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Full Waveform Sonic

COMPANY	Excelsior Mining
WELL	NSH-014B
FIELD	Gunnison
COUNTY	Cochise
STATE	Arizona

Company Excelsior Mining
Well NSH-014B
Field Gunnison
County Cochise
State AZ

LOCATION
NSH-014B

QTR **SEC** **TWP** **RGE**

OTHER SERVICES
Electric Resistivity
Caliper

PERMANENT DATUM GROUND LEVEL **ELEVATION** NA

LOG MEAS. FROM GROUND LEVEL 0.0' **ABOVE PERMINANT DATUM**

DRILLING MEAS. FROM GROUND LEVEL

DATE ACQUIRED	20 November 2014			
RUN NUMBER	3			
LOG TYPE	Sonic			
DEPTH-DRILLER	1280'			
DEPTH-LOGGER	1280'			
BTM LOG INTERVAL	1285.8'			
TOP LOG INTERVAL	13.8'			
RECORDED BY	C. ONeil			
WITNESSED BY	C. Gardner			
PROBE TYPE, S/N	TRSS 9209			
LOGGING SPEED	12 ft/min			
A.S.D.E.	NA			
SAMPLE INTERVAL	0.1'			

BOREHOLE RECORD				**CASING RECORD**			
RUN No.	**BIT**	**FROM**	**TO**	**SIZE**	**WGT.**	**FROM**	**TO**
ONE	10"	0	1000'	12.25"	STEEL	GS	20'
	9 5/8"	1000'	TD				

NA - Not Available, N/A - Not Applicable

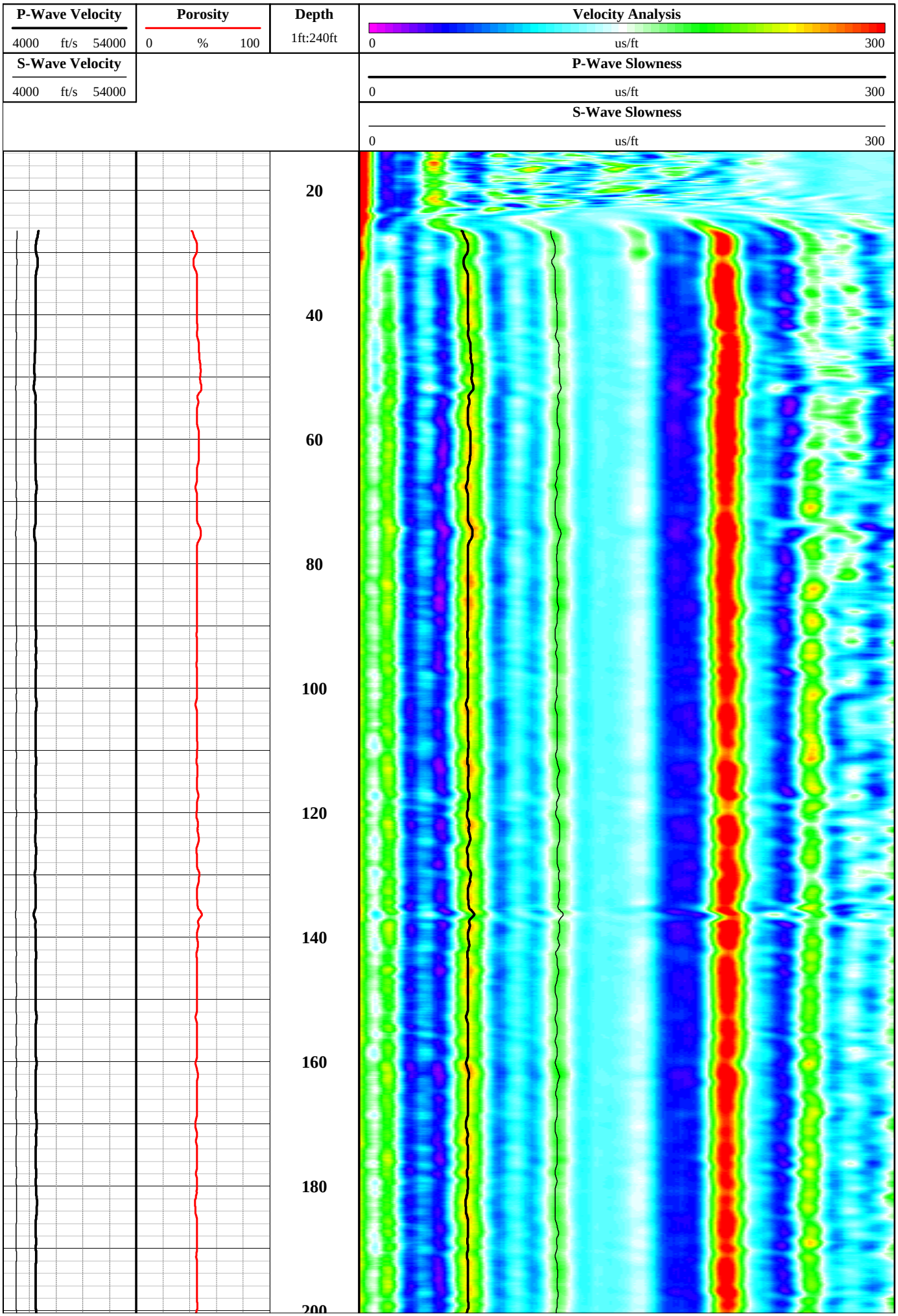
COMMENTS
Water-level = 20.1'

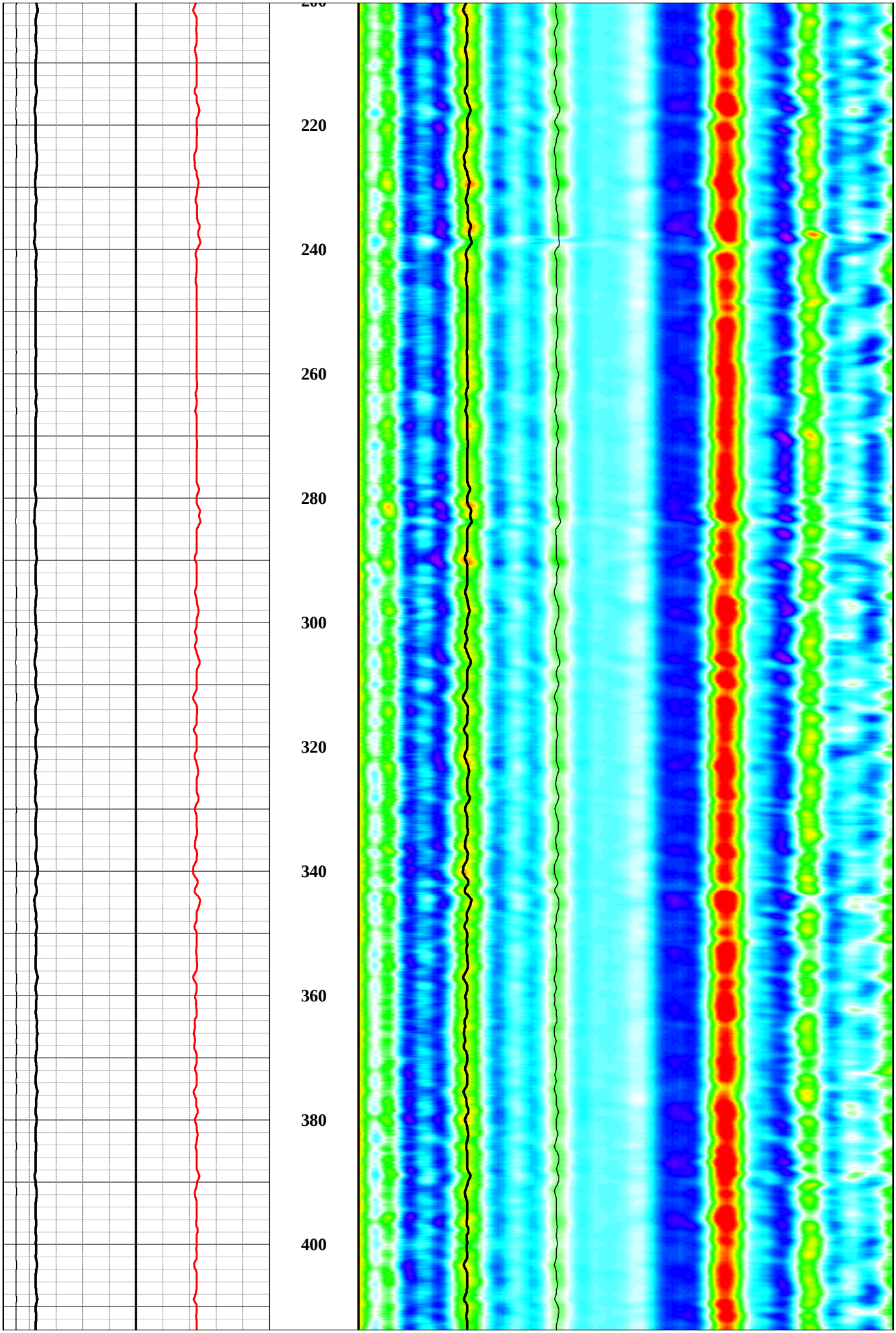
Porosity Calculation

Porosity = (delta t log - delta t matrix) / (delta t fluid - delta t matrix)

Where: delta t log = P-Wave Velocity
delta t matrix = Maximum Value of P-Wave Velocity (27400 ft/s)
delta t fluid = Fluid velocity of borehole (assumption of muddy borehole conditions ~ 3280 ft/s)

INPUT FILES:
NSH-014B Sonic.hed
NSH-014B Sonic.lgx


P-Wave Velocity
4000 ft/s 54000
S-Wave Velocity
4000 ft/s 54000
Porosity
0 % 100
Depth
1ft:240ft
Velocity Analysis
0 us/ft 300
P-Wave Slowness
0 us/ft 300
S-Wave Slowness
0 us/ft 300
20
40
60
80
100
120
140
160
180
200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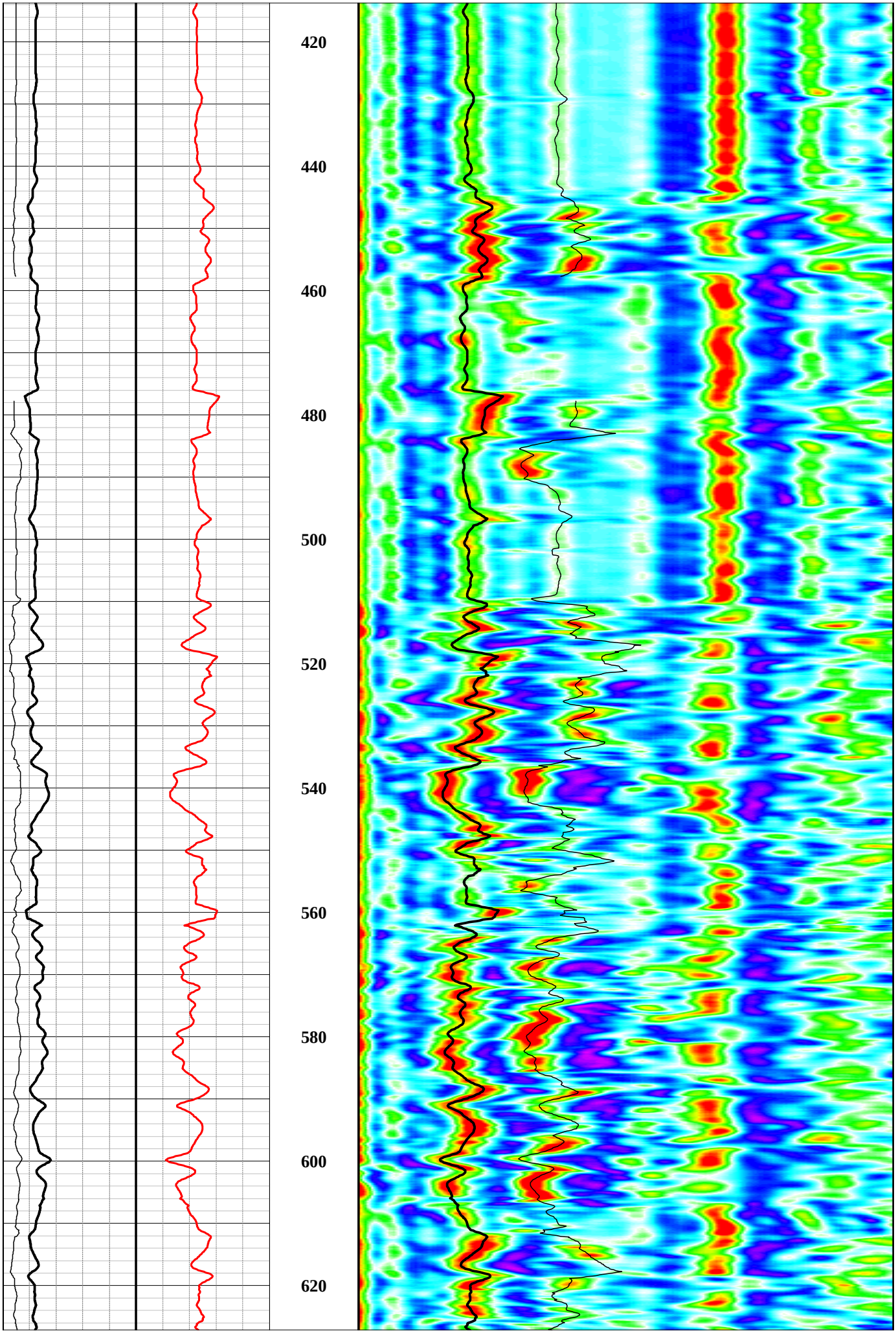
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520
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580
600
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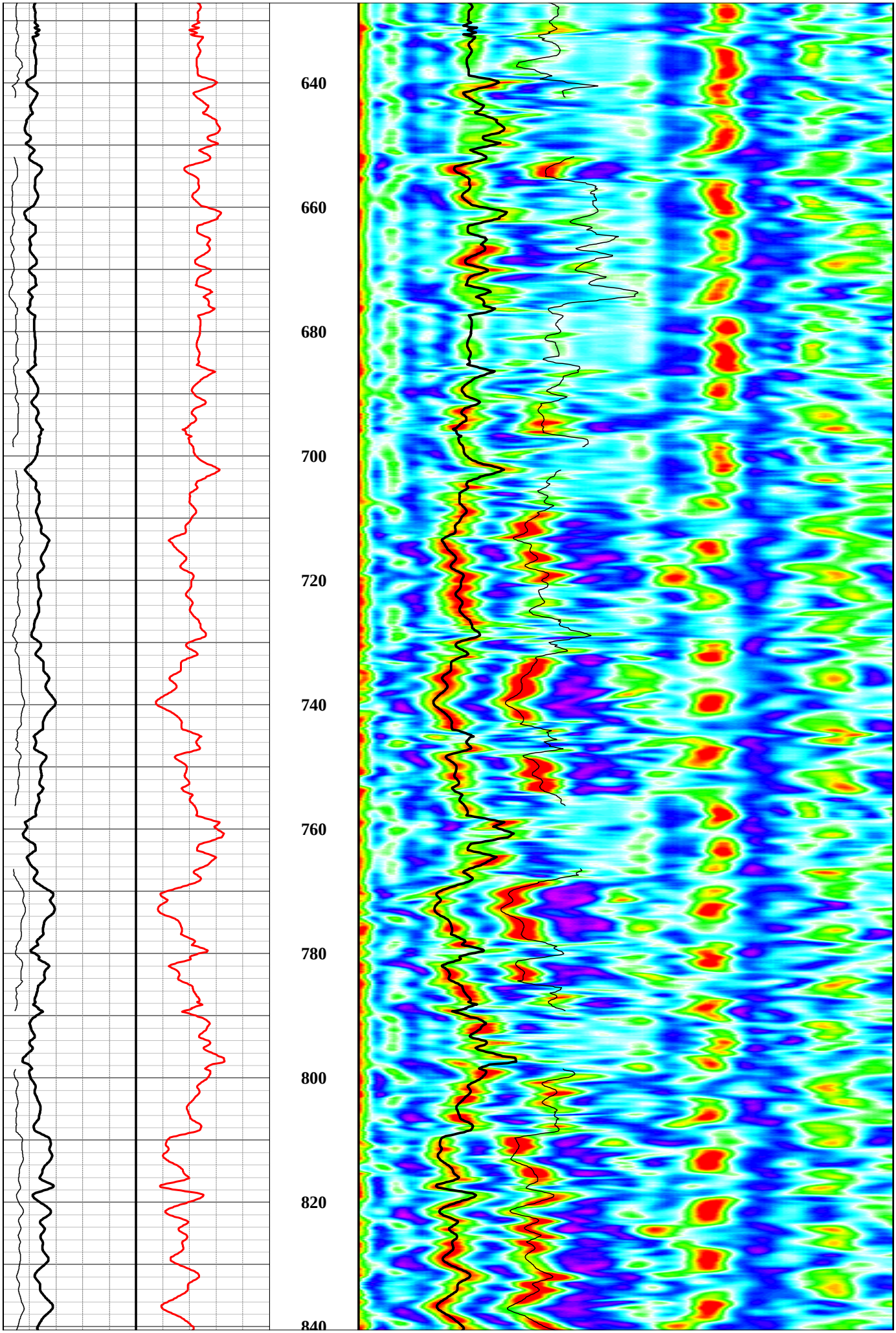
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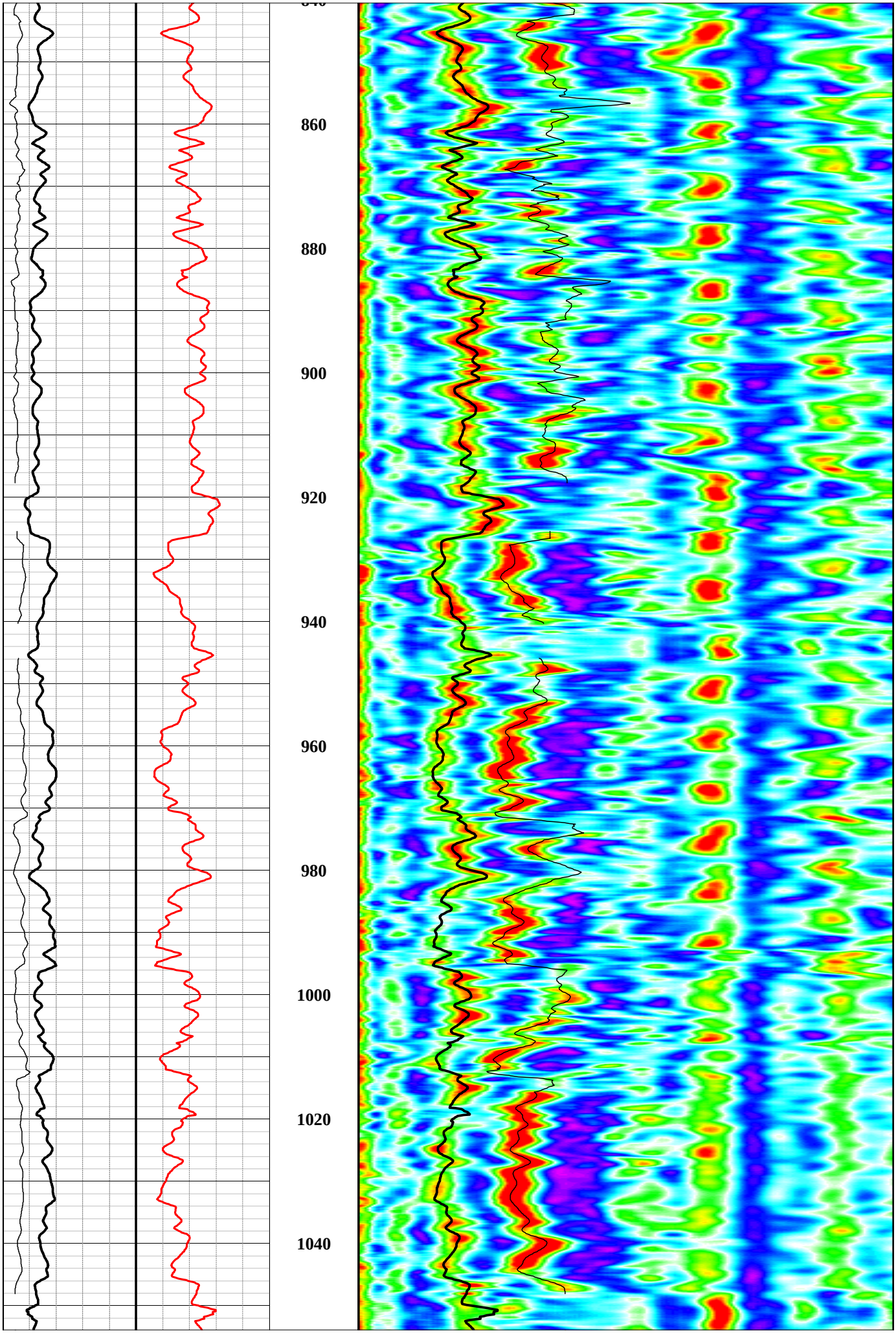
660
680
700
720
740
760
780
800
820
840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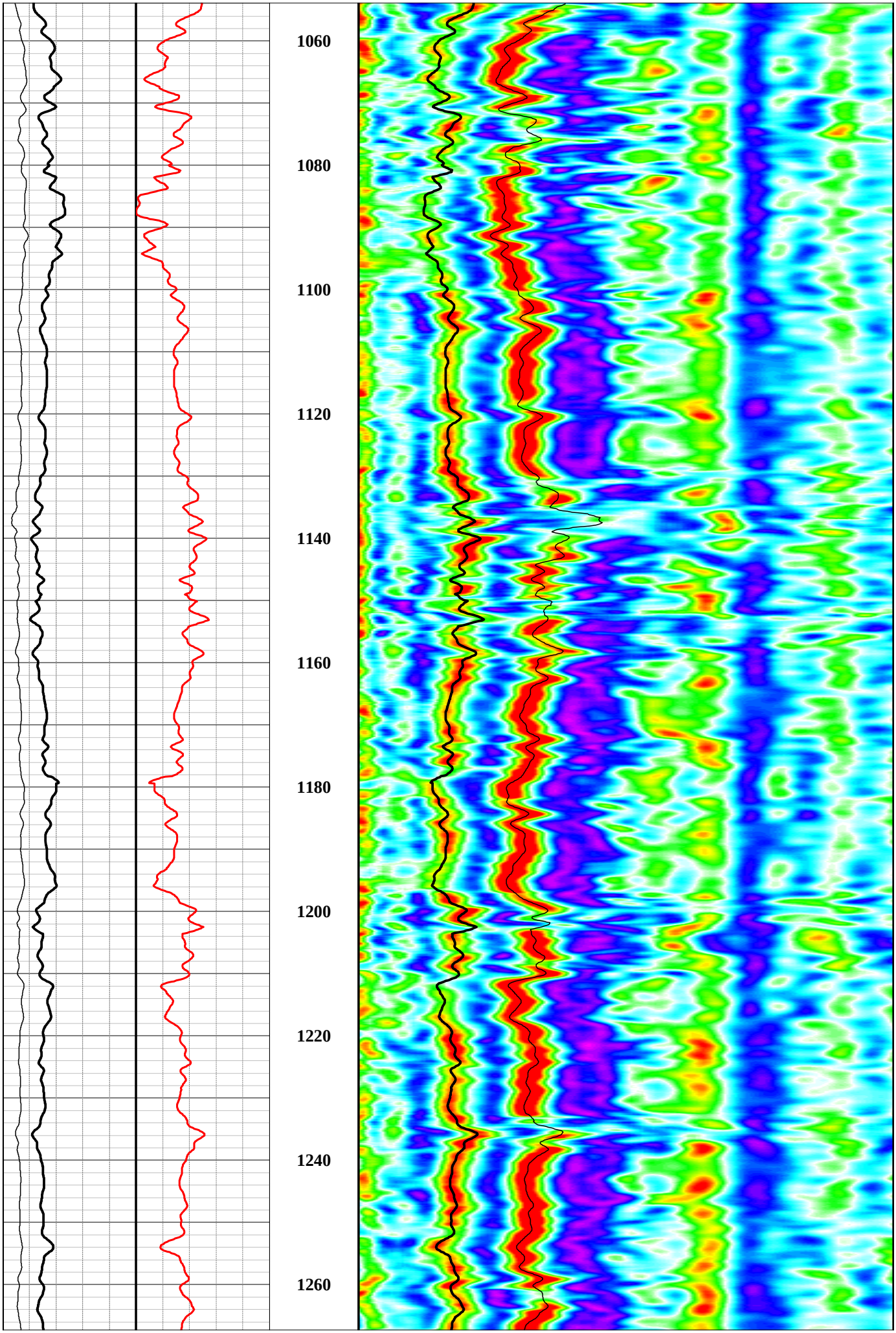
880
900
920
940
960
980
1000
1020
1040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1080
1100
1120
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1160
1180
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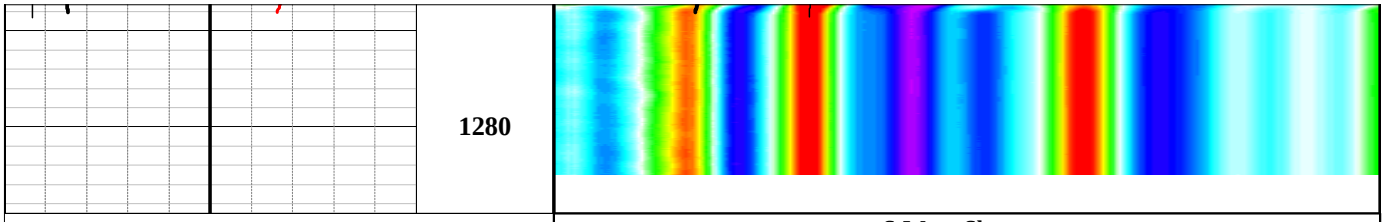
1220
1240
1260



1280

S-Wave Slowness

0 us/ft 300

S-Wave Velocity

4000 ft/s 54000

P-Wave Slowness

0 us/ft 300

P-Wave Velocity

4000 ft/s 54000

Porosity

0 % 100

Depth

1ft:240ft

Velocity Analysis

0 us/ft 300