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ISO/IEC 17025:2017 Accredited Laboratory

NVLAP Code: 200826-0

February 8, 2023

Caliber Armor LLC 1421 Selinda Ave. Louisville, KY 40213 ATTN: Kevin Strnatka

Dear Mr. Strnatka:

In accordance with your instructions, Oregon Ballistic Laboratories conducted Ballistic Resistance (V₀) testing on one sample.

The sample was tested in accordance with NIJ-STD-0101.07 (draft) Level RF1 (abbreviated) (modified) in an indoor range with the muzzle of the test barrel mounted 50 feet 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	S/N:	Weight (lbs.)	Projectile	Shots	Velocity (fps)		Penetrations	BFD		Pass/Fail
No.:					Min:	Max:	Penelialions	Min:	Max:	rass/raii
34597	812270-AV2- 002	7.32	M193	3	3279	3308	0	5.66	14.47	<u>PASS</u>
			Type 56 MSC	3	2471	2518	0	14.73	21.01	<u>PASS</u>

<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
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Oregon Ballistic Laboratories
503.689.5134

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BALLISTIC RESISTANCE TEST - V₀

Customer: Caliber Armor LLC

OBL ID#: 34597 Date Rcv'd: 1/27/2023 Test Date: 2/1/2023 Purchase Order:

TEST SAMPLE

812270-AV2-002 19-AV2-1012-SPC Serial No.: Model No.: Lot No.: 812270 N/A

Description: Level RF1 Hard Armor Plate

Size (in.): Weight (lb.):

10 x 12 7.32 0.491

19.59

19.85

95.4

Thickness: Avg. Thk. (in): 0.491

Screen 4 to target (ft):

Primary Vel. Location:

Striking Velocity: Target to Witness:

Witness Panel:

RANGE SET-UP Range to Target: Screen Dist. Vel. 1 (ft.): 50 ft. Range #: Temperature: Screen Dist. Vel. 2 (ft.):

Bar. Pressure: 30.05 in. Hg 24.7 % Rel. Humidity: 8.25 ft. from target Sample Temp. Recorder: Jason Stone

No N/A Gunner: N/A

5.5" clay block w/ 3/4" plywood backing

Obliquity: 0 Degrees

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

Post Test:

Clay Drops (mm):

Drop Avg (mm): Clay Temp °F:

20.86 Clay Drops (mm): 20.58 Drop Avg (mm):

98.1 Clay Temp °F: Clay Box #:

20.32

19.47

20.54 20.64

19.69 20.36

Backing Material:

NIJ-STD-0101.07 (draft) RF1 (abbrev) (mod)

AMMUNITION

5.56mm M193 Ball

Powder: IMR 4227

Required Velocity:

STANDARDS / PROCEDURES

20.55

20.16

3300 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	55.0	19.7	1526	1219	3277	3281	3279	P	0°	5.66	TL
2	54.9	19.8	1511	1210	3309	3306	3308	P	0°	14.47	BR
3	55.0	19.8	1523	1221	3283	3276	3280	Р	0°		ML
4	123.3	23.1	1988	1587	2515	2520	2518	P	0°	21.01	TR / Switched to Type 56 MSC @ 2500 fps +/- 30 fps
5	122.9	23.1	2024	1619	2470	2471	2471	P	0°	14.73	BL
6	122.6	23.1	1988	1589	2515	2517	2516	Р	0°		MR

69.6 °F

Jerhemi Stone

REMARKS:

P=Partial Penetration

C=Complete Penetration

UH=Unfair Hit

Projectile Yaw Check: <5° for all velocity shots

ange Set-up per NIJ-STD-0101.06

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.