

FREY PIVOT SERVICE

SEPTEMBER 30, 2025

WISH-119638

CUSTOMER : KEVIN MULVEY

2002 LINDSAY GEN II - 30

8 TOWER - 1292.79 FT

SYSTEM 900 GPM @ 32 PSI

LEGAL : SW 1/4 10-16-28

SENNINGER UP3 XCEL TOP

SENNINGER 10 PSI REGULATORS

NELSON SR-100 .80 TB

ELEVATION 6 FT UP, 30 FT DOWN

77 COUNTY ROAD 40

STAPLETON, NEBRASKA 69163

(308)636-2327

WARRANTY

WATER APPLICATION UNIFORMITY OBTAINED WITH THIS SYSTEM CAN BE ADVERSELY AFFECTED BY MANY VARIABLES INCLUDING THE IMPROPER MAKEUP OR INSTALLATION OF THE SPRINKLER OR SPRAY NOZZLE PACKAGE, OBSTRUCTED NOZZLES, MAINTAINING INCORRECT PIVOT PRESSURE, UNFAVORABLE CLIMATIC CONDITIONS, TIGHT AND/OR SLOPING SOILS, IMPROPER END GUN ARC SETTINGS, ERRATIC AND IMPROPER OPERATING SPEED OF THE SYSTEM, POOR QUALITY OF WATER WITH ABRASIVES, CORROSIVES, AND/OR SOLIDS WHICH CAN CAUSE PLUGGING AND JAMMING, AS WELL AS INHERENT VARIABLES IN THE MANY COMPONENTS COMPRISING THE SYSTEM. THEREFORE WESTERN IRRIGATION SUPPLY HOUSE, INC., MAKES NO WARRANTY AS TO THE UNIFORMITY OF COVERAGE OBTAINED FROM THIS WATER APPLICATION PRINTOUT OTHER THAN ITS MATHEMATICAL ACCURACY.

IT IS THE RESPONSIBILITY OF THE END USER TO DETERMINE IF ANY INCOMPATIBILITY EXISTS BETWEEN THE WATER DISTRIBUTION DEVICES AND THE CROP, THE SOIL, AND THE PHYSICAL STRUCTURE OF THE MECHANICAL MOVE SYSTEM. WESTERN IRRIGATION SUPPLY HOUSE, INC., THEREFORE, DISCLAIMS ANY LIABILITY FOR DAMAGES DUE TO FAILURE OF THE SYSTEM TO PERFORM AS CONTEMPLATED.

FIGURES PRESENTED ON THIS COMPUTER PRINTOUT ARE BASED ON THE FOLLOWING:

1. DATA FURNISHED TO WESTERN IRRIGATION SUPPLY HOUSE, INC., ON PIPE LENGTH, DIAMETER, SURFACE FINISH, OUTLET SPACINGS, WATER FLOW, PIVOT PRESSURE AND ALL OTHER APPLICABLE INFORMATION.
2. THERE IS 100% WATER APPLICATION EFFICIENCY (ZERO WIND VELOCITY AND NO EVAPORATION).
3. PIVOT PRESSURE IS MEASURED ON THE MAIN HORIZONTAL DISTRIBUTION PIPE JUST AFTER THE LAST ELBOW.
4. MAIN PIPE PRESSURE IS CALCULATED AS IF THE PIVOT IS ALWAYS ON LEVEL GROUND.
5. SPRINKLER OR SPRAY NOZZLE BASE PRESSURE MAY BE LESS THAN MAIN LINE PIPE PRESSURE DUE TO THE USE OF PRESSURE REGULATORS. WHERE DROP PIPES ARE USED THE STATIC HEAD IS ADDED TO AND FRICTION LOSS IS SUBTRACTED FROM THE MAIN LINE PIPE PRESSURE TO DETERMINE INLET PSI. REGULATORS ARE CONSIDERED MOUNTED AT THE SAME HEIGHT AS THE SPRINKLING DEVICE UNLESS NOTED.

2002 LINDSAY GEN II - 30

SEPTEMBER 30, 2025

WISH-119638

DEALER

FREY PIVOT SERVICE
77 COUNTY ROAD 40
STAPLETON, NEBRASKA 69163

IRRIGATOR

KEVIN MULVEY
SW 1/4 10-16-28

TOTAL TARGET GPM	900.00	FRICTION FACTOR USED	138	SPANS	LENGTH	PIPE I.D.
TOP OF PIVOT PRESSURE	32.00	TOTAL LENGTH	1292.79	1	159.64	6.395
ENDGUN TARGET GPM	126.55	NUMBER OF TOWERS	8	7	157.04	6.395
NUMBER OF OUTLETS	525	NUMBER OF SPRINKLERS	124	OH	33.87	5.369

SENNINGER UP3 XCEL TOP
SENNINGER PSR-2 10 PSI SERIES REGULATORS

ELEVATION IS 6 FT UP AND 30 FT DOWN

CAUTIONS AND WARNINGS

1. Over watering at beginning of system due to practical limitations on smallest nozzle sizes available and/or allowable for proper operation.
2. This system designed for minimum pressure. Failure to deliver indicated pressure at the top of pivot point will adversely affect regulator and/or sprinkler/spray performance. Elevations, pipe sizes and type of drop pipe must be as shown.

OUTLET NO.	LAST OUTLET	DISTANCE TO PIVOT	GPM NEED	GPM DEL.	PIPE PSI	NOZZLE PSI	SPRINKLER LABEL AND NOZZLE SIZE	SPRK NO.	REG SIZE	PLUG NO.
49		120.37	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	41
50	12.14	122.87	1.38	1.35	29.25	11.40	XCEL TOP UP3 7.5 LIME	9	SPSR2-10	
51		125.29	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	42
52		127.71	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	43
53		130.21	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	44
54		132.63	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	45
55	12.18	135.05	1.53	1.53	29.28	11.40	XCEL TOP UP3 8 LAVENDER	10	SPSR2-10	
56		137.55	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	46
57		139.97	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	47
58		142.39	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	48
59		144.89	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	49
60	12.26	147.31	1.70	1.73	29.36	11.40	XCEL TOP UP3 8.5 LAVENDER	11	SPSR2-10	
61		149.73	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	50
62		152.23	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	51
63		154.73	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	52
64		157.06	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	53
TOWER 1	159.64	159.64								
65	12.65	159.96	1.85	1.93	29.24	11.40	XCEL TOP UP3 9 GREY	12	SPSR2-10	
66		162.54	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	54
67		164.87	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	55
68		167.37	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	56
69		169.87	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	57
70	12.33	172.29	1.96	1.93	28.89	11.40	XCEL TOP UP3 9 GREY	13	SPSR2-10	
71		174.71	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	58
72		177.21	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	59
73		179.63	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	60
74		182.05	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	61
75	12.26	184.55	2.08	2.16	28.40	11.38	XCEL TOP UP3 9.5 GREY	14	SPSR2-10	
76		186.97	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	62
77		189.39	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	63
78		191.89	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	64
79		194.31	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	65
80	12.18	196.73	2.21	2.16	27.97	11.38	XCEL TOP UP3 9.5 GREY	15	SPSR2-10	
81		199.23	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	66
82		201.73	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	67
83		204.06	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	68
84		206.55	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	69
85	12.15	208.88	2.36	2.39	27.61	11.36	XCEL TOP UP3 10 TURQUOISE	16	SPSR2-10	
86		211.38	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	70
87		213.88	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	71
88		216.30	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	72
89		218.72	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	73
90	12.34	221.22	2.51	2.39	27.29	11.36	XCEL TOP UP3 10 TURQUOISE	17	SPSR2-10	
91		223.72	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	74
92		226.05	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	75
93		228.58	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	76
94		230.91	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	77
95	12.19	233.41	2.64	2.63	27.04	11.34	XCEL TOP UP3 10.5 TURQ	18	SPSR2-10	

OUTLET NO.	LAST OUTLET	DISTANCE TO PIVOT	GPM NEED	GPM DEL.	PIPE PSI	NOZZLE PSI	SPRINKLER LABEL AND NOZZLE SIZE	SPRK NO.	REG SIZE	PLUG NO.
96		235.91	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	78
97		238.33	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	79
98		240.75	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	80
99		243.25	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	81
100	12.26	245.67	2.78	2.89	26.85	11.31	XCEL TOP UP3 11 YELLOW	19	SPSR2-10	
101		248.09	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	82
102		250.59	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	83
103		253.01	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	84
104		255.43	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	85
105	12.26	257.93	2.91	2.89	26.72	11.31	XCEL TOP UP3 11 YELLOW	20	SPSR2-10	
106		260.35	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	86
107		262.77	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	87
108		265.27	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	88
109		267.77	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	89
110	12.17	270.10	3.04	3.15	26.65	11.28	XCEL TOP UP3 11.5 YELLOW	21	SPSR2-10	
111		272.58	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	90
112		274.91	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	91
113		277.41	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	92
114		279.91	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	93
115	12.23	282.33	3.19	3.15	26.64	11.28	XCEL TOP UP3 11.5 YELLOW	22	SPSR2-10	
116		284.75	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	94
117		287.25	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	95
118		289.67	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	96
119		292.09	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	97
120	12.26	294.59	3.33	3.44	26.69	11.26	XCEL TOP UP3 12 RED	23	SPSR2-10	
121		297.01	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	98
122		299.43	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	99
123		301.93	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	100
124		304.35	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	101
125	12.18	306.77	3.54	3.44	26.79	11.26	XCEL TOP UP3 12 RED	24	SPSR2-10	
126		309.27	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	102
127		311.77	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	103
128		314.10	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	104
TOWER 2		157.04								
129		316.68								
130	12.81	317.00	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	105
131		319.58	3.32	3.44	26.63	11.26	XCEL TOP UP3 12 RED	25	SPSR2-10	
132		321.91	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	106
133		324.41	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	107
134	9.75	326.91	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	108
135		329.33	2.97	2.89	26.33	11.31	XCEL TOP UP3 11 YELLOW	26	SPSR2-10	
136		331.75	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	109
137		334.25	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	110
138	9.76	336.67	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	111
139		339.09	3.07	3.15	25.94	11.28	XCEL TOP UP3 11.5 YELLOW	27	SPSR2-10	
140		341.59	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	112
141		344.01	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	113
142	9.84	346.43	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	114
		348.93	3.17	3.15	25.60	11.28	XCEL TOP UP3 11.5 YELLOW	28	SPSR2-10	

OUTLET NO.	LAST OUTLET	DISTANCE TO PIVOT	GPM NEED	GPM DEL.	PIPE PSI	NOZZLE PSI	SPRINKLER LABEL AND NOZZLE SIZE	SPRK NO.	REG SIZE	PLUG NO.
143		351.35	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	115
144		353.77	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	116
145		356.27	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	117
146	9.84	358.77	3.23	3.16	25.29	11.28	XCEL TOP UP3 11.5 YELLOW	29	SPSR2-10	
147		361.10	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	118
148		363.59	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	119
149		365.92	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	120
150	9.65	368.42	3.32	3.44	25.03	11.26	XCEL TOP UP3 12 RED	30	SPSR2-10	
151		370.92	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	121
152		373.34	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	122
153		375.76	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	123
154	9.84	378.26	3.41	3.44	24.80	11.26	XCEL TOP UP3 12 RED	31	SPSR2-10	
155		380.76	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	124
156		383.09	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	125
157		385.62	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	126
158	9.69	387.95	3.50	3.44	24.61	11.26	XCEL TOP UP3 12 RED	32	SPSR2-10	
159		390.45	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	127
160		392.95	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	128
161		395.37	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	129
162	9.84	397.79	3.62	3.73	24.46	11.23	XCEL TOP UP3 12.5 RED	33	SPSR2-10	
163		400.29	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	130
164		402.71	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	131
165		405.13	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	132
166	9.84	407.63	3.69	3.73	24.35	11.23	XCEL TOP UP3 12.5 RED	34	SPSR2-10	
167		410.05	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	133
168		412.47	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	134
169		414.97	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	135
170	9.76	417.39	3.76	3.73	24.27	11.23	XCEL TOP UP3 12.5 RED	35	SPSR2-10	
171		419.81	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	136
172		422.31	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	137
173		424.81	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	138
174	9.75	427.14	3.86	3.73	24.24	11.23	XCEL TOP UP3 12.5 RED	36	SPSR2-10	
175		429.62	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	139
176		431.95	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	140
177		434.45	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	141
178	9.81	436.95	3.95	4.03	24.24	11.20	XCEL TOP UP3 13 WHITE	37	SPSR2-10	
179		439.37	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	142
180		441.79	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	143
181		444.29	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	144
182	9.76	446.71	4.03	4.03	24.28	11.20	XCEL TOP UP3 13 WHITE	38	SPSR2-10	
183		449.13	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	145
184		451.63	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	146
185		454.05	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	147
186	9.76	456.47	4.13	4.03	24.36	11.20	XCEL TOP UP3 13 WHITE	39	SPSR2-10	
187		458.97	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	148
188		461.39	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	149
189		463.81	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	150
190	9.84	466.31	4.34	4.34	24.44	11.17	XCEL TOP UP3 13.5 WHITE	40	SPSR2-10	

OUTLET NO.	LAST OUTLET	DISTANCE TO PIVOT	GPM NEED	GPM DEL.	PIPE PSI	NOZZLE PSI	SPRINKLER LABEL AND NOZZLE SIZE	SPRK NO.	REG SIZE	PLUG NO.
380		932.51	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	293
381		934.93	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	294
382	9.84	937.43	8.73	8.76	19.73	10.42	XCEL TOP UP3 19.5 BLACK	88	SPSR2-10	
383		939.93	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	295
384		942.26	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	296
TOWER 6	157.04	944.84	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	297
385		945.16	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	297
386	10.31	947.74	8.78	8.76	19.67	10.42	XCEL TOP UP3 19.5 BLACK	89	SPSR2-10	
387		950.07	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	298
388		952.57	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	299
389		955.07	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	300
390	9.75	957.49	8.63	8.76	19.47	10.42	XCEL TOP UP3 19.5 BLACK	90	SPSR2-10	
391		959.91	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	301
392		962.41	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	302
393		964.83	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	303
394	9.76	967.25	8.76	8.76	19.19	10.42	XCEL TOP UP3 19.5 BLACK	91	SPSR2-10	
395		969.75	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	304
396		972.17	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	305
397		974.59	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	306
398	9.84	977.09	8.88	8.76	18.94	10.42	XCEL TOP UP3 19.5 BLACK	92	SPSR2-10	
399		979.51	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	307
400		981.93	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	308
401		984.43	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	309
402	9.84	986.93	8.89	8.76	18.74	10.43	XCEL TOP UP3 19.5 BLACK	93	SPSR2-10	
403		989.26	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	310
404		991.75	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	311
405		994.08	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	312
406	9.65	996.58	8.98	9.17	18.58	10.35	XCEL TOP UP3 20 DK TURQUOISE	94	SPSR2-10	
407		999.08	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	313
408		1001.50	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	314
409		1003.92	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	315
410	9.84	1006.42	9.08	9.18	18.45	10.35	XCEL TOP UP3 20 DK TURQUOISE	95	SPSR2-10	
411		1008.92	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	316
412		1011.25	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	317
413		1013.78	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	318
414	9.69	1016.11	9.17	9.18	18.37	10.35	XCEL TOP UP3 20 DK TURQUOISE	96	SPSR2-10	
415		1018.61	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	319
416		1021.11	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	320
417		1023.53	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	321
418	9.84	1025.95	9.32	9.18	18.32	10.35	XCEL TOP UP3 20 DK TURQUOISE	97	SPSR2-10	
419		1028.45	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	322
420		1030.87	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	323
421		1033.29	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	324
422	9.84	1035.79	9.38	9.18	18.31	10.35	XCEL TOP UP3 20 DK TURQUOISE	98	SPSR2-10	
423		1038.21	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	325
424		1040.63	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	326
425		1043.13	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	327
426	9.76	1045.55	9.43	9.60	18.34	10.27	XCEL TOP UP3 20.5 DK TURQ	99	SPSR2-10	

OUTLET NO.	LAST OUTLET	DISTANCE TO PIVOT	GPM NEED	GPM DEL.	PIPE PSI	NOZZLE PSI	SPRINKLER LABEL AND NOZZLE SIZE	SPRK NO.	REG SIZE	PLUG NO.	
474		9.84	1163.46	10.48	10.44	17.96	10.09 XCEL TOP UP3 21.5 MUSTARD	111	SPSR2-10		
475			1165.96	-	-	-	- - - - -	-	-	364	
476			1168.29	-	-	-	- - - - -	-	-	365	
477			1170.82	-	-	-	- - - - -	-	-	366	
478	9.69		1173.15	10.57	10.45	17.90	10.09 XCEL TOP UP3 21.5 MUSTARD	112	SPSR2-10		
479			1175.65	-	-	-	- - - - -	-	-	367	
480			1178.15	-	-	-	- - - - -	-	-	368	
481			1180.57	-	-	-	- - - - -	-	-	369	
482	9.84		1182.99	10.75	10.86	17.88	9.97 XCEL TOP UP3 22 MAROON	113	SPSR2-10		
483			1185.49	-	-	-	- - - - -	-	-	370	
484			1187.91	-	-	-	- - - - -	-	-	371	
485			1190.33	-	-	-	- - - - -	-	-	372	
486	9.84		1192.83	10.79	10.86	17.89	9.97 XCEL TOP UP3 22 MAROON	114	SPSR2-10		
487			1195.25	-	-	-	- - - - -	-	-	373	
488			1197.67	-	-	-	- - - - -	-	-	374	
489			1200.17	-	-	-	- - - - -	-	-	375	
490	9.76		1202.59	10.82	10.87	17.95	9.97 XCEL TOP UP3 22 MAROON	115	SPSR2-10		
491			1205.01	-	-	-	- - - - -	-	-	376	
492			1207.51	-	-	-	- - - - -	-	-	377	
493			1210.01	-	-	-	- - - - -	-	-	378	
494	9.75		1212.34	10.93	10.87	18.04	9.98 XCEL TOP UP3 22 MAROON	116	SPSR2-10		
495			1214.82	-	-	-	- - - - -	-	-	379	
496			1217.15	-	-	-	- - - - -	-	-	380	
497			1219.65	-	-	-	- - - - -	-	-	381	
498	9.81		1222.15	11.03	10.87	18.17	9.98 XCEL TOP UP3 22 MAROON	117	SPSR2-10		
499			1224.57	-	-	-	- - - - -	-	-	382	
500			1226.99	-	-	-	- - - - -	-	-	383	
501			1229.49	-	-	-	- - - - -	-	-	384	
502	9.76		1231.91	11.11	11.29	18.34	9.86 XCEL TOP UP3 22.5 MAROON	118	SPSR2-10		
503			1234.33	-	-	-	- - - - -	-	-	385	
504			1236.83	-	-	-	- - - - -	-	-	386	
505			1239.25	-	-	-	- - - - -	-	-	387	
506	9.76		1241.67	11.22	11.29	18.55	9.86 XCEL TOP UP3 22.5 MAROON	119	SPSR2-10		
507			1244.17	-	-	-	- - - - -	-	-	388	
508			1246.59	-	-	-	- - - - -	-	-	389	
509			1249.01	-	-	-	- - - - -	-	-	390	
510	9.84		1251.51	11.16	11.29	18.76	9.86 XCEL TOP UP3 22.5 MAROON	120	SPSR2-10		
511			1254.01	-	-	-	- - - - -	-	-	391	
512			1256.34	-	-	-	- - - - -	-	-	392	
TOWER 8	157.04		1258.92	PIPE ID CHANGES FROM 6.395 TO 5.369							
513	9.53		1261.04	11.15	11.29	18.75	9.86 XCEL TOP UP3 22.5 MAROON	121	SPSR2-10		
514			1263.37	-	-	-	- - - - -	-	-	393	
515			1265.87	-	-	-	- - - - -	-	-	394	
516			1268.37	-	-	-	- - - - -	-	-	395	
517	9.75		1270.79	11.32	11.29	18.73	9.87 XCEL TOP UP3 22.5 MAROON	122	SPSR2-10		
518			1273.21	-	-	-	- - - - -	-	-	396	
519			1275.71	-	-	-	- - - - -	-	-	397	

OUTLET NO.	LAST OUTLET	DISTANCE TO PIVOT	GPM NEED	GPM DEL.	PIPE PSI	NOZZLE PSI	SPRINKLER LABEL AND NOZZLE SIZE	SPRK NO.	REG SIZE	PLUG NO.
520		1278.21	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	398
521	9.75	1280.54	11.57	11.72	18.72	9.75	XCEL TOP UP3 23 CREAM	123	SPSR2-10	
522		1283.04	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	399
523		1285.54	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	400
524		1288.04	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	401
525	10.00	1290.54	11.69	11.72	18.70	9.75	XCEL TOP UP3 23 CREAM	124	SPSR2-10	
OVERHANG	33.87	1292.79	123.90	ENDGUN	(1) NELSON SR-100 .80 TB		LINDSAY 3HP BOOSTER PUMP			

BOOSTER PUMP AT END ADDS 31.36 PSI TO PIPE PRESSURE FOR A PRESSURE OF 50.06 PSI
 FRICTION LOSS THROUGH ENDGUN VALVE IS 5.07 PSI - ENDGUN PRESSURE IS 44.99 PSI

TOTAL GPM = 900.67

GPA = 6.42

MINIMUM RECOMMENDED REGULATOR INLET PRESSURE IS 15.00 PSI
 WITH GRADUATED ELEVATION OF 6.00 FT THE INLET PRESSURE IS 15.50 PSI FOR SPRINKLER 114
 THIS POSITION IS THE CLOSEST TO THE MINIMUM RECOMMENDED INLET PRESSURE

HYDRAULICS SUMMARY

TOWER NUMBER	ACRES UNDER SPAN	GPM NEED	ACTUAL GPM	PERCENT DEVIATION	GPM PER ACRE	AVERAGE IN. PER HR DELIVERED UNDER SPAN	AVERAGE IN. DELIVERED FOR REVOLUTION TIME		
							36 HR	48 HR	60 HR
1	1.84	11.79	13.12	11%	7.14	0.016	0.57	0.76	0.95
2	5.39	34.62	34.57	0%	6.41	0.014	0.51	0.68	0.85
3	8.95	57.44	57.47	0%	6.42	0.014	0.51	0.68	0.85
4	12.51	80.27	80.12	0%	6.41	0.014	0.51	0.68	0.85
5	16.07	103.09	102.75	0%	6.40	0.014	0.51	0.68	0.85
6	19.62	125.92	125.58	0%	6.40	0.014	0.51	0.68	0.85
7	23.18	148.75	148.55	0%	6.41	0.014	0.51	0.68	0.85
8	26.74	171.57	171.70	0%	6.42	0.014	0.51	0.68	0.85
OVERHANG	6.23	40.00	42.89	7%	6.88	0.015	0.55	0.73	0.91
ENDGUN	18.49	126.55	123.90	4%	6.70				
TOTAL	139.03	900.00	900.67		6.48				

SUMMARY OF SPRINKLERS

5 XCEL TOP UP3 6 GOLD
1 XCEL TOP UP3 6.5 GOLD
2 XCEL TOP UP3 7 LIME
1 XCEL TOP UP3 7.5 LIME
1 XCEL TOP UP3 8 LAVENDER
1 XCEL TOP UP3 8.5 LAVENDER
2 XCEL TOP UP3 9 GREY
2 XCEL TOP UP3 9.5 GREY
2 XCEL TOP UP3 10 TURQUOISE
1 XCEL TOP UP3 10.5 TURQ
3 XCEL TOP UP3 11 YELLOW
5 XCEL TOP UP3 11.5 YELLOW
6 XCEL TOP UP3 12 RED
4 XCEL TOP UP3 12.5 RED
3 XCEL TOP UP3 13 WHITE
4 XCEL TOP UP3 13.5 WHITE
3 XCEL TOP UP3 14 BLUE
4 XCEL TOP UP3 14.5 BLUE
4 XCEL TOP UP3 15 DK BROWN
3 XCEL TOP UP3 15.5 DK BROWN
5 XCEL TOP UP3 16 ORANGE
5 XCEL TOP UP3 16.5 ORANGE
3 XCEL TOP UP3 17 DK GREEN
5 XCEL TOP UP3 17.5 DK GREEN
4 XCEL TOP UP3 18 PURPLE
5 XCEL TOP UP3 18.5 PURPLE
3 XCEL TOP UP3 19 BLACK
6 XCEL TOP UP3 19.5 BLACK
5 XCEL TOP UP3 20 DK TURQUOISE
4 XCEL TOP UP3 20.5 DK TURQ
4 XCEL TOP UP3 21 MUSTARD
6 XCEL TOP UP3 21.5 MUSTARD
5 XCEL TOP UP3 22 MAROON
5 XCEL TOP UP3 22.5 MAROON
2 XCEL TOP UP3 23 CREAM

401 PLUGS**SUMMARY OF REGULATORS**

124 Senn PSR2 10 psi

TOTAL OF 124 REGULATORS

NOZZLE POSITION CHART

XCEL TOP UP3 6 GOLD	1, 2, 3, 4, 5
XCEL TOP UP3 6.5 GOLD	6
XCEL TOP UP3 7 LIME	7, 8
XCEL TOP UP3 7.5 LIME	9
XCEL TOP UP3 8 LAVENDER	10
XCEL TOP UP3 8.5 LAVENDER	11
XCEL TOP UP3 9 GREY	12, 13
XCEL TOP UP3 9.5 GREY	14, 15
XCEL TOP UP3 10 TURQUOISE	16, 17
XCEL TOP UP3 10.5 TURQ	18
XCEL TOP UP3 11 YELLOW	19, 20, 26
XCEL TOP UP3 11.5 YELLOW	21, 22, 27, 28, 29
XCEL TOP UP3 12 RED	23, 24, 25, 30, 31, 32
XCEL TOP UP3 12.5 RED	33, 34, 35, 36
XCEL TOP UP3 13 WHITE	37, 38, 39
XCEL TOP UP3 13.5 WHITE	40, 41, 42, 43
XCEL TOP UP3 14 BLUE	44, 45, 46
XCEL TOP UP3 14.5 BLUE	47, 48, 49, 50
XCEL TOP UP3 15 DK BROWN	51, 52, 53, 54
XCEL TOP UP3 15.5 DK BROWN	55, 56, 58
XCEL TOP UP3 16 ORANGE	57, 59, 60, 61, 62
XCEL TOP UP3 16.5 ORANGE	63, 64, 65, 66, 67
XCEL TOP UP3 17 DK GREEN	68, 69, 70
XCEL TOP UP3 17.5 DK GREEN	71, 72, 73, 74, 75
XCEL TOP UP3 18 PURPLE	76, 77, 78, 79
XCEL TOP UP3 18.5 PURPLE	80, 81, 82, 83, 84
XCEL TOP UP3 19 BLACK	85, 86, 87
XCEL TOP UP3 19.5 BLACK	88, 89, 90, 91, 92, 93
XCEL TOP UP3 20 DK TURQUOISE	94, 95, 96, 97, 98
XCEL TOP UP3 20.5 DK TURQ	99, 100, 101, 102
XCEL TOP UP3 21 MUSTARD	103, 104, 106, 107
XCEL TOP UP3 21.5 MUSTARD	105, 108, 109, 110, 111, 112
XCEL TOP UP3 22 MAROON	113, 114, 115, 116, 117
XCEL TOP UP3 22.5 MAROON	118, 119, 120, 121, 122
XCEL TOP UP3 23 CREAM	123, 124

FREY PIVOT SERVICE
77 COUNTY ROAD 40
STAPLETON, NEBRASKA 69163

2002 LINDSAY GEN II - 30

SEPTEMBER 30, 2025
WISH-119638
KEVIN MULVEY
SW 1/4 10-16-28
900 GPM @ 32 PSI

SENNINGER 10 PSI REGULATORS
NO DROPS
NELSON SR-100 .80 TB

Rotation time at 100% = 13.59 Hours Or 815 minutes

900 GPM @ 32 PSI

Installation Chart

Page 1

Out #	Drop Len	Sprk #	Noz Size	Reg	Out #	Drop Len	Sprk #	Noz Size	Reg	Out #	Drop Len	Sprk #	Noz Size	Reg	Out #	Drop Len	Sprk #	Noz Size	Reg	Out #	Drop Len	Sprk #	Noz Size	Reg		
1	PLUG				61	PLUG				56		23	12	PSR210	51	PLUG				46		52	15	PSR210		
2	PLUG				62	PLUG				57	PLUG				52	PLUG				47	PLUG					
3	PLUG				63	PLUG				58	PLUG				53	PLUG				48	PLUG					
4	PLUG				64	PLUG				59	PLUG				54	PLUG				49	PLUG					
5	PLUG				TOWER 1				60	PLUG				55	PLUG				50	PLUG						
6	PLUG				1	12	9		PSR210	61		24	12	PSR210	56	PLUG				51	PLUG					
7	PLUG				2	PLUG				62	PLUG				57	PLUG				52	PLUG					
8	PLUG				3	PLUG				63	PLUG				58	PLUG				53	PLUG					
9	PLUG				4	PLUG				64	PLUG				59	PLUG				54	PLUG					
10	1	6		PSR210	5	PLUG				TOWER 2				60	PLUG				55	PLUG						
11	PLUG				6		13	9		PSR210	1	PLUG			61	PLUG				56	PLUG					
12	PLUG				7	PLUG				2	PLUG		25	12	PSR210	62		40	13.5	PSR210	57	PLUG				
13	PLUG				8	PLUG				3	PLUG				63	PLUG				58	PLUG					
14	PLUG				9	PLUG				4	PLUG				64	PLUG				59	PLUG					
15	2	6		PSR210	10	PLUG				5	PLUG				TOWER 3				60	PLUG						
16	PLUG				11	14	9.5		PSR210	6	PLUG		26	11	PSR210	1	PLUG				61	PLUG				
17	PLUG				12	PLUG				7	PLUG				2	PLUG				62	PLUG					
18	PLUG				13	PLUG				8	PLUG				3	PLUG				63	PLUG					
19	PLUG				14	PLUG				9	PLUG				4	PLUG				64	PLUG					
20	3	6		PSR210	15	PLUG				10	PLUG		27	11.5	PSR210	5	PLUG				TOWER 4					
21	PLUG				16	15	9.5		PSR210	11	PLUG				6	PLUG				1	PLUG					
22	PLUG				17	PLUG				12	PLUG				7	PLUG				2	PLUG					
23	PLUG				18	PLUG				13	PLUG				8	PLUG				3	PLUG					
24	PLUG				19	PLUG				14	PLUG		28	11.5	PSR210	9	PLUG				4	PLUG				
25	4	6		PSR210	20	PLUG				15	PLUG				10	PLUG				5	PLUG					
26	PLUG				21		16	10		PSR210	16	PLUG				11	PLUG				6	PLUG				
27	PLUG				22	PLUG				17	PLUG				12	PLUG				7	PLUG					
28	PLUG				23	PLUG				18	PLUG		29	11.5	PSR210	13	PLUG				8	PLUG				
29	PLUG				24	PLUG				19	PLUG				14	PLUG				9	PLUG					
30	5	6		PSR210	25	PLUG				20	PLUG				15	PLUG				10	PLUG					
31	PLUG				26		17	10		PSR210	21	PLUG				16	PLUG				11	PLUG				
32	PLUG				27	PLUG				22	PLUG		30	12	PSR210	17	PLUG				12	PLUG				
33	PLUG				28	PLUG				23	PLUG				18	PLUG				13	PLUG					
34	PLUG				29	PLUG				24	PLUG				19	PLUG				14	PLUG					
35	6	6.5		PSR210	30	PLUG				25	PLUG				20	PLUG				15	PLUG					
36	PLUG				31		18	10.5		PSR210	26	PLUG		31	12	PSR210	21	PLUG				16	PLUG			
37	PLUG				32	PLUG				27	PLUG				22	PLUG				17	PLUG					
38	PLUG				33	PLUG				28	PLUG				23	PLUG				18	PLUG					
39	PLUG				34	PLUG				29	PLUG				24	PLUG				19	PLUG					
40	7	7		PSR210	35	PLUG				30	PLUG		32	12	PSR210	25	PLUG				20	PLUG				
41	PLUG				36		19	11		PSR210	31	PLUG				26	PLUG				21	PLUG				
42	PLUG				37	PLUG				32	PLUG				27	PLUG				22	PLUG					
43	PLUG				38	PLUG				33	PLUG				28	PLUG				23	PLUG					
44	PLUG				39	PLUG				34	PLUG		33	12.5	PSR210	29	PLUG				24	PLUG				
45	8	7		PSR210	40	PLUG				35	PLUG				30	PLUG				25	PLUG					
46	PLUG				41		20	11		PSR210	36	PLUG				31	PLUG				26	PLUG				
47	PLUG				42	PLUG				37	PLUG				32	PLUG				27	PLUG					
48	PLUG				43	PLUG				38	PLUG				34	PLUG				28	PLUG					
49	PLUG				44	PLUG				39	PLUG		34	12.5	PSR210	33	PLUG				29	PLUG				
50	9	7.5		PSR210	45	PLUG				40	PLUG				35	PLUG				30	PLUG					
51	PLUG				46		21	11.5		PSR210	41	PLUG				36	PLUG				31	PLUG				
52	PLUG				47	PLUG				42	PLUG		35	12.5	PSR210	37	PLUG				32	PLUG				
53	PLUG				48	PLUG				43	PLUG				38	PLUG				33	PLUG					
54	PLUG				49	PLUG				44	PLUG				39	PLUG				34	PLUG					
55	10	8		PSR210	50	PLUG				45	PLUG				40	PLUG				35	PLUG					
56	PLUG				51		22	11.5		PSR210	46	PLUG		36	12.5	PSR210	41	PLUG				36	PLUG			
57	PLUG				52	PLUG				47	PLUG				42	PLUG				37	PLUG					
58	PLUG				53	PLUG				48	PLUG				43	PLUG				38	PLUG					
59	PLUG				54	PLUG				49	PLUG				44	PLUG				39	PLUG					
60	11	8.5		PSR210	55	PLUG				50	PLUG		37	13	PSR210	45	PLUG				40	PLUG				

**FREY PIVOT SERVICE
77 COUNTY ROAD 40
STAPLETON, NEBRASKA 69163**

2002 LINDSAY GEN II - 30

SEPTEMBER 30, 2025
WISH-119638
KEVIN MULVEY
SW 1/4 10-16-28
900 GPM @ 32 PSI

**SENNINGER 10 PSI REGULATORS
NO DROPS
NELSON SR-100 .80 TB**

Rotation time at 100% = 13.59 Hours Or 815 minutes

900 GPM @ 32 PSI

Page 2

Installation Chart																		Page 2		
Out #	Drop Len	Sprk #	Noz Size	Reg	Out #	Drop Len	Sprk #	Noz Size	Reg	Out #	Drop Len	Sprk #	Noz Size	Reg	Out #	Drop Len	Sprk #	Noz Size	Reg	
41	PLUG				36	PLUG				31	PLUG				26		111	21.5	PSR210	
42		67	16.5	PSR210	37	PLUG				32	PLUG				27	PLUG				
43	PLUG				38		82	18.5	PSR210	33	PLUG				28	PLUG				
44	PLUG				39	PLUG				34		97	20	PSR210	29	PLUG				
45	PLUG				40	PLUG				35	PLUG				30		112	21.5	PSR210	
46		68	17	PSR210	41	PLUG				36	PLUG				31	PLUG				
47	PLUG				42		83	18.5	PSR210	37	PLUG				32	PLUG				
48	PLUG				43	PLUG				38		98	20	PSR210	33	PLUG				
49	PLUG				44	PLUG				39	PLUG				34		113	22	PSR210	
50		69	17	PSR210	45	PLUG				40	PLUG				35	PLUG				
51	PLUG				46		84	18.5	PSR210	41	PLUG				36	PLUG				
52	PLUG				47	PLUG				42		99	20.5	PSR210	37	PLUG				
53	PLUG				48	PLUG				43	PLUG				38		114	22	PSR210	
54		70	17	PSR210	49	PLUG				44	PLUG				39	PLUG				
55	PLUG				50		85	19	PSR210	45	PLUG				40	PLUG				
56	PLUG				51	PLUG				46		100	20.5	PSR210	41	PLUG				
57	PLUG				52	PLUG				47	PLUG				42		115	22	PSR210	
58		71	17.5	PSR210	53	PLUG				48	PLUG				43	PLUG				
59	PLUG				54		86	19	PSR210	49	PLUG				44	PLUG				
60	PLUG				55	PLUG				50		101	20.5	PSR210	45	PLUG				
61	PLUG				56	PLUG				51	PLUG				46		116	22	PSR210	
62		72	17.5	PSR210	57	PLUG				52	PLUG				47	PLUG				
63	PLUG				58		87	19	PSR210	53	PLUG				48	PLUG				
64	PLUG				59	PLUG				54		102	20.5	PSR210	49	PLUG				
TOWER 5	PLUG				60	PLUG				55	PLUG				50		117	22	PSR210	
					61	PLUG				56	PLUG				51	PLUG				
1		73	17.5	PSR210	62		88	19.5	PSR210	57	PLUG				52	PLUG				
2	PLUG				63	PLUG				58		103	21	PSR210	53	PLUG				
3	PLUG				64	PLUG				59	PLUG				54		118	22.5	PSR210	
4	PLUG				TOWER 6	1	PLUG			60	PLUG				55	PLUG				
5	PLUG					2	89	19.5	PSR210	62	PLUG				56	PLUG				
6		74	17.5	PSR210		3	PLUG			63	PLUG				57	PLUG				
7	PLUG					4	PLUG			64	PLUG				58		119	22.5	PSR210	
8	PLUG					5	PLUG			TOWER 7	60	PLUG				59	PLUG			
9	PLUG					6	PLUG				61	PLUG				60				
10		75	17.5	PSR210		7	PLUG				62	PLUG				61	PLUG			
11	PLUG					8	PLUG				63	PLUG				62		120	22.5	PSR210
12	PLUG					9	PLUG				64	PLUG				63	PLUG			
13	PLUG					10	PLUG			TOWER 8	65	PLUG				64	PLUG			
14		76	18	PSR210		11	PLUG				66	PLUG				65		121	22.5	PSR210
15	PLUG					12	PLUG				67	PLUG				66	PLUG			
16	PLUG					13	PLUG				68	PLUG				67	PLUG			
17	PLUG					14	PLUG				69	PLUG				68	PLUG			
18		77	18	PSR210		15	PLUG				70	PLUG				69		122	22.5	PSR210
19	PLUG					16	PLUG				71	PLUG				70	PLUG			
20	PLUG					17	PLUG				72	PLUG				71	PLUG			
21	PLUG					18	PLUG				73	PLUG				72	PLUG			
22		78	18	PSR210		19	PLUG				74	PLUG				73	PLUG			
23	PLUG					20	PLUG				75	PLUG				74	PLUG			
24	PLUG					21	PLUG				76	PLUG				75		123	23	PSR210
25	PLUG					22	PLUG				77	PLUG				76	PLUG			
26		79	18	PSR210		23	PLUG				78	PLUG				77	PLUG			
27	PLUG					24	PLUG				79	PLUG				78	PLUG			
28	PLUG					25	PLUG				80	PLUG				79		124	23	PSR210
29	PLUG					26	PLUG				81	PLUG				80	PLUG			
30		80	18.5	PSR210		27	PLUG				82	PLUG				81	PLUG			
31	PLUG					28	PLUG				83	PLUG				82	PLUG			
32	PLUG					29	PLUG				84	PLUG				83	PLUG			
33	PLUG					30	PLUG				85	PLUG				84	PLUG			
34	PLUG						96	20	PSR210		86	PLUG				85	PLUG			
35	PLUG						97	20	PSR210		87	PLUG				86	PLUG			

PRECIPITATION CHART FOR FULL CIRCLE

WISH-119638

SEPTEMBER 30, 2025

DEALER - FREY PIVOT SERVICE

IRRIGATOR - KEVIN MULVEY
FIELD - SW 1/4 10-16-28

TOTAL LENGTH PIPE = 1292.79 SYSTEM PRESSURE = 32 PSI
 GPM UNDER PIPE = 776.77 TOTAL GPM = 900.67
 ACRES UNDER PIPE = 120.54
 RANGE OF ENDGUN = 95.63 RUN FOR MINIMUM PRESSURE
 GPM OF ENDGUN = 123.90
 ACRES UNDER ENDGUN = 18.49
 WATERING LENGTH = 1388.42

MOTOR SIZE (HP) = 3/4
 LOADED MOTOR RPM = 1750
 CENTER GEAR BOX RATIO = 40
 WHEEL GEAR BOX RATIO = 50
 TIRE SIZE = 11 X 24.5
 LAST TOWER SPEED (FPM) = 9.70

PRECIPITATION DATA FIGURED WITH ENDGUN RUNNING

PRECIPITATION BASED

% TIMER BASED

PRECIPITATION INCHES	% TIMER SETTING	TIME HOURS	% TIMER SETTING	PRECIPITATION INCHES	TIME HOURS
.19	100.00	13.59 - 815(min)	100.00	.19	13.59 - 815(min)
.20	96.76	14.05	90.00	.22	15.10
.25	77.41	17.56	80.00	.24	16.99
.30	64.51	21.07	70.00	.28	19.42
.40	48.38	28.09	60.00	.32	22.65
.50	38.71	35.11	50.00	.39	27.18
.60	32.25	42.14	45.00	.43	30.20
.70	27.65	49.16	40.00	.48	33.98
.75	25.80	52.67	35.00	.55	38.83
.80	24.19	56.18	30.00	.65	45.30
.90	21.50	63.21	25.00	.77	54.36
1.00	19.35	70.23	20.00	.97	67.96
1.25	15.48	87.79	15.00	1.29	90.61
1.50	12.90	105.34	10.00	1.94	135.91
1.75	11.06	122.90	5.00	3.87	271.82

CAUTION: The relationship between precipitation rate, timer setting, and hours per revolution provided above are theoretical numbers based on the data list at the top of the page. Actual precipitation rates may vary due to the following field and machine conditions: wind drift; evaporation; tire slippage, tire loaded radius; drive train efficiency; elevation changes; soil type. Due to these varying field and machine conditions the above chart should be used as a guide only.