Date	Bullet	Powder	Primer	High	Low	ES	Average	Comments
Data Current		3/26/13						
SPECIAL NOTE:								
These loads have proven safe in MY RIFLES, and the rifles I have worked with. However, this does not mean they will be safe in YOUR RIFLE. As always approach upper limits with caution. This load data is for you to use wisely and safely, always start low and work up and do not exceed nor interchange data between rifles!								
DO NOT START WITH MAXIMUM LOADS IN YOUR RIFLE----START AT LEAST 10% BELOW MAX AND WORK YOUR WAY UP WITH EXTREME CAUTION								
Powder from one keg to the next can be different, your powder may not be the same as mine! Proceed in a safe manner Drop the loads listed below and work up								
Pressures listed below, along with velocity and other factors were correct and safe in this rifle, this day, with this keg of powder, primers, case, and bullet. Change in components, even within the same Lot# can and will give different results, use this information in a safe manner and beware of the many factors involved when changing components! This information is provided to you as a guideline and I assume no liability or responsibility for it's use.								
Because I have no control over the individual loading practices and or components used, the user of this data releases the Author, writer, designer, creator of this data from any and all liability arising out of the use of the data or information provided in this document. The Author, or creators of this data makes no representations or warranties either express or implied with the information in this data. The user of this data provided in this document assumes any and all risks associated with using said information.								
500 Nitro Load Data			Rifle--Sabatti Double Rifle 24 Inch Barrels Assumed 1:15 Twist Rate					
You MUST approach this Data with EXTREME CAUTION. Your Rifle, Powder, Primer, and brass may have major differences than what was tested here. This must be taken into account and used wisely. Use all common methods to keep up with, and stay under max Pressures. Start Well Below listed data and work up in your rifle.								
Below I was able to do some case measurements, these may or may not work in your individual rifle because of variance in chambers, however this may give you another tool in which to work with. These measurements were taken with the Sabatti and Hornady Brass..... Your rifle may be different, and your brass may be different.								
500 Nitro Hornady Brass Measurements .335 to .350 up from bottom of the Rim This is where the brass starts to expand.								
Pressure		Amount of Increase in Case Size From FIRED RESIZED BRASS						
23982 PSI--29441 PSI		+ .001						
35247 PSI--37863 PSI		+ .0015						
39201 PSI--40500 PSI		+ .002						
41447 PSI--44000 PSI		+ .0025						
44500 PSI--45007 PSI		+ .003						
Factory Ammo Tests---FYI								
1/31/12	570 Hornady DGS Factory Ammo			1991	1990	1	1991	42735 PSI
1/31/12	570 Woodleigh FMJ Norma PH Ammo			0	0	0	2102	34768 PSI
	SPECIAL NOTE: Extreme Spread between 2 traces 38043 PSI---31493 PSI--Retest Required							
2/10/12	570 Woodleigh FMJ Norma PH Ammo			1956	1913	43	1934	33809 pSI
	SPECIAL NOTE: Extreme Spread between 2 traces 36000 PSI---31000 PSI--							
2/10/12	570 Soft Kynoch Factory Ammo			2002	1969	33	1986	42224 PSI
2/21/12	570 Soft Kynoch Factory Ammo			0	0	0	1991	44469 PSI
2/21/12	570 A Square Factory Lion Load			1915	1887	28	1901	38348 PSI
2/21/12	570 A Square Factory Lion Load			1935	1924	11	1930	39474 PSI
2/21/12	570 Original Kynoch Cordite Factory			2024	2005	20	2015	44119 PSI
525 BBW#13 Copper 2 Band Cup Point EXP								
1/31/12	525 #13 CP	106/IMR 4350	Fed 215	0	0	0	2002	37434 PSI
535 BBW#13 NonCon HP								
1/31/12	535 #13 HP	113/WW 760	Fed 215	2084	2060	24	2074	36028 PSI
1/24/12	535 BBW#13	106/IMR 4350	Fed 215	2085	2037	47	2061	41070 PSI

570 BBW#13 Brass Solid

1/24/12	570 BBW#13	106/IMR 4350	Fed 215	2048	2026	22	2037	43128	PSI
1/24/12	570 BBW#13	106/IMR 4350	Fed 215	0	0	0	0	42430	PSI--Sam IMR 4350
1/24/12	570 BBW#13	107/IMR 4350	Fed 215	0	0	0	2122	44730	PSI--Crimped
1/24/12	570 BBW#13	107/IMR 4350	Fed 215	2103	2094	8	2099	45491	PSI--No Crimp
1/24/12	570 BBW#13	108/IMR 4350	Fed 215	2145	2114	31	2130	47043	PSI--MDM IMR 4350
1/31/12	570 BBW#13	108/IMR 4350	Fed 215	1992	1982	10	1987	46985	PSI--Sam IMR 4350
1/31/12	570 BBW#13	98/V-N140	Fed 215	2092	2089	3	2090	42836	PSI
1/24/12	570 BBW#13	105/IMR 4007	Fed 215	2155	2108	47	2132	45837	PSI--MAX Pressure
1/24/12	570 BBW#13	105/RL 17	Fed 215	2123	2115	8	2119	45488	PSI--MAX Pressure
1/24/12	570 BBW#13	105/RL 17	Fed 215	2129	2098	30	2114	47949	PSI--No Crimp
1/24/12	570 BBW#13	103/V-N550	Fed 215	2099	2082	17	2091	40080	PSI
1/31/12	570 BBW#13	103/V-N550	Fed 215	2014	2011	2	2013	39979	PSI
1/31/12	570 BBW#13	104/V-N550	Fed 215	0	0	0	2097	44545	PSI
1/31/12	570 BBW#13	105/V-N550	Fed 215	2138	2108	29	2123	46663	PSI
1/24/12	570 BBW#13	97/RL 15	Fed 215	2143	2102	41	2123	44002	PSI---NO FILLER
1/31/12	570 BBW#13	97/RL 15	Fed 215	2052	2025	27	2038	40288	PSI--X3
1/31/12	570 BBW#13	97/RL 15	Fed 215	2018	2014	4	2016	38199	PSI--No Crimp
1/24/12	570 BBW#13	103/WW 760	Fed 215	1999	1937	62	1968	29904	PSI
1/31/12	570 BBW#13	107/WW 760	Fed 215	0	0	0	2008	32865	PSI
1/31/12	570 BBW#13	110/WW 760	Fed 215	2078	2071	7	2074	38228	PSI
1/31/12	570 BBW#13	112/WW 760	Fed 215	2121	2100	21	2111	40507	PSI--X2
1/31/12	570 BBW#13	112/WW 760	Fed 215	2103	2067	35	2086	39021	PSI--X3
1/31/12	570 BBW#13	113/WW 760	Fed 215	2101	2094	7	2099	40325	PSI--X3
1/31/12	570 BBW#13	114/WW 760	Fed 215	2135	2123	12	2129	40301	PSI
1/24/12	570 BBW#13	99/Big Game	Fed 215	2161	2146	16	2154	48887	PSI--High Pressure
		Accurate Arms							
1/31/12	570 BBW#13	106/XMR4350	Fed 215	1844	1837	7	1840	28801	PSI
1/31/12	570 BBW#13	110/XMR4350	Fed 215	1950	1945	5	1947	31663	PSI
1/31/12	570 BBW#13	103/Hybrid100	Fed 215	0	0	0	1908	38152	PSI
1/24/12	570 BBW#13	97/Varget	Fed 215	2176	2169	7	2172	48893	PSI--High Pressure!
1/24/12	570 BBW#13	96/Varget	Fed 215	2148	2138	10	2143	48157	PSI--Crimped
1/24/12	570 BBW#13	96/Varget	Fed 215	2156	2140	16	2148	48291	PSI--No Crimp
1/31/12	570 BBW#13	96/Varget	Fed 215	2131	2112	19	2121	51907	PSI--Crimped
1/31/12	570 BBW#13	96/Varget	Fed 215	2099	2091	7	2095	45777	PSI--No Crimp
		Hornady SuperPerformance Powder							
2/21/12	570 BBW#13	112/Horn SP	Fed 215	1692	1675	17	1684	Primary Peaks 15000 PSI	
2/21/12	570 BBW#13	116/Horn SP	Fed 215	1895	1864	31	1880	Secondary Peaks 25533 PSI	
	NOTE: Hornady SuperPerformance too slow for 500 Nitro								
2/21/12	570 BBW#13	115/H-4831	Fed 215	1956	1941	16	1949	36108	PSI
2/21/12	570 BBW#13	112/IMR 4831	Fed 215	2022	2020	2	2021	43052	PSI

SPECIAL NOTE: Crimp vs No Crimp Study

1/24/12	570 BBW#13	107/IMR 4350	Fed 215	0	0	0	2122	44730	PSI--Crimped
1/24/12	570 BBW#13	107/IMR 4350	Fed 215	2103	2094	8	2099	45491	PSI--No Crimp
1/24/12	570 BBW#13	105/RL 17	Fed 215	2123	2115	8	2119	45488	PSI--Crimped
1/24/12	570 BBW#13	105/RL 17	Fed 215	2129	2098	30	2114	47949	PSI--No Crimp
1/24/12	570 BBW#13	96/Varget	Fed 215	2148	2138	10	2143	48157	PSI--Crimped
1/24/12	570 BBW#13	96/Varget	Fed 215	2156	2140	16	2148	48291	PSI--No Crimp
1/31/12	570 BBW#13	96/Varget	Fed 215	2131	2112	19	2121	51907	PSI--Crimped
1/31/12	570 BBW#13	96/Varget	Fed 215	2099	2091	7	2095	45777	PSI--No Crimp

1/31/12	570 BBW#13	97/RL 15	Fed 215		2052	2025	27	2038	40288 PSI--X3
1/31/12	570 BBW#13	97/RL 15	Fed 215		2018	2014	4	2016	38199 PSI--No Crimp
Data 2/20/2013									
No actual Pressure data taken on the loads below, only case study.									
Approach with EXTREME CAUTION IN YOUR RIFLE									
ALL THE DATA LISTED BELOW TAKEN WITH A Sabatti 24 Inch 500 NE									
350 gr BBW#13 NonCon HP									
2/20/13	350 #13 HP	106/RL 15	Fed 215	Right	2297	Left	2284	With Talon Tip	
2/20/13	350 #13 HP	110/RL 15	Fed 215	Right	2393	Left	2434	With Talon Tip	
2/20/13	350 #13 HP	112/RL 15	Fed 215	Right	2407	Left	2426	No Talon Tip	
2/20/13	350 #13 HP	114/RL 15	Fed 215	Right	2556	Left	2550	With Talon Tip	
2/20/13	350 #13 HP	115/RL 15	Fed 215	Right	2476	Left	2488	No Talon Tip	
2/20/13	350 #13 HP	117/RL 15	Fed 215	Right	2596	Left	2589	With Talon Tip	
	All Loads Crossing in this rifle... Extreme Spread 4 Inches at 50 Yards								
	All Loads Safe Pressures								
475 gr BBW#13 NonCon HP-----Match to 510 gr BBW#13 Solid									
2/20/13	475 #13 HP	112/RL 15	Fed 215	Right	2334	Left	2363	Max Safe Pressure	
510 gr BBW#13 Brass Solid					Velocity		Velocity		
2/20/13	510 #13 Solid	101/RL 15	Fed 215	Right	2057	Left	2072		
2/20/13	510 #13 Solid	102/RL 15	Fed 215	Right	2085	Left	2109		
2/20/13	510 #13 Solid	103/RL 15	Fed 215	Right	2112	Left	2120		
2/20/13	510 #13 Solid	104/RL 15	Fed 215	Right	2160	Left	2164		
2/20/13	510 #13 Solid	105/RL 15	Fed 215	Right	2155	Left	2171		
2/20/13	510 #13 Solid	106/RL 15	Fed 215	Right	2180	Left	2198		
2/20/13	510 #13 Solid	107/RL 15	Fed 215	Right	2190	Left	2211		
2/20/13	510 #13 Solid	108/RL 15	Fed 215	Right	2259	Left	2221		
2/20/13	510 #13 Solid	109/RL 15	Fed 215	Right	2265	Left	2280		
2/20/13	510 #13 Solid	110/RL 15	Fed 215	Right	2288	Left	2287	Max SAFE PRESSURE	
2/20/13	510 #13 Solid	111/RL 15	Fed 215	Right	2328	Left	2308	Reaching Maximum Pressures	
Date----2/27/2013									
No actual Pressure data taken on the loads below, only case study.									
Approach with EXTREME CAUTION IN YOUR RIFLE									
ALL THE DATA LISTED BELOW TAKEN WITH A Heym 26 Inch 500 NE									
475 gr BBW#13 NonCon HP-----Match to 510 gr BBW#13 Solid									
2/27/13	475 #13 HP	105/RL 15	Fed 215	Right	2261	Left	2261	Only 1 Reading Taken	
2/27/13	475 #13 HP	109/RL 15	Fed 215	Right	2425	Left	2457	No Pressure Signs	
2/27/13	475 #13 HP	110/RL 15	Fed 215	Right	2448	Left	2452	No Pressure Signs	
2/27/13	475 #13 HP	111/RL 15	Fed 215	Right	2451	Left	2465	No Pressure Signs	
2/27/13	475 #13 HP	112/RL 15	Fed 215	Right	0	Left	0	No Chrono Data--No Pressure Signs	
Since there was little gain in velocity from 109/RL 15 to 112/RL 15 we would suggest looking closer at									
109 to 110/ RL 15 to match with 510 #13 Solid.									
510 gr BBW#13 Brass Solid									
2/27/13	510 #13 Solid	106/RL 15	Fed 215	Right	2309	Left	2309	Only 1 Chrono Reading	
2/27/13	510 #13 Solid	107/RL 15	Fed 215	Right	2321	Left	2321	Only 1 Chrono Reading	
2/27/13	510 #13 Solid	108/RL 15	Fed 215	Right	2349	Left	2365	No Pressure Signs	
2/27/13	510 #13 Solid	109/RL 15	Fed 215	Right	0	Left	0	No Reading--No Pressure Signs	

3/19/2013--3/23/2013	Data Using Pressure Trace 1 and 2 Units.....						Sabatti 500 NE 24 Inch Barrels		
Below PT 1 was used With Sam's Keg of RL 15 and Jamison Brass									
570 BBW#13 Solid									
3/19/13	570 #13 Solid	97/RL 15	Fed 215	2060	2055	6	2058	40958 PSI	
This Same Load Tested Below on 1/31/2012									
1/31/12	570 BBW#13	97/RL 15	Fed 215	2052	2025	27	2038	40288 PSI	
3/19/13	570 #13 Solid	99/RL 15	Fed 215	2102	2098	4	2100.3	43087 PSI	
3/19/13	570 #13 Solid	100/RL 15	Fed 215	0	0	0	2116	46177 PSI	
As you can see from the above load, going to 100/RL15 gave no significant increase in velocity									
510 BBW#13 Solid									
3/19/13	510 #13 Solid	108/RL 15	Fed 215	0	0	0	2197	39369 PSI	
3/19/13	510 #13 Solid	112/RL 15	Fed 215	2345	2329	16	2337	47427 PSI	
475 BBW#13 NonCon HP									
3/19/13	475#13 HP	109/RL 15	Fed 215	2222	2217	5	2220	36663 PSI	
350 BBW#13 NonCon HP									
3/19/13	350 #13 HP	115/RL 15	Fed 215	2524	2519	5	2522	35820 PSI	
3/19/2013 Pressure Trace 2 Data.....									
Below Data was taken using Pressure Trace 2 After it was Calibrated to PT 1									
This load Used Sam's RL 15 and Jamison Brass									
3/19/13	570 #13 Solid	97/RL 15	Fed 215	0	0	0	2049	40384 PSI	
This load Used Sam's RL 15 and Hornady Brass									
3/22/13	570 #13 Solid	97/RL 15	Fed 215	2003	1957	47	1980	35247 PSI--HornBrass	+ .002
All Data Below Used MDM RL 15---- New 12 lb Blended Same Lot Number as Sam's RL 15									
570 BBW#13 Solid									
3/19/13	570 #13 Solid	97/RL 15	Fed 215	2031	2014	17	2023	37397 PSI-- Jamison Brass	
3/19/13	570 #13 Solid	97/RL 15	Fed 215	1922	1916	6	1919	30516 PSI-- Hornady Brass	
3/19/13	570 #13 Solid	97/RL 15	Fed 215	1923	1918	5	1920	30301 PSI-- Federal Brass	
3/19/13	570 #13 Solid	97/RL 15	Fed 215	2032	2026	6	2029	39416 PSI-- Bell 470NE Brass	
3/19/13	570 #13 Solid	102/RL 15	Fed 215	0	0	0	2099	41052 PSI-- Hornady Brass	
3/22/13	570 #13 Solid	103/RL 15	Fed 215	2096	2081	15	2090	39631 PSI--HornBrass	+ .002
3/22/13	570 #13 Solid	103/IMR 4007	Fed 215	2060	2026	34	2043	42844 PSI--HornBrass	+ .0025
				44241	41447				
				+ .003	+ .0025				
3/23/13	570 #13 Solid	104/IMR 4007	Fed 215	2074	2057	16	2065	44444 PSI--HornBrass	+ .0025
3/22/13	570 #13 Solid	80/IMR 4064	Fed 215	1676	1647	30	1661	23982 PSI--HornBrass	+ .001
3/23/13	570 #13 Solid	83/IMR 4064	Fed 215	0	0	0	1771	29441 PSI--HornBrass	+ .001
3/23/13	570 #13 Solid	86/IMR 4064	Fed 215	1882.9	1882.5	0.4	1882.7	35211 PSI--HornBrass	+ .0015
3/23/13	570 #13 Solid	89/IMR 4064	Fed 215	1995	1987	8	1991	41773 PSI--HornBrass	+ .002
3/23/13	570 #13 Solid	91/IMR 4064	Fed 215	2043	2033	10	2038	44237 PSI--HornBrass	+ .0025

3/25/13	570 #13 Solid	95/RL 19	Fed 215	1529	1527	2	1528	22053 PSI--HornBrass	
It is doubtful that enough powder and pressure can be developed to get the 570 up to velocity? Nice load however and may try to work up more data later.									
3/25/13	570 #13 Solid	95/RL 22	Fed 215	1520	1486	34	1503	22455 PSI--HornBrass	
Same as RL 19 Applies here.									
3/25/13	570 #13 Solid	80/IMR 8208	Fed 215	0	0	0	1755	26944 PSI--HornBrass	
3/25/13	570 #13 Solid	85/IMR 8208	Fed 215	1935	1924	11	1930	36919 PSI--HornBrass	
3/25/13	570 #13 Solid	88/IMR 8208	Fed 215	2058	2032	26	2045	44435 PSI--HornBrass	
Powder Blending Test #1 65% IMR 8208 + 35% RL 15-- 3262013									
3/26/13	570 #13	85/Blend	Fed 215	0	0	0	1856	No Data..... Software Issue PT 2	
3/26/13	570 #13	85/Blend	Fed 215	1844	1840	3	1842	27757 PSI--- PT 1	
3/26/13	570 #13	88/Blend	Fed 215	1967	1962	5	1964	35586 PSI--- PT 1	
3/26/13	570 #13	90/Blend	Fed 215	2062	2058	4	2060	44839 PSI--- PT 1	
570 Hornady DGS									
3/19/13	570 HornDGS	97/RL 15	Fed 215	1916	1901	15	1908	33073 PSI-- Hornady Brass	
3/19/13	570 HornDGS	99/RL 15	Fed 215	2019	1985	34	2002	37958 PSI-- Hornady Brass	
535 BBW#13 NonCon HP									
3/19/13	535 #13 HP	102/RL 15	Fed 215	2171	2170	1	2171	42077 PSI-- Jamison Brass	
3/19/13	535 #13 HP	104/RL 15	Fed 215	2222	2214	8	2218	45273 PSI-- Jamison Brass	
510 BBW#13 Solid									
3/19/13	510 #13 Solid	108/RL 15	Fed 215	2173	2160	13	2166	36173 PSI-- Hornady Brass	
3/19/13	510 #13 Solid	108/RL 15	Fed 215	2174	2161	13	2168	36573 PSI-- Federal Brass	
3/19/13	510 #13 Solid	110/RL 15	Fed 215	2215	2212	3	2214	39202 PSI-- Hornady Brass	
3/19/13	510 #13 Solid	112/RL 15	Fed 215	2284	2274	10	2279	42712 PSI-- Hornady Brass	
3/22/13	510 #13 Solid	114/RL 15	Fed 215	2320	2292	28	2306	43394 PSI-- HornBrass + .0025	
				45007	41781				
				+ .003	+ .0025				
3/23/13	510 #13 Solid	93/IMR 4064	Fed 215	2055	2046	9	2050	37239 PSI-- HornBrass + .0015	
3/23/13	510 #13 Solid	96/IMR 4064	Fed 215	2162	2160	2	2161	44469 PSI-- HornBrass + .0025	
3/26/13	510 #13 Solid	88/IMR 8208	Fed 215	1937	1926	11	1931	No Data	
3/26/13	510 #13 Solid	90/IMR 8208	Fed 215	2043	2022	21	2031	34287 PSI	
3/26/13	510 #13 Solid	93/IMR 8208	Fed 215	2144	2128	16	2136	40551 PSI	
3/26/13	510 #13 Solid	95/IMR 8208	Fed 215	2199	2188	11	2194	44059 PSI	
475 BBW#13 NonCon HP									
		Below Sam RL 15-- Jamison Brass							
3/19/13	475 #13 HP	109/RL 15	Fed 215	2250	2248	2	2249	39069 PSI-- JamBrass	
		Below MDM RL 15-- Hornady Brass							
3/22/13	475 #13 HP	112/RL 15	Fed 215	2285	2280	5	2283	37863 PSI-- HornBrass + .0015	

3/22/13	475 #13 HP	114/RL 15	Fed 215	2321	2303	18	2312	39201 PSI-- HornBrass +	.002
3/23/13	475 #13 HP	99/IMR 4064	Fed 215	2258	2248	10	2253	44919 PSI-- HornBrass +	.003