

# WILDLAND FIRE HYDRAULICS CALCULATIONS - "BONEHEAD" vs. ACCURATE!

Disclaimer: Unlike the spineless authors at 'frictionlosscalculator.com,' I TAKE FULL LIABILITY THESE CALCULATIONS ARE 100% ACCURATE AND RELIABLE - SUE ME!

Is there truly a "CHOICE" which method to more EASILY vs. ACCURATELY calculate Fire Ground Hydraulics when mathematics "NEVER" LIE!?! Well somebody is! *Is it YOU!?! Hmmm!?!*

How do you explain **45.25%** UNDER "CALCULATED" Engine Pressure at 1,100 feet at

**60** GPM 1.5" nozzle **10** GPM "Laterals" at **200** ft. every **200** and HEAD **0**

I was THREATENED to "DO NOT CONFUSE THE CLASS !!!" in May 1986 at the CAL FIRE Fire Academy or face certain TERMINATION! Yet I graduated "TOP STUDENT" at Rank ONE (1) of 23 at 96.8%?

Are you even aware of this truly [IN]-SIGNIFICANT formula that is instructed INTERNATIONALLY!?!

	<b>FL = C * (Q / 100)^2 * (L / 100)</b>	<b>Engine Pressure = Nozzle Pressure + Friction Loss + Appliance(s) + HEAD</b>	5/15/2020
<u>San Dimas</u>	Coefficient (C) for 1.5" hose is 35	<a href="http://www.tinyurl.com/hftfire">http://www.tinyurl.com/hftfire</a> - ALL supporting videos	<a href="http://frictionlosscalculator.com">http://frictionlosscalculator.com</a> <u>12/31/2022</u>
<u>Trgn &amp; Dev.</u>	Coefficient (C) for 1" hose is 250	'SAFE' Hose Deployment: <a href="http://www.tinyurl.com/hftfire01">http://www.tinyurl.com/hftfire01</a>	1
<u>Ctr. 2005</u>	GPM (Q)	written: <a href="http://www.hoseroiler.info">http://www.hoseroiler.info</a>	35
<u>test results</u>	Length (L)	<b>Please NOTE:</b> Your wannabe "academy" demands accuracy within 10 PSI right!?! How can you justify <u>FAILING</u> past students now <u>UNEMPLOYED</u> when it's evidenced you <u>INSTRUCT</u> results that are <u>GROSSLY INCORRECT</u> by far <u>MORE!?!</u>	250
		24	150

Please feel FREE to fill-in ONLY the - LIGHT BLUE - highlighted cells to satisfy your 'SIMPLE' curiosity!

But don't forget the maximum ENGINE PRESSURE CANNOT EXCEED 400 PSI! REMEMBER!?!

Or do you recall the "TEST PRESSURE" of fire hose is just as fire apparatus are "CONFUSINGLY" governed!?!

'YOU' INSTRUCT 'YOUR' PERSONAL AGENDA that FORCES 1000's of FF's to answer 'WRONG' to GRADUATE!

Have I crossed a POLITICAL LINE!?! Am I not a willing party who worships my paycheck over TRUTH?

The Affirmative Action goals as an EEO employer in the late 1970's mandated by our Federal Government caused CAL FIRE (CDF) to face what it STILL considers an INSURMOUNTABLE DILEMMA : How in the world are 'THEY' gonna SECURE HUNDREDS OF MILLIONS OF DOLLARS each and every year for DECADES to meet IT'S highest priority!?! ...balance the all mighty God fearing Fiscal Budget! ENJOY Admissible EVIDENCE they will DECEIVE ANY uneducated individual for 'THE MONEY' even if it BURNS FIREFIGHTERS FOR FEDERAL RESERVE NOTES!!!

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Click here for "supporting" video: <http://www.tinyurl.com/calfire01> ...and then go on "time-line" to 1:13:40 to LEARN in <http://www.tinyurl.com/calfire02>

GET TRUTH verified by the Feds! Hoffmann Fire & Rescue Technologies - (877) HOSEROLLER Cover Letter and Resume ' and Patents #6267319 & #6659389

Do dispute #1 & #6! **Go to: <http://www.hydraulicsapp.com>** [www.hftfire.com](http://www.hftfire.com) - © 2014 - 2020 - All Rights Reserved <http://tinyurl.com/noahmorgan01>

# "CORRECT" METHOD - INTERNATIONALLY RECOGNIZED "FIRE STANDARD"

HEAD:	(Enter FEET elevation)		Laterals Start:	If 1.5" 'Trunk' line is SUPPLY ONLY w/ 1" Laterals, then enter ZERO "0" for 1.5" AND "X" GPM for 1" laterals.						
<u>0</u>	1.5"	1.5" Prog.	<u>200</u>	ACCURATE	1" Lateral	Number of	1.0" Lateral	Number of laterals 'shut down'		ACTUAL
<u>0</u>	NOZZLE	Friction Loss	Progressing at:	1.5" Sub-total	<u>10</u>	1.0" Laterals	Friction Loss	1.0" Sub-total	<u>0</u>	REQUIRED
NP - (T/C)	GPM	per 100'	<u>200</u>	"Friction Loss"	GPM	at 100' each	per 100'	Friction Loss	APPLIANCE	Engine Pressure
<u>100</u>	<u>60</u>	12.6	<u>100</u>	<u>12.6</u>	0	0	0.0	<u>0.0</u>	<u>ZERO (0)</u>	112.6
<u>100</u>	60	12.6	<u>200</u>	<u>25.2</u>	0	0	0.0	<u>0.0</u>	<u>Due to LOW</u>	125.2
<u>100</u>	70	17.2	<u>300</u>	<u>46.9</u>	10	1	2.5	<u>2.5</u>	<u>Water Flow</u>	149.4
<u>100</u>	70	17.2	<u>400</u>	<u>59.5</u>	10	1	2.5	<u>2.5</u>	<u>0</u>	162.0
<u>100</u>	80	22.4	<u>500</u>	<u>91.7</u>	10	2	2.5	<u>5.0</u>	<u>0</u>	196.7
<u>100</u>	80	22.4	<u>600</u>	<u>104.3</u>	10	2	2.5	<u>5.0</u>	<u>0</u>	209.3
<u>100</u>	90	28.4	<u>700</u>	<u>148.4</u>	10	3	2.5	<u>7.5</u>	<u>0</u>	255.9
<u>100</u>	90	28.4	<u>800</u>	<u>161.0</u>	10	3	2.5	<u>7.5</u>	<u>0</u>	268.5
<u>100</u>	100	35.0	<u>900</u>	<u>218.4</u>	10	4	2.5	<u>10.0</u>	<u>0</u>	328.4
<u>100</u>	<u>100</u>	<u>35.0</u>	<u>1000</u>	<u>231.0</u>	<u>10</u>	<u>4</u>	<u>2.5</u>	<u>10.0</u>	<u>0</u>	<u>341.0</u>
<u>100</u>	<u>110</u>	<u>42.4</u>	<u>1100</u>	<u>303.1</u>	<u>10</u>	<u>5</u>	<u>2.5</u>	<u>12.5</u>	<u>0</u>	<u>415.6</u>
<u>100</u>	110	42.4	<u>1200</u>	<u>315.7</u>	10	5	2.5	<u>12.5</u>	<u>0</u>	<u>428.2</u>
<u>100</u>	120	50.4	<u>1300</u>	<u>403.9</u>	10	6	2.5	<u>15.0</u>	<u>0</u>	<u>518.9</u>
<u>100</u>	120	50.4	<u>1400</u>	<u>416.5</u>	10	6	2.5	<u>15.0</u>	<u>0</u>	<u>531.5</u>
<u>100</u>	130	59.2	<u>1500</u>	<u>522.2</u>	10	7	2.5	<u>17.5</u>	<u>0</u>	<u>639.7</u>
<u>100</u>	130	59.2	<u>1600</u>	<u>534.8</u>	10	7	2.5	<u>17.5</u>	<u>0</u>	<u>652.3</u>
<u>100</u>	140	68.6	<u>1700</u>	<u>659.4</u>	10	8	2.5	<u>20.0</u>	<u>0</u>	<u>779.4</u>
<u>100</u>	140	68.6	<u>1800</u>	<u>672.0</u>	10	8	2.5	<u>20.0</u>	<u>0</u>	<u>792.0</u>
<u>100</u>	150	78.8	<u>1900</u>	<u>816.9</u>	10	9	2.5	<u>22.5</u>	<u>0</u>	<u>939.4</u>
<u>100</u>	<u>150</u>	<u>78.8</u>	<u>2000</u>	<u>829.5</u>	<u>10</u>	<u>9</u>	<u>2.5</u>	<u>22.5</u>	<u>0</u>	<u>952.0</u>

THESE ARE THE ACCURATE CALCULATIONS PER INTERNATIONAL "LAWS" of PHYSICS ...YET CAL FIRE's THREAT

"IT SHALL NOT BE DISPUTED OR BE FIRED" calculation [METHOD] at 1100 ft. is a FULL **172.5 PSI** of

"EXTRA" PRESSURE TO "DANGEROUSLY" EXTEND 'YOUR' HOSELAY AN "EXTRA" **1450 FEET!!!**

This is AFTER NFPA 1002 DEMANDS to "STOP!!" and pump a DOWNHILL Grade of **-3.3%** ...and yet, the

Cadet has BEEN DECEIVED to BELIEVE he/she can pump UPHILL **397 FEET!!!** at a FULL **36.12%**

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**" POLITICALLY CORRECT " CAL FIRE ACADEMY METHOD IN WHICH THE "TRUNK LINE" NEVER ADJUSTS FOR " INCREASED " GPM FOR EACH ONE (1") INCH LATERAL ADDED WHICH EXPONENTIALLY INCREASES "FL!"**

HEAD: (Enter FEET elevation)		Laterals Start:		<b>"Politically" Correct</b>	Nozzle: 3/16" = 7 gpm		1/4" = 13 gpm		5/16" = 21 gpm		3/8" = 30 gpm		1/2" = 53 gpm	
0	1.5"	1.5" <u>FLAT</u>	200		1" Lateral	Number of	1.0" Lateral	Number of laterals 'shut down'		Politically				
0	<u>NOZZLE</u>	Friction Loss	Progressing at:		1.5" Sub-total	10	1.0" Laterals	Friction Loss	1.0" Sub-total	0	CORRECT			
NP - (T/C)	GPM	per 100'	200	"Friction Loss"	GPM	at 100' each	per 100'	Friction Loss	APPLIANCE	WRONG EP				
100	60	8.6	100	8.6	0	0	0.0	0.0	0	108.6				
100	60	8.6	200	17.3	0	0	0.0	0.0	0	117.3				
100	60	8.6	300	25.9	10	1	1.5	1.5	5	132.4				
100	60	8.6	400	34.6	10	1	1.5	1.5	5	141.1				
100	60	8.6	500	43.2	10	2	1.5	3.0	10	156.2				
100	60	8.6	600	51.8	10	2	1.5	3.0	10	164.8				
100	60	8.6	700	60.5	10	3	1.5	4.5	15	180.0				
100	60	8.6	800	69.1	10	3	1.5	4.5	15	188.6				
100	60	8.6	900	77.8	10	4	1.5	6.0	20	203.8				
100	60	8.6	1000	86.4	10	4	1.5	6.0	20	212.4				
100	60	8.6	1100	95.0	10	5	1.5	7.5	25	227.5				
100	60	8.6	1200	103.7	10	5	1.5	7.5	25	236.2				
100	60	8.6	1300	112.3	10	6	1.5	9.0	30	251.3				
100	60	8.6	1400	121.0	10	6	1.5	9.0	30	260.0				
100	60	8.6	1500	129.6	10	7	1.5	10.5	35	275.1				
100	60	8.6	1600	138.2	10	7	1.5	10.5	35	283.7				
100	60	8.6	1700	146.9	10	8	1.5	12.0	40	298.9				
100	60	8.6	1800	155.5	10	8	1.5	12.0	40	307.5				
100	60	8.6	1900	164.2	10	9	1.5	13.5	45	322.7				
100	60	8.6	2000	172.8	10	9	1.5	13.5	45	331.3				

This should look really familiar to your "NORMAL" or "STATUS QUO" that has kept YOU and literally every SEVERELY DECEIVED STUDENT feeling 'SAFE AND SECURE' as, "Ya' all got 'em through the MATH somehow!"  
 ...but have you considered REALITY!?! Ask the USFS, BLM, NPS, OSF, NSF, & ASF what they do!  
 But what do you care 'cuz the only numbers important to you are "THE RESULTS" of an "EASIER" math equation!

Click here for "supporting" evidences: <http://www.tinyurl.com/calfire03> <http://www.tinyurl.com/calfire04> <http://www.tinyurl.com/calfire05>  
 World's GREATEST hosecabinet! Hoffmann Fire & Rescue Technologies - (877) HOSEROLLER [(877) 467-3765] CAL-FIRE Certificates and 'FALSE' positive RESULTS!

1.5" Hose Length	Number of 1" Laterals	<u>ACTUAL REQUIRED EP</u>	<u>ACTUAL REMAINING PSI TO 400</u>	<u>ACTUAL Hose to ADD w/o NEW Laterals</u>	<u>CAN WE PUMP?</u>	<u>"Politically Correct" EP</u>	<u>NET Incorrect EP</u>	<u>NET RESULT ERROR!</u>	<u>ASS-U-ME d REMAINING PSI TO 400</u>	<u>HOSE 'BELIEVED' can be EXTENDED BEYOND ACTUAL</u>
100	0	112.6	287.4	2281	<u>YES</u>	108.6	4.0	3.52%	291.4	<u>0</u>
200	0	125.2	274.8	2181	<u>YES</u>	117.3	7.9	6.33%	282.7	<u>92</u>
300	1	149.4	250.6	1461	<u>YES</u>	132.4	17.0	11.37%	267.6	<u>143</u>
400	1	162.0	238.0	1388	<u>YES</u>	141.1	20.9	12.93%	258.9	<u>176</u>
500	2	196.7	203.3	908	<u>YES</u>	156.2	40.5	20.59%	243.8	<u>341</u>
600	2	209.3	190.7	851	<u>YES</u>	164.8	44.5	21.24%	235.2	<u>374</u>
700	3	255.9	144.1	508	<u>YES</u>	180.0	75.9	29.67%	220.0	<u>639</u>
800	3	268.5	131.5	464	<u>YES</u>	188.6	79.9	29.75%	211.4	<u>672</u>
900	4	328.4	71.6	205	<u>YES</u>	203.8	124.6	37.95%	196.2	<u>1048</u>
1000	4	341.0	59.0	169	<u>YES</u>	212.4	128.6	37.71%	187.6	<u>1082</u>
<u>1100</u>	<u>5</u>	<u>415.6</u>	<u>0.0</u>	<u>0</u>	<u>STOP!</u>	<u>227.5</u>	<u>188.1</u>	<u>45.25%</u>	<u>172.5</u>	<u>1450</u>
1200	5	428.2	0.0	0	STOP!	236.2	192.0	44.84%	163.8	1378
1300	6	518.9	0.0	0	STOP!	251.3	267.6	51.57%	148.7	1250
1400	6	531.5	0.0	0	STOP!	260.0	271.5	51.09%	140.0	1178
1500	7	639.7	0.0	0	STOP!	275.1	364.6	57.00%	124.9	1050
1600	7	652.3	0.0	0	STOP!	283.7	368.6	56.50%	116.3	978

And you question why Firefighters SCREAM, "MORE PRESSURE !!! MORE PRESSURE !!! MORE PRESSURE !!!"?

*How many have been INJURED and RISK DEATH UPON "PURPOSEFUL" DISREGARD to LAWS of PHYSICS!?!*

...or are "YOU" who "Firefighter SAFETY" is a very distant "NON-PRIORITY" to securing the GRADUATING NUMBERS !?!

**Those I've shared this BELIEVE you ARE CRIMINALLY LIABLE for ALL associated BURN INJURIES & DEATHS!**

Reflect on this regarding the "Crank Fire" as my CDF Fire Captain Robert Togstad ILLUSTRATES the IMPORTANCE of ACCURACY!

**Think 'SAFETY' WHEN THIS 'POTENTIAL' OCCURS!**

**...WHAT ARE 'THOSE' NUMBERS!?!**

<http://www.tinyurl.com/crankfire>

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**See how over \$46,000,000 FELONY EMBEZZLED from U.S. and CA taxpayers results in \$885 MILLION in FINES to 'MOB' CCPOA!**

<http://www.caextortion.com/>

Road to 'INSANITY' - DOCUMENTARY

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<http://tinyurl.com/SLOAA340>

**Go to: <http://www.hydraulicsapp.com>**

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<http://tinyurl.com/aluminumovercast>