

Table 1. Comparison of theoretical σ and actual σ for selected thin sections from the four Benson cores.

API# 4704101704

Thin section #1
(well #11192, 4368 feet)

Components	theoretical σ	actual σ
Quartz	4.99	6.14
Argillaceous	4.47	3.97
Carbonate	3.67	3.08
Feldspar	1.17	0.89
Porosity	1.53	1.14

API# 4700100502

Thin section #2
(well #11199, 4286 feet)

Components	theoretical σ	actual σ
Quartz	4.85	4.38
Argillaceous	3.67	2.55
Carbonate	3.67	1.73
Feldspar	1.53	1.34
Porosity	1.59	0.55

API# 4700100163

Thin section #3
(well #10612, 3919 feet)

Components	theoretical σ	actual σ
Quartz	4.81	2.88
Argillaceous	3.36	1.00
Carbonate	4.00	2.24
Feldspar	1.17	0.54
Porosity	0.45	0.45

API# 4700100243

Thin section #4
(well #10746, 4136.5 feet)

Components	theoretical σ	actual σ
Quartz	4.93	3.03
Argillaceous	4.45	3.21
Carbonate	3.51	2.30
Feldspar	1.19	0.84
Porosity	2.15	0.84