



GOLDER RANCH FIRE DISTRICT

Engineer Practical Check Sheets

Obtaining Available Water

Standards:

NFPA 1010 Section 1002: 5.2.4, 5.2.4(B)

Task/Performance Outcome:

The candidate shall be given the objective of determining available water supply during a pumping evolution. Upon completing this objective, the candidate shall be able to determine the estimated available water to them for continued pumping evolutions.

Required Personal Protective Equipment (PPE):

Turnout pants/boots, helmet and utility gloves

Required Equipment:

- Type 1 pumper (with foam injection system)

Critical Fail Criteria:

Failure consists of the following:

- Failure to complete any of the given tasks
- Failure to place wheel chocks prior to throttling truck
- Failure to refill on board water tank
- Cavitation of pump
- Failure to wear the required PPE
- Failure to keep accountability on the fire ground
- Failure to exit the apparatus safely and with three points of contact
- Glaring, gross errors, as documented by the evaluator
- An apparent lack of efficiency and comfort with the activity, as documented by the evaluator
- Less than 80% of available points scored

Evolution Details:

The candidate will be instructed to establish a water supply and determine their static water pressure. After establishing one or more hose lines the candidate must determine their residual intake pressure. Once those processes are completed the candidate must identify the amount of water supply that is available to be pumped beyond their current water flow. The candidate must charge the hose line(s) safely and smoothly when the hose lines are ready to be charged. Once the hose lines are charged with water the candidate must set the pump discharge pressure correctly. The candidate must set the pump discharge pressure to the highest line(s) and gate down necessary hose line(s) to the proper pressure(s). The candidate must ensure the discharge relief valve or pressure governor is set to the correct level for the highest line. The candidate must ensure the hose line(s) are dressed for smooth advancement, leaks and kinks are addressed and truck vitals are monitored.



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Candidate Name:	Date:	
Actions	Points Available	Points Earned
Addresses Accountability.	CFC	
Parking brake engaged.	1	
Pump engaged.	1	
Ensures that "OK to Pump" light is on.	1	
Wheel Chocks placed prior to throttling up engine.	CFC	
Tank-to-pump valve opened.	1	
Candidate safely pulls 5 inch supply line off apparatus and connects to Jaffrey (and to hydrant if no partner).	1	
Calls for water (or opens hydrant if no partner).	1	
Bleeds air from line before opening intake.	1	
No kinks or bends which would restrict optimal water flow.	1	
Transitions from tank to hydrant supply.	1	
Water supply evolution completed safely and efficiently.	1	
Tank to pump is closed.	1	
Determines static intake pressure on mater intake gauge (there must be no water flow through the pump in order to determine a true static intake pressure). Static Intake _____ psi	1	
Throttles truck between 1000-1200 RPM prior to operating primer.	1	
Operates Primer for a minimum of 3 seconds.	1	
Waits for line to charge before throttling up.	1	
Charges line(s) with appropriate pressure within 10% of theoretical for the given hose line. _____ psi	2	
Pressure relief device set for current pressure.	1	
Knows current GPM flowing. _____ gpm	1	
While flowing hose line(s) determine the residual pressure from the hydrant on the master intake gauge (intake pressure left over after the first attack line(s) are flowing). Residual Intake _____ psi	1	



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Correctly determines available water using the "First digit method"		
Critical Fail Criteria	CFC	
Must ask candidate: Available water from hydrant (). _____gpm		
All lines are properly charged and checked for any kinks or obstructions.	1	
All couplings are tight.	1	
All T-handles are locked in position.	1	
All gauges are at the proper operating pressure.	1	
Master discharge gauge matches the highest pressure line.	1	
The highest pressure line is fully open.	1	
All mechanical gauges are within the normal limits.	1	
D/O does 360 of the truck observing functions, leaks, kinks, hose placement, etc.	1	
Demonstrated overall efficiency and comfort with the evolution.	3	
Total Points (25/31)	31	

Evaluator: _____ Total: _____/31

Circle one:

Pass/Fail on points/Fail on critical criteria

Comments _____

