

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.

<u>DEALER</u> FREY PIVOT SERVICE 77 COUNTY ROAD 40 STAPLETON, NEBRASKA 69163			<u>IRRIGATOR</u> 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	12.14	120.37	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	41
50		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	12.18	132.63	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	45
55		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	12.26	144.89	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	49
60		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	159.64	157.06	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	53
TOWER 1		159.64													
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	12.33	167.37	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	56
69		169.87	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	57
70		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	12.26	179.63	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	60
74		182.05	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	61
75		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	12.18	191.89	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	64
79		194.31	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	65
80		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	12.15	204.06	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	68
84		206.55	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	69
85		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	12.34	216.30	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	72
89		218.72	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	73
90		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	12.19	228.58	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	76
94		230.91	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	77
95		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	316.68																	
129		317.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	105
130	12.81	319.58	3.32	3.44	26.63	11.26	XCEL	TOP	UP3	12	RED						25	SPSR2-10	
131		321.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	106
132		324.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107
133		326.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	108
134	9.75	329.33	2.97	2.89	26.33	11.31	XCEL	TOP	UP3	11	YELLOW						26	SPSR2-10	
135		331.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	109
136		334.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	110
137		336.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	111
138	9.76	339.09	3.07	3.15	25.94	11.28	XCEL	TOP	UP3	11.5	YELLOW						27	SPSR2-10	
139		341.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	112
140		344.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	113
141		346.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	114
142	9.84	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													
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.
427		1047.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328		
428		1050.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	329		
429		1052.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	330		
430	9.75	1055.30	9.54	9.60	18.41	10.27	XCEL	TOP	UP3	20.5	DK	TURQ		100	SPSR2-10				
431		1057.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	331		
432		1060.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	332		
433		1062.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	333		
434	9.81	1065.11	9.63	9.60	18.52	10.27	XCEL	TOP	UP3	20.5	DK	TURQ		101	SPSR2-10				
435		1067.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	334		
436		1069.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	335		
437		1072.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	336		
438	9.76	1074.87	9.70	9.60	18.67	10.27	XCEL	TOP	UP3	20.5	DK	TURQ		102	SPSR2-10				
439		1077.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	337		
440		1079.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	338		
441		1082.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	339		
442	9.76	1084.63	9.83	10.02	18.86	10.19	XCEL	TOP	UP3	21	MUSTARD		103	SPSR2-10					
443		1087.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	340		
444		1089.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	341		
445		1091.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	342		
446	9.84	1094.47	10.19	10.03	19.05	10.20	XCEL	TOP	UP3	21	MUSTARD		104	SPSR2-10					
447		1096.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	343		
448		1099.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	344		
TOWER 7	157.04	1101.88																	
449		1102.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	345		
450	10.31	1104.78	10.24	10.44	19.02	10.08	XCEL	TOP	UP3	21.5	MUSTARD		105	SPSR2-10					
451		1107.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	346		
452		1109.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	347		
453		1112.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	348		
454	9.75	1114.53	10.04	10.03	18.85	10.19	XCEL	TOP	UP3	21	MUSTARD		106	SPSR2-10					
455		1116.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	349		
456		1119.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350		
457		1121.87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	351		
458	9.76	1124.29	10.18	10.03	18.59	10.20	XCEL	TOP	UP3	21	MUSTARD		107	SPSR2-10					
459		1126.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	352		
460		1129.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	353		
461		1131.63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	354		
462	9.84	1134.13	10.32	10.44	18.37	10.08	XCEL	TOP	UP3	21.5	MUSTARD		108	SPSR2-10					
463		1136.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	355		
464		1138.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	356		
465		1141.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	357		
466	9.84	1143.97	10.30	10.44	18.20	10.08	XCEL	TOP	UP3	21.5	MUSTARD		109	SPSR2-10					
467		1146.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	358		
468		1148.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	359		
469		1151.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	360		
470	9.65	1153.62	10.38	10.44	18.06	10.08	XCEL	TOP	UP3	21.5	MUSTARD		110	SPSR2-10					
471		1156.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	361		
472		1158.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	362		
473		1160.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	363		

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

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		38	13	PSR210	49	PLUG			
5	PLUG				TOWER 1					60	PLUG				55	PLUG				50	PLUG	53	15	PSR210
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		39	13	PSR210	53	PLUG			
9	PLUG				4	PLUG				64	PLUG				59	PLUG				54		54	15	PSR210
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		25	12	PSR210	62		40	13.5	PSR210	57	PLUG			
13	PLUG				8	PLUG				3	PLUG				63	PLUG				58		55	15.5	PSR210
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		26	11	PSR210	1	PLUG				61	PLUG			
17	PLUG				12	PLUG				7	PLUG				2		41	13.5	PSR210	62		56	15.5	PSR210
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		27	11.5	PSR210	5	PLUG				TOWER 4				
21	PLUG				16		15	9.5	PSR210	11	PLUG				6		42	13.5	PSR210	1	PLUG			
22	PLUG				17	PLUG				12	PLUG				7	PLUG				2		57	16	PSR210
23	PLUG				18	PLUG				13	PLUG				8	PLUG				3	PLUG			
24	PLUG				19	PLUG				14		28	11.5	PSR210	9	PLUG				4	PLUG			
25		4	6	PSR210	20	PLUG				15	PLUG				10		43	13.5	PSR210	5	PLUG			
26	PLUG				21		16	10	PSR210	16	PLUG				11	PLUG				6		58	15.5	PSR210
27	PLUG				22	PLUG				17	PLUG				12	PLUG				7	PLUG			
28	PLUG				23	PLUG				18		29	11.5	PSR210	13	PLUG				8	PLUG			
29	PLUG				24	PLUG				19	PLUG				14		44	14	PSR210	9	PLUG			
30		5	6	PSR210	25	PLUG				20	PLUG				15	PLUG				10		59	16	PSR210
31	PLUG				26		17	10	PSR210	21	PLUG				16	PLUG				11	PLUG			
32	PLUG				27	PLUG				22	PLUG		12	PSR210	17	PLUG				12	PLUG			
33	PLUG				28	PLUG				23	PLUG				18		45	14	PSR210	13	PLUG			
34	PLUG				29	PLUG				24	PLUG				19	PLUG				14		60	16	PSR210
35		6	6.5	PSR210	30	PLUG				25	PLUG				20	PLUG				15	PLUG			
36	PLUG				31		18	10.5	PSR210	26		31	12	PSR210	21	PLUG				16	PLUG			
37	PLUG				32	PLUG				27	PLUG				22		46	14	PSR210	17	PLUG			
38	PLUG				33	PLUG				28	PLUG				23	PLUG				18		61	16	PSR210
39	PLUG				34	PLUG				29	PLUG				24	PLUG				19	PLUG			
40		7	7	PSR210	35	PLUG				30		32	12	PSR210	25	PLUG				20	PLUG			
41	PLUG				36		19	11	PSR210	31	PLUG				26		47	14.5	PSR210	21	PLUG			
42	PLUG				37	PLUG				32	PLUG				27	PLUG				22		62	16	PSR210
43	PLUG				38	PLUG				33	PLUG				28	PLUG				23	PLUG			
44	PLUG				39	PLUG				34		33	12.5	PSR210	29	PLUG				24	PLUG			
45		8	7	PSR210	40	PLUG				35	PLUG				30		48	14.5	PSR210	25	PLUG			
46	PLUG				41		20	11	PSR210	36	PLUG				31	PLUG				26		63	16.5	PSR210
47	PLUG				42	PLUG				37	PLUG				32	PLUG				27	PLUG			
48	PLUG				43	PLUG				38		34	12.5	PSR210	33	PLUG				28	PLUG			
49	PLUG				44	PLUG				39	PLUG				34		49	14.5	PSR210	29	PLUG			
50		9	7.5	PSR210	45	PLUG				40	PLUG				35	PLUG				30		64	16.5	PSR210
51	PLUG				46		21	11.5	PSR210	41	PLUG				36	PLUG				31	PLUG			
52	PLUG				47	PLUG				42		35	12.5	PSR210	37	PLUG				32	PLUG			
53	PLUG				48	PLUG				43	PLUG				38		50	14.5	PSR210	33	PLUG			
54	PLUG				49	PLUG				44	PLUG				39	PLUG				34		65	16.5	PSR210
55		10	8	PSR210	50	PLUG				45	PLUG				40	PLUG				35	PLUG			
56	PLUG				51		22	11.5	PSR210	46		36	12.5	PSR210	41	PLUG				36	PLUG			
57	PLUG				52	PLUG				47	PLUG				42		51	15	PSR210	37	PLUG			
58	PLUG				53	PLUG				48	PLUG				43	PLUG				38		66	16.5	PSR210
59	PLUG				54	PLUG				49	PLUG				44	PLUG				39	PLUG			
60		11	8.5	PSR210	55	PLUG				50		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

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				60	PLUG				55	PLUG				50		117	22	PSR210
1	PLUG				61	PLUG				56	PLUG				51	PLUG			
2		73	17.5	PSR210	62		88	19.5	PSR210	57	PLUG				52	PLUG			
3	PLUG				63	PLUG				58		103	21	PSR210	53	PLUG			
4	PLUG				64	PLUG				59	PLUG				54		118	22.5	PSR210
5	PLUG					TOWER 6				60	PLUG				55	PLUG			
6		74	17.5	PSR210	1	PLUG				61	PLUG				56	PLUG			
7	PLUG				2		89	19.5	PSR210	62		104	21	PSR210	57	PLUG			
8	PLUG				3	PLUG				63	PLUG				58		119	22.5	PSR210
9	PLUG				4	PLUG				64	PLUG				59	PLUG			
10		75	17.5	PSR210	5	PLUG					TOWER 7				60	PLUG			
11	PLUG				6		90	19.5	PSR210	1	PLUG				61	PLUG			
12	PLUG				7	PLUG				2		105	21.5	PSR210	62		120	22.5	PSR210
13	PLUG				8	PLUG				3	PLUG				63	PLUG			
14		76	18	PSR210	9	PLUG				4	PLUG				64	PLUG			
15	PLUG				10		91	19.5	PSR210	5	PLUG					TOWER 8			
16	PLUG				11	PLUG				6		106	21	PSR210	1		121	22.5	PSR210
17	PLUG				12	PLUG				7	PLUG				2	PLUG			
18		77	18	PSR210	13	PLUG				8	PLUG				3	PLUG			
19	PLUG				14		92	19.5	PSR210	9	PLUG				4	PLUG			
20	PLUG				15	PLUG				10		107	21	PSR210	5		122	22.5	PSR210
21	PLUG				16	PLUG				11	PLUG				6	PLUG			
22		78	18	PSR210	17	PLUG				12	PLUG				7	PLUG			
23	PLUG				18		93	19.5	PSR210	13	PLUG				8	PLUG			
24	PLUG				19	PLUG				14		108	21.5	PSR210	9		123	23	PSR210
25	PLUG				20	PLUG				15	PLUG				10	PLUG			
26		79	18	PSR210	21	PLUG				16	PLUG				11	PLUG			
27	PLUG				22		94	20	PSR210	17	PLUG				12	PLUG			
28	PLUG				23	PLUG				18		109	21.5	PSR210	13		124	23	PSR210
29	PLUG				24	PLUG				19	PLUG								
30		80	18.5	PSR210	25	PLUG				20	PLUG								
31	PLUG				26		95	20	PSR210	21	PLUG								
32	PLUG				27	PLUG				22		110	21.5	PSR210					
33	PLUG				28	PLUG				23	PLUG								
34		81	18.5	PSR210	29	PLUG				24	PLUG								
35	PLUG				30		96	20	PSR210	25	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.