

# ENERGETIC TEST LABS

### Customer Information

Customer Name: Tac11  
Customer ID: TAC

Test Type: Ballistic Resistance Test - V0  
Test Report Number: ETL-TR-TAC-23-108-0102  
Test Date: Apr. 18, 2023

### Sample Information

Sample Identifier: ETL-TSI-TAC-23-108-0102  
Model Number: ARK-MC-1012  
Lot Number: N/A  
Description: N/A  
Size: 9.75" x 11.75"  
Weight (lbs): 2.2  
Thickness (in): 0.564

### Test Parameters

Reference Specification: NIJ 0101.07 (Draft) - Modified  
Projectile/Threat: 5.56x45mm M193  
Required Velocity (ft/s): 3250 ± 30  
Backing Material: Clay  
Obliquity: 0  
Witness Panel: N/A

### Range Parameters

Temperature (°F): 76.8  
Bar Pressure (in.Hg): 28.8  
Rel. Humidity (%): 31  
Barrel to Screen Start (ft): 41.7  
Barrel to Target (ft): 49.2  
Screen Set 1 Distance (ft): 5.0208  
Screen Set 2 Distance (ft): 5.0208

### Clay Conditioning

Pre-Test Drops (mm): 17.46    18.48    19.28    21.04    18.64  
Average Drop (mm): 18.98  
Clay Temperature (°F): 97.2  
Clay Box: 1  
Post-Test Drops (mm):  
Average Drop (mm):  
Clay Temperature (°F):

### Test Data

Shot Number	Time 1	Time 2	Velocity 1	Velocity 2	Average Velocity	Penetration (P/C)	Obliquity	Back Face Deformation	Notes
1	1544	1544	3251.8	3251.8	3251.8	P	0	33.39	
2	1523	1525	3296.7	3292.3	3294.5	P	0	39.64	
3	1557	1558	3224.7	3222.6	3223.7	P	0	N/A	
4	1534	1533	3273	3275.1	3274.1	P	0	N/A	
5	1538	1538	3264.5	3264.5	3264.5	P	0	N/A	
6	1556	1560	3226.7	3218.5	3222.6	P	0	N/A	

### Test Remarks:

### Acronyms

P = Partial Penetration  
C = Complete Penetration  
U = Unfair Hit

### Units

lbs = Pounds  
in = inch  
ft = feet  
mm = millimeter  
ft/s = feet per second  
°F = Degrees Fahrenheit  
in.Hg = inches of mercury

### Test Report History

Revision	Range Operator 1	Range Operator 2	Report Reviewer	Date Released
A	A.Gibson	M.Denhart	M.Denhart	Apr. 18, 2023