



Special Report 107-1983

Agricultural Extension Service
University of Minnesota

Data From:

Becker
Crookston
Grand Rapids
Lamberton
Morris
Rosemount
St. Paul
Staples
Waseca

C.A.W.A.P.*

1982 Crop Season
Climatic Data
University of Minnesota
Agricultural Experiment Station
Research Locations

UNIVERSITY OF MINNESOTA
DOCUMENTS

AUG 16 1991

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*University of Minnesota Cooperative
Agricultural Weather Advisory Program

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Department of Soil Science

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UNIVERSITY OF MINNESOTA AGRICULTURAL EXPERIMENT STATION
AGRICULTURAL CLIMATIC DATA
1982

The following data summarize the environmental conditions at nine University of Minnesota branch and satellite experiment stations in 1982. These data are stored on the "MERITSS" computer system and are accessible by using the "ENVDATA" computer software package.

These parameters were measured at most or all of the experiment stations:

MAX	Daily maximum temperature in degrees fahrenheit
MIN	Daily minimum temperature in degrees fahrenheit
PRECIP	Daily precipitation in inches
WIND	Daily wind run in miles per day
SOLAR	Daily incoming short wave solar radiation in langleys (cal/cm2) per day
PAN	Daily pan evaporation in inches
SOILMAX	Daily maximum soil temperature at 4 inches in degrees fahrenheit
SOILMIN	Daily minimum soil temperature at 4 inches in degrees fahrenheit
DEGREE DAYS	Accumulated growing degree days with base temperatures corresponding to major crops of the area

Occasional problems may arise in the data set due to inconsistencies in the method and time of observation as well as positioning of equipment. These problems are minimal.

Analysis of environmental data is helpful in operational decision making and in interpretation of research results. Call the Extension Climatology Office if additional environmental information is needed.

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* Many thanks to the many Experiment Station and Extension *
* personnel who make this summary possible. To those who made *
* weather observations in the pouring rain or those who *
* entered the data on computer terminals despite their busy *
* schedules, THANK YOU!!!! *
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MEAN MONTHLY TEMPERATURE AND DEPARTURE FROM NORMAL (DEGREES F.)

	APR	MAY	JUN	JUL	AUG	SEP	OCT
CROOKSTON DEP.	41.0 +1.1	56.5 +2.6	57.9 -5.7	69.1 0.0	65.6 -1.9	55.7 -1.1	44.3 -1.1
MORRIS DEP.	40.4 -2.3	58.4 +2.3	60.5 -5.4	72.6 +1.9	67.4 -1.4	56.4 -2.1	45.0 -2.0
GRAND RAPIDS DEP.	38.6 -2.2	57.7 +4.1	58.5 -4.0	68.9 +1.7	64.5 -0.3	56.4 +1.2	47.0 +1.7
STAPLES DEP. (1)	38.1 -2.8	56.9 +2.7	58.4 -5.6	69.8 +0.6	69.2 +2.0	55.8 -0.7	45.3 -0.3
BECKER DEP. (2)	40.2 -2.9	59.3 +3.6	61.4 -3.8	72.6 +2.3	69.2 +1.4	58.2 +0.6	48.1 +1.3
LAMBERTON DEP. (3)	41.4 -3.5	60.4 +2.4	63.0 -5.2	72.9 +0.7	69.0 -0.5	60.0 -0.5	49.3 -0.4
WASECA DEP.	40.3 -3.7	59.8 +2.8	62.2 -4.3	72.3 +1.4	68.3 0.0	58.8 -0.5	49.3 +1.0
ROSEMOUNT DEP.	42.6 -0.5	60.8 +4.8	62.1 -3.6	73.4 +2.7	70.0 +1.8	61.3 +2.5	49.9 +1.8
ST. PAUL DEP. (4)	43.4 -2.5	61.3 +3.0	62.4 -5.7	73.9 +0.8	70.5 -0.1	59.3 -1.1	50.5 +1.0

- (1) DEPARTURE FROM WADENA NORMALS
- (2) DEPARTURE FROM ST. CLOUD NORMALS
- (3) DEPARTURE FROM SPRINGFIELD NORMALS
- (4) DEPARTURE FROM MINNEAPOLIS/ST. PAUL INTERNATIONAL AIRPORT NORMALS

(TEMPERATURE NORMALS IN THIS TABLE HAVE BEEN CORRECTED FOR TIME OF OBSERVATION AND MAY THEREFORE DIFFER FROM THOSE PUBLISHED BY THE NATIONAL CLIMATIC CENTER.)

TOTAL MONTHLY PRECIPITATION AND DEPARTURE FROM NORMAL (INCHES)

	APR	MAY	JUN	JUL	AUG	SEP	OCT
CROOKSTON DEP.	0.77 -0.62	3.16 +0.96	2.49 -1.12	3.28 +0.11	1.55 -1.49	1.50 -0.83	4.97 +3.58
MORRIS DEP.	1.74 -0.71	2.79 -0.12	1.92 -1.99	4.36 +1.07	3.70 +0.57	4.10 +2.19	4.22 +2.37
GRAND RAPIDS DEP.	2.44 +0.45	4.53 +1.37	4.42 +0.63	2.33 -1.79	5.16 +1.78	2.27 -0.02	2.71 +0.69
STAPLES DEP. (1)	2.42 -0.06	4.63 +1.62	3.65 -0.75	2.56 -1.42	2.44 -1.00	3.44 +0.96	4.04 +2.21
BECKER DEP. (2)	0.78 -1.30	4.59 +0.95	1.86 -2.55	2.67 -1.03	4.57 +0.19	3.30 +0.41	4.12 +2.16
LAMBERTON DEP. (3)	2.41 +0.09	5.66 +2.42	2.20 -1.32	4.88 +1.39	3.94 +0.40	3.81 +1.27	3.98 +2.05
WASECA DEP.	2.78 +0.14	6.45 +2.69	1.78 -2.70	1.46 -2.56	4.61 +0.61	4.27 +0.91	3.72 +1.63
ROSEMOUNT DEP.	2.58 +0.12	5.03 +1.34	1.26 -3.51	2.40 -1.59	3.97 -0.32	3.33 +0.16	4.55 +2.33
ST. PAUL DEP. (4)	1.14 -1.29	4.60 +1.01	1.75 -2.64	2.55 -1.03	3.56 -0.27	2.29 -0.76	3.59 +1.18

- (1) DEPARTURE FROM WADENA NORMALS
- (2) DEPARTURE FROM ST. CLOUD NORMALS
- (3) DEPARTURE FROM SPRINGFIELD NORMALS
- (4) DEPARTURE FROM 1961 - 1980 AVERAGE

TOTAL MONTHLY PAN EVAPORATION AND DEPARTURE FROM AVERAGE (INCHES)

	APR	MAY	JUN	JUL	AUG	SEP	OCT
CROOKSTON DEP.	M *	3.39 *	7.58 *	9.40 *	6.56 *	4.26 *	0.99 *
MORRIS DEP.	2.73 +0.95	6.07 -1.87	7.35 -1.95	7.35 -2.33	7.49 -0.29	4.34 -1.33	1.68 +0.06
GRAND RAPIDS DEP.	M *	M *	M *	M *	M *	M *	M *
STAPLES DEP.	3.89 *	6.60 *	7.34 *	7.26 -1.24	6.91 -0.09	3.56 -1.04	1.90 -0.80
BECKER DEP.	M *	5.88 *	6.49 *	8.46 *	6.91 *	4.60 *	2.52 *
LAMBERTON DEP.	1.05 M	5.34 -2.48	6.76 -2.28	5.87 -3.23	5.40 -1.97	3.47 -1.98	1.02 -0.76
WASECA DEP.	0.95 M	6.23 -1.42	8.33 -0.05	8.18 -0.38	7.47 +0.79	4.50 -0.22	0.31 M
ROSEMOUNT DEP. (1)	0.95 M	5.90 -1.30	7.00 -1.44	8.86 +0.56	7.88 +0.54	2.44 M	M M
ST. PAUL DEP.	2.50 +0.72	6.25 -1.05	7.18 -1.32	8.51 -0.78	7.72 +0.35	4.21 -0.45	0.88 -0.41

- (1) DEPARTURE FROM FARMINGTON AVERAGE
- M MISSING DATA OR MEASUREMENT NOT TAKEN
- * AVERAGE NOT AVAILABLE

(USE CAUTION WHEN MAKING AREAL COMPARISONS FOR THE MONTHS OF APRIL AND OCTOBER. THE DATES ON WHICH PAN MEASUREMENT BEGAN AND ENDED MAY DIFFER BETWEEN LOCATIONS.)

MEAN DAILY SOLAR RADIATION (LANGLEYS PER DAY)

	APR	MAY	JUN	JUL	AUG	SEP	OCT
CROOKSTON	269	269	320	359	342	209	134
MORRIS	M	M	M	451	412	281	M
GRAND RAPIDS	506	M	M	456	412	273	176
STAPLES	M	417	514	469	446	248	176
BECKER	M	M	M	521	453	305	202
LAMBERTON	400	321	457	448	293	264	185
WASECA	427	375	513	518	476	334	186
ROSEMOUNT	M	M	M	M	M	M	M
ST. PAUL	434	441	565	544	471	323	211

M MISSING DATA OR MEASUREMENT NOT TAKEN

MEAN DAILY WIND RUN (MILES PER DAY)

	APR	MAY	JUN	JUL	AUG	SEP	OCT
CROOKSTON	M	M	114	87	74	99	105
MORRIS	M	M	M	M	M	M	M
GRAND RAPIDS	M	M	M	M	M	M	M
STAPLES	130	100	93	87	74	99	104
BECKER	M	M	M	130	128	165	158
LAMBERTON	M	72	59	34	25	M	M
WASECA	184	153	137	113	77	104	123
ROSEMOUNT	M	M	M	M	M	M	M
ST. PAUL	137	92	69	60	60	88	100

M MISSING DATA OR MEASUREMENT NOT TAKEN

LOCATION : BECKER

		DEGREE DAYS										
		MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 40 ACCUM VALUE	BASE = 50 ACCUM VALUE	BASE = 50/86 ACCUM VALUE
04/01/82	49.00	22.00	0.00							4.50	0.00	0.00
04/02/82	51.00	24.00	0.00							4.50	0.00	0.00
04/03/82	50.00	23.00	0.00							4.50	0.00	0.00
04/04/82	50.00	23.00	0.00							4.50	0.00	0.00
04/05/82	50.00	23.00	0.00							4.50	0.00	0.00
04/06/82	50.00	23.00	0.00							4.50	0.00	0.00
04/07/82	52.00	25.00	0.00							4.50	0.00	0.00
04/08/82	52.00	25.00	0.00							4.50	0.00	0.00
04/09/82	52.00	25.00	0.00							4.50	0.00	0.00
04/10/82	52.00	25.00	0.00							4.50	0.00	0.00
04/11/82	51.00	24.00	0.00							4.50	0.00	0.00
04/12/82	47.00	41.00	0.00							4.50	0.00	0.00
04/13/82	46.00	41.00	0.00							4.50	0.00	0.00
04/14/82	46.00	41.00	0.00							4.50	0.00	0.00
04/15/82	44.00	39.00	0.00							4.50	0.00	0.00
04/16/82	44.00	39.00	0.00							4.50	0.00	0.00
04/17/82	42.00	37.00	0.00							4.50	0.00	0.00
04/18/82	42.00	37.00	0.00							4.50	0.00	0.00
04/19/82	42.00	37.00	0.00							4.50	0.00	0.00
04/20/82	45.00	40.00	0.00							10.00	0.00	0.00
04/21/82	46.00	41.00	0.00							23.50	0.00	0.00
04/22/82	46.00	41.00	0.00							43.00	0.00	0.00
04/23/82	46.00	41.00	0.00							43.00	0.00	0.00
04/24/82	46.00	41.00	0.00							43.00	0.00	0.00
04/25/82	46.00	41.00	0.00							43.00	0.00	0.00
04/26/82	46.00	41.00	0.00							43.00	0.00	0.00
04/27/82	46.00	41.00	0.00							43.00	0.00	0.00
04/28/82	46.00	41.00	0.00							43.00	0.00	0.00
04/29/82	46.00	41.00	0.00							43.00	0.00	0.00
04/30/82	46.00	41.00	0.00							43.00	0.00	0.00
05/01/82	46.00	41.00	0.01			.23				65.00	0.00	0.00
05/02/82	46.00	41.00	0.00			.23				70.00	0.00	0.00
05/03/82	46.00	41.00	0.01			.23				67.00	0.00	0.00
05/04/82	46.00	41.00	0.00			.47				71.00	0.00	0.00
05/05/82	46.00	41.00	0.52			.08				58.00	0.00	0.00
05/06/82	46.00	41.00	0.12			.11				57.00	0.00	0.00
05/07/82	46.00	41.00	0.00			.20				57.00	0.00	0.00
05/08/82	46.00	41.00	0.00			.20				72.00	0.00	0.00
05/09/82	46.00	41.00	0.75			.20				72.00	0.00	0.00
05/10/82	46.00	41.00	0.00			.28				71.00	0.00	0.00
05/11/82	46.00	41.00	0.00			.17				71.00	0.00	0.00
05/12/82	46.00	41.00	0.00			.02				58.00	0.00	0.00
05/13/82	46.00	41.00	0.00			.13				72.00	0.00	0.00
05/14/82	46.00	41.00	0.00			.21				73.00	0.00	0.00
05/15/82	46.00	41.00	0.00			.21				74.00	0.00	0.00
05/16/82	46.00	41.00	0.00			.22				74.00	0.00	0.00
05/17/82	46.00	41.00	0.00			.10				67.00	0.00	0.00
05/18/82	46.00	41.00	0.00			.24				67.00	0.00	0.00
05/19/82	46.00	41.00	0.00			.31				77.00	0.00	0.00
05/20/82	46.00	41.00	0.00			.22				76.00	0.00	0.00
05/21/82	46.00	41.00	0.00			.15				71.00	0.00	0.00
05/22/82	46.00	41.00	0.00			.15				75.00	0.00	0.00
05/23/82	46.00	41.00	0.00			.15				80.00	0.00	0.00
05/24/82	46.00	41.00	0.00			.19				76.00	0.00	0.00
05/25/82	46.00	41.00	0.00			.27				74.00	0.00	0.00
05/26/82	46.00	41.00	0.00			.01				72.00	0.00	0.00
05/27/82	46.00	41.00	0.01			.17				70.00	0.00	0.00
05/28/82	46.00	41.00	0.00			.18				74.00	0.00	0.00
05/29/82	46.00	41.00	0.00			.01				80.00	0.00	0.00
05/30/82	46.00	41.00	0.00			.19				74.00	0.00	0.00
05/31/82	46.00	41.00	0.00							74.00	0.00	0.00

L O C A T I O N : B E C K E R

D E G R E E D A Y S

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 40			BASE = 50			BASE = 50/86		
									ACCULM	VALUE		ACCULM	VALUE		ACCULM	VALUE	
06/01/82	62.00	42.00	0			.11	68.00	59.00	757.50	335.00		445.00					
06/02/82	68.00	38.00	0			.26	79.00	59.00	770.50	338.00		454.00					
06/03/82	65.00	38.00	0			.13	79.00	60.00	782.00	339.50		461.50					
06/04/82	69.00	45.00	0			.22	81.00	64.00	799.00	346.50		471.00					
06/05/82	75.00	58.00	0			.17	80.00	64.00	825.50	363.00		487.50					
06/06/82	78.00	57.00	.41			.24	79.00	65.00	853.00	380.00		505.00					
06/07/82	66.00	44.00	0			.15	78.00	63.00	874.50	392.00		516.50					
06/08/82	65.00	44.00	0			.14	70.00	59.00	889.00	396.50		524.00					
06/09/82	73.00	54.00	0			.21	79.00	66.00	912.50	410.00		537.50					
06/10/82	70.00	45.00	0			.14	69.00	58.00	930.00	417.50		547.50					
06/11/82	71.00	41.00	0			.27	80.00	61.00	946.00	423.00		558.00					
06/12/82	71.00	48.00	0	141.00	742.00	.22	84.00	59.00	965.50	433.00		568.50					
06/13/82	83.00	52.00	0	134.00	640.00	.25	87.00	63.00	993.00	450.00		586.00					
06/14/82	71.00	46.00	0		249.00	.29	84.00	60.00	1011.50	459.00		596.50					
06/15/82	72.00	52.00	0	172.00	738.00	.28	85.00	61.00	1033.50	471.00		608.50					
06/16/82	82.00	43.00	0	139.00	581.00	.21	85.00	59.00	1056.00	483.00		624.50					
06/17/82	71.00	56.00	0	128.00	458.00	.20	82.00	65.00	1079.50	497.00		638.00					
06/18/82	68.00	47.00	0	87.00	333.00	.13	75.00	62.00	1097.00	504.00		647.00					
06/19/82	62.00	43.00	.24	129.00	405.00	.12	74.00	58.00	1109.50	507.00		653.00					
06/20/82	71.00	54.00	.08	146.00	453.00	.13	77.00	60.00	1132.00	519.00		665.00					
06/21/82	73.00	49.00	0	128.00	656.00	.38	84.00	58.00	1153.00	530.00		677.00					
06/22/82	76.00	46.00	0	81.00	617.00	.25	85.00	60.00	1174.00	541.00		690.00					
06/23/82	86.00	55.00	0	128.00	610.00	.20	90.00	66.00	1204.50	562.00		710.50					
06/24/82	77.00	55.00	.67	168.00	319.00	.30	78.00	67.00	1230.50	578.00		726.50					
06/25/82	74.00	51.00	0	129.00	738.00	.07	89.00	61.00	1253.00	590.00		739.00					
06/26/82	77.00	44.00	0	111.00	668.00	.24	90.00	62.00	1274.50	602.00		752.50					
06/27/82	87.00	55.00	0	90.00	699.00	.24	96.00	67.00	1305.50	623.00		773.00					
06/28/82	90.00	55.00	0	133.00	578.00	.44	97.00	71.00	1338.00	645.00		793.50					
06/29/82	74.00	56.00	.46	158.00	638.00	.25	87.00	67.00	1363.00	660.00		808.00					
06/30/82	77.00	52.00	0	95.00	709.00	.25	91.00	64.00	1387.50	675.00		823.00					
07/01/82	82.00	49.00	0	101.00	718.00	.29	93.00	76.00	1413.00	690.00		839.00					
07/02/82	84.00	60.00	0	135.00	471.00	.23	89.00	72.00	1445.00	712.00		861.00					
07/03/82	90.00	64.00	0	139.00	711.00	.35	97.00	73.00	1482.00	739.00		886.00					
07/04/82	97.00	60.00	0	116.00	704.00	.35	100.00	75.00	1520.50	768.00		909.00					
07/05/82	98.00	70.00	0	299.00	600.00	.55	98.00	81.00	1564.50	802.00		937.00					
07/06/82	86.00	62.00	1.17	171.00	364.00	.30	89.00	72.00	1598.50	822.00		961.00					
07/07/82	74.00	54.00	0	163.00	679.00	.32	88.00	68.00	1622.50	840.00		975.00					
07/08/82	85.00	53.00	0	147.00	529.00	.26	89.00	66.00	1651.50	859.00		994.00					
07/09/82	83.00	59.00	.04	136.00	368.00	.20	85.00	73.00	1682.50	880.00		1015.00					
07/10/82	82.00	56.00	0	144.00	110.00	.06	95.00	67.00	1701.50	880.00		1024.00					
07/11/82	83.00	58.00	0	132.00	684.00	.20	91.00	64.00	1732.00	900.00		1044.00					
07/12/82	86.00	61.00	0	81.00	631.00	.46	97.00	70.00	1764.00	931.00		1066.00					
07/13/82	82.00	63.00	.04	84.00	422.00	.29	89.00	74.00	1794.50	952.00		1087.00					
07/14/82	90.00	61.00	0	100.00	647.00	.18	97.00	71.00	1830.00	977.00		1110.00					
07/15/82	82.00	67.00	0	131.00	279.00	.27	87.00	77.00	1864.50	1002.00		1135.00					
07/16/82	89.00	68.00	0	187.00	351.00	.13	90.00	76.00	1903.00	1030.00		1162.00					
07/17/82	81.00	63.00	0	154.00	653.00	.31	95.00	76.00	1935.00	1052.00		1184.00					
07/18/82	83.00	58.00	0	104.00	681.00	.40	97.00	75.00	1965.50	1073.00		1204.50					
07/19/82	85.00	55.00	0	111.00	584.00	.40	94.00	74.00	1995.50	1093.00		1224.50					
07/20/82	92.00	61.00	0	123.00	600.00	.25	97.00	76.00	2032.00	1119.00		1248.00					
07/21/82	90.00	68.00	.24	32.00	117.00	.25	95.00	79.00	2071.00	1148.00		1275.00					
07/22/82	87.00	63.00	.04	108.00	688.00	.30	98.00	73.00	2106.00	1173.00		1299.00					
07/23/82	88.00	64.00	0	118.00	573.00	.31	97.00	74.00	2140.50	1198.00		1323.00					
07/24/82	86.00	69.00	0	184.00	408.00	.22	93.00	78.00	2178.00	1225.00		1350.00					
07/25/82	84.00	67.00	0	111.00	380.00	.18	87.00	77.00	2213.50	1251.00		1376.00					
07/26/82	76.00	65.00	.67	89.00	270.00	.07	79.00	72.00	2242.50	1270.00		1395.00					
07/27/82	83.00	55.00	0	97.00	659.00	.27	93.00	68.00	2272.50	1290.00		1415.00					
07/28/82	87.00	57.00	0	75.00	600.00	.29	94.00	71.00	2304.50	1312.00		1436.00					
07/29/82	79.00	50.00	.39	168.00	602.00	.29	87.00	74.00	2334.00	1331.00		1456.00					
07/30/82	82.00	50.00	0	121.00	579.00	.26	90.00	69.00	2364.50	1352.00		1476.00					
07/31/82	86.00	63.00	0	147.00	492.00	.22	89.00	71.00	2399.00	1376.00		1501.00					

LOCATION : B E C K E R

DEGREE DAYS

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 40			BASE = 50			BASE = 50/86		
									ACCUM	VALUE		ACCUM	VALUE		ACCUM	VALUE	
10/01/82	53.00	43.00	.08	148.00	91.00	.13	559.00	54.00	3857.50	2221.00	2392.50	2221.00	2392.50				
10/02/82	62.00	47.00	.95	148.00	117.00	.02	660.00	54.00	3872.00	2225.50	2398.50	2225.50	2398.50				
10/03/82	65.00	44.00	0	97.00	387.00	.08	660.00	49.00	3886.50	2230.00	2406.00	2230.00	2406.00				
10/04/82	74.00	45.00	0	139.00	291.00	.11	667.00	51.00	3906.00	2239.50	2418.00	2239.50	2418.00				
10/05/82	68.00	45.00	.59	139.00	318.00	.12	667.00	52.00	3922.50	2246.00	2427.00	2246.00	2427.00				
10/06/82	71.00	40.00	1.26	194.00	117.00	.10	666.00	52.00	3938.00	2251.50	2437.50	2251.50	2437.50				
10/07/82	47.00	38.00	.08	180.00	116.00	.19	554.40	48.00	3940.50	2251.50	2437.50	2251.50	2437.50				
10/08/82	59.00	39.00	0	141.00	197.00	.04	558.40	48.00	3949.50	2251.50	2442.00	2251.50	2442.00				
10/09/82	54.00	48.00	.24	176.00	195.00	.04	554.40	52.00	3960.50	2252.50	2444.00	2252.50	2444.00				
10/10/82	56.00	47.00	0	94.00	151.00	.05	558.40	51.00	3972.00	2254.00	2447.00	2254.00	2447.00				
10/11/82	50.00	45.00	.04	160.00	94.00	.03	554.40	50.00	3979.50	2254.00	2447.00	2254.00	2447.00				
10/12/82	51.00	45.00	.05	136.00	93.00	.01	554.40	50.00	3987.50	2254.00	2447.50	2254.00	2447.50				
10/13/82	48.00	44.00	0	128.00	81.00	.04	552.00	49.00	3993.50	2254.00	2447.50	2254.00	2447.50				
10/14/82	68.00	44.00	.04	162.00	321.00	.05	661.00	47.00	4009.50	2260.00	2456.50	2260.00	2456.50				
10/15/82	54.00	38.00	.04	189.00	337.00	.06	668.00	47.00	4015.50	2260.00	2458.50	2260.00	2458.50				
10/16/82	53.00	30.00	0	86.00	250.00	.08	558.00	41.00	4017.00	2260.00	2460.00	2260.00	2460.00				
10/17/82	64.00	42.00	0	167.00	277.00	.15	559.50	46.00	4030.00	2263.00	2467.00	2263.00	2467.00				
10/18/82	65.00	42.00	0	154.00	183.00	.10	558.00	47.00	4043.50	2266.50	2474.50	2266.50	2474.50				
10/19/82	48.00	33.00	.71	267.00	136.00	.09	553.00	41.00	4044.00	2266.50	2474.50	2266.50	2474.50				
10/20/82	38.00	28.00	.04	226.00	183.00	.06	466.00	28.00	4044.00	2266.50	2474.50	2266.50	2474.50				
10/21/82	45.00	27.00	0	75.00	292.00	.05	499.00	37.00	4044.00	2266.50	2474.50	2266.50	2474.50				
10/22/82	53.00	26.00	0	119.00	294.00	.01	499.00	36.00	4044.00	2266.50	2476.00	2266.50	2476.00				
10/23/82	60.00	31.00	0	189.00	285.00	.09	552.00	37.00	4049.50	2266.50	2481.00	2266.50	2481.00				
10/24/82	62.00	41.00	0	221.00	271.00	.12	554.00	42.00	4061.00	2268.00	2487.00	2268.00	2487.00				
10/25/82	63.00	36.00	0	131.00	242.00	.14	555.00	42.00	4070.50	2268.00	2493.50	2268.00	2493.50				
10/26/82	64.00	46.00	0	219.00	225.00	.12	557.00	47.00	4085.50	2273.00	2500.50	2273.00	2500.50				
10/27/82	54.00	45.00	0	198.00	85.00	.18	551.00	47.00	4095.00	2273.00	2502.50	2273.00	2502.50				
10/28/82	55.00	43.00	0	194.00	114.00	.06	552.00	47.00	4103.50	2273.00	2504.50	2273.00	2504.50				
10/29/82	59.00	43.00	0	260.00	217.00	.07	554.00	47.00	4114.50	2274.00	2509.00	2274.00	2509.00				
10/30/82	40.00	29.00	0	112.00	219.00	.07	550.00	41.00	4114.50	2274.00	2509.00	2274.00	2509.00				
10/31/82	48.00	27.00	0	46.00	77.00	.06	46.00	39.00	4114.50	2274.00	2509.00	2274.00	2509.00				

L O C A T I O N : C R O O K S T O N

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	DEGREE DAYS		
									BASE = 40 ACCUM VALUE	BASE = 45 ACCUM VALUE	BASE = 50/86 ACCUM VALUE
04/01/82	38.00	17.00	0		249.82		34.00	33.00	0	0	0
04/02/82	38.00	32.00	.45		51.26		34.00	33.00	0	0	0
04/03/82	32.00	7.00	.06		204.19		33.00	32.00	0	0	0
04/04/82	23.00	6.00	0		241.19		32.00	31.00	0	0	0
04/05/82	24.00	16.00	0		285.59		31.00	31.00	0	0	0
04/06/82	27.00	13.00	0		300.39		31.00	31.00	0	0	0
04/07/82	36.00	23.00	0		265.86		31.00	31.00	0	0	0
04/08/82	36.00	26.00	0		194.32		31.00	31.00	0	0	0
04/09/82	39.00	30.00	0		183.22		32.00	31.00	0	0	0
04/10/82	38.00	29.00	.02		178.29		32.00	32.00	0	0	0
04/11/82	47.00	26.00	0		265.86		40.00	32.00	0	0	0
04/12/82	51.00	37.00	.12		125.26		40.00	35.00	4.00	0	.50
04/13/82	47.00	30.00	0		278.19		42.00	35.00	4.00	0	.50
04/14/82	63.00	37.00	0		329.99		50.00	35.00	14.00	5.00	7.00
04/15/82	66.00	43.00	0		275.72		50.00	45.00	28.50	14.50	15.00
04/16/82	66.00	39.00	.03		223.92		50.00	45.00	41.00	22.00	23.00
04/17/82	52.00	30.00	0		326.29		52.00	37.00	42.00	22.00	24.00
04/18/82	58.00	34.00	0		297.92		54.00	40.00	48.00	23.00	28.00
04/19/82	56.00	31.00	0		268.32		54.00	40.00	51.50	23.00	31.00
04/20/82	54.00	26.00	0		329.99		47.00	37.00	51.50	23.00	33.00
04/21/82	55.00	32.00	0		309.02		52.00	38.00	55.00	23.00	35.50
04/22/82	70.00	32.00	0		333.69		55.00	39.00	66.00	29.00	45.50
04/23/82	81.00	40.00	0		373.16		67.00	45.00	86.50	44.50	61.00
04/24/82	82.00	45.00	0		406.46		67.00	45.00	110.00	63.00	77.00
04/25/82	82.00	37.00	0		231.32		67.00	49.00	129.50	77.50	93.00
04/26/82	56.00	27.00	0		342.32		60.00	39.00	131.00	77.50	96.00
04/27/82	61.00	33.00	0		331.22		61.00	46.00	138.00	79.50	101.50
04/28/82	64.00	42.00	0		327.52		61.00	48.00	151.00	87.50	108.50
04/29/82	64.00	37.00	0		246.12		61.00	48.00	161.50	93.00	115.50
04/30/82	67.00	39.00	.09		304.09		60.00	47.00	174.50	101.00	124.00
05/01/82	67.00	39.00	0		304.09		60.00	49.00	187.50	109.00	132.50
05/02/82	76.00	39.00	0		311.49		60.00	50.00	205.00	121.50	145.50
05/03/82	79.00	56.00	0		352.19		60.00	54.00	232.50	144.00	163.00
05/04/82	82.00	58.00	1.00		306.56		60.00	56.00	262.50	169.00	183.00
05/05/82	70.00	44.00	.08		132.66		60.00	50.00	279.50	181.00	193.00
05/06/82	62.00	39.00	0		390.42		50.00	42.00	290.00	186.50	199.00
05/07/82	64.00	31.00	0		326.29		50.00	41.00	297.50	189.00	206.00
05/08/82	56.00	30.00	.01		265.86		50.00	40.00	300.50	189.00	209.00
05/09/82	58.00	38.00	0		318.89		61.00	39.00	308.50	192.00	213.00
05/10/82	57.00	45.00	.50		111.69		50.00	46.00	319.50	198.00	216.50
05/11/82	57.00	43.00	.22	167	128.96	.02	50.00	47.00	329.50	203.00	220.00
05/12/82	59.00	45.00	0	83.00	135.12	.07	52.00	47.00	338.50	207.00	221.50
05/13/82	56.00	48.00	.03	145.00	151.16	.08	52.00	48.00	350.50	214.00	224.50
05/14/82	58.00	49.00	0	87.00	222.69	.06	54.00	50.00	364.00	222.50	228.50
05/15/82	59.00	55.00	.22	192.00	95.66	.04	54.00	53.00	381.00	234.50	235.50
05/16/82	74.00	56.00	.71	143.00	239.96	.28	61.00	54.00	406.00	254.50	250.50
05/17/82	68.00	55.00	.23	176.00	168.42	.16	62.00	56.00	427.50	271.00	262.00
05/18/82	62.00	53.00	0	119.00	147.46	.04	57.00	56.00	445.00	283.50	269.50
05/19/82	58.00	51.00	.02	151.00	101.82	.05	56.00	56.00	459.50	293.00	274.00
05/20/82	58.00	42.00	0	172.00	168.42	.13	57.00	51.00	469.50	298.00	278.00
05/21/82	63.00	41.00	0	132.00	354.66	.24	64.00	48.00	481.50	305.00	284.50
05/22/82	64.00	41.00	0	87.00	323.82	.23	64.00	49.00	494.00	312.50	291.50
05/23/82	73.00	44.00	0	86.00	380.56	.30	72.00	49.00	512.50	326.00	303.00
05/24/82	75.00	53.00	0	105.00	396.59	.32	76.00	54.00	536.50	345.00	317.00
05/25/82	72.00	58.00	0	70.00	291.76	.19	75.00	57.00	561.50	365.00	332.00
05/26/82	72.00	50.00	0	46.00	273.26	.19	75.00	61.00	582.50	381.00	343.00
05/27/82	78.00	52.00	0	51.00	344.79	.22	79.00	60.00	607.50	401.00	358.00
05/28/82	80.00	53.00	0	26.00	457.02	.20	81.00	61.00	634.00	422.50	374.50
05/29/82	79.00	49.00	.08	80.00	374.39	.25	81.00	63.00	658.00	441.50	389.00
05/30/82	72.00	46.00	0	53.00	630.92	.31	81.00	63.00	677.00	455.50	400.00
05/31/82	57.00	43.00	.06	50.00	142.52	.01	63.00	54.00	687.00	460.50	403.50

LOCATION : CROOKSTON

DEGREE DAYS

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 40 ACCUMUL VALUE	BASE = 45 ACCUMUL VALUE	BASE = 50/86 ACCUMUL VALUE
06/01/82	54.00	40.00	0	117.00	288.06	.15	57.00	51.00	694.00	462.50	405.50
06/02/82	54.00	36.00	0	101.00	444.69	.21	65.00	50.00	699.00	462.50	407.50
06/03/82	64.00	43.00	0	28.00	366.99	.20	74.00	49.00	712.50	471.00	414.50
06/04/82	71.00	44.00	0	85.00	370.69	.32	74.00	56.00	730.00	483.50	425.00
06/05/82	76.00	56.00	0	184.00	322.59	.39	72.00	57.00	756.00	504.50	441.00
06/06/82	74.00	63.00	.04	239.00	265.86	.37	61.00	59.00	784.50	528.00	459.50
06/07/82	66.00	52.00	.52	179.00	82.09	0	60.00	58.00	803.50	542.00	468.50
06/08/82	57.00	40.00	0	104.00	101.82	.10	58.00	52.00	812.00	545.50	472.00
06/09/82	55.00	47.00	.71	136.00	158.56	.12	53.00	52.00	823.00	551.50	474.50
06/10/82	57.00	43.00	.13	174.00	120.32	.02	52.00	50.00	833.00	556.50	478.00
06/11/82	69.00	51.00	.01	84.00	566.79	.28	60.00	50.00	853.00	571.50	488.00
06/12/82	70.00	41.00	0	117.00	392.89	.31	63.00	54.00	868.50	582.00	498.00
06/13/82	73.00	50.00	0	88.00	391.66	.36	61.00	53.00	890.00	598.50	509.50
06/14/82	81.00	54.00	.03	53.00	400.29	.32	67.00	57.00	917.50	621.00	527.00
06/15/82	76.00	44.00	0	149.00	412.62	.41	67.00	60.00	937.50	636.00	540.00
06/16/82	70.00	45.00	0	106.00	526.09	.30	65.00	59.00	955.00	648.50	550.00
06/17/82	77.00	52.00	0	93.00	243.66	.29	65.00	59.00	979.50	668.00	564.50
06/18/82	66.00	47.00	0	117.00	358.36	.33	63.00	60.00	996.00	679.50	572.50
06/19/82	65.00	42.00	0	78.00	281.89	.26	59.00	55.00	1009.50	688.00	580.00
06/20/82	68.00	46.00	.11	191.00	226.39	.01	58.00	56.00	1026.50	700.00	589.00
06/21/82	68.00	45.00	0	113.00	316.42	.47	61.00	56.00	1043.00	711.50	598.00
06/22/82	70.00	41.00	0	79.00	389.19	.30	71.00	62.00	1058.50	722.00	608.00
06/23/82	72.00	51.00	.05	76.00	292.99	.11	63.00	56.00	1080.00	738.50	619.50
06/24/82	84.00	57.00	.02	141.00	295.46	.32	65.00	60.00	1110.50	764.00	640.00
06/25/82	65.00	40.00	0	159.00	309.02	.29	63.00	58.00	1123.00	771.50	647.50
06/26/82	71.00	47.00	0	57.00	423.72	.27	67.00	58.00	1142.00	785.50	658.00
06/27/82	77.00	58.00	.17	111.00	368.22	.32	68.00	59.00	1169.50	808.00	675.50
06/28/82	79.00	53.00	.10	85.00	384.26	.32	71.00	64.00	1195.50	829.00	691.50
06/29/82	62.00	44.00	.60	102.00	131.42	.14	71.00	57.00	1208.50	837.00	697.50
06/30/82	69.00	45.00	0	69.00	381.79	.29	60.00	54.00	1225.50	849.00	707.00
07/01/82	73.00	49.00	0	60.00	401.52	.31	71.00	56.00	1246.50	865.00	718.50
07/02/82	79.00	61.00	0	145.00	433.59	.58	62.00	61.00	1276.50	890.00	738.50
07/03/82	79.00	62.00	0	149.00	342.32	.31	70.00	67.00	1307.00	915.50	759.00
07/04/82	88.00	60.00	0	59.00	682.72	.33	77.00	66.00	1341.00	944.50	782.00
07/05/82	84.00	65.00	.55	249.00	198.02	.25	69.00	68.00	1375.50	974.00	806.50
07/06/82	86.00	59.00	0	93.00	458.26	.30	70.00	67.00	1408.00	1001.50	829.00
07/07/82	77.00	55.00	0	91.00	297.92	.31	70.00	67.00	1434.00	1022.50	845.00
07/08/82	72.00	56.00	0	114.00	358.36	.37	70.00	65.00	1458.00	1041.50	859.00
07/09/82	80.00	59.00	.32	84.00	329.99	.35	75.00	65.00	1487.50	1066.00	878.50
07/10/82	71.00	59.00	.18	113.00	157.32	.23	67.00	65.00	1512.50	1086.00	893.50
07/11/82	75.00	52.00	0	46.00	445.92	.29	70.00	63.00	1536.00	1104.50	907.00
07/12/82	81.00	55.00	0	28.00	380.56	.24	76.00	62.00	1564.00	1127.00	925.00
07/13/82	87.00	62.00	0	29.00	406.46	.32	74.00	67.00	1598.50	1157.00	949.00
07/14/82	77.00	58.00	0	100.00	238.72	.25	74.00	69.00	1626.00	1179.00	966.50
07/15/82	85.00	64.00	0	94.00	342.32	.41	80.00	68.00	1660.50	1209.50	991.00
07/16/82	84.00	61.00	0	74.00	228.86	.20	77.00	71.00	1693.00	1236.50	1013.50
07/17/82	83.00	56.00	.06	144.00	210.36	.22	77.00	70.00	1722.50	1261.00	1033.00
07/18/82	77.00	52.00	0	117.00	399.06	.34	77.00	68.00	1747.00	1280.50	1047.50
07/19/82	78.00	55.00	.38	51.00	381.79	.28	81.00	65.00	1773.50	1302.00	1064.00
07/20/82	75.00	58.00	.07	88.00	278.19	.16	73.00	67.00	1800.00	1323.50	1080.50
07/21/82	90.00	61.00	1.22	90.00	564.32	.77	84.00	67.00	1835.50	1354.00	1104.00
07/22/82	79.00	53.00	0	68.00	469.36	.31	79.00	67.00	1861.50	1375.00	1120.00
07/23/82	80.00	59.00	0	109.00	511.29	.24	77.00	65.00	1891.00	1399.50	1139.50
07/24/82	87.00	68.00	.14	169.00	296.69	.27	81.00	69.00	1928.50	1432.00	1166.50
07/25/82	82.00	57.00	0	56.00	497.72	.29	83.00	71.00	1958.00	1456.50	1186.00
07/26/82	80.00	58.00	0	27.00	264.62	.16	80.00	68.00	1987.00	1480.50	1205.00
07/27/82	80.00	57.00	0	26.00	364.52	.24	84.00	67.00	2015.50	1504.00	1223.50
07/28/82	80.00	54.00	0	22.00	201.72	.25	81.00	70.00	2042.50	1526.00	1240.50
07/29/82	83.00	57.00	.35	62.00	396.59	.32	83.00	69.00	2072.50	1551.00	1260.50
07/30/82	75.00	54.00	.01	86.00	300.39	.20	72.00	65.00	2097.00	1570.50	1275.00
07/31/82	82.00	58.00	0	53.00	299.16	.30	82.00	63.00	2127.00	1595.50	1295.00

LOCATION : CROOKSTON

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 40 ACCUM VALUE	BASE = 45 ACCUM VALUE	BASE = 50/86 ACCUM VALUE
08/01	83.00	59.00	0.00	22.00	220.12	.17	77.00	69.00	2158.00	1621.50	1313.16
08/02	84.00	62.00	0.00	113.00	219.92	.26	84.00	69.00	2191.00	1649.50	1333.99
08/03	89.00	63.00	0.00	130.00	480.46	.30	83.00	72.00	2227.00	1680.50	1363.50
08/04	81.00	57.00	0.00	32.00	60.62	.23	86.00	72.00	2256.00	1704.50	1382.50
08/05	87.00	58.00	0.00	51.00	11.29	.15	86.00	70.00	2288.00	1732.50	1404.50
08/06	82.00	58.00	.78	83.00	376.86	.43	86.00	71.00	2322.00	1760.50	1428.50
08/07	84.00	50.00	0.00	24.00	395.36	.18	82.00	73.00	2354.00	1787.50	1450.50
08/08	84.00	57.00	0.00	130.00	22.59	.38	82.00	69.00	2384.00	1813.50	1470.50
08/09	71.00	46.00	0.03	147.00	274.49	.20	74.00	63.00	2403.00	1826.50	1481.50
08/10	67.00	43.00	0.00	147.00	263.39	.21	71.00	63.00	2411.00	1836.50	1489.50
08/11	71.00	43.00	0.00	26.00	365.76	.15	78.00	64.00	2433.00	1848.50	1500.50
08/12	76.00	53.00	0.00	161.00	326.29	.35	78.00	62.00	2459.00	1868.50	1514.50
08/13	73.00	61.00	0.07	157.00	193.09	.15	68.00	65.00	2488.00	1890.50	1531.50
08/14	86.00	63.00	0.00	157.00	309.02	.22	84.00	67.00	2522.00	1919.50	1556.50
08/15	79.00	59.00	0.00	152.00	201.72	.16	74.00	70.00	2555.00	1946.50	1578.50
08/16	86.00	59.00	0.00	29.00	349.72	.17	81.00	70.00	2588.00	1974.50	1600.50
08/17	85.00	63.00	.33	31.00	426.19	.20	78.00	68.00	2614.00	1997.50	1619.50
08/18	79.00	63.00	0.00	63.00	149.62	.19	85.00	67.00	2644.00	2026.50	1644.50
08/19	91.00	63.00	0.03	51.00	344.72	.26	80.00	73.00	2688.00	2058.50	1667.50
08/20	83.00	61.00	0.00	41.00	412.22	.29	82.00	73.00	2712.00	2080.50	1684.50
08/21	83.00	57.00	0.00	41.00	158.26	.24	84.00	67.00	2742.00	2105.50	1704.50
08/22	87.00	57.00	.14	96.00	306.56	.18	78.00	68.00	2774.00	2132.50	1726.50
08/23	78.00	53.00	.17	41.00	243.66	.19	79.00	66.00	2799.00	2153.50	1741.50
08/24	73.00	50.00	0.00	14.00	257.22	.15	76.00	64.00	2821.00	2169.50	1753.50
08/25	71.00	47.00	0.00	75.00	268.32	.19	73.00	63.00	2841.00	2183.50	1763.50
08/26	67.00	40.00	0.00	68.00	315.19	.21	71.00	60.00	2855.00	2192.50	1772.50
08/27	64.00	35.00	0.00	33.00	207.89	.15	66.00	56.00	2866.00	2196.50	1779.50
08/28	63.00	37.00	0.00	35.00	247.36	.15	69.00	53.00	2873.00	2201.50	1785.50
08/29	70.00	51.00	1.79	17.00	263.39	.26	69.00	60.00	2893.00	2217.50	1796.50
08/30	72.00	38.00	0.00	51.00	254.76	.17	70.00	58.00	2908.00	2227.50	1807.50
08/31	58.00	48.00	0.00	81.00	174.59	.02	68.00	58.00	2921.00	2235.50	1811.50
09/01	77.00	48.00	0.01	37.00	95.66	.11	70.00	58.00	2944.00	2252.50	1824.50
09/02	80.00	48.00	0.00	79.00	221.46	.21	70.00	59.00	2968.00	2271.50	1831.50
09/03	72.00	38.00	0.00	72.00	238.72	.22	68.00	58.00	2988.00	2281.50	1833.50
09/04	78.00	45.00	0.00	76.00	291.76	.16	73.00	56.00	3000.00	2298.50	1838.50
09/05	89.00	48.00	0.00	104.00	301.62	.30	77.00	61.00	3033.00	2321.50	1850.50
09/06	68.00	40.00	0.00	60.00	274.49	.21	71.00	60.00	3047.00	2330.50	1850.50
09/07	69.00	45.00	0.00	136.00	262.16	.20	70.00	57.00	3064.00	2342.50	1850.50
09/08	73.00	54.00	0.00	209.00	200.49	.13	66.00	60.00	3087.00	2361.50	1850.50
09/09	86.00	52.00	0.00	201.00	209.12	.27	75.00	65.00	3121.00	2390.50	1850.50
09/10	83.00	59.00	0.00	170.00	244.89	.19	74.00	68.00	3152.00	2416.50	1850.50
09/11	87.00	54.00	0.00	181.00	246.12	.31	78.00	68.00	3188.00	2446.50	1850.50
09/12	70.00	57.00	0.00	50.00	262.16	.09	70.00	65.00	3211.00	2463.50	1850.50
09/13	58.00	37.00	.40	34.00	79.62	.04	64.00	55.00	3217.00	2466.50	1850.50
09/14	59.00	41.00	0.00	46.00	88.26	.04	58.00	54.00	3227.00	2471.50	1850.50
09/15	52.00	44.00	0.00	86.00	115.39	.08	53.00	53.00	3239.00	2474.50	1850.50
09/16	57.00	39.00	0.00	53.00	105.52	.08	58.00	51.00	3244.00	2477.50	1850.50
09/17	55.00	43.00	.33	60.00	142.52	.01	51.00	49.00	3252.00	2481.50	1850.50
09/18	75.00	39.00	.08	56.00	232.46	.08	58.00	49.00	3262.00	2485.50	1850.50
09/19	58.00	42.00	0.00	69.00	235.02	.15	60.00	49.00	3280.00	2499.50	1850.50
09/20	53.00	31.00	0.00	104.00	80.86	.09	54.00	47.00	3288.00	2499.50	1850.50
09/21	58.00	31.00	0.00	34.00	233.79	.13	55.00	45.00	3287.00	2499.50	1850.50
09/22	67.00	38.00	0.00	112.00	300.39	.19	60.00	46.00	3299.00	2506.50	1850.50
09/23	75.00	49.00	0.01	176.00	412.62	.24	61.00	50.00	3321.00	2523.50	1850.50
09/24	62.00	38.00	0.00	136.00	226.39	.07	57.00	51.00	3331.00	2528.50	1850.50
09/25	59.00	28.00	0.00	60.00	164.72	.13	57.00	48.00	3335.00	2528.50	1850.50
09/26	60.00	34.00	0.00	184.00	251.06	.15	53.00	45.00	3344.00	2531.50	1850.50
09/27	69.00	44.00	0.00	45.00	216.52	.18	60.00	44.00	3359.00	2543.50	1850.50
09/28	58.00	49.00	.06	165.00	235.02	.05	54.00	54.00	3371.00	2550.50	1850.50
09/29	68.00	45.00	0.00	148.00	70.99	.05	56.00	53.00	3388.00	2561.50	1850.50
09/30	55.00	37.00	0.00	42.00	143.76	.10	55.00	48.00	3394.00	2562.50	1850.50

LOCATION : GRAND RAPIDS

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	DEGREE DAYS			
									BASE = 40 ACCUM	BASE = 50 VALUE	BASE = 50/86 ACCUM	BASE = 50/86 VALUE
04/01/82	38.00	13.00	0.00		521.38				0.00		0.00	
04/02/82	39.00	29.00	0.00		99.51				0.00		0.00	
04/03/82	35.00	8.00	1.65		288.92				0.00		0.00	
04/04/82	29.00	0.00	0.00		558.28				0.00		0.00	
04/05/82	27.00	8.00	0.00		585.34				0.00		0.00	
04/06/82	37.00	-1.00	0.00		617.32				0.00		0.00	
04/07/82	40.00	1.00	0.00		640.69				0.00		0.00	
04/08/82	42.00	10.00	0.00		563.20				0.00		0.00	
04/09/82	42.00	16.00	0.00		429.13				0.00		0.00	
04/10/82	37.00	25.00	.05		217.58				0.00		0.00	
04/11/82	46.00	12.00	0.00		593.95				0.00		0.00	
04/12/82	44.00	34.00	.17		148.70				0.00		0.00	
04/13/82	50.00	32.00	0.00		543.52				1.00		0.00	
04/14/82	60.00	30.00	0.00		486.94				16.00		5.00	
04/15/82	63.00	41.00	.09		533.68				18.00	2.00	11.50	
04/16/82	62.00	40.00	.36		175.76				29.00	3.00	17.50	
04/17/82	50.00	30.00	0.00		640.69				29.00	3.00	17.50	
04/18/82	48.00	30.00	.12		223.73				29.00	3.00	17.50	
04/19/82	47.00	30.00	0.00		506.62				29.00	3.00	17.50	
04/20/82	44.00	24.00	0.00		655.44				29.00	3.00	17.50	
04/21/82	56.00	23.00	0.00		563.20				29.00	3.00	20.50	
04/22/82	62.00	26.00	0.00		633.31				33.00	3.00	26.50	
04/23/82	77.00	44.00	0.00		654.21				53.00	13.00	40.00	
04/24/82	79.00	51.00	0.00		628.39				78.00	28.00	55.00	
04/25/82	77.00	47.00	0.00		579.19				100.00	40.00	68.50	
04/26/82	58.00	31.00	0.00		661.59				105.00	40.00	72.50	
04/27/82	63.00	27.00	0.00		684.96				110.00	40.00	79.00	
04/28/82	66.00	30.00	0.00		619.78				118.00	40.00	87.00	
04/29/82	67.00	30.00	0.00		670.20				126.00	40.00	95.50	
04/30/82	67.00	43.00	0.00		483.25				141.00	45.00	104.00	
05/01/82	74.00	33.00	0.00		581.65				155.00	49.00	116.00	
05/02/82	79.00	44.00	0.00		561.97				176.00	60.00	130.50	
05/03/82	78.00	45.00	0.00		416.83				198.00	72.00	144.50	
05/04/82	80.00	51.00	.68		307.37				223.00	87.00	160.00	
05/05/82	61.00	46.00	.22		271.70				237.00	91.00	165.50	
05/06/82	62.00	37.00	0.00		246.50				246.00	91.00	171.50	
05/07/82	62.00	32.00	0.00		253.50				253.00	91.00	177.50	
05/08/82	65.00	35.00	0.00		263.50				263.00	91.00	185.00	
05/09/82	64.00	42.00	0.00		276.50				276.00	94.00	192.00	
05/10/82	71.00	42.00	.87		293.00				293.00	100.00	202.50	
05/11/82	70.00	45.00	.12		310.50				310.00	108.00	212.50	
05/12/82	55.00	46.00	0.00		321.50				321.00	108.00	215.00	
05/13/82	59.00	44.00	.45		332.50				332.00	110.00	219.50	
05/14/82	77.00	55.00	0.00		358.00				358.00	126.00	235.50	
05/15/82	78.00	57.00	.71		386.00				386.00	143.00	253.00	
05/16/82	75.00	53.00	.08		410.00				410.00	157.00	267.00	
05/17/82	65.00	48.00	.23		426.50				426.00	164.00	274.50	
05/18/82	59.00	54.00	.79		443.00				443.00	170.00	281.00	
05/19/82	62.00	53.00	.02		460.00				460.00	178.00	288.50	
05/20/82	65.00	39.00	0.00		472.00				472.00	180.00	296.00	
05/21/82	69.00	35.00	0.00		484.00				484.00	182.00	305.50	
05/22/82	74.00	37.00	0.00		500.00				500.00	187.00	317.50	
05/23/82	73.00	35.00	0.00		514.00				514.00	191.00	329.00	
05/24/82	76.00	40.00	0.00		532.00				532.00	199.00	342.00	
05/25/82	75.00	46.00	0.00		552.00				552.00	210.00	354.50	
05/26/82	78.00	50.00	0.00		576.00				576.00	224.00	368.50	
05/27/82	80.00	49.00	0.00		601.00				601.00	238.00	383.50	
05/28/82	80.00	46.00	0.00		624.00				624.00	251.00	398.50	
05/29/82	78.00	57.00	.29		651.00				651.00	269.00	416.00	
05/30/82	78.00	42.00	0.00		671.00				671.00	279.00	430.00	
05/31/82	72.00	17.00	.07		691.00				691.00	288.00	441.00	

LOCATION : GRAND RAPIDS

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 40 ACCUMUL VALUE	DEGREE DAYS BASE = 50 ACCUMUL VALUE	BASE = 50/86 ACCUMUL VALUE
06	55	42							699.50	288.50	443.50
06	55	42							709.00	288.50	450.50
06	55	41							721.00	290.00	459.50
06	55	41							739.00	298.00	472.50
06	55	41							759.00	308.00	484.50
06	55	41							781.00	320.00	496.50
06	55	41							802.00	331.00	507.50
06	55	41							819.00	338.00	515.50
06	55	41							838.00	347.00	524.50
06	55	41							854.00	355.00	533.50
06	55	41							869.00	362.00	543.50
06	55	41							885.00	368.00	554.50
06	55	41							903.00	378.00	568.50
06	55	41							923.00	394.00	584.50
06	55	41							945.00	405.00	595.50
06	55	41							990.00	420.00	616.50
06	55	41							1020.00	425.00	624.50
06	55	41							1054.00	428.00	631.50
06	55	41							1091.00	438.00	640.50
06	55	41							1131.00	444.00	649.50
06	55	41							1173.00	450.00	660.50
06	55	41							1219.00	460.00	672.50
06	55	41							1268.00	478.00	690.50
06	55	41							1319.00	487.00	701.50
06	55	41							1373.00	498.00	714.50
06	55	41							1429.00	516.00	731.50
06	55	41							1488.00	522.00	747.50
06	55	41							1549.00	533.00	757.50
06	55	41							1612.00	545.00	769.50
06	55	41							1678.00	557.00	784.50
06	55	41							1747.00	575.00	802.50
06	55	41							1819.00	599.00	825.50
06	55	41							1894.00	626.00	845.50
06	55	41							1973.00	654.00	869.50
06	55	41							2057.00	683.00	893.50
06	55	41							2147.00	713.00	912.50
06	55	41							2242.00	734.00	928.50
06	55	41							2343.00	751.00	946.50
06	55	41							2449.00	769.00	955.50
06	55	41							2561.00	788.00	972.50
06	55	41							2679.00	807.00	989.50
06	55	41							2803.00	829.00	1009.50
06	55	41							2933.00	848.00	1028.50
06	55	41							3069.00	871.00	1049.50
06	55	41							3211.00	887.00	1068.50
06	55	41							3359.00	898.00	1091.50
06	55	41							3513.00	918.00	1108.50
06	55	41							3673.00	943.00	1119.50
06	55	41							3839.00	962.00	1138.50
06	55	41							4011.00	981.00	1161.50
06	55	41							4189.00	1004.00	1180.50
06	55	41							4373.00	1022.00	1200.50
06	55	41							4563.00	1043.00	1223.50
06	55	41							4759.00	1060.00	1241.50
06	55	41							4961.00	1077.00	1261.50
06	55	41							5169.00	1096.00	1278.50
06	55	41							5383.00	1113.00	1295.50
06	55	41							5603.00	1131.00	1314.50
06	55	41							5829.00	1149.00	1332.50
06	55	41							6061.00	1167.00	1349.50

LOCATION : GRAND RAPIDS

		DEGREE DAYS										
		MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 40 ACCUM VALUE	BASE = 50 ACCUM VALUE	BASE = 50/86 ACCUM VALUE
08/08	82	77.00	58.00	0.00		488.17				2169.00	1148.50	1367.50
08/08	82	77.00	47.00	0.00		137.00				2191.00	1160.50	1380.50
08/08	82	77.00	66.00	0.00		431.00				2224.00	1183.50	1403.50
08/08	82	77.00	45.00	0.00		120.00				2256.00	1205.50	1426.50
08/08	82	77.00	66.00	0.00		55.00				2291.00	1230.50	1449.50
08/08	82	77.00	34.00	0.00		344.00				2321.00	1250.50	1469.50
08/08	82	77.00	66.00	1.39		393.00				2354.00	1273.50	1492.50
08/08	82	77.00	66.00	0.00		379.00				2383.00	1293.50	1512.50
08/08	82	77.00	44.00	0.00		600.00				2401.00	1300.50	1520.50
08/08	82	77.00	74.00	0.00		574.00				2416.00	1305.50	1524.50
08/08	82	77.00	43.00	0.00		555.00				2432.00	1311.50	1528.50
08/08	82	77.00	43.00	0.00		433.00				2445.00	1321.50	1534.50
08/08	82	77.00	44.00	0.00		444.00				2477.00	1337.50	1549.50
08/08	82	77.00	44.00	0.00		422.00				2506.00	1355.50	1566.50
08/08	82	77.00	27.00	0.00		333.00				2536.00	1376.50	1589.50
08/08	82	77.00	33.00	0.00		333.00				2599.00	1409.50	1620.50
08/08	82	77.00	33.00	0.00		455.00				2633.00	1444.00	1655.00
08/08	82	77.00	44.00	0.00		176.00				2666.00	1462.00	1672.00
08/08	82	77.00	44.00	0.00		176.00				2683.00	1476.00	1685.00
08/08	82	77.00	44.00	0.00		176.00				2711.00	1490.00	1700.00
08/08	82	77.00	44.00	0.00		176.00				2739.00	1508.00	1714.00
08/08	82	77.00	44.00	0.00		176.00				2763.00	1522.00	1728.00
08/08	82	77.00	44.00	0.00		176.00				2783.00	1533.00	1739.00
08/08	82	77.00	44.00	0.00		176.00				2803.00	1544.00	1750.00
08/08	82	77.00	44.00	0.00		176.00				2819.00	1549.00	1755.00
08/08	82	77.00	44.00	0.00		176.00				2834.00	1553.00	1759.00
08/08	82	77.00	44.00	0.00		176.00				2848.00	1556.00	1762.00
08/08	82	77.00	44.00	0.00		176.00				2862.00	1559.00	1765.00
08/08	82	77.00	44.00	0.00		176.00				2876.00	1562.00	1768.00
08/08	82	77.00	44.00	0.00		176.00				2890.00	1565.00	1771.00
08/08	82	77.00	44.00	0.00		176.00				2904.00	1568.00	1774.00
08/08	82	77.00	44.00	0.00		176.00				2918.00	1571.00	1777.00
08/08	82	77.00	44.00	0.00		176.00				2932.00	1574.00	1780.00
08/08	82	77.00	44.00	0.00		176.00				2946.00	1577.00	1783.00
08/08	82	77.00	44.00	0.00		176.00				2960.00	1580.00	1786.00
08/08	82	77.00	44.00	0.00		176.00				2974.00	1583.00	1789.00
08/08	82	77.00	44.00	0.00		176.00				2988.00	1586.00	1792.00
08/08	82	77.00	44.00	0.00		176.00				3002.00	1589.00	1795.00
08/08	82	77.00	44.00	0.00		176.00				3016.00	1592.00	1798.00
08/08	82	77.00	44.00	0.00		176.00				3030.00	1595.00	1801.00
08/08	82	77.00	44.00	0.00		176.00				3044.00	1598.00	1804.00
08/08	82	77.00	44.00	0.00		176.00				3058.00	1601.00	1807.00
08/08	82	77.00	44.00	0.00		176.00				3072.00	1604.00	1810.00
08/08	82	77.00	44.00	0.00		176.00				3086.00	1607.00	1813.00
08/08	82	77.00	44.00	0.00		176.00				3100.00	1610.00	1816.00
08/08	82	77.00	44.00	0.00		176.00				3114.00	1613.00	1819.00
08/08	82	77.00	44.00	0.00		176.00				3128.00	1616.00	1822.00
08/08	82	77.00	44.00	0.00		176.00				3142.00	1619.00	1825.00
08/08	82	77.00	44.00	0.00		176.00				3156.00	1622.00	1828.00
08/08	82	77.00	44.00	0.00		176.00				3170.00	1625.00	1831.00
08/08	82	77.00	44.00	0.00		176.00				3184.00	1628.00	1834.00
08/08	82	77.00	44.00	0.00		176.00				3198.00	1631.00	1837.00
08/08	82	77.00	44.00	0.00		176.00				3212.00	1634.00	1840.00
08/08	82	77.00	44.00	0.00		176.00				3226.00	1637.00	1843.00
08/08	82	77.00	44.00	0.00		176.00				3240.00	1640.00	1846.00
08/08	82	77.00	44.00	0.00		176.00				3254.00	1643.00	1849.00
08/08	82	77.00	44.00	0.00		176.00				3268.00	1646.00	1852.00
08/08	82	77.00	44.00	0.00		176.00				3282.00	1649.00	1855.00
08/08	82	77.00	44.00	0.00		176.00				3296.00	1652.00	1858.00
08/08	82	77.00	44.00	0.00		176.00				3310.00	1655.00	1861.00
08/08	82	77.00	44.00	0.00		176.00				3324.00	1658.00	1864.00
08/08	82	77.00	44.00	0.00		176.00				3338.00	1661.00	1867.00
08/08	82	77.00	44.00	0.00		176.00				3352.00	1664.00	1870.00
08/08	82	77.00	44.00	0.00		176.00				3366.00	1667.00	1873.00
08/08	82	77.00	44.00	0.00		176.00				3380.00	1670.00	1876.00
08/08	82	77.00	44.00	0.00		176.00				3394.00	1673.00	1879.00

LOCATION : GRAND RAPIDS

								DEGREE DAYS				
		MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 40 ACCULM VALUE	BASE = 50 ACCULM VALUE	BASE = 50/86 ACCULM VALUE
10/01/82	55.8	00	35.00	0		229.88				3397.50	1795.50	2137.50
10/02/82	55.3	00	41.00	1.39		56.46				3404.50	1795.50	2139.00
10/03/82	55.3	00	43.00	.02		349.19				3417.50	1798.50	2145.50
10/04/82	55.8	00	42.00	.02		236.03				3432.50	1803.50	2154.50
10/05/82	57.7	00	37.00	0		279.08				3444.50	1805.50	2163.00
10/06/82	57.7	00	45.00	.81		61.38				3455.50	1806.50	2166.50
10/07/82	57.7	00	37.00	.61		103.20				3459.00	1806.50	2166.50
10/08/82	57.7	00	42.00	.02		108.12				3466.50	1806.50	2167.50
10/09/82	57.7	00	43.00	.43		35.55				3474.00	1806.50	2169.00
10/10/82	57.7	00	44.00	.32		108.12				3483.00	1806.50	2171.00
10/11/82	57.7	00	45.00	.14		145.01				3494.00	1807.50	2174.50
10/12/82	57.7	00	43.00	.17		85.98				3501.00	1807.50	2175.00
10/13/82	57.7	00	41.00	.04		103.20				3506.50	1807.50	2175.00
10/14/82	57.7	00	42.00	0		296.30				3520.00	1811.00	2182.50
10/15/82	57.7	00	40.00	0		272.93				3531.50	1812.00	2189.00
10/16/82	57.7	00	28.00	0		148.70				3531.50	1812.00	2189.00
10/17/82	57.7	00	34.00	.26		242.18				3537.50	1812.00	2193.00
10/18/82	57.7	00	40.00	.01		100.74				3546.50	1812.00	2197.00
10/19/82	57.7	00	35.00	.02		61.38				3550.00	1812.00	2198.50
10/20/82	41.00	29.00	0	0		202.82				3550.00	1812.00	2198.50
10/21/82	47.00	30.00	0	0		269.24				3550.00	1812.00	2198.50
10/22/82	54.00	24.00	0	0		271.70				3550.00	1812.00	2200.50
10/23/82	54.00	28.00	0	0		256.94				3550.00	1812.00	2200.50
10/24/82	54.00	35.00	0	0		227.42				3552.10	1812.00	2211.00
10/25/82	54.00	31.00	0	0		239.72				3550.00	1812.00	2218.50
10/26/82	54.00	44.00	0	0		170.84				3555.00	1817.00	2226.00
10/27/82	54.00	43.00	0	0		136.40				3557.50	1819.00	2232.00
10/28/82	54.00	44.00	.01			84.75				3607.50	1819.00	2235.00
10/29/82	54.00	40.00	.09			152.39				3614.50	1819.00	2237.00
10/30/82	54.00	30.00	0	0		256.94				3617.00	1819.00	2239.50
10/31/82	54.00	28.00	0	0		168.38				3618.50	1819.00	2242.00

LOCATION : L A M B E R T O N

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 45 ACCUM VALUE	BASE = 50 ACCUM VALUE	BASE = 50/86 ACCUM VALUE
04/01	55	30	00		446		46	45	00	00	00
04/02	56	30	00		386		45	45	00	00	00
04/03	78	7	90		168		53	36	00	00	10
04/04	00	00	00		337		00	34	00	00	10
04/05	25	9	00		223		35	34	00	00	10
04/06	28	3	11		413		00	34	00	00	10
04/07	00	6	00		513		34	34	00	00	10
04/08	32	21	00		22		33	34	00	00	10
04/09	27	22	05		248		00	34	00	00	10
04/10	38	15	04		313		34	34	00	00	10
04/11	37	26	00		427		34	34	00	00	10
04/12	37	24	00		446		34	34	00	00	10
04/13	46	35	00		472		34	34	00	00	10
04/14	58	33	00		169		34	34	00	00	10
04/15	60	37	00		493		54	35	00	00	23
04/16	72	45	10		396		56	44	00	00	23
04/17	74	45	78		283		62	50	17	18	23
04/18	49	35	07		103		52	42	32	18	11
04/19	58	48	00		522		54	42	40	21	11
04/20	66	32	00		151		58	42	45	21	11
04/21	40	21	34		76		46	40	45	21	11
04/22	45	27	00		527		41	38	45	21	11
04/23	32	32	00		476		52	40	45	21	11
04/24	60	41	00		549		55	41	51	22	11
04/25	46	46	00		542		59	46	67	33	11
04/26	76	50	00		520		64	50	85	46	11
04/27	66	36	00		352		61	50	91	47	11
04/28	66	30	00	79	571	33	62	49	91	47	11
04/29	66	33	00	70	551	33	65	47	95	47	11
04/30	66	33	00	70	518	33	61	66	97	47	11
05/01	66	33	00	70	498	33	61	70	105	50	11
05/02	66	33	00	70	445	33	66	71	129	80	11
05/03	66	33	00	70	514	33	74	74	151	80	11
05/04	66	33	00	70	499	33	73	73	180	80	11
05/05	66	33	00	70	356	33	66	66	204	123	11
05/06	66	33	00	70	300	33	66	66	209	124	11
05/07	66	33	00	70	446	33	66	66	214	124	11
05/08	66	33	00	70	453	33	66	66	219	124	11
05/09	66	33	00	70	374	33	66	66	230	124	11
05/10	66	33	00	70	448	33	66	66	254	149	11
05/11	66	33	00	70	459	33	66	66	277	167	11
05/12	66	33	00	70	187	33	66	66	290	175	11
05/13	66	33	00	70	176	33	66	66	304	184	11
05/14	66	33	00	70	520	33	66	66	321	198	11
05/15	66	33	00	70	112	33	66	66	339	198	11
05/16	66	33	00	70	103	33	66	66	354	198	11
05/17	66	33	00	70	367	33	66	66	376	198	11
05/18	66	33	00	70	499	33	66	66	391	198	11
05/19	66	33	00	70	221	33	66	66	408	198	11
05/20	66	33	00	70	133	33	66	66	427	198	11
05/21	66	33	00	70	112	33	66	66	436	198	11
05/22	66	33	00	70	181	33	66	66	446	198	11
05/23	66	33	00	70	579	33	66	66	453	198	11
05/24	66	33	00	70	296	33	66	66	467	198	11
05/25	66	33	00	70	68	33	66	66	482	198	11
05/26	66	33	00	70	112	33	66	66	499	198	11
05/27	66	33	00	70	337	33	66	66	512	198	11
05/28	66	33	00	70	397	33	66	66	527	198	11
05/29	66	33	00	70	302	33	66	66	548	198	11
05/30	66	33	00	70	00	33	66	66	565	198	11
05/31	66	33	00	70	00	33	66	66	582	198	11

L O C A T I O N : L A M B E R T O N

		DEGREE DAYS											
		BASE = 45					BASE = 50					BASE = 50/86	
		MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	ACCULM VALUE	ACCULM VALUE	ACCULM VALUE	ACCULM VALUE
06/01/82		54.00	43.00	00	83.00	4554.00	.21	63.00	54.00	586.50	372.50	494.50	
06/02/82		72.00	41.00	00	63.00	5993.00	.30	70.00	40.00	597.50	379.50	505.50	
06/03/82		76.00	43.00	00	41.00	5228.00	.11	77.00	59.00	606.50	383.00	513.00	
06/04/82		70.00	44.00	00	41.00	4444.00	.39	77.00	60.00	620.50	392.00	523.00	
06/05/82		73.00	45.00	00	41.00	4166.00	.30	76.00	62.00	639.50	405.50	536.50	
06/06/82		77.00	47.00	00	41.00	4753.00	.00	77.00	64.00	661.00	422.50	553.50	
06/07/82		72.00	47.00	.8	49.00	4733.00	.15	78.00	61.00	679.50	435.50	566.50	
06/08/82		73.00	48.00	00	61.00	5322.00	.21	72.00	59.00	694.50	446.50	578.00	
06/09/82		77.00	50.00	.28	64.00	5622.00	.10	75.00	60.00	715.50	462.00	594.00	
06/10/82		71.00	50.00	00	104.00	2552.00	.15	65.00	57.00	726.50	468.00	600.50	
06/11/82		74.00	50.00	00	19.00	5999.00	.29	76.00	67.00	742.50	478.50	611.00	
06/12/82		71.00	50.00	.28	19.00	5844.00	.00	68.00	60.00	759.00	490.50	623.00	
06/13/82		71.00	46.00	00	40.00	6011.00	.29	74.00	60.00	772.50	499.00	633.50	
06/14/82		61.00	46.00	00	30.00	6244.00	.29	80.00	60.00	798.50	520.00	654.50	
06/15/82		69.00	57.00	.65	15.00	5117.00	.00	69.00	64.00	816.50	533.00	667.50	
06/16/82		72.00	47.00	00	86.00	5733.00	.33	74.00	60.00	831.50	542.50	678.50	
06/17/82		82.00	55.00	.12	73.00	5554.00	.24	78.00	60.00	854.50	561.00	697.00	
06/18/82		75.00	56.00	00	61.00	4886.00	.24	78.00	66.00	875.50	576.50	712.50	
06/19/82		68.00	47.00	00	44.00	2599.00	.15	71.00	60.00	887.50	584.00	721.50	
06/20/82		73.00	53.00	00	78.00	4077.00	.30	73.00	60.00	905.50	597.00	734.50	
06/21/82		72.00	51.00	00	72.00	5011.00	.27	75.00	62.00	922.00	608.50	746.00	
06/22/82		76.00	46.00	00	63.00	5133.00	.30	78.00	63.00	938.00	619.50	759.00	
06/23/82		78.00	53.00	00	6.00	6077.00	.30	84.00	64.00	958.50	635.00	774.50	
06/24/82		89.00	64.00	00	63.00	5244.00	.39	83.00	71.00	990.00	661.50	799.50	
06/25/82		79.00	54.00	.02	120.00	2577.00	.19	78.00	68.00	1011.50	678.00	816.00	
06/26/82		76.00	48.00	00	68.00	5744.00	.30	82.00	66.00	1028.50	690.00	829.00	
06/27/82		77.00	52.00	00	24.00	3772.00	.15	77.00	66.00	1048.00	704.50	843.50	
06/28/82		86.00	60.00	00	7.00	5822.00	.27	87.00	71.00	1076.50	727.50	866.50	
06/29/82		91.00	56.00	00	79.00	5355.00	.43	88.00	71.00	1104.50	751.00	887.50	
06/30/82		75.00	54.00	00	54.00	3477.00	.22	78.00	68.00	1124.50	765.50	902.00	
07/01/82		78.00	54.00	00	45.00	4633.00	.27	82.00	68.00	1145.00	781.50	918.00	
07/02/82		84.00	61.00	00	58.00	5088.00	.28	84.00	72.00	1172.50	804.00	940.50	
07/03/82		80.00	68.00	00	8.00	3299.00	.15	80.00	72.00	1201.50	828.00	964.50	
07/04/82		91.00	60.00	00	43.00	5999.00	.43	88.00	72.00	1232.00	853.50	987.50	
07/05/82		98.00	72.00	00	83.00	5799.00	.55	90.00	72.00	1272.00	888.50	1016.50	
07/06/82		94.00	65.00	1.39	116.00	3996.00	.03	86.00	74.00	1306.50	918.00	1042.00	
07/07/82		85.00	60.00	.26	61.00	3322.00	.00	83.00	68.00	1334.00	940.50	1064.50	
07/08/82		76.00	60.00	.41	32.00	5566.00	.06	80.00	70.00	1357.00	958.50	1082.50	
07/09/82		84.00	63.00	.00	50.00	4577.00	.04	80.00	70.00	1385.50	982.00	1106.00	
07/10/82		84.00	64.00	.00	38.00	3466.00	.15	82.00	72.00	1414.50	1006.00	1130.00	
07/11/82		67.00	57.00	.13	60.00	88.00	.00	73.00	68.00	1431.50	1018.00	1142.00	
07/12/82		81.00	60.00	00	16.00	5322.00	.20	81.00	71.00	1457.00	1038.50	1162.50	
07/13/82		82.00	60.00	00	26.00	5333.00	.25	84.00	72.00	1483.00	1059.50	1183.50	
07/14/82		80.00	64.00	00	6.00	3996.00	.15	80.00	73.00	1510.00	1081.50	1205.50	
07/15/82		87.00	66.00	.76	3.00	4747.00	.00	84.00	72.00	1541.50	1108.00	1231.50	
07/16/82		86.00	65.00	00	25.00	3799.00	.21	84.00	76.00	1572.00	1133.50	1257.00	
07/17/82		89.00	66.00	.09	77.00	4922.00	.27	85.00	76.00	1604.50	1161.00	1283.00	
07/18/82		78.00	58.00	00	18.00	4747.00	.23	88.00	71.00	1627.50	1179.00	1301.00	
07/19/82		81.00	59.00	00	6.00	5500.00	.22	88.00	73.00	1652.50	1199.00	1321.00	
07/20/82		88.00	68.00	00	22.00	5244.00	.24	89.00	78.00	1685.50	1227.00	1348.00	
07/21/82		91.00	64.00	1.50	41.00	5499.00	.00	93.00	77.00	1718.00	1254.50	1373.00	
07/22/82		85.00	66.00	00	7.00	4988.00	.30	89.00	76.00	1748.50	1280.00	1398.50	
07/23/82		85.00	64.00	00	6.00	5377.00	.15	90.00	76.00	1778.00	1304.50	1423.00	
07/24/82		85.00	68.00	.02	26.00	4411.00	.23	87.00	76.00	1809.50	1331.00	1449.50	
07/25/82		88.00	68.00	00	28.00	3422.00	.15	86.00	76.00	1842.50	1359.00	1476.50	
07/26/82		83.00	66.00	00	49.00	3244.00	.15	86.00	77.00	1872.00	1383.50	1501.00	
07/27/82		73.00	60.00	00	27.00	1699.00	.13	78.00	73.00	1893.50	1400.00	1517.50	
07/28/82		80.00	56.00	00	14.00	5311.00	.25	86.00	73.00	1916.50	1418.00	1535.50	
07/29/82		82.00	65.00	00	4.00	5188.00	.23	86.00	76.00	1945.50	1441.50	1559.00	
07/30/82		77.00	56.00	00	41.00	5255.00	.30	84.00	72.00	1966.50	1458.00	1575.50	
07/31/82		79.00	55.00	00	16.00	4366.00	.25	84.00	72.00	1988.50	1475.00	1592.50	

LOCATION : L A M B E R T O N

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 45 ACCUM VALUE	BASE = 50 ACCUM VALUE	BASE = 50/86 ACCUM VALUE
09/00/82	88	67	0	25	480	.24	85	72	2019	1500	1618
09/01/82	88	67	0	25	503	.25	88	76	2053	1530	1646
09/02/82	88	67	0	78	493	.30	82	79	2093	1564	1676
09/03/82	88	67	0	24	233	.0	89	76	2122	1589	1701
09/04/82	88	67	0	24	152	.24	90	78	2154	1615	1727
09/05/82	88	67	0	34	211	.29	90	77	2184	1641	1752
09/06/82	88	67	0	1	277	.15	88	76	2210	1662	1773
09/07/82	88	67	0	13	248	.15	88	76	2237	1683	1795
09/08/82	88	67	0	7	400	.30	88	70	2255	1696	1808
09/09/82	88	67	0	3	400	.15	88	76	2264	1701	1816
09/10/82	88	67	0	3	277	.18	88	76	2276	1708	1827
09/11/82	88	67	0	13	248	.22	88	76	2293	1720	1837
09/12/82	88	67	0	7	400	.20	88	76	2314	1736	1853
09/13/82	88	67	0	7	400	.15	88	76	2333	1753	1874
09/14/82	88	67	0	1	152	.09	88	72	2366	1777	1893
09/15/82	88	67	0	1	277	.21	88	72	2399	1797	1916
09/16/82	88	67	0	1	400	.21	88	75	2418	1822	1931
09/17/82	88	67	0	1	400	.22	88	75	2444	1845	1949
09/18/82	88	67	0	1	400	.22	88	75	2476	1877	1988
09/19/82	88	67	0	1	400	.22	88	75	2507	1893	2011
09/20/82	88	67	0	1	400	.22	88	75	2537	1910	2028
09/21/82	88	67	0	1	400	.20	88	75	2566	1933	2053
09/22/82	88	67	0	1	400	.20	88	75	2595	1955	2068
09/23/82	88	67	0	1	400	.19	88	75	2624	1980	2099
09/24/82	88	67	0	1	400	.19	88	75	2654	1998	2116
09/25/82	88	67	0	1	400	.17	87	76	2684	2012	2134
09/26/82	88	67	0	1	400	.17	87	76	2714	2022	2146
09/27/82	88	67	0	1	400	.17	87	76	2744	2033	2156
09/28/82	88	67	0	1	400	.17	87	76	2774	2048	2171
09/29/82	88	67	0	1	400	.17	87	76	2804	2064	2187
09/30/82	88	67	0	1	400	.17	87	76	2834	2084	2208
09/01/82	88	67	0	1	400	.24	88	78	2864	2099	2223
09/02/82	88	67	0	4	400	.27	88	78	2894	2110	2234
09/03/82	88	67	0	4	400	.24	88	78	2924	2124	2248
09/04/82	88	67	0	15	400	.15	88	77	2954	2146	2271
09/05/82	88	67	0	15	400	.15	88	77	2984	2157	2282
09/06/82	88	67	0	15	400	.05	87	76	3014	2160	2287
09/07/82	88	67	0	15	400	.04	87	76	3044	2177	2304
09/08/82	88	67	0	28	400	.09	87	74	3074	2197	2324
09/09/82	88	67	0	28	400	.15	87	74	3104	2218	2345
09/10/82	88	67	0	28	400	.15	87	74	3134	2233	2370
09/11/82	88	67	0	33	400	.15	87	74	3164	2252	2389
09/12/82	88	67	0	35	400	.15	87	74	3194	2274	2401
09/13/82	88	67	0	35	400	.15	87	74	3224	2278	2405
09/14/82	88	67	0	35	400	.15	87	74	3254	2278	2407
09/15/82	88	67	0	35	400	.11	86	73	3284	2278	2411
09/16/82	88	67	0	14	400	.11	86	73	3314	2278	2415
09/17/82	88	67	0	14	400	.12	86	73	3344	2283	2422
09/18/82	88	67	0	14	400	.13	86	73	3374	2293	2433
09/19/82	88	67	0	14	400	.25	88	75	3404	2296	2438
09/20/82	88	67	0	14	400	.15	86	73	3434	2296	2443
09/21/82	88	67	0	14	400	.15	86	73	3464	2297	2450
09/22/82	88	67	0	14	400	.15	86	73	3494	2304	2461
09/23/82	88	67	0	14	400	.28	88	70	3524	2318	2475
09/24/82	88	67	0	14	400	.15	86	73	3554	2318	2477
09/25/82	88	67	0	14	400	.15	86	73	3584	2322	2485
09/26/82	88	67	0	14	400	.15	86	73	3614	2330	2496
09/27/82	88	67	0	14	400	.30	88	70	3644	2340	2507
09/28/82	88	67	0	14	400	.15	86	73	3674	2357	2525
09/29/82	88	67	0	14	400	.15	86	73	3704	2368	2539
09/30/82	88	67	0	14	400	.15	86	73	3734	2368	2539

LOCATION : L A M B E R T O N

		DEGREE DAYS										
		MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 45 ACCUMUL VALUE	BASE = 50 ACCUMUL VALUE	BASE = 50/86 ACCUMUL VALUE
10/01/82	55.66	43.00	.48			94.00		58.00	58.00	3186.00	2368.50	2250.00
10/02/82	58.33	47.00	.74			46.00		66.00	66.00	3196.00	2373.50	2250.00
10/03/82	51.00	41.00	.05			46.00	.0700	62.00	62.00	3200.00	2373.50	2250.00
10/04/82	50.00	52.00				43.00		66.00	66.00	3217.00	2385.50	2250.00
10/05/82	50.00	52.00				29.00	.1500	66.00	66.00	3237.00	2400.50	2250.00
10/06/82	50.00	52.00				24.00		66.00	66.00	3253.00	2411.50	2250.00
10/07/82	50.00	52.00	.57			74.00		66.00	66.00	3260.00	2413.50	2250.00
10/08/82	50.00	52.00	.20			74.00		66.00	66.00	3266.00	2413.50	2250.00
10/09/82	50.00	52.00	.51			324.00	.1500	66.00	66.00	3266.00	2413.50	2250.00
10/10/82	50.00	52.00	.30			84.00		66.00	66.00	3266.00	2413.50	2250.00
10/11/82	50.00	52.00	.43			70.00	0.00	66.00	66.00	3272.00	2413.50	2250.00
10/12/82	50.00	52.00	.09			119.00	.0800	66.00	66.00	3277.00	2414.50	2250.00
10/13/82	50.00	52.00				80.00		66.00	66.00	3279.00	2414.50	2250.00
10/14/82	50.00	52.00				85.00		66.00	66.00	3279.00	2414.50	2250.00
10/15/82	50.00	52.00				77.00		66.00	66.00	3279.00	2414.50	2250.00
10/16/82	50.00	52.00				22.00	.1100	66.00	66.00	3291.00	2421.50	2250.00
10/17/82	50.00	52.00				33.00		66.00	66.00	3292.00	2421.50	2250.00
10/18/82	50.00	52.00				12.00	.1500	66.00	66.00	3309.00	2431.50	2250.00
10/19/82	50.00	52.00				27.00		66.00	66.00	3329.00	2442.50	2250.00
10/20/82	50.00	52.00	0.00			28.00	.0200	66.00	66.00	3330.00	2443.50	2250.00
10/21/82	50.00	52.00				11.00		66.00	66.00	3330.00	2443.50	2250.00
10/22/82	50.00	52.00				6.00		66.00	66.00	3330.00	2443.50	2250.00
10/23/82	50.00	52.00				20.00		66.00	66.00	3330.00	2443.50	2250.00
10/24/82	50.00	52.00				34.00		66.00	66.00	3330.00	2443.50	2250.00
10/25/82	50.00	52.00				33.00		66.00	66.00	3330.00	2443.50	2250.00
10/26/82	50.00	52.00				33.00		66.00	66.00	3330.00	2443.50	2250.00
10/27/82	50.00	52.00				32.00		66.00	66.00	3330.00	2443.50	2250.00
10/28/82	50.00	52.00				47.00		66.00	66.00	3330.00	2443.50	2250.00
10/29/82	50.00	52.00				50.00		66.00	66.00	3330.00	2443.50	2250.00
10/30/82	50.00	52.00				15.00		66.00	66.00	3330.00	2443.50	2250.00
10/31/82	50.00	52.00				15.00		66.00	66.00	3330.00	2443.50	2250.00

L O C A T I O N : M O R R I S

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	DEGREE DAYS		
									BASE = 40 ACCUM VALUE	BASE = 45 ACCUM VALUE	BASE = 50/86 ACCUM VALUE
004/01/82	46.00	27.00	0.00				45.00	32.00	0.00	0.00	0.00
004/02/82	47.00	30.00	0.00				42.00	32.00	0.00	0.00	0.00
004/03/82	44.90	11.00	1.25				44.00	33.00	0.00	0.00	0.00
004/04/82	20.00	10.00	0.00				35.00	32.00	0.00	0.00	0.00
004/05/82	27.00	12.00	0.00				32.00	32.00	0.00	0.00	0.00
004/06/82	22.00	14.00	0.00				32.00	31.00	0.00	0.00	0.00
004/07/82	33.00	20.00	0.00				32.00	32.00	0.00	0.00	0.00
004/08/82	33.20	23.00	0.00				32.00	32.00	0.00	0.00	0.00
004/09/82	33.40	24.00	0.00				32.00	32.00	0.00	0.00	0.00
004/10/82	33.90	27.00	0.00				33.00	32.00	0.00	0.00	0.00
004/11/82	33.90	27.00	0.00				34.00	32.00	0.00	0.00	0.00
004/12/82	44.70	31.00	0.20				42.00	32.00	0.00	0.00	0.00
004/13/82	44.90	30.00	0.00				43.00	34.00	0.00	0.00	0.00
004/14/82	55.00	34.00	0.50				56.00	33.00	0.00	0.00	0.00
004/15/82	55.00	46.00	0.00				56.00	41.00	4.50	0.00	0.00
004/16/82	55.00	42.00	0.00				62.00	46.00	21.50	12.00	11.00
004/17/82	55.00	31.00	0.00				47.00	36.00	41.50	25.50	25.00
004/18/82	55.00	34.00	0.00				47.00	33.00	46.50	25.50	28.00
004/19/82	55.00	34.00	0.00				55.00	35.00	53.50	27.50	33.00
004/20/82	44.00	27.00	0.00			0.00	43.00	34.00	53.50	27.50	33.00
004/21/82	44.00	29.00	0.00			0.18	43.00	33.00	53.50	27.50	33.00
004/22/82	55.00	30.00	0.00			0.11	53.00	33.00	55.00	27.50	34.00
004/23/82	55.00	37.00	0.00			0.27	56.00	35.00	65.50	32.50	41.00
004/24/82	77.00	44.00	0.00			0.42	60.00	39.00	85.50	48.00	54.00
004/25/82	77.00	48.00	0.00			0.35	66.00	46.00	108.00	65.50	68.00
004/26/82	69.00	31.00	0.00			0.25	64.00	42.00	116.00	68.50	75.00
004/27/82	55.00	32.00	0.00			0.19	63.00	41.00	121.00	68.50	79.00
004/28/82	55.00	33.00	0.00			0.23	62.00	40.00	129.00	71.50	86.00
004/29/82	55.00	32.00	0.00			0.33	62.00	43.00	137.00	74.50	93.00
004/30/82	55.00	41.00	0.07			0.31	60.00	42.00	150.50	83.00	101.00
005/01/82	66.80	39.00	0.00			0.22	68.00	48.00	164.00	91.50	110.00
005/02/82	75.00	41.00	0.00			0.34	72.00	48.00	182.00	104.50	122.50
005/03/82	79.00	47.00	0.00			0.47	72.00	51.00	205.00	122.50	137.00
005/04/82	87.00	60.00	0.00			0.46	74.00	56.00	238.50	151.00	160.00
005/05/82	79.00	44.00	0.02			0.22	70.00	54.00	260.00	167.50	174.50
005/06/82	59.00	36.00	0.00			0.10	59.00	48.00	267.50	170.00	179.00
005/07/82	69.70	26.00	0.00			0.24	62.00	43.00	274.00	171.50	187.50
005/08/82	60.00	33.00	0.00			0.20	63.00	42.00	280.50	173.00	192.50
005/09/82	72.00	46.00	0.05			0.31	71.00	45.00	299.50	187.00	203.50
005/10/82	71.00	52.00	0.19			0.19	62.00	55.00	321.00	203.50	215.00
005/11/82	77.00	47.00	0.56			0.24	68.00	55.00	343.00	220.50	228.50
005/12/82	55.00	46.00	0.10			0.08	61.00	53.00	354.00	226.50	231.50
005/13/82	55.00	49.00	0.56			0.05	55.00	53.00	366.00	233.50	234.00
005/14/82	66.00	50.00	0.24			0.07	65.00	53.00	384.00	246.50	242.00
005/15/82	72.00	57.00	0.09			0.13	65.00	59.00	408.50	266.00	256.50
005/16/82	68.00	55.00	0.02			0.19	64.00	57.00	430.00	282.50	268.00
005/17/82	77.00	57.00	0.43			0.21	69.00	57.00	457.00	304.50	285.50
005/18/82	68.00	53.00	0.00			0.09	67.00	59.00	477.50	320.00	295.50
005/19/82	65.00	46.00	0.00			0.10	63.00	54.00	493.00	330.50	303.00
005/20/82	68.00	47.00	0.00			0.18	70.00	54.00	510.50	343.00	312.00
005/21/82	65.00	41.00	0.00			0.30	68.00	51.00	523.50	351.00	319.50
005/22/82	62.00	43.00	0.00			0.14	60.00	50.00	536.00	358.50	325.50
005/23/82	72.00	43.00	0.00			0.22	72.00	48.00	553.50	371.00	336.50
005/24/82	73.00	49.00	0.00			0.33	80.00	52.00	574.50	387.00	348.00
005/25/82	70.00	53.00	0.00			0.13	68.00	60.00	596.00	403.50	359.50
005/26/82	69.00	55.00	0.00			0.17	73.00	62.00	618.00	420.50	371.50
005/27/82	64.00	57.00	0.13			0.05	64.00	60.00	638.50	436.00	382.00
005/28/82	71.00	50.00	0.00			0.09	72.00	59.00	659.00	451.50	392.50
005/29/82	75.00	57.00	0.26			0.20	74.00	58.00	685.00	472.50	408.50
005/30/82	76.00	48.00	0.00			0.24	76.00	60.00	707.00	489.50	421.50
005/31/82	67.00	41.00	0.12			0.11	67.00	53.00	721.00	498.50	430.00

LOCATION: MORRIS

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 40 ACCUM VALUE	BASE = 45 ACCUM VALUE	BASE = 50/86 ACCUM VALUE
06/01/82	58.00	39.00	0			.19	65.00	50.00	729.50	502.00	434.00
06/02/82	67.00	34.00	0			.27	75.00	50.00	740.00	507.50	442.50
06/03/82	64.00	40.00	0			.19	77.00	51.00	752.00	514.50	449.50
06/04/82	69.00	44.00	0			.21	80.00	55.00	768.50	526.00	459.00
06/05/82	75.00	50.00	0			.38	80.00	58.00	791.00	543.50	471.50
06/06/82	75.00	57.00	.36			.40	76.00	61.00	817.00	564.50	487.50
06/07/82	70.00	53.00	.03			.09	65.00	58.00	838.50	581.00	499.00
06/08/82	64.00	40.00	0			.11	64.00	52.00	850.50	588.00	506.00
06/09/82	71.00	49.00	0			.19	76.00	52.00	870.50	603.00	516.50
06/10/82	61.00	44.00	.08			.07	62.00	52.00	883.00	610.50	522.00
06/11/82	72.00	41.00	0			.25	52.00	52.00	899.50	622.00	533.00
06/12/82	77.00	44.00	.05		374.00	.14	75.00	55.00	920.00	637.50	546.50
06/13/82	72.00	46.00	0		628.00	.20	82.00	53.00	939.00	651.50	557.50
06/14/82	80.00	54.00	.09		306.00	.30	88.00	59.00	966.00	673.50	574.50
06/15/82	72.00	53.00	.09		625.00	.37	79.00	63.00	988.50	691.00	587.00
06/16/82	73.00	45.00	0		306.00	.25	84.00	62.00	1007.50	705.00	598.50
06/17/82	82.00	56.00	.15		618.00	.15	81.00	61.00	1036.50	729.00	617.50
06/18/82	72.00	50.00	0		422.00	.28	80.00	63.00	1057.50	745.00	628.50
06/19/82	69.00	40.00	0		467.00	.20	80.00	60.00	1072.00	754.50	638.00
06/20/82	73.00	50.00	.02		399.00	.24	72.00	60.00	1093.50	771.00	649.50
06/21/82	71.00	44.00	0		342.00	.21	78.00	60.00	1111.00	783.50	660.00
06/22/82	74.00	41.00	0		466.00	.30	84.00	60.00	1128.50	796.00	672.00
06/23/82	76.00	51.00	0		544.00	.24	87.00	61.00	1152.00	814.50	685.50
06/24/82	88.00	59.00	.21		533.00	.36	88.00	67.00	1185.50	843.00	708.00
06/25/82	69.00	45.00	0		277.00	.20	78.00	60.00	1202.50	855.00	717.50
06/26/82	72.00	47.00	0		583.00	.21	84.00	58.00	1222.00	869.50	728.50
06/27/82	77.00	55.00	0		552.00	.25	87.00	63.00	1248.00	890.50	744.50
06/28/82	88.00	60.00	.03		183.00	.30	92.00	68.00	1282.00	919.50	767.50
06/29/82	91.00	52.00	.93		421.00	.56	88.00	65.00	1313.50	946.00	786.50
06/30/82	72.00	51.00	0		491.00	.24	78.00	61.00	1335.00	962.50	798.00
07/01/82	75.00	55.00	0		551.00	.28	86.00	61.00	1358.00	980.50	811.00
07/02/82	79.00	59.00	0		558.00	.31	88.00	63.00	1387.00	1004.50	830.00
07/03/82	80.00	52.00	.25		289.00	.13	86.00	69.00	1418.00	1030.50	851.00
07/04/82	89.00	59.00	0		636.00	.27	95.00	69.00	1452.00	1059.50	873.50
07/05/82	93.00	65.00	0		585.00	.43	98.00	72.00	1491.00	1093.50	899.00
07/06/82	92.00	63.00	1.05		477.00	.54	97.00	72.00	1528.50	1126.00	923.50
07/07/82	79.00	58.00	.25		248.00	.14	84.00	66.00	1557.00	1149.50	942.00
07/08/82	72.00	54.00	.09		571.00	.36	78.00	65.00	1580.00	1167.50	955.00
07/09/82	84.00	58.00	1.58		411.00	0	80.00	63.00	1611.00	1193.50	976.00
07/10/82	78.00	60.00	.01		299.00	.18	79.00	68.00	1640.00	1217.50	995.00
07/11/82	66.00	54.00	.04		94.00	.02	73.00	62.00	1660.00	1232.50	1005.00
07/12/82	81.00	58.00	0		552.00	.25	82.00	59.00	1689.50	1257.00	1024.50
07/13/82	85.00	61.00	.07		535.00	.22	93.00	64.00	1722.50	1285.00	1047.50
07/14/82	79.00	59.00	.10		265.00	.12	79.00	68.00	1751.50	1309.00	1066.50
07/15/82	85.00	66.00	.23		489.00	.33	91.00	63.00	1787.00	1339.50	1092.00
07/16/82	82.00	66.00	.17		355.00	.14	84.00	69.00	1821.00	1368.50	1116.00
07/17/82	87.00	59.00	.02		289.00	.28	83.00	69.00	1854.00	1396.50	1138.50
07/18/82	77.00	55.00	0		573.00	.18	90.00	64.00	1880.00	1417.50	1154.50
07/19/82	79.00	58.00	0		563.00	.13	95.00	65.00	1908.50	1441.00	1173.00
07/20/82	83.00	64.00	0		479.00	.20	91.00	68.00	1942.00	1469.50	1196.50
07/21/82	91.00	64.00	.05		591.00	.40	98.00	72.00	1979.50	1502.00	1221.50
07/22/82	87.00	60.00	0		533.00	.25	99.00	73.00	2013.00	1530.50	1244.50
07/23/82	86.00	63.00	0		571.00	.29	98.00	77.00	2047.50	1560.00	1269.00
07/24/82	87.00	67.00	0		405.00	.25	92.00	78.00	2084.50	1592.00	1295.50
07/25/82	90.00	57.00	.22		389.00	.25	93.00	77.00	2118.00	1620.50	1317.00
07/26/82	78.00	58.00	.02		317.00	.21	88.00	74.00	2146.00	1643.50	1335.00
07/27/82	78.00	54.00	.21		375.00	.17	88.00	70.00	2172.00	1664.50	1351.00
07/28/82	82.00	58.00	0		541.00	.25	94.00	68.00	2202.00	1689.50	1371.00
07/29/82	82.00	61.00	0		453.00	.24	94.00	73.00	2233.50	1716.00	1392.50
07/30/82	78.00	53.00	0		510.00	.30	90.00	72.00	2259.00	1736.50	1408.00
07/31/82	81.00	51.00	0		491.00	.23	90.00	70.00	2285.00	1757.50	1424.00

LOCATION : MORRIS

DEGREE DAYS

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 40 ACCUMUL VALUE	BASE = 45 ACCUMUL VALUE	BASE = 50/86 ACCUMUL VALUE
08/01/82	88.00	62.00	0.00		396.00	.15	88.00	72.00	2320.00	1787.50	1448.00
08/02/82	91.00	61.00	0.00		504.00	.37	97.00	75.00	2341.00	1803.50	1455.00
08/03/82	95.00	66.00	0.00		502.00	.30	97.00	78.00	2381.50	1839.00	1485.00
08/04/82	89.00	62.00	0.00		321.00	.21	92.00	77.00	2417.00	1869.50	1503.00
08/05/82	91.00	65.00	0.00		483.00	.27	99.00	77.00	2455.00	1902.50	1534.00
08/06/82	90.00	64.00	0.00		429.00	.29	97.00	80.00	2492.00	1934.50	1555.00
08/07/82	88.00	62.00	.38		503.00	.35	99.00	80.00	2527.00	1964.50	1583.00
08/08/82	84.00	53.00	.27		457.00	.24	88.00	68.00	2555.50	1988.00	1603.00
08/09/82	72.00	50.00	0.00		404.00	.24	80.00	64.00	2576.50	2004.00	1613.00
08/10/82	68.00	42.00	0.00		489.00	.12	82.00	61.00	2591.50	2014.00	1622.00
08/11/82	71.00	43.00	0.00		516.00	.20	87.00	61.00	2608.50	2026.00	1632.00
08/12/82	76.00	50.00	0.00		535.00	.19	82.00	65.00	2631.50	2044.00	1645.00
08/13/82	72.00	54.00	0.00		249.00	.19	72.00	65.00	2654.50	2062.00	1658.00
08/14/82	81.00	59.00	0.00		356.00	.15	82.00	67.00	2684.50	2087.00	1678.00
08/15/82	82.00	60.00	0.00		261.00	.18	78.00	68.00	2715.50	2113.00	1699.00
08/16/82	85.00	57.00	0.00		356.00	.16	85.00	70.00	2746.50	2139.00	1720.00
08/17/82	87.00	60.00	1.93		449.00	.00	88.00	70.00	2780.00	2167.50	1743.00
08/18/82	87.00	64.00	0.00		451.00	.27	85.00	69.00	2815.50	2198.00	1768.00
08/19/82	89.00	63.00	0.00		477.00	.25	82.00	71.00	2851.50	2229.00	1793.00
08/20/82	87.00	52.00	0.00		380.00	.28	84.00	68.00	2881.00	2253.50	1812.00
08/21/82	82.00	52.00	0.00		486.00	.31	84.00	65.00	2908.00	2275.50	1829.00
08/22/82	87.00	58.00	.26		426.00	.33	84.00	66.00	2940.50	2303.00	1855.00
08/23/82	76.00	55.00	0.00		414.00	.18	82.00	67.00	2966.00	2323.50	1866.00
08/24/82	74.00	55.00	.09		415.00	.17	84.00	67.00	2990.50	2343.00	1881.00
08/25/82	75.00	46.00	0.00		400.00	.23	79.00	64.00	3011.00	2358.50	1895.00
08/26/82	85.00	49.00	0.00		434.00	.26	81.00	63.00	3038.50	2380.50	1911.00
08/27/82	64.00	37.00	.34		200.00	.09	73.00	55.00	3048.50	2386.00	1914.00
08/28/82	65.00	41.00	0.00		470.00	.21	70.00	54.00	3061.50	2394.00	1922.00
08/29/82	69.00	44.00	.41		320.00	.16	68.00	57.00	3078.00	2405.50	1930.00
08/30/82	79.00	45.00	.02		287.00	.28	73.00	59.00	3100.00	2422.50	1941.00
08/31/82	72.00	50.00	0.00		401.00	.21	74.00	58.00	3121.00	2438.50	1960.00
09/01/82	83.00	52.00	1.79		340.00	.03	81.00	63.00	3148.50	2461.00	1977.00
09/02/82	80.00	50.00	0.00		398.00	.22	75.00	62.00	3173.50	2481.00	1993.00
09/03/82	71.00	44.00	0.00		442.00	.26	70.00	57.00	3191.00	2493.50	2003.00
09/04/82	77.00	47.00	0.00		474.00	.16	77.00	55.00	3213.00	2510.50	2009.00
09/05/82	84.00	52.00	.40		346.00	.30	77.00	61.00	3241.00	2533.50	2039.00
09/06/82	72.00	44.00	0.00		471.00	.18	74.00	60.00	3259.00	2543.50	2044.00
09/07/82	67.00	45.00	0.00		484.00	.20	71.00	57.00	3275.00	2557.50	2055.00
09/08/82	72.00	55.00	0.00		139.00	.03	67.00	58.00	3298.50	2576.00	2068.00
09/09/82	77.00	60.00	0.00		286.00	.16	73.00	62.00	3327.50	2599.50	2086.00
09/10/82	82.00	59.00	0.00		241.00	.13	76.00	65.00	3357.50	2625.50	2105.00
09/11/82	85.00	60.00	0.00		387.00	.19	78.00	62.00	3390.00	2655.50	2130.00
09/12/82	75.00	53.00	.25		253.00	.23	73.00	62.00	3414.00	2674.50	2145.00
09/13/82	66.00	45.00	.25		80.00	.06	64.00	57.00	3427.00	2679.50	2145.00
09/14/82	59.00	44.00	.50		134.00	.02	59.00	53.00	3443.50	2685.50	2155.00
09/15/82	57.00	44.00	.50		96.00	.07	56.00	52.00	3444.50	2691.00	2159.00
09/16/82	54.00	35.00	0.00		157.00	.07	57.00	49.00	3453.00	2691.00	2159.00
09/17/82	58.00	45.00	.03		113.00	.08	55.00	49.00	3464.50	2697.50	2166.00
09/18/82	59.00	33.00	0.00		241.00	.09	57.00	48.00	3470.50	2698.50	2167.00
09/19/82	72.00	36.00	0.00		389.00	.14	57.00	44.00	3484.50	2707.50	2178.00
09/20/82	54.00	32.00	0.00		200.00	.12	55.00	48.00	3488.50	2707.50	2180.00
09/21/82	58.00	34.00	0.00		341.00	.14	61.00	47.00	3493.50	2707.50	2180.00
09/22/82	65.00	33.00	0.00		379.00	.12	67.00	45.00	3502.50	2711.50	2182.00
09/23/82	73.00	40.00	0.00		347.00	.23	65.00	43.00	3519.00	2723.00	2193.00
09/24/82	70.00	46.00	0.00		258.00	.18	65.00	52.00	3537.00	2736.00	2213.00
09/25/82	54.00	30.00	0.00		128.00	.06	57.00	47.00	3539.00	2736.00	2215.00
09/26/82	62.00	30.00	0.00		335.00	.13	62.00	45.00	3545.00	2737.00	2221.00
09/27/82	74.00	45.00	0.00		323.00	.20	67.00	51.00	3545.00	2737.00	2221.00
09/28/82	71.00	46.00	0.00		239.00	.23	64.00	55.00	3563.50	2750.50	2233.00
09/29/82	77.00	46.00	.37		256.00	.24	68.00	54.00	3585.00	2767.00	2244.00
09/30/82	61.00	35.00	0.00		161.00	.07	61.00	50.00	3593.00	2770.00	2251.00

LOCATION : MORRIS

		DEGREE DAYS									
	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 40 ACCULM VALUE	BASE = 45 ACCULM VALUE	BASE = 50/B6 ACCULM VALUE
10/01/82	56.00	35.00	0		237.00	.14	58.00	47.00	3598.50	2770.50	2254.00
10/02/82	55.00	40.00	1.05		479.00	.07	54.00	48.00	3606.00	2773.00	2256.50
10/03/82	54.00	34.00	0		155.00	.08	55.00	48.00	3610.00	2773.00	2258.50
10/04/82	68.00	36.00	0		322.00	.14	62.00	45.00	3622.00	2780.00	2267.50
10/05/82	66.00	38.00	.04			.09	62.00	49.00	3634.00	2787.00	2275.50
10/06/82	62.00	39.00	.99			.32	57.00	47.00	3644.50	2792.50	2281.50
10/07/82	54.00	33.00	.23			.12	56.00	46.00	3648.00	2792.50	2283.50
10/08/82	46.00	34.00	.03			.06	49.00	43.00	3648.00	2792.50	2283.50
10/09/82	55.00	40.00	1.02			.36	50.00	45.00	3655.50	2795.00	2286.00
10/10/82	52.00	43.00	.26			.06	51.00	49.00	3663.00	2797.50	2287.00
10/11/82	50.00	40.00	.20			.08	50.00	47.00	3668.00	2797.50	2287.00
10/12/82	45.00	40.00	.15			.03	48.00	46.00	3670.50	2797.50	2287.00
10/13/82	44.00	39.00	.03			.03	48.00	45.00	3672.00	2797.50	2287.00
10/14/82	52.00	37.00	0			.04	51.00	44.00	3676.50	2797.50	2288.00
10/15/82	65.00	38.00	0			.06	55.00	41.00	3688.00	2804.00	2295.50
10/16/82	53.00	29.00	0			0	50.00	40.00	3689.00	2804.00	2297.00
10/17/82	57.00	30.00	0			0	51.00	37.00	3692.50	2804.00	2300.50
10/18/82	69.00	43.00	0			0	59.00	43.00	3708.50	2815.00	2310.00
10/19/82	50.00	36.00	0			0	53.00	46.00	3711.50	2815.00	2310.00
10/20/82	40.00	27.00	13			0	47.00	38.00	3711.50	2815.00	2310.00
10/21/82	40.00	21.00	0			0	41.00	36.00	3711.50	2815.00	2310.00
10/22/82	46.00	22.00	0			0	44.00	35.00	3711.50	2815.00	2310.00
10/23/82	56.00	28.00	0			0	47.00	35.00	3713.50	2815.00	2313.00
10/24/82	62.00	33.00	0			0	47.00	35.00	3721.00	2817.50	2319.00
10/25/82	63.00	38.00	0			0	54.00	40.00	3731.50	2823.00	2325.50
10/26/82	63.00	39.00	0			0	55.00	42.00	3742.50	2829.00	2332.00
10/27/82	64.00	48.00	0			0	55.00	43.00	3758.50	2840.00	2339.00
10/28/82	57.00	41.00	0			0	52.00	47.00	3767.50	2844.00	2342.50
10/29/82	52.00	35.00	.06			0	50.00	45.00	3771.00	2844.00	2343.50
10/30/82	59.00	25.00	.03			0	50.00	40.00	3773.00	2844.00	2348.00
10/31/82	52.00	25.00	0			0	48.00	37.00	3773.00	2844.00	2349.00

L O C A T I O N : R O S E M O U N T

										DEGREE DAYS				
										BASE = 45	BASE = 50	BASE = 50/86		
	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	ACCUM	VALUE	ACCUM	VALUE	ACCUM	VALUE
04/01/82	51.00	26.00	0							0			0	0
04/02/82	58.00	40.00	0							4.00			0	4.50
04/03/82	56.00	16.00	.34							4.00			0	7.50
04/04/82	32.00	11.00	0							4.00			0	7.50
04/05/82	29.00	20.00	.17							4.00			0	7.50
04/06/82	33.00	9.00	0							4.00			0	7.50
04/07/82	34.00	18.00	0							4.00			0	7.50
04/08/82	31.00	23.00	.12							4.00			0	7.50
04/09/82	35.00	21.00	0							4.00			0	7.50
04/10/82	38.00	32.00	0							4.00			0	7.50
04/11/82	46.00	20.00	0							4.00			0	7.50
04/12/82	55.00	33.00	0							4.00			0	7.50
04/13/82	58.00	38.00	0							7.00			0	10.00
04/14/82	62.00	34.00	0							10.00			0	14.00
04/15/82	62.00	47.00	0							19.50			0	20.00
04/16/82	62.00	44.00	.91							27.50		4.50	0	26.00
04/17/82	56.00	38.00	.32							29.50		7.50	0	32.00
04/18/82	65.00	33.00	0							33.50		7.50	0	35.00
04/19/82	60.00	36.00	.12							36.50		7.50	0	42.50
04/20/82	44.00	25.00	.55							36.50		7.50	0	47.50
04/21/82	55.00	27.00	0							36.50		7.50	0	50.00
04/22/82	60.00	30.00	0							36.50		7.50	0	55.00
04/23/82	72.00	44.00	0							49.50		15.50	0	66.00
04/24/82	75.00	41.00	0							62.50		23.50	0	78.50
04/25/82	70.00	49.00	0							77.00		33.00	0	88.50
04/26/82	61.00	41.00	0							83.00		34.00	0	94.00
04/27/82	63.00	30.00	0							84.50		34.00	0	100.50
04/28/82	63.00	32.00	0			.19				87.00		34.00	0	107.00
04/29/82	67.00	32.00	0			.27				91.00		34.00	0	115.50
04/30/82	67.00	45.00	0			.49				102.50		40.00	0	124.00
05/01/82	73.00	39.00	0			.08				113.50		46.00	0	135.50
05/02/82	77.00	42.00	0		606.00	.24				128.00		55.50	0	149.00
05/03/82	81.00	47.00	0		466.00	.36				147.00		69.50	0	164.50
05/04/82	86.00	61.00	.78		387.00	.38				175.50		93.00	0	188.00
05/05/82	62.00	47.00	.08		137.00	0				185.50		97.50	0	194.00
05/06/82	50.00	42.00	.24		141.00	0				186.00		97.50	0	194.00
05/07/82	57.00	37.00	0		627.00	0				188.00		97.50	0	197.50
05/08/82	71.00	37.00	0		572.00	.24				197.00		101.50	0	208.00
05/09/82	71.00	51.00	.55		420.00	.21				213.00		112.50	0	219.50
05/10/82	81.00	59.00	0		517.00	.20				239.00		132.50	0	239.00
05/11/82	71.00	54.00	0		491.00	.36				255.50		145.00	0	251.50
05/12/82	62.00	52.00	.26		71.00	.28				267.50		152.00	0	258.50
05/13/82	70.00	62.00	.16		214.00	.28				288.00		168.00	0	274.50
05/14/82	76.00	59.00	.04		340.00	.02				311.00		185.50	0	292.00
05/15/82	74.00	57.00	.20		456.00	.24				331.50		201.00	0	307.50
05/16/82	78.00	58.00	.08		534.00	.20				354.00		219.00	0	325.50
05/17/82	71.00	58.00	.35		194.00	.15				374.00		233.50	0	340.00
05/18/82	70.00	57.00	.04		471.00	.12				392.50		247.00	0	353.50
05/19/82	75.00	53.00	0		622.00	.19				411.00		261.00	0	367.50
05/20/82	64.00	48.00	0		597.00	.27				422.50		267.00	0	374.50
05/21/82	65.00	46.00	.12		342.00	.28				433.00		272.50	0	382.00
05/22/82	66.00	48.00	.16		264.00	.15				445.00		279.50	0	390.00
05/23/82	70.00	40.00	0		549.00	.22				455.00		284.50	0	400.00
05/24/82	70.00	47.00	0		425.00	.25				468.50		293.00	0	410.00
05/25/82	68.00	48.00	0		302.00	.16				481.50		301.00	0	419.00
05/26/82	63.00	54.00	.38		120.00	.10				495.00		309.50	0	427.50
05/27/82	72.00	59.00	0		256.00	.02				515.50		325.00	0	443.00
05/28/82	78.00	57.00	.04		523.00	.19				538.00		342.50	0	460.00
05/29/82	80.00	58.00	.19		365.00	.20				562.00		361.50	0	479.50
05/30/82	79.00	54.00	.36		563.00	.16				583.50		378.00	0	496.00
05/31/82	65.00	45.00	0		576.00	.35				593.50		383.00	0	503.50

L O C A T I O N : R O S E M O U N T

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 45		DEGREE DAYS		BASE = 50/86	
									ACCULM	VALUE	ACCULM	VALUE	ACCULM	VALUE
00/01/82	71.00	44.00	0.00		66.00	.20			606.00	390.50		514.00		
00/02/82	64.00	44.00	0.00		69.00	.31			612.00	391.50		521.00		
00/03/82	69.00	43.00	0.00		66.00	.30			623.00	397.50		530.00		
00/04/82	71.00	44.00	0.00		62.00	.47			640.00	410.00		543.00		
00/05/82	74.00	47.00	0.00		61.00	.20			656.00	420.00		555.00		
00/06/82	69.00	47.00	.04		21.00	.15	65.00	61.00	674.00	433.50		568.00		
00/07/82	71.00	48.00	0.00		66.00	.20	72.00	60.00	691.00	446.00		580.00		
00/08/82	77.00	48.00	0.00		22.00	.30	76.00	69.00	709.00	458.00		594.00		
00/09/82	66.00	45.00	0.00		22.00	.25	61.00	61.00	722.00	466.00		602.00		
00/10/82	67.00	45.00	0.00		75.00	.17	71.00	63.00	735.00	474.00		610.00		
00/11/82	78.00	44.00	0.00		55.00	.33	73.00	68.00	752.00	486.00		624.00		
00/12/82	72.00	45.00	0.00		70.00	.19	74.00	69.00	769.00	498.00		636.00		
00/13/82	81.00	45.00	0.00		70.00	.19	77.00	66.00	790.00	514.00		652.00		
00/14/82	65.00	40.00	0.00		65.00	.19	67.00	63.00	805.00	525.00		663.00		
00/15/82	71.00	40.00	0.00		4.00	.19	70.00	64.00	821.00	535.00		689.00		
00/16/82	81.00	40.00	.16		6.00	.41	75.00	57.00	839.00	549.00		701.00		
00/17/82	71.00	40.00	0.00		44.00	.15	71.00	63.00	857.00	561.00		710.00		
00/18/82	66.00	40.00	.12		37.00	.15	69.00	59.00	870.00	569.00		719.00		
00/19/82	66.00	40.00	0.00		43.00	.15	67.00	55.00	882.00	576.00		730.00		
00/20/82	68.00	40.00	.04		44.00	.15	66.00	57.00	897.00	587.00		741.00		
00/21/82	73.00	40.00	0.00		22.00	.15	72.00	55.00	913.00	597.00		756.00		
00/22/82	75.00	40.00	0.00	17.00	1.00	.22	78.00	60.00	932.00	612.00		775.00		
00/23/82	85.00	40.00	0.00	24.00	5.00	.23	82.00	62.00	956.00	631.00		794.00		
00/24/82	77.00	40.00	0.00	15.00	2.00	.23	74.00	66.00	980.00	650.00		806.00		
00/25/82	72.00	40.00	0.00	15.00	3.00	.28	75.00	64.00	998.00	662.00		818.00		
00/26/82	74.00	40.00	0.00	15.00	3.00	.26	80.00	68.00	1014.00	674.00		841.00		
00/27/82	88.00	40.00	0.00	13.00	5.00	.26	90.00	67.00	1042.00	696.00		863.00		
00/28/82	88.00	40.00	.04	13.00	4.00	.26	88.00	67.00	1070.00	720.00		877.00		
00/29/82	74.00	40.00	0.00	10.00	4.00	.20	85.00	69.00	1089.00	747.00		890.00		
00/30/82	76.00	40.00	0.00	10.00	4.00	.20	85.00	63.00	1108.00	762.00		906.00		
00/01/82	89.00	40.00	0.00	13.00	4.00	.30	88.00	68.00	1128.00	780.00		924.00		
00/02/82	89.00	40.00	0.00	13.00	4.00	.30	88.00	70.00	1151.00	807.00		949.00		
00/03/82	89.00	40.00	0.00	22.00	4.00	.36	89.00	70.00	1182.00	837.00		973.00		
00/04/82	89.00	40.00	0.00	22.00	4.00	.36	89.00	71.00	1217.00	872.00		1003.00		
00/05/82	89.00	40.00	.24	23.00	4.00	.36	89.00	71.00	1258.00	896.00		1026.00		
00/06/82	89.00	40.00	0.00	23.00	4.00	.36	89.00	71.00	1307.00	911.00		1042.00		
00/07/82	89.00	40.00	0.00	23.00	4.00	.32	88.00	68.00	1330.00	930.00		1060.00		
00/08/82	89.00	40.00	0.00	23.00	4.00	.31	88.00	73.00	1359.00	954.00		1084.00		
00/09/82	89.00	40.00	0.00	18.00	4.00	.20	74.00	65.00	1377.00	967.00		1097.00		
00/10/82	89.00	40.00	0.00	18.00	4.00	.20	82.00	65.00	1402.00	987.00		1117.00		
00/11/82	89.00	40.00	0.00	18.00	4.00	.20	88.00	68.00	1430.00	1009.00		1140.00		
00/12/82	89.00	40.00	0.00	18.00	4.00	.33	92.00	71.00	1458.00	1032.00		1162.00		
00/13/82	89.00	40.00	0.00	18.00	4.00	.33	92.00	71.00	1489.00	1058.00		1186.00		
00/14/82	89.00	40.00	0.00	18.00	4.00	.33	92.00	71.00	1519.00	1084.00		1212.00		
00/15/82	89.00	40.00	0.00	18.00	4.00	.43	91.00	69.00	1551.00	1111.00		1238.00		
00/16/82	89.00	40.00	0.00	14.00	0.00	.43	92.00	69.00	1589.00	1143.00		1269.00		
00/17/82	89.00	40.00	0.00	14.00	0.00	.43	92.00	69.00	1616.00	1165.00		1291.00		
00/18/82	89.00	40.00	0.00	14.00	0.00	.43	92.00	69.00	1641.00	1185.00		1311.00		
00/19/82	89.00	40.00	0.00	14.00	0.00	.24	92.00	69.00	1671.00	1211.00		1335.00		
00/20/82	89.00	40.00	0.00	14.00	0.00	.24	92.00	69.00	1704.00	1238.00		1361.00		
00/21/82	89.00	40.00	0.00	14.00	0.00	.24	92.00	69.00	1735.00	1264.00		1386.00		
00/22/82	89.00	40.00	0.00	14.00	0.00	.32	92.00	69.00	1763.00	1288.00		1409.00		
00/23/82	89.00	40.00	0.00	14.00	0.00	.31	92.00	69.00	1794.00	1313.00		1435.00		
00/24/82	89.00	40.00	0.00	14.00	0.00	.31	92.00	69.00	1825.00	1339.00		1461.00		
00/25/82	89.00	40.00	0.00	119.00	326.00	.15	92.00	74.00	1850.00	1360.00		1481.00		
00/26/82	89.00	40.00	.20	119.00	326.00	.15	92.00	74.00	1878.00	1383.00		1504.00		
00/27/82	89.00	40.00	0.00	119.00	326.00	.31	92.00	74.00	1905.00	1405.00		1526.00		
00/28/82	89.00	40.00	0.00	119.00	326.00	.32	92.00	74.00	1934.00	1429.00		1550.00		
00/29/82	89.00	40.00	0.00	119.00	326.00	.32	92.00	74.00	1960.00	1450.00		1571.00		
00/30/82	89.00	40.00	0.00	119.00	326.00	.32	92.00	74.00	1989.00	1474.00		1594.00		
00/31/82	89.00	40.00	0.00	119.00	326.00	.22	92.00	74.00	1989.00	1474.00		1594.00		

LOCATION : ROSEMOUNT

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	DEGREE DAYS		
									BASE = 45 ACCULM VALUE	BASE = 50 ACCULM VALUE	BASE = 50/86 ACCULM VALUE
10/01/82	60.00	48.00	.12						3262.50	2440.00	2598.50
10/02/82	60.00	52.00	.40						3273.50	2446.00	2604.50
10/03/82	65.00	45.00	0						3283.50	2451.00	2612.00
10/04/82	75.00	41.00	0						3296.50	2459.00	2624.50
10/05/82	75.00	41.00	0						3309.50	2467.00	2637.00
10/06/82	71.00	50.00	1.02						3325.00	2477.50	2647.50
10/07/82	54.00	39.00	.34						3326.50	2477.50	2649.50
10/08/82	58.00	35.00	.02						3328.00	2477.50	2653.50
10/09/82	58.00	48.00	.07						3336.00	2480.50	2657.50
10/10/82	57.00	47.00	.12						3343.00	2482.50	2661.00
10/11/82	49.00	44.00	.05						3344.50	2482.50	2661.00
10/12/82	51.00	42.00	.05						3346.00	2482.50	2661.50
10/13/82	52.00	46.00	.05						3350.00	2482.50	2662.50
10/14/82	69.00	41.00	0						3360.00	2487.50	2672.00
10/15/82	68.00	45.00	.11						3371.50	2494.00	2681.00
10/16/82	56.00	30.00	0						3371.50	2494.00	2684.00
10/17/82	67.00	41.00	0						3380.50	2498.00	2692.50
10/18/82	65.00	42.00	0						3390.50	2503.00	2701.50
10/19/82	66.00	43.00	.60						3400.00	2507.50	2709.50
10/20/82	44.00	32.00	1.35						3400.00	2507.50	2709.50
10/21/82	43.00	26.00	0						3400.00	2507.50	2709.50
10/22/82	56.00	26.00	0						3400.00	2507.50	2712.50
10/23/82	61.00	34.00	0						3402.50	2507.50	2718.00
10/24/82	62.00	35.00	0						3406.00	2507.50	2724.00
10/25/82	67.00	35.00	0						3412.00	2508.50	2732.50
10/26/82	66.00	37.00	0						3418.50	2510.00	2740.50
10/27/82	60.00	46.00	.05						3426.50	2513.00	2745.50
10/28/82	53.00	46.00	0						3431.00	2513.00	2747.00
10/29/82	59.00	42.00	.13						3436.50	2513.50	2751.50
10/30/82	58.00	30.00	0						3436.50	2513.50	2755.50
10/31/82	50.00	30.00	.07						3436.50	2513.50	2755.50

L O C A T I O N : S T . P A U L

		DEGREE DAYS										
		MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 40 ACCUMUL VALUE	BASE = 50 ACCUMUL VALUE	BASE = 50/86 ACCUMUL VALUE
00/01/82	44.00	26.00	0.00	0.00	147.00	428.00		36.00				
00/02/82	44.00	40.00	0.00	0.00	237.00	130.00		37.00		8.00		
00/03/82	44.00	16.00	.12	0.00	359.00	342.00		31.00		8.00		3.50
00/04/82	44.00	20.00	0.00	0.00	175.00	535.00		32.00		8.00		5.50
00/05/82	44.00	20.00	0.00	0.00	131.00	256.00		32.00		8.00		5.50
00/06/82	44.00	14.00	0.00	0.00	69.00	573.00		31.00		8.00		5.50
00/07/82	44.00	21.00	0.00	0.00	79.00	439.00		32.00		8.00		5.50
00/08/82	44.00	22.4.00	0.00	0.00	50.00	202.00		31.00		8.00		5.50
00/09/82	44.00	22.00	.07	0.00	50.00	273.00		31.00		8.00		5.50
00/10/82	44.00	32.00	.01	0.00	199.00	243.00		33.00		8.00		5.50
00/11/82	44.00	21.00	0.00	0.00	86.00	581.00		41.00		8.00		5.50
00/12/82	44.00	39.6.00	0.00	0.00	190.00	122.00		38.00		11.00		6.50
00/13/82	44.00	39.6.00	.06	0.00	135.00	525.00		47.00		17.00		8.50
00/14/82	44.00	38.8.00	0.00	0.00	109.00	414.00		46.00		26.00		14.00
00/15/82	44.00	48.8.00	.04	0.00	203.00	319.00		49.00		43.00	6.50	21.50
00/16/82	44.00	48.8.00	.27	0.00	112.00	219.00		51.00		58.00	11.50	27.00
00/17/82	44.00	39.6.00	.22	0.00	253.00	558.00		49.00		63.00	11.50	29.00
00/18/82	44.00	39.6.00	0.00	0.00	129.00	308.00		48.00		73.00	12.00	35.00
00/19/82	44.00	33.4.00	.04	0.00	161.00	255.00		47.00		81.00	12.00	41.00
00/20/82	44.00	24.00	.25	0.00	158.00	619.00		40.00		81.00	12.00	41.00
00/21/82	44.00	33.1.00	0.00	0.00	82.00	623.00		49.00		85.00	12.00	44.00
00/22/82	44.00	33.3.00	0.00	0.00	78.00	634.00	.17	52.00		90.00	12.00	48.00
00/23/82	44.00	45.5.00	0.00	0.00	167.00	639.00	.25	62.00		110.00	12.00	60.00
00/24/82	44.00	55.1.00	0.00	0.00	170.00	635.00	.40	62.00		132.00	34.00	72.50
00/25/82	44.00	55.5.00	.03	0.00	123.00	368.00	.38	61.00		156.00	48.00	86.50
00/26/82	44.00	11.00	.03	0.00	140.00	577.00	.20	60.00		169.00	51.00	94.00
00/27/82	44.00	33.3.00	0.00	0.00	288.00	648.00	.22	63.00		177.00	51.00	100.00
00/28/82	44.00	38.0.00	0.00	0.00	630.00	630.00	.21	61.00		188.00	52.00	106.00
00/29/82	44.00	38.8.00	0.00	0.00	106.00	649.00	.26	61.00		200.00	54.00	114.00
00/30/82	44.00	46.6.00	0.00	0.00	103.00	281.00	.41	57.00		215.00	59.00	121.50
00/01/82	44.00	45.5.00	.01	0.00	29.00	293.00	.07	66.00		229.00	63.00	127.50
00/02/82	44.00	45.9.00	0.00	0.00	40.00	613.00	.23	69.00		249.00	73.00	138.50
00/03/82	44.00	55.3.00	0.00	0.00	112.00	647.00	.35	69.00		274.00	88.00	153.00
00/04/82	44.00	55.3.00	0.00	0.00	173.00	442.00	.33	72.00		301.00	105.00	170.00
00/05/82	44.00	55.3.00	.37	0.00	171.00	399.00	.28	59.00		330.00	124.00	189.00
00/06/82	44.00	11.00	.18	0.00	94.00	168.00	.10	53.00		340.00	124.00	194.00
00/07/82	44.00	39.00	.16	0.00	66.00	197.00	.06	59.00		345.00	124.00	194.00
00/08/82	44.00	40.00	0.00	0.00	77.00	677.00	.25	67.00		354.00	124.00	198.00
00/09/82	44.00	49.00	.46	0.00	64.00	583.00	.22	62.00		373.00	133.00	207.00
00/10/82	44.00	49.00	.01	0.00	158.00	421.00	.21	69.00		393.00	143.00	218.00
00/11/82	44.00	55.3.00	.02	0.00	216.00	529.00	.35	70.00		420.00	161.00	235.00
00/12/82	44.00	55.3.00	0.00	0.00	91.00	553.00	.20	58.00		441.00	171.00	246.00
00/13/82	44.00	55.3.00	1.19	0.00	117.00	103.00	.02	64.00		459.00	180.00	254.00
00/14/82	44.00	62.00	.19	0.00	74.00	204.00	.02	69.00		485.00	196.00	270.00
00/15/82	44.00	57.7.00	.27	0.00	105.00	409.00	.26	68.00		512.00	212.00	287.00
00/16/82	44.00	58.8.00	.49	0.00	117.00	493.00	.36	72.00		538.00	228.00	303.00
00/17/82	44.00	58.8.00	.25	0.00	96.00	555.00	.24	67.00		566.00	246.00	321.00
00/18/82	44.00	60.0.00	.43	0.00	142.00	188.00	.06	67.00		590.00	261.00	335.00
00/19/82	44.00	55.3.00	0.00	0.00	88.00	466.00	.25	74.00		611.00	271.00	346.00
00/20/82	44.00	52.0.00	0.00	0.00	88.00	634.00	.26	72.00		633.00	284.00	358.00
00/21/82	44.00	45.5.00	0.00	0.00	170.00	650.00	.34	65.00		647.00	287.00	364.00
00/22/82	44.00	46.0.00	.02	0.00	136.00	336.00	.14	64.00		663.00	294.00	373.00
00/23/82	44.00	43.0.00	0.00	0.00	73.00	420.00	.20	70.00		680.00	301.00	383.00
00/24/82	44.00	55.0.00	0.00	0.00	62.00	633.00	.23	72.00		700.00	311.00	393.00
00/25/82	44.00	51.1.00	0.00	0.00	43.00	560.00	.22	72.00		722.00	323.00	405.00
00/26/82	44.00	55.5.00	0.00	0.00	45.00	423.00	.19	65.00		745.00	336.00	418.00
00/27/82	44.00	55.6.00	.30	0.00	87.00	204.00	.02	68.00		767.00	348.00	430.00
00/28/82	44.00	58.8.00	0.00	0.00	22.00	345.00	.09	75.00		793.00	364.00	446.00
00/29/82	44.00	61.0.00	0.00	0.00	11.00	551.00	.21	75.00		824.00	384.00	467.00
00/30/82	44.00	55.5.00	.06	0.00	9.00	386.00	.15	77.00		851.00	401.00	484.00
00/31/82	44.00	54.0.00	.19	0.00	85.00	584.00	.34	70.00		876.00	417.00	499.00

L O C A T I O N : S T . P A U L

		DEGREE DAYS														
		BASE = 40					BASE = 50					BASE = 50/86				
DATE	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	ACCULM VALUE	ACCULM VALUE	ACCULM VALUE	ACCULM VALUE	ACCULM VALUE	ACCULM VALUE	ACCULM VALUE	
06/01/82	64.00	47.00	0	142.00	607.00	.33	72.00	72.00	892.00	422.50	506.50	422.50	506.50	422.50	506.50	
06/02/82	70.00	42.00	0	112.00	740.00	.35	73.00	73.00	908.00	428.50	516.50	428.50	516.50	428.50	516.50	
06/03/82	63.00	41.00	0	49.00	702.00	.32	70.00	70.00	920.00	430.50	523.00	430.50	523.00	430.50	523.00	
06/04/82	68.00	48.00	0	16.00	523.00	.17	71.00	71.00	938.00	438.50	532.00	438.50	532.00	438.50	532.00	
06/05/82	72.00	52.00	0	29.00	568.00	.23	73.00	73.00	960.00	450.50	544.00	450.50	544.00	450.50	544.00	
06/06/82	74.00	59.00	0	145.00	641.00	.39	67.00	67.00	986.50	467.00	560.50	467.00	560.50	467.00	560.50	
06/07/82	70.00	56.00	.03	197.00	330.00	.22	70.00	70.00	1009.50	480.00	573.50	480.00	573.50	480.00	573.50	
06/08/82	70.00	51.00	0	98.00	516.00	.21	75.00	75.00	1030.00	490.50	584.00	490.50	584.00	490.50	584.00	
06/09/82	77.00	58.00	.01	35.00	619.00	.24	69.00	69.00	1057.50	508.00	601.50	508.00	601.50	508.00	601.50	
06/10/82	69.00	49.00	0	140.00	229.00	.17	73.00	73.00	1076.50	517.00	611.00	517.00	611.00	517.00	611.00	
06/11/82	71.00	46.00	0	78.00	758.00	.31	72.00	72.00	1095.00	525.50	621.50	525.50	621.50	525.50	621.50	
06/12/82	77.00	54.00	0	57.00	689.00	.29	79.00	79.00	1120.50	541.00	637.00	541.00	637.00	541.00	637.00	
06/13/82	70.00	52.00	0	70.00	760.00	.32	79.00	79.00	1141.50	552.00	648.00	552.00	648.00	552.00	648.00	
06/14/82	79.00	60.00	0	65.00	698.00	.33	69.00	69.00	1171.00	571.50	667.50	571.50	667.50	571.50	667.50	
06/15/82	69.00	56.00	.21	36.00	215.00	.03	74.00	74.00	1193.50	584.00	680.00	584.00	680.00	584.00	680.00	
06/16/82	70.00	47.00	0	74.00	599.00	.26	76.00	76.00	1212.00	592.50	690.00	592.50	690.00	592.50	690.00	
06/17/82	78.00	56.00	0	61.00	581.00	.24	77.00	77.00	1239.00	609.50	707.00	609.50	707.00	609.50	707.00	
06/18/82	69.00	49.00	0	66.00	529.00	.26	71.00	71.00	1258.00	618.50	716.50	618.50	716.50	618.50	716.50	
06/19/82	66.00	46.00	0	17.00	447.00	.15	71.00	71.00	1274.00	624.50	724.50	624.50	724.50	624.50	724.50	
06/20/82	68.00	55.00	.22	75.00	410.00	.16	67.00	67.00	1295.50	636.00	736.00	636.00	736.00	636.00	736.00	
06/21/82	69.00	50.00	.29	60.00	440.00	.16	73.00	73.00	1315.00	645.50	745.50	645.50	745.50	645.50	745.50	
06/22/82	71.00	48.00	0	62.00	692.00	.28	75.00	75.00	1334.50	655.00	756.00	655.00	756.00	655.00	756.00	
06/23/82	72.00	56.00	0	8.00	521.00	.17	79.00	79.00	1358.50	669.00	770.00	669.00	770.00	669.00	770.00	
06/24/82	84.00	59.00	.46	78.00	589.00	.34	73.00	73.00	1390.00	690.50	791.50	690.50	791.50	690.50	791.50	
06/25/82	75.00	54.00	.24	88.00	258.00	.14	76.00	76.00	1414.50	705.00	806.00	705.00	806.00	705.00	806.00	
06/26/82	72.00	49.00	0	55.00	761.00	.26	80.00	80.00	1435.00	715.50	817.00	715.50	817.00	715.50	817.00	
06/27/82	75.00	60.00	0	35.00	677.00	.27	85.00	85.00	1462.50	733.00	834.50	733.00	834.50	733.00	834.50	
06/28/82	84.00	63.00	0	3.00	680.00	.26	90.00	90.00	1496.00	756.50	858.00	756.50	858.00	756.50	858.00	
06/29/82	87.00	55.00	.29	72.00	577.00	.09	79.00	79.00	1527.00	777.50	878.50	777.50	878.50	777.50	878.50	
06/30/82	73.00	52.00	0	45.00	599.00	.23	81.00	81.00	1549.50	790.00	891.00	790.00	891.00	790.00	891.00	
07/01/82	74.00	52.00	0	16.00	687.00	.26	84.00	84.00	1572.50	803.00	904.00	803.00	904.00	803.00	904.00	
07/02/82	80.00	61.00	0	53.00	709.00	.36	82.00	82.00	1603.00	823.50	924.50	823.50	924.50	823.50	924.50	
07/03/82	80.00	66.00	0	75.00	479.00	.22	87.00	87.00	1636.00	846.50	947.50	846.50	947.50	846.50	947.50	
07/04/82	89.00	67.00	0	66.00	732.00	.40	92.00	92.00	1674.00	874.00	974.00	874.00	974.00	874.00	974.00	
07/05/82	96.00	74.00	0	78.00	759.00	.46	96.00	96.00	1719.00	909.50	1004.00	909.50	1004.00	909.50	1004.00	
07/06/82	96.00	67.00	.29	165.00	575.00	.49	86.00	86.00	1760.50	941.00	1030.50	941.00	1030.50	941.00	1030.50	
07/07/82	85.00	63.00	0	70.00	471.00	.26	84.00	84.00	1794.50	965.00	1054.50	965.00	1054.50	965.00	1054.50	
07/08/82	76.00	55.00	0	76.00	657.00	.34	82.00	82.00	1820.00	980.50	1070.00	980.50	1070.00	980.50	1070.00	
07/09/82	85.00	67.00	.01	63.00	548.00	.26	86.00	86.00	1856.00	1006.50	1096.00	1006.50	1096.00	1006.50	1096.00	
07/10/82	85.00	60.00	.01	63.00	482.00	.25	72.00	72.00	1888.50	1029.00	1118.50	1029.00	1118.50	1029.00	1118.50	
07/11/82	85.00	57.00	.63	72.00	128.00	.15	81.00	81.00	1909.50	1040.00	1129.50	1040.00	1129.50	1040.00	1129.50	
07/12/82	85.00	62.00	0	51.00	672.00	.29	87.00	87.00	1941.00	1061.50	1151.00	1061.50	1151.00	1061.50	1151.00	
07/13/82	84.00	65.00	0	12.00	665.00	.27	84.00	84.00	1975.50	1086.00	1175.50	1086.00	1175.50	1086.00	1175.50	
07/14/82	84.00	65.00	0	1.00	385.00	.14	98.00	98.00	2009.50	1110.00	1199.50	1110.00	1199.50	1110.00	1199.50	
07/15/82	89.00	69.00	.87	28.00	535.00	.29	77.00	77.00	2048.50	1139.00	1227.00	1139.00	1227.00	1139.00	1227.00	
07/16/82	79.00	69.00	.06	59.00	279.00	.11	82.00	82.00	2082.50	1163.00	1251.00	1163.00	1251.00	1163.00	1251.00	
07/17/82	85.00	70.00	0	20.00	496.00	.33	83.00	83.00	2120.00	1190.50	1278.50	1190.50	1278.50	1190.50	1278.50	
07/18/82	85.00	65.00	0	139.00	576.00	.24	83.00	83.00	2153.00	1213.50	1301.50	1213.50	1301.50	1213.50	1301.50	
07/19/82	85.00	61.00	0	44.00	709.00	.40	80.00	80.00	2185.00	1235.50	1323.50	1235.50	1323.50	1235.50	1323.50	
07/20/82	85.00	67.00	0	61.00	645.00	.31	90.00	90.00	2221.00	1261.50	1349.50	1261.50	1349.50	1261.50	1349.50	
07/21/82	85.00	70.00	0	85.00	607.00	.40	83.00	83.00	2260.00	1290.50	1377.50	1290.50	1377.50	1290.50	1377.50	
07/22/82	84.00	67.00	0	28.00	309.00	.14	86.00	86.00	2295.50	1316.00	1403.00	1316.00	1403.00	1316.00	1403.00	
07/23/82	86.00	63.00	0	22.00	548.00	.26	88.00	88.00	2330.00	1340.50	1427.50	1340.50	1427.50	1340.50	1427.50	
07/24/82	87.00	70.00	0	67.00	638.00	.36	84.00	84.00	2368.50	1369.00	1455.00	1369.00	1455.00	1369.00	1455.00	
07/25/82	87.00	70.00	0	90.00	399.00	.18	81.00	81.00	2408.50	1399.00	1485.00	1399.00	1485.00	1399.00	1485.00	
07/26/82	84.00	64.00	.84	44.00	275.00	.16	76.00	76.00	2442.50	1423.00	1509.00	1423.00	1509.00	1423.00	1509.00	
07/27/82	85.00	62.00	.03	33.00	632.00	.12	84.00	84.00	2471.00	1441.50	1527.50	1441.50	1527.50	1441.50	1527.50	
07/28/82	85.00	62.00	0	49.00	668.00	.24	88.00	88.00	2502.50	1463.00	1549.00	1463.00	1549.00	1463.00	1549.00	
07/29/82	84.00	67.00	0	36.00	546.00	.30	87.00	87.00	2538.00	1488.50	1574.50	1488.50	1574.50	1488.50	1574.50	
07/30/82	81.00	60.00	0	120.00	569.00	.36	84.00	84.00	2568.50	1509.00	1595.00	1509.00	1595.00	1509.00	1595.00	
07/31/82	81.00	62.00	0	67.00	511.00	.26	85.00	85.00	2600.00	1530.50	1616.50	1530.50	1616.50	1530.50	1616.50	

L O C A T I O N : S T . P A U L

										DEGREE DAYS		
	MAXTEMP	MINTEMP	PRECIP	WIND	SDLAR	PAN	SOILMAX	SOILMIN	BASE = 40 ACCULM VALUE	BASE = 50 ACCULM VALUE	BASE = 50/86 ACCULM VALUE	
08/01/82	87.00	67.00	0	51.00	492.00	.26	88.00		2637.00	1557.50	1643.00	
08/02/82	88.00	57.00	0	62.00	524.00	.26	86.00		2669.50	1580.00	1664.50	
08/03/82	94.00	66.00	0	146.00	577.00	.36	92.00		2709.50	1610.00	1690.50	
08/04/82	95.00	74.00	0	58.00	454.00	.30	93.00		2754.00	1644.50	1720.50	
08/05/82	93.00	71.00	0	21.00	544.00	.26	92.00		2796.00	1676.50	1749.00	
08/06/82	90.00	68.00	0	34.00	505.00	.28	89.00		2835.00	1705.50	1776.00	
08/07/82	89.00	66.00	0	11.00	492.00	.22	89.00		2872.50	1733.00	1802.00	
08/08/82	88.00	62.00	0	84.00	521.00	.38	84.00		2907.50	1758.00	1826.00	
08/09/82	76.00	55.00	0	181.00	538.00	.42	76.00		2933.00	1773.50	1841.50	
08/10/82	69.00	49.00	0	67.00	367.00	.18	79.00		2952.00	1782.50	1851.50	
08/11/82	73.00	48.00	0	34.00	502.00	.23	82.00		2972.50	1793.00	1862.50	
08/12/82	78.00	53.00	0	18.00	649.00	.30	80.00		2998.00	1808.50	1878.00	
08/13/82	80.00	60.00	0	96.00	498.00	.22	73.00		3028.00	1828.00	1898.00	
08/14/82	71.00	61.00	.07	5.00	227.00	.02	80.00		3054.00	1844.50	1914.00	
08/15/82	82.00	65.00	0	36.00	399.00	.13	82.00		3087.50	1868.00	1937.50	
08/16/82	83.00	65.00	0	16.00	327.00	.14	84.00		3121.50	1892.00	1961.50	
08/17/82	89.00	63.00	.72	14.00	444.00	.41	82.00		3157.50	1918.00	1986.00	
08/18/82	85.00	66.00	0	7.00	505.00	.19	85.00		3193.00	1943.50	2011.50	
08/19/82	86.00	71.00	0	79.00	496.00	.29	88.00		3234.50	1972.00	2040.00	
08/20/82	89.00	66.00	0	60.00	489.00	.29	85.00		3286.00	1997.00	2063.00	
08/21/82	82.00	66.00	0	106.00	558.00	.33	86.00		3329.50	2016.00	2082.50	
08/22/82	85.00	65.00	.0	61.00	453.00	.33	83.00		3380.50	2047.00	2107.50	
08/23/82	79.00	60.00	.5	39.00	462.00	.44	75.00		3438.50	2079.00	2146.50	
08/24/82	77.00	57.00	.49	38.00	309.00	.13	78.00		3441.00	2092.50	2159.00	
08/25/82	81.00	45.00	.4	111.00	570.00	.31	76.00		3462.00	2111.00	2178.00	
08/26/82	77.00	45.00	.0	82.00	357.00	.24	74.00		3462.00	2122.00	2191.00	
08/28/82	65.00	49.00	.8	52.00	581.00	.20	76.00		3479.00	2129.00	2199.00	
08/29/82	68.00	52.00	.0	115.00	463.00	.20	69.00		3499.00	2139.00	2209.00	
08/30/82	69.00	55.00	.47	31.00	132.00	.20	74.00		3521.00	2151.00	2221.00	
08/31/82	72.00	59.00	0	84.00	560.00	.27	72.00		3546.50	2167.00	2236.50	
09/01/82	72.00	61.00	.41	80.00	203.00	.07	77.00		3573.00	2183.50	2253.00	
09/02/82	78.00	56.00	0	103.00	475.00	.27	74.00		3600.00	2200.00	2270.00	
09/03/82	69.00	52.00	0	131.00	473.00	.27	75.00		3620.50	2211.00	2280.00	
09/04/82	72.00	52.00	0	57.00	548.00	.22	77.00		3642.50	2223.00	2292.50	
09/05/82	80.00	58.00	0	114.00	513.00	.23	72.00		3671.50	2242.00	2311.50	
09/06/82	70.00	47.00	.23	102.00	220.00	.18	71.00		3690.00	2250.50	2321.50	
09/07/82	67.00	49.00	0	80.00	539.00	.20	65.00		3708.00	2258.50	2330.00	
09/08/82	64.00	55.00	0	63.00	131.00	.04	67.00		3727.50	2268.00	2339.50	
09/09/82	74.00	62.00	0	85.00	182.00	.06	74.00		3755.50	2286.00	2357.50	
09/10/82	80.00	66.00	.68	110.00	331.00	.22	73.00		3788.50	2309.00	2380.50	
09/11/82	80.00	67.00	0	56.00	338.00	.11	78.00		3822.00	2332.50	2404.00	
09/12/82	84.00	68.00	.08	55.00	355.00	.18	73.00		3858.00	2358.50	2430.00	
09/13/82	75.00	54.00	.08	116.00	172.00	.12	65.00		3882.50	2373.00	2444.50	
09/14/82	58.00	52.00	.02	95.00	100.00	.08	60.00		3897.50	2378.00	2449.50	
09/15/82	56.00	45.00	.38	120.00	68.00	.0	59.00		3908.00	2378.50	2452.50	
09/16/82	53.00	45.00	.01	58.00	213.00	.08	60.00		3917.00	2378.50	2454.00	
09/17/82	58.00	49.00	.02	63.00	204.00	.05	64.00		3930.50	2382.00	2458.00	
09/18/82	66.00	43.00	.16	50.00	315.00	.13	65.00		3945.00	2386.50	2466.00	
09/19/82	66.00	46.00	0	33.00	472.00	.15	63.00		3961.00	2392.50	2474.00	
09/20/82	59.00	41.00	0	128.00	353.00	.17	61.00		3971.00	2392.50	2478.50	
09/21/82	57.00	37.00	0	52.00	367.00	.12	64.00		3978.00	2392.50	2482.00	
09/22/82	63.00	40.00	0	9.00	466.00	.10	65.00		3989.50	2394.00	2488.50	
09/23/82	68.00	41.00	0	94.00	441.00	.19	68.00		4005.50	2400.00	2497.50	
09/24/82	73.00	54.00	.03	133.00	367.00	.17	59.00		4029.00	2413.50	2511.00	
09/25/82	56.00	41.00	0	58.00	92.00	.06	65.00		4037.50	2413.50	2514.00	
09/26/82	62.00	41.00	0	33.00	441.00	.11	64.00		4049.00	2415.00	2520.00	
09/27/82	66.00	44.00	0	112.00	443.00	.17	65.00		4064.00	2420.00	2528.00	
09/28/82	66.00	48.00	0	149.00	409.00	.16	67.00		4081.00	2427.00	2536.00	
09/29/82	72.00	56.00	.01	193.00	251.00	.11	66.00		4105.00	2441.00	2550.00	
09/30/82	73.00	49.00	.18	120.00	201.00	.19	65.00		4126.00	2452.00	2561.50	

L O C A T I O N : S T . P A U L

DEGREE DAYS

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 40 ACCULM VALUE	BASE = 50 ACCULM VALUE	BASE = 50/86 ACCULM VALUE
10/01/82	62.00	47.00	.01	61.00	287.00	.17	60.00		4140.50	2456.50	2567.50
10/02/82	58.00	47.00	.38	104.00	114.00	.02	59.00		4153.00	2459.00	2571.50
10/03/82	58.00	46.00	.20	86.00	86.00	.04	63.00		4165.00	2461.00	2575.50
10/04/82	65.00	47.00	0	36.00	404.00	.10	64.00		4181.00	2467.00	2583.00
10/05/82	75.00	51.00	0	73.00	362.00	.14	65.00		4204.00	2480.00	2596.00
10/06/82	73.00	50.00	.52	93.00	290.00	.12	65.00		4225.50	2491.50	2607.50
10/07/82	69.00	40.00	.23	169.00	107.00	.17	53.00		4240.00	2496.00	2617.00
10/08/82	50.00	39.00	.13	62.00	107.00	.02	55.00		4244.50	2496.00	2617.00
10/09/82	59.00	42.00	.05	185.00	217.00	.05	54.00		4255.00	2496.50	2621.50
10/10/82	56.00	47.00	.10	100.00	47.00	.02	57.00		4266.50	2498.00	2624.50
10/11/82	55.00	45.00	.08	70.00	135.00	.03	53.00		4276.50	2498.00	2627.00
10/12/82	50.00	43.00	.09	90.00	83.00		52.00		4283.00	2498.00	2627.00
10/13/82	51.00	43.00	.04	98.00	107.00		52.00		4290.00	2498.00	2627.50
10/14/82	67.00	42.00	0	119.00	318.00		57.00		4304.50	2502.50	2636.00
10/15/82	68.00	46.00	.05	142.00	356.00		56.00		4321.50	2509.50	2645.00
10/16/82	53.00	32.00	0	88.00	296.00		53.00		4324.00	2509.50	2646.50
10/17/82	55.00	43.00	.01	112.00	342.00		55.00		4338.00	2513.50	2654.00
10/18/82	68.00	45.00	0	72.00	255.00		58.00		4354.50	2520.00	2663.00
10/19/82	66.00	42.00	.48	110.00	46.00		52.00		4368.50	2524.00	2671.00
10/20/82	43.00	31.00	1.10	228.00	173.00		44.00		4368.50	2524.00	2671.00
10/21/82	43.00	28.00	0	50.00	266.00		46.00		4368.50	2524.00	2671.00
10/22/82	55.00	28.00	0	51.00	304.00		47.00		4370.00	2524.00	2673.50
10/23/82	60.00	36.00	0	98.00	307.00		50.00		4378.00	2524.00	2678.50
10/24/82	62.00	40.00	0	116.00	281.00		52.00		4389.00	2525.00	2684.50
10/25/82	66.00	41.00	0	54.00	266.00		53.00		4402.50	2528.50	2692.50
10/26/82	64.00	43.00	0	83.00	248.00		55.00		4416.00	2532.00	2699.50
10/27/82	60.00	47.00	.04	169.00	90.00		49.00		4429.50	2535.50	2704.50
10/28/82	53.00	48.00	0	124.00	57.00		50.00		4440.00	2536.00	2706.00
10/29/82	59.00	43.00	.08	140.00	246.00		51.00		4451.00	2537.00	2710.50
10/30/82	57.00	33.00	0	94.00	213.00		48.00		4456.00	2537.00	2714.00
10/31/82	51.00	33.00	0	15.00	126.00		46.00		4458.00	2537.00	2714.50

L O C A T I O N : S T A P L E S

		DEGREE DAYS										
		MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 40 ACCULM VALUE	BASE = 50 ACCULM VALUE	BASE = 50/86 ACCULM VALUE
04/01/82		36.00	21.00	0	209.00			35.00	35.00	0	0	0
04/02/82		38.00	33.00	0	326.00			35.00	35.00	0	0	0
04/03/82		41.00	10.00	1.70	288.00			35.00	35.00	0	0	0
04/04/82		16.00	6.00	0	147.00			35.00	35.00	0	0	0
04/05/82		30.00	12.00	0	56.00			35.00	35.00	0	0	0
04/06/82		25.00	4.00	0	78.00			35.00	32.00	0	0	0
04/07/82		34.00	9.00	0	39.00			34.00	34.00	0	0	0
04/08/82		35.00	16.00	0	49.00			36.00	34.00	0	0	0
04/09/82		34.00	20.00	0	36.00			35.00	35.00	0	0	0
04/10/82		38.00	24.00	0	244.00			37.00	37.00	0	0	0
04/11/82		32.00	13.00	0	212.00			40.00	38.00	0	0	0
04/12/82		43.00	34.00	.31	112.00		0	39.00	38.00	0	0	0
04/13/82		41.00	36.00	0	76.00		.02	40.00	37.00	0	0	0
04/14/82		56.00	33.00	0	70.00		.09	55.00	37.00	4.50	0	0
04/15/82		66.00	44.00	.18	153.00		.09	56.00	46.00	17.00	2.50	3.0
04/16/82		68.00	42.00	.11	100.00		.27	64.00	47.00	32.00	7.50	17.50
04/17/82		53.00	30.00	0	170.00		.17	51.00	38.00	33.50	7.50	19.00
04/18/82		54.00	30.00	0	155.00		.21	53.00	37.00	35.50	7.50	21.00
04/19/82		51.00	34.00	0	78.00		.06	54.00	41.00	38.00	7.50	21.00
04/20/82		52.00	36.00	0	111.00		.14	52.00	36.00	42.00	7.50	22.50
04/21/82		46.00	23.00	0	126.00		.27	51.00	37.00	42.00	7.50	22.50
04/22/82		55.00	26.00	.02	51.00		.09	58.00	37.00	42.50	7.50	25.00
04/23/82		62.00	36.00	0	163.00		.19	59.00	38.00	51.50	7.50	31.00
04/24/82		78.00	47.00	0	197.00		.53	71.00	41.00	74.00	20.00	45.00
04/25/82		76.00	48.00	0	169.00		.39	75.00	50.00	96.00	32.00	58.00
04/26/82		63.00	29.00	0	136.00		.31	72.00	43.00	102.00	32.00	64.50
04/27/82		57.00	26.00	0	64.00		.22	69.00	40.00	103.50	32.00	68.00
04/28/82		64.00	29.00	0	44.00		.21	73.00	40.00	110.00	32.00	75.00
04/29/82		64.00	27.00	0	77.00		.15	74.00	43.00	115.50	32.00	82.00
04/30/82		65.00	40.00	.09	174.00	555.00	.48	71.00	44.00	128.00	34.50	89.50
05/01/82		66.00	36.00	0	75.00	590.00	.25	73.00	48.00	139.00	35.50	97.50
05/02/82		74.00	42.00	0	81.00	610.00	.33	81.00	51.00	157.00	43.50	109.50
05/03/82		73.00	53.00	0	150.00	400.00	.43	81.00	51.00	180.00	56.50	122.50
05/04/82		78.00	59.00	.02	203.00	290.00	.25	77.00	57.00	208.50	75.00	141.00
05/05/82		81.00	43.00	.24	134.00	240.00	.27	76.00	51.00	230.50	87.00	156.00
05/06/82		56.00	35.00	.01	47.00	370.00	.12	59.00	47.00	236.00	87.00	159.00
05/07/82		64.00	26.00	0	130.00	650.00	.30	69.00	43.00	241.00	87.00	166.00
05/08/82		56.00	26.00	0	97.00	490.00	.12	70.00	42.00	242.00	87.00	169.00
05/09/82		69.00	43.00	0	90.00	200.00	.23	82.00	45.00	258.00	93.00	179.00
05/10/82		59.00	47.00	.39	137.00	300.00	.11	60.00	54.00	271.00	96.00	183.50
05/11/82		75.00	41.00	.01	139.00	280.00	.15	71.00	54.00	289.00	104.00	196.00
05/12/82		58.00	46.00	.01	86.00	120.00	.06	65.00	55.00	301.00	106.00	200.00
05/13/82		54.00	45.00	.61	95.00	220.00	.14	58.00	55.00	310.50	106.00	202.00
05/14/82		66.00	47.00	.33	43.00	400.00	.06	67.00	54.00	327.00	112.50	210.00
05/15/82		73.00	54.00	.13	126.00	480.00	.13	71.00	61.00	350.50	126.00	223.50
05/16/82		72.00	52.00	.31	129.00	340.00	.25	72.00	60.00	372.50	138.00	235.50
05/17/82		74.00	50.00	.83	139.00	340.00	.41	73.00	61.00	394.50	150.00	247.50
05/18/82		68.00	53.00	1.11	117.00	200.00	.17	69.00	61.00	415.00	160.50	258.00
05/19/82		64.00	52.00	.01	125.00	240.00	.11	66.00	61.00	433.00	168.50	266.00
05/20/82		67.00	44.00	0	109.00	410.00	.20	78.00	57.00	448.50	174.00	274.50
05/21/82		63.00	37.00	0	146.00	650.00	.32	77.00	53.00	458.50	174.00	281.00
05/22/82		67.00	38.00	0	95.00	565.00	.26	82.00	53.00	471.00	176.50	289.50
05/23/82		72.00	40.00	0	60.00	675.00	.30	87.00	55.00	487.00	182.50	300.50
05/24/82		74.00	45.00	0	60.00	660.00	.20	90.00	60.00	506.50	192.00	312.50
05/25/82		67.00	46.00	0	61.00	300.00	.12	73.00	61.00	523.00	198.50	321.00
05/26/82		70.00	51.00	0	55.00	500.00	.17	83.00	61.00	543.50	209.00	331.50
05/27/82		71.00	53.00	0	70.00	400.00	.17	80.00	63.00	565.50	221.00	343.50
05/28/82		78.00	52.00	0	61.00	640.00	.30	93.00	64.00	590.50	236.00	358.50
05/29/82		78.00	59.00	.61	43.00	460.00	.30	85.00	66.00	619.00	254.50	377.00
05/30/82		72.00	41.00	0	106.00	480.00	.22	77.00	58.00	635.50	261.00	388.00
05/31/82		69.00	47.00	.01	89.00	420.00	.15	72.00	59.00	653.50	269.00	397.50

L O C A T I O N : S T A P L E S

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	DEGREE DAYS		
									BASE = 40 ACCULM VALUE	BASE = 50 ACCULM VALUE	BASE = 50/86 ACCULM VALUE
06/01/82	61.00	37.00	0	118.00	560.00	.16	66.00	53.00	662.50	269.00	403.00
06/02/82	60.00	37.00	0	116.00	700.00	.24	85.00	53.00	671.00	269.00	408.00
06/03/82	65.00	38.00	0	49.00	700.00	.22	87.00	54.00	682.50	270.50	415.00
06/04/82	68.00	40.00	0	48.00	580.00	.21	84.00	58.00	696.50	274.50	424.00
06/05/82	72.00	50.00	0	102.00	480.00	.29	83.00	58.00	717.50	285.50	435.00
06/06/82	71.00	53.00	.17	177.00	660.00	.38	83.00	58.00	739.50	297.50	447.00
06/07/82	62.00	51.00	.17	171.00	120.00	.08	66.00	60.00	756.00	304.00	454.00
06/08/82	59.00	37.00	0	106.00	180.00	.12	63.00	54.00	764.00	304.00	458.00
06/09/82	64.00	47.00	0	61.00	420.00	.15	74.00	55.00	779.50	309.50	465.00
06/10/82	63.00	42.00	.03	150.00	200.00	.09	66.00	54.00	792.00	312.00	472.00
06/11/82	69.00	41.00	0	111.00	700.00	.30	81.00	55.00	807.00	317.00	481.00
06/12/82	74.00	40.00	0	99.00	620.00	.30	85.00	59.00	824.00	324.00	493.00
06/13/82	70.00	50.00	0	143.00	700.00	.41	87.00	60.00	844.00	334.00	503.00
06/14/82	81.00	50.00	0	79.00	660.00	.32	90.00	65.00	869.50	349.50	519.00
06/15/82	77.00	49.00	.24	95.00	520.00	.25	89.00	61.00	892.50	362.50	532.00
06/16/82	70.00	40.00	0	81.00	700.00	.32	90.00	59.00	907.50	367.50	542.00
06/17/82	76.00	51.00	.03	92.00	320.00	.18	90.00	59.00	931.00	381.00	556.00
06/18/82	67.00	43.00	0	68.00	580.00	.26	94.00	63.00	946.00	386.00	564.00
06/19/82	65.00	43.00	0	37.00	400.00	.04	72.00	61.00	960.00	390.00	572.00
06/20/82	70.00	50.00	.34	144.00	280.00	.36	72.00	61.00	980.00	400.00	582.00
06/21/82	70.00	52.00	.02	89.00	440.00	.20	77.00	57.00	1001.00	411.00	593.00
06/22/82	69.00	47.00	.02	67.00	580.00	.21	81.00	57.00	1019.00	419.00	602.00
06/23/82	75.00	54.00	0	45.00	760.00	.22	95.00	57.00	1043.50	433.50	617.00
06/24/82	82.00	59.00	1.63	126.00	560.00	.51	100.00	84.00	1074.00	454.00	637.00
06/25/82	69.00	47.00	0	118.00	160.00	.21	75.00	59.00	1092.00	462.00	647.00
06/26/82	71.00	47.00	0	43.00	720.00	.25	87.00	59.00	1111.00	471.00	657.00
06/27/82	74.00	51.00	0	52.00	640.00	.21	88.00	61.00	1136.00	486.00	672.00
06/28/82	83.00	51.00	0	68.00	660.00	.36	94.00	66.00	1165.00	505.00	691.00
06/29/82	73.00	51.00	1.00	90.00	260.00	.28	82.00	62.00	1186.50	516.50	703.00
06/30/82	71.00	49.00	0	45.00	560.00	.21	80.00	60.00	1206.50	526.50	713.00
07/01/82	74.00	49.00	0	36.00	720.00	.25	87.00	60.00	1228.00	538.00	725.00
07/02/82	77.00	62.00	0	88.00	700.00	.32	95.00	64.00	1257.50	557.50	745.00
07/03/82	78.00	62.00	.02	90.00	480.00	.16	90.00	71.00	1289.00	579.00	766.00
07/04/82	86.00	61.00	0	84.00	760.00	.36	95.00	72.00	1322.50	602.50	790.00
07/05/82	91.00	51.00	0	115.00	220.00	.28	101.00	77.00	1353.50	623.50	808.00
07/06/82	93.00	51.00	.72	163.00	300.00	.50	98.00	75.00	1392.50	652.50	834.00
07/07/82	82.00	51.00	.68	97.00	420.00	.29	87.00	67.00	1423.50	673.50	855.00
07/08/82	69.00	41.00	.02	124.00	380.00	.25	91.00	66.00	1445.00	685.00	866.00
07/09/82	80.00	40.00	.40	62.00	500.00	.17	84.00	62.00	1478.00	708.00	889.00
07/10/82	81.00	40.00	.04	61.00	320.00	.17	88.00	71.00	1498.50	718.50	905.00
07/11/82	64.00	51.00	0	49.00	140.00	.06	65.00	65.00	1517.50	727.50	914.00
07/12/82	80.00	51.00	0	66.00	660.00	.26	70.00	63.00	1546.50	746.50	933.00
07/13/82	84.00	51.00	0	41.00	400.00	.27	74.00	70.00	1579.00	769.00	955.00
07/14/82	71.00	52.00	.17	33.00	220.00	.05	70.00	70.00	1605.50	785.50	972.00
07/15/82	83.00	52.00	0	51.00	640.00	.24	74.00	69.00	1641.50	811.50	998.00
07/16/82	76.00	53.00	.15	81.00	200.00	.06	74.00	69.00	1673.50	833.50	1020.00
07/17/82	82.00	54.00	0	141.00	240.00	.16	73.00	70.00	1706.50	856.50	1043.00
07/18/82	75.00	52.00	0	108.00	600.00	.34	90.00	70.00	1733.00	873.00	1059.00
07/19/82	77.00	52.00	0	60.00	700.00	.12	96.00	70.00	1761.00	891.00	1077.00
07/20/82	74.00	52.00	.11	72.00	420.00	.24	85.00	69.00	1788.00	908.00	1094.00
07/21/82	91.00	51.00	0	56.00	591.00	.17	100.00	69.00	1824.00	934.00	1118.00
07/22/82	87.00	52.00	0	46.00	533.00	.40	102.00	73.00	1857.00	957.00	1140.00
07/23/82	88.00	52.00	0	58.00	571.00	.27	103.00	73.00	1889.50	979.50	1163.00
07/24/82	84.00	52.00	.03	137.00	405.00	.30	97.00	74.00	1918.00	999.00	1181.00
07/25/82	84.00	52.00	.10	105.00	389.00	.28	90.00	72.00	1949.00	1019.00	1202.00
07/26/82	77.00	52.00	.02	34.00	200.00	.18	85.00	72.00	1980.00	1040.00	1223.00
07/27/82	81.00	52.00	0	24.00	740.00	.05	94.00	69.00	2009.50	1059.50	1243.00
07/28/82	84.00	52.00	.02	38.00	620.00	.25	102.00	69.00	2040.00	1080.00	1264.00
07/29/82	82.00	52.00	.07	46.00	480.00	.28	102.00	70.00	2074.00	1104.00	1287.00
07/30/82	74.00	52.00	.01	132.00	460.00	.27	85.00	69.00	2101.00	1121.00	1304.00
07/31/82	79.00	51.00	0	79.00	540.00	.26	93.00	69.00	2131.00	1141.00	1324.00

LOCATION : STAPLES

DEGREE DAYS

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 40 ACCULM VALUE	BASE = 50 ACCULM VALUE	BASE = 50/86 ACCULM VALUE
08/01/82	86.00	65.00	0	69.00	430.00	.21	93.00	71.00	2166.50	1166.50	1350.00
08/02/82	90.00	60.00	0	109.00	570.00	.29	104.00	74.00	2201.50	1191.50	1373.00
08/03/82	98.00	61.00	0	132.00	730.00	.23	102.00	73.00	2241.50	1221.50	1396.50
08/04/82	90.00	62.00	0	58.00	700.00	.44	105.00	75.00	2277.50	1247.50	1420.50
08/05/82	93.00	67.00	0	44.00	580.00	.18	107.00	75.00	2317.50	1277.50	1447.00
08/06/82	98.00	68.00	.26	47.00	260.00	.25	103.00	75.00	2360.00	1310.00	1474.00
08/07/82	89.00	49.00	.02	48.00	460.00	.24	100.00	73.00	2389.50	1329.50	1492.00
08/08/82	83.00	60.00	.04	108.00	450.00	.30	88.00	67.00	2420.00	1350.00	1513.50
08/09/82	71.00	53.00	.06	177.00	404.00	.22	85.00	61.00	2442.50	1362.50	1525.50
08/10/82	68.00	52.00	0	73.00	420.00	.18	90.00	60.00	2462.50	1372.50	1535.50
08/11/82	71.00	48.00	0	41.00	540.00	.22	94.00	63.00	2482.50	1382.50	1546.00
08/12/82	74.00	54.00	0	63.00	620.00	.26	100.00	62.00	2500.00	1396.00	1560.00
08/13/82	75.00	63.00	0	149.00	450.00	.55	87.00	64.00	2535.50	1415.50	1579.00
08/14/82	81.00	65.00	0	29.00	330.00	.14	94.00	71.00	2566.50	1438.50	1602.00
08/15/82	78.00	66.00	0	97.00	300.00	.13	86.00	71.00	2600.00	1460.00	1624.00
08/16/82	86.00	73.00	0	40.00	380.00	.16	95.00	73.00	2639.50	1489.50	1653.50
08/17/82	87.00	67.00	1.06	39.00	160.00	.29	89.00	70.00	2676.50	1516.50	1680.00
08/18/82	89.00	70.00	0	29.00	540.00	.05	90.00	70.00	2711.50	1546.50	1708.00
08/19/82	88.00	72.00	0	105.00	460.00	.14	89.00	75.00	2751.50	1576.50	1737.00
08/20/82	84.00	58.00	0	45.00	410.00	.23	91.00	69.00	2787.50	1597.50	1758.00
08/21/82	79.00	60.00	0	153.00	530.00	.29	94.00	67.00	2816.50	1616.50	1777.50
08/22/82	84.00	60.00	.3	108.00	360.00	.22	88.00	70.00	2848.50	1638.50	1799.50
08/23/82	76.00	62.00	0	82.00	530.00	.20	86.00	67.00	2877.50	1657.50	1818.50
08/24/82	75.00	59.00	0	36.00	440.00	.20	90.00	67.00	2904.50	1674.50	1833.50
08/25/82	74.00	53.00	0	80.00	440.00	.25	86.00	69.00	2928.50	1688.50	1849.50
08/26/82	77.00	56.00	0	106.00	360.00	.23	84.00	63.00	2954.50	1704.50	1865.50
08/27/82	60.00	35.00	.06	36.00	140.00	.07	70.00	55.00	2962.50	1704.50	1870.50
08/28/82	64.00	42.00	.02	57.00	580.00	.19	70.00	54.00	2975.50	1707.50	1877.50
08/29/82	65.00	53.00	0	105.00	420.00	.20	80.00	63.00	2994.50	1716.50	1886.50
08/30/82	77.00	46.00	0	53.00	300.00	.21	83.00	62.00	3015.50	1728.50	1900.00
08/31/82	66.00	53.00	.07	34.00	260.00	.14	78.00	61.00	3035.50	1737.50	1909.50
09/01/82	73.00	53.00	.14	39.00	240.00	.08	77.00	64.00	3058.50	1750.50	1922.50
09/02/82	75.00	54.00	0	115.00	360.00	.19	80.00	61.00	3082.50	1765.50	1937.00
09/03/82	68.00	42.00	0	105.00	220.00	.21	78.00	59.00	3097.50	1770.50	1946.00
09/04/82	74.00	46.00	0	55.00	220.00	.18	85.00	58.00	3117.50	1780.50	1958.00
09/05/82	81.00	53.00	.74	110.00	300.00	.25	88.00	62.00	3144.50	1797.50	1975.00
09/06/82	69.00	41.00	0	63.00	50.00	.17	84.00	60.00	3159.50	1802.50	1984.50
09/07/82	67.00	44.00	0	74.00	60.00	.21	79.00	59.00	3175.50	1807.50	1993.00
09/08/82	63.00	53.00	0	123.00	220.00	.01	67.00	61.00	3193.50	1815.50	2001.00
09/09/82	75.00	61.00	0	152.00	300.00	.10	75.00	66.00	3221.50	1833.50	2019.00
09/10/82	79.00	59.00	0	117.00	340.00	.04	79.00	69.00	3250.00	1852.00	2033.50
09/11/82	81.00	62.00	0	78.00	200.00	.26	87.00	68.00	3281.50	1874.50	2059.50
09/12/82	75.00	52.00	.67	97.00	80.00	.05	79.00	66.00	3305.50	1887.50	2073.00
09/13/82	66.00	47.00	.20	96.00	95.00	.09	67.00	61.00	3321.50	1894.00	2081.00
09/14/82	56.00	44.00	1.005	65.00	110.00	.09	64.00	60.00	3331.50	1894.00	2084.00
09/15/82	56.00	43.00	0	84.00	18.00	.13	63.00	62.00	3341.50	1894.00	2087.00
09/16/82	55.00	37.00	.004	28.00	110.00	.08	63.00	63.00	3347.50	1894.00	2089.50
09/17/82	55.00	44.00	.09	100.00	290.00	.10	64.00	64.00	3356.50	1894.00	2092.00
09/18/82	60.00	34.00	0	79.00	440.00	.11	65.00	65.00	3363.50	1894.00	2097.00
09/19/82	69.00	42.00	0	102.00	180.00	.17	68.00	63.00	3379.50	1899.50	2106.50
09/20/82	55.00	33.00	0	114.00	300.00	.08	58.00	61.00	3383.00	1899.50	2109.00
09/21/82	57.00	31.00	0	49.00	420.00	.10	64.00	60.00	3387.50	1899.50	2112.50
09/22/82	68.00	45.00	0	26.00	390.00	.10	74.00	64.00	3403.50	1906.00	2121.50
09/23/82	68.00	50.00	0	134.00	150.00	.18	70.00	62.00	3422.50	1915.00	2130.50
09/24/82	62.00	48.00	0	153.00	100.00	.07	62.00	62.00	3437.50	1920.00	2136.50
09/25/82	54.00	32.00	.01	73.00	420.00	.08	61.00	62.00	3440.00	1920.00	2138.50
09/26/82	60.00	41.00	0	100.00	360.00	.12	71.00	65.00	3451.50	1920.50	2143.50
09/27/82	68.00	41.00	0	69.00	180.00	.04	73.00	63.00	3465.50	1925.00	2152.50
09/28/82	63.00	47.00	.09	158.00	120.00	.10	68.00	66.00	3480.50	1930.00	2159.00
09/29/82	69.00	46.00	.40	130.00	180.00	.10	66.00	62.00	3498.50	1937.50	2168.50
09/30/82	67.00	34.00	0	45.00	330.00	.07	66.00	59.00	3508.50	1938.00	2177.00

LOCATION : STAPLES

		DEGREE DAYS									
		BASE = 40					BASE = 50				
		ACCUM	MIN	VALUE	ACCUM	MIN	VALUE	ACCUM	MIN	VALUE	
10/01/	MAXTEMP	0	0	0	0	0	0	0	0	0	
10/02/	MINTEMP	0	0	0	0	0	0	0	0	0	
10/03/	PRECIP	0	0	0	0	0	0	0	0	0	
10/04/	WIND	0	0	0	0	0	0	0	0	0	
10/05/	SOLAR	0	0	0	0	0	0	0	0	0	
10/06/	PAN	0	0	0	0	0	0	0	0	0	
10/07/	SOILMAX	0	0	0	0	0	0	0	0	0	
10/08/	SOILMIN	0	0	0	0	0	0	0	0	0	
10/09/	BASE = 40 ACCUM	0	0	0	0	0	0	0	0	0	
10/10/	BASE = 40 MIN	0	0	0	0	0	0	0	0	0	
10/11/	BASE = 40 VALUE	0	0	0	0	0	0	0	0	0	
10/12/	BASE = 50 ACCUM	0	0	0	0	0	0	0	0	0	
10/13/	BASE = 50 MIN	0	0	0	0	0	0	0	0	0	
10/14/	BASE = 50 VALUE	0	0	0	0	0	0	0	0	0	
10/15/	BASE = 40 ACCUM	0	0	0	0	0	0	0	0	0	
10/16/	BASE = 40 MIN	0	0	0	0	0	0	0	0	0	
10/17/	BASE = 40 VALUE	0	0	0	0	0	0	0	0	0	
10/18/	BASE = 50 ACCUM	0	0	0	0	0	0	0	0	0	
10/19/	BASE = 50 MIN	0	0	0	0	0	0	0	0	0	
10/20/	BASE = 50 VALUE	0	0	0	0	0	0	0	0	0	
10/21/	BASE = 40 ACCUM	0	0	0	0	0	0	0	0	0	
10/22/	BASE = 40 MIN	0	0	0	0	0	0	0	0	0	
10/23/	BASE = 40 VALUE	0	0	0	0	0	0	0	0	0	
10/24/	BASE = 50 ACCUM	0	0	0	0	0	0	0	0	0	
10/25/	BASE = 50 MIN	0	0	0	0	0	0	0	0	0	
10/26/	BASE = 50 VALUE	0	0	0	0	0	0	0	0	0	
10/27/	BASE = 40 ACCUM	0	0	0	0	0	0	0	0	0	
10/28/	BASE = 40 MIN	0	0	0	0	0	0	0	0	0	
10/29/	BASE = 40 VALUE	0	0	0	0	0	0	0	0	0	
10/30/	BASE = 50 ACCUM	0	0	0	0	0	0	0	0	0	
10/31/	BASE = 50 MIN	0	0	0	0	0	0	0	0	0	

LOCATION : WASECA

									DEGREE DAYS			
		MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 45 ACCUM VALUE	BASE = 50 ACCUM VALUE	BASE = 50/86 ACCUM VALUE
00	01/82	61	41	00	196	544	.27	665	000	554	352	443
00	02/82	71	43	00	164	633	.36	665	000	554	352	443
00	03/82	66	46	00	111	599	.24	71	000	566	359	453
00	04/82	66	46	00	102	571	.23	73	000	576	363	460
00	05/82	71	49	00	126	688	.31	73	000	587	379	468
00	06/82	71	57	00	263	647	.41	75	000	602	395	476
00	07/82	66	54	00	374	112	.11	65	000	623	405	494
00	08/82	75	44	00	165	701	.33	77	000	637	415	504
00	09/82	75	48	00	149	575	.28	77	000	653	430	505
00	10/82	66	45	00	223	369	.27	73	000	673	437	505
00	11/82	73	48	00	113	715	.33	77	000	684	447	505
00	12/82	74	52	00	117	414	.19	70	000	700	460	505
00	01/83	75	44	00	101	709	.44	70	000	718	470	505
00	02/83	80	58	00	143	701	.43	66	000	732	489	505
00	03/83	71	56	00	108	148	.08	66	000	756	502	505
00	04/83	71	46	00	84	425	.21	66	000	775	511	505
00	05/83	80	55	00	202	668	.44	66	000	811	528	505
00	06/83	70	52	00	65	337	.14	70	000	827	539	505
00	07/83	69	44	00	64	417	.17	71	000	838	546	505
00	08/83	73	54	00	165	573	.29	75	000	857	559	505
00	09/83	68	47	00	118	428	.16	75	000	869	567	505
00	10/83	75	44	00	103	614	.31	78	000	884	576	505
00	11/83	82	54	00	69	577	.22	78	000	903	591	505
00	12/83	86	60	00	194	636	.51	88	000	931	614	505
00	01/84	82	57	00	134	248	.34	88	000	956	633	505
00	02/84	70	54	00	97	472	.29	71	000	973	645	505
00	03/84	70	56	00	76	371	.11	71	000	991	658	505
00	04/84	83	62	00	32	583	.18	88	000	1018	681	505
00	05/84	88	57	00	121	631	.51	91	000	1046	703	505
00	06/84	71	54	00	118	285	.17	74	000	1063	716	505
00	07/84	74	55	00	98	600	.31	81	000	1083	730	505
00	08/84	80	59	00	144	583	.35	86	000	1107	750	505
00	09/84	75	62	00	135	310	.12	71	000	1131	768	505
00	10/84	90	61	00	91	648	.41	88	000	1161	794	505
00	11/84	95	62	00	197	678	.47	88	000	1195	823	505
00	12/84	95	65	00	289	601	.0	99	000	1230	853	505
00	01/85	79	59	00	182	342	.28	88	000	1254	872	505
00	02/85	76	55	00	131	675	.34	78	000	1275	887	505
00	03/85	83	62	00	154	655	.30	88	000	1302	910	505
00	04/85	79	62	00	116	339	.17	88	000	1328	930	505
00	05/85	72	58	00	124	118	.0	88	000	1348	945	505
00	06/85	79	58	00	82	656	.33	88	000	1371	964	505
00	07/85	83	45	00	45	559	.26	88	000	1397	985	505
00	08/85	85	52	00	52	567	.25	71	000	1426	1009	505
00	09/85	87	68	00	126	622	.30	88	000	1459	1036	505
00	10/85	85	65	00	163	280	.05	88	000	1489	1061	505
00	11/85	87	67	00	216	585	.45	88	000	1521	1088	505
00	12/85	81	60	00	78	392	.22	73	000	1546	1109	505
00	01/86	84	61	00	59	662	.43	73	000	1574	1131	505
00	02/86	83	64	00	92	588	.33	75	000	1602	1155	505
00	03/86	84	66	00	113	529	.30	78	000	1632	1180	505
00	04/86	79	61	00	42	361	.19	75	000	1657	1200	505
00	05/86	86	64	00	59	627	.29	75	000	1687	1225	505
00	06/86	85	65	00	94	574	.30	78	000	1717	1250	505
00	07/86	89	67	00	141	468	.25	88	000	1750	1277	505
00	08/86	80	64	00	94	435	.22	78	000	1783	1305	505
00	09/86	81	60	00	88	298	.18	75	000	1810	1327	505
00	10/86	84	60	00	54	586	.27	75	000	1835	1348	505
00	11/86	84	52	00	52	584	.23	75	000	1864	1372	505
00	12/86	85	53	00	107	591	.30	75	000	1888	1391	505
00	01/87	80	55	00	71	549	.28	73	000	1911	1408	505

LOCATION : W A S E C A

DEGREE DAYS

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	BASE = 45		BASE = 50		BASE = 50/86	
									ACCULM	VALUE	ACCULM	VALUE	ACCULM	VALUE
08/01/82	83.00	66.00	0	106.00	5667.00	.29	89.00	73.00	1940.50	1433.00	1534.00			
08/02/82	90.00	68.00	0	103.00	5660.00	.35	93.00	77.00	1974.50	1462.00	1561.00			
08/03/82	92.00	72.00	0	180.00	5997.00	.44	94.00	79.00	2011.50	1494.00	1590.00			
08/04/82	94.00	69.00	.90	102.00	515.00	.42	86.00	80.00	2048.00	1525.50	1617.50			
08/05/82	84.00	69.00	0	50.00	3397.00	.11	86.00	76.00	2079.50	1552.00	1644.00			
08/06/82	86.00	64.00	0	82.00	513.00	.28	89.00	76.00	2109.50	1577.00	1669.00			
08/07/82	83.00	62.00	0	36.00	454.00	.20	91.00	75.00	2137.00	1599.50	1691.00			
08/08/82	86.00	55.00	0	57.00	569.00	.27	95.00	76.00	2162.50	1620.00	1712.00			
08/09/82	75.00	50.00	0	117.00	575.00	.26	87.00	72.00	2180.00	1632.50	1724.50			
08/10/82	65.00	42.00	0	58.00	435.00	.25	78.00	66.00	2188.50	1636.00	1732.00			
08/11/82	72.00	45.00	0	28.00	553.00	.14	83.00	65.00	2202.00	1644.50	1743.00			
08/12/82	76.00	49.00	0	37.00	627.00	.20	87.00	67.00	2219.50	1657.00	1756.00			
08/13/82	74.00	52.00	0	132.00	578.00	.22	83.00	68.00	2237.50	1670.00	1769.00			
08/14/82	73.00	61.00	0	40.00	208.00	.18	77.00	71.00	2259.50	1687.00	1786.00			
08/15/82	80.00	64.00	0	67.00	374.00	.13	83.00	72.00	2286.50	1709.00	1808.00			
08/16/82	81.00	60.00	0	38.00	365.00	.08	84.00	73.00	2312.00	1729.50	1828.00			
08/17/82	86.00	62.00	0	28.00	506.00	.31	91.00	73.00	2341.00	1753.50	1852.00			
08/18/82	85.00	61.00	.29	30.00	464.00	.25	88.00	75.00	2370.50	1778.00	1877.00			
08/19/82	83.00	67.00	0	129.00	450.00	.23	87.00	74.00	2400.50	1803.00	1902.00			
08/20/82	87.00	58.00	0	44.00	370.00	.16	88.00	75.00	2428.00	1825.50	1924.00			
08/21/82	81.00	51.00	0	42.00	543.00	.30	91.00	73.00	2449.00	1841.00	1940.00			
08/22/82	82.00	54.00	.80	151.00	584.00	.42	90.00	73.00	2472.00	1859.50	1958.00			
08/23/82	75.00	56.00	0	54.00	482.00	.21	82.00	70.00	2492.50	1875.00	1973.00			
08/24/82	78.00	59.00	.78	55.00	436.00	.21	84.00	70.00	2516.00	1893.50	1992.00			
08/25/82	71.00	47.00	.30	50.00	316.00	.14	73.00	63.00	2530.00	1902.50	2002.50			
08/26/82	79.00	52.00	0	123.00	571.00	.27	76.00	63.00	2550.50	1918.00	2018.00			
08/27/82	78.00	47.00	.21	100.00	542.00	.29	83.00	64.00	2568.00	1930.50	2032.00			
08/28/82	65.00	47.00	.05	33.00	571.00	.20	76.00	64.00	2579.50	1936.50	2039.50			
08/29/82	66.00	57.00	.38	155.00	378.00	.26	74.00	63.00	2595.50	1948.00	2051.00			
08/30/82	63.00	59.00	.75	60.00	98.00	.14	67.00	66.00	2611.50	1959.00	2062.00			
08/31/82	75.00	59.00	.15	92.00	546.00	.26	77.00	67.00	2633.50	1976.00	2079.00			
09/01/82	79.00	62.00	1.30	93.00	265.00	.39	74.00	65.00	2659.00	1996.50	2099.00			
09/02/82	78.00	52.00	0	88.00	421.00	.22	78.00	65.00	2679.00	2011.50	2114.50			
09/03/82	69.00	46.00	0	92.00	561.00	.22	74.00	61.00	2691.50	2019.00	2124.00			
09/04/82	72.00	48.00	0	38.00	515.00	.10	80.00	61.00	2706.50	2029.00	2135.00			
09/05/82	79.00	54.00	0	144.00	514.00	.27	81.00	63.00	2728.00	2045.50	2151.50			
09/06/82	75.00	51.00	.40	108.00	202.00	.16	73.00	64.00	2746.00	2058.50	2164.50			
09/07/82	63.00	51.00	0	100.00	234.00	.09	67.00	64.00	2758.00	2065.50	2171.50			
09/08/82	69.00	56.00	.02	87.00	156.00	.07	67.00	62.00	2775.50	2078.00	2184.00			
09/09/82	74.00	60.00	0	143.00	326.00	.08	73.00	64.00	2797.50	2095.00	2201.00			
09/10/82	79.00	65.00	.33	156.00	301.00	.25	77.00	67.00	2824.50	2117.00	2223.00			
09/11/82	80.00	66.00	0	121.00	327.00	.08	75.00	70.00	2852.50	2140.00	2246.00			
09/12/82	84.00	67.00	.18	142.00	469.00	.27	81.00	68.00	2883.00	2165.50	2271.50			
09/13/82	74.00	52.00	1.17	99.00	104.00	.26	72.00	65.00	2901.00	2178.50	2284.50			
09/14/82	58.00	52.00	.08	86.00	118.00	.15	65.00	61.00	2911.00	2183.50	2289.50			
09/15/82	55.00	48.00	.25	106.00	86.00	.0	62.00	58.00	2917.50	2185.00	2292.00			
09/16/82	53.00	39.00	.02	47.00	177.00	.06	58.00	53.00	2918.50	2185.00	2293.50			
09/17/82	59.00	43.00	.04	88.00	283.00	.08	61.00	52.00	2924.50	2186.00	2298.00			
09/18/82	67.00	39.00	.02	72.00	316.00	.10	65.00	54.00	2932.50	2189.00	2306.50			
09/19/82	67.00	40.00	0	78.00	481.00	.13	68.00	53.00	2941.00	2192.50	2315.00			
09/20/82	62.00	43.00	0	100.00	415.00	.07	68.00	56.00	2948.50	2195.00	2321.00			
09/21/82	57.00	31.00	0	51.00	420.00	.13	65.00	51.00	2948.50	2195.00	2324.50			
09/22/82	64.00	35.00	0	24.00	494.00	.11	70.00	51.00	2953.00	2195.00	2331.50			
09/23/82	69.00	40.00	0	130.00	475.00	.22	71.00	54.00	2962.50	2199.50	2341.00			
09/24/82	76.00	54.00	0	141.00	433.00	.18	74.00	60.00	2982.50	2214.50	2356.00			
09/25/82	59.00	39.00	0	67.00	108.00	.05	63.00	54.00	2986.50	2214.50	2360.50			
09/26/82	62.00	40.00	0	60.00	466.00	.07	70.00	54.00	2992.50	2215.50	2366.50			
09/27/82	65.00	42.00	0	109.00	449.00	.14	69.00	54.00	3001.00	2219.00	2374.00			
09/28/82	68.00	43.00	0	190.00	433.00	.15	69.00	56.00	3011.50	2224.50	2383.00			
09/29/82	73.00	54.00	0	243.00	232.00	.16	67.00	61.00	3030.00	2238.00	2396.50			
09/30/82	74.00	54.00	.46	120.00	206.00	.24	68.00	61.00	3049.00	2252.00	2410.50			

LOCATION : W A S E C A

	MAXTEMP	MINTEMP	PRECIP	WIND	SOLAR	PAN	SOILMAX	SOILMIN	DEGREE DAYS		
									BASE = 45 ACCUM VALUE	BASE = 50 ACCUM VALUE	BASE = 50/86 ACCUM VALUE
10/01/82	62.00	51.00	.63	53.00	155.00	.13	63.00	59.00	3060.50	2258.50	2417.00
10/02/82	62.00	51.00	.25	140.00	97.00	.00	60.00	59.00	3072.00	2265.00	2423.50
10/03/82	60.00	40.00	.17	69.00	94.00	.18	60.00	52.00	3077.00	2265.00	2428.50
10/04/82	68.00	42.00	.00	53.00	428.00	.00	60.00	51.00	3087.00	2270.00	2437.50
10/05/82	75.00	49.00	.00	95.00	398.00	.00	65.00	54.00	3104.00	2282.00	2450.00
10/06/82	75.00	54.00	.52	125.00	238.00	.00	67.00	54.00	3123.00	2296.00	2464.50
10/07/82	72.00	40.00	.30	124.00	414.00	.00	64.00	52.00	3140.00	2302.00	2475.50
10/08/82	61.00	40.00	.00	137.00	410.00	.00	60.00	51.00	3140.00	2302.00	2481.00
10/09/82	66.00	42.00	.00	204.00	208.00	.00	60.00	52.00	3147.00	2305.00	2487.50
10/10/82	62.00	47.00	.13	150.00	86.00	.00	58.00	54.00	3157.00	2310.00	2493.50
10/11/82	57.00	43.00	.06	169.00	157.00	.00	57.00	54.00	3162.00	2310.00	2497.00
10/12/82	49.00	42.00	.04	150.00	98.00	.00	52.00	50.00	3162.00	2310.00	2497.00
10/13/82	50.00	43.00	.05	118.00	141.00	.00	52.00	50.00	3164.00	2310.00	2498.00
10/14/82	52.00	38.00	.01	100.00	158.00	.00	53.00	47.00	3164.00	2310.00	2498.00
10/15/82	70.00	38.00	.01	100.00	370.00	.00	59.00	47.00	3173.00	2314.00	2508.00
10/16/82	58.00	28.00	.00	108.00	359.00	.00	58.00	46.00	3173.00	2314.00	2512.00
10/17/82	56.00	28.00	.02	86.00	241.00	.00	58.00	44.00	3173.00	2314.00	2515.00
10/18/82	66.00	43.00	.00	121.00	302.00	.00	60.00	49.00	3182.50	2318.00	2523.00
10/19/82	69.00	44.00	.00	107.00	263.00	.00	61.00	50.00	3194.00	2322.00	2532.00
10/20/82	48.00	32.00	1.20	191.00	37.00	.00	54.00	42.00	3194.00	2322.00	2532.00
10/21/82	37.00	21.00	.00	63.00	167.00	.00	43.00	41.00	3194.00	2322.00	2532.00
10/22/82	43.00	25.00	.00	8.00	284.00	.00	47.00	40.00	3194.00	2322.00	2532.00
10/23/82	56.00	30.00	.00	104.00	334.00	.00	48.00	40.00	3194.00	2322.00	2535.00
10/24/82	60.00	37.00	.00	158.00	336.00	.00	50.00	41.00	3197.50	2322.00	2540.00
10/25/82	61.00	40.00	.00	121.00	303.00	.00	53.00	43.00	3203.00	2322.00	2546.00
10/26/82	68.00	40.00	.00	115.00	320.00	.00	57.00	45.00	3212.00	2322.00	2555.00
10/27/82	64.00	42.00	.00	184.00	320.00	.00	57.00	48.00	3220.00	2332.00	2562.00
10/28/82	54.00	45.00	.15	221.00	322.00	.00	50.00	49.00	3224.50	2332.00	2564.00
10/29/82	50.00	42.00	.13	158.00	322.00	.00	50.00	48.00	3225.50	2332.00	2564.00
10/30/82	60.00	32.00	.00	140.00	322.00	.00	51.00	45.00	3226.50	2332.00	2569.00
10/31/82	47.00	32.00	.00	32.00	322.00	.00	47.00	43.00	3226.50	2332.00	2569.00

