



# GOLDER RANCH FIRE DISTRICT

## Engineer Practical Check Sheets

### Drafting From a Static Water Source

**Standards:**

NFPA 1010 Section 1002: 10.2.1, 10.2.1 (B)

NFPA 1010 Section 1002: 10.2.2, 10.2.2 (B)

**Task/Performance Outcome:**

The candidate shall be given the objective of drafting from a static water source to supply one dump line and, at minimum, one fire attack line.

**Required Personal Protective Equipment (PPE):**

Turnout Pants, Helmet, and Gloves

**Required Equipment:**

- Type 1 Fire Apparatus
- Drafting tank
- Low level strainer

**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 assigned to setup and position the given fire apparatus to draft from a static water source (drafting tank). The candidate must pull a draft and supply, at minimum, one fire attack line. The candidate must also establish a dump line back into the draft tank to prevent over heating of the pump and loss of draft. The candidate must charge the hose lines 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 and ensure the discharge relief valve or pressure governor is set to the correct level for the highest line. The candidate must ensure the hose lines are dressed for smooth advancement, leaks and kinks are addressed and truck vitals are monitored.



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<b>Candidate Name:</b>	<b>Date:</b>	
<b>Actions</b>	<b>Points Available</b>	<b>Points Earned</b>
<b>Addresses Accountability.</b>	<b>CFC</b>	
Stage apparatus next to drop tank.	1	
Parking brake engaged.	1	
Prepare the pump for drafting. Close all discharge valves, and cap any suction fittings not being used. Close all drain valves and tank valves. Close the auxiliary cooler line(s).	1	
Inspect suction hoses. Check female coupling(s) for gasket(s), damage or debris. Inspect overall condition of hose(s).	1	
Connect the sections of suction hose together, and install the low level strainer on the end that is placed in the water.	1	
Connect the suction hose to the fire pump and place strainer in the water.	1	
Establish a dump line back to the drop tank.	1	
Engage apparatus pump.	1	
Ensures that "OK to Pump" light is on.	1	
<b>Wheel Chocks placed prior to throttling up engine.</b>	<b>CFC</b>	
Throttles truck between 1000-1200 RPM prior to operating primer.	1	
Operates primer continually (could take 30-40 seconds to pull the draft).	1	
Watch master supply gauge on the pump panel should begin to show a pressure reading on the negative side of zero. This measurement, which is given in inches (or millimeters) of mercury, is another indication that the priming pump is developing a vacuum within the fire pump.	1	
Continue holding the primer control handle in the fully engaged position until draft is pulled no more than 60 seconds. You should also see some indication on the master discharge gauge of pressure being developed by the fire pump.	1	
Adjust the hand throttle or computer governor to obtain the desired discharge pressure.	1	
Slowly open the discharge valve for the hose-line that is serving as the dump line. (Opening the valve quickly may lead to a loss of the vacuum and cause the pump to lose draft).	1	
Begin flowing a small amount of water back into the water source or tank through the dump line for pump cooling purposes.	1	
Charges attack line with appropriate pressure within 10% of theoretical for the given hose line.  _____ psi	2	
Pressure relief device set for current pressure.	1	
All lines are properly charged and checked for any kinks or obstructions.	1	



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All couplings are tight.	1	
All T-handles 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	
<b>Total Points (24/30)</b>	<b>30</b>	

Evaluator: \_\_\_\_\_ Total: \_\_\_\_\_/30

Circle one:

Pass/Fail on points/Fail on critical criteria

Comments \_\_\_\_\_  
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