V-Cone Application Sizing

Serial #	99-0579
Tag	
Model	VT0BQC02N1
Job Ref.	JB4012

Fluid State	LIQUID
Fluid	Water , WATER
End User	ARGONNE LABS

Description	3/4" V-CONE
Note	

Mktg. Code	

C_f	0.8145	
P_f	120.0	psiG
T_f	90.0	°F
ρ	62.00	lb/ft3
μ	0.7827	cP
G		
Z		
Y		
k		
C_P		
Mw	18.015	
P_b		
T_b		
Z_b		
P_{baro}	14.696	psiA
P_c	3198.8	psiA
T_c	1164.8	°R
F_a	1.000	
aPE	D 9.5e-06	d 9.5e-06 ⇐
P_v	0.6991	psiA

⇐ Entered value.

q	max. Flowrate	10	GPM
Re	max. Reynolds	4.870e+04	
V	max. Velocity	6.016	fps
ΔP	max. Dp	46.421	inWC
ΔP	min. Dp	0.46421	inWC
D	Meter I.D.	0.82400	in
d	Cone O.D.	0.62600	in
β	Beta Ratio	0.6503	
	Turn Down	10	

McCrometer Cal.	
Third Party Cal.	
Dye. Pen. Exam.	
Hydro. Test	
X-Ray Exam.	
Mag. Part.	
PMI	
CMTR Copies	
McCrometer Eng.	MBB

	Re	Velocity fps	Gas. Exp. Y	ΔP inWC	Flowrate GPM
1	4.870e+04	6.0164		46.421	10.000
2	4.383e+04	5.4147		37.601	9.0000
3	3.896e+04	4.8131		29.710	8.0000
4	3.409e+04	4.2115		22.747	7.0000
5	2.922e+04	3.6098		16.712	6.0000
6	2.435e+04	3.0082		11.605	5.0000
7	1.948e+04	2.4066		7.4275	4.0000
8	1.461e+04	1.8049		4.1780	3.0000
9	9740	1.2033		1.8569	2.0000
10	4870	0.60164		0.46421	1.0000

Table based on one flow condition (P, T ...)

Record Start Date	04-27-1999
Print Date	05-24-1999

McCROMETER