



September 26, 2019

Safe Life Defense  
5725 S. Valley View #4  
Las Vegas, NV 89118  
ATTN: Nick Groat

Dear Mr. Groat:

In accordance with your instructions, Oregon Ballistic Laboratories conducted Ballistic Resistance ( $V_0$ ) testing on three samples.

The samples were tested in accordance with NIJ-STD-0101.06 Level III (abbreviated) (modified) 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 infrared light screens, in conjunction with time-based frequency counters, were positioned such that bullet 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 No.:	Model No.:	Weight (lbs.)	Projectile	Shots	Velocity (fps)		Penetrations	BFD (mm)		Pass/Fail
					Min.	Max.		Min.	Max.	
22903	FRAS	9.07	SS109	8	3109	3128	0	30.34	35.81	<b>PASS</b>
22904	FRAS	9.19	M193	8	3229	3292	0	20.54	24.40	<b>PASS</b>
22905	FRAS	9.19	M67	8	2372	2400	0	36.76	39.50	<b>PASS</b>

Samples will be maintained at Oregon Ballistic Laboratories for 30 days and then discarded, unless other instructions are received. If you have any further questions or concerns, please contact us.

Sincerely,

Brandon Bertsch  
Oregon Ballistic Laboratories

This report pertains only to the samples tested and must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.



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

Customer: SafeLife Defense  
 OBL ID#: 22903  
 Date Rcv'd: 9/23/2019  
 Test Date: 9/24/2019  
 Purchase Order:

**TEST SAMPLE**  
 Sample No.: 1  
 Model No.: 453C9902AA  
 Lot No.: CPC0000027  
 Plies: N/A  
 Description: FRAS Flexible Rifle Armor Panel  
 Size: L  
 Weight (lb.): 9.07  
 Thickness:  
 Avg. Thk. (in):

**RANGE SET-UP**  
 Range to Target: 50 ft. Range #: 2  
 Screen Dist. Vel. 1 (ft.): 5 Temperature: 69.5 °F  
 Screen Dist. Vel. 2 (ft.): 5 Bar. Pressure: 30.27 in. Hg  
 Screen 4 to target (ft): N/A Rel. Humidity: 53.7 %  
 Primary Vel. Location: 8.25 ft. from target Sample Temp. Amb. °F  
 Striking Velocity: No Recorder: Darius Nuttbrock  
 Target to Witness: N/A Gunner: Jesse Crisanti  
 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:  
 Clay Drops (mm): 19.31 19.91 19.72 19.35 19.00  
 Drop Avg (mm): 19.46  
 Clay Temp °F: 93.0  
 Clay Box #: 2  
 Post Test:  
 Clay Drops (mm): 17.77 16.58 17.77 16.40 17.81  
 Drop Avg (mm): 17.27  
 Clay Temp °F: 91.4

**AMMUNITION**  
 Projectile: 5.56mm SS109/M855 Ball Powder: IMR 4227

**STANDARDS / PROCEDURES**  
 NIJ-STD-0101.06 Level III (abbrev) (mod) - Special Threat Required Velocity: 3115 fps ± 30 fps

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	62.5	21.2	1602	1600	3121	3125	3123	P	0°	35.81	
2	63.0	21.2	1598	1599	3129	3127	3128	P	0°	30.34	
3	63.0	21.2	1604	1604	3117	3117	3117	P	0°	33.98	
4	62.8	21.2	1607	1608	3111	3109	3110	P	30°		
5	63.0	21.2	1604	1604	3117	3117	3117	P	45°		
6	62.5	21.2	1608	1608	3109	3109	3109	P	0°		
7	62.9	21.2	1605	1604	3115	3117	3116	P	0°		
8	62.8	21.2	1604	1603	3117	3119	3118	P	0°		

**REMARKS:**  
 P=Partial Penetration  
 C=Complete Penetration  
 UH=Unfair Hit

**TEST RESULTS:**  
 Test sample satisfied the ballistic requirements given.

**FOOTNOTES:**  
 Sample was not subjected to Armor Drop Test per section 6.2.3.4  
 Sample was not subjected to Armor Submersion per section 7.8.2

This report pertains only to the samples tested and must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Customer: SafeLife Defense  
 OBL ID#: 22904  
 Date Rcv'd: 9/23/2019  
 Test Date: 9/24/2019  
 Purchase Order:

**TEST SAMPLE**  
 Sample No.: 1  
 Model No.: 453C9902AA  
 Lot No.: CPC0000027  
 Plies: N/A  
 Description: FRAS Flexible Rifle Armor Panel  
 Size: L  
 Weight (lb.): 9.19  
 Thickness:  
 Avg. Thk. (in):

**RANGE SET-UP**  
 Range to Target: 50 ft. Range #: 2  
 Screen Dist. Vel. 1 (ft.): 5 Temperature: 68.8 °F  
 Screen Dist. Vel. 2 (ft.): 5 Bar. Pressure: 30.27 in. Hg  
 Screen 4 to target (ft): N/A Rel. Humidity: 55.4 %  
 Primary Vel. Location: 8.25 ft. from target Sample Temp. Amb. °F  
 Striking Velocity: No Recorder: Darius Nuttbrock  
 Target to Witness: N/A Gunner: Jesse Crisanti  
 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:  
 Clay Drops (mm): 21.21 21.24 20.43 20.76 20.80  
 Drop Avg (mm): 20.89  
 Clay Temp °F: 95.0  
 Clay Box #: 3  
 Post Test:  
 Clay Drops (mm): 17.82 17.61 17.11 18.10 17.42  
 Drop Avg (mm): 17.61  
 Clay Temp °F: 93.2

**AMMUNITION**  
 Projectile: 5.56mm M193 Ball Powder: IMR 4227

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

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	54.8	21.5	1532	1530	3264	3268	3266	P	0°	22.60	
2	55.2	21.5	1520	1520	3289	3289	3289	P	0°	20.54	
3	55.2	21.5	1549	1548	3228	3230	3229	P	0°	24.40	
4	55.0	21.5	1520	1518	3289	3294	3292	P	30°		
5	54.8	21.5	1539	1536	3249	3255	3252	P	45°		
6	55.2	21.5	1544	1543	3238	3240	3239	P	0°		
7	54.8	21.5	1535	1536	3257	3255	3256	P	0°		
8	55.2	21.5	1532	1531	3264	3266	3265	P	0°		

**REMARKS:**  
 P=Partial Penetration  
 C=Complete Penetration  
 UH=Unfair Hit  
 Sample shot with curved clay build up backer.

**TEST RESULTS:**  
 Test sample satisfied the ballistic requirements given.  
**FOOTNOTES:**  
 Sample was not subjected to Armor Drop Test per section 6.2.3.4  
 Sample was not subjected to Armor Submersion per section 7.8.2

Customer: SafeLife Defense  
 OBL ID#: 22905  
 Date Rcv'd: 9/23/2019  
 Test Date: 9/24/2019  
 Purchase Order:

**TEST SAMPLE**

Sample No.: 1	Size: L
Model No.: 453C9902AA	Weight (lb.): 9.19
Lot No.: CPC0000027	Thickness:
Plies: N/A	Avg. Thk. (in):
Description: FRAS Flexible Rifle Armor Panel	

**RANGE SET-UP**

Range to Target: 50 ft.	Range #: 2	Pre Test:	
Screen Dist. Vel. 1 (ft.): 5	Temperature: 69.1 °F	Clay Drops (mm):	19.31 19.91 19.72 19.35 19.00
Screen Dist. Vel. 2 (ft.): 5	Bar. Pressure: 30.27 in. Hg	Drop Avg (mm):	19.46
Screen 4 to target (ft): N/A	Rel. Humidity: 52.3 %	Clay Temp °F:	93.0
Primary Vel. Location: 8.25 ft. from target	Sample Temp. Amb. °F	Clay Box #:	2
Striking Velocity: No	Recorder: Darius Nuttbrock	Post Test:	
Target to Witness: N/A	Gunner: Jesse Crisanti	Clay Drops (mm):	17.77 16.58 17.77 16.40 17.41
Witness Panel: N/A		Drop Avg (mm):	17.19
Backing Material: 5.5" clay block w/ 3/4" plywood backing		Clay Temp °F:	91.4
Obliquity: 0 Degrees			
Barrel: 7.62x39mm/1:9.45/24"			

**AMMUNITION**

Projectile: 7.62x39mm M67 Lead Core Powder: IMR 4227

**STANDARDS / PROCEDURES**

NIJ-STD-0101.06 Level III (abbrev) (mod) - Special Threat Required Velocity: 2395 fps ± 30 fps

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	124.3	24.5	2108	2108	2372	2372	2372	P	0°	36.76	
2	124.8	24.6	2083	2086	2400	2397	2399	P	0°	37.87	
3	124.1	24.6	2083	2083	2400	2400	2400	P	0°	39.50	
4	123.9	24.6	2102	2100	2379	2381	2380	P	30°		
5	123.4	24.6	2095	2098	2387	2383	2385	P	45°		
6	123.5	24.6	2087	2087	2396	2396	2396	P	0°		
7	122.9	24.6	2099	2098	2382	2383	2383	P	0°		
8	123.8	24.6	2097	2100	2384	2381	2383	P	0°		

**REMARKS:**

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

**TEST RESULTS:**

Test sample satisfied the ballistic requirements given.

**FOOTNOTES:**

Sample was not subjected to Armor Drop Test per section 6.2.3.4  
 Sample was not subjected to Armor Submersion per section 7.8.2