

Test Lab Report

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|---|--------------|--|----------------|
| Date Submitted: | 19 May, 1999 | Tracking #: | TLR 9142J |
| Project #: | 241095 | Engineer: | SNEDEKER, J.R. |
| Test Objective: Complete ultimate strength / intentional abuse testing on each of 3 of the M/710 EET sample rifles dated 18 May 99. See Phil Reesor. | | | |
| Test Description: 1. Hand-Load work-up: 30-06 / Case: Rem / Primer: Rem / Projectile: 220 grain SP Round Nose / Powder: IMR 4198, Lot # E92MY12-L3207. 2. U.R. Shooting : Shoot SAAMI 5 rounds minimum, 5 rounds at 35, 37, 39, 41 and 43 grains. Reevaluate at this time. Shooting for 120k psi. 3. Shoot: A. One rifle will be subjected to a ultra-high pressure hand-loaded round without the bore being obstructed. B. A second rifle will be subjected to an ultra-high pressure hand-loaded round with the bore obstructed with 7 .30-06 bullets forced into the bore to a point just ahead of the chamber. C. The third rifle will be fired using a standard pressure round but with the firing pin filed at the tip to produce a sharp edge. | | | |
| Notes: Use the standard forms for recording the results. In addition to the test results, and as a minimum, each data sheet should list the tester's initials, the date, the beginning and ending round level covered by that data sheet. Also, the "TLW" number, the serial number of the firearm and the sample number and the ammunition type used when the malfunction occurred should be recorded on each data sheet. | | | |
| Round must be kept in a locked red ammunition box until time to be loaded into the test rifle. | | | |
| Resource Usage: Manpower Requirements - 1 technician; one ammunition technician Facility Requirements -- blow-up room, hand-loaded ammunition, high speed video system. | | Test Results Required: Formal Report: Data Only: X REQUESTED Completion Date: 28 May 99 | |
| Required Materials/Parts/Equipment (include quantities): | | | |
| Test Parts Availability Date: 18 May 99 | | | |
| Start Date: 17 June 99 Completion Date: 22 June 99 Report Date: 22 June 99 | | Test Assigned To: Gary Howell Received 16 June 99 | |
| Results: <ol style="list-style-type: none"> 1. Cases available, Projectiles had to pull out of live rounds, powder 180 grams Available. 2. See attachment TLR9142J. 3. A. First gun at 120K fired, bolt won't open, gun to Mike Keeney. 3. B. Second gun fired, gun completely apart, see Jim Snedeker. 3. C. Third gun fired, gun fired normally, case not pierced. 16 July 99 pending !!! 18 May 00 completed !!! | | | |

ET09873

21-Jun-99

30-06 Hi Pressure Evaluation

U.R. # 129 Transd # 2130

Powder: IMR 4198

Lot # E95MY12/L3207

220 grain SP Round Nose

SAAMI # 30-06SPRG-180-18WW

10 SHOTS

Shot 48.8K

SAAMI 50.1K

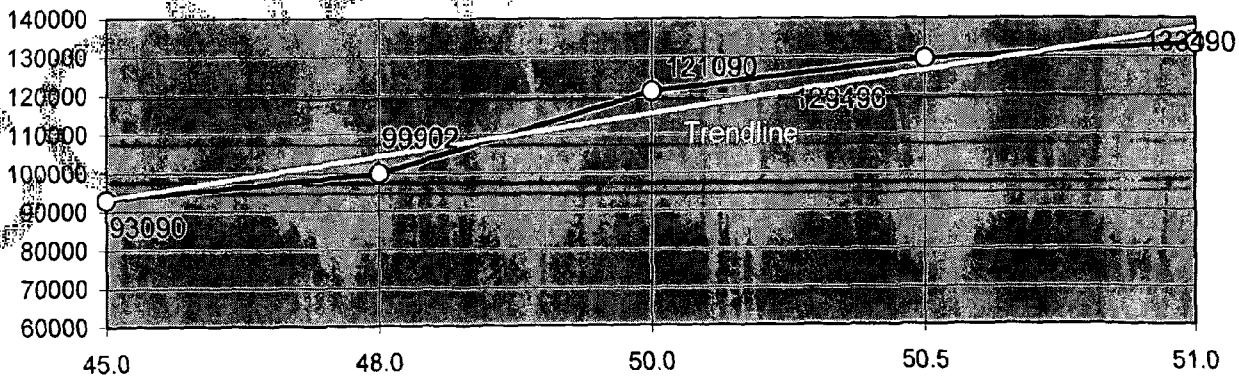
= 1.3 CF

OFFSET 5790

+ CF 1.3K

= 7090 (CF & Offset)

| Grains: | # RDS: | Oehler Pressure Raw Data | AMP: | Scope: Raw Data | Oehler Press with cf & Offset: | Scope Press with cf & Offset: | Oehler Settings: |
|---------|--------|--------------------------------|----------------|-----------------------|--------------------------------------|-------------------------------------|---------------------|
| 35 | 5 | 43420 | PCB 1v=10k | NA | 50510 | NA | 1v=10k |
| 37 | 5 | 51367 | PCB 1v=10k | NA | 58457 | NA | 1v=10k |
| 39 | 1 | 57080 | PCB 1v=10k | NA | 64170 | NA | 1v=10k |
| 41 | 1 | 64355 | PCB 1v=10k | NA | 71445 | NA | 1v=10k |
| 43 | 1 | 74609 | PCB 1v=10k | NA | 81699 | NA | 1v=10k |
| 45 | 1 | 84863 | PCB 1v=10k | NA | 91953 | NA | 1v=10k |
| 48 | 1 | 99902 | PCB 1v=10k | NA | 106992 | NA | 1v=10k |
| 49 | 1 | 99951 Max PCB | PCB 1v=10k | NA | 10741 | NA | 1v=10k |
| 50 | 1 | 99951 Max PCB | PCB 1v=10k | NA | 10741 | NA | 1v=10k |
| 45 | 1 | 86020 | Kistler 1v=20k | 4.3v = 86k | 93110 | 93090 | 1v=10k |
| 50 | 1 | 115620 | Kistler 1v=20k | 5.7v = 114k | 122710 | 121090 | 1v=10k |
| 50.5 | 1 | 121420 | Kistler 1v=20k | 6.12v = 122.4k | 128510 | 129490 | 1v=10k |
| 51 | 1 | 126220 | Kistler 1v=20k | 6.32v = 126.4k | 133310 | 133490 | 1v=10k |
| Warmup | 1 | 51367 | Kistler 1v=20k | Missed | 58457 | Missed | 1v= 20k |
| Warmup | 1 | 51758 | Kistler 1v=20k | 2.59v = 51.8k | 58848 | 58890 | 1v= 20k |
| Warmup | 1 | 47949 | Kistler 1v=20k | 2.41v = 48.2k | 55039 | 55290 | 1v= 20k |
| 45 | 1 | 90430 | Kistler 1v=20k | 4.58v = 91.6k | 97520 | 98690 | 1v= 20k |
| 50 | 1 | 116992 | Kistler 1v=20k | 5.84v = 116.8k | 124082 | 125890 | 1v= 20k |

Hi-Press 30-06 only Kistler amp readings**Suggestions:** Use Kistler Amp if going beyond 100k, with scale at 20,000 (1v = 20K).

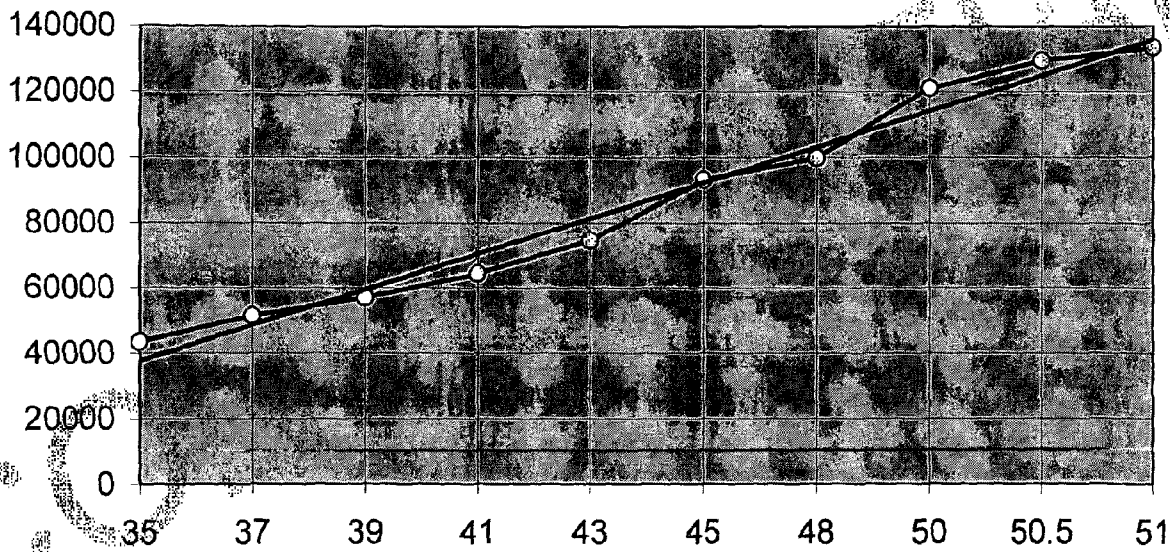
Oehler use scale of 20,000 (1v = 20k) with no offset or cf.

Tlr9142J

ET09874

| | |
|------|--------|
| 35 | 43420 |
| 37 | 51367 |
| 39 | 57080 |
| 41 | 64355 |
| 43 | 74609 |
| 45 | 93090 |
| 48 | 99902 |
| 50 | 121090 |
| 50.5 | 129490 |
| 51 | 133490 |

Load Work Up



ET09875