

ENERGETIC TEST LABS

Customer Information

Customer Name: Tac I I
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: I
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

ENERGETIC TEST LABS

Customer Information

Customer Name: Tac I I
Customer ID: TAC

Test Type: Ballistic Resistance Test - V0
Test Report Number: ETL-TR-TAC-23-108-0101
Test Date: Apr. 18, 2023

Sample Information

Sample Identifier: ETL-TSI-TAC-23-108-0101
Model Number: ARK-MC-1012
Lot Number: N/A
Description: N/A
Size: 9.75" x 11.75"
Weight (lbs): 2.18
Thickness (in): 0.555

Test Parameters

Reference Specification: NIJ 0101.07 (Draft) - Modified
Projectile/Threat: 7.62x39mm MSC
Required Velocity (ft/s): 2380 ± 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: I
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	2119	2118	2369.4	2370.5	2370	P	0	35.86	
2	2103	2103	2387.4	2387.4	2387.4	P	0	39.88	
3	2114	2111	2375	2378.4	2376.7	P	0	N/A	
4	2111	2111	2378.4	2378.4	2378.4	P	0	N/A	
5	2125	2125	2362.7	2362.7	2362.7	P	0	N/A	
6	2115	2116	2373.9	2372.8	2373.4	P	0	N/A	

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Test Report History

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