

Department of Public Safety

Captain Jackie F. Kellett Manager, Forensic Division jkellett@greenvillecounty.org (864) 467-5398 www.greenvillecounty.org

November, 8, 2011

Noel Lasure Vice President of Marketing & Product Development Teludyne Tech Industries 1018 S. Batesville Road Greer, SC 29650

Dear Mr. Lasure:

This examiner was asked to test fire a Remington model 700 rifle with serial number G7058478 in caliber 300 Winchester Magnum during the week of September 26, 2011. These test shots were preformed prior to Teludyne Tech Industries doing any work on the rifle. The test shots were obtained by use of a Water Recovery Tank. The fired bullet specimens were placed in a bag and stored in a secure location by this examiner in order to compare them at a later date to test shots from the post-jacketed barrel. The post-jacketed fired bullet specimens were obtained. The pre-jacketed fired bullet specimens were then microscopically compared against the post-jacketed fired bullet specimens. The result of these comparisons is that the pre-jacketed fired bullet specimens were fired from the same barrel as the post-jacketed fired bullet specimens. It is the opinion of this examiner that the barrel of the Remington model 700 rifle with serial number G7058478 in caliber 300 Winchester Magnum has not been altered or changed by the installation of the StraightJacket[®] Barrel System.

Sincerely,

James W. Armstrong Firearms Examiner Greenville Crime Lab 4 McGee Street Greenville, SC 29601 (864) 467-5178

HP White Test Cycle - HPWLI 11988-01A-1

Sustained Fire Test



 Point of Aim (POA)
 Test Rifle TTI-BR-01X
 Remington M700, S/N G7058478, .300 Win Mag without StraightJacket* Barrel System
 Remington M700, S/N G7058478, .300 Win Mag with StraightJacket* Barrel System

HP White Test Cycle - HPWLI 11988-01A-2

Sustained Fire Test



 Point of Aim (POA)
 Test Rifle TTI-BR-01X
 Remington M700, S/N G7058478, .300 Win Mag without StraightJacket[®] Barrel System
 Remington M700, S/N G7058478, .300 Win Mag with StraightJacket[®] Barrel System

3114 Scarboro Road Street, Maryland 21154-1822 Telephone: (410) 838-6550 Facsimile: (410) 838-2802 Email: info@hpwhite.com www.hpwhite.com



17 November 2011 (HPWLI 11988-01A) (Revised 30 November 2011)

Teludyne Tech 1018 S. Batesville Road 3-D Greer, SC 29650

Attention: Noel Lasure

In accordance with your instructions, H.P. White Laboratory, Inc. conducted Velocity and Dispersion Testing of one Remington Model 700, chambered in .300 Winchester Magnum, identified as S/N: G7058478 received 17 October 2011 via Federal Express.

Testing was conducted using caliber .300 Win. Mag., Black Hills, 190 gr. Boat-Tail Hollow Point, Lot 4513091811. The test sample was fixtured on an indoor range using a universal firearms mounting system. Photoelectric infrared screens were positioned at 5.0 and 25.0 feet which, in conjunction with dual elapsed time counters (chronographs), were used to compute projectile velocities 15.0 feet forward of the muzzle. Dispersion target was fixtured 100 yards from muzzle. Sighting optics mounted on the firearm was used to determine point of aim. To achieve warm conditions; 20 rounds were fired within a three minute timeframe. Warm testing was performed immediately following this procedure. Table I presents a summary of the enclosed data records.

Testing was conducted on 17 October 2011 with the firearm in its original configuration. On 2 November 2011 testing was conducted with the Teludyne Tech. Straight Jacket System installed. James W Armstrong, Firearms Examiner for Greenville County Crime Lab performed a bullet comparison on a single round fired 26 September 2011 with the firearm in its pre-jacketed state. On 1 November 2011 another single round was fired with the Straight Jacket system installed on the firearm. It was determined that the pre-jacketed bullet and the post-jacketed bullet were fired from the same barrel.

This report is based on data obtained from having tested only the sample submitted, and should NOT be interpreted as an endorsement by H.P. White Laboratory, Inc. of the continuing quality, or performance, of any other items of the same, or similar, design.

The test sample was returned into the custody of your on-site representative. Should you have any questions regarding this matter, or if we may be of any further service, please do not hesitate to contact us.

Sincerely,

H.P. White Laboratory, Inc.

Kevin Black

KB/sh Enclosures

3114 Scarboro Road Street, Maryland 21154-1822 Telephone: (410) 838-6550 Facsimile: (410) 838-2802 Email: info@hpwhite.com www.hpwhite.com



Condition	Bullet	Defendent of	Velocity (fps)		Barrel	Dispersion	
		Bullet Shots	Mean	Extreme Variation	Temperature (d)	At 100 Yards	Aim vs. Impact
Ambient 190gr. 10 2998		61	N/A	2.150"	3.25" High 0.74" Left		
Warm(b)	190gr. BTHP	10	3013	57	Int: 191.2 F Ext: 176.0 F	3.913"	1.90" High 0.25" Right
Ambient (a)	190gr. BTHP	10	2960	55	N/A	1.883"	1.25" High
Warm (a)(c)	190gr. BTHP	10	2965	47	Int: 155.7 F Ext: 142.1 F	2.625"	1.25" Low 0.75" Right

TABLE I. SUMMARY OF RESULTS

(a) With Straight Jacket System

(b) Group shift from ambient temperature to warm temperature: 1.90" low, 1.00" Right

(c) Group shift from ambient temperature to warm temperature: 0.74" Left

(d) Temperature taken 8" forward of chamber



Manufacturer : BLACK HILLS Type : .300 WIN MAG. Bullet : BOAT-TAIL HP Catalog No. : UNKNOWN Lot No. : 4513091811

WEAPON

Type : G7058478 Ser. No.:

SET-UP

Vel. Screen 1 : 5 Vel. Screen 2 : 25 Case : .300 WIN MAG. Primer : UNKNOWN Bullet Wt.(gr.) : 190 Powder : UNKNOWN Overall Length (in.) : 3.309

Barrel Length (in.) :

Range No.: 6

Gunner : BLACK

Recorder : UNGER

Reference Firing Date :

Customer : Teludyne

Job No. : 11988-01 Test Date : 10/17/11

Conditioning : AMBIENT Loader : UNKNOWN Date Rec'd : 10/17/11 Via : HAND CARRIED Returned : REMINGTON MODEL

Velocity Correction (fps) :

Temperature (F): 65 Barometer (in Hg): 29.89 Rel. Humidity (%): 40

		7			_					
Shot	Time 1	Velocity 1	Time 2	Velocity 2	Average	Corrected	Include			
No.	(usec)	(fps)	(usec)	(fps)	Velocity (fps)	Velocity	in Results	Remarks		
1	6710	2981	6710	2981	2981	(fps)	Y			
2		a second second		A STORE STORE		2981				
	6613	3024	6613	3024	3024	3024	Y	<u>1</u>		
3	6601	3030	6601	3030	3030	3030	Y			
4	6698	2986	6698	2986	2986	2986	Y			
5	6736	2969	6736	2969	2969	2969	Y			
6	6644	3010	6644	3010	3010	3010	Y	- C		
7	6675	2996	6675	2996	2996	2996	Y			
8	6715	2978	6715	2978	2978	2978	Y			
9	6671	2998	6671	2998	2998	2998	Y			
10	6654	3006	6654	3006	3006	3006	Y			
11										
12										
13										
14										
15										
16		1								
17										
18										
19										
20				1 1						
21				1 1						
22										
23		1								
24										
25				1 1						
26										
27										
28						1				
29										
30										
	TC	Magazi	CANT	DEMADIC	-					
RESUL		Measured	SAAMI	REMARK						
No. D	ata Points :	10	Reqmt.	POST 20 R						
	Maximum :	3030		BARREL R	LIURNED	TO AMBIE	ENT TE	MPERATURE.		
	Minimum :	2969		100 YARD	DISPERSI	ON (10 RC	UND G	ROUP): 2.150"		
Extreme	Extreme Variation : 61			POINT OF	AIM VS. P	OINT OF I	MPACT:	3.25" HIGH, 0.74" LEFT		
	Average :	2998								
	Deviation :	18.93								
	Avg.+3 Std. Dev.: 3055									
	Standard Error 5.99									
A	vg. + 2SE :	3010	The last							
A	vg. + 5SE :	3028								
A	vg. + 5SE :	3028								



Manufacturer : BLACK HILLS Type : .300 WIN MAG. Bullet : BOAT-TAIL HP Catalog No. : UNKNOWN Lot No. : 4513091811

WEAPON

Type : G7058478 Ser. No.:

SET-UP

Vel. Screen 1 : 5 Vel. Screen 2 : 25 Case : .300 WIN MAG. Primer : UNKNOWN Bullet Wt.(gr.) : 190 Powder : UNKNOWN Overall Length (in.) : 3.309 Customer : Teludyne

Job No.: 11988-01 Test Date: 10/17/11

Conditioning : AMBIENT Loader : UNKNOWN Date Rec'd : 10/17/11 Via : HAND CARRIED Returned : REMINGTON MODEL

Velocity Correction (fps) :

Temperature (F): 65 Barometer (in Hg): 29.89 Rel. Humidity (%): 40

Range No.:	6
Gunner :	BLACK
Recorder ·	UNGER

Barrel Length (in.) :

Reference Firing Date :

	1	-	1	1							
Shot	Time 1	Velocity 1	Time 2	Velocity 2	Average Velocity	Corrected Velocity	Include in	Remarks			
No.	(usec)	(fps)	(usec)	(fps)	(fps)	(fps)	Results	Remarks			
1	6636	3014	6636	3014	3014	3014	Y				
2	6618	3022	6618	3022	3022	3022	Y				
3	6668	2999	6668	2999	2999	2999	Y	°			
4	6669	2999	6663	3002	3000	3000	Y				
5	6663	3002	6663	3002	3002	3002	Y				
6	6574	3042	6574	3042	3042		Y				
7	6626	3018	6626			3042	1				
8	6672	2998	6672	3018 2998	3018	3018	Y				
9	6569	3045	6569		2998	2998	Y				
10	6695	2987		3045	3045	3045	Y				
11	0095	2987	6695	2987	2987	2987	Y				
12	1										
13											
13				1							
14											
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17				1 1				1 dates			
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	TO			DELCIEN	-						
RESU		Measured	SAAMI	REMARK							
No. I	Data Points	10	Reqmt.	POST 20 F	OUNDS F	IRED WITH	HIN 3 M	INUTES			
1	Maximum .	3045 2987	2 2 2 2 2 2	INTERNAL	BARREL	IEMPERA	IURE 8	FROM CHAMBER: 191.2 F			
								B" FROM CHAMBER: 176.0 F			
Extrem	Extreme Variation : 57							ROUP): 3.913"			
Average : 3013 POINT OF AIM VS. POINT OF IMPACT: 1.35" HIGH,											
	Standard Deviation : 18.28 G			GROUP SH	GROUP SHIFT FROM AMBIENT TO WARM: 1.90" LOW, 1.00" RIGHT						
	3 Std. Dev.:	3068	Surger 1								
Standard Error 5.78											
Avg. + 2SE : 3024											
1	Avg. + 5SE :	3042	a States in								



Manufacturer : BLACK HILLS Type : 300 WIN MAG Bullet : BOAT-TAIL HP Catalog No. : Lot No. : 4513091811

WEAPON

Type :	G7058478
Ser. No .:	

SET-UP

Vel. Screen 1 : 5 Vel. Screen 2 : 25 Case : 300 WIN MAG Primer : UNKNOWN Bullet Wt.(gr.) : 190 Powder : UNKNOWN Overall Length (in.) : 3.309 Customer : TELUDYNE

Job No. : 11988-01 Test Date : 11/2/11

Conditioning : AMBIENT Loader : UNKNOWN Date Rec'd : 11/2/11 Via : HAND CARRIED Returned : REMINGTON 300 WIN

Velocity Correction (fps) :

Temperature (F): 70 Barometer (in Hg): 29.56 Rel. Humidity (%): 34

Range No.: 6 Gunner : BLACK Recorder : BLACK

Barrel Length (in.) :

Reference Firing Date :

Shot Ne. Time 1 (usec) Velocity 1 (ps) Time 2 (usec) Velocity 2 (ps) Average Velocity 2 (ps) Connected Velocity 1 (ps) Induce Near Near (ps) Remarks 1 6600 2990 6681 2991 2990 2995 2955 Y 2 6675 2996 6681 2991 2995 2955 Y 3 6757 2956 6767 2956 2957 7 5 6766 2955 6776 2952 2953 Y 7 6745 2966 6749 2963 2964 2964 Y 9 6782 2948 2947 2941 2941 Y 10 6779 2950 6785 2948 2949 2949 Y 11 12 14 15 14 14 14 14 14 14 14 14 14 14 14 14 14 14 14 14 14 1									
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5 6769 2955 6776 2952 2953 2953 Y 6 6767 2956 6776 2952 2954 Y 7 6745 2956 6773 2952 2954 Y 9 6782 2949 6789 2946 2964 Y 9 6782 2949 6789 2946 2947 2947 Y 10 6777 6785 2948 2949 2949 2949 Y 11 12 13 14						and a strategy of			
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Minimum : 2947 INTERNAL BARREL TEMPERATURE 8" FROM CHAMBER: 155.7 F Extreme Variation : 47 EXTERNAL BARREL TEMPERATURE 8" FROM CHAMBER: 142.1 F Average : 2965 100 YARD DISPERSION (10 SHOT GROUP): 2.625" Bandard Deviation : 16.61 POINT OF AIM VS. POINT OF IMPACT: 1.25" LOW, 0.75" LEFT Avg.+3 Std. Dev.: 3015 GROUP SHIFT FROM AMBIENT TO WARM: 0.74" LEFT Standard Error : 5.25 Avg. + 2SE 2975	No. D	Data Points :	10	Reqmt.					
Extreme Variation : 47 EXTERNAL BARREL TEMPERATURE 8" FROM CHAMBER: 142.1 F Average : 2965 100 YARD DISPERSION (10 SHOT GROUP): 2.625" Standard Deviation : 16.61 POINT OF AIM VS. POINT OF IMPACT: 1.25" LOW, 0.75" LEFT Avg.+3 Std. Dev.: 3015 GROUP SHIFT FROM AMBIENT TO WARM: 0.74" LEFT Standard Error : 5.25 Avg. + 2SE 2975									
Average : 2965 100 YARD DISPERSION (10 SHOT GROUP): 2.625" Standard Deviation : 16.61 POINT OF AIM VS. POINT OF IMPACT: 1.25" LOW, 0.75" LEFT Avg.+3 Std. Dev.: 3015 GROUP SHIFT FROM AMBIENT TO WARM: 0.74" LEFT Standard Error : 5.25 Avg. + 2SE 2975			1 1		INTERNAL	BARREL	TEMPERA	TURE 8	FROM CHAMBER: 155.7 F
Avg.+3 Std. Dev.: 3015 Standard Error: 5.25 Avg. + 2SE 2975	Extrem				EXTERNAL	BARREL	TEMPERA	TURE 8	3" FROM CHAMBER: 142.1 F
Avg.+3 Std. Dev.: 3015 Standard Error : 5.25 Avg. + 2SE 2975 GROUP SHIFT FROM AMBIENT TO WARM: 0.74" LEFT									
Standard Error: 5.25 Avg. + 2SE 2975			4564967						
Avg. + 2SE . 2975					GROUP SP	III PRON	AMBIENT	10 00	ARIVI. U. 74 LEFT
			2991						



Manufacturer : BLACK HILLS Type : 300 WIN MAG Bullet : BOAT-TAIL HP Catalog No. : Lot No. : 4513091811

WEAPON

Type : G7058478 Ser. No.:

SET-UP

Vel. Screen 1 : 5 Vel. Screen 2 : 25 Case : 300 WIN MAG Primer : UNKNOWN Bullet Wt.(gr.) : 190 Powder : UNKNOWN Overall Length (in.) : 3.309 Customer : TELUDYNE

Job No.: 11988-01 Test Date: 11/2/11

Conditioning : AMBIENT Loader : UNKNOWN Date Rec'd : 11/2/11 Via : HAND CARRIED Returned : REMINGTON 300 WIN

11.6

Velocity Correction (fps) :

Temperature (F): 70 Barometer (in Hg): 29.56 Rel. Humidity (%): 34

Reference Firing Date :

Barrel Length (in.) :

Range No.: 6 Gunner : BLACK Recorder : BLACK

	_							
Shot	Time 1	Velocity 1	Time 2	Velocity 2	Average	Corrected	Include	
No.	(usec)	(fps)	(usec)	(fps)	Velocity (fps)	Velocity	in Results	Remarks
1	6818	2933	6816	2934	2934	(fps) 2934	Y	
2	6745	2965	6753	2962	2963			
-3	6795	2943	6803	2902	100 Control 100	2963	Y	
4	6725	2974	6731	2940	2942	2942	Y	
5	6741	2967	6749	State A. C.	2973	2973	Y	
6	6829	2929		2963	2965	2965	Y	
7	and the second second		6839	2924	2927	2927	Y	
	6723	2975	6726	2974	2974	2974	Y	
8	6726	2974	6735	2970	2972	2972	Y	
9	6702	2984	6713	2979	2982	2982	Y	
10	6736	2969	6744	2966	2967	2967	Y	
11								
12								
13								
14								
15								
16 17				1 1				
18								
				1 1				
19								
20								
21 22								
23								
24								
25								
26								
27 28								
							1	
29 30								
								1
RESUL	TS	Measured	SAAMI	REMARKS				
No E	Data Points :	10	Regmt.	WITH STR/				
	Maximum	2982		POST 20 R				NUTES
	Minimum :	2927		BARREL R	ETURNED	TO AMBIE	INT TE	MPERATURE.
Extrem	e Variation :	55		100 YARD	DISPERSI	ON (10 SH	OT GRO	DUP): 1.883"
	Average 2960			POINT OF	AIM VS. PO	OINT OF IN	IPACT:	1.25" HIGH.
Standard	Deviation :	17.89						-
Avg.+	3 Std. Dev.:	3013	10 M 10					P
Stan	dard Error :	5.66	1. 1. 1. 1. 1.					
A	vg. + 2SE	2971	the second					
	vg. + 5SE	2988						

HP White Test Cycle - HPWLI 11988-01B-1

MIL-SPEC Extreme Temperature Test

-4 -	-3	2 -	1	0	1	2	34	
4			ar)		<u>Shots Fired: 5</u> <u>Atmospheric</u> — 65°F	Conditions: Indoc	or Range,	
2		3.42"			<u>Rifle Conditic</u> Precision Rifle <u>Barrel Tempe</u> <u>Time Elapsed</u> <u>Sights Used:</u>	rature: Cold Bore : 55 minutes/15 n 6-24x56 target op	ninutes tic	
1	-				 mounted to a pic rail, mounted on the rifle's receiver <u>Ammo Used:</u> Factory new 190 GR BTHP Match Lot# 4513091811 <u>Distance:</u> 100 yards <u>Notes:</u> After each round was fired, the barrel was allowed to cool back to its 			
			1.00"		starting temperature to ensure a true cold bore shot was taken. Testing was conducted in accordance with MIL-STD- 810.			
1				1.75"				
				0.66"				

Legend
Point of Aim (POA)
Test Rifle TTI-BR-01X
Remington M700, S/N G7058478, .300 Win Mag without
StraightJacket® Barrel System
Remington M700, S/N G7058478, .300 Win Mag with
StraightJacket® Barrel System

HP White Test Cycle - HPWLI 11988-01B-2

MIL-SPEC Extreme Temperature Test



Legend

Point of Aim (POA) Test Rifle TTI-BR-01X

> Remington M700, S/N G7058478, .300 Win Mag without StraightJacket[®] Barrel System Remington M700, S/N G7058478, .300 Win Mag with

StraightJacket[®] Barrel System

HP White Test Cycle - HPWLI 11988-01B-3

MIL-SPEC Extreme Temperature Test



Legend
Point of Aim (POA)
Test Rifle TTI-BR-01X
Remington M700, S/N G7058478, .300 Win Mag without
StraightJacket[®] Barrel System
Remington M700, S/N G7058478, .300 Win Mag with
StraightJacket[®] Barrel System

3114 Scarboro Road Street, Maryland 21154-1822 Telephone: (410) 838-6550 Facsimile: (410) 838-2802 Email: info@hpwhite.com www.hpwhite.com



17 November 2011 (HPWLI 11988-01B)

Teludyne Tech 1018 S. Batesville Road 3-D Greer, SC 29650

Attention: Noel Lasure

In accordance with your instructions, H.P. White Laboratory, Inc. conducted Velocity and Dispersion Testing of one Remington Model 700, chambered in .300 Winchester Magnum, identified as S/N: G7058478 received 17 October 2011 via Federal Express.

Testing was conducted using caliber .300 Win. Mag., Black Hills, 190 gr. Boat-Tail Hollow Point, Lot 4513091811. The test sample was fixtured on an indoor range using a universal firearms mounting system. Photoelectric infrared screens were positioned at 5.0 and 25.0 feet which, in conjunction with dual elapsed time counters (chronographs), were used to compute projectile velocities 15.0 feet forward of the muzzle. Dispersion target was fixtured 100 yards from muzzle. Sighting optics mounted on the firearm was used to determine point of aim. Temperature conditions; were achieved by placing the entire firearm in thermal conditioning chambers. Once the internal barrel temperature reached the desired condition, the firearm was removed from the chamber and tested immediately. Table I presents a summary of the enclosed data records.

Testing was conducted on 17 October 2011 with the firearm in its original configuration. On 2 November 2011 testing was conducted with the Teludyne Tech. Straight Jacket System installed. James W Armstrong, Firearms Examiner for Greenville County Crime Lab performed a bullet comparison on a single round fired 26 September 2011 with the firearm in its pre-jacketed state. On 1 November 2011 another single round was fired with the Straight Jacket system installed on the firearm. It was determined that the pre-jacketed bullet and the post-jacketed bullet were fired from the same barrel.

This report is based on data obtained from having tested only the sample submitted, and should NOT be interpreted as an endorsement by H.P. White Laboratory, Inc. of the continuing quality, or performance, of any other items of the same, or similar, design.

The test sample was returned into the custody of your on-site representative. Should you have any questions regarding this matter, or if we may be of any further service, please do not hesitate to contact us.

Sincerely,

H.P. White Laboratory, Inc.

XW

Kevin Black

KB/sh Enclosures

3114 Scarboro Road Street, Maryland 21154-1822 Telephone: (410) 838-6550 Facsimile: (410) 838-2802 Email: info@hpwhite.com www.hpwhite.com



		State 1872 Fire Com	Velo	city (fps)	Dispersion		
Condition	Bullet	Bullet Shots	Mean	Extreme Variation	At 100 Yards	Aim vs. Impact	
-60 F	190gr. BTHP	5	2997	41	4.571"	1.29" High 1.31" Left	
+160 F	190gr. BTHP	5	3035	48	2.530"	1.68" High 0.80" Left	
COLD BORE (b)(d)	190gr. BTHP	gr. 5		58	0.962"	3.42" High 1.00" Left	
-60 F (a)	190gr. BTHP	5	2954	43	1.956"	1.12" Low 0.96" Right	
+160 F (a)	190gr. BTHP	5	3002	84	1.585"	0.83" Low 0.61" Right	
COLD BORE (a)(c)(d)	190gr. BTHP	5	2950	33	1.104"	1.75" Low 0.66" Right	

TABLE I. SUMMARY OF RESULTS

(b) Test Duration 55 Minutes

(c) Test Duration 15 Minutes

(d) Barrel returned to ambient temperature between shots.



Manufacturer : BLACK HILLS Type : 300 WIN MAG Bullet : BOAT-TAIL HP Catalog No. : Lot No. : 4513091811

WEAPON

Type: G7058478 Ser. No.:

SET-UP

Vel. Screen 1 : 5 Vel. Screen 2 : 25 Case : 300 WIN MAG Primer : UNKNOWN Bullet Wt.(gr.) : 190 Powder : UNKNOWN Overall Length (in.) : 3.309

Barrel Length (in.) : Reference Firing Date :

> Range No.: 6 Gunner : BLACK Recorder : BLACK

Customer : TELUDYNE

Job No. : 11988-01 Test Date : 11/2/11

Conditioning : AMBIENT Loader : UNKNOWN Date Rec'd : 11/2/11 Via : HAND CARRIED Returned : REMINGTON 300 WIN

Velocity Correction (fps) :

Temperature (F): 70 Barometer (in Hg): 29.56 Rel. Humidity (%): 34

Shot	Time 1	Velocity 1	Time 2	Velocity 2	Average	Corrected	Include	Dementer
No.	(usec)	(fps)	(usec)	(fps)	Velocity (fps)	Velocity (fps)	in Results	Remarks
1	6772	2953	6778	2951	2952	2952	Y	
2	6702	2984	6706	2982	2983	2983	Y	
3	6790	2946	6794	2944	2945	2945	Y	2
4	6781	2949	6785	2948	2949	2949	Y	
5	6801	2941	6804	2939	2940	2940	Y	
6					×			
7								
8								
9								
10								
11 12								
12								
14								
15								
16								
17								
18								
19								
20 21								
21								
23								
24								
25								
26		1						
27								
28								
29 30								
	TC	Magazi	CAAL	REMARK	10			
RESU	LIS Data Points :	Measured 5	SAAMI			CKET SYS	TEM	
NO.	Maximum :	2983	Reqmt.					TESTING
	Minimum :	2940						DUP): 1.956"
Extrem	e Variation :	43						: 1.12" LOW, 0.96" RIGHT.
	Average : 2954			1				
Standar	d Deviation :	15.31						
Avg.	+3 Std. Dev.:	3000						
	ndard Error :	6.85						
	Avg. + 2SE	2967						
	Avg. + 5SE .	2988						



Manufacturer : BLACK HILLS Type : 300 WIN MAG Bullet : BOAT-TAIL HP Catalog No. : Lot No. : 4513091811

WEAPON

Type: G7058478 Ser. No.:

SET-UP

Vel. Screen 1 : 5 Vel. Screen 2 : 25 Case : 300 WIN MAG Primer : UNKNOWN Bullet Wt.(gr.) : 190 Powder : UNKNOWN Overall Length (in.) : 3.309

Overall Length (in.): 3.309

Barrel Length (in.) : Reference Firing Date :

> Range No.: 6 Gunner : BLACK Recorder : BLACK

Customer : TELUDYNE

Job No. : 11988-01 Test Date : 11/2/11

Conditioning : AMBIENT Loader : UNKNOWN Date Rec'd : 11/2/11 Via : HAND CARRIED Returned : REMINGTON 300 WINg

Velocity Correction (fps) :

Temperature (F): 70 Barometer (in Hg): 29.56 Rel. Humidity (%): 34

Shot No.Time 1 (usec)Velocity 1 (fps)Time 2 (usec)Velocity 2 (fps)Average Velocity 2 (fps)Corrected Velocity (fps)Include in ResultsRemarks1677129546762295829562956Y2663630146628301830163016Y	
No. (usec) (fps) (usec) (fps) velocity (fps) velocity (fps) in Results refinitions 1 6771 2954 6762 2958 2956 2956 Y	
1 6771 2954 6762 2958 2956 2956 Y	
3 6582 3039 6576 3041 3040 3040 Y	
4 6668 2999 6658 3004 3002 3002 Y	
5 6672 2998 6667 3000 2999 2999 Y	
6	
7	
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9 9	
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16	
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21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
RESULTS Measured SAAMI REMARKS	
No. Data Points : 5 Regmt. WITH STRAIGHT JACKET SYSTEM	
Maximum : 3040 BARREL HEATED TO 160 F PRIOR TO TESTING Minimum : 2956 100 YARD DISPERSION (5 SHOT GROUP): 1.585"	
DOUT OF HULLO DOUT OF HIDLOT A COLLOW A CHIDION	т
Extreme Variation : 84 POINT OF AIM VS. POINT OF IMPACT: 0.83" LOW, 0.61" RIGH	
Standard Deviation : 27.49	
Avg.+3 Std. Dev.: 3085	
Standard Error: 12,30	
Avg. + 2SE 3027	
Avg. + 5SE : 3064	



Manufacturer : BLACK HILLS Type : 300 WIN MAG Bullet : BOAT-TAIL HP Catalog No. : Lot No. : 4513091811

WEAPON

Type : G7058478 Ser. No.:

SET-UP

Vel. Screen 1 : 5 Vel. Screen 2 : 25 Case : 300 WIN MAG Primer : UNKNOWN Bullet Wt.(gr.) : 190 Powder : UNKNOWN Overall Length (in.) : 3.309

Overall Length (in.) : 3.309

Barrel Length (in.) : Reference Firing Date :

> Range No.: 6 Gunner : BLACK Recorder : BLACK

Customer : TELUDYNE

Job No. : 11988-01 Test Date : 11/2/11

Conditioning : AMBIENT Loader : UNKNOWN Date Rec'd : 11/2/11 Via : HAND CARRIED Returned : REMINGTON 300 WIN

Velocity Correction (fps) :

Temperature (F): 70 Barometer (in Hg): 29.56 Rel. Humidity (%): 34

Shot	Time 1	Velocity 1	Time 2	Velocity 2	Average	Corrected	Include	Demode
No.	(usec)	(fps)	(usec)	(fps)	Velocity (fps)	Velocity (fps)	in Results	Remarks
1	6732	2971	6744	2966	2968	2968	Y	
2	6810	2937	6816	2934	2936	2936	Y	
3	6765	2956	6762	2958	2957	2957	Ŷ	9
4	6775	2952	6785	2948	2950	2950	Ŷ	
5	6802	2940	6807	2938	2939	2939	Ý	
6	0002	2010						
7								- 1
8								
9								
10								
11								
12								
13								
14								
15					0			
16 17								
18								
19								
20								
21								
22								
23								
24								
25								
26	2							
27								
28 29								
30								
RESU	ITS	Mancurod	SAAMI	REMARK	2			
	Data Points :	Measured 5	Regmt.			CKET SYS	TEM	
NO. I	Maximum :	2968	requit.	COLD BO		UNE TOTO		
	Minimum :	2936				ION (5 SH	OT GRO	DUP): 1.104"
Extrem	he Variation :	33		POINT OF	AIM VS. F	POINT OF	IMPACT	1.75" LOW, 0.66" RIGHT.
	Average :	2950		TEST DUP	RATION: 1	5 MINUTES	S	
Standar	d Deviation :	11.89		1				
Avg.	+3 Std. Dev.:	2986						
Sta	ndard Error :	5.32						
	Avg. + 2SE :	2961						
	Avg. + 5SE :	2977	Sec. Sec.					



Manufacturer : BLACK HILLS Type : .300 WIN MAG. Bullet : BOAT-TAIL HP Catalog No. : UNKNOWN Lot No. : 4513091811

WEAPON

Type : G7058478 Ser. No.:

SET-UP

Vel. Screen 1 : 5 Vel. Screen 2 : 25 Case : .300 WIN MAG. Primer : UNKNOWN Bullet Wt.(gr.) : 190 Powder : UNKNOWN Overall Length (in.) : 3.309 Customer : Teludyne

Job No. : 11988-01 Test Date : 10/17/11

Conditioning : AMBIENT Loader : UNKNOWN Date Rec'd : 10/17/11 Via : HAND CARRIED Returned : REMINGTON MODEL

Velocity Correction (fps) :

Temperature (F): 65 Barometer (in Hg): 29.89 Rel. Humidity (%): 40

Range No.: 6 Gunner : BLACK

Recorder : UNGER

Barrel Length (in.) : Reference Firing Date :

Shot No.	Time 1 (usec)	Velocity 1 (fps)	Time 2 (usec)	Velocity 2 (fps)	Average Velocity (fps)	Corrected Velocity (fps)	Include in Results	Remarks		
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	6545 6557 6649 6572 6622	3056 3050 3008 3043 3020	6545 6557 6649 6572 6622	3056 3050 3008 3043 3020	3056 3050 3008 3043 3020	3056 3050 3008 3043 3020	Y Y Y Y			
30										
RESU	LTS	Measured	SAAMI	REMARKS						
No. Data Points :		5	Reqmt.	BARREL HEATED TO 160 F PRIOR TO TESTING.						
Maximum :		3056						DUP): 2.530"		
Minimum :		3008		POINT OF	AIM VS. H	-UINT OF	IMPACI	Г: 1.68" HIGH, 0.80" LEFT		
Extrem	Ne Variation :	48 3035								
Standa	Average : rd Deviation :	18.31								
	+3 Std. Dev.:	3090								
	ndard Error :	8.19								
	Avg. + 2SE ;	3052								
Avg. + 5SE :		3076								



Manufacturer : BLACK HILLS Type : .300 WIN MAG. Bullet : BOAT-TAIL HP Catalog No. : UNKNOWN Lot No. : 4513091811

WEAPON

Type : G7058478 Ser. No.:

SET-UP

Vel. Screen 1 : 5 Vel. Screen 2 : 25 Case : .300 WIN MAG. Primer : UNKNOWN Buillet Wt.(gr.) : 190 Powder : UNKNOWN Overall Length (in.) : 3.309

Barrel Length (in.) : Reference Firing Date :

> Range No.: 6 Gunner : BLACK Recorder : UNGER

Customer : Teludyne

Job No. : 11988-01 Test Date : 10/17/11

Conditioning : AMBIENT Loader : UNKNOWN Date Rec'd : 10/17/11 Via : HAND CARRIED Returned : REMINGTON MODEL

Velocity Correction (fps) :

Temperature (F): 65 Barometer (in Hg): 29.89 Rel. Humidity (%): 40

Shot	Time 1	Velocity 1	Time 2	Velocity 2	Average	Corrected	Include			
No.	(usec)	(fps)	(usec)	(fps)	Velocity (fps)	Velocity (fps)	in Results	Remarks		
1	6728	2973	6728	2973	2973	2973	Y			
2	6709	2981	6709	2981	2981	2981	Ý			
3	6664	3001	6664	3001	3001	3001	Y			
4	6636	3014	6636	3014	3014	3014	Ý			
5	6636	3014	6636	3014	3014	3014	Ý			
6	0000	0014	00000	5014	5014	5014	'			
7										
8										
9										
10										
11										
12										
13										
14										
15				1 1						
16										
17										
18										
19										
20										
21										
22										
23										
24										
25 26										
20										
28										
29										
30										
RESU	ITS	Measured	SAAMI	REMARK	S					
-	Data Points :	5	Regmt.	BARREL COOLED TO -60 F PRIOR TO TESTING.						
	Maximum :	3014	rioquia.	100 YARD DISPERSION (5 SHOT GROUP): 4.571"						
	Minimum	2973	San Star					1.29" HIGH, 1.31" LEFT		
Extrem	e Variation :	41								
	Average :	2997		1						
Standar	d Deviation :	16.92	1000							
	3 Std. Dev.;	3047								
	ndard Error :	7.57								
	Avg. + 2SE :	3012								
Avg. + 5SE :		3034	25. 8							



Manufacturer : BLACK HILLS Type : .300 WIN MAG. Bullet : BOAT-TAIL HP Catalog No. : UNKNOWN Lot No. : 4513091811

WEAPON

Type : G7058478 Ser. No.:

SET-UP

Vel. Screen 1 : 5 Vel. Screen 2 : 25 Case : .300 WIN MAG. Primer : UNKNOWN Bullet Wt.(gr.) : 190 Powder : UNKNOWN Overall Length (in.) : 3.309 Customer : Teludyne

Job No.: 11988-01 Test Date: 10/17/11

Conditioning : AMBIENT Loader : UNKNOWN Date Rec'd : 10/17/11 Via : HAND CARRIED Returned : REMINGTON MODEL

Velocity Correction (fps) :

Temperature (F): 65 Barometer (in Hg): 29.89 Rel. Humidity (%): 40

Reference Firing Date :	
Range No.: 6	

Barrel Length (in.) :

Range No.: 6 Gunner : BLACK Recorder : UNGER

No. (1 1 6 2 6 3 6 4 6	ime 1 usec) 6990 7711 582 661 644	Velocity 1 (fps) 2990 2980 3039 3003 3010	Time 2 (usec) 6690 6711 6582 6661 6644	Velocity 2 (fps) 2990 2980 3039 3003 3010	Average Velocity (fps) 2990 2980 3039 3003 3010	Corrected Velocity (fps) 2990 2980 3039 3003 3010	Include in Results Y Y Y Y Y	Remarks
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30								
RESULTS No. Data Points : Maximum : Minimum : Extreme Variation : Average : Standard Deviation : Avg.+3 Std. Dev.: Standard Error : Avg. + 2SE : Avg. + 5SE :		Measured 5 3039 2980 58 3004 20.07 3064 8.97 3022 3049	SAAMI Reqmt.	POINT OF	DISPERS AIM VS. F		MPACT	DUP): 0.962" F: 3.42" HIGH, 1.00" LEFT

HP White Test Cycle - HPWLI 11988-01C-1

Directional Heat Influence Test



Remington M700, S/N G7058478, .300 Win Mag with StraightJacket* Barrel System



StraightJacket[®] Barrel System Remington M700, S/N G7058478, .300 Win Mag with

StraightJacket[#] Barrel System

3114 Scarboro Road Street, Maryland 21154-1822 Telephone: (410) 838-6550 Facsimile: (410) 838-2802 Email: info@hpwhite.com www.hpwhite.com



30 November 2011 (HPWLI 11988-01C)

Teludyne Tech 1018 S. Batesville Road 3-D Greer, SC 29650

Attention: Noel Lasure

In accordance with your instructions, H.P. White Laboratory, Inc. conducted Velocity and Dispersion Testing of one Remington Model 700, chambered in .300 Winchester Magnum, identified as S/N: G7058478 received 17 October 2011 via Federal Express.

Testing was conducted using caliber .300 Win. Mag., Black Hills, 190 gr. Boat-Tail Hollow Point, Lot 4513091811. The test sample was fixtured on an indoor range using a universal firearms mounting system. Photoelectric infrared screens were positioned at 5.0 and 25.0 feet which, in conjunction with dual elapsed time counters (chronographs), were used to compute projectile velocities 15.0 feet forward of the muzzle. Dispersion target was fixtured 100 yards from muzzle. Sighting optics mounted on the firearm was used to determine point of aim. Temperature conditions were achieved by placing a directional torpedo heater on one side of the barrel at a distance of five feet for a period of one hour. The firearm was removed from conditioning and tested immediately. Table I presents a summary of the enclosed data records.

Testing was conducted on 17 October 2011 with the firearm in its original configuration. On 2 November 2011 testing was conducted with the Teludyne Tech. Straight Jacket System installed. James W Armstrong, Firearms Examiner for Greenville County Crime Lab performed a bullet comparison on a single round fired 26 September 2011 with the firearm in its pre-jacketed state. On 1 November 2011 another single round was fired with the Straight Jacket system installed on the firearm. It was determined that the pre-jacketed bullet and the post-jacketed bullet were fired from the same barrel.

This report is based on data obtained from having tested only the sample submitted, and should NOT be interpreted as an endorsement by H.P. White Laboratory, Inc. of the continuing quality, or performance, of any other items of the same, or similar, design.

The test sample was returned into the custody of your on-site representative. Should you have any questions regarding this matter, or if we may be of any further service, please do not hesitate to contact us.

Sincerely,

H.P. White Laboratory, Inc.

Kevin Black

KB/sh Enclosures

H H 170		 -	10.00	

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