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Full Waveform Sonic

COMPANY	Excelsior Mining
WELL	NSH-019
FIELD	Gunnison
COUNTY	Cochise
STATE	Arizona

Company Excelsior Mining
Well NSH-019
Field Gunnison
County Cochise
State AZ

LOCATION
NSH-019

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

OTHER SERVICES
Acoustic Televiewer
Compensated Density
Dual Neutron
Electric Resistivity
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	15 December 2014			
RUN NUMBER	1			
LOG TYPE	Sonic			
DEPTH-DRILLER	1410'			
DEPTH-LOGGER				
BTM LOG INTERVAL				
TOP LOG INTERVAL				
RECORDED BY	C. ONeil			
WITNESSED BY	Kendra Ford			
PROBE TYPE, S/N	TRSS 9209			
LOGGING SPEED	12 ft/min			
A.S.D.E.	0.8'			
SAMPLE INTERVAL	0.1'			

BOREHOLE RECORD				**CASING RECORD**			
RUN No.	**BIT**	**FROM**	**TO**	**SIZE**	**WGT.**	**FROM**	**TO**
ONE	7 7/8"	640'	1410'	8"	STEEL	GS	640'

NA - Not Available, N/A - Not Applicable

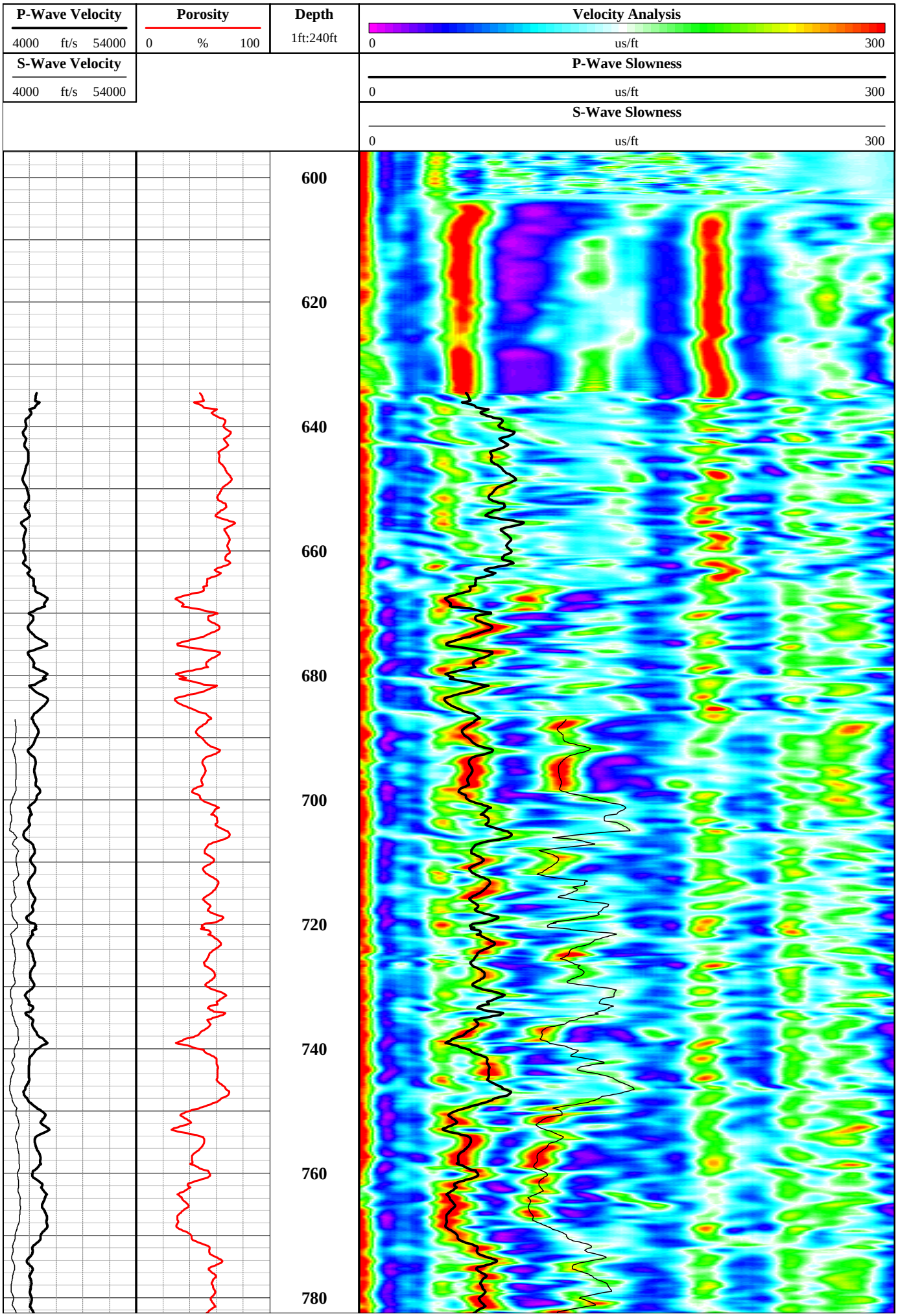
COMMENTS
Water-level = 601'

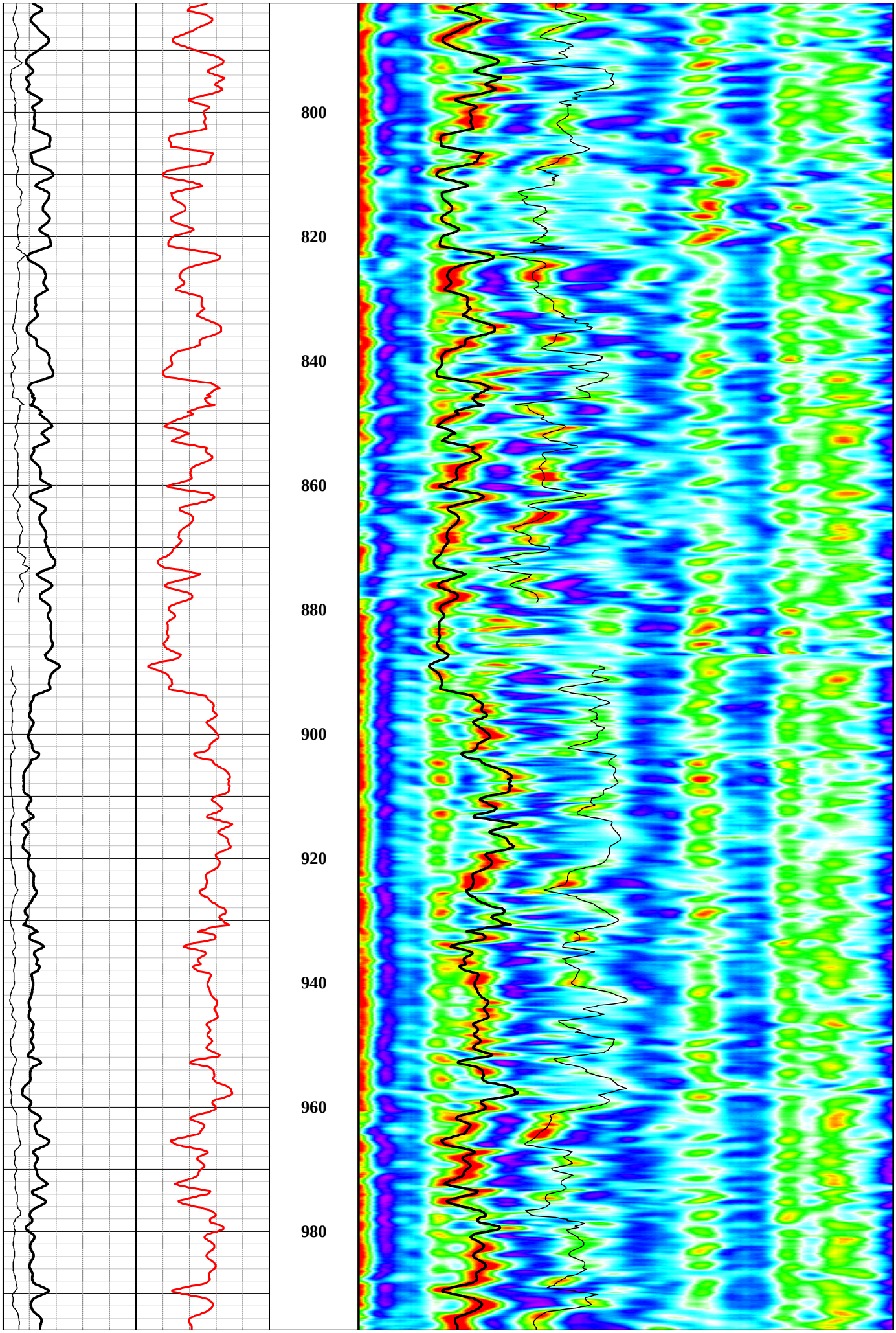
Porosity Calculation

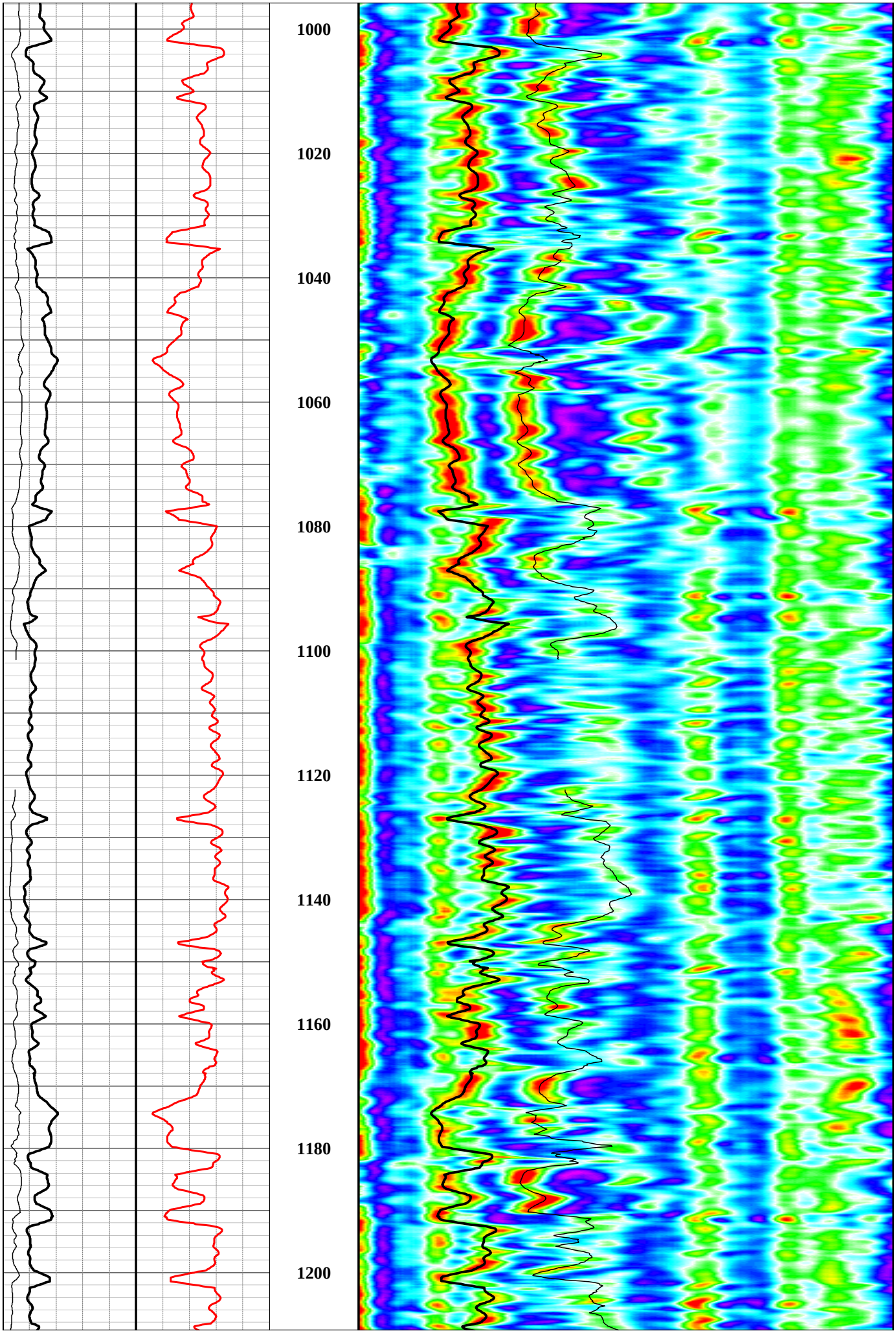
Porosity = (delta t log - delta t matrix) / (delta t fluid - delta t matrix)

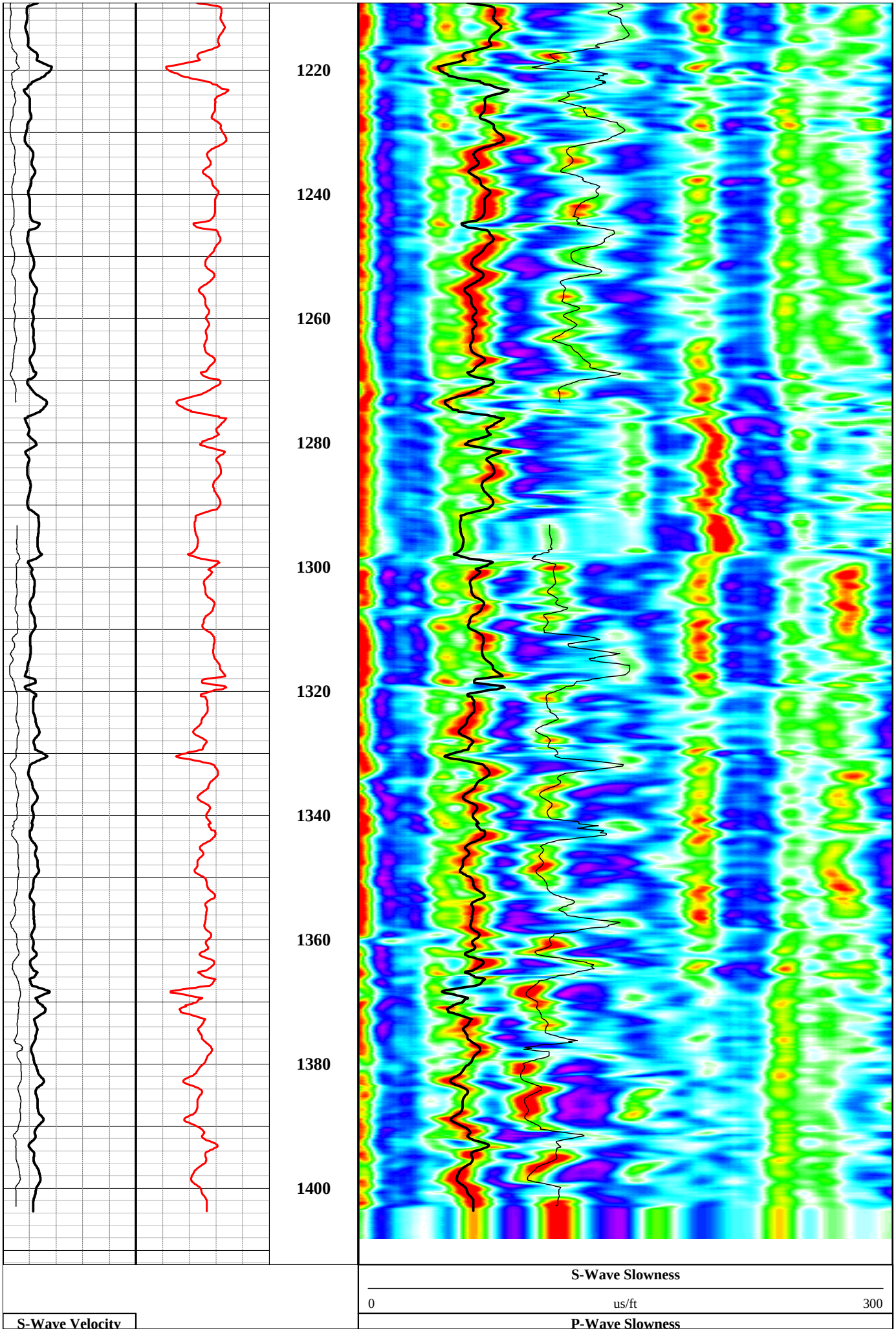
Where: delta t log = P-Wave Velocity
delta t matrix = Maximum Value of P-Wave Velocity (27400 ft/s)
delta t fluid = Fluid velocity of borehole (assumption of clear water ~ 5000 ft/s)

INPUT FILES:
NSH-019 Sonic.hed
NSH-019 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
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
S-Wave Velocity
S-Wave Slowness
0
us/ft
300
P-Wave Slowness

4000 ft/s 54000			0 us/ft 300
P-Wave Velocity	**Porosity**	**Depth**	**Velocity Analysis**
4000 ft/s 54000	0 % 100	1ft:240ft	0 us/ft 300