Pressure Distribution Worksheet - Draft

THE UNIVERSITY OF

	Pressure Distribution Worksheet - Draft																	ARIZON COOPERATIVE EXTER						
1.	1. Select Number of Perforated Laterals:														Geotextile ອີກັດວິກີດວິກີດວິກີດວິກີດວິກີດວິກີດວິກີດວິກີ							XICXXI		
2.	Selec	Select <i>Perforation Spacing</i> :											Doct 1/	4" perfora	ations spa	aced 3' ap	part con	2"	of rock	Best .	Les Co			
3.	Select Perforation Diameter 0																	of rock			12'			
4.	Determine the <i>Number of Perforation Spaces</i> . Divide the <i>Length of Laterals</i> (Line 16) by the <i>Perforation Spacing</i> (Line 2) and round down to the nearest whole number.										Perforation sizing: 1/8" to 1/4"													
	Number of Perforation Spaces = ft - ft -										Perforation spacing: 2' to 3'													
Б	Number of Perforation spaces – III – IIII – III – III – III – IIII – IIIIII												space	2										
5.	Perfo	rations Per Lat	eral =			Spaces	+	1	=			1												
	Check Table I to ensure that the number of perforations per lateral guarantees less than a 10% discharge variation.																							
	Table I Maximum Number of Perforations Per Lateral to Guarantee <10% Discharge Variation]									
				$1/_4$ Inch He	oles					³ / ₁	6 Inch Ho	oles	¹ / ₈ Inch Holes											
		Perforation Spacing (Fee	.) 1	Pipe L	iameter (Inches)		2	Perforation Spacing (Feet)		Pipe Di		ameter (neter (Inches)		Perforation Spacing (Feet)		Pipe		Jameter (Inches)		2			
		2	10	13	192	30	60	2	2	12	174	26	46	87		2	21	33	44	74	149	1		
		21/2	8	12	16	28	54	21	V2	12	17	24	40	80	2	21/2	20	30	41	69	135			
		3	8	12	16	25	52		3	12	16	22	3/	/5		3	20	29	38	64	128			
6.	Total	Number of Per	forations	equals the	Number	of Perfor	ations per	r Lateral (Line 5) n	nultiplied	by the N	umber of	Perfora	ed Latera	als (Line '	1). T								
	Perforations Per Lateral X Number of Perforated Laterals											=	= Total Number of				Perforations							
	Calcu	Calculate the Square Feet per Perforation												Table II Volume of Liquid in Pipe			Pine	Table III Perforation Discharge (GPM)						
7.	Bed A	Recommended value is 6-10 ft ⁻ per perforation. Does not apply to At-Grades Bed Area = Bed Width (ft) X Bed Length (ft)															Tipe	Perforation Diameter				er		
											Pipe Di	iameter	Liquid F	Per Foot	Head (ft)	1/8	³ / ₁₆	7/32	1/4					
8.	Squar	re Foot per Peri	∧ ⊧ oration	Bed Area	(Line 7) c	divided by	, the <i>Tota</i>	I Number	of Perfor	rations (L	ine 6).			(Inc	nes)	(Gall	ions)	1 0 ^a						
	$ft2 \div ft^{2}/perforations = ft^{2}/perforations$										ions	1 0.0		045	2.0 ^b	0.18	0.41		0.74					
											10113	1.5 0		0.0	110	5.0 ^c	0.20	0.93		1.65				
9. Select Minimum Average Head: ft 2 0.170													170											
													a: Use 1.0 for dwe inch holes.					lings using	1/4 inch	or 3/16				
10	10 Select <i>Perforation Discharge</i> (GPM) based on Table III: GPM per Perforation													4 0.661 b: Use 2.0 for dw						ellings usi	ng 1/8 in	ich		
11. Determine required Flow Rate by multiplying the Total Number of Perforations (Line 6) by the inch or Perforation Discharge (Line 10).														holes; or inch or 3	r, for other establishments using 1/4 3/16 inch holes.									
	Perforations X GPM per Perforation =														C: Use 5.0 for other inch perforations.							establishments using 1/8		
12.	12. Select Type of Manifold Connection (End or Center):																							
13.	13. Select <i>Minimum Diameter</i> of laterals based on Table I: 1.00 in																	F	×'	D bit	be from p	oump		
	Determine Volume of Distribution Piping														Ľ	-								
14.	. Pipe Diameter of Distribution Pipe in												clean outs											
15.	Volun	me of Liquid Pe	Foot of	Distribution	n Piping P	Per Latera	al :			Gallor	IS		alternate location of pipe from pump											
16. Length of Laterals = (Number of perfs - 1) x Spacing of perfs														Cleanouts										
(ft =ft																Manifo	old pipe				J			
17.	17. Volume of Distribution Piping = = [Number of Perforated Laterals (Line 1) X Length of Laterals (Line 16) X (Volume of Liquid Per Foot of Distribution Piping (Line 15)]																							
x ft x gal = Gallons													Alternate loc of pipe from								ernate loca pipe from p	ation pump		
Pipe from pump													mp											
ı her	еру се	rury that I have	complet	ea this wor	< in accor	uance wi	ın all app	iicable ord	inances,	rules and	i laws.													
		(Designer) (Signature)										(License #) (Da							ate)		-			