

CRUZAN IRRIGATION

SEPTEMBER 22, 2025

WISH-119611

CUSTOMER : SCOTT MAHAFFEY

VALLEY 8000 - 108
9 TOWER - 1297.4 FT
SYSTEM 750 GPM @ 50 PSI

LEGAL : PIVOT OLD 1/4
P.O. NO. : 5926

SENNINGER UP3 I-WOB2
SENNINGER 10 PSI REGULATORS
NELSON SR-100 .70 TB
ELEVATION 25 FT UP, 20 FT DOWN

11049 HIGHWAY 491
CORTEZ, COLORADO 81321
(970)565-9409

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.

VALLEY 8000 - 108

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DEALER

CRUZAN IRRIGATION
 11049 HIGHWAY 491
 CORTEZ, COLORADO 81321

IRRIGATOR

SCOTT MAHAFFEY
 PIVOT OLD 1/4
 5926

				SPAN #	LENGTH	PIPE I.D.	# OF HEADS
TOTAL TARGET GPM	750.00	FRICTION FACTOR USED	140				
TOP OF PIVOT PRESSURE	50.00	TOTAL LENGTH	1297.40	1	140.78	6.415	7
ENDGUN TARGET GPM	88.19	NUMBER OF TOWERS	9	2	140.04	6.415	8
NUMBER OF OUTLETS	148	NUMBER OF SPRINKLERS	131	3	140.04	6.415	16
				4	140.04	6.415	16
SENNINGER UP3 I-WOB2 - LOW ANGLE 9 GROOVE BLUE PADS				5	140.04	6.415	16
SENNINGER PSR-2 10 PSI SERIES REGULATORS				6	140.04	6.415	16
DROPS AVERAGE 9.5 FT OF .75 I.D. FLEXIBLE HOSE - SENNINGER UNIMAG WEIGHT				7	140.04	6.415	16
ELEVATION IS 25 FT UP AND 20 FT DOWN				8	140.04	6.415	16
				9	139.78	6.415	16
				OH	18.28	6.415	2
					18.28	3.79	2

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		5.40	-	-	-	-	-	-	-	-	1
2		14.40	-	-	-	-	-	-	-	-	2
3	23.40	23.40	0.41	0.85	49.38	11.40	I-WOB2 UP3 6 GOLD	1	SPSR2-10		108
4		32.40	-	-	-	-	-	-	-	-	3
5	18.00	41.40	0.56	0.85	48.91	11.40	I-WOB2 UP3 6 GOLD	2	SPSR2-10		114
6		49.92	-	-	-	-	-	-	-	-	4
7	16.94	58.34	0.76	0.85	48.57	11.40	I-WOB2 UP3 6 GOLD	3	SPSR2-10		120
8		66.76	-	-	-	-	-	-	-	-	5
9	16.46	74.80	0.98	1.00	48.36	11.40	I-WOB2 UP3 6.5 GOLD	4	SPSR2-10		120
10		83.22	-	-	-	-	-	-	-	-	6
11	16.84	91.64	1.24	1.16	48.24	11.40	I-WOB2 UP3 7 LIME	5	SPSR2-10		114
12		100.16	-	-	-	-	-	-	-	-	7
13	17.52	109.16	1.52	1.53	48.24	11.40	I-WOB2 UP3 8 LAVENDER	6	SPSR2-10		108
14		118.16	-	-	-	-	-	-	-	-	8
15	18.00	127.16	1.81	1.73	48.36	11.40	I-WOB2 UP3 8.5 LAVENDER	7	SPSR2-10		102
16		136.16	-	-	-	-	-	-	-	-	9
TOWER 1	140.78	140.78									
17	18.28	145.44	2.07	2.16	48.28	11.38	I-WOB2 UP3 9.5 GREY	8	SPSR2-10		96
18		154.44	-	-	-	-	-	-	-	-	10
19	18.00	163.44	2.31	2.39	47.73	11.36	I-WOB2 UP3 10 TURQUOISE	9	SPSR2-10		108
20		172.44	-	-	-	-	-	-	-	-	11
21	18.00	181.44	2.49	2.39	47.26	11.36	I-WOB2 UP3 10 TURQUOISE	10	SPSR2-10		114
22		189.96	-	-	-	-	-	-	-	-	12
23	16.94	198.38	2.60	2.63	46.94	11.34	I-WOB2 UP3 10.5 TURQUOISE	11	SPSR2-10		120
24		206.80	-	-	-	-	-	-	-	-	13
25	16.46	214.84	2.81	2.89	46.73	11.31	I-WOB2 UP3 11 YELLOW	12	SPSR2-10		120
26		223.26	-	-	-	-	-	-	-	-	14
27	16.84	231.68	3.13	3.15	46.62	11.28	I-WOB2 UP3 11.5 YELLOW	13	SPSR2-10		114
28		240.20	-	-	-	-	-	-	-	-	15
29	17.52	249.20	3.48	3.44	46.63	11.26	I-WOB2 UP3 12 RED	14	SPSR2-10		108
30		258.20	-	-	-	-	-	-	-	-	16
31	18.00	267.20	3.81	3.73	46.76	11.23	I-WOB2 UP3 12.5 RED	15	SPSR2-10		102
32		276.20	-	-	-	-	-	-	-	-	17
TOWER 2	140.04	280.82									
33	18.28	285.48	3.03	3.15	46.69	11.28	I-WOB2 UP3 11.5 YELLOW	16	SPSR2-10		96
34	9.00	294.48	2.08	2.16	46.43	11.38	I-WOB2 UP3 9.5 GREY	17	SPSR2-10		102
35	9.00	303.48	2.14	2.16	46.15	11.38	I-WOB2 UP3 9.5 GREY	18	SPSR2-10		108
36	9.00	312.48	2.21	2.16	45.91	11.38	I-WOB2 UP3 9.5 GREY	19	SPSR2-10		108
37	9.00	321.48	2.21	2.16	45.70	11.38	I-WOB2 UP3 9.5 GREY	20	SPSR2-10		114
38	8.52	330.00	2.19	2.16	45.53	11.38	I-WOB2 UP3 9.5 GREY	21	SPSR2-10		114
39	8.42	338.42	2.24	2.16	45.39	11.38	I-WOB2 UP3 9.5 GREY	22	SPSR2-10		120
40	8.42	346.84	2.24	2.16	45.28	11.38	I-WOB2 UP3 9.5 GREY	23	SPSR2-10		120
41	8.04	354.88	2.30	2.39	45.19	11.36	I-WOB2 UP3 10 TURQUOISE	24	SPSR2-10		120
42	8.42	363.30	2.40	2.39	45.13	11.36	I-WOB2 UP3 10 TURQUOISE	25	SPSR2-10		120
43	8.42	371.72	2.47	2.39	45.10	11.36	I-WOB2 UP3 10 TURQUOISE	26	SPSR2-10		114
44	8.52	380.24	2.62	2.63	45.10	11.34	I-WOB2 UP3 10.5 TURQUOISE	27	SPSR2-10		114
45	9.00	389.24	2.75	2.63	45.13	11.34	I-WOB2 UP3 10.5 TURQUOISE	28	SPSR2-10		108
46	9.00	398.24	2.82	2.89	45.18	11.31	I-WOB2 UP3 11 YELLOW	29	SPSR2-10		108

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
47	9.00	407.24	2.88	2.89	45.27	11.31	I-WOB2 UP3 11 YELLOW	30	SPSR2-10		102
48	9.00	416.24	2.99	2.89	45.32	11.31	I-WOB2 UP3 11 YELLOW	31	SPSR2-10		96
TOWER 3	140.04	420.86									
49	9.28	425.52	3.06	3.15	45.23	11.28	I-WOB2 UP3 11.5 YELLOW	32	SPSR2-10		96
50	9.00	434.52	3.07	3.15	44.97	11.28	I-WOB2 UP3 11.5 YELLOW	33	SPSR2-10		102
51	9.00	443.52	3.14	3.15	44.71	11.28	I-WOB2 UP3 11.5 YELLOW	34	SPSR2-10		108
52	9.00	452.52	3.20	3.15	44.48	11.28	I-WOB2 UP3 11.5 YELLOW	35	SPSR2-10		108
53	9.00	461.52	3.18	3.15	44.28	11.28	I-WOB2 UP3 11.5 YELLOW	36	SPSR2-10		114
54	8.52	470.04	3.13	3.15	44.12	11.28	I-WOB2 UP3 11.5 YELLOW	37	SPSR2-10		114
55	8.42	478.46	3.16	3.15	43.98	11.28	I-WOB2 UP3 11.5 YELLOW	38	SPSR2-10		120
56	8.42	486.88	3.15	3.15	43.88	11.28	I-WOB2 UP3 11.5 YELLOW	39	SPSR2-10		120
57	8.04	494.92	3.20	3.15	43.81	11.28	I-WOB2 UP3 11.5 YELLOW	40	SPSR2-10		120
58	8.42	503.34	3.33	3.44	43.76	11.26	I-WOB2 UP3 12 RED	41	SPSR2-10		120
59	8.42	511.76	3.40	3.44	43.74	11.26	I-WOB2 UP3 12 RED	42	SPSR2-10		114
60	8.52	520.28	3.58	3.44	43.75	11.26	I-WOB2 UP3 12 RED	43	SPSR2-10		114
61	9.00	529.28	3.74	3.73	43.79	11.23	I-WOB2 UP3 12.5 RED	44	SPSR2-10		108
62	9.00	538.28	3.81	3.73	43.86	11.23	I-WOB2 UP3 12.5 RED	45	SPSR2-10		108
63	9.00	547.28	3.87	3.73	43.96	11.23	I-WOB2 UP3 12.5 RED	46	SPSR2-10		102
64	9.00	556.28	4.00	4.03	44.02	11.20	I-WOB2 UP3 13 WHITE	47	SPSR2-10		96
TOWER 4	140.04	560.90									
65	9.28	565.56	4.06	4.03	43.94	11.20	I-WOB2 UP3 13 WHITE	48	SPSR2-10		96
66	9.00	574.56	4.06	4.03	43.69	11.20	I-WOB2 UP3 13 WHITE	49	SPSR2-10		102
67	9.00	583.56	4.13	4.03	43.44	11.20	I-WOB2 UP3 13 WHITE	50	SPSR2-10		108
68	9.00	592.56	4.19	4.34	43.23	11.17	I-WOB2 UP3 13.5 WHITE	51	SPSR2-10		108
69	9.00	601.56	4.14	4.03	43.04	11.20	I-WOB2 UP3 13 WHITE	52	SPSR2-10		114
70	8.52	610.08	4.06	4.03	42.89	11.20	I-WOB2 UP3 13 WHITE	53	SPSR2-10		114
71	8.42	618.50	4.09	4.03	42.77	11.20	I-WOB2 UP3 13 WHITE	54	SPSR2-10		120
72	8.42	626.92	4.06	4.03	42.68	11.20	I-WOB2 UP3 13 WHITE	55	SPSR2-10		120
73	8.04	634.96	4.11	4.03	42.62	11.20	I-WOB2 UP3 13 WHITE	56	SPSR2-10		120
74	8.42	643.38	4.26	4.34	42.59	11.17	I-WOB2 UP3 13.5 WHITE	57	SPSR2-10		120
75	8.42	651.80	4.34	4.34	42.58	11.17	I-WOB2 UP3 13.5 WHITE	58	SPSR2-10		114
76	8.52	660.32	4.55	4.66	42.60	11.13	I-WOB2 UP3 14 BLUE	59	SPSR2-10		114
77	9.00	669.32	4.73	4.66	42.65	11.13	I-WOB2 UP3 14 BLUE	60	SPSR2-10		108
78	9.00	678.32	4.80	4.66	42.74	11.13	I-WOB2 UP3 14 BLUE	61	SPSR2-10		108
79	9.00	687.32	4.86	4.99	42.86	11.10	I-WOB2 UP3 14.5 BLUE	62	SPSR2-10		102
80	9.00	696.32	5.00	4.99	42.93	11.10	I-WOB2 UP3 14.5 BLUE	63	SPSR2-10		96
TOWER 5	140.04	700.94									
81	9.28	705.60	5.07	4.99	42.86	11.10	I-WOB2 UP3 14.5 BLUE	64	SPSR2-10		96
82	9.00	714.60	5.06	4.99	42.64	11.10	I-WOB2 UP3 14.5 BLUE	65	SPSR2-10		102
83	9.00	723.60	5.12	4.99	42.40	11.10	I-WOB2 UP3 14.5 BLUE	66	SPSR2-10		108
84	9.00	732.60	5.19	5.34	42.20	11.04	I-WOB2 UP3 15 DK BROWN	67	SPSR2-10		108
85	9.00	741.60	5.11	4.99	42.03	11.10	I-WOB2 UP3 14.5 BLUE	68	SPSR2-10		114
86	8.52	750.12	5.00	4.99	41.89	11.10	I-WOB2 UP3 14.5 BLUE	69	SPSR2-10		114
87	8.42	758.54	5.02	4.99	41.79	11.10	I-WOB2 UP3 14.5 BLUE	70	SPSR2-10		120
88	8.42	766.96	4.96	4.99	41.71	11.10	I-WOB2 UP3 14.5 BLUE	71	SPSR2-10		120
89	8.04	775.00	5.02	4.99	41.67	11.10	I-WOB2 UP3 14.5 BLUE	72	SPSR2-10		120
90	8.42	783.42	5.19	5.34	41.65	11.04	I-WOB2 UP3 15 DK BROWN	73	SPSR2-10		120
91	8.42	791.84	5.27	5.34	41.66	11.04	I-WOB2 UP3 15 DK BROWN	74	SPSR2-10		114

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
92	8.52	800.36	5.51	5.68	41.69	10.98	I-WOB2 UP3 15.5 DK BROWN	75	SPSR2-10		114
93	9.00	809.36	5.72	5.68	41.76	10.98	I-WOB2 UP3 15.5 DK BROWN	76	SPSR2-10		108
94	9.00	818.36	5.79	5.68	41.86	10.98	I-WOB2 UP3 15.5 DK BROWN	77	SPSR2-10		108
95	9.00	827.36	5.85	5.68	42.00	10.98	I-WOB2 UP3 15.5 DK BROWN	78	SPSR2-10		102
96	9.00	836.36	6.01	6.04	42.08	10.91	I-WOB2 UP3 16 ORANGE	79	SPSR2-10		96
TOWER 6	140.04	840.98									
97	9.28	845.64	6.08	6.04	42.04	10.91	I-WOB2 UP3 16 ORANGE	80	SPSR2-10		96
98	9.00	854.64	6.05	6.04	41.83	10.91	I-WOB2 UP3 16 ORANGE	81	SPSR2-10		102
99	9.00	863.64	6.11	6.04	41.61	10.91	I-WOB2 UP3 16 ORANGE	82	SPSR2-10		108
100	9.00	872.64	6.18	6.04	41.42	10.91	I-WOB2 UP3 16 ORANGE	83	SPSR2-10		108
101	9.00	881.64	6.08	6.04	41.26	10.91	I-WOB2 UP3 16 ORANGE	84	SPSR2-10		114
102	8.52	890.16	5.93	6.04	41.15	10.91	I-WOB2 UP3 16 ORANGE	85	SPSR2-10		114
103	8.42	898.58	5.95	6.04	41.06	10.91	I-WOB2 UP3 16 ORANGE	86	SPSR2-10		120
104	8.42	907.00	5.87	6.04	41.00	10.91	I-WOB2 UP3 16 ORANGE	87	SPSR2-10		120
105	8.04	915.04	5.92	6.04	40.97	10.91	I-WOB2 UP3 16 ORANGE	88	SPSR2-10		120
106	8.42	923.46	6.11	6.04	40.96	10.91	I-WOB2 UP3 16 ORANGE	89	SPSR2-10		120
107	8.42	931.88	6.21	6.04	40.99	10.91	I-WOB2 UP3 16 ORANGE	90	SPSR2-10		114
108	8.52	940.40	6.48	6.41	41.04	10.85	I-WOB2 UP3 16.5 ORANGE	91	SPSR2-10		114
109	9.00	949.40	6.72	6.78	41.12	10.78	I-WOB2 UP3 17 DK GREEN	92	SPSR2-10		108
110	9.00	958.40	6.79	6.78	41.24	10.78	I-WOB2 UP3 17 DK GREEN	93	SPSR2-10		108
111	9.00	967.40	6.85	6.78	41.39	10.78	I-WOB2 UP3 17 DK GREEN	94	SPSR2-10		102
112	9.00	976.40	7.02	7.16	41.49	10.71	I-WOB2 UP3 17.5 DK GREEN	95	SPSR2-10		96
TOWER 7	140.04	981.02									
113	9.28	985.68	7.09	7.16	41.46	10.71	I-WOB2 UP3 17.5 DK GREEN	96	SPSR2-10		96
114	9.00	994.68	7.04	7.16	41.27	10.71	I-WOB2 UP3 17.5 DK GREEN	97	SPSR2-10		102
115	9.00	1003.68	7.10	7.16	41.07	10.71	I-WOB2 UP3 17.5 DK GREEN	98	SPSR2-10		108
116	9.00	1012.68	7.16	7.16	40.89	10.71	I-WOB2 UP3 17.5 DK GREEN	99	SPSR2-10		108
117	9.00	1021.68	7.03	7.16	40.76	10.71	I-WOB2 UP3 17.5 DK GREEN	100	SPSR2-10		114
118	8.52	1030.20	6.85	6.78	40.65	10.78	I-WOB2 UP3 17 DK GREEN	101	SPSR2-10		114
119	8.42	1038.62	6.87	6.78	40.58	10.78	I-WOB2 UP3 17 DK GREEN	102	SPSR2-10		120
120	8.42	1047.04	6.77	6.78	40.54	10.78	I-WOB2 UP3 17 DK GREEN	103	SPSR2-10		120
121	8.04	1055.08	6.82	6.78	40.52	10.78	I-WOB2 UP3 17 DK GREEN	104	SPSR2-10		120
122	8.42	1063.50	7.04	7.16	40.53	10.71	I-WOB2 UP3 17.5 DK GREEN	105	SPSR2-10		120
123	8.42	1071.92	7.13	7.16	40.57	10.71	I-WOB2 UP3 17.5 DK GREEN	106	SPSR2-10		114
124	8.52	1080.44	7.44	7.55	40.63	10.64	I-WOB2 UP3 18 PURPLE	107	SPSR2-10		114
125	9.00	1089.44	7.70	7.55	40.73	10.64	I-WOB2 UP3 18 PURPLE	108	SPSR2-10		108
126	9.00	1098.44	7.77	7.95	40.86	10.57	I-WOB2 UP3 18.5 PURPLE	109	SPSR2-10		108
127	9.00	1107.44	7.82	7.95	41.03	10.57	I-WOB2 UP3 18.5 PURPLE	110	SPSR2-10		102
128	9.00	1116.44	8.00	7.95	41.15	10.57	I-WOB2 UP3 18.5 PURPLE	111	SPSR2-10		96
TOWER 8	140.04	1121.06									
129	9.28	1125.72	8.07	7.95	41.13	10.57	I-WOB2 UP3 18.5 PURPLE	112	SPSR2-10		96
130	9.00	1134.72	8.02	7.95	40.95	10.57	I-WOB2 UP3 18.5 PURPLE	113	SPSR2-10		102
131	9.00	1143.72	8.09	7.95	40.76	10.57	I-WOB2 UP3 18.5 PURPLE	114	SPSR2-10		108
132	9.00	1152.72	8.16	8.35	40.61	10.49	I-WOB2 UP3 19 BLACK	115	SPSR2-10		108
133	9.00	1161.72	7.99	7.95	40.48	10.57	I-WOB2 UP3 18.5 PURPLE	116	SPSR2-10		114
134	8.52	1170.24	7.79	7.95	40.39	10.57	I-WOB2 UP3 18.5 PURPLE	117	SPSR2-10		114
135	8.42	1178.66	7.78	7.95	40.33	10.57	I-WOB2 UP3 18.5 PURPLE	118	SPSR2-10		120
136	8.42	1187.08	7.65	7.55	40.30	10.64	I-WOB2 UP3 18 PURPLE	119	SPSR2-10		120

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
137	8.04	1195.12	7.71	7.55	40.29	10.64	I-WOB2 UP3 18 PURPLE	120	SPSR2-10		120
138	8.42	1203.54	7.96	7.95	40.32	10.57	I-WOB2 UP3 18.5 PURPLE	121	SPSR2-10		120
139	8.42	1211.96	8.06	7.95	40.37	10.57	I-WOB2 UP3 18.5 PURPLE	122	SPSR2-10		114
140	8.52	1220.48	8.41	8.35	40.44	10.50	I-WOB2 UP3 19 BLACK	123	SPSR2-10		114
141	9.00	1229.48	8.71	8.76	40.56	10.42	I-WOB2 UP3 19.5 BLACK	124	SPSR2-10		108
142	9.00	1238.48	8.77	8.76	40.70	10.42	I-WOB2 UP3 19.5 BLACK	125	SPSR2-10		108
143	9.00	1247.48	8.83	8.76	40.88	10.42	I-WOB2 UP3 19.5 BLACK	126	SPSR2-10		102
144	9.00	1256.48	8.88	8.76	41.01	10.42	I-WOB2 UP3 19.5 BLACK	127	SPSR2-10		96
TOWER 9	139.78	1260.84									
145	8.93	1265.41	9.04	9.17	41.00	10.35	I-WOB2 UP3 20 DK TURQUOISE	128	SPSR2-10		96
146	9.14	1274.55	9.16	9.18	41.00	10.35	I-WOB2 UP3 20 DK TURQUOISE	129	SPSR2-10		96
							PIPE ID CHANGES FROM 6.415 TO 3.790				
147	9.14	1283.69	9.22	9.18	40.96	10.35	I-WOB2 UP3 20 DK TURQUOISE	130	SPSR2-10		96
148	9.14	1292.83	9.29	9.18	40.93	10.35	I-WOB2 UP3 20 DK TURQUOISE	131	SPSR2-10		96
OVERHANG	36.56	1297.40		88.71	ENDGUN		(1) NELSON SR-100 .70 TB				

THERE IS NO BOOSTER PUMP

FRICITION LOSS THROUGH ENDGUN VALVE IS 2.05 PSI - ENDGUN PRESSURE IS 38.88 PSI

TOTAL GPM = 750.36

GPA = 5.45

MINIMUM RECOMMENDED REGULATOR INLET PRESSURE IS 15.00 PSI

WITH GRADUATED ELEVATION OF 25.00 FT THE INLET PRESSURE IS 32.30 PSI FOR SPRINKLER 131
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	1.43	7.79	8.57	10%	5.99	0.013	0.48	0.64	0.79
2	4.26	23.21	22.89	-1%	5.38	0.012	0.43	0.57	0.71
3	7.09	38.63	38.70	0%	5.46	0.012	0.43	0.58	0.72
4	9.92	54.06	53.86	0%	5.43	0.012	0.43	0.58	0.72
5	12.74	69.48	69.26	0%	5.43	0.012	0.43	0.58	0.72
6	15.57	84.90	84.72	0%	5.44	0.012	0.43	0.58	0.72
7	18.40	100.32	100.32	0%	5.45	0.012	0.43	0.58	0.72
8	21.23	115.74	116.19	0%	5.47	0.012	0.44	0.58	0.73
9	24.01	130.90	130.43	0%	5.43	0.012	0.43	0.58	0.72
OVERHANG ENDGUN	6.75	36.77	36.71	0%	5.44	0.012	0.43	0.58	0.72
TOTAL	137.39	750.00	750.36		5.46				

SUMMARY OF SPRINKLERS

3 I-WOB2 UP3 6 GOLD
1 I-WOB2 UP3 6.5 GOLD
1 I-WOB2 UP3 7 LIME
1 I-WOB2 UP3 8 LAVENDER
1 I-WOB2 UP3 8.5 LAVENDER
8 I-WOB2 UP3 9.5 GREY
5 I-WOB2 UP3 10 TURQUOISE
3 I-WOB2 UP3 10.5 TURQUOISE
4 I-WOB2 UP3 11 YELLOW
11 I-WOB2 UP3 11.5 YELLOW
4 I-WOB2 UP3 12 RED
4 I-WOB2 UP3 12.5 RED
9 I-WOB2 UP3 13 WHITE
3 I-WOB2 UP3 13.5 WHITE
3 I-WOB2 UP3 14 BLUE
10 I-WOB2 UP3 14.5 BLUE
3 I-WOB2 UP3 15 DK BROWN
4 I-WOB2 UP3 15.5 DK BROWN
12 I-WOB2 UP3 16 ORANGE
1 I-WOB2 UP3 16.5 ORANGE
7 I-WOB2 UP3 17 DK GREEN
8 I-WOB2 UP3 17.5 DK GREEN
4 I-WOB2 UP3 18 PURPLE
11 I-WOB2 UP3 18.5 PURPLE
2 I-WOB2 UP3 19 BLACK
4 I-WOB2 UP3 19.5 BLACK
4 I-WOB2 UP3 20 DK TURQUOISE

SUMMARY OF DROPS**SUMMARY OF REGULATORS**

19 96 IN DROP
16 102 IN DROP
32 108 IN DROP
32 114 IN DROP
32 120 IN DROP

131 Senn PSR2 10 psi

17 PLUGS**TOTAL OF 131 DROPS**

LENGTH OF HOSE: 1200.0 FT.

TOTAL OF 131 REGULATORS

NOZZLE POSITION CHART

I-WOB2 UP3 6 GOLD	1, 2, 3
I-WOB2 UP3 6.5 GOLD	4
I-WOB2 UP3 7 LIME	5
I-WOB2 UP3 8 LAVENDER	6
I-WOB2 UP3 8.5 LAVENDER	7
I-WOB2 UP3 9.5 GREY	8, 17, 18, 19, 20, 21, 22, 23
I-WOB2 UP3 10 TURQUOISE	9, 10, 24, 25, 26
I-WOB2 UP3 10.5 TURQUOISE	11, 27, 28
I-WOB2 UP3 11 YELLOW	12, 29, 30, 31
I-WOB2 UP3 11.5 YELLOW	13, 16, 32, 33, 34, 35, 36, 37, 38, 39, 40
I-WOB2 UP3 12 RED	14, 41, 42, 43
I-WOB2 UP3 12.5 RED	15, 44, 45, 46
I-WOB2 UP3 13 WHITE	47, 48, 49, 50, 52, 53, 54, 55, 56
I-WOB2 UP3 13.5 WHITE	51, 57, 58
I-WOB2 UP3 14 BLUE	59, 60, 61
I-WOB2 UP3 14.5 BLUE	62, 63, 64, 65, 66, 68, 69, 70, 71, 72
I-WOB2 UP3 15 DK BROWN	67, 73, 74
I-WOB2 UP3 15.5 DK BROWN	75, 76, 77, 78
I-WOB2 UP3 16 ORANGE	79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90
I-WOB2 UP3 16.5 ORANGE	91
I-WOB2 UP3 17 DK GREEN	92, 93, 94, 101, 102, 103, 104
I-WOB2 UP3 17.5 DK GREEN	95, 96, 97, 98, 99, 100, 105, 106
I-WOB2 UP3 18 PURPLE	107, 108, 119, 120
I-WOB2 UP3 18.5 PURPLE	109, 110, 111, 112, 113, 114, 116, 117, 118, 121, 122
I-WOB2 UP3 19 BLACK	115, 123
I-WOB2 UP3 19.5 BLACK	124, 125, 126, 127
I-WOB2 UP3 20 DK TURQUOISE	128, 129, 130, 131

CRUZAN IRRIGATION
11049 HIGHWAY 491
CORTEZ, COLORADO 81321

VALLEY 8000 - 108
 SENNINGER UP3 I-WOB2
 SENNINGER 10 PSI REGULATORS
 .75 I.D. FLEXIBLE HOSE
 NELSON SR-100 .70 TB

SEPTEMBER 22, 2025
 WISH-119611
 SCOTT MAHAFFEY
 PIVOT OLD 1/4
 750 GPM @ 50 PSI

Rotation time at 100% = 14.06 Hours Or 844 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	
1	PLUG				10	120	41	12	PSR210	2	102	97	17.5	PSR210	
2	PLUG				11	114	42	12	PSR210	3	108	98	17.5	PSR210	
3	108	1	6	PSR210	12	114	43	12	PSR210	4	108	99	17.5	PSR210	
4	PLUG				13	108	44	12.5	PSR210	5	114	100	17.5	PSR210	
5	114	2	6	PSR210	14	108	45	12.5	PSR210	6	114	101	17	PSR210	
6	PLUG				15	102	46	12.5	PSR210	7	120	102	17	PSR210	
7	120	3	6	PSR210	16	96	47	13	PSR210	8	120	103	17	PSR210	
8	PLUG				TOWER 4					9	120	104	17	PSR210	
9	120	4	6.5	PSR210	1	96	48	13	PSR210	10	120	105	17.5	PSR210	
10	PLUG				2	102	49	13	PSR210	11	114	106	17.5	PSR210	
11	114	5	7	PSR210	3	108	50	13	PSR210	12	114	107	18	PSR210	
12	PLUG				4	108	51	13.5	PSR210	13	108	108	18	PSR210	
13	108	6	8	PSR210	5	114	52	13	PSR210	14	108	109	18.5	PSR210	
14	PLUG				6	114	53	13	PSR210	15	102	110	18.5	PSR210	
15	102	7	8.5	PSR210	7	120	54	13	PSR210	16	96	111	18.5	PSR210	
16	PLUG				8	120	55	13	PSR210	TOWER 8					
1	TOWER 1					9	120	56	13	PSR210	1	96	112	18.5	PSR210
2	96	8	9.5	PSR210	10	120	57	13.5	PSR210	2	102	113	18.5	PSR210	
3	PLUG				11	114	58	13.5	PSR210	3	108	114	18.5	PSR210	
4	108	9	10	PSR210	12	114	59	14	PSR210	4	108	115	19	PSR210	
5	PLUG				13	108	60	14	PSR210	5	114	116	18.5	PSR210	
6	114	10	10	PSR210	14	108	61	14	PSR210	6	114	117	18.5	PSR210	
7	PLUG				15	102	62	14.5	PSR210	7	120	118	18.5	PSR210	
8	120	11	10.5	PSR210	16	96	63	14.5	PSR210	8	120	119	18	PSR210	
9	PLUG				TOWER 5					9	120	120	18	PSR210	
10	120	12	11	PSR210	1	96	64	14.5	PSR210	10	120	121	18.5	PSR210	
11	PLUG				2	102	65	14.5	PSR210	11	114	122	18.5	PSR210	
12	114	13	11.5	PSR210	3	108	66	14.5	PSR210	12	114	123	19	PSR210	
13	PLUG				4	108	67	15	PSR210	13	108	124	19.5	PSR210	
14	108	14	12	PSR210	5	114	68	14.5	PSR210	14	108	125	19.5	PSR210	
15	PLUG				6	114	69	14.5	PSR210	15	102	126	19.5	PSR210	
16	102	15	12.5	PSR210	7	120	70	14.5	PSR210	16	96	127	19.5	PSR210	
1	TOWER 2					9	120	72	14.5	PSR210	TOWER 9				
2	96	16	11.5	PSR210	10	120	73	15	PSR210	1	96	128	20	PSR210	
3	102	17	9.5	PSR210	11	114	74	15	PSR210	2	96	129	20	PSR210	
4	108	18	9.5	PSR210	12	114	75	15.5	PSR210	3	96	130	20	PSR210	
5	108	19	9.5	PSR210	13	108	76	15.5	PSR210	4	96	131	20	PSR210	
6	114	20	9.5	PSR210	14	108	77	15.5	PSR210	TOWER 6					
7	114	21	9.5	PSR210	15	102	78	15.5	PSR210	TOWER 7					
8	120	22	9.5	PSR210	16	96	79	16	PSR210	TOWER 8					
9	120	23	9.5	PSR210	TOWER 3					9	120	80	16	PSR210	
10	120	24	10	PSR210	1	96	81	16	PSR210	10	102	82	16	PSR210	
11	120	25	10	PSR210	2	102	82	16	PSR210	11	108	83	16	PSR210	
12	114	26	10	PSR210	3	108	82	16	PSR210	12	114	83	16	PSR210	
13	114	27	10.5	PSR210	4	108	83	16	PSR210	13	108	84	16	PSR210	
14	108	28	10.5	PSR210	5	114	84	16	PSR210	14	108	85	16	PSR210	
15	108	29	11	PSR210	6	114	85	16	PSR210	15	102	86	16	PSR210	
16	102	30	11	PSR210	7	120	86	16	PSR210	16	96	87	16	PSR210	
1	96	31	11	PSR210	8	120	87	16	PSR210	TOWER 9					
2	96	32	11.5	PSR210	10	120	89	16	PSR210	TOWER 10					
3	102	33	11.5	PSR210	11	114	90	16	PSR210	TOWER 11					
4	108	34	11.5	PSR210	12	114	91	16.5	PSR210	TOWER 12					
5	108	35	11.5	PSR210	13	108	92	17	PSR210	TOWER 13					
6	114	36	11.5	PSR210	14	108	93	17	PSR210	TOWER 14					
7	114	37	11.5	PSR210	15	102	94	17	PSR210	TOWER 15					
8	120	38	11.5	PSR210	16	96	95	17.5	PSR210	TOWER 16					
9	120	39	11.5	PSR210	1	96	96	17.5	PSR210	TOWER 17					

PRECIPITATION CHART FOR FULL CIRCLE

WISH-119611

SEPTEMBER 22, 2025

DEALER - CRUZAN IRRIGATION

IRRIGATOR - SCOTT MAHAFFEY
FIELD - PIVOT OLD 1/4

TOTAL LENGTH PIPE = 1297.40 SYSTEM PRESSURE = 50 PSI
 GPM UNDER PIPE = 661.65 TOTAL GPM = 750.36
 ACRES UNDER PIPE = 121.40
 RANGE OF ENDGUN = 82.79
 GPM OF ENDGUN = 88.71
 ACRES UNDER ENDGUN = 15.99
 WATERING LENGTH = 1380.19

MOTOR SIZE (HP) = .6
 LOADED MOTOR RPM = 1800
 CENTER GEAR BOX RATIO = 53
 WHEEL GEAR BOX RATIO = 52
 TIRE SIZE = 11.2 X 38
 LAST TOWER SPEED (FPM) = 9.39

PRECIPITATION DATA FIGURED WITH ENDGUN RUNNING

PRECIPITATION BASED

% TIMER BASED

PRECIPITATION INCHES	% TIMER SETTING	TIME HOURS	% TIMER SETTING	PRECIPITATION INCHES	TIME HOURS
.17	100.00	14.06 - 844(min)	100.00	.17	14.06 - 844(min)
.20	84.67	16.61	90.00	.19	15.62
.25	67.73	20.76	80.00	.21	17.58
.30	56.45	24.91	70.00	.24	20.09
.40	42.33	33.21	60.00	.28	23.44
.50	33.87	41.52	50.00	.34	28.12
.60	28.22	49.82	45.00	.38	31.25
.70	24.19	58.13	40.00	.42	35.15
.75	22.58	62.28	35.00	.48	40.18
.80	21.17	66.43	30.00	.56	46.87
.90	18.82	74.73	25.00	.68	56.25
1.00	16.93	83.04	20.00	.85	70.31
1.25	13.55	103.80	15.00	1.13	93.74
1.50	11.29	124.56	10.00	1.69	140.61
1.75	9.68	145.31	5.00	3.39	281.23

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 - CRUZAN IRRIGATION
P.O. - 5926

IRRIGATOR - SCOTT MAHAFFEY
FIELD - PIVOT OLD 1/4

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	SPAN 8 POS/LEN	SPAN 9 POS/LEN	ENDBOOM POS/LEN
1 - 108	8 - 96	16 - 96	32 - 96	48 - 96	64 - 96	80 - 96	96 - 96	112 - 96	128 - 96
2 - 114	9 - 108	17 - 102	33 - 102	49 - 102	65 - 102	81 - 102	97 - 102	113 - 102	129 - 96
3 - 120	10 - 114	18 - 108	34 - 108	50 - 108	66 - 108	82 - 108	98 - 108	114 - 108	130 - 96
4 - 120	11 - 120	19 - 108	35 - 108	51 - 108	67 - 108	83 - 108	99 - 108	115 - 108	131 - 96
5 - 114	12 - 120	20 - 114	36 - 114	52 - 114	68 - 114	84 - 114	100 - 114	116 - 114	
6 - 108	13 - 114	21 - 114	37 - 114	53 - 114	69 - 114	85 - 114	101 - 114	117 - 114	
7 - 102	14 - 108	22 - 120	38 - 120	54 - 120	70 - 120	86 - 120	102 - 120	118 - 120	
	15 - 102	23 - 120	39 - 120	55 - 120	71 - 120	87 - 120	103 - 120	119 - 120	
		24 - 120	40 - 120	56 - 120	72 - 120	88 - 120	104 - 120	120 - 120	
		25 - 120	41 - 120	57 - 120	73 - 120	89 - 120	105 - 120	121 - 120	
		26 - 114	42 - 114	58 - 114	74 - 114	90 - 114	106 - 114	122 - 114	
		27 - 114	43 - 114	59 - 114	75 - 114	91 - 114	107 - 114	123 - 114	
		28 - 108	44 - 108	60 - 108	76 - 108	92 - 108	108 - 108	124 - 108	
		29 - 108	45 - 108	61 - 108	77 - 108	93 - 108	109 - 108	125 - 108	
		30 - 102	46 - 102	62 - 102	78 - 102	94 - 102	110 - 102	126 - 102	
		31 - 96	47 - 96	63 - 96	79 - 96	95 - 96	111 - 96	127 - 96	

SUMMARY OF DROPS

19 - 96 IN DROP
16 - 102 IN DROP
32 - 108 IN DROP
32 - 114 IN DROP
32 - 120 IN DROP

TOTAL OF 131 DROPS