



April 13, 2018

In accordance with your instructions, Oregon Ballistic Laboratories conducted Ballistic Resistance (V_0) testing on one sample.

The sample was tested in accordance with NIJ-STD-0101.06 Level II / IIIA (abbreviated) (modified) in an indoor range with the muzzle of the test barrel mounted 15 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 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 No.:	S/N	Weight (lbs.)	Projectile	Shots	Velocity (fps)	Penetrations	BFD (mm)	Pass/Fail
19105	C	1.38	9mm FMJ	1	1295	0	19.50	<u>PASS</u>
			.357 Mag JSP	1	1421	0	26.89	<u>PASS</u>
			.44 Mag SJHP	1	1436	0	37.08	<u>PASS</u>

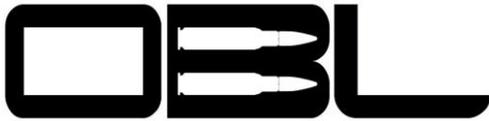
Samples will be maintained at Oregon Ballistic Laboratories for 30 days and then discarded, unless other instructions are received. If you have any further questions or concerns, please contact us.

Sincerely,

Brandon Bertsch
Oregon Ballistic Laboratories



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



OREGON BALLISTIC LABORATORIES

BALLISTIC RESISTANCE TEST - V₀

Customer:
 OBL ID#: 19105
 Test Date: 4/13/2018
 Purchase Order:

TEST SAMPLE						
Serial No.:	C	Size:	11.5 x 7.5			
Model No.:	IA0032A	Weight (lb.):	1.38			
Lot No.:	IA0032A-T001	Thickness:	0.402	0.412	0.415	0.406
Plies:	N/A	Avg. Thk. (in):	0.409			
Description:	Ballistic Face Mask					

RANGE SET-UP										
Range to Target:	15 ft.	Range #:	3		Pre Test:					
Screen Dist. Vel. 1 (ft.):	5	Temperature:	72.4 °F		Clay Drops (mm):	17.64	16.92	17.96	17.77	17.44
Screen Dist. Vel. 2 (ft.):	5	Bar. Pressure:	30.30 in. Hg		Drop Avg (mm):	17.55				
Screen 4 to target (ft):	N/A	Rel. Humidity:	34.4 %		Clay Temp °F:	96.3				
Primary Vel. Location:	8.25 ft. from target	Sample Temp.	Amb. °F		Clay Box #:	1				
Striking Velocity:	No	Recorder:	Jesse Crisanti		Post Test:					
Target to Witness:	N/A	Gunner:	Darius Nuttbrock		Clay Drops (mm):	17.15	17.05	17.68	17.12	17.09
Witness Panel:	N/A			Drop Avg (mm):	17.22					
Backing Material:	5.5" clay block w/ 3/4" plywood backing			Clay Temp °F:	92.3					
Obliquity:	0 Degrees									
Barrel:	9mm Luger/1:10/4.5"									

AMMUNITION			
Projectile:	9mm 124gr. FMJ Lot #23558	Powder:	D032-03

STANDARDS / PROCEDURES			
NIJ-STD-0101.06 Level II / Level IIIA (abbrev) (mod)	Required Velocity:	fps ± 30 fps	

SHOT NO.	PROJECTILE WT. (gr.)	POWDER WT. (gr.)	TIME 1 μs (10 ⁻⁶)	TIME 2 μs (10 ⁻⁶)	VELOCITY 1 ft/s	VELOCITY 2 ft/s	AVERAGE VELOCITY	PENET. P/C	OBLIQUITY	CALIPER BFD	NOTES
1	125.1	5.9	3865	3861	1294	1295	1295	P	0°	19.50	9mm FMJ
2	158.2	7.5	3522	3518	1420	1421	1421	P	0°	26.89	.357 Mag JSP
3	239.8	11.7	3484	3481	1435	1436	1436	P	0°	37.08	.44 Mag SJHP

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			

OBL #19105 – Pre-Test



Post-Test

