


A 1500 gpm Pumper  
Drafts 2320 gpm

How Did Those Guys At  
Winfield Do That?  
May 2003

# The Test

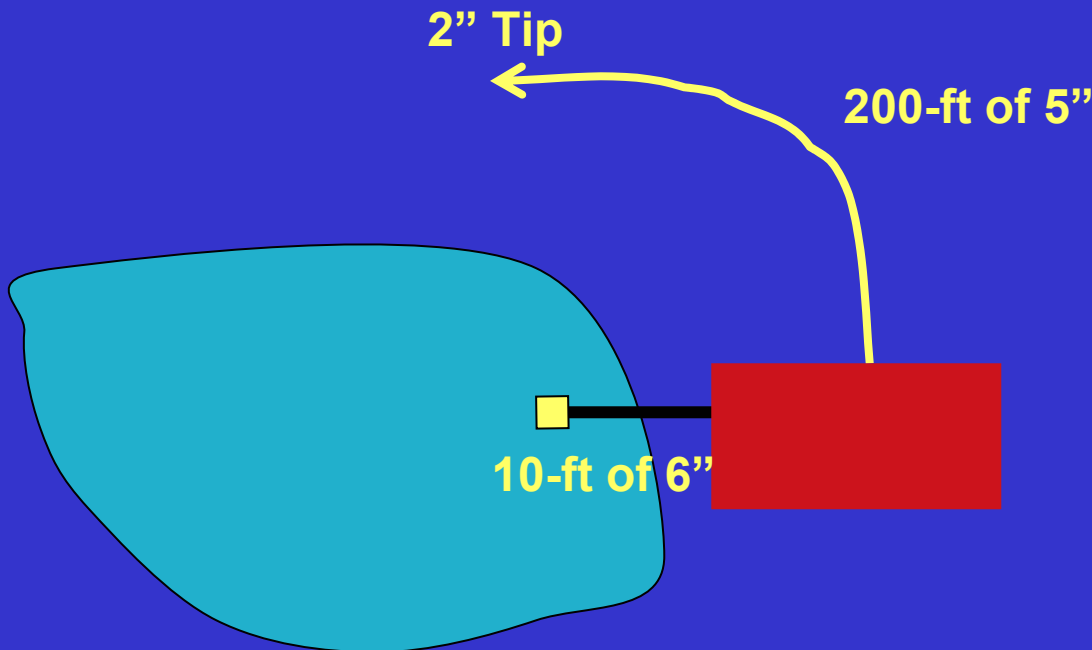
In May 2003, the Winfield Community VFD of Carroll County, Maryland conducted a flow test to see how much water they could move with their 1500 gpm, single-stage pumper. The intent was to eventually draft using all three of the pumper's intakes and to maximize the flow from draft. The following slides present the results of this test. The bottom line is that this 1500 gpm rig pumped 2320 gpm – pretty darn good and it just goes to show you that a rig is not really that confined by its rated capacity.



# Test #1 — Draft through Front Suction

## Set up:

- 1500-gpm Pumper (Series 60 — 500 hp diesel)
- Front suction with 10-ft of 6" suction & floating strainer
- Discharge through portable monitor with 2" tip
- Lift = 8 ft





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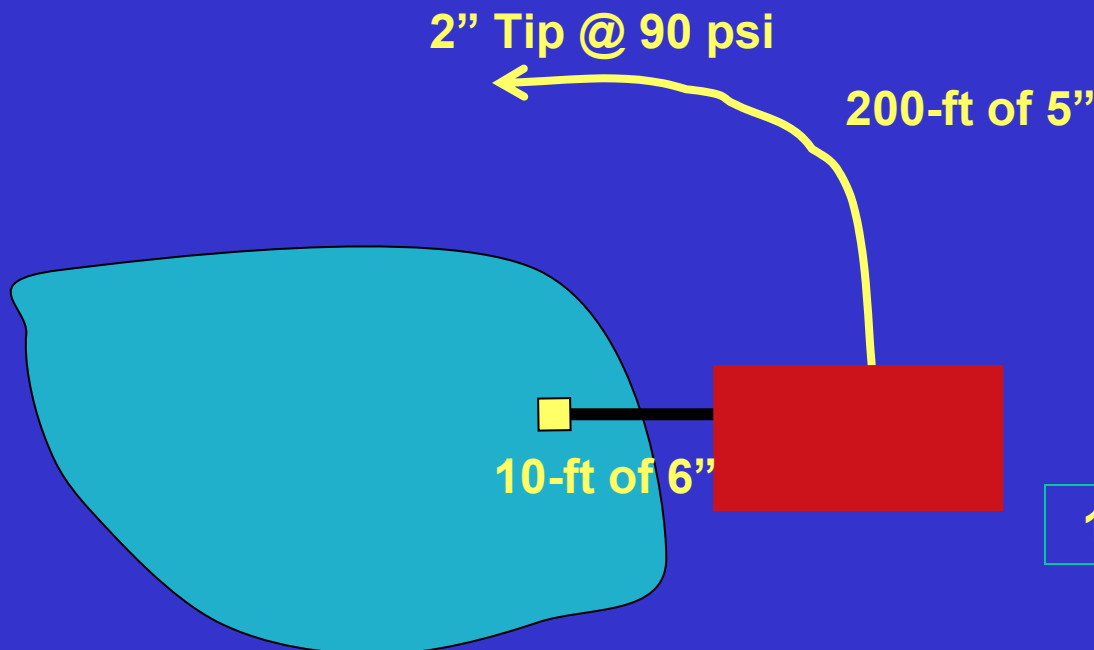


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# Test #1 — Draft through Front Suction

## Set up:

- 1500-gpm Pumper (Series 60 — 500 hp diesel)
- Front suction with 10-ft of 6" suction & floating strainer
- Discharge through portable monitor with 2" tip
- Lift = 8 ft



## Results:

- Nozzle Psi = 90 psi
- Flow = 1128 gpm
- Pump Psi = 125 psi
- Motor = 1480 rpm

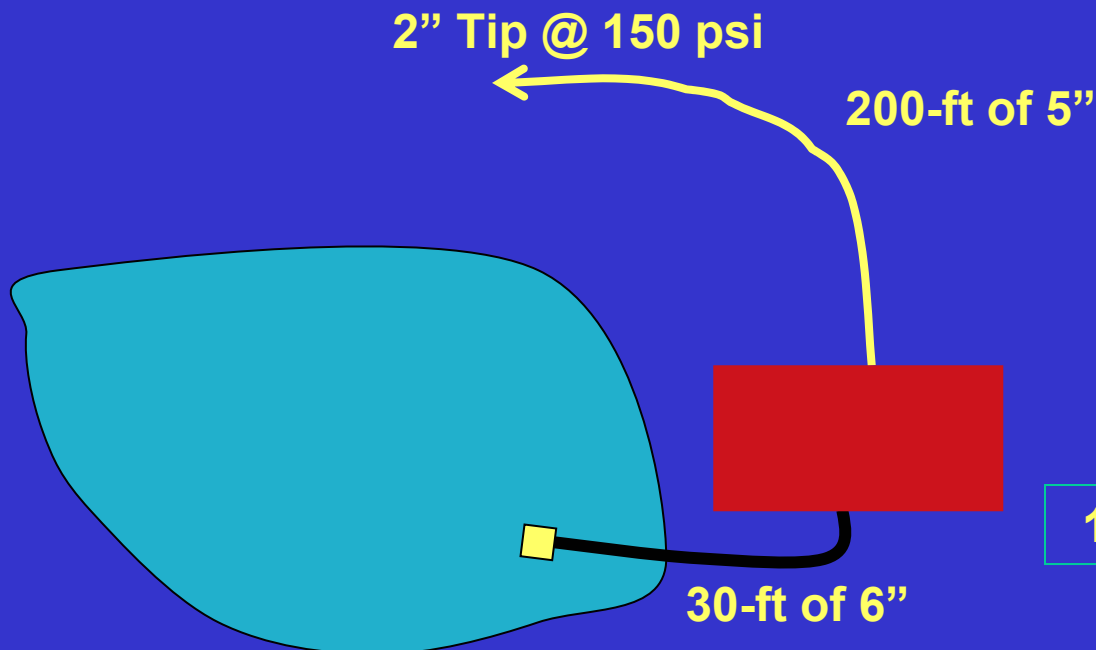
1128 gpm @ 125 psi @ 1480 rpm



# Test #2 — Draft through Side Suction

## Set up:

- 1500-gpm Pumper (Series 60 — 500 hp diesel)
- Side suction with 30-ft of 6" suction & floating strainer
- Discharge through portable monitor with 2" tip
- Lift = 8 ft



## Results:

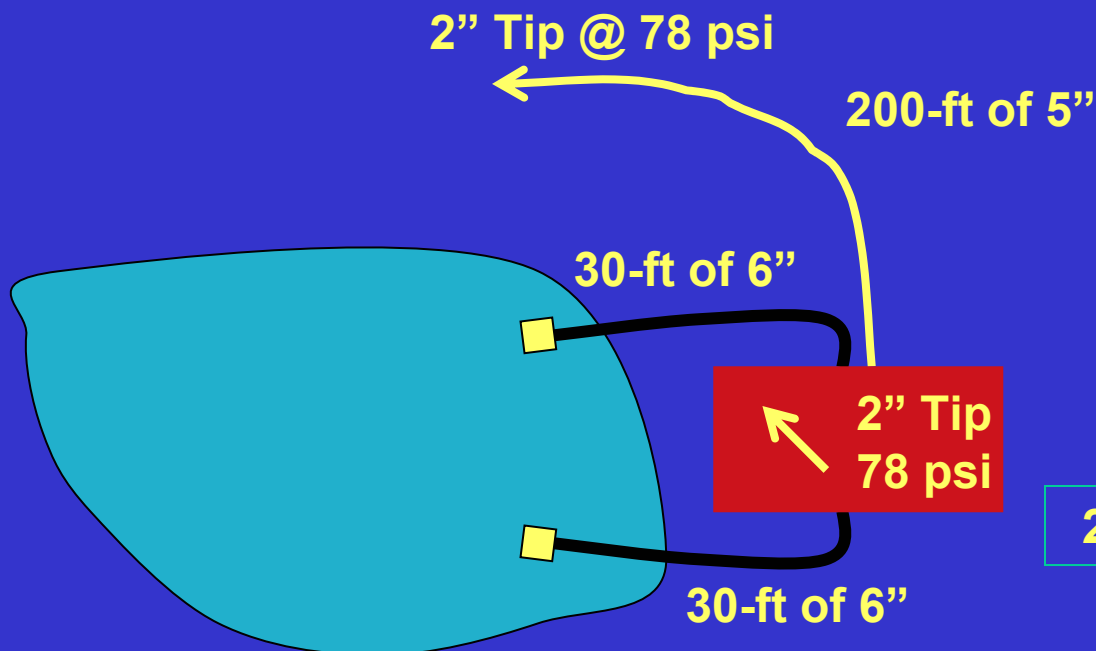
- Nozzle Psi = 150 psi
- Flow = 1456 gpm
- Pump Psi = 248 psi
- Motor = 1942 rpm

1456 gpm @ 248 psi @ 1942 rpm

# Test #3 — Draft through Both Side Suctions

## Set up:

- 1500-gpm Pumper (Series 60 — 500 hp diesel)
- Side suction with 30-ft of 6" suction & floating strainers
- Discharge through portable monitor & deck gun with 2" tips
- Lift = 8 ft



## Results:

- Nozzle Psi = 78 & 78 psi
- Flow = 2100 gpm
- Pump Psi = 128 psi
- Motor = 1988 rpm

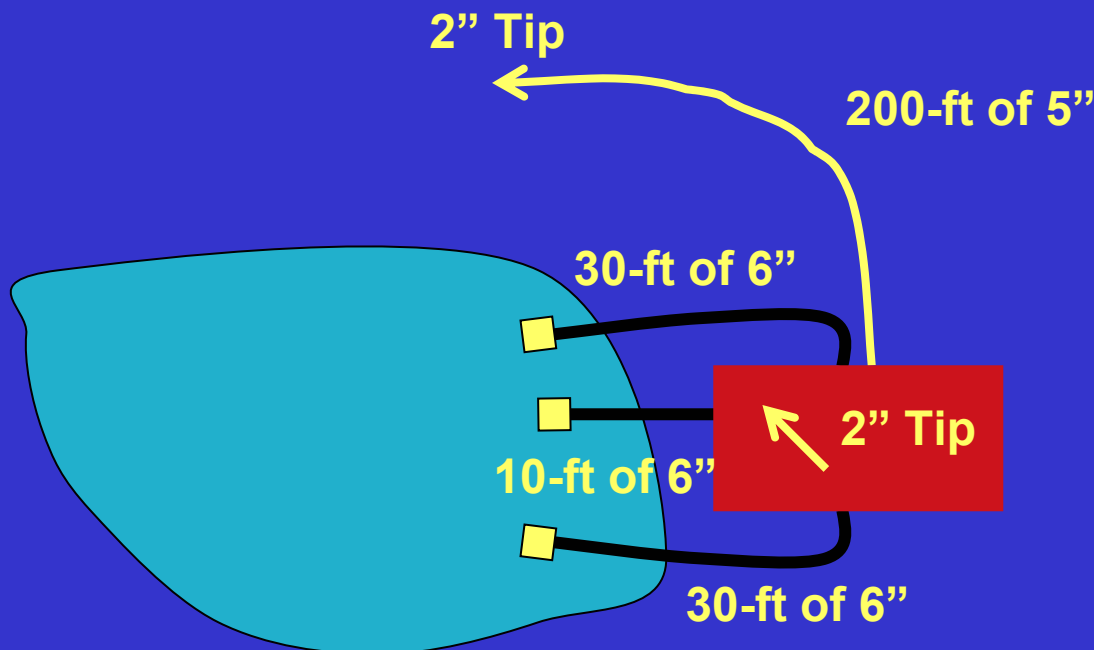
2100 gpm @ 128 psi @ 1988 rpm



# Test #4 — Draft through Front & Both Side Suctions

## Set up:

- 1500-gpm Pumper (Series 60 — 500 hp diesel)
- Front suction with 10-ft of 6" suction & floating strainer
- Both side suction with 30-ft of 6" suction & floating strainers
- Discharge through portable monitor & deck gun with 2" tips
- Lift = 8 ft





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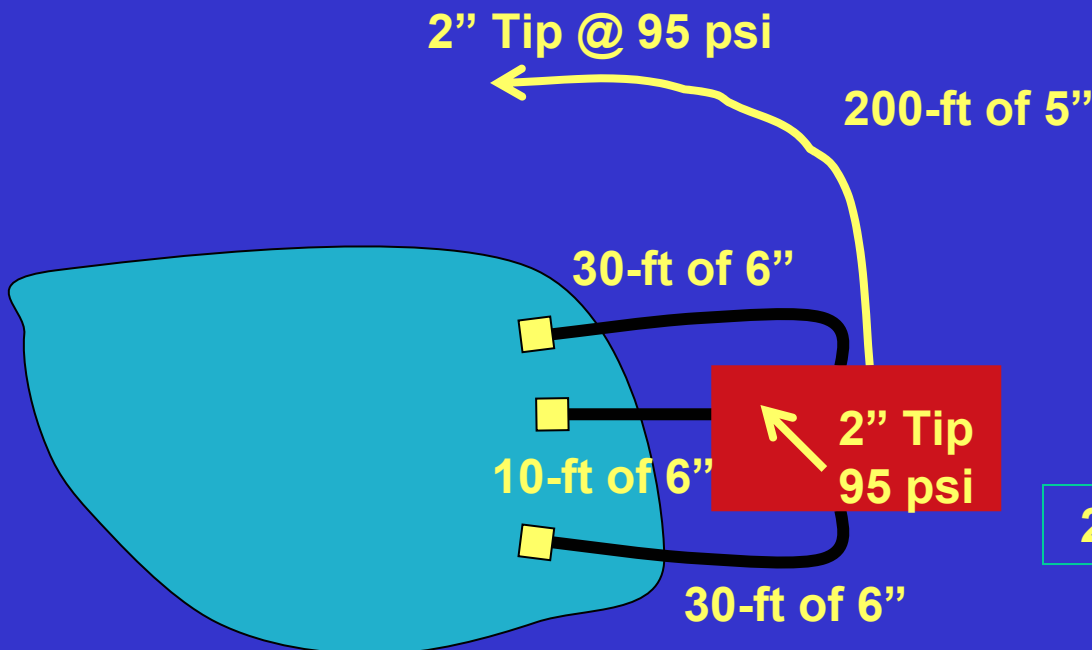


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# Test #4 — Draft through Front & Both Side Suctions

## Set up:

- 1500-gpm Pumper (Series 60 — 500 hp diesel)
- Front suction with 10-ft of 6" suction & floating strainer
- Both side suction with 30-ft of 6" suction & floating strainers
- Discharge through portable monitor & deck gun with 2" tips
- Lift = 8 ft



## Results:

- Nozzle Psi = 95 & 95 psi
- Flow = 2320 gpm
- Pump Psi = 125 psi
- Motor = 1700 rpm

2320 gpm @ 125 psi @ 1700 rpm



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