	191.8	284	4	0
253	58.59	192.2	29	6	1
254	58.84	193.1	2	8	1
255	58.87	193.1	354	6	1
256	58.89	193.2	45	7	1
257	58.90	193.2	353	5	1
258	59.04	193.7	16	5	1
259	59.11	193.9	11	5	1
260	59.12	194.0	10	6	1
261	59.16	194.1	353	4	1
262	59.20	194.2	18	4	0
263	59.23	194.3	19	3	1
264	59.27	194.4	9	6	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
265	59.30	194.6	6	8	1
266	59.34	194.7	13	6	1
267	59.34	194.7	33	8	1
268	59.45	195.0	321	7	1
269	59.51	195.3	33	10	1
270	59.59	195.5	352	4	1
271	59.60	195.6	351	10	1
272	59.64	195.7	352	4	0
273	59.74	196.0	331	7	1
274	59.78	196.1	352	5	1
275	59.85	196.4	349	3	1
276	59.94	196.6	17	4	0
277	60.00	196.8	49	8	1
278	60.05	197.0	353	15	1
279	60.25	197.7	13	5	0
280	60.43	198.3	32	7	1
281	60.48	198.4	46	6	1
282	60.50	198.5	22	8	1
283	60.55	198.7	32	25	1
284	60.58	198.8	353	13	1
285	60.63	198.9	15	5	1
286	60.64	199.0	5	4	1
287	60.66	199.0	349	7	1
288	60.67	199.1	31	4	1
289	60.71	199.2	357	6	1
290	60.81	199.5	344	6	1
291	60.92	199.9	10	2	1
292	61.05	200.3	321	11	1
293	61.08	200.4	346	9	1
294	61.11	200.5	24	7	1
295	61.15	200.6	53	5	1
296	61.46	201.7	35	9	0
297	62.17	204.0	142	5	0
298	62.22	204.1	311	2	0
299	62.34	204.5	0	0	0
300	62.57	205.3	355	4	1
301	62.60	205.4	241	4	1
302	62.63	205.5	311	7	1
303	62.74	205.9	58	8	1
304	62.98	206.6	66	7	0
305	63.08	206.9	72	7	0
306	63.36	207.9	8	8	1
307	63.44	208.1	333	2	1
308	63.50	208.3	18	4	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
309	63.61	208.7	341	3	1
310	63.76	209.2	11	12	1
311	63.81	209.3	90	7	1
312	63.84	209.4	8	8	1
313	63.88	209.6	15	7	1
314	64.00	210.0	35	4	1
315	64.08	210.3	91	4	1
316	64.12	210.4	80	6	1
317	64.17	210.5	2	6	1
318	64.36	211.2	44	4	1
319	64.42	211.4	290	2	1
320	64.47	211.5	319	5	1
321	64.66	212.1	70	4	1
322	64.70	212.3	349	6	1
323	64.73	212.4	353	4	1
324	64.76	212.5	24	4	1
325	64.99	213.2	40	8	0
326	65.12	213.7	296	12	1
327	65.30	214.2	48	6	1
328	65.34	214.4	170	5	1
329	65.48	214.8	356	5	1
330	65.61	215.3	343	7	1
331	65.68	215.5	193	4	1
332	65.72	215.6	92	1	1
333	65.78	215.8	59	6	1
334	65.85	216.0	344	5	2
335	65.89	216.2	69	1	1
336	66.00	216.5	30	5	1
337	66.12	216.9	103	1	0
338	66.58	218.4	339	3	0
339	66.68	218.8	176	5	1
340	66.85	219.3	11	4	1
341	66.89	219.5	317	7	1
342	66.99	219.8	144	7	1
343	67.23	220.6	10	4	0
344	67.31	220.8	311	5	0
345	67.52	221.5	13	6	0
346	67.88	222.7	108	8	1
347	68.07	223.3	350	5	0
348	68.15	223.6	11	4	1
349	68.23	223.9	8	2	0
350	68.45	224.6	0	0	0
351	68.59	225.0	13	4	0
352	68.93	226.2	0	3	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
353	69.05	226.5	158	10	1
354	69.13	226.8	17	3	0
355	69.57	228.3	269	8	1
356	69.62	228.4	31	8	1
357	70.03	229.8	20	4	0
358	70.13	230.1	15	5	0
359	70.24	230.5	71	4	1
360	70.32	230.7	219	4	0
361	70.35	230.8	93	14	1
362	70.49	231.3	82	5	1
363	70.59	231.6	59	7	1
364	70.77	232.2	39	5	1
365	70.93	232.7	16	3	0
366	71.02	233.0	180	5	0
367	71.05	233.1	187	6	0
368	71.10	233.3	161	8	1
369	71.22	233.7	148	6	0
370	71.40	234.3	58	9	0
371	71.47	234.5	353	8	0
372	71.83	235.7	303	4	0
373	71.87	235.8	349	7	0
374	71.94	236.0	27	6	0
375	72.19	236.8	351	8	1
376	72.23	237.0	338	3	1
377	72.29	237.2	1	3	0
378	72.65	238.4	254	5	0
379	72.76	238.7	214	2	1
380	73.07	239.7	321	5	0
381	73.09	239.8	355	4	0
382	73.16	240.0	52	4	0
383	73.26	240.3	214	20	1
384	73.35	240.7	200	15	1
385	73.58	241.4	220	19	1
386	73.63	241.6	231	10	1
387	73.75	242.0	206	15	1
388	73.81	242.2	227	8	1
389	73.85	242.3	179	6	1
390	73.93	242.5	62	10	1
391	74.10	243.1	68	17	1
392	74.42	244.2	278	9	1
393	74.59	244.7	117	8	1
394	74.73	245.2	105	12	1
395	74.82	245.5	234	5	1
396	75.28	247.0	160	5	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
397	75.33	247.1	187	3	1
398	75.45	247.6	84	4	1
399	75.92	249.1	100	2	1
400	76.09	249.6	175	6	1
401	76.49	251.0	179	11	1
402	76.61	251.3	221	8	1
403	76.88	252.2	36	9	1
404	76.92	252.4	20	11	1
405	76.99	252.6	20	6	1
406	77.29	253.6	38	24	1
407	77.44	254.1	17	10	1
408	77.58	254.5	62	5	1
409	77.64	254.7	162	7	1
410	77.85	255.4	1	9	0
411	78.09	256.2	15	15	0
412	78.54	257.7	139	6	0
413	78.94	259.0	172	4	1
414	79.02	259.3	60	20	1
415	79.13	259.6	104	13	1
416	79.40	260.5	1	6	1
417	79.44	260.6	89	6	1
418	79.63	261.3	333	11	1
419	79.96	262.3	345	17	1
420	80.39	263.8	11	11	1
421	80.54	264.2	355	7	1
422	80.73	264.9	203	19	1
423	80.85	265.3	169	9	1
424	80.95	265.6	1	3	1
425	81.31	266.8	312	9	1
426	81.35	266.9	304	10	1
427	81.42	267.1	164	15	1
428	81.54	267.5	263	19	1
429	81.60	267.7	309	4	1
430	81.65	267.9	103	16	1
431	81.76	268.2	142	12	1
432	81.94	268.8	187	11	1
433	82.03	269.1	217	22	1
434	82.10	269.4	320	14	1
435	82.61	271.0	353	22	1
436	82.83	271.8	67	5	1
437	83.36	273.5	69	11	1
438	83.95	275.4	236	4	1
439	84.07	275.8	26	5	1
440	84.09	275.9	33	15	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
441	84.15	276.1	342	8	1
442	84.16	276.1	62	3	1
443	84.21	276.3	32	4	1
444	84.26	276.4	72	6	1
445	84.32	276.7	24	5	1
446	84.41	277.0	24	8	1
447	84.66	277.8	337	9	1
448	84.85	278.4	10	2	1
449	85.24	279.7	5	6	1
450	85.27	279.8	30	7	1
451	85.34	280.0	104	14	1
452	85.43	280.3	348	6	1
453	85.55	280.7	320	4	0
454	85.78	281.4	66	6	0
455	86.03	282.3	15	3	0
456	86.91	285.2	353	8	1
457	87.07	285.7	233	5	1
458	87.56	287.3	326	1	0
459	88.02	288.8	223	2	0
460	88.06	288.9	165	7	0
461	88.27	289.6	351	20	1
462	88.59	290.6	17	18	1
463	88.62	290.7	159	8	1
464	89.32	293.1	163	12	1
465	89.45	293.5	235	6	1
466	89.76	294.5	305	4	0
467	90.12	295.7	17	4	0
468	90.34	296.4	15	4	0
469	90.51	297.0	357	5	0
470	90.75	297.7	356	5	0
471	90.83	298.0	17	4	0
472	91.10	298.9	341	4	0
473	91.22	299.3	17	4	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0208
Stoller
Dec 7, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
1	13.80	45.3	12	4	2
2	13.81	45.3	121	17	1
3	13.83	45.4	204	6	2
4	14.35	47.1	301	8	1
5	14.39	47.2	255	16	0
6	14.45	47.4	20	10	0
7	14.55	47.7	342	3	0
8	15.03	49.3	313	18	0
9	15.28	50.1	4	3	0
10	15.39	50.5	19	9	1
11	15.58	51.1	8	10	1
12	15.72	51.6	13	3	1
13	15.82	51.9	329	15	1
14	15.99	52.5	2	3	1
15	16.08	52.8	315	9	1
16	16.25	53.3	10	8	1
17	16.36	53.7	331	10	1
18	16.49	54.1	346	5	1
19	16.94	55.6	329	9	1
20	17.09	56.1	4	5	1
21	17.22	56.5	210	18	1
22	17.35	56.9	138	4	1
23	17.48	57.4	324	2	1
24	17.50	57.4	147	10	1
25	17.68	58.0	347	8	1
26	18.00	59.1	27	6	1
27	18.14	59.5	329	8	1
28	18.20	59.7	301	10	1
29	18.36	60.2	348	6	0
30	18.42	60.4	350	5	0
31	18.55	60.9	342	3	1
32	18.68	61.3	6	3	1
33	18.82	61.7	194	5	1
34	18.86	61.9	302	4	1
35	19.00	62.3	33	7	1
36	19.06	62.5	7	11	1
37	19.12	62.7	17	9	1
38	19.23	63.1	23	12	1
39	19.39	63.6	335	1	1
40	19.41	63.7	173	2	1
41	19.46	63.9	8	4	1
42	19.57	64.2	32	10	1
43	19.60	64.3	318	9	1
44	19.68	64.6	355	6	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0208
Stoller
Dec 7, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
45	19.72	64.7	9	1	1
46	19.77	64.9	15	6	1
47	19.86	65.2	300	11	1
48	19.92	65.4	35	3	1
49	19.98	65.6	325	12	1
50	20.03	65.7	85	8	1
51	20.10	66.0	294	7	1
52	20.15	66.1	358	5	1
53	20.22	66.3	33	14	1
54	20.30	66.6	9	8	1
55	20.36	66.8	97	9	1
56	20.49	67.2	119	5	1
57	20.52	67.3	122	5	1
58	20.56	67.4	5	4	1
59	20.63	67.7	173	3	1
60	20.77	68.1	7	3	0
61	20.83	68.3	59	7	1
62	20.92	68.6	307	13	1
63	20.97	68.8	322	12	1
64	21.04	69.0	334	4	1
65	21.19	69.5	5	8	1
66	21.34	70.0	48	4	1
67	21.42	70.3	7	16	1
68	21.43	70.3	166	11	1
69	21.52	70.6	0	2	1
70	21.59	70.8	332	6	1
71	21.64	71.0	6	3	1
72	21.69	71.2	10	2	1
73	21.72	71.3	4	3	1
74	21.80	71.5	25	15	1
75	21.87	71.8	24	6	1
76	21.91	71.9	5	7	0
77	21.95	72.0	326	5	0
78	22.05	72.3	3	5	1
79	22.08	72.4	149	5	1
80	22.17	72.8	2	2	1
81	22.28	73.1	27	5	1
82	22.37	73.4	326	4	1
83	22.45	73.7	0	3	1
84	22.48	73.8	8	3	1
85	22.51	73.9	40	8	1
86	22.57	74.1	36	5	1
87	22.80	74.8	206	9	1
88	22.82	74.9	10	10	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0208
Stoller
Dec 7, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
89	22.92	75.2	359	10	1
90	23.02	75.5	11	3	1
91	23.10	75.8	8	7	1
92	23.34	76.6	16	10	1
93	23.51	77.1	10	3	1
94	23.72	77.8	19	5	1
95	23.86	78.3	16	5	1
96	23.88	78.3	31	5	1
97	24.25	79.6	348	7	2
98	24.68	81.0	124	19	1
99	24.70	81.1	30	5	1
100	31.72	104.1	7	2	1
101	31.90	104.7	4	7	1
102	32.11	105.3	54	9	1
103	32.29	105.9	316	14	1
104	32.88	107.9	41	12	1
105	37.91	124.4	192	5	2
106	38.04	124.8	151	3	1
107	39.20	128.6	2	0	1
108	41.40	135.8	22	9	1
109	41.71	136.8	51	19	2
110	42.56	139.6	247	14	1
111	44.09	144.7	180	10	1
112	44.43	145.8	179	3	1
113	45.01	147.7	148	7	1
114	45.13	148.1	167	2	1
115	52.08	170.9	12	2	1
116	56.40	185.1	10	4	1
117	56.54	185.5	6	8	1
118	57.39	188.3	6	4	2
119	57.56	188.9	360	2	1
120	57.64	189.1	9	4	1
121	58.40	191.6	333	5	1
122	58.56	192.1	349	6	1
123	58.69	192.6	354	3	1
124	58.99	193.6	354	3	0
125	59.00	193.6	0	0	1
126	59.62	195.6	199	9	1
127	59.78	196.1	6	2	1
128	60.28	197.8	8	1	1
129	60.52	198.6	8	5	1
130	60.64	199.0	357	8	1
131	61.31	201.2	71	5	1
132	61.73	202.5	10	4	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0208
Stoller
Dec 7, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
133	62.45	204.9	190	5	1
134	63.11	207.1	349	2	1
135	63.22	207.4	11	4	1
136	63.30	207.7	352	3	1
137	63.41	208.1	61	2	1
138	63.52	208.4	159	2	2
139	63.74	209.1	39	12	1
140	63.85	209.5	320	8	1
141	64.08	210.2	4	8	1
142	64.40	211.3	173	7	1
143	64.47	211.5	334	6	2
144	64.51	211.7	175	10	1
145	64.68	212.2	196	4	1
146	65.09	213.6	25	8	1
147	65.72	215.6	8	2	1
148	66.32	217.6	310	4	1
149	66.39	217.8	0	0	1
150	66.45	218.0	234	3	1
151	66.47	218.1	6	2	1
152	66.49	218.1	44	6	1
153	67.00	219.8	8	2	1
154	67.14	220.3	6	4	1
155	67.46	221.3	37	2	1
156	69.17	226.9	325	4	1
157	69.52	228.1	0	6	2
158	70.38	230.9	288	1	2
159	71.60	234.9	296	8	1
160	71.70	235.2	6	6	1
161	71.76	235.4	213	15	1
162	71.93	236.0	67	16	1
163	72.15	236.7	74	13	1
164	72.84	239.0	74	20	1
165	73.24	240.3	63	7	1
166	75.08	246.3	96	3	1
167	75.11	246.4	9	5	1
168	76.01	249.4	175	7	1
169	76.56	251.2	147	5	1
170	76.61	251.4	190	6	1
171	76.67	251.5	178	8	1
172	77.82	255.3	4	3	1
173	78.31	256.9	316	4	2
174	78.60	257.9	188	3	1
175	79.14	259.6	221	3	0
176	80.06	262.7	12	4	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0208
Stoller
Dec 7, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
177	81.92	268.8	317	4	1
178	82.05	269.2	352	24	1
179	82.37	270.3	201	27	1
180	82.90	272.0	7	3	1
181	84.34	276.7	319	10	1
182	84.44	277.1	338	11	1
183	84.66	277.8	328	13	1
184	85.34	280.0	30	4	1
185	86.05	282.3	249	9	1
186	86.75	284.6	7	10	1
187	87.14	285.9	8	5	1
188	87.87	288.3	316	4	1
189	88.41	290.1	21	3	1
190	88.75	291.2	10	4	1
191	89.51	293.7	339	10	1
192	89.90	295.0	40	8	1
193	90.53	297.0	123	8	1
194	90.96	298.4	12	5	1
195	91.39	299.8	341	9	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0207
Stoller
Dec 8, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
1	8.03	26.3	66	23	2
2	8.04	26.4	167	31	2
3	8.14	26.7	59	3	2
4	8.17	26.8	308	12	1
5	8.18	26.9	20	11	1
6	8.21	26.9	306	47	2
7	8.30	27.2	146	12	1
8	8.39	27.5	126	7	1
9	8.41	27.6	264	21	2
10	8.56	28.1	14	11	1
11	8.63	28.3	137	8	2
12	8.65	28.4	306	46	2
13	8.73	28.6	183	8	2
14	8.80	28.9	32	8	1
15	8.89	29.2	194	8	1
16	8.94	29.3	161	9	1
17	8.99	29.5	343	14	2
18	9.00	29.5	5	22	0
19	9.04	29.7	337	13	1
20	9.09	29.8	151	32	1
21	9.11	29.9	344	25	2
22	9.14	30.0	8	25	2
23	9.27	30.4	81	17	1
24	9.27	30.4	257	11	1
25	9.35	30.7	243	7	2
26	9.39	30.8	194	14	2
27	9.42	30.9	198	12	2
28	9.50	31.2	254	7	2
29	9.56	31.4	220	21	1
30	9.59	31.5	116	33	2
31	9.63	31.6	222	27	2
32	9.70	31.8	242	19	2
33	9.77	32.1	206	18	2
34	9.82	32.2	335	16	2
35	9.88	32.4	343	10	1
36	9.94	32.6	204	7	1
37	10.02	32.9	241	14	1
38	10.02	32.9	296	7	1
39	10.06	33.0	273	11	2
40	10.09	33.1	251	5	2
41	10.22	33.5	318	11	2
42	10.25	33.6	19	3	2
43	10.31	33.8	324	5	2
44	10.34	33.9	342	4	2

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0207
Stoller
Dec 8, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
45	10.38	34.1	325	12	2
46	10.46	34.3	349	11	1
47	10.50	34.5	354	14	1
48	10.52	34.5	11	16	1
49	10.54	34.6	328	11	2
50	10.59	34.7	7	16	1
51	10.61	34.8	117	9	2
52	10.63	34.9	2	8	2
53	10.66	35.0	308	3	2
54	10.71	35.1	15	6	2
55	10.75	35.3	328	8	1
56	10.80	35.4	313	4	1
57	10.83	35.5	17	18	2
58	10.87	35.7	354	11	1
59	10.89	35.7	313	18	2
60	11.02	36.1	269	8	1
61	11.07	36.3	228	7	1
62	11.25	36.9	277	14	1
63	11.30	37.1	291	28	1
64	11.39	37.4	9	9	2
65	11.44	37.5	3	10	1
66	11.47	37.6	40	36	1
67	11.49	37.7	338	11	2
68	11.53	37.8	34	10	2
69	11.58	38.0	97	9	1
70	11.61	38.1	44	7	2
71	11.67	38.3	29	12	1
72	11.71	38.4	41	6	2
73	11.82	38.8	107	23	1
74	11.82	38.8	31	28	2
75	11.88	39.0	24	5	2
76	11.97	39.3	126	23	2
77	11.98	39.3	340	15	2
78	12.05	39.5	342	6	2
79	12.12	39.8	15	11	1
80	12.16	39.9	19	9	2
81	12.25	40.2	16	11	2
82	12.34	40.5	307	6	2
83	12.50	41.0	24	22	2
84	12.53	41.1	213	21	1
85	12.62	41.4	28	17	2
86	12.67	41.6	33	17	2
87	12.76	41.9	18	19	1
88	12.86	42.2	19	25	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0207
Stoller
Dec 8, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
89	12.98	42.6	210	51	1
90	13.11	43.0	43	5	2
91	13.15	43.2	291	22	1
92	13.22	43.4	359	11	1
93	13.28	43.6	1	10	1
94	14.00	45.9	8	7	1
95	14.11	46.3	350	8	2
96	14.15	46.4	5	2	1
97	14.24	46.7	358	9	1
98	14.29	46.9	42	14	1
99	14.34	47.1	48	11	1
100	14.52	47.7	127	8	1
101	14.63	48.0	13	3	0
102	14.71	48.3	47	14	0
103	14.82	48.6	351	7	0
104	14.96	49.1	307	23	1
105	15.01	49.2	24	9	1
106	15.12	49.6	81	13	1
107	15.41	50.6	91	15	0
108	15.72	51.6	11	12	2
109	16.61	54.5	304	27	0
110	16.74	54.9	358	4	0
111	18.10	59.4	56	24	0
112	18.15	59.5	234	8	0
113	18.41	60.4	338	14	0
114	19.12	62.7	359	43	1
115	19.48	63.9	330	21	0
116	19.62	64.4	347	18	0
117	19.78	64.9	79	7	0
118	20.18	66.2	341	11	0
119	20.80	68.2	330	7	1
120	21.54	70.7	11	10	0
121	21.99	72.2	354	14	0
122	22.63	74.2	278	14	0
123	22.85	75.0	1	5	0
124	23.18	76.1	10	8	0
125	23.45	76.9	12	17	0
126	23.75	77.9	79	18	0
127	23.98	78.7	25	21	0
128	24.70	81.0	60	18	0
129	24.76	81.2	10	16	0
130	25.03	82.1	27	12	0
131	25.16	82.6	49	16	0
132	25.28	82.9	348	23	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0207
Stoller
Dec 8, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
133	25.68	84.3	9	11	0
134	25.87	84.9	138	7	0
135	26.30	86.3	22	12	0
136	26.73	87.7	16	9	0
137	26.76	87.8	14	10	0
138	27.86	91.4	340	19	0
139	28.10	92.2	6	13	0
140	28.52	93.6	4	7	0
141	28.94	94.9	351	13	0
142	29.26	96.0	331	10	0
143	29.75	97.6	360	8	0
144	29.98	98.4	5	10	0
145	30.29	99.4	171	4	0
146	30.82	101.1	351	13	0
147	30.99	101.7	21	12	0
148	31.23	102.5	43	21	0
149	31.88	104.6	35	13	0
150	32.59	106.9	58	14	0
151	33.08	108.5	47	17	0
152	33.47	109.8	44	12	1
153	33.69	110.5	15	22	0
154	34.49	113.2	342	6	0
155	34.84	114.3	31	5	0
156	35.39	116.1	38	5	0
157	36.07	118.4	24	10	0
158	36.73	120.5	17	19	0
159	38.12	125.1	163	5	0
160	40.22	132.0	49	15	0
161	41.21	135.2	234	3	0
162	42.76	140.3	293	9	0
163	42.78	140.4	311	8	1
164	44.20	145.0	69	0	0
165	45.26	148.5	19	5	0
166	45.94	150.7	10	10	0
167	46.36	152.1	245	7	0
168	46.49	152.5	59	8	0
169	46.93	154.0	60	18	0
170	47.31	155.2	83	9	0
171	48.18	158.1	44	10	0
172	49.55	162.6	2	10	0
173	50.21	164.7	8	16	0
174	50.37	165.2	17	7	0
175	51.52	169.0	12	9	0
176	52.37	171.8	3	11	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0207
Stoller
Dec 8, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
177	52.54	172.4	132	11	0
178	53.39	175.2	41	7	0
179	53.64	176.0	18	11	0
180	54.11	177.5	21	23	0
181	55.10	180.8	57	17	0
182	55.16	181.0	28	17	0
183	55.65	182.6	78	9	0
184	56.93	186.8	56	11	0
185	57.65	189.2	11	11	0
186	58.51	192.0	312	4	0
187	59.05	193.7	27	12	0
188	60.62	198.9	82	14	1
189	62.59	205.4	153	4	0
190	62.91	206.4	6	16	0
191	64.46	211.5	325	23	0
192	65.04	213.4	85	21	0
193	65.17	213.8	56	22	0
194	65.64	215.3	320	5	0
195	65.81	215.9	2	9	1
196	65.90	216.2	127	8	0
197	66.18	217.1	319	17	0
198	67.42	221.2	29	16	0
199	67.59	221.8	352	30	0
200	67.70	222.1	49	37	0
201	68.07	223.3	83	36	0
202	68.50	224.8	359	34	0
203	69.02	226.5	186	5	0
204	69.04	226.5	174	6	0
205	69.30	227.4	188	10	0
206	69.35	227.5	20	10	0
207	69.63	228.5	23	10	0
208	70.30	230.6	353	16	0
209	70.90	232.6	225	30	0
210	71.73	235.3	340	8	0
211	71.87	235.8	330	18	0
212	73.04	239.6	9	11	0
213	74.42	244.2	61	6	0
214	74.80	245.4	166	4	0
215	75.08	246.3	63	7	0
216	75.54	247.8	68	7	0
217	76.82	252.1	158	5	0
218	77.29	253.6	28	7	0
219	78.37	257.1	301	22	0
220	80.85	265.3	286	12	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0207
Stoller
Dec 8, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
221	81.03	265.8	275	24	0
222	82.12	269.4	48	14	0
223	82.81	271.7	6	11	0
224	83.08	272.6	332	26	0
225	83.91	275.3	18	6	0
226	86.78	284.7	63	6	0
227	86.97	285.3	147	6	0
228	87.60	287.4	299	14	0
229	87.86	288.3	352	12	0
230	88.19	289.3	52	18	0
231	88.69	291.0	16	8	0
232	88.97	291.9	40	12	0
233	89.88	294.9	3	16	0
234	90.01	295.3	41	10	0
235	90.05	295.5	14	7	0
236	90.14	295.7	179	11	0
237	90.29	296.2	260	16	0
238	91.32	299.6	2	5	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0206
Stoller
Jan. 8, 2002

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
1	7.55	24.8	253	5	1
2	7.61	25.0	310	8	1
3	7.69	25.2	353	6	1
4	7.73	25.4	46	5	1
5	7.79	25.6	74	4	1
6	7.91	26.0	135	7	1
7	7.96	26.1	292	12	1
8	7.98	26.2	168	9	1
9	8.07	26.5	347	6	1
10	8.17	26.8	57	3	1
11	8.26	27.1	32	5	1
12	8.33	27.3	27	6	1
13	8.49	27.9	213	7	1
14	8.61	28.3	233	14	1
15	8.76	28.7	21	5	1
16	8.81	28.9	337	6	1
17	9.12	29.9	2	20	1
18	9.60	31.5	6	3	1
19	9.75	32.0	143	4	1
20	9.93	32.6	308	9	0
21	10.47	34.3	182	7	1
22	10.58	34.7	1	5	1
23	10.82	35.5	35	7	0
24	10.88	35.7	33	12	0
25	11.14	36.6	64	8	0
26	11.38	37.3	11	3	0
27	11.81	38.8	29	8	1
28	11.98	39.3	62	8	1
29	12.24	40.2	73	10	0
30	12.45	40.9	73	0	0
31	12.52	41.1	275	4	0
32	12.59	41.3	196	3	0
33	12.62	41.4	263	4	0
34	12.66	41.5	311	5	0
35	12.72	41.7	84	4	0
36	12.75	41.8	295	2	0
37	12.83	42.1	70	3	1
38	12.86	42.2	0	0	0
39	12.90	42.3	323	3	0
40	12.93	42.4	253	5	0
41	12.98	42.6	346	6	0
42	13.01	42.7	336	9	0
43	13.07	42.9	29	3	1
44	13.18	43.2	297	12	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0206
Stoller
Jan. 8, 2002

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
45	13.21	43.3	299	9	0
46	13.24	43.5	354	6	0
47	13.32	43.7	3	11	1
48	13.49	44.3	53	11	1
49	13.56	44.5	354	14	1
50	13.64	44.8	28	10	1
51	13.80	45.3	10	6	0
52	13.91	45.7	8	2	0
53	14.00	45.9	6	10	1
54	14.09	46.2	27	9	1
55	14.16	46.5	303	34	1
56	14.21	46.6	137	9	1
57	14.38	47.2	38	5	1
58	14.51	47.6	277	6	1
59	14.60	47.9	342	9	1
60	14.65	48.1	111	13	1
61	14.72	48.3	74	16	1
62	14.85	48.7	82	14	1
63	15.03	49.3	311	44	1
64	15.18	49.8	264	3	1
65	15.21	49.9	247	4	1
66	15.27	50.1	347	5	1
67	15.55	51.0	6	8	0
68	15.71	51.5	309	7	0
69	16.03	52.6	255	5	1
70	16.40	53.8	63	15	1
71	16.41	53.8	268	5	1
72	16.46	54.0	13	9	1
73	16.96	55.6	286	9	0
74	17.07	56.0	190	7	0
75	17.32	56.8	253	5	1
76	17.70	58.1	316	27	1
77	17.98	59.0	338	10	0
78	18.14	59.5	324	3	0
79	18.36	60.2	276	6	0
80	19.06	62.5	339	7	1
81	19.14	62.8	354	9	1
82	19.26	63.2	167	13	0
83	19.37	63.6	168	6	0
84	19.44	63.8	184	10	0
85	19.50	64.0	206	12	0
86	19.55	64.2	171	3	0
87	19.86	65.2	45	12	0
88	20.01	65.7	1	11	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0206
Stoller
Jan. 8, 2002

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
89	20.39	66.9	358	12	0
90	20.59	67.6	2	27	0
91	20.77	68.2	352	22	0
92	20.99	68.9	1	8	0
93	21.27	69.8	12	5	0
94	21.63	71.0	320	5	0
95	21.72	71.3	350	4	0
96	21.93	72.0	25	3	0
97	22.03	72.3	8	3	0
98	22.46	73.7	4	2	1
99	22.69	74.4	8	8	1
100	23.09	75.8	306	10	0
101	23.25	76.3	0	13	0
102	23.34	76.6	319	10	0
103	23.58	77.4	306	3	0
104	23.86	78.3	322	5	0
105	23.98	78.7	14	10	1
106	24.56	80.6	355	3	0
107	25.56	83.9	335	9	1
108	25.73	84.4	50	9	1
109	26.21	86.0	315	19	0
110	26.76	87.8	342	7	1
111	27.11	88.9	224	11	0
112	27.19	89.2	230	12	0
113	27.60	90.5	304	5	0
114	27.88	91.5	0	0	0
115	28.77	94.4	347	5	1
116	29.24	95.9	319	24	1
117	29.33	96.2	112	9	1
118	29.45	96.6	58	14	1
119	29.58	97.1	57	6	1
120	29.99	98.4	90	16	1
121	30.07	98.6	269	40	1
122	30.16	99.0	22	5	1
123	30.39	99.7	13	3	0
124	30.55	100.2	341	12	0
125	31.05	101.9	11	3	0
126	31.18	102.3	13	6	0
127	31.37	102.9	16	6	0
128	31.82	104.4	72	5	1
129	32.12	105.4	25	21	0
130	32.32	106.1	59	11	0
131	32.39	106.3	12	17	1
132	32.93	108.1	307	36	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0206
Stoller
Jan. 8, 2002

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
133	33.21	109.0	346	10	1
134	33.47	109.8	10	14	1
135	33.64	110.4	302	5	1
136	33.77	110.8	0	0	1
137	33.84	111.0	270	25	1
138	34.04	111.7	105	5	1
139	34.34	112.7	146	4	1
140	34.60	113.5	101	2	0
141	35.79	117.4	53	6	0
142	35.96	118.0	18	5	1
143	36.29	119.1	11	6	0
144	36.53	119.8	351	10	0
145	36.89	121.0	37	9	0
146	37.21	122.1	0	2	1
147	37.24	122.2	74	10	1
148	37.34	122.5	357	4	0
149	37.66	123.6	11	5	0
150	37.89	124.3	139	3	0
151	37.95	124.5	311	6	1
152	38.29	125.6	309	11	1
153	38.61	126.7	352	12	1
154	39.17	128.5	343	17	1
155	39.59	129.9	96	7	1
156	39.88	130.9	58	2	1
157	40.02	131.3	55	34	1
158	40.67	133.4	35	3	0
159	41.06	134.7	21	3	0
160	41.26	135.4	48	10	0
161	41.55	136.3	93	5	1
162	41.84	137.3	339	6	0
163	42.03	137.9	342	9	0
164	42.32	138.8	12	3	0
165	42.83	140.5	353	4	0
166	43.10	141.4	12	5	0
167	43.27	142.0	18	3	0
168	44.90	147.3	173	4	0
169	45.38	148.9	214	9	0
170	47.74	156.6	123	8	1
171	49.20	161.4	19	3	1
172	49.46	162.3	283	4	0
173	50.22	164.8	157	5	0
174	50.63	166.1	8	2	1
175	53.17	174.4	49	9	0
176	54.03	177.3	329	11	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0206
Stoller
Jan. 8, 2002

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
177	54.39	178.5	244	2	1
178	54.45	178.6	155	9	1
179	54.56	179.0	184	5	1
180	54.71	179.5	17	4	0
181	55.30	181.4	239	6	1
182	55.59	182.4	198	7	1
183	56.09	184.0	175	3	0
184	56.52	185.4	161	8	0
185	56.59	185.7	162	5	1
186	56.92	186.7	0	0	0
187	57.25	187.8	98	2	1
188	57.31	188.0	191	11	1
189	58.35	191.4	15	2	0
190	58.85	193.1	91	3	1
191	58.91	193.3	168	4	0
192	59.52	195.3	235	5	1
193	60.02	196.9	125	17	1
194	60.41	198.2	9	1	1
195	60.51	198.5	215	5	1
196	60.63	198.9	85	7	1
197	60.74	199.3	242	70	1
198	60.77	199.4	237	14	1
199	60.96	200.0	350	13	1
200	61.08	200.4	93	9	2
201	61.16	200.7	312	19	2
202	61.58	202.0	316	5	0
203	61.91	203.1	19	6	0
204	62.36	204.6	111	1	1
205	63.53	208.4	2	6	0
206	63.92	209.7	137	2	0
207	64.76	212.5	11	7	0
208	65.18	213.9	104	3	2
209	65.35	214.4	187	3	1
210	66.09	216.8	23	6	2
211	66.34	217.6	2	10	0
212	66.60	218.5	37	8	0
213	67.00	219.8	1	7	0
214	67.22	220.6	18	4	0
215	67.85	222.6	19	4	0
216	68.27	224.0	351	7	0
217	68.70	225.4	295	3	0
218	68.80	225.7	24	7	0
219	69.07	226.6	39	3	0
220	69.56	228.2	0	7	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0206
Stoller
Jan. 8, 2002

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
221	69.88	229.3	345	7	0
222	69.99	229.6	19	3	0
223	70.29	230.6	17	8	0
224	70.49	231.3	0	0	0
225	71.04	233.1	357	7	0
226	71.28	233.9	64	8	0
227	71.47	234.5	122	0	1
228	71.62	235.0	21	6	0
229	71.70	235.2	89	9	0
230	71.75	235.4	5	5	0
231	71.91	235.9	6	8	0
232	72.02	236.3	35	6	0
233	72.10	236.6	10	9	0
234	72.25	237.0	24	3	1
235	72.33	237.3	92	5	1
236	72.38	237.5	8	5	1
237	72.41	237.6	4	5	0
238	72.60	238.2	23	3	1
239	72.73	238.6	24	4	0
240	72.85	239.0	19	5	0
241	72.95	239.4	32	3	0
242	73.08	239.8	35	5	0
243	73.14	240.0	38	3	0
244	73.37	240.7	7	8	0
245	73.44	240.9	0	0	0
246	73.53	241.2	35	6	0
247	73.93	242.5	356	4	0
248	74.12	243.2	18	8	0
249	74.34	243.9	11	4	0
250	74.55	244.6	127	0	1
251	74.84	245.6	20	8	0
252	75.04	246.2	336	6	0
253	75.14	246.5	18	5	0
254	75.49	247.7	6	7	0
255	75.52	247.8	347	7	0
256	75.73	248.5	13	9	0
257	75.92	249.1	347	9	0
258	76.00	249.3	341	5	0
259	76.28	250.3	3	2	0
260	76.33	250.4	7	3	0
261	76.53	251.1	1	3	0
262	76.62	251.4	11	3	0
263	77.11	253.0	18	6	0
264	77.37	253.8	11	5	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0206
Stoller
Jan. 8, 2002

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
265	77.57	254.5	113	0	1
266	77.72	255.0	11	4	0
267	77.92	255.6	3	7	1
268	78.06	256.1	96	5	1
269	78.10	256.2	137	7	1
270	78.16	256.4	148	2	1
271	78.20	256.6	359	7	1
272	78.29	256.9	65	6	1
273	78.46	257.4	128	7	0
274	78.53	257.6	9	10	0
275	78.57	257.8	7	6	0
276	78.67	258.1	0	0	0
277	78.78	258.5	5	2	0
278	79.10	259.5	62	0	0
279	79.20	259.8	8	6	0
280	79.43	260.6	10	7	1
281	79.54	261.0	5	6	0
282	79.69	261.4	10	5	0
283	79.98	262.4	339	4	0
284	80.08	262.7	335	5	0
285	80.17	263.0	348	0	0
286	80.31	263.5	9	13	0
287	80.41	263.8	4	13	0
288	80.62	264.5	15	4	1
289	80.77	265.0	8	11	0
290	80.86	265.3	342	5	0
291	81.22	266.5	18	8	1
292	81.33	266.8	21	10	0
293	81.97	268.9	12	3	0
294	82.08	269.3	11	3	0
295	82.50	270.7	21	4	1
296	82.50	270.7	16	3	0
297	82.80	271.6	347	9	1
298	83.11	272.7	334	5	0
299	83.46	273.8	12	5	0
300	83.50	273.9	0	0	0
301	83.63	274.4	308	2	1
302	83.74	274.7	39	7	0
303	83.97	275.5	49	7	1
304	84.11	276.0	10	3	0
305	84.29	276.6	98	8	0
306	84.54	277.4	5	10	0
307	84.88	278.5	3	8	0
308	84.94	278.7	327	6	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0206
Stoller
Jan. 8, 2002

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
309	85.01	278.9	12	10	0
310	85.24	279.7	4	11	1
311	85.27	279.8	8	5	1
312	85.33	280.0	10	6	1
313	85.58	280.8	8	5	0
314	85.80	281.5	63	4	0
315	85.84	281.6	4	6	0
316	85.84	281.6	24	4	0
317	85.96	282.0	38	3	1
318	86.06	282.4	0	4	0
319	86.26	283.0	14	7	0
320	86.36	283.3	4	6	0
321	86.41	283.5	81	4	0
322	86.70	284.4	17	9	1
323	86.81	284.8	18	7	0
324	86.83	284.9	34	6	0
325	86.96	285.3	8	11	0
326	87.11	285.8	323	2	0
327	87.28	286.3	346	5	0
328	87.41	286.8	9	3	0
329	87.46	286.9	12	5	0
330	87.60	287.4	1	5	0
331	87.68	287.7	21	7	0
332	87.82	288.1	33	6	0
333	87.90	288.4	350	5	0
334	88.05	288.9	6	3	0
335	88.30	289.7	23	5	0
336	88.33	289.8	345	3	0
337	88.50	290.4	14	4	0
338	88.73	291.1	175	3	1
339	88.82	291.4	22	3	0
340	88.95	291.8	357	4	0
341	89.04	292.1	359	5	0
342	89.25	292.8	13	5	0
343	89.42	293.4	85	7	0
344	89.73	294.4	180	13	1
345	90.02	295.3	258	2	0
346	90.25	296.1	6	6	0
347	90.30	296.3	28	5	0
348	90.36	296.5	21	5	0
349	90.85	298.1	318	8	0
350	91.03	298.7	14	2	1
351	91.19	299.2	9	15	1
352	91.42	299.9	144	3	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0205
Stoller
Dec 9, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
1	7.89	25.9	282	39	1
2	8.04	26.4	201	16	0
3	8.12	26.6	180	8	0
4	8.19	26.9	267	30	1
5	8.25	27.1	154	7	1
6	8.31	27.3	313	17	1
7	8.35	27.4	231	17	1
8	8.43	27.7	258	26	1
9	8.48	27.8	259	27	1
10	8.52	27.9	280	31	1
11	8.65	28.4	223	40	1
12	8.74	28.7	233	45	1
13	8.83	29.0	245	28	1
14	9.06	29.7	346	37	1
15	9.14	30.0	350	27	1
16	9.19	30.2	174	81	1
17	9.20	30.2	323	22	1
18	9.25	30.3	356	13	1
19	9.30	30.5	2	20	1
20	9.35	30.7	44	27	1
21	9.40	30.8	6	24	1
22	9.49	31.1	355	21	1
23	9.56	31.4	352	27	1
24	9.58	31.4	348	20	1
25	9.62	31.6	1	16	2
26	9.68	31.8	99	16	1
27	9.70	31.8	8	20	2
28	9.76	32.0	312	13	3
29	9.78	32.1	118	21	2
30	9.86	32.4	80	12	2
31	9.93	32.6	6	18	2
32	9.95	32.7	189	42	2
33	10.04	32.9	4	12	2
34	10.09	33.1	32	14	2
35	10.13	33.2	37	6	1
36	10.15	33.3	27	8	1
37	10.20	33.5	6	5	2
38	10.24	33.6	359	21	2
39	10.28	33.7	292	8	2
40	10.35	34.0	354	12	1
41	10.38	34.1	37	5	2
42	10.54	34.6	33	5	1
43	10.61	34.8	15	13	2
44	10.67	35.0	4	10	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0205
Stoller
Dec 9, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
45	10.72	35.2	5	10	2
46	10.81	35.5	11	5	2
47	10.88	35.7	25	10	1
48	10.93	35.9	11	18	1
49	11.03	36.2	7	7	1
50	11.16	36.6	1	7	2
51	11.29	37.0	1	5	2
52	11.34	37.2	70	7	1
53	11.45	37.6	5	6	2
54	11.50	37.7	23	11	1
55	11.55	37.9	11	21	1
56	11.64	38.2	272	3	1
57	11.75	38.5	61	14	1
58	11.80	38.7	8	3	1
59	11.81	38.8	4	19	1
60	11.83	38.8	175	3	2
61	11.88	39.0	171	22	3
62	11.92	39.1	213	13	1
63	11.95	39.2	140	8	1
64	11.99	39.3	1	9	1
65	12.02	39.4	23	9	1
66	12.11	39.7	142	0	2
67	12.21	40.1	28	13	2
68	12.30	40.4	5	7	2
69	12.40	40.7	344	9	2
70	12.45	40.9	359	5	1
71	12.51	41.1	314	6	2
72	12.63	41.4	357	1	3
73	12.75	41.8	334	12	1
74	12.97	42.6	39	5	1
75	13.31	43.7	13	4	0
76	13.46	44.2	15	4	0
77	14.04	46.1	17	5	0
78	14.19	46.5	4	7	1
79	14.34	47.1	32	7	1
80	14.63	48.0	33	12	0
81	14.74	48.4	6	6	0
82	15.01	49.2	66	38	1
83	15.40	50.5	73	37	1
84	15.55	51.0	80	26	1
85	15.79	51.8	83	49	1
86	16.22	53.2	53	10	1
87	16.34	53.6	288	14	1
88	16.44	54.0	353	9	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0205
Stoller
Dec 9, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
89	16.55	54.3	43	9	1
90	16.95	55.6	85	24	0
91	17.21	56.5	14	11	0
92	17.38	57.0	12	8	0
93	17.80	58.4	38	9	0
94	17.96	58.9	312	7	1
95	18.00	59.1	140	10	1
96	18.13	59.5	100	15	1
97	18.30	60.0	207	8	0
98	18.37	60.3	157	13	0
99	18.59	61.0	97	16	0
100	18.77	61.6	74	8	0
101	18.92	62.1	192	13	0
102	19.00	62.4	322	13	0
103	19.39	63.6	23	18	0
104	19.52	64.0	0	11	0
105	19.64	64.5	23	16	0
106	19.77	64.9	14	5	0
107	20.15	66.1	72	10	0
108	20.20	66.3	34	17	0
109	20.20	66.3	62	25	0
110	20.29	66.6	240	20	0
111	20.88	68.5	305	15	0
112	21.02	69.0	358	8	0
113	21.18	69.5	331	5	0
114	21.25	69.7	157	11	0
115	21.35	70.0	283	14	0
116	21.63	71.0	159	22	0
117	22.06	72.4	305	17	0
118	22.18	72.8	26	6	0
119	22.38	73.4	349	16	0
120	22.38	73.4	356	4	0
121	22.50	73.8	31	10	0
122	24.05	78.9	50	8	0
123	24.35	79.9	30	14	0
124	24.48	80.3	208	9	0
125	27.32	89.6	22	6	0
126	34.46	113.1	338	8	0
127	34.96	114.7	177	7	0
128	36.08	118.4	125	8	0
129	36.25	118.9	78	9	0
130	36.37	119.3	19	11	0
131	43.37	142.3	215	7	0
132	43.78	143.7	287	21	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0205
Stoller
Dec 9, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
133	43.84	143.8	40	7	1
134	44.13	144.8	129	4	0
135	44.14	144.8	66	5	0
136	50.19	164.7	218	7	0
137	50.22	164.8	37	13	0
138	50.25	164.9	165	13	0
139	50.78	166.6	115	11	0
140	52.81	173.3	44	11	0
141	53.08	174.2	16	4	0
142	53.48	175.5	45	4	0
143	53.75	176.3	16	1	0
144	54.06	177.4	23	6	0
145	54.21	177.8	230	5	0
146	54.37	178.4	21	4	0
147	54.84	179.9	311	11	0
148	55.00	180.5	66	4	0
149	55.14	180.9	94	5	0
150	55.19	181.1	9	4	0
151	55.39	181.7	48	5	0
152	55.55	182.3	179	5	0
153	55.73	182.9	164	3	0
154	56.39	185.0	228	7	0
155	56.66	185.9	11	5	0
156	57.10	187.3	4	5	0
157	57.54	188.8	63	9	0
158	57.67	189.2	169	5	0
159	57.87	189.9	21	6	0
160	57.94	190.1	3	10	0
161	58.42	191.7	18	8	0
162	58.53	192.0	52	5	0
163	58.74	192.7	61	7	0
164	59.46	195.1	202	8	0
165	60.39	198.1	18	9	0
166	60.49	198.5	16	5	0
167	61.30	201.1	2	6	0
168	61.40	201.4	10	11	0
169	61.74	202.6	251	6	0
170	61.77	202.7	218	13	0
171	61.93	203.2	256	14	0
172	62.02	203.5	306	15	0
173	63.98	209.9	9	3	0
174	64.28	210.9	11	5	0
175	64.42	211.4	21	11	0
176	64.75	212.4	297	14	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0205
Stoller
Dec 9, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
177	64.86	212.8	269	16	0
178	65.26	214.1	112	3	0
179	65.43	214.7	309	7	0
180	65.65	215.4	197	15	0
181	66.11	216.9	7	5	0
182	66.45	218.0	295	3	0
183	66.63	218.6	261	12	0
184	66.95	219.7	291	9	0
185	67.69	222.1	23	5	0
186	67.98	223.0	321	4	0
187	68.32	224.1	4	2	0
188	68.68	225.3	215	4	0
189	68.88	226.0	273	5	0
190	69.13	226.8	5	6	0
191	69.66	228.5	265	17	0
192	69.72	228.8	5	1	0
193	70.77	232.2	174	7	0
194	71.82	235.6	27	6	0
195	72.06	236.4	14	5	0
196	72.82	238.9	227	4	0
197	73.00	239.5	19	2	0
198	73.48	241.1	61	7	0
199	74.07	243.0	146	13	0
200	74.40	244.1	256	6	0
201	74.56	244.6	141	2	0
202	75.02	246.1	302	6	0
203	75.25	246.9	20	6	0
204	78.19	256.5	204	3	1
205	78.51	257.6	14	5	1
206	78.63	258.0	62	3	0
207	78.84	258.7	134	1	0
208	79.24	260.0	211	7	0
209	79.34	260.3	220	5	0
210	79.53	260.9	238	11	0
211	80.31	263.5	11	3	0
212	80.46	264.0	222	1	0
213	80.67	264.7	354	6	1
214	80.83	265.2	18	3	0
215	81.20	266.4	253	8	0
216	81.70	268.1	327	2	0
217	81.84	268.5	158	4	0
218	82.24	269.8	279	5	0
219	82.35	270.2	37	4	0
220	82.51	270.7	177	4	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0205
Stoller
Dec 9, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
221	83.29	273.3	96	6	0
222	83.41	273.6	181	5	0
223	83.82	275.0	145	7	0
224	83.94	275.4	164	5	0
225	84.03	275.7	11	5	0
226	84.19	276.2	211	13	0
227	84.30	276.6	5	4	0
228	84.44	277.0	183	3	0
229	84.97	278.8	268	8	0
230	85.12	279.3	194	10	1
231	85.19	279.5	337	10	0
232	85.23	279.6	89	4	0
233	85.26	279.7	298	5	0
234	85.30	279.9	164	7	1
235	85.92	281.9	316	15	0
236	86.05	282.3	290	17	0
237	86.12	282.5	3	13	0
238	86.21	282.8	329	9	1
239	86.31	283.2	268	7	0
240	86.34	283.3	182	9	0
241	86.57	284.0	9	7	0
242	86.62	284.2	21	4	0
243	86.72	284.5	184	10	1
244	86.79	284.7	286	8	0
245	87.13	285.9	3	12	1
246	87.29	286.4	269	12	1
247	87.45	286.9	341	9	1
248	87.51	287.1	247	15	1
249	87.56	287.3	0	0	1
250	87.58	287.3	334	4	1
251	87.62	287.5	16	6	1
252	87.66	287.6	292	4	0
253	87.95	288.5	328	5	1
254	87.98	288.7	94	1	0
255	88.01	288.7	215	2	1
256	88.15	289.2	120	5	1
257	88.21	289.4	310	4	1
258	88.26	289.6	16	1	0
259	88.30	289.7	318	2	0
260	88.46	290.2	192	4	1
261	88.48	290.3	131	4	1
262	88.50	290.4	129	5	1
263	88.61	290.7	338	2	0
264	88.72	291.1	16	1	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0205
Stoller
Dec 9, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
265	88.85	291.5	160	3	0
266	88.88	291.6	318	3	1
267	89.02	292.1	24	2	0
268	89.09	292.3	227	5	0
269	89.24	292.8	20	5	0
270	89.43	293.4	36	2	0
271	89.45	293.5	38	5	0
272	89.50	293.6	266	7	1
273	89.60	294.0	16	3	1
274	89.74	294.4	33	11	0
275	89.91	295.0	110	7	1
276	90.00	295.3	317	15	1
277	90.12	295.7	245	21	1
278	90.21	296.0	105	14	1
279	90.28	296.2	272	13	1
280	90.32	296.3	249	8	1
281	90.41	296.6	335	7	1
282	90.50	296.9	276	1	1
283	90.61	297.3	16	4	1
284	90.85	298.1	260	5	1
285	91.00	298.6	230	8	1
286	91.15	299.1	91	3	1
287	91.23	299.3	46	5	0
288	91.28	299.5	253	21	1
289	91.30	299.6	269	18	1
290	91.33	299.6	334	7	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
1	7.96	26.1	166	25	1
2	8.03	26.3	303	17	1
3	8.05	26.4	130	13	1
4	8.14	26.7	289	11	1
5	8.18	26.9	305	22	1
6	8.21	26.9	341	13	1
7	8.25	27.1	353	19	1
8	8.35	27.4	160	15	1
9	8.39	27.5	258	20	1
10	8.47	27.8	64	19	1
11	8.52	28.0	339	23	1
12	8.57	28.1	335	18	1
13	8.65	28.4	237	29	1
14	8.71	28.6	112	13	1
15	8.77	28.8	179	13	1
16	8.85	29.0	342	25	1
17	8.92	29.3	266	20	1
18	8.96	29.4	301	13	1
19	9.01	29.6	160	18	1
20	9.07	29.8	262	23	1
21	9.14	30.0	51	18	1
22	9.26	30.4	131	18	1
23	9.31	30.6	161	33	1
24	9.38	30.8	227	34	1
25	9.48	31.1	256	12	1
26	9.61	31.5	148	40	1
27	9.65	31.7	33	13	1
28	9.70	31.8	353	7	1
29	9.74	32.0	168	15	1
30	9.81	32.2	140	26	1
31	9.89	32.4	203	15	1
32	9.90	32.5	316	12	1
33	9.96	32.7	174	27	1
34	10.07	33.1	187	16	1
35	10.17	33.4	6	14	1
36	10.21	33.5	347	12	1
37	10.26	33.7	296	10	1
38	10.29	33.8	27	6	1
39	10.31	33.8	11	8	1
40	10.36	34.0	1	8	1
41	10.41	34.1	356	8	1
42	10.45	34.3	352	15	1
43	10.49	34.4	331	12	1
44	10.51	34.5	342	9	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
45	10.53	34.6	225	9	1
46	10.59	34.8	349	13	1
47	10.61	34.8	34	14	1
48	10.69	35.1	138	11	2
49	10.73	35.2	89	11	1
50	10.77	35.3	358	8	1
51	10.81	35.5	11	7	1
52	10.91	35.8	198	7	1
53	10.98	36.0	17	12	1
54	11.04	36.2	326	10	1
55	11.09	36.4	353	12	0
56	11.24	36.9	348	9	1
57	11.29	37.0	300	15	1
58	11.32	37.1	22	13	1
59	11.38	37.3	343	12	1
60	11.44	37.5	77	10	1
61	11.50	37.7	212	9	1
62	11.55	37.9	8	11	1
63	11.59	38.0	18	10	1
64	11.62	38.1	289	15	1
65	11.74	38.5	331	11	1
66	11.77	38.6	24	11	1
67	11.84	38.9	11	14	1
68	11.90	39.0	195	14	1
69	11.96	39.3	141	31	1
70	11.99	39.3	5	1	0
71	12.10	39.7	307	8	0
72	12.18	40.0	330	7	1
73	12.21	40.1	19	6	1
74	12.23	40.1	240	18	1
75	12.36	40.6	354	13	1
76	12.47	40.9	358	8	1
77	12.54	41.1	124	9	1
78	12.64	41.5	352	11	1
79	12.67	41.6	329	12	1
80	12.73	41.8	2	8	1
81	12.80	42.0	312	11	1
82	12.86	42.2	14	9	2
83	12.93	42.4	315	9	1
84	12.98	42.6	311	8	1
85	13.04	42.8	347	7	1
86	13.16	43.2	113	10	1
87	13.16	43.2	336	23	1
88	13.30	43.6	350	6	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
89	13.36	43.8	28	4	1
90	13.45	44.1	344	12	1
91	13.52	44.4	47	11	1
92	13.64	44.8	343	6	1
93	13.70	45.0	13	11	2
94	13.81	45.3	345	9	1
95	13.83	45.4	333	10	1
96	13.95	45.8	10	13	1
97	14.18	46.5	326	9	1
98	14.34	47.0	24	6	1
99	14.54	47.7	354	8	1
100	14.58	47.9	350	6	0
101	14.62	48.0	0	6	0
102	14.82	48.6	11	9	0
103	15.05	49.4	351	9	0
104	15.09	49.5	24	5	0
105	15.22	49.9	356	9	0
106	15.37	50.4	347	8	0
107	15.51	50.9	3	10	0
108	15.64	51.3	359	11	0
109	15.74	51.6	358	9	0
110	15.78	51.8	348	10	0
111	15.99	52.5	347	16	1
112	16.43	53.9	350	8	0
113	16.56	54.3	330	16	1
114	16.57	54.4	23	10	1
115	16.89	55.4	343	10	0
116	17.02	55.8	34	18	0
117	17.88	58.7	28	11	0
118	17.98	59.0	33	9	0
119	18.59	61.0	354	6	0
120	18.76	61.6	2	9	0
121	19.13	62.8	138	35	0
122	19.20	63.0	146	37	0
123	19.39	63.6	167	15	0
124	19.59	64.3	165	5	1
125	19.77	64.9	72	10	1
126	19.91	65.3	15	3	1
127	20.51	67.3	9	5	1
128	20.67	67.8	16	7	0
129	20.83	68.3	14	9	1
130	20.96	68.8	12	6	0
131	21.13	69.3	353	11	0
132	21.16	69.4	38	6	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
133	21.26	69.8	349	6	0
134	21.32	70.0	51	8	0
135	21.45	70.4	349	5	0
136	21.74	71.3	35	4	0
137	21.96	72.1	337	4	0
138	22.02	72.2	14	6	0
139	22.06	72.4	17	5	0
140	22.31	73.2	50	5	0
141	22.36	73.4	20	3	0
142	22.48	73.8	15	6	0
143	22.57	74.1	45	9	0
144	22.73	74.6	128	4	0
145	22.77	74.7	89	4	0
146	23.03	75.6	176	12	0
147	23.31	76.5	123	13	0
148	23.77	78.0	106	23	1
149	24.03	78.8	84	25	1
150	24.34	79.9	98	23	1
151	24.42	80.1	357	6	0
152	24.74	81.2	125	10	0
153	24.91	81.7	31	4	0
154	25.02	82.1	29	3	0
155	25.12	82.4	6	4	0
156	25.66	84.2	13	4	0
157	25.76	84.5	336	5	0
158	25.84	84.8	6	6	0
159	26.07	85.5	47	6	0
160	26.25	86.1	346	6	0
161	26.48	86.9	342	2	0
162	26.53	87.0	4	7	0
163	26.67	87.5	7	10	0
164	26.76	87.8	11	9	0
165	27.35	89.7	323	6	0
166	27.83	91.3	261	4	0
167	27.96	91.7	276	7	0
168	28.00	91.9	225	7	0
169	28.53	93.6	4	11	0
170	28.78	94.4	350	5	0
171	29.24	95.9	336	7	1
172	29.39	96.4	31	7	0
173	29.78	97.7	353	9	0
174	30.14	98.9	357	8	0
175	30.69	100.7	10	8	0
176	31.10	102.0	6	8	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
177	31.63	103.8	17	14	0
178	31.67	103.9	14	15	1
179	32.13	105.4	357	5	0
180	32.53	106.7	343	10	0
181	33.09	108.6	348	7	1
182	33.24	109.1	32	8	0
183	34.60	113.5	348	8	0
184	34.75	114.0	11	7	0
185	35.67	117.0	12	8	0
186	35.70	117.1	18	9	0
187	35.73	117.2	11	9	0
188	36.64	120.2	7	6	0
189	37.16	121.9	322	9	0
190	37.34	122.5	20	8	0
191	37.79	124.0	10	4	0
192	37.88	124.3	4	7	0
193	38.58	126.6	360	7	0
194	38.80	127.3	29	6	2
195	39.31	129.0	23	7	0
196	39.36	129.1	35	9	0
197	39.40	129.3	27	11	0
198	39.59	129.9	56	12	0
199	39.67	130.1	55	10	0
200	39.72	130.3	80	9	0
201	39.78	130.5	96	11	0
202	39.98	131.2	80	13	0
203	40.24	132.0	324	8	1
204	40.75	133.7	359	8	0
205	40.86	134.0	358	10	0
206	41.16	135.0	127	10	0
207	41.25	135.4	351	7	0
208	41.33	135.6	10	5	0
209	41.36	135.7	353	6	0
210	41.39	135.8	5	5	0
211	41.48	136.1	342	8	0
212	41.64	136.6	344	12	0
213	41.72	136.9	356	10	0
214	41.82	137.2	316	10	0
215	42.05	138.0	7	7	0
216	42.25	138.6	353	11	0
217	42.37	139.0	335	5	0
218	42.61	139.8	340	8	0
219	42.73	140.2	346	5	0
220	43.10	141.4	335	11	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
221	43.14	141.5	287	10	0
222	43.22	141.8	313	16	0
223	43.26	141.9	316	18	0
224	43.30	142.1	348	7	0
225	43.38	142.3	3	14	0
226	43.52	142.8	32	8	0
227	43.58	143.0	10	7	0
228	43.62	143.1	8	10	0
229	43.70	143.4	351	9	0
230	43.88	144.0	28	5	0
231	43.96	144.2	347	7	0
232	44.07	144.6	337	6	0
233	44.23	145.1	137	0	1
234	44.26	145.2	350	9	0
235	44.28	145.3	1	7	0
236	44.35	145.5	23	7	0
237	44.50	146.0	40	5	0
238	44.67	146.6	19	5	0
239	44.90	147.3	2	6	0
240	44.97	147.6	335	7	1
241	45.01	147.7	333	8	1
242	45.06	147.9	20	6	0
243	45.13	148.1	31	6	0
244	45.42	149.0	6	9	0
245	45.53	149.4	29	5	0
246	45.67	149.8	5	10	0
247	45.78	150.2	3	5	0
248	45.84	150.4	10	5	0
249	45.96	150.8	7	5	0
250	46.21	151.6	8	7	0
251	46.31	152.0	7	17	0
252	46.43	152.3	2	4	0
253	46.54	152.7	9	10	0
254	46.58	152.8	2	7	0
255	46.64	153.0	4	8	0
256	46.80	153.5	20	5	0
257	46.95	154.0	347	6	0
258	47.18	154.8	33	8	0
259	47.29	155.1	6	4	1
260	47.44	155.6	336	8	0
261	47.50	155.8	352	6	0
262	47.69	156.5	357	8	0
263	47.80	156.8	357	7	0
264	48.12	157.9	2	7	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
265	48.18	158.1	354	11	0
266	48.53	159.2	32	8	0
267	48.80	160.1	9	11	0
268	49.08	161.0	6	9	0
269	49.12	161.2	18	10	0
270	49.44	162.2	13	6	0
271	49.49	162.4	7	9	0
272	49.59	162.7	343	9	0
273	49.71	163.1	332	7	0
274	49.86	163.6	357	11	0
275	50.08	164.3	17	8	0
276	50.73	166.5	11	8	0
277	50.85	166.8	26	8	0
278	51.07	167.5	24	10	0
279	51.12	167.7	25	10	0
280	51.49	168.9	11	4	0
281	51.56	169.2	5	8	0
282	51.62	169.4	18	5	0
283	51.86	170.2	19	11	1
284	53.52	175.6	336	7	0
285	53.65	176.0	5	7	0
286	55.31	181.5	1	6	0
287	55.38	181.7	23	6	0
288	55.76	182.9	183	1	0
289	56.70	186.0	357	6	0
290	57.22	187.7	9	8	0
291	57.47	188.6	29	2	0
292	57.55	188.8	10	3	0
293	59.35	194.7	18	7	1
294	59.60	195.5	343	16	1
295	59.76	196.1	347	8	1
296	60.62	198.9	11	6	0
297	63.53	208.4	16	5	0
298	63.68	208.9	15	7	0
299	63.74	209.1	35	7	0
300	63.79	209.3	12	8	0
301	63.88	209.6	20	11	0
302	64.04	210.1	14	7	0
303	64.12	210.4	16	13	0
304	64.22	210.7	10	9	0
305	64.33	211.1	24	5	0
306	64.59	211.9	1	7	0
307	64.69	212.2	46	5	1
308	64.78	212.5	17	7	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
309	64.84	212.7	14	3	0
310	64.90	212.9	339	9	0
311	64.95	213.1	5	7	0
312	64.97	213.2	358	6	0
313	65.12	213.7	357	9	0
314	65.59	215.2	234	4	0
315	65.76	215.8	1	5	0
316	65.86	216.1	357	6	0
317	65.97	216.4	18	7	0
318	66.04	216.7	13	6	0
319	66.12	216.9	11	4	0
320	66.20	217.2	32	6	0
321	66.24	217.3	4	6	0
322	66.28	217.5	354	9	0
323	66.34	217.6	20	6	0
324	66.48	218.1	6	10	0
325	66.51	218.2	20	7	0
326	66.55	218.4	17	6	0
327	66.60	218.5	9	8	0
328	66.72	218.9	10	8	0
329	66.80	219.2	13	7	0
330	66.86	219.4	11	8	0
331	66.99	219.8	12	11	0
332	67.28	220.7	3	7	0
333	67.33	220.9	17	8	0
334	67.48	221.4	4	7	0
335	67.55	221.6	17	9	0
336	67.60	221.8	14	4	0
337	67.65	221.9	27	7	0
338	67.68	222.1	15	5	0
339	67.76	222.3	20	8	0
340	67.94	222.9	358	5	0
341	67.98	223.0	11	7	0
342	68.04	223.2	26	5	0
343	68.17	223.7	14	12	0
344	68.22	223.8	69	10	0
345	68.26	224.0	13	9	0
346	68.41	224.4	32	5	0
347	68.53	224.9	336	10	0
348	68.70	225.4	108	7	1
349	68.77	225.6	14	4	0
350	68.90	226.0	1	7	1
351	69.15	226.9	21	6	0
352	69.34	227.5	26	8	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
353	69.40	227.7	12	11	0
354	69.46	227.9	4	7	0
355	69.53	228.1	20	7	0
356	69.59	228.3	9	8	0
357	69.69	228.6	32	4	1
358	69.78	228.9	331	8	0
359	70.09	230.0	16	7	0
360	70.22	230.4	31	7	0
361	70.25	230.5	18	10	0
362	70.30	230.6	356	6	1
363	70.37	230.9	10	6	0
364	70.41	231.0	304	7	0
365	70.54	231.4	8	7	0
366	70.66	231.8	347	6	0
367	70.87	232.5	26	4	0
368	70.91	232.6	14	5	0
369	70.95	232.8	36	4	0
370	71.04	233.1	11	6	0
371	71.10	233.3	17	7	0
372	71.14	233.4	13	10	0
373	71.20	233.6	7	9	0
374	71.40	234.2	21	8	0
375	71.57	234.8	4	5	0
376	71.82	235.6	6	6	0
377	71.90	235.9	170	11	1
378	72.02	236.3	6	10	0
379	72.21	236.9	5	8	0
380	72.36	237.4	16	6	0
381	72.68	238.5	1	5	0
382	72.94	239.3	34	5	0
383	73.11	239.9	19	7	0
384	73.14	240.0	13	7	0
385	73.18	240.1	13	5	0
386	73.26	240.4	353	7	0
387	73.33	240.6	14	8	0
388	73.40	240.8	20	9	0
389	73.50	241.1	21	6	0
390	73.56	241.4	11	7	0
391	73.62	241.5	11	8	0
392	73.65	241.6	190	6	1
393	73.68	241.7	17	10	0
394	73.71	241.8	204	4	1
395	73.72	241.9	16	7	0
396	73.98	242.7	340	9	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
397	74.13	243.2	23	6	0
398	74.26	243.6	11	9	0
399	74.32	243.8	60	8	0
400	74.34	243.9	87	4	1
401	74.42	244.2	34	7	0
402	74.49	244.4	18	6	0
403	74.53	244.5	11	11	0
404	74.59	244.7	6	8	0
405	74.64	244.9	21	5	0
406	74.76	245.3	8	3	0
407	74.84	245.5	333	6	0
408	74.97	246.0	357	7	0
409	75.04	246.2	11	6	0
410	75.09	246.4	352	10	0
411	75.14	246.5	10	6	0
412	75.21	246.8	21	5	0
413	75.29	247.0	82	9	1
414	75.31	247.1	67	7	1
415	75.37	247.3	18	11	0
416	75.49	247.7	10	6	0
417	75.63	248.1	3	4	0
418	75.68	248.3	48	6	0
419	75.86	248.9	13	4	0
420	75.90	249.0	64	8	0
421	75.95	249.2	20	8	0
422	76.06	249.5	15	9	0
423	76.12	249.8	40	7	0
424	76.15	249.8	43	7	1
425	76.21	250.0	52	7	1
426	76.27	250.2	30	5	0
427	76.42	250.7	259	14	1
428	76.54	251.1	42	12	1
429	76.60	251.3	36	5	0
430	76.77	251.9	14	7	0
431	76.94	252.4	193	24	1
432	77.01	252.7	31	5	0
433	77.08	252.9	22	3	1
434	77.14	253.1	353	2	1
435	77.21	253.3	29	6	0
436	77.31	253.7	16	5	0
437	77.39	253.9	44	8	0
438	77.44	254.1	11	8	0
439	77.57	254.5	11	11	0
440	77.67	254.8	14	3	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
441	77.71	255.0	340	12	0
442	77.89	255.6	12	6	0
443	78.03	256.0	40	8	0
444	78.34	257.0	13	7	0
445	78.75	258.4	114	6	0
446	78.85	258.7	13	5	0
447	78.88	258.8	10	6	0
448	78.90	258.9	16	7	0
449	79.22	259.9	17	5	0
450	79.35	260.4	23	8	0
451	79.45	260.7	22	7	0
452	79.73	261.6	17	5	0
453	79.82	261.9	359	9	0
454	79.93	262.3	6	8	0
455	79.98	262.4	22	1	1
456	80.05	262.6	21	5	1
457	80.37	263.7	16	7	0
458	80.99	265.7	20	3	1
459	81.52	267.5	347	7	1
460	81.68	268.0	324	4	0
461	82.09	269.3	341	7	1
462	82.90	272.0	27	5	1
463	83.02	272.4	352	4	0
464	83.25	273.1	11	6	0
465	83.48	273.9	360	8	0
466	83.89	275.2	214	4	0
467	84.01	275.6	204	2	1
468	84.11	276.0	27	2	0
469	84.51	277.3	4	5	0
470	84.61	277.6	9	5	0
471	84.68	277.8	18	4	0
472	84.86	278.4	354	7	0
473	85.24	279.7	49	3	1
474	85.53	280.6	352	10	1
475	85.62	280.9	23	3	1
476	85.98	282.1	356	6	0
477	86.11	282.5	7	8	1
478	86.44	283.6	337	9	0
479	86.48	283.7	349	5	1
480	86.62	284.2	352	5	1
481	86.72	284.5	351	5	1
482	86.94	285.2	334	3	0
483	86.94	285.2	351	4	1
484	87.01	285.5	14	7	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
485	87.09	285.7	346	7	0
486	87.13	285.9	348	7	0
487	87.28	286.4	355	9	0
488	87.44	286.9	339	7	0
489	87.67	287.6	20	8	0
490	87.91	288.4	9	7	0
491	87.99	288.7	29	4	0
492	88.18	289.3	11	8	0
493	88.54	290.5	357	7	0
494	88.65	290.9	10	9	1
495	88.85	291.5	359	6	0
496	89.00	292.0	16	8	0
497	89.17	292.6	16	7	0
498	89.26	292.9	170	10	1
499	89.35	293.1	195	5	1
500	89.42	293.4	12	6	0
501	90.06	295.5	9	6	0
502	90.42	296.6	359	2	1
503	90.60	297.2	31	2	1
504	91.20	299.2	10	6	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0203
Stoller
Dec 10, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
1	9.94	32.6	248	14	1
2	10.04	32.9	239	19	1
3	10.22	33.5	38	12	1
4	10.30	33.8	318	3	1
5	10.37	34.0	255	10	1
6	10.86	35.6	350	14	1
7	11.00	36.1	226	26	1
8	11.11	36.4	5	15	1
9	11.18	36.7	297	11	1
10	11.82	38.8	169	14	1
11	11.96	39.3	171	5	1
12	12.14	39.8	355	16	1
13	12.54	41.1	185	24	1
14	13.12	43.0	333	15	1
15	13.14	43.1	52	6	1
16	13.22	43.4	339	18	1
17	13.37	43.9	28	28	1
18	13.40	44.0	170	27	1
19	13.47	44.2	271	46	1
20	13.48	44.2	128	19	1
21	13.54	44.4	352	84	1
22	13.55	44.5	55	10	2
23	13.61	44.6	168	11	2
24	13.69	44.9	84	22	1
25	13.77	45.2	353	15	2
26	13.80	45.3	124	33	2
27	13.97	45.8	129	15	1
28	14.12	46.3	127	29	1
29	14.22	46.6	98	26	1
30	14.32	47.0	300	31	1
31	14.33	47.0	117	26	1
32	14.35	47.1	131	22	1
33	14.39	47.2	355	28	1
34	14.56	47.8	95	20	2
35	14.93	49.0	282	12	2
36	15.14	49.7	5	5	1
37	15.29	50.2	75	9	1
38	16.95	55.6	206	79	3
39	18.16	59.6	68	10	1
40	20.78	68.2	33	83	3
41	21.63	71.0	315	8	1
42	22.45	73.7	348	7	1
43	24.31	79.8	6	16	1
44	24.74	81.2	12	12	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0203
Stoller
Dec 10, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
45	24.86	81.6	8	17	0
46	25.30	83.0	3	10	0
47	25.53	83.8	334	8	0
48	25.91	85.0	348	13	0
49	27.09	88.9	2	10	0
50	27.96	91.7	4	7	0
51	28.87	94.7	9	10	0
52	29.61	97.2	346	15	0
53	30.14	98.9	346	10	0
54	31.39	103.0	326	9	0
55	31.54	103.5	22	8	0
56	31.87	104.6	348	12	0
57	32.16	105.5	8	8	0
58	33.05	108.4	4	8	0
59	33.38	109.5	326	9	0
60	33.68	110.5	13	9	0
61	34.13	112.0	333	9	0
62	35.00	114.8	334	11	0
63	35.47	116.4	350	7	0
64	35.80	117.4	15	4	0
65	36.42	119.5	34	10	0
66	37.00	121.4	344	9	1
67	38.11	125.0	339	7	0
68	38.67	126.9	9	11	0
69	39.43	129.4	3	15	1
70	40.08	131.5	354	14	1
71	40.68	133.5	334	7	0
72	42.05	138.0	6	9	0
73	43.16	141.6	8	7	0
74	44.09	144.7	19	5	0
75	46.03	151.0	18	2	0
76	46.93	154.0	15	13	0
77	47.82	156.9	0	0	0
78	48.27	158.4	15	5	0
79	50.31	165.1	16	4	0
80	52.11	171.0	36	3	0
81	53.00	173.9	353	12	0
82	54.00	177.2	195	9	1
83	54.89	180.1	18	5	0
84	55.14	180.9	20	6	0
85	55.56	182.3	346	8	0
86	56.37	185.0	6	6	3
87	56.88	186.6	308	8	0
88	57.38	188.2	298	5	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0203
Stoller
Dec 10, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
89	57.93	190.1	27	11	0
90	58.64	192.4	36	7	1
91	58.68	192.5	17	7	1
92	60.45	198.3	0	0	0
93	62.12	203.8	23	2	0
94	62.34	204.5	18	10	1
95	63.23	207.5	0	0	0
96	65.71	215.6	0	0	1
97	65.78	215.8	193	7	1
98	65.79	215.9	13	8	1
99	65.83	216.0	21	10	1
100	65.88	216.1	10	3	1
101	65.97	216.4	6	3	1
102	66.28	217.5	169	4	1
103	66.60	218.5	262	4	1
104	66.91	219.5	187	6	0
105	67.05	220.0	12	3	1
106	67.52	221.5	191	5	1
107	67.64	221.9	165	7	2
108	67.77	222.4	202	13	0
109	67.95	222.9	181	18	0
110	68.08	223.4	148	20	0
111	68.20	223.7	169	16	0
112	69.67	228.6	17	3	1
113	71.63	235.0	31	5	1
114	71.73	235.3	8	6	1
115	71.89	235.9	4	10	1
116	71.98	236.1	3	3	1
117	74.55	244.6	21	9	1
118	75.51	247.7	8	6	1
119	75.54	247.8	21	6	1
120	75.57	247.9	0	0	1
121	75.64	248.2	15	3	1
122	76.43	250.7	330	13	1
123	76.85	252.1	347	3	1
124	76.99	252.6	28	5	1
125	77.01	252.7	16	6	1
126	77.21	253.3	349	6	1
127	77.57	254.5	22	2	1
128	77.64	254.7	22	7	2
129	77.71	255.0	22	5	2
130	78.06	256.1	15	6	1
131	78.28	256.8	20	5	1
132	78.59	257.9	29	10	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0203
Stoller
Dec 10, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
133	78.90	258.9	0	0	1
134	78.96	259.1	4	10	1
135	79.09	259.5	12	8	1
136	79.16	259.7	23	14	1
137	79.27	260.1	36	5	1
138	79.62	261.2	0	0	1
139	79.85	262.0	5	7	3
140	80.02	262.5	10	6	2
141	80.17	263.0	23	4	1
142	80.23	263.2	11	6	2
143	80.60	264.4	10	8	1
144	80.96	265.6	240	3	1
145	81.52	267.4	21	13	1
146	82.48	270.6	9	6	1
147	83.21	273.0	331	3	1
148	83.29	273.3	10	4	1
149	83.38	273.6	0	0	1
150	83.60	274.3	7	12	1
151	84.53	277.3	7	9	1
152	86.03	282.3	16	7	1
153	86.21	282.8	12	6	1
154	86.32	283.2	25	8	1
155	86.89	285.1	104	4	1
156	87.14	285.9	16	7	1
157	87.86	288.3	8	7	1
158	88.16	289.2	28	5	1
159	88.42	290.1	31	11	1
160	88.76	291.2	22	9	1
161	90.03	295.4	36	11	1
162	90.21	296.0	10	6	1
163	90.55	297.1	8	5	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0202
Stoller
Dec 10/11, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
1	9.13	30.0	46	14	1
2	9.18	30.1	164	4	1
3	9.24	30.3	29	8	1
4	9.32	30.6	111	8	2
5	9.37	30.7	70	12	2
6	9.42	30.9	30	10	2
7	9.45	31.0	41	22	1
8	9.50	31.2	347	9	1
9	9.52	31.2	336	15	1
10	9.60	31.5	284	6	1
11	9.63	31.6	294	9	1
12	9.70	31.8	314	9	1
13	9.77	32.1	280	18	2
14	9.84	32.3	353	9	2
15	9.95	32.6	283	28	1
16	9.99	32.8	283	23	1
17	10.04	32.9	200	26	1
18	10.10	33.1	359	21	1
19	10.16	33.3	61	9	2
20	10.24	33.6	23	9	2
21	10.27	33.7	4	8	2
22	10.31	33.8	33	5	1
23	10.33	33.9	15	9	2
24	10.35	34.0	310	9	2
25	10.38	34.1	346	14	2
26	10.41	34.2	311	12	2
27	10.49	34.4	7	22	2
28	10.56	34.6	272	14	1
29	10.62	34.8	83	17	2
30	10.63	34.9	262	20	2
31	10.71	35.1	5	12	2
32	10.74	35.2	6	11	1
33	10.74	35.3	288	22	1
34	10.82	35.5	148	19	2
35	10.84	35.6	8	17	2
36	10.88	35.7	38	8	2
37	10.92	35.8	284	6	2
38	10.97	36.0	20	10	2
39	11.00	36.1	339	12	2
40	11.04	36.2	30	9	2
41	11.09	36.4	3	17	2
42	11.16	36.6	89	7	1
43	11.17	36.7	331	16	2
44	11.24	36.9	10	8	2

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0202
Stoller
Dec 10/11, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
45	11.27	37.0	28	8	1
46	11.34	37.2	357	8	2
47	11.38	37.3	340	10	2
48	11.41	37.4	324	14	1
49	11.46	37.6	344	11	2
50	11.48	37.7	4	10	2
51	11.55	37.9	21	11	2
52	11.58	38.0	36	6	2
53	11.64	38.2	341	6	1
54	11.68	38.3	173	55	1
55	11.70	38.4	11	21	2
56	11.79	38.7	66	5	2
57	11.86	38.9	302	9	1
58	11.91	39.1	76	3	1
59	11.97	39.3	357	10	2
60	12.04	39.5	334	9	1
61	12.08	39.6	1	13	2
62	12.21	40.1	343	14	1
63	12.24	40.2	16	7	1
64	12.26	40.2	356	13	1
65	12.31	40.4	341	10	2
66	12.38	40.6	354	12	1
67	12.44	40.8	345	11	2
68	12.52	41.1	348	6	2
69	12.55	41.2	348	9	1
70	12.56	41.2	358	15	1
71	12.63	41.5	19	20	2
72	12.80	42.0	4	9	1
73	12.86	42.2	36	14	1
74	12.91	42.4	342	12	2
75	12.94	42.5	357	8	1
76	13.01	42.7	145	5	1
77	13.27	43.5	199	40	2
78	13.29	43.6	57	25	1
79	13.30	43.6	322	28	1
80	13.53	44.4	214	12	1
81	14.39	47.2	332	7	0
82	14.94	49.0	339	4	0
83	15.29	50.2	5	7	0
84	15.98	52.4	328	4	0
85	16.82	55.2	0	10	0
86	17.51	57.5	358	8	0
87	18.30	60.0	5	7	0
88	19.94	65.4	336	10	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0202
Stoller
Dec 10/11, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
89	20.24	66.4	357	4	0
90	20.52	67.3	5	12	1
91	20.60	67.6	26	8	1
92	21.83	71.6	349	8	0
93	21.96	72.1	348	12	1
94	24.96	81.9	12	6	0
95	25.23	82.8	357	7	0
96	25.66	84.2	353	7	1
97	26.21	86.0	340	9	0
98	26.86	88.1	347	7	0
99	27.15	89.1	358	5	0
100	27.62	90.6	352	9	0
101	28.40	93.2	4	6	0
102	28.86	94.7	23	5	0
103	29.13	95.6	145	2	1
104	29.48	96.7	173	14	1
105	29.66	97.3	127	4	1
106	30.43	99.9	116	6	1
107	30.60	100.4	133	6	1
108	31.02	101.8	102	4	1
109	31.15	102.2	357	6	1
110	31.40	103.0	157	0	1
111	32.10	105.3	160	8	1
112	32.18	105.6	194	4	1
113	33.49	109.9	27	7	1
114	34.02	111.6	6	9	1
115	35.37	116.0	10	4	1
116	37.00	121.4	311	5	1
117	37.70	123.7	7	8	1
118	37.74	123.8	153	10	1
119	38.20	125.3	2	6	1
120	38.34	125.8	126	6	1
121	38.38	125.9	6	12	1
122	39.27	128.8	11	5	0
123	40.09	131.5	332	7	1
124	40.38	132.5	11	9	0
125	41.04	134.6	355	7	0
126	41.91	137.5	34	9	0
127	42.54	139.6	19	8	0
128	42.63	139.9	356	5	1
129	42.96	141.0	16	5	1
130	43.62	143.1	14	8	3
131	44.19	145.0	28	6	0
132	44.50	146.0	5	8	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0202
Stoller
Dec 10/11, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
133	44.70	146.7	6	5	0
134	45.29	148.6	330	8	1
135	45.52	149.3	7	5	1
136	46.05	151.1	353	5	0
137	46.44	152.4	358	7	0
138	46.88	153.8	16	7	0
139	47.22	154.9	12	6	1
140	47.80	156.8	350	5	0
141	48.43	158.9	352	5	0
142	49.03	160.9	330	8	2
143	49.73	163.2	9	8	0
144	50.04	164.2	19	6	0
145	50.54	165.8	24	8	0
146	51.20	168.0	1	5	0
147	51.62	169.4	351	7	1
148	52.15	171.1	346	5	1
149	52.59	172.5	360	6	0
150	52.98	173.8	7	7	0
151	53.83	176.6	342	8	0
152	54.40	178.5	350	6	0
153	54.85	180.0	6	8	0
154	55.20	181.1	5	7	0
155	55.74	182.9	22	4	0
156	56.17	184.3	342	7	0
157	56.51	185.4	184	2	1
158	57.14	187.5	6	7	0
159	57.84	189.8	7	8	0
160	58.34	191.4	359	5	0
161	58.53	192.0	2	6	0
162	59.04	193.7	332	6	0
163	59.41	194.9	7	6	0
164	59.85	196.4	330	5	0
165	60.79	199.5	346	7	0
166	61.15	200.6	350	7	0
167	62.02	203.5	5	7	0
168	62.76	205.9	2	5	0
169	63.84	209.4	7	6	0
170	64.48	211.6	358	5	0
171	65.61	215.2	197	7	1
172	65.94	216.3	10	9	3
173	66.33	217.6	354	5	0
174	66.62	218.6	353	3	1
175	66.77	219.1	190	25	1
176	66.81	219.2	118	6	1

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0202
Stoller
Dec 10/11, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
177	66.89	219.5	96	7	1
178	66.98	219.8	314	9	1
179	67.02	219.9	306	6	1
180	67.92	222.8	348	4	0
181	68.33	224.2	11	9	0
182	68.86	225.9	332	6	0
183	69.37	227.6	0	6	0
184	69.61	228.4	4	6	0
185	69.70	228.7	5	8	0
186	70.08	229.9	358	7	0
187	70.93	232.7	360	8	0
188	71.46	234.5	348	3	0
189	71.87	235.8	0	6	0
190	72.37	237.4	354	10	0
191	72.60	238.2	354	9	0
192	72.76	238.7	338	7	2
193	73.10	239.8	4	5	1
194	73.72	241.9	356	6	0
195	74.35	243.9	71	4	1
196	75.21	246.8	0	0	0
197	75.56	247.9	10	6	0
198	76.02	249.4	0	0	1
199	76.41	250.7	359	5	1
200	76.48	250.9	11	3	1
201	76.79	251.9	12	3	0
202	76.99	252.6	14	5	0
203	77.46	254.2	337	6	0
204	77.83	255.3	5	5	1
205	77.91	255.6	8	4	2
206	78.08	256.2	8	5	0
207	78.45	257.4	324	4	1
208	78.65	258.0	7	7	0
209	79.73	261.6	181	5	1
210	79.85	262.0	13	4	0
211	80.26	263.3	16	8	0
212	80.50	264.1	331	7	1
213	81.02	265.8	10	1	0
214	81.30	266.7	24	4	0
215	81.48	267.3	5	5	1
216	81.66	267.9	166	7	1
217	81.68	268.0	134	16	1
218	81.74	268.2	5	6	1
219	82.13	269.5	352	4	0
220	82.83	271.7	10	6	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0202
Stoller
Dec 10/11, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
221	83.32	273.4	12	4	1
222	83.72	274.7	299	4	1
223	84.15	276.1	6	6	1
224	84.52	277.3	3	6	0
225	85.44	280.3	359	5	0
226	86.48	283.7	18	4	0
227	87.04	285.6	51	4	1
228	87.99	288.7	15	6	0
229	88.92	291.7	358	7	0
230	89.58	293.9	17	5	0
231	90.28	296.2	16	5	0
232	90.50	296.9	353	3	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0201
Stoller
Dec 11, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
1	8.99	29.5	1	9	1
2	9.11	29.9	10	8	1
3	9.23	30.3	323	3	1
4	9.29	30.5	209	3	1
5	9.52	31.2	254	9	1
6	9.59	31.5	50	1	1
7	9.65	31.7	0	0	2
8	9.71	31.9	0	0	1
9	9.74	32.0	55	11	1
10	9.80	32.2	162	8	1
11	9.93	32.6	299	5	1
12	10.25	33.6	287	15	1
13	10.26	33.7	57	19	1
14	10.34	33.9	161	85	1
15	10.38	34.1	0	0	1
16	10.43	34.2	14	6	2
17	10.69	35.1	314	9	1
18	10.91	35.8	108	8	1
19	11.15	36.6	99	9	1
20	11.58	38.0	344	4	1
21	11.66	38.3	356	6	1
22	11.82	38.8	176	4	1
23	11.95	39.2	292	4	1
24	12.25	40.2	86	6	1
25	12.76	41.9	106	4	0
26	12.93	42.4	326	5	0
27	13.07	42.9	88	20	1
28	13.07	42.9	293	14	1
29	13.21	43.3	39	5	1
30	13.48	44.2	21	7	0
31	13.64	44.8	311	4	0
32	13.80	45.3	158	2	0
33	13.87	45.5	54	4	1
34	14.22	46.6	81	2	0
35	14.55	47.7	243	7	0
36	15.28	50.1	53	1	0
37	16.24	53.3	0	0	1
38	16.57	54.4	11	2	0
39	17.35	56.9	0	0	0
40	18.67	61.3	80	3	0
41	19.92	65.3	11	5	0
42	20.08	65.9	319	4	0
43	20.26	66.5	337	4	0
44	20.55	67.4	303	3	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0201
Stoller
Dec 11, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
45	21.34	70.0	356	5	0
46	21.63	71.0	307	9	0
47	21.78	71.5	329	8	0
48	21.99	72.2	334	4	0
49	22.14	72.7	350	5	0
50	22.38	73.4	0	0	0
51	22.81	74.8	12	3	0
52	22.93	75.2	55	9	0
53	23.16	76.0	346	7	0
54	23.24	76.2	314	3	0
55	23.40	76.8	257	4	0
56	23.86	78.3	336	10	0
57	24.09	79.1	3	6	0
58	24.18	79.3	22	6	0
59	24.30	79.7	358	4	0
60	24.46	80.3	10	4	0
61	24.59	80.7	280	5	0
62	24.86	81.6	359	3	0
63	24.96	81.9	322	3	0
64	25.37	83.2	346	7	0
65	25.49	83.6	354	10	0
66	25.81	84.7	93	1	2
67	25.85	84.8	303	4	3
68	30.00	98.4	336	12	0
69	30.58	100.3	224	6	1
70	30.73	100.8	144	3	1
71	31.05	101.9	262	19	1
72	31.52	103.4	332	3	0
73	31.64	103.8	351	3	1
74	31.68	103.9	296	2	1
75	31.70	104.0	246	7	2
76	31.76	104.2	139	9	3
77	31.77	104.2	290	13	3
78	32.13	105.4	0	0	0
79	34.92	114.6	311	9	1
80	38.79	127.3	178	5	0
81	39.25	128.8	107	14	0
82	40.33	132.3	310	3	0
83	41.00	134.5	335	1	0
84	41.47	136.1	48	29	1
85	42.35	138.9	297	20	1
86	44.09	144.7	345	3	1
87	44.42	145.8	347	5	0
88	44.50	146.0	356	3	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0201
Stoller
Dec 11, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
89	44.59	146.3	293	4	0
90	44.73	146.7	11	3	0
91	44.76	146.8	10	3	0
92	44.79	147.0	0	0	0
93	44.88	147.3	23	5	0
94	44.94	147.4	32	4	0
95	44.99	147.6	22	4	0
96	45.03	147.7	8	7	0
97	45.07	147.9	0	0	0
98	45.15	148.1	329	6	0
99	45.26	148.5	11	3	0
100	45.34	148.8	0	0	0
101	45.44	149.1	25	6	0
102	45.53	149.4	139	4	0
103	45.56	149.5	9	4	1
104	45.62	149.7	13	4	0
105	45.71	150.0	89	7	1
106	45.77	150.2	82	3	1
107	46.07	151.2	326	9	1
108	46.10	151.3	2	5	0
109	46.19	151.6	43	2	1
110	46.28	151.8	311	8	0
111	46.43	152.3	0	0	0
112	46.62	153.0	92	5	0
113	46.73	153.3	22	2	1
114	46.85	153.7	317	6	1
115	47.00	154.2	37	5	1
116	47.11	154.6	17	5	1
117	47.15	154.7	13	6	1
118	47.20	154.9	12	8	1
119	47.27	155.1	162	1	2
120	47.38	155.4	14	3	1
121	47.41	155.6	0	0	1
122	47.45	155.7	338	6	2
123	47.49	155.8	0	0	1
124	47.52	155.9	0	0	1
125	47.55	156.0	185	7	1
126	47.57	156.1	356	6	2
127	47.61	156.2	4	5	2
128	47.87	157.1	21	3	1
129	47.94	157.3	36	8	0
130	48.03	157.6	17	7	0
131	48.08	157.7	10	10	0
132	48.20	158.1	61	15	0

All directions are with respect to magnetic north.

Orientation Summary Table
Image Features
Crescent Junction, UT
Well: CH-0201
Stoller
Dec 11, 2005

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
133	48.25	158.3	316	8	0
134	48.36	158.7	55	5	1
135	48.78	160.0	53	4	0
136	49.05	160.9	20	6	0
137	49.22	161.5	41	5	0
138	49.46	162.3	0	0	0
139	49.53	162.5	63	6	1
140	49.88	163.6	0	0	0
141	50.36	165.2	0	0	1
142	50.87	166.9	221	9	1
143	51.02	167.4	188	5	1
144	51.16	167.9	0	0	0
145	51.20	168.0	0	0	0
146	51.58	169.2	52	14	1
147	52.36	171.8	11	4	1
148	52.41	172.0	11	2	1
149	53.01	173.9	92	7	1
150	53.67	176.1	158	4	0
151	53.91	176.9	10	9	1
152	53.95	177.0	144	14	1
153	54.71	179.5	37	6	3
154	55.99	183.7	34	3	1
155	57.42	188.4	5	3	0
156	60.20	197.5	349	5	1
157	63.82	209.4	64	13	1
158	64.97	213.2	325	9	2
159	65.50	214.9	0	0	1
160	65.54	215.0	188	14	1
161	67.42	221.2	169	5	3
162	67.88	222.7	8	12	1
163	71.16	233.5	332	15	1
164	71.59	234.9	169	5	1
165	72.30	237.2	0	0	1
166	77.31	253.7	21	3	1
167	84.80	278.2	198	15	1
168	86.33	283.3	280	6	1
169	87.06	285.6	18	4	1
170	89.55	293.8	177	5	1
171	91.18	299.1	53	7	1

All directions are with respect to magnetic north.

APPENDIX C

ROCK QUALITY DESIGNATION TABLES
IMAGE FEATURES

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0210
Stoller
Dec 6, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
7.50	24.6	1		
7.52	24.7	1	0.00	
7.55	24.8	1	0.00	
7.57	24.8	1	0.00	
7.59	24.9	1	0.00	
7.62	25.0	1	0.00	
7.65	25.1	2	0.00	
7.68	25.2	1	0.00	
7.69	25.2	1	0.00	
7.71	25.3	1	0.00	
7.72	25.3	1	0.00	
7.74	25.4	1	0.00	
7.76	25.5	1	0.00	
7.78	25.5	1	0.00	
7.79	25.6	1	0.00	
7.81	25.6	1	0.00	
7.84	25.7	1	0.00	
7.86	25.8	1	0.00	
7.88	25.9	1	0.00	
7.92	26.0	1	0.00	
7.94	26.0	1	0.00	
7.98	26.2	1	0.00	
7.99	26.2	1	0.00	
8.03	26.4	1	0.00	
8.04	26.4	1	0.00	
8.06	26.5	1	0.00	
8.09	26.5	1	0.00	
8.12	26.6	1	0.00	
8.16	26.8	2	0.00	
8.20	26.9	1	0.00	
8.25	27.1	2	0.00	
8.30	27.2	1	0.00	
8.32	27.3	2	0.00	
8.35	27.4	1	0.00	
8.37	27.5	1	0.00	
8.40	27.6	1	0.00	
8.44	27.7	1	0.00	
8.45	27.7	1	0.00	
8.49	27.9	1	0.00	
8.52	27.9	1	0.00	
8.55	28.1	1	0.00	
8.58	28.2	1	0.00	
8.60	28.2	1	0.00	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0210
Stoller
Dec 6, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
8.64	28.4	1	0.00	
8.68	28.5	2	0.00	
8.71	28.6	2	0.00	
8.75	28.7	1	0.00	
8.78	28.8	1	0.00	
8.85	29.0	2	0.00	
8.88	29.1	1	0.00	
8.90	29.2	1	0.00	
8.94	29.3	1	0.00	
8.96	29.4	1	0.00	
8.99	29.5	1	0.00	
9.02	29.6	2	0.00	
9.07	29.8	2	0.00	
9.09	29.8	2	0.00	
9.13	30.0	2	0.00	
9.14	30.0		0.00	**0**
9.17	30.1	2	0.00	
9.21	30.2	2	0.00	
9.30	30.5	1	0.00	
9.33	30.6	1	0.00	
9.35	30.7	1	0.00	
9.38	30.8	1	0.00	
9.45	31.0	1	0.00	
9.49	31.1	1	0.00	
9.52	31.2	2	0.00	
9.58	31.4	1	0.00	
9.62	31.6	2	0.00	
9.66	31.7	2	0.00	
9.69	31.8	1	0.00	
9.72	31.9	2	0.00	
9.78	32.1	2	0.00	
9.84	32.3	1	0.00	
9.86	32.4	1	0.00	
9.91	32.5	2	0.00	
9.95	32.7	2	0.00	
10.05	33.0	2	0.33	
10.13	33.3	1	0.00	
10.18	33.4	2	0.00	
10.24	33.6	1	0.00	
10.30	33.8	2	0.00	
10.36	34.0	1	0.00	
10.43	34.2	2	0.00	
10.57	34.7	2	0.45	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0210
Stoller
Dec 6, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
10.70	35.1	1	0.42	
10.83	35.5	1	0.44	
11.01	36.1	1	0.59	
11.24	36.9	1	0.75	
11.45	37.6	1	0.71	
11.52	37.8	2	0.00	
11.96	39.2	1	1.46	
12.19	40.0		0.76	**59.1**
14.06	46.1	2	6.14	
14.16	46.5	1	0.33	
15.24	50.0		3.53	**100**
18.29	60.0		10.00	**100**
21.34	70.0		10.00	**100**
24.38	80.0		10.00	**100**
27.43	90.0		10.00	**100**
28.18	92.5	1	2.47	
28.32	92.9	1	0.43	
30.48	100.0		7.10	**100**
31.58	103.6	1	3.62	
32.18	105.6	1	1.96	
32.37	106.2	1	0.62	
32.47	106.5	1	0.34	
32.88	107.9	1	1.34	
32.92	108.0	1	0.00	
32.99	108.2	1	0.00	
33.06	108.5	1	0.00	
33.53	110.0		1.55	**94.3**
34.48	113.1	1	3.12	
34.61	113.6	1	0.43	
34.75	114.0	1	0.46	
35.13	115.2	1	1.23	
35.19	115.5	1	0.00	
35.26	115.7	1	0.00	
35.46	116.3	1	0.64	
36.01	118.1	1	1.81	
36.13	118.5	1	0.39	
36.56	120.0	1	1.42	
36.58	120.0		0.00	**95**
36.80	120.7	1	0.74	
37.14	121.9	1	1.12	
37.45	122.9	1	1.01	
38.29	125.6	1	2.76	
38.40	126.0	1	0.37	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0210
Stoller
Dec 6, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
38.52	126.4	1	0.38	
39.13	128.4	1	1.99	
39.31	129.0	1	0.60	
39.42	129.3	1	0.36	
39.56	129.8	1	0.47	
39.62	130.0		0.00	**98**
40.22	132.0	1	1.95	
40.34	132.3	1	0.39	
40.36	132.4	1	0.00	
40.50	132.9	1	0.46	
40.66	133.4	1	0.52	
40.79	133.8	1	0.43	
40.93	134.3	1	0.44	
41.07	134.7	1	0.46	
41.32	135.6	1	0.81	
41.33	135.6	1	0.00	
41.53	136.3	1	0.64	
41.69	136.8	1	0.54	
41.74	136.9	1	0.00	
42.31	138.8	1	1.87	
42.67	140.0		1.20	**97.1**
42.79	140.4	1	0.38	
43.25	141.9	1	1.51	
43.60	143.1	1	1.16	
43.73	143.5	1	0.43	
44.10	144.7	1	1.21	
44.25	145.2	1	0.48	
44.34	145.5	1	0.00	
44.46	145.9	1	0.40	
45.27	148.5	1	2.67	
45.72	150.0		1.47	**97.1**
46.41	152.3	1	2.28	
47.40	155.5	1	3.22	
47.80	156.8	1	1.33	
47.98	157.4	1	0.59	
48.18	158.1	1	0.65	
48.77	160.0		1.93	**100**
49.22	161.5	1	1.47	
50.07	164.3	1	2.79	
50.08	164.3	1	0.00	
50.30	165.0	1	0.73	
51.03	167.4	1	2.40	
51.05	167.5	1	0.00	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0210
Stoller
Dec 6, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
51.24	168.1	1	0.60	
51.52	169.0	1	0.94	
51.58	169.2	1	0.00	
51.80	170.0	1	0.72	
51.82	170.0		0.00	**96.5**
52.43	172.0	1	2.01	
52.46	172.1	1	0.00	
52.52	172.3	1	0.00	
53.04	174.0	1	1.71	
53.45	175.4	1	1.33	
53.75	176.4	1	1.00	
53.87	176.8	1	0.40	
53.96	177.0	1	0.00	
54.23	177.9	1	0.88	
54.86	180.0		2.09	**94.2**
56.41	185.1	1	5.06	
57.22	187.7	1	2.66	
57.30	188.0	1	0.00	
57.33	188.1	1	0.00	
57.91	190.0		1.90	**96.2**
58.25	191.1	1	1.10	
58.32	191.3	1	0.00	
59.83	196.3	1	4.95	
60.96	200.0		3.71	**97.6**
61.13	200.6	1	0.57	
61.29	201.1	1	0.51	
63.04	206.8	1	5.73	
63.07	206.9	1	0.00	
64.01	210.0		3.07	**98.8**
64.83	212.7	1	2.71	
65.26	214.1	1	1.41	
65.84	216.0	1	1.89	
66.01	216.6	1	0.57	
66.37	217.8	1	1.17	
66.50	218.2	1	0.43	
66.86	219.4	1	1.18	
67.06	220.0		0.64	**100**
67.49	221.4	1	1.44	
67.94	222.9	1	1.45	
69.40	227.7	1	4.80	
69.46	227.9	1	0.00	
69.67	228.6	1	0.68	
69.72	228.7	1	0.00	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0210
Stoller
Dec 6, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
70.10	230.0		1.26	**96.3**
70.11	230.0	1	0.00	
70.40	231.0	1	0.96	
70.93	232.7	1	1.74	
71.13	233.4	1	0.64	
71.18	233.5	1	0.00	
71.34	234.1	1	0.55	
73.05	239.7	1	5.59	
73.15	240.0		0.34	**98.2**
73.73	241.9	1	1.88	
74.49	244.4	1	2.52	
75.02	246.1	1	1.73	
75.56	247.9	1	1.77	
76.09	249.6	1	1.74	
76.20	250.0		0.36	**100**
78.32	257.0	1	6.97	
78.46	257.4	1	0.44	
78.60	257.9	1	0.48	
78.62	258.0	1	0.00	
78.70	258.2	1	0.00	
78.92	258.9	1	0.72	
79.04	259.3	1	0.41	
79.11	259.5	1	0.00	
79.19	259.8	1	0.00	
79.19	259.8	1	0.00	
79.25	260.0		0.00	**90.2**
79.25	260.0	1	0.00	
79.31	260.2	1	0.00	
79.43	260.6	1	0.40	
79.57	261.1	1	0.46	
79.57	261.1	1	0.00	
79.62	261.2	1	0.00	
80.10	262.8	1	1.58	
80.50	264.1	1	1.29	
82.30	270.0		5.90	**96.3**
82.56	270.9	1	0.86	
82.67	271.2	1	0.37	
82.95	272.2	1	0.93	
83.05	272.5	1	0.33	
84.21	276.3	1	3.79	
84.84	278.4	1	2.08	
84.98	278.8	1	0.43	
85.12	279.3	1	0.46	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0210
Stoller
Dec 6, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
85.31	279.9	1	0.65	
85.34	280.0		0.00	**99**
85.96	282.0	1	2.02	
87.37	286.7	1	4.64	
87.61	287.4	1	0.78	
87.69	287.7	1	0.00	
88.39	290.0		2.30	**97.4**
88.63	290.8	1	0.77	
88.79	291.3	1	0.52	
89.82	294.7	1	3.38	
90.41	296.6	1	1.96	
91.44	300.0		3.37	**100**

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
11.29	37.0	1		
11.34	37.2	1	0.00	
11.40	37.4	1	0.00	
11.48	37.7	1	0.00	
11.48	37.7	1	0.00	
11.49	37.7	1	0.00	
11.58	38.0	1	0.00	
11.64	38.2	1	0.00	
11.72	38.4	1	0.00	
11.78	38.7	1	0.00	
11.81	38.8	1	0.00	
11.91	39.1	1	0.00	
11.92	39.1	1	0.00	
12.05	39.5	1	0.42	
12.09	39.7	1	0.00	
12.11	39.7	1	0.00	
12.15	39.9	1	0.00	
12.19	40.0	1	0.00	
12.19	40.0		0.00	**15**
12.24	40.2	1	0.00	
12.35	40.5	1	0.35	
12.44	40.8	1	0.00	
12.50	41.0	1	0.00	
12.56	41.2	1	0.00	
12.67	41.6	1	0.35	
12.71	41.7	1	0.00	
12.81	42.0	1	0.00	
12.86	42.2	1	0.00	
12.91	42.4	1	0.00	
12.94	42.5	1	0.00	
13.02	42.7	1	0.00	
13.12	43.0	1	0.00	
13.16	43.2	1	0.00	
13.22	43.4	1	0.00	
13.23	43.4	1	0.00	
13.24	43.5	1	0.00	
13.28	43.6	1	0.00	
13.29	43.6	1	0.00	
13.41	44.0	1	0.40	
13.50	44.3	1	0.00	
13.55	44.5	1	0.00	
13.59	44.6	1	0.00	
13.67	44.8	1	0.00	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
13.75	45.1	1	0.00	
13.78	45.2	1	0.00	
13.81	45.3	1	0.00	
13.94	45.7	1	0.43	
14.00	45.9	1	0.00	
14.08	46.2	1	0.00	
14.16	46.5	1	0.00	
14.24	46.7	1	0.00	
14.27	46.8	1	0.00	
14.34	47.1	1	0.00	
15.15	49.7	1	2.67	
15.24	50.0		0.00	**42**
15.35	50.4	1	0.36	
15.52	50.9	1	0.55	
15.91	52.2	1	1.28	
15.94	52.3	1	0.00	
15.98	52.4	1	0.00	
16.16	53.0	1	0.60	
16.28	53.4	2	0.39	
16.56	54.3	2	0.91	
16.80	55.1	2	0.81	
17.12	56.2	1	1.03	
17.19	56.4	1	0.00	
17.30	56.8	1	0.36	
18.25	59.9	1	3.13	
18.29	60.0		0.00	**94.2**
18.99	62.3	1	2.30	
19.13	62.8	1	0.45	
21.34	70.0		7.25	**100**
24.38	80.0		10.00	**100**
25.94	85.1	1	5.11	
27.43	90.0		4.89	**100**
28.82	94.6	1	4.57	
29.68	97.4	1	2.79	
29.73	97.6	1	0.00	
29.78	97.7	2	0.00	
30.48	100.0		2.31	**96.7**
30.71	100.8	1	0.77	
30.78	101.0	1	0.00	
31.37	102.9	1	1.93	
31.39	103.0	1	0.00	
31.42	103.1	1	0.00	
31.43	103.1	1	0.00	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
31.50	103.4	1	0.00	
31.54	103.5	1	0.00	
32.10	105.3	1	1.83	
32.24	105.8	1	0.46	
32.73	107.4	1	1.62	
33.53	110.0		2.61	**92.2**
35.09	115.1	1	5.13	
35.18	115.4	1	0.00	
35.28	115.8	1	0.33	
36.38	119.4	1	3.60	
36.58	120.0		0.64	**97**
36.70	120.4	1	0.41	
36.74	120.5	2	0.00	
36.85	120.9	2	0.38	
36.92	121.1	1	0.00	
37.15	121.9	1	0.76	
37.65	123.5	1	1.64	
37.80	124.0	1	0.49	
39.62	130.0		5.99	**96.7**
40.72	133.6	1	3.58	
40.84	134.0	1	0.41	
42.67	140.0		6.01	**100**
44.61	146.4	1	6.37	
45.06	147.9	1	1.48	
45.63	149.7	1	1.85	
45.66	149.8	1	0.00	
45.72	150.0		0.00	**97**
46.31	151.9	1	1.92	
47.36	155.4	1	3.45	
47.38	155.4	1	0.00	
47.42	155.6	1	0.00	
47.58	156.1	1	0.50	
47.68	156.4	1	0.34	
48.77	160.0		3.57	**97.8**
48.77	160.0	1	0.00	
48.80	160.1	1	0.00	
49.04	160.9	1	0.78	
49.06	161.0	1	0.00	
49.11	161.1	1	0.00	
49.29	161.7	1	0.59	
49.38	162.0	1	0.00	
49.42	162.1	1	0.00	
49.45	162.2	1	0.00	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
49.53	162.5	1	0.00	
49.79	163.4	1	0.85	
49.82	163.4	1	0.00	
49.85	163.5	1	0.00	
49.86	163.6	1	0.00	
50.11	164.4	1	0.81	
50.15	164.5	1	0.00	
50.67	166.3	1	1.72	
50.69	166.3	1	0.00	
50.94	167.1	1	0.79	
51.02	167.4	1	0.00	
51.21	168.0	1	0.61	
51.22	168.1	1	0.00	
51.24	168.1	1	0.00	
51.33	168.4	1	0.00	
51.47	168.9	1	0.44	
51.49	168.9	1	0.00	
51.55	169.1	1	0.00	
51.74	169.8	1	0.62	
51.82	170.0		0.00	**72.1**
52.43	172.0	1	2.00	
52.83	173.3	1	1.34	
53.76	176.4	1	3.05	
54.57	179.0	1	2.64	
54.63	179.2	1	0.00	
54.86	180.0		0.77	**98**
54.97	180.4	1	0.36	
55.19	181.1	1	0.72	
55.25	181.3	1	0.00	
55.30	181.4	1	0.00	
55.48	182.0	1	0.59	
56.70	186.0	1	4.03	
56.75	186.2	1	0.00	
56.75	186.2	1	0.00	
56.87	186.6	1	0.39	
57.08	187.3	1	0.67	
57.13	187.4	1	0.00	
57.25	187.8	1	0.41	
57.28	187.9	1	0.00	
57.31	188.0	1	0.00	
57.36	188.2	1	0.00	
57.42	188.4	2	0.00	
57.55	188.8	1	0.41	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
57.61	189.0	1	0.00	
57.90	190.0	1	0.95	
57.91	190.0		0.00	**85.3**
58.02	190.4	1	0.36	
58.38	191.5	1	1.16	
58.59	192.2	1	0.69	
58.84	193.1	1	0.85	
58.87	193.1	1	0.00	
58.89	193.2	1	0.00	
58.90	193.2	1	0.00	
59.04	193.7	1	0.47	
59.11	193.9	1	0.00	
59.12	194.0	1	0.00	
59.16	194.1	1	0.00	
59.23	194.3	1	0.00	
59.27	194.4	1	0.00	
59.30	194.6	1	0.00	
59.34	194.7	1	0.00	
59.34	194.7	1	0.00	
59.45	195.0	1	0.35	
59.51	195.3	1	0.00	
59.59	195.5	1	0.00	
59.60	195.6	1	0.00	
59.74	196.0	1	0.44	
59.78	196.1	1	0.00	
59.85	196.4	1	0.00	
60.00	196.8	1	0.49	
60.05	197.0	1	0.00	
60.43	198.3	1	1.23	
60.48	198.4	1	0.00	
60.50	198.5	1	0.00	
60.55	198.7	1	0.00	
60.58	198.8	1	0.00	
60.63	198.9	1	0.00	
60.64	199.0	1	0.00	
60.66	199.0	1	0.00	
60.67	199.1	1	0.00	
60.71	199.2	1	0.00	
60.81	199.5	1	0.00	
60.92	199.9	1	0.37	
60.96	200.0		0.00	**64.1**
61.05	200.3	1	0.00	
61.08	200.4	1	0.00	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
61.11	200.5	1	0.00	
61.15	200.6	1	0.00	
62.57	205.3	1	4.66	
62.60	205.4	1	0.00	
62.63	205.5	1	0.00	
62.74	205.9	1	0.38	
63.36	207.9	1	2.03	
63.44	208.1	1	0.00	
63.50	208.3	1	0.00	
63.61	208.7	1	0.34	
63.76	209.2	1	0.52	
63.81	209.3	1	0.00	
63.84	209.4	1	0.00	
63.88	209.6	1	0.00	
64.00	210.0	1	0.42	
64.01	210.0		0.00	**83.5**
64.08	210.3	1	0.00	
64.12	210.4	1	0.00	
64.17	210.5	1	0.00	
64.36	211.2	1	0.64	
64.42	211.4	1	0.00	
64.47	211.5	1	0.00	
64.66	212.1	1	0.63	
64.70	212.3	1	0.00	
64.73	212.4	1	0.00	
64.76	212.5	1	0.00	
65.12	213.7	1	1.18	
65.30	214.2	1	0.59	
65.34	214.4	1	0.00	
65.48	214.8	1	0.44	
65.61	215.3	1	0.43	
65.68	215.5	1	0.00	
65.72	215.6	1	0.00	
65.78	215.8	1	0.00	
65.85	216.0	2	0.00	
65.89	216.2	1	0.00	
66.00	216.5	1	0.35	
66.68	218.8	1	2.22	
66.85	219.3	1	0.57	
66.89	219.5	1	0.00	
66.99	219.8	1	0.00	
67.06	220.0		0.00	**70.5**
67.88	222.7	1	2.71	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
68.15	223.6	1	0.89	
69.05	226.5	1	2.94	
69.57	228.3	1	1.71	
69.62	228.4	1	0.00	
70.10	230.0		1.60	**98.5**
70.24	230.5	1	0.46	
70.35	230.8	1	0.36	
70.49	231.3	1	0.45	
70.59	231.6	1	0.00	
70.77	232.2	1	0.59	
71.10	233.3	1	1.10	
72.19	236.8	1	3.57	
72.23	237.0	1	0.00	
72.76	238.7	1	1.74	
73.15	240.0		1.30	**95.7**
73.26	240.3	1	0.34	
73.35	240.7	1	0.00	
73.58	241.4	1	0.73	
73.63	241.6	1	0.00	
73.75	242.0	1	0.39	
73.81	242.2	1	0.00	
73.85	242.3	1	0.00	
73.93	242.5	1	0.00	
74.10	243.1	1	0.57	
74.42	244.2	1	1.05	
74.59	244.7	1	0.55	
74.73	245.2	1	0.48	
74.82	245.5	1	0.00	
75.28	247.0	1	1.50	
75.33	247.1	1	0.00	
75.45	247.6	1	0.42	
75.92	249.1	1	1.52	
76.09	249.6	1	0.57	
76.20	250.0		0.36	**84.8**
76.49	251.0	1	0.95	
76.61	251.3	1	0.38	
76.88	252.2	1	0.89	
76.92	252.4	1	0.00	
76.99	252.6	1	0.00	
77.29	253.6	1	0.97	
77.44	254.1	1	0.50	
77.58	254.5	1	0.46	
77.64	254.7	1	0.00	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
78.94	259.0	1	4.29	
79.02	259.3	1	0.00	
79.13	259.6	1	0.35	
79.25	260.0		0.39	**91.8**
79.40	260.5	1	0.49	
79.44	260.6	1	0.00	
79.63	261.3	1	0.61	
79.96	262.3	1	1.08	
80.39	263.8	1	1.42	
80.54	264.2	1	0.48	
80.73	264.9	1	0.63	
80.85	265.3	1	0.40	
80.95	265.6	1	0.34	
81.31	266.8	1	1.16	
81.35	266.9	1	0.00	
81.42	267.1	1	0.00	
81.54	267.5	1	0.42	
81.60	267.7	1	0.00	
81.65	267.9	1	0.00	
81.76	268.2	1	0.35	
81.94	268.8	1	0.59	
82.03	269.1	1	0.00	
82.10	269.4	1	0.00	
82.30	270.0		0.64	**86.1**
82.61	271.0	1	1.02	
82.83	271.8	1	0.74	
83.36	273.5	1	1.72	
83.95	275.4	1	1.95	
84.07	275.8	1	0.39	
84.09	275.9	1	0.00	
84.15	276.1	1	0.00	
84.16	276.1	1	0.00	
84.21	276.3	1	0.00	
84.26	276.4	1	0.00	
84.32	276.7	1	0.00	
84.41	277.0	1	0.00	
84.66	277.8	1	0.80	
84.85	278.4	1	0.62	
85.24	279.7	1	1.30	
85.27	279.8	1	0.00	
85.34	280.0	1	0.00	
85.34	280.0		0.00	**85.4**
85.43	280.3	1	0.00	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0209
Stoller
Dec 6/7, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
86.91	285.2	1	4.87	
87.07	285.7	1	0.52	
88.27	289.6	1	3.94	
88.39	290.0		0.39	**97.2**
88.59	290.6	1	0.64	
88.62	290.7	1	0.00	
89.32	293.1	1	2.32	
89.45	293.5	1	0.41	
91.22	299.3	1	5.80	
91.44	300.0		0.73	**99**

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0208
Stoller
Dec 7, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
13.81	45.3	1		
13.83	45.4	2	0.00	
14.35	47.1	1	1.69	
15.24	50.0		2.93	**98.3**
15.39	50.5	1	0.48	
15.58	51.1	1	0.65	
15.72	51.6	1	0.46	
15.82	51.9	1	0.00	
15.99	52.5	1	0.57	
16.08	52.8	1	0.00	
16.25	53.3	1	0.57	
16.36	53.7	1	0.35	
16.49	54.1	1	0.43	
16.94	55.6	1	1.48	
17.09	56.1	1	0.49	
17.22	56.5	1	0.43	
17.35	56.9	1	0.42	
17.48	57.4	1	0.44	
17.50	57.4	1	0.00	
17.68	58.0	1	0.61	
18.00	59.1	1	1.04	
18.14	59.5	1	0.46	
18.20	59.7	1	0.00	
18.29	60.0		0.00	**88.8**
18.55	60.9	1	0.86	
18.68	61.3	1	0.43	
18.82	61.7	1	0.44	
18.86	61.9	1	0.00	
19.00	62.3	1	0.44	
19.06	62.5	1	0.00	
19.12	62.7	1	0.00	
19.23	63.1	1	0.36	
19.39	63.6	1	0.50	
19.41	63.7	1	0.00	
19.46	63.9	1	0.00	
19.57	64.2	1	0.34	
19.60	64.3	1	0.00	
19.68	64.6	1	0.00	
19.72	64.7	1	0.00	
19.77	64.9	1	0.00	
19.86	65.2	1	0.00	
19.92	65.4	1	0.00	
19.98	65.6	1	0.00	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0208
Stoller
Dec 7, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
20.03	65.7	1	0.00	
20.10	66.0	1	0.00	
20.15	66.1	1	0.00	
20.22	66.3	1	0.00	
20.30	66.6	1	0.00	
20.36	66.8	1	0.00	
20.49	67.2	1	0.41	
20.52	67.3	1	0.00	
20.56	67.4	1	0.00	
20.63	67.7	1	0.00	
20.83	68.3	1	0.63	
20.92	68.6	1	0.00	
20.97	68.8	1	0.00	
21.04	69.0	1	0.00	
21.19	69.5	1	0.50	
21.34	70.0		0.48	**53.9**
21.34	70.0	1	0.00	
21.42	70.3	1	0.00	
21.43	70.3	1	0.00	
21.52	70.6	1	0.00	
21.59	70.8	1	0.00	
21.64	71.0	1	0.00	
21.69	71.2	1	0.00	
21.72	71.3	1	0.00	
21.80	71.5	1	0.00	
21.87	71.8	1	0.00	
22.05	72.3	1	0.58	
22.08	72.4	1	0.00	
22.17	72.8	1	0.00	
22.28	73.1	1	0.34	
22.37	73.4	1	0.00	
22.45	73.7	1	0.00	
22.48	73.8	1	0.00	
22.51	73.9	1	0.00	
22.57	74.1	1	0.00	
22.80	74.8	1	0.75	
22.82	74.9	1	0.00	
22.92	75.2	1	0.00	
23.02	75.5	1	0.00	
23.10	75.8	1	0.00	
23.34	76.6	1	0.80	
23.51	77.1	1	0.55	
23.72	77.8	1	0.69	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0208
Stoller
Dec 7, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
23.86	78.3	1	0.47	
23.88	78.3	1	0.00	
24.25	79.6	2	1.21	
24.38	80.0		0.45	**58.4**
24.68	81.0	1	0.96	
24.70	81.1	1	0.00	
27.43	90.0		8.95	**99.1**
30.48	100.0		10.00	**100**
31.72	104.1	1	4.08	
31.90	104.7	1	0.57	
32.11	105.3	1	0.69	
32.29	105.9	1	0.60	
32.88	107.9	1	1.92	
33.53	110.0		2.14	**100**
36.58	120.0		10.00	**100**
37.91	124.4	2	4.37	
38.04	124.8	1	0.43	
39.20	128.6	1	3.81	
39.62	130.0		1.39	**100**
41.40	135.8	1	5.82	
41.71	136.8	2	1.02	
42.56	139.6	1	2.79	
42.67	140.0		0.37	**100**
44.09	144.7	1	4.66	
44.43	145.8	1	1.12	
45.01	147.7	1	1.88	
45.13	148.1	1	0.41	
45.72	150.0		1.93	**100**
48.77	160.0		10.00	**100**
51.82	170.0		10.00	**100**
52.08	170.9	1	0.87	
54.86	180.0		9.13	**100**
56.40	185.1	1	5.05	
56.54	185.5	1	0.45	
57.39	188.3	2	2.80	
57.56	188.9	1	0.55	
57.64	189.1	1	0.00	
57.91	190.0		0.89	**97.4**
58.40	191.6	1	1.61	
58.56	192.1	1	0.50	
58.69	192.6	1	0.44	
59.00	193.6	1	1.01	
59.62	195.6	1	2.06	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0208
Stoller
Dec 7, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
59.78	196.1	1	0.50	
60.28	197.8	1	1.64	
60.52	198.6	1	0.81	
60.64	199.0	1	0.39	
60.96	200.0		1.04	**100**
61.31	201.2	1	1.16	
61.73	202.5	1	1.35	
62.45	204.9	1	2.39	
63.11	207.1	1	2.16	
63.22	207.4	1	0.37	
63.30	207.7	1	0.00	
63.41	208.1	1	0.37	
63.52	208.4	2	0.36	
63.74	209.1	1	0.72	
63.85	209.5	1	0.35	
64.01	210.0		0.52	**97.5**
64.08	210.2	1	0.00	
64.40	211.3	1	1.05	
64.47	211.5	2	0.00	
64.51	211.7	1	0.00	
64.68	212.2	1	0.54	
65.09	213.6	1	1.36	
65.72	215.6	1	2.06	
66.32	217.6	1	1.98	
66.39	217.8	1	0.00	
66.45	218.0	1	0.00	
66.47	218.1	1	0.00	
66.49	218.1	1	0.00	
67.00	219.8	1	1.66	
67.06	220.0		0.00	**86.5**
67.14	220.3	1	0.00	
67.46	221.3	1	1.05	
69.17	226.9	1	5.60	
69.52	228.1	2	1.15	
70.10	230.0		1.93	**97.3**
70.38	230.9	2	0.89	
71.60	234.9	1	4.03	
71.70	235.2	1	0.00	
71.76	235.4	1	0.00	
71.93	236.0	1	0.57	
72.15	236.7	1	0.72	
72.84	239.0	1	2.25	
73.15	240.0		1.04	**95**

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0208
Stoller
Dec 7, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
73.24	240.3	1	0.00	
75.08	246.3	1	6.02	
75.11	246.4	1	0.00	
76.01	249.4	1	2.96	
76.20	250.0		0.62	**96**
76.56	251.2	1	1.18	
76.61	251.4	1	0.00	
76.67	251.5	1	0.00	
77.82	255.3	1	3.77	
78.31	256.9	2	1.62	
78.60	257.9	1	0.97	
79.25	260.0		2.11	**96.5**
80.06	262.7	1	2.67	
81.92	268.8	1	6.11	
82.05	269.2	1	0.40	
82.30	270.0		0.82	**100**
82.37	270.3	1	0.00	
82.90	272.0	1	1.72	
84.34	276.7	1	4.74	
84.44	277.1	1	0.34	
84.66	277.8	1	0.70	
85.34	280.0	1	2.25	
85.34	280.0		0.00	**97.5**
86.05	282.3	1	2.33	
86.75	284.6	1	2.27	
87.14	285.9	1	1.28	
87.87	288.3	1	2.40	
88.39	290.0		1.72	**100**
88.41	290.1	1	0.00	
88.75	291.2	1	1.12	
89.51	293.7	1	2.48	
89.90	295.0	1	1.29	
90.53	297.0	1	2.04	
90.96	298.4	1	1.43	
91.39	299.8	1	1.40	
91.44	300.0		0.00	**97.6**

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0207
Stoller
Dec 8, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
8.03	26.3	2		
8.04	26.4	2	0.00	
8.14	26.7	2	0.34	
8.17	26.8	1	0.00	
8.18	26.9	1	0.00	
8.21	26.9	2	0.00	
8.30	27.2	1	0.00	
8.39	27.5	1	0.00	
8.41	27.6	2	0.00	
8.56	28.1	1	0.49	
8.63	28.3	2	0.00	
8.65	28.4	2	0.00	
8.73	28.6	2	0.00	
8.80	28.9	1	0.00	
8.89	29.2	1	0.00	
8.94	29.3	1	0.00	
8.99	29.5	2	0.00	
9.04	29.7	1	0.00	
9.09	29.8	1	0.00	
9.11	29.9	2	0.00	
9.14	30.0	2	0.00	
9.15	30.0		0.00	**22.4**
9.27	30.4	1	0.40	
9.27	30.4	1	0.00	
9.35	30.7	2	0.00	
9.39	30.8	2	0.00	
9.42	30.9	2	0.00	
9.50	31.2	2	0.00	
9.56	31.4	1	0.00	
9.59	31.5	2	0.00	
9.63	31.6	2	0.00	
9.70	31.8	2	0.00	
9.77	32.1	2	0.00	
9.82	32.2	2	0.00	
9.88	32.4	1	0.00	
9.94	32.6	1	0.00	
10.02	32.9	1	0.00	
10.02	32.9	1	0.00	
10.06	33.0	2	0.00	
10.09	33.1	2	0.00	
10.22	33.5	2	0.42	
10.25	33.6	2	0.00	
10.31	33.8	2	0.00	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0207
Stoller
Dec 8, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
10.34	33.9	2	0.00	
10.38	34.1	2	0.00	
10.46	34.3	1	0.00	
10.50	34.5	1	0.00	
10.52	34.5	1	0.00	
10.54	34.6	2	0.00	
10.59	34.7	1	0.00	
10.61	34.8	2	0.00	
10.63	34.9	2	0.00	
10.66	35.0	2	0.00	
10.71	35.1	2	0.00	
10.75	35.3	1	0.00	
10.80	35.4	1	0.00	
10.83	35.5	2	0.00	
10.87	35.7	1	0.00	
10.89	35.7	2	0.00	
11.02	36.1	1	0.41	
11.07	36.3	1	0.00	
11.25	36.9	1	0.58	
11.30	37.1	1	0.00	
11.39	37.4	2	0.00	
11.44	37.5	1	0.00	
11.47	37.6	1	0.00	
11.49	37.7	2	0.00	
11.53	37.8	2	0.00	
11.58	38.0	1	0.00	
11.61	38.1	2	0.00	
11.67	38.3	1	0.00	
11.71	38.4	2	0.00	
11.82	38.8	1	0.34	
11.82	38.8	2	0.00	
11.88	39.0	2	0.00	
11.97	39.3	2	0.00	
11.98	39.3	2	0.00	
12.05	39.5	2	0.00	
12.12	39.8	1	0.00	
12.16	39.9	2	0.00	
12.20	40.0		0.00	**21.5**
12.25	40.2	2	0.00	
12.34	40.5	2	0.00	
12.50	41.0	2	0.54	
12.53	41.1	1	0.00	
12.62	41.4	2	0.00	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0207
Stoller
Dec 8, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
12.67	41.6	2	0.00	
12.76	41.9	1	0.00	
12.86	42.2	1	0.34	
12.98	42.6	1	0.37	
13.11	43.0	2	0.44	
13.15	43.2	1	0.00	
13.22	43.4	1	0.00	
13.28	43.6	1	0.00	
14.00	45.9	1	2.35	
14.11	46.3	2	0.35	
14.15	46.4	1	0.00	
14.24	46.7	1	0.00	
14.29	46.9	1	0.00	
14.34	47.1	1	0.00	
14.52	47.7	1	0.60	
14.96	49.1	1	1.43	
15.01	49.2	1	0.00	
15.12	49.6	1	0.36	
15.25	50.0		0.40	**71.8**
15.72	51.6	2	1.57	
18.29	60.0		8.43	**100**
19.12	62.7	1	2.74	
20.80	68.2	1	5.50	
21.34	70.0		1.76	**100**
24.39	80.0		10.00	**100**
27.44	90.0		10.00	**100**
30.49	100.0		10.00	**100**
33.47	109.8	1	9.82	
33.54	110.0		0.00	**98.2**
36.59	120.0		10.00	**100**
39.64	130.0		10.00	**100**
42.69	140.0		10.00	**100**
42.78	140.4	1	0.00	
45.74	150.0		9.64	**96.4**
48.78	160.0		10.00	**100**
51.83	170.0		10.00	**100**
54.88	180.0		10.00	**100**
57.93	190.0		10.00	**100**
60.62	198.9	1	8.88	
60.98	200.0		1.12	**100**
64.03	210.0		10.00	**100**
65.81	215.9	1	5.90	
67.08	220.0		4.10	**100**

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0207
Stoller
Dec 8, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
70.13	230.0		10.00	**100**
73.18	240.0		10.00	**100**
76.23	250.0		10.00	**100**
79.27	260.0		10.00	**100**
82.32	270.0		10.00	**100**
85.37	280.0		10.00	**100**
88.42	290.0		10.00	**100**
91.47	300.0		10.00	**100**

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0206
Stoller
Jan. 8, 2002

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
7.55	24.8	1		
7.61	25.0	1	0.00	
7.69	25.2	1	0.00	
7.73	25.4	1	0.00	
7.79	25.6	1	0.00	
7.91	26.0	1	0.40	
7.96	26.1	1	0.00	
7.98	26.2	1	0.00	
8.07	26.5	1	0.00	
8.17	26.8	1	0.00	
8.26	27.1	1	0.00	
8.33	27.3	1	0.00	
8.49	27.9	1	0.53	
8.61	28.3	1	0.39	
8.76	28.7	1	0.49	
8.81	28.9	1	0.00	
9.12	29.9	1	1.00	
9.14	30.0		0.00	**54.0**
9.60	31.5	1	1.50	
9.75	32.0	1	0.49	
10.47	34.3	1	2.35	
10.58	34.7	1	0.38	
11.81	38.8	1	4.03	
11.98	39.3	1	0.55	
12.19	40.0		0.70	**100.0**
12.83	42.1	1	2.10	
13.07	42.9	1	0.78	
13.32	43.7	1	0.81	
13.49	44.3	1	0.56	
13.56	44.5	1	0.00	
13.64	44.8	1	0.00	
14.00	45.9	1	1.18	
14.09	46.2	1	0.00	
14.16	46.5	1	0.00	
14.21	46.6	1	0.00	
14.38	47.2	1	0.55	
14.51	47.6	1	0.42	
14.60	47.9	1	0.00	
14.65	48.1	1	0.00	
14.72	48.3	1	0.00	
14.85	48.7	1	0.44	
15.03	49.3	1	0.57	
15.18	49.8	1	0.50	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0206
Stoller
Jan. 8, 2002

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
15.21	49.9	1	0.00	
15.24	50.0		0.00	**79.1**
15.27	50.1	1	0.00	
16.03	52.6	1	2.49	
16.40	53.8	1	1.19	
16.41	53.8	1	0.00	
16.46	54.0	1	0.00	
17.32	56.8	1	2.81	
17.70	58.1	1	1.26	
18.29	60.0		1.93	**96.8**
19.06	62.5	1	2.54	
19.14	62.8	1	0.00	
21.34	70.0		7.22	**97.6**
22.46	73.7	1	3.69	
22.69	74.4	1	0.75	
23.98	78.7	1	4.23	
24.38	80.0		1.33	**100.0**
25.56	83.9	1	3.86	
25.73	84.4	1	0.55	
26.76	87.8	1	3.37	
27.43	90.0		2.22	**100.0**
28.77	94.4	1	4.38	
29.24	95.9	1	1.54	
29.33	96.2	1	0.00	
29.45	96.6	1	0.39	
29.58	97.1	1	0.44	
29.99	98.4	1	1.35	
30.07	98.6	1	0.00	
30.16	99.0	1	0.00	
30.48	100.0		1.05	**91.5**
31.82	104.4	1	4.40	
32.39	106.3	1	1.85	
32.93	108.1	1	1.80	
33.21	109.0	1	0.90	
33.47	109.8	1	0.86	
33.53	110.0		0.00	**98.1**
33.64	110.4	1	0.38	
33.77	110.8	1	0.40	
33.84	111.0	1	0.00	
34.04	111.7	1	0.65	
34.34	112.7	1	1.00	
35.96	118.0	1	5.30	
36.58	120.0		2.03	**97.6**

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0206
Stoller
Jan. 8, 2002

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
37.21	122.1	1	2.07	
37.24	122.2	1	0.00	
37.95	124.5	1	2.35	
38.29	125.6	1	1.10	
38.61	126.7	1	1.06	
39.17	128.5	1	1.83	
39.59	129.9	1	1.39	
39.62	130.0		0.00	**98.0**
39.88	130.9	1	0.85	
40.02	131.3	1	0.45	
41.55	136.3	1	5.03	
42.67	140.0		3.67	**100.0**
45.72	150.0		10.00	**100.0**
47.74	156.6	1	6.63	
48.77	160.0		3.37	**100.0**
49.20	161.4	1	1.42	
50.63	166.1	1	4.70	
51.82	170.0		3.88	**100.0**
54.03	177.3	1	7.25	
54.39	178.5	1	1.20	
54.45	178.6	1	0.00	
54.56	179.0	1	0.38	
54.86	180.0		0.99	**98.2**
55.30	181.4	1	1.43	
55.59	182.4	1	0.96	
56.59	185.7	1	3.27	
57.25	187.8	1	2.16	
57.31	188.0	1	0.00	
57.91	190.0		1.96	**97.8**
58.85	193.1	1	3.09	
59.52	195.3	1	2.17	
60.02	196.9	1	1.67	
60.41	198.2	1	1.25	
60.51	198.5	1	0.35	
60.63	198.9	1	0.39	
60.74	199.3	1	0.36	
60.77	199.4	1	0.00	
60.96	200.0	1	0.63	
60.96	200.0		0.00	**99.1**
61.08	200.4	2	0.41	
61.16	200.7	2	0.00	
62.36	204.6	1	3.93	
64.01	210.0		5.40	**97.4**

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0206
Stoller
Jan. 8, 2002

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
65.18	213.9	2	3.85	
65.35	214.4	1	0.54	
66.09	216.8	2	2.44	
67.06	220.0		3.17	**100.0**
70.10	230.0		10.00	**100.0**
71.47	234.5	1	4.49	
72.25	237.0	1	2.54	
72.33	237.3	1	0.00	
72.38	237.5	1	0.00	
72.60	238.2	1	0.71	
73.15	240.0		1.82	**95.6**
74.55	244.6	1	4.58	
76.20	250.0		5.42	**100.0**
77.57	254.5	1	4.48	
77.92	255.6	1	1.15	
78.06	256.1	1	0.46	
78.10	256.2	1	0.00	
78.16	256.4	1	0.00	
78.20	256.6	1	0.00	
78.29	256.9	1	0.00	
79.25	260.0		3.14	**92.3**
79.43	260.6	1	0.59	
80.62	264.5	1	3.91	
81.22	266.5	1	1.98	
82.30	270.0		3.52	**100.0**
82.50	270.7	1	0.67	
82.80	271.6	1	0.97	
83.63	274.4	1	2.75	
83.97	275.5	1	1.11	
85.24	279.7	1	4.16	
85.27	279.8	1	0.00	
85.33	280.0	1	0.00	
85.34	280.0		0.00	**96.6**
85.96	282.0	1	2.03	
86.70	284.4	1	2.41	
88.39	290.0		5.56	**100.0**
88.73	291.1	1	1.11	
89.73	294.4	1	3.29	
91.03	298.7	1	4.26	
91.19	299.2	1	0.53	
91.42	299.9	1	0.73	
91.44	300.0		0.00	**99.2**

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0205
Stoller
Dec 9, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
7.89	25.9	1		
8.19	26.9	1	0.98	
8.25	27.1	1	0.00	
8.31	27.3	1	0.00	
8.35	27.4	1	0.00	
8.43	27.7	1	0.00	
8.48	27.8	1	0.00	
8.52	27.9	1	0.00	
8.65	28.4	1	0.43	
8.74	28.7	1	0.00	
8.83	29.0	1	0.00	
9.06	29.7	1	0.77	
9.14	30.0	1	0.00	
9.14	30.0		0.00	**53.2**
9.19	30.2	1	0.00	
9.20	30.2	1	0.00	
9.25	30.3	1	0.00	
9.30	30.5	1	0.00	
9.35	30.7	1	0.00	
9.40	30.8	1	0.00	
9.49	31.1	1	0.00	
9.56	31.4	1	0.00	
9.58	31.4	1	0.00	
9.62	31.6	2	0.00	
9.68	31.8	1	0.00	
9.70	31.8	2	0.00	
9.76	32.0	3	0.00	
9.78	32.1	2	0.00	
9.86	32.4	2	0.00	
9.93	32.6	2	0.00	
9.95	32.7	2	0.00	
10.04	32.9	2	0.00	
10.09	33.1	2	0.00	
10.13	33.2	1	0.00	
10.15	33.3	1	0.00	
10.20	33.5	2	0.00	
10.24	33.6	2	0.00	
10.28	33.7	2	0.00	
10.35	34.0	1	0.00	
10.38	34.1	2	0.00	
10.54	34.6	1	0.54	
10.61	34.8	2	0.00	
10.67	35.0	1	0.00	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0205
Stoller
Dec 9, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
10.72	35.2	2	0.00	
10.81	35.5	2	0.00	
10.88	35.7	1	0.00	
10.93	35.9	1	0.00	
11.03	36.2	1	0.00	
11.16	36.6	2	0.43	
11.29	37.0	2	0.43	
11.34	37.2	1	0.00	
11.45	37.6	2	0.34	
11.50	37.7	1	0.00	
11.55	37.9	1	0.00	
11.64	38.2	1	0.00	
11.75	38.5	1	0.34	
11.80	38.7	1	0.00	
11.81	38.8	1	0.00	
11.83	38.8	2	0.00	
11.88	39.0	3	0.00	
11.92	39.1	1	0.00	
11.95	39.2	1	0.00	
11.99	39.3	1	0.00	
12.02	39.4	1	0.00	
12.11	39.7	2	0.00	
12.19	40.0		0.00	**20.8**
12.21	40.1	2	0.00	
12.30	40.4	2	0.00	
12.40	40.7	2	0.33	
12.45	40.9	1	0.00	
12.51	41.1	2	0.00	
12.63	41.4	3	0.38	
12.75	41.8	1	0.40	
12.97	42.6	1	0.72	
14.19	46.5	1	3.99	
14.34	47.1	1	0.52	
15.01	49.2	1	2.18	
15.24	50.0		0.76	**92.8**
15.40	50.5	1	0.53	
15.55	51.0	1	0.48	
15.79	51.8	1	0.79	
16.22	53.2	1	1.43	
16.34	53.6	1	0.38	
16.44	54.0	1	0.34	
16.55	54.3	1	0.36	
17.96	58.9	1	4.60	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0205
Stoller
Dec 9, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
18.00	59.1	1	0.00	
18.13	59.5	1	0.42	
18.29	60.0		0.51	**98.4**
21.34	70.0		10.00	**100**
24.38	80.0		10.00	**100**
27.43	90.0		10.00	**100**
30.48	100.0		10.00	**100**
33.53	110.0		10.00	**100**
36.58	120.0		10.00	**100**
39.62	130.0		10.00	**100**
42.67	140.0		10.00	**100**
43.84	143.8	1	3.83	
45.72	150.0		6.17	**100**
48.77	160.0		10.00	**100**
51.82	170.0		10.00	**100**
54.86	180.0		10.00	**100**
57.91	190.0		10.00	**100**
60.96	200.0		10.00	**100**
64.01	210.0		10.00	**100**
67.06	220.0		10.00	**100**
70.10	230.0		10.00	**100**
73.15	240.0		10.00	**100**
76.20	250.0		10.00	**100**
78.19	256.5	1	6.54	
78.51	257.6	1	1.03	
79.25	260.0		2.43	**100**
80.67	264.7	1	4.67	
82.30	270.0		5.33	**100**
85.12	279.3	1	9.26	
85.30	279.9	1	0.61	
85.34	280.0		0.00	**98.7**
86.21	282.8	1	2.84	
86.72	284.5	1	1.69	
87.13	285.9	1	1.33	
87.29	286.4	1	0.53	
87.45	286.9	1	0.52	
87.51	287.1	1	0.00	
87.56	287.3	1	0.00	
87.58	287.3	1	0.00	
87.62	287.5	1	0.00	
87.95	288.5	1	1.08	
88.01	288.7	1	0.00	
88.15	289.2	1	0.47	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0205
Stoller
Dec 9, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
88.21	289.4	1	0.00	
88.39	290.0		0.61	**90.7**
88.46	290.2	1	0.00	
88.48	290.3	1	0.00	
88.50	290.4	1	0.00	
88.72	291.1	1	0.72	
88.88	291.6	1	0.52	
89.50	293.6	1	2.02	
89.60	294.0	1	0.35	
89.91	295.0	1	1.01	
90.00	295.3	1	0.00	
90.12	295.7	1	0.39	
90.21	296.0	1	0.00	
90.28	296.2	1	0.00	
90.32	296.3	1	0.00	
90.41	296.6	1	0.00	
90.50	296.9	1	0.00	
90.61	297.3	1	0.35	
90.85	298.1	1	0.79	
91.00	298.6	1	0.50	
91.15	299.1	1	0.49	
91.28	299.5	1	0.43	
91.30	299.6	1	0.00	
91.33	299.6	1	0.00	
91.44	300.0		0.36	**79.3**

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
7.96	26.1	1		
8.03	26.3	1	0.00	
8.05	26.4	1	0.00	
8.14	26.7	1	0.00	
8.18	26.9	1	0.00	
8.21	26.9	1	0.00	
8.25	27.1	1	0.00	
8.35	27.4	1	0.33	
8.39	27.5	1	0.00	
8.47	27.8	1	0.00	
8.52	28.0	1	0.00	
8.57	28.1	1	0.00	
8.65	28.4	1	0.00	
8.71	28.6	1	0.00	
8.77	28.8	1	0.00	
8.85	29.0	1	0.00	
8.92	29.3	1	0.00	
8.96	29.4	1	0.00	
9.01	29.6	1	0.00	
9.07	29.8	1	0.00	
9.14	30.0	1	0.00	
9.14	30.0		0.00	**3.3**
9.26	30.4	1	0.38	
9.31	30.6	1	0.00	
9.38	30.8	1	0.00	
9.48	31.1	1	0.00	
9.61	31.5	1	0.43	
9.65	31.7	1	0.00	
9.70	31.8	1	0.00	
9.74	32.0	1	0.00	
9.81	32.2	1	0.00	
9.89	32.4	1	0.00	
9.90	32.5	1	0.00	
9.96	32.7	1	0.00	
10.07	33.1	1	0.38	
10.17	33.4	1	0.33	
10.21	33.5	1	0.00	
10.26	33.7	1	0.00	
10.29	33.8	1	0.00	
10.31	33.8	1	0.00	
10.36	34.0	1	0.00	
10.41	34.1	1	0.00	
10.45	34.3	1	0.00	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
10.49	34.4	1	0.00	
10.51	34.5	1	0.00	
10.53	34.6	1	0.00	
10.59	34.8	1	0.00	
10.61	34.8	1	0.00	
10.69	35.1	2	0.00	
10.73	35.2	1	0.00	
10.77	35.3	1	0.00	
10.81	35.5	1	0.00	
10.91	35.8	1	0.35	
10.98	36.0	1	0.00	
11.04	36.2	1	0.00	
11.24	36.9	1	0.66	
11.29	37.0	1	0.00	
11.32	37.1	1	0.00	
11.38	37.3	1	0.00	
11.44	37.5	1	0.00	
11.50	37.7	1	0.00	
11.55	37.9	1	0.00	
11.59	38.0	1	0.00	
11.62	38.1	1	0.00	
11.74	38.5	1	0.38	
11.77	38.6	1	0.00	
11.84	38.9	1	0.00	
11.90	39.0	1	0.00	
11.96	39.3	1	0.00	
12.18	40.0	1	0.72	
12.19	40.0		0.00	**36.3**
12.21	40.1	1	0.00	
12.23	40.1	1	0.00	
12.36	40.6	1	0.43	
12.47	40.9	1	0.34	
12.54	41.1	1	0.00	
12.64	41.5	1	0.34	
12.67	41.6	1	0.00	
12.73	41.8	1	0.00	
12.80	42.0	1	0.00	
12.86	42.2	2	0.00	
12.93	42.4	1	0.00	
12.98	42.6	1	0.00	
13.04	42.8	1	0.00	
13.16	43.2	1	0.38	
13.16	43.2	1	0.00	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
13.30	43.6	1	0.45	
13.36	43.8	1	0.00	
13.45	44.1	1	0.00	
13.52	44.4	1	0.00	
13.64	44.8	1	0.39	
13.70	45.0	2	0.00	
13.81	45.3	1	0.36	
13.83	45.4	1	0.00	
13.95	45.8	1	0.38	
14.18	46.5	1	0.76	
14.34	47.0	1	0.51	
14.54	47.7	1	0.66	
15.24	50.0		2.30	**73**
15.99	52.5	1	2.45	
16.56	54.3	1	1.87	
16.57	54.4	1	0.00	
18.29	60.0		5.63	**99.5**
19.59	64.3	1	4.27	
19.77	64.9	1	0.60	
19.91	65.3	1	0.44	
20.51	67.3	1	1.99	
20.83	68.3	1	1.04	
21.34	70.0		1.66	**100**
23.77	78.0	1	7.99	
24.03	78.8	1	0.85	
24.34	79.9	1	1.02	
24.38	80.0		0.00	**98.6**
27.43	90.0		10.00	**100**
29.24	95.9	1	5.94	
30.48	100.0		4.06	**100**
31.67	103.9	1	3.92	
33.09	108.6	1	4.65	
33.53	110.0		1.43	**100**
36.58	120.0		10.00	**100**
38.80	127.3	2	7.29	
39.62	130.0		2.71	**100**
40.24	132.0	1	2.02	
42.67	140.0		7.98	**100**
44.23	145.1	1	5.12	
44.97	147.6	1	2.43	
45.01	147.7	1	0.00	
45.72	150.0		2.34	**98.9**
47.29	155.1	1	5.14	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
48.77	160.0		4.86	**100**
51.82	170.0		10.00	**100**
51.86	170.2	1	0.00	
54.86	180.0		9.85	**98.5**
57.91	190.0		10.00	**100**
59.35	194.7	1	4.71	
59.60	195.5	1	0.82	
59.76	196.1	1	0.52	
60.96	200.0		3.95	**100**
64.01	210.0		10.00	**100**
64.69	212.2	1	2.23	
67.06	220.0		7.77	**100**
68.70	225.4	1	5.40	
68.90	226.0	1	0.64	
69.69	228.6	1	2.60	
70.10	230.0		1.36	**100**
70.30	230.6	1	0.64	
71.90	235.9	1	5.26	
73.15	240.0		4.10	**100**
73.65	241.6	1	1.63	
73.71	241.8	1	0.00	
74.34	243.9	1	2.08	
75.29	247.0	1	3.11	
75.31	247.1	1	0.00	
76.15	249.8	1	2.74	
76.20	250.0		0.00	**95.6**
76.21	250.0	1	0.00	
76.42	250.7	1	0.68	
76.54	251.1	1	0.41	
76.94	252.4	1	1.30	
77.08	252.9	1	0.47	
77.14	253.1	1	0.00	
79.25	260.0		6.91	**97.7**
79.98	262.4	1	2.40	
80.05	262.6	1	0.00	
80.99	265.7	1	3.10	
81.52	267.5	1	1.72	
82.09	269.3	1	1.87	
82.30	270.0		0.68	**97.7**
82.90	272.0	1	1.98	
84.01	275.6	1	3.64	
85.24	279.7	1	4.04	
85.34	280.0		0.34	**100**

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0204
Stoller
Dec 9/10, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
85.53	280.6	1	0.60	
85.62	280.9	1	0.00	
86.11	282.5	1	1.61	
86.48	283.7	1	1.22	
86.62	284.2	1	0.46	
86.72	284.5	1	0.33	
86.94	285.2	1	0.70	
87.01	285.5	1	0.00	
88.39	290.0		4.55	**94.7**
88.65	290.9	1	0.85	
89.26	292.9	1	2.01	
89.35	293.1	1	0.00	
90.42	296.6	1	3.50	
90.60	297.2	1	0.60	
91.44	300.0		2.76	**97.2**

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0203
Stoller
Dec 10, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
9.94	32.6	1		
10.04	32.9	1	0.34	
10.22	33.5	1	0.58	
10.30	33.8	1	0.00	
10.37	34.0	1	0.00	
10.86	35.6	1	1.62	
11.00	36.1	1	0.46	
11.11	36.4	1	0.35	
11.18	36.7	1	0.00	
11.82	38.8	1	2.12	
11.96	39.3	1	0.46	
12.14	39.8	1	0.59	
12.19	40.0		0.00	**88.1**
12.54	41.1	1	1.14	
13.12	43.0	1	1.89	
13.14	43.1	1	0.00	
13.22	43.4	1	0.00	
13.37	43.9	1	0.49	
13.40	44.0	1	0.00	
13.47	44.2	1	0.00	
13.48	44.2	1	0.00	
13.54	44.4	1	0.00	
13.55	44.5	2	0.00	
13.61	44.6	2	0.00	
13.69	44.9	1	0.00	
13.77	45.2	2	0.00	
13.80	45.3	2	0.00	
13.97	45.8	1	0.53	
14.12	46.3	1	0.50	
14.22	46.6	1	0.00	
14.32	47.0	1	0.35	
14.33	47.0	1	0.00	
14.35	47.1	1	0.00	
14.39	47.2	1	0.00	
14.56	47.8	2	0.58	
14.93	49.0	2	1.19	
15.14	49.7	1	0.69	
15.24	50.0		0.34	**77**
15.29	50.2	1	0.00	
16.95	55.6	3	5.44	
18.16	59.6	1	3.96	
18.29	60.0		0.43	**98.3**
20.78	68.2	3	8.17	
21.34	70.0		1.83	**100**

$$RQD = \frac{\text{Sum(Unfractured Lengths > 10cm) (feet)}}{\text{10 feet}} \times 100$$

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0203
Stoller
Dec 10, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
21.63	71.0	1	0.95	
22.45	73.7	1	2.70	
24.31	79.8	1	6.10	
24.38	80.0		0.00	**97.5**
27.43	90.0		10.00	**100**
30.48	100.0		10.00	**100**
33.53	110.0		10.00	**100**
36.58	120.0		10.00	**100**
37.00	121.4	1	1.40	
39.43	129.4	1	7.97	
39.62	130.0		0.63	**100**
40.08	131.5	1	1.50	
42.67	140.0		8.50	**100**
45.72	150.0		10.00	**100**
48.77	160.0		10.00	**100**
51.82	170.0		10.00	**100**
54.00	177.2	1	7.18	
54.86	180.0		2.82	**100**
56.37	185.0	3	4.95	
57.38	188.2	1	3.29	
57.91	190.0		1.76	**100**
58.64	192.4	1	2.40	
58.68	192.5	1	0.00	
60.96	200.0		7.49	**98.9**
62.34	204.5	1	4.54	
64.01	210.0		5.46	**100**
65.71	215.6	1	5.58	
65.78	215.8	1	0.00	
65.79	215.9	1	0.00	
65.83	216.0	1	0.00	
65.88	216.1	1	0.00	
65.97	216.4	1	0.00	
66.28	217.5	1	1.02	
66.60	218.5	1	1.03	
67.05	220.0	1	1.48	
67.06	220.0		0.00	**91.1**
67.52	221.5	1	1.51	
67.64	221.9	2	0.40	
69.67	228.6	1	6.68	
70.10	230.0		1.41	**100**
71.63	235.0	1	5.00	
71.73	235.3	1	0.00	
71.89	235.9	1	0.55	
71.98	236.1	1	0.00	

$$RQD = \frac{\text{Sum(Unfractured Lengths > 10cm) (feet)}}{\text{10 feet}} \times 100$$

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0203
Stoller
Dec 10, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
73.15	240.0		3.86	**94.1**
74.55	244.6	1	4.59	
75.51	247.7	1	3.15	
75.54	247.8	1	0.00	
75.57	247.9	1	0.00	
75.64	248.2	1	0.00	
76.20	250.0		1.84	**95.8**
76.43	250.7	1	0.74	
76.85	252.1	1	1.38	
76.99	252.6	1	0.46	
77.01	252.7	1	0.00	
77.21	253.3	1	0.67	
77.57	254.5	1	1.18	
77.64	254.7	2	0.00	
77.71	255.0	2	0.00	
78.06	256.1	1	1.12	
78.28	256.8	1	0.74	
78.59	257.9	1	1.02	
78.90	258.9	1	1.02	
78.96	259.1	1	0.00	
79.09	259.5	1	0.40	
79.16	259.7	1	0.00	
79.25	260.0		0.00	**87.3**
79.27	260.1	1	0.00	
79.62	261.2	1	1.15	
79.85	262.0	3	0.75	
80.02	262.5	2	0.56	
80.17	263.0	1	0.51	
80.23	263.2	2	0.00	
80.60	264.4	1	1.20	
80.96	265.6	1	1.18	
81.52	267.4	1	1.83	
82.30	270.0		2.56	**97.4**
82.48	270.6	1	0.62	
83.21	273.0	1	2.37	
83.29	273.3	1	0.00	
83.38	273.6	1	0.00	
83.60	274.3	1	0.73	
84.53	277.3	1	3.05	
85.34	280.0		2.67	**94.4**
86.03	282.3	1	2.25	
86.21	282.8	1	0.58	
86.32	283.2	1	0.36	
86.89	285.1	1	1.88	

$$\text{RQD} = \frac{\text{Sum(Unfractured Lengths} > \text{10cm) (feet)}}{\text{10 feet}} \times 100$$

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0203
Stoller
Dec 10, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
87.14	285.9	1	0.81	
87.86	288.3	1	2.37	
88.16	289.2	1	0.98	
88.39	290.0		0.77	**100**
88.42	290.1	1	0.00	
88.76	291.2	1	1.12	
90.03	295.4	1	4.18	
90.21	296.0	1	0.58	
90.55	297.1	1	1.10	
91.44	300.0		2.93	**99.1**

$$\text{RQD} = \frac{\text{Sum(Unfractured Lengths} > \text{10cm) (feet)}}{\text{10 feet}} \times 100$$

Rock Quality Designation Table Table
Image Features
Crescent Junction, UT
Well: CH-0202
Stoller
Dec 10/11, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
9.18	30.1	1		
9.24	30.3	1	0.00	
9.32	30.6	2	0.00	
9.37	30.7	2	0.00	
9.42	30.9	2	0.00	
9.45	31.0	1	0.00	
9.50	31.2	1	0.00	
9.52	31.2	1	0.00	
9.60	31.5	1	0.00	
9.63	31.6	1	0.00	
9.70	31.8	1	0.00	
9.77	32.1	2	0.00	
9.84	32.3	2	0.00	
9.95	32.6	1	0.35	
9.99	32.8	1	0.00	
10.04	32.9	1	0.00	
10.10	33.1	1	0.00	
10.16	33.3	2	0.00	
10.24	33.6	2	0.00	
10.27	33.7	2	0.00	
10.31	33.8	1	0.00	
10.33	33.9	2	0.00	
10.35	34.0	2	0.00	
10.38	34.1	2	0.00	
10.41	34.2	2	0.00	
10.49	34.4	2	0.00	
10.56	34.6	1	0.00	
10.62	34.8	2	0.00	
10.63	34.9	2	0.00	
10.71	35.1	2	0.00	
10.74	35.2	1	0.00	
10.74	35.3	1	0.00	
10.82	35.5	2	0.00	
10.84	35.6	2	0.00	
10.88	35.7	2	0.00	
10.92	35.8	2	0.00	
10.97	36.0	2	0.00	
11.00	36.1	2	0.00	
11.04	36.2	2	0.00	
11.09	36.4	2	0.00	
11.16	36.6	1	0.00	
11.17	36.7	2	0.00	
11.24	36.9	2	0.00	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table Table
Image Features
Crescent Junction, UT
Well: CH-0202
Stoller
Dec 10/11, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
11.27	37.0	1	0.00	
11.34	37.2	2	0.00	
11.38	37.3	2	0.00	
11.41	37.4	1	0.00	
11.46	37.6	2	0.00	
11.48	37.7	2	0.00	
11.55	37.9	2	0.00	
11.58	38.0	2	0.00	
11.64	38.2	1	0.00	
11.68	38.3	1	0.00	
11.70	38.4	2	0.00	
11.79	38.7	2	0.00	
11.86	38.9	1	0.00	
11.91	39.1	1	0.00	
11.97	39.3	2	0.00	
12.04	39.5	1	0.00	
12.08	39.6	2	0.00	
12.19	40.0		0.36	**7.1**
12.21	40.1	1	0.00	
12.24	40.2	1	0.00	
12.26	40.2	1	0.00	
12.31	40.4	2	0.00	
12.38	40.6	1	0.00	
12.44	40.8	2	0.00	
12.52	41.1	2	0.00	
12.55	41.2	1	0.00	
12.56	41.2	1	0.00	
12.63	41.5	2	0.00	
12.80	42.0	1	0.53	
12.86	42.2	1	0.00	
12.91	42.4	2	0.00	
12.94	42.5	1	0.00	
13.01	42.7	1	0.00	
13.27	43.5	2	0.87	
13.29	43.6	1	0.00	
13.30	43.6	1	0.00	
13.53	44.4	1	0.76	
15.24	50.0		5.62	**77.8**
18.29	60.0		10.00	**100.0**
20.52	67.3	1	7.33	
20.60	67.6	1	0.00	
21.34	70.0		2.43	**97.6**
21.96	72.1	1	2.05	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table Table
Image Features
Crescent Junction, UT
Well: CH-0202
Stoller
Dec 10/11, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
24.38	80.0		7.95	**100.0**
25.66	84.2	1	4.18	
27.43	90.0		5.82	**100.0**
29.13	95.6	1	5.58	
29.48	96.7	1	1.13	
29.66	97.3	1	0.59	
30.43	99.9	1	2.55	
30.48	100.0		0.00	**98.5**
30.60	100.4	1	0.40	
31.02	101.8	1	1.38	
31.15	102.2	1	0.42	
31.40	103.0	1	0.82	
32.10	105.3	1	2.29	
32.18	105.6	1	0.00	
33.49	109.9	1	4.30	
33.53	110.0		0.00	**96.1**
34.02	111.6	1	1.61	
35.37	116.0	1	4.43	
36.58	120.0		3.96	**100.0**
37.00	121.4	1	1.38	
37.70	123.7	1	2.30	
37.74	123.8	1	0.00	
38.20	125.3	1	1.52	
38.34	125.8	1	0.47	
38.38	125.9	1	0.00	
39.62	130.0		4.07	**97.4**
40.09	131.5	1	1.52	
42.63	139.9	1	8.34	
42.67	140.0		0.00	**98.6**
42.96	141.0	1	0.96	
43.62	143.1	3	2.16	
44.50	146.0	1	2.87	
45.29	148.6	1	2.59	
45.52	149.3	1	0.76	
45.72	150.0		0.66	**100.0**
47.22	154.9	1	4.92	
48.77	160.0		5.08	**100.0**
49.03	160.9	2	0.87	
51.62	169.4	1	8.48	
51.82	170.0		0.65	**100.0**
52.15	171.1	1	1.09	
54.86	180.0		8.91	**100.0**
56.51	185.4	1	5.40	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table Table
Image Features
Crescent Junction, UT
Well: CH-0202
Stoller
Dec 10/11, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
57.91	190.0		4.60	**100.0**
60.96	200.0		10.00	**100.0**
64.01	210.0		10.00	**100.0**
65.61	215.2	1	5.24	
65.94	216.3	3	1.09	
66.62	218.6	1	2.24	
66.77	219.1	1	0.50	
66.81	219.2	1	0.00	
66.89	219.5	1	0.00	
66.98	219.8	1	0.00	
67.02	219.9	1	0.00	
67.06	220.0		0.00	**90.7**
70.10	230.0		10.00	**100.0**
72.76	238.7	2	8.71	
73.10	239.8	1	1.12	
73.15	240.0		0.00	**98.3**
74.35	243.9	1	3.94	
76.02	249.4	1	5.46	
76.20	250.0		0.60	**100.0**
76.41	250.7	1	0.68	
76.48	250.9	1	0.00	
77.83	255.3	1	4.41	
77.91	255.6	2	0.00	
78.45	257.4	1	1.75	
79.25	260.0		2.63	**94.7**
79.73	261.6	1	1.57	
80.50	264.1	1	2.54	
81.48	267.3	1	3.22	
81.66	267.9	1	0.58	
81.68	268.0	1	0.00	
81.74	268.2	1	0.00	
82.30	270.0		1.81	**97.2**
83.32	273.4	1	3.37	
83.72	274.7	1	1.30	
84.15	276.1	1	1.42	
85.34	280.0		3.91	**100.0**
87.04	285.6	1	5.57	
88.39	290.0		4.43	**100.0**

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0201
Stoller
Dec 11, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
8.99	29.5	1		
9.11	29.9	1	0.39	
9.14	30.0			
9.23	30.3	1	0.00	
9.29	30.5	1	0.00	
9.52	31.2	1	0.75	
9.59	31.5	1	0.00	
9.65	31.7	2	0.00	
9.71	31.9	1	0.00	
9.74	32.0	1	0.00	
9.80	32.2	1	0.00	
9.93	32.6	1	0.42	
10.25	33.6	1	1.04	
10.26	33.7	1	0.00	
10.34	33.9	1	0.00	
10.38	34.1	1	0.00	
10.43	34.2	2	0.00	
10.69	35.1	1	0.84	
10.91	35.8	1	0.71	
11.15	36.6	1	0.79	
11.58	38.0	1	1.43	
11.66	38.3	1	0.00	
11.82	38.8	1	0.53	
11.95	39.2	1	0.42	
12.19	40.0		0.79	**77.2**
12.25	40.2	1	0.00	
13.07	42.9	1	2.68	
13.07	42.9	1	0.00	
13.21	43.3	1	0.45	
13.87	45.5	1	2.19	
15.24	50.0		4.48	**98**
16.24	53.3	1	3.27	
18.29	60.0		6.73	**100**
21.34	70.0		10.00	**100**
24.38	80.0		10.00	**100**
25.81	84.7	2	4.69	
25.85	84.8	3	0.00	
27.43	90.0		5.19	**98.8**
30.48	100.0		10.00	**100**
30.58	100.3	1	0.33	
30.73	100.8	1	0.48	
31.05	101.9	1	1.07	
31.64	103.8	1	1.91	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0201
Stoller
Dec 11, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
31.68	103.9	1	0.00	
31.70	104.0	2	0.00	
31.76	104.2	3	0.00	
31.77	104.2	3	0.00	
33.53	110.0		5.76	**95.5**
34.92	114.6	1	4.57	
36.58	120.0		5.43	**100**
39.62	130.0		10.00	**100**
41.47	136.1	1	6.06	
42.35	138.9	1	2.88	
42.67	140.0		1.06	**100**
44.09	144.7	1	4.65	
45.56	149.5	1	4.83	
45.71	150.0	1	0.48	
45.72	150.0		0.00	**99.6**
45.77	150.2	1	0.00	
46.07	151.2	1	1.00	
46.19	151.6	1	0.39	
46.73	153.3	1	1.77	
46.85	153.7	1	0.38	
47.00	154.2	1	0.50	
47.11	154.6	1	0.35	
47.15	154.7	1	0.00	
47.20	154.9	1	0.00	
47.27	155.1	2	0.00	
47.38	155.4	1	0.36	
47.41	155.6	1	0.00	
47.45	155.7	2	0.00	
47.49	155.8	1	0.00	
47.52	155.9	1	0.00	
47.55	156.0	1	0.00	
47.57	156.1	2	0.00	
47.61	156.2	2	0.00	
47.87	157.1	1	0.88	
48.36	158.7	1	1.58	
48.77	160.0		1.35	**85.6**
49.53	162.5	1	2.49	
50.36	165.2	1	2.73	
50.87	166.9	1	1.68	
51.02	167.4	1	0.49	
51.58	169.2	1	1.82	
51.82	170.0		0.79	**100**
52.36	171.8	1	1.78	

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

Rock Quality Designation Table
Image Features
Crescent Junction, UT
Well: CH-0201
Stoller
Dec 11, 2005

Depth (meters)	Depth (feet)	Feature Rank (0 to 5)	Delta Depth (feet)	RQD (%)
52.41	172.0	1	0.00	
53.01	173.9	1	1.98	
53.91	176.9	1	2.95	
53.95	177.0	1	0.00	
54.71	179.5	3	2.51	
54.86	180.0		0.49	**97.1**
55.99	183.7	1	3.71	
57.91	190.0		6.29	**100**
60.20	197.5	1	7.51	
60.96	200.0		2.49	**100**
63.82	209.4	1	9.39	
64.01	210.0		0.61	**100**
64.97	213.2	2	3.16	
65.50	214.9	1	1.75	
65.54	215.0	1	0.00	
67.06	220.0		4.99	**99**
67.42	221.2	3	1.18	
67.88	222.7	1	1.52	
70.10	230.0		7.30	**100**
71.16	233.5	1	3.48	
71.59	234.9	1	1.38	
72.30	237.2	1	2.34	
73.15	240.0		2.80	**100**
76.20	250.0		10.00	**100**
77.31	253.7	1	3.65	
79.25	260.0		6.35	**100**
82.30	270.0		10.00	**100**
84.80	278.2	1	8.23	
85.34	280.0		1.77	**100**
86.33	283.3	1	3.25	
87.06	285.6	1	2.37	
88.39	290.0		4.38	**100**
89.55	293.8	1	3.79	
91.18	299.1	1	5.35	
91.44	300.0		0.86	**100**

RQD = Sum(Unfractured Lengths > 10cm) (feet) x 100
10 feet

APPENDIX D

LIMITATIONS

LIMITATIONS

COLOG's logging was performed in accordance with generally accepted industry practices. COLOG has observed that degree of care and skill generally exercised by others under similar circumstances and conditions. Interpretations of logs or interpretations of test or other data, and any recommendation or hydrogeologic description based upon such interpretations, are opinions based upon inferences from measurements, empirical relationships and assumptions. These inferences and assumptions require engineering judgment, and therefore, are not scientific certainties. As such, other professional engineers or analysts may differ as to their interpretation. Accordingly, COLOG cannot and does not warrant the accuracy, correctness or completeness of any such interpretation, recommendation or hydrogeologic description.

All technical data, evaluations, analysis, reports, and other work products are instruments of COLOG's professional services intended for one-time use on this project. Any reuse of work product by Client for other than the purpose for which they were originally intended will be at Client's sole risk and without liability to COLOG. COLOG makes no warranties, either express or implied. Under no circumstances shall COLOG or its employees be liable for consequential damages.

_____