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Full Waveform Sonic

COMPANY	Excelsior Mining
WELL	NSH-017
FIELD	Gunnison
COUNTY	Cochise
STATE	Arizona

Company Excelsior Mining
Well NSH-017
Field Gunnison
County Cochise
State AZ

LOCATION
NSH-017

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

OTHER SERVICES
Acoustic Televiewer
Optical Televiewer
Electric Resistivity
T. Fl/Res
Flow-Meter

PERMANENT DATUM GROUND LEVEL **ELEVATION** NA

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

DRILLING MEAS. FROM GROUND LEVEL

DATE ACQUIRED	3 December 2014			
RUN NUMBER	4			
LOG TYPE	Sonic			
DEPTH-DRILLER	1200'			
DEPTH-LOGGER	1200'			
BTM LOG INTERVAL	1198.8'			
TOP LOG INTERVAL	576.6'			
RECORDED BY	C. ONeil			
WITNESSED BY				
PROBE TYPE, S/N	TRSS 9209			
LOGGING SPEED	12 ft/min			
A.S.D.E.	0.09'			
SAMPLE INTERVAL	0.1'			

BOREHOLE RECORD				**CASING RECORD**			
RUN No.	**BIT**	**FROM**	**TO**	**SIZE**	**WGT.**	**FROM**	**TO**
ONE	12"	20'	1200'	14"	STEEL	GS	20'

NA - Not Available, N/A - Not Applicable

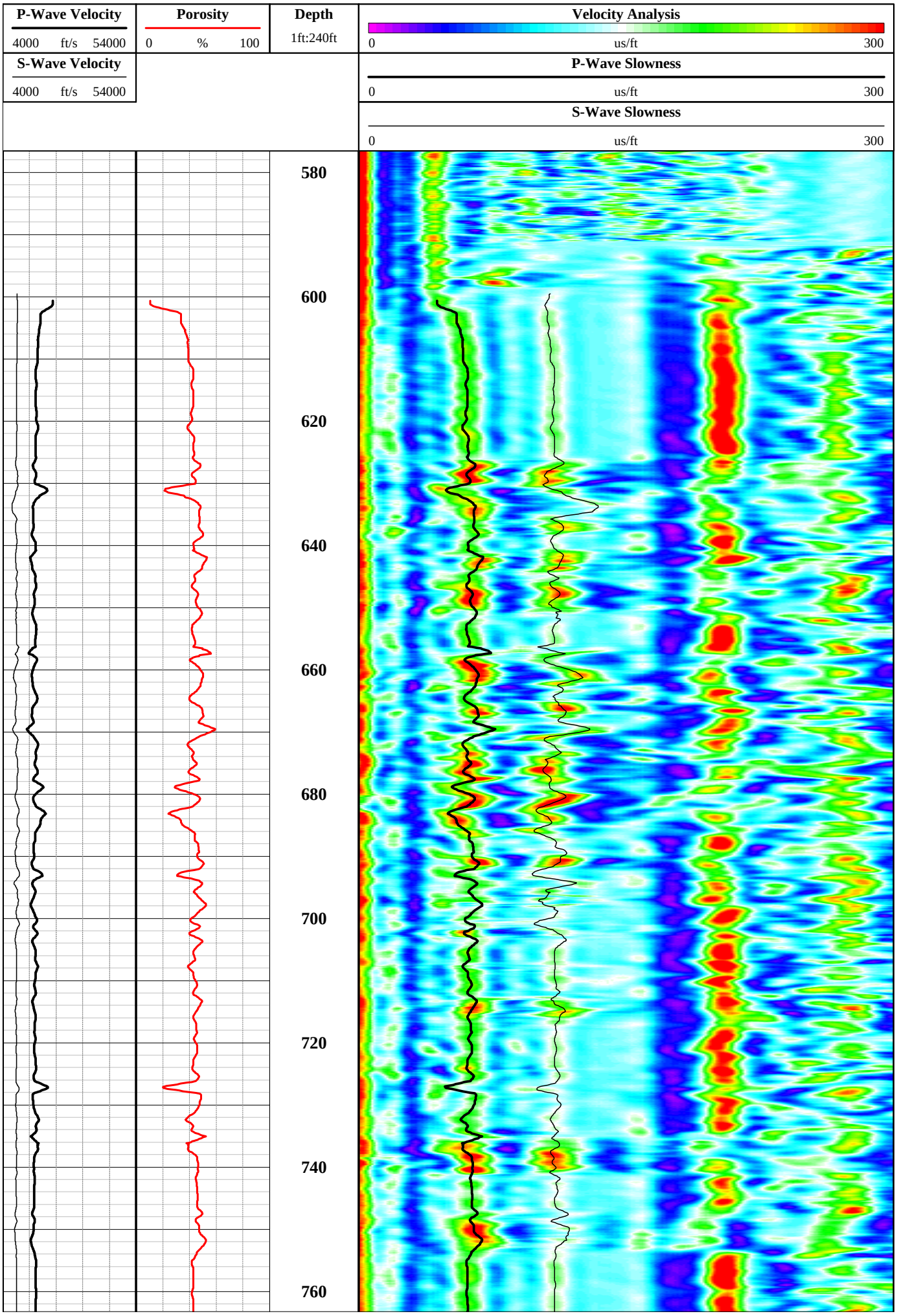
COMMENTS
Water-level = 590'

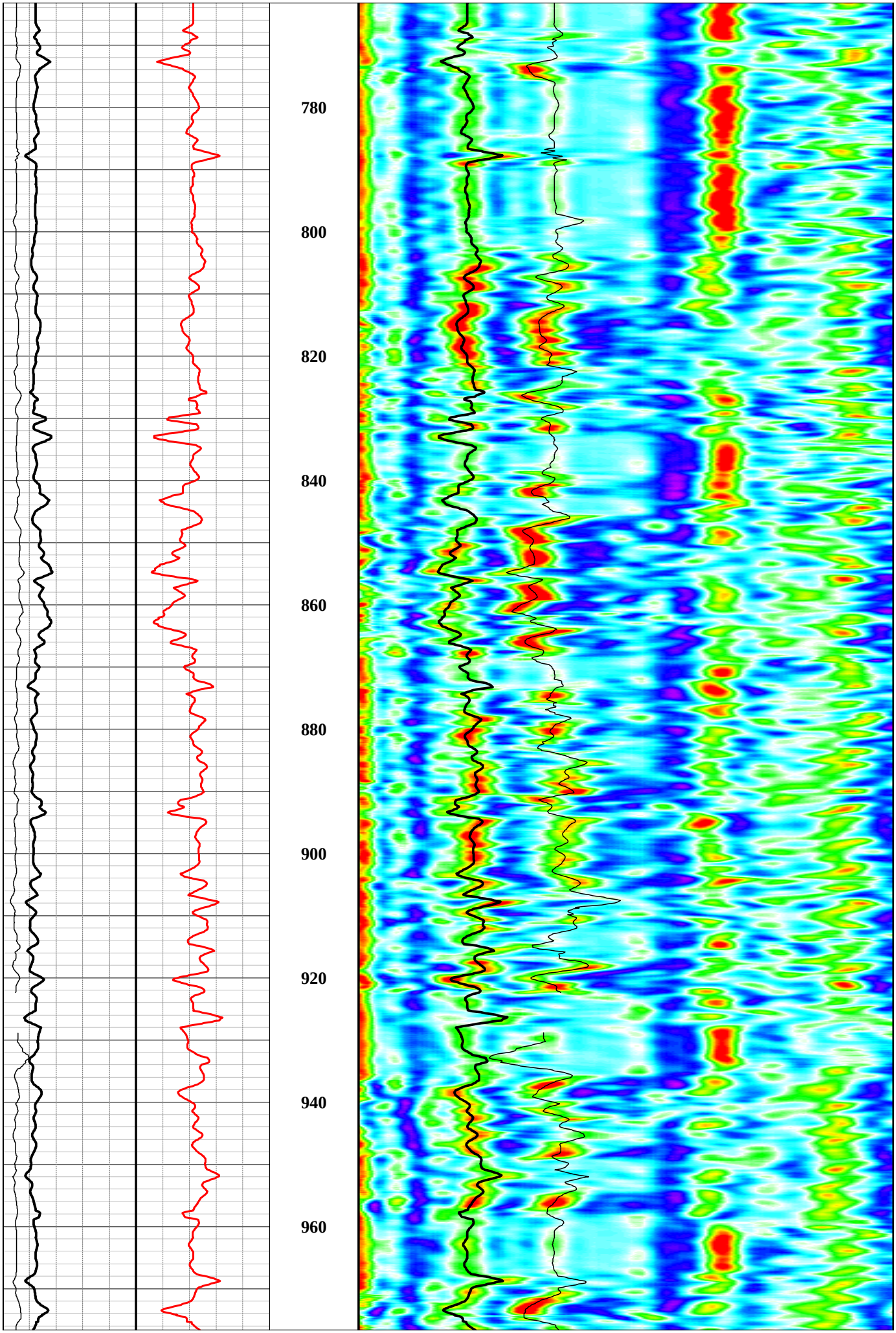
Porosity Calculation

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 (24900 ft/s)
delta t fluid = Fluid velocity of borehole (assumption of clear water ~ 5000 ft/s)

INPUT FILES:
NSH-017 Sonic.hed
NSH-017 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
580
600
620
640
660
680
700
720
740
760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800
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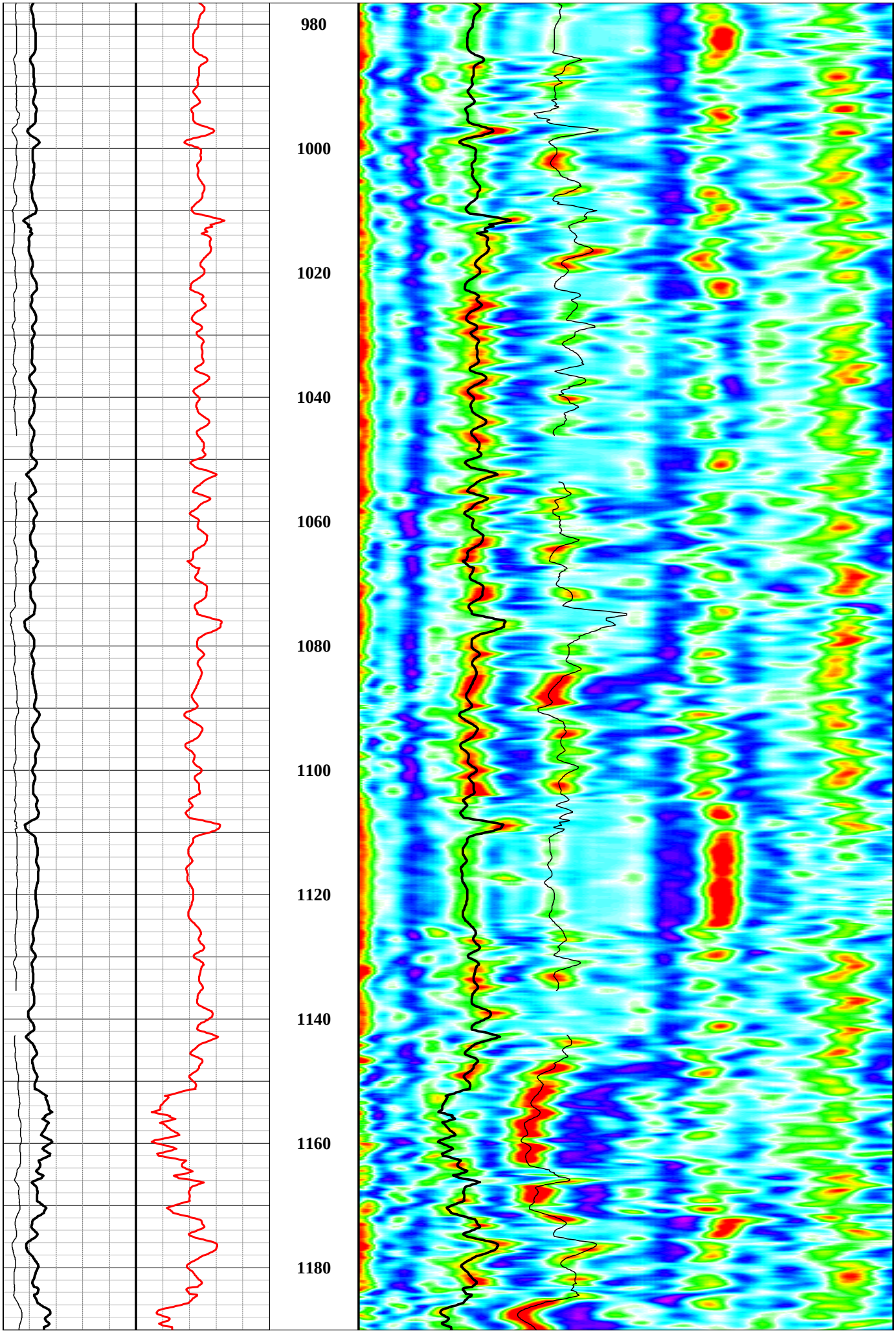
860
880
900
920
940
960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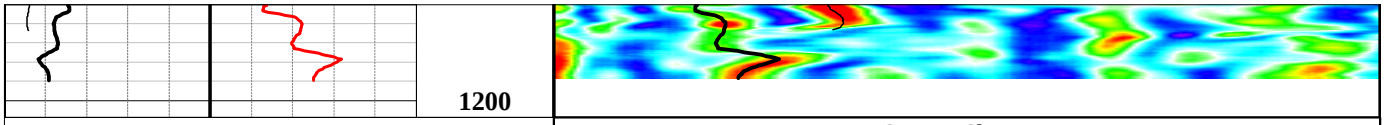

S-Wave Slowness

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