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ISO/IEC 17025:2017 Accredited Laboratory

NVLAP Code: 200826-0

July 27, 2022

Tacticon Armament 11295 Sunrise Gold Cir. Ste F Rancho Cordova, CA 95742 ATTN: Danny Sue

Dear Mr. Sue:

In accordance with your instructions, Oregon Ballistic Laboratories conducted Ballistic Resistance (V<sub>0</sub>) testing on two samples.

The samples were tested in accordance with NIJ-STD-0101.06 Level III (abbreviated) (modified) – Special Threat in an indoor range with the muzzle of the test barrel mounted 50 feet away from the target and positioned to produce 0-degree obliquity impacts. Four Oehler model 57 infrared velocity light screens, in conjunction with two HP 5315A time-based frequency counters, were placed such that projectile velocity was measured 8.25 feet from the target. Penetrations were determined by examination of a 5.5-inch clay block mounted behind the test sample. Results for all testing performed for this purpose are summarized in the following table.

	Test Sample		Ballistic Threat				Results				
OBL Sample No.:		Weight	Drojoctilo	Shots	Velocity (fps)		Penetrations	BFD (mm)		Pass/Fail	
No.:	Sample No	(lbs.)	Projectile	SHOIS	Min.	Max.	Penetrations	Min.	Max.	rass/rall	
33173	TABP338502	3.36	M193	6	3222	3279	0	16.35	21.11	<u>PASS</u>	
33175	TABP339001	3.33	M193	6	3230	3275	0	32.74	33.14	<u>PASS</u>	

<sup>\*</sup>Data shown in the table represents fair impacts only.

<u>This report pertains only to the samples tested and may not be modified or edited in any way.</u> This report may not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any federal government agency. Samples will be maintained at Oregon Ballistic Laboratories for 30 days and discarded unless other instructions are received. If you have any further questions or concerns, don't hesitate to contact us.

Darius Nuttbrock
Ballistic Test Director

Oregon Ballistic Laboratories

503.689.5134

Email: dnuttbrock@oregonbl.com



## **BALLISTIC RESISTANCE TEST - V<sub>0</sub>**

21.49

20.76

Customer: Tacticon Armament

11 x 14 3.36

OBL ID#: 33173 Date Rcv'd: 7/12/2022 Test Date: 7/26/2022 Purchase Order:

Powder: IMR 4227

TEST SAMPLE

TABP338502 Size (in.): Weight (lb.): Sample No.: Model No.: N/A

Lot No.: Thickness: Avg. Thk. (in): Description: Level III Hard Armor Plate

RANGE SET-UP Range to Target: Screen Dist. Vel. 1 (ft.): 50 ft. Range #: Pre Test:

70.4 °F Temperature: 19.08 20.03 21.15 Clay Drops (mm): Screen Dist. Vel. 2 (ft.): Bar. Pressure: 29.85 in. Hg 20.50 Drop Avg (mm): Screen 4 to target (ft): Rel. Humidity: 50.3 % 94.8 Clay Temp °F:

Primary Vel. Location: 8.25 ft. from target Sample Temp. Clay Box #: No N/A Recorder: Jason Stone Post Test:

Striking Velocity: Target to Witness: 20.49 20.58 18.22 17.62 17.40 Gunner: **Aaron Stone** Clay Drops (mm): Witness Panel: N/A Drop Avg (mm): Clay Temp °F: 18.86 94.3

Backing Material: 5.5" clay block w/ 3/4" plywood backing

Obliquity: 0 Degrees

Barrel: 5.56mm NATO/1:7/30"

AMMUNITION 5.56mm M193 Ball

STANDARDS / PROCEDURES NIJ-STD-0101.06 Level III (abbrev) (mod) - Special Threat Required Velocity: 3250 fps ± 30 fps

SHOT	PROJECTILE	POWDER	TIME 1	TIME 2	VELOCITY 1	VELOCITY 2	AVERAGE	PENEI.		CALIPER	NOTES
NO.	WT. (gr.)	WT. (gr.)	μs (10 <sup>-6</sup> )	μs (10 <sup>-6</sup> )	ft/s	ft/s	VELOCITY	P/C	OBLIQUITY	BFD	NOTES
1	55.1	19.8	1525	1220	3279	3279	3279	Р	0°	21.11	
2	55.0	19.7	1550	1243	3226	3218	3222	Р	0°	16.35	
3	55.0	19.7	1541	1230	3245	3252	3249	P	0°		
4	55.1	19.7	1550	1242	3226	3221	3224	Р	0°		
5	55.0	19.8	1526	1222	3277	3273	3275	Р	0°		
6	54.9	19.7	1550	1236	3226	3236	3231	Р	0°		
					TEAT DEALS TO						

REMARKS:

TEST RESULTS: Test sample satisfied the ballistic requirements given. P=Partial Penetration

C=Complete Penetration

FOOTNOTES:
Sample was not subjected to Armor Drop Test. UH=Unfair Hit Projectile Yaw Check: <5° for all velocity shots Sample was not subjected to Armor Submersion.



## **BALLISTIC RESISTANCE TEST - V<sub>0</sub>**

20.03

20.58

21.15

18.22

21.49

17.62

20.76

17.40

Customer: Tacticon Armament

OBL ID#: 33175 Date Rcv'd: 7/12/2022 Test Date: 7/26/2022 Purchase Order:

TEST SAMPLE
TABP339001 Sample No.: Model No.: N/A

Lot No.:

Description: Level III Hard Armor Plate

Size (in.): Weight (lb.): 11 x 14 3.33 Thickness:

Avg. Thk. (in):

50 ft. Range #:

RANGE SET-UP Range to Target: Screen Dist. Vel. 1 (ft.): 70.4 °F Temperature: Screen Dist. Vel. 2 (ft.): Bar. Pressure: 29.85 in. Hg Screen 4 to target (ft): Rel. Humidity: 50.3 % Primary Vel. Location: 8.25 ft. from target Sample Temp.

Striking Velocity: Target to Witness: No N/A Witness Panel: N/A

Backing Material: 5.5" clay block w/ 3/4" plywood backing

Obliquity: 0 Degrees

Barrel: 5.56mm NATO/1:7/30" Pre Test:

19.08 Clay Drops (mm): 20.50 Drop Avg (mm): 94.8 Clay Temp °F:

Clay Box #:

Post Test:

Clay Drops (mm):

18.86

Drop Avg (mm): Clay Temp °F: 94.3

AMMUNITION

5.56mm M193 Ball Powder: IMR 4227

Recorder:

Gunner:

STANDARDS / PROCEDURES
NIJ-STD-0101.06 Level III (abbrev) (mod) - Special Threat

Required Velocity: 3250 fps ± 30 fps

20.49

SHOT NO.	PROJECTILE WT. (gr.)	POWDER WT. (gr.)	TIME 1 μs (10 <sup>-6</sup> )	TIME 2 μs (10 <sup>-6</sup> )	VELOCITY 1 ft/s	VELOCITY 2 ft/s	AVERAGE VELOCITY	PENET. P/C	OBLIQUITY	CALIPER BFD	NOTES
1	55.1	19.7	1536	1232	3255	3247	3251	Р	0°	32.74	
2	55.1	19.7	1543	1235	3240	3239	3240	Р	0°	33.14	
3	55.1	19.7	1546	1240	3234	3226	3230	P	0°		
4	54.9	19.7	1525	1223	3279	3271	3275	Р	0°		
5	55.0	19.7	1530	1222	3268	3273	3271	Р	0°		
6	55.1	19.7	1546	1235	3234	3239	3237	Р	0°		

Jason Stone

**Aaron Stone** 

REMARKS:

P=Partial Penetration

C=Complete Penetration

UH=Unfair Hit

Projectile Yaw Check: <5° for all velocity shots

TEST RESULTS:

Test sample satisfied the ballistic requirements given.

FOOTNOTES:
Sample was not subjected to Armor Drop Test.

Sample was not subjected to Armor Submersion.



## **OBL# 33173 - Pre Test**



**OBL# 33173 - Post Test** 



**OBL# 33175 - Pre Test** 



**OBL# 33175 - Post Test** 



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