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Full Waveform Sonic

COMPANY	Excelsior Mining
WELL	NSH-023
FIELD	Gunnison
COUNTY	Cochise
STATE	AZ

Company Excelsior Mining
Well NSH-023
Field Gunnison
County Cochise
State AZ

LOCATION
NSH-023

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

OTHER SERVICES
Acoustic Televiewer
Fl./Temp Res.
Compensated Density
Dual Neutron
Electric Resistivity

PERMANENT DATUM GROUND LEVEL **ELEVATION** NA

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

DRILLING MEAS. FROM GROUND LEVEL

DATE ACQUIRED	18 January 2015			
RUN NUMBER	2			
LOG TYPE	Sonic			
DEPTH-DRILLER	1446'			
DEPTH-LOGGER	1440'			
BTM LOG INTERVAL	1440.2'			
TOP LOG INTERVAL	598.1'			
RECORDED BY	C. ONeil			
WITNESSED BY	P. Kroger			
PROBE TYPE, S/N	TRSS 9209			
LOGGING SPEED	12 ft/min			
A.S.D.E.	0.4'			
SAMPLE INTERVAL	0.1'			

BOREHOLE RECORD				**CASING RECORD**			
RUN No.	**BIT**	**FROM**	**TO**	**SIZE**	**WGT.**	**FROM**	**TO**
ONE	7 7/8"	647'	1446'	8"	STEEL	GS	647'

NA - Not Available, N/A - Not Applicable

COMMENTS

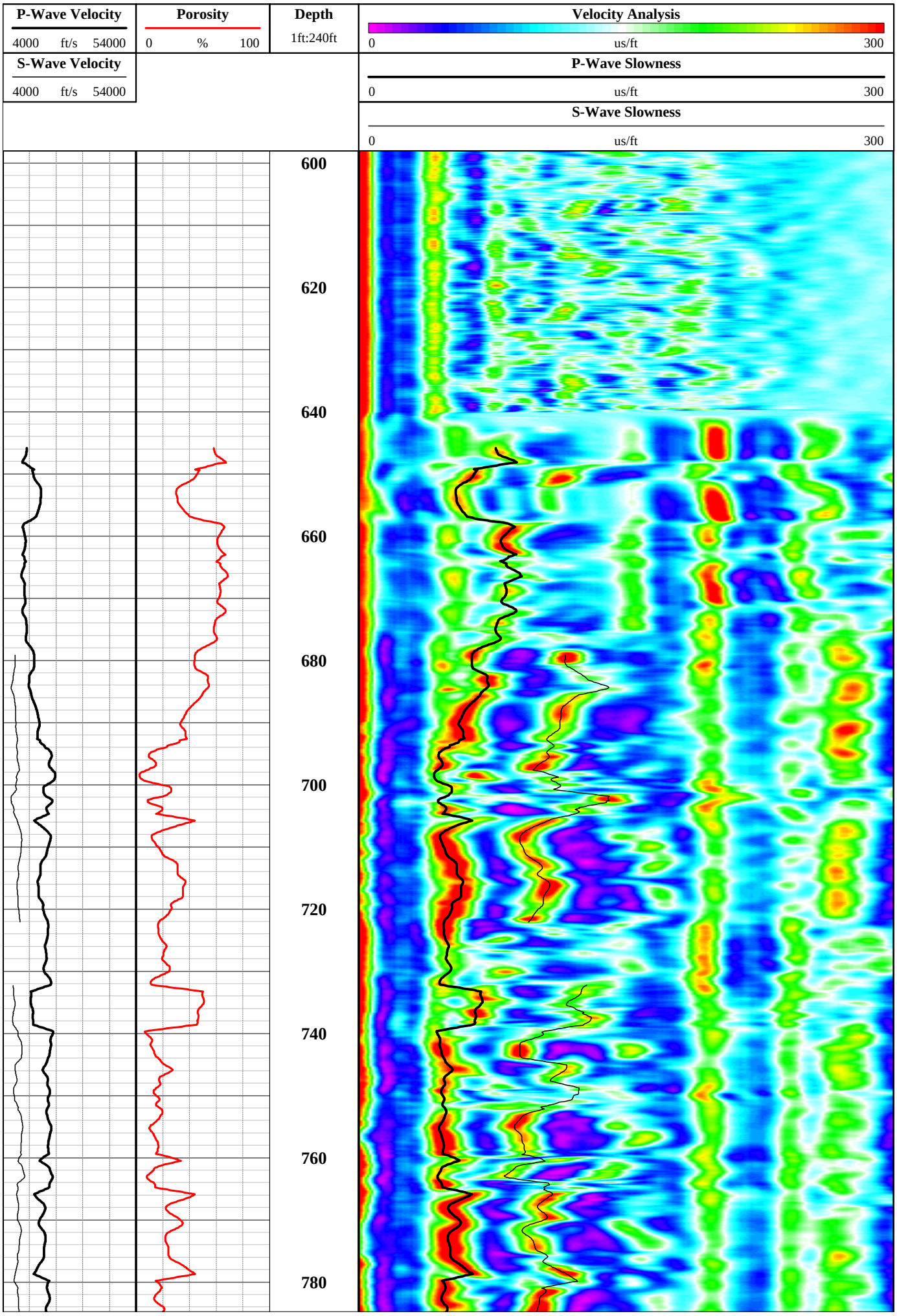
Water-level = 645.9'

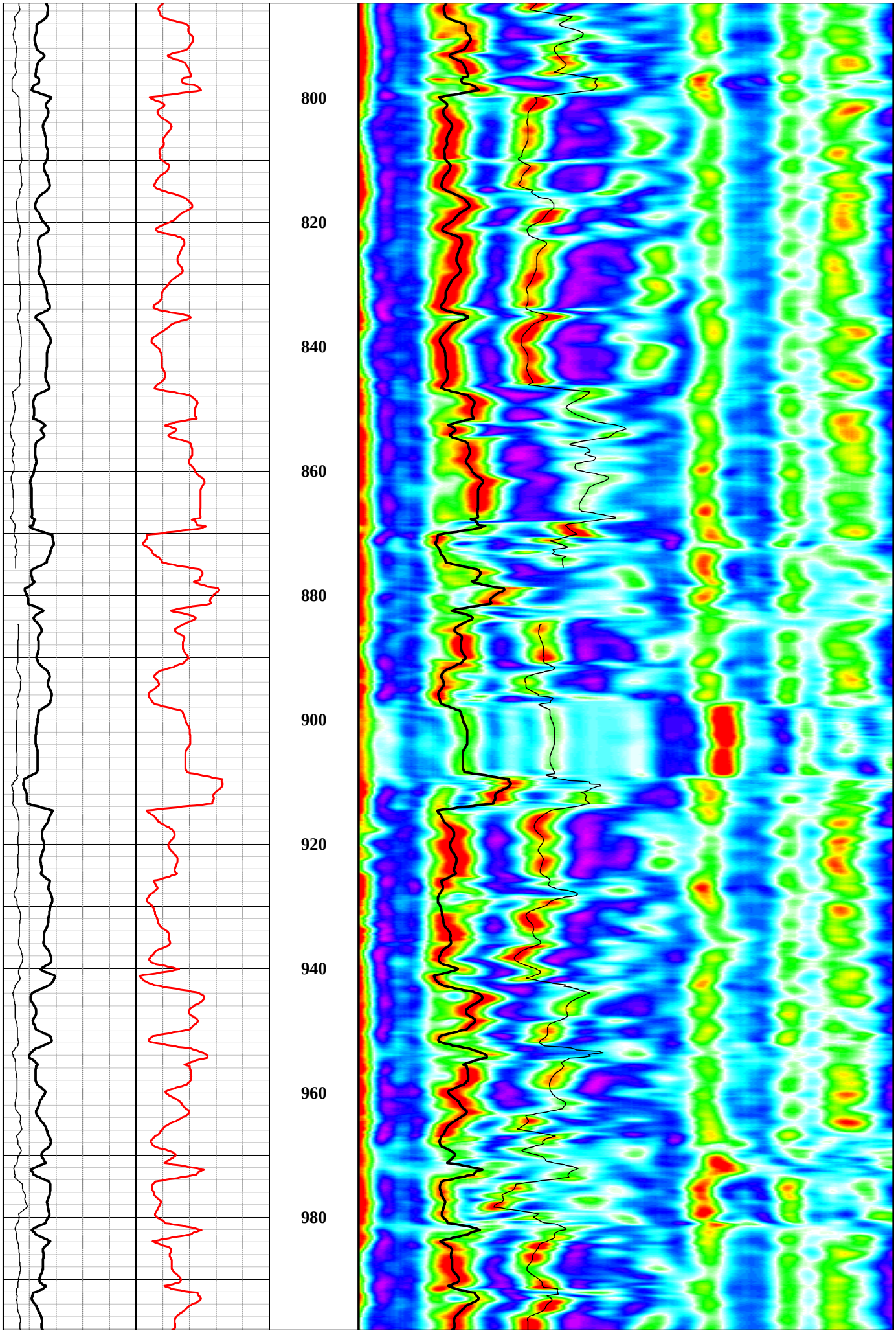
Porosity Calculation

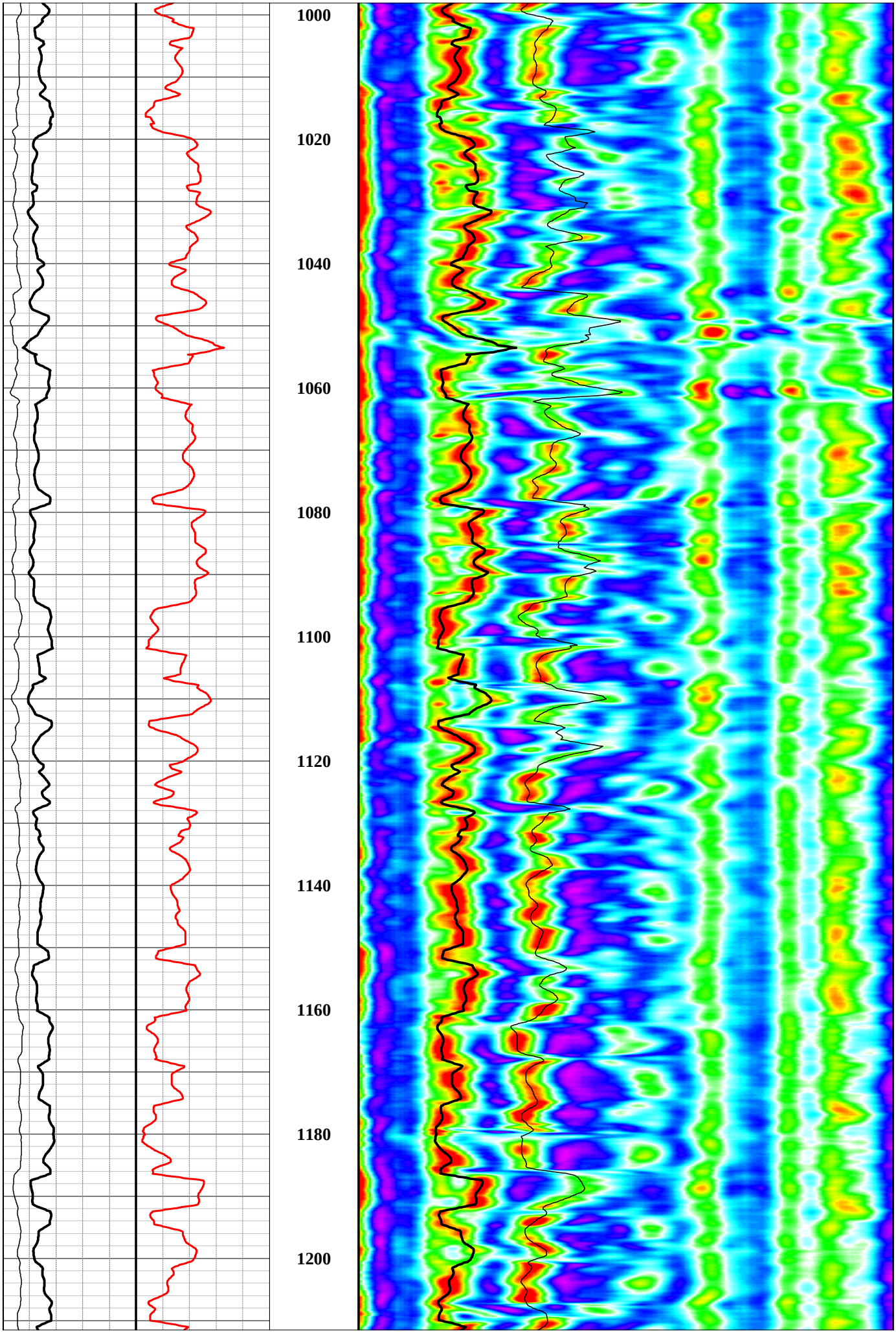
Porosity = (delta t log - delta t matrix) / (delta t fluid - delta t matrix)

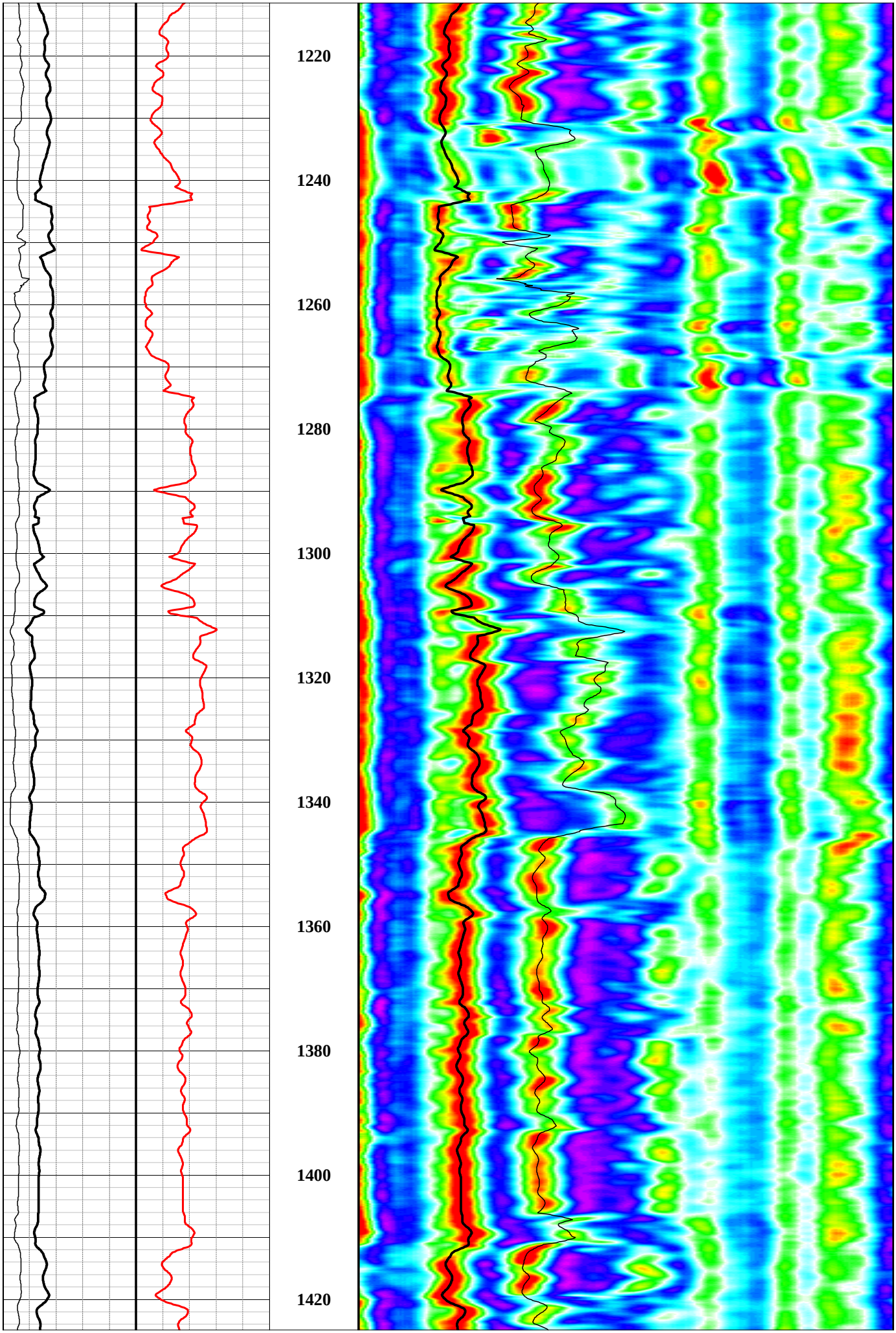
Where: delta t log = P-Wave Velocity
delta t matrix = Maximum Value of P-Wave Velocity (24200 ft/s)
delta t fluid = Fluid velocity of borehole (assumption of clear water ~ 5000 ft/s)

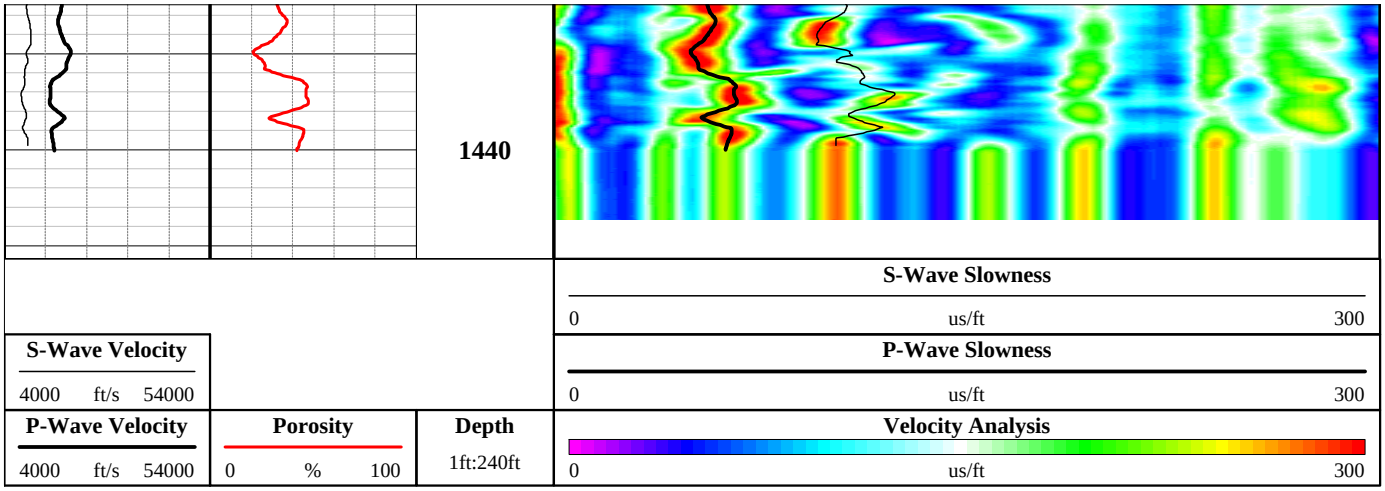
INPUT FILES:
NSH-023-Sonic-u.hed
NSH-023-Sonic-u.LGX


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
600
620
640
660
680
700
720
740
760
780


800
820
840
860
880
900
920
940
960
980


1000
1020
1040
1060
1080
1100
1120
1140
1160
1180
1200


1220
1240
1260
1280
1300
1320
1340
1360
1380
1400
1420


1440
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