

Brass Fetcher Ballistic Testing

40 S&W Magsafe SWAT load 46gr

Load # N/A Lot # 020412

Bare gelatin

	Shot 1	Shot 2	Shot 3
Calibration depth (Inches, corrected to 590 ft/sec impact velocity) (Ideal gelatin block penetration depth = 3.4")	3.6	3.4	3.3
Impact velocity (Measured at 7ft) (ft/sec)	2221	2220	2234
Deepest Penetration Depth (inch)	3.9	4.1	4.1

Notes :

Weapon – Glock 23 with 4.0" barrel length

Distance – 10.0 feet, muzzle to impact face

Shot 1

Block Calibration Velocity (ft/sec)	Block Calibration Depth (inch)	Block Calibration Temperature (Degrees Fahrenheit)	Block Core Temperature (Degrees Fahrenheit)
570.3	3.5	40.6	41.3

Impact Velocity (ft/sec)	Deepest Penetration Depth (inch)	Maximum Crack Diameter (inch)	Maximum Crack Diameter Location (inch)
2221	3.9	3.8	2.2

Cavitation Depth (inch)
3.9

Test site conditions – 63 degrees Fahrenheit, 58% relative humidity

Time out of refrigeration prior to shot impact – 3 minutes

Figure 1. Side view of **Shot 1** gelatin block



Figure 2. Top view of **Shot 1** gelatin block



Figure 3. Projectile view of **Shot 1** recovered fragments



Shot 2

Block Calibration Velocity (ft/sec)	Block Calibration Depth (inch)	Block Calibration Temperature (Degrees Fahrenheit)	Block Core Temperature (Degrees Fahrenheit)
595.0	3.3	39.9	40.4

Impact Velocity (ft/sec)	Deepest Penetration Depth (inch)	Maximum Crack Diameter (inch)	Maximum Crack Diameter Location (inch)
2220	4.1	3.0	1.8

Cavitation Depth (inch)
4.1

Test site conditions – 64 degrees Fahrenheit, 60% relative humidity

Time out of refrigeration prior to shot impact – 3 minutes

Figure 4. Side view of **Shot 2** gelatin block



Figure 5. Top view of **Shot 2** gelatin block



Figure 6. Projectile view of **Shot 2** recovered fragments



Shot 3

Block Calibration Velocity (ft/sec)	Block Calibration Depth (inch)	Block Calibration Temperature (Degrees Fahrenheit)	Block Core Temperature (Degrees Fahrenheit)
590.4	3.3	38.6	39.0

Impact Velocity (ft/sec)	Deepest Penetration Depth (inch)	Maximum Crack Diameter (inch)	Maximum Crack Diameter Location (inch)
2234	4.1	4.1	2.1

Cavitation Depth (inch)
4.1

Test site conditions – 64 degrees Fahrenheit, 60% relative humidity

Time out of refrigeration prior to shot impact – 3 minutes

Figure 7. Side view of **Shot 3** gelatin block

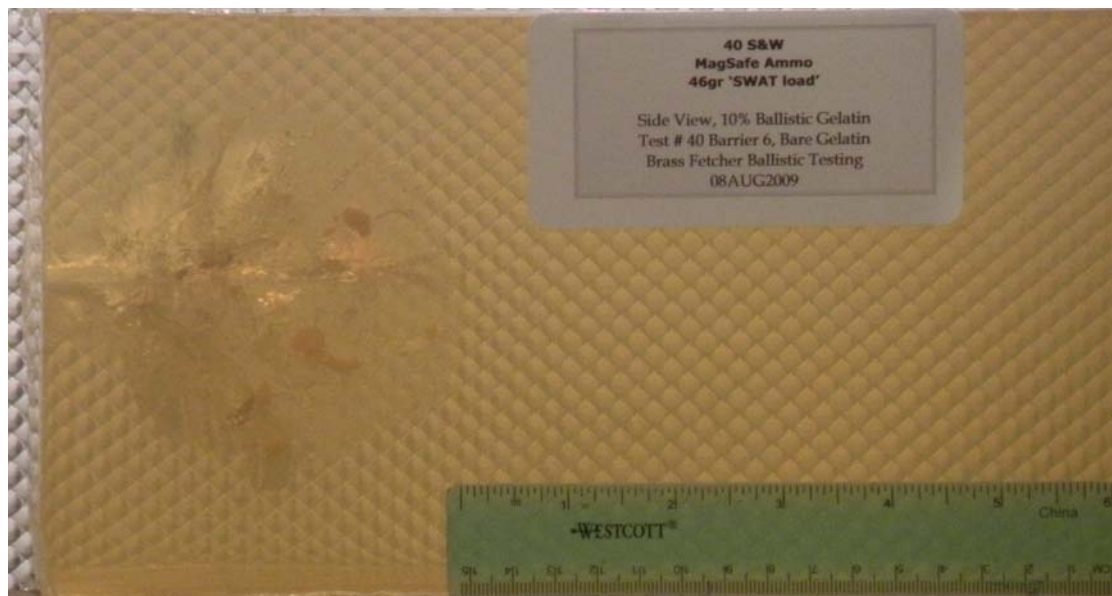


Figure 8. Top view of **Shot 3** gelatin block



Figure 9. Projectile view of **Shot 3** recovered fragments

