

AQUA IRRIGATION

SEPTEMBER 29, 2025

WISH-119635

CUSTOMER : RAY NIESLANIK

LINDSAY 9500 - 90
7 TOWER - 1300.47 FT
SYSTEM 900 GPM @ 50 PSI

LEGAL : N-2

NELSON R3030 ROTATORS & A3030 ACCELERATORS
NELSON 20 & 10 PSI REGULATORS
NELSON SR-75 .80 TB
ELEVATION 5 FT UP, 0 FT DOWN

9370 COUNTY ROAD 35
ATWOOD, COLORADO 80722
(970)522-7560

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.

LINDSAY 9500 - 90

SEPTEMBER 29, 2025

WISH-119635

DEALER

AQUA IRRIGATION
 9370 COUNTY ROAD 35
 ATWOOD, COLORADO 80722

IRRIGATOR

RAY NIESLANIK
 N-2

				SPAN #	LENGTH	PIPE I.D.	# OF HEADS
TOTAL TARGET GPM	900.00	FRICTION FACTOR USED	138				
TOP OF PIVOT PRESSURE	50.00	TOTAL LENGTH	1300.47	1	181.60	6.395	10
ENDGUN TARGET GPM	110.70	NUMBER OF TOWERS	7	2	179.00	6.395	12
NUMBER OF OUTLETS	181	NUMBER OF SPRINKLERS	113	3	179.00	6.395	12
				4	179.00	6.395	12
NELSON R3030 ROTATORS - D8 ORANGE PLATES FIRST FIVE SPANS				5	179.00	6.395	13
NELSON A3030 ACCELERATORS - D6 GOLD PLATES BALANCE				6	179.00	6.395	24
NELSON BLUE TOP INTEGRAL 20 & 10 PSI SERIES REGULATORS				7	179.00	6.395	24
POLYDROPS® AVERAGE 6.5 FT				OH	44.87	5.369	6
ELEVATION IS 5 FT UP AND 0 FT DOWN							

CAUTIONS AND WARNINGS

1. Inadequate crop clearance and/or structural interference may cause poor water distribution, resulting in decreased uniformity and possible streaking.
2. Over watering at beginning of system due to practical limitations on smallest nozzle sizes available and/or allowable for proper operation.

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.	DROP LENGTH
1		2.92	-	-	-	-	-	-	-	-	1
2		7.76	-	-	-	-	-	-	-	-	2
3		15.26	-	-	-	-	-	-	-	-	3
4		22.59	-	-	-	-	-	-	-	-	4
5	29.93	29.93	0.78	1.57	49.07	22.20	R3030 14 LIME	1	NNB20LF	72	
6		37.26	-	-	-	-	-	-	-	-	5
7		44.76	-	-	-	-	-	-	-	-	6
8	21.83	51.76	0.85	1.57	48.36	22.20	R3030 14 LIME	2	NNB20LF	84	
9		59.26	-	-	-	-	-	-	-	-	7
10	14.83	66.59	0.91	1.57	47.96	22.19	R3030 14 LIME	3	NNB20LF	90	
11		73.93	-	-	-	-	-	-	-	-	8
12	14.67	81.26	1.10	1.57	47.63	22.19	R3030 14 LIME	4	NNB20LF	90	
13		88.76	-	-	-	-	-	-	-	-	9
14	14.50	95.76	1.31	1.57	47.37	22.19	R3030 14 LIME	5	NNB20LF	90	
15		103.26	-	-	-	-	-	-	-	-	10
16	14.83	110.59	1.52	1.57	47.17	22.19	R3030 14 LIME	6	NNB20LF	90	
17		117.93	-	-	-	-	-	-	-	-	11
18	14.67	125.26	1.70	1.57	47.04	22.19	R3030 14 LIME	7	NNB20LF	84	
19		132.76	-	-	-	-	-	-	-	-	12
20	14.50	139.76	1.91	1.83	46.97	22.06	R3030 15 LIME	8	NNB20LF	78	
21		147.26	-	-	-	-	-	-	-	-	13
22	14.83	154.59	2.12	2.07	46.97	21.94	R3030 16 LAVENDER	9	NNB20LF	72	
23		161.93	-	-	-	-	-	-	-	-	14
24	14.67	169.26	2.54	2.58	47.03	21.68	R3030 18 GRAY	10	NNB20LF	66	
25		176.76	-	-	-	-	-	-	-	-	15
TOWER 1	181.60	181.60									
26		182.59	-	-	-	-	-	-	-	-	16
27	17.50	186.76	2.80	2.89	46.80	21.53	R3030 19 GRAY	11	NNB20LF	60	
28		194.26	-	-	-	-	-	-	-	-	17
29	14.83	201.59	2.76	2.89	46.29	21.52	R3030 19 GRAY	12	NNB20LF	72	
30		208.93	-	-	-	-	-	-	-	-	18
31	14.67	216.26	2.93	2.89	45.77	21.52	R3030 19 GRAY	13	NNB20LF	78	
32		223.76	-	-	-	-	-	-	-	-	19
33	14.50	230.76	3.15	3.20	45.33	21.37	R3030 20 TURQUOISE	14	NNB20LF	84	
34		238.26	-	-	-	-	-	-	-	-	20
35	14.83	245.59	3.37	3.46	44.94	21.24	R3030 21 TURQUOISE	15	NNB20LF	90	
36		252.93	-	-	-	-	-	-	-	-	21
37	14.67	260.26	3.53	3.46	44.63	21.24	R3030 21 TURQUOISE	16	NNB20LF	90	
38		267.76	-	-	-	-	-	-	-	-	22
39	14.50	274.76	3.75	3.83	44.38	21.06	R3030 22 YELLOW	17	NNB20LF	90	
40		282.26	-	-	-	-	-	-	-	-	23
41	14.83	289.59	3.97	3.83	44.20	21.07	R3030 22 YELLOW	18	NNB20LF	90	
42		296.93	-	-	-	-	-	-	-	-	24
43	14.67	304.26	4.13	4.15	44.08	20.95	R3030 23 YELLOW	19	NNB20LF	84	
44		311.76	-	-	-	-	-	-	-	-	25
45	14.50	318.76	4.35	4.15	44.03	20.95	R3030 23 YELLOW	20	NNB20LF	78	
46		326.26	-	-	-	-	-	-	-	-	26
47	14.83	333.59	4.58	4.56	44.05	20.87	R3030 24 RED	21	NNB20LF	72	

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.	DROP LENGTH
48		340.93	-	-	-	-	-	-	-	-	27
49	14.67	348.26	5.22	5.32	44.14	20.73	R3030 26 WHITE	22	NNB20LF		66
50		355.76	-	-	-	-	-	-	-	-	28
TOWER 2	179.00	360.60									
51		361.59	-	-	-	-	-	-	-	-	29
52	17.50	365.76	5.49	5.32	43.93	20.73	R3030 26 WHITE	23	NNB20LF		60
53		373.26	-	-	-	-	-	-	-	-	30
54	14.83	380.59	5.22	5.32	43.44	20.73	R3030 26 WHITE	24	NNB20LF		72
55		387.93	-	-	-	-	-	-	-	-	31
56	14.67	395.26	5.36	5.32	42.95	20.73	R3030 26 WHITE	25	NNB20LF		78
57		402.76	-	-	-	-	-	-	-	-	32
58	14.50	409.76	5.59	5.70	42.53	20.66	R3030 27 WHITE	26	NNB20LF		84
59		417.26	-	-	-	-	-	-	-	-	33
60	14.83	424.59	5.82	5.70	42.18	20.66	R3030 27 WHITE	27	NNB20LF		90
61		431.93	-	-	-	-	-	-	-	-	34
62	14.67	439.26	5.96	6.20	41.89	20.56	R3030 28 BLUE	28	NNB20LF		90
63		446.76	-	-	-	-	-	-	-	-	35
64	14.50	453.76	6.19	6.20	41.67	20.56	R3030 28 BLUE	29	NNB20LF		90
65		461.26	-	-	-	-	-	-	-	-	36
66	14.83	468.59	6.43	6.61	41.52	20.48	R3030 29 BLUE	30	NNB20LF		90
67		475.93	-	-	-	-	-	-	-	-	37
68	14.67	483.26	6.55	6.61	41.43	20.48	R3030 29 BLUE	31	NNB20LF		84
69		490.76	-	-	-	-	-	-	-	-	38
70	14.50	497.76	6.79	6.61	41.42	20.48	R3030 29 BLUE	32	NNB20LF		78
71		505.26	-	-	-	-	-	-	-	-	39
72	14.83	512.59	7.03	7.06	41.47	20.39	R3030 30 DK BROWN	33	NNB20LF		72
73		519.93	-	-	-	-	-	-	-	-	40
74	14.67	527.26	7.90	8.00	41.59	20.21	R3030 32 ORANGE	34	NNB20LF		66
75		534.76	-	-	-	-	-	-	-	-	41
TOWER 3	179.00	539.60									
76		540.59	-	-	-	-	-	-	-	-	42
77	17.50	544.76	8.18	8.00	41.42	20.21	R3030 32 ORANGE	35	NNB20LF		60
78		552.26	-	-	-	-	-	-	-	-	43
79	14.83	559.59	7.67	7.46	40.97	20.31	R3030 31 DK BROWN	36	NNB20LF		72
80		566.93	-	-	-	-	-	-	-	-	44
81	14.67	574.26	7.79	8.00	40.52	20.21	R3030 32 ORANGE	37	NNB20LF		78
82		581.76	-	-	-	-	-	-	-	-	45
83	14.50	588.76	8.03	8.00	40.14	20.21	R3030 32 ORANGE	38	NNB20LF		84
84		596.26	-	-	-	-	-	-	-	-	46
85	14.83	603.59	8.28	8.53	39.82	20.17	R3030 33 ORANGE	39	NNB20LF		90
86		610.93	-	-	-	-	-	-	-	-	47
87	14.67	618.26	8.38	8.53	39.58	20.17	R3030 33 ORANGE	40	NNB20LF		90
88		625.76	-	-	-	-	-	-	-	-	48
89	14.50	632.76	8.62	8.53	39.40	20.17	R3030 33 ORANGE	41	NNB20LF		90
90		640.26	-	-	-	-	-	-	-	-	49
91	14.83	647.59	8.88	9.04	39.29	20.14	R3030 34 DK GREEN	42	NNB20LF		90
92		654.93	-	-	-	-	-	-	-	-	50
93	14.67	662.26	8.97	9.04	39.24	20.14	R3030 34 DK GREEN	43	NNB20LF		84

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.	DROP LENGTH
94		669.76	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	51	
95	14.50	676.76	9.22	9.04	39.27	20.13	R3030 34 DK GREEN	44	NNB20LF	78	
96		684.26	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	52	
97	14.83	691.59	9.48	9.52	39.37	20.11	R3030 35 DK GREEN	45	NNB20LF	72	
98		698.93	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	53	
99	14.67	706.26	10.57	10.68	39.53	20.04	R3030 37 PURPLE	46	NNB20LF	66	
100		713.76	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	54	
TOWER 4	179.00	718.60									
101		719.59	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	55	
102	17.50	723.76	10.86	10.68	39.42	20.03	R3030 37 PURPLE	47	NNB20LF	60	
103		731.26	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	56	
104	14.83	738.59	10.12	10.00	39.01	20.08	R3030 36 PURPLE	48	NNB20LF	72	
105		745.93	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	57	
106	14.67	753.26	10.21	10.00	38.61	20.07	R3030 36 PURPLE	49	NNB20LF	78	
107		760.76	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	58	
108	14.50	767.76	10.47	10.68	38.27	20.03	R3030 37 PURPLE	50	NNB20LF	84	
109		775.26	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	59	
110	14.83	782.59	10.73	10.68	38.00	20.03	R3030 37 PURPLE	51	NNB20LF	90	
111		789.93	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	60	
112	14.67	797.26	10.81	10.68	37.80	20.03	R3030 37 PURPLE	52	NNB20LF	90	
113		804.76	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	61	
114	14.50	811.76	11.07	11.27	37.67	19.98	R3030 38 BLACK	53	NNB20LF	90	
115		819.26	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	62	
116	14.83	826.59	11.33	11.27	37.61	19.98	R3030 38 BLACK	54	NNB20LF	90	
117		833.93	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	63	
118	14.67	841.26	11.41	11.27	37.62	19.97	R3030 38 BLACK	55	NNB20LF	84	
119		848.76	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	64	
120	14.50	855.76	11.67	11.89	37.69	19.92	R3030 39 BLACK	56	NNB20LF	78	
121		863.26	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	65	
122	14.83	870.59	11.94	11.89	37.84	19.92	R3030 39 BLACK	57	NNB20LF	72	
123		877.93	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	66	
124	14.67	885.26	9.10	9.04	38.05	20.12	R3030 34 DK GREEN	58	NNB20LF	66	
125	7.50	892.76	7.27	7.45	38.06	20.28	R3030 31 DK BROWN	59	NNB20LF	60	
TOWER 5	179.00	897.60									
126		898.59	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	67	
127	10.00	902.76	7.34	7.26	38.00	10.57	A3030 36 PURPLE	60	NNB10LF	60	
128	7.50	910.26	6.27	6.21	37.85	10.70	A3030 33 ORANGE	61	NNB10LF	66	
129	7.33	917.59	6.26	6.21	37.64	10.70	A3030 33 ORANGE	62	NNB10LF	72	
130	7.34	924.93	6.31	6.21	37.45	10.70	A3030 33 ORANGE	63	NNB10LF	72	
131	7.33	932.26	6.43	6.57	37.28	10.64	A3030 34 DK GREEN	64	NNB10LF	78	
132	7.50	939.76	6.33	6.20	37.13	10.69	A3030 33 ORANGE	65	NNB10LF	78	
133	7.00	946.76	6.39	6.21	37.00	10.70	A3030 33 ORANGE	66	NNB10LF	84	
134	7.50	954.26	6.58	6.57	36.88	10.63	A3030 34 DK GREEN	67	NNB10LF	84	
135	7.33	961.59	6.56	6.57	36.78	10.64	A3030 34 DK GREEN	68	NNB10LF	90	
136	7.34	968.93	6.61	6.57	36.69	10.64	A3030 34 DK GREEN	69	NNB10LF	90	
137	7.33	976.26	6.74	6.57	36.63	10.63	A3030 34 DK GREEN	70	NNB10LF	90	
138	7.50	983.76	6.64	6.57	36.58	10.63	A3030 34 DK GREEN	71	NNB10LF	90	
139	7.00	990.76	6.69	6.57	36.54	10.63	A3030 34 DK GREEN	72	NNB10LF	90	

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.	DROP LENGTH
140	7.50	998.26	6.90	6.92	36.53	10.59	A3030 35 DK GREEN	73	NNB10LF	90	
141	7.33	1005.59	6.87	6.92	36.53	10.59	A3030 35 DK GREEN	74	NNB10LF	90	
142	7.34	1012.93	6.92	6.92	36.55	10.59	A3030 35 DK GREEN	75	NNB10LF	90	
143	7.33	1020.26	7.05	6.91	36.59	10.59	A3030 35 DK GREEN	76	NNB10LF	84	
144	7.50	1027.76	6.94	6.91	36.64	10.59	A3030 35 DK GREEN	77	NNB10LF	84	
145	7.00	1034.76	6.99	6.91	36.71	10.58	A3030 35 DK GREEN	78	NNB10LF	78	
146	7.50	1042.26	7.20	7.25	36.80	10.55	A3030 36 PURPLE	79	NNB10LF	78	
147	7.33	1049.59	7.18	7.25	36.90	10.55	A3030 36 PURPLE	80	NNB10LF	72	
148	7.34	1056.93	7.22	7.25	37.02	10.55	A3030 36 PURPLE	81	NNB10LF	72	
149	7.33	1064.26	7.35	7.25	37.16	10.55	A3030 36 PURPLE	82	NNB10LF	66	
150	7.50	1071.76	8.75	8.59	37.20	10.41	A3030 39 BLACK	83	NNB10LF	60	
TOWER 6	179.00	1076.60									
151		1077.59	-	-	-	-	-	-	-	-	68
152	10.00	1081.76	8.82	9.01	37.16	10.37	A3030 40 DK TURQ	84	NNB10LF	60	
153	7.50	1089.26	7.53	7.73	37.04	10.50	A3030 37 PURPLE	85	NNB10LF	66	
154	7.33	1096.59	7.49	7.73	36.86	10.50	A3030 37 PURPLE	86	NNB10LF	72	
155	7.34	1103.93	7.53	7.72	36.69	10.50	A3030 37 PURPLE	87	NNB10LF	72	
156	7.33	1111.26	7.66	7.73	36.55	10.50	A3030 37 PURPLE	88	NNB10LF	78	
157	7.50	1118.76	7.53	7.72	36.41	10.49	A3030 37 PURPLE	89	NNB10LF	78	
158	7.00	1125.76	7.58	7.72	36.31	10.49	A3030 37 PURPLE	90	NNB10LF	84	
159	7.50	1133.26	7.79	7.72	36.21	10.49	A3030 37 PURPLE	91	NNB10LF	84	
160	7.33	1140.59	7.76	7.72	36.13	10.50	A3030 37 PURPLE	92	NNB10LF	90	
161	7.34	1147.93	7.81	7.72	36.07	10.49	A3030 37 PURPLE	93	NNB10LF	90	
162	7.33	1155.26	7.95	8.15	36.02	10.45	A3030 38 BLACK	94	NNB10LF	90	
163	7.50	1162.76	7.82	7.72	35.99	10.49	A3030 37 PURPLE	95	NNB10LF	90	
164	7.00	1169.76	7.87	7.72	35.98	10.49	A3030 37 PURPLE	96	NNB10LF	90	
165	7.50	1177.26	8.11	8.15	35.99	10.45	A3030 38 BLACK	97	NNB10LF	90	
166	7.33	1184.59	8.07	8.15	36.01	10.45	A3030 38 BLACK	98	NNB10LF	90	
167	7.34	1191.93	8.11	8.15	36.05	10.45	A3030 38 BLACK	99	NNB10LF	90	
168	7.33	1199.26	8.25	8.15	36.11	10.45	A3030 38 BLACK	100	NNB10LF	84	
169	7.50	1206.76	8.12	8.15	36.18	10.45	A3030 38 BLACK	101	NNB10LF	84	
170	7.00	1213.76	8.17	8.15	36.27	10.45	A3030 38 BLACK	102	NNB10LF	78	
171	7.50	1221.26	8.41	8.59	36.38	10.41	A3030 39 BLACK	103	NNB10LF	78	
172	7.33	1228.59	8.35	8.15	36.50	10.45	A3030 38 BLACK	104	NNB10LF	72	
173	7.34	1235.93	8.42	8.59	36.64	10.41	A3030 39 BLACK	105	NNB10LF	72	
174	7.33	1243.26	8.55	8.59	36.80	10.41	A3030 39 BLACK	106	NNB10LF	66	
175	7.50	1250.76	9.68	9.52	36.85	10.32	A3030 41 DK TURQ	107	NNB10LF	60	
TOWER 7	179.00	1255.60									
			PIPE ID CHANGES FROM 6.395 TO 5.369								
176	9.21	1259.97	9.78	9.94	36.84	10.28	A3030 42 MUSTARD	108	NNB10LF	60	
177	7.50	1267.47	8.70	8.59	36.82	10.41	A3030 39 BLACK	109	NNB10LF	60	
178	7.33	1274.80	8.69	8.59	36.81	10.41	A3030 39 BLACK	110	NNB10LF	60	
179	7.34	1282.14	8.77	8.59	36.80	10.41	A3030 39 BLACK	111	NNB10LF	60	
180	7.33	1289.47	9.00	9.01	36.80	10.36	A3030 40 DK TURQ	112	NNB10LF	60	
181	7.50	1296.97	9.09	9.01	36.79	10.36	A3030 40 DK TURQ	113	NNB10LF	60	
OVERHANG	44.87	1300.47			110.68	ENDGUN	(1) NELSON SR-75 .80 TB				

THERE IS NO BOOSTER PUMP

FRICTION LOSS THROUGH ENDGUN VALVE IS 0.97 PSI - ENDGUN PRESSURE IS 35.82 PSI

TOTAL GPM = 900.14

GPA = 6.47

MINIMUM RECOMMENDED REGULATOR INLET PRESSURE IS 25.00 PSI

WITH GRADUATED ELEVATION OF 5.00 FT THE INLET PRESSURE IS 37.80 PSI FOR SPRINKLER 57

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	2.38	15.39	18.11	18%	7.61	0.017	0.61	0.81	1.01
2	7.00	45.30	45.09	0%	6.44	0.014	0.51	0.68	0.85
3	11.62	75.20	75.20	0%	6.47	0.014	0.51	0.69	0.86
4	16.24	105.11	104.91	0%	6.46	0.014	0.51	0.69	0.86
5	20.86	135.02	134.43	0%	6.44	0.014	0.51	0.68	0.85
6	25.49	164.92	163.50	-1%	6.42	0.014	0.51	0.68	0.85
7	30.11	194.83	194.84	0%	6.47	0.014	0.51	0.69	0.86
OVERHANG	8.27	53.53	53.38	0%	6.45	0.014	0.51	0.68	0.86
ENDGUN	16.77	110.70	110.68	2%	6.60				
TOTAL	138.75	900.00	900.14		6.49				

SUMMARY OF SPRINKLERS

7 R3030 14 LIME
1 R3030 15 LIME
1 R3030 16 LAVENDER
1 R3030 18 GRAY
3 R3030 19 GRAY
1 R3030 20 TURQUOISE
2 R3030 21 TURQUOISE
2 R3030 22 YELLOW
2 R3030 23 YELLOW
1 R3030 24 RED
4 R3030 26 WHITE
2 R3030 27 WHITE
2 R3030 28 BLUE
3 R3030 29 BLUE
1 R3030 30 DK BROWN
2 R3030 31 DK BROWN
4 R3030 32 ORANGE
3 R3030 33 ORANGE
4 R3030 34 DK GREEN
1 R3030 35 DK GREEN
2 R3030 36 PURPLE
5 R3030 37 PURPLE
3 R3030 38 BLACK
2 R3030 39 BLACK
5 A3030 33 ORANGE
7 A3030 34 DK GREEN
6 A3030 35 DK GREEN
5 A3030 36 PURPLE
11 A3030 37 PURPLE
8 A3030 38 BLACK
7 A3030 39 BLACK
3 A3030 40 DK TURQ
1 A3030 41 DK TURQ
1 A3030 42 MUSTARD

SUMMARY OF DROPS

15 60 IN DROP
9 66 IN DROP
18 72 IN DROP
17 78 IN DROP
18 84 IN DROP
36 90 IN DROP

SUMMARY OF REGULATORS

59 Nelson Blue Int Uni Flo 20 psi
54 Nelson Blue Int Uni Flo 10 psi

68 PLUGS**TOTAL OF 113 DROPS****TOTAL OF 113 REGULATORS**

NOZZLE POSITION CHART

R3030 14 LIME	1, 2, 3, 4, 5, 6, 7
R3030 15 LIME	8
R3030 16 LAVENDER	9
R3030 18 GRAY	10
R3030 19 GRAY	11, 12, 13
R3030 20 TURQUOISE	14
R3030 21 TURQUOISE	15, 16
R3030 22 YELLOW	17, 18
R3030 23 YELLOW	19, 20
R3030 24 RED	21
R3030 26 WHITE	22, 23, 24, 25
R3030 27 WHITE	26, 27
R3030 28 BLUE	28, 29
R3030 29 BLUE	30, 31, 32
R3030 30 DK BROWN	33
R3030 31 DK BROWN	36, 59
R3030 32 ORANGE	34, 35, 37, 38
R3030 33 ORANGE	39, 40, 41
R3030 34 DK GREEN	42, 43, 44, 58
R3030 35 DK GREEN	45
R3030 36 PURPLE	48, 49
R3030 37 PURPLE	46, 47, 50, 51, 52
R3030 38 BLACK	53, 54, 55
R3030 39 BLACK	56, 57
A3030 33 ORANGE	61, 62, 63, 65, 66
A3030 34 DK GREEN	64, 67, 68, 69, 70, 71, 72
A3030 35 DK GREEN	73, 74, 75, 76, 77, 78
A3030 36 PURPLE	60, 79, 80, 81, 82
A3030 37 PURPLE	85, 86, 87, 88, 89, 90, 91, 92, 93, 95, 96
A3030 38 BLACK	94, 97, 98, 99, 100, 101, 102, 104
A3030 39 BLACK	83, 103, 105, 106, 109, 110, 111
A3030 40 DK TURQ	84, 112, 113
A3030 41 DK TURQ	107
A3030 42 MUSTARD	108

AQUA IRRIGATION
9370 COUNTY ROAD 35
ATWOOD, COLORADO 80722

SEPTEMBER 29, 2025
 WISH-119635
 RAY NIESLANIK

LINDSAY 9500 - 90
 NELSON R3030 ROTATORS
 NELSON 20 & 10 PSI REGULATORS
 POLYDROPS®
 NELSON SR-75 .80 TB

Rotation time at 100% = 9.44 Hours Or 566 minutes

900 GPM @ 50 PSI

N-2

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	
1	PLUG				9	PLUG				17	PLUG				25	60	107	41	10LF	
2	PLUG				10	90	27	27	20LF	18	84	55	38	20LF	1	60	108	42	10LF	
3	PLUG				11	PLUG				19	PLUG				2	60	109	39	10LF	
4	PLUG				12	90	28	28	20LF	20	78	56	39	20LF	3	60	110	39	10LF	
5	72	1	14	20LF	13	PLUG				21	PLUG				4	60	111	39	10LF	
6	PLUG				14	90	29	28	20LF	22	72	57	39	20LF	5	60	112	40	10LF	
7	PLUG				15	PLUG				23	PLUG				6	60	113	40	10LF	
8	84	2	14	20LF	16	90	30	29	20LF	24	66	58	34	20LF						
9	PLUG				17	PLUG				25	60	59	31	20LF						
10	90	3	14	20LF	18	84	31	29	20LF											
11	PLUG				19	PLUG					1	PLUG								
12	90	4	14	20LF	20	78	32	29	20LF	2	60	60	36	10LF						
13	PLUG				21	PLUG				3	66	61	33	10LF						
14	90	5	14	20LF	22	72	33	30	20LF	4	72	62	33	10LF						
15	PLUG				23	PLUG				5	72	63	33	10LF						
16	90	6	14	20LF	24	66	34	32	20LF	6	78	64	34	10LF						
17	PLUG				25	PLUG				7	78	65	33	10LF						
18	84	7	14	20LF						8	84	66	33	10LF						
19	PLUG					1	PLUG			9	84	67	34	10LF						
20	78	8	15	20LF		2	60	35	32	10	90	68	34	10LF						
21	PLUG					3	PLUG			11	90	69	34	10LF						
22	72	9	16	20LF		4	72	36	31	12	90	70	34	10LF						
23	PLUG					5	PLUG			13	90	71	34	10LF						
24	66	10	18	20LF		6	78	37	32	14	90	72	34	10LF						
25	PLUG					7	PLUG			15	90	73	35	10LF						
	TOWER 1					8	84	38	32	10	90	74	35	10LF						
1	PLUG					9	PLUG			16	90	75	35	10LF						
2	60	11	19	20LF		10	90	39	33	18	84	76	35	10LF						
3	PLUG					11	PLUG			19	84	77	35	10LF						
4	72	12	19	20LF		12	90	40	33	20	78	78	35	10LF						
5	PLUG					13	PLUG			21	78	79	36	10LF						
6	78	13	19	20LF		14	90	41	33	22	72	80	36	10LF						
7	PLUG					15	PLUG			23	72	81	36	10LF						
8	84	14	20	20LF		16	90	42	34	24	66	82	36	10LF						
9	PLUG					17	PLUG			25	60	83	39	10LF						
10	90	15	21	20LF		18	84	43	34	10					TOWER 6					
11	PLUG					19	PLUG			1	PLUG									
12	90	16	21	20LF		20	78	44	34	2	60	84	40	10LF						
13	PLUG					21	PLUG			3	66	85	37	10LF						
14	90	17	22	20LF		22	72	45	35	4	72	86	37	10LF						
15	PLUG					23	PLUG			5	72	87	37	10LF						
16	90	18	22	20LF		24	66	46	37	6	78	88	37	10LF						
17	PLUG					25	PLUG			7	78	89	37	10LF						
18	84	19	23	20LF						8	84	90	37	10LF						
19	PLUG						9	84	91											
20	78	20	23	20LF		2	60	47	37	10	90	92	37	10LF						
21	PLUG					3	PLUG			11	90	93	37	10LF						
22	72	21	24	20LF		4	72	48	36	12	90	94	38	10LF						
23	PLUG					5	PLUG			13	90	95	37	10LF						
24	66	22	26	20LF		6	78	49	36	14	90	96	37	10LF						
25	PLUG					7	PLUG			15	90	97	38	10LF						
	TOWER 2					8	84	50	37	16	90	98	38	10LF						
1	PLUG					9	PLUG			17	90	99	38	10LF						
2	60	23	26	20LF		10	90	51	37	18	84	100	38	10LF						
3	PLUG					11	PLUG			19	84	101	38	10LF						
4	72	24	26	20LF		12	90	52	37	20	78	102	38	10LF						
5	PLUG					13	PLUG			21	78	103	39	10LF						
6	78	25	26	20LF		14	90	53	38	22	72	104	38	10LF						
7	PLUG					15	PLUG			23	72	105	39	10LF						
8	84	26	27	20LF		16	90	54	38	24	66	106	39	10LF						

PRECIPITATION CHART FOR FULL CIRCLE

WISH-119635

SEPTEMBER 29, 2025

DEALER - AQUA IRRIGATION

IRRIGATOR - RAY NIESLANIK
FIELD - N-2

TOTAL LENGTH PIPE = 1300.47 SYSTEM PRESSURE = 50 PSI
 GPM UNDER PIPE = 789.46 TOTAL GPM = 900.14
 ACRES UNDER PIPE = 121.97
 RANGE OF ENDGUN = 86.54
 GPM OF ENDGUN = 110.68
 ACRES UNDER ENDGUN = 16.77
 WATERING LENGTH = 1387.01

MOTOR SIZE (HP) = 3/4
 LOADED MOTOR RPM = 1750
 CENTER GEAR BOX RATIO = 40
 WHEEL GEAR BOX RATIO = 50
 TIRE SIZE = 12.4 X 38
 LAST TOWER SPEED (FPM) = 13.93

PRECIPITATION DATA FIGURED WITH ENDGUN RUNNING

PRECIPITATION BASED

% TIMER BASED

PRECIPITATION INCHES	% TIMER SETTING	TIME HOURS	% TIMER SETTING	PRECIPITATION INCHES	TIME HOURS
.13	100.00	9.44 - 566(min)	100.00	.13	9.44 - 566(min)
.20	67.50	13.98	90.00	.15	10.49
.25	54.00	17.48	80.00	.17	11.80
.30	45.00	20.98	70.00	.19	13.48
.40	33.75	27.97	60.00	.22	15.73
.50	27.00	34.96	50.00	.27	18.88
.60	22.50	41.95	45.00	.30	20.98
.70	19.28	48.95	40.00	.34	23.60
.75	18.00	52.44	35.00	.39	26.97
.80	16.87	55.94	30.00	.45	31.46
.90	15.00	62.93	25.00	.54	37.76
1.00	13.50	69.92	20.00	.67	47.20
1.25	10.80	87.40	15.00	.90	62.93
1.50	9.00	104.89	10.00	1.35	94.39
1.75	7.71	122.37	5.00	2.70	188.78

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.

DEALER - AQUA IRRIGATION

IRRIGATOR - RAY NIESLANIK
FIELD - N-2

SPAN 1 POS/LEN	SPAN 2 POS/LEN	SPAN 3 POS/LEN	SPAN 4 POS/LEN	SPAN 5 POS/LEN	SPAN 6 POS/LEN	SPAN 7 POS/LEN	ENDBOOM POS/LEN
1 - 72	11 - 60	23 - 60	35 - 60	47 - 60	60 - 60	84 - 60	108 - 60
2 - 84	12 - 72	24 - 72	36 - 72	48 - 72	61 - 66	85 - 66	109 - 60
3 - 90	13 - 78	25 - 78	37 - 78	49 - 78	62 - 72	86 - 72	110 - 60
4 - 90	14 - 84	26 - 84	38 - 84	50 - 84	63 - 72	87 - 72	111 - 60
5 - 90	15 - 90	27 - 90	39 - 90	51 - 90	64 - 78	88 - 78	112 - 60
6 - 90	16 - 90	28 - 90	40 - 90	52 - 90	65 - 78	89 - 78	113 - 60
7 - 84	17 - 90	29 - 90	41 - 90	53 - 90	66 - 84	90 - 84	
8 - 78	18 - 90	30 - 90	42 - 90	54 - 90	67 - 84	91 - 84	
9 - 72	19 - 84	31 - 84	43 - 84	55 - 84	68 - 90	92 - 90	
10 - 66	20 - 78	32 - 78	44 - 78	56 - 78	69 - 90	93 - 90	
	21 - 72	33 - 72	45 - 72	57 - 72	70 - 90	94 - 90	
	22 - 66	34 - 66	46 - 66	58 - 66	71 - 90	95 - 90	
			59 - 60	72 - 90	96 - 90		
				73 - 90	97 - 90		
				74 - 90	98 - 90		
				75 - 90	99 - 90		
				76 - 84	100 - 84		
				77 - 84	101 - 84		
				78 - 78	102 - 78		
				79 - 78	103 - 78		
				80 - 72	104 - 72		
				81 - 72	105 - 72		
				82 - 66	106 - 66		
				83 - 60	107 - 60		

SUMMARY OF DROPS

15 - 60 IN DROP
 9 - 66 IN DROP
 18 - 72 IN DROP
 17 - 78 IN DROP
 18 - 84 IN DROP
 36 - 90 IN DROP

TOTAL OF 113 DROPS

POLY SENN GRAY FEMALE X PLASTIC MALE