Brass Fetcher Ballistic Testing

50 Caliber Northwest Custom Projectile *Manstopper* 350gr

Load # N/A; Lot N/A

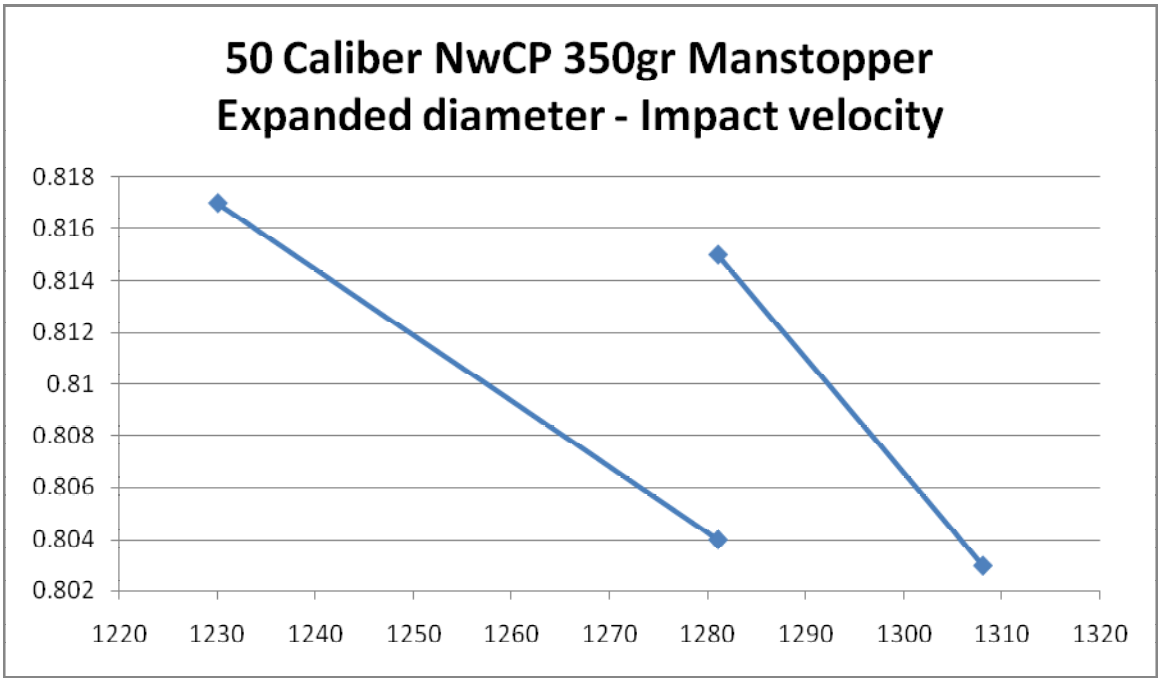
Bare gelatin

	Shot 1	Shot 2	Shot 3	Shot 4	Shot 5
Calibration depth (Inches, corrected to 590 ft/sec impact velocity) (Ideal gelatin block penetration depth = 3.4")	3.3	3.5	3.7	3.4	3.4
Impact velocity (Measured at 7ft) (ft/sec)	1281	1308	1365	1281	1230
Deepest Penetration Depth (inch)	15.4 + 1" sand	15.4 +1.5" sand	15.5 +1.8" sand	15.6 +1" sand	15.5 + 0.8" sand

Notes :

Weapon – Smith and Wesson *500* with 9.0" barrel length

Distance – 10.0 feet, muzzle to impact face


50 Caliber NwCP 350gr Manstopper
Expanded diameter - Impact velocity
0.818
0.816
0.814
0.812
0.81
0.808
0.806
0.804
0.802
1220
1230
1240
1250
1260
1270
1280
1290
1300
1310
1320

Shot 1

Block Calibration Velocity (ft/sec)	Block Calibration Depth (inch)	Block Calibration Temperature (Degrees Fahrenheit)	Block Core Temperature (Degrees Fahrenheit)
582.7	3.2	40.2	41.3

Impact Velocity (ft/sec)	Deepest Penetration Depth (inch)	Maximum Crack Diameter (inch)	Maximum Crack Diameter Location (inch)
1281	15.4 +	5.6	3.6

Cavitation Depth (inch)
0.1 to 15.2

Notes :

Bullet recovered average diameter – 0.815”

Bullet recovered height – 0.735”

Bullet recovered weight – 299.2gr

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

Time out of refrigeration prior to shot impact – 3 minutes

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

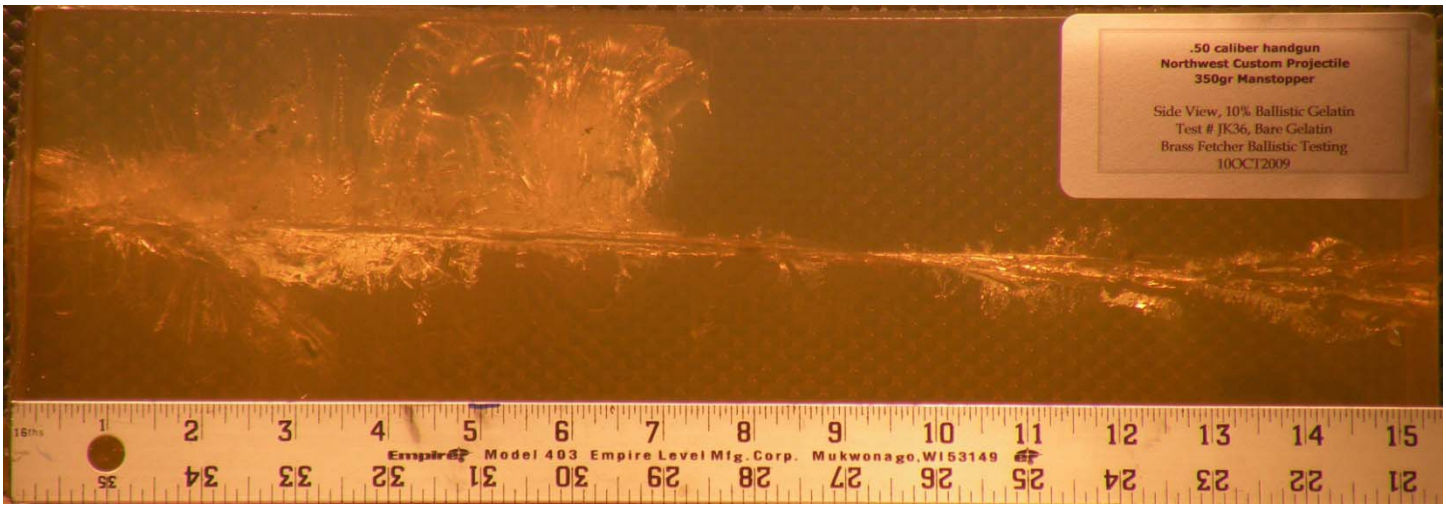


Figure 2. Top view of **Shot 1** gelatin block

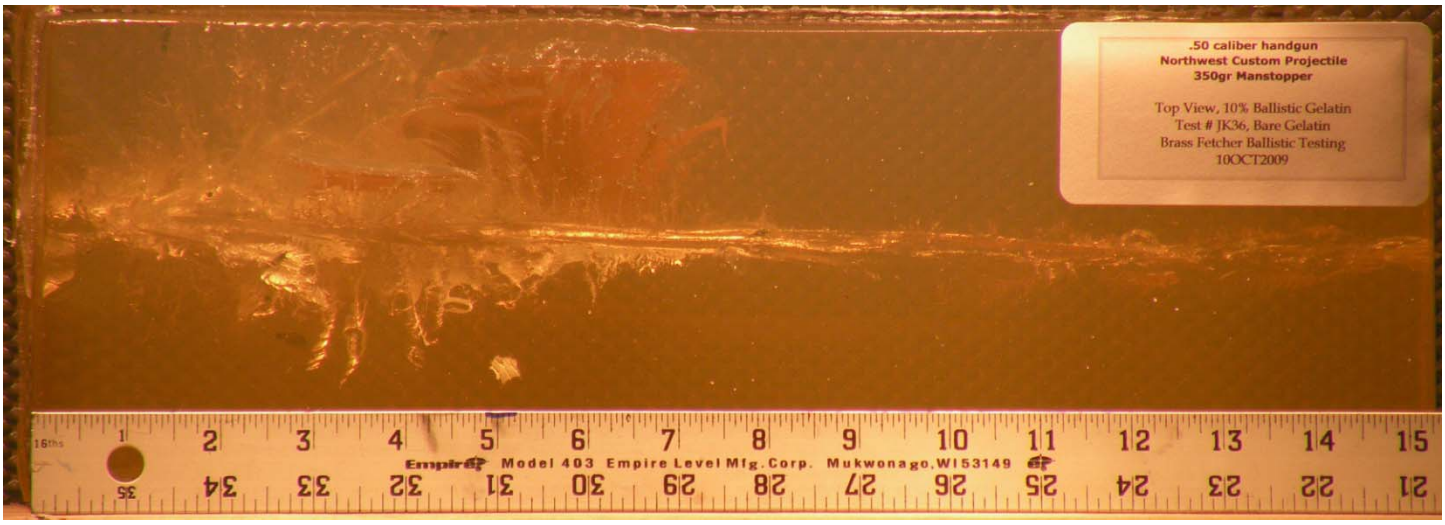


Figure 3. Projectile view of **Shot 1** recovered fragments

Shot 2

Block Calibration Velocity (ft/sec)	Block Calibration Depth (inch)	Block Calibration Temperature (Degrees Fahrenheit)	Block Core Temperature (Degrees Fahrenheit)
565.0	3.3	41.9	42.8

Impact Velocity (ft/sec)	Deepest Penetration Depth (inch)	Maximum Crack Diameter (inch)	Maximum Crack Diameter Location (inch)
1308	15.4 +	5.3	4.5

Cavitation Depth (inch)
15.3

Notes :

Bullet recovered average diameter – 0.803”

Bullet recovered height – 0.764”

Bullet recovered weight – 309.1gr

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

Time out of refrigeration prior to shot impact – 3 minutes

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

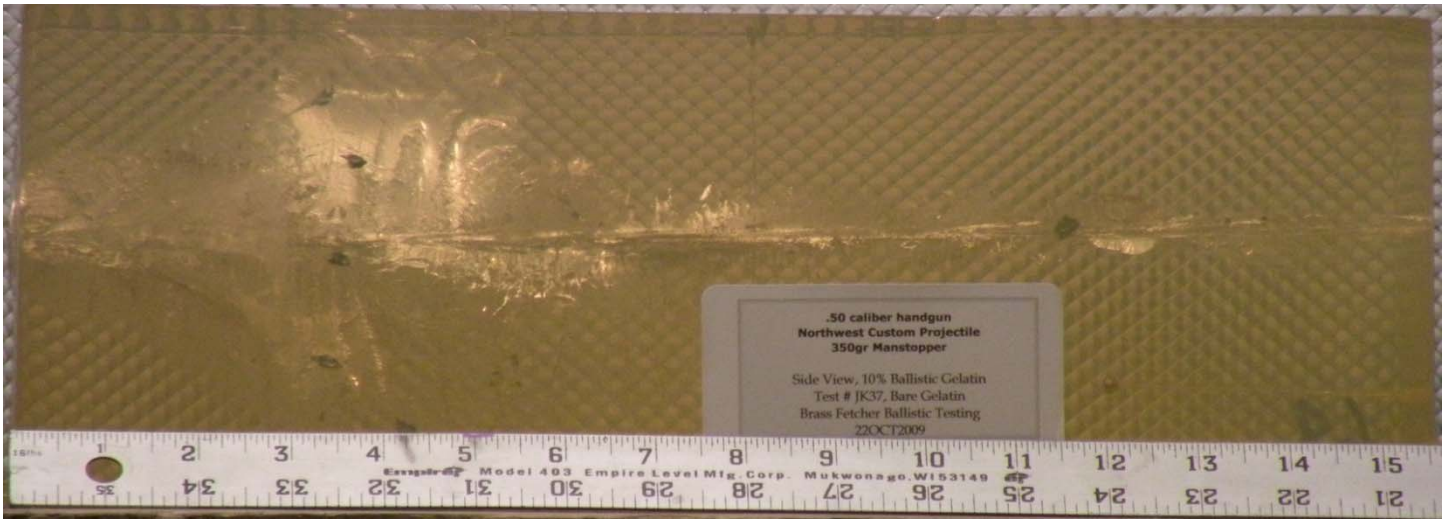


Figure 5. Top view of **Shot 2** gelatin block

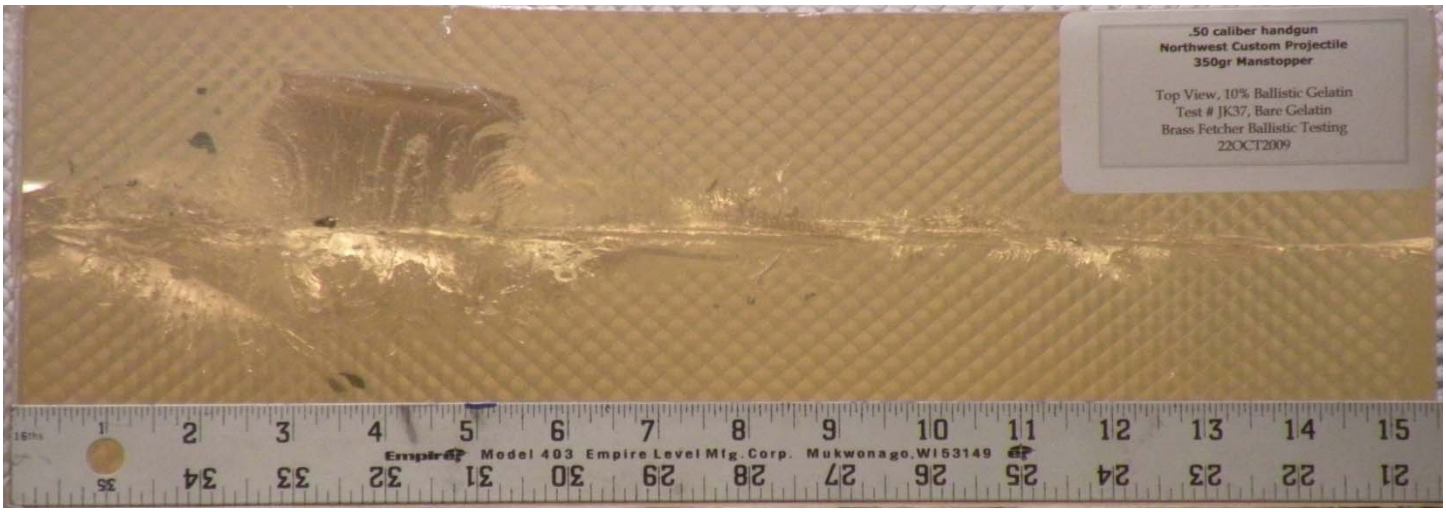


Figure 6. Projectile view of **Shot 2** recovered fragments

Shot 3

Block Calibration Velocity (ft/sec)	Block Calibration Depth (inch)	Block Calibration Temperature (Degrees Fahrenheit)	Block Core Temperature (Degrees Fahrenheit)
569.8	3.6	41.9	42.0

Impact Velocity (ft/sec)	Deepest Penetration Depth (inch)	Maximum Crack Diameter (inch)	Maximum Crack Diameter Location (inch)
1365	15.5 +	5.0	3.5

Cavitation Depth (inch)
15.4

Notes :

Bullet recovered average diameter – 0.788”

Bullet recovered height – Core : 0.601”, Jacket : 0.458”

Bullet recovered weight – 267.0gr

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

Time out of refrigeration prior to shot impact – 3 minutes

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

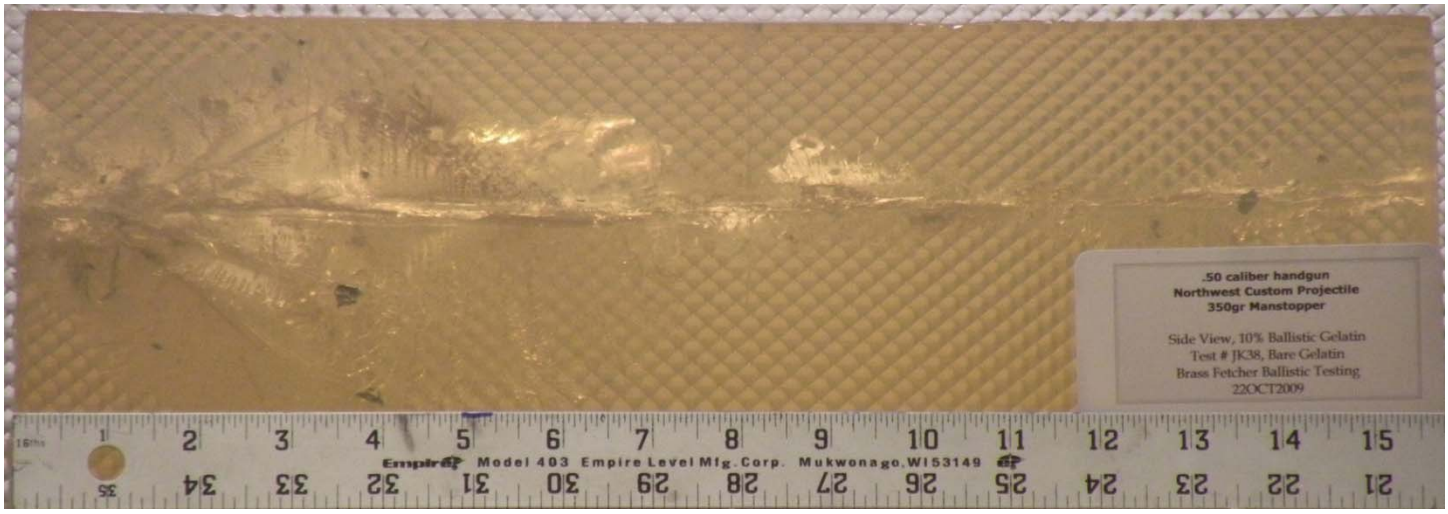


Figure 8. Top view of **Shot 3** gelatin block

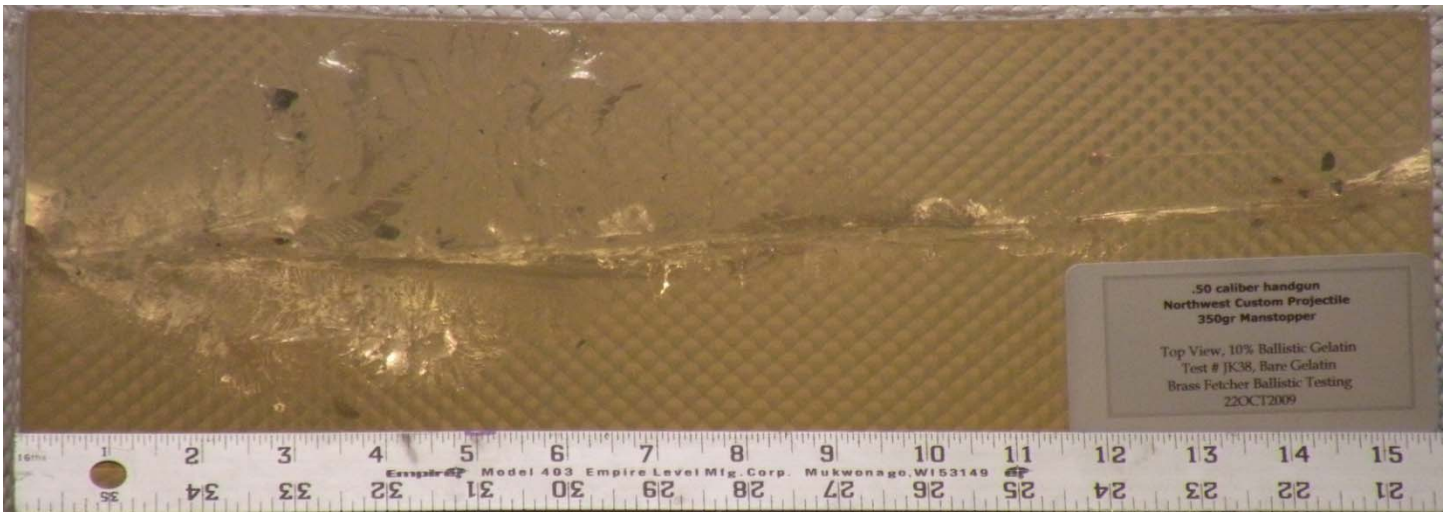


Figure 9. Projectile view of **Shot 3** recovered fragments

Shot 4

Block Calibration Velocity (ft/sec)	Block Calibration Depth (inch)	Block Calibration Temperature (Degrees Fahrenheit)	Block Core Temperature (Degrees Fahrenheit)
580.3	3.4	41.3	42.2

Impact Velocity (ft/sec)	Deepest Penetration Depth (inch)	Maximum Crack Diameter (inch)	Maximum Crack Diameter Location (inch)
1281	15.6 +	5.4	4.5

Cavitation Depth (inch)
15.6

Notes :

Bullet recovered average diameter – 0.804”

Bullet recovered height – 0.704”

Bullet recovered weight – 280.0gr

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

Time out of refrigeration prior to shot impact – 3 minutes

Figure 10. Side view of **Shot 4** gelatin block

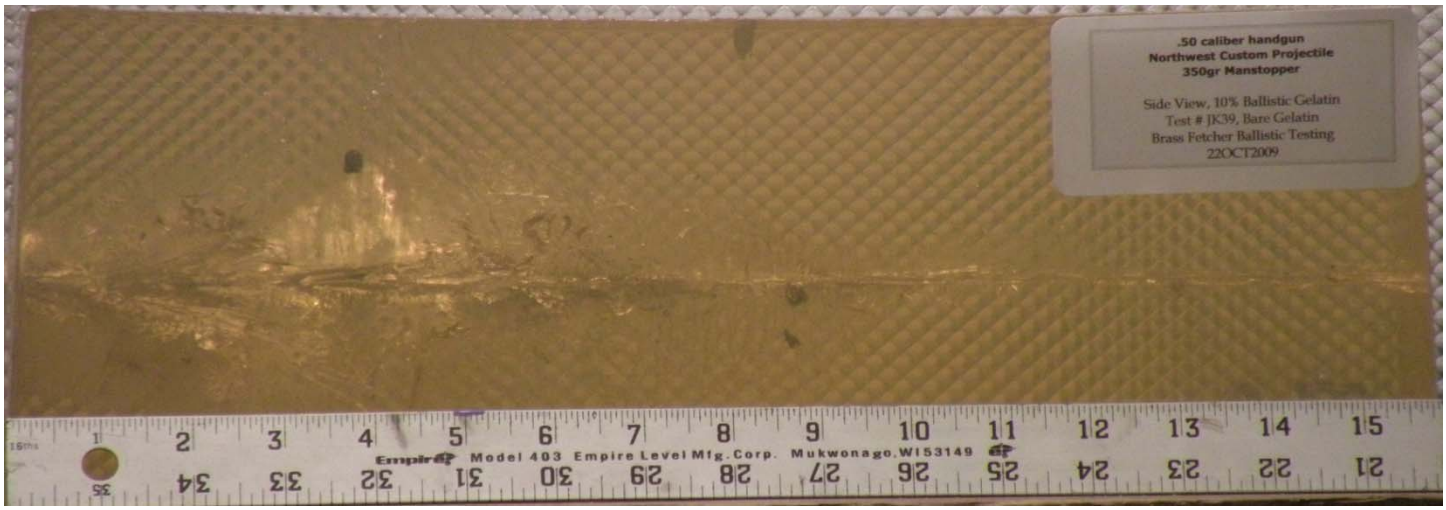


Figure 11. Top view of **Shot 4** gelatin block

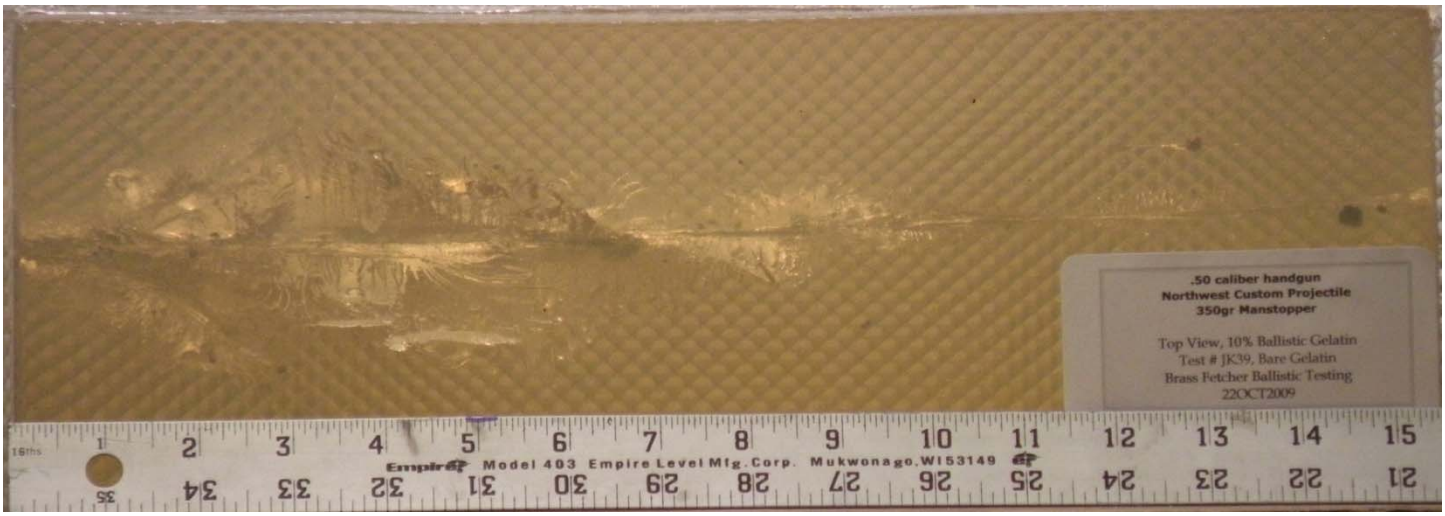
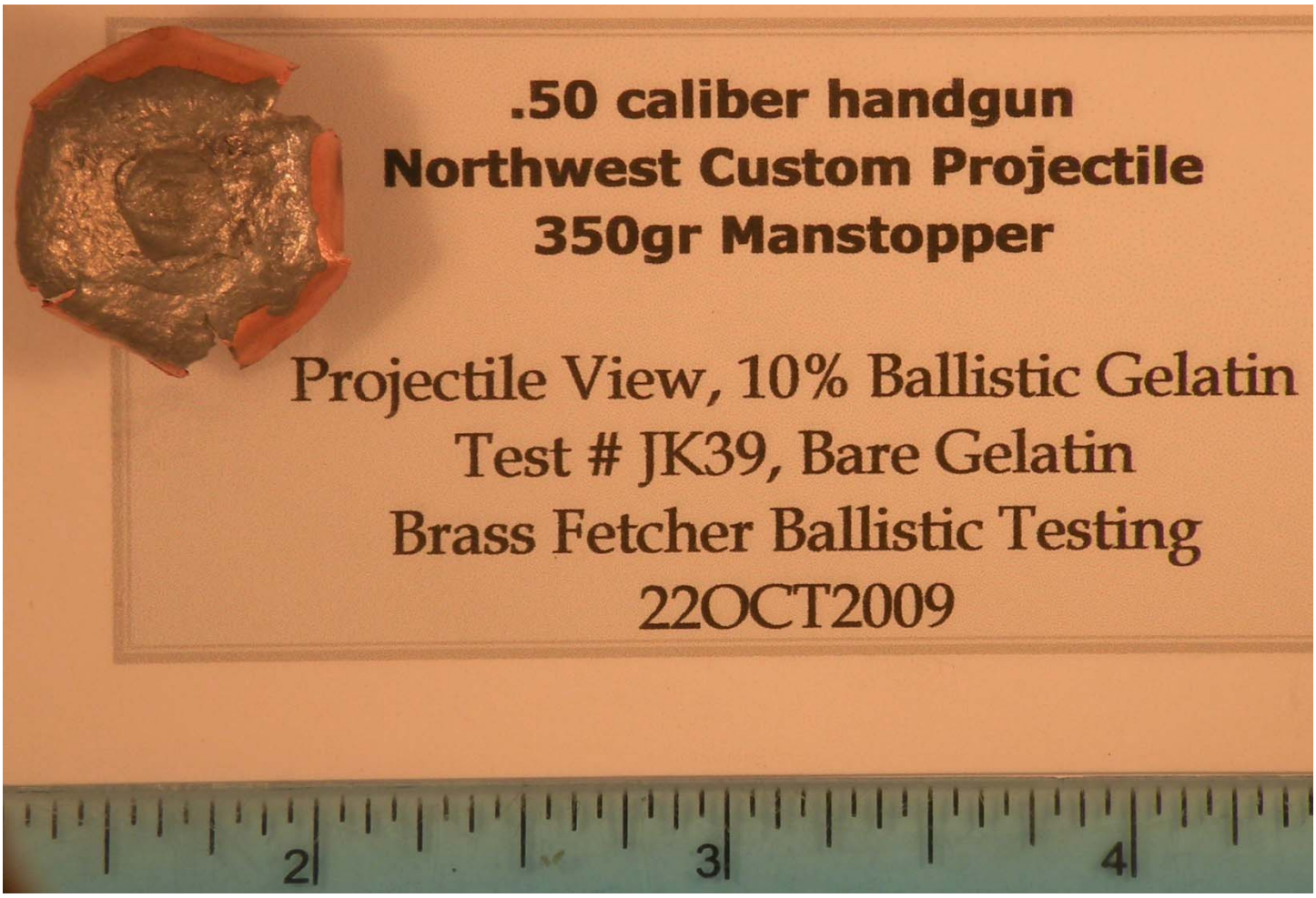


Figure 12. Projectile view of **Shot 4** recovered fragments



Shot 5

Block Calibration Velocity (ft/sec)	Block Calibration Depth (inch)	Block Calibration Temperature (Degrees Fahrenheit)	Block Core Temperature (Degrees Fahrenheit)
577.1	3.3	40.4	41.0

Impact Velocity (ft/sec)	Deepest Penetration Depth (inch)	Maximum Crack Diameter (inch)	Maximum Crack Diameter Location (inch)
1230	15.5	5.4	5.5

Cavitation Depth (inch)
15.4

Notes :

Bullet recovered average diameter – 0.817”

Bullet recovered height – 0.799”

Bullet recovered weight – 276.7gr

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

Time out of refrigeration prior to shot impact – 3 minutes

Figure 13. Side view of **Shot 5** gelatin block

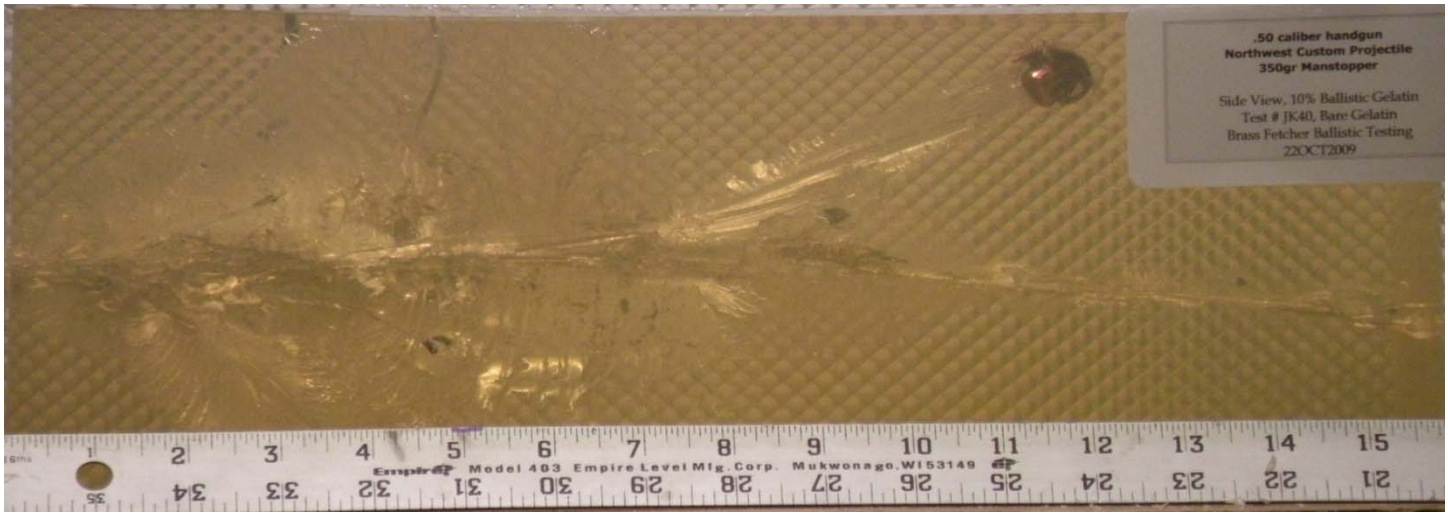


Figure 14. Top view of **Shot 5** gelatin block

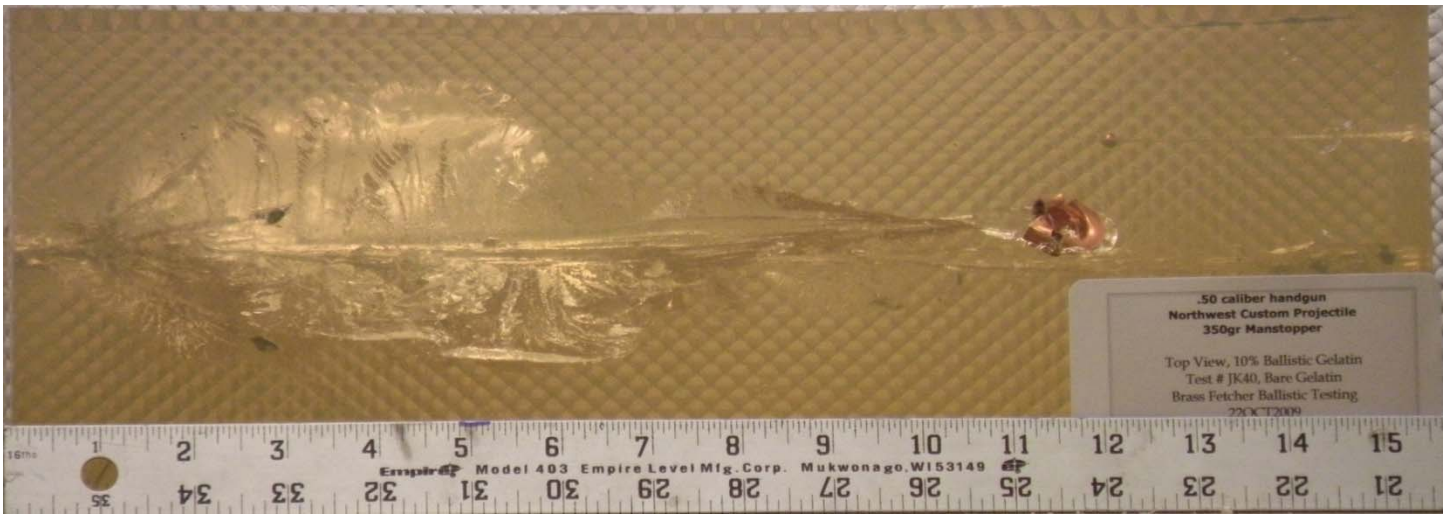


Figure 15. Projectile view of **Shot 5** recovered fragments