

Fire Pump Service Test Worksheet

NFPA 1910 (2024 edition), Chapter 22 · test date 2026-10-16

TECHNICIAN'S DETERMINATION

Determined by **J. Smith** on 2026-10-16.

PASS

Signature: _____

APPARATUS AND CONDITIONS

Department	Sample Fire Dept	Unit	Engine 9
Apparatus	Pierce Enforcer	Pump	Waterous CSU
Rated capacity	1500 gpm	Serial	SAMPLE-0001
Supply	Draft	Elevation	900 ft
Air / water	61°F / 58°F	Lift / baro	8 ft / 29.9 in. Hg

FOR THE TECHNICIAN'S REVIEW

Readings outside the NFPA 1910 values this form checks (clause in brackets). They inform the determination above; they do not make it.

- Tank-to-pump 800 gpm is below the 1000 gpm baseline; report decreasing performance to the AHJ (22.8.5).

PUMPING: 100% OF RATED (1500 GPM) AT 150 PSI NET, 20 MINUTES

Reading	Engine rpm	Discharge psi	Intake in. Hg	Net psi	Flow gpm
Start	1780	146	10.0	151	1510
5 min	1790	146	10.0	151	1500
10 min	1790	146	10.0	151	1500
15 min	1800	146	10.0	151	1500
20 min	1800	146	10.0	151	1505
Average	1792	146	10.0	151	1503

Clause 22.7.8.2.1. Averages per 22.8.2.

PUMPING: 100% OF RATED (1500 GPM) AT 165 PSI NET, 5 MINUTES

Reading	Engine rpm	Discharge psi	Intake in. Hg	Net psi	Flow gpm
Start	1850	161	10.0	166	1500
5 min	1850	161	10.0	166	1500
Average	1850	161	10.0	166	1500

Clause 22.7.8.2.1. Averages per 22.8.2.

PUMPING: 70% OF RATED (1050 GPM) AT 200 PSI NET, 10 MINUTES

Reading	Engine rpm	Discharge psi	Intake in. Hg	Net psi	Flow gpm
Start	1900	196	8.0	200	1050
5 min	1900	196	8.0	200	1050
10 min	1900	196	8.0	200	1050
Average	1900	196	8.0	200	1050

Clause 22.7.8.2.1. Averages per 22.8.2.

PUMPING: 50% OF RATED (750 GPM) AT 250 PSI NET, 10 MINUTES

Reading	Engine rpm	Discharge psi	Intake in. Hg	Net psi	Flow gpm
Start	2000	246	6.0	249	750
5 min	2000	246	6.0	249	750
10 min	2000	246	6.0	249	750
Average	2000	246	6.0	249	750

Clause 22.7.8.2.1. Averages per 22.8.2.

OTHER TESTS

Test	Recorded	NFPA 1910 value
Engine speed (22.7.3)	2120 rpm governed, label 2100 rpm	within ± 50 rpm of the label
Pump shift indicator / interlock (22.7.4-5)	Yes / Yes	indicate and operate correctly
Priming (22.7.6)	38 s	45 s or less
Vacuum, intakes capped (22.7.7)	23 $\rightarrow$ 18 in. Hg	reach 22 in. Hg (less above 2000 ft); lose $\leq$ 10 in 5 min
Vacuum, intake valves closed (22.7.7)	23 $\rightarrow$ 19 in. Hg	same
Pressure control at 150 psi (22.7.9)	peak 175 psi	rise $\leq$ 30 psi; valves closed in 3-10 s
Pressure control at 90 psi (22.7.9)	peak 110 psi	rise $\leq$ 30 psi; valves closed in 3-10 s
Pressure control at 250 psi (22.7.9)	peak 272 psi	rise $\leq$ 30 psi; valves closed in 3-10 s
Gauge test (22.7.11)	at 150: 150 · 200: 202 · 250: 252	within 10 psi
Flowmeter (22.7.12)	1350 vs 1500 gpm measured	within 10%
Intake relief valve (22.7.10)	Yes	per the maker's specifications
Tank-to-pump flow (22.7.13)	800 gpm (baseline 1000)	compare with maker's / previous rate

NOTES AND DEFECTS

Packing drip normal. Tank-to-pump down from last year; tank screen to be checked.

Results recorded and determined by the technician named above. Overhaul Prep provides this form and NFPA 1910 (2024) reference values and flags readings outside them; it does not inspect, test or certify apparatus. Net pump pressure at draft uses 0.49 psi per in. Hg (NFPA 1910 informative annex B.4). Prepared with Overhaul Prep (overhaulprep.app) for you@yourdepartment.org.