

# Fire Hydrant Flow Test Form

Required fields highlighted in blue.

Auto-populated Fields:

% Pressure Drop, Total Water Loss, Residual Flow, Fire Flow at 20PSI, and NFPA 291 Standard Color Code.

I. Project Information	
<b>Name:</b> V.K. Knowlton Construction & Utilities, Inc.	<b>Phone:</b> (210) 651-6860
<b>Company Address:</b> 18225 FM 2252, San Antonio, Texas 78266	
<b>Project Name:</b> STEELWOOD TRAIL UNIT 4	
<b>NBU Work Order Numbers:</b> W-209398	

TEST # 1

II. Flow Test Data		Click <b>Reset Fields</b> to recalculate auto-populated fields.	
Test Hydrant	<b>NBU FH ID #:</b> 15126	<b>Plan Sheet/Hydrant #:</b> NBU Asset Map / 15126	<b>Private:</b> No
	<b>Location Description:</b> S. Solms Road north of Moon Hill Road		
	<b>Size and Material of Main:</b> 12" C900 (DR-18)		
	<b>Manufacturer:</b> CLOW		<b>OEM Year:</b> 2024
	<b>Static PSI:</b> 80	<b>Residual PSI:</b> 70	<b>% Pressure Drop:</b> 12.50
Flow Hydrant 1	<b>NBU FH ID #:</b> ID #59	<b>Plan Sheet/Hydrant #:</b> C6.00 / ID #59	<b>Diameter:</b> 2.5
	<b>Size and Material of Main:</b> 12" C900 (DR-18)		
	<b>Pitot PSI:</b> 26	<b>Observed Flow:</b> 856	<b>Minutes Flowed:</b> 2
	<b>Total Water Loss:</b> 1712		
Flow Hydrant 2 (OPTIONAL)	<b>NBU FH ID #:</b> ID #59	<b>Plan Sheet/Hydrant #:</b> C6.00 / ID #59	<b>Diameter:</b> 2.5
	<b>Size and Material of Main:</b> ***flowing both outlets of hydrant***		
	<b>Pitot PSI:</b> 26	<b>Observed Flow:</b> 856	<b>Minutes Flowed:</b> 2
	<b>Total Water Loss:</b> 1712		

III. Calculations (Auto-populated)	
<b>Residual Flow</b> $Q_r = 29.83 \times c_d \times D^2 \sqrt{P_p \times H_f}$	<b>Fire Flow at 20 PSI</b> $Q_f = Q_r \times ((P_s - 20) / (P_s - P_r))^{0.54}$
<b>Cd</b> = 0.9	<b>Qr</b> = 1711
<b>D</b> = 2.5	<b>Ps</b> = 80
<b>Pp</b> = 26	<b>Pr</b> = 70
<b>Hf</b> = 2	<b>Qf</b> = 4503
<b>Qr</b> = 1711	<b>NFPA 291 Standard Color Code:</b> 1500 GPM & Above = Light Blue

IV. Tester/Company Information	
<b>Flow Test Conducted by:</b> Protection Development, Incorporated	<b>Phone:</b> (210) 828-7533
<b>Business License #:</b> Texas Registered Engineering Firm (F-2816)	
<b>Company Address:</b> 8620 North New Braunfels Avenue, Suite 100, San Antonio, Texas 78217	
<b>Print Name:</b> Alex Akeroyd and Geoff Owens	<b>Date:</b> 09/16/2025

2025-0223

V. NBFD Fire Hydrant Flow Requirements (To be completed by Fire Department)		
<b>Print Name:</b>	<b>Title:</b>	<b>Accepted:</b>
<b>Signature:</b>	<b>Date and Time:</b>	

# Fire Hydrant Flow Test Form

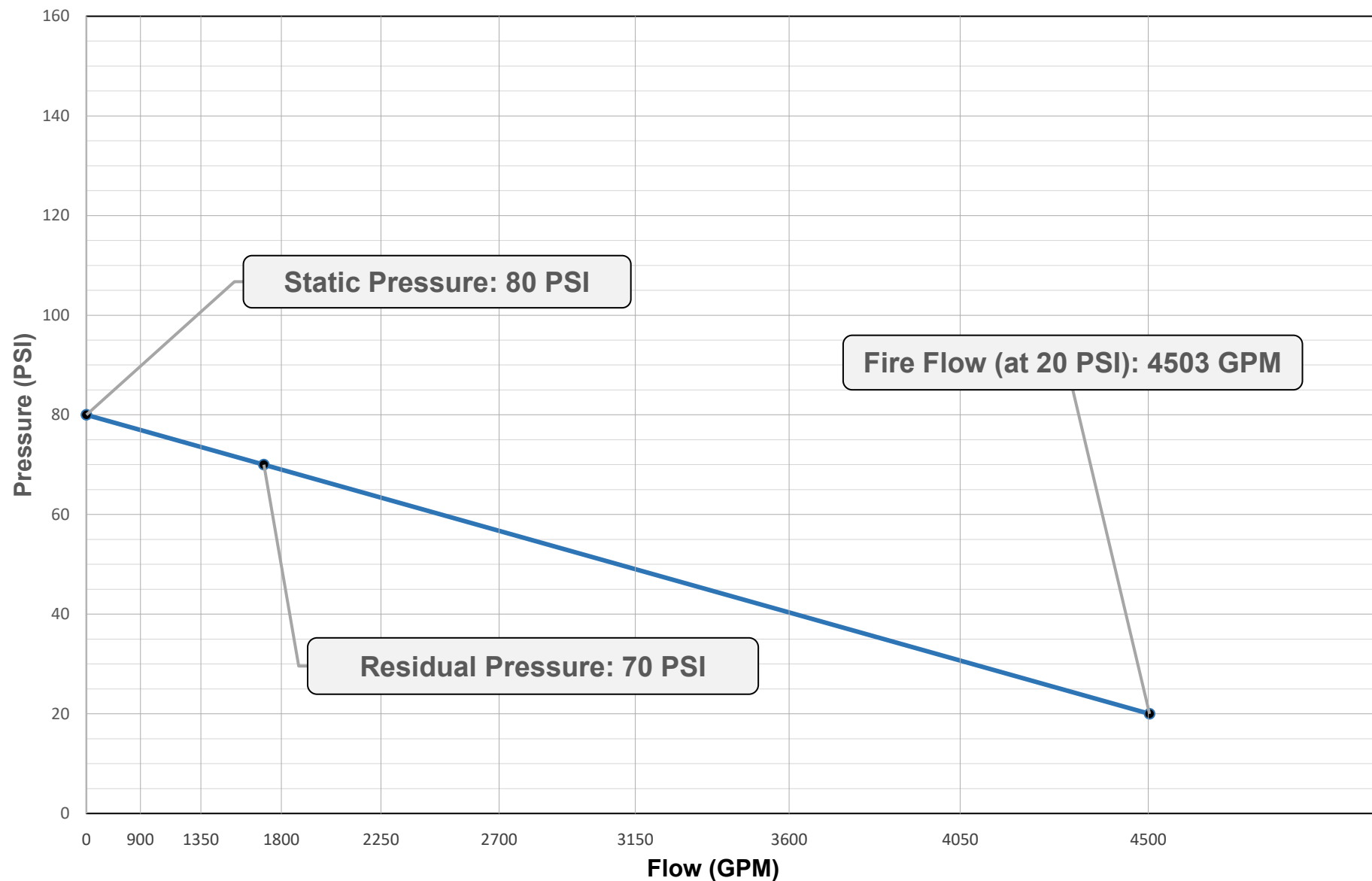


## VI. Sketch (Attach any additional calculations and graphs made by testing company)

Label Hydrant Numbers and Street Names



<b>Project Name:</b>	Steelwood Trail Unit 4 - Test #1
<b>Project Number:</b>	25-0223
<b>Test Date:</b>	September 16, 2025
<b>City:</b>	New Braunfels



<b>Static Pressure:</b> 80 PSI	<b>Residual Pressure:</b> 70 PSI	<b>Flow Test @ Residual Pressure:</b> 1,711 GPM	<b>Fire Flow (at 20 PSI):</b> 4,503 GPM
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