

Petition to De-List
The Lower San Joaquin River
As A Water Body Impaired By
Salt and Boron
Under §303(d) of the California Clean Water Act

Submitted By:
San Joaquin River Group Authority

I. INTRODUCTION

Due to frequent exceedances of water quality objectives for salinity at Vernalis, the Central Valley Regional Water Quality Control Board (“Regional Board”) included the Lower San Joaquin River¹ (“LSJR”) as an impaired water body on the California Clean Water Act §303(d) list.² (Total Maximum Daily Load (“TMDL”) for Salinity and Boron in the Lower San Joaquin River, Staff Report of the California Environmental Protection Agency, Regional Water Quality Control Board, Central Valley Region, January 2002 (“2002 TMDL Report”), p1.)

Salinity objectives for the Lower San Joaquin River (“LSJR”), measured as electrical conductivity (“EC”), contained in the current Southern Delta EC Objectives in the Water Quality Objectives for Agricultural Beneficial Uses, are designed to protect South Delta agriculture. (1995 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (“1995 WQCP”), p 17, Table 2.) The Southern Delta EC Objective is measured at Vernalis (“Vernalis Objectives”) and requires an EC of 0.7 decisiemens per meter (“dS/m”) from April 1 through August 31 (“Vernalis Irrigation Season Objective”) and 1.0 dS/m at all other times (“Vernalis Non-Irrigation Season Objective”), based on a running 30-day average. In addition, the Regional Board has adopted boron water quality objectives for the LSJR, but these objectives were never approved by the United States Environmental Protection Agency.

¹ For basin planning purposes, the LSJR is the region draining the 130 miles of the San Joaquin River downstream of Mendota Dam and upstream of Vernalis. (Final Staff Report of the California Environmental Protection Agency Regional Water Quality Control Board Central Valley Region, September 10, 2004 (“Final Staff Report”), p5.)

² An “exceedance” occurs when the concentration of the controlled pollutant is greater than the amount allowed by the water quality objective. In the case of salinity, an exceedance would occur any time the EC is more than 0.7 dS/m from April 1 through August 31 and 1.0 dS/m from September 1 through March 31. A “violation” would only occur if the running 30-day average were greater than 0.7 dS/m from April 1 through August 31 and 1.0 dS/m from September 1 through March 31.

(2002 TMDL Report, p2.) Water quality objectives for boron will be reviewed as part of the ongoing Basin Plan Amendment process to establish new salinity objectives. (Id.)

Table 1: Applicable Water Quality Objectives

SALINITY	Irrigation Season	Non-Irrigation Season
Reach	(April 1 – August 31)	(September 1 – March 1)
Vernalis only	0.7 dS/m (30-day running average)	1.0 dS/m (30-day running average)
BORON	Irrigation Season	Non-Irrigation Season
Reach	(March 15 – September 15)	(September 16 – March 14)
Sack Dam to Merced River	2.0 mg/L (maximum) 0.8 mg/L (monthly mean)	5.8 mg/L (maximum) 2.0 mg/L (monthly mean)
Merced River to Vernalis	2.0 mg/L (maximum) 0.8 mg/L (monthly mean)	2.6 mg/L (maximum) 1.0 mg/L (monthly mean) ³

The Regional Board has prepared TMDL’s for salt and boron for the LSJR.⁴ The Basin Plan amendment for the salt and boron TMDL is currently before the SWRCB.

The San Joaquin River Group Authority (“SJRG”) petitions the State Water Resources Control Board (“SWRCB”) to de-list the LSJR as a water body impaired by salt and boron. (Water Code §13191.3.) The SJRG requests the de-listing, because the Vernalis Salinity Objectives are being met, beneficial uses are not impaired, and the Vernalis Salinity Objectives will continue to be met in the future.

II. De-Listing Requirements.

Pursuant to §13191.3(a) of the Water Code, the SWRCB prepared guidelines for the listing and de-listing of water bodies and the development and implementation of TMDL’s pursuant to §303(d) of the Federal Clean Water Act.⁵ Under the Listing Policy,

³ In Critical years, the required monthly mean Non-Irrigation Season Merced River-Vernalis Boron Objective is 1.3 mg/L.

⁴ A TMDL, usually expressed as mass per time, is the sum of the receiving water’s loading capacity allocated to an existing or future point source, the portion of the receiving water’s Loading Capacity allocated to an existing or future non-point source of pollution or to natural background sources, and an appropriate margin of safety. (Final Staff Report, p30; 2002 TMDL Report, p5-6.) The Loading Capacity is the most loading the water body can receive without violating water quality standards. (Id.)

⁵ According to Water Code §13191.3(a),

a water body shall be de-listed if water quality objectives are being met, beneficial uses are not impaired, and water quality objectives will be met in the future. (Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List ("Listing Policy"), p11; Final Staff Report on Changes to California's Clean Water Act Section 303(d) List (December 14, 2001) p17.) A water body shall also be de-listed if the water quality objective is revised and conditions in the water body would comply with the revised water quality objective. (Id.) Based on all of the foregoing reasons, the Regional Board must de-list the LSJR for impairment due to salt and boron.

III. There Have Been No Violations of the Vernalis Objectives Since 1995.

The SWRCB Listing Policy requires that a water body listed as impaired due to exceeded water quality objectives, criteria, or standards for conventional pollutants be de-listed if the number of measured exceedances are less than or equal to about 25%. (Listing Policy, p15, Table 4.2.) The de-listing analysis must be based on at least 30 samples. (Id.)

The Regional Board listed the LSJR as an impaired water body due to frequent exceedances during the twelve-year period from 1986 to 1998. Half of these years however, consisted of one of the most serious, prolonged droughts in California history, skewing the data and biasing the sample.

Since 1995, there have been no violations of the Vernalis Objectives. (See Exhibit A, Declaration of Dan Steiner with attached EC data.) The Vernalis Objectives are based on a 30-day running average, which over nine years, constitutes over 108 samples. (2002

The state board, on or before July 1, 2003, shall prepare guidelines to be used by the state board and the regional boards for the purpose of listing and delisting waters and developing and implementing the total maximum daily load (TMDL) program and total maximum daily loads pursuant to Section 303(d) of the federal Clean Water Act. (44 U.S.C Sec 1313(d).)

TMDL Report, p21.) Since there have been zero violations, the LSJR must be de-listed for EC.

IV. Beneficial Uses Are Not Impaired by EC at Vernalis.

The Regional Board concluded that, due to frequent exceedances of the Vernalis Objectives from 1986 to 1998, the LSJR could not fully support the beneficial uses of irrigation and agriculture. (Final Staff Report, p4.) However, no empirical or other data supporting such theoretical impacts has ever been presented. If there was such a causal link, then it would have occurred from 1987 to 1994, during the worst extended drought on record. While impacts on farms have been claimed, no evidence supporting such a claim has ever been submitted. Regional Board 303(d) documents are devoid of any analysis determining whether the beneficial use of irrigation and agriculture is actually impaired. Furthermore, farmers “believe” they are impacted when the Vernalis Objectives are exceeded, but empirical data shows no impact to South Delta agriculture due to salinity.

A. South Delta Farmers Have Never Established a Relationship Between Their Yields and Vernalis Water Quality.

The Vernalis Objectives were specifically intended to establish a maximum concentration of salinity in the water at Vernalis sufficient to support a 100% crop yield. (D-1641, p79.) Since then, it became conventional wisdom that any time the Vernalis Objectives were exceeded, especially the when the Vernalis Irrigation Season Salinity Objective applied, crop yields were affected. A farmer in the south Delta, William Salmon, testified that “Any actions which will increase salinity flowing into the South Delta will simply incrementally increase the harm which [my] farming operation is subjected to each year.” (See Exhibit B, p47-48.) (emphasis added.)

While the foregoing statement by Mr. Salmon attempts to link the quality of water at Vernalis with the quality and yield of crops that he grows, the allegedly supporting information he submitted shows no correlation between his crops and water quality at Vernalis. In another declaration, Mr. Salmon stated that the salinity problem has been getting worse since 1999. (Bay-Delta, Depo. Tr. William Salmon, p13 (May 25, 1999).) If true, this is certainly odd, as there have been no violations of the Vernalis standard since at least 1995. (Exhibit A, Decl. of Dan Steiner and Vernalis EC data.) Indeed, Mr. Salmon testified in his deposition that he did not know if the Vernalis water quality standard had been violated since 2000. (*Id.*, p15.) Thus, regardless of the veracity of Mr. Salmon's claims of salinity damage to his crops, he provided no data supporting a direct relationship between damage to his crops caused by salinity of the San Joaquin River water and violations of the Vernalis Objectives.⁶

Another farmer, Kurt Sharp, testified similarly, stating that "As salinity at Vernalis rises, particularly above the Vernalis standard, there is a corresponding negative effect on the irrigated crops grown by [me]." (*Central Delta Water Agency ("CDWA") v. USA*, declaration of Kurt Sharp, p3 (June 14, 1999).) (emphasis added.)⁷ Mr. Sharp's statement has even less evidentiary support. Despite alleging a direct connection between

⁶ Mr. Salmon's claim that salinity is the cause of the yield loss of his crops is dubious at best. In a 1999 deposition, Mr. Salmon admitted that he was unable to correlate damage to his walnuts to salinity of the irrigation water he used. He stated "Now, that is not totally. it is not totally. I can't totally say that it is the salt. I also have a virus, what they call black line disease which walnuts get." (Bay-Delta, Depo. Tr. William Salmon, p78 (May 25, 1999).) Mr. Salmon made a similar admission regarding tomatoes, for which he stated "And in 1990 I finally gave up growing tomatoes because I was no longer – it was no longer economically feasible for me to grow with my yields. My yields kept coming down. Now, I can't sit here and tell you that it was directly related to the salt in the water..." (*Id.*, p81.) Perhaps most telling, despite this dramatic statement about quitting tomatoes due to declining yields, in 1999 Mr. Salmon planted 357.5 acres of tomatoes. (*Id.*, Ex. 5.)

⁷ The property Mr. Sharp farms is not located within the south Delta, but in the Central Delta Water Agency ("CDWA"), far to the north of the area to be protected by the Southern Delta water quality objectives. However, his testimony underscores the fact that many Delta farmers, even those who are not in the south Delta, believe south Delta salinity has adversely affected their crop yields.

water quality at Vernalis and adverse impacts to crops grown by R.C. Farms, Mr. Sharp admitted he has absolutely no basis for attempting to make such a connection. In a 2003 deposition, Mr. Sharp acknowledged that knowing the salt content of the irrigation water he was applying would be a key piece of information regarding his claim of connection between water quality at Vernalis and adverse impacts to crops he grows. (CDWA v. USA Depo. Tr. Kurt Sharp, June 24, 2003, p10-11.) Despite this, Mr. Sharp admitted that he did not know or check the salt content of the water he was applying, and acknowledged that water quality could be getting better and he would not even know it. (Id., p11, 21-22.)

Mr. Sharp was even more open and honest about lacking any information correlating water quality at Vernalis and impacts to the crops grown at R.C. Farms in his deposition taken June 24, 2003, as the following exchange illustrates:

“Q. Have you done any analysis to understand the correlation between EC at Vernalis and EC at R.C. Farms?”

“A. Have I done any what?”

“Q. Analysis.”

“A. No.”

“Q. Are you aware of any reports or studies that you have read or reviewed that has a correlation between EC’s at Vernalis and EC’s at where you divert from the San Joaquin River?”

“A. Say that question again.”

“Q. Yeah. Have you read any books, analysis, reports that shows a correlation between EC’s at Vernalis and EC’s at R.C. Farms?”

“A. No, I have not.” (CDWA v. USA, Depo. Tr., Kurt Sharp, p25 (June 24, 2003).)

When asked to give specific details about crop yield declines due to salt, Mr. Sharp testified that certain parts of R.C. farms' fields have been experiencing declines from 1997 up and through 2003 which he attributed to salt build-up (In re Long-Term Petition Change of: Modesto Irrigation District, et al., Depo. Tr. Kurt Sharp, p15-17 (March 27, 2003).)

A third farmer, Alex Hildebrand has testified that "Any time the Vernalis standard is exceeded, there is a corresponding negative effect on the irrigated crops grown in the South Delta. I have personally experienced such harm on my crops." (CDWA v. USA, Decl. of Hildebrand, p12-13 (May 7, 1999).) He too failed to provide any quantitative data supporting a link between violations of the Vernalis Objectives and his crop yields.

The Regional Board, in listing the LSJR as impaired due to EC, also concluded that the beneficial use of agriculture was impaired, but like the South Delta farmers, did so without any analysis, quantitative data, or citations to any supporting evidence. (2002 TMDL Report, p10.) The Regional Board, Messrs. Salmon, Sharp, and Hildebrand, and many others have consistently claimed that violations of the Vernalis Objectives have harmed their crop yields, but neither they, nor anyone else, have ever provided any quantitative evidence supporting a correlative or causal relationship between EC at EC at Vernalis and declining crop yields in the south Delta.

B. Historical Data Shows EC at Vernalis Has Not Impaired Beneficial Uses.

Due to the lack of competent analysis and objective, correlative data supporting the unsubstantiated belief that every time violations of the Vernalis Objectives occurs farmers in the Southern Delta experience a corresponding negative impact on their crops, the SJRGA conducted its own investigation to determine whether such a relationship existed. The SJRGA obtained data from the San Joaquin County Agriculture Commissioner's Reports and compared the data to historical water quality at Vernalis for every year from 1970 to 2003. (See Exhibit C: Compiled Crop Data, Tables 2-6.) The results indicate no relationship exists between Vernalis water quality and south Delta crop yields.

The Vernalis Objectives were established to protect agriculture, the most sensitive beneficial use. (2002 TMDL Report, p24.) In D-1485, the SWRCB adopted a Vernalis Irrigation Season Salinity Objective of 0.7 dS/m, the maximum average EC beans can tolerate in their root zone before declining in yield. (1995 WQCP, p5; See Exhibit D, p4.) Since beans were the most salt-sensitive crop grown in the South Delta, the SWRCB reasoned that establishing a salinity objective sufficient to protect beans would protect all other crops grown in the South Delta. (Id.) If Messrs. Salmon, Sharp, and Hildebrand were correct in their belief that their crop yields declined in direct relation to violations of the Vernalis Irrigation Season Salinity Objective, then violations of the Vernalis Objectives would impact beans more than any other crop.

The SJRGA directly compared bean yields to the corresponding average EC of each irrigation season in order to observe when yield declines corresponded with high

salinity and when they did not correspond with high salinity.⁸ (See Table 1.) An

“irrigation season” was defined as the period each year from April 1 through August 31.

Table 2: Dry Bean Yield and Seasonal Average Water Quality at Vernalis, 1970-2003.⁹

Year	Yield (Tons/Acre)	EC (dS/m)	Year Type ¹⁰
1970	0.88	0.68	AN
1971	0.88	0.72	BN
1972	1.05	1.01	D
1973	1.16	0.68	AN
1974	1.18	0.53	W
1975	1.18	0.57	W
1976	0.91	0.99	C
1977	0.89	1.49	C
1978	0.85	0.41	W
1979	0.97	0.68	AN
1980	1.07	0.71	W
1981	1.04	0.73	D
1982	0.80	0.28	W
1983	0.85	0.19	W
1984	0.91	0.63	AN
1985	1.15	0.62	D
1986	1.05	0.38	W
1987	1.06	0.72	C
1988	1.07	0.74	C
1989	1.04	0.75	C
1990	1.50	0.75	C
1991	1.15	0.86	C
1992	1.09	0.78	C
1993	1.13	0.64	W
1994	1.20	0.74	C
1995	1.15	0.26	W
1996	1.08	0.49	W
1997	1.14	0.56	W
1998	0.8	0.19	W
1999	1.15	0.45	AN
2000	1.09	0.46	AN
2001	1.05	0.58	D
2002	1.08	0.56	D
2003	1.09	0.55	BN

⁸ Data for historical flow and electrical conductivity was obtained from Mr. Daniel Steiner. (Exhibit A.)

⁹ Consecutive years in which the seasonal average exceeded the Objective are shaded yellow. Years in which the yield was less than 10% below the mean are shaded green.

¹⁰ San Joaquin River Basin Index Year Types. W= Wet, AN = Above Normal, BN = Below Normal, D = Dry, C = Critical. (Exhibit E, p32.)

Overall, seasonal average EC at Vernalis ranged from a low of 0.19 dS/m to a high of 1.49 dS/m. The mean EC for the period was 0.63 dS/m.¹¹ Yields for that period ranged from a low of 0.80 tons/acre to a high of 1.5 tons/acre. The mean yield was 1.05 tons/acre.¹² However, since yields vary by about 10%, solely due to variations in weather, seed quality, insect infestations, fertilization, and other factors and farming practices, yields could have been as low as 0.90 tons/acre for reasons unrelated to water quality. (See Exhibit F, p2.)

In the thirty-three years observed, the seasonal average EC exceeded the Vernalis Irrigation Season Salinity Objective thirteen times. However, yields declined to less than 10% below the mean yield only twice – once in 1971, a Below Normal year, when yields were 0.88 tons/acre and EC was 0.72 dS/m, and again in 1977, a Critically Dry year, when yields were 0.89 tons/acre and EC was 1.49 dS/m, the highest EC during the sample period.

None of the other eleven instances in which seasonal average EC exceeded the Vernalis Irrigation Season Salinity Objective accompanied significant declines in bean yields. Eight of these years had yields at or above the mean. Some of these years even had the best yields of the entire thirty-three year period. In fact, the highest yields in the entire period, 1.5 tons/acre, occurred in 1990, when the average EC of the season was 0.75 dS/m! In contrast, 1997 had one of the worst yields, at only 0.8 tons/acre, but the best water quality, at 0.19 dS/m.

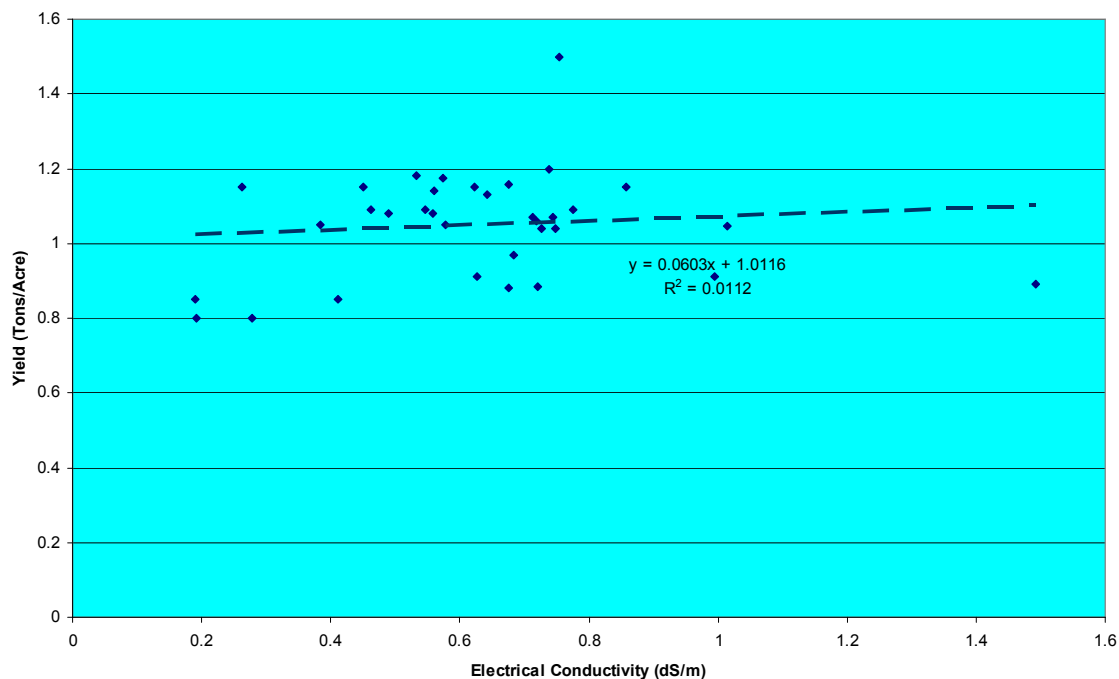
South Delta farmers such as Mr. Salmon and Mr. Sharp have repeatedly claimed that violations of the Vernalis Irrigation Season Salinity Objective lead to corresponding

¹¹ The standard deviation was 0.17 dS/m.

¹² The standard deviation was 0.10 tons/acre. The median yield was 1.07 tons/acre

declines in their yields, yet they have also repeatedly failed to provide any documentation or other supporting evidence demonstrating a correlative or causal relationship between exceedances of the Vernalis Irrigation Season Salinity Objective and harm to their crops. They could not do so, because no such evidence existed. Comparing seasonal average EC at Vernalis with bean yields demonstrates that bean yields do not decrease when EC exceeds the Vernalis Irrigation Season Salinity Objective and that no relationship between the two exists. (See Figure 1.)

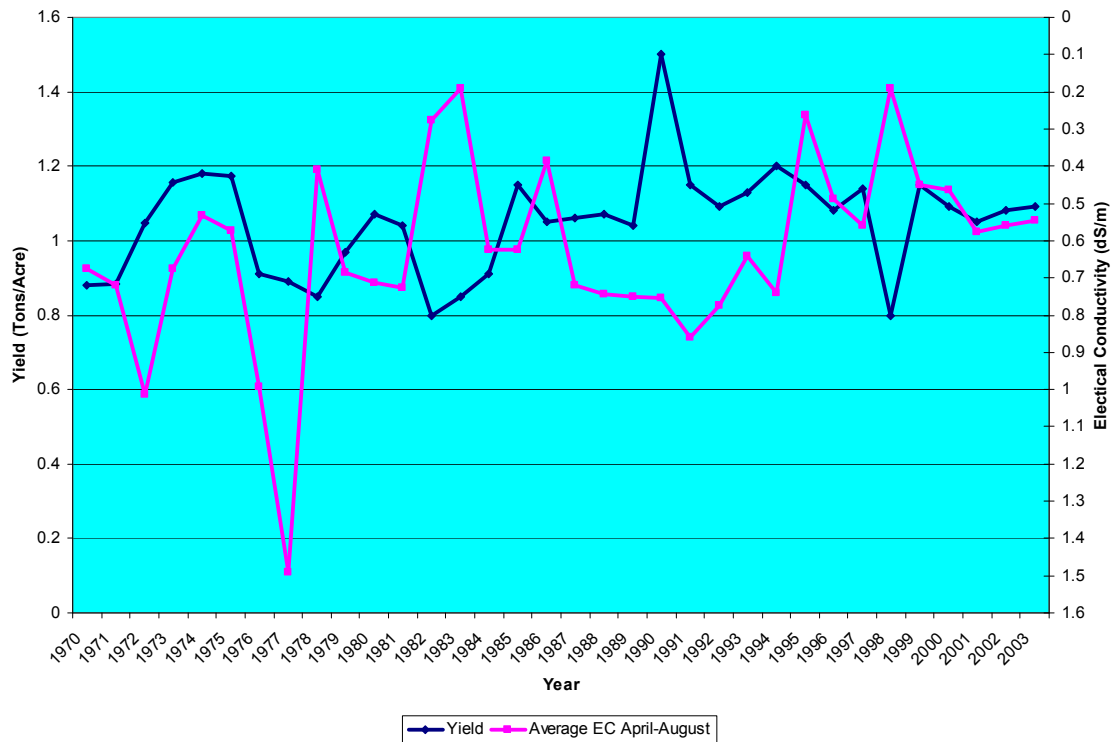
Figure 1: San Joaquin County dry bean yield and seasonal average water quality. (See Exhibit C.)



According to the work of Ayers and Westcot however, it takes time for salt to accumulate in the root zone to a concentration sufficient to reduce yield. (R. S. Ayers and D. W. Westcot, Water Quality for Agriculture §2.4.2 (FAO Irrigation and Drainage Paper, 29 Rev. 1, 1985).) Even without leaching, two or more years of irrigation are generally required before salt concentrations climb high enough to harm yields. (Id.)

Consequently, the SJRGA examined bean yields and water quality over the period from 1970 to 2003 to determine whether any patterns or trends emerged. Based on the Ayers and Westcot work, one or more consecutive years in which the seasonal average salinity exceeded 0.7 dS/m should have eventually led to declines in yields, but again there was no relationship between Vernalis water quality and bean yields. (*Id.*; See Figure 2.)

Figure 2: San Joaquin County dry bean yield and seasonal average water quality from 1970 to 2003. (See Exhibit C.)



In the entire thirty-three year period observed, there were two instances in which yields declined more than 10% below the mean after one or more years in which the seasonal average EC at Vernalis exceeded 0.7 dS/m.

The first instance occurred in 1977, when the yield was 0.89 tons/acre, the EC at Vernalis that year was 1.49 dS/m, and the EC at Vernalis the prior year was 0.99 dS/m.¹³

¹³ In the 1970's and 1980's, the fifteen-year moving average of the mean annual discharge was about 800,000 AF. (2002 TMDL Report, p14.) The discharge at Vernalis in 1977 was only 400,000 AF and was

The second instance occurred in 1982, when yields were 0.85 tons/acre, and the seasonal average EC in the two prior years was 0.71 dS/m in 1980 and 0.73 dS/m in 1981.

However, there was also a significant period when seasonal average EC exceeded 0.7 dS/m every year from 1987 through 1992 - a total of six consecutive years.

Throughout that period, however, bean yields stayed remarkably stable. In fact, they were higher than the mean in all six years. 1990, the fourth consecutive year in which seasonal average EC exceeded 0.7 dS/m, had the highest bean yields of the entire period from 1970 to 2003 (1.5 tons/acre). Such a long period of EC at Vernalis in excess of the salinity tolerance of beans defeats the notion that even violations over multiple, consecutive seasons correlate with or cause declines in yields.

The SJRGA also tried to find trends in corn, both grain (See Figure 3) and silage (See Figure 4), and alfalfa (See Figure 5), but the only trends found were inconsistent with the belief that violations of the Vernalis Objectives cause crop losses.

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the lowest annual discharge between 1930 and 1998. (Id.) It is therefore uncertain crop yields were impacted by poor water quality or insufficient supply.

Table 3: Corn grain, corn silage, and alfalfa yields and seasonal average water quality at Vernalis, 1970-2003.¹⁴ (See Exhibit C.)

Year	Corn Grain Yield (Tons/Acre)	Corn Silage Yield (Tons/Acre)	Alfalfa Yield (Tons/Acre)	EC (dS/m)	Year Type
1970	3.14	22.75	6.33	0.68	AN
1971	3.25	20.50	6.70	0.72	BN
1972	3.15	25.00	6.63	1.01	D
1973	3.60	23.70	7.00	0.68	AN
1974	3.40	24.30	6.66	0.53	W
1975	3.59	22.11	6.54	0.57	W
1976	3.51	23.50	7.32	0.99	C
1977	3.95	21.40	7.47	1.49	C
1978	3.85	20.94	6.77	0.41	W
1979	4.03	24.87	6.86	0.68	AN
1980	4.40	24.14	6.48	0.71	W
1981	3.89	23.90	6.83	0.73	D
1982	4.50	24.20	6.93	0.28	W
1983	3.92	25.10	6.74	0.19	W
1984	4.47	24.51	6.95	0.63	AN
1985	4.70	27.30	7.31	0.62	D
1986	4.62	26.30	6.46	0.38	W
1987	4.70	26.60	6.79	0.72	C
1988	4.46	22.90	7.14	0.74	C
1989	4.64	24.50	6.90	0.75	C
1990	4.32	23.70	6.78	0.75	C
1991	4.67	26.90	7.30	0.86	C
1992	5.07	25.10	8.33	0.78	C
1993	5.04	26.10	7.00	0.64	W
1994	5.20	29.00	7.25	0.74	C
1995	4.97	27.73	7.25	0.26	W
1996	4.48	27.55	6.81	0.49	W
1997	5.14	27.18	6.98	0.56	W
1998	4.50	28.17	6.10	0.19	W
1999	4.95	28.15	6.32	0.45	AN
2000	5.13	28.89	6.22	0.46	AN
2001	4.76	29.87	7.2	0.58	D
2002	5.20	30.00	7.00	0.56	D
2003	4.63	28.35	7.11	0.55	BN

¹⁴ Consecutive years in which the seasonal average exceeded the Objective are shaded pink.

Figure 3: San Joaquin County corn grain yields and seasonal average water quality from 1970 to 2003. (See Exhibit C.)

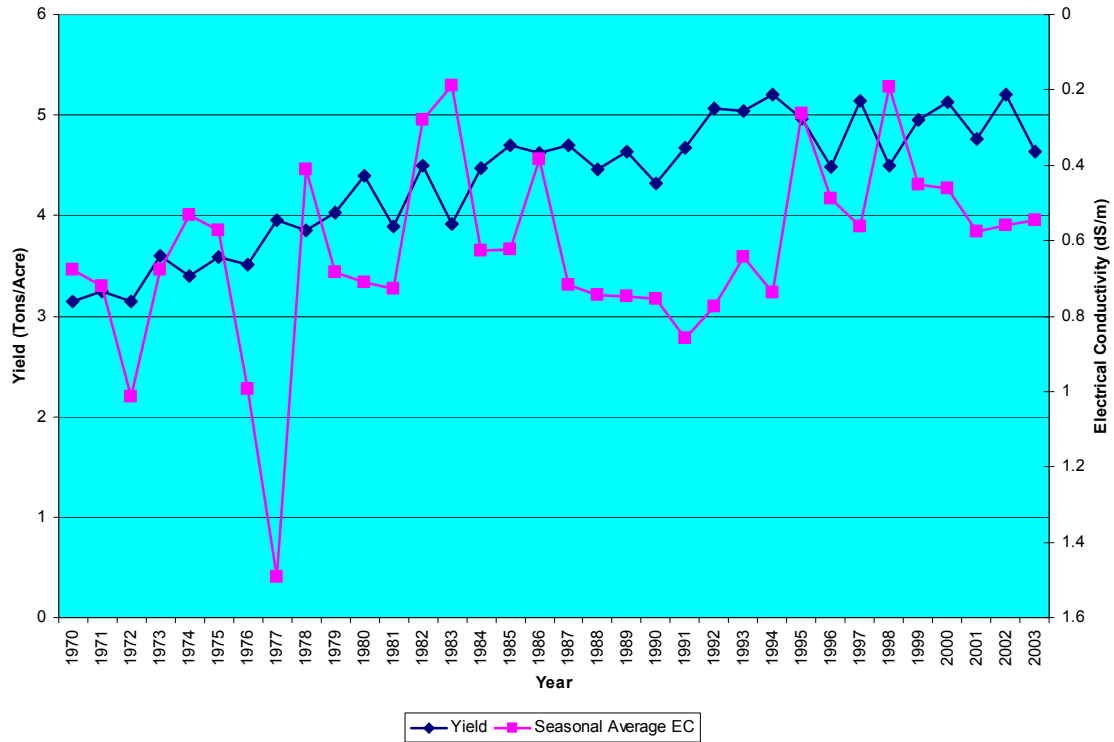
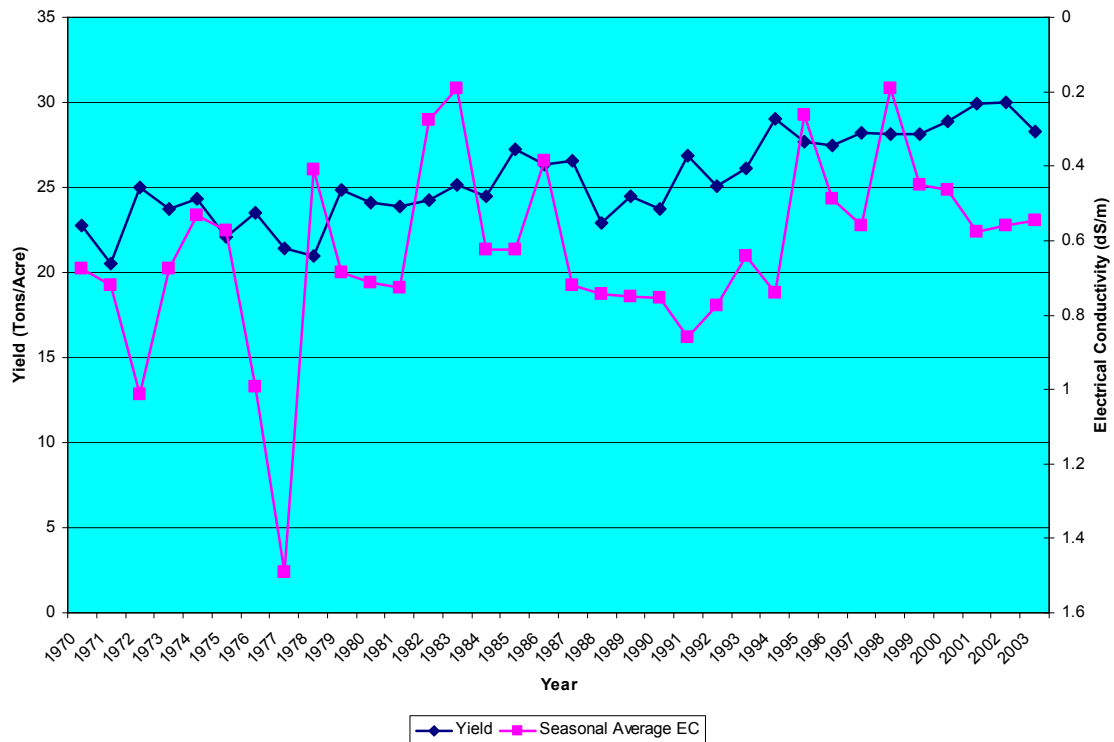


Figure 4: San Joaquin County corn silage yields and seasonal average water quality from 1970 to 2003. (See Exhibit C.)



Corn grain and corn silage yields steadily increased over the period of 1970 to 2003. (See Figures 4 and 5.) Corn grain yields continued rising in 1977, and continued doing so in 1978. Corn grain yields even continued rising throughout the period from 1987 to 1992, when seasonal average EC exceeded the Vernalis Irrigation Season Salinity Objective every year. Silage corn yields had a similar trend. Yields decreased slightly in 1977 and 1978, but then increased again in 1979 and returned to their upward trend. However, the work of Ayers and Westcott does not predict declines in corn yields until the EC of the applied irrigation water exceeds 1.1 dS/m. (Ayers and Westcott, Water Quality for Agriculture §2.4.3.) In the entire thirty-three year period, seasonal average EC at Vernalis only exceeded 1.1 dS/m in one year, 1977. The conventional wisdom would have predicted declines in the yields of both grain corn and silage corn, but instead grain corn yields increased!

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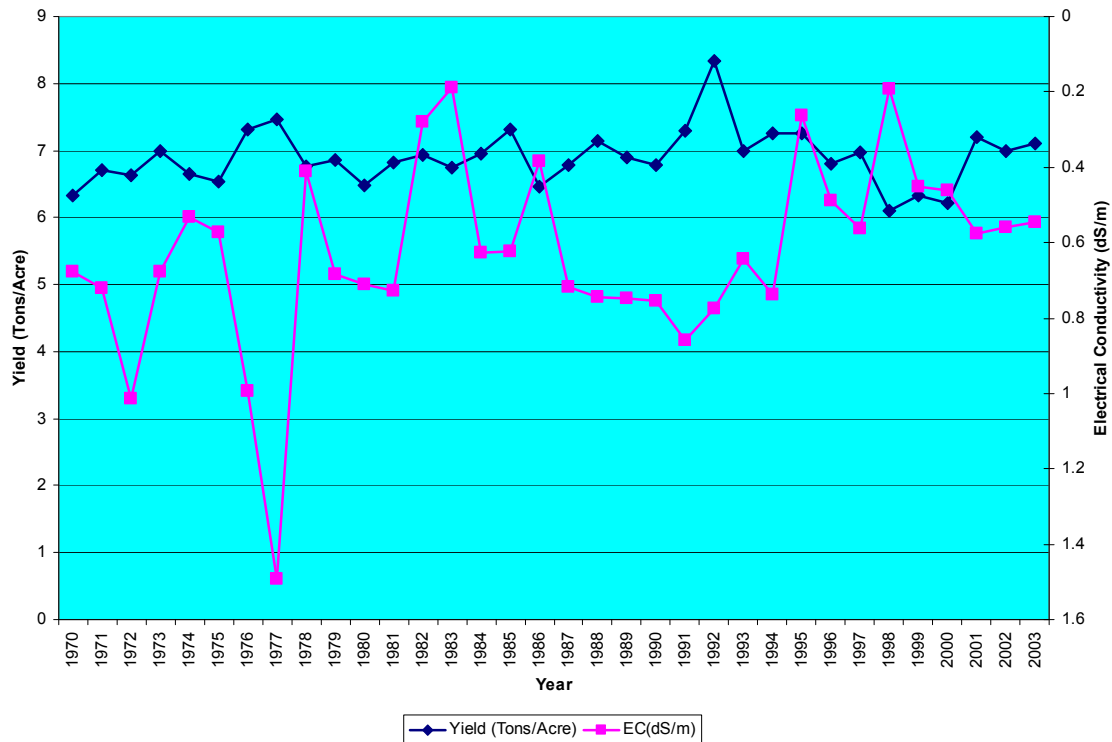
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Figure 5: San Joaquin County alfalfa yields and seasonal average water quality from 1970 to 2003.



Alfalfa yields stayed relatively stable from 1970 to 2003. (See Figure 5.) Alfalfa yields even increased between 1987 and 1994, when the seasonal average EC at Vernalis exceeded 0.7 dS/m in six out of seven years. Even consecutive years of seasonal average EC at Vernalis exceeding 0.7 dS/m failed to adversely impact alfalfa yields. The highest yields of the entire period, 8.33 tons/acre, occurred in 1992, which was the fourth consecutive year seasonal average EC at Vernalis exceeded 0.7 dS/m. However, the work of Ayers and Westcot does not predict declines in alfalfa yields until the EC of the applied irrigation water exceeds 1.3 dS/m. (Ayers and Westcot, Water Quality for Agriculture §2.4.3.) In the entire thirty-three year period, seasonal average EC at Vernalis only exceeded 1.3 dS/m in one year, 1977. Contrary to conventional wisdom however, alfalfa yields did not decline that year, but increased instead.

The SJRGA's analysis was based on information obtained from the San Joaquin County Agriculture Commission, rather than data specific to the south Delta, but south Delta agriculture constitutes a significant percentage of San Joaquin County agriculture. In 1996, the most recent land use survey data available from the DWR, the southern Delta alone accounted for over 46% of San Joaquin County's bean production. (Exhibit G, p2, 56.) About 10,550 acres of bean were grown in the southern Delta, while 22,800 acres of beans were grown in San Joaquin County. (Id.) Alfalfa constituted an even larger portion of San Joaquin County output, about 55%, with 35,600 acres of alfalfa grown in the south Delta and 64,890 acres grown in San Joaquin County. (See Exhibit C, Table 7.) Corn grown in the southern Delta, both grain and silage, accounted for about 24% of San Joaquin County output, a smaller portion than beans and alfalfa. (See Exhibit G, p40, 48.) Nevertheless, since the south Delta accounts for such a large percentage of county output, San Joaquin County statistics adequately represent southern Delta bean, corn, and alfalfa statistics.

San Joaquin County yields of grain corn, silage corn, and dry beans are substantially better than average yields in the United States and even California by up to 20%. (Exhibit G, p8, 17, 23.) San Joaquin County grain corn and silage corn yields even exceed those of major corn growing states such as Nebraska. (Id., p8.) If these crops were impacted by excessive salt and boron, then one would expect average or below-average yields compared to the norm, rather than yields substantially better than the norm!

If the South Delta farmers were correct in their beliefs, then corn, alfalfa, and especially bean yields should have declined in relation to violations of the Vernalis Objectives. Contrary to conventional wisdom and the deeply-held beliefs of many,

historical data disproves the existence of any correlation or causal relationship between EC's at Vernalis and impacts to south Delta agriculture.

C. Assumptions Underlying the Development of the Vernalis Objectives in D-1485 Were Incorrect.

Since the historical data showed no impact on crop yields due to violations of the Vernalis Objectives, the SJRGA re-examined the information used to establish Vernalis Objectives in D-1485, and found that some of the fundamental assumptions forming the foundation of D-1485 were either incorrect or outdated. As a result, the Vernalis Objectives are virtually irrelevant to south Delta agriculture and exceedances, if they did occur, would not substantially affect beneficial uses.

1. Data Used to Establish the Vernalis Objective Did Not Account for Rainfall.

As discussed in the testimony of Dr. James Brownell, the initial work on establishing crop salinity relationships, which was later used by the SWRCB in D-1485, was done in large pots, under controlled conditions and did not consider leaching due to natural rainfall. (See Exhibit F, p1.)

For example, the SWRCB considered the 1974 UC-Committee of Consultants developed "Guidelines for Interpretation of Water Quality for Agriculture" (1976 UC Exhibit 1), which evaluated the interrelationship between the salinity of the irrigation water, the soil salinity, and the leaching fraction to determine the impact on crop yields. Another exhibit submitted by the University of California Agricultural Extension (1976 UC Exhibit 7), similarly evaluated only the impacts of the salinity of the irrigation water actually applied. UC Exhibit 3 predicted yield declines based upon crops grown under

controlled circumstances, with salinity of the irrigation water applied at one of two fixed amounts, 1.35 dS/m and 2.0 dS/m. (1976 UC Exhibit 3.)

Agronomy research continued after D-1485 and began incorporating the effects of rainfall. The SWRCB considered much of this material when it re-examined the Vernalis Objectives in the late 1980's. In 1983, Prichard, Hoffman, and Meyer determined that the winter rainfall observed in their study generally leached surface soils free of salts and allow good seed germination. (Ayers and Westcot, Water Quality for Agriculture §8.2.) With such conditions, corn could be irrigated with an EC_w as high as 2.2 with no loss in yield. (See Exhibit F, p5.)

In 1986, Hoffman et al. obtained similar result when they reported that 100% yields of corn could be achieved using irrigation water with an EC_w as high at 2.0 dS/m if leaching were adequate from either winter rain or irrigation to reduce the average soil water EC_e below the tolerance threshold. (See Exhibit H, p5.) Even sub-irrigation with irrigation water with an EC_w as high as 1.5 dS/m failed to reduce corn yields. (Id., p5.) If leaching was inadequate, maximum yield was impossible even with non-saline water. (Id.)

Ayers and Westcot compiled additional information in 1985, including a model derived from previous work performed at the United States Department of Agriculture Salinity Laboratory in 1977 by Maas and Hoffman. (See Exhibit F, p1.) Ayers and Westcot assumed the plant root zone was divided into four equal quarters where the plant extracted forty percent of its water from the top quarter, thirty percent from the second quarter, twenty percent from the third quarter, and ten percent from the bottom quarter. (Id.) It also assumed a 15% leaching fraction and the occurrence of no rainfall. (See

Exhibit J, p11.) Based on these assumptions Ayers and Westcot concluded irrigation water with an average root zone salinity of 1.0 dS/m, the salinity threshold for beans, would require irrigation water with an EC_w of 0.7 dS/m. (Id.) Even though their work excluded rainfall, they recognized rainfall could provide additional leaching benefits beyond that provided by irrigation water alone by stating

“Rainfall **must** be considered in estimating the leaching requirement..[rainfall] in excess of ET... will satisfy all or part of the leaching needed to control salts. The advantage of rainfall in accomplishing all or part of the leaching is that it uniformly applies an almost salt-free water ($EC_w < 0.05$ dS/m.)” (Ayers and Westcot, Water Quality For Agriculture §2.4.2.) (emphasis added)

Hoffman, Prichard and Meyer later developed a mathematic equation to quantifying the impact of rainfall. (Hoffman, p1.) Using this equation, they predicted relative crop yield using the same assumptions used by Ayers and Westcot, except one scenario lacked rainfall and the other include “normal effective rainfall.” (Hoffman, Table 5.) In the scenario without rainfall, the maximum irrigation water EC_w able to maintain 100% yield of beans was 0.8125 dS/m. With “normal effective rainfall” however, 100% yields were attainable with irrigation water EC_w ’s as high as 0.906 dS/m. (Hoffman, Table 5.)

Despite recognition that natural rainfall was a factor in predicting the maximum salinity in irrigation water protective of 100% crop yield, research excluding rainfall essentially supported the existing 0.7 dS/m water quality objective. (Hoffman, Table 5; (Ayers and Westcot, Water Quality for Agriculture §2.4.2.) Apparently giving more credence to the predictions that did not include rainfall, the SWRCB left the Vernalis Summer Objective unchanged. In doing so, the SWRCB has maintained a standard which

is objectively over-protective of the south Delta agricultural beneficial uses. (See Exhibit F, p9.) As a result, even when violations have occurred, agriculture has not been affected.

2. The SWRCB Developed a Policy Protecting Sub-Irrigation on Organic Soils, Which are Rare in the South Delta.

In the D-1485 proceedings, the SWRCB was concerned about the large amount of corn grown on organic (peat) soils using sub-irrigation. (See Exhibit D, 2.)

Their concern was misplaced however, because almost all of the soil in the south Delta is mineral soil. A review of the San Joaquin County soil survey shows there are no organic soils south of the Grant Line Canal. (See San Joaquin County Soil Survey; see also Exhibit H, p15-19, Figures 12 through 17.) The only organic soils in the south Delta are within the boundaries of the CDWA. (Id.)

Mr. Hildebrand corroborated the absence of organic soils in the south Delta in testimony before the SWRCB in 1987, which stated

“let us examine the source and nature of the technical information which is needed in order to make a valid application in the South Delta of generalized data on applied water quality versus crop yield. You heard a lot about peat soils, but ours are mineral soils. Some are below sea level, but most are above summer mean levels.” (See Exhibit O, p2-3 (includes Bay-Delta testimony from Mr. Hildebrand from the 1980’s).)

Mr. Hildebrand further testified that

“The “Report on the Salt Tolerance of Corn in the Delta” by the U.S. Salinity Laboratory, et al. was based on peat lands. It, therefore, has limited applicability in the South Delta.” (Id., p12.) (emphasis added.)

The SWRCB improperly designed the Vernalis Objectives to protect crops grown on organic soils, because it improperly assumed there were organic soils in the south Delta. (See Exhibit H, p15-19, Figures 12 to 17.) Then, as now, the SWRCB should have

focused on the data and testimony concerning the affects of salinity on salt sensitive crops such as beans which are grown in mineral soils with surface irrigation. (See Exhibit H, p15-19, Figures 12 to 17.)

3. Fish and Agriculture Barriers Limit the Reach and Influence of San Joaquin River Water.

The development of the Vernalis Objectives in D-1485 also relied on a critical, fundamental assumption – that south Delta agriculture uses San Joaquin River water for irrigation and therefore EC at Vernalis influences EC elsewhere in the south Delta. To determine the hydrologic relationship between Vernalis and other parts of the Delta, Ms. Susan Paulsen used the Fischer Delta Model (“FDM”) to simulate hydrodynamics and salinity within the Delta. (See Exhibit I, p1.) As explained in her presentation, once operations of the Head of Old River Barrier (“HORB”), Grant Line Canal Barrier (“GLCB”), Middle River Barrier (“MRB”), Old River Barrier at Tracy (“ORB”), and Delta Cross Channel Barrier (“DXC”) begin in April, and until they end in December, almost 100% of the water from the San Joaquin River remains in the San Joaquin River. (Exhibit I, p12; see Figures 6 and 7.)

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Figure 6: Flow split at confluence of Old and San Joaquin Rivers with standard HORB schedule. (Exhibit I, p12.)

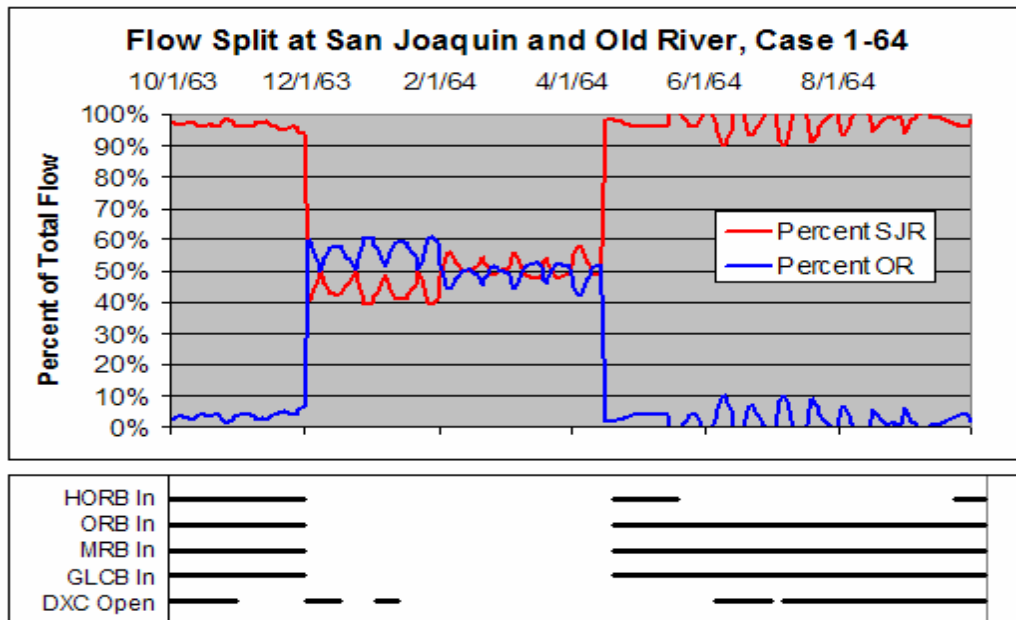
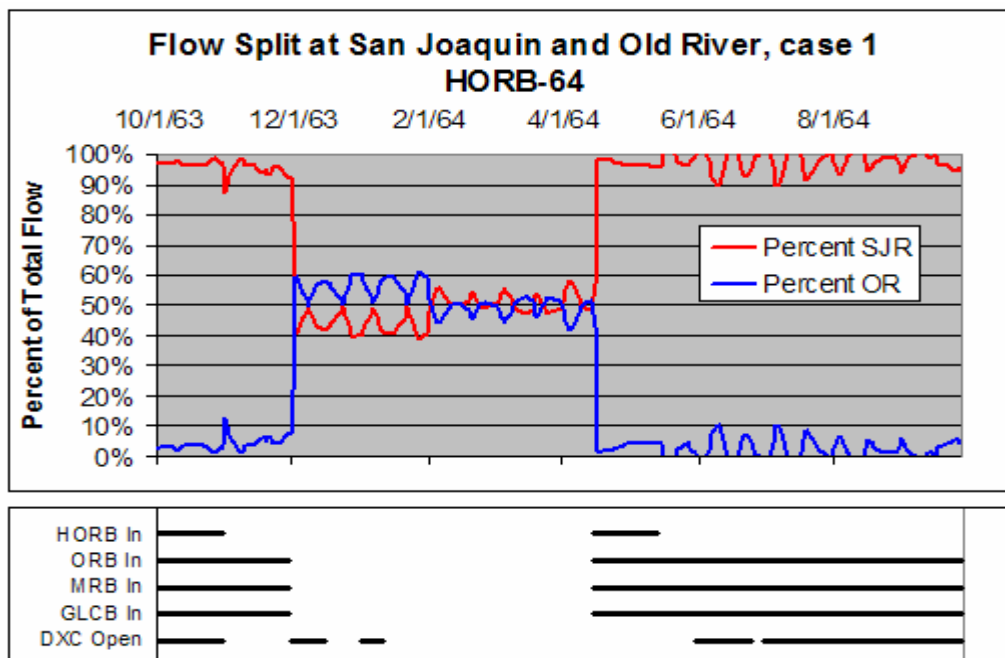
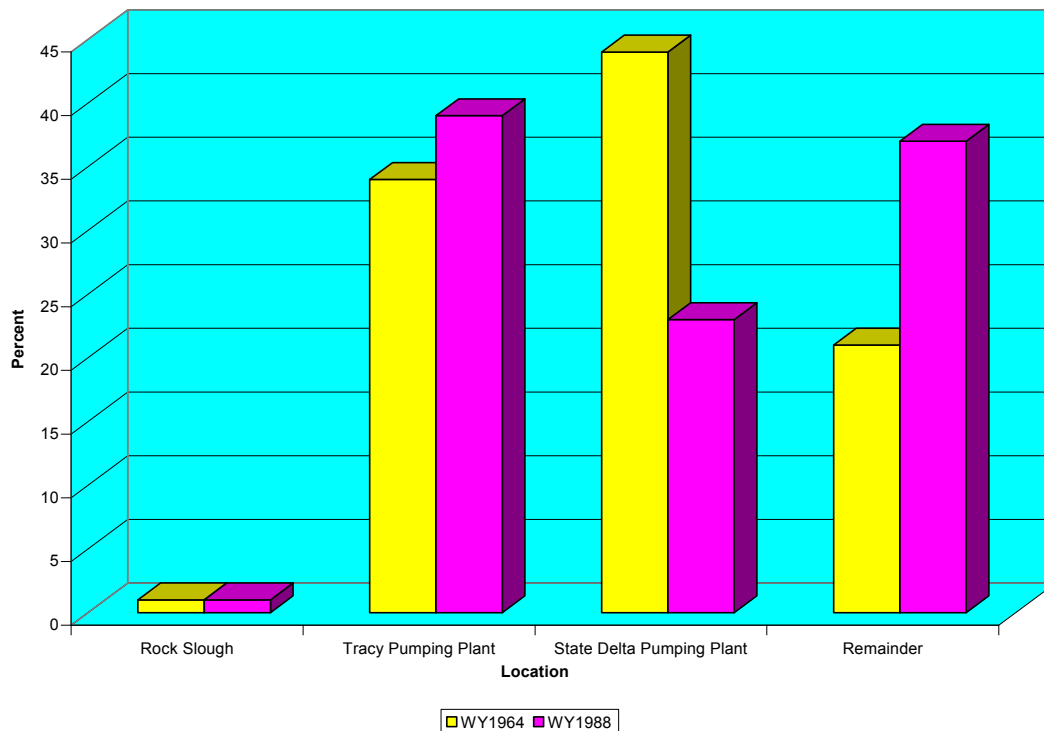


Figure 7: Flow split at confluence of Old and San Joaquin Rivers with modified HORB schedule. (Exhibit I, p12.)



Ms. Paulsen also analyzed the effects of exports. In a Dry year, only 21% of San Joaquin River water remains in the Delta.¹⁵ (Id., p4, 11; see Figure 8.) The rest of the water is exported. (Id.) In a Critical year, only 37% of San Joaquin River water remains in the Delta.¹⁶ (Id.) As in Dry years, the remaining water is exported. (Id.)

Figure 8: Fate of San Joaquin River Water in Water Years 1964 and 1988. (Exhibit L, p4.)



Finally, Ms. Paulsen added a tracer to further isolate the fate of San Joaquin River water. She determined that in an Above Normal year, no more than 18.5% of San Joaquin River water flowed into Turner Cut.¹⁷ (See Exhibit L, p13-14.) Even in a Dry year, when a greater proportion of water remains in the Delta, no more than 23% of San Joaquin River water enters Turner Cut.¹⁸ (Id.) These simulated percentages, as low as they may

¹⁵ Ms. Paulsen modeled water year 1964 as the Dry year. (See Appendices I and L.)

¹⁶ Ms. Paulsen modeled water year 1988 as the Critical year. (See Appendices I and L.)

¹⁷ Water year 2000 was used to simulate the Above Normal year. (Exhibit M.)

¹⁸ Water Year 2001 was used to simulate the Above Normal year. (Exhibit M, p3.)

appear, actually overestimate the amount of San Joaquin River water flowing into Turner Cut, because the FDM sometimes counts tracers multiple times.¹⁹ Therefore, the amount of San Joaquin River water entering Turner Cut is less than that predicted by the simulation. (Id.)

Together, the barriers and exports prevent almost all of the San Joaquin River's water from entering Old River and effectively eliminate any significant hydrologic relationship between Vernalis and the interior south Delta during the summer irrigation season and thwart any significant influence EC at Vernalis can have on EC on Old River at Middle River, Old River at Tracy Road Bridge, or other locations in the interior south Delta. (See Exhibit I, p12.) Once the San Joaquin River reaches the Stockton Deep Water Ship Channel, water from San Joaquin River joins the Sacramento River. (Environmental Impact Report ("EIR") for the 1995 WQCP, pIII-104, III-106; Exhibit G, p5-6.) Very little of the water in Turner Cut, Paine Slough, the Grant Line Canal, and other areas in the interior southern Delta comes from the San Joaquin River. (Id.) Instead, most water comes from the Sacramento River. (Id.) As a result, the interior south Delta is irrigated primarily with Sacramento River water, and the most fundamental assumption underlying the Vernalis Objectives, that San Joaquin River water irrigates crops in the south Delta, is wrong.

Thomas M. Zuckerman, a farmer on the Rindge Tract, corroborated Ms. Paulsen's analysis. He testified that, due to the "myriad of channels and connections to the Sacramento River, both natural and constructed as part of the Central Valley Project", the

¹⁹ On Tables 2 and 3, the CVP, SWP, Los Vaqueros, and Contra Costa export columns, plus the Martinez column should total approximately 100%. (Exhibit M, p13-14.) If they total less than 100%, the remaining percentage represents water remaining in the Delta. The sum of the Old River, Stockton Ship Channel, Turner Cut, Columbia Cut, Little Connection Slough, and Middle River columns will exceed 100%, because the tracers are counted multiple times.

water he pumps comes from either the Sacramento or Mokelumne River, not the San Joaquin. (Bay-Delta, Depo. Tr. Thomas A. Zuckerman, p33-34 (May 25, 1999).)

Ms. Paulsen's analysis further refutes the testimony of Mr. Salmon. (See Exhibit B, p47.) Mr. Salmon describes declines in the yields of walnuts and grapes grown at his farm at the east end of the Grant Line Canal. (See Exhibit B, p47.) No correlation existed between his crop yields and EC at Vernalis however, because in the irrigation season there is no significant hydrologic relationship between the water he diverts and the water at Vernalis. (See Exhibit I, p12; see §III(A), *supra*.) Even if Mr. Salmon, the SDWA, or others had evidence demonstrating a correlation between the EC of the water Mr. Salmon diverts and EC at Vernalis, the lack of any significant hydrologic relationship forecloses the existence of any causal relationship.

The Vernalis Irrigation Season Objective was set at a level of salinity sufficient to protect the yields of beans, the most salt-sensitive crop grown in the south Delta²⁰, but due to the combined effects of exports and barriers, the Vernalis Irrigation Season Objective only provides substantial protection to crops irrigated with San Joaquin River water upstream from the Stockton Deep Water Ship Channel and east of the HORB. (See Exhibit H, p20-21, Figures 18 and 19.) About 3,000 acres of beans are grown in this area²¹, and almost all of them are located in the Banta-Carbona Irrigation District

²⁰ Mr. Hildebrand testified that beans are so salt sensitive that as the irrigation water became saltier, beans in the south Delta were replaced with corn. (Exhibit O, p10.) In fact, Mr. Hildebrand testified that so much corn was grown that there a surplus. (*Id.*)

²¹ Drs. Hagen and Mason estimated that, based on the rate of decline in bean production in San Joaquin County, 4,346 acres of beans would be grown in the south Delta in 2003. (Exhibit G, p2.) In 1996, about 75% of the beans were irrigated with surface water. (*Id.*) Assuming the proportion of beans irrigated with surface water remained constant, about 3,259 acres of beans would have been irrigated with surface water in 2003.

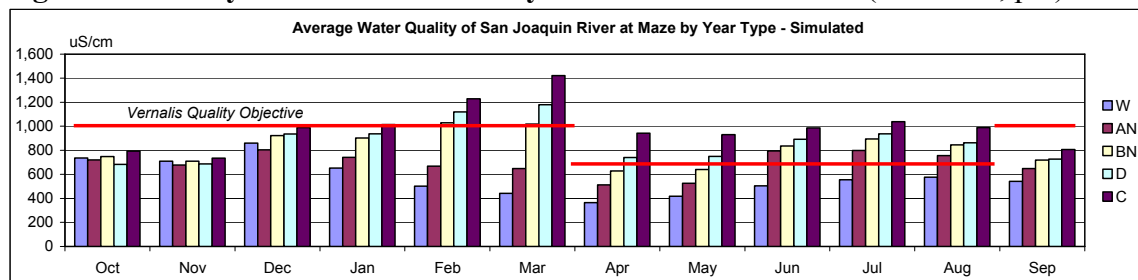
(“BCID”).²² Consequently, the Vernalis Summer Objective only protects 3,000 acres of beans.

V. The Vernalis Objectives Will Always Be Met.

The latest version of CALSIM II (“CALSIM II-Revised”), developed by Mr. Dan Steiner for the USBR, is the product of over three years of refinement and enhancement of prior models used to simulate the hydrology and water resource operations of the LSJR Basin.²³ (Exhibit E, p17.)

CALSIM II-Revised first analyzes “Maze”, the San Joaquin River upstream of its confluence with the Stanislaus River, because conditions at Maze drive conditions at Vernalis. (*Id.*, p14.; See Figure 9.) Here, it captures the effects of upstream operations of the Merced River and Tuolumne River, and occasional flow from the upper San Joaquin River and Kings River. It analyzes water quality using a new mass balance approach. (*Id.*) Then, it presents results for Vernalis. (*Id.*; See Figure 10)

Figure 9: Salinity at Maze simulated by CALSIM II-Revised.²⁴ (Exhibit E, p8.)

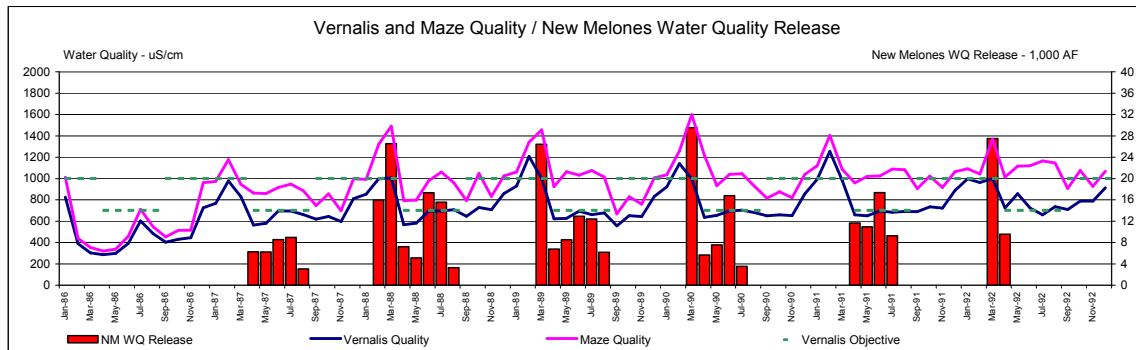


²² In 2003, about 2,300 acres of beans were grown in the BCID. (Exhibit G, p2.)

²³ CALSIM, and subsequently CALSIM II, were designed and implemented to replace DWRSIM, one of the planning models used to develop the TMDL for the salt and boron in the LSJR. (Department of Water Resources, Office of State Water Project Planning, Modeling Support Branch, Computer Models, <http://modeling.water.ca.gov/hydro/model/description.html>.)

²⁴ Note that EC is depicted in “uS/cm.” For purposes of conversion, 1000 uS/cm = 1 dS/m.

Figure 10: CALSIM II-Revised simulation of San Joaquin River salinity at Vernalis.
(Exhibit E, p16.)



CALSIM II-Revised significantly improves on prior modeling efforts.

SANJASM, the original Kratzer equation, and prior versions of CALSIM II all overestimated salinity at Maze, and in turn overestimated releases from New Melones for water quality. (*Id.*, p19.) These prior models overstated salt loading in the lower San Joaquin River occurring in the summer months and, as a result, exaggerated the LSJR salinity problem, and led the SWRCB to believe the problem was more serious than it was in reality. (*Id.*, p19-20; See Figure 11.)

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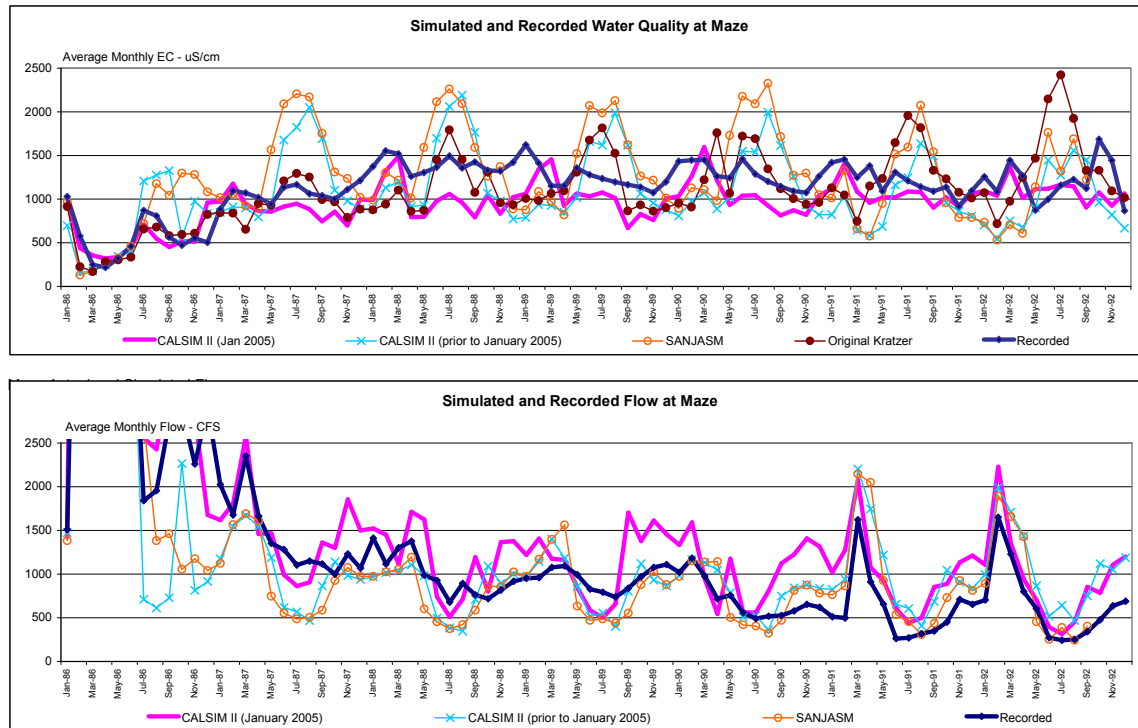
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Figure 11: Comparison of CALSIM II-Revised to salinity and flow at Maze simulated by previous models and to historical water quality and flow.²⁵ (Exhibit E, p17.)



CALSIM II-Revised incorporates current river and water resource management methods, and, as a result, simulates different historical conditions than were actually experienced. (*Id.*, p20.) CALSIM II-Revised also incorporates the effects of new projects, such as the Vernalis Adaptive Management Plan, the Grasslands Bypass Project, and the New Melones Interim Plan of Operations (“IPO”), which have changed the river’s hydrology from conditions existing in the past. It has been refined and calibrated against recent recorded data, and more accurately models current river hydrology and actual salinity conditions. (*Id.*) “Major operational changes caused by the Central Valley Project Improvement Act... and the Vernalis Adaptive Management Program have... changed

²⁵ Note that EC is depicted in “uS/cm.” For purposes of conversion, 1000 uS/cm = 1 dS/m.

the LSJR's hydrology.” (2002 TMDL Report, p56.) These changes are captured by CALSIM II-Revised.

Using CALSIM II-Revised to simulate historic conditions with current river and water resource management practices shows that in the 73-year data set, 15 violations of the Vernalis Irrigation Season Salinity Objective would have occurred if New Melones were operated with strict adherence to the IPO. (*Id.*, p12-13; See Table 5.) Given that each violation counts as a month and in the 73-year data set there were 876 months, violations would have occurred less than 2% of the time. (*Id.*, p12-13.) Of the 15 violations, 10 would have occurred in the summer.

Table 5: Violations of the objective at Vernalis.²⁶ (Exhibit E, p13.)

Average Monthly Water Quality at Vernalis - Simulated (uS/cm)												
WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1935	C	C	C	C	1080	C	C	C	C	C	C	C
1961	C	C	C	C	1058	C	C	C	C	C	717	C
1977	C	C	C	C	C	C	C	C	C	C	710	C
1988	C	C	C	C	C	C	C	C	C	C	708	C
1989	C	C	C	C	1207	C	C	C	C	C	C	C
1990	C	C	C	C	1139	C	C	C	C	C	C	C
1991	C	C	C	C	1253	C	C	C	C	C	C	C
1992	C	C	C	C	C	C	749	1011	723	C	737	C
1994	C	C	C	C	C	C	C	C	735	718	725	C
Notes: "C" means water quality was within compliance for month. Exceedence during April or May is during non-pulse flow period.												
Water Quality Objective - uS/cm												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	1000	1000	1000	1000	1000	1000	700	700	700	700	700	1000
Estimated Additional New Melones Release Needed to Provided Water Quality Compliance - 1,000 acre-feet												
WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1935					10							
1961					7						2	
1977											1	
1988											1	
1989					20							
1990					15							
1991					22							
1992							6	21	1		3	
1994									4	1	2	
End of Month New Melones Storage - 1,000 acre-feet												
WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1935	584	580	583	616	640	690	820	1012	1127	1074	1001	958
1961	1201	1216	1231	1239	1243	1224	1186	1132	1079	1023	966	934
1977	1448	1444	1436	1428	1400	1339	1273	1209	1181	1124	1069	1047
1988	1443	1424	1410	1414	1404	1361	1298	1222	1182	1145	1109	1081
1989	1045	1029	1022	1020	1029	1079	1047	1002	984	932	882	886
1990	906	908	923	936	952	920	856	786	733	676	633	609
1991	598	580	589	587	584	626	594	558	521	461	404	385
1992	382	371	386	400	450	467	441	361	308	252	194	166
1994	716	738	772	802	825	775	723	675	619	552	490	455

²⁶ Only violations of the Objective are shown. Violations are shaded pink. For purposes of conversion, 1000 uS/cm = 1 dS/m.

The largest violation of the Vernalis Irrigation Season Salinity Objective, and the largest violation of either of the Vernalis Objectives in the entire 73-year period, would have occurred in May, 1992, when the Vernalis Irrigation Season Salinity Objective was exceeded by 0.311 dS/m.²⁷ (Id.) All other violations of the Vernalis Irrigation Season Salinity Objective would have exceeded the objective by less than 0.05 dS/m. (Id.) Meeting the Vernalis Irrigation Season Salinity Objective in May, 1992, would have required 21,000 AF of water, but all other violations would have required 1,000 AF to 6,000 AF of additional water.²⁸ (Id.)

For every violation, New Melones had more than sufficient water available in storage to achieve the Vernalis Objectives. The USBR uses the IPO to determine when to release water from New Melones and how much water to release when a release is made. (Bay-Delta Hrg. Tr. Lowell Ploss, p195-196 (April 21-22, 1998).) Additionally, the IPO projects how much water New Melones will retain in storage for the remainder of each year. (Id.) By managing releases and storage, the IPO can insure an adequate supply of water in the event of a prolonged drought. (Id.) As Mr. Lowell Ploss, then the head of CVP operations for the United States Bureau of Reclamation (“USBR”), stated in D-1641, the USBR would do everything possible to meet salinity objectives. (D-1641; Bay-Delta Hrg. Tr. Lowell Ploss, p6553-6554 (November 10, 1998).) Since 1995, the USBR has met, or exceeded, the Vernalis Objectives. (Exhibit A, Declaration of Daniel B. Steiner; See also Exhibits P and Q.)

²⁷ Despite the exceedance in May, 1992, yields for dry beans, the most salt-sensitive crop grown in the south Delta, were far above the mean yield for San Joaquin County. (Exhibit G, p56.) 1992 was also a Critical year type following five consecutive Critical years. (Exhibit E, p32.)

²⁸ The average amount of water required to meet the Summer Vernalis for all 10 of the irrigation season violations would have been 8,400 AF. If the violation in May, 1992, is excluded, the average amount of water required would have been 2,333 AF.

In D-1641, the SWRCB required that the USBR meet the Vernalis Objectives and use “any measures available” to do so. (D-1641, p79, 89.) CALSIM II-Revised shows salinity objectives can be met.²⁹ Since the USBR can achieve the Vernalis Objectives, is legally required to do so, and has stated it will meet the Vernalis Objectives, the Vernalis Objectives will always be achieved. Boron objectives will always be achieved as well, since the Regional Board’s linkage analysis demonstrates that meeting the Vernalis Objectives will also result in meeting boron objectives. (January 2002 TMDL, p87.) Even if the USBR violates their permit terms and conditions and strictly follows the IPO, the Vernalis Objectives will still be met over 98% of the time, which is still sufficient to require de-listing of the LSJR.

VI. The SWRCB is Reviewing the Vernalis Objectives and May Change the Standard from 0.7 dS/m to 1.0 dS/m.

The SWRCB is currently conducting its Periodic Review of the Bay-Delta Water Quality Control Plan (“Periodic Review”) and has decided to review the Vernalis Objectives. As part of the Periodic Review, the SJRGA has recommended changing the Vernalis Objectives from an objective of 0.7 dS/m from April through August and 1.0 dS/m the rest of the year, to an objective of 1.0 dS/m for the entire year (“Alternative Objective”).

Mr. Steiner used CALSIM II-Revised to model the effect of the Alternative Objective on flows and water quality. (Exhibit E, p21.) Currently, the Vernalis Irrigation Season Salinity Objective and the dissolved oxygen objective at Ripon require similar levels of release from New Melones. (Id.) As a result, the dissolved oxygen objective at Ripon drives Vernalis EC, and changing the Vernalis Irrigation Season Salinity Objective

²⁹ CALSIM II-Revised also shows flow objectives can be met, even without USBR releases of B(2) water.

does not significantly change releases from New Melones for EC at Vernalis.³⁰ (Id., p27; See Figures 12 and 13.)

Water quality on average would be about the same, although in Critical year types EC at Vernalis would increase by about 0.1 dS/m. (Id.) In Dry year types, the most marked change would occur in July, but even this change would only be about 0.05 dS/m. (Exhibit E, p26.) It should be emphasized, that such changes only occur when a 100 cfs flow surrogate is used. **If the current dissolved oxygen objectives at Ripon remain, EC at Vernalis does not change.** (Id.)

If the SWRCB adopts and implements the Alternative Objective, the new salinity objective will be 1.0 dS/m for the entire year. EC at Vernalis will never exceed 1.0 dS/m, even with the current IPO, violations will never occur, and as now, beneficial uses will not be impaired.

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³⁰ In CALSIM II-Revised, assumed operation of the IPO at New Melones “layers” one component of flow upon another, i.e., the fishery release is assumed to provide the “first” water in the river. (Exhibit E, p21.) Then, if required to meet the Objective, supplemental releases are made. (Id.)

Figure 12: Simulated water quality with current Vernalis Objectives. (See Exhibit E, p26.)

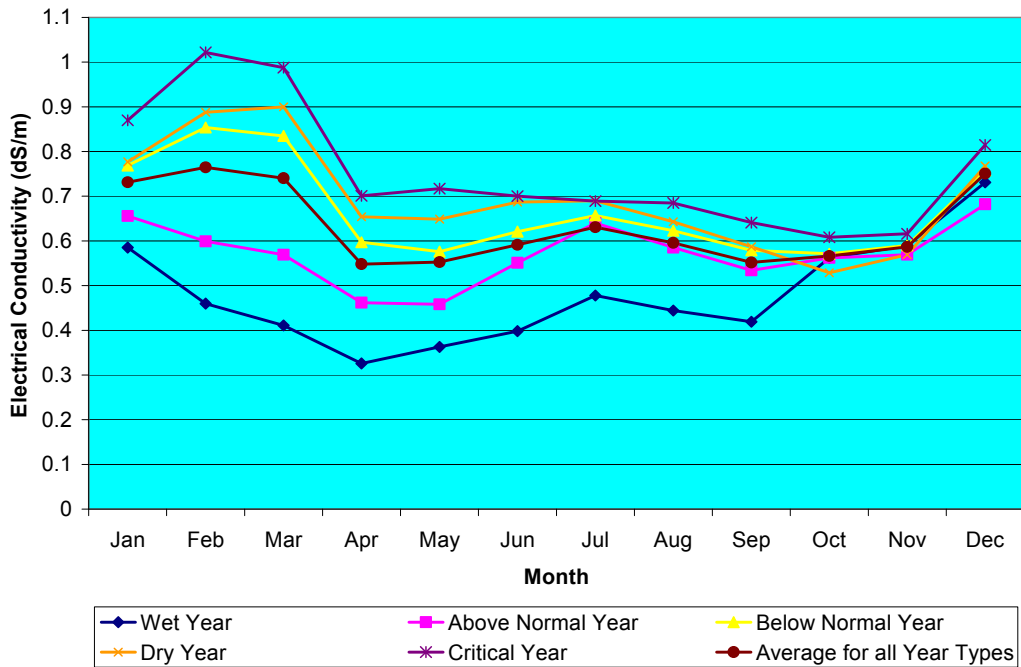
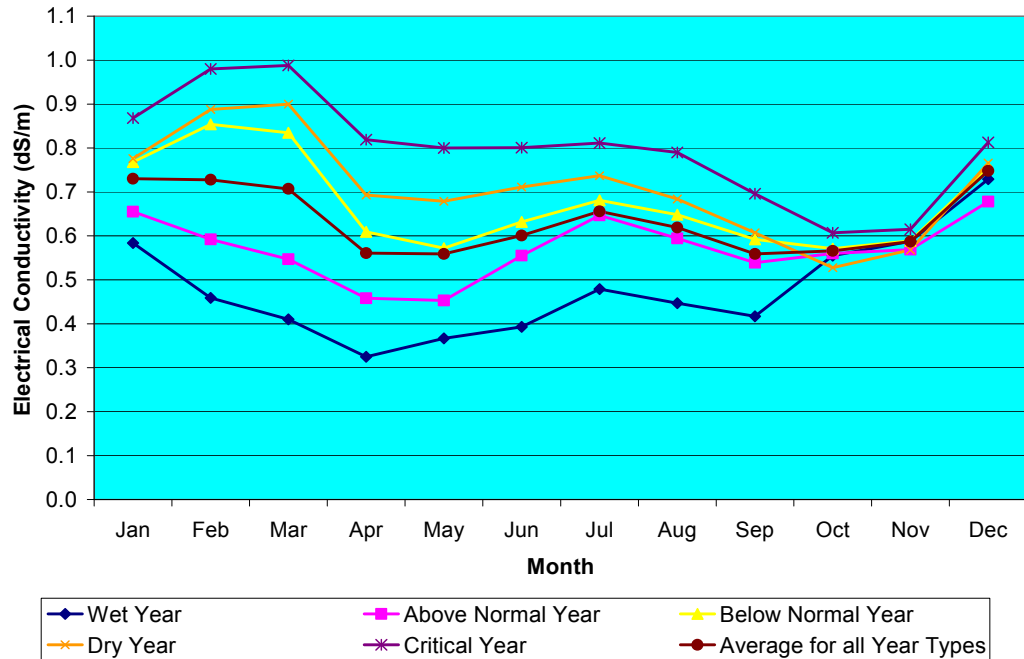


Figure 13: Simulated water quality with Alternative Objective.³¹ (Id.)



³¹ In Figure 10, the dissolved oxygen objective is been replaced with a 100 cfs surrogate.

VII. CONCLUSION

LSJR impairment due to EC is a myth. The myth started with a misunderstanding of the problem and has since been promulgated by endless chants by Delta farmers. Like most myths, there is no empirical or other evidence supporting the “belief.” There have been no violations of the Vernalis Objectives in almost ten years. Exceedances of the Vernalis Objectives have never impacted south Delta agriculture, and no south Delta farmer has ever proved otherwise. Ten years of compliance without proof of harmful impact is enough, by itself, to require de-listing. In addition, the latest modeling, represented in CALSIM II-Revised, proves the EC problem was exaggerated, and with current river and water management practices, violations of the Vernalis Objectives will never occur. If the SWRCB changes the Vernalis Objectives to the Alternative Objective recommended by the SJRGA, violations will never occur. The SJRGA petitions the Regional Board to de-list the LSJR as a water body impaired by salt and boron.

Petition to De-List the Lower San Joaquin River

For

Impairment by Salt and Boron

EXHIBIT A

Flow & Water Quality Data

Submitted By:

SAN JOAQUIN RIVER GROUP AUTHORITY

I, Daniel B. Steiner, declare as follows:

1. I am a registered Civil Engineer in the State of California, Certificate No. 32226. I received a B.S. in Engineering from the University of California, Davis, in 1977. I am currently self-employed and conduct business as Daniel B. Steiner – Consulting Engineer. I have over 28 years of experience in water resources planning, development and management, including the planning and implementation of operations for multipurpose water systems that have water and power supply, flood control, recreation, fishery and wildlife enhancement and water quality objectives. I also have experience in evaluation of water rights, contracted and court decreed entitlements, and water use.

2. My experience includes participation in several regulatory proceedings including the development of the 1995 State Water Resources Control Board Water Quality Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary and Decision 1641, the development of the New Melones Interim Plan of Operations, and the technical and policy development of the San Joaquin River Agreement and its environmental documentation. I am a co-developer of the San Joaquin River Basin representation within the joint Department of Water Resources/Bureau of Reclamation CALSIM II model, with responsibility for the depiction of San Joaquin River hydrology and operations from Friant to the Sacramento-San Joaquin Delta. I have participated in or have been directly responsible for several hydrologic analyses concerning flow and quality of the San Joaquin River, most recently in the State Water Resources Control Board Periodic Review of the Plan where I presented results from CALSIM II depicting the existing condition of the San Joaquin River. I also participated in the recent stake-holder based workgroup known as the San Joaquin River Water Quality Management Group which has developed a set of actions to achieve current water quality objectives for salinity on the San Joaquin River at Vernalis. My CALSIM II San Joaquin River modeling was the basis for technical analysis used by that effort.

3. **Based on a review and analysis of the historical water quality record for the San Joaquin River at Vernalis, it is my opinion that the State Water Resources Control Board agricultural water quality objective at Vernalis (Interagency Station C-10) has been met since the adoption of the 1995 Water Quality Plan.** The basis for my opinion follows.

4. The Plan identifies the water quality objectives for the San Joaquin River at Airport Way Bridge (Vernalis) to be 0.7 mmhos/cm for the April through August period, and 1.0

mmhos/cm for the September through March period. The description of the objective is the “maximum 30-day running average of mean daily EC (mmhos/cm)”. In my analysis and reporting I use the convention of $\mu\text{S}/\text{cm}$ which equates to 700 $\mu\text{S}/\text{cm}$ and 1,000 $\mu\text{S}/\text{cm}$ quality parameters.

5. During the transition period in April from the lesser objective to the higher objective the interpretation of compliance has been that the 700 $\mu\text{S}/\text{cm}$ 30-day running average must be achieved by the 30th day of April. Prior to that date the 30-day running average may be lesser in quality due to the ramping down from the 1,000 $\mu\text{S}/\text{cm}$ average that may have occurred in the preceding period.¹

6. I acquired the historical daily quality record for the San Joaquin River at Vernalis from the Bureau of Reclamation database. This source of data provided a consistent record for the site since 1995. I also acquired flow data for the site from the USGS database. I have plotted the record in the graphs contained in Figure 1. Shown in the graphs are the flow and quality at Vernalis for each year since 1995. Also shown is the Plan objective for each season and the 30-day running average quality at Vernalis. At no time since 1995 has the objective not been in compliance.

7. The data used in my analysis is available in the public domain, and can be provided by me upon request.

I, Daniel B. Steiner, declare under penalty of perjury under the laws of the State of California the foregoing is true and correct and that this declaration was executed at Granite Bay, California on this 14th day of September, 2005.



Daniel B. Steiner

¹ Personal communication, Peggy Manza, United States Bureau of Reclamation, Central Valley Operations. 2005.

Figure 1A: Flow and Quality at Vernalis

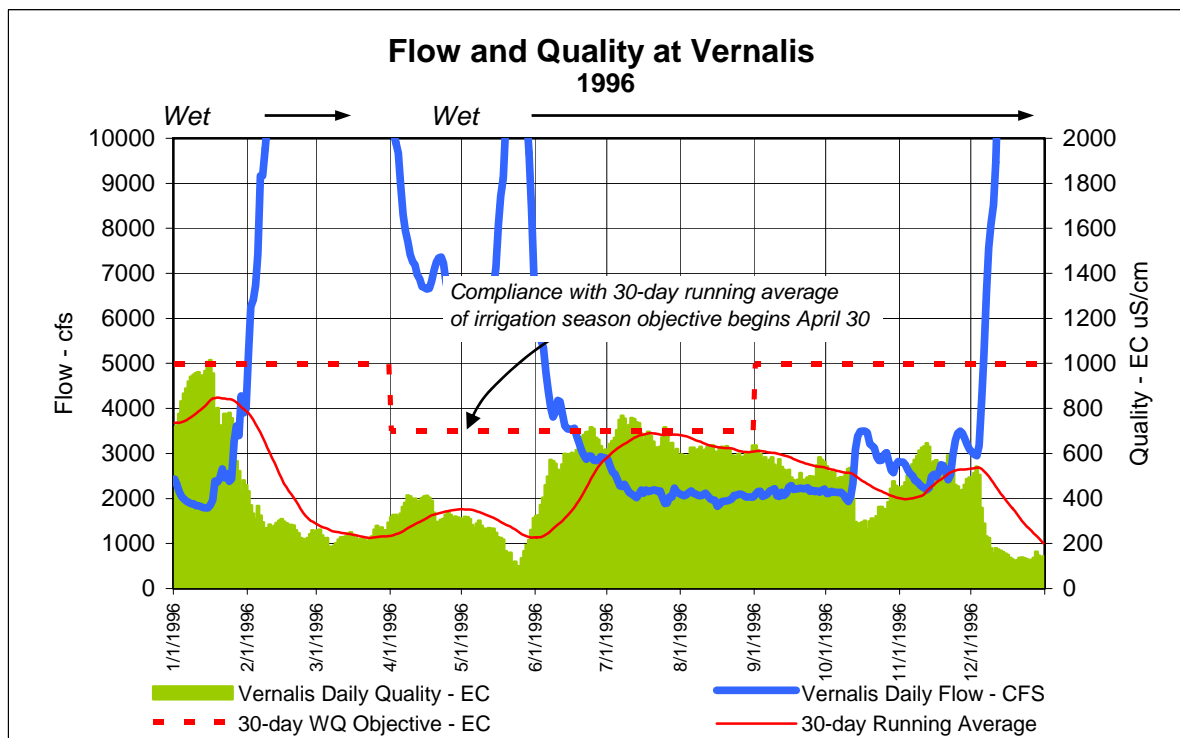
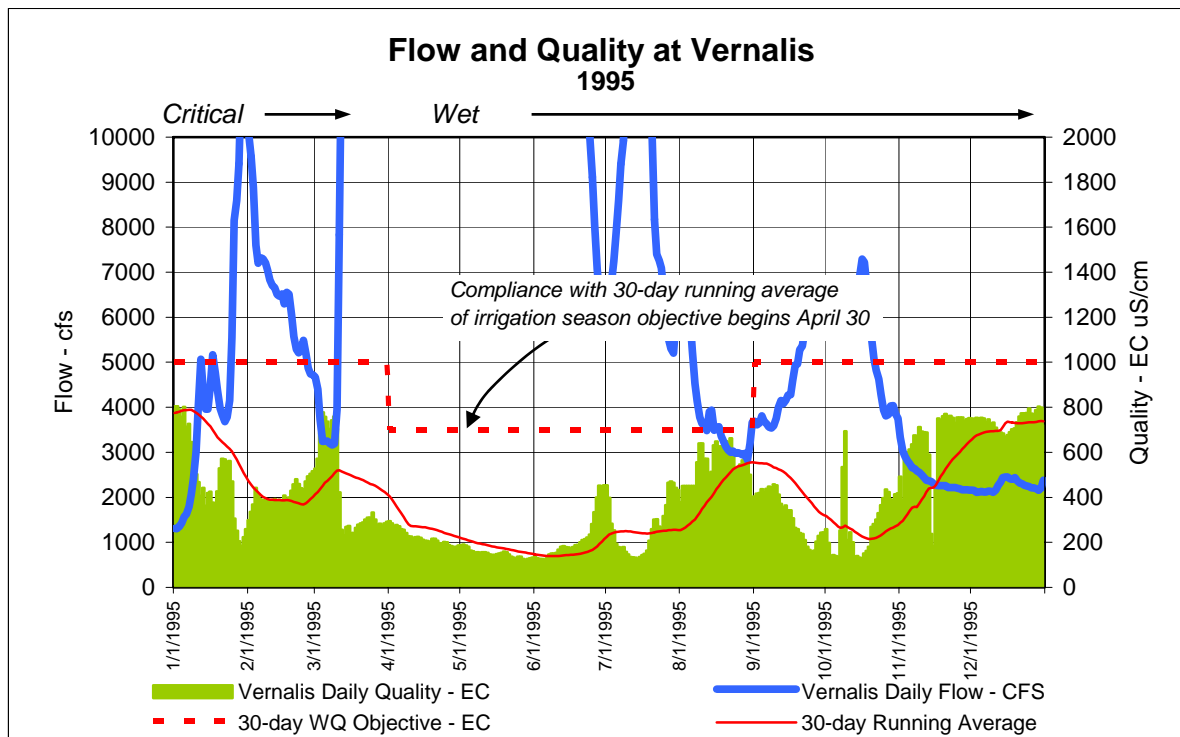


Figure 1B: Flow and Quality at Vernalis

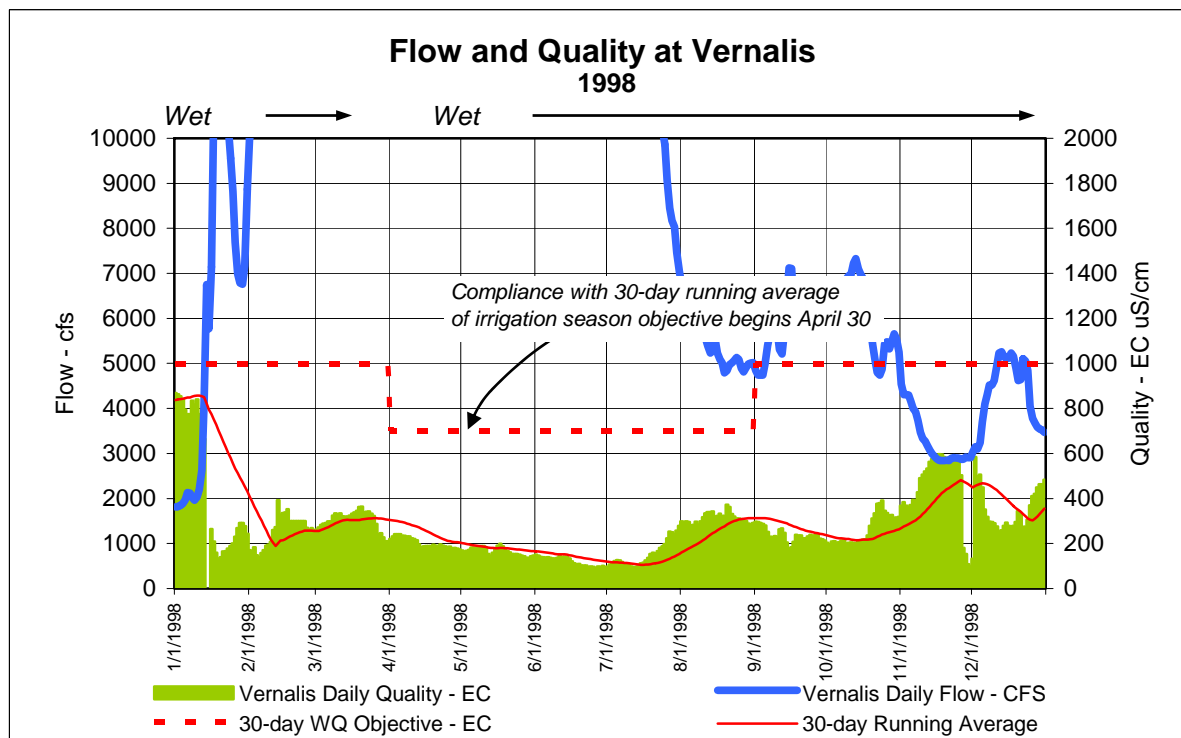
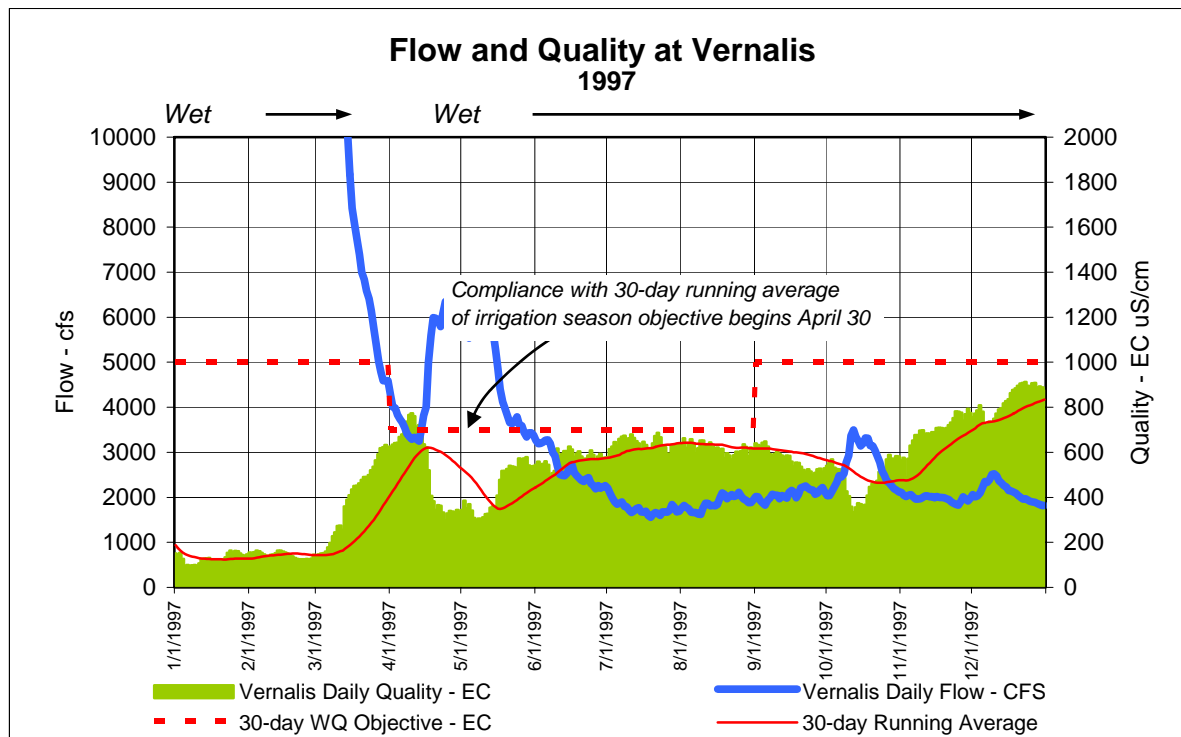


Figure 1C: Flow and Quality at Vernalis

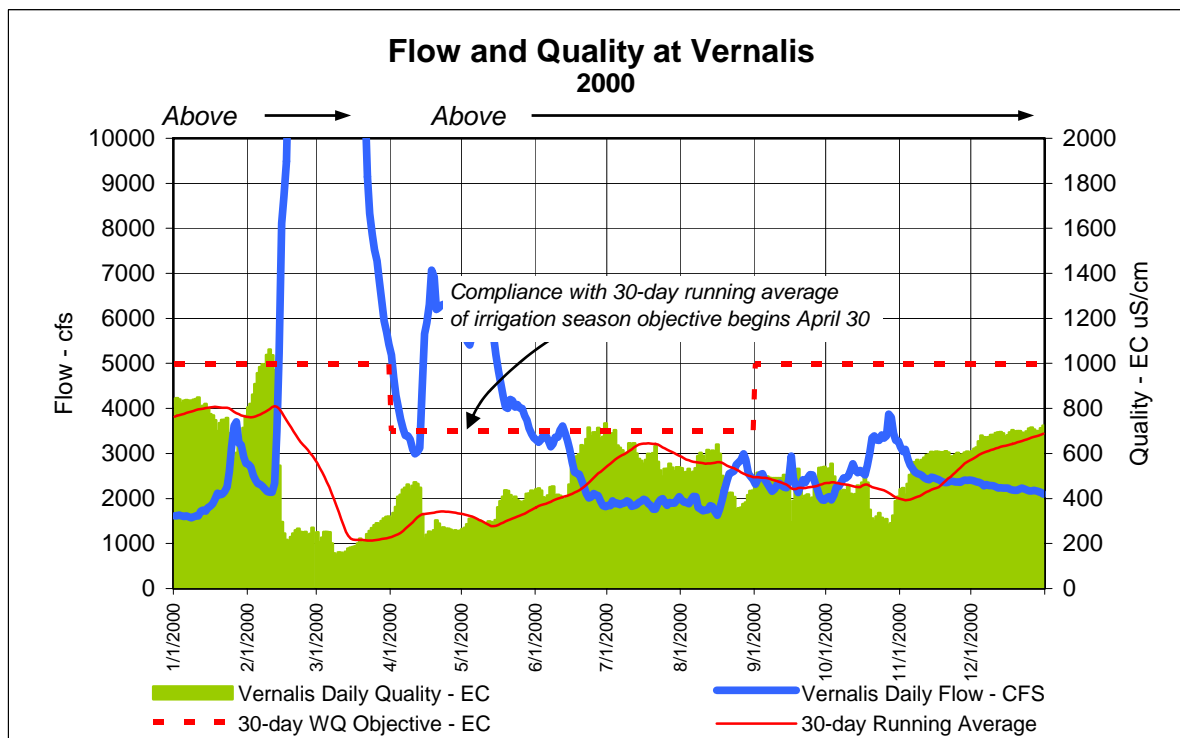
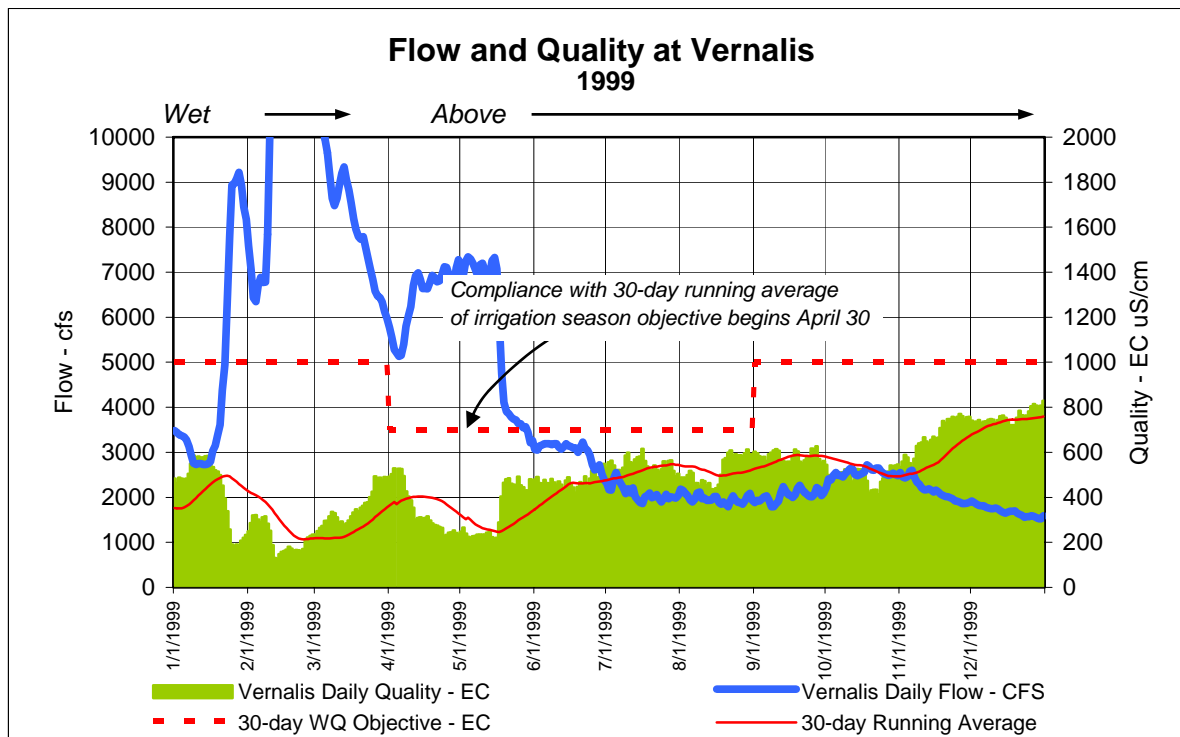


Figure 1D: Flow and Quality at Vernalis

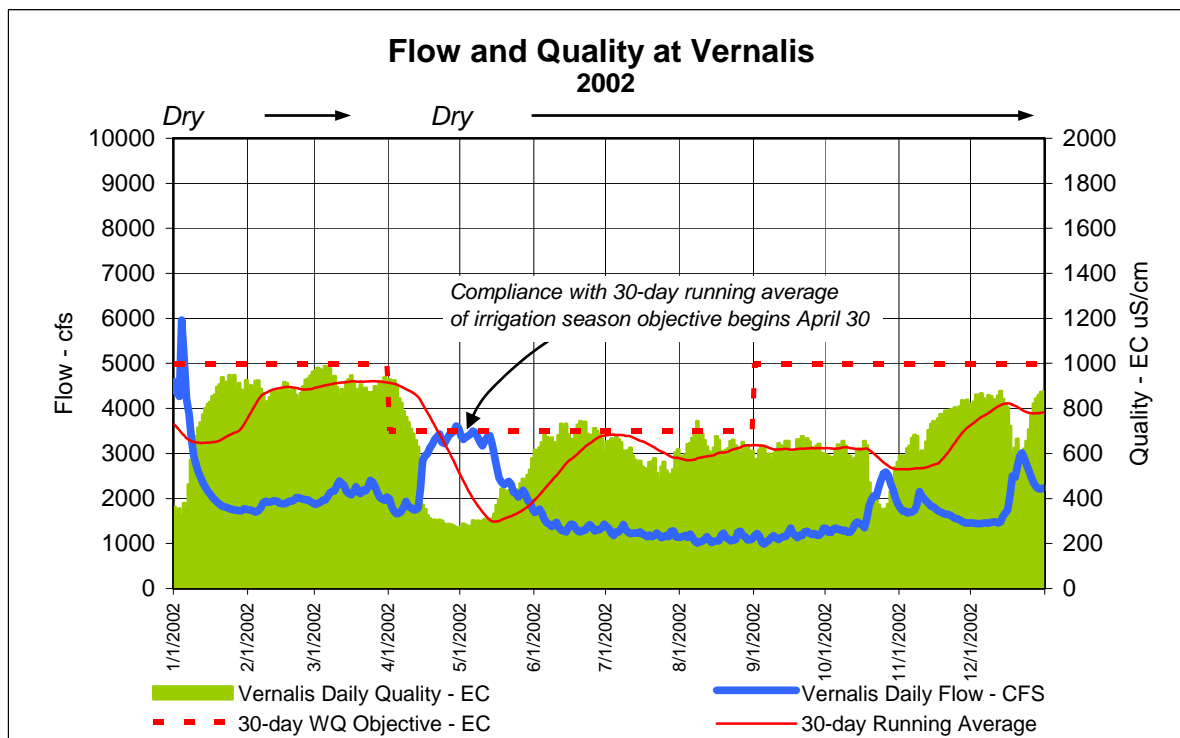
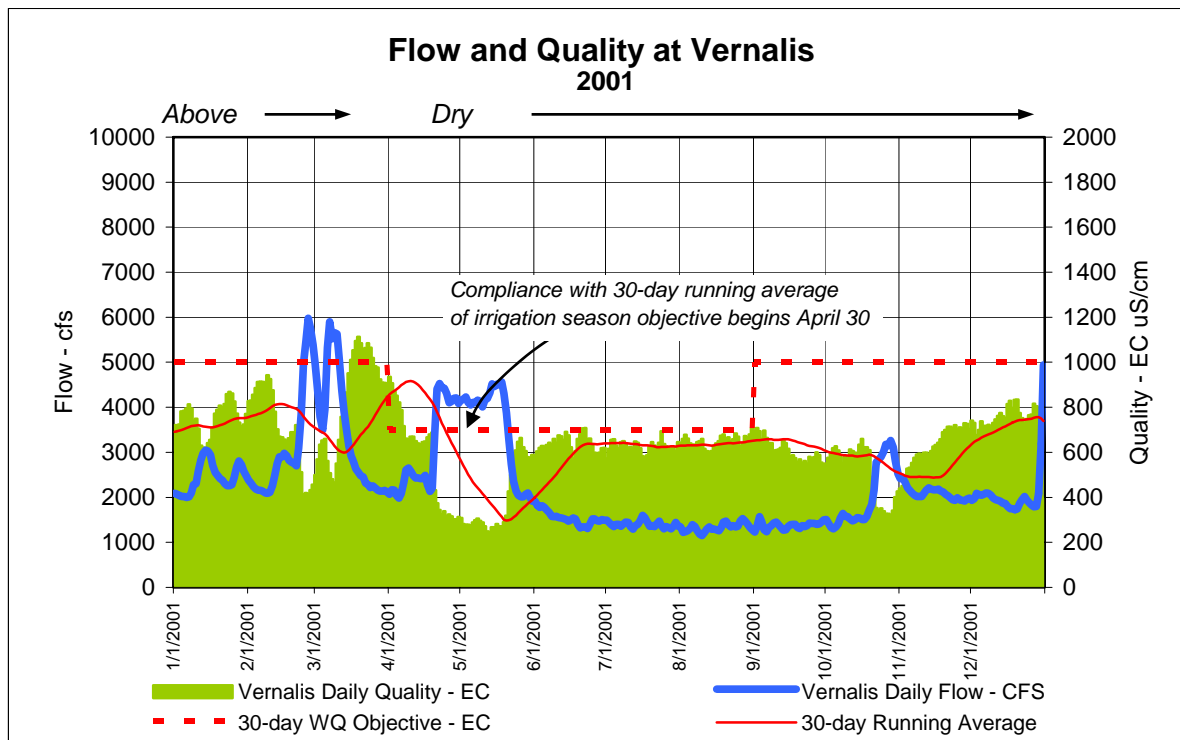


Figure 1E: Flow and Quality at Vernalis

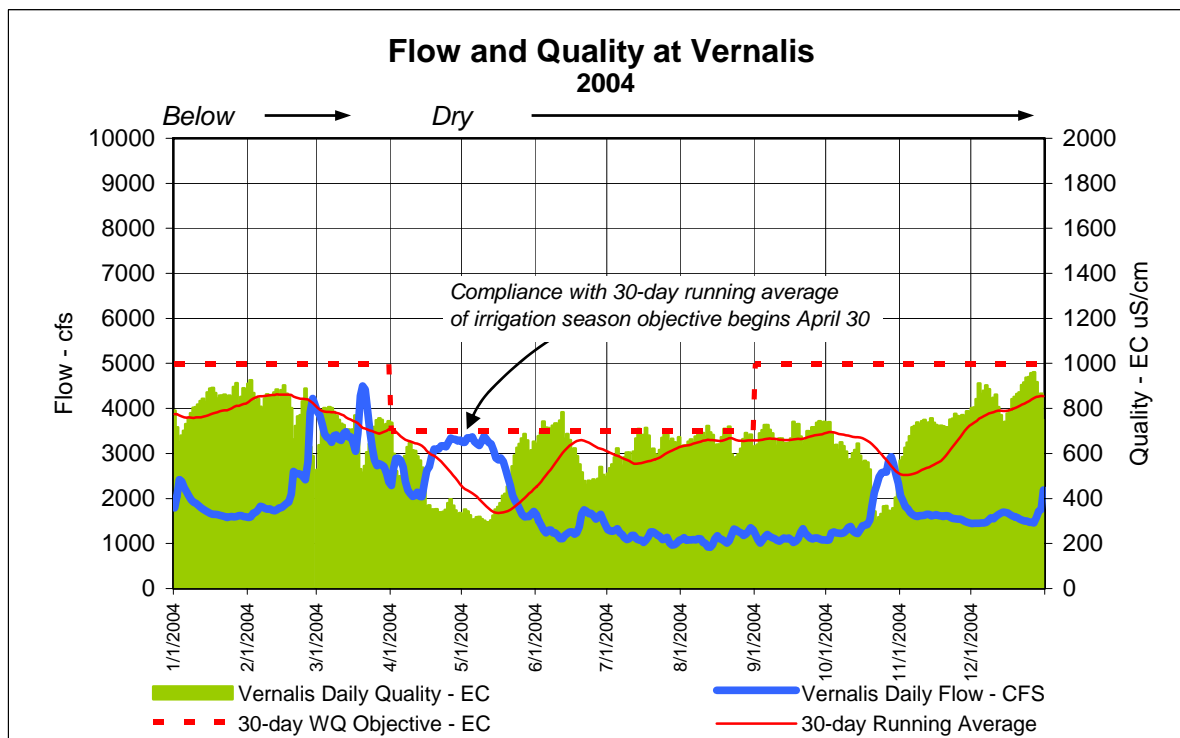
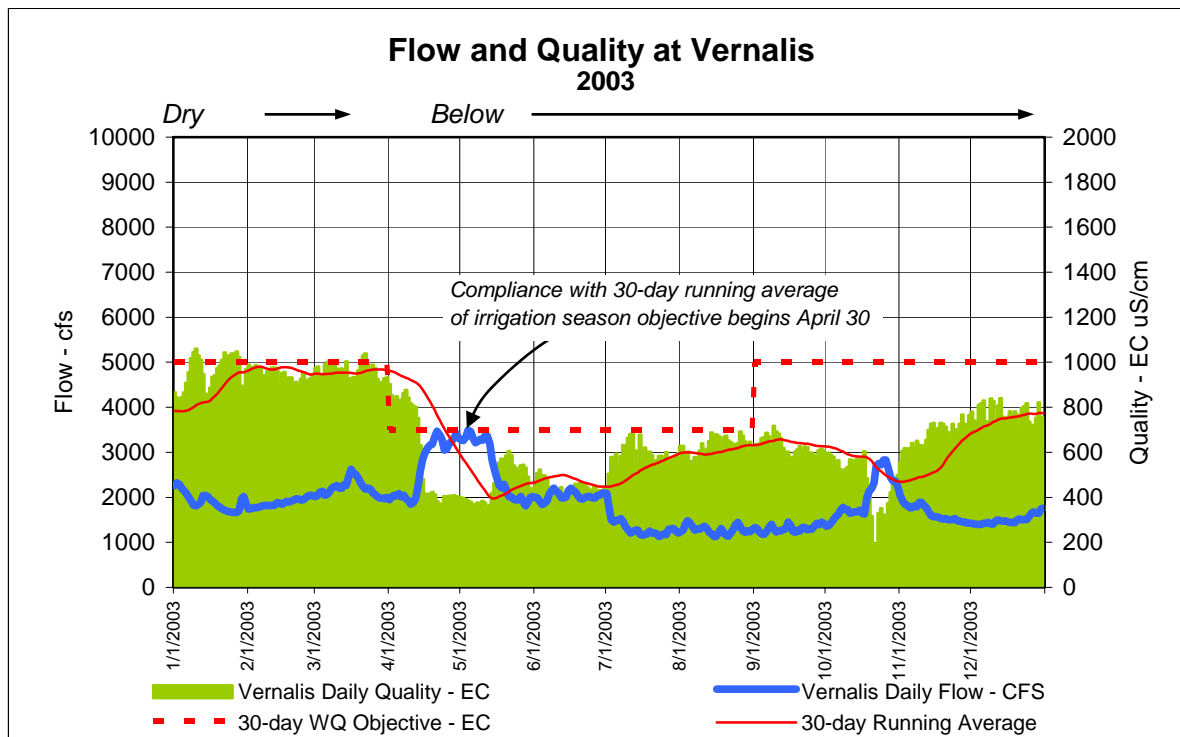
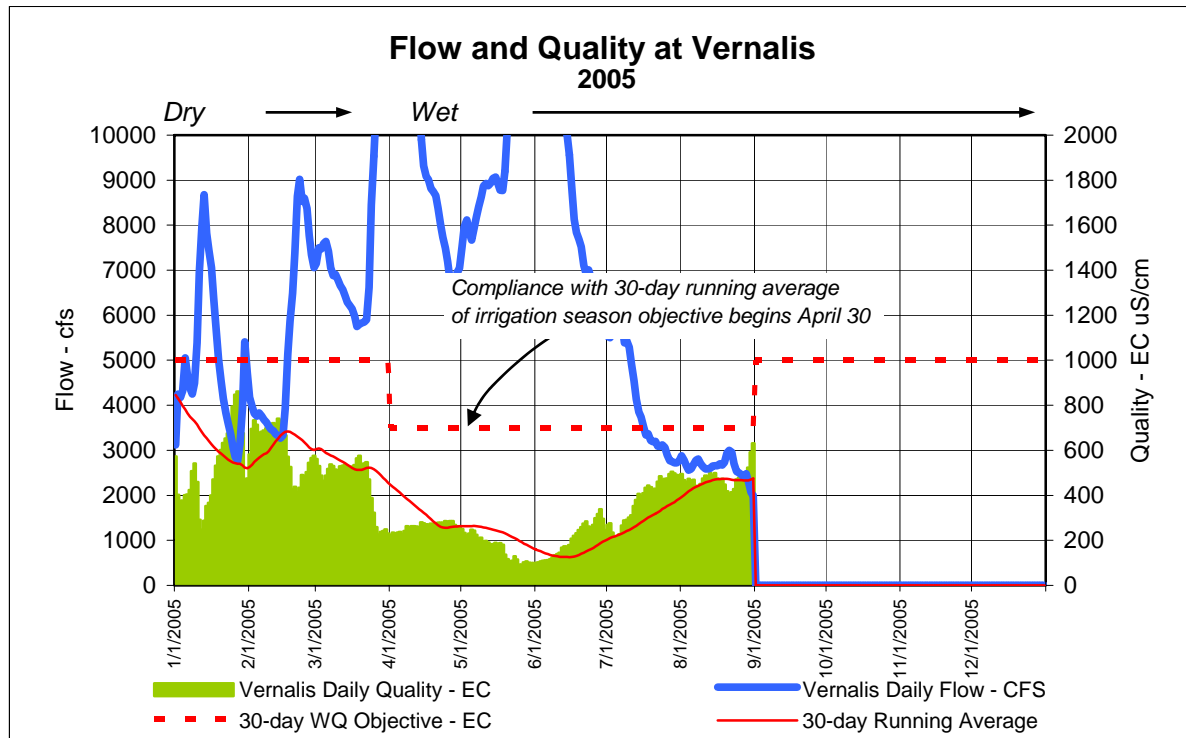


Figure 1F: Flow and Quality at Vernalis

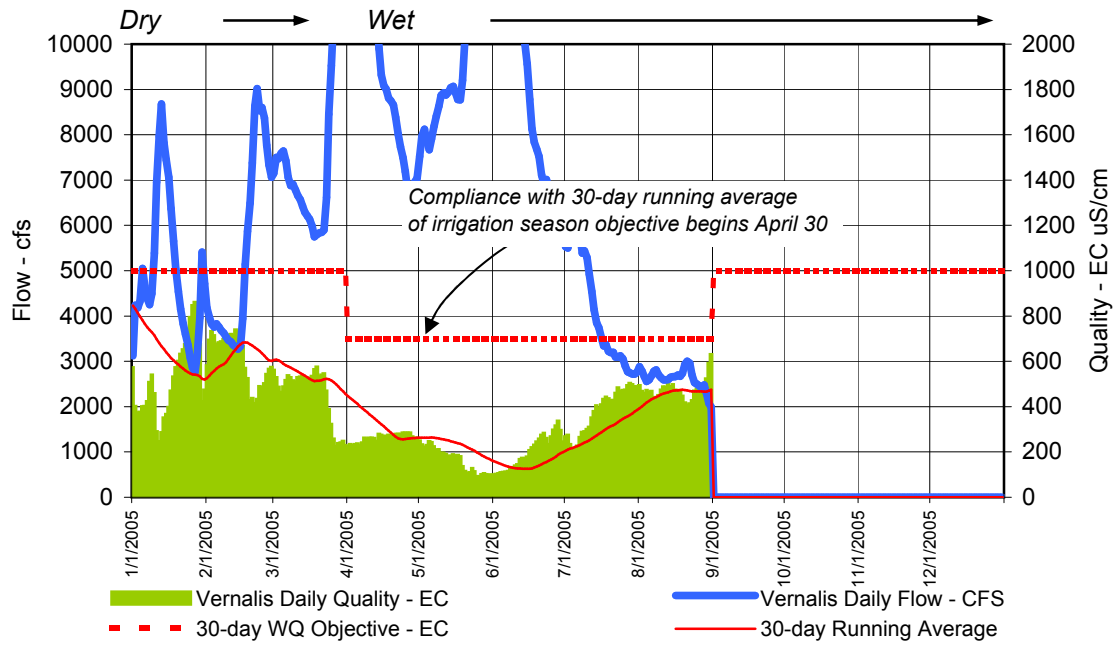


Vernalis Flow and Quality Data
Data compiled and graphics developed by Dan Steiner

916-791-2511

Sheet Name	Contents
Graphs	Graphic interface to plot one calendar year of data
60-20-20	San Joaquin Basin Index
1956-2004	Flow and quality data (chronological)

Flow and Quality at Vernalis 2005



Water Year	April - July Runoff (acre-feet)				Total	October - March Runoff (acre-feet)				Total	0.2 * PYI		Index	Year	Water Year
	Stanislaus	Tuolumne	Merced	Friant		Stanislaus	Tuolumne	Merced	Friant		Cap 900	602020			
1904					5374000					1957000	633000	4249000	Wet	1904	
1905					3361000					1815000	849800	3229400	Above	1905	
1906					9238000					2533000	645880	6695280	Wet	1906	
1907					7606000					3672000	900000	6198000	Wet	1907	
1908					2167000					981000	900000	2396400	Dry	1908	
1909	1114100	1718000	939600	2134000	5905700	784600	908700	507000	651600	2851900	479280	4593080	Wet	1909	u
1910	697100	1137400	592300	1194400	3621200	691300	965400	454100	759200	2870000	900000	3646720	Above	1910	u
1911	1497000	2222000	1265500	2537000	7521500	810600	1120700	801900	892900	3626100	729344	5967464	Wet	1911	u
1912	479800	883800	401400	804800	2569800	104800	147700	98500	186700	537700	900000	2549420	Below	1912	t
1913	475400	878000	341600	645800	2340800	102100	146830	61200	127300	437430	509884	2001850	Critical	1913	s
1914	1073300	1681000	929800	1988900	5673000	665200	878700	455700	721700	2721300	400370	4348430	Wet	1914	u
1915	975900	1561000	856000	1555900	4948800	298100	454550	221300	320900	1294850	869686	4097936	Wet	1915	u
1916	1029900	1623000	920500	1925100	5498500	608000	826570	508200	726800	2669570	819587.2	4652601	Wet	1916	u
1917	1020700	1595000	776400	1444100	4836200	333600	592500	324100	411300	1661500	900000	4134020	Wet	1917	u
1918	593200	1085190	560200	1159300	3397890	221000	355270	252800	240800	1069870	826804	3079512	Below	1918	t
1919	592300	1000700	484100	908700	2985800	172700	335420	192100	359600	1059820	615902.4	2619346	Below	1919	t
1920	588900	1072990	550900	1076800	3289590	145600	250240	122500	201800	720140	523869.3	2641651	Below	1920	t
1921	789500	1250030	649600	1150600	3839730	460100	747840	351200	406500	1965640	528330.3	3225296	Above	1921	u
1922	1129200	1924370	1027500	1913500	5994570	280400	508940	371400	348900	1509640	645059.3	4543729	Wet	1922	u
1923	797200	1264010	667400	1225000	3953610	310400	472360	251900	351300	1385960	900000	3549358	Above	1923	u
1924	167200	381920	174600	310000	1033720	93900	160710	74600	119000	448210	709871.6	1419746	Critical	1924	s
1925	839100	1353010	636900	1097400	3926410	369400	550610	253700	275400	1449110	283949.1	2929617	Below	1925	t
1926	402200	794220	449000	914900	2560320	198600	311060	155300	227300	892260	585923.4	2300567	Dry	1926	s
1927	907000	1428060	754000	1475100	4564160	436000	585630	316900	463200	1801730	460113.5	3558955	Above	1927	u
1928	533500	891810	431400	781400	2638110	408900	623350	303600	352900	1688750	711791.1	2632407	Below	1928	t
1929	411700	791650	387100	701500	2291950	100400	182820	95600	137000	515820	526481.4	2004815	Critical	1929	s
1930	513100	855790	385300	683000	2437190	207500	281790	121600	153300	764190	400963.1	2016115	Critical	1930	s
1931	215400	422580	189200	349400	1176580	99200	176960	69260	112500	457920	403223	1200755	Critical	1931	s
1932	971800	1477700	724600	1512000	4686100	357200	592540	373400	469300	1792440	240151	3410299	Above	1932	u
1933	517100	923010	424600	901400	2766110	81900	160750	86100	166000	494750	682059.8	2440676	Dry	1933	s
1934	219400	442590	189000	408500	1259490	296700	335950	166100	261700	984450	488135.2	1440719	Critical	1934	s
1935	996300	1617260	896700	1516800	5027060	109000	460810	259900	344000	1264310	288143.8	3557242	Above	1935	u
1936	864300	1425840	732800	1356800	4379740	437900	713640	408600	443500	2003640	711448.4	3740020	Above	1936	u
1937	810100	1420270	800100	1625100	4655570	282200	555090	406600	538100	1781990	748004.1	3897744	Wet	1937	u
1938	1347600	2159330	1253000	2573100	7333030	657800	1189990	783000	944800	3575590	779548.8	5894485	Wet	1938	u
1939	346510	589620	294200	602400	1832730	172400	367080	176800	279500	995780	900000	2198794	Dry	1939	s
1940	787410	1297620	651800	1308100	4044930	601300	902440	437300	544300	2485340	439758.8	3363785	Above	1940	u
1941	931400	1700770	955800	1926000	5513970	385200	749910	469600	617400	2222110	672757	4425561	Wet	1941	u
1942	1038200	1660000	903600	1680600	5282400	422400	662080	355700	492000	1932180	885112.2	4440988	Wet	1942	u
1943	847430	1373490	718200	1341500	4280620	693290	966310	550540	646700	2856840	888197.6	4027938	Wet	1943	u
1944	520280	975230	506910	971100	2973520	145840	306520	170000	243600	865960	805587.5	2762892	Below	1944	t
1945	839610	1364650	686900	1480500	4371660	416650	704330	391700	556900	2069580	552578.3	3589490	Above	1945	u
1946	715090	1157070	602570	1172000	3646730	448150	710950	334100	501580	1994780	717898.1	3304892	Above	1946	u
1947	393550	676350	338320	707200	2115420	233330	414950	225780	389900	1263960	660978.4	2183022	Dry	1947	s
1948	769430	1178790	597970	1035700	3581890	116560	222110	85550	138100	562320	436604.5	2698202	Below	1948	t
1949	606400	1024510	509210	975500	3115620	130050	213390	126900	148100	618440	539640.5	2532700	Below	1949	t
1950	832300	1178200	551830	1009000	3571330	229700	361650	165300	266000	1022650	506540.1	2853868	Below	1950	t
1951	530760	943500	438980	916500	2829740	1148730	1521840	782620	899100	4352290	570773.6	3139076	Above	1951	u
1952	1437530	2143790	1072570	2181200	6835090	438590	767570	452210	524500	2182870	627815.1	5165443	Wet	1952	u
1953	719050	1113350	450860	900300	3183560	231420	388860	171680	283000	1074960	900000	3025128	Below	1953	t
1954	640620	1019780	483640	1015900	3159940	238140	405170	184080	268600	1095990	605025.6	2720188	Below	1954	t
1955	505950	841880	417700	900400	2665930	167380	279700	116290	219600	782970	544037.5	2300190	Dry	1955	s
1956	976800	1667510	868800	1777900	5291010	875400	1432480	773000	1061300	4142180	460037.9	4463080	Wet	1956	u
1957	643400	1024630	494000	1023800	3185830	232600	382160	149100	255200	1019060	892616	3007926	Below	1957	t
1958	1275230	1997520	1055600	2067900	6396250	370420	569350	314700	414700	1669170	601585.2	4773169	Wet	1958	u
1959	347420	612570	287500	605700	1853190	220150	330820	148400	285000	984370	900000	2208788	Dry	1959	s
1960	398750	720210	343480	608300	2070740	193260	321230	138780	195900	849170	441757.6	1854036	Critical	1960	s
1961	292320	525700	226750	451300	1496070	102740	190340	81710	160300	535090	370807.1	1375467	Critical	1961	s
1962	784570	1313980	660500	1485900	4244950	200810	432920	257650	365700	1257080	275093.4	3073479	Below	1962	t
1963	855770	1423760	677070	1412700	4369300	391680	569500	291820	430100	1683100	614695.9	3572896	Above	1963	u
1964	431760	758510	310720	643100	2144090	203050	351260	134950	239800	929060	714579.2	2186845	Dry	1964	s
1965	887510	1479150	761390	1420600	4548650	820860	1148880	578840	678300	3226880	437369	3811935	Wet	1965	u
1966	424200	762070	399910	836600	2422780	274100	524960	260560	428200	1487820	762387	2513619	Below	1966	t
1967	1372000	2154490	1240500	2327200	7094190	508800	852330	418060	684000	2463190	502723.8	5251876	Wet	1967	u
1968	388400	634830	275200	552200	1850630	240900	357210	142100	279300	1019510	900000	2214280	Dry	1968	s
1969	1392600	2482490	1366900	2898000	8139990	785000	1301780	787000	964700	3838480	442856	6094546	Wet	1969	u
1970	579700	1003645	466600	906900	2956845	726400	924347	404200	491000	2545947	900000	3183296	Above	1970	u
1971	685100	1072179	502300	970200	3229779	375000	581489	222200	377800	1556489	636659.3	2885824	Below	1971	t
1972	466700	747739	351300	625200	2218239	305300	436497	186200	326000	1253997	577164.9	2158908	Dry	1972	s
1973	825600	1372289	738100	1546100	4482089	444700	632776	353600	441000	1872076	431781.5	3495450	Above	1973	u
1974	890300	1398577	734900	1507500	4531277	643600	802284	378100	603800	2427784	699090	3903413	Wet		

Water	April - July Runoff (acre-feet)					October - March Runoff (acre-feet)					0.2 * PYI	Index	Year	Water
Year	Stanislaus	Tuolumne	Merced	Friant	Total	Stanislaus	Tuolumne	Merced	Friant	Total	Cap 900	602020	Class	Year
1985	433120	800741	386800	785850	2406511	242590	394804	169010	301600	1108004	737718.6	2403226	Dry	1985 s
1986	824601	1510845	785282	1801300	4922028	1067440	1412402	755872	1121900	4357614	480645.2	4305385	Wet	1986 u
1987	236229	472644	220693	553900	1483466	125682	172140	74504	178700	551026	861077	1861362	Critical	1987 s
1988	221363	494015	273584	562724	1551686	147688	319524	132264	264996	864472	372272.4	1476178	Critical	1988 s
1989	512169	865641	377875	668116	2423801	257337	434481	146206	232772	1070796	295235.7	1963675	Critical	1989 s
1990	284227	522338	271588	514221	1592374	183526	315971	127174	205469	832140	392735.1	1514587	Critical	1990 s
1991	407650	878256	446291	835932	2568129	94026	195094	108498	160701	558319	302917.5	1955459	Critical	1991 s
1992	265933	525254	299041	568447	1658675	208210	291924	141018	214560	855712	391091.7	1557439	Critical	1992 s
1993	974023	1715748	919774	1946747	5556292	565206	829146	479355	617449	2491156	311487.8	4143494	Wet	1993 u
1994	310876	621864	268027	602238	1803005	138189	228143	96587	198194	661113	828698.8	2042724	Critical	1994 s
1995	1481273	2506359	1405372	2616447	8009451	799093	1218854	695596	955805	3669348	408544.9	5948085	Wet	1995 u
1996	845138	1421881	722923	1518061	4508003	639748	857494	465961	610844	2574047	900000	4119611	Wet	1996 u
1997	542621	1211037	589668	1251158	3594484	1201194	1942249	1140483	1464531	5748457	823922.2	4130304	Wet	1997 u
1998	1342185	2241978	1216084	2306443	7106690	680452	977485	548316	622120	2828373	826060.8	5655749	Wet	1998 u
1999	806904	1376349	598126	1070454	3851833	507572	695671	288988	406883	1899114	900000	3590923	Above	1999 u
2000	666273	1265593	597406	1251119	3780391	479067	699801	358553	438774	1976195	718184.5	3381658	Above	2000 u
2001	368344	702404	370930	794843	2236521	209136	327081	159585	246809	942611	676331.6	2206766	Dry	2001 s
2002	541130	920667	428570	846036	2736403	302419	466363	200050	304457	1273289	441353.3	2337853	Dry	2002 s
2003	672700	1166478	595544	1057868	3492590	285655	415905	200568	346167	1248295	468200.9	2813414	Below	2003 t
2004	416859	762554	333402	735476	2248291	338734	538010	243423	375360	1495527	562682.8	2210763	Dry	2004 s
2005													Wet	2005 u

$$X + (0.2 * Y) + (0.2 * Z)$$

Where: y San Joaquin Valley Unimpaired Runoff
October - March San Joaquin Valley Unimpaired Runoff
is Year's Index Capped at 4,500,000 acre-feet

Year Classifications	Index
Wet	3,800,000 af
Above Normal	3,100,000 af
Below Normal	2,500,000 af
Dry	2,100,000 af
Critical	less than 2,100,000 af

Graph Column Number			1	2	3	4	5	6	7	8	9	10	11	12
YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting	
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running	
1929	10	1929.10	1-Oct-29							1390				
1929	10	1929.10	2-Oct-29							1490				
1929	10	1929.10	3-Oct-29							1540				
1929	10	1929.10	4-Oct-29							1490				
1929	10	1929.10	5-Oct-29							1540				
1929	10	1929.10	6-Oct-29							1540				
1929	10	1929.10	7-Oct-29							1540				
1929	10	1929.10	8-Oct-29							1490				
1929	10	1929.10	9-Oct-29							1440				
1929	10	1929.10	10-Oct-29							1440				
1929	10	1929.10	11-Oct-29							1340				
1929	10	1929.10	12-Oct-29							1290				
1929	10	1929.10	13-Oct-29							1290				
1929	10	1929.10	14-Oct-29							1340				
1929	10	1929.10	15-Oct-29							1440				
1929	10	1929.10	16-Oct-29							1490				
1929	10	1929.10	17-Oct-29							1540				
1929	10	1929.10	18-Oct-29							1540				
1929	10	1929.10	19-Oct-29							1490				
1929	10	1929.10	20-Oct-29							1440				
1929	10	1929.10	21-Oct-29							1440				
1929	10	1929.10	22-Oct-29							1340				
1929	10	1929.10	23-Oct-29							1340				
1929	10	1929.10	24-Oct-29							1340				
1929	10	1929.10	25-Oct-29							1340				
1929	10	1929.10	26-Oct-29							1340				
1929	10	1929.10	27-Oct-29							1390				
1929	10	1929.10	28-Oct-29							1290				
1929	10	1929.10	29-Oct-29							1240				
1929	10	1929.10	30-Oct-29							1240				
1929	10	1929.10	31-Oct-29							1240				
1929	11	1929.11	1-Nov-29							1190				
1929	11	1929.11	2-Nov-29							1190				
1929	11	1929.11	3-Nov-29							1190				
1929	11	1929.11	4-Nov-29							1160				
1929	11	1929.11	5-Nov-29							1140				
1929	11	1929.11	6-Nov-29							1140				
1929	11	1929.11	7-Nov-29							1140				
1929	11	1929.11	8-Nov-29							1140				
1929	11	1929.11	9-Nov-29							1140				
1929	11	1929.11	10-Nov-29							1190				
1929	11	1929.11	11-Nov-29							1290				
1929	11	1929.11	12-Nov-29							1240				
1929	11	1929.11	13-Nov-29							1290				
1929	11	1929.11	14-Nov-29							1290				
1929	11	1929.11	15-Nov-29							1240				
1929	11	1929.11	16-Nov-29							1240				
1929	11	1929.11	17-Nov-29							1240				
1929	11	1929.11	18-Nov-29							1240				
1929	11	1929.11	19-Nov-29							1240				
1929	11	1929.11	20-Nov-29							1240				
1929	11	1929.11	21-Nov-29							1290				
1929	11	1929.11	22-Nov-29							1290				
1929	11	1929.11	23-Nov-29							1290				
1929	11	1929.11	24-Nov-29							1290				
1929	11	1929.11	25-Nov-29							1290				
1929	11	1929.11	26-Nov-29							1290				
1929	11	1929.11	27-Nov-29							1290				
1929	11	1929.11	28-Nov-29							1290				
1929	11	1929.11	29-Nov-29							1290				
1929	11	1929.11	30-Nov-29							1240				
1929	12	1929.12	1-Dec-29							1240				
1929	12	1929.12	2-Dec-29							1240				
1929	12	1929.12	3-Dec-29							1240				
1929	12	1929.12	4-Dec-29							1240				
1929	12	1929.12	5-Dec-29							1240				
1929	12	1929.12	6-Dec-29							1240				
1929	12	1929.12	7-Dec-29							1190				
1929	12	1929.12	8-Dec-29							1240				
1929	12	1929.12	9-Dec-29							1240				
1929	12	1929.12	10-Dec-29							1240				
1929	12	1929.12	11-Dec-29							1240				
1929	12	1929.12	12-Dec-29							1290				
1929	12	1929.12	13-Dec-29							1290				
1929	12	1929.12	14-Dec-29							1290				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1929	12	1929.12	15-Dec-29						1290				
1929	12	1929.12	16-Dec-29						1290				
1929	12	1929.12	17-Dec-29						1290				
1929	12	1929.12	18-Dec-29						1290				
1929	12	1929.12	19-Dec-29						1240				
1929	12	1929.12	20-Dec-29						1290				
1929	12	1929.12	21-Dec-29						1290				
1929	12	1929.12	22-Dec-29						1340				
1929	12	1929.12	23-Dec-29						1340				
1929	12	1929.12	24-Dec-29						1340				
1929	12	1929.12	25-Dec-29						1390				
1929	12	1929.12	26-Dec-29						1440				
1929	12	1929.12	27-Dec-29						1390				
1929	12	1929.12	28-Dec-29						1290				
1929	12	1929.12	29-Dec-29						1290				
1929	12	1929.12	30-Dec-29						1290				
1929	12	1929.12	31-Dec-29						1290				
1930	1	1930.01	1-Jan-30						1290				
1930	1	1930.01	2-Jan-30						1290				
1930	1	1930.01	3-Jan-30						1290				
1930	1	1930.01	4-Jan-30						1290				
1930	1	1930.01	5-Jan-30						1340				
1930	1	1930.01	6-Jan-30						1390				
1930	1	1930.01	7-Jan-30						1340				
1930	1	1930.01	8-Jan-30						1540				
1930	1	1930.01	9-Jan-30						1840				
1930	1	1930.01	10-Jan-30						2020				
1930	1	1930.01	11-Jan-30						2080				
1930	1	1930.01	12-Jan-30						2140				
1930	1	1930.01	13-Jan-30						1900				
1930	1	1930.01	14-Jan-30						1720				
1930	1	1930.01	15-Jan-30						1900				
1930	1	1930.01	16-Jan-30						1840				
1930	1	1930.01	17-Jan-30						1780				
1930	1	1930.01	18-Jan-30						1780				
1930	1	1930.01	19-Jan-30						1780				
1930	1	1930.01	20-Jan-30						1720				
1930	1	1930.01	21-Jan-30						1720				
1930	1	1930.01	22-Jan-30						1720				
1930	1	1930.01	23-Jan-30						1780				
1930	1	1930.01	24-Jan-30						2020				
1930	1	1930.01	25-Jan-30						2200				
1930	1	1930.01	26-Jan-30						2340				
1930	1	1930.01	27-Jan-30						2270				
1930	1	1930.01	28-Jan-30						2020				
1930	1	1930.01	29-Jan-30						2270				
1930	1	1930.01	30-Jan-30						2140				
1930	1	1930.01	31-Jan-30						2020				
1930	2	1930.02	1-Feb-30						2080				
1930	2	1930.02	2-Feb-30						2020				
1930	2	1930.02	3-Feb-30						1900				
1930	2	1930.02	4-Feb-30						1780				
1930	2	1930.02	5-Feb-30						1780				
1930	2	1930.02	6-Feb-30						1780				
1930	2	1930.02	7-Feb-30						1720				
1930	2	1930.02	8-Feb-30						1600				
1930	2	1930.02	9-Feb-30						1600				
1930	2	1930.02	10-Feb-30						1600				
1930	2	1930.02	11-Feb-30						1540				
1930	2	1930.02	12-Feb-30						1600				
1930	2	1930.02	13-Feb-30						1600				
1930	2	1930.02	14-Feb-30						1540				
1930	2	1930.02	15-Feb-30						1540				
1930	2	1930.02	16-Feb-30						1540				
1930	2	1930.02	17-Feb-30						1540				
1930	2	1930.02	18-Feb-30						1490				
1930	2	1930.02	19-Feb-30						1490				
1930	2	1930.02	20-Feb-30						1490				
1930	2	1930.02	21-Feb-30						1440				
1930	2	1930.02	22-Feb-30						1440				
1930	2	1930.02	23-Feb-30						1490				
1930	2	1930.02	24-Feb-30						1660				
1930	2	1930.02	25-Feb-30						1780				
1930	2	1930.02	26-Feb-30						1900				
1930	2	1930.02	27-Feb-30						2340				
1930	2	1930.02	28-Feb-30						2340				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1930	3	1930.03	1-Mar-30						2020				
1930	3	1930.03	2-Mar-30						1960				
1930	3	1930.03	3-Mar-30						1900				
1930	3	1930.03	4-Mar-30						1900				
1930	3	1930.03	5-Mar-30						2410				
1930	3	1930.03	6-Mar-30						3390				
1930	3	1930.03	7-Mar-30						4060				
1930	3	1930.03	8-Mar-30						3430				
1930	3	1930.03	9-Mar-30						3180				
1930	3	1930.03	10-Mar-30						2630				
1930	3	1930.03	11-Mar-30						2490				
1930	3	1930.03	12-Mar-30						2420				
1930	3	1930.03	13-Mar-30						2210				
1930	3	1930.03	14-Mar-30						2280				
1930	3	1930.03	15-Mar-30						2350				
1930	3	1930.03	16-Mar-30						2350				
1930	3	1930.03	17-Mar-30						2280				
1930	3	1930.03	18-Mar-30						2280				
1930	3	1930.03	19-Mar-30						2280				
1930	3	1930.03	20-Mar-30						2280				
1930	3	1930.03	21-Mar-30						1900				
1930	3	1930.03	22-Mar-30						1840				
1930	3	1930.03	23-Mar-30						1780				
1930	3	1930.03	24-Mar-30						1960				
1930	3	1930.03	25-Mar-30						2210				
1930	3	1930.03	26-Mar-30						1840				
1930	3	1930.03	27-Mar-30						2350				
1930	3	1930.03	28-Mar-30						2860				
1930	3	1930.03	29-Mar-30						3020				
1930	3	1930.03	30-Mar-30						3020				
1930	3	1930.03	31-Mar-30						3180				
1930	4	1930.04	1-Apr-30						3260				
1930	4	1930.04	2-Apr-30						2940				
1930	4	1930.04	3-Apr-30						2700				
1930	4	1930.04	4-Apr-30						2350				
1930	4	1930.04	5-Apr-30						2350				
1930	4	1930.04	6-Apr-30						2210				
1930	4	1930.04	7-Apr-30						2020				
1930	4	1930.04	8-Apr-30						2280				
1930	4	1930.04	9-Apr-30						3020				
1930	4	1930.04	10-Apr-30						2940				
1930	4	1930.04	11-Apr-30						2630				
1930	4	1930.04	12-Apr-30						2490				
1930	4	1930.04	13-Apr-30						2140				
1930	4	1930.04	14-Apr-30						3020				
1930	4	1930.04	15-Apr-30						2860				
1930	4	1930.04	16-Apr-30						2280				
1930	4	1930.04	17-Apr-30						2140				
1930	4	1930.04	18-Apr-30						2080				
1930	4	1930.04	19-Apr-30						2140				
1930	4	1930.04	20-Apr-30						2140				
1930	4	1930.04	21-Apr-30						2350				
1930	4	1930.04	22-Apr-30						2560				
1930	4	1930.04	23-Apr-30						2860				
1930	4	1930.04	24-Apr-30						3020				
1930	4	1930.04	25-Apr-30						3180				
1930	4	1930.04	26-Apr-30						3180				
1930	4	1930.04	27-Apr-30						2780				
1930	4	1930.04	28-Apr-30						2640				
1930	4	1930.04	29-Apr-30						2500				
1930	4	1930.04	30-Apr-30						2360				
1930	5	1930.05	1-May-30						2220				
1930	5	1930.05	2-May-30						2080				
1930	5	1930.05	3-May-30						2020				
1930	5	1930.05	4-May-30						2210				
1930	5	1930.05	5-May-30						2280				
1930	5	1930.05	6-May-30						2350				
1930	5	1930.05	7-May-30						2280				
1930	5	1930.05	8-May-30						2080				
1930	5	1930.05	9-May-30						1960				
1930	5	1930.05	10-May-30						1840				
1930	5	1930.05	11-May-30						1840				
1930	5	1930.05	12-May-30						1780				
1930	5	1930.05	13-May-30						1660				
1930	5	1930.05	14-May-30						1540				
1930	5	1930.05	15-May-30						1450				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1930	5	1930.05	16-May-30						1390				
1930	5	1930.05	17-May-30						1360				
1930	5	1930.05	18-May-30						1420				
1930	5	1930.05	19-May-30						1420				
1930	5	1930.05	20-May-30						1840				
1930	5	1930.05	21-May-30						3020				
1930	5	1930.05	22-May-30						2780				
1930	5	1930.05	23-May-30						3020				
1930	5	1930.05	24-May-30						2940				
1930	5	1930.05	25-May-30						2700				
1930	5	1930.05	26-May-30						3180				
1930	5	1930.05	27-May-30						2780				
1930	5	1930.05	28-May-30						2700				
1930	5	1930.05	29-May-30						2780				
1930	5	1930.05	30-May-30						2860				
1930	5	1930.05	31-May-30						2860				
1930	6	1930.06	1-Jun-30						2560				
1930	6	1930.06	2-Jun-30						1900				
1930	6	1930.06	3-Jun-30						1720				
1930	6	1930.06	4-Jun-30						1780				
1930	6	1930.06	5-Jun-30						1780				
1930	6	1930.06	6-Jun-30						2560				
1930	6	1930.06	7-Jun-30						2560				
1930	6	1930.06	8-Jun-30						2700				
1930	6	1930.06	9-Jun-30						3020				
1930	6	1930.06	10-Jun-30						3180				
1930	6	1930.06	11-Jun-30						3020				
1930	6	1930.06	12-Jun-30						2780				
1930	6	1930.06	13-Jun-30						2420				
1930	6	1930.06	14-Jun-30						3430				
1930	6	1930.06	15-Jun-30						4250				
1930	6	1930.06	16-Jun-30						4350				
1930	6	1930.06	17-Jun-30						4850				
1930	6	1930.06	18-Jun-30						4750				
1930	6	1930.06	19-Jun-30						4150				
1930	6	1930.06	20-Jun-30						3100				
1930	6	1930.06	21-Jun-30						2860				
1930	6	1930.06	22-Jun-30						2560				
1930	6	1930.06	23-Jun-30						2350				
1930	6	1930.06	24-Jun-30						2420				
1930	6	1930.06	25-Jun-30						2280				
1930	6	1930.06	26-Jun-30						2080				
1930	6	1930.06	27-Jun-30						1960				
1930	6	1930.06	28-Jun-30						1840				
1930	6	1930.06	29-Jun-30						1720				
1930	6	1930.06	30-Jun-30						1690				
1930	7	1930.07	1-Jul-30						1630				
1930	7	1930.07	2-Jul-30						1570				
1930	7	1930.07	3-Jul-30						1570				
1930	7	1930.07	4-Jul-30						1570				
1930	7	1930.07	5-Jul-30						1600				
1930	7	1930.07	6-Jul-30						1540				
1930	7	1930.07	7-Jul-30						1510				
1930	7	1930.07	8-Jul-30						1450				
1930	7	1930.07	9-Jul-30						1390				
1930	7	1930.07	10-Jul-30						1360				
1930	7	1930.07	11-Jul-30						1390				
1930	7	1930.07	12-Jul-30						1330				
1930	7	1930.07	13-Jul-30						1360				
1930	7	1930.07	14-Jul-30						1390				
1930	7	1930.07	15-Jul-30						1330				
1930	7	1930.07	16-Jul-30						1270				
1930	7	1930.07	17-Jul-30						1210				
1930	7	1930.07	18-Jul-30						1210				
1930	7	1930.07	19-Jul-30						1180				
1930	7	1930.07	20-Jul-30						1180				
1930	7	1930.07	21-Jul-30						1130				
1930	7	1930.07	22-Jul-30						1000				
1930	7	1930.07	23-Jul-30						980				
1930	7	1930.07	24-Jul-30						955				
1930	7	1930.07	25-Jul-30						930				
1930	7	1930.07	26-Jul-30						955				
1930	7	1930.07	27-Jul-30						955				
1930	7	1930.07	28-Jul-30						880				
1930	7	1930.07	29-Jul-30						858				
1930	7	1930.07	30-Jul-30						858				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1930	7	1930.07	31-Jul-30						812				
1930	8	1930.08	1-Aug-30						768				
1930	8	1930.08	2-Aug-30						725				
1930	8	1930.08	3-Aug-30						725				
1930	8	1930.08	4-Aug-30						745				
1930	8	1930.08	5-Aug-30						725				
1930	8	1930.08	6-Aug-30						705				
1930	8	1930.08	7-Aug-30						665				
1930	8	1930.08	8-Aug-30						645				
1930	8	1930.08	9-Aug-30						835				
1930	8	1930.08	10-Aug-30						955				
1930	8	1930.08	11-Aug-30						980				
1930	8	1930.08	12-Aug-30						980				
1930	8	1930.08	13-Aug-30						955				
1930	8	1930.08	14-Aug-30						980				
1930	8	1930.08	15-Aug-30						955				
1930	8	1930.08	16-Aug-30						955				
1930	8	1930.08	17-Aug-30						980				
1930	8	1930.08	18-Aug-30						1030				
1930	8	1930.08	19-Aug-30						1060				
1930	8	1930.08	20-Aug-30						1060				
1930	8	1930.08	21-Aug-30						930				
1930	8	1930.08	22-Aug-30						790				
1930	8	1930.08	23-Aug-30						745				
1930	8	1930.08	24-Aug-30						812				
1930	8	1930.08	25-Aug-30						930				
1930	8	1930.08	26-Aug-30						1080				
1930	8	1930.08	27-Aug-30						1100				
1930	8	1930.08	28-Aug-30						1080				
1930	8	1930.08	29-Aug-30						1160				
1930	8	1930.08	30-Aug-30						1240				
1930	8	1930.08	31-Aug-30						1210				
1930	9	1930.09	1-Sep-30						1240				
1930	9	1930.09	2-Sep-30						1210				
1930	9	1930.09	3-Sep-30						1210				
1930	9	1930.09	4-Sep-30						1240				
1930	9	1930.09	5-Sep-30						1240				
1930	9	1930.09	6-Sep-30						1240				
1930	9	1930.09	7-Sep-30						1270				
1930	9	1930.09	8-Sep-30						1300				
1930	9	1930.09	9-Sep-30						1300				
1930	9	1930.09	10-Sep-30						1330				
1930	9	1930.09	11-Sep-30						1360				
1930	9	1930.09	12-Sep-30						1420				
1930	9	1930.09	13-Sep-30						1420				
1930	9	1930.09	14-Sep-30						1450				
1930	9	1930.09	15-Sep-30						1540				
1930	9	1930.09	16-Sep-30						1540				
1930	9	1930.09	17-Sep-30						1540				
1930	9	1930.09	18-Sep-30						1480				
1930	9	1930.09	19-Sep-30						1420				
1930	9	1930.09	20-Sep-30						1630				
1930	9	1930.09	21-Sep-30						1630				
1930	9	1930.09	22-Sep-30						1480				
1930	9	1930.09	23-Sep-30						1510				
1930	9	1930.09	24-Sep-30						1510				
1930	9	1930.09	25-Sep-30						1540				
1930	9	1930.09	26-Sep-30						1540				
1930	9	1930.09	27-Sep-30						1540				
1930	9	1930.09	28-Sep-30						1540				
1930	9	1930.09	29-Sep-30						1630				
1930	9	1930.09	30-Sep-30						1690				
1930	10	1930.10	1-Oct-30						1840				
1930	10	1930.10	2-Oct-30						1900				
1930	10	1930.10	3-Oct-30						1900				
1930	10	1930.10	4-Oct-30						1900				
1930	10	1930.10	5-Oct-30						1840				
1930	10	1930.10	6-Oct-30						1840				
1930	10	1930.10	7-Oct-30						1780				
1930	10	1930.10	8-Oct-30						1720				
1930	10	1930.10	9-Oct-30						1720				
1930	10	1930.10	10-Oct-30						1720				
1930	10	1930.10	11-Oct-30						1660				
1930	10	1930.10	12-Oct-30						1660				
1930	10	1930.10	13-Oct-30						1660				
1930	10	1930.10	14-Oct-30						1660				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1930	10	1930.10	15-Oct-30						1630				
1930	10	1930.10	16-Oct-30						1600				
1930	10	1930.10	17-Oct-30						1630				
1930	10	1930.10	18-Oct-30						1630				
1930	10	1930.10	19-Oct-30						1600				
1930	10	1930.10	20-Oct-30						1630				
1930	10	1930.10	21-Oct-30						1570				
1930	10	1930.10	22-Oct-30						1570				
1930	10	1930.10	23-Oct-30						1570				
1930	10	1930.10	24-Oct-30						1540				
1930	10	1930.10	25-Oct-30						1570				
1930	10	1930.10	26-Oct-30						1540				
1930	10	1930.10	27-Oct-30						1570				
1930	10	1930.10	28-Oct-30						1600				
1930	10	1930.10	29-Oct-30						1570				
1930	10	1930.10	30-Oct-30						1570				
1930	10	1930.10	31-Oct-30						1540				
1930	11	1930.11	1-Nov-30						1540				
1930	11	1930.11	2-Nov-30						1540				
1930	11	1930.11	3-Nov-30						1540				
1930	11	1930.11	4-Nov-30						1540				
1930	11	1930.11	5-Nov-30						1480				
1930	11	1930.11	6-Nov-30						1510				
1930	11	1930.11	7-Nov-30						1540				
1930	11	1930.11	8-Nov-30						1510				
1930	11	1930.11	9-Nov-30						1510				
1930	11	1930.11	10-Nov-30						1570				
1930	11	1930.11	11-Nov-30						1480				
1930	11	1930.11	12-Nov-30						1450				
1930	11	1930.11	13-Nov-30						1450				
1930	11	1930.11	14-Nov-30						1480				
1930	11	1930.11	15-Nov-30						1510				
1930	11	1930.11	16-Nov-30						1510				
1930	11	1930.11	17-Nov-30						1540				
1930	11	1930.11	18-Nov-30						1540				
1930	11	1930.11	19-Nov-30						1540				
1930	11	1930.11	20-Nov-30						1600				
1930	11	1930.11	21-Nov-30						1900				
1930	11	1930.11	22-Nov-30						1960				
1930	11	1930.11	23-Nov-30						1900				
1930	11	1930.11	24-Nov-30						1900				
1930	11	1930.11	25-Nov-30						1840				
1930	11	1930.11	26-Nov-30						1840				
1930	11	1930.11	27-Nov-30						1900				
1930	11	1930.11	28-Nov-30						1960				
1930	11	1930.11	29-Nov-30						1900				
1930	11	1930.11	30-Nov-30						1840				
1930	12	1930.12	1-Dec-30						1900				
1930	12	1930.12	2-Dec-30						1900				
1930	12	1930.12	3-Dec-30						1900				
1930	12	1930.12	4-Dec-30						1900				
1930	12	1930.12	5-Dec-30						1900				
1930	12	1930.12	6-Dec-30						1900				
1930	12	1930.12	7-Dec-30						1900				
1930	12	1930.12	8-Dec-30						1840				
1930	12	1930.12	9-Dec-30						1840				
1930	12	1930.12	10-Dec-30						1960				
1930	12	1930.12	11-Dec-30						2020				
1930	12	1930.12	12-Dec-30						1960				
1930	12	1930.12	13-Dec-30						1960				
1930	12	1930.12	14-Dec-30						1960				
1930	12	1930.12	15-Dec-30						2020				
1930	12	1930.12	16-Dec-30						2020				
1930	12	1930.12	17-Dec-30						2080				
1930	12	1930.12	18-Dec-30						2080				
1930	12	1930.12	19-Dec-30						2020				
1930	12	1930.12	20-Dec-30						2020				
1930	12	1930.12	21-Dec-30						2080				
1930	12	1930.12	22-Dec-30						2080				
1930	12	1930.12	23-Dec-30						2080				
1930	12	1930.12	24-Dec-30						2140				
1930	12	1930.12	25-Dec-30						2140				
1930	12	1930.12	26-Dec-30						1900				
1930	12	1930.12	27-Dec-30						1660				
1930	12	1930.12	28-Dec-30						1630				
1930	12	1930.12	29-Dec-30						1540				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1930	12	1930.12	30-Dec-30						1480				
1930	12	1930.12	31-Dec-30						1510				
1931	1	1931.01	1-Jan-31						1540				
1931	1	1931.01	2-Jan-31						1570				
1931	1	1931.01	3-Jan-31						1480				
1931	1	1931.01	4-Jan-31						1450				
1931	1	1931.01	5-Jan-31						1480				
1931	1	1931.01	6-Jan-31						1540				
1931	1	1931.01	7-Jan-31						1540				
1931	1	1931.01	8-Jan-31						1510				
1931	1	1931.01	9-Jan-31						1480				
1931	1	1931.01	10-Jan-31						1450				
1931	1	1931.01	11-Jan-31						1450				
1931	1	1931.01	12-Jan-31						1450				
1931	1	1931.01	13-Jan-31						1420				
1931	1	1931.01	14-Jan-31						1420				
1931	1	1931.01	15-Jan-31						1450				
1931	1	1931.01	16-Jan-31						1450				
1931	1	1931.01	17-Jan-31						1450				
1931	1	1931.01	18-Jan-31						1450				
1931	1	1931.01	19-Jan-31						1450				
1931	1	1931.01	20-Jan-31						1450				
1931	1	1931.01	21-Jan-31						1540				
1931	1	1931.01	22-Jan-31						1600				
1931	1	1931.01	23-Jan-31						1690				
1931	1	1931.01	24-Jan-31						1720				
1931	1	1931.01	25-Jan-31						1720				
1931	1	1931.01	26-Jan-31						1720				
1931	1	1931.01	27-Jan-31						1690				
1931	1	1931.01	28-Jan-31						1720				
1931	1	1931.01	29-Jan-31						1720				
1931	1	1931.01	30-Jan-31						1660				
1931	1	1931.01	31-Jan-31						1660				
1931	2	1931.02	1-Feb-31						1690				
1931	2	1931.02	2-Feb-31						1660				
1931	2	1931.02	3-Feb-31						1600				
1931	2	1931.02	4-Feb-31						1630				
1931	2	1931.02	5-Feb-31						1600				
1931	2	1931.02	6-Feb-31						1570				
1931	2	1931.02	7-Feb-31						1510				
1931	2	1931.02	8-Feb-31						1510				
1931	2	1931.02	9-Feb-31						1510				
1931	2	1931.02	10-Feb-31						1480				
1931	2	1931.02	11-Feb-31						1510				
1931	2	1931.02	12-Feb-31						1540				
1931	2	1931.02	13-Feb-31						1540				
1931	2	1931.02	14-Feb-31						1600				
1931	2	1931.02	15-Feb-31						1630				
1931	2	1931.02	16-Feb-31						1630				
1931	2	1931.02	17-Feb-31						1630				
1931	2	1931.02	18-Feb-31						1660				
1931	2	1931.02	19-Feb-31						1660				
1931	2	1931.02	20-Feb-31						1660				
1931	2	1931.02	21-Feb-31						1600				
1931	2	1931.02	22-Feb-31						1600				
1931	2	1931.02	23-Feb-31						1540				
1931	2	1931.02	24-Feb-31						1570				
1931	2	1931.02	25-Feb-31						1780				
1931	2	1931.02	26-Feb-31						1720				
1931	2	1931.02	27-Feb-31						1660				
1931	2	1931.02	28-Feb-31						1570				
1931	3	1931.03	1-Mar-31						1510				
1931	3	1931.03	2-Mar-31						1510				
1931	3	1931.03	3-Mar-31						1450				
1931	3	1931.03	4-Mar-31						1300				
1931	3	1931.03	5-Mar-31						1160				
1931	3	1931.03	6-Mar-31						1060				
1931	3	1931.03	7-Mar-31						1030				
1931	3	1931.03	8-Mar-31						1030				
1931	3	1931.03	9-Mar-31						1030				
1931	3	1931.03	10-Mar-31						980				
1931	3	1931.03	11-Mar-31						955				
1931	3	1931.03	12-Mar-31						930				
1931	3	1931.03	13-Mar-31						892				
1931	3	1931.03	14-Mar-31						840				
1931	3	1931.03	15-Mar-31						790				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1931	3	1931.03	16-Mar-31						765				
1931	3	1931.03	17-Mar-31						750				
1931	3	1931.03	18-Mar-31						740				
1931	3	1931.03	19-Mar-31						740				
1931	3	1931.03	20-Mar-31						735				
1931	3	1931.03	21-Mar-31						720				
1931	3	1931.03	22-Mar-31						710				
1931	3	1931.03	23-Mar-31						685				
1931	3	1931.03	24-Mar-31						656				
1931	3	1931.03	25-Mar-31						647				
1931	3	1931.03	26-Mar-31						638				
1931	3	1931.03	27-Mar-31						629				
1931	3	1931.03	28-Mar-31						602				
1931	3	1931.03	29-Mar-31						598				
1931	3	1931.03	30-Mar-31						611				
1931	3	1931.03	31-Mar-31						606				
1931	4	1931.04	1-Apr-31						534				
1931	4	1931.04	2-Apr-31						514				
1931	4	1931.04	3-Apr-31						498				
1931	4	1931.04	4-Apr-31						498				
1931	4	1931.04	5-Apr-31						498				
1931	4	1931.04	6-Apr-31						486				
1931	4	1931.04	7-Apr-31						466				
1931	4	1931.04	8-Apr-31						438				
1931	4	1931.04	9-Apr-31						413				
1931	4	1931.04	10-Apr-31						396				
1931	4	1931.04	11-Apr-31						396				
1931	4	1931.04	12-Apr-31						402				
1931	4	1931.04	13-Apr-31						382				
1931	4	1931.04	14-Apr-31						376				
1931	4	1931.04	15-Apr-31						373				
1931	4	1931.04	16-Apr-31						370				
1931	4	1931.04	17-Apr-31						364				
1931	4	1931.04	18-Apr-31						340				
1931	4	1931.04	19-Apr-31						316				
1931	4	1931.04	20-Apr-31						319				
1931	4	1931.04	21-Apr-31						319				
1931	4	1931.04	22-Apr-31						310				
1931	4	1931.04	23-Apr-31						304				
1931	4	1931.04	24-Apr-31						298				
1931	4	1931.04	25-Apr-31						307				
1931	4	1931.04	26-Apr-31						319				
1931	4	1931.04	27-Apr-31						346				
1931	4	1931.04	28-Apr-31						358				
1931	4	1931.04	29-Apr-31						367				
1931	4	1931.04	30-Apr-31						370				
1931	5	1931.05	1-May-31						376				
1931	5	1931.05	2-May-31						376				
1931	5	1931.05	3-May-31						376				
1931	5	1931.05	4-May-31						385				
1931	5	1931.05	5-May-31						373				
1931	5	1931.05	6-May-31						361				
1931	5	1931.05	7-May-31						349				
1931	5	1931.05	8-May-31						340				
1931	5	1931.05	9-May-31						343				
1931	5	1931.05	10-May-31						370				
1931	5	1931.05	11-May-31						382				
1931	5	1931.05	12-May-31						382				
1931	5	1931.05	13-May-31						410				
1931	5	1931.05	14-May-31						444				
1931	5	1931.05	15-May-31						486				
1931	5	1931.05	16-May-31						472				
1931	5	1931.05	17-May-31						458				
1931	5	1931.05	18-May-31						483				
1931	5	1931.05	19-May-31						490				
1931	5	1931.05	20-May-31						466				
1931	5	1931.05	21-May-31						472				
1931	5	1931.05	22-May-31						444				
1931	5	1931.05	23-May-31						438				
1931	5	1931.05	24-May-31						441				
1931	5	1931.05	25-May-31						522				
1931	5	1931.05	26-May-31						562				
1931	5	1931.05	27-May-31						588				
1931	5	1931.05	28-May-31						584				
1931	5	1931.05	29-May-31						566				
1931	5	1931.05	30-May-31						530				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1931	5	1931.05	31-May-31						486				
1931	6	1931.06	1-Jun-31						448				
1931	6	1931.06	2-Jun-31						441				
1931	6	1931.06	3-Jun-31						424				
1931	6	1931.06	4-Jun-31						388				
1931	6	1931.06	5-Jun-31						385				
1931	6	1931.06	6-Jun-31						406				
1931	6	1931.06	7-Jun-31						406				
1931	6	1931.06	8-Jun-31						392				
1931	6	1931.06	9-Jun-31						402				
1931	6	1931.06	10-Jun-31						379				
1931	6	1931.06	11-Jun-31						370				
1931	6	1931.06	12-Jun-31						370				
1931	6	1931.06	13-Jun-31						373				
1931	6	1931.06	14-Jun-31						392				
1931	6	1931.06	15-Jun-31						420				
1931	6	1931.06	16-Jun-31						448				
1931	6	1931.06	17-Jun-31						427				
1931	6	1931.06	18-Jun-31						399				
1931	6	1931.06	19-Jun-31						388				
1931	6	1931.06	20-Jun-31						406				
1931	6	1931.06	21-Jun-31						434				
1931	6	1931.06	22-Jun-31						434				
1931	6	1931.06	23-Jun-31						406				
1931	6	1931.06	24-Jun-31						379				
1931	6	1931.06	25-Jun-31						379				
1931	6	1931.06	26-Jun-31						352				
1931	6	1931.06	27-Jun-31						340				
1931	6	1931.06	28-Jun-31						337				
1931	6	1931.06	29-Jun-31						334				
1931	6	1931.06	30-Jun-31						307				
1931	7	1931.07	1-Jul-31						298				
1931	7	1931.07	2-Jul-31						307				
1931	7	1931.07	3-Jul-31						301				
1931	7	1931.07	4-Jul-31						282				
1931	7	1931.07	5-Jul-31						278				
1931	7	1931.07	6-Jul-31						280				
1931	7	1931.07	7-Jul-31						270				
1931	7	1931.07	8-Jul-31						255				
1931	7	1931.07	9-Jul-31						235				
1931	7	1931.07	10-Jul-31						210				
1931	7	1931.07	11-Jul-31						228				
1931	7	1931.07	12-Jul-31						240				
1931	7	1931.07	13-Jul-31						235				
1931	7	1931.07	14-Jul-31						218				
1931	7	1931.07	15-Jul-31						208				
1931	7	1931.07	16-Jul-31						200				
1931	7	1931.07	17-Jul-31						216				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1931	8	1931.08	15-Aug-31						202				
1931	8	1931.08	16-Aug-31						230				
1931	8	1931.08	17-Aug-31						216				
1931	8	1931.08	18-Aug-31						218				
1931	8	1931.08	19-Aug-31						218				
1931	8	1931.08	20-Aug-31						202				
1931	8	1931.08	21-Aug-31						212				
1931	8	1931.08	22-Aug-31						214				
1931	8	1931.08	23-Aug-31						248				
1931	8	1931.08	24-Aug-31						275				
1931	8	1931.08	25-Aug-31						238				
1931	8	1931.08	26-Aug-31						222				
1931	8	1931.08	27-Aug-31						222				
1931	8	1931.08	28-Aug-31						212				
1931	8	1931.08	29-Aug-31						218				
1931	8	1931.08	30-Aug-31						235				
1931	8	1931.08	31-Aug-31						275				
1931	9	1931.09	1-Sep-31						275				
1931	9	1931.09	2-Sep-31						268				
1931	9	1931.09	3-Sep-31						270				
1931	9	1931.09	4-Sep-31						290				
1931	9	1931.09	5-Sep-31						301				
1931	9	1931.09	6-Sep-31						304				
1931	9	1931.09	7-Sep-31						298				
1931	9	1931.09	8-Sep-31						268				
1931	9	1931.09	9-Sep-31						288				
1931	9	1931.09	10-Sep-31						285				
1931	9	1931.09	11-Sep-31						270				
1931	9	1931.09	12-Sep-31						295				
1931	9	1931.09	13-Sep-31						325				
1931	9	1931.09	14-Sep-31						343				
1931	9	1931.09	15-Sep-31						337				
1931	9	1931.09	16-Sep-31						343				
1931	9	1931.09	17-Sep-31						343				
1931	9	1931.09	18-Sep-31						340				
1931	9	1931.09	19-Sep-31						352				
1931	9	1931.09	20-Sep-31						355				
1931	9	1931.09	21-Sep-31						349				
1931	9	1931.09	22-Sep-31						337				
1931	9	1931.09	23-Sep-31						343				
1931	9	1931.09	24-Sep-31						337				
1931	9	1931.09	25-Sep-31						337				
1931	9	1931.09	26-Sep-31						331				
1931	9	1931.09	27-Sep-31						346				
1931	9	1931.09	28-Sep-31						355				
1931	9	1931.09	29-Sep-31						346				
1931	9	1931.09	30-Sep-31						355				
1931	10	1931.10	1-Oct-31						355				
1931	10	1931.10	2-Oct-31						337				
1931	10	1931.10	3-Oct-31						337				
1931	10	1931.10	4-Oct-31						343				
1931	10	1931.10	5-Oct-31						361				
1931	10	1931.10	6-Oct-31						367				
1931	10	1931.10	7-Oct-31						370				
1931	10	1931.10	8-Oct-31						427				
1931	10	1931.10	9-Oct-31						462				
1931	10	1931.10	10-Oct-31						483				
1931	10	1931.10	11-Oct-31						490				
1931	10	1931.10	12-Oct-31						480				
1931	10	1931.10	13-Oct-31						469				
1931	10	1931.10	14-Oct-31						466				
1931	10	1931.10	15-Oct-31						472				
1931	10	1931.10	16-Oct-31						466				
1931	10	1931.10	17-Oct-31						462				
1931	10	1931.10	18-Oct-31						472				
1931	10	1931.10	19-Oct-31						476				
1931	10	1931.10	20-Oct-31						472				
1931	10	1931.10	21-Oct-31						480				
1931	10	1931.10	22-Oct-31						506				
1931	10	1931.10	23-Oct-31						544				
1931	10	1931.10	24-Oct-31						552				
1931	10	1931.10	25-Oct-31						575				
1931	10	1931.10	26-Oct-31						588				
1931	10	1931.10	27-Oct-31						593				
1931	10	1931.10	28-Oct-31						593				
1931	10	1931.10	29-Oct-31						602				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1931	10	1931.10	30-Oct-31						602				
1931	10	1931.10	31-Oct-31						602				
1931	11	1931.11	1-Nov-31						588				
1931	11	1931.11	2-Nov-31						580				
1931	11	1931.11	3-Nov-31						539				
1931	11	1931.11	4-Nov-31						530				
1931	11	1931.11	5-Nov-31						562				
1931	11	1931.11	6-Nov-31						552				
1931	11	1931.11	7-Nov-31						539				
1931	11	1931.11	8-Nov-31						566				
1931	11	1931.11	9-Nov-31						566				
1931	11	1931.11	10-Nov-31						575				
1931	11	1931.11	11-Nov-31						562				
1931	11	1931.11	12-Nov-31						566				
1931	11	1931.11	13-Nov-31						588				
1931	11	1931.11	14-Nov-31						593				
1931	11	1931.11	15-Nov-31						638				
1931	11	1931.11	16-Nov-31						634				
1931	11	1931.11	17-Nov-31						624				
1931	11	1931.11	18-Nov-31						598				
1931	11	1931.11	19-Nov-31						624				
1931	11	1931.11	20-Nov-31						715				
1931	11	1931.11	21-Nov-31						700				
1931	11	1931.11	22-Nov-31						680				
1931	11	1931.11	23-Nov-31						740				
1931	11	1931.11	24-Nov-31						715				
1931	11	1931.11	25-Nov-31						790				
1931	11	1931.11	26-Nov-31						920				
1931	11	1931.11	27-Nov-31						840				
1931	11	1931.11	28-Nov-31						765				
1931	11	1931.11	29-Nov-31						695				
1931	11	1931.11	30-Nov-31						700				
1931	12	1931.12	1-Dec-31						685				
1931	12	1931.12	2-Dec-31						720				
1931	12	1931.12	3-Dec-31						875				
1931	12	1931.12	4-Dec-31						902				
1931	12	1931.12	5-Dec-31						902				
1931	12	1931.12	6-Dec-31						875				
1931	12	1931.12	7-Dec-31						848				
1931	12	1931.12	8-Dec-31						795				
1931	12	1931.12	9-Dec-31						795				
1931	12	1931.12	10-Dec-31						902				
1931	12	1931.12	11-Dec-31						875				
1931	12	1931.12	12-Dec-31						930				
1931	12	1931.12	13-Dec-31						1010				
1931	12	1931.12	14-Dec-31						1010				
1931	12	1931.12	15-Dec-31						902				
1931	12	1931.12	16-Dec-31						875				
1931	12	1931.12	17-Dec-31						985				
1931	12	1931.12	18-Dec-31						1120				
1931	12	1931.12	19-Dec-31						1040				
1931	12	1931.12	20-Dec-31						958				
1931	12	1931.12	21-Dec-31						902				
1931	12	1931.12	22-Dec-31						848				
1931	12	1931.12	23-Dec-31						820				
1931	12	1931.12	24-Dec-31						875				
1931	12	1931.12	25-Dec-31						958				
1931	12	1931.12	26-Dec-31						1270				
1931	12	1931.12	27-Dec-31						1450				
1931	12	1931.12	28-Dec-31						1990				
1931	12	1931.12	29-Dec-31						3470				
1931	12	1931.12	30-Dec-31						4180				
1931	12	1931.12	31-Dec-31						4020				
1932	1	1932.01	1-Jan-32						4100				
1932	1	1932.01	2-Jan-32						4860				
1932	1	1932.01	3-Jan-32						5040				
1932	1	1932.01	4-Jan-32						4770				
1932	1	1932.01	5-Jan-32						4420				
1932	1	1932.01	6-Jan-32						4100				
1932	1	1932.01	7-Jan-32						4100				
1932	1	1932.01	8-Jan-32						4180				
1932	1	1932.01	9-Jan-32						3940				
1932	1	1932.01	10-Jan-32						3700				
1932	1	1932.01	11-Jan-32						3330				
1932	1	1932.01	12-Jan-32						3120				
1932	1	1932.01	13-Jan-32						3050				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1932	1	1932.01	14-Jan-32						2700				
1932	1	1932.01	15-Jan-32						2700				
1932	1	1932.01	16-Jan-32						2770				
1932	1	1932.01	17-Jan-32						2630				
1932	1	1932.01	18-Jan-32						2700				
1932	1	1932.01	19-Jan-32						2770				
1932	1	1932.01	20-Jan-32						2840				
1932	1	1932.01	21-Jan-32						2910				
1932	1	1932.01	22-Jan-32						2980				
1932	1	1932.01	23-Jan-32						3050				
1932	1	1932.01	24-Jan-32						2980				
1932	1	1932.01	25-Jan-32						2910				
1932	1	1932.01	26-Jan-32						2840				
1932	1	1932.01	27-Jan-32						2770				
1932	1	1932.01	28-Jan-32						2700				
1932	1	1932.01	29-Jan-32						2840				
1932	1	1932.01	30-Jan-32						2910				
1932	1	1932.01	31-Jan-32						2840				
1932	2	1932.02	1-Feb-32						3700				
1932	2	1932.02	2-Feb-32						5040				
1932	2	1932.02	3-Feb-32						5310				
1932	2	1932.02	4-Feb-32						5310				
1932	2	1932.02	5-Feb-32						5580				
1932	2	1932.02	6-Feb-32						6030				
1932	2	1932.02	7-Feb-32						7800				
1932	2	1932.02	8-Feb-32						11300				
1932	2	1932.02	9-Feb-32						12700				
1932	2	1932.02	10-Feb-32						14600				
1932	2	1932.02	11-Feb-32						15600				
1932	2	1932.02	12-Feb-32						15900				
1932	2	1932.02	13-Feb-32						16100				
1932	2	1932.02	14-Feb-32						16200				
1932	2	1932.02	15-Feb-32						16600				
1932	2	1932.02	16-Feb-32						16700				
1932	2	1932.02	17-Feb-32						16100				
1932	2	1932.02	18-Feb-32						15900				
1932	2	1932.02	19-Feb-32						15600				
1932	2	1932.02	20-Feb-32						14700				
1932	2	1932.02	21-Feb-32						13500				
1932	2	1932.02	22-Feb-32						12000				
1932	2	1932.02	23-Feb-32						9140				
1932	2	1932.02	24-Feb-32						7300				
1932	2	1932.02	25-Feb-32						6900				
1932	2	1932.02	26-Feb-32						6400				
1932	2	1932.02	27-Feb-32						6400				
1932	2	1932.02	28-Feb-32						6600				
1932	2	1932.02	29-Feb-32						7200				
1932	3	1932.03	1-Mar-32						7400				
1932	3	1932.03	2-Mar-32						7500				
1932	3	1932.03	3-Mar-32						7910				
1932	3	1932.03	4-Mar-32						8020				
1932	3	1932.03	5-Mar-32						8020				
1932	3	1932.03	6-Mar-32						7200				
1932	3	1932.03	7-Mar-32						6400				
1932	3	1932.03	8-Mar-32						5490				
1932	3	1932.03	9-Mar-32						5130				
1932	3	1932.03	10-Mar-32						5130				
1932	3	1932.03	11-Mar-32						5220				
1932	3	1932.03	12-Mar-32						4950				
1932	3	1932.03	13-Mar-32						4420				
1932	3	1932.03	14-Mar-32						4100				
1932	3	1932.03	15-Mar-32						4180				
1932	3	1932.03	16-Mar-32						4590				
1932	3	1932.03	17-Mar-32						4590				
1932	3	1932.03	18-Mar-32						4340				
1932	3	1932.03	19-Mar-32						4100				
1932	3	1932.03	20-Mar-32						4100				
1932	3	1932.03	21-Mar-32						4020				
1932	3	1932.03	22-Mar-32						4020				
1932	3	1932.03	23-Mar-32						4100				
1932	3	1932.03	24-Mar-32						4020				
1932	3	1932.03	25-Mar-32						3620				
1932	3	1932.03	26-Mar-32						3470				
1932	3	1932.03	27-Mar-32						3330				
1932	3	1932.03	28-Mar-32						3190				
1932	3	1932.03	29-Mar-32						2980				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1932	3	1932.03	30-Mar-32						2980				
1932	3	1932.03	31-Mar-32						2980				
1932	4	1932.04	1-Apr-32						2840				
1932	4	1932.04	2-Apr-32						2770				
1932	4	1932.04	3-Apr-32						2770				
1932	4	1932.04	4-Apr-32						2980				
1932	4	1932.04	5-Apr-32						3050				
1932	4	1932.04	6-Apr-32						3330				
1932	4	1932.04	7-Apr-32						3620				
1932	4	1932.04	8-Apr-32						3700				
1932	4	1932.04	9-Apr-32						4180				
1932	4	1932.04	10-Apr-32						4420				
1932	4	1932.04	11-Apr-32						4680				
1932	4	1932.04	12-Apr-32						4950				
1932	4	1932.04	13-Apr-32						5220				
1932	4	1932.04	14-Apr-32						5400				
1932	4	1932.04	15-Apr-32						5310				
1932	4	1932.04	16-Apr-32						5310				
1932	4	1932.04	17-Apr-32						5670				
1932	4	1932.04	18-Apr-32						6030				
1932	4	1932.04	19-Apr-32						6030				
1932	4	1932.04	20-Apr-32						6120				
1932	4	1932.04	21-Apr-32						6400				
1932	4	1932.04	22-Apr-32						6900				
1932	4	1932.04	23-Apr-32						6800				
1932	4	1932.04	24-Apr-32						6210				
1932	4	1932.04	25-Apr-32						5850				
1932	4	1932.04	26-Apr-32						5400				
1932	4	1932.04	27-Apr-32						5040				
1932	4	1932.04	28-Apr-32						4680				
1932	4	1932.04	29-Apr-32						4500				
1932	4	1932.04	30-Apr-32						4260				
1932	5	1932.05	1-May-32						4340				
1932	5	1932.05	2-May-32						4680				
1932	5	1932.05	3-May-32						5130				
1932	5	1932.05	4-May-32						5670				
1932	5	1932.05	5-May-32						5670				
1932	5	1932.05	6-May-32						6210				
1932	5	1932.05	7-May-32						7100				
1932	5	1932.05	8-May-32						7700				
1932	5	1932.05	9-May-32						8460				
1932	5	1932.05	10-May-32						9020				
1932	5	1932.05	11-May-32						9260				
1932	5	1932.05	12-May-32						9260				
1932	5	1932.05	13-May-32						9500				
1932	5	1932.05	14-May-32						10800				
1932	5	1932.05	15-May-32						12200				
1932	5	1932.05	16-May-32						13700				
1932	5	1932.05	17-May-32						14700				
1932	5	1932.05	18-May-32						15400				
1932	5	1932.05	19-May-32						15800				
1932	5	1932.05	20-May-32						15900				
1932	5	1932.05	21-May-32						15800				
1932	5	1932.05	22-May-32						15300				
1932	5	1932.05	23-May-32						15000				
1932	5	1932.05	24-May-32						14700				
1932	5	1932.05	25-May-32						14100				
1932	5	1932.05	26-May-32						14000				
1932	5	1932.05	27-May-32						14200				
1932	5	1932.05	28-May-32						14800				
1932	5	1932.05	29-May-32						15800				
1932	5	1932.05	30-May-32						17200				
1932	5	1932.05	31-May-32						18000				
1932	6	1932.06	1-Jun-32						18000				
1932	6	1932.06	2-Jun-32						16900				
1932	6	1932.06	3-Jun-32						15300				
1932	6	1932.06	4-Jun-32						13400				
1932	6	1932.06	5-Jun-32						12200				
1932	6	1932.06	6-Jun-32						11700				
1932	6	1932.06	7-Jun-32						11400				
1932	6	1932.06	8-Jun-32						11700				
1932	6	1932.06	9-Jun-32						11500				
1932	6	1932.06	10-Jun-32						11300				
1932	6	1932.06	11-Jun-32						12200				
1932	6	1932.06	12-Jun-32						13800				
1932	6	1932.06	13-Jun-32						15200				

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1932	6	1932.06	14-Jun-32						16100				
1932	6	1932.06	15-Jun-32						16900				
1932	6	1932.06	16-Jun-32						17400				
1932	6	1932.06	17-Jun-32						17400				
1932	6	1932.06	18-Jun-32						16600				
1932	6	1932.06	19-Jun-32						15800				
1932	6	1932.06	20-Jun-32						15400				
1932	6	1932.06	21-Jun-32						15600				
1932	6	1932.06	22-Jun-32						15900				
1932	6	1932.06	23-Jun-32						16900				
1932	6	1932.06	24-Jun-32						17700				
1932	6	1932.06	25-Jun-32						17500				
1932	6	1932.06	26-Jun-32						15800				
1932	6	1932.06	27-Jun-32						15300				
1932	6	1932.06	28-Jun-32						15900				
1932	6	1932.06	29-Jun-32						16100				
1932	6	1932.06	30-Jun-32						16100				
1932	7	1932.07	1-Jul-32						15800				
1932	7	1932.07	2-Jul-32						13800				
1932	7	1932.07	3-Jul-32						12200				
1932	7	1932.07	4-Jul-32						11400				
1932	7	1932.07	5-Jul-32						10900				
1932	7	1932.07	6-Jul-32						9840				
1932	7	1932.07	7-Jul-32						9190				
1932	7	1932.07	8-Jul-32						8560				
1932	7	1932.07	9-Jul-32						8440				
1932	7	1932.07	10-Jul-32						7360				
1932	7	1932.07	11-Jul-32						6690				
1932	7	1932.07	12-Jul-32						6060				
1932	7	1932.07	13-Jul-32						5760				
1932	7	1932.07	14-Jul-32						5360				
1932	7	1932.07	15-Jul-32						4960				
1932	7	1932.07	16-Jul-32						4690				
1932	7	1932.07	17-Jul-32						4330				
1932	7	1932.07	18-Jul-32						3910				
1932	7	1932.07	19-Jul-32						3350				
1932	7	1932.07	20-Jul-32						3030				
1932	7	1932.07	21-Jul-32						2800				
1932	7	1932.07	22-Jul-32						2660				
1932	7	1932.07	23-Jul-32						2520				
1932	7	1932.07	24-Jul-32						2450				
1932	7	1932.07	25-Jul-32						2380				
1932	7	1932.07	26-Jul-32						2310				
1932	7	1932.07	27-Jul-32						2170				
1932	7	1932.07	28-Jul-32						1890				
1932	7	1932.07	29-Jul-32						1710				
1932	7	1932.07	30-Jul-32						1590				
1932	7	1932.07	31-Jul-32						1470				
1932	8	1932.08	1-Aug-32						1470				
1932	8	1932.08	2-Aug-32						1410				
1932	8	1932.08	3-Aug-32						1380				
1932	8	1932.08	4-Aug-32						1330				
1932	8	1932.08	5-Aug-32						1270				
1932	8	1932.08	6-Aug-32						1240				
1932	8	1932.08	7-Aug-32						1220				
1932	8	1932.08	8-Aug-32						1190				
1932	8	1932.08	9-Aug-32						1220				
1932	8	1932.08	10-Aug-32						1190				
1932	8	1932.08	11-Aug-32						1190				
1932	8	1932.08	12-Aug-32						1160				
1932	8	1932.08	13-Aug-32						1140				
1932	8	1932.08	14-Aug-32						1140				
1932	8	1932.08	15-Aug-32						1190				
1932	8	1932.08	16-Aug-32						1190				
1932	8	1932.08	17-Aug-32						1220				
1932	8	1932.08	18-Aug-32						1160				
1932	8	1932.08	19-Aug-32						1140				
1932	8	1932.08	20-Aug-32						1090				
1932	8	1932.08	21-Aug-32						1060				
1932	8	1932.08	22-Aug-32						1090				
1932	8	1932.08	23-Aug-32						1090				
1932	8	1932.08	24-Aug-32						1090				
1932	8	1932.08	25-Aug-32						1040				
1932	8	1932.08	26-Aug-32						1020				
1932	8	1932.08	27-Aug-32						1020				
1932	8	1932.08	28-Aug-32						1020				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1932	8	1932.08 29-Aug-32							1040				
1932	8	1932.08 30-Aug-32							1040				
1932	8	1932.08 31-Aug-32							1040				
1932	9	1932.09 1-Sep-32							1020				
1932	9	1932.09 2-Sep-32							1020				
1932	9	1932.09 3-Sep-32							1020				
1932	9	1932.09 4-Sep-32							1040				
1932	9	1932.09 5-Sep-32							1060				
1932	9	1932.09 6-Sep-32							1060				
1932	9	1932.09 7-Sep-32							1020				
1932	9	1932.09 8-Sep-32							1020				
1932	9	1932.09 9-Sep-32							990				
1932	9	1932.09 10-Sep-32							965				
1932	9	1932.09 11-Sep-32							965				
1932	9	1932.09 12-Sep-32							1040				
1932	9	1932.09 13-Sep-32							1090				
1932	9	1932.09 14-Sep-32							1060				
1932	9	1932.09 15-Sep-32							1060				
1932	9	1932.09 16-Sep-32							1020				
1932	9	1932.09 17-Sep-32							1060				
1932	9	1932.09 18-Sep-32							1120				
1932	9	1932.09 19-Sep-32							1160				
1932	9	1932.09 20-Sep-32							1160				
1932	9	1932.09 21-Sep-32							1140				
1932	9	1932.09 22-Sep-32							1140				
1932	9	1932.09 23-Sep-32							1090				
1932	9	1932.09 24-Sep-32							1090				
1932	9	1932.09 25-Sep-32							1090				
1932	9	1932.09 26-Sep-32							1090				
1932	9	1932.09 27-Sep-32							1120				
1932	9	1932.09 28-Sep-32							1090				
1932	9	1932.09 29-Sep-32							1090				
1932	9	1932.09 30-Sep-32							1120				
1932	10	1932.10 1-Oct-32							1120				
1932	10	1932.10 2-Oct-32							1120				
1932	10	1932.10 3-Oct-32							1180				
1932	10	1932.10 4-Oct-32							1210				
1932	10	1932.10 5-Oct-32							1210				
1932	10	1932.10 6-Oct-32							1210				
1932	10	1932.10 7-Oct-32							1210				
1932	10	1932.10 8-Oct-32							1210				
1932	10	1932.10 9-Oct-32							1240				
1932	10	1932.10 10-Oct-32							1240				
1932	10	1932.10 11-Oct-32							1240				
1932	10	1932.10 12-Oct-32							1210				
1932	10	1932.10 13-Oct-32							1180				
1932	10	1932.10 14-Oct-32							1210				
1932	10	1932.10 15-Oct-32							1210				
1932	10	1932.10 16-Oct-32							1240				
1932	10	1932.10 17-Oct-32							1270				
1932	10	1932.10 18-Oct-32							1300				
1932	10	1932.10 19-Oct-32							1810				
1932	10	1932.10 20-Oct-32							2050				
1932	10	1932.10 21-Oct-32							2050				
1932	10	1932.10 22-Oct-32							2110				
1932	10	1932.10 23-Oct-32							2110				
1932	10	1932.10 24-Oct-32							2180				
1932	10	1932.10 25-Oct-32							2440				
1932	10	1932.10 26-Oct-32							2500				
1932	10	1932.10 27-Oct-32							2560				
1932	10	1932.10 28-Oct-32							2560				
1932	10	1932.10 29-Oct-32							2560				
1932	10	1932.10 30-Oct-32							2560				
1932	10	1932.10 31-Oct-32							2500				
1932	11	1932.11 1-Nov-32							2500				
1932	11	1932.11 2-Nov-32							2370				
1932	11	1932.11 3-Nov-32							2110				
1932	11	1932.11 4-Nov-32							2050				
1932	11	1932.11 5-Nov-32							1990				
1932	11	1932.11 6-Nov-32							1990				
1932	11	1932.11 7-Nov-32							1990				
1932	11	1932.11 8-Nov-32							2050				
1932	11	1932.11 9-Nov-32							2370				
1932	11	1932.11 10-Nov-32							2500				
1932	11	1932.11 11-Nov-32							2500				
1932	11	1932.11 12-Nov-32							2370				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1932	11	1932.11 13-Nov-32							1870				
1932	11	1932.11 14-Nov-32							1810				
1932	11	1932.11 15-Nov-32							1750				
1932	11	1932.11 16-Nov-32							1750				
1932	11	1932.11 17-Nov-32							1690				
1932	11	1932.11 18-Nov-32							1660				
1932	11	1932.11 19-Nov-32							1690				
1932	11	1932.11 20-Nov-32							1660				
1932	11	1932.11 21-Nov-32							1660				
1932	11	1932.11 22-Nov-32							1630				
1932	11	1932.11 23-Nov-32							1630				
1932	11	1932.11 24-Nov-32							1630				
1932	11	1932.11 25-Nov-32							1630				
1932	11	1932.11 26-Nov-32							1630				
1932	11	1932.11 27-Nov-32							1600				
1932	11	1932.11 28-Nov-32							1630				
1932	11	1932.11 29-Nov-32							1600				
1932	11	1932.11 30-Nov-32							1600				
1932	12	1932.12 1-Dec-32							1630				
1932	12	1932.12 2-Dec-32							1630				
1932	12	1932.12 3-Dec-32							1660				
1932	12	1932.12 4-Dec-32							1690				
1932	12	1932.12 5-Dec-32							1810				
1932	12	1932.12 6-Dec-32							1750				
1932	12	1932.12 7-Dec-32							1750				
1932	12	1932.12 8-Dec-32							1870				
1932	12	1932.12 9-Dec-32							1990				
1932	12	1932.12 10-Dec-32							1870				
1932	12	1932.12 11-Dec-32							1870				
1932	12	1932.12 12-Dec-32							1810				
1932	12	1932.12 13-Dec-32							1750				
1932	12	1932.12 14-Dec-32							1750				
1932	12	1932.12 15-Dec-32							1750				
1932	12	1932.12 16-Dec-32							1690				
1932	12	1932.12 17-Dec-32							1690				
1932	12	1932.12 18-Dec-32							1750				
1932	12	1932.12 19-Dec-32							1810				
1932	12	1932.12 20-Dec-32							1810				
1932	12	1932.12 21-Dec-32							1870				
1932	12	1932.12 22-Dec-32							1990				
1932	12	1932.12 23-Dec-32							2050				
1932	12	1932.12 24-Dec-32							2050				
1932	12	1932.12 25-Dec-32							2110				
1932	12	1932.12 26-Dec-32							2110				
1932	12	1932.12 27-Dec-32							2050				
1932	12	1932.12 28-Dec-32							2050				
1932	12	1932.12 29-Dec-32							2050				
1932	12	1932.12 30-Dec-32							2180				
1932	12	1932.12 31-Dec-32							2110				
1933	1	1933.01 1-Jan-33							2110				
1933	1	1933.01 2-Jan-33							2050				
1933	1	1933.01 3-Jan-33							1930				
1933	1	1933.01 4-Jan-33							1930				
1933	1	1933.01 5-Jan-33							1930				
1933	1	1933.01 6-Jan-33							1990				
1933	1	1933.01 7-Jan-33							1990				
1933	1	1933.01 8-Jan-33							1930				
1933	1	1933.01 9-Jan-33							1870				
1933	1	1933.01 10-Jan-33							1870				
1933	1	1933.01 11-Jan-33							1870				
1933	1	1933.01 12-Jan-33							1930				
1933	1	1933.01 13-Jan-33							1870				
1933	1	1933.01 14-Jan-33							1810				
1933	1	1933.01 15-Jan-33							1750				
1933	1	1933.01 16-Jan-33							1690				
1933	1	1933.01 17-Jan-33							1660				
1933	1	1933.01 18-Jan-33							1660				
1933	1	1933.01 19-Jan-33							1690				
1933	1	1933.01 20-Jan-33							1750				
1933	1	1933.01 21-Jan-33							1810				
1933	1	1933.01 22-Jan-33							1870				
1933	1	1933.01 23-Jan-33							1930				
1933	1	1933.01 24-Jan-33							1990				
1933	1	1933.01 25-Jan-33							2050				
1933	1	1933.01 26-Jan-33							2180				
1933	1	1933.01 27-Jan-33							2300				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1933	1	1933.01	28-Jan-33						2500				
1933	1	1933.01	29-Jan-33						2630				
1933	1	1933.01	30-Jan-33						2770				
1933	1	1933.01	31-Jan-33						2910				
1933	2	1933.02	1-Feb-33						3050				
1933	2	1933.02	2-Feb-33						3050				
1933	2	1933.02	3-Feb-33						2980				
1933	2	1933.02	4-Feb-33						2910				
1933	2	1933.02	5-Feb-33						2910				
1933	2	1933.02	6-Feb-33						2980				
1933	2	1933.02	7-Feb-33						3050				
1933	2	1933.02	8-Feb-33						3050				
1933	2	1933.02	9-Feb-33						3190				
1933	2	1933.02	10-Feb-33						3190				
1933	2	1933.02	11-Feb-33						3190				
1933	2	1933.02	12-Feb-33						3050				
1933	2	1933.02	13-Feb-33						2980				
1933	2	1933.02	14-Feb-33						2910				
1933	2	1933.02	15-Feb-33						2980				
1933	2	1933.02	16-Feb-33						3050				
1933	2	1933.02	17-Feb-33						2980				
1933	2	1933.02	18-Feb-33						3190				
1933	2	1933.02	19-Feb-33						3330				
1933	2	1933.02	20-Feb-33						3260				
1933	2	1933.02	21-Feb-33						2910				
1933	2	1933.02	22-Feb-33						3050				
1933	2	1933.02	23-Feb-33						3120				
1933	2	1933.02	24-Feb-33						2910				
1933	2	1933.02	25-Feb-33						2770				
1933	2	1933.02	26-Feb-33						2770				
1933	2	1933.02	27-Feb-33						2770				
1933	2	1933.02	28-Feb-33						2560				
1933	3	1933.03	1-Mar-33						2560				
1933	3	1933.03	2-Mar-33						2560				
1933	3	1933.03	3-Mar-33						2560				
1933	3	1933.03	4-Mar-33						2440				
1933	3	1933.03	5-Mar-33						2300				
1933	3	1933.03	6-Mar-33						2240				
1933	3	1933.03	7-Mar-33						2050				
1933	3	1933.03	8-Mar-33						1870				
1933	3	1933.03	9-Mar-33						1870				
1933	3	1933.03	10-Mar-33						1750				
1933	3	1933.03	11-Mar-33						1660				
1933	3	1933.03	12-Mar-33						1570				
1933	3	1933.03	13-Mar-33						1570				
1933	3	1933.03	14-Mar-33						1540				
1933	3	1933.03	15-Mar-33						1420				
1933	3	1933.03	16-Mar-33						1390				
1933	3	1933.03	17-Mar-33						1600				
1933	3	1933.03	18-Mar-33						1660				
1933	3	1933.03	19-Mar-33						1690				
1933	3	1933.03	20-Mar-33						1750				
1933	3	1933.03	21-Mar-33						1630				
1933	3	1933.03	22-Mar-33						1480				
1933	3	1933.03	23-Mar-33						1450				
1933	3	1933.03	24-Mar-33						1450				
1933	3	1933.03	25-Mar-33						1390				
1933	3	1933.03	26-Mar-33						1360				
1933	3	1933.03	27-Mar-33						1390				
1933	3	1933.03	28-Mar-33						1390				
1933	3	1933.03	29-Mar-33						1420				
1933	3	1933.03	30-Mar-33						1450				
1933	3	1933.03	31-Mar-33						1390				
1933	4	1933.04	1-Apr-33						1360				
1933	4	1933.04	2-Apr-33						1360				
1933	4	1933.04	3-Apr-33						1330				
1933	4	1933.04	4-Apr-33						1270				
1933	4	1933.04	5-Apr-33						1210				
1933	4	1933.04	6-Apr-33						1120				
1933	4	1933.04	7-Apr-33						1120				
1933	4	1933.04	8-Apr-33						1120				
1933	4	1933.04	9-Apr-33						1150				
1933	4	1933.04	10-Apr-33						1120				
1933	4	1933.04	11-Apr-33						1150				
1933	4	1933.04	12-Apr-33						1150				
1933	4	1933.04	13-Apr-33						1070				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1933	4	1933.04	14-Apr-33						1040				
1933	4	1933.04	15-Apr-33						1040				
1933	4	1933.04	16-Apr-33						1070				
1933	4	1933.04	17-Apr-33						1120				
1933	4	1933.04	18-Apr-33						1180				
1933	4	1933.04	19-Apr-33						1150				
1933	4	1933.04	20-Apr-33						1120				
1933	4	1933.04	21-Apr-33						1100				
1933	4	1933.04	22-Apr-33						1100				
1933	4	1933.04	23-Apr-33						1100				
1933	4	1933.04	24-Apr-33						1180				
1933	4	1933.04	25-Apr-33						1180				
1933	4	1933.04	26-Apr-33						1210				
1933	4	1933.04	27-Apr-33						1150				
1933	4	1933.04	28-Apr-33						1040				
1933	4	1933.04	29-Apr-33						1040				
1933	4	1933.04	30-Apr-33						1070				
1933	5	1933.05	1-May-33						1120				
1933	5	1933.05	2-May-33						1150				
1933	5	1933.05	3-May-33						1180				
1933	5	1933.05	4-May-33						1180				
1933	5	1933.05	5-May-33						1210				
1933	5	1933.05	6-May-33						1270				
1933	5	1933.05	7-May-33						1420				
1933	5	1933.05	8-May-33						1690				
1933	5	1933.05	9-May-33						1660				
1933	5	1933.05	10-May-33						1630				
1933	5	1933.05	11-May-33						1570				
1933	5	1933.05	12-May-33						1540				
1933	5	1933.05	13-May-33						1510				
1933	5	1933.05	14-May-33						1510				
1933	5	1933.05	15-May-33						1480				
1933	5	1933.05	16-May-33						1450				
1933	5	1933.05	17-May-33						1360				
1933	5	1933.05	18-May-33						1270				
1933	5	1933.05	19-May-33						1210				
1933	5	1933.05	20-May-33						1180				
1933	5	1933.05	21-May-33						1180				
1933	5	1933.05	22-May-33						1300				
1933	5	1933.05	23-May-33						1330				
1933	5	1933.05	24-May-33						1270				
1933	5	1933.05	25-May-33						1210				
1933	5	1933.05	26-May-33						1180				
1933	5	1933.05	27-May-33						1150				
1933	5	1933.05	28-May-33						1120				
1933	5	1933.05	29-May-33						1210				
1933	5	1933.05	30-May-33						1300				
1933	5	1933.05	31-May-33						3050				
1933	6	1933.06	1-Jun-33						3940				
1933	6	1933.06	2-Jun-33						4420				
1933	6	1933.06	3-Jun-33						5040				
1933	6	1933.06	4-Jun-33						5580				
1933	6	1933.06	5-Jun-33						5760				
1933	6	1933.06	6-Jun-33						5100				
1933	6	1933.06	7-Jun-33						4440				
1933	6	1933.06	8-Jun-33						5200				
1933	6	1933.06	9-Jun-33						5900				
1933	6	1933.06	10-Jun-33						6000				
1933	6	1933.06	11-Jun-33						5900				
1933	6	1933.06	12-Jun-33						5800				
1933	6	1933.06	13-Jun-33						5500				
1933	6	1933.06	14-Jun-33						5600				
1933	6	1933.06	15-Jun-33						5900				
1933	6	1933.06	16-Jun-33						7700				
1933	6	1933.06	17-Jun-33						8240				
1933	6	1933.06	18-Jun-33						7300				
1933	6	1933.06	19-Jun-33						7500				
1933	6	1933.06	20-Jun-33						7200				
1933	6	1933.06	21-Jun-33						6300				
1933	6	1933.06	22-Jun-33						5300				
1933	6	1933.06	23-Jun-33						5200				
1933	6	1933.06	24-Jun-33						5000				
1933	6	1933.06	25-Jun-33						4620				
1933	6	1933.06	26-Jun-33						3580				
1933	6	1933.06	27-Jun-33						3000				
1933	6	1933.06	28-Jun-33						2930				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1933	6	1933.06	29-Jun-33						2720				
1933	6	1933.06	30-Jun-33						2580				
1933	7	1933.07	1-Jul-33						2370				
1933	7	1933.07	2-Jul-33						2160				
1933	7	1933.07	3-Jul-33						2030				
1933	7	1933.07	4-Jul-33						1850				
1933	7	1933.07	5-Jul-33						1760				
1933	7	1933.07	6-Jul-33						1610				
1933	7	1933.07	7-Jul-33						1490				
1933	7	1933.07	8-Jul-33						1430				
1933	7	1933.07	9-Jul-33						1370				
1933	7	1933.07	10-Jul-33						1340				
1933	7	1933.07	11-Jul-33						1280				
1933	7	1933.07	12-Jul-33						1160				
1933	7	1933.07	13-Jul-33						1050				
1933	7	1933.07	14-Jul-33						970				
1933	7	1933.07	15-Jul-33						915				
1933	7	1933.07	16-Jul-33						915				
1933	7	1933.07	17-Jul-33						888				
1933	7	1933.07	18-Jul-33						860				
1933	7	1933.07	19-Jul-33						805				
1933	7	1933.07	20-Jul-33						778				
1933	7	1933.07	21-Jul-33						725				
1933	7	1933.07	22-Jul-33						750				
1933	7	1933.07	23-Jul-33						725				
1933	7	1933.07	24-Jul-33						725				
1933	7	1933.07	25-Jul-33						725				
1933	7	1933.07	26-Jul-33						700				
1933	7	1933.07	27-Jul-33						675				
1933	7	1933.07	28-Jul-33						641				
1933	7	1933.07	29-Jul-33						610				
1933	7	1933.07	30-Jul-33						596				
1933	7	1933.07	31-Jul-33						618				
1933	8	1933.08	1-Aug-33						641				
1933	8	1933.08	2-Aug-33						632				
1933	8	1933.08	3-Aug-33						646				
1933	8	1933.08	4-Aug-33						675				
1933	8	1933.08	5-Aug-33						675				
1933	8	1933.08	6-Aug-33						725				
1933	8	1933.08	7-Aug-33						725				
1933	8	1933.08	8-Aug-33						700				
1933	8	1933.08	9-Aug-33						675				
1933	8	1933.08	10-Aug-33						646				
1933	8	1933.08	11-Aug-33						632				
1933	8	1933.08	12-Aug-33						623				
1933	8	1933.08	13-Aug-33						614				
1933	8	1933.08	14-Aug-33						623				
1933	8	1933.08	15-Aug-33						600				
1933	8	1933.08	16-Aug-33						578				
1933	8	1933.08	17-Aug-33						569				
1933	8	1933.08	18-Aug-33						569				
1933	8	1933.08	19-Aug-33						614				
1933	8	1933.08	20-Aug-33						725				
1933	8	1933.08	21-Aug-33						650				
1933	8	1933.08	22-Aug-33						675				
1933	8	1933.08	23-Aug-33						700				
1933	8	1933.08	24-Aug-33						700				
1933	8	1933.08	25-Aug-33						720				
1933	8	1933.08	26-Aug-33						685				
1933	8	1933.08	27-Aug-33						675				
1933	8	1933.08	28-Aug-33						730				
1933	8	1933.08	29-Aug-33						730				
1933	8	1933.08	30-Aug-33						735				
1933	8	1933.08	31-Aug-33						760				
1933	9	1933.09	1-Sep-33						760				
1933	9	1933.09	2-Sep-33						735				
1933	9	1933.09	3-Sep-33						760				
1933	9	1933.09	4-Sep-33						812				
1933	9	1933.09	5-Sep-33						840				
1933	9	1933.09	6-Sep-33						840				
1933	9	1933.09	7-Sep-33						922				
1933	9	1933.09	8-Sep-33						1070				
1933	9	1933.09	9-Sep-33						1160				
1933	9	1933.09	10-Sep-33						1220				
1933	9	1933.09	11-Sep-33						1280				
1933	9	1933.09	12-Sep-33						1250				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1933	9	1933.09 13-Sep-33							1280				
1933	9	1933.09 14-Sep-33							1250				
1933	9	1933.09 15-Sep-33							1220				
1933	9	1933.09 16-Sep-33							980				
1933	9	1933.09 17-Sep-33							1100				
1933	9	1933.09 18-Sep-33							1280				
1933	9	1933.09 19-Sep-33							1370				
1933	9	1933.09 20-Sep-33							1340				
1933	9	1933.09 21-Sep-33							1310				
1933	9	1933.09 22-Sep-33							1280				
1933	9	1933.09 23-Sep-33							1250				
1933	9	1933.09 24-Sep-33							1250				
1933	9	1933.09 25-Sep-33							1250				
1933	9	1933.09 26-Sep-33							1310				
1933	9	1933.09 27-Sep-33							1340				
1933	9	1933.09 28-Sep-33							1370				
1933	9	1933.09 29-Sep-33							1340				
1933	9	1933.09 30-Sep-33							1340				
1933	10	1933.10 1-Oct-33							1370				
1933	10	1933.10 2-Oct-33							1370				
1933	10	1933.10 3-Oct-33							1400				
1933	10	1933.10 4-Oct-33							1400				
1933	10	1933.10 5-Oct-33							1400				
1933	10	1933.10 6-Oct-33							1440				
1933	10	1933.10 7-Oct-33							1400				
1933	10	1933.10 8-Oct-33							1440				
1933	10	1933.10 9-Oct-33							1500				
1933	10	1933.10 10-Oct-33							1500				
1933	10	1933.10 11-Oct-33							1890				
1933	10	1933.10 12-Oct-33							1700				
1933	10	1933.10 13-Oct-33							1760				
1933	10	1933.10 14-Oct-33							1960				
1933	10	1933.10 15-Oct-33							2020				
1933	10	1933.10 16-Oct-33							1760				
1933	10	1933.10 17-Oct-33							1700				
1933	10	1933.10 18-Oct-33							1600				
1933	10	1933.10 19-Oct-33							1470				
1933	10	1933.10 20-Oct-33							1470				
1933	10	1933.10 21-Oct-33							1440				
1933	10	1933.10 22-Oct-33							1400				
1933	10	1933.10 23-Oct-33							1400				
1933	10	1933.10 24-Oct-33							1440				
1933	10	1933.10 25-Oct-33							1440				
1933	10	1933.10 26-Oct-33							1400				
1933	10	1933.10 27-Oct-33							1400				
1933	10	1933.10 28-Oct-33							1440				
1933	10	1933.10 29-Oct-33							1470				
1933	10	1933.10 30-Oct-33							1560				
1933	10	1933.10 31-Oct-33							1600				
1933	11	1933.11 1-Nov-33							1630				
1933	11	1933.11 2-Nov-33							1560				
1933	11	1933.11 3-Nov-33							1630				
1933	11	1933.11 4-Nov-33							1630				
1933	11	1933.11 5-Nov-33							1600				
1933	11	1933.11 6-Nov-33							1530				
1933	11	1933.11 7-Nov-33							1500				
1933	11	1933.11 8-Nov-33							1530				
1933	11	1933.11 9-Nov-33							1530				
1933	11	1933.11 10-Nov-33							1530				
1933	11	1933.11 11-Nov-33							1500				
1933	11	1933.11 12-Nov-33							1530				
1933	11	1933.11 13-Nov-33							1530				
1933	11	1933.11 14-Nov-33							1500				
1933	11	1933.11 15-Nov-33							1500				
1933	11	1933.11 16-Nov-33							1530				
1933	11	1933.11 17-Nov-33							1530				
1933	11	1933.11 18-Nov-33							1530				
1933	11	1933.11 19-Nov-33							1530				
1933	11	1933.11 20-Nov-33							1530				
1933	11	1933.11 21-Nov-33							1470				
1933	11	1933.11 22-Nov-33							1530				
1933	11	1933.11 23-Nov-33							1500				
1933	11	1933.11 24-Nov-33							1500				
1933	11	1933.11 25-Nov-33							1500				
1933	11	1933.11 26-Nov-33							1500				
1933	11	1933.11 27-Nov-33							1500				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1933	11	1933.11	28-Nov-33						1530				
1933	11	1933.11	29-Nov-33						1470				
1933	11	1933.11	30-Nov-33						1470				
1933	12	1933.12	1-Dec-33						1470				
1933	12	1933.12	2-Dec-33						1400				
1933	12	1933.12	3-Dec-33						1370				
1933	12	1933.12	4-Dec-33						1400				
1933	12	1933.12	5-Dec-33						1400				
1933	12	1933.12	6-Dec-33						1530				
1933	12	1933.12	7-Dec-33						1760				
1933	12	1933.12	8-Dec-33						1760				
1933	12	1933.12	9-Dec-33						1760				
1933	12	1933.12	10-Dec-33						1760				
1933	12	1933.12	11-Dec-33						1760				
1933	12	1933.12	12-Dec-33						1630				
1933	12	1933.12	13-Dec-33						1630				
1933	12	1933.12	14-Dec-33						1760				
1933	12	1933.12	15-Dec-33						1820				
1933	12	1933.12	16-Dec-33						1960				
1933	12	1933.12	17-Dec-33						2500				
1933	12	1933.12	18-Dec-33						2850				
1933	12	1933.12	19-Dec-33						2500				
1933	12	1933.12	20-Dec-33						2900				
1933	12	1933.12	21-Dec-33						3300				
1933	12	1933.12	22-Dec-33						3500				
1933	12	1933.12	23-Dec-33						3500				
1933	12	1933.12	24-Dec-33						3600				
1933	12	1933.12	25-Dec-33						3500				
1933	12	1933.12	26-Dec-33						3300				
1933	12	1933.12	27-Dec-33						3400				
1933	12	1933.12	28-Dec-33						3350				
1933	12	1933.12	29-Dec-33						3300				
1933	12	1933.12	30-Dec-33						3450				
1933	12	1933.12	31-Dec-33						3550				
1934	1	1934.01	1-Jan-34						3700				
1934	1	1934.01	2-Jan-34						3950				
1934	1	1934.01	3-Jan-34						4200				
1934	1	1934.01	4-Jan-34						4100				
1934	1	1934.01	5-Jan-34						3900				
1934	1	1934.01	6-Jan-34						3500				
1934	1	1934.01	7-Jan-34						3300				
1934	1	1934.01	8-Jan-34						3150				
1934	1	1934.01	9-Jan-34						3000				
1934	1	1934.01	10-Jan-34						2900				
1934	1	1934.01	11-Jan-34						2810				
1934	1	1934.01	12-Jan-34						2670				
1934	1	1934.01	13-Jan-34						2600				
1934	1	1934.01	14-Jan-34						2540				
1934	1	1934.01	15-Jan-34						2480				
1934	1	1934.01	16-Jan-34						2410				
1934	1	1934.01	17-Jan-34						2410				
1934	1	1934.01	18-Jan-34						2540				
1934	1	1934.01	19-Jan-34						2410				
1934	1	1934.01	20-Jan-34						2340				
1934	1	1934.01	21-Jan-34						2280				
1934	1	1934.01	22-Jan-34						2280				
1934	1	1934.01	23-Jan-34						2220				
1934	1	1934.01	24-Jan-34						2220				
1934	1	1934.01	25-Jan-34						2220				
1934	1	1934.01	26-Jan-34						2220				
1934	1	1934.01	27-Jan-34						2220				
1934	1	1934.01	28-Jan-34						2150				
1934	1	1934.01	29-Jan-34						2150				
1934	1	1934.01	30-Jan-34						2080				
1934	1	1934.01	31-Jan-34						2150				
1934	2	1934.02	1-Feb-34						2150				
1934	2	1934.02	2-Feb-34						2220				
1934	2	1934.02	3-Feb-34						2220				
1934	2	1934.02	4-Feb-34						2150				
1934	2	1934.02	5-Feb-34						2150				
1934	2	1934.02	6-Feb-34						2150				
1934	2	1934.02	7-Feb-34						2220				
1934	2	1934.02	8-Feb-34						2220				
1934	2	1934.02	9-Feb-34						2220				
1934	2	1934.02	10-Feb-34						2280				
1934	2	1934.02	11-Feb-34						2220				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1934	2	1934.02	12-Feb-34						2220				
1934	2	1934.02	13-Feb-34						2150				
1934	2	1934.02	14-Feb-34						2150				
1934	2	1934.02	15-Feb-34						2150				
1934	2	1934.02	16-Feb-34						2150				
1934	2	1934.02	17-Feb-34						2080				
1934	2	1934.02	18-Feb-34						2080				
1934	2	1934.02	19-Feb-34						2080				
1934	2	1934.02	20-Feb-34						2080				
1934	2	1934.02	21-Feb-34						2280				
1934	2	1934.02	22-Feb-34						2740				
1934	2	1934.02	23-Feb-34						2480				
1934	2	1934.02	24-Feb-34						2220				
1934	2	1934.02	25-Feb-34						2410				
1934	2	1934.02	26-Feb-34						2220				
1934	2	1934.02	27-Feb-34						2280				
1934	2	1934.02	28-Feb-34						2740				
1934	3	1934.03	1-Mar-34						2740				
1934	3	1934.03	2-Mar-34						2540				
1934	3	1934.03	3-Mar-34						2410				
1934	3	1934.03	4-Mar-34						2340				
1934	3	1934.03	5-Mar-34						2150				
1934	3	1934.03	6-Mar-34						1960				
1934	3	1934.03	7-Mar-34						1820				
1934	3	1934.03	8-Mar-34						1700				
1934	3	1934.03	9-Mar-34						1630				
1934	3	1934.03	10-Mar-34						1530				
1934	3	1934.03	11-Mar-34						1530				
1934	3	1934.03	12-Mar-34						1500				
1934	3	1934.03	13-Mar-34						1530				
1934	3	1934.03	14-Mar-34						1560				
1934	3	1934.03	15-Mar-34						1530				
1934	3	1934.03	16-Mar-34						1470				
1934	3	1934.03	17-Mar-34						1400				
1934	3	1934.03	18-Mar-34						1370				
1934	3	1934.03	19-Mar-34						1370				
1934	3	1934.03	20-Mar-34						1500				
1934	3	1934.03	21-Mar-34						1760				
1934	3	1934.03	22-Mar-34						1700				
1934	3	1934.03	23-Mar-34						1760				
1934	3	1934.03	24-Mar-34						1700				
1934	3	1934.03	25-Mar-34						1560				
1934	3	1934.03	26-Mar-34						1560				
1934	3	1934.03	27-Mar-34						1500				
1934	3	1934.03	28-Mar-34						1530				
1934	3	1934.03	29-Mar-34						1400				
1934	3	1934.03	30-Mar-34						1280				
1934	3	1934.03	31-Mar-34						1220				
1934	4	1934.04	1-Apr-34						1160				
1934	4	1934.04	2-Apr-34						1100				
1934	4	1934.04	3-Apr-34						1100				
1934	4	1934.04	4-Apr-34						1040				
1934	4	1934.04	5-Apr-34						950				
1934	4	1934.04	6-Apr-34						950				
1934	4	1934.04	7-Apr-34						895				
1934	4	1934.04	8-Apr-34						840				
1934	4	1934.04	9-Apr-34						785				
1934	4	1934.04	10-Apr-34						760				
1934	4	1934.04	11-Apr-34						710				
1934	4	1934.04	12-Apr-34						690				
1934	4	1934.04	13-Apr-34						670				
1934	4	1934.04	14-Apr-34						612				
1934	4	1934.04	15-Apr-34						617				
1934	4	1934.04	16-Apr-34						640				
1934	4	1934.04	17-Apr-34						626				
1934	4	1934.04	18-Apr-34						576				
1934	4	1934.04	19-Apr-34						576				
1934	4	1934.04	20-Apr-34						568				
1934	4	1934.04	21-Apr-34						522				
1934	4	1934.04	22-Apr-34						536				
1934	4	1934.04	23-Apr-34						599				
1934	4	1934.04	24-Apr-34						563				
1934	4	1934.04	25-Apr-34						540				
1934	4	1934.04	26-Apr-34						514				
1934	4	1934.04	27-Apr-34						480				
1934	4	1934.04	28-Apr-34						468				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1934	4	1934.04	29-Apr-34						472				
1934	4	1934.04	30-Apr-34						500				
1934	5	1934.05	1-May-34						522				
1934	5	1934.05	2-May-34						558				
1934	5	1934.05	3-May-34						586				
1934	5	1934.05	4-May-34						604				
1934	5	1934.05	5-May-34						635				
1934	5	1934.05	6-May-34						645				
1934	5	1934.05	7-May-34						675				
1934	5	1934.05	8-May-34						710				
1934	5	1934.05	9-May-34						665				
1934	5	1934.05	10-May-34						655				
1934	5	1934.05	11-May-34						685				
1934	5	1934.05	12-May-34						705				
1934	5	1934.05	13-May-34						665				
1934	5	1934.05	14-May-34						695				
1934	5	1934.05	15-May-34						690				
1934	5	1934.05	16-May-34						620				
1934	5	1934.05	17-May-34						600				
1934	5	1934.05	18-May-34						600				
1934	5	1934.05	19-May-34						560				
1934	5	1934.05	20-May-34						560				
1934	5	1934.05	21-May-34						600				
1934	5	1934.05	22-May-34						640				
1934	5	1934.05	23-May-34						600				
1934	5	1934.05	24-May-34						560				
1934	5	1934.05	25-May-34						600				
1934	5	1934.05	26-May-34						620				
1934	5	1934.05	27-May-34						665				
1934	5	1934.05	28-May-34						685				
1934	5	1934.05	29-May-34						805				
1934	5	1934.05	30-May-34						710				
1934	5	1934.05	31-May-34						685				
1934	6	1934.06	1-Jun-34						685				
1934	6	1934.06	2-Jun-34						640				
1934	6	1934.06	3-Jun-34						620				
1934	6	1934.06	4-Jun-34						627				
1934	6	1934.06	5-Jun-34						646				
1934	6	1934.06	6-Jun-34						684				
1934	6	1934.06	7-Jun-34						703				
1934	6	1934.06	8-Jun-34						722				
1934	6	1934.06	9-Jun-34						722				
1934	6	1934.06	10-Jun-34						722				
1934	6	1934.06	11-Jun-34						684				
1934	6	1934.06	12-Jun-34						684				
1934	6	1934.06	13-Jun-34						665				
1934	6	1934.06	14-Jun-34						646				
1934	6	1934.06	15-Jun-34						627				
1934	6	1934.06	16-Jun-34						627				
1934	6	1934.06	17-Jun-34						627				
1934	6	1934.06	18-Jun-34						627				
1934	6	1934.06	19-Jun-34						608				
1934	6	1934.06	20-Jun-34						608				
1934	6	1934.06	21-Jun-34						608				
1934	6	1934.06	22-Jun-34						559				
1934	6	1934.06	23-Jun-34						520				
1934	6	1934.06	24-Jun-34						538				
1934	6	1934.06	25-Jun-34						563				
1934	6	1934.06	26-Jun-34						570				
1934	6	1934.06	27-Jun-34						548				
1934	6	1934.06	28-Jun-34						509				
1934	6	1934.06	29-Jun-34						498				
1934	7	1934.07	1-Jul-34						462				
1934	7	1934.07	2-Jul-34						473				
1934	7	1934.07	3-Jul-34						422				
1934	7	1934.07	4-Jul-34						426				
1934	7	1934.07	5-Jul-34						433				
1934	7	1934.07	6-Jul-34						440				
1934	7	1934.07	7-Jul-34						448				
1934	7	1934.07	8-Jul-34						440				
1934	7	1934.07	9-Jul-34						430				
1934	7	1934.07	10-Jul-34						394				
1934	7	1934.07	11-Jul-34						370				
1934	7	1934.07	12-Jul-34						342				
1934	7	1934.07	13-Jul-34						336				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1934	7	1934.07	14-Jul-34						339				
1934	7	1934.07	15-Jul-34						349				
1934	7	1934.07	16-Jul-34						359				
1934	7	1934.07	17-Jul-34						376				
1934	7	1934.07	18-Jul-34						387				
1934	7	1934.07	19-Jul-34						387				
1934	7	1934.07	20-Jul-34						380				
1934	7	1934.07	21-Jul-34						380				
1934	7	1934.07	22-Jul-34						370				
1934	7	1934.07	23-Jul-34						383				
1934	7	1934.07	24-Jul-34						412				
1934	7	1934.07	25-Jul-34						415				
1934	7	1934.07	26-Jul-34						412				
1934	7	1934.07	27-Jul-34						408				
1934	7	1934.07	28-Jul-34						383				
1934	7	1934.07	29-Jul-34						380				
1934	7	1934.07	30-Jul-34						356				
1934	7	1934.07	31-Jul-34						363				
1934	8	1934.08	1-Aug-34						349				
1934	8	1934.08	2-Aug-34						349				
1934	8	1934.08	3-Aug-34						346				
1934	8	1934.08	4-Aug-34						370				
1934	8	1934.08	5-Aug-34						380				
1934	8	1934.08	6-Aug-34						373				
1934	8	1934.08	7-Aug-34						373				
1934	8	1934.08	8-Aug-34						373				
1934	8	1934.08	9-Aug-34						373				
1934	8	1934.08	10-Aug-34						356				
1934	8	1934.08	11-Aug-34						346				
1934	8	1934.08	12-Aug-34						346				
1934	8	1934.08	13-Aug-34						353				
1934	8	1934.08	14-Aug-34						366				
1934	8	1934.08	15-Aug-34						356				
1934	8	1934.08	16-Aug-34						339				
1934	8	1934.08	17-Aug-34						315				
1934	8	1934.08	18-Aug-34						339				
1934	8	1934.08	19-Aug-34						349				
1934	8	1934.08	20-Aug-34						366				
1934	8	1934.08	21-Aug-34						349				
1934	8	1934.08	22-Aug-34						349				
1934	8	1934.08	23-Aug-34						366				
1934	8	1934.08	24-Aug-34						404				
1934	8	1934.08	25-Aug-34						422				
1934	8	1934.08	26-Aug-34						469				
1934	8	1934.08	27-Aug-34						487				
1934	8	1934.08	28-Aug-34						516				
1934	8	1934.08	29-Aug-34						487				
1934	8	1934.08	30-Aug-34						473				
1934	8	1934.08	31-Aug-34						448				
1934	9	1934.09	1-Sep-34						437				
1934	9	1934.09	2-Sep-34						476				
1934	9	1934.09	3-Sep-34						487				
1934	9	1934.09	4-Sep-34						487				
1934	9	1934.09	5-Sep-34						480				
1934	9	1934.09	6-Sep-34						444				
1934	9	1934.09	7-Sep-34						444				
1934	9	1934.09	8-Sep-34						458				
1934	9	1934.09	9-Sep-34						466				
1934	9	1934.09	10-Sep-34						484				
1934	9	1934.09	11-Sep-34						505				
1934	9	1934.09	12-Sep-34						512				
1934	9	1934.09	13-Sep-34						516				
1934	9	1934.09	14-Sep-34						509				
1934	9	1934.09	15-Sep-34						494				
1934	9	1934.09	16-Sep-34						516				
1934	9	1934.09	17-Sep-34						527				
1934	9	1934.09	18-Sep-34						523				
1934	9	1934.09	19-Sep-34						516				
1934	9	1934.09	20-Sep-34						491				
1934	9	1934.09	21-Sep-34						469				
1934	9	1934.09	22-Sep-34						466				
1934	9	1934.09	23-Sep-34						480				
1934	9	1934.09	24-Sep-34						505				
1934	9	1934.09	25-Sep-34						545				
1934	9	1934.09	26-Sep-34						559				
1934	9	1934.09	27-Sep-34						563				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1934	9	1934.09	28-Sep-34						559				
1934	9	1934.09	29-Sep-34						559				
1934	9	1934.09	30-Sep-34						538				
1934	10	1934.10	1-Oct-34						545				
1934	10	1934.10	2-Oct-34						581				
1934	10	1934.10	3-Oct-34						594				
1934	10	1934.10	4-Oct-34						612				
1934	10	1934.10	5-Oct-34						626				
1934	10	1934.10	6-Oct-34						622				
1934	10	1934.10	7-Oct-34						645				
1934	10	1934.10	8-Oct-34						655				
1934	10	1934.10	9-Oct-34						710				
1934	10	1934.10	10-Oct-34						670				
1934	10	1934.10	11-Oct-34						630				
1934	10	1934.10	12-Oct-34						608				
1934	10	1934.10	13-Oct-34						608				
1934	10	1934.10	14-Oct-34						604				
1934	10	1934.10	15-Oct-34						608				
1934	10	1934.10	16-Oct-34						617				
1934	10	1934.10	17-Oct-34						812				
1934	10	1934.10	18-Oct-34						980				
1934	10	1934.10	19-Oct-34						1040				
1934	10	1934.10	20-Oct-34						1040				
1934	10	1934.10	21-Oct-34						1070				
1934	10	1934.10	22-Oct-34						1100				
1934	10	1934.10	23-Oct-34						1100				
1934	10	1934.10	24-Oct-34						1130				
1934	10	1934.10	25-Oct-34						1160				
1934	10	1934.10	26-Oct-34						1130				
1934	10	1934.10	27-Oct-34						1160				
1934	10	1934.10	28-Oct-34						1160				
1934	10	1934.10	29-Oct-34						1160				
1934	10	1934.10	30-Oct-34						1160				
1934	10	1934.10	31-Oct-34						1190				
1934	11	1934.11	1-Nov-34						1250				
1934	11	1934.11	2-Nov-34						1400				
1934	11	1934.11	3-Nov-34						1400				
1934	11	1934.11	4-Nov-34						1250				
1934	11	1934.11	5-Nov-34						1100				
1934	11	1934.11	6-Nov-34						1000				
1934	11	1934.11	7-Nov-34						1040				
1934	11	1934.11	8-Nov-34						1070				
1934	11	1934.11	9-Nov-34						1130				
1934	11	1934.11	10-Nov-34						1130				
1934	11	1934.11	11-Nov-34						1160				
1934	11	1934.11	12-Nov-34						1160				
1934	11	1934.11	13-Nov-34						1160				
1934	11	1934.11	14-Nov-34						1130				
1934	11	1934.11	15-Nov-34						1160				
1934	11	1934.11	16-Nov-34						1220				
1934	11	1934.11	17-Nov-34						1250				
1934	11	1934.11	18-Nov-34						1280				
1934	11	1934.11	19-Nov-34						1340				
1934	11	1934.11	20-Nov-34						1370				
1934	11	1934.11	21-Nov-34						1400				
1934	11	1934.11	22-Nov-34						1440				
1934	11	1934.11	23-Nov-34						1440				
1934	11	1934.11	24-Nov-34						1470				
1934	11	1934.11	25-Nov-34						1440				
1934	11	1934.11	26-Nov-34						1440				
1934	11	1934.11	27-Nov-34						1470				
1934	11	1934.11	28-Nov-34						1470				
1934	11	1934.11	29-Nov-34						1560				
1934	11	1934.11	30-Nov-34						1600				
1934	12	1934.12	1-Dec-34						1600				
1934	12	1934.12	2-Dec-34						1560				
1934	12	1934.12	3-Dec-34						1470				
1934	12	1934.12	4-Dec-34						1400				
1934	12	1934.12	5-Dec-34						1400				
1934	12	1934.12	6-Dec-34						1400				
1934	12	1934.12	7-Dec-34						1400				
1934	12	1934.12	8-Dec-34						1400				
1934	12	1934.12	9-Dec-34						1400				
1934	12	1934.12	10-Dec-34						1400				
1934	12	1934.12	11-Dec-34						1400				
1934	12	1934.12	12-Dec-34						1400				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1934	12	1934.12	13-Dec-34						1440				
1934	12	1934.12	14-Dec-34						1500				
1934	12	1934.12	15-Dec-34						1530				
1934	12	1934.12	16-Dec-34						1630				
1934	12	1934.12	17-Dec-34						1560				
1934	12	1934.12	18-Dec-34						1630				
1934	12	1934.12	19-Dec-34						1630				
1934	12	1934.12	20-Dec-34						1630				
1934	12	1934.12	21-Dec-34						1630				
1934	12	1934.12	22-Dec-34						1700				
1934	12	1934.12	23-Dec-34						1700				
1934	12	1934.12	24-Dec-34						1760				
1934	12	1934.12	25-Dec-34						1760				
1934	12	1934.12	26-Dec-34						1760				
1934	12	1934.12	27-Dec-34						1760				
1934	12	1934.12	28-Dec-34						1820				
1934	12	1934.12	29-Dec-34						2020				
1934	12	1934.12	30-Dec-34						2020				
1934	12	1934.12	31-Dec-34						2080				
1935	1	1935.01	1-Jan-35						2080				
1935	1	1935.01	2-Jan-35						2020				
1935	1	1935.01	3-Jan-35						1960				
1935	1	1935.01	4-Jan-35						1960				
1935	1	1935.01	5-Jan-35						2020				
1935	1	1935.01	6-Jan-35						2340				
1935	1	1935.01	7-Jan-35						2740				
1935	1	1935.01	8-Jan-35						2880				
1935	1	1935.01	9-Jan-35						3090				
1935	1	1935.01	10-Jan-35						3780				
1935	1	1935.01	11-Jan-35						4260				
1935	1	1935.01	12-Jan-35						4020				
1935	1	1935.01	13-Jan-35						3780				
1935	1	1935.01	14-Jan-35						3780				
1935	1	1935.01	15-Jan-35						3780				
1935	1	1935.01	16-Jan-35						4020				
1935	1	1935.01	17-Jan-35						4680				
1935	1	1935.01	18-Jan-35						4950				
1935	1	1935.01	19-Jan-35						5040				
1935	1	1935.01	20-Jan-35						5760				
1935	1	1935.01	21-Jan-35						5580				
1935	1	1935.01	22-Jan-35						4860				
1935	1	1935.01	23-Jan-35						4500				
1935	1	1935.01	24-Jan-35						4260				
1935	1	1935.01	25-Jan-35						4020				
1935	1	1935.01	26-Jan-35						3780				
1935	1	1935.01	27-Jan-35						3540				
1935	1	1935.01	28-Jan-35						3300				
1935	1	1935.01	29-Jan-35						3230				
1935	1	1935.01	30-Jan-35						3300				
1935	1	1935.01	31-Jan-35						3460				
1935	2	1935.02	1-Feb-35						3540				
1935	2	1935.02	2-Feb-35						3460				
1935	2	1935.02	3-Feb-35						3380				
1935	2	1935.02	4-Feb-35						3300				
1935	2	1935.02	5-Feb-35						3160				
1935	2	1935.02	6-Feb-35						3160				
1935	2	1935.02	7-Feb-35						3160				
1935	2	1935.02	8-Feb-35						3020				
1935	2	1935.02	9-Feb-35						2950				
1935	2	1935.02	10-Feb-35						2950				
1935	2	1935.02	11-Feb-35						3020				
1935	2	1935.02	12-Feb-35						3230				
1935	2	1935.02	13-Feb-35						3460				
1935	2	1935.02	14-Feb-35						3620				
1935	2	1935.02	15-Feb-35						3700				
1935	2	1935.02	16-Feb-35						3780				
1935	2	1935.02	17-Feb-35						4100				
1935	2	1935.02	18-Feb-35						4100				
1935	2	1935.02	19-Feb-35						3940				
1935	2	1935.02	20-Feb-35						3860				
1935	2	1935.02	21-Feb-35						3860				
1935	2	1935.02	22-Feb-35						4020				
1935	2	1935.02	23-Feb-35						4100				
1935	2	1935.02	24-Feb-35						3780				
1935	2	1935.02	25-Feb-35						3620				
1935	2	1935.02	26-Feb-35						3540				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1935	2	1935.02	27-Feb-35						3540				
1935	2	1935.02	28-Feb-35						3620				
1935	3	1935.03	1-Mar-35						3540				
1935	3	1935.03	2-Mar-35						3540				
1935	3	1935.03	3-Mar-35						3460				
1935	3	1935.03	4-Mar-35						3380				
1935	3	1935.03	5-Mar-35						3300				
1935	3	1935.03	6-Mar-35						3380				
1935	3	1935.03	7-Mar-35						3460				
1935	3	1935.03	8-Mar-35						4100				
1935	3	1935.03	9-Mar-35						6030				
1935	3	1935.03	10-Mar-35						5850				
1935	3	1935.03	11-Mar-35						5130				
1935	3	1935.03	12-Mar-35						4770				
1935	3	1935.03	13-Mar-35						4770				
1935	3	1935.03	14-Mar-35						4860				
1935	3	1935.03	15-Mar-35						4680				
1935	3	1935.03	16-Mar-35						4340				
1935	3	1935.03	17-Mar-35						4100				
1935	3	1935.03	18-Mar-35						3940				
1935	3	1935.03	19-Mar-35						3860				
1935	3	1935.03	20-Mar-35						3780				
1935	3	1935.03	21-Mar-35						3860				
1935	3	1935.03	22-Mar-35						4020				
1935	3	1935.03	23-Mar-35						3940				
1935	3	1935.03	24-Mar-35						3700				
1935	3	1935.03	25-Mar-35						3780				
1935	3	1935.03	26-Mar-35						3780				
1935	3	1935.03	27-Mar-35						3940				
1935	3	1935.03	28-Mar-35						3940				
1935	3	1935.03	29-Mar-35						3780				
1935	3	1935.03	30-Mar-35						3700				
1935	3	1935.03	31-Mar-35						3620				
1935	4	1935.04	1-Apr-35						3620				
1935	4	1935.04	2-Apr-35						3540				
1935	4	1935.04	3-Apr-35						3620				
1935	4	1935.04	4-Apr-35						3940				
1935	4	1935.04	5-Apr-35						5220				
1935	4	1935.04	6-Apr-35						8000				
1935	4	1935.04	7-Apr-35						9400				
1935	4	1935.04	8-Apr-35						9100				
1935	4	1935.04	9-Apr-35						10700				
1935	4	1935.04	10-Apr-35						13500				
1935	4	1935.04	11-Apr-35						16600				
1935	4	1935.04	12-Apr-35						17500				
1935	4	1935.04	13-Apr-35						16200				
1935	4	1935.04	14-Apr-35						15000				
1935	4	1935.04	15-Apr-35						14400				
1935	4	1935.04	16-Apr-35						14700				
1935	4	1935.04	17-Apr-35						17300				
1935	4	1935.04	18-Apr-35						22300				
1935	4	1935.04	19-Apr-35						23000				
1935	4	1935.04	20-Apr-35						21500				
1935	4	1935.04	21-Apr-35						20000				
1935	4	1935.04	22-Apr-35						19500				
1935	4	1935.04	23-Apr-35						19500				
1935	4	1935.04	24-Apr-35						19500				
1935	4	1935.04	25-Apr-35						19800				
1935	4	1935.04	26-Apr-35						19800				
1935	4	1935.04	27-Apr-35						19500				
1935	4	1935.04	28-Apr-35						18800				
1935	4	1935.04	29-Apr-35						18600				
1935	4	1935.04	30-Apr-35						18600				
1935	5	1935.05	1-May-35						19800				
1935	5	1935.05	2-May-35						20700				
1935	5	1935.05	3-May-35						19500				
1935	5	1935.05	4-May-35						17500				
1935	5	1935.05	5-May-35						16200				
1935	5	1935.05	6-May-35						15100				
1935	5	1935.05	7-May-35						14400				
1935	5	1935.05	8-May-35						14300				
1935	5	1935.05	9-May-35						14500				
1935	5	1935.05	10-May-35						15100				
1935	5	1935.05	11-May-35						15700				
1935	5	1935.05	12-May-35						16600				
1935	5	1935.05	13-May-35						16600				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1935	5	1935.05	14-May-35						16000				
1935	5	1935.05	15-May-35						15600				
1935	5	1935.05	16-May-35						15200				
1935	5	1935.05	17-May-35						15000				
1935	5	1935.05	18-May-35						14500				
1935	5	1935.05	19-May-35						13800				
1935	5	1935.05	20-May-35						13000				
1935	5	1935.05	21-May-35						12700				
1935	5	1935.05	22-May-35						12800				
1935	5	1935.05	23-May-35						13300				
1935	5	1935.05	24-May-35						14000				
1935	5	1935.05	25-May-35						14800				
1935	5	1935.05	26-May-35						15900				
1935	5	1935.05	27-May-35						16700				
1935	5	1935.05	28-May-35						19100				
1935	5	1935.05	29-May-35						22300				
1935	5	1935.05	30-May-35						23600				
1935	5	1935.05	31-May-35						23600				
1935	6	1935.06	1-Jun-35						20800				
1935	6	1935.06	2-Jun-35						18400				
1935	6	1935.06	3-Jun-35						17200				
1935	6	1935.06	4-Jun-35						17200				
1935	6	1935.06	5-Jun-35						18800				
1935	6	1935.06	6-Jun-35						20500				
1935	6	1935.06	7-Jun-35						21800				
1935	6	1935.06	8-Jun-35						22400				
1935	6	1935.06	9-Jun-35						22300				
1935	6	1935.06	10-Jun-35						21800				
1935	6	1935.06	11-Jun-35						20600				
1935	6	1935.06	12-Jun-35						19700				
1935	6	1935.06	13-Jun-35						19100				
1935	6	1935.06	14-Jun-35						18400				
1935	6	1935.06	15-Jun-35						18000				
1935	6	1935.06	16-Jun-35						17300				
1935	6	1935.06	17-Jun-35						16300				
1935	6	1935.06	18-Jun-35						15200				
1935	6	1935.06	19-Jun-35						14600				
1935	6	1935.06	20-Jun-35						14100				
1935	6	1935.06	21-Jun-35						14200				
1935	6	1935.06	22-Jun-35						13900				
1935	6	1935.06	23-Jun-35						12700				
1935	6	1935.06	24-Jun-35						11700				
1935	6	1935.06	25-Jun-35						10600				
1935	6	1935.06	26-Jun-35						9500				
1935	6	1935.06	27-Jun-35						8000				
1935	6	1935.06	28-Jun-35						6660				
1935	6	1935.06	29-Jun-35						5900				
1935	6	1935.06	30-Jun-35						5630				
1935	7	1935.07	1-Jul-35						5810				
1935	7	1935.07	2-Jul-35						5630				
1935	7	1935.07	3-Jul-35						5900				
1935	7	1935.07	4-Jul-35						6170				
1935	7	1935.07	5-Jul-35						5360				
1935	7	1935.07	6-Jul-35						4520				
1935	7	1935.07	7-Jul-35						4040				
1935	7	1935.07	8-Jul-35						3720				
1935	7	1935.07	9-Jul-35						3480				
1935	7	1935.07	10-Jul-35						3240				
1935	7	1935.07	11-Jul-35						2950				
1935	7	1935.07	12-Jul-35						2670				
1935	7	1935.07	13-Jul-35						2320				
1935	7	1935.07	14-Jul-35						2040				
1935	7	1935.07	15-Jul-35						1970				
1935	7	1935.07	16-Jul-35						1970				
1935	7	1935.07	17-Jul-35						1770				
1935	7	1935.07	18-Jul-35						1710				
1935	7	1935.07	19-Jul-35						1590				
1935	7	1935.07	20-Jul-35						1500				
1935	7	1935.07	21-Jul-35						1500				
1935	7	1935.07	22-Jul-35						1530				
1935	7	1935.07	23-Jul-35						1650				
1935	7	1935.07	24-Jul-35						1530				
1935	7	1935.07	25-Jul-35						1440				
1935	7	1935.07	26-Jul-35						1330				
1935	7	1935.07	27-Jul-35						1300				
1935	7	1935.07	28-Jul-35						1300				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1935	7	1935.07	29-Jul-35						1300				
1935	7	1935.07	30-Jul-35						1250				
1935	7	1935.07	31-Jul-35						1150				
1935	8	1935.08	1-Aug-35						1080				
1935	8	1935.08	2-Aug-35						1080				
1935	8	1935.08	3-Aug-35						1050				
1935	8	1935.08	4-Aug-35						1050				
1935	8	1935.08	5-Aug-35						1020				
1935	8	1935.08	6-Aug-35						1020				
1935	8	1935.08	7-Aug-35						1020				
1935	8	1935.08	8-Aug-35						1000				
1935	8	1935.08	9-Aug-35						975				
1935	8	1935.08	10-Aug-35						950				
1935	8	1935.08	11-Aug-35						950				
1935	8	1935.08	12-Aug-35						950				
1935	8	1935.08	13-Aug-35						925				
1935	8	1935.08	14-Aug-35						850				
1935	8	1935.08	15-Aug-35						850				
1935	8	1935.08	16-Aug-35						850				
1935	8	1935.08	17-Aug-35						925				
1935	8	1935.08	18-Aug-35						1000				
1935	8	1935.08	19-Aug-35						1050				
1935	8	1935.08	20-Aug-35						1050				
1935	8	1935.08	21-Aug-35						1000				
1935	8	1935.08	22-Aug-35						950				
1935	8	1935.08	23-Aug-35						925				
1935	8	1935.08	24-Aug-35						950				
1935	8	1935.08	25-Aug-35						1000				
1935	8	1935.08	26-Aug-35						1050				
1935	8	1935.08	27-Aug-35						1080				
1935	8	1935.08	28-Aug-35						1080				
1935	8	1935.08	29-Aug-35						1050				
1935	8	1935.08	30-Aug-35						1050				
1935	8	1935.08	31-Aug-35						1050				
1935	9	1935.09	1-Sep-35						1100				
1935	9	1935.09	2-Sep-35						1120				
1935	9	1935.09	3-Sep-35						1100				
1935	9	1935.09	4-Sep-35						1080				
1935	9	1935.09	5-Sep-35						1120				
1935	9	1935.09	6-Sep-35						1050				
1935	9	1935.09	7-Sep-35						1080				
1935	9	1935.09	8-Sep-35						1100				
1935	9	1935.09	9-Sep-35						1120				
1935	9	1935.09	10-Sep-35						1100				
1935	9	1935.09	11-Sep-35						1100				
1935	9	1935.09	12-Sep-35						1080				
1935	9	1935.09	13-Sep-35						1080				
1935	9	1935.09	14-Sep-35						1220				
1935	9	1935.09	15-Sep-35						1500				
1935	9	1935.09	16-Sep-35						1650				
1935	9	1935.09	17-Sep-35						1680				
1935	9	1935.09	18-Sep-35						1620				
1935	9	1935.09	19-Sep-35						1560				
1935	9	1935.09	20-Sep-35						1470				
1935	9	1935.09	21-Sep-35						1470				
1935	9	1935.09	22-Sep-35						1560				
1935	9	1935.09	23-Sep-35						1590				
1935	9	1935.09	24-Sep-35						1560				
1935	9	1935.09	25-Sep-35						1560				
1935	9	1935.09	26-Sep-35						1560				
1935	9	1935.09	27-Sep-35						1560				
1935	9	1935.09	28-Sep-35						1560				
1935	9	1935.09	29-Sep-35						1560				
1935	9	1935.09	30-Sep-35						1590				
1935	10	1935.10	1-Oct-35						1620				
1935	10	1935.10	2-Oct-35						1720				
1935	10	1935.10	3-Oct-35						1900				
1935	10	1935.10	4-Oct-35						2000				
1935	10	1935.10	5-Oct-35						2070				
1935	10	1935.10	6-Oct-35						2070				
1935	10	1935.10	7-Oct-35						2140				
1935	10	1935.10	8-Oct-35						2070				
1935	10	1935.10	9-Oct-35						2070				
1935	10	1935.10	10-Oct-35						2070				
1935	10	1935.10	11-Oct-35						2000				
1935	10	1935.10	12-Oct-35						2000				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1935	10	1935.10	13-Oct-35						2000				
1935	10	1935.10	14-Oct-35						2000				
1935	10	1935.10	15-Oct-35						2070				
1935	10	1935.10	16-Oct-35						2210				
1935	10	1935.10	17-Oct-35						2140				
1935	10	1935.10	18-Oct-35						2140				
1935	10	1935.10	19-Oct-35						2210				
1935	10	1935.10	20-Oct-35						2280				
1935	10	1935.10	21-Oct-35						2210				
1935	10	1935.10	22-Oct-35						2140				
1935	10	1935.10	23-Oct-35						2070				
1935	10	1935.10	24-Oct-35						2000				
1935	10	1935.10	25-Oct-35						2000				
1935	10	1935.10	26-Oct-35						2000				
1935	10	1935.10	27-Oct-35						2000				
1935	10	1935.10	28-Oct-35						2000				
1935	10	1935.10	29-Oct-35						1960				
1935	10	1935.10	30-Oct-35						1930				
1935	10	1935.10	31-Oct-35						1930				
1935	11	1935.11	1-Nov-35						1930				
1935	11	1935.11	2-Nov-35						1930				
1935	11	1935.11	3-Nov-35						1760				
1935	11	1935.11	4-Nov-35						1720				
1935	11	1935.11	5-Nov-35						1760				
1935	11	1935.11	6-Nov-35						1720				
1935	11	1935.11	7-Nov-35						1760				
1935	11	1935.11	8-Nov-35						1760				
1935	11	1935.11	9-Nov-35						1760				
1935	11	1935.11	10-Nov-35						1760				
1935	11	1935.11	11-Nov-35						1720				
1935	11	1935.11	12-Nov-35						1680				
1935	11	1935.11	13-Nov-35						1680				
1935	11	1935.11	14-Nov-35						1760				
1935	11	1935.11	15-Nov-35						1790				
1935	11	1935.11	16-Nov-35						1820				
1935	11	1935.11	17-Nov-35						1860				
1935	11	1935.11	18-Nov-35						1900				
1935	11	1935.11	19-Nov-35						1900				
1935	11	1935.11	20-Nov-35						1930				
1935	11	1935.11	21-Nov-35						1960				
1935	11	1935.11	22-Nov-35						2070				
1935	11	1935.11	23-Nov-35						2140				
1935	11	1935.11	24-Nov-35						2210				
1935	11	1935.11	25-Nov-35						2280				
1935	11	1935.11	26-Nov-35						2280				
1935	11	1935.11	27-Nov-35						2280				
1935	11	1935.11	28-Nov-35						2350				
1935	11	1935.11	29-Nov-35						2350				
1935	11	1935.11	30-Nov-35						2350				
1935	12	1935.12	1-Dec-35						2280				
1935	12	1935.12	2-Dec-35						2280				
1935	12	1935.12	3-Dec-35						2280				
1935	12	1935.12	4-Dec-35						2210				
1935	12	1935.12	5-Dec-35						2210				
1935	12	1935.12	6-Dec-35						2210				
1935	12	1935.12	7-Dec-35						2280				
1935	12	1935.12	8-Dec-35						2350				
1935	12	1935.12	9-Dec-35						2420				
1935	12	1935.12	10-Dec-35						2420				
1935	12	1935.12	11-Dec-35						2490				
1935	12	1935.12	12-Dec-35						2630				
1935	12	1935.12	13-Dec-35						2630				
1935	12	1935.12	14-Dec-35						2630				
1935	12	1935.12	15-Dec-35						2560				
1935	12	1935.12	16-Dec-35						2560				
1935	12	1935.12	17-Dec-35						2490				
1935	12	1935.12	18-Dec-35						2490				
1935	12	1935.12	19-Dec-35						2560				
1935	12	1935.12	20-Dec-35						2630				
1935	12	1935.12	21-Dec-35						2630				
1935	12	1935.12	22-Dec-35						2630				
1935	12	1935.12	23-Dec-35						2630				
1935	12	1935.12	24-Dec-35						2630				
1935	12	1935.12	25-Dec-35						2700				
1935	12	1935.12	26-Dec-35						2780				
1935	12	1935.12	27-Dec-35						2700				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1935	12	1935.12	28-Dec-35						2700				
1935	12	1935.12	29-Dec-35						2780				
1935	12	1935.12	30-Dec-35						2940				
1935	12	1935.12	31-Dec-35						2860				
1936	1	1936.01	1-Jan-36						2780				
1936	1	1936.01	2-Jan-36						2780				
1936	1	1936.01	3-Jan-36						2630				
1936	1	1936.01	4-Jan-36						2630				
1936	1	1936.01	5-Jan-36						2630				
1936	1	1936.01	6-Jan-36						2700				
1936	1	1936.01	7-Jan-36						2630				
1936	1	1936.01	8-Jan-36						2560				
1936	1	1936.01	9-Jan-36						2700				
1936	1	1936.01	10-Jan-36						2940				
1936	1	1936.01	11-Jan-36						3420				
1936	1	1936.01	12-Jan-36						4060				
1936	1	1936.01	13-Jan-36						4550				
1936	1	1936.01	14-Jan-36						3820				
1936	1	1936.01	15-Jan-36						4060				
1936	1	1936.01	16-Jan-36						4640				
1936	1	1936.01	17-Jan-36						4060				
1936	1	1936.01	18-Jan-36						3820				
1936	1	1936.01	19-Jan-36						3580				
1936	1	1936.01	20-Jan-36						3500				
1936	1	1936.01	21-Jan-36						3260				
1936	1	1936.01	22-Jan-36						3180				
1936	1	1936.01	23-Jan-36						3100				
1936	1	1936.01	24-Jan-36						3180				
1936	1	1936.01	25-Jan-36						3420				
1936	1	1936.01	26-Jan-36						3420				
1936	1	1936.01	27-Jan-36						3340				
1936	1	1936.01	28-Jan-36						2940				
1936	1	1936.01	29-Jan-36						3260				
1936	1	1936.01	30-Jan-36						3420				
1936	1	1936.01	31-Jan-36						3420				
1936	2	1936.02	1-Feb-36						3420				
1936	2	1936.02	2-Feb-36						3260				
1936	2	1936.02	3-Feb-36						3660				
1936	2	1936.02	4-Feb-36						3820				
1936	2	1936.02	5-Feb-36						4060				
1936	2	1936.02	6-Feb-36						4060				
1936	2	1936.02	7-Feb-36						4140				
1936	2	1936.02	8-Feb-36						4220				
1936	2	1936.02	9-Feb-36						4380				
1936	2	1936.02	10-Feb-36						4220				
1936	2	1936.02	11-Feb-36						3660				
1936	2	1936.02	12-Feb-36						3900				
1936	2	1936.02	13-Feb-36						5360				
1936	2	1936.02	14-Feb-36						6760				
1936	2	1936.02	15-Feb-36						8890				
1936	2	1936.02	16-Feb-36						9440				
1936	2	1936.02	17-Feb-36						10200				
1936	2	1936.02	18-Feb-36						12500				
1936	2	1936.02	19-Feb-36						14400				
1936	2	1936.02	20-Feb-36						16000				
1936	2	1936.02	21-Feb-36						18100				
1936	2	1936.02	22-Feb-36						20700				
1936	2	1936.02	23-Feb-36						22800				
1936	2	1936.02	24-Feb-36						26700				
1936	2	1936.02	25-Feb-36						28600				
1936	2	1936.02	26-Feb-36						28600				
1936	2	1936.02	27-Feb-36						28500				
1936	2	1936.02	28-Feb-36						28300				
1936	2	1936.02	29-Feb-36						27100				
1936	3	1936.03	1-Mar-36						26200				
1936	3	1936.03	2-Mar-36						24600				
1936	3	1936.03	3-Mar-36						24000				
1936	3	1936.03	4-Mar-36						23100				
1936	3	1936.03	5-Mar-36						21900				
1936	3	1936.03	6-Mar-36						21000				
1936	3	1936.03	7-Mar-36						20000				
1936	3	1936.03	8-Mar-36						18700				
1936	3	1936.03	9-Mar-36						17500				
1936	3	1936.03	10-Mar-36						15800				
1936	3	1936.03	11-Mar-36						13600				
1936	3	1936.03	12-Mar-36						12000				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1936	3	1936.03	13-Mar-36						11200				
1936	3	1936.03	14-Mar-36						11600				
1936	3	1936.03	15-Mar-36						12200				
1936	3	1936.03	16-Mar-36						12500				
1936	3	1936.03	17-Mar-36						12700				
1936	3	1936.03	18-Mar-36						12800				
1936	3	1936.03	19-Mar-36						12700				
1936	3	1936.03	20-Mar-36						12500				
1936	3	1936.03	21-Mar-36						11800				
1936	3	1936.03	22-Mar-36						11600				
1936	3	1936.03	23-Mar-36						11200				
1936	3	1936.03	24-Mar-36						10700				
1936	3	1936.03	25-Mar-36						10200				
1936	3	1936.03	26-Mar-36						9660				
1936	3	1936.03	27-Mar-36						9000				
1936	3	1936.03	28-Mar-36						7660				
1936	3	1936.03	29-Mar-36						6960				
1936	3	1936.03	30-Mar-36						6760				
1936	3	1936.03	31-Mar-36						7160				
1936	4	1936.04	1-Apr-36						7860				
1936	4	1936.04	2-Apr-36						7860				
1936	4	1936.04	3-Apr-36						7860				
1936	4	1936.04	4-Apr-36						8060				
1936	4	1936.04	5-Apr-36						8560				
1936	4	1936.04	6-Apr-36						9000				
1936	4	1936.04	7-Apr-36						9330				
1936	4	1936.04	8-Apr-36						9660				
1936	4	1936.04	9-Apr-36						9880				
1936	4	1936.04	10-Apr-36						10200				
1936	4	1936.04	11-Apr-36						10600				
1936	4	1936.04	12-Apr-36						10800				
1936	4	1936.04	13-Apr-36						11300				
1936	4	1936.04	14-Apr-36						11800				
1936	4	1936.04	15-Apr-36						12400				
1936	4	1936.04	16-Apr-36						12900				
1936	4	1936.04	17-Apr-36						13800				
1936	4	1936.04	18-Apr-36						14700				
1936	4	1936.04	19-Apr-36						15600				
1936	4	1936.04	20-Apr-36						16500				
1936	4	1936.04	21-Apr-36						17500				
1936	4	1936.04	22-Apr-36						17500				
1936	4	1936.04	23-Apr-36						17500				
1936	4	1936.04	24-Apr-36						17300				
1936	4	1936.04	25-Apr-36						17100				
1936	4	1936.04	26-Apr-36						17300				
1936	4	1936.04	27-Apr-36						17100				
1936	4	1936.04	28-Apr-36						17100				
1936	4	1936.04	29-Apr-36						16900				
1936	4	1936.04	30-Apr-36						16700				
1936	5	1936.05	1-May-36						16200				
1936	5	1936.05	2-May-36						15300				
1936	5	1936.05	3-May-36						14100				
1936	5	1936.05	4-May-36						13400				
1936	5	1936.05	5-May-36						13200				
1936	5	1936.05	6-May-36						13600				
1936	5	1936.05	7-May-36						14400				
1936	5	1936.05	8-May-36						14700				
1936	5	1936.05	9-May-36						14700				
1936	5	1936.05	10-May-36						14400				
1936	5	1936.05	11-May-36						14100				
1936	5	1936.05	12-May-36						14100				
1936	5	1936.05	13-May-36						14200				
1936	5	1936.05	14-May-36						14800				
1936	5	1936.05	15-May-36						16200				
1936	5	1936.05	16-May-36						18400				
1936	5	1936.05	17-May-36						20700				
1936	5	1936.05	18-May-36						22000				
1936	5	1936.05	19-May-36						22200				
1936	5	1936.05	20-May-36						22000				
1936	5	1936.05	21-May-36						21700				
1936	5	1936.05	22-May-36						21200				
1936	5	1936.05	23-May-36						19500				
1936	5	1936.05	24-May-36						17900				
1936	5	1936.05	25-May-36						16900				
1936	5	1936.05	26-May-36						16300				
1936	5	1936.05	27-May-36						16700				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1936	5	1936.05	28-May-36						16900				
1936	5	1936.05	29-May-36						17100				
1936	5	1936.05	30-May-36						17100				
1936	5	1936.05	31-May-36						16300				
1936	6	1936.06	1-Jun-36						15300				
1936	6	1936.06	2-Jun-36						14500				
1936	6	1936.06	3-Jun-36						13500				
1936	6	1936.06	4-Jun-36						12100				
1936	6	1936.06	5-Jun-36						11000				
1936	6	1936.06	6-Jun-36						10000				
1936	6	1936.06	7-Jun-36						9220				
1936	6	1936.06	8-Jun-36						9330				
1936	6	1936.06	9-Jun-36						11300				
1936	6	1936.06	10-Jun-36						12400				
1936	6	1936.06	11-Jun-36						12200				
1936	6	1936.06	12-Jun-36						11300				
1936	6	1936.06	13-Jun-36						11400				
1936	6	1936.06	14-Jun-36						12100				
1936	6	1936.06	15-Jun-36						12800				
1936	6	1936.06	16-Jun-36						13200				
1936	6	1936.06	17-Jun-36						13200				
1936	6	1936.06	18-Jun-36						12100				
1936	6	1936.06	19-Jun-36						10400				
1936	6	1936.06	20-Jun-36						9770				
1936	6	1936.06	21-Jun-36						10200				
1936	6	1936.06	22-Jun-36						10800				
1936	6	1936.06	23-Jun-36						11300				
1936	6	1936.06	24-Jun-36						10800				
1936	6	1936.06	25-Jun-36						9220				
1936	6	1936.06	26-Jun-36						8560				
1936	6	1936.06	27-Jun-36						8780				
1936	6	1936.06	28-Jun-36						8890				
1936	6	1936.06	29-Jun-36						9110				
1936	6	1936.06	30-Jun-36						8780				
1936	7	1936.07	1-Jul-36						7260				
1936	7	1936.07	2-Jul-36						6080				
1936	7	1936.07	3-Jul-36						5990				
1936	7	1936.07	4-Jul-36						5720				
1936	7	1936.07	5-Jul-36						5450				
1936	7	1936.07	6-Jul-36						4910				
1936	7	1936.07	7-Jul-36						4300				
1936	7	1936.07	8-Jul-36						3740				
1936	7	1936.07	9-Jul-36						3660				
1936	7	1936.07	10-Jul-36						4140				
1936	7	1936.07	11-Jul-36						4140				
1936	7	1936.07	12-Jul-36						3420				
1936	7	1936.07	13-Jul-36						3180				
1936	7	1936.07	14-Jul-36						3020				
1936	7	1936.07	15-Jul-36						2860				
1936	7	1936.07	16-Jul-36						2630				
1936	7	1936.07	17-Jul-36						2420				
1936	7	1936.07	18-Jul-36						2070				
1936	7	1936.07	19-Jul-36						1900				
1936	7	1936.07	20-Jul-36						1860				
1936	7	1936.07	21-Jul-36						1760				
1936	7	1936.07	22-Jul-36						1650				
1936	7	1936.07	23-Jul-36						1490				
1936	7	1936.07	24-Jul-36						1430				
1936	7	1936.07	25-Jul-36						1370				
1936	7	1936.07	26-Jul-36						1370				
1936	7	1936.07	27-Jul-36						1400				
1936	7	1936.07	28-Jul-36						1340				
1936	7	1936.07	29-Jul-36						1280				
1936	7	1936.07	30-Jul-36						1280				
1936	8	1936.08	1-Aug-36						1250				
1936	8	1936.08	2-Aug-36						1280				
1936	8	1936.08	3-Aug-36						1310				
1936	8	1936.08	4-Aug-36						1250				
1936	8	1936.08	5-Aug-36						1190				
1936	8	1936.08	6-Aug-36						1130				
1936	8	1936.08	7-Aug-36						1100				
1936	8	1936.08	8-Aug-36						1040				
1936	8	1936.08	9-Aug-36						1040				
1936	8	1936.08	10-Aug-36						1100				
1936	8	1936.08	11-Aug-36						1070				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1936	8	1936.08	12-Aug-36						1040				
1936	8	1936.08	13-Aug-36						980				
1936	8	1936.08	14-Aug-36						1010				
1936	8	1936.08	15-Aug-36						1010				
1936	8	1936.08	16-Aug-36						1040				
1936	8	1936.08	17-Aug-36						1130				
1936	8	1936.08	18-Aug-36						1100				
1936	8	1936.08	19-Aug-36						1040				
1936	8	1936.08	20-Aug-36						1040				
1936	8	1936.08	21-Aug-36						1040				
1936	8	1936.08	22-Aug-36						1070				
1936	8	1936.08	23-Aug-36						1190				
1936	8	1936.08	24-Aug-36						1310				
1936	8	1936.08	25-Aug-36						1280				
1936	8	1936.08	26-Aug-36						1190				
1936	8	1936.08	27-Aug-36						1130				
1936	8	1936.08	28-Aug-36						1070				
1936	8	1936.08	29-Aug-36						1070				
1936	8	1936.08	30-Aug-36						1100				
1936	8	1936.08	31-Aug-36						1160				
1936	9	1936.09	1-Sep-36						1160				
1936	9	1936.09	2-Sep-36						1130				
1936	9	1936.09	3-Sep-36						1100				
1936	9	1936.09	4-Sep-36						1130				
1936	9	1936.09	5-Sep-36						1130				
1936	9	1936.09	6-Sep-36						1220				
1936	9	1936.09	7-Sep-36						1250				
1936	9	1936.09	8-Sep-36						1220				
1936	9	1936.09	9-Sep-36						1190				
1936	9	1936.09	10-Sep-36						1100				
1936	9	1936.09	11-Sep-36						1100				
1936	9	1936.09	12-Sep-36						1070				
1936	9	1936.09	13-Sep-36						1100				
1936	9	1936.09	14-Sep-36						1190				
1936	9	1936.09	15-Sep-36						1250				
1936	9	1936.09	16-Sep-36						1250				
1936	9	1936.09	17-Sep-36						1250				
1936	9	1936.09	18-Sep-36						1250				
1936	9	1936.09	19-Sep-36						1250				
1936	9	1936.09	20-Sep-36						1250				
1936	9	1936.09	21-Sep-36						1250				
1936	9	1936.09	22-Sep-36						1190				
1936	9	1936.09	23-Sep-36						1280				
1936	9	1936.09	24-Sep-36						1490				
1936	9	1936.09	25-Sep-36						1550				
1936	9	1936.09	26-Sep-36						1550				
1936	9	1936.09	27-Sep-36						1580				
1936	9	1936.09	28-Sep-36						1620				
1936	9	1936.09	29-Sep-36						1650				
1936	9	1936.09	30-Sep-36						1680				
1936	10	1936.10	1-Oct-36						1720				
1936	10	1936.10	2-Oct-36						1650				
1936	10	1936.10	3-Oct-36						1820				
1936	10	1936.10	4-Oct-36						1900				
1936	10	1936.10	5-Oct-36						1960				
1936	10	1936.10	6-Oct-36						1960				
1936	10	1936.10	7-Oct-36						2000				
1936	10	1936.10	8-Oct-36						2000				
1936	10	1936.10	9-Oct-36						2000				
1936	10	1936.10	10-Oct-36						2000				
1936	10	1936.10	11-Oct-36						2000				
1936	10	1936.10	12-Oct-36						2000				
1936	10	1936.10	13-Oct-36						1960				
1936	10	1936.10	14-Oct-36						1930				
1936	10	1936.10	15-Oct-36						1900				
1936	10	1936.10	16-Oct-36						1960				
1936	10	1936.10	17-Oct-36						2000				
1936	10	1936.10	18-Oct-36						1960				
1936	10	1936.10	19-Oct-36						1930				
1936	10	1936.10	20-Oct-36						1960				
1936	10	1936.10	21-Oct-36						1930				
1936	10	1936.10	22-Oct-36						1930				
1936	10	1936.10	23-Oct-36						1900				
1936	10	1936.10	24-Oct-36						1860				
1936	10	1936.10	25-Oct-36						1820				
1936	10	1936.10	26-Oct-36						1860				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1936	10	1936.10	27-Oct-36						1790				
1936	10	1936.10	28-Oct-36						1720				
1936	10	1936.10	29-Oct-36						1720				
1936	10	1936.10	30-Oct-36						1680				
1936	10	1936.10	31-Oct-36						1760				
1936	11	1936.11	1-Nov-36						1820				
1936	11	1936.11	2-Nov-36						1760				
1936	11	1936.11	3-Nov-36						1650				
1936	11	1936.11	4-Nov-36						1650				
1936	11	1936.11	5-Nov-36						1680				
1936	11	1936.11	6-Nov-36						1650				
1936	11	1936.11	7-Nov-36						1620				
1936	11	1936.11	8-Nov-36						1620				
1936	11	1936.11	9-Nov-36						1620				
1936	11	1936.11	10-Nov-36						1620				
1936	11	1936.11	11-Nov-36						1650				
1936	11	1936.11	12-Nov-36						1720				
1936	11	1936.11	13-Nov-36						1790				
1936	11	1936.11	14-Nov-36						2000				
1936	11	1936.11	15-Nov-36						2210				
1936	11	1936.11	16-Nov-36						2350				
1936	11	1936.11	17-Nov-36						2210				
1936	11	1936.11	18-Nov-36						2140				
1936	11	1936.11	19-Nov-36						2140				
1936	11	1936.11	20-Nov-36						2140				
1936	11	1936.11	21-Nov-36						2140				
1936	11	1936.11	22-Nov-36						2070				
1936	11	1936.11	23-Nov-36						2070				
1936	11	1936.11	24-Nov-36						2140				
1936	11	1936.11	25-Nov-36						2140				
1936	11	1936.11	26-Nov-36						2210				
1936	11	1936.11	27-Nov-36						2280				
1936	11	1936.11	28-Nov-36						2280				
1936	11	1936.11	29-Nov-36						2210				
1936	11	1936.11	30-Nov-36						2210				
1936	12	1936.12	1-Dec-36						2280				
1936	12	1936.12	2-Dec-36						2280				
1936	12	1936.12	3-Dec-36						2350				
1936	12	1936.12	4-Dec-36						2350				
1936	12	1936.12	5-Dec-36						2350				
1936	12	1936.12	6-Dec-36						2350				
1936	12	1936.12	7-Dec-36						2350				
1936	12	1936.12	8-Dec-36						2420				
1936	12	1936.12	9-Dec-36						2860				
1936	12	1936.12	10-Dec-36						3020				
1936	12	1936.12	11-Dec-36						3020				
1936	12	1936.12	12-Dec-36						3100				
1936	12	1936.12	13-Dec-36						3100				
1936	12	1936.12	14-Dec-36						3100				
1936	12	1936.12	15-Dec-36						3020				
1936	12	1936.12	16-Dec-36						3100				
1936	12	1936.12	17-Dec-36						2940				
1936	12	1936.12	18-Dec-36						2860				
1936	12	1936.12	19-Dec-36						2860				
1936	12	1936.12	20-Dec-36						2860				
1936	12	1936.12	21-Dec-36						2860				
1936	12	1936.12	22-Dec-36						2940				
1936	12	1936.12	23-Dec-36						3100				
1936	12	1936.12	24-Dec-36						3260				
1936	12	1936.12	25-Dec-36						3260				
1936	12	1936.12	26-Dec-36						3100				
1936	12	1936.12	27-Dec-36						2940				
1936	12	1936.12	28-Dec-36						3020				
1936	12	1936.12	29-Dec-36						3020				
1936	12	1936.12	30-Dec-36						3100				
1936	12	1936.12	31-Dec-36						3340				
1937	1	1937.01	1-Jan-37						3500				
1937	1	1937.01	2-Jan-37						3580				
1937	1	1937.01	3-Jan-37						3500				
1937	1	1937.01	4-Jan-37						3500				
1937	1	1937.01	5-Jan-37						3500				
1937	1	1937.01	6-Jan-37						3500				
1937	1	1937.01	7-Jan-37						3580				
1937	1	1937.01	8-Jan-37						3420				
1937	1	1937.01	9-Jan-37						3340				
1937	1	1937.01	10-Jan-37						3260				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1937	1	1937.01	11-Jan-37						3260				
1937	1	1937.01	12-Jan-37						3260				
1937	1	1937.01	13-Jan-37						3180				
1937	1	1937.01	14-Jan-37						3260				
1937	1	1937.01	15-Jan-37						3340				
1937	1	1937.01	16-Jan-37						3340				
1937	1	1937.01	17-Jan-37						3260				
1937	1	1937.01	18-Jan-37						3180				
1937	1	1937.01	19-Jan-37						3020				
1937	1	1937.01	20-Jan-37						3020				
1937	1	1937.01	21-Jan-37						3100				
1937	1	1937.01	22-Jan-37						3180				
1937	1	1937.01	23-Jan-37						3180				
1937	1	1937.01	24-Jan-37						3180				
1937	1	1937.01	25-Jan-37						3180				
1937	1	1937.01	26-Jan-37						3100				
1937	1	1937.01	27-Jan-37						2940				
1937	1	1937.01	28-Jan-37						3020				
1937	1	1937.01	29-Jan-37						3180				
1937	1	1937.01	30-Jan-37						3420				
1937	1	1937.01	31-Jan-37						3740				
1937	2	1937.02	1-Feb-37						4300				
1937	2	1937.02	2-Feb-37						4140				
1937	2	1937.02	3-Feb-37						4460				
1937	2	1937.02	4-Feb-37						5090				
1937	2	1937.02	5-Feb-37						5450				
1937	2	1937.02	6-Feb-37						7360				
1937	2	1937.02	7-Feb-37						9880				
1937	2	1937.02	8-Feb-37						11000				
1937	2	1937.02	9-Feb-37						9550				
1937	2	1937.02	10-Feb-37						9000				
1937	2	1937.02	11-Feb-37						9330				
1937	2	1937.02	12-Feb-37						9880				
1937	2	1937.02	13-Feb-37						10600				
1937	2	1937.02	14-Feb-37						11300				
1937	2	1937.02	15-Feb-37						13100				
1937	2	1937.02	16-Feb-37						14200				
1937	2	1937.02	17-Feb-37						14500				
1937	2	1937.02	18-Feb-37						15600				
1937	2	1937.02	19-Feb-37						17500				
1937	2	1937.02	20-Feb-37						18800				
1937	2	1937.02	21-Feb-37						19000				
1937	2	1937.02	22-Feb-37						18400				
1937	2	1937.02	23-Feb-37						17300				
1937	2	1937.02	24-Feb-37						17300				
1937	2	1937.02	25-Feb-37						17500				
1937	2	1937.02	26-Feb-37						17700				
1937	2	1937.02	27-Feb-37						17500				
1937	2	1937.02	28-Feb-37						17300				
1937	3	1937.03	1-Mar-37						16700				
1937	3	1937.03	2-Mar-37						15600				
1937	3	1937.03	3-Mar-37						15000				
1937	3	1937.03	4-Mar-37						13800				
1937	3	1937.03	5-Mar-37						12800				
1937	3	1937.03	6-Mar-37						12100				
1937	3	1937.03	7-Mar-37						11400				
1937	3	1937.03	8-Mar-37						10500				
1937	3	1937.03	9-Mar-37						9660				
1937	3	1937.03	10-Mar-37						9550				
1937	3	1937.03	11-Mar-37						9330				
1937	3	1937.03	12-Mar-37						9550				
1937	3	1937.03	13-Mar-37						10100				
1937	3	1937.03	14-Mar-37						11600				
1937	3	1937.03	15-Mar-37						12200				
1937	3	1937.03	16-Mar-37						12100				
1937	3	1937.03	17-Mar-37						12100				
1937	3	1937.03	18-Mar-37						11800				
1937	3	1937.03	19-Mar-37						11300				
1937	3	1937.03	20-Mar-37						10800				
1937	3	1937.03	21-Mar-37						10800				
1937	3	1937.03	22-Mar-37						11200				
1937	3	1937.03	23-Mar-37						12900				
1937	3	1937.03	24-Mar-37						14200				
1937	3	1937.03	25-Mar-37						15200				
1937	3	1937.03	26-Mar-37						17300				
1937	3	1937.03	27-Mar-37						19000				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1937	3	1937.03	28-Mar-37						18400				
1937	3	1937.03	29-Mar-37						17700				
1937	3	1937.03	30-Mar-37						17500				
1937	3	1937.03	31-Mar-37						17300				
1937	4	1937.04	1-Apr-37						16900				
1937	4	1937.04	2-Apr-37						16700				
1937	4	1937.04	3-Apr-37						16900				
1937	4	1937.04	4-Apr-37						16900				
1937	4	1937.04	5-Apr-37						16500				
1937	4	1937.04	6-Apr-37						16200				
1937	4	1937.04	7-Apr-37						15600				
1937	4	1937.04	8-Apr-37						15300				
1937	4	1937.04	9-Apr-37						14800				
1937	4	1937.04	10-Apr-37						14400				
1937	4	1937.04	11-Apr-37						13900				
1937	4	1937.04	12-Apr-37						13800				
1937	4	1937.04	13-Apr-37						13800				
1937	4	1937.04	14-Apr-37						13800				
1937	4	1937.04	15-Apr-37						13600				
1937	4	1937.04	16-Apr-37						13500				
1937	4	1937.04	17-Apr-37						13600				
1937	4	1937.04	18-Apr-37						13600				
1937	4	1937.04	19-Apr-37						13200				
1937	4	1937.04	20-Apr-37						12900				
1937	4	1937.04	21-Apr-37						12900				
1937	4	1937.04	22-Apr-37						12900				
1937	4	1937.04	23-Apr-37						13500				
1937	4	1937.04	24-Apr-37						13900				
1937	4	1937.04	25-Apr-37						13900				
1937	4	1937.04	26-Apr-37						13600				
1937	4	1937.04	27-Apr-37						13600				
1937	4	1937.04	28-Apr-37						14100				
1937	4	1937.04	29-Apr-37						14800				
1937	4	1937.04	30-Apr-37						14800				
1937	5	1937.05	1-May-37						14700				
1937	5	1937.05	2-May-37						14200				
1937	5	1937.05	3-May-37						13600				
1937	5	1937.05	4-May-37						13500				
1937	5	1937.05	5-May-37						13600				
1937	5	1937.05	6-May-37						14100				
1937	5	1937.05	7-May-37						14500				
1937	5	1937.05	8-May-37						15000				
1937	5	1937.05	9-May-37						15200				
1937	5	1937.05	10-May-37						15200				
1937	5	1937.05	11-May-37						15200				
1937	5	1937.05	12-May-37						15300				
1937	5	1937.05	13-May-37						15500				
1937	5	1937.05	14-May-37						16900				
1937	5	1937.05	15-May-37						19300				
1937	5	1937.05	16-May-37						22200				
1937	5	1937.05	17-May-37						24500				
1937	5	1937.05	18-May-37						25100				
1937	5	1937.05	19-May-37						25400				
1937	5	1937.05	20-May-37						24900				
1937	5	1937.05	21-May-37						24500				
1937	5	1937.05	22-May-37						23800				
1937	5	1937.05	23-May-37						23600				
1937	5	1937.05	24-May-37						23900				
1937	5	1937.05	25-May-37						24400				
1937	5	1937.05	26-May-37						25000				
1937	5	1937.05	27-May-37						25800				
1937	5	1937.05	28-May-37						25800				
1937	5	1937.05	29-May-37						25400				
1937	5	1937.05	30-May-37						25600				
1937	5	1937.05	31-May-37						25900				
1937	6	1937.06	1-Jun-37						26000				
1937	6	1937.06	2-Jun-37						25400				
1937	6	1937.06	3-Jun-37						24500				
1937	6	1937.06	4-Jun-37						23600				
1937	6	1937.06	5-Jun-37						22400				
1937	6	1937.06	6-Jun-37						20600				
1937	6	1937.06	7-Jun-37						18600				
1937	6	1937.06	8-Jun-37						16900				
1937	6	1937.06	9-Jun-37						16200				
1937	6	1937.06	10-Jun-37						15500				
1937	6	1937.06	11-Jun-37						14700				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1937	6	1937.06	12-Jun-37						13800				
1937	6	1937.06	13-Jun-37						13200				
1937	6	1937.06	14-Jun-37						12900				
1937	6	1937.06	15-Jun-37						13400				
1937	6	1937.06	16-Jun-37						13900				
1937	6	1937.06	17-Jun-37						13900				
1937	6	1937.06	18-Jun-37						14700				
1937	6	1937.06	19-Jun-37						15500				
1937	6	1937.06	20-Jun-37						15500				
1937	6	1937.06	21-Jun-37						15000				
1937	6	1937.06	22-Jun-37						14700				
1937	6	1937.06	23-Jun-37						14500				
1937	6	1937.06	24-Jun-37						13800				
1937	6	1937.06	25-Jun-37						12700				
1937	6	1937.06	26-Jun-37						10800				
1937	6	1937.06	27-Jun-37						9440				
1937	6	1937.06	28-Jun-37						8670				
1937	6	1937.06	29-Jun-37						8160				
1937	6	1937.06	30-Jun-37						7760				
1937	7	1937.07	1-Jul-37						7560				
1937	7	1937.07	2-Jul-37						7360				
1937	7	1937.07	3-Jul-37						7060				
1937	7	1937.07	4-Jul-37						6660				
1937	7	1937.07	5-Jul-37						6080				
1937	7	1937.07	6-Jul-37						5360				
1937	7	1937.07	7-Jul-37						4910				
1937	7	1937.07	8-Jul-37						4460				
1937	7	1937.07	9-Jul-37						4140				
1937	7	1937.07	10-Jul-37						3820				
1937	7	1937.07	11-Jul-37						3580				
1937	7	1937.07	12-Jul-37						3420				
1937	7	1937.07	13-Jul-37						3170				
1937	7	1937.07	14-Jul-37						2940				
1937	7	1937.07	15-Jul-37						2660				
1937	7	1937.07	16-Jul-37						2450				
1937	7	1937.07	17-Jul-37						2310				
1937	7	1937.07	18-Jul-37						2240				
1937	7	1937.07	19-Jul-37						2100				
1937	7	1937.07	20-Jul-37						1970				
1937	7	1937.07	21-Jul-37						1850				
1937	7	1937.07	22-Jul-37						1730				
1937	7	1937.07	23-Jul-37						1670				
1937	7	1937.07	24-Jul-37						1610				
1937	7	1937.07	25-Jul-37						1610				
1937	7	1937.07	26-Jul-37						1550				
1937	7	1937.07	27-Jul-37						1450				
1937	7	1937.07	28-Jul-37						1400				
1937	7	1937.07	29-Jul-37						1350				
1937	7	1937.07	30-Jul-37						1300				
1937	7	1937.07	31-Jul-37						1300				
1937	8	1937.08	1-Aug-37						1300				
1937	8	1937.08	2-Aug-37						1350				
1937	8	1937.08	3-Aug-37						1350				
1937	8	1937.08	4-Aug-37						1300				
1937	8	1937.08	5-Aug-37						1280				
1937	8	1937.08	6-Aug-37						1280				
1937	8	1937.08	7-Aug-37						1220				
1937	8	1937.08	8-Aug-37						1200				
1937	8	1937.08	9-Aug-37						1250				
1937	8	1937.08	10-Aug-37						1200				
1937	8	1937.08	11-Aug-37						1150				
1937	8	1937.08	12-Aug-37						1090				
1937	8	1937.08	13-Aug-37						1050				
1937	8	1937.08	14-Aug-37						1050				
1937	8	1937.08	15-Aug-37						1070				
1937	8	1937.08	16-Aug-37						1070				
1937	8	1937.08	17-Aug-37						1090				
1937	8	1937.08	18-Aug-37						1070				
1937	8	1937.08	19-Aug-37						1070				
1937	8	1937.08	20-Aug-37						1010				
1937	8	1937.08	21-Aug-37						1010				
1937	8	1937.08	22-Aug-37						1010				
1937	8	1937.08	23-Aug-37						1070				
1937	8	1937.08	24-Aug-37						1070				
1937	8	1937.08	25-Aug-37						1040				
1937	8	1937.08	26-Aug-37						1010				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1937	8	1937.08	27-Aug-37						950				
1937	8	1937.08	28-Aug-37						980				
1937	8	1937.08	29-Aug-37						1100				
1937	8	1937.08	30-Aug-37						1160				
1937	8	1937.08	31-Aug-37						1160				
1937	9	1937.09	1-Sep-37						1130				
1937	9	1937.09	2-Sep-37						1100				
1937	9	1937.09	3-Sep-37						1160				
1937	9	1937.09	4-Sep-37						1160				
1937	9	1937.09	5-Sep-37						1160				
1937	9	1937.09	6-Sep-37						1250				
1937	9	1937.09	7-Sep-37						1280				
1937	9	1937.09	8-Sep-37						1220				
1937	9	1937.09	9-Sep-37						1190				
1937	9	1937.09	10-Sep-37						1280				
1937	9	1937.09	11-Sep-37						1400				
1937	9	1937.09	12-Sep-37						1430				
1937	9	1937.09	13-Sep-37						1460				
1937	9	1937.09	14-Sep-37						1490				
1937	9	1937.09	15-Sep-37						1490				
1937	9	1937.09	16-Sep-37						1400				
1937	9	1937.09	17-Sep-37						1370				
1937	9	1937.09	18-Sep-37						1340				
1937	9	1937.09	19-Sep-37						1370				
1937	9	1937.09	20-Sep-37						1460				
1937	9	1937.09	21-Sep-37						1490				
1937	9	1937.09	22-Sep-37						1520				
1937	9	1937.09	23-Sep-37						1550				
1937	9	1937.09	24-Sep-37						1550				
1937	9	1937.09	25-Sep-37						1620				
1937	9	1937.09	26-Sep-37						1620				
1937	9	1937.09	27-Sep-37						1650				
1937	9	1937.09	28-Sep-37						1580				
1937	9	1937.09	29-Sep-37						1580				
1937	9	1937.09	30-Sep-37						1580				
1937	10	1937.10	1-Oct-37						1620				
1937	10	1937.10	2-Oct-37						1720				
1937	10	1937.10	3-Oct-37						1900				
1937	10	1937.10	4-Oct-37						1960				
1937	10	1937.10	5-Oct-37						1900				
1937	10	1937.10	6-Oct-37						1930				
1937	10	1937.10	7-Oct-37						1960				
1937	10	1937.10	8-Oct-37						2000				
1937	10	1937.10	9-Oct-37						1960				
1937	10	1937.10	10-Oct-37						1820				
1937	10	1937.10	11-Oct-37						1860				
1937	10	1937.10	12-Oct-37						1900				
1937	10	1937.10	13-Oct-37						1900				
1937	10	1937.10	14-Oct-37						1960				
1937	10	1937.10	15-Oct-37						2070				
1937	10	1937.10	16-Oct-37						2210				
1937	10	1937.10	17-Oct-37						2140				
1937	10	1937.10	18-Oct-37						2070				
1937	10	1937.10	19-Oct-37						2000				
1937	10	1937.10	20-Oct-37						2000				
1937	10	1937.10	21-Oct-37						1930				
1937	10	1937.10	22-Oct-37						1860				
1937	10	1937.10	23-Oct-37						1900				
1937	10	1937.10	24-Oct-37						1820				
1937	10	1937.10	25-Oct-37						1790				
1937	10	1937.10	26-Oct-37						1760				
1937	10	1937.10	27-Oct-37						1760				
1937	10	1937.10	28-Oct-37						1820				
1937	10	1937.10	29-Oct-37						1790				
1937	10	1937.10	30-Oct-37						1790				
1937	10	1937.10	31-Oct-37						1760				
1937	11	1937.11	1-Nov-37						1720				
1937	11	1937.11	2-Nov-37						1720				
1937	11	1937.11	3-Nov-37						1860				
1937	11	1937.11	4-Nov-37						1900				
1937	11	1937.11	5-Nov-37						1900				
1937	11	1937.11	6-Nov-37						1900				
1937	11	1937.11	7-Nov-37						1930				
1937	11	1937.11	8-Nov-37						1930				
1937	11	1937.11	9-Nov-37						1860				
1937	11	1937.11	10-Nov-37						1930				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1937	11	1937.11	11-Nov-37						1930				
1937	11	1937.11	12-Nov-37						1930				
1937	11	1937.11	13-Nov-37						1930				
1937	11	1937.11	14-Nov-37						1960				
1937	11	1937.11	15-Nov-37						1930				
1937	11	1937.11	16-Nov-37						1860				
1937	11	1937.11	17-Nov-37						1930				
1937	11	1937.11	18-Nov-37						1960				
1937	11	1937.11	19-Nov-37						1960				
1937	11	1937.11	20-Nov-37						2000				
1937	11	1937.11	21-Nov-37						2070				
1937	11	1937.11	22-Nov-37						2140				
1937	11	1937.11	23-Nov-37						2070				
1937	11	1937.11	24-Nov-37						2140				
1937	11	1937.11	25-Nov-37						2210				
1937	11	1937.11	26-Nov-37						2210				
1937	11	1937.11	27-Nov-37						2140				
1937	11	1937.11	28-Nov-37						2140				
1937	11	1937.11	29-Nov-37						2140				
1937	11	1937.11	30-Nov-37						2070				
1937	12	1937.12	1-Dec-37						2140				
1937	12	1937.12	2-Dec-37						2210				
1937	12	1937.12	3-Dec-37						2210				
1937	12	1937.12	4-Dec-37						2210				
1937	12	1937.12	5-Dec-37						2210				
1937	12	1937.12	6-Dec-37						2280				
1937	12	1937.12	7-Dec-37						2280				
1937	12	1937.12	8-Dec-37						2210				
1937	12	1937.12	9-Dec-37						2210				
1937	12	1937.12	10-Dec-37						2280				
1937	12	1937.12	11-Dec-37						2420				
1937	12	1937.12	12-Dec-37						3260				
1937	12	1937.12	13-Dec-37						5360				
1937	12	1937.12	14-Dec-37						6460				
1937	12	1937.12	15-Dec-37						7060				
1937	12	1937.12	16-Dec-37						7060				
1937	12	1937.12	17-Dec-37						7160				
1937	12	1937.12	18-Dec-37						7260				
1937	12	1937.12	19-Dec-37						7260				
1937	12	1937.12	20-Dec-37						7260				
1937	12	1937.12	21-Dec-37						7160				
1937	12	1937.12	22-Dec-37						7460				
1937	12	1937.12	23-Dec-37						7660				
1937	12	1937.12	24-Dec-37						7860				
1937	12	1937.12	25-Dec-37						7860				
1937	12	1937.12	26-Dec-37						7860				
1937	12	1937.12	27-Dec-37						7660				
1937	12	1937.12	28-Dec-37						7360				
1937	12	1937.12	29-Dec-37						7260				
1937	12	1937.12	30-Dec-37						6960				
1937	12	1937.12	31-Dec-37						6660				
1938	1	1938.01	1-Jan-38						6460				
1938	1	1938.01	2-Jan-38						6170				
1938	1	1938.01	3-Jan-38						5720				
1938	1	1938.01	4-Jan-38						5540				
1938	1	1938.01	5-Jan-38						5810				
1938	1	1938.01	6-Jan-38						5810				
1938	1	1938.01	7-Jan-38						5630				
1938	1	1938.01	8-Jan-38						5630				
1938	1	1938.01	9-Jan-38						5540				
1938	1	1938.01	10-Jan-38						5270				
1938	1	1938.01	11-Jan-38						5090				
1938	1	1938.01	12-Jan-38						5270				
1938	1	1938.01	13-Jan-38						5270				
1938	1	1938.01	14-Jan-38						5270				
1938	1	1938.01	15-Jan-38						5180				
1938	1	1938.01	16-Jan-38						5360				
1938	1	1938.01	17-Jan-38						5540				
1938	1	1938.01	18-Jan-38						5720				
1938	1	1938.01	19-Jan-38						6080				
1938	1	1938.01	20-Jan-38						6660				
1938	1	1938.01	21-Jan-38						7160				
1938	1	1938.01	22-Jan-38						7460				
1938	1	1938.01	23-Jan-38						7360				
1938	1	1938.01	24-Jan-38						7160				
1938	1	1938.01	25-Jan-38						6960				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1938	1	1938.01	26-Jan-38						7360				
1938	1	1938.01	27-Jan-38						7360				
1938	1	1938.01	28-Jan-38						7260				
1938	1	1938.01	29-Jan-38						7060				
1938	1	1938.01	30-Jan-38						6860				
1938	1	1938.01	31-Jan-38						7160				
1938	2	1938.02	1-Feb-38						7560				
1938	2	1938.02	2-Feb-38						10400				
1938	2	1938.02	3-Feb-38						12400				
1938	2	1938.02	4-Feb-38						13800				
1938	2	1938.02	5-Feb-38						16200				
1938	2	1938.02	6-Feb-38						17700				
1938	2	1938.02	7-Feb-38						16300				
1938	2	1938.02	8-Feb-38						14400				
1938	2	1938.02	9-Feb-38						13500				
1938	2	1938.02	10-Feb-38						14100				
1938	2	1938.02	11-Feb-38						17300				
1938	2	1938.02	12-Feb-38						28000				
1938	2	1938.02	13-Feb-38						34000				
1938	2	1938.02	14-Feb-38						40000				
1938	2	1938.02	15-Feb-38						39300				
1938	2	1938.02	16-Feb-38						36700				
1938	2	1938.02	17-Feb-38						35100				
1938	2	1938.02	18-Feb-38						33600				
1938	2	1938.02	19-Feb-38						31500				
1938	2	1938.02	20-Feb-38						29400				
1938	2	1938.02	21-Feb-38						28200				
1938	2	1938.02	22-Feb-38						27100				
1938	2	1938.02	23-Feb-38						26000				
1938	2	1938.02	24-Feb-38						25500				
1938	2	1938.02	25-Feb-38						24200				
1938	2	1938.02	26-Feb-38						22600				
1938	2	1938.02	27-Feb-38						20800				
1938	2	1938.02	28-Feb-38						20200				
1938	3	1938.03	1-Mar-38						19800				
1938	3	1938.03	2-Mar-38						20500				
1938	3	1938.03	3-Mar-38						21800				
1938	3	1938.03	4-Mar-38						26500				
1938	3	1938.03	5-Mar-38						33600				
1938	3	1938.03	6-Mar-38						35100				
1938	3	1938.03	7-Mar-38						36700				
1938	3	1938.03	8-Mar-38						38400				
1938	3	1938.03	9-Mar-38						38400				
1938	3	1938.03	10-Mar-38						39300				
1938	3	1938.03	11-Mar-38						39300				
1938	3	1938.03	12-Mar-38						36700				
1938	3	1938.03	13-Mar-38						35900				
1938	3	1938.03	14-Mar-38						40200				
1938	3	1938.03	15-Mar-38						50000				
1938	3	1938.03	16-Mar-38						50000				
1938	3	1938.03	17-Mar-38						43200				
1938	3	1938.03	18-Mar-38						41200				
1938	3	1938.03	19-Mar-38						39300				
1938	3	1938.03	20-Mar-38						37500				
1938	3	1938.03	21-Mar-38						35900				
1938	3	1938.03	22-Mar-38						35900				
1938	3	1938.03	23-Mar-38						34300				
1938	3	1938.03	24-Mar-38						32900				
1938	3	1938.03	25-Mar-38						30800				
1938	3	1938.03	26-Mar-38						30100				
1938	3	1938.03	27-Mar-38						28800				
1938	3	1938.03	28-Mar-38						27600				
1938	3	1938.03	29-Mar-38						27100				
1938	3	1938.03	30-Mar-38						26500				
1938	3	1938.03	31-Mar-38						25500				
1938	4	1938.04	1-Apr-38						24200				
1938	4	1938.04	2-Apr-38						22600				
1938	4	1938.04	3-Apr-38						21400				
1938	4	1938.04	4-Apr-38						20800				
1938	4	1938.04	5-Apr-38						20200				
1938	4	1938.04	6-Apr-38						20500				
1938	4	1938.04	7-Apr-38						21800				
1938	4	1938.04	8-Apr-38						21800				
1938	4	1938.04	9-Apr-38						21400				
1938	4	1938.04	10-Apr-38						20500				
1938	4	1938.04	11-Apr-38						20500				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1938	4	1938.04	12-Apr-38						20500				
1938	4	1938.04	13-Apr-38						20800				
1938	4	1938.04	14-Apr-38						21400				
1938	4	1938.04	15-Apr-38						21800				
1938	4	1938.04	16-Apr-38						21800				
1938	4	1938.04	17-Apr-38						21400				
1938	4	1938.04	18-Apr-38						21100				
1938	4	1938.04	19-Apr-38						21100				
1938	4	1938.04	20-Apr-38						21400				
1938	4	1938.04	21-Apr-38						22200				
1938	4	1938.04	22-Apr-38						23400				
1938	4	1938.04	23-Apr-38						24200				
1938	4	1938.04	24-Apr-38						24200				
1938	4	1938.04	25-Apr-38						24600				
1938	4	1938.04	26-Apr-38						25100				
1938	4	1938.04	27-Apr-38						25500				
1938	4	1938.04	28-Apr-38						25500				
1938	4	1938.04	29-Apr-38						25100				
1938	4	1938.04	30-Apr-38						25500				
1938	5	1938.05	1-May-38						25500				
1938	5	1938.05	2-May-38						25100				
1938	5	1938.05	3-May-38						24600				
1938	5	1938.05	4-May-38						25100				
1938	5	1938.05	5-May-38						25100				
1938	5	1938.05	6-May-38						24200				
1938	5	1938.05	7-May-38						23800				
1938	5	1938.05	8-May-38						23400				
1938	5	1938.05	9-May-38						23400				
1938	5	1938.05	10-May-38						23400				
1938	5	1938.05	11-May-38						23400				
1938	5	1938.05	12-May-38						23400				
1938	5	1938.05	13-May-38						23800				
1938	5	1938.05	14-May-38						24200				
1938	5	1938.05	15-May-38						25100				
1938	5	1938.05	16-May-38						27600				
1938	5	1938.05	17-May-38						30100				
1938	5	1938.05	18-May-38						30800				
1938	5	1938.05	19-May-38						31500				
1938	5	1938.05	20-May-38						32200				
1938	5	1938.05	21-May-38						31500				
1938	5	1938.05	22-May-38						30800				
1938	5	1938.05	23-May-38						30100				
1938	5	1938.05	24-May-38						29400				
1938	5	1938.05	25-May-38						30100				
1938	5	1938.05	26-May-38						31500				
1938	5	1938.05	27-May-38						33600				
1938	5	1938.05	28-May-38						34300				
1938	5	1938.05	29-May-38						36700				
1938	5	1938.05	30-May-38						37500				
1938	5	1938.05	31-May-38						37500				
1938	6	1938.06	1-Jun-38						36700				
1938	6	1938.06	2-Jun-38						37500				
1938	6	1938.06	3-Jun-38						39300				
1938	6	1938.06	4-Jun-38						42200				
1938	6	1938.06	5-Jun-38						44300				
1938	6	1938.06	6-Jun-38						46500				
1938	6	1938.06	7-Jun-38						47600				
1938	6	1938.06	8-Jun-38						47600				
1938	6	1938.06	9-Jun-38						46500				
1938	6	1938.06	10-Jun-38						45400				
1938	6	1938.06	11-Jun-38						44300				
1938	6	1938.06	12-Jun-38						43200				
1938	6	1938.06	13-Jun-38						41200				
1938	6	1938.06	14-Jun-38						39300				
1938	6	1938.06	15-Jun-38						35900				
1938	6	1938.06	16-Jun-38						33600				
1938	6	1938.06	17-Jun-38						34300				
1938	6	1938.06	18-Jun-38						35100				
1938	6	1938.06	19-Jun-38						35900				
1938	6	1938.06	20-Jun-38						35900				
1938	6	1938.06	21-Jun-38						34300				
1938	6	1938.06	22-Jun-38						31500				
1938	6	1938.06	23-Jun-38						28200				
1938	6	1938.06	24-Jun-38						26000				
1938	6	1938.06	25-Jun-38						25500				
1938	6	1938.06	26-Jun-38						26500				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1938	6	1938.06	27-Jun-38						28200				
1938	6	1938.06	28-Jun-38						28800				
1938	6	1938.06	29-Jun-38						29400				
1938	6	1938.06	30-Jun-38						28800				
1938	7	1938.07	1-Jul-38						27600				
1938	7	1938.07	2-Jul-38						25500				
1938	7	1938.07	3-Jul-38						23000				
1938	7	1938.07	4-Jul-38						21400				
1938	7	1938.07	5-Jul-38						21400				
1938	7	1938.07	6-Jul-38						21400				
1938	7	1938.07	7-Jul-38						21100				
1938	7	1938.07	8-Jul-38						20500				
1938	7	1938.07	9-Jul-38						19800				
1938	7	1938.07	10-Jul-38						19500				
1938	7	1938.07	11-Jul-38						19200				
1938	7	1938.07	12-Jul-38						18900				
1938	7	1938.07	13-Jul-38						18100				
1938	7	1938.07	14-Jul-38						16700				
1938	7	1938.07	15-Jul-38						15400				
1938	7	1938.07	16-Jul-38						14400				
1938	7	1938.07	17-Jul-38						13800				
1938	7	1938.07	18-Jul-38						13400				
1938	7	1938.07	19-Jul-38						12800				
1938	7	1938.07	20-Jul-38						12000				
1938	7	1938.07	21-Jul-38						10800				
1938	7	1938.07	22-Jul-38						9000				
1938	7	1938.07	23-Jul-38						7580				
1938	7	1938.07	24-Jul-38						6810				
1938	7	1938.07	25-Jul-38						6500				
1938	7	1938.07	26-Jul-38						6300				
1938	7	1938.07	27-Jul-38						6200				
1938	7	1938.07	28-Jul-38						6100				
1938	7	1938.07	29-Jul-38						6000				
1938	7	1938.07	30-Jul-38						5900				
1938	7	1938.07	31-Jul-38						5800				
1938	8	1938.08	1-Aug-38						5700				
1938	8	1938.08	2-Aug-38						5500				
1938	8	1938.08	3-Aug-38						5500				
1938	8	1938.08	4-Aug-38						5400				
1938	8	1938.08	5-Aug-38						5100				
1938	8	1938.08	6-Aug-38						4830				
1938	8	1938.08	7-Aug-38						4560				
1938	8	1938.08	8-Aug-38						4560				
1938	8	1938.08	9-Aug-38						4470				
1938	8	1938.08	10-Aug-38						4200				
1938	8	1938.08	11-Aug-38						3840				
1938	8	1938.08	12-Aug-38						3600				
1938	8	1938.08	13-Aug-38						3440				
1938	8	1938.08	14-Aug-38						3360				
1938	8	1938.08	15-Aug-38						3360				
1938	8	1938.08	16-Aug-38						3040				
1938	8	1938.08	17-Aug-38						2800				
1938	8	1938.08	18-Aug-38						2560				
1938	8	1938.08	19-Aug-38						2400				
1938	8	1938.08	20-Aug-38						2320				
1938	8	1938.08	21-Aug-38						2240				
1938	8	1938.08	22-Aug-38						2320				
1938	8	1938.08	23-Aug-38						2240				
1938	8	1938.08	24-Aug-38						2170				
1938	8	1938.08	25-Aug-38						2170				
1938	8	1938.08	26-Aug-38						2100				
1938	8	1938.08	27-Aug-38						2100				
1938	8	1938.08	28-Aug-38						2100				
1938	8	1938.08	29-Aug-38						2100				
1938	8	1938.08	30-Aug-38						2030				
1938	8	1938.08	31-Aug-38						2030				
1938	9	1938.09	1-Sep-38						2240				
1938	9	1938.09	2-Sep-38						2240				
1938	9	1938.09	3-Sep-38						2240				
1938	9	1938.09	4-Sep-38						2240				
1938	9	1938.09	5-Sep-38						2240				
1938	9	1938.09	6-Sep-38						2240				
1938	9	1938.09	7-Sep-38						2240				
1938	9	1938.09	8-Sep-38						2170				
1938	9	1938.09	9-Sep-38						2170				
1938	9	1938.09	10-Sep-38						2170				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1938	9	1938.09 11-Sep-38							2170				
1938	9	1938.09 12-Sep-38							2170				
1938	9	1938.09 13-Sep-38							2170				
1938	9	1938.09 14-Sep-38							2100				
1938	9	1938.09 15-Sep-38							2170				
1938	9	1938.09 16-Sep-38							2170				
1938	9	1938.09 17-Sep-38							2100				
1938	9	1938.09 18-Sep-38							2170				
1938	9	1938.09 19-Sep-38							2240				
1938	9	1938.09 20-Sep-38							2240				
1938	9	1938.09 21-Sep-38							2240				
1938	9	1938.09 22-Sep-38							2170				
1938	9	1938.09 23-Sep-38							2100				
1938	9	1938.09 24-Sep-38							2170				
1938	9	1938.09 25-Sep-38							2240				
1938	9	1938.09 26-Sep-38							2320				
1938	9	1938.09 27-Sep-38							2400				
1938	9	1938.09 28-Sep-38							2400				
1938	9	1938.09 29-Sep-38							2400				
1938	9	1938.09 30-Sep-38							2400				
1938	10	1938.10 1-Oct-38							2450				
1938	10	1938.10 2-Oct-38							2510				
1938	10	1938.10 3-Oct-38							2660				
1938	10	1938.10 4-Oct-38							2680				
1938	10	1938.10 5-Oct-38							2660				
1938	10	1938.10 6-Oct-38							2700				
1938	10	1938.10 7-Oct-38							2730				
1938	10	1938.10 8-Oct-38							2730				
1938	10	1938.10 9-Oct-38							2740				
1938	10	1938.10 10-Oct-38							2730				
1938	10	1938.10 11-Oct-38							2720				
1938	10	1938.10 12-Oct-38							2560				
1938	10	1938.10 13-Oct-38							2510				
1938	10	1938.10 14-Oct-38							2500				
1938	10	1938.10 15-Oct-38							2610				
1938	10	1938.10 16-Oct-38							2870				
1938	10	1938.10 17-Oct-38							2920				
1938	10	1938.10 18-Oct-38							2860				
1938	10	1938.10 19-Oct-38							2720				
1938	10	1938.10 20-Oct-38							2640				
1938	10	1938.10 21-Oct-38							2630				
1938	10	1938.10 22-Oct-38							2640				
1938	10	1938.10 23-Oct-38							2670				
1938	10	1938.10 24-Oct-38							2720				
1938	10	1938.10 25-Oct-38							2710				
1938	10	1938.10 26-Oct-38							2700				
1938	10	1938.10 27-Oct-38							2610				
1938	10	1938.10 28-Oct-38							2560				
1938	10	1938.10 29-Oct-38							2540				
1938	10	1938.10 30-Oct-38							2600				
1938	10	1938.10 31-Oct-38							2750				
1938	11	1938.11 1-Nov-38							2960				
1938	11	1938.11 2-Nov-38							3030				
1938	11	1938.11 3-Nov-38							3220				
1938	11	1938.11 4-Nov-38							3740				
1938	11	1938.11 5-Nov-38							3930				
1938	11	1938.11 6-Nov-38							4030				
1938	11	1938.11 7-Nov-38							3920				
1938	11	1938.11 8-Nov-38							3900				
1938	11	1938.11 9-Nov-38							4160				
1938	11	1938.11 10-Nov-38							4180				
1938	11	1938.11 11-Nov-38							4130				
1938	11	1938.11 12-Nov-38							4040				
1938	11	1938.11 13-Nov-38							3930				
1938	11	1938.11 14-Nov-38							3890				
1938	11	1938.11 15-Nov-38							3860				
1938	11	1938.11 16-Nov-38							4080				
1938	11	1938.11 17-Nov-38							4100				
1938	11	1938.11 18-Nov-38							4030				
1938	11	1938.11 19-Nov-38							4040				
1938	11	1938.11 20-Nov-38							4160				
1938	11	1938.11 21-Nov-38							4040				
1938	11	1938.11 22-Nov-38							4060				
1938	11	1938.11 23-Nov-38							4240				
1938	11	1938.11 24-Nov-38							4040				
1938	11	1938.11 25-Nov-38							3660				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1938	11	1938.11	26-Nov-38						3360				
1938	11	1938.11	27-Nov-38						3310				
1938	11	1938.11	28-Nov-38						3230				
1938	11	1938.11	29-Nov-38						3220				
1938	11	1938.11	30-Nov-38						3460				
1938	12	1938.12	1-Dec-38						3600				
1938	12	1938.12	2-Dec-38						3530				
1938	12	1938.12	3-Dec-38						3430				
1938	12	1938.12	4-Dec-38						3410				
1938	12	1938.12	5-Dec-38						3300				
1938	12	1938.12	6-Dec-38						3360				
1938	12	1938.12	7-Dec-38						3650				
1938	12	1938.12	8-Dec-38						3860				
1938	12	1938.12	9-Dec-38						3890				
1938	12	1938.12	10-Dec-38						3890				
1938	12	1938.12	11-Dec-38						3870				
1938	12	1938.12	12-Dec-38						3730				
1938	12	1938.12	13-Dec-38						3580				
1938	12	1938.12	14-Dec-38						3570				
1938	12	1938.12	15-Dec-38						3600				
1938	12	1938.12	16-Dec-38						3730				
1938	12	1938.12	17-Dec-38						3780				
1938	12	1938.12	18-Dec-38						3770				
1938	12	1938.12	19-Dec-38						3630				
1938	12	1938.12	20-Dec-38						3620				
1938	12	1938.12	21-Dec-38						3800				
1938	12	1938.12	22-Dec-38						3860				
1938	12	1938.12	23-Dec-38						3860				
1938	12	1938.12	24-Dec-38						3860				
1938	12	1938.12	25-Dec-38						3860				
1938	12	1938.12	26-Dec-38						3720				
1938	12	1938.12	27-Dec-38						3600				
1938	12	1938.12	28-Dec-38						3580				
1938	12	1938.12	29-Dec-38						3720				
1938	12	1938.12	30-Dec-38						4010				
1938	12	1938.12	31-Dec-38						4040				
1939	1	1939.01	1-Jan-39						3820				
1939	1	1939.01	2-Jan-39						3340				
1939	1	1939.01	3-Jan-39						3220				
1939	1	1939.01	4-Jan-39						3720				
1939	1	1939.01	5-Jan-39						4040				
1939	1	1939.01	6-Jan-39						4190				
1939	1	1939.01	7-Jan-39						4320				
1939	1	1939.01	8-Jan-39						4340				
1939	1	1939.01	9-Jan-39						4050				
1939	1	1939.01	10-Jan-39						4010				
1939	1	1939.01	11-Jan-39						4430				
1939	1	1939.01	12-Jan-39						4440				
1939	1	1939.01	13-Jan-39						4470				
1939	1	1939.01	14-Jan-39						4640				
1939	1	1939.01	15-Jan-39						4670				
1939	1	1939.01	16-Jan-39						4310				
1939	1	1939.01	17-Jan-39						4160				
1939	1	1939.01	18-Jan-39						4440				
1939	1	1939.01	19-Jan-39						4590				
1939	1	1939.01	20-Jan-39						4640				
1939	1	1939.01	21-Jan-39						4620				
1939	1	1939.01	22-Jan-39						4540				
1939	1	1939.01	23-Jan-39						4170				
1939	1	1939.01	24-Jan-39						4000				
1939	1	1939.01	25-Jan-39						4000				
1939	1	1939.01	26-Jan-39						3950				
1939	1	1939.01	27-Jan-39						3840				
1939	1	1939.01	28-Jan-39						3660				
1939	1	1939.01	29-Jan-39						3560				
1939	1	1939.01	30-Jan-39						3360				
1939	1	1939.01	31-Jan-39						3280				
1939	2	1939.02	1-Feb-39						3480				
1939	2	1939.02	2-Feb-39						3660				
1939	2	1939.02	3-Feb-39						3620				
1939	2	1939.02	4-Feb-39						3570				
1939	2	1939.02	5-Feb-39						3640				
1939	2	1939.02	6-Feb-39						3560				
1939	2	1939.02	7-Feb-39						3850				
1939	2	1939.02	8-Feb-39						4360				
1939	2	1939.02	9-Feb-39						5250				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1939	2	1939.02	10-Feb-39						5550				
1939	2	1939.02	11-Feb-39						5300				
1939	2	1939.02	12-Feb-39						5050				
1939	2	1939.02	13-Feb-39						4800				
1939	2	1939.02	14-Feb-39						4690				
1939	2	1939.02	15-Feb-39						4700				
1939	2	1939.02	16-Feb-39						4600				
1939	2	1939.02	17-Feb-39						4430				
1939	2	1939.02	18-Feb-39						4360				
1939	2	1939.02	19-Feb-39						4320				
1939	2	1939.02	20-Feb-39						4200				
1939	2	1939.02	21-Feb-39						4140				
1939	2	1939.02	22-Feb-39						4110				
1939	2	1939.02	23-Feb-39						4020				
1939	2	1939.02	24-Feb-39						3860				
1939	2	1939.02	25-Feb-39						3660				
1939	2	1939.02	26-Feb-39						3500				
1939	2	1939.02	27-Feb-39						3360				
1939	2	1939.02	28-Feb-39						3140				
1939	3	1939.03	1-Mar-39						2970				
1939	3	1939.03	2-Mar-39						2810				
1939	3	1939.03	3-Mar-39						2480				
1939	3	1939.03	4-Mar-39						2060				
1939	3	1939.03	5-Mar-39						1830				
1939	3	1939.03	6-Mar-39						1690				
1939	3	1939.03	7-Mar-39						1570				
1939	3	1939.03	8-Mar-39						1510				
1939	3	1939.03	9-Mar-39						1590				
1939	3	1939.03	10-Mar-39						1790				
1939	3	1939.03	11-Mar-39						2000				
1939	3	1939.03	12-Mar-39						2290				
1939	3	1939.03	13-Mar-39						2410				
1939	3	1939.03	14-Mar-39						2290				
1939	3	1939.03	15-Mar-39						2200				
1939	3	1939.03	16-Mar-39						2130				
1939	3	1939.03	17-Mar-39						2030				
1939	3	1939.03	18-Mar-39						2000				
1939	3	1939.03	19-Mar-39						1990				
1939	3	1939.03	20-Mar-39						2030				
1939	3	1939.03	21-Mar-39						2080				
1939	3	1939.03	22-Mar-39						2070				
1939	3	1939.03	23-Mar-39						1900				
1939	3	1939.03	24-Mar-39						1570				
1939	3	1939.03	25-Mar-39						1440				
1939	3	1939.03	26-Mar-39						1500				
1939	3	1939.03	27-Mar-39						1940				
1939	3	1939.03	28-Mar-39						2060				
1939	3	1939.03	29-Mar-39						2130				
1939	3	1939.03	30-Mar-39						2140				
1939	3	1939.03	31-Mar-39						2320				
1939	4	1939.04	1-Apr-39						2490				
1939	4	1939.04	2-Apr-39						2570				
1939	4	1939.04	3-Apr-39						2630				
1939	4	1939.04	4-Apr-39						2400				
1939	4	1939.04	5-Apr-39						2220				
1939	4	1939.04	6-Apr-39						2120				
1939	4	1939.04	7-Apr-39						2080				
1939	4	1939.04	8-Apr-39						2350				
1939	4	1939.04	9-Apr-39						2770				
1939	4	1939.04	10-Apr-39						2660				
1939	4	1939.04	11-Apr-39						2800				
1939	4	1939.04	12-Apr-39						2490				
1939	4	1939.04	13-Apr-39						2360				
1939	4	1939.04	14-Apr-39						2360				
1939	4	1939.04	15-Apr-39						2470				
1939	4	1939.04	16-Apr-39						2650				
1939	4	1939.04	17-Apr-39						2700				
1939	4	1939.04	18-Apr-39						2710				
1939	4	1939.04	19-Apr-39						2710				
1939	4	1939.04	20-Apr-39						2570				
1939	4	1939.04	21-Apr-39						2510				
1939	4	1939.04	22-Apr-39						2690				
1939	4	1939.04	23-Apr-39						2710				
1939	4	1939.04	24-Apr-39						2760				
1939	4	1939.04	25-Apr-39						2510				
1939	4	1939.04	26-Apr-39						2340				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1939	4	1939.04	27-Apr-39						2200				
1939	4	1939.04	28-Apr-39						2100				
1939	4	1939.04	29-Apr-39						2020				
1939	4	1939.04	30-Apr-39						2050				
1939	5	1939.05	1-May-39						2240				
1939	5	1939.05	2-May-39						2600				
1939	5	1939.05	3-May-39						3100				
1939	5	1939.05	4-May-39						2460				
1939	5	1939.05	5-May-39						2220				
1939	5	1939.05	6-May-39						2200				
1939	5	1939.05	7-May-39						2200				
1939	5	1939.05	8-May-39						2230				
1939	5	1939.05	9-May-39						2150				
1939	5	1939.05	10-May-39						2020				
1939	5	1939.05	11-May-39						2130				
1939	5	1939.05	12-May-39						2200				
1939	5	1939.05	13-May-39						2210				
1939	5	1939.05	14-May-39						2150				
1939	5	1939.05	15-May-39						2110				
1939	5	1939.05	16-May-39						2100				
1939	5	1939.05	17-May-39						1990				
1939	5	1939.05	18-May-39						1870				
1939	5	1939.05	19-May-39						1710				
1939	5	1939.05	20-May-39						1670				
1939	5	1939.05	21-May-39						1660				
1939	5	1939.05	22-May-39						1820				
1939	5	1939.05	23-May-39						1880				
1939	5	1939.05	24-May-39						1840				
1939	5	1939.05	25-May-39						1770				
1939	5	1939.05	26-May-39						1720				
1939	5	1939.05	27-May-39						1690				
1939	5	1939.05	28-May-39						1860				
1939	5	1939.05	29-May-39						1850				
1939	5	1939.05	30-May-39						1750				
1939	5	1939.05	31-May-39						1710				
1939	6	1939.06	1-Jun-39						1680				
1939	6	1939.06	2-Jun-39						1560				
1939	6	1939.06	3-Jun-39						1390				
1939	6	1939.06	4-Jun-39						1300				
1939	6	1939.06	5-Jun-39						1260				
1939	6	1939.06	6-Jun-39						1170				
1939	6	1939.06	7-Jun-39						1080				
1939	6	1939.06	8-Jun-39						1030				
1939	6	1939.06	9-Jun-39						998				
1939	6	1939.06	10-Jun-39						962				
1939	6	1939.06	11-Jun-39						980				
1939	6	1939.06	12-Jun-39						980				
1939	6	1939.06	13-Jun-39						920				
1939	6	1939.06	14-Jun-39						876				
1939	6	1939.06	15-Jun-39						854				
1939	6	1939.06	16-Jun-39						854				
1939	6	1939.06	17-Jun-39						870				
1939	6	1939.06	18-Jun-39						938				
1939	6	1939.06	19-Jun-39						974				
1939	6	1939.06	20-Jun-39						950				
1939	6	1939.06	21-Jun-39						892				
1939	6	1939.06	22-Jun-39						810				
1939	6	1939.06	23-Jun-39						738				
1939	6	1939.06	24-Jun-39						728				
1939	6	1939.06	25-Jun-39						782				
1939	6	1939.06	26-Jun-39						838				
1939	6	1939.06	27-Jun-39						810				
1939	6	1939.06	28-Jun-39						782				
1939	6	1939.06	29-Jun-39						876				
1939	6	1939.06	30-Jun-39						843				
1939	7	1939.07	1-Jul-39						804				
1939	7	1939.07	2-Jul-39						854				
1939	7	1939.07	3-Jul-39						920				
1939	7	1939.07	4-Jul-39						1030				
1939	7	1939.07	5-Jul-39						1060				
1939	7	1939.07	6-Jul-39						914				
1939	7	1939.07	7-Jul-39						843				
1939	7	1939.07	8-Jul-39						826				
1939	7	1939.07	9-Jul-39						832				
1939	7	1939.07	10-Jul-39						860				
1939	7	1939.07	11-Jul-39						865				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1939	7	1939.07	12-Jul-39						826				
1939	7	1939.07	13-Jul-39						750				
1939	7	1939.07	14-Jul-39						716				
1939	7	1939.07	15-Jul-39						738				
1939	7	1939.07	16-Jul-39						738				
1939	7	1939.07	17-Jul-39						810				
1939	7	1939.07	18-Jul-39						799				
1939	7	1939.07	19-Jul-39						750				
1939	7	1939.07	20-Jul-39						706				
1939	7	1939.07	21-Jul-39						685				
1939	7	1939.07	22-Jul-39						640				
1939	7	1939.07	23-Jul-39						610				
1939	7	1939.07	24-Jul-39						595				
1939	7	1939.07	25-Jul-39						570				
1939	7	1939.07	26-Jul-39						565				
1939	7	1939.07	27-Jul-39						545				
1939	7	1939.07	28-Jul-39						585				
1939	7	1939.07	29-Jul-39						650				
1939	7	1939.07	30-Jul-39						650				
1939	7	1939.07	31-Jul-39						706				
1939	8	1939.08	1-Aug-39						733				
1939	8	1939.08	2-Aug-39						716				
1939	8	1939.08	3-Aug-39						680				
1939	8	1939.08	4-Aug-39						640				
1939	8	1939.08	5-Aug-39						630				
1939	8	1939.08	6-Aug-39						660				
1939	8	1939.08	7-Aug-39						711				
1939	8	1939.08	8-Aug-39						722				
1939	8	1939.08	9-Aug-39						690				
1939	8	1939.08	10-Aug-39						665				
1939	8	1939.08	11-Aug-39						655				
1939	8	1939.08	12-Aug-39						670				
1939	8	1939.08	13-Aug-39						733				
1939	8	1939.08	14-Aug-39						744				
1939	8	1939.08	15-Aug-39						760				
1939	8	1939.08	16-Aug-39						755				
1939	8	1939.08	17-Aug-39						706				
1939	8	1939.08	18-Aug-39						695				
1939	8	1939.08	19-Aug-39						670				
1939	8	1939.08	20-Aug-39						706				
1939	8	1939.08	21-Aug-39						804				
1939	8	1939.08	22-Aug-39						755				
1939	8	1939.08	23-Aug-39						722				
1939	8	1939.08	24-Aug-39						700				
1939	8	1939.08	25-Aug-39						675				
1939	8	1939.08	26-Aug-39						685				
1939	8	1939.08	27-Aug-39						695				
1939	8	1939.08	28-Aug-39						766				
1939	8	1939.08	29-Aug-39						826				
1939	8	1939.08	30-Aug-39						832				
1939	8	1939.08	31-Aug-39						772				
1939	9	1939.09	1-Sep-39						816				
1939	9	1939.09	2-Sep-39						838				
1939	9	1939.09	3-Sep-39						887				
1939	9	1939.09	4-Sep-39						956				
1939	9	1939.09	5-Sep-39						938				
1939	9	1939.09	6-Sep-39						986				
1939	9	1939.09	7-Sep-39						968				
1939	9	1939.09	8-Sep-39						882				
1939	9	1939.09	9-Sep-39						865				
1939	9	1939.09	10-Sep-39						904				
1939	9	1939.09	11-Sep-39						914				
1939	9	1939.09	12-Sep-39						932				
1939	9	1939.09	13-Sep-39						986				
1939	9	1939.09	14-Sep-39						998				
1939	9	1939.09	15-Sep-39						1060				
1939	9	1939.09	16-Sep-39						1050				
1939	9	1939.09	17-Sep-39						1080				
1939	9	1939.09	18-Sep-39						1100				
1939	9	1939.09	19-Sep-39						1070				
1939	9	1939.09	20-Sep-39						1020				
1939	9	1939.09	21-Sep-39						1000				
1939	9	1939.09	22-Sep-39						974				
1939	9	1939.09	23-Sep-39						944				
1939	9	1939.09	24-Sep-39						950				
1939	9	1939.09	25-Sep-39						986				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1939	9	1939.09 26-Sep-39							1260				
1939	9	1939.09 27-Sep-39							1380				
1939	9	1939.09 28-Sep-39							1410				
1939	9	1939.09 29-Sep-39							1430				
1939	9	1939.09 30-Sep-39							1420				
1939	10	1939.10 1-Oct-39							1500				
1939	10	1939.10 2-Oct-39							1670				
1939	10	1939.10 3-Oct-39							1720				
1939	10	1939.10 4-Oct-39							1850				
1939	10	1939.10 5-Oct-39							1840				
1939	10	1939.10 6-Oct-39							1770				
1939	10	1939.10 7-Oct-39							1720				
1939	10	1939.10 8-Oct-39							1680				
1939	10	1939.10 9-Oct-39							1670				
1939	10	1939.10 10-Oct-39							1640				
1939	10	1939.10 11-Oct-39							1580				
1939	10	1939.10 12-Oct-39							1520				
1939	10	1939.10 13-Oct-39							1490				
1939	10	1939.10 14-Oct-39							1470				
1939	10	1939.10 15-Oct-39							1470				
1939	10	1939.10 16-Oct-39							1470				
1939	10	1939.10 17-Oct-39							1330				
1939	10	1939.10 18-Oct-39							1270				
1939	10	1939.10 19-Oct-39							1290				
1939	10	1939.10 20-Oct-39							1240				
1939	10	1939.10 21-Oct-39							1220				
1939	10	1939.10 22-Oct-39							1260				
1939	10	1939.10 23-Oct-39							1260				
1939	10	1939.10 24-Oct-39							1260				
1939	10	1939.10 25-Oct-39							1270				
1939	10	1939.10 26-Oct-39							1360				
1939	10	1939.10 27-Oct-39							1420				
1939	10	1939.10 28-Oct-39							1440				
1939	10	1939.10 29-Oct-39							1440				
1939	10	1939.10 30-Oct-39							1450				
1939	10	1939.10 31-Oct-39							1450				
1939	11	1939.11 1-Nov-39							1490				
1939	11	1939.11 2-Nov-39							1640				
1939	11	1939.11 3-Nov-39							1700				
1939	11	1939.11 4-Nov-39							1500				
1939	11	1939.11 5-Nov-39							1430				
1939	11	1939.11 6-Nov-39							1420				
1939	11	1939.11 7-Nov-39							1400				
1939	11	1939.11 8-Nov-39							1420				
1939	11	1939.11 9-Nov-39							1410				
1939	11	1939.11 10-Nov-39							1390				
1939	11	1939.11 11-Nov-39							1380				
1939	11	1939.11 12-Nov-39							1400				
1939	11	1939.11 13-Nov-39							1410				
1939	11	1939.11 14-Nov-39							1380				
1939	11	1939.11 15-Nov-39							1410				
1939	11	1939.11 16-Nov-39							1450				
1939	11	1939.11 17-Nov-39							1450				
1939	11	1939.11 18-Nov-39							1440				
1939	11	1939.11 19-Nov-39							1420				
1939	11	1939.11 20-Nov-39							1420				
1939	11	1939.11 21-Nov-39							1410				
1939	11	1939.11 22-Nov-39							1420				
1939	11	1939.11 23-Nov-39							1430				
1939	11	1939.11 24-Nov-39							1420				
1939	11	1939.11 25-Nov-39							1410				
1939	11	1939.11 26-Nov-39							1410				
1939	11	1939.11 27-Nov-39							1410				
1939	11	1939.11 28-Nov-39							1410				
1939	11	1939.11 29-Nov-39							1410				
1939	11	1939.11 30-Nov-39							1380				
1939	12	1939.12 1-Dec-39							1380				
1939	12	1939.12 2-Dec-39							1370				
1939	12	1939.12 3-Dec-39							1380				
1939	12	1939.12 4-Dec-39							1360				
1939	12	1939.12 5-Dec-39							1350				
1939	12	1939.12 6-Dec-39							1380				
1939	12	1939.12 7-Dec-39							1470				
1939	12	1939.12 8-Dec-39							1530				
1939	12	1939.12 9-Dec-39							1620				
1939	12	1939.12 10-Dec-39							1630				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1939	12	1939.12	11-Dec-39						1580				
1939	12	1939.12	12-Dec-39						1500				
1939	12	1939.12	13-Dec-39						1490				
1939	12	1939.12	14-Dec-39						1580				
1939	12	1939.12	15-Dec-39						1660				
1939	12	1939.12	16-Dec-39						1700				
1939	12	1939.12	17-Dec-39						1740				
1939	12	1939.12	18-Dec-39						1730				
1939	12	1939.12	19-Dec-39						1680				
1939	12	1939.12	20-Dec-39						1660				
1939	12	1939.12	21-Dec-39						1710				
1939	12	1939.12	22-Dec-39						1740				
1939	12	1939.12	23-Dec-39						1760				
1939	12	1939.12	24-Dec-39						1720				
1939	12	1939.12	25-Dec-39						1670				
1939	12	1939.12	26-Dec-39						1650				
1939	12	1939.12	27-Dec-39						1630				
1939	12	1939.12	28-Dec-39						1620				
1939	12	1939.12	29-Dec-39						1620				
1939	12	1939.12	30-Dec-39						1630				
1939	12	1939.12	31-Dec-39						1640				
1940	1	1940.01	1-Jan-40						1650				
1940	1	1940.01	2-Jan-40						1670				
1940	1	1940.01	3-Jan-40						1620				
1940	1	1940.01	4-Jan-40						1650				
1940	1	1940.01	5-Jan-40						1780				
1940	1	1940.01	6-Jan-40						2080				
1940	1	1940.01	7-Jan-40						2130				
1940	1	1940.01	8-Jan-40						2200				
1940	1	1940.01	9-Jan-40						2380				
1940	1	1940.01	10-Jan-40						3090				
1940	1	1940.01	11-Jan-40						4460				
1940	1	1940.01	12-Jan-40						6040				
1940	1	1940.01	13-Jan-40						6450				
1940	1	1940.01	14-Jan-40						5580				
1940	1	1940.01	15-Jan-40						5350				
1940	1	1940.01	16-Jan-40						5430				
1940	1	1940.01	17-Jan-40						5540				
1940	1	1940.01	18-Jan-40						5630				
1940	1	1940.01	19-Jan-40						5690				
1940	1	1940.01	20-Jan-40						5580				
1940	1	1940.01	21-Jan-40						5170				
1940	1	1940.01	22-Jan-40						4680				
1940	1	1940.01	23-Jan-40						4320				
1940	1	1940.01	24-Jan-40						4100				
1940	1	1940.01	25-Jan-40						3990				
1940	1	1940.01	26-Jan-40						4020				
1940	1	1940.01	27-Jan-40						5420				
1940	1	1940.01	28-Jan-40						5500				
1940	1	1940.01	29-Jan-40						4970				
1940	1	1940.01	30-Jan-40						4890				
1940	1	1940.01	31-Jan-40						5000				
1940	2	1940.02	1-Feb-40						5260				
1940	2	1940.02	2-Feb-40						5530				
1940	2	1940.02	3-Feb-40						5810				
1940	2	1940.02	4-Feb-40						6220				
1940	2	1940.02	5-Feb-40						6930				
1940	2	1940.02	6-Feb-40						6680				
1940	2	1940.02	7-Feb-40						6510				
1940	2	1940.02	8-Feb-40						6930				
1940	2	1940.02	9-Feb-40						7500				
1940	2	1940.02	10-Feb-40						7690				
1940	2	1940.02	11-Feb-40						7710				
1940	2	1940.02	12-Feb-40						7990				
1940	2	1940.02	13-Feb-40						8100				
1940	2	1940.02	14-Feb-40						8050				
1940	2	1940.02	15-Feb-40						8660				
1940	2	1940.02	16-Feb-40						10100				
1940	2	1940.02	17-Feb-40						9500				
1940	2	1940.02	18-Feb-40						8610				
1940	2	1940.02	19-Feb-40						8640				
1940	2	1940.02	20-Feb-40						8590				
1940	2	1940.02	21-Feb-40						8260				
1940	2	1940.02	22-Feb-40						7860				
1940	2	1940.02	23-Feb-40						7500				
1940	2	1940.02	24-Feb-40						7530				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1940	2	1940.02	25-Feb-40						9820				
1940	2	1940.02	26-Feb-40						10900				
1940	2	1940.02	27-Feb-40						11200				
1940	2	1940.02	28-Feb-40						13800				
1940	2	1940.02	29-Feb-40						21000				
1940	3	1940.03	1-Mar-40						30000				
1940	3	1940.03	2-Mar-40						27500				
1940	3	1940.03	3-Mar-40						23700				
1940	3	1940.03	4-Mar-40						20600				
1940	3	1940.03	5-Mar-40						18700				
1940	3	1940.03	6-Mar-40						17700				
1940	3	1940.03	7-Mar-40						17100				
1940	3	1940.03	8-Mar-40						16800				
1940	3	1940.03	9-Mar-40						16700				
1940	3	1940.03	10-Mar-40						16500				
1940	3	1940.03	11-Mar-40						16200				
1940	3	1940.03	12-Mar-40						15700				
1940	3	1940.03	13-Mar-40						14800				
1940	3	1940.03	14-Mar-40						13700				
1940	3	1940.03	15-Mar-40						12700				
1940	3	1940.03	16-Mar-40						11800				
1940	3	1940.03	17-Mar-40						10900				
1940	3	1940.03	18-Mar-40						10300				
1940	3	1940.03	19-Mar-40						9750				
1940	3	1940.03	20-Mar-40						9350				
1940	3	1940.03	21-Mar-40						8840				
1940	3	1940.03	22-Mar-40						8490				
1940	3	1940.03	23-Mar-40						8110				
1940	3	1940.03	24-Mar-40						7760				
1940	3	1940.03	25-Mar-40						7780				
1940	3	1940.03	26-Mar-40						8050				
1940	3	1940.03	27-Mar-40						9660				
1940	3	1940.03	28-Mar-40						13400				
1940	3	1940.03	29-Mar-40						19100				
1940	3	1940.03	30-Mar-40						20700				
1940	3	1940.03	31-Mar-40						21000				
1940	4	1940.04	1-Apr-40						31100				
1940	4	1940.04	2-Apr-40						36600				
1940	4	1940.04	3-Apr-40						32100				
1940	4	1940.04	4-Apr-40						27100				
1940	4	1940.04	5-Apr-40						23600				
1940	4	1940.04	6-Apr-40						21800				
1940	4	1940.04	7-Apr-40						20400				
1940	4	1940.04	8-Apr-40						18900				
1940	4	1940.04	9-Apr-40						17900				
1940	4	1940.04	10-Apr-40						17400				
1940	4	1940.04	11-Apr-40						14800				
1940	4	1940.04	12-Apr-40						15500				
1940	4	1940.04	13-Apr-40						14500				
1940	4	1940.04	14-Apr-40						14000				
1940	4	1940.04	15-Apr-40						13700				
1940	4	1940.04	16-Apr-40						13700				
1940	4	1940.04	17-Apr-40						13800				
1940	4	1940.04	18-Apr-40						13400				
1940	4	1940.04	19-Apr-40						12800				
1940	4	1940.04	20-Apr-40						12500				
1940	4	1940.04	21-Apr-40						12400				
1940	4	1940.04	22-Apr-40						12000				
1940	4	1940.04	23-Apr-40						11700				
1940	4	1940.04	24-Apr-40						12000				
1940	4	1940.04	25-Apr-40						12500				
1940	4	1940.04	26-Apr-40						12800				
1940	4	1940.04	27-Apr-40						13000				
1940	4	1940.04	28-Apr-40						12700				
1940	4	1940.04	29-Apr-40						11800				
1940	4	1940.04	30-Apr-40						10700				
1940	5	1940.05	1-May-40						9950				
1940	5	1940.05	2-May-40						9520				
1940	5	1940.05	3-May-40						9630				
1940	5	1940.05	4-May-40						10600				
1940	5	1940.05	5-May-40						10800				
1940	5	1940.05	6-May-40						11300				
1940	5	1940.05	7-May-40						11200				
1940	5	1940.05	8-May-40						11100				
1940	5	1940.05	9-May-40						11000				
1940	5	1940.05	10-May-40						11400				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1940	5	1940.05	11-May-40						12200				
1940	5	1940.05	12-May-40						13300				
1940	5	1940.05	13-May-40						13800				
1940	5	1940.05	14-May-40						14000				
1940	5	1940.05	15-May-40						14800				
1940	5	1940.05	16-May-40						15800				
1940	5	1940.05	17-May-40						16200				
1940	5	1940.05	18-May-40						16200				
1940	5	1940.05	19-May-40						16300				
1940	5	1940.05	20-May-40						16400				
1940	5	1940.05	21-May-40						16200				
1940	5	1940.05	22-May-40						15900				
1940	5	1940.05	23-May-40						15900				
1940	5	1940.05	24-May-40						16000				
1940	5	1940.05	25-May-40						16200				
1940	5	1940.05	26-May-40						16300				
1940	5	1940.05	27-May-40						17200				
1940	5	1940.05	28-May-40						18100				
1940	5	1940.05	29-May-40						18600				
1940	5	1940.05	30-May-40						18800				
1940	5	1940.05	31-May-40						18600				
1940	6	1940.06	1-Jun-40						17900				
1940	6	1940.06	2-Jun-40						17200				
1940	6	1940.06	3-Jun-40						16700				
1940	6	1940.06	4-Jun-40						16200				
1940	6	1940.06	5-Jun-40						15800				
1940	6	1940.06	6-Jun-40						15300				
1940	6	1940.06	7-Jun-40						14200				
1940	6	1940.06	8-Jun-40						13300				
1940	6	1940.06	9-Jun-40						12500				
1940	6	1940.06	10-Jun-40						11800				
1940	6	1940.06	11-Jun-40						11800				
1940	6	1940.06	12-Jun-40						11800				
1940	6	1940.06	13-Jun-40						11700				
1940	6	1940.06	14-Jun-40						11500				
1940	6	1940.06	15-Jun-40						11400				
1940	6	1940.06	16-Jun-40						11300				
1940	6	1940.06	17-Jun-40						11200				
1940	6	1940.06	18-Jun-40						10700				
1940	6	1940.06	19-Jun-40						10400				
1940	6	1940.06	20-Jun-40						10200				
1940	6	1940.06	21-Jun-40						9480				
1940	6	1940.06	22-Jun-40						8100				
1940	6	1940.06	23-Jun-40						7470				
1940	6	1940.06	24-Jun-40						7110				
1940	6	1940.06	25-Jun-40						6500				
1940	6	1940.06	26-Jun-40						5940				
1940	6	1940.06	27-Jun-40						5220				
1940	6	1940.06	28-Jun-40						4690				
1940	6	1940.06	29-Jun-40						4210				
1940	6	1940.06	30-Jun-40						3870				
1940	7	1940.07	1-Jul-40						3650				
1940	7	1940.07	2-Jul-40						3360				
1940	7	1940.07	3-Jul-40						3080				
1940	7	1940.07	4-Jul-40						3000				
1940	7	1940.07	5-Jul-40						2960				
1940	7	1940.07	6-Jul-40						2740				
1940	7	1940.07	7-Jul-40						2580				
1940	7	1940.07	8-Jul-40						2430				
1940	7	1940.07	9-Jul-40						2290				
1940	7	1940.07	10-Jul-40						2130				
1940	7	1940.07	11-Jul-40						1990				
1940	7	1940.07	12-Jul-40						1900				
1940	7	1940.07	13-Jul-40						1800				
1940	7	1940.07	14-Jul-40						1690				
1940	7	1940.07	15-Jul-40						1670				
1940	7	1940.07	16-Jul-40						1650				
1940	7	1940.07	17-Jul-40						1590				
1940	7	1940.07	18-Jul-40						1520				
1940	7	1940.07	19-Jul-40						1460				
1940	7	1940.07	20-Jul-40						1680				
1940	7	1940.07	21-Jul-40						1990				
1940	7	1940.07	22-Jul-40						1900				
1940	7	1940.07	23-Jul-40						1720				
1940	7	1940.07	24-Jul-40						1580				
1940	7	1940.07	25-Jul-40						1490				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1940	7	1940.07	26-Jul-40						1350				
1940	7	1940.07	27-Jul-40						1320				
1940	7	1940.07	28-Jul-40						1310				
1940	7	1940.07	29-Jul-40						1380				
1940	7	1940.07	30-Jul-40						1360				
1940	7	1940.07	31-Jul-40						1270				
1940	8	1940.08	1-Aug-40						1190				
1940	8	1940.08	2-Aug-40						1160				
1940	8	1940.08	3-Aug-40						1090				
1940	8	1940.08	4-Aug-40						1100				
1940	8	1940.08	5-Aug-40						1140				
1940	8	1940.08	6-Aug-40						1150				
1940	8	1940.08	7-Aug-40						1120				
1940	8	1940.08	8-Aug-40						1130				
1940	8	1940.08	9-Aug-40						1050				
1940	8	1940.08	10-Aug-40						996				
1940	8	1940.08	11-Aug-40						1000				
1940	8	1940.08	12-Aug-40						1060				
1940	8	1940.08	13-Aug-40						1080				
1940	8	1940.08	14-Aug-40						1100				
1940	8	1940.08	15-Aug-40						1090				
1940	8	1940.08	16-Aug-40						1100				
1940	8	1940.08	17-Aug-40						1140				
1940	8	1940.08	18-Aug-40						1160				
1940	8	1940.08	19-Aug-40						1220				
1940	8	1940.08	20-Aug-40						1250				
1940	8	1940.08	21-Aug-40						1220				
1940	8	1940.08	22-Aug-40						1250				
1940	8	1940.08	23-Aug-40						1250				
1940	8	1940.08	24-Aug-40						1270				
1940	8	1940.08	25-Aug-40						1290				
1940	8	1940.08	26-Aug-40						1420				
1940	8	1940.08	27-Aug-40						1380				
1940	8	1940.08	28-Aug-40						1320				
1940	8	1940.08	29-Aug-40						1330				
1940	8	1940.08	30-Aug-40						1340				
1940	8	1940.08	31-Aug-40						1370				
1940	9	1940.09	1-Sep-40						1400				
1940	9	1940.09	2-Sep-40						1500				
1940	9	1940.09	3-Sep-40						1600				
1940	9	1940.09	4-Sep-40						1600				
1940	9	1940.09	5-Sep-40						1600				
1940	9	1940.09	6-Sep-40						1610				
1940	9	1940.09	7-Sep-40						1620				
1940	9	1940.09	8-Sep-40						1680				
1940	9	1940.09	9-Sep-40						1740				
1940	9	1940.09	10-Sep-40						1690				
1940	9	1940.09	11-Sep-40						1640				
1940	9	1940.09	12-Sep-40						1660				
1940	9	1940.09	13-Sep-40						1670				
1940	9	1940.09	14-Sep-40						1680				
1940	9	1940.09	15-Sep-40						1730				
1940	9	1940.09	16-Sep-40						1790				
1940	9	1940.09	17-Sep-40						1780				
1940	9	1940.09	18-Sep-40						1780				
1940	9	1940.09	19-Sep-40						1750				
1940	9	1940.09	20-Sep-40						1740				
1940	9	1940.09	21-Sep-40						1730				
1940	9	1940.09	22-Sep-40						1750				
1940	9	1940.09	23-Sep-40						1760				
1940	9	1940.09	24-Sep-40						1780				
1940	9	1940.09	25-Sep-40						1750				
1940	9	1940.09	26-Sep-40						1710				
1940	9	1940.09	27-Sep-40						1670				
1940	9	1940.09	28-Sep-40						1730				
1940	9	1940.09	29-Sep-40						1780				
1940	9	1940.09	30-Sep-40						1720				
1940	10	1940.10	1-Oct-40						1660				
1940	10	1940.10	2-Oct-40						1640				
1940	10	1940.10	3-Oct-40						1610				
1940	10	1940.10	4-Oct-40						1620				
1940	10	1940.10	5-Oct-40						1680				
1940	10	1940.10	6-Oct-40						1700				
1940	10	1940.10	7-Oct-40						1710				
1940	10	1940.10	8-Oct-40						1720				
1940	10	1940.10	9-Oct-40						1740				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1940	10	1940.10	10-Oct-40						1670				
1940	10	1940.10	11-Oct-40						1610				
1940	10	1940.10	12-Oct-40						1600				
1940	10	1940.10	13-Oct-40						1590				
1940	10	1940.10	14-Oct-40						1590				
1940	10	1940.10	15-Oct-40						1560				
1940	10	1940.10	16-Oct-40						1630				
1940	10	1940.10	17-Oct-40						1650				
1940	10	1940.10	18-Oct-40						1550				
1940	10	1940.10	19-Oct-40						1520				
1940	10	1940.10	20-Oct-40						1520				
1940	10	1940.10	21-Oct-40						1520				
1940	10	1940.10	22-Oct-40						1550				
1940	10	1940.10	23-Oct-40						1490				
1940	10	1940.10	24-Oct-40						1500				
1940	10	1940.10	25-Oct-40						1540				
1940	10	1940.10	26-Oct-40						1560				
1940	10	1940.10	27-Oct-40						1570				
1940	10	1940.10	28-Oct-40						1600				
1940	10	1940.10	29-Oct-40						1570				
1940	10	1940.10	30-Oct-40						1590				
1940	10	1940.10	31-Oct-40						1650				
1940	11	1940.11	1-Nov-40						1690				
1940	11	1940.11	2-Nov-40						1710				
1940	11	1940.11	3-Nov-40						1710				
1940	11	1940.11	4-Nov-40						1630				
1940	11	1940.11	5-Nov-40						1560				
1940	11	1940.11	6-Nov-40						1550				
1940	11	1940.11	7-Nov-40						1640				
1940	11	1940.11	8-Nov-40						1700				
1940	11	1940.11	9-Nov-40						1710				
1940	11	1940.11	10-Nov-40						1690				
1940	11	1940.11	11-Nov-40						1620				
1940	11	1940.11	12-Nov-40						1560				
1940	11	1940.11	13-Nov-40						1550				
1940	11	1940.11	14-Nov-40						1610				
1940	11	1940.11	15-Nov-40						1600				
1940	11	1940.11	16-Nov-40						1530				
1940	11	1940.11	17-Nov-40						1500				
1940	11	1940.11	18-Nov-40						1470				
1940	11	1940.11	19-Nov-40						1450				
1940	11	1940.11	20-Nov-40						1450				
1940	11	1940.11	21-Nov-40						1480				
1940	11	1940.11	22-Nov-40						1500				
1940	11	1940.11	23-Nov-40						1790				
1940	11	1940.11	24-Nov-40						1980				
1940	11	1940.11	25-Nov-40						2140				
1940	11	1940.11	26-Nov-40						2150				
1940	11	1940.11	27-Nov-40						2180				
1940	11	1940.11	28-Nov-40						2260				
1940	11	1940.11	29-Nov-40						2060				
1940	11	1940.11	30-Nov-40						1970				
1940	12	1940.12	1-Dec-40						1930				
1940	12	1940.12	2-Dec-40						1890				
1940	12	1940.12	3-Dec-40						1860				
1940	12	1940.12	4-Dec-40						1900				
1940	12	1940.12	5-Dec-40						1920				
1940	12	1940.12	6-Dec-40						1850				
1940	12	1940.12	7-Dec-40						1800				
1940	12	1940.12	8-Dec-40						1760				
1940	12	1940.12	9-Dec-40						1750				
1940	12	1940.12	10-Dec-40						1710				
1940	12	1940.12	11-Dec-40						1760				
1940	12	1940.12	12-Dec-40						1760				
1940	12	1940.12	13-Dec-40						1780				
1940	12	1940.12	14-Dec-40						1840				
1940	12	1940.12	15-Dec-40						1900				
1940	12	1940.12	16-Dec-40						1980				
1940	12	1940.12	17-Dec-40						2100				
1940	12	1940.12	18-Dec-40						2300				
1940	12	1940.12	19-Dec-40						2510				
1940	12	1940.12	20-Dec-40						2610				
1940	12	1940.12	21-Dec-40						2660				
1940	12	1940.12	22-Dec-40						2840				
1940	12	1940.12	23-Dec-40						3100				
1940	12	1940.12	24-Dec-40						3240				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1940	12	1940.12	25-Dec-40						3620				
1940	12	1940.12	26-Dec-40						4020				
1940	12	1940.12	27-Dec-40						4660				
1940	12	1940.12	28-Dec-40						6540				
1940	12	1940.12	29-Dec-40						8340				
1940	12	1940.12	30-Dec-40						8020				
1940	12	1940.12	31-Dec-40						7410				
1941	1	1941.01	1-Jan-41						7620				
1941	1	1941.01	2-Jan-41						7700				
1941	1	1941.01	3-Jan-41						7620				
1941	1	1941.01	4-Jan-41						7830				
1941	1	1941.01	5-Jan-41						8100				
1941	1	1941.01	6-Jan-41						8120				
1941	1	1941.01	7-Jan-41						7770				
1941	1	1941.01	8-Jan-41						7770				
1941	1	1941.01	9-Jan-41						7420				
1941	1	1941.01	10-Jan-41						6860				
1941	1	1941.01	11-Jan-41						6540				
1941	1	1941.01	12-Jan-41						6380				
1941	1	1941.01	13-Jan-41						6250				
1941	1	1941.01	14-Jan-41						6280				
1941	1	1941.01	15-Jan-41						6620				
1941	1	1941.01	16-Jan-41						6910				
1941	1	1941.01	17-Jan-41						6830				
1941	1	1941.01	18-Jan-41						6610				
1941	1	1941.01	19-Jan-41						6390				
1941	1	1941.01	20-Jan-41						6340				
1941	1	1941.01	21-Jan-41						6260				
1941	1	1941.01	22-Jan-41						6420				
1941	1	1941.01	23-Jan-41						6730				
1941	1	1941.01	24-Jan-41						6960				
1941	1	1941.01	25-Jan-41						7130				
1941	1	1941.01	26-Jan-41						7250				
1941	1	1941.01	27-Jan-41						7290				
1941	1	1941.01	28-Jan-41						7370				
1941	1	1941.01	29-Jan-41						7790				
1941	1	1941.01	30-Jan-41						7980				
1941	1	1941.01	31-Jan-41						8010				
1941	2	1941.02	1-Feb-41						8000				
1941	2	1941.02	2-Feb-41						7920				
1941	2	1941.02	3-Feb-41						7620				
1941	2	1941.02	4-Feb-41						7210				
1941	2	1941.02	5-Feb-41						7000				
1941	2	1941.02	6-Feb-41						6900				
1941	2	1941.02	7-Feb-41						6800				
1941	2	1941.02	8-Feb-41						6710				
1941	2	1941.02	9-Feb-41						6820				
1941	2	1941.02	10-Feb-41						7550				
1941	2	1941.02	11-Feb-41						8920				
1941	2	1941.02	12-Feb-41						9320				
1941	2	1941.02	13-Feb-41						10300				
1941	2	1941.02	14-Feb-41						10400				
1941	2	1941.02	15-Feb-41						10800				
1941	2	1941.02	16-Feb-41						12200				
1941	2	1941.02	17-Feb-41						14300				
1941	2	1941.02	18-Feb-41						16600				
1941	2	1941.02	19-Feb-41						18800				
1941	2	1941.02	20-Feb-41						20100				
1941	2	1941.02	21-Feb-41						20900				
1941	2	1941.02	22-Feb-41						20800				
1941	2	1941.02	23-Feb-41						20800				
1941	2	1941.02	24-Feb-41						20600				
1941	2	1941.02	25-Feb-41						20200				
1941	2	1941.02	26-Feb-41						19400				
1941	2	1941.02	27-Feb-41						20000				
1941	2	1941.02	28-Feb-41						20000				
1941	3	1941.03	1-Mar-41						19400				
1941	3	1941.03	2-Mar-41						21000				
1941	3	1941.03	3-Mar-41						26400				
1941	3	1941.03	4-Mar-41						31900				
1941	3	1941.03	5-Mar-41						34100				
1941	3	1941.03	6-Mar-41						32500				
1941	3	1941.03	7-Mar-41						30300				
1941	3	1941.03	8-Mar-41						29100				
1941	3	1941.03	9-Mar-41						28700				
1941	3	1941.03	10-Mar-41						27700				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1941	3	1941.03	11-Mar-41						26700				
1941	3	1941.03	12-Mar-41						25600				
1941	3	1941.03	13-Mar-41						24200				
1941	3	1941.03	14-Mar-41						23000				
1941	3	1941.03	15-Mar-41						21900				
1941	3	1941.03	16-Mar-41						20500				
1941	3	1941.03	17-Mar-41						19200				
1941	3	1941.03	18-Mar-41						18300				
1941	3	1941.03	19-Mar-41						17700				
1941	3	1941.03	20-Mar-41						17300				
1941	3	1941.03	21-Mar-41						16800				
1941	3	1941.03	22-Mar-41						16200				
1941	3	1941.03	23-Mar-41						15500				
1941	3	1941.03	24-Mar-41						14700				
1941	3	1941.03	25-Mar-41						14600				
1941	3	1941.03	26-Mar-41						14500				
1941	3	1941.03	27-Mar-41						13800				
1941	3	1941.03	28-Mar-41						13600				
1941	3	1941.03	29-Mar-41						13700				
1941	3	1941.03	30-Mar-41						13600				
1941	3	1941.03	31-Mar-41						13700				
1941	4	1941.04	1-Apr-41						13700				
1941	4	1941.04	2-Apr-41						14100				
1941	4	1941.04	3-Apr-41						14700				
1941	4	1941.04	4-Apr-41						15200				
1941	4	1941.04	5-Apr-41						15900				
1941	4	1941.04	6-Apr-41						19200				
1941	4	1941.04	7-Apr-41						20900				
1941	4	1941.04	8-Apr-41						19800				
1941	4	1941.04	9-Apr-41						19100				
1941	4	1941.04	10-Apr-41						18900				
1941	4	1941.04	11-Apr-41						19400				
1941	4	1941.04	12-Apr-41						20200				
1941	4	1941.04	13-Apr-41						20600				
1941	4	1941.04	14-Apr-41						20000				
1941	4	1941.04	15-Apr-41						19500				
1941	4	1941.04	16-Apr-41						19400				
1941	4	1941.04	17-Apr-41						19200				
1941	4	1941.04	18-Apr-41						18900				
1941	4	1941.04	19-Apr-41						18500				
1941	4	1941.04	20-Apr-41						18000				
1941	4	1941.04	21-Apr-41						17100				
1941	4	1941.04	22-Apr-41						16400				
1941	4	1941.04	23-Apr-41						15600				
1941	4	1941.04	24-Apr-41						14900				
1941	4	1941.04	25-Apr-41						14600				
1941	4	1941.04	26-Apr-41						14100				
1941	4	1941.04	27-Apr-41						13700				
1941	4	1941.04	28-Apr-41						13500				
1941	4	1941.04	29-Apr-41						13600				
1941	4	1941.04	30-Apr-41						13900				
1941	5	1941.05	1-May-41						14100				
1941	5	1941.05	2-May-41						14500				
1941	5	1941.05	3-May-41						14900				
1941	5	1941.05	4-May-41						15600				
1941	5	1941.05	5-May-41						16400				
1941	5	1941.05	6-May-41						17200				
1941	5	1941.05	7-May-41						17800				
1941	5	1941.05	8-May-41						18600				
1941	5	1941.05	9-May-41						19200				
1941	5	1941.05	10-May-41						19700				
1941	5	1941.05	11-May-41						20400				
1941	5	1941.05	12-May-41						21300				
1941	5	1941.05	13-May-41						22400				
1941	5	1941.05	14-May-41						24000				
1941	5	1941.05	15-May-41						24300				
1941	5	1941.05	16-May-41						23000				
1941	5	1941.05	17-May-41						21500				
1941	5	1941.05	18-May-41						20800				
1941	5	1941.05	19-May-41						20200				
1941	5	1941.05	20-May-41						19900				
1941	5	1941.05	21-May-41						20300				
1941	5	1941.05	22-May-41						20700				
1941	5	1941.05	23-May-41						21300				
1941	5	1941.05	24-May-41						22700				
1941	5	1941.05	25-May-41						24100				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1941	5	1941.05	26-May-41						25900				
1941	5	1941.05	27-May-41						28100				
1941	5	1941.05	28-May-41						29300				
1941	5	1941.05	29-May-41						28700				
1941	5	1941.05	30-May-41						27400				
1941	5	1941.05	31-May-41						25500				
1941	6	1941.06	1-Jun-41						24000				
1941	6	1941.06	2-Jun-41						23100				
1941	6	1941.06	3-Jun-41						22600				
1941	6	1941.06	4-Jun-41						22900				
1941	6	1941.06	5-Jun-41						23500				
1941	6	1941.06	6-Jun-41						23900				
1941	6	1941.06	7-Jun-41						25300				
1941	6	1941.06	8-Jun-41						26500				
1941	6	1941.06	9-Jun-41						26000				
1941	6	1941.06	10-Jun-41						23900				
1941	6	1941.06	11-Jun-41						22200				
1941	6	1941.06	12-Jun-41						21800				
1941	6	1941.06	13-Jun-41						22100				
1941	6	1941.06	14-Jun-41						21900				
1941	6	1941.06	15-Jun-41						23800				
1941	6	1941.06	16-Jun-41						25100				
1941	6	1941.06	17-Jun-41						25300				
1941	6	1941.06	18-Jun-41						24300				
1941	6	1941.06	19-Jun-41						23500				
1941	6	1941.06	20-Jun-41						22100				
1941	6	1941.06	21-Jun-41						21000				
1941	6	1941.06	22-Jun-41						21200				
1941	6	1941.06	23-Jun-41						21700				
1941	6	1941.06	24-Jun-41						21300				
1941	6	1941.06	25-Jun-41						20500				
1941	6	1941.06	26-Jun-41						19800				
1941	6	1941.06	27-Jun-41						18700				
1941	6	1941.06	28-Jun-41						17700				
1941	6	1941.06	29-Jun-41						17100				
1941	6	1941.06	30-Jun-41						16300				
1941	7	1941.07	1-Jul-41						15600				
1941	7	1941.07	2-Jul-41						15000				
1941	7	1941.07	3-Jul-41						14300				
1941	7	1941.07	4-Jul-41						13900				
1941	7	1941.07	5-Jul-41						14200				
1941	7	1941.07	6-Jul-41						15000				
1941	7	1941.07	7-Jul-41						16200				
1941	7	1941.07	8-Jul-41						16000				
1941	7	1941.07	9-Jul-41						15000				
1941	7	1941.07	10-Jul-41						14000				
1941	7	1941.07	11-Jul-41						13000				
1941	7	1941.07	12-Jul-41						12000				
1941	7	1941.07	13-Jul-41						11000				
1941	7	1941.07	14-Jul-41						10000				
1941	7	1941.07	15-Jul-41						9500				
1941	7	1941.07	16-Jul-41						9000				
1941	7	1941.07	17-Jul-41						8200				
1941	7	1941.07	18-Jul-41						7640				
1941	7	1941.07	19-Jul-41						7000				
1941	7	1941.07	20-Jul-41						6000				
1941	7	1941.07	21-Jul-41						5500				
1941	7	1941.07	22-Jul-41						4500				
1941	7	1941.07	23-Jul-41						4100				
1941	7	1941.07	24-Jul-41						3700				
1941	7	1941.07	25-Jul-41						3500				
1941	7	1941.07	26-Jul-41						3400				
1941	7	1941.07	27-Jul-41						3300				
1941	7	1941.07	28-Jul-41						3300				
1941	7	1941.07	29-Jul-41						3200				
1941	7	1941.07	30-Jul-41						3200				
1941	7	1941.07	31-Jul-41						3170				
1941	8	1941.08	1-Aug-41						3100				
1941	8	1941.08	2-Aug-41						2900				
1941	8	1941.08	3-Aug-41						2600				
1941	8	1941.08	4-Aug-41						2400				
1941	8	1941.08	5-Aug-41						2270				
1941	8	1941.08	6-Aug-41						2120				
1941	8	1941.08	7-Aug-41						2040				
1941	8	1941.08	8-Aug-41						1980				
1941	8	1941.08	9-Aug-41						1870				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1941	8	1941.08	10-Aug-41						1940				
1941	8	1941.08	11-Aug-41						1990				
1941	8	1941.08	12-Aug-41						1980				
1941	8	1941.08	13-Aug-41						1990				
1941	8	1941.08	14-Aug-41						2010				
1941	8	1941.08	15-Aug-41						1940				
1941	8	1941.08	16-Aug-41						1860				
1941	8	1941.08	17-Aug-41						1930				
1941	8	1941.08	18-Aug-41						1980				
1941	8	1941.08	19-Aug-41						1900				
1941	8	1941.08	20-Aug-41						1840				
1941	8	1941.08	21-Aug-41						1840				
1941	8	1941.08	22-Aug-41						2010				
1941	8	1941.08	23-Aug-41						2020				
1941	8	1941.08	24-Aug-41						2060				
1941	8	1941.08	25-Aug-41						2070				
1941	8	1941.08	26-Aug-41						2060				
1941	8	1941.08	27-Aug-41						2040				
1941	8	1941.08	28-Aug-41						2060				
1941	8	1941.08	29-Aug-41						2050				
1941	8	1941.08	30-Aug-41						2000				
1941	8	1941.08	31-Aug-41						2090				
1941	9	1941.09	1-Sep-41						2080				
1941	9	1941.09	2-Sep-41						2020				
1941	9	1941.09	3-Sep-41						1940				
1941	9	1941.09	4-Sep-41						1820				
1941	9	1941.09	5-Sep-41						1790				
1941	9	1941.09	6-Sep-41						1690				
1941	9	1941.09	7-Sep-41						1650				
1941	9	1941.09	8-Sep-41						1710				
1941	9	1941.09	9-Sep-41						1680				
1941	9	1941.09	10-Sep-41						1470				
1941	9	1941.09	11-Sep-41						1400				
1941	9	1941.09	12-Sep-41						1350				
1941	9	1941.09	13-Sep-41						1300				
1941	9	1941.09	14-Sep-41						1420				
1941	9	1941.09	15-Sep-41						1520				
1941	9	1941.09	16-Sep-41						1580				
1941	9	1941.09	17-Sep-41						1520				
1941	9	1941.09	18-Sep-41						1530				
1941	9	1941.09	19-Sep-41						1660				
1941	9	1941.09	20-Sep-41						1660				
1941	9	1941.09	21-Sep-41						1720				
1941	9	1941.09	22-Sep-41						1810				
1941	9	1941.09	23-Sep-41						1790				
1941	9	1941.09	24-Sep-41						1670				
1941	9	1941.09	25-Sep-41						1720				
1941	9	1941.09	26-Sep-41						1790				
1941	9	1941.09	27-Sep-41						1750				
1941	9	1941.09	28-Sep-41						1810				
1941	9	1941.09	29-Sep-41						1870				
1941	9	1941.09	30-Sep-41						1870				
1941	10	1941.10	1-Oct-41						1850				
1941	10	1941.10	2-Oct-41						1800				
1941	10	1941.10	3-Oct-41						1810				
1941	10	1941.10	4-Oct-41						1880				
1941	10	1941.10	5-Oct-41						1900				
1941	10	1941.10	6-Oct-41						1980				
1941	10	1941.10	7-Oct-41						1980				
1941	10	1941.10	8-Oct-41						1980				
1941	10	1941.10	9-Oct-41						1990				
1941	10	1941.10	10-Oct-41						1940				
1941	10	1941.10	11-Oct-41						1940				
1941	10	1941.10	12-Oct-41						1980				
1941	10	1941.10	13-Oct-41						2030				
1941	10	1941.10	14-Oct-41						2110				
1941	10	1941.10	15-Oct-41						2180				
1941	10	1941.10	16-Oct-41						2430				
1941	10	1941.10	17-Oct-41						2400				
1941	10	1941.10	18-Oct-41						2160				
1941	10	1941.10	19-Oct-41						2140				
1941	10	1941.10	20-Oct-41						2210				
1941	10	1941.10	21-Oct-41						2290				
1941	10	1941.10	22-Oct-41						2480				
1941	10	1941.10	23-Oct-41						2510				
1941	10	1941.10	24-Oct-41						2420				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1941	10	1941.10	25-Oct-41						2440				
1941	10	1941.10	26-Oct-41						2480				
1941	10	1941.10	27-Oct-41						2580				
1941	10	1941.10	28-Oct-41						2600				
1941	10	1941.10	29-Oct-41						2560				
1941	10	1941.10	30-Oct-41						2540				
1941	10	1941.10	31-Oct-41						2570				
1941	11	1941.11	1-Nov-41						2530				
1941	11	1941.11	2-Nov-41						2430				
1941	11	1941.11	3-Nov-41						2270				
1941	11	1941.11	4-Nov-41						2140				
1941	11	1941.11	5-Nov-41						2140				
1941	11	1941.11	6-Nov-41						2100				
1941	11	1941.11	7-Nov-41						2080				
1941	11	1941.11	8-Nov-41						2060				
1941	11	1941.11	9-Nov-41						2030				
1941	11	1941.11	10-Nov-41						2020				
1941	11	1941.11	11-Nov-41						2030				
1941	11	1941.11	12-Nov-41						2090				
1941	11	1941.11	13-Nov-41						2330				
1941	11	1941.11	14-Nov-41						2510				
1941	11	1941.11	15-Nov-41						2560				
1941	11	1941.11	16-Nov-41						2570				
1941	11	1941.11	17-Nov-41						2560				
1941	11	1941.11	18-Nov-41						2530				
1941	11	1941.11	19-Nov-41						2600				
1941	11	1941.11	20-Nov-41						2580				
1941	11	1941.11	21-Nov-41						2540				
1941	11	1941.11	22-Nov-41						2400				
1941	11	1941.11	23-Nov-41						2380				
1941	11	1941.11	24-Nov-41						2400				
1941	11	1941.11	25-Nov-41						2400				
1941	11	1941.11	26-Nov-41						2410				
1941	11	1941.11	27-Nov-41						2380				
1941	11	1941.11	28-Nov-41						2330				
1941	11	1941.11	29-Nov-41						2240				
1941	11	1941.11	30-Nov-41						2240				
1941	12	1941.12	1-Dec-41						2290				
1941	12	1941.12	2-Dec-41						2330				
1941	12	1941.12	3-Dec-41						2380				
1941	12	1941.12	4-Dec-41						2430				
1941	12	1941.12	5-Dec-41						2660				
1941	12	1941.12	6-Dec-41						2980				
1941	12	1941.12	7-Dec-41						3450				
1941	12	1941.12	8-Dec-41						3650				
1941	12	1941.12	9-Dec-41						3940				
1941	12	1941.12	10-Dec-41						4310				
1941	12	1941.12	11-Dec-41						4610				
1941	12	1941.12	12-Dec-41						4750				
1941	12	1941.12	13-Dec-41						4740				
1941	12	1941.12	14-Dec-41						4730				
1941	12	1941.12	15-Dec-41						4750				
1941	12	1941.12	16-Dec-41						4600				
1941	12	1941.12	17-Dec-41						5360				
1941	12	1941.12	18-Dec-41						5900				
1941	12	1941.12	19-Dec-41						5900				
1941	12	1941.12	20-Dec-41						5900				
1941	12	1941.12	21-Dec-41						5800				
1941	12	1941.12	22-Dec-41						5300				
1941	12	1941.12	23-Dec-41						5400				
1941	12	1941.12	24-Dec-41						6000				
1941	12	1941.12	25-Dec-41						6100				
1941	12	1941.12	26-Dec-41						5900				
1941	12	1941.12	27-Dec-41						5500				
1941	12	1941.12	28-Dec-41						5900				
1941	12	1941.12	29-Dec-41						6000				
1941	12	1941.12	30-Dec-41						6800				
1941	12	1941.12	31-Dec-41						7700				
1942	1	1942.01	1-Jan-42						7540				
1942	1	1942.01	2-Jan-42						7250				
1942	1	1942.01	3-Jan-42						6760				
1942	1	1942.01	4-Jan-42						7140				
1942	1	1942.01	5-Jan-42						7360				
1942	1	1942.01	6-Jan-42						7660				
1942	1	1942.01	7-Jan-42						7720				
1942	1	1942.01	8-Jan-42						8140				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1942	1	1942.01	9-Jan-42						8920				
1942	1	1942.01	10-Jan-42						9220				
1942	1	1942.01	11-Jan-42						9160				
1942	1	1942.01	12-Jan-42						8860				
1942	1	1942.01	13-Jan-42						8380				
1942	1	1942.01	14-Jan-42						8440				
1942	1	1942.01	15-Jan-42						8380				
1942	1	1942.01	16-Jan-42						8320				
1942	1	1942.01	17-Jan-42						8260				
1942	1	1942.01	18-Jan-42						8200				
1942	1	1942.01	19-Jan-42						8020				
1942	1	1942.01	20-Jan-42						7540				
1942	1	1942.01	21-Jan-42						7720				
1942	1	1942.01	22-Jan-42						7780				
1942	1	1942.01	23-Jan-42						7900				
1942	1	1942.01	24-Jan-42						8080				
1942	1	1942.01	25-Jan-42						8500				
1942	1	1942.01	26-Jan-42						9220				
1942	1	1942.01	27-Jan-42						9340				
1942	1	1942.01	28-Jan-42						9960				
1942	1	1942.01	29-Jan-42						10600				
1942	1	1942.01	30-Jan-42						10500				
1942	1	1942.01	31-Jan-42						10500				
1942	2	1942.02	1-Feb-42						11400				
1942	2	1942.02	2-Feb-42						12000				
1942	2	1942.02	3-Feb-42						12600				
1942	2	1942.02	4-Feb-42						13500				
1942	2	1942.02	5-Feb-42						13700				
1942	2	1942.02	6-Feb-42						14300				
1942	2	1942.02	7-Feb-42						15400				
1942	2	1942.02	8-Feb-42						16000				
1942	2	1942.02	9-Feb-42						15700				
1942	2	1942.02	10-Feb-42						14900				
1942	2	1942.02	11-Feb-42						14300				
1942	2	1942.02	12-Feb-42						14100				
1942	2	1942.02	13-Feb-42						14000				
1942	2	1942.02	14-Feb-42						13800				
1942	2	1942.02	15-Feb-42						13900				
1942	2	1942.02	16-Feb-42						13900				
1942	2	1942.02	17-Feb-42						13600				
1942	2	1942.02	18-Feb-42						13200				
1942	2	1942.02	19-Feb-42						13000				
1942	2	1942.02	20-Feb-42						12600				
1942	2	1942.02	21-Feb-42						11400				
1942	2	1942.02	22-Feb-42						10800				
1942	2	1942.02	23-Feb-42						10200				
1942	2	1942.02	24-Feb-42						9540				
1942	2	1942.02	25-Feb-42						9680				
1942	2	1942.02	26-Feb-42						9610				
1942	2	1942.02	27-Feb-42						9750				
1942	2	1942.02	28-Feb-42						9540				
1942	3	1942.03	1-Mar-42						9160				
1942	3	1942.03	2-Mar-42						8800				
1942	3	1942.03	3-Mar-42						8380				
1942	3	1942.03	4-Mar-42						8440				
1942	3	1942.03	5-Mar-42						8380				
1942	3	1942.03	6-Mar-42						8140				
1942	3	1942.03	7-Mar-42						7960				
1942	3	1942.03	8-Mar-42						7780				
1942	3	1942.03	9-Mar-42						7300				
1942	3	1942.03	10-Mar-42						7080				
1942	3	1942.03	11-Mar-42						7360				
1942	3	1942.03	12-Mar-42						7540				
1942	3	1942.03	13-Mar-42						7540				
1942	3	1942.03	14-Mar-42						7720				
1942	3	1942.03	15-Mar-42						8020				
1942	3	1942.03	16-Mar-42						8620				
1942	3	1942.03	17-Mar-42						8920				
1942	3	1942.03	18-Mar-42						9540				
1942	3	1942.03	19-Mar-42						10200				
1942	3	1942.03	20-Mar-42						10700				
1942	3	1942.03	21-Mar-42						10900				
1942	3	1942.03	22-Mar-42						10700				
1942	3	1942.03	23-Mar-42						10100				
1942	3	1942.03	24-Mar-42						9540				
1942	3	1942.03	25-Mar-42						9680				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1942	3	1942.03	26-Mar-42						9470				
1942	3	1942.03	27-Mar-42						9220				
1942	3	1942.03	28-Mar-42						8680				
1942	3	1942.03	29-Mar-42						8260				
1942	3	1942.03	30-Mar-42						7720				
1942	3	1942.03	31-Mar-42						7080				
1942	4	1942.04	1-Apr-42						6700				
1942	4	1942.04	2-Apr-42						6480				
1942	4	1942.04	3-Apr-42						6200				
1942	4	1942.04	4-Apr-42						6150				
1942	4	1942.04	5-Apr-42						6540				
1942	4	1942.04	6-Apr-42						7120				
1942	4	1942.04	7-Apr-42						7770				
1942	4	1942.04	8-Apr-42						9050				
1942	4	1942.04	9-Apr-42						10300				
1942	4	1942.04	10-Apr-42						10800				
1942	4	1942.04	11-Apr-42						11200				
1942	4	1942.04	12-Apr-42						11800				
1942	4	1942.04	13-Apr-42						12400				
1942	4	1942.04	14-Apr-42						13100				
1942	4	1942.04	15-Apr-42						14400				
1942	4	1942.04	16-Apr-42						15700				
1942	4	1942.04	17-Apr-42						16500				
1942	4	1942.04	18-Apr-42						16500				
1942	4	1942.04	19-Apr-42						16600				
1942	4	1942.04	20-Apr-42						16700				
1942	4	1942.04	21-Apr-42						16900				
1942	4	1942.04	22-Apr-42						17500				
1942	4	1942.04	23-Apr-42						18000				
1942	4	1942.04	24-Apr-42						18500				
1942	4	1942.04	25-Apr-42						18800				
1942	4	1942.04	26-Apr-42						18700				
1942	4	1942.04	27-Apr-42						18400				
1942	4	1942.04	28-Apr-42						18100				
1942	4	1942.04	29-Apr-42						17900				
1942	4	1942.04	30-Apr-42						17600				
1942	5	1942.05	1-May-42						16700				
1942	5	1942.05	2-May-42						16100				
1942	5	1942.05	3-May-42						15900				
1942	5	1942.05	4-May-42						15500				
1942	5	1942.05	5-May-42						15000				
1942	5	1942.05	6-May-42						14800				
1942	5	1942.05	7-May-42						14400				
1942	5	1942.05	8-May-42						14000				
1942	5	1942.05	9-May-42						14100				
1942	5	1942.05	10-May-42						14500				
1942	5	1942.05	11-May-42						15200				
1942	5	1942.05	12-May-42						15500				
1942	5	1942.05	13-May-42						15500				
1942	5	1942.05	14-May-42						15100				
1942	5	1942.05	15-May-42						14300				
1942	5	1942.05	16-May-42						13900				
1942	5	1942.05	17-May-42						14100				
1942	5	1942.05	18-May-42						13900				
1942	5	1942.05	19-May-42						13400				
1942	5	1942.05	20-May-42						13200				
1942	5	1942.05	21-May-42						13500				
1942	5	1942.05	22-May-42						14800				
1942	5	1942.05	23-May-42						16900				
1942	5	1942.05	24-May-42						19100				
1942	5	1942.05	25-May-42						20300				
1942	5	1942.05	26-May-42						20500				
1942	5	1942.05	27-May-42						22500				
1942	5	1942.05	28-May-42						24400				
1942	5	1942.05	29-May-42						23600				
1942	5	1942.05	30-May-42						21700				
1942	5	1942.05	31-May-42						20100				
1942	6	1942.06	1-Jun-42						18700				
1942	6	1942.06	2-Jun-42						18400				
1942	6	1942.06	3-Jun-42						19600				
1942	6	1942.06	4-Jun-42						21300				
1942	6	1942.06	5-Jun-42						22200				
1942	6	1942.06	6-Jun-42						23000				
1942	6	1942.06	7-Jun-42						24300				
1942	6	1942.06	8-Jun-42						26000				
1942	6	1942.06	9-Jun-42						27100				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1942	6	1942.06	10-Jun-42						26800				
1942	6	1942.06	11-Jun-42						26000				
1942	6	1942.06	12-Jun-42						25200				
1942	6	1942.06	13-Jun-42						24800				
1942	6	1942.06	14-Jun-42						24700				
1942	6	1942.06	15-Jun-42						24200				
1942	6	1942.06	16-Jun-42						23800				
1942	6	1942.06	17-Jun-42						24100				
1942	6	1942.06	18-Jun-42						24200				
1942	6	1942.06	19-Jun-42						24000				
1942	6	1942.06	20-Jun-42						23700				
1942	6	1942.06	21-Jun-42						23400				
1942	6	1942.06	22-Jun-42						22600				
1942	6	1942.06	23-Jun-42						21400				
1942	6	1942.06	24-Jun-42						19800				
1942	6	1942.06	25-Jun-42						18700				
1942	6	1942.06	26-Jun-42						18600				
1942	6	1942.06	27-Jun-42						19200				
1942	6	1942.06	28-Jun-42						18700				
1942	6	1942.06	29-Jun-42						17400				
1942	6	1942.06	30-Jun-42						15300				
1942	7	1942.07	1-Jul-42						13900				
1942	7	1942.07	2-Jul-42						13500				
1942	7	1942.07	3-Jul-42						14500				
1942	7	1942.07	4-Jul-42						15900				
1942	7	1942.07	5-Jul-42						16400				
1942	7	1942.07	6-Jul-42						16000				
1942	7	1942.07	7-Jul-42						15000				
1942	7	1942.07	8-Jul-42						13200				
1942	7	1942.07	9-Jul-42						10400				
1942	7	1942.07	10-Jul-42						8990				
1942	7	1942.07	11-Jul-42						8330				
1942	7	1942.07	12-Jul-42						7890				
1942	7	1942.07	13-Jul-42						7350				
1942	7	1942.07	14-Jul-42						7080				
1942	7	1942.07	15-Jul-42						6770				
1942	7	1942.07	16-Jul-42						6440				
1942	7	1942.07	17-Jul-42						5860				
1942	7	1942.07	18-Jul-42						5860				
1942	7	1942.07	19-Jul-42						5560				
1942	7	1942.07	20-Jul-42						5440				
1942	7	1942.07	21-Jul-42						5000				
1942	7	1942.07	22-Jul-42						4500				
1942	7	1942.07	23-Jul-42						4100				
1942	7	1942.07	24-Jul-42						3800				
1942	7	1942.07	25-Jul-42						3400				
1942	7	1942.07	26-Jul-42						3100				
1942	7	1942.07	27-Jul-42						2900				
1942	7	1942.07	28-Jul-42						2700				
1942	7	1942.07	29-Jul-42						2500				
1942	7	1942.07	30-Jul-42						2400				
1942	7	1942.07	31-Jul-42						2300				
1942	8	1942.08	1-Aug-42						2200				
1942	8	1942.08	2-Aug-42						2100				
1942	8	1942.08	3-Aug-42						2050				
1942	8	1942.08	4-Aug-42						2000				
1942	8	1942.08	5-Aug-42						1900				
1942	8	1942.08	6-Aug-42						1850				
1942	8	1942.08	7-Aug-42						1750				
1942	8	1942.08	8-Aug-42						1700				
1942	8	1942.08	9-Aug-42						1650				
1942	8	1942.08	10-Aug-42						1600				
1942	8	1942.08	11-Aug-42						1600				
1942	8	1942.08	12-Aug-42						1550				
1942	8	1942.08	13-Aug-42						1520				
1942	8	1942.08	14-Aug-42						1500				
1942	8	1942.08	15-Aug-42						1500				
1942	8	1942.08	16-Aug-42						1500				
1942	8	1942.08	17-Aug-42						1500				
1942	8	1942.08	18-Aug-42						1500				
1942	8	1942.08	19-Aug-42						1500				
1942	8	1942.08	20-Aug-42						1500				
1942	8	1942.08	21-Aug-42						1500				
1942	8	1942.08	22-Aug-42						1600				
1942	8	1942.08	23-Aug-42						1600				
1942	8	1942.08	24-Aug-42						1500				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1942	8	1942.08	25-Aug-42						1450				
1942	8	1942.08	26-Aug-42						1650				
1942	8	1942.08	27-Aug-42						1800				
1942	8	1942.08	28-Aug-42						1800				
1942	8	1942.08	29-Aug-42						1800				
1942	8	1942.08	30-Aug-42						1800				
1942	8	1942.08	31-Aug-42						1750				
1942	9	1942.09	1-Sep-42						1650				
1942	9	1942.09	2-Sep-42						1750				
1942	9	1942.09	3-Sep-42						1850				
1942	9	1942.09	4-Sep-42						1800				
1942	9	1942.09	5-Sep-42						1800				
1942	9	1942.09	6-Sep-42						1900				
1942	9	1942.09	7-Sep-42						2050				
1942	9	1942.09	8-Sep-42						2050				
1942	9	1942.09	9-Sep-42						1990				
1942	9	1942.09	10-Sep-42						2000				
1942	9	1942.09	11-Sep-42						2000				
1942	9	1942.09	12-Sep-42						2000				
1942	9	1942.09	13-Sep-42						2000				
1942	9	1942.09	14-Sep-42						2000				
1942	9	1942.09	15-Sep-42						1950				
1942	9	1942.09	16-Sep-42						1900				
1942	9	1942.09	17-Sep-42						1900				
1942	9	1942.09	18-Sep-42						1850				
1942	9	1942.09	19-Sep-42						1900				
1942	9	1942.09	20-Sep-42						1900				
1942	9	1942.09	21-Sep-42						2000				
1942	9	1942.09	22-Sep-42						1950				
1942	9	1942.09	23-Sep-42						1900				
1942	9	1942.09	24-Sep-42						1850				
1942	9	1942.09	25-Sep-42						1800				
1942	9	1942.09	26-Sep-42						1850				
1942	9	1942.09	27-Sep-42						1900				
1942	9	1942.09	28-Sep-42						2000				
1942	9	1942.09	29-Sep-42						2000				
1942	9	1942.09	30-Sep-42						2000				
1942	10	1942.10	1-Oct-42						2000				
1942	10	1942.10	2-Oct-42						2000				
1942	10	1942.10	3-Oct-42						2050				
1942	10	1942.10	4-Oct-42						2150				
1942	10	1942.10	5-Oct-42						2170				
1942	10	1942.10	6-Oct-42						2140				
1942	10	1942.10	7-Oct-42						2110				
1942	10	1942.10	8-Oct-42						2100				
1942	10	1942.10	9-Oct-42						2010				
1942	10	1942.10	10-Oct-42						2090				
1942	10	1942.10	11-Oct-42						2250				
1942	10	1942.10	12-Oct-42						2450				
1942	10	1942.10	13-Oct-42						2400				
1942	10	1942.10	14-Oct-42						2350				
1942	10	1942.10	15-Oct-42						2350				
1942	10	1942.10	16-Oct-42						2360				
1942	10	1942.10	17-Oct-42						2360				
1942	10	1942.10	18-Oct-42						2410				
1942	10	1942.10	19-Oct-42						2440				
1942	10	1942.10	20-Oct-42						2400				
1942	10	1942.10	21-Oct-42						2330				
1942	10	1942.10	22-Oct-42						2270				
1942	10	1942.10	23-Oct-42						2220				
1942	10	1942.10	24-Oct-42						2210				
1942	10	1942.10	25-Oct-42						2270				
1942	10	1942.10	26-Oct-42						2280				
1942	10	1942.10	27-Oct-42						2250				
1942	10	1942.10	28-Oct-42						2210				
1942	10	1942.10	29-Oct-42						2240				
1942	10	1942.10	30-Oct-42						2230				
1942	10	1942.10	31-Oct-42						2240				
1942	11	1942.11	1-Nov-42						2310				
1942	11	1942.11	2-Nov-42						2270				
1942	11	1942.11	3-Nov-42						2130				
1942	11	1942.11	4-Nov-42						2090				
1942	11	1942.11	5-Nov-42						2020				
1942	11	1942.11	6-Nov-42						1960				
1942	11	1942.11	7-Nov-42						1950				
1942	11	1942.11	8-Nov-42						1940				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1942	11	1942.11	9-Nov-42						1950				
1942	11	1942.11	10-Nov-42						1960				
1942	11	1942.11	11-Nov-42						2010				
1942	11	1942.11	12-Nov-42						2080				
1942	11	1942.11	13-Nov-42						2110				
1942	11	1942.11	14-Nov-42						2130				
1942	11	1942.11	15-Nov-42						2140				
1942	11	1942.11	16-Nov-42						2130				
1942	11	1942.11	17-Nov-42						2160				
1942	11	1942.11	18-Nov-42						2210				
1942	11	1942.11	19-Nov-42						2240				
1942	11	1942.11	20-Nov-42						2380				
1942	11	1942.11	21-Nov-42						2360				
1942	11	1942.11	22-Nov-42						2300				
1942	11	1942.11	23-Nov-42						2310				
1942	11	1942.11	24-Nov-42						2590				
1942	11	1942.11	25-Nov-42						3020				
1942	11	1942.11	26-Nov-42						3230				
1942	11	1942.11	27-Nov-42						3230				
1942	11	1942.11	28-Nov-42						3080				
1942	11	1942.11	29-Nov-42						2900				
1942	11	1942.11	30-Nov-42						2800				
1942	12	1942.12	1-Dec-42						2800				
1942	12	1942.12	2-Dec-42						2800				
1942	12	1942.12	3-Dec-42						3030				
1942	12	1942.12	4-Dec-42						3240				
1942	12	1942.12	5-Dec-42						3900				
1942	12	1942.12	6-Dec-42						3830				
1942	12	1942.12	7-Dec-42						3840				
1942	12	1942.12	8-Dec-42						3740				
1942	12	1942.12	9-Dec-42						4090				
1942	12	1942.12	10-Dec-42						4220				
1942	12	1942.12	11-Dec-42						4310				
1942	12	1942.12	12-Dec-42						4330				
1942	12	1942.12	13-Dec-42						4270				
1942	12	1942.12	14-Dec-42						3910				
1942	12	1942.12	15-Dec-42						4200				
1942	12	1942.12	16-Dec-42						4420				
1942	12	1942.12	17-Dec-42						4470				
1942	12	1942.12	18-Dec-42						4440				
1942	12	1942.12	19-Dec-42						4520				
1942	12	1942.12	20-Dec-42						4540				
1942	12	1942.12	21-Dec-42						4630				
1942	12	1942.12	22-Dec-42						4700				
1942	12	1942.12	23-Dec-42						4760				
1942	12	1942.12	24-Dec-42						4840				
1942	12	1942.12	25-Dec-42						5090				
1942	12	1942.12	26-Dec-42						5410				
1942	12	1942.12	27-Dec-42						5030				
1942	12	1942.12	28-Dec-42						5190				
1942	12	1942.12	29-Dec-42						5310				
1942	12	1942.12	30-Dec-42						5600				
1942	12	1942.12	31-Dec-42						5880				
1943	1	1943.01	1-Jan-43						6030				
1943	1	1943.01	2-Jan-43						5820				
1943	1	1943.01	3-Jan-43						5160				
1943	1	1943.01	4-Jan-43						4910				
1943	1	1943.01	5-Jan-43						4810				
1943	1	1943.01	6-Jan-43						4750				
1943	1	1943.01	7-Jan-43						4590				
1943	1	1943.01	8-Jan-43						4420				
1943	1	1943.01	9-Jan-43						4310				
1943	1	1943.01	10-Jan-43						4220				
1943	1	1943.01	11-Jan-43						4120				
1943	1	1943.01	12-Jan-43						4130				
1943	1	1943.01	13-Jan-43						4360				
1943	1	1943.01	14-Jan-43						4420				
1943	1	1943.01	15-Jan-43						4380				
1943	1	1943.01	16-Jan-43						4330				
1943	1	1943.01	17-Jan-43						4270				
1943	1	1943.01	18-Jan-43						4180				
1943	1	1943.01	19-Jan-43						3840				
1943	1	1943.01	20-Jan-43						3420				
1943	1	1943.01	21-Jan-43						3320				
1943	1	1943.01	22-Jan-43						4010				
1943	1	1943.01	23-Jan-43						6140				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1943	1	1943.01	24-Jan-43						5980				
1943	1	1943.01	25-Jan-43						7250				
1943	1	1943.01	26-Jan-43						8030				
1943	1	1943.01	27-Jan-43						8490				
1943	1	1943.01	28-Jan-43						9080				
1943	1	1943.01	29-Jan-43						10200				
1943	1	1943.01	30-Jan-43						10500				
1943	1	1943.01	31-Jan-43						11600				
1943	2	1943.02	1-Feb-43						14100				
1943	2	1943.02	2-Feb-43						15900				
1943	2	1943.02	3-Feb-43						16300				
1943	2	1943.02	4-Feb-43						16900				
1943	2	1943.02	5-Feb-43						17100				
1943	2	1943.02	6-Feb-43						16700				
1943	2	1943.02	7-Feb-43						15900				
1943	2	1943.02	8-Feb-43						15000				
1943	2	1943.02	9-Feb-43						14700				
1943	2	1943.02	10-Feb-43						14700				
1943	2	1943.02	11-Feb-43						14000				
1943	2	1943.02	12-Feb-43						13300				
1943	2	1943.02	13-Feb-43						12500				
1943	2	1943.02	14-Feb-43						12000				
1943	2	1943.02	15-Feb-43						11600				
1943	2	1943.02	16-Feb-43						11300				
1943	2	1943.02	17-Feb-43						11200				
1943	2	1943.02	18-Feb-43						11000				
1943	2	1943.02	19-Feb-43						10600				
1943	2	1943.02	20-Feb-43						10300				
1943	2	1943.02	21-Feb-43						9990				
1943	2	1943.02	22-Feb-43						9800				
1943	2	1943.02	23-Feb-43						9830				
1943	2	1943.02	24-Feb-43						10800				
1943	2	1943.02	25-Feb-43						11300				
1943	2	1943.02	26-Feb-43						12200				
1943	2	1943.02	27-Feb-43						13400				
1943	2	1943.02	28-Feb-43						13500				
1943	3	1943.03	1-Mar-43						13400				
1943	3	1943.03	2-Mar-43						13200				
1943	3	1943.03	3-Mar-43						13000				
1943	3	1943.03	4-Mar-43						12600				
1943	3	1943.03	5-Mar-43						12200				
1943	3	1943.03	6-Mar-43						12700				
1943	3	1943.03	7-Mar-43						16000				
1943	3	1943.03	8-Mar-43						19800				
1943	3	1943.03	9-Mar-43						20700				
1943	3	1943.03	10-Mar-43						21800				
1943	3	1943.03	11-Mar-43						27800				
1943	3	1943.03	12-Mar-43						37500				
1943	3	1943.03	13-Mar-43						36700				
1943	3	1943.03	14-Mar-43						32100				
1943	3	1943.03	15-Mar-43						29600				
1943	3	1943.03	16-Mar-43						28600				
1943	3	1943.03	17-Mar-43						28100				
1943	3	1943.03	18-Mar-43						27100				
1943	3	1943.03	19-Mar-43						27400				
1943	3	1943.03	20-Mar-43						27900				
1943	3	1943.03	21-Mar-43						27200				
1943	3	1943.03	22-Mar-43						26000				
1943	3	1943.03	23-Mar-43						25300				
1943	3	1943.03	24-Mar-43						24800				
1943	3	1943.03	25-Mar-43						24200				
1943	3	1943.03	26-Mar-43						23400				
1943	3	1943.03	27-Mar-43						22700				
1943	3	1943.03	28-Mar-43						21800				
1943	3	1943.03	29-Mar-43						21200				
1943	3	1943.03	30-Mar-43						20900				
1943	3	1943.03	31-Mar-43						21100				
1943	4	1943.04	1-Apr-43						20800				
1943	4	1943.04	2-Apr-43						20000				
1943	4	1943.04	3-Apr-43						19300				
1943	4	1943.04	4-Apr-43						19200				
1943	4	1943.04	5-Apr-43						19300				
1943	4	1943.04	6-Apr-43						19400				
1943	4	1943.04	7-Apr-43						19600				
1943	4	1943.04	8-Apr-43						19500				
1943	4	1943.04	9-Apr-43						19200				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1943	4	1943.04	10-Apr-43						19200				
1943	4	1943.04	11-Apr-43						18900				
1943	4	1943.04	12-Apr-43						18200				
1943	4	1943.04	13-Apr-43						17500				
1943	4	1943.04	14-Apr-43						17200				
1943	4	1943.04	15-Apr-43						17200				
1943	4	1943.04	16-Apr-43						17500				
1943	4	1943.04	17-Apr-43						17500				
1943	4	1943.04	18-Apr-43						17400				
1943	4	1943.04	19-Apr-43						17400				
1943	4	1943.04	20-Apr-43						17400				
1943	4	1943.04	21-Apr-43						17400				
1943	4	1943.04	22-Apr-43						17100				
1943	4	1943.04	23-Apr-43						16200				
1943	4	1943.04	24-Apr-43						15800				
1943	4	1943.04	25-Apr-43						16300				
1943	4	1943.04	26-Apr-43						16800				
1943	4	1943.04	27-Apr-43						17000				
1943	4	1943.04	28-Apr-43						16800				
1943	4	1943.04	29-Apr-43						16900				
1943	4	1943.04	30-Apr-43						19800				
1943	5	1943.05	1-May-43						21100				
1943	5	1943.05	2-May-43						19700				
1943	5	1943.05	3-May-43						19100				
1943	5	1943.05	4-May-43						19400				
1943	5	1943.05	5-May-43						19100				
1943	5	1943.05	6-May-43						18100				
1943	5	1943.05	7-May-43						17000				
1943	5	1943.05	8-May-43						16500				
1943	5	1943.05	9-May-43						16400				
1943	5	1943.05	10-May-43						16300				
1943	5	1943.05	11-May-43						15500				
1943	5	1943.05	12-May-43						14600				
1943	5	1943.05	13-May-43						14300				
1943	5	1943.05	14-May-43						14200				
1943	5	1943.05	15-May-43						14100				
1943	5	1943.05	16-May-43						13600				
1943	5	1943.05	17-May-43						12700				
1943	5	1943.05	18-May-43						11500				
1943	5	1943.05	19-May-43						10200				
1943	5	1943.05	20-May-43						9380				
1943	5	1943.05	21-May-43						9100				
1943	5	1943.05	22-May-43						8790				
1943	5	1943.05	23-May-43						8640				
1943	5	1943.05	24-May-43						9140				
1943	5	1943.05	25-May-43						11300				
1943	5	1943.05	26-May-43						14100				
1943	5	1943.05	27-May-43						16100				
1943	5	1943.05	28-May-43						17300				
1943	5	1943.05	29-May-43						18300				
1943	5	1943.05	30-May-43						19200				
1943	5	1943.05	31-May-43						19400				
1943	6	1943.06	1-Jun-43						18600				
1943	6	1943.06	2-Jun-43						18900				
1943	6	1943.06	3-Jun-43						21100				
1943	6	1943.06	4-Jun-43						24600				
1943	6	1943.06	5-Jun-43						23100				
1943	6	1943.06	6-Jun-43						19500				
1943	6	1943.06	7-Jun-43						15900				
1943	6	1943.06	8-Jun-43						13300				
1943	6	1943.06	9-Jun-43						11900				
1943	6	1943.06	10-Jun-43						11900				
1943	6	1943.06	11-Jun-43						12400				
1943	6	1943.06	12-Jun-43						12900				
1943	6	1943.06	13-Jun-43						13400				
1943	6	1943.06	14-Jun-43						12200				
1943	6	1943.06	15-Jun-43						10300				
1943	6	1943.06	16-Jun-43						8850				
1943	6	1943.06	17-Jun-43						8360				
1943	6	1943.06	18-Jun-43						8370				
1943	6	1943.06	19-Jun-43						8150				
1943	6	1943.06	20-Jun-43						8430				
1943	6	1943.06	21-Jun-43						8450				
1943	6	1943.06	22-Jun-43						8780				
1943	6	1943.06	23-Jun-43						8690				
1943	6	1943.06	24-Jun-43						7890				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1943	6	1943.06	25-Jun-43						7380				
1943	6	1943.06	26-Jun-43						6640				
1943	6	1943.06	27-Jun-43						5860				
1943	6	1943.06	28-Jun-43						5180				
1943	6	1943.06	29-Jun-43						4510				
1943	6	1943.06	30-Jun-43						4040				
1943	7	1943.07	1-Jul-43						3690				
1943	7	1943.07	2-Jul-43						3210				
1943	7	1943.07	3-Jul-43						3000				
1943	7	1943.07	4-Jul-43						2880				
1943	7	1943.07	5-Jul-43						2950				
1943	7	1943.07	6-Jul-43						2830				
1943	7	1943.07	7-Jul-43						2640				
1943	7	1943.07	8-Jul-43						2620				
1943	7	1943.07	9-Jul-43						2730				
1943	7	1943.07	10-Jul-43						2430				
1943	7	1943.07	11-Jul-43						2330				
1943	7	1943.07	12-Jul-43						2320				
1943	7	1943.07	13-Jul-43						2260				
1943	7	1943.07	14-Jul-43						2200				
1943	7	1943.07	15-Jul-43						2120				
1943	7	1943.07	16-Jul-43						2060				
1943	7	1943.07	17-Jul-43						2000				
1943	7	1943.07	18-Jul-43						1960				
1943	7	1943.07	19-Jul-43						1940				
1943	7	1943.07	20-Jul-43						1850				
1943	7	1943.07	21-Jul-43						1830				
1943	7	1943.07	22-Jul-43						1780				
1943	7	1943.07	23-Jul-43						1750				
1943	7	1943.07	24-Jul-43						1740				
1943	7	1943.07	25-Jul-43						1720				
1943	7	1943.07	26-Jul-43						1700				
1943	7	1943.07	27-Jul-43						1690				
1943	7	1943.07	28-Jul-43						1580				
1943	7	1943.07	29-Jul-43						1560				
1943	7	1943.07	30-Jul-43						1560				
1943	7	1943.07	31-Jul-43						1520				
1943	8	1943.08	1-Aug-43						1520				
1943	8	1943.08	2-Aug-43						1480				
1943	8	1943.08	3-Aug-43						1490				
1943	8	1943.08	4-Aug-43						1450				
1943	8	1943.08	5-Aug-43						1420				
1943	8	1943.08	6-Aug-43						1440				
1943	8	1943.08	7-Aug-43						1440				
1943	8	1943.08	8-Aug-43						1480				
1943	8	1943.08	9-Aug-43						1580				
1943	8	1943.08	10-Aug-43						1560				
1943	8	1943.08	11-Aug-43						1500				
1943	8	1943.08	12-Aug-43						1500				
1943	8	1943.08	13-Aug-43						1480				
1943	8	1943.08	14-Aug-43						1440				
1943	8	1943.08	15-Aug-43						1500				
1943	8	1943.08	16-Aug-43						1560				
1943	8	1943.08	17-Aug-43						1570				
1943	8	1943.08	18-Aug-43						1570				
1943	8	1943.08	19-Aug-43						1540				
1943	8	1943.08	20-Aug-43						1530				
1943	8	1943.08	21-Aug-43						1570				
1943	8	1943.08	22-Aug-43						1660				
1943	8	1943.08	23-Aug-43						1730				
1943	8	1943.08	24-Aug-43						1700				
1943	8	1943.08	25-Aug-43						1650				
1943	8	1943.08	26-Aug-43						1650				
1943	8	1943.08	27-Aug-43						1620				
1943	8	1943.08	28-Aug-43						1540				
1943	8	1943.08	29-Aug-43						1510				
1943	8	1943.08	30-Aug-43						1560				
1943	8	1943.08	31-Aug-43						1560				
1943	9	1943.09	1-Sep-43						1540				
1943	9	1943.09	2-Sep-43						1540				
1943	9	1943.09	3-Sep-43						1530				
1943	9	1943.09	4-Sep-43						1520				
1943	9	1943.09	5-Sep-43						1560				
1943	9	1943.09	6-Sep-43						1610				
1943	9	1943.09	7-Sep-43						1580				
1943	9	1943.09	8-Sep-43						1510				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1943	9	1943.09	9-Sep-43						1490				
1943	9	1943.09	10-Sep-43						1520				
1943	9	1943.09	11-Sep-43						1510				
1943	9	1943.09	12-Sep-43						1540				
1943	9	1943.09	13-Sep-43						1580				
1943	9	1943.09	14-Sep-43						1580				
1943	9	1943.09	15-Sep-43						1580				
1943	9	1943.09	16-Sep-43						1620				
1943	9	1943.09	17-Sep-43						1610				
1943	9	1943.09	18-Sep-43						1620				
1943	9	1943.09	19-Sep-43						1680				
1943	9	1943.09	20-Sep-43						1810				
1943	9	1943.09	21-Sep-43						1870				
1943	9	1943.09	22-Sep-43						1780				
1943	9	1943.09	23-Sep-43						1780				
1943	9	1943.09	24-Sep-43						1800				
1943	9	1943.09	25-Sep-43						1840				
1943	9	1943.09	26-Sep-43						1950				
1943	9	1943.09	27-Sep-43						2020				
1943	9	1943.09	28-Sep-43						2060				
1943	9	1943.09	29-Sep-43						2040				
1943	9	1943.09	30-Sep-43						2000				
1943	10	1943.10	1-Oct-43						2020				
1943	10	1943.10	2-Oct-43						2040				
1943	10	1943.10	3-Oct-43						2120				
1943	10	1943.10	4-Oct-43						2140				
1943	10	1943.10	5-Oct-43						2140				
1943	10	1943.10	6-Oct-43						2060				
1943	10	1943.10	7-Oct-43						2010				
1943	10	1943.10	8-Oct-43						2060				
1943	10	1943.10	9-Oct-43						2120				
1943	10	1943.10	10-Oct-43						2140				
1943	10	1943.10	11-Oct-43						2180				
1943	10	1943.10	12-Oct-43						2190				
1943	10	1943.10	13-Oct-43						2180				
1943	10	1943.10	14-Oct-43						2160				
1943	10	1943.10	15-Oct-43						2140				
1943	10	1943.10	16-Oct-43						2180				
1943	10	1943.10	17-Oct-43						2130				
1943	10	1943.10	18-Oct-43						2000				
1943	10	1943.10	19-Oct-43						1960				
1943	10	1943.10	20-Oct-43						1980				
1943	10	1943.10	21-Oct-43						2020				
1943	10	1943.10	22-Oct-43						2180				
1943	10	1943.10	23-Oct-43						2200				
1943	10	1943.10	24-Oct-43						2180				
1943	10	1943.10	25-Oct-43						2140				
1943	10	1943.10	26-Oct-43						2100				
1943	10	1943.10	27-Oct-43						2130				
1943	10	1943.10	28-Oct-43						2140				
1943	10	1943.10	29-Oct-43						2120				
1943	10	1943.10	30-Oct-43						2090				
1943	10	1943.10	31-Oct-43						2110				
1943	11	1943.11	1-Nov-43						2100				
1943	11	1943.11	2-Nov-43						1980				
1943	11	1943.11	3-Nov-43						1920				
1943	11	1943.11	4-Nov-43						1920				
1943	11	1943.11	5-Nov-43						1950				
1943	11	1943.11	6-Nov-43						1970				
1943	11	1943.11	7-Nov-43						2010				
1943	11	1943.11	8-Nov-43						1960				
1943	11	1943.11	9-Nov-43						1970				
1943	11	1943.11	10-Nov-43						1880				
1943	11	1943.11	11-Nov-43						1780				
1943	11	1943.11	12-Nov-43						1740				
1943	11	1943.11	13-Nov-43						1740				
1943	11	1943.11	14-Nov-43						1740				
1943	11	1943.11	15-Nov-43						1750				
1943	11	1943.11	16-Nov-43						1730				
1943	11	1943.11	17-Nov-43						1720				
1943	11	1943.11	18-Nov-43						1950				
1943	11	1943.11	19-Nov-43						2060				
1943	11	1943.11	20-Nov-43						2090				
1943	11	1943.11	21-Nov-43						2130				
1943	11	1943.11	22-Nov-43						2140				
1943	11	1943.11	23-Nov-43						2010				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1943	11	1943.11	24-Nov-43						2060				
1943	11	1943.11	25-Nov-43						2100				
1943	11	1943.11	26-Nov-43						2100				
1943	11	1943.11	27-Nov-43						1960				
1943	11	1943.11	28-Nov-43						2070				
1943	11	1943.11	29-Nov-43						2050				
1943	11	1943.11	30-Nov-43						1980				
1943	12	1943.12	1-Dec-43						2060				
1943	12	1943.12	2-Dec-43						2170				
1943	12	1943.12	3-Dec-43						2260				
1943	12	1943.12	4-Dec-43						2350				
1943	12	1943.12	5-Dec-43						2390				
1943	12	1943.12	6-Dec-43						2400				
1943	12	1943.12	7-Dec-43						2200				
1943	12	1943.12	8-Dec-43						2420				
1943	12	1943.12	9-Dec-43						2530				
1943	12	1943.12	10-Dec-43						2420				
1943	12	1943.12	11-Dec-43						2380				
1943	12	1943.12	12-Dec-43						2340				
1943	12	1943.12	13-Dec-43						2300				
1943	12	1943.12	14-Dec-43						2180				
1943	12	1943.12	15-Dec-43						2290				
1943	12	1943.12	16-Dec-43						2410				
1943	12	1943.12	17-Dec-43						2460				
1943	12	1943.12	18-Dec-43						2470				
1943	12	1943.12	19-Dec-43						2550				
1943	12	1943.12	20-Dec-43						2490				
1943	12	1943.12	21-Dec-43						2400				
1943	12	1943.12	22-Dec-43						2490				
1943	12	1943.12	23-Dec-43						2500				
1943	12	1943.12	24-Dec-43						2490				
1943	12	1943.12	25-Dec-43						2470				
1943	12	1943.12	26-Dec-43						2430				
1943	12	1943.12	27-Dec-43						2300				
1943	12	1943.12	28-Dec-43						2370				
1943	12	1943.12	29-Dec-43						2580				
1943	12	1943.12	30-Dec-43						2500				
1943	12	1943.12	31-Dec-43						2420				
1944	1	1944.01	1-Jan-44						2390				
1944	1	1944.01	2-Jan-44						2410				
1944	1	1944.01	3-Jan-44						2370				
1944	1	1944.01	4-Jan-44						2380				
1944	1	1944.01	5-Jan-44						2790				
1944	1	1944.01	6-Jan-44						3020				
1944	1	1944.01	7-Jan-44						2980				
1944	1	1944.01	8-Jan-44						2790				
1944	1	1944.01	9-Jan-44						2750				
1944	1	1944.01	10-Jan-44						2700				
1944	1	1944.01	11-Jan-44						2510				
1944	1	1944.01	12-Jan-44						2740				
1944	1	1944.01	13-Jan-44						2930				
1944	1	1944.01	14-Jan-44						2920				
1944	1	1944.01	15-Jan-44						3040				
1944	1	1944.01	16-Jan-44						2960				
1944	1	1944.01	17-Jan-44						2680				
1944	1	1944.01	18-Jan-44						2580				
1944	1	1944.01	19-Jan-44						2580				
1944	1	1944.01	20-Jan-44						2540				
1944	1	1944.01	21-Jan-44						2620				
1944	1	1944.01	22-Jan-44						2690				
1944	1	1944.01	23-Jan-44						2730				
1944	1	1944.01	24-Jan-44						2610				
1944	1	1944.01	25-Jan-44						2470				
1944	1	1944.01	26-Jan-44						2570				
1944	1	1944.01	27-Jan-44						2620				
1944	1	1944.01	28-Jan-44						2780				
1944	1	1944.01	29-Jan-44						2710				
1944	1	1944.01	30-Jan-44						2750				
1944	1	1944.01	31-Jan-44						2760				
1944	2	1944.02	1-Feb-44						2650				
1944	2	1944.02	2-Feb-44						2790				
1944	2	1944.02	3-Feb-44						2790				
1944	2	1944.02	4-Feb-44						2870				
1944	2	1944.02	5-Feb-44						3030				
1944	2	1944.02	6-Feb-44						3070				
1944	2	1944.02	7-Feb-44						2930				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1944	2	1944.02	8-Feb-44						2800				
1944	2	1944.02	9-Feb-44						2820				
1944	2	1944.02	10-Feb-44						2840				
1944	2	1944.02	11-Feb-44						3110				
1944	2	1944.02	12-Feb-44						2980				
1944	2	1944.02	13-Feb-44						2810				
1944	2	1944.02	14-Feb-44						2630				
1944	2	1944.02	15-Feb-44						2580				
1944	2	1944.02	16-Feb-44						2690				
1944	2	1944.02	17-Feb-44						2670				
1944	2	1944.02	18-Feb-44						2590				
1944	2	1944.02	19-Feb-44						2550				
1944	2	1944.02	20-Feb-44						2500				
1944	2	1944.02	21-Feb-44						2380				
1944	2	1944.02	22-Feb-44						2180				
1944	2	1944.02	23-Feb-44						2580				
1944	2	1944.02	24-Feb-44						3910				
1944	2	1944.02	25-Feb-44						3530				
1944	2	1944.02	26-Feb-44						3350				
1944	2	1944.02	27-Feb-44						3300				
1944	2	1944.02	28-Feb-44						3100				
1944	2	1944.02	29-Feb-44						2950				
1944	3	1944.03	1-Mar-44						4420				
1944	3	1944.03	2-Mar-44						6170				
1944	3	1944.03	3-Mar-44						5860				
1944	3	1944.03	4-Mar-44						5510				
1944	3	1944.03	5-Mar-44						6090				
1944	3	1944.03	6-Mar-44						7210				
1944	3	1944.03	7-Mar-44						6240				
1944	3	1944.03	8-Mar-44						6300				
1944	3	1944.03	9-Mar-44						6370				
1944	3	1944.03	10-Mar-44						6250				
1944	3	1944.03	11-Mar-44						6050				
1944	3	1944.03	12-Mar-44						6120				
1944	3	1944.03	13-Mar-44						5750				
1944	3	1944.03	14-Mar-44						5380				
1944	3	1944.03	15-Mar-44						5260				
1944	3	1944.03	16-Mar-44						5150				
1944	3	1944.03	17-Mar-44						5050				
1944	3	1944.03	18-Mar-44						4950				
1944	3	1944.03	19-Mar-44						4810				
1944	3	1944.03	20-Mar-44						4720				
1944	3	1944.03	21-Mar-44						4610				
1944	3	1944.03	22-Mar-44						4400				
1944	3	1944.03	23-Mar-44						4200				
1944	3	1944.03	24-Mar-44						4050				
1944	3	1944.03	25-Mar-44						3480				
1944	3	1944.03	26-Mar-44						3130				
1944	3	1944.03	27-Mar-44						2690				
1944	3	1944.03	28-Mar-44						2420				
1944	3	1944.03	29-Mar-44						2140				
1944	3	1944.03	30-Mar-44						1950				
1944	3	1944.03	31-Mar-44						1860				
1944	4	1944.04	1-Apr-44						1700				
1944	4	1944.04	2-Apr-44						1630				
1944	4	1944.04	3-Apr-44						1570				
1944	4	1944.04	4-Apr-44						1540				
1944	4	1944.04	5-Apr-44						1540				
1944	4	1944.04	6-Apr-44						1530				
1944	4	1944.04	7-Apr-44						1470				
1944	4	1944.04	8-Apr-44						1460				
1944	4	1944.04	9-Apr-44						1760				
1944	4	1944.04	10-Apr-44						1940				
1944	4	1944.04	11-Apr-44						2040				
1944	4	1944.04	12-Apr-44						2470				
1944	4	1944.04	13-Apr-44						2720				
1944	4	1944.04	14-Apr-44						2890				
1944	4	1944.04	15-Apr-44						2840				
1944	4	1944.04	16-Apr-44						2600				
1944	4	1944.04	17-Apr-44						2380				
1944	4	1944.04	18-Apr-44						2170				
1944	4	1944.04	19-Apr-44						2030				
1944	4	1944.04	20-Apr-44						2300				
1944	4	1944.04	21-Apr-44						2540				
1944	4	1944.04	22-Apr-44						2890				
1944	4	1944.04	23-Apr-44						2920				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1944	4	1944.04	24-Apr-44						2970				
1944	4	1944.04	25-Apr-44						2840				
1944	4	1944.04	26-Apr-44						2540				
1944	4	1944.04	27-Apr-44						2420				
1944	4	1944.04	28-Apr-44						2880				
1944	4	1944.04	29-Apr-44						3110				
1944	4	1944.04	30-Apr-44						3310				
1944	5	1944.05	1-May-44						3370				
1944	5	1944.05	2-May-44						3200				
1944	5	1944.05	3-May-44						2840				
1944	5	1944.05	4-May-44						2440				
1944	5	1944.05	5-May-44						2180				
1944	5	1944.05	6-May-44						2050				
1944	5	1944.05	7-May-44						1990				
1944	5	1944.05	8-May-44						1980				
1944	5	1944.05	9-May-44						1910				
1944	5	1944.05	10-May-44						1850				
1944	5	1944.05	11-May-44						2520				
1944	5	1944.05	12-May-44						3520				
1944	5	1944.05	13-May-44						3550				
1944	5	1944.05	14-May-44						3450				
1944	5	1944.05	15-May-44						3790				
1944	5	1944.05	16-May-44						3820				
1944	5	1944.05	17-May-44						4330				
1944	5	1944.05	18-May-44						4820				
1944	5	1944.05	19-May-44						4950				
1944	5	1944.05	20-May-44						4850				
1944	5	1944.05	21-May-44						4840				
1944	5	1944.05	22-May-44						4320				
1944	5	1944.05	23-May-44						4230				
1944	5	1944.05	24-May-44						5580				
1944	5	1944.05	25-May-44						6100				
1944	5	1944.05	26-May-44						5820				
1944	5	1944.05	27-May-44						5400				
1944	5	1944.05	28-May-44						4960				
1944	5	1944.05	29-May-44						4480				
1944	5	1944.05	30-May-44						4850				
1944	5	1944.05	31-May-44						4640				
1944	6	1944.06	1-Jun-44						4990				
1944	6	1944.06	2-Jun-44						5200				
1944	6	1944.06	3-Jun-44						5000				
1944	6	1944.06	4-Jun-44						5130				
1944	6	1944.06	5-Jun-44						5250				
1944	6	1944.06	6-Jun-44						4940				
1944	6	1944.06	7-Jun-44						4700				
1944	6	1944.06	8-Jun-44						4840				
1944	6	1944.06	9-Jun-44						5030				
1944	6	1944.06	10-Jun-44						5140				
1944	6	1944.06	11-Jun-44						5130				
1944	6	1944.06	12-Jun-44						4780				
1944	6	1944.06	13-Jun-44						4000				
1944	6	1944.06	14-Jun-44						3230				
1944	6	1944.06	15-Jun-44						3070				
1944	6	1944.06	16-Jun-44						3060				
1944	6	1944.06	17-Jun-44						2940				
1944	6	1944.06	18-Jun-44						2780				
1944	6	1944.06	19-Jun-44						2570				
1944	6	1944.06	20-Jun-44						2240				
1944	6	1944.06	21-Jun-44						2000				
1944	6	1944.06	22-Jun-44						1870				
1944	6	1944.06	23-Jun-44						1770				
1944	6	1944.06	24-Jun-44						1700				
1944	6	1944.06	25-Jun-44						1790				
1944	6	1944.06	26-Jun-44						1830				
1944	6	1944.06	27-Jun-44						1770				
1944	6	1944.06	28-Jun-44						1650				
1944	6	1944.06	29-Jun-44						1590				
1944	6	1944.06	30-Jun-44						1530				
1944	7	1944.07	1-Jul-44						1480				
1944	7	1944.07	2-Jul-44						1500				
1944	7	1944.07	3-Jul-44						1590				
1944	7	1944.07	4-Jul-44						1500				
1944	7	1944.07	5-Jul-44						1420				
1944	7	1944.07	6-Jul-44						1370				
1944	7	1944.07	7-Jul-44						1300				
1944	7	1944.07	8-Jul-44						1260				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1944	7	1944.07	9-Jul-44						1290				
1944	7	1944.07	10-Jul-44						1360				
1944	7	1944.07	11-Jul-44						1380				
1944	7	1944.07	12-Jul-44						1340				
1944	7	1944.07	13-Jul-44						1290				
1944	7	1944.07	14-Jul-44						1260				
1944	7	1944.07	15-Jul-44						1250				
1944	7	1944.07	16-Jul-44						1260				
1944	7	1944.07	17-Jul-44						1240				
1944	7	1944.07	18-Jul-44						1210				
1944	7	1944.07	19-Jul-44						1160				
1944	7	1944.07	20-Jul-44						1120				
1944	7	1944.07	21-Jul-44						1140				
1944	7	1944.07	22-Jul-44						1110				
1944	7	1944.07	23-Jul-44						1100				
1944	7	1944.07	24-Jul-44						1110				
1944	7	1944.07	25-Jul-44						1100				
1944	7	1944.07	26-Jul-44						1070				
1944	7	1944.07	27-Jul-44						1030				
1944	7	1944.07	28-Jul-44						1050				
1944	7	1944.07	29-Jul-44						1060				
1944	7	1944.07	30-Jul-44						1100				
1944	7	1944.07	31-Jul-44						1150				
1944	8	1944.08	1-Aug-44						1150				
1944	8	1944.08	2-Aug-44						1090				
1944	8	1944.08	3-Aug-44						1060				
1944	8	1944.08	4-Aug-44						1080				
1944	8	1944.08	5-Aug-44						1060				
1944	8	1944.08	6-Aug-44						1080				
1944	8	1944.08	7-Aug-44						1080				
1944	8	1944.08	8-Aug-44						1020				
1944	8	1944.08	9-Aug-44						1000				
1944	8	1944.08	10-Aug-44						1000				
1944	8	1944.08	11-Aug-44						1020				
1944	8	1944.08	12-Aug-44						984				
1944	8	1944.08	13-Aug-44						1010				
1944	8	1944.08	14-Aug-44						1100				
1944	8	1944.08	15-Aug-44						1120				
1944	8	1944.08	16-Aug-44						1090				
1944	8	1944.08	17-Aug-44						1100				
1944	8	1944.08	18-Aug-44						1120				
1944	8	1944.08	19-Aug-44						1080				
1944	8	1944.08	20-Aug-44						1100				
1944	8	1944.08	21-Aug-44						1170				
1944	8	1944.08	22-Aug-44						1190				
1944	8	1944.08	23-Aug-44						1140				
1944	8	1944.08	24-Aug-44						1080				
1944	8	1944.08	25-Aug-44						1060				
1944	8	1944.08	26-Aug-44						1080				
1944	8	1944.08	27-Aug-44						1130				
1944	8	1944.08	28-Aug-44						1190				
1944	8	1944.08	29-Aug-44						1180				
1944	8	1944.08	30-Aug-44						1140				
1944	8	1944.08	31-Aug-44						1110				
1944	9	1944.09	1-Sep-44						1100				
1944	9	1944.09	2-Sep-44						1140				
1944	9	1944.09	3-Sep-44						1200				
1944	9	1944.09	4-Sep-44						1220				
1944	9	1944.09	5-Sep-44						1180				
1944	9	1944.09	6-Sep-44						1140				
1944	9	1944.09	7-Sep-44						1090				
1944	9	1944.09	8-Sep-44						1040				
1944	9	1944.09	9-Sep-44						1060				
1944	9	1944.09	10-Sep-44						1090				
1944	9	1944.09	11-Sep-44						1120				
1944	9	1944.09	12-Sep-44						1100				
1944	9	1944.09	13-Sep-44						1080				
1944	9	1944.09	14-Sep-44						1060				
1944	9	1944.09	15-Sep-44						1100				
1944	9	1944.09	16-Sep-44						1160				
1944	9	1944.09	17-Sep-44						1200				
1944	9	1944.09	18-Sep-44						1260				
1944	9	1944.09	19-Sep-44						1280				
1944	9	1944.09	20-Sep-44						1240				
1944	9	1944.09	21-Sep-44						1260				
1944	9	1944.09	22-Sep-44						1300				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1944	9	1944.09	23-Sep-44						1320				
1944	9	1944.09	24-Sep-44						1340				
1944	9	1944.09	25-Sep-44						1360				
1944	9	1944.09	26-Sep-44						1310				
1944	9	1944.09	27-Sep-44						1260				
1944	9	1944.09	28-Sep-44						1240				
1944	9	1944.09	29-Sep-44						1330				
1944	9	1944.09	30-Sep-44						1390				
1944	10	1944.10	1-Oct-44						1500				
1944	10	1944.10	2-Oct-44						1570				
1944	10	1944.10	3-Oct-44						1530				
1944	10	1944.10	4-Oct-44						1490				
1944	10	1944.10	5-Oct-44						1490				
1944	10	1944.10	6-Oct-44						1530				
1944	10	1944.10	7-Oct-44						1560				
1944	10	1944.10	8-Oct-44						1610				
1944	10	1944.10	9-Oct-44						1670				
1944	10	1944.10	10-Oct-44						1670				
1944	10	1944.10	11-Oct-44						1650				
1944	10	1944.10	12-Oct-44						1650				
1944	10	1944.10	13-Oct-44						1620				
1944	10	1944.10	14-Oct-44						1590				
1944	10	1944.10	15-Oct-44						1680				
1944	10	1944.10	16-Oct-44						1720				
1944	10	1944.10	17-Oct-44						1800				
1944	10	1944.10	18-Oct-44						1720				
1944	10	1944.10	19-Oct-44						1670				
1944	10	1944.10	20-Oct-44						1670				
1944	10	1944.10	21-Oct-44						1690				
1944	10	1944.10	22-Oct-44						1680				
1944	10	1944.10	23-Oct-44						1730				
1944	10	1944.10	24-Oct-44						1760				
1944	10	1944.10	25-Oct-44						1740				
1944	10	1944.10	26-Oct-44						1710				
1944	10	1944.10	27-Oct-44						1710				
1944	10	1944.10	28-Oct-44						1690				
1944	10	1944.10	29-Oct-44						1670				
1944	10	1944.10	30-Oct-44						1650				
1944	10	1944.10	31-Oct-44						1680				
1944	11	1944.11	1-Nov-44						1720				
1944	11	1944.11	2-Nov-44						1710				
1944	11	1944.11	3-Nov-44						1700				
1944	11	1944.11	4-Nov-44						1730				
1944	11	1944.11	5-Nov-44						1820				
1944	11	1944.11	6-Nov-44						1800				
1944	11	1944.11	7-Nov-44						1780				
1944	11	1944.11	8-Nov-44						1800				
1944	11	1944.11	9-Nov-44						1810				
1944	11	1944.11	10-Nov-44						1850				
1944	11	1944.11	11-Nov-44						2430				
1944	11	1944.11	12-Nov-44						3280				
1944	11	1944.11	13-Nov-44						3140				
1944	11	1944.11	14-Nov-44						2880				
1944	11	1944.11	15-Nov-44						3100				
1944	11	1944.11	16-Nov-44						3220				
1944	11	1944.11	17-Nov-44						3170				
1944	11	1944.11	18-Nov-44						3090				
1944	11	1944.11	19-Nov-44						2970				
1944	11	1944.11	20-Nov-44						2680				
1944	11	1944.11	21-Nov-44						2480				
1944	11	1944.11	22-Nov-44						2610				
1944	11	1944.11	23-Nov-44						2730				
1944	11	1944.11	24-Nov-44						2720				
1944	11	1944.11	25-Nov-44						2630				
1944	11	1944.11	26-Nov-44						2750				
1944	11	1944.11	27-Nov-44						2610				
1944	11	1944.11	28-Nov-44						2490				
1944	11	1944.11	29-Nov-44						2650				
1944	11	1944.11	30-Nov-44						2840				
1944	12	1944.12	1-Dec-44						2920				
1944	12	1944.12	2-Dec-44						2980				
1944	12	1944.12	3-Dec-44						3100				
1944	12	1944.12	4-Dec-44						2850				
1944	12	1944.12	5-Dec-44						2760				
1944	12	1944.12	6-Dec-44						3220				
1944	12	1944.12	7-Dec-44						3740				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1944	12	1944.12	8-Dec-44						3950				
1944	12	1944.12	9-Dec-44						4210				
1944	12	1944.12	10-Dec-44						4170				
1944	12	1944.12	11-Dec-44						3640				
1944	12	1944.12	12-Dec-44						3400				
1944	12	1944.12	13-Dec-44						3700				
1944	12	1944.12	14-Dec-44						3770				
1944	12	1944.12	15-Dec-44						3780				
1944	12	1944.12	16-Dec-44						3760				
1944	12	1944.12	17-Dec-44						3690				
1944	12	1944.12	18-Dec-44						3460				
1944	12	1944.12	19-Dec-44						3570				
1944	12	1944.12	20-Dec-44						4100				
1944	12	1944.12	21-Dec-44						4200				
1944	12	1944.12	22-Dec-44						4250				
1944	12	1944.12	23-Dec-44						4290				
1944	12	1944.12	24-Dec-44						4140				
1944	12	1944.12	25-Dec-44						3540				
1944	12	1944.12	26-Dec-44						3250				
1944	12	1944.12	27-Dec-44						3870				
1944	12	1944.12	28-Dec-44						4470				
1944	12	1944.12	29-Dec-44						4660				
1944	12	1944.12	30-Dec-44						4970				
1944	12	1944.12	31-Dec-44						5020				
1945	1	1945.01	1-Jan-45						4400				
1945	1	1945.01	2-Jan-45						3940				
1945	1	1945.01	3-Jan-45						3980				
1945	1	1945.01	4-Jan-45						4260				
1945	1	1945.01	5-Jan-45						4310				
1945	1	1945.01	6-Jan-45						4330				
1945	1	1945.01	7-Jan-45						4210				
1945	1	1945.01	8-Jan-45						3680				
1945	1	1945.01	9-Jan-45						3480				
1945	1	1945.01	10-Jan-45						4200				
1945	1	1945.01	11-Jan-45						4480				
1945	1	1945.01	12-Jan-45						4520				
1945	1	1945.01	13-Jan-45						4520				
1945	1	1945.01	14-Jan-45						4310				
1945	1	1945.01	15-Jan-45						3750				
1945	1	1945.01	16-Jan-45						3420				
1945	1	1945.01	17-Jan-45						3960				
1945	1	1945.01	18-Jan-45						4200				
1945	1	1945.01	19-Jan-45						4200				
1945	1	1945.01	20-Jan-45						4140				
1945	1	1945.01	21-Jan-45						3970				
1945	1	1945.01	22-Jan-45						3430				
1945	1	1945.01	23-Jan-45						3140				
1945	1	1945.01	24-Jan-45						3550				
1945	1	1945.01	25-Jan-45						3750				
1945	1	1945.01	26-Jan-45						3630				
1945	1	1945.01	27-Jan-45						3530				
1945	1	1945.01	28-Jan-45						3440				
1945	1	1945.01	29-Jan-45						3120				
1945	1	1945.01	30-Jan-45						2880				
1945	1	1945.01	31-Jan-45						3060				
1945	2	1945.02	1-Feb-45						3410				
1945	2	1945.02	2-Feb-45						4600				
1945	2	1945.02	3-Feb-45						8280				
1945	2	1945.02	4-Feb-45						9950				
1945	2	1945.02	5-Feb-45						11000				
1945	2	1945.02	6-Feb-45						12700				
1945	2	1945.02	7-Feb-45						14200				
1945	2	1945.02	8-Feb-45						14200				
1945	2	1945.02	9-Feb-45						13900				
1945	2	1945.02	10-Feb-45						13700				
1945	2	1945.02	11-Feb-45						13100				
1945	2	1945.02	12-Feb-45						12600				
1945	2	1945.02	13-Feb-45						12800				
1945	2	1945.02	14-Feb-45						13200				
1945	2	1945.02	15-Feb-45						13000				
1945	2	1945.02	16-Feb-45						13000				
1945	2	1945.02	17-Feb-45						13000				
1945	2	1945.02	18-Feb-45						12500				
1945	2	1945.02	19-Feb-45						11900				
1945	2	1945.02	20-Feb-45						11800				
1945	2	1945.02	21-Feb-45						11500				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1945	2	1945.02	22-Feb-45						10700				
1945	2	1945.02	23-Feb-45						9320				
1945	2	1945.02	24-Feb-45						8630				
1945	2	1945.02	25-Feb-45						8270				
1945	2	1945.02	26-Feb-45						7720				
1945	2	1945.02	27-Feb-45						7710				
1945	2	1945.02	28-Feb-45						7990				
1945	3	1945.03	1-Mar-45						7980				
1945	3	1945.03	2-Mar-45						7960				
1945	3	1945.03	3-Mar-45						7840				
1945	3	1945.03	4-Mar-45						7480				
1945	3	1945.03	5-Mar-45						6700				
1945	3	1945.03	6-Mar-45						6710				
1945	3	1945.03	7-Mar-45						7660				
1945	3	1945.03	8-Mar-45						7840				
1945	3	1945.03	9-Mar-45						7840				
1945	3	1945.03	10-Mar-45						7770				
1945	3	1945.03	11-Mar-45						7360				
1945	3	1945.03	12-Mar-45						6540				
1945	3	1945.03	13-Mar-45						6270				
1945	3	1945.03	14-Mar-45						6890				
1945	3	1945.03	15-Mar-45						7000				
1945	3	1945.03	16-Mar-45						8380				
1945	3	1945.03	17-Mar-45						10100				
1945	3	1945.03	18-Mar-45						9260				
1945	3	1945.03	19-Mar-45						8660				
1945	3	1945.03	20-Mar-45						9440				
1945	3	1945.03	21-Mar-45						9680				
1945	3	1945.03	22-Mar-45						9320				
1945	3	1945.03	23-Mar-45						9210				
1945	3	1945.03	24-Mar-45						10400				
1945	3	1945.03	25-Mar-45						11100				
1945	3	1945.03	26-Mar-45						10600				
1945	3	1945.03	27-Mar-45						11800				
1945	3	1945.03	28-Mar-45						14200				
1945	3	1945.03	29-Mar-45						14800				
1945	3	1945.03	30-Mar-45						14600				
1945	3	1945.03	31-Mar-45						14300				
1945	4	1945.04	1-Apr-45						13600				
1945	4	1945.04	2-Apr-45						12800				
1945	4	1945.04	3-Apr-45						13000				
1945	4	1945.04	4-Apr-45						13200				
1945	4	1945.04	5-Apr-45						12600				
1945	4	1945.04	6-Apr-45						11800				
1945	4	1945.04	7-Apr-45						10800				
1945	4	1945.04	8-Apr-45						9700				
1945	4	1945.04	9-Apr-45						8980				
1945	4	1945.04	10-Apr-45						8500				
1945	4	1945.04	11-Apr-45						8380				
1945	4	1945.04	12-Apr-45						7890				
1945	4	1945.04	13-Apr-45						7300				
1945	4	1945.04	14-Apr-45						6830				
1945	4	1945.04	15-Apr-45						6370				
1945	4	1945.04	16-Apr-45						5990				
1945	4	1945.04	17-Apr-45						5560				
1945	4	1945.04	18-Apr-45						5490				
1945	4	1945.04	19-Apr-45						5940				
1945	4	1945.04	20-Apr-45						6790				
1945	4	1945.04	21-Apr-45						7330				
1945	4	1945.04	22-Apr-45						8020				
1945	4	1945.04	23-Apr-45						8450				
1945	4	1945.04	24-Apr-45						8190				
1945	4	1945.04	25-Apr-45						8200				
1945	4	1945.04	26-Apr-45						8280				
1945	4	1945.04	27-Apr-45						8800				
1945	4	1945.04	28-Apr-45						9530				
1945	4	1945.04	29-Apr-45						10200				
1945	4	1945.04	30-Apr-45						11100				
1945	5	1945.05	1-May-45						11600				
1945	5	1945.05	2-May-45						13200				
1945	5	1945.05	3-May-45						14600				
1945	5	1945.05	4-May-45						15800				
1945	5	1945.05	5-May-45						16800				
1945	5	1945.05	6-May-45						17600				
1945	5	1945.05	7-May-45						18100				
1945	5	1945.05	8-May-45						18800				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1945	5	1945.05	9-May-45						19500				
1945	5	1945.05	10-May-45						20000				
1945	5	1945.05	11-May-45						20300				
1945	5	1945.05	12-May-45						20100				
1945	5	1945.05	13-May-45						19900				
1945	5	1945.05	14-May-45						19400				
1945	5	1945.05	15-May-45						18900				
1945	5	1945.05	16-May-45						18000				
1945	5	1945.05	17-May-45						16200				
1945	5	1945.05	18-May-45						13900				
1945	5	1945.05	19-May-45						12400				
1945	5	1945.05	20-May-45						12000				
1945	5	1945.05	21-May-45						11700				
1945	5	1945.05	22-May-45						11200				
1945	5	1945.05	23-May-45						10500				
1945	5	1945.05	24-May-45						9880				
1945	5	1945.05	25-May-45						9220				
1945	5	1945.05	26-May-45						8590				
1945	5	1945.05	27-May-45						7690				
1945	5	1945.05	28-May-45						6780				
1945	5	1945.05	29-May-45						6110				
1945	5	1945.05	30-May-45						6180				
1945	5	1945.05	31-May-45						6430				
1945	6	1945.06	1-Jun-45						7480				
1945	6	1945.06	2-Jun-45						6760				
1945	6	1945.06	3-Jun-45						6990				
1945	6	1945.06	4-Jun-45						7550				
1945	6	1945.06	5-Jun-45						8240				
1945	6	1945.06	6-Jun-45						9680				
1945	6	1945.06	7-Jun-45						10900				
1945	6	1945.06	8-Jun-45						10700				
1945	6	1945.06	9-Jun-45						9880				
1945	6	1945.06	10-Jun-45						8820				
1945	6	1945.06	11-Jun-45						7680				
1945	6	1945.06	12-Jun-45						8070				
1945	6	1945.06	13-Jun-45						10700				
1945	6	1945.06	14-Jun-45						12400				
1945	6	1945.06	15-Jun-45						13700				
1945	6	1945.06	16-Jun-45						14900				
1945	6	1945.06	17-Jun-45						15600				
1945	6	1945.06	18-Jun-45						15200				
1945	6	1945.06	19-Jun-45						15100				
1945	6	1945.06	20-Jun-45						15500				
1945	6	1945.06	21-Jun-45						15500				
1945	6	1945.06	22-Jun-45						14600				
1945	6	1945.06	23-Jun-45						14200				
1945	6	1945.06	24-Jun-45						15700				
1945	6	1945.06	25-Jun-45						16000				
1945	6	1945.06	26-Jun-45						11900				
1945	6	1945.06	27-Jun-45						9600				
1945	6	1945.06	28-Jun-45						8770				
1945	6	1945.06	29-Jun-45						8560				
1945	6	1945.06	30-Jun-45						9010				
1945	7	1945.07	1-Jul-45						8730				
1945	7	1945.07	2-Jul-45						8380				
1945	7	1945.07	3-Jul-45						7500				
1945	7	1945.07	4-Jul-45						6850				
1945	7	1945.07	5-Jul-45						7120				
1945	7	1945.07	6-Jul-45						7370				
1945	7	1945.07	7-Jul-45						5990				
1945	7	1945.07	8-Jul-45						6120				
1945	7	1945.07	9-Jul-45						5610				
1945	7	1945.07	10-Jul-45						5160				
1945	7	1945.07	11-Jul-45						4530				
1945	7	1945.07	12-Jul-45						4270				
1945	7	1945.07	13-Jul-45						3860				
1945	7	1945.07	14-Jul-45						3480				
1945	7	1945.07	15-Jul-45						3330				
1945	7	1945.07	16-Jul-45						3260				
1945	7	1945.07	17-Jul-45						2860				
1945	7	1945.07	18-Jul-45						2460				
1945	7	1945.07	19-Jul-45						2220				
1945	7	1945.07	20-Jul-45						2130				
1945	7	1945.07	21-Jul-45						2050				
1945	7	1945.07	22-Jul-45						2000				
1945	7	1945.07	23-Jul-45						1920				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1945	7	1945.07	24-Jul-45						1850				
1945	7	1945.07	25-Jul-45						1750				
1945	7	1945.07	26-Jul-45						1650				
1945	7	1945.07	27-Jul-45						1570				
1945	7	1945.07	28-Jul-45						1530				
1945	7	1945.07	29-Jul-45						1560				
1945	7	1945.07	30-Jul-45						1590				
1945	7	1945.07	31-Jul-45						1590				
1945	8	1945.08	1-Aug-45						1530				
1945	8	1945.08	2-Aug-45						1460				
1945	8	1945.08	3-Aug-45						1460				
1945	8	1945.08	4-Aug-45						1420				
1945	8	1945.08	5-Aug-45						1560				
1945	8	1945.08	6-Aug-45						1730				
1945	8	1945.08	7-Aug-45						1740				
1945	8	1945.08	8-Aug-45						1650				
1945	8	1945.08	9-Aug-45						1680				
1945	8	1945.08	10-Aug-45						1670				
1945	8	1945.08	11-Aug-45						1790				
1945	8	1945.08	12-Aug-45						1930				
1945	8	1945.08	13-Aug-45						2020				
1945	8	1945.08	14-Aug-45						2000				
1945	8	1945.08	15-Aug-45						1930				
1945	8	1945.08	16-Aug-45						1900				
1945	8	1945.08	17-Aug-45						1830				
1945	8	1945.08	18-Aug-45						1860				
1945	8	1945.08	19-Aug-45						1940				
1945	8	1945.08	20-Aug-45						2090				
1945	8	1945.08	21-Aug-45						2000				
1945	8	1945.08	22-Aug-45						1860				
1945	8	1945.08	23-Aug-45						1750				
1945	8	1945.08	24-Aug-45						1680				
1945	8	1945.08	25-Aug-45						1660				
1945	8	1945.08	26-Aug-45						1750				
1945	8	1945.08	27-Aug-45						1890				
1945	8	1945.08	28-Aug-45						1900				
1945	8	1945.08	29-Aug-45						1840				
1945	8	1945.08	30-Aug-45						1820				
1945	8	1945.08	31-Aug-45						1830				
1945	9	1945.09	1-Sep-45						1840				
1945	9	1945.09	2-Sep-45						1900				
1945	9	1945.09	3-Sep-45						2000				
1945	9	1945.09	4-Sep-45						2090				
1945	9	1945.09	5-Sep-45						2050				
1945	9	1945.09	6-Sep-45						1930				
1945	9	1945.09	7-Sep-45						1920				
1945	9	1945.09	8-Sep-45						1890				
1945	9	1945.09	9-Sep-45						1950				
1945	9	1945.09	10-Sep-45						2240				
1945	9	1945.09	11-Sep-45						2220				
1945	9	1945.09	12-Sep-45						2130				
1945	9	1945.09	13-Sep-45						2110				
1945	9	1945.09	14-Sep-45						2100				
1945	9	1945.09	15-Sep-45						2200				
1945	9	1945.09	16-Sep-45						2120				
1945	9	1945.09	17-Sep-45						2060				
1945	9	1945.09	18-Sep-45						2050				
1945	9	1945.09	19-Sep-45						1940				
1945	9	1945.09	20-Sep-45						1930				
1945	9	1945.09	21-Sep-45						1940				
1945	9	1945.09	22-Sep-45						1920				
1945	9	1945.09	23-Sep-45						2050				
1945	9	1945.09	24-Sep-45						2100				
1945	9	1945.09	25-Sep-45						2080				
1945	9	1945.09	26-Sep-45						1990				
1945	9	1945.09	27-Sep-45						1960				
1945	9	1945.09	28-Sep-45						1970				
1945	9	1945.09	29-Sep-45						2030				
1945	9	1945.09	30-Sep-45						2220				
1945	10	1945.10	1-Oct-45						2350				
1945	10	1945.10	2-Oct-45						2350				
1945	10	1945.10	3-Oct-45						2180				
1945	10	1945.10	4-Oct-45						2050				
1945	10	1945.10	5-Oct-45						2050				
1945	10	1945.10	6-Oct-45						2180				
1945	10	1945.10	7-Oct-45						2160				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1945	10	1945.10	8-Oct-45						2630				
1945	10	1945.10	9-Oct-45						3030				
1945	10	1945.10	10-Oct-45						3040				
1945	10	1945.10	11-Oct-45						2990				
1945	10	1945.10	12-Oct-45						2990				
1945	10	1945.10	13-Oct-45						3120				
1945	10	1945.10	14-Oct-45						3280				
1945	10	1945.10	15-Oct-45						3360				
1945	10	1945.10	16-Oct-45						3520				
1945	10	1945.10	17-Oct-45						3490				
1945	10	1945.10	18-Oct-45						3230				
1945	10	1945.10	19-Oct-45						3080				
1945	10	1945.10	20-Oct-45						3010				
1945	10	1945.10	21-Oct-45						3000				
1945	10	1945.10	22-Oct-45						2900				
1945	10	1945.10	23-Oct-45						2740				
1945	10	1945.10	24-Oct-45						2690				
1945	10	1945.10	25-Oct-45						2670				
1945	10	1945.10	26-Oct-45						2620				
1945	10	1945.10	27-Oct-45						2560				
1945	10	1945.10	28-Oct-45						2530				
1945	10	1945.10	29-Oct-45						2490				
1945	10	1945.10	30-Oct-45						2480				
1945	10	1945.10	31-Oct-45						2750				
1945	11	1945.11	1-Nov-45						2910				
1945	11	1945.11	2-Nov-45						2950				
1945	11	1945.11	3-Nov-45						3040				
1945	11	1945.11	4-Nov-45						3040				
1945	11	1945.11	5-Nov-45						2980				
1945	11	1945.11	6-Nov-45						2950				
1945	11	1945.11	7-Nov-45						3200				
1945	11	1945.11	8-Nov-45						3350				
1945	11	1945.11	9-Nov-45						3400				
1945	11	1945.11	10-Nov-45						3440				
1945	11	1945.11	11-Nov-45						3480				
1945	11	1945.11	12-Nov-45						3290				
1945	11	1945.11	13-Nov-45						3060				
1945	11	1945.11	14-Nov-45						3260				
1945	11	1945.11	15-Nov-45						3580				
1945	11	1945.11	16-Nov-45						3720				
1945	11	1945.11	17-Nov-45						3800				
1945	11	1945.11	18-Nov-45						3820				
1945	11	1945.11	19-Nov-45						3570				
1945	11	1945.11	20-Nov-45						3400				
1945	11	1945.11	21-Nov-45						3660				
1945	11	1945.11	22-Nov-45						3830				
1945	11	1945.11	23-Nov-45						3860				
1945	11	1945.11	24-Nov-45						3740				
1945	11	1945.11	25-Nov-45						3910				
1945	11	1945.11	26-Nov-45						3750				
1945	11	1945.11	27-Nov-45						3520				
1945	11	1945.11	28-Nov-45						3820				
1945	11	1945.11	29-Nov-45						4010				
1945	11	1945.11	30-Nov-45						4160				
1945	12	1945.12	1-Dec-45						4240				
1945	12	1945.12	2-Dec-45						4390				
1945	12	1945.12	3-Dec-45						4410				
1945	12	1945.12	4-Dec-45						4360				
1945	12	1945.12	5-Dec-45						4640				
1945	12	1945.12	6-Dec-45						4860				
1945	12	1945.12	7-Dec-45						4950				
1945	12	1945.12	8-Dec-45						5050				
1945	12	1945.12	9-Dec-45						5230				
1945	12	1945.12	10-Dec-45						4950				
1945	12	1945.12	11-Dec-45						4790				
1945	12	1945.12	12-Dec-45						5130				
1945	12	1945.12	13-Dec-45						5230				
1945	12	1945.12	14-Dec-45						5230				
1945	12	1945.12	15-Dec-45						5200				
1945	12	1945.12	16-Dec-45						5110				
1945	12	1945.12	17-Dec-45						4590				
1945	12	1945.12	18-Dec-45						4360				
1945	12	1945.12	19-Dec-45						4790				
1945	12	1945.12	20-Dec-45						4940				
1945	12	1945.12	21-Dec-45						5000				
1945	12	1945.12	22-Dec-45						5290				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1945	12	1945.12	23-Dec-45						6320				
1945	12	1945.12	24-Dec-45						6190				
1945	12	1945.12	25-Dec-45						5990				
1945	12	1945.12	26-Dec-45						6910				
1945	12	1945.12	27-Dec-45						7710				
1945	12	1945.12	28-Dec-45						8460				
1945	12	1945.12	29-Dec-45						9250				
1945	12	1945.12	30-Dec-45						9740				
1945	12	1945.12	31-Dec-45						10400				
1946	1	1946.01	1-Jan-46						10800				
1946	1	1946.01	2-Jan-46						10900				
1946	1	1946.01	3-Jan-46						10600				
1946	1	1946.01	4-Jan-46						10500				
1946	1	1946.01	5-Jan-46						10400				
1946	1	1946.01	6-Jan-46						11000				
1946	1	1946.01	7-Jan-46						11600				
1946	1	1946.01	8-Jan-46						11400				
1946	1	1946.01	9-Jan-46						11700				
1946	1	1946.01	10-Jan-46						11900				
1946	1	1946.01	11-Jan-46						12000				
1946	1	1946.01	12-Jan-46						11700				
1946	1	1946.01	13-Jan-46						10900				
1946	1	1946.01	14-Jan-46						10100				
1946	1	1946.01	15-Jan-46						9990				
1946	1	1946.01	16-Jan-46						10200				
1946	1	1946.01	17-Jan-46						10100				
1946	1	1946.01	18-Jan-46						9680				
1946	1	1946.01	19-Jan-46						9300				
1946	1	1946.01	20-Jan-46						8480				
1946	1	1946.01	21-Jan-46						7830				
1946	1	1946.01	22-Jan-46						7820				
1946	1	1946.01	23-Jan-46						7800				
1946	1	1946.01	24-Jan-46						7730				
1946	1	1946.01	25-Jan-46						7600				
1946	1	1946.01	26-Jan-46						7270				
1946	1	1946.01	27-Jan-46						7020				
1946	1	1946.01	28-Jan-46						6840				
1946	1	1946.01	29-Jan-46						7250				
1946	1	1946.01	30-Jan-46						7390				
1946	1	1946.01	31-Jan-46						7020				
1946	2	1946.02	1-Feb-46						6910				
1946	2	1946.02	2-Feb-46						6730				
1946	2	1946.02	3-Feb-46						6710				
1946	2	1946.02	4-Feb-46						6800				
1946	2	1946.02	5-Feb-46						7310				
1946	2	1946.02	6-Feb-46						6680				
1946	2	1946.02	7-Feb-46						6370				
1946	2	1946.02	8-Feb-46						6210				
1946	2	1946.02	9-Feb-46						6030				
1946	2	1946.02	10-Feb-46						5920				
1946	2	1946.02	11-Feb-46						5600				
1946	2	1946.02	12-Feb-46						5540				
1946	2	1946.02	13-Feb-46						5710				
1946	2	1946.02	14-Feb-46						5720				
1946	2	1946.02	15-Feb-46						5800				
1946	2	1946.02	16-Feb-46						5810				
1946	2	1946.02	17-Feb-46						5730				
1946	2	1946.02	18-Feb-46						5680				
1946	2	1946.02	19-Feb-46						5840				
1946	2	1946.02	20-Feb-46						6120				
1946	2	1946.02	21-Feb-46						6170				
1946	2	1946.02	22-Feb-46						5960				
1946	2	1946.02	23-Feb-46						5700				
1946	2	1946.02	24-Feb-46						5380				
1946	2	1946.02	25-Feb-46						5200				
1946	2	1946.02	26-Feb-46						5060				
1946	2	1946.02	27-Feb-46						5060				
1946	2	1946.02	28-Feb-46						4990				
1946	3	1946.03	1-Mar-46						5030				
1946	3	1946.03	2-Mar-46						4940				
1946	3	1946.03	3-Mar-46						4760				
1946	3	1946.03	4-Mar-46						4400				
1946	3	1946.03	5-Mar-46						4280				
1946	3	1946.03	6-Mar-46						4480				
1946	3	1946.03	7-Mar-46						4690				
1946	3	1946.03	8-Mar-46						4670				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1946	3	1946.03	9-Mar-46						4580				
1946	3	1946.03	10-Mar-46						4390				
1946	3	1946.03	11-Mar-46						3510				
1946	3	1946.03	12-Mar-46						2790				
1946	3	1946.03	13-Mar-46						2910				
1946	3	1946.03	14-Mar-46						3010				
1946	3	1946.03	15-Mar-46						3100				
1946	3	1946.03	16-Mar-46						3070				
1946	3	1946.03	17-Mar-46						3050				
1946	3	1946.03	18-Mar-46						2750				
1946	3	1946.03	19-Mar-46						2800				
1946	3	1946.03	20-Mar-46						3230				
1946	3	1946.03	21-Mar-46						3510				
1946	3	1946.03	22-Mar-46						3700				
1946	3	1946.03	23-Mar-46						3750				
1946	3	1946.03	24-Mar-46						3560				
1946	3	1946.03	25-Mar-46						3470				
1946	3	1946.03	26-Mar-46						3440				
1946	3	1946.03	27-Mar-46						3600				
1946	3	1946.03	28-Mar-46						3250				
1946	3	1946.03	29-Mar-46						3190				
1946	3	1946.03	30-Mar-46						3490				
1946	3	1946.03	31-Mar-46						4350				
1946	4	1946.04	1-Apr-46						4850				
1946	4	1946.04	2-Apr-46						5040				
1946	4	1946.04	3-Apr-46						5500				
1946	4	1946.04	4-Apr-46						5820				
1946	4	1946.04	5-Apr-46						5780				
1946	4	1946.04	6-Apr-46						5890				
1946	4	1946.04	7-Apr-46						5550				
1946	4	1946.04	8-Apr-46						5370				
1946	4	1946.04	9-Apr-46						5290				
1946	4	1946.04	10-Apr-46						5140				
1946	4	1946.04	11-Apr-46						4470				
1946	4	1946.04	12-Apr-46						4100				
1946	4	1946.04	13-Apr-46						3500				
1946	4	1946.04	14-Apr-46						3460				
1946	4	1946.04	15-Apr-46						3750				
1946	4	1946.04	16-Apr-46						3890				
1946	4	1946.04	17-Apr-46						4460				
1946	4	1946.04	18-Apr-46						5200				
1946	4	1946.04	19-Apr-46						6110				
1946	4	1946.04	20-Apr-46						6910				
1946	4	1946.04	21-Apr-46						7270				
1946	4	1946.04	22-Apr-46						6960				
1946	4	1946.04	23-Apr-46						6410				
1946	4	1946.04	24-Apr-46						6090				
1946	4	1946.04	25-Apr-46						6590				
1946	4	1946.04	26-Apr-46						7380				
1946	4	1946.04	27-Apr-46						8660				
1946	4	1946.04	28-Apr-46						10100				
1946	4	1946.04	29-Apr-46						10400				
1946	4	1946.04	30-Apr-46						10500				
1946	5	1946.05	1-May-46						10900				
1946	5	1946.05	2-May-46						10900				
1946	5	1946.05	3-May-46						10800				
1946	5	1946.05	4-May-46						11000				
1946	5	1946.05	5-May-46						11600				
1946	5	1946.05	6-May-46						12200				
1946	5	1946.05	7-May-46						12700				
1946	5	1946.05	8-May-46						13800				
1946	5	1946.05	9-May-46						15500				
1946	5	1946.05	10-May-46						16200				
1946	5	1946.05	11-May-46						16500				
1946	5	1946.05	12-May-46						16100				
1946	5	1946.05	13-May-46						14600				
1946	5	1946.05	14-May-46						12900				
1946	5	1946.05	15-May-46						12400				
1946	5	1946.05	16-May-46						12300				
1946	5	1946.05	17-May-46						12300				
1946	5	1946.05	18-May-46						12000				
1946	5	1946.05	19-May-46						12100				
1946	5	1946.05	20-May-46						12800				
1946	5	1946.05	21-May-46						13500				
1946	5	1946.05	22-May-46						14800				
1946	5	1946.05	23-May-46						15700				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1946	5	1946.05	24-May-46						14600				
1946	5	1946.05	25-May-46						12200				
1946	5	1946.05	26-May-46						10900				
1946	5	1946.05	27-May-46						11500				
1946	5	1946.05	28-May-46						13400				
1946	5	1946.05	29-May-46						14100				
1946	5	1946.05	30-May-46						13300				
1946	5	1946.05	31-May-46						11200				
1946	6	1946.06	1-Jun-46						9920				
1946	6	1946.06	2-Jun-46						9010				
1946	6	1946.06	3-Jun-46						9340				
1946	6	1946.06	4-Jun-46						10400				
1946	6	1946.06	5-Jun-46						11300				
1946	6	1946.06	6-Jun-46						12000				
1946	6	1946.06	7-Jun-46						11700				
1946	6	1946.06	8-Jun-46						10300				
1946	6	1946.06	9-Jun-46						8460				
1946	6	1946.06	10-Jun-46						7300				
1946	6	1946.06	11-Jun-46						7520				
1946	6	1946.06	12-Jun-46						7890				
1946	6	1946.06	13-Jun-46						7610				
1946	6	1946.06	14-Jun-46						6180				
1946	6	1946.06	15-Jun-46						5040				
1946	6	1946.06	16-Jun-46						4310				
1946	6	1946.06	17-Jun-46						3920				
1946	6	1946.06	18-Jun-46						3640				
1946	6	1946.06	19-Jun-46						3280				
1946	6	1946.06	20-Jun-46						2910				
1946	6	1946.06	21-Jun-46						2700				
1946	6	1946.06	22-Jun-46						2500				
1946	6	1946.06	23-Jun-46						2440				
1946	6	1946.06	24-Jun-46						2400				
1946	6	1946.06	25-Jun-46						2200				
1946	6	1946.06	26-Jun-46						2010				
1946	6	1946.06	27-Jun-46						1870				
1946	6	1946.06	28-Jun-46						1780				
1946	6	1946.06	29-Jun-46						1770				
1946	6	1946.06	30-Jun-46						1800				
1946	7	1946.07	1-Jul-46						1800				
1946	7	1946.07	2-Jul-46						1710				
1946	7	1946.07	3-Jul-46						1600				
1946	7	1946.07	4-Jul-46						1690				
1946	7	1946.07	5-Jul-46						1760				
1946	7	1946.07	6-Jul-46						1710				
1946	7	1946.07	7-Jul-46						1710				
1946	7	1946.07	8-Jul-46						1770				
1946	7	1946.07	9-Jul-46						1770				
1946	7	1946.07	10-Jul-46						1640				
1946	7	1946.07	11-Jul-46						1610				
1946	7	1946.07	12-Jul-46						1630				
1946	7	1946.07	13-Jul-46						1580				
1946	7	1946.07	14-Jul-46						1550				
1946	7	1946.07	15-Jul-46						1570				
1946	7	1946.07	16-Jul-46						1450				
1946	7	1946.07	17-Jul-46						1360				
1946	7	1946.07	18-Jul-46						1320				
1946	7	1946.07	19-Jul-46						1290				
1946	7	1946.07	20-Jul-46						1260				
1946	7	1946.07	21-Jul-46						1300				
1946	7	1946.07	22-Jul-46						1290				
1946	7	1946.07	23-Jul-46						1280				
1946	7	1946.07	24-Jul-46						1180				
1946	7	1946.07	25-Jul-46						1150				
1946	7	1946.07	26-Jul-46						1170				
1946	7	1946.07	27-Jul-46						1200				
1946	7	1946.07	28-Jul-46						1220				
1946	7	1946.07	29-Jul-46						1320				
1946	7	1946.07	30-Jul-46						1310				
1946	7	1946.07	31-Jul-46						1230				
1946	8	1946.08	1-Aug-46						1150				
1946	8	1946.08	2-Aug-46						1120				
1946	8	1946.08	3-Aug-46						1090				
1946	8	1946.08	4-Aug-46						1130				
1946	8	1946.08	5-Aug-46						1220				
1946	8	1946.08	6-Aug-46						1230				
1946	8	1946.08	7-Aug-46						1160				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1946	8	1946.08	8-Aug-46						1140				
1946	8	1946.08	9-Aug-46						1180				
1946	8	1946.08	10-Aug-46						1170				
1946	8	1946.08	11-Aug-46						1200				
1946	8	1946.08	12-Aug-46						1260				
1946	8	1946.08	13-Aug-46						1200				
1946	8	1946.08	14-Aug-46						1110				
1946	8	1946.08	15-Aug-46						1100				
1946	8	1946.08	16-Aug-46						1140				
1946	8	1946.08	17-Aug-46						1190				
1946	8	1946.08	18-Aug-46						1290				
1946	8	1946.08	19-Aug-46						1370				
1946	8	1946.08	20-Aug-46						1370				
1946	8	1946.08	21-Aug-46						1290				
1946	8	1946.08	22-Aug-46						1210				
1946	8	1946.08	23-Aug-46						1160				
1946	8	1946.08	24-Aug-46						1180				
1946	8	1946.08	25-Aug-46						1250				
1946	8	1946.08	26-Aug-46						1280				
1946	8	1946.08	27-Aug-46						1320				
1946	8	1946.08	28-Aug-46						1330				
1946	8	1946.08	29-Aug-46						1340				
1946	8	1946.08	30-Aug-46						1350				
1946	8	1946.08	31-Aug-46						1410				
1946	9	1946.09	1-Sep-46						1460				
1946	9	1946.09	2-Sep-46						1480				
1946	9	1946.09	3-Sep-46						1500				
1946	9	1946.09	4-Sep-46						1520				
1946	9	1946.09	5-Sep-46						1520				
1946	9	1946.09	6-Sep-46						1480				
1946	9	1946.09	7-Sep-46						1450				
1946	9	1946.09	8-Sep-46						1520				
1946	9	1946.09	9-Sep-46						1550				
1946	9	1946.09	10-Sep-46						1570				
1946	9	1946.09	11-Sep-46						1550				
1946	9	1946.09	12-Sep-46						1520				
1946	9	1946.09	13-Sep-46						1520				
1946	9	1946.09	14-Sep-46						1460				
1946	9	1946.09	15-Sep-46						1460				
1946	9	1946.09	16-Sep-46						1510				
1946	9	1946.09	17-Sep-46						1530				
1946	9	1946.09	18-Sep-46						1510				
1946	9	1946.09	19-Sep-46						1500				
1946	9	1946.09	20-Sep-46						1510				
1946	9	1946.09	21-Sep-46						1490				
1946	9	1946.09	22-Sep-46						1480				
1946	9	1946.09	23-Sep-46						1510				
1946	9	1946.09	24-Sep-46						1470				
1946	9	1946.09	25-Sep-46						1440				
1946	9	1946.09	26-Sep-46						1400				
1946	9	1946.09	27-Sep-46						1380				
1946	9	1946.09	28-Sep-46						1380				
1946	9	1946.09	29-Sep-46						1400				
1946	9	1946.09	30-Sep-46						1430				
1946	10	1946.10	1-Oct-46						1460				
1946	10	1946.10	2-Oct-46						1520				
1946	10	1946.10	3-Oct-46						1590				
1946	10	1946.10	4-Oct-46						1660				
1946	10	1946.10	5-Oct-46						1730				
1946	10	1946.10	6-Oct-46						1760				
1946	10	1946.10	7-Oct-46						1800				
1946	10	1946.10	8-Oct-46						1800				
1946	10	1946.10	9-Oct-46						1770				
1946	10	1946.10	10-Oct-46						1800				
1946	10	1946.10	11-Oct-46						1910				
1946	10	1946.10	12-Oct-46						1910				
1946	10	1946.10	13-Oct-46						1920				
1946	10	1946.10	14-Oct-46						1930				
1946	10	1946.10	15-Oct-46						1940				
1946	10	1946.10	16-Oct-46						2000				
1946	10	1946.10	17-Oct-46						2090				
1946	10	1946.10	18-Oct-46						1970				
1946	10	1946.10	19-Oct-46						1870				
1946	10	1946.10	20-Oct-46						1820				
1946	10	1946.10	21-Oct-46						1830				
1946	10	1946.10	22-Oct-46						1800				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1946	10	1946.10	23-Oct-46						1810				
1946	10	1946.10	24-Oct-46						1820				
1946	10	1946.10	25-Oct-46						1820				
1946	10	1946.10	26-Oct-46						1810				
1946	10	1946.10	27-Oct-46						1780				
1946	10	1946.10	28-Oct-46						1720				
1946	10	1946.10	29-Oct-46						1710				
1946	10	1946.10	30-Oct-46						1820				
1946	10	1946.10	31-Oct-46						2080				
1946	11	1946.11	1-Nov-46						2190				
1946	11	1946.11	2-Nov-46						2210				
1946	11	1946.11	3-Nov-46						2230				
1946	11	1946.11	4-Nov-46						2210				
1946	11	1946.11	5-Nov-46						2200				
1946	11	1946.11	6-Nov-46						2310				
1946	11	1946.11	7-Nov-46						2340				
1946	11	1946.11	8-Nov-46						2310				
1946	11	1946.11	9-Nov-46						2360				
1946	11	1946.11	10-Nov-46						2380				
1946	11	1946.11	11-Nov-46						2360				
1946	11	1946.11	12-Nov-46						2270				
1946	11	1946.11	13-Nov-46						2380				
1946	11	1946.11	14-Nov-46						2560				
1946	11	1946.11	15-Nov-46						2560				
1946	11	1946.11	16-Nov-46						2520				
1946	11	1946.11	17-Nov-46						2500				
1946	11	1946.11	18-Nov-46						2500				
1946	11	1946.11	19-Nov-46						2600				
1946	11	1946.11	20-Nov-46						2750				
1946	11	1946.11	21-Nov-46						2900				
1946	11	1946.11	22-Nov-46						3000				
1946	11	1946.11	23-Nov-46						3170				
1946	11	1946.11	24-Nov-46						3310				
1946	11	1946.11	25-Nov-46						3170				
1946	11	1946.11	26-Nov-46						2990				
1946	11	1946.11	27-Nov-46						2900				
1946	11	1946.11	28-Nov-46						3200				
1946	11	1946.11	29-Nov-46						3100				
1946	11	1946.11	30-Nov-46						3000				
1946	12	1946.12	1-Dec-46						3400				
1946	12	1946.12	2-Dec-46						3750				
1946	12	1946.12	3-Dec-46						3600				
1946	12	1946.12	4-Dec-46						3550				
1946	12	1946.12	5-Dec-46						3550				
1946	12	1946.12	6-Dec-46						3550				
1946	12	1946.12	7-Dec-46						3550				
1946	12	1946.12	8-Dec-46						3600				
1946	12	1946.12	9-Dec-46						3500				
1946	12	1946.12	10-Dec-46						3700				
1946	12	1946.12	11-Dec-46						3890				
1946	12	1946.12	12-Dec-46						4090				
1946	12	1946.12	13-Dec-46						4270				
1946	12	1946.12	14-Dec-46						4320				
1946	12	1946.12	15-Dec-46						4270				
1946	12	1946.12	16-Dec-46						4150				
1946	12	1946.12	17-Dec-46						4050				
1946	12	1946.12	18-Dec-46						4080				
1946	12	1946.12	19-Dec-46						4050				
1946	12	1946.12	20-Dec-46						4010				
1946	12	1946.12	21-Dec-46						3890				
1946	12	1946.12	22-Dec-46						3650				
1946	12	1946.12	23-Dec-46						3130				
1946	12	1946.12	24-Dec-46						2880				
1946	12	1946.12	25-Dec-46						2950				
1946	12	1946.12	26-Dec-46						2930				
1946	12	1946.12	27-Dec-46						2820				
1946	12	1946.12	28-Dec-46						2780				
1946	12	1946.12	29-Dec-46						3120				
1946	12	1946.12	30-Dec-46						3490				
1946	12	1946.12	31-Dec-46						3560				
1947	1	1947.01	1-Jan-47						3470				
1947	1	1947.01	2-Jan-47						3440				
1947	1	1947.01	3-Jan-47						3480				
1947	1	1947.01	4-Jan-47						3440				
1947	1	1947.01	5-Jan-47						3290				
1947	1	1947.01	6-Jan-47						3140				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1947	1	1947.01	7-Jan-47						3050				
1947	1	1947.01	8-Jan-47						2960				
1947	1	1947.01	9-Jan-47						2900				
1947	1	1947.01	10-Jan-47						2830				
1947	1	1947.01	11-Jan-47						2780				
1947	1	1947.01	12-Jan-47						2740				
1947	1	1947.01	13-Jan-47						2720				
1947	1	1947.01	14-Jan-47						2710				
1947	1	1947.01	15-Jan-47						2670				
1947	1	1947.01	16-Jan-47						2640				
1947	1	1947.01	17-Jan-47						2610				
1947	1	1947.01	18-Jan-47						2620				
1947	1	1947.01	19-Jan-47						2650				
1947	1	1947.01	20-Jan-47						2570				
1947	1	1947.01	21-Jan-47						2530				
1947	1	1947.01	22-Jan-47						2480				
1947	1	1947.01	23-Jan-47						2480				
1947	1	1947.01	24-Jan-47						2460				
1947	1	1947.01	25-Jan-47						2460				
1947	1	1947.01	26-Jan-47						2470				
1947	1	1947.01	27-Jan-47						2480				
1947	1	1947.01	28-Jan-47						2500				
1947	1	1947.01	29-Jan-47						2600				
1947	1	1947.01	30-Jan-47						2530				
1947	1	1947.01	31-Jan-47						2550				
1947	2	1947.02	1-Feb-47						2560				
1947	2	1947.02	2-Feb-47						2560				
1947	2	1947.02	3-Feb-47						2520				
1947	2	1947.02	4-Feb-47						2510				
1947	2	1947.02	5-Feb-47						2480				
1947	2	1947.02	6-Feb-47						2470				
1947	2	1947.02	7-Feb-47						2430				
1947	2	1947.02	8-Feb-47						2420				
1947	2	1947.02	9-Feb-47						2340				
1947	2	1947.02	10-Feb-47						2270				
1947	2	1947.02	11-Feb-47						2220				
1947	2	1947.02	12-Feb-47						2220				
1947	2	1947.02	13-Feb-47						2250				
1947	2	1947.02	14-Feb-47						2300				
1947	2	1947.02	15-Feb-47						2410				
1947	2	1947.02	16-Feb-47						2520				
1947	2	1947.02	17-Feb-47						2550				
1947	2	1947.02	18-Feb-47						2520				
1947	2	1947.02	19-Feb-47						2460				
1947	2	1947.02	20-Feb-47						2430				
1947	2	1947.02	21-Feb-47						2400				
1947	2	1947.02	22-Feb-47						2390				
1947	2	1947.02	23-Feb-47						2380				
1947	2	1947.02	24-Feb-47						2340				
1947	2	1947.02	25-Feb-47						2340				
1947	2	1947.02	26-Feb-47						2380				
1947	2	1947.02	27-Feb-47						2380				
1947	2	1947.02	28-Feb-47						2350				
1947	3	1947.03	1-Mar-47						2330				
1947	3	1947.03	2-Mar-47						2300				
1947	3	1947.03	3-Mar-47						2260				
1947	3	1947.03	4-Mar-47						2310				
1947	3	1947.03	5-Mar-47						2400				
1947	3	1947.03	6-Mar-47						2300				
1947	3	1947.03	7-Mar-47						2200				
1947	3	1947.03	8-Mar-47						2100				
1947	3	1947.03	9-Mar-47						2100				
1947	3	1947.03	10-Mar-47						2070				
1947	3	1947.03	11-Mar-47						2110				
1947	3	1947.03	12-Mar-47						2150				
1947	3	1947.03	13-Mar-47						2260				
1947	3	1947.03	14-Mar-47						2500				
1947	3	1947.03	15-Mar-47						2540				
1947	3	1947.03	16-Mar-47						2580				
1947	3	1947.03	17-Mar-47						2610				
1947	3	1947.03	18-Mar-47						2510				
1947	3	1947.03	19-Mar-47						2440				
1947	3	1947.03	20-Mar-47						2490				
1947	3	1947.03	21-Mar-47						2570				
1947	3	1947.03	22-Mar-47						2380				
1947	3	1947.03	23-Mar-47						2380				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1947	3	1947.03	24-Mar-47						2110				
1947	3	1947.03	25-Mar-47						1880				
1947	3	1947.03	26-Mar-47						1940				
1947	3	1947.03	27-Mar-47						2060				
1947	3	1947.03	28-Mar-47						2150				
1947	3	1947.03	29-Mar-47						2320				
1947	3	1947.03	30-Mar-47						2060				
1947	3	1947.03	31-Mar-47						1640				
1947	4	1947.04	1-Apr-47						1950				
1947	4	1947.04	2-Apr-47						2130				
1947	4	1947.04	3-Apr-47						2060				
1947	4	1947.04	4-Apr-47						1970				
1947	4	1947.04	5-Apr-47						1880				
1947	4	1947.04	6-Apr-47						1760				
1947	4	1947.04	7-Apr-47						1620				
1947	4	1947.04	8-Apr-47						1490				
1947	4	1947.04	9-Apr-47						1360				
1947	4	1947.04	10-Apr-47						1330				
1947	4	1947.04	11-Apr-47						1280				
1947	4	1947.04	12-Apr-47						1210				
1947	4	1947.04	13-Apr-47						1140				
1947	4	1947.04	14-Apr-47						1120				
1947	4	1947.04	15-Apr-47						1000				
1947	4	1947.04	16-Apr-47						935				
1947	4	1947.04	17-Apr-47						990				
1947	4	1947.04	18-Apr-47						1600				
1947	4	1947.04	19-Apr-47						1950				
1947	4	1947.04	20-Apr-47						1900				
1947	4	1947.04	21-Apr-47						1900				
1947	4	1947.04	22-Apr-47						1950				
1947	4	1947.04	23-Apr-47						2000				
1947	4	1947.04	24-Apr-47						1400				
1947	4	1947.04	25-Apr-47						1200				
1947	4	1947.04	26-Apr-47						1150				
1947	4	1947.04	27-Apr-47						1100				
1947	4	1947.04	28-Apr-47						1050				
1947	4	1947.04	29-Apr-47						1100				
1947	4	1947.04	30-Apr-47						1100				
1947	5	1947.05	1-May-47						1070				
1947	5	1947.05	2-May-47						1240				
1947	5	1947.05	3-May-47						1830				
1947	5	1947.05	4-May-47						2460				
1947	5	1947.05	5-May-47						2890				
1947	5	1947.05	6-May-47						3090				
1947	5	1947.05	7-May-47						3060				
1947	5	1947.05	8-May-47						3150				
1947	5	1947.05	9-May-47						2940				
1947	5	1947.05	10-May-47						2190				
1947	5	1947.05	11-May-47						1970				
1947	5	1947.05	12-May-47						1920				
1947	5	1947.05	13-May-47						1690				
1947	5	1947.05	14-May-47						1510				
1947	5	1947.05	15-May-47						1370				
1947	5	1947.05	16-May-47						1360				
1947	5	1947.05	17-May-47						1380				
1947	5	1947.05	18-May-47						1540				
1947	5	1947.05	19-May-47						1700				
1947	5	1947.05	20-May-47						1670				
1947	5	1947.05	21-May-47						1690				
1947	5	1947.05	22-May-47						1800				
1947	5	1947.05	23-May-47						1920				
1947	5	1947.05	24-May-47						2310				
1947	5	1947.05	25-May-47						2590				
1947	5	1947.05	26-May-47						2560				
1947	5	1947.05	27-May-47						2440				
1947	5	1947.05	28-May-47						2230				
1947	5	1947.05	29-May-47						2080				
1947	5	1947.05	30-May-47						1940				
1947	5	1947.05	31-May-47						1830				
1947	6	1947.06	1-Jun-47						1720				
1947	6	1947.06	2-Jun-47						1630				
1947	6	1947.06	3-Jun-47						1490				
1947	6	1947.06	4-Jun-47						1290				
1947	6	1947.06	5-Jun-47						1240				
1947	6	1947.06	6-Jun-47						1180				
1947	6	1947.06	7-Jun-47						1140				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1947	6	1947.06	8-Jun-47						1160				
1947	6	1947.06	9-Jun-47						1150				
1947	6	1947.06	10-Jun-47						1100				
1947	6	1947.06	11-Jun-47						1090				
1947	6	1947.06	12-Jun-47						1180				
1947	6	1947.06	13-Jun-47						1060				
1947	6	1947.06	14-Jun-47						984				
1947	6	1947.06	15-Jun-47						962				
1947	6	1947.06	16-Jun-47						902				
1947	6	1947.06	17-Jun-47						790				
1947	6	1947.06	18-Jun-47						693				
1947	6	1947.06	19-Jun-47						652				
1947	6	1947.06	20-Jun-47						626				
1947	6	1947.06	21-Jun-47						613				
1947	6	1947.06	22-Jun-47						661				
1947	6	1947.06	23-Jun-47						666				
1947	6	1947.06	24-Jun-47						652				
1947	6	1947.06	25-Jun-47						630				
1947	6	1947.06	26-Jun-47						609				
1947	6	1947.06	27-Jun-47						609				
1947	6	1947.06	28-Jun-47						581				
1947	6	1947.06	29-Jun-47						584				
1947	6	1947.06	30-Jun-47						630				
1947	7	1947.07	1-Jul-47						596				
1947	7	1947.07	2-Jul-47						588				
1947	7	1947.07	3-Jul-47						600				
1947	7	1947.07	4-Jul-47						596				
1947	7	1947.07	5-Jul-47						558				
1947	7	1947.07	6-Jul-47						592				
1947	7	1947.07	7-Jul-47						617				
1947	7	1947.07	8-Jul-47						596				
1947	7	1947.07	9-Jul-47						558				
1947	7	1947.07	10-Jul-47						518				
1947	7	1947.07	11-Jul-47						500				
1947	7	1947.07	12-Jul-47						500				
1947	7	1947.07	13-Jul-47						540				
1947	7	1947.07	14-Jul-47						565				
1947	7	1947.07	15-Jul-47						543				
1947	7	1947.07	16-Jul-47						507				
1947	7	1947.07	17-Jul-47						500				
1947	7	1947.07	18-Jul-47						479				
1947	7	1947.07	19-Jul-47						466				
1947	7	1947.07	20-Jul-47						469				
1947	7	1947.07	21-Jul-47						482				
1947	7	1947.07	22-Jul-47						486				
1947	7	1947.07	23-Jul-47						469				
1947	7	1947.07	24-Jul-47						460				
1947	7	1947.07	25-Jul-47						476				
1947	7	1947.07	26-Jul-47						482				
1947	7	1947.07	27-Jul-47						525				
1947	7	1947.07	28-Jul-47						543				
1947	7	1947.07	29-Jul-47						536				
1947	7	1947.07	30-Jul-47						504				
1947	7	1947.07	31-Jul-47						476				
1947	8	1947.08	1-Aug-47						466				
1947	8	1947.08	2-Aug-47						453				
1947	8	1947.08	3-Aug-47						476				
1947	8	1947.08	4-Aug-47						558				
1947	8	1947.08	5-Aug-47						543				
1947	8	1947.08	6-Aug-47						525				
1947	8	1947.08	7-Aug-47						522				
1947	8	1947.08	8-Aug-47						518				
1947	8	1947.08	9-Aug-47						504				
1947	8	1947.08	10-Aug-47						514				
1947	8	1947.08	11-Aug-47						588				
1947	8	1947.08	12-Aug-47						577				
1947	8	1947.08	13-Aug-47						540				
1947	8	1947.08	14-Aug-47						518				
1947	8	1947.08	15-Aug-47						547				
1947	8	1947.08	16-Aug-47						550				
1947	8	1947.08	17-Aug-47						613				
1947	8	1947.08	18-Aug-47						648				
1947	8	1947.08	19-Aug-47						638				
1947	8	1947.08	20-Aug-47						577				
1947	8	1947.08	21-Aug-47						522				
1947	8	1947.08	22-Aug-47						562				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1947	8	1947.08	23-Aug-47						596				
1947	8	1947.08	24-Aug-47						656				
1947	8	1947.08	25-Aug-47						674				
1947	8	1947.08	26-Aug-47						638				
1947	8	1947.08	27-Aug-47						600				
1947	8	1947.08	28-Aug-47						600				
1947	8	1947.08	29-Aug-47						605				
1947	8	1947.08	30-Aug-47						626				
1947	8	1947.08	31-Aug-47						697				
1947	9	1947.09	1-Sep-47						780				
1947	9	1947.09	2-Sep-47						830				
1947	9	1947.09	3-Sep-47						805				
1947	9	1947.09	4-Sep-47						830				
1947	9	1947.09	5-Sep-47						805				
1947	9	1947.09	6-Sep-47						750				
1947	9	1947.09	7-Sep-47						825				
1947	9	1947.09	8-Sep-47						1010				
1947	9	1947.09	9-Sep-47						957				
1947	9	1947.09	10-Sep-47						924				
1947	9	1947.09	11-Sep-47						913				
1947	9	1947.09	12-Sep-47						874				
1947	9	1947.09	13-Sep-47						891				
1947	9	1947.09	14-Sep-47						940				
1947	9	1947.09	15-Sep-47						1030				
1947	9	1947.09	16-Sep-47						1200				
1947	9	1947.09	17-Sep-47						1260				
1947	9	1947.09	18-Sep-47						1250				
1947	9	1947.09	19-Sep-47						1270				
1947	9	1947.09	20-Sep-47						1280				
1947	9	1947.09	21-Sep-47						1360				
1947	9	1947.09	22-Sep-47						1390				
1947	9	1947.09	23-Sep-47						1350				
1947	9	1947.09	24-Sep-47						1310				
1947	9	1947.09	25-Sep-47						1300				
1947	9	1947.09	26-Sep-47						1240				
1947	9	1947.09	27-Sep-47						1210				
1947	9	1947.09	28-Sep-47						1210				
1947	9	1947.09	29-Sep-47						1210				
1947	9	1947.09	30-Sep-47						1210				
1947	10	1947.10	1-Oct-47						1270				
1947	10	1947.10	2-Oct-47						1450				
1947	10	1947.10	3-Oct-47						1370				
1947	10	1947.10	4-Oct-47						1300				
1947	10	1947.10	5-Oct-47						1290				
1947	10	1947.10	6-Oct-47						1260				
1947	10	1947.10	7-Oct-47						1180				
1947	10	1947.10	8-Oct-47						1250				
1947	10	1947.10	9-Oct-47						1330				
1947	10	1947.10	10-Oct-47						1420				
1947	10	1947.10	11-Oct-47						1460				
1947	10	1947.10	12-Oct-47						1410				
1947	10	1947.10	13-Oct-47						1330				
1947	10	1947.10	14-Oct-47						1230				
1947	10	1947.10	15-Oct-47						1270				
1947	10	1947.10	16-Oct-47						1330				
1947	10	1947.10	17-Oct-47						1330				
1947	10	1947.10	18-Oct-47						1330				
1947	10	1947.10	19-Oct-47						1270				
1947	10	1947.10	20-Oct-47						1170				
1947	10	1947.10	21-Oct-47						1110				
1947	10	1947.10	22-Oct-47						1230				
1947	10	1947.10	23-Oct-47						1320				
1947	10	1947.10	24-Oct-47						1350				
1947	10	1947.10	25-Oct-47						1360				
1947	10	1947.10	26-Oct-47						1370				
1947	10	1947.10	27-Oct-47						1350				
1947	10	1947.10	28-Oct-47						1270				
1947	10	1947.10	29-Oct-47						1290				
1947	10	1947.10	30-Oct-47						1380				
1947	10	1947.10	31-Oct-47						1450				
1947	11	1947.11	1-Nov-47						1470				
1947	11	1947.11	2-Nov-47						1500				
1947	11	1947.11	3-Nov-47						1710				
1947	11	1947.11	4-Nov-47						1660				
1947	11	1947.11	5-Nov-47						1750				
1947	11	1947.11	6-Nov-47						1810				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1947	11	1947.11	7-Nov-47						1850				
1947	11	1947.11	8-Nov-47						1900				
1947	11	1947.11	9-Nov-47						1910				
1947	11	1947.11	10-Nov-47						1820				
1947	11	1947.11	11-Nov-47						1650				
1947	11	1947.11	12-Nov-47						1730				
1947	11	1947.11	13-Nov-47						1720				
1947	11	1947.11	14-Nov-47						1870				
1947	11	1947.11	15-Nov-47						1960				
1947	11	1947.11	16-Nov-47						1990				
1947	11	1947.11	17-Nov-47						1940				
1947	11	1947.11	18-Nov-47						1740				
1947	11	1947.11	19-Nov-47						1890				
1947	11	1947.11	20-Nov-47						1960				
1947	11	1947.11	21-Nov-47						1990				
1947	11	1947.11	22-Nov-47						2020				
1947	11	1947.11	23-Nov-47						1850				
1947	11	1947.11	24-Nov-47						1730				
1947	11	1947.11	25-Nov-47						1620				
1947	11	1947.11	26-Nov-47						1640				
1947	11	1947.11	27-Nov-47						1670				
1947	11	1947.11	28-Nov-47						1640				
1947	11	1947.11	29-Nov-47						1600				
1947	11	1947.11	30-Nov-47						1590				
1947	12	1947.12	1-Dec-47						1590				
1947	12	1947.12	2-Dec-47						1520				
1947	12	1947.12	3-Dec-47						1540				
1947	12	1947.12	4-Dec-47						1600				
1947	12	1947.12	5-Dec-47						1640				
1947	12	1947.12	6-Dec-47						1730				
1947	12	1947.12	7-Dec-47						1820				
1947	12	1947.12	8-Dec-47						1680				
1947	12	1947.12	9-Dec-47						1570				
1947	12	1947.12	10-Dec-47						1740				
1947	12	1947.12	11-Dec-47						1970				
1947	12	1947.12	12-Dec-47						1950				
1947	12	1947.12	13-Dec-47						1840				
1947	12	1947.12	14-Dec-47						1820				
1947	12	1947.12	15-Dec-47						1670				
1947	12	1947.12	16-Dec-47						1570				
1947	12	1947.12	17-Dec-47						1730				
1947	12	1947.12	18-Dec-47						1920				
1947	12	1947.12	19-Dec-47						1820				
1947	12	1947.12	20-Dec-47						1870				
1947	12	1947.12	21-Dec-47						2020				
1947	12	1947.12	22-Dec-47						1750				
1947	12	1947.12	23-Dec-47						1600				
1947	12	1947.12	24-Dec-47						1660				
1947	12	1947.12	25-Dec-47						1660				
1947	12	1947.12	26-Dec-47						1570				
1947	12	1947.12	27-Dec-47						1520				
1947	12	1947.12	28-Dec-47						1480				
1947	12	1947.12	29-Dec-47						1510				
1947	12	1947.12	30-Dec-47						1520				
1947	12	1947.12	31-Dec-47						1660				
1948	1	1948.01	1-Jan-48						1830				
1948	1	1948.01	2-Jan-48						1830				
1948	1	1948.01	3-Jan-48						1570				
1948	1	1948.01	4-Jan-48						1540				
1948	1	1948.01	5-Jan-48						1490				
1948	1	1948.01	6-Jan-48						1360				
1948	1	1948.01	7-Jan-48						1400				
1948	1	1948.01	8-Jan-48						1440				
1948	1	1948.01	9-Jan-48						1490				
1948	1	1948.01	10-Jan-48						1480				
1948	1	1948.01	11-Jan-48						1450				
1948	1	1948.01	12-Jan-48						1430				
1948	1	1948.01	13-Jan-48						1350				
1948	1	1948.01	14-Jan-48						1380				
1948	1	1948.01	15-Jan-48						1390				
1948	1	1948.01	16-Jan-48						1390				
1948	1	1948.01	17-Jan-48						1380				
1948	1	1948.01	18-Jan-48						1360				
1948	1	1948.01	19-Jan-48						1310				
1948	1	1948.01	20-Jan-48						1170				
1948	1	1948.01	21-Jan-48						1190				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1948	1	1948.01	22-Jan-48						1290				
1948	1	1948.01	23-Jan-48						1320				
1948	1	1948.01	24-Jan-48						1290				
1948	1	1948.01	25-Jan-48						1320				
1948	1	1948.01	26-Jan-48						1190				
1948	1	1948.01	27-Jan-48						1060				
1948	1	1948.01	28-Jan-48						1170				
1948	1	1948.01	29-Jan-48						1310				
1948	1	1948.01	30-Jan-48						1360				
1948	1	1948.01	31-Jan-48						1360				
1948	2	1948.02	1-Feb-48						1290				
1948	2	1948.02	2-Feb-48						1210				
1948	2	1948.02	3-Feb-48						990				
1948	2	1948.02	4-Feb-48						980				
1948	2	1948.02	5-Feb-48						1050				
1948	2	1948.02	6-Feb-48						1090				
1948	2	1948.02	7-Feb-48						1030				
1948	2	1948.02	8-Feb-48						945				
1948	2	1948.02	9-Feb-48						895				
1948	2	1948.02	10-Feb-48						875				
1948	2	1948.02	11-Feb-48						885				
1948	2	1948.02	12-Feb-48						900				
1948	2	1948.02	13-Feb-48						835				
1948	2	1948.02	14-Feb-48						800				
1948	2	1948.02	15-Feb-48						780				
1948	2	1948.02	16-Feb-48						758				
1948	2	1948.02	17-Feb-48						750				
1948	2	1948.02	18-Feb-48						754				
1948	2	1948.02	19-Feb-48						742				
1948	2	1948.02	20-Feb-48						722				
1948	2	1948.02	21-Feb-48						694				
1948	2	1948.02	22-Feb-48						670				
1948	2	1948.02	23-Feb-48						686				
1948	2	1948.02	24-Feb-48						634				
1948	2	1948.02	25-Feb-48						610				
1948	2	1948.02	26-Feb-48						560				
1948	2	1948.02	27-Feb-48						575				
1948	2	1948.02	28-Feb-48						606				
1948	2	1948.02	29-Feb-48						654				
1948	3	1948.03	1-Mar-48						578				
1948	3	1948.03	2-Mar-48						453				
1948	3	1948.03	3-Mar-48						388				
1948	3	1948.03	4-Mar-48						380				
1948	3	1948.03	5-Mar-48						352				
1948	3	1948.03	6-Mar-48						331				
1948	3	1948.03	7-Mar-48						328				
1948	3	1948.03	8-Mar-48						324				
1948	3	1948.03	9-Mar-48						388				
1948	3	1948.03	10-Mar-48						372				
1948	3	1948.03	11-Mar-48						345				
1948	3	1948.03	12-Mar-48						360				
1948	3	1948.03	13-Mar-48						390				
1948	3	1948.03	14-Mar-48						511				
1948	3	1948.03	15-Mar-48						575				
1948	3	1948.03	16-Mar-48						614				
1948	3	1948.03	17-Mar-48						662				
1948	3	1948.03	18-Mar-48						682				
1948	3	1948.03	19-Mar-48						690				
1948	3	1948.03	20-Mar-48						714				
1948	3	1948.03	21-Mar-48						714				
1948	3	1948.03	22-Mar-48						706				
1948	3	1948.03	23-Mar-48						710				
1948	3	1948.03	24-Mar-48						726				
1948	3	1948.03	25-Mar-48						750				
1948	3	1948.03	26-Mar-48						920				
1948	3	1948.03	27-Mar-48						1100				
1948	3	1948.03	28-Mar-48						1010				
1948	3	1948.03	29-Mar-48						935				
1948	3	1948.03	30-Mar-48						830				
1948	3	1948.03	31-Mar-48						726				
1948	4	1948.04	1-Apr-48						682				
1948	4	1948.04	2-Apr-48						658				
1948	4	1948.04	3-Apr-48						682				
1948	4	1948.04	4-Apr-48						698				
1948	4	1948.04	5-Apr-48						730				
1948	4	1948.04	6-Apr-48						758				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1948	4	1948.04	7-Apr-48						785				
1948	4	1948.04	8-Apr-48						855				
1948	4	1948.04	9-Apr-48						835				
1948	4	1948.04	10-Apr-48						825				
1948	4	1948.04	11-Apr-48						805				
1948	4	1948.04	12-Apr-48						855				
1948	4	1948.04	13-Apr-48						990				
1948	4	1948.04	14-Apr-48						1140				
1948	4	1948.04	15-Apr-48						1210				
1948	4	1948.04	16-Apr-48						1210				
1948	4	1948.04	17-Apr-48						1020				
1948	4	1948.04	18-Apr-48						895				
1948	4	1948.04	19-Apr-48						805				
1948	4	1948.04	20-Apr-48						1270				
1948	4	1948.04	21-Apr-48						2300				
1948	4	1948.04	22-Apr-48						2370				
1948	4	1948.04	23-Apr-48						2030				
1948	4	1948.04	24-Apr-48						1710				
1948	4	1948.04	25-Apr-48						2820				
1948	4	1948.04	26-Apr-48						2680				
1948	4	1948.04	27-Apr-48						2310				
1948	4	1948.04	28-Apr-48						2300				
1948	4	1948.04	29-Apr-48						2450				
1948	4	1948.04	30-Apr-48						3110				
1948	5	1948.05	1-May-48						3710				
1948	5	1948.05	2-May-48						3680				
1948	5	1948.05	3-May-48						3850				
1948	5	1948.05	4-May-48						3930				
1948	5	1948.05	5-May-48						3900				
1948	5	1948.05	6-May-48						3680				
1948	5	1948.05	7-May-48						3210				
1948	5	1948.05	8-May-48						4080				
1948	5	1948.05	9-May-48						4700				
1948	5	1948.05	10-May-48						4300				
1948	5	1948.05	11-May-48						3660				
1948	5	1948.05	12-May-48						3360				
1948	5	1948.05	13-May-48						3230				
1948	5	1948.05	14-May-48						3290				
1948	5	1948.05	15-May-48						3640				
1948	5	1948.05	16-May-48						4300				
1948	5	1948.05	17-May-48						4890				
1948	5	1948.05	18-May-48						5660				
1948	5	1948.05	19-May-48						6540				
1948	5	1948.05	20-May-48						6920				
1948	5	1948.05	21-May-48						6810				
1948	5	1948.05	22-May-48						6230				
1948	5	1948.05	23-May-48						5330				
1948	5	1948.05	24-May-48						4380				
1948	5	1948.05	25-May-48						4020				
1948	5	1948.05	26-May-48						4970				
1948	5	1948.05	27-May-48						5830				
1948	5	1948.05	28-May-48						6820				
1948	5	1948.05	29-May-48						8570				
1948	5	1948.05	30-May-48						8440				
1948	5	1948.05	31-May-48						9090				
1948	6	1948.06	1-Jun-48						9940				
1948	6	1948.06	2-Jun-48						9950				
1948	6	1948.06	3-Jun-48						9790				
1948	6	1948.06	4-Jun-48						10100				
1948	6	1948.06	5-Jun-48						10300				
1948	6	1948.06	6-Jun-48						10800				
1948	6	1948.06	7-Jun-48						11000				
1948	6	1948.06	8-Jun-48						10100				
1948	6	1948.06	9-Jun-48						8920				
1948	6	1948.06	10-Jun-48						8680				
1948	6	1948.06	11-Jun-48						9860				
1948	6	1948.06	12-Jun-48						10800				
1948	6	1948.06	13-Jun-48						11600				
1948	6	1948.06	14-Jun-48						11600				
1948	6	1948.06	15-Jun-48						11000				
1948	6	1948.06	16-Jun-48						10800				
1948	6	1948.06	17-Jun-48						10700				
1948	6	1948.06	18-Jun-48						10100				
1948	6	1948.06	19-Jun-48						8510				
1948	6	1948.06	20-Jun-48						7350				
1948	6	1948.06	21-Jun-48						5610				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1948	6	1948.06	22-Jun-48						5180				
1948	6	1948.06	23-Jun-48						5170				
1948	6	1948.06	24-Jun-48						5270				
1948	6	1948.06	25-Jun-48						5700				
1948	6	1948.06	26-Jun-48						5970				
1948	6	1948.06	27-Jun-48						6540				
1948	6	1948.06	28-Jun-48						6040				
1948	6	1948.06	29-Jun-48						5620				
1948	6	1948.06	30-Jun-48						5170				
1948	7	1948.07	1-Jul-48						4290				
1948	7	1948.07	2-Jul-48						3730				
1948	7	1948.07	3-Jul-48						3090				
1948	7	1948.07	4-Jul-48						2820				
1948	7	1948.07	5-Jul-48						2580				
1948	7	1948.07	6-Jul-48						2180				
1948	7	1948.07	7-Jul-48						1810				
1948	7	1948.07	8-Jul-48						1450				
1948	7	1948.07	9-Jul-48						1270				
1948	7	1948.07	10-Jul-48						1160				
1948	7	1948.07	11-Jul-48						1120				
1948	7	1948.07	12-Jul-48						1080				
1948	7	1948.07	13-Jul-48						1020				
1948	7	1948.07	14-Jul-48						965				
1948	7	1948.07	15-Jul-48						910				
1948	7	1948.07	16-Jul-48						845				
1948	7	1948.07	17-Jul-48						810				
1948	7	1948.07	18-Jul-48						835				
1948	7	1948.07	19-Jul-48						830				
1948	7	1948.07	20-Jul-48						825				
1948	7	1948.07	21-Jul-48						775				
1948	7	1948.07	22-Jul-48						746				
1948	7	1948.07	23-Jul-48						690				
1948	7	1948.07	24-Jul-48						678				
1948	7	1948.07	25-Jul-48						690				
1948	7	1948.07	26-Jul-48						738				
1948	7	1948.07	27-Jul-48						718				
1948	7	1948.07	28-Jul-48						674				
1948	7	1948.07	29-Jul-48						606				
1948	7	1948.07	30-Jul-48						606				
1948	7	1948.07	31-Jul-48						634				
1948	8	1948.08	1-Aug-48						642				
1948	8	1948.08	2-Aug-48						666				
1948	8	1948.08	3-Aug-48						650				
1948	8	1948.08	4-Aug-48						630				
1948	8	1948.08	5-Aug-48						614				
1948	8	1948.08	6-Aug-48						582				
1948	8	1948.08	7-Aug-48						578				
1948	8	1948.08	8-Aug-48						630				
1948	8	1948.08	9-Aug-48						670				
1948	8	1948.08	10-Aug-48						626				
1948	8	1948.08	11-Aug-48						600				
1948	8	1948.08	12-Aug-48						582				
1948	8	1948.08	13-Aug-48						572				
1948	8	1948.08	14-Aug-48						600				
1948	8	1948.08	15-Aug-48						618				
1948	8	1948.08	16-Aug-48						674				
1948	8	1948.08	17-Aug-48						698				
1948	8	1948.08	18-Aug-48						722				
1948	8	1948.08	19-Aug-48						726				
1948	8	1948.08	20-Aug-48						790				
1948	8	1948.08	21-Aug-48						766				
1948	8	1948.08	22-Aug-48						758				
1948	8	1948.08	23-Aug-48						850				
1948	8	1948.08	24-Aug-48						875				
1948	8	1948.08	25-Aug-48						850				
1948	8	1948.08	26-Aug-48						835				
1948	8	1948.08	27-Aug-48						870				
1948	8	1948.08	28-Aug-48						910				
1948	8	1948.08	29-Aug-48						940				
1948	8	1948.08	30-Aug-48						970				
1948	8	1948.08	31-Aug-48						985				
1948	9	1948.09	1-Sep-48						980				
1948	9	1948.09	2-Sep-48						990				
1948	9	1948.09	3-Sep-48						975				
1948	9	1948.09	4-Sep-48						970				
1948	9	1948.09	5-Sep-48						970				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1948	9	1948.09	6-Sep-48						970				
1948	9	1948.09	7-Sep-48						960				
1948	9	1948.09	8-Sep-48						950				
1948	9	1948.09	9-Sep-48						950				
1948	9	1948.09	10-Sep-48						965				
1948	9	1948.09	11-Sep-48						915				
1948	9	1948.09	12-Sep-48						860				
1948	9	1948.09	13-Sep-48						915				
1948	9	1948.09	14-Sep-48						885				
1948	9	1948.09	15-Sep-48						880				
1948	9	1948.09	16-Sep-48						955				
1948	9	1948.09	17-Sep-48						970				
1948	9	1948.09	18-Sep-48						1000				
1948	9	1948.09	19-Sep-48						1050				
1948	9	1948.09	20-Sep-48						1100				
1948	9	1948.09	21-Sep-48						1080				
1948	9	1948.09	22-Sep-48						1060				
1948	9	1948.09	23-Sep-48						1050				
1948	9	1948.09	24-Sep-48						1110				
1948	9	1948.09	25-Sep-48						1300				
1948	9	1948.09	26-Sep-48						1500				
1948	9	1948.09	27-Sep-48						1580				
1948	9	1948.09	28-Sep-48						1580				
1948	9	1948.09	29-Sep-48						1570				
1948	9	1948.09	30-Sep-48						1590				
1948	10	1948.10	1-Oct-48						1600				
1948	10	1948.10	2-Oct-48						1640				
1948	10	1948.10	3-Oct-48						1730				
1948	10	1948.10	4-Oct-48						1700				
1948	10	1948.10	5-Oct-48						1600				
1948	10	1948.10	6-Oct-48						1600				
1948	10	1948.10	7-Oct-48						1700				
1948	10	1948.10	8-Oct-48						1650				
1948	10	1948.10	9-Oct-48						1600				
1948	10	1948.10	10-Oct-48						1550				
1948	10	1948.10	11-Oct-48						1490				
1948	10	1948.10	12-Oct-48						1450				
1948	10	1948.10	13-Oct-48						1600				
1948	10	1948.10	14-Oct-48						1580				
1948	10	1948.10	15-Oct-48						1550				
1948	10	1948.10	16-Oct-48						1650				
1948	10	1948.10	17-Oct-48						1700				
1948	10	1948.10	18-Oct-48						1550				
1948	10	1948.10	19-Oct-48						1480				
1948	10	1948.10	20-Oct-48						1510				
1948	10	1948.10	21-Oct-48						1490				
1948	10	1948.10	22-Oct-48						1500				
1948	10	1948.10	23-Oct-48						1510				
1948	10	1948.10	24-Oct-48						1510				
1948	10	1948.10	25-Oct-48						1480				
1948	10	1948.10	26-Oct-48						1410				
1948	10	1948.10	27-Oct-48						1400				
1948	10	1948.10	28-Oct-48						1420				
1948	10	1948.10	29-Oct-48						1440				
1948	10	1948.10	30-Oct-48						1460				
1948	10	1948.10	31-Oct-48						1460				
1948	11	1948.11	1-Nov-48						1450				
1948	11	1948.11	2-Nov-48						1430				
1948	11	1948.11	3-Nov-48						1510				
1948	11	1948.11	4-Nov-48						1480				
1948	11	1948.11	5-Nov-48						1480				
1948	11	1948.11	6-Nov-48						1500				
1948	11	1948.11	7-Nov-48						1500				
1948	11	1948.11	8-Nov-48						1500				
1948	11	1948.11	9-Nov-48						1400				
1948	11	1948.11	10-Nov-48						1430				
1948	11	1948.11	11-Nov-48						1430				
1948	11	1948.11	12-Nov-48						1440				
1948	11	1948.11	13-Nov-48						1480				
1948	11	1948.11	14-Nov-48						1520				
1948	11	1948.11	15-Nov-48						1540				
1948	11	1948.11	16-Nov-48						1540				
1948	11	1948.11	17-Nov-48						1530				
1948	11	1948.11	18-Nov-48						1540				
1948	11	1948.11	19-Nov-48						1570				
1948	11	1948.11	20-Nov-48						1570				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1948	11	1948.11	21-Nov-48						1600				
1948	11	1948.11	22-Nov-48						1580				
1948	11	1948.11	23-Nov-48						1500				
1948	11	1948.11	24-Nov-48						1490				
1948	11	1948.11	25-Nov-48						1510				
1948	11	1948.11	26-Nov-48						1510				
1948	11	1948.11	27-Nov-48						1450				
1948	11	1948.11	28-Nov-48						1450				
1948	11	1948.11	29-Nov-48						1460				
1948	11	1948.11	30-Nov-48						1380				
1948	12	1948.12	1-Dec-48						1420				
1948	12	1948.12	2-Dec-48						1430				
1948	12	1948.12	3-Dec-48						1450				
1948	12	1948.12	4-Dec-48						1430				
1948	12	1948.12	5-Dec-48						1400				
1948	12	1948.12	6-Dec-48						1380				
1948	12	1948.12	7-Dec-48						1350				
1948	12	1948.12	8-Dec-48						1380				
1948	12	1948.12	9-Dec-48						1440				
1948	12	1948.12	10-Dec-48						1490				
1948	12	1948.12	11-Dec-48						1470				
1948	12	1948.12	12-Dec-48						1420				
1948	12	1948.12	13-Dec-48						1400				
1948	12	1948.12	14-Dec-48						1360				
1948	12	1948.12	15-Dec-48						1390				
1948	12	1948.12	16-Dec-48						1430				
1948	12	1948.12	17-Dec-48						1470				
1948	12	1948.12	18-Dec-48						1660				
1948	12	1948.12	19-Dec-48						1640				
1948	12	1948.12	20-Dec-48						1520				
1948	12	1948.12	21-Dec-48						1420				
1948	12	1948.12	22-Dec-48						1440				
1948	12	1948.12	23-Dec-48						1440				
1948	12	1948.12	24-Dec-48						1470				
1948	12	1948.12	25-Dec-48						1650				
1948	12	1948.12	26-Dec-48						1620				
1948	12	1948.12	27-Dec-48						1450				
1948	12	1948.12	28-Dec-48						1450				
1948	12	1948.12	29-Dec-48						1650				
1948	12	1948.12	30-Dec-48						1770				
1948	12	1948.12	31-Dec-48						1800				
1949	1	1949.01	1-Jan-49						1800				
1949	1	1949.01	2-Jan-49						1700				
1949	1	1949.01	3-Jan-49						1370				
1949	1	1949.01	4-Jan-49						1230				
1949	1	1949.01	5-Jan-49						1440				
1949	1	1949.01	6-Jan-49						1520				
1949	1	1949.01	7-Jan-49						1540				
1949	1	1949.01	8-Jan-49						1520				
1949	1	1949.01	9-Jan-49						1520				
1949	1	1949.01	10-Jan-49						1450				
1949	1	1949.01	11-Jan-49						1380				
1949	1	1949.01	12-Jan-49						1700				
1949	1	1949.01	13-Jan-49						1940				
1949	1	1949.01	14-Jan-49						1870				
1949	1	1949.01	15-Jan-49						1820				
1949	1	1949.01	16-Jan-49						1760				
1949	1	1949.01	17-Jan-49						1700				
1949	1	1949.01	18-Jan-49						1500				
1949	1	1949.01	19-Jan-49						1600				
1949	1	1949.01	20-Jan-49						1950				
1949	1	1949.01	21-Jan-49						2180				
1949	1	1949.01	22-Jan-49						1950				
1949	1	1949.01	23-Jan-49						2080				
1949	1	1949.01	24-Jan-49						1900				
1949	1	1949.01	25-Jan-49						1640				
1949	1	1949.01	26-Jan-49						2030				
1949	1	1949.01	27-Jan-49						2190				
1949	1	1949.01	28-Jan-49						2170				
1949	1	1949.01	29-Jan-49						2080				
1949	1	1949.01	30-Jan-49						1850				
1949	1	1949.01	31-Jan-49						1580				
1949	2	1949.02	1-Feb-49						1400				
1949	2	1949.02	2-Feb-49						1430				
1949	2	1949.02	3-Feb-49						1480				
1949	2	1949.02	4-Feb-49						1540				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1949	2	1949.02	5-Feb-49						1500				
1949	2	1949.02	6-Feb-49						1520				
1949	2	1949.02	7-Feb-49						1470				
1949	2	1949.02	8-Feb-49						1390				
1949	2	1949.02	9-Feb-49						1800				
1949	2	1949.02	10-Feb-49						1820				
1949	2	1949.02	11-Feb-49						1650				
1949	2	1949.02	12-Feb-49						1610				
1949	2	1949.02	13-Feb-49						1550				
1949	2	1949.02	14-Feb-49						1470				
1949	2	1949.02	15-Feb-49						1400				
1949	2	1949.02	16-Feb-49						1450				
1949	2	1949.02	17-Feb-49						1450				
1949	2	1949.02	18-Feb-49						1430				
1949	2	1949.02	19-Feb-49						1380				
1949	2	1949.02	20-Feb-49						1310				
1949	2	1949.02	21-Feb-49						1260				
1949	2	1949.02	22-Feb-49						1170				
1949	2	1949.02	23-Feb-49						1210				
1949	2	1949.02	24-Feb-49						1170				
1949	2	1949.02	25-Feb-49						1180				
1949	2	1949.02	26-Feb-49						1190				
1949	2	1949.02	27-Feb-49						1180				
1949	2	1949.02	28-Feb-49						1210				
1949	3	1949.03	1-Mar-49						1090				
1949	3	1949.03	2-Mar-49						1200				
1949	3	1949.03	3-Mar-49						1370				
1949	3	1949.03	4-Mar-49						1700				
1949	3	1949.03	5-Mar-49						3770				
1949	3	1949.03	6-Mar-49						3210				
1949	3	1949.03	7-Mar-49						2440				
1949	3	1949.03	8-Mar-49						2130				
1949	3	1949.03	9-Mar-49						2230				
1949	3	1949.03	10-Mar-49						2600				
1949	3	1949.03	11-Mar-49						2920				
1949	3	1949.03	12-Mar-49						3340				
1949	3	1949.03	13-Mar-49						4240				
1949	3	1949.03	14-Mar-49						4300				
1949	3	1949.03	15-Mar-49						3940				
1949	3	1949.03	16-Mar-49						3940				
1949	3	1949.03	17-Mar-49						3990				
1949	3	1949.03	18-Mar-49						4000				
1949	3	1949.03	19-Mar-49						3930				
1949	3	1949.03	20-Mar-49						3910				
1949	3	1949.03	21-Mar-49						3990				
1949	3	1949.03	22-Mar-49						3590				
1949	3	1949.03	23-Mar-49						4150				
1949	3	1949.03	24-Mar-49						4570				
1949	3	1949.03	25-Mar-49						4730				
1949	3	1949.03	26-Mar-49						4810				
1949	3	1949.03	27-Mar-49						4750				
1949	3	1949.03	28-Mar-49						4110				
1949	3	1949.03	29-Mar-49						3820				
1949	3	1949.03	30-Mar-49						4250				
1949	3	1949.03	31-Mar-49						4520				
1949	4	1949.04	1-Apr-49						4490				
1949	4	1949.04	2-Apr-49						4130				
1949	4	1949.04	3-Apr-49						4000				
1949	4	1949.04	4-Apr-49						2920				
1949	4	1949.04	5-Apr-49						2380				
1949	4	1949.04	6-Apr-49						2540				
1949	4	1949.04	7-Apr-49						2260				
1949	4	1949.04	8-Apr-49						1830				
1949	4	1949.04	9-Apr-49						1530				
1949	4	1949.04	10-Apr-49						1660				
1949	4	1949.04	11-Apr-49						1860				
1949	4	1949.04	12-Apr-49						1750				
1949	4	1949.04	13-Apr-49						2010				
1949	4	1949.04	14-Apr-49						1570				
1949	4	1949.04	15-Apr-49						1540				
1949	4	1949.04	16-Apr-49						1730				
1949	4	1949.04	17-Apr-49						1800				
1949	4	1949.04	18-Apr-49						1870				
1949	4	1949.04	19-Apr-49						1770				
1949	4	1949.04	20-Apr-49						1600				
1949	4	1949.04	21-Apr-49						1340				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1949	4	1949.04	22-Apr-49						1300				
1949	4	1949.04	23-Apr-49						1240				
1949	4	1949.04	24-Apr-49						1230				
1949	4	1949.04	25-Apr-49						1260				
1949	4	1949.04	26-Apr-49						1270				
1949	4	1949.04	27-Apr-49						1360				
1949	4	1949.04	28-Apr-49						1580				
1949	4	1949.04	29-Apr-49						2620				
1949	4	1949.04	30-Apr-49						3290				
1949	5	1949.05	1-May-49						3430				
1949	5	1949.05	2-May-49						3440				
1949	5	1949.05	3-May-49						3470				
1949	5	1949.05	4-May-49						3720				
1949	5	1949.05	5-May-49						3590				
1949	5	1949.05	6-May-49						3420				
1949	5	1949.05	7-May-49						3060				
1949	5	1949.05	8-May-49						2670				
1949	5	1949.05	9-May-49						2580				
1949	5	1949.05	10-May-49						2730				
1949	5	1949.05	11-May-49						2750				
1949	5	1949.05	12-May-49						2710				
1949	5	1949.05	13-May-49						2870				
1949	5	1949.05	14-May-49						3450				
1949	5	1949.05	15-May-49						4130				
1949	5	1949.05	16-May-49						5020				
1949	5	1949.05	17-May-49						5080				
1949	5	1949.05	18-May-49						4360				
1949	5	1949.05	19-May-49						4470				
1949	5	1949.05	20-May-49						4770				
1949	5	1949.05	21-May-49						4610				
1949	5	1949.05	22-May-49						4030				
1949	5	1949.05	23-May-49						3520				
1949	5	1949.05	24-May-49						2710				
1949	5	1949.05	25-May-49						2180				
1949	5	1949.05	26-May-49						1920				
1949	5	1949.05	27-May-49						2520				
1949	5	1949.05	28-May-49						3850				
1949	5	1949.05	29-May-49						4090				
1949	5	1949.05	30-May-49						4020				
1949	5	1949.05	31-May-49						4250				
1949	6	1949.06	1-Jun-49						4290				
1949	6	1949.06	2-Jun-49						3560				
1949	6	1949.06	3-Jun-49						3140				
1949	6	1949.06	4-Jun-49						2710				
1949	6	1949.06	5-Jun-49						2400				
1949	6	1949.06	6-Jun-49						2300				
1949	6	1949.06	7-Jun-49						2430				
1949	6	1949.06	8-Jun-49						2620				
1949	6	1949.06	9-Jun-49						2860				
1949	6	1949.06	10-Jun-49						2900				
1949	6	1949.06	11-Jun-49						2940				
1949	6	1949.06	12-Jun-49						2780				
1949	6	1949.06	13-Jun-49						2880				
1949	6	1949.06	14-Jun-49						2810				
1949	6	1949.06	15-Jun-49						2330				
1949	6	1949.06	16-Jun-49						1950				
1949	6	1949.06	17-Jun-49						1670				
1949	6	1949.06	18-Jun-49						1450				
1949	6	1949.06	19-Jun-49						1380				
1949	6	1949.06	20-Jun-49						1320				
1949	6	1949.06	21-Jun-49						1260				
1949	6	1949.06	22-Jun-49						1100				
1949	6	1949.06	23-Jun-49						1030				
1949	6	1949.06	24-Jun-49						940				
1949	6	1949.06	25-Jun-49						870				
1949	6	1949.06	26-Jun-49						870				
1949	6	1949.06	27-Jun-49						875				
1949	6	1949.06	28-Jun-49						850				
1949	6	1949.06	29-Jun-49						785				
1949	6	1949.06	30-Jun-49						775				
1949	7	1949.07	1-Jul-49						694				
1949	7	1949.07	2-Jul-49						654				
1949	7	1949.07	3-Jul-49						674				
1949	7	1949.07	4-Jul-49						734				
1949	7	1949.07	5-Jul-49						762				
1949	7	1949.07	6-Jul-49						710				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1949	7	1949.07	7-Jul-49						690				
1949	7	1949.07	8-Jul-49						622				
1949	7	1949.07	9-Jul-49						575				
1949	7	1949.07	10-Jul-49						589				
1949	7	1949.07	11-Jul-49						626				
1949	7	1949.07	12-Jul-49						618				
1949	7	1949.07	13-Jul-49						566				
1949	7	1949.07	14-Jul-49						547				
1949	7	1949.07	15-Jul-49						511				
1949	7	1949.07	16-Jul-49						538				
1949	7	1949.07	17-Jul-49						508				
1949	7	1949.07	18-Jul-49						520				
1949	7	1949.07	19-Jul-49						511				
1949	7	1949.07	20-Jul-49						487				
1949	7	1949.07	21-Jul-49						502				
1949	7	1949.07	22-Jul-49						493				
1949	7	1949.07	23-Jul-49						484				
1949	7	1949.07	24-Jul-49						517				
1949	7	1949.07	25-Jul-49						535				
1949	7	1949.07	26-Jul-49						502				
1949	7	1949.07	27-Jul-49						442				
1949	7	1949.07	28-Jul-49						408				
1949	7	1949.07	29-Jul-49						431				
1949	7	1949.07	30-Jul-49						464				
1949	7	1949.07	31-Jul-49						526				
1949	8	1949.08	1-Aug-49						544				
1949	8	1949.08	2-Aug-49						487				
1949	8	1949.08	3-Aug-49						467				
1949	8	1949.08	4-Aug-49						420				
1949	8	1949.08	5-Aug-49						388				
1949	8	1949.08	6-Aug-49						382				
1949	8	1949.08	7-Aug-49						456				
1949	8	1949.08	8-Aug-49						523				
1949	8	1949.08	9-Aug-49						532				
1949	8	1949.08	10-Aug-49						517				
1949	8	1949.08	11-Aug-49						535				
1949	8	1949.08	12-Aug-49						553				
1949	8	1949.08	13-Aug-49						582				
1949	8	1949.08	14-Aug-49						614				
1949	8	1949.08	15-Aug-49						638				
1949	8	1949.08	16-Aug-49						630				
1949	8	1949.08	17-Aug-49						626				
1949	8	1949.08	18-Aug-49						600				
1949	8	1949.08	19-Aug-49						582				
1949	8	1949.08	20-Aug-49						614				
1949	8	1949.08	21-Aug-49						674				
1949	8	1949.08	22-Aug-49						762				
1949	8	1949.08	23-Aug-49						734				
1949	8	1949.08	24-Aug-49						690				
1949	8	1949.08	25-Aug-49						714				
1949	8	1949.08	26-Aug-49						710				
1949	8	1949.08	27-Aug-49						706				
1949	8	1949.08	28-Aug-49						785				
1949	8	1949.08	29-Aug-49						845				
1949	8	1949.08	30-Aug-49						714				
1949	8	1949.08	31-Aug-49						638				
1949	9	1949.09	1-Sep-49						614				
1949	9	1949.09	2-Sep-49						589				
1949	9	1949.09	3-Sep-49						642				
1949	9	1949.09	4-Sep-49						726				
1949	9	1949.09	5-Sep-49						766				
1949	9	1949.09	6-Sep-49						754				
1949	9	1949.09	7-Sep-49						730				
1949	9	1949.09	8-Sep-49						642				
1949	9	1949.09	9-Sep-49						622				
1949	9	1949.09	10-Sep-49						646				
1949	9	1949.09	11-Sep-49						706				
1949	9	1949.09	12-Sep-49						706				
1949	9	1949.09	13-Sep-49						706				
1949	9	1949.09	14-Sep-49						710				
1949	9	1949.09	15-Sep-49						742				
1949	9	1949.09	16-Sep-49						800				
1949	9	1949.09	17-Sep-49						770				
1949	9	1949.09	18-Sep-49						770				
1949	9	1949.09	19-Sep-49						830				
1949	9	1949.09	20-Sep-49						770				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1949	9	1949.09 21-Sep-49							754				
1949	9	1949.09 22-Sep-49							714				
1949	9	1949.09 23-Sep-49							682				
1949	9	1949.09 24-Sep-49							638				
1949	9	1949.09 25-Sep-49							714				
1949	9	1949.09 26-Sep-49							770				
1949	9	1949.09 27-Sep-49							734				
1949	9	1949.09 28-Sep-49							722				
1949	9	1949.09 29-Sep-49							722				
1949	9	1949.09 30-Sep-49							746				
1949	10	1949.10 1-Oct-49							770				
1949	10	1949.10 2-Oct-49							845				
1949	10	1949.10 3-Oct-49							900				
1949	10	1949.10 4-Oct-49							900				
1949	10	1949.10 5-Oct-49							850				
1949	10	1949.10 6-Oct-49							915				
1949	10	1949.10 7-Oct-49							935				
1949	10	1949.10 8-Oct-49							1020				
1949	10	1949.10 9-Oct-49							1010				
1949	10	1949.10 10-Oct-49							990				
1949	10	1949.10 11-Oct-49							1010				
1949	10	1949.10 12-Oct-49							1080				
1949	10	1949.10 13-Oct-49							1180				
1949	10	1949.10 14-Oct-49							1240				
1949	10	1949.10 15-Oct-49							1380				
1949	10	1949.10 16-Oct-49							1710				
1949	10	1949.10 17-Oct-49							1610				
1949	10	1949.10 18-Oct-49							1320				
1949	10	1949.10 19-Oct-49							1360				
1949	10	1949.10 20-Oct-49							1440				
1949	10	1949.10 21-Oct-49							1570				
1949	10	1949.10 22-Oct-49							1600				
1949	10	1949.10 23-Oct-49							1570				
1949	10	1949.10 24-Oct-49							1470				
1949	10	1949.10 25-Oct-49							1360				
1949	10	1949.10 26-Oct-49							1460				
1949	10	1949.10 27-Oct-49							1550				
1949	10	1949.10 28-Oct-49							1600				
1949	10	1949.10 29-Oct-49							1590				
1949	10	1949.10 30-Oct-49							1570				
1949	10	1949.10 31-Oct-49							1480				
1949	11	1949.11 1-Nov-49							1370				
1949	11	1949.11 2-Nov-49							1370				
1949	11	1949.11 3-Nov-49							1520				
1949	11	1949.11 4-Nov-49							1570				
1949	11	1949.11 5-Nov-49							1630				
1949	11	1949.11 6-Nov-49							1650				
1949	11	1949.11 7-Nov-49							1590				
1949	11	1949.11 8-Nov-49							1510				
1949	11	1949.11 9-Nov-49							1660				
1949	11	1949.11 10-Nov-49							1740				
1949	11	1949.11 11-Nov-49							1820				
1949	11	1949.11 12-Nov-49							1760				
1949	11	1949.11 13-Nov-49							1640				
1949	11	1949.11 14-Nov-49							1620				
1949	11	1949.11 15-Nov-49							1510				
1949	11	1949.11 16-Nov-49							1590				
1949	11	1949.11 17-Nov-49							1640				
1949	11	1949.11 18-Nov-49							1660				
1949	11	1949.11 19-Nov-49							1680				
1949	11	1949.11 20-Nov-49							1680				
1949	11	1949.11 21-Nov-49							1590				
1949	11	1949.11 22-Nov-49							1480				
1949	11	1949.11 23-Nov-49							1540				
1949	11	1949.11 24-Nov-49							1580				
1949	11	1949.11 25-Nov-49							1620				
1949	11	1949.11 26-Nov-49							1480				
1949	11	1949.11 27-Nov-49							1510				
1949	11	1949.11 28-Nov-49							1530				
1949	11	1949.11 29-Nov-49							1400				
1949	11	1949.11 30-Nov-49							1510				
1949	12	1949.12 1-Dec-49							1620				
1949	12	1949.12 2-Dec-49							1700				
1949	12	1949.12 3-Dec-49							1780				
1949	12	1949.12 4-Dec-49							1820				
1949	12	1949.12 5-Dec-49							1730				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1949	12	1949.12	6-Dec-49						1540				
1949	12	1949.12	7-Dec-49						1600				
1949	12	1949.12	8-Dec-49						1580				
1949	12	1949.12	9-Dec-49						1660				
1949	12	1949.12	10-Dec-49						1620				
1949	12	1949.12	11-Dec-49						1570				
1949	12	1949.12	12-Dec-49						1540				
1949	12	1949.12	13-Dec-49						1490				
1949	12	1949.12	14-Dec-49						1520				
1949	12	1949.12	15-Dec-49						1520				
1949	12	1949.12	16-Dec-49						1590				
1949	12	1949.12	17-Dec-49						1660				
1949	12	1949.12	18-Dec-49						1630				
1949	12	1949.12	19-Dec-49						1600				
1949	12	1949.12	20-Dec-49						1530				
1949	12	1949.12	21-Dec-49						1520				
1949	12	1949.12	22-Dec-49						1550				
1949	12	1949.12	23-Dec-49						1540				
1949	12	1949.12	24-Dec-49						1520				
1949	12	1949.12	25-Dec-49						1480				
1949	12	1949.12	26-Dec-49						1540				
1949	12	1949.12	27-Dec-49						1400				
1949	12	1949.12	28-Dec-49						1350				
1949	12	1949.12	29-Dec-49						1470				
1949	12	1949.12	30-Dec-49						1540				
1949	12	1949.12	31-Dec-49						1490				
1950	1	1950.01	1-Jan-50						1470				
1950	1	1950.01	2-Jan-50						1410				
1950	1	1950.01	3-Jan-50						1240				
1950	1	1950.01	4-Jan-50						1210				
1950	1	1950.01	5-Jan-50						1260				
1950	1	1950.01	6-Jan-50						1290				
1950	1	1950.01	7-Jan-50						1270				
1950	1	1950.01	8-Jan-50						1270				
1950	1	1950.01	9-Jan-50						1230				
1950	1	1950.01	10-Jan-50						1190				
1950	1	1950.01	11-Jan-50						1270				
1950	1	1950.01	12-Jan-50						1320				
1950	1	1950.01	13-Jan-50						1340				
1950	1	1950.01	14-Jan-50						1380				
1950	1	1950.01	15-Jan-50						1440				
1950	1	1950.01	16-Jan-50						1460				
1950	1	1950.01	17-Jan-50						1450				
1950	1	1950.01	18-Jan-50						2560				
1950	1	1950.01	19-Jan-50						4080				
1950	1	1950.01	20-Jan-50						3160				
1950	1	1950.01	21-Jan-50						2750				
1950	1	1950.01	22-Jan-50						2650				
1950	1	1950.01	23-Jan-50						2530				
1950	1	1950.01	24-Jan-50						2380				
1950	1	1950.01	25-Jan-50						2310				
1950	1	1950.01	26-Jan-50						2260				
1950	1	1950.01	27-Jan-50						2240				
1950	1	1950.01	28-Jan-50						2320				
1950	1	1950.01	29-Jan-50						3180				
1950	1	1950.01	30-Jan-50						3970				
1950	1	1950.01	31-Jan-50						3060				
1950	2	1950.02	1-Feb-50						2710				
1950	2	1950.02	2-Feb-50						2570				
1950	2	1950.02	3-Feb-50						2500				
1950	2	1950.02	4-Feb-50						2420				
1950	2	1950.02	5-Feb-50						2500				
1950	2	1950.02	6-Feb-50						3540				
1950	2	1950.02	7-Feb-50						3510				
1950	2	1950.02	8-Feb-50						3670				
1950	2	1950.02	9-Feb-50						3750				
1950	2	1950.02	10-Feb-50						4100				
1950	2	1950.02	11-Feb-50						4140				
1950	2	1950.02	12-Feb-50						4310				
1950	2	1950.02	13-Feb-50						4190				
1950	2	1950.02	14-Feb-50						3930				
1950	2	1950.02	15-Feb-50						3850				
1950	2	1950.02	16-Feb-50						3640				
1950	2	1950.02	17-Feb-50						3550				
1950	2	1950.02	18-Feb-50						3510				
1950	2	1950.02	19-Feb-50						3460				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1950	2	1950.02	20-Feb-50						3370				
1950	2	1950.02	21-Feb-50						3410				
1950	2	1950.02	22-Feb-50						3830				
1950	2	1950.02	23-Feb-50						3880				
1950	2	1950.02	24-Feb-50						3820				
1950	2	1950.02	25-Feb-50						3820				
1950	2	1950.02	26-Feb-50						3790				
1950	2	1950.02	27-Feb-50						3760				
1950	2	1950.02	28-Feb-50						3650				
1950	3	1950.03	1-Mar-50						3430				
1950	3	1950.03	2-Mar-50						3370				
1950	3	1950.03	3-Mar-50						3390				
1950	3	1950.03	4-Mar-50						3380				
1950	3	1950.03	5-Mar-50						3330				
1950	3	1950.03	6-Mar-50						3180				
1950	3	1950.03	7-Mar-50						3100				
1950	3	1950.03	8-Mar-50						2890				
1950	3	1950.03	9-Mar-50						2600				
1950	3	1950.03	10-Mar-50						2460				
1950	3	1950.03	11-Mar-50						2300				
1950	3	1950.03	12-Mar-50						2080				
1950	3	1950.03	13-Mar-50						1840				
1950	3	1950.03	14-Mar-50						1710				
1950	3	1950.03	15-Mar-50						1580				
1950	3	1950.03	16-Mar-50						1450				
1950	3	1950.03	17-Mar-50						1250				
1950	3	1950.03	18-Mar-50						1150				
1950	3	1950.03	19-Mar-50						1140				
1950	3	1950.03	20-Mar-50						1110				
1950	3	1950.03	21-Mar-50						1090				
1950	3	1950.03	22-Mar-50						1090				
1950	3	1950.03	23-Mar-50						1060				
1950	3	1950.03	24-Mar-50						1190				
1950	3	1950.03	25-Mar-50						1940				
1950	3	1950.03	26-Mar-50						2830				
1950	3	1950.03	27-Mar-50						2980				
1950	3	1950.03	28-Mar-50						2500				
1950	3	1950.03	29-Mar-50						2220				
1950	3	1950.03	30-Mar-50						2150				
1950	3	1950.03	31-Mar-50						2580				
1950	4	1950.04	1-Apr-50						2790				
1950	4	1950.04	2-Apr-50						3120				
1950	4	1950.04	3-Apr-50						3170				
1950	4	1950.04	4-Apr-50						3330				
1950	4	1950.04	5-Apr-50						4100				
1950	4	1950.04	6-Apr-50						4060				
1950	4	1950.04	7-Apr-50						4570				
1950	4	1950.04	8-Apr-50						4040				
1950	4	1950.04	9-Apr-50						4500				
1950	4	1950.04	10-Apr-50						6000				
1950	4	1950.04	11-Apr-50						7140				
1950	4	1950.04	12-Apr-50						7360				
1950	4	1950.04	13-Apr-50						7200				
1950	4	1950.04	14-Apr-50						6900				
1950	4	1950.04	15-Apr-50						6200				
1950	4	1950.04	16-Apr-50						5530				
1950	4	1950.04	17-Apr-50						4940				
1950	4	1950.04	18-Apr-50						4740				
1950	4	1950.04	19-Apr-50						4880				
1950	4	1950.04	20-Apr-50						4710				
1950	4	1950.04	21-Apr-50						5030				
1950	4	1950.04	22-Apr-50						6080				
1950	4	1950.04	23-Apr-50						6920				
1950	4	1950.04	24-Apr-50						7160				
1950	4	1950.04	25-Apr-50						6800				
1950	4	1950.04	26-Apr-50						6200				
1950	4	1950.04	27-Apr-50						5780				
1950	4	1950.04	28-Apr-50						5730				
1950	4	1950.04	29-Apr-50						5920				
1950	4	1950.04	30-Apr-50						6100				
1950	5	1950.05	1-May-50						5740				
1950	5	1950.05	2-May-50						5230				
1950	5	1950.05	3-May-50						4990				
1950	5	1950.05	4-May-50						4500				
1950	5	1950.05	5-May-50						3920				
1950	5	1950.05	6-May-50						3260				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1950	5	1950.05	7-May-50						3040				
1950	5	1950.05	8-May-50						2940				
1950	5	1950.05	9-May-50						2680				
1950	5	1950.05	10-May-50						2380				
1950	5	1950.05	11-May-50						2310				
1950	5	1950.05	12-May-50						2340				
1950	5	1950.05	13-May-50						2500				
1950	5	1950.05	14-May-50						2780				
1950	5	1950.05	15-May-50						3200				
1950	5	1950.05	16-May-50						4000				
1950	5	1950.05	17-May-50						4600				
1950	5	1950.05	18-May-50						5300				
1950	5	1950.05	19-May-50						6100				
1950	5	1950.05	20-May-50						6400				
1950	5	1950.05	21-May-50						6500				
1950	5	1950.05	22-May-50						6520				
1950	5	1950.05	23-May-50						6650				
1950	5	1950.05	24-May-50						7070				
1950	5	1950.05	25-May-50						7180				
1950	5	1950.05	26-May-50						6840				
1950	5	1950.05	27-May-50						6520				
1950	5	1950.05	28-May-50						6380				
1950	5	1950.05	29-May-50						6440				
1950	5	1950.05	30-May-50						7480				
1950	5	1950.05	31-May-50						9590				
1950	6	1950.06	1-Jun-50						10800				
1950	6	1950.06	2-Jun-50						12300				
1950	6	1950.06	3-Jun-50						13700				
1950	6	1950.06	4-Jun-50						14500				
1950	6	1950.06	5-Jun-50						14500				
1950	6	1950.06	6-Jun-50						12600				
1950	6	1950.06	7-Jun-50						8530				
1950	6	1950.06	8-Jun-50						6590				
1950	6	1950.06	9-Jun-50						5800				
1950	6	1950.06	10-Jun-50						4180				
1950	6	1950.06	11-Jun-50						3360				
1950	6	1950.06	12-Jun-50						3080				
1950	6	1950.06	13-Jun-50						2920				
1950	6	1950.06	14-Jun-50						2720				
1950	6	1950.06	15-Jun-50						2350				
1950	6	1950.06	16-Jun-50						2110				
1950	6	1950.06	17-Jun-50						2020				
1950	6	1950.06	18-Jun-50						2000				
1950	6	1950.06	19-Jun-50						1900				
1950	6	1950.06	20-Jun-50						2020				
1950	6	1950.06	21-Jun-50						2170				
1950	6	1950.06	22-Jun-50						2220				
1950	6	1950.06	23-Jun-50						2300				
1950	6	1950.06	24-Jun-50						3490				
1950	6	1950.06	25-Jun-50						3950				
1950	6	1950.06	26-Jun-50						2570				
1950	6	1950.06	27-Jun-50						1860				
1950	6	1950.06	28-Jun-50						1480				
1950	6	1950.06	29-Jun-50						1210				
1950	6	1950.06	30-Jun-50						1180				
1950	7	1950.07	1-Jul-50						1030				
1950	7	1950.07	2-Jul-50						993				
1950	7	1950.07	3-Jul-50						986				
1950	7	1950.07	4-Jul-50						937				
1950	7	1950.07	5-Jul-50						828				
1950	7	1950.07	6-Jul-50						799				
1950	7	1950.07	7-Jul-50						810				
1950	7	1950.07	8-Jul-50						735				
1950	7	1950.07	9-Jul-50						710				
1950	7	1950.07	10-Jul-50						755				
1950	7	1950.07	11-Jul-50						772				
1950	7	1950.07	12-Jul-50						735				
1950	7	1950.07	13-Jul-50						730				
1950	7	1950.07	14-Jul-50						750				
1950	7	1950.07	15-Jul-50						725				
1950	7	1950.07	16-Jul-50						670				
1950	7	1950.07	17-Jul-50						705				
1950	7	1950.07	18-Jul-50						642				
1950	7	1950.07	19-Jul-50						582				
1950	7	1950.07	20-Jul-50						586				
1950	7	1950.07	21-Jul-50						556				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1950	7	1950.07	22-Jul-50						574				
1950	7	1950.07	23-Jul-50						574				
1950	7	1950.07	24-Jul-50						610				
1950	7	1950.07	25-Jul-50						566				
1950	7	1950.07	26-Jul-50						504				
1950	7	1950.07	27-Jul-50						497				
1950	7	1950.07	28-Jul-50						466				
1950	7	1950.07	29-Jul-50						463				
1950	7	1950.07	30-Jul-50						532				
1950	7	1950.07	31-Jul-50						486				
1950	8	1950.08	1-Aug-50						507				
1950	8	1950.08	2-Aug-50						532				
1950	8	1950.08	3-Aug-50						528				
1950	8	1950.08	4-Aug-50						510				
1950	8	1950.08	5-Aug-50						521				
1950	8	1950.08	6-Aug-50						549				
1950	8	1950.08	7-Aug-50						606				
1950	8	1950.08	8-Aug-50						610				
1950	8	1950.08	9-Aug-50						614				
1950	8	1950.08	10-Aug-50						594				
1950	8	1950.08	11-Aug-50						614				
1950	8	1950.08	12-Aug-50						637				
1950	8	1950.08	13-Aug-50						675				
1950	8	1950.08	14-Aug-50						685				
1950	8	1950.08	15-Aug-50						675				
1950	8	1950.08	16-Aug-50						665				
1950	8	1950.08	17-Aug-50						610				
1950	8	1950.08	18-Aug-50						624				
1950	8	1950.08	19-Aug-50						665				
1950	8	1950.08	20-Aug-50						632				
1950	8	1950.08	21-Aug-50						690				
1950	8	1950.08	22-Aug-50						650				
1950	8	1950.08	23-Aug-50						680				
1950	8	1950.08	24-Aug-50						685				
1950	8	1950.08	25-Aug-50						665				
1950	8	1950.08	26-Aug-50						646				
1950	8	1950.08	27-Aug-50						670				
1950	8	1950.08	28-Aug-50						665				
1950	8	1950.08	29-Aug-50						637				
1950	8	1950.08	30-Aug-50						610				
1950	8	1950.08	31-Aug-50						590				
1950	9	1950.09	1-Sep-50						646				
1950	9	1950.09	2-Sep-50						665				
1950	9	1950.09	3-Sep-50						720				
1950	9	1950.09	4-Sep-50						710				
1950	9	1950.09	5-Sep-50						642				
1950	9	1950.09	6-Sep-50						650				
1950	9	1950.09	7-Sep-50						650				
1950	9	1950.09	8-Sep-50						655				
1950	9	1950.09	9-Sep-50						642				
1950	9	1950.09	10-Sep-50						685				
1950	9	1950.09	11-Sep-50						840				
1950	9	1950.09	12-Sep-50						810				
1950	9	1950.09	13-Sep-50						810				
1950	9	1950.09	14-Sep-50						852				
1950	9	1950.09	15-Sep-50						894				
1950	9	1950.09	16-Sep-50						1000				
1950	9	1950.09	17-Sep-50						1060				
1950	9	1950.09	18-Sep-50						1270				
1950	9	1950.09	19-Sep-50						1370				
1950	9	1950.09	20-Sep-50						1320				
1950	9	1950.09	21-Sep-50						1310				
1950	9	1950.09	22-Sep-50						1320				
1950	9	1950.09	23-Sep-50						1320				
1950	9	1950.09	24-Sep-50						1340				
1950	9	1950.09	25-Sep-50						1210				
1950	9	1950.09	26-Sep-50						1080				
1950	9	1950.09	27-Sep-50						1020				
1950	9	1950.09	28-Sep-50						951				
1950	9	1950.09	29-Sep-50						972				
1950	9	1950.09	30-Sep-50						958				
1950	10	1950.10	1-Oct-50						944				
1950	10	1950.10	2-Oct-50						1020				
1950	10	1950.10	3-Oct-50						1080				
1950	10	1950.10	4-Oct-50						1010				
1950	10	1950.10	5-Oct-50						968				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1950	10	1950.10	6-Oct-50						908				
1950	10	1950.10	7-Oct-50						974				
1950	10	1950.10	8-Oct-50						1030				
1950	10	1950.10	9-Oct-50						1020				
1950	10	1950.10	10-Oct-50						950				
1950	10	1950.10	11-Oct-50						902				
1950	10	1950.10	12-Oct-50						1030				
1950	10	1950.10	13-Oct-50						1290				
1950	10	1950.10	14-Oct-50						1370				
1950	10	1950.10	15-Oct-50						1410				
1950	10	1950.10	16-Oct-50						1400				
1950	10	1950.10	17-Oct-50						1410				
1950	10	1950.10	18-Oct-50						1420				
1950	10	1950.10	19-Oct-50						1400				
1950	10	1950.10	20-Oct-50						1430				
1950	10	1950.10	21-Oct-50						1510				
1950	10	1950.10	22-Oct-50						1530				
1950	10	1950.10	23-Oct-50						1520				
1950	10	1950.10	24-Oct-50						1540				
1950	10	1950.10	25-Oct-50						1650				
1950	10	1950.10	26-Oct-50						1660				
1950	10	1950.10	27-Oct-50						1750				
1950	10	1950.10	28-Oct-50						1790				
1950	10	1950.10	29-Oct-50						1780				
1950	10	1950.10	30-Oct-50						1700				
1950	10	1950.10	31-Oct-50						1650				
1950	11	1950.11	1-Nov-50						1670				
1950	11	1950.11	2-Nov-50						1700				
1950	11	1950.11	3-Nov-50						1770				
1950	11	1950.11	4-Nov-50						1810				
1950	11	1950.11	5-Nov-50						1790				
1950	11	1950.11	6-Nov-50						1680				
1950	11	1950.11	7-Nov-50						1560				
1950	11	1950.11	8-Nov-50						1610				
1950	11	1950.11	9-Nov-50						1610				
1950	11	1950.11	10-Nov-50						1660				
1950	11	1950.11	11-Nov-50						1840				
1950	11	1950.11	12-Nov-50						1930				
1950	11	1950.11	13-Nov-50						1890				
1950	11	1950.11	14-Nov-50						1820				
1950	11	1950.11	15-Nov-50						1850				
1950	11	1950.11	16-Nov-50						1870				
1950	11	1950.11	17-Nov-50						1870				
1950	11	1950.11	18-Nov-50						2020				
1950	11	1950.11	19-Nov-50						2350				
1950	11	1950.11	20-Nov-50						5260				
1950	11	1950.11	21-Nov-50						14800				
1950	11	1950.11	22-Nov-50						23000				
1950	11	1950.11	23-Nov-50						30000				
1950	11	1950.11	24-Nov-50						27200				
1950	11	1950.11	25-Nov-50						23000				
1950	11	1950.11	26-Nov-50						19900				
1950	11	1950.11	27-Nov-50						18000				
1950	11	1950.11	28-Nov-50						16800				
1950	11	1950.11	29-Nov-50						15900				
1950	11	1950.11	30-Nov-50						14900				
1950	12	1950.12	1-Dec-50						13100				
1950	12	1950.12	2-Dec-50						10800				
1950	12	1950.12	3-Dec-50						9980				
1950	12	1950.12	4-Dec-50						10300				
1950	12	1950.12	5-Dec-50						19900				
1950	12	1950.12	6-Dec-50						25000				
1950	12	1950.12	7-Dec-50						25300				
1950	12	1950.12	8-Dec-50						40000				
1950	12	1950.12	9-Dec-50						70000				
1950	12	1950.12	10-Dec-50						70000				
1950	12	1950.12	11-Dec-50						56000				
1950	12	1950.12	12-Dec-50						46900				
1950	12	1950.12	13-Dec-50						39900				
1950	12	1950.12	14-Dec-50						32000				
1950	12	1950.12	15-Dec-50						26800				
1950	12	1950.12	16-Dec-50						25500				
1950	12	1950.12	17-Dec-50						24100				
1950	12	1950.12	18-Dec-50						22200				
1950	12	1950.12	19-Dec-50						21100				
1950	12	1950.12	20-Dec-50						20600				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1950	12	1950.12	21-Dec-50						20200				
1950	12	1950.12	22-Dec-50						19500				
1950	12	1950.12	23-Dec-50						18800				
1950	12	1950.12	24-Dec-50						17600				
1950	12	1950.12	25-Dec-50						15600				
1950	12	1950.12	26-Dec-50						14400				
1950	12	1950.12	27-Dec-50						13800				
1950	12	1950.12	28-Dec-50						13200				
1950	12	1950.12	29-Dec-50						12600				
1950	12	1950.12	30-Dec-50						12100				
1950	12	1950.12	31-Dec-50						11700				
1951	1	1951.01	1-Jan-51						11400				
1951	1	1951.01	2-Jan-51						10900				
1951	1	1951.01	3-Jan-51						10200				
1951	1	1951.01	4-Jan-51						8700				
1951	1	1951.01	5-Jan-51						7630				
1951	1	1951.01	6-Jan-51						6880				
1951	1	1951.01	7-Jan-51						6440				
1951	1	1951.01	8-Jan-51						6220				
1951	1	1951.01	9-Jan-51						5940				
1951	1	1951.01	10-Jan-51						5680				
1951	1	1951.01	11-Jan-51						5330				
1951	1	1951.01	12-Jan-51						6230				
1951	1	1951.01	13-Jan-51						8440				
1951	1	1951.01	14-Jan-51						8490				
1951	1	1951.01	15-Jan-51						8520				
1951	1	1951.01	16-Jan-51						8660				
1951	1	1951.01	17-Jan-51						8470				
1951	1	1951.01	18-Jan-51						9550				
1951	1	1951.01	19-Jan-51						10400				
1951	1	1951.01	20-Jan-51						11100				
1951	1	1951.01	21-Jan-51						12700				
1951	1	1951.01	22-Jan-51						13800				
1951	1	1951.01	23-Jan-51						13700				
1951	1	1951.01	24-Jan-51						14000				
1951	1	1951.01	25-Jan-51						14300				
1951	1	1951.01	26-Jan-51						14700				
1951	1	1951.01	27-Jan-51						14700				
1951	1	1951.01	28-Jan-51						14600				
1951	1	1951.01	29-Jan-51						14500				
1951	1	1951.01	30-Jan-51						14100				
1951	1	1951.01	31-Jan-51						12400				
1951	2	1951.02	1-Feb-51						11500				
1951	2	1951.02	2-Feb-51						11700				
1951	2	1951.02	3-Feb-51						11600				
1951	2	1951.02	4-Feb-51						11300				
1951	2	1951.02	5-Feb-51						11000				
1951	2	1951.02	6-Feb-51						10600				
1951	2	1951.02	7-Feb-51						10200				
1951	2	1951.02	8-Feb-51						10000				
1951	2	1951.02	9-Feb-51						9820				
1951	2	1951.02	10-Feb-51						9970				
1951	2	1951.02	11-Feb-51						10800				
1951	2	1951.02	12-Feb-51						11700				
1951	2	1951.02	13-Feb-51						12900				
1951	2	1951.02	14-Feb-51						13300				
1951	2	1951.02	15-Feb-51						13200				
1951	2	1951.02	16-Feb-51						13100				
1951	2	1951.02	17-Feb-51						12900				
1951	2	1951.02	18-Feb-51						12400				
1951	2	1951.02	19-Feb-51						11800				
1951	2	1951.02	20-Feb-51						11100				
1951	2	1951.02	21-Feb-51						9980				
1951	2	1951.02	22-Feb-51						9340				
1951	2	1951.02	23-Feb-51						9260				
1951	2	1951.02	24-Feb-51						9260				
1951	2	1951.02	25-Feb-51						9100				
1951	2	1951.02	26-Feb-51						8800				
1951	2	1951.02	27-Feb-51						8290				
1951	2	1951.02	28-Feb-51						7830				
1951	3	1951.03	1-Mar-51						8350				
1951	3	1951.03	2-Mar-51						8820				
1951	3	1951.03	3-Mar-51						8960				
1951	3	1951.03	4-Mar-51						8290				
1951	3	1951.03	5-Mar-51						7810				
1951	3	1951.03	6-Mar-51						8740				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1951	3	1951.03	7-Mar-51						9400				
1951	3	1951.03	8-Mar-51						9400				
1951	3	1951.03	9-Mar-51						9220				
1951	3	1951.03	10-Mar-51						9040				
1951	3	1951.03	11-Mar-51						8830				
1951	3	1951.03	12-Mar-51						8440				
1951	3	1951.03	13-Mar-51						7950				
1951	3	1951.03	14-Mar-51						7380				
1951	3	1951.03	15-Mar-51						7460				
1951	3	1951.03	16-Mar-51						7950				
1951	3	1951.03	17-Mar-51						7980				
1951	3	1951.03	18-Mar-51						8020				
1951	3	1951.03	19-Mar-51						7580				
1951	3	1951.03	20-Mar-51						6660				
1951	3	1951.03	21-Mar-51						7580				
1951	3	1951.03	22-Mar-51						7900				
1951	3	1951.03	23-Mar-51						7720				
1951	3	1951.03	24-Mar-51						7870				
1951	3	1951.03	25-Mar-51						7390				
1951	3	1951.03	26-Mar-51						7050				
1951	3	1951.03	27-Mar-51						6800				
1951	3	1951.03	28-Mar-51						6320				
1951	3	1951.03	29-Mar-51						5890				
1951	3	1951.03	30-Mar-51						5280				
1951	3	1951.03	31-Mar-51						4760				
1951	4	1951.04	1-Apr-51						3970				
1951	4	1951.04	2-Apr-51						3420				
1951	4	1951.04	3-Apr-51						3230				
1951	4	1951.04	4-Apr-51						3000				
1951	4	1951.04	5-Apr-51						2830				
1951	4	1951.04	6-Apr-51						2610				
1951	4	1951.04	7-Apr-51						2630				
1951	4	1951.04	8-Apr-51						2440				
1951	4	1951.04	9-Apr-51						2220				
1951	4	1951.04	10-Apr-51						2000				
1951	4	1951.04	11-Apr-51						1820				
1951	4	1951.04	12-Apr-51						1820				
1951	4	1951.04	13-Apr-51						2890				
1951	4	1951.04	14-Apr-51						3160				
1951	4	1951.04	15-Apr-51						3250				
1951	4	1951.04	16-Apr-51						3150				
1951	4	1951.04	17-Apr-51						3030				
1951	4	1951.04	18-Apr-51						3000				
1951	4	1951.04	19-Apr-51						3000				
1951	4	1951.04	20-Apr-51						2680				
1951	4	1951.04	21-Apr-51						1920				
1951	4	1951.04	22-Apr-51						2000				
1951	4	1951.04	23-Apr-51						2750				
1951	4	1951.04	24-Apr-51						2620				
1951	4	1951.04	25-Apr-51						2570				
1951	4	1951.04	26-Apr-51						2350				
1951	4	1951.04	27-Apr-51						1930				
1951	4	1951.04	28-Apr-51						1860				
1951	4	1951.04	29-Apr-51						2230				
1951	4	1951.04	30-Apr-51						3190				
1951	5	1951.05	1-May-51						4730				
1951	5	1951.05	2-May-51						5370				
1951	5	1951.05	3-May-51						5200				
1951	5	1951.05	4-May-51						4970				
1951	5	1951.05	5-May-51						5190				
1951	5	1951.05	6-May-51						5570				
1951	5	1951.05	7-May-51						6620				
1951	5	1951.05	8-May-51						7670				
1951	5	1951.05	9-May-51						6750				
1951	5	1951.05	10-May-51						5260				
1951	5	1951.05	11-May-51						3990				
1951	5	1951.05	12-May-51						3670				
1951	5	1951.05	13-May-51						3750				
1951	5	1951.05	14-May-51						4000				
1951	5	1951.05	15-May-51						3910				
1951	5	1951.05	16-May-51						3720				
1951	5	1951.05	17-May-51						3900				
1951	5	1951.05	18-May-51						3770				
1951	5	1951.05	19-May-51						3900				
1951	5	1951.05	20-May-51						4400				
1951	5	1951.05	21-May-51						4970				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1951	5	1951.05	22-May-51						6350				
1951	5	1951.05	23-May-51						8210				
1951	5	1951.05	24-May-51						8950				
1951	5	1951.05	25-May-51						9460				
1951	5	1951.05	26-May-51						9660				
1951	5	1951.05	27-May-51						9720				
1951	5	1951.05	28-May-51						10600				
1951	5	1951.05	29-May-51						12100				
1951	5	1951.05	30-May-51						13200				
1951	5	1951.05	31-May-51						12700				
1951	6	1951.06	1-Jun-51						10500				
1951	6	1951.06	2-Jun-51						7350				
1951	6	1951.06	3-Jun-51						5180				
1951	6	1951.06	4-Jun-51						3930				
1951	6	1951.06	5-Jun-51						3340				
1951	6	1951.06	6-Jun-51						2990				
1951	6	1951.06	7-Jun-51						2630				
1951	6	1951.06	8-Jun-51						2410				
1951	6	1951.06	9-Jun-51						2490				
1951	6	1951.06	10-Jun-51						2820				
1951	6	1951.06	11-Jun-51						2780				
1951	6	1951.06	12-Jun-51						2700				
1951	6	1951.06	13-Jun-51						2580				
1951	6	1951.06	14-Jun-51						2460				
1951	6	1951.06	15-Jun-51						2630				
1951	6	1951.06	16-Jun-51						3440				
1951	6	1951.06	17-Jun-51						3770				
1951	6	1951.06	18-Jun-51						3960				
1951	6	1951.06	19-Jun-51						4060				
1951	6	1951.06	20-Jun-51						4040				
1951	6	1951.06	21-Jun-51						3120				
1951	6	1951.06	22-Jun-51						3300				
1951	6	1951.06	23-Jun-51						3530				
1951	6	1951.06	24-Jun-51						2820				
1951	6	1951.06	25-Jun-51						2450				
1951	6	1951.06	26-Jun-51						2210				
1951	6	1951.06	27-Jun-51						2020				
1951	6	1951.06	28-Jun-51						1780				
1951	6	1951.06	29-Jun-51						1480				
1951	6	1951.06	30-Jun-51						1370				
1951	7	1951.07	1-Jul-51						1300				
1951	7	1951.07	2-Jul-51						1300				
1951	7	1951.07	3-Jul-51						1300				
1951	7	1951.07	4-Jul-51						1210				
1951	7	1951.07	5-Jul-51						1180				
1951	7	1951.07	6-Jul-51						1110				
1951	7	1951.07	7-Jul-51						955				
1951	7	1951.07	8-Jul-51						955				
1951	7	1951.07	9-Jul-51						1050				
1951	7	1951.07	10-Jul-51						1030				
1951	7	1951.07	11-Jul-51						977				
1951	7	1951.07	12-Jul-51						966				
1951	7	1951.07	13-Jul-51						872				
1951	7	1951.07	14-Jul-51						944				
1951	7	1951.07	15-Jul-51						977				
1951	7	1951.07	16-Jul-51						988				
1951	7	1951.07	17-Jul-51						933				
1951	7	1951.07	18-Jul-51						850				
1951	7	1951.07	19-Jul-51						784				
1951	7	1951.07	20-Jul-51						675				
1951	7	1951.07	21-Jul-51						600				
1951	7	1951.07	22-Jul-51						655				
1951	7	1951.07	23-Jul-51						635				
1951	7	1951.07	24-Jul-51						640				
1951	7	1951.07	25-Jul-51						605				
1951	7	1951.07	26-Jul-51						508				
1951	7	1951.07	27-Jul-51						540				
1951	7	1951.07	28-Jul-51						555				
1951	7	1951.07	29-Jul-51						555				
1951	7	1951.07	30-Jul-51						670				
1951	7	1951.07	31-Jul-51						655				
1951	8	1951.08	1-Aug-51						498				
1951	8	1951.08	2-Aug-51						454				
1951	8	1951.08	3-Aug-51						498				
1951	8	1951.08	4-Aug-51						600				
1951	8	1951.08	5-Aug-51						630				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1951	8	1951.08	6-Aug-51						645				
1951	8	1951.08	7-Aug-51						640				
1951	8	1951.08	8-Aug-51						585				
1951	8	1951.08	9-Aug-51						575				
1951	8	1951.08	10-Aug-51						595				
1951	8	1951.08	11-Aug-51						655				
1951	8	1951.08	12-Aug-51						757				
1951	8	1951.08	13-Aug-51						856				
1951	8	1951.08	14-Aug-51						774				
1951	8	1951.08	15-Aug-51						686				
1951	8	1951.08	16-Aug-51						570				
1951	8	1951.08	17-Aug-51						665				
1951	8	1951.08	18-Aug-51						740				
1951	8	1951.08	19-Aug-51						840				
1951	8	1951.08	20-Aug-51						916				
1951	8	1951.08	21-Aug-51						911				
1951	8	1951.08	22-Aug-51						845				
1951	8	1951.08	23-Aug-51						850				
1951	8	1951.08	24-Aug-51						834				
1951	8	1951.08	25-Aug-51						955				
1951	8	1951.08	26-Aug-51						938				
1951	8	1951.08	27-Aug-51						994				
1951	8	1951.08	28-Aug-51						999				
1951	8	1951.08	29-Aug-51						994				
1951	8	1951.08	30-Aug-51						1050				
1951	8	1951.08	31-Aug-51						994				
1951	9	1951.09	1-Sep-51						994				
1951	9	1951.09	2-Sep-51						999				
1951	9	1951.09	3-Sep-51						1050				
1951	9	1951.09	4-Sep-51						1050				
1951	9	1951.09	5-Sep-51						1020				
1951	9	1951.09	6-Sep-51						950				
1951	9	1951.09	7-Sep-51						982				
1951	9	1951.09	8-Sep-51						982				
1951	9	1951.09	9-Sep-51						994				
1951	9	1951.09	10-Sep-51						1040				
1951	9	1951.09	11-Sep-51						982				
1951	9	1951.09	12-Sep-51						906				
1951	9	1951.09	13-Sep-51						872				
1951	9	1951.09	14-Sep-51						867				
1951	9	1951.09	15-Sep-51						884				
1951	9	1951.09	16-Sep-51						960				
1951	9	1951.09	17-Sep-51						966				
1951	9	1951.09	18-Sep-51						955				
1951	9	1951.09	19-Sep-51						972				
1951	9	1951.09	20-Sep-51						938				
1951	9	1951.09	21-Sep-51						966				
1951	9	1951.09	22-Sep-51						1150				
1951	9	1951.09	23-Sep-51						1180				
1951	9	1951.09	24-Sep-51						1190				
1951	9	1951.09	25-Sep-51						1130				
1951	9	1951.09	26-Sep-51						1110				
1951	9	1951.09	27-Sep-51						1110				
1951	9	1951.09	28-Sep-51						1160				
1951	9	1951.09	29-Sep-51						1310				
1951	9	1951.09	30-Sep-51						1370				
1951	10	1951.10	1-Oct-51						1370				
1951	10	1951.10	2-Oct-51						1390				
1951	10	1951.10	3-Oct-51						1620				
1951	10	1951.10	4-Oct-51						1870				
1951	10	1951.10	5-Oct-51						1940				
1951	10	1951.10	6-Oct-51						1990				
1951	10	1951.10	7-Oct-51						2060				
1951	10	1951.10	8-Oct-51						2010				
1951	10	1951.10	9-Oct-51						1950				
1951	10	1951.10	10-Oct-51						1920				
1951	10	1951.10	11-Oct-51						1800				
1951	10	1951.10	12-Oct-51						1820				
1951	10	1951.10	13-Oct-51						1860				
1951	10	1951.10	14-Oct-51						1890				
1951	10	1951.10	15-Oct-51						1880				
1951	10	1951.10	16-Oct-51						1910				
1951	10	1951.10	17-Oct-51						1990				
1951	10	1951.10	18-Oct-51						1920				
1951	10	1951.10	19-Oct-51						1800				
1951	10	1951.10	20-Oct-51						1740				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1951	10	1951.10	21-Oct-51						1720				
1951	10	1951.10	22-Oct-51						1680				
1951	10	1951.10	23-Oct-51						1550				
1951	10	1951.10	24-Oct-51						1620				
1951	10	1951.10	25-Oct-51						1740				
1951	10	1951.10	26-Oct-51						1790				
1951	10	1951.10	27-Oct-51						1730				
1951	10	1951.10	28-Oct-51						1690				
1951	10	1951.10	29-Oct-51						1700				
1951	10	1951.10	30-Oct-51						1690				
1951	10	1951.10	31-Oct-51						1680				
1951	11	1951.11	1-Nov-51						1690				
1951	11	1951.11	2-Nov-51						1680				
1951	11	1951.11	3-Nov-51						1660				
1951	11	1951.11	4-Nov-51						1630				
1951	11	1951.11	5-Nov-51						1590				
1951	11	1951.11	6-Nov-51						1530				
1951	11	1951.11	7-Nov-51						1510				
1951	11	1951.11	8-Nov-51						1520				
1951	11	1951.11	9-Nov-51						1550				
1951	11	1951.11	10-Nov-51						1590				
1951	11	1951.11	11-Nov-51						1640				
1951	11	1951.11	12-Nov-51						1660				
1951	11	1951.11	13-Nov-51						1580				
1951	11	1951.11	14-Nov-51						1570				
1951	11	1951.11	15-Nov-51						1650				
1951	11	1951.11	16-Nov-51						1700				
1951	11	1951.11	17-Nov-51						1700				
1951	11	1951.11	18-Nov-51						1710				
1951	11	1951.11	19-Nov-51						1680				
1951	11	1951.11	20-Nov-51						1700				
1951	11	1951.11	21-Nov-51						1780				
1951	11	1951.11	22-Nov-51						1870				
1951	11	1951.11	23-Nov-51						2110				
1951	11	1951.11	24-Nov-51						2170				
1951	11	1951.11	25-Nov-51						2200				
1951	11	1951.11	26-Nov-51						2240				
1951	11	1951.11	27-Nov-51						2070				
1951	11	1951.11	28-Nov-51						2020				
1951	11	1951.11	29-Nov-51						1950				
1951	11	1951.11	30-Nov-51						1940				
1951	12	1951.12	1-Dec-51						1970				
1951	12	1951.12	2-Dec-51						2100				
1951	12	1951.12	3-Dec-51						2460				
1951	12	1951.12	4-Dec-51						2450				
1951	12	1951.12	5-Dec-51						2880				
1951	12	1951.12	6-Dec-51						3710				
1951	12	1951.12	7-Dec-51						3730				
1951	12	1951.12	8-Dec-51						3530				
1951	12	1951.12	9-Dec-51						3440				
1951	12	1951.12	10-Dec-51						3260				
1951	12	1951.12	11-Dec-51						3120				
1951	12	1951.12	12-Dec-51						3000				
1951	12	1951.12	13-Dec-51						3010				
1951	12	1951.12	14-Dec-51						2920				
1951	12	1951.12	15-Dec-51						2850				
1951	12	1951.12	16-Dec-51						2770				
1951	12	1951.12	17-Dec-51						2590				
1951	12	1951.12	18-Dec-51						2540				
1951	12	1951.12	19-Dec-51						2680				
1951	12	1951.12	20-Dec-51						2750				
1951	12	1951.12	21-Dec-51						2780				
1951	12	1951.12	22-Dec-51						2760				
1951	12	1951.12	23-Dec-51						2990				
1951	12	1951.12	24-Dec-51						2970				
1951	12	1951.12	25-Dec-51						3040				
1951	12	1951.12	26-Dec-51						3160				
1951	12	1951.12	27-Dec-51						3150				
1951	12	1951.12	28-Dec-51						3400				
1951	12	1951.12	29-Dec-51						3690				
1951	12	1951.12	30-Dec-51						5150				
1951	12	1951.12	31-Dec-51						6360				
1952	1	1952.01	1-Jan-52						6370				
1952	1	1952.01	2-Jan-52						5300				
1952	1	1952.01	3-Jan-52						4710				
1952	1	1952.01	4-Jan-52						4640				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1952	1	1952.01	5-Jan-52						4520				
1952	1	1952.01	6-Jan-52						4680				
1952	1	1952.01	7-Jan-52						4600				
1952	1	1952.01	8-Jan-52						4700				
1952	1	1952.01	9-Jan-52						4880				
1952	1	1952.01	10-Jan-52						5000				
1952	1	1952.01	11-Jan-52						5140				
1952	1	1952.01	12-Jan-52						5380				
1952	1	1952.01	13-Jan-52						6200				
1952	1	1952.01	14-Jan-52						7070				
1952	1	1952.01	15-Jan-52						6780				
1952	1	1952.01	16-Jan-52						9740				
1952	1	1952.01	17-Jan-52						11300				
1952	1	1952.01	18-Jan-52						10900				
1952	1	1952.01	19-Jan-52						11100				
1952	1	1952.01	20-Jan-52						10900				
1952	1	1952.01	21-Jan-52						10100				
1952	1	1952.01	22-Jan-52						10100				
1952	1	1952.01	23-Jan-52						10100				
1952	1	1952.01	24-Jan-52						9980				
1952	1	1952.01	25-Jan-52						10500				
1952	1	1952.01	26-Jan-52						14000				
1952	1	1952.01	27-Jan-52						16100				
1952	1	1952.01	28-Jan-52						16300				
1952	1	1952.01	29-Jan-52						15800				
1952	1	1952.01	30-Jan-52						14300				
1952	1	1952.01	31-Jan-52						13200				
1952	2	1952.02	1-Feb-52						12800				
1952	2	1952.02	2-Feb-52						12700				
1952	2	1952.02	3-Feb-52						13200				
1952	2	1952.02	4-Feb-52						14000				
1952	2	1952.02	5-Feb-52						14100				
1952	2	1952.02	6-Feb-52						13300				
1952	2	1952.02	7-Feb-52						12700				
1952	2	1952.02	8-Feb-52						12900				
1952	2	1952.02	9-Feb-52						13000				
1952	2	1952.02	10-Feb-52						12800				
1952	2	1952.02	11-Feb-52						12200				
1952	2	1952.02	12-Feb-52						11600				
1952	2	1952.02	13-Feb-52						11200				
1952	2	1952.02	14-Feb-52						10200				
1952	2	1952.02	15-Feb-52						9860				
1952	2	1952.02	16-Feb-52						9860				
1952	2	1952.02	17-Feb-52						9960				
1952	2	1952.02	18-Feb-52						9940				
1952	2	1952.02	19-Feb-52						9970				
1952	2	1952.02	20-Feb-52						10200				
1952	2	1952.02	21-Feb-52						10300				
1952	2	1952.02	22-Feb-52						10800				
1952	2	1952.02	23-Feb-52						11400				
1952	2	1952.02	24-Feb-52						11400				
1952	2	1952.02	25-Feb-52						11300				
1952	2	1952.02	26-Feb-52						11000				
1952	2	1952.02	27-Feb-52						10500				
1952	2	1952.02	28-Feb-52						10300				
1952	2	1952.02	29-Feb-52						10200				
1952	3	1952.03	1-Mar-52						10100				
1952	3	1952.03	2-Mar-52						9900				
1952	3	1952.03	3-Mar-52						9620				
1952	3	1952.03	4-Mar-52						9550				
1952	3	1952.03	5-Mar-52						9580				
1952	3	1952.03	6-Mar-52						9460				
1952	3	1952.03	7-Mar-52						9460				
1952	3	1952.03	8-Mar-52						9610				
1952	3	1952.03	9-Mar-52						9660				
1952	3	1952.03	10-Mar-52						9500				
1952	3	1952.03	11-Mar-52						9340				
1952	3	1952.03	12-Mar-52						9620				
1952	3	1952.03	13-Mar-52						9880				
1952	3	1952.03	14-Mar-52						10200				
1952	3	1952.03	15-Mar-52						10700				
1952	3	1952.03	16-Mar-52						12800				
1952	3	1952.03	17-Mar-52						15000				
1952	3	1952.03	18-Mar-52						14800				
1952	3	1952.03	19-Mar-52						15000				
1952	3	1952.03	20-Mar-52						16400				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1952	3	1952.03	21-Mar-52						17700				
1952	3	1952.03	22-Mar-52						18700				
1952	3	1952.03	23-Mar-52						18300				
1952	3	1952.03	24-Mar-52						17100				
1952	3	1952.03	25-Mar-52						16800				
1952	3	1952.03	26-Mar-52						17200				
1952	3	1952.03	27-Mar-52						18400				
1952	3	1952.03	28-Mar-52						19600				
1952	3	1952.03	29-Mar-52						20500				
1952	3	1952.03	30-Mar-52						20900				
1952	3	1952.03	31-Mar-52						20800				
1952	4	1952.04	1-Apr-52						20600				
1952	4	1952.04	2-Apr-52						20300				
1952	4	1952.04	3-Apr-52						20100				
1952	4	1952.04	4-Apr-52						20000				
1952	4	1952.04	5-Apr-52						19900				
1952	4	1952.04	6-Apr-52						19700				
1952	4	1952.04	7-Apr-52						19900				
1952	4	1952.04	8-Apr-52						20100				
1952	4	1952.04	9-Apr-52						20600				
1952	4	1952.04	10-Apr-52						21100				
1952	4	1952.04	11-Apr-52						21300				
1952	4	1952.04	12-Apr-52						21300				
1952	4	1952.04	13-Apr-52						20700				
1952	4	1952.04	14-Apr-52						20000				
1952	4	1952.04	15-Apr-52						19800				
1952	4	1952.04	16-Apr-52						19900				
1952	4	1952.04	17-Apr-52						20000				
1952	4	1952.04	18-Apr-52						20000				
1952	4	1952.04	19-Apr-52						19600				
1952	4	1952.04	20-Apr-52						19000				
1952	4	1952.04	21-Apr-52						18600				
1952	4	1952.04	22-Apr-52						18600				
1952	4	1952.04	23-Apr-52						18700				
1952	4	1952.04	24-Apr-52						18900				
1952	4	1952.04	25-Apr-52						19200				
1952	4	1952.04	26-Apr-52						19800				
1952	4	1952.04	27-Apr-52						20500				
1952	4	1952.04	28-Apr-52						21400				
1952	4	1952.04	29-Apr-52						22700				
1952	4	1952.04	30-Apr-52						23600				
1952	5	1952.05	1-May-52						24100				
1952	5	1952.05	2-May-52						24400				
1952	5	1952.05	3-May-52						23900				
1952	5	1952.05	4-May-52						23800				
1952	5	1952.05	5-May-52						24100				
1952	5	1952.05	6-May-52						24600				
1952	5	1952.05	7-May-52						24700				
1952	5	1952.05	8-May-52						24800				
1952	5	1952.05	9-May-52						24800				
1952	5	1952.05	10-May-52						24700				
1952	5	1952.05	11-May-52						24100				
1952	5	1952.05	12-May-52						23800				
1952	5	1952.05	13-May-52						24100				
1952	5	1952.05	14-May-52						25400				
1952	5	1952.05	15-May-52						27200				
1952	5	1952.05	16-May-52						28800				
1952	5	1952.05	17-May-52						29800				
1952	5	1952.05	18-May-52						29900				
1952	5	1952.05	19-May-52						30200				
1952	5	1952.05	20-May-52						30600				
1952	5	1952.05	21-May-52						31200				
1952	5	1952.05	22-May-52						31600				
1952	5	1952.05	23-May-52						31600				
1952	5	1952.05	24-May-52						30200				
1952	5	1952.05	25-May-52						29300				
1952	5	1952.05	26-May-52						28800				
1952	5	1952.05	27-May-52						29000				
1952	5	1952.05	28-May-52						29400				
1952	5	1952.05	29-May-52						31600				
1952	5	1952.05	30-May-52						33200				
1952	5	1952.05	31-May-52						33100				
1952	6	1952.06	1-Jun-52						33700				
1952	6	1952.06	2-Jun-52						33600				
1952	6	1952.06	3-Jun-52						33000				
1952	6	1952.06	4-Jun-52						32700				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1952	6	1952.06	5-Jun-52						32000				
1952	6	1952.06	6-Jun-52						31600				
1952	6	1952.06	7-Jun-52						31600				
1952	6	1952.06	8-Jun-52						31600				
1952	6	1952.06	9-Jun-52						30200				
1952	6	1952.06	10-Jun-52						30200				
1952	6	1952.06	11-Jun-52						29000				
1952	6	1952.06	12-Jun-52						26700				
1952	6	1952.06	13-Jun-52						24100				
1952	6	1952.06	14-Jun-52						21900				
1952	6	1952.06	15-Jun-52						20600				
1952	6	1952.06	16-Jun-52						20000				
1952	6	1952.06	17-Jun-52						19500				
1952	6	1952.06	18-Jun-52						19300				
1952	6	1952.06	19-Jun-52						19300				
1952	6	1952.06	20-Jun-52						19400				
1952	6	1952.06	21-Jun-52						19500				
1952	6	1952.06	22-Jun-52						19400				
1952	6	1952.06	23-Jun-52						19300				
1952	6	1952.06	24-Jun-52						18600				
1952	6	1952.06	25-Jun-52						17300				
1952	6	1952.06	26-Jun-52						15700				
1952	6	1952.06	27-Jun-52						14200				
1952	6	1952.06	28-Jun-52						13100				
1952	6	1952.06	29-Jun-52						12100				
1952	6	1952.06	30-Jun-52						11000				
1952	7	1952.07	1-Jul-52						9170				
1952	7	1952.07	2-Jul-52						7270				
1952	7	1952.07	3-Jul-52						6180				
1952	7	1952.07	4-Jul-52						5670				
1952	7	1952.07	5-Jul-52						5250				
1952	7	1952.07	6-Jul-52						4800				
1952	7	1952.07	7-Jul-52						4710				
1952	7	1952.07	8-Jul-52						5110				
1952	7	1952.07	9-Jul-52						4570				
1952	7	1952.07	10-Jul-52						4340				
1952	7	1952.07	11-Jul-52						4170				
1952	7	1952.07	12-Jul-52						3860				
1952	7	1952.07	13-Jul-52						3710				
1952	7	1952.07	14-Jul-52						3590				
1952	7	1952.07	15-Jul-52						3490				
1952	7	1952.07	16-Jul-52						3120				
1952	7	1952.07	17-Jul-52						2850				
1952	7	1952.07	18-Jul-52						2610				
1952	7	1952.07	19-Jul-52						2460				
1952	7	1952.07	20-Jul-52						2280				
1952	7	1952.07	21-Jul-52						2190				
1952	7	1952.07	22-Jul-52						2110				
1952	7	1952.07	23-Jul-52						1990				
1952	7	1952.07	24-Jul-52						1900				
1952	7	1952.07	25-Jul-52						1760				
1952	7	1952.07	26-Jul-52						1710				
1952	7	1952.07	27-Jul-52						1640				
1952	7	1952.07	28-Jul-52						1550				
1952	7	1952.07	29-Jul-52						1520				
1952	7	1952.07	30-Jul-52						1440				
1952	7	1952.07	31-Jul-52						1420				
1952	8	1952.08	1-Aug-52						1600				
1952	8	1952.08	2-Aug-52						1510				
1952	8	1952.08	3-Aug-52						1420				
1952	8	1952.08	4-Aug-52						1440				
1952	8	1952.08	5-Aug-52						1390				
1952	8	1952.08	6-Aug-52						1290				
1952	8	1952.08	7-Aug-52						1300				
1952	8	1952.08	8-Aug-52						1350				
1952	8	1952.08	9-Aug-52						1320				
1952	8	1952.08	10-Aug-52						1350				
1952	8	1952.08	11-Aug-52						1360				
1952	8	1952.08	12-Aug-52						1340				
1952	8	1952.08	13-Aug-52						1350				
1952	8	1952.08	14-Aug-52						1360				
1952	8	1952.08	15-Aug-52						1390				
1952	8	1952.08	16-Aug-52						1400				
1952	8	1952.08	17-Aug-52						1440				
1952	8	1952.08	18-Aug-52						1440				
1952	8	1952.08	19-Aug-52						1380				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1952	8	1952.08	20-Aug-52						1320				
1952	8	1952.08	21-Aug-52						1260				
1952	8	1952.08	22-Aug-52						1250				
1952	8	1952.08	23-Aug-52						1270				
1952	8	1952.08	24-Aug-52						1270				
1952	8	1952.08	25-Aug-52						1320				
1952	8	1952.08	26-Aug-52						1270				
1952	8	1952.08	27-Aug-52						1270				
1952	8	1952.08	28-Aug-52						1240				
1952	8	1952.08	29-Aug-52						1320				
1952	8	1952.08	30-Aug-52						1360				
1952	8	1952.08	31-Aug-52						1430				
1952	9	1952.09	1-Sep-52						1520				
1952	9	1952.09	2-Sep-52						1490				
1952	9	1952.09	3-Sep-52						1380				
1952	9	1952.09	4-Sep-52						1330				
1952	9	1952.09	5-Sep-52						1300				
1952	9	1952.09	6-Sep-52						1290				
1952	9	1952.09	7-Sep-52						1390				
1952	9	1952.09	8-Sep-52						1510				
1952	9	1952.09	9-Sep-52						1560				
1952	9	1952.09	10-Sep-52						1480				
1952	9	1952.09	11-Sep-52						1560				
1952	9	1952.09	12-Sep-52						1550				
1952	9	1952.09	13-Sep-52						1620				
1952	9	1952.09	14-Sep-52						1720				
1952	9	1952.09	15-Sep-52						1970				
1952	9	1952.09	16-Sep-52						1990				
1952	9	1952.09	17-Sep-52						1970				
1952	9	1952.09	18-Sep-52						1970				
1952	9	1952.09	19-Sep-52						1880				
1952	9	1952.09	20-Sep-52						1790				
1952	9	1952.09	21-Sep-52						1850				
1952	9	1952.09	22-Sep-52						1880				
1952	9	1952.09	23-Sep-52						1690				
1952	9	1952.09	24-Sep-52						1650				
1952	9	1952.09	25-Sep-52						1600				
1952	9	1952.09	26-Sep-52						1550				
1952	9	1952.09	27-Sep-52						1550				
1952	9	1952.09	28-Sep-52						1560				
1952	9	1952.09	29-Sep-52						1520				
1952	9	1952.09	30-Sep-52						1480				
1952	10	1952.10	1-Oct-52						1490				
1952	10	1952.10	2-Oct-52						1490				
1952	10	1952.10	3-Oct-52						1510				
1952	10	1952.10	4-Oct-52						1470				
1952	10	1952.10	5-Oct-52						1510				
1952	10	1952.10	6-Oct-52						1570				
1952	10	1952.10	7-Oct-52						1590				
1952	10	1952.10	8-Oct-52						1700				
1952	10	1952.10	9-Oct-52						1920				
1952	10	1952.10	10-Oct-52						2110				
1952	10	1952.10	11-Oct-52						2080				
1952	10	1952.10	12-Oct-52						2140				
1952	10	1952.10	13-Oct-52						2120				
1952	10	1952.10	14-Oct-52						2150				
1952	10	1952.10	15-Oct-52						2130				
1952	10	1952.10	16-Oct-52						2280				
1952	10	1952.10	17-Oct-52						2340				
1952	10	1952.10	18-Oct-52						2160				
1952	10	1952.10	19-Oct-52						2040				
1952	10	1952.10	20-Oct-52						1920				
1952	10	1952.10	21-Oct-52						1850				
1952	10	1952.10	22-Oct-52						1850				
1952	10	1952.10	23-Oct-52						1820				
1952	10	1952.10	24-Oct-52						1830				
1952	10	1952.10	25-Oct-52						1830				
1952	10	1952.10	26-Oct-52						1860				
1952	10	1952.10	27-Oct-52						1850				
1952	10	1952.10	28-Oct-52						1850				
1952	10	1952.10	29-Oct-52						1820				
1952	10	1952.10	30-Oct-52						1800				
1952	10	1952.10	31-Oct-52						1760				
1952	11	1952.11	1-Nov-52						1760				
1952	11	1952.11	2-Nov-52						1750				
1952	11	1952.11	3-Nov-52						1710				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1952	11	1952.11	4-Nov-52						1700				
1952	11	1952.11	5-Nov-52						1700				
1952	11	1952.11	6-Nov-52						1700				
1952	11	1952.11	7-Nov-52						1700				
1952	11	1952.11	8-Nov-52						1670				
1952	11	1952.11	9-Nov-52						1670				
1952	11	1952.11	10-Nov-52						1690				
1952	11	1952.11	11-Nov-52						1780				
1952	11	1952.11	12-Nov-52						1820				
1952	11	1952.11	13-Nov-52						1830				
1952	11	1952.11	14-Nov-52						1880				
1952	11	1952.11	15-Nov-52						1940				
1952	11	1952.11	16-Nov-52						2000				
1952	11	1952.11	17-Nov-52						2100				
1952	11	1952.11	18-Nov-52						2430				
1952	11	1952.11	19-Nov-52						2580				
1952	11	1952.11	20-Nov-52						2690				
1952	11	1952.11	21-Nov-52						2780				
1952	11	1952.11	22-Nov-52						2800				
1952	11	1952.11	23-Nov-52						2800				
1952	11	1952.11	24-Nov-52						2780				
1952	11	1952.11	25-Nov-52						2780				
1952	11	1952.11	26-Nov-52						2750				
1952	11	1952.11	27-Nov-52						2680				
1952	11	1952.11	28-Nov-52						2620				
1952	11	1952.11	29-Nov-52						2570				
1952	11	1952.11	30-Nov-52						2620				
1952	12	1952.12	1-Dec-52						2620				
1952	12	1952.12	2-Dec-52						2680				
1952	12	1952.12	3-Dec-52						2780				
1952	12	1952.12	4-Dec-52						2760				
1952	12	1952.12	5-Dec-52						2770				
1952	12	1952.12	6-Dec-52						2790				
1952	12	1952.12	7-Dec-52						2830				
1952	12	1952.12	8-Dec-52						2950				
1952	12	1952.12	9-Dec-52						3240				
1952	12	1952.12	10-Dec-52						3260				
1952	12	1952.12	11-Dec-52						3500				
1952	12	1952.12	12-Dec-52						3520				
1952	12	1952.12	13-Dec-52						3540				
1952	12	1952.12	14-Dec-52						3550				
1952	12	1952.12	15-Dec-52						3460				
1952	12	1952.12	16-Dec-52						3310				
1952	12	1952.12	17-Dec-52						3400				
1952	12	1952.12	18-Dec-52						3430				
1952	12	1952.12	19-Dec-52						3520				
1952	12	1952.12	20-Dec-52						3700				
1952	12	1952.12	21-Dec-52						3990				
1952	12	1952.12	22-Dec-52						4190				
1952	12	1952.12	23-Dec-52						4250				
1952	12	1952.12	24-Dec-52						4480				
1952	12	1952.12	25-Dec-52						4560				
1952	12	1952.12	26-Dec-52						4590				
1952	12	1952.12	27-Dec-52						4680				
1952	12	1952.12	28-Dec-52						4760				
1952	12	1952.12	29-Dec-52						4640				
1952	12	1952.12	30-Dec-52						4750				
1952	12	1952.12	31-Dec-52						5080				
1953	1	1953.01	1-Jan-53						6040				
1953	1	1953.01	2-Jan-53						5560				
1953	1	1953.01	3-Jan-53						5240				
1953	1	1953.01	4-Jan-53						5670				
1953	1	1953.01	5-Jan-53						5660				
1953	1	1953.01	6-Jan-53						5450				
1953	1	1953.01	7-Jan-53						5300				
1953	1	1953.01	8-Jan-53						5280				
1953	1	1953.01	9-Jan-53						5640				
1953	1	1953.01	10-Jan-53						5660				
1953	1	1953.01	11-Jan-53						5610				
1953	1	1953.01	12-Jan-53						5570				
1953	1	1953.01	13-Jan-53						5570				
1953	1	1953.01	14-Jan-53						5600				
1953	1	1953.01	15-Jan-53						5880				
1953	1	1953.01	16-Jan-53						6460				
1953	1	1953.01	17-Jan-53						6220				
1953	1	1953.01	18-Jan-53						6230				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1953	1	1953.01	19-Jan-53						6560				
1953	1	1953.01	20-Jan-53						6740				
1953	1	1953.01	21-Jan-53						6620				
1953	1	1953.01	22-Jan-53						7120				
1953	1	1953.01	23-Jan-53						6740				
1953	1	1953.01	24-Jan-53						6460				
1953	1	1953.01	25-Jan-53						6330				
1953	1	1953.01	26-Jan-53						6210				
1953	1	1953.01	27-Jan-53						6040				
1953	1	1953.01	28-Jan-53						5880				
1953	1	1953.01	29-Jan-53						5780				
1953	1	1953.01	30-Jan-53						5670				
1953	1	1953.01	31-Jan-53						5580				
1953	2	1953.02	1-Feb-53						5510				
1953	2	1953.02	2-Feb-53						5490				
1953	2	1953.02	3-Feb-53						5480				
1953	2	1953.02	4-Feb-53						5500				
1953	2	1953.02	5-Feb-53						5490				
1953	2	1953.02	6-Feb-53						5480				
1953	2	1953.02	7-Feb-53						5380				
1953	2	1953.02	8-Feb-53						5020				
1953	2	1953.02	9-Feb-53						4470				
1953	2	1953.02	10-Feb-53						4140				
1953	2	1953.02	11-Feb-53						4060				
1953	2	1953.02	12-Feb-53						3850				
1953	2	1953.02	13-Feb-53						3440				
1953	2	1953.02	14-Feb-53						3100				
1953	2	1953.02	15-Feb-53						2800				
1953	2	1953.02	16-Feb-53						2600				
1953	2	1953.02	17-Feb-53						2650				
1953	2	1953.02	18-Feb-53						2650				
1953	2	1953.02	19-Feb-53						2600				
1953	2	1953.02	20-Feb-53						2870				
1953	2	1953.02	21-Feb-53						2840				
1953	2	1953.02	22-Feb-53						2730				
1953	2	1953.02	23-Feb-53						2640				
1953	2	1953.02	24-Feb-53						2680				
1953	2	1953.02	25-Feb-53						2540				
1953	2	1953.02	26-Feb-53						2340				
1953	2	1953.02	27-Feb-53						2300				
1953	2	1953.02	28-Feb-53						2210				
1953	3	1953.03	1-Mar-53						1780				
1953	3	1953.03	2-Mar-53						1560				
1953	3	1953.03	3-Mar-53						1400				
1953	3	1953.03	4-Mar-53						1390				
1953	3	1953.03	5-Mar-53						1340				
1953	3	1953.03	6-Mar-53						1250				
1953	3	1953.03	7-Mar-53						1030				
1953	3	1953.03	8-Mar-53						944				
1953	3	1953.03	9-Mar-53						905				
1953	3	1953.03	10-Mar-53						856				
1953	3	1953.03	11-Mar-53						1000				
1953	3	1953.03	12-Mar-53						1120				
1953	3	1953.03	13-Mar-53						1150				
1953	3	1953.03	14-Mar-53						1220				
1953	3	1953.03	15-Mar-53						1210				
1953	3	1953.03	16-Mar-53						1210				
1953	3	1953.03	17-Mar-53						1190				
1953	3	1953.03	18-Mar-53						1130				
1953	3	1953.03	19-Mar-53						1120				
1953	3	1953.03	20-Mar-53						1370				
1953	3	1953.03	21-Mar-53						1540				
1953	3	1953.03	22-Mar-53						1470				
1953	3	1953.03	23-Mar-53						1370				
1953	3	1953.03	24-Mar-53						1210				
1953	3	1953.03	25-Mar-53						1060				
1953	3	1953.03	26-Mar-53						1040				
1953	3	1953.03	27-Mar-53						938				
1953	3	1953.03	28-Mar-53						905				
1953	3	1953.03	29-Mar-53						844				
1953	3	1953.03	30-Mar-53						785				
1953	3	1953.03	31-Mar-53						700				
1953	4	1953.04	1-Apr-53						690				
1953	4	1953.04	2-Apr-53						650				
1953	4	1953.04	3-Apr-53						650				
1953	4	1953.04	4-Apr-53						710				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1953	4	1953.04	5-Apr-53						817				
1953	4	1953.04	6-Apr-53						844				
1953	4	1953.04	7-Apr-53						725				
1953	4	1953.04	8-Apr-53						668				
1953	4	1953.04	9-Apr-53						628				
1953	4	1953.04	10-Apr-53						659				
1953	4	1953.04	11-Apr-53						822				
1953	4	1953.04	12-Apr-53						1070				
1953	4	1953.04	13-Apr-53						1070				
1953	4	1953.04	14-Apr-53						974				
1953	4	1953.04	15-Apr-53						884				
1953	4	1953.04	16-Apr-53						812				
1953	4	1953.04	17-Apr-53						806				
1953	4	1953.04	18-Apr-53						818				
1953	4	1953.04	19-Apr-53						854				
1953	4	1953.04	20-Apr-53						986				
1953	4	1953.04	21-Apr-53						1110				
1953	4	1953.04	22-Apr-53						1660				
1953	4	1953.04	23-Apr-53						1540				
1953	4	1953.04	24-Apr-53						1210				
1953	4	1953.04	25-Apr-53						1020				
1953	4	1953.04	26-Apr-53						980				
1953	4	1953.04	27-Apr-53						1710				
1953	4	1953.04	28-Apr-53						4520				
1953	4	1953.04	29-Apr-53						7040				
1953	4	1953.04	30-Apr-53						8670				
1953	5	1953.05	1-May-53						7700				
1953	5	1953.05	2-May-53						6430				
1953	5	1953.05	3-May-53						5580				
1953	5	1953.05	4-May-53						4930				
1953	5	1953.05	5-May-53						4360				
1953	5	1953.05	6-May-53						4090				
1953	5	1953.05	7-May-53						4010				
1953	5	1953.05	8-May-53						3660				
1953	5	1953.05	9-May-53						3330				
1953	5	1953.05	10-May-53						3430				
1953	5	1953.05	11-May-53						3270				
1953	5	1953.05	12-May-53						2640				
1953	5	1953.05	13-May-53						1740				
1953	5	1953.05	14-May-53						1490				
1953	5	1953.05	15-May-53						1400				
1953	5	1953.05	16-May-53						1380				
1953	5	1953.05	17-May-53						1660				
1953	5	1953.05	18-May-53						2060				
1953	5	1953.05	19-May-53						2050				
1953	5	1953.05	20-May-53						1860				
1953	5	1953.05	21-May-53						2100				
1953	5	1953.05	22-May-53						3040				
1953	5	1953.05	23-May-53						3040				
1953	5	1953.05	24-May-53						2570				
1953	5	1953.05	25-May-53						2690				
1953	5	1953.05	26-May-53						2560				
1953	5	1953.05	27-May-53						2370				
1953	5	1953.05	28-May-53						2410				
1953	5	1953.05	29-May-53						2270				
1953	5	1953.05	30-May-53						2280				
1953	5	1953.05	31-May-53						2440				
1953	6	1953.06	1-Jun-53						2700				
1953	6	1953.06	2-Jun-53						3460				
1953	6	1953.06	3-Jun-53						3640				
1953	6	1953.06	4-Jun-53						3400				
1953	6	1953.06	5-Jun-53						3190				
1953	6	1953.06	6-Jun-53						3320				
1953	6	1953.06	7-Jun-53						3940				
1953	6	1953.06	8-Jun-53						5080				
1953	6	1953.06	9-Jun-53						5300				
1953	6	1953.06	10-Jun-53						4660				
1953	6	1953.06	11-Jun-53						4340				
1953	6	1953.06	12-Jun-53						4110				
1953	6	1953.06	13-Jun-53						3800				
1953	6	1953.06	14-Jun-53						4300				
1953	6	1953.06	15-Jun-53						4200				
1953	6	1953.06	16-Jun-53						4210				
1953	6	1953.06	17-Jun-53						4310				
1953	6	1953.06	18-Jun-53						4200				
1953	6	1953.06	19-Jun-53						4430				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1953	6	1953.06	20-Jun-53						6910				
1953	6	1953.06	21-Jun-53						9450				
1953	6	1953.06	22-Jun-53						9880				
1953	6	1953.06	23-Jun-53						8520				
1953	6	1953.06	24-Jun-53						5420				
1953	6	1953.06	25-Jun-53						7370				
1953	6	1953.06	26-Jun-53						6400				
1953	6	1953.06	27-Jun-53						5360				
1953	6	1953.06	28-Jun-53						4350				
1953	6	1953.06	29-Jun-53						3850				
1953	6	1953.06	30-Jun-53						3330				
1953	7	1953.07	1-Jul-53						3600				
1953	7	1953.07	2-Jul-53						3800				
1953	7	1953.07	3-Jul-53						3800				
1953	7	1953.07	4-Jul-53						3480				
1953	7	1953.07	5-Jul-53						3420				
1953	7	1953.07	6-Jul-53						2750				
1953	7	1953.07	7-Jul-53						2510				
1953	7	1953.07	8-Jul-53						2390				
1953	7	1953.07	9-Jul-53						2390				
1953	7	1953.07	10-Jul-53						2290				
1953	7	1953.07	11-Jul-53						2090				
1953	7	1953.07	12-Jul-53						1830				
1953	7	1953.07	13-Jul-53						1620				
1953	7	1953.07	14-Jul-53						1220				
1953	7	1953.07	15-Jul-53						990				
1953	7	1953.07	16-Jul-53						886				
1953	7	1953.07	17-Jul-53						808				
1953	7	1953.07	18-Jul-53						786				
1953	7	1953.07	19-Jul-53						814				
1953	7	1953.07	20-Jul-53						874				
1953	7	1953.07	21-Jul-53						792				
1953	7	1953.07	22-Jul-53						720				
1953	7	1953.07	23-Jul-53						670				
1953	7	1953.07	24-Jul-53						650				
1953	7	1953.07	25-Jul-53						650				
1953	7	1953.07	26-Jul-53						635				
1953	7	1953.07	27-Jul-53						690				
1953	7	1953.07	28-Jul-53						630				
1953	7	1953.07	29-Jul-53						620				
1953	7	1953.07	30-Jul-53						655				
1953	7	1953.07	31-Jul-53						670				
1953	8	1953.08	1-Aug-53						630				
1953	8	1953.08	2-Aug-53						690				
1953	8	1953.08	3-Aug-53						814				
1953	8	1953.08	4-Aug-53						798				
1953	8	1953.08	5-Aug-53						740				
1953	8	1953.08	6-Aug-53						705				
1953	8	1953.08	7-Aug-53						675				
1953	8	1953.08	8-Aug-53						755				
1953	8	1953.08	9-Aug-53						730				
1953	8	1953.08	10-Aug-53						803				
1953	8	1953.08	11-Aug-53						750				
1953	8	1953.08	12-Aug-53						665				
1953	8	1953.08	13-Aug-53						665				
1953	8	1953.08	14-Aug-53						665				
1953	8	1953.08	15-Aug-53						670				
1953	8	1953.08	16-Aug-53						712				
1953	8	1953.08	17-Aug-53						762				
1953	8	1953.08	18-Aug-53						718				
1953	8	1953.08	19-Aug-53						665				
1953	8	1953.08	20-Aug-53						615				
1953	8	1953.08	21-Aug-53						660				
1953	8	1953.08	22-Aug-53						746				
1953	8	1953.08	23-Aug-53						817				
1953	8	1953.08	24-Aug-53						874				
1953	8	1953.08	25-Aug-53						806				
1953	8	1953.08	26-Aug-53						784				
1953	8	1953.08	27-Aug-53						822				
1953	8	1953.08	28-Aug-53						734				
1953	8	1953.08	29-Aug-53						756				
1953	8	1953.08	30-Aug-53						910				
1953	8	1953.08	31-Aug-53						1040				
1953	9	1953.09	1-Sep-53						1070				
1953	9	1953.09	2-Sep-53						994				
1953	9	1953.09	3-Sep-53						904				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1953	9	1953.09	4-Sep-53						898				
1953	9	1953.09	5-Sep-53						958				
1953	9	1953.09	6-Sep-53						970				
1953	9	1953.09	7-Sep-53						970				
1953	9	1953.09	8-Sep-53						958				
1953	9	1953.09	9-Sep-53						904				
1953	9	1953.09	10-Sep-53						898				
1953	9	1953.09	11-Sep-53						898				
1953	9	1953.09	12-Sep-53						934				
1953	9	1953.09	13-Sep-53						970				
1953	9	1953.09	14-Sep-53						1040				
1953	9	1953.09	15-Sep-53						988				
1953	9	1953.09	16-Sep-53						916				
1953	9	1953.09	17-Sep-53						934				
1953	9	1953.09	18-Sep-53						1040				
1953	9	1953.09	19-Sep-53						1110				
1953	9	1953.09	20-Sep-53						1150				
1953	9	1953.09	21-Sep-53						1290				
1953	9	1953.09	22-Sep-53						1360				
1953	9	1953.09	23-Sep-53						1300				
1953	9	1953.09	24-Sep-53						1230				
1953	9	1953.09	25-Sep-53						1260				
1953	9	1953.09	26-Sep-53						1320				
1953	9	1953.09	27-Sep-53						1450				
1953	9	1953.09	28-Sep-53						1460				
1953	9	1953.09	29-Sep-53						1370				
1953	9	1953.09	30-Sep-53						1240				
1953	10	1953.10	1-Oct-53						1260				
1953	10	1953.10	2-Oct-53						1290				
1953	10	1953.10	3-Oct-53						1290				
1953	10	1953.10	4-Oct-53						1490				
1953	10	1953.10	5-Oct-53						1500				
1953	10	1953.10	6-Oct-53						1390				
1953	10	1953.10	7-Oct-53						1460				
1953	10	1953.10	8-Oct-53						1620				
1953	10	1953.10	9-Oct-53						1630				
1953	10	1953.10	10-Oct-53						1710				
1953	10	1953.10	11-Oct-53						1790				
1953	10	1953.10	12-Oct-53						1830				
1953	10	1953.10	13-Oct-53						1780				
1953	10	1953.10	14-Oct-53						1810				
1953	10	1953.10	15-Oct-53						2070				
1953	10	1953.10	16-Oct-53						2320				
1953	10	1953.10	17-Oct-53						2270				
1953	10	1953.10	18-Oct-53						1930				
1953	10	1953.10	19-Oct-53						1820				
1953	10	1953.10	20-Oct-53						1760				
1953	10	1953.10	21-Oct-53						1660				
1953	10	1953.10	22-Oct-53						1590				
1953	10	1953.10	23-Oct-53						1570				
1953	10	1953.10	24-Oct-53						1520				
1953	10	1953.10	25-Oct-53						1510				
1953	10	1953.10	26-Oct-53						1470				
1953	10	1953.10	27-Oct-53						1450				
1953	10	1953.10	28-Oct-53						1420				
1953	10	1953.10	29-Oct-53						1400				
1953	10	1953.10	30-Oct-53						1450				
1953	10	1953.10	31-Oct-53						1460				
1953	11	1953.11	1-Nov-53						1490				
1953	11	1953.11	2-Nov-53						1470				
1953	11	1953.11	3-Nov-53						1400				
1953	11	1953.11	4-Nov-53						1440				
1953	11	1953.11	5-Nov-53						1550				
1953	11	1953.11	6-Nov-53						1670				
1953	11	1953.11	7-Nov-53						1750				
1953	11	1953.11	8-Nov-53						1750				
1953	11	1953.11	9-Nov-53						1630				
1953	11	1953.11	10-Nov-53						1520				
1953	11	1953.11	11-Nov-53						1420				
1953	11	1953.11	12-Nov-53						1560				
1953	11	1953.11	13-Nov-53						1500				
1953	11	1953.11	14-Nov-53						1570				
1953	11	1953.11	15-Nov-53						1710				
1953	11	1953.11	16-Nov-53						1830				
1953	11	1953.11	17-Nov-53						1710				
1953	11	1953.11	18-Nov-53						1850				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1953	11	1953.11	19-Nov-53						1950				
1953	11	1953.11	20-Nov-53						1860				
1953	11	1953.11	21-Nov-53						1830				
1953	11	1953.11	22-Nov-53						1830				
1953	11	1953.11	23-Nov-53						1790				
1953	11	1953.11	24-Nov-53						1710				
1953	11	1953.11	25-Nov-53						1720				
1953	11	1953.11	26-Nov-53						1730				
1953	11	1953.11	27-Nov-53						1710				
1953	11	1953.11	28-Nov-53						1640				
1953	11	1953.11	29-Nov-53						1620				
1953	11	1953.11	30-Nov-53						1650				
1953	12	1953.12	1-Dec-53						1630				
1953	12	1953.12	2-Dec-53						1780				
1953	12	1953.12	3-Dec-53						1920				
1953	12	1953.12	4-Dec-53						1980				
1953	12	1953.12	5-Dec-53						2030				
1953	12	1953.12	6-Dec-53						2120				
1953	12	1953.12	7-Dec-53						2110				
1953	12	1953.12	8-Dec-53						1910				
1953	12	1953.12	9-Dec-53						1780				
1953	12	1953.12	10-Dec-53						1800				
1953	12	1953.12	11-Dec-53						1710				
1953	12	1953.12	12-Dec-53						1710				
1953	12	1953.12	13-Dec-53						1680				
1953	12	1953.12	14-Dec-53						1680				
1953	12	1953.12	15-Dec-53						1670				
1953	12	1953.12	16-Dec-53						1660				
1953	12	1953.12	17-Dec-53						1700				
1953	12	1953.12	18-Dec-53						1750				
1953	12	1953.12	19-Dec-53						1790				
1953	12	1953.12	20-Dec-53						1830				
1953	12	1953.12	21-Dec-53						1830				
1953	12	1953.12	22-Dec-53						1790				
1953	12	1953.12	23-Dec-53						1730				
1953	12	1953.12	24-Dec-53						1690				
1953	12	1953.12	25-Dec-53						1640				
1953	12	1953.12	26-Dec-53						1620				
1953	12	1953.12	27-Dec-53						1610				
1953	12	1953.12	28-Dec-53						1630				
1953	12	1953.12	29-Dec-53						1610				
1953	12	1953.12	30-Dec-53						1620				
1953	12	1953.12	31-Dec-53						1610				
1954	1	1954.01	1-Jan-54						1590				
1954	1	1954.01	2-Jan-54						1590				
1954	1	1954.01	3-Jan-54						1580				
1954	1	1954.01	4-Jan-54						1580				
1954	1	1954.01	5-Jan-54						1560				
1954	1	1954.01	6-Jan-54						1540				
1954	1	1954.01	7-Jan-54						1510				
1954	1	1954.01	8-Jan-54						1460				
1954	1	1954.01	9-Jan-54						1430				
1954	1	1954.01	10-Jan-54						1400				
1954	1	1954.01	11-Jan-54						1400				
1954	1	1954.01	12-Jan-54						1420				
1954	1	1954.01	13-Jan-54						1450				
1954	1	1954.01	14-Jan-54						1510				
1954	1	1954.01	15-Jan-54						1510				
1954	1	1954.01	16-Jan-54						1540				
1954	1	1954.01	17-Jan-54						1560				
1954	1	1954.01	18-Jan-54						1610				
1954	1	1954.01	19-Jan-54						1540				
1954	1	1954.01	20-Jan-54						1640				
1954	1	1954.01	21-Jan-54						1830				
1954	1	1954.01	22-Jan-54						1710				
1954	1	1954.01	23-Jan-54						1620				
1954	1	1954.01	24-Jan-54						1690				
1954	1	1954.01	25-Jan-54						1670				
1954	1	1954.01	26-Jan-54						1690				
1954	1	1954.01	27-Jan-54						1980				
1954	1	1954.01	28-Jan-54						2120				
1954	1	1954.01	29-Jan-54						2270				
1954	1	1954.01	30-Jan-54						2240				
1954	1	1954.01	31-Jan-54						2110				
1954	2	1954.02	1-Feb-54						1940				
1954	2	1954.02	2-Feb-54						1760				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1954	2	1954.02	3-Feb-54						1730				
1954	2	1954.02	4-Feb-54						1710				
1954	2	1954.02	5-Feb-54						1670				
1954	2	1954.02	6-Feb-54						1630				
1954	2	1954.02	7-Feb-54						1590				
1954	2	1954.02	8-Feb-54						1620				
1954	2	1954.02	9-Feb-54						1640				
1954	2	1954.02	10-Feb-54						1640				
1954	2	1954.02	11-Feb-54						1690				
1954	2	1954.02	12-Feb-54						1610				
1954	2	1954.02	13-Feb-54						1670				
1954	2	1954.02	14-Feb-54						1900				
1954	2	1954.02	15-Feb-54						2440				
1954	2	1954.02	16-Feb-54						2880				
1954	2	1954.02	17-Feb-54						3350				
1954	2	1954.02	18-Feb-54						3800				
1954	2	1954.02	19-Feb-54						3910				
1954	2	1954.02	20-Feb-54						3670				
1954	2	1954.02	21-Feb-54						3460				
1954	2	1954.02	22-Feb-54						3150				
1954	2	1954.02	23-Feb-54						2830				
1954	2	1954.02	24-Feb-54						2600				
1954	2	1954.02	25-Feb-54						2520				
1954	2	1954.02	26-Feb-54						2440				
1954	2	1954.02	27-Feb-54						2370				
1954	2	1954.02	28-Feb-54						2820				
1954	3	1954.03	1-Mar-54						2640				
1954	3	1954.03	2-Mar-54						2030				
1954	3	1954.03	3-Mar-54						1740				
1954	3	1954.03	4-Mar-54						1510				
1954	3	1954.03	5-Mar-54						1180				
1954	3	1954.03	6-Mar-54						946				
1954	3	1954.03	7-Mar-54						850				
1954	3	1954.03	8-Mar-54						850				
1954	3	1954.03	9-Mar-54						839				
1954	3	1954.03	10-Mar-54						862				
1954	3	1954.03	11-Mar-54						3340				
1954	3	1954.03	12-Mar-54						6040				
1954	3	1954.03	13-Mar-54						6300				
1954	3	1954.03	14-Mar-54						4520				
1954	3	1954.03	15-Mar-54						2880				
1954	3	1954.03	16-Mar-54						2800				
1954	3	1954.03	17-Mar-54						5100				
1954	3	1954.03	18-Mar-54						7690				
1954	3	1954.03	19-Mar-54						8160				
1954	3	1954.03	20-Mar-54						6880				
1954	3	1954.03	21-Mar-54						6230				
1954	3	1954.03	22-Mar-54						6530				
1954	3	1954.03	23-Mar-54						6910				
1954	3	1954.03	24-Mar-54						6950				
1954	3	1954.03	25-Mar-54						6730				
1954	3	1954.03	26-Mar-54						6480				
1954	3	1954.03	27-Mar-54						6290				
1954	3	1954.03	28-Mar-54						6140				
1954	3	1954.03	29-Mar-54						6000				
1954	3	1954.03	30-Mar-54						6090				
1954	3	1954.03	31-Mar-54						6730				
1954	4	1954.04	1-Apr-54						7210				
1954	4	1954.04	2-Apr-54						6970				
1954	4	1954.04	3-Apr-54						6740				
1954	4	1954.04	4-Apr-54						6600				
1954	4	1954.04	5-Apr-54						6210				
1954	4	1954.04	6-Apr-54						6110				
1954	4	1954.04	7-Apr-54						6150				
1954	4	1954.04	8-Apr-54						5910				
1954	4	1954.04	9-Apr-54						5490				
1954	4	1954.04	10-Apr-54						5080				
1954	4	1954.04	11-Apr-54						4780				
1954	4	1954.04	12-Apr-54						4470				
1954	4	1954.04	13-Apr-54						4110				
1954	4	1954.04	14-Apr-54						3580				
1954	4	1954.04	15-Apr-54						3410				
1954	4	1954.04	16-Apr-54						3600				
1954	4	1954.04	17-Apr-54						3810				
1954	4	1954.04	18-Apr-54						4240				
1954	4	1954.04	19-Apr-54						4590				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1954	4	1954.04	20-Apr-54						4410				
1954	4	1954.04	21-Apr-54						4380				
1954	4	1954.04	22-Apr-54						4150				
1954	4	1954.04	23-Apr-54						4160				
1954	4	1954.04	24-Apr-54						4600				
1954	4	1954.04	25-Apr-54						4750				
1954	4	1954.04	26-Apr-54						4560				
1954	4	1954.04	27-Apr-54						4470				
1954	4	1954.04	28-Apr-54						4940				
1954	4	1954.04	29-Apr-54						5780				
1954	4	1954.04	30-Apr-54						6510				
1954	5	1954.05	1-May-54						6370				
1954	5	1954.05	2-May-54						5840				
1954	5	1954.05	3-May-54						5210				
1954	5	1954.05	4-May-54						4330				
1954	5	1954.05	5-May-54						4330				
1954	5	1954.05	6-May-54						5060				
1954	5	1954.05	7-May-54						5910				
1954	5	1954.05	8-May-54						6540				
1954	5	1954.05	9-May-54						6800				
1954	5	1954.05	10-May-54						8070				
1954	5	1954.05	11-May-54						9120				
1954	5	1954.05	12-May-54						9700				
1954	5	1954.05	13-May-54						9260				
1954	5	1954.05	14-May-54						9370				
1954	5	1954.05	15-May-54						8810				
1954	5	1954.05	16-May-54						8060				
1954	5	1954.05	17-May-54						7900				
1954	5	1954.05	18-May-54						7880				
1954	5	1954.05	19-May-54						8080				
1954	5	1954.05	20-May-54						9430				
1954	5	1954.05	21-May-54						9920				
1954	5	1954.05	22-May-54						9770				
1954	5	1954.05	23-May-54						9500				
1954	5	1954.05	24-May-54						8300				
1954	5	1954.05	25-May-54						5930				
1954	5	1954.05	26-May-54						4340				
1954	5	1954.05	27-May-54						3580				
1954	5	1954.05	28-May-54						3200				
1954	5	1954.05	29-May-54						2800				
1954	5	1954.05	30-May-54						2500				
1954	5	1954.05	31-May-54						2280				
1954	6	1954.06	1-Jun-54						2050				
1954	6	1954.06	2-Jun-54						1930				
1954	6	1954.06	3-Jun-54						1760				
1954	6	1954.06	4-Jun-54						1670				
1954	6	1954.06	5-Jun-54						1620				
1954	6	1954.06	6-Jun-54						1590				
1954	6	1954.06	7-Jun-54						1540				
1954	6	1954.06	8-Jun-54						1470				
1954	6	1954.06	9-Jun-54						1540				
1954	6	1954.06	10-Jun-54						1590				
1954	6	1954.06	11-Jun-54						1580				
1954	6	1954.06	12-Jun-54						1570				
1954	6	1954.06	13-Jun-54						1590				
1954	6	1954.06	14-Jun-54						1560				
1954	6	1954.06	15-Jun-54						1460				
1954	6	1954.06	16-Jun-54						1300				
1954	6	1954.06	17-Jun-54						1190				
1954	6	1954.06	18-Jun-54						1130				
1954	6	1954.06	19-Jun-54						1100				
1954	6	1954.06	20-Jun-54						1080				
1954	6	1954.06	21-Jun-54						1040				
1954	6	1954.06	22-Jun-54						922				
1954	6	1954.06	23-Jun-54						817				
1954	6	1954.06	24-Jun-54						746				
1954	6	1954.06	25-Jun-54						690				
1954	6	1954.06	26-Jun-54						740				
1954	6	1954.06	27-Jun-54						806				
1954	6	1954.06	28-Jun-54						898				
1954	6	1954.06	29-Jun-54						839				
1954	6	1954.06	30-Jun-54						756				
1954	7	1954.07	1-Jul-54						724				
1954	7	1954.07	2-Jul-54						729				
1954	7	1954.07	3-Jul-54						712				
1954	7	1954.07	4-Jul-54						756				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1954	7	1954.07	5-Jul-54						822				
1954	7	1954.07	6-Jul-54						812				
1954	7	1954.07	7-Jul-54						778				
1954	7	1954.07	8-Jul-54						635				
1954	7	1954.07	9-Jul-54						620				
1954	7	1954.07	10-Jul-54						696				
1954	7	1954.07	11-Jul-54						773				
1954	7	1954.07	12-Jul-54						795				
1954	7	1954.07	13-Jul-54						696				
1954	7	1954.07	14-Jul-54						575				
1954	7	1954.07	15-Jul-54						504				
1954	7	1954.07	16-Jul-54						494				
1954	7	1954.07	17-Jul-54						472				
1954	7	1954.07	18-Jul-54						463				
1954	7	1954.07	19-Jul-54						422				
1954	7	1954.07	20-Jul-54						368				
1954	7	1954.07	21-Jul-54						400				
1954	7	1954.07	22-Jul-54						352				
1954	7	1954.07	23-Jul-54						364				
1954	7	1954.07	24-Jul-54						414				
1954	7	1954.07	25-Jul-54						372				
1954	7	1954.07	26-Jul-54						388				
1954	7	1954.07	27-Jul-54						364				
1954	7	1954.07	28-Jul-54						354				
1954	7	1954.07	29-Jul-54						332				
1954	7	1954.07	30-Jul-54						310				
1954	7	1954.07	31-Jul-54						310				
1954	8	1954.08	1-Aug-54						328				
1954	8	1954.08	2-Aug-54						392				
1954	8	1954.08	3-Aug-54						380				
1954	8	1954.08	4-Aug-54						340				
1954	8	1954.08	5-Aug-54						348				
1954	8	1954.08	6-Aug-54						340				
1954	8	1954.08	7-Aug-54						316				
1954	8	1954.08	8-Aug-54						392				
1954	8	1954.08	9-Aug-54						499				
1954	8	1954.08	10-Aug-54						512				
1954	8	1954.08	11-Aug-54						445				
1954	8	1954.08	12-Aug-54						517				
1954	8	1954.08	13-Aug-54						504				
1954	8	1954.08	14-Aug-54						555				
1954	8	1954.08	15-Aug-54						635				
1954	8	1954.08	16-Aug-54						740				
1954	8	1954.08	17-Aug-54						675				
1954	8	1954.08	18-Aug-54						540				
1954	8	1954.08	19-Aug-54						490				
1954	8	1954.08	20-Aug-54						494				
1954	8	1954.08	21-Aug-54						535				
1954	8	1954.08	22-Aug-54						645				
1954	8	1954.08	23-Aug-54						734				
1954	8	1954.08	24-Aug-54						690				
1954	8	1954.08	25-Aug-54						615				
1954	8	1954.08	26-Aug-54						615				
1954	8	1954.08	27-Aug-54						675				
1954	8	1954.08	28-Aug-54						718				
1954	8	1954.08	29-Aug-54						768				
1954	8	1954.08	30-Aug-54						795				
1954	8	1954.08	31-Aug-54						707				
1954	9	1954.09	1-Sep-54						640				
1954	9	1954.09	2-Sep-54						595				
1954	9	1954.09	3-Sep-54						560				
1954	9	1954.09	4-Sep-54						575				
1954	9	1954.09	5-Sep-54						685				
1954	9	1954.09	6-Sep-54						768				
1954	9	1954.09	7-Sep-54						762				
1954	9	1954.09	8-Sep-54						734				
1954	9	1954.09	9-Sep-54						665				
1954	9	1954.09	10-Sep-54						707				
1954	9	1954.09	11-Sep-54						680				
1954	9	1954.09	12-Sep-54						751				
1954	9	1954.09	13-Sep-54						778				
1954	9	1954.09	14-Sep-54						734				
1954	9	1954.09	15-Sep-54						707				
1954	9	1954.09	16-Sep-54						680				
1954	9	1954.09	17-Sep-54						707				
1954	9	1954.09	18-Sep-54						784				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1954	9	1954.09 19-Sep-54							868				
1954	9	1954.09 20-Sep-54							862				
1954	9	1954.09 21-Sep-54							756				
1954	9	1954.09 22-Sep-54							702				
1954	9	1954.09 23-Sep-54							740				
1954	9	1954.09 24-Sep-54							806				
1954	9	1954.09 25-Sep-54							874				
1954	9	1954.09 26-Sep-54							982				
1954	9	1954.09 27-Sep-54							1000				
1954	9	1954.09 28-Sep-54							910				
1954	9	1954.09 29-Sep-54							800				
1954	9	1954.09 30-Sep-54							806				
1954	10	1954.10 1-Oct-54							773				
1954	10	1954.10 2-Oct-54							828				
1954	10	1954.10 3-Oct-54							868				
1954	10	1954.10 4-Oct-54							904				
1954	10	1954.10 5-Oct-54							839				
1954	10	1954.10 6-Oct-54							812				
1954	10	1954.10 7-Oct-54							795				
1954	10	1954.10 8-Oct-54							868				
1954	10	1954.10 9-Oct-54							874				
1954	10	1954.10 10-Oct-54							880				
1954	10	1954.10 11-Oct-54							898				
1954	10	1954.10 12-Oct-54							880				
1954	10	1954.10 13-Oct-54							828				
1954	10	1954.10 14-Oct-54							844				
1954	10	1954.10 15-Oct-54							892				
1954	10	1954.10 16-Oct-54							1080				
1954	10	1954.10 17-Oct-54							1310				
1954	10	1954.10 18-Oct-54							1190				
1954	10	1954.10 19-Oct-54							1110				
1954	10	1954.10 20-Oct-54							1140				
1954	10	1954.10 21-Oct-54							1290				
1954	10	1954.10 22-Oct-54							1350				
1954	10	1954.10 23-Oct-54							1300				
1954	10	1954.10 24-Oct-54							1240				
1954	10	1954.10 25-Oct-54							1160				
1954	10	1954.10 26-Oct-54							1070				
1954	10	1954.10 27-Oct-54							1160				
1954	10	1954.10 28-Oct-54							1250				
1954	10	1954.10 29-Oct-54							1260				
1954	10	1954.10 30-Oct-54							1310				
1954	10	1954.10 31-Oct-54							1320				
1954	11	1954.11 1-Nov-54							1210				
1954	11	1954.11 2-Nov-54							1110				
1954	11	1954.11 3-Nov-54							1220				
1954	11	1954.11 4-Nov-54							1290				
1954	11	1954.11 5-Nov-54							1300				
1954	11	1954.11 6-Nov-54							1310				
1954	11	1954.11 7-Nov-54							1300				
1954	11	1954.11 8-Nov-54							1200				
1954	11	1954.11 9-Nov-54							1190				
1954	11	1954.11 10-Nov-54							1320				
1954	11	1954.11 11-Nov-54							1340				
1954	11	1954.11 12-Nov-54							1390				
1954	11	1954.11 13-Nov-54							1360				
1954	11	1954.11 14-Nov-54							1370				
1954	11	1954.11 15-Nov-54							1340				
1954	11	1954.11 16-Nov-54							1370				
1954	11	1954.11 17-Nov-54							1550				
1954	11	1954.11 18-Nov-54							1540				
1954	11	1954.11 19-Nov-54							1520				
1954	11	1954.11 20-Nov-54							1520				
1954	11	1954.11 21-Nov-54							1570				
1954	11	1954.11 22-Nov-54							1460				
1954	11	1954.11 23-Nov-54							1420				
1954	11	1954.11 24-Nov-54							1540				
1954	11	1954.11 25-Nov-54							1630				
1954	11	1954.11 26-Nov-54							1630				
1954	11	1954.11 27-Nov-54							1450				
1954	11	1954.11 28-Nov-54							1400				
1954	11	1954.11 29-Nov-54							1400				
1954	11	1954.11 30-Nov-54							1320				
1954	12	1954.12 1-Dec-54							1420				
1954	12	1954.12 2-Dec-54							1470				
1954	12	1954.12 3-Dec-54							1520				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1954	12	1954.12	4-Dec-54						1620				
1954	12	1954.12	5-Dec-54						1870				
1954	12	1954.12	6-Dec-54						1750				
1954	12	1954.12	7-Dec-54						1540				
1954	12	1954.12	8-Dec-54						1600				
1954	12	1954.12	9-Dec-54						1760				
1954	12	1954.12	10-Dec-54						1920				
1954	12	1954.12	11-Dec-54						2270				
1954	12	1954.12	12-Dec-54						2350				
1954	12	1954.12	13-Dec-54						2190				
1954	12	1954.12	14-Dec-54						2030				
1954	12	1954.12	15-Dec-54						2090				
1954	12	1954.12	16-Dec-54						2120				
1954	12	1954.12	17-Dec-54						2320				
1954	12	1954.12	18-Dec-54						2360				
1954	12	1954.12	19-Dec-54						2030				
1954	12	1954.12	20-Dec-54						1840				
1954	12	1954.12	21-Dec-54						1810				
1954	12	1954.12	22-Dec-54						1780				
1954	12	1954.12	23-Dec-54						1750				
1954	12	1954.12	24-Dec-54						1710				
1954	12	1954.12	25-Dec-54						1670				
1954	12	1954.12	26-Dec-54						1610				
1954	12	1954.12	27-Dec-54						1490				
1954	12	1954.12	28-Dec-54						1520				
1954	12	1954.12	29-Dec-54						1590				
1954	12	1954.12	30-Dec-54						1670				
1954	12	1954.12	31-Dec-54						1560				
1955	1	1955.01	1-Jan-55					1710	1710				
1955	1	1955.01	2-Jan-55					2440	2440				
1955	1	1955.01	3-Jan-55					4020	4020				
1955	1	1955.01	4-Jan-55					3100	3100				
1955	1	1955.01	5-Jan-55					2970	2970				
1955	1	1955.01	6-Jan-55					2900	2900				
1955	1	1955.01	7-Jan-55					2840	2840				
1955	1	1955.01	8-Jan-55					2570	2570				
1955	1	1955.01	9-Jan-55					2160	2160				
1955	1	1955.01	10-Jan-55					2260	2260				
1955	1	1955.01	11-Jan-55					2520	2520				
1955	1	1955.01	12-Jan-55					2770	2770				
1955	1	1955.01	13-Jan-55					2670	2670				
1955	1	1955.01	14-Jan-55					2320	2320				
1955	1	1955.01	15-Jan-55					2230	2230				
1955	1	1955.01	16-Jan-55					2230	2230				
1955	1	1955.01	17-Jan-55					3400	3400				
1955	1	1955.01	18-Jan-55					4180	4180				
1955	1	1955.01	19-Jan-55					4120	4120				
1955	1	1955.01	20-Jan-55					5250	5250				
1955	1	1955.01	21-Jan-55					4550	4550				
1955	1	1955.01	22-Jan-55					4060	4060				
1955	1	1955.01	23-Jan-55					3750	3750				
1955	1	1955.01	24-Jan-55					3220	3220				
1955	1	1955.01	25-Jan-55					2770	2770				
1955	1	1955.01	26-Jan-55					2680	2680				
1955	1	1955.01	27-Jan-55					2580	2580				
1955	1	1955.01	28-Jan-55					2560	2560				
1955	1	1955.01	29-Jan-55					2440	2440				
1955	1	1955.01	30-Jan-55					2340	2340				
1955	1	1955.01	31-Jan-55					2310	2310				
1955	2	1955.02	1-Feb-55					2420	2420				
1955	2	1955.02	2-Feb-55					2220	2220				
1955	2	1955.02	3-Feb-55					2200	2200				
1955	2	1955.02	4-Feb-55					2170	2170				
1955	2	1955.02	5-Feb-55					2050	2050				
1955	2	1955.02	6-Feb-55					2030	2030				
1955	2	1955.02	7-Feb-55					1960	1960				
1955	2	1955.02	8-Feb-55					1950	1950				
1955	2	1955.02	9-Feb-55					2460	2460				
1955	2	1955.02	10-Feb-55					2620	2620				
1955	2	1955.02	11-Feb-55					2540	2540				
1955	2	1955.02	12-Feb-55					2510	2510				
1955	2	1955.02	13-Feb-55					2500	2500				
1955	2	1955.02	14-Feb-55					2390	2390				
1955	2	1955.02	15-Feb-55					2430	2430				
1955	2	1955.02	16-Feb-55					2600	2600				
1955	2	1955.02	17-Feb-55					2510	2510				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1955	2	1955.02	18-Feb-55					2520	2520				
1955	2	1955.02	19-Feb-55					2630	2630				
1955	2	1955.02	20-Feb-55					2860	2860				
1955	2	1955.02	21-Feb-55					2760	2760				
1955	2	1955.02	22-Feb-55					2680	2680				
1955	2	1955.02	23-Feb-55					2810	2810				
1955	2	1955.02	24-Feb-55					2770	2770				
1955	2	1955.02	25-Feb-55					2670	2670				
1955	2	1955.02	26-Feb-55					2450	2450				
1955	2	1955.02	27-Feb-55					2470	2470				
1955	2	1955.02	28-Feb-55					2450	2450				
1955	3	1955.03	1-Mar-55					2420	2420				
1955	3	1955.03	2-Mar-55					2690	2690				
1955	3	1955.03	3-Mar-55					2290	2290				
1955	3	1955.03	4-Mar-55					2030	2030				
1955	3	1955.03	5-Mar-55					1960	1960				
1955	3	1955.03	6-Mar-55					2150	2150				
1955	3	1955.03	7-Mar-55					2070	2070				
1955	3	1955.03	8-Mar-55					1930	1930				
1955	3	1955.03	9-Mar-55					1980	1980				
1955	3	1955.03	10-Mar-55					2030	2030				
1955	3	1955.03	11-Mar-55					2290	2290				
1955	3	1955.03	12-Mar-55					2200	2200				
1955	3	1955.03	13-Mar-55					2410	2410				
1955	3	1955.03	14-Mar-55					2030	2030				
1955	3	1955.03	15-Mar-55					1980	1980				
1955	3	1955.03	16-Mar-55					1880	1880				
1955	3	1955.03	17-Mar-55					1860	1860				
1955	3	1955.03	18-Mar-55					1690	1690				
1955	3	1955.03	19-Mar-55					1420	1420				
1955	3	1955.03	20-Mar-55					1280	1280				
1955	3	1955.03	21-Mar-55					1180	1180				
1955	3	1955.03	22-Mar-55					934	934				
1955	3	1955.03	23-Mar-55					828	828				
1955	3	1955.03	24-Mar-55					795	795				
1955	3	1955.03	25-Mar-55					740	740				
1955	3	1955.03	26-Mar-55					665	665				
1955	3	1955.03	27-Mar-55					635	635				
1955	3	1955.03	28-Mar-55					635	635				
1955	3	1955.03	29-Mar-55					530	530				
1955	3	1955.03	30-Mar-55					445	445				
1955	3	1955.03	31-Mar-55					414	414				
1955	4	1955.04	1-Apr-55					400	400				
1955	4	1955.04	2-Apr-55					472	472				
1955	4	1955.04	3-Apr-55					517	517				
1955	4	1955.04	4-Apr-55					565	565				
1955	4	1955.04	5-Apr-55					565	565				
1955	4	1955.04	6-Apr-55					600	600				
1955	4	1955.04	7-Apr-55					535	535				
1955	4	1955.04	8-Apr-55					512	512				
1955	4	1955.04	9-Apr-55					590	590				
1955	4	1955.04	10-Apr-55					729	729				
1955	4	1955.04	11-Apr-55					839	839				
1955	4	1955.04	12-Apr-55					756	756				
1955	4	1955.04	13-Apr-55					670	670				
1955	4	1955.04	14-Apr-55					605	605				
1955	4	1955.04	15-Apr-55					620	620				
1955	4	1955.04	16-Apr-55					560	560				
1955	4	1955.04	17-Apr-55					650	650				
1955	4	1955.04	18-Apr-55					886	886				
1955	4	1955.04	19-Apr-55					1070	1070				
1955	4	1955.04	20-Apr-55					1140	1140				
1955	4	1955.04	21-Apr-55					1240	1240				
1955	4	1955.04	22-Apr-55					1500	1500				
1955	4	1955.04	23-Apr-55					1720	1720				
1955	4	1955.04	24-Apr-55					1740	1740				
1955	4	1955.04	25-Apr-55					1560	1560				
1955	4	1955.04	26-Apr-55					1430	1430				
1955	4	1955.04	27-Apr-55					1320	1320				
1955	4	1955.04	28-Apr-55					1280	1280				
1955	4	1955.04	29-Apr-55					1270	1270				
1955	4	1955.04	30-Apr-55					1160	1160				
1955	5	1955.05	1-May-55					1150	1150				
1955	5	1955.05	2-May-55					1310	1310				
1955	5	1955.05	3-May-55					1330	1330				
1955	5	1955.05	4-May-55					1280	1280				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1955	5	1955.05	5-May-55					1190	1190				
1955	5	1955.05	6-May-55					1070	1070				
1955	5	1955.05	7-May-55					982	982				
1955	5	1955.05	8-May-55					1240	1240				
1955	5	1955.05	9-May-55					1410	1410				
1955	5	1955.05	10-May-55					1370	1370				
1955	5	1955.05	11-May-55					1170	1170				
1955	5	1955.05	12-May-55					982	982				
1955	5	1955.05	13-May-55					844	844				
1955	5	1955.05	14-May-55					762	762				
1955	5	1955.05	15-May-55					768	768				
1955	5	1955.05	16-May-55					736	736				
1955	5	1955.05	17-May-55					625	625				
1955	5	1955.05	18-May-55					522	522				
1955	5	1955.05	19-May-55					526	526				
1955	5	1955.05	20-May-55					517	517				
1955	5	1955.05	21-May-55					476	476				
1955	5	1955.05	22-May-55					550	550				
1955	5	1955.05	23-May-55					560	560				
1955	5	1955.05	24-May-55					535	535				
1955	5	1955.05	25-May-55					1200	1200				
1955	5	1955.05	26-May-55					2200	2200				
1955	5	1955.05	27-May-55					1580	1580				
1955	5	1955.05	28-May-55					1730	1730				
1955	5	1955.05	29-May-55					1740	1740				
1955	5	1955.05	30-May-55					2290	2290				
1955	5	1955.05	31-May-55					3020	3020				
1955	6	1955.06	1-Jun-55					3170	3170				
1955	6	1955.06	2-Jun-55					2680	2680				
1955	6	1955.06	3-Jun-55					1750	1750				
1955	6	1955.06	4-Jun-55					1420	1420				
1955	6	1955.06	5-Jun-55					1290	1290				
1955	6	1955.06	6-Jun-55					1630	1630				
1955	6	1955.06	7-Jun-55					2190	2190				
1955	6	1955.06	8-Jun-55					2700	2700				
1955	6	1955.06	9-Jun-55					2970	2970				
1955	6	1955.06	10-Jun-55					3050	3050				
1955	6	1955.06	11-Jun-55					2930	2930				
1955	6	1955.06	12-Jun-55					2770	2770				
1955	6	1955.06	13-Jun-55					2190	2190				
1955	6	1955.06	14-Jun-55					1760	1760				
1955	6	1955.06	15-Jun-55					1420	1420				
1955	6	1955.06	16-Jun-55					1160	1160				
1955	6	1955.06	17-Jun-55					1010	1010				
1955	6	1955.06	18-Jun-55					916	916				
1955	6	1955.06	19-Jun-55					916	916				
1955	6	1955.06	20-Jun-55					910	910				
1955	6	1955.06	21-Jun-55					795	795				
1955	6	1955.06	22-Jun-55					680	680				
1955	6	1955.06	23-Jun-55					620	620				
1955	6	1955.06	24-Jun-55					595	595				
1955	6	1955.06	25-Jun-55					650	650				
1955	6	1955.06	26-Jun-55					615	615				
1955	6	1955.06	27-Jun-55					605	605				
1955	6	1955.06	28-Jun-55					540	540				
1955	6	1955.06	29-Jun-55					481	481				
1955	6	1955.06	30-Jun-55					458	458				
1955	7	1955.07	1-Jul-55					432	432				
1955	7	1955.07	2-Jul-55					404	404				
1955	7	1955.07	3-Jul-55					472	472				
1955	7	1955.07	4-Jul-55					605	605				
1955	7	1955.07	5-Jul-55					645	645				
1955	7	1955.07	6-Jul-55					555	555				
1955	7	1955.07	7-Jul-55					499	499				
1955	7	1955.07	8-Jul-55					427	427				
1955	7	1955.07	9-Jul-55					414	414				
1955	7	1955.07	10-Jul-55					522	522				
1955	7	1955.07	11-Jul-55					540	540				
1955	7	1955.07	12-Jul-55					458	458				
1955	7	1955.07	13-Jul-55					400	400				
1955	7	1955.07	14-Jul-55					396	396				
1955	7	1955.07	15-Jul-55					340	340				
1955	7	1955.07	16-Jul-55					350	350				
1955	7	1955.07	17-Jul-55					384	384				
1955	7	1955.07	18-Jul-55					458	458				
1955	7	1955.07	19-Jul-55					422	422				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1955	7	1955.07	20-Jul-55					360	360				
1955	7	1955.07	21-Jul-55					340	340				
1955	7	1955.07	22-Jul-55					330	330				
1955	7	1955.07	23-Jul-55					330	330				
1955	7	1955.07	24-Jul-55					350	350				
1955	7	1955.07	25-Jul-55					392	392				
1955	7	1955.07	26-Jul-55					360	360				
1955	7	1955.07	27-Jul-55					360	360				
1955	7	1955.07	28-Jul-55					360	360				
1955	7	1955.07	29-Jul-55					340	340				
1955	7	1955.07	30-Jul-55					330	330				
1955	7	1955.07	31-Jul-55					330	330				
1955	8	1955.08	1-Aug-55					340	340				
1955	8	1955.08	2-Aug-55					350	350				
1955	8	1955.08	3-Aug-55					350	350				
1955	8	1955.08	4-Aug-55					350	350				
1955	8	1955.08	5-Aug-55					360	360				
1955	8	1955.08	6-Aug-55					360	360				
1955	8	1955.08	7-Aug-55					380	380				
1955	8	1955.08	8-Aug-55					422	422				
1955	8	1955.08	9-Aug-55					427	427				
1955	8	1955.08	10-Aug-55					380	380				
1955	8	1955.08	11-Aug-55					330	330				
1955	8	1955.08	12-Aug-55					312	312				
1955	8	1955.08	13-Aug-55					304	304				
1955	8	1955.08	14-Aug-55					350	350				
1955	8	1955.08	15-Aug-55					476	476				
1955	8	1955.08	16-Aug-55					427	427				
1955	8	1955.08	17-Aug-55					458	458				
1955	8	1955.08	18-Aug-55					436	436				
1955	8	1955.08	19-Aug-55					463	463				
1955	8	1955.08	20-Aug-55					494	494				
1955	8	1955.08	21-Aug-55					535	535				
1955	8	1955.08	22-Aug-55					590	590				
1955	8	1955.08	23-Aug-55					504	504				
1955	8	1955.08	24-Aug-55					458	458				
1955	8	1955.08	25-Aug-55					376	376				
1955	8	1955.08	26-Aug-55					392	392				
1955	8	1955.08	27-Aug-55					440	440				
1955	8	1955.08	28-Aug-55					508	508				
1955	8	1955.08	29-Aug-55					610	610				
1955	8	1955.08	30-Aug-55					610	610				
1955	8	1955.08	31-Aug-55					565	565				
1955	9	1955.09	1-Sep-55					555	555				
1955	9	1955.09	2-Sep-55					585	585				
1955	9	1955.09	3-Sep-55					615	615				
1955	9	1955.09	4-Sep-55					565	565				
1955	9	1955.09	5-Sep-55					560	560				
1955	9	1955.09	6-Sep-55					508	508				
1955	9	1955.09	7-Sep-55					472	472				
1955	9	1955.09	8-Sep-55					409	409				
1955	9	1955.09	9-Sep-55					409	409				
1955	9	1955.09	10-Sep-55					463	463				
1955	9	1955.09	11-Sep-55					575	575				
1955	9	1955.09	12-Sep-55					670	670				
1955	9	1955.09	13-Sep-55					565	565				
1955	9	1955.09	14-Sep-55					555	555				
1955	9	1955.09	15-Sep-55					575	575				
1955	9	1955.09	16-Sep-55					570	570				
1955	9	1955.09	17-Sep-55					620	620				
1955	9	1955.09	18-Sep-55					718	718				
1955	9	1955.09	19-Sep-55					773	773				
1955	9	1955.09	20-Sep-55					670	670				
1955	9	1955.09	21-Sep-55					640	640				
1955	9	1955.09	22-Sep-55					650	650				
1955	9	1955.09	23-Sep-55					670	670				
1955	9	1955.09	24-Sep-55					670	670				
1955	9	1955.09	25-Sep-55					746	746				
1955	9	1955.09	26-Sep-55					812	812				
1955	9	1955.09	27-Sep-55					751	751				
1955	9	1955.09	28-Sep-55					655	655				
1955	9	1955.09	29-Sep-55					640	640				
1955	9	1955.09	30-Sep-55					620	620				
1955	10	1955.10	1-Oct-55					635	635				
1955	10	1955.10	2-Oct-55					702	702				
1955	10	1955.10	3-Oct-55					718	718				

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1955	10	1955.10	4-Oct-55					660	660				
1955	10	1955.10	5-Oct-55					615	615				
1955	10	1955.10	6-Oct-55					635	635				
1955	10	1955.10	7-Oct-55					650	650				
1955	10	1955.10	8-Oct-55					660	660				
1955	10	1955.10	9-Oct-55					685	685				
1955	10	1955.10	10-Oct-55					724	724				
1955	10	1955.10	11-Oct-55					762	762				
1955	10	1955.10	12-Oct-55					773	773				
1955	10	1955.10	13-Oct-55					718	718				
1955	10	1955.10	14-Oct-55					685	685				
1955	10	1955.10	15-Oct-55					756	756				
1955	10	1955.10	16-Oct-55					839	839				
1955	10	1955.10	17-Oct-55					928	928				
1955	10	1955.10	18-Oct-55					856	856				
1955	10	1955.10	19-Oct-55					822	822				
1955	10	1955.10	20-Oct-55					940	940				
1955	10	1955.10	21-Oct-55					994	994				
1955	10	1955.10	22-Oct-55					994	994				
1955	10	1955.10	23-Oct-55					994	994				
1955	10	1955.10	24-Oct-55					892	892				
1955	10	1955.10	25-Oct-55					839	839				
1955	10	1955.10	26-Oct-55					822	822				
1955	10	1955.10	27-Oct-55					874	874				
1955	10	1955.10	28-Oct-55					892	892				
1955	10	1955.10	29-Oct-55					922	922				
1955	10	1955.10	30-Oct-55					922	922				
1955	10	1955.10	31-Oct-55					874	874				
1955	11	1955.11	1-Nov-55					795	795				
1955	11	1955.11	2-Nov-55					800	800				
1955	11	1955.11	3-Nov-55					1040	1040				
1955	11	1955.11	4-Nov-55					1180	1180				
1955	11	1955.11	5-Nov-55					1210	1210				
1955	11	1955.11	6-Nov-55					1230	1230				
1955	11	1955.11	7-Nov-55					1160	1160				
1955	11	1955.11	8-Nov-55					970	970				
1955	11	1955.11	9-Nov-55					928	928				
1955	11	1955.11	10-Nov-55					834	834				
1955	11	1955.11	11-Nov-55					718	718				
1955	11	1955.11	12-Nov-55					696	696				
1955	11	1955.11	13-Nov-55					729	729				
1955	11	1955.11	14-Nov-55					773	773				
1955	11	1955.11	15-Nov-55					812	812				
1955	11	1955.11	16-Nov-55					874	874				
1955	11	1955.11	17-Nov-55					1090	1090				
1955	11	1955.11	18-Nov-55					1210	1210				
1955	11	1955.11	19-Nov-55					1270	1270				
1955	11	1955.11	20-Nov-55					1270	1270				
1955	11	1955.11	21-Nov-55					1210	1210				
1955	11	1955.11	22-Nov-55					1130	1130				
1955	11	1955.11	23-Nov-55					1190	1190				
1955	11	1955.11	24-Nov-55					1260	1260				
1955	11	1955.11	25-Nov-55					1260	1260				
1955	11	1955.11	26-Nov-55					1280	1280				
1955	11	1955.11	27-Nov-55					1300	1300				
1955	11	1955.11	28-Nov-55					1360	1360				
1955	11	1955.11	29-Nov-55					1270	1270				
1955	11	1955.11	30-Nov-55					1270	1270				
1955	12	1955.12	1-Dec-55					1320	1320				
1955	12	1955.12	2-Dec-55					1400	1400				
1955	12	1955.12	3-Dec-55					1420	1420				
1955	12	1955.12	4-Dec-55					1420	1420				
1955	12	1955.12	5-Dec-55					1560	1560				
1955	12	1955.12	6-Dec-55					1490	1490				
1955	12	1955.12	7-Dec-55					1420	1420				
1955	12	1955.12	8-Dec-55					1640	1640				
1955	12	1955.12	9-Dec-55					1780	1780				
1955	12	1955.12	10-Dec-55					1970	1970				
1955	12	1955.12	11-Dec-55					1910	1910				
1955	12	1955.12	12-Dec-55					1800	1800				
1955	12	1955.12	13-Dec-55					1900	1900				
1955	12	1955.12	14-Dec-55					1850	1850				
1955	12	1955.12	15-Dec-55					1660	1660				
1955	12	1955.12	16-Dec-55					1610	1610				
1955	12	1955.12	17-Dec-55					1580	1580				
1955	12	1955.12	18-Dec-55					1510	1510				

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1955	12	1955.12	19-Dec-55					1740	1740				
1955	12	1955.12	20-Dec-55					1720	1720				
1955	12	1955.12	21-Dec-55					1920	1920				
1955	12	1955.12	22-Dec-55					2040	2040				
1955	12	1955.12	23-Dec-55					3210	3210				
1955	12	1955.12	24-Dec-55					15500	15500				
1955	12	1955.12	25-Dec-55					40400	40400				
1955	12	1955.12	26-Dec-55					47400	47400				
1955	12	1955.12	27-Dec-55					39500	39500				
1955	12	1955.12	28-Dec-55					42300	42300				
1955	12	1955.12	29-Dec-55					40900	40900				
1955	12	1955.12	30-Dec-55					37000	37000				
1955	12	1955.12	31-Dec-55					35200	35200				
1956	1	1956.01	1-Jan-56					34000	34000				
1956	1	1956.01	2-Jan-56					32900	32900				
1956	1	1956.01	3-Jan-56					31400	31400				
1956	1	1956.01	4-Jan-56					29700	29700				
1956	1	1956.01	5-Jan-56					28200	28200				
1956	1	1956.01	6-Jan-56					27700	27700				
1956	1	1956.01	7-Jan-56					28600	28600				
1956	1	1956.01	8-Jan-56					28600	28600				
1956	1	1956.01	9-Jan-56					27900	27900				
1956	1	1956.01	10-Jan-56					27000	27000				
1956	1	1956.01	11-Jan-56					25800	25800				
1956	1	1956.01	12-Jan-56					24400	24400				
1956	1	1956.01	13-Jan-56					23000	23000				
1956	1	1956.01	14-Jan-56					21500	21500				
1956	1	1956.01	15-Jan-56					20200	20200				
1956	1	1956.01	16-Jan-56					21000	21000				
1956	1	1956.01	17-Jan-56					24400	24400				
1956	1	1956.01	18-Jan-56					27600	27600				
1956	1	1956.01	19-Jan-56					27600	27600				
1956	1	1956.01	20-Jan-56					27000	27000				
1956	1	1956.01	21-Jan-56					26300	26300				
1956	1	1956.01	22-Jan-56					25400	25400				
1956	1	1956.01	23-Jan-56					23900	23900				
1956	1	1956.01	24-Jan-56					23600	23600				
1956	1	1956.01	25-Jan-56					25200	25200				
1956	1	1956.01	26-Jan-56					25700	25700				
1956	1	1956.01	27-Jan-56					27000	27000				
1956	1	1956.01	28-Jan-56					29600	29600				
1956	1	1956.01	29-Jan-56					30800	30800				
1956	1	1956.01	30-Jan-56					31000	31000				
1956	1	1956.01	31-Jan-56					31400	31400				
1956	2	1956.02	1-Feb-56					31300	31300				
1956	2	1956.02	2-Feb-56					30400	30400				
1956	2	1956.02	3-Feb-56					28500	28500				
1956	2	1956.02	4-Feb-56					26100	26100				
1956	2	1956.02	5-Feb-56					24000	24000				
1956	2	1956.02	6-Feb-56					22000	22000				
1956	2	1956.02	7-Feb-56					20300	20300				
1956	2	1956.02	8-Feb-56					18900	18900				
1956	2	1956.02	9-Feb-56					17800	17800				
1956	2	1956.02	10-Feb-56					16600	16600				
1956	2	1956.02	11-Feb-56					15700	15700				
1956	2	1956.02	12-Feb-56					15100	15100				
1956	2	1956.02	13-Feb-56					14600	14600				
1956	2	1956.02	14-Feb-56					14400	14400				
1956	2	1956.02	15-Feb-56					14400	14400				
1956	2	1956.02	16-Feb-56					14800	14800				
1956	2	1956.02	17-Feb-56					14900	14900				
1956	2	1956.02	18-Feb-56					14800	14800				
1956	2	1956.02	19-Feb-56					14700	14700				
1956	2	1956.02	20-Feb-56					14000	14000				
1956	2	1956.02	21-Feb-56					13300	13300				
1956	2	1956.02	22-Feb-56					12900	12900				
1956	2	1956.02	23-Feb-56					12800	12800				
1956	2	1956.02	24-Feb-56					12900	12900				
1956	2	1956.02	25-Feb-56					12900	12900				
1956	2	1956.02	26-Feb-56					12900	12900				
1956	2	1956.02	27-Feb-56					13200	13200				
1956	2	1956.02	28-Feb-56					13300	13300				
1956	2	1956.02	29-Feb-56					13600	13600				
1956	3	1956.03	1-Mar-56					13700	13700				
1956	3	1956.03	2-Mar-56					13600	13600				
1956	3	1956.03	3-Mar-56					13200	13200				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1956	3	1956.03	4-Mar-56					12800	12800				
1956	3	1956.03	5-Mar-56					12300	12300				
1956	3	1956.03	6-Mar-56					11800	11800				
1956	3	1956.03	7-Mar-56					11200	11200				
1956	3	1956.03	8-Mar-56					10500	10500				
1956	3	1956.03	9-Mar-56					9850	9850				
1956	3	1956.03	10-Mar-56					9300	9300				
1956	3	1956.03	11-Mar-56					8970	8970				
1956	3	1956.03	12-Mar-56					8750	8750				
1956	3	1956.03	13-Mar-56					8410	8410				
1956	3	1956.03	14-Mar-56					8290	8290				
1956	3	1956.03	15-Mar-56					7860	7860				
1956	3	1956.03	16-Mar-56					6940	6940				
1956	3	1956.03	17-Mar-56					5960	5960				
1956	3	1956.03	18-Mar-56					5220	5220				
1956	3	1956.03	19-Mar-56					5100	5100				
1956	3	1956.03	20-Mar-56					4930	4930				
1956	3	1956.03	21-Mar-56					4720	4720				
1956	3	1956.03	22-Mar-56					4520	4520				
1956	3	1956.03	23-Mar-56					4350	4350				
1956	3	1956.03	24-Mar-56					3940	3940				
1956	3	1956.03	25-Mar-56					3420	3420				
1956	3	1956.03	26-Mar-56					3180	3180				
1956	3	1956.03	27-Mar-56					3560	3560				
1956	3	1956.03	28-Mar-56					3830	3830				
1956	3	1956.03	29-Mar-56					3740	3740				
1956	3	1956.03	30-Mar-56					3730	3730				
1956	3	1956.03	31-Mar-56					4400	4400				
1956	4	1956.04	1-Apr-56					5080	5080				
1956	4	1956.04	2-Apr-56					5380	5380				
1956	4	1956.04	3-Apr-56					4480	4480				
1956	4	1956.04	4-Apr-56					4020	4020				
1956	4	1956.04	5-Apr-56					3800	3800				
1956	4	1956.04	6-Apr-56					3570	3570				
1956	4	1956.04	7-Apr-56					3510	3510				
1956	4	1956.04	8-Apr-56					3600	3600				
1956	4	1956.04	9-Apr-56					3950	3950				
1956	4	1956.04	10-Apr-56					4170	4170				
1956	4	1956.04	11-Apr-56					4750	4750				
1956	4	1956.04	12-Apr-56					5880	5880				
1956	4	1956.04	13-Apr-56					6870	6870				
1956	4	1956.04	14-Apr-56					7440	7440				
1956	4	1956.04	15-Apr-56					7700	7700				
1956	4	1956.04	16-Apr-56					7740	7740				
1956	4	1956.04	17-Apr-56					7350	7350				
1956	4	1956.04	18-Apr-56					6850	6850				
1956	4	1956.04	19-Apr-56					6300	6300				
1956	4	1956.04	20-Apr-56					5900	5900				
1956	4	1956.04	21-Apr-56					5600	5600				
1956	4	1956.04	22-Apr-56					5730	5730				
1956	4	1956.04	23-Apr-56					6140	6140				
1956	4	1956.04	24-Apr-56					7040	7040				
1956	4	1956.04	25-Apr-56					7590	7590				
1956	4	1956.04	26-Apr-56					8060	8060				
1956	4	1956.04	27-Apr-56					8640	8640				
1956	4	1956.04	28-Apr-56					10200	10200				
1956	4	1956.04	29-Apr-56					10400	10400				
1956	4	1956.04	30-Apr-56					10100	10100				
1956	5	1956.05	1-May-56					9510	9510				
1956	5	1956.05	2-May-56					8650	8650				
1956	5	1956.05	3-May-56					8970	8970				
1956	5	1956.05	4-May-56					9960	9960				
1956	5	1956.05	5-May-56					11400	11400				
1956	5	1956.05	6-May-56					15700	15700				
1956	5	1956.05	7-May-56					17800	17800				
1956	5	1956.05	8-May-56					17400	17400				
1956	5	1956.05	9-May-56					17000	17000				
1956	5	1956.05	10-May-56					15900	15900				
1956	5	1956.05	11-May-56					15100	15100				
1956	5	1956.05	12-May-56					14600	14600				
1956	5	1956.05	13-May-56					13900	13900				
1956	5	1956.05	14-May-56					12700	12700				
1956	5	1956.05	15-May-56					10800	10800				
1956	5	1956.05	16-May-56					9280	9280				
1956	5	1956.05	17-May-56					9000	9000				
1956	5	1956.05	18-May-56					9090	9090				

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1956	5	1956.05	19-May-56					9270	9270				
1956	5	1956.05	20-May-56					9610	9610				
1956	5	1956.05	21-May-56					10400	10400				
1956	5	1956.05	22-May-56					11200	11200				
1956	5	1956.05	23-May-56					13200	13200				
1956	5	1956.05	24-May-56					16000	16000				
1956	5	1956.05	25-May-56					16700	18700				
1956	5	1956.05	26-May-56					19900	19900				
1956	5	1956.05	27-May-56					19900	19900				
1956	5	1956.05	28-May-56					20100	20100				
1956	5	1956.05	29-May-56					20200	20200				
1956	5	1956.05	30-May-56					19400	19400				
1956	5	1956.05	31-May-56					18600	18600				
1956	6	1956.06	1-Jun-56					19100	19100				
1956	6	1956.06	2-Jun-56					19600	19600				
1956	6	1956.06	3-Jun-56					19400	19400				
1956	6	1956.06	4-Jun-56					19000	19000				
1956	6	1956.06	5-Jun-56					18600	18600				
1956	6	1956.06	6-Jun-56					18400	18400				
1956	6	1956.06	7-Jun-56					17000	17000				
1956	6	1956.06	8-Jun-56					15600	15600				
1956	6	1956.06	9-Jun-56					14300	14300				
1956	6	1956.06	10-Jun-56					12500	12500				
1956	6	1956.06	11-Jun-56					11500	11500				
1956	6	1956.06	12-Jun-56					11400	11400				
1956	6	1956.06	13-Jun-56					11200	11200				
1956	6	1956.06	14-Jun-56					10900	10900				
1956	6	1956.06	15-Jun-56					10900	10900				
1956	6	1956.06	16-Jun-56					10700	10700				
1956	6	1956.06	17-Jun-56					10500	10500				
1956	6	1956.06	18-Jun-56					9490	9490				
1956	6	1956.06	19-Jun-56					8480	8480				
1956	6	1956.06	20-Jun-56					8680	8680				
1956	6	1956.06	21-Jun-56					9270	9270				
1956	6	1956.06	22-Jun-56					10700	10700				
1956	6	1956.06	23-Jun-56					10900	10900				
1956	6	1956.06	24-Jun-56					10100	10100				
1956	6	1956.06	25-Jun-56					8060	8060				
1956	6	1956.06	26-Jun-56					7540	7540				
1956	6	1956.06	27-Jun-56					7680	7680				
1956	6	1956.06	28-Jun-56					7350	7350				
1956	6	1956.06	29-Jun-56					8570	8570				
1956	6	1956.06	30-Jun-56					10100	10100				
1956	7	1956.07	1-Jul-56					10200	10200				
1956	7	1956.07	2-Jul-56					8570	8570				
1956	7	1956.07	3-Jul-56					6770	6770				
1956	7	1956.07	4-Jul-56					5580	5580				
1956	7	1956.07	5-Jul-56					4870	4870				
1956	7	1956.07	6-Jul-56					4380	4380				
1956	7	1956.07	7-Jul-56					4140	4140				
1956	7	1956.07	8-Jul-56					4020	4020				
1956	7	1956.07	9-Jul-56					3780	3780				
1956	7	1956.07	10-Jul-56					3560	3560				
1956	7	1956.07	11-Jul-56					3400	3400				
1956	7	1956.07	12-Jul-56					3240	3240				
1956	7	1956.07	13-Jul-56					3060	3060				
1956	7	1956.07	14-Jul-56					2990	2990				
1956	7	1956.07	15-Jul-56					2780	2780				
1956	7	1956.07	16-Jul-56					2650	2650				
1956	7	1956.07	17-Jul-56					2400	2400				
1956	7	1956.07	18-Jul-56					2040	2040				
1956	7	1956.07	19-Jul-56					1830	1830				
1956	7	1956.07	20-Jul-56					1740	1740				
1956	7	1956.07	21-Jul-56					1740	1740				
1956	7	1956.07	22-Jul-56					1680	1680				
1956	7	1956.07	23-Jul-56					1570	1570				
1956	7	1956.07	24-Jul-56					1560	1560				
1956	7	1956.07	25-Jul-56					1680	1680				
1956	7	1956.07	26-Jul-56					1580	1580				
1956	7	1956.07	27-Jul-56					2050	2050				
1956	7	1956.07	28-Jul-56					3060	3060				
1956	7	1956.07	29-Jul-56					3810	3810				
1956	7	1956.07	30-Jul-56					3810	3810				
1956	7	1956.07	31-Jul-56					3430	3430				
1956	8	1956.08	1-Aug-56					2470	2470				
1956	8	1956.08	2-Aug-56					2240	2240				

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1956	8	1956.08	3-Aug-56					2770	2770				
1956	8	1956.08	4-Aug-56					3030	3030				
1956	8	1956.08	5-Aug-56					2830	2830				
1956	8	1956.08	6-Aug-56					2590	2590				
1956	8	1956.08	7-Aug-56					2240	2240				
1956	8	1956.08	8-Aug-56					2470	2470				
1956	8	1956.08	9-Aug-56					2160	2160				
1956	8	1956.08	10-Aug-56					1830	1830				
1956	8	1956.08	11-Aug-56					1700	1700				
1956	8	1956.08	12-Aug-56					1710	1710				
1956	8	1956.08	13-Aug-56					1810	1810				
1956	8	1956.08	14-Aug-56					1670	1670				
1956	8	1956.08	15-Aug-56					1600	1600				
1956	8	1956.08	16-Aug-56					1600	1600				
1956	8	1956.08	17-Aug-56					1500	1600				
1956	8	1956.08	18-Aug-56					1600	1600				
1956	8	1956.08	19-Aug-56					1630	1630				
1956	8	1956.08	20-Aug-56					1700	1700				
1956	8	1956.08	21-Aug-56					1690	1690				
1956	8	1956.08	22-Aug-56					1680	1680				
1956	8	1956.08	23-Aug-56					1610	1610				
1956	8	1956.08	24-Aug-56					1600	1600				
1956	8	1956.08	25-Aug-56					1590	1590				
1956	8	1956.08	26-Aug-56					1620	1620				
1956	8	1956.08	27-Aug-56					1660	1660				
1956	8	1956.08	28-Aug-56					1620	1620				
1956	8	1956.08	29-Aug-56					1570	1570				
1956	8	1956.08	30-Aug-56					1530	1530				
1956	8	1956.08	31-Aug-56					1540	1540				
1956	9	1956.09	1-Sep-56					1530	1530				
1956	9	1956.09	2-Sep-56					1620	1620				
1956	9	1956.09	3-Sep-56					1640	1640				
1956	9	1956.09	4-Sep-56					1590	1590				
1956	9	1956.09	5-Sep-56					1590	1590				
1956	9	1956.09	6-Sep-56					1650	1650				
1956	9	1956.09	7-Sep-56					1800	1800				
1956	9	1956.09	8-Sep-56					1790	1790				
1956	9	1956.09	9-Sep-56					1920	1920				
1956	9	1956.09	10-Sep-56					1940	1940				
1956	9	1956.09	11-Sep-56					1810	1810				
1956	9	1956.09	12-Sep-56					1730	1730				
1956	9	1956.09	13-Sep-56					1810	1810				
1956	9	1956.09	14-Sep-56					1880	1880				
1956	9	1956.09	15-Sep-56					1900	1900				
1956	9	1956.09	16-Sep-56					1940	1940				
1956	9	1956.09	17-Sep-56					1990	1990				
1956	9	1956.09	18-Sep-56					1860	1860				
1956	9	1956.09	19-Sep-56					1860	1860				
1956	9	1956.09	20-Sep-56					2000	2000				
1956	9	1956.09	21-Sep-56					2040	2040				
1956	9	1956.09	22-Sep-56					2130	2130				
1956	9	1956.09	23-Sep-56					2200	2200				
1956	9	1956.09	24-Sep-56					2230	2230				
1956	9	1956.09	25-Sep-56					2160	2160				
1956	9	1956.09	26-Sep-56					2000	2000				
1956	9	1956.09	27-Sep-56					1930	1930				
1956	9	1956.09	28-Sep-56					2000	2000				
1956	9	1956.09	29-Sep-56					2040	2040				
1956	9	1956.09	30-Sep-56					1970	1970				
1956	10	1956.10	1-Oct-56					2010	2010				
1956	10	1956.10	2-Oct-56					1880	1880				
1956	10	1956.10	3-Oct-56					1770	1770				
1956	10	1956.10	4-Oct-56					1600	1800				
1956	10	1956.10	5-Oct-56					1900	1900				
1956	10	1956.10	6-Oct-56					1960	1960				
1956	10	1956.10	7-Oct-56					2060	2060				
1956	10	1956.10	8-Oct-56					2100	2100				
1956	10	1956.10	9-Oct-56					2040	2040				
1956	10	1956.10	10-Oct-56					1960	1960				
1956	10	1956.10	11-Oct-56					1940	1940				
1956	10	1956.10	12-Oct-56					1890	1890				
1956	10	1956.10	13-Oct-56					1830	1830				
1956	10	1956.10	14-Oct-56					1900	1900				
1956	10	1956.10	15-Oct-56					2070	2070				
1956	10	1956.10	16-Oct-56					2040	2040				
1956	10	1956.10	17-Oct-56					2140	2140				

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1956	10	1956.10	18-Oct-56					2240	2240				
1956	10	1956.10	19-Oct-56					2200	2200				
1956	10	1956.10	20-Oct-56					2150	2150				
1956	10	1956.10	21-Oct-56					2160	2160				
1956	10	1956.10	22-Oct-56					2080	2080				
1956	10	1956.10	23-Oct-56					1920	1920				
1956	10	1956.10	24-Oct-56					2020	2020				
1956	10	1956.10	25-Oct-56					2030	2030				
1956	10	1956.10	26-Oct-56					2000	2000				
1956	10	1956.10	27-Oct-56					2040	2040				
1956	10	1956.10	28-Oct-56					2020	2020				
1956	10	1956.10	29-Oct-56					1980	1980				
1956	10	1956.10	30-Oct-56					1900	1900				
1956	10	1956.10	31-Oct-56					1930	1930				
1956	11	1956.11	1-Nov-56					1780	1780				
1956	11	1956.11	2-Nov-56					1720	1720				
1956	11	1956.11	3-Nov-56					1710	1710				
1956	11	1956.11	4-Nov-56					1680	1680				
1956	11	1956.11	5-Nov-56					1770	1770				
1956	11	1956.11	6-Nov-56					1900	1900				
1956	11	1956.11	7-Nov-56					1920	1920				
1956	11	1956.11	8-Nov-56					1920	1920				
1956	11	1956.11	9-Nov-56					1940	1940				
1956	11	1956.11	10-Nov-56					1930	1930				
1956	11	1956.11	11-Nov-56					1900	1900				
1956	11	1956.11	12-Nov-56					1910	1910				
1956	11	1956.11	13-Nov-56					1960	1960				
1956	11	1956.11	14-Nov-56					1910	1910				
1956	11	1956.11	15-Nov-56					1970	1970				
1956	11	1956.11	16-Nov-56					2000	2000				
1956	11	1956.11	17-Nov-56					1990	1990				
1956	11	1956.11	18-Nov-56					2000	2000				
1956	11	1956.11	19-Nov-56					1970	1970				
1956	11	1956.11	20-Nov-56					1930	1930				
1956	11	1956.11	21-Nov-56					2620	2620				
1956	11	1956.11	22-Nov-56					3100	3100				
1956	11	1956.11	23-Nov-56					3040	3040				
1956	11	1956.11	24-Nov-56					2840	2840				
1956	11	1956.11	25-Nov-56					3060	3060				
1956	11	1956.11	26-Nov-56					2850	2850				
1956	11	1956.11	27-Nov-56					2790	2790				
1956	11	1956.11	28-Nov-56					2890	2890				
1956	11	1956.11	29-Nov-56					2720	2720				
1956	11	1956.11	30-Nov-56					2630	2630				
1956	12	1956.12	1-Dec-56					2730	2730				
1956	12	1956.12	2-Dec-56					2700	2700				
1956	12	1956.12	3-Dec-56					2450	2450				
1956	12	1956.12	4-Dec-56					2400	2400				
1956	12	1956.12	5-Dec-56					2820	2820				
1956	12	1956.12	6-Dec-56					2880	2880				
1956	12	1956.12	7-Dec-56					2830	2830				
1956	12	1956.12	8-Dec-56					2920	2920				
1956	12	1956.12	9-Dec-56					2800	2800				
1956	12	1956.12	10-Dec-56					2340	2340				
1956	12	1956.12	11-Dec-56					2280	2280				
1956	12	1956.12	12-Dec-56					2540	2540				
1956	12	1956.12	13-Dec-56					2450	2450				
1956	12	1956.12	14-Dec-56					2420	2420				
1956	12	1956.12	15-Dec-56					2510	2510				
1956	12	1956.12	16-Dec-56					2490	2490				
1956	12	1956.12	17-Dec-56					2260	2260				
1956	12	1956.12	18-Dec-56					2340	2340				
1956	12	1956.12	19-Dec-56					2850	2850				
1956	12	1956.12	20-Dec-56					2890	2890				
1956	12	1956.12	21-Dec-56					2990	2990				
1956	12	1956.12	22-Dec-56					3020	3020				
1956	12	1956.12	23-Dec-56					2850	2850				
1956	12	1956.12	24-Dec-56					2480	2480				
1956	12	1956.12	25-Dec-56					2280	2250				
1956	12	1956.12	26-Dec-56					1990	1990				
1956	12	1956.12	27-Dec-56					1740	1740				
1956	12	1956.12	28-Dec-56					2000	2000				
1956	12	1956.12	29-Dec-56					2160	2160				
1956	12	1956.12	30-Dec-56					2210	2210				
1956	12	1956.12	31-Dec-56					2070	2070				
1957	1	1957.01	1-Jan-57					1990	1990				

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1957	1	1957.01	2-Jan-57					2010	2010				
1957	1	1957.01	3-Jan-57					1850	1850				
1957	1	1957.01	4-Jan-57					1990	1990				
1957	1	1957.01	5-Jan-57					1960	1960				
1957	1	1957.01	6-Jan-57					1970	1970				
1957	1	1957.01	7-Jan-57					1830	1830				
1957	1	1957.01	8-Jan-57					1840	1840				
1957	1	1957.01	9-Jan-57					1910	1910				
1957	1	1957.01	10-Jan-57					1920	1920				
1957	1	1957.01	11-Jan-57					2010	2010				
1957	1	1957.01	12-Jan-57					1970	1970				
1957	1	1957.01	13-Jan-57					2160	2160				
1957	1	1957.01	14-Jan-57					2040	2040				
1957	1	1957.01	15-Jan-57					1860	1860				
1957	1	1957.01	16-Jan-57					1990	1990				
1957	1	1957.01	17-Jan-57					2080	2080				
1957	1	1957.01	18-Jan-57					2110	2110				
1957	1	1957.01	19-Jan-57					2110	2110				
1957	1	1957.01	20-Jan-57					2120	2120				
1957	1	1957.01	21-Jan-57					1970	1970				
1957	1	1957.01	22-Jan-57					1770	1770				
1957	1	1957.01	23-Jan-57					1820	1820				
1957	1	1957.01	24-Jan-57					1890	1890				
1957	1	1957.01	25-Jan-57					1810	1810				
1957	1	1957.01	26-Jan-57					1810	1810				
1957	1	1957.01	27-Jan-57					1840	1840				
1957	1	1957.01	28-Jan-57					1770	1770				
1957	1	1957.01	29-Jan-57					1660	1660				
1957	1	1957.01	30-Jan-57					1740	1740				
1957	1	1957.01	31-Jan-57					1780	1760				
1957	2	1957.02	1-Feb-57					1820	1820				
1957	2	1957.02	2-Feb-57					1770	1770				
1957	2	1957.02	3-Feb-57					1750	1750				
1957	2	1957.02	4-Feb-57					1600	1600				
1957	2	1957.02	5-Feb-57					1540	1540				
1957	2	1957.02	6-Feb-57					1630	1630				
1957	2	1957.02	7-Feb-57					1680	1680				
1957	2	1957.02	8-Feb-57					1680	1680				
1957	2	1957.02	9-Feb-57					1660	1660				
1957	2	1957.02	10-Feb-57					1770	1770				
1957	2	1957.02	11-Feb-57					1750	1750				
1957	2	1957.02	12-Feb-57					1660	1660				
1957	2	1957.02	13-Feb-57					2120	2120				
1957	2	1957.02	14-Feb-57					2510	2510				
1957	2	1957.02	15-Feb-57					2880	2680				
1957	2	1957.02	16-Feb-57					2500	2500				
1957	2	1957.02	17-Feb-57					2110	2110				
1957	2	1957.02	18-Feb-57					1780	1780				
1957	2	1957.02	19-Feb-57					1630	1630				
1957	2	1957.02	20-Feb-57					1690	1690				
1957	2	1957.02	21-Feb-57					1510	1510				
1957	2	1957.02	22-Feb-57					1350	1350				
1957	2	1957.02	23-Feb-57					1350	1350				
1957	2	1957.02	24-Feb-57					1340	1340				
1957	2	1957.02	25-Feb-57					1420	1420				
1957	2	1957.02	26-Feb-57					1750	1750				
1957	2	1957.02	27-Feb-57					1660	1660				
1957	2	1957.02	28-Feb-57					1660	1660				
1957	3	1957.03	1-Mar-57					1690	1690				
1957	3	1957.03	2-Mar-57					1720	1720				
1957	3	1957.03	3-Mar-57					1840	1940				
1957	3	1957.03	4-Mar-57					2230	2230				
1957	3	1957.03	5-Mar-57					2150	2150				
1957	3	1957.03	6-Mar-57					3340	3340				
1957	3	1957.03	7-Mar-57					4690	4690				
1957	3	1957.03	8-Mar-57					4150	4150				
1957	3	1957.03	9-Mar-57					3750	3750				
1957	3	1957.03	10-Mar-57					3250	3250				
1957	3	1957.03	11-Mar-57					2670	2670				
1957	3	1957.03	12-Mar-57					2510	2510				
1957	3	1957.03	13-Mar-57					2720	2720				
1957	3	1957.03	14-Mar-57					3030	3030				
1957	3	1957.03	15-Mar-57					3160	3160				
1957	3	1957.03	16-Mar-57					3030	3030				
1957	3	1957.03	17-Mar-57					3120	3120				
1957	3	1957.03	18-Mar-57					3040	3040				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1957	3	1957.03	19-Mar-57					3040	3040				
1957	3	1957.03	20-Mar-57					3710	3710				
1957	3	1957.03	21-Mar-57					4230	4230				
1957	3	1957.03	22-Mar-57					4470	4470				
1957	3	1957.03	23-Mar-57					4340	4340				
1957	3	1957.03	24-Mar-57					4000	4000				
1957	3	1957.03	25-Mar-57					3830	3830				
1957	3	1957.03	26-Mar-57					3490	3490				
1957	3	1957.03	27-Mar-57					2770	2770				
1957	3	1957.03	28-Mar-57					2390	2390				
1957	3	1957.03	29-Mar-57					2210	2210				
1957	3	1957.03	30-Mar-57					2020	2080				
1957	3	1957.03	31-Mar-57					1930	1930				
1957	4	1957.04	1-Apr-57					1810	1810				
1957	4	1957.04	2-Apr-57					1610	1610				
1957	4	1957.04	3-Apr-57					1300	1300				
1957	4	1957.04	4-Apr-57					1060	1060				
1957	4	1957.04	5-Apr-57					924	924				
1957	4	1957.04	6-Apr-57					798	798				
1957	4	1957.04	7-Apr-57					726	726				
1957	4	1957.04	8-Apr-57					744	744				
1957	4	1957.04	9-Apr-57					702	702				
1957	4	1957.04	10-Apr-57					654	654				
1957	4	1957.04	11-Apr-57					654	654				
1957	4	1957.04	12-Apr-57					644	644				
1957	4	1957.04	13-Apr-57					649	649				
1957	4	1957.04	14-Apr-57					714	714				
1957	4	1957.04	15-Apr-57					1040	1040				
1957	4	1957.04	16-Apr-57					1100	1100				
1957	4	1957.04	17-Apr-57					1010	1010				
1957	4	1957.04	18-Apr-57					1340	1340				
1957	4	1957.04	19-Apr-57					1610	1610				
1957	4	1957.04	20-Apr-57					1750	1750				
1957	4	1957.04	21-Apr-57					2070	2070				
1957	4	1957.04	22-Apr-57					2230	2230				
1957	4	1957.04	23-Apr-57					2130	2130				
1957	4	1957.04	24-Apr-57					1970	1970				
1957	4	1957.04	25-Apr-57					1940	1940				
1957	4	1957.04	26-Apr-57					2000	2000				
1957	4	1957.04	27-Apr-57					1960	1960				
1957	4	1957.04	28-Apr-57					1860	1860				
1957	4	1957.04	29-Apr-57					1510	1510				
1957	4	1957.04	30-Apr-57					1280	1280				
1957	5	1957.05	1-May-57					1130	1130				
1957	5	1957.05	2-May-57					1090	1090				
1957	5	1957.05	3-May-57					1080	1080				
1957	5	1957.05	4-May-57					1070	1070				
1957	5	1957.05	5-May-57					1090	1090				
1957	5	1957.05	6-May-57					1070	1070				
1957	5	1957.05	7-May-57					1010	1010				
1957	5	1957.05	8-May-57					918	918				
1957	5	1957.05	9-May-57					1030	1030				
1957	5	1957.05	10-May-57					1370	1370				
1957	5	1957.05	11-May-57					1460	1460				
1957	5	1957.05	12-May-57					1340	1340				
1957	5	1957.05	13-May-57					1350	1350				
1957	5	1957.05	14-May-57					1240	1240				
1957	5	1957.05	15-May-57					1330	1330				
1957	5	1957.05	16-May-57					1470	1470				
1957	5	1957.05	17-May-57					1490	1490				
1957	5	1957.05	18-May-57					1630	1630				
1957	5	1957.05	19-May-57					1960	1960				
1957	5	1957.05	20-May-57					3520	3520				
1957	5	1957.05	21-May-57					5590	5590				
1957	5	1957.05	22-May-57					6490	6490				
1957	5	1957.05	23-May-57					6180	6150				
1957	5	1957.05	24-May-57					5390	5390				
1957	5	1957.05	25-May-57					5250	5250				
1957	5	1957.05	26-May-57					4910	4910				
1957	5	1957.05	27-May-57					4390	4390				
1957	5	1957.05	28-May-57					3870	3870				
1957	5	1957.05	29-May-57					3730	3730				
1957	5	1957.05	30-May-57					3520	3520				
1957	5	1957.05	31-May-57					3080	3080				
1957	6	1957.06	1-Jun-57					2910	2910				
1957	6	1957.06	2-Jun-57					3390	3390				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1957	6	1957.06						4320		4320			
1957	6	1957.06						5140		5140			
1957	6	1957.06						5640		5640			
1957	6	1957.06						6390		6390			
1957	6	1957.06						7800		7800			
1957	6	1957.06						8450		8450			
1957	6	1957.06						8690		8690			
1957	6	1957.06						9260		9260			
1957	6	1957.06						8370		8370			
1957	6	1957.06						5790		5790			
1957	6	1957.06						3780		3780			
1957	6	1957.06						2890		2890			
1957	6	1957.06						2730		2730			
1957	6	1957.06						3060		3060			
1957	6	1957.06						3110		3110			
1957	6	1957.06						2690		2690			
1957	6	1957.06						2210		2210			
1957	6	1957.06						1830		1830			
1957	6	1957.06						1590		1590			
1957	6	1957.06						1770		1770			
1957	6	1957.06						1960		1960			
1957	6	1957.06						1690		1690			
1957	6	1957.06						1420		1420			
1957	6	1957.06						1300		1300			
1957	6	1957.06						1240		1240			
1957	6	1957.06						1150		1150			
1957	6	1957.06						1070		1070			
1957	6	1957.06						1140		1140			
1957	7	1957.07						1400		1400			
1957	7	1957.07						1240		1240			
1957	7	1957.07						1160		1160			
1957	7	1957.07						1150		1150			
1957	7	1957.07						1160		1160			
1957	7	1957.07						1090		1090			
1957	7	1957.07						1090		1090			
1957	7	1957.07						1100		1100			
1957	7	1957.07						1050		1050			
1957	7	1957.07						954		954			
1957	7	1957.07						876		876			
1957	7	1957.07						804		804			
1957	7	1957.07						744		744			
1957	7	1957.07						756		756			
1957	7	1957.07						964		864			
1957	7	1957.07						780		780			
1957	7	1957.07						708		708			
1957	7	1957.07						720		720			
1957	7	1957.07						690		690			
1957	7	1957.07						638		638			
1957	7	1957.07						744		744			
1957	7	1957.07						888		888			
1957	7	1957.07						888		888			
1957	7	1957.07						762		762			
1957	7	1957.07						684		684			
1957	7	1957.07						632		632			
1957	7	1957.07						654		654			
1957	7	1957.07						696		696			
1957	7	1957.07						768		768			
1957	7	1957.07						744		744			
1957	7	1957.07						684		684			
1957	8	1957.08						605		605			
1957	8	1957.08						570		570			
1957	8	1957.08						555		555			
1957	8	1957.08						565		565			
1957	8	1957.08						672		672			
1957	8	1957.08						690		690			
1957	8	1957.08						666		666			
1957	8	1957.08						732		732			
1957	8	1957.08						780		780			
1957	8	1957.08						804		804			
1957	8	1957.08						846		846			
1957	8	1957.08						936		936			
1957	8	1957.08						964		864			
1957	8	1957.08						728		726			
1957	8	1957.08						660		660			
1957	8	1957.08						666		666			
1957	8	1957.08						649		649			

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1957	8	1957.08	18-Aug-57					786	786				
1957	8	1957.08	19-Aug-57					924	924				
1957	8	1957.08	20-Aug-57					858	858				
1957	8	1957.08	21-Aug-57					798	798				
1957	8	1957.08	22-Aug-57					822	822				
1957	8	1957.08	23-Aug-57					738	738				
1957	8	1957.08	24-Aug-57					732	732				
1957	8	1957.08	25-Aug-57					762	762				
1957	8	1957.08	26-Aug-57					822	822				
1957	8	1957.08	27-Aug-57					810	810				
1957	8	1957.08	28-Aug-57					750	750				
1957	8	1957.08	29-Aug-57					810	810				
1957	8	1957.08	30-Aug-57					846	846				
1957	8	1957.08	31-Aug-57					894	894				
1957	9	1957.09	1-Sep-57					1010	1010				
1957	9	1957.09	2-Sep-57					1120	1120				
1957	9	1957.09	3-Sep-57					1050	1050				
1957	9	1957.09	4-Sep-57					990	990				
1957	9	1957.09	5-Sep-57					936	936				
1957	9	1957.09	6-Sep-57					918	918				
1957	9	1957.09	7-Sep-57					924	924				
1957	9	1957.09	8-Sep-57					1020	1020				
1957	9	1957.09	9-Sep-57					1060	1060				
1957	9	1957.09	10-Sep-57					942	942				
1957	9	1957.09	11-Sep-57					966	966				
1957	9	1957.09	12-Sep-57					990	990				
1957	9	1957.09	13-Sep-57					1030	1030				
1957	9	1957.09	14-Sep-57					1010	1010				
1957	9	1957.09	15-Sep-57					1050	1050				
1957	9	1957.09	16-Sep-57					1190	1190				
1957	9	1957.09	17-Sep-57					1160	1160				
1957	9	1957.09	18-Sep-57					1190	1190				
1957	9	1957.09	19-Sep-57					1220	1220				
1957	9	1957.09	20-Sep-57					1260	1260				
1957	9	1957.09	21-Sep-57					1350	1350				
1957	9	1957.09	22-Sep-57					1370	1370				
1957	9	1957.09	23-Sep-57					1410	1410				
1957	9	1957.09	24-Sep-57					1280	1280				
1957	9	1957.09	25-Sep-57					1240	1240				
1957	9	1957.09	26-Sep-57					1240	1240				
1957	9	1957.09	27-Sep-57					1280	1280				
1957	9	1957.09	28-Sep-57					1350	1350				
1957	9	1957.09	29-Sep-57					1410	1410				
1957	9	1957.09	30-Sep-57					1490	1490				
1957	10	1957.10	1-Oct-57					1550	1550				
1957	10	1957.10	2-Oct-57					1540	1540				
1957	10	1957.10	3-Oct-57					1570	1570				
1957	10	1957.10	4-Oct-57					1590	1590				
1957	10	1957.10	5-Oct-57					1740	1740				
1957	10	1957.10	6-Oct-57					1700	1700				
1957	10	1957.10	7-Oct-57					1780	1780				
1957	10	1957.10	8-Oct-57					1590	1590				
1957	10	1957.10	9-Oct-57					1590	1590				
1957	10	1957.10	10-Oct-57					1700	1700				
1957	10	1957.10	11-Oct-57					2030	2030				
1957	10	1957.10	12-Oct-57					2560	2560				
1957	10	1957.10	13-Oct-57					2610	2610				
1957	10	1957.10	14-Oct-57					2940	2940				
1957	10	1957.10	15-Oct-57					3020	3020				
1957	10	1957.10	16-Oct-57					2880	2880				
1957	10	1957.10	17-Oct-57					2460	2460				
1957	10	1957.10	18-Oct-57					2150	2150				
1957	10	1957.10	19-Oct-57					2040	2040				
1957	10	1957.10	20-Oct-57					2110	2110				
1957	10	1957.10	21-Oct-57					2000	2000				
1957	10	1957.10	22-Oct-57					1820	1820				
1957	10	1957.10	23-Oct-57					2030	2030				
1957	10	1957.10	24-Oct-57					2110	2110				
1957	10	1957.10	25-Oct-57					2250	2250				
1957	10	1957.10	26-Oct-57					2130	2130				
1957	10	1957.10	27-Oct-57					2090	2090				
1957	10	1957.10	28-Oct-57					2070	2070				
1957	10	1957.10	29-Oct-57					2090	2090				
1957	10	1957.10	30-Oct-57					2000	2000				
1957	10	1957.10	31-Oct-57					1990	1990				
1957	11	1957.11	1-Nov-57					1950	1950				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1957	11	1957.11	2-Nov-57					1850	1850				
1957	11	1957.11	3-Nov-57					1870	1870				
1957	11	1957.11	4-Nov-57					1830	1830				
1957	11	1957.11	5-Nov-57					1790	1790				
1957	11	1957.11	6-Nov-57					1930	1930				
1957	11	1957.11	7-Nov-57					1940	1940				
1957	11	1957.11	8-Nov-57					2010	2010				
1957	11	1957.11	9-Nov-57					2280	2280				
1957	11	1957.11	10-Nov-57					2300	2300				
1957	11	1957.11	11-Nov-57					2190	2190				
1957	11	1957.11	12-Nov-57					2120	2120				
1957	11	1957.11	13-Nov-57					2340	2340				
1957	11	1957.11	14-Nov-57					2500	2500				
1957	11	1957.11	15-Nov-57					2500	2500				
1957	11	1957.11	16-Nov-57					2460	2460				
1957	11	1957.11	17-Nov-57					2430	2430				
1957	11	1957.11	18-Nov-57					2260	2260				
1957	11	1957.11	19-Nov-57					2290	2290				
1957	11	1957.11	20-Nov-57					2570	2570				
1957	11	1957.11	21-Nov-57					2510	2510				
1957	11	1957.11	22-Nov-57					2440	2440				
1957	11	1957.11	23-Nov-57					2460	2460				
1957	11	1957.11	24-Nov-57					2430	2430				
1957	11	1957.11	25-Nov-57					2290	2290				
1957	11	1957.11	26-Nov-57					2300	2300				
1957	11	1957.11	27-Nov-57					2500	2500				
1957	11	1957.11	28-Nov-57					2480	2480				
1957	11	1957.11	29-Nov-57					2420	2420				
1957	11	1957.11	30-Nov-57					2210	2210				
1957	12	1957.12	1-Dec-57					2410	2410				
1957	12	1957.12	2-Dec-57					2320	2320				
1957	12	1957.12	3-Dec-57					2270	2270				
1957	12	1957.12	4-Dec-57					2550	2550				
1957	12	1957.12	5-Dec-57					2670	2670				
1957	12	1957.12	6-Dec-57					2740	2740				
1957	12	1957.12	7-Dec-57					2730	2730				
1957	12	1957.12	8-Dec-57					2730	2730				
1957	12	1957.12	9-Dec-57					2600	2600				
1957	12	1957.12	10-Dec-57					2620	2620				
1957	12	1957.12	11-Dec-57					2900	2900				
1957	12	1957.12	12-Dec-57					2700	2700				
1957	12	1957.12	13-Dec-57					2580	2580				
1957	12	1957.12	14-Dec-57					2610	2610				
1957	12	1957.12	15-Dec-57					2670	2670				
1957	12	1957.12	16-Dec-57					2530	2530				
1957	12	1957.12	17-Dec-57					2320	2320				
1957	12	1957.12	18-Dec-57					2560	2560				
1957	12	1957.12	19-Dec-57					2560	2560				
1957	12	1957.12	20-Dec-57					2550	2550				
1957	12	1957.12	21-Dec-57					2520	2520				
1957	12	1957.12	22-Dec-57					2540	2540				
1957	12	1957.12	23-Dec-57					2440	2440				
1957	12	1957.12	24-Dec-57					2260	2260				
1957	12	1957.12	25-Dec-57					2480	2480				
1957	12	1957.12	26-Dec-57					2320	2320				
1957	12	1957.12	27-Dec-57					2080	2080				
1957	12	1957.12	28-Dec-57					2330	2330				
1957	12	1957.12	29-Dec-57					2420	2420				
1957	12	1957.12	30-Dec-57					2200	2200				
1957	12	1957.12	31-Dec-57					2100	2100				
1958	1	1958.01	1-Jan-58					2260	2260				
1958	1	1958.01	2-Jan-58					1970	1970				
1958	1	1958.01	3-Jan-58					1700	1700				
1958	1	1958.01	4-Jan-58					1700	1700				
1958	1	1958.01	5-Jan-58					1680	1680				
1958	1	1958.01	6-Jan-58					1620	1620				
1958	1	1958.01	7-Jan-58					1630	1630				
1958	1	1958.01	8-Jan-58					1690	1690				
1958	1	1958.01	9-Jan-58					1690	1690				
1958	1	1958.01	10-Jan-58					1950	1950				
1958	1	1958.01	11-Jan-58					2140	2140				
1958	1	1958.01	12-Jan-58					2160	2160				
1958	1	1958.01	13-Jan-58					2220	2220				
1958	1	1958.01	14-Jan-58					2270	2270				
1958	1	1958.01	15-Jan-58					2260	2260				
1958	1	1958.01	16-Jan-58					2570	2570				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1958	1	1958.01	17-Jan-58					2700	2700				
1958	1	1958.01	18-Jan-58					2720	2720				
1958	1	1958.01	19-Jan-58					2650	2650				
1958	1	1958.01	20-Jan-58					2620	2620				
1958	1	1958.01	21-Jan-58					2490	2490				
1958	1	1958.01	22-Jan-58					2220	2220				
1958	1	1958.01	23-Jan-58					2170	2170				
1958	1	1958.01	24-Jan-58					2260	2260				
1958	1	1958.01	25-Jan-58					2500	2500				
1958	1	1958.01	26-Jan-58					2950	2950				
1958	1	1958.01	27-Jan-58					3340	3340				
1958	1	1958.01	28-Jan-58					4270	4270				
1958	1	1958.01	29-Jan-58					3780	3780				
1958	1	1958.01	30-Jan-58					3470	3470				
1958	1	1958.01	31-Jan-58					3390	3390				
1958	2	1958.02	1-Feb-58					3690	3690				
1958	2	1958.02	2-Feb-58					3870	3870				
1958	2	1958.02	3-Feb-58					3710	3710				
1958	2	1958.02	4-Feb-58					3690	3690				
1958	2	1958.02	5-Feb-58					5010	5010				
1958	2	1958.02	6-Feb-58					6250	6250				
1958	2	1958.02	7-Feb-58					5640	5640				
1958	2	1958.02	8-Feb-58					5410	5410				
1958	2	1958.02	9-Feb-58					5400	5400				
1958	2	1958.02	10-Feb-58					5080	5080				
1958	2	1958.02	11-Feb-58					4650	4650				
1958	2	1958.02	12-Feb-58					4430	4430				
1958	2	1958.02	13-Feb-58					4560	4560				
1958	2	1958.02	14-Feb-58					4920	4920				
1958	2	1958.02	15-Feb-58					3960	3960				
1958	2	1958.02	16-Feb-58					3300	3300				
1958	2	1958.02	17-Feb-58					3020	3020				
1958	2	1958.02	18-Feb-58					3470	3470				
1958	2	1958.02	19-Feb-58					4640	4640				
1958	2	1958.02	20-Feb-58					8120	8120				
1958	2	1958.02	21-Feb-58					8760	8760				
1958	2	1958.02	22-Feb-58					7510	7510				
1958	2	1958.02	23-Feb-58					6940	6940				
1958	2	1958.02	24-Feb-58					6450	6450				
1958	2	1958.02	25-Feb-58					6250	6250				
1958	2	1958.02	26-Feb-58					7750	7750				
1958	2	1958.02	27-Feb-58					8020	8020				
1958	2	1958.02	28-Feb-58					7650	7650				
1958	3	1958.03	1-Mar-58					7500	7500				
1958	3	1958.03	2-Mar-58					7660	7660				
1958	3	1958.03	3-Mar-58					7720	7720				
1958	3	1958.03	4-Mar-58					7360	7360				
1958	3	1958.03	5-Mar-58					6960	6960				
1958	3	1958.03	6-Mar-58					6750	6750				
1958	3	1958.03	7-Mar-58					6640	6640				
1958	3	1958.03	8-Mar-58					6600	6600				
1958	3	1958.03	9-Mar-58					6590	6590				
1958	3	1958.03	10-Mar-58					6700	6700				
1958	3	1958.03	11-Mar-58					6700	6700				
1958	3	1958.03	12-Mar-58					6190	6190				
1958	3	1958.03	13-Mar-58					5590	5590				
1958	3	1958.03	14-Mar-58					5280	5280				
1958	3	1958.03	15-Mar-58					5420	5420				
1958	3	1958.03	16-Mar-58					6660	6660				
1958	3	1958.03	17-Mar-58					11000	11000				
1958	3	1958.03	18-Mar-58					12800	12800				
1958	3	1958.03	19-Mar-58					13000	13000				
1958	3	1958.03	20-Mar-58					13700	13700				
1958	3	1958.03	21-Mar-58					14600	14600				
1958	3	1958.03	22-Mar-58					15700	15700				
1958	3	1958.03	23-Mar-58					18300	18300				
1958	3	1958.03	24-Mar-58					21000	21000				
1958	3	1958.03	25-Mar-58					22400	22400				
1958	3	1958.03	26-Mar-58					23600	23600				
1958	3	1958.03	27-Mar-58					24000	24000				
1958	3	1958.03	28-Mar-58					22900	22900				
1958	3	1958.03	29-Mar-58					20900	20900				
1958	3	1958.03	30-Mar-58					18200	18200				
1958	3	1958.03	31-Mar-58					16500	16500				
1958	4	1958.04	1-Apr-58					17500	17500				
1958	4	1958.04	2-Apr-58					21600	21600				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1958	4	1958.04	3-Apr-58					27200	27200				
1958	4	1958.04	4-Apr-58					34700	34700				
1958	4	1958.04	5-Apr-58					40900	40900				
1958	4	1958.04	6-Apr-58					39000	39000				
1958	4	1958.04	7-Apr-58					40200	40200				
1958	4	1958.04	8-Apr-58					40600	40600				
1958	4	1958.04	9-Apr-58					40900	40900				
1958	4	1958.04	10-Apr-58					38400	38400				
1958	4	1958.04	11-Apr-58					35200	35200				
1958	4	1958.04	12-Apr-58					32600	32600				
1958	4	1958.04	13-Apr-58					31200	31200				
1958	4	1958.04	14-Apr-58					29200	29200				
1958	4	1958.04	15-Apr-58					27800	27800				
1958	4	1958.04	16-Apr-58					26600	26600				
1958	4	1958.04	17-Apr-58					25600	25600				
1958	4	1958.04	18-Apr-58					24700	24700				
1958	4	1958.04	19-Apr-58					23600	23600				
1958	4	1958.04	20-Apr-58					22900	22900				
1958	4	1958.04	21-Apr-58					23200	23200				
1958	4	1958.04	22-Apr-58					23600	23600				
1958	4	1958.04	23-Apr-58					23400	23400				
1958	4	1958.04	24-Apr-58					23100	23100				
1958	4	1958.04	25-Apr-58					22400	22400				
1958	4	1958.04	26-Apr-58					21500	21500				
1958	4	1958.04	27-Apr-58					20700	20700				
1958	4	1958.04	28-Apr-58					20100	20100				
1958	4	1958.04	29-Apr-58					19700	19700				
1958	4	1958.04	30-Apr-58					19500	19500				
1958	5	1958.05	1-May-58					19400	19400				
1958	5	1958.05	2-May-58					18300	18300				
1958	5	1958.05	3-May-58					17600	17600				
1958	5	1958.05	4-May-58					17600	17600				
1958	5	1958.05	5-May-58					18200	18200				
1958	5	1958.05	6-May-58					19500	19500				
1958	5	1958.05	7-May-58					20600	20600				
1958	5	1958.05	8-May-58					21100	21100				
1958	5	1958.05	9-May-58					19800	19800				
1958	5	1958.05	10-May-58					19600	19600				
1958	5	1958.05	11-May-58					20300	20300				
1958	5	1958.05	12-May-58					20900	20900				
1958	5	1958.05	13-May-58					21900	21900				
1958	5	1958.05	14-May-58					22100	22100				
1958	5	1958.05	15-May-58					22000	22000				
1958	5	1958.05	16-May-58					21700	21700				
1958	5	1958.05	17-May-58					21300	21300				
1958	5	1958.05	18-May-58					21500	21500				
1958	5	1958.05	19-May-58					22600	22600				
1958	5	1958.05	20-May-58					24100	24100				
1958	5	1958.05	21-May-58					25200	25200				
1958	5	1958.05	22-May-58					25700	25700				
1958	5	1958.05	23-May-58					26600	26600				
1958	5	1958.05	24-May-58					28300	28300				
1958	5	1958.05	25-May-58					28600	28600				
1958	5	1958.05	26-May-58					29100	29100				
1958	5	1958.05	27-May-58					27000	27000				
1958	5	1958.05	28-May-58					25500	25500				
1958	5	1958.05	29-May-58					24300	24300				
1958	5	1958.05	30-May-58					22800	22800				
1958	5	1958.05	31-May-58					21800	21800				
1958	6	1958.06	1-Jun-58					21800	21800				
1958	6	1958.06	2-Jun-58					21900	21900				
1958	6	1958.06	3-Jun-58					20100	20100				
1958	6	1958.06	4-Jun-58					20500	20500				
1958	6	1958.06	5-Jun-58					21300	21300				
1958	6	1958.06	6-Jun-58					20300	20300				
1958	6	1958.06	7-Jun-58					16900	16900				
1958	6	1958.06	8-Jun-58					15700	15700				
1958	6	1958.06	9-Jun-58					15800	15800				
1958	6	1958.06	10-Jun-58					15700	15700				
1958	6	1958.06	11-Jun-58					15200	15200				
1958	6	1958.06	12-Jun-58					14800	14800				
1958	6	1958.06	13-Jun-58					13900	13900				
1958	6	1958.06	14-Jun-58					12800	12800				
1958	6	1958.06	15-Jun-58					12000	12000				
1958	6	1958.06	16-Jun-58					11400	11400				
1958	6	1958.06	17-Jun-58					10500	10500				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1958	6	1958.06	18-Jun-58					10200	10200				
1958	6	1958.06	19-Jun-58					10900	10900				
1958	6	1958.06	20-Jun-58					12900	12900				
1958	6	1958.06	21-Jun-58					15900	15900				
1958	6	1958.06	22-Jun-58					17500	17500				
1958	6	1958.06	23-Jun-58					17700	17700				
1958	6	1958.06	24-Jun-58					17300	17300				
1958	6	1958.06	25-Jun-58					16800	16800				
1958	6	1958.06	26-Jun-58					16700	16700				
1958	6	1958.06	27-Jun-58					15500	15500				
1958	6	1958.06	28-Jun-58					13100	13100				
1958	6	1958.06	29-Jun-58					12200	12200				
1958	6	1958.06	30-Jun-58					11200	11200				
1958	7	1958.07	1-Jul-58					10700	10700				
1958	7	1958.07	2-Jul-58					10600	10600				
1958	7	1958.07	3-Jul-58					8440	8440				
1958	7	1958.07	4-Jul-58					6710	6710				
1958	7	1958.07	5-Jul-58					5830	5830				
1958	7	1958.07	6-Jul-58					6530	6530				
1958	7	1958.07	7-Jul-58					7330	7330				
1958	7	1958.07	8-Jul-58					7850	7850				
1958	7	1958.07	9-Jul-58					6330	6330				
1958	7	1958.07	10-Jul-58					4870	4870				
1958	7	1958.07	11-Jul-58					4080	4080				
1958	7	1958.07	12-Jul-58					3960	3960				
1958	7	1958.07	13-Jul-58					3850	3850				
1958	7	1958.07	14-Jul-58					3610	3610				
1958	7	1958.07	15-Jul-58					3270	3270				
1958	7	1958.07	16-Jul-58					3150	3150				
1958	7	1958.07	17-Jul-58					2810	2810				
1958	7	1958.07	18-Jul-58					2640	2640				
1958	7	1958.07	19-Jul-58					2490	2490				
1958	7	1958.07	20-Jul-58					2450	2450				
1958	7	1958.07	21-Jul-58					2330	2330				
1958	7	1958.07	22-Jul-58					2070	2070				
1958	7	1958.07	23-Jul-58					1900	1900				
1958	7	1958.07	24-Jul-58					1790	1790				
1958	7	1958.07	25-Jul-58					1710	1710				
1958	7	1958.07	26-Jul-58					1690	1690				
1958	7	1958.07	27-Jul-58					1660	1660				
1958	7	1958.07	28-Jul-58					1650	1650				
1958	7	1958.07	29-Jul-58					1590	1590				
1958	7	1958.07	30-Jul-58					1510	1510				
1958	7	1958.07	31-Jul-58					1450	1450				
1958	8	1958.08	1-Aug-58					1430	1430				
1958	8	1958.08	2-Aug-58					1410	1410				
1958	8	1958.08	3-Aug-58					1420	1420				
1958	8	1958.08	4-Aug-58					1590	1590				
1958	8	1958.08	5-Aug-58					1540	1540				
1958	8	1958.08	6-Aug-58					1470	1470				
1958	8	1958.08	7-Aug-58					1440	1440				
1958	8	1958.08	8-Aug-58					1470	1470				
1958	8	1958.08	9-Aug-58					1590	1590				
1958	8	1958.08	10-Aug-58					1680	1680				
1958	8	1958.08	11-Aug-58					1750	1750				
1958	8	1958.08	12-Aug-58					1650	1650				
1958	8	1958.08	13-Aug-58					1560	1560				
1958	8	1958.08	14-Aug-58					1470	1470				
1958	8	1958.08	15-Aug-58					1440	1440				
1958	8	1958.08	16-Aug-58					1450	1450				
1958	8	1958.08	17-Aug-58					1520	1520				
1958	8	1958.08	18-Aug-58					1630	1630				
1958	8	1958.08	19-Aug-58					1600	1600				
1958	8	1958.08	20-Aug-58					1540	1540				
1958	8	1958.08	21-Aug-58					1490	1490				
1958	8	1958.08	22-Aug-58					1470	1470				
1958	8	1958.08	23-Aug-58					1520	1520				
1958	8	1958.08	24-Aug-58					1570	1570				
1958	8	1958.08	25-Aug-58					1590	1590				
1958	8	1958.08	26-Aug-58					1590	1590				
1958	8	1958.08	27-Aug-58					1500	1500				
1958	8	1958.08	28-Aug-58					1480	1480				
1958	8	1958.08	29-Aug-58					1520	1520				
1958	8	1958.08	30-Aug-58					1550	1550				
1958	8	1958.08	31-Aug-58					1670	1670				
1958	9	1958.09	1-Sep-58					1760	1760				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1958	9	1958.09	2-Sep-58					1690	1690				
1958	9	1958.09	3-Sep-58					1670	1670				
1958	9	1958.09	4-Sep-58					1700	1700				
1958	9	1958.09	5-Sep-58					1690	1690				
1958	9	1958.09	6-Sep-58					1670	1670				
1958	9	1958.09	7-Sep-58					1850	1850				
1958	9	1958.09	8-Sep-58					1950	1950				
1958	9	1958.09	9-Sep-58					1990	1990				
1958	9	1958.09	10-Sep-58					2180	2180				
1958	9	1958.09	11-Sep-58					2290	2290				
1958	9	1958.09	12-Sep-58					2370	2370				
1958	9	1958.09	13-Sep-58					2410	2410				
1958	9	1958.09	14-Sep-58					2550	2550				
1958	9	1958.09	15-Sep-58					2570	2570				
1958	9	1958.09	16-Sep-58					2260	2260				
1958	9	1958.09	17-Sep-58					2260	2260				
1958	9	1958.09	18-Sep-58					2290	2290				
1958	9	1958.09	19-Sep-58					2320	2320				
1958	9	1958.09	20-Sep-58					2300	2300				
1958	9	1958.09	21-Sep-58					2420	2420				
1958	9	1958.09	22-Sep-58					2450	2450				
1958	9	1958.09	23-Sep-58					2540	2540				
1958	9	1958.09	24-Sep-58					2640	2640				
1958	9	1958.09	25-Sep-58					2650	2650				
1958	9	1958.09	26-Sep-58					2560	2560				
1958	9	1958.09	27-Sep-58					2570	2570				
1958	9	1958.09	28-Sep-58					2590	2590				
1958	9	1958.09	29-Sep-58					2610	2610				
1958	9	1958.09	30-Sep-58					2470	2470				
1958	10	1958.10	1-Oct-58					2470	2470				
1958	10	1958.10	2-Oct-58					2460	2460				
1958	10	1958.10	3-Oct-58					2430	2430				
1958	10	1958.10	4-Oct-58					2470	2470				
1958	10	1958.10	5-Oct-58					2550	2550				
1958	10	1958.10	6-Oct-58					2580	2580				
1958	10	1958.10	7-Oct-58					2620	2620				
1958	10	1958.10	8-Oct-58					2590	2590				
1958	10	1958.10	9-Oct-58					2600	2600				
1958	10	1958.10	10-Oct-58					2620	2620				
1958	10	1958.10	11-Oct-58					2500	2500				
1958	10	1958.10	12-Oct-58					2450	2450				
1958	10	1958.10	13-Oct-58					2390	2390				
1958	10	1958.10	14-Oct-58					2450	2450				
1958	10	1958.10	15-Oct-58					2530	2530				
1958	10	1958.10	16-Oct-58					2580	2580				
1958	10	1958.10	17-Oct-58					2580	2580				
1958	10	1958.10	18-Oct-58					2500	2500				
1958	10	1958.10	19-Oct-58					2430	2430				
1958	10	1958.10	20-Oct-58					2280	2280				
1958	10	1958.10	21-Oct-58					2290	2290				
1958	10	1958.10	22-Oct-58					3490	3490				
1958	10	1958.10	23-Oct-58					3600	3600				
1958	10	1958.10	24-Oct-58					3600	3600				
1958	10	1958.10	25-Oct-58					3600	3600				
1958	10	1958.10	26-Oct-58					3600	3600				
1958	10	1958.10	27-Oct-58					3620	3620				
1958	10	1958.10	28-Oct-58					3570	3570				
1958	10	1958.10	29-Oct-58					3500	3500				
1958	10	1958.10	30-Oct-58					3440	3440				
1958	10	1958.10	31-Oct-58					3500	3500				
1958	11	1958.11	1-Nov-58					3490	3490				
1958	11	1958.11	2-Nov-58					3470	3470				
1958	11	1958.11	3-Nov-58					3370	3370				
1958	11	1958.11	4-Nov-58					3300	3300				
1958	11	1958.11	5-Nov-58					3380	3380				
1958	11	1958.11	6-Nov-58					3530	3530				
1958	11	1958.11	7-Nov-58					3590	3590				
1958	11	1958.11	8-Nov-58					3560	3560				
1958	11	1958.11	9-Nov-58					3530	3530				
1958	11	1958.11	10-Nov-58					3410	3410				
1958	11	1958.11	11-Nov-58					3350	3350				
1958	11	1958.11	12-Nov-58					3380	3380				
1958	11	1958.11	13-Nov-58					3410	3410				
1958	11	1958.11	14-Nov-58					3450	3450				
1958	11	1958.11	15-Nov-58					3470	3470				
1958	11	1958.11	16-Nov-58					3490	3490				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1958	11	1958.11	17-Nov-58					3520	3520				
1958	11	1958.11	18-Nov-58					3570	3570				
1958	11	1958.11	19-Nov-58					3730	3730				
1958	11	1958.11	20-Nov-58					3830	3830				
1958	11	1958.11	21-Nov-58					3860	3860				
1958	11	1958.11	22-Nov-58					3810	3810				
1958	11	1958.11	23-Nov-58					3830	3830				
1958	11	1958.11	24-Nov-58					3850	3850				
1958	11	1958.11	25-Nov-58					3850	3850				
1958	11	1958.11	26-Nov-58					3910	3910				
1958	11	1958.11	27-Nov-58					4000	4000				
1958	11	1958.11	28-Nov-58					4000	4000				
1958	11	1958.11	29-Nov-58					3980	3980				
1958	11	1958.11	30-Nov-58					4050	4050				
1958	12	1958.12	1-Dec-58					4040	4040				
1958	12	1958.12	2-Dec-58					4090	4090				
1958	12	1958.12	3-Dec-58					4210	4210				
1958	12	1958.12	4-Dec-58					4030	4030				
1958	12	1958.12	5-Dec-58					3840	3840				
1958	12	1958.12	6-Dec-58					3820	3820				
1958	12	1958.12	7-Dec-58					3630	3630				
1958	12	1958.12	8-Dec-58					3480	3480				
1958	12	1958.12	9-Dec-58					3450	3450				
1958	12	1958.12	10-Dec-58					3400	3400				
1958	12	1958.12	11-Dec-58					3360	3360				
1958	12	1958.12	12-Dec-58					3330	3330				
1958	12	1958.12	13-Dec-58					3320	3320				
1958	12	1958.12	14-Dec-58					3290	3290				
1958	12	1958.12	15-Dec-58					3040	3040				
1958	12	1958.12	16-Dec-58					2970	2970				
1958	12	1958.12	17-Dec-58					2600	2600				
1958	12	1958.12	18-Dec-58					2360	2360				
1958	12	1958.12	19-Dec-58					2260	2260				
1958	12	1958.12	20-Dec-58					2230	2230				
1958	12	1958.12	21-Dec-58					2240	2240				
1958	12	1958.12	22-Dec-58					2190	2190				
1958	12	1958.12	23-Dec-58					2200	2200				
1958	12	1958.12	24-Dec-58					2340	2340				
1958	12	1958.12	25-Dec-58					2400	2400				
1958	12	1958.12	26-Dec-58					2300	2300				
1958	12	1958.12	27-Dec-58					2230	2230				
1958	12	1958.12	28-Dec-58					2230	2230				
1958	12	1958.12	29-Dec-58					2220	2220				
1958	12	1958.12	30-Dec-58					2220	2220				
1958	12	1958.12	31-Dec-58					2280	2280				
1959	1	1959.01	1-Jan-59					2310	2310				
1959	1	1959.01	2-Jan-59					2180	2180				
1959	1	1959.01	3-Jan-59					1790	1790				
1959	1	1959.01	4-Jan-59					1880	1880				
1959	1	1959.01	5-Jan-59					1770	1770				
1959	1	1959.01	6-Jan-59					1820	1820				
1959	1	1959.01	7-Jan-59					2090	2090				
1959	1	1959.01	8-Jan-59					1930	1930				
1959	1	1959.01	9-Jan-59					2020	2020				
1959	1	1959.01	10-Jan-59					2300	2300				
1959	1	1959.01	11-Jan-59					2540	2540				
1959	1	1959.01	12-Jan-59					2560	2560				
1959	1	1959.01	13-Jan-59					2200	2200				
1959	1	1959.01	14-Jan-59					2580	2580				
1959	1	1959.01	15-Jan-59					2710	2710				
1959	1	1959.01	16-Jan-59					2780	2780				
1959	1	1959.01	17-Jan-59					2690	2690				
1959	1	1959.01	18-Jan-59					2580	2580				
1959	1	1959.01	19-Jan-59					2390	2390				
1959	1	1959.01	20-Jan-59					2250	2250				
1959	1	1959.01	21-Jan-59					2380	2380				
1959	1	1959.01	22-Jan-59					2360	2360				
1959	1	1959.01	23-Jan-59					2360	2360				
1959	1	1959.01	24-Jan-59					2390	2390				
1959	1	1959.01	25-Jan-59					2580	2580				
1959	1	1959.01	26-Jan-59					2580	2580				
1959	1	1959.01	27-Jan-59					2540	2540				
1959	1	1959.01	28-Jan-59					2780	2780				
1959	1	1959.01	29-Jan-59					2500	2500				
1959	1	1959.01	30-Jan-59					2210	2210				
1959	1	1959.01	31-Jan-59					2240	2240				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1959	2	1959.02	1-Feb-59					2150	2150				
1959	2	1959.02	2-Feb-59					2020	2020				
1959	2	1959.02	3-Feb-59					1960	1960				
1959	2	1959.02	4-Feb-59					2140	2140				
1959	2	1959.02	5-Feb-59					2040	2040				
1959	2	1959.02	6-Feb-59					2000	2000				
1959	2	1959.02	7-Feb-59					1960	1960				
1959	2	1959.02	8-Feb-59					1940	1940				
1959	2	1959.02	9-Feb-59					1890	1890				
1959	2	1959.02	10-Feb-59					1860	1860				
1959	2	1959.02	11-Feb-59					2180	2180				
1959	2	1959.02	12-Feb-59					2490	2490				
1959	2	1959.02	13-Feb-59					2620	2620				
1959	2	1959.02	14-Feb-59					2730	2730				
1959	2	1959.02	15-Feb-59					2700	2700				
1959	2	1959.02	16-Feb-59					2660	2660				
1959	2	1959.02	17-Feb-59					3770	3770				
1959	2	1959.02	18-Feb-59					4030	4030				
1959	2	1959.02	19-Feb-59					5150	5150				
1959	2	1959.02	20-Feb-59					4840	4840				
1959	2	1959.02	21-Feb-59					5070	5070				
1959	2	1959.02	22-Feb-59					5560	5560				
1959	2	1959.02	23-Feb-59					5510	5510				
1959	2	1959.02	24-Feb-59					4960	4960				
1959	2	1959.02	25-Feb-59					4600	4600				
1959	2	1959.02	26-Feb-59					4080	4080				
1959	2	1959.02	27-Feb-59					4340	4340				
1959	2	1959.02	28-Feb-59					4260	4260				
1959	3	1959.03	1-Mar-59					4080	4080				
1959	3	1959.03	2-Mar-59					3900	3900				
1959	3	1959.03	3-Mar-59					3630	3630				
1959	3	1959.03	4-Mar-59					3780	3780				
1959	3	1959.03	5-Mar-59					3710	3710				
1959	3	1959.03	6-Mar-59					3380	3380				
1959	3	1959.03	7-Mar-59					3130	3130				
1959	3	1959.03	8-Mar-59					3110	3110				
1959	3	1959.03	9-Mar-59					2930	2930				
1959	3	1959.03	10-Mar-59					2770	2770				
1959	3	1959.03	11-Mar-59					2500	2500				
1959	3	1959.03	12-Mar-59					2310	2310				
1959	3	1959.03	13-Mar-59					2180	2180				
1959	3	1959.03	14-Mar-59					1990	1990				
1959	3	1959.03	15-Mar-59					1950	1950				
1959	3	1959.03	16-Mar-59					1660	1660				
1959	3	1959.03	17-Mar-59					1390	1390				
1959	3	1959.03	18-Mar-59					1310	1310				
1959	3	1959.03	19-Mar-59					1140	1140				
1959	3	1959.03	20-Mar-59					1090	1090				
1959	3	1959.03	21-Mar-59					1020	1020				
1959	3	1959.03	22-Mar-59					990	990				
1959	3	1959.03	23-Mar-59					1010	1010				
1959	3	1959.03	24-Mar-59					1090	1090				
1959	3	1959.03	25-Mar-59					1150	1150				
1959	3	1959.03	26-Mar-59					1150	1150				
1959	3	1959.03	27-Mar-59					1150	1150				
1959	3	1959.03	28-Mar-59					1120	1120				
1959	3	1959.03	29-Mar-59					1160	1160				
1959	3	1959.03	30-Mar-59					1190	1190				
1959	3	1959.03	31-Mar-59					1160	1160				
1959	4	1959.04	1-Apr-59					1070	1070				
1959	4	1959.04	2-Apr-59					955	955				
1959	4	1959.04	3-Apr-59					895	895				
1959	4	1959.04	4-Apr-59					830	830				
1959	4	1959.04	5-Apr-59					780	780				
1959	4	1959.04	6-Apr-59					770	770				
1959	4	1959.04	7-Apr-59					750	750				
1959	4	1959.04	8-Apr-59					725	725				
1959	4	1959.04	9-Apr-59					696	696				
1959	4	1959.04	10-Apr-59					701	701				
1959	4	1959.04	11-Apr-59					710	710				
1959	4	1959.04	12-Apr-59					725	725				
1959	4	1959.04	13-Apr-59					725	725				
1959	4	1959.04	14-Apr-59					710	710				
1959	4	1959.04	15-Apr-59					669	669				
1959	4	1959.04	16-Apr-59					664	664				
1959	4	1959.04	17-Apr-59					655	655				

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1959	4	1959.04	18-Apr-59					682	682				
1959	4	1959.04	19-Apr-59					705	705				
1959	4	1959.04	20-Apr-59					710	710				
1959	4	1959.04	21-Apr-59					678	678				
1959	4	1959.04	22-Apr-59					664	664				
1959	4	1959.04	23-Apr-59					664	664				
1959	4	1959.04	24-Apr-59					678	678				
1959	4	1959.04	25-Apr-59					696	696				
1959	4	1959.04	26-Apr-59					890	890				
1959	4	1959.04	27-Apr-59					1160	1160				
1959	4	1959.04	28-Apr-59					1280	1280				
1959	4	1959.04	29-Apr-59					1300	1300				
1959	4	1959.04	30-Apr-59					1220	1220				
1959	5	1959.05	1-May-59					1100	1100				
1959	5	1959.05	2-May-59					1090	1090				
1959	5	1959.05	3-May-59					1120	1120				
1959	5	1959.05	4-May-59					1070	1070				
1959	5	1959.05	5-May-59					990	990				
1959	5	1959.05	6-May-59					895	895				
1959	5	1959.05	7-May-59					810	810				
1959	5	1959.05	8-May-59					800	800				
1959	5	1959.05	9-May-59					820	820				
1959	5	1959.05	10-May-59					790	790				
1959	5	1959.05	11-May-59					870	870				
1959	5	1959.05	12-May-59					855	855				
1959	5	1959.05	13-May-59					765	765				
1959	5	1959.05	14-May-59					705	705				
1959	5	1959.05	15-May-59					740	740				
1959	5	1959.05	16-May-59					705	705				
1959	5	1959.05	17-May-59					710	710				
1959	5	1959.05	18-May-59					780	780				
1959	5	1959.05	19-May-59					765	765				
1959	5	1959.05	20-May-59					696	696				
1959	5	1959.05	21-May-59					696	696				
1959	5	1959.05	22-May-59					701	701				
1959	5	1959.05	23-May-59					710	710				
1959	5	1959.05	24-May-59					705	705				
1959	5	1959.05	25-May-59					710	710				
1959	5	1959.05	26-May-59					650	650				
1959	5	1959.05	27-May-59					618	618				
1959	5	1959.05	28-May-59					664	664				
1959	5	1959.05	29-May-59					650	650				
1959	5	1959.05	30-May-59					659	659				
1959	5	1959.05	31-May-59					678	678				
1959	6	1959.06	1-Jun-59					715	715				
1959	6	1959.06	2-Jun-59					730	730				
1959	6	1959.06	3-Jun-59					669	669				
1959	6	1959.06	4-Jun-59					632	632				
1959	6	1959.06	5-Jun-59					590	590				
1959	6	1959.06	6-Jun-59					572	572				
1959	6	1959.06	7-Jun-59					595	595				
1959	6	1959.06	8-Jun-59					632	632				
1959	6	1959.06	9-Jun-59					595	595				
1959	6	1959.06	10-Jun-59					590	590				
1959	6	1959.06	11-Jun-59					590	590				
1959	6	1959.06	12-Jun-59					600	600				
1959	6	1959.06	13-Jun-59					544	544				
1959	6	1959.06	14-Jun-59					581	581				
1959	6	1959.06	15-Jun-59					641	641				
1959	6	1959.06	16-Jun-59					572	572				
1959	6	1959.06	17-Jun-59					476	476				
1959	6	1959.06	18-Jun-59					455	455				
1959	6	1959.06	19-Jun-59					450	450				
1959	6	1959.06	20-Jun-59					455	455				
1959	6	1959.06	21-Jun-59					463	463				
1959	6	1959.06	22-Jun-59					467	467				
1959	6	1959.06	23-Jun-59					455	455				
1959	6	1959.06	24-Jun-59					403	403				
1959	6	1959.06	25-Jun-59					360	360				
1959	6	1959.06	26-Jun-59					381	381				
1959	6	1959.06	27-Jun-59					392	392				
1959	6	1959.06	28-Jun-59					422	422				
1959	6	1959.06	29-Jun-59					501	501				
1959	6	1959.06	30-Jun-59					455	455				
1959	7	1959.07	1-Jul-59					446	446				
1959	7	1959.07	2-Jul-59					392	392				

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1959	7	1959.07	3-Jul-59					385	385				
1959	7	1959.07	4-Jul-59					385	385				
1959	7	1959.07	5-Jul-59					419	419				
1959	7	1959.07	6-Jul-59					446	446				
1959	7	1959.07	7-Jul-59					407	407				
1959	7	1959.07	8-Jul-59					381	381				
1959	7	1959.07	9-Jul-59					364	364				
1959	7	1959.07	10-Jul-59					343	343				
1959	7	1959.07	11-Jul-59					301	301				
1959	7	1959.07	12-Jul-59					298	298				
1959	7	1959.07	13-Jul-59					295	295				
1959	7	1959.07	14-Jul-59					282	282				
1959	7	1959.07	15-Jul-59					275	275				
1959	7	1959.07	16-Jul-59					263	263				
1959	7	1959.07	17-Jul-59					263	263				
1959	7	1959.07	18-Jul-59					257	257				
1959	7	1959.07	19-Jul-59					285	285				
1959	7	1959.07	20-Jul-59					314	314				
1959	7	1959.07	21-Jul-59					285	285				
1959	7	1959.07	22-Jul-59					279	279				
1959	7	1959.07	23-Jul-59					263	263				
1959	7	1959.07	24-Jul-59					260	260				
1959	7	1959.07	25-Jul-59					275	275				
1959	7	1959.07	26-Jul-59					285	285				
1959	7	1959.07	27-Jul-59					298	298				
1959	7	1959.07	28-Jul-59					263	263				
1959	7	1959.07	29-Jul-59					242	242				
1959	7	1959.07	30-Jul-59					212	212				
1959	7	1959.07	31-Jul-59					218	218				
1959	8	1959.08	1-Aug-59					206	206				
1959	8	1959.08	2-Aug-59					242	242				
1959	8	1959.08	3-Aug-59					266	266				
1959	8	1959.08	4-Aug-59					272	272				
1959	8	1959.08	5-Aug-59					272	272				
1959	8	1959.08	6-Aug-59					275	275				
1959	8	1959.08	7-Aug-59					279	279				
1959	8	1959.08	8-Aug-59					285	285				
1959	8	1959.08	9-Aug-59					333	333				
1959	8	1959.08	10-Aug-59					360	360				
1959	8	1959.08	11-Aug-59					317	317				
1959	8	1959.08	12-Aug-59					311	311				
1959	8	1959.08	13-Aug-59					285	285				
1959	8	1959.08	14-Aug-59					295	295				
1959	8	1959.08	15-Aug-59					314	314				
1959	8	1959.08	16-Aug-59					340	340				
1959	8	1959.08	17-Aug-59					411	411				
1959	8	1959.08	18-Aug-59					403	403				
1959	8	1959.08	19-Aug-59					419	419				
1959	8	1959.08	20-Aug-59					407	407				
1959	8	1959.08	21-Aug-59					411	411				
1959	8	1959.08	22-Aug-59					411	411				
1959	8	1959.08	23-Aug-59					535	535				
1959	8	1959.08	24-Aug-59					646	646				
1959	8	1959.08	25-Aug-59					613	613				
1959	8	1959.08	26-Aug-59					609	609				
1959	8	1959.08	27-Aug-59					609	609				
1959	8	1959.08	28-Aug-59					535	535				
1959	8	1959.08	29-Aug-59					567	567				
1959	8	1959.08	30-Aug-59					632	632				
1959	8	1959.08	31-Aug-59					613	613				
1959	9	1959.09	1-Sep-59					526	526				
1959	9	1959.09	2-Sep-59					501	501				
1959	9	1959.09	3-Sep-59					531	531				
1959	9	1959.09	4-Sep-59					567	567				
1959	9	1959.09	5-Sep-59					577	577				
1959	9	1959.09	6-Sep-59					590	590				
1959	9	1959.09	7-Sep-59					627	627				
1959	9	1959.09	8-Sep-59					618	618				
1959	9	1959.09	9-Sep-59					554	554				
1959	9	1959.09	10-Sep-59					563	563				
1959	9	1959.09	11-Sep-59					522	522				
1959	9	1959.09	12-Sep-59					484	484				
1959	9	1959.09	13-Sep-59					526	526				
1959	9	1959.09	14-Sep-59					535	535				
1959	9	1959.09	15-Sep-59					518	518				
1959	9	1959.09	16-Sep-59					558	558				

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1959	9	1959.09 17-Sep-59						549	549				
1959	9	1959.09 18-Sep-59						715	715				
1959	9	1959.09 19-Sep-59						1230	1230				
1959	9	1959.09 20-Sep-59						1530	1530				
1959	9	1959.09 21-Sep-59						1520	1520				
1959	9	1959.09 22-Sep-59						1340	1340				
1959	9	1959.09 23-Sep-59						1210	1210				
1959	9	1959.09 24-Sep-59						1150	1150				
1959	9	1959.09 25-Sep-59						1090	1090				
1959	9	1959.09 26-Sep-59						1020	1020				
1959	9	1959.09 27-Sep-59						930	930				
1959	9	1959.09 28-Sep-59						885	885				
1959	9	1959.09 29-Sep-59						825	825				
1959	9	1959.09 30-Sep-59						775	775				
1959	10	1959.10 1-Oct-59						775	775				
1959	10	1959.10 2-Oct-59						730	730				
1959	10	1959.10 3-Oct-59						715	715				
1959	10	1959.10 4-Oct-59						730	730				
1959	10	1959.10 5-Oct-59						730	730				
1959	10	1959.10 6-Oct-59						725	725				
1959	10	1959.10 7-Oct-59						725	725				
1959	10	1959.10 8-Oct-59						765	765				
1959	10	1959.10 9-Oct-59						810	810				
1959	10	1959.10 10-Oct-59						830	830				
1959	10	1959.10 11-Oct-59						815	815				
1959	10	1959.10 12-Oct-59						815	815				
1959	10	1959.10 13-Oct-59						700	700				
1959	10	1959.10 14-Oct-59						700	700				
1959	10	1959.10 15-Oct-59						885	885				
1959	10	1959.10 16-Oct-59						935	935				
1959	10	1959.10 17-Oct-59						980	980				
1959	10	1959.10 18-Oct-59						985	985				
1959	10	1959.10 19-Oct-59						970	970				
1959	10	1959.10 20-Oct-59						915	915				
1959	10	1959.10 21-Oct-59						925	925				
1959	10	1959.10 22-Oct-59						995	995				
1959	10	1959.10 23-Oct-59						1000	1000				
1959	10	1959.10 24-Oct-59						1060	1060				
1959	10	1959.10 25-Oct-59						1060	1060				
1959	10	1959.10 26-Oct-59						1040	1040				
1959	10	1959.10 27-Oct-59						930	930				
1959	10	1959.10 28-Oct-59						945	945				
1959	10	1959.10 29-Oct-59						970	970				
1959	10	1959.10 30-Oct-59						995	995				
1959	10	1959.10 31-Oct-59						1020	1020				
1959	11	1959.11 1-Nov-59						1010	1010				
1959	11	1959.11 2-Nov-59						1010	1010				
1959	11	1959.11 3-Nov-59						890	890				
1959	11	1959.11 4-Nov-59						915	915				
1959	11	1959.11 5-Nov-59						985	985				
1959	11	1959.11 6-Nov-59						1020	1020				
1959	11	1959.11 7-Nov-59						1040	1040				
1959	11	1959.11 8-Nov-59						1040	1040				
1959	11	1959.11 9-Nov-59						1040	1040				
1959	11	1959.11 10-Nov-59						960	960				
1959	11	1959.11 11-Nov-59						990	990				
1959	11	1959.11 12-Nov-59						1040	1040				
1959	11	1959.11 13-Nov-59						1050	1050				
1959	11	1959.11 14-Nov-59						1090	1090				
1959	11	1959.11 15-Nov-59						1100	1100				
1959	11	1959.11 16-Nov-59						1100	1100				
1959	11	1959.11 17-Nov-59						1040	1040				
1959	11	1959.11 18-Nov-59						1120	1120				
1959	11	1959.11 19-Nov-59						1150	1150				
1959	11	1959.11 20-Nov-59						1150	1150				
1959	11	1959.11 21-Nov-59						1150	1150				
1959	11	1959.11 22-Nov-59						1130	1130				
1959	11	1959.11 23-Nov-59						1130	1130				
1959	11	1959.11 24-Nov-59						1030	1030				
1959	11	1959.11 25-Nov-59						1060	1060				
1959	11	1959.11 26-Nov-59						1110	1110				
1959	11	1959.11 27-Nov-59						1100	1100				
1959	11	1959.11 28-Nov-59						1010	1010				
1959	11	1959.11 29-Nov-59						1020	1020				
1959	11	1959.11 30-Nov-59						1060	1060				
1959	12	1959.12 1-Dec-59						995	995				

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1959	12	1959.12	2-Dec-59					1060	1060				
1959	12	1959.12	3-Dec-59					1100	1100				
1959	12	1959.12	4-Dec-59					1130	1130				
1959	12	1959.12	5-Dec-59					1120	1120				
1959	12	1959.12	6-Dec-59					1120	1120				
1959	12	1959.12	7-Dec-59					1120	1120				
1959	12	1959.12	8-Dec-59					1070	1070				
1959	12	1959.12	9-Dec-59					1130	1130				
1959	12	1959.12	10-Dec-59					1190	1190				
1959	12	1959.12	11-Dec-59					1180	1180				
1959	12	1959.12	12-Dec-59					1180	1180				
1959	12	1959.12	13-Dec-59					1170	1170				
1959	12	1959.12	14-Dec-59					1270	1270				
1959	12	1959.12	15-Dec-59					1160	1160				
1959	12	1959.12	16-Dec-59					1370	1370				
1959	12	1959.12	17-Dec-59					1380	1380				
1959	12	1959.12	18-Dec-59					1330	1330				
1959	12	1959.12	19-Dec-59					1410	1410				
1959	12	1959.12	20-Dec-59					1340	1340				
1959	12	1959.12	21-Dec-59					1240	1240				
1959	12	1959.12	22-Dec-59					1110	1110				
1959	12	1959.12	23-Dec-59					1260	1260				
1959	12	1959.12	24-Dec-59					1330	1330				
1959	12	1959.12	25-Dec-59					1370	1370				
1959	12	1959.12	26-Dec-59					1190	1190				
1959	12	1959.12	27-Dec-59					1010	1010				
1959	12	1959.12	28-Dec-59					1020	1020				
1959	12	1959.12	29-Dec-59					1010	1010				
1959	12	1959.12	30-Dec-59					1140	1140				
1959	12	1959.12	31-Dec-59					1190	1190				
1960	1	1960.01	1-Jan-60					1230	1230				
1960	1	1960.01	2-Jan-60					1190	1190				
1960	1	1960.01	3-Jan-60					1060	1060				
1960	1	1960.01	4-Jan-60					1070	1070				
1960	1	1960.01	5-Jan-60					1090	1090				
1960	1	1960.01	6-Jan-60					1310	1310				
1960	1	1960.01	7-Jan-60					1470	1470				
1960	1	1960.01	8-Jan-60					1510	1510				
1960	1	1960.01	9-Jan-60					1500	1500				
1960	1	1960.01	10-Jan-60					1570	1570				
1960	1	1960.01	11-Jan-60					1500	1500				
1960	1	1960.01	12-Jan-60					1420	1420				
1960	1	1960.01	13-Jan-60					1690	1690				
1960	1	1960.01	14-Jan-60					1600	1600				
1960	1	1960.01	15-Jan-60					1620	1620				
1960	1	1960.01	16-Jan-60					1770	1770				
1960	1	1960.01	17-Jan-60					1730	1730				
1960	1	1960.01	18-Jan-60					1460	1460				
1960	1	1960.01	19-Jan-60					1340	1340				
1960	1	1960.01	20-Jan-60					1550	1550				
1960	1	1960.01	21-Jan-60					1420	1420				
1960	1	1960.01	22-Jan-60					1430	1430				
1960	1	1960.01	23-Jan-60					1570	1570				
1960	1	1960.01	24-Jan-60					1360	1360				
1960	1	1960.01	25-Jan-60					1290	1290				
1960	1	1960.01	26-Jan-60					1230	1230				
1960	1	1960.01	27-Jan-60					1260	1260				
1960	1	1960.01	28-Jan-60					1270	1270				
1960	1	1960.01	29-Jan-60					1270	1270				
1960	1	1960.01	30-Jan-60					1230	1230				
1960	1	1960.01	31-Jan-60					1230	1230				
1960	2	1960.02	1-Feb-60					1190	1190				
1960	2	1960.02	2-Feb-60					1220	1220				
1960	2	1960.02	3-Feb-60					1480	1480				
1960	2	1960.02	4-Feb-60					1400	1400				
1960	2	1960.02	5-Feb-60					1510	1510				
1960	2	1960.02	6-Feb-60					1610	1610				
1960	2	1960.02	7-Feb-60					1640	1640				
1960	2	1960.02	8-Feb-60					1530	1530				
1960	2	1960.02	9-Feb-60					1510	1510				
1960	2	1960.02	10-Feb-60					2130	2130				
1960	2	1960.02	11-Feb-60					3000	3000				
1960	2	1960.02	12-Feb-60					3100	3100				
1960	2	1960.02	13-Feb-60					2760	2760				
1960	2	1960.02	14-Feb-60					2590	2590				
1960	2	1960.02	15-Feb-60					2330	2330				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1960	2	1960.02	16-Feb-60					2000	2000				
1960	2	1960.02	17-Feb-60					1840	1840				
1960	2	1960.02	18-Feb-60					1700	1700				
1960	2	1960.02	19-Feb-60					1640	1640				
1960	2	1960.02	20-Feb-60					1630	1630				
1960	2	1960.02	21-Feb-60					1580	1580				
1960	2	1960.02	22-Feb-60					1400	1400				
1960	2	1960.02	23-Feb-60					1330	1330				
1960	2	1960.02	24-Feb-60					1280	1280				
1960	2	1960.02	25-Feb-60					1260	1260				
1960	2	1960.02	26-Feb-60					1310	1310				
1960	2	1960.02	27-Feb-60					1360	1360				
1960	2	1960.02	28-Feb-60					1360	1360				
1960	2	1960.02	29-Feb-60					1260	1260				
1960	3	1960.03	1-Mar-60					1200	1200				
1960	3	1960.03	2-Mar-60					1280	1280				
1960	3	1960.03	3-Mar-60					1230	1230				
1960	3	1960.03	4-Mar-60					1150	1150				
1960	3	1960.03	5-Mar-60					1080	1080				
1960	3	1960.03	6-Mar-60					1030	1030				
1960	3	1960.03	7-Mar-60					986	986				
1960	3	1960.03	8-Mar-60					866	866				
1960	3	1960.03	9-Mar-60					860	860				
1960	3	1960.03	10-Mar-60					794	794				
1960	3	1960.03	11-Mar-60					704	704				
1960	3	1960.03	12-Mar-60					580	580				
1960	3	1960.03	13-Mar-60					508	508				
1960	3	1960.03	14-Mar-60					467	467				
1960	3	1960.03	15-Mar-60					408	408				
1960	3	1960.03	16-Mar-60					386	386				
1960	3	1960.03	17-Mar-60					364	364				
1960	3	1960.03	18-Mar-60					328	328				
1960	3	1960.03	19-Mar-60					277	277				
1960	3	1960.03	20-Mar-60					257	257				
1960	3	1960.03	21-Mar-60					297	297				
1960	3	1960.03	22-Mar-60					233	233				
1960	3	1960.03	23-Mar-60					253	253				
1960	3	1960.03	24-Mar-60					217	217				
1960	3	1960.03	25-Mar-60					213	213				
1960	3	1960.03	26-Mar-60					229	229				
1960	3	1960.03	27-Mar-60					314	314				
1960	3	1960.03	28-Mar-60					386	386				
1960	3	1960.03	29-Mar-60					485	485				
1960	3	1960.03	30-Mar-60					498	498				
1960	3	1960.03	31-Mar-60					565	565				
1960	4	1960.04	1-Apr-60					600	600				
1960	4	1960.04	2-Apr-60					480	480				
1960	4	1960.04	3-Apr-60					458	458				
1960	4	1960.04	4-Apr-60					454	454				
1960	4	1960.04	5-Apr-60					395	395				
1960	4	1960.04	6-Apr-60					323	323				
1960	4	1960.04	7-Apr-60					318	318				
1960	4	1960.04	8-Apr-60					346	346				
1960	4	1960.04	9-Apr-60					350	350				
1960	4	1960.04	10-Apr-60					386	386				
1960	4	1960.04	11-Apr-60					480	480				
1960	4	1960.04	12-Apr-60					530	530				
1960	4	1960.04	13-Apr-60					526	526				
1960	4	1960.04	14-Apr-60					422	422				
1960	4	1960.04	15-Apr-60					328	328				
1960	4	1960.04	16-Apr-60					346	346				
1960	4	1960.04	17-Apr-60					440	440				
1960	4	1960.04	18-Apr-60					462	462				
1960	4	1960.04	19-Apr-60					386	386				
1960	4	1960.04	20-Apr-60					301	301				
1960	4	1960.04	21-Apr-60					261	261				
1960	4	1960.04	22-Apr-60					277	277				
1960	4	1960.04	23-Apr-60					328	328				
1960	4	1960.04	24-Apr-60					490	490				
1960	4	1960.04	25-Apr-60					640	640				
1960	4	1960.04	26-Apr-60					698	698				
1960	4	1960.04	27-Apr-60					854	854				
1960	4	1960.04	28-Apr-60					1220	1220				
1960	4	1960.04	29-Apr-60					1270	1270				
1960	4	1960.04	30-Apr-60					1150	1150				
1960	5	1960.05	1-May-60					1100	1100				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1960	5	1960.05	2-May-60					1050	1050				
1960	5	1960.05	3-May-60					962	962				
1960	5	1960.05	4-May-60					812	812				
1960	5	1960.05	5-May-60					625	625				
1960	5	1960.05	6-May-60					595	595				
1960	5	1960.05	7-May-60					512	512				
1960	5	1960.05	8-May-60					490	490				
1960	5	1960.05	9-May-60					503	503				
1960	5	1960.05	10-May-60					458	458				
1960	5	1960.05	11-May-60					382	382				
1960	5	1960.05	12-May-60					346	346				
1960	5	1960.05	13-May-60					368	368				
1960	5	1960.05	14-May-60					404	404				
1960	5	1960.05	15-May-60					467	467				
1960	5	1960.05	16-May-60					660	660				
1960	5	1960.05	17-May-60					675	675				
1960	5	1960.05	18-May-60					620	620				
1960	5	1960.05	19-May-60					615	615				
1960	5	1960.05	20-May-60					660	660				
1960	5	1960.05	21-May-60					590	590				
1960	5	1960.05	22-May-60					590	590				
1960	5	1960.05	23-May-60					698	698				
1960	5	1960.05	24-May-60					758	758				
1960	5	1960.05	25-May-60					734	734				
1960	5	1960.05	26-May-60					680	680				
1960	5	1960.05	27-May-60					650	650				
1960	5	1960.05	28-May-60					555	555				
1960	5	1960.05	29-May-60					503	503				
1960	5	1960.05	30-May-60					555	555				
1960	5	1960.05	31-May-60					535	535				
1960	6	1960.06	1-Jun-60					467	467				
1960	6	1960.06	2-Jun-60					440	440				
1960	6	1960.06	3-Jun-60					377	377				
1960	6	1960.06	4-Jun-60					354	354				
1960	6	1960.06	5-Jun-60					346	346				
1960	6	1960.06	6-Jun-60					336	336				
1960	6	1960.06	7-Jun-60					281	281				
1960	6	1960.06	8-Jun-60					265	265				
1960	6	1960.06	9-Jun-60					253	253				
1960	6	1960.06	10-Jun-60					310	310				
1960	6	1960.06	11-Jun-60					305	305				
1960	6	1960.06	12-Jun-60					314	314				
1960	6	1960.06	13-Jun-60					301	301				
1960	6	1960.06	14-Jun-60					269	269				
1960	6	1960.06	15-Jun-60					237	237				
1960	6	1960.06	16-Jun-60					237	237				
1960	6	1960.06	17-Jun-60					225	225				
1960	6	1960.06	18-Jun-60					225	225				
1960	6	1960.06	19-Jun-60					205	205				
1960	6	1960.06	20-Jun-60					265	265				
1960	6	1960.06	21-Jun-60					265	265				
1960	6	1960.06	22-Jun-60					285	285				
1960	6	1960.06	23-Jun-60					229	229				
1960	6	1960.06	24-Jun-60					293	293				
1960	6	1960.06	25-Jun-60					245	245				
1960	6	1960.06	26-Jun-60					217	217				
1960	6	1960.06	27-Jun-60					341	341				
1960	6	1960.06	28-Jun-60					323	323				
1960	6	1960.06	29-Jun-60					273	273				
1960	6	1960.06	30-Jun-60					305	305				
1960	7	1960.07	1-Jul-60					314	314				
1960	7	1960.07	2-Jul-60					285	285				
1960	7	1960.07	3-Jul-60					289	289				
1960	7	1960.07	4-Jul-60					368	368				
1960	7	1960.07	5-Jul-60					382	382				
1960	7	1960.07	6-Jul-60					293	293				
1960	7	1960.07	7-Jul-60					233	233				
1960	7	1960.07	8-Jul-60					189	189				
1960	7	1960.07	9-Jul-60					160	160				
1960	7	1960.07	10-Jul-60					171	171				
1960	7	1960.07	11-Jul-60					233	233				
1960	7	1960.07	12-Jul-60					241	241				
1960	7	1960.07	13-Jul-60					197	197				
1960	7	1960.07	14-Jul-60					157	157				
1960	7	1960.07	15-Jul-60					143	143				
1960	7	1960.07	16-Jul-60					143	143				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1960	7	1960.07	17-Jul-60					193	193				
1960	7	1960.07	18-Jul-60					245	245				
1960	7	1960.07	19-Jul-60					217	217				
1960	7	1960.07	20-Jul-60					154	154				
1960	7	1960.07	21-Jul-60					168	168				
1960	7	1960.07	22-Jul-60					157	157				
1960	7	1960.07	23-Jul-60					146	146				
1960	7	1960.07	24-Jul-60					164	164				
1960	7	1960.07	25-Jul-60					217	217				
1960	7	1960.07	26-Jul-60					237	237				
1960	7	1960.07	27-Jul-60					241	241				
1960	7	1960.07	28-Jul-60					201	201				
1960	7	1960.07	29-Jul-60					209	209				
1960	7	1960.07	30-Jul-60					269	269				
1960	7	1960.07	31-Jul-60					277	277				
1960	8	1960.08	1-Aug-60					281	281				
1960	8	1960.08	2-Aug-60					332	332				
1960	8	1960.08	3-Aug-60					301	301				
1960	8	1960.08	4-Aug-60					314	314				
1960	8	1960.08	5-Aug-60					273	273				
1960	8	1960.08	6-Aug-60					277	277				
1960	8	1960.08	7-Aug-60					341	341				
1960	8	1960.08	8-Aug-60					364	364				
1960	8	1960.08	9-Aug-60					336	336				
1960	8	1960.08	10-Aug-60					318	318				
1960	8	1960.08	11-Aug-60					293	293				
1960	8	1960.08	12-Aug-60					249	249				
1960	8	1960.08	13-Aug-60					209	209				
1960	8	1960.08	14-Aug-60					221	221				
1960	8	1960.08	15-Aug-60					261	261				
1960	8	1960.08	16-Aug-60					171	171				
1960	8	1960.08	17-Aug-60					164	164				
1960	8	1960.08	18-Aug-60					168	168				
1960	8	1960.08	19-Aug-60					150	150				
1960	8	1960.08	20-Aug-60					185	185				
1960	8	1960.08	21-Aug-60					237	237				
1960	8	1960.08	22-Aug-60					310	310				
1960	8	1960.08	23-Aug-60					321	321				
1960	8	1960.08	24-Aug-60					289	289				
1960	8	1960.08	25-Aug-60					261	261				
1960	8	1960.08	26-Aug-60					285	285				
1960	8	1960.08	27-Aug-60					289	289				
1960	8	1960.08	28-Aug-60					285	285				
1960	8	1960.08	29-Aug-60					341	341				
1960	8	1960.08	30-Aug-60					257	257				
1960	8	1960.08	31-Aug-60					209	209				
1960	9	1960.09	1-Sep-60					253	253				
1960	9	1960.09	2-Sep-60					281	281				
1960	9	1960.09	3-Sep-60					293	293				
1960	9	1960.09	4-Sep-60					341	341				
1960	9	1960.09	5-Sep-60					413	413				
1960	9	1960.09	6-Sep-60					404	404				
1960	9	1960.09	7-Sep-60					382	382				
1960	9	1960.09	8-Sep-60					382	382				
1960	9	1960.09	9-Sep-60					377	377				
1960	9	1960.09	10-Sep-60					350	350				
1960	9	1960.09	11-Sep-60					386	386				
1960	9	1960.09	12-Sep-60					390	390				
1960	9	1960.09	13-Sep-60					382	382				
1960	9	1960.09	14-Sep-60					341	341				
1960	9	1960.09	15-Sep-60					328	328				
1960	9	1960.09	16-Sep-60					350	350				
1960	9	1960.09	17-Sep-60					368	368				
1960	9	1960.09	18-Sep-60					382	382				
1960	9	1960.09	19-Sep-60					444	444				
1960	9	1960.09	20-Sep-60					418	418				
1960	9	1960.09	21-Sep-60					386	386				
1960	9	1960.09	22-Sep-60					395	395				
1960	9	1960.09	23-Sep-60					418	418				
1960	9	1960.09	24-Sep-60					431	431				
1960	9	1960.09	25-Sep-60					422	422				
1960	9	1960.09	26-Sep-60					440	440				
1960	9	1960.09	27-Sep-60					449	449				
1960	9	1960.09	28-Sep-60					444	444				
1960	9	1960.09	29-Sep-60					444	444				
1960	9	1960.09	30-Sep-60					454	454				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1960	10	1960.10	1-Oct-60					478	478				
1960	10	1960.10	2-Oct-60					546	546				
1960	10	1960.10	3-Oct-60					542	542				
1960	10	1960.10	4-Oct-60					486	486				
1960	10	1960.10	5-Oct-60					494	494				
1960	10	1960.10	6-Oct-60					506	506				
1960	10	1960.10	7-Oct-60					546	546				
1960	10	1960.10	8-Oct-60					584	584				
1960	10	1960.10	9-Oct-60					584	584				
1960	10	1960.10	10-Oct-60					592	592				
1960	10	1960.10	11-Oct-60					562	562				
1960	10	1960.10	12-Oct-60					579	579				
1960	10	1960.10	13-Oct-60					682	682				
1960	10	1960.10	14-Oct-60					750	750				
1960	10	1960.10	15-Oct-60					840	840				
1960	10	1960.10	16-Oct-60					895	895				
1960	10	1960.10	17-Oct-60					890	890				
1960	10	1960.10	18-Oct-60					795	795				
1960	10	1960.10	19-Oct-60					765	765				
1960	10	1960.10	20-Oct-60					860	860				
1960	10	1960.10	21-Oct-60					865	865				
1960	10	1960.10	22-Oct-60					880	880				
1960	10	1960.10	23-Oct-60					895	895				
1960	10	1960.10	24-Oct-60					805	805				
1960	10	1960.10	25-Oct-60					660	660				
1960	10	1960.10	26-Oct-60					710	710				
1960	10	1960.10	27-Oct-60					790	790				
1960	10	1960.10	28-Oct-60					835	835				
1960	10	1960.10	29-Oct-60					880	880				
1960	10	1960.10	30-Oct-60					905	905				
1960	10	1960.10	31-Oct-60					890	890				
1960	11	1960.11	1-Nov-60					830	830				
1960	11	1960.11	2-Nov-60					810	810				
1960	11	1960.11	3-Nov-60					905	905				
1960	11	1960.11	4-Nov-60					950	950				
1960	11	1960.11	5-Nov-60					1010	1010				
1960	11	1960.11	6-Nov-60					1080	1080				
1960	11	1960.11	7-Nov-60					1080	1080				
1960	11	1960.11	8-Nov-60					1080	1080				
1960	11	1960.11	9-Nov-60					1120	1120				
1960	11	1960.11	10-Nov-60					1100	1100				
1960	11	1960.11	11-Nov-60					1100	1100				
1960	11	1960.11	12-Nov-60					1110	1110				
1960	11	1960.11	13-Nov-60					1130	1130				
1960	11	1960.11	14-Nov-60					1130	1130				
1960	11	1960.11	15-Nov-60					1050	1050				
1960	11	1960.11	16-Nov-60					1060	1060				
1960	11	1960.11	17-Nov-60					1040	1040				
1960	11	1960.11	18-Nov-60					1040	1040				
1960	11	1960.11	19-Nov-60					1070	1070				
1960	11	1960.11	20-Nov-60					1050	1050				
1960	11	1960.11	21-Nov-60					975	975				
1960	11	1960.11	22-Nov-60					925	925				
1960	11	1960.11	23-Nov-60					955	955				
1960	11	1960.11	24-Nov-60					1040	1040				
1960	11	1960.11	25-Nov-60					1050	1050				
1960	11	1960.11	26-Nov-60					985	985				
1960	11	1960.11	27-Nov-60					885	885				
1960	11	1960.11	28-Nov-60					900	900				
1960	11	1960.11	29-Nov-60					925	925				
1960	11	1960.11	30-Nov-60					990	990				
1960	12	1960.12	1-Dec-60					1080	1080				
1960	12	1960.12	2-Dec-60					1130	1130				
1960	12	1960.12	3-Dec-60					1200	1200				
1960	12	1960.12	4-Dec-60					1360	1360				
1960	12	1960.12	5-Dec-60					1360	1360				
1960	12	1960.12	6-Dec-60					1310	1310				
1960	12	1960.12	7-Dec-60					1260	1260				
1960	12	1960.12	8-Dec-60					1420	1420				
1960	12	1960.12	9-Dec-60					1450	1450				
1960	12	1960.12	10-Dec-60					1430	1430				
1960	12	1960.12	11-Dec-60					1410	1410				
1960	12	1960.12	12-Dec-60					1370	1370				
1960	12	1960.12	13-Dec-60					1310	1310				
1960	12	1960.12	14-Dec-60					1220	1220				
1960	12	1960.12	15-Dec-60					1310	1310				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1960	12	1960.12	16-Dec-60					1350	1350				
1960	12	1960.12	17-Dec-60					1330	1330				
1960	12	1960.12	18-Dec-60					1290	1290				
1960	12	1960.12	19-Dec-60					1190	1190				
1960	12	1960.12	20-Dec-60					1210	1210				
1960	12	1960.12	21-Dec-60					1260	1260				
1960	12	1960.12	22-Dec-60					1270	1270				
1960	12	1960.12	23-Dec-60					1280	1280				
1960	12	1960.12	24-Dec-60					1270	1270				
1960	12	1960.12	25-Dec-60					1250	1250				
1960	12	1960.12	26-Dec-60					1250	1250				
1960	12	1960.12	27-Dec-60					1240	1240				
1960	12	1960.12	28-Dec-60					1220	1220				
1960	12	1960.12	29-Dec-60					1260	1260				
1960	12	1960.12	30-Dec-60					1300	1300				
1960	12	1960.12	31-Dec-60					1310	1310				
1961	1	1961.01	1-Jan-61					1300	1300				
1961	1	1961.01	2-Jan-61					1260	1260				
1961	1	1961.01	3-Jan-61					1150	1150				
1961	1	1961.01	4-Jan-61					1080	1080				
1961	1	1961.01	5-Jan-61					1230	1230				
1961	1	1961.01	6-Jan-61					1270	1270				
1961	1	1961.01	7-Jan-61					1280	1280				
1961	1	1961.01	8-Jan-61					1260	1260				
1961	1	1961.01	9-Jan-61					1250	1250				
1961	1	1961.01	10-Jan-61					1150	1150				
1961	1	1961.01	11-Jan-61					1230	1230				
1961	1	1961.01	12-Jan-61					1290	1290				
1961	1	1961.01	13-Jan-61					1340	1340				
1961	1	1961.01	14-Jan-61					1450	1450				
1961	1	1961.01	15-Jan-61					1460	1460				
1961	1	1961.01	16-Jan-61					1340	1340				
1961	1	1961.01	17-Jan-61					1280	1280				
1961	1	1961.01	18-Jan-61					1300	1300				
1961	1	1961.01	19-Jan-61					1360	1360				
1961	1	1961.01	20-Jan-61					1370	1370				
1961	1	1961.01	21-Jan-61					1370	1370				
1961	1	1961.01	22-Jan-61					1460	1460				
1961	1	1961.01	23-Jan-61					1450	1450				
1961	1	1961.01	24-Jan-61					1310	1310				
1961	1	1961.01	25-Jan-61					1230	1230				
1961	1	1961.01	26-Jan-61					1370	1370				
1961	1	1961.01	27-Jan-61					1420	1420				
1961	1	1961.01	28-Jan-61					1530	1530				
1961	1	1961.01	29-Jan-61					1580	1580				
1961	1	1961.01	30-Jan-61					1560	1560				
1961	1	1961.01	31-Jan-61					1560	1560				
1961	2	1961.02	1-Feb-61					1590	1590				
1961	2	1961.02	2-Feb-61					1570	1570				
1961	2	1961.02	3-Feb-61					1470	1470				
1961	2	1961.02	4-Feb-61					1440	1440				
1961	2	1961.02	5-Feb-61					1490	1490				
1961	2	1961.02	6-Feb-61					1330	1330				
1961	2	1961.02	7-Feb-61					1230	1230				
1961	2	1961.02	8-Feb-61					1200	1200				
1961	2	1961.02	9-Feb-61					1200	1200				
1961	2	1961.02	10-Feb-61					1150	1150				
1961	2	1961.02	11-Feb-61					1120	1120				
1961	2	1961.02	12-Feb-61					1070	1070				
1961	2	1961.02	13-Feb-61					1010	1010				
1961	2	1961.02	14-Feb-61					960	960				
1961	2	1961.02	15-Feb-61					945	945				
1961	2	1961.02	16-Feb-61					980	980				
1961	2	1961.02	17-Feb-61					1000	1000				
1961	2	1961.02	18-Feb-61					1000	1000				
1961	2	1961.02	19-Feb-61					1000	1000				
1961	2	1961.02	20-Feb-61					985	985				
1961	2	1961.02	21-Feb-61					955	955				
1961	2	1961.02	22-Feb-61					955	955				
1961	2	1961.02	23-Feb-61					970	970				
1961	2	1961.02	24-Feb-61					950	950				
1961	2	1961.02	25-Feb-61					970	970				
1961	2	1961.02	26-Feb-61					990	990				
1961	2	1961.02	27-Feb-61					935	935				
1961	2	1961.02	28-Feb-61					845	845				
1961	3	1961.03	1-Mar-61					860	860				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1961	3	1961.03	2-Mar-61					795	795				
1961	3	1961.03	3-Mar-61					660	660				
1961	3	1961.03	4-Mar-61					534	534				
1961	3	1961.03	5-Mar-61					522	522				
1961	3	1961.03	6-Mar-61					579	579				
1961	3	1961.03	7-Mar-61					562	562				
1961	3	1961.03	8-Mar-61					546	546				
1961	3	1961.03	9-Mar-61					446	446				
1961	3	1961.03	10-Mar-61					350	350				
1961	3	1961.03	11-Mar-61					350	350				
1961	3	1961.03	12-Mar-61					340	340				
1961	3	1961.03	13-Mar-61					375	375				
1961	3	1961.03	14-Mar-61					316	316				
1961	3	1961.03	15-Mar-61					281	281				
1961	3	1961.03	16-Mar-61					299	299				
1961	3	1961.03	17-Mar-61					319	319				
1961	3	1961.03	18-Mar-61					358	358				
1961	3	1961.03	19-Mar-61					410	410				
1961	3	1961.03	20-Mar-61					446	446				
1961	3	1961.03	21-Mar-61					406	406				
1961	3	1961.03	22-Mar-61					375	375				
1961	3	1961.03	23-Mar-61					354	354				
1961	3	1961.03	24-Mar-61					358	358				
1961	3	1961.03	25-Mar-61					392	392				
1961	3	1961.03	26-Mar-61					400	400				
1961	3	1961.03	27-Mar-61					478	478				
1961	3	1961.03	28-Mar-61					486	486				
1961	3	1961.03	29-Mar-61					462	462				
1961	3	1961.03	30-Mar-61					372	372				
1961	3	1961.03	31-Mar-61					330	330				
1961	4	1961.04	1-Apr-61					299	299				
1961	4	1961.04	2-Apr-61					333	333				
1961	4	1961.04	3-Apr-61					336	336				
1961	4	1961.04	4-Apr-61					257	257				
1961	4	1961.04	5-Apr-61					195	195				
1961	4	1961.04	6-Apr-61					176	176				
1961	4	1961.04	7-Apr-61					197	197				
1961	4	1961.04	8-Apr-61					203	203				
1961	4	1961.04	9-Apr-61					186	186				
1961	4	1961.04	10-Apr-61					206	206				
1961	4	1961.04	11-Apr-61					225	225				
1961	4	1961.04	12-Apr-61					173	173				
1961	4	1961.04	13-Apr-61					147	147				
1961	4	1961.04	14-Apr-61					163	163				
1961	4	1961.04	15-Apr-61					147	147				
1961	4	1961.04	16-Apr-61					142	142				
1961	4	1961.04	17-Apr-61					145	145				
1961	4	1961.04	18-Apr-61					106	106				
1961	4	1961.04	19-Apr-61					80	80				
1961	4	1961.04	20-Apr-61					68	68				
1961	4	1961.04	21-Apr-61					87	87				
1961	4	1961.04	22-Apr-61					132	132				
1961	4	1961.04	23-Apr-61					179	179				
1961	4	1961.04	24-Apr-61					266	266				
1961	4	1961.04	25-Apr-61					296	296				
1961	4	1961.04	26-Apr-61					260	260				
1961	4	1961.04	27-Apr-61					242	242				
1961	4	1961.04	28-Apr-61					245	245				
1961	4	1961.04	29-Apr-61					254	254				
1961	4	1961.04	30-Apr-61					245	245				
1961	5	1961.05	1-May-61					254	254				
1961	5	1961.05	2-May-61					263	263				
1961	5	1961.05	3-May-61					225	225				
1961	5	1961.05	4-May-61					209	209				
1961	5	1961.05	5-May-61					225	225				
1961	5	1961.05	6-May-61					251	251				
1961	5	1961.05	7-May-61					347	347				
1961	5	1961.05	8-May-61					466	466				
1961	5	1961.05	9-May-61					490	490				
1961	5	1961.05	10-May-61					458	458				
1961	5	1961.05	11-May-61					406	406				
1961	5	1961.05	12-May-61					434	434				
1961	5	1961.05	13-May-61					403	403				
1961	5	1961.05	14-May-61					426	426				
1961	5	1961.05	15-May-61					438	438				
1961	5	1961.05	16-May-61					392	392				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1961	5	1961.05	17-May-61					375	375				
1961	5	1961.05	18-May-61					372	372				
1961	5	1961.05	19-May-61					375	375				
1961	5	1961.05	20-May-61					386	386				
1961	5	1961.05	21-May-61					414	414				
1961	5	1961.05	22-May-61					462	462				
1961	5	1961.05	23-May-61					450	450				
1961	5	1961.05	24-May-61					438	438				
1961	5	1961.05	25-May-61					450	450				
1961	5	1961.05	26-May-61					450	450				
1961	5	1961.05	27-May-61					406	406				
1961	5	1961.05	28-May-61					375	375				
1961	5	1961.05	29-May-61					392	392				
1961	5	1961.05	30-May-61					378	378				
1961	5	1961.05	31-May-61					361	361				
1961	6	1961.06	1-Jun-61					335	335				
1961	6	1961.06	2-Jun-61					294	294				
1961	6	1961.06	3-Jun-61					239	239				
1961	6	1961.06	4-Jun-61					239	239				
1961	6	1961.06	5-Jun-61					291	291				
1961	6	1961.06	6-Jun-61					300	300				
1961	6	1961.06	7-Jun-61					256	256				
1961	6	1961.06	8-Jun-61					248	248				
1961	6	1961.06	9-Jun-61					237	237				
1961	6	1961.06	10-Jun-61					211	211				
1961	6	1961.06	11-Jun-61					214	214				
1961	6	1961.06	12-Jun-61					248	248				
1961	6	1961.06	13-Jun-61					239	239				
1961	6	1961.06	14-Jun-61					190	190				
1961	6	1961.06	15-Jun-61					178	178				
1961	6	1961.06	16-Jun-61					154	154				
1961	6	1961.06	17-Jun-61					163	163				
1961	6	1961.06	18-Jun-61					175	175				
1961	6	1961.06	19-Jun-61					175	175				
1961	6	1961.06	20-Jun-61					180	180				
1961	6	1961.06	21-Jun-61					173	173				
1961	6	1961.06	22-Jun-61					146	146				
1961	6	1961.06	23-Jun-61					137	137				
1961	6	1961.06	24-Jun-61					163	163				
1961	6	1961.06	25-Jun-61					173	173				
1961	6	1961.06	26-Jun-61					214	214				
1961	6	1961.06	27-Jun-61					180	180				
1961	6	1961.06	28-Jun-61					146	146				
1961	6	1961.06	29-Jun-61					144	144				
1961	6	1961.06	30-Jun-61					170	170				
1961	7	1961.07	1-Jul-61					185	185				
1961	7	1961.07	2-Jul-61					199	199				
1961	7	1961.07	3-Jul-61					194	194				
1961	7	1961.07	4-Jul-61					209	209				
1961	7	1961.07	5-Jul-61					197	197				
1961	7	1961.07	6-Jul-61					151	151				
1961	7	1961.07	7-Jul-61					125	125				
1961	7	1961.07	8-Jul-61					110	110				
1961	7	1961.07	9-Jul-61					137	137				
1961	7	1961.07	10-Jul-61					151	151				
1961	7	1961.07	11-Jul-61					115	115				
1961	7	1961.07	12-Jul-61					72	72				
1961	7	1961.07	13-Jul-61					59	59				
1961	7	1961.07	14-Jul-61					57	57				
1961	7	1961.07	15-Jul-61					70	70				
1961	7	1961.07	16-Jul-61					101	101				
1961	7	1961.07	17-Jul-61					101	101				
1961	7	1961.07	18-Jul-61					84	84				
1961	7	1961.07	19-Jul-61					36	36				
1961	7	1961.07	20-Jul-61					36	36				
1961	7	1961.07	21-Jul-61					59	59				
1961	7	1961.07	22-Jul-61					63	63				
1961	7	1961.07	23-Jul-61					57	57				
1961	7	1961.07	24-Jul-61					96	96				
1961	7	1961.07	25-Jul-61					65	65				
1961	7	1961.07	26-Jul-61					68	68				
1961	7	1961.07	27-Jul-61					63	63				
1961	7	1961.07	28-Jul-61					72	72				
1961	7	1961.07	29-Jul-61					61	61				
1961	7	1961.07	30-Jul-61					91	91				
1961	7	1961.07	31-Jul-61					132	132				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1961	8	1961.08	1-Aug-61					115	115				
1961	8	1961.08	2-Aug-61					89	89				
1961	8	1961.08	3-Aug-61					63	63				
1961	8	1961.08	4-Aug-61					54	54				
1961	8	1961.08	5-Aug-61					54	54				
1961	8	1961.08	6-Aug-61					65	65				
1961	8	1961.08	7-Aug-61					101	101				
1961	8	1961.08	8-Aug-61					89	89				
1961	8	1961.08	9-Aug-61					36	36				
1961	8	1961.08	10-Aug-61					30	30				
1961	8	1961.08	11-Aug-61					50	50				
1961	8	1961.08	12-Aug-61					63	63				
1961	8	1961.08	13-Aug-61					132	132				
1961	8	1961.08	14-Aug-61					173	173				
1961	8	1961.08	15-Aug-61					190	190				
1961	8	1961.08	16-Aug-61					178	178				
1961	8	1961.08	17-Aug-61					149	149				
1961	8	1961.08	18-Aug-61					149	149				
1961	8	1961.08	19-Aug-61					137	137				
1961	8	1961.08	20-Aug-61					163	163				
1961	8	1961.08	21-Aug-61					224	224				
1961	8	1961.08	22-Aug-61					224	224				
1961	8	1961.08	23-Aug-61					214	214				
1961	8	1961.08	24-Aug-61					204	204				
1961	8	1961.08	25-Aug-61					209	209				
1961	8	1961.08	26-Aug-61					194	194				
1961	8	1961.08	27-Aug-61					194	194				
1961	8	1961.08	28-Aug-61					248	248				
1961	8	1961.08	29-Aug-61					279	279				
1961	8	1961.08	30-Aug-61					296	296				
1961	8	1961.08	31-Aug-61					304	304				
1961	9	1961.09	1-Sep-61					335	335				
1961	9	1961.09	2-Sep-61					360	360				
1961	9	1961.09	3-Sep-61					363	363				
1961	9	1961.09	4-Sep-61					394	394				
1961	9	1961.09	5-Sep-61					374	374				
1961	9	1961.09	6-Sep-61					360	360				
1961	9	1961.09	7-Sep-61					310	310				
1961	9	1961.09	8-Sep-61					304	304				
1961	9	1961.09	9-Sep-61					314	314				
1961	9	1961.09	10-Sep-61					324	324				
1961	9	1961.09	11-Sep-61					346	346				
1961	9	1961.09	12-Sep-61					328	328				
1961	9	1961.09	13-Sep-61					276	276				
1961	9	1961.09	14-Sep-61					237	237				
1961	9	1961.09	15-Sep-61					239	239				
1961	9	1961.09	16-Sep-61					262	262				
1961	9	1961.09	17-Sep-61					262	262				
1961	9	1961.09	18-Sep-61					291	291				
1961	9	1961.09	19-Sep-61					324	324				
1961	9	1961.09	20-Sep-61					335	335				
1961	9	1961.09	21-Sep-61					335	335				
1961	9	1961.09	22-Sep-61					328	328				
1961	9	1961.09	23-Sep-61					321	321				
1961	9	1961.09	24-Sep-61					346	346				
1961	9	1961.09	25-Sep-61					363	363				
1961	9	1961.09	26-Sep-61					332	332				
1961	9	1961.09	27-Sep-61					310	310				
1961	9	1961.09	28-Sep-61					321	321				
1961	9	1961.09	29-Sep-61					318	318				
1961	9	1961.09	30-Sep-61					321	321				
1961	10	1961.10	1-Oct-61					335	335				
1961	10	1961.10	2-Oct-61					378	378				
1961	10	1961.10	3-Oct-61					324	324				
1961	10	1961.10	4-Oct-61					304	304				
1961	10	1961.10	5-Oct-61					300	300				
1961	10	1961.10	6-Oct-61					291	291				
1961	10	1961.10	7-Oct-61					318	318				
1961	10	1961.10	8-Oct-61					356	356				
1961	10	1961.10	9-Oct-61					382	382				
1961	10	1961.10	10-Oct-61					386	386				
1961	10	1961.10	11-Oct-61					382	382				
1961	10	1961.10	12-Oct-61					382	382				
1961	10	1961.10	13-Oct-61					386	386				
1961	10	1961.10	14-Oct-61					386	386				
1961	10	1961.10	15-Oct-61					523	523				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1961	10	1961.10	16-Oct-61					475	475				
1961	10	1961.10	17-Oct-61					434	434				
1961	10	1961.10	18-Oct-61					393	393				
1961	10	1961.10	19-Oct-61					399	399				
1961	10	1961.10	20-Oct-61					414	414				
1961	10	1961.10	21-Oct-61					418	418				
1961	10	1961.10	22-Oct-61					459	459				
1961	10	1961.10	23-Oct-61					478	478				
1961	10	1961.10	24-Oct-61					475	475				
1961	10	1961.10	25-Oct-61					466	466				
1961	10	1961.10	26-Oct-61					450	450				
1961	10	1961.10	27-Oct-61					453	453				
1961	10	1961.10	28-Oct-61					469	469				
1961	10	1961.10	29-Oct-61					494	494				
1961	10	1961.10	30-Oct-61					498	498				
1961	10	1961.10	31-Oct-61					494	494				
1961	11	1961.11	1-Nov-61					504	504				
1961	11	1961.11	2-Nov-61					510	510				
1961	11	1961.11	3-Nov-61					520	520				
1961	11	1961.11	4-Nov-61					514	514				
1961	11	1961.11	5-Nov-61					584	584				
1961	11	1961.11	6-Nov-61					636	636				
1961	11	1961.11	7-Nov-61					633	633				
1961	11	1961.11	8-Nov-61					616	616				
1961	11	1961.11	9-Nov-61					633	633				
1961	11	1961.11	10-Nov-61					633	633				
1961	11	1961.11	11-Nov-61					647	647				
1961	11	1961.11	12-Nov-61					608	608				
1961	11	1961.11	13-Nov-61					570	570				
1961	11	1961.11	14-Nov-61					517	517				
1961	11	1961.11	15-Nov-61					517	517				
1961	11	1961.11	16-Nov-61					507	507				
1961	11	1961.11	17-Nov-61					507	507				
1961	11	1961.11	18-Nov-61					485	485				
1961	11	1961.11	19-Nov-61					494	494				
1961	11	1961.11	20-Nov-61					556	556				
1961	11	1961.11	21-Nov-61					594	594				
1961	11	1961.11	22-Nov-61					616	616				
1961	11	1961.11	23-Nov-61					626	626				
1961	11	1961.11	24-Nov-61					630	630				
1961	11	1961.11	25-Nov-61					650	650				
1961	11	1961.11	26-Nov-61					678	678				
1961	11	1961.11	27-Nov-61					700	700				
1961	11	1961.11	28-Nov-61					700	700				
1961	11	1961.11	29-Nov-61					700	700				
1961	11	1961.11	30-Nov-61					706	706				
1961	12	1961.12	1-Dec-61					714	714				
1961	12	1961.12	2-Dec-61					734	734				
1961	12	1961.12	3-Dec-61					759	759				
1961	12	1961.12	4-Dec-61					766	766				
1961	12	1961.12	5-Dec-61					800	800				
1961	12	1961.12	6-Dec-61					832	832				
1961	12	1961.12	7-Dec-61					836	836				
1961	12	1961.12	8-Dec-61					832	832				
1961	12	1961.12	9-Dec-61					812	812				
1961	12	1961.12	10-Dec-61					800	800				
1961	12	1961.12	11-Dec-61					792	792				
1961	12	1961.12	12-Dec-61					766	766				
1961	12	1961.12	13-Dec-61					742	742				
1961	12	1961.12	14-Dec-61					728	728				
1961	12	1961.12	15-Dec-61					717	717				
1961	12	1961.12	16-Dec-61					703	703				
1961	12	1961.12	17-Dec-61					682	682				
1961	12	1961.12	18-Dec-61					668	668				
1961	12	1961.12	19-Dec-61					664	664				
1961	12	1961.12	20-Dec-61					668	668				
1961	12	1961.12	21-Dec-61					661	661				
1961	12	1961.12	22-Dec-61					650	650				
1961	12	1961.12	23-Dec-61					650	650				
1961	12	1961.12	24-Dec-61					647	647				
1961	12	1961.12	25-Dec-61					647	647				
1961	12	1961.12	26-Dec-61					640	640				
1961	12	1961.12	27-Dec-61					633	633				
1961	12	1961.12	28-Dec-61					630	630				
1961	12	1961.12	29-Dec-61					630	630				
1961	12	1961.12	30-Dec-61					626	626				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1961	12	1961.12	31-Dec-61					626	626				
1962	1	1962.01	1-Jan-62					619	619				
1962	1	1962.01	2-Jan-62					616	616				
1962	1	1962.01	3-Jan-62					616	616				
1962	1	1962.01	4-Jan-62					612	612				
1962	1	1962.01	5-Jan-62					608	608				
1962	1	1962.01	6-Jan-62					612	612				
1962	1	1962.01	7-Jan-62					619	619				
1962	1	1962.01	8-Jan-62					626	626				
1962	1	1962.01	9-Jan-62					633	633				
1962	1	1962.01	10-Jan-62					692	692				
1962	1	1962.01	11-Jan-62					748	748				
1962	1	1962.01	12-Jan-62					800	800				
1962	1	1962.01	13-Jan-62					820	820				
1962	1	1962.01	14-Jan-62					828	828				
1962	1	1962.01	15-Jan-62					820	820				
1962	1	1962.01	16-Jan-62					812	812				
1962	1	1962.01	17-Jan-62					800	800				
1962	1	1962.01	18-Jan-62					776	776				
1962	1	1962.01	19-Jan-62					770	770				
1962	1	1962.01	20-Jan-62					900	900				
1962	1	1962.01	21-Jan-62					1030	1030				
1962	1	1962.01	22-Jan-62					1170	1170				
1962	1	1962.01	23-Jan-62					1260	1260				
1962	1	1962.01	24-Jan-62					1160	1160				
1962	1	1962.01	25-Jan-62					972	972				
1962	1	1962.01	26-Jan-62					896	896				
1962	1	1962.01	27-Jan-62					856	856				
1962	1	1962.01	28-Jan-62					836	836				
1962	1	1962.01	29-Jan-62					812	812				
1962	1	1962.01	30-Jan-62					800	800				
1962	1	1962.01	31-Jan-62					812	812				
1962	2	1962.02	1-Feb-62					808	808				
1962	2	1962.02	2-Feb-62					792	792				
1962	2	1962.02	3-Feb-62					780	780				
1962	2	1962.02	4-Feb-62					770	770				
1962	2	1962.02	5-Feb-62					756	756				
1962	2	1962.02	6-Feb-62					748	748				
1962	2	1962.02	7-Feb-62					752	752				
1962	2	1962.02	8-Feb-62					756	756				
1962	2	1962.02	9-Feb-62					831	831				
1962	2	1962.02	10-Feb-62					1090	1090				
1962	2	1962.02	11-Feb-62					2000	2000				
1962	2	1962.02	12-Feb-62					3550	3550				
1962	2	1962.02	13-Feb-62					4670	4670				
1962	2	1962.02	14-Feb-62					4760	4760				
1962	2	1962.02	15-Feb-62					5780	5780				
1962	2	1962.02	16-Feb-62					7820	7820				
1962	2	1962.02	17-Feb-62					10200	10200				
1962	2	1962.02	18-Feb-62					11100	11100				
1962	2	1962.02	19-Feb-62					11600	11600				
1962	2	1962.02	20-Feb-62					12000	12000				
1962	2	1962.02	21-Feb-62					12500	12500				
1962	2	1962.02	22-Feb-62					12200	12200				
1962	2	1962.02	23-Feb-62					11400	11400				
1962	2	1962.02	24-Feb-62					10600	10600				
1962	2	1962.02	25-Feb-62					10000	10000				
1962	2	1962.02	26-Feb-62					8970	8970				
1962	2	1962.02	27-Feb-62					7690	7690				
1962	2	1962.02	28-Feb-62					6850	6850				
1962	3	1962.03	1-Mar-62					6390	6390				
1962	3	1962.03	2-Mar-62					5730	5730				
1962	3	1962.03	3-Mar-62					5160	5160				
1962	3	1962.03	4-Mar-62					5040	5040				
1962	3	1962.03	5-Mar-62					5020	5020				
1962	3	1962.03	6-Mar-62					5000	5000				
1962	3	1962.03	7-Mar-62					5690	5690				
1962	3	1962.03	8-Mar-62					7220	7220				
1962	3	1962.03	9-Mar-62					8620	8620				
1962	3	1962.03	10-Mar-62					9650	9650				
1962	3	1962.03	11-Mar-62					9830	9830				
1962	3	1962.03	12-Mar-62					8780	8780				
1962	3	1962.03	13-Mar-62					7890	7890				
1962	3	1962.03	14-Mar-62					7340	7340				
1962	3	1962.03	15-Mar-62					6980	6980				
1962	3	1962.03	16-Mar-62					6780	6780				

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1962	3	1962.03	17-Mar-62					6620	6620				
1962	3	1962.03	18-Mar-62					6120	6120				
1962	3	1962.03	19-Mar-62					5820	5820				
1962	3	1962.03	20-Mar-62					5610	5610				
1962	3	1962.03	21-Mar-62					5170	5170				
1962	3	1962.03	22-Mar-62					4940	4940				
1962	3	1962.03	23-Mar-62					4870	4870				
1962	3	1962.03	24-Mar-62					4740	4740				
1962	3	1962.03	25-Mar-62					4550	4550				
1962	3	1962.03	26-Mar-62					4420	4420				
1962	3	1962.03	27-Mar-62					4330	4330				
1962	3	1962.03	28-Mar-62					4230	4230				
1962	3	1962.03	29-Mar-62					3970	3970				
1962	3	1962.03	30-Mar-62					3790	3790				
1962	3	1962.03	31-Mar-62					3610	3610				
1962	4	1962.04	1-Apr-62					3540	3540				
1962	4	1962.04	2-Apr-62					3410	3410				
1962	4	1962.04	3-Apr-62					3120	3120				
1962	4	1962.04	4-Apr-62					2700	2700				
1962	4	1962.04	5-Apr-62					2380	2380				
1962	4	1962.04	6-Apr-62					2250	2250				
1962	4	1962.04	7-Apr-62					2150	2150				
1962	4	1962.04	8-Apr-62					2070	2070				
1962	4	1962.04	9-Apr-62					1990	1990				
1962	4	1962.04	10-Apr-62					1930	1930				
1962	4	1962.04	11-Apr-62					1840	1840				
1962	4	1962.04	12-Apr-62					1780	1780				
1962	4	1962.04	13-Apr-62					1760	1760				
1962	4	1962.04	14-Apr-62					1730	1730				
1962	4	1962.04	15-Apr-62					1510	1510				
1962	4	1962.04	16-Apr-62					1420	1420				
1962	4	1962.04	17-Apr-62					1280	1280				
1962	4	1962.04	18-Apr-62					1220	1220				
1962	4	1962.04	19-Apr-62					1570	1570				
1962	4	1962.04	20-Apr-62					1800	1800				
1962	4	1962.04	21-Apr-62					2050	2050				
1962	4	1962.04	22-Apr-62					2340	2340				
1962	4	1962.04	23-Apr-62					2280	2280				
1962	4	1962.04	24-Apr-62					2060	2060				
1962	4	1962.04	25-Apr-62					1990	1990				
1962	4	1962.04	26-Apr-62					1960	1960				
1962	4	1962.04	27-Apr-62					2010	2010				
1962	4	1962.04	28-Apr-62					2100	2100				
1962	4	1962.04	29-Apr-62					2140	2140				
1962	4	1962.04	30-Apr-62					2170	2170				
1962	5	1962.05	1-May-62					2000	2000				
1962	5	1962.05	2-May-62					1760	1760				
1962	5	1962.05	3-May-62					1690	1690				
1962	5	1962.05	4-May-62					1660	1660				
1962	5	1962.05	5-May-62					1700	1700				
1962	5	1962.05	6-May-62					2010	2010				
1962	5	1962.05	7-May-62					2540	2540				
1962	5	1962.05	8-May-62					2940	2940				
1962	5	1962.05	9-May-62					3170	3170				
1962	5	1962.05	10-May-62					4240	4240				
1962	5	1962.05	11-May-62					5090	5090				
1962	5	1962.05	12-May-62					5460	5460				
1962	5	1962.05	13-May-62					5130	5130				
1962	5	1962.05	14-May-62					4530	4530				
1962	5	1962.05	15-May-62					4050	4050				
1962	5	1962.05	16-May-62					3290	3290				
1962	5	1962.05	17-May-62					2560	2560				
1962	5	1962.05	18-May-62					2210	2210				
1962	5	1962.05	19-May-62					1970	1970				
1962	5	1962.05	20-May-62					1850	1850				
1962	5	1962.05	21-May-62					1930	1930				
1962	5	1962.05	22-May-62					1910	1910				
1962	5	1962.05	23-May-62					2000	2000				
1962	5	1962.05	24-May-62					2050	2050				
1962	5	1962.05	25-May-62					2030	2030				
1962	5	1962.05	26-May-62					2120	2120				
1962	5	1962.05	27-May-62					2200	2200				
1962	5	1962.05	28-May-62					2020	2020				
1962	5	1962.05	29-May-62					1880	1880				
1962	5	1962.05	30-May-62					1690	1690				
1962	5	1962.05	31-May-62					1570	1570				

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1962	6	1962.06	1-Jun-62					1440	1440				
1962	6	1962.06	2-Jun-62					1550	1550				
1962	6	1962.06	3-Jun-62					3570	3570				
1962	6	1962.06	4-Jun-62					4490	4490				
1962	6	1962.06	5-Jun-62					5060	5060				
1962	6	1962.06	6-Jun-62					5490	5490				
1962	6	1962.06	7-Jun-62					4660	4660				
1962	6	1962.06	8-Jun-62					3540	3540				
1962	6	1962.06	9-Jun-62					3650	3650				
1962	6	1962.06	10-Jun-62					4350	4350				
1962	6	1962.06	11-Jun-62					4440	4440				
1962	6	1962.06	12-Jun-62					4920	4920				
1962	6	1962.06	13-Jun-62					5300	5300				
1962	6	1962.06	14-Jun-62					5040	5040				
1962	6	1962.06	15-Jun-62					4530	4530				
1962	6	1962.06	16-Jun-62					3910	3910				
1962	6	1962.06	17-Jun-62					3400	3400				
1962	6	1962.06	18-Jun-62					3080	3080				
1962	6	1962.06	19-Jun-62					2410	2410				
1962	6	1962.06	20-Jun-62					2640	2640				
1962	6	1962.06	21-Jun-62					3290	3290				
1962	6	1962.06	22-Jun-62					3510	3510				
1962	6	1962.06	23-Jun-62					3530	3530				
1962	6	1962.06	24-Jun-62					3530	3530				
1962	6	1962.06	25-Jun-62					3170	3170				
1962	6	1962.06	26-Jun-62					2690	2690				
1962	6	1962.06	27-Jun-62					2320	2320				
1962	6	1962.06	28-Jun-62					2000	2000				
1962	6	1962.06	29-Jun-62					1780	1780				
1962	6	1962.06	30-Jun-62					1620	1620				
1962	7	1962.07	1-Jul-62					1600	1600				
1962	7	1962.07	2-Jul-62					1450	1450				
1962	7	1962.07	3-Jul-62					1280	1280				
1962	7	1962.07	4-Jul-62					1180	1180				
1962	7	1962.07	5-Jul-62					1070	1070				
1962	7	1962.07	6-Jul-62					984	984				
1962	7	1962.07	7-Jul-62					953	953				
1962	7	1962.07	8-Jul-62					935	935				
1962	7	1962.07	9-Jul-62					917	917				
1962	7	1962.07	10-Jul-62					904	904				
1962	7	1962.07	11-Jul-62					890	890				
1962	7	1962.07	12-Jul-62					878	878				
1962	7	1962.07	13-Jul-62					866	866				
1962	7	1962.07	14-Jul-62					854	854				
1962	7	1962.07	15-Jul-62					842	842				
1962	7	1962.07	16-Jul-62					830	830				
1962	7	1962.07	17-Jul-62					818	818				
1962	7	1962.07	18-Jul-62					806	806				
1962	7	1962.07	19-Jul-62					794	794				
1962	7	1962.07	20-Jul-62					746	746				
1962	7	1962.07	21-Jul-62					710	710				
1962	7	1962.07	22-Jul-62					726	726				
1962	7	1962.07	23-Jul-62					730	730				
1962	7	1962.07	24-Jul-62					627	627				
1962	7	1962.07	25-Jul-62					599	599				
1962	7	1962.07	26-Jul-62					574	574				
1962	7	1962.07	27-Jul-62					557	557				
1962	7	1962.07	28-Jul-62					565	566				
1962	7	1962.07	29-Jul-62					614	614				
1962	7	1962.07	30-Jul-62					630	630				
1962	7	1962.07	31-Jul-62					606	606				
1962	8	1962.08	1-Aug-62					650	650				
1962	8	1962.08	2-Aug-62					642	642				
1962	8	1962.08	3-Aug-62					634	634				
1962	8	1962.08	4-Aug-62					642	642				
1962	8	1962.08	5-Aug-62					679	679				
1962	8	1962.08	6-Aug-62					778	778				
1962	8	1962.08	7-Aug-62					764	764				
1962	8	1962.08	8-Aug-62					760	760				
1962	8	1962.08	9-Aug-62					756	756				
1962	8	1962.08	10-Aug-62					751	751				
1962	8	1962.08	11-Aug-62					746	746				
1962	8	1962.08	12-Aug-62					733	733				
1962	8	1962.08	13-Aug-62					746	746				
1962	8	1962.08	14-Aug-62					728	728				
1962	8	1962.08	15-Aug-62					582	582				

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1962	8	1962.08	16-Aug-62					562	562				
1962	8	1962.08	17-Aug-62					598	598				
1962	8	1962.08	18-Aug-62					622	622				
1962	8	1962.08	19-Aug-62					618	618				
1962	8	1962.08	20-Aug-62					658	658				
1962	8	1962.08	21-Aug-62					642	642				
1962	8	1962.08	22-Aug-62					642	642				
1962	8	1962.08	23-Aug-62					614	614				
1962	8	1962.08	24-Aug-62					650	650				
1962	8	1962.08	25-Aug-62					706	706				
1962	8	1962.08	26-Aug-62					778	778				
1962	8	1962.08	27-Aug-62					841	841				
1962	8	1962.08	28-Aug-62					764	764				
1962	8	1962.08	29-Aug-62					787	787				
1962	8	1962.08	30-Aug-62					733	733				
1962	8	1962.08	31-Aug-62					706	706				
1962	9	1962.09	1-Sep-62					792	792				
1962	9	1962.09	2-Sep-62					900	900				
1962	9	1962.09	3-Sep-62					990	990				
1962	9	1962.09	4-Sep-62					965	965				
1962	9	1962.09	5-Sep-62					890	890				
1962	9	1962.09	6-Sep-62					920	920				
1962	9	1962.09	7-Sep-62					950	950				
1962	9	1962.09	8-Sep-62					995	995				
1962	9	1962.09	9-Sep-62					1080	1080				
1962	9	1962.09	10-Sep-62					1110	1110				
1962	9	1962.09	11-Sep-62					1080	1080				
1962	9	1962.09	12-Sep-62					995	995				
1962	9	1962.09	13-Sep-62					925	925				
1962	9	1962.09	14-Sep-62					885	885				
1962	9	1962.09	15-Sep-62					920	920				
1962	9	1962.09	16-Sep-62					930	930				
1962	9	1962.09	17-Sep-62					920	920				
1962	9	1962.09	18-Sep-62					895	895				
1962	9	1962.09	19-Sep-62					880	880				
1962	9	1962.09	20-Sep-62					905	905				
1962	9	1962.09	21-Sep-62					980	980				
1962	9	1962.09	22-Sep-62					1040	1040				
1962	9	1962.09	23-Sep-62					1060	1060				
1962	9	1962.09	24-Sep-62					1140	1140				
1962	9	1962.09	25-Sep-62					1140	1140				
1962	9	1962.09	26-Sep-62					1100	1100				
1962	9	1962.09	27-Sep-62					1060	1060				
1962	9	1962.09	28-Sep-62					1090	1090				
1962	9	1962.09	29-Sep-62					1120	1120				
1962	9	1962.09	30-Sep-62					1140	1140				
1962	10	1962.10	1-Oct-62					1160	1160				
1962	10	1962.10	2-Oct-62					1190	1190				
1962	10	1962.10	3-Oct-62					1200	1200				
1962	10	1962.10	4-Oct-62					1220	1220				
1962	10	1962.10	5-Oct-62					1260	1260				
1962	10	1962.10	6-Oct-62					1260	1260				
1962	10	1962.10	7-Oct-62					1330	1330				
1962	10	1962.10	8-Oct-62					1300	1300				
1962	10	1962.10	9-Oct-62					1140	1140				
1962	10	1962.10	10-Oct-62					1050	1050				
1962	10	1962.10	11-Oct-62					1110	1110				
1962	10	1962.10	12-Oct-62					1260	1260				
1962	10	1962.10	13-Oct-62					1650	1650				
1962	10	1962.10	14-Oct-62					1940	1940				
1962	10	1962.10	15-Oct-62					2070	2070				
1962	10	1962.10	16-Oct-62					2100	2100				
1962	10	1962.10	17-Oct-62					1970	1970				
1962	10	1962.10	18-Oct-62					1760	1760				
1962	10	1962.10	19-Oct-62					1630	1630				
1962	10	1962.10	20-Oct-62					1550	1550				
1962	10	1962.10	21-Oct-62					1520	1520				
1962	10	1962.10	22-Oct-62					1480	1480				
1962	10	1962.10	23-Oct-62					1370	1370				
1962	10	1962.10	24-Oct-62					1300	1300				
1962	10	1962.10	25-Oct-62					1320	1320				
1962	10	1962.10	26-Oct-62					1380	1380				
1962	10	1962.10	27-Oct-62					1430	1430				
1962	10	1962.10	28-Oct-62					1480	1480				
1962	10	1962.10	29-Oct-62					1520	1520				
1962	10	1962.10	30-Oct-62					1550	1550				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1962	10	1962.10	31-Oct-62					1560	1560				
1962	11	1962.11	1-Nov-62					1570	1570				
1962	11	1962.11	2-Nov-62					1570	1570				
1962	11	1962.11	3-Nov-62					1570	1570				
1962	11	1962.11	4-Nov-62					1570	1570				
1962	11	1962.11	5-Nov-62					1550	1550				
1962	11	1962.11	6-Nov-62					1470	1470				
1962	11	1962.11	7-Nov-62					1400	1400				
1962	11	1962.11	8-Nov-62					1420	1420				
1962	11	1962.11	9-Nov-62					1450	1450				
1962	11	1962.11	10-Nov-62					1470	1470				
1962	11	1962.11	11-Nov-62					1480	1480				
1962	11	1962.11	12-Nov-62					1490	1490				
1962	11	1962.11	13-Nov-62					1500	1500				
1962	11	1962.11	14-Nov-62					1510	1510				
1962	11	1962.11	15-Nov-62					1540	1540				
1962	11	1962.11	16-Nov-62					1570	1570				
1962	11	1962.11	17-Nov-62					1600	1600				
1962	11	1962.11	18-Nov-62					1600	1600				
1962	11	1962.11	19-Nov-62					1590	1590				
1962	11	1962.11	20-Nov-62					1550	1550				
1962	11	1962.11	21-Nov-62					1580	1580				
1962	11	1962.11	22-Nov-62					1590	1590				
1962	11	1962.11	23-Nov-62					1610	1610				
1962	11	1962.11	24-Nov-62					1580	1580				
1962	11	1962.11	25-Nov-62					1720	1720				
1962	11	1962.11	26-Nov-62					1930	1930				
1962	11	1962.11	27-Nov-62					1890	1890				
1962	11	1962.11	28-Nov-62					2200	2200				
1962	11	1962.11	29-Nov-62					2310	2310				
1962	11	1962.11	30-Nov-62					2420	2420				
1962	12	1962.12	1-Dec-62					2520	2520				
1962	12	1962.12	2-Dec-62					2480	2480				
1962	12	1962.12	3-Dec-62					2160	2160				
1962	12	1962.12	4-Dec-62					1970	1970				
1962	12	1962.12	5-Dec-62					2180	2180				
1962	12	1962.12	6-Dec-62					2310	2310				
1962	12	1962.12	7-Dec-62					2480	2480				
1962	12	1962.12	8-Dec-62					2620	2620				
1962	12	1962.12	9-Dec-62					2570	2570				
1962	12	1962.12	10-Dec-62					2290	2290				
1962	12	1962.12	11-Dec-62					2120	2120				
1962	12	1962.12	12-Dec-62					2480	2480				
1962	12	1962.12	13-Dec-62					2450	2450				
1962	12	1962.12	14-Dec-62					2430	2430				
1962	12	1962.12	15-Dec-62					2290	2290				
1962	12	1962.12	16-Dec-62					2240	2240				
1962	12	1962.12	17-Dec-62					2130	2130				
1962	12	1962.12	18-Dec-62					1980	1980				
1962	12	1962.12	19-Dec-62					2360	2360				
1962	12	1962.12	20-Dec-62					2590	2590				
1962	12	1962.12	21-Dec-62					2790	2790				
1962	12	1962.12	22-Dec-62					3010	3010				
1962	12	1962.12	23-Dec-62					3110	3110				
1962	12	1962.12	24-Dec-62					2890	2890				
1962	12	1962.12	25-Dec-62					2670	2670				
1962	12	1962.12	26-Dec-62					2590	2590				
1962	12	1962.12	27-Dec-62					2260	2260				
1962	12	1962.12	28-Dec-62					2430	2430				
1962	12	1962.12	29-Dec-62					2260	2260				
1962	12	1962.12	30-Dec-62					2400	2400				
1962	12	1962.12	31-Dec-62					2420	2420				
1963	1	1963.01	1-Jan-63					2190	2190				
1963	1	1963.01	2-Jan-63					2180	2180				
1963	1	1963.01	3-Jan-63					1940	1940				
1963	1	1963.01	4-Jan-63					2270	2270				
1963	1	1963.01	5-Jan-63					2270	2270				
1963	1	1963.01	6-Jan-63					2000	2000				
1963	1	1963.01	7-Jan-63					1720	1720				
1963	1	1963.01	8-Jan-63					1670	1670				
1963	1	1963.01	9-Jan-63					1960	1960				
1963	1	1963.01	10-Jan-63					2090	2090				
1963	1	1963.01	11-Jan-63					2000	2000				
1963	1	1963.01	12-Jan-63					2090	2090				
1963	1	1963.01	13-Jan-63					2130	2130				
1963	1	1963.01	14-Jan-63					1910	1910				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1963	1	1963.01	15-Jan-63					1690	1690				
1963	1	1963.01	16-Jan-63					1630	1630				
1963	1	1963.01	17-Jan-63					1630	1630				
1963	1	1963.01	18-Jan-63					1640	1640				
1963	1	1963.01	19-Jan-63					1590	1590				
1963	1	1963.01	20-Jan-63					1590	1590				
1963	1	1963.01	21-Jan-63					1530	1530				
1963	1	1963.01	22-Jan-63					1470	1470				
1963	1	1963.01	23-Jan-63					1470	1470				
1963	1	1963.01	24-Jan-63					1500	1500				
1963	1	1963.01	25-Jan-63					1470	1470				
1963	1	1963.01	26-Jan-63					1500	1500				
1963	1	1963.01	27-Jan-63					1500	1500				
1963	1	1963.01	28-Jan-63					1410	1410				
1963	1	1963.01	29-Jan-63					1300	1300				
1963	1	1963.01	30-Jan-63					1440	1440				
1963	1	1963.01	31-Jan-63					1590	1590				
1963	2	1963.02	1-Feb-63					1920	1920				
1963	2	1963.02	2-Feb-63					3830	3830				
1963	2	1963.02	3-Feb-63					9220	9220				
1963	2	1963.02	4-Feb-63					12100	12100				
1963	2	1963.02	5-Feb-63					12000	12000				
1963	2	1963.02	6-Feb-63					11700	11700				
1963	2	1963.02	7-Feb-63					11000	11000				
1963	2	1963.02	8-Feb-63					8700	8700				
1963	2	1963.02	9-Feb-63					7500	7500				
1963	2	1963.02	10-Feb-63					7700	7700				
1963	2	1963.02	11-Feb-63					9100	9100				
1963	2	1963.02	12-Feb-63					9700	9700				
1963	2	1963.02	13-Feb-63					8700	8700				
1963	2	1963.02	14-Feb-63					9700	9700				
1963	2	1963.02	15-Feb-63					11900	11900				
1963	2	1963.02	16-Feb-63					11200	11200				
1963	2	1963.02	17-Feb-63					9970	9970				
1963	2	1963.02	18-Feb-63					9280	9280				
1963	2	1963.02	19-Feb-63					8660	8660				
1963	2	1963.02	20-Feb-63					8650	8650				
1963	2	1963.02	21-Feb-63					7550	7550				
1963	2	1963.02	22-Feb-63					6690	6690				
1963	2	1963.02	23-Feb-63					6350	6350				
1963	2	1963.02	24-Feb-63					5950	5950				
1963	2	1963.02	25-Feb-63					5420	5420				
1963	2	1963.02	26-Feb-63					5100	5100				
1963	2	1963.02	27-Feb-63					4930	4930				
1963	2	1963.02	28-Feb-63					4670	4670				
1963	3	1963.03	1-Mar-63					4390	4390				
1963	3	1963.03	2-Mar-63					3950	3950				
1963	3	1963.03	3-Mar-63					3620	3620				
1963	3	1963.03	4-Mar-63					3300	3300				
1963	3	1963.03	5-Mar-63					2720	2720				
1963	3	1963.03	6-Mar-63					2620	2620				
1963	3	1963.03	7-Mar-63					2450	2450				
1963	3	1963.03	8-Mar-63					2290	2290				
1963	3	1963.03	9-Mar-63					2180	2180				
1963	3	1963.03	10-Mar-63					2060	2060				
1963	3	1963.03	11-Mar-63					1930	1930				
1963	3	1963.03	12-Mar-63					1750	1750				
1963	3	1963.03	13-Mar-63					1860	1860				
1963	3	1963.03	14-Mar-63					1610	1610				
1963	3	1963.03	15-Mar-63					1460	1460				
1963	3	1963.03	16-Mar-63					1450	1450				
1963	3	1963.03	17-Mar-63					1790	1790				
1963	3	1963.03	18-Mar-63					2440	2440				
1963	3	1963.03	19-Mar-63					2150	2150				
1963	3	1963.03	20-Mar-63					1780	1780				
1963	3	1963.03	21-Mar-63					1570	1570				
1963	3	1963.03	22-Mar-63					1420	1420				
1963	3	1963.03	23-Mar-63					1450	1450				
1963	3	1963.03	24-Mar-63					1560	1560				
1963	3	1963.03	25-Mar-63					1910	1910				
1963	3	1963.03	26-Mar-63					1930	1930				
1963	3	1963.03	27-Mar-63					1760	1760				
1963	3	1963.03	28-Mar-63					1790	1790				
1963	3	1963.03	29-Mar-63					3480	3480				
1963	3	1963.03	30-Mar-63					7680	7680				
1963	3	1963.03	31-Mar-63					8480	8480				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1963	4	1963.04	1-Apr-63					8730	8730				
1963	4	1963.04	2-Apr-63					7720	7720				
1963	4	1963.04	3-Apr-63					6120	6120				
1963	4	1963.04	4-Apr-63					5610	5610				
1963	4	1963.04	5-Apr-63					5190	5190				
1963	4	1963.04	6-Apr-63					4120	4120				
1963	4	1963.04	7-Apr-63					3870	3870				
1963	4	1963.04	8-Apr-63					6260	6260				
1963	4	1963.04	9-Apr-63					8360	8360				
1963	4	1963.04	10-Apr-63					9860	9860				
1963	4	1963.04	11-Apr-63					9440	9440				
1963	4	1963.04	12-Apr-63					11200	11200				
1963	4	1963.04	13-Apr-63					12500	12500				
1963	4	1963.04	14-Apr-63					10700	10700				
1963	4	1963.04	15-Apr-63					8350	8350				
1963	4	1963.04	16-Apr-63					9810	9810				
1963	4	1963.04	17-Apr-63					10600	10600				
1963	4	1963.04	18-Apr-63					8940	8940				
1963	4	1963.04	19-Apr-63					7810	7810				
1963	4	1963.04	20-Apr-63					7970	7970				
1963	4	1963.04	21-Apr-63					9100	9100				
1963	4	1963.04	22-Apr-63					10300	10300				
1963	4	1963.04	23-Apr-63					10400	10400				
1963	4	1963.04	24-Apr-63					10400	10400				
1963	4	1963.04	25-Apr-63					9840	9840				
1963	4	1963.04	26-Apr-63					9600	9600				
1963	4	1963.04	27-Apr-63					9690	9690				
1963	4	1963.04	28-Apr-63					9550	9550				
1963	4	1963.04	29-Apr-63					8400	8400				
1963	4	1963.04	30-Apr-63					8030	8030				
1963	5	1963.05	1-May-63					8380	8380				
1963	5	1963.05	2-May-63					7540	7540				
1963	5	1963.05	3-May-63					6500	6500				
1963	5	1963.05	4-May-63					6750	6750				
1963	5	1963.05	5-May-63					6840	6840				
1963	5	1963.05	6-May-63					6930	6930				
1963	5	1963.05	7-May-63					6800	6800				
1963	5	1963.05	8-May-63					6910	6910				
1963	5	1963.05	9-May-63					7190	7190				
1963	5	1963.05	10-May-63					7720	7720				
1963	5	1963.05	11-May-63					8650	8650				
1963	5	1963.05	12-May-63					10800	10800				
1963	5	1963.05	13-May-63					12200	12200				
1963	5	1963.05	14-May-63					11600	11600				
1963	5	1963.05	15-May-63					9790	9790				
1963	5	1963.05	16-May-63					8150	8150				
1963	5	1963.05	17-May-63					6910	6910				
1963	5	1963.05	18-May-63					6050	6050				
1963	5	1963.05	19-May-63					6490	6490				
1963	5	1963.05	20-May-63					8310	8310				
1963	5	1963.05	21-May-63					9490	9490				
1963	5	1963.05	22-May-63					10200	10200				
1963	5	1963.05	23-May-63					10900	10900				
1963	5	1963.05	24-May-63					11200	11200				
1963	5	1963.05	25-May-63					11900	11900				
1963	5	1963.05	26-May-63					12500	12500				
1963	5	1963.05	27-May-63					12700	12700				
1963	5	1963.05	28-May-63					12300	12300				
1963	5	1963.05	29-May-63					12000	12000				
1963	5	1963.05	30-May-63					12700	12700				
1963	5	1963.05	31-May-63					13100	13100				
1963	6	1963.06	1-Jun-63					13000	13000				
1963	6	1963.06	2-Jun-63					12500	12500				
1963	6	1963.06	3-Jun-63					11600	11600				
1963	6	1963.06	4-Jun-63					10800	10800				
1963	6	1963.06	5-Jun-63					9410	9410				
1963	6	1963.06	6-Jun-63					7810	7810				
1963	6	1963.06	7-Jun-63					6430	6430				
1963	6	1963.06	8-Jun-63					5810	5810				
1963	6	1963.06	9-Jun-63					6050	6050				
1963	6	1963.06	10-Jun-63					6370	6370				
1963	6	1963.06	11-Jun-63					6540	6540				
1963	6	1963.06	12-Jun-63					7780	7780				
1963	6	1963.06	13-Jun-63					7000	7000				
1963	6	1963.06	14-Jun-63					4550	4550				
1963	6	1963.06	15-Jun-63					3540	3540				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1963	6	1963.06	16-Jun-63					4760	4760				
1963	6	1963.06	17-Jun-63					5510	5510				
1963	6	1963.06	18-Jun-63					4940	4940				
1963	6	1963.06	19-Jun-63					6060	6060				
1963	6	1963.06	20-Jun-63					6410	6410				
1963	6	1963.06	21-Jun-63					8080	8080				
1963	6	1963.06	22-Jun-63					9010	9010				
1963	6	1963.06	23-Jun-63					8330	8330				
1963	6	1963.06	24-Jun-63					6350	6350				
1963	6	1963.06	25-Jun-63					5070	5070				
1963	6	1963.06	26-Jun-63					3910	3910				
1963	6	1963.06	27-Jun-63					3360	3360				
1963	6	1963.06	28-Jun-63					2910	2910				
1963	6	1963.06	29-Jun-63					2740	2740				
1963	6	1963.06	30-Jun-63					3260	3260				
1963	7	1963.07	1-Jul-63					3490	3490				
1963	7	1963.07	2-Jul-63					3130	3130				
1963	7	1963.07	3-Jul-63					2970	2970				
1963	7	1963.07	4-Jul-63					2370	2370				
1963	7	1963.07	5-Jul-63					2240	2240				
1963	7	1963.07	6-Jul-63					2130	2130				
1963	7	1963.07	7-Jul-63					2020	2020				
1963	7	1963.07	8-Jul-63					2360	2360				
1963	7	1963.07	9-Jul-63					2350	2350				
1963	7	1963.07	10-Jul-63					2210	2210				
1963	7	1963.07	11-Jul-63					2410	2410				
1963	7	1963.07	12-Jul-63					2180	2180				
1963	7	1963.07	13-Jul-63					2210	2210				
1963	7	1963.07	14-Jul-63					2050	2050				
1963	7	1963.07	15-Jul-63					1900	1900				
1963	7	1963.07	16-Jul-63					1760	1760				
1963	7	1963.07	17-Jul-63					1640	1640				
1963	7	1963.07	18-Jul-63					1580	1580				
1963	7	1963.07	19-Jul-63					1460	1460				
1963	7	1963.07	20-Jul-63					1350	1350				
1963	7	1963.07	21-Jul-63					1320	1320				
1963	7	1963.07	22-Jul-63					1350	1350				
1963	7	1963.07	23-Jul-63					1300	1300				
1963	7	1963.07	24-Jul-63					1200	1200				
1963	7	1963.07	25-Jul-63					1080	1080				
1963	7	1963.07	26-Jul-63					1080	1080				
1963	7	1963.07	27-Jul-63					1050	1050				
1963	7	1963.07	28-Jul-63					1080	1080				
1963	7	1963.07	29-Jul-63					1100	1100				
1963	7	1963.07	30-Jul-63					1080	1080				
1963	7	1963.07	31-Jul-63					1020	1020				
1963	8	1963.08	1-Aug-63					1020	1020				
1963	8	1963.08	2-Aug-63					1020	1020				
1963	8	1963.08	3-Aug-63					1000	1000				
1963	8	1963.08	4-Aug-63					1020	1020				
1963	8	1963.08	5-Aug-63					1100	1100				
1963	8	1963.08	6-Aug-63					1120	1120				
1963	8	1963.08	7-Aug-63					1080	1080				
1963	8	1963.08	8-Aug-63					1080	1080				
1963	8	1963.08	9-Aug-63					1080	1080				
1963	8	1963.08	10-Aug-63					1120	1120				
1963	8	1963.08	11-Aug-63					1220	1220				
1963	8	1963.08	12-Aug-63					1280	1280				
1963	8	1963.08	13-Aug-63					1150	1150				
1963	8	1963.08	14-Aug-63					1100	1100				
1963	8	1963.08	15-Aug-63					1050	1050				
1963	8	1963.08	16-Aug-63					1080	1080				
1963	8	1963.08	17-Aug-63					1080	1080				
1963	8	1963.08	18-Aug-63					1100	1100				
1963	8	1963.08	19-Aug-63					1100	1100				
1963	8	1963.08	20-Aug-63					1100	1100				
1963	8	1963.08	21-Aug-63					1080	1080				
1963	8	1963.08	22-Aug-63					1060	1060				
1963	8	1963.08	23-Aug-63					1060	1060				
1963	8	1963.08	24-Aug-63					1090	1090				
1963	8	1963.08	25-Aug-63					1120	1120				
1963	8	1963.08	26-Aug-63					1180	1180				
1963	8	1963.08	27-Aug-63					1150	1150				
1963	8	1963.08	28-Aug-63					1060	1060				
1963	8	1963.08	29-Aug-63					1060	1060				
1963	8	1963.08	30-Aug-63					1080	1080				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1963	8	1963.08	31-Aug-63					1120	1120				
1963	9	1963.09	1-Sep-63					1140	1140				
1963	9	1963.09	2-Sep-63					1200	1200				
1963	9	1963.09	3-Sep-63					1210	1210				
1963	9	1963.09	4-Sep-63					1200	1200				
1963	9	1963.09	5-Sep-63					1200	1200				
1963	9	1963.09	6-Sep-63					1200	1200				
1963	9	1963.09	7-Sep-63					1190	1190				
1963	9	1963.09	8-Sep-63					1220	1220				
1963	9	1963.09	9-Sep-63					1270	1270				
1963	9	1963.09	10-Sep-63					1290	1290				
1963	9	1963.09	11-Sep-63					1280	1280				
1963	9	1963.09	12-Sep-63					1240	1240				
1963	9	1963.09	13-Sep-63					1260	1260				
1963	9	1963.09	14-Sep-63					1340	1340				
1963	9	1963.09	15-Sep-63					1450	1450				
1963	9	1963.09	16-Sep-63					1630	1630				
1963	9	1963.09	17-Sep-63					1780	1780				
1963	9	1963.09	18-Sep-63					1780	1780				
1963	9	1963.09	19-Sep-63					1800	1800				
1963	9	1963.09	20-Sep-63					1800	1800				
1963	9	1963.09	21-Sep-63					1840	1840				
1963	9	1963.09	22-Sep-63					1920	1920				
1963	9	1963.09	23-Sep-63					2060	2060				
1963	9	1963.09	24-Sep-63					1980	1980				
1963	9	1963.09	25-Sep-63					1920	1920				
1963	9	1963.09	26-Sep-63					1860	1860				
1963	9	1963.09	27-Sep-63					1770	1770				
1963	9	1963.09	28-Sep-63					1630	1630				
1963	9	1963.09	29-Sep-63					1520	1520				
1963	9	1963.09	30-Sep-63					1470	1470				
1963	10	1963.10	1-Oct-63					1440	1440				
1963	10	1963.10	2-Oct-63					1420	1420				
1963	10	1963.10	3-Oct-63					1400	1400				
1963	10	1963.10	4-Oct-63					1440	1440				
1963	10	1963.10	5-Oct-63					1630	1630				
1963	10	1963.10	6-Oct-63					1920	1920				
1963	10	1963.10	7-Oct-63					2190	2190				
1963	10	1963.10	8-Oct-63					2470	2470				
1963	10	1963.10	9-Oct-63					2220	2220				
1963	10	1963.10	10-Oct-63					2050	2050				
1963	10	1963.10	11-Oct-63					2230	2230				
1963	10	1963.10	12-Oct-63					2720	2720				
1963	10	1963.10	13-Oct-63					3140	3140				
1963	10	1963.10	14-Oct-63					3470	3470				
1963	10	1963.10	15-Oct-63					3660	3660				
1963	10	1963.10	16-Oct-63					3310	3310				
1963	10	1963.10	17-Oct-63					3120	3120				
1963	10	1963.10	18-Oct-63					3200	3200				
1963	10	1963.10	19-Oct-63					3210	3210				
1963	10	1963.10	20-Oct-63					3040	3040				
1963	10	1963.10	21-Oct-63					3290	3290				
1963	10	1963.10	22-Oct-63					3680	3680				
1963	10	1963.10	23-Oct-63					3670	3670				
1963	10	1963.10	24-Oct-63					3540	3540				
1963	10	1963.10	25-Oct-63					3370	3370				
1963	10	1963.10	26-Oct-63					3090	3090				
1963	10	1963.10	27-Oct-63					2790	2790				
1963	10	1963.10	28-Oct-63					2650	2650				
1963	10	1963.10	29-Oct-63					2520	2520				
1963	10	1963.10	30-Oct-63					2550	2550				
1963	10	1963.10	31-Oct-63					2570	2570				
1963	11	1963.11	1-Nov-63					2550	2550				
1963	11	1963.11	2-Nov-63					2480	2480				
1963	11	1963.11	3-Nov-63					2570	2570				
1963	11	1963.11	4-Nov-63					2600	2600				
1963	11	1963.11	5-Nov-63					2610	2610				
1963	11	1963.11	6-Nov-63					2660	2660				
1963	11	1963.11	7-Nov-63					2660	2660				
1963	11	1963.11	8-Nov-63					2640	2640				
1963	11	1963.11	9-Nov-63					2640	2640				
1963	11	1963.11	10-Nov-63					2650	2650				
1963	11	1963.11	11-Nov-63					2640	2640				
1963	11	1963.11	12-Nov-63					2630	2630				
1963	11	1963.11	13-Nov-63					2630	2630				
1963	11	1963.11	14-Nov-63					2640	2640				

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1963	11	1963.11	15-Nov-63					2690	2690				
1963	11	1963.11	16-Nov-63					2740	2740				
1963	11	1963.11	17-Nov-63					2800	2800				
1963	11	1963.11	18-Nov-63					2920	2920				
1963	11	1963.11	19-Nov-63					2980	2980				
1963	11	1963.11	20-Nov-63					3220	3220				
1963	11	1963.11	21-Nov-63					3420	3420				
1963	11	1963.11	22-Nov-63					3430	3430				
1963	11	1963.11	23-Nov-63					3530	3530				
1963	11	1963.11	24-Nov-63					3690	3690				
1963	11	1963.11	25-Nov-63					3740	3740				
1963	11	1963.11	26-Nov-63					3740	3740				
1963	11	1963.11	27-Nov-63					3720	3720				
1963	11	1963.11	28-Nov-63					3740	3740				
1963	11	1963.11	29-Nov-63					3820	3820				
1963	11	1963.11	30-Nov-63					3860	3860				
1963	12	1963.12	1-Dec-63					3900	3900				
1963	12	1963.12	2-Dec-63					3920	3920				
1963	12	1963.12	3-Dec-63					3910	3910				
1963	12	1963.12	4-Dec-63					3810	3810				
1963	12	1963.12	5-Dec-63					3620	3620				
1963	12	1963.12	6-Dec-63					3560	3560				
1963	12	1963.12	7-Dec-63					3550	3550				
1963	12	1963.12	8-Dec-63					3530	3530				
1963	12	1963.12	9-Dec-63					3540	3540				
1963	12	1963.12	10-Dec-63					3540	3540				
1963	12	1963.12	11-Dec-63					3490	3490				
1963	12	1963.12	12-Dec-63					3400	3400				
1963	12	1963.12	13-Dec-63					3400	3400				
1963	12	1963.12	14-Dec-63					3410	3410				
1963	12	1963.12	15-Dec-63					3370	3370				
1963	12	1963.12	16-Dec-63					3260	3260				
1963	12	1963.12	17-Dec-63					3260	3260				
1963	12	1963.12	18-Dec-63					3280	3280				
1963	12	1963.12	19-Dec-63					3230	3230				
1963	12	1963.12	20-Dec-63					3150	3150				
1963	12	1963.12	21-Dec-63					3350	3350				
1963	12	1963.12	22-Dec-63					3490	3490				
1963	12	1963.12	23-Dec-63					3510	3510				
1963	12	1963.12	24-Dec-63					3540	3540				
1963	12	1963.12	25-Dec-63					3790	3790				
1963	12	1963.12	26-Dec-63					3910	3910				
1963	12	1963.12	27-Dec-63					3980	3980				
1963	12	1963.12	28-Dec-63					3700	3700				
1963	12	1963.12	29-Dec-63					3460	3460				
1963	12	1963.12	30-Dec-63					3360	3360				
1963	12	1963.12	31-Dec-63					3300	3300				
1964	1	1964.01	1-Jan-64					3300	3300				
1964	1	1964.01	2-Jan-64					3330	3330				
1964	1	1964.01	3-Jan-64					3350	3350				
1964	1	1964.01	4-Jan-64					3250	3250				
1964	1	1964.01	5-Jan-64					3190	3190				
1964	1	1964.01	6-Jan-64					3180	3180				
1964	1	1964.01	7-Jan-64					3200	3200				
1964	1	1964.01	8-Jan-64					3280	3280				
1964	1	1964.01	9-Jan-64					3290	3290				
1964	1	1964.01	10-Jan-64					3050	3050				
1964	1	1964.01	11-Jan-64					2910	2910				
1964	1	1964.01	12-Jan-64					2840	2840				
1964	1	1964.01	13-Jan-64					2710	2710				
1964	1	1964.01	14-Jan-64					2650	2650				
1964	1	1964.01	15-Jan-64					2700	2700				
1964	1	1964.01	16-Jan-64					2680	2680				
1964	1	1964.01	17-Jan-64					2680	2680				
1964	1	1964.01	18-Jan-64					2450	2450				
1964	1	1964.01	19-Jan-64					2360	2360				
1964	1	1964.01	20-Jan-64					2350	2350				
1964	1	1964.01	21-Jan-64					2410	2410				
1964	1	1964.01	22-Jan-64					2510	2510				
1964	1	1964.01	23-Jan-64					3110	3110				
1964	1	1964.01	24-Jan-64					3360	3360				
1964	1	1964.01	25-Jan-64					3000	3000				
1964	1	1964.01	26-Jan-64					2840	2840				
1964	1	1964.01	27-Jan-64					2730	2730				
1964	1	1964.01	28-Jan-64					2600	2600				
1964	1	1964.01	29-Jan-64					2590	2590				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1964	1	1964.01	30-Jan-64					2580	2580				
1964	1	1964.01	31-Jan-64					2550	2550				
1964	2	1964.02	1-Feb-64					2600	2600				
1964	2	1964.02	2-Feb-64					2530	2530				
1964	2	1964.02	3-Feb-64					2500	2500				
1964	2	1964.02	4-Feb-64					2450	2450				
1964	2	1964.02	5-Feb-64					2480	2480				
1964	2	1964.02	6-Feb-64					2480	2480				
1964	2	1964.02	7-Feb-64					2470	2470				
1964	2	1964.02	8-Feb-64					2440	2440				
1964	2	1964.02	9-Feb-64					2000	2000				
1964	2	1964.02	10-Feb-64					1800	1800				
1964	2	1964.02	11-Feb-64					1600	1600				
1964	2	1964.02	12-Feb-64					1600	1600				
1964	2	1964.02	13-Feb-64					1650	1650				
1964	2	1964.02	14-Feb-64					1650	1650				
1964	2	1964.02	15-Feb-64					1700	1700				
1964	2	1964.02	16-Feb-64					1600	1600				
1964	2	1964.02	17-Feb-64					1500	1500				
1964	2	1964.02	18-Feb-64					1400	1400				
1964	2	1964.02	19-Feb-64					1500	1500				
1964	2	1964.02	20-Feb-64					1400	1400				
1964	2	1964.02	21-Feb-64					1200	1200				
1964	2	1964.02	22-Feb-64					1200	1200				
1964	2	1964.02	23-Feb-64					1150	1150				
1964	2	1964.02	24-Feb-64					1150	1150				
1964	2	1964.02	25-Feb-64					1100	1100				
1964	2	1964.02	26-Feb-64					1100	1100				
1964	2	1964.02	27-Feb-64					1150	1150				
1964	2	1964.02	28-Feb-64					1000	1000				
1964	2	1964.02	29-Feb-64					820	820				
1964	3	1964.03	1-Mar-64					800	800				
1964	3	1964.03	2-Mar-64					760	760				
1964	3	1964.03	3-Mar-64					720	720				
1964	3	1964.03	4-Mar-64					695	695				
1964	3	1964.03	5-Mar-64					695	695				
1964	3	1964.03	6-Mar-64					722	722				
1964	3	1964.03	7-Mar-64					785	785				
1964	3	1964.03	8-Mar-64					826	826				
1964	3	1964.03	9-Mar-64					839	839				
1964	3	1964.03	10-Mar-64					816	816				
1964	3	1964.03	11-Mar-64					776	776				
1964	3	1964.03	12-Mar-64					821	821				
1964	3	1964.03	13-Mar-64					970	970				
1964	3	1964.03	14-Mar-64					960	960				
1964	3	1964.03	15-Mar-64					880	880				
1964	3	1964.03	16-Mar-64					830	830				
1964	3	1964.03	17-Mar-64					767	767				
1964	3	1964.03	18-Mar-64					762	762				
1964	3	1964.03	19-Mar-64					902	902				
1964	3	1964.03	20-Mar-64					893	893				
1964	3	1964.03	21-Mar-64					888	888				
1964	3	1964.03	22-Mar-64					898	898				
1964	3	1964.03	23-Mar-64					1240	1240				
1964	3	1964.03	24-Mar-64					1330	1330				
1964	3	1964.03	25-Mar-64					1290	1290				
1964	3	1964.03	26-Mar-64					1260	1260				
1964	3	1964.03	27-Mar-64					1220	1220				
1964	3	1964.03	28-Mar-64					1160	1160				
1964	3	1964.03	29-Mar-64					1120	1120				
1964	3	1964.03	30-Mar-64					1100	1100				
1964	3	1964.03	31-Mar-64					1070	1070				
1964	4	1964.04	1-Apr-64					1120	1120				
1964	4	1964.04	2-Apr-64					1200	1200				
1964	4	1964.04	3-Apr-64					1170	1170				
1964	4	1964.04	4-Apr-64					925	925				
1964	4	1964.04	5-Apr-64					862	862				
1964	4	1964.04	6-Apr-64					844	844				
1964	4	1964.04	7-Apr-64					740	740				
1964	4	1964.04	8-Apr-64					686	686				
1964	4	1964.04	9-Apr-64					677	677				
1964	4	1964.04	10-Apr-64					659	659				
1964	4	1964.04	11-Apr-64					659	659				
1964	4	1964.04	12-Apr-64					672	672				
1964	4	1964.04	13-Apr-64					636	636				
1964	4	1964.04	14-Apr-64					589	589				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1964	4	1964.04	15-Apr-64					561	561				
1964	4	1964.04	16-Apr-64					614	614				
1964	4	1964.04	17-Apr-64					593	593				
1964	4	1964.04	18-Apr-64					589	589				
1964	4	1964.04	19-Apr-64					597	597				
1964	4	1964.04	20-Apr-64					749	749				
1964	4	1964.04	21-Apr-64					780	780				
1964	4	1964.04	22-Apr-64					767	767				
1964	4	1964.04	23-Apr-64					776	776				
1964	4	1964.04	24-Apr-64					785	785				
1964	4	1964.04	25-Apr-64					772	772				
1964	4	1964.04	26-Apr-64					785	785				
1964	4	1964.04	27-Apr-64					808	808				
1964	4	1964.04	28-Apr-64					821	821				
1964	4	1964.04	29-Apr-64					776	776				
1964	4	1964.04	30-Apr-64					713	713				
1964	5	1964.05	1-May-64					672	672				
1964	5	1964.05	2-May-64					704	704				
1964	5	1964.05	3-May-64					736	736				
1964	5	1964.05	4-May-64					785	785				
1964	5	1964.05	5-May-64					834	834				
1964	5	1964.05	6-May-64					888	888				
1964	5	1964.05	7-May-64					935	935				
1964	5	1964.05	8-May-64					898	898				
1964	5	1964.05	9-May-64					850	850				
1964	5	1964.05	10-May-64					800	800				
1964	5	1964.05	11-May-64					700	700				
1964	5	1964.05	12-May-64					632	632				
1964	5	1964.05	13-May-64					581	581				
1964	5	1964.05	14-May-64					561	561				
1964	5	1964.05	15-May-64					501	501				
1964	5	1964.05	16-May-64					505	505				
1964	5	1964.05	17-May-64					505	505				
1964	5	1964.05	18-May-64					561	561				
1964	5	1964.05	19-May-64					654	654				
1964	5	1964.05	20-May-64					650	650				
1964	5	1964.05	21-May-64					672	672				
1964	5	1964.05	22-May-64					672	672				
1964	5	1964.05	23-May-64					664	664				
1964	5	1964.05	24-May-64					668	668				
1964	5	1964.05	25-May-64					722	722				
1964	5	1964.05	26-May-64					726	726				
1964	5	1964.05	27-May-64					722	722				
1964	5	1964.05	28-May-64					744	744				
1964	5	1964.05	29-May-64					740	740				
1964	5	1964.05	30-May-64					780	780				
1964	5	1964.05	31-May-64					740	740				
1964	6	1964.06	1-Jun-64					690	690				
1964	6	1964.06	2-Jun-64					601	601				
1964	6	1964.06	3-Jun-64					589	589				
1964	6	1964.06	4-Jun-64					569	569				
1964	6	1964.06	5-Jun-64					557	557				
1964	6	1964.06	6-Jun-64					537	537				
1964	6	1964.06	7-Jun-64					569	569				
1964	6	1964.06	8-Jun-64					628	628				
1964	6	1964.06	9-Jun-64					848	848				
1964	6	1964.06	10-Jun-64					1060	1060				
1964	6	1964.06	11-Jun-64					1080	1080				
1964	6	1964.06	12-Jun-64					1060	1060				
1964	6	1964.06	13-Jun-64					960	960				
1964	6	1964.06	14-Jun-64					852	852				
1964	6	1964.06	15-Jun-64					848	848				
1964	6	1964.06	16-Jun-64					776	776				
1964	6	1964.06	17-Jun-64					708	708				
1964	6	1964.06	18-Jun-64					614	614				
1964	6	1964.06	19-Jun-64					577	577				
1964	6	1964.06	20-Jun-64					521	521				
1964	6	1964.06	21-Jun-64					541	541				
1964	6	1964.06	22-Jun-64					593	593				
1964	6	1964.06	23-Jun-64					533	533				
1964	6	1964.06	24-Jun-64					441	441				
1964	6	1964.06	25-Jun-64					425	425				
1964	6	1964.06	26-Jun-64					409	409				
1964	6	1964.06	27-Jun-64					429	429				
1964	6	1964.06	28-Jun-64					489	489				
1964	6	1964.06	29-Jun-64					481	481				

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1964	6	1964.06	30-Jun-64					517	517				
1964	7	1964.07	1-Jul-64					493	493				
1964	7	1964.07	2-Jul-64					461	461				
1964	7	1964.07	3-Jul-64					457	457				
1964	7	1964.07	4-Jul-64					465	465				
1964	7	1964.07	5-Jul-64					517	517				
1964	7	1964.07	6-Jul-64					557	557				
1964	7	1964.07	7-Jul-64				1337	513	513			1337	
1964	7	1964.07	8-Jul-64				1368	437	437			1368	
1964	7	1964.07	9-Jul-64				1252	445	445			1252	
1964	7	1964.07	10-Jul-64				1322	393	393			1322	
1964	7	1964.07	11-Jul-64				1401	397	397			1401	
1964	7	1964.07	12-Jul-64				1423	377	377			1423	
1964	7	1964.07	13-Jul-64					405	405			1386.5	
1964	7	1964.07	14-Jul-64				1350	337	337			1350	
1964	7	1964.07	15-Jul-64				1412	288	288			1412	
1964	7	1964.07	16-Jul-64				1430	253	253			1430	
1964	7	1964.07	17-Jul-64				1380	306	306			1380	
1964	7	1964.07	18-Jul-64				1360	340	340			1360	
1964	7	1964.07	19-Jul-64				1280	397	397			1280	
1964	7	1964.07	20-Jul-64				1208	409	409			1208	
1964	7	1964.07	21-Jul-64				1285	369	369			1285	
1964	7	1964.07	22-Jul-64				1304	358	358			1304	
1964	7	1964.07	23-Jul-64				1315	373	373			1315	
1964	7	1964.07	24-Jul-64				1285	344	344			1285	
1964	7	1964.07	25-Jul-64				1330	298	298			1330	
1964	7	1964.07	26-Jul-64				1280	351	351			1280	
1964	7	1964.07	27-Jul-64				1270	369	369			1270	
1964	7	1964.07	28-Jul-64				1305	358	358			1305	
1964	7	1964.07	29-Jul-64				1274	320	320			1274	
1964	7	1964.07	30-Jul-64				1330	250	250			1330	
1964	7	1964.07	31-Jul-64				1282	236	236			1282	
1964	8	1964.08	1-Aug-64				1378	274	274			1378	
1964	8	1964.08	2-Aug-64				1326	320	320			1326	
1964	8	1964.08	3-Aug-64				1258	340	340			1258	
1964	8	1964.08	4-Aug-64				1276	334	334			1276	
1964	8	1964.08	5-Aug-64				1260	320	320			1260	
1964	8	1964.08	6-Aug-64					320	320			1332.5	
1964	8	1964.08	7-Aug-64									1405	1323
1964	8	1964.08	8-Aug-64				1405	267	267			1290	1325
1964	8	1964.08	9-Aug-64				1290	274	274			1373	1326
1964	8	1964.08	10-Aug-64				1373	306	306			1371.5	1325
1964	8	1964.08	11-Aug-64					373	373			1371.5	1324
1964	8	1964.08	12-Aug-64					344	344				1323
1964	8	1964.08	13-Aug-64				1370	316	316			1370	1323
1964	8	1964.08	14-Aug-64				1350	330	330			1350	1323
1964	8	1964.08	15-Aug-64				1344	302	302			1344	1321
1964	8	1964.08	16-Aug-64				1372	330	330			1372	1319
1964	8	1964.08	17-Aug-64				1279	377	377			1279	1315
1964	8	1964.08	18-Aug-64				1160	501	501			1160	1309
1964	8	1964.08	19-Aug-64				1265	489	489			1265	1308
1964	8	1964.08	20-Aug-64				1183	521	521			1183	1307
1964	8	1964.08	21-Aug-64				1250	485	485			1250	1306
1964	8	1964.08	22-Aug-64				1305	429	429			1305	1306
1964	8	1964.08	23-Aug-64				1220	457	457			1220	1303
1964	8	1964.08	24-Aug-64				1172	537	537			1172	1299
1964	8	1964.08	25-Aug-64				1100	654	654			1100	1292
1964	8	1964.08	26-Aug-64				1132	650	650			1132	1287
1964	8	1964.08	27-Aug-64				1190	589	589			1190	1284
1964	8	1964.08	28-Aug-64					565	565			1216	1281
1964	8	1964.08	29-Aug-64					581	581			1216	1279
1964	8	1964.08	30-Aug-64				1242	589	589			1242	1276
1964	8	1964.08	31-Aug-64				1181	677	677			1181	1273
1964	9	1964.09	1-Sep-64				1118	790	790			1118	1264
1964	9	1964.09	2-Sep-64				1028	911	911			1028	1254
1964	9	1964.09	3-Sep-64				995	930	930			995	1246
1964	9	1964.09	4-Sep-64				915	898	898			915	1234
1964	9	1964.09	5-Sep-64				933	880	880			933	1223
1964	9	1964.09	6-Sep-64				988	834	834			988	1211
1964	9	1964.09	7-Sep-64				992	821	821			992	1197
1964	9	1964.09	8-Sep-64				1020	857	857			1020	1188
1964	9	1964.09	9-Sep-64				2105	821	821			2105	1213
1964	9	1964.09	10-Sep-64				1138	780	780			1138	1205
1964	9	1964.09	11-Sep-64				1167	718	718			1167	1198
1964	9	1964.09	12-Sep-64				1168	704	704			1168	1191
1964	9	1964.09	13-Sep-64				1164	708	708			1164	1185
1964	9	1964.09	13-Sep-64				1187	704	704			1187	1180

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1964	9	1964.09	14-Sep-64				1138	749	749			1138	1172
1964	9	1964.09	15-Sep-64				1172	740	740			1172	1169
1964	9	1964.09	16-Sep-64				1150	704	704			1150	1168
1964	9	1964.09	17-Sep-64				1155	700	700			1155	1165
1964	9	1964.09	18-Sep-64				1150	700	700			1150	1164
1964	9	1964.09	19-Sep-64				1125	704	704			1125	1159
1964	9	1964.09	20-Sep-64				1085	722	722			1085	1152
1964	9	1964.09	21-Sep-64					776	776			1102.5	1148
1964	9	1964.09	22-Sep-64				1120	790	790			1120	1146
1964	9	1964.09	23-Sep-64				1050	816	816			1050	1145
1964	9	1964.09	24-Sep-64				905	1040	1040			905	1137
1964	9	1964.09	25-Sep-64				870	1220	1220			870	1127
1964	9	1964.09	26-Sep-64				715	1290	1290			715	1110
1964	9	1964.09	27-Sep-64				700	1390	1390			700	1093
1964	9	1964.09	28-Sep-64				695	1490	1490			695	1074
1964	9	1964.09	29-Sep-64				765	1290	1290			765	1061
1964	9	1964.09	30-Sep-64				750	1300	1300			750	1048
1964	10	1964.10	1-Oct-64				720	1410	1410			720	1038
1964	10	1964.10	2-Oct-64				717	1480	1480			717	1029
1964	10	1964.10	3-Oct-64				730	1420	1420			730	1023
1964	10	1964.10	4-Oct-64				760	1390	1390			760	1017
1964	10	1964.10	5-Oct-64				746	1410	1410			746	1009
1964	10	1964.10	6-Oct-64				730	1430	1430			730	1000
1964	10	1964.10	7-Oct-64				720	1450	1450			720	990
1964	10	1964.10	8-Oct-64				760	1400	1400			760	945
1964	10	1964.10	9-Oct-64				738	1410	1410			738	932
1964	10	1964.10	10-Oct-64				742	1430	1430			742	918
1964	10	1964.10	11-Oct-64				745	1470	1470			745	904
1964	10	1964.10	12-Oct-64				782	1440	1440			782	891
1964	10	1964.10	13-Oct-64				773	1440	1440			773	877
1964	10	1964.10	14-Oct-64				770	1500	1500			770	865
1964	10	1964.10	15-Oct-64				754	1520	1520			754	851
1964	10	1964.10	16-Oct-64				725	1530	1530			725	837
1964	10	1964.10	17-Oct-64				740	1460	1460			740	823
1964	10	1964.10	18-Oct-64				810	1360	1360			810	811
1964	10	1964.10	19-Oct-64				840	1290	1290			840	802
1964	10	1964.10	20-Oct-64				900	1180	1180			900	796
1964	10	1964.10	21-Oct-64				930	1140	1140			930	790
1964	10	1964.10	22-Oct-64				928	1150	1150			928	784
1964	10	1964.10	23-Oct-64				934	1140	1140			934	780
1964	10	1964.10	24-Oct-64				918	1140	1140			918	780
1964	10	1964.10	25-Oct-64				910	1160	1160			910	782
1964	10	1964.10	26-Oct-64				890	1200	1200			890	787
1964	10	1964.10	27-Oct-64				910	1220	1220			910	794
1964	10	1964.10	28-Oct-64				916	1410	1410			916	802
1964	10	1964.10	29-Oct-64				710	1780	1780			710	800
1964	10	1964.10	30-Oct-64				535	1940	1940			535	793
1964	10	1964.10	31-Oct-64				552	2050	2050			552	787
1964	11	1964.11	1-Nov-64				540	2120	2120			540	781
1964	11	1964.11	2-Nov-64				574	2140	2140			574	776
1964	11	1964.11	3-Nov-64				530	2050	2050			530	768
1964	11	1964.11	4-Nov-64				660	1860	1860			660	766
1964	11	1964.11	5-Nov-64				732	1820	1820			732	766
1964	11	1964.11	6-Nov-64				730	1790	1790			730	766
1964	11	1964.11	7-Nov-64				750	1770	1770			750	766
1964	11	1964.11	8-Nov-64				685	1790	1790			685	764
1964	11	1964.11	9-Nov-64				682	1780	1780			682	762
1964	11	1964.11	10-Nov-64				710	1790	1790			710	761
1964	11	1964.11	11-Nov-64				640	1900	1900			640	756
1964	11	1964.11	12-Nov-64				660	2050	2050			660	752
1964	11	1964.11	13-Nov-64					2080	2080			544	745
1964	11	1964.11	14-Nov-64					2150	2150			544	738
1964	11	1964.11	15-Nov-64					2460	2460			544	732
1964	11	1964.11	16-Nov-64					3010	3010			544	725
1964	11	1964.11	17-Nov-64					2950	2950			544	716
1964	11	1964.11	18-Nov-64				428	2610	2610			428	702
1964	11	1964.11	19-Nov-64				420	2660	2660			420	686
1964	11	1964.11	20-Nov-64				348	3190	3190			348	667
1964	11	1964.11	21-Nov-64				375	3280	3280			375	649
1964	11	1964.11	22-Nov-64				390	3240	3240			390	631
1964	11	1964.11	23-Nov-64				400	3120	3120			400	613
1964	11	1964.11	24-Nov-64				440	3000	3000			440	598
1964	11	1964.11	25-Nov-64				493	2750	2750			493	584
1964	11	1964.11	26-Nov-64				510	2520	2520			510	571
1964	11	1964.11	27-Nov-64				545	2300	2300			545	559
1964	11	1964.11	28-Nov-64				575	2180	2180			575	554

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1964	11	1964.11	29-Nov-64				588	2150	2150			588	556
1964	11	1964.11	30-Nov-64				580	2150	2150			580	557
1964	12	1964.12	1-Dec-64				570	2130	2130			570	558
1964	12	1964.12	2-Dec-64				540	2210	2210			540	557
1964	12	1964.12	3-Dec-64				490	2290	2290			490	555
1964	12	1964.12	4-Dec-64				570	2140	2140			570	552
1964	12	1964.12	5-Dec-64				540	2170	2170			540	546
1964	12	1964.12	6-Dec-64				505	2150	2150			505	538
1964	12	1964.12	7-Dec-64				593	2020	2020			593	533
1964	12	1964.12	8-Dec-64				610	1930	1930			610	531
1964	12	1964.12	9-Dec-64				595	2020	2020			595	528
1964	12	1964.12	10-Dec-64				608	2020	2020			608	524
1964	12	1964.12	11-Dec-64				640	1990	1990			640	524
1964	12	1964.12	12-Dec-64				620	2020	2020			620	523
1964	12	1964.12	13-Dec-64				580	2040	2040			580	524
1964	12	1964.12	14-Dec-64				642	1940	1940			642	528
1964	12	1964.12	15-Dec-64				662	1840	1840			662	532
1964	12	1964.12	16-Dec-64				553	2060	2060			553	532
1964	12	1964.12	17-Dec-64				548	2130	2130			548	532
1964	12	1964.12	18-Dec-64				542	2120	2120			542	536
1964	12	1964.12	19-Dec-64				533	2220	2220			533	540
1964	12	1964.12	20-Dec-64				515	2310	2310			515	545
1964	12	1964.12	21-Dec-64				535	2260	2260			535	550
1964	12	1964.12	22-Dec-64				485	2200	2200			485	554
1964	12	1964.12	23-Dec-64				460	2780	2780			460	556
1964	12	1964.12	24-Dec-64				255	4950	4950			255	549
1964	12	1964.12	25-Dec-64				124	14000	14000			124	537
1964	12	1964.12	26-Dec-64				110	19800	19800			110	524
1964	12	1964.12	27-Dec-64				160	18700	18700			160	511
1964	12	1964.12	28-Dec-64				118	20100	20100			118	496
1964	12	1964.12	29-Dec-64				110	20900	20900			110	480
1964	12	1964.12	30-Dec-64				130	20500	20500			130	465
1964	12	1964.12	31-Dec-64				140	19200	19200			140	450
1965	1	1965.01	1-Jan-65				145	18200	18200			145	437
1965	1	1965.01	2-Jan-65				155	17800	17800			155	426
1965	1	1965.01	3-Jan-65				165	17300	17300			165	413
1965	1	1965.01	4-Jan-65				175	16600	16600			175	400
1965	1	1965.01	5-Jan-65				200	15200	15200			200	390
1965	1	1965.01	6-Jan-65				225	14000	14000			225	378
1965	1	1965.01	7-Jan-65				165	14300	14300			165	363
1965	1	1965.01	8-Jan-65				160	18100	18100			160	349
1965	1	1965.01	9-Jan-65				155	21800	21800			155	334
1965	1	1965.01	10-Jan-65				138	22000	22000			138	317
1965	1	1965.01	11-Jan-65				140	22000	22000			140	301
1965	1	1965.01	12-Jan-65				160	22700	22700			160	287
1965	1	1965.01	13-Jan-65				175	22100	22100			175	271
1965	1	1965.01	14-Jan-65				220	20500	20500			220	257
1965	1	1965.01	15-Jan-65				235	18000	18000			235	246
1965	1	1965.01	16-Jan-65				340	15100	15100			340	239
1965	1	1965.01	17-Jan-65				350	12800	12800			350	233
1965	1	1965.01	18-Jan-65				295	11500	11500			295	225
1965	1	1965.01	19-Jan-65				350	10800	10800			350	219
1965	1	1965.01	20-Jan-65				330	10100	10100			330	212
1965	1	1965.01	21-Jan-65				360	9220	9220			360	208
1965	1	1965.01	22-Jan-65				375	8650	8650			375	205
1965	1	1965.01	23-Jan-65				345	8670	8670			345	208
1965	1	1965.01	24-Jan-65				325	9220	9220			325	215
1965	1	1965.01	25-Jan-65				330	9630	9630			330	222
1965	1	1965.01	26-Jan-65				260	10100	10100			260	226
1965	1	1965.01	27-Jan-65				232	10400	10400			232	230
1965	1	1965.01	28-Jan-65				236	10500	10500			236	234
1965	1	1965.01	29-Jan-65				275	10200	10200			275	239
1965	1	1965.01	30-Jan-65				290	9600	9600			290	244
1965	1	1965.01	31-Jan-65				340	8800	8800			340	250
1965	2	1965.02	1-Feb-65				345	8500	8500			345	256
1965	2	1965.02	2-Feb-65				268	8750	8750			268	260
1965	2	1965.02	3-Feb-65				280	8620	8620			280	263
1965	2	1965.02	4-Feb-65				342	8120	8120			342	268
1965	2	1965.02	5-Feb-65				358	7730	7730			358	272
1965	2	1965.02	6-Feb-65				342	7940	7940			342	278
1965	2	1965.02	7-Feb-65				250	8720	8720			250	281
1965	2	1965.02	8-Feb-65				242	9360	9360			242	284
1965	2	1965.02	9-Feb-65				234	9750	9750			234	287
1965	2	1965.02	10-Feb-65				238	9870	9870			238	291
1965	2	1965.02	11-Feb-65				255	9260	9260			255	294
1965	2	1965.02	12-Feb-65				300	8360	8360			300	298

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1965	2	1965.02	13-Feb-65				318	7930	7930			318	301
1965	2	1965.02	14-Feb-65				318	7730	7730			318	304
1965	2	1965.02	15-Feb-65				330	7970	7970			330	304
1965	2	1965.02	16-Feb-65				235	8430	8430			235	300
1965	2	1965.02	17-Feb-65				260	8260	8260			260	299
1965	2	1965.02	18-Feb-65				280	7790	7790			280	296
1965	2	1965.02	19-Feb-65				298	7430	7430			298	295
1965	2	1965.02	20-Feb-65				305	7100	7100			305	294
1965	2	1965.02	21-Feb-65				315	6900	6900			315	292
1965	2	1965.02	22-Feb-65				325	6610	6610			325	291
1965	2	1965.02	23-Feb-65				365	6470	6470			365	292
1965	2	1965.02	24-Feb-65				275	6890	6890			275	290
1965	2	1965.02	25-Feb-65				245	7150	7150			245	290
1965	2	1965.02	26-Feb-65				240	7180	7180			240	290
1965	2	1965.02	27-Feb-65				315	6810	6810			315	293
1965	2	1965.02	28-Feb-65				328	6340	6340			328	295
1965	3	1965.03	1-Mar-65				335	5940	5940			335	296
1965	3	1965.03	2-Mar-65					5740	5740			322.5	295
1965	3	1965.03	3-Mar-65				310	5610	5610			310	294
1965	3	1965.03	4-Mar-65				305	6050	6050			305	296
1965	3	1965.03	5-Mar-65				155	6740	6740			155	291
1965	3	1965.03	6-Mar-65				170	7020	7020			170	286
1965	3	1965.03	7-Mar-65				280	6780	6780			280	283
1965	3	1965.03	8-Mar-65				225	6700	6700			225	279
1965	3	1965.03	9-Mar-65				175	7320	7320			175	277
1965	3	1965.03	10-Mar-65				180	7700	7700			180	275
1965	3	1965.03	11-Mar-65				230	7150	7150			230	274
1965	3	1965.03	12-Mar-65					6300	6300			355	278
1965	3	1965.03	13-Mar-65					6090	6090			355	282
1965	3	1965.03	14-Mar-65				480	7180	7180			480	288
1965	3	1965.03	15-Mar-65				600	5990	5990			600	297
1965	3	1965.03	16-Mar-65				485	5460	5460			485	303
1965	3	1965.03	17-Mar-65				355	5710	5710			355	303
1965	3	1965.03	18-Mar-65				335	5780	5780			335	307
1965	3	1965.03	19-Mar-65				325	5820	5820			325	309
1965	3	1965.03	20-Mar-65				300	5740	5740			300	310
1965	3	1965.03	21-Mar-65				410	4860	4860			410	313
1965	3	1965.03	22-Mar-65				475	4060	4060			475	319
1965	3	1965.03	23-Mar-65				510	3600	3600			510	326
1965	3	1965.03	24-Mar-65				554	3290	3290			554	333
1965	3	1965.03	25-Mar-65				616	2920	2920			616	342
1965	3	1965.03	26-Mar-65				654	2880	2880			654	354
1965	3	1965.03	27-Mar-65				648	2910	2910			648	368
1965	3	1965.03	28-Mar-65				550	3270	3270			550	378
1965	3	1965.03	29-Mar-65				481	3430	3430			481	383
1965	3	1965.03	30-Mar-65				477	3420	3420			477	388
1965	3	1965.03	31-Mar-65				470	3660	3660			470	393
1965	4	1965.04	1-Apr-65				436	4090	4090			436	397
1965	4	1965.04	2-Apr-65				404	4670	4670			404	400
1965	4	1965.04	3-Apr-65				359	5240	5240			359	402
1965	4	1965.04	4-Apr-65				297	6070	6070			297	406
1965	4	1965.04	5-Apr-65				278	6400	6400			278	410
1965	4	1965.04	6-Apr-65				285	6390	6390			285	410
1965	4	1965.04	7-Apr-65				315	6200	6200			315	413
1965	4	1965.04	8-Apr-65				285	6270	6270			285	417
1965	4	1965.04	9-Apr-65				222	6780	6780			222	418
1965	4	1965.04	10-Apr-65				205	7710	7710			205	417
1965	4	1965.04	11-Apr-65				185	9280	9280			185	412
1965	4	1965.04	12-Apr-65				195	11200	11200			195	406
1965	4	1965.04	13-Apr-65				143	12700	12700			143	395
1965	4	1965.04	14-Apr-65				135	13800	13800			135	380
1965	4	1965.04	15-Apr-65				140	14100	14100			140	368
1965	4	1965.04	16-Apr-65				155	14200	14200			155	361
1965	4	1965.04	17-Apr-65				150	14500	14500			150	355
1965	4	1965.04	18-Apr-65				145	14300	14300			145	349
1965	4	1965.04	19-Apr-65				153	13800	13800			153	344
1965	4	1965.04	20-Apr-65				170	13500	13500			170	336
1965	4	1965.04	21-Apr-65				195	12800	12800			195	327
1965	4	1965.04	22-Apr-65				230	11500	11500			230	318
1965	4	1965.04	23-Apr-65				226	10600	10600			226	307
1965	4	1965.04	24-Apr-65				205	10800	10800			205	293
1965	4	1965.04	25-Apr-65				165	11200	11200			165	277
1965	4	1965.04	26-Apr-65				165	11100	11100			165	261
1965	4	1965.04	27-Apr-65				175	10600	10600			175	248
1965	4	1965.04	28-Apr-65				205	9730	9730			205	239
1965	4	1965.04	29-Apr-65				235	8420	8420			235	231

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1965	4	1965.04	30-Apr-65				235	7830	7830			235	223
1965	5	1965.05	1-May-65				260	6890	6890			260	217
1965	5	1965.05	2-May-65				270	6410	6410			270	213
1965	5	1965.05	3-May-65				285	6290	6290			285	210
1965	5	1965.05	4-May-65				310	6350	6350			310	211
1965	5	1965.05	5-May-65				240	6150	6150			240	209
1965	5	1965.05	6-May-65				260	5800	5800			260	209
1965	5	1965.05	7-May-65				235	5890	5890			235	206
1965	5	1965.05	8-May-65				235	5920	5920			235	204
1965	5	1965.05	9-May-65				220	6320	6320			220	204
1965	5	1965.05	10-May-65				195	6740	6740			195	204
1965	5	1965.05	11-May-65				205	6780	6780			205	205
1965	5	1965.05	12-May-65				220	6400	6400			220	205
1965	5	1965.05	13-May-65				240	6200	6200			240	209
1965	5	1965.05	14-May-65				245	5960	5960			245	212
1965	5	1965.05	15-May-65				285	5380	5380			285	217
1965	5	1965.05	16-May-65				350	4610	4610			350	224
1965	5	1965.05	17-May-65				417	3980	3980			417	233
1965	5	1965.05	18-May-65				455	3540	3540			455	243
1965	5	1965.05	19-May-65				430	3580	3580			430	252
1965	5	1965.05	20-May-65				413	3670	3670			413	260
1965	5	1965.05	21-May-65				416	3610	3610			416	268
1965	5	1965.05	22-May-65				400	3740	3740			400	273
1965	5	1965.05	23-May-65				332	4540	4540			332	277
1965	5	1965.05	24-May-65				235	5890	5890			235	278
1965	5	1965.05	25-May-65				215	6280	6280			215	279
1965	5	1965.05	26-May-65				235	6140	6140			235	282
1965	5	1965.05	27-May-65				270	5540	5540			270	285
1965	5	1965.05	28-May-65				320	4520	4520			320	289
1965	5	1965.05	29-May-65				365	3930	3930			365	293
1965	5	1965.05	30-May-65				390	3620	3620			390	298
1965	5	1965.05	31-May-65				425	3500	3500			425	304
1965	6	1965.06	1-Jun-65				435	3370	3370			435	309
1965	6	1965.06	2-Jun-65				430	3350	3350			430	314
1965	6	1965.06	3-Jun-65				362	3830	3830			362	316
1965	6	1965.06	4-Jun-65				267	4610	4610			267	317
1965	6	1965.06	5-Jun-65				235	5030	5030			235	316
1965	6	1965.06	6-Jun-65				198	5970	5970			198	315
1965	6	1965.06	7-Jun-65				185	6640	6640			185	313
1965	6	1965.06	8-Jun-65				185	6750	6750			185	312
1965	6	1965.06	9-Jun-65				185	6830	6830			185	312
1965	6	1965.06	10-Jun-65				165	7100	7100			165	310
1965	6	1965.06	11-Jun-65				150	7490	7490			150	308
1965	6	1965.06	12-Jun-65				150	7670	7670			150	305
1965	6	1965.06	13-Jun-65				130	8010	8010			130	301
1965	6	1965.06	14-Jun-65				130	9130	9130			130	296
1965	6	1965.06	15-Jun-65				130	9280	9280			130	289
1965	6	1965.06	16-Jun-65				140	8420	8420			140	279
1965	6	1965.06	17-Jun-65				160	7640	7640			160	269
1965	6	1965.06	18-Jun-65				170	6950	6950			170	261
1965	6	1965.06	19-Jun-65				260	5490	5490			260	256
1965	6	1965.06	20-Jun-65				330	4140	4140			330	253
1965	6	1965.06	21-Jun-65				415	3640	3640			415	253
1965	6	1965.06	22-Jun-65				480	3340	3340			480	258
1965	6	1965.06	23-Jun-65				415	3700	3700			415	264
1965	6	1965.06	24-Jun-65				340	3930	3930			340	268
1965	6	1965.06	25-Jun-65				345	3950	3950			345	272
1965	6	1965.06	26-Jun-65				300	4370	4370			300	273
1965	6	1965.06	27-Jun-65				275	4780	4780			275	272
1965	6	1965.06	28-Jun-65				215	5080	5080			215	267
1965	6	1965.06	29-Jun-65				230	4840	4840			230	261
1965	6	1965.06	30-Jun-65				280	4180	4180			280	256
1965	7	1965.07	1-Jul-65				375	3720	3720			375	254
1965	7	1965.07	2-Jul-65				365	3690	3690			365	252
1965	7	1965.07	3-Jul-65				460	3190	3190			460	256
1965	7	1965.07	4-Jul-65				488	3020	3020			488	263
1965	7	1965.07	5-Jul-65				455	3080	3080			455	270
1965	7	1965.07	6-Jul-65				470	2910	2910			470	279
1965	7	1965.07	7-Jul-65				480	2850	2850			480	289
1965	7	1965.07	8-Jul-65				470	2860	2860			470	299
1965	7	1965.07	9-Jul-65				495	2740	2740			495	309
1965	7	1965.07	10-Jul-65				555	2590	2590			555	322
1965	7	1965.07	11-Jul-65				610	2500	2500			610	337
1965	7	1965.07	12-Jul-65				665	2320	2320			665	354
1965	7	1965.07	13-Jul-65				630	2300	2300			630	371
1965	7	1965.07	14-Jul-65				545	2300	2300			545	385

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1965	7	1965.07	15-Jul-65				650	1920	1920			650	402
1965	7	1965.07	16-Jul-65				725	1760	1760			725	422
1965	7	1965.07	17-Jul-65				760	1600	1600			760	442
1965	7	1965.07	18-Jul-65				825	1440	1440			825	464
1965	7	1965.07	19-Jul-65				840	1220	1220			840	483
1965	7	1965.07	20-Jul-65				910	1200	1200			910	502
1965	7	1965.07	21-Jul-65				940	1120	1120			940	520
1965	7	1965.07	22-Jul-65				920	1080	1080			920	534
1965	7	1965.07	23-Jul-65				930	1100	1100			930	552
1965	7	1965.07	24-Jul-65				920	1080	1080			920	571
1965	7	1965.07	25-Jul-65				910	1120	1120			910	590
1965	7	1965.07	26-Jul-65				940	1100	1100			940	611
1965	7	1965.07	27-Jul-65				905	1110	1110			905	632
1965	7	1965.07	28-Jul-65				882	1100	1100			882	654
1965	7	1965.07	29-Jul-65				846	1080	1080			846	675
1965	7	1965.07	30-Jul-65				858	1050	1050			858	694
1965	7	1965.07	31-Jul-65				870	1010	1010			870	711
1965	8	1965.08	1-Aug-65				866	1040	1040			866	727
1965	8	1965.08	2-Aug-65				855	1060	1060			855	741
1965	8	1965.08	3-Aug-65				850	1040	1040			850	753
1965	8	1965.08	4-Aug-65				840	1000	1000			840	765
1965	8	1965.08	5-Aug-65				865	955	955			865	779
1965	8	1965.08	6-Aug-65				865	985	985			865	791
1965	8	1965.08	7-Aug-65				855	1030	1030			855	804
1965	8	1965.08	8-Aug-65				830	1110	1110			830	815
1965	8	1965.08	9-Aug-65				830	1140	1140			830	825
1965	8	1965.08	10-Aug-65				860	1080	1080			860	833
1965	8	1965.08	11-Aug-65				888	1070	1070			888	840
1965	8	1965.08	12-Aug-65				835	1340	1340			835	847
1965	8	1965.08	13-Aug-65				667	1720	1720			667	851
1965	8	1965.08	14-Aug-65				596	1820	1820			596	849
1965	8	1965.08	15-Aug-65				641	1750	1750			641	847
1965	8	1965.08	16-Aug-65				712	1680	1680			712	845
1965	8	1965.08	17-Aug-65				750	1380	1380			750	843
1965	8	1965.08	18-Aug-65				815	1240	1240			815	842
1965	8	1965.08	19-Aug-65				895	1130	1130			895	841
1965	8	1965.08	20-Aug-65				905	1160	1160			905	840
1965	8	1965.08	21-Aug-65				870	1140	1140			870	838
1965	8	1965.08	22-Aug-65				840	1230	1230			840	835
1965	8	1965.08	23-Aug-65				840	1260	1260			840	833
1965	8	1965.08	24-Aug-65				870	1160	1160			870	831
1965	8	1965.08	25-Aug-65				885	1140	1140			885	830
1965	8	1965.08	26-Aug-65				865	1160	1160			865	828
1965	8	1965.08	27-Aug-65				805	1210	1210			805	826
1965	8	1965.08	28-Aug-65				835	1140	1140			835	825
1965	8	1965.08	29-Aug-65				830	1200	1200			830	824
1965	8	1965.08	30-Aug-65				827	1260	1260			827	823
1965	8	1965.08	31-Aug-65				775	1210	1210			775	820
1965	9	1965.09	1-Sep-65				800	1180	1180			800	818
1965	9	1965.09	2-Sep-65				780	1290	1290			780	816
1965	9	1965.09	3-Sep-65				775	1300	1300			775	814
1965	9	1965.09	4-Sep-65				770	1320	1320			770	810
1965	9	1965.09	5-Sep-65				750	1420	1420			750	807
1965	9	1965.09	6-Sep-65				720	1540	1540			720	802
1965	9	1965.09	7-Sep-65				720	1530	1530			720	798
1965	9	1965.09	8-Sep-65				685	1600	1600			685	794
1965	9	1965.09	9-Sep-65				720	1510	1510			720	789
1965	9	1965.09	10-Sep-65				722	1470	1470			722	783
1965	9	1965.09	11-Sep-65				726	1490	1490			726	780
1965	9	1965.09	12-Sep-65				700	1570	1570			700	781
1965	9	1965.09	13-Sep-65				665	1610	1610			665	783
1965	9	1965.09	14-Sep-65				695	1510	1510			695	785
1965	9	1965.09	15-Sep-65				758	1360	1360			758	786
1965	9	1965.09	16-Sep-65				777	1360	1360			777	787
1965	9	1965.09	17-Sep-65				730	1510	1510			730	785
1965	9	1965.09	18-Sep-65				665	1690	1690			665	777
1965	9	1965.09	19-Sep-65				660	1690	1690			660	769
1965	9	1965.09	20-Sep-65				655	1760	1760			655	762
1965	9	1965.09	21-Sep-65				674	1570	1570			674	756
1965	9	1965.09	22-Sep-65				700	1710	1710			700	751
1965	9	1965.09	23-Sep-65				625	1850	1850			625	743
1965	9	1965.09	24-Sep-65				545	1860	1860			545	732
1965	9	1965.09	25-Sep-65				555	1950	1950			555	721
1965	9	1965.09	26-Sep-65				510	2180	2180			510	712
1965	9	1965.09	27-Sep-65				410	2290	2290			410	697
1965	9	1965.09	28-Sep-65				460	2270	2270			460	685

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1965	9	1965.09	29-Sep-65				450	2400	2400			450	673
1965	9	1965.09	30-Sep-65				420	2560	2560			420	661
1965	10	1965.10	1-Oct-65				378	2800	2800			378	647
1965	10	1965.10	2-Oct-65				375	2910	2910			375	633
1965	10	1965.10	3-Oct-65				380	2990	2990			380	620
1965	10	1965.10	4-Oct-65				395	3030	3030			395	608
1965	10	1965.10	5-Oct-65				400	2970	2970			400	596
1965	10	1965.10	6-Oct-65				400	2930	2930			400	585
1965	10	1965.10	7-Oct-65				380	3100	3100			380	574
1965	10	1965.10	8-Oct-65				390	3150	3150			390	564
1965	10	1965.10	9-Oct-65				400	3150	3150			400	553
1965	10	1965.10	10-Oct-65				420	3030	3030			420	543
1965	10	1965.10	11-Oct-65				425	3030	3030			425	533
1965	10	1965.10	12-Oct-65				395	3130	3130			395	523
1965	10	1965.10	13-Oct-65				375	3290	3290			375	513
1965	10	1965.10	14-Oct-65				345	3420	3420			345	502
1965	10	1965.10	15-Oct-65				345	3610	3610			345	488
1965	10	1965.10	16-Oct-65				300	3850	3850			300	472
1965	10	1965.10	17-Oct-65				285	3780	3780			285	457
1965	10	1965.10	18-Oct-65				315	3550	3550			315	446
1965	10	1965.10	19-Oct-65				335	3460	3460			335	435
1965	10	1965.10	20-Oct-65				365	3340	3340			365	425
1965	10	1965.10	21-Oct-65				395	3160	3160			395	416
1965	10	1965.10	22-Oct-65				520	2570	2570			520	410
1965	10	1965.10	23-Oct-65				565	2270	2270			565	408
1965	10	1965.10	24-Oct-65				560	2150	2150			560	408
1965	10	1965.10	25-Oct-65				585	2060	2060			585	409
1965	10	1965.10	26-Oct-65				610	2010	2010			610	413
1965	10	1965.10	27-Oct-65				595	2060	2060			595	419
1965	10	1965.10	28-Oct-65				585	1990	1990			585	423
1965	10	1965.10	29-Oct-65				455	2480	2480			455	423
1965	10	1965.10	30-Oct-65				325	2960	2960			325	420
1965	10	1965.10	31-Oct-65				335	3040	3040			335	419
1965	11	1965.11	1-Nov-65				360	3010	3010			360	418
1965	11	1965.11	2-Nov-65				410	2850	2850			410	419
1965	11	1965.11	3-Nov-65				440	2660	2660			440	421
1965	11	1965.11	4-Nov-65				455	2650	2650			455	422
1965	11	1965.11	5-Nov-65				455	2640	2640			455	424
1965	11	1965.11	6-Nov-65				450	2650	2650			450	427
1965	11	1965.11	7-Nov-65				455	2600	2600			455	429
1965	11	1965.11	8-Nov-65				475	2520	2520			475	431
1965	11	1965.11	9-Nov-65				480	2430	2430			480	433
1965	11	1965.11	10-Nov-65				450	2510	2510			450	434
1965	11	1965.11	11-Nov-65				410	2660	2660			410	435
1965	11	1965.11	12-Nov-65				440	2860	2860			440	437
1965	11	1965.11	13-Nov-65				415	3000	3000			415	439
1965	11	1965.11	14-Nov-65				400	3120	3120			400	441
1965	11	1965.11	15-Nov-65				390	3130	3130			390	444
1965	11	1965.11	16-Nov-65				460	3070	3070			460	450
1965	11	1965.11	17-Nov-65				440	3150	3150			440	454
1965	11	1965.11	18-Nov-65				390	3490	3490			390	456
1965	11	1965.11	19-Nov-65				390	3620	3620			390	457
1965	11	1965.11	20-Nov-65				395	3710	3710			395	457
1965	11	1965.11	21-Nov-65				355	4020	4020			355	451
1965	11	1965.11	22-Nov-65				355	4310	4310			355	444
1965	11	1965.11	23-Nov-65				360	4450	4450			360	437
1965	11	1965.11	24-Nov-65				325	4770	4770			325	429
1965	11	1965.11	25-Nov-65				315	5190	5190			315	419
1965	11	1965.11	26-Nov-65				310	5510	5510			310	409
1965	11	1965.11	27-Nov-65				280	5630	5630			280	399
1965	11	1965.11	28-Nov-65				285	5700	5700			285	394
1965	11	1965.11	29-Nov-65				300	5670	5670			300	393
1965	11	1965.11	30-Nov-65				315	5730	5730			315	392
1965	12	1965.12	1-Dec-65				215	6500	6500			215	387
1965	12	1965.12	2-Dec-65					7370	7370			247.5	382
1965	12	1965.12	3-Dec-65					7950	7950			247.5	375
1965	12	1965.12	4-Dec-65					8670	8670			247.5	368
1965	12	1965.12	5-Dec-65					9270	9270			247.5	362
1965	12	1965.12	6-Dec-65					9570	9570			247.5	355
1965	12	1965.12	7-Dec-65				280	9690	9690			280	349
1965	12	1965.12	8-Dec-65				240	9410	9410			240	341
1965	12	1965.12	9-Dec-65				290	8720	8720			290	335
1965	12	1965.12	10-Dec-65				350	7220	7220			350	331
1965	12	1965.12	11-Dec-65				380	6180	6180			380	330
1965	12	1965.12	12-Dec-65				400	5810	5810			400	329
1965	12	1965.12	13-Dec-65				385	5610	5610			385	328

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1965	12	1965.12	14-Dec-65				390	5430	5430			390	328
1965	12	1965.12	15-Dec-65				390	5390	5390			390	328
1965	12	1965.12	16-Dec-65				375	5330	5330			375	325
1965	12	1965.12	17-Dec-65				370	5270	5270			370	323
1965	12	1965.12	18-Dec-65				360	5490	5490			360	322
1965	12	1965.12	19-Dec-65				355	5630	5630			355	320
1965	12	1965.12	20-Dec-65				365	5520	5520			365	319
1965	12	1965.12	21-Dec-65				360	5500	5500			360	320
1965	12	1965.12	22-Dec-65				355	5590	5590			355	320
1965	12	1965.12	23-Dec-65				355	5620	5620			355	319
1965	12	1965.12	24-Dec-65				355	5540	5540			355	320
1965	12	1965.12	25-Dec-65				465	4860	4860			465	325
1965	12	1965.12	26-Dec-65				485	4180	4180			485	331
1965	12	1965.12	27-Dec-65				535	3820	3820			535	340
1965	12	1965.12	28-Dec-65				580	3820	3820			580	350
1965	12	1965.12	29-Dec-65				565	4160	4160			565	358
1965	12	1965.12	30-Dec-65				525	4390	4390			525	365
1965	12	1965.12	31-Dec-65				435	5720	5720			435	373
1966	1	1966.01	1-Jan-66				320	7330	7330			320	375
1966	1	1966.01	2-Jan-66				205	8500	8500			205	374
1966	1	1966.01	3-Jan-66				180	9330	9330			180	372
1966	1	1966.01	4-Jan-66				200	9590	9590			200	370
1966	1	1966.01	5-Jan-66				290	8810	8810			290	371
1966	1	1966.01	6-Jan-66				370	7570	7570			370	374
1966	1	1966.01	7-Jan-66				440	6530	6530			440	381
1966	1	1966.01	8-Jan-66				465	5950	5950			465	387
1966	1	1966.01	9-Jan-66				480	5600	5600			480	391
1966	1	1966.01	10-Jan-66				510	5350	5350			510	396
1966	1	1966.01	11-Jan-66				530	5210	5210			530	400
1966	1	1966.01	12-Jan-66				505	5430	5430			505	404
1966	1	1966.01	13-Jan-66				478	5560	5560			478	407
1966	1	1966.01	14-Jan-66				490	5480	5480			490	410
1966	1	1966.01	15-Jan-66				510	5370	5370			510	415
1966	1	1966.01	16-Jan-66				540	4910	4910			540	420
1966	1	1966.01	17-Jan-66				575	4650	4650			575	427
1966	1	1966.01	18-Jan-66				585	4530	4530			585	435
1966	1	1966.01	19-Jan-66				585	4500	4500			585	442
1966	1	1966.01	20-Jan-66				580	4420	4420			580	450
1966	1	1966.01	21-Jan-66				578	4350	4350			578	457
1966	1	1966.01	22-Jan-66				585	4230	4230			585	465
1966	1	1966.01	23-Jan-66				615	4080	4080			615	474
1966	1	1966.01	24-Jan-66				720	3590	3590			720	482
1966	1	1966.01	25-Jan-66				825	3130	3130			825	493
1966	1	1966.01	26-Jan-66				820	3020	3020			820	503
1966	1	1966.01	27-Jan-66				818	3020	3020			818	511
1966	1	1966.01	28-Jan-66				825	2980	2980			825	519
1966	1	1966.01	29-Jan-66				870	2940	2940			870	531
1966	1	1966.01	30-Jan-66				825	3160	3160			825	544
1966	1	1966.01	31-Jan-66				605	4190	4190			605	553
1966	2	1966.02	1-Feb-66				500	5050	5050			500	563
1966	2	1966.02	2-Feb-66				545	5010	5010			545	575
1966	2	1966.02	3-Feb-66				460	4910	4910			460	584
1966	2	1966.02	4-Feb-66				470	4780	4780			470	590
1966	2	1966.02	5-Feb-66				510	4640	4640			510	595
1966	2	1966.02	6-Feb-66				530	4650	4650			530	598
1966	2	1966.02	7-Feb-66				420	5330	5330			420	596
1966	2	1966.02	8-Feb-66				440	5640	5640			440	595
1966	2	1966.02	9-Feb-66				530	4950	4950			530	596
1966	2	1966.02	10-Feb-66				485	4700	4700			485	594
1966	2	1966.02	11-Feb-66				480	4690	4690			480	593
1966	2	1966.02	12-Feb-66				475	4660	4660			475	593
1966	2	1966.02	13-Feb-66				480	4530	4530			480	593
1966	2	1966.02	14-Feb-66				490	4420	4420			490	592
1966	2	1966.02	15-Feb-66				545	4180	4180			545	592
1966	2	1966.02	16-Feb-66				515	3840	3840			515	590
1966	2	1966.02	17-Feb-66				600	3660	3660			600	591
1966	2	1966.02	18-Feb-66				600	3540	3540			600	591
1966	2	1966.02	19-Feb-66				570	3770	3770			570	591
1966	2	1966.02	20-Feb-66				610	3580	3580			610	592
1966	2	1966.02	21-Feb-66				625	3410	3410			625	593
1966	2	1966.02	22-Feb-66				655	3330	3330			655	595
1966	2	1966.02	23-Feb-66				705	3160	3160			705	594
1966	2	1966.02	24-Feb-66				745	2920	2920			745	592
1966	2	1966.02	25-Feb-66				775	2860	2860			775	590
1966	2	1966.02	26-Feb-66				735	2840	2840			735	587
1966	2	1966.02	27-Feb-66				745	2800	2800			745	585

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1966	2	1966.02	28-Feb-66				745	2710	2710			745	581
1966	3	1966.03	1-Mar-66				780	2720	2720			780	579
1966	3	1966.03	2-Mar-66				670	2850	2850			670	581
1966	3	1966.03	3-Mar-66				580	3020	3020			580	584
1966	3	1966.03	4-Mar-66				540	3020	3020			540	584
1966	3	1966.03	5-Mar-66				540	3010	3010			540	586
1966	3	1966.03	6-Mar-66				540	2970	2970			540	589
1966	3	1966.03	7-Mar-66				675	2670	2670			675	594
1966	3	1966.03	8-Mar-66				730	2500	2500			730	601
1966	3	1966.03	9-Mar-66				750	2460	2460			750	612
1966	3	1966.03	10-Mar-66				720	2490	2490			720	621
1966	3	1966.03	11-Mar-66					2450	2450			720	628
1966	3	1966.03	12-Mar-66					2090	2090			720	635
1966	3	1966.03	13-Mar-66					1960	1960			720	643
1966	3	1966.03	14-Mar-66					1890	1890			720	652
1966	3	1966.03	15-Mar-66					1830	1830			720	660
1966	3	1966.03	16-Mar-66					1810	1810			720	667
1966	3	1966.03	17-Mar-66					1710	1710			800	676
1966	3	1966.03	18-Mar-66					1630	1630			800	685
1966	3	1966.03	19-Mar-66					1690	1690			800	692
1966	3	1966.03	20-Mar-66					1480	1480			900	702
1966	3	1966.03	21-Mar-66					1380	1380			900	713
1966	3	1966.03	22-Mar-66					1240	1240			900	723
1966	3	1966.03	23-Mar-66					1220	1220			900	732
1966	3	1966.03	24-Mar-66					1220	1220			900	740
1966	3	1966.03	25-Mar-66					1170	1170			900	746
1966	3	1966.03	26-Mar-66					1140	1140			900	752
1966	3	1966.03	27-Mar-66					1140	1140			900	756
1966	3	1966.03	28-Mar-66					1200	1200			900	761
1966	3	1966.03	29-Mar-66					1200	1200			900	766
1966	3	1966.03	30-Mar-66					1120	1120			900	772
1966	3	1966.03	31-Mar-66					1080	1080			900	776
1966	4	1966.04	1-Apr-66					1130	1130			900	783
1966	4	1966.04	2-Apr-66					1080	1080			900	794
1966	4	1966.04	3-Apr-66					1020	1020			900	806
1966	4	1966.04	4-Apr-66					1010	1010			900	818
1966	4	1966.04	5-Apr-66					955	955			1020	834
1966	4	1966.04	6-Apr-66					940	940			1020	845
1966	4	1966.04	7-Apr-66					888	888			1020	855
1966	4	1966.04	8-Apr-66					868	868			1020	864
1966	4	1966.04	9-Apr-66					970	970			1020	874
1966	4	1966.04	10-Apr-66					1220	1220			900	880
1966	4	1966.04	11-Apr-66					1380	1380			900	886
1966	4	1966.04	12-Apr-66					1440	1440			900	892
1966	4	1966.04	13-Apr-66					1360	1360			900	898
1966	4	1966.04	14-Apr-66					1200	1200			900	904
1966	4	1966.04	15-Apr-66					1150	1150			900	910
1966	4	1966.04	16-Apr-66					1040	1040			1020	917
1966	4	1966.04	17-Apr-66					905	905			1020	925
1966	4	1966.04	18-Apr-66					888	888			1020	932
1966	4	1966.04	19-Apr-66					892	892			1020	936
1966	4	1966.04	20-Apr-66					848	848			1020	940
1966	4	1966.04	21-Apr-66					804	804			1020	944
1966	4	1966.04	22-Apr-66					820	820			1020	948
1966	4	1966.04	23-Apr-66					852	852			1020	952
1966	4	1966.04	24-Apr-66					892	892			1020	956
1966	4	1966.04	25-Apr-66					888	888			1020	960
1966	4	1966.04	26-Apr-66					820	820			1020	964
1966	4	1966.04	27-Apr-66					784	784			1020	968
1966	4	1966.04	28-Apr-66					776	776			1020	972
1966	4	1966.04	29-Apr-66				1020	820	820			1020	976
1966	4	1966.04	30-Apr-66				1000	808	808			1000	979
1966	5	1966.05	1-May-66				1000	826	826			1000	983
1966	5	1966.05	2-May-66				1050	852	852			1050	988
1966	5	1966.05	3-May-66				1035	794	794			1035	992
1966	5	1966.05	4-May-66				1045	785	785			1045	997
1966	5	1966.05	5-May-66				1030	780	780			1030	997
1966	5	1966.05	6-May-66				1020	826	826			1020	997
1966	5	1966.05	7-May-66				1030	826	826			1030	998
1966	5	1966.05	8-May-66				1015	862	862			1015	998
1966	5	1966.05	9-May-66				995	902	902			995	997
1966	5	1966.05	10-May-66				990	1020	1020			990	1000
1966	5	1966.05	11-May-66				825	1140	1140			825	997
1966	5	1966.05	12-May-66				830	1120	1120			830	995
1966	5	1966.05	13-May-66				870	1060	1060			870	994
1966	5	1966.05	14-May-66				915	1050	1050			915	994

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1966	5	1966.05	15-May-66				925	1060	1060			925	995
1966	5	1966.05	16-May-66				900	1060	1060			900	991
1966	5	1966.05	17-May-66				915	1000	1000			915	988
1966	5	1966.05	18-May-66				960	950	950			960	986
1966	5	1966.05	19-May-66				950	888	888			950	983
1966	5	1966.05	20-May-66				965	834	834			965	982
1966	5	1966.05	21-May-66					798	798			952.5	979
1966	5	1966.05	22-May-66				940	834	834			940	977
1966	5	1966.05	23-May-66				985	852	852			985	975
1966	5	1966.05	24-May-66				1030	808	808			1030	976
1966	5	1966.05	25-May-66				1090	744	744			1090	978
1966	5	1966.05	26-May-66				1065	664	664			1065	980
1966	5	1966.05	27-May-66				1110	690	690			1110	983
1966	5	1966.05	28-May-66				1190	610	610			1190	988
1966	5	1966.05	29-May-66				1085	695	695			1085	990
1966	5	1966.05	30-May-66				1010	731	731			1010	991
1966	5	1966.05	31-May-66				1020	695	695			1020	991
1966	6	1966.06	1-Jun-66				1015	605	605			1015	990
1966	6	1966.06	2-Jun-66				930	597	597			930	987
1966	6	1966.06	3-Jun-66				1000	636	636			1000	985
1966	6	1966.06	4-Jun-66				1110	614	614			1110	988
1966	6	1966.06	5-Jun-66				1035	700	700			1035	988
1966	6	1966.06	6-Jun-66				975	736	736			975	987
1966	6	1966.06	7-Jun-66				960	776	776			960	985
1966	6	1966.06	8-Jun-66				940	780	780			940	983
1966	6	1966.06	9-Jun-66				950	731	731			950	982
1966	6	1966.06	10-Jun-66				1000	736	736			1000	987
1966	6	1966.06	11-Jun-66				1015	641	641			1015	994
1966	6	1966.06	12-Jun-66				1070	628	628			1070	1000
1966	6	1966.06	13-Jun-66				1075	601	601			1075	1006
1966	6	1966.06	14-Jun-66				1150	581	581			1150	1013
1966	6	1966.06	15-Jun-66				1215	437	437			1215	1024
1966	6	1966.06	16-Jun-66				1290	373	373			1290	1036
1966	6	1966.06	17-Jun-66				1280	373	373			1280	1047
1966	6	1966.06	18-Jun-66				1245	393	393			1245	1057
1966	6	1966.06	19-Jun-66				1167	465	465			1167	1063
1966	6	1966.06	20-Jun-66				1065	549	549			1065	1067
1966	6	1966.06	21-Jun-66				1110	477	477			1110	1073
1966	6	1966.06	22-Jun-66				1185	413	413			1185	1079
1966	6	1966.06	23-Jun-66				1140	481	481			1140	1083
1966	6	1966.06	24-Jun-66				1110	529	529			1110	1084
1966	6	1966.06	25-Jun-66				1100	525	525			1100	1085
1966	6	1966.06	26-Jun-66				1100	517	517			1100	1085
1966	6	1966.06	27-Jun-66				1080	565	565			1080	1081
1966	6	1966.06	28-Jun-66				1080	585	585			1080	1081
1966	6	1966.06	29-Jun-66				1150	581	581			1150	1085
1966	6	1966.06	30-Jun-66				1190	469	469			1190	1091
1966	7	1966.07	1-Jul-66				1225	393	393			1225	1098
1966	7	1966.07	2-Jul-66				1210	429	429			1210	1107
1966	7	1966.07	3-Jul-66				1110	469	469			1110	1111
1966	7	1966.07	4-Jul-66				1090	509	509			1090	1110
1966	7	1966.07	5-Jul-66				1110	549	549			1110	1113
1966	7	1966.07	6-Jul-66				1150	509	509			1150	1119
1966	7	1966.07	7-Jul-66				1195	457	457			1195	1127
1966	7	1966.07	8-Jul-66				1240	409	409			1240	1137
1966	7	1966.07	9-Jul-66				1195	433	433			1195	1145
1966	7	1966.07	10-Jul-66				1175	453	453			1175	1151
1966	7	1966.07	11-Jul-66				1185	493	493			1185	1156
1966	7	1966.07	12-Jul-66				1220	481	481			1220	1161
1966	7	1966.07	13-Jul-66				1215	485	485			1215	1166
1966	7	1966.07	14-Jul-66				1240	469	469			1240	1169
1966	7	1966.07	15-Jul-66				1210	501	501			1210	1169
1966	7	1966.07	16-Jul-66				1170	517	517			1170	1165
1966	7	1966.07	17-Jul-66				1130	517	517			1130	1160
1966	7	1966.07	18-Jul-66				1105	545	545			1105	1155
1966	7	1966.07	19-Jul-66				1150	501	501			1150	1155
1966	7	1966.07	20-Jul-66				1180	429	429			1180	1158
1966	7	1966.07	21-Jul-66				1300	362	362			1300	1165
1966	7	1966.07	22-Jul-66				1305	373	373			1305	1169
1966	7	1966.07	23-Jul-66				1325	334	334			1325	1175
1966	7	1966.07	24-Jul-66				1235	377	377			1235	1179
1966	7	1966.07	25-Jul-66				1085	453	453			1085	1179
1966	7	1966.07	26-Jul-66				1145	369	369			1145	1180
1966	7	1966.07	27-Jul-66				1155	351	351			1155	1183
1966	7	1966.07	28-Jul-66				1228	326	326			1228	1187
1966	7	1966.07	29-Jul-66				1270	323	323			1270	1191

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1966	7	1966.07	30-Jul-66				1280	326	326			1280	1194
1966	7	1966.07	31-Jul-66				1100	489	489			1100	1190
1966	8	1966.08	1-Aug-66				1000	650	650			1000	1183
1966	8	1966.08	2-Aug-66				1050	628	628			1050	1181
1966	8	1966.08	3-Aug-66				1150	573	573			1150	1183
1966	8	1966.08	4-Aug-66				1160	477	477			1160	1185
1966	8	1966.08	5-Aug-66				1120	425	425			1120	1184
1966	8	1966.08	6-Aug-66				1185	401	401			1185	1184
1966	8	1966.08	7-Aug-66				1160	405	405			1160	1181
1966	8	1966.08	8-Aug-66				1210	425	425			1210	1181
1966	8	1966.08	9-Aug-66				1235	437	437			1235	1183
1966	8	1966.08	10-Aug-66				1272	409	409			1272	1186
1966	8	1966.08	11-Aug-66				1345	358	358			1345	1191
1966	8	1966.08	12-Aug-66				1260	389	389			1260	1192
1966	8	1966.08	13-Aug-66				1225	409	409			1225	1192
1966	8	1966.08	14-Aug-66				1225	449	449			1225	1192
1966	8	1966.08	15-Aug-66				1188	505	505			1188	1193
1966	8	1966.08	16-Aug-66				1188	481	481			1188	1195
1966	8	1966.08	17-Aug-66				1218	425	425			1218	1198
1966	8	1966.08	18-Aug-66				1265	385	385			1265	1202
1966	8	1966.08	19-Aug-66				1255	381	381			1255	1205
1966	8	1966.08	20-Aug-66				1260	377	377			1260	1203
1966	8	1966.08	21-Aug-66				1235	449	449			1235	1201
1966	8	1966.08	22-Aug-66				1215	565	565			1215	1197
1966	8	1966.08	23-Aug-66				1140	589	589			1140	1194
1966	8	1966.08	24-Aug-66				1190	501	501			1190	1198
1966	8	1966.08	25-Aug-66				1200	529	529			1200	1199
1966	8	1966.08	26-Aug-66				1168	553	553			1168	1200
1966	8	1966.08	27-Aug-66				1160	632	632			1160	1198
1966	8	1966.08	28-Aug-66				1080	659	659			1080	1191
1966	8	1966.08	29-Aug-66				1150	708	708			1150	1187
1966	8	1966.08	30-Aug-66				1165	682	682			1165	1189
1966	8	1966.08	31-Aug-66				1155	641	641			1155	1194
1966	9	1966.09	1-Sep-66				1218	597	597			1218	1200
1966	9	1966.09	2-Sep-66				1180	593	593			1180	1201
1966	9	1966.09	3-Sep-66				1200	585	585			1200	1202
1966	9	1966.09	4-Sep-66				1150	672	672			1150	1203
1966	9	1966.09	5-Sep-66				1110	718	718			1110	1201
1966	9	1966.09	6-Sep-66				1150	682	682			1150	1200
1966	9	1966.09	7-Sep-66				1190	686	686			1190	1200
1966	9	1966.09	8-Sep-66				1185	636	636			1185	1198
1966	9	1966.09	9-Sep-66				1175	654	654			1175	1195
1966	9	1966.09	10-Sep-66				1185	659	659			1185	1190
1966	9	1966.09	11-Sep-66				1172	718	718			1172	1187
1966	9	1966.09	12-Sep-66				1170	740	740			1170	1185
1966	9	1966.09	13-Sep-66				1180	744	744			1180	1183
1966	9	1966.09	14-Sep-66				1150	695	695			1150	1182
1966	9	1966.09	15-Sep-66				1160	695	695			1160	1181
1966	9	1966.09	16-Sep-66				1145	731	731			1145	1179
1966	9	1966.09	17-Sep-66				1165	713	713			1165	1175
1966	9	1966.09	18-Sep-66				1170	726	726			1170	1172
1966	9	1966.09	19-Sep-66				1155	776	776			1155	1169
1966	9	1966.09	20-Sep-66				1130	780	780			1130	1165
1966	9	1966.09	21-Sep-66				1110	790	790			1110	1162
1966	9	1966.09	22-Sep-66				1140	808	808			1140	1162
1966	9	1966.09	23-Sep-66				1060	830	830			1060	1158
1966	9	1966.09	24-Sep-66				1140	803	803			1140	1156
1966	9	1966.09	25-Sep-66				1120	780	780			1120	1154
1966	9	1966.09	26-Sep-66				1120	803	803			1120	1153
1966	9	1966.09	27-Sep-66				1075	803	803			1075	1153
1966	9	1966.09	28-Sep-66				1105	776	776			1105	1151
1966	9	1966.09	29-Sep-66				1050	780	780			1050	1147
1966	9	1966.09	30-Sep-66				1090	785	785			1090	1145
1966	10	1966.10	1-Oct-66				1100	780	780			1100	1141
1966	10	1966.10	2-Oct-66				1080	785	785			1080	1138
1966	10	1966.10	3-Oct-66				995	857	857			995	1131
1966	10	1966.10	4-Oct-66				935	906	906			935	1124
1966	10	1966.10	5-Oct-66				930	940	940			930	1118
1966	10	1966.10	6-Oct-66				910	955	955			910	1110
1966	10	1966.10	7-Oct-66				855	995	995			855	1099
1966	10	1966.10	8-Oct-66				855	955	955			855	1088
1966	10	1966.10	9-Oct-66				845	1000	1000			845	1077
1966	10	1966.10	10-Oct-66				865	1000	1000			865	1066
1966	10	1966.10	11-Oct-66				945	945	945			945	1058
1966	10	1966.10	12-Oct-66				930	1060	1060			930	1050
1966	10	1966.10	13-Oct-66				850	1150	1150			850	1039

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1966	10	1966.10	14-Oct-66				835	1180	1180			835	1029
1966	10	1966.10	15-Oct-66				790	1220	1220			790	1017
1966	10	1966.10	16-Oct-66				705	1260	1260			705	1002
1966	10	1966.10	17-Oct-66				680	1300	1300			680	986
1966	10	1966.10	18-Oct-66				675	1260	1260			675	969
1966	10	1966.10	19-Oct-66				645	1220	1220			645	952
1966	10	1966.10	20-Oct-66				675	1260	1260			675	937
1966	10	1966.10	21-Oct-66				645	1280	1280			645	922
1966	10	1966.10	22-Oct-66				660	1290	1290			660	906
1966	10	1966.10	23-Oct-66				620	1320	1320			620	891
1966	10	1966.10	24-Oct-66				655	1320	1320			655	875
1966	10	1966.10	25-Oct-66				640	1190	1190			640	859
1966	10	1966.10	26-Oct-66				765	1100	1100			765	847
1966	10	1966.10	27-Oct-66				725	1100	1100			725	835
1966	10	1966.10	28-Oct-66				790	1120	1120			790	825
1966	10	1966.10	29-Oct-66				770	1140	1140			770	815
1966	10	1966.10	30-Oct-66				750	1120	1120			750	804
1966	10	1966.10	31-Oct-66				775	1130	1130			775	793
1966	11	1966.11	1-Nov-66				895	1040	1040			895	787
1966	11	1966.11	2-Nov-66				985	1040	1040			985	787
1966	11	1966.11	3-Nov-66				815	1200	1200			815	783
1966	11	1966.11	4-Nov-66				715	1340	1340			715	776
1966	11	1966.11	5-Nov-66				690	1340	1340			690	768
1966	11	1966.11	6-Nov-66				695	1350	1350			695	763
1966	11	1966.11	7-Nov-66				685	1420	1420			685	757
1966	11	1966.11	8-Nov-66				685	1440	1440			685	752
1966	11	1966.11	9-Nov-66				675	1440	1440			675	746
1966	11	1966.11	10-Nov-66				675	1450	1450			675	737
1966	11	1966.11	11-Nov-66				670	1450	1450			670	728
1966	11	1966.11	12-Nov-66				692	1430	1430			692	723
1966	11	1966.11	13-Nov-66				695	1440	1440			695	718
1966	11	1966.11	14-Nov-66				690	1420	1420			690	715
1966	11	1966.11	15-Nov-66				735	1390	1390			735	716
1966	11	1966.11	16-Nov-66				680	1460	1460			680	716
1966	11	1966.11	17-Nov-66				670	1500	1500			670	715
1966	11	1966.11	18-Nov-66				665	1490	1490			665	716
1966	11	1966.11	19-Nov-66				670	1470	1470			670	716
1966	11	1966.11	20-Nov-66				685	1410	1410			685	717
1966	11	1966.11	21-Nov-66				860	1200	1200			860	724
1966	11	1966.11	22-Nov-66				1030	1100	1100			1030	738
1966	11	1966.11	23-Nov-66				955	1220	1220			955	748
1966	11	1966.11	24-Nov-66				755	1430	1430			755	751
1966	11	1966.11	25-Nov-66				685	1460	1460			685	749
1966	11	1966.11	26-Nov-66				840	1240	1240			840	753
1966	11	1966.11	27-Nov-66				930	1200	1200			930	757
1966	11	1966.11	28-Nov-66				915	1190	1190			915	762
1966	11	1966.11	29-Nov-66				1040	1110	1110			1040	772
1966	11	1966.11	30-Nov-66				990	1220	1220			990	779
1966	12	1966.12	1-Dec-66				785	1450	1450			785	775
1966	12	1966.12	2-Dec-66				720	1510	1510			720	766
1966	12	1966.12	3-Dec-66				705	1620	1620			705	763
1966	12	1966.12	4-Dec-66				675	1680	1680			675	761
1966	12	1966.12	5-Dec-66				655	1730	1730			655	760
1966	12	1966.12	6-Dec-66				650	1820	1820			650	759
1966	12	1966.12	7-Dec-66				425	3150	3150			425	750
1966	12	1966.12	8-Dec-66				235	5660	5660			235	735
1966	12	1966.12	9-Dec-66				225	6660	6660			225	720
1966	12	1966.12	10-Dec-66				155	7510	7510			155	703
1966	12	1966.12	11-Dec-66				155	8470	8470			155	686
1966	12	1966.12	12-Dec-66				235	8170	8170			235	670
1966	12	1966.12	13-Dec-66				305	6960	6960			305	657
1966	12	1966.12	14-Dec-66				345	5860	5860			345	646
1966	12	1966.12	15-Dec-66				360	5170	5170			360	633
1966	12	1966.12	16-Dec-66				355	4900	4900			355	623
1966	12	1966.12	17-Dec-66				355	4760	4760			355	612
1966	12	1966.12	18-Dec-66				358	4630	4630			358	602
1966	12	1966.12	19-Dec-66				355	4540	4540			355	591
1966	12	1966.12	20-Dec-66				350	4470	4470			350	580
1966	12	1966.12	21-Dec-66				355	4440	4440			355	563
1966	12	1966.12	22-Dec-66				365	4420	4420			365	541
1966	12	1966.12	23-Dec-66				375	4400	4400			375	522
1966	12	1966.12	24-Dec-66					4400	4400			385	509
1966	12	1966.12	25-Dec-66					4300	4300			385	499
1966	12	1966.12	26-Dec-66					4200	4200			385	484
1966	12	1966.12	27-Dec-66					4160	4160			385	466
1966	12	1966.12	28-Dec-66				395	4100	4100			395	449

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1966	12	1966.12	29-Dec-66				475	3670	3670			475	430
1966	12	1966.12	30-Dec-66				475	3430	3430			475	413
1966	12	1966.12	31-Dec-66				470	3400	3400			470	402
1967	1	1967.01	1-Jan-67				470	3100	3100			470	394
1967	1	1967.01	2-Jan-67				580	2710	2710			580	390
1967	1	1967.01	3-Jan-67				670	2490	2490			670	390
1967	1	1967.01	4-Jan-67				720	2400	2400			720	392
1967	1	1967.01	5-Jan-67				605	2610	2610			605	390
1967	1	1967.01	6-Jan-67				625	2590	2590			625	397
1967	1	1967.01	7-Jan-67				655	2600	2600			655	411
1967	1	1967.01	8-Jan-67				670	2560	2560			670	426
1967	1	1967.01	9-Jan-67				750	2440	2440			750	446
1967	1	1967.01	10-Jan-67				775	2390	2390			775	466
1967	1	1967.01	11-Jan-67				735	2470	2470			735	483
1967	1	1967.01	12-Jan-67				790	2340	2340			790	499
1967	1	1967.01	13-Jan-67				850	2200	2200			850	516
1967	1	1967.01	14-Jan-67				890	2150	2150			890	534
1967	1	1967.01	15-Jan-67				900	2050	2050			900	552
1967	1	1967.01	16-Jan-67				950	1940	1940			950	572
1967	1	1967.01	17-Jan-67				965	1900	1900			965	592
1967	1	1967.01	18-Jan-67				930	1910	1910			930	611
1967	1	1967.01	19-Jan-67				900	1920	1920			900	629
1967	1	1967.01	20-Jan-67				870	1940	1940			870	647
1967	1	1967.01	21-Jan-67				865	1980	1980			865	663
1967	1	1967.01	22-Jan-67				820	2320	2320			820	678
1967	1	1967.01	23-Jan-67				525	3920	3920			525	683
1967	1	1967.01	24-Jan-67				425	4590	4590			425	684
1967	1	1967.01	25-Jan-67				485	4720	4720			485	687
1967	1	1967.01	26-Jan-67				340	5650	5650			340	686
1967	1	1967.01	27-Jan-67				450	4950	4950			450	688
1967	1	1967.01	28-Jan-67				345	5660	5660			345	683
1967	1	1967.01	29-Jan-67				315	6230	6230			315	678
1967	1	1967.01	30-Jan-67				370	5960	5960			370	675
1967	1	1967.01	31-Jan-67				340	6760	6760			340	670
1967	2	1967.02	1-Feb-67				260	8070	8070			260	660
1967	2	1967.02	2-Feb-67				240	7880	7880			240	645
1967	2	1967.02	3-Feb-67				215	8260	8260			215	629
1967	2	1967.02	4-Feb-67				215	8270	8270			215	616
1967	2	1967.02	5-Feb-67					7930	7930			270	604
1967	2	1967.02	6-Feb-67			325		7600	7600			325	593
1967	2	1967.02	7-Feb-67			295		7370	7370			295	580
1967	2	1967.02	8-Feb-67			275		7410	7410			275	564
1967	2	1967.02	9-Feb-67			250		7610	7610			250	547
1967	2	1967.02	10-Feb-67			255		7740	7740			255	531
1967	2	1967.02	11-Feb-67			295		7770	7770			295	514
1967	2	1967.02	12-Feb-67			355		7480	7480			355	498
1967	2	1967.02	13-Feb-67			390		6830	6830			390	481
1967	2	1967.02	14-Feb-67			395		6300	6300			395	464
1967	2	1967.02	15-Feb-67			388		5880	5880			388	446
1967	2	1967.02	16-Feb-67			380		5800	5800			380	426
1967	2	1967.02	17-Feb-67			375		5740	5740			375	408
1967	2	1967.02	18-Feb-67			375		5530	5530			375	390
1967	2	1967.02	19-Feb-67			390		5300	5300			390	374
1967	2	1967.02	20-Feb-67			400		5130	5130			400	359
1967	2	1967.02	21-Feb-67			408		5110	5110			408	345
1967	2	1967.02	22-Feb-67			410		4990	4990			410	341
1967	2	1967.02	23-Feb-67			405		4990	4990			405	340
1967	2	1967.02	24-Feb-67			405		5180	5180			405	338
1967	2	1967.02	25-Feb-67			430		5010	5010			430	341
1967	2	1967.02	26-Feb-67			445		4630	4630			445	341
1967	2	1967.02	27-Feb-67			475		4260	4260			475	345
1967	2	1967.02	28-Feb-67			485		4100	4100			485	351
1967	3	1967.03	1-Mar-67			475		4040	4040			475	354
1967	3	1967.03	2-Mar-67			515		3750	3750			515	360
1967	3	1967.03	3-Mar-67			510		3590	3590			510	368
1967	3	1967.03	4-Mar-67			530		3420	3420			530	378
1967	3	1967.03	5-Mar-67			565		3240	3240			565	390
1967	3	1967.03	6-Mar-67			635		2790	2790			635	404
1967	3	1967.03	7-Mar-67			705		2480	2480			705	418
1967	3	1967.03	8-Mar-67			685		2510	2510			685	430
1967	3	1967.03	9-Mar-67			705		2350	2350			705	444
1967	3	1967.03	10-Mar-67			745		2240	2240			745	459
1967	3	1967.03	11-Mar-67			700		2340	2340			700	474
1967	3	1967.03	12-Mar-67			650		3420	3420			650	488
1967	3	1967.03	13-Mar-67			695		2520	2520			695	501
1967	3	1967.03	14-Mar-67			565		3210	3210			565	508

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1967	3	1967.03	15-Mar-67				435	4130	4130			435	509
1967	3	1967.03	16-Mar-67				305	5500	5500			305	506
1967	3	1967.03	17-Mar-67				130	8630	8630			130	498
1967	3	1967.03	18-Mar-67				135	12100	12100			135	490
1967	3	1967.03	19-Mar-67				145	14600	14600			145	482
1967	3	1967.03	20-Mar-67				130	15900	15900			130	474
1967	3	1967.03	21-Mar-67				135	16300	16300			135	465
1967	3	1967.03	22-Mar-67				155	15500	15500			155	457
1967	3	1967.03	23-Mar-67				190	13600	13600			190	450
1967	3	1967.03	24-Mar-67				260	10500	10500			260	445
1967	3	1967.03	25-Mar-67				260	8390	8390			260	440
1967	3	1967.03	26-Mar-67				270	7380	7380			270	436
1967	3	1967.03	27-Mar-67				300	6660	6660			300	431
1967	3	1967.03	28-Mar-67					6050	6050			332.5	427
1967	3	1967.03	29-Mar-67					5450	5450			332.5	423
1967	3	1967.03	30-Mar-67					4990	4990			332.5	418
1967	3	1967.03	31-Mar-67				365	5050	5050			365	414
1967	4	1967.04	1-Apr-67				300	5910	5910			300	407
1967	4	1967.04	2-Apr-67				195	7930	7930			195	396
1967	4	1967.04	3-Apr-67				200	8830	8830			200	385
1967	4	1967.04	4-Apr-67				230	8920	8920			230	374
1967	4	1967.04	5-Apr-67				280	7620	7620			280	362
1967	4	1967.04	6-Apr-67				255	6740	6740			255	347
1967	4	1967.04	7-Apr-67				200	7490	7490			200	331
1967	4	1967.04	8-Apr-67				150	10300	10300			150	313
1967	4	1967.04	9-Apr-67				130	12700	12700			130	292
1967	4	1967.04	10-Apr-67				135	13700	13700			135	273
1967	4	1967.04	11-Apr-67				142	13900	13900			142	256
1967	4	1967.04	12-Apr-67				150	14000	14000			150	238
1967	4	1967.04	13-Apr-67				170	13800	13800			170	225
1967	4	1967.04	14-Apr-67				160	13900	13900			160	216
1967	4	1967.04	15-Apr-67				150	14000	14000			150	211
1967	4	1967.04	16-Apr-67				175	13000	13000			175	212
1967	4	1967.04	17-Apr-67				200	12100	12100			200	214
1967	4	1967.04	18-Apr-67				215	11500	11500			215	217
1967	4	1967.04	19-Apr-67				175	11800	11800			175	218
1967	4	1967.04	20-Apr-67				135	14100	14100			135	218
1967	4	1967.04	21-Apr-67				130	15400	15400			130	217
1967	4	1967.04	22-Apr-67				130	15800	15800			130	215
1967	4	1967.04	23-Apr-67				130	17000	17000			130	211
1967	4	1967.04	24-Apr-67				160	18400	18400			160	208
1967	4	1967.04	25-Apr-67				160	20400	20400			160	204
1967	4	1967.04	26-Apr-67				160	23700	23700			160	199
1967	4	1967.04	27-Apr-67				150	25000	25000			150	193
1967	4	1967.04	28-Apr-67				150	25200	25200			150	187
1967	4	1967.04	29-Apr-67				150	25800	25800			150	181
1967	4	1967.04	30-Apr-67				150	25900	25900			150	174
1967	5	1967.05	1-May-67				158	24900	24900			158	169
1967	5	1967.05	2-May-67				160	24200	24200			160	168
1967	5	1967.05	3-May-67				159	23600	23600			159	167
1967	5	1967.05	4-May-67				159	23200	23200			159	164
1967	5	1967.05	5-May-67				159	22800	22800			159	160
1967	5	1967.05	6-May-67				158	22300	22300			158	157
1967	5	1967.05	7-May-67				155	21800	21800			155	156
1967	5	1967.05	8-May-67				150	21200	21200			150	156
1967	5	1967.05	9-May-67				155	20600	20600			155	156
1967	5	1967.05	10-May-67				157	20200	20200			157	157
1967	5	1967.05	11-May-67				150	20500	20500			150	157
1967	5	1967.05	12-May-67				145	21500	21500			145	157
1967	5	1967.05	13-May-67				135	21700	21700			135	156
1967	5	1967.05	14-May-67				140	19800	19800			140	155
1967	5	1967.05	15-May-67				145	18500	18500			145	155
1967	5	1967.05	16-May-67				150	18300	18300			150	154
1967	5	1967.05	17-May-67				145	18500	18500			145	153
1967	5	1967.05	18-May-67				145	18500	18500			145	150
1967	5	1967.05	19-May-67				145	18000	18000			145	149
1967	5	1967.05	20-May-67				145	17400	17400			145	150
1967	5	1967.05	21-May-67				145	16900	16900			145	150
1967	5	1967.05	22-May-67				145	16300	16300			145	151
1967	5	1967.05	23-May-67				135	16600	16600			135	151
1967	5	1967.05	24-May-67				130	17800	17800			130	150
1967	5	1967.05	25-May-67				120	19300	19300			120	148
1967	5	1967.05	26-May-67				115	21000	21000			115	147
1967	5	1967.05	27-May-67				115	21000	21000			115	146
1967	5	1967.05	28-May-67				115	20700	20700			115	145
1967	5	1967.05	29-May-67				105	21000	21000			105	143

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1967	5	1967.05	30-May-67				105	21300	21300			105	142
1967	5	1967.05	31-May-67				105	21900	21900			105	140
1967	6	1967.06	1-Jun-67				100	22500	22500			100	138
1967	6	1967.06	2-Jun-67				100	23100	23100			100	136
1967	6	1967.06	3-Jun-67				100	23200	23200			100	134
1967	6	1967.06	4-Jun-67				105	22000	22000			105	132
1967	6	1967.06	5-Jun-67				110	20300	20300			110	130
1967	6	1967.06	6-Jun-67				115	20100	20100			115	129
1967	6	1967.06	7-Jun-67				110	21500	21500			110	128
1967	6	1967.06	8-Jun-67				115	21700	21700			115	126
1967	6	1967.06	9-Jun-67				120	20500	20500			120	125
1967	6	1967.06	10-Jun-67				115	20200	20200			115	124
1967	6	1967.06	11-Jun-67				110	20600	20600			110	123
1967	6	1967.06	12-Jun-67				100	21400	21400			100	122
1967	6	1967.06	13-Jun-67				95	22200	22200			95	120
1967	6	1967.06	14-Jun-67				100	22000	22000			100	119
1967	6	1967.06	15-Jun-67				110	19800	19800			110	117
1967	6	1967.06	16-Jun-67				130	17700	17700			130	117
1967	6	1967.06	17-Jun-67				145	16200	16200			145	117
1967	6	1967.06	18-Jun-67				120	16100	16100			120	116
1967	6	1967.06	19-Jun-67				115	16800	16800			115	115
1967	6	1967.06	20-Jun-67				105	17800	17800			105	114
1967	6	1967.06	21-Jun-67				100	18600	18600			100	112
1967	6	1967.06	22-Jun-67				105	18700	18700			105	111
1967	6	1967.06	23-Jun-67				110	18300	18300			110	111
1967	6	1967.06	24-Jun-67				110	18000	18000			110	110
1967	6	1967.06	25-Jun-67				100	18400	18400			100	110
1967	6	1967.06	26-Jun-67				90	19200	19200			90	109
1967	6	1967.06	27-Jun-67				90	20200	20200			90	108
1967	6	1967.06	28-Jun-67				90	20900	20900			90	108
1967	6	1967.06	29-Jun-67				95	21200	21200			95	107
1967	6	1967.06	30-Jun-67				95	20800	20800			95	107
1967	7	1967.07	1-Jul-67				95	20400	20400			95	107
1967	7	1967.07	2-Jul-67				90	20800	20800			90	106
1967	7	1967.07	3-Jul-67				85	21100	21100			85	106
1967	7	1967.07	4-Jul-67				80	21000	21000			80	105
1967	7	1967.07	5-Jul-67				85	20300	20300			85	104
1967	7	1967.07	6-Jul-67				85	19400	19400			85	103
1967	7	1967.07	7-Jul-67				85	18900	18900			85	102
1967	7	1967.07	8-Jul-67				90	17900	17900			90	102
1967	7	1967.07	9-Jul-67				95	16900	16900			95	101
1967	7	1967.07	10-Jul-67				110	15800	15800			110	101
1967	7	1967.07	11-Jul-67				110	14400	14400			110	101
1967	7	1967.07	12-Jul-67				110	13600	13600			110	101
1967	7	1967.07	13-Jul-67				130	11900	11900			130	102
1967	7	1967.07	14-Jul-67				165	10300	10300			165	104
1967	7	1967.07	15-Jul-67				240	8270	8270			240	109
1967	7	1967.07	16-Jul-67				295	6600	6600			295	114
1967	7	1967.07	17-Jul-67				245	7030	7030			245	117
1967	7	1967.07	18-Jul-67				190	7540	7540			190	120
1967	7	1967.07	19-Jul-67				200	7190	7190			200	123
1967	7	1967.07	20-Jul-67				235	6520	6520			235	127
1967	7	1967.07	21-Jul-67				290	5520	5520			290	133
1967	7	1967.07	22-Jul-67				320	4660	4660			320	140
1967	7	1967.07	23-Jul-67				345	4240	4240			345	148
1967	7	1967.07	24-Jul-67				380	3750	3750			380	157
1967	7	1967.07	25-Jul-67				440	3470	3470			440	169
1967	7	1967.07	26-Jul-67				410	3500	3500			410	179
1967	7	1967.07	27-Jul-67				440	2970	2970			440	191
1967	7	1967.07	28-Jul-67				490	2620	2620			490	204
1967	7	1967.07	29-Jul-67				535	2440	2440			535	219
1967	7	1967.07	30-Jul-67				565	2460	2460			565	235
1967	7	1967.07	31-Jul-67				545	2460	2460			545	250
1967	8	1967.08	1-Aug-67				585	2360	2360			585	266
1967	8	1967.08	2-Aug-67				615	2250	2250			615	284
1967	8	1967.08	3-Aug-67				605	2340	2340			605	301
1967	8	1967.08	4-Aug-67				550	2310	2310			550	317
1967	8	1967.08	5-Aug-67				595	2130	2130			595	334
1967	8	1967.08	6-Aug-67				615	2100	2100			615	351
1967	8	1967.08	7-Aug-67				615	2130	2130			615	369
1967	8	1967.08	8-Aug-67				600	2180	2180			600	386
1967	8	1967.08	9-Aug-67				565	2130	2130			565	401
1967	8	1967.08	10-Aug-67				570	2100	2100			570	416
1967	8	1967.08	11-Aug-67				585	2040	2040			585	432
1967	8	1967.08	12-Aug-67				585	2080	2080			585	447
1967	8	1967.08	13-Aug-67				585	2110	2110			585	461

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1967	8	1967.08	14-Aug-67				605	2090	2090			605	473
1967	8	1967.08	15-Aug-67				630	1980	1980			630	485
1967	8	1967.08	16-Aug-67				655	1930	1930			655	498
1967	8	1967.08	17-Aug-67				630	1890	1890			630	513
1967	8	1967.08	18-Aug-67				620	1850	1850			620	527
1967	8	1967.08	19-Aug-67				615	1830	1830			615	540
1967	8	1967.08	20-Aug-67				615	1870	1870			615	550
1967	8	1967.08	21-Aug-67				635	1930	1930			635	561
1967	8	1967.08	22-Aug-67				630	1940	1940			630	570
1967	8	1967.08	23-Aug-67				610	1860	1860			610	578
1967	8	1967.08	24-Aug-67				620	1860	1860			620	584
1967	8	1967.08	25-Aug-67				605	1890	1890			605	591
1967	8	1967.08	26-Aug-67				615	1860	1860			615	596
1967	8	1967.08	27-Aug-67				615	1850	1850			615	601
1967	8	1967.08	28-Aug-67				615	1930	1930			615	603
1967	8	1967.08	29-Aug-67				595	1950	1950			595	604
1967	8	1967.08	30-Aug-67				590	1910	1910			590	606
1967	8	1967.08	31-Aug-67				585	1960	1960			585	606
1967	9	1967.09	1-Sep-67				580	1910	1910			580	605
1967	9	1967.09	2-Sep-67				575	1980	1980			575	604
1967	9	1967.09	3-Sep-67				565	2060	2060			565	604
1967	9	1967.09	4-Sep-67				540	2100	2100			540	602
1967	9	1967.09	5-Sep-67				570	2010	2010			570	601
1967	9	1967.09	6-Sep-67				615	1910	1910			615	601
1967	9	1967.09	7-Sep-67				655	1880	1880			655	603
1967	9	1967.09	8-Sep-67				650	1870	1870			650	605
1967	9	1967.09	9-Sep-67				650	1800	1800			650	608
1967	9	1967.09	10-Sep-67				620	1890	1890			620	609
1967	9	1967.09	11-Sep-67				605	1990	1990			605	610
1967	9	1967.09	12-Sep-67				615	1990	1990			615	611
1967	9	1967.09	13-Sep-67				595	1890	1890			595	611
1967	9	1967.09	14-Sep-67				630	1870	1870			630	611
1967	9	1967.09	15-Sep-67				650	1830	1830			650	610
1967	9	1967.09	16-Sep-67				625	1910	1910			625	610
1967	9	1967.09	17-Sep-67				605	1990	1990			605	610
1967	9	1967.09	18-Sep-67				590	2040	2040			590	609
1967	9	1967.09	19-Sep-67				580	2100	2100			580	608
1967	9	1967.09	20-Sep-67				585	2040	2040			585	606
1967	9	1967.09	21-Sep-67				600	1970	1970			600	605
1967	9	1967.09	22-Sep-67				580	2030	2030			580	604
1967	9	1967.09	23-Sep-67				560	2100	2100			560	602
1967	9	1967.09	24-Sep-67				550	2160	2160			550	600
1967	9	1967.09	25-Sep-67				535	2230	2230			535	598
1967	9	1967.09	26-Sep-67				570	2220	2220			570	596
1967	9	1967.09	27-Sep-67				560	2190	2190			560	594
1967	9	1967.09	28-Sep-67				560	2140	2140			560	593
1967	9	1967.09	29-Sep-67				510	2290	2290			510	590
1967	9	1967.09	30-Sep-67				465	2470	2470			465	586
1967	10	1967.10	1-Oct-67	445	465	435		445	2460	2460		445	582
1967	10	1967.10	2-Oct-67	510	575	460		510	2470	2470		510	580
1967	10	1967.10	3-Oct-67	555	575	540		555	2500	2500		555	579
1967	10	1967.10	4-Oct-67	530	545	515		530	2530	2530		530	579
1967	10	1967.10	5-Oct-67	520	530	510		520	2570	2570		520	577
1967	10	1967.10	6-Oct-67	515	520	505		515	2600	2600		515	574
1967	10	1967.10	7-Oct-67	525	535	515		525	2660	2660		525	570
1967	10	1967.10	8-Oct-67	520	530	510		520	2700	2700		520	565
1967	10	1967.10	9-Oct-67	510	535	495		510	2720	2720		510	561
1967	10	1967.10	10-Oct-67	565	595	535		565	2450	2450		565	559
1967	10	1967.10	11-Oct-67	655	670	595		655	2260	2260		655	561
1967	10	1967.10	12-Oct-67	655	670	625		655	2180	2180		655	562
1967	10	1967.10	13-Oct-67	650	655	645		650	2190	2190		650	564
1967	10	1967.10	14-Oct-67	670	695	645		670	2180	2180		670	565
1967	10	1967.10	15-Oct-67	655	665	635		655	2200	2200		655	565
1967	10	1967.10	16-Oct-67	625	655	585		625	2380	2380		625	565
1967	10	1967.10	17-Oct-67	625	650	585		625	2350	2350		625	566
1967	10	1967.10	18-Oct-67	620	650	605		620	2360	2360		620	567
1967	10	1967.10	19-Oct-67	595	605	585		595	2420	2420		595	567
1967	10	1967.10	20-Oct-67	545	590	490		545	2570	2570		545	566
1967	10	1967.10	21-Oct-67	425	490	370		425	2760	2760		425	560
1967	10	1967.10	22-Oct-67	340	370	320		340	2990	2990		340	552
1967	10	1967.10	23-Oct-67	340	350	325		340	3070	3070		340	545
1967	10	1967.10	24-Oct-67	375	390	350		375	2940	2940		375	539
1967	10	1967.10	25-Oct-67	385	390	330		385	3030	3030		385	534
1967	10	1967.10	26-Oct-67	300	330	290		300	3320	3320		300	525
1967	10	1967.10	27-Oct-67	285	290	280		285	3590	3590		285	516
1967	10	1967.10	28-Oct-67	295	315	285		295	3660	3660		295	507

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1967	10	1967.10	29-Oct-67	325	335	310		325	3420	3420		325	501
1967	10	1967.10	30-Oct-67	330	345	305		330	3300	3300		330	496
1967	10	1967.10	31-Oct-67	270	305	250		270	3660	3660		270	491
1967	11	1967.11	1-Nov-67	270	295	250		270	3740	3740		270	483
1967	11	1967.11	2-Nov-67	315	355	295		315	3660	3660		315	475
1967	11	1967.11	3-Nov-67	350	360	340		350	3500	3500		350	469
1967	11	1967.11	4-Nov-67	365	385	330		365	3430	3430		365	463
1967	11	1967.11	5-Nov-67	370	385	360		370	3350	3350		370	459
1967	11	1967.11	6-Nov-67	390	430	360		390	3270	3270		390	454
1967	11	1967.11	7-Nov-67	410	430	385		410	3190	3190		410	450
1967	11	1967.11	8-Nov-67	375	390	360		375	3320	3320		375	446
1967	11	1967.11	9-Nov-67	370	380	355		370	3360	3360		370	439
1967	11	1967.11	10-Nov-67	375	390	360		375	3430	3430		375	430
1967	11	1967.11	11-Nov-67	350	360	330		350	3500	3500		350	420
1967	11	1967.11	12-Nov-67	325	330	315		325	3530	3530		325	409
1967	11	1967.11	13-Nov-67	330	345	315		330	3460	3460		330	398
1967	11	1967.11	14-Nov-67	345	360	330		345	3350	3350		345	387
1967	11	1967.11	15-Nov-67	345	355	330		345	3440	3440		345	378
1967	11	1967.11	16-Nov-67	355	375	345		355	3470	3470		355	369
1967	11	1967.11	17-Nov-67	365	380	345		365	3420	3420		365	361
1967	11	1967.11	18-Nov-67	380	390	370		380	3350	3350		380	353
1967	11	1967.11	19-Nov-67	370	380	355		370	3450	3450		370	348
1967	11	1967.11	20-Nov-67	375	390	365		375	3470	3470		375	346
1967	11	1967.11	21-Nov-67	385	395	360		385	3490	3490		385	347
1967	11	1967.11	22-Nov-67	350	360	340		350	3700	3700		350	348
1967	11	1967.11	23-Nov-67	360	375	345		360	3620	3620		360	347
1967	11	1967.11	24-Nov-67	375	400	360		375	3470	3470		375	347
1967	11	1967.11	25-Nov-67	385	400	355		385	3350	3350		385	350
1967	11	1967.11	26-Nov-67	330	355	320		330	3510	3510		330	351
1967	11	1967.11	27-Nov-67	340	360	320		340	3420	3420		340	353
1967	11	1967.11	28-Nov-67	345	360	310		345	3430	3430		345	353
1967	11	1967.11	29-Nov-67	300	315	290		300	3730	3730		300	352
1967	11	1967.11	30-Nov-67	310	320	305		310	3780	3780		310	354
1967	12	1967.12	1-Dec-67	300	315	290		300	3930	3930		300	355
1967	12	1967.12	2-Dec-67	305	320	295		305	3970	3970		305	354
1967	12	1967.12	3-Dec-67	330	360	310		330	3860	3860		330	354
1967	12	1967.12	4-Dec-67	370	390	360		370	3710	3710		370	354
1967	12	1967.12	5-Dec-67	385	390	375		385	3620	3620		385	354
1967	12	1967.12	6-Dec-67	370	380	365		370	3790	3790		370	354
1967	12	1967.12	7-Dec-67	370	375	365		370	3820	3820		370	352
1967	12	1967.12	8-Dec-67	355	365	345		355	3890	3890		355	352
1967	12	1967.12	9-Dec-67	355	375	335		355	3890	3890		355	351
1967	12	1967.12	10-Dec-67	370	385	350		370	3870	3870		370	351
1967	12	1967.12	11-Dec-67	385	400	370		385	3710	3710		385	352
1967	12	1967.12	12-Dec-67	385	400	355		385	3640	3640		385	354
1967	12	1967.12	13-Dec-67	345	360	330		345	3740	3740		345	355
1967	12	1967.12	14-Dec-67	360	370	340		360	3640	3640		360	355
1967	12	1967.12	15-Dec-67	360	370	340		360	3740	3740		360	356
1967	12	1967.12	16-Dec-67	335	345	325		335	3930	3930		335	355
1967	12	1967.12	17-Dec-67	350	370	330		350	3880	3880		350	355
1967	12	1967.12	18-Dec-67	380	405	360		380	3770	3770		380	355
1967	12	1967.12	19-Dec-67	395	405	385		395	3720	3720		395	355
1967	12	1967.12	20-Dec-67	390	420	370		390	3720	3720		390	356
1967	12	1967.12	21-Dec-67	425	440	410		425	3570	3570		425	357
1967	12	1967.12	22-Dec-67	435	445	425		435	3570	3570		435	360
1967	12	1967.12	23-Dec-67	405	435	390		405	3580	3580		405	362
1967	12	1967.12	24-Dec-67	420	430	410		420	3450	3450		420	363
1967	12	1967.12	25-Dec-67	440	445	435		440	3330	3330		440	365
1967	12	1967.12	26-Dec-67	440	445	430		440	3260	3260		440	369
1967	12	1967.12	27-Dec-67	440	445	435		440	3230	3230		440	372
1967	12	1967.12	28-Dec-67	440	445	435		440	3250	3250		440	375
1967	12	1967.12	29-Dec-67	440	445	435		440	3230	3230		440	380
1967	12	1967.12	30-Dec-67	445	455	440		445	3210	3210		445	384
1967	12	1967.12	31-Dec-67	450	470	455		450	3160	3160		450	389
1968	1	1968.01	1-Jan-68	470	475	465		470	3120	3120		470	395
1968	1	1968.01	2-Jan-68	455	470	440		455	3130	3130		455	399
1968	1	1968.01	3-Jan-68	450	455	445		450	3170	3170		450	402
1968	1	1968.01	4-Jan-68	445	455	415		445	3280	3280		445	404
1968	1	1968.01	5-Jan-68	415	425	395		415	3400	3400		415	405
1968	1	1968.01	6-Jan-68	390	415	370		390	3500	3500		390	406
1968	1	1968.01	7-Jan-68	395	430	385		395	3540	3540		395	407
1968	1	1968.01	8-Jan-68	440	455	430		440	3330	3330		440	410
1968	1	1968.01	9-Jan-68	470	485	450		470	3300	3300		470	413
1968	1	1968.01	10-Jan-68	480	500	460		480	3500	3500		480	416
1968	1	1968.01	11-Jan-68	490	500	475		490	3570	3570		490	420
1968	1	1968.01	12-Jan-68	510	520	490		510	3480	3480		510	425

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1968	1	1968.01	13-Jan-68	530	585	510		530	3400	3400		530	431
1968	1	1968.01	14-Jan-68	600	615	585		600	3190	3190		600	439
1968	1	1968.01	15-Jan-68	610	625	600		610	3010	3010		610	448
1968	1	1968.01	16-Jan-68	645	675	625		645	2910	2910		645	458
1968	1	1968.01	17-Jan-68	695	720	675		695	2840	2840		695	469
1968	1	1968.01	18-Jan-68	725	735	715		725	2820	2820		725	480
1968	1	1968.01	19-Jan-68	720	740	690		720	2800	2800		720	491
1968	1	1968.01	20-Jan-68	685	695	675		685	2740	2740		685	499
1968	1	1968.01	21-Jan-68	680	685	675		680	2700	2700		680	507
1968	1	1968.01	22-Jan-68	705	755	685		705	2560	2560		705	517
1968	1	1968.01	23-Jan-68	835	860	755		835	2320	2320		835	531
1968	1	1968.01	24-Jan-68	780	855	755		780	2470	2470		780	543
1968	1	1968.01	25-Jan-68	750	760	740		750	2530	2530		750	553
1968	1	1968.01	26-Jan-68	735	765	710		735	2540	2540		735	563
1968	1	1968.01	27-Jan-68	710	725	695		710	2500	2500		710	572
1968	1	1968.01	28-Jan-68	735	755	725		735	2400	2400		735	582
1968	1	1968.01	29-Jan-68	755	760	750		755	2300	2300		755	592
1968	1	1968.01	30-Jan-68	765	775	755		765	2290	2290		765	602
1968	1	1968.01	31-Jan-68	740	775	705		740	2510	2510		740	611
1968	2	1968.02	1-Feb-68	725	765	690		725	2560	2560		725	620
1968	2	1968.02	2-Feb-68	715	765	685		715	2510	2510		715	629
1968	2	1968.02	3-Feb-68	650	685	635		650	2420	2420		650	636
1968	2	1968.02	4-Feb-68	735	765	670		735	2200	2200		735	647
1968	2	1968.02	5-Feb-68	765	795	730		765	2140	2140		765	659
1968	2	1968.02	6-Feb-68	785	800	760		785	2100	2100		785	672
1968	2	1968.02	7-Feb-68	735	765	690		735	2170	2170		735	682
1968	2	1968.02	8-Feb-68	740	805	685		740	2110	2110		740	691
1968	2	1968.02	9-Feb-68	815	855	700		815	2150	2150		815	702
1968	2	1968.02	10-Feb-68	570	700	515		570	2410	2410		570	705
1968	2	1968.02	11-Feb-68	495	515	480		495	2540	2540		495	704
1968	2	1968.02	12-Feb-68	525	565	490		525	2480	2480		525	704
1968	2	1968.02	13-Feb-68	605	695	565		605	2290	2290		605	704
1968	2	1968.02	14-Feb-68	710	735	680		710	2210	2210		710	708
1968	2	1968.02	15-Feb-68	705	730	685		705	2240	2240		705	710
1968	2	1968.02	16-Feb-68	750	780	735		750	2130	2130		750	712
1968	2	1968.02	17-Feb-68	815	855	780		815	2020	2020		815	715
1968	2	1968.02	18-Feb-68	865	905	845		865	1950	1950		865	719
1968	2	1968.02	19-Feb-68	930	950	905		930	1910	1910		930	728
1968	2	1968.02	20-Feb-68	950	1015	910		950	1900	1900		950	737
1968	2	1968.02	21-Feb-68	895	1015	750		895	2110	2110		895	743
1968	2	1968.02	22-Feb-68	575	750	510		575	2880	2880		575	734
1968	2	1968.02	23-Feb-68	470	510	410		470	3360	3360		470	724
1968	2	1968.02	24-Feb-68	380	410	370		380	4100	4100		380	712
1968	2	1968.02	25-Feb-68	415	425	395		415	4120	4120		415	701
1968	2	1968.02	26-Feb-68	430	440	420		430	3980	3980		430	692
1968	2	1968.02	27-Feb-68	455	480	430		455	3830	3830		455	682
1968	2	1968.02	28-Feb-68	510	530	480		510	3590	3590		510	674
1968	2	1968.02	29-Feb-68	530	535	525		530	3470	3470		530	666
1968	3	1968.03	1-Mar-68	525	530	515		525	3420	3420		525	659
1968	3	1968.03	2-Mar-68	535	560	525		535	3300	3300		535	653
1968	3	1968.03	3-Mar-68	630	670	560		630	2910	2910		630	650
1968	3	1968.03	4-Mar-68	700	755	645		700	2620	2620		700	652
1968	3	1968.03	5-Mar-68	600	750	465		600	2840	2840		600	647
1968	3	1968.03	6-Mar-68	500	540	450		500	3020	3020		500	638
1968	3	1968.03	7-Mar-68	520	555	490		520	3020	3020		520	629
1968	3	1968.03	8-Mar-68	545	585	490		545	3190	3190		545	623
1968	3	1968.03	9-Mar-68	565	585	515		565	3250	3250		565	617
1968	3	1968.03	10-Mar-68	500	535	475		500	3370	3370		500	607
1968	3	1968.03	11-Mar-68	595	655	535		595	2980	2980		595	608
1968	3	1968.03	12-Mar-68	630	695	570		630	2840	2840		630	612
1968	3	1968.03	13-Mar-68	535	570	510		535	3000	3000		535	612
1968	3	1968.03	14-Mar-68	520	540	490		520	3040	3040		520	610
1968	3	1968.03	15-Mar-68	535	550	520		535	3000	3000		535	604
1968	3	1968.03	16-Mar-68	520	535	510		520	3090	3090		520	598
1968	3	1968.03	17-Mar-68	495	515	470		495	3140	3140		495	589
1968	3	1968.03	18-Mar-68	475	515	455		475	3360	3360		475	578
1968	3	1968.03	19-Mar-68	505	530	465		505	3310	3310		505	566
1968	3	1968.03	20-Mar-68	400	465	370		400	3680	3680		400	548
1968	3	1968.03	21-Mar-68	400	420	390		400	3750	3750		400	530
1968	3	1968.03	22-Mar-68	415	425	400		415	3770	3770		415	514
1968	3	1968.03	23-Mar-68	445	480	410		445	3620	3620		445	509
1968	3	1968.03	24-Mar-68	480	515	465		480	3350	3350		480	510
1968	3	1968.03	25-Mar-68	535	555	515		535	3160	3160		535	515
1968	3	1968.03	26-Mar-68	550	560	545		550	3000	3000		550	519
1968	3	1968.03	27-Mar-68	545	565	525		545	2920	2920		545	523
1968	3	1968.03	28-Mar-68	570	585	555		570	2690	2690		570	527

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1968	3	1968.03 29-Mar-68	640	675	585		640	2260	2260			640	531
1968	3	1968.03 30-Mar-68	675	675	570		675	2370	2370			675	536
1968	3	1968.03 31-Mar-68	535	570	490		535	2620	2620			535	537
1968	4	1968.04 1-Apr-68	535	560	495		535	2620	2620			535	537
1968	4	1968.04 2-Apr-68	555	585	505		555	2930	2930			555	534
1968	4	1968.04 3-Apr-68	495	525	480		495	3060	3060			495	527
1968	4	1968.04 4-Apr-68	550	580	530		550	2750	2750			550	526
1968	4	1968.04 5-Apr-68	570	595	550		570	2570	2570			570	528
1968	4	1968.04 6-Apr-68	560	575	550		560	2440	2440			560	529
1968	4	1968.04 7-Apr-68	575	605	560		575	2130	2130			575	530
1968	4	1968.04 8-Apr-68	640	655	605		640	1900	1900			640	533
1968	4	1968.04 9-Apr-68	690	715	650		690	1680	1680			690	539
1968	4	1968.04 10-Apr-68	770	810	695		770	1440	1440			770	545
1968	4	1968.04 11-Apr-68	820					1240	1240			820	551
1968	4	1968.04 12-Apr-68	870					1120	1120			870	562
1968	4	1968.04 13-Apr-68	920					1100	1100			920	576
1968	4	1968.04 14-Apr-68	970					1100	1100			970	590
1968	4	1968.04 15-Apr-68	1000					1160	1160			1000	606
1968	4	1968.04 16-Apr-68	1000	1010	990		1000	1000	1000			1000	623
1968	4	1968.04 17-Apr-68	1005	1020	990		1005	906	906			1005	641
1968	4	1968.04 18-Apr-68	1005	1045	970		1005	930	930			1005	657
1968	4	1968.04 19-Apr-68	1030	1055	995		1030	844	844			1030	678
1968	4	1968.04 20-Apr-68	1015	1050	985		1015	830	830			1015	699
1968	4	1968.04 21-Apr-68	1015	1020	935		1015	862	862			1015	719
1968	4	1968.04 22-Apr-68	895	925	880		895	945	945			895	734
1968	4	1968.04 23-Apr-68	915	930	910		915	940	940			915	748
1968	4	1968.04 24-Apr-68	905	920	890		905	945	945			905	761
1968	4	1968.04 25-Apr-68	900	950	880		900	980	980			900	772
1968	4	1968.04 26-Apr-68	955	970	945		955	925	925			955	786
1968	4	1968.04 27-Apr-68	925	950	900		925	880	880			925	798
1968	4	1968.04 28-Apr-68	910	940	875		910	955	955			910	807
1968	4	1968.04 29-Apr-68	875	905	845		875	980	980			875	814
1968	4	1968.04 30-Apr-68	895	940	845		895	902	902			895	826
1968	5	1968.05 1-May-68	955	990	940		955	798	798			955	840
1968	5	1968.05 2-May-68	980	1000	960		980	780	780			980	854
1968	5	1968.05 3-May-68	940	975	915		940	816	816			940	869
1968	5	1968.05 4-May-68	950	970	910		950	826	826			950	882
1968	5	1968.05 5-May-68	905	950	855		905	920	920			905	893
1968	5	1968.05 6-May-68	880	905	865		880	975	975			880	904
1968	5	1968.05 7-May-68	925	965	880		925	930	930			925	915
1968	5	1968.05 8-May-68	970	1005	950		970	911	911			970	926
1968	5	1968.05 9-May-68	960	975	950		960	870	870			960	935
1968	5	1968.05 10-May-68	980	1000	955		980	848	848			980	942
1968	5	1968.05 11-May-68	985	1010	935		985	893	893			985	948
1968	5	1968.05 12-May-68	970	995	945		970	970	970			970	951
1968	5	1968.05 13-May-68	975	1020	945		975	1040	1040			975	953
1968	5	1968.05 14-May-68	940	975	875		940	1140	1140			940	952
1968	5	1968.05 15-May-68	875	895	865		875	1120	1120			875	948
1968	5	1968.05 16-May-68	875	890	860		875	1040	1040			875	944
1968	5	1968.05 17-May-68	900	920	880		900	995	995			900	940
1968	5	1968.05 18-May-68	915	960	890		915	960	960			915	937
1968	5	1968.05 19-May-68	940	975	915		940	950	950			940	934
1968	5	1968.05 20-May-68	905	925	865		905	995	995			905	931
1968	5	1968.05 21-May-68	930	980	865		930	902	902			930	928
1968	5	1968.05 22-May-68	985	1015	945		985	875	875			985	931
1968	5	1968.05 23-May-68	965	1005	940		965	844	844			965	932
1968	5	1968.05 24-May-68	990	1035	945		990	893	893			990	935
1968	5	1968.05 25-May-68	950	985	930		950	884	884			950	937
1968	5	1968.05 26-May-68	1020	1040	985		1020	844	844			1020	939
1968	5	1968.05 27-May-68	975	1020	955		975	875	875			975	941
1968	5	1968.05 28-May-68	1000	1035	960		1000	794	794			1000	944
1968	5	1968.05 29-May-68	1050	1070	1010		1050	700	700			1050	950
1968	5	1968.05 30-May-68	1045	1085	1010		1045	654	654			1045	955
1968	5	1968.05 31-May-68	1105	1120	1060		1105	581	581			1105	960
1968	6	1968.06 1-Jun-68	1180	1220	1115		1180	549	549			1180	966
1968	6	1968.06 2-Jun-68	1150	1220	1070		1150	601	601			1150	973
1968	6	1968.06 3-Jun-68	1050	1075	1010		1050	650	650			1050	977
1968	6	1968.06 4-Jun-68	1140	1195	1075		1140	593	593			1140	984
1968	6	1968.06 5-Jun-68	1180	1210	1155		1180	589	589			1180	994
1968	6	1968.06 6-Jun-68	1110	1205	1025		1110	646	646			1110	1001
1968	6	1968.06 7-Jun-68	1050	1085	1015		1050	654	654			1050	1003
1968	6	1968.06 8-Jun-68	1045	1055	1025		1045	632	632			1045	1006
1968	6	1968.06 9-Jun-68	1020	1035	1005		1020	704	704			1020	1007
1968	6	1968.06 10-Jun-68	985	1035	965		985	749	749			985	1007
1968	6	1968.06 11-Jun-68	1075	1125	1025		1075	690	690			1075	1011
1968	6	1968.06 12-Jun-68	1075	1100	1060		1075	623	623			1075	1014

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1968	6	1968.06 13-Jun-68	1100	1125	1080		1100	593	593			1100	1020
1968	6	1968.06 14-Jun-68	1055	1080	1035		1055	628	628			1055	1026
1968	6	1968.06 15-Jun-68	1065	1105	1040		1065	610	610			1065	1032
1968	6	1968.06 16-Jun-68	1060	1110	1020		1060	581	581			1060	1037
1968	6	1968.06 17-Jun-68	1015	1085	975		1015	641	641			1015	1041
1968	6	1968.06 18-Jun-68	1105	1130	1065		1105	589	589			1105	1046
1968	6	1968.06 19-Jun-68	1110	1130	1035		1110	577	577			1110	1053
1968	6	1968.06 20-Jun-68	1130	1190	1030		1130	493	493			1130	1060
1968	6	1968.06 21-Jun-68	1130	1170	1050		1130	553	553			1130	1064
1968	6	1968.06 22-Jun-68	1115	1150	1055		1115	529	529			1115	1069
1968	6	1968.06 23-Jun-68	1070	1110	1005		1070	585	585			1070	1072
1968	6	1968.06 24-Jun-68	975	1005	925		975	641	641			975	1073
1968	6	1968.06 25-Jun-68	1070	1135	1000		1070	549	549			1070	1075
1968	6	1968.06 26-Jun-68	1120	1160	1100		1120	489	489			1120	1079
1968	6	1968.06 27-Jun-68	1145	1200	1060		1145	501	501			1145	1084
1968	6	1968.06 28-Jun-68	1075	1115	1030		1075	533	533			1075	1085
1968	6	1968.06 29-Jun-68	1075	1155	1030		1075	485	485			1075	1086
1968	6	1968.06 30-Jun-68	1145	1190	1110		1145	489	489			1145	1087
1968	7	1968.07 1-Jul-68	1085	1110	1070		1085	517	517			1085	1084
1968	7	1968.07 2-Jul-68	1155	1215	1075		1155	469	469			1155	1084
1968	7	1968.07 3-Jul-68	1180	1210	1135		1180	477	477			1180	1089
1968	7	1968.07 4-Jul-68	1135	1190	1065		1135	485	485			1135	1089
1968	7	1968.07 5-Jul-68	1110	1125	1075		1110	485	485			1110	1086
1968	7	1968.07 6-Jul-68	1070	1125	1020		1070	485	485			1070	1085
1968	7	1968.07 7-Jul-68	1055	1075	1045		1055	469	469			1055	1085
1968	7	1968.07 8-Jul-68	1060	1110	1025		1060	469	469			1060	1086
1968	7	1968.07 9-Jul-68	1125	1175	1055		1125	465	465			1125	1089
1968	7	1968.07 10-Jul-68	1175	1220	1120		1175	469	469			1175	1095
1968	7	1968.07 11-Jul-68	1140	1165	1120		1140	469	469			1140	1098
1968	7	1968.07 12-Jul-68	1085	1145	1020		1085	469	469			1085	1098
1968	7	1968.07 13-Jul-68	1055	1070	1025		1055	489	489			1055	1096
1968	7	1968.07 14-Jul-68	1015	1050	965		1015	525	525			1015	1095
1968	7	1968.07 15-Jul-68	955	970	950		955	585	585			955	1091
1968	7	1968.07 16-Jul-68	1020	1080	960		1020	569	569			1020	1090
1968	7	1968.07 17-Jul-68	1070	1080	1045		1070	549	549			1070	1092
1968	7	1968.07 18-Jul-68	1065	1095	1025		1065	501	501			1065	1091
1968	7	1968.07 19-Jul-68	1120	1135	1090		1120	457	457			1120	1091
1968	7	1968.07 20-Jul-68	1150	1180	1075		1150	453	453			1150	1092
1968	7	1968.07 21-Jul-68	1100	1170	1040		1100	469	469			1100	1091
1968	7	1968.07 22-Jul-68	1030	1070	1005		1030	561	561			1030	1088
1968	7	1968.07 23-Jul-68	1025	1080	980		1025	553	553			1025	1086
1968	7	1968.07 24-Jul-68	1165	1200	1085		1165	513	513			1165	1093
1968	7	1968.07 25-Jul-68	1125	1200	1045		1125	481	481			1125	1094
1968	7	1968.07 26-Jul-68	1130	1155	1075		1130	497	497			1130	1095
1968	7	1968.07 27-Jul-68	1135	1055	1105		1135	521	521			1135	1094
1968	7	1968.07 28-Jul-68	1110	1140	1040		1110	533	533			1110	1096
1968	7	1968.07 29-Jul-68	1050	1095	1015		1050	573	573			1050	1095
1968	7	1968.07 30-Jul-68	1135	1220	1070		1135	529	529			1135	1094
1968	7	1968.07 31-Jul-68	1170	1220	1140		1170	505	505			1170	1097
1968	8	1968.08 1-Aug-68	1135	1165	1080		1135	549	549			1135	1097
1968	8	1968.08 2-Aug-68	1090	1110	1070		1090	577	577			1090	1094
1968	8	1968.08 3-Aug-68	1060	1085	1025		1060	581	581			1060	1091
1968	8	1968.08 4-Aug-68	995	1685	745		995	646	646			995	1087
1968	8	1968.08 5-Aug-68	960	1000	940		960	708	708			960	1084
1968	8	1968.08 6-Aug-68	990	1010	955		990	682	682			990	1081
1968	8	1968.08 7-Aug-68	1010	1030	980		1010	646	646			1010	1080
1968	8	1968.08 8-Aug-68	1040	1050	1010		1040	618	618			1040	1077
1968	8	1968.08 9-Aug-68	1055	1065	1040		1055	589	589			1055	1073
1968	8	1968.08 10-Aug-68	1065	1080	1040		1065	610	610			1065	1070
1968	8	1968.08 11-Aug-68	1000	1040	985		1000	677	677			1000	1068
1968	8	1968.08 12-Aug-68	1000	1035	965		1000	677	677			1000	1066
1968	8	1968.08 13-Aug-68	1075	1125	1030		1075	641	641			1075	1068
1968	8	1968.08 14-Aug-68	1090	1120	1070		1090	636	636			1090	1072
1968	8	1968.08 15-Aug-68	1070	1085	1050		1070	618	618			1070	1074
1968	8	1968.08 16-Aug-68	1050	1060	1035		1050	623	623			1050	1073
1968	8	1968.08 17-Aug-68	1065	1085	1045		1065	610	610			1065	1073
1968	8	1968.08 18-Aug-68	965	1050	920		965	754	754			965	1068
1968	8	1968.08 19-Aug-68	935	965	910		935	812	812			935	1061
1968	8	1968.08 20-Aug-68	960	1055	880		960	834	834			960	1056
1968	8	1968.08 21-Aug-68	945	970	925		945	893	893			945	1053
1968	8	1968.08 22-Aug-68	935	955	905		935	985	985			935	1050
1968	8	1968.08 23-Aug-68	915	940	900		915	1020	1020			915	1042
1968	8	1968.08 24-Aug-68	930	945	910		930	950	950			930	1036
1968	8	1968.08 25-Aug-68	915	930	895		915	950	950			915	1028
1968	8	1968.08 26-Aug-68	905	925	855		905	1040	1040			905	1021
1968	8	1968.08 27-Aug-68	870	890	825		870	1040	1040			870	1013

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1968	8	1968.08 28-Aug-68	905	925	870		905	980	980			905	1008
1968	8	1968.08 29-Aug-68	910	925	895		910	1030	1030			910	1000
1968	8	1968.08 30-Aug-68	960	1020	900		960	960	960			960	993
1968	8	1968.08 31-Aug-68	1030	1045	1005		1030	880	880			1030	990
1968	9	1968.09 1-Sep-68	1015	1020	995		1015	898	898			1015	987
1968	9	1968.09 2-Sep-68	1030	1040	1015		1030	898	898			1030	986
1968	9	1968.09 3-Sep-68	1015	1040	970		1015	857	857			1015	987
1968	9	1968.09 4-Sep-68	975	995	950		975	834	834			975	988
1968	9	1968.09 5-Sep-68	975	995	945		975	803	803			975	987
1968	9	1968.09 6-Sep-68	955	970	935		955	857	857			955	985
1968	9	1968.09 7-Sep-68	920	930	915		920	893	893			920	981
1968	9	1968.09 8-Sep-68	935	955	890		935	965	965			935	977
1968	9	1968.09 9-Sep-68	925	945	885		925	980	980			925	973
1968	9	1968.09 10-Sep-68	1000	1040	945		1000	893	893			1000	973
1968	9	1968.09 11-Sep-68	1020	1030	1015		1020	852	852			1020	973
1968	9	1968.09 12-Sep-68	1010	1030	970		1010	916	916			1010	971
1968	9	1968.09 13-Sep-68	970	985	940		970	935	935			970	967
1968	9	1968.09 14-Sep-68	940	960	920		940	945	945			940	963
1968	9	1968.09 15-Sep-68	910	920	895		910	1000	1000			910	958
1968	9	1968.09 16-Sep-68	885	910	865		885	1030	1030			885	952
1968	9	1968.09 17-Sep-68	915	955	875		915	960	960			915	950
1968	9	1968.09 18-Sep-68	950	975	925		950	935	935			950	951
1968	9	1968.09 19-Sep-68	1000	1025	970		1000	884	884			1000	952
1968	9	1968.09 20-Sep-68	990	1025	945		990	875	875			990	954
1968	9	1968.09 21-Sep-68	960	985	930		960	893	893			960	955
1968	9	1968.09 22-Sep-68	940	970	915		940	925	925			940	955
1968	9	1968.09 23-Sep-68	925	945	900		925	975	975			925	955
1968	9	1968.09 24-Sep-68	925	945	895		925	980	980			925	956
1968	9	1968.09 25-Sep-68	920	935	885		920	980	980			920	956
1968	9	1968.09 26-Sep-68	895	925	845		895	1010	1010			895	957
1968	9	1968.09 27-Sep-68	830	840	805		830	1070	1070			830	954
1968	9	1968.09 28-Sep-68	850	870	825		850	1020	1020			850	952
1968	9	1968.09 29-Sep-68	880	905	860		880	1030	1030			880	950
1968	9	1968.09 30-Sep-68	915	935	880		915	1050	1050			915	946
1968	10	1968.10 1-Oct-68	920	960	860		920	1040	1040			920	943
1968	10	1968.10 2-Oct-68	915	940	870		915	1010	1010			915	939
1968	10	1968.10 3-Oct-68	885	915	860		885	1060	1060			885	935
1968	10	1968.10 4-Oct-68	900	920	875		900	1110	1110			900	932
1968	10	1968.10 5-Oct-68	860	885	840		860	1180	1180			860	928
1968	10	1968.10 6-Oct-68	865	890	830		865	1260	1260			865	925
1968	10	1968.10 7-Oct-68	825	845	805		825	1240	1240			825	922
1968	10	1968.10 8-Oct-68	845	865	825		845	1190	1190			845	919
1968	10	1968.10 9-Oct-68	910	935	865		910	1130	1130			910	919
1968	10	1968.10 10-Oct-68	930	940	915		930	1120	1120			930	916
1968	10	1968.10 11-Oct-68	950	985	925		950	1120	1120			950	914
1968	10	1968.10 12-Oct-68	975	1015	935		975	1040	1040			975	913
1968	10	1968.10 13-Oct-68	930	965	880		930	1270	1270			930	911
1968	10	1968.10 14-Oct-68	765	900	685		765	1630	1630			765	906
1968	10	1968.10 15-Oct-68	555	685	495		555	1970	1970			555	894
1968	10	1968.10 16-Oct-68	505	545	480		505	2000	2000			505	881
1968	10	1968.10 17-Oct-68	565	625	530		565	1820	1820			565	869
1968	10	1968.10 18-Oct-68	605	680	570		605	1630	1630			605	858
1968	10	1968.10 19-Oct-68	670	715	645		670	1490	1490			670	847
1968	10	1968.10 20-Oct-68	720	750	700		720	1330	1330			720	838
1968	10	1968.10 21-Oct-68	800	845	750		800	1180	1180			800	833
1968	10	1968.10 22-Oct-68	840	860	830		840	1120	1120			840	829
1968	10	1968.10 23-Oct-68	830	835	825		830	1150	1150			830	826
1968	10	1968.10 24-Oct-68	815	830	795		815	1210	1210			815	822
1968	10	1968.10 25-Oct-68	800	820	740		800	1290	1290			800	818
1968	10	1968.10 26-Oct-68	690	740	655		690	1560	1560			690	812
1968	10	1968.10 27-Oct-68	600	655	565		600	1660	1660			600	804
1968	10	1968.10 28-Oct-68	545	565	525		545	1720	1720			545	794
1968	10	1968.10 29-Oct-68	525	530	520		525	1770	1770			525	782
1968	10	1968.10 30-Oct-68	530	540	520		530	1800	1800			530	769
1968	10	1968.10 31-Oct-68	540	555	535		540	1810	1810			540	756
1968	11	1968.11 1-Nov-68	540	550	530		540	1840	1840			540	744
1968	11	1968.11 2-Nov-68	530	540	510		530	1900	1900			530	732
1968	11	1968.11 3-Nov-68	505	510	480		505	2020	2020			505	719
1968	11	1968.11 4-Nov-68	470	480	465		470	2100	2100			470	706
1968	11	1968.11 5-Nov-68	495	535	470		495	2100	2100			495	694
1968	11	1968.11 6-Nov-68	565	585	535		565	2020	2020			565	685
1968	11	1968.11 7-Nov-68	605	620	585		605	1980	1980			605	677
1968	11	1968.11 8-Nov-68	625	630	620		625	1940	1940			625	667
1968	11	1968.11 9-Nov-68	635	645	630		635	1870	1870			635	658
1968	11	1968.11 10-Nov-68	665	675	645		665	1830	1830			665	648
1968	11	1968.11 11-Nov-68	680	700	675		680	1780	1780			680	638

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1968	11	1968.11 12-Nov-68	750	825	695		750	1620	1620			750	632
1968	11	1968.11 13-Nov-68	885	945	825		885	1390	1390			885	636
1968	11	1968.11 14-Nov-68	965	985	945		965	1330	1330			965	650
1968	11	1968.11 15-Nov-68	960	970	945		960	1410	1410			960	665
1968	11	1968.11 16-Nov-68	915	945	900		915	1440	1440			915	677
1968	11	1968.11 17-Nov-68	885	900	865		885	1500	1500			885	686
1968	11	1968.11 18-Nov-68	865	880	855		865	1500	1500			865	693
1968	11	1968.11 19-Nov-68	890	905	880		890	1470	1470			890	698
1968	11	1968.11 20-Nov-68	905	940	875		905	1440	1440			905	702
1968	11	1968.11 21-Nov-68	945	970	925		945	1400	1400			945	705
1968	11	1968.11 22-Nov-68	995	1010	965		995	1380	1380			995	711
1968	11	1968.11 23-Nov-68	1010	1025	995		1010	1350	1350			1010	717
1968	11	1968.11 24-Nov-68	1005	1010	985		1005	1310	1310			1005	724
1968	11	1968.11 25-Nov-68	1000	1015	980		1000	1280	1280			1000	734
1968	11	1968.11 26-Nov-68	970	980	965		970	1290	1290			970	747
1968	11	1968.11 27-Nov-68	965	970	960		965	1290	1290			965	761
1968	11	1968.11 28-Nov-68	965	970	960		965	1290	1290			965	775
1968	11	1968.11 29-Nov-68	950	975	860		950	1410	1410			950	789
1968	11	1968.11 30-Nov-68	825	860	780		825	1650	1650			825	799
1968	12	1968.12 1-Dec-68	735	780	700		735	1700	1700			735	805
1968	12	1968.12 2-Dec-68	710	715	705		710	1690	1690			710	811
1968	12	1968.12 3-Dec-68	710	720	705		710	1700	1700			710	818
1968	12	1968.12 4-Dec-68	705	720	685		705	1740	1740			705	826
1968	12	1968.12 5-Dec-68	695	700	690		695	1750	1750			695	833
1968	12	1968.12 6-Dec-68	695	700	685		695	1800	1800			695	837
1968	12	1968.12 7-Dec-68	590	685	540		590	2070	2070			590	837
1968	12	1968.12 8-Dec-68	515	540	495		515	2240	2240			515	833
1968	12	1968.12 9-Dec-68	555	565	540		555	2190	2190			555	830
1968	12	1968.12 10-Dec-68	570	590	560		570	2140	2140			570	827
1968	12	1968.12 11-Dec-68	600	635	585		600	2080	2080			600	824
1968	12	1968.12 12-Dec-68	610	640	575		610	2080	2080			610	820
1968	12	1968.12 13-Dec-68	630	655	610		630	2040	2040			630	811
1968	12	1968.12 14-Dec-68	585	640	565		585	2140	2140			585	799
1968	12	1968.12 15-Dec-68	530	570	500		530	2320	2320			530	784
1968	12	1968.12 16-Dec-68	610	645	570		610	2120	2120			610	774
1968	12	1968.12 17-Dec-68	655	665	645		655	2070	2070			655	766
1968	12	1968.12 18-Dec-68	550	645	505		550	2420	2420			550	756
1968	12	1968.12 19-Dec-68	490	510	480		490	2610	2610			490	743
1968	12	1968.12 20-Dec-68	505	520	490		505	2580	2580			505	729
1968	12	1968.12 21-Dec-68	500	520	490		500	2590	2590			500	714
1968	12	1968.12 22-Dec-68	465	495	450		465	2730	2730			465	697
1968	12	1968.12 23-Dec-68	475	485	465		475	2740	2740			475	679
1968	12	1968.12 24-Dec-68	475	480	470		475	2750	2750			475	661
1968	12	1968.12 25-Dec-68	470	490	460		470	2840	2840			470	644
1968	12	1968.12 26-Dec-68	510	535	490		510	2760	2760			510	628
1968	12	1968.12 27-Dec-68	460	535	305		460	3060	3060			460	611
1968	12	1968.12 28-Dec-68	325	385	285		325	4180	4180			325	590
1968	12	1968.12 29-Dec-68	315	390	255		315	4460	4460			315	569
1968	12	1968.12 30-Dec-68	255	265	245		255	4490	4490			255	550
1968	12	1968.12 31-Dec-68	290	310	265		290	4440	4440			290	535
1969	1	1969.01 1-Jan-69	325	335	310		325	4320	4320			325	522
1969	1	1969.01 2-Jan-69	340	345	335		340	4200	4200			340	510
1969	1	1969.01 3-Jan-69	365	380	345		365	4160	4160			365	499
1969	1	1969.01 4-Jan-69	445	490	375		445	3690	3690			445	490
1969	1	1969.01 5-Jan-69	495	545	450		495	3230	3230			495	484
1969	1	1969.01 6-Jan-69	545	585	520		545	2880	2880			545	482
1969	1	1969.01 7-Jan-69	570	585	525		570	2780	2780			570	484
1969	1	1969.01 8-Jan-69	510	545	470		510	2990	2990			510	482
1969	1	1969.01 9-Jan-69	530	545	515		530	2950	2950			530	481
1969	1	1969.01 10-Jan-69	525	540	510		525	3000	3000			525	479
1969	1	1969.01 11-Jan-69	495	535	475		495	3200	3200			495	475
1969	1	1969.01 12-Jan-69	470	490	450		470	3320	3320			470	469
1969	1	1969.01 13-Jan-69	465	490	450		465	3340	3340			465	465
1969	1	1969.01 14-Jan-69	475	485	415		475	3580	3580			475	464
1969	1	1969.01 15-Jan-69	260	415	210		260	6180	6180			260	452
1969	1	1969.01 16-Jan-69	280	365	185		280	7700	7700			280	439
1969	1	1969.01 17-Jan-69	200	250	175		200	7560	7560			200	428
1969	1	1969.01 18-Jan-69	250	260	240		250	7650	7650			250	420
1969	1	1969.01 19-Jan-69	270	315	240		270	7770	7770			270	412
1969	1	1969.01 20-Jan-69	290	330	195		290	9350	9350			290	405
1969	1	1969.01 21-Jan-69	180	195	160		180	14000	14000			180	395
1969	1	1969.01 22-Jan-69	115	160	85		115	23100	23100			115	383
1969	1	1969.01 23-Jan-69	105	120	100		105	29600	29600			105	371
1969	1	1969.01 24-Jan-69	130	135	120		130	27200	27200			130	360
1969	1	1969.01 25-Jan-69	130	135	125		130	26300	26300			130	347
1969	1	1969.01 26-Jan-69	125	130	120		125	29100	29100			125	336

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1969	1	1969.01 27-Jan-69	105	120	95		105	41700	41700			105	329
1969	1	1969.01 28-Jan-69	135	150	95		135	39000	39000			135	323
1969	1	1969.01 29-Jan-69	140	150	130		140	36800	36800			140	319
1969	1	1969.01 30-Jan-69	125	130	120		125	35000	35000			125	313
1969	1	1969.01 31-Jan-69	125	135	120		125	32600	32600			125	307
1969	2	1969.02 1-Feb-69	145	160	135		145	31000	31000			145	300
1969	2	1969.02 2-Feb-69	165	170	160		165	29900	29900			165	293
1969	2	1969.02 3-Feb-69	175	185	165		175	28700	28700			175	284
1969	2	1969.02 4-Feb-69	185	195	180		185	27000	27000			185	274
1969	2	1969.02 5-Feb-69	185	195	180		185	26900	26900			185	262
1969	2	1969.02 6-Feb-69	195	205	185		195	26900	26900			195	250
1969	2	1969.02 7-Feb-69	195	205	190		195	27000	27000			195	239
1969	2	1969.02 8-Feb-69	205	210	200		205	27300	27300			205	228
1969	2	1969.02 9-Feb-69	205	210	195		205	28100	28100			205	218
1969	2	1969.02 10-Feb-69	190	200	180		190	30000	30000			190	207
1969	2	1969.02 11-Feb-69	175	180	170		175	31500	31500			175	198
1969	2	1969.02 12-Feb-69	175	175	175		175	31900	31900			175	188
1969	2	1969.02 13-Feb-69	175	175	175		175	32400	32400			175	178
1969	2	1969.02 14-Feb-69	175	180	170		175	32900	32900			175	175
1969	2	1969.02 15-Feb-69	190	195	180		190	32800	32800			190	172
1969	2	1969.02 16-Feb-69	195	195	195		195	32800	32800			195	172
1969	2	1969.02 17-Feb-69	185	195	170		185	32900	32900			185	170
1969	2	1969.02 18-Feb-69	180	190	170		180	32900	32900			180	167
1969	2	1969.02 19-Feb-69	190	200	180		190	32900	32900			190	163
1969	2	1969.02 20-Feb-69	195	205	185		195	34200	34200			195	164
1969	2	1969.02 21-Feb-69	185	200	175		185	35200	35200			185	166
1969	2	1969.02 22-Feb-69	185	200	175		185	35300	35300			185	169
1969	2	1969.02 23-Feb-69	190	205	180		190	34200	34200			190	171
1969	2	1969.02 24-Feb-69	205	220	190		205	33600	33600			205	173
1969	2	1969.02 25-Feb-69	205	220	190		205	34800	34800			205	176
1969	2	1969.02 26-Feb-69	195	210	180		195	38800	38800			195	179
1969	2	1969.02 27-Feb-69	185	210	160		185	44000	44000			185	181
1969	2	1969.02 28-Feb-69	160	180	130		160	45600	45600			160	181
1969	3	1969.03 1-Mar-69	190	200	180		190	47600	47600			190	184
1969	3	1969.03 2-Mar-69	195	210	185		195	46200	46200			195	186
1969	3	1969.03 3-Mar-69	195	210	180		195	44200	44200			195	188
1969	3	1969.03 4-Mar-69	200	210	185		200	41800	41800			200	189
1969	3	1969.03 5-Mar-69	205	215	185		205	39300	39300			205	190
1969	3	1969.03 6-Mar-69	220	235	200		220	36400	36400			220	191
1969	3	1969.03 7-Mar-69	225	240	205		225	34000	34000			225	192
1969	3	1969.03 8-Mar-69	225	250	210		225	32200	32200			225	193
1969	3	1969.03 9-Mar-69	230	260	220		230	31000	31000			230	194
1969	3	1969.03 10-Mar-69	230	250	220		230	30400	30400			230	195
1969	3	1969.03 11-Mar-69	220	250	215		220	30000	30000			220	196
1969	3	1969.03 12-Mar-69	215	240	210		215	29900	29900			215	197
1969	3	1969.03 13-Mar-69	225	245	215		225	29800	29800			225	198
1969	3	1969.03 14-Mar-69	220	240	210		220	29200	29200			220	200
1969	3	1969.03 15-Mar-69	225	235	220		225	28400	28400			225	201
1969	3	1969.03 16-Mar-69	225	245	215		225	28100	28100			225	203
1969	3	1969.03 17-Mar-69	220	235	210		220	27900	27900			220	204
1969	3	1969.03 18-Mar-69	225	240	215		225	27300	27300			225	205
1969	3	1969.03 19-Mar-69	230	245	220		230	26700	26700			230	207
1969	3	1969.03 20-Mar-69	230	240	220		230	26300	26300			230	208
1969	3	1969.03 21-Mar-69	230	245	225		230	26000	26000			230	210
1969	3	1969.03 22-Mar-69	225	245	210		225	26000	26000			225	211
1969	3	1969.03 23-Mar-69	210	230	200		210	26400	26400			210	211
1969	3	1969.03 24-Mar-69	200	210	195		200	26800	26800			200	212
1969	3	1969.03 25-Mar-69	200	210	190		200	27100	27100			200	212
1969	3	1969.03 26-Mar-69	195	205	190		195	27200	27200			195	212
1969	3	1969.03 27-Mar-69	205	220	195		205	27100	27100			205	212
1969	3	1969.03 28-Mar-69	205	215	195		205	26500	26500			205	212
1969	3	1969.03 29-Mar-69	225	240	210		225	26000	26000			225	214
1969	3	1969.03 30-Mar-69	215	240	200		215	25800	25800			215	215
1969	3	1969.03 31-Mar-69	205	225	185		205	25500	25500			205	216
1969	4	1969.04 1-Apr-69	185	190	180		185	25500	25500			185	216
1969	4	1969.04 2-Apr-69	180	180	180		180	25300	25300			180	215
1969	4	1969.04 3-Apr-69	180	185	175		180	24700	24700			180	214
1969	4	1969.04 4-Apr-69	180	180	175		180	24100	24100			180	214
1969	4	1969.04 5-Apr-69	180	185	125		180	23400	23400			180	212
1969	4	1969.04 6-Apr-69	175	180	170		175	23200	23200			175	211
1969	4	1969.04 7-Apr-69	170	175	165		170	24300	24300			170	209
1969	4	1969.04 8-Apr-69	160	160	160		160	25400	25400			160	206
1969	4	1969.04 9-Apr-69	165	170	160		165	26600	26600			165	204
1969	4	1969.04 10-Apr-69	150	160	140		150	27400	27400			150	202
1969	4	1969.04 11-Apr-69	145	150	140		145	27000	27000			145	200
1969	4	1969.04 12-Apr-69	155	160	150		155	26000	26000			155	197

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1969	4	1969.04 13-Apr-69	155	160	150		155	25100	25100			155	195
1969	4	1969.04 14-Apr-69	155	155	155		155	24400	24400			155	193
1969	4	1969.04 15-Apr-69	155	160	150		155	23700	23700			155	190
1969	4	1969.04 16-Apr-69	155	160	150		155	22600	22600			155	188
1969	4	1969.04 17-Apr-69	170	175	160		170	21500	21500			170	186
1969	4	1969.04 18-Apr-69	175	180	170		175	20600	20600			175	185
1969	4	1969.04 19-Apr-69	170	175	165		170	20200	20200			170	183
1969	4	1969.04 20-Apr-69	165	170	160		165	19900	19900			165	180
1969	4	1969.04 21-Apr-69	160	165	150		160	19900	19900			160	178
1969	4	1969.04 22-Apr-69	160	160	155		160	19700	19700			160	177
1969	4	1969.04 23-Apr-69	165	170	160		165	19100	19100			165	175
1969	4	1969.04 24-Apr-69	165	170	165		165	18400	18400			165	174
1969	4	1969.04 25-Apr-69	170	170	165		170	17900	17900			170	173
1969	4	1969.04 26-Apr-69	165	170	160		165	17700	17700			165	172
1969	4	1969.04 27-Apr-69	155	160	155		155	17700	17700			155	170
1969	4	1969.04 28-Apr-69	155	160	150		155	17700	17700			155	168
1969	4	1969.04 29-Apr-69	155	160	150		155	17400	17400			155	166
1969	4	1969.04 30-Apr-69	150	155	150		150	17100	17100			150	164
1969	5	1969.05 1-May-69	155	160	150		155	16900	16900			155	163
1969	5	1969.05 2-May-69	150	155	145		150	16900	16900			150	162
1969	5	1969.05 3-May-69	150	155	145		150	16800	16800			150	161
1969	5	1969.05 4-May-69	155	160	155		155	16100	16100			155	160
1969	5	1969.05 5-May-69	150	160	145		150	15900	15900			150	159
1969	5	1969.05 6-May-69	140	145	135		140	16400	16400			140	158
1969	5	1969.05 7-May-69	135	140	135		135	16700	16700			135	157
1969	5	1969.05 8-May-69	140	140	140		140	16900	16900			140	156
1969	5	1969.05 9-May-69	135	140	135		135	17200	17200			135	155
1969	5	1969.05 10-May-69	140	140	140		140	17400	17400			140	155
1969	5	1969.05 11-May-69	140	145	140		140	17200	17200			140	155
1969	5	1969.05 12-May-69	130	140	120		130	17800	17800			130	154
1969	5	1969.05 13-May-69	110	120	100		110	19600	19600			110	153
1969	5	1969.05 14-May-69	100	105	100		100	21300	21300			100	151
1969	5	1969.05 15-May-69	100	105	100		100	23000	23000			100	149
1969	5	1969.05 16-May-69	100	105	95		100	25100	25100			100	147
1969	5	1969.05 17-May-69	95	100	90		95	27200	27200			95	145
1969	5	1969.05 18-May-69	85	90	85		85	29000	29000			85	142
1969	5	1969.05 19-May-69	80	85	75		80	30300	30300			80	139
1969	5	1969.05 20-May-69	80	85	75		80	30900	30900			80	136
1969	5	1969.05 21-May-69	75	85	70		75	31200	31200			75	133
1969	5	1969.05 22-May-69	75	85	70		75	31300	31300			75	130
1969	5	1969.05 23-May-69	75	80	70		75	31500	31500			75	127
1969	5	1969.05 24-May-69	70	75	65		70	31900	31900			70	124
1969	5	1969.05 25-May-69	70	75	65		70	32200	32200			70	121
1969	5	1969.05 26-May-69	70	70	70		70	32400	32400			70	117
1969	5	1969.05 27-May-69	70	70	70		70	32400	32400			70	115
1969	5	1969.05 28-May-69	80	95	70		80	32500	32500			80	112
1969	5	1969.05 29-May-69	90	95	85		90	32700	32700			90	110
1969	5	1969.05 30-May-69	90	95	85		90	33000	33000			90	108
1969	5	1969.05 31-May-69	90	95	85		90	33300	33300			90	106
1969	6	1969.06 1-Jun-69	90	95	85		90	33500	33500			90	104
1969	6	1969.06 2-Jun-69	85	90	80		85	33500	33500			85	102
1969	6	1969.06 3-Jun-69	85	95	80		85	33600	33600			85	99
1969	6	1969.06 4-Jun-69	85	95	80		85	33600	33600			85	97
1969	6	1969.06 5-Jun-69	85	95	80		85	33600	33600			85	95
1969	6	1969.06 6-Jun-69	85	90	80		85	33600	33600			85	94
1969	6	1969.06 7-Jun-69	85	90	75		85	33600	33600			85	92
1969	6	1969.06 8-Jun-69	80	90	75		80	33800	33800			80	90
1969	6	1969.06 9-Jun-69	80	80	80		80	34100	34100			80	88
1969	6	1969.06 10-Jun-69	80	80	80		80	34500	34500			80	86
1969	6	1969.06 11-Jun-69	80	85	80		80	35000	35000			80	84
1969	6	1969.06 12-Jun-69	85	90	85		85	34900	34900			85	83
1969	6	1969.06 13-Jun-69	95	95	90		95	34000	34000			95	83
1969	6	1969.06 14-Jun-69	95	100	90		95	32600	32600			95	83
1969	6	1969.06 15-Jun-69	100	105	95		100	31200	31200			100	83
1969	6	1969.06 16-Jun-69	105	115	100		105	29700	29700			105	83
1969	6	1969.06 17-Jun-69	120	125	110		120	27300	27300			120	85
1969	6	1969.06 18-Jun-69	115	120	105		115	26200	26200			115	86
1969	6	1969.06 19-Jun-69	105	110	100		105	26200	26200			105	87
1969	6	1969.06 20-Jun-69	105	115	100		105	25600	25600			105	88
1969	6	1969.06 21-Jun-69	115	120	110		115	24100	24100			115	89
1969	6	1969.06 22-Jun-69	120	125	120		120	22900	22900			120	90
1969	6	1969.06 23-Jun-69	120	125	110		120	21700	21700			120	92
1969	6	1969.06 24-Jun-69	110	110	110		110	20800	20800			110	93
1969	6	1969.06 25-Jun-69	105	110	100		105	20500	20500			105	95
1969	6	1969.06 26-Jun-69	105	105	105		105	20600	20600			105	96
1969	6	1969.06 27-Jun-69	105	105	105		105	20000	20000			105	97

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1969	6	1969.06	28-Jun-69	120	140	105		120	17900	17900		120	98
1969	6	1969.06	29-Jun-69	160	175	140		160	15200	15200		160	100
1969	6	1969.06	30-Jun-69	190	200	175		190	12800	12800		190	103
1969	7	1969.07	1-Jul-69	210	220	200		210	11200	11200		210	107
1969	7	1969.07	2-Jul-69	225	230	220		225	10100	10100		225	112
1969	7	1969.07	3-Jul-69	220	230	215		220	9450	9450		220	116
1969	7	1969.07	4-Jul-69	215	220	215		215	8500	8500		215	121
1969	7	1969.07	5-Jul-69	220	225	215		220	8260	8260		220	125
1969	7	1969.07	6-Jul-69	215	225	205		215	8660	8660		215	130
1969	7	1969.07	7-Jul-69	225	230	220		225	8540	8540		225	134
1969	7	1969.07	8-Jul-69	220	225	215		220	8110	8110		220	139
1969	7	1969.07	9-Jul-69	235	255	225		235	7650	7650		235	144
1969	7	1969.07	10-Jul-69	290	325	255		290	6860	6860		290	151
1969	7	1969.07	11-Jul-69	290	330	250		290	6910	6910		290	158
1969	7	1969.07	12-Jul-69	250	265	240		250	6930	6930		250	164
1969	7	1969.07	13-Jul-69	280	290	265		280	6430	6430		280	170
1969	7	1969.07	14-Jul-69	290	295	290		290	6080	6080		290	176
1969	7	1969.07	15-Jul-69	310	335	295		310	5620	5620		310	183
1969	7	1969.07	16-Jul-69	310	345	225		310	5700	5700		310	190
1969	7	1969.07	17-Jul-69	220	245	210		220	6640	6640		220	193
1969	7	1969.07	18-Jul-69	295	350	245		295	5910	5910		295	199
1969	7	1969.07	19-Jul-69	385	430	345		385	4350	4350		385	209
1969	7	1969.07	20-Jul-69	455	460	425		455	3750	3750		455	220
1969	7	1969.07	21-Jul-69	440	455	410		440	3790	3790		440	231
1969	7	1969.07	22-Jul-69	420	440	405		420	3830	3830		420	241
1969	7	1969.07	23-Jul-69	425	470	400		425	3630	3630		425	251
1969	7	1969.07	24-Jul-69	490	515	470		490	3140	3140		490	264
1969	7	1969.07	25-Jul-69	525	545	510		525	2940	2940		525	278
1969	7	1969.07	26-Jul-69	545	555	540		545	2820	2820		545	293
1969	7	1969.07	27-Jul-69	530	550	515		530	2950	2950		530	307
1969	7	1969.07	28-Jul-69	505	515	495		505	3020	3020		505	320
1969	7	1969.07	29-Jul-69	495	510	485		495	2930	2930		495	331
1969	7	1969.07	30-Jul-69	545	585	510		545	2670	2670		545	343
1969	7	1969.07	31-Jul-69	600	625	580		600	2520	2520		600	356
1969	8	1969.08	1-Aug-69	625	645	610		625	2370	2370		625	369
1969	8	1969.08	2-Aug-69	615	625	610		615	2410	2410		615	382
1969	8	1969.08	3-Aug-69	610	625	600		610	2460	2460		610	395
1969	8	1969.08	4-Aug-69	620	640	600		620	2450	2450		620	409
1969	8	1969.08	5-Aug-69	645	650	640		645	2340	2340		645	423
1969	8	1969.08	6-Aug-69	630	640	620		630	2250	2250		630	437
1969	8	1969.08	7-Aug-69	640	655	625		640	2220	2220		640	451
1969	8	1969.08	8-Aug-69	640	650	630		640	2210	2210		640	464
1969	8	1969.08	9-Aug-69	635	640	625		635	2210	2210		635	476
1969	8	1969.08	10-Aug-69	625	635	620		625	2230	2230		625	487
1969	8	1969.08	11-Aug-69	630	650	610		630	2280	2280		630	499
1969	8	1969.08	12-Aug-69	640	660	620		640	2170	2170		640	511
1969	8	1969.08	13-Aug-69	645	660	635		645	2140	2140		645	523
1969	8	1969.08	14-Aug-69	670	680	660		670	2090	2090		670	535
1969	8	1969.08	15-Aug-69	680	690	670		680	2040	2040		680	548
1969	8	1969.08	16-Aug-69	705	725	685		705	1990	1990		705	564
1969	8	1969.08	17-Aug-69	715	730	700		715	2110	2110		715	578
1969	8	1969.08	18-Aug-69	690	710	670		690	2280	2280		690	588
1969	8	1969.08	19-Aug-69	605	670	560		605	2320	2320		605	593
1969	8	1969.08	20-Aug-69	565	570	550		565	2320	2320		565	597
1969	8	1969.08	21-Aug-69	575	580	565		575	2320	2320		575	602
1969	8	1969.08	22-Aug-69	560	570	550		560	2330	2330		560	607
1969	8	1969.08	23-Aug-69	550	555	545		550	2320	2320		550	609
1969	8	1969.08	24-Aug-69	530	545	505		530	2420	2420		530	609
1969	8	1969.08	25-Aug-69	485	505	470		485	2580	2580		485	607
1969	8	1969.08	26-Aug-69	495	510	485		495	2500	2500		495	606
1969	8	1969.08	27-Aug-69	500	505	495		500	2440	2440		500	606
1969	8	1969.08	28-Aug-69	515	525	500		515	2470	2470		515	606
1969	8	1969.08	29-Aug-69	510	520	505		510	2500	2500		510	605
1969	8	1969.08	30-Aug-69	490	505	475		490	2620	2620		490	601
1969	8	1969.08	31-Aug-69	465	475	455		465	2670	2670		465	596
1969	9	1969.09	1-Sep-69	465	470	455		465	2700	2700		465	591
1969	9	1969.09	2-Sep-69	450	465	435		450	2700	2700		450	586
1969	9	1969.09	3-Sep-69	445	460	435		445	2680	2680		445	580
1969	9	1969.09	4-Sep-69	440	450	430		440	2710	2710		440	573
1969	9	1969.09	5-Sep-69	425	435	415		425	2790	2790		425	566
1969	9	1969.09	6-Sep-69	405	420	390		405	2880	2880		405	558
1969	9	1969.09	7-Sep-69	410	425	385		410	2980	2980		410	551
1969	9	1969.09	8-Sep-69	370	390	355		370	3250	3250		370	542
1969	9	1969.09	9-Sep-69	360	370	355		360	3300	3300		360	533
1969	9	1969.09	10-Sep-69	385	390	370		385	3260	3260		385	525
1969	9	1969.09	11-Sep-69	380	385	375		380	3250	3250		380	516

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1969	9	1969.09 12-Sep-69	395	405	380		395	3210	3210			395	508
1969	9	1969.09 13-Sep-69	415	430	400		415	3120	3120			415	499
1969	9	1969.09 14-Sep-69	415	430	400		415	3150	3150			415	491
1969	9	1969.09 15-Sep-69	410	415	390		410	3160	3160			410	481
1969	9	1969.09 16-Sep-69	410	430	400		410	3070	3070			410	471
1969	9	1969.09 17-Sep-69	455	465	430		455	3090	3090			455	463
1969	9	1969.09 18-Sep-69	420	440	410		420	3090	3090			420	457
1969	9	1969.09 19-Sep-69	445	460	425		445	3000	3000			445	453
1969	9	1969.09 20-Sep-69	450	470	435		450	3200	3200			450	448
1969	9	1969.09 21-Sep-69	440	450	430		440	3260	3260			440	444
1969	9	1969.09 22-Sep-69	430	450	410		430	3300	3300			430	440
1969	9	1969.09 23-Sep-69	410	425	395		410	3270	3270			410	436
1969	9	1969.09 24-Sep-69	415	420	405		415	3200	3200			415	434
1969	9	1969.09 25-Sep-69	405	415	395		405	3240	3240			405	431
1969	9	1969.09 26-Sep-69	380	400	365		380	3480	3480			380	427
1969	9	1969.09 27-Sep-69	390	400	375		390	3590	3590			390	423
1969	9	1969.09 28-Sep-69	335	400	275		335	4190	4190			335	417
1969	9	1969.09 29-Sep-69	265	275	255		265	4680	4680			265	410
1969	9	1969.09 30-Sep-69	260	265	255		260	4850	4850			260	403
1969	10	1969.10 1-Oct-69	275	290	260		275	4670	4670			275	396
1969	10	1969.10 2-Oct-69	295	305	290		295	4420	4420			295	391
1969	10	1969.10 3-Oct-69	300	305	295		300	4360	4360			300	386
1969	10	1969.10 4-Oct-69	300	305	295		300	4460	4460			300	382
1969	10	1969.10 5-Oct-69	290	305	280		290	4560	4560			290	377
1969	10	1969.10 6-Oct-69	280	285	275		280	4620	4620			280	373
1969	10	1969.10 7-Oct-69	285	290	280		285	4590	4590			285	369
1969	10	1969.10 8-Oct-69	285	295	280		285	4490	4490			285	366
1969	10	1969.10 9-Oct-69	325	355	295		325	4110	4110			325	365
1969	10	1969.10 10-Oct-69	380	385	355		380	3770	3770			380	365
1969	10	1969.10 11-Oct-69	390	395	385		390	3620	3620			390	365
1969	10	1969.10 12-Oct-69	395	400	390		395	3470	3470			395	365
1969	10	1969.10 13-Oct-69	400	410	395		400	3400	3400			400	365
1969	10	1969.10 14-Oct-69	405	415	400		405	3340	3340			405	364
1969	10	1969.10 15-Oct-69	365	400	335		365	3730	3730			365	363
1969	10	1969.10 16-Oct-69	310	335	285		310	4230	4230			310	359
1969	10	1969.10 17-Oct-69	275	290	265		275	4360	4360			275	353
1969	10	1969.10 18-Oct-69	265	270	260		265	4270	4270			265	348
1969	10	1969.10 19-Oct-69	240	260	225		240	4420	4420			240	341
1969	10	1969.10 20-Oct-69	235	245	225		235	4440	4440			235	334
1969	10	1969.10 21-Oct-69	245	250	240		245	4420	4420			245	328
1969	10	1969.10 22-Oct-69	245	250	240		245	4640	4640			245	322
1969	10	1969.10 23-Oct-69	240	245	235		240	4760	4760			240	316
1969	10	1969.10 24-Oct-69	225	245	210		225	4890	4890			225	310
1969	10	1969.10 25-Oct-69	205	210	200		205	5060	5060			205	303
1969	10	1969.10 26-Oct-69	200	205	195		200	5220	5220			200	297
1969	10	1969.10 27-Oct-69	200	210	195		200	5320	5320			200	291
1969	10	1969.10 28-Oct-69	215	220	210		215	5310	5310			215	287
1969	10	1969.10 29-Oct-69	220	225	215		220	5290	5290			220	285
1969	10	1969.10 30-Oct-69	245	260	225		245	5100	5100			245	285
1969	10	1969.10 31-Oct-69	260	265	255		260	4980	4980			260	284
1969	11	1969.11 1-Nov-69	260	265	255		260	4920	4920			260	283
1969	11	1969.11 2-Nov-69	260	265	255		260	4890	4890			260	282
1969	11	1969.11 3-Nov-69	255	265	250		255	4880	4880			255	280
1969	11	1969.11 4-Nov-69	280	290	265		280	4730	4730			280	280
1969	11	1969.11 5-Nov-69	305	320	290		305	4670	4670			305	281
1969	11	1969.11 6-Nov-69	275	295	255		275	4830	4830			275	280
1969	11	1969.11 7-Nov-69	260	265	255		260	5030	5030			260	279
1969	11	1969.11 8-Nov-69	265	270	265		265	5040	5040			265	277
1969	11	1969.11 9-Nov-69	290	300	270		290	4970	4970			290	274
1969	11	1969.11 10-Nov-69	300	300	295		300	4880	4880			300	271
1969	11	1969.11 11-Nov-69	295	300	295		295	4860	4860			295	268
1969	11	1969.11 12-Nov-69	290	295	285		290	4890	4890			290	264
1969	11	1969.11 13-Nov-69	295	300	290		295	4850	4850			295	261
1969	11	1969.11 14-Nov-69	285	290	270		285	4910	4910			285	258
1969	11	1969.11 15-Nov-69	255	270	245		255	5150	5150			255	256
1969	11	1969.11 16-Nov-69	245	250	245		245	5100	5100			245	255
1969	11	1969.11 17-Nov-69	275	325	245		275	4850	4850			275	256
1969	11	1969.11 18-Nov-69	365	390	325		365	4400	4400			365	260
1969	11	1969.11 19-Nov-69	425	460	390		425	4300	4300			425	266
1969	11	1969.11 20-Nov-69	405	455	380		405	4280	4280			405	271
1969	11	1969.11 21-Nov-69	375	390	365		375	4250	4250			375	276
1969	11	1969.11 22-Nov-69	365	370	355		365	4210	4210			365	280
1969	11	1969.11 23-Nov-69	355	365	345		355	4230	4230			355	284
1969	11	1969.11 24-Nov-69	370	410	355		370	4060	4060			370	290
1969	11	1969.11 25-Nov-69	455	485	405		455	3820	3820			455	298
1969	11	1969.11 26-Nov-69	430	470	415		430	4110	4110			430	306

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1969	11	1969.11	27-Nov-69	340	415	300		340	4410	4410		340	310
1969	11	1969.11	28-Nov-69	295	300	290		295	4500	4500		295	313
1969	11	1969.11	29-Nov-69	310	320	300		310	4430	4430		310	315
1969	11	1969.11	30-Nov-69	315	325	310		315	4380	4380		315	317
1969	12	1969.12	1-Dec-69	325	335	315		325	4360	4360		325	319
1969	12	1969.12	2-Dec-69	335	345	310		335	4430	4430		335	321
1969	12	1969.12	3-Dec-69	310	315	300		310	4650	4650		310	323
1969	12	1969.12	4-Dec-69	315	340	300		315	4560	4560		315	324
1969	12	1969.12	5-Dec-69	345	355	335		345	4390	4390		345	326
1969	12	1969.12	6-Dec-69	360	375	350		360	4200	4200		360	328
1969	12	1969.12	7-Dec-69	375	385	370		375	4080	4080		375	332
1969	12	1969.12	8-Dec-69	380	385	375		380	4020	4020		380	336
1969	12	1969.12	9-Dec-69	385	390	380		385	4010	4010		385	339
1969	12	1969.12	10-Dec-69	385	395	380		385	4010	4010		385	342
1969	12	1969.12	11-Dec-69	400	415	390		400	3930	3930		400	346
1969	12	1969.12	12-Dec-69	405	415	395		405	376	3910		405	349
1969	12	1969.12	13-Dec-69	395	400	390		395	377	3930		395	353
1969	12	1969.12	14-Dec-69	435	475	400		435	376	3770		435	358
1969	12	1969.12	15-Dec-69	480	495	465		480	376	3640		480	365
1969	12	1969.12	16-Dec-69	500	510	490		500	376	3590		500	374
1969	12	1969.12	17-Dec-69	495	505	480		495	235	3590		495	381
1969	12	1969.12	18-Dec-69	485	490	480		485	117	3560		485	385
1969	12	1969.12	19-Dec-69	475	485	470		475	105	3560		475	387
1969	12	1969.12	20-Dec-69	470	480	460		470	102	3580		470	389
1969	12	1969.12	21-Dec-69	485	525	470		485	101	3480		485	393
1969	12	1969.12	22-Dec-69	535	545	525		535	99	3430		535	398
1969	12	1969.12	23-Dec-69	575	610	545		575	3910	3310		575	406
1969	12	1969.12	24-Dec-69	575	610	545		575	3930	3380		575	412
1969	12	1969.12	25-Dec-69	525	560	450		525	3770	3550		525	415
1969	12	1969.12	26-Dec-69	395	450	345		395	3640	4100		395	414
1969	12	1969.12	27-Dec-69	330	345	325		330	3590	4510		330	413
1969	12	1969.12	28-Dec-69	320	325	315		320	3590	4660		320	414
1969	12	1969.12	29-Dec-69	320	340	315		320	3560	4690		320	414
1969	12	1969.12	30-Dec-69	335	340	330		335	3560	4710		335	415
1969	12	1969.12	31-Dec-69	320	330	310		320	3580	4770		320	415
1970	1	1970.01	1-Jan-70	305	320	285		305	4840	4840		305	414
1970	1	1970.01	2-Jan-70	275	285	270		275	4910	4910		275	413
1970	1	1970.01	3-Jan-70	305	365	275		305	4660	4660		305	412
1970	1	1970.01	4-Jan-70	395	405	365		395	4100	4100		395	414
1970	1	1970.01	5-Jan-70	410	415	405		410	3950	3950		410	416
1970	1	1970.01	6-Jan-70	415	425	390		415	3950	3950		415	417
1970	1	1970.01	7-Jan-70	370	390	355		370	4210	4210		370	417
1970	1	1970.01	8-Jan-70	370	390	350		370	3990	3990		370	416
1970	1	1970.01	9-Jan-70	365	380	355		365	4030	4030		365	416
1970	1	1970.01	10-Jan-70	355	385	335		355	4100	4100		355	414
1970	1	1970.01	11-Jan-70	395	420	375		395	4040	4040		395	414
1970	1	1970.01	12-Jan-70	440	465	415		440	3880	3880		440	415
1970	1	1970.01	13-Jan-70	470	480	460		470	3880	3880		470	416
1970	1	1970.01	14-Jan-70	490	525	475		490	4080	4080		490	417
1970	1	1970.01	15-Jan-70	505	525	430		505	4630	4630		505	417
1970	1	1970.01	16-Jan-70	355	440	325		355	6720	6720		355	412
1970	1	1970.01	17-Jan-70	325	400	230		325	8220	8220		325	407
1970	1	1970.01	18-Jan-70	215	230	170		215	12200	12200		215	398
1970	1	1970.01	19-Jan-70	160	175	150		160	17400	17400		160	388
1970	1	1970.01	20-Jan-70	175	190	155		175	18200	18200		175	378
1970	1	1970.01	21-Jan-70	170	175	165		170	18400	18400		170	365
1970	1	1970.01	22-Jan-70	180	190	170		180	18700	18700		180	352
1970	1	1970.01	23-Jan-70	155	170	145		155	24000	24000		155	338
1970	1	1970.01	24-Jan-70	165	180	150		165	24000	24000		165	326
1970	1	1970.01	25-Jan-70	190	200	180		190	21200	21200		190	319
1970	1	1970.01	26-Jan-70	195	200	190		195	20200	20200		195	315
1970	1	1970.01	27-Jan-70	185	195	180		185	19700	19700		185	310
1970	1	1970.01	28-Jan-70	195	205	180		195	19400	19400		195	306
1970	1	1970.01	29-Jan-70	210	215	200		210	18900	18900		210	302
1970	1	1970.01	30-Jan-70	220	225	215		220	17900	17900		220	299
1970	1	1970.01	31-Jan-70	240	250	230		240	16200	16200		240	297
1970	2	1970.02	1-Feb-70	260	270	250		260	13300	13300		260	296
1970	2	1970.02	2-Feb-70	275	285	260		275	11400	11400		275	295
1970	2	1970.02	3-Feb-70	300	315	285		300	10300	10300		300	292
1970	2	1970.02	4-Feb-70	320	330	305		320	9680	9680		320	289
1970	2	1970.02	5-Feb-70	310	325	285		310	9870	9870		310	285
1970	2	1970.02	6-Feb-70	295	305	280		295	9870	9870		295	283
1970	2	1970.02	7-Feb-70	300	305	295		300	9570	9570		300	281
1970	2	1970.02	8-Feb-70	295	300	290		295	9300	9300		295	278
1970	2	1970.02	9-Feb-70	295	300	285		295	9150	9150		295	276
1970	2	1970.02	10-Feb-70	260	285	235		260	9180	9180		260	272

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1970	2	1970.02 11-Feb-70	240	250	230		240	9360	9360			240	265
1970	2	1970.02 12-Feb-70	270	290	245		270	9360	9360			270	258
1970	2	1970.02 13-Feb-70	280	290	270		280	9230	9230			280	251
1970	2	1970.02 14-Feb-70	275	280	265		275	9260	9260			275	244
1970	2	1970.02 15-Feb-70	295	315	275		295	8840	8840			295	242
1970	2	1970.02 16-Feb-70	325	340	310		325	8580	8580			325	242
1970	2	1970.02 17-Feb-70	325	330	315		325	8390	8390			325	245
1970	2	1970.02 18-Feb-70	300	315	295		300	8340	8340			300	250
1970	2	1970.02 19-Feb-70	300	310	290		300	8530	8530			300	254
1970	2	1970.02 20-Feb-70	265	290	255		265	8890	8890			265	257
1970	2	1970.02 21-Feb-70	250	265	255		250	9020	9020			250	260
1970	2	1970.02 22-Feb-70	275	280	265		275	9000	9000			275	264
1970	2	1970.02 23-Feb-70	300	335	280		300	8750	8750			300	268
1970	2	1970.02 24-Feb-70	335	345	330		335	8370	8370			335	273
1970	2	1970.02 25-Feb-70	325	335	320		325	8100	8100			325	277
1970	2	1970.02 26-Feb-70	330	340	320		330	8010	8010			330	282
1970	2	1970.02 27-Feb-70	305	325	290		305	7970	7970			305	286
1970	2	1970.02 28-Feb-70	340	360	300		340	7730	7730			340	290
1970	3	1970.03 1-Mar-70	375	390	360		375	7130	7130			375	295
1970	3	1970.03 2-Mar-70	375	380	345		375	7360	7360			375	300
1970	3	1970.03 3-Mar-70	305	345	290		305	9040	9040			305	301
1970	3	1970.03 4-Mar-70	295	335	245		295	9800	9800			295	302
1970	3	1970.03 5-Mar-70	205	245	180		205	10200	10200			205	299
1970	3	1970.03 6-Mar-70	220	225	205		220	11300	11300			220	296
1970	3	1970.03 7-Mar-70	225	225	220		225	11700	11700			225	293
1970	3	1970.03 8-Mar-70	220	225	215		220	11700	11700			220	290
1970	3	1970.03 9-Mar-70	220	225	215		220	11900	11900			220	288
1970	3	1970.03 10-Mar-70	240	255	225		240	11800	11800			240	286
1970	3	1970.03 11-Mar-70	260	265	255		260	11200	11200			260	285
1970	3	1970.03 12-Mar-70	275	310	265		275	10400	10400			275	285
1970	3	1970.03 13-Mar-70	320	325	310		320	9120	9120			320	288
1970	3	1970.03 14-Mar-70	325	330	320		325	8200	8200			325	290
1970	3	1970.03 15-Mar-70	355	370	330		355	7550	7550			355	292
1970	3	1970.03 16-Mar-70	385	400	375		385	7000	7000			385	296
1970	3	1970.03 17-Mar-70	415	450	390		415	6510	6510			415	300
1970	3	1970.03 18-Mar-70	485	505	450		485	5600	5600			485	305
1970	3	1970.03 19-Mar-70	510	530	500		510	5310	5310			510	311
1970	3	1970.03 20-Mar-70	535	550	515		535	5050	5050			535	319
1970	3	1970.03 21-Mar-70	510	525	495		510	5070	5070			510	326
1970	3	1970.03 22-Mar-70	520	535	510		520	4860	4860			520	335
1970	3	1970.03 23-Mar-70	545	575	520		545	4770	4770			545	344
1970	3	1970.03 24-Mar-70	540	575	515		540	4650	4650			540	353
1970	3	1970.03 25-Mar-70	565	590	525		565	4450	4450			565	362
1970	3	1970.03 26-Mar-70	595	625	570		595	4050	4050			595	371
1970	3	1970.03 27-Mar-70	625	675	605		625	3700	3700			625	381
1970	3	1970.03 28-Mar-70	740	780	675		740	3450	3450			740	394
1970	3	1970.03 29-Mar-70	775	790	750		775	3300	3300			775	410
1970	3	1970.03 30-Mar-70	795	840	750		795	3270	3270			795	425
1970	3	1970.03 31-Mar-70	825	850	785		825	3130	3130			825	440
1970	4	1970.04 1-Apr-70	760	805	700		760	2800	2800			760	453
1970	4	1970.04 2-Apr-70	650	700	630		650	2250	2250			650	465
1970	4	1970.04 3-Apr-70	720	780	645		720	1960	1960			720	479
1970	4	1970.04 4-Apr-70	825	840	780		825	1860	1860			825	499
1970	4	1970.04 5-Apr-70	855	875	820		855	1720	1720			855	521
1970	4	1970.04 6-Apr-70	880	915	860		880	1650	1650			880	542
1970	4	1970.04 7-Apr-70	920	935	885		920	1670	1670			920	566
1970	4	1970.04 8-Apr-70	875	885	865		875	1680	1680			875	588
1970	4	1970.04 9-Apr-70	895	910	880		895	1590	1590			895	609
1970	4	1970.04 10-Apr-70	915	935	900		915	1550	1550			915	631
1970	4	1970.04 11-Apr-70	930	950	910		930	1500	1500			930	653
1970	4	1970.04 12-Apr-70	925	950	885		925	1540	1540			925	673
1970	4	1970.04 13-Apr-70	890	905	860		890	1680	1680			890	692
1970	4	1970.04 14-Apr-70	865	885	835		865	1760	1760			865	709
1970	4	1970.04 15-Apr-70	835	855	795		835	1690	1690			835	724
1970	4	1970.04 16-Apr-70	820	835	800		820	1680	1680			820	738
1970	4	1970.04 17-Apr-70	840	850	815		840	1650	1650			840	749
1970	4	1970.04 18-Apr-70	825	845	810		825	1630	1630			825	760
1970	4	1970.04 19-Apr-70	825	840	805		825	1600	1600			825	770
1970	4	1970.04 20-Apr-70	805	820	790		805	1590	1590			805	779
1970	4	1970.04 21-Apr-70	825	850	795		825	1450	1450			825	790
1970	4	1970.04 22-Apr-70	855	865	840		855	1380	1380			855	800
1970	4	1970.04 23-Apr-70	870	880	845		870	1330	1330			870	811
1970	4	1970.04 24-Apr-70	840	875	810		840	1370	1370			840	820
1970	4	1970.04 25-Apr-70	815	845	790		815	1470	1470			815	827
1970	4	1970.04 26-Apr-70	790	805	775		790	1590	1590			790	833
1970	4	1970.04 27-Apr-70	800	825	780		800	1690	1690			800	835

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1970	4	1970.04 28-Apr-70	830	850	805		830	1650	1650			830	837
1970	4	1970.04 29-Apr-70	835	850	805		835	1590	1590			835	838
1970	4	1970.04 30-Apr-70	835	845	815		835	1610	1610			835	838
1970	5	1970.05 1-May-70	810	830	795		810	1660	1660			810	840
1970	5	1970.05 2-May-70	820					1590	1590			820	846
1970	5	1970.05 3-May-70	830					1620	1620			830	849
1970	5	1970.05 4-May-70	840					1630	1630			840	850
1970	5	1970.05 5-May-70	860	880	825		860	1490	1490			860	850
1970	5	1970.05 6-May-70	855	880	810		855	1530	1530			855	849
1970	5	1970.05 7-May-70	770	815	745		770	1680	1680			770	844
1970	5	1970.05 8-May-70	735	775	695		735	1630	1630			735	840
1970	5	1970.05 9-May-70	665	695	640		665	1810	1810			665	832
1970	5	1970.05 10-May-70	595	640	555		595	2110	2110			595	821
1970	5	1970.05 11-May-70	560	570	545		560	2350	2350			560	809
1970	5	1970.05 12-May-70	550	560	525		550	2420	2420			550	796
1970	5	1970.05 13-May-70	515	530	490		515	2490	2490			515	784
1970	5	1970.05 14-May-70	505	515	490		505	2510	2510			505	772
1970	5	1970.05 15-May-70	520	525	510		520	2470	2470			520	761
1970	5	1970.05 16-May-70	505	520	465		505	2520	2520			505	751
1970	5	1970.05 17-May-70	415	465	380		415	3110	3110			415	737
1970	5	1970.05 18-May-70	370	385	360		370	3540	3540			370	722
1970	5	1970.05 19-May-70	365	390	340		365	3600	3600			365	706
1970	5	1970.05 20-May-70	360	365	345		360	3640	3640			360	691
1970	5	1970.05 21-May-70	365	375	355		365	3490	3490			365	676
1970	5	1970.05 22-May-70	420	500	365		420	3060	3060			420	662
1970	5	1970.05 23-May-70	575	620	495		575	2320	2320			575	652
1970	5	1970.05 24-May-70	655	700	585		655	2010	2010			655	646
1970	5	1970.05 25-May-70	500	590	465		500	2500	2500			500	635
1970	5	1970.05 26-May-70	470	495	455		470	2690	2690			470	624
1970	5	1970.05 27-May-70	500	520	460		500	2570	2570			500	614
1970	5	1970.05 28-May-70	490	510	475		490	2460	2460			490	603
1970	5	1970.05 29-May-70	480	495	460		480	2430	2430			480	591
1970	5	1970.05 30-May-70	420	460	385		420	2610	2610			420	577
1970	5	1970.05 31-May-70	410	440	385		410	2650	2650			410	564
1970	6	1970.06 1-Jun-70	475	490	440		475	2500	2500			475	553
1970	6	1970.06 2-Jun-70	425	470	405		425	3780	2780			425	539
1970	6	1970.06 3-Jun-70	410	435	380		410	3150	3150			410	525
1970	6	1970.06 4-Jun-70	320	385	265		320	3780	3780			320	507
1970	6	1970.06 5-Jun-70	245	265	225		245	3880	3880			245	486
1970	6	1970.06 6-Jun-70	245	265	225		245	3700	3700			245	469
1970	6	1970.06 7-Jun-70	300	345	265		300	3070	3070			300	454
1970	6	1970.06 8-Jun-70	415	480	345		415	2420	2420			415	446
1970	6	1970.06 9-Jun-70	520	550	480		520	2080	2080			520	444
1970	6	1970.06 10-Jun-70	470	520	345		470	2390	2390			470	441
1970	6	1970.06 11-Jun-70	300	350	275		300	3510	3510			300	432
1970	6	1970.06 12-Jun-70	315	335	300		315	3770	3770			315	426
1970	6	1970.06 13-Jun-70	335	355	310		335	3200	3200			335	420
1970	6	1970.06 14-Jun-70	255	310	220		255	3470	3470			255	411
1970	6	1970.06 15-Jun-70	265	315	225		265	3580	3580			265	403
1970	6	1970.06 16-Jun-70	380	420	315		380	2630	2630			380	402
1970	6	1970.06 17-Jun-70	450	475	420		450	1980	1980			450	405
1970	6	1970.06 18-Jun-70	540	595	470		540	1620	1620			540	410
1970	6	1970.06 19-Jun-70	650	700	595		650	1380	1380			650	420
1970	6	1970.06 20-Jun-70	745	790	700		745	1220	1220			745	433
1970	6	1970.06 21-Jun-70	760	790	745		760	1230	1230			760	444
1970	6	1970.06 22-Jun-70	705	755	550		705	1500	1500			705	448
1970	6	1970.06 23-Jun-70	460	560	335		460	2140	2140			460	442
1970	6	1970.06 24-Jun-70	295	335	275		295	2990	2990			295	435
1970	6	1970.06 25-Jun-70	335	355	310		335	2700	2700			335	431
1970	6	1970.06 26-Jun-70	320	355	300		320	2810	2810			320	425
1970	6	1970.06 27-Jun-70	295	345	280		295	2990	2990			295	418
1970	6	1970.06 28-Jun-70	380	400	345		380	2440	2440			380	415
1970	6	1970.06 29-Jun-70	340	415	240		340	3040	3040			340	412
1970	6	1970.06 30-Jun-70	300	335	240		300	3160	3160			300	408
1970	7	1970.07 1-Jul-70	315	345	295		315	2920	2920			315	403
1970	7	1970.07 2-Jul-70	445	480	345		445	2320	2320			445	404
1970	7	1970.07 3-Jul-70	485	495	480		485	2130	2130			485	406
1970	7	1970.07 4-Jul-70	505	545	495		505	1950	1950			505	412
1970	7	1970.07 5-Jul-70	615	690	545		615	1780	1780			615	425
1970	7	1970.07 6-Jul-70	720	740	690		720	1650	1650			720	441
1970	7	1970.07 7-Jul-70	755	785	730		755	1600	1600			755	456
1970	7	1970.07 8-Jul-70	815	840	765		815	1430	1430			815	469
1970	7	1970.07 9-Jul-70	870	900	840		870	1270	1270			870	481
1970	7	1970.07 10-Jul-70	880	895	860		880	1250	1250			880	494
1970	7	1970.07 11-Jul-70	870	885	845		870	1240	1240			870	513
1970	7	1970.07 12-Jul-70	845	880	820		845	1270	1270			845	531

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1970	7	1970.07	13-Jul-70	805	850	755		805	1380	1380		805	547
1970	7	1970.07	14-Jul-70	850					1330	1330		850	567
1970	7	1970.07	15-Jul-70	850					1150	1150		850	586
1970	7	1970.07	16-Jul-70	850					1120	1120		850	602
1970	7	1970.07	17-Jul-70	850					1090	1090		850	615
1970	7	1970.07	18-Jul-70	900					1110	1110		900	627
1970	7	1970.07	19-Jul-70	900					1120	1120		900	635
1970	7	1970.07	20-Jul-70	900					1130	1130		900	641
1970	7	1970.07	21-Jul-70	900					1020	1020		900	645
1970	7	1970.07	22-Jul-70	960	1000	945	960	902	902	902		960	654
1970	7	1970.07	23-Jul-70	980	1020	935	980	920	920	920		980	671
1970	7	1970.07	24-Jul-70	925	940	915	925	950	950	950		925	692
1970	7	1970.07	25-Jul-70	895	930	850	895	974	974	974		895	711
1970	7	1970.07	26-Jul-70	835	860	805	835	1080	1080	1080		835	728
1970	7	1970.07	27-Jul-70	810	835	790	810	1150	1150	1150		810	745
1970	7	1970.07	28-Jul-70	840	870	810	840	1130	1130	1130		840	760
1970	7	1970.07	29-Jul-70	855	890	825	855	1000	1000	1000		855	778
1970	7	1970.07	30-Jul-70	870	915	860	870	944	944	944		870	797
1970	7	1970.07	31-Jul-70	890	920	870	890	926	926	926		890	816
1970	8	1970.08	1-Aug-70	840	900	815	840	968	968	968		840	829
1970	8	1970.08	2-Aug-70	795	835	775	795	1030	1030	1030		795	839
1970	8	1970.08	3-Aug-70	810	860	770	810	1110	1110	1110		810	849
1970	8	1970.08	4-Aug-70	890	915	845	890	1050	1050	1050		890	859
1970	8	1970.08	5-Aug-70	895	920	870	895	950	950	950		895	864
1970	8	1970.08	6-Aug-70	870	920	835	870	1030	1030	1030		870	868
1970	8	1970.08	7-Aug-70	840	870	825	840	1010	1010	1010		840	869
1970	8	1970.08	8-Aug-70	840	870	790	840	980	980	980		840	868
1970	8	1970.08	9-Aug-70	800	805	790	800	1040	1040	1040		800	865
1970	8	1970.08	10-Aug-70	805	825	775	805	1070	1070	1070		805	863
1970	8	1970.08	11-Aug-70	860	885	825	860	962	962	962		860	864
1970	8	1970.08	12-Aug-70	865	880	845	865	908	908	908		865	866
1970	8	1970.08	13-Aug-70	855	870	825	855	920	920	920		855	866
1970	8	1970.08	14-Aug-70	840	855	815	840	950	950	950		840	866
1970	8	1970.08	15-Aug-70	840	850	830	840	926	926	926		840	865
1970	8	1970.08	16-Aug-70	820	840	800	820	986	986	986		820	864
1970	8	1970.08	17-Aug-70	800	835	775	800	1080	1080	1080		800	861
1970	8	1970.08	18-Aug-70	835	845	805	835	1060	1060	1060		835	859
1970	8	1970.08	19-Aug-70	825	840	810	825	962	962	962		825	856
1970	8	1970.08	20-Aug-70	855	875	840	855	968	968	968		855	855
1970	8	1970.08	21-Aug-70	855	875	830	855	956	956	956		855	851
1970	8	1970.08	22-Aug-70	835	860	815	835	1010	1010	1010		835	846
1970	8	1970.08	23-Aug-70	815	850	780	815	1040	1040	1040		815	843
1970	8	1970.08	24-Aug-70	760	790	745	760	1210	1210	1210		760	838
1970	8	1970.08	25-Aug-70	760	780	740	760	1230	1230	1230		760	836
1970	8	1970.08	26-Aug-70	775	790	750	775	1140	1140	1140		775	835
1970	8	1970.08	27-Aug-70	775	795	760	775	1140	1140	1140		775	832
1970	8	1970.08	28-Aug-70	790	810	780	790	1130	1130	1130		790	830
1970	8	1970.08	29-Aug-70	795	830	765	795	1170	1170	1170		795	828
1970	8	1970.08	30-Aug-70	810	830	780	810	1140	1140	1140		810	825
1970	8	1970.08	31-Aug-70	755	780	710	755	1250	1250	1250		755	822
1970	9	1970.09	1-Sep-70	745	775	710	745	1220	1220	1220		745	821
1970	9	1970.09	2-Sep-70	805	835	765	805	1090	1090	1090		805	820
1970	9	1970.09	3-Sep-70	840	860	820	840	1070	1070	1070		840	819
1970	9	1970.09	4-Sep-70	835	850	820	835	1090	1090	1090		835	817
1970	9	1970.09	5-Sep-70	765	825	725	765	1210	1210	1210		765	813
1970	9	1970.09	6-Sep-70	705	725	655	705	1320	1320	1320		705	809
1970	9	1970.09	7-Sep-70	675	690	645	675	1380	1380	1380		675	803
1970	9	1970.09	8-Sep-70	740	785	685	740	1220	1220	1220		740	801
1970	9	1970.09	9-Sep-70	825	855	780	825	1080	1080	1080		825	802
1970	9	1970.09	10-Sep-70	870	885	850	870	1030	1030	1030		870	802
1970	9	1970.09	11-Sep-70	845	870	795	845	1080	1080	1080		845	802
1970	9	1970.09	12-Sep-70	765	795	725	765	1260	1260	1260		765	799
1970	9	1970.09	13-Sep-70	745	770	705	745	1340	1340	1340		745	795
1970	9	1970.09	14-Sep-70	730	760	700	730	1380	1380	1380		730	792
1970	9	1970.09	15-Sep-70	735	770	710	735	1370	1370	1370		735	789
1970	9	1970.09	16-Sep-70	790	810	770	790	1260	1260	1260		790	789
1970	9	1970.09	17-Sep-70	780	795	765	780	1260	1260	1260		780	787
1970	9	1970.09	18-Sep-70	760	780	740	760	1300	1300	1300		760	785
1970	9	1970.09	19-Sep-70	730	755	715	730	1420	1420	1420		730	780
1970	9	1970.09	20-Sep-70	720	735	680	720	1510	1510	1510		720	776
1970	9	1970.09	21-Sep-70	705	725	680	705	1590	1590	1590		705	772
1970	9	1970.09	22-Sep-70	750	775	725	750	1510	1510	1510		750	769
1970	9	1970.09	23-Sep-70	755	770	745	755	1440	1440	1440		755	769
1970	9	1970.09	24-Sep-70	765	780	750	765	1410	1410	1410		765	769
1970	9	1970.09	25-Sep-70	760	780	745	760	1360	1360	1360		760	769
1970	9	1970.09	26-Sep-70	745	760	715	745	1410	1410	1410		745	768

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1970	9	1970.09 27-Sep-70	710	720	680		710	1520	1520			710	765
1970	9	1970.09 28-Sep-70	690	725	650		690	1550	1550			690	762
1970	9	1970.09 29-Sep-70	705	710	690		705	1480	1480			705	758
1970	9	1970.09 30-Sep-70	720	760	675		720	1420	1420			720	757
1970	10	1970.10 1-Oct-70	730	755	710		730	1420	1420			730	757
1970	10	1970.10 2-Oct-70	680	710	645		680	1530	1530			680	752
1970	10	1970.10 3-Oct-70	660	670	645		660	1550	1550			660	746
1970	10	1970.10 4-Oct-70	650	665	640		650	1590	1590			650	740
1970	10	1970.10 5-Oct-70	695	720	660		695	1600	1600			695	738
1970	10	1970.10 6-Oct-70	675	695	660		675	1640	1640			675	737
1970	10	1970.10 7-Oct-70	690	710	680		690	1570	1570			690	737
1970	10	1970.10 8-Oct-70	715	735	690		715	1530	1530			715	737
1970	10	1970.10 9-Oct-70	720	735	705		720	1500	1500			720	733
1970	10	1970.10 10-Oct-70	700	730	675		700	1540	1540			700	727
1970	10	1970.10 11-Oct-70	695	720	675		695	1570	1570			695	722
1970	10	1970.10 12-Oct-70	695	715	660		695	1560	1560			695	720
1970	10	1970.10 13-Oct-70	690	710	655		690	1550	1550			690	718
1970	10	1970.10 14-Oct-70	680	700	655		680	1590	1590			680	717
1970	10	1970.10 15-Oct-70	665	685	625		665	1650	1650			665	714
1970	10	1970.10 16-Oct-70	610	625	570		610	1820	1820			610	708
1970	10	1970.10 17-Oct-70	565	575	545		565	1860	1860			565	701
1970	10	1970.10 18-Oct-70	635	680	575		635	1670	1670			635	697
1970	10	1970.10 19-Oct-70	725	785	680		725	1530	1530			725	697
1970	10	1970.10 20-Oct-70	805	820	785		805	1440	1440			805	700
1970	10	1970.10 21-Oct-70	850	885	820		850	1370	1370			850	704
1970	10	1970.10 22-Oct-70	930	965	870		930	1300	1300			930	710
1970	10	1970.10 23-Oct-70	950	965	940		950	1280	1280			950	717
1970	10	1970.10 24-Oct-70	955	975	935		955	1280	1280			955	723
1970	10	1970.10 25-Oct-70	940	945	925		940	1290	1290			940	729
1970	10	1970.10 26-Oct-70	920	940	900		920	1250	1250			920	735
1970	10	1970.10 27-Oct-70	910	925	900		910	1240	1240			910	742
1970	10	1970.10 28-Oct-70	930	945	920		930	1200	1200			930	750
1970	10	1970.10 29-Oct-70	945	960	930		945	1200	1200			945	758
1970	10	1970.10 30-Oct-70	970	1000	955		970	1190	1190			970	766
1970	10	1970.10 31-Oct-70	1000	1005	990		1000	1140	1140			1000	775
1970	11	1970.11 1-Nov-70	1005	1015	1000		1005	1120	1120			1005	786
1970	11	1970.11 2-Nov-70	1000	1010	965		1000	1140	1140			1000	797
1970	11	1970.11 3-Nov-70	985	1005	960		985	1150	1150			985	808
1970	11	1970.11 4-Nov-70	945	970	920		945	1190	1190			945	817
1970	11	1970.11 5-Nov-70	905	930	885		905	1270	1270			905	824
1970	11	1970.11 6-Nov-70	915	930	895		915	1360	1360			915	832
1970	11	1970.11 7-Nov-70	870	905	825		870	1470	1470			870	837
1970	11	1970.11 8-Nov-70	815	835	805		815	1530	1530			815	840
1970	11	1970.11 9-Nov-70	825	845	810		825	1520	1520			825	844
1970	11	1970.11 10-Nov-70	850	855	845		850	1480	1480			850	850
1970	11	1970.11 11-Nov-70	850	860	840		850	1470	1470			850	855
1970	11	1970.11 12-Nov-70	855	885	820		855	1550	1550			855	860
1970	11	1970.11 13-Nov-70	850	865	830		850	1560	1560			850	866
1970	11	1970.11 14-Nov-70	865	880	860		865	1590	1590			865	873
1970	11	1970.11 15-Nov-70	840	865	820		840	1600	1600			840	880
1970	11	1970.11 16-Nov-70	825	840	815		825	1570	1570			825	889
1970	11	1970.11 17-Nov-70	845	855	840		845	1600	1600			845	896
1970	11	1970.11 18-Nov-70	860	880	825		860	1570	1570			860	900
1970	11	1970.11 19-Nov-70	830	840	825		830	1540	1540			830	901
1970	11	1970.11 20-Nov-70	840	850	835		840	1520	1520			840	901
1970	11	1970.11 21-Nov-70	845	855	840		845	1520	1520			845	898
1970	11	1970.11 22-Nov-70	805	850	755		805	1620	1620			805	893
1970	11	1970.11 23-Nov-70	740	760	725		740	1750	1750			740	886
1970	11	1970.11 24-Nov-70	715	725	705		715	1800	1800			715	879
1970	11	1970.11 25-Nov-70	710	715	705		710	1860	1860			710	872
1970	11	1970.11 26-Nov-70	695	710	680		695	1950	1950			695	864
1970	11	1970.11 27-Nov-70	690	705	680		690	1990	1990			690	856
1970	11	1970.11 28-Nov-70	690	695	670		690	2040	2040			690	848
1970	11	1970.11 29-Nov-70	585	670	490		585	2750	2750			585	835
1970	11	1970.11 30-Nov-70	450	495	430		450	3570	3570			450	817
1970	12	1970.12 1-Dec-70	505	520	445		505	3580	3580			505	800
1970	12	1970.12 2-Dec-70	535	565	420		535	3430	3430			535	785
1970	12	1970.12 3-Dec-70	535	540	525		535	3590	3590			535	770
1970	12	1970.12 4-Dec-70	555	690	540		555	3590	3590			555	757
1970	12	1970.12 5-Dec-70	600	625	540		600	3640	3640			600	746
1970	12	1970.12 6-Dec-70	440	530	375		440	4620	4620			440	731
1970	12	1970.12 7-Dec-70	365	370	360		365	5230	5230			365	714
1970	12	1970.12 8-Dec-70	375	405	335		375	5270	5270			375	699
1970	12	1970.12 9-Dec-70	430	465	405		430	4730	4730			430	686
1970	12	1970.12 10-Dec-70	545	615	465		545	3830	3830			545	676
1970	12	1970.12 11-Dec-70	645	670	615		645	3260	3260			645	669

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1970	12	1970.12 12-Dec-70	560	630	520		560	3590	3590			560	659
1970	12	1970.12 13-Dec-70	525	530	515		525	3900	3900			525	648
1970	12	1970.12 14-Dec-70	480	520	430		480	4150	4150			480	635
1970	12	1970.12 15-Dec-70	415	430	405		415	4350	4350			415	621
1970	12	1970.12 16-Dec-70	405	410	400		405	4550	4550			405	607
1970	12	1970.12 17-Dec-70	410	415	405		410	4660	4660			410	593
1970	12	1970.12 18-Dec-70	375	405	355		375	5060	5060			375	577
1970	12	1970.12 19-Dec-70	360	365	355		360	5470	5470			360	561
1970	12	1970.12 20-Dec-70	350	360	345		350	5760	5760			350	545
1970	12	1970.12 21-Dec-70	360	365	345		360	6100	6100			360	528
1970	12	1970.12 22-Dec-70	342	345	340		342	6330	6330			342	513
1970	12	1970.12 23-Dec-70	342	345	340		342	6630	6630			342	500
1970	12	1970.12 24-Dec-70	335	340	330		335	6610	6610			335	487
1970	12	1970.12 25-Dec-70	330	340	315		330	6500	6500			330	474
1970	12	1970.12 26-Dec-70	335	340	320		335	6510	6510			335	462
1970	12	1970.12 27-Dec-70	340	350	335		340	6500	6500			340	451
1970	12	1970.12 28-Dec-70	350	355	345		350	6400	6400			350	439
1970	12	1970.12 29-Dec-70	350	355	345		350	6310	6310			350	431
1970	12	1970.12 30-Dec-70	350	365	340		350	6240	6240			350	428
1970	12	1970.12 31-Dec-70	360	375	350		360	5970	5970			360	423
1971	1	1971.01 1-Jan-71	365	375	360		365	5880	5880			365	418
1971	1	1971.01 2-Jan-71	350	370	335		350	5920	5920			350	411
1971	1	1971.01 3-Jan-71	330	340	320		330	6080	6080			330	404
1971	1	1971.01 4-Jan-71	325	330	320		325	6110	6110			325	395
1971	1	1971.01 5-Jan-71	325	337	320		325	6040	6040			325	391
1971	1	1971.01 6-Jan-71	350	380	337		350	5780	5780			350	390
1971	1	1971.01 7-Jan-71	400	420	380		400	5100	5100			400	391
1971	1	1971.01 8-Jan-71	427	437	420		427	4780	4780			427	391
1971	1	1971.01 9-Jan-71	435	443	430		435	4710	4710			435	388
1971	1	1971.01 10-Jan-71	430	440	427		430	4660	4660			430	380
1971	1	1971.01 11-Jan-71	425	435	425		425	4560	4560			425	376
1971	1	1971.01 12-Jan-71	455	470	440		455	4410	4410			455	374
1971	1	1971.01 13-Jan-71	465	475	460		465	4380	4380			465	373
1971	1	1971.01 14-Jan-71	505	460	360		505	5070	5070			505	376
1971	1	1971.01 15-Jan-71	350	360	340		350	5660	5660			350	374
1971	1	1971.01 16-Jan-71	335	350	330		335	5900	5900			335	372
1971	1	1971.01 17-Jan-71	365	385	350		365	5530	5530			365	371
1971	1	1971.01 18-Jan-71	400	410	390		400	5150	5150			400	373
1971	1	1971.01 19-Jan-71	425	430	410		425	5080	5080			425	375
1971	1	1971.01 20-Jan-71	460	478	430		460	5140	5140			460	379
1971	1	1971.01 21-Jan-71	468	470	462		468	5160	5160			468	383
1971	1	1971.01 22-Jan-71	475	470	480		475	5220	5220			475	387
1971	1	1971.01 23-Jan-71	485	490	478		485	5230	5230			485	392
1971	1	1971.01 24-Jan-71	468	480	450		468	5460	5460			468	397
1971	1	1971.01 25-Jan-71	458	470	445		458	5560	5560			458	401
1971	1	1971.01 26-Jan-71	480	495	470		480	5370	5370			480	406
1971	1	1971.01 27-Jan-71	510	495	520		510	5030	5030			510	411
1971	1	1971.01 28-Jan-71	540	555	525		540	4780	4780			540	417
1971	1	1971.01 29-Jan-71	565	568	552		565	4560	4560			565	424
1971	1	1971.01 30-Jan-71	570	580	565		570	4440	4440			570	431
1971	1	1971.01 31-Jan-71	545	580	510		545	4560	4560			545	437
1971	2	1971.02 1-Feb-71	515	530	505		515	4730	4730			515	443
1971	2	1971.02 2-Feb-71	505	523	480		505	4740	4740			505	449
1971	2	1971.02 3-Feb-71	455	480	435		455	5100	5100			455	453
1971	2	1971.02 4-Feb-71	470	490	460		470	4980	4980			470	458
1971	2	1971.02 5-Feb-71	450					4710	4710			450	461
1971	2	1971.02 6-Feb-71	425					4670	4670			425	462
1971	2	1971.02 7-Feb-71	425					4700	4700			425	462
1971	2	1971.02 8-Feb-71	400					4700	4700			400	461
1971	2	1971.02 9-Feb-71	375					4580	4580			375	459
1971	2	1971.02 10-Feb-71	375					4600	4600			375	457
1971	2	1971.02 11-Feb-71	350					4620	4620			350	454
1971	2	1971.02 12-Feb-71	350					4740	4740			350	450
1971	2	1971.02 13-Feb-71	348	350	345		348	4690	4690			348	445
1971	2	1971.02 14-Feb-71	345	360	340		345	4290	4290			345	445
1971	2	1971.02 15-Feb-71	380	380	360		380	4010	4010			380	446
1971	2	1971.02 16-Feb-71	420	430	380		420	4140	4140			420	448
1971	2	1971.02 17-Feb-71	400	400	400		400	4630	4630			400	448
1971	2	1971.02 18-Feb-71	400	400	400		400	4670	4670			400	447
1971	2	1971.02 19-Feb-71	400	400	400		400	4670	4670			400	445
1971	2	1971.02 20-Feb-71	400	400	400		400	4580	4580			400	443
1971	2	1971.02 21-Feb-71	400	400	400		400	4560	4560			400	440
1971	2	1971.02 22-Feb-71	390	410	360		390	4510	4510			390	437
1971	2	1971.02 23-Feb-71	400	418	400		400	4410	4410			400	435
1971	2	1971.02 24-Feb-71	440	470	418		440	3980	3980			440	434
1971	2	1971.02 25-Feb-71	480	480	470		480	3830	3830			480	434

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1971	2	1971.02 26-Feb-71	480	480	480		480	3470	3470			480	433
1971	2	1971.02 27-Feb-71	500	520	480		500	2990	2990			500	432
1971	2	1971.02 28-Feb-71	560	618	520		560	2660	2660			560	432
1971	3	1971.03 1-Mar-71	600	620	571		600	2620	2620			600	433
1971	3	1971.03 2-Mar-71	550	572	550		550	2570	2570			550	433
1971	3	1971.03 3-Mar-71	570	605	550		570	2420	2420			570	435
1971	3	1971.03 4-Mar-71	628	640	605		628	2380	2380			628	439
1971	3	1971.03 5-Mar-71	605	620	595		605	2400	2400			605	444
1971	3	1971.03 6-Mar-71	600	600	600		600	2380	2380			600	448
1971	3	1971.03 7-Mar-71	595	600	580		595	2390	2390			595	453
1971	3	1971.03 8-Mar-71	555	580	533		555	2470	2470			555	457
1971	3	1971.03 9-Mar-71	531	533	530		531	2440	2440			531	461
1971	3	1971.03 10-Mar-71	585	610	530		585	2280	2280			585	467
1971	3	1971.03 11-Mar-71	615	630	610		615	2280	2280			615	475
1971	3	1971.03 12-Mar-71	630	640	610		630	2300	2300			630	484
1971	3	1971.03 13-Mar-71	575	610	545		575	2470	2470			575	491
1971	3	1971.03 14-Mar-71	530	545	520		530	2690	2690			530	497
1971	3	1971.03 15-Mar-71	500	540	470		500	3020	3020			500	502
1971	3	1971.03 16-Mar-71	470	470	470		470	3140	3140			470	506
1971	3	1971.03 17-Mar-71	470	470	470		470	3060	3060			470	509
1971	3	1971.03 18-Mar-71	470	470	470		470	2860	2860			470	511
1971	3	1971.03 19-Mar-71	475	520	467		475	2630	2630			475	513
1971	3	1971.03 20-Mar-71	540	547	520		540	2500	2500			540	518
1971	3	1971.03 21-Mar-71	590	620	547		590	2330	2330			590	524
1971	3	1971.03 22-Mar-71	615	628	600		615	2320	2320			615	532
1971	3	1971.03 23-Mar-71	615	620	610		615	2290	2290			615	539
1971	3	1971.03 24-Mar-71	635	640	620		635	2290	2290			635	547
1971	3	1971.03 25-Mar-71	640	625	652		640	2310	2310			640	555
1971	3	1971.03 26-Mar-71	580	630	520		580	2880	2880			580	560
1971	3	1971.03 27-Mar-71	520	525	520		520	3220	3220			520	561
1971	3	1971.03 28-Mar-71	528	530	525		528	3100	3100			528	563
1971	3	1971.03 29-Mar-71	550	560	530		550	2970	2970			550	564
1971	3	1971.03 30-Mar-71	555	555	558		555	2760	2760			555	564
1971	3	1971.03 31-Mar-71	575	590	558		575	2500	2500			575	563
1971	4	1971.04 1-Apr-71	630	675	590		630	2270	2270			630	566
1971	4	1971.04 2-Apr-71	695	700	690		695	2130	2130			695	570
1971	4	1971.04 3-Apr-71	720	740	695		720	2050	2050			720	573
1971	4	1971.04 4-Apr-71	700	720	680		700	2000	2000			700	576
1971	4	1971.04 5-Apr-71	745	790	700		745	1820	1820			745	581
1971	4	1971.04 6-Apr-71	700					1820	1820			700	585
1971	4	1971.04 7-Apr-71	700					1930	1930			700	589
1971	4	1971.04 8-Apr-71	700					1980	1980			700	595
1971	4	1971.04 9-Apr-71	700					1940	1940			700	599
1971	4	1971.04 10-Apr-71	700					1950	1950			700	602
1971	4	1971.04 11-Apr-71	700					2050	2050			700	604
1971	4	1971.04 12-Apr-71	700					2000	2000			700	608
1971	4	1971.04 13-Apr-71	700					1740	1740			700	614
1971	4	1971.04 14-Apr-71	700					1980	1980			700	621
1971	4	1971.04 15-Apr-71	700					2150	2150			700	628
1971	4	1971.04 16-Apr-71	700					2060	2060			700	636
1971	4	1971.04 17-Apr-71	695	707	675		695	2240	2240			695	643
1971	4	1971.04 18-Apr-71	665	677	630		665	2440	2440			665	650
1971	4	1971.04 19-Apr-71	695	620	570		695	2570	2570			695	655
1971	4	1971.04 20-Apr-71	570	570	565		570	2500	2500			570	654
1971	4	1971.04 21-Apr-71	560	565	555		560	2440	2440			560	652
1971	4	1971.04 22-Apr-71	585	640	555		585	2110	2110			585	651
1971	4	1971.04 23-Apr-71	730	810	640		730	1700	1700			730	655
1971	4	1971.04 24-Apr-71	750	810	650		750	1660	1660			750	658
1971	4	1971.04 25-Apr-71	730	815	680		730	1720	1720			730	663
1971	4	1971.04 26-Apr-71	760	825	710		760	1680	1680			760	671
1971	4	1971.04 27-Apr-71	830	890	820		830	1580	1580			830	681
1971	4	1971.04 28-Apr-71	845	880	830		845	1550	1550			845	691
1971	4	1971.04 29-Apr-71	850					1410	1410			850	701
1971	4	1971.04 30-Apr-71	850					1370	1370			850	710
1971	5	1971.05 1-May-71	885	900	860		885	1390	1390			885	719
1971	5	1971.05 2-May-71	820	860	765		820	1560	1560			820	723
1971	5	1971.05 3-May-71	785	820	760		785	1760	1760			785	725
1971	5	1971.05 4-May-71	775	783	767		775	1830	1830			775	728
1971	5	1971.05 5-May-71	773	780	767		773	1860	1860			773	728
1971	5	1971.05 6-May-71	765	775	740		765	1900	1900			765	731
1971	5	1971.05 7-May-71	735	775	710		735	1860	1860			735	732
1971	5	1971.05 8-May-71	730	755	690		730	1960	1960			730	733
1971	5	1971.05 9-May-71	645	690	603		645	2360	2360			645	731
1971	5	1971.05 10-May-71	570	603	550		570	2620	2620			570	727
1971	5	1971.05 11-May-71	580	610	570		580	2430	2430			580	723
1971	5	1971.05 12-May-71	565	695	487		565	2240	2240			565	718

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1971	5	1971.05 13-May-71	637	870	450		637	1980	1980			637	716
1971	5	1971.05 14-May-71	535	590	455		535	1860	1860			535	711
1971	5	1971.05 15-May-71	590	625	520		590	1650	1650			590	707
1971	5	1971.05 16-May-71	655	860	520		655	1590	1590			655	705
1971	5	1971.05 17-May-71	600	880	350		600	1840	1840			600	702
1971	5	1971.05 18-May-71	465	620	355		465	2260	2260			465	696
1971	5	1971.05 19-May-71	560	760	370		560	2330	2330			560	691
1971	5	1971.05 20-May-71	500	640	340		500	2270	2270			500	689
1971	5	1971.05 21-May-71	595	765	385		595	1840	1840			595	690
1971	5	1971.05 22-May-71	770	800	755		770	1700	1700			770	696
1971	5	1971.05 23-May-71	820	875	770		820	1530	1530			820	699
1971	5	1971.05 24-May-71	890	900	873		890	1520	1520			890	704
1971	5	1971.05 25-May-71	905	930	893		905	1390	1390			905	710
1971	5	1971.05 26-May-71	903	910	900		903	1300	1300			903	714
1971	5	1971.05 27-May-71	913	930	907		913	1230	1230			913	717
1971	5	1971.05 28-May-71	895	930	850		895	1310	1310			895	719
1971	5	1971.05 29-May-71	797	850	767		797	1590	1590			797	717
1971	5	1971.05 30-May-71	750	780	687		750	1790	1790			750	714
1971	5	1971.05 31-May-71	640	687	607		640	2060	2060			640	705
1971	6	1971.06 1-Jun-71	655	683	610		655	1910	1910			655	700
1971	6	1971.06 2-Jun-71	697	707	665		697	1760	1760			697	697
1971	6	1971.06 3-Jun-71	707	710	705		707	1650	1650			707	695
1971	6	1971.06 4-Jun-71	708	710	707		708	1600	1600			708	693
1971	6	1971.06 5-Jun-71	713	730	710		713	1500	1500			713	691
1971	6	1971.06 6-Jun-71	755	770	730		755	1440	1440			755	692
1971	6	1971.06 7-Jun-71	775	790	770		775	1480	1480			775	693
1971	6	1971.06 8-Jun-71	800	825	775		800	1380	1380			800	698
1971	6	1971.06 9-Jun-71	725	825	570		725	1550	1550			725	703
1971	6	1971.06 10-Jun-71	520	570	490		520	2030	2030			520	701
1971	6	1971.06 11-Jun-71	445	490	420		445	2470	2470			445	697
1971	6	1971.06 12-Jun-71	480	500	440		480	2450	2450			480	692
1971	6	1971.06 13-Jun-71	495	500	485		495	2350	2350			495	691
1971	6	1971.06 14-Jun-71	495	520	450		495	2330	2330			495	688
1971	6	1971.06 15-Jun-71	450					2760	2760			450	681
1971	6	1971.06 16-Jun-71	450					3060	3060			450	676
1971	6	1971.06 17-Jun-71	400					2890	2890			400	674
1971	6	1971.06 18-Jun-71	400					2700	2700			400	668
1971	6	1971.06 19-Jun-71	335	395	305		335	2860	2860			335	663
1971	6	1971.06 20-Jun-71	345	375	220		345	3030	3030			345	654
1971	6	1971.06 21-Jun-71	350	373	330		350	2960	2960			350	640
1971	6	1971.06 22-Jun-71	385	413	350		385	2590	2590			385	626
1971	6	1971.06 23-Jun-71	410	445	387		410	2510	2510			410	610
1971	6	1971.06 24-Jun-71	437	520	400		437	2360	2360			437	594
1971	6	1971.06 25-Jun-71	485	525	427		485	2210	2210			485	580
1971	6	1971.06 26-Jun-71	445	525	417		445	2400	2400			445	565
1971	6	1971.06 27-Jun-71	493	545	403		493	2280	2280			493	551
1971	6	1971.06 28-Jun-71	353	400	280		353	2860	2860			353	537
1971	6	1971.06 29-Jun-71	320	450	270		320	3900	3900			320	522
1971	6	1971.06 30-Jun-71	515	545	450		515	2390	2390			515	518
1971	7	1971.07 1-Jul-71	565	630	500		565	2040	2040			565	515
1971	7	1971.07 2-Jul-71	660	685	620		660	1700	1700			660	514
1971	7	1971.07 3-Jul-71	675	680	670		675	1530	1530			675	513
1971	7	1971.07 4-Jul-71	683	685	680		683	1490	1490			683	512
1971	7	1971.07 5-Jul-71	683	710	623		683	1530	1530			683	511
1971	7	1971.07 6-Jul-71	685	703	623		685	1370	1370			685	509
1971	7	1971.07 7-Jul-71	750	780	700		750	1180	1180			750	508
1971	7	1971.07 8-Jul-71	780	800	775		780	1140	1140			780	507
1971	7	1971.07 9-Jul-71	810	820	795		810	1090	1090			810	510
1971	7	1971.07 10-Jul-71	820	850	810		820	1050	1050			820	520
1971	7	1971.07 11-Jul-71	810	845	780		810	1080	1080			810	532
1971	7	1971.07 12-Jul-71	850	895	810		850	1110	1110			850	544
1971	7	1971.07 13-Jul-71	855	890	810		855	1050	1050			855	556
1971	7	1971.07 14-Jul-71	845	880	815		845	940	940			845	568
1971	7	1971.07 15-Jul-71	890	910	860		890	900	900			890	583
1971	7	1971.07 16-Jul-71	880	905	845		880	865	865			880	597
1971	7	1971.07 17-Jul-71	895	930	860		895	860	860			895	614
1971	7	1971.07 18-Jul-71	865	900	800		865	945	945			865	629
1971	7	1971.07 19-Jul-71	795	810	775		795	1040	1040			795	644
1971	7	1971.07 20-Jul-71	825	860	780		825	930	930			825	660
1971	7	1971.07 21-Jul-71	875	905	835		875	830	830			875	678
1971	7	1971.07 22-Jul-71	915	940	895		915	762	762			915	696
1971	7	1971.07 23-Jul-71	920	940	895		920	757	757			920	713
1971	7	1971.07 24-Jul-71	920	935	880		920	748	748			920	729
1971	7	1971.07 25-Jul-71	880	900	865		880	805	805			880	742
1971	7	1971.07 26-Jul-71	845	870	810		845	935	935			845	755
1971	7	1971.07 27-Jul-71	850	870	800		850	905	905			850	767

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1971	7	1971.07 28-Jul-71	845	865	820		845	905	905			845	784
1971	7	1971.07 29-Jul-71	845	870	830		845	875	875			845	801
1971	7	1971.07 30-Jul-71	875	910	850		875	855	855			875	813
1971	7	1971.07 31-Jul-71	895	915	865		895	825	825			895	824
1971	8	1971.08 1-Aug-71	860	910	835		860	780	780			860	831
1971	8	1971.08 2-Aug-71	875	910	850		875	870	870			875	837
1971	8	1971.08 3-Aug-71	870	890	855		870	870	870			870	844
1971	8	1971.08 4-Aug-71	880	940	850		880	790	790			880	850
1971	8	1971.08 5-Aug-71	930	945	910		930	775	775			930	858
1971	8	1971.08 6-Aug-71	900					770	770			900	863
1971	8	1971.08 7-Aug-71	900					830	830			900	867
1971	8	1971.08 8-Aug-71	900					845	845			900	870
1971	8	1971.08 9-Aug-71	900					850	850			900	873
1971	8	1971.08 10-Aug-71	880	945	820		880	795	795			880	875
1971	8	1971.08 11-Aug-71	935	965	900		935	757	757			935	878
1971	8	1971.08 12-Aug-71	895	940	855		895	762	762			895	880
1971	8	1971.08 13-Aug-71	830	885	770		830	734	734			830	879
1971	8	1971.08 14-Aug-71	800	850	730		800	795	795			800	876
1971	8	1971.08 15-Aug-71	760	825	730		760	950	950			760	872
1971	8	1971.08 16-Aug-71	740	765	715		740	1010	1010			740	867
1971	8	1971.08 17-Aug-71	777	805	740		777	945	945			777	864
1971	8	1971.08 18-Aug-71	785	830	755		785	875	875			785	864
1971	8	1971.08 19-Aug-71	783	810	760		783	870	870			783	862
1971	8	1971.08 20-Aug-71	785	813	740		785	890	890			785	859
1971	8	1971.08 21-Aug-71	820	850	780		820	830	830			820	856
1971	8	1971.08 22-Aug-71	800	853	770		800	930	930			800	852
1971	8	1971.08 23-Aug-71	745	770	720		745	1070	1070			745	846
1971	8	1971.08 24-Aug-71	720	740	700		720	1080	1080			720	841
1971	8	1971.08 25-Aug-71	755	800	715		755	970	970			755	838
1971	8	1971.08 26-Aug-71	835	855	800		835	870	870			835	837
1971	8	1971.08 27-Aug-71	805	860	785		805	945	945			805	836
1971	8	1971.08 28-Aug-71	835	860	800		835	925	925			835	836
1971	8	1971.08 29-Aug-71	755	825	720		755	1060	1060			755	832
1971	8	1971.08 30-Aug-71	755	825	675		755	1120	1120			755	827
1971	8	1971.08 31-Aug-71	803	830	795		803	1080	1080			803	825
1971	9	1971.09 1-Sep-71	805	835	770		805	1000	1000			805	823
1971	9	1971.09 2-Sep-71	810	823	800		810	1010	1010			810	821
1971	9	1971.09 3-Sep-71	800	827	783		800	980	980			800	818
1971	9	1971.09 4-Sep-71	825	860	800		825	986	986			825	815
1971	9	1971.09 5-Sep-71	765	800	740		765	1020	1020			765	810
1971	9	1971.09 6-Sep-71	770	795	750		770	1010	1010			770	806
1971	9	1971.09 7-Sep-71	785	847	730		785	1030	1030			785	802
1971	9	1971.09 8-Sep-71	820	840	805		820	986	986			820	799
1971	9	1971.09 9-Sep-71	805	830	790		805	997	997			805	797
1971	9	1971.09 10-Sep-71	855	905	800		855	930	930			855	794
1971	9	1971.09 11-Sep-71	855	905	810		855	940	940			855	793
1971	9	1971.09 12-Sep-71	785	810	765		785	1110	1110			785	791
1971	9	1971.09 13-Sep-71	830					1150	1150			830	792
1971	9	1971.09 14-Sep-71	830					1040	1040			830	795
1971	9	1971.09 15-Sep-71	840	855	820		840	935	935			840	798
1971	9	1971.09 16-Sep-71	835	845	820		835	890	890			835	800
1971	9	1971.09 17-Sep-71	840	870	830		840	890	890			840	802
1971	9	1971.09 18-Sep-71	790	845	765		790	945	945			790	802
1971	9	1971.09 19-Sep-71	785	805	755		785	936	986			785	802
1971	9	1971.09 20-Sep-71	785	830	745		785	1050	1050			785	801
1971	9	1971.09 21-Sep-71	845	865	800		845	1020	1020			845	802
1971	9	1971.09 22-Sep-71	810	825	785		810	1050	1050			810	804
1971	9	1971.09 23-Sep-71	775	790	760		775	1120	1120			775	805
1971	9	1971.09 24-Sep-71	715	760	690		715	1260	1260			715	806
1971	9	1971.09 25-Sep-71	690	700	675		690	1300	1300			690	800
1971	9	1971.09 26-Sep-71	680	695	635		680	1350	1350			680	796
1971	9	1971.09 27-Sep-71	652	715	630		652	1440	1440			652	790
1971	9	1971.09 28-Sep-71	645	670	615		645	1510	1510			645	786
1971	9	1971.09 29-Sep-71	632	654	612		632	1480	1480			632	782
1971	9	1971.09 30-Sep-71	644	660	615		644	1500	1500			644	777
1971	10	1971.10 1-Oct-71	617	650	600		617	1580	1580			617	771
1971	10	1971.10 2-Oct-71	600	615	580		600	1640	1640			600	764
1971	10	1971.10 3-Oct-71	596	605	575		596	1790	1790			596	757
1971	10	1971.10 4-Oct-71	580	610	570		580	1930	1930			580	749
1971	10	1971.10 5-Oct-71	590	605	565		590	1920	1920			590	743
1971	10	1971.10 6-Oct-71	540	570	500		540	2020	2020			540	735
1971	10	1971.10 7-Oct-71	495	515	475		495	2010	2010			495	725
1971	10	1971.10 8-Oct-71	470	480	450		470	2080	2080			470	714
1971	10	1971.10 9-Oct-71	445	455	405		445	2210	2210			445	702
1971	10	1971.10 10-Oct-71	355	405	325		355	2440	2440			355	685
1971	10	1971.10 11-Oct-71	315	325	310		315	2540	2540			315	667

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1971	10	1971.10 12-Oct-71	325	355	305		325	2510	2510			325	652
1971	10	1971.10 13-Oct-71	350	355	340		350	2580	2580			350	636
1971	10	1971.10 14-Oct-71	390	425	355		390	2420	2420			390	621
1971	10	1971.10 15-Oct-71	410	425	400		410	2620	2620			410	607
1971	10	1971.10 16-Oct-71	380	405	335		380	2960	2960			380	592
1971	10	1971.10 17-Oct-71	305	335	285		305	3590	3590			305	574
1971	10	1971.10 18-Oct-71	345	380	310		345	3610	3610			345	559
1971	10	1971.10 19-Oct-71	435	495	380		435	3500	3500			435	547
1971	10	1971.10 20-Oct-71	505	525	495		505	2700	2700			505	538
1971	10	1971.10 21-Oct-71	535	555	510		535	2140	2140			535	528
1971	10	1971.10 22-Oct-71	615	675	545		615	1940	1940			615	521
1971	10	1971.10 23-Oct-71	670	680	640		670	1690	1690			670	518
1971	10	1971.10 24-Oct-71	580	640	545		580	1930	1930			580	513
1971	10	1971.10 25-Oct-71	510	545	480		510	2070	2070			510	507
1971	10	1971.10 26-Oct-71	520	570	495		520	2010	2010			520	502
1971	10	1971.10 27-Oct-71	595	620	565		595	1970	1970			595	500
1971	10	1971.10 28-Oct-71	595	615	575		595	1960	1960			595	498
1971	10	1971.10 29-Oct-71	560	575	545		560	1930	1930			560	496
1971	10	1971.10 30-Oct-71	555	600	545		555	1860	1860			555	493
1971	10	1971.10 31-Oct-71	615	635	600		615	1680	1680			615	493
1971	11	1971.11 1-Nov-71	655	680	635		655	1610	1610			655	495
1971	11	1971.11 2-Nov-71	716	760	685		716	1450	1450			716	499
1971	11	1971.11 3-Nov-71	723	760	700		723	1430	1430			723	503
1971	11	1971.11 4-Nov-71	692	705	665		692	1470	1470			692	507
1971	11	1971.11 5-Nov-71	643	665	625		643	1490	1490			643	510
1971	11	1971.11 6-Nov-71	627	645	615		627	1500	1500			627	515
1971	11	1971.11 7-Nov-71	656	670	635		656	1440	1440			656	521
1971	11	1971.11 8-Nov-71	680	695	660		680	1440	1440			680	529
1971	11	1971.11 9-Nov-71	675	690	650		675	1470	1470			675	539
1971	11	1971.11 10-Nov-71	635	650	625		635	1510	1510			635	550
1971	11	1971.11 11-Nov-71	625	630	620		625	1550	1550			625	560
1971	11	1971.11 12-Nov-71	605	620	595		605	1570	1570			605	568
1971	11	1971.11 13-Nov-71	580	595	575		580	1580	1580			580	575
1971	11	1971.11 14-Nov-71	585	595	580		585	1560	1560			585	581
1971	11	1971.11 15-Nov-71	595	625	570		595	1550	1550			595	588
1971	11	1971.11 16-Nov-71	610	620	595		610	1550	1550			610	598
1971	11	1971.11 17-Nov-71	625	645	615		625	1550	1550			625	607
1971	11	1971.11 18-Nov-71	645	655	640		645	1550	1550			645	614
1971	11	1971.11 19-Nov-71	665	685	655		665	1540	1540			665	620
1971	11	1971.11 20-Nov-71	620	685	550		620	1660	1660			620	622
1971	11	1971.11 21-Nov-71	525	550	515		525	1890	1890			525	619
1971	11	1971.11 22-Nov-71	540	560	520		540	1980	1980			540	615
1971	11	1971.11 23-Nov-71	550	560	535		550	2050	2050			550	614
1971	11	1971.11 24-Nov-71	580	610	550		580	1910	1910			580	616
1971	11	1971.11 25-Nov-71	630	640	610		630	1820	1820			630	620
1971	11	1971.11 26-Nov-71	610	630	590		610	1830	1830			610	621
1971	11	1971.11 27-Nov-71	610	615	600		610	1860	1860			610	621
1971	11	1971.11 28-Nov-71	620	630	615		620	1860	1860			620	623
1971	11	1971.11 29-Nov-71	625	630	605		625	1860	1860			625	625
1971	11	1971.11 30-Nov-71	615	620	600		615	1860	1860			615	625
1971	12	1971.12 1-Dec-71	585	600	570		585	1860	1860			585	623
1971	12	1971.12 2-Dec-71	620	630	585		620	1840	1840			620	620
1971	12	1971.12 3-Dec-71	615	620	610		615	1860	1860			615	616
1971	12	1971.12 4-Dec-71	605	620	595		605	1880	1880			605	613
1971	12	1971.12 5-Dec-71	610	615	585		610	1880	1880			610	612
1971	12	1971.12 6-Dec-71	595	605	580		595	1890	1890			595	611
1971	12	1971.12 7-Dec-71	600	615	590		600	1890	1890			600	609
1971	12	1971.12 8-Dec-71	595	600	580		595	1880	1880			595	607
1971	12	1971.12 9-Dec-71	580	585	575		580	1900	1900			580	603
1971	12	1971.12 10-Dec-71	595	610	575		595	1910	1910			595	602
1971	12	1971.12 11-Dec-71	560	600	510		560	2050	2050			560	600
1971	12	1971.12 12-Dec-71	500	515	495		500	2130	2130			500	596
1971	12	1971.12 13-Dec-71	500	510	490		500	2150	2150			500	594
1971	12	1971.12 14-Dec-71	495	505	485		495	2140	2140			495	591
1971	12	1971.12 15-Dec-71	490	505	475		490	2160	2160			490	587
1971	12	1971.12 16-Dec-71	440	475	415		440	2330	2330			440	582
1971	12	1971.12 17-Dec-71	415	420	405		415	2440	2440			415	575
1971	12	1971.12 18-Dec-71	410	415	405		410	2470	2470			410	567
1971	12	1971.12 19-Dec-71	415	420	405		415	2480	2480			415	558
1971	12	1971.12 20-Dec-71	410	420	405		410	2470	2470			410	551
1971	12	1971.12 21-Dec-71	440	460	415		440	2370	2370			440	549
1971	12	1971.12 22-Dec-71	490	525	460		490	2200	2200			490	547
1971	12	1971.12 23-Dec-71	525	530	515		525	2150	2150			525	546
1971	12	1971.12 24-Dec-71	535	555	525		535	2190	2190			535	545
1971	12	1971.12 25-Dec-71	475	540	410		475	2540	2540			475	539
1971	12	1971.12 26-Dec-71	385	410	365		385	3150	3150			385	532

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1971	12	1971.12 27-Dec-71	375	385	365		375	3400	3400			375	524
1971	12	1971.12 28-Dec-71	385	395	375		385	3430	3430			385	516
1971	12	1971.12 29-Dec-71	380	390	365		380	3720	3720			380	508
1971	12	1971.12 30-Dec-71	370	380	355		370	3860	3860			370	500
1971	12	1971.12 31-Dec-71	360	385	335		360	3730	3730			360	492
1972	1	1972.01 1-Jan-72	320	335	315		320	3600	3600			320	482
1972	1	1972.01 2-Jan-72	355	370	330		355	3370	3370			355	474
1972	1	1972.01 3-Jan-72	400	420	370		400	3260	3260			400	467
1972	1	1972.01 4-Jan-72	427	460	413		427	3170	3170			427	461
1972	1	1972.01 5-Jan-72	403	460	370		403	3370	3370			403	454
1972	1	1972.01 6-Jan-72	390	403	380		390	3390	3390			390	447
1972	1	1972.01 7-Jan-72	395	430	350		395	3420	3420			395	441
1972	1	1972.01 8-Jan-72	335	350	330		335	3480	3480			335	433
1972	1	1972.01 9-Jan-72	340	350	330		340	3470	3470			340	424
1972	1	1972.01 10-Jan-72	365	380	353		365	3370	3370			365	418
1972	1	1972.01 11-Jan-72	375	383	370		375	3320	3320			375	413
1972	1	1972.01 12-Jan-72	360	380	340		360	3460	3460			360	409
1972	1	1972.01 13-Jan-72	355	367	340		355	3410	3410			355	404
1972	1	1972.01 14-Jan-72	375	380	365		375	3340	3340			375	400
1972	1	1972.01 15-Jan-72	387	393	380		387	3000	3000			387	398
1972	1	1972.01 16-Jan-72	390	397	383		390	2870	2870			390	398
1972	1	1972.01 17-Jan-72	410	430	390		410	2810	2810			410	398
1972	1	1972.01 18-Jan-72	440	465	415		440	2800	2800			440	398
1972	1	1972.01 19-Jan-72	505	520	465		505	2830	2830			505	402
1972	1	1972.01 20-Jan-72	560	585	520		560	2920	2920			560	406
1972	1	1972.01 21-Jan-72	595	600	585		595	2920	2920			595	409
1972	1	1972.01 22-Jan-72	605	615	600		605	2900	2900			605	412
1972	1	1972.01 23-Jan-72	625	640	610		625	2860	2860			625	415
1972	1	1972.01 24-Jan-72	650	660	640		650	2820	2820			650	421
1972	1	1972.01 25-Jan-72	665	675	660		665	2810	2810			665	430
1972	1	1972.01 26-Jan-72	660	675	645		660	2840	2840			660	439
1972	1	1972.01 27-Jan-72	650	655	640		650	2860	2860			650	448
1972	1	1972.01 28-Jan-72	630	640	615		630	2870	2870			630	457
1972	1	1972.01 29-Jan-72	590	615	540		590	3020	3020			590	464
1972	1	1972.01 30-Jan-72	545	560	535		545	3110	3110			545	470
1972	1	1972.01 31-Jan-72	555	565	545		555	2950	2950			555	478
1972	2	1972.02 1-Feb-72	585	620	560		585	2860	2860			585	486
1972	2	1972.02 2-Feb-72	595	620	565		595	2950	2950			595	492
1972	2	1972.02 3-Feb-72	500	565	480		500	3300	3300			500	495
1972	2	1972.02 4-Feb-72	470	480	455		470	3380	3380			470	497
1972	2	1972.02 5-Feb-72	470	495	455		470	3340	3340			470	499
1972	2	1972.02 6-Feb-72	465	490	450		465	3330	3330			465	502
1972	2	1972.02 7-Feb-72	480	495	460		480	3230	3230			480	507
1972	2	1972.02 8-Feb-72	490	500	455		490	3190	3190			490	512
1972	2	1972.02 9-Feb-72	430	455	415		430	3390	3390			430	514
1972	2	1972.02 10-Feb-72	440	480	415		440	3530	3530			440	516
1972	2	1972.02 11-Feb-72	415	425	395		415	3640	3640			415	518
1972	2	1972.02 12-Feb-72	420	450	395		420	3650	3650			420	520
1972	2	1972.02 13-Feb-72	510	565	440		510	3220	3220			510	524
1972	2	1972.02 14-Feb-72	610	640	550		610	2790	2790			610	532
1972	2	1972.02 15-Feb-72	635	660	590		635	2660	2660			635	540
1972	2	1972.02 16-Feb-72	625	640	610		625	2770	2770			625	547
1972	2	1972.02 17-Feb-72	595	620	565		595	2750	2750			595	552
1972	2	1972.02 18-Feb-72	580	590	565		580	2690	2690			580	555
1972	2	1972.02 19-Feb-72	570	575	565		570	2620	2620			570	555
1972	2	1972.02 20-Feb-72	565	590	555		565	2480	2480			565	554
1972	2	1972.02 21-Feb-72	640	665	590		640	2200	2200			640	555
1972	2	1972.02 22-Feb-72	700	735	665		700	1960	1960			700	558
1972	2	1972.02 23-Feb-72	730	740	720		730	1880	1880			730	561
1972	2	1972.02 24-Feb-72	705	730	665		705	1910	1910			705	562
1972	2	1972.02 25-Feb-72	700	735	650		700	1980	1980			700	563
1972	2	1972.02 26-Feb-72	705	735	700		705	1920	1920			705	565
1972	2	1972.02 27-Feb-72	710	740	690		710	1840	1840			710	568
1972	2	1972.02 28-Feb-72	830	885	740		830	1530	1530			830	576
1972	2	1972.02 29-Feb-72	890	895	865		890	1350	1350			890	587
1972	3	1972.03 1-Mar-72	730	870	660		730	1400	1400			730	593
1972	3	1972.03 2-Mar-72	635	695	590		635	1460	1460			635	595
1972	3	1972.03 3-Mar-72	585	595	565		585	1500	1500			585	594
1972	3	1972.03 4-Mar-72	590	600	560		590	1460	1460			590	597
1972	3	1972.03 5-Mar-72	625	660	595		625	1310	1310			625	603
1972	3	1972.03 6-Mar-72	685	745	640		685	1240	1240			685	610
1972	3	1972.03 7-Mar-72	675	690	635		675	1260	1260			675	617
1972	3	1972.03 8-Mar-72	665	680	630		665	1250	1250			665	623
1972	3	1972.03 9-Mar-72	635	650	610		635	1260	1260			635	628
1972	3	1972.03 10-Mar-72	665	735	610		665	1410	1410			665	636
1972	3	1972.03 11-Mar-72	590	725	525		590	1630	1630			590	641

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1972	3	1972.03 12-Mar-72	530	545	515		530	1600	1600			530	644
1972	3	1972.03 13-Mar-72	575	600	550		575	1520	1520			575	650
1972	3	1972.03 14-Mar-72	610	640	590		610	1420	1420			610	653
1972	3	1972.03 15-Mar-72	660	670	640		660	1370	1370			660	655
1972	3	1972.03 16-Mar-72	680	690	660		680	1350	1350			680	656
1972	3	1972.03 17-Mar-72	695	705	680		695	1380	1380			695	658
1972	3	1972.03 18-Mar-72	685	715	660		685	1370	1370			685	661
1972	3	1972.03 19-Mar-72	650	680	630		650	1370	1370			650	664
1972	3	1972.03 20-Mar-72	673	690	650		673	1390	1390			673	667
1972	3	1972.03 21-Mar-72	690	705	680		690	1390	1390			690	671
1972	3	1972.03 22-Mar-72	687	713	670		687	1440	1440			687	673
1972	3	1972.03 23-Mar-72	683	690	677		683	1560	1560			683	672
1972	3	1972.03 24-Mar-72	655	680	650		655	1490	1490			655	670
1972	3	1972.03 25-Mar-72	655	663	635		655	1470	1470			655	668
1972	3	1972.03 26-Mar-72	665	680	630		665	1390	1390			665	667
1972	3	1972.03 27-Mar-72	710	763	635		710	1280	1280			710	667
1972	3	1972.03 28-Mar-72	767	793	730		767	1160	1160			767	669
1972	3	1972.03 29-Mar-72	737	763	730		737	1170	1170			737	666
1972	3	1972.03 30-Mar-72	720	740	700		720	1240	1240			720	660
1972	3	1972.03 31-Mar-72	710	720	690		710	1230	1230			710	660
1972	4	1972.04 1-Apr-72	713	723	690		713	1230	1230			713	662
1972	4	1972.04 2-Apr-72	715	730	700		715	1370	1370			715	667
1972	4	1972.04 3-Apr-72	765	840	715		765	1290	1290			765	672
1972	4	1972.04 4-Apr-72	860	870	845		860	1130	1130			860	680
1972	4	1972.04 5-Apr-72	850	870	825		850	1080	1080			850	686
1972	4	1972.04 6-Apr-72	775	855	730		775	1240	1240			775	689
1972	4	1972.04 7-Apr-72	755	780	715		755	1290	1290			755	692
1972	4	1972.04 8-Apr-72	755	780	715		755	1250	1250			755	696
1972	4	1972.04 9-Apr-72	790	810	770		790	1210	1210			790	700
1972	4	1972.04 10-Apr-72	790	840	740		790	1280	1280			790	707
1972	4	1972.04 11-Apr-72	865	870	840		865	1100	1100			865	718
1972	4	1972.04 12-Apr-72	870	885	820		870	1110	1110			870	728
1972	4	1972.04 13-Apr-72	815	845	790		815	1170	1170			815	735
1972	4	1972.04 14-Apr-72	850	875	835		850	1070	1070			850	741
1972	4	1972.04 15-Apr-72	860	870	810		860	1100	1100			860	747
1972	4	1972.04 16-Apr-72	805	820	780		805	1130	1130			805	751
1972	4	1972.04 17-Apr-72	800	810	780		800	1110	1110			800	755
1972	4	1972.04 18-Apr-72	795	825	760		795	1040	1040			795	759
1972	4	1972.04 19-Apr-72	825	860	795		825	1000	1000			825	764
1972	4	1972.04 20-Apr-72	900	1000	860		900	860	860			900	771
1972	4	1972.04 21-Apr-72	995	1030	980		995	766	766			995	782
1972	4	1972.04 22-Apr-72	990	1030	965		990	739	739			990	792
1972	4	1972.04 23-Apr-72	1000	1040	960		1000	809	805			1000	803
1972	4	1972.04 24-Apr-72	920	965	880		920	865	865			920	812
1972	4	1972.04 25-Apr-72	925	945	900		925	815	815			925	821
1972	4	1972.04 26-Apr-72	890	930	860		890	805	805			890	827
1972	4	1972.04 27-Apr-72	920	950	890		920	830	830			920	832
1972	4	1972.04 28-Apr-72	920	950	895		920	845	845			920	838
1972	4	1972.04 29-Apr-72	895	915	870		895	785	785			895	844
1972	4	1972.04 30-Apr-72	850	885	815		850	785	785			850	849
1972	5	1972.05 1-May-72	880	950	820		880	880	880			880	854
1972	5	1972.05 2-May-72	940	995	885		940	780	780			940	862
1972	5	1972.05 3-May-72	940	985	885		940	780	780			940	868
1972	5	1972.05 4-May-72	1000	1065	955		1000	748	748			1000	872
1972	5	1972.05 5-May-72	1015	1040	980		1015	698	698			1015	878
1972	5	1972.05 6-May-72	985	1015	960		985	716	716			985	885
1972	5	1972.05 7-May-72	955	1015	885		955	815	815			955	891
1972	5	1972.05 8-May-72	930	1025	870		930	845	845			930	897
1972	5	1972.05 9-May-72	985	1015	960		985	865	865			985	904
1972	5	1972.05 10-May-72	970	990	935		970	870	870			970	910
1972	5	1972.05 11-May-72	940	980	920		940	860	860			940	912
1972	5	1972.05 12-May-72	920	940	890		920	850	850			920	914
1972	5	1972.05 13-May-72	945	990	890		945	785	785			945	918
1972	5	1972.05 14-May-72	1020	1100	935		1020	716	716			1020	924
1972	5	1972.05 15-May-72	1090	1160	1020		1090	658	658			1090	932
1972	5	1972.05 16-May-72	1110	1150	1055		1110	644	644			1110	942
1972	5	1972.05 17-May-72	1030	1095	930		1030	694	694			1030	949
1972	5	1972.05 18-May-72	955	970	920		955	748	748			955	955
1972	5	1972.05 19-May-72	945	975	910		945	708	708			945	959
1972	5	1972.05 20-May-72	945	960	930		945	672	672			945	960
1972	5	1972.05 21-May-72	910	930	890		910	716	716			910	957
1972	5	1972.05 22-May-72	915	955	857		915	805	805			915	955
1972	5	1972.05 23-May-72	905	940	853		905	830	830			905	952
1972	5	1972.05 24-May-72	930	975	890		930	757	757			930	952
1972	5	1972.05 25-May-72	950	970	930		950	716	716			950	953
1972	5	1972.05 26-May-72	965	985	945		965	680	680			965	955

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1972	5	1972.05 27-May-72	965	990	937		965	676	676			965	957
1972	5	1972.05 28-May-72	963	1000	940		963	654	654			963	958
1972	5	1972.05 29-May-72	950	975	927		950	628	628			950	960
1972	5	1972.05 30-May-72	965	1030	915		965	662	662			965	964
1972	5	1972.05 31-May-72	1045	1060	1030		1045	620	620			1045	969
1972	6	1972.06 1-Jun-72	1051					596	596			1051	973
1972	6	1972.06 2-Jun-72	1051					556	556			1051	977
1972	6	1972.06 3-Jun-72	1135	1220	1060		1135	516	516			1135	981
1972	6	1972.06 4-Jun-72	1060	1210	890		1060	568	568			1060	983
1972	6	1972.06 5-Jun-72	1000	1040	940			636	636			1000	983
1972	6	1972.06 6-Jun-72	1070	1125	1033		1070	620	620			1070	987
1972	6	1972.06 7-Jun-72	1120	1155	1090		1120	572	572			1120	994
1972	6	1972.06 8-Jun-72	1060	1120	1030		1060	572	572			1060	996
1972	6	1972.06 9-Jun-72	1055	1080	1030		1055	588	588			1055	999
1972	6	1972.06 10-Jun-72	1040	1100	995		1040	644	644			1040	1002
1972	6	1972.06 11-Jun-72	1015	1080	965		1015	667	667			1015	1005
1972	6	1972.06 12-Jun-72	955	975	955		955	752	752			955	1006
1972	6	1972.06 13-Jun-72	960	990	935		960	694	694			960	1004
1972	6	1972.06 14-Jun-72	1025	1050	990		1025	632	632			1025	1002
1972	6	1972.06 15-Jun-72	1055	1075	1020		1055	588	588			1055	1000
1972	6	1972.06 16-Jun-72	1070	1130	1055		1070	560	560			1070	1001
1972	6	1972.06 17-Jun-72	1110	1130	1065		1110	556	556			1110	1006
1972	6	1972.06 18-Jun-72	1030	1075	1000		1030	588	588			1030	1009
1972	6	1972.06 19-Jun-72	1070	1150	1015		1070	568	568			1070	1013
1972	6	1972.06 20-Jun-72	1075	1135	1000		1075	576	576			1075	1019
1972	6	1972.06 21-Jun-72	1135	1165	1110		1135	572	572			1135	1026
1972	6	1972.06 22-Jun-72	1125	1170	1070		1125	548	548			1125	1033
1972	6	1972.06 23-Jun-72	1160	1175	1125		1160	516	516			1160	1041
1972	6	1972.06 24-Jun-72	1110	1150	1080		1110	500	500			1110	1046
1972	6	1972.06 25-Jun-72	1050	1110	990		1050	576	576			1050	1049
1972	6	1972.06 26-Jun-72	1015	1095	960		1015	632	632			1015	1051
1972	6	1972.06 27-Jun-72	1100	1135	1070		1100	592	592			1100	1055
1972	6	1972.06 28-Jun-72	1055	1130	1030		1055	568	568			1055	1059
1972	6	1972.06 29-Jun-72	1005	1050	960		1005	548	548			1005	1060
1972	6	1972.06 30-Jun-72	1075	1095	1000		1075	508	508			1075	1061
1972	7	1972.07 1-Jul-72	1030	1090	960		1030	532	532			1030	1061
1972	7	1972.07 2-Jul-72	1090	1140	1035		1090	472	472			1090	1062
1972	7	1972.07 3-Jul-72	1100	1140	1075		1100	492	492			1100	1061
1972	7	1972.07 4-Jul-72	1130	1175	1110		1130	456	456			1130	1063
1972	7	1972.07 5-Jul-72	1095	1175	1065		1095	484	484			1095	1066
1972	7	1972.07 6-Jul-72	1165	1215	1130		1165	496	496			1165	1069
1972	7	1972.07 7-Jul-72	1130	1215	1065		1130	484	484			1130	1070
1972	7	1972.07 8-Jul-72	1180	1205	1145		1180	473	473			1180	1074
1972	7	1972.07 9-Jul-72	1160	1215	1105		1160	448	448			1160	1077
1972	7	1972.07 10-Jul-72	1120	1150	1075		1120	488	488			1120	1080
1972	7	1972.07 11-Jul-72	1135	1280	1080		1135	484	484			1135	1084
1972	7	1972.07 12-Jul-72	1180	1200	1145		1180	476	476			1180	1091
1972	7	1972.07 13-Jul-72	1170	1190	1140		1170	484	484			1170	1098
1972	7	1972.07 14-Jul-72	1190	1210	1175		1190	470	470			1190	1104
1972	7	1972.07 15-Jul-72	1200	1250	1170		1200	428	428			1200	1109
1972	7	1972.07 16-Jul-72	1215	1275	1120		1215	410	410			1215	1114
1972	7	1972.07 17-Jul-72	1110	1185	1065		1110	480	480			1110	1114
1972	7	1972.07 18-Jul-72	1105	1197	1020		1105	456	456			1105	1116
1972	7	1972.07 19-Jul-72	1125	1160	1100		1125	434	434			1125	1118
1972	7	1972.07 20-Jul-72	1175	1195	1140		1175	403	403			1175	1121
1972	7	1972.07 21-Jul-72	1145	1180	1103		1145	424	424			1145	1122
1972	7	1972.07 22-Jul-72	1125	1180	1090		1125	459	459			1125	1122
1972	7	1972.07 23-Jul-72	1080	1190	1000		1080	528	528			1080	1119
1972	7	1972.07 24-Jul-72	1035	1080	995		1035	564	564			1035	1116
1972	7	1972.07 25-Jul-72	1065	1075	1050		1065	556	556			1065	1117
1972	7	1972.07 26-Jul-72	1040	1065	1015		1040	532	532			1040	1118
1972	7	1972.07 27-Jul-72	1100	1155	1065		1100	466	466			1100	1118
1972	7	1972.07 28-Jul-72	1135	1155	1105		1135	459	459			1135	1120
1972	7	1972.07 29-Jul-72	1100	1130	1050		1100	516	516			1100	1124
1972	7	1972.07 30-Jul-72	1125	1145	1095		1125	504	504			1125	1125
1972	7	1972.07 31-Jul-72	1075	1140	1035		1075	560	560			1075	1127
1972	8	1972.08 1-Aug-72	1030	1045	1010		1030	548	548			1030	1125
1972	8	1972.08 2-Aug-72	1040	1060	1020		1040	520	520			1040	1123
1972	8	1972.08 3-Aug-72	1105	1190	1060		1105	452	452			1105	1122
1972	8	1972.08 4-Aug-72	1160	1195	1120		1160	431	431			1160	1124
1972	8	1972.08 5-Aug-72	1140	1190	1090		1140	452	452			1140	1123
1972	8	1972.08 6-Aug-72	1095	1195	1025		1095	512	512			1095	1122
1972	8	1972.08 7-Aug-72	1070	1115	1035		1070	580	580			1070	1118
1972	8	1972.08 8-Aug-72	1090	1120	1040		1090	556	556			1090	1116
1972	8	1972.08 9-Aug-72	1055	1150	1000		1055	528	528			1055	1114
1972	8	1972.08 10-Aug-72	1120	1160	1100		1120	470	470			1120	1113

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1972	8	1972.08 11-Aug-72	1170	1225	1085		1170	459	459			1170	1113
1972	8	1972.08 12-Aug-72	1115	1160	1045		1115	488	488			1115	1111
1972	8	1972.08 13-Aug-72	1110	1155	1085		1110	508	508			1110	1109
1972	8	1972.08 14-Aug-72	1080	1120	1040		1080	536	536			1080	1105
1972	8	1972.08 15-Aug-72	1040	1055	1025		1040	560	560			1040	1099
1972	8	1972.08 16-Aug-72	1035	1065	1000		1035	540	540			1035	1096
1972	8	1972.08 17-Aug-72	1015	1045	990		1015	580	580			1015	1093
1972	8	1972.08 18-Aug-72	1020	1050	990		1020	572	572			1020	1090
1972	8	1972.08 19-Aug-72	1045	1085	1005		1045	588	588			1045	1085
1972	8	1972.08 20-Aug-72	1040	1070	1010		1040	632	632			1040	1082
1972	8	1972.08 21-Aug-72	1020	1050	980		1020	654	654			1020	1078
1972	8	1972.08 22-Aug-72	1045	1075	1025		1045	584	584			1045	1077
1972	8	1972.08 23-Aug-72	1050	1115	1005		1050	548	548			1050	1078
1972	8	1972.08 24-Aug-72	1140	1165	1115		1140	504	504			1140	1080
1972	8	1972.08 25-Aug-72	1105	1145	1060		1105	524	524			1105	1082
1972	8	1972.08 26-Aug-72	1070	1110	1040		1070	540	540			1070	1081
1972	8	1972.08 27-Aug-72	1025	1095	970		1025	588	588			1025	1078
1972	8	1972.08 28-Aug-72	985	1045	940		985	628	628			985	1074
1972	8	1972.08 29-Aug-72	1035	1070	995		1035	624	624			1035	1071
1972	8	1972.08 30-Aug-72	1025	1050	990		1025	596	596			1025	1069
1972	8	1972.08 31-Aug-72	1080	1125	1040		1080	532	532			1080	1071
1972	9	1972.09 1-Sep-72	1090	1120	1055		1090	532	532			1090	1073
1972	9	1972.09 2-Sep-72	1065	1100	1030		1065	536	536			1065	1071
1972	9	1972.09 3-Sep-72	1070	1110	1010		1070	548	548			1070	1068
1972	9	1972.09 4-Sep-72	990	1010	980		990	584	584			990	1063
1972	9	1972.09 5-Sep-72	955	975	930		955	680	680			955	1059
1972	9	1972.09 6-Sep-72	940	960	905		940	703	703			940	1054
1972	9	1972.09 7-Sep-72	960	975	915		960	658	658			960	1050
1972	9	1972.09 8-Sep-72	955	1005	895		955	690	690			955	1047
1972	9	1972.09 9-Sep-72	855	920	645		855	850	850			855	1038
1972	9	1972.09 10-Sep-72	525	645	445		525	1170	1170			525	1016
1972	9	1972.09 11-Sep-72	425	445	410		425	1460	1460			425	993
1972	9	1972.09 12-Sep-72	410	420	395		410	1540	1540			410	970
1972	9	1972.09 13-Sep-72	415	435	390		415	1650	1650			415	948
1972	9	1972.09 14-Sep-72	430	440	400		430	1800	1800			430	927
1972	9	1972.09 15-Sep-72	385	400	375		385	1820	1820			385	906
1972	9	1972.09 16-Sep-72	375	390	365		375	1880	1880			375	884
1972	9	1972.09 17-Sep-72	370	400	350		370	1980	1980			370	863
1972	9	1972.09 18-Sep-72	370	380	360		370	2120	2120			370	840
1972	9	1972.09 19-Sep-72	370	380	360		370	2170	2170			370	818
1972	9	1972.09 20-Sep-72	360	365	350		360	2180	2180			360	796
1972	9	1972.09 21-Sep-72	355	370	335		355	2170	2170			355	773
1972	9	1972.09 22-Sep-72	345	360	330		345	2230	2230			345	749
1972	9	1972.09 23-Sep-72	360	375	350		360	2240	2240			360	723
1972	9	1972.09 24-Sep-72	350	360	345		350	2260	2260			350	698
1972	9	1972.09 25-Sep-72	485	410	460		485	2190	2190			485	679
1972	9	1972.09 26-Sep-72	425	445	410		425	2050	2050			425	659
1972	9	1972.09 27-Sep-72	445	455	430		445	2060	2060			445	641
1972	9	1972.09 28-Sep-72	410	430	390		410	2150	2150			410	620
1972	9	1972.09 29-Sep-72	405	410	400		405	2070	2070			405	599
1972	9	1972.09 30-Sep-72	450	475	420		450	1930	1930			450	578
1972	10	1972.10 1-Oct-72	480	485	475		480	1840	1840			480	558
1972	10	1972.10 2-Oct-72	490	510	480		490	1830	1830			490	539
1972	10	1972.10 3-Oct-72	465	480	455		465	2000	2000			465	519
1972	10	1972.10 4-Oct-72	435	485	355		435	2320	2320			435	500
1972	10	1972.10 5-Oct-72	365	380	350		365	2280	2280			365	480
1972	10	1972.10 6-Oct-72	395	405	375		395	2140	2140			395	462
1972	10	1972.10 7-Oct-72	430	450	405		430	2000	2000			430	445
1972	10	1972.10 8-Oct-72	435	440	420		435	1980	1980			435	427
1972	10	1972.10 9-Oct-72	450	460	435		450	1980	1980			450	414
1972	10	1972.10 10-Oct-72	455	475	440		455	1960	1960			455	411
1972	10	1972.10 11-Oct-72	465	475	450		465	1930	1930			465	413
1972	10	1972.10 12-Oct-72	515	575	475		515	1800	1800			515	416
1972	10	1972.10 13-Oct-72	615	635	575		615	1690	1690			615	423
1972	10	1972.10 14-Oct-72	620	640	610		620	1650	1650			620	429
1972	10	1972.10 15-Oct-72	605	610	595		605	1680	1680			605	437
1972	10	1972.10 16-Oct-72	625	670	600		625	1620	1620			625	445
1972	10	1972.10 17-Oct-72	685	690	655		685	1570	1570			685	455
1972	10	1972.10 18-Oct-72	650	685	615		650	1710	1710			650	465
1972	10	1972.10 19-Oct-72	635	695	615		635	1740	1740			635	474
1972	10	1972.10 20-Oct-72	695	735	665		695	1650	1650			695	485
1972	10	1972.10 21-Oct-72	640	675	615		640	1650	1650			640	494
1972	10	1972.10 22-Oct-72	520	640	370		520	2200	2200			520	500
1972	10	1972.10 23-Oct-72	425	485	390		425	2580	2580			425	502
1972	10	1972.10 24-Oct-72	480	540	415		480	2580	2580			480	507
1972	10	1972.10 25-Oct-72	505	590	445		505	2550	2550			505	507

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1972	10	1972.10 26-Oct-72	485	590	420		485	2650	2650			485	509
1972	10	1972.10 27-Oct-72	475	590	415		475	2700	2700			475	510
1972	10	1972.10 28-Oct-72	505	600	425		505	2560	2560			505	513
1972	10	1972.10 29-Oct-72	615	750	460		615	1890	1890			615	520
1972	10	1972.10 30-Oct-72	730	760	705		730	1580	1580			730	530
1972	10	1972.10 31-Oct-72	820	870	760		820	1430	1430			820	541
1972	11	1972.11 1-Nov-72	810	860	780		810	1440	1440			810	552
1972	11	1972.11 2-Nov-72	780	800	770		780	1470	1470			780	562
1972	11	1972.11 3-Nov-72	760	770	750		760	1490	1490			760	573
1972	11	1972.11 4-Nov-72	730	755	710		730	1560	1560			730	585
1972	11	1972.11 5-Nov-72	700	715	690		700	1610	1610			700	595
1972	11	1972.11 6-Nov-72	750	790	710		750	1530	1530			750	606
1972	11	1972.11 7-Nov-72	800	810	780		800	1500	1500			800	618
1972	11	1972.11 8-Nov-72	780	810	750		780	1520	1520			780	629
1972	11	1972.11 9-Nov-72	770	815	730		770	1550	1550			770	640
1972	11	1972.11 10-Nov-72	740	745	730		740	1550	1550			740	649
1972	11	1972.11 11-Nov-72	725	745	685		725	1730	1730			725	656
1972	11	1972.11 12-Nov-72	655	705	615		655	1880	1880			655	657
1972	11	1972.11 13-Nov-72	655	690	625		655	1930	1930			655	658
1972	11	1972.11 14-Nov-72	685	700	665		685	2060	2060			685	661
1972	11	1972.11 15-Nov-72	650	670	630		650	2160	2160			650	662
1972	11	1972.11 16-Nov-72	637	660	625		637	2380	2380			637	660
1972	11	1972.11 17-Nov-72	640	660	610		640	2700	2700			640	660
1972	11	1972.11 18-Nov-72	580	610	560		580	3000	3000			580	658
1972	11	1972.11 19-Nov-72	603	625	590		603	3020	3020			603	655
1972	11	1972.11 20-Nov-72	660	705	630		660	2830	2830			660	656
1972	11	1972.11 21-Nov-72	735	760	705		735	2660	2660			735	663
1972	11	1972.11 22-Nov-72	750	760	740		750	2690	2690			750	674
1972	11	1972.11 23-Nov-72	735	740	730		735	2720	2720			735	682
1972	11	1972.11 24-Nov-72	730	740	720		730	2770	2770			730	690
1972	11	1972.11 25-Nov-72	725	735	720		725	2820	2820			725	698
1972	11	1972.11 26-Nov-72	720	730	710		720	2830	2830			720	706
1972	11	1972.11 27-Nov-72	725	745	710		725	2810	2810			725	713
1972	11	1972.11 28-Nov-72	760	780	740		760	2770	2770			760	718
1972	11	1972.11 29-Nov-72	770	780	760		770	2750	2750			770	719
1972	11	1972.11 30-Nov-72	770	780	760		770	2760	2760			770	718
1972	12	1972.12 1-Dec-72	760	770	750		760	2730	2730			760	716
1972	12	1972.12 2-Dec-72	745	760	730		745	2680	2680			745	715
1972	12	1972.12 3-Dec-72	730	735	720		730	2620	2620			730	714
1972	12	1972.12 4-Dec-72	740	750	730		740	2540	2540			740	714
1972	12	1972.12 5-Dec-72	745	750	740		745	2510	2510			745	716
1972	12	1972.12 6-Dec-72	735	745	725		735	2500	2500			735	715
1972	12	1972.12 7-Dec-72	725	735	715		725	2500	2500			725	713
1972	12	1972.12 8-Dec-72	720	735	710		720	2510	2510			720	711
1972	12	1972.12 9-Dec-72	710	720	705		710	2510	2510			710	709
1972	12	1972.12 10-Dec-72	705	710	698		705	2510	2510			705	708
1972	12	1972.12 11-Dec-72	715	720	710		715	2510	2510			715	707
1972	12	1972.12 12-Dec-72	715	720	710		715	2490	2490			715	709
1972	12	1972.12 13-Dec-72	700	720	695		700	2470	2470			700	711
1972	12	1972.12 14-Dec-72	700	720	680		700	2450	2450			700	711
1972	12	1972.12 15-Dec-72	690	715	680		690	2460	2460			690	713
1972	12	1972.12 16-Dec-72	715	730	705		715	2420	2420			715	715
1972	12	1972.12 17-Dec-72	735	755	720		735	2360	2360			735	718
1972	12	1972.12 18-Dec-72	750	790	740		750	2240	2240			750	724
1972	12	1972.12 19-Dec-72	760	790	710		760	2260	2260			760	729
1972	12	1972.12 20-Dec-72	700	715	685		700	2430	2430			700	731
1972	12	1972.12 21-Dec-72	590	685	525		590	2680	2680			590	726
1972	12	1972.12 22-Dec-72	540	560	525		540	2750	2750			540	719
1972	12	1972.12 23-Dec-72	530	550	520		530	2740	2740			530	712
1972	12	1972.12 24-Dec-72	590	610	550		590	2700	2700			590	707
1972	12	1972.12 25-Dec-72	620	630	605		620	2580	2580			620	704
1972	12	1972.12 26-Dec-72	645	660	630		645	2510	2510			645	701
1972	12	1972.12 27-Dec-72	665	680	655		665	2440	2440			665	699
1972	12	1972.12 28-Dec-72	685	700	670		685	2420	2420			685	697
1972	12	1972.12 29-Dec-72	700	710	690		700	2380	2380			700	694
1972	12	1972.12 30-Dec-72	715	720	710		715	2330	2330			715	693
1972	12	1972.12 31-Dec-72	720	730	710		720	2330	2330			720	691
1973	1	1973.01 1-Jan-73	730	740	710		730	2300	2300			730	691
1973	1	1973.01 2-Jan-73	735	740	730		735	2200	2200			735	691
1973	1	1973.01 3-Jan-73	745	750	735		745	2210	2210			745	691
1973	1	1973.01 4-Jan-73	705	740	665		705	2240	2240			705	690
1973	1	1973.01 5-Jan-73	675	700	645		675	2250	2250			675	688
1973	1	1973.01 6-Jan-73	620	660	595		620	2290	2290			620	684
1973	1	1973.01 7-Jan-73	605	635	590		605	2290	2290			605	680
1973	1	1973.01 8-Jan-73	660	685	635		660	2170	2170			660	679
1973	1	1973.01 9-Jan-73	685	700	670		685	2170	2170			685	678

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1973	1	1973.01 10-Jan-73	650	690	610		650	2350	2350			650	676
1973	1	1973.01 11-Jan-73	580	635	420		580	3030	3030			580	671
1973	1	1973.01 12-Jan-73	470	550	420		470	3550	3550			470	664
1973	1	1973.01 13-Jan-73	460	555	345		460	4070	4070			460	656
1973	1	1973.01 14-Jan-73	375	450	340		375	4520	4520			375	645
1973	1	1973.01 15-Jan-73	450	460	440		450	3970	3970			450	636
1973	1	1973.01 16-Jan-73	500	545	445		500	3740	3740			500	629
1973	1	1973.01 17-Jan-73	510	545	440		510	4330	4330			510	621
1973	1	1973.01 18-Jan-73	360	440	310		360	6410	6410			360	607
1973	1	1973.01 19-Jan-73	385	480	265		385	6370	6370			385	597
1973	1	1973.01 20-Jan-73	320	360	275		320	6660	6660			320	588
1973	1	1973.01 21-Jan-73	375	400	350		375	6520	6520			375	582
1973	1	1973.01 22-Jan-73	450	520	380		450	6140	6140			450	580
1973	1	1973.01 23-Jan-73	565	600	520		565	5850	5850			565	579
1973	1	1973.01 24-Jan-73	625	655	595		625	5620	5620			625	579
1973	1	1973.01 25-Jan-73	670	695	655		670	5340	5340			670	580
1973	1	1973.01 26-Jan-73	690	700	680		690	5070	5070			690	581
1973	1	1973.01 27-Jan-73	700	725	690		700	4740	4740			700	581
1973	1	1973.01 28-Jan-73	735	755	725		735	4510	4510			735	582
1973	1	1973.01 29-Jan-73	775	790	753		775	4280	4280			775	584
1973	1	1973.01 30-Jan-73	805	820	790		805	4170	4170			805	587
1973	1	1973.01 31-Jan-73	760	800	720		760	4470	4470			760	588
1973	2	1973.02 1-Feb-73	700	715	685		700	4870	4870			700	587
1973	2	1973.02 2-Feb-73	675	695	655		675	4690	4690			675	585
1973	2	1973.02 3-Feb-73	680	700	655		680	4590	4590			680	584
1973	2	1973.02 4-Feb-73	695	720	630		695	4440	4440			695	584
1973	2	1973.02 5-Feb-73	745	770	720		745	4160	4160			745	589
1973	2	1973.02 6-Feb-73	785	800	760		785	4080	4080			785	595
1973	2	1973.02 7-Feb-73	745	800	680		745	4730	4730			745	597
1973	2	1973.02 8-Feb-73	610	780	540		610	5270	5270			610	595
1973	2	1973.02 9-Feb-73	685	720	640		685	4900	4900			685	596
1973	2	1973.02 10-Feb-73	645	710	610		645	4700	4700			645	598
1973	2	1973.02 11-Feb-73	630	680	550		630	5310	5310			630	604
1973	2	1973.02 12-Feb-73	430	550	300		430	8200	8200			430	603
1973	2	1973.02 13-Feb-73	240	300	205		240	11100	11100			240	598
1973	2	1973.02 14-Feb-73	260	285	220		260	11400	11400			260	592
1973	2	1973.02 15-Feb-73	270	290	250		270	11500	11500			270	584
1973	2	1973.02 16-Feb-73	240	250	230		240	12300	12300			240	575
1973	2	1973.02 17-Feb-73	260	290	245		260	12900	12900			260	572
1973	2	1973.02 18-Feb-73	325	355	290		325	12900	12900			325	570
1973	2	1973.02 19-Feb-73	380	405	355		380	12000	12000			380	572
1973	2	1973.02 20-Feb-73	410	420	400		410	11000	11000			410	573
1973	2	1973.02 21-Feb-73	425	430	420		425	10200	10200			425	572
1973	2	1973.02 22-Feb-73	440	450	430		440	9760	9760			440	568
1973	2	1973.02 23-Feb-73	460	470	450		460	9500	9500			460	562
1973	2	1973.02 24-Feb-73	510	530	470		510	9130	9130			510	557
1973	2	1973.02 25-Feb-73	570	645	530		570	8590	8590			570	553
1973	2	1973.02 26-Feb-73	705	735	640		705	7760	7760			705	553
1973	2	1973.02 27-Feb-73	745	775	730		745	6910	6910			745	554
1973	2	1973.02 28-Feb-73	740	775	710		740	6780	6780			740	552
1973	3	1973.03 1-Mar-73	610	710	580		610	7920	7920			610	546
1973	3	1973.03 2-Mar-73	600	615	585		600	7700	7700			600	541
1973	3	1973.03 3-Mar-73	550	580	515		550	7240	7240			550	536
1973	3	1973.03 4-Mar-73	520	570	495		520	7280	7280			520	530
1973	3	1973.03 5-Mar-73	640	690	570		640	7410	7410			640	529
1973	3	1973.03 6-Mar-73	730	750	690		730	7020	7020			730	530
1973	3	1973.03 7-Mar-73	705	750	670		705	6680	6680			705	529
1973	3	1973.03 8-Mar-73	620	670	590		620	7100	7100			620	523
1973	3	1973.03 9-Mar-73	533	600	445		533	8300	8300			533	516
1973	3	1973.03 10-Mar-73	415	445	390		415	9380	9380			415	510
1973	3	1973.03 11-Mar-73	410	450	395		410	9120	9120			410	501
1973	3	1973.03 12-Mar-73	495	550	440		495	8860	8860			495	496
1973	3	1973.03 13-Mar-73	590	640	530		590	8420	8420			590	494
1973	3	1973.03 14-Mar-73	630	640	600		630	7720	7720			630	501
1973	3	1973.03 15-Mar-73	590	630	560		590	7100	7100			590	513
1973	3	1973.03 16-Mar-73	635	670	580		635	6730	6730			635	525
1973	3	1973.03 17-Mar-73	675	690	640		675	6360	6360			675	539
1973	3	1973.03 18-Mar-73	640	670	610		640	6540	6540			640	552
1973	3	1973.03 19-Mar-73	630	640	620		630	6550	6550			630	564
1973	3	1973.03 20-Mar-73	650	680	620		650	6540	6540			650	575
1973	3	1973.03 21-Mar-73	620	660	550		620	6730	6730			620	583
1973	3	1973.03 22-Mar-73	585	630	545		585	7230	7230			585	589
1973	3	1973.03 23-Mar-73	415	550	340		415	7710	7710			415	589
1973	3	1973.03 24-Mar-73	388	415	355		388	8130	8130			388	587
1973	3	1973.03 25-Mar-73	370	380	350		370	8280	8280			370	584
1973	3	1973.03 26-Mar-73	410	460	360		410	8310	8310			410	581

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1973	3	1973.03 27-Mar-73	475	490	440		475	8250	8250			475	577
1973	3	1973.03 28-Mar-73	455	490	405		455	8200	8200			455	569
1973	3	1973.03 29-Mar-73	415	440	390		415	7890	7890			415	558
1973	3	1973.03 30-Mar-73	400	420	390		400	7710	7710			400	547
1973	3	1973.03 31-Mar-73	435	475	405		435	7530	7530			435	541
1973	4	1973.04 1-Apr-73	450	480	420		450	7280	7280			450	536
1973	4	1973.04 2-Apr-73	440	440	440		440	7090	7090			440	532
1973	4	1973.04 3-Apr-73	420	440	400		420	6920	6920			420	529
1973	4	1973.04 4-Apr-73	385	400	370		385	6870	6870			385	520
1973	4	1973.04 5-Apr-73	405	425	380		405	6790	6790			405	510
1973	4	1973.04 6-Apr-73	460	495	430		460	6470	6470			460	501
1973	4	1973.04 7-Apr-73	480	500	460		480	5960	5960			480	497
1973	4	1973.04 8-Apr-73	470	480	460		470	5620	5620			470	495
1973	4	1973.04 9-Apr-73	460	470	455		460	5380	5380			460	496
1973	4	1973.04 10-Apr-73	500	520	470		500	4990	4990			500	499
1973	4	1973.04 11-Apr-73	505	560	490		505	4590	4590			505	499
1973	4	1973.04 12-Apr-73	500	535	485		500	4240	4240			500	496
1973	4	1973.04 13-Apr-73	570	595	535		570	3930	3930			570	494
1973	4	1973.04 14-Apr-73	615	630	595		615	3790	3790			615	495
1973	4	1973.04 15-Apr-73	590	615	570		590	3950	3950			590	494
1973	4	1973.04 16-Apr-73	615	645	590		615	3960	3960			615	492
1973	4	1973.04 17-Apr-73	635	640	620		635	3800	3800			635	492
1973	4	1973.04 18-Apr-73	645	680	630		645	3540	3540			645	492
1973	4	1973.04 19-Apr-73	700	720	680		700	3100	3100			700	494
1973	4	1973.04 20-Apr-73	720	790	700		720	2900	2900			720	497
1973	4	1973.04 21-Apr-73	735	755	705		735	2810	2810			735	502
1973	4	1973.04 22-Apr-73	791					2620	2620			791	515
1973	4	1973.04 23-Apr-73	791					2540	2540			791	528
1973	4	1973.04 24-Apr-73	830	880	790		830	2280	2280			830	543
1973	4	1973.04 25-Apr-73	880	905	860		880	2130	2130			880	559
1973	4	1973.04 26-Apr-73	850	905	750		850	2040	2040			850	572
1973	4	1973.04 27-Apr-73	670	750	610		670	2380	2380			670	579
1973	4	1973.04 28-Apr-73	620	630	610		620	2620	2620			620	586
1973	4	1973.04 29-Apr-73	615	625	600		615	2660	2660			615	593
1973	4	1973.04 30-Apr-73	600	640	565		600	2850	2850			600	598
1973	5	1973.05 1-May-73	550	570	540		550	2860	2860			550	602
1973	5	1973.05 2-May-73	560	590	540		560	2820	2820			560	606
1973	5	1973.05 3-May-73	570	617	550		570	2810	2810			570	611
1973	5	1973.05 4-May-73	645	660	610		645	2620	2620			645	619
1973	5	1973.05 5-May-73	630	675	610		630	2540	2540			630	627
1973	5	1973.05 6-May-73	710	770	660		710	2180	2180			710	635
1973	5	1973.05 7-May-73	775	795	750		775	2040	2040			775	645
1973	5	1973.05 8-May-73	760	790	730		760	1990	1990			760	655
1973	5	1973.05 9-May-73	770	795	740		770	1870	1870			770	665
1973	5	1973.05 10-May-73	780	810	765		780	1840	1840			780	674
1973	5	1973.05 11-May-73	815	830	790		815	1780	1780			815	685
1973	5	1973.05 12-May-73	820	840	810		820	1730	1730			820	695
1973	5	1973.05 13-May-73	835	845	800		835	1680	1680			835	704
1973	5	1973.05 14-May-73	825	865	790		825	1700	1700			825	711
1973	5	1973.05 15-May-73	880	895	865		880	1600	1600			880	721
1973	5	1973.05 16-May-73	880	915	775		880	1660	1660			880	730
1973	5	1973.05 17-May-73	680	775	495		680	2130	2130			680	731
1973	5	1973.05 18-May-73	355	495	310		355	3540	3540			355	721
1973	5	1973.05 19-May-73	320	340	300		320	4100	4100			320	709
1973	5	1973.05 20-May-73	350	390	325		350	4190	4190			350	696
1973	5	1973.05 21-May-73	350	370	335		350	4210	4210			350	684
1973	5	1973.05 22-May-73	340	360	325		340	4440	4440			340	669
1973	5	1973.05 23-May-73	330	385	305		330	4440	4440			330	653
1973	5	1973.05 24-May-73	405	430	375		405	3560	3560			405	639
1973	5	1973.05 25-May-73	455	500	425		455	2950	2950			455	625
1973	5	1973.05 26-May-73	425	500	360		425	3020	3020			425	611
1973	5	1973.05 27-May-73	320	360	270		320	3630	3630			320	599
1973	5	1973.05 28-May-73	265	280	255		265	4320	4320			265	587
1973	5	1973.05 29-May-73	295	320	270		295	4360	4360			295	577
1973	5	1973.05 30-May-73	290	300	275		290	4070	4070			290	566
1973	5	1973.05 31-May-73	260	275	240		260	4360	4360			260	557
1973	6	1973.06 1-Jun-73	240	240	240		240	4670	4670			240	546
1973	6	1973.06 2-Jun-73	240	250	230		240	4750	4750			240	535
1973	6	1973.06 3-Jun-73	290	330	250		290	4360	4360			290	523
1973	6	1973.06 4-Jun-73	315	320	300		315	3920	3920			315	513
1973	6	1973.06 5-Jun-73	295	310	285		295	3820	3820			295	499
1973	6	1973.06 6-Jun-73	310	325	290		310	3500	3500			310	483
1973	6	1973.06 7-Jun-73	320	330	305		320	3460	3460			320	469
1973	6	1973.06 8-Jun-73	310	320	290		310	3420	3420			310	453
1973	6	1973.06 9-Jun-73	305	320	285		305	3350	3350			305	437
1973	6	1973.06 10-Jun-73	320	350	290		320	3340	3340			320	421

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1973	6	1973.06 11-Jun-73	310	330	290		310	3420	3420			310	404
1973	6	1973.06 12-Jun-73	300	320	280		300	3490	3490			300	386
1973	6	1973.06 13-Jun-73	350	420	310		350	3190	3190			350	370
1973	6	1973.06 14-Jun-73	485	550	420		485	2630	2630			485	357
1973	6	1973.06 15-Jun-73	545	570	515		545	2240	2240			545	346
1973	6	1973.06 16-Jun-73	570	585	550		570	2090	2090			570	342
1973	6	1973.06 17-Jun-73	580	610	555		580	2000	2000			580	350
1973	6	1973.06 18-Jun-73	630	690	600		630	1910	1910			630	360
1973	6	1973.06 19-Jun-73	710	735	680		710	1660	1660			710	372
1973	6	1973.06 20-Jun-73	750	780	725		750	1520	1520			750	385
1973	6	1973.06 21-Jun-73	670	790	400		670	1470	1470			670	396
1973	6	1973.06 22-Jun-73	765	770	715		765	1470	1470			765	411
1973	6	1973.06 23-Jun-73	710	720	700		710	1560	1560			710	421
1973	6	1973.06 24-Jun-73	700	720	670		700	1560	1560			700	429
1973	6	1973.06 25-Jun-73	720	755	685		720	1520	1520			720	439
1973	6	1973.06 26-Jun-73	750	785	735		750	1410	1410			750	453
1973	6	1973.06 27-Jun-73	805	840	785		805	1340	1340			805	471
1973	6	1973.06 28-Jun-73	755	790	730		755	1440	1440			755	487
1973	6	1973.06 29-Jun-73	710	730	685		710	1430	1430			710	501
1973	6	1973.06 30-Jun-73	710	725	700		710	1340	1340			710	516
1973	7	1973.07 1-Jul-73	760	790	715		760	1250	1250			760	533
1973	7	1973.07 2-Jul-73	770	820	740		770	1270	1270			770	551
1973	7	1973.07 3-Jul-73	845	870	820		845	1150	1150			845	569
1973	7	1973.07 4-Jul-73	840	865	800		840	1190	1190			840	587
1973	7	1973.07 5-Jul-73	830	885	780		830	1160	1160			830	605
1973	7	1973.07 6-Jul-73	910	940	880		910	1070	1070			910	625
1973	7	1973.07 7-Jul-73	905	925	890		905	1010	1010			905	644
1973	7	1973.07 8-Jul-73	910	940	875		910	992	992			910	664
1973	7	1973.07 9-Jul-73	910	955	870		910	1050	1050			910	684
1973	7	1973.07 10-Jul-73	955	995	915		955	1050	1050			955	705
1973	7	1973.07 11-Jul-73	940	965	910		940	986	986			940	726
1973	7	1973.07 12-Jul-73	900	930	875		900	997	997			900	746
1973	7	1973.07 13-Jul-73	915	940	900		915	992	992			915	765
1973	7	1973.07 14-Jul-73	960	995	930		960	955	955			960	781
1973	7	1973.07 15-Jul-73	910	955	875		910	1050	1050			910	793
1973	7	1973.07 16-Jul-73	910	955	880		910	1120	1120			910	805
1973	7	1973.07 17-Jul-73	935	960	905		935	1140	1140			935	816
1973	7	1973.07 18-Jul-73	925	950	900		925	1090	1090			925	826
1973	7	1973.07 19-Jul-73	965	980	930		965	997	997			965	835
1973	7	1973.07 20-Jul-73	940	985	900		940	1050	1050			940	841
1973	7	1973.07 21-Jul-73	860	900	830		860	1110	1110			860	847
1973	7	1973.07 22-Jul-73	835	875	810		835	1140	1140			835	850
1973	7	1973.07 23-Jul-73	830	845	805		830	1230	1230			830	854
1973	7	1973.07 24-Jul-73	835	860	810		835	1170	1170			835	858
1973	7	1973.07 25-Jul-73	835	870	800		835	1120	1120			835	862
1973	7	1973.07 26-Jul-73	890	925	855		890	1020	1020			890	867
1973	7	1973.07 27-Jul-73	945	980	905		945	960	960			945	871
1973	7	1973.07 28-Jul-73	930	985	865		930	1000	1000			930	877
1973	7	1973.07 29-Jul-73	865	890	830		865	1070	1070			865	882
1973	7	1973.07 30-Jul-73	865	900	830		865	1080	1080			865	888
1973	7	1973.07 31-Jul-73	860	885	830		860	1080	1080			860	891
1973	8	1973.08 1-Aug-73	900	920	860		900	1050	1050			900	895
1973	8	1973.08 2-Aug-73	860	920	845		860	1050	1050			860	896
1973	8	1973.08 3-Aug-73	820	860	800		820	1020	1020			820	895
1973	8	1973.08 4-Aug-73	815	840	800		815	1040	1040			815	895
1973	8	1973.08 5-Aug-73	815	845	770		815	1050	1050			815	891
1973	8	1973.08 6-Aug-73	805	870	765		805	1110	1110			805	888
1973	8	1973.08 7-Aug-73	865	895	855		865	1020	1020			865	887
1973	8	1973.08 8-Aug-73	890	900	860		890	960	960			890	886
1973	8	1973.08 9-Aug-73	905	955	875		905	975	975			905	884
1973	8	1973.08 10-Aug-73	935	965	900		935	960	960			935	884
1973	8	1973.08 11-Aug-73	890	915	860		890	1050	1050			890	884
1973	8	1973.08 12-Aug-73	840	870	810		840	1140	1140			840	881
1973	8	1973.08 13-Aug-73	855	860	840		855	1100	1100			855	878
1973	8	1973.08 14-Aug-73	855	870	840		855	1070	1070			855	876
1973	8	1973.08 15-Aug-73	850	870	830		850	1050	1050			850	874
1973	8	1973.08 16-Aug-73	840	855	830		840	1090	1090			840	871
1973	8	1973.08 17-Aug-73	830	855	805		830	1100	1100			830	868
1973	8	1973.08 18-Aug-73	790	840	735		790	1080	1080			790	862
1973	8	1973.08 19-Aug-73	780	830	740		780	1050	1050			780	856
1973	8	1973.08 20-Aug-73	850	875	825		850	1100	1100			850	856
1973	8	1973.08 21-Aug-73	835	850	820		835	1050	1050			835	856
1973	8	1973.08 22-Aug-73	870	925	840		870	955	955			870	857
1973	8	1973.08 23-Aug-73	900	935	865		900	950	950			900	860
1973	8	1973.08 24-Aug-73	840	890	810		840	1070	1070			840	860
1973	8	1973.08 25-Aug-73	844					1100	1100			844	858

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1973	8	1973.08 26-Aug-73	844					1140	1140			844	855
1973	8	1973.08 27-Aug-73	844					1190	1190			844	852
1973	8	1973.08 28-Aug-73	810	850	785		810	1230	1230			810	850
1973	8	1973.08 29-Aug-73	825	850	795		825	1150	1150			825	849
1973	8	1973.08 30-Aug-73	593					1100	1100			593	840
1973	8	1973.08 31-Aug-73	593					1080	1080			593	830
1973	9	1973.09 1-Sep-73	343	911	269		343	1190	1190			343	812
1973	9	1973.09 2-Sep-73	395	623	270		395	1270	1270			395	798
1973	9	1973.09 3-Sep-73	718	888	259		718	1380	1380			718	795
1973	9	1973.09 4-Sep-73	844	921	489		844	1300	1300			844	796
1973	9	1973.09 5-Sep-73	622	906	302		622	1210	1210			622	790
1973	9	1973.09 6-Sep-73	489	797	311		489	1170	1170			489	777
1973	9	1973.09 7-Sep-73	676	797	302		676	1230	1230			676	770
1973	9	1973.09 8-Sep-73	593	886	310		593	1280	1280			593	760
1973	9	1973.09 9-Sep-73	834	880	275		834	1380	1380			834	756
1973	9	1973.09 10-Sep-73	620	900	249		620	1400	1400			620	747
1973	9	1973.09 11-Sep-73	609	888	202		609	1370	1370			609	740
1973	9	1973.09 12-Sep-73	554	783	209		554	1380	1380			554	730
1973	9	1973.09 13-Sep-73	824	858	794		824	1310	1310			824	729
1973	9	1973.09 14-Sep-73	821	840	785		821	1350	1350			821	728
1973	9	1973.09 15-Sep-73	836	874	800		836	1390	1390			836	728
1973	9	1973.09 16-Sep-73	702	821	491		702	1500	1500			702	723
1973	9	1973.09 17-Sep-73	760				760	1540	1540			760	722
1973	9	1973.09 18-Sep-73	774	802	642		774	1510	1510			774	722
1973	9	1973.09 19-Sep-73	797	825	681		797	1470	1470			797	720
1973	9	1973.09 20-Sep-73	786	825	735		786	1550	1550			786	719
1973	9	1973.09 21-Sep-73	740	765	723		740	1590	1590			740	714
1973	9	1973.09 22-Sep-73	773	788	756		773	1490	1490			773	710
1973	9	1973.09 23-Sep-73	761	794	711		761	1580	1580			761	707
1973	9	1973.09 24-Sep-73	757	788	737		757	1720	1720			757	705
1973	9	1973.09 25-Sep-73	747	779	729		747	1720	1720			747	701
1973	9	1973.09 26-Sep-73	712		702		712	1790	1790			712	697
1973	9	1973.09 27-Sep-73	703					1770	1770			703	693
1973	9	1973.09 28-Sep-73	650	759	452		650	1740	1740			650	688
1973	9	1973.09 29-Sep-73	758					1780	1780			758	693
1973	9	1973.09 30-Sep-73	758					1760	1760			758	699
1973	10	1973.10 1-Oct-73	758					1760	1760			758	712
1973	10	1973.10 2-Oct-73	825	844	810		825	1660	1660			825	727
1973	10	1973.10 3-Oct-73	798	833	729		798	1800	1800			798	729
1973	10	1973.10 4-Oct-73	653	731	312		653	2060	2060			653	723
1973	10	1973.10 5-Oct-73	630					2910	2910			630	723
1973	10	1973.10 6-Oct-73	501	562	403		501	2900	2900			501	724
1973	10	1973.10 7-Oct-73	567	600	463		567	2450	2450			567	720
1973	10	1973.10 8-Oct-73	533					2900	2900			533	718
1973	10	1973.10 9-Oct-73	533					3000	3000			533	708
1973	10	1973.10 10-Oct-73	531	549	488		531	2820	2820			531	705
1973	10	1973.10 11-Oct-73	501					2830	2830			501	701
1973	10	1973.10 12-Oct-73	504	521	487		504	2770	2770			504	700
1973	10	1973.10 13-Oct-73	468	507	386		468	2650	2650			468	688
1973	10	1973.10 14-Oct-73	462	521	400		462	2520	2520			462	676
1973	10	1973.10 15-Oct-73	518	576	304		518	2430	2430			518	665
1973	10	1973.10 16-Oct-73	616	663	576		616	2230	2230			616	662
1973	10	1973.10 17-Oct-73	600					2190	2190			600	657
1973	10	1973.10 18-Oct-73	600					2520	2520			600	651
1973	10	1973.10 19-Oct-73	600					2740	2740			600	645
1973	10	1973.10 20-Oct-73	600					2900	2900			600	639
1973	10	1973.10 21-Oct-73	600					2950	2950			600	634
1973	10	1973.10 22-Oct-73	600					2620	2620			600	628
1973	10	1973.10 23-Oct-73	600					2340	2340			600	623
1973	10	1973.10 24-Oct-73	600					2180	2180			600	618
1973	10	1973.10 25-Oct-73	600					2450	2450			600	613
1973	10	1973.10 26-Oct-73	600					2700	2700			600	609
1973	10	1973.10 27-Oct-73	600					2910	2910			600	605
1973	10	1973.10 28-Oct-73	600					2950	2950			600	604
1973	10	1973.10 29-Oct-73	600					2610	2610			600	599
1973	10	1973.10 30-Oct-73	581				581	2370	2370			581	593
1973	10	1973.10 31-Oct-73	465	531	446		465	2820	2820			465	583
1973	11	1973.11 1-Nov-73	457	476	435		457	2960	2960			457	571
1973	11	1973.11 2-Nov-73	527	661	496			2910	2910			527	562
1973	11	1973.11 3-Nov-73	576	611	558		576	2580	2580			576	559
1973	11	1973.11 4-Nov-73	608	640	592		608	2400	2400			608	558
1973	11	1973.11 5-Nov-73	646	665	640			2240	2240			646	563
1973	11	1973.11 6-Nov-73	678	683	665		678	2110	2110			678	567
1973	11	1973.11 7-Nov-73	698	750	669		698	2060	2060			698	572
1973	11	1973.11 8-Nov-73	815	858	753		815	1810	1810			815	582
1973	11	1973.11 9-Nov-73	884	903	863		884	1700	1700			884	593

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1973	11	1973.11	10-Nov-73	841	906	735		841	1770	1770		841	605
1973	11	1973.11	11-Nov-73	636	717	627		636	1860	1860		636	609
1973	11	1973.11	12-Nov-73	636	654	627		636	1870	1870		636	615
1973	11	1973.11	13-Nov-73	642	654	636		642	1870	1870		642	621
1973	11	1973.11	14-Nov-73	657					1890	1890		657	625
1973	11	1973.11	15-Nov-73	666	677	660		666	1910	1910		666	627
1973	11	1973.11	16-Nov-73	685	708	671		685	1920	1920		685	630
1973	11	1973.11	17-Nov-73	699	713	694		699	1930	1930		699	633
1973	11	1973.11	18-Nov-73	699	713	650		699	1960	1960		699	637
1973	11	1973.11	19-Nov-73	626					1980	1980		626	637
1973	11	1973.11	20-Nov-73	596	660	567		596	2110	2110		596	637
1973	11	1973.11	21-Nov-73	510	582	428		510	2390	2390		510	634
1973	11	1973.11	22-Nov-73	408	423	397		408	2710	2710		408	628
1973	11	1973.11	23-Nov-73	420	442	397		420	2770	2770		420	622
1973	11	1973.11	24-Nov-73	475	506	441		475	2590	2590		475	618
1973	11	1973.11	25-Nov-73	439					2440	2440		439	612
1973	11	1973.11	26-Nov-73	439					2500	2500		439	607
1973	11	1973.11	27-Nov-73	439					2610	2610		439	602
1973	11	1973.11	28-Nov-73	449	495	398		449	2780	2780		449	597
1973	11	1973.11	29-Nov-73	410	482	212		410	2900	2900		410	591
1973	11	1973.11	30-Nov-73	446	520	137		446	2900	2900		446	590
1973	12	1973.12	1-Dec-73	522	546	485		522	2900	2900		522	592
1973	12	1973.12	2-Dec-73	581	634	546		581	2930	2930		581	594
1973	12	1973.12	3-Dec-73	559	640	472		559	2960	2960		559	594
1973	12	1973.12	4-Dec-73	544	563	495		544	2960	2960		544	592
1973	12	1973.12	5-Dec-73	535	555	484		535	2960	2960		535	588
1973	12	1973.12	6-Dec-73	442	523	334		442	2990	2990		442	580
1973	12	1973.12	7-Dec-73	498	527	460		498	2990	2990		498	573
1973	12	1973.12	8-Dec-73	495					3000	3000		495	563
1973	12	1973.12	9-Dec-73	492	569	341		492	2990	2990		492	550
1973	12	1973.12	10-Dec-73	556	563	540		556	2910	2910		556	540
1973	12	1973.12	11-Dec-73	566	603	502		566	2870	2870		566	538
1973	12	1973.12	12-Dec-73	567	651	429		567	2860	2860		567	535
1973	12	1973.12	13-Dec-73	537	615	500		537	2910	2910		537	532
1973	12	1973.12	14-Dec-73	586	630	549		586	2920	2920		586	530
1973	12	1973.12	15-Dec-73	577	617	313		577	2860	2860		577	527
1973	12	1973.12	16-Dec-73	500					3200	3200		500	520
1973	12	1973.12	17-Dec-73	500					3460	3460		500	514
1973	12	1973.12	18-Dec-73	430	450	327		430	3460	3460		430	505
1973	12	1973.12	19-Dec-73	500					3500	3500		500	501
1973	12	1973.12	20-Dec-73	500					3520	3520		500	497
1973	12	1973.12	21-Dec-73	470		433		470	3550	3550		470	496
1973	12	1973.12	22-Dec-73	438	463	418		438	3780	3780		438	497
1973	12	1973.12	23-Dec-73	384	441	279		384	3910	3910		384	496
1973	12	1973.12	24-Dec-73	410	466	343		410	3910	3910		410	494
1973	12	1973.12	25-Dec-73	375	418	379		375	3840	3840		375	492
1973	12	1973.12	26-Dec-73	405	433	298		405	3770	3770		405	490
1973	12	1973.12	27-Dec-73	448	457	437		448	3870	3870		448	491
1973	12	1973.12	28-Dec-73	449	459	434		449	4730	4730		449	491
1973	12	1973.12	29-Dec-73	406					6420	6420		406	491
1973	12	1973.12	30-Dec-73	406					6320	6320		406	489
1973	12	1973.12	31-Dec-73	406					5930	5930		406	485
1974	1	1974.01	1-Jan-74	406					5830	5830		406	480
1974	1	1974.01	2-Jan-74	406					5760	5760		406	474
1974	1	1974.01	3-Jan-74	393	402	377		393	5770	5770		393	469
1974	1	1974.01	4-Jan-74	334	375	305		334	6360	6360		334	463
1974	1	1974.01	5-Jan-74	318	332	292		318	6800	6800		318	459
1974	1	1974.01	6-Jan-74	318	335	308		318	6890	6890		318	453
1974	1	1974.01	7-Jan-74	313	330	294		313	6940	6940		313	447
1974	1	1974.01	8-Jan-74	313	323	294		313	7070	7070		313	441
1974	1	1974.01	9-Jan-74	264	274	245		264	7830	7830		264	431
1974	1	1974.01	10-Jan-74	275					8110	8110		275	421
1974	1	1974.01	11-Jan-74	285	307	272		285	8200	8200		285	412
1974	1	1974.01	12-Jan-74	328	339	320		328	8290	8290		328	405
1974	1	1974.01	13-Jan-74	328	347	313		328	7980	7980		328	396
1974	1	1974.01	14-Jan-74	416	427	401		416	7180	7180		416	391
1974	1	1974.01	15-Jan-74	429	438	423		429	6450	6450		429	388
1974	1	1974.01	16-Jan-74	392	418	373		392	6740	6740		392	385
1974	1	1974.01	17-Jan-74	373	384	361		373	6770	6770		373	383
1974	1	1974.01	18-Jan-74	360	390	285		360	6840	6840		360	378
1974	1	1974.01	19-Jan-74	339	497	277		339	7710	7710		339	373
1974	1	1974.01	20-Jan-74	363	469	339		363	8290	8290		363	369
1974	1	1974.01	21-Jan-74	349	369	315		349	8180	8180		349	366
1974	1	1974.01	22-Jan-74	331	345	318		331	8050	8050		331	365
1974	1	1974.01	23-Jan-74	334	352	323		334	8820	8820		334	362
1974	1	1974.01	24-Jan-74	342	353	330		342	8990	8990		342	361

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1974	1	1974.01 25-Jan-74	324	335	314		324	9380	9380			324	358
1974	1	1974.01 26-Jan-74	304	322	276		304	9650	9650			304	353
1974	1	1974.01 27-Jan-74	307	365	272		307	9700	9700			307	349
1974	1	1974.01 28-Jan-74	326	374	236		326	9330	9330			326	346
1974	1	1974.01 29-Jan-74	353	362	343		353	8830	8830			353	344
1974	1	1974.01 30-Jan-74	326	349	318		326	9340	9340			326	342
1974	1	1974.01 31-Jan-74	333					9140	9140			333	339
1974	2	1974.02 1-Feb-74	333	340	327		333	8600	8600			333	337
1974	2	1974.02 2-Feb-74	322	328	315		322	8360	8360			322	334
1974	2	1974.02 3-Feb-74	304	394	331		304	7880	7880			304	333
1974	2	1974.02 4-Feb-74	392	399	384		392	7320	7320			392	336
1974	2	1974.02 5-Feb-74	413	464	404		413	6750	6750			413	339
1974	2	1974.02 6-Feb-74	435	457	415		435	6670	6670			435	343
1974	2	1974.02 7-Feb-74	457	482	405		457	6350	6350			457	348
1974	2	1974.02 8-Feb-74	465					5910	5910			465	355
1974	2	1974.02 9-Feb-74	476	509	452		476	5550	5550			476	361
1974	2	1974.02 10-Feb-74	481	509	455		481	5380	5380			481	368
1974	2	1974.02 11-Feb-74	495	520	388		495	4930	4930			495	373
1974	2	1974.02 12-Feb-74	512	555	488		512	4490	4490			512	380
1974	2	1974.02 13-Feb-74	476	510	451		476	4670	4670			476	382
1974	2	1974.02 14-Feb-74	428	452	401		428	4970	4970			428	382
1974	2	1974.02 15-Feb-74	398	418	372		398	5070	5070			398	382
1974	2	1974.02 16-Feb-74	422	450	399		422	4950	4950			422	383
1974	2	1974.02 17-Feb-74	457	492	429		457	4530	4530			457	387
1974	2	1974.02 18-Feb-74	501	525	482		501	4140	4140			501	392
1974	2	1974.02 19-Feb-74	556	586	531		556	3670	3670			556	398
1974	2	1974.02 20-Feb-74	585	594	576		585	3500	3500			585	406
1974	2	1974.02 21-Feb-74	559	588	527		559	3540	3540			559	414
1974	2	1974.02 22-Feb-74	481	521	461		481	3670	3670			481	419
1974	2	1974.02 23-Feb-74	460	467	450		460	3760	3760			460	423
1974	2	1974.02 24-Feb-74	462	483	450		462	3730	3730			462	427
1974	2	1974.02 25-Feb-74	482	491	477		482	3650	3650			482	433
1974	2	1974.02 26-Feb-74	509	521	491		509	3500	3500			509	440
1974	2	1974.02 27-Feb-74	506	515	497		506	3550	3550			506	446
1974	2	1974.02 28-Feb-74	504	515	497		504	3530	3530			504	451
1974	3	1974.03 1-Mar-74	434					3420	3420			434	455
1974	3	1974.03 2-Mar-74	434					3460	3460			434	458
1974	3	1974.03 3-Mar-74	434					4510	4510			434	461
1974	3	1974.03 4-Mar-74	434					5070	5070			434	465
1974	3	1974.03 5-Mar-74	434					4900	4900			434	469
1974	3	1974.03 6-Mar-74	435	524	347		435	4920	4920			435	471
1974	3	1974.03 7-Mar-74	293	350	268		293	5520	5520			293	467
1974	3	1974.03 8-Mar-74	303	332	294		303	6020	6020			303	462
1974	3	1974.03 9-Mar-74	307	317	298		307	6240	6240			307	457
1974	3	1974.03 10-Mar-74	331	346	311		331	6190	6190			331	453
1974	3	1974.03 11-Mar-74	347	371	333		347	5800	5800			347	449
1974	3	1974.03 12-Mar-74	374	382	372		374	5490	5490			374	445
1974	3	1974.03 13-Mar-74	378	390	367		378	5360	5360			378	441
1974	3	1974.03 14-Mar-74	398	408	389		398	5180	5180			398	437
1974	3	1974.03 15-Mar-74	366	407	333		366	4860	4860			366	434
1974	3	1974.03 16-Mar-74	382	396	362		382	4380	4380			382	432
1974	3	1974.03 17-Mar-74	406	427	387		406	4200	4200			406	432
1974	3	1974.03 18-Mar-74	448	483	416		448	4090	4090			448	433
1974	3	1974.03 19-Mar-74	501	505	482		501	3990	3990			501	435
1974	3	1974.03 20-Mar-74	458	485	437		458	4060	4060			458	433
1974	3	1974.03 21-Mar-74	481	487	474		481	4000	4000			481	431
1974	3	1974.03 22-Mar-74	474	485	464		474	3900	3900			474	427
1974	3	1974.03 23-Mar-74	483	493	467		483	3850	3850			483	425
1974	3	1974.03 24-Mar-74	487	520	470		487	3780	3780			487	425
1974	3	1974.03 25-Mar-74	484	491	476		484	3850	3850			484	426
1974	3	1974.03 26-Mar-74	478	500	423		478	3920	3920			478	426
1974	3	1974.03 27-Mar-74	393	418	359		393	4870	4870			393	423
1974	3	1974.03 28-Mar-74	424	438	396		424	5490	5490			424	420
1974	3	1974.03 29-Mar-74	401	421	393		401	5940	5940			401	417
1974	3	1974.03 30-Mar-74	411	429	400		411	5910	5910			411	414
1974	3	1974.03 31-Mar-74	375	450	343		375	6160	6160			375	412
1974	4	1974.04 1-Apr-74	361	368	344		361	6470	6470			361	409
1974	4	1974.04 2-Apr-74	341	355	326		341	6880	6880			341	406
1974	4	1974.04 3-Apr-74	337	341	330		337	7820	7820			337	403
1974	4	1974.04 4-Apr-74	370					8100	8100			370	401
1974	4	1974.04 5-Apr-74	370					7960	7960			370	399
1974	4	1974.04 6-Apr-74	370					8350	8350			370	401
1974	4	1974.04 7-Apr-74	370					8530	8530			370	404
1974	4	1974.04 8-Apr-74	370					8300	8300			370	406
1974	4	1974.04 9-Apr-74	370					7600	7600			370	407
1974	4	1974.04 10-Apr-74	393	423	360		393	7120	7120			393	408

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1974	4	1974.04 11-Apr-74	409	434	313		409	6650	6650			409	410
1974	4	1974.04 12-Apr-74	400	423	328		400	6400	6400			400	410
1974	4	1974.04 13-Apr-74	396					6380	6380			396	410
1974	4	1974.04 14-Apr-74	396					6430	6430			396	411
1974	4	1974.04 15-Apr-74	381	389	374		381	6250	6250			381	411
1974	4	1974.04 16-Apr-74	395	409	376		395	5880	5880			395	411
1974	4	1974.04 17-Apr-74	418	438	398		418	5530	5530			418	410
1974	4	1974.04 18-Apr-74	436	452	418		436	5300	5300			436	408
1974	4	1974.04 19-Apr-74	416	448	394		416	5290	5290			416	406
1974	4	1974.04 20-Apr-74	426	445	404		426	5290	5290			426	405
1974	4	1974.04 21-Apr-74	454	517	406		454	5110	5110			454	404
1974	4	1974.04 22-Apr-74	493	515	473		493	4580	4580			493	404
1974	4	1974.04 23-Apr-74	528	580	491		528	4230	4230			528	406
1974	4	1974.04 24-Apr-74	609	651	570		609	3570	3570			609	410
1974	4	1974.04 25-Apr-74	646	677	623		646	3340	3340			646	415
1974	4	1974.04 26-Apr-74	624	636	609		624	3180	3180			624	423
1974	4	1974.04 27-Apr-74	632	651	592		632	3100	3100			632	430
1974	4	1974.04 28-Apr-74	514	592	483		514	3650	3650			514	434
1974	4	1974.04 29-Apr-74	479	502	443		479	4040	4040			479	436
1974	4	1974.04 30-Apr-74	445	459	431		445	4170	4170			445	438
1974	5	1974.05 1-May-74	447	470	427		447	4210	4210			447	441
1974	5	1974.05 2-May-74	406	423	391		406	3910	3910			406	443
1974	5	1974.05 3-May-74	407	424	392		407	3890	3890			407	446
1974	5	1974.05 4-May-74	427					3970	3970			427	448
1974	5	1974.05 5-May-74	427					4080	4080			427	449
1974	5	1974.05 6-May-74	427					4180	4180			427	451
1974	5	1974.05 7-May-74	427					3950	3950			427	453
1974	5	1974.05 8-May-74	459	515	431		459	3620	3620			459	456
1974	5	1974.05 9-May-74	438	462	401		438	4080	4080			438	459
1974	5	1974.05 10-May-74	378	410	345		378	4510	4510			378	458
1974	5	1974.05 11-May-74	341	356	333		341	4960	4960			341	456
1974	5	1974.05 12-May-74	354	375	330		354	5170	5170			354	454
1974	5	1974.05 13-May-74	383	402	369		383	5070	5070			383	454
1974	5	1974.05 14-May-74	374	395	335		374	4900	4900			374	453
1974	5	1974.05 15-May-74	337	351	322		337	5040	5040			337	452
1974	5	1974.05 16-May-74	314	327	295		314	5390	5390			314	449
1974	5	1974.05 17-May-74	314	324	304		314	5440	5440			314	445
1974	5	1974.05 18-May-74	320	328	311		320	5350	5350			320	442
1974	5	1974.05 19-May-74	349	376	318		349	5240	5240			349	439
1974	5	1974.05 20-May-74	386	401	373		386	5080	5080			386	438
1974	5	1974.05 21-May-74	378	396	368		378	4620	4620			378	435
1974	5	1974.05 22-May-74	468	525	402		468	3760	3760			468	435
1974	5	1974.05 23-May-74	568	603	521		568	3020	3020			568	436
1974	5	1974.05 24-May-74	610	634	592		610	2700	2700			610	436
1974	5	1974.05 25-May-74	573	663	461		573	2560	2560			573	434
1974	5	1974.05 26-May-74	676	719	480		676	2460	2460			676	435
1974	5	1974.05 27-May-74	657	723	486		657	2390	2390			657	436
1974	5	1974.05 28-May-74	701	740	623		701	2260	2260			701	442
1974	5	1974.05 29-May-74	494	611	307		494	3120	3120			494	443
1974	5	1974.05 30-May-74	360	389	316		360	3830	3830			360	440
1974	5	1974.05 31-May-74	270	311	288		270	4540	4540			270	434
1974	6	1974.06 1-Jun-74	308	329	287		308	4920	4920			308	431
1974	6	1974.06 2-Jun-74	277	303	247		277	5130	5130			277	427
1974	6	1974.06 3-Jun-74	283	304	263		283	5370	5370			283	422
1974	6	1974.06 4-Jun-74	274	257	193		274	5340	5340			274	417
1974	6	1974.06 5-Jun-74	295	305	282		295	5100	5100			295	412
1974	6	1974.06 6-Jun-74	301	308	291		301	4930	4930			301	408
1974	6	1974.06 7-Jun-74	314	327	294		314	4930	4930			314	403
1974	6	1974.06 8-Jun-74	320	331	305		320	4910	4910			320	399
1974	6	1974.06 9-Jun-74	290	307	276		290	5230	5230			290	396
1974	6	1974.06 10-Jun-74	269	301	212		269	5670	5670			269	394
1974	6	1974.06 11-Jun-74	207	218	200		207	5730	5730			207	389
1974	6	1974.06 12-Jun-74	249	285	221		249	4880	4880			249	385
1974	6	1974.06 13-Jun-74	348	379	287		348	3970	3970			348	384
1974	6	1974.06 14-Jun-74	364	396	347		364	3750	3750			364	385
1974	6	1974.06 15-Jun-74	440	462	400		440	3310	3310			440	389
1974	6	1974.06 16-Jun-74	369	436	307		369	3840	3840			369	391
1974	6	1974.06 17-Jun-74	298	317	280		298	4400	4400			298	390
1974	6	1974.06 18-Jun-74	294	335	280		294	4370	4370			294	388
1974	6	1974.06 19-Jun-74	389	412	367		389	3890	3890			389	388
1974	6	1974.06 20-Jun-74	445	470	422		445	3360	3360			445	390
1974	6	1974.06 21-Jun-74	461	501	442		461	2800	2800			461	390
1974	6	1974.06 22-Jun-74	623	669	519		623	2500	2500			623	392
1974	6	1974.06 23-Jun-74	595					2360	2360			595	391
1974	6	1974.06 24-Jun-74	708	719	699		708	2400	2400			708	396
1974	6	1974.06 25-Jun-74	595					2330	2330			595	393

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1974	6	1974.06	26-Jun-74	595				2350	2350			595	391
1974	6	1974.06	27-Jun-74	595				2220	2220			595	388
1974	6	1974.06	28-Jun-74	558	785	458	558	2070	2070			558	390
1974	6	1974.06	29-Jun-74	624	827	460	624	1900	1900			624	399
1974	6	1974.06	30-Jun-74	910	936	880	910	1840	1840			910	420
1974	7	1974.07	1-Jul-74	747	897	471	747	1840	1840			747	435
1974	7	1974.07	2-Jul-74	869	911	821	869	1700	1700			869	454
1974	7	1974.07	3-Jul-74	918	936	874	918	1600	1600			918	475
1974	7	1974.07	4-Jul-74	772	951	473	772	1570	1570			772	492
1974	7	1974.07	5-Jul-74	902	948	846	902	1630	1630			902	512
1974	7	1974.07	6-Jul-74	822	855	777	822	1620	1620			822	530
1974	7	1974.07	7-Jul-74	825	855	815	825	1600	1600			825	547
1974	7	1974.07	8-Jul-74	848	882	825	848	1700	1700			848	564
1974	7	1974.07	9-Jul-74	823	855	788	823	1760	1760			823	582
1974	7	1974.07	10-Jul-74	696	794	665	696	2040	2040			696	596
1974	7	1974.07	11-Jul-74	647	681	627	647	2160	2160			647	611
1974	7	1974.07	12-Jul-74	682	717	651	682	2070	2070			682	625
1974	7	1974.07	13-Jul-74	743				2000	2000			743	639
1974	7	1974.07	14-Jul-74	743				2070	2070			743	651
1974	7	1974.07	15-Jul-74	743				1970	1970			743	661
1974	7	1974.07	16-Jul-74	743				1740	1740			743	674
1974	7	1974.07	17-Jul-74	743				1610	1610			743	689
1974	7	1974.07	18-Jul-74	743				1520	1520			743	704
1974	7	1974.07	19-Jul-74	743				1410	1410			743	715
1974	7	1974.07	20-Jul-74	923	940	903	923	1400	1400			923	731
1974	7	1974.07	21-Jul-74	721	921	467	721	1520	1520			721	740
1974	7	1974.07	22-Jul-74	676	819	463	676	1550	1550			676	742
1974	7	1974.07	23-Jul-74	694	915	463	694	1410	1410			694	745
1974	7	1974.07	24-Jul-74	879	948	496	879	1340	1340			879	751
1974	7	1974.07	25-Jul-74	492	520	462	492	1400	1400			492	747
1974	7	1974.07	26-Jul-74	790	844	508	790	1430	1430			790	754
1974	7	1974.07	27-Jul-74	755	794	713	755	1470	1470			755	759
1974	7	1974.07	28-Jul-74	800				1440	1440			800	767
1974	7	1974.07	29-Jul-74	864	880	852	864	1430	1430			864	775
1974	7	1974.07	30-Jul-74	872	897	836	872	1410	1410			872	774
1974	7	1974.07	31-Jul-74	904	969	827	904	1320	1320			904	779
1974	8	1974.08	1-Aug-74	895	954	827	895	1300	1300			895	780
1974	8	1974.08	2-Aug-74	863	936	511	863	1300	1300			863	778
1974	8	1974.08	3-Aug-74	673	960	458	673	1260	1260			673	775
1974	8	1974.08	4-Aug-74	628	911	457	628	1340	1340			628	766
1974	8	1974.08	5-Aug-74	679				1380	1380			679	761
1974	8	1974.08	6-Aug-74	679				1310	1310			679	756
1974	8	1974.08	7-Aug-74	679				1260	1260			679	751
1974	8	1974.08	8-Aug-74	679				1340	1340			679	746
1974	8	1974.08	9-Aug-74	679				1370	1370			679	745
1974	8	1974.08	10-Aug-74	679				1380	1380			679	746
1974	8	1974.08	11-Aug-74	679				1370	1370			679	746
1974	8	1974.08	12-Aug-74	679				1430	1430			679	744
1974	8	1974.08	13-Aug-74	647	909	486	647	1320	1320			647	741
1974	8	1974.08	14-Aug-74	768	965	459	768	1290	1290			768	742
1974	8	1974.08	15-Aug-74	727	960	474	727	1380	1380			727	741
1974	8	1974.08	16-Aug-74	678				1590	1590			678	739
1974	8	1974.08	17-Aug-74	678				1700	1700			678	737
1974	8	1974.08	18-Aug-74	678				1820	1820			678	735
1974	8	1974.08	19-Aug-74	621	645	500	621	1880	1880			621	725
1974	8	1974.08	20-Aug-74	596	663	453	596	1840	1840			596	720
1974	8	1974.08	21-Aug-74	485	540	449	485	1810	1810			485	714
1974	8	1974.08	22-Aug-74	568	675	446	568	1740	1740			568	710
1974	8	1974.08	23-Aug-74	533	665	442	533	1810	1810			533	698
1974	8	1974.08	24-Aug-74	545	671	439	545	1820	1820			545	700
1974	8	1974.08	25-Aug-74	607	642	511	607	1970	1970			607	694
1974	8	1974.08	26-Aug-74	626	642	606	626	2050	2050			626	690
1974	8	1974.08	27-Aug-74	573	648	474	573	2000	2000			573	682
1974	8	1974.08	28-Aug-74	541	588	487	541	1910	1910			541	671
1974	8	1974.08	29-Aug-74	541	595	476	541	1990	1990			541	660
1974	8	1974.08	30-Aug-74	545	592	493	545	2020	2020			545	648
1974	8	1974.08	31-Aug-74	532	587	475	532	2080	2080			532	636
1974	9	1974.09	1-Sep-74	588	600	473	588	2170	2170			588	627
1974	9	1974.09	2-Sep-74	520	567	467	520	2300	2300			520	622
1974	9	1974.09	3-Sep-74	520	593	475	520	2260	2260			520	618
1974	9	1974.09	4-Sep-74	518	580	466	518	2220	2220			518	613
1974	9	1974.09	5-Sep-74	538	627	452	538	2220	2220			538	608
1974	9	1974.09	6-Sep-74	546	634	446	546	2210	2210			546	604
1974	9	1974.09	7-Sep-74	561	651	444	561	2220	2220			561	600
1974	9	1974.09	8-Sep-74	528	600	451	528	2360	2360			528	595
1974	9	1974.09	9-Sep-74	506	615	60	506	2400	2400			506	589

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1974	9	1974.09 10-Sep-74	587	627	469		587	2280	2280			587	586
1974	9	1974.09 11-Sep-74	529	611	455		529	2390	2390			529	581
1974	9	1974.09 12-Sep-74	513	582	452		513	2560	2560			513	577
1974	9	1974.09 13-Sep-74	459	592	55		459	2500	2500			459	566
1974	9	1974.09 14-Sep-74	602	621	592		602	2450	2450			602	562
1974	9	1974.09 15-Sep-74	622	648	603		622	2420	2420			622	560
1974	9	1974.09 16-Sep-74	659	665	648		659	2400	2400			659	560
1974	9	1974.09 17-Sep-74	590	663	460		590	2420	2420			590	557
1974	9	1974.09 18-Sep-74	521	636	437		521	2680	2680			521	553
1974	9	1974.09 19-Sep-74	462	509	427		462	3150	3150			462	549
1974	9	1974.09 20-Sep-74	424	442	416		424	3500	3500			424	547
1974	9	1974.09 21-Sep-74	424	438	413		424	3630	3630			424	542
1974	9	1974.09 22-Sep-74	429	445	417		429	3620	3620			429	539
1974	9	1974.09 23-Sep-74	436	474	425		436	3650	3650			436	535
1974	9	1974.09 24-Sep-74	456	483	427		456	3480	3480			456	530
1974	9	1974.09 25-Sep-74	490	447	410		490	3520	3520			490	525
1974	9	1974.09 26-Sep-74	425	438	413		425	3630	3630			425	520
1974	9	1974.09 27-Sep-74	440	459	425		440	3640	3640			440	517
1974	9	1974.09 28-Sep-74	437	451	427		437	3670	3670			437	514
1974	9	1974.09 29-Sep-74	440					3660	3660			440	510
1974	9	1974.09 30-Sep-74	453	480	436		453	3760	3760			453	507
1974	10	1974.10 1-Oct-74	458	478	431		458	3760	3760			458	503
1974	10	1974.10 2-Oct-74	438	475	418		438	3830	3830			438	500
1974	10	1974.10 3-Oct-74	474	502	443		474	3560	3560			474	499
1974	10	1974.10 4-Oct-74	480	512	453		480	3400	3400			480	498
1974	10	1974.10 5-Oct-74	474	509	461		474	3330	3330			474	495
1974	10	1974.10 6-Oct-74	496	540	462		496	3120	3120			496	494
1974	10	1974.10 7-Oct-74	523	574	487		523	2990	2990			523	493
1974	10	1974.10 8-Oct-74	545	576	483		545	2970	2970			545	493
1974	10	1974.10 9-Oct-74	562	576	544		562	2920	2920			562	495
1974	10	1974.10 10-Oct-74	603	636	561		603	2770	2770			603	495
1974	10	1974.10 11-Oct-74	632	642	621		632	2600	2600			632	499
1974	10	1974.10 12-Oct-74	571	636	502		571	2860	2860			571	501
1974	10	1974.10 13-Oct-74	474	494	465		474	3040	3040			474	501
1974	10	1974.10 14-Oct-74	476	488	467		476	3040	3040			476	497
1974	10	1974.10 15-Oct-74	509	531	405		509	2940	2940			509	493
1974	10	1974.10 16-Oct-74	580	621	531		580	2690	2690			580	491
1974	10	1974.10 17-Oct-74	549	617	494		549	3020	3020			549	489
1974	10	1974.10 18-Oct-74	496	510	485		496	3220	3220			496	489
1974	10	1974.10 19-Oct-74	527	549	502		527	3140	3140			527	491
1974	10	1974.10 20-Oct-74	563	582	546		563	3060	3060			563	495
1974	10	1974.10 21-Oct-74	549	574	540		549	3080	3080			549	500
1974	10	1974.10 22-Oct-74	541	555	521		541	3140	3140			541	503
1974	10	1974.10 23-Oct-74	465	519	396		465	3560	3560			465	504
1974	10	1974.10 24-Oct-74	382	394	383		382	4120	4120			382	502
1974	10	1974.10 25-Oct-74	383	399	383		383	4380	4380			383	498
1974	10	1974.10 26-Oct-74	385	390	383		385	4560	4560			385	497
1974	10	1974.10 27-Oct-74	398	411	383		398	4570	4570			398	495
1974	10	1974.10 28-Oct-74	409	425	399		409	4530	4530			409	495
1974	10	1974.10 29-Oct-74	395	431	351		395	4620	4620			395	493
1974	10	1974.10 30-Oct-74	342	349	336		342	4770	4770			342	489
1974	10	1974.10 31-Oct-74	346	360	333		346	4820	4820			346	486
1974	11	1974.11 1-Nov-74	373	381	361		373	4710	4710			373	483
1974	11	1974.11 2-Nov-74	328	375	283		328	4830	4830			328	479
1974	11	1974.11 3-Nov-74	309	332	279		309	5140	5140			309	473
1974	11	1974.11 4-Nov-74	325	333	309		325	5240	5240			325	468
1974	11	1974.11 5-Nov-74	309	325	303		309	5180	5180			309	462
1974	11	1974.11 6-Nov-74	381	432	328		381	4580	4580			381	457
1974	11	1974.11 7-Nov-74	425	456	193		425	3860	3860			425	453
1974	11	1974.11 8-Nov-74	400					3680	3680			400	448
1974	11	1974.11 9-Nov-74	400					3670	3670			400	441
1974	11	1974.11 10-Nov-74	400					3660	3660			400	433
1974	11	1974.11 11-Nov-74	400					3610	3610			400	427
1974	11	1974.11 12-Nov-74	400					3600	3600			400	425
1974	11	1974.11 13-Nov-74	400					3610	3610			400	422
1974	11	1974.11 14-Nov-74	400					3640	3640			400	419
1974	11	1974.11 15-Nov-74	400					3590	3590			400	413
1974	11	1974.11 16-Nov-74	400					3620	3620			400	408
1974	11	1974.11 17-Nov-74	400					3680	3680			400	405
1974	11	1974.11 18-Nov-74	400					3670	3670			400	400
1974	11	1974.11 19-Nov-74	400					3670	3670			400	395
1974	11	1974.11 20-Nov-74	400					3660	3660			400	390
1974	11	1974.11 21-Nov-74	400					3480	3480			400	385
1974	11	1974.11 22-Nov-74	400					3400	3400			400	383
1974	11	1974.11 23-Nov-74	400					3340	3340			400	384
1974	11	1974.11 24-Nov-74	400					3340	3340			400	384

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1974	11	1974.11 25-Nov-74	400					3500	3500			400	385
1974	11	1974.11 26-Nov-74	400					3600	3600			400	385
1974	11	1974.11 27-Nov-74	400					3740	3740			400	384
1974	11	1974.11 28-Nov-74	400					3830	3830			400	385
1974	11	1974.11 29-Nov-74	400					3830	3830			400	387
1974	11	1974.11 30-Nov-74	400					3760	3760			400	388
1974	12	1974.12 1-Dec-74	400					3860	3860			400	389
1974	12	1974.12 2-Dec-74	400					4000	4000			400	392
1974	12	1974.12 3-Dec-74	400					4200	4200			400	395
1974	12	1974.12 4-Dec-74	400					4650	4650			400	397
1974	12	1974.12 5-Dec-74	400					4640	4640			400	400
1974	12	1974.12 6-Dec-74	400					4740	4740			400	401
1974	12	1974.12 7-Dec-74	400					5010	5010			400	400
1974	12	1974.12 8-Dec-74	400					5070	5070			400	400
1974	12	1974.12 9-Dec-74	400					5030	5030			400	400
1974	12	1974.12 10-Dec-74	400					4940	4940			400	400
1974	12	1974.12 11-Dec-74	400					4890	4890			400	400
1974	12	1974.12 12-Dec-74	400					4860	4860			400	400
1974	12	1974.12 13-Dec-74	400					4840	4840			400	400
1974	12	1974.12 14-Dec-74	400					4830	4830			400	400
1974	12	1974.12 15-Dec-74	400					4840	4840			400	400
1974	12	1974.12 16-Dec-74	400					4840	4840			400	400
1974	12	1974.12 17-Dec-74	400					4730	4730			400	400
1974	12	1974.12 18-Dec-74	400					4350	4350			400	400
1974	12	1974.12 19-Dec-74	400					4130	4130			400	400
1974	12	1974.12 20-Dec-74	400					4010	4010			400	400
1974	12	1974.12 21-Dec-74	400					3940	3940			400	400
1974	12	1974.12 22-Dec-74	400					3690	3690			400	400
1974	12	1974.12 23-Dec-74	400					3130	3130			400	400
1974	12	1974.12 24-Dec-74	400					2870	2870			400	400
1974	12	1974.12 25-Dec-74	400					3080	3080			400	400
1974	12	1974.12 26-Dec-74	400					3250	3250			400	400
1974	12	1974.12 27-Dec-74	400					2890	2890			400	400
1974	12	1974.12 28-Dec-74	400					3560	3560			400	400
1974	12	1974.12 29-Dec-74	400					3740	3740			400	400
1974	12	1974.12 30-Dec-74	400					3470	3470			400	400
1974	12	1974.12 31-Dec-74	400					2930	2930			400	400
1975	1	1975.01 1-Jan-75	400					3580	3580			400	400
1975	1	1975.01 2-Jan-75	400					3480	3480			400	400
1975	1	1975.01 3-Jan-75	400					2850	2850			400	400
1975	1	1975.01 4-Jan-75	400					3680	3680			400	400
1975	1	1975.01 5-Jan-75	400					3890	3890			400	400
1975	1	1975.01 6-Jan-75	400					3550	3550			400	400
1975	1	1975.01 7-Jan-75	400					2920	2920			400	400
1975	1	1975.01 8-Jan-75	400					3770	3770			400	400
1975	1	1975.01 9-Jan-75	443	495	408		443	3880	3880			443	401
1975	1	1975.01 10-Jan-75	440	487	410		440	3940	3940			440	403
1975	1	1975.01 11-Jan-75	432	484	401		432	4050	4050			432	404
1975	1	1975.01 12-Jan-75	437	496	396		437	4060	4060			437	405
1975	1	1975.01 13-Jan-75	461	555	386		461	3590	3590			461	407
1975	1	1975.01 14-Jan-75	574	617	431		574	2950	2950			574	413
1975	1	1975.01 15-Jan-75	370	390	301		370	3740	3740			370	412
1975	1	1975.01 16-Jan-75	380	416	322		380	4020	4020			380	411
1975	1	1975.01 17-Jan-75	396	429	362		396	4120	4120			396	411
1975	1	1975.01 18-Jan-75	406	442	374		406	4160	4160			406	411
1975	1	1975.01 19-Jan-75	418	480	332		418	4080	4080			418	412
1975	1	1975.01 20-Jan-75	534	648	444		534	3610	3610			534	416
1975	1	1975.01 21-Jan-75	701	756	611		701	2990	2990			701	426
1975	1	1975.01 22-Jan-75	542	561	519		542	3940	3940			542	431
1975	1	1975.01 23-Jan-75	547	576	521		547	4230	4230			547	436
1975	1	1975.01 24-Jan-75	493	544	450		493	4350	4350			493	439
1975	1	1975.01 25-Jan-75	507	543	467		507	4340	4340			507	443
1975	1	1975.01 26-Jan-75	543	723	490		543	4140	4140			543	447
1975	1	1975.01 27-Jan-75	699	797	630		699	3550	3550			699	457
1975	1	1975.01 28-Jan-75	811	1025	665		811	3000	3000			811	471
1975	1	1975.01 29-Jan-75	560	582	536		560	3880	3880			560	476
1975	1	1975.01 30-Jan-75	555	702	479		555	4150	4150			555	482
1975	1	1975.01 31-Jan-75	520	588	469		520	4270	4270			520	486
1975	2	1975.02 1-Feb-75	520	560	477		520	4290	4290			520	490
1975	2	1975.02 2-Feb-75	581	756	473		581	4250	4250			581	496
1975	2	1975.02 3-Feb-75	780	806	648		780	3540	3540			780	508
1975	2	1975.02 4-Feb-75	745	840	507		745	3610	3610			745	520
1975	2	1975.02 5-Feb-75	379	483	295		379	4790	4790			379	519
1975	2	1975.02 6-Feb-75	348	390	310		348	6080	6080			348	517
1975	2	1975.02 7-Feb-75	305	319	294		305	6910	6910			305	514
1975	2	1975.02 8-Feb-75	306	339	296		306	7250	7250			306	510

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1975	2	1975.02 9-Feb-75	353	382	341		353	7200	7200			353	507
1975	2	1975.02 10-Feb-75	406	424	382		406	6870	6870			406	506
1975	2	1975.02 11-Feb-75	417	433	392		417	6950	6950			417	505
1975	2	1975.02 12-Feb-75	388	393	380		388	7140	7140			388	503
1975	2	1975.02 13-Feb-75	346	380	315		346	7110	7110			346	495
1975	2	1975.02 14-Feb-75	298	311	293		298	7800	7800			298	493
1975	2	1975.02 15-Feb-75	328	352	296		328	8820	8820			328	491
1975	2	1975.02 16-Feb-75	363	383	341		363	8670	8670			363	490
1975	2	1975.02 17-Feb-75	393	418	338		393	7950	7950			393	490
1975	2	1975.02 18-Feb-75	449	478	419		449	7120	7120			449	491
1975	2	1975.02 19-Feb-75	487	517	426		487	6710	6710			487	489
1975	2	1975.02 20-Feb-75	462	478	452		462	6830	6830			462	481
1975	2	1975.02 21-Feb-75	474	515	447		474	6610	6610			474	479
1975	2	1975.02 22-Feb-75	471	508	448		471	6300	6300			471	476
1975	2	1975.02 23-Feb-75	487	541	440		487	6010	6010			487	476
1975	2	1975.02 24-Feb-75	491	532	444		491	5410	5410			491	476
1975	2	1975.02 25-Feb-75	497	529	455		497	5030	5030			497	474
1975	2	1975.02 26-Feb-75	428	450	414		428	5460	5460			428	465
1975	2	1975.02 27-Feb-75	461	511	417		461	4990	4990			461	453
1975	2	1975.02 28-Feb-75	519	552	486		519	4240	4240			519	452
1975	3	1975.03 1-Mar-75	587	617	538		587	3830	3830			587	453
1975	3	1975.03 2-Mar-75	610	623	580		610	3750	3750			610	456
1975	3	1975.03 3-Mar-75	571	594	546		571	3850	3850			571	458
1975	3	1975.03 4-Mar-75	596	627	527		596	3580	3580			596	458
1975	3	1975.03 5-Mar-75	505	521	483		505	3750	3750			505	449
1975	3	1975.03 6-Mar-75	513	529	485		513	3930	3930			513	441
1975	3	1975.03 7-Mar-75	520	538	504		520	4270	4270			520	446
1975	3	1975.03 8-Mar-75	523	543	496		523	4640	4640			523	452
1975	3	1975.03 9-Mar-75	517	535	501		517	4860	4860			517	459
1975	3	1975.03 10-Mar-75	487	540	461		487	5000	5000			487	465
1975	3	1975.03 11-Mar-75	457	479	422		457	5060	5060			457	468
1975	3	1975.03 12-Mar-75	419	431	405		419	5610	5610			419	469
1975	3	1975.03 13-Mar-75	409	431	306		409	5800	5800			409	469
1975	3	1975.03 14-Mar-75	454	478	436		454	5730	5730			454	471
1975	3	1975.03 15-Mar-75	413	437	351		413	6350	6350			413	473
1975	3	1975.03 16-Mar-75	411	427	396		411	6300	6300			411	477
1975	3	1975.03 17-Mar-75	383	397	375		383	6230	6230			383	479
1975	3	1975.03 18-Mar-75	409	435	382		409	6380	6380			409	480
1975	3	1975.03 19-Mar-75	403	421	389		403	6070	6070			403	480
1975	3	1975.03 20-Mar-75	382	390	372		382	6330	6330			382	478
1975	3	1975.03 21-Mar-75	372	382	364		372	6590	6590			372	474
1975	3	1975.03 22-Mar-75	389	403	377		389	6620	6620			389	472
1975	3	1975.03 23-Mar-75	371	380	365		371	7070	7070			371	469
1975	3	1975.03 24-Mar-75	391	422	338		391	7040	7040			391	466
1975	3	1975.03 25-Mar-75	369	392	337		369	6530	6530			369	462
1975	3	1975.03 26-Mar-75	399	352	330		399	6930	6930			399	459
1975	3	1975.03 27-Mar-75	338	343	332		338	7010	7010			338	454
1975	3	1975.03 28-Mar-75	324	328	319		324	6740	6740			324	450
1975	3	1975.03 29-Mar-75	321	328	313		321	6630	6630			321	445
1975	3	1975.03 30-Mar-75	328	332	323		328	6820	6820			328	439
1975	3	1975.03 31-Mar-75	341	363	323		341	6920	6920			341	431
1975	4	1975.04 1-Apr-75	390	404	370		390	6420	6420			390	424
1975	4	1975.04 2-Apr-75	417	440	397		417	5800	5800			417	418
1975	4	1975.04 3-Apr-75	483	528	432		483	5060	5060			483	415
1975	4	1975.04 4-Apr-75	528	560	503		528	4450	4450			528	415
1975	4	1975.04 5-Apr-75	559	568	552		559	4100	4100			559	417
1975	4	1975.04 6-Apr-75	563	574	552		563	3990	3990			563	418
1975	4	1975.04 7-Apr-75	530	555	506		530	4140	4140			530	419
1975	4	1975.04 8-Apr-75	514	519	506		514	4320	4320			514	418
1975	4	1975.04 9-Apr-75	518					4880	4880			518	420
1975	4	1975.04 10-Apr-75	518					5110	5110			518	422
1975	4	1975.04 11-Apr-75	518					5100	5100			518	425
1975	4	1975.04 12-Apr-75	518					4960	4960			518	428
1975	4	1975.04 13-Apr-75	518					4740	4740			518	431
1975	4	1975.04 14-Apr-75	518					4560	4560			518	434
1975	4	1975.04 15-Apr-75	500	513	484		500	4240	4240			500	437
1975	4	1975.04 16-Apr-75	529	564	514		529	3880	3880			529	442
1975	4	1975.04 17-Apr-75	585	621	552		585	3470	3470			585	448
1975	4	1975.04 18-Apr-75	600	609	588		600	3340	3340			600	454
1975	4	1975.04 19-Apr-75	623	648	609		623	3220	3220			623	462
1975	4	1975.04 20-Apr-75	593	627	563		593	3240	3240			593	470
1975	4	1975.04 21-Apr-75	546	636	527		546	3310	3310			546	475
1975	4	1975.04 22-Apr-75	565	592	540		565	3190	3190			565	481
1975	4	1975.04 23-Apr-75	607	645	594		607	3070	3070			607	489
1975	4	1975.04 24-Apr-75	614	640	594		614	2970	2970			614	497
1975	4	1975.04 25-Apr-75	647	660	636		647	2890	2890			647	505

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1975	4	1975.04 26-Apr-75	652	671	627		652	2900	2900			652	516
1975	4	1975.04 27-Apr-75	633	663	615		633	2950	2950			633	526
1975	4	1975.04 28-Apr-75	606	621	594		606	2970	2970			606	535
1975	4	1975.04 29-Apr-75	620	636	606		620	2810	2810			620	545
1975	4	1975.04 30-Apr-75	653	681	634		653	2630	2630			653	556
1975	5	1975.05 1-May-75	677	694	663		677	2510	2510			677	565
1975	5	1975.05 2-May-75	708	771	665		708	2360	2360			708	575
1975	5	1975.05 3-May-75	719	740	654		719	2330	2330			719	583
1975	5	1975.05 4-May-75	537	627	500		537	3090	3090			537	583
1975	5	1975.05 5-May-75	474	497	445		474	3660	3660			474	580
1975	5	1975.05 6-May-75	451	473	435		451	3690	3690			451	576
1975	5	1975.05 7-May-75	440	471	323		440	3910	3910			440	573
1975	5	1975.05 8-May-75	413	427	394		413	4060	4060			413	570
1975	5	1975.05 9-May-75	400	414	385		400	4000	4000			400	566
1975	5	1975.05 10-May-75	407	430	390		407	3960	3960			407	562
1975	5	1975.05 11-May-75	459	487	431		459	3670	3670			459	560
1975	5	1975.05 12-May-75	466	492	421		466	3570	3570			466	559
1975	5	1975.05 13-May-75	442					3440	3440			442	556
1975	5	1975.05 14-May-75	420	444	409		420	3690	3690			420	553
1975	5	1975.05 15-May-75	420	444	393		420	3840	3840			420	550
1975	5	1975.05 16-May-75	396	410	386		396	3970	3970			396	546
1975	5	1975.05 17-May-75	380	392	366		380	4070	4070			380	539
1975	5	1975.05 18-May-75	356	365	345		356	4240	4240			356	531
1975	5	1975.05 19-May-75	344	352	329		344	4340	4340			344	522
1975	5	1975.05 20-May-75	334	339	326		334	4350	4350			334	513
1975	5	1975.05 21-May-75	322	330	314		322	4550	4550			322	505
1975	5	1975.05 22-May-75	319	330	310		319	4650	4650			319	497
1975	5	1975.05 23-May-75	329	337	319		329	4550	4550			329	488
1975	5	1975.05 24-May-75	320					4470	4470			320	478
1975	5	1975.05 25-May-75	320					4530	4530			320	467
1975	5	1975.05 26-May-75	314	320	309		314	4580	4580			314	456
1975	5	1975.05 27-May-75	310	319	302		310	4540	4540			310	445
1975	5	1975.05 28-May-75	305	310	298		305	4590	4590			305	435
1975	5	1975.05 29-May-75	315	321	309		315	4580	4580			315	425
1975	5	1975.05 30-May-75	309	314	304		309	4630	4630			309	414
1975	5	1975.05 31-May-75	293	308	277		293	4700	4700			293	401
1975	6	1975.06 1-Jun-75	305	464	242		305	4980	4980			305	387
1975	6	1975.06 2-Jun-75	441	463	417		441	5860	5860			441	378
1975	6	1975.06 3-Jun-75	372	408	355		372	6550	6550			372	373
1975	6	1975.06 4-Jun-75	346	357	335		346	7350	7350			346	368
1975	6	1975.06 5-Jun-75	382	441	338		382	7570	7570			382	366
1975	6	1975.06 6-Jun-75	393	423	349		393	7070	7070			393	364
1975	6	1975.06 7-Jun-75	346	368	319		346	7350	7350			346	362
1975	6	1975.06 8-Jun-75	375	422	333		375	7560	7560			375	361
1975	6	1975.06 9-Jun-75	314	440	223		314	7880	7880			314	358
1975	6	1975.06 10-Jun-75	215	224	205		215	8100	8100			215	350
1975	6	1975.06 11-Jun-75	233	252	208		233	8000	8000			233	342
1975	6	1975.06 12-Jun-75	255	263	246		255	7510	7510			255	336
1975	6	1975.06 13-Jun-75	262	277	252		262	6030	6030			262	331
1975	6	1975.06 14-Jun-75	240					6120	6120			240	325
1975	6	1975.06 15-Jun-75	220					7160	7160			220	319
1975	6	1975.06 16-Jun-75	203	213	195		203	7740	7740			203	313
1975	6	1975.06 17-Jun-75	188	192	183		188	7840	7840			188	307
1975	6	1975.06 18-Jun-75	187	195	183		187	8040	8040			187	302
1975	6	1975.06 19-Jun-75	221	261	189		221	7810	7810			221	298
1975	6	1975.06 20-Jun-75	328	387	260		328	6600	6600			328	299
1975	6	1975.06 21-Jun-75	436	496	385		436	4380	4380			436	303
1975	6	1975.06 22-Jun-75	479	526	433		479	3480	3480			479	308
1975	6	1975.06 23-Jun-75	512	543	475		512	3130	3130			512	314
1975	6	1975.06 24-Jun-75	524	545	490		524	2860	2860			524	321
1975	6	1975.06 25-Jun-75	578	681	510		578	2700	2700			578	330
1975	6	1975.06 26-Jun-75	561	580	536		561	2440	2440			561	338
1975	6	1975.06 27-Jun-75	597	617	580		597	2330	2330			597	348
1975	6	1975.06 28-Jun-75	612	634	600		612	2290	2290			612	358
1975	6	1975.06 29-Jun-75	625	642	600		625	2260	2260			625	368
1975	6	1975.06 30-Jun-75	629	663	597		629	2240	2240			629	379
1975	7	1975.07 1-Jul-75	704	737	660		704	2030	2030			704	393
1975	7	1975.07 2-Jul-75	737	773	708		737	1930	1930			737	402
1975	7	1975.07 3-Jul-75	789	813	761		789	1860	1860			789	416
1975	7	1975.07 4-Jul-75	744	794	711		744	1930	1930			744	430
1975	7	1975.07 5-Jul-75	741	785	702		741	1970	1970			741	442
1975	7	1975.07 6-Jul-75	706	746	665		706	2040	2040			706	452
1975	7	1975.07 7-Jul-75	692	717	663		692	2030	2030			692	464
1975	7	1975.07 8-Jul-75	724	756	694		724	1910	1910			724	475
1975	7	1975.07 9-Jul-75	657	690	640		657	2020	2020			657	487
1975	7	1975.07 10-Jul-75	657	708	681		657	1980	1980			657	501

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1975	7	1975.07 11-Jul-75	732	815	708		732	1740	1740			732	518
1975	7	1975.07 12-Jul-75	815	844	791		815	1680	1680			815	537
1975	7	1975.07 13-Jul-75	786	827	759		786	1680	1680			786	554
1975	7	1975.07 14-Jul-75	791	815	773		791	1630	1630			791	573
1975	7	1975.07 15-Jul-75	822	888	794		822	1560	1560			822	593
1975	7	1975.07 16-Jul-75	834	867	797		834	1550	1550			834	614
1975	7	1975.07 17-Jul-75	779	794	767		779	1650	1650			779	633
1975	7	1975.07 18-Jul-75	761	777	746		761	1670	1670			761	652
1975	7	1975.07 19-Jul-75	749	773	717		749	1760	1760			749	670
1975	7	1975.07 20-Jul-75	729	759	717		729	1780	1780			729	683
1975	7	1975.07 21-Jul-75	739	765	723		739	1760	1760			739	694
1975	7	1975.07 22-Jul-75	771	806	750		771	1620	1620			771	703
1975	7	1975.07 23-Jul-75	845	858	819		845	1460	1460			845	714
1975	7	1975.07 24-Jul-75	825	858	761		825	1470	1470			825	724
1975	7	1975.07 25-Jul-75	704	759	675		704	1630	1630			704	729
1975	7	1975.07 26-Jul-75	713	735	694		713	1490	1490			713	734
1975	7	1975.07 27-Jul-75	702	735	669		702	1550	1550			702	737
1975	7	1975.07 28-Jul-75	738	771	696		738	1500	1500			738	741
1975	7	1975.07 29-Jul-75	781	810	765		781	1440	1440			781	747
1975	7	1975.07 30-Jul-75	780	810	753		780	1460	1460			780	752
1975	7	1975.07 31-Jul-75	751	773	735		751	1490	1490			751	753
1975	8	1975.08 1-Aug-75	785	819	753		785	1430	1430			785	755
1975	8	1975.08 2-Aug-75	806	821	785		806	1400	1400			806	755
1975	8	1975.08 3-Aug-75	836	861	785		836	1430	1400			836	758
1975	8	1975.08 4-Aug-75	821	876	761		821	1450	1450			821	761
1975	8	1975.08 5-Aug-75	808	867	779		808	1420	1420			808	764
1975	8	1975.08 6-Aug-75	793	827	759		793	1350	1350			793	768
1975	8	1975.08 7-Aug-75	738	750	729		738	1400	1400			738	768
1975	8	1975.08 8-Aug-75	738	759	725		738	1440	1440			738	771
1975	8	1975.08 9-Aug-75	749	777	729		749	1470	1470			749	774
1975	8	1975.08 10-Aug-75	725					1490	1490			725	774
1975	8	1975.08 11-Aug-75	706	746	694		706	1550	1550			706	770
1975	8	1975.08 12-Aug-75	694	723	675		694	1520	1520			694	767
1975	8	1975.08 13-Aug-75	740	756	719		740	1440	1440			740	765
1975	8	1975.08 14-Aug-75	767	802	725		767	1400	1400			767	764
1975	8	1975.08 15-Aug-75	781	810	761		781	1350	1350			781	762
1975	8	1975.08 16-Aug-75	780	810	765		780	1340	1340			780	762
1975	8	1975.08 17-Aug-75	750	800	725		750	1480	1480			750	761
1975	8	1975.08 18-Aug-75	654	735	588		654	1850	1850			654	758
1975	8	1975.08 19-Aug-75	565	597	488		565	2270	2270			565	753
1975	8	1975.08 20-Aug-75	486	506	477		486	2420	2420			486	744
1975	8	1975.08 21-Aug-75	538	576	510		538	2300	2300			538	737
1975	8	1975.08 22-Aug-75	582	603	561		582	2230	2230			582	728
1975	8	1975.08 23-Aug-75	572	586	552		572	2220	2220			572	719
1975	8	1975.08 24-Aug-75	566	580	555		566	2200	2200			566	715
1975	8	1975.08 25-Aug-75	641	719	563		641	2090	2090			641	712
1975	8	1975.08 26-Aug-75	748	779	719		748	1760	1760			748	714
1975	8	1975.08 27-Aug-75	732	765	711		732	1710	1710			732	714
1975	8	1975.08 28-Aug-75	731	746	723		731	1710	1710			731	712
1975	8	1975.08 29-Aug-75	765	794	737		765	1640	1640			765	712
1975	8	1975.08 30-Aug-75	805	849	783		805	1620	1620			805	713
1975	8	1975.08 31-Aug-75	793	855	746		793	1740	1740			793	714
1975	9	1975.09 1-Sep-75	739	765	719		739	1930	1930			739	711
1975	9	1975.09 2-Sep-75	760	863	731		760	1790	1790			760	709
1975	9	1975.09 3-Sep-75	731	753	713		731	1770	1770			731	706
1975	9	1975.09 4-Sep-75	761	779	735		761	1710	1710			761	704
1975	9	1975.09 5-Sep-75	716	743	681		716	1890	1890			716	702
1975	9	1975.09 6-Sep-75	625	681	546		625	2130	2130			625	698
1975	9	1975.09 7-Sep-75	507	544	471		507	2380	2380			507	690
1975	9	1975.09 8-Sep-75	447	467	423		447	2500	2500			447	680
1975	9	1975.09 9-Sep-75	461	471	453		461	2460	2460			461	671
1975	9	1975.09 10-Sep-75	488	506	471		488	2340	2340			488	664
1975	9	1975.09 11-Sep-75	492	510	471		492	2470	2470			492	657
1975	9	1975.09 12-Sep-75	485	491	473		485	2570	2570			485	649
1975	9	1975.09 13-Sep-75	460					2770	2770			460	639
1975	9	1975.09 14-Sep-75	440					2800	2800			440	627
1975	9	1975.09 15-Sep-75	432	450	419		432	2800	2800			432	616
1975	9	1975.09 16-Sep-75	417	429	408		417	2910	2910			417	605
1975	9	1975.09 17-Sep-75	412	425	402		412	2810	2810			412	597
1975	9	1975.09 18-Sep-75	427	431	423		427	2760	2760			427	592
1975	9	1975.09 19-Sep-75	425	431	417		425	2790	2790			425	590
1975	9	1975.09 20-Sep-75	406	429	390		406	2940	2940			406	586
1975	9	1975.09 21-Sep-75	414	429	394		414	2980	2980			414	580
1975	9	1975.09 22-Sep-75	425	435	419		425	2980	2980			425	575
1975	9	1975.09 23-Sep-75	408	417	402		408	2950	2950			408	570
1975	9	1975.09 24-Sep-75	395	413	375		395	3010	3010			395	562

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1975	9	1975.09 25-Sep-75	385	394	377		385	3060	3060			385	549
1975	9	1975.09 26-Sep-75	356	394	340		356	3210	3210			356	537
1975	9	1975.09 27-Sep-75	354	360	345		354	3250	3250			354	524
1975	9	1975.09 28-Sep-75	359	375	348		359	3250	3250			359	511
1975	9	1975.09 29-Sep-75	394	405	377		394	3210	3210			394	497
1975	9	1975.09 30-Sep-75	408	413	402		408	3150	3150			408	484
1975	10	1975.10 1-Oct-75	386	411	375		386	3240	3240			386	473
1975	10	1975.10 2-Oct-75	369	377	357		369	3310	3310			369	460
1975	10	1975.10 3-Oct-75	361	363	357		361	3380	3380			361	447
1975	10	1975.10 4-Oct-75	357	363	351		357	3420	3420			357	434
1975	10	1975.10 5-Oct-75	363	369	357		363	3410	3410			363	422
1975	10	1975.10 6-Oct-75	355	360	348		355	3510	3510			355	413
1975	10	1975.10 7-Oct-75	356	363	348		356	3540	3540			356	408
1975	10	1975.10 8-Oct-75	365	381	357		365	3490	3490			365	405
1975	10	1975.10 9-Oct-75	330	377	300		330	3880	3880			330	401
1975	10	1975.10 10-Oct-75	288	303	232		288	4190	4190			288	394
1975	10	1975.10 11-Oct-75	280	282	276		280	4410	4410			280	387
1975	10	1975.10 12-Oct-75	267	280	261		267	4600	4600			267	380
1975	10	1975.10 13-Oct-75	259	263	255		259	4580	4580			259	373
1975	10	1975.10 14-Oct-75	246	255	240		246	4460	4460			246	367
1975	10	1975.10 15-Oct-75	228	252	204		228	4760	4760			228	360
1975	10	1975.10 16-Oct-75	213	227	197		213	5280	5280			213	353
1975	10	1975.10 17-Oct-75	217	227	198		217	5520	5520			217	347
1975	10	1975.10 18-Oct-75	223	239	213		223	5620	5620			223	340
1975	10	1975.10 19-Oct-75	219	231	202		219	5710	5710			219	333
1975	10	1975.10 20-Oct-75	225	243	202		225	5660	5660			225	327
1975	10	1975.10 21-Oct-75	230	245	215		230	5550	5550			230	321
1975	10	1975.10 22-Oct-75	239	255	229		239	5400	5400			239	315
1975	10	1975.10 23-Oct-75	252	269	235		252	5160	5160			252	309
1975	10	1975.10 24-Oct-75	254	272	234		254	5090	5090			254	305
1975	10	1975.10 25-Oct-75	254	275	236		254	5030	5030			254	300
1975	10	1975.10 26-Oct-75	248	252	233		248	4920	4920			248	297
1975	10	1975.10 27-Oct-75	250					4620	4620			250	293
1975	10	1975.10 28-Oct-75	254	276	240		254	4380	4380			254	290
1975	10	1975.10 29-Oct-75	255	276	232		255	4700	4700			255	285
1975	10	1975.10 30-Oct-75	251	264	239		251	4900	4900			251	280
1975	10	1975.10 31-Oct-75	250	260	236		250	5120	5120			250	275
1975	11	1975.11 1-Nov-75	248	276	226		248	5420	5420			248	271
1975	11	1975.11 2-Nov-75	250	264	227		250	5410	5410			250	268
1975	11	1975.11 3-Nov-75	246	262	216		246	5290	5290			246	264
1975	11	1975.11 4-Nov-75	249	262	224		249	5240	5240			249	260
1975	11	1975.11 5-Nov-75	242	255	231		242	5450	5450			242	256
1975	11	1975.11 6-Nov-75	255	281	236		255	5510	5510			255	253
1975	11	1975.11 7-Nov-75	272	286	259		272	4840	4840			272	250
1975	11	1975.11 8-Nov-75	276	292	264		276	4580	4580			276	248
1975	11	1975.11 9-Nov-75	280	302	260		280	4490	4490			280	248
1975	11	1975.11 10-Nov-75	286	304	271		286	4090	4090			286	248
1975	11	1975.11 11-Nov-75	292	304	273		292	3750	3750			292	249
1975	11	1975.11 12-Nov-75	291	319	268		291	3670	3670			291	250
1975	11	1975.11 13-Nov-75	291	310	268		291	3620	3620			291	251
1975	11	1975.11 14-Nov-75	290	303	271		290	3570	3570			290	253
1975	11	1975.11 15-Nov-75	286	306	262		286	3510	3510			286	256
1975	11	1975.11 16-Nov-75	286	299	273		286	3440	3440			286	258
1975	11	1975.11 17-Nov-75	296	313	282		296	3380	3380			296	261
1975	11	1975.11 18-Nov-75	301	316	283		301	3280	3280			301	263
1975	11	1975.11 19-Nov-75	377	465	284		377	3200	3200			377	268
1975	11	1975.11 20-Nov-75	468	477	459		468	3200	3200			468	276
1975	11	1975.11 21-Nov-75	475	479	471		475	3220	3220			475	284
1975	11	1975.11 22-Nov-75	477	488	467		477	3210	3210			477	292
1975	11	1975.11 23-Nov-75	464	471	459		464	3220	3220			464	299
1975	11	1975.11 24-Nov-75	459	461	453		459	3190	3190			459	306
1975	11	1975.11 25-Nov-75	454	459	446		454	3170	3170			454	312
1975	11	1975.11 26-Nov-75	446	450	440		446	3200	3200			446	319
1975	11	1975.11 27-Nov-75	453	461	446		453	3250	3250			453	326
1975	11	1975.11 28-Nov-75	450	461	437		450	3270	3270			450	332
1975	11	1975.11 29-Nov-75	437	443	429		437	3270	3270			437	338
1975	11	1975.11 30-Nov-75	439	446	435		439	3240	3240			439	345
1975	12	1975.12 1-Dec-75	489	437	423		489	3240	3240			489	353
1975	12	1975.12 2-Dec-75	411	423	399		411	3280	3280			411	358
1975	12	1975.12 3-Dec-75	400	408	394		400	3430	3430			400	363
1975	12	1975.12 4-Dec-75	406	411	402		406	3470	3470			406	368
1975	12	1975.12 5-Dec-75	401	405	399		401	3460	3460			401	374
1975	12	1975.12 6-Dec-75	395	399	386		395	3490	3490			395	378
1975	12	1975.12 7-Dec-75	400					3570	3570			400	383
1975	12	1975.12 8-Dec-75	400					3580	3580			400	387
1975	12	1975.12 9-Dec-75	400					3560	3560			400	391

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1975	12	1975.12 10-Dec-75	400					3570	3570			400	394
1975	12	1975.12 11-Dec-75	400					3590	3590			400	398
1975	12	1975.12 12-Dec-75	400					3620	3620			400	402
1975	12	1975.12 13-Dec-75	400					3630	3630			400	405
1975	12	1975.12 14-Dec-75	400					3580	3580			400	409
1975	12	1975.12 15-Dec-75	400					3570	3570			400	413
1975	12	1975.12 16-Dec-75	400					3550	3550			400	417
1975	12	1975.12 17-Dec-75	400					3530	3530			400	420
1975	12	1975.12 18-Dec-75	400					3490	3490			400	423
1975	12	1975.12 19-Dec-75	400					3500	3500			400	424
1975	12	1975.12 20-Dec-75	400					3530	3530			400	422
1975	12	1975.12 21-Dec-75	400					3600	3600			400	419
1975	12	1975.12 22-Dec-75	400					3950	3950			400	417
1975	12	1975.12 23-Dec-75	400					3690	3690			400	415
1975	12	1975.12 24-Dec-75	400					4350	4350			400	413
1975	12	1975.12 25-Dec-75	400					4630	4630			400	411
1975	12	1975.12 26-Dec-75	400					4350	4350			400	409
1975	12	1975.12 27-Dec-75	400					3790	3790			400	408
1975	12	1975.12 28-Dec-75	400					4260	4260			400	406
1975	12	1975.12 29-Dec-75	400					4440	4440			400	405
1975	12	1975.12 30-Dec-75	400					4100	4100			400	403
1975	12	1975.12 31-Dec-75	400					4690	4690			400	400
1976	1	1976.01 1-Jan-76	400					5020	5020			400	400
1976	1	1976.01 2-Jan-76	400					4930	4930			400	400
1976	1	1976.01 3-Jan-76	400					4170	4170			400	400
1976	1	1976.01 4-Jan-76	400					4700	4700			400	400
1976	1	1976.01 5-Jan-76	400					4710	4710			400	400
1976	1	1976.01 6-Jan-76	400					4140	4140			400	400
1976	1	1976.01 7-Jan-76	400					4820	4820			400	400
1976	1	1976.01 8-Jan-76	400					4780	4780			400	400
1976	1	1976.01 9-Jan-76	400					4300	4300			400	400
1976	1	1976.01 10-Jan-76	400					3690	3690			400	400
1976	1	1976.01 11-Jan-76	400					4150	4150			400	400
1976	1	1976.01 12-Jan-76	400					4120	4120			400	400
1976	1	1976.01 13-Jan-76	500					3210	3210			500	403
1976	1	1976.01 14-Jan-76	500					3480	3480			500	407
1976	1	1976.01 15-Jan-76	500					3420	3420			500	410
1976	1	1976.01 16-Jan-76	500					3270	3270			500	413
1976	1	1976.01 17-Jan-76	500					3190	3190			500	417
1976	1	1976.01 18-Jan-76	700					3090	3090			700	427
1976	1	1976.01 19-Jan-76	700					2860	2860			700	437
1976	1	1976.01 20-Jan-76	700					2450	2450			700	447
1976	1	1976.01 21-Jan-76	700					2900	2900			700	457
1976	1	1976.01 22-Jan-76	900					2910	2910			900	473
1976	1	1976.01 23-Jan-76	900					2760	2760			900	490
1976	1	1976.01 24-Jan-76	900					2260	2260			900	507
1976	1	1976.01 25-Jan-76	900					2140	2140			900	523
1976	1	1976.01 26-Jan-76	1000					2090	2090			1000	543
1976	1	1976.01 27-Jan-76	1000					2030	2030			1000	563
1976	1	1976.01 28-Jan-76	1000					1940	1940			1000	583
1976	1	1976.01 29-Jan-76	1000					1880	1880			1000	603
1976	1	1976.01 30-Jan-76	1000					1830	1830			1000	623
1976	1	1976.01 31-Jan-76	1035	1061	1008		1035	1870	1870			1035	645
1976	2	1976.02 1-Feb-76	983	1011	942		983	1930	1930			983	664
1976	2	1976.02 2-Feb-76	933	1008	849		933	1930	1930			933	682
1976	2	1976.02 3-Feb-76	889	921	858		889	1900	1900			889	698
1976	2	1976.02 4-Feb-76	840	858	819		840	1850	1850			840	713
1976	2	1976.02 5-Feb-76	872	886	849		872	1850	1850			872	728
1976	2	1976.02 6-Feb-76	772	880	681		772	2190	2190			772	741
1976	2	1976.02 7-Feb-76	717	750	675		717	2410	2410			717	751
1976	2	1976.02 8-Feb-76	746	771	729		746	2330	2330			746	763
1976	2	1976.02 9-Feb-76	738	777	708		738	2330	2330			738	774
1976	2	1976.02 10-Feb-76	752	777	723		752	2370	2370			752	786
1976	2	1976.02 11-Feb-76	770	800	753		770	2340	2340			770	798
1976	2	1976.02 12-Feb-76	750	788	731		750	2330	2330			750	807
1976	2	1976.02 13-Feb-76	786	806	771		786	2230	2230			786	816
1976	2	1976.02 14-Feb-76	768	791	750		768	2290	2290			768	825
1976	2	1976.02 15-Feb-76	778	815	759		778	2340	2340			778	834
1976	2	1976.02 16-Feb-76	798	833	771		798	2300	2300			798	844
1976	2	1976.02 17-Feb-76	802	846	735		802	2300	2300			802	848
1976	2	1976.02 18-Feb-76	821	833	771		821	2270	2270			821	852
1976	2	1976.02 19-Feb-76	854	874	836		854	2190	2190			854	857
1976	2	1976.02 20-Feb-76	868	886	836		868	2040	2040			868	862
1976	2	1976.02 21-Feb-76	849	874	815		849	2000	2000			849	861
1976	2	1976.02 22-Feb-76	837	852	815		837	2070	2070			837	859
1976	2	1976.02 23-Feb-76	851	876	827		851	2070	2070			851	857

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1976	2	1976.02 24-Feb-76	868	880	852		868	1960	1960			868	856
1976	2	1976.02 25-Feb-76	889	900	874		889	1920	1920			889	852
1976	2	1976.02 26-Feb-76	883	903	855		883	1930	1930			883	848
1976	2	1976.02 27-Feb-76	869	897	849		869	1930	1930			869	844
1976	2	1976.02 28-Feb-76	860	880	840		860	1870	1870			860	839
1976	2	1976.02 29-Feb-76	854	863	840		854	1860	1860			854	834
1976	3	1976.03 1-Mar-76	890	957	844		890	1950	1950			890	830
1976	3	1976.03 2-Mar-76	845	892	813		845	2110	2110			845	825
1976	3	1976.03 3-Mar-76	818	855	735		818	2270	2270			818	821
1976	3	1976.03 4-Mar-76	800	846	731		800	2250	2250			800	818
1976	3	1976.03 5-Mar-76	879	906	849		879	2220	2220			879	819
1976	3	1976.03 6-Mar-76	873	911	810		873	2250	2250			873	820
1976	3	1976.03 7-Mar-76	782	813	767		782	2240	2240			782	820
1976	3	1976.03 8-Mar-76	790	802	777		790	2180	2180			790	822
1976	3	1976.03 9-Mar-76	758	785	740		758	2130	2130			758	823
1976	3	1976.03 10-Mar-76	757	771	743		757	2220	2220			757	823
1976	3	1976.03 11-Mar-76	773	800	690		773	2260	2260			773	824
1976	3	1976.03 12-Mar-76	670	694	648		670	2330	2320			670	821
1976	3	1976.03 13-Mar-76	687	723	651		687	2140	2140			687	819
1976	3	1976.03 14-Mar-76	742	759	723		742	2050	2050			742	817
1976	3	1976.03 15-Mar-76	722	788	681		722	1970	1970			722	816
1976	3	1976.03 16-Mar-76	793	821	761		793	1780	1780			793	816
1976	3	1976.03 17-Mar-76	839	876	813		839	1660	1660			839	817
1976	3	1976.03 18-Mar-76	832	846	802		832	1570	1570			832	818
1976	3	1976.03 19-Mar-76	822	836	800		822	1510	1510			822	818
1976	3	1976.03 20-Mar-76	808	827	777		808	1450	1450			808	817
1976	3	1976.03 21-Mar-76	789	813	735		789	1460	1460			789	814
1976	3	1976.03 22-Mar-76	749	827	711		749	1570	1570			749	811
1976	3	1976.03 23-Mar-76	779	813	746		779	1460	1460			779	809
1976	3	1976.03 24-Mar-76	803	810	788		803	1420	1420			803	807
1976	3	1976.03 25-Mar-76	753	788	731		753	1380	1380			753	804
1976	3	1976.03 26-Mar-76	696	740	671		696	1440	1440			696	797
1976	3	1976.03 27-Mar-76	700					1400	1400			700	791
1976	3	1976.03 28-Mar-76	700					1450	1450			700	785
1976	3	1976.03 29-Mar-76	700					1540	1540			700	780
1976	3	1976.03 30-Mar-76	700	767	660		700	1430	1430			700	775
1976	3	1976.03 31-Mar-76	726	800	663		726	1420	1420			726	770
1976	4	1976.04 1-Apr-76	728	756	699		728	1520	1520			728	766
1976	4	1976.04 2-Apr-76	717	813	683		717	1410	1410			717	762
1976	4	1976.04 3-Apr-76	905	960	831		905	1230	1230			905	766
1976	4	1976.04 4-Apr-76	991	1025	960		991	1330	1330			991	769
1976	4	1976.04 5-Apr-76	924	990	867		924	1480	1480			924	771
1976	4	1976.04 6-Apr-76	897	969	867		897	1400	1400			897	775
1976	4	1976.04 7-Apr-76	974	983	957		974	1290	1290			974	781
1976	4	1976.04 8-Apr-76	894	936	852		894	1520	1520			894	786
1976	4	1976.04 9-Apr-76	782	876	725		782	1760	1760			782	787
1976	4	1976.04 10-Apr-76	690	731	645		690	1810	1810			690	784
1976	4	1976.04 11-Apr-76	735	773	663		735	1750	1750			735	786
1976	4	1976.04 12-Apr-76	721	759	696		721	1760	1760			721	787
1976	4	1976.04 13-Apr-76	772	797	750		772	1680	1680			772	788
1976	4	1976.04 14-Apr-76	787	825	771		787	1580	1580			787	790
1976	4	1976.04 15-Apr-76	854	903	806		854	1440	1440			854	792
1976	4	1976.04 16-Apr-76	878	917	844		878	1420	1420			878	794
1976	4	1976.04 17-Apr-76	869	911	849		869	1390	1390			869	795
1976	4	1976.04 18-Apr-76	898	923	874		898	1350	1350			898	797
1976	4	1976.04 19-Apr-76	938	1029	888		938	1320	1320			938	802
1976	4	1976.04 20-Apr-76	1003	1050	957		1003	1150	1150			1003	809
1976	4	1976.04 21-Apr-76	1080	1131	1040		1080	1020	1020			1080	820
1976	4	1976.04 22-Apr-76	1142	1170	1113		1142	931	931			1142	832
1976	4	1976.04 23-Apr-76	1107	1146	1050		1107	940	940			1107	842
1976	4	1976.04 24-Apr-76	1079	1094	1059		1079	914	914			1079	853
1976	4	1976.04 25-Apr-76	1066	1094	1043		1066	929	929			1066	865
1976	4	1976.04 26-Apr-76	1062	1131	1005		1062	969	969			1062	877
1976	4	1976.04 27-Apr-76	1158	1209	1115		1158	924	924			1158	893
1976	4	1976.04 28-Apr-76	1104	1146	1053		1104	860	860			1104	906
1976	4	1976.04 29-Apr-76	1109	1155	1073		1109	855	855			1109	920
1976	4	1976.04 30-Apr-76	1138	1180	1083		1138	850	850			1138	933
1976	5	1976.05 1-May-76	1074	1125	1008		1074	865	865			1074	945
1976	5	1976.05 2-May-76	992	1011	960		992	905	905			992	954
1976	5	1976.05 3-May-76	1004	1110	942		1004	960	960			1004	957
1976	5	1976.05 4-May-76	1060	1131	1017		1060	914	914			1060	960
1976	5	1976.05 5-May-76	1073	1091	1056		1073	861	861			1073	965
1976	5	1976.05 6-May-76	1127	1170	1094		1127	845	845			1127	972
1976	5	1976.05 7-May-76	1042	1119	1005		1042	970	970			1042	975
1976	5	1976.05 8-May-76	947	1013	915		947	1030	1030			947	976
1976	5	1976.05 9-May-76	923	954	897		923	1030	1030			923	981

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1976	5	1976.05 10-May-76	972	1019	921		972	1080	1080			972	990
1976	5	1976.05 11-May-76	958	1002	917		958	1090	1090			958	998
1976	5	1976.05 12-May-76	985	1017	942		985	1010	1010			985	1007
1976	5	1976.05 13-May-76	1015	1025	986		1015	984	984			1015	1015
1976	5	1976.05 14-May-76	1020					983	983			1020	1023
1976	5	1976.05 15-May-76	1020					960	960			1020	1028
1976	5	1976.05 16-May-76	1020					915	915			1020	1033
1976	5	1976.05 17-May-76	1020					1030	1030			1020	1038
1976	5	1976.05 18-May-76	1020					930	930			1020	1042
1976	5	1976.05 19-May-76	1030	1059	996		1030	904	904			1030	1045
1976	5	1976.05 20-May-76	1054	1088	1025		1054	869	869			1054	1047
1976	5	1976.05 21-May-76	1064	1113	1005		1064	907	907			1064	1046
1976	5	1976.05 22-May-76	1020					917	917			1020	1042
1976	5	1976.05 23-May-76	1020					921	921			1020	1039
1976	5	1976.05 24-May-76	1020					1030	1030			1020	1037
1976	5	1976.05 25-May-76	1020					971	971			1020	1036
1976	5	1976.05 26-May-76	991	1035	971		991	934	934			991	1033
1976	5	1976.05 27-May-76	1016	1067	986		1016	903	903			1016	1029
1976	5	1976.05 28-May-76	1045	1088	1008		1045	855	855			1045	1027
1976	5	1976.05 29-May-76	1152	1186	1106		1152	825	825			1152	1028
1976	5	1976.05 30-May-76	1087	1133	1031		1087	855	855			1087	1026
1976	5	1976.05 31-May-76	1080					868	868			1080	1027
1976	6	1976.06 1-Jun-76	1078	1102	1056		1078	885	885			1078	1029
1976	6	1976.06 2-Jun-76	1035	1085	975		1035	883	883			1035	1030
1976	6	1976.06 3-Jun-76	986	1019	948		986	924	924			986	1028
1976	6	1976.06 4-Jun-76	1028	1056	999		1028	876	876			1028	1027
1976	6	1976.06 5-Jun-76	1031	1065	1008		1031	864	864			1031	1023
1976	6	1976.06 6-Jun-76	1029	1083	981		1029	880	880			1029	1023
1976	6	1976.06 7-Jun-76	1017	1050	975		1017	868	868			1017	1025
1976	6	1976.06 8-Jun-76	1053	1110	1013		1053	807	807			1053	1030
1976	6	1976.06 9-Jun-76	1034	1091	996		1034	788	788			1034	1032
1976	6	1976.06 10-Jun-76	1058	1097	1035		1058	769	769			1058	1035
1976	6	1976.06 11-Jun-76	1021	1061	983		1021	781	781			1021	1036
1976	6	1976.06 12-Jun-76	1029	1091	957		1029	845	845			1029	1037
1976	6	1976.06 13-Jun-76	950	994	917		950	920	920			950	1034
1976	6	1976.06 14-Jun-76	989	1031	954		989	899	899			989	1033
1976	6	1976.06 15-Jun-76	1026	1061	999		1026	829	829			1026	1033
1976	6	1976.06 16-Jun-76	1071	1088	1053		1071	804	804			1071	1035
1976	6	1976.06 17-Jun-76	1055	1083	1031		1055	779	779			1055	1036
1976	6	1976.06 18-Jun-76	1080	1113	1050		1080	745	745			1080	1038
1976	6	1976.06 19-Jun-76	1089	1125	1050		1089	760	760			1089	1039
1976	6	1976.06 20-Jun-76	1063	1102	1035		1063	821	821			1063	1039
1976	6	1976.06 21-Jun-76	1026	1085	986		1026	886	886			1026	1039
1976	6	1976.06 22-Jun-76	1063	1085	1011		1063	775	775			1063	1041
1976	6	1976.06 23-Jun-76	1103	1121	1077		1103	722	722			1103	1044
1976	6	1976.06 24-Jun-76	1139	1180	1094		1139	682	682			1139	1047
1976	6	1976.06 25-Jun-76	1146	1176	1106		1146	697	697			1146	1053
1976	6	1976.06 26-Jun-76	1193	1223	1144		1193	655	655			1193	1059
1976	6	1976.06 27-Jun-76	1121	1163	1029		1121	691	691			1121	1061
1976	6	1976.06 28-Jun-76	1026	1056	996		1026	766	766			1026	1057
1976	6	1976.06 29-Jun-76	1040	1071	1008		1040	692	692			1040	1055
1976	6	1976.06 30-Jun-76	1098	1125	1067		1098	632	632			1098	1056
1976	7	1976.07 1-Jul-76	1146	1170	1100		1146	634	634			1146	1058
1976	7	1976.07 2-Jul-76	1182	1221	1158		1182	663	663			1182	1063
1976	7	1976.07 3-Jul-76	1117	1161	1073		1117	714	714			1117	1067
1976	7	1976.07 4-Jul-76	1150	1230	1073		1150	728	728			1150	1072
1976	7	1976.07 5-Jul-76	1200					842	842			1200	1077
1976	7	1976.07 6-Jul-76	1200					813	813			1200	1083
1976	7	1976.07 7-Jul-76	1200					688	688			1200	1089
1976	7	1976.07 8-Jul-76	1200					645	645			1200	1094
1976	7	1976.07 9-Jul-76	1210	1217	1200		1210	605	605			1210	1100
1976	7	1976.07 10-Jul-76	1229	1263	1192		1229	587	587			1229	1105
1976	7	1976.07 11-Jul-76	1150					595	595			1150	1110
1976	7	1976.07 12-Jul-76	1106	1127	1083		1106	662	662			1106	1112
1976	7	1976.07 13-Jul-76	1110	1149	1071		1110	636	636			1110	1118
1976	7	1976.07 14-Jul-76	1133	1176	1040		1133	652	652			1133	1122
1976	7	1976.07 15-Jul-76	1035	1071	990		1035	643	643			1035	1123
1976	7	1976.07 16-Jul-76	1096	1161	981		1096	623	623			1096	1124
1976	7	1976.07 17-Jul-76	1143	1182	1115		1143	630	630			1143	1126
1976	7	1976.07 18-Jul-76	1067	1125	954		1067	693	693			1067	1126
1976	7	1976.07 19-Jul-76	994	1029	945		994	769	769			994	1123
1976	7	1976.07 20-Jul-76	1031	1071	983		1031	698	698			1031	1122
1976	7	1976.07 21-Jul-76	1073	1136	906		1073	647	647			1073	1123
1976	7	1976.07 22-Jul-76	1133	1152	1102		1133	639	639			1133	1126
1976	7	1976.07 23-Jul-76	1156	1217	1102		1156	643	643			1156	1127
1976	7	1976.07 24-Jul-76	1142	1167	1102		1142	627	627			1142	1128

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1976	7	1976.07	25-Jul-76	1171	1223	1115		1171	643	643		1171	1128
1976	7	1976.07	26-Jul-76	1070	1100	1037		1070	693	693		1070	1124
1976	7	1976.07	27-Jul-76	1033	1100	986		1033	693	693		1033	1121
1976	7	1976.07	28-Jul-76	1160	1227	1102		1160	652	652		1160	1126
1976	7	1976.07	29-Jul-76	1218	1269	1176		1218	679	679		1218	1132
1976	7	1976.07	30-Jul-76	1114	1133	1079		1114	649	649		1114	1132
1976	7	1976.07	31-Jul-76	1081	1119	1040		1081	723	723		1081	1130
1976	8	1976.08	1-Aug-76	1016	1037	954		1016	805	805		1016	1125
1976	8	1976.08	2-Aug-76	920	971	836		920	894	894		920	1118
1976	8	1976.08	3-Aug-76	855	874	840		855	869	869		855	1108
1976	8	1976.08	4-Aug-76	922	1053	888		922	809	809		922	1099
1976	8	1976.08	5-Aug-76	1001	1043	923		1001	775	775		1001	1092
1976	8	1976.08	6-Aug-76	949	981	911		949	817	817		949	1084
1976	8	1976.08	7-Aug-76	946	971	917		946	825	825		946	1075
1976	8	1976.08	8-Aug-76	921	986	855		921	875	875		921	1066
1976	8	1976.08	9-Aug-76	845	874	783		845	975	975		845	1053
1976	8	1976.08	10-Aug-76	917	960	815		917	853	853		917	1045
1976	8	1976.08	11-Aug-76	955	971	942		955	824	824		955	1040
1976	8	1976.08	12-Aug-76	969	999	945		969	815	815		969	1036
1976	8	1976.08	13-Aug-76	977	1079	876		977	903	903		977	1030
1976	8	1976.08	14-Aug-76	843	886	788		843	1040	1040		843	1024
1976	8	1976.08	15-Aug-76	796	815	746		796	1240	1240		796	1014
1976	8	1976.08	16-Aug-76	695	737	671		695	1350	1350		695	999
1976	8	1976.08	17-Aug-76	794	836	699		794	1140	1140		794	990
1976	8	1976.08	18-Aug-76	829	855	806		829	1010	1010		829	984
1976	8	1976.08	19-Aug-76	787	819	725		787	1120	1120		787	976
1976	8	1976.08	20-Aug-76	761	806	729		761	1240	1240		761	966
1976	8	1976.08	21-Aug-76	684	746	611		684	1380	1380		684	951
1976	8	1976.08	22-Aug-76	645	677	606		645	1470	1470		645	934
1976	8	1976.08	23-Aug-76	665	694	642		665	1560	1560		665	918
1976	8	1976.08	24-Aug-76	708	735	669		708	1470	1470		708	903
1976	8	1976.08	25-Aug-76	766	836	708		766	1290	1290		766	892
1976	8	1976.08	26-Aug-76	850	888	827		850	1160	1160		850	886
1976	8	1976.08	27-Aug-76	922	940	892		922	1100	1100		922	878
1976	8	1976.08	28-Aug-76	975	986	951		975	1020	1020		975	870
1976	8	1976.08	29-Aug-76	986	1019	934		986	1040	1040		986	866
1976	8	1976.08	30-Aug-76	943	969	906		943	1070	1070		943	861
1976	8	1976.08	31-Aug-76	1000				959	959			1000	861
1976	9	1976.09	1-Sep-76	1032	1040	1013		1032	859	859		1032	865
1976	9	1976.09	2-Sep-76	1011	1065	948		1011	855	855		1011	870
1976	9	1976.09	3-Sep-76	983	1023	930		983	865	865		983	872
1976	9	1976.09	4-Sep-76	951	1017	867		951	859	859		951	870
1976	9	1976.09	5-Sep-76	950				885	885			950	870
1976	9	1976.09	6-Sep-76	950				881	881			950	870
1976	9	1976.09	7-Sep-76	949	1056	886		949	885	885		949	871
1976	9	1976.09	8-Sep-76	966	1017	917		966	883	883		966	875
1976	9	1976.09	9-Sep-76	938	963	906		938	876	876		938	876
1976	9	1976.09	10-Sep-76	998	1031	954		998	854	854		998	877
1976	9	1976.09	11-Sep-76	1040	1100	996		1040	859	859		1040	880
1976	9	1976.09	12-Sep-76	929	1017	815		929	952	952		929	878
1976	9	1976.09	13-Sep-76	818	846	783		818	1050	1050		818	877
1976	9	1976.09	14-Sep-76	759	794	683		759	1130	1130		759	876
1976	9	1976.09	15-Sep-76	698	719	675		698	1230	1230		698	876
1976	9	1976.09	16-Sep-76	675	708	654		675	1210	1210		675	872
1976	9	1976.09	17-Sep-76	762	797	711		762	1100	1100		762	870
1976	9	1976.09	18-Sep-76	805	840	750		805	1070	1070		805	871
1976	9	1976.09	19-Sep-76	769	794	746		769	1150	1150		769	871
1976	9	1976.09	20-Sep-76	823	894	746		823	1180	1180		823	876
1976	9	1976.09	21-Sep-76	828	867	788		828	1190	1190		828	882
1976	9	1976.09	22-Sep-76	831	844	813		831	1190	1190		831	887
1976	9	1976.09	23-Sep-76	832	858	810		832	1140	1140		832	891
1976	9	1976.09	24-Sep-76	833	861	813		833	1130	1130		833	894
1976	9	1976.09	25-Sep-76	782	806	767		782	1190	1190		782	891
1976	9	1976.09	26-Sep-76	777	785	743		777	1160	1160		777	886
1976	9	1976.09	27-Sep-76	792	888	735		792	1250	1250		792	880
1976	9	1976.09	28-Sep-76	911	948	849		911	1160	1160		911	878
1976	9	1976.09	29-Sep-76	849	954	783		849	1360	1360		849	875
1976	9	1976.09	30-Sep-76	732	771	702		732	1600	1600		732	866
1976	10	1976.10	1-Oct-76	662	699	634		662	1750	1750		662	853
1976	10	1976.10	2-Oct-76	641	694	576		641	1850	1850		641	841
1976	10	1976.10	3-Oct-76	611	621	603		611	1940	1940		611	829
1976	10	1976.10	4-Oct-76	618	642	597		618	1920	1920		618	818
1976	10	1976.10	5-Oct-76	654	663	627		654	1820	1820		654	808
1976	10	1976.10	6-Oct-76	747	863	657		747	1650	1650		747	801
1976	10	1976.10	7-Oct-76	865	876	849		865	1540	1540		865	798
1976	10	1976.10	8-Oct-76	844	861	827		844	1520	1520		844	794

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1976	10	1976.10 9-Oct-76	850	880	827		850	1480	1480			850	791
1976	10	1976.10 10-Oct-76	901	960	882		901	1430	1430			901	788
1976	10	1976.10 11-Oct-76	943	965	923		943	1300	1300			943	785
1976	10	1976.10 12-Oct-76	984	1061	940		984	1210	1210			984	787
1976	10	1976.10 13-Oct-76	1102	1158	1067		1102	1130	1130			1102	796
1976	10	1976.10 14-Oct-76	1194	1234	1158		1194	1060	1060			1194	811
1976	10	1976.10 15-Oct-76	1195	1240	1158		1195	1020	1020			1195	827
1976	10	1976.10 16-Oct-76	1157	1254	1037		1157	1080	1080			1157	843
1976	10	1976.10 17-Oct-76	1067	1094	1031		1067	1080	1080			1067	853
1976	10	1976.10 18-Oct-76	1149	1180	1106		1149	1040	1040			1149	865
1976	10	1976.10 19-Oct-76	1108	1133	1043		1108	1030	1030			1108	876
1976	10	1976.10 20-Oct-76	1092	1115	1056		1092	1030	1030			1092	885
1976	10	1976.10 21-Oct-76	1099	1115	1079		1099	1030	1030			1099	894
1976	10	1976.10 22-Oct-76	1089	1110	1067		1089	1030	1030			1089	903
1976	10	1976.10 23-Oct-76	1085	1102	1059		1085	1040	1040			1085	911
1976	10	1976.10 24-Oct-76	1062	1077	1053		1062	1020	1020			1062	919
1976	10	1976.10 25-Oct-76	1085	1091	1059		1085	1020	1020			1085	929
1976	10	1976.10 26-Oct-76	1070					1010	1010			1070	939
1976	10	1976.10 27-Oct-76	1066	1131	1040		1066	1030	1030			1066	948
1976	10	1976.10 28-Oct-76	1044	1065	1017		1044	1070	1070			1044	952
1976	10	1976.10 29-Oct-76	1020	1040	999		1020	1110	1110			1020	958
1976	10	1976.10 30-Oct-76	1036	1043	1025		1036	1100	1100			1036	968
1976	10	1976.10 31-Oct-76	1046					1140	1140			1046	981
1976	11	1976.11 1-Nov-76	1046					1160	1160			1046	994
1976	11	1976.11 2-Nov-76	1056	1071	1035		1056	1150	1150			1056	1009
1976	11	1976.11 3-Nov-76	1073	1085	1059		1073	1140	1140			1073	1024
1976	11	1976.11 4-Nov-76	1050					1110	1110			1050	1038
1976	11	1976.11 5-Nov-76	1138	1149	1127		1138	1060	1060			1138	1051
1976	11	1976.11 6-Nov-76	1159	1180	1133		1159	1010	1010			1159	1060
1976	11	1976.11 7-Nov-76	1185	1197	1163		1185	1010	1010			1185	1072
1976	11	1976.11 8-Nov-76	1144	1170	1115		1144	1030	1030			1144	1082
1976	11	1976.11 9-Nov-76	1098	1125	1083		1098	1040	1040			1098	1088
1976	11	1976.11 10-Nov-76	1072	1085	1059		1072	1070	1070			1072	1092
1976	11	1976.11 11-Nov-76	1065					1090	1090			1065	1095
1976	11	1976.11 12-Nov-76	1061	1071	1053		1061	1160	1160			1061	1094
1976	11	1976.11 13-Nov-76	1074	1091	1053		1074	1170	1170			1074	1090
1976	11	1976.11 14-Nov-76	1070	1085	1056		1070	1180	1180			1070	1086
1976	11	1976.11 15-Nov-76	1005	1056	969		1005	1200	1200			1005	1080
1976	11	1976.11 16-Nov-76	1017	1037	969		1017	1200	1200			1017	1079
1976	11	1976.11 17-Nov-76	975	996	963		975	1210	1210			975	1073
1976	11	1976.11 18-Nov-76	987	1013	963		987	1230	1230			987	1069
1976	11	1976.11 19-Nov-76	975	986	960		975	1240	1240			975	1065
1976	11	1976.11 20-Nov-76	1000	1017	983		1000	1240	1240			1000	1062
1976	11	1976.11 21-Nov-76	1029	1043	1008		1029	1210	1210			1029	1060
1976	11	1976.11 22-Nov-76	1057	1079	1040		1057	1180	1180			1057	1059
1976	11	1976.11 23-Nov-76	1071	1079	1061		1071	1150	1150			1071	1059
1976	11	1976.11 24-Nov-76	1066	1083	1056		1066	1150	1150			1066	1059
1976	11	1976.11 25-Nov-76	1068	1077	1053		1068	1150	1150			1068	1058
1976	11	1976.11 26-Nov-76	1086	1110	1067		1086	1130	1130			1086	1059
1976	11	1976.11 27-Nov-76	1097	1119	1073		1097	1120	1120			1097	1061
1976	11	1976.11 28-Nov-76	1080					1110	1110			1080	1063
1976	11	1976.11 29-Nov-76	1071	1083	1061		1071	1090	1090			1071	1064
1976	11	1976.11 30-Nov-76	1050					1090	1090			1050	1064
1976	12	1976.12 1-Dec-76	1050					1080	1080			1050	1064
1976	12	1976.12 2-Dec-76	1050					1050	1050			1050	1064
1976	12	1976.12 3-Dec-76	1050					1040	1040			1050	1063
1976	12	1976.12 4-Dec-76	1050					1060	1060			1050	1063
1976	12	1976.12 5-Dec-76	1050					1040	1040			1050	1060
1976	12	1976.12 6-Dec-76	1050					1040	1040			1050	1057
1976	12	1976.12 7-Dec-76	1050					1030	1030			1050	1052
1976	12	1976.12 8-Dec-76	1050					1040	1040			1050	1049
1976	12	1976.12 9-Dec-76	1050					1040	1040			1050	1048
1976	12	1976.12 10-Dec-76	1050					1010	1010			1050	1047
1976	12	1976.12 11-Dec-76	1050					1010	1010			1050	1046
1976	12	1976.12 12-Dec-76	1050					1020	1020			1050	1046
1976	12	1976.12 13-Dec-76	1050					1030	1030			1050	1045
1976	12	1976.12 14-Dec-76	1050					1010	1010			1050	1044
1976	12	1976.12 15-Dec-76	1050					984	984			1050	1046
1976	12	1976.12 16-Dec-76	1050					988	988			1050	1047
1976	12	1976.12 17-Dec-76	1050					1010	1010			1050	1050
1976	12	1976.12 18-Dec-76	1050					983	983			1050	1052
1976	12	1976.12 19-Dec-76	1050					945	945			1050	1054
1976	12	1976.12 20-Dec-76	1050					933	933			1050	1056
1976	12	1976.12 21-Dec-76	1050					920	920			1050	1057
1976	12	1976.12 22-Dec-76	1050					903	903			1050	1056
1976	12	1976.12 23-Dec-76	1050					880	880			1050	1056

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1976	12	1976.12 24-Dec-76	1050					881	881			1050	1055
1976	12	1976.12 25-Dec-76	1050					884	884			1050	1054
1976	12	1976.12 26-Dec-76	1050					891	891			1050	1053
1976	12	1976.12 27-Dec-76	1050					876	876			1050	1052
1976	12	1976.12 28-Dec-76	1050					824	824			1050	1051
1976	12	1976.12 29-Dec-76	1050					771	771			1050	1050
1976	12	1976.12 30-Dec-76	1041	1067	1005		1041	801	801			1041	1050
1976	12	1976.12 31-Dec-76	985	999	963		985	936	936			985	1048
1977	1	1977.01 1-Jan-77	993	1023	957		993	980	980			993	1046
1977	1	1977.01 2-Jan-77	1014	1025	990		1014	984	984			1014	1044
1977	1	1977.01 3-Jan-77	978	999	948		978	1050	1050			978	1042
1977	1	1977.01 4-Jan-77	994	1035	942		994	1070	1070			994	1040
1977	1	1977.01 5-Jan-77	1037	1050	1029		1037	1080	1080			1037	1040
1977	1	1977.01 6-Jan-77	1079	1125	1031		1079	1100	1100			1079	1041
1977	1	1977.01 7-Jan-77	1127	1149	1106		1127	1100	1100			1127	1043
1977	1	1977.01 8-Jan-77	1140	1174	1121		1140	1130	1130			1140	1046
1977	1	1977.01 9-Jan-77	1300					1130	1130			1300	1055
1977	1	1977.01 10-Jan-77	1300					1120	1120			1300	1063
1977	1	1977.01 11-Jan-77	1516	1581	1492		1516	1120	1120			1516	1078
1977	1	1977.01 12-Jan-77	1522	1536	1509		1522	1120	1120			1522	1094
1977	1	1977.01 13-Jan-77	1523	1530	1515		1523	1120	1120			1523	1110
1977	1	1977.01 14-Jan-77	1402	1548	1305		1402	1110	1110			1402	1122
1977	1	1977.01 15-Jan-77	1340	1353	1329		1340	1100	1100			1340	1131
1977	1	1977.01 16-Jan-77	1325	1353	1296		1325	1100	1100			1325	1141
1977	1	1977.01 17-Jan-77	1298	1317	1283		1298	1100	1100			1298	1149
1977	1	1977.01 18-Jan-77	1319	1337	1299		1319	1090	1090			1319	1158
1977	1	1977.01 19-Jan-77	1359	1400	1337		1359	1080	1080			1359	1168
1977	1	1977.01 20-Jan-77	1400	1413	1383		1400	1070	1070			1400	1180
1977	1	1977.01 21-Jan-77	1399	1427	1353		1399	1060	1060			1399	1191
1977	1	1977.01 22-Jan-77	1419	1446	1371		1419	1040	1040			1419	1204
1977	1	1977.01 23-Jan-77	1438	1470	1397		1438	1020	1020			1438	1217
1977	1	1977.01 24-Jan-77	1462	1515	1402		1462	1020	1020			1462	1230
1977	1	1977.01 25-Jan-77	1533	1565	1506		1533	1050	1050			1533	1246
1977	1	1977.01 26-Jan-77	1559	1613	1436		1559	1090	1090			1559	1263
1977	1	1977.01 27-Jan-77	1611	1646	1583		1611	1130	1130			1611	1282
1977	1	1977.01 28-Jan-77	1631	1656	1619		1631	1150	1150			1631	1301
1977	1	1977.01 29-Jan-77	1675	1710	1646		1675	1170	1170			1675	1323
1977	1	1977.01 30-Jan-77	1697	1719	1685		1697	1160	1160			1697	1346
1977	1	1977.01 31-Jan-77	1677	1691	1661		1677	1170	1170			1677	1369
1977	2	1977.02 1-Feb-77	1654	1700	1605		1654	1150	1150			1654	1390
1977	2	1977.02 2-Feb-77	1643	1694	1608		1643	1130	1130			1643	1413
1977	2	1977.02 3-Feb-77	1576	1625	1548		1576	1130	1130			1576	1432
1977	2	1977.02 4-Feb-77	1599	1640	1565		1599	1090	1090			1599	1451
1977	2	1977.02 5-Feb-77	1640	1677	1596		1640	1080	1080			1640	1469
1977	2	1977.02 6-Feb-77	1625	1677	1577		1625	1060	1060			1625	1486
1977	2	1977.02 7-Feb-77	1652	1715	1605		1652	1070	1070			1652	1503
1977	2	1977.02 8-Feb-77	1673	1715	1623		1673	1010	1010			1673	1516
1977	2	1977.02 9-Feb-77	1611	1623	1590		1611	996	996			1611	1526
1977	2	1977.02 10-Feb-77	1584	1613	1540		1584	990	990			1584	1528
1977	2	1977.02 11-Feb-77	1561	1583	1527		1561	913	913			1561	1530
1977	2	1977.02 12-Feb-77	1595	1619	1569		1595	868	868			1595	1532
1977	2	1977.02 13-Feb-77	1576	1613	1511		1576	845	845			1576	1538
1977	2	1977.02 14-Feb-77	1563	1599	1534		1563	812	812			1563	1545
1977	2	1977.02 15-Feb-77	1544	1583	1506		1544	727	727			1544	1552
1977	2	1977.02 16-Feb-77	1535	1569	1506		1535	674	674			1535	1560
1977	2	1977.02 17-Feb-77	1514	1557	1476		1514	634	634			1514	1567
1977	2	1977.02 18-Feb-77	1533	1569	1511		1533	610	610			1533	1573
1977	2	1977.02 19-Feb-77	1517	1548	1480		1517	572	572			1517	1577
1977	2	1977.02 20-Feb-77	1520	1551	1480		1520	533	533			1520	1581
1977	2	1977.02 21-Feb-77	1504	1545	1476		1504	525	525			1504	1583
1977	2	1977.02 22-Feb-77	1446	1509	1377		1446	524	524			1446	1584
1977	2	1977.02 23-Feb-77	1411	1517	1317		1411	492	492			1411	1582
1977	2	1977.02 24-Feb-77	1280	1365	1197		1280	543	543			1280	1574
1977	2	1977.02 25-Feb-77	1356	1444	1294		1356	573	573			1356	1567
1977	2	1977.02 26-Feb-77	1318	1402	1257		1318	540	540			1318	1557
1977	2	1977.02 27-Feb-77	1282	1323	1245		1282	507	507			1282	1545
1977	2	1977.02 28-Feb-77	1276	1317	1248		1276	481	481			1276	1532
1977	3	1977.03 1-Mar-77	1327	1356	1308		1327	420	420			1327	1520
1977	3	1977.03 2-Mar-77	1320	1350	1265		1320	395	395			1320	1508
1977	3	1977.03 3-Mar-77	1184	1263	1083		1184	409	409			1184	1492
1977	3	1977.03 4-Mar-77	1102	1155	1065		1102	403	403			1102	1474
1977	3	1977.03 5-Mar-77	1077	1094	1067		1077	413	413			1077	1458
1977	3	1977.03 6-Mar-77	1097	1144	1035		1097	416	416			1097	1441
1977	3	1977.03 7-Mar-77	1096	1119	1059		1096	407	407			1096	1423
1977	3	1977.03 8-Mar-77	1043	1113	965		1043	378	378			1043	1403
1977	3	1977.03 9-Mar-77	984	1013	957		984	375	375			984	1381

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1977	3	1977.03 10-Mar-77	1011	1050	963		1011	390	390			1011	1359
1977	3	1977.03 11-Mar-77	998	1046	963		998	381	381			998	1338
1977	3	1977.03 12-Mar-77	1060	1106	977		1060	378	378			1060	1321
1977	3	1977.03 13-Mar-77	1122	1146	1094		1122	438	438			1122	1306
1977	3	1977.03 14-Mar-77	1213	1265	1131		1213	486	486			1213	1294
1977	3	1977.03 15-Mar-77	1242	1281	1203		1242	486	486			1242	1283
1977	3	1977.03 16-Mar-77	1206	1269	1146		1206	601	601			1206	1271
1977	3	1977.03 17-Mar-77	1126	1176	1067		1126	818	818			1126	1257
1977	3	1977.03 18-Mar-77	1101	1144	1067		1101	860	860			1101	1242
1977	3	1977.03 19-Mar-77	1141	1182	1106		1141	812	812			1141	1230
1977	3	1977.03 20-Mar-77	1196	1254	1136		1196	768	768			1196	1219
1977	3	1977.03 21-Mar-77	1242	1283	1215		1242	740	740			1242	1209
1977	3	1977.03 22-Mar-77	1249	1277	1203		1249	679	679			1249	1200
1977	3	1977.03 23-Mar-77	1229	1269	1188		1229	612	612			1229	1191
1977	3	1977.03 24-Mar-77	1228	1277	1170		1228	574	574			1228	1184
1977	3	1977.03 25-Mar-77	1177	1223	1121		1177	573	573			1177	1176
1977	3	1977.03 26-Mar-77	1164	1194	1119		1164	568	568			1164	1172
1977	3	1977.03 27-Mar-77	1115	1188	1083		1115	554	554			1115	1164
1977	3	1977.03 28-Mar-77	1157	1200	1094		1157	531	531			1157	1159
1977	3	1977.03 29-Mar-77	1128	1194	1077		1128	492	492			1128	1154
1977	3	1977.03 30-Mar-77	1102	1182	1025		1102	451	451			1102	1148
1977	3	1977.03 31-Mar-77	1099	1161	1061		1099	426	426			1099	1140
1977	4	1977.04 1-Apr-77	1134	1406	1013		1134	450	450			1134	1134
1977	4	1977.04 2-Apr-77	1029	1174	957		1029	379	379			1029	1129
1977	4	1977.04 3-Apr-77	1065	1140	1013		1065	390	390			1065	1128
1977	4	1977.04 4-Apr-77	1277	1383	1163		1277	366	366			1277	1134
1977	4	1977.04 5-Apr-77	1455	1438	1394		1455	318	318			1455	1146
1977	4	1977.04 6-Apr-77	1462	1509	1385		1462	280	280			1462	1159
1977	4	1977.04 7-Apr-77	1448	1480	1415		1448	259	259			1448	1172
1977	4	1977.04 8-Apr-77	1479	1546	1427		1479	250	250			1479	1189
1977	4	1977.04 9-Apr-77	1558	1625	1517		1558	250	250			1558	1207
1977	4	1977.04 10-Apr-77	1535	1596	1482		1535	276	276			1535	1225
1977	4	1977.04 11-Apr-77	1466	1583	1371		1466	323	323			1466	1238
1977	4	1977.04 12-Apr-77	1594	1659	1527		1594	254	254			1594	1254
1977	4	1977.04 13-Apr-77	1706	1797	1640		1706	175	175			1706	1270
1977	4	1977.04 14-Apr-77	1754	1803	1710		1754	140	140			1754	1287
1977	4	1977.04 15-Apr-77	1648	1733	1571		1648	162	162			1648	1302
1977	4	1977.04 16-Apr-77	1640	1688	1608		1640	151	151			1640	1319
1977	4	1977.04 17-Apr-77	1676	1755	1629		1676	141	141			1676	1338
1977	4	1977.04 18-Apr-77	1617	1721	1486		1617	148	148			1617	1354
1977	4	1977.04 19-Apr-77	1482	1505	1455		1482	141	141			1482	1364
1977	4	1977.04 20-Apr-77	1487	1517	1440		1487	131	131			1487	1372
1977	4	1977.04 21-Apr-77	1456	1494	1377		1456	145	145			1456	1379
1977	4	1977.04 22-Apr-77	1560	1602	1506		1560	120	120			1560	1390
1977	4	1977.04 23-Apr-77	1545	1586	1494		1545	121	121			1545	1401
1977	4	1977.04 24-Apr-77	1558	1617	1509		1558	131	131			1558	1413
1977	4	1977.04 25-Apr-77	1506	1557	1446		1506	145	145			1506	1425
1977	4	1977.04 26-Apr-77	1457	1521	1413		1457	144	144			1457	1436
1977	4	1977.04 27-Apr-77	1418	1446	1383		1418	151	151			1418	1445
1977	4	1977.04 28-Apr-77	1435	1486	1397		1435	133	133			1435	1455
1977	4	1977.04 29-Apr-77	1395	1694	1257		1395	133	133			1395	1465
1977	4	1977.04 30-Apr-77	1387	1667	1284		1387	156	156			1387	1474
1977	5	1977.05 1-May-77	1192	1245	1152		1192	289	289			1192	1476
1977	5	1977.05 2-May-77	1209	1263	1152		1209	423	423			1209	1482
1977	5	1977.05 3-May-77	1287	1302	1248		1287	348	348			1287	1490
1977	5	1977.05 4-May-77	1209	1245	1170		1209	327	327			1209	1487
1977	5	1977.05 5-May-77	1334	1474	1206		1334	322	322			1334	1483
1977	5	1977.05 6-May-77	1536	1569	1482		1536	338	338			1536	1486
1977	5	1977.05 7-May-77	1486	1536	1455		1486	376	376			1486	1487
1977	5	1977.05 8-May-77	1425	1467	1383		1425	425	425			1425	1485
1977	5	1977.05 9-May-77	1420	1488	1365		1420	459	459			1420	1481
1977	5	1977.05 10-May-77	1433	1476	1385		1433	501	501			1433	1477
1977	5	1977.05 11-May-77	1355	1400	1335		1355	528	528			1355	1474
1977	5	1977.05 12-May-77	1315	1410	1197		1315	513	513			1315	1464
1977	5	1977.05 13-May-77	1142	1180	1115		1142	524	524			1142	1445
1977	5	1977.05 14-May-77	1189	1211	1155		1189	524	524			1189	1427
1977	5	1977.05 15-May-77	1219	1230	1203		1219	560	560			1219	1412
1977	5	1977.05 16-May-77	1168	1223	1079		1168	588	588			1168	1397
1977	5	1977.05 17-May-77	1233	1271	1131		1233	528	528			1233	1382
1977	5	1977.05 18-May-77	1274	1296	1254		1274	437	437			1274	1370
1977	5	1977.05 19-May-77	1271	1283	1251		1271	411	411			1271	1363
1977	5	1977.05 20-May-77	1296	1331	1269		1296	389	389			1296	1357
1977	5	1977.05 21-May-77	1282	1356	1221		1282	455	455			1282	1351
1977	5	1977.05 22-May-77	1326	1356	1283		1326	403	403			1326	1343
1977	5	1977.05 23-May-77	1347	1400	1311		1347	422	422			1347	1337
1977	5	1977.05 24-May-77	1368	1400	1340		1368	376	376			1368	1330

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1977	5	1977.05 25-May-77	1390	1413	1361		1390	342	342			1390	1327
1977	5	1977.05 26-May-77	1388	1419	1359		1388	298	298			1388	1324
1977	5	1977.05 27-May-77	1393	1427	1367		1393	302	302			1393	1323
1977	5	1977.05 28-May-77	1352	1400	1296		1352	302	302			1352	1321
1977	5	1977.05 29-May-77	1361	1379	1335		1361	260	260			1361	1320
1977	5	1977.05 30-May-77	1413	1474	1367		1413	242	242			1413	1320
1977	5	1977.05 31-May-77	1483	1560	1400		1483	181	181			1483	1330
1977	6	1977.06 1-Jun-77	1637	1697	1565		1637	138	138			1637	1344
1977	6	1977.06 2-Jun-77	1617	1679	1551		1617	135	135			1617	1355
1977	6	1977.06 3-Jun-77	1521	1619	1415		1521	132	132			1521	1366
1977	6	1977.06 4-Jun-77	1441	1492	1391		1441	146	146			1441	1369
1977	6	1977.06 5-Jun-77	1442	1534	1331		1442	151	151			1442	1366
1977	6	1977.06 6-Jun-77	1355	1431	1240		1355	163	163			1355	1362
1977	6	1977.06 7-Jun-77	1220	1290	1136		1220	156	156			1220	1355
1977	6	1977.06 8-Jun-77	1384	1446	1290		1384	129	129			1384	1354
1977	6	1977.06 9-Jun-77	1518	1685	1361		1518	92	92			1518	1357
1977	6	1977.06 10-Jun-77	1743	1806	1656		1743	77	77			1743	1370
1977	6	1977.06 11-Jun-77	1748	1857	1653		1748	71	71			1748	1384
1977	6	1977.06 12-Jun-77	1608	1746	1461		1608	116	116			1608	1400
1977	6	1977.06 13-Jun-77	1569	1631	1515		1569	129	129			1569	1412
1977	6	1977.06 14-Jun-77	1519	1629	1425		1519	131	131			1519	1422
1977	6	1977.06 15-Jun-77	1468	1517	1427		1468	117	117			1468	1432
1977	6	1977.06 16-Jun-77	1462	1511	1419		1462	116	116			1462	1440
1977	6	1977.06 17-Jun-77	1441	1476	1410		1441	115	115			1441	1445
1977	6	1977.06 18-Jun-77	1485	1548	1421		1485	120	120			1485	1453
1977	6	1977.06 19-Jun-77	1392	1425	1340		1392	147	147			1392	1456
1977	6	1977.06 20-Jun-77	1413	1521	1329		1413	140	140			1413	1460
1977	6	1977.06 21-Jun-77	1498	1540	1446		1498	111	111			1498	1466
1977	6	1977.06 22-Jun-77	1558	1602	1494		1558	84	84			1558	1473
1977	6	1977.06 23-Jun-77	1522	1557	1480		1522	81	81			1522	1478
1977	6	1977.06 24-Jun-77	1559	1631	1509		1559	67	67			1559	1484
1977	6	1977.06 25-Jun-77	1569	1691	1397		1569	76	76			1569	1490
1977	6	1977.06 26-Jun-77	1466	1523	1394		1466	95	95			1466	1492
1977	6	1977.06 27-Jun-77	1412	1476	1373		1412	120	120			1412	1494
1977	6	1977.06 28-Jun-77	1445	1494	1379		1445	132	132			1445	1497
1977	6	1977.06 29-Jun-77	1485	1551	1431		1485	128	128			1485	1499
1977	6	1977.06 30-Jun-77	1573	1629	1515		1573	126	126			1573	1502
1977	7	1977.07 1-Jul-77	1608	1671	1521		1608	108	108			1608	1501
1977	7	1977.07 2-Jul-77	1555	1637	1488		1555	95	95			1555	1499
1977	7	1977.07 3-Jul-77	1613	1673	1548		1613	99	99			1613	1502
1977	7	1977.07 4-Jul-77	1538	1643	1359		1538	115	115			1538	1506
1977	7	1977.07 5-Jul-77	1527	1599	1427		1527	121	121			1527	1508
1977	7	1977.07 6-Jul-77	1519	1565	1463		1519	126	126			1519	1514
1977	7	1977.07 7-Jul-77	1531	1563	1476		1531	123	123			1531	1524
1977	7	1977.07 8-Jul-77	1566	1619	1482		1566	114	114			1566	1530
1977	7	1977.07 9-Jul-77	1587	1679	1467		1587	104	104			1587	1533
1977	7	1977.07 10-Jul-77	1542	1586	1482		1542	88	88			1542	1526
1977	7	1977.07 11-Jul-77	1599	1659	1560		1599	79	79			1599	1521
1977	7	1977.07 12-Jul-77	1675	1731	1594		1675	89	89			1675	1523
1977	7	1977.07 13-Jul-77	1521	1719	1446		1521	76	76			1521	1522
1977	7	1977.07 14-Jul-77	1683	1848	1557		1683	60	60			1683	1527
1977	7	1977.07 15-Jul-77	1825	1919	1694		1825	58	58			1825	1539
1977	7	1977.07 16-Jul-77	1826	2015	1702		1826	56	56			1826	1551
1977	7	1977.07 17-Jul-77	1836	2002	1646		1836	67	67			1836	1564
1977	7	1977.07 18-Jul-77	1728	1875	1596		1728	102	102			1728	1572
1977	7	1977.07 19-Jul-77	1656	1800	1503		1656	90	90			1656	1581
1977	7	1977.07 20-Jul-77	1560	1679	1436		1560	94	94			1560	1586
1977	7	1977.07 21-Jul-77	1597	1671	1523		1597	92	92			1597	1589
1977	7	1977.07 22-Jul-77	1604	1706	1480		1604	86	86			1604	1591
1977	7	1977.07 23-Jul-77	1610	1719	1509		1610	77	77			1610	1594
1977	7	1977.07 24-Jul-77	1630	1744	1486		1630	104	104			1630	1596
1977	7	1977.07 25-Jul-77	1487	1575	1415		1487	119	119			1487	1593
1977	7	1977.07 26-Jul-77	1495	1569	1385		1495	107	107			1495	1594
1977	7	1977.07 27-Jul-77	1519	1617	1400		1519	95	95			1519	1598
1977	7	1977.07 28-Jul-77	1576	1661	1476		1576	75	75			1576	1602
1977	7	1977.07 29-Jul-77	1650	1700	1577		1650	96	96			1650	1608
1977	7	1977.07 30-Jul-77	1606	1694	1517		1606	92	92			1606	1609
1977	7	1977.07 31-Jul-77	1590	1643	1536		1590	71	71			1590	1608
1977	8	1977.08 1-Aug-77	1643	1761	1551		1643	95	95			1643	1611
1977	8	1977.08 2-Aug-77	1573	1623	1506		1573	81	81			1573	1610
1977	8	1977.08 3-Aug-77	1651	1733	1575		1651	75	75			1651	1614
1977	8	1977.08 4-Aug-77	1651	1706	1575		1651	65	65			1651	1618
1977	8	1977.08 5-Aug-77	1651	1774	1494		1651	73	73			1651	1622
1977	8	1977.08 6-Aug-77	1599	1752	1476		1599	88	88			1599	1625
1977	8	1977.08 7-Aug-77	1514	1619	1361		1514	109	109			1514	1623
1977	8	1977.08 8-Aug-77	1481	1530	1421		1481	150	150			1481	1619

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1977	8	1977.08 9-Aug-77	1469	1527	1402		1469	134	134			1469	1617
1977	8	1977.08 10-Aug-77	1150					138	138			1150	1602
1977	8	1977.08 11-Aug-77	1150					113	113			1150	1584
1977	8	1977.08 12-Aug-77	1593	1679	1470		1593	100	100			1593	1587
1977	8	1977.08 13-Aug-77	1644	1755	1534		1644	109	109			1644	1585
1977	8	1977.08 14-Aug-77	1567	1640	1480		1567	154	154			1567	1577
1977	8	1977.08 15-Aug-77	1353	1455	1294		1353	221	221			1353	1561
1977	8	1977.08 16-Aug-77	1383	1415	1317		1383	163	163			1383	1546
1977	8	1977.08 17-Aug-77	1454	1515	1421		1454	133	133			1454	1537
1977	8	1977.08 18-Aug-77	1544	1581	1492		1544	124	124			1544	1533
1977	8	1977.08 19-Aug-77	1486	1548	1421		1486	130	130			1486	1531
1977	8	1977.08 20-Aug-77	1500	1560	1461		1500	132	132			1500	1527
1977	8	1977.08 21-Aug-77	1477	1521	1402		1477	154	154			1477	1523
1977	8	1977.08 22-Aug-77	1450	1506	1402		1450	190	190			1450	1518
1977	8	1977.08 23-Aug-77	1504	1548	1455		1504	173	173			1504	1514
1977	8	1977.08 24-Aug-77	1520	1590	1463		1520	170	170			1520	1515
1977	8	1977.08 25-Aug-77	1559	1656	1506		1559	121	121			1559	1517
1977	8	1977.08 26-Aug-77	1666	1710	1623		1666	95	95			1666	1522
1977	8	1977.08 27-Aug-77	1684	1786	1590		1684	96	96			1684	1525
1977	8	1977.08 28-Aug-77	1631	1752	1497		1631	115	115			1631	1525
1977	8	1977.08 29-Aug-77	1525	1656	1373		1525	163	163			1525	1522
1977	8	1977.08 30-Aug-77	1493	1560	1452		1493	98	98			1493	1519
1977	8	1977.08 31-Aug-77	1675	1731	1577		1675	88	88			1675	1520
1977	9	1977.09 1-Sep-77	1619	1740	1470		1619	116	116			1619	1521
1977	9	1977.09 2-Sep-77	1542	1599	1482		1542	127	127			1542	1518
1977	9	1977.09 3-Sep-77	1615	1665	1557		1615	134	134			1615	1517
1977	9	1977.09 4-Sep-77	1523	1608	1455		1523	142	142			1523	1512
1977	9	1977.09 5-Sep-77	1529	1583	1470		1529	140	140			1529	1510
1977	9	1977.09 6-Sep-77	1587	1683	1545		1587	126	126			1587	1512
1977	9	1977.09 7-Sep-77	1659	1761	1557		1659	119	119			1659	1518
1977	9	1977.09 8-Sep-77	1632	1744	1509		1632	123	123			1632	1524
1977	9	1977.09 9-Sep-77	1639	1713	1560		1639	111	111			1639	1540
1977	9	1977.09 10-Sep-77	1632	1782	1482		1632	121	121			1632	1556
1977	9	1977.09 11-Sep-77	1554	1581	1517		1554	130	130			1554	1555
1977	9	1977.09 12-Sep-77	1497	1560	1458		1497	153	153			1497	1550
1977	9	1977.09 13-Sep-77	1508	1569	1440		1508	157	157			1508	1548
1977	9	1977.09 14-Sep-77	1468	1534	1421		1468	146	146			1468	1552
1977	9	1977.09 15-Sep-77	1560	1665	1521		1560	135	135			1560	1558
1977	9	1977.09 16-Sep-77	1578	1673	1452		1578	165	165			1578	1562
1977	9	1977.09 17-Sep-77	1399	1444	1359		1399	175	175			1399	1557
1977	9	1977.09 18-Sep-77	1370	1427	1260		1370	225	225			1370	1553
1977	9	1977.09 19-Sep-77	1301	1359	1230		1301	227	227			1301	1547
1977	9	1977.09 20-Sep-77	1249	1275	1211		1249	235	235			1249	1539
1977	9	1977.09 21-Sep-77	1280	1317	1217		1280	210	210			1280	1533
1977	9	1977.09 22-Sep-77	1290	1313	1260		1290	217	217			1290	1526
1977	9	1977.09 23-Sep-77	1265	1286	1236		1265	237	237			1265	1518
1977	9	1977.09 24-Sep-77	1239	1275	1211		1239	245	245			1239	1507
1977	9	1977.09 25-Sep-77	1213	1248	1170		1213	234	234			1213	1492
1977	9	1977.09 26-Sep-77	1206	1248	1161		1206	284	284			1206	1476
1977	9	1977.09 27-Sep-77	1247	1319	1209		1247	255	255			1247	1463
1977	9	1977.09 28-Sep-77	1328	1373	1281		1328	219	219			1328	1457
1977	9	1977.09 29-Sep-77	1308	1346	1283		1308	220	220			1308	1450
1977	9	1977.09 30-Sep-77	1349	1394	1319		1349	232	232			1349	1440
1977	10	1977.10 1-Oct-77	1369	1394	1340		1369	258	258			1369	1431
1977	10	1977.10 2-Oct-77	1357	1410	1305		1357	282	282			1357	1425
1977	10	1977.10 3-Oct-77	1312	1365	1251		1312	260	260			1312	1415
1977	10	1977.10 4-Oct-77	1330					228	228			1330	1409
1977	10	1977.10 5-Oct-77	1359	1383	1329		1359	218	218			1359	1403
1977	10	1977.10 6-Oct-77	1380	1530	1294		1380	225	225			1380	1396
1977	10	1977.10 7-Oct-77	1513	1545	1467		1513	225	225			1513	1391
1977	10	1977.10 8-Oct-77	1456	1521	1421		1456	225	225			1456	1385
1977	10	1977.10 9-Oct-77	1495	1540	1455		1495	239	239			1495	1380
1977	10	1977.10 10-Oct-77	1434	1458	1397		1434	246	246			1434	1374
1977	10	1977.10 11-Oct-77	1450	1517	1388		1450	242	242			1450	1370
1977	10	1977.10 12-Oct-77	1404	1436	1371		1404	250	250			1404	1367
1977	10	1977.10 13-Oct-77	1423	1521	1350		1423	250	250			1423	1364
1977	10	1977.10 14-Oct-77	1418	1474	1361		1418	253	253			1418	1363
1977	10	1977.10 15-Oct-77	1415	1455	1367		1415	250	250			1415	1358
1977	10	1977.10 16-Oct-77	1442	1474	1402		1442	272	272			1442	1353
1977	10	1977.10 17-Oct-77	1424	1452	1397		1424	253	253			1424	1354
1977	10	1977.10 18-Oct-77	1455	1482	1415		1455	232	232			1455	1357
1977	10	1977.10 19-Oct-77	1438	1467	1388		1438	225	225			1438	1362
1977	10	1977.10 20-Oct-77	1402	1436	1361		1402	246	246			1402	1367
1977	10	1977.10 21-Oct-77	1436	1461	1394		1436	253	253			1436	1372
1977	10	1977.10 22-Oct-77	1472	1534	1391		1472	253	253			1472	1378
1977	10	1977.10 23-Oct-77	1500	1517	1467		1500	246	246			1500	1386

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1977	10	1977.10 24-Oct-77	1460	1492	1431		1460	257	257			1460	1393
1977	10	1977.10 25-Oct-77	1516	1542	1480		1516	232	232			1516	1403
1977	10	1977.10 26-Oct-77	1486	1540	1433		1486	225	225			1486	1413
1977	10	1977.10 27-Oct-77	1472	1506	1427		1472	242	242			1472	1420
1977	10	1977.10 28-Oct-77	1430	1463	1402		1430	253	253			1430	1424
1977	10	1977.10 29-Oct-77	1390	1415	1365		1390	260	260			1390	1426
1977	10	1977.10 30-Oct-77	1379	1388	1359		1379	268	268			1379	1427
1977	10	1977.10 31-Oct-77	1424	1452	1379		1424	264	264			1424	1429
1977	11	1977.11 1-Nov-77	1468	1534	1410		1468	257	257			1468	1433
1977	11	1977.11 2-Nov-77	1404	1425	1373		1404	266	266			1404	1436
1977	11	1977.11 3-Nov-77	1343	1367	1329		1343	301	301			1343	1436
1977	11	1977.11 4-Nov-77	1348	1388	1331		1348	296	296			1348	1436
1977	11	1977.11 5-Nov-77	1444	1482	1394		1444	285	285			1444	1438
1977	11	1977.11 6-Nov-77	1395	1436	1365		1395	318	318			1395	1434
1977	11	1977.11 7-Nov-77	1331	1383	1283		1331	383	383			1331	1430
1977	11	1977.11 8-Nov-77	1213	1286	1155		1213	387	387			1213	1421
1977	11	1977.11 9-Nov-77	1194	1211	1163		1194	415	415			1194	1413
1977	11	1977.11 10-Nov-77	1161	1176	1152		1161	458	458			1161	1403
1977	11	1977.11 11-Nov-77	1080	1152	1035		1080	485	485			1080	1392
1977	11	1977.11 12-Nov-77	1013	1031	994		1013	506	506			1013	1378
1977	11	1977.11 13-Nov-77	988	994	981		988	540	540			988	1364
1977	11	1977.11 14-Nov-77	997	1002	990		997	534	534			997	1350
1977	11	1977.11 15-Nov-77	997	1005	990		997	522	522			997	1335
1977	11	1977.11 16-Nov-77	1014	1053	994		1014	477	477			1014	1322
1977	11	1977.11 17-Nov-77	1082	1115	1056		1082	435	435			1082	1309
1977	11	1977.11 18-Nov-77	1130	1136	1115		1130	419	419			1130	1299
1977	11	1977.11 19-Nov-77	1122	1131	1100		1122	421	421			1122	1290
1977	11	1977.11 20-Nov-77	1084	1100	1040		1084	445	445			1084	1278
1977	11	1977.11 21-Nov-77	988	1031	965		988	454	454			988	1262
1977	11	1977.11 22-Nov-77	979	983	975		979	459	459			979	1244
1977	11	1977.11 23-Nov-77	979	986	951		979	497	497			979	1228
1977	11	1977.11 24-Nov-77	981	1046	915		981	521	521			981	1211
1977	11	1977.11 25-Nov-77	1001	1017	975		1001	489	489			1001	1194
1977	11	1977.11 26-Nov-77	1004	1008	994		1004	465	465			1004	1179
1977	11	1977.11 27-Nov-77	1004	1017	996		1004	467	467			1004	1165
1977	11	1977.11 28-Nov-77	991	1005	986		991	465	465			991	1151
1977	11	1977.11 29-Nov-77	1010	1025	994		1010	463	463			1010	1139
1977	11	1977.11 30-Nov-77	1011	1023	1002		1011	461	461			1011	1125
1977	12	1977.12 1-Dec-77	994	1005	977		994	455	455			994	1109
1977	12	1977.12 2-Dec-77	1016	1035	1005		1016	445	445			1016	1096
1977	12	1977.12 3-Dec-77	1049	1056	1035		1049	441	441			1049	1087
1977	12	1977.12 4-Dec-77	1050	1056	1040		1050	443	443			1050	1077
1977	12	1977.12 5-Dec-77	1036	1050	1019		1036	456	456			1036	1063
1977	12	1977.12 6-Dec-77	1036	1043	1031		1036	446	446			1036	1051
1977	12	1977.12 7-Dec-77	1038	1043	1035		1038	442	442			1038	1041
1977	12	1977.12 8-Dec-77	1038	1043	1035		1038	444	444			1038	1036
1977	12	1977.12 9-Dec-77	1013	1050	977		1013	437	437			1013	1030
1977	12	1977.12 10-Dec-77	976	983	971		976	434	434			976	1023
1977	12	1977.12 11-Dec-77	961	971	942		961	452	452			961	1019
1977	12	1977.12 12-Dec-77	946	963	940		946	472	472			946	1017
1977	12	1977.12 13-Dec-77	981	990	963		981	448	448			981	1017
1977	12	1977.12 14-Dec-77	976	983	971		976	442	442			976	1016
1977	12	1977.12 15-Dec-77	998	1005	983		998	442	442			998	1016
1977	12	1977.12 16-Dec-77	998	1002	996		998	444	444			998	1016
1977	12	1977.12 17-Dec-77	983	996	971		983	470	470			983	1012
1977	12	1977.12 18-Dec-77	937	969	880		937	531	531			937	1006
1977	12	1977.12 19-Dec-77	872	882	863		872	547	547			872	998
1977	12	1977.12 20-Dec-77	936	969	888		936	544	544			936	993
1977	12	1977.12 21-Dec-77	932	963	903		932	576	576			932	991
1977	12	1977.12 22-Dec-77	880	900	874		880	588	588			880	988
1977	12	1977.12 23-Dec-77	875	880	870		875	585	585			875	984
1977	12	1977.12 24-Dec-77	846	876	831		846	596	596			846	980
1977	12	1977.12 25-Dec-77	898	906	858		898	581	581			898	976
1977	12	1977.12 26-Dec-77	910	927	900		910	574	574			910	973
1977	12	1977.12 27-Dec-77	922	936	906		922	587	587			922	970
1977	12	1977.12 28-Dec-77	826	897	791		826	600	600			826	965
1977	12	1977.12 29-Dec-77	801	815	791		801	591	591			801	958
1977	12	1977.12 30-Dec-77	832	840	819		832	584	584			832	952
1977	12	1977.12 31-Dec-77	863	888	840		863	581	581			863	948
1978	1	1978.01 1-Jan-78	887	903	867		887	574	574			887	943
1978	1	1978.01 2-Jan-78	889	906	867		889	574	574			889	938
1978	1	1978.01 3-Jan-78	907	917	900		907	576	576			907	933
1978	1	1978.01 4-Jan-78	895	903	882		895	585	585			895	928
1978	1	1978.01 5-Jan-78	879	892	858		879	596	596			879	923
1978	1	1978.01 6-Jan-78	834	861	753		834	661	661			834	916
1978	1	1978.01 7-Jan-78	746	765	729		746	694	694			746	907

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1978	1	1978.01 8-Jan-78	728	783	677		728	813	813			728	897
1978	1	1978.01 9-Jan-78	668	683	642		668	943	943			668	887
1978	1	1978.01 10-Jan-78	516	636	456		516	1040	1040			516	872
1978	1	1978.01 11-Jan-78	528	645	472		528	1010	1010			528	858
1978	1	1978.01 12-Jan-78	603	651	586		603	1280	1280			603	846
1978	1	1978.01 13-Jan-78	502	580	471		502	1340	1340			502	830
1978	1	1978.01 14-Jan-78	468	476	459		468	1300	1300			468	812
1978	1	1978.01 15-Jan-78	489	514	464		489	1510	1510			489	795
1978	1	1978.01 16-Jan-78	424	493	341		424	2540	2540			424	776
1978	1	1978.01 17-Jan-78	390	419	309		390	3640	3640			390	758
1978	1	1978.01 18-Jan-78	360					4150	4150			360	741
1978	1	1978.01 19-Jan-78	360					4340	4340			360	722
1978	1	1978.01 20-Jan-78	341	356	313		341	4520	4520			341	702
1978	1	1978.01 21-Jan-78	333	397	310		333	5190	5190			333	684
1978	1	1978.01 22-Jan-78	419	433	393		419	5160	5160			419	669
1978	1	1978.01 23-Jan-78	462	493	435		462	4800	4800			462	656
1978	1	1978.01 24-Jan-78	517	615	498		517	4290	4290			517	643
1978	1	1978.01 25-Jan-78	673	729	621		673	3570	3570			673	635
1978	1	1978.01 26-Jan-78	776	819	729		776	2930	2930			776	631
1978	1	1978.01 27-Jan-78	872	921	819		872	2490	2490			872	632
1978	1	1978.01 28-Jan-78	905	930	867		905	2340	2340			905	636
1978	1	1978.01 29-Jan-78	857	867	849		857	2420	2420			857	636
1978	1	1978.01 30-Jan-78	855	858	849		855	2370	2370			855	636
1978	1	1978.01 31-Jan-78	856	861	849		856	2300	2300			856	635
1978	2	1978.02 1-Feb-78	800					2240	2240			800	632
1978	2	1978.02 2-Feb-78	800					2210	2210			800	629
1978	2	1978.02 3-Feb-78	800					2160	2160			800	625
1978	2	1978.02 4-Feb-78	800					2120	2120			800	623
1978	2	1978.02 5-Feb-78	800					2110	2110			800	622
1978	2	1978.02 6-Feb-78	800					2180	2180			800	623
1978	2	1978.02 7-Feb-78	800					2250	2250			800	626
1978	2	1978.02 8-Feb-78	800					3150	3150			800	630
1978	2	1978.02 9-Feb-78	800					4970	4970			800	640
1978	2	1978.02 10-Feb-78	800					6600	6600			800	649
1978	2	1978.02 11-Feb-78	800					8090	8090			800	655
1978	2	1978.02 12-Feb-78	800					7720	7720			800	665
1978	2	1978.02 13-Feb-78	800					7590	7590			800	676
1978	2	1978.02 14-Feb-78	800					8330	8330			800	687
1978	2	1978.02 15-Feb-78	800					8980	8980			800	699
1978	2	1978.02 16-Feb-78	800					9460	9460			800	713
1978	2	1978.02 17-Feb-78	800					10100	10100			800	728
1978	2	1978.02 18-Feb-78	800					11700	11700			800	742
1978	2	1978.02 19-Feb-78	800					13100	13100			800	758
1978	2	1978.02 20-Feb-78	800					13500	13500			800	773
1978	2	1978.02 21-Feb-78	800					13200	13200			800	786
1978	2	1978.02 22-Feb-78	800					12500	12500			800	797
1978	2	1978.02 23-Feb-78	800					11500	11500			800	806
1978	2	1978.02 24-Feb-78	800					10300	10300			800	811
1978	2	1978.02 25-Feb-78	800					9020	9020			800	812
1978	2	1978.02 26-Feb-78	800					7700	7700			800	809
1978	2	1978.02 27-Feb-78	800					6500	6500			800	806
1978	2	1978.02 28-Feb-78	800					5640	5640			800	804
1978	3	1978.03 1-Mar-78	750	772	732		750	5120	5120			750	800
1978	3	1978.03 2-Mar-78	751	788	730		751	4850	4850			751	797
1978	3	1978.03 3-Mar-78	763	784	741		763	4700	4700			763	795
1978	3	1978.03 4-Mar-78	800	825	775		800	4800	4800			800	795
1978	3	1978.03 5-Mar-78	701	768	513		701	5970	5970			701	792
1978	3	1978.03 6-Mar-78	380	492	306		380	8530	8530			380	778
1978	3	1978.03 7-Mar-78	309	322	293		309	9470	9470			309	762
1978	3	1978.03 8-Mar-78	311	322	292		311	9680	9680			311	746
1978	3	1978.03 9-Mar-78	245	289	225		245	10500	10500			245	727
1978	3	1978.03 10-Mar-78	229	239	223		229	11900	11900			229	708
1978	3	1978.03 11-Mar-78	231	237	222		231	13800	13800			231	689
1978	3	1978.03 12-Mar-78	240	249	233		240	15400	15400			240	670
1978	3	1978.03 13-Mar-78	252	261	240		252	16200	16200			252	652
1978	3	1978.03 14-Mar-78	267	275	257		267	16300	16300			267	634
1978	3	1978.03 15-Mar-78	277	285	269		277	16200	16200			277	617
1978	3	1978.03 16-Mar-78	279	286	269		279	15900	15900			279	600
1978	3	1978.03 17-Mar-78	297	305	284		297	15500	15500			297	583
1978	3	1978.03 18-Mar-78	312	319	303		312	14900	14900			312	566
1978	3	1978.03 19-Mar-78	325	337	316		325	14100	14100			325	551
1978	3	1978.03 20-Mar-78	329	343	319		329	13300	13300			329	535
1978	3	1978.03 21-Mar-78	324	330	317		324	12700	12700			324	519
1978	3	1978.03 22-Mar-78	320	332	317		320	12200	12200			320	503
1978	3	1978.03 23-Mar-78	324	359	314		324	11700	11700			324	487
1978	3	1978.03 24-Mar-78	321	339	308		321	11500	11500			321	471

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1978	3	1978.03 25-Mar-78	303	318	287		303	11400	11400			303	455
1978	3	1978.03 26-Mar-78	295	310	283		295	11500	11500			295	438
1978	3	1978.03 27-Mar-78	290	313	276		290	11500	11500			290	421
1978	3	1978.03 28-Mar-78	275	280	269		275	11500	11500			275	403
1978	3	1978.03 29-Mar-78	268	273	264		268	11500	11500			268	386
1978	3	1978.03 30-Mar-78	268	274	265		268	11500	11500			268	368
1978	3	1978.03 31-Mar-78	262	267	255		262	11600	11600			262	352
1978	4	1978.04 1-Apr-78	256	263	252		256	11800	11800			256	335
1978	4	1978.04 2-Apr-78	250	256	245		250	12200	12200			250	318
1978	4	1978.04 3-Apr-78	244	251	237		244	12700	12700			244	299
1978	4	1978.04 4-Apr-78	224	233	213		224	13200	13200			224	284
1978	4	1978.04 5-Apr-78	208	212	202		208	14100	14100			208	278
1978	4	1978.04 6-Apr-78	199	205	185		199	15300	15300			199	274
1978	4	1978.04 7-Apr-78	198	204	189		198	16400	16400			198	270
1978	4	1978.04 8-Apr-78	206	216	192		206	17800	17800			206	269
1978	4	1978.04 9-Apr-78	216	221	211		216	18600	18600			216	269
1978	4	1978.04 10-Apr-78	212	225	204		212	19300	19300			212	268
1978	4	1978.04 11-Apr-78	194	201	184		194	20700	20700			194	267
1978	4	1978.04 12-Apr-78	187	194	176		187	22100	22100			187	264
1978	4	1978.04 13-Apr-78	197	206	189		197	22800	22800			197	262
1978	4	1978.04 14-Apr-78	199	209	187		199	23100	23100			199	259
1978	4	1978.04 15-Apr-78	180	186	173		180	22900	22900			180	256
1978	4	1978.04 16-Apr-78	177	186	171		177	22500	22500			177	252
1978	4	1978.04 17-Apr-78	171	177	165		171	22000	22000			171	247
1978	4	1978.04 18-Apr-78	179	188	167		179	21800	21800			179	243
1978	4	1978.04 19-Apr-78	185					21900	21900			185	238
1978	4	1978.04 20-Apr-78	198	214	189		198	22100	22100			198	234
1978	4	1978.04 21-Apr-78	191	199	171		191	22400	22400			191	229
1978	4	1978.04 22-Apr-78	190	211	171		190	22300	22300			190	225
1978	4	1978.04 23-Apr-78	182	188	175		182	22000	22000			182	220
1978	4	1978.04 24-Apr-78	174	180	165		174	21600	21600			174	216
1978	4	1978.04 25-Apr-78	171	181	163		171	21100	21100			171	212
1978	4	1978.04 26-Apr-78	169	185	157		169	21300	21300			169	208
1978	4	1978.04 27-Apr-78	153	161	145		153	22800	22800			153	204
1978	4	1978.04 28-Apr-78	149	165	128		149	23900	23900			149	200
1978	4	1978.04 29-Apr-78	154	167	138		154	24800	24800			154	196
1978	4	1978.04 30-Apr-78	140	157	124		140	25400	25400			140	192
1978	5	1978.05 1-May-78	150					26000	26000			150	188
1978	5	1978.05 2-May-78	160	163	157		160	26000	26000			160	185
1978	5	1978.05 3-May-78	154	157	151		154	26200	26200			154	182
1978	5	1978.05 4-May-78	151	155	150		151	26200	26200			151	180
1978	5	1978.05 5-May-78	149	165	125		149	25800	25800			149	178
1978	5	1978.05 6-May-78	147	158	135		147	25500	25500			147	176
1978	5	1978.05 7-May-78	142	154	132		142	25400	25400			142	174
1978	5	1978.05 8-May-78	143	160	124		143	25200	25200			143	172
1978	5	1978.05 9-May-78	134	145	121		134	25000	25000			134	169
1978	5	1978.05 10-May-78	129	142	109		129	24700	24700			129	167
1978	5	1978.05 11-May-78	126	138	113		126	23300	23300			126	164
1978	5	1978.05 12-May-78	144	157	125		144	21700	21700			144	163
1978	5	1978.05 13-May-78	154	170	139		154	20500	20500			154	162
1978	5	1978.05 14-May-78	162	171	151		162	19000	19000			162	160
1978	5	1978.05 15-May-78	165	170	160		165	17700	17700			165	160
1978	5	1978.05 16-May-78	162	165	158		162	16800	16800			162	159
1978	5	1978.05 17-May-78	160	167	152		160	16200	16200			160	159
1978	5	1978.05 18-May-78	158	167	149		158	15600	15600			158	158
1978	5	1978.05 19-May-78	149	161	141		149	15000	15000			149	157
1978	5	1978.05 20-May-78	136	141	123		136	14900	14900			136	155
1978	5	1978.05 21-May-78	123	137	111		123	15200	15200			123	153
1978	5	1978.05 22-May-78	113	137	105		113	15700	15700			113	150
1978	5	1978.05 23-May-78	106	111	101		106	15900	15900			106	148
1978	5	1978.05 24-May-78	110	115	98		110	15900	15900			110	145
1978	5	1978.05 25-May-78	114	129	100		114	15800	15800			114	144
1978	5	1978.05 26-May-78	129	144	121		129	15200	15200			129	142
1978	5	1978.05 27-May-78	136	145	124		136	14300	14300			136	142
1978	5	1978.05 28-May-78	138	144	132		138	12900	12900			138	141
1978	5	1978.05 29-May-78	131	134	127		131	12100	12100			131	141
1978	5	1978.05 30-May-78	133	137	124		133	11600	11600			133	140
1978	5	1978.05 31-May-78	143	152	134		143	11400	11400			143	140
1978	6	1978.06 1-Jun-78	161	170	149		161	11200	11200			161	140
1978	6	1978.06 2-Jun-78	170	177	163		170	10700	10700			170	141
1978	6	1978.06 3-Jun-78	158	165	152		158	10400	10400			158	141
1978	6	1978.06 4-Jun-78	152	157	147		152	10100	10100			152	141
1978	6	1978.06 5-Jun-78	134	147	121		134	10000	10000			134	141
1978	6	1978.06 6-Jun-78	120	128	110		120	9930	9930			120	140
1978	6	1978.06 7-Jun-78	112	121	105		112	9830	9830			112	139
1978	6	1978.06 8-Jun-78	139	153	121		139	9500	9500			139	139

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1978	6	1978.06 9-Jun-78	153	161	147		153	8950	8950			153	140
1978	6	1978.06 10-Jun-78	163	169	157		163	8470	8470			163	141
1978	6	1978.06 11-Jun-78	163	167	157		163	8250	8250			163	142
1978	6	1978.06 12-Jun-78	174	181	163		174	7990	7990			174	142
1978	6	1978.06 13-Jun-78	202	216	181		202	7350	7350			202	144
1978	6	1978.06 14-Jun-78	243	262	218		243	6420	6420			243	146
1978	6	1978.06 15-Jun-78	251	264	236		251	6090	6090			251	149
1978	6	1978.06 16-Jun-78	217	238	197		217	6460	6460			217	151
1978	6	1978.06 17-Jun-78	199	208	192		199	6960	6960			199	152
1978	6	1978.06 18-Jun-78	199	206	193		199	7170	7170			199	154
1978	6	1978.06 19-Jun-78	222	239	200		222	6620	6620			222	157
1978	6	1978.06 20-Jun-78	214	224	203		214	6080	6080			214	160
1978	6	1978.06 21-Jun-78	248	281	208		248	5350	5350			248	164
1978	6	1978.06 22-Jun-78	317	344	279		317	4640	4640			317	172
1978	6	1978.06 23-Jun-78	338	354	330		338	4390	4390			338	179
1978	6	1978.06 24-Jun-78	331	348	304		331	4320	4320			331	186
1978	6	1978.06 25-Jun-78	288	295	281		288	4700	4700			288	192
1978	6	1978.06 26-Jun-78	304	322	277		304	4730	4730			304	197
1978	6	1978.06 27-Jun-78	354	387	324		354	4430	4430			354	204
1978	6	1978.06 28-Jun-78	414	426	392		414	4000	4000			414	214
1978	6	1978.06 29-Jun-78	432	487	408		432	3760	3760			432	224
1978	6	1978.06 30-Jun-78	539	581	491		539	3290	3290			539	237
1978	7	1978.07 1-Jul-78	596	608	589		596	2980	2980			596	252
1978	7	1978.07 2-Jul-78	607	620	589		607	2830	2830			607	266
1978	7	1978.07 3-Jul-78	611	648	555		611	2770	2770			611	281
1978	7	1978.07 4-Jul-78	530	559	503		530	2880	2880			530	294
1978	7	1978.07 5-Jul-78	530	571	505		530	2810	2810			530	307
1978	7	1978.07 6-Jul-78	604	644	569		604	2470	2470			604	323
1978	7	1978.07 7-Jul-78	642	665	620		642	2260	2260			642	341
1978	7	1978.07 8-Jul-78	642	662	627		642	2180	2180			642	358
1978	7	1978.07 9-Jul-78	612	657	553		612	2240	2240			612	373
1978	7	1978.07 10-Jul-78	568	606	543		568	2230	2230			568	386
1978	7	1978.07 11-Jul-78	622	640	588		622	2040	2040			622	402
1978	7	1978.07 12-Jul-78	643	662	625		643	1920	1920			643	417
1978	7	1978.07 13-Jul-78	588	630	559		588	1930	1930			588	430
1978	7	1978.07 14-Jul-78	609	633	586		609	1880	1880			609	442
1978	7	1978.07 15-Jul-78	648	686	628		648	1820	1820			648	456
1978	7	1978.07 16-Jul-78	675	698	648		675	1740	1740			675	471
1978	7	1978.07 17-Jul-78	648	666	628		648	1730	1730			648	486
1978	7	1978.07 18-Jul-78	718	755	666		718	1640	1640			718	503
1978	7	1978.07 19-Jul-78	759	737	740		759	1590	1590			759	521
1978	7	1978.07 20-Jul-78	703	750	660		703	1590	1590			703	537
1978	7	1978.07 21-Jul-78	698	718	677		698	1490	1490			698	552
1978	7	1978.07 22-Jul-78	726	747	697		726	1500	1500			726	566
1978	7	1978.07 23-Jul-78	724	759	704		724	1500	1500			724	579
1978	7	1978.07 24-Jul-78	759	791	736		759	1500	1500			759	593
1978	7	1978.07 25-Jul-78	817	846	784		817	1410	1410			817	611
1978	7	1978.07 26-Jul-78	854	890	819		854	1360	1360			854	629
1978	7	1978.07 27-Jul-78	844	901	798		844	1360	1360			844	645
1978	7	1978.07 28-Jul-78	889	934	866		889	1330	1330			889	661
1978	7	1978.07 29-Jul-78	868	927	822		868	1340	1340			868	676
1978	7	1978.07 30-Jul-78	807	860	764		807	1410	1410			807	685
1978	7	1978.07 31-Jul-78	841	876	806		841	1410	1410			841	693
1978	8	1978.08 1-Aug-78	864	887	843		864	1340	1340			864	701
1978	8	1978.08 2-Aug-78	904	948	864		904	1270	1270			904	711
1978	8	1978.08 3-Aug-78	797	841	754		797	1340	1340			797	720
1978	8	1978.08 4-Aug-78	741	779	718		741	1360	1360			741	727
1978	8	1978.08 5-Aug-78	795	850	746		795	1340	1340			795	734
1978	8	1978.08 6-Aug-78	812	852	779		812	1380	1380			812	739
1978	8	1978.08 7-Aug-78	760	793	715		760	1410	1410			760	743
1978	8	1978.08 8-Aug-78	808	838	774		808	1330	1330			808	750
1978	8	1978.08 9-Aug-78	815	851	755		815	1260	1260			815	758
1978	8	1978.08 10-Aug-78	782	837	745		782	1350	1350			782	763
1978	8	1978.08 11-Aug-78	778	820	731		778	1330	1330			778	768
1978	8	1978.08 12-Aug-78	748	772	714		748	1290	1290			748	773
1978	8	1978.08 13-Aug-78	781	803	764		781	1280	1280			781	779
1978	8	1978.08 14-Aug-78	771	804	745		771	1310	1310			771	783
1978	8	1978.08 15-Aug-78	822	851	751		822	1320	1320			822	788
1978	8	1978.08 16-Aug-78	835	874	785		835	1270	1270			835	794
1978	8	1978.08 17-Aug-78	799	838	765		799	1290	1290			799	797
1978	8	1978.08 18-Aug-78	792	842	766		792	1260	1260			792	798
1978	8	1978.08 19-Aug-78	809	838	785		809	1290	1290			809	801
1978	8	1978.08 20-Aug-78	785	820	752		785	1370	1370			785	804
1978	8	1978.08 21-Aug-78	756	806	716		756	1520	1520			756	805
1978	8	1978.08 22-Aug-78	753	817	707		753	1460	1460			753	806
1978	8	1978.08 23-Aug-78	770	809	729		770	1380	1380			770	807

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1978	8	1978.08 24-Aug-78	790	833	759		790	1410	1410			790	806
1978	8	1978.08 25-Aug-78	765	797	726		765	1470	1470			765	803
1978	8	1978.08 26-Aug-78	727	772	690		727	1610	1610			727	799
1978	8	1978.08 27-Aug-78	660	720	607		660	1760	1760			660	791
1978	8	1978.08 28-Aug-78	642	661	626		642	1820	1820			642	784
1978	8	1978.08 29-Aug-78	629	660	590		629	1730	1730			629	778
1978	8	1978.08 30-Aug-78	628	654	598		628	1680	1680			628	771
1978	8	1978.08 31-Aug-78	631	674	586		631	1730	1730			631	763
1978	9	1978.09 1-Sep-78	594	625	572		594	1790	1790			594	753
1978	9	1978.09 2-Sep-78	615	634	591		615	1790	1790			615	746
1978	9	1978.09 3-Sep-78	586	627	545		586	1910	1910			586	741
1978	9	1978.09 4-Sep-78	517	554	489		517	2060	2060			517	732
1978	9	1978.09 5-Sep-78	496	507	484		496	2160	2160			496	721
1978	9	1978.09 6-Sep-78	475	517	431		475	2460	2460			475	712
1978	9	1978.09 7-Sep-78	392	424	364		392	2780	2780			392	698
1978	9	1978.09 8-Sep-78	385	400	372		385	2730	2730			385	684
1978	9	1978.09 9-Sep-78	377	390	367		377	2800	2800			377	670
1978	9	1978.09 10-Sep-78	388	408	371		388	2940	2940			388	657
1978	9	1978.09 11-Sep-78	378	412	355		378	2990	2990			378	645
1978	9	1978.09 12-Sep-78	359	385	343		359	2930	2930			359	631
1978	9	1978.09 13-Sep-78	365	385	347		365	2880	2880			365	617
1978	9	1978.09 14-Sep-78	387	428	367		387	2770	2770			387	603
1978	9	1978.09 15-Sep-78	402	460	359		402	2710	2710			402	588
1978	9	1978.09 16-Sep-78	396	461	347		396	2800	2800			396	575
1978	9	1978.09 17-Sep-78	379	418	329		379	2880	2880			379	561
1978	9	1978.09 18-Sep-78	338	370	275		338	3000	3000			338	546
1978	9	1978.09 19-Sep-78	330	376	265		330	2910	2910			330	530
1978	9	1978.09 20-Sep-78	348	382	279		348	2820	2820			348	517
1978	9	1978.09 21-Sep-78	359	389	311		359	2760	2760			359	504
1978	9	1978.09 22-Sep-78	355	379	300		355	2770	2770			355	490
1978	9	1978.09 23-Sep-78	350	375	319		350	2870	2870			350	475
1978	9	1978.09 24-Sep-78	329	369	273		329	3070	3070			329	461
1978	9	1978.09 25-Sep-78	329	357	247		329	3190	3190			329	447
1978	9	1978.09 26-Sep-78	370	406	290		370	3000	3000			370	438
1978	9	1978.09 27-Sep-78	392	405	365		392	2970	2970			392	429
1978	9	1978.09 28-Sep-78	374	383	364		374	3060	3060			374	421
1978	9	1978.09 29-Sep-78	379	393	365		379	3030	3030			379	413
1978	9	1978.09 30-Sep-78	379	405	359		379	3080	3080			379	404
1978	10	1978.10 1-Oct-78	357	387	222		357	3180	3180			357	396
1978	10	1978.10 2-Oct-78	370	382	354		370	3180	3180			370	388
1978	10	1978.10 3-Oct-78	357	387	294		357	3200	3200			357	380
1978	10	1978.10 4-Oct-78	248	279	222		248	4120	4120			248	371
1978	10	1978.10 5-Oct-78	303	332	271		303	3580	3580			303	365
1978	10	1978.10 6-Oct-78	321	336	306		321	3240	3240			321	360
1978	10	1978.10 7-Oct-78	324	343	311		324	3210	3210			324	358
1978	10	1978.10 8-Oct-78	325	336	316		325	3240	3240			325	356
1978	10	1978.10 9-Oct-78	321	337	307		321	3230	3230			321	354
1978	10	1978.10 10-Oct-78	318	342	307		318	3100	3100			318	351
1978	10	1978.10 11-Oct-78	334	352	321		334	3130	3130			334	350
1978	10	1978.10 12-Oct-78	310	347	284		310	3340	3340			310	348
1978	10	1978.10 13-Oct-78	304	316	293		304	3300	3300			304	346
1978	10	1978.10 14-Oct-78	309	325	294		309	3200	3200			309	344
1978	10	1978.10 15-Oct-78	321	338	304		321	3140	3140			321	341
1978	10	1978.10 16-Oct-78	323	340	309		323	3120	3120			323	339
1978	10	1978.10 17-Oct-78	337	363	314		337	3010	3010			337	337
1978	10	1978.10 18-Oct-78	360	374	349		360	2860	2860			360	338
1978	10	1978.10 19-Oct-78	354	395	346		354	2820	2820			354	339
1978	10	1978.10 20-Oct-78	344	367	333		344	2790	2790			344	339
1978	10	1978.10 21-Oct-78	336	345	328		336	2780	2780			336	338
1978	10	1978.10 22-Oct-78	300					2800	2800			300	336
1978	10	1978.10 23-Oct-78	282	321	226		282	2990	2990			282	334
1978	10	1978.10 24-Oct-78	220	228	213		220	3170	3170			220	330
1978	10	1978.10 25-Oct-78	201	207	195		201	3490	3490			201	326
1978	10	1978.10 26-Oct-78	202	209	192		202	3670	3670			202	320
1978	10	1978.10 27-Oct-78	206	217	197		206	3840	3840			206	314
1978	10	1978.10 28-Oct-78	192	209	183		192	4110	4110			192	308
1978	10	1978.10 29-Oct-78	187	199	171		187	4310	4310			187	302
1978	10	1978.10 30-Oct-78	210	219	195		210	4100	4100			210	296
1978	10	1978.10 31-Oct-78	221	231	209		221	3900	3900			221	291
1978	11	1978.11 1-Nov-78	209	216	195		209	4090	4090			209	286
1978	11	1978.11 2-Nov-78	185					4160	4160			185	280
1978	11	1978.11 3-Nov-78	174	180	167		174	4650	4650			174	278
1978	11	1978.11 4-Nov-78	165	178	152		165	4920	4920			165	273
1978	11	1978.11 5-Nov-78	169	182	152		169	4870	4870			169	268
1978	11	1978.11 6-Nov-78	196	226	172		196	4520	4520			196	264
1978	11	1978.11 7-Nov-78	245	264	222		245	3830	3830			245	261

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1978	11	1978.11 8-Nov-78	262	275	247		262	3600	3600			262	259
1978	11	1978.11 9-Nov-78	248	274	236		248	3670	3670			248	257
1978	11	1978.11 10-Nov-78	206	227	197		206	3910	3910			206	253
1978	11	1978.11 11-Nov-78	208	220	198		208	4000	4000			208	249
1978	11	1978.11 12-Nov-78	242	259	216		242	3950	3950			242	247
1978	11	1978.11 13-Nov-78	291	310	261		291	3730	3730			291	247
1978	11	1978.11 14-Nov-78	331	355	311		331	3540	3540			331	247
1978	11	1978.11 15-Nov-78	368	388	347		368	3360	3360			368	248
1978	11	1978.11 16-Nov-78	408	437	387		408	3200	3200			408	251
1978	11	1978.11 17-Nov-78	434	517	400		434	3100	3100			434	253
1978	11	1978.11 18-Nov-78	431	487	399		431	3050	3050			431	256
1978	11	1978.11 19-Nov-78	447	477	421		447	3030	3030			447	259
1978	11	1978.11 20-Nov-78	438	459	426		438	2990	2990			438	263
1978	11	1978.11 21-Nov-78	425	438	412		425	3060	3060			425	267
1978	11	1978.11 22-Nov-78	440	464	409		440	3080	3080			440	272
1978	11	1978.11 23-Nov-78	462	486	448		462	3070	3070			462	280
1978	11	1978.11 24-Nov-78	494	530	479		494	2980	2980			494	290
1978	11	1978.11 25-Nov-78	529	556	506		529	2890	2890			529	301
1978	11	1978.11 26-Nov-78	547	557	529		547	2780	2780			547	312
1978	11	1978.11 27-Nov-78	558	573	538		558	2690	2690			558	324
1978	11	1978.11 28-Nov-78	561	579	540		561	2650	2650			561	337
1978	11	1978.11 29-Nov-78	543	556	532		543	2720	2720			543	348
1978	11	1978.11 30-Nov-78	548	570	505		548	2840	2840			548	359
1978	12	1978.12 1-Dec-78	494	503	485		494	2900	2900			494	368
1978	12	1978.12 2-Dec-78	476	482	469		476	2920	2920			476	378
1978	12	1978.12 3-Dec-78	468	476	454		468	2920	2920			468	388
1978	12	1978.12 4-Dec-78	453	467	441		453	2910	2910			453	397
1978	12	1978.12 5-Dec-78	461	477	441		461	2880	2880			461	407
1978	12	1978.12 6-Dec-78	449	454	441		449	2830	2830			449	416
1978	12	1978.12 7-Dec-78	453	486	441		453	2760	2760			453	423
1978	12	1978.12 8-Dec-78	458	476	451		458	2760	2760			458	429
1978	12	1978.12 9-Dec-78	492	516	471		492	2790	2790			492	437
1978	12	1978.12 10-Dec-78	513	555	453		513	2940	2940			513	447
1978	12	1978.12 11-Dec-78	368	476	326		368	3060	3060			368	453
1978	12	1978.12 12-Dec-78	332	339	324		332	3110	3110			332	456
1978	12	1978.12 13-Dec-78	343	362	325		343	3050	3050			343	457
1978	12	1978.12 14-Dec-78	394	415	355		394	2870	2870			394	460
1978	12	1978.12 15-Dec-78	441	459	415		441	2690	2690			441	462
1978	12	1978.12 16-Dec-78	476	502	452		476	2570	2570			476	464
1978	12	1978.12 17-Dec-78	478	486	465		478	2520	2520			478	466
1978	12	1978.12 18-Dec-78	495	509	474		495	2540	2540			495	468
1978	12	1978.12 19-Dec-78	492	509	475		492	2530	2530			492	469
1978	12	1978.12 20-Dec-78	541	558	503		541	2390	2390			541	473
1978	12	1978.12 21-Dec-78	548	563	516		548	2420	2420			548	477
1978	12	1978.12 22-Dec-78	423	503	375		423	2840	2840			423	476
1978	12	1978.12 23-Dec-78	349	377	316		349	3120	3120			349	473
1978	12	1978.12 24-Dec-78	344	394	299		344	3270	3270			344	468
1978	12	1978.12 25-Dec-78	405	472	358		405	2950	2950			405	463
1978	12	1978.12 26-Dec-78	539	603	463		539	2360	2360			539	463
1978	12	1978.12 27-Dec-78	647	671	610		647	2180	2180			647	466
1978	12	1978.12 28-Dec-78	424	531	386		424	2830	2830			424	462
1978	12	1978.12 29-Dec-78	380	412	342		380	3090	3090			380	456
1978	12	1978.12 30-Dec-78	377	406	346		377	3120	3120			377	450
1978	12	1978.12 31-Dec-78	390	438	343		390	3060	3060			390	447
1979	1	1979.01 1-Jan-79	425	492	381		425	2800	2800			425	445
1979	1	1979.01 2-Jan-79	575	634	509		575	2210	2210			575	449
1979	1	1979.01 3-Jan-79	632	688	434		632	2180	2180			632	455
1979	1	1979.01 4-Jan-79	314	386	282		314	3330	3330			314	450
1979	1	1979.01 5-Jan-79	313	346	271		313	3580	3580			313	445
1979	1	1979.01 6-Jan-79	325	353	288		325	3530	3530			325	441
1979	1	1979.01 7-Jan-79	342	391	295		342	3470	3470			342	437
1979	1	1979.01 8-Jan-79	408	503	348		408	3140	3140			408	434
1979	1	1979.01 9-Jan-79	532	577	414		532	2610	2610			532	435
1979	1	1979.01 10-Jan-79	337	392	308		337	3630	3630			337	434
1979	1	1979.01 11-Jan-79	386	450	310		386	4070	4070			386	436
1979	1	1979.01 12-Jan-79	263	304	212		263	4420	4420			263	433
1979	1	1979.01 13-Jan-79	201	260	158		201	6610	6610			201	427
1979	1	1979.01 14-Jan-79	235	264	207		235	6660	6660			235	420
1979	1	1979.01 15-Jan-79	216	289	188		216	6050	6050			216	411
1979	1	1979.01 16-Jan-79	262	285	242		262	6360	6360			262	404
1979	1	1979.01 17-Jan-79	215	241	193		215	7600	7600			215	395
1979	1	1979.01 18-Jan-79	227	246	199		227	7760	7760			227	386
1979	1	1979.01 19-Jan-79	241	265	217		241	7970	7970			241	376
1979	1	1979.01 20-Jan-79	285	303	259		285	7790	7790			285	367
1979	1	1979.01 21-Jan-79	289	314	271		289	7250	7250			289	363
1979	1	1979.01 22-Jan-79	318	381	267		318	6620	6620			318	362

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1979	1	1979.01 23-Jan-79	395	418	353		395	5810	5810			395	363
1979	1	1979.01 24-Jan-79	346	361	333		346	5390	5390			346	361
1979	1	1979.01 25-Jan-79	359	382	335		359	6590	6590			359	355
1979	1	1979.01 26-Jan-79	370	394	336		370	6550	6550			370	346
1979	1	1979.01 27-Jan-79	395	417	369		395	6400	6400			395	345
1979	1	1979.01 28-Jan-79	398	428	370		398	6130	6130			398	346
1979	1	1979.01 29-Jan-79	427	477	380		427	5480	5480			427	347
1979	1	1979.01 30-Jan-79	488	527	412		488	4800	4800			488	351
1979	1	1979.01 31-Jan-79	392	409	370		392	5440	5440			392	350
1979	2	1979.02 1-Feb-79	375	396	352		375	5750	5750			375	343
1979	2	1979.02 2-Feb-79	381	407	363		381	5810	5810			381	335
1979	2	1979.02 3-Feb-79	385	409	351		385	5910	5910			385	337
1979	2	1979.02 4-Feb-79	416	438	387		416	5990	5990			416	340
1979	2	1979.02 5-Feb-79	421	455	392		421	5640	5640			421	344
1979	2	1979.02 6-Feb-79	425					4710	4710			425	346
1979	2	1979.02 7-Feb-79	431	447	414		431	4860	4860			431	347
1979	2	1979.02 8-Feb-79	419	449	390		419	4930	4930			419	343
1979	2	1979.02 9-Feb-79	500					4870	4870			500	349
1979	2	1979.02 10-Feb-79	500					4750	4750			500	353
1979	2	1979.02 11-Feb-79	500					4530	4530			500	360
1979	2	1979.02 12-Feb-79	557	616	489		557	4180	4180			557	372
1979	2	1979.02 13-Feb-79	599	656	456		599	3620	3620			599	384
1979	2	1979.02 14-Feb-79	423	444	385		423	4550	4550			423	391
1979	2	1979.02 15-Feb-79	352	378	330		352	5640	5640			352	394
1979	2	1979.02 16-Feb-79	348	402	249		348	6840	6840			348	399
1979	2	1979.02 17-Feb-79	203	241	178		203	7410	7410			203	398
1979	2	1979.02 18-Feb-79	237	250	223		237	7800	7800			237	398
1979	2	1979.02 19-Feb-79	273	306	249		273	7540	7540			273	397
1979	2	1979.02 20-Feb-79	316	330	292		316	6670	6670			316	398
1979	2	1979.02 21-Feb-79	303	334	250		303	7050	7050			303	398
1979	2	1979.02 22-Feb-79	215	242	184		215	9210	9210			215	392
1979	2	1979.02 23-Feb-79	205	217	186		205	11500	11500			205	387
1979	2	1979.02 24-Feb-79	189	196	179		189	12800	12800			189	381
1979	2	1979.02 25-Feb-79	195	205	189		195	13100	13100			195	376
1979	2	1979.02 26-Feb-79	230	264	205		230	12300	12300			230	370
1979	2	1979.02 27-Feb-79	293	332	265		293	11000	11000			293	367
1979	2	1979.02 28-Feb-79	292	309	279		292	10900	10900			292	362
1979	3	1979.03 1-Mar-79	294	312	278		294	10900	10900			294	356
1979	3	1979.03 2-Mar-79	262	288	247		262	12200	12200			262	351
1979	3	1979.03 3-Mar-79	269	285	253		269	13700	13700			269	348
1979	3	1979.03 4-Mar-79	255	271	235		255	12400	12400			255	344
1979	3	1979.03 5-Mar-79	272	301	239		272	11200	11200			272	340
1979	3	1979.03 6-Mar-79	315	333	292		315	10200	10200			315	336
1979	3	1979.03 7-Mar-79	302	317	288		302	10200	10200			302	332
1979	3	1979.03 8-Mar-79	318	350	292		318	9950	9950			318	329
1979	3	1979.03 9-Mar-79	330	356	315		330	9590	9590			330	326
1979	3	1979.03 10-Mar-79	347	383	308		347	9280	9280			347	323
1979	3	1979.03 11-Mar-79	362	405	331		362	8970	8970			362	319
1979	3	1979.03 12-Mar-79	369	417	324		369	8390	8390			369	314
1979	3	1979.03 13-Mar-79	401	427	350		401	7590	7590			401	311
1979	3	1979.03 14-Mar-79	346	355	337		346	7950	7950			346	304
1979	3	1979.03 15-Mar-79	332	355	308		332	8060	8060			332	295
1979	3	1979.03 16-Mar-79	313	329	305		313	8090	8090			313	291
1979	3	1979.03 17-Mar-79	317	352	303		317	8160	8160			317	290
1979	3	1979.03 18-Mar-79	326	349	307		326	8430	8430			326	289
1979	3	1979.03 19-Mar-79	336	360	314		336	8290	8290			336	294
1979	3	1979.03 20-Mar-79	356	389	310		356	7690	7690			356	298
1979	3	1979.03 21-Mar-79	321	336	308		321	8140	8140			321	299
1979	3	1979.03 22-Mar-79	335	355	314		335	8050	8050			335	300
1979	3	1979.03 23-Mar-79	349	367	315		349	7820	7820			349	302
1979	3	1979.03 24-Mar-79	377	409	354		377	7470	7470			377	307
1979	3	1979.03 25-Mar-79	384	430	349		384	6730	6730			384	313
1979	3	1979.03 26-Mar-79	462	519	406		462	5710	5710			462	322
1979	3	1979.03 27-Mar-79	527	576	466		527	4990	4990			527	333
1979	3	1979.03 28-Mar-79	462	501	413		462	5740	5740			462	341
1979	3	1979.03 29-Mar-79	376	402	346		376	7190	7190			376	344
1979	3	1979.03 30-Mar-79	383	417	343		383	7800	7800			383	347
1979	3	1979.03 31-Mar-79	403	429	375		403	7330	7330			403	350
1979	4	1979.04 1-Apr-79	396	453	363		396	7080	7080			396	355
1979	4	1979.04 2-Apr-79	394	438	358		394	6840	6840			394	359
1979	4	1979.04 3-Apr-79	476	513	439		476	6200	6200			476	366
1979	4	1979.04 4-Apr-79	426	443	409		426	6510	6510			426	371
1979	4	1979.04 5-Apr-79	427	450	405		427	6190	6190			427	375
1979	4	1979.04 6-Apr-79	465	510	407		465	5760	5760			465	381
1979	4	1979.04 7-Apr-79	556	598	499		556	4970	4970			556	388
1979	4	1979.04 8-Apr-79	655	700	597		655	4300	4300			655	399

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1979	4	1979.04 9-Apr-79	700					3700	3700			700	411
1979	4	1979.04 10-Apr-79	800					3230	3230			800	426
1979	4	1979.04 11-Apr-79	800					3240	3240			800	440
1979	4	1979.04 12-Apr-79	800					3120	3120			800	453
1979	4	1979.04 13-Apr-79	800					2970	2970			800	468
1979	4	1979.04 14-Apr-79	800					2810	2810			800	484
1979	4	1979.04 15-Apr-79	900					2660	2660			900	504
1979	4	1979.04 16-Apr-79	900					2630	2630			900	523
1979	4	1979.04 17-Apr-79	900					2450	2450			900	542
1979	4	1979.04 18-Apr-79	900					2490	2490			900	561
1979	4	1979.04 19-Apr-79	900					2420	2420			900	579
1979	4	1979.04 20-Apr-79	900					2270	2270			900	598
1979	4	1979.04 21-Apr-79	922	944	906		922	2310	2310			922	618
1979	4	1979.04 22-Apr-79	892	918	856		892	2310	2310			892	636
1979	4	1979.04 23-Apr-79	927	954	904		927	2300	2300			927	654
1979	4	1979.04 24-Apr-79	960	991	944		960	2150	2150			960	674
1979	4	1979.04 25-Apr-79	891	989	842		891	2190	2190			891	688
1979	4	1979.04 26-Apr-79	820	864	782		820	2300	2300			820	698
1979	4	1979.04 27-Apr-79	791	833	752		791	2570	2570			791	709
1979	4	1979.04 28-Apr-79	750	810	692		750	2600	2600			750	721
1979	4	1979.04 29-Apr-79	847	885	808		847	2330	2330			847	737
1979	4	1979.04 30-Apr-79	882	897	868		882	2290	2290			882	753
1979	5	1979.05 1-May-79	897	931	871		897	2100	2100			897	769
1979	5	1979.05 2-May-79	885	930	858		885	2180	2180			885	786
1979	5	1979.05 3-May-79	870	936	827		870	1990	1990			870	799
1979	5	1979.05 4-May-79	811	844	771		811	1980	1980			811	812
1979	5	1979.05 5-May-79	810	848	775		810	1860	1860			810	824
1979	5	1979.05 6-May-79	850					1810	1810			850	837
1979	5	1979.05 7-May-79	874	924	825		874	1830	1830			874	848
1979	5	1979.05 8-May-79	808	855	772		808	1820	1820			808	853
1979	5	1979.05 9-May-79	783	794	771		783	1790	1790			783	856
1979	5	1979.05 10-May-79	819	836	799		819	1710	1710			819	856
1979	5	1979.05 11-May-79	839	871	810		839	1690	1690			839	858
1979	5	1979.05 12-May-79	800					1670	1670			800	858
1979	5	1979.05 13-May-79	800					1730	1730			800	858
1979	5	1979.05 14-May-79	771	782	760		771	1810	1810			771	857
1979	5	1979.05 15-May-79	810	856	757		810	1640	1640			810	854
1979	5	1979.05 16-May-79	886	923	839		886	1480	1480			886	853
1979	5	1979.05 17-May-79	889	908	863		889	1540	1540			889	853
1979	5	1979.05 18-May-79	880	942	787		880	1600	1600			880	852
1979	5	1979.05 19-May-79	732	777	690		732	1950	1950			732	847
1979	5	1979.05 20-May-79	599	704	542		599	2400	2400			599	837
1979	5	1979.05 21-May-79	532	560	508		532	2820	2820			532	824
1979	5	1979.05 22-May-79	516	532	503		516	2760	2760			516	811
1979	5	1979.05 23-May-79	548	576	534		548	2770	2770			548	798
1979	5	1979.05 24-May-79	557	583	550		557	3190	3190			557	785
1979	5	1979.05 25-May-79	444	559	315		444	3690	3690			444	770
1979	5	1979.05 26-May-79	306	315	298		306	3960	3960			306	753
1979	5	1979.05 27-May-79	301	318	281		301	3830	3830			301	737
1979	5	1979.05 28-May-79	265	287	246		265	4310	4310			265	720
1979	5	1979.05 29-May-79	254	271	239		254	4690	4690			254	701
1979	5	1979.05 30-May-79	249	263	236		249	4820	4820			249	680
1979	5	1979.05 31-May-79	251	263	227		251	4810	4810			251	658
1979	6	1979.06 1-Jun-79	287	322	260		287	4350	4350			287	638
1979	6	1979.06 2-Jun-79	392	424	330		392	3220	3220			392	622
1979	6	1979.06 3-Jun-79	428	436	419		428	2790	2790			428	609
1979	6	1979.06 4-Jun-79	440	450	433		440	2700	2700			440	597
1979	6	1979.06 5-Jun-79	396	434	369		396	2820	2820			396	582
1979	6	1979.06 6-Jun-79	375	386	365		375	2960	2960			375	565
1979	6	1979.06 7-Jun-79	384	393	367		384	2930	2930			384	551
1979	6	1979.06 8-Jun-79	398	421	370		398	2890	2890			398	538
1979	6	1979.06 9-Jun-79	347	373	325		347	3320	3320			347	523
1979	6	1979.06 10-Jun-79	369	382	335		369	3310	3310			369	507
1979	6	1979.06 11-Jun-79	417	445	386		417	2780	2780			417	494
1979	6	1979.06 12-Jun-79	473	488	452		473	2340	2340			473	483
1979	6	1979.06 13-Jun-79	518	549	474		518	2150	2150			518	475
1979	6	1979.06 14-Jun-79	437	461	420		437	2500	2500			437	462
1979	6	1979.06 15-Jun-79	434	456	404		434	2550	2550			434	447
1979	6	1979.06 16-Jun-79	397	436	375		397	2730	2730			397	431
1979	6	1979.06 17-Jun-79	526	580	441		526	2250	2250			526	419
1979	6	1979.06 18-Jun-79	601	620	578		601	2020	2020			601	415
1979	6	1979.06 19-Jun-79	632	646	619		632	1890	1890			632	416
1979	6	1979.06 20-Jun-79	669	705	628		669	1680	1680			669	420
1979	6	1979.06 21-Jun-79	720	734	703		720	1560	1560			720	427
1979	6	1979.06 22-Jun-79	756	781	726		756	1480	1480			756	434
1979	6	1979.06 23-Jun-79	797	834	761		797	1360	1360			797	442

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1979	6	1979.06	24-Jun-79	811	865	755		811	1410	1410		811	454
1979	6	1979.06	25-Jun-79	781	806	752		781	1440	1440		781	470
1979	6	1979.06	26-Jun-79	822	846	802		822	1320	1320		822	488
1979	6	1979.06	27-Jun-79	830	859	795		830	1290	1290		830	506
1979	6	1979.06	28-Jun-79	871	906	709		871	1230	1230		871	527
1979	6	1979.06	29-Jun-79	888	904	821		888	1150	1150		888	548
1979	6	1979.06	30-Jun-79	880	943	849		880	1190	1190		880	569
1979	7	1979.07	1-Jul-79	858	900	817		858	1230	1230		858	588
1979	7	1979.07	2-Jul-79	818	844	795		818	1340	1340		818	602
1979	7	1979.07	3-Jul-79	837	877	815		837	1310	1310		837	616
1979	7	1979.07	4-Jul-79	811	855	774		811	1260	1260		811	628
1979	7	1979.07	5-Jul-79	775	796	749		775	1290	1290		775	641
1979	7	1979.07	6-Jul-79	774	811	745		774	1310	1310		774	654
1979	7	1979.07	7-Jul-79	746	808	698		746	1380	1380		746	666
1979	7	1979.07	8-Jul-79	744	766	721		744	1380	1380		744	678
1979	7	1979.07	9-Jul-79	792	830	770		792	1370	1370		792	693
1979	7	1979.07	10-Jul-79	837	877	818		837	1240	1240		837	708
1979	7	1979.07	11-Jul-79	848	867	801		848	1150	1150		848	723
1979	7	1979.07	12-Jul-79	831	868	796		831	1210	1210		831	735
1979	7	1979.07	13-Jul-79	848	887	793		848	1140	1140		848	746
1979	7	1979.07	14-Jul-79	878	898	854		878	1090	1090		878	760
1979	7	1979.07	15-Jul-79	855	941	792		855	1180	1180		855	774
1979	7	1979.07	16-Jul-79	799	837	750		799	1320	1320		799	788
1979	7	1979.07	17-Jul-79	773	794	745		773	1280	1280		773	796
1979	7	1979.07	18-Jul-79	840	874	793		840	1150	1150		840	804
1979	7	1979.07	19-Jul-79	791	850	717		791	1220	1220		791	809
1979	7	1979.07	20-Jul-79	727	745	715		727	1250	1250		727	811
1979	7	1979.07	21-Jul-79	754	790	712		754	1280	1280		754	812
1979	7	1979.07	22-Jul-79	705	733	672		705	1530	1530		705	811
1979	7	1979.07	23-Jul-79	650	671	618		650	1750	1750		650	806
1979	7	1979.07	24-Jul-79	654	665	638		654	1590	1590		654	801
1979	7	1979.07	25-Jul-79	688	715	659		688	1480	1480		688	797
1979	7	1979.07	26-Jul-79	709	731	685		709	1480	1480		709	794
1979	7	1979.07	27-Jul-79	658	688	629		658	1520	1520		658	788
1979	7	1979.07	28-Jul-79	685	710	654		685	1420	1420		685	782
1979	7	1979.07	29-Jul-79	747	786	703		747	1330	1330		747	777
1979	7	1979.07	30-Jul-79	736	778	701		736	1460	1460		736	772
1979	7	1979.07	31-Jul-79	701	724	677		701	1400	1400		701	767
1979	8	1979.08	1-Aug-79	721	744	678		721	1370	1370		721	764
1979	8	1979.08	2-Aug-79	689	710	668		689	1420	1420		689	759
1979	8	1979.08	3-Aug-79	736	774	677		736	1410	1410		736	756
1979	8	1979.08	4-Aug-79	704	737	673		704	1430	1430		704	754
1979	8	1979.08	5-Aug-79	693	714	670		693	1470	1470		693	751
1979	8	1979.08	6-Aug-79	644	686	611		644	1690	1690		644	748
1979	8	1979.08	7-Aug-79	665	696	645		665	1600	1600		665	745
1979	8	1979.08	8-Aug-79	723	760	681		723	1440	1440		723	743
1979	8	1979.08	9-Aug-79	745	770	712		745	1390	1390		745	740
1979	8	1979.08	10-Aug-79	806	838	769		806	1290	1290		806	739
1979	8	1979.08	11-Aug-79	811	837	790		811	1260	1260		811	738
1979	8	1979.08	12-Aug-79	823	859	777		823	1270	1270		823	737
1979	8	1979.08	13-Aug-79	750	792	690		750	1430	1430		750	733
1979	8	1979.08	14-Aug-79	746	775	717		746	1380	1380		746	729
1979	8	1979.08	15-Aug-79	789	819	766		789	1280	1280		789	729
1979	8	1979.08	16-Aug-79	839	874	788		839	1260	1260		839	731
1979	8	1979.08	17-Aug-79	833	873	801		833	1260	1260		833	731
1979	8	1979.08	18-Aug-79	817	838	797		817	1270	1270		817	732
1979	8	1979.08	19-Aug-79	768	832	705		768	1450	1450		768	733
1979	8	1979.08	20-Aug-79	677	696	664		677	1570	1570		677	730
1979	8	1979.08	21-Aug-79	741	773	708		741	1460	1460		741	732
1979	8	1979.08	22-Aug-79	734	753	688		734	1440	1440		734	734
1979	8	1979.08	23-Aug-79	738	773	696		738	1410	1410		738	737
1979	8	1979.08	24-Aug-79	726	754	702		726	1510	1510		726	738
1979	8	1979.08	25-Aug-79	707	724	697		707	1540	1540		707	738
1979	8	1979.08	26-Aug-79	699	717	680		699	1610	1610		699	740
1979	8	1979.08	27-Aug-79	725				1730	1730			725	741
1979	8	1979.08	28-Aug-79	725				1540	1540			725	740
1979	8	1979.08	29-Aug-79	725				1570	1570			725	740
1979	8	1979.08	30-Aug-79	725				1640	1640			725	741
1979	8	1979.08	31-Aug-79	765	784	751		765	1590	1590		765	742
1979	9	1979.09	1-Sep-79	747	759	733		747	1670	1670		747	744
1979	9	1979.09	2-Sep-79	743	766	719		743	1690	1690		743	744
1979	9	1979.09	3-Sep-79	685	732	660		685	1760	1760		685	744
1979	9	1979.09	4-Sep-79	710	725	687		710	1670	1670		710	744
1979	9	1979.09	5-Sep-79	740	763	726		740	1640	1640		740	748
1979	9	1979.09	6-Sep-79	764	779	749		764	1560	1560		764	751
1979	9	1979.09	7-Sep-79	739	779	688		739	1570	1570		739	751

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1979	9	1979.09 8-Sep-79	661	709	616		661	1750	1750			661	749
1979	9	1979.09 9-Sep-79	602	630	555		602	1880	1880			602	742
1979	9	1979.09 10-Sep-79	575	612	555		575	1910	1910			575	734
1979	9	1979.09 11-Sep-79	627	646	607		627	1770	1770			627	727
1979	9	1979.09 12-Sep-79	651	672	639		651	1700	1700			651	724
1979	9	1979.09 13-Sep-79	670	690	623		670	1610	1610			670	722
1979	9	1979.09 14-Sep-79	617	633	603		617	1620	1620			617	716
1979	9	1979.09 15-Sep-79	604	625	578		604	1620	1620			604	708
1979	9	1979.09 16-Sep-79	593	607	570		593	1660	1660			593	700
1979	9	1979.09 17-Sep-79	581	602	568		581	1680	1680			581	692
1979	9	1979.09 18-Sep-79	581	609	548		581	1620	1620			581	686
1979	9	1979.09 19-Sep-79	584	617	541		584	1620	1620			584	683
1979	9	1979.09 20-Sep-79	518	544	503		518	1770	1770			518	675
1979	9	1979.09 21-Sep-79	561	598	535		561	1750	1750			561	670
1979	9	1979.09 22-Sep-79	560	580	530		560	1770	1770			560	664
1979	9	1979.09 23-Sep-79	473	529	435		473	2040	2040			473	655
1979	9	1979.09 24-Sep-79	412	451	395		412	2210	2210			412	645
1979	9	1979.09 25-Sep-79	430	451	399		430	2070	2070			430	636
1979	9	1979.09 26-Sep-79	453	487	400		453	2090	2090			453	627
1979	9	1979.09 27-Sep-79	385	398	367		385	2420	2420			385	616
1979	9	1979.09 28-Sep-79	389	416	364		389	2290	2290			389	605
1979	9	1979.09 29-Sep-79	372	390	350		372	2380	2380			372	593
1979	9	1979.09 30-Sep-79	363	381	339		363	2440	2440			363	580
1979	10	1979.10 1-Oct-79	369	385	351		369	2440	2440			369	567
1979	10	1979.10 2-Oct-79	407	437	379		407	2240	2240			407	556
1979	10	1979.10 3-Oct-79	351	411	306		351	2530	2530			351	545
1979	10	1979.10 4-Oct-79	298	316	285		298	2820	2820			298	531
1979	10	1979.10 5-Oct-79	329	355	305		329	2720	2720			329	517
1979	10	1979.10 6-Oct-79	363	375	353		363	2540	2540			363	504
1979	10	1979.10 7-Oct-79	372	385	357		372	2550	2550			372	492
1979	10	1979.10 8-Oct-79	363	377	353		363	2630	2630			363	482
1979	10	1979.10 9-Oct-79	378	392	362		378	2530	2530			378	474
1979	10	1979.10 10-Oct-79	338	373	314		338	2660	2660			338	466
1979	10	1979.10 11-Oct-79	293	316	275		293	2980	2980			293	455
1979	10	1979.10 12-Oct-79	289	300	276		289	3080	3080			289	443
1979	10	1979.10 13-Oct-79	311	337	293		311	2970	2970			311	431
1979	10	1979.10 14-Oct-79	312	336	291		312	3050	3050			312	421
1979	10	1979.10 15-Oct-79	271	323	204		271	3140	3140			271	410
1979	10	1979.10 16-Oct-79	197	213	185		197	3430	3430			197	397
1979	10	1979.10 17-Oct-79	176	186	163		176	4030	4030			176	383
1979	10	1979.10 18-Oct-79	220	259	183		220	3780	3780			220	371
1979	10	1979.10 19-Oct-79	298	336	262		298	3120	3120			298	362
1979	10	1979.10 20-Oct-79	325					3080	3080			325	355
1979	10	1979.10 21-Oct-79	347	371	317		347	3120	3120			347	348
1979	10	1979.10 22-Oct-79	412	491	355		412	2810	2810			412	343
1979	10	1979.10 23-Oct-79	535	567	496		535	2240	2240			535	345
1979	10	1979.10 24-Oct-79	422	495	398		422	2540	2540			422	346
1979	10	1979.10 25-Oct-79	405	444	374		405	2690	2690			405	345
1979	10	1979.10 26-Oct-79	421	454	383		421	2740	2740			421	344
1979	10	1979.10 27-Oct-79	430	463	399		430	2700	2700			430	345
1979	10	1979.10 28-Oct-79	457	614	418		457	2600	2600			457	347
1979	10	1979.10 29-Oct-79	525	614	465		525	2380	2380			525	353
1979	10	1979.10 30-Oct-79	697	754	469		697	1990	1990			697	364
1979	10	1979.10 31-Oct-79	525	643	492		525	2370	2370			525	369
1979	11	1979.11 1-Nov-79	477	507	436		477	2560	2560			477	371
1979	11	1979.11 2-Nov-79	447	474	419		447	2700	2700			447	374
1979	11	1979.11 3-Nov-79	440	475	408		440	2770	2770			440	379
1979	11	1979.11 4-Nov-79	475	533	429		475	2780	2650			475	384
1979	11	1979.11 5-Nov-79	571	640	523		571	2480	2350			571	391
1979	11	1979.11 6-Nov-79	649	672	625		649	2140	2140			649	400
1979	11	1979.11 7-Nov-79	599	624	560		599	2130	2130			599	408
1979	11	1979.11 8-Nov-79	515	552	478		515	2270	2270			515	413
1979	11	1979.11 9-Nov-79	484	502	471		484	2390	2390			484	418
1979	11	1979.11 10-Nov-79	553	589	501		553	2230	2230			553	426
1979	11	1979.11 11-Nov-79	526	554	511		526	2210	2210			526	434
1979	11	1979.11 12-Nov-79	528	542	507		528	2190	2190			528	441
1979	11	1979.11 13-Nov-79	549	573	517		549	2120	2120			549	449
1979	11	1979.11 14-Nov-79	566	580	550		566	2090	2090			566	459
1979	11	1979.11 15-Nov-79	538	551	526		538	2160	2160			538	470
1979	11	1979.11 16-Nov-79	505	526	485		505	2240	2240			505	481
1979	11	1979.11 17-Nov-79	487	498	477		487	2300	2300			487	490
1979	11	1979.11 18-Nov-79	495	514	481		495	2280	2280			495	497
1979	11	1979.11 19-Nov-79	474	485	465		474	2340	2340			474	502
1979	11	1979.11 20-Nov-79	476	484	461		476	2320	2320			476	506
1979	11	1979.11 21-Nov-79	477	496	460		477	2330	2330			477	508
1979	11	1979.11 22-Nov-79	492	501	485		492	2340	2340			492	507

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1979	11	1979.11 23-Nov-79	498	510	492		498	2320	2320			498	509
1979	11	1979.11 24-Nov-79	514	524	503		514	2240	2240			514	513
1979	11	1979.11 25-Nov-79	507	526	499		507	2280	2280			507	516
1979	11	1979.11 26-Nov-79	502	546	478		502	2310	2310			502	518
1979	11	1979.11 27-Nov-79	508	520	498		508	2250	2250			508	520
1979	11	1979.11 28-Nov-79	500	515	489		500	2270	2270			500	519
1979	11	1979.11 29-Nov-79	540	591	490		540	2220	2220			540	514
1979	11	1979.11 30-Nov-79	475	496	462		475	2340	2340			475	512
1979	12	1979.12 1-Dec-79	464	474	452		464	2370	2370			464	512
1979	12	1979.12 2-Dec-79	476	493	462		476	2370	2370			476	513
1979	12	1979.12 3-Dec-79	471	486	459		471	2310	2310			471	514
1979	12	1979.12 4-Dec-79	516	568	467		516	2160	2160			516	515
1979	12	1979.12 5-Dec-79	512	565	478		512	2110	2110			512	513
1979	12	1979.12 6-Dec-79	487	493	480		487	2140	2140			487	508
1979	12	1979.12 7-Dec-79	495					2140	2140			495	504
1979	12	1979.12 8-Dec-79	506	520	490		506	2120	2120			506	504
1979	12	1979.12 9-Dec-79	506	516	495		506	2100	2100			506	505
1979	12	1979.12 10-Dec-79	509	520	503		509	2060	2060			509	503
1979	12	1979.12 11-Dec-79	502	521	486		502	1990	1990			502	503
1979	12	1979.12 12-Dec-79	472	489	453		472	2040	2040			472	501
1979	12	1979.12 13-Dec-79	463	474	452		463	2080	2080			463	498
1979	12	1979.12 14-Dec-79	448	461	438		448	2090	2090			448	494
1979	12	1979.12 15-Dec-79	440	452	426		440	2090	2090			440	491
1979	12	1979.12 16-Dec-79	440	454	422		440	2110	2110			440	488
1979	12	1979.12 17-Dec-79	427	437	420		427	2130	2130			427	486
1979	12	1979.12 18-Dec-79	442	452	427		442	2140	2140			442	485
1979	12	1979.12 19-Dec-79	413	433	398		413	2260	2260			413	483
1979	12	1979.12 20-Dec-79	396	409	382		396	2450	2450			396	480
1979	12	1979.12 21-Dec-79	379	403	333		379	2580	2580			379	477
1979	12	1979.12 22-Dec-79	302	327	279		302	3030	3030			302	470
1979	12	1979.12 23-Dec-79	319	356	288		319	3150	3150			319	464
1979	12	1979.12 24-Dec-79	356	372	351		356	2970	2970			356	459
1979	12	1979.12 25-Dec-79	377	393	357		377	3010	3010			377	455
1979	12	1979.12 26-Dec-79	363	414	237		363	3290	3290			363	450
1979	12	1979.12 27-Dec-79	455	482	409		455	3010	3010			455	448
1979	12	1979.12 28-Dec-79	415	459	385		415	3060	3060			415	446
1979	12	1979.12 29-Dec-79	354	379	335		354	3280	3280			354	439
1979	12	1979.12 30-Dec-79	368	415	332		368	3350	3350			368	436
1979	12	1979.12 31-Dec-79	437	473	418		437	3100	3100			437	435
1980	1	1980.01 1-Jan-80	490	508	460		490	2960	2960			490	435
1980	1	1980.01 2-Jan-80	481	498	466		481	3000	3000			481	436
1980	1	1980.01 3-Jan-80	484	514	386		484	3100	3100			484	435
1980	1	1980.01 4-Jan-80	305	372	279		305	4200	4200			305	428
1980	1	1980.01 5-Jan-80	274	287	265		274	4790	4790			274	421
1980	1	1980.01 6-Jan-80	266	281	253		266	4950	4950			266	413
1980	1	1980.01 7-Jan-80	286	323	262		286	4640	4640			286	406
1980	1	1980.01 8-Jan-80	341	369	298		341	3960	3960			341	400
1980	1	1980.01 9-Jan-80	259	289	242		259	4610	4610			259	392
1980	1	1980.01 10-Jan-80	251	270	228		251	4910	4910			251	383
1980	1	1980.01 11-Jan-80	251	271	232		251	5490	5490			251	376
1980	1	1980.01 12-Jan-80	244	265	225		244	6700	6700			244	369
1980	1	1980.01 13-Jan-80	225	237	212		225	8330	8330			225	361
1980	1	1980.01 14-Jan-80	199	213	175		199	9600	9600			199	353
1980	1	1980.01 15-Jan-80	168	183	156		168	11600	11600			168	344
1980	1	1980.01 16-Jan-80	161	170	151		161	14000	14000			161	335
1980	1	1980.01 17-Jan-80	153	162	145		153	15200	15200			153	326
1980	1	1980.01 18-Jan-80	152	165	135		152	15900	15900			152	317
1980	1	1980.01 19-Jan-80	155	172	141		155	17100	17100			155	309
1980	1	1980.01 20-Jan-80	147	163	130		147	18100	18100			147	301
1980	1	1980.01 21-Jan-80	143	156	129		143	19000	19000			143	296
1980	1	1980.01 22-Jan-80	150	159	139		150	19800	19800			150	290
1980	1	1980.01 23-Jan-80	158	169	145		158	20900	20900			158	284
1980	1	1980.01 24-Jan-80	168	173	163		168	21900	21900			168	277
1980	1	1980.01 25-Jan-80	166	173	161		166	22500	22500			166	270
1980	1	1980.01 26-Jan-80	168	182	114		168	23000	23000			168	261
1980	1	1980.01 27-Jan-80	170					23500	23500			170	252
1980	1	1980.01 28-Jan-80	170					23500	23500			170	246
1980	1	1980.01 29-Jan-80	170					23300	23300			170	240
1980	1	1980.01 30-Jan-80	175	182	167		175	22800	22800			175	231
1980	1	1980.01 31-Jan-80	176	180	172		176	21800	21800			176	221
1980	2	1980.02 1-Feb-80	173	178	167		173	21300	21300			173	210
1980	2	1980.02 2-Feb-80	174	181	167		174	21100	21100			174	200
1980	2	1980.02 3-Feb-80	180	190	172		180	20700	20700			180	196
1980	2	1980.02 4-Feb-80	197	209	185		197	19800	19800			197	193
1980	2	1980.02 5-Feb-80	212	220	202		212	18700	18700			212	191
1980	2	1980.02 6-Feb-80	242	258	221		242	17600	17600			242	190

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1980	2	1980.02 7-Feb-80	266	276	249		266	16500	16500			266	187
1980	2	1980.02 8-Feb-80	271	282	259		271	15200	15200			271	188
1980	2	1980.02 9-Feb-80	275	287	260		275	14000	14000			275	189
1980	2	1980.02 10-Feb-80	275	297	263		275	12800	12800			275	189
1980	2	1980.02 11-Feb-80	273	283	265		273	11900	11900			273	190
1980	2	1980.02 12-Feb-80	276	285	267		276	11300	11300			276	192
1980	2	1980.02 13-Feb-80	263	279	250		263	10900	10900			263	194
1980	2	1980.02 14-Feb-80	268	280	250		268	10600	10600			268	198
1980	2	1980.02 15-Feb-80	293	309	273		293	10500	10500			293	202
1980	2	1980.02 16-Feb-80	311	334	290		311	10400	10400			311	207
1980	2	1980.02 17-Feb-80	338	359	317		338	11300	11300			338	213
1980	2	1980.02 18-Feb-80	285	307	261		285	13500	13500			285	218
1980	2	1980.02 19-Feb-80	290	303	276		290	14800	14800			290	223
1980	2	1980.02 20-Feb-80	270					15700	15700			270	227
1980	2	1980.02 21-Feb-80	250					18100	18100			250	230
1980	2	1980.02 22-Feb-80	236	241	228		236	20300	20300			236	233
1980	2	1980.02 23-Feb-80	236	249	226		236	22700	22700			236	235
1980	2	1980.02 24-Feb-80	236	247	219		236	25200	25200			236	237
1980	2	1980.02 25-Feb-80	207	217	182		207	29200	29200			207	239
1980	2	1980.02 26-Feb-80	194	208	177		194	33400	33400			194	239
1980	2	1980.02 27-Feb-80	195	207	181		195	33700	33700			195	240
1980	2	1980.02 28-Feb-80	200	207	180		200	28700	32400			200	241
1980	2	1980.02 29-Feb-80	205	220	189		205	30900	30900			205	242
1980	3	1980.03 1-Mar-80	204	210	195		204	30000	30000			204	243
1980	3	1980.03 2-Mar-80	204	212	198		204	29600	29600			204	244
1980	3	1980.03 3-Mar-80	203	215	192		203	29300	29300			203	245
1980	3	1980.03 4-Mar-80	206	213	197		206	28500	28500			206	246
1980	3	1980.03 5-Mar-80	214	223	202		214	27000	27600			214	247
1980	3	1980.03 6-Mar-80	219	236	202		219	26500	27500			219	247
1980	3	1980.03 7-Mar-80	217	229	206		217	27900	28300			217	246
1980	3	1980.03 8-Mar-80	211	223	197		211	29100	29100			211	244
1980	3	1980.03 9-Mar-80	207	223	195		207	30000	30000			207	242
1980	3	1980.03 10-Mar-80	197	209	184		197	32000	32000			197	239
1980	3	1980.03 11-Mar-80	182	188	176		182	32500	32500			182	236
1980	3	1980.03 12-Mar-80	187	198	170		187	31700	31700			187	233
1980	3	1980.03 13-Mar-80	185	196	176		185	30600	30600			185	230
1980	3	1980.03 14-Mar-80	195	211	185		195	29000	29000			195	228
1980	3	1980.03 15-Mar-80	209	218	196		209	26600	26600			209	226
1980	3	1980.03 16-Mar-80	208	224	197		208	25400	25400			208	223
1980	3	1980.03 17-Mar-80	204	219	196		204	24800	24800			204	220
1980	3	1980.03 18-Mar-80	202	211	193		202	24800	24800			202	215
1980	3	1980.03 19-Mar-80	188	199	181		188	25700	25700			188	212
1980	3	1980.03 20-Mar-80	183	192	176		183	26200	26200			183	208
1980	3	1980.03 21-Mar-80	187	199	175		187	25600	25600			187	206
1980	3	1980.03 22-Mar-80	198	208	186		198	24100	24100			198	204
1980	3	1980.03 23-Mar-80	218	236	196		218	22000	22000			218	203
1980	3	1980.03 24-Mar-80	226	235	213		226	20400	20400			226	203
1980	3	1980.03 25-Mar-80	215	226	205		215	20300	20300			215	202
1980	3	1980.03 26-Mar-80	217	229	202		217	19600	19600			217	203
1980	3	1980.03 27-Mar-80	229	239	217		229	18400	18400			229	204
1980	3	1980.03 28-Mar-80	231	239	221		231	17400	17400			231	205
1980	3	1980.03 29-Mar-80	236	246	223		236	16500	16500			236	206
1980	3	1980.03 30-Mar-80	235	247	225		235	15700	15700			235	207
1980	3	1980.03 31-Mar-80	243	253	227		243	15000	15000			243	209
1980	4	1980.04 1-Apr-80	248	256	236		248	14200	14200			248	210
1980	4	1980.04 2-Apr-80	278	297	259		278	13200	13200			278	213
1980	4	1980.04 3-Apr-80	282	298	271		282	12200	12200			282	215
1980	4	1980.04 4-Apr-80	281	292	273		281	11400	11400			281	217
1980	4	1980.04 5-Apr-80	271	285	255		271	11100	11100			271	219
1980	4	1980.04 6-Apr-80	259	272	246		259	11300	11300			259	220
1980	4	1980.04 7-Apr-80	278	300	265		278	10800	10800			278	223
1980	4	1980.04 8-Apr-80	283	292	275		283	10400	10400			283	225
1980	4	1980.04 9-Apr-80	297	316	274		297	9680	9680			297	229
1980	4	1980.04 10-Apr-80	303	318	290		303	9220	9220			303	233
1980	4	1980.04 11-Apr-80	288	302	262		288	9160	9160			288	236
1980	4	1980.04 12-Apr-80	260	269	250		260	9190	9190			260	238
1980	4	1980.04 13-Apr-80	272	293	252		272	9250	9250			272	241
1980	4	1980.04 14-Apr-80	253	271	238		253	9570	9570			253	242
1980	4	1980.04 15-Apr-80	235	253	225		235	9880	9880			235	243
1980	4	1980.04 16-Apr-80	211	220	203		211	10400	10400			211	244
1980	4	1980.04 17-Apr-80	213	223	198		213	10700	10700			213	244
1980	4	1980.04 18-Apr-80	219	226	216		219	10700	10700			219	245
1980	4	1980.04 19-Apr-80	210	221	202		210	10600	10600			210	246
1980	4	1980.04 20-Apr-80	205	211	197		205	10500	10500			205	246
1980	4	1980.04 21-Apr-80	215	233	197		215	10200	10200			215	247
1980	4	1980.04 22-Apr-80	250	274	225		250	9510	9510			250	248

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1980	4	1980.04 23-Apr-80	275	311	252		275	9100	9100			275	250
1980	4	1980.04 24-Apr-80	267	301	254		267	8920	8920			267	251
1980	4	1980.04 25-Apr-80	269	278	254		269	8850	8850			269	253
1980	4	1980.04 26-Apr-80	263	273	255		263	8910	8910			263	254
1980	4	1980.04 27-Apr-80	237	257	214		237	9260	9260			237	255
1980	4	1980.04 28-Apr-80	205	212	192		205	9710	9710			205	254
1980	4	1980.04 29-Apr-80	204	215	189		204	9790	9790			204	252
1980	4	1980.04 30-Apr-80	208	218	202		208	9780	9780			208	251
1980	5	1980.05 1-May-80	208	218	195		208	9690	9690			208	250
1980	5	1980.05 2-May-80	211	228	199		211	9630	9630			211	248
1980	5	1980.05 3-May-80	206	218	193		206	9570	9570			206	245
1980	5	1980.05 4-May-80	209	228	194		209	9460	9460			209	243
1980	5	1980.05 5-May-80	203	212	195		203	9430	9430			203	241
1980	5	1980.05 6-May-80	201	210	190		201	9330	9330			201	239
1980	5	1980.05 7-May-80	201	211	189		201	9280	9280			201	236
1980	5	1980.05 8-May-80	189	200	179		189	9350	9350			189	233
1980	5	1980.05 9-May-80	180	193	161		180	9490	9490			180	229
1980	5	1980.05 10-May-80	172	186	156		172	9760	9760			172	225
1980	5	1980.05 11-May-80	155	165	143		155	10100	10100			155	220
1980	5	1980.05 12-May-80	148	159	132		148	10600	10600			148	216
1980	5	1980.05 13-May-80	152	161	145		152	10800	10800			152	212
1980	5	1980.05 14-May-80	153	159	144		153	10700	10700			153	209
1980	5	1980.05 15-May-80	155	167	142		155	10700	10700			155	206
1980	5	1980.05 16-May-80	133	145	123		133	10800	10800			133	204
1980	5	1980.05 17-May-80	138	154	126		138	10900	10900			138	201
1980	5	1980.05 18-May-80	158	174	145		158	11200	11200			158	199
1980	5	1980.05 19-May-80	161	177	145		161	11300	11300			161	198
1980	5	1980.05 20-May-80	176	200	156		176	11200	11200			176	197
1980	5	1980.05 21-May-80	181	192	167		181	11000	11000			181	196
1980	5	1980.05 22-May-80	181	191	172		181	10800	10800			181	193
1980	5	1980.05 23-May-80	182	187	175		182	10300	10300			182	190
1980	5	1980.05 24-May-80	186	194	177		186	9930	9930			186	188
1980	5	1980.05 25-May-80	193	205	176		193	9620	9620			193	185
1980	5	1980.05 26-May-80	201	210	192		201	9390	9390			201	183
1980	5	1980.05 27-May-80	209	225	191		209	9030	9030			209	182
1980	5	1980.05 28-May-80	221	233	211		221	8700	8700			221	183
1980	5	1980.05 29-May-80	231	243	222		231	8470	8470			231	183
1980	5	1980.05 30-May-80	220	227	208		220	8360	8360			220	184
1980	5	1980.05 31-May-80	213	220	200		213	8390	8390			213	184
1980	6	1980.06 1-Jun-80	207	220	197		207	8540	8540			207	184
1980	6	1980.06 2-Jun-80	230	241	216		230	8330	8330			230	185
1980	6	1980.06 3-Jun-80	232	240	226		232	7970	7970			232	185
1980	6	1980.06 4-Jun-80	242	255	229		242	7620	7620			242	187
1980	6	1980.06 5-Jun-80	264	275	247		264	7190	7190			264	189
1980	6	1980.06 6-Jun-80	286	295	267		286	6840	6840			286	192
1980	6	1980.06 7-Jun-80	293	300	284		293	6570	6570			293	195
1980	6	1980.06 8-Jun-80	315	331	293		315	6080	6080			315	200
1980	6	1980.06 9-Jun-80	331	350	313		331	5730	5730			331	205
1980	6	1980.06 10-Jun-80	344	367	322		344	5430	5430			344	211
1980	6	1980.06 11-Jun-80	333	348	324		333	5380	5380			333	217
1980	6	1980.06 12-Jun-80	342	367	322		342	5230	5230			342	224
1980	6	1980.06 13-Jun-80	354	365	341		354	5190	5190			354	230
1980	6	1980.06 14-Jun-80	358	370	337		358	5090	5090			358	237
1980	6	1980.06 15-Jun-80	381	391	365		381	4980	4980			381	245
1980	6	1980.06 16-Jun-80	390	409	370		390	4900	4900			390	254
1980	6	1980.06 17-Jun-80	410					4690	4690			410	262
1980	6	1980.06 18-Jun-80	410					4540	4540			410	271
1980	6	1980.06 19-Jun-80	410					4330	4330			410	278
1980	6	1980.06 20-Jun-80	433	450	419		433	4190	4190			433	287
1980	6	1980.06 21-Jun-80	425	433	416		425	4160	4160			425	295
1980	6	1980.06 22-Jun-80	412	421	399		412	4170	4170			412	303
1980	6	1980.06 23-Jun-80	426	444	404		426	4230	4230			426	311
1980	6	1980.06 24-Jun-80	450	467	433		450	4040	4040			450	319
1980	6	1980.06 25-Jun-80	461	478	442		461	3930	3930			461	328
1980	6	1980.06 26-Jun-80	450	464	441		450	3850	3850			450	336
1980	6	1980.06 27-Jun-80	453	467	439		453	3830	3830			453	344
1980	6	1980.06 28-Jun-80	454	477	439		454	3880	3880			454	351
1980	6	1980.06 29-Jun-80	435	449	412		435	3870	3870			435	358
1980	6	1980.06 30-Jun-80	385	411	361		385	4380	4380			385	364
1980	7	1980.07 1-Jul-80	370	390	357		370	4450	4450			370	369
1980	7	1980.07 2-Jul-80	395	460	358		395	4330	4330			395	375
1980	7	1980.07 3-Jul-80	440	456	419		440	4110	4110			440	382
1980	7	1980.07 4-Jul-80	438	449	426		438	3940	3940			438	388
1980	7	1980.07 5-Jul-80	445	457	435		445	3990	3990			445	394
1980	7	1980.07 6-Jul-80	465	484	439		465	4080	4080			465	400
1980	7	1980.07 7-Jul-80	369	444	331		369	4190	4190			369	403

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1980	7	1980.07	8-Jul-80	367	410	334		367	4200	4200		367	405
1980	7	1980.07	9-Jul-80	322	353	283		322	4410	4410		322	404
1980	7	1980.07	10-Jul-80	267	276	262		267	4620	4620		267	402
1980	7	1980.07	11-Jul-80	269	285	250		269	4710	4710		269	400
1980	7	1980.07	12-Jul-80	314	350	285		314	4620	4620		314	399
1980	7	1980.07	13-Jul-80	381	410	352		381	4210	4210		381	400
1980	7	1980.07	14-Jul-80	428	451	405		428	3750	3750		428	402
1980	7	1980.07	15-Jul-80	469	489	445		469	3420	3420		469	405
1980	7	1980.07	16-Jul-80	501	514	485		501	3260	3260		501	408
1980	7	1980.07	17-Jul-80	522	536	504		522	3170	3170		522	412
1980	7	1980.07	18-Jul-80	525	538	513		525	3170	3170		525	416
1980	7	1980.07	19-Jul-80	513	522	499		513	3120	3120		513	419
1980	7	1980.07	20-Jul-80	507	522	489		507	3160	3160		507	422
1980	7	1980.07	21-Jul-80	525	565	496		525	3090	3090		525	425
1980	7	1980.07	22-Jul-80	554	569	541		554	2900	2900		554	430
1980	7	1980.07	23-Jul-80	543	555	531		543	2740	2740		543	434
1980	7	1980.07	24-Jul-80	546					2720	2720		546	437
1980	7	1980.07	25-Jul-80	550	598	506		550	2540	2540		550	440
1980	7	1980.07	26-Jul-80	653	687	595		653	2210	2210		653	447
1980	7	1980.07	27-Jul-80	721	744	674		721	2070	2070		721	456
1980	7	1980.07	28-Jul-80	777	811	722		777	2090	2090		777	467
1980	7	1980.07	29-Jul-80	794	826	772		794	1980	1980		794	479
1980	7	1980.07	30-Jul-80	822	845	800		822	1830	1830		822	493
1980	7	1980.07	31-Jul-80	787	805	770		787	1810	1810		787	507
1980	8	1980.08	1-Aug-80	773	801	743		773	1810	1810		773	520
1980	8	1980.08	2-Aug-80	800	826	759		800	1760	1760		800	532
1980	8	1980.08	3-Aug-80	765					1840	1840		765	542
1980	8	1980.08	4-Aug-80	738	752	727		738	1900	1900		738	552
1980	8	1980.08	5-Aug-80	776	803	740		776	1790	1790		776	563
1980	8	1980.08	6-Aug-80	815	858	771		815	1790	1790		815	577
1980	8	1980.08	7-Aug-80	792	829	771		792	1840	1840		792	592
1980	8	1980.08	8-Aug-80	800	811	784		800	1810	1810		800	608
1980	8	1980.08	9-Aug-80	802	834	765		802	1860	1860		802	625
1980	8	1980.08	10-Aug-80	790	834	755		790	1940	1940		790	643
1980	8	1980.08	11-Aug-80	748	791	719		748	2050	2050		748	657
1980	8	1980.08	12-Aug-80	730	755	705		730	1990	1990		730	669
1980	8	1980.08	13-Aug-80	760	784	741		760	1870	1870		760	680
1980	8	1980.08	14-Aug-80	767	793	745		767	1820	1820		767	690
1980	8	1980.08	15-Aug-80	770	795	742		770	1830	1830		770	699
1980	8	1980.08	16-Aug-80	721	784	684		721	1920	1920		721	705
1980	8	1980.08	17-Aug-80	694	708	672		694	2010	2010		694	711
1980	8	1980.08	18-Aug-80	709	729	697		709	2090	2090		709	718
1980	8	1980.08	19-Aug-80	720	739	706		720	1970	1970		720	725
1980	8	1980.08	20-Aug-80	708	716	699		708	1990	1990		708	731
1980	8	1980.08	21-Aug-80	687	698	673		687	2050	2050		687	735
1980	8	1980.08	22-Aug-80	691	710	675		691	1990	1990		691	740
1980	8	1980.08	23-Aug-80	680	723	655		680	2020	2020		680	745
1980	8	1980.08	24-Aug-80	665	709	646		665	2110	2110		665	749
1980	8	1980.08	25-Aug-80	637	666	626		637	2230	2230		637	748
1980	8	1980.08	26-Aug-80	646	669	627		646	2060	2060		646	745
1980	8	1980.08	27-Aug-80	641	662	632		641	2050	2050		641	741
1980	8	1980.08	28-Aug-80	646	660	635		646	2110	2110		646	736
1980	8	1980.08	29-Aug-80	615	635	591		615	2140	2140		615	729
1980	8	1980.08	30-Aug-80	599	622	580		599	2130	2130		599	723
1980	8	1980.08	31-Aug-80	594	618	576		594	2270	2270		594	717
1980	9	1980.09	1-Sep-80	560	591	538		560	2400	2400		560	709
1980	9	1980.09	2-Sep-80	535	553	523		535	2410	2410		535	701
1980	9	1980.09	3-Sep-80	581	599	557		581	2220	2220		581	696
1980	9	1980.09	4-Sep-80	493	606	410		493	2820	2820		493	687
1980	9	1980.09	5-Sep-80	359	394	343		359	3450	3450		359	671
1980	9	1980.09	6-Sep-80	347	359	334		347	3630	3630		347	657
1980	9	1980.09	7-Sep-80	329	344	316		329	3810	3810		329	641
1980	9	1980.09	8-Sep-80	319	340	299		319	3960	3960		319	625
1980	9	1980.09	9-Sep-80	332	344	299		332	3860	3860		332	609
1980	9	1980.09	10-Sep-80	307	322	291		307	3930	3930		307	595
1980	9	1980.09	11-Sep-80	300	317	291		300	3980	3980		300	580
1980	9	1980.09	12-Sep-80	291	300	284		291	4070	4070		291	565
1980	9	1980.09	13-Sep-80	287	297	276		287	4150	4150		287	549
1980	9	1980.09	14-Sep-80	259	274	247		259	4320	4320		259	532
1980	9	1980.09	15-Sep-80	252	259	239		252	4510	4510		252	516
1980	9	1980.09	16-Sep-80	268	279	254		268	4290	4290		268	502
1980	9	1980.09	17-Sep-80	250					4330	4330		250	487
1980	9	1980.09	18-Sep-80	250					4390	4390		250	471
1980	9	1980.09	19-Sep-80	250					4480	4480		250	456
1980	9	1980.09	20-Sep-80	232	241	225		232	4620	4620		232	441
1980	9	1980.09	21-Sep-80	216	229	201		216	4710	4710		216	425

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1980	9	1980.09 22-Sep-80	260					4740	4740			260	411
1980	9	1980.09 23-Sep-80	260					4560	4560			260	397
1980	9	1980.09 24-Sep-80	260	276	232		260	4200	4200			260	385
1980	9	1980.09 25-Sep-80	288	318	260		288	3680	3680			288	373
1980	9	1980.09 26-Sep-80	322	338	308		322	3380	3380			322	362
1980	9	1980.09 27-Sep-80	336	344	328		336	3290	3290			336	352
1980	9	1980.09 28-Sep-80	321	337	312		321	3300	3300			321	342
1980	9	1980.09 29-Sep-80	312	323	303		312	3340	3340			312	332
1980	9	1980.09 30-Sep-80	324	333	308		324	3220	3220			324	323
1980	10	1980.10 1-Oct-80	326	344	313		326	3150	3150			326	316
1980	10	1980.10 2-Oct-80	325	338	303		325	3300	3300			325	309
1980	10	1980.10 3-Oct-80	244	301	193		244	4230	4230			244	297
1980	10	1980.10 4-Oct-80	192	196	184		192	4760	4760			192	287
1980	10	1980.10 5-Oct-80	192	202	186		192	5070	5070			192	282
1980	10	1980.10 6-Oct-80	186	195	178		186	5230	5230			186	276
1980	10	1980.10 7-Oct-80	182	187	176		182	5380	5380			182	271
1980	10	1980.10 8-Oct-80	179	194	170		179	5410	5410			179	267
1980	10	1980.10 9-Oct-80	189	200	181		189	5380	5380			189	262
1980	10	1980.10 10-Oct-80	189	201	178		189	5270	5270			189	258
1980	10	1980.10 11-Oct-80	201	215	186		201	4990	4990			201	255
1980	10	1980.10 12-Oct-80	219	229	207		219	4670	4670			219	252
1980	10	1980.10 13-Oct-80	223	233	210		223	4490	4490			223	250
1980	10	1980.10 14-Oct-80	224	246	208		224	4390	4390			224	249
1980	10	1980.10 15-Oct-80	244	257	232		244	4190	4190			244	249
1980	10	1980.10 16-Oct-80	280	319	254		280	3840	3840			280	249
1980	10	1980.10 17-Oct-80	350					3540	3540			350	253
1980	10	1980.10 18-Oct-80	350					3310	3310			350	256
1980	10	1980.10 19-Oct-80	350					3330	3330			350	259
1980	10	1980.10 20-Oct-80	350					3280	3280			350	263
1980	10	1980.10 21-Oct-80	408	423	373		408	3190	3190			408	270
1980	10	1980.10 22-Oct-80	311	356	282		311	3840	3840			311	271
1980	10	1980.10 23-Oct-80	331	373	279		331	3630	3630			331	274
1980	10	1980.10 24-Oct-80	381	412	348		381	3340	3340			381	278
1980	10	1980.10 25-Oct-80	375	391	357		375	3300	3300			375	281
1980	10	1980.10 26-Oct-80	342	382	305		342	3560	3560			342	281
1980	10	1980.10 27-Oct-80	291	323	269		291	3900	3900			291	280
1980	10	1980.10 28-Oct-80	296	317	181		296	3770	3770			296	279
1980	10	1980.10 29-Oct-80	325					3690	3690			325	279
1980	10	1980.10 30-Oct-80	378	398	351		378	3450	3450			378	281
1980	10	1980.10 31-Oct-80	390	409	365		390	3360	3360			390	283
1980	11	1980.11 1-Nov-80	402	421	383		402	3310	3310			402	286
1980	11	1980.11 2-Nov-80	339	405	272		339	3670	3670			339	289
1980	11	1980.11 3-Nov-80	283	300	265		283	4380	4380			283	292
1980	11	1980.11 4-Nov-80	283	298	273		283	4480	4480			283	295
1980	11	1980.11 5-Nov-80	274	285	259		274	4480	4480			274	298
1980	11	1980.11 6-Nov-80	341	435	267		341	4270	4270			341	303
1980	11	1980.11 7-Nov-80	444	470	417		444	3390	3390			444	312
1980	11	1980.11 8-Nov-80	447	464	433		447	3040	3040			447	321
1980	11	1980.11 9-Nov-80	427	439	415		427	3060	3060			427	329
1980	11	1980.11 10-Nov-80	420	428	410		420	3060	3060			420	336
1980	11	1980.11 11-Nov-80	422					3040	3040			422	343
1980	11	1980.11 12-Nov-80	424	433	414		424	3030	3030			424	349
1980	11	1980.11 13-Nov-80	417	428	401		417	3030	3030			417	356
1980	11	1980.11 14-Nov-80	405	419	388		405	3060	3060			405	361
1980	11	1980.11 15-Nov-80	400	411	389		400	3070	3070			400	365
1980	11	1980.11 16-Nov-80	402	427	385		402	2970	2970			402	367
1980	11	1980.11 17-Nov-80	392	403	375		392	2980	2980			392	368
1980	11	1980.11 18-Nov-80	408	426	386		408	2940	2940			408	370
1980	11	1980.11 19-Nov-80	405	414	394		405	2920	2920			405	372
1980	11	1980.11 20-Nov-80	400	407	390		400	2940	2940			400	372
1980	11	1980.11 21-Nov-80	403	422	382		403	2940	2940			403	375
1980	11	1980.11 22-Nov-80	397	409	375		397	3010	3010			397	377
1980	11	1980.11 23-Nov-80	366	380	353		366	3170	3170			366	377
1980	11	1980.11 24-Nov-80	353	365	344		353	3170	3170			353	376
1980	11	1980.11 25-Nov-80	362	373	343		362	3110	3110			362	377
1980	11	1980.11 26-Nov-80	341	353	331		341	3150	3150			341	378
1980	11	1980.11 27-Nov-80	338	351	325		338	3180	3180			338	380
1980	11	1980.11 28-Nov-80	342	355	329		342	3180	3180			342	380
1980	11	1980.11 29-Nov-80	347	357	340		347	3120	3120			347	379
1980	11	1980.11 30-Nov-80	338	345	330		338	3180	3180			338	377
1980	12	1980.12 1-Dec-80	340	354	328		340	3180	3180			340	375
1980	12	1980.12 2-Dec-80	364	373	354		364	3100	3100			364	376
1980	12	1980.12 3-Dec-80	370	376	364		370	3080	3080			370	379
1980	12	1980.12 4-Dec-80	386	410	363		386	3130	3130			386	383
1980	12	1980.12 5-Dec-80	403	423	380		403	3140	3140			403	387
1980	12	1980.12 6-Dec-80	428	441	410		428	3120	3120			428	390

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1980	12	1980.12 7-Dec-80	423	437	415		423	3130	3130			423	389
1980	12	1980.12 8-Dec-80	427	438	409		427	3090	3090			427	388
1980	12	1980.12 9-Dec-80	441	455	422		441	3000	3000			441	389
1980	12	1980.12 10-Dec-80	482	502	450		482	2820	2820			482	391
1980	12	1980.12 11-Dec-80	502	536	482		502	2740	2740			502	394
1980	12	1980.12 12-Dec-80	501	541	483		501	2710	2710			501	396
1980	12	1980.12 13-Dec-80	500	534	476		500	2690	2690			500	399
1980	12	1980.12 14-Dec-80	482	507	465		482	2740	2740			482	401
1980	12	1980.12 15-Dec-80	497	515	484		497	2750	2750			497	405
1980	12	1980.12 16-Dec-80	419	494	301		419	2690	2690			419	405
1980	12	1980.12 17-Dec-80						2700	2700			0	
1980	12	1980.12 18-Dec-80						2690	2690			0	
1980	12	1980.12 19-Dec-80						2700	2700			0	
1980	12	1980.12 20-Dec-80						2680	2680			0	
1980	12	1980.12 21-Dec-80						2730	2730			0	
1980	12	1980.12 22-Dec-80						3170	3170			0	
1980	12	1980.12 23-Dec-80						2900	2900			0	
1980	12	1980.12 24-Dec-80						3640	3640			0	
1980	12	1980.12 25-Dec-80						3820	3820			0	
1980	12	1980.12 26-Dec-80						3340	3340			0	
1980	12	1980.12 27-Dec-80						2540	2540			0	
1980	12	1980.12 28-Dec-80						2890	2890			0	
1980	12	1980.12 29-Dec-80						2870	2870			0	
1980	12	1980.12 30-Dec-80						2450	2450			0	
1980	12	1980.12 31-Dec-80						3200	3200			0	
1981	1	1981.01 1-Jan-81						3460	3460			0	
1981	1	1981.01 2-Jan-81						3230	3230			0	
1981	1	1981.01 3-Jan-81						2510	2510			0	
1981	1	1981.01 4-Jan-81						3130	3130			0	
1981	1	1981.01 5-Jan-81						2920	2920			0	
1981	1	1981.01 6-Jan-81						2430	2430			0	
1981	1	1981.01 7-Jan-81						3310	3310			0	
1981	1	1981.01 8-Jan-81						3540	3540			0	
1981	1	1981.01 9-Jan-81						3620	3620			0	
1981	1	1981.01 10-Jan-81						3560	3560			0	
1981	1	1981.01 11-Jan-81						3420	3420			0	
1981	1	1981.01 12-Jan-81						2970	2970			0	
1981	1	1981.01 13-Jan-81						2380	2380			0	
1981	1	1981.01 14-Jan-81						3190	3190			0	
1981	1	1981.01 15-Jan-81						3400	3400			0	
1981	1	1981.01 16-Jan-81						3350	3350			0	
1981	1	1981.01 17-Jan-81						3390	3390			0	
1981	1	1981.01 18-Jan-81						3260	3260			0	
1981	1	1981.01 19-Jan-81						2840	2840			0	
1981	1	1981.01 20-Jan-81						2300	2300			0	
1981	1	1981.01 21-Jan-81						2690	2690			0	
1981	1	1981.01 22-Jan-81						2760	2760			0	
1981	1	1981.01 23-Jan-81						2880	2880			0	
1981	1	1981.01 24-Jan-81						3060	3060			0	
1981	1	1981.01 25-Jan-81						3010	3010			0	
1981	1	1981.01 26-Jan-81						2820	2820			0	
1981	1	1981.01 27-Jan-81						2810	2810			0	
1981	1	1981.01 28-Jan-81						3340	3340			0	
1981	1	1981.01 29-Jan-81						4270	4270			0	
1981	1	1981.01 30-Jan-81						5220	5220			0	
1981	1	1981.01 31-Jan-81						5700	5700			0	
1981	2	1981.02 1-Feb-81						4960	4960			0	
1981	2	1981.02 2-Feb-81						4090	4090			0	
1981	2	1981.02 3-Feb-81						3280	3280			0	
1981	2	1981.02 4-Feb-81						3420	3420			0	
1981	2	1981.02 5-Feb-81						3340	3340			0	
1981	2	1981.02 6-Feb-81						3250	3250			0	
1981	2	1981.02 7-Feb-81						3220	3220			0	
1981	2	1981.02 8-Feb-81						2990	2990			0	
1981	2	1981.02 9-Feb-81						2690	2690			0	
1981	2	1981.02 10-Feb-81						2450	2450			0	
1981	2	1981.02 11-Feb-81						2950	2950			0	
1981	2	1981.02 12-Feb-81						3030	3030			0	
1981	2	1981.02 13-Feb-81						2920	2920			0	
1981	2	1981.02 14-Feb-81						2880	2880			0	
1981	2	1981.02 15-Feb-81						2810	2810			0	
1981	2	1981.02 16-Feb-81						2400	2400			0	
1981	2	1981.02 17-Feb-81						2220	2220			0	
1981	2	1981.02 18-Feb-81						2220	2220			0	
1981	2	1981.02 19-Feb-81						2630	2630			0	
1981	2	1981.02 20-Feb-81						2660	2660			0	

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1981	2	1981.02 21-Feb-81						2690	2690			0	
1981	2	1981.02 22-Feb-81						2630	2630			0	
1981	2	1981.02 23-Feb-81						2230	2230			0	
1981	2	1981.02 24-Feb-81						2060	2060			0	
1981	2	1981.02 25-Feb-81						2480	2480			0	
1981	2	1981.02 26-Feb-81						2640	2640			0	
1981	2	1981.02 27-Feb-81						2730	2730			0	
1981	2	1981.02 28-Feb-81						2740	2740			0	
1981	3	1981.03 1-Mar-81						2600	2600			0	
1981	3	1981.03 2-Mar-81						2350	2350			0	
1981	3	1981.03 3-Mar-81						2090	2090			0	
1981	3	1981.03 4-Mar-81						2300	2300			0	
1981	3	1981.03 5-Mar-81						2520	2520			0	
1981	3	1981.03 6-Mar-81						3080	3080			0	
1981	3	1981.03 7-Mar-81						3470	3470			0	
1981	3	1981.03 8-Mar-81						3250	3250			0	
1981	3	1981.03 9-Mar-81						2830	2830			0	
1981	3	1981.03 10-Mar-81						2490	2490			0	
1981	3	1981.03 11-Mar-81						2490	2490			0	
1981	3	1981.03 12-Mar-81						2370	2370			0	
1981	3	1981.03 13-Mar-81						2340	2340			0	
1981	3	1981.03 14-Mar-81						2320	2320			0	
1981	3	1981.03 15-Mar-81						2340	2340			0	
1981	3	1981.03 16-Mar-81						2350	2350			0	
1981	3	1981.03 17-Mar-81						2290	2290			0	
1981	3	1981.03 18-Mar-81						2710	2710			0	
1981	3	1981.03 19-Mar-81						2990	2990			0	
1981	3	1981.03 20-Mar-81						3420	3420			0	
1981	3	1981.03 21-Mar-81						4950	4950			0	
1981	3	1981.03 22-Mar-81						4600	4600			0	
1981	3	1981.03 23-Mar-81						4430	4430			0	
1981	3	1981.03 24-Mar-81						4180	4180			0	
1981	3	1981.03 25-Mar-81						4260	4260			0	
1981	3	1981.03 26-Mar-81						3970	3970			0	
1981	3	1981.03 27-Mar-81	622	682	586		622	4410	4410			622	
1981	3	1981.03 28-Mar-81	758	826	678		758	3880	3880			758	
1981	3	1981.03 29-Mar-81	814	827	806		814	3420	3420			814	
1981	3	1981.03 30-Mar-81	845	885	796		845	3170	3170			845	
1981	3	1981.03 31-Mar-81	895	949	841		895	2910	2910			895	
1981	4	1981.04 1-Apr-81	900	937	860		900	2950	2950			900	
1981	4	1981.04 2-Apr-81	925	967	891		925	2920	2920			925	
1981	4	1981.04 3-Apr-81	956	974	914		956	2710	2710			956	
1981	4	1981.04 4-Apr-81	1022	1108	948		1022	2470	2470			1022	
1981	4	1981.04 5-Apr-81	1112	1150	1081		1112	2380	2380			1112	
1981	4	1981.04 6-Apr-81	1088	1105	1061		1088	2260	2260			1088	
1981	4	1981.04 7-Apr-81	1155	1216	1059		1155	1970	1970			1155	
1981	4	1981.04 8-Apr-81	1170	1204	1141		1170	1900	1900			1170	
1981	4	1981.04 9-Apr-81	1092	1196	1005		1092	1830	1830			1092	
1981	4	1981.04 10-Apr-81	1085	1110	1034		1085	1760	1760			1085	
1981	4	1981.04 11-Apr-81	1045	1088	998		1045	1760	1760			1045	
1981	4	1981.04 12-Apr-81	977	1025	920		977	1820	1820			977	
1981	4	1981.04 13-Apr-81	887	915	870		887	2000	2000			887	
1981	4	1981.04 14-Apr-81	856	869	813		856	1960	1960			856	
1981	4	1981.04 15-Apr-81	772	810	741		772	2030	2030			772	
1981	4	1981.04 16-Apr-81	684	745	632		684	2240	2240			684	
1981	4	1981.04 17-Apr-81	612	632	577		612	2440	2440			612	
1981	4	1981.04 18-Apr-81	560	582	535		560	2550	2550			560	
1981	4	1981.04 19-Apr-81	545	570	522		545	2910	2910			545	
1981	4	1981.04 20-Apr-81	534	565	500		534	3330	3330			534	
1981	4	1981.04 21-Apr-81	499	515	484		499	3260	3260			499	
1981	4	1981.04 22-Apr-81	513	548	489		513	3250	3250			513	
1981	4	1981.04 23-Apr-81	495	531	454		495	3180	3180			495	
1981	4	1981.04 24-Apr-81	462	474	449		462	3140	3140			462	
1981	4	1981.04 25-Apr-81	480	500	470		480	3040	3040			480	812
1981	4	1981.04 26-Apr-81	503	511	489		503	2990	2990			503	808
1981	4	1981.04 27-Apr-81	532	565	505		532	2930	2930			532	801
1981	4	1981.04 28-Apr-81	551	570	522		551	2780	2780			551	792
1981	4	1981.04 29-Apr-81	535	555	504		535	2640	2640			535	781
1981	4	1981.04 30-Apr-81	559	595	518		559	2570	2570			559	770
1981	5	1981.05 1-May-81	601	628	572		601	2380	2380			601	760
1981	5	1981.05 2-May-81	586	597	574		586	2280	2280			586	749
1981	5	1981.05 3-May-81	604	621	587		604	2310	2310			604	737
1981	5	1981.05 4-May-81	622	638	605		622	2300	2300			622	724
1981	5	1981.05 5-May-81	641	676	610		641	2200	2200			641	708
1981	5	1981.05 6-May-81	623	636	609		623	2160	2160			623	693
1981	5	1981.05 7-May-81	591	611	566		591	2160	2160			591	674

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1981	5	1981.05 8-May-81	582	591	568		582	2160	2160			582	654
1981	5	1981.05 9-May-81	559	590	507		559	2240	2240			559	637
1981	5	1981.05 10-May-81	514	535	494		514	2270	2270			514	617
1981	5	1981.05 11-May-81	562	600	520		562	2330	2330			562	601
1981	5	1981.05 12-May-81	598	616	575		598	2220	2220			598	589
1981	5	1981.05 13-May-81	622	653	590		622	2000	2000			622	580
1981	5	1981.05 14-May-81	679	701	654		679	1890	1890			679	574
1981	5	1981.05 15-May-81	675	698	648		675	1850	1850			675	571
1981	5	1981.05 16-May-81	637	675	615		637	1860	1860			637	569
1981	5	1981.05 17-May-81	674	705	632		674	1830	1830			674	571
1981	5	1981.05 18-May-81	684	718	652		684	1910	1910			684	575
1981	5	1981.05 19-May-81	692	710	672		692	1850	1850			692	580
1981	5	1981.05 20-May-81	707	731	689		707	1790	1790			707	586
1981	5	1981.05 21-May-81	685	710	674		685	1800	1800			685	592
1981	5	1981.05 22-May-81	740	782	691		740	1780	1780			740	600
1981	5	1981.05 23-May-81	759	786	744		759	1770	1770			759	609
1981	5	1981.05 24-May-81	779	797	749		779	1700	1700			779	619
1981	5	1981.05 25-May-81	786	812	763		786	1760	1760			786	629
1981	5	1981.05 26-May-81	776	812	753		776	1810	1810			776	639
1981	5	1981.05 27-May-81	742	761	720		742	1680	1680			742	646
1981	5	1981.05 28-May-81	760	808	716		760	1610	1610			760	652
1981	5	1981.05 29-May-81	774	798	754		774	1650	1650			774	660
1981	5	1981.05 30-May-81	795	821	774		795	1680	1680			795	668
1981	5	1981.05 31-May-81	775	797	751		775	1740	1740			775	674
1981	6	1981.06 1-Jun-81	766	792	725		766	1760	1760			766	680
1981	6	1981.06 2-Jun-81	751	780	710		751	1640	1640			751	685
1981	6	1981.06 3-Jun-81	797	850	738		797	1540	1540			797	691
1981	6	1981.06 4-Jun-81	831	857	813		831	1470	1470			831	697
1981	6	1981.06 5-Jun-81	824	857	799		824	1490	1490			824	704
1981	6	1981.06 6-Jun-81	802	847	756		802	1480	1480			802	711
1981	6	1981.06 7-Jun-81	753	780	740		753	1540	1540			753	717
1981	6	1981.06 8-Jun-81	766	780	747		766	1570	1570			766	724
1981	6	1981.06 9-Jun-81	805	826	780		805	1500	1500			805	733
1981	6	1981.06 10-Jun-81	816	846	789		816	1370	1370			816	742
1981	6	1981.06 11-Jun-81	818	834	798		818	1270	1270			818	749
1981	6	1981.06 12-Jun-81	826	862	783		826	1260	1260			826	756
1981	6	1981.06 13-Jun-81	813	836	802		813	1320	1320			813	760
1981	6	1981.06 14-Jun-81	787	816	756		787	1420	1420			787	764
1981	6	1981.06 15-Jun-81	778	824	744		778	1550	1550			778	769
1981	6	1981.06 16-Jun-81	819	849	780		819	1470	1470			819	774
1981	6	1981.06 17-Jun-81	819	857	792		819	1400	1400			819	778
1981	6	1981.06 18-Jun-81	798	833	766		798	1350	1350			798	782
1981	6	1981.06 19-Jun-81	757	830	713		757	1390	1390			757	783
1981	6	1981.06 20-Jun-81	757	789	718		757	1420	1420			757	786
1981	6	1981.06 21-Jun-81	702	752	646		702	1660	1660			702	784
1981	6	1981.06 22-Jun-81	616	648	560		616	1840	1840			616	780
1981	6	1981.06 23-Jun-81	592	632	560		592	1700	1700			592	773
1981	6	1981.06 24-Jun-81	571	608	516		571	1580	1580			571	766
1981	6	1981.06 25-Jun-81	605	637	588		605	1490	1490			605	761
1981	6	1981.06 26-Jun-81	613	631	587		613	1430	1430			613	756
1981	6	1981.06 27-Jun-81	611	654	571		611	1470	1470			611	751
1981	6	1981.06 28-Jun-81	587	623	521		587	1560	1560			587	745
1981	6	1981.06 29-Jun-81	547	586	501		547	1540	1540			547	737
1981	6	1981.06 30-Jun-81	596	618	563		596	1480	1480			596	731
1981	7	1981.07 1-Jul-81	616	650	592		616	1420	1420			616	726
1981	7	1981.07 2-Jul-81	650	678	628		650	1410	1410			650	722
1981	7	1981.07 3-Jul-81	623	650	581		623	1510	1510			623	717
1981	7	1981.07 4-Jul-81	588	606	571		588	1590	1590			588	709
1981	7	1981.07 5-Jul-81	577	594	562		577	1620	1620			577	700
1981	7	1981.07 6-Jul-81	552	572	530		552	1710	1710			552	692
1981	7	1981.07 7-Jul-81	595	623	546		595	1490	1490			595	687
1981	7	1981.07 8-Jul-81	642	666	618		642	1320	1320			642	683
1981	7	1981.07 9-Jul-81	696	725	664		696	1240	1240			696	679
1981	7	1981.07 10-Jul-81	762	782	739		762	1190	1190			762	677
1981	7	1981.07 11-Jul-81	757	775	737		757	1200	1200			757	675
1981	7	1981.07 12-Jul-81	736	776	699		736	1290	1290			736	672
1981	7	1981.07 13-Jul-81	732	765	696		732	1290	1290			732	669
1981	7	1981.07 14-Jul-81	743	770	718		743	1210	1210			743	668
1981	7	1981.07 15-Jul-81	716	734	691		716	1180	1180			716	666
1981	7	1981.07 16-Jul-81	753	787	714		753	1110	1110			753	664
1981	7	1981.07 17-Jul-81	730	746	704		730	1180	1180			730	661
1981	7	1981.07 18-Jul-81	725	742	697		725	1250	1250			725	658
1981	7	1981.07 19-Jul-81	748	782	732		748	1290	1290			748	658
1981	7	1981.07 20-Jul-81	788	828	760		788	1340	1340			788	659
1981	7	1981.07 21-Jul-81	804	835	769		804	1180	1180			804	662
1981	7	1981.07 22-Jul-81	874	924	817		874	1050	1050			874	671

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1981	7	1981.07 23-Jul-81	823	852	780		823	1070	1070			823	679
1981	7	1981.07 24-Jul-81	810	861	738		810	1030	1030			810	687
1981	7	1981.07 25-Jul-81	830	867	799		830	1070	1070			830	694
1981	7	1981.07 26-Jul-81	789	822	750		789	1220	1220			789	700
1981	7	1981.07 27-Jul-81	757	780	727		757	1240	1240			757	705
1981	7	1981.07 28-Jul-81	810	856	772		810	1190	1190			810	712
1981	7	1981.07 29-Jul-81	816	840	791		816	1140	1140			816	721
1981	7	1981.07 30-Jul-81	815	841	796		815	1070	1070			815	729
1981	7	1981.07 31-Jul-81	791	831	750		791	1120	1120			791	734
1981	8	1981.08 1-Aug-81	780	814	739		780	1200	1200			780	739
1981	8	1981.08 2-Aug-81	777	813	738		777	1250	1250			777	744
1981	8	1981.08 3-Aug-81	762	808	711		762	1360	1360			762	750
1981	8	1981.08 4-Aug-81	726	773	680		726	1330	1330			726	755
1981	8	1981.08 5-Aug-81	772	840	737		772	1300	1300			772	762
1981	8	1981.08 6-Aug-81	817	885	750		817	1260	1260			817	769
1981	8	1981.08 7-Aug-81	785	819	727		785	1340	1340			785	774
1981	8	1981.08 8-Aug-81	757	800	722		757	1290	1290			757	776
1981	8	1981.08 9-Aug-81	734	776	703		734	1320	1320			734	775
1981	8	1981.08 10-Aug-81	713	765	670		713	1370	1370			713	774
1981	8	1981.08 11-Aug-81	717	750	691		717	1330	1330			717	773
1981	8	1981.08 12-Aug-81	730	753	709		730	1270	1270			730	773
1981	8	1981.08 13-Aug-81	749	802	710		749	1230	1230			749	773
1981	8	1981.08 14-Aug-81	718	744	694		718	1220	1220			718	773
1981	8	1981.08 15-Aug-81	726	766	682		726	1180	1180			726	772
1981	8	1981.08 16-Aug-81	736	776	687		736	1200	1200			736	773
1981	8	1981.08 17-Aug-81	669	687	649		669	1360	1360			669	771
1981	8	1981.08 18-Aug-81	673	710	630		673	1240	1240			673	768
1981	8	1981.08 19-Aug-81	696	725	656		696	1130	1130			696	765
1981	8	1981.08 20-Aug-81	731	771	696		731	1120	1120			731	763
1981	8	1981.08 21-Aug-81	743	757	723		743	1170	1170			743	758
1981	8	1981.08 22-Aug-81	726	742	703		726	1220	1220			726	755
1981	8	1981.08 23-Aug-81	701	723	665		701	1260	1260			701	752
1981	8	1981.08 24-Aug-81	659	694	632		659	1420	1420			659	746
1981	8	1981.08 25-Aug-81	663	685	624		663	1410	1410			663	742
1981	8	1981.08 26-Aug-81	705	731	675		705	1290	1290			705	740
1981	8	1981.08 27-Aug-81	713	735	701		713	1230	1230			713	737
1981	8	1981.08 28-Aug-81	742	767	708		742	1180	1180			742	734
1981	8	1981.08 29-Aug-81	746	772	714		746	1210	1210			746	732
1981	8	1981.08 30-Aug-81	751	773	722		751	1300	1300			751	731
1981	8	1981.08 31-Aug-81	686	715	647		686	1360	1360			686	727
1981	9	1981.09 1-Sep-81	674	715	639		674	1260	1260			674	724
1981	9	1981.09 2-Sep-81	689	713	669		689	1230	1230			689	722
1981	9	1981.09 3-Sep-81	692	722	655		692	1200	1200			692	720
1981	9	1981.09 4-Sep-81	678	691	658		678	1250	1250			678	717
1981	9	1981.09 5-Sep-81	691	740	654		691	1260	1260			691	713
1981	9	1981.09 6-Sep-81	686	709	654		686	1270	1270			686	710
1981	9	1981.09 7-Sep-81	714	740	690		714	1320	1320			714	708
1981	9	1981.09 8-Sep-81	685	721	634		685	1380	1380			685	707
1981	9	1981.09 9-Sep-81	645	671	612		645	1290	1290			645	704
1981	9	1981.09 10-Sep-81	710	747	672		710	1210	1210			710	704
1981	9	1981.09 11-Sep-81	724	743	713		724	1240	1240			724	704
1981	9	1981.09 12-Sep-81	752	784	712		752	1100	1100			752	704
1981	9	1981.09 13-Sep-81	785	822	743		785	1110	1110			785	706
1981	9	1981.09 14-Sep-81	735	772	689		735	1170	1170			735	707
1981	9	1981.09 15-Sep-81	730	756	694		730	1110	1110			730	706
1981	9	1981.09 16-Sep-81	753	785	704		753	1030	1030			753	709
1981	9	1981.09 17-Sep-81	749	773	733		749	1080	1080			749	712
1981	9	1981.09 18-Sep-81	769	791	741		769	1100	1100			769	714
1981	9	1981.09 19-Sep-81	760	782	728		760	1090	1090			760	715
1981	9	1981.09 20-Sep-81	780	824	731		780	1180	1180			780	716
1981	9	1981.09 21-Sep-81	790	816	747		790	1170	1170			790	719
1981	9	1981.09 22-Sep-81	783	820	718		783	1130	1130			783	721
1981	9	1981.09 23-Sep-81	754	792	706		754	1080	1080			754	724
1981	9	1981.09 24-Sep-81	732	758	706		732	1111	1110			732	727
1981	9	1981.09 25-Sep-81	706	722	696		706	1160	1160			706	727
1981	9	1981.09 26-Sep-81	754	782	707		754	1160	1160			754	728
1981	9	1981.09 27-Sep-81	750	795	700		750	1200	1200			750	728
1981	9	1981.09 28-Sep-81	723	741	701		723	1260	1260			723	728
1981	9	1981.09 29-Sep-81	727	758	685		727	1190	1190			727	727
1981	9	1981.09 30-Sep-81	744	802	672		744	1110	1100			744	729
1981	10	1981.10 1-Oct-81	738	771	690		738	1140	1140			738	731
1981	10	1981.10 2-Oct-81	696	716	671		696	1230	1230			696	731
1981	10	1981.10 3-Oct-81	666	696	579		666	1370	1370			666	730
1981	10	1981.10 4-Oct-81	528	500	462		528	1730	1730			528	725
1981	10	1981.10 5-Oct-81	496	554	456		496	1670	1670			496	719
1981	10	1981.10 6-Oct-81	565	576	548		565	1480	1480			565	715

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1981	10	1981.10	7-Oct-81	621	650	586		621	1340	1340		621	712
1981	10	1981.10	8-Oct-81	631	666	607		631	1400	1400		631	710
1981	10	1981.10	9-Oct-81	574	610	522		574	1500	1500		574	708
1981	10	1981.10	10-Oct-81	582	621	528		582	1510	1510		582	703
1981	10	1981.10	11-Oct-81	524	556	473		524	1720	1720		524	697
1981	10	1981.10	12-Oct-81	478	487	471		478	1780	1780		478	687
1981	10	1981.10	13-Oct-81	492	508	474		492	1690	1690		492	678
1981	10	1981.10	14-Oct-81	549	590	495		549	1550	1550		549	671
1981	10	1981.10	15-Oct-81	537	566	513		537	1670	1670		537	665
1981	10	1981.10	16-Oct-81	563	601	523		563	1740	1740		563	659
1981	10	1981.10	17-Oct-81	501	529	461		501	1630	1630		501	650
1981	10	1981.10	18-Oct-81	509	553	474		509	1540	1540		509	642
1981	10	1981.10	19-Oct-81	582	640	541		582	1360	1360		582	636
1981	10	1981.10	20-Oct-81	679	714	658		679	1230	1230		679	632
1981	10	1981.10	21-Oct-81	786	876	718		786	1100	1100		786	632
1981	10	1981.10	22-Oct-81	870	898	847		870	1060	1060		870	635
1981	10	1981.10	23-Oct-81	855	879	830		855	1070	1070		855	639
1981	10	1981.10	24-Oct-81	806	825	793		806	1060	1060		806	641
1981	10	1981.10	25-Oct-81	808	819	798		808	1090	1090		808	644
1981	10	1981.10	26-Oct-81	827	847	806		827	1090	1090		827	647
1981	10	1981.10	27-Oct-81	833	840	805		833	1090	1090		833	650
1981	10	1981.10	28-Oct-81	756	805	686		756	1170	1170		756	651
1981	10	1981.10	29-Oct-81	647	685	618		647	1320	1320		647	648
1981	10	1981.10	30-Oct-81	678	698	652		678	1330	1330		678	646
1981	10	1981.10	31-Oct-81	687	710	674		687	1320	1320		687	644
1981	11	1981.11	1-Nov-81	749	778	714		749	1260	1260		749	646
1981	11	1981.11	2-Nov-81	742	751	728		742	1230	1230		742	649
1981	11	1981.11	3-Nov-81	743	753	738		743	1220	1220		743	656
1981	11	1981.11	4-Nov-81	698	748	630		698	1290	1290		698	662
1981	11	1981.11	5-Nov-81	624	656	587		624	1400	1400		624	664
1981	11	1981.11	6-Nov-81	610	623	597		610	1450	1450		610	664
1981	11	1981.11	7-Nov-81	643	672	610		643	1370	1370		643	664
1981	11	1981.11	8-Nov-81	680	694	665		680	1290	1290		680	668
1981	11	1981.11	9-Nov-81	710	730	691		710	1270	1270		710	672
1981	11	1981.11	10-Nov-81	718	725	712		718	1260	1260		718	679
1981	11	1981.11	11-Nov-81	723	728	719		723	1250	1250		723	687
1981	11	1981.11	12-Nov-81	715	722	706		715	1280	1280		715	694
1981	11	1981.11	13-Nov-81	694	720	671		694	1410	1410		694	699
1981	11	1981.11	14-Nov-81	647	691	603		647	1640	1640		647	703
1981	11	1981.11	15-Nov-81	638	650	628		638	1710	1710		638	705
1981	11	1981.11	16-Nov-81	689	724	660		689	1800	1800		689	712
1981	11	1981.11	17-Nov-81	662	714	600		662	1860	1860		662	717
1981	11	1981.11	18-Nov-81	610	635	581		610	1830	1830		610	718
1981	11	1981.11	19-Nov-81	657	669	639		657	1790	1790		657	717
1981	11	1981.11	20-Nov-81	676	692	661		676	1730	1730		676	713
1981	11	1981.11	21-Nov-81	726	744	697		726	1660	1660		726	708
1981	11	1981.11	22-Nov-81	746	756	737		746	1600	1600		746	705
1981	11	1981.11	23-Nov-81	761	776	749		761	1580	1580		761	703
1981	11	1981.11	24-Nov-81	802	825	778		802	1560	1560		802	703
1981	11	1981.11	25-Nov-81	827	840	799		827	1550	1550		827	703
1981	11	1981.11	26-Nov-81	750					1650	1650		750	700
1981	11	1981.11	27-Nov-81	685	709	672		685	1770	1770		685	698
1981	11	1981.11	28-Nov-81	667	682	641		667	1850	1850		667	699
1981	11	1981.11	29-Nov-81	621	638	590		621	2070	2070		621	697
1981	11	1981.11	30-Nov-81	599	617	589		599	2290	2290		599	694
1981	12	1981.12	1-Dec-81	588	635	526		588	2270	2270		588	688
1981	12	1981.12	2-Dec-81	565	590	529		565	2200	2200		565	682
1981	12	1981.12	3-Dec-81	634	648	619		634	2120	2120		634	679
1981	12	1981.12	4-Dec-81	652	661	641		652	2030	2030		652	677
1981	12	1981.12	5-Dec-81	672	680	661		672	1930	1930		672	679
1981	12	1981.12	6-Dec-81	690	703	677		690	1880	1880		690	682
1981	12	1981.12	7-Dec-81	734	765	706		734	1950	1950		734	685
1981	12	1981.12	8-Dec-81	692	704	689		692	1980	1980		692	685
1981	12	1981.12	9-Dec-81	687	696	681		687	1950	1950		687	684
1981	12	1981.12	10-Dec-81	715	734	695		715	1920	1920		715	684
1981	12	1981.12	11-Dec-81	718	731	713		718	1910	1910		718	684
1981	12	1981.12	12-Dec-81	728	731	725		728	1900	1900		728	684
1981	12	1981.12	13-Dec-81	726	733	717		726	1880	1880		726	685
1981	12	1981.12	14-Dec-81	722	732	712		722	1860	1860		722	688
1981	12	1981.12	15-Dec-81	743	762	731		743	1840	1840		743	691
1981	12	1981.12	16-Dec-81	749	760	738		749	1810	1810		749	693
1981	12	1981.12	17-Dec-81	734	742	729		734	1780	1780		734	696
1981	12	1981.12	18-Dec-81	751	779	734		751	1740	1740		751	701
1981	12	1981.12	19-Dec-81	874	929	785		874	1570	1570		874	708
1981	12	1981.12	20-Dec-81	954	984	927		954	1470	1470		954	717
1981	12	1981.12	21-Dec-81	967	983	951		967	1450	1450		967	725

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1981	12	1981.12 22-Dec-81	920	972	767		920	1530	1560			920	731
1981	12	1981.12 23-Dec-81	729	760	687		729	1870	1870			729	730
1981	12	1981.12 24-Dec-81	701	712	689		701	1960	1960			701	726
1981	12	1981.12 25-Dec-81	663	709	626		663	1940	1940			663	721
1981	12	1981.12 26-Dec-81	676	725	639		676	1760	1760			676	719
1981	12	1981.12 27-Dec-81	790	832	730		790	1550	1550			790	722
1981	12	1981.12 28-Dec-81	879	928	837		879	1470	1470			879	729
1981	12	1981.12 29-Dec-81	916	927	908		916	1460	1460			916	739
1981	12	1981.12 30-Dec-81	836	945	749		836	1720	1720			836	747
1981	12	1981.12 31-Dec-81	553	756	441		553	2680	2680			553	746
1982	1	1982.01 1-Jan-82	589	677	524		589	2770	2770			589	746
1982	1	1982.01 2-Jan-82	674	740	549		674	2580	2580			674	748
1982	1	1982.01 3-Jan-82	531	549	511		531	2690	2690			531	744
1982	1	1982.01 4-Jan-82	516	537	478		516	2960	2960			516	739
1982	1	1982.01 5-Jan-82	415	473	330		415	4120	4120			415	729
1982	1	1982.01 6-Jan-82	249	330	217		249	7510	7510			249	713
1982	1	1982.01 7-Jan-82	275	296	243		275	7990	7990			275	699
1982	1	1982.01 8-Jan-82	257	313	221		257	6720	6720			257	685
1982	1	1982.01 9-Jan-82	299	312	286		299	5780	5780			299	671
1982	1	1982.01 10-Jan-82	321	366	291		321	5130	5130			321	658
1982	1	1982.01 11-Jan-82	413	460	371		413	4290	4290			413	647
1982	1	1982.01 12-Jan-82	546	596	464		546	3620	3620			546	641
1982	1	1982.01 13-Jan-82	510	558	488		510	3750	3750			510	634
1982	1	1982.01 14-Jan-82	468	488	446		468	3770	3770			468	625
1982	1	1982.01 15-Jan-82	460	487	435		460	3680	3680			460	616
1982	1	1982.01 16-Jan-82	478	516	444		478	3570	3570			478	607
1982	1	1982.01 17-Jan-82	517	579	441		517	3330	3330			517	599
1982	1	1982.01 18-Jan-82	637	735	582		637	2850	2850			637	591
1982	1	1982.01 19-Jan-82	833	897	744		833	2460	2460			833	587
1982	1	1982.01 20-Jan-82	746	873	700		746	2940	2940			746	580
1982	1	1982.01 21-Jan-82	662	692	622		662	3290	3290			662	571
1982	1	1982.01 22-Jan-82	643	671	610		643	3580	3580			643	568
1982	1	1982.01 23-Jan-82	662	713	612		662	3650	3650			662	567
1982	1	1982.01 24-Jan-82	606	665	561		606	3630	3630			606	565
1982	1	1982.01 25-Jan-82	674	737	630		674	3220	3220			674	565
1982	1	1982.01 26-Jan-82	827	878	741		827	2830	2830			827	566
1982	1	1982.01 27-Jan-82	764	849	737		764	3110	3110			764	563
1982	1	1982.01 28-Jan-82	681	727	661		681	3430	3430			681	555
1982	1	1982.01 29-Jan-82	640	654	630		640	3670	3670			640	548
1982	1	1982.01 30-Jan-82	640					3820	3820			640	551
1982	1	1982.01 31-Jan-82	640					3820	3820			640	553
1982	2	1982.02 1-Feb-82	640					3670	3670			640	552
1982	2	1982.02 2-Feb-82	643	693	562		643	3580	3580			643	555
1982	2	1982.02 3-Feb-82	538	570	505		538	4140	4140			538	556
1982	2	1982.02 4-Feb-82	524	558	496		524	4210	4210			524	560
1982	2	1982.02 5-Feb-82	494	518	454		494	4400	4400			494	568
1982	2	1982.02 6-Feb-82	458	494	426		458	4770	4770			458	574
1982	2	1982.02 7-Feb-82	486	537	438		486	4700	4700			486	582
1982	2	1982.02 8-Feb-82	566	676	496		566	4130	4130			566	591
1982	2	1982.02 9-Feb-82	747	822	636		747	3340	3340			747	605
1982	2	1982.02 10-Feb-82	526	607	482		526	4360	4360			526	609
1982	2	1982.02 11-Feb-82	483	525	447		483	4820	4820			483	606
1982	2	1982.02 12-Feb-82	476	520	441		476	4950	4950			476	605
1982	2	1982.02 13-Feb-82	460	501	424		460	4970	4970			460	605
1982	2	1982.02 14-Feb-82	483	532	437		483	4790	4790			483	606
1982	2	1982.02 15-Feb-82	525	616	382		525	4410	4410			525	607
1982	2	1982.02 16-Feb-82	602	680	429		602	4240	4240			602	610
1982	2	1982.02 17-Feb-82	372	420	305		372	7720	7720			372	601
1982	2	1982.02 18-Feb-82	300					9100	9100			300	584
1982	2	1982.02 19-Feb-82	300					8780	8780			300	569
1982	2	1982.02 20-Feb-82	300					8990	8990			300	557
1982	2	1982.02 21-Feb-82	210	229	192		210	9830	9830			210	542
1982	2	1982.02 22-Feb-82	239	256	226		239	10600	10600			239	528
1982	2	1982.02 23-Feb-82	289	358	258		289	10800	10800			289	518
1982	2	1982.02 24-Feb-82	300	361	279		300	10700	10700			300	505
1982	2	1982.02 25-Feb-82	285	295	277		285	10400	10400			285	487
1982	2	1982.02 26-Feb-82	272	283	265		272	10100	10100			272	471
1982	2	1982.02 27-Feb-82	289	327	254		289	9880	9880			289	458
1982	2	1982.02 28-Feb-82	284	289	278		284	9690	9690			284	446
1982	3	1982.03 1-Mar-82	284	373	272		284	9500	9500			284	434
1982	3	1982.03 2-Mar-82	278	288	272		278	9440	9440			278	422
1982	3	1982.03 3-Mar-82	271	280	263		271	9520	9520			271	409
1982	3	1982.03 4-Mar-82	261	271	252		261	9830	9830			261	397
1982	3	1982.03 5-Mar-82	262	269	251		262	9870	9870			262	388
1982	3	1982.03 6-Mar-82	261	269	254		261	9730	9730			261	379
1982	3	1982.03 7-Mar-82	265	274	256		265	9610	9610			265	371

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1982	3	1982.03 8-Mar-82	276	282	268		276	9440	9440			276	365
1982	3	1982.03 9-Mar-82	280	287	272		280	9290	9290			280	358
1982	3	1982.03 10-Mar-82	272	294	262		272	9230	9230			272	348
1982	3	1982.03 11-Mar-82	270	281	261		270	9140	9140			270	333
1982	3	1982.03 12-Mar-82	290	308	271		290	8970	8970			290	325
1982	3	1982.03 13-Mar-82	307	317	297		307	8880	8880			307	319
1982	3	1982.03 14-Mar-82	317	326	310		317	9030	9030			317	313
1982	3	1982.03 15-Mar-82	317	328	308		317	9070	9070			317	309
1982	3	1982.03 16-Mar-82	322	331	312		322	9430	9430			322	303
1982	3	1982.03 17-Mar-82	284	309	262		284	9920	9920			284	295
1982	3	1982.03 18-Mar-82	251	272	229		251	11200	11200			251	284
1982	3	1982.03 19-Mar-82	264	275	254		264	11600	11600			264	280
1982	3	1982.03 20-Mar-82	276	290	262		276	11500	11500			276	279
1982	3	1982.03 21-Mar-82	257	283	242		257	11500	11500			257	278
1982	3	1982.03 22-Mar-82	254	267	241		254	11400	11400			254	276
1982	3	1982.03 23-Mar-82	272	363	254		272	11400	11400			272	278
1982	3	1982.03 24-Mar-82	286	300	274		286	11300	11300			286	280
1982	3	1982.03 25-Mar-82	300	324	282		300	11200	11200			300	280
1982	3	1982.03 26-Mar-82	332	351	318		332	10800	10800			332	281
1982	3	1982.03 27-Mar-82	367	381	347		367	10300	10300			367	284
1982	3	1982.03 28-Mar-82	372	388	365		372	9750	9750			372	287
1982	3	1982.03 29-Mar-82	360	374	346		360	9440	9440			360	290
1982	3	1982.03 30-Mar-82	342	360	324		342	9720	9720			342	292
1982	3	1982.03 31-Mar-82	314	321	301		314	10900	10900			314	293
1982	4	1982.04 1-Apr-82	261	303	231		261	12200	12200			261	292
1982	4	1982.04 2-Apr-82	216	229	202		216	14600	14600			216	290
1982	4	1982.04 3-Apr-82	218	229	210		218	15000	15000			218	289
1982	4	1982.04 4-Apr-82	205	214	104		205	14300	14300			205	287
1982	4	1982.04 5-Apr-82	208	219	195		208	14200	14200			208	285
1982	4	1982.04 6-Apr-82	217	228	205		217	14800	14800			217	284
1982	4	1982.04 7-Apr-82	201	213	194		201	15900	15900			201	281
1982	4	1982.04 8-Apr-82	207	225	190		207	18500	18500			207	279
1982	4	1982.04 9-Apr-82	178	207	167		178	21700	21700			178	276
1982	4	1982.04 10-Apr-82	181	188	169		181	23900	23900			181	273
1982	4	1982.04 11-Apr-82	193	215	180		193	23600	23600			193	269
1982	4	1982.04 12-Apr-82	221	230	204		221	22800	22800			221	266
1982	4	1982.04 13-Apr-82	229	236	224		229	22500	22500			229	264
1982	4	1982.04 14-Apr-82	231	247	222		231	21700	21700			231	261
1982	4	1982.04 15-Apr-82	235	247	227		235	21800	21800			235	258
1982	4	1982.04 16-Apr-82	208	224	197		208	24100	24100			208	255
1982	4	1982.04 17-Apr-82	189	198	175		189	27700	27700			189	253
1982	4	1982.04 18-Apr-82	171	177	164		171	29600	29600			171	250
1982	4	1982.04 19-Apr-82	173	179	164		173	29600	29600			173	247
1982	4	1982.04 20-Apr-82	174	180	166		174	29200	29200			174	244
1982	4	1982.04 21-Apr-82	173	181	162		173	28900	28900			173	241
1982	4	1982.04 22-Apr-82	169	185	156		169	28600	28600			169	238
1982	4	1982.04 23-Apr-82	162	171	154		162	28200	28200			162	234
1982	4	1982.04 24-Apr-82	162	171	152		162	27900	27900			162	229
1982	4	1982.04 25-Apr-82	158	164	150		158	27600	27600			158	223
1982	4	1982.04 26-Apr-82	155	163	146		155	27200	27200			155	216
1982	4	1982.04 27-Apr-82	154	158	149		154	26700	26700			154	209
1982	4	1982.04 28-Apr-82	153	159	146		153	26100	26100			153	202
1982	4	1982.04 29-Apr-82	154	160	150		154	25300	25300			154	196
1982	4	1982.04 30-Apr-82	156	165	148		156	24700	24700			156	190
1982	5	1982.05 1-May-82	151	162	139		151	24400	24400			151	187
1982	5	1982.05 2-May-82	141	158	126		141	24300	24300			141	184
1982	5	1982.05 3-May-82	139	151	129		139	24800	24800			139	182
1982	5	1982.05 4-May-82	141	146	134		141	24600	24600			141	179
1982	5	1982.05 5-May-82	142	150	134		142	24100	24100			142	177
1982	5	1982.05 6-May-82	142	150	132		142	23700	23700			142	175
1982	5	1982.05 7-May-82	138	146	134		138	23200	23200			138	173
1982	5	1982.05 8-May-82	135	144	128		135	22900	22900			135	170
1982	5	1982.05 9-May-82	128	136	123		128	22700	22700			128	169
1982	5	1982.05 10-May-82	127	138	119		127	22700	22700			127	167
1982	5	1982.05 11-May-82	132	142	121		132	22300	22300			132	165
1982	5	1982.05 12-May-82	132	140	122		132	22100	22100			132	162
1982	5	1982.05 13-May-82	136	146	128		136	22100	22100			136	159
1982	5	1982.05 14-May-82	136	144	126		136	21900	21900			136	156
1982	5	1982.05 15-May-82	131	139	122		131	21200	21200			131	152
1982	5	1982.05 16-May-82	137	145	124		137	20400	20400			137	150
1982	5	1982.05 17-May-82	145	150	137		145	19400	19400			145	148
1982	5	1982.05 18-May-82	150	156	143		150	18800	18800			150	148
1982	5	1982.05 19-May-82	150	160	143		150	18200	18200			150	147
1982	5	1982.05 20-May-82	150	165	142		150	17600	17600			150	146
1982	5	1982.05 21-May-82	160	174	151		160	16800	16800			160	146
1982	5	1982.05 22-May-82	184	198	166		184	16000	16000			184	146

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1982	5	1982.05 23-May-82	202	211	196		202	15000	15000			202	147
1982	5	1982.05 24-May-82	214	222	206		214	14000	14000			214	149
1982	5	1982.05 25-May-82	219	224	215		219	13100	13100			219	151
1982	5	1982.05 26-May-82	240	252	224		240	12200	12200			240	154
1982	5	1982.05 27-May-82	268	285	252		268	11200	11200			268	158
1982	5	1982.05 28-May-82	283	293	273		283	10300	10300			283	162
1982	5	1982.05 29-May-82	270	279	263		270	9780	9780			270	166
1982	5	1982.05 30-May-82	269	281	256		269	9350	9350			269	170
1982	5	1982.05 31-May-82	268	278	258		268	9140	9140			268	174
1982	6	1982.06 1-Jun-82	280	288	269		280	9010	9010			280	178
1982	6	1982.06 2-Jun-82	275	288	266		275	8860	8860			275	183
1982	6	1982.06 3-Jun-82	257	274	242		257	8960	8960			257	187
1982	6	1982.06 4-Jun-82	252	273	231		252	9130	9130			252	190
1982	6	1982.06 5-Jun-82	254	224	245		254	9330	9330			254	194
1982	6	1982.06 6-Jun-82	228	247	214		228	9490	9490			228	197
1982	6	1982.06 7-Jun-82	234	249	220		234	9420	9420			234	200
1982	6	1982.06 8-Jun-82	250	258	243		250	9140	9140			250	204
1982	6	1982.06 9-Jun-82	242	256	234		242	8980	8980			242	208
1982	6	1982.06 10-Jun-82	250	268	237		250	8670	8670			250	212
1982	6	1982.06 11-Jun-82	267	276	257		267	8270	8270			267	217
1982	6	1982.06 12-Jun-82	256	263	249		256	8080	8080			256	221
1982	6	1982.06 13-Jun-82	268	279	260		268	7760	7760			268	225
1982	6	1982.06 14-Jun-82	306	332	278		306	7310	7310			306	231
1982	6	1982.06 15-Jun-82	340	360	329		340	6700	6700			340	238
1982	6	1982.06 16-Jun-82	348	359	327		348	6290	6290			348	244
1982	6	1982.06 17-Jun-82	353	364	343		353	6130	6130			353	251
1982	6	1982.06 18-Jun-82	363	371	352		363	6170	6170			363	258
1982	6	1982.06 19-Jun-82	346	355	339		346	6190	6190			346	265
1982	6	1982.06 20-Jun-82	340	348	328		340	6270	6270			340	271
1982	6	1982.06 21-Jun-82	331	344	315		331	6280	6280			331	276
1982	6	1982.06 22-Jun-82	338	345	331		338	6090	6090			338	280
1982	6	1982.06 23-Jun-82	323	338	315		323	6220	6220			323	284
1982	6	1982.06 24-Jun-82	306	314	294		306	6290	6290			306	287
1982	6	1982.06 25-Jun-82	302	309	296		302	6430	6430			302	289
1982	6	1982.06 26-Jun-82	300	310	289		300	6610	6610			300	290
1982	6	1982.06 27-Jun-82	273	289	256		273	7050	7050			273	290
1982	6	1982.06 28-Jun-82	251	260	242		251	7350	7350			251	289
1982	6	1982.06 29-Jun-82	249	255	242		249	7400	7400			249	288
1982	6	1982.06 30-Jun-82	239	247	230		239	7640	7640			239	287
1982	7	1982.07 1-Jul-82	220	233	208		220	8120	8120			220	285
1982	7	1982.07 2-Jul-82	121	210	143		121	9480	9480			121	280
1982	7	1982.07 3-Jul-82	138	146	128		138	10700	10700			138	276
1982	7	1982.07 4-Jul-82	154	168	136		154	11200	11200			154	273
1982	7	1982.07 5-Jul-82	165					11300	11300			165	270
1982	7	1982.07 6-Jul-82	182	189	176		182	10900	10900			182	269
1982	7	1982.07 7-Jul-82	207	223	184		207	9930	9930			207	268
1982	7	1982.07 8-Jul-82	230	242	216		230	9100	9100			230	267
1982	7	1982.07 9-Jul-82	263	287	235		263	8150	8150			263	268
1982	7	1982.07 10-Jul-82	323	355	287		323	6860	6830			323	270
1982	7	1982.07 11-Jul-82	366	381	247		366	5840	5840			366	273
1982	7	1982.07 12-Jul-82	407	440	384		407	5110	5110			407	278
1982	7	1982.07 13-Jul-82	462	478	440		462	4610	4610			462	285
1982	7	1982.07 14-Jul-82	468	478	456		468	4480	4480			468	290
1982	7	1982.07 15-Jul-82	477	491	468		477	4410	4410			477	295
1982	7	1982.07 16-Jul-82	476	489	466		476	4390	4390			476	299
1982	7	1982.07 17-Jul-82	442	461	422		442	4420	4420			442	302
1982	7	1982.07 18-Jul-82	445					4520	4520			445	305
1982	7	1982.07 19-Jul-82	445					4460	4460			445	308
1982	7	1982.07 20-Jul-82	448	465	436		448	4420	4420			448	312
1982	7	1982.07 21-Jul-82	445	456	430		445	4250	4280			445	316
1982	7	1982.07 22-Jul-82	452	461	443		452	4220	4220			452	319
1982	7	1982.07 23-Jul-82	443	467	428		443	4250	4250			443	323
1982	7	1982.07 24-Jul-82	434	448	424		434	4200	4200			434	328
1982	7	1982.07 25-Jul-82	427	435	413		427	4390	4390			427	332
1982	7	1982.07 26-Jul-82	395	408	384		395	4610	4610			395	335
1982	7	1982.07 27-Jul-82	384	396	374		384	4550	4550			384	339
1982	7	1982.07 28-Jul-82	369	382	357		369	4520	4520			369	343
1982	7	1982.07 29-Jul-82	350	366	323		350	4600	4600			350	346
1982	7	1982.07 30-Jul-82	339	360	323		339	4650	4650			339	349
1982	7	1982.07 31-Jul-82	386	393	378		386	4410	4410			386	355
1982	8	1982.08 1-Aug-82	386	393	378		386	4430	4430			386	364
1982	8	1982.08 2-Aug-82	408	444	381		408	4200	4200			408	373
1982	8	1982.08 3-Aug-82	450	462	433		450	3960	3960			450	382
1982	8	1982.08 4-Aug-82	400	443	381		400	4230	4230			400	390
1982	8	1982.08 5-Aug-82	374	381	364		374	4240	4240			374	397
1982	8	1982.08 6-Aug-82	386	397	377		386	4240	4240			386	403

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1982	8	1982.08 7-Aug-82	373	387	360		373	4340	4340			373	407
1982	8	1982.08 8-Aug-82	403	434	371		403	4140	4140			403	412
1982	8	1982.08 9-Aug-82	435	440	429		435	4120	4120			435	416
1982	8	1982.08 10-Aug-82	419	438	407		419	3960	3960			419	418
1982	8	1982.08 11-Aug-82	418	428	409		418	3820	3820			418	418
1982	8	1982.08 12-Aug-82	415	427	404		415	3900	3900			415	416
1982	8	1982.08 13-Aug-82	414	424	404		414	3920	3920			414	415
1982	8	1982.08 14-Aug-82	421	484	403		421	3890	3890			421	413
1982	8	1982.08 15-Aug-82	416	429	405		416	4050	4050			416	411
1982	8	1982.08 16-Aug-82	425	432	419		425	4060	4060			425	410
1982	8	1982.08 17-Aug-82	425					3900	3900			425	410
1982	8	1982.08 18-Aug-82	425	448	404		425	3860	3860			425	409
1982	8	1982.08 19-Aug-82	410					3940	3940			410	408
1982	8	1982.08 20-Aug-82	404	453	360		404	3930	3930			404	406
1982	8	1982.08 21-Aug-82	397	406	386		397	3920	3920			397	404
1982	8	1982.08 22-Aug-82	405	416	396		405	3950	3950			405	403
1982	8	1982.08 23-Aug-82	397	412	379		397	3960	3960			397	402
1982	8	1982.08 24-Aug-82	400	408	390		400	3750	3750			400	401
1982	8	1982.08 25-Aug-82	390	492	376		390	3710	3710			390	401
1982	8	1982.08 26-Aug-82	379	391	365		379	3750	3750			379	401
1982	8	1982.08 27-Aug-82	370	378	363		370	3920	3920			370	401
1982	8	1982.08 28-Aug-82	378	387	364		378	4030	4030			378	402
1982	8	1982.08 29-Aug-82	377	386	365		377	4110	4110			377	403
1982	8	1982.08 30-Aug-82	356	366	343		356	4210	4210			356	402
1982	8	1982.08 31-Aug-82	360	372	348		360	4080	4080			360	401
1982	9	1982.09 1-Sep-82	365	376	347		365	3960	3960			365	400
1982	9	1982.09 2-Sep-82	363	371	351		363	3980	3980			363	397
1982	9	1982.09 3-Sep-82	346	361	330		346	4160	4160			346	395
1982	9	1982.09 4-Sep-82	310	334	296		310	4430	4430			310	393
1982	9	1982.09 5-Sep-82	270	292	256		270	4970	4970			270	389
1982	9	1982.09 6-Sep-82	271	304	246		271	5040	5040			271	385
1982	9	1982.09 7-Sep-82	313	326	303		313	4300	4300			313	382
1982	9	1982.09 8-Sep-82	309	319	278		309	4160	4160			309	378
1982	9	1982.09 9-Sep-82	237	266	223		237	4850	4850			237	372
1982	9	1982.09 10-Sep-82	228	240	222		228	5090	5090			228	366
1982	9	1982.09 11-Sep-82	233	246	216		233	5170	5170			233	360
1982	9	1982.09 12-Sep-82	209	215	200		209	5570	5570			209	353
1982	9	1982.09 13-Sep-82	224	236	207		224	5600	5600			224	346
1982	9	1982.09 14-Sep-82	238	250	224		238	5120	5120			238	340
1982	9	1982.09 15-Sep-82	206	219	188		206	5540	5540			206	333
1982	9	1982.09 16-Sep-82	197	208	187		197	5810	5810			197	326
1982	9	1982.09 17-Sep-82	188	198	182		188	6150	6150			188	318
1982	9	1982.09 18-Sep-82	179	188	171		179	6460	6460			179	310
1982	9	1982.09 19-Sep-82	168	180	163		168	6810	6810			168	302
1982	9	1982.09 20-Sep-82	164	178	156		164	7130	7130			164	294
1982	9	1982.09 21-Sep-82	158	164	153		158	7240	7240			158	286
1982	9	1982.09 22-Sep-82	157	162	150		157	7230	7230			157	278
1982	9	1982.09 23-Sep-82	157	160	148		157	7250	7250			157	270
1982	9	1982.09 24-Sep-82	152	161	144		152	7570	7570			152	262
1982	9	1982.09 25-Sep-82	150	159	143		150	8160	8160			150	254
1982	9	1982.09 26-Sep-82	147	158	139		147	8450	8450			147	247
1982	9	1982.09 27-Sep-82	139	148	126		139	8540	8540			139	239
1982	9	1982.09 28-Sep-82	137	150	124		137	8260	8540			137	231
1982	9	1982.09 29-Sep-82	144	157	134		144	8330	8260			144	224
1982	9	1982.09 30-Sep-82	130	148	119		130	8330	8330			130	216
1982	10	1982.10 1-Oct-82	120	133	112		120	8830	8830			120	208
1982	10	1982.10 2-Oct-82	120	132	111		120	8910	8910			120	200
1982	10	1982.10 3-Oct-82	125	133	115		125	8870	8870			125	193
1982	10	1982.10 4-Oct-82	122	133	115		122	8900	8900			122	186
1982	10	1982.10 5-Oct-82	124	133	119		124	8760	8760			124	182
1982	10	1982.10 6-Oct-82	134	145	123		134	8430	8430			134	177
1982	10	1982.10 7-Oct-82	142	150	133		142	8100	8100			142	171
1982	10	1982.10 8-Oct-82	137	145	128		137	8090	8090			137	166
1982	10	1982.10 9-Oct-82	138	146	128		138	8120	8120			138	162
1982	10	1982.10 10-Oct-82	141	151	133		141	8000	8000			141	159
1982	10	1982.10 11-Oct-82	142	146	137		142	7960	7960			142	156
1982	10	1982.10 12-Oct-82	140					7880	7880			140	154
1982	10	1982.10 13-Oct-82	137	163	129		137	7770	7770			137	151
1982	10	1982.10 14-Oct-82	137	138	133		137	7830	7830			137	148
1982	10	1982.10 15-Oct-82	138	141	133		138	7880	7880			138	145
1982	10	1982.10 16-Oct-82	142	148	136		142	7890	7890			142	144
1982	10	1982.10 17-Oct-82	146	150	144		146	7860	7860			146	142
1982	10	1982.10 18-Oct-82	145	148	142		145	7670	7670			145	141
1982	10	1982.10 19-Oct-82	156	162	149		156	7450	7450			156	141
1982	10	1982.10 20-Oct-82	152	155	148		152	7390	7390			152	140
1982	10	1982.10 21-Oct-82	146	150	144		146	7420	7420			146	140

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1982	10	1982.10	22-Oct-82	144	149	134		144	7530	7530		144	139
1982	10	1982.10	23-Oct-82	120	133	115		120	7850	7850		120	138
1982	10	1982.10	24-Oct-82	121	124	116		121	8170	8170		121	137
1982	10	1982.10	25-Oct-82	124	125	122		124	8300	8300		124	136
1982	10	1982.10	26-Oct-82	124	127	122		124	8370	8370		124	136
1982	10	1982.10	27-Oct-82	126	134	121		126	8490	8490		126	135
1982	10	1982.10	28-Oct-82	128	136	122		128	8600	8600		128	135
1982	10	1982.10	29-Oct-82	150					8640	8640		150	135
1982	10	1982.10	30-Oct-82	150					8760	8760		150	136
1982	10	1982.10	31-Oct-82	150					8840	8840		150	137
1982	11	1982.11	1-Nov-82	150					8840	8840		150	138
1982	11	1982.11	2-Nov-82	150					8870	8870		150	139
1982	11	1982.11	3-Nov-82	150					8960	8960		150	139
1982	11	1982.11	4-Nov-82	150					9040	9040		150	140
1982	11	1982.11	5-Nov-82	150					9080	9080		150	141
1982	11	1982.11	6-Nov-82	150					8620	8620		150	141
1982	11	1982.11	7-Nov-82	190	198	183	190	7610	7610			190	143
1982	11	1982.11	8-Nov-82	188	195	184	188	7280	7280			188	145
1982	11	1982.11	9-Nov-82	195	203	188	195	7140	7140			195	146
1982	11	1982.11	10-Nov-82	216	254	173	216	7030	7030			216	149
1982	11	1982.11	11-Nov-82	316	353	256	316	6190	6190			316	155
1982	11	1982.11	12-Nov-82	385	402	356	385	5610	5610			385	163
1982	11	1982.11	13-Nov-82	404	424	382	404	5410	5410			404	172
1982	11	1982.11	14-Nov-82	414	427	396	414	5280	5280			414	181
1982	11	1982.11	15-Nov-82	430	445	386	430	5280	5280			430	191
1982	11	1982.11	16-Nov-82	368	415	353	368	5380	5380			368	198
1982	11	1982.11	17-Nov-82	343	362	261	343	5310	5310			343	205
1982	11	1982.11	18-Nov-82	416	443	365	416	5230	5230			416	213
1982	11	1982.11	19-Nov-82	391	452	345	391	5460	5460			391	221
1982	11	1982.11	20-Nov-82	332	348	305	332	5710	5710			332	228
1982	11	1982.11	21-Nov-82	307	327	274	307	5750	5750			307	233
1982	11	1982.11	22-Nov-82	269	301	249	269	5870	5870			269	238
1982	11	1982.11	23-Nov-82	254	258	240	254	6100	6100			254	242
1982	11	1982.11	24-Nov-82	214	238	196	214	6390	6390			214	245
1982	11	1982.11	25-Nov-82	172	193	159	172	6830	6830			172	247
1982	11	1982.11	26-Nov-82	158	250	150	158	7320	7320			158	248
1982	11	1982.11	27-Nov-82	146	148	142	146	7710	7710			146	249
1982	11	1982.11	28-Nov-82	141	145	137	141	8160	8160			141	248
1982	11	1982.11	29-Nov-82	137	140	135	137	8650	8650			137	248
1982	11	1982.11	30-Nov-82	146	156	136	146	9120	9120			146	248
1982	12	1982.12	1-Dec-82	156	173	130	156	10700	10700			156	248
1982	12	1982.12	2-Dec-82	156	193	130	156	12600	12600			156	248
1982	12	1982.12	3-Dec-82	198	209	190	198	13100	13100			198	250
1982	12	1982.12	4-Dec-82	180				13400	13400			180	251
1982	12	1982.12	5-Dec-82	180				14100	14100			180	252
1982	12	1982.12	6-Dec-82	174	181	172		15000	15000			174	253
1982	12	1982.12	7-Dec-82	189	198	183	189	15900	15900			189	253
1982	12	1982.12	8-Dec-82	182	185	179	182	16400	16400			182	252
1982	12	1982.12	9-Dec-82	180	183	175	180	16600	16600			180	252
1982	12	1982.12	10-Dec-82	175	177	173	175	16800	16800			175	250
1982	12	1982.12	11-Dec-82	171	173	168	171	17200	17200			171	246
1982	12	1982.12	12-Dec-82	166	168	165	166	17300	17300			166	238
1982	12	1982.12	13-Dec-82	169	174	166	169	17200	17200			169	230
1982	12	1982.12	14-Dec-82	165	173	160	165	16900	16900			165	222
1982	12	1982.12	15-Dec-82	162	164	161	162	16700	16700			162	213
1982	12	1982.12	16-Dec-82	167	169	164	167	16500	16500			167	207
1982	12	1982.12	17-Dec-82	171	175	168	171	16200	16200			171	201
1982	12	1982.12	18-Dec-82	171	174	170	171	15800	15800			171	193
1982	12	1982.12	19-Dec-82	167	171	165	167	15500	15500			167	185
1982	12	1982.12	20-Dec-82	165	166	163	165	15300	15300			165	180
1982	12	1982.12	21-Dec-82	160	164	158	160	15300	15300			160	175
1982	12	1982.12	22-Dec-82	170	172	163	170	15400	15400			170	171
1982	12	1982.12	23-Dec-82	175				16000	16000			175	169
1982	12	1982.12	24-Dec-82	184	190	181	184	17600	17600			184	168
1982	12	1982.12	25-Dec-82	204	214	190	204	17500	17500			204	169
1982	12	1982.12	26-Dec-82	216	218	214	216	17200	17200			216	171
1982	12	1982.12	27-Dec-82	204	213	196	204	18000	18000			204	173
1982	12	1982.12	28-Dec-82	187	196	175	187	19700	19700			187	174
1982	12	1982.12	29-Dec-82	171	175	167	171	21500	21500			171	175
1982	12	1982.12	30-Dec-82	169	171	166	169	22100	22100			169	176
1982	12	1982.12	31-Dec-82	173	179	168	173	21800	21800			173	177
1983	1	1983.01	1-Jan-83	186	188	181	186	21300	21300			186	178
1983	1	1983.01	2-Jan-83	184	186	182	184	20900	20900			184	177
1983	1	1983.01	3-Jan-83	186	190	182	186	20100	20100			186	177
1983	1	1983.01	4-Jan-83	198	203	190	198	19100	19100			198	178
1983	1	1983.01	5-Jan-83	201	203	199	201	18100	18100			201	179

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1983	1	1983.01 6-Jan-83	202	203	201		202	17400	17400			202	179
1983	1	1983.01 7-Jan-83	206	208	204		206	16800	16800			206	180
1983	1	1983.01 8-Jan-83	200					16400	16400			200	181
1983	1	1983.01 9-Jan-83	200					16100	16100			200	182
1983	1	1983.01 10-Jan-83	197	199	196		197	16000	16000			197	183
1983	1	1983.01 11-Jan-83	200					15700	15700			200	184
1983	1	1983.01 12-Jan-83	201	205	196		201	15400	15400			201	185
1983	1	1983.01 13-Jan-83	208	210	206		208	15200	15200			208	186
1983	1	1983.01 14-Jan-83	213	217	208		213	14800	14800			213	188
1983	1	1983.01 15-Jan-83	214	215	213		214	14600	14600			214	189
1983	1	1983.01 16-Jan-83	217	219	215		217	14200	14200			217	191
1983	1	1983.01 17-Jan-83	225	230	220		225	13800	13800			225	193
1983	1	1983.01 18-Jan-83	236	244	230		236	13400	13400			236	195
1983	1	1983.01 19-Jan-83	244	248	238		244	13100	13100			244	198
1983	1	1983.01 20-Jan-83	237	244	232		237	13300	13300			237	200
1983	1	1983.01 21-Jan-83	236	244	230		236	13400	13400			236	202
1983	1	1983.01 22-Jan-83	244	249	241		244	13500	13500			244	205
1983	1	1983.01 23-Jan-83	247	252	239		247	14700	14700			247	207
1983	1	1983.01 24-Jan-83	238	245	234		238	17900	17900			238	208
1983	1	1983.01 25-Jan-83	245	250	239		245	20200	20200			245	209
1983	1	1983.01 26-Jan-83	253	258	246		253	21600	21600			253	211
1983	1	1983.01 27-Jan-83	253	261	239		253	23000	23000			253	213
1983	1	1983.01 28-Jan-83	232	244	216		232	28700	28700			232	215
1983	1	1983.01 29-Jan-83	208	213	204		208	35100	35100			208	216
1983	1	1983.01 30-Jan-83	211	216	202		211	38300	38300			211	217
1983	1	1983.01 31-Jan-83	197	202	195		197	39000	39000			197	218
1983	2	1983.02 1-Feb-83	215	230	197		215	36400	36400			215	219
1983	2	1983.02 2-Feb-83	237	242	231		237	33900	33900			237	221
1983	2	1983.02 3-Feb-83	248	257	243		248	31500	31500			248	222
1983	2	1983.02 4-Feb-83	263	269	257		263	29400	29400			263	224
1983	2	1983.02 5-Feb-83	271	272	269		271	28200	28200			271	227
1983	2	1983.02 6-Feb-83	277	280	273		277	27400	27400			277	229
1983	2	1983.02 7-Feb-83	295	297	288		295	27100	27100			295	232
1983	2	1983.02 8-Feb-83	295	297	288		295	29400	29400			295	235
1983	2	1983.02 9-Feb-83	277	285	271		277	33300	33300			277	238
1983	2	1983.02 10-Feb-83	277	283	270		277	34100	34100			277	240
1983	2	1983.02 11-Feb-83	270	282	252		270	34700	34700			270	243
1983	2	1983.02 12-Feb-83	238	249	232		238	37100	37100			238	244
1983	2	1983.02 13-Feb-83	240	250	232		240	37500	37500			240	245
1983	2	1983.02 14-Feb-83	242	256	233		242	36400	36400			242	246
1983	2	1983.02 15-Feb-83	246	250	239		246	34800	34800			246	247
1983	2	1983.02 16-Feb-83	247	250	244		247	34500	34500			247	247
1983	2	1983.02 17-Feb-83	244	246	242		244	34100	34100			244	248
1983	2	1983.02 18-Feb-83	248	254	244		248	33400	33400			248	248
1983	2	1983.02 19-Feb-83	257	261	254		257	32500	32500			257	248
1983	2	1983.02 20-Feb-83	262	270	257		262	31400	31400			262	249
1983	2	1983.02 21-Feb-83	272	275	259		272	30600	30600			272	250
1983	2	1983.02 22-Feb-83	271	274	264		271	30200	30200			271	251
1983	2	1983.02 23-Feb-83	261	264	259		261	29700	29700			261	252
1983	2	1983.02 24-Feb-83	263	266	259		263	29100	29100			263	252
1983	2	1983.02 25-Feb-83	271	280	265		271	27700	27700			271	253
1983	2	1983.02 26-Feb-83	277	279	275		277	26800	26800			277	254
1983	2	1983.02 27-Feb-83	277					26500	26500			277	255
1983	2	1983.02 28-Feb-83	278	285	274		278	27200	27200			278	258
1983	3	1983.03 1-Mar-83	277	281	274		277	29900	29900			277	260
1983	3	1983.03 2-Mar-83	263	274	253		263	33700	33700			263	262
1983	3	1983.03 3-Mar-83	244	254	238		244	37000	37000			244	263
1983	3	1983.03 4-Mar-83	236	241	226		236	41800	41800			236	263
1983	3	1983.03 5-Mar-83	204	224	189		204	42000	42000			204	261
1983	3	1983.03 6-Mar-83	208	219	192		208	43000	43000			208	260
1983	3	1983.03 7-Mar-83	225	230	220		225	44700	44700			225	258
1983	3	1983.03 8-Mar-83	242	250	232		242	43800	43800			242	257
1983	3	1983.03 9-Mar-83	260	265	251		260	42200	42200			260	256
1983	3	1983.03 10-Mar-83	264	267	261		264	41200	41200			264	255
1983	3	1983.03 11-Mar-83	259	262	257		259	41000	41000			259	254
1983	3	1983.03 12-Mar-83	260	268	256		260	40200	40200			260	254
1983	3	1983.03 13-Mar-83	281	290	268		281	38900	38900			281	254
1983	3	1983.03 14-Mar-83	289	294	285		289	39200	39200			289	256
1983	3	1983.03 15-Mar-83	283	290	277		283	39700	39700			283	257
1983	3	1983.03 16-Mar-83	290	294	285		290	39400	39400			290	259
1983	3	1983.03 17-Mar-83	267	282	252		267	39200	39200			267	259
1983	3	1983.03 18-Mar-83	252	256	250		252	39000	39000			252	260
1983	3	1983.03 19-Mar-83	254	257	250		254	39600	39600			254	260
1983	3	1983.03 20-Mar-83	254	257	246		254	39300	39300			254	260
1983	3	1983.03 21-Mar-83	238	246	234		238	39800	39800			238	259
1983	3	1983.03 22-Mar-83	234	236	231		234	38800	38800			234	258

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1983	3	1983.03 23-Mar-83	227	235	215		227	37900	37900			227	257
1983	3	1983.03 24-Mar-83	209	215	201		209	38600	38600			209	255
1983	3	1983.03 25-Mar-83	207	214	199		207	40600	40600			207	253
1983	3	1983.03 26-Mar-83	211	215	207		211	42800	42800			211	251
1983	3	1983.03 27-Mar-83	216	219	213		216	42600	42600			216	250
1983	3	1983.03 28-Mar-83	215	218	212		215	42500	42500			215	247
1983	3	1983.03 29-Mar-83	222	229	213		222	39000	39000			222	246
1983	3	1983.03 30-Mar-83	229	231	227		229	41400	41400			229	244
1983	3	1983.03 31-Mar-83	227	230	223		227	42300	42300			227	242
1983	4	1983.04 1-Apr-83	223	225	221		223	41500	41500			223	241
1983	4	1983.04 2-Apr-83	220	224	216		220	40800	40800			220	240
1983	4	1983.04 3-Apr-83	214	217	208		214	39800	39800			214	239
1983	4	1983.04 4-Apr-83	208	209	206		208	38500	38500			208	240
1983	4	1983.04 5-Apr-83	214	217	210		214	38200	38200			214	240
1983	4	1983.04 6-Apr-83	207	210	203		207	38300	38300			207	239
1983	4	1983.04 7-Apr-83	200	202	196		200	37900	37900			200	238
1983	4	1983.04 8-Apr-83	197	199	195		197	37300	37300			197	236
1983	4	1983.04 9-Apr-83	194	196	192		194	37100	37100			194	233
1983	4	1983.04 10-Apr-83	190	192	187		190	36600	36600			190	231
1983	4	1983.04 11-Apr-83	188	191	184		188	36100	36100			188	229
1983	4	1983.04 12-Apr-83	189	190	187		189	35800	35800			189	226
1983	4	1983.04 13-Apr-83	188	190	184		188	35400	35400			188	222
1983	4	1983.04 14-Apr-83	183	187	181		183	35300	35300			183	219
1983	4	1983.04 15-Apr-83	179	181	176		179	35100	35100			179	215
1983	4	1983.04 16-Apr-83	178	180	176		178	34800	34800			178	212
1983	4	1983.04 17-Apr-83	177	178	174		177	34600	34600			177	210
1983	4	1983.04 18-Apr-83	170	175	166		170	34500	34500			170	207
1983	4	1983.04 19-Apr-83	163	165	162		163	34500	34500			163	204
1983	4	1983.04 20-Apr-83	163	166	160		163	34300	34300			163	201
1983	4	1983.04 21-Apr-83	166	168	164		166	34100	34100			166	199
1983	4	1983.04 22-Apr-83	163	166	160		163	34300	34300			163	197
1983	4	1983.04 23-Apr-83	156	159	151		156	34700	34700			156	195
1983	4	1983.04 24-Apr-83	149	151	146		149	35200	35200			149	193
1983	4	1983.04 25-Apr-83	145	146	143		145	35700	35700			145	191
1983	4	1983.04 26-Apr-83	141	145	139		141	36300	36300			141	189
1983	4	1983.04 27-Apr-83	141	142	139		141	36600	36600			141	186
1983	4	1983.04 28-Apr-83	142	145	140		142	36800	36800			142	183
1983	4	1983.04 29-Apr-83	145	146	143		145	36900	36900			145	181
1983	4	1983.04 30-Apr-83	148	151	146		148	36400	36400			148	178
1983	5	1983.05 1-May-83	151	154	148		151	36000	36000			151	176
1983	5	1983.05 2-May-83	154	156	152		154	36000	36000			154	173
1983	5	1983.05 3-May-83	153	155	151		153	36200	36200			153	171
1983	5	1983.05 4-May-83	149	151	146		149	36500	36500			149	169
1983	5	1983.05 5-May-83	142	146	139		142	37000	37000			142	167
1983	5	1983.05 6-May-83	135	138	133		135	37300	37300			135	165
1983	5	1983.05 7-May-83	136	138	133		136	37000	37000			136	163
1983	5	1983.05 8-May-83	143	149	138		143	35900	35900			143	161
1983	5	1983.05 9-May-83	155	158	149		155	34200	34200			155	159
1983	5	1983.05 10-May-83	160	162	158		160	33500	33500			160	158
1983	5	1983.05 11-May-83	157	160	153		157	33000	33000			157	157
1983	5	1983.05 12-May-83	155	157	153		155	32600	32600			155	156
1983	5	1983.05 13-May-83	157	160	155		157	32000	32000			157	155
1983	5	1983.05 14-May-83	159	161	158		159	31500	31500			159	154
1983	5	1983.05 15-May-83	159	160	158		159	31000	31000			159	154
1983	5	1983.05 16-May-83	159	161	158		159	30200	30200			159	153
1983	5	1983.05 17-May-83	163	166	160		163	29700	29700			163	153
1983	5	1983.05 18-May-83	161	162	160		161	29100	29100			161	152
1983	5	1983.05 19-May-83	161	162	158		161	28700	28700			161	152
1983	5	1983.05 20-May-83	157	159	152		157	28400	28400			157	152
1983	5	1983.05 21-May-83	150	153	148		150	28300	28300			150	152
1983	5	1983.05 22-May-83	146	148	144		146	28200	28200			146	151
1983	5	1983.05 23-May-83	141	143	139		141	28100	28100			141	150
1983	5	1983.05 24-May-83	139	140	138		139	28100	28100			139	150
1983	5	1983.05 25-May-83	139	141	137		139	28200	28200			139	150
1983	5	1983.05 26-May-83	134	137	131		134	28800	28800			134	150
1983	5	1983.05 27-May-83	129	131	126		129	29400	29400			129	149
1983	5	1983.05 28-May-83	123	126	122		123	29700	29700			123	149
1983	5	1983.05 29-May-83	120	122	119		120	29800	29800			120	148
1983	5	1983.05 30-May-83	119	120	118		119	30100	30100			119	147
1983	5	1983.05 31-May-83	116	121	113		116	30400	30400			116	146
1983	6	1983.06 1-Jun-83	111	113	108		111	30700	30700			111	144
1983	6	1983.06 2-Jun-83	109	111	107		109	30900	30900			109	143
1983	6	1983.06 3-Jun-83	118	122	111		118	30000	30000			118	142
1983	6	1983.06 4-Jun-83	124	126	122		124	28800	28800			124	141
1983	6	1983.06 5-Jun-83	128	131	126		128	27900	27900			128	141
1983	6	1983.06 6-Jun-83	126	128	122		126	27200	27200			126	141

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1983	6	1983.06	7-Jun-83	123	124	121		123	27200	27200		123	140
1983	6	1983.06	8-Jun-83	118	121	116		118	27300	27300		118	139
1983	6	1983.06	9-Jun-83	121	135	114		121	27400	27400		121	137
1983	6	1983.06	10-Jun-83	132	133	131		132	27200	27200		132	137
1983	6	1983.06	11-Jun-83	132	133	130		132	26900	26900		132	136
1983	6	1983.06	12-Jun-83	131	132	130		131	26600	26600		131	135
1983	6	1983.06	13-Jun-83	127	129	124		127	26600	26600		127	134
1983	6	1983.06	14-Jun-83	123	124	122		123	26600	26600		123	133
1983	6	1983.06	15-Jun-83	124	126	122		124	26500	26500		124	132
1983	6	1983.06	16-Jun-83	123	125	122		123	26500	26500		123	130
1983	6	1983.06	17-Jun-83	129	132	124		129	25600	25600		129	129
1983	6	1983.06	18-Jun-83	131	134	128		131	24900	24900		131	128
1983	6	1983.06	19-Jun-83	132	135	130		132	24600	24600		132	127
1983	6	1983.06	20-Jun-83	129	131	126		129	24400	24400		129	127
1983	6	1983.06	21-Jun-83	128	131	126		128	24300	24300		128	126
1983	6	1983.06	22-Jun-83	129	132	127		129	24100	24100		129	126
1983	6	1983.06	23-Jun-83	129	132	128		129	24000	24000		129	125
1983	6	1983.06	24-Jun-83	129	132	126		129	23900	23900		129	125
1983	6	1983.06	25-Jun-83	130	132	129		130	23900	23900		130	125
1983	6	1983.06	26-Jun-83	130	132	128		130	23700	23700		130	125
1983	6	1983.06	27-Jun-83	128	131	126		128	23600	23600		128	125
1983	6	1983.06	28-Jun-83	126	129	124		126	23700	23700		126	125
1983	6	1983.06	29-Jun-83	123	128	121		123	23800	23800		123	125
1983	6	1983.06	30-Jun-83	123	128	121		123	23700	23700		123	126
1983	7	1983.07	1-Jul-83	127	130	124		127	23400	23400		127	126
1983	7	1983.07	2-Jul-83	128	130	127		128	23400	23400		128	127
1983	7	1983.07	3-Jul-83	127	128	125		127	23300	23300		127	127
1983	7	1983.07	4-Jul-83	128	131	126		128	23200	23200		128	127
1983	7	1983.07	5-Jul-83	129	132	126		129	23200	23200		129	127
1983	7	1983.07	6-Jul-83	126	128	124		126	23200	23200		126	127
1983	7	1983.07	7-Jul-83	121	127	119		121	23400	23400		121	127
1983	7	1983.07	8-Jul-83	120	122	118		120	23800	23800		120	127
1983	7	1983.07	9-Jul-83	118	120	117		118	24000	24000		118	127
1983	7	1983.07	10-Jul-83	116	117	112		116	24400	24400		116	127
1983	7	1983.07	11-Jul-83	113	115	111		113	24900	24900		113	126
1983	7	1983.07	12-Jul-83	116	117	114		116	25100	25100		116	125
1983	7	1983.07	13-Jul-83	118	119	117		118	24900	24900		118	125
1983	7	1983.07	14-Jul-83	119	121	118		119	24600	24600		119	125
1983	7	1983.07	15-Jul-83	121	124	120		121	24200	24200		121	125
1983	7	1983.07	16-Jul-83	127	131	122		127	23400	23400		127	125
1983	7	1983.07	17-Jul-83	132	134	131		132	22400	22400		132	125
1983	7	1983.07	18-Jul-83	137	142	134		137	21300	21300		137	125
1983	7	1983.07	19-Jul-83	151	159	142		151	20000	20000		151	126
1983	7	1983.07	20-Jul-83	171	181	160		171	18400	18400		171	127
1983	7	1983.07	21-Jul-83	199	212	183		199	16900	16900		199	130
1983	7	1983.07	22-Jul-83	232	252	214		232	15600	15600		232	133
1983	7	1983.07	23-Jul-83	274	284	254		274	14200	14200		274	138
1983	7	1983.07	24-Jul-83	285	292	279		285	13000	13000		285	143
1983	7	1983.07	25-Jul-83	304	312	292		304	12100	12100		304	149
1983	7	1983.07	26-Jul-83	312	315	311		312	11300	11300		312	155
1983	7	1983.07	27-Jul-83	322	339	311		322	10700	10700		322	162
1983	7	1983.07	28-Jul-83	360	372	341		360	10000	10000		360	169
1983	7	1983.07	29-Jul-83	377	390	367		377	9480	9480		377	178
1983	7	1983.07	30-Jul-83	382	388	378		382	9170	9170		382	186
1983	7	1983.07	31-Jul-83	372	384	356		372	9100	9100		372	195
1983	8	1983.08	1-Aug-83	356	364	348		356	9010	9010		356	202
1983	8	1983.08	2-Aug-83	354	362	345		354	8860	8860		354	210
1983	8	1983.08	3-Aug-83	362	367	358		362	8650	8650		362	218
1983	8	1983.08	4-Aug-83	367	370	364		367	8590	8590		367	225
1983	8	1983.08	5-Aug-83	367	373	360		367	8670	8670		367	234
1983	8	1983.08	6-Aug-83	357	362	350		357	8680	8680		357	241
1983	8	1983.08	7-Aug-83	363	366	360		363	8710	8710		363	249
1983	8	1983.08	8-Aug-83	363	370	332		363	8730	8730		363	258
1983	8	1983.08	9-Aug-83	357	364	344		357	8630	8630		357	266
1983	8	1983.08	10-Aug-83	344	350	339		344	8480	8480		344	273
1983	8	1983.08	11-Aug-83	341	349	336		341	8320	8320		341	281
1983	8	1983.08	12-Aug-83	348	351	308		348	8280	8280		348	289
1983	8	1983.08	13-Aug-83	345	349	342		345	8330	8330		345	296
1983	8	1983.08	14-Aug-83	346	352	340		346	8340	8340		346	304
1983	8	1983.08	15-Aug-83	337	343	331		337	8500	8500		337	311
1983	8	1983.08	16-Aug-83	335	338	331		335	8430	8430		335	317
1983	8	1983.08	17-Aug-83	328	335	319		328	8320	8320		328	324
1983	8	1983.08	18-Aug-83	329	332	318		329	8270	8270		329	330
1983	8	1983.08	19-Aug-83	306	322	296		306	8510	8510		306	334
1983	8	1983.08	20-Aug-83	280	297	268		280	8940	8940		280	337
1983	8	1983.08	21-Aug-83	283	292	274		283	9130	9130		283	339

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1983	8	1983.08 22-Aug-83	267	275	262		267	9190	9190			267	338
1983	8	1983.08 23-Aug-83	256	263	243		256	9170	9170			256	337
1983	8	1983.08 24-Aug-83	246	249	244		246	9210	9210			246	335
1983	8	1983.08 25-Aug-83	247	252	240		247	9180	9180			247	333
1983	8	1983.08 26-Aug-83	224	238	214		224	9750	9750			224	330
1983	8	1983.08 27-Aug-83	218	224	212		218	10000	10000			218	325
1983	8	1983.08 28-Aug-83	203	214	190		203	10300	10300			203	319
1983	8	1983.08 29-Aug-83	189	204	183		189	10800	10800			189	313
1983	8	1983.08 30-Aug-83	198	210	186		198	11000	11000			198	307
1983	8	1983.08 31-Aug-83	191	197	187		191	11100	11100			191	302
1983	9	1983.09 1-Sep-83	196	197	195		196	11000	11000			196	296
1983	9	1983.09 2-Sep-83	199	204	196		199	10900	10900			199	291
1983	9	1983.09 3-Sep-83	191	196	186		191	10900	10900			191	285
1983	9	1983.09 4-Sep-83	189	192	184		189	10900	10900			189	279
1983	9	1983.09 5-Sep-83	185	242	179		185	11100	11100			185	273
1983	9	1983.09 6-Sep-83	188	192	179		188	11000	11000			188	268
1983	9	1983.09 7-Sep-83	172	177	167		172	11100	11100			172	261
1983	9	1983.09 8-Sep-83	165	168	161		165	11400	11400			165	255
1983	9	1983.09 9-Sep-83	165	166	163		165	11600	11600			165	249
1983	9	1983.09 10-Sep-83	168	171	165		168	11700	11700			168	243
1983	9	1983.09 11-Sep-83	176	179	172		176	11600	11600			176	237
1983	9	1983.09 12-Sep-83	172	175	169		172	11600	11600			172	232
1983	9	1983.09 13-Sep-83	174	175	172		174	11400	11400			174	226
1983	9	1983.09 14-Sep-83	168	172	165		168	11200	11200			168	220
1983	9	1983.09 15-Sep-83	159	166	149		159	11200	11200			159	214
1983	9	1983.09 16-Sep-83	143	148	140		143	11300	11300			143	208
1983	9	1983.09 17-Sep-83	159	172	144		159	11300	11300			159	203
1983	9	1983.09 18-Sep-83	184	190	174		184	11100	11100			184	199
1983	9	1983.09 19-Sep-83	175	186	169		175	10900	10900			175	195
1983	9	1983.09 20-Sep-83	164	169	158		164	10900	10900			164	191
1983	9	1983.09 21-Sep-83	155	159	151		155	10800	10800			155	187
1983	9	1983.09 22-Sep-83	149	155	144		149	11000	11000			149	184
1983	9	1983.09 23-Sep-83	146	148	145		146	11600	11600			146	180
1983	9	1983.09 24-Sep-83	145	151	142		145	11600	11600			145	177
1983	9	1983.09 25-Sep-83	158	161	151		158	11600	11600			158	175
1983	9	1983.09 26-Sep-83	164	168	154		164	11500	11500			164	173
1983	9	1983.09 27-Sep-83	146	156	136		146	11600	11600			146	171
1983	9	1983.09 28-Sep-83	141	143	139		141	11700	11700			141	170
1983	9	1983.09 29-Sep-83	136	138	132		136	11800	11800			136	167
1983	9	1983.09 30-Sep-83	129	133	126		129	12000	12000			129	165
1983	10	1983.10 1-Oct-83	139	150	128		139	12100	12100			139	163
1983	10	1983.10 2-Oct-83	152	156	147		152	12100	12100			152	162
1983	10	1983.10 3-Oct-83	158	162	151		158	12100	12100			158	161
1983	10	1983.10 4-Oct-83	144	152	135		144	12300	12300			144	159
1983	10	1983.10 5-Oct-83	128	146	112		128	12600	12600			128	157
1983	10	1983.10 6-Oct-83	110	115	106		110	13100	13100			110	155
1983	10	1983.10 7-Oct-83	114	115	113		114	13500	13500			114	153
1983	10	1983.10 8-Oct-83	118	121	115		118	14000	14000			118	151
1983	10	1983.10 9-Oct-83	125	128	122		125	14300	14300			125	150
1983	10	1983.10 10-Oct-83	130	133	127		130	14400	14400			130	149
1983	10	1983.10 11-Oct-83	135	136	133		135	14500	14500			135	147
1983	10	1983.10 12-Oct-83	133	135	131		133	14500	14500			133	146
1983	10	1983.10 13-Oct-83	127	133	124		127	14500	14500			127	144
1983	10	1983.10 14-Oct-83	131	136	126		131	14400	14400			131	143
1983	10	1983.10 15-Oct-83	135	138	133		135	14400	14400			135	142
1983	10	1983.10 16-Oct-83	136	138	134		136	14200	14200			136	142
1983	10	1983.10 17-Oct-83	137	138	136		137	13800	13800			137	141
1983	10	1983.10 18-Oct-83						13500	13500			0	
1983	10	1983.10 19-Oct-83						13300	13300			0	
1983	10	1983.10 20-Oct-83						13100	13100			0	
1983	10	1983.10 21-Oct-83						12900	12900			0	
1983	10	1983.10 22-Oct-83						12800	12800			0	
1983	10	1983.10 23-Oct-83						12900	12900			0	
1983	10	1983.10 24-Oct-83						12900	12900			0	
1983	10	1983.10 25-Oct-83						12900	12900			0	
1983	10	1983.10 26-Oct-83						12900	12900			0	
1983	10	1983.10 27-Oct-83						13000	13000			0	
1983	10	1983.10 28-Oct-83						13100	13100			0	
1983	10	1983.10 29-Oct-83						13000	13000			0	
1983	10	1983.10 30-Oct-83						12900	12900			0	
1983	10	1983.10 31-Oct-83						13000	12800			0	
1983	11	1983.11 1-Nov-83						12700	12700			0	
1983	11	1983.11 2-Nov-83						12300	12300			0	
1983	11	1983.11 3-Nov-83						11100	11100			0	
1983	11	1983.11 4-Nov-83						10400	10400			0	
1983	11	1983.11 5-Nov-83						10100	10100			0	

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1983	11	1983.11 6-Nov-83						9580	9330			0	
1983	11	1983.11 7-Nov-83						9590	8460			0	
1983	11	1983.11 8-Nov-83						9370	8060			0	
1983	11	1983.11 9-Nov-83						9290	8010			0	
1983	11	1983.11 10-Nov-83						9050	8080			0	
1983	11	1983.11 11-Nov-83						8950	8260			0	
1983	11	1983.11 12-Nov-83						8870	8420			0	
1983	11	1983.11 13-Nov-83						8780	8560			0	
1983	11	1983.11 14-Nov-83						8690	8780			0	
1983	11	1983.11 15-Nov-83						8570	8650			0	
1983	11	1983.11 16-Nov-83						8500	8600			0	
1983	11	1983.11 17-Nov-83						8940	8940			0	
1983	11	1983.11 18-Nov-83						9510	9510			0	
1983	11	1983.11 19-Nov-83						10700	10700			0	
1983	11	1983.11 20-Nov-83						11100	11100			0	
1983	11	1983.11 21-Nov-83						11400	11400			0	
1983	11	1983.11 22-Nov-83						12100	12100			0	
1983	11	1983.11 23-Nov-83						12200	12200			0	
1983	11	1983.11 24-Nov-83						12400	12400			0	
1983	11	1983.11 25-Nov-83						13100	13100			0	
1983	11	1983.11 26-Nov-83						14400	14400			0	
1983	11	1983.11 27-Nov-83						13600	13600			0	
1983	11	1983.11 28-Nov-83						13300	13300			0	
1983	11	1983.11 29-Nov-83						13600	13600			0	
1983	11	1983.11 30-Nov-83						14100	14100			0	
1983	12	1983.12 1-Dec-83						14800	14800			0	
1983	12	1983.12 2-Dec-83						15400	15400			0	
1983	12	1983.12 3-Dec-83						16000	16000			0	
1983	12	1983.12 4-Dec-83						16500	16500			0	
1983	12	1983.12 5-Dec-83						17200	17200			0	
1983	12	1983.12 6-Dec-83						17900	17900			0	
1983	12	1983.12 7-Dec-83						18900	18900			0	
1983	12	1983.12 8-Dec-83						20200	20200			0	
1983	12	1983.12 9-Dec-83						21300	21300			0	
1983	12	1983.12 10-Dec-83						21900	21900			0	
1983	12	1983.12 11-Dec-83						22100	22100			0	
1983	12	1983.12 12-Dec-83						22100	22100			0	
1983	12	1983.12 13-Dec-83						22200	22200			0	
1983	12	1983.12 14-Dec-83						22100	22100			0	
1983	12	1983.12 15-Dec-83						21800	21800			0	
1983	12	1983.12 16-Dec-83						21700	21700			0	
1983	12	1983.12 17-Dec-83						21500	21500			0	
1983	12	1983.12 18-Dec-83						21100	21100			0	
1983	12	1983.12 19-Dec-83						20100	20100			0	
1983	12	1983.12 20-Dec-83						18800	18800			0	
1983	12	1983.12 21-Dec-83						17300	17300			0	
1983	12	1983.12 22-Dec-83						15600	15600			0	
1983	12	1983.12 23-Dec-83						14500	14500			0	
1983	12	1983.12 24-Dec-83						14100	14100			0	
1983	12	1983.12 25-Dec-83						15000	15000			0	
1983	12	1983.12 26-Dec-83						17700	17700			0	
1983	12	1983.12 27-Dec-83						17500	17500			0	
1983	12	1983.12 28-Dec-83						18600	18600			0	
1983	12	1983.12 29-Dec-83						20500	20500			0	
1983	12	1983.12 30-Dec-83						22800	22800			0	
1983	12	1983.12 31-Dec-83						25700	25700			0	
1984	1	1984.01 1-Jan-84	150					28900	28900			150	
1984	1	1984.01 2-Jan-84	150					31400	31400			150	
1984	1	1984.01 3-Jan-84	150					32400	32400			150	
1984	1	1984.01 4-Jan-84	150					32800	32800			150	
1984	1	1984.01 5-Jan-84	150					32800	32800			150	
1984	1	1984.01 6-Jan-84	155	156	153		155	32800	32800			155	
1984	1	1984.01 7-Jan-84	156	159	154		156	35600	32600			156	
1984	1	1984.01 8-Jan-84	156	161	128		156	32200	32200			156	
1984	1	1984.01 9-Jan-84	143	161	125		143	31900	31900			143	
1984	1	1984.01 10-Jan-84	127	130	126		127	31800	31800			127	
1984	1	1984.01 11-Jan-84	129	132	126		129	31200	31200			129	
1984	1	1984.01 12-Jan-84	128	132	125		128	30100	30100			128	
1984	1	1984.01 13-Jan-84	150					28100	28100			150	
1984	1	1984.01 14-Jan-84	150					26600	26600			150	
1984	1	1984.01 15-Jan-84	169	174	152		169	25700	25700			169	
1984	1	1984.01 16-Jan-84	173	177	170		173	25100	25100			173	
1984	1	1984.01 17-Jan-84	173	175	170		173	24500	24500			173	
1984	1	1984.01 18-Jan-84	170	173	167		170	24100	24100			170	
1984	1	1984.01 19-Jan-84	172	174	170		172	24000	24000			172	
1984	1	1984.01 20-Jan-84	171	173	170		171	23800	23800			171	

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1984	1	1984.01 21-Jan-84	177	182	171		177	23400	23400			177	
1984	1	1984.01 22-Jan-84	179	182	177		179	22900	22900			179	
1984	1	1984.01 23-Jan-84	187	190	182		187	22200	22200			187	
1984	1	1984.01 24-Jan-84	195	205	186		195	21400	21400			195	
1984	1	1984.01 25-Jan-84	211	221	205		211	20500	20500			211	
1984	1	1984.01 26-Jan-84	225	232	218		225	19300	19300			225	
1984	1	1984.01 27-Jan-84	229	230	225		229	18100	18100			229	
1984	1	1984.01 28-Jan-84	239	247	229		239	17100	17100			239	
1984	1	1984.01 29-Jan-84	253	263	246		253	16400	16400			253	
1984	1	1984.01 30-Jan-84	281	291	265		281	15600	15600			281	175
1984	1	1984.01 31-Jan-84	292	300	289		292	14900	14900			292	180
1984	2	1984.02 1-Feb-84	298	303	294		298	14100	14100			298	185
1984	2	1984.02 2-Feb-84	296	301	291		296	13500	13500			296	189
1984	2	1984.02 3-Feb-84	288	291	284		288	13100	13100			288	194
1984	2	1984.02 4-Feb-84	301	316	282		301	12700	12700			301	199
1984	2	1984.02 5-Feb-84	329	341	317		329	12200	12200			329	205
1984	2	1984.02 6-Feb-84	314	326	263		314	11800	11800			314	210
1984	2	1984.02 7-Feb-84	320	328	314		320	11300	11300			320	216
1984	2	1984.02 8-Feb-84	330	336	321		330	11100	11100			330	222
1984	2	1984.02 9-Feb-84	334	341	330		334	10900	10900			334	229
1984	2	1984.02 10-Feb-84	336	339	332		336	10800	10800			336	236
1984	2	1984.02 11-Feb-84	336	338	333		336	10700	10700			336	243
1984	2	1984.02 12-Feb-84	330					10600	10600			330	249
1984	2	1984.02 13-Feb-84	326	330	322		326	10600	10600			326	254
1984	2	1984.02 14-Feb-84	332	341	320		332	10400	10400			332	260
1984	2	1984.02 15-Feb-84	337	342	333		337	10100	10100			337	265
1984	2	1984.02 16-Feb-84	333	337	326		333	10100	10100			333	271
1984	2	1984.02 17-Feb-84	332	340	325		332	10200	10200			332	276
1984	2	1984.02 18-Feb-84	344	354	334		344	10200	10200			344	282
1984	2	1984.02 19-Feb-84	335	343	327		335	10100	10100			335	287
1984	2	1984.02 20-Feb-84	338	340	334		338	9920	9920			338	293
1984	2	1984.02 21-Feb-84	338	369	329		338	9850	9850			338	298
1984	2	1984.02 22-Feb-84	322	338	299		322	10100	10100			322	302
1984	2	1984.02 23-Feb-84	323	345	300		323	10500	10500			323	307
1984	2	1984.02 24-Feb-84	328	341	313		328	10200	10200			328	311
1984	2	1984.02 25-Feb-84	297	332	318		297	10100	10100			297	313
1984	2	1984.02 26-Feb-84	301	313	285		301	9970	9970			301	315
1984	2	1984.02 27-Feb-84	333	367	305		333	9770	9770			333	319
1984	2	1984.02 28-Feb-84	350	355	342		350	9640	9640			350	322
1984	2	1984.02 29-Feb-84	343	350	271		343	9610	9610			343	324
1984	3	1984.03 1-Mar-84	347	353	341		347	9540	9540			347	326
1984	3	1984.03 2-Mar-84	343	347	337		343	9450	9450			343	327
1984	3	1984.03 3-Mar-84	336	342	329		336	9490	9490			336	329
1984	3	1984.03 4-Mar-84	343	366	297		343	9220	9220			343	330
1984	3	1984.03 5-Mar-84	352	364	338		352	8950	8950			352	332
1984	3	1984.03 6-Mar-84	348	362	334		348	8850	8850			348	333
1984	3	1984.03 7-Mar-84	368	376	361		368	8710	8710			368	335
1984	3	1984.03 8-Mar-84	359	364	352		359	8470	8470			359	336
1984	3	1984.03 9-Mar-84	365	377	351		365	8270	8270			365	337
1984	3	1984.03 10-Mar-84	387	476	364		387	8180	8180			387	339
1984	3	1984.03 11-Mar-84	360	372	352		360	8110	8110			360	340
1984	3	1984.03 12-Mar-84	357	377	331		357	8100	8100			357	340
1984	3	1984.03 13-Mar-84	337	362	319		337	8290	8290			337	340
1984	3	1984.03 14-Mar-84	389	400	366		389	7790	7790			389	343
1984	3	1984.03 15-Mar-84	396	405	386		396	7610	7610			396	345
1984	3	1984.03 16-Mar-84	412	425	400		412	7590	7590			412	347
1984	3	1984.03 17-Mar-84	463	457	409		463	7200	7200			463	352
1984	3	1984.03 18-Mar-84	458	484	414		458	7160	7160			458	356
1984	3	1984.03 19-Mar-84	386	410	372		386	7570	7570			386	357
1984	3	1984.03 20-Mar-84	432	459	413		432	7280	7280			432	360
1984	3	1984.03 21-Mar-84	482	505	448		482	6750	6750			482	365
1984	3	1984.03 22-Mar-84	491	503	478		491	6440	6440			491	370
1984	3	1984.03 23-Mar-84	479	488	467		479	6380	6380			479	376
1984	3	1984.03 24-Mar-84	489	510	474		489	6270	6270			489	381
1984	3	1984.03 25-Mar-84	471	481	455		471	6140	6140			471	386
1984	3	1984.03 26-Mar-84	473	491	448		473	6170	6170			473	392
1984	3	1984.03 27-Mar-84	445	457	419		445	6300	6300			445	396
1984	3	1984.03 28-Mar-84	483	496	458		483	5980	5980			483	401
1984	3	1984.03 29-Mar-84	507	561	493		507	5610	5610			507	407
1984	3	1984.03 30-Mar-84	535	550	516		535	5420	5420			535	413
1984	3	1984.03 31-Mar-84	530	544	514		530	5260	5260			530	419
1984	4	1984.04 1-Apr-84	527	555	496		527	5230	5230			527	425
1984	4	1984.04 2-Apr-84	572	617	551		572	5050	5050			572	433
1984	4	1984.04 3-Apr-84	590	602	568		590	4950	4950			590	441
1984	4	1984.04 4-Apr-84	582	596	568		582	4850	4850			582	449
1984	4	1984.04 5-Apr-84	583	601	570		583	4820	4820			583	457

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1984	4	1984.04 6-Apr-84	546	566	531		546	4790	4790			546	463
1984	4	1984.04 7-Apr-84	559	581	542		559	4790	4790			559	470
1984	4	1984.04 8-Apr-84	594	615	581		594	4550	4550			594	477
1984	4	1984.04 9-Apr-84	625	634	612		625	4510	4510			625	485
1984	4	1984.04 10-Apr-84	618	630	612		618	4400	4400			618	494
1984	4	1984.04 11-Apr-84	642	658	618		642	4280	4280			642	503
1984	4	1984.04 12-Apr-84	661	672	642		661	4170	4170			661	514
1984	4	1984.04 13-Apr-84	647	664	626		647	4050	4050			647	523
1984	4	1984.04 14-Apr-84	632	663	598		632	3960	3960			632	530
1984	4	1984.04 15-Apr-84	644	666	620		644	3990	3990			644	538
1984	4	1984.04 16-Apr-84	643	662	623		643	4020	4020			643	544
1984	4	1984.04 17-Apr-84	629	642	613		629	4000	4000			629	550
1984	4	1984.04 18-Apr-84	600					3870	3870			600	557
1984	4	1984.04 19-Apr-84	600					4080	4080			600	563
1984	4	1984.04 20-Apr-84	600					4270	4270			600	567
1984	4	1984.04 21-Apr-84	600					4320	4320			600	570
1984	4	1984.04 22-Apr-84	600					4290	4290			600	574
1984	4	1984.04 23-Apr-84	600					4390	4390			600	578
1984	4	1984.04 24-Apr-84	600					4200	4200			600	582
1984	4	1984.04 25-Apr-84	600					3980	3980			600	586
1984	4	1984.04 26-Apr-84	600					3900	3900			600	592
1984	4	1984.04 27-Apr-84	600					3780	3780			600	596
1984	4	1984.04 28-Apr-84	600					3670	3670			600	599
1984	4	1984.04 29-Apr-84	600					3720	3720			600	601
1984	4	1984.04 30-Apr-84	600					3670	3670			600	603
1984	5	1984.05 1-May-84	600					3610	3610			600	606
1984	5	1984.05 2-May-84	582	588	575		582	3620	3620			582	606
1984	5	1984.05 3-May-84	592	613	546		592	3520	3520			592	606
1984	5	1984.05 4-May-84	604	621	587		604	3450	3450			604	607
1984	5	1984.05 5-May-84	617	635	595		617	3470	3470			617	608
1984	5	1984.05 6-May-84	582	604	575		582	3540	3540			582	609
1984	5	1984.05 7-May-84	587	603	572		587	3530	3530			587	610
1984	5	1984.05 8-May-84	614	624	602		614	3400	3400			614	611
1984	5	1984.05 9-May-84	604	624	584		604	3370	3370			604	610
1984	5	1984.05 10-May-84	569	581	559		569	3270	3270			569	608
1984	5	1984.05 11-May-84	560	580	515		560	3110	3110			560	606
1984	5	1984.05 12-May-84	574	600	544		574	3120	3120			574	603
1984	5	1984.05 13-May-84	602	622	579		602	3120	3120			602	601
1984	5	1984.05 14-May-84	584	597	576		584	3250	3250			584	600
1984	5	1984.05 15-May-84	584	599	568		584	3190	3190			584	598
1984	5	1984.05 16-May-84	557	581	530		557	3350	3350			557	595
1984	5	1984.05 17-May-84	469	523	437		469	3760	3760			469	589
1984	5	1984.05 18-May-84	418	432	402		418	3950	3950			418	583
1984	5	1984.05 19-May-84	398	417	381		398	4010	4010			398	577
1984	5	1984.05 20-May-84	389	420	361		389	4010	4010			389	570
1984	5	1984.05 21-May-84	399	450	367		399	3860	3860			399	563
1984	5	1984.05 22-May-84	503	539	455		503	3170	3170			503	560
1984	5	1984.05 23-May-84	571	605	532		571	2890	2890			571	559
1984	5	1984.05 24-May-84	622	639	602		622	2770	2770			622	559
1984	5	1984.05 25-May-84	614	623	596		614	2710	2710			614	560
1984	5	1984.05 26-May-84	645	673	608		645	2620	2620			645	561
1984	5	1984.05 27-May-84	676	694	650		676	2680	2680			676	564
1984	5	1984.05 28-May-84	668	692	652		668	2700	2700			668	566
1984	5	1984.05 29-May-84	659	671	629		659	2590	2590			659	568
1984	5	1984.05 30-May-84	706	761	653		706	2440	2440			706	572
1984	5	1984.05 31-May-84	739	771			739	2350	2350			739	576
1984	6	1984.06 1-Jun-84	693	703	683		693	2250	2250			693	580
1984	6	1984.06 2-Jun-84	708	740	688		708	2170	2170			708	584
1984	6	1984.06 3-Jun-84	683	746	653		683	2290	2290			683	586
1984	6	1984.06 4-Jun-84	644	666	622		644	2480	2480			644	587
1984	6	1984.06 5-Jun-84	654	674	630		654	2470	2470			654	590
1984	6	1984.06 6-Jun-84	660	687	629		660	2530	2530			660	592
1984	6	1984.06 7-Jun-84	662	744	633		662	2520	2520			662	594
1984	6	1984.06 8-Jun-84	643	689	605		643	2520	2520			643	595
1984	6	1984.06 9-Jun-84	646	676	604		646	2430	2430			646	598
1984	6	1984.06 10-Jun-84	663	681	634		663	2470	2470			663	601
1984	6	1984.06 11-Jun-84	660	690	641		660	2650	2650			660	604
1984	6	1984.06 12-Jun-84	663	713	644		663	2570	2570			663	606
1984	6	1984.06 13-Jun-84	701	724	677		701	2400	2400			701	610
1984	6	1984.06 14-Jun-84	735	747	721		735	2340	2340			735	615
1984	6	1984.06 15-Jun-84	688	728	657		688	2380	2380			688	619
1984	6	1984.06 16-Jun-84	653	665	634		653	2400	2400			653	625
1984	6	1984.06 17-Jun-84	660	676	634		660	2380	2380			660	634
1984	6	1984.06 18-Jun-84	651	672	634		651	2480	2480			651	642
1984	6	1984.06 19-Jun-84	666	680	637		666	2360	2360			666	651
1984	6	1984.06 20-Jun-84	702	750	650		702	2180	2180			702	661

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1984	6	1984.06	21-Jun-84	768	795	741		768	2110	2110		768	670
1984	6	1984.06	22-Jun-84	780				2060	2060			780	677
1984	6	1984.06	23-Jun-84	799	808	789		799	2040	2040		799	683
1984	6	1984.06	24-Jun-84	800	822	784		800	2040	2040		800	689
1984	6	1984.06	25-Jun-84	802	813	784		802	2220	2220		802	694
1984	6	1984.06	26-Jun-84	740	819	660		740	2130	2130		740	697
1984	6	1984.06	27-Jun-84	677	710	640		677	2050	2050		677	697
1984	6	1984.06	28-Jun-84	703	731	692		703	1980	1980		703	698
1984	6	1984.06	29-Jun-84	685	716	655		685	1990	1990		685	698
1984	6	1984.06	30-Jun-84	671	698	649		671	2010	2010		671	695
1984	7	1984.07	1-Jul-84	678	703	655		678	2080	2080		678	695
1984	7	1984.07	2-Jul-84	620	664	357		620	2210	2210		620	692
1984	7	1984.07	3-Jul-84	632	742	472		632	2040	2040		632	690
1984	7	1984.07	4-Jul-84	640	676	587		640	1930	1930		640	690
1984	7	1984.07	5-Jul-84	642	661	594		642	1960	1960		642	690
1984	7	1984.07	6-Jul-84	673	710	637		673	1970	1970		673	690
1984	7	1984.07	7-Jul-84	717	738	684		717	1970	1970		717	692
1984	7	1984.07	8-Jul-84	687	725	648		687	1980	1980		687	693
1984	7	1984.07	9-Jul-84	648	690	620		648	1930	1930		648	693
1984	7	1984.07	10-Jul-84	648	679	619		648	1930	1930		648	693
1984	7	1984.07	11-Jul-84	679	706	644		679	1820	1820		679	694
1984	7	1984.07	12-Jul-84	683	699	662		683	1770	1770		683	694
1984	7	1984.07	13-Jul-84	682	722	664		682	1770	1770		682	694
1984	7	1984.07	14-Jul-84	693	718	643		693	1770	1770		693	692
1984	7	1984.07	15-Jul-84	547	650	476		547	1940	1940		547	688
1984	7	1984.07	16-Jul-84	700					1990	1990		700	689
1984	7	1984.07	17-Jul-84	700					1830	1830		700	690
1984	7	1984.07	18-Jul-84	700					1800	1800		700	692
1984	7	1984.07	19-Jul-84	700					1790	1790		700	693
1984	7	1984.07	20-Jul-84	700					1710	1710		700	693
1984	7	1984.07	21-Jul-84	700					1710	1710		700	691
1984	7	1984.07	22-Jul-84	700					1770	1770		700	688
1984	7	1984.07	23-Jul-84	700					1870	1870		700	685
1984	7	1984.07	24-Jul-84	700					1870	1870		700	682
1984	7	1984.07	25-Jul-84	700					1840	1840		700	678
1984	7	1984.07	26-Jul-84	700					1860	1860		700	677
1984	7	1984.07	27-Jul-84	700					1850	1850		700	678
1984	7	1984.07	28-Jul-84	700					1940	1940		700	678
1984	7	1984.07	29-Jul-84	700					2040	2040		700	678
1984	7	1984.07	30-Jul-84	700					2060	2060		700	679
1984	7	1984.07	31-Jul-84	700					2020	2020		700	680
1984	8	1984.08	1-Aug-84	700					1950	1950		700	682
1984	8	1984.08	2-Aug-84	700					1930	1930		700	685
1984	8	1984.08	3-Aug-84	700					1910	1910		700	687
1984	8	1984.08	4-Aug-84	700					1910	1910		700	689
1984	8	1984.08	5-Aug-84	700					1930	1930		700	689
1984	8	1984.08	6-Aug-84	700					2030	2030		700	689
1984	8	1984.08	7-Aug-84	700					1950	1950		700	689
1984	8	1984.08	8-Aug-84	700					1830	1830		700	691
1984	8	1984.08	9-Aug-84	700					1830	1830		700	693
1984	8	1984.08	10-Aug-84	718	727	704		718	1850	1850		718	694
1984	8	1984.08	11-Aug-84	713	726	703		713	1880	1880		713	695
1984	8	1984.08	12-Aug-84	704	729	687		704	1970	1970		704	696
1984	8	1984.08	13-Aug-84	691	725	671		691	2110	2110		691	696
1984	8	1984.08	14-Aug-84	648	674	632		648	2100	2100		648	699
1984	8	1984.08	15-Aug-84	630	652	603		630	2010	2010		630	697
1984	8	1984.08	16-Aug-84	640	659	619		640	2010	2010		640	695
1984	8	1984.08	17-Aug-84	618	644	590		618	2090	2090		618	692
1984	8	1984.08	18-Aug-84	578	603	558		578	2210	2210		578	688
1984	8	1984.08	19-Aug-84	604	628	574		604	2230	2230		604	685
1984	8	1984.08	20-Aug-84	603	623	587		603	2300	2300		603	682
1984	8	1984.08	21-Aug-84	601	621	587		601	2240	2240		601	678
1984	8	1984.08	22-Aug-84	539	575	513		539	2360	2360		539	673
1984	8	1984.08	23-Aug-84	525	537	517		525	2440	2440		525	667
1984	8	1984.08	24-Aug-84	529	550	509		529	2490	2490		529	661
1984	8	1984.08	25-Aug-84	551	617	526		551	2470	2470		551	656
1984	8	1984.08	26-Aug-84	558	573	546		558	2490	2490		558	652
1984	8	1984.08	27-Aug-84	539	609	508		539	2750	2750		539	646
1984	8	1984.08	28-Aug-84	513	521	506		513	2630	2630		513	640
1984	8	1984.08	29-Aug-84	546	564	523		546	2520	2520		546	635
1984	8	1984.08	30-Aug-84	662	570	541		662	2570	2570		662	634
1984	8	1984.08	31-Aug-84	542	556	527		542	2570	2570		542	628
1984	9	1984.09	1-Sep-84	542	563	527		542	2590	2590		542	623
1984	9	1984.09	2-Sep-84	543	560	527		543	2660	2660		543	618
1984	9	1984.09	3-Sep-84	528	582	334		528	2670	2670		528	612
1984	9	1984.09	4-Sep-84	543	565	520		543	2660	2660		543	607

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1984	9	1984.09 5-Sep-84	518	541	481		518	2680	2680			518	601
1984	9	1984.09 6-Sep-84	485	503	460		485	2710	2710			485	594
1984	9	1984.09 7-Sep-84	464	480	451		464	2780	2780			464	586
1984	9	1984.09 8-Sep-84	474	488	455		474	2750	2750			474	578
1984	9	1984.09 9-Sep-84	486	504	404		486	2680	2680			486	571
1984	9	1984.09 10-Sep-84	470	482	461		470	2800	2800			470	562
1984	9	1984.09 11-Sep-84	474	487	453		474	2810	2810			474	555
1984	9	1984.09 12-Sep-84	467	487	440		467	2830	2830			467	547
1984	9	1984.09 13-Sep-84	440	456	423		440	2890	2890			440	540
1984	9	1984.09 14-Sep-84	452	464	442		452	2870	2870			452	534
1984	9	1984.09 15-Sep-84	450					2820	2820			450	528
1984	9	1984.09 16-Sep-84	450					2910	2910			450	523
1984	9	1984.09 17-Sep-84	449	459	441		449	3040	3040			449	518
1984	9	1984.09 18-Sep-84	451	458	436		451	3030	3030			451	513
1984	9	1984.09 19-Sep-84	452	464	438		452	2940	2940			452	508
1984	9	1984.09 20-Sep-84	433	447	400		433	2970	2970			433	503
1984	9	1984.09 21-Sep-84	405	411	392		405	3040	3040			405	498
1984	9	1984.09 22-Sep-84	393	405	382		393	3090	3090			393	494
1984	9	1984.09 23-Sep-84	374	388	361		374	3180	3180			374	488
1984	9	1984.09 24-Sep-84	369	377	358		369	3220	3220			369	482
1984	9	1984.09 25-Sep-84	374	384	358		374	3200	3200			374	476
1984	9	1984.09 26-Sep-84	384	398	370		384	3190	3190			384	471
1984	9	1984.09 27-Sep-84	382	436	368		382	3140	3140			382	467
1984	9	1984.09 28-Sep-84	385					3100	3100			385	461
1984	9	1984.09 29-Sep-84	385					3090	3090			385	452
1984	9	1984.09 30-Sep-84	385					3180	3180			385	447
1984	10	1984.10 1-Oct-84	385					3890	3280			385	442
1984	10	1984.10 2-Oct-84	385	394	370		385	3730	3180			385	436
1984	10	1984.10 3-Oct-84	374	396	357		374	3670	3190			374	431
1984	10	1984.10 4-Oct-84	360	364	355		360	3720	3260			360	425
1984	10	1984.10 5-Oct-84	346	354	336		346	3810	3370			346	419
1984	10	1984.10 6-Oct-84	329	346	313		329	3940	3520			329	414
1984	10	1984.10 7-Oct-84	308	316	296		308	4080	3680			308	409
1984	10	1984.10 8-Oct-84	307	318	299		307	4080	3710			307	403
1984	10	1984.10 9-Oct-84	315	324	308		315	3930	3620			315	398
1984	10	1984.10 10-Oct-84	316	326	309		316	3800	3560			316	393
1984	10	1984.10 11-Oct-84	317	329	298		317	3840	3640			317	387
1984	10	1984.10 12-Oct-84	298	305	293		298	3990	3800			298	382
1984	10	1984.10 13-Oct-84	299	306	292		299	4040	3890			299	377
1984	10	1984.10 14-Oct-84	281	294	245		281	4240	4110			281	371
1984	10	1984.10 15-Oct-84	244	256	234		244	4210	4110			244	365
1984	10	1984.10 16-Oct-84	255	267	243		255	4170	4150			255	358
1984	10	1984.10 17-Oct-84	224	245	202		224	5030	5000			224	351
1984	10	1984.10 18-Oct-84	201	207	193		201	5510	5480			201	342
1984	10	1984.10 19-Oct-84	200	204	194		200	5540	5540			200	334
1984	10	1984.10 20-Oct-84	250					5400	5400			250	328
1984	10	1984.10 21-Oct-84	250					4760	4690			250	323
1984	10	1984.10 22-Oct-84	308	313	300		308	4190	4050			308	320
1984	10	1984.10 23-Oct-84	325	344	309		325	3940	3790			325	318
1984	10	1984.10 24-Oct-84	339	353	323		339	3840	3700			339	317
1984	10	1984.10 25-Oct-84	370	389	353		370	3580	3420			370	317
1984	10	1984.10 26-Oct-84	384	394	375		384	3440	3280			384	317
1984	10	1984.10 27-Oct-84	399	410	381		399	3380	3220			399	317
1984	10	1984.10 28-Oct-84	381	391	374		381	3430	3290			381	317
1984	10	1984.10 29-Oct-84	393	401	389		393	3290	3150			393	318
1984	10	1984.10 30-Oct-84	393	403	387		393	3240	3100			393	318
1984	10	1984.10 31-Oct-84	418	426	400		418	3200	3060			418	319
1984	11	1984.11 1-Nov-84	427	439	414		427	3120	2980			427	320
1984	11	1984.11 2-Nov-84	437	463	413		437	3050	2920			437	322
1984	11	1984.11 3-Nov-84	473	482	460		473	2880	2740			473	326
1984	11	1984.11 4-Nov-84	487	497	470		487	2780	2650			487	331
1984	11	1984.11 5-Nov-84	494	508	482		494	2720	2590			494	336
1984	11	1984.11 6-Nov-84	501	508	494		501	2680	2570			501	343
1984	11	1984.11 7-Nov-84	501	509	495		501	2650	2550			501	349
1984	11	1984.11 8-Nov-84	495	508	477		495	2710	2620			495	355
1984	11	1984.11 9-Nov-84	484	491	476		484	2740	2670			484	361
1984	11	1984.11 10-Nov-84	479	487	469		479	2680	2610			479	366
1984	11	1984.11 11-Nov-84	487	490	482		487	2660	2610			487	373
1984	11	1984.11 12-Nov-84	492	501	404		492	2620	2570			492	379
1984	11	1984.11 13-Nov-84	488	496	480		488	2610	2570			488	386
1984	11	1984.11 14-Nov-84	490	500	482		490	2630	2610			490	394
1984	11	1984.11 15-Nov-84	494	506	483		494	2620	2610			494	402
1984	11	1984.11 16-Nov-84	501	508	495		501	2620	2620			501	411
1984	11	1984.11 17-Nov-84	500	509	487		500	2670	2670			500	421
1984	11	1984.11 18-Nov-84	504	508	498		504	2620	2620			504	431
1984	11	1984.11 19-Nov-84	517	529	508		517	2590	2590			517	440

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1984	11	1984.11 20-Nov-84	528	538	512		528	2570	2570			528	450
1984	11	1984.11 21-Nov-84	533	539	526		533	2580	2580			533	457
1984	11	1984.11 22-Nov-84	528					2630	2630			528	464
1984	11	1984.11 23-Nov-84	521	563	461		521	2880	2880			521	470
1984	11	1984.11 24-Nov-84	408	454	383		408	3110	3110			408	471
1984	11	1984.11 25-Nov-84	367	380	358		367	3280	3280			367	471
1984	11	1984.11 26-Nov-84	362	375	352		362	3430	3430			362	469
1984	11	1984.11 27-Nov-84	366	377	327		366	3430	3430			366	469
1984	11	1984.11 28-Nov-84	369	377	365		369	3450	3450			369	468
1984	11	1984.11 29-Nov-84	367	373	360		367	3440	3440			367	467
1984	11	1984.11 30-Nov-84	362	369	351		362	3500	3500			362	465
1984	12	1984.12 1-Dec-84	360	386	344		360	3530	3530			360	463
1984	12	1984.12 2-Dec-84	410	423	389		410	3250	3250			410	462
1984	12	1984.12 3-Dec-84	397	405	383		397	3140	3140			397	460
1984	12	1984.12 4-Dec-84	380	402	301		380	3320	3320			380	456
1984	12	1984.12 5-Dec-84	259	287	245		259	4470	4470			259	448
1984	12	1984.12 6-Dec-84	257	276	241		257	4770	4770			257	440
1984	12	1984.12 7-Dec-84	265	289	238		265	4730	4730			265	432
1984	12	1984.12 8-Dec-84	295	319	267		295	4440	4440			295	426
1984	12	1984.12 9-Dec-84	313	336	289		313	4260	4260			313	420
1984	12	1984.12 10-Dec-84	345	394	303		345	4070	4070			345	416
1984	12	1984.12 11-Dec-84	409	440	342		409	3720	3720			409	413
1984	12	1984.12 12-Dec-84	311	332	293		311	4700	4700			311	407
1984	12	1984.12 13-Dec-84	305	332	283		305	4930	4890			305	401
1984	12	1984.12 14-Dec-84	300	329	278		300	5020	5000			300	394
1984	12	1984.12 15-Dec-84	284	304	267		284	5080	5060			284	387
1984	12	1984.12 16-Dec-84	304	340	271		304	5000	5000			304	381
1984	12	1984.12 17-Dec-84	300					5170	5170			300	374
1984	12	1984.12 18-Dec-84	300					4760	4760			300	367
1984	12	1984.12 19-Dec-84	300					5660	5660			300	360
1984	12	1984.12 20-Dec-84	254	279	227		254	5790	5790			254	351
1984	12	1984.12 21-Dec-84	300					5730	5730			300	343
1984	12	1984.12 22-Dec-84	300					5690	5690			300	336
1984	12	1984.12 23-Dec-84	300					5450	5450			300	328
1984	12	1984.12 24-Dec-84	352	363	325		352	4980	4980			352	326
1984	12	1984.12 25-Dec-84	361	380	307		361	4540	4540			361	326
1984	12	1984.12 26-Dec-84	295	342	266		295	5030	5030			295	324
1984	12	1984.12 27-Dec-84	355	382	290		355	4610	4610			355	324
1984	12	1984.12 28-Dec-84	260	279	246		260	5560	5560			260	320
1984	12	1984.12 29-Dec-84	256	279	235		256	5760	5760			256	316
1984	12	1984.12 30-Dec-84	268	293	240		268	5660	5660			268	313
1984	12	1984.12 31-Dec-84	296	327	271		296	5200	5170			296	311
1985	1	1985.01 1-Jan-85	339	365	292		339	4750	4710			339	309
1985	1	1985.01 2-Jan-85	281	318	252		281	5170	5100			281	305
1985	1	1985.01 3-Jan-85	330	358	282		330	4720	4590			330	303
1985	1	1985.01 4-Jan-85	285	304	269		285	5120	5090			285	304
1985	1	1985.01 5-Jan-85	289	313	270		289	5040	5040			289	305
1985	1	1985.01 6-Jan-85	295	314	274		295	4740	4740			295	306
1985	1	1985.01 7-Jan-85	359	432	311		359	4040	4140			359	308
1985	1	1985.01 8-Jan-85	471	497	435		471	3710	3710			471	313
1985	1	1985.01 9-Jan-85	401	440	381		401	4110	4110			401	315
1985	1	1985.01 10-Jan-85	399	433	370		399	4090	4090			399	315
1985	1	1985.01 11-Jan-85	416	446	389		416	3960	3960			416	319
1985	1	1985.01 12-Jan-85	408	431	387		408	3970	3970			408	322
1985	1	1985.01 13-Jan-85	419	469	383		419	3860	3860			419	326
1985	1	1985.01 14-Jan-85	494	552	463		494	3470	3470			494	333
1985	1	1985.01 15-Jan-85	583	640	528		583	3340	3340			583	342
1985	1	1985.01 16-Jan-85	454	504	424		454	4010	4010			454	347
1985	1	1985.01 17-Jan-85	437	472	405		437	4080	4080			437	352
1985	1	1985.01 18-Jan-85	433	464	405		433	4060	4060			433	356
1985	1	1985.01 19-Jan-85	420	455	393		420	4060	4060			420	362
1985	1	1985.01 20-Jan-85	432	484	395		432	3980	3980			432	366
1985	1	1985.01 21-Jan-85	496	534	461		496	3640	3640			496	373
1985	1	1985.01 22-Jan-85	583	630	520		583	3420	3420			583	382
1985	1	1985.01 23-Jan-85	450	502	420		450	4010	4010			450	386
1985	1	1985.01 24-Jan-85	426	457	397		426	4090	4090			426	388
1985	1	1985.01 25-Jan-85	418	454	385		418	4120	4120			418	392
1985	1	1985.01 26-Jan-85	422	462	385		422	4080	4080			422	394
1985	1	1985.01 27-Jan-85	449	497	412		449	3870	3870			449	400
1985	1	1985.01 28-Jan-85	511	557	484		511	3500	3500			511	409
1985	1	1985.01 29-Jan-85	591	635	542		591	3320	3320			591	420
1985	1	1985.01 30-Jan-85	467	522	440		467	3850	3850			467	425
1985	1	1985.01 31-Jan-85	439	471	411		439	4000	4000			439	429
1985	2	1985.02 1-Feb-85	423	450	398		423	4070	4070			423	433
1985	2	1985.02 2-Feb-85	433	468	395		433	4000	4000			433	437
1985	2	1985.02 3-Feb-85	476	544	432		476	3710	3710			476	443

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1985	2	1985.02	4-Feb-85	576	632	541		576	3160	3160		576	453
1985	2	1985.02	5-Feb-85	707	768	642		707	2810	2810		707	466
1985	2	1985.02	6-Feb-85	569	662	525		569	3290	3290		569	473
1985	2	1985.02	7-Feb-85	519	552	487		519	3370	3370		519	475
1985	2	1985.02	8-Feb-85	508	551	477		508	3410	3410		508	479
1985	2	1985.02	9-Feb-85	443	489	346		443	3910	3910		443	480
1985	2	1985.02	10-Feb-85	378	507	300		378	4670	4670		378	479
1985	2	1985.02	11-Feb-85	169	201	139		169	3660	3660		169	471
1985	2	1985.02	12-Feb-85	643	677	575		643	3310	3310		643	478
1985	2	1985.02	13-Feb-85	499	553	464		499	3670	3670		499	478
1985	2	1985.02	14-Feb-85	519	558	483		519	3550	3550		519	476
1985	2	1985.02	15-Feb-85	552	597	511		552	3380	3380		552	480
1985	2	1985.02	16-Feb-85	599	648	554		599	3260	3260		599	485
1985	2	1985.02	17-Feb-85	656	720	614		656	3060	3060		656	492
1985	2	1985.02	18-Feb-85	728	758	705		728	2760	2760		728	503
1985	2	1985.02	19-Feb-85	810	847	764		810	2490	2490		810	515
1985	2	1985.02	20-Feb-85	832	847	770		832	2460	2460		832	527
1985	2	1985.02	21-Feb-85	645	748	600		645	2890	2890		645	529
1985	2	1985.02	22-Feb-85	548	580	518		548	3170	3170		548	532
1985	2	1985.02	23-Feb-85	570	618	524		570	3170	3170		570	537
1985	2	1985.02	24-Feb-85	571	585	548		571	3050	3050		571	542
1985	2	1985.02	25-Feb-85	595	657	555		595	2760	2760		595	548
1985	2	1985.02	26-Feb-85	645	655	634		645	2450	2450		645	554
1985	2	1985.02	27-Feb-85	646	660	632		646	2640	2640		646	559
1985	2	1985.02	28-Feb-85	631	657	588		631	2660	2630		631	560
1985	3	1985.03	1-Mar-85	604	624	579		604	2660	2720		604	564
1985	3	1985.03	2-Mar-85	616	641	592		616	2570	2490		616	570
1985	3	1985.03	3-Mar-85	677	705	649		677	2670	2310		677	579
1985	3	1985.03	4-Mar-85	699	726	674		699	2600	2270		699	588
1985	3	1985.03	5-Mar-85	695	723	662		695	2540	2340		695	595
1985	3	1985.03	6-Mar-85	649	661	631		649	2480	2510		649	597
1985	3	1985.03	7-Mar-85	652	674	634		652	2670	2670		652	596
1985	3	1985.03	8-Mar-85	638	656	608		638	2700	2720		638	598
1985	3	1985.03	9-Mar-85	634	672	596		634	2610	2640		634	602
1985	3	1985.03	10-Mar-85	682	722	662		682	2650	2680		682	608
1985	3	1985.03	11-Mar-85	665	718	618		665	3170	3190		665	615
1985	3	1985.03	12-Mar-85	683	721	632		683	3070	3100		683	625
1985	3	1985.03	13-Mar-85	678	700	645		678	2960	2990		678	642
1985	3	1985.03	14-Mar-85	622	644	608		622	3020	3050		622	641
1985	3	1985.03	15-Mar-85	620	663	597		620	2980	3010		620	645
1985	3	1985.03	16-Mar-85	692	727	662		692	2820	2850		692	651
1985	3	1985.03	17-Mar-85	713	729	694		713	2770	2800		713	657
1985	3	1985.03	18-Mar-85	688	708	663		688	2790	2820		688	659
1985	3	1985.03	19-Mar-85	697	711	679		697	2820	2850		697	661
1985	3	1985.03	20-Mar-85	715	761	680		715	2760	2790		715	660
1985	3	1985.03	21-Mar-85	756	764	744		756	2690	2710		756	659
1985	3	1985.03	22-Mar-85	769	795	738		769	2490	2520		769	657
1985	3	1985.03	23-Mar-85	802	812	786		802	2400	2430		802	662
1985	3	1985.03	24-Mar-85	784	804	767		784	2420	2450		784	670
1985	3	1985.03	25-Mar-85	781	796	764		781	2510	2540		781	677
1985	3	1985.03	26-Mar-85	804	816	774		804	2290	2320		804	684
1985	3	1985.03	27-Mar-85	761	778	749		761	2580	2610		761	690
1985	3	1985.03	28-Mar-85	752	773	729		752	2850	2880		752	694
1985	3	1985.03	29-Mar-85	734	754	706		734	3040	3070		734	696
1985	3	1985.03	30-Mar-85	695	726	667		695	3230	3260		695	699
1985	3	1985.03	31-Mar-85	681	718	659		681	3210	3230		681	701
1985	4	1985.04	1-Apr-85	683	714	652		683	3150	3180		683	703
1985	4	1985.04	2-Apr-85	723	757	685		723	2820	2850		723	705
1985	4	1985.04	3-Apr-85	809	847	760		809	2450	2480		809	709
1985	4	1985.04	4-Apr-85	880	916	827		880	2160	2180		880	715
1985	4	1985.04	5-Apr-85	938	986	902		938	1960	1980		938	724
1985	4	1985.04	6-Apr-85	972	996	962		972	1880	1900		972	735
1985	4	1985.04	7-Apr-85	884	973	820		884	2130	2160		884	743
1985	4	1985.04	8-Apr-85	822	853	785		822	2340	2360		822	750
1985	4	1985.04	9-Apr-85	824	844	803		824	2240	2270		824	754
1985	4	1985.04	10-Apr-85	818	856	790		818	2130	2150		818	759
1985	4	1985.04	11-Apr-85	848	869	814		848	2120	2150		848	765
1985	4	1985.04	12-Apr-85	808	823	792		808	2150	2180		808	769
1985	4	1985.04	13-Apr-85	824	843	805		824	2290	2320		824	776
1985	4	1985.04	14-Apr-85	790	825	769		790	2350	2370		790	782
1985	4	1985.04	15-Apr-85	758	780	739		758	2490	2510		758	784
1985	4	1985.04	16-Apr-85	759	775	742		759	2320	2340		759	785
1985	4	1985.04	17-Apr-85	738	780	709		738	2320	2340		738	787
1985	4	1985.04	18-Apr-85	742	757	722		742	2540	2560		742	788
1985	4	1985.04	19-Apr-85	697	748	665		697	2700	2720		697	788
1985	4	1985.04	20-Apr-85	676	699	660		676	2740	2760		676	785

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1985	4	1985.04 21-Apr-85	690	714	672		690	2760	2780			690	783
1985	4	1985.04 22-Apr-85	650	685	635		650	2900	2920			650	778
1985	4	1985.04 23-Apr-85	656	672	628		656	2750	2770			656	773
1985	4	1985.04 24-Apr-85	671	706	637		671	2520	2540			671	770
1985	4	1985.04 25-Apr-85	668	698	648		668	2440	2460			668	765
1985	4	1985.04 26-Apr-85	585	635	560		585	2620	2630			585	759
1985	4	1985.04 27-Apr-85	564	573	550		564	2690	2700			564	753
1985	4	1985.04 28-Apr-85	566	580	553		566	2440	2460			566	747
1985	4	1985.04 29-Apr-85	576	595	558		576	2530	2540			576	743
1985	4	1985.04 30-Apr-85	606	660	573		606	2420	2430			606	741
1985	5	1985.05 1-May-85	652	666	635		652	2310	2320			652	740
1985	5	1985.05 2-May-85	669	761	648		669	2320	2330			669	738
1985	5	1985.05 3-May-85	631	643	620		631	2310	2320			631	732
1985	5	1985.05 4-May-85	633	659	621		633	2250	2260			633	724
1985	5	1985.05 5-May-85	640	676	597		640	2370	2380			640	714
1985	5	1985.05 6-May-85	586	606	567		586	2540	2550			586	701
1985	5	1985.05 7-May-85	600	614	584		600	2370	2380			600	692
1985	5	1985.05 8-May-85	623	639	607		623	2280	2290			623	685
1985	5	1985.05 9-May-85	624	637	612		624	2270	2270			624	678
1985	5	1985.05 10-May-85	613	632	596		613	2340	2350			613	671
1985	5	1985.05 11-May-85	632	661	600		632	2350	2350			632	664
1985	5	1985.05 12-May-85	642	663	621		642	2490	2490			642	659
1985	5	1985.05 13-May-85	648	661	631		648	2580	2580			648	653
1985	5	1985.05 14-May-85	679	702	652		679	2420	2420			679	649
1985	5	1985.05 15-May-85	672	686	661		672	2260	2260			672	646
1985	5	1985.05 16-May-85	692	709	674		692	2150	2150			692	644
1985	5	1985.05 17-May-85	716	760	684		716	2100	2100			716	643
1985	5	1985.05 18-May-85	778	804	751		778	2040	2040			778	645
1985	5	1985.05 19-May-85	788	802	767		788	2020	2020			788	648
1985	5	1985.05 20-May-85	750	795	717		750	2150	2150			750	650
1985	5	1985.05 21-May-85	734	748	722		734	2040	2040			734	651
1985	5	1985.05 22-May-85	778	797	742		778	1920	1920			778	656
1985	5	1985.05 23-May-85	804	819	785		804	1830	1810			804	661
1985	5	1985.05 24-May-85	822	857	772		822	1750	1740			822	666
1985	5	1985.05 25-May-85	833	847	806		833	1720	1700			833	671
1985	5	1985.05 26-May-85	824	844	805		824	1740	1750			824	679
1985	5	1985.05 27-May-85	779	805	747		779	1830	1860			779	686
1985	5	1985.05 28-May-85	817	844	790		817	1900	1870			817	695
1985	5	1985.05 29-May-85	779	819	744		779	1900	1820			779	701
1985	5	1985.05 30-May-85	764	798	740		764	1810	1780			764	707
1985	5	1985.05 31-May-85	719	777	683		719	1800	1800			719	709
1985	6	1985.06 1-Jun-85	692	713	674		692	1940	1920			692	710
1985	6	1985.06 2-Jun-85	664	682	644		664	2130	2140			664	711
1985	6	1985.06 3-Jun-85	615	638	592		615	2440	2450			615	710
1985	6	1985.06 4-Jun-85	635	662	602		635	2360	2360			635	710
1985	6	1985.06 5-Jun-85	634	646	622		634	2250	2260			634	712
1985	6	1985.06 6-Jun-85	624	634	612		624	2220	2230			624	712
1985	6	1985.06 7-Jun-85	660	684	633		660	2100	2110			660	714
1985	6	1985.06 8-Jun-85	696	741	660		696	1820	1810			696	716
1985	6	1985.06 9-Jun-85	766	782	735		766	1700	1720			766	721
1985	6	1985.06 10-Jun-85	786	819	760		786	1820	1780			786	726
1985	6	1985.06 11-Jun-85	806	829	782		806	1690	1670			806	732
1985	6	1985.06 12-Jun-85	834	854	813		834	1560	1570			834	738
1985	6	1985.06 13-Jun-85	807	828	787		807	1510	1510			807	742
1985	6	1985.06 14-Jun-85	775	793	748		775	1580	1560			775	746
1985	6	1985.06 15-Jun-85	751	781	732		751	1560	1580			751	748
1985	6	1985.06 16-Jun-85	775	793	749		775	1580	1610			775	750
1985	6	1985.06 17-Jun-85	731	750	705		731	1780	1840			731	748
1985	6	1985.06 18-Jun-85	694	720	670		694	1750	1760			694	745
1985	6	1985.06 19-Jun-85	676	685	664		676	1750	1720			676	742
1985	6	1985.06 20-Jun-85	704	720	687		704	1760	1760			704	741
1985	6	1985.06 21-Jun-85	709	730	667		709	1740	1720			709	739
1985	6	1985.06 22-Jun-85	699	719	627		699	1670	1660			699	736
1985	6	1985.06 23-Jun-85	681	696	651		681	1610	1590			681	731
1985	6	1985.06 24-Jun-85	634	660	614		634	1660	1650			634	724
1985	6	1985.06 25-Jun-85	675	696	633		675	1580	1560			675	719
1985	6	1985.06 26-Jun-85	709	735	680		709	1420	1410			709	717
1985	6	1985.06 27-Jun-85	713	751	673		713	1300	1280			713	714
1985	6	1985.06 28-Jun-85	753	785	722		753	1300	1280			753	713
1985	6	1985.06 29-Jun-85	747	770	728		747	1450	1440			747	712
1985	6	1985.06 30-Jun-85	717	752	667		717	1500	1480			717	712
1985	7	1985.07 1-Jul-85	606	665	536		606	2050	2040			606	709
1985	7	1985.07 2-Jul-85	527	544	508		527	2440	2430			527	705
1985	7	1985.07 3-Jul-85	516	533	500		516	2410	2400			516	701
1985	7	1985.07 4-Jul-85	492	506	474		492	2470	2460			492	697
1985	7	1985.07 5-Jul-85	504	519	493		504	2490	2480			504	692

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1985	7	1985.07	6-Jul-85	499	514	487		499	2550	2540		499	688
1985	7	1985.07	7-Jul-85	474	486	462		474	2520	2520		474	682
1985	7	1985.07	8-Jul-85	472	486	455		472	2670	2660		472	674
1985	7	1985.07	9-Jul-85	490	500	476		490	2660	2650		490	665
1985	7	1985.07	10-Jul-85	483	513	454		483	2500	2490		483	655
1985	7	1985.07	11-Jul-85	488	506	447		488	2550	2540		488	645
1985	7	1985.07	12-Jul-85	446	459	431		446	2670	2660		446	632
1985	7	1985.07	13-Jul-85	461	471	455		461	2640	2630		461	620
1985	7	1985.07	14-Jul-85	460	474	447		460	2740	2730		460	610
1985	7	1985.07	15-Jul-85	462	480	445		462	2870	2860		462	600
1985	7	1985.07	16-Jul-85	464	476	446		464	2660	2650		464	590
1985	7	1985.07	17-Jul-85	489	507	473		489	2470	2460		489	581
1985	7	1985.07	18-Jul-85	492	516	475		492	2540	2540		492	575
1985	7	1985.07	19-Jul-85	501	514	490		501	2500	2490		501	569
1985	7	1985.07	20-Jul-85	473	493	443		473	2450	2440		473	561
1985	7	1985.07	21-Jul-85	469	500	440		469	2540	2530		469	553
1985	7	1985.07	22-Jul-85	505	528	476		505	2650	2640		505	547
1985	7	1985.07	23-Jul-85	509	526	470		509	2610	2600		509	541
1985	7	1985.07	24-Jul-85	476	495	457		476	2530	2520		476	536
1985	7	1985.07	25-Jul-85	490	513	465		490	2430	2420		490	530
1985	7	1985.07	26-Jul-85	467	484	450		467	2450	2440		467	522
1985	7	1985.07	27-Jul-85	445	458	435		445	2590	2580		445	513
1985	7	1985.07	28-Jul-85	456	473	436		456	2660	2650		456	503
1985	7	1985.07	29-Jul-85	453	471	435		453	2780	2770		453	493
1985	7	1985.07	30-Jul-85	484	507	455		484	2750	2730		484	485
1985	7	1985.07	31-Jul-85	458	494	427		458	2750	2730		458	480
1985	8	1985.08	1-Aug-85	505	525	488		505	2710	2690		505	479
1985	8	1985.08	2-Aug-85	489	502	461		489	2800	2790		489	479
1985	8	1985.08	3-Aug-85	508	531	484		508	2750	2740		508	479
1985	8	1985.08	4-Aug-85	503	522	489		503	2790	2780		503	479
1985	8	1985.08	5-Aug-85	503	542	471		503	2780	2770		503	479
1985	8	1985.08	6-Aug-85	497	511	480		497	2580	2570		497	480
1985	8	1985.08	7-Aug-85	549	617	482		549	2190	2180		549	483
1985	8	1985.08	8-Aug-85	568	606	510		568	2000	1990		568	485
1985	8	1985.08	9-Aug-85	509	522	497		509	2310	2290		509	486
1985	8	1985.08	10-Aug-85	527	553	495		527	2350	2330		527	487
1985	8	1985.08	11-Aug-85	522	538	482		522	2640	2620		522	490
1985	8	1985.08	12-Aug-85	471	482	455		471	2800	2780		471	490
1985	8	1985.08	13-Aug-85	448	463	431		448	2680	2660		448	490
1985	8	1985.08	14-Aug-85	441	458	426		441	2560	2550		441	489
1985	8	1985.08	15-Aug-85	458	479	443		458	2410	2400		458	489
1985	8	1985.08	16-Aug-85	444	455	417		444	2390	2380		444	487
1985	8	1985.08	17-Aug-85	439	463	412		439	2540	2530		439	486
1985	8	1985.08	18-Aug-85	432	446	410		432	2810	2790		432	483
1985	8	1985.08	19-Aug-85	424	437	412		424	3020	3000		424	482
1985	8	1985.08	20-Aug-85	409	429	391		409	2910	2890		409	480
1985	8	1985.08	21-Aug-85	444	479	403		444	2780	2760		444	478
1985	8	1985.08	22-Aug-85	462	480	448		462	2730	2720		462	476
1985	8	1985.08	23-Aug-85	480	501	468		480	2670	2650		480	476
1985	8	1985.08	24-Aug-85	482	504	466		482	2710	2690		482	476
1985	8	1985.08	25-Aug-85	469	480	446		469	2810	2800		469	476
1985	8	1985.08	26-Aug-85	442	450	430		442	2880	2870		442	476
1985	8	1985.08	27-Aug-85	435	450	421		435	2790	2770		435	475
1985	8	1985.08	28-Aug-85	462	486	430		462	2670	2650		462	475
1985	8	1985.08	29-Aug-85	505	520	485		505	2460	2440		505	476
1985	8	1985.08	30-Aug-85	500	607	488		500	2310	2290		500	478
1985	8	1985.08	31-Aug-85	542	581	507		542	2270	2250		542	479
1985	9	1985.09	1-Sep-85	590	636	525		590	2150	2130		590	482
1985	9	1985.09	2-Sep-85	634	653	622		634	1990	1980		634	486
1985	9	1985.09	3-Sep-85	672	689	655		672	1900	1890		672	492
1985	9	1985.09	4-Sep-85	640	662	619		640	1890	1880		640	497
1985	9	1985.09	5-Sep-85	649	662	639		649	1760	1750		649	502
1985	9	1985.09	6-Sep-85	664	685	640		664	1780	1770		664	505
1985	9	1985.09	7-Sep-85	673	683	647		673	1800	1780		673	509
1985	9	1985.09	8-Sep-85	619	636	596		619	1970	1960		619	513
1985	9	1985.09	9-Sep-85	626	638	611		626	2170	2150		626	516
1985	9	1985.09	10-Sep-85	610	624	592		610	2160	2170		610	519
1985	9	1985.09	11-Sep-85	615	635	590		615	2190	2170		615	524
1985	9	1985.09	12-Sep-85	605	617	592		605	2090	2070		605	529
1985	9	1985.09	13-Sep-85	613				613	1960	1950		613	535
1985	9	1985.09	14-Sep-85	620					1950	1930		620	540
1985	9	1985.09	15-Sep-85	620					1880	1870		620	546
1985	9	1985.09	16-Sep-85	631	645	618		631	1930	1920		631	552
1985	9	1985.09	17-Sep-85	597	633	550		597	1940	1930		597	558
1985	9	1985.09	18-Sep-85	573	596	547		573	1830	1830		573	563
1985	9	1985.09	19-Sep-85	577	583	563		577	1780	1780		577	568

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1985	9	1985.09 20-Sep-85	567	584	552		567	1710	1710			567	572
1985	9	1985.09 21-Sep-85	540	556	526		540	1850	1840			540	575
1985	9	1985.09 22-Sep-85	519	538	485		519	1900	1900			519	576
1985	9	1985.09 23-Sep-85	505	525	489		505	1900	1900			505	577
1985	9	1985.09 24-Sep-85	553	567	553		553	1840	1840			553	580
1985	9	1985.09 25-Sep-85	525					1840	1850			525	583
1985	9	1985.09 26-Sep-85	500	524	480		500	1850	1870			500	585
1985	9	1985.09 27-Sep-85	511	572	461		511	1880	1900			511	587
1985	9	1985.09 28-Sep-85	589	606	567		589	1900	1920			589	589
1985	9	1985.09 29-Sep-85	546	575	516		546	2030	2050			546	591
1985	9	1985.09 30-Sep-85	540	574	521		540	2040	2060			540	591
1985	10	1985.10 1-Oct-85	546	561	531		546	2000	2000			546	589
1985	10	1985.10 2-Oct-85	549	558	534		549	1970	1970			549	586
1985	10	1985.10 3-Oct-85	506	546	416		506	2280	2280			506	581
1985	10	1985.10 4-Oct-85	369	405	359		369	2420	2420			369	572
1985	10	1985.10 5-Oct-85	416	441	377		416	2250	2250			416	564
1985	10	1985.10 6-Oct-85	471	487	443		471	2220	2220			471	558
1985	10	1985.10 7-Oct-85	509	519	489		509	2140	2140			509	552
1985	10	1985.10 8-Oct-85	512	524	504		512	2090	2090			512	549
1985	10	1985.10 9-Oct-85	544	564	524		544	1960	1960			544	546
1985	10	1985.10 10-Oct-85	556	573	536		556	1890	1890			556	544
1985	10	1985.10 11-Oct-85	571	585	534		571	1850	1850			571	543
1985	10	1985.10 12-Oct-85	555	567	532		555	1830	1830			555	541
1985	10	1985.10 13-Oct-85	563	577	547		563	1820	1820			563	539
1985	10	1985.10 14-Oct-85	533	548	503		533	1940	1940			533	536
1985	10	1985.10 15-Oct-85	517	538	495		517	1950	1950			517	533
1985	10	1985.10 16-Oct-85	537	576	502		537	1910	1910			537	530
1985	10	1985.10 17-Oct-85	545	586	509		545	1950	1950			545	528
1985	10	1985.10 18-Oct-85	470	512	450		470	2250	2250			470	525
1985	10	1985.10 19-Oct-85	487	526	466		487	1990	1990			487	522
1985	10	1985.10 20-Oct-85	545	556	534		545	1880	1880			545	521
1985	10	1985.10 21-Oct-85	568	588	536		568	1890	1890			568	522
1985	10	1985.10 22-Oct-85	507	528	494		507	2090	2090			507	521
1985	10	1985.10 23-Oct-85	537	561	499		537	2110	2110			537	523
1985	10	1985.10 24-Oct-85	558	578	536		558	2100	2100			558	523
1985	10	1985.10 25-Oct-85	612	636	578		612	2100	2100			612	526
1985	10	1985.10 26-Oct-85	627	633	610		627	2110	2110			627	530
1985	10	1985.10 27-Oct-85	579	608	521		579	2210	2210			579	532
1985	10	1985.10 28-Oct-85	526	623	501		526	2320	2320			526	530
1985	10	1985.10 29-Oct-85	546	566	533		546	2300	2300			546	530
1985	10	1985.10 30-Oct-85	575	596	548		575	2240	2240			575	531
1985	10	1985.10 31-Oct-85	597	621	570		597	2170	2170			597	533
1985	11	1985.11 1-Nov-85	625	637	614		625	2120	2120			625	535
1985	11	1985.11 2-Nov-85	627	638	619		627	2100	2100			627	539
1985	11	1985.11 3-Nov-85	627	639	618		627	2080	2080			627	548
1985	11	1985.11 4-Nov-85	640	651	627		640	2060	2060			640	556
1985	11	1985.11 5-Nov-85	645	658	626		645	2040	2040			645	561
1985	11	1985.11 6-Nov-85	651	659	641		651	2010	2010			651	566
1985	11	1985.11 7-Nov-85	692	718	653		692	1940	1940			692	572
1985	11	1985.11 8-Nov-85	729	746	708		729	1840	1840			729	578
1985	11	1985.11 9-Nov-85	736	752	719		736	1800	1800			736	584
1985	11	1985.11 10-Nov-85	739	748	723		739	1790	1790			739	590
1985	11	1985.11 11-Nov-85	714	729	700		714	1790	1790			714	595
1985	11	1985.11 12-Nov-85	692	718	664		692	1800	1800			692	599
1985	11	1985.11 13-Nov-85	683	708	659		683	1810	1810			683	604
1985	11	1985.11 14-Nov-85	707	725	689		707	1810	1810			707	611
1985	11	1985.11 15-Nov-85	702	715	688		702	1810	1810			702	616
1985	11	1985.11 16-Nov-85	695	703	686		695	1780	1780			695	621
1985	11	1985.11 17-Nov-85	715	730	700		715	1760	1760			715	629
1985	11	1985.11 18-Nov-85	743	764	724		743	1740	1740			743	638
1985	11	1985.11 19-Nov-85	756	776	738		756	1710	1710			756	645
1985	11	1985.11 20-Nov-85	733	741	720		733	1670	1670			733	651
1985	11	1985.11 21-Nov-85	742	755	727		742	1630	1630			742	658
1985	11	1985.11 22-Nov-85	771	874	751		771	1630	1630			771	666
1985	11	1985.11 23-Nov-85	758	763	755		758	1790	1790			758	673
1985	11	1985.11 24-Nov-85	764	772	759		764	2000	2000			764	678
1985	11	1985.11 25-Nov-85	700					2150	2150			700	680
1985	11	1985.11 26-Nov-85	700					2170	2170			700	684
1985	11	1985.11 27-Nov-85	625	641	605		625	2170	2170			625	688
1985	11	1985.11 28-Nov-85	653	675	631		653	2190	2190			653	691
1985	11	1985.11 29-Nov-85	629	651	615		629	2280	2280			629	693
1985	11	1985.11 30-Nov-85	607	625	581		607	2400	2400			607	693
1985	12	1985.12 1-Dec-85	584	620	555		584	2500	2500			584	692
1985	12	1985.12 2-Dec-85	649	676	622		649	2580	2580			649	693
1985	12	1985.12 3-Dec-85	627	652	603		627	2620	2620			627	693
1985	12	1985.12 4-Dec-85	618	646	595		618	2600	2600			618	692

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1985	12	1985.12	5-Dec-85	688	715	651		688	2580	2580		688	693
1985	12	1985.12	6-Dec-85	650	696	622		650	2650	2650		650	693
1985	12	1985.12	7-Dec-85	609	629	598		609	2670	2670		609	691
1985	12	1985.12	8-Dec-85	613	623	603		613	2660	2660		613	687
1985	12	1985.12	9-Dec-85	601	613	589		601	2660	2660		601	682
1985	12	1985.12	10-Dec-85	616	638	591		616	2610	2610		616	678
1985	12	1985.12	11-Dec-85	678	703	644		678	2380	2380		678	677
1985	12	1985.12	12-Dec-85	721	747	699		721	2200	2200		721	678
1985	12	1985.12	13-Dec-85	797	849	746		797	2040	2040		797	682
1985	12	1985.12	14-Dec-85	880	899	857		880	1950	1950		880	687
1985	12	1985.12	15-Dec-85	890	899	882		890	1880	1880		890	694
1985	12	1985.12	16-Dec-85	909	939	881		909	1840	1840		909	701
1985	12	1985.12	17-Dec-85	947	962	933		947	1830	1830		947	709
1985	12	1985.12	18-Dec-85	963	976	953		963	1820	1820		963	716
1985	12	1985.12	19-Dec-85	952	957	948		952	1800	1800		952	722
1985	12	1985.12	20-Dec-85	952	967	939		952	1770	1770		952	730
1985	12	1985.12	21-Dec-85	947	953	935		947	1750	1750		947	737
1985	12	1985.12	22-Dec-85	920	954	881		920	1780	1780		920	742
1985	12	1985.12	23-Dec-85	766	874	707		766	1930	1930		766	742
1985	12	1985.12	24-Dec-85	756	788	723		756	1960	1960		756	742
1985	12	1985.12	25-Dec-85	740	794	703		740	2070	2070		740	743
1985	12	1985.12	26-Dec-85	713	733	700		713	2100	2100		713	743
1985	12	1985.12	27-Dec-85	757	789	720		757	2040	2040		757	748
1985	12	1985.12	28-Dec-85	733	797	695		733	2070	2070		733	750
1985	12	1985.12	29-Dec-85	610	710	562		610	2380	2380		610	750
1985	12	1985.12	30-Dec-85	595	643	565		595	2440	2440		595	749
1985	12	1985.12	31-Dec-85	702	744	643		702	2200	2200		702	753
1986	1	1986.01	1-Jan-86	636	651	626		636	2360	2360		636	753
1986	1	1986.01	2-Jan-86	664	704	650		664	2330	2330		664	754
1986	1	1986.01	3-Jan-86	807	874	711		807	1980	1980		807	760
1986	1	1986.01	4-Jan-86	835	873	796		835	1950	1950		835	765
1986	1	1986.01	5-Jan-86	784	806	770		784	2000	2000		784	770
1986	1	1986.01	6-Jan-86	793	834	758		793	1920	1920		793	776
1986	1	1986.01	7-Jan-86	903	962	838		903	1810	1810		903	786
1986	1	1986.01	8-Jan-86	875	965	822		875	1920	1920		875	795
1986	1	1986.01	9-Jan-86	798	853	763		798	2010	2010		798	801
1986	1	1986.01	10-Jan-86	804	821	781		804	1990	1990		804	805
1986	1	1986.01	11-Jan-86	799	812	791		799	1960	1960		799	808
1986	1	1986.01	12-Jan-86	792	800	784		792	1930	1930		792	807
1986	1	1986.01	13-Jan-86	831	879	800		831	1870	1870		831	806
1986	1	1986.01	14-Jan-86	947	1004	887		947	1740	1740		947	808
1986	1	1986.01	15-Jan-86	935	1005	884		935	1910	1910		935	809
1986	1	1986.01	16-Jan-86	870	896	834		870	2060	2060		870	806
1986	1	1986.01	17-Jan-86	649	834	499		649	2240	2240		649	796
1986	1	1986.01	18-Jan-86	531	550	515		531	2200	2200		531	781
1986	1	1986.01	19-Jan-86	540	555	514		540	2190	2190		540	768
1986	1	1986.01	20-Jan-86	519	544	485		519	2130	2130		519	753
1986	1	1986.01	21-Jan-86	504	520	470		504	2040	2040		504	740
1986	1	1986.01	22-Jan-86	749	955	484		749	2060	2060		749	739
1986	1	1986.01	23-Jan-86	873	891	854		873	2190	2190		873	743
1986	1	1986.01	24-Jan-86	900	923	884		900	2190	2190		900	748
1986	1	1986.01	25-Jan-86	958	985	920		958	2000	2000		958	756
1986	1	1986.01	26-Jan-86	994	1016	960		994	1920	1920		994	764
1986	1	1986.01	27-Jan-86	933	956	919		933	2050	2050		933	771
1986	1	1986.01	28-Jan-86	949	970	921		949	2030	2030		949	782
1986	1	1986.01	29-Jan-86	884	955	826		884	2130	2130		884	792
1986	1	1986.01	30-Jan-86	827	843	802		827	2260	2260		827	796
1986	1	1986.01	31-Jan-86	798	827	763		798	2480	2480		798	802
1986	2	1986.02	1-Feb-86	723	756	696		723	2670	2670		723	803
1986	2	1986.02	2-Feb-86	764	794	722		764	2730	2730		764	802
1986	2	1986.02	3-Feb-86	793	808	775		793	2780	2780		793	801
1986	2	1986.02	4-Feb-86	797	815	771		797	2820	2820		797	801
1986	2	1986.02	5-Feb-86	660	798	610		660	3330	3330		660	797
1986	2	1986.02	6-Feb-86	642	659	621		642	3260	3260		642	788
1986	2	1986.02	7-Feb-86	588	622	562		588	3060	3060		588	778
1986	2	1986.02	8-Feb-86	593	622	574		593	2820	2820		593	772
1986	2	1986.02	9-Feb-86	651	676	620		651	2510	2510		651	766
1986	2	1986.02	10-Feb-86	716	770	677		716	2300	2300		716	764
1986	2	1986.02	11-Feb-86	829	865	774		829	2080	2080		829	765
1986	2	1986.02	12-Feb-86	771	860	722		771	2280	2280		771	763
1986	2	1986.02	13-Feb-86	713	733	703		713	2550	2550		713	755
1986	2	1986.02	14-Feb-86	611	710	478		611	3740	3740		611	744
1986	2	1986.02	15-Feb-86	613	709	497		613	4460	4460		613	736
1986	2	1986.02	16-Feb-86	474	582	424		474	5000	5000		474	730
1986	2	1986.02	17-Feb-86	467	487	435		467	5320	5320		467	728
1986	2	1986.02	18-Feb-86	310	429	229		310	8110	8110		310	720

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1986	2	1986.02 19-Feb-86	248	261	236		248	11400	11400			248	711
1986	2	1986.02 20-Feb-86	233				233	13900	13900			233	702
1986	2	1986.02 21-Feb-86	227				227	15300	15300			227	685
1986	2	1986.02 22-Feb-86	219				219	16000	16000			219	663
1986	2	1986.02 23-Feb-86	206				206	19900	19900			206	640
1986	2	1986.02 24-Feb-86	197				197	22900	22900			197	614
1986	2	1986.02 25-Feb-86	191				191	22700	22700			191	588
1986	2	1986.02 26-Feb-86	189				189	21300	21300			189	563
1986	2	1986.02 27-Feb-86	187	194	180		187	20400	20400			187	537
1986	2	1986.02 28-Feb-86	192	212	178		192	19200	19200			192	514
1986	3	1986.03 1-Mar-86	215	220	213		215	18100	18100			215	494
1986	3	1986.03 2-Mar-86	222	230	216		222	16900	16900			222	475
1986	3	1986.03 3-Mar-86	227	243	216		227	15800	15800			227	458
1986	3	1986.03 4-Mar-86	219	224	211		219	14700	14700			219	440
1986	3	1986.03 5-Mar-86	206	211	199		206	13900	13900			206	420
1986	3	1986.03 6-Mar-86	191	198	182		191	13500	13500			191	400
1986	3	1986.03 7-Mar-86	174	181	167		174	13300	13300			174	384
1986	3	1986.03 8-Mar-86	152	165	139		152	13600	13600			152	368
1986	3	1986.03 9-Mar-86	133	140	117		133	14600	14600			133	353
1986	3	1986.03 10-Mar-86	139	149	114		139	16400	16400			139	337
1986	3	1986.03 11-Mar-86	153	169	137		153	17300	17300			153	321
1986	3	1986.03 12-Mar-86	150	158	133		150	19800	19800			150	302
1986	3	1986.03 13-Mar-86	108	131	89		108	24100	24100			108	278
1986	3	1986.03 14-Mar-86	77	88	67		77	27700	27700			77	255
1986	3	1986.03 15-Mar-86	62	68	58		62	30600	30600			62	233
1986	3	1986.03 16-Mar-86	63	67	59		63	33000	33000			63	215
1986	3	1986.03 17-Mar-86	93	118	65		93	35800	35800			93	197
1986	3	1986.03 18-Mar-86	132	164	98		132	36400	36400			132	186
1986	3	1986.03 19-Mar-86	152	157	147		152	36600	36600			152	176
1986	3	1986.03 20-Mar-86	155	161	149		155	36000	36000			155	170
1986	3	1986.03 21-Mar-86	163	169	157		163	34600	34600			163	168
1986	3	1986.03 22-Mar-86	169	175	162		169	33000	33000			169	165
1986	3	1986.03 23-Mar-86	172	176	167		172	31800	31800			172	164
1986	3	1986.03 24-Mar-86	182	192	170		182	30800	30800			182	162
1986	3	1986.03 25-Mar-86	191	196	185		191	29900	29900			191	162
1986	3	1986.03 26-Mar-86	192	196	187		192	29300	29300			192	162
1986	3	1986.03 27-Mar-86	193	198	190		193	28800	28800			193	162
1986	3	1986.03 28-Mar-86	199	202	194		199	28400	28400			199	162
1986	3	1986.03 29-Mar-86	197	200	194		197	27800	27800			197	162
1986	3	1986.03 30-Mar-86	194	197	190		194	27000	27000			194	163
1986	3	1986.03 31-Mar-86	193	198	188		193	26600	26600			193	162
1986	4	1986.04 1-Apr-86	190	194	186		190	26200	26200			190	161
1986	4	1986.04 2-Apr-86	187	189	182		187	25300	25300			187	159
1986	4	1986.04 3-Apr-86	186	192	180		186	24800	24800			186	158
1986	4	1986.04 4-Apr-86	187	191	184		187	24500	24500			187	158
1986	4	1986.04 5-Apr-86	187	191	184		187	24200	24200			187	158
1986	4	1986.04 6-Apr-86	191	196	187		191	23800	23800			191	158
1986	4	1986.04 7-Apr-86	185	186	182		185	23600	23600			185	159
1986	4	1986.04 8-Apr-86	190	194	186		190	23400	23400			190	161
1986	4	1986.04 9-Apr-86	197	202	192		197	22900	22900			197	163
1986	4	1986.04 10-Apr-86	195	200	191		195	22300	22300			195	164
1986	4	1986.04 11-Apr-86	189				189	22000	22000			189	166
1986	4	1986.04 12-Apr-86	181				181	21800	21800			181	168
1986	4	1986.04 13-Apr-86	181	185	176		181	21700	21700			181	172
1986	4	1986.04 14-Apr-86	188	197	182		188	21500	21500			188	176
1986	4	1986.04 15-Apr-86	185	187	180		185	21200	21200			185	180
1986	4	1986.04 16-Apr-86	184	187	178		184	20900	20900			184	183
1986	4	1986.04 17-Apr-86	187	192	183		187	20400	20400			187	185
1986	4	1986.04 18-Apr-86	192	197	187		192	19500	19500			192	186
1986	4	1986.04 19-Apr-86	197	203	190		197	18900	18900			197	187
1986	4	1986.04 20-Apr-86	202	208	193		202	18300	18300			202	189
1986	4	1986.04 21-Apr-86	199	220	176		199	17600	17600			199	190
1986	4	1986.04 22-Apr-86	182	189	174		182	16700	16700			182	190
1986	4	1986.04 23-Apr-86	191	195	186		191	15700	15700			191	190
1986	4	1986.04 24-Apr-86	197	202	191		197	14800	14800			197	191
1986	4	1986.04 25-Apr-86	200	203	197		200	14000	14000			200	191
1986	4	1986.04 26-Apr-86	201	205	196		201	13500	13500			201	191
1986	4	1986.04 27-Apr-86	211	220	201		211	13000	13000			211	192
1986	4	1986.04 28-Apr-86	228	234	220		228	12300	12300			228	193
1986	4	1986.04 29-Apr-86	228	234	224		228	11700	11700			228	194
1986	4	1986.04 30-Apr-86	224	228	217		224	11200	11200			224	195
1986	5	1986.05 1-May-86	232	247	216		232	10900	10900			232	196
1986	5	1986.05 2-May-86	245	249	241		245	10800	10800			245	198
1986	5	1986.05 3-May-86	239	242	232		239	10700	10700			239	200
1986	5	1986.05 4-May-86	215	231	201		215	10700	10700			215	201
1986	5	1986.05 5-May-86	216	232	200		216	10600	10600			216	202

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1986	5	1986.05 6-May-86	241	248	231		241	10300	10300			241	203
1986	5	1986.05 7-May-86	248	254	243		248	10200	10200			248	206
1986	5	1986.05 8-May-86	247	252	241		247	10000	10000			247	207
1986	5	1986.05 9-May-86	259	266	253		259	9860	9860			259	209
1986	5	1986.05 10-May-86	247	253	239		247	9920	9920			247	211
1986	5	1986.05 11-May-86	237	245	231		237	9930	9930			237	213
1986	5	1986.05 12-May-86	240	245	233		240	9940	9940			240	215
1986	5	1986.05 13-May-86	228	235	219		228	9720	9720			228	216
1986	5	1986.05 14-May-86	220	223	216		220	9470	9470			220	217
1986	5	1986.05 15-May-86	226	234	216		226	9240	9240			226	219
1986	5	1986.05 16-May-86	236	244	227		236	9010	9010			236	221
1986	5	1986.05 17-May-86	256	268	240		256	8640	8640			256	223
1986	5	1986.05 18-May-86	277	287	266		277	8350	8350			277	226
1986	5	1986.05 19-May-86	290	299	281		290	8180	8180			290	229
1986	5	1986.05 20-May-86	301	310	291		301	7970	7970			301	232
1986	5	1986.05 21-May-86	320	328	308		320	7540	7540			320	236
1986	5	1986.05 22-May-86	329	333	323		329	7130	7130			329	241
1986	5	1986.05 23-May-86	322	329	317		322	7000	7000			322	245
1986	5	1986.05 24-May-86	331	337	324		331	7010	7010			331	250
1986	5	1986.05 25-May-86	332	340	325		332	6960	6960			332	254
1986	5	1986.05 26-May-86	331	339	317		331	6990	6990			331	259
1986	5	1986.05 27-May-86	329	348	314		329	6810	6810			329	262
1986	5	1986.05 28-May-86	331	336	321		331	6690	6690			331	266
1986	5	1986.05 29-May-86	309	324	284		309	6840	6840			309	269
1986	5	1986.05 30-May-86	280	287	274		280	7140	7140			280	270
1986	5	1986.05 31-May-86	279	288	269		279	7140	7140			279	272
1986	6	1986.06 1-Jun-86	262	270	251		262	7220	7220			262	273
1986	6	1986.06 2-Jun-86	247	254	240		247	7310	7310			247	273
1986	6	1986.06 3-Jun-86	254	259	247		254	7290	7290			254	274
1986	6	1986.06 4-Jun-86	253	265	246		253	7370	7370			253	275
1986	6	1986.06 5-Jun-86	251	257	244		251	7310	7310			251	276
1986	6	1986.06 6-Jun-86	250	255	241		250	7210	7210			250	276
1986	6	1986.06 7-Jun-86	241	247	235		241	7320	7320			241	276
1986	6	1986.06 8-Jun-86	251	257	241		251	7410	7410			251	275
1986	6	1986.06 9-Jun-86	247	253	239		247	7500	7500			247	275
1986	6	1986.06 10-Jun-86	245	260	233		245	7460	7460			245	276
1986	6	1986.06 11-Jun-86	243	246	238		243	7490	7490			243	276
1986	6	1986.06 12-Jun-86	241	246	227		241	7630	7630			241	276
1986	6	1986.06 13-Jun-86	229	236	221		229	7780	7780			229	276
1986	6	1986.06 14-Jun-86	230	234	228		230	7830	7830			230	277
1986	6	1986.06 15-Jun-86	244	255	229		244	7510	7510			244	277
1986	6	1986.06 16-Jun-86	257	267	247		257	7240	7240			257	277
1986	6	1986.06 17-Jun-86	271	281	263		271	6920	6920			271	277
1986	6	1986.06 18-Jun-86	290	297	279		290	6730	6730			290	277
1986	6	1986.06 19-Jun-86	320	335	294		320	6290	6290			320	277
1986	6	1986.06 20-Jun-86	333	355	312		333	5790	5790			333	278
1986	6	1986.06 21-Jun-86	405	444	360		405	5070	5070			405	280
1986	6	1986.06 22-Jun-86	467	484	444		467	4680	4680			467	285
1986	6	1986.06 23-Jun-86	497	523	468		497	4550	4550			497	291
1986	6	1986.06 24-Jun-86	518	531	507		518	4310	4310			518	297
1986	6	1986.06 25-Jun-86	525	538	512		525	4180	4180			525	303
1986	6	1986.06 26-Jun-86	537	545	527		537	4060	4060			537	310
1986	6	1986.06 27-Jun-86	515	536	507		515	3980	3980			515	316
1986	6	1986.06 28-Jun-86	519	530	502		519	3820	3820			519	323
1986	6	1986.06 29-Jun-86	539	555	514		539	3820	3820			539	332
1986	6	1986.06 30-Jun-86	541	557	518		541	3920	3920			541	341
1986	7	1986.07 1-Jul-86	551	559	538		551	3780	3780			551	350
1986	7	1986.07 2-Jul-86	567	582	545		567	3490	3490			567	361
1986	7	1986.07 3-Jul-86	577	598	564		577	3420	3420			577	372
1986	7	1986.07 4-Jul-86	566	576	557		566	3580	3580			566	382
1986	7	1986.07 5-Jul-86	554	563	546		554	3710	3710			554	392
1986	7	1986.07 6-Jul-86	572	599	541		572	3660	3660			572	403
1986	7	1986.07 7-Jul-86	569	588	533		569	3610	3610			569	414
1986	7	1986.07 8-Jul-86	541	554	526		541	3480	3480			541	424
1986	7	1986.07 9-Jul-86	540	563	513		540	3250	3250			540	433
1986	7	1986.07 10-Jul-86	562	573	547		562	3210	3210			562	444
1986	7	1986.07 11-Jul-86	560	591	535		560	3170	3170			560	455
1986	7	1986.07 12-Jul-86	596	613	581		596	2860	2860			596	466
1986	7	1986.07 13-Jul-86	626	646	596		626	2760	2760			626	480
1986	7	1986.07 14-Jul-86	639	666	623		639	2780	2780			639	493
1986	7	1986.07 15-Jul-86	629	648	607		629	2540	2540			629	506
1986	7	1986.07 16-Jul-86	662	689	634		662	2420	2420			662	520
1986	7	1986.07 17-Jul-86	635	653	610		635	2320	2320			635	532
1986	7	1986.07 18-Jul-86	626	652	599		626	2250	2250			626	543
1986	7	1986.07 19-Jul-86	678	703	649		678	2220	2220			678	555
1986	7	1986.07 20-Jul-86	682	697	667		682	2290	2290			682	567

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1986	7	1986.07 21-Jul-86	679	696	658		679	2410	2410			679	576
1986	7	1986.07 22-Jul-86	640	655	624		640	2490	2490			640	581
1986	7	1986.07 23-Jul-86	626	651	612		626	2380	2380			626	586
1986	7	1986.07 24-Jul-86	634	653	615		634	2440	2440			634	590
1986	7	1986.07 25-Jul-86	626	634	615		626	2640	2640			626	593
1986	7	1986.07 26-Jul-86	606	626	594		606	2780	2780			606	595
1986	7	1986.07 27-Jul-86	598	607	590		598	2850	2850			598	598
1986	7	1986.07 28-Jul-86	599	611	584		599	2870	2870			599	601
1986	7	1986.07 29-Jul-86	599	609	584		599	2750	2750			599	603
1986	7	1986.07 30-Jul-86	606	626	585		606	2700	2700			606	605
1986	7	1986.07 31-Jul-86	626	647	607		626	2600	2600			626	607
1986	8	1986.08 1-Aug-86	636	656	614		636	2550	2550			636	610
1986	8	1986.08 2-Aug-86	621	633	607		621	2610	2610			621	611
1986	8	1986.08 3-Aug-86	571	600	545		571	2990	2990			571	611
1986	8	1986.08 4-Aug-86	523	539	513		523	3250	3250			523	610
1986	8	1986.08 5-Aug-86	515	523	507		515	2970	2970			515	608
1986	8	1986.08 6-Aug-86	517	536	497		517	3000	3000			517	607
1986	8	1986.08 7-Aug-86	507	527	492		507	3040	3040			507	605
1986	8	1986.08 8-Aug-86	510	527	494		510	2980	2980			510	604
1986	8	1986.08 9-Aug-86	497	512	483		497	3080	3080			497	602
1986	8	1986.08 10-Aug-86	496	506	486		496	3150	3150			496	600
1986	8	1986.08 11-Aug-86	506	533	480		506	3250	3250			506	597
1986	8	1986.08 12-Aug-86	504	520	483		504	3210	3210			504	593
1986	8	1986.08 13-Aug-86	518	547	481		518	3010	3010			518	589
1986	8	1986.08 14-Aug-86	520	540	483		520	3070	3070			520	585
1986	8	1986.08 15-Aug-86	479	490	467		479	3070	3070			479	579
1986	8	1986.08 16-Aug-86	504	527	481		504	3100	3100			504	575
1986	8	1986.08 17-Aug-86	518				518	3230	3230			518	571
1986	8	1986.08 18-Aug-86	517				517	3310	3310			517	566
1986	8	1986.08 19-Aug-86	497	518	473		497	3160	3160			497	560
1986	8	1986.08 20-Aug-86	476	481	471		476	3210	3210			476	553
1986	8	1986.08 21-Aug-86	455	469	431		455	3380	3380			455	547
1986	8	1986.08 22-Aug-86	445	467	426		445	3390	3390			445	541
1986	8	1986.08 23-Aug-86	477	497	461		477	3390	3390			477	536
1986	8	1986.08 24-Aug-86	472	492	454		472	3490	3490			472	531
1986	8	1986.08 25-Aug-86	465	474	453		465	3520	3520			465	526
1986	8	1986.08 26-Aug-86	484	494	452		484	3300	3300			484	522
1986	8	1986.08 27-Aug-86	486	506	470		486	3280	3280			486	518
1986	8	1986.08 28-Aug-86	459	469	448		459	3340	3340			459	514
1986	8	1986.08 29-Aug-86	472	495	426		472	3390	3390			472	509
1986	8	1986.08 30-Aug-86	484	495	467		484	3450	3450			484	504
1986	8	1986.08 31-Aug-86	468	477	460		468	3510	3510			468	499
1986	9	1986.09 1-Sep-86	454	469	440		454	3600	3600			454	493
1986	9	1986.09 2-Sep-86	447	458	436		447	3510	3510			447	489
1986	9	1986.09 3-Sep-86	459	473	444		459	3450	3450			459	487
1986	9	1986.09 4-Sep-86	444	457	432		444	3540	3540			444	485
1986	9	1986.09 5-Sep-86	442	450	432		442	3580	3580			442	482
1986	9	1986.09 6-Sep-86	437	455	425		437	3550	3550			437	480
1986	9	1986.09 7-Sep-86	427	438	419		427	3560	3560			427	477
1986	9	1986.09 8-Sep-86	412	500	395		412	3790	3790			412	474
1986	9	1986.09 9-Sep-86	404				404	3650	3650			404	471
1986	9	1986.09 10-Sep-86	404	416	385		404	3620	3620			404	468
1986	9	1986.09 11-Sep-86	380	387	370		380	3660	3660			380	464
1986	9	1986.09 12-Sep-86	359	376	345		359	3840	3840			359	458
1986	9	1986.09 13-Sep-86	338	349	328		338	4040	4040			338	452
1986	9	1986.09 14-Sep-86	321	332	309		321	4190	4190			321	447
1986	9	1986.09 15-Sep-86	303	343	297		303	4370	4370			303	440
1986	9	1986.09 16-Sep-86	323	343	302		323	4100	4100			323	434
1986	9	1986.09 17-Sep-86	291	326	272		291	4640	4640			291	426
1986	9	1986.09 18-Sep-86	256	266	243		256	4980	4980			256	418
1986	9	1986.09 19-Sep-86	246	256	236		246	5200	5200			246	410
1986	9	1986.09 20-Sep-86	238				238	5160	5160			238	403
1986	9	1986.09 21-Sep-86	233				233	4920	4920			233	396
1986	9	1986.09 22-Sep-86	285	298	267		285	4550	4550			285	390
1986	9	1986.09 23-Sep-86	308	319	297		308	4110	4110			308	384
1986	9	1986.09 24-Sep-86	302	313	291		302	4320	4320			302	379
1986	9	1986.09 25-Sep-86	284	301	266		284	4730	4730			284	372
1986	9	1986.09 26-Sep-86	258	266	250		258	4900	4900			258	365
1986	9	1986.09 27-Sep-86	256	261	249		256	4840	4840			256	358
1986	9	1986.09 28-Sep-86	266	276	257		266	4700	4700			266	351
1986	9	1986.09 29-Sep-86	288	311	271		288	4410	4410			288	344
1986	9	1986.09 30-Sep-86	333	349	314		333	3910	3910			333	340
1986	10	1986.10 1-Oct-86	332	348	323		332	3840	3840			332	336
1986	10	1986.10 2-Oct-86	325	337	307		325	3860	3860			325	332
1986	10	1986.10 3-Oct-86	304	316	296		304	4040	4040			304	327
1986	10	1986.10 4-Oct-86	306	322	294		306	3950	3950			306	322

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1986	10	1986.10	5-Oct-86	311	318	304		311	3930	3930		311	318
1986	10	1986.10	6-Oct-86	317	348	298		317	3850	3850		317	314
1986	10	1986.10	7-Oct-86	363	378	349		363	3490	3490		363	312
1986	10	1986.10	8-Oct-86	337	369	320		337	3620	3620		337	309
1986	10	1986.10	9-Oct-86	330	342	325		330	3680	3680		330	307
1986	10	1986.10	10-Oct-86	325	334	318		325	3760	3760		325	304
1986	10	1986.10	11-Oct-86	317	328	304		317	3850	3850		317	302
1986	10	1986.10	12-Oct-86	314	327	301		314	3940	3940		314	300
1986	10	1986.10	13-Oct-86	326	334	313		326	3910	3910		326	300
1986	10	1986.10	14-Oct-86	355	378	332		355	3520	3520		355	301
1986	10	1986.10	15-Oct-86	361	376	350		361	3730	3730		361	303
1986	10	1986.10	16-Oct-86	311	356	267		311	4130	4130		311	303
1986	10	1986.10	17-Oct-86	267	270	263		267	4420	4420		267	302
1986	10	1986.10	18-Oct-86	267	276	257		267	4460	4460		267	302
1986	10	1986.10	19-Oct-86	255	261	248		255	3980	3980		255	302
1986	10	1986.10	20-Oct-86	261	276	245		261	3720	3720		261	303
1986	10	1986.10	21-Oct-86	289	303	276		289	3560	3560		289	305
1986	10	1986.10	22-Oct-86	313	326	302		313	3490	3490		313	306
1986	10	1986.10	23-Oct-86	316	319	312		316	3480	3480		316	306
1986	10	1986.10	24-Oct-86	315	321	313		315	3450	3450		315	307
1986	10	1986.10	25-Oct-86	318				318	3420	3420		318	308
1986	10	1986.10	26-Oct-86	314				314	3410	3410		314	310
1986	10	1986.10	27-Oct-86	342	353	333		342	3500	3500		342	313
1986	10	1986.10	28-Oct-86	326	332	323		326	3610	3610		326	315
1986	10	1986.10	29-Oct-86	333	339	328		333	3510	3510		333	316
1986	10	1986.10	30-Oct-86	343	352	329		343	3460	3460		343	316
1986	10	1986.10	31-Oct-86	357	368	344		357	3410	3410		357	317
1986	11	1986.11	1-Nov-86	361	366	357		361	3350	3350		361	318
1986	11	1986.11	2-Nov-86	379	397	361		379	3280	3280		379	321
1986	11	1986.11	3-Nov-86	411	427	393		411	3230	3230		411	324
1986	11	1986.11	4-Nov-86	423	432	418		423	3190	3190		423	328
1986	11	1986.11	5-Nov-86	426	445	413		426	3160	3160		426	332
1986	11	1986.11	6-Nov-86	423	435	412		423	3110	3110		423	334
1986	11	1986.11	7-Nov-86	422	438	411		422	3030	3030		422	337
1986	11	1986.11	8-Nov-86	430	446	419		430	3000	3000		430	340
1986	11	1986.11	9-Nov-86	427	446	414		427	3010	3010		427	343
1986	11	1986.11	10-Nov-86	431	456	388		431	3020	3020		431	347
1986	11	1986.11	11-Nov-86	435				435	3020	3020		435	351
1986	11	1986.11	12-Nov-86	439				439	2990	2990		439	355
1986	11	1986.11	13-Nov-86	420	436	402		420	2960	2960		420	357
1986	11	1986.11	14-Nov-86	411	425	403		411	2940	2940		411	359
1986	11	1986.11	15-Nov-86	427	463	400		427	2850	2850		427	363
1986	11	1986.11	16-Nov-86	481	507	464		481	2650	2650		481	370
1986	11	1986.11	17-Nov-86	441	472	420		441	2610	2610		441	376
1986	11	1986.11	18-Nov-86	506				506	2620	2620		506	384
1986	11	1986.11	19-Nov-86	501				501	2570	2570		501	392
1986	11	1986.11	20-Nov-86	500	516	491		500	2540	2540		500	399
1986	11	1986.11	21-Nov-86	496	503	489		496	2490	2490		496	405
1986	11	1986.11	22-Nov-86	489	500	482		489	2500	2500		489	411
1986	11	1986.11	23-Nov-86	484	493	474		484	2500	2500		484	417
1986	11	1986.11	24-Nov-86	491	502	453		491	2470	2470		491	422
1986	11	1986.11	25-Nov-86	499	509	491		499	2440	2440		499	428
1986	11	1986.11	26-Nov-86	501	510	490		501	2430	2430		501	434
1986	11	1986.11	27-Nov-86	497	509	486		497	2510	2510		497	439
1986	11	1986.11	28-Nov-86	470	490	463		470	2570	2570		470	444
1986	11	1986.11	29-Nov-86	466	474	457		466	2600	2600		466	448
1986	11	1986.11	30-Nov-86	458	469	446		458	2610	2610		458	452
1986	12	1986.12	1-Dec-86	459	468	452		459	2640	2640		459	455
1986	12	1986.12	2-Dec-86	441	461	402		441	2990	2990		441	457
1986	12	1986.12	3-Dec-86	380	400	368		380	3180	3180		380	456
1986	12	1986.12	4-Dec-86	380	414	374		380	3350	3350		380	454
1986	12	1986.12	5-Dec-86	371	390	356		371	3270	3270		371	453
1986	12	1986.12	6-Dec-86	408	430	387		408	2950	2950		408	452
1986	12	1986.12	7-Dec-86	452	466	432		452	2760	2760		452	453
1986	12	1986.12	8-Dec-86	502	536	472		502	2660	2660		502	455
1986	12	1986.12	9-Dec-86	510	577	327		510	2880	2880		510	458
1986	12	1986.12	10-Dec-86	303	334	266		303	4100	4100		303	454
1986	12	1986.12	11-Dec-86	295	343	259		295	4280	4280		295	449
1986	12	1986.12	12-Dec-86	285	331	250		285	4370	4370		285	444
1986	12	1986.12	13-Dec-86	276	315	241		276	4510	4510		276	439
1986	12	1986.12	14-Dec-86	276	315	234		276	4460	4460		276	435
1986	12	1986.12	15-Dec-86	330	414	263		330	3780	3780		330	432
1986	12	1986.12	16-Dec-86	447	527	297		447	3080	3080		447	430
1986	12	1986.12	17-Dec-86	283	323	249		283	4260	4260		283	425
1986	12	1986.12	18-Dec-86	295	343	255		295	4350	4350		295	418
1986	12	1986.12	19-Dec-86	280	323	247		280	4610	4610		280	411

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1986	12	1986.12	20-Dec-86	243	316	242		243	4630	4630		243	402
1986	12	1986.12	21-Dec-86	286	331	234		286	4300	4300		286	395
1986	12	1986.12	22-Dec-86	335	417	272		335	3770	3770		335	390
1986	12	1986.12	23-Dec-86	455	544	297		455	3190	3190		455	389
1986	12	1986.12	24-Dec-86	283	326	251		283	4340	4340		283	382
1986	12	1986.12	25-Dec-86	300	347	246		300	4380	4380		300	376
1986	12	1986.12	26-Dec-86	361	438	300		361	3800	3800		361	371
1986	12	1986.12	27-Dec-86	500	565	428		500	3100	3100		500	371
1986	12	1986.12	28-Dec-86	347	399	308		347	3920	3920		347	367
1986	12	1986.12	29-Dec-86	353	446	286		353	3680	3680		353	363
1986	12	1986.12	30-Dec-86	515	621	363		515	3070	3070		515	365
1986	12	1986.12	31-Dec-86	304	339	248		304	4230	4230		304	360
1987	1	1987.01	1-Jan-87	363				363	4480	4480		363	357
1987	1	1987.01	2-Jan-87	389	435	336		389	3910	3910		389	358
1987	1	1987.01	3-Jan-87	515	611	443		515	2750	2750		515	362
1987	1	1987.01	4-Jan-87	590	624	565		590	2540	2540		590	369
1987	1	1987.01	5-Jan-87	621	653	595		621	2320	2320		621	376
1987	1	1987.01	6-Jan-87	712	758	658		712	2060	2060		712	385
1987	1	1987.01	7-Jan-87	588	730	518		588	2550	2550		588	388
1987	1	1987.01	8-Jan-87	477	509	437		477	2750	2750		477	387
1987	1	1987.01	9-Jan-87	469	520	437		469	2770	2770		469	392
1987	1	1987.01	10-Jan-87	485	561	426		485	2580	2580		485	399
1987	1	1987.01	11-Jan-87	593	613	560		593	2170	2170		593	409
1987	1	1987.01	12-Jan-87	625	683	597		625	2050	2050		625	421
1987	1	1987.01	13-Jan-87	738	781	633		738	1810	1810		738	436
1987	1	1987.01	14-Jan-87	661	768	623		661	2090	2090		661	447
1987	1	1987.01	15-Jan-87	646	663	631		646	2070	2070		646	454
1987	1	1987.01	16-Jan-87	637	651	619		637	2060	2060		637	466
1987	1	1987.01	17-Jan-87	589	646	565		589	2190	2190		589	475
1987	1	1987.01	18-Jan-87	595	614	576		595	2120	2120		595	486
1987	1	1987.01	19-Jan-87	652	705	620		652	1950	1950		652	499
1987	1	1987.01	20-Jan-87	768	791	714		768	1720	1720		768	516
1987	1	1987.01	21-Jan-87	699	784	647		699	1920	1920		699	528
1987	1	1987.01	22-Jan-87	657	682	634		657	1950	1950		657	534
1987	1	1987.01	23-Jan-87	623	668	594		623	2000	2000		623	546
1987	1	1987.01	24-Jan-87	617	641	587		617	2130	2130		617	556
1987	1	1987.01	25-Jan-87	633	665	623		633	2140	2140		633	565
1987	1	1987.01	26-Jan-87	697	738	674		697	2020	2020		697	572
1987	1	1987.01	27-Jan-87	743	761	724		743	1860	1860		743	585
1987	1	1987.01	28-Jan-87	687	731	656		687	2110	2110		687	596
1987	1	1987.01	29-Jan-87	588	653	556		588	2200	2200		588	599
1987	1	1987.01	30-Jan-87	633	688	600		633	2110	2110		633	610
1987	1	1987.01	31-Jan-87	640	673	617		640	2080	2080		640	619
1987	2	1987.02	1-Feb-87	656	698	631		656	1990	1990		656	628
1987	2	1987.02	2-Feb-87	776	830	708		776	1720	1720		776	637
1987	2	1987.02	3-Feb-87	827	843	811		827	1700	1700		827	644
1987	2	1987.02	4-Feb-87	753	810	727		753	1860	1860		753	649
1987	2	1987.02	5-Feb-87	726	745	701		726	1880	1880		726	649
1987	2	1987.02	6-Feb-87	796	838	745		796	1740	1740		796	656
1987	2	1987.02	7-Feb-87	847	886	805		847	1590	1590		847	669
1987	2	1987.02	8-Feb-87	916	948	880		916	1500	1500		916	683
1987	2	1987.02	9-Feb-87	959	974	947		959	1410	1410		959	699
1987	2	1987.02	10-Feb-87	963	980	951		963	1390	1390		963	712
1987	2	1987.02	11-Feb-87	921	957	906		921	1480	1480		921	721
1987	2	1987.02	12-Feb-87	894	906	878		894	1590	1590		894	727
1987	2	1987.02	13-Feb-87	851	877	806		851	1880	1880		851	733
1987	2	1987.02	14-Feb-87	756	802	679		756	2450	2450		756	737
1987	2	1987.02	15-Feb-87	658	718	625		658	2940	2940		658	737
1987	2	1987.02	16-Feb-87	761	790	709		761	2790	2790		761	743
1987	2	1987.02	17-Feb-87	677	706	665		677	2760	2760		677	746
1987	2	1987.02	18-Feb-87	698	722	668		698	2700	2700		698	747
1987	2	1987.02	19-Feb-87	740	770	706		740	2590	2590		740	746
1987	2	1987.02	20-Feb-87	805	832	765		805	2440	2440		805	750
1987	2	1987.02	21-Feb-87	816	833	802		816	2290	2290		816	755
1987	2	1987.02	22-Feb-87	826	840	805		826	2350	2350		826	762
1987	2	1987.02	23-Feb-87	788	800	774		788	2460	2460		788	768
1987	2	1987.02	24-Feb-87	794	807	781		794	2450	2450		794	773
1987	2	1987.02	25-Feb-87	810	823	795		810	2460	2460		810	777
1987	2	1987.02	26-Feb-87	798	810	771		798	2460	2460		798	779
1987	2	1987.02	27-Feb-87	771	786	755		771	2470	2470		771	781
1987	2	1987.02	28-Feb-87	788	805	766		788	2470	2470		788	788
1987	3	1987.03	1-Mar-87	780	793	768		780	2480	2480		780	793
1987	3	1987.03	2-Mar-87	806	828	781		806	2480	2480		806	799
1987	3	1987.03	3-Mar-87	786	818	758		786	2540	2540		786	803
1987	3	1987.03	4-Mar-87	747	765	711		747	2610	2610		747	802
1987	3	1987.03	5-Mar-87	730	761	704		730	2780	2780		730	799

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1987	3	1987.03	6-Mar-87	685	724	549		685	3590	3590		685	796
1987	3	1987.03	7-Mar-87	405	528	343		405	6000	6000		405	786
1987	3	1987.03	8-Mar-87	546	571	502		546	5220	5220		546	777
1987	3	1987.03	9-Mar-87	513	528	494		513	4370	4370		513	766
1987	3	1987.03	10-Mar-87	581	639	530		581	4010	4010		581	755
1987	3	1987.03	11-Mar-87	711	764	646		711	3710	3710		711	747
1987	3	1987.03	12-Mar-87	823	887	768		823	3410	3410		823	742
1987	3	1987.03	13-Mar-87	918	940	886		918	3260	3260		918	742
1987	3	1987.03	14-Mar-87	958	983	935		958	3120	3120		958	744
1987	3	1987.03	15-Mar-87	981	992	972		981	3040	3040		981	749
1987	3	1987.03	16-Mar-87	972	983	950		972	3000	3000		972	756
1987	3	1987.03	17-Mar-87	981	1022	943		981	3050	3050		981	767
1987	3	1987.03	18-Mar-87	914	978	861		914	3180	3180		914	772
1987	3	1987.03	19-Mar-87	829	853	802		829	3340	3340		829	777
1987	3	1987.03	20-Mar-87	809	823	788		809	3360	3360		809	780
1987	3	1987.03	21-Mar-87	802	817	790		802	3320	3320		802	782
1987	3	1987.03	22-Mar-87	807	827	784		807	3370	3370		807	783
1987	3	1987.03	23-Mar-87	805	830	778		805	3380	3380		805	782
1987	3	1987.03	24-Mar-87	819	844	802		819	3480	3480		819	782
1987	3	1987.03	25-Mar-87	807	823	795		807	3510	3510		807	783
1987	3	1987.03	26-Mar-87	801	809	793		801	3470	3470		801	783
1987	3	1987.03	27-Mar-87	781	799	748		781	3430	3430		781	782
1987	3	1987.03	28-Mar-87	759	773	746		759	3400	3400		759	781
1987	3	1987.03	29-Mar-87	768	776	761		768	3370	3370		768	780
1987	3	1987.03	30-Mar-87	771	782	763		771	3310	3310		771	780
1987	3	1987.03	31-Mar-87	790	809	778		790	3260	3260		790	780
1987	4	1987.04	1-Apr-87	782	796	766		782	3190	3190		782	779
1987	4	1987.04	2-Apr-87	814	840	782		814	3170	3170		814	780
1987	4	1987.04	3-Apr-87	783	813	764		783	3310	3310		783	782
1987	4	1987.04	4-Apr-87	774	789	759		774	3370	3370		774	783
1987	4	1987.04	5-Apr-87	737	754	730		737	3350	3350		737	785
1987	4	1987.04	6-Apr-87	753	772	727		753	3320	3320		753	796
1987	4	1987.04	7-Apr-87	752	766	733		752	3250	3250		752	803
1987	4	1987.04	8-Apr-87	728	734	718		728	3180	3180		728	810
1987	4	1987.04	9-Apr-87	729	745	711		729	3130	3130		729	815
1987	4	1987.04	10-Apr-87	711	747	718		711	3100	3100		711	815
1987	4	1987.04	11-Apr-87	693	746	727		693	3080	3080		693	811
1987	4	1987.04	12-Apr-87	676	755	728		676	3090	3090		676	803
1987	4	1987.04	13-Apr-87	658	758	609		658	3100	3100		658	793
1987	4	1987.04	14-Apr-87	631	653	618		631	3040	3040		631	781
1987	4	1987.04	15-Apr-87	603	616	575		603	2940	2940		603	769
1987	4	1987.04	16-Apr-87	625	652	604		625	2790	2790		625	757
1987	4	1987.04	17-Apr-87	612	634	594		612	2720	2720		612	747
1987	4	1987.04	18-Apr-87	612	626	605		612	2760	2760		612	740
1987	4	1987.04	19-Apr-87	626	637	619		626	2710	2710		626	734
1987	4	1987.04	20-Apr-87	583	617	549		583	2760	2760		583	726
1987	4	1987.04	21-Apr-87	561	584	526		561	2690	2690		561	718
1987	4	1987.04	22-Apr-87	534	547	527		534	2580	2580		534	709
1987	4	1987.04	23-Apr-87	541	557	525		541	2440	2440		541	700
1987	4	1987.04	24-Apr-87	545	579	520		545	2400	2400		545	691
1987	4	1987.04	25-Apr-87	585	604	556		585	2420	2420		585	684
1987	4	1987.04	26-Apr-87	557	578	537		557	2430	2430		557	676
1987	4	1987.04	27-Apr-87	528	544	513		528	2490	2490		528	669
1987	4	1987.04	28-Apr-87	568	585	538		568	2470	2470		568	662
1987	4	1987.04	29-Apr-87	583	600	561		583	2390	2390		583	656
1987	4	1987.04	30-Apr-87	585	602	558		585	2340	2340		585	649
1987	5	1987.05	1-May-87	542	555	520		542	2410	2410		542	641
1987	5	1987.05	2-May-87	534	553	511		534	2510	2510		534	632
1987	5	1987.05	3-May-87	582	607	547		582	2410	2410		582	625
1987	5	1987.05	4-May-87	631	649	613		631	2380	2380		631	620
1987	5	1987.05	5-May-87	659	692	612		659	2280	2280		659	618
1987	5	1987.05	6-May-87	670	697	642		670	2180	2180		670	615
1987	5	1987.05	7-May-87	708	734	671		708	2000	2000		708	613
1987	5	1987.05	8-May-87	736	758	718		736	2000	2000		736	614
1987	5	1987.05	9-May-87	755	780	719		755	2080	2080		755	614
1987	5	1987.05	10-May-87	721	738	693		721	2190	2190		721	615
1987	5	1987.05	11-May-87	676	688	664		676	2300	2300		676	614
1987	5	1987.05	12-May-87	715	747	671		715	2220	2220		715	616
1987	5	1987.05	13-May-87	730	768	702		730	2130	2130		730	618
1987	5	1987.05	14-May-87	738	753	717		738	2090	2090		738	622
1987	5	1987.05	15-May-87	715	725	705		715	2030	2030		715	625
1987	5	1987.05	16-May-87	706	727	689		706	2050	2050		706	628
1987	5	1987.05	17-May-87	706	730	683		706	2090	2090		706	631
1987	5	1987.05	18-May-87	705				705	2220	2220		705	634
1987	5	1987.05	19-May-87	715				715	2120	2120		715	637
1987	5	1987.05	20-May-87	707	734	676		707	2050	2050		707	641

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1987	5	1987.05 21-May-87	715	725	696		715	2120	2120			715	646
1987	5	1987.05 22-May-87	699	712	676		699	2170	2170			699	652
1987	5	1987.05 23-May-87	658	675	645		658	2180	2180			658	656
1987	5	1987.05 24-May-87	664	678	652		664	2260	2260			664	660
1987	5	1987.05 25-May-87	648	677	623		648	2290	2290			648	662
1987	5	1987.05 26-May-87	659	677	637		659	2260	2260			659	665
1987	5	1987.05 27-May-87	651	659	641		651	2220	2220			651	669
1987	5	1987.05 28-May-87	657				657	2130	2130			657	672
1987	5	1987.05 29-May-87	667	679	654		667	2030	2030			667	675
1987	5	1987.05 30-May-87	683				683	2020	2020			683	678
1987	5	1987.05 31-May-87	698				698	2090	2090			698	684
1987	6	1987.06 1-Jun-87	711				711	2180	2180			711	690
1987	6	1987.06 2-Jun-87	733	765	698		733	2070	2070			733	695
1987	6	1987.06 3-Jun-87	773	799	741		773	1980	1980			773	699
1987	6	1987.06 4-Jun-87	816	842	784		816	1930	1930			816	705
1987	6	1987.06 5-Jun-87	804	823	781		804	1910	1910			804	709
1987	6	1987.06 6-Jun-87	784	812	759		784	1970	1970			784	712
1987	6	1987.06 7-Jun-87	762	778	738		762	2190	2190			762	712
1987	6	1987.06 8-Jun-87	747	784	723		747	2260	2260			747	712
1987	6	1987.06 9-Jun-87	747	763	727		747	2280	2280			747	713
1987	6	1987.06 10-Jun-87	730	754	698		730	2220	2220			730	715
1987	6	1987.06 11-Jun-87	709	733	679		709	2160	2160			709	715
1987	6	1987.06 12-Jun-87	701	721	681		701	2110	2110			701	714
1987	6	1987.06 13-Jun-87	715	743	680		715	2090	2090			715	713
1987	6	1987.06 14-Jun-87	695	720	661		695	2110	2110			695	712
1987	6	1987.06 15-Jun-87	680	728	650		680	2140	2140			680	711
1987	6	1987.06 16-Jun-87	633	653	618		633	2010	2010			633	709
1987	6	1987.06 17-Jun-87	632	649	608		632	1980	1980			632	706
1987	6	1987.06 18-Jun-87	672	711	616		672	1900	1900			672	705
1987	6	1987.06 19-Jun-87	686	705	665		686	1880	1880			686	704
1987	6	1987.06 20-Jun-87	665	678	632		665	1960	1960			665	703
1987	6	1987.06 21-Jun-87	639	671	610		639	2010	2010			639	701
1987	6	1987.06 22-Jun-87	677	722	638		677	2010	2010			677	701
1987	6	1987.06 23-Jun-87	762	786	691		762	1890	1890			762	705
1987	6	1987.06 24-Jun-87	766	784	751		766	1840	1840			766	708
1987	6	1987.06 25-Jun-87	757	785	726		757	1850	1850			757	712
1987	6	1987.06 26-Jun-87	758	780	732		758	1730	1730			758	715
1987	6	1987.06 27-Jun-87	745	769	711		745	1710	1710			745	718
1987	6	1987.06 28-Jun-87	709	727	690		709	1760	1760			709	720
1987	6	1987.06 29-Jun-87	718	753	701		718	1820	1820			718	721
1987	6	1987.06 30-Jun-87	758	779	728		758	1750	1750			758	723
1987	7	1987.07 1-Jul-87	719	736	697		719	1680	1680			719	723
1987	7	1987.07 2-Jul-87	695	719	667		695	1730	1730			695	722
1987	7	1987.07 3-Jul-87	713	728	689		713	1710	1710			713	720
1987	7	1987.07 4-Jul-87	764	787	734		764	1650	1650			764	718
1987	7	1987.07 5-Jul-87	757	779	729		757	1750	1750			757	717
1987	7	1987.07 6-Jul-87	745	756	730		745	1780	1780			745	715
1987	7	1987.07 7-Jul-87	790	815	745		790	1670	1670			790	716
1987	7	1987.07 8-Jul-87	802	844	765		802	1600	1600			802	718
1987	7	1987.07 9-Jul-87	781	801	749		781	1610	1610			781	719
1987	7	1987.07 10-Jul-87	806	847	742		806	1560	1560			806	722
1987	7	1987.07 11-Jul-87	819	850	787		819	1540	1540			819	725
1987	7	1987.07 12-Jul-87	753	780	735		753	1610	1610			753	727
1987	7	1987.07 13-Jul-87	753	766	739		753	1620	1620			753	728
1987	7	1987.07 14-Jul-87	779	821	749		779	1580	1580			779	731
1987	7	1987.07 15-Jul-87	742	774	718		742	1450	1450			742	733
1987	7	1987.07 16-Jul-87	750	788	713		750	1410	1410			750	737
1987	7	1987.07 17-Jul-87	744	767	721		744	1390	1390			744	741
1987	7	1987.07 18-Jul-87	762	781	736		762	1350	1350			762	744
1987	7	1987.07 19-Jul-87	744	761	726		744	1530	1530			744	746
1987	7	1987.07 20-Jul-87	707	742	679		707	1670	1670			707	747
1987	7	1987.07 21-Jul-87	734	757	718		734	1660	1660			734	750
1987	7	1987.07 22-Jul-87	728	750	705		728	1680	1680			728	752
1987	7	1987.07 23-Jul-87	741	769	710		741	1640	1640			741	751
1987	7	1987.07 24-Jul-87	742	760	722		742	1710	1710			742	751
1987	7	1987.07 25-Jul-87	740					1780	1780			740	750
1987	7	1987.07 26-Jul-87	740					1850	1850			740	749
1987	7	1987.07 27-Jul-87	737	758	717		737	1860	1860			737	749
1987	7	1987.07 28-Jul-87	749	766	719		749	1720	1720			749	750
1987	7	1987.07 29-Jul-87	766	791	729		766	1670	1670			766	752
1987	7	1987.07 30-Jul-87	783	810	743		783	1620	1620			783	753
1987	7	1987.07 31-Jul-87	833	893	774		833	1510	1510			833	757
1987	8	1987.08 1-Aug-87	873	914	834		873	1510	1510			873	763
1987	8	1987.08 2-Aug-87	823	845	797		823	1650	1650			823	766
1987	8	1987.08 3-Aug-87	822	833	810		822	1650	1650			822	768
1987	8	1987.08 4-Aug-87	820	834	803		820	1540	1540			820	770

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1987	8	1987.08	5-Aug-87	800				1420	1420			800	772
1987	8	1987.08	6-Aug-87	800				1500	1500			800	772
1987	8	1987.08	7-Aug-87	787	799	763		1480	1480			787	772
1987	8	1987.08	8-Aug-87	814	840	779	814	1510	1510			814	773
1987	8	1987.08	9-Aug-87	782	810	757	782	1640	1640			782	772
1987	8	1987.08	10-Aug-87	787	817	765	787	1680	1680			787	771
1987	8	1987.08	11-Aug-87	761	775	729	761	1650	1650			761	771
1987	8	1987.08	12-Aug-87	742	765	723	742	1670	1670			742	771
1987	8	1987.08	13-Aug-87	751	778	709	751	1680	1680			751	770
1987	8	1987.08	14-Aug-87	746	763	733	746	1670	1670			746	770
1987	8	1987.08	15-Aug-87	781	821	734	781	1690	1690			781	771
1987	8	1987.08	16-Aug-87	800	828	783	800	1750	1750			800	773
1987	8	1987.08	17-Aug-87	830	855	812	830	1690	1690			830	775
1987	8	1987.08	18-Aug-87	788	846	765	788	1670	1670			788	777
1987	8	1987.08	19-Aug-87	797	813	775	797	1600	1600			797	780
1987	8	1987.08	20-Aug-87	816	857	786	816	1510	1510			816	783
1987	8	1987.08	21-Aug-87	805	823	787	805	1490	1490			805	785
1987	8	1987.08	22-Aug-87	809	852	763	809	1560	1560			809	787
1987	8	1987.08	23-Aug-87	839	865	822	839	1630	1630			839	791
1987	8	1987.08	24-Aug-87	817	866	796	817	1680	1680			817	793
1987	8	1987.08	25-Aug-87	784	794	769	784	1650	1650			784	795
1987	8	1987.08	26-Aug-87	763	783	745	763	1680	1680			763	796
1987	8	1987.08	27-Aug-87	762	784	741	762	1690	1690			762	796
1987	8	1987.08	28-Aug-87	754	776	724	754	1700	1700			754	796
1987	8	1987.08	29-Aug-87	807	839	772	807	1660	1660			807	796
1987	8	1987.08	30-Aug-87	809	829	794	809	1750	1750			809	796
1987	8	1987.08	31-Aug-87	783	811	750	783	1780	1780			783	793
1987	9	1987.09	1-Sep-87	804	829	778	804	1740	1740			804	792
1987	9	1987.09	2-Sep-87	805			805	1770	1770			805	791
1987	9	1987.09	3-Sep-87	784	801	760	784	1690	1690			784	790
1987	9	1987.09	4-Sep-87	794	803	784	794	1650	1650			794	790
1987	9	1987.09	5-Sep-87	806	818	789	806	1640	1640			806	790
1987	9	1987.09	6-Sep-87	776	805	732	776	1790	1790			776	790
1987	9	1987.09	7-Sep-87	732	767	706	732	1840	1840			732	787
1987	9	1987.09	8-Sep-87	731	757	708	731	1830	1830			731	785
1987	9	1987.09	9-Sep-87	708	715	700	708	1800	1800			708	783
1987	9	1987.09	10-Sep-87	748	777	714	748	1660	1660			748	782
1987	9	1987.09	11-Sep-87	767	798	730	767	1590	1590			767	783
1987	9	1987.09	12-Sep-87	804	838	741	804	1510	1510			804	785
1987	9	1987.09	13-Sep-87	827	850	792	827	1620	1620			827	788
1987	9	1987.09	14-Sep-87	790	812	748	790	1700	1700			790	788
1987	9	1987.09	15-Sep-87	718	756	660	718	1710	1710			718	785
1987	9	1987.09	16-Sep-87	704	738	661	704	1630	1630			704	781
1987	9	1987.09	17-Sep-87	722	748	697	722	1590	1590			722	779
1987	9	1987.09	18-Sep-87	727	766	686	727	1580	1580			727	777
1987	9	1987.09	19-Sep-87	732	749	713	732	1530	1530			732	774
1987	9	1987.09	20-Sep-87	745	766	720	745	1550	1550			745	772
1987	9	1987.09	21-Sep-87	741	759	727	741	1630	1630			741	769
1987	9	1987.09	22-Sep-87	768	808	729	768	1510	1510			768	767
1987	9	1987.09	23-Sep-87	758	777	743	758	1420	1420			758	765
1987	9	1987.09	24-Sep-87	765				1430	1430			765	764
1987	9	1987.09	25-Sep-87	765				1330	1330			765	765
1987	9	1987.09	26-Sep-87	770	791	746	770	1350	1350			770	765
1987	9	1987.09	27-Sep-87	751	789	697	751	1440	1440			751	765
1987	9	1987.09	28-Sep-87	716	732	699	716	1480	1480			716	762
1987	9	1987.09	29-Sep-87	710	733	678	710	1490	1490			710	758
1987	9	1987.09	30-Sep-87	716	756	679	716	1400	1400			716	756
1987	10	1987.10	1-Oct-87	749	783	709	749	1340	1340			749	754
1987	10	1987.10	2-Oct-87	832	879	759	832	1220	1220			832	755
1987	10	1987.10	3-Oct-87	868	905	829	868	1250	1250			868	758
1987	10	1987.10	4-Oct-87	831	848	821	831	1310	1310			831	759
1987	10	1987.10	5-Oct-87	829	857	780	829	1350	1350			829	760
1987	10	1987.10	6-Oct-87	782	790	775	782	1320	1320			782	760
1987	10	1987.10	7-Oct-87	782	808	767	782	1290	1290			782	762
1987	10	1987.10	8-Oct-87	786	822	754	786	1280	1280			786	764
1987	10	1987.10	9-Oct-87	831	875	793	831	1270	1270			831	768
1987	10	1987.10	10-Oct-87	826	871	764	826	1310	1310			826	770
1987	10	1987.10	11-Oct-87	728	759	694	728	1410	1410			728	769
1987	10	1987.10	12-Oct-87	770	794	726	770	1440	1440			770	768
1987	10	1987.10	13-Oct-87	699	719	652	699	1470	1470			699	764
1987	10	1987.10	14-Oct-87	643	663	614	643	1500	1500			643	759
1987	10	1987.10	15-Oct-87	633	666	589	633	1500	1500			633	756
1987	10	1987.10	16-Oct-87	612	651	571	612	1540	1540			612	753
1987	10	1987.10	17-Oct-87	665	730	621	665	1490	1490			665	751
1987	10	1987.10	18-Oct-87	647	677	618	647	1470	1470			647	748
1987	10	1987.10	19-Oct-87	679	711	630	679	1380	1380			679	747

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1987	10	1987.10 20-Oct-87	719	749	694		719	1340	1340			719	746
1987	10	1987.10 21-Oct-87	751	772	724		751	1330	1330			751	746
1987	10	1987.10 22-Oct-87	760	775	747		760	1310	1310			760	746
1987	10	1987.10 23-Oct-87	785	802	769		785	1310	1310			785	747
1987	10	1987.10 24-Oct-87	799	812	785		799	1300	1300			799	748
1987	10	1987.10 25-Oct-87	805				805	1330	1330			805	749
1987	10	1987.10 26-Oct-87	804	818	792		804	1340	1340			804	750
1987	10	1987.10 27-Oct-87	814	833	793		814	1330	1330			814	752
1987	10	1987.10 28-Oct-87	825	838	819		825	1400	1400			825	756
1987	10	1987.10 29-Oct-87	848	867	826		848	1410	1410			848	761
1987	10	1987.10 30-Oct-87	852	862	845		852	1440	1440			852	765
1987	10	1987.10 31-Oct-87	828	843	818		828	1480	1480			828	768
1987	11	1987.11 1-Nov-87	813	821	802		813	1520	1520			813	767
1987	11	1987.11 2-Nov-87	818	834	801		818	1550	1550			818	765
1987	11	1987.11 3-Nov-87	836	857	818		836	1570	1570			836	766
1987	11	1987.11 4-Nov-87	863	899	825		863	1570	1570			863	767
1987	11	1987.11 5-Nov-87	885	897	878		885	1560	1560			885	770
1987	11	1987.11 6-Nov-87	877	883	869		877	1540	1540			877	773
1987	11	1987.11 7-Nov-87	871	881	860		871	1520	1520			871	776
1987	11	1987.11 8-Nov-87	862	881	758		862	1500	1500			862	777
1987	11	1987.11 9-Nov-87	838	861	826		838	1480	1480			838	778
1987	11	1987.11 10-Nov-87	832	856	815		832	1480	1480			832	781
1987	11	1987.11 11-Nov-87	813	833	792		813	1480	1480			813	783
1987	11	1987.11 12-Nov-87	807	818	795		807	1470	1470			807	786
1987	11	1987.11 13-Nov-87	809	822	797		809	1470	1470			809	792
1987	11	1987.11 14-Nov-87	786	802	764		786	1490	1490			786	797
1987	11	1987.11 15-Nov-87	763	778	740		763	1500	1500			763	802
1987	11	1987.11 16-Nov-87	808	841	779		808	1500	1500			808	807
1987	11	1987.11 17-Nov-87	789	812	767		789	1560	1560			789	811
1987	11	1987.11 18-Nov-87	765	772	755		765	1640	1640			765	814
1987	11	1987.11 19-Nov-87	763	780	747		763	1620	1620			763	816
1987	11	1987.11 20-Nov-87	768	787	749		768	1590	1590			768	816
1987	11	1987.11 21-Nov-87	778	874	754		778	1580	1580			778	817
1987	11	1987.11 22-Nov-87	771	781	758		771	1580	1580			771	816
1987	11	1987.11 23-Nov-87	778	796	761		778	1580	1580			778	816
1987	11	1987.11 24-Nov-87	780	798	767		780	1580	1580			780	815
1987	11	1987.11 25-Nov-87	774	791	753		774	1570	1570			774	814
1987	11	1987.11 26-Nov-87	786	808	754		786	1570	1570			786	813
1987	11	1987.11 27-Nov-87	804	824	776		804	1590	1590			804	812
1987	11	1987.11 28-Nov-87	814	833	796		814	1600	1600			814	811
1987	11	1987.11 29-Nov-87	801	821	786		801	1600	1600			801	809
1987	11	1987.11 30-Nov-87	753	791	735		753	1580	1580			753	807
1987	12	1987.12 1-Dec-87	734	743	725		734	1560	1560			734	804
1987	12	1987.12 2-Dec-87	753	773	733		753	1530	1530			753	802
1987	12	1987.12 3-Dec-87	790	819	765		790	1500	1500			790	801
1987	12	1987.12 4-Dec-87	843	855	819		843	1420	1420			843	800
1987	12	1987.12 5-Dec-87	843	855	823		843	1430	1430			843	798
1987	12	1987.12 6-Dec-87	863	874	832		863	1390	1390			863	798
1987	12	1987.12 7-Dec-87	894	929	864		894	1350	1350			894	799
1987	12	1987.12 8-Dec-87	906	914	893		906	1350	1350			906	800
1987	12	1987.12 9-Dec-87	893	916	871		893	1350	1350			893	802
1987	12	1987.12 10-Dec-87	892	908	870		892	1350	1350			892	804
1987	12	1987.12 11-Dec-87	902	913	891		902	1300	1300			902	807
1987	12	1987.12 12-Dec-87	908	931	894		908	1250	1250			908	810
1987	12	1987.12 13-Dec-87	903	927	885		903	1250	1250			903	814
1987	12	1987.12 14-Dec-87	909	927	890		909	1240	1240			909	818
1987	12	1987.12 15-Dec-87	926	942	910		926	1240	1240			926	823
1987	12	1987.12 16-Dec-87	931	941	925		931	1240	1240			931	827
1987	12	1987.12 17-Dec-87	921	933	912		921	1260	1260			921	832
1987	12	1987.12 18-Dec-87	938	967	905		938	1250	1250			938	837
1987	12	1987.12 19-Dec-87	985	1013	964		985	1220	1220			985	845
1987	12	1987.12 20-Dec-87	1002	1020	985		1002	1170	1170			1002	853
1987	12	1987.12 21-Dec-87	1027	1047	1002		1027	1160	1160			1027	861
1987	12	1987.12 22-Dec-87	989	1006	980		989	1160	1160			989	868
1987	12	1987.12 23-Dec-87	976	991	959		976	1150	1150			976	875
1987	12	1987.12 24-Dec-87	941	959	928		941	1150	1150			941	880
1987	12	1987.12 25-Dec-87	936	963	914		936	1150	1150			936	885
1987	12	1987.12 26-Dec-87	934				934	1150	1150			934	890
1987	12	1987.12 27-Dec-87	933	944	920		933	1120	1120			933	895
1987	12	1987.12 28-Dec-87	923	939	905		923	1130	1130			923	898
1987	12	1987.12 29-Dec-87	885	935	868		885	1240	1240			885	901
1987	12	1987.12 30-Dec-87	851	866	833		851	1260	1260			851	904
1987	12	1987.12 31-Dec-87	870	883	863		870	1300	1300			870	909
1988	1	1988.01 1-Jan-88	905	915	881		905	1360	1360			905	914
1988	1	1988.01 2-Jan-88	893	913	878		893	1380	1380			893	917
1988	1	1988.01 3-Jan-88	875	905	851		875	1360	1360			875	918

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1988	1	1988.01	4-Jan-88	916	935	895		916	1320	1320		916	921
1988	1	1988.01	5-Jan-88	958	977	928		958	1280	1280		958	924
1988	1	1988.01	6-Jan-88	972	983	962		972	1260	1260		972	927
1988	1	1988.01	7-Jan-88	959	976	947		959	1280	1280		959	928
1988	1	1988.01	8-Jan-88	978	994	959		978	1330	1330		978	931
1988	1	1988.01	9-Jan-88	949	963	942		949	1380	1380		949	933
1988	1	1988.01	10-Jan-88	971	987	956		971	1320	1320		971	935
1988	1	1988.01	11-Jan-88	1014	1031	992		1014	1240	1240		1014	939
1988	1	1988.01	12-Jan-88	1060	1100	1027		1060	1190	1190		1060	944
1988	1	1988.01	13-Jan-88	1098	1123	1064		1098	1180	1180		1098	951
1988	1	1988.01	14-Jan-88	1167	1246	1106		1167	1220	1220		1167	959
1988	1	1988.01	15-Jan-88	1246	1259	1226		1246	1270	1270		1246	969
1988	1	1988.01	16-Jan-88	1220	1236	1198		1220	1330	1330		1220	979
1988	1	1988.01	17-Jan-88	1185	1228	1140		1185	1450	1450		1185	987
1988	1	1988.01	18-Jan-88	1096	1173	1001		1096	1780	1780		1096	991
1988	1	1988.01	19-Jan-88	911	984	887		911	2260	2260		911	988
1988	1	1988.01	20-Jan-88	954	992	901		954	2100	2100		954	986
1988	1	1988.01	21-Jan-88	1024	1082	970		1024	1910	1910		1024	987
1988	1	1988.01	22-Jan-88	1096	1124	1060		1096	1770	1770		1096	991
1988	1	1988.01	23-Jan-88	1166	1201	1120		1166	1690	1690		1166	998
1988	1	1988.01	24-Jan-88	1219	1253	1175		1219	1610	1610		1219	1008
1988	1	1988.01	25-Jan-88	1290	1333	1245		1290	1550	1550		1290	1019
1988	1	1988.01	26-Jan-88	1335	1357	1316		1335	1510	1510		1335	1033
1988	1	1988.01	27-Jan-88	1313	1330	1299		1313	1510	1510		1313	1046
1988	1	1988.01	28-Jan-88	1363	1406	1321		1363	1510	1510		1363	1062
1988	1	1988.01	29-Jan-88	1379	1396	1358		1379	1520	1520		1379	1079
1988	1	1988.01	30-Jan-88	1340	1386	1292		1340	1540	1540		1340	1095
1988	1	1988.01	31-Jan-88	1324	1346	1298		1324	1550	1550		1324	1109
1988	2	1988.02	1-Feb-88	1339	1361	1306		1339	1550	1550		1339	1124
1988	2	1988.02	2-Feb-88	1356	1375	1337		1356	1550	1550		1356	1140
1988	2	1988.02	3-Feb-88	1346	1371	1322		1346	1540	1540		1346	1154
1988	2	1988.02	4-Feb-88	1302	1323	1268		1302	1500	1500		1302	1166
1988	2	1988.02	5-Feb-88	1320	1353	1294		1320	1470	1470		1320	1177
1988	2	1988.02	6-Feb-88	1334	1360	1298		1334	1460	1460		1334	1190
1988	2	1988.02	7-Feb-88	1319	1336	1289		1319	1470	1470		1319	1201
1988	2	1988.02	8-Feb-88	1296	1318	1275		1296	1460	1460		1296	1213
1988	2	1988.02	9-Feb-88	1331	1371	1277		1331	1450	1450		1331	1225
1988	2	1988.02	10-Feb-88	1351	1386	1326		1351	1470	1470		1351	1236
1988	2	1988.02	11-Feb-88	1343	1372	1322		1343	1460	1460		1343	1245
1988	2	1988.02	12-Feb-88	1279	1321	1245		1279	1430	1430		1279	1251
1988	2	1988.02	13-Feb-88	1289	1335	1235		1289	1410	1410		1289	1256
1988	2	1988.02	14-Feb-88	1325	1357	1294		1325	1380	1380		1325	1258
1988	2	1988.02	15-Feb-88	1313	1332	1286		1313	1350	1350		1313	1261
1988	2	1988.02	16-Feb-88	1346	1391	1299		1346	1350	1350		1346	1267
1988	2	1988.02	17-Feb-88	1401	1433	1359		1401	1330	1330		1401	1277
1988	2	1988.02	18-Feb-88	1353	1385	1281		1353	1320	1320		1353	1292
1988	2	1988.02	19-Feb-88	1337	1373	1312		1337	1300	1300		1337	1304
1988	2	1988.02	20-Feb-88	1336	1365	1300		1336	1270	1270		1336	1315
1988	2	1988.02	21-Feb-88	1349	1370	1318		1349	1240	1240		1349	1323
1988	2	1988.02	22-Feb-88	1394	1444	1342		1394	1210	1210		1394	1331
1988	2	1988.02	23-Feb-88	1379	1461	1329		1379	1190	1190		1379	1336
1988	2	1988.02	24-Feb-88	1299	1325	1285		1299	1200	1200		1299	1336
1988	2	1988.02	25-Feb-88	1303	1329	1278		1303	1190	1190		1303	1335
1988	2	1988.02	26-Feb-88	1273	1301	1240		1273	1200	1200		1273	1334
1988	2	1988.02	27-Feb-88	1126	1243	1019		1126	1340	1340		1126	1326
1988	2	1988.02	28-Feb-88	983	1001	971		983	1540	1540		983	1313
1988	2	1988.02	29-Feb-88	940	963	905		940	1650	1650		940	1300
1988	3	1988.03	1-Mar-88	904	919	867		904	1870	1870		904	1286
1988	3	1988.03	2-Mar-88	850	876	811		850	1970	1970		850	1269
1988	3	1988.03	3-Mar-88	819	863	790		819	2050	2050		819	1251
1988	3	1988.03	4-Mar-88	846	884	816		846	2130	2130		846	1235
1988	3	1988.03	5-Mar-88	826	844	808		826	2140	2140		826	1219
1988	3	1988.03	6-Mar-88	843	864	817		843	2150	2150		843	1203
1988	3	1988.03	7-Mar-88	842	862	821		842	2180	2160		842	1187
1988	3	1988.03	8-Mar-88	849	871	832		849	2160	2140		849	1171
1988	3	1988.03	9-Mar-88	844	860	825		844	2140	2150		844	1156
1988	3	1988.03	10-Mar-88	818	849	767		818	2150	2060		818	1139
1988	3	1988.03	11-Mar-88	801	871	771		801	2060	2110		801	1120
1988	3	1988.03	12-Mar-88	785	814	744		785	2110	2210		785	1102
1988	3	1988.03	13-Mar-88	769	796	742		769	2210	2270		769	1085
1988	3	1988.03	14-Mar-88	766	799	721		766	2270	2270		766	1067
1988	3	1988.03	15-Mar-88	732	759	712		732	2270	2350		732	1048
1988	3	1988.03	16-Mar-88	717	735	699		717	2350	2400		717	1028
1988	3	1988.03	17-Mar-88	756	815	693		756	2400	2470		756	1008
1988	3	1988.03	18-Mar-88	819	847	793		819	2470	2420		819	989
1988	3	1988.03	19-Mar-88	785	797	773		785	2420	2470		785	970

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1988	3	1988.03 20-Mar-88	805	837	769		805	2470	2420			805	952
1988	3	1988.03 21-Mar-88	771	786	745		771	2420	2340			771	933
1988	3	1988.03 22-Mar-88	769	792	751		769	2340	2320			769	914
1988	3	1988.03 23-Mar-88	768	787	737		768	2320	2340			768	893
1988	3	1988.03 24-Mar-88	792	812	771		792	2340	2330			792	873
1988	3	1988.03 25-Mar-88	774	809	737		774	2330	2330			774	856
1988	3	1988.03 26-Mar-88	788	806	760		788	2330	2360			788	839
1988	3	1988.03 27-Mar-88	763	782	751		763	2360	2320			763	822
1988	3	1988.03 28-Mar-88	762	779	741		762	2320	2250			762	810
1988	3	1988.03 29-Mar-88	744	766	718		744	2250	2260			744	802
1988	3	1988.03 30-Mar-88	728	739	709		728	2260	2220			728	795
1988	3	1988.03 31-Mar-88	758	797	716		758	2220	2180			758	790
1988	4	1988.04 1-Apr-88	783	804	760		783	2180	2180			783	787
1988	4	1988.04 2-Apr-88	787	810	762		787	2090	2090			787	786
1988	4	1988.04 3-Apr-88	747	786	724		747	2140	2140			747	783
1988	4	1988.04 4-Apr-88	725	744	710		725	2160	2160			725	780
1988	4	1988.04 5-Apr-88	707	748	657		707	2160	2160			707	775
1988	4	1988.04 6-Apr-88	675	707	645		675	2100	2100			675	770
1988	4	1988.04 7-Apr-88	688	703	677		688	1990	1990			688	764
1988	4	1988.04 8-Apr-88	682	705	655		682	1810	1810			682	759
1988	4	1988.04 9-Apr-88	681	700	665		681	1790	1790			681	754
1988	4	1988.04 10-Apr-88	697	733	661		697	1740	1740			697	751
1988	4	1988.04 11-Apr-88	761	778	734		761	1710	1710			761	750
1988	4	1988.04 12-Apr-88	776	787	765		776	1630	1630			776	750
1988	4	1988.04 13-Apr-88	762	782	739		762	1610	1610			762	750
1988	4	1988.04 14-Apr-88	653	737	612		653	1890	1890			653	747
1988	4	1988.04 15-Apr-88	612	623	603		612	2180	2180			612	744
1988	4	1988.04 16-Apr-88	616	624	607		616	2230	2230			616	739
1988	4	1988.04 17-Apr-88	643	668	613		643	2250	2250			643	733
1988	4	1988.04 18-Apr-88	666	692	640		666	2140	2140			666	729
1988	4	1988.04 19-Apr-88	666	681	648		666	2020	2020			666	725
1988	4	1988.04 20-Apr-88	666	678	653		666	2180	2180			666	721
1988	4	1988.04 21-Apr-88	687	727	643		687	2310	2310			687	719
1988	4	1988.04 22-Apr-88	746	776	718		746	2150	2150			746	718
1988	4	1988.04 23-Apr-88	774	801	750		774	2200	2200			774	717
1988	4	1988.04 24-Apr-88	663	726	628		663	2600	2600			663	714
1988	4	1988.04 25-Apr-88	650	667	630		650	2590	2590			650	709
1988	4	1988.04 26-Apr-88	651	681	615		651	2620	2620			651	705
1988	4	1988.04 27-Apr-88	594	609	576		594	2720	2720			594	700
1988	4	1988.04 28-Apr-88	579	594	568		579	2650	2650			579	694
1988	4	1988.04 29-Apr-88	620	643	595		620	2370	2370			620	691
1988	4	1988.04 30-Apr-88	665	685	644		665	2160	2160			665	687
1988	5	1988.05 1-May-88	698	709	680		698	2110	2110			698	685
1988	5	1988.05 2-May-88	711	733	682		711	2000	2000			711	682
1988	5	1988.05 3-May-88	741	777	701		741	1910	1910			741	682
1988	5	1988.05 4-May-88	727	751	701		727	1870	1870			727	682
1988	5	1988.05 5-May-88	708	719	700		708	1920	1920			708	682
1988	5	1988.05 6-May-88	703	726	685		703	1940	1940			703	683
1988	5	1988.05 7-May-88	726	760	695		726	1940	1940			726	684
1988	5	1988.05 8-May-88	747	759	725		747	2080	2080			747	686
1988	5	1988.05 9-May-88	718	725	714		718	2110	2110			718	688
1988	5	1988.05 10-May-88	737	754	713		737	2040	2040			737	689
1988	5	1988.05 11-May-88	708	725	647		708	1970	1970			708	687
1988	5	1988.05 12-May-88	717	733	696		717	1840	1840			717	685
1988	5	1988.05 13-May-88	699	720	676		699	1770	1770			699	683
1988	5	1988.05 14-May-88	693	707	671		693	1700	1700			693	684
1988	5	1988.05 15-May-88	688	699	671		688	1710	1710			688	687
1988	5	1988.05 16-May-88	692	717	648		692	1720	1720			692	689
1988	5	1988.05 17-May-88	739	778	676		739	1750	1750			739	693
1988	5	1988.05 18-May-88	684	701	671		684	1740	1740			684	693
1988	5	1988.05 19-May-88	712	740	680		712	1620	1620			712	695
1988	5	1988.05 20-May-88	762	789	728		762	1540	1540			762	698
1988	5	1988.05 21-May-88	760	778	740		760	1570	1570			760	700
1988	5	1988.05 22-May-88	754	777	718		754	1650	1650			754	701
1988	5	1988.05 23-May-88	715	739	683		715	1680	1680			715	699
1988	5	1988.05 24-May-88	710	748	679		710	1600	1600			710	700
1988	5	1988.05 25-May-88	676	696	643		676	1570	1570			676	701
1988	5	1988.05 26-May-88	648	665	631		648	1590	1590			648	701
1988	5	1988.05 27-May-88	660	693	633		660	1590	1590			660	703
1988	5	1988.05 28-May-88	663	684	645		663	1610	1610			663	706
1988	5	1988.05 29-May-88	688	719	653		688	1630	1630			688	708
1988	5	1988.05 30-May-88	714	732	699		714	1680	1680			714	710
1988	5	1988.05 31-May-88	708	726	689		708	1770	1770			708	710
1988	6	1988.06 1-Jun-88	709	723	685		709	1740	1740			709	710
1988	6	1988.06 2-Jun-88	694	717	663		694	1700	1700			694	709
1988	6	1988.06 3-Jun-88	675	712	650		675	1710	1710			675	707

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1988	6	1988.06	4-Jun-88	697	716	677		697	1650	1650		697	707
1988	6	1988.06	5-Jun-88	729	758	655		729	1660	1660		729	707
1988	6	1988.06	6-Jun-88	749	780	730		749	1680	1680		749	708
1988	6	1988.06	7-Jun-88	740	777	714		740	1660	1660		740	708
1988	6	1988.06	8-Jun-88	710	741	676		710	1750	1750		710	708
1988	6	1988.06	9-Jun-88	764	802	724		764	1750	1750		764	709
1988	6	1988.06	10-Jun-88	792	815	766		792	1700	1700		792	711
1988	6	1988.06	11-Jun-88	798	820	775		798	1610	1610		798	714
1988	6	1988.06	12-Jun-88	805	826	784		805	1630	1630		805	718
1988	6	1988.06	13-Jun-88	827	857	803		827	1690	1690		827	722
1988	6	1988.06	14-Jun-88	821	846	800		821	1580	1580		821	727
1988	6	1988.06	15-Jun-88	797	819	769		797	1570	1570		797	730
1988	6	1988.06	16-Jun-88	714	758	690		714	1650	1650		714	729
1988	6	1988.06	17-Jun-88	715	738	700		715	1640	1640		715	730
1988	6	1988.06	18-Jun-88	740	773	715		740	1670	1670		740	731
1988	6	1988.06	19-Jun-88	746	761	735		746	1790	1790		746	731
1988	6	1988.06	20-Jun-88	737	762	725		737	1830	1830		737	730
1988	6	1988.06	21-Jun-88	741	753	713		741	1740	1740		741	729
1988	6	1988.06	22-Jun-88	674	707	654		674	1770	1770		674	728
1988	6	1988.06	23-Jun-88	663	684	639		663	1810	1810		663	726
1988	6	1988.06	24-Jun-88	653	672	636		653	1830	1830		653	726
1988	6	1988.06	25-Jun-88	643	676	609		643	1860	1860		643	726
1988	6	1988.06	26-Jun-88	637	663	605		637	1910	1910		637	725
1988	6	1988.06	27-Jun-88	675	711	637		675	1910	1910		675	725
1988	6	1988.06	28-Jun-88	750	795	696		750	1720	1720		750	727
1988	6	1988.06	29-Jun-88	785	803	773		785	1590	1590		785	730
1988	6	1988.06	30-Jun-88	795	829	763		795	1530	1530		795	733
1988	7	1988.07	1-Jul-88	810	831	787		810	1530	1530		810	736
1988	7	1988.07	2-Jul-88	814	839	792		814	1480	1480		814	740
1988	7	1988.07	3-Jul-88	780	806	754		780	1500	1500		780	743
1988	7	1988.07	4-Jul-88	809	846	760		809	1490	1490		809	747
1988	7	1988.07	5-Jul-88	784	796	765		784	1480	1480		784	749
1988	7	1988.07	6-Jul-88	786	813	762		786	1470	1470		786	750
1988	7	1988.07	7-Jul-88	781	816	750		781	1450	1450		781	752
1988	7	1988.07	8-Jul-88	817	841	779		817	1340	1340		817	755
1988	7	1988.07	9-Jul-88	833	857	804		833	1350	1350		833	757
1988	7	1988.07	10-Jul-88	874	925	821		874	1350	1350		874	760
1988	7	1988.07	11-Jul-88	895	929	875		895	1310	1310		895	763
1988	7	1988.07	12-Jul-88	914	947	875		914	1250	1250		914	767
1988	7	1988.07	13-Jul-88	948	972	924		948	1180	1180		948	771
1988	7	1988.07	14-Jul-88	916	931	903		916	1200	1200		916	774
1988	7	1988.07	15-Jul-88	940	950	914		940	1220	1220		940	779
1988	7	1988.07	16-Jul-88	897	928	844		897	1240	1240		897	785
1988	7	1988.07	17-Jul-88	855	880	829		855	1260	1260		855	790
1988	7	1988.07	18-Jul-88	831	869	810		831	1340	1340		831	793
1988	7	1988.07	19-Jul-88	797	813	781		797	1250	1250		797	794
1988	7	1988.07	20-Jul-88	788	819	748		788	1260	1260		788	796
1988	7	1988.07	21-Jul-88	714	744	685		714	1310	1310		714	795
1988	7	1988.07	22-Jul-88	716	765	677		716	1310	1310		716	797
1988	7	1988.07	23-Jul-88	717	754	674		717	1340	1340		717	798
1988	7	1988.07	24-Jul-88	676	719	638		676	1440	1440		676	799
1988	7	1988.07	25-Jul-88	711	735	688		711	1450	1450		711	802
1988	7	1988.07	26-Jul-88	710	720	674		710	1410	1410		710	804
1988	7	1988.07	27-Jul-88	694	707	676		694	1390	1390		694	805
1988	7	1988.07	28-Jul-88	666	697	634		666	1360	1360		666	802
1988	7	1988.07	29-Jul-88	678	690	657		678	1360	1360		678	798
1988	7	1988.07	30-Jul-88	681	705	665		681	1370	1370		681	794
1988	7	1988.07	31-Jul-88	781	851	690		781	1370	1370		781	793
1988	8	1988.08	1-Aug-88	809	821	795		809	1390	1390		809	793
1988	8	1988.08	2-Aug-88	799	833	771		799	1360	1360		799	794
1988	8	1988.08	3-Aug-88	792	811	771		792	1330	1330		792	793
1988	8	1988.08	4-Aug-88	775	804	737		775	1400	1400		775	793
1988	8	1988.08	5-Aug-88	755	779	735		755	1400	1400		755	792
1988	8	1988.08	6-Aug-88	790	811	761		790	1390	1390		790	792
1988	8	1988.08	7-Aug-88	784	802	767		784	1570	1570		784	791
1988	8	1988.08	8-Aug-88	791	823	761		791	1650	1650		791	790
1988	8	1988.08	9-Aug-88	821	845	800		821	1550	1550		821	788
1988	8	1988.08	10-Aug-88	795	812	769		795	1530	1530		795	785
1988	8	1988.08	11-Aug-88	820	852	786		820	1480	1480		820	782
1988	8	1988.08	12-Aug-88	806	827	771		806	1460	1460		806	777
1988	8	1988.08	13-Aug-88	835	849	819		835	1470	1470		835	774
1988	8	1988.08	14-Aug-88	807	827	789		807	1560	1560		807	770
1988	8	1988.08	15-Aug-88	840	861	809		840	1650	1650		840	768
1988	8	1988.08	16-Aug-88	825	844	804		825	1590	1590		825	767
1988	8	1988.08	17-Aug-88	818	840	793		818	1550	1550		818	766
1988	8	1988.08	18-Aug-88	780	794	770		780	1590	1590		780	766

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1988	8	1988.08 19-Aug-88	761	778	744		761	1640	1640			761	765
1988	8	1988.08 20-Aug-88	774	790	752		774	1650	1650			774	767
1988	8	1988.08 21-Aug-88	767	802	736		767	1710	1710			767	769
1988	8	1988.08 22-Aug-88	816	853	773		816	1700	1700			816	772
1988	8	1988.08 23-Aug-88	829	857	796		829	1630	1630			829	777
1988	8	1988.08 24-Aug-88	797	820	778		797	1630	1630			797	780
1988	8	1988.08 25-Aug-88	784	808	770		784	1590	1590			784	782
1988	8	1988.08 26-Aug-88	774	795	754		774	1620	1620			774	785
1988	8	1988.08 27-Aug-88	761	777	738		761	1600	1600			761	788
1988	8	1988.08 28-Aug-88	751	773	731		751	1660	1660			751	791
1988	8	1988.08 29-Aug-88	737	756	715		737	1750	1750			737	792
1988	8	1988.08 30-Aug-88	764	792	736		764	1640	1640			764	792
1988	8	1988.08 31-Aug-88	783	797	764		783	1540	1540			783	791
1988	9	1988.09 1-Sep-88	761	775	740		761	1510	1510			761	790
1988	9	1988.09 2-Sep-88	789	812	760		789	1440	1440			789	790
1988	9	1988.09 3-Sep-88	816	843	786		816	1450	1450			816	791
1988	9	1988.09 4-Sep-88	809	836	784		809	1530	1530			809	793
1988	9	1988.09 5-Sep-88	804				804	1560	1560			804	793
1988	9	1988.09 6-Sep-88	799				799	1530	1530			799	794
1988	9	1988.09 7-Sep-88	794	803	782		794	1560	1560			794	794
1988	9	1988.09 8-Sep-88	781	816	758		781	1570	1570			781	793
1988	9	1988.09 9-Sep-88	773	795	747		773	1520	1520			773	792
1988	9	1988.09 10-Sep-88	760	785	723		760	1490	1490			760	790
1988	9	1988.09 11-Sep-88	778	791	762		778	1490	1490			778	789
1988	9	1988.09 12-Sep-88	790	812	759		790	1480	1480			790	787
1988	9	1988.09 13-Sep-88	817	849	791		817	1470	1470			817	788
1988	9	1988.09 14-Sep-88	789	801	775		789	1470	1470			789	786
1988	9	1988.09 15-Sep-88	751	774	696		751	1520	1520			751	784
1988	9	1988.09 16-Sep-88	704	725	677		704	1570	1570			704	780
1988	9	1988.09 17-Sep-88	693	716	659		693	1500	1500			693	777
1988	9	1988.09 18-Sep-88	708	737	677		708	1480	1480			708	775
1988	9	1988.09 19-Sep-88	739	760	720		739	1530	1530			739	774
1988	9	1988.09 20-Sep-88	721	748	686		721	1610	1610			721	772
1988	9	1988.09 21-Sep-88	684	710	650		684	1550	1550			684	768
1988	9	1988.09 22-Sep-88	722	741	702		722	1490	1490			722	764
1988	9	1988.09 23-Sep-88	723	750	685		723	1380	1380			723	762
1988	9	1988.09 24-Sep-88	743	766	726		743	1320	1320			743	761
1988	9	1988.09 25-Sep-88	750	776	720		750	1300	1300			750	760
1988	9	1988.09 26-Sep-88	757	773	736		757	1320	1320			757	760
1988	9	1988.09 27-Sep-88	749	769	728		749	1270	1270			749	760
1988	9	1988.09 28-Sep-88	777	817	738		777	1260	1260			777	761
1988	9	1988.09 29-Sep-88	798	831	760		798	1220	1220			798	762
1988	9	1988.09 30-Sep-88	829	849	802		829	1170	1170			829	764
1988	10	1988.10 1-Oct-88	841	850	827		841	1130	1130			841	766
1988	10	1988.10 2-Oct-88	835	852	801		835	1150	1150			835	768
1988	10	1988.10 3-Oct-88	814	835	787		814	1130	1130			814	768
1988	10	1988.10 4-Oct-88	862	907	821		862	1060	1060			862	770
1988	10	1988.10 5-Oct-88	892	903	882		892	1080	1080			892	772
1988	10	1988.10 6-Oct-88	853	888	831		853	1080	1080			853	774
1988	10	1988.10 7-Oct-88	889	907	864		889	1040	1040			889	777
1988	10	1988.10 8-Oct-88	871	898	841		871	994	994			871	780
1988	10	1988.10 9-Oct-88	871	900	837		871	1040	1040			871	784
1988	10	1988.10 10-Oct-88	908	933	883		908	1070	1070			908	789
1988	10	1988.10 11-Oct-88	850	896	826		850	1050	1050			850	791
1988	10	1988.10 12-Oct-88	837	865	814		837	1050	1050			837	793
1988	10	1988.10 13-Oct-88	812	825	796		812	1050	1050			812	792
1988	10	1988.10 14-Oct-88	795	808	778		795	1040	1040			795	793
1988	10	1988.10 15-Oct-88	817	828	806		817	1040	1040			817	795
1988	10	1988.10 16-Oct-88	827	851	802		827	1040	1040			827	799
1988	10	1988.10 17-Oct-88	846	866	823		846	1050	1050			846	804
1988	10	1988.10 18-Oct-88	859	878	839		859	1040	1040			859	809
1988	10	1988.10 19-Oct-88	849	863	830		849	1090	1090			849	813
1988	10	1988.10 20-Oct-88	770	827	684		770	1160	1160			770	814
1988	10	1988.10 21-Oct-88	620	674	605		620	1420	1420			620	812
1988	10	1988.10 22-Oct-88	694	730	646		694	1270	1270			694	811
1988	10	1988.10 23-Oct-88	736	755	714		736	1180	1180			736	812
1988	10	1988.10 24-Oct-88	755	770	739		755	1160	1160			755	812
1988	10	1988.10 25-Oct-88	782	811	738		782	1200	1200			782	813
1988	10	1988.10 26-Oct-88	774	799	755		774	1230	1230			774	814
1988	10	1988.10 27-Oct-88	758	780	742		758	1210	1210			758	814
1988	10	1988.10 28-Oct-88	763	783	741		763	1220	1220			763	814
1988	10	1988.10 29-Oct-88	770	790	754		770	1210	1210			770	813
1988	10	1988.10 30-Oct-88	762	777	747		762	1210	1210			762	810
1988	10	1988.10 31-Oct-88	784	800	768		784	1230	1230			784	809
1988	11	1988.11 1-Nov-88	788	804	776		788	1250	1250			788	807
1988	11	1988.11 2-Nov-88	781	804	762		781	1240	1240			781	806

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1988	11	1988.11 3-Nov-88	796	814	771		796	1240	1240			796	804
1988	11	1988.11 4-Nov-88	796	807	778		796	1250	1250			796	800
1988	11	1988.11 5-Nov-88	776	783	764		776	1240	1240			776	798
1988	11	1988.11 6-Nov-88	794	823	771		794	1230	1230			794	795
1988	11	1988.11 7-Nov-88	815	833	783		815	1210	1210			815	793
1988	11	1988.11 8-Nov-88	794	814	783		794	1210	1210			794	790
1988	11	1988.11 9-Nov-88	799	814	782		799	1210	1210			799	787
1988	11	1988.11 10-Nov-88	785	801	763		785	1220	1220			785	784
1988	11	1988.11 11-Nov-88	779	803	768		779	1240	1240			779	783
1988	11	1988.11 12-Nov-88	772	785	762		772	1240	1240			772	781
1988	11	1988.11 13-Nov-88	770	786	750		770	1230	1230			770	780
1988	11	1988.11 14-Nov-88	769	786	757		769	1230	1230			769	779
1988	11	1988.11 15-Nov-88	764	788	751		764	1230	1230			764	777
1988	11	1988.11 16-Nov-88	806	855	758		806	1240	1240			806	775
1988	11	1988.11 17-Nov-88	832	864	802		832	1250	1250			832	774
1988	11	1988.11 18-Nov-88	808	827	783		808	1280	1280			808	773
1988	11	1988.11 19-Nov-88	834	859	816		834	1280	1280			834	775
1988	11	1988.11 20-Nov-88	842	870	823		842	1280	1280			842	783
1988	11	1988.11 21-Nov-88	869	899	844		869	1270	1270			869	788
1988	11	1988.11 22-Nov-88	869	888	854		869	1290	1290			869	793
1988	11	1988.11 23-Nov-88	850	880	820		850	1320	1320			850	796
1988	11	1988.11 24-Nov-88	815	843	783		815	1370	1370			815	797
1988	11	1988.11 25-Nov-88	798	822	778		798	1390	1390			798	798
1988	11	1988.11 26-Nov-88	815	823	808		815	1380	1380			815	800
1988	11	1988.11 27-Nov-88	816	831	806		816	1350	1350			816	802
1988	11	1988.11 28-Nov-88	834	852	812		834	1350	1350			834	804
1988	11	1988.11 29-Nov-88	857	878	822		857	1350	1350			857	807
1988	11	1988.11 30-Nov-88	801	819	792		801	1360	1360			801	807
1988	12	1988.12 1-Dec-88	800	822	786		800	1360	1360			800	808
1988	12	1988.12 2-Dec-88	819	830	809		819	1360	1360			819	809
1988	12	1988.12 3-Dec-88	821	844	801		821	1350	1350			821	810
1988	12	1988.12 4-Dec-88	790	810	778		790	1330	1330			790	810
1988	12	1988.12 5-Dec-88	790	805	771		790	1330	1330			790	810
1988	12	1988.12 6-Dec-88	817	844	802		817	1330	1330			817	811
1988	12	1988.12 7-Dec-88	797	808	773		797	1330	1330			797	810
1988	12	1988.12 8-Dec-88	812	841	791		812	1340	1340			812	811
1988	12	1988.12 9-Dec-88	808	827	797		808	1360	1360			808	811
1988	12	1988.12 10-Dec-88	804	823	789		804	1360	1360			804	812
1988	12	1988.12 11-Dec-88	804	819	788		804	1360	1360			804	813
1988	12	1988.12 12-Dec-88	843	881	806		843	1360	1360			843	815
1988	12	1988.12 13-Dec-88	843	864	825		843	1330	1330			843	818
1988	12	1988.12 14-Dec-88	837	857	819		837	1300	1300			837	820
1988	12	1988.12 15-Dec-88	863	880	827		863	1290	1290			863	823
1988	12	1988.12 16-Dec-88	871	887	857		871	1290	1290			871	825
1988	12	1988.12 17-Dec-88	854	869	842		854	1290	1290			854	826
1988	12	1988.12 18-Dec-88	864	872	854		864	1290	1290			864	828
1988	12	1988.12 19-Dec-88	879	890	867		879	1310	1310			879	829
1988	12	1988.12 20-Dec-88	872	886	851		872	1350	1350			872	830
1988	12	1988.12 21-Dec-88	860	891	828		860	1420	1420			860	830
1988	12	1988.12 22-Dec-88	837	857	818		837	1450	1450			837	829
1988	12	1988.12 23-Dec-88	857	894	818		857	1430	1430			857	829
1988	12	1988.12 24-Dec-88	897	926	873		897	1460	1460			897	832
1988	12	1988.12 25-Dec-88	900	921	886		900	1460	1460			900	835
1988	12	1988.12 26-Dec-88	899	916	884		899	1440	1440			899	838
1988	12	1988.12 27-Dec-88	911	928	892		911	1440	1440			911	841
1988	12	1988.12 28-Dec-88	926	940	911		926	1450	1450			926	844
1988	12	1988.12 29-Dec-88	914	937	895		914	1480	1480			914	846
1988	12	1988.12 30-Dec-88	929	942	917		929	1450	1450			929	851
1988	12	1988.12 31-Dec-88	946	955	936		946	1430	1430			946	855
1989	1	1989.01 1-Jan-89	940	950	927		940	1420	1420			940	860
1989	1	1989.01 2-Jan-89	980	1005	944		980	1360	1360			980	865
1989	1	1989.01 3-Jan-89	1040	1121	1005		1040	1310	1310			1040	873
1989	1	1989.01 4-Jan-89	1074	1089	1055		1074	1260	1260			1074	883
1989	1	1989.01 5-Jan-89	1108	1140	1090		1108	1240	1240			1108	892
1989	1	1989.01 6-Jan-89	1108	1138	1081		1108	1260	1260			1108	903
1989	1	1989.01 7-Jan-89	1041	1076	1025		1041	1280	1280			1041	910
1989	1	1989.01 8-Jan-89	1051	1086	1036		1051	1280	1280			1051	918
1989	1	1989.01 9-Jan-89	1055	1069	1038		1055	1280	1280			1055	927
1989	1	1989.01 10-Jan-89	1047	1060	1025		1047	1310	1310			1047	935
1989	1	1989.01 11-Jan-89	1034	1056	1017		1034	1310	1310			1034	941
1989	1	1989.01 12-Jan-89	1039	1061	1019		1039	1300	1300			1039	948
1989	1	1989.01 13-Jan-89	1053	1072	1026		1053	1290	1290			1053	955
1989	1	1989.01 14-Jan-89	1077	1096	1061		1077	1270	1270			1077	962
1989	1	1989.01 15-Jan-89	1072	1095	1044		1072	1260	1260			1072	969
1989	1	1989.01 16-Jan-89	1099	1129	1079		1099	1240	1240			1099	977
1989	1	1989.01 17-Jan-89	1109	1137	1076		1109	1230	1230			1109	985

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1989	1	1989.01	18-Jan-89	1152	1180	1133		1152	1230	1230		1152	994
1989	1	1989.01	19-Jan-89	1152	1181	1139		1152	1220	1220		1152	1004
1989	1	1989.01	20-Jan-89	1163	1198	1133		1163	1220	1220		1163	1014
1989	1	1989.01	21-Jan-89	1202	1230	1178		1202	1200	1200		1202	1026
1989	1	1989.01	22-Jan-89	1207	1223	1197		1207	1180	1180		1207	1038
1989	1	1989.01	23-Jan-89	1207	1241	1177		1207	1210	1210		1207	1048
1989	1	1989.01	24-Jan-89	1221	1241	1197		1221	1270	1270		1221	1059
1989	1	1989.01	25-Jan-89	1213	1263	1169		1213	1270	1270		1213	1069
1989	1	1989.01	26-Jan-89	1212	1240	1187		1212	1250	1250		1212	1079
1989	1	1989.01	27-Jan-89	1213	1253	1173		1213	1220	1220		1213	1089
1989	1	1989.01	28-Jan-89	1246	1277	1225		1246	1200	1200		1246	1100
1989	1	1989.01	29-Jan-89	1256	1292	1223		1256	1190	1190		1256	1111
1989	1	1989.01	30-Jan-89	1258	1292	1235		1258	1180	1180		1258	1121
1989	1	1989.01	31-Jan-89	1254	1288	1230		1254	1170	1170		1254	1131
1989	2	1989.02	1-Feb-89	1248	1276	1214		1248	1160	1160		1248	1140
1989	2	1989.02	2-Feb-89	1233	1256	1211		1233	1150	1150		1233	1147
1989	2	1989.02	3-Feb-89	1252	1267	1216		1252	1140	1140		1252	1153
1989	2	1989.02	4-Feb-89	1244	1257	1225		1244	1150	1150		1244	1157
1989	2	1989.02	5-Feb-89	1178	1237	1150		1178	1200	1200		1178	1160
1989	2	1989.02	6-Feb-89	1188	1225	1148		1188	1220	1220		1188	1165
1989	2	1989.02	7-Feb-89	1183	1226	1157		1183	1250	1250		1183	1169
1989	2	1989.02	8-Feb-89	1169	1202	1143		1169	1280	1280		1169	1173
1989	2	1989.02	9-Feb-89	1135	1159	1106		1135	1300	1300		1135	1176
1989	2	1989.02	10-Feb-89	1161	1249	1145		1161	1320	1320		1161	1180
1989	2	1989.02	11-Feb-89	1188	1212	1156		1188	1310	1310		1188	1185
1989	2	1989.02	12-Feb-89	1239	1272	1209		1239	1290	1290		1239	1191
1989	2	1989.02	13-Feb-89	1241	1269	1223		1241	1330	1330		1241	1197
1989	2	1989.02	14-Feb-89	1215	1253	1177		1215	1370	1370		1215	1201
1989	2	1989.02	15-Feb-89	1182	1206	1145		1182	1390	1390		1182	1204
1989	2	1989.02	16-Feb-89	1215	1243	1144		1215	1380	1380		1215	1208
1989	2	1989.02	17-Feb-89	1244	1290	1211		1244	1340	1340		1244	1211
1989	2	1989.02	18-Feb-89	1316	1344	1290		1316	1300	1300		1316	1216
1989	2	1989.02	19-Feb-89	1346	1371	1335		1346	1270	1270		1346	1222
1989	2	1989.02	20-Feb-89	1377	1406	1336		1377	1240	1240		1377	1228
1989	2	1989.02	21-Feb-89	1426	1463	1396		1426	1230	1230		1426	1235
1989	2	1989.02	22-Feb-89	1368	1391	1349		1368	1230	1230		1368	1241
1989	2	1989.02	23-Feb-89	1350	1373	1316		1350	1180	1180		1350	1245
1989	2	1989.02	24-Feb-89	1349	1385	1317		1349	1140	1140		1349	1250
1989	2	1989.02	25-Feb-89	1421	1468	1377		1421	1120	1120		1421	1257
1989	2	1989.02	26-Feb-89	1499	1543	1458		1499	1110	1110		1499	1266
1989	2	1989.02	27-Feb-89	1487	1509	1440		1487	1090	1090		1487	1274
1989	2	1989.02	28-Feb-89	1401	1466	1312		1401	1060	1060		1401	1279
1989	3	1989.03	1-Mar-89	1364	1407	1292		1364	1130	1130		1364	1282
1989	3	1989.03	2-Mar-89	1204	1274	1172		1204	1330	1330		1204	1281
1989	3	1989.03	3-Mar-89	1069	1171	1013		1069	1570	1570		1069	1275
1989	3	1989.03	4-Mar-89	917	1068	839		917	2110	2110		917	1264
1989	3	1989.03	5-Mar-89	980	1029	895		980	2130	2130		980	1255
1989	3	1989.03	6-Mar-89	904	993	864		904	2110	2110		904	1244
1989	3	1989.03	7-Mar-89	816	853	801		816	2080	2080		816	1232
1989	3	1989.03	8-Mar-89	802	809	796		802	2060	2060		802	1219
1989	3	1989.03	9-Mar-89	820	860	796		820	2120	2120		820	1207
1989	3	1989.03	10-Mar-89	865	886	856		865	2180	2180		865	1197
1989	3	1989.03	11-Mar-89	908	953	858		908	2290	2290		908	1189
1989	3	1989.03	12-Mar-89	827	854	793		827	2260	2260		827	1178
1989	3	1989.03	13-Mar-89	774	839	708		774	2480	2480		774	1164
1989	3	1989.03	14-Mar-89	849	874	816		849	2240	2240		849	1151
1989	3	1989.03	15-Mar-89	822	836	811		822	2170	2170		822	1137
1989	3	1989.03	16-Mar-89	802	836	777		802	2190	2190		802	1123
1989	3	1989.03	17-Mar-89	803	818	781		803	2180	2180		803	1111
1989	3	1989.03	18-Mar-89	772	802	747		772	2130	2130		772	1096
1989	3	1989.03	19-Mar-89	760	784	745		760	2080	2080		760	1080
1989	3	1989.03	20-Mar-89	777	798	749		777	2050	2050		777	1062
1989	3	1989.03	21-Mar-89	752	775	731		752	1960	1960		752	1042
1989	3	1989.03	22-Mar-89	737	757	718		737	1920	1920		737	1021
1989	3	1989.03	23-Mar-89	701	722	670		701	1890	1890		701	997
1989	3	1989.03	24-Mar-89	672	692	650		672	1840	1840		672	973
1989	3	1989.03	25-Mar-89	681	716	665		681	1870	1870		681	951
1989	3	1989.03	26-Mar-89	685	715	665		685	1960	1960		685	929
1989	3	1989.03	27-Mar-89	728	749	678		728	2020	2020		728	906
1989	3	1989.03	28-Mar-89	729	742	710		729	2040	2040		729	880
1989	3	1989.03	29-Mar-89	713	732	687		713	2130	2130		713	854
1989	3	1989.03	30-Mar-89	696	728	635		696	2220	2220		696	831
1989	3	1989.03	31-Mar-89	675	715	624		675	1980	1980		675	808
1989	4	1989.04	1-Apr-89	677	701	665		677	1830	1830		677	790
1989	4	1989.04	2-Apr-89	719	770	670		719	1810	1810		719	779
1989	4	1989.04	3-Apr-89	842	886	781		842	1790	1790		842	776

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1989	4	1989.04	4-Apr-89	860	883	837		860	1770	1770		860	772
1989	4	1989.04	5-Apr-89	874	931	819		874	1760	1760		874	771
1989	4	1989.04	6-Apr-89	807	854	746		807	1720	1720		807	771
1989	4	1989.04	7-Apr-89	760	809	715		760	1760	1760		760	770
1989	4	1989.04	8-Apr-89	744	793	699		744	1760	1760		744	767
1989	4	1989.04	9-Apr-89	735	762	708		735	1740	1740		735	763
1989	4	1989.04	10-Apr-89	744	801	687		744	1790	1790		744	757
1989	4	1989.04	11-Apr-89	713	747	675		713	1800	1800		713	753
1989	4	1989.04	12-Apr-89	700	749	665		700	1770	1770		700	751
1989	4	1989.04	13-Apr-89	692	726	667		692	1720	1720		692	746
1989	4	1989.04	14-Apr-89	676	724	659		676	1720	1720		676	741
1989	4	1989.04	15-Apr-89	711	737	672		711	1660	1660		711	738
1989	4	1989.04	16-Apr-89	720	734	701		720	1600	1600		720	735
1989	4	1989.04	17-Apr-89	732	760	703		732	1680	1680		732	734
1989	4	1989.04	18-Apr-89	729	754	714		729	1800	1800		729	733
1989	4	1989.04	19-Apr-89	714	789	657		714	1920	1920		714	731
1989	4	1989.04	20-Apr-89	683	714	637		683	1970	1970		683	728
1989	4	1989.04	21-Apr-89	800	853	723		800	1910	1910		800	730
1989	4	1989.04	22-Apr-89	863	907	812		863	1980	1980		863	736
1989	4	1989.04	23-Apr-89	857	888	832		857	2000	2000		857	742
1989	4	1989.04	24-Apr-89	852	883	821		852	2110	2110		852	748
1989	4	1989.04	25-Apr-89	825	853	801		825	2200	2200		825	752
1989	4	1989.04	26-Apr-89	783	811	766		783	2300	2300		783	754
1989	4	1989.04	27-Apr-89	764	774	757		764	2240	2240		764	755
1989	4	1989.04	28-Apr-89	740					2330	2330		740	756
1989	4	1989.04	29-Apr-89	740					2440	2440		740	758
1989	4	1989.04	30-Apr-89	722	731	707		722	2580	2580		722	759
1989	5	1989.05	1-May-89	680					2530	2530		680	759
1989	5	1989.05	2-May-89	680					2360	2360		680	758
1989	5	1989.05	3-May-89	680					2570	2570		680	753
1989	5	1989.05	4-May-89	647	665	621		647	2430	2430		647	746
1989	5	1989.05	5-May-89	635	658	617		635	2250	2250		635	738
1989	5	1989.05	6-May-89	649	663	634		649	2140	2140		649	732
1989	5	1989.05	7-May-89	636	650	620		636	2120	2120		636	728
1989	5	1989.05	8-May-89	642	672	614		642	2100	2100		642	725
1989	5	1989.05	9-May-89	673	694	632		673	2060	2060		673	723
1989	5	1989.05	10-May-89	649	668	627		649	2010	2010		649	720
1989	5	1989.05	11-May-89	671	702	623		671	1990	1990		671	718
1989	5	1989.05	12-May-89	680					1950	1950		680	718
1989	5	1989.05	13-May-89	686	738	650		686	1910	1910		686	717
1989	5	1989.05	14-May-89	716	751	676		716	1890	1890		716	719
1989	5	1989.05	15-May-89	748	785	708		748	1830	1830		748	720
1989	5	1989.05	16-May-89	726	757	696		726	1770	1770		726	720
1989	5	1989.05	17-May-89	723	757	692		723	1780	1780		723	720
1989	5	1989.05	18-May-89	776	813	735		776	1740	1740		776	721
1989	5	1989.05	19-May-89	753	768	736		753	1680	1680		753	723
1989	5	1989.05	20-May-89	761	812	720		761	1700	1700		761	725
1989	5	1989.05	21-May-89	720	771	656		720	1790	1790		720	723
1989	5	1989.05	22-May-89	667	726	635		667	1800	1800		667	716
1989	5	1989.05	23-May-89	684	707	666		684	1780	1780		684	710
1989	5	1989.05	24-May-89	649	670	634		649	1760	1760		649	704
1989	5	1989.05	25-May-89	670	691	634		670	1720	1720		670	698
1989	5	1989.05	26-May-89	645	657	632		645	1750	1750		645	694
1989	5	1989.05	27-May-89	652	673	622		652	1800	1800		652	690
1989	5	1989.05	28-May-89	659	687	639		659	1800	1800		659	687
1989	5	1989.05	29-May-89	671	684	655		671	1820	1820		671	685
1989	5	1989.05	30-May-89	665	681	651		665	1810	1810		665	683
1989	5	1989.05	31-May-89	660	679	629		660	1790	1790		660	682
1989	6	1989.06	1-Jun-89	694	732	661		694	1780	1780		694	683
1989	6	1989.06	2-Jun-89	736	752	715		736	1660	1660		736	685
1989	6	1989.06	3-Jun-89	715	740	677		715	1650	1650		715	687
1989	6	1989.06	4-Jun-89	747	781	719		747	1760	1760		747	691
1989	6	1989.06	5-Jun-89	746	773	718		746	1760	1760		746	694
1989	6	1989.06	6-Jun-89	724	755	684		724	1690	1690		724	697
1989	6	1989.06	7-Jun-89	701	740	663		701	1670	1670		701	699
1989	6	1989.06	8-Jun-89	693	705	664		693	1600	1600		693	700
1989	6	1989.06	9-Jun-89	698	756	661		698	1530	1530		698	701
1989	6	1989.06	10-Jun-89	774	790	746		774	1530	1530		774	705
1989	6	1989.06	11-Jun-89	821	867	764		821	1550	1550		821	709
1989	6	1989.06	12-Jun-89	828	851	792		828	1580	1580		828	714
1989	6	1989.06	13-Jun-89	834	895	768		834	1520	1520		834	718
1989	6	1989.06	14-Jun-89	840					1480	1480		840	721
1989	6	1989.06	15-Jun-89	840					1450	1450		840	725
1989	6	1989.06	16-Jun-89	846	878	812		846	1460	1460		846	729
1989	6	1989.06	17-Jun-89	842	865	802		842	1430	1430		842	731
1989	6	1989.06	18-Jun-89	885	936	830		885	1470	1470		885	736

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1989	6	1989.06 19-Jun-89	891	907	876		891	1540	1540			891	740
1989	6	1989.06 20-Jun-89	924	965	882		924	1410	1410			924	747
1989	6	1989.06 21-Jun-89	871	916	844		871	1470	1470			871	754
1989	6	1989.06 22-Jun-89	844	869	817		844	1600	1600			844	759
1989	6	1989.06 23-Jun-89	731	814	645		731	1610	1610			731	762
1989	6	1989.06 24-Jun-89	633	650	618		633	1700	1700			633	760
1989	6	1989.06 25-Jun-89	695	722	652		695	1600	1600			695	762
1989	6	1989.06 26-Jun-89	715	735	700		715	1640	1640			715	764
1989	6	1989.06 27-Jun-89	712	741	685		712	1620	1620			712	766
1989	6	1989.06 28-Jun-89	681	695	660		681	1620	1620			681	766
1989	6	1989.06 29-Jun-89	742	784	692		742	1560	1560			742	769
1989	6	1989.06 30-Jun-89	751	772	724		751	1550	1550			751	772
1989	7	1989.07 1-Jul-89	738	761	716		738	1490	1490			738	773
1989	7	1989.07 2-Jul-89	801	840	760		801	1500	1500			801	775
1989	7	1989.07 3-Jul-89	804	828	760		804	1550	1550			804	778
1989	7	1989.07 4-Jul-89	801	827	759		801	1460	1460			801	780
1989	7	1989.07 5-Jul-89	725	760	701		725	1470	1470			725	780
1989	7	1989.07 6-Jul-89	739	781	698		739	1390	1390			739	780
1989	7	1989.07 7-Jul-89	763	816	708		763	1300	1300			763	782
1989	7	1989.07 8-Jul-89	811	845	772		811	1200	1200			811	786
1989	7	1989.07 9-Jul-89	816	844	772		816	1190	1190			816	790
1989	7	1989.07 10-Jul-89	770	793	744		770	1230	1230			770	790
1989	7	1989.07 11-Jul-89	744	777	712		744	1240	1240			744	787
1989	7	1989.07 12-Jul-89	741	781	704		741	1280	1280			741	784
1989	7	1989.07 13-Jul-89	759	787	723		759	1320	1320			759	782
1989	7	1989.07 14-Jul-89	718	747	683		718	1320	1320			718	778
1989	7	1989.07 15-Jul-89	694	735	642		694	1370	1370			694	773
1989	7	1989.07 16-Jul-89	767	806	706		767	1360	1360			767	770
1989	7	1989.07 17-Jul-89	770	789	745		770	1350	1350			770	768
1989	7	1989.07 18-Jul-89	779	808	750		779	1340	1340			779	764
1989	7	1989.07 19-Jul-89	733	751	707		733	1250	1250			733	759
1989	7	1989.07 20-Jul-89	743	759	727		743	1220	1220			743	753
1989	7	1989.07 21-Jul-89	748	767	713		748	1210	1210			748	749
1989	7	1989.07 22-Jul-89	740	785	700		740	1200	1200			740	745
1989	7	1989.07 23-Jul-89	796	823	777		796	1250	1250			796	748
1989	7	1989.07 24-Jul-89	751	777	706		751	1280	1280			751	752
1989	7	1989.07 25-Jul-89	745	783	696		745	1210	1210			745	753
1989	7	1989.07 26-Jul-89	768	793	743		768	1190	1190			768	755
1989	7	1989.07 27-Jul-89	730	764	679		730	1220	1220			730	756
1989	7	1989.07 28-Jul-89	745					1120	1120			745	758
1989	7	1989.07 29-Jul-89	745					1090	1090			745	758
1989	7	1989.07 30-Jul-89	745					1070	1070			745	758
1989	7	1989.07 31-Jul-89	745					1130	1130			745	758
1989	8	1989.08 1-Aug-89	760	772	738		760	1120	1120			760	757
1989	8	1989.08 2-Aug-89	719	749	683		719	1120	1120			719	754
1989	8	1989.08 3-Aug-89	721	742	687		721	1150	1150			721	751
1989	8	1989.08 4-Aug-89	687	711	673		687	1180	1180			687	750
1989	8	1989.08 5-Aug-89	727	766	686		727	1150	1150			727	749
1989	8	1989.08 6-Aug-89	797	833	754		797	1130	1130			797	750
1989	8	1989.08 7-Aug-89	724	748	684		724	1220	1220			724	748
1989	8	1989.08 8-Aug-89	721	752	681		721	1200	1200			721	744
1989	8	1989.08 9-Aug-89	724	770	665		724	1180	1180			724	743
1989	8	1989.08 10-Aug-89	780	806	768		780	1130	1130			780	744
1989	8	1989.08 11-Aug-89	795	824	782		795	1080	1080			795	746
1989	8	1989.08 12-Aug-89	838	871	824		838	1070	1070			838	749
1989	8	1989.08 13-Aug-89	871	907	836		871	1070	1070			871	754
1989	8	1989.08 14-Aug-89	907	927	890		907	1100	1100			907	761
1989	8	1989.08 15-Aug-89	902	924	886		902	984	984			902	765
1989	8	1989.08 16-Aug-89	914	925	906		914	985	985			914	770
1989	8	1989.08 17-Aug-89	813	918	678		813	1070	1070			813	771
1989	8	1989.08 18-Aug-89	705	737	676		705	1110	1110			705	770
1989	8	1989.08 19-Aug-89	742	771	715		742	1140	1140			742	770
1989	8	1989.08 20-Aug-89	744	787	705		744	1220	1220			744	770
1989	8	1989.08 21-Aug-89	763	784	733		763	1360	1360			763	771
1989	8	1989.08 22-Aug-89	750	779	711		750	1320	1320			750	769
1989	8	1989.08 23-Aug-89	782	854	694		782	1260	1260			782	770
1989	8	1989.08 24-Aug-89	823	849	785		823	1190	1190			823	773
1989	8	1989.08 25-Aug-89	773	816	730		773	1170	1170			773	773
1989	8	1989.08 26-Aug-89	782	817	734		782	1150	1150			782	775
1989	8	1989.08 27-Aug-89	755	802	709		755	1240	1240			755	775
1989	8	1989.08 28-Aug-89	722	763	687		722	1370	1370			722	774
1989	8	1989.08 29-Aug-89	701	720	687		701	1290	1290			701	773
1989	8	1989.08 30-Aug-89	688	714	655		688	1260	1260			688	771
1989	8	1989.08 31-Aug-89	717	768	680		717	1230	1230			717	770
1989	9	1989.09 1-Sep-89	758	808	690		758	1180	1180			758	771
1989	9	1989.09 2-Sep-89	854	911	792		854	1110	1110			854	775

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1989	9	1989.09 3-Sep-89	883	898	860		883	1130	1130			883	782
1989	9	1989.09 4-Sep-89	840	867	805		840	1210	1210			840	786
1989	9	1989.09 5-Sep-89	808	851	770		808	1190	1190			808	786
1989	9	1989.09 6-Sep-89	818	861	783		818	1170	1170			818	789
1989	9	1989.09 7-Sep-89	798	839	756		798	1190	1190			798	792
1989	9	1989.09 8-Sep-89	778	807	746		778	1210	1210			778	793
1989	9	1989.09 9-Sep-89	728	756	696		728	1310	1310			728	792
1989	9	1989.09 10-Sep-89	733	770	700		733	1300	1300			733	790
1989	9	1989.09 11-Sep-89	720	735	705		720	1300	1300			720	786
1989	9	1989.09 12-Sep-89	726	757	693		726	1280	1280			726	781
1989	9	1989.09 13-Sep-89	725	747	687		725	1260	1260			725	775
1989	9	1989.09 14-Sep-89	769	821	713		769	1250	1250			769	770
1989	9	1989.09 15-Sep-89	819	858	788		819	1170	1170			819	767
1989	9	1989.09 16-Sep-89	778	817	750		778	1220	1220			778	766
1989	9	1989.09 17-Sep-89	733	766	685		733	1470	1470			733	767
1989	9	1989.09 18-Sep-89	634	683	572		634	1690	1690			634	763
1989	9	1989.09 19-Sep-89	586	595	573		586	1780	1780			586	758
1989	9	1989.09 20-Sep-89	646	699	577		646	1690	1690			646	754
1989	9	1989.09 21-Sep-89	722	757	681		722	1540	1540			722	753
1989	9	1989.09 22-Sep-89	788	821	746		788	1410	1410			788	754
1989	9	1989.09 23-Sep-89	802	827	772		802	1390	1390			802	753
1989	9	1989.09 24-Sep-89	824	843	803		824	1380	1380			824	755
1989	9	1989.09 25-Sep-89	806	829	788		806	1420	1420			806	755
1989	9	1989.09 26-Sep-89	810	822	794		810	1410	1410			810	757
1989	9	1989.09 27-Sep-89	816	845	795		816	1390	1390			816	760
1989	9	1989.09 28-Sep-89	849	870	815		849	1360	1360			849	765
1989	9	1989.09 29-Sep-89	792	824	725		792	1500	1500			792	769
1989	9	1989.09 30-Sep-89	716	729	704		716	1670	1670			716	769
1989	10	1989.10 1-Oct-89	755	774	733		755	1600	1600			755	769
1989	10	1989.10 2-Oct-89	802	833	771		802	1500	1500			802	767
1989	10	1989.10 3-Oct-89	811	825	801		811	1440	1440			811	764
1989	10	1989.10 4-Oct-89	819	837	801		819	1390	1390			819	764
1989	10	1989.10 5-Oct-89	820				820	1310	1310			820	764
1989	10	1989.10 6-Oct-89	908	926	855		908	1250	1250			908	767
1989	10	1989.10 7-Oct-89	920	947	884		920	1230	1230			920	771
1989	10	1989.10 8-Oct-89	907	942	869		907	1250	1250			907	775
1989	10	1989.10 9-Oct-89	906	934	878		906	1210	1210			906	781
1989	10	1989.10 10-Oct-89	890	907	872		890	1200	1200			890	787
1989	10	1989.10 11-Oct-89	846	869	572		846	1220	1220			846	791
1989	10	1989.10 12-Oct-89	840					1240	1240			840	795
1989	10	1989.10 13-Oct-89	838	865	822		838	1290	1290			838	798
1989	10	1989.10 14-Oct-89	779	828	732		779	1330	1330			779	799
1989	10	1989.10 15-Oct-89	718	733	701		718	1330	1330			718	795
1989	10	1989.10 16-Oct-89	739	780	708		739	1330	1330			739	794
1989	10	1989.10 17-Oct-89	649	744	576		649	1590	1590			649	791
1989	10	1989.10 18-Oct-89	623	689	568		623	1600	1600			623	791
1989	10	1989.10 19-Oct-89	702	730	658		702	1450	1450			702	795
1989	10	1989.10 20-Oct-89	735	744	716		735	1370	1370			735	798
1989	10	1989.10 21-Oct-89	721	742	699		721	1350	1350			721	798
1989	10	1989.10 22-Oct-89	708	732	687		708	1310	1310			708	795
1989	10	1989.10 23-Oct-89	760	778	737		760	1340	1340			760	794
1989	10	1989.10 24-Oct-89	703	758	654		703	1490	1490			703	790
1989	10	1989.10 25-Oct-89	672	682	661		672	1620	1620			672	785
1989	10	1989.10 26-Oct-89	659	675	638		659	1620	1620			659	780
1989	10	1989.10 27-Oct-89	685	719	663		685	1590	1590			685	776
1989	10	1989.10 28-Oct-89	686	701	663		686	1580	1580			686	770
1989	10	1989.10 29-Oct-89	736	767	698		736	1500	1500			736	768
1989	10	1989.10 30-Oct-89	782	813	752		782	1470	1470			782	771
1989	10	1989.10 31-Oct-89	803	822	788		803	1430	1430			803	772
1989	11	1989.11 1-Nov-89	826	841	809		826	1390	1390			826	773
1989	11	1989.11 2-Nov-89	841	853	828		841	1370	1370			841	774
1989	11	1989.11 3-Nov-89	826	840	810		826	1430	1430			826	774
1989	11	1989.11 4-Nov-89	785	822	764		785	1470	1470			785	773
1989	11	1989.11 5-Nov-89	769	781	751		769	1460	1460			769	768
1989	11	1989.11 6-Nov-89	814	847	774		814	1420	1420			814	765
1989	11	1989.11 7-Nov-89	833	857	807		833	1400	1400			833	762
1989	11	1989.11 8-Nov-89	832	847	811		832	1390	1390			832	760
1989	11	1989.11 9-Nov-89	837	862	809		837	1380	1380			837	758
1989	11	1989.11 10-Nov-89	832	854	812		832	1380	1380			832	758
1989	11	1989.11 11-Nov-89	810	830	791		810	1370	1370			810	757
1989	11	1989.11 12-Nov-89	826	854	808		826	1370	1370			826	756
1989	11	1989.11 13-Nov-89	810	822	793		810	1380	1380			810	757
1989	11	1989.11 14-Nov-89	826	861	799		826	1380	1380			826	761
1989	11	1989.11 15-Nov-89	804	815	788		804	1400	1400			804	763
1989	11	1989.11 16-Nov-89	807	828	784		807	1390	1390			807	768
1989	11	1989.11 17-Nov-89	808	829	792		808	1390	1390			808	775

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1989	11	1989.11 18-Nov-89	807	828	784		807	1390	1390			807	778
1989	11	1989.11 19-Nov-89	819	852	789		819	1380	1380			819	781
1989	11	1989.11 20-Nov-89	821	844	789		821	1360	1360			821	784
1989	11	1989.11 21-Nov-89	838	860	819		838	1370	1370			838	789
1989	11	1989.11 22-Nov-89	809	825	794		809	1380	1380			809	790
1989	11	1989.11 23-Nov-89	831	854	798		831	1360	1360			831	794
1989	11	1989.11 24-Nov-89	826	840	815		826	1350	1350			826	800
1989	11	1989.11 25-Nov-89	818	827	805		818	1370	1370			818	805
1989	11	1989.11 26-Nov-89	811	834	788		811	1450	1450			811	809
1989	11	1989.11 27-Nov-89	807	839	773		807	1480	1480			807	813
1989	11	1989.11 28-Nov-89	836	895	795		836	1470	1470			836	816
1989	11	1989.11 29-Nov-89	850	868	828		850	1500	1500			850	819
1989	11	1989.11 30-Nov-89	818	865	796		818	1500	1500			818	819
1989	12	1989.12 1-Dec-89	817	852	795		817	1500	1500			817	819
1989	12	1989.12 2-Dec-89	772	789	740		772	1490	1490			772	817
1989	12	1989.12 3-Dec-89	806	845	768		806	1450	1450			806	816
1989	12	1989.12 4-Dec-89	843	861	828		843	1440	1440			843	818
1989	12	1989.12 5-Dec-89	840					1480	1480			840	820
1989	12	1989.12 6-Dec-89	840					1500	1500			840	821
1989	12	1989.12 7-Dec-89	831	844	821		831	1510	1510			831	821
1989	12	1989.12 8-Dec-89	832	844	819		832	1500	1500			832	821
1989	12	1989.12 9-Dec-89	845	865	830		845	1480	1480			845	821
1989	12	1989.12 10-Dec-89	873	898	841		873	1450	1450			873	823
1989	12	1989.12 11-Dec-89	863	888	823		863	1420	1420			863	824
1989	12	1989.12 12-Dec-89	905	950	857		905	1400	1400			905	827
1989	12	1989.12 13-Dec-89	930	942	916		930	1390	1390			930	831
1989	12	1989.12 14-Dec-89	930	949	914		930	1380	1380			930	835
1989	12	1989.12 15-Dec-89	931	957	802		931	1390	1390			931	839
1989	12	1989.12 16-Dec-89	911	934	883		911	1430	1430			911	842
1989	12	1989.12 17-Dec-89	857	880	826		857	1420	1420			857	844
1989	12	1989.12 18-Dec-89	875					1350	1350			875	846
1989	12	1989.12 19-Dec-89	900					1290	1290			900	849
1989	12	1989.12 20-Dec-89	950					1300	1300			950	853
1989	12	1989.12 21-Dec-89	1001	1013	990		1001	1320	1320			1001	859
1989	12	1989.12 22-Dec-89	1014	1056	977		1014	1360	1360			1014	865
1989	12	1989.12 23-Dec-89	1032	1046	1019		1032	1350	1350			1032	872
1989	12	1989.12 24-Dec-89	1038	1044	1033		1038	1330	1330			1038	879
1989	12	1989.12 25-Dec-89	1050	1068	1032		1050	1310	1310			1050	887
1989	12	1989.12 26-Dec-89	1073	1088	1060		1073	1290	1290			1073	896
1989	12	1989.12 27-Dec-89	1070	1086	1055		1070	1270	1270			1070	904
1989	12	1989.12 28-Dec-89	1074	1089	1063		1074	1270	1270			1074	912
1989	12	1989.12 29-Dec-89	1100					1250	1250			1100	921
1989	12	1989.12 30-Dec-89	1100					1260	1260			1100	930
1989	12	1989.12 31-Dec-89	1100					1240	1240			1100	940
1990	1	1990.01 1-Jan-90	1100					1220	1220			1100	950
1990	1	1990.01 2-Jan-90	1114	1136	1089		1114	1210	1210			1114	961
1990	1	1990.01 3-Jan-90	1093	1117	1076		1093	1190	1190			1093	969
1990	1	1990.01 4-Jan-90	1115	1145	1079		1115	1170	1170			1115	978
1990	1	1990.01 5-Jan-90	1141	1165	1104		1141	1190	1190			1141	988
1990	1	1990.01 6-Jan-90	1138	1160	1123		1138	1200	1200			1138	999
1990	1	1990.01 7-Jan-90	1128	1154	1107		1128	1200	1200			1128	1008
1990	1	1990.01 8-Jan-90	1129	1173	1096		1129	1180	1180			1129	1018
1990	1	1990.01 9-Jan-90	1121	1136	1100		1121	1170	1170			1121	1026
1990	1	1990.01 10-Jan-90	1151	1186	1108		1151	1170	1170			1151	1036
1990	1	1990.01 11-Jan-90	1158	1170	1147		1158	1180	1180			1158	1044
1990	1	1990.01 12-Jan-90	1133	1154	1115		1133	1180	1180			1133	1051
1990	1	1990.01 13-Jan-90	1106	1142	1083		1106	1250	1250			1106	1057
1990	1	1990.01 14-Jan-90	1084	1101	1076		1084	1310	1310			1084	1062
1990	1	1990.01 15-Jan-90	1047	1083	1025		1047	1350	1350			1047	1066
1990	1	1990.01 16-Jan-90	1030	1061	997		1030	1370	1370			1030	1072
1990	1	1990.01 17-Jan-90	1093	1120	1066		1093	1350	1350			1093	1079
1990	1	1990.01 18-Jan-90	1107	1139	1081		1107	1340	1340			1107	1086
1990	1	1990.01 19-Jan-90	1119	1171	1066		1119	1310	1310			1119	1092
1990	1	1990.01 20-Jan-90	1119	1149	1090		1119	1300	1300			1119	1096
1990	1	1990.01 21-Jan-90	1075	1098	1049		1075	1280	1280			1075	1098
1990	1	1990.01 22-Jan-90	1132	1179	1085		1132	1270	1270			1132	1101
1990	1	1990.01 23-Jan-90	1187	1222	1144		1187	1270	1270			1187	1106
1990	1	1990.01 24-Jan-90	1210	1240	1170		1210	1260	1260			1210	1112
1990	1	1990.01 25-Jan-90	1182	1221	1155		1182	1260	1260			1182	1115
1990	1	1990.01 26-Jan-90	1198	1233	1163		1198	1230	1230			1198	1119
1990	1	1990.01 27-Jan-90	1194	1208	1171		1194	1220	1220			1194	1123
1990	1	1990.01 28-Jan-90	1222	1259	1178		1222	1210	1210			1222	1128
1990	1	1990.01 29-Jan-90	1217	1239	1176		1217	1210	1210			1217	1131
1990	1	1990.01 30-Jan-90	1207	1230	1177		1207	1210	1210			1207	1135
1990	1	1990.01 31-Jan-90	1172	1189	1144		1172	1240	1240			1172	1137
1990	2	1990.02 1-Feb-90	1121	1151	1100		1121	1220	1220			1121	1138

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1990	2	1990.02	2-Feb-90	1116	1144	1080		1116	1250	1250		1116	1138
1990	2	1990.02	3-Feb-90	1099	1118	1086		1099	1260	1260		1099	1138
1990	2	1990.02	4-Feb-90	1120	1180	1076		1120	1260	1260		1120	1137
1990	2	1990.02	5-Feb-90	1123	1151	1091		1123	1310	1310		1123	1137
1990	2	1990.02	6-Feb-90	1187	1223	1144		1187	1290	1290		1187	1139
1990	2	1990.02	7-Feb-90	1172	1192	1147		1172	1310	1310		1172	1140
1990	2	1990.02	8-Feb-90	1117	1155	1084		1117	1300	1300		1117	1140
1990	2	1990.02	9-Feb-90	1163	1217	1129		1163	1300	1300		1163	1140
1990	2	1990.02	10-Feb-90	1175	1208	1131		1175	1280	1280		1175	1141
1990	2	1990.02	11-Feb-90	1193	1211	1174		1193	1270	1270		1193	1143
1990	2	1990.02	12-Feb-90	1234	1268	1196		1234	1260	1260		1234	1147
1990	2	1990.02	13-Feb-90	1198	1240	1165		1198	1250	1250		1198	1151
1990	2	1990.02	14-Feb-90	1173	1199	1141		1173	1220	1220		1173	1155
1990	2	1990.02	15-Feb-90	1222	1248	1198		1222	1220	1220		1222	1162
1990	2	1990.02	16-Feb-90	1194	1225	1166		1194	1250	1250		1194	1165
1990	2	1990.02	17-Feb-90	1135	1182	1084		1135	1420	1420		1135	1166
1990	2	1990.02	18-Feb-90	1081	1119	1031		1081	1520	1520		1081	1165
1990	2	1990.02	19-Feb-90	1111	1128	1074		1111	1580	1580		1111	1164
1990	2	1990.02	20-Feb-90	1114	1149	1071		1114	1630	1630		1114	1166
1990	2	1990.02	21-Feb-90	1053	1091	993		1053	1660	1660		1053	1163
1990	2	1990.02	22-Feb-90	1036	1071	989		1036	1630	1630		1036	1158
1990	2	1990.02	23-Feb-90	1091	1128	1050		1091	1540	1540		1091	1154
1990	2	1990.02	24-Feb-90	1144	1173	1111		1144	1460	1460		1144	1153
1990	2	1990.02	25-Feb-90	1213	1240	1176		1213	1410	1410		1213	1153
1990	2	1990.02	26-Feb-90	1249	1275	1223		1249	1390	1390		1249	1155
1990	2	1990.02	27-Feb-90	1243	1259	1213		1243	1390	1390		1243	1156
1990	2	1990.02	28-Feb-90	1238	1252	1218		1238	1350	1350		1238	1156
1990	3	1990.03	1-Mar-90	1252	1280	1232		1252	1340	1340		1252	1158
1990	3	1990.03	2-Mar-90	1174	1237	1139		1174	1400	1400		1174	1158
1990	3	1990.03	3-Mar-90	1053	1102	994		1053	1590	1590		1053	1156
1990	3	1990.03	4-Mar-90	961	989	928		961	1790	1790		961	1151
1990	3	1990.03	5-Mar-90	950	986	916		950	1870	1870		950	1146
1990	3	1990.03	6-Mar-90	942	970	916		942	1920	1920		942	1140
1990	3	1990.03	7-Mar-90	886	901	861		886	1940	1940		886	1132
1990	3	1990.03	8-Mar-90	855	886	829		855	1930	1930		855	1121
1990	3	1990.03	9-Mar-90	856	890	816		856	1930	1930		856	1110
1990	3	1990.03	10-Mar-90	831	843	820		831	1920	1920		831	1101
1990	3	1990.03	11-Mar-90	846	862	825		846	1930	1930		846	1090
1990	3	1990.03	12-Mar-90	903	934	856		903	1910	1910		903	1081
1990	3	1990.03	13-Mar-90	932	949	916		932	1850	1850		932	1072
1990	3	1990.03	14-Mar-90	857	911	829		857	1940	1940		857	1060
1990	3	1990.03	15-Mar-90	829	845	798		829	1940	1940		829	1047
1990	3	1990.03	16-Mar-90	781	794	762		781	1920	1920		781	1034
1990	3	1990.03	17-Mar-90	775	802	740		775	1910	1910		775	1020
1990	3	1990.03	18-Mar-90	778	796	753		778	1910	1910		778	1006
1990	3	1990.03	19-Mar-90	790	829	754		790	1900	1900		790	994
1990	3	1990.03	20-Mar-90	755	780	709		755	1810	1810		755	983
1990	3	1990.03	21-Mar-90	698	723	676		698	1720	1720		698	970
1990	3	1990.03	22-Mar-90	677	699	644		677	1660	1660		677	955
1990	3	1990.03	23-Mar-90	700	732	644		700	1670	1670		700	943
1990	3	1990.03	24-Mar-90	631	658	593		631	1650	1650		631	930
1990	3	1990.03	25-Mar-90	607	650	564		607	1590	1590		607	914
1990	3	1990.03	26-Mar-90	642	669	620		642	1590	1590		642	897
1990	3	1990.03	27-Mar-90	611	643	588		611	1620	1620		611	877
1990	3	1990.03	28-Mar-90	581	601	564		581	1670	1670		581	854
1990	3	1990.03	29-Mar-90	576	599	546		576	1630	1630		576	832
1990	3	1990.03	30-Mar-90	605	633	576		605	1620	1620		605	811
1990	3	1990.03	31-Mar-90	622	676	565		622	1500	1500		622	790
1990	4	1990.04	1-Apr-90	619	653	568		619	1440	1440		619	772
1990	4	1990.04	2-Apr-90	634	681	579		634	1470	1470		634	758
1990	4	1990.04	3-Apr-90	679	711	639		679	1460	1460		679	748
1990	4	1990.04	4-Apr-90	668	698	646		668	1370	1370		668	739
1990	4	1990.04	5-Apr-90	675					1280	1280		675	730
1990	4	1990.04	6-Apr-90	675					1270	1270		675	723
1990	4	1990.04	7-Apr-90	680	715	643			1250	1250		680	717
1990	4	1990.04	8-Apr-90	695	714	664		695	1240	1240		695	712
1990	4	1990.04	9-Apr-90	707	752	665		707	1320	1320		707	708
1990	4	1990.04	10-Apr-90	805	849	722		805	1290	1290		805	706
1990	4	1990.04	11-Apr-90	822	872	751		822	1190	1190		822	704
1990	4	1990.04	12-Apr-90	825	847	797		825	1140	1140		825	700
1990	4	1990.04	13-Apr-90	814	845	762		814	1080	1080		814	699
1990	4	1990.04	14-Apr-90	778	808	726		778	1050	1050		778	697
1990	4	1990.04	15-Apr-90	757	788	720		757	1060	1060		757	696
1990	4	1990.04	16-Apr-90	787	807	768		787	1210	1210		787	696
1990	4	1990.04	17-Apr-90	801	842	750		801	1190	1190		801	697
1990	4	1990.04	18-Apr-90	784	809	761		784	1170	1170		784	697

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1990	4	1990.04 19-Apr-90	753	771	730		753	1140	1140			753	697
1990	4	1990.04 20-Apr-90	690	728	653		690	1210	1210			690	697
1990	4	1990.04 21-Apr-90	724	787	654		724	1250	1250			724	698
1990	4	1990.04 22-Apr-90	769	829	650		769	1380	1380			769	701
1990	4	1990.04 23-Apr-90	744	765	717		744	1600	1600			744	704
1990	4	1990.04 24-Apr-90	735	771	693		735	1680	1680			735	709
1990	4	1990.04 25-Apr-90	730	763	697		730	1590	1590			730	712
1990	4	1990.04 26-Apr-90	763	808	699		763	1600	1600			763	717
1990	4	1990.04 27-Apr-90	723	743	695		723	1470	1470			723	721
1990	4	1990.04 28-Apr-90	750					1350	1350			750	727
1990	4	1990.04 29-Apr-90	786	805	748		786	1270	1270			786	733
1990	4	1990.04 30-Apr-90	886	959	817		886	1260	1260			886	742
1990	5	1990.05 1-May-90	811	900	666		811	1350	1350			811	748
1990	5	1990.05 2-May-90	671	701	634		671	1440	1440			671	750
1990	5	1990.05 3-May-90	669	683	653		669	1410	1410			669	749
1990	5	1990.05 4-May-90	663	682	648		663	1390	1390			663	749
1990	5	1990.05 5-May-90	606	657	509		606	1480	1480			606	747
1990	5	1990.05 6-May-90	545	585	506		545	1440	1440			545	742
1990	5	1990.05 7-May-90	577	634	508		577	1360	1360			577	739
1990	5	1990.05 8-May-90	672	750	578		672	1290	1290			672	738
1990	5	1990.05 9-May-90	732	793	663		732	1200	1200			732	739
1990	5	1990.05 10-May-90	751	785	713		751	1140	1140			751	737
1990	5	1990.05 11-May-90	755	833	676		755	1100	1100			755	735
1990	5	1990.05 12-May-90	792	826	739		792	1080	1080			792	734
1990	5	1990.05 13-May-90	760	816	689		760	1150	1150			760	732
1990	5	1990.05 14-May-90	726	801	646		726	1260	1260			726	730
1990	5	1990.05 15-May-90	757	831	665		757	1240	1240			757	730
1990	5	1990.05 16-May-90	767	812	719		767	1180	1180			767	730
1990	5	1990.05 17-May-90	711	746	678		711	1210	1210			711	727
1990	5	1990.05 18-May-90	720	752	695		720	1120	1120			720	725
1990	5	1990.05 19-May-90	720	733	696		720	1060	1060			720	724
1990	5	1990.05 20-May-90	737	787	696		737	1080	1080			737	725
1990	5	1990.05 21-May-90	751	778	732		751	1130	1130			751	726
1990	5	1990.05 22-May-90	810	854	737		810	1080	1080			810	727
1990	5	1990.05 23-May-90	776	810	743		776	1050	1050			776	728
1990	5	1990.05 24-May-90	728	746	703		728	1110	1110			728	728
1990	5	1990.05 25-May-90	725	745	691		725	1060	1060			725	728
1990	5	1990.05 26-May-90	756	790	711		756	1030	1030			756	728
1990	5	1990.05 27-May-90	808	830	779		808	1150	1150			808	731
1990	5	1990.05 28-May-90	724	774	671		724	1720	1720			724	730
1990	5	1990.05 29-May-90	628	654	608		628	1970	1970			628	724
1990	5	1990.05 30-May-90	657	728	588		657	1760	1760			657	717
1990	5	1990.05 31-May-90	762	800	726		762	1620	1620			762	715
1990	6	1990.06 1-Jun-90	926	1055	805		926	1410	1410			926	724
1990	6	1990.06 2-Jun-90	1067	1081	1050		1067	1300	1300			1067	737
1990	6	1990.06 3-Jun-90	1067	1094	1042		1067	1270	1270			1067	750
1990	6	1990.06 4-Jun-90	1021	1060	998		1021	1300	1300			1021	764
1990	6	1990.06 5-Jun-90	1009	1052	965		1009	1270	1270			1009	780
1990	6	1990.06 6-Jun-90	953	1020	904		953	1250	1250			953	792
1990	6	1990.06 7-Jun-90	872	904	861		872	1290	1290			872	799
1990	6	1990.06 8-Jun-90	832	860	812		832	1260	1260			832	802
1990	6	1990.06 9-Jun-90	785	809	762		785	1220	1220			785	803
1990	6	1990.06 10-Jun-90	778	801	758		778	1190	1190			778	804
1990	6	1990.06 11-Jun-90	767	785	717		767	1230	1230			767	803
1990	6	1990.06 12-Jun-90	731	770	685		731	1160	1160			731	802
1990	6	1990.06 13-Jun-90	716	753	655		716	1090	1090			716	802
1990	6	1990.06 14-Jun-90	669	718	628		669	1090	1090			669	799
1990	6	1990.06 15-Jun-90	703	754	662		703	1130	1130			703	797
1990	6	1990.06 16-Jun-90	710	752	654		710	1130	1130			710	797
1990	6	1990.06 17-Jun-90	681	727	632		681	1170	1170			681	796
1990	6	1990.06 18-Jun-90	727	764	686		727	1200	1200			727	796
1990	6	1990.06 19-Jun-90	759	803	694		759	1080	1080			759	797
1990	6	1990.06 20-Jun-90	771	784	756		771	1020	1020			771	797
1990	6	1990.06 21-Jun-90	827	881	764		827	962	962			827	798
1990	6	1990.06 22-Jun-90	820	854	534		820	925	925			820	799
1990	6	1990.06 23-Jun-90	885	925	838		885	907	907			885	805
1990	6	1990.06 24-Jun-90	864	903	819		864	931	931			864	809
1990	6	1990.06 25-Jun-90	830	867	803		830	975	975			830	812
1990	6	1990.06 26-Jun-90	881	930	814		881	915	915			881	814
1990	6	1990.06 27-Jun-90	805	872	767		805	927	927			805	817
1990	6	1990.06 28-Jun-90	780	825	715		780	970	970			780	822
1990	6	1990.06 29-Jun-90	753	790	707		753	964	964			753	825
1990	6	1990.06 30-Jun-90	726	783	681		726	957	957			726	824
1990	7	1990.07 1-Jul-90	697	732	677		697	1040	1040			697	816
1990	7	1990.07 2-Jul-90	762	806	694		762	1090	1090			762	806
1990	7	1990.07 3-Jul-90	758	794	709		758	1100	1100			758	796

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1990	7	1990.07	4-Jul-90	796	833	759		796	1160	1160		796	788
1990	7	1990.07	5-Jul-90	743	781	684		743	1180	1180		743	779
1990	7	1990.07	6-Jul-90	810	862	749		810	1070	1070		810	775
1990	7	1990.07	7-Jul-90	822	880	760		822	1040	1040		822	773
1990	7	1990.07	8-Jul-90	781	834	749		781	1110	1110		781	771
1990	7	1990.07	9-Jul-90	805	892	755		805	1110	1110		805	772
1990	7	1990.07	10-Jul-90	846	881	815		846	1060	1060		846	774
1990	7	1990.07	11-Jul-90	866	884	855		866	1000	1000		866	777
1990	7	1990.07	12-Jul-90	868	906	839		868	965	965		868	782
1990	7	1990.07	13-Jul-90	813	988	910		813	908	908		813	785
1990	7	1990.07	14-Jul-90	765	795	732		765	906	906		765	788
1990	7	1990.07	15-Jul-90	716	730	697		716	939	939		716	789
1990	7	1990.07	16-Jul-90	687	716	657		687	1020	1020		687	788
1990	7	1990.07	17-Jul-90	658	701	618		658	1010	1010		658	787
1990	7	1990.07	18-Jul-90	722	759	673		722	965	965		722	787
1990	7	1990.07	19-Jul-90	700	754	641		700	985	985		700	785
1990	7	1990.07	20-Jul-90	731	749	704		731	918	918		731	784
1990	7	1990.07	21-Jul-90	710	733	668		710	922	922		710	780
1990	7	1990.07	22-Jul-90	742	808	693		742	886	886		742	777
1990	7	1990.07	23-Jul-90	743	774	671		743	995	995		743	773
1990	7	1990.07	24-Jul-90	736	759	714		736	1000	1000		736	768
1990	7	1990.07	25-Jul-90	765	803	726		765	1010	1010		765	766
1990	7	1990.07	26-Jul-90	780	829	714		780	935	935		780	763
1990	7	1990.07	27-Jul-90	786	814	752		786	919	919		786	762
1990	7	1990.07	28-Jul-90	764	806	679		764	982	982		764	762
1990	7	1990.07	29-Jul-90	768	817	721		768	991	991		768	762
1990	7	1990.07	30-Jul-90	756	787	720		756	1090	1090		756	763
1990	7	1990.07	31-Jul-90	763	805	656		763	973	973		763	765
1990	8	1990.08	1-Aug-90	753	792	700		753	924	924		753	765
1990	8	1990.08	2-Aug-90	798	833	753		798	877	877		798	766
1990	8	1990.08	3-Aug-90	801	836	765		801	932	932		801	767
1990	8	1990.08	4-Aug-90	766	790	742		766	952	952		766	767
1990	8	1990.08	5-Aug-90	722	739	679		722	1020	1020		722	764
1990	8	1990.08	6-Aug-90	753	828	672		753	1070	1070		753	762
1990	8	1990.08	7-Aug-90	766	826	737		766	1080	1080		766	762
1990	8	1990.08	8-Aug-90	731	774	666		731	1070	1070		731	759
1990	8	1990.08	9-Aug-90	765				1040	1040			765	756
1990	8	1990.08	10-Aug-90	743	772	709		743	999	999		743	752
1990	8	1990.08	11-Aug-90	733	783	686		733	1010	1010		733	748
1990	8	1990.08	12-Aug-90	729	782	662		729	983	983		729	745
1990	8	1990.08	13-Aug-90	743	803	694		743	951	951		743	744
1990	8	1990.08	14-Aug-90	710	733	675		710	964	964		710	744
1990	8	1990.08	15-Aug-90	670	685	656		670	1010	1010		670	744
1990	8	1990.08	16-Aug-90	674	728	638		674	1050	1050		674	744
1990	8	1990.08	17-Aug-90	639	668	600		639	1090	1090		639	741
1990	8	1990.08	18-Aug-90	665	726	634		665	1070	1070		665	740
1990	8	1990.08	19-Aug-90	651	684	599		651	1160	1160		651	738
1990	8	1990.08	20-Aug-90	625	659	590		625	1270	1270		625	735
1990	8	1990.08	21-Aug-90	633	653	614		633	1220	1220		633	731
1990	8	1990.08	22-Aug-90	652	691	614		652	1150	1150		652	728
1990	8	1990.08	23-Aug-90	691	735	646		691	1110	1110		691	727
1990	8	1990.08	24-Aug-90	721	766	678		721	997	997		721	725
1990	8	1990.08	25-Aug-90	719	739	683		719	1010	1010		719	723
1990	8	1990.08	26-Aug-90	692	733	661		692	1060	1060		692	720
1990	8	1990.08	27-Aug-90	692	724	658		692	1120	1120		692	717
1990	8	1990.08	28-Aug-90	688	722	672		688	1040	1040		688	715
1990	8	1990.08	29-Aug-90	688	775	613		688	980	980		688	713
1990	8	1990.08	30-Aug-90	744	765	719		744	934	934		744	712
1990	8	1990.08	31-Aug-90	771	804	737		771	875	875		771	713
1990	9	1990.09	1-Sep-90	785	801	761		785	930	930		785	712
1990	9	1990.09	2-Sep-90	784	816	747		784	1030	1030		784	712
1990	9	1990.09	3-Sep-90	784	829	727		784	1030	1030		784	712
1990	9	1990.09	4-Sep-90	747	811	671		747	1050	1050		747	713
1990	9	1990.09	5-Sep-90	786	827	734		786	971	971		786	714
1990	9	1990.09	6-Sep-90	789	823	754		789	899	899		789	715
1990	9	1990.09	7-Sep-90	772	802	752		772	814	814		772	716
1990	9	1990.09	8-Sep-90	750				821	821			750	716
1990	9	1990.09	9-Sep-90	723	754	704		723	860	860		723	715
1990	9	1990.09	10-Sep-90	788	813	760		788	889	889		788	717
1990	9	1990.09	11-Sep-90	765	818	722		765	873	873		765	718
1990	9	1990.09	12-Sep-90	722	739	701		722	833	833		722	717
1990	9	1990.09	13-Sep-90	767	796	726		767	778	778		767	719
1990	9	1990.09	14-Sep-90	775	809	748		775	750	750		775	723
1990	9	1990.09	15-Sep-90	768	805	751		768	789	789		768	726
1990	9	1990.09	16-Sep-90	779	820	721		779	892	892		779	731
1990	9	1990.09	17-Sep-90	699	714	685		699	931	931		699	732

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1990	9	1990.09 18-Sep-90	705	722	694		705	853	853			705	733
1990	9	1990.09 19-Sep-90	710	727	698		710	749	749			710	736
1990	9	1990.09 20-Sep-90	719	739	711		719	685	685			719	739
1990	9	1990.09 21-Sep-90	856	865	846		856	706	706			856	746
1990	9	1990.09 22-Sep-90	849	866	838		849	747	747			849	751
1990	9	1990.09 23-Sep-90	853	865	843		853	824	824			853	756
1990	9	1990.09 24-Sep-90	855	865	845		855	937	937			855	760
1990	9	1990.09 25-Sep-90	851	859	847		851	922	922			851	765
1990	9	1990.09 26-Sep-90	830	845	802		830	900	900			830	770
1990	9	1990.09 27-Sep-90	828	840	815		828	906	906			828	775
1990	9	1990.09 28-Sep-90	777	791	753		777	948	948			777	778
1990	9	1990.09 29-Sep-90	845	893	784		845	973	973			845	781
1990	9	1990.09 30-Sep-90	837	861	797		837	986	986			837	783
1990	10	1990.10 1-Oct-90	794	820	768		794	1000	1000			794	784
1990	10	1990.10 2-Oct-90	843	889	789		843	909	909			843	786
1990	10	1990.10 3-Oct-90	861	886	781		861	856	856			861	788
1990	10	1990.10 4-Oct-90	882	952	826		882	806	806			882	793
1990	10	1990.10 5-Oct-90	900	960	866		900	810	810			900	796
1990	10	1990.10 6-Oct-90	842	873	813		842	818	818			842	798
1990	10	1990.10 7-Oct-90	889	912	862		889	839	839			889	802
1990	10	1990.10 8-Oct-90	819	854	781		819	930	930			819	804
1990	10	1990.10 9-Oct-90	785	840	635		785	950	950			785	806
1990	10	1990.10 10-Oct-90	575	643	528		575	1290	1290			575	799
1990	10	1990.10 11-Oct-90	714	767	643		714	1080	1080			714	798
1990	10	1990.10 12-Oct-90	770	812	720		770	958	958			770	799
1990	10	1990.10 13-Oct-90	824	872	786		824	911	911			824	801
1990	10	1990.10 14-Oct-90	818	821	815		818	880	880			818	803
1990	10	1990.10 15-Oct-90	833	856	803		833	883	883			833	805
1990	10	1990.10 16-Oct-90	741	805	636		741	973	973			741	803
1990	10	1990.10 17-Oct-90	711	741	678		711	994	994			711	804
1990	10	1990.10 18-Oct-90	669	741	647		669	962	962			669	803
1990	10	1990.10 19-Oct-90	637	653	619		637	1020	1020			637	800
1990	10	1990.10 20-Oct-90	600	622	566		600	1090	1090			600	796
1990	10	1990.10 21-Oct-90	576	605	545		576	1110	1110			576	787
1990	10	1990.10 22-Oct-90	617	634	600		617	1100	1100			617	779
1990	10	1990.10 23-Oct-90	633	672	615		633	1100	1100			633	772
1990	10	1990.10 24-Oct-90	623	630	615		623	1050	1050			623	764
1990	10	1990.10 25-Oct-90	615	629	602		615	1050	1050			615	756
1990	10	1990.10 26-Oct-90	600	614	589		600	1070	1070			600	749
1990	10	1990.10 27-Oct-90	584	593	578		584	1080	1080			584	740
1990	10	1990.10 28-Oct-90	599	615	582		599	1050	1050			599	735
1990	10	1990.10 29-Oct-90	586	605	566		586	1060	1060			586	726
1990	10	1990.10 30-Oct-90	611	618	598		611	1050	1050			611	718
1990	10	1990.10 31-Oct-90	581	599	557		581	1110	1110			581	711
1990	11	1990.11 1-Nov-90	546	555	534		546	1130	1130			546	701
1990	11	1990.11 2-Nov-90	537	569	516		537	1120	1120			537	691
1990	11	1990.11 3-Nov-90	575	595	551		575	1090	1090			575	680
1990	11	1990.11 4-Nov-90	611	640	586		611	1080	1080			611	671
1990	11	1990.11 5-Nov-90	611	623	601		611	1080	1080			611	663
1990	11	1990.11 6-Nov-90	600	615	587		600	1080	1080			600	653
1990	11	1990.11 7-Nov-90	591	604	574		591	1090	1090			591	646
1990	11	1990.11 8-Nov-90	584	609	560		584	1120	1120			584	639
1990	11	1990.11 9-Nov-90	590	609	571		590	1120	1120			590	640
1990	11	1990.11 10-Nov-90	609	625	589		609	1100	1100			609	636
1990	11	1990.11 11-Nov-90	607	626	585		607	1110	1110			607	631
1990	11	1990.11 12-Nov-90	630	649	609		630	1110	1110			630	624
1990	11	1990.11 13-Nov-90	648	661	632		648	1130	1130			648	619
1990	11	1990.11 14-Nov-90	630	642	616		630	1150	1150			630	612
1990	11	1990.11 15-Nov-90	612	620	603		612	1140	1140			612	607
1990	11	1990.11 16-Nov-90	604	612	591		604	1130	1130			604	604
1990	11	1990.11 17-Nov-90	610	632	589		610	1110	1110			610	602
1990	11	1990.11 18-Nov-90	645	661	628		645	1110	1110			645	602
1990	11	1990.11 19-Nov-90	654	748	644		654	1120	1120			654	604
1990	11	1990.11 20-Nov-90	634	679	646		634	1130	1130			634	606
1990	11	1990.11 21-Nov-90	622	650	598		622	1160	1160			622	606
1990	11	1990.11 22-Nov-90	603	615	590		603	1140	1140			603	605
1990	11	1990.11 23-Nov-90	624	637	614		624	1130	1130			624	605
1990	11	1990.11 24-Nov-90	638	649	625		638	1120	1120			638	606
1990	11	1990.11 25-Nov-90	653	669	640		653	1120	1120			653	608
1990	11	1990.11 26-Nov-90	647	655	640		647	1110	1110			647	610
1990	11	1990.11 27-Nov-90	633	642	622		633	1120	1120			633	611
1990	11	1990.11 28-Nov-90	634	648	627		634	1110	1110			634	612
1990	11	1990.11 29-Nov-90	649	749	634		649	1110	1110			649	614
1990	11	1990.11 30-Nov-90	658	673	644		658	1090	1090			658	616
1990	12	1990.12 1-Dec-90	698	730	657		698	1050	1050			698	621
1990	12	1990.12 2-Dec-90	749	763	732		749	963	963			749	628

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1990	12	1990.12	3-Dec-90	765	778	753		765	936	936		765	635
1990	12	1990.12	4-Dec-90	810	866	762		810	926	926		810	641
1990	12	1990.12	5-Dec-90	875	888	865		875	926	926		875	650
1990	12	1990.12	6-Dec-90	879	902	860		879	895	895		879	660
1990	12	1990.12	7-Dec-90	897	916	880		897	860	860		897	670
1990	12	1990.12	8-Dec-90	897	903	892		897	846	846		897	680
1990	12	1990.12	9-Dec-90	904	920	893		904	843	843		904	691
1990	12	1990.12	10-Dec-90	912	933	895		912	854	854		912	701
1990	12	1990.12	11-Dec-90	938	957	913		938	884	884		938	712
1990	12	1990.12	12-Dec-90	896	924	876		896	951	951		896	721
1990	12	1990.12	13-Dec-90	879	889	867		879	956	956		879	728
1990	12	1990.12	14-Dec-90	863	882	849		863	979	979		863	736
1990	12	1990.12	15-Dec-90	895	915	887		895	973	973		895	746
1990	12	1990.12	16-Dec-90	948	971	915		948	930	930		948	757
1990	12	1990.12	17-Dec-90	961	973	946		961	920	920		961	769
1990	12	1990.12	18-Dec-90	957	970	947		957	911	911		957	779
1990	12	1990.12	19-Dec-90	941	953	924		941	911	911		941	789
1990	12	1990.12	20-Dec-90	919	923	913		919	917	917		919	798
1990	12	1990.12	21-Dec-90	917	931	894		917	918	918		917	808
1990	12	1990.12	22-Dec-90	905	929	893		905	908	908		905	818
1990	12	1990.12	23-Dec-90	918	931	904		918	911	911		918	828
1990	12	1990.12	24-Dec-90	919	936	900		919	913	913		919	837
1990	12	1990.12	25-Dec-90	920	945	896		920	904	904		920	846
1990	12	1990.12	26-Dec-90	962	990	928		962	901	901		962	857
1990	12	1990.12	27-Dec-90	976	992	962		976	901	901		976	868
1990	12	1990.12	28-Dec-90	967	981	956		967	900	900		967	879
1990	12	1990.12	29-Dec-90	934	948	912		934	911	911		934	889
1990	12	1990.12	30-Dec-90	895	907	882		895	931	931		895	897
1990	12	1990.12	31-Dec-90	874	885	855		874	942	942		874	902
1991	1	1991.01	1-Jan-91	875			875	959	959			875	907
1991	1	1991.01	2-Jan-91	885	899	872	885	952	952			885	911
1991	1	1991.01	3-Jan-91	923	942	888	923	939	939			923	914
1991	1	1991.01	4-Jan-91	998	938	930	998	924	924			998	918
1991	1	1991.01	5-Jan-91	966	998	943	966	921	921			966	921
1991	1	1991.01	6-Jan-91	966	947	921	966	917	917			966	924
1991	1	1991.01	7-Jan-91	930	943	920	930	909	909			930	925
1991	1	1991.01	8-Jan-91	961	1135	924	961	913	913			961	927
1991	1	1991.01	9-Jan-91	955	986	923	955	916	916			955	928
1991	1	1991.01	10-Jan-91	982	994	971	982	916	916			982	930
1991	1	1991.01	11-Jan-91	977	986	971	977	905	905			977	932
1991	1	1991.01	12-Jan-91	995	1006	977	995	905	905			995	936
1991	1	1991.01	13-Jan-91	1010	1028	990	1010	882	882			1010	941
1991	1	1991.01	14-Jan-91	1028	1041	1011	1028	870	870			1028	945
1991	1	1991.01	15-Jan-91	1062	1089	1032	1062	834	834			1062	949
1991	1	1991.01	16-Jan-91	1098	1111	1078	1098	789	789			1098	954
1991	1	1991.01	17-Jan-91	1099	1137	1065	1099	794	794			1099	959
1991	1	1991.01	18-Jan-91	969	1158	754	969	793	793			969	960
1991	1	1991.01	19-Jan-91	1100	756	730		798	798			1100	966
1991	1	1991.01	20-Jan-91	1100	782	753		799	799			1100	972
1991	1	1991.01	21-Jan-91	1100	757	723		778	778			1100	978
1991	1	1991.01	22-Jan-91	1100	752	704		726	726			1100	984
1991	1	1991.01	23-Jan-91	1100	768	711		722	722			1100	990
1991	1	1991.01	24-Jan-91	1100	786	705		712	712			1100	996
1991	1	1991.01	25-Jan-91	1107			1107	704	704			1107	1001
1991	1	1991.01	26-Jan-91	1116	1169	1066	1116	693	693			1116	1006
1991	1	1991.01	27-Jan-91	1110	1187	1010	1110	668	668			1110	1011
1991	1	1991.01	28-Jan-91	1043	1074	1002	1043	695	695			1043	1014
1991	1	1991.01	29-Jan-91	1069	1090	1038	1069	666	666			1069	1020
1991	1	1991.01	30-Jan-91	1053	1090	1030	1053	672	672			1053	1026
1991	1	1991.01	31-Jan-91	1078	1107	1057	1078	634	634			1078	1033
1991	2	1991.02	1-Feb-91	1022	1106	945	1022	613	613			1022	1037
1991	2	1991.02	2-Feb-91	925	950	882	925	615	615			925	1037
1991	2	1991.02	3-Feb-91	928	1012	853	928	740	740			928	1035
1991	2	1991.02	4-Feb-91	966	1011	943	966	800	800			966	1035
1991	2	1991.02	5-Feb-91	1003	1034	956	1003	947	947			1003	1036
1991	2	1991.02	6-Feb-91	935	1003	872	935	1020	1020			935	1036
1991	2	1991.02	7-Feb-91	1047	1169	932	1047	959	959			1047	1039
1991	2	1991.02	8-Feb-91	1062	1119	1019	1062	926	926			1062	1043
1991	2	1991.02	9-Feb-91	1153	1175	1119	1153	913	913			1153	1049
1991	2	1991.02	10-Feb-91	1133	1158	1095	1133	888	888			1133	1054
1991	2	1991.02	11-Feb-91	1137	1166	1104	1137	879	879			1137	1058
1991	2	1991.02	12-Feb-91	1204	1226	1174	1204	865	865			1204	1065
1991	2	1991.02	13-Feb-91	1228	1283	1189	1228	890	890			1228	1072
1991	2	1991.02	14-Feb-91	1115	1193	1060	1115	868	868			1115	1073
1991	2	1991.02	15-Feb-91	1102	1114	1086	1102	819	819			1102	1073
1991	2	1991.02	16-Feb-91	1119	1148	1086	1119	790	790			1119	1074

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1991	2	1991.02 17-Feb-91	1159	1181	1145		1159	758	758			1159	1080
1991	2	1991.02 18-Feb-91	1188	1218	1135		1188	769	769			1188	1083
1991	2	1991.02 19-Feb-91	1197	1239	1162		1197	755	755			1197	1087
1991	2	1991.02 20-Feb-91	1126	1174	1101		1126	682	682			1126	1088
1991	2	1991.02 21-Feb-91	1056	1105	1007		1056	632	632			1056	1086
1991	2	1991.02 22-Feb-91	1048	1112	993		1048	589	589			1048	1084
1991	2	1991.02 23-Feb-91	1063	1105	1033		1063	548	548			1063	1083
1991	2	1991.02 24-Feb-91	962	1066	882		962	554	554			962	1078
1991	2	1991.02 25-Feb-91	975	1078	881		975	564	564			975	1074
1991	2	1991.02 26-Feb-91	1044	1092	1011		1044	559	559			1044	1071
1991	2	1991.02 27-Feb-91	1052	1083	1027		1052	580	580			1052	1072
1991	2	1991.02 28-Feb-91	1044	1092	1018		1044	698	698			1044	1071
1991	3	1991.03 1-Mar-91	996	1034	965		996	876	876			996	1069
1991	3	1991.03 2-Mar-91	1035	1141	965		1035	1010	1010			1035	1067
1991	3	1991.03 3-Mar-91	1092	1131	1041		1092	1050	1050			1092	1070
1991	3	1991.03 4-Mar-91	981	1044	939		981	1180	1180			981	1072
1991	3	1991.03 5-Mar-91	992	1034	965		992	1280	1280			992	1074
1991	3	1991.03 6-Mar-91	996	1086	879		996	1380	1380			996	1075
1991	3	1991.03 7-Mar-91	1047	1112	981		1047	1320	1320			1047	1076
1991	3	1991.03 8-Mar-91	1170	1250	1110		1170	1300	1300			1170	1084
1991	3	1991.03 9-Mar-91	1219	1251	1190		1219	1250	1250			1219	1090
1991	3	1991.03 10-Mar-91	1273	1301	1247		1273	1180	1180			1273	1097
1991	3	1991.03 11-Mar-91	1270	1288	1227		1270	1130	1130			1270	1101
1991	3	1991.03 12-Mar-91	1277	1335	1225		1277	1100	1100			1277	1106
1991	3	1991.03 13-Mar-91	1310	1328	1287		1310	1080	1080			1310	1111
1991	3	1991.03 14-Mar-91	1286	1333	1249		1286	1080	1080			1286	1114
1991	3	1991.03 15-Mar-91	1217	1249	1196		1217	1080	1080			1217	1114
1991	3	1991.03 16-Mar-91	1229	1276	1203		1229	1060	1060			1229	1118
1991	3	1991.03 17-Mar-91	1273	1283	1263		1273	1090	1090			1273	1123
1991	3	1991.03 18-Mar-91	1233	1270	1186		1233	1150	1150			1233	1127
1991	3	1991.03 19-Mar-91	1170	1220	1132		1170	1200	1200			1170	1127
1991	3	1991.03 20-Mar-91	1007	1124	852		1007	1430	1430			1007	1121
1991	3	1991.03 21-Mar-91	775	831	714		775	2180	2180			775	1107
1991	3	1991.03 22-Mar-91	531	682	405		531	2980	2980			531	1087
1991	3	1991.03 23-Mar-91	423	464	401		423	2850	2850			423	1066
1991	3	1991.03 24-Mar-91	601	686	473		601	2620	2620			601	1051
1991	3	1991.03 25-Mar-91	748	788	691		748	2420	2420			748	1041
1991	3	1991.03 26-Mar-91	700	812	571		700	2780	2780			700	1032
1991	3	1991.03 27-Mar-91	618	676	556		618	3310	3310			618	1020
1991	3	1991.03 28-Mar-91	415	546	341		415	3980	3980			415	999
1991	3	1991.03 29-Mar-91	488	542	413		488	3510	3510			488	981
1991	3	1991.03 30-Mar-91	603	649	548		603	2880	2880			603	966
1991	3	1991.03 31-Mar-91	762	832	667		762	2410	2410			762	958
1991	4	1991.04 1-Apr-91	899	950	840		899	2080	2080			899	954
1991	4	1991.04 2-Apr-91	994	1050	946		994	1840	1840			994	950
1991	4	1991.04 3-Apr-91	1079	1116	1048		1079	1680	1680			1079	954
1991	4	1991.04 4-Apr-91	1139	1170	1111		1139	1570	1570			1139	958
1991	4	1991.04 5-Apr-91	1208	1236	1152		1208	1480	1480			1208	965
1991	4	1991.04 6-Apr-91	1243	1253	1236		1243	1420	1420			1243	972
1991	4	1991.04 7-Apr-91	1259	1265	1254		1259	1380	1380			1259	975
1991	4	1991.04 8-Apr-91	1269	1277	1261		1269	1340	1340			1269	977
1991	4	1991.04 9-Apr-91	1284	1307	1271		1284	1280	1280			1284	977
1991	4	1991.04 10-Apr-91	1321	1334	1308		1321	1180	1180			1321	979
1991	4	1991.04 11-Apr-91	1325	1338	1306		1325	1060	1060			1325	980
1991	4	1991.04 12-Apr-91	1378	1490	1290		1378	951	951			1378	983
1991	4	1991.04 13-Apr-91	1481	1492	1471		1481	843	843			1481	989
1991	4	1991.04 14-Apr-91	1458	1488	1403		1458	839	839			1458	997
1991	4	1991.04 15-Apr-91	1433	1507	1395		1433	809	809			1433	1004
1991	4	1991.04 16-Apr-91	1634	1707	1515		1634	755	755			1634	1016
1991	4	1991.04 17-Apr-91	1544	1640	1412		1544	702	702			1544	1026
1991	4	1991.04 18-Apr-91	1382	1407	1360		1382	642	642			1382	1033
1991	4	1991.04 19-Apr-91	1242	1344	1133		1242	632	632			1242	1041
1991	4	1991.04 20-Apr-91	1117	1147	1087		1117	649	649			1117	1053
1991	4	1991.04 21-Apr-91	1087	1170	989		1087	861	861			1087	1071
1991	4	1991.04 22-Apr-91	1183	1235	1076		1183	965	965			1183	1096
1991	4	1991.04 23-Apr-91	1033	1061	1021		1033	907	907			1033	1111
1991	4	1991.04 24-Apr-91	879	996	775		879	1070	1070			879	1115
1991	4	1991.04 25-Apr-91	739	767	678		739	1140	1140			739	1117
1991	4	1991.04 26-Apr-91	653	669	640		653	1130	1130			653	1118
1991	4	1991.04 27-Apr-91	628	636	623		628	1120	1120			628	1125
1991	4	1991.04 28-Apr-91	640	646	634		640	1230	1230			640	1130
1991	4	1991.04 29-Apr-91	649	656	644		649	1650	1650			649	1131
1991	4	1991.04 30-Apr-91	500					1840	1840			500	1123
1991	5	1991.05 1-May-91	500					2000	2000			500	1109
1991	5	1991.05 2-May-91	500					1940	1940			500	1093
1991	5	1991.05 3-May-91	365	383	350		365	1580	1580			365	1069

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1991	5	1991.05 4-May-91	473	568	376		473	1280	1280			473	1047
1991	5	1991.05 5-May-91	592	627	547		592	1080	1080			592	1026
1991	5	1991.05 6-May-91	635	710	597		635	980	980			635	1006
1991	5	1991.05 7-May-91	696	744	662		696	913	913			696	987
1991	5	1991.05 8-May-91	723	741	702		723	875	875			723	969
1991	5	1991.05 9-May-91	800					852	852			800	953
1991	5	1991.05 10-May-91	800					784	784			800	936
1991	5	1991.05 11-May-91	800					750	750			800	918
1991	5	1991.05 12-May-91	800					774	774			800	899
1991	5	1991.05 13-May-91	775				775	784	784			775	875
1991	5	1991.05 14-May-91	847	866	835		847	708	708			847	855
1991	5	1991.05 15-May-91	880	901	856		880	687	687			880	837
1991	5	1991.05 16-May-91	809	879	785		809	720	720			809	809
1991	5	1991.05 17-May-91	763	820	726		763	751	751			763	783
1991	5	1991.05 18-May-91	717	805	637		717	816	816			717	761
1991	5	1991.05 19-May-91	528	631	469		528	1230	1230			528	737
1991	5	1991.05 20-May-91	442	500	380		442	1500	1500			442	715
1991	5	1991.05 21-May-91	425	492	384		425	1620	1620			425	692
1991	5	1991.05 22-May-91	448	494	426		448	1630	1630			448	668
1991	5	1991.05 23-May-91	504	568	453		504	1250	1250			504	650
1991	5	1991.05 24-May-91	588	647	546		588	1060	1060			588	641
1991	5	1991.05 25-May-91	634	742	588		634	1020	1020			634	637
1991	5	1991.05 26-May-91	601	637	654		601	966	966			601	635
1991	5	1991.05 27-May-91	624	718	592		624	931	931			624	635
1991	5	1991.05 28-May-91	704	795	647		704	849	849			704	637
1991	5	1991.05 29-May-91	800	824	772		800	783	783			800	642
1991	5	1991.05 30-May-91	804	831	765		804	739	739			804	653
1991	5	1991.05 31-May-91	846	873	814		846	663	663			846	664
1991	6	1991.06 1-Jun-91	797	870	754		797	659	659			797	674
1991	6	1991.06 2-Jun-91	771	841	732		771	661	661			771	688
1991	6	1991.06 3-Jun-91	806	870	734		806	648	648			806	699
1991	6	1991.06 4-Jun-91	827	889	795		827	625	625			827	706
1991	6	1991.06 5-Jun-91	905	950	854		905	566	566			905	715
1991	6	1991.06 6-Jun-91	900	921	868		900	565	565			900	722
1991	6	1991.06 7-Jun-91	901	927	869		901	537	537			901	728
1991	6	1991.06 8-Jun-91	879	950	804		879	565	565			879	731
1991	6	1991.06 9-Jun-91	837	914	785		837	545	545			837	732
1991	6	1991.06 10-Jun-91	897	951	849		897	530	530			897	735
1991	6	1991.06 11-Jun-91	943	966	916		943	512	512			943	740
1991	6	1991.06 12-Jun-91	1028	1101	968		1028	507	507			1028	749
1991	6	1991.06 13-Jun-91	1090	1186	1021		1090	511	511			1090	757
1991	6	1991.06 14-Jun-91	1016	1079	956		1016	520	520			1016	761
1991	6	1991.06 15-Jun-91	948	971	887		948	587	587			948	766
1991	6	1991.06 16-Jun-91	900					612	612			900	770
1991	6	1991.06 17-Jun-91	822	840	807		822	648	648			822	774
1991	6	1991.06 18-Jun-91	818	875	763		818	630	630			818	784
1991	6	1991.06 19-Jun-91	783	830	747		783	633	633			783	795
1991	6	1991.06 20-Jun-91	822	889	793		822	596	596			822	808
1991	6	1991.06 21-Jun-91	907	939	875		907	551	551			907	823
1991	6	1991.06 22-Jun-91	959	1014	928		959	503	503			959	839
1991	6	1991.06 23-Jun-91	887	1008	845		887	517	517			887	849
1991	6	1991.06 24-Jun-91	802	832	774		802	550	550			802	854
1991	6	1991.06 25-Jun-91	809	859	764		809	527	527			809	861
1991	6	1991.06 26-Jun-91	859	914	821		859	506	506			859	869
1991	6	1991.06 27-Jun-91	912	1001	794		912	511	511			912	876
1991	6	1991.06 28-Jun-91	827	892	778		827	539	539			827	877
1991	6	1991.06 29-Jun-91	804	832	769		804	581	581			804	877
1991	6	1991.06 30-Jun-91	696	762	651		696	604	604			696	872
1991	7	1991.07 1-Jul-91	699	759	656		699	640	640			699	868
1991	7	1991.07 2-Jul-91	763	850	725		763	596	596			763	868
1991	7	1991.07 3-Jul-91	837	856	827		837	536	536			837	869
1991	7	1991.07 4-Jul-91	808	880	747		808	531	531			808	869
1991	7	1991.07 5-Jul-91	810	877	764		810	500	500			810	865
1991	7	1991.07 6-Jul-91	790	828	767		790	518	518			790	862
1991	7	1991.07 7-Jul-91	843	875	828		843	552	552			843	860
1991	7	1991.07 8-Jul-91	819	895	722		819	641	641			819	858
1991	7	1991.07 9-Jul-91	750					718	718			750	855
1991	7	1991.07 10-Jul-91	702	751	658		702	747	747			702	848
1991	7	1991.07 11-Jul-91	665	744	623		665	699	699			665	839
1991	7	1991.07 12-Jul-91	752	772	732		752	650	650			752	830
1991	7	1991.07 13-Jul-91	689	762	633		689	621	621			689	817
1991	7	1991.07 14-Jul-91	652	756	592		652	609	609			652	804
1991	7	1991.07 15-Jul-91	708	752	661		708	669	669			708	796
1991	7	1991.07 16-Jul-91	748	781	715		748	646	646			748	791
1991	7	1991.07 17-Jul-91	763	786	740		763	593	593			763	789
1991	7	1991.07 18-Jul-91	813	850	784		813	572	572			813	789

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1991	7	1991.07 19-Jul-91	860	892	822		860	567	567			860	792
1991	7	1991.07 20-Jul-91	863	893	775		863	571	571			863	793
1991	7	1991.07 21-Jul-91	774	813	739		774	619	619			774	789
1991	7	1991.07 22-Jul-91	822	854	780		822	637	637			822	784
1991	7	1991.07 23-Jul-91	826	852	808		826	597	597			826	782
1991	7	1991.07 24-Jul-91	761	806	736		761	562	562			761	781
1991	7	1991.07 25-Jul-91	767	792	752		767	559	559			767	779
1991	7	1991.07 26-Jul-91	821	844	798		821	509	509			821	778
1991	7	1991.07 27-Jul-91	757	832	723		757	523	523			757	773
1991	7	1991.07 28-Jul-91	753	803	679		753	525	525			753	771
1991	7	1991.07 29-Jul-91	748	793	711		748	600	600			748	769
1991	7	1991.07 30-Jul-91	736	761	644		736	578	578			736	770
1991	7	1991.07 31-Jul-91	751	802	722		751	530	530			751	772
1991	8	1991.08 1-Aug-91	819	848	765		819	546	546			819	774
1991	8	1991.08 2-Aug-91	787	819	773		787	510	510			787	772
1991	8	1991.08 3-Aug-91	869	893	837		869	506	506			869	774
1991	8	1991.08 4-Aug-91	822	867	762		822	611	611			822	774
1991	8	1991.08 5-Aug-91	757	816	655		757	628	628			757	773
1991	8	1991.08 6-Aug-91	805	831	788		805	603	603			805	772
1991	8	1991.08 7-Aug-91	822	881	765		822	581	581			822	772
1991	8	1991.08 8-Aug-91	819	868	783		819	580	580			819	774
1991	8	1991.08 9-Aug-91	783	824	775		783	559	559			783	777
1991	8	1991.08 10-Aug-91	786	823	759		786	555	555			786	781
1991	8	1991.08 11-Aug-91	864	893	823		864	536	536			864	785
1991	8	1991.08 12-Aug-91	852	893	835		852	561	561			852	790
1991	8	1991.08 13-Aug-91	827	857	787		827	536	536			827	796
1991	8	1991.08 14-Aug-91	865	913	823		865	526	526			865	801
1991	8	1991.08 15-Aug-91	936	975	893		936	513	513			936	808
1991	8	1991.08 16-Aug-91	879	977	860		879	478	478			879	811
1991	8	1991.08 17-Aug-91	939	960	897		939	495	495			939	816
1991	8	1991.08 18-Aug-91	806	872	751		806	580	580			806	814
1991	8	1991.08 19-Aug-91	756	788	722		756	670	670			756	810
1991	8	1991.08 20-Aug-91	787	881	693		787	582	582			787	811
1991	8	1991.08 21-Aug-91	775	863	749		775	528	528			775	809
1991	8	1991.08 22-Aug-91	832	858	802		832	472	472			832	809
1991	8	1991.08 23-Aug-91	860	883	826		860	472	472			860	813
1991	8	1991.08 24-Aug-91	830	880	810		830	491	491			830	815
1991	8	1991.08 25-Aug-91	849	872	824		849	488	488			849	816
1991	8	1991.08 26-Aug-91	816	875	782		816	554	554			816	818
1991	8	1991.08 27-Aug-91	897	924	870		897	525	525			897	822
1991	8	1991.08 28-Aug-91	876	897	854		876	499	499			876	827
1991	8	1991.08 29-Aug-91	912	946	880		912	468	468			912	833
1991	8	1991.08 30-Aug-91	810	939	754		810	492	492			810	835
1991	8	1991.08 31-Aug-91	821	863	786		821	514	514			821	835
1991	9	1991.09 1-Sep-91	794	821	766		794	558	558			794	835
1991	9	1991.09 2-Sep-91	788	801	774		788	548	548			788	832
1991	9	1991.09 3-Sep-91	820	865	763		820	565	565			820	832
1991	9	1991.09 4-Sep-91	833	861	799		833	488	488			833	835
1991	9	1991.09 5-Sep-91	852	897	810		852	436	436			852	836
1991	9	1991.09 6-Sep-91	833	866	761		833	446	446			833	837
1991	9	1991.09 7-Sep-91	744	777	672		744	512	512			744	834
1991	9	1991.09 8-Sep-91	725	760	683		725	564	564			725	832
1991	9	1991.09 9-Sep-91	798	855	732		798	582	582			798	833
1991	9	1991.09 10-Sep-91	850	880	800		850	564	564			850	832
1991	9	1991.09 11-Sep-91	800					563	563			800	830
1991	9	1991.09 12-Sep-91	800					549	549			800	829
1991	9	1991.09 13-Sep-91	787	814	774		787	563	563			787	827
1991	9	1991.09 14-Sep-91	800					562	562			800	822
1991	9	1991.09 15-Sep-91	802	830	773		802	596	596			802	820
1991	9	1991.09 16-Sep-91	765	778	754		765	624	624			765	814
1991	9	1991.09 17-Sep-91	781	792	761		781	588	588			781	813
1991	9	1991.09 18-Sep-91	782	852	708		782	565	565			782	814
1991	9	1991.09 19-Sep-91	830	848	806		830	552	552			830	815
1991	9	1991.09 20-Sep-91	818	865	763		818	584	584			818	817
1991	9	1991.09 21-Sep-91	847	872	822		847	549	549			847	817
1991	9	1991.09 22-Sep-91	825	848	803		825	616	616			825	816
1991	9	1991.09 23-Sep-91	828	888	747		828	637	637			828	816
1991	9	1991.09 24-Sep-91	882	965	841		882	550	550			882	817
1991	9	1991.09 25-Sep-91	916	977	887		916	561	561			916	821
1991	9	1991.09 26-Sep-91	915	926	901		915	573	573			915	821
1991	9	1991.09 27-Sep-91	892	927	843		892	617	617			892	822
1991	9	1991.09 28-Sep-91	817	851	787		817	666	666			817	819
1991	9	1991.09 29-Sep-91	820	862	778		820	715	715			820	819
1991	9	1991.09 30-Sep-91	742	774	679		742	729	729			742	816
1991	10	1991.10 1-Oct-91	800					657	657			800	816
1991	10	1991.10 2-Oct-91	850				850	606	606			850	818

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1991	10	1991.10	3-Oct-91	961	1007	934		961	589	589		961	823
1991	10	1991.10	4-Oct-91	961	1008	932		961	549	549		961	827
1991	10	1991.10	5-Oct-91	958	982	938		958	518	518		958	831
1991	10	1991.10	6-Oct-91	980	1011	956		980	558	558		980	836
1991	10	1991.10	7-Oct-91	912	984	821		912	616	616		912	841
1991	10	1991.10	8-Oct-91	758	803	739		758	747	747		758	843
1991	10	1991.10	9-Oct-91	802	845	752		802	675	675		802	843
1991	10	1991.10	10-Oct-91	865	921	824		865	621	621		865	843
1991	10	1991.10	11-Oct-91	923	971	869		923	612	612		923	847
1991	10	1991.10	12-Oct-91	893	947	840		893	633	633		893	850
1991	10	1991.10	13-Oct-91	858	911	755		858	669	669		858	853
1991	10	1991.10	14-Oct-91	743	775	672		743	723	723		743	851
1991	10	1991.10	15-Oct-91	808	856	754		808	692	692		808	851
1991	10	1991.10	16-Oct-91	776	800	758		776	698	698		776	851
1991	10	1991.10	17-Oct-91	846	887	810		846	650	650		846	854
1991	10	1991.10	18-Oct-91	848	868	813		848	666	666		848	856
1991	10	1991.10	19-Oct-91	713	805	678		713	753	753		713	852
1991	10	1991.10	20-Oct-91	666	707	639		666	817	817		666	847
1991	10	1991.10	21-Oct-91	658	750	635		658	830	830		658	841
1991	10	1991.10	22-Oct-91	638	676	593		638	872	872		638	834
1991	10	1991.10	23-Oct-91	541	581	521		541	907	907		541	825
1991	10	1991.10	24-Oct-91	580	618	544		580	863	863		580	815
1991	10	1991.10	25-Oct-91	611	623	596		611	883	883		611	805
1991	10	1991.10	26-Oct-91	574	630	526		574	989	989		574	793
1991	10	1991.10	27-Oct-91	496	527	460		496	1220	1220		496	780
1991	10	1991.10	28-Oct-91	467	509	432		467	1180	1180		467	768
1991	10	1991.10	29-Oct-91	465	507	394		465	1180	1180		465	756
1991	10	1991.10	30-Oct-91	477	500	382		477	1210	1210		477	748
1991	10	1991.10	31-Oct-91	468	500	432		468	1260	1260		468	737
1991	11	1991.11	1-Nov-91	447	492	406		447	1300	1300		447	723
1991	11	1991.11	2-Nov-91	477	469	431		477	1260	1260		477	707
1991	11	1991.11	3-Nov-91	457	500	416		457	1200	1200		457	690
1991	11	1991.11	4-Nov-91	447	460	413		447	1160	1160		447	673
1991	11	1991.11	5-Nov-91	464	474	452		464	1110	1110		464	656
1991	11	1991.11	6-Nov-91	484	504	416		484	1100	1100		484	642
1991	11	1991.11	7-Nov-91	511	527	498		511	1090	1090		511	633
1991	11	1991.11	8-Nov-91	530	537	523		530	1090	1090		530	624
1991	11	1991.11	9-Nov-91	551	571	526		551	1110	1110		551	614
1991	11	1991.11	10-Nov-91	550	561	542		550	1100	1100		550	601
1991	11	1991.11	11-Nov-91	562	576	546		562	1080	1080		562	590
1991	11	1991.11	12-Nov-91	564	571	556		564	1070	1070		564	581
1991	11	1991.11	13-Nov-91	573	585	562		573	1060	1060		573	575
1991	11	1991.11	14-Nov-91	589	603	573		589	1080	1080		589	568
1991	11	1991.11	15-Nov-91	594	604	580		594	1080	1080		594	562
1991	11	1991.11	16-Nov-91	592	597	584		592	1050	1050		592	553
1991	11	1991.11	17-Nov-91	589	596	581		589	1060	1060		589	545
1991	11	1991.11	18-Nov-91	616	634	601		616	1060	1060		616	541
1991	11	1991.11	19-Nov-91	637	642	629		637	1060	1060		637	540
1991	11	1991.11	20-Nov-91	625	651	613		625	1060	1060		625	539
1991	11	1991.11	21-Nov-91	625	635	619		625	1050	1050		625	539
1991	11	1991.11	22-Nov-91	642	654	631		642	1010	1010		642	542
1991	11	1991.11	23-Nov-91	643	679	631		643	1010	1010		643	544
1991	11	1991.11	24-Nov-91	642	742	628		642	1020	1020		642	545
1991	11	1991.11	25-Nov-91	655	677	635		655	1050	1050		655	548
1991	11	1991.11	26-Nov-91	639	675	614		639	1050	1050		639	553
1991	11	1991.11	27-Nov-91	629	637	621		629	1040	1040		629	558
1991	11	1991.11	28-Nov-91	616	627	605		616	1030	1030		616	563
1991	11	1991.11	29-Nov-91	611	634	600		611	1040	1040		611	568
1991	11	1991.11	30-Nov-91	630	640	623		630	1040	1040		630	573
1991	12	1991.12	1-Dec-91	619	635	606		619	1050	1050		619	579
1991	12	1991.12	2-Dec-91	652	679	631		652	1010	1010		652	585
1991	12	1991.12	3-Dec-91	702	742	639		702	960	960		702	593
1991	12	1991.12	4-Dec-91	733	743	726		733	922	922		733	602
1991	12	1991.12	5-Dec-91	731	740	674		731	901	901		731	611
1991	12	1991.12	6-Dec-91	736	748	727		736	895	895		736	620
1991	12	1991.12	7-Dec-91	735	739	730		735	895	895		735	627
1991	12	1991.12	8-Dec-91	741	766	723		741	913	913		741	634
1991	12	1991.12	9-Dec-91	780	824	765		780	892	892		780	642
1991	12	1991.12	10-Dec-91	753	765	746		753	877	877		753	649
1991	12	1991.12	11-Dec-91	760	772	752		760	879	879		760	655
1991	12	1991.12	12-Dec-91	758	772	744		758	881	881		758	662
1991	12	1991.12	13-Dec-91	764	785	752		764	884	884		764	668
1991	12	1991.12	14-Dec-91	775	791	760		775	884	884		775	674
1991	12	1991.12	15-Dec-91	799	804	791		799	877	877		799	681
1991	12	1991.12	16-Dec-91	793	801	784		793	868	868		793	688
1991	12	1991.12	17-Dec-91	797	806	785		797	861	861		797	695

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1991	12	1991.12	18-Dec-91	827	853	803		827	845	845		827	702
1991	12	1991.12	19-Dec-91	858	868	834		858	836	836		858	709
1991	12	1991.12	20-Dec-91	858	878	841		858	854	854		858	717
1991	12	1991.12	21-Dec-91	843	857	823		843	873	873		843	724
1991	12	1991.12	22-Dec-91	822	834	813		822	874	874		822	730
1991	12	1991.12	23-Dec-91	835	852	815		835	866	866		835	736
1991	12	1991.12	24-Dec-91	849	860	833		849	866	866		849	743
1991	12	1991.12	25-Dec-91	830	844	821		830	873	873		830	749
1991	12	1991.12	26-Dec-91	831	840	824		831	875	875		831	756
1991	12	1991.12	27-Dec-91	829	843	818		829	881	881		829	762
1991	12	1991.12	28-Dec-91	823	836	812		823	893	893		823	769
1991	12	1991.12	29-Dec-91	806	831	787		806	908	908		806	776
1991	12	1991.12	30-Dec-91	755	797	724		755	929	929		755	780
1991	12	1991.12	31-Dec-91	790	820	767		790	916	916		790	786
1992	1	1992.01	1-Jan-92	834	852	823		834	910	910		834	792
1992	1	1992.01	2-Jan-92	868	885	847		868	900	900		868	797
1992	1	1992.01	3-Jan-92	861	887	846		861	896	896		861	801
1992	1	1992.01	4-Jan-92	842	854	834		842	893	893		842	805
1992	1	1992.01	5-Jan-92	845	867	831		845	924	924		845	809
1992	1	1992.01	6-Jan-92	765	843	633		765	994	994		765	810
1992	1	1992.01	7-Jan-92	793	835	772		793	989	989		793	811
1992	1	1992.01	8-Jan-92	838	851	820		838	1000	1000		838	813
1992	1	1992.01	9-Jan-92	856	871	844		856	1020	1020		856	817
1992	1	1992.01	10-Jan-92	850	861	835		850	1040	1040		850	820
1992	1	1992.01	11-Jan-92	878	887	866		878	1030	1030		878	824
1992	1	1992.01	12-Jan-92	870	881	854		870	1020	1020		870	827
1992	1	1992.01	13-Jan-92	890	908	853		890	1010	1010		890	831
1992	1	1992.01	14-Jan-92	898	914	881		898	969	969		898	834
1992	1	1992.01	15-Jan-92	922	934	914		922	962	962		922	839
1992	1	1992.01	16-Jan-92	932	939	918		932	962	962		932	843
1992	1	1992.01	17-Jan-92	934	940	919		934	962	962		934	847
1992	1	1992.01	18-Jan-92	953	963	933		953	959	959		953	850
1992	1	1992.01	19-Jan-92	945	962	923		945	954	954		945	853
1992	1	1992.01	20-Jan-92	958	980	936		958	944	944		958	857
1992	1	1992.01	21-Jan-92	957	971	948		957	946	946		957	861
1992	1	1992.01	22-Jan-92	934	945	925		934	944	944		934	865
1992	1	1992.01	23-Jan-92	940	957	930		940	937	937		940	868
1992	1	1992.01	24-Jan-92	949	956	940		949	936	936		949	872
1992	1	1992.01	25-Jan-92	952	958	948		952	941	941		952	876
1992	1	1992.01	26-Jan-92	948	971	935		948	942	942		948	880
1992	1	1992.01	27-Jan-92	961	981	947		961	947	947		961	884
1992	1	1992.01	28-Jan-92	963	982	944		963	949	949		963	889
1992	1	1992.01	29-Jan-92	939	951	917		939	952	952		939	896
1992	1	1992.01	30-Jan-92	937	957	919		937	966	966		937	900
1992	1	1992.01	31-Jan-92	929	955	918		929	939	939		929	904
1992	2	1992.02	1-Feb-92	931	937	921		931	940	940		931	906
1992	2	1992.02	2-Feb-92	930	943	921		930	932	932		930	908
1992	2	1992.02	3-Feb-92	965	990	941		965	921	921		965	912
1992	2	1992.02	4-Feb-92	989	1001	977		989	912	912		989	917
1992	2	1992.02	5-Feb-92	988	1006	976		988	903	903		988	924
1992	2	1992.02	6-Feb-92	983	996	975		983	918	918		983	931
1992	2	1992.02	7-Feb-92	937	972	922		937	944	944		937	934
1992	2	1992.02	8-Feb-92	919	931	907		919	945	945		919	936
1992	2	1992.02	9-Feb-92	932	942	922		932	927	927		932	939
1992	2	1992.02	10-Feb-92	938	952	919		938	950	950		938	941
1992	2	1992.02	11-Feb-92	831	907	787		831	1150	1150		831	939
1992	2	1992.02	12-Feb-92	749	776	726		749	1320	1320		749	935
1992	2	1992.02	13-Feb-92	620	742	553		620	1930	1930		620	926
1992	2	1992.02	14-Feb-92	398	528	329		398	3650	3650		398	908
1992	2	1992.02	15-Feb-92	456	500	402		456	3390	3390		456	892
1992	2	1992.02	16-Feb-92	422	512	294		422	4550	4550		422	875
1992	2	1992.02	17-Feb-92	365	410	297		365	5110	5110		365	856
1992	2	1992.02	18-Feb-92	386	405	346		386	4350	4350		386	837
1992	2	1992.02	19-Feb-92	359	425	329		359	3900	3900		359	817
1992	2	1992.02	20-Feb-92	473	522	430		473	3510	3510		473	801
1992	2	1992.02	21-Feb-92	578	624	527		578	3070	3070		578	789
1992	2	1992.02	22-Feb-92	645	662	635		645	2730	2730		645	779
1992	2	1992.02	23-Feb-92	695	721	652		695	2340	2340		695	771
1992	2	1992.02	24-Feb-92	735	763	714		735	2080	2080		735	763
1992	2	1992.02	25-Feb-92	787	812	760		787	1890	1890		787	758
1992	2	1992.02	26-Feb-92	893	996	807		893	1750	1750		893	756
1992	2	1992.02	27-Feb-92	1017	1040	996		1017	1620	1620		1017	758
1992	2	1992.02	28-Feb-92	1072	1106	1042		1072	1530	1530		1072	762
1992	2	1992.02	29-Feb-92	1101	1109	1090		1101	1470	1470		1101	767
1992	3	1992.03	1-Mar-92	1112	1138	1096		1112	1400	1400		1112	774
1992	3	1992.03	2-Mar-92	1146	1177	1132		1146	1350	1350		1146	781

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1992	3	1992.03	3-Mar-92	1182	1200	1168		1182	1320	1320		1182	789
1992	3	1992.03	4-Mar-92	1202	1217	1188		1202	1290	1290		1202	797
1992	3	1992.03	5-Mar-92	1192	1205	1139		1192	1280	1280		1192	804
1992	3	1992.03	6-Mar-92	1153	1187	1107		1153	1370	1370		1153	809
1992	3	1992.03	7-Mar-92	978	1112	698		978	1770	1770		978	809
1992	3	1992.03	8-Mar-92	792	899	676		792	2090	2090		792	804
1992	3	1992.03	9-Mar-92	933	965	903		933	1760	1760		933	805
1992	3	1992.03	10-Mar-92	964	984	933		964	1600	1600		964	806
1992	3	1992.03	11-Mar-92	995	1029	965		995	1490	1490		995	808
1992	3	1992.03	12-Mar-92	1048	1081	1017		1048	1400	1400		1048	815
1992	3	1992.03	13-Mar-92	1122	1181	1073		1122	1340	1340		1122	827
1992	3	1992.03	14-Mar-92	1168	1234	1143		1168	1290	1290		1168	846
1992	3	1992.03	15-Mar-92	1190	1211	1152		1190	1270	1270		1190	872
1992	3	1992.03	16-Mar-92	1185	1200	1168		1185	1270	1270		1185	896
1992	3	1992.03	17-Mar-92	1219	1256	1192		1219	1270	1270		1219	923
1992	3	1992.03	18-Mar-92	1285	1324	1242		1285	1300	1300		1285	954
1992	3	1992.03	19-Mar-92	1228	1263	1205		1228	1320	1320		1228	982
1992	3	1992.03	20-Mar-92	1243	1266	1127		1243	1300	1300		1243	1011
1992	3	1992.03	21-Mar-92	1259	1275	1245		1259	1280	1280		1259	1037
1992	3	1992.03	22-Mar-92	1261	1274	1220		1261	1290	1290		1261	1060
1992	3	1992.03	23-Mar-92	1144	1222	1071		1144	1460	1460		1144	1077
1992	3	1992.03	24-Mar-92	1015	1060	984		1015	1530	1530		1015	1087
1992	3	1992.03	25-Mar-92	1005	1057	968		1005	1570	1570		1005	1096
1992	3	1992.03	26-Mar-92	940	981	906		940	1640	1640		940	1101
1992	3	1992.03	27-Mar-92	945	979	907		945	1700	1700		945	1103
1992	3	1992.03	28-Mar-92	965	1005	936		965	1680	1680		965	1101
1992	3	1992.03	29-Mar-92	999	1034	971		999	1670	1670		999	1099
1992	3	1992.03	30-Mar-92	1019	1050	991		1019	1650	1650		1019	1096
1992	3	1992.03	31-Mar-92	1060	1117	1044		1060	1610	1610		1060	1095
1992	4	1992.04	1-Apr-92	1051	1075	1028		1051	1570	1570		1051	1091
1992	4	1992.04	2-Apr-92	1014	1036	991		1014	1620	1620		1014	1086
1992	4	1992.04	3-Apr-92	980	1015	950		980	1620	1620		980	1078
1992	4	1992.04	4-Apr-92	966	992	937		966	1620	1620		966	1071
1992	4	1992.04	5-Apr-92	924	938	915		924	1640	1640		924	1063
1992	4	1992.04	6-Apr-92	902	927	879		902	1630	1630		902	1061
1992	4	1992.04	7-Apr-92	874	902	846		874	1620	1620		874	1063
1992	4	1992.04	8-Apr-92	891	915	861		891	1620	1620		891	1062
1992	4	1992.04	9-Apr-92	840	855	818		840	1610	1610		840	1058
1992	4	1992.04	10-Apr-92	813	837	782		813	1550	1550		813	1052
1992	4	1992.04	11-Apr-92	763	782	741		763	1520	1520		763	1042
1992	4	1992.04	12-Apr-92	717	739	676		717	1580	1580		717	1029
1992	4	1992.04	13-Apr-92	763	781	748		763	1530	1530		763	1015
1992	4	1992.04	14-Apr-92	768	785	750		768	1510	1510		768	1001
1992	4	1992.04	15-Apr-92	737	754	705		737	1420	1420		737	986
1992	4	1992.04	16-Apr-92	724	760	691		724	1340	1340		724	970
1992	4	1992.04	17-Apr-92	667	711	637		667	1330	1330		667	949
1992	4	1992.04	18-Apr-92	657	711	633		657	1230	1230		657	930
1992	4	1992.04	19-Apr-92	704	736	672		704	1180	1180		704	912
1992	4	1992.04	20-Apr-92	707	743	670		707	1190	1190		707	894
1992	4	1992.04	21-Apr-92	762	834	702		762	1010	1010		762	877
1992	4	1992.04	22-Apr-92	838	874	758		838	1000	1000		838	867
1992	4	1992.04	23-Apr-92	733	750	702		733	1020	1020		733	858
1992	4	1992.04	24-Apr-92	681	726	579		681	1070	1070		681	847
1992	4	1992.04	25-Apr-92	557	585	488		557	1270	1270		557	834
1992	4	1992.04	26-Apr-92	497	550	449		497	1330	1330		497	819
1992	4	1992.04	27-Apr-92	488	537	435		488	1400	1400		488	803
1992	4	1992.04	28-Apr-92	390	429	352		390	1610	1610		390	783
1992	4	1992.04	29-Apr-92	381	397	353		381	1500	1500		381	762
1992	4	1992.04	30-Apr-92	373	445	348		373	1410	1410		373	739
1992	5	1992.05	1-May-92	378	400	343		378	1360	1360		378	716
1992	5	1992.05	2-May-92	382	412	363		382	1420	1420		382	695
1992	5	1992.05	3-May-92	367	381	353		367	1420	1420		367	675
1992	5	1992.05	4-May-92	415	437	403		415	1480	1480		415	656
1992	5	1992.05	5-May-92	427	447	377		427	1420	1420		427	640
1992	5	1992.05	6-May-92	489	527	451		489	1250	1250		489	626
1992	5	1992.05	7-May-92	498	513	422		498	1150	1150		498	614
1992	5	1992.05	8-May-92	483	512	454		483	1010	1010		483	600
1992	5	1992.05	9-May-92	452	466	427		452	1040	1040		452	587
1992	5	1992.05	10-May-92	436	470	390		436	1100	1100		436	574
1992	5	1992.05	11-May-92	538	588	382		538	1170	1170		538	567
1992	5	1992.05	12-May-92	639	685	563		639	1020	1020		639	564
1992	5	1992.05	13-May-92	643	674	621		643	868	868		643	560
1992	5	1992.05	14-May-92	698	768	642		698	743	743		698	558
1992	5	1992.05	15-May-92	669	762	521		669	717	717		669	556
1992	5	1992.05	16-May-92	464	510	430		464	921	921		464	547
1992	5	1992.05	17-May-92	475	511	429		475	954	954		475	541

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1992	5	1992.05 18-May-92	504	550	465		504	985	985			504	536
1992	5	1992.05 19-May-92	501	574	461		501	911	911			501	529
1992	5	1992.05 20-May-92	646	692	579		646	678	678			646	527
1992	5	1992.05 21-May-92	730	777	693		730	583	583			730	526
1992	5	1992.05 22-May-92	821	864	789		821	575	575			821	525
1992	5	1992.05 23-May-92	824	861	798		824	542	542			824	528
1992	5	1992.05 24-May-92	829	846	813		829	563	563			829	533
1992	5	1992.05 25-May-92	842	885	817		842	589	589			842	543
1992	5	1992.05 26-May-92	791	843	758		791	566	566			791	552
1992	5	1992.05 27-May-92	802	852	746		802	541	541			802	563
1992	5	1992.05 28-May-92	801	834	772		801	516	516			801	577
1992	5	1992.05 29-May-92	769	820	727		769	505	505			769	590
1992	5	1992.05 30-May-92	729	767	656		729	536	536			729	601
1992	5	1992.05 31-May-92	729	793	691		729	505	505			729	613
1992	6	1992.06 1-Jun-92	758	794	714		758	506	506			758	626
1992	6	1992.06 2-Jun-92	787	817	767		787	518	518			787	640
1992	6	1992.06 3-Jun-92	788	836	767		788	527	527			788	652
1992	6	1992.06 4-Jun-92	799	826	773		799	508	508			799	664
1992	6	1992.06 5-Jun-92	865	921	823		865	450	450			865	677
1992	6	1992.06 6-Jun-92	902	926	874		902	438	438			902	690
1992	6	1992.06 7-Jun-92	912	951	874		912	474	474			912	705
1992	6	1992.06 8-Jun-92	801	923	756		801	516	516			801	716
1992	6	1992.06 9-Jun-92	808	861	782		808	488	488			808	729
1992	6	1992.06 10-Jun-92	869	918	837		869	442	442			869	740
1992	6	1992.06 11-Jun-92	878	947	822		878	433	433			878	748
1992	6	1992.06 12-Jun-92	873	955	808		873	440	440			873	755
1992	6	1992.06 13-Jun-92	892	933	861		892	488	488			892	762
1992	6	1992.06 14-Jun-92	853	930	814		853	536	536			853	768
1992	6	1992.06 15-Jun-92	810	838	793		810	588	588			810	780
1992	6	1992.06 16-Jun-92	759	798	679		759	579	579			759	789
1992	6	1992.06 17-Jun-92	735	773	674		735	544	544			735	797
1992	6	1992.06 18-Jun-92	724	751	681		724	478	478			724	804
1992	6	1992.06 19-Jun-92	765	818	718		765	449	449			765	808
1992	6	1992.06 20-Jun-92	740	786	718		740	479	479			740	809
1992	6	1992.06 21-Jun-92	822	855	794		822	488	488			822	809
1992	6	1992.06 22-Jun-92	853	898	811		853	471	471			853	810
1992	6	1992.06 23-Jun-92	927	942	912		927	390	390			927	813
1992	6	1992.06 24-Jun-92	956	1004	937		956	421	421			956	817
1992	6	1992.06 25-Jun-92	1003	1027	977		1003	428	428			1003	824
1992	6	1992.06 26-Jun-92	911	1030	808		911	451	451			911	827
1992	6	1992.06 27-Jun-92	814	850	766		814	434	434			814	828
1992	6	1992.06 28-Jun-92	840	860	825		840	453	453			840	830
1992	6	1992.06 29-Jun-92	860	917	793		860	479	479			860	834
1992	6	1992.06 30-Jun-92	823	875	766		823	521	521			823	838
1992	7	1992.07 1-Jul-92	780	808	746		780	473	473			780	838
1992	7	1992.07 2-Jul-92	766	793	739		766	457	457			766	838
1992	7	1992.07 3-Jul-92	818	852	773		818	426	426			818	839
1992	7	1992.07 4-Jul-92	834	873	807		834	447	447			834	840
1992	7	1992.07 5-Jul-92	925	977	860		925	492	492			925	842
1992	7	1992.07 6-Jul-92	867	910	821		867	484	484			867	841
1992	7	1992.07 7-Jul-92	856	927	796		856	461	461			856	839
1992	7	1992.07 8-Jul-92	932	947	900		932	413	413			932	843
1992	7	1992.07 9-Jul-92	935	948	927		935	398	398			935	847
1992	7	1992.07 10-Jul-92	925	960	885		925	409	409			925	849
1992	7	1992.07 11-Jul-92	875				429	429				875	849
1992	7	1992.07 12-Jul-92	816	844	794		816	458	458			816	847
1992	7	1992.07 13-Jul-92	744	763	723		744	501	501			744	842
1992	7	1992.07 14-Jul-92	755	805	683		755	476	476			755	839
1992	7	1992.07 15-Jul-92	842	876	814		842	441	441			842	840
1992	7	1992.07 16-Jul-92	880	975	822		880	430	430			880	844
1992	7	1992.07 17-Jul-92	890	971	848		890	405	405			890	849
1992	7	1992.07 18-Jul-92	880	944	834		880	406	406			880	854
1992	7	1992.07 19-Jul-92	854	957	804		854	443	443			854	857
1992	7	1992.07 20-Jul-92	808	858	781		808	467	467			808	860
1992	7	1992.07 21-Jul-92	908	944	870		908	433	433			908	863
1992	7	1992.07 22-Jul-92	871	898	837		871	438	438			871	863
1992	7	1992.07 23-Jul-92	821	862	777		821	462	462			821	860
1992	7	1992.07 24-Jul-92	787	854	747		787	463	463			787	854
1992	7	1992.07 25-Jul-92	788	828	703		788	459	459			788	847
1992	7	1992.07 26-Jul-92	806	830	749		806	473	473			806	843
1992	7	1992.07 27-Jul-92	834	860	798		834	490	490			834	844
1992	7	1992.07 28-Jul-92	840	892	786		840	439	439			840	844
1992	7	1992.07 29-Jul-92	842	889	789		842	448	448			842	843
1992	7	1992.07 30-Jul-92	865	910	832		865	413	413			865	845
1992	7	1992.07 31-Jul-92	907	936	888		907	414	414			907	849
1992	8	1992.08 1-Aug-92	917	966	875		917	454	454			917	854

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1992	8	1992.08 2-Aug-92	876	933	816		876	547	547			876	856
1992	8	1992.08 3-Aug-92	830	850	812		830	546	546			830	856
1992	8	1992.08 4-Aug-92	840	873	799		840	439	439			840	853
1992	8	1992.08 5-Aug-92	801	870	573		801	426	426			801	851
1992	8	1992.08 6-Aug-92	863	888	826		863	434	434			863	851
1992	8	1992.08 7-Aug-92	865					468	468			865	849
1992	8	1992.08 8-Aug-92	865					459	459			865	847
1992	8	1992.08 9-Aug-92	865					485	485			865	845
1992	8	1992.08 10-Aug-92	865					460	460			865	844
1992	8	1992.08 11-Aug-92	865					446	446			865	846
1992	8	1992.08 12-Aug-92	865					420	420			865	850
1992	8	1992.08 13-Aug-92	871	896	825		871	418	418			871	854
1992	8	1992.08 14-Aug-92	851	949	832		851	433	433			851	854
1992	8	1992.08 15-Aug-92	902	963	741		902	469	469			902	855
1992	8	1992.08 16-Aug-92	879	931	843		879	482	482			879	854
1992	8	1992.08 17-Aug-92	898	924	851		898	489	489			898	855
1992	8	1992.08 18-Aug-92	867	906	834		867	466	466			867	855
1992	8	1992.08 19-Aug-92	868	925	815		868	423	423			868	857
1992	8	1992.08 20-Aug-92	898	934	841		898	411	411			898	857
1992	8	1992.08 21-Aug-92	911	945	860		911	448	448			911	858
1992	8	1992.08 22-Aug-92	852	887	828		852	474	474			852	859
1992	8	1992.08 23-Aug-92	860	914	832		860	506	506			860	862
1992	8	1992.08 24-Aug-92	910	934	886		910	550	550			910	866
1992	8	1992.08 25-Aug-92	922	968	881		922	502	502			922	870
1992	8	1992.08 26-Aug-92	954	973	933		954	497	497			954	874
1992	8	1992.08 27-Aug-92	889	937	859		889	493	493			889	875
1992	8	1992.08 28-Aug-92	864	919	837		864	507	507			864	876
1992	8	1992.08 29-Aug-92	847	874	828		847	560	560			847	876
1992	8	1992.08 30-Aug-92	826	865	792		826	606	606			826	873
1992	8	1992.08 31-Aug-92	841	892	812		841	651	651			841	870
1992	9	1992.09 1-Sep-92	900	937	858		900	607	607			900	871
1992	9	1992.09 2-Sep-92	913	942	867		913	595	595			913	874
1992	9	1992.09 3-Sep-92	914	956	882		914	597	597			914	876
1992	9	1992.09 4-Sep-92	937	972	878		937	592	592			937	881
1992	9	1992.09 5-Sep-92	935	982	875		935	602	602			935	883
1992	9	1992.09 6-Sep-92	776	965	668		776	646	646			776	880
1992	9	1992.09 7-Sep-92	801	916	570		801	629	629			801	878
1992	9	1992.09 8-Sep-92	790	821	758		790	602	602			790	876
1992	9	1992.09 9-Sep-92	810					564	564			810	874
1992	9	1992.09 10-Sep-92	831	913	758		831	562	562			831	873
1992	9	1992.09 11-Sep-92	840					579	579			840	872
1992	9	1992.09 12-Sep-92	860					562	562			860	872
1992	9	1992.09 13-Sep-92	880					608	608			880	873
1992	9	1992.09 14-Sep-92	900					631	631			900	872
1992	9	1992.09 15-Sep-92	914	940	862		914	636	636			914	874
1992	9	1992.09 16-Sep-92	921	946	887		921	585	585			921	874
1992	9	1992.09 17-Sep-92	989	1060	950		989	582	582			989	878
1992	9	1992.09 18-Sep-92	950					571	571			950	881
1992	9	1992.09 19-Sep-92	921	959	887		921	567	567			921	882
1992	9	1992.09 20-Sep-92	921					659	659			921	882
1992	9	1992.09 21-Sep-92	922	952	904		922	667	667			922	885
1992	9	1992.09 22-Sep-92	911	935	891		911	631	631			911	886
1992	9	1992.09 23-Sep-92	867	929	809		867	626	626			867	885
1992	9	1992.09 24-Sep-92	909	964	856		909	604	604			909	884
1992	9	1992.09 25-Sep-92	922	988	866		922	597	597			922	883
1992	9	1992.09 26-Sep-92	985	1003	967		985	623	623			985	887
1992	9	1992.09 27-Sep-92	953	987	882		953	713	713			953	890
1992	9	1992.09 28-Sep-92	866	881	842		866	862	862			866	890
1992	9	1992.09 29-Sep-92	840	886	810		840	928	928			840	891
1992	9	1992.09 30-Sep-92	934	1026	820		934	811	811			934	894
1992	10	1992.10 1-Oct-92	1007	1022	986		1007	747	747			1007	897
1992	10	1992.10 2-Oct-92	1025	1055	1005		1025	733	733			1025	901
1992	10	1992.10 3-Oct-92	1053	1085	1022		1053	702	702			1053	906
1992	10	1992.10 4-Oct-92	1067	1117	1034		1067	670	670			1067	910
1992	10	1992.10 5-Oct-92	1082	1100	1066		1082	653	653			1082	915
1992	10	1992.10 6-Oct-92	1086	1121	1056		1086	582	582			1086	925
1992	10	1992.10 7-Oct-92	1067	1120	1027		1067	558	558			1067	934
1992	10	1992.10 8-Oct-92	1146	1180	1068		1146	602	602			1146	946
1992	10	1992.10 9-Oct-92	1044	1095	993		1044	566	566			1044	954
1992	10	1992.10 10-Oct-92	1029	1080	990		1029	542	542			1029	960
1992	10	1992.10 11-Oct-92	1037	1059	1009		1037	594	594			1037	967
1992	10	1992.10 12-Oct-92	986	1032	935		986	598	598			986	971
1992	10	1992.10 13-Oct-92	972	1011	950		972	554	554			972	974
1992	10	1992.10 14-Oct-92	1046	1135	1016		1046	550	550			1046	979
1992	10	1992.10 15-Oct-92	1102	1152	1036		1102	550	550			1102	985
1992	10	1992.10 16-Oct-92	1098	1149	1053		1098	546	546			1098	991

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1992	10	1992.10	17-Oct-92	1048	1091	1026		1048	582	582		1048	993
1992	10	1992.10	18-Oct-92	935	1094	854		935	927	927		935	993
1992	10	1992.10	19-Oct-92	807	870	698		807	813	813		807	989
1992	10	1992.10	20-Oct-92	674	710	634		674	1090	1090		674	981
1992	10	1992.10	21-Oct-92	633	700	570		633	1350	1350		633	971
1992	10	1992.10	22-Oct-92	623	665	599		623	1360	1360		623	961
1992	10	1992.10	23-Oct-92	691	739	654		691	1210	1210		691	956
1992	10	1992.10	24-Oct-92	799	839	749		799	1050	1050		799	952
1992	10	1992.10	25-Oct-92	704	850	504		704	1170	1170		704	945
1992	10	1992.10	26-Oct-92	440	471	422		440	1230	1230		440	926
1992	10	1992.10	27-Oct-92	439	468	428		439	1240	1240		439	909
1992	10	1992.10	28-Oct-92	442	464	431		442	1230	1230		442	895
1992	10	1992.10	29-Oct-92	508	549	470		508	1150	1150		508	884
1992	10	1992.10	30-Oct-92	600	630	555		600	1100	1100		600	873
1992	10	1992.10	31-Oct-92	649	711	615		649	1060	1060		649	861
1992	11	1992.11	1-Nov-92	679	700	653		679	1020	1020		679	850
1992	11	1992.11	2-Nov-92	704	726	690		704	996	996		704	838
1992	11	1992.11	3-Nov-92	581	744	382		581	995	995		581	822
1992	11	1992.11	4-Nov-92	730				730	1010	1010		730	810
1992	11	1992.11	5-Nov-92	727	760	627		727	1010	1010		727	798
1992	11	1992.11	6-Nov-92	766	781	751		766	999	999		766	788
1992	11	1992.11	7-Nov-92	774	800	760		774	991	991		774	776
1992	11	1992.11	8-Nov-92	797				797	986	986		797	767
1992	11	1992.11	9-Nov-92	800				800	1000	1000		800	760
1992	11	1992.11	10-Nov-92	805				805	1000	1000		805	752
1992	11	1992.11	11-Nov-92	810				810	993	993		810	746
1992	11	1992.11	12-Nov-92	800				800	996	996		800	740
1992	11	1992.11	13-Nov-92	810				810	998	998		810	733
1992	11	1992.11	14-Nov-92	815				815	981	981		815	723
1992	11	1992.11	15-Nov-92	820				820	977	977		820	714
1992	11	1992.11	16-Nov-92	840				840	978	978		840	707
1992	11	1992.11	17-Nov-92	850				850	941	941		850	704
1992	11	1992.11	18-Nov-92	870				870	900	900		870	706
1992	11	1992.11	19-Nov-92	899				899	899	899		899	714
1992	11	1992.11	20-Nov-92	927				927	926	926		927	723
1992	11	1992.11	21-Nov-92	927				927	918	918		927	733
1992	11	1992.11	22-Nov-92	927				927	921	921		927	741
1992	11	1992.11	23-Nov-92	927				927	931	931		927	746
1992	11	1992.11	24-Nov-92	927				927	931	931		927	753
1992	11	1992.11	25-Nov-92	900				916	916	916		900	768
1992	11	1992.11	26-Nov-92	900				904	904	904		900	784
1992	11	1992.11	27-Nov-92	900				902	902	902		900	799
1992	11	1992.11	28-Nov-92	800				884	884	884		800	809
1992	11	1992.11	29-Nov-92	800				884	884	884		800	815
1992	11	1992.11	30-Nov-92	800				883	883	883		800	820
1992	12	1992.12	1-Dec-92				770	873	873	873		770	823
1992	12	1992.12	2-Dec-92				744	870	870	870		744	825
1992	12	1992.12	3-Dec-92				740	876	876	876		740	830
1992	12	1992.12	4-Dec-92				727	884	884	884		727	830
1992	12	1992.12	5-Dec-92				724	897	897	897		724	830
1992	12	1992.12	6-Dec-92				725	898	898	898		725	829
1992	12	1992.12	7-Dec-92				723	946	946	946		723	827
1992	12	1992.12	8-Dec-92				679	990	990	990		679	823
1992	12	1992.12	9-Dec-92				709	974	974	974		709	820
1992	12	1992.12	10-Dec-92				711	984	984	984		711	817
1992	12	1992.12	11-Dec-92				698	1070	1070	1070		698	813
1992	12	1992.12	12-Dec-92				724	1120	1120	1120		724	810
1992	12	1992.12	13-Dec-92				830	1100	1100	1100		830	811
1992	12	1992.12	14-Dec-92				850	1080	1080	1080		850	812
1992	12	1992.12	15-Dec-92				910	1080	1080	1080		910	815
1992	12	1992.12	16-Dec-92				941	1050	1050	1050		941	819
1992	12	1992.12	17-Dec-92				977	1020	1020	1020		977	823
1992	12	1992.12	18-Dec-92				946	1020	1020	1020		946	825
1992	12	1992.12	19-Dec-92				946	1030	1030	1030		946	827
1992	12	1992.12	20-Dec-92				956	1000	1000	1000		956	828
1992	12	1992.12	21-Dec-92				942	983	983	983		942	828
1992	12	1992.12	22-Dec-92				967	968	968	968		967	830
1992	12	1992.12	23-Dec-92				966	962	962	962		966	831
1992	12	1992.12	24-Dec-92				960	959	959	959		960	832
1992	12	1992.12	25-Dec-92				973	943	943	943		973	835
1992	12	1992.12	26-Dec-92				986	934	934	934		986	837
1992	12	1992.12	27-Dec-92				977	929	929	929		977	840
1992	12	1992.12	28-Dec-92				979	937	937	937		979	846
1992	12	1992.12	29-Dec-92				917	1010	1010	1010		917	850
1992	12	1992.12	30-Dec-92				850	1030	1030	1030		850	852
1992	12	1992.12	31-Dec-92				889	1010	1010	1010		889	856

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1993	1	1993.01	1-Jan-93				923	1000	1000			923	862
1993	1	1993.01	2-Jan-93				825	1060	1060			825	864
1993	1	1993.01	3-Jan-93				810	1080	1080			810	867
1993	1	1993.01	4-Jan-93				775	1150	1150			775	869
1993	1	1993.01	5-Jan-93				718	1220	1220			718	869
1993	1	1993.01	6-Jan-93				693	1250	1250			693	868
1993	1	1993.01	7-Jan-93				681	1270	1270			681	866
1993	1	1993.01	8-Jan-93				651	1400	1400			651	858
1993	1	1993.01	9-Jan-93				490	2330	2330			490	848
1993	1	1993.01	10-Jan-93				377	2920	2920			377	830
1993	1	1993.01	11-Jan-93				202	3460	3460			202	810
1993	1	1993.01	12-Jan-93				235	3910	3910			235	794
1993	1	1993.01	13-Jan-93				365	3670	3670			365	775
1993	1	1993.01	14-Jan-93				345	4940	4940			345	731
1993	1	1993.01	15-Jan-93				317	6470	6470			317	707
1993	1	1993.01	16-Jan-93				256	6530	6530			256	686
1993	1	1993.01	17-Jan-93				250	6160	6160			250	661
1993	1	1993.01	18-Jan-93				291	6570	6570			291	640
1993	1	1993.01	19-Jan-93				219	9590	9590			219	620
1993	1	1993.01	20-Jan-93				308	8950	8950			308	602
1993	1	1993.01	21-Jan-93				369	7130	7130			369	587
1993	1	1993.01	22-Jan-93				441	6710	6710			441	571
1993	1	1993.01	23-Jan-93				486	6500	6500			486	557
1993	1	1993.01	24-Jan-93				503	6020	6020			503	544
1993	1	1993.01	25-Jan-93				555	5300	5300			555	533
1993	1	1993.01	26-Jan-93				588	4750	4750			588	527
1993	1	1993.01	27-Jan-93				652	4180	4180			652	525
1993	1	1993.01	28-Jan-93				737	3580	3580			737	525
1993	1	1993.01	29-Jan-93				809	3140	3140			809	524
1993	1	1993.01	30-Jan-93				883	2860	2860			883	529
1993	1	1993.01	31-Jan-93				897	2620	2620			897	536
1993	2	1993.02	1-Feb-93				963	2410	2410			963	544
1993	2	1993.02	2-Feb-93				1013	2270	2270			1013	556
1993	2	1993.02	3-Feb-93				1040	2160	2160			1040	570
1993	2	1993.02	4-Feb-93				1060	2040	2040			1060	585
1993	2	1993.02	5-Feb-93				1117	1960	1960			1117	600
1993	2	1993.02	6-Feb-93				1120	1900	1900			1120	621
1993	2	1993.02	7-Feb-93				1125	1840	1840			1125	641
1993	2	1993.02	8-Feb-93				1100	2140	2140			1100	654
1993	2	1993.02	9-Feb-93				971	2910	2910			971	668
1993	2	1993.02	10-Feb-93				604	4360	4360			604	674
1993	2	1993.02	11-Feb-93				654	4150	4150			654	684
1993	2	1993.02	12-Feb-93				533	3720	3720			533	700
1993	2	1993.02	13-Feb-93				655	3610	3610			655	723
1993	2	1993.02	14-Feb-93				813	3270	3270			813	749
1993	2	1993.02	15-Feb-93				941	2910	2910			941	776
1993	2	1993.02	16-Feb-93				1033	2670	2670			1033	809
1993	2	1993.02	17-Feb-93				1089	2480	2480			1089	839
1993	2	1993.02	18-Feb-93				1197	2400	2400			1197	865
1993	2	1993.02	19-Feb-93				1225	3090	3090			1225	887
1993	2	1993.02	20-Feb-93				1150	3850	3850			1150	901
1993	2	1993.02	21-Feb-93				1100	3760	3760			1100	910
1993	2	1993.02	22-Feb-93				900	3460	3460			900	919
1993	2	1993.02	23-Feb-93				764	3300	3300			764	927
1993	2	1993.02	24-Feb-93				825	3200	3200			825	931
1993	2	1993.02	25-Feb-93				844	3240	3240			844	926
1993	2	1993.02	26-Feb-93				775	3510	3510			775	918
1993	2	1993.02	27-Feb-93				572	4070	4070			572	908
1993	2	1993.02	28-Feb-93				571	4310	4310			571	899
1993	3	1993.03	1-Mar-93				579	4380	4380			579	892
1993	3	1993.03	2-Mar-93				641	4270	4270			641	886
1993	3	1993.03	3-Mar-93				756	4050	4050			756	882
1993	3	1993.03	4-Mar-93				836	3720	3720			836	881
1993	3	1993.03	5-Mar-93				913	3370	3370			913	881
1993	3	1993.03	6-Mar-93				1022	3010	3010			1022	883
1993	3	1993.03	7-Mar-93				1121	2720	2720			1121	887
1993	3	1993.03	8-Mar-93				1189	2510	2510			1189	892
1993	3	1993.03	9-Mar-93				1223	2340	2340			1223	903
1993	3	1993.03	10-Mar-93				1275	2220	2220			1275	927
1993	3	1993.03	11-Mar-93				1304	2120	2120			1304	950
1993	3	1993.03	12-Mar-93				1321	2030	2030			1321	979
1993	3	1993.03	13-Mar-93				1345	1990	1990			1345	1002
1993	3	1993.03	14-Mar-93				1377	1950	1950			1377	1019
1993	3	1993.03	15-Mar-93				1356	1920	1920			1356	1032
1993	3	1993.03	16-Mar-93				1333	1870	1870			1333	
1993	3	1993.03	17-Mar-93				1338	1850	1850			1338	

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1993	3	1993.03	18-Mar-93				1375	1820	1820			1375	1044
1993	3	1993.03	19-Mar-93				1330	1770	1770			1330	1052
1993	3	1993.03	20-Mar-93				1306	1770	1770			1306	1056
1993	3	1993.03	21-Mar-93				1335	1800	1800			1335	1059
1993	3	1993.03	22-Mar-93				1159	1960	1960			1159	1060
1993	3	1993.03	23-Mar-93				1115	2040	2040			1115	1060
1993	3	1993.03	24-Mar-93				1036	2200	2200			1036	1065
1993	3	1993.03	25-Mar-93				974	2340	2340			974	1072
1993	3	1993.03	26-Mar-93				927	2700	2700			927	1075
1993	3	1993.03	27-Mar-93				823	3370	3370			823	1074
1993	3	1993.03	28-Mar-93				649	3950	3950			649	1070
1993	3	1993.03	29-Mar-93				541	3870	3870			541	1069
1993	3	1993.03	30-Mar-93				618	3950	3950			618	1071
1993	3	1993.03	31-Mar-93				678	3910	3910			678	1074
1993	4	1993.04	1-Apr-93				722	3760	3760			722	1077
1993	4	1993.04	2-Apr-93				798	3530	3530			798	1078
1993	4	1993.04	3-Apr-93				854	3270	3270			854	1079
1993	4	1993.04	4-Apr-93				871	3110	3110			871	1077
1993	4	1993.04	5-Apr-93				857	3100	3100			857	1072
1993	4	1993.04	6-Apr-93				890	2970	2970			890	1064
1993	4	1993.04	7-Apr-93				941	2820	2820			941	1056
1993	4	1993.04	8-Apr-93				940	3070	3070			940	1046
1993	4	1993.04	9-Apr-93				775	3280	3280			775	1030
1993	4	1993.04	10-Apr-93				734	3260	3260			734	1011
1993	4	1993.04	11-Apr-93				700	3370	3370			700	990
1993	4	1993.04	12-Apr-93				615	3510	3510			615	966
1993	4	1993.04	13-Apr-93				626	3520	3520			626	941
1993	4	1993.04	14-Apr-93				567	3500	3500			567	914
1993	4	1993.04	15-Apr-93				541	3530	3530			541	888
1993	4	1993.04	16-Apr-93				546	3510	3510			546	861
1993	4	1993.04	17-Apr-93				553	3530	3530			553	834
1993	4	1993.04	18-Apr-93				559	3560	3560			559	808
1993	4	1993.04	19-Apr-93				573	3380	3380			573	784
1993	4	1993.04	20-Apr-93				563	3240	3240			563	758
1993	4	1993.04	21-Apr-93				578	3110	3110			578	739
1993	4	1993.04	22-Apr-93				575	3040	3040			575	721
1993	4	1993.04	23-Apr-93				596	2970	2970			596	706
1993	4	1993.04	24-Apr-93				569	3010	3010			569	693
1993	4	1993.04	25-Apr-93				552	3050	3050			552	680
1993	4	1993.04	26-Apr-93				536	3280	3280			536	671
1993	4	1993.04	27-Apr-93				435	3920	3920			435	663
1993	4	1993.04	28-Apr-93				400	4330	4330			400	659
1993	4	1993.04	29-Apr-93				394	4550	4550			394	651
1993	4	1993.04	30-Apr-93				401	4540	4540			401	642
1993	5	1993.05	1-May-93				397	4490	4490			397	631
1993	5	1993.05	2-May-93				378	4580	4580			378	617
1993	5	1993.05	3-May-93				353	4610	4610			353	601
1993	5	1993.05	4-May-93				309	4730	4730			309	582
1993	5	1993.05	5-May-93				307	4680	4680			307	563
1993	5	1993.05	6-May-93				318	4750	4750			318	544
1993	5	1993.05	7-May-93				318	4720	4720			318	524
1993	5	1993.05	8-May-93				323	4620	4620			323	503
1993	5	1993.05	9-May-93				320	4700	4700			320	488
1993	5	1993.05	10-May-93				340	4430	4430			340	475
1993	5	1993.05	11-May-93				400	3880	3880			400	465
1993	5	1993.05	12-May-93				417	3770	3770			417	458
1993	5	1993.05	13-May-93				422	3700	3700			422	451
1993	5	1993.05	14-May-93				428	3600	3600			428	447
1993	5	1993.05	15-May-93				449	3560	3560			449	444
1993	5	1993.05	16-May-93				467	3460	3460			467	441
1993	5	1993.05	17-May-93				478	3320	3320			478	439
1993	5	1993.05	18-May-93				543	2970	2970			543	438
1993	5	1993.05	19-May-93				613	2620	2620			613	439
1993	5	1993.05	20-May-93				692	2410	2410			692	444
1993	5	1993.05	21-May-93				635	2660	2660			635	446
1993	5	1993.05	22-May-93				578	2810	2810			578	446
1993	5	1993.05	23-May-93				599	2870	2870			599	446
1993	5	1993.05	24-May-93				605	2870	2870			605	447
1993	5	1993.05	25-May-93				626	2890	2890			626	449
1993	5	1993.05	26-May-93				591	3020	3020			591	451
1993	5	1993.05	27-May-93				588	3050	3050			588	456
1993	5	1993.05	28-May-93				597	3110	3110			597	463
1993	5	1993.05	29-May-93				560	3010	3010			560	468
1993	5	1993.05	30-May-93				557	2990	2990			557	474
1993	5	1993.05	31-May-93				520	3030	3030			520	478
1993	6	1993.06	1-Jun-93				494	3110	3110		494	494	482

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1993	6	1993.06	2-Jun-93				502	3000	3000		502	502	487
1993	6	1993.06	3-Jun-93				493	2860	2860		493	493	493
1993	6	1993.06	4-Jun-93				496	2790	2790		496	496	499
1993	6	1993.06	5-Jun-93				511	2840	2840		511	511	505
1993	6	1993.06	6-Jun-93				551	2860	2860		551	551	513
1993	6	1993.06	7-Jun-93				602	2710	2710		602	602	522
1993	6	1993.06	8-Jun-93				648	2610	2610		648	648	533
1993	6	1993.06	9-Jun-93				605	2530	2530		605	605	542
1993	6	1993.06	10-Jun-93				563	2580	2580		563	563	548
1993	6	1993.06	11-Jun-93				516	2680	2680		516	516	551
1993	6	1993.06	12-Jun-93				529	2670	2670		529	529	555
1993	6	1993.06	13-Jun-93				520	2670	2670		520	520	558
1993	6	1993.06	14-Jun-93				498	2670	2670		498	498	559
1993	6	1993.06	15-Jun-93				499	2590	2590		499	499	560
1993	6	1993.06	16-Jun-93				561	2410	2410		561	561	563
1993	6	1993.06	17-Jun-93				593	2310	2310		593	593	565
1993	6	1993.06	18-Jun-93				599	2300	2300		599	599	564
1993	6	1993.06	19-Jun-93				601	2250	2250		601	601	561
1993	6	1993.06	20-Jun-93				587	2210	2210		587	587	560
1993	6	1993.06	21-Jun-93				555	2250	2250		555	555	559
1993	6	1993.06	22-Jun-93				609	2100	2100		609	609	559
1993	6	1993.06	23-Jun-93				614	1940	1940		614	614	560
1993	6	1993.06	24-Jun-93				744	1710	1710		744	744	563
1993	6	1993.06	25-Jun-93				770	1670	1670		770	770	569
1993	6	1993.06	26-Jun-93				776	1650	1650		776	776	576
1993	6	1993.06	27-Jun-93				747	1630	1630		747	747	581
1993	6	1993.06	28-Jun-93				794	1590	1590		794	794	588
1993	6	1993.06	29-Jun-93				780	1570	1570		780	780	596
1993	6	1993.06	30-Jun-93				811	1470	1470		811	811	606
1993	7	1993.07	1-Jul-93				833	1470	1470		833	833	617
1993	7	1993.07	2-Jul-93				866	1430	1430		866	866	629
1993	7	1993.07	3-Jul-93				892	1370	1370		892	892	642
1993	7	1993.07	4-Jul-93				844	1490	1490		844	844	654
1993	7	1993.07	5-Jul-93				780	1630	1630		780	780	663
1993	7	1993.07	6-Jul-93				742	1620	1620		742	742	669
1993	7	1993.07	7-Jul-93				794	1600	1600		794	794	676
1993	7	1993.07	8-Jul-93				764	1630	1630		764	764	680
1993	7	1993.07	9-Jul-93				759	1630	1630		759	759	685
1993	7	1993.07	10-Jul-93				787	1560	1560		787	787	692
1993	7	1993.07	11-Jul-93				775	1560	1560		775	775	701
1993	7	1993.07	12-Jul-93				807	1560	1560		807	807	710
1993	7	1993.07	13-Jul-93				825	1500	1500		825	825	720
1993	7	1993.07	14-Jul-93				817	1450	1450		817	817	731
1993	7	1993.07	15-Jul-93				834	1420	1420		834	834	742
1993	7	1993.07	16-Jul-93				846	1390	1390		846	846	752
1993	7	1993.07	17-Jul-93				813	1450	1450		813	813	759
1993	7	1993.07	18-Jul-93				775	1490	1490		775	775	765
1993	7	1993.07	19-Jul-93				747	1510	1510		747	747	770
1993	7	1993.07	20-Jul-93				703	1500	1500		703	703	773
1993	7	1993.07	21-Jul-93				677	1440	1440		677	677	778
1993	7	1993.07	22-Jul-93				710	1450	1450		710	710	781
1993	7	1993.07	23-Jul-93				724	1410	1410		724	724	785
1993	7	1993.07	24-Jul-93				779	1390	1390		779	779	786
1993	7	1993.07	25-Jul-93				712	1450	1450		712	712	784
1993	7	1993.07	26-Jul-93				726	1450	1450		726	726	782
1993	7	1993.07	27-Jul-93				710	1520	1520		710	710	781
1993	7	1993.07	28-Jul-93				628	1540	1540		628	628	775
1993	7	1993.07	29-Jul-93				632	1560	1560		632	632	770
1993	7	1993.07	30-Jul-93				603	1670	1670		603	603	763
1993	7	1993.07	31-Jul-93				600	1660	1660		600	600	756
1993	8	1993.08	1-Aug-93				628	1730	1730		628	628	748
1993	8	1993.08	2-Aug-93				581	1870	1870		581	581	737
1993	8	1993.08	3-Aug-93				593	1820	1820		593	593	729
1993	8	1993.08	4-Aug-93				618	1760	1760		618	618	724
1993	8	1993.08	5-Aug-93				654	1640	1640		654	654	721
1993	8	1993.08	6-Aug-93				686	1570	1570		686	686	717
1993	8	1993.08	7-Aug-93				645	1770	1770		645	645	713
1993	8	1993.08	8-Aug-93				625	1850	1850		625	625	709
1993	8	1993.08	9-Aug-93				575	1830	1830		575	575	702
1993	8	1993.08	10-Aug-93				616	1840	1840		616	616	696
1993	8	1993.08	11-Aug-93				588	1860	1860		588	588	689
1993	8	1993.08	12-Aug-93				561	1890	1890		561	561	680
1993	8	1993.08	13-Aug-93				542	1930	1930		542	542	671
1993	8	1993.08	14-Aug-93				552	2010	2010		552	552	662
1993	8	1993.08	15-Aug-93				556	2080	2080		556	556	652
1993	8	1993.08	16-Aug-93				567	2070	2070		567	567	644

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1993	8	1993.08	17-Aug-93				568	1990	1990		568	568	637
1993	8	1993.08	18-Aug-93				574	1920	1920		574	574	631
1993	8	1993.08	19-Aug-93				578	1910	1910		578	578	627
1993	8	1993.08	20-Aug-93				537	1950	1950		537	537	622
1993	8	1993.08	21-Aug-93				546	1960	1960		546	546	617
1993	8	1993.08	22-Aug-93				597	1940	1940		597	597	613
1993	8	1993.08	23-Aug-93				585	1980	1980		585	585	606
1993	8	1993.08	24-Aug-93				579	1890	1890		579	579	602
1993	8	1993.08	25-Aug-93				582	1830	1830		582	582	597
1993	8	1993.08	26-Aug-93				550	1900	1900		550	550	592
1993	8	1993.08	27-Aug-93				514	2030	2030		514	514	588
1993	8	1993.08	28-Aug-93				487	2200	2200		487	487	583
1993	8	1993.08	29-Aug-93				453	2570	2570		453	453	578
1993	8	1993.08	30-Aug-93				376	3110	3110		376	376	570
1993	8	1993.08	31-Aug-93				333	3250	3250		333	333	561
1993	9	1993.09	1-Sep-93				310	3350	3350		310	310	552
1993	9	1993.09	2-Sep-93				328	3250	3250		328	328	543
1993	9	1993.09	3-Sep-93				331	3240	3240		331	331	533
1993	9	1993.09	4-Sep-93				334	3240	3240		334	334	523
1993	9	1993.09	5-Sep-93				326	3330	3330		326	326	511
1993	9	1993.09	6-Sep-93				368	3290	3290		368	368	501
1993	9	1993.09	7-Sep-93				362	3220	3220		362	362	493
1993	9	1993.09	8-Sep-93				363	3100	3100		363	363	485
1993	9	1993.09	9-Sep-93				340	3180	3180		340	340	476
1993	9	1993.09	10-Sep-93				350	3170	3170		350	350	468
1993	9	1993.09	11-Sep-93				349	3030	3030		349	349	461
1993	9	1993.09	12-Sep-93				364	2950	2950		364	364	455
1993	9	1993.09	13-Sep-93				413	2780	2780		413	413	451
1993	9	1993.09	14-Sep-93				411	2690	2690		411	411	446
1993	9	1993.09	15-Sep-93				390	2760	2760		390	390	440
1993	9	1993.09	16-Sep-93				386	2800	2800		386	386	434
1993	9	1993.09	17-Sep-93				349	2900	2900		349	349	426
1993	9	1993.09	18-Sep-93				337	2940	2940		337	337	418
1993	9	1993.09	19-Sep-93				388	2710	2710		388	388	413
1993	9	1993.09	20-Sep-93				445	2550	2550		445	445	410
1993	9	1993.09	21-Sep-93				459	2410	2410		459	459	405
1993	9	1993.09	22-Sep-93				440	2380	2380		440	440	401
1993	9	1993.09	23-Sep-93				448	2300	2300		448	448	396
1993	9	1993.09	24-Sep-93				468	2260	2260		468	468	392
1993	9	1993.09	25-Sep-93				485	2250	2250		485	485	390
1993	9	1993.09	26-Sep-93				515	2330	2330		515	515	390
1993	9	1993.09	27-Sep-93				487	2400	2400		487	487	390
1993	9	1993.09	28-Sep-93				486	2210	2210		486	486	391
1993	9	1993.09	29-Sep-93				499	2120	2120		499	499	395
1993	9	1993.09	30-Sep-93				484	1990	1990		484	484	401
1993	10	1993.10	1-Oct-93				531	1920	1920		531	531	408
1993	10	1993.10	2-Oct-93				550	1900	1900		550	550	415
1993	10	1993.10	3-Oct-93				524	2050	2050		524	524	422
1993	10	1993.10	4-Oct-93				496	2090	2090		496	496	427
1993	10	1993.10	5-Oct-93				478	2030	2030		478	478	432
1993	10	1993.10	6-Oct-93				455	2180	2180		455	455	435
1993	10	1993.10	7-Oct-93				289	3210	3210		289	289	433
1993	10	1993.10	8-Oct-93				226	4060	4060		226	226	428
1993	10	1993.10	9-Oct-93				233	3740	3740		233	233	425
1993	10	1993.10	10-Oct-93				261	3380	3380		261	261	422
1993	10	1993.10	11-Oct-93				244	3630	3630		244	244	418
1993	10	1993.10	12-Oct-93				214	3850	3850		214	214	413
1993	10	1993.10	13-Oct-93				185	3980	3980		185	185	405
1993	10	1993.10	14-Oct-93				189	3960	3960		189	189	398
1993	10	1993.10	15-Oct-93				200	3890	3890		200	200	392
1993	10	1993.10	16-Oct-93				214	3730	3730		214	214	386
1993	10	1993.10	17-Oct-93				232	3740	3740		232	232	382
1993	10	1993.10	18-Oct-93				227	4140	4140		227	227	378
1993	10	1993.10	19-Oct-93				229	4330	4330		229	229	373
1993	10	1993.10	20-Oct-93				261	4170	4170		261	261	367
1993	10	1993.10	21-Oct-93				361	3780	3780		361	361	364
1993	10	1993.10	22-Oct-93				402	3310	3310		402	402	362
1993	10	1993.10	23-Oct-93				444	2890	2890		444	444	362
1993	10	1993.10	24-Oct-93				501	2560	2560		501	501	363
1993	10	1993.10	25-Oct-93				584	2370	2370		584	584	367
1993	10	1993.10	26-Oct-93				623	2280	2280		623	623	370
1993	10	1993.10	27-Oct-93				660	2130	2130		660	660	376
1993	10	1993.10	28-Oct-93				662	2110	2110		662	662	382
1993	10	1993.10	29-Oct-93				649	2250	2250		649	649	387
1993	10	1993.10	30-Oct-93				569	2340	2340		569	569	390
1993	10	1993.10	31-Oct-93				589	2260	2260		589	589	392

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1993	11	1993.11	1-Nov-93				654	2100	2100		654	654	395
1993	11	1993.11	2-Nov-93				679	2060	2060		679	679	400
1993	11	1993.11	3-Nov-93				715	1990	1990		715	715	408
1993	11	1993.11	4-Nov-93				745	1900	1900		745	745	417
1993	11	1993.11	5-Nov-93				692	1890	1890		692	692	424
1993	11	1993.11	6-Nov-93				735	1840	1840		735	735	439
1993	11	1993.11	7-Nov-93				750	1770	1770		750	750	457
1993	11	1993.11	8-Nov-93				739	1750	1750		739	739	474
1993	11	1993.11	9-Nov-93				771	1740	1740		771	771	491
1993	11	1993.11	10-Nov-93				751	1710	1710		751	751	508
1993	11	1993.11	11-Nov-93				748	1760	1760		748	748	525
1993	11	1993.11	12-Nov-93				769	1760	1760		769	769	545
1993	11	1993.11	13-Nov-93				780	1770	1770		780	780	565
1993	11	1993.11	14-Nov-93				792	1730	1730		792	792	584
1993	11	1993.11	15-Nov-93				808	1700	1700		808	808	604
1993	11	1993.11	16-Nov-93				812	1690	1690		812	812	623
1993	11	1993.11	17-Nov-93				816	1700	1700		816	816	643
1993	11	1993.11	18-Nov-93				807	1700	1700		807	807	662
1993	11	1993.11	19-Nov-93				790	1690	1690		790	790	680
1993	11	1993.11	20-Nov-93				793	1670	1670		793	793	694
1993	11	1993.11	21-Nov-93				795	1670	1670		795	795	707
1993	11	1993.11	22-Nov-93				829	1680	1680		829	829	720
1993	11	1993.11	23-Nov-93				838	1660	1660		838	838	731
1993	11	1993.11	24-Nov-93				856	1620	1620		856	856	741
1993	11	1993.11	25-Nov-93				873	1580	1580		873	873	749
1993	11	1993.11	26-Nov-93				840	1650	1650		840	840	755
1993	11	1993.11	27-Nov-93				803	1730	1730		803	803	760
1993	11	1993.11	28-Nov-93				758	1740	1740		758	758	763
1993	11	1993.11	29-Nov-93				682	1760	1760		682	682	767
1993	11	1993.11	30-Nov-93				724	1760	1760		724	724	771
1993	12	1993.12	1-Dec-93				797	1680	1680		797	797	776
1993	12	1993.12	2-Dec-93				834	1610	1610		834	834	781
1993	12	1993.12	3-Dec-93				834	1590	1590		834	834	785
1993	12	1993.12	4-Dec-93				834	1580	1580		834	834	788
1993	12	1993.12	5-Dec-93				855	1540	1540		855	855	794
1993	12	1993.12	6-Dec-93				864	1530	1530		864	864	798
1993	12	1993.12	7-Dec-93				824	1510	1510		824	824	801
1993	12	1993.12	8-Dec-93				775	1590	1590		775	775	802
1993	12	1993.12	9-Dec-93				730	1710	1710		730	730	800
1993	12	1993.12	10-Dec-93				765	1680	1680		765	765	801
1993	12	1993.12	11-Dec-93				738	1660	1660		738	738	801
1993	12	1993.12	12-Dec-93				773	1640	1640		773	773	801
1993	12	1993.12	13-Dec-93				815	1580	1580		815	815	802
1993	12	1993.12	14-Dec-93				818	1560	1560		818	818	803
1993	12	1993.12	15-Dec-93				717	1710	1710		717	717	800
1993	12	1993.12	16-Dec-93				730	1680	1680		730	730	797
1993	12	1993.12	17-Dec-93				765	1660	1660		765	765	795
1993	12	1993.12	18-Dec-93				763	1670	1670		763	763	794
1993	12	1993.12	19-Dec-93				709	1770	1770		709	709	791
1993	12	1993.12	20-Dec-93				795	1720	1720		795	795	791
1993	12	1993.12	21-Dec-93				805	1660	1660		805	805	791
1993	12	1993.12	22-Dec-93				821	1680	1680		821	821	791
1993	12	1993.12	23-Dec-93				808	1710	1710		808	808	790
1993	12	1993.12	24-Dec-93				824	1670	1670		824	824	789
1993	12	1993.12	25-Dec-93				845	1630	1630		845	845	788
1993	12	1993.12	26-Dec-93				852	1620	1620		852	852	789
1993	12	1993.12	27-Dec-93				860	1620	1620		860	860	790
1993	12	1993.12	28-Dec-93				852	1590	1590		852	852	794
1993	12	1993.12	29-Dec-93				879	1530	1530		879	879	800
1993	12	1993.12	30-Dec-93				875	1550	1550		875	875	805
1993	12	1993.12	31-Dec-93				848	1540	1540		848	848	807
1994	1	1994.01	1-Jan-94				830	1540	1540		830	830	807
1994	1	1994.01	2-Jan-94				827	1580	1580		827	827	807
1994	1	1994.01	3-Jan-94				730	1730	1730		730	730	803
1994	1	1994.01	4-Jan-94				682	1780	1780		682	682	797
1994	1	1994.01	5-Jan-94				732	1870	1870		732	732	793
1994	1	1994.01	6-Jan-94				633	2010	2010		633	633	787
1994	1	1994.01	7-Jan-94				638	1950	1950		638	638	782
1994	1	1994.01	8-Jan-94				625	1930	1930		625	625	778
1994	1	1994.01	9-Jan-94				632	1920	1920		632	632	774
1994	1	1994.01	10-Jan-94				659	1890	1890		659	659	771
1994	1	1994.01	11-Jan-94				680	1820	1820		680	680	768
1994	1	1994.01	12-Jan-94				661	1880	1880		661	661	763
1994	1	1994.01	13-Jan-94				642	1920	1920		642	642	757
1994	1	1994.01	14-Jan-94				668	1850	1850		668	668	756
1994	1	1994.01	15-Jan-94				725	1770	1770		725	725	756

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1994	1	1994.01	16-Jan-94				812	1640	1640		812	812	757
1994	1	1994.01	17-Jan-94				865	1580	1580		865	865	760
1994	1	1994.01	18-Jan-94				858	1580	1580		858	858	765
1994	1	1994.01	19-Jan-94				829	1630	1630		829	829	767
1994	1	1994.01	20-Jan-94				775	1700	1700		775	775	766
1994	1	1994.01	21-Jan-94				738	1760	1760		738	738	763
1994	1	1994.01	22-Jan-94				798	1640	1640		798	798	762
1994	1	1994.01	23-Jan-94				891	1580	1580		891	891	765
1994	1	1994.01	24-Jan-94				868	1660	1660		868	868	765
1994	1	1994.01	25-Jan-94				826	1820	1820		826	826	765
1994	1	1994.01	26-Jan-94				771	1980	1980		771	771	762
1994	1	1994.01	27-Jan-94				764	1960	1960		764	764	759
1994	1	1994.01	28-Jan-94				836	1870	1870		836	836	757
1994	1	1994.01	29-Jan-94				864	1750	1750		864	864	757
1994	1	1994.01	30-Jan-94				878	1700	1700		878	878	758
1994	1	1994.01	31-Jan-94				952	1670	1670		952	952	762
1994	2	1994.02	1-Feb-94				966	1630	1630		966	966	767
1994	2	1994.02	2-Feb-94				993	1600	1600		993	993	775
1994	2	1994.02	3-Feb-94				1013	1580	1580		1013	1013	786
1994	2	1994.02	4-Feb-94				1025	1550	1550		1025	1025	796
1994	2	1994.02	5-Feb-94				994	1540	1540		994	994	808
1994	2	1994.02	6-Feb-94				999	1530	1530		999	999	820
1994	2	1994.02	7-Feb-94				994	1530	1530		994	994	833
1994	2	1994.02	8-Feb-94				969	1650	1650		969	969	844
1994	2	1994.02	9-Feb-94				800	2000	2000		800	800	848
1994	2	1994.02	10-Feb-94				562	2780	2780		562	562	845
1994	2	1994.02	11-Feb-94				561	2660	2660		561	561	841
1994	2	1994.02	12-Feb-94				505	2460	2460		505	505	837
1994	2	1994.02	13-Feb-94				724	2190	2190		724	724	839
1994	2	1994.02	14-Feb-94				844	1980	1980		844	844	842
1994	2	1994.02	15-Feb-94				912	1850	1850		912	912	846
1994	2	1994.02	16-Feb-94				952	1760	1760		952	952	849
1994	2	1994.02	17-Feb-94				952	1740	1740		952	952	852
1994	2	1994.02	18-Feb-94				950	1750	1750		950	950	856
1994	2	1994.02	19-Feb-94				957	1850	1850		957	957	862
1994	2	1994.02	20-Feb-94				897	2170	2170		897	897	867
1994	2	1994.02	21-Feb-94				696	2310	2310		696	696	864
1994	2	1994.02	22-Feb-94				766	2360	2360		766	766	860
1994	2	1994.02	23-Feb-94				724	2390	2390		724	724	855
1994	2	1994.02	24-Feb-94				726	2390	2390		726	726	852
1994	2	1994.02	25-Feb-94				846	2270	2270		846	846	854
1994	2	1994.02	26-Feb-94				954	2140	2140		954	954	860
1994	2	1994.02	27-Feb-94				980	2020	2020		980	980	865
1994	2	1994.02	28-Feb-94				1065	1960	1960		1065	1065	872
1994	3	1994.03	1-Mar-94				1144	1900	1900		1144	1144	881
1994	3	1994.03	2-Mar-94				1138	1850	1850		1138	1138	887
1994	3	1994.03	3-Mar-94				1119	1860	1860		1119	1119	892
1994	3	1994.03	4-Mar-94				1079	1880	1880		1079	1079	895
1994	3	1994.03	5-Mar-94				973	2070	2070		973	973	894
1994	3	1994.03	6-Mar-94				942	2310	2310		942	942	891
1994	3	1994.03	7-Mar-94				919	2300	2300		919	919	888
1994	3	1994.03	8-Mar-94				899	2310	2310		899	899	885
1994	3	1994.03	9-Mar-94				868	2390	2390		868	868	881
1994	3	1994.03	10-Mar-94				843	2440	2440		843	843	877
1994	3	1994.03	11-Mar-94				862	2410	2410		862	862	879
1994	3	1994.03	12-Mar-94				895	2360	2360		895	895	890
1994	3	1994.03	13-Mar-94				852	2310	2310		852	852	899
1994	3	1994.03	14-Mar-94				857	2310	2310		857	857	911
1994	3	1994.03	15-Mar-94				836	2300	2300		836	836	915
1994	3	1994.03	16-Mar-94				795	2310	2310		795	795	913
1994	3	1994.03	17-Mar-94				767	2410	2410		767	767	908
1994	3	1994.03	18-Mar-94				742	2530	2530		742	742	901
1994	3	1994.03	19-Mar-94				759	2430	2430		759	759	895
1994	3	1994.03	20-Mar-94				778	2390	2390		778	778	889
1994	3	1994.03	21-Mar-94				758	2350	2350		758	758	883
1994	3	1994.03	22-Mar-94				776	2280	2280		776	776	879
1994	3	1994.03	23-Mar-94				811	2190	2190		811	811	882
1994	3	1994.03	24-Mar-94				793	2140	2140		793	793	883
1994	3	1994.03	25-Mar-94				822	2150	2150		822	822	887
1994	3	1994.03	26-Mar-94				786	2150	2150		786	786	889
1994	3	1994.03	27-Mar-94				727	2140	2140		727	727	885
1994	3	1994.03	28-Mar-94				749	2090	2090		749	749	878
1994	3	1994.03	29-Mar-94				724	2020	2020		724	724	869
1994	3	1994.03	30-Mar-94				711	1960	1960		711	711	857
1994	3	1994.03	31-Mar-94				724	1840	1840		724	724	843
1994	4	1994.04	1-Apr-94				716	1820	1820		716	716	829

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1994	4	1994.04	2-Apr-94				723	1760	1760		723	723	816
1994	4	1994.04	3-Apr-94				731	1770	1770		731	731	805
1994	4	1994.04	4-Apr-94				723	1800	1800		723	723	796
1994	4	1994.04	5-Apr-94				725	1730	1730		725	725	789
1994	4	1994.04	6-Apr-94				733	1640	1640		733	733	783
1994	4	1994.04	7-Apr-94				741	1580	1580		741	741	778
1994	4	1994.04	8-Apr-94				767	1490	1490		767	767	774
1994	4	1994.04	9-Apr-94				808	1570	1570		808	808	773
1994	4	1994.04	10-Apr-94				717	1690	1690		717	717	768
1994	4	1994.04	11-Apr-94				739	1670	1670		739	739	763
1994	4	1994.04	12-Apr-94				799	1490	1490		799	799	761
1994	4	1994.04	13-Apr-94				844	1450	1450		844	844	761
1994	4	1994.04	14-Apr-94				847	1430	1430		847	847	761
1994	4	1994.04	15-Apr-94				816	1390	1390		816	816	762
1994	4	1994.04	16-Apr-94				800	1330	1330		800	800	763
1994	4	1994.04	17-Apr-94				797	1380	1380		797	797	765
1994	4	1994.04	18-Apr-94				780	1410	1410		780	780	766
1994	4	1994.04	19-Apr-94				858	1340	1340		858	858	768
1994	4	1994.04	20-Apr-94				879	1320	1320		879	879	772
1994	4	1994.04	21-Apr-94				830	1330	1330		830	830	774
1994	4	1994.04	22-Apr-94				794	1370	1370		794	794	773
1994	4	1994.04	23-Apr-94				802	1410	1410		802	802	774
1994	4	1994.04	24-Apr-94				760	1730	1730		760	760	772
1994	4	1994.04	25-Apr-94				504	2390	2390		504	504	762
1994	4	1994.04	26-Apr-94				374	2920	2920		374	374	751
1994	4	1994.04	27-Apr-94				331	3310	3310		331	331	737
1994	4	1994.04	28-Apr-94				325	3620	3620		325	325	723
1994	4	1994.04	29-Apr-94				310	3640	3640		310	310	710
1994	4	1994.04	30-Apr-94				330	3100	3100		330	330	697
1994	5	1994.05	1-May-94				466	2440	2440		466	466	688
1994	5	1994.05	2-May-94				580	2030	2030		580	580	684
1994	5	1994.05	3-May-94				667	1760	1760		667	667	682
1994	5	1994.05	4-May-94				734	1660	1660		734	734	682
1994	5	1994.05	5-May-94				702	1510	1510		702	702	681
1994	5	1994.05	6-May-94				747	1610	1610		747	747	682
1994	5	1994.05	7-May-94				676	2150	2150		676	676	679
1994	5	1994.05	8-May-94				454	2740	2740		454	454	669
1994	5	1994.05	9-May-94				398	2880	2880		398	398	655
1994	5	1994.05	10-May-94				415	2840	2840		415	415	645
1994	5	1994.05	11-May-94				393	2790	2790		393	393	634
1994	5	1994.05	12-May-94				373	2560	2560		373	373	620
1994	5	1994.05	13-May-94				485	2130	2130		485	485	608
1994	5	1994.05	14-May-94				617	1820	1820		617	617	600
1994	5	1994.05	15-May-94				668	1700	1700		668	668	595
1994	5	1994.05	16-May-94				717	1560	1560		717	717	592
1994	5	1994.05	17-May-94				780	1470	1470		780	780	592
1994	5	1994.05	18-May-94				824	1470	1470		824	824	593
1994	5	1994.05	19-May-94				718	1770	1770		718	718	588
1994	5	1994.05	20-May-94				520	2360	2360		520	520	576
1994	5	1994.05	21-May-94				477	2520	2520		477	477	565
1994	5	1994.05	22-May-94				474	2550	2550		474	474	554
1994	5	1994.05	23-May-94				465	2470	2470		465	465	543
1994	5	1994.05	24-May-94				514	2230	2230		514	514	535
1994	5	1994.05	25-May-94				590	1950	1950		590	590	537
1994	5	1994.05	26-May-94				657	1630	1630		657	657	547
1994	5	1994.05	27-May-94				784	1430	1430		784	784	562
1994	5	1994.05	28-May-94				813	1340	1340		813	813	578
1994	5	1994.05	29-May-94				845	1310	1310		845	845	596
1994	5	1994.05	30-May-94				828	1280	1280		828	828	613
1994	5	1994.05	31-May-94				929	1190	1190		929	929	628
1994	6	1994.06	1-Jun-94				857	1170	1170		857	857	637
1994	6	1994.06	2-Jun-94				816	1150	1150		816	816	642
1994	6	1994.06	3-Jun-94				862	1120	1120		862	862	647
1994	6	1994.06	4-Jun-94				939	1080	1080		939	939	655
1994	6	1994.06	5-Jun-94				932	1100	1100		932	932	661
1994	6	1994.06	6-Jun-94				964	1090	1090		964	964	670
1994	6	1994.06	7-Jun-94				1008	1050	1050		1008	1008	689
1994	6	1994.06	8-Jun-94				925	1030	1030		925	925	706
1994	6	1994.06	9-Jun-94				970	1030	1030		970	970	725
1994	6	1994.06	10-Jun-94				889	1130	1130		889	889	741
1994	6	1994.06	11-Jun-94				811	1140	1140		811	811	756
1994	6	1994.06	12-Jun-94				813	1130	1130		813	813	767
1994	6	1994.06	13-Jun-94				866	1110	1110		866	866	775
1994	6	1994.06	14-Jun-94				887	1080	1080		887	887	782
1994	6	1994.06	15-Jun-94				860	1020	1020		860	860	787
1994	6	1994.06	16-Jun-94				828	1030	1030		828	828	789

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1994	6	1994.06	17-Jun-94				801	1080	1080		801	801	788
1994	6	1994.06	18-Jun-94				722	1170	1170		722	722	788
1994	6	1994.06	19-Jun-94				718	1160	1160		718	718	795
1994	6	1994.06	20-Jun-94				718	1170	1170		718	718	803
1994	6	1994.06	21-Jun-94				749	1140	1140		749	749	812
1994	6	1994.06	22-Jun-94				816	1150	1150		816	816	824
1994	6	1994.06	23-Jun-94				882	1130	1130		882	882	836
1994	6	1994.06	24-Jun-94				788	1080	1080		788	788	843
1994	6	1994.06	25-Jun-94				772	1140	1140		772	772	846
1994	6	1994.06	26-Jun-94				739	1210	1210		739	739	845
1994	6	1994.06	27-Jun-94				746	1190	1190		746	746	843
1994	6	1994.06	28-Jun-94				781	1100	1100		781	781	841
1994	6	1994.06	29-Jun-94				725	1080	1080		725	725	837
1994	6	1994.06	30-Jun-94				740	1000	1000		740	740	831
1994	7	1994.07	1-Jul-94				755	981	981		755	755	827
1994	7	1994.07	2-Jul-94				779	938	938		779	779	826
1994	7	1994.07	3-Jul-94				780	980	980		780	780	823
1994	7	1994.07	4-Jul-94				725	1080	1080		725	725	816
1994	7	1994.07	5-Jul-94				766	1090	1090		766	766	811
1994	7	1994.07	6-Jul-94				752	1120	1120		752	752	804
1994	7	1994.07	7-Jul-94				768	1100	1100		768	768	796
1994	7	1994.07	8-Jul-94				793	1020	1020		793	793	791
1994	7	1994.07	9-Jul-94				863	976	976		863	863	788
1994	7	1994.07	10-Jul-94				846	964	964		846	846	786
1994	7	1994.07	11-Jul-94				798	986	986		798	798	786
1994	7	1994.07	12-Jul-94				854	906	906		854	854	787
1994	7	1994.07	13-Jul-94				866	923	923		866	866	787
1994	7	1994.07	14-Jul-94				854	920	920		854	854	786
1994	7	1994.07	15-Jul-94				807	943	943		807	807	784
1994	7	1994.07	16-Jul-94				793	929	929		793	793	783
1994	7	1994.07	17-Jul-94				818	923	923		818	818	784
1994	7	1994.07	18-Jul-94				892	1030	1030		892	892	789
1994	7	1994.07	19-Jul-94				913	998	998		913	913	796
1994	7	1994.07	20-Jul-94				890	1070	1070		890	890	802
1994	7	1994.07	21-Jul-94				703	1190	1190		703	703	800
1994	7	1994.07	22-Jul-94				640	1280	1280		640	640	794
1994	7	1994.07	23-Jul-94				610	1360	1360		610	610	785
1994	7	1994.07	24-Jul-94				566	1480	1480		566	566	778
1994	7	1994.07	25-Jul-94				573	1540	1540		573	573	771
1994	7	1994.07	26-Jul-94				577	1530	1530		577	577	766
1994	7	1994.07	27-Jul-94				580	1530	1530		580	580	760
1994	7	1994.07	28-Jul-94				589	1500	1500		589	589	754
1994	7	1994.07	29-Jul-94				580	1410	1410		580	580	749
1994	7	1994.07	30-Jul-94				651	1330	1330		651	651	746
1994	7	1994.07	31-Jul-94				734	1170	1170		734	734	745
1994	8	1994.08	1-Aug-94				824	1110	1110		824	824	747
1994	8	1994.08	2-Aug-94				825	1050	1050		825	825	748
1994	8	1994.08	3-Aug-94				802	1020	1020		802	802	751
1994	8	1994.08	4-Aug-94				802	989	989		802	802	752
1994	8	1994.08	5-Aug-94				825	936	936		825	825	755
1994	8	1994.08	6-Aug-94				874	892	892		874	874	758
1994	8	1994.08	7-Aug-94				890	885	885		890	890	761
1994	8	1994.08	8-Aug-94				876	947	947		876	876	762
1994	8	1994.08	9-Aug-94				843	837	837		843	843	762
1994	8	1994.08	10-Aug-94				799	826	826		799	799	762
1994	8	1994.08	11-Aug-94				747	866	866		747	747	758
1994	8	1994.08	12-Aug-94				764	854	854		764	764	755
1994	8	1994.08	13-Aug-94				802	805	805		802	802	753
1994	8	1994.08	14-Aug-94				832	776	776		832	832	754
1994	8	1994.08	15-Aug-94				861	816	816		861	861	756
1994	8	1994.08	16-Aug-94				880	830	830		880	880	758
1994	8	1994.08	17-Aug-94				848	818	818		848	848	757
1994	8	1994.08	18-Aug-94				733	829	829		733	733	751
1994	8	1994.08	19-Aug-94				738	808	806		738	738	746
1994	8	1994.08	20-Aug-94				748	879	879		748	748	747
1994	8	1994.08	21-Aug-94				696	899	899		696	696	749
1994	8	1994.08	22-Aug-94				704	953	953		704	704	752
1994	8	1994.08	23-Aug-94				748	876	876		748	748	758
1994	8	1994.08	24-Aug-94				740	829	829		740	740	764
1994	8	1994.08	25-Aug-94				756	777	777		756	756	770
1994	8	1994.08	26-Aug-94				794	800	800		794	794	777
1994	8	1994.08	27-Aug-94				787	794	794		787	787	783
1994	8	1994.08	28-Aug-94				783	797	797		783	783	790
1994	8	1994.08	29-Aug-94				830	822	822		830	830	796
1994	8	1994.08	30-Aug-94				833	801	801		833	833	799
1994	8	1994.08	31-Aug-94				788	761	761		788	788	798

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1994	9	1994.09	1-Sep-94				818	743	743		818	818	798
1994	9	1994.09	2-Sep-94				816	761	761		816	816	799
1994	9	1994.09	3-Sep-94				830	808	808		830	830	799
1994	9	1994.09	4-Sep-94				881	875	875		881	881	801
1994	9	1994.09	5-Sep-94				883	901	901		883	883	802
1994	9	1994.09	6-Sep-94				852	874	874		852	852	800
1994	9	1994.09	7-Sep-94				887	800	800		887	887	801
1994	9	1994.09	8-Sep-94				892	761	761		892	892	802
1994	9	1994.09	9-Sep-94				830	798	798		830	830	803
1994	9	1994.09	10-Sep-94				869	783	783		869	869	807
1994	9	1994.09	11-Sep-94				830	842	842		830	830	810
1994	9	1994.09	12-Sep-94				808	897	897		808	808	810
1994	9	1994.09	13-Sep-94				844	877	877		844	844	810
1994	9	1994.09	14-Sep-94				891	865	865		891	891	811
1994	9	1994.09	15-Sep-94				872	865	865		872	872	811
1994	9	1994.09	16-Sep-94				839	857	857		839	839	811
1994	9	1994.09	17-Sep-94				854	896	896		854	854	815
1994	9	1994.09	18-Sep-94				840	981	981		840	840	818
1994	9	1994.09	19-Sep-94				844	956	956		844	844	821
1994	9	1994.09	20-Sep-94				772	870	870		772	772	824
1994	9	1994.09	21-Sep-94				869	833	833		869	869	829
1994	9	1994.09	22-Sep-94				906	827	827		906	906	835
1994	9	1994.09	23-Sep-94				915	838	838		915	915	840
1994	9	1994.09	24-Sep-94				892	859	859		892	892	845
1994	9	1994.09	25-Sep-94				837	985	985		837	837	846
1994	9	1994.09	26-Sep-94				815	1010	1010		815	815	847
1994	9	1994.09	27-Sep-94				867	914	914		867	867	850
1994	9	1994.09	28-Sep-94				853	917	917		853	853	851
1994	9	1994.09	29-Sep-94				773	961	961		773	773	849
1994	9	1994.09	30-Sep-94				784	917	917		784	784	849
1994	10	1994.10	1-Oct-94				841	967	967		841	841	850
1994	10	1994.10	2-Oct-94				776	1030	1030		776	776	848
1994	10	1994.10	3-Oct-94				787	1000	1000		787	787	847
1994	10	1994.10	4-Oct-94				760	965	965		760	760	843
1994	10	1994.10	5-Oct-94				789	975	975		789	789	840
1994	10	1994.10	6-Oct-94				790	1050	1050		790	790	838
1994	10	1994.10	7-Oct-94				727	1110	1110		727	727	832
1994	10	1994.10	8-Oct-94				682	1120	1120		682	682	825
1994	10	1994.10	9-Oct-94				690	1080	1080		690	690	821
1994	10	1994.10	10-Oct-94				741	1030	1030		741	741	816
1994	10	1994.10	11-Oct-94				803	999	999		803	803	815
1994	10	1994.10	12-Oct-94				785	1000	1000		785	785	815
1994	10	1994.10	13-Oct-94				761	1040	1040		761	761	812
1994	10	1994.10	14-Oct-94				690	1040	1040		690	690	805
1994	10	1994.10	15-Oct-94				722	1110	1110		722	722	800
1994	10	1994.10	16-Oct-94				433	1680	1680		433	433	787
1994	10	1994.10	17-Oct-94				266	2170	2170		266	266	767
1994	10	1994.10	18-Oct-94				265	2280	2280		265	265	748
1994	10	1994.10	19-Oct-94				302	2220	2220		302	302	730
1994	10	1994.10	20-Oct-94				311	2090	2090		311	311	714
1994	10	1994.10	21-Oct-94				396	1880	1880		396	396	699
1994	10	1994.10	22-Oct-94				442	1680	1680		442	442	683
1994	10	1994.10	23-Oct-94				472	1570	1570		472	472	668
1994	10	1994.10	24-Oct-94				484	1570	1570		484	484	655
1994	10	1994.10	25-Oct-94				518	1510	1510		518	518	644
1994	10	1994.10	26-Oct-94				577	1460	1460		577	577	636
1994	10	1994.10	27-Oct-94				703	1390	1390		703	703	631
1994	10	1994.10	28-Oct-94				700	1380	1380		700	700	626
1994	10	1994.10	29-Oct-94				703	1360	1360		703	703	623
1994	10	1994.10	30-Oct-94				730	1340	1340		730	730	622
1994	10	1994.10	31-Oct-94				724	1360	1360		724	724	618
1994	11	1994.11	1-Nov-94				706	1390	1390		706	706	615
1994	11	1994.11	2-Nov-94				678	1420	1420		678	678	612
1994	11	1994.11	3-Nov-94				626	1420	1420		626	626	607
1994	11	1994.11	4-Nov-94				645	1370	1370		645	645	602
1994	11	1994.11	5-Nov-94				666	1340	1340		666	666	598
1994	11	1994.11	6-Nov-94				670	1290	1290		670	670	596
1994	11	1994.11	7-Nov-94				685	1280	1280		685	685	596
1994	11	1994.11	8-Nov-94				685	1260	1260		685	685	596
1994	11	1994.11	9-Nov-94				716	1260	1260		716	716	595
1994	11	1994.11	10-Nov-94				698	1300	1300		698	698	592
1994	11	1994.11	11-Nov-94				689	1310	1310		689	689	589
1994	11	1994.11	12-Nov-94				710	1270	1270		710	710	587
1994	11	1994.11	13-Nov-94				729	1270	1270		729	729	588
1994	11	1994.11	14-Nov-94				723	1280	1280		723	723	588
1994	11	1994.11	15-Nov-94				712	1290	1290		712	712	598

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1994	11	1994.11	16-Nov-94				718	1290	1290		718	718	613
1994	11	1994.11	17-Nov-94				720	1280	1280		720	720	628
1994	11	1994.11	18-Nov-94				721	1270	1270		721	721	642
1994	11	1994.11	19-Nov-94				723	1260	1260		723	723	656
1994	11	1994.11	20-Nov-94				726	1260	1260		726	726	667
1994	11	1994.11	21-Nov-94				734	1250	1250		734	734	676
1994	11	1994.11	22-Nov-94				744	1250	1250		744	744	685
1994	11	1994.11	23-Nov-94				748	1250	1250		748	748	694
1994	11	1994.11	24-Nov-94				759	1250	1250		759	759	702
1994	11	1994.11	25-Nov-94				766	1250	1250		766	766	709
1994	11	1994.11	26-Nov-94				766	1250	1250		766	766	711
1994	11	1994.11	27-Nov-94				738	1260	1260		738	738	712
1994	11	1994.11	28-Nov-94				752	1260	1260		752	752	714
1994	11	1994.11	29-Nov-94				744	1260	1260		744	744	714
1994	11	1994.11	30-Nov-94				732	1240	1240		732	732	714
1994	12	1994.12	1-Dec-94				730	1250	1250		730	730	715
1994	12	1994.12	2-Dec-94				721	1270	1270		721	721	717
1994	12	1994.12	3-Dec-94				715	1280	1280		715	715	720
1994	12	1994.12	4-Dec-94				702	1290	1290		702	702	721
1994	12	1994.12	5-Dec-94				661	1300	1300		661	661	721
1994	12	1994.12	6-Dec-94				697	1290	1290		697	697	722
1994	12	1994.12	7-Dec-94				702	1280	1280		702	702	723
1994	12	1994.12	8-Dec-94				681	1290	1290		681	681	723
1994	12	1994.12	9-Dec-94				675	1290	1290		675	675	721
1994	12	1994.12	10-Dec-94				693	1290	1290		693	693	721
1994	12	1994.12	11-Dec-94				707	1280	1280		707	707	722
1994	12	1994.12	12-Dec-94				710	1290	1290		710	710	722
1994	12	1994.12	13-Dec-94				700	1300	1300		700	700	721
1994	12	1994.12	14-Dec-94				713	1310	1310		713	713	720
1994	12	1994.12	15-Dec-94				728	1320	1320		728	728	721
1994	12	1994.12	16-Dec-94				741	1320	1320		741	741	722
1994	12	1994.12	17-Dec-94				779	1320	1320		779	779	724
1994	12	1994.12	18-Dec-94				853	1310	1310		853	853	728
1994	12	1994.12	19-Dec-94				861	1300	1300		861	861	733
1994	12	1994.12	20-Dec-94				881	1290	1290		881	881	738
1994	12	1994.12	21-Dec-94				889	1290	1290		889	889	743
1994	12	1994.12	22-Dec-94				885	1290	1290		885	885	748
1994	12	1994.12	23-Dec-94				851	1290	1290		851	851	751
1994	12	1994.12	24-Dec-94				856	1280	1280		856	856	754
1994	12	1994.12	25-Dec-94				849	1300	1300		849	849	757
1994	12	1994.12	26-Dec-94				824	1310	1310		824	824	759
1994	12	1994.12	27-Dec-94				808	1310	1310		808	808	761
1994	12	1994.12	28-Dec-94				807	1310	1310		807	807	763
1994	12	1994.12	29-Dec-94				824	1290	1290		824	824	766
1994	12	1994.12	30-Dec-94				826	1290	1290		826	826	769
1994	12	1994.12	31-Dec-94				825	1310	1310		825	825	772
1995	1	1995.01	1-Jan-95				805	1310	1310		805	805	775
1995	1	1995.01	2-Jan-95				804	1310	1310		804	804	778
1995	1	1995.01	3-Jan-95				790	1360	1360		790	790	781
1995	1	1995.01	4-Jan-95				757	1430	1430		757	757	784
1995	1	1995.01	5-Jan-95				802	1570	1570		802	802	788
1995	1	1995.01	6-Jan-95				713	1630	1630		713	713	788
1995	1	1995.01	7-Jan-95				726	1790	1790		726	726	789
1995	1	1995.01	8-Jan-95				645	2070	2070		645	645	788
1995	1	1995.01	9-Jan-95				549	2430	2430		549	549	784
1995	1	1995.01	10-Jan-95				503	3010	3010		503	503	777
1995	1	1995.01	11-Jan-95				467	4030	4030		467	467	769
1995	1	1995.01	12-Jan-95				407	5070	5070		407	407	759
1995	1	1995.01	13-Jan-95				442	4400	4400		442	442	750
1995	1	1995.01	14-Jan-95				362	3960	3960		362	362	738
1995	1	1995.01	15-Jan-95				419	3960	3960		419	419	727
1995	1	1995.01	16-Jan-95				425	4520	4520		425	425	715
1995	1	1995.01	17-Jan-95				376	5170	5170		376	376	699
1995	1	1995.01	18-Jan-95				357	4770	4770		357	357	682
1995	1	1995.01	19-Jan-95				426	4370	4370		426	426	667
1995	1	1995.01	20-Jan-95				529	3980	3980		529	529	655
1995	1	1995.01	21-Jan-95				572	3830	3830		572	572	645
1995	1	1995.01	22-Jan-95				569	3680	3680		569	569	635
1995	1	1995.01	23-Jan-95				559	3780	3780		559	559	626
1995	1	1995.01	24-Jan-95				562	4150	4150		562	562	616
1995	1	1995.01	25-Jan-95				470	5550	5550		470	470	604
1995	1	1995.01	26-Jan-95				306	8150	8150		306	306	587
1995	1	1995.01	27-Jan-95				252	8590	8590		252	252	569
1995	1	1995.01	28-Jan-95				205	9410	9410		205	205	548
1995	1	1995.01	29-Jan-95				185	11500	11500		185	185	527
1995	1	1995.01	30-Jan-95				223	11300	11300		223	223	507

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1995	1	1995.01	31-Jan-95				259	10500	10500		259	259	489
1995	2	1995.02	1-Feb-95				298	10100	10100		298	298	472
1995	2	1995.02	2-Feb-95				336	9570	9570		336	336	457
1995	2	1995.02	3-Feb-95				368	8890	8890		368	368	444
1995	2	1995.02	4-Feb-95				442	7600	7600		442	442	432
1995	2	1995.02	5-Feb-95				414	7200	7200		414	414	422
1995	2	1995.02	6-Feb-95				391	7320	7320		391	391	411
1995	2	1995.02	7-Feb-95				388	7300	7300		388	388	402
1995	2	1995.02	8-Feb-95				382	7210	7210		382	382	396
1995	2	1995.02	9-Feb-95				388	7040	7040		388	388	393
1995	2	1995.02	10-Feb-95				386	6830	6830		386	386	390
1995	2	1995.02	11-Feb-95				388	6700	6700		388	388	389
1995	2	1995.02	12-Feb-95				392	6660	6660		392	392	388
1995	2	1995.02	13-Feb-95				384	6500	6500		384	384	388
1995	2	1995.02	14-Feb-95				390	6470	6470		390	390	387
1995	2	1995.02	15-Feb-95				384	6520	6520		384	384	386
1995	2	1995.02	16-Feb-95				408	6300	6300		408	408	387
1995	2	1995.02	17-Feb-95				381	6550	6550		381	381	388
1995	2	1995.02	18-Feb-95				399	6510	6510		399	399	387
1995	2	1995.02	19-Feb-95				429	6050	6050		429	429	384
1995	2	1995.02	20-Feb-95				458	5570	5570		458	458	380
1995	2	1995.02	21-Feb-95				481	5290	5290		481	481	377
1995	2	1995.02	22-Feb-95				459	5210	5210		459	459	374
1995	2	1995.02	23-Feb-95				441	5270	5270		441	441	370
1995	2	1995.02	24-Feb-95				436	5490	5490		436	436	368
1995	2	1995.02	25-Feb-95				470	5180	5180		470	470	374
1995	2	1995.02	26-Feb-95				493	4870	4870		493	493	382
1995	2	1995.02	27-Feb-95				504	4740	4740		504	504	392
1995	2	1995.02	28-Feb-95				516	4720	4720		516	516	403
1995	3	1995.03	1-Mar-95				528	4670	4670		528	528	413
1995	3	1995.03	2-Mar-95				572	4400	4400		572	572	424
1995	3	1995.03	3-Mar-95				686	3730	3730		686	686	436
1995	3	1995.03	4-Mar-95				777	3240	3240		777	777	451
1995	3	1995.03	5-Mar-95				757	3250	3250		757	757	464
1995	3	1995.03	6-Mar-95				737	3250	3250		737	737	474
1995	3	1995.03	7-Mar-95				704	3200	3200		704	704	484
1995	3	1995.03	8-Mar-95				742	3160	3160		742	742	495
1995	3	1995.03	9-Mar-95				759	3190	3190		759	759	508
1995	3	1995.03	10-Mar-95				705	3950	3950		705	705	518
1995	3	1995.03	11-Mar-95				422	7830	7830		422	422	520
1995	3	1995.03	12-Mar-95				256	12600	12600		256	256	515
1995	3	1995.03	13-Mar-95				231	14100	14100		231	231	510
1995	3	1995.03	14-Mar-95				268	13200	13200		268	268	506
1995	3	1995.03	15-Mar-95				273	12500	12500		273	273	502
1995	3	1995.03	16-Mar-95				241	13500	13500		241	241	497
1995	3	1995.03	17-Mar-95				241	17200	17200		241	241	492
1995	3	1995.03	18-Mar-95				264	22000	22000		264	264	488
1995	3	1995.03	19-Mar-95				278	25200	25200		278	278	484
1995	3	1995.03	20-Mar-95				285	25900	25900		285	285	480
1995	3	1995.03	21-Mar-95				288	25100	25100		288	288	476
1995	3	1995.03	22-Mar-95				301	23700	23700		301	301	471
1995	3	1995.03	23-Mar-95				310	21900	21900		310	310	465
1995	3	1995.03	24-Mar-95				310	22000	22000		310	310	460
1995	3	1995.03	25-Mar-95				332	20600	20600		332	332	456
1995	3	1995.03	26-Mar-95				302	20200	20200		302	302	452
1995	3	1995.03	27-Mar-95				279	21400	21400		279	279	445
1995	3	1995.03	28-Mar-95				283	23100	23100		283	283	438
1995	3	1995.03	29-Mar-95				274	24600	24600		274	274	431
1995	3	1995.03	30-Mar-95				284	25200	25200		284	284	423
1995	3	1995.03	31-Mar-95				291	25100	25100		291	291	415
1995	4	1995.04	1-Apr-95				294	24700	24700		294	294	406
1995	4	1995.04	2-Apr-95				284	24200	24200		284	284	392
1995	4	1995.04	3-Apr-95				275	23700	23700		275	275	376
1995	4	1995.04	4-Apr-95				277	22900	22900		277	277	360
1995	4	1995.04	5-Apr-95				271	22300	22300		271	271	344
1995	4	1995.04	6-Apr-95				259	21800	21800		259	259	329
1995	4	1995.04	7-Apr-95				256	21500	21500		256	256	313
1995	4	1995.04	8-Apr-95				241	21400	21400		241	241	296
1995	4	1995.04	9-Apr-95				228	21400	21400		228	228	280
1995	4	1995.04	10-Apr-95				226	21200	21200		226	226	273
1995	4	1995.04	11-Apr-95				216	20700	20700		216	216	272
1995	4	1995.04	12-Apr-95				223	20400	20400		223	223	272
1995	4	1995.04	13-Apr-95				224	19800	19800		224	224	270
1995	4	1995.04	14-Apr-95				221	19300	19300		221	221	269
1995	4	1995.04	15-Apr-95				212	19000	19000		212	212	268
1995	4	1995.04	16-Apr-95				208	18700	18700		208	208	267

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1995	4	1995.04	17-Apr-95				206	18800	18800		206	206	265
1995	4	1995.04	18-Apr-95				202	18600	18600		202	202	262
1995	4	1995.04	19-Apr-95				216	18400	18400		216	216	260
1995	4	1995.04	20-Apr-95				216	18200	18200		216	216	257
1995	4	1995.04	21-Apr-95				207	18000	18000		207	207	254
1995	4	1995.04	22-Apr-95				196	18200	18200		196	196	250
1995	4	1995.04	23-Apr-95				196	18600	18600		196	196	247
1995	4	1995.04	24-Apr-95				202	18700	18700		202	202	242
1995	4	1995.04	25-Apr-95				201	18800	18800		201	201	239
1995	4	1995.04	26-Apr-95				187	18600	18600		187	187	236
1995	4	1995.04	27-Apr-95				184	18400	18400		184	184	233
1995	4	1995.04	28-Apr-95				179	17800	17800		179	179	229
1995	4	1995.04	29-Apr-95				181	17100	17100		181	181	226
1995	4	1995.04	30-Apr-95				186	16800	16800		186	186	222
1995	5	1995.05	1-May-95				188	16800	16800		188	188	219
1995	5	1995.05	2-May-95				191	17200	17200		191	191	216
1995	5	1995.05	3-May-95				186	17700	17700		186	186	213
1995	5	1995.05	4-May-95				180	19000	19000		180	180	210
1995	5	1995.05	5-May-95				164	20800	20800		164	164	206
1995	5	1995.05	6-May-95				161	21700	21700		161	161	203
1995	5	1995.05	7-May-95				155	22200	22200		155	155	199
1995	5	1995.05	8-May-95				157	22400	22400		157	157	197
1995	5	1995.05	9-May-95				153	22300	22300		153	153	194
1995	5	1995.05	10-May-95				157	22600	22600		157	157	192
1995	5	1995.05	11-May-95				157	22900	22900		157	157	190
1995	5	1995.05	12-May-95				154	22900	22900		154	154	188
1995	5	1995.05	13-May-95				147	22800	22800		147	147	185
1995	5	1995.05	14-May-95				145	22900	22900		145	145	182
1995	5	1995.05	15-May-95				144	22900	22900		144	144	180
1995	5	1995.05	16-May-95				148	22800	22800		148	148	178
1995	5	1995.05	17-May-95				150	23000	23000		150	150	176
1995	5	1995.05	18-May-95				154	23200	23200		154	154	175
1995	5	1995.05	19-May-95				159	23200	23200		159	159	173
1995	5	1995.05	20-May-95				157	23100	23100		157	157	171
1995	5	1995.05	21-May-95				147	23400	23400		147	147	169
1995	5	1995.05	22-May-95				136	23400	23400		136	136	167
1995	5	1995.05	23-May-95				132	23500	23500		132	132	165
1995	5	1995.05	24-May-95				120	23500	23500		120	120	162
1995	5	1995.05	25-May-95				136	23500	23500		136	136	160
1995	5	1995.05	26-May-95				136	23200	23200		136	136	158
1995	5	1995.05	27-May-95				126	23100	23100		126	126	156
1995	5	1995.05	28-May-95				122	23200	23200		122	122	154
1995	5	1995.05	29-May-95				127	23200	23200		127	127	153
1995	5	1995.05	30-May-95				129	23000	23000		129	129	151
1995	5	1995.05	31-May-95				132	22400	22400		132	132	149
1995	6	1995.06	1-Jun-95				137	21900	21900		137	137	147
1995	6	1995.06	2-Jun-95				130	21400	21400		130	130	145
1995	6	1995.06	3-Jun-95				126	21100	21100		126	126	143
1995	6	1995.06	4-Jun-95				127	20800	20800		127	127	142
1995	6	1995.06	5-Jun-95				123	20300	20300		123	123	141
1995	6	1995.06	6-Jun-95				129	19800	19800		129	129	140
1995	6	1995.06	7-Jun-95				146	19100	19100		146	146	140
1995	6	1995.06	8-Jun-95				151	18200	18200		151	151	139
1995	6	1995.06	9-Jun-95				150	17600	17600		150	150	139
1995	6	1995.06	10-Jun-95				154	17100	17100		154	154	139
1995	6	1995.06	11-Jun-95				168	16400	16400		168	168	140
1995	6	1995.06	12-Jun-95				180	15600	15600		180	180	141
1995	6	1995.06	13-Jun-95				184	14800	14800		184	184	142
1995	6	1995.06	14-Jun-95				179	14200	14200		179	179	143
1995	6	1995.06	15-Jun-95				178	16300	13600		178	178	144
1995	6	1995.06	16-Jun-95				171	13300	13300		171	171	145
1995	6	1995.06	17-Jun-95				179	12800	12800		179	179	146
1995	6	1995.06	18-Jun-95				188	12300	12300		188	188	147
1995	6	1995.06	19-Jun-95				189	12000	12000		189	189	148
1995	6	1995.06	20-Jun-95				200	11700	11700		200	200	150
1995	6	1995.06	21-Jun-95				210	11500	11500		210	210	152
1995	6	1995.06	22-Jun-95				215	11100	11100		215	215	155
1995	6	1995.06	23-Jun-95				222	10700	10700		222	222	158
1995	6	1995.06	24-Jun-95				234	10000	10000		234	234	161
1995	6	1995.06	25-Jun-95				281	9110	9110		281	281	166
1995	6	1995.06	26-Jun-95				334	8060	8060		334	334	173
1995	6	1995.06	27-Jun-95				399	7070	7070		399	399	182
1995	6	1995.06	28-Jun-95				452	6450	6450		452	452	193
1995	6	1995.06	29-Jun-95				449	6290	6290		449	449	204
1995	6	1995.06	30-Jun-95				453	6060	6060		453	453	215
1995	7	1995.07	1-Jul-95				454	6130	6130		454	454	225

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1995	7	1995.07	2-Jul-95				398	6330	6330		398	398	234
1995	7	1995.07	3-Jul-95				283	6730	6730		283	283	239
1995	7	1995.07	4-Jul-95				253	7250	7250		253	253	244
1995	7	1995.07	5-Jul-95				194	7860	7860		194	194	246
1995	7	1995.07	6-Jul-95				179	8600	8600		179	179	248
1995	7	1995.07	7-Jul-95				168	9400	9400		168	168	248
1995	7	1995.07	8-Jul-95				179	9920	9920		179	179	249
1995	7	1995.07	9-Jul-95				158	11200	11200		158	158	250
1995	7	1995.07	10-Jul-95				146	12100	12100		146	146	249
1995	7	1995.07	11-Jul-95				135	13300	13300		135	135	248
1995	7	1995.07	12-Jul-95				133	14900	14900		133	133	247
1995	7	1995.07	13-Jul-95				132	16200	16200		132	132	245
1995	7	1995.07	14-Jul-95				127	17000	17000		127	127	243
1995	7	1995.07	15-Jul-95				135	17600	17600		135	135	242
1995	7	1995.07	16-Jul-95				143	17200	17200		143	143	241
1995	7	1995.07	17-Jul-95				149	16100	16100		149	149	240
1995	7	1995.07	18-Jul-95				164	15000	15000		164	164	239
1995	7	1995.07	19-Jul-95				207	12800	12800		207	207	240
1995	7	1995.07	20-Jul-95				259	10200	10200		259	259	242
1995	7	1995.07	21-Jul-95				301	8170	8170		301	301	245
1995	7	1995.07	22-Jul-95				303	7400	7400		303	303	247
1995	7	1995.07	23-Jul-95				270	7260	7260		270	270	249
1995	7	1995.07	24-Jul-95				264	7090	7090		264	264	250
1995	7	1995.07	25-Jul-95				317	6520	6520		317	317	251
1995	7	1995.07	26-Jul-95				365	5860	5860		365	365	252
1995	7	1995.07	27-Jul-95				465	5500	5500		465	465	255
1995	7	1995.07	28-Jul-95				470	5300	5300		470	470	255
1995	7	1995.07	29-Jul-95				465	5200	5200		465	465	256
1995	7	1995.07	30-Jul-95				442	5900	5900		442	442	255
1995	7	1995.07	31-Jul-95				432	6300	6300		432	432	255
1995	8	1995.08	1-Aug-95				378	6600	6600		378	378	254
1995	8	1995.08	2-Aug-95					6700	6700		450	450	259
1995	8	1995.08	3-Aug-95					6130	6130		450	450	266
1995	8	1995.08	4-Aug-95					6090	6090		450	450	275
1995	8	1995.08	5-Aug-95					5940	5940		450	450	284
1995	8	1995.08	6-Aug-95					5240	5240		450	450	293
1995	8	1995.08	7-Aug-95					4530	4530		450	450	302
1995	8	1995.08	8-Aug-95				556	4130	4130		556	556	315
1995	8	1995.08	9-Aug-95				639	3780	3780		639	639	332
1995	8	1995.08	10-Aug-95				640	3640	3640		640	640	349
1995	8	1995.08	11-Aug-95				571	3610	3610		571	571	363
1995	8	1995.08	12-Aug-95				572	3480	3480		572	572	378
1995	8	1995.08	13-Aug-95				499	3900	3900		499	499	390
1995	8	1995.08	14-Aug-95				513	3940	3940		513	513	403
1995	8	1995.08	15-Aug-95				631	3490	3490		631	631	419
1995	8	1995.08	16-Aug-95				648	3540	3540		648	648	436
1995	8	1995.08	17-Aug-95				626	3570	3570		626	626	451
1995	8	1995.08	18-Aug-95				627	3360	3360		627	627	465
1995	8	1995.08	19-Aug-95				619	3250	3250		619	619	477
1995	8	1995.08	20-Aug-95				649	3120	3120		649	649	489
1995	8	1995.08	21-Aug-95				646	3050	3050		646	646	500
1995	8	1995.08	22-Aug-95				663	3000	3000		663	663	513
1995	8	1995.08	23-Aug-95				603	3030	3030		603	603	525
1995	8	1995.08	24-Aug-95				528	2980	2980		528	528	532
1995	8	1995.08	25-Aug-95				527	2990	2990		527	527	537
1995	8	1995.08	26-Aug-95				546	2970	2970		546	546	540
1995	8	1995.08	27-Aug-95				564	2940	2940		564	564	543
1995	8	1995.08	28-Aug-95				588	2980	2980		588	588	547
1995	8	1995.08	29-Aug-95				600	2830	2830		600	600	552
1995	8	1995.08	30-Aug-95				500	3190	3190		500	500	554
1995	8	1995.08	31-Aug-95				402	3670	3670		402	402	555
1995	9	1995.09	1-Sep-95				404	3690	3690		404	404	554
1995	9	1995.09	2-Sep-95				417	3610	3610		417	417	553
1995	9	1995.09	3-Sep-95				419	3650	3650		419	419	552
1995	9	1995.09	4-Sep-95				437	3810	3810		437	437	551
1995	9	1995.09	5-Sep-95				423	3690	3690		423	423	550
1995	9	1995.09	6-Sep-95				438	3630	3630		438	438	550
1995	9	1995.09	7-Sep-95				448	3560	3560		448	448	546
1995	9	1995.09	8-Sep-95				445	3540	3540		445	445	540
1995	9	1995.09	9-Sep-95				458	3590	3590		458	458	534
1995	9	1995.09	10-Sep-95				454	3750	3750		454	454	530
1995	9	1995.09	11-Sep-95				412	4000	4000		412	412	524
1995	9	1995.09	12-Sep-95				371	4150	4150		371	371	520
1995	9	1995.09	13-Sep-95				356	4080	4080		356	356	515
1995	9	1995.09	14-Sep-95				364	4160	4160		364	364	506
1995	9	1995.09	15-Sep-95				343	4270	4270		343	343	496

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1995	9	1995.09 16-Sep-95					343	4280	4280		343	343	486
1995	9	1995.09 17-Sep-95					307	4600	4600		307	307	476
1995	9	1995.09 18-Sep-95					265	4940	4940		265	265	464
1995	9	1995.09 19-Sep-95					259	4960	4960		259	259	451
1995	9	1995.09 20-Sep-95					241	5280	5280		241	241	438
1995	9	1995.09 21-Sep-95					237	5360	5360		237	237	423
1995	9	1995.09 22-Sep-95					211	5680	5680		211	211	410
1995	9	1995.09 23-Sep-95					180	6140	6140		180	180	399
1995	9	1995.09 24-Sep-95					166	6510	6510		166	166	387
1995	9	1995.09 25-Sep-95					158	6770	6770		158	158	374
1995	9	1995.09 26-Sep-95					164	6570	6570		164	164	360
1995	9	1995.09 27-Sep-95					203	6290	6290		203	203	348
1995	9	1995.09 28-Sep-95					229	5980	5980		229	229	335
1995	9	1995.09 29-Sep-95					243	5790	5790		243	243	327
1995	9	1995.09 30-Sep-95					244	5700	5700		244	244	321
1995	10	1995.10 1-Oct-95					259	5650	5650		259	259	316
1995	10	1995.10 2-Oct-95					197	6320	6320		197	197	309
1995	10	1995.10 3-Oct-95					133	6650	6650		133	133	300
1995	10	1995.10 4-Oct-95					144	6620	6620		144	144	290
1995	10	1995.10 5-Oct-95					139	6640	6640		139	139	280
1995	10	1995.10 6-Oct-95					137	6520	6520		137	137	270
1995	10	1995.10 7-Oct-95						6540	6540		253	253	264
1995	10	1995.10 8-Oct-95						6590	6590		535	535	267
1995	10	1995.10 9-Oct-95						6650	6650		693	693	275
1995	10	1995.10 10-Oct-95				210		6600	6600		210	210	267
1995	10	1995.10 11-Oct-95				244		6490	6490		244	244	261
1995	10	1995.10 12-Oct-95						6450	6450		200	200	255
1995	10	1995.10 13-Oct-95						6420	6420		137	137	248
1995	10	1995.10 14-Oct-95				140		6670	6670		140	140	240
1995	10	1995.10 15-Oct-95				132		6900	6900		132	132	233
1995	10	1995.10 16-Oct-95				129		7290	7290		129	129	226
1995	10	1995.10 17-Oct-95						7220	7220		150	150	221
1995	10	1995.10 18-Oct-95				162		6650	6650		162	162	218
1995	10	1995.10 19-Oct-95				181		6010	6010		181	181	215
1995	10	1995.10 20-Oct-95				268		5500	5500		268	268	216
1995	10	1995.10 21-Oct-95				281		5070	5070		281	281	217
1995	10	1995.10 22-Oct-95				302		4820	4820		302	302	220
1995	10	1995.10 23-Oct-95				330		4630	4630		330	330	225
1995	10	1995.10 24-Oct-95				366		4280	4280		366	366	232
1995	10	1995.10 25-Oct-95				396		3940	3940		396	396	240
1995	10	1995.10 26-Oct-95				435		3810	3810		435	435	249
1995	10	1995.10 27-Oct-95				423		3840	3840		423	423	256
1995	10	1995.10 28-Oct-95				391		4030	4030		391	391	262
1995	10	1995.10 29-Oct-95				365		4040	4040		365	365	266
1995	10	1995.10 30-Oct-95				414		3860	3860		414	414	272
1995	10	1995.10 31-Oct-95				418		3750	3750		418	418	277
1995	11	1995.11 1-Nov-95				492		3330	3330		492	492	287
1995	11	1995.11 2-Nov-95				388		3030	3030		388	388	295
1995	11	1995.11 3-Nov-95				576		2910	2910		576	576	310
1995	11	1995.11 4-Nov-95				600		2810	2810		600	600	325
1995	11	1995.11 5-Nov-95				612		2740	2740		612	612	341
1995	11	1995.11 6-Nov-95				635		2660	2660		635	635	354
1995	11	1995.11 7-Nov-95				675		2640	2640		675	675	358
1995	11	1995.11 8-Nov-95				672		2590	2590		672	672	357
1995	11	1995.11 9-Nov-95				712		2550	2550		712	712	374
1995	11	1995.11 10-Nov-95				692		2500	2500		692	692	389
1995	11	1995.11 11-Nov-95				690		2440	2440		690	690	405
1995	11	1995.11 12-Nov-95				688		2380	2380		688	688	424
1995	11	1995.11 13-Nov-95				590		2370	2370		590	590	439
1995	11	1995.11 14-Nov-95				238		2350	2350		238	238	442
1995	11	1995.11 15-Nov-95				184		2300	2300		184	184	444
1995	11	1995.11 16-Nov-95				466		2270	2270		466	466	455
1995	11	1995.11 17-Nov-95				750		2260	2260		750	750	474
1995	11	1995.11 18-Nov-95				745		2260	2260		745	745	493
1995	11	1995.11 19-Nov-95				761		2260	2260		761	761	510
1995	11	1995.11 20-Nov-95				771		2260	2260		771	771	526
1995	11	1995.11 21-Nov-95				760		2220	2220		760	760	541
1995	11	1995.11 22-Nov-95				762		2220	2220		762	762	556
1995	11	1995.11 23-Nov-95				754		2220	2220		754	754	569
1995	11	1995.11 24-Nov-95				730		2220	2220		730	730	580
1995	11	1995.11 25-Nov-95				755		2200	2200		755	755	590
1995	11	1995.11 26-Nov-95				755		2190	2190		755	755	601
1995	11	1995.11 27-Nov-95				755		2170	2170		755	755	614
1995	11	1995.11 28-Nov-95				741		2170	2170		741	741	626
1995	11	1995.11 29-Nov-95				747		2170	2170		747	747	637
1995	11	1995.11 30-Nov-95				752		2160	2160		752	752	648

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1995	12	1995.12	1-Dec-95				751	2160	2160		751	751	657
1995	12	1995.12	2-Dec-95				742	2150	2150		742	742	669
1995	12	1995.12	3-Dec-95				753	2110	2110		753	753	675
1995	12	1995.12	4-Dec-95				750	2120	2120		750	750	680
1995	12	1995.12	5-Dec-95				753	2130	2130		753	753	684
1995	12	1995.12	6-Dec-95				750	2120	2120		750	750	688
1995	12	1995.12	7-Dec-95				735	2120	2120		735	735	690
1995	12	1995.12	8-Dec-95				746	2140	2140		746	746	693
1995	12	1995.12	9-Dec-95				725	2130	2130		725	725	693
1995	12	1995.12	10-Dec-95				732	2110	2110		732	732	694
1995	12	1995.12	11-Dec-95				709	2160	2160		709	709	695
1995	12	1995.12	12-Dec-95				673	2260	2260		673	673	695
1995	12	1995.12	13-Dec-95				688	2340	2340		688	688	698
1995	12	1995.12	14-Dec-95				684	2440	2440		684	684	713
1995	12	1995.12	15-Dec-95				669	2450	2450		669	669	729
1995	12	1995.12	16-Dec-95				676	2450	2450		676	676	736
1995	12	1995.12	17-Dec-95				690	2410	2410		690	690	734
1995	12	1995.12	18-Dec-95				702	2410	2410		702	702	732
1995	12	1995.12	19-Dec-95				706	2440	2440		706	706	731
1995	12	1995.12	20-Dec-95				733	2370	2370		733	733	729
1995	12	1995.12	21-Dec-95				759	2320	2320		759	759	729
1995	12	1995.12	22-Dec-95				773	2300	2300		773	773	730
1995	12	1995.12	23-Dec-95				773	2270	2270		773	773	730
1995	12	1995.12	24-Dec-95				775	2250	2250		775	775	732
1995	12	1995.12	25-Dec-95				795	2240	2240		795	795	733
1995	12	1995.12	26-Dec-95				772	2210	2210		772	772	734
1995	12	1995.12	27-Dec-95				761	2210	2210		761	761	734
1995	12	1995.12	28-Dec-95				788	2190	2190		788	788	735
1995	12	1995.12	29-Dec-95				803	2160	2160		803	803	737
1995	12	1995.12	30-Dec-95				799	2210	2210		799	799	739
1995	12	1995.12	31-Dec-95				718	2380	2380		718	718	738
1996	1	1996.01	1-Jan-96				716	2430	2430		716	716	737
1996	1	1996.01	2-Jan-96				724	2310	2310		724	724	736
1996	1	1996.01	3-Jan-96				776	2140	2140		776	776	737
1996	1	1996.01	4-Jan-96				832	2040	2040		832	832	739
1996	1	1996.01	5-Jan-96				865	1980	1980		865	865	743
1996	1	1996.01	6-Jan-96				889	1940	1940		889	889	748
1996	1	1996.01	7-Jan-96				920	1910	1910		920	920	754
1996	1	1996.01	8-Jan-96				941	1880	1880		941	941	761
1996	1	1996.01	9-Jan-96				950	1880	1880		950	950	769
1996	1	1996.01	10-Jan-96				956	1840	1840		956	956	777
1996	1	1996.01	11-Jan-96				961	1840	1840		961	961	786
1996	1	1996.01	12-Jan-96				944	1820	1820		944	944	795
1996	1	1996.01	13-Jan-96				947	1800	1800		947	947	804
1996	1	1996.01	14-Jan-96				966	1790	1790		966	966	814
1996	1	1996.01	15-Jan-96				1006	1790	1790		1006	1006	825
1996	1	1996.01	16-Jan-96				1015	1850	1850		1015	1015	836
1996	1	1996.01	17-Jan-96				955	1960	1960		955	955	844
1996	1	1996.01	18-Jan-96				759	2390	2390		759	759	846
1996	1	1996.01	19-Jan-96				801	2370	2370		801	801	848
1996	1	1996.01	20-Jan-96				725	2450	2450		725	725	847
1996	1	1996.01	21-Jan-96				687	2660	2660		687	687	844
1996	1	1996.01	22-Jan-96				776	2460	2460		776	776	844
1996	1	1996.01	23-Jan-96				705	2550	2550		705	705	842
1996	1	1996.01	24-Jan-96				781	2380	2380		781	781	841
1996	1	1996.01	25-Jan-96				756	2440	2440		756	756	841
1996	1	1996.01	26-Jan-96				583	3280	3280		583	583	835
1996	1	1996.01	27-Jan-96				566	3610	3610		566	566	827
1996	1	1996.01	28-Jan-96				522	3400	3400		522	522	818
1996	1	1996.01	29-Jan-96				425	4280	4280		425	425	806
1996	1	1996.01	30-Jan-96				480	3900	3900		480	480	798
1996	1	1996.01	31-Jan-96				459	3980	3980		459	459	789
1996	2	1996.02	1-Feb-96				432	5250	5250		432	432	779
1996	2	1996.02	2-Feb-96				370	6260	6260		370	370	766
1996	2	1996.02	3-Feb-96				333	6420	6420		333	333	749
1996	2	1996.02	4-Feb-96				309	6740	6740		309	309	731
1996	2	1996.02	5-Feb-96				367	7430	7430		367	367	713
1996	2	1996.02	6-Feb-96				324	9170	9170		324	324	693
1996	2	1996.02	7-Feb-96				294	9170	9170		294	294	672
1996	2	1996.02	8-Feb-96				246	9770	9770		246	246	648
1996	2	1996.02	9-Feb-96				268	10300	10300		268	268	625
1996	2	1996.02	10-Feb-96				284	10600	10600		284	284	603
1996	2	1996.02	11-Feb-96				268	11100	11100		268	268	580
1996	2	1996.02	12-Feb-96				278	11400	11400		278	278	558
1996	2	1996.02	13-Feb-96				292	11400	11400		292	292	536
1996	2	1996.02	14-Feb-96				302	11200	11200		302	302	512

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1996	2	1996.02	15-Feb-96				309	11200	11200		309	309	489
1996	2	1996.02	16-Feb-96				297	11300	11300		297	297	467
1996	2	1996.02	17-Feb-96				290	11300	11300		290	290	451
1996	2	1996.02	18-Feb-96				283	11500	11500		283	283	434
1996	2	1996.02	19-Feb-96				283	11700	11700		283	283	419
1996	2	1996.02	20-Feb-96				280	12200	12200		280	280	405
1996	2	1996.02	21-Feb-96				258	13700	13700		258	258	388
1996	2	1996.02	22-Feb-96				246	14700	14700		246	246	373
1996	2	1996.02	23-Feb-96				224	15400	15400		224	224	354
1996	2	1996.02	24-Feb-96				220	15400	15400		220	220	336
1996	2	1996.02	25-Feb-96				208	15800	15800		208	208	324
1996	2	1996.02	26-Feb-96				224	15900	15900		224	224	313
1996	2	1996.02	27-Feb-96				241	15700	15700		241	241	303
1996	2	1996.02	28-Feb-96				259	15400	15400		259	259	298
1996	2	1996.02	29-Feb-96				260	15300	15300		260	260	290
1996	3	1996.03	1-Mar-96				259	15200	15200		259	259	284
1996	3	1996.03	2-Mar-96				262	15000	15000		262	262	278
1996	3	1996.03	3-Mar-96				236	14900	14900		236	236	273
1996	3	1996.03	4-Mar-96				223	15200	15200		223	223	270
1996	3	1996.03	5-Mar-96				225	15400	15400		225	225	267
1996	3	1996.03	6-Mar-96				186	16100	16100		186	186	261
1996	3	1996.03	7-Mar-96				181	16800	16800		181	181	256
1996	3	1996.03	8-Mar-96				191	17200	17200		191	191	253
1996	3	1996.03	9-Mar-96				202	17400	17400		202	202	251
1996	3	1996.03	10-Mar-96				218	17600	17600		218	218	250
1996	3	1996.03	11-Mar-96				228	17500	17500		228	228	248
1996	3	1996.03	12-Mar-96				228	17300	17300		228	228	246
1996	3	1996.03	13-Mar-96				232	17200	17200		232	232	245
1996	3	1996.03	14-Mar-96				243	16700	16700		243	243	243
1996	3	1996.03	15-Mar-96				250	16000	16000		250	250	242
1996	3	1996.03	16-Mar-96				238	15400	15400		238	238	239
1996	3	1996.03	17-Mar-96				226	15100	15100		226	226	237
1996	3	1996.03	18-Mar-96				212	15200	15200		212	212	234
1996	3	1996.03	19-Mar-96				219	15300	15300		219	219	232
1996	3	1996.03	20-Mar-96				221	15400	15400		221	221	230
1996	3	1996.03	21-Mar-96				215	15600	15600		215	215	228
1996	3	1996.03	22-Mar-96				208	15600	15600		208	208	226
1996	3	1996.03	23-Mar-96				219	15100	15100		219	219	225
1996	3	1996.03	24-Mar-96				231	14300	14300		231	231	226
1996	3	1996.03	25-Mar-96				261	13400	13400		261	261	227
1996	3	1996.03	26-Mar-96				279	12400	12400		279	279	229
1996	3	1996.03	27-Mar-96				267	12300	12300		267	267	231
1996	3	1996.03	28-Mar-96				271	12100	12100		271	271	232
1996	3	1996.03	29-Mar-96				259	12000	12000		259	259	232
1996	3	1996.03	30-Mar-96				259	11700	11700		259	259	232
1996	3	1996.03	31-Mar-96				293	10800	10800		293	293	233
1996	4	1996.04	1-Apr-96				317	10200	10200		317	317	235
1996	4	1996.04	2-Apr-96				327	10100	10100		327	327	238
1996	4	1996.04	3-Apr-96				327	9900	9900		327	327	241
1996	4	1996.04	4-Apr-96				315	9670	9670		315	315	244
1996	4	1996.04	5-Apr-96				332	8990	8990		332	332	249
1996	4	1996.04	6-Apr-96				363	8300	8300		363	363	255
1996	4	1996.04	7-Apr-96				381	7950	7950		381	381	261
1996	4	1996.04	8-Apr-96				414	7700	7700		414	414	268
1996	4	1996.04	9-Apr-96				409	7420	7420		409	409	275
1996	4	1996.04	10-Apr-96				393	7260	7260		393	393	280
1996	4	1996.04	11-Apr-96				400	7190	7190		400	400	286
1996	4	1996.04	12-Apr-96				382	6970	6970		382	382	291
1996	4	1996.04	13-Apr-96				390	6870	6870		390	390	296
1996	4	1996.04	14-Apr-96				402	6710	6710		402	402	301
1996	4	1996.04	15-Apr-96				409	6680	6680		409	409	307
1996	4	1996.04	16-Apr-96				412	6650	6650		412	412	313
1996	4	1996.04	17-Apr-96				404	6670	6670		404	404	319
1996	4	1996.04	18-Apr-96				390	6820	6820		390	390	325
1996	4	1996.04	19-Apr-96				337	7080	7080		337	337	329
1996	4	1996.04	20-Apr-96				295	7250	7250		295	295	332
1996	4	1996.04	21-Apr-96				295	7340	7340		295	295	334
1996	4	1996.04	22-Apr-96				306	7360	7360		306	306	337
1996	4	1996.04	23-Apr-96				310	7230	7230		310	310	340
1996	4	1996.04	24-Apr-96				329	6800	6800		329	329	342
1996	4	1996.04	25-Apr-96				339	6560	6560		339	339	344
1996	4	1996.04	26-Apr-96				327	6690	6690		327	327	346
1996	4	1996.04	27-Apr-96				316	6700	6700		316	316	348
1996	4	1996.04	28-Apr-96				320	6680	6680		320	320	350
1996	4	1996.04	29-Apr-96				316	6670	6670		316	316	352
1996	4	1996.04	30-Apr-96				311	6600	6600		311	311	352

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1996	5	1996.05	1-May-96				308	6530	6530		308	308	352
1996	5	1996.05	2-May-96				318	6600	6600		318	318	352
1996	5	1996.05	3-May-96				317	6380	6380		317	317	351
1996	5	1996.05	4-May-96				309	6230	6230		309	309	351
1996	5	1996.05	5-May-96				281	6500	6500		281	281	349
1996	5	1996.05	6-May-96				269	6700	6700		269	269	346
1996	5	1996.05	7-May-96				289	6440	6440		289	289	343
1996	5	1996.05	8-May-96				301	6240	6240		301	301	339
1996	5	1996.05	9-May-96				279	6350	6350		279	279	335
1996	5	1996.05	10-May-96				266	6540	6540		266	266	331
1996	5	1996.05	11-May-96				263	6770	6770		263	263	326
1996	5	1996.05	12-May-96				268	6830	6830		268	268	323
1996	5	1996.05	13-May-96				266	6830	6830		266	266	318
1996	5	1996.05	14-May-96				266	6730	6730		266	266	314
1996	5	1996.05	15-May-96				247	7130	7130		247	247	308
1996	5	1996.05	16-May-96				227	8100	8100		227	227	302
1996	5	1996.05	17-May-96				225	8720	8720		225	225	296
1996	5	1996.05	18-May-96				217	9120	9120		217	217	291
1996	5	1996.05	19-May-96				167	10200	10200		167	167	285
1996	5	1996.05	20-May-96				155	11000	11000		155	155	280
1996	5	1996.05	21-May-96				159	11200	11200		159	159	276
1996	5	1996.05	22-May-96				111	11300	11300		111	111	269
1996	5	1996.05	23-May-96				120	11600	11600		120	120	263
1996	5	1996.05	24-May-96				99	11700	11700		99	99	255
1996	5	1996.05	25-May-96				100	11700	11700		100	100	247
1996	5	1996.05	26-May-96				135	11300	11300		135	135	241
1996	5	1996.05	27-May-96				166	10900	10900		166	166	236
1996	5	1996.05	28-May-96				193	10400	10400		193	193	232
1996	5	1996.05	29-May-96				216	9670	9670		216	216	228
1996	5	1996.05	30-May-96				260	8390	8390		260	260	227
1996	5	1996.05	31-May-96				313	6970	6970		313	313	227
1996	6	1996.06	1-Jun-96				322	6020	6020		322	322	227
1996	6	1996.06	2-Jun-96				326	5740	5740		326	326	227
1996	6	1996.06	3-Jun-96				371	5500	5500		371	371	229
1996	6	1996.06	4-Jun-96				403	5350	5350		403	403	233
1996	6	1996.06	5-Jun-96				459	4790	4790		459	459	240
1996	6	1996.06	6-Jun-96				497	4390	4390		497	497	247
1996	6	1996.06	7-Jun-96				572	4010	4010		572	572	256
1996	6	1996.06	8-Jun-96				566	3810	3810		566	566	265
1996	6	1996.06	9-Jun-96				555	3910	3910		555	555	275
1996	6	1996.06	10-Jun-96				528	4180	4180		528	528	284
1996	6	1996.06	11-Jun-96				507	4150	4150		507	507	292
1996	6	1996.06	12-Jun-96				551	3860	3860		551	551	301
1996	6	1996.06	13-Jun-96				599	3610	3610		599	599	312
1996	6	1996.06	14-Jun-96				596	3550	3550		596	596	324
1996	6	1996.06	15-Jun-96				597	3540	3540		597	597	336
1996	6	1996.06	16-Jun-96				602	3540	3540		602	602	349
1996	6	1996.06	17-Jun-96				598	3560	3560		598	598	361
1996	6	1996.06	18-Jun-96				615	3380	3380		615	615	376
1996	6	1996.06	19-Jun-96				641	3220	3220		641	641	393
1996	6	1996.06	20-Jun-96				672	3070	3070		672	672	410
1996	6	1996.06	21-Jun-96				683	2950	2950		683	683	429
1996	6	1996.06	22-Jun-96				695	2870	2870		695	695	448
1996	6	1996.06	23-Jun-96				696	2940	2940		696	696	468
1996	6	1996.06	24-Jun-96				716	2940	2940		716	716	488
1996	6	1996.06	25-Jun-96				710	2850	2850		710	710	508
1996	6	1996.06	26-Jun-96				669	2840	2840		669	669	524
1996	6	1996.06	27-Jun-96				661	2850	2850		661	661	540
1996	6	1996.06	28-Jun-96				632	2930	2930		632	632	554
1996	6	1996.06	29-Jun-96				606	2910	2910		606	606	565
1996	6	1996.06	30-Jun-96				617	2900	2900		617	617	575
1996	7	1996.07	1-Jul-96				607	2870	2870		607	607	585
1996	7	1996.07	2-Jul-96				642	2710	2710		642	642	595
1996	7	1996.07	3-Jul-96				655	2590	2590		655	655	605
1996	7	1996.07	4-Jul-96				670	2540	2540		670	670	614
1996	7	1996.07	5-Jul-96				704	2420	2420		704	704	622
1996	7	1996.07	6-Jul-96				749	2280	2280		749	749	630
1996	7	1996.07	7-Jul-96				767	2270	2270		767	767	637
1996	7	1996.07	8-Jul-96				755	2320	2320		755	755	643
1996	7	1996.07	9-Jul-96				702	2220	2220		702	702	648
1996	7	1996.07	10-Jul-96				726	2130	2130		726	726	655
1996	7	1996.07	11-Jul-96				757	2100	2100		757	757	663
1996	7	1996.07	12-Jul-96				753	2060	2060		753	753	670
1996	7	1996.07	13-Jul-96				739	2020	2020		739	739	674
1996	7	1996.07	14-Jul-96				735	2090	2090		735	735	679
1996	7	1996.07	15-Jul-96				690	2190	2190		690	690	682

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1996	7	1996.07	16-Jul-96				660	2120	2120		660	660	684
1996	7	1996.07	17-Jul-96				681	2190	2190		681	681	687
1996	7	1996.07	18-Jul-96				696	2150	2150		696	696	690
1996	7	1996.07	19-Jul-96				678	2170	2170		678	678	691
1996	7	1996.07	20-Jul-96				652	2190	2190		652	652	690
1996	7	1996.07	21-Jul-96				627	2190	2190		627	627	688
1996	7	1996.07	22-Jul-96				626	2150	2150		626	626	686
1996	7	1996.07	23-Jul-96				630	2170	2170		630	630	684
1996	7	1996.07	24-Jul-96				671	2010	2010		671	671	682
1996	7	1996.07	25-Jul-96				717	1890	1890		717	717	682
1996	7	1996.07	26-Jul-96				700	1900	1900		700	700	684
1996	7	1996.07	27-Jul-96				642	2040	2040		642	642	683
1996	7	1996.07	28-Jul-96				647	2030	2030		647	647	683
1996	7	1996.07	29-Jul-96				613	2230	2230		613	613	684
1996	7	1996.07	30-Jul-96				620	2140	2140		620	620	684
1996	7	1996.07	31-Jul-96				569	2110	2110		569	569	682
1996	8	1996.08	1-Aug-96				596	2080	2080		596	596	681
1996	8	1996.08	2-Aug-96				590	2060	2060		590	590	679
1996	8	1996.08	3-Aug-96				589	2080	2080		589	589	676
1996	8	1996.08	4-Aug-96				593	2130	2130		593	593	672
1996	8	1996.08	5-Aug-96				625	2170	2170		625	625	668
1996	8	1996.08	6-Aug-96				625	2120	2120		625	625	663
1996	8	1996.08	7-Aug-96				608	2100	2100		608	608	659
1996	8	1996.08	8-Aug-96				618	2070	2070		618	618	656
1996	8	1996.08	9-Aug-96				629	2060	2060		629	629	653
1996	8	1996.08	10-Aug-96				579	2080	2080		579	579	647
1996	8	1996.08	11-Aug-96				617	2120	2120		617	617	642
1996	8	1996.08	12-Aug-96				629	2060	2060		629	629	638
1996	8	1996.08	13-Aug-96				631	1990	1990		631	631	635
1996	8	1996.08	14-Aug-96				637	1970	1970		637	637	633
1996	8	1996.08	15-Aug-96				607	1960	1960		607	607	631
1996	8	1996.08	16-Aug-96				607	1830	1830		607	607	629
1996	8	1996.08	17-Aug-96				623	1870	1870		623	623	627
1996	8	1996.08	18-Aug-96				630	1930	1930		630	630	625
1996	8	1996.08	19-Aug-96				608	1940	1940		608	608	623
1996	8	1996.08	20-Aug-96				632	1950	1950		632	632	624
1996	8	1996.08	21-Aug-96				619	1960	1960		619	619	623
1996	8	1996.08	22-Aug-96				593	1990	1990		593	593	622
1996	8	1996.08	23-Aug-96				590	2070	2070		590	590	619
1996	8	1996.08	24-Aug-96				582	2070	2070		582	582	615
1996	8	1996.08	25-Aug-96				598	2100	2100		598	598	612
1996	8	1996.08	26-Aug-96				576	2100	2100		576	576	609
1996	8	1996.08	27-Aug-96				585	2070	2070		585	585	607
1996	8	1996.08	28-Aug-96				600	2030	2030		600	600	607
1996	8	1996.08	29-Aug-96				596	2030	2030		596	596	606
1996	8	1996.08	30-Aug-96				604	2030	2030		604	604	607
1996	8	1996.08	31-Aug-96				635	2030	2030		635	635	609
1996	9	1996.09	1-Sep-96				636	2090	2090		636	636	610
1996	9	1996.09	2-Sep-96				614	2150	2150		614	614	611
1996	9	1996.09	3-Sep-96				597	2160	2160		597	597	611
1996	9	1996.09	4-Sep-96				575	2050	2050		575	575	609
1996	9	1996.09	5-Sep-96				583	2070	2070		583	583	608
1996	9	1996.09	6-Sep-96				552	2100	2100		552	552	606
1996	9	1996.09	7-Sep-96				571	2170	2170		571	571	605
1996	9	1996.09	8-Sep-96				583	2190	2190		583	583	603
1996	9	1996.09	9-Sep-96				550	2220	2220		550	550	602
1996	9	1996.09	10-Sep-96				537	2060	2060		537	537	599
1996	9	1996.09	11-Sep-96				574	2050	2050		574	574	598
1996	9	1996.09	12-Sep-96				540	2140	2140		540	540	594
1996	9	1996.09	13-Sep-96				528	2070	2070		528	528	591
1996	9	1996.09	14-Sep-96				522	2120	2120		522	522	588
1996	9	1996.09	15-Sep-96				527	2250	2250		527	527	585
1996	9	1996.09	16-Sep-96				493	2290	2290		493	493	581
1996	9	1996.09	17-Sep-96				482	2200	2200		482	482	576
1996	9	1996.09	18-Sep-96				474	2210	2210		474	474	572
1996	9	1996.09	19-Sep-96				484	2220	2220		484	484	567
1996	9	1996.09	20-Sep-96				513	2230	2230		513	513	563
1996	9	1996.09	21-Sep-96				482	2220	2220		482	482	559
1996	9	1996.09	22-Sep-96				484	2220	2220		484	484	556
1996	9	1996.09	23-Sep-96				493	2240	2240		493	493	553
1996	9	1996.09	24-Sep-96				499	2160	2160		499	499	550
1996	9	1996.09	25-Sep-96				497	2180	2180		497	497	547
1996	9	1996.09	26-Sep-96				492	2150	2150		492	492	544
1996	9	1996.09	27-Sep-96				547	2170	2170		547	547	542
1996	9	1996.09	28-Sep-96				583	2140	2140		583	583	542
1996	9	1996.09	29-Sep-96				571	2180	2180		571	571	541

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1996	9	1996.09	30-Sep-96				562	2210	2210		562	562	538
1996	10	1996.10	1-Oct-96				543	2110	2110		543	543	535
1996	10	1996.10	2-Oct-96				515	2120	2120		515	515	532
1996	10	1996.10	3-Oct-96				517	2160	2160		517	517	529
1996	10	1996.10	4-Oct-96				515	2140	2140		515	515	527
1996	10	1996.10	5-Oct-96				474	2140	2140		474	474	523
1996	10	1996.10	6-Oct-96				491	2130	2130		491	491	521
1996	10	1996.10	7-Oct-96				494	2140	2140		494	494	519
1996	10	1996.10	8-Oct-96				495	2080	2080		495	495	516
1996	10	1996.10	9-Oct-96				505	2000	2000		505	505	514
1996	10	1996.10	10-Oct-96				532	1930	1930		532	532	514
1996	10	1996.10	11-Oct-96				536	2030	2030		536	536	513
1996	10	1996.10	12-Oct-96					2330	2330		400	400	508
1996	10	1996.10	13-Oct-96				296	3090	3090		296	296	501
1996	10	1996.10	14-Oct-96				282	3380	3380		282	282	493
1996	10	1996.10	15-Oct-96					3490	3490		290	290	485
1996	10	1996.10	16-Oct-96				294	3500	3500		294	294	478
1996	10	1996.10	17-Oct-96				301	3500	3500		301	301	472
1996	10	1996.10	18-Oct-96				265	3460	3460		265	265	465
1996	10	1996.10	19-Oct-96				299	3210	3210		299	299	459
1996	10	1996.10	20-Oct-96				311	3170	3170		311	311	452
1996	10	1996.10	21-Oct-96				304	3130	3130		304	304	446
1996	10	1996.10	22-Oct-96				321	2920	2920		321	321	441
1996	10	1996.10	23-Oct-96				362	2840	2840		362	362	436
1996	10	1996.10	24-Oct-96				363	2850	2850		363	363	432
1996	10	1996.10	25-Oct-96				352	2970	2970		352	352	427
1996	10	1996.10	26-Oct-96				351	3010	3010		351	351	422
1996	10	1996.10	27-Oct-96				384	2830	2830		384	384	417
1996	10	1996.10	28-Oct-96				444	2620	2620		444	444	412
1996	10	1996.10	29-Oct-96				476	2570	2570		476	476	409
1996	10	1996.10	30-Oct-96				457	2740	2740		457	457	406
1996	10	1996.10	31-Oct-96				449	2820	2820		449	449	403
1996	11	1996.11	1-Nov-96				447	2810	2810		447	447	400
1996	11	1996.11	2-Nov-96				454	2810	2810		454	454	398
1996	11	1996.11	3-Nov-96				472	2750	2750		472	472	397
1996	11	1996.11	4-Nov-96				503	2630	2630		503	503	398
1996	11	1996.11	5-Nov-96				539	2550	2550		539	539	399
1996	11	1996.11	6-Nov-96				551	2500	2500		551	551	401
1996	11	1996.11	7-Nov-96				571	2400	2400		571	571	404
1996	11	1996.11	8-Nov-96				589	2370	2370		589	589	407
1996	11	1996.11	9-Nov-96				613	2310	2310		613	613	409
1996	11	1996.11	10-Nov-96				626	2260	2260		626	626	412
1996	11	1996.11	11-Nov-96				631	2240	2240		631	631	420
1996	11	1996.11	12-Nov-96				646	2190	2190		646	646	432
1996	11	1996.11	13-Nov-96				630	2240	2240		630	630	443
1996	11	1996.11	14-Nov-96				556	2490	2490		556	556	452
1996	11	1996.11	15-Nov-96				564	2540	2540		564	564	461
1996	11	1996.11	16-Nov-96				570	2480	2480		570	570	470
1996	11	1996.11	17-Nov-96				522	2580	2580		522	522	479
1996	11	1996.11	18-Nov-96				481	2750	2750		481	481	485
1996	11	1996.11	19-Nov-96				524	2730	2730		524	524	492
1996	11	1996.11	20-Nov-96				555	2600	2600		555	555	500
1996	11	1996.11	21-Nov-96				592	2420	2420		592	592	509
1996	11	1996.11	22-Nov-96				561	2530	2530		561	561	516
1996	11	1996.11	23-Nov-96				514	2960	2960		514	514	521
1996	11	1996.11	24-Nov-96				460	3300	3300		460	460	524
1996	11	1996.11	25-Nov-96				454	3450	3450		454	454	528
1996	11	1996.11	26-Nov-96				429	3500	3500		429	429	529
1996	11	1996.11	27-Nov-96				438	3450	3450		438	438	529
1996	11	1996.11	28-Nov-96				461	3330	3330		461	461	529
1996	11	1996.11	29-Nov-96				486	3190	3190		486	486	530
1996	11	1996.11	30-Nov-96				493	3090	3090		493	493	531
1996	12	1996.12	1-Dec-96				495	3030	3030		495	495	533
1996	12	1996.12	2-Dec-96				513	2980	2980		513	513	535
1996	12	1996.12	3-Dec-96				542	2950	2950		542	542	537
1996	12	1996.12	4-Dec-96				505	3180	3180		505	505	537
1996	12	1996.12	5-Dec-96				358	4190	4190		358	358	531
1996	12	1996.12	6-Dec-96				288	5190	5190		288	288	522
1996	12	1996.12	7-Dec-96				231	6580	6580		231	231	511
1996	12	1996.12	8-Dec-96				225	7570	7570		225	225	499
1996	12	1996.12	9-Dec-96				179	8090	8090		179	179	484
1996	12	1996.12	10-Dec-96				155	8520	8520		155	155	469
1996	12	1996.12	11-Dec-96				179	9460	9460		179	179	454
1996	12	1996.12	12-Dec-96				174	11300	11300		174	174	438
1996	12	1996.12	13-Dec-96				168	11700	11700		168	168	422
1996	12	1996.12	14-Dec-96				162	12400	12400		162	162	409

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1996	12	1996.12	15-Dec-96				155	12800	12800		155	155	396
1996	12	1996.12	16-Dec-96				149	13200	13200		149	149	382
1996	12	1996.12	17-Dec-96				137	13700	13700		137	137	369
1996	12	1996.12	18-Dec-96				130	14100	14100		130	130	357
1996	12	1996.12	19-Dec-96				116	14300	14300		116	116	343
1996	12	1996.12	20-Dec-96				127	14400	14400		127	127	329
1996	12	1996.12	21-Dec-96				136	14600	14600		136	136	314
1996	12	1996.12	22-Dec-96				138	15500	15500		138	138	300
1996	12	1996.12	23-Dec-96				135	18100	18100		135	135	287
1996	12	1996.12	24-Dec-96				131	18700	18700		131	131	276
1996	12	1996.12	25-Dec-96				121	18100	18100		121	121	265
1996	12	1996.12	26-Dec-96				128	18100	18100		128	128	255
1996	12	1996.12	27-Dec-96				136	18400	18400		136	136	245
1996	12	1996.12	28-Dec-96				164	17700	17700		164	164	235
1996	12	1996.12	29-Dec-96				147	18500	18500		147	147	224
1996	12	1996.12	30-Dec-96				135	19900	19900		135	135	212
1996	12	1996.12	31-Dec-96				144	20700	20700		144	144	200
1997	1	1997.01	1-Jan-97				150	21100	21100		150	150	188
1997	1	1997.01	2-Jan-97				146	21800	21800		146	146	175
1997	1	1997.01	3-Jan-97				153	24700	24700		153	153	163
1997	1	1997.01	4-Jan-97				126	44900	44900		126	126	156
1997	1	1997.01	5-Jan-97				66	54300	54300		66	66	148
1997	1	1997.01	6-Jan-97				99	41400	41400		99	99	144
1997	1	1997.01	7-Jan-97				95	37900	37900		95	95	139
1997	1	1997.01	8-Jan-97				98	33700	33700		98	98	137
1997	1	1997.01	9-Jan-97				100	32700	32700		100	100	135
1997	1	1997.01	10-Jan-97				97	31700	31700		97	97	132
1997	1	1997.01	11-Jan-97				106	29800	29800		106	106	130
1997	1	1997.01	12-Jan-97				127	28100	28100		127	127	128
1997	1	1997.01	13-Jan-97				127	26700	26700		127	127	127
1997	1	1997.01	14-Jan-97				129	25600	25600		129	129	126
1997	1	1997.01	15-Jan-97				131	25400	25400		131	131	126
1997	1	1997.01	16-Jan-97				124	25700	25700		124	124	125
1997	1	1997.01	17-Jan-97				117	25900	25900		117	117	125
1997	1	1997.01	18-Jan-97				119	25900	25900		119	119	125
1997	1	1997.01	19-Jan-97				120	26100	26100		120	120	125
1997	1	1997.01	20-Jan-97				124	26400	26400		124	124	124
1997	1	1997.01	21-Jan-97				124	26700	26700		124	124	124
1997	1	1997.01	22-Jan-97				134	26700	26700		134	134	124
1997	1	1997.01	23-Jan-97				153	26900	26900		153	153	125
1997	1	1997.01	24-Jan-97				163	28000	28000		163	163	126
1997	1	1997.01	25-Jan-97				155	29000	29000		155	155	127
1997	1	1997.01	26-Jan-97				162	30000	30000		162	162	128
1997	1	1997.01	27-Jan-97				160	31500	31500		160	160	128
1997	1	1997.01	28-Jan-97				151	32600	32600		151	151	128
1997	1	1997.01	29-Jan-97				143	33300	33300		143	143	128
1997	1	1997.01	30-Jan-97				135	33600	33600		135	135	128
1997	1	1997.01	31-Jan-97				146	33600	33600		146	146	128
1997	2	1997.02	1-Feb-97				155	33600	33600		155	155	128
1997	2	1997.02	2-Feb-97				153	33800	33800		153	153	128
1997	2	1997.02	3-Feb-97				156	34100	34100		156	156	129
1997	2	1997.02	4-Feb-97				164	34500	34500		164	164	132
1997	2	1997.02	5-Feb-97				161	35600	35600		161	161	134
1997	2	1997.02	6-Feb-97				153	37600	37600		153	153	136
1997	2	1997.02	7-Feb-97				146	39700	39700		146	146	138
1997	2	1997.02	8-Feb-97				141	40800	40800		141	141	139
1997	2	1997.02	9-Feb-97				138	41000	41000		138	138	141
1997	2	1997.02	10-Feb-97				145	40500	40500		145	145	142
1997	2	1997.02	11-Feb-97				146	39900	39900		146	146	143
1997	2	1997.02	12-Feb-97				152	38600	38600		152	152	143
1997	2	1997.02	13-Feb-97				163	35300	35300		163	163	144
1997	2	1997.02	14-Feb-97				164	32600	32600		164	164	146
1997	2	1997.02	15-Feb-97				159	31500	31500		159	159	147
1997	2	1997.02	16-Feb-97				155	30900	30900		155	155	148
1997	2	1997.02	17-Feb-97				151	30700	30700		151	151	149
1997	2	1997.02	18-Feb-97				144	30800	30800		144	144	150
1997	2	1997.02	19-Feb-97				138	31600	31600		138	138	150
1997	2	1997.02	20-Feb-97				131	33700	33700		131	131	151
1997	2	1997.02	21-Feb-97				127	35300	35300		127	127	150
1997	2	1997.02	22-Feb-97				125	35400	35400		125	125	149
1997	2	1997.02	23-Feb-97				125	35400	35400		125	125	148
1997	2	1997.02	24-Feb-97				125	35100	35100		125	125	147
1997	2	1997.02	25-Feb-97				126	34700	34700		126	126	146
1997	2	1997.02	26-Feb-97				125	33800	33800		125	125	145
1997	2	1997.02	27-Feb-97				128	32900	32900		128	128	144
1997	2	1997.02	28-Feb-97				145	32200	32200		145	145	144

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1997	3	1997.03	1-Mar-97				139	31300	31300		139	139	144
1997	3	1997.03	2-Mar-97				147	29900	29900		147	147	144
1997	3	1997.03	3-Mar-97				150	28500	28500		150	150	144
1997	3	1997.03	4-Mar-97				152	27400	27400		152	152	144
1997	3	1997.03	5-Mar-97				159	26300	26300		159	159	144
1997	3	1997.03	6-Mar-97				177	24300	24300		177	177	145
1997	3	1997.03	7-Mar-97				197	22000	22000		197	197	146
1997	3	1997.03	8-Mar-97				227	20000	20000		227	227	148
1997	3	1997.03	9-Mar-97				244	18400	18400		244	244	152
1997	3	1997.03	10-Mar-97				273	16800	16800		273	273	156
1997	3	1997.03	11-Mar-97				275	15300	15300		275	275	160
1997	3	1997.03	12-Mar-97				256	13500	13500		256	256	164
1997	3	1997.03	13-Mar-97				360	11700	11700		360	360	171
1997	3	1997.03	14-Mar-97				390	10200	10200		390	390	179
1997	3	1997.03	15-Mar-97				410	9170	9170		410	410	187
1997	3	1997.03	16-Mar-97				435	8420	8420		435	435	197
1997	3	1997.03	17-Mar-97				450	8050	8050		450	450	206
1997	3	1997.03	18-Mar-97				452	7740	7740		452	452	216
1997	3	1997.03	19-Mar-97				462	7390	7390		462	462	226
1997	3	1997.03	20-Mar-97				477	7000	7000		477	477	238
1997	3	1997.03	21-Mar-97				490	6840	6840		490	490	249
1997	3	1997.03	22-Mar-97				491	6590	6590		491	491	261
1997	3	1997.03	23-Mar-97				499	6410	6410		499	499	274
1997	3	1997.03	24-Mar-97				520	6140	6140		520	520	287
1997	3	1997.03	25-Mar-97				536	5740	5740		536	536	301
1997	3	1997.03	26-Mar-97				564	5410	5410		564	564	315
1997	3	1997.03	27-Mar-97				592	5020	5020		592	592	331
1997	3	1997.03	28-Mar-97				618	4780	4780		618	618	347
1997	3	1997.03	29-Mar-97				622	4590	4590		622	622	364
1997	3	1997.03	30-Mar-97				633	4590	4590		633	633	380
1997	3	1997.03	31-Mar-97				615	4590	4590		615	615	396
1997	4	1997.04	1-Apr-97				625	4270	4270		625	625	412
1997	4	1997.04	2-Apr-97				634	4010	4010		634	634	428
1997	4	1997.04	3-Apr-97				641	3980	3980		641	641	444
1997	4	1997.04	4-Apr-97				643	3830	3830		643	643	460
1997	4	1997.04	5-Apr-97				668	3740	3740		668	668	477
1997	4	1997.04	6-Apr-97				679	3670	3670		679	679	493
1997	4	1997.04	7-Apr-97				692	3550	3550		692	692	508
1997	4	1997.04	8-Apr-97				737	3410	3410		737	737	525
1997	4	1997.04	9-Apr-97				766	3340	3340		766	766	541
1997	4	1997.04	10-Apr-97				773	3290	3290		773	773	558
1997	4	1997.04	11-Apr-97				761	3330	3330		761	761	575
1997	4	1997.04	12-Apr-97				713	3290	3290		713	713	586
1997	4	1997.04	13-Apr-97				720	3250	3250		720	720	597
1997	4	1997.04	14-Apr-97				704	3510	3510		704	704	607
1997	4	1997.04	15-Apr-97				635	3820	3820		635	635	614
1997	4	1997.04	16-Apr-97				622	4010	4010		622	622	619
1997	4	1997.04	17-Apr-97				520	5000	5000		520	520	622
1997	4	1997.04	18-Apr-97				406	5590	5590		406	406	620
1997	4	1997.04	19-Apr-97				383	5990	5990		383	383	617
1997	4	1997.04	20-Apr-97				344	5980	5980		344	344	612
1997	4	1997.04	21-Apr-97				365	5930	5930		365	365	608
1997	4	1997.04	22-Apr-97				362	5790	5790		362	362	603
1997	4	1997.04	23-Apr-97				333	6080	6080		333	333	597
1997	4	1997.04	24-Apr-97				299	6350	6350		299	299	589
1997	4	1997.04	25-Apr-97				329	6260	6260		329	329	581
1997	4	1997.04	26-Apr-97				340	6150	6150		340	340	573
1997	4	1997.04	27-Apr-97				337	6140	6140		337	337	563
1997	4	1997.04	28-Apr-97				334	6160	6160		334	334	554
1997	4	1997.04	29-Apr-97				344	6110	6110		344	344	544
1997	4	1997.04	30-Apr-97				335	6020	6020		335	335	535
1997	5	1997.05	1-May-97				344	5940	5940		344	344	525
1997	5	1997.05	2-May-97				385	5780	5780		385	385	517
1997	5	1997.05	3-May-97				351	5630	5630		351	351	507
1997	5	1997.05	4-May-97				369	5540	5540		369	369	498
1997	5	1997.05	5-May-97				341	5930	5930		341	341	487
1997	5	1997.05	6-May-97				309	6110	6110		309	309	475
1997	5	1997.05	7-May-97				298	5990	5990		298	298	462
1997	5	1997.05	8-May-97				306	6000	6000		306	306	448
1997	5	1997.05	9-May-97				304	5940	5940		304	304	432
1997	5	1997.05	10-May-97				311	5990	5990		311	311	417
1997	5	1997.05	11-May-97				326	6250	6250		326	326	402
1997	5	1997.05	12-May-97				327	6240	6240		327	327	389
1997	5	1997.05	13-May-97				354	5860	5860		354	354	377
1997	5	1997.05	14-May-97				360	5680	5680		360	360	366
1997	5	1997.05	15-May-97				353	5270	5270		353	353	356

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1997	5	1997.05	16-May-97				408	4860	4860		408	408	349
1997	5	1997.05	17-May-97				477	4410	4410		477	477	348
1997	5	1997.05	18-May-97				517	4120	4120		517	517	352
1997	5	1997.05	19-May-97				518	3980	3980		518	518	356
1997	5	1997.05	20-May-97				526	3810	3810		526	526	362
1997	5	1997.05	21-May-97				540	3660	3660		540	540	368
1997	5	1997.05	22-May-97				538	3640	3640		538	538	374
1997	5	1997.05	23-May-97				534	3690	3690		534	534	380
1997	5	1997.05	24-May-97				525	3790	3790		525	525	388
1997	5	1997.05	25-May-97				573	3610	3610		573	573	396
1997	5	1997.05	26-May-97				568	3590	3590		568	568	404
1997	5	1997.05	27-May-97				573	3440	3440		573	573	412
1997	5	1997.05	28-May-97				579	3340	3340		579	579	420
1997	5	1997.05	29-May-97				541	3430	3430		541	541	426
1997	5	1997.05	30-May-97				537	3430	3430		537	537	433
1997	5	1997.05	31-May-97				539	3380	3380		539	539	440
1997	6	1997.06	1-Jun-97				544	3270	3270		544	544	445
1997	6	1997.06	2-Jun-97				559	3190	3190		559	559	452
1997	6	1997.06	3-Jun-97				543	3200	3200		543	543	458
1997	6	1997.06	4-Jun-97				549	3230	3230		549	549	465
1997	6	1997.06	5-Jun-97				560	3270	3270		560	560	473
1997	6	1997.06	6-Jun-97				545	3280	3280		545	545	481
1997	6	1997.06	7-Jun-97				491	3200	3200		491	491	487
1997	6	1997.06	8-Jun-97				508	2990	2990		508	508	494
1997	6	1997.06	9-Jun-97				517	2920	2920		517	517	501
1997	6	1997.06	10-Jun-97				617	2680	2680		617	617	511
1997	6	1997.06	11-Jun-97				583	2510	2510		583	583	519
1997	6	1997.06	12-Jun-97				593	2490	2490		593	593	527
1997	6	1997.06	13-Jun-97				606	2480	2480		606	606	535
1997	6	1997.06	14-Jun-97				605	2540	2540		605	605	544
1997	6	1997.06	15-Jun-97				625	2670	2670		625	625	551
1997	6	1997.06	16-Jun-97				612	2730	2730		612	612	556
1997	6	1997.06	17-Jun-97				580	2550	2550		580	580	558
1997	6	1997.06	18-Jun-97				594	2490	2490		594	594	560
1997	6	1997.06	19-Jun-97				604	2430	2430		604	604	563
1997	6	1997.06	20-Jun-97				582	2380	2380		582	582	564
1997	6	1997.06	21-Jun-97				571	2350	2350		571	571	565
1997	6	1997.06	22-Jun-97				572	2410	2410		572	572	567
1997	6	1997.06	23-Jun-97				585	2440	2440		585	585	569
1997	6	1997.06	24-Jun-97				608	2310	2310		608	608	570
1997	6	1997.06	25-Jun-97				588	2260	2260		588	588	570
1997	6	1997.06	26-Jun-97				560	2190	2190		560	560	570
1997	6	1997.06	27-Jun-97				582	2260	2260		582	582	570
1997	6	1997.06	28-Jun-97				593	2200	2200		593	593	572
1997	6	1997.06	29-Jun-97				563	2230	2230		563	563	573
1997	6	1997.06	30-Jun-97				577	2260	2260		577	577	574
1997	7	1997.07	1-Jul-97				579	2200	2200		579	579	575
1997	7	1997.07	2-Jul-97				614	2090	2090		614	614	577
1997	7	1997.07	3-Jul-97				626	1990	1990		626	626	580
1997	7	1997.07	4-Jul-97				646	1900	1900		646	646	583
1997	7	1997.07	5-Jul-97				629	1850	1850		629	629	585
1997	7	1997.07	6-Jul-97				660	1870	1870		660	660	589
1997	7	1997.07	7-Jul-97				670	1900	1900		670	670	595
1997	7	1997.07	8-Jul-97				674	1800	1800		674	674	601
1997	7	1997.07	9-Jul-97				657	1790	1790		657	657	605
1997	7	1997.07	10-Jul-97				663	1710	1710		663	663	607
1997	7	1997.07	11-Jul-97				679	1660	1660		679	679	610
1997	7	1997.07	12-Jul-97				664	1700	1700		664	664	612
1997	7	1997.07	13-Jul-97				649	1750	1750		649	649	614
1997	7	1997.07	14-Jul-97				640	1770	1770		640	640	615
1997	7	1997.07	15-Jul-97				615	1680	1680		615	615	615
1997	7	1997.07	16-Jul-97				647	1670	1670		647	647	616
1997	7	1997.07	17-Jul-97				632	1690	1690		632	632	617
1997	7	1997.07	18-Jul-97				611	1600	1600		611	611	618
1997	7	1997.07	19-Jul-97				616	1560	1560		616	616	618
1997	7	1997.07	20-Jul-97				640	1620	1620		640	640	620
1997	7	1997.07	21-Jul-97				672	1660	1660		672	672	624
1997	7	1997.07	22-Jul-97				687	1640	1640		687	687	628
1997	7	1997.07	23-Jul-97				667	1600	1600		667	667	630
1997	7	1997.07	24-Jul-97				631	1680	1680		631	631	631
1997	7	1997.07	25-Jul-97				622	1680	1680		622	622	632
1997	7	1997.07	26-Jul-97				594	1670	1670		594	594	633
1997	7	1997.07	27-Jul-97				592	1710	1710		592	592	634
1997	7	1997.07	28-Jul-97				633	1840	1840		633	633	635
1997	7	1997.07	29-Jul-97				627	1780	1780		627	627	637
1997	7	1997.07	30-Jul-97				634	1680	1680		634	634	639

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1997	7	1997.07	31-Jul-97				636	1690	1690		636	636	641
1997	8	1997.08	1-Aug-97				640	1760	1760		640	640	642
1997	8	1997.08	2-Aug-97				662	1820	1820		662	662	643
1997	8	1997.08	3-Aug-97				620	1780	1780		620	620	642
1997	8	1997.08	4-Aug-97				641	1750	1750		641	641	643
1997	8	1997.08	5-Aug-97				658	1670	1670		658	658	642
1997	8	1997.08	6-Aug-97				641	1660	1660		641	641	641
1997	8	1997.08	7-Aug-97				596	1660	1660		596	596	639
1997	8	1997.08	8-Aug-97				618	1630	1630		618	618	638
1997	8	1997.08	9-Aug-97				653	1620	1620		653	653	637
1997	8	1997.08	10-Aug-97				652	1760	1760		652	652	636
1997	8	1997.08	11-Aug-97				634	1870	1870		634	634	635
1997	8	1997.08	12-Aug-97				632	1860	1860		632	632	635
1997	8	1997.08	13-Aug-97				644	1810	1810		644	644	635
1997	8	1997.08	14-Aug-97				625	1820	1820		625	625	635
1997	8	1997.08	15-Aug-97				613	1810	1810		613	613	634
1997	8	1997.08	16-Aug-97				621	1840	1840		621	621	634
1997	8	1997.08	17-Aug-97				606	1990	1990		606	606	634
1997	8	1997.08	18-Aug-97				616	2100	2100		616	616	634
1997	8	1997.08	19-Aug-97				574	2070	2070		574	574	631
1997	8	1997.08	20-Aug-97				596	1970	1970		596	596	629
1997	8	1997.08	21-Aug-97				585	2020	2020		585	585	625
1997	8	1997.08	22-Aug-97				569	2060	2060		569	569	622
1997	8	1997.08	23-Aug-97				587	2020	2020		587	587	621
1997	8	1997.08	24-Aug-97				602	2040	2040		602	602	620
1997	8	1997.08	25-Aug-97				601	2110	2110		601	601	620
1997	8	1997.08	26-Aug-97				606	2020	2020		606	606	621
1997	8	1997.08	27-Aug-97				635	1960	1960		635	635	621
1997	8	1997.08	28-Aug-97				624	1930	1930		624	624	621
1997	8	1997.08	29-Aug-97				583	1880	1880		583	583	619
1997	8	1997.08	30-Aug-97				621	1880	1880		621	621	619
1997	8	1997.08	31-Aug-97				612	1940	1940		612	612	618
1997	9	1997.09	1-Sep-97				640	2020	2020		640	640	617
1997	9	1997.09	2-Sep-97				633	2010	2010		633	633	617
1997	9	1997.09	3-Sep-97				628	1920	1920		628	628	617
1997	9	1997.09	4-Sep-97				643	1870	1870		643	643	616
1997	9	1997.09	5-Sep-97				648	1830	1830		648	648	617
1997	9	1997.09	6-Sep-97				626	1930	1930		626	626	618
1997	9	1997.09	7-Sep-97				591	1980	1980		591	591	617
1997	9	1997.09	8-Sep-97				589	2070	2070		589	589	615
1997	9	1997.09	9-Sep-97				593	2050	2050		593	593	613
1997	9	1997.09	10-Sep-97				601	2050	2050		601	601	611
1997	9	1997.09	11-Sep-97				593	1970	1970		593	593	610
1997	9	1997.09	12-Sep-97				586	2040	2040		586	586	608
1997	9	1997.09	13-Sep-97				578	2020	2020		578	578	607
1997	9	1997.09	14-Sep-97				585	1980	1980		585	585	606
1997	9	1997.09	15-Sep-97				584	2110	2110		584	584	605
1997	9	1997.09	16-Sep-97				559	2150	2150		559	559	603
1997	9	1997.09	17-Sep-97				538	2120	2120		538	538	600
1997	9	1997.09	18-Sep-97				554	1990	1990		554	554	600
1997	9	1997.09	19-Sep-97				553	2070	2070		553	553	598
1997	9	1997.09	20-Sep-97				536	2210	2210		536	536	597
1997	9	1997.09	21-Sep-97				521	2230	2230		521	521	595
1997	9	1997.09	22-Sep-97				513	2250	2250		513	513	593
1997	9	1997.09	23-Sep-97				524	2200	2200		524	524	590
1997	9	1997.09	24-Sep-97				515	2170	2170		515	515	587
1997	9	1997.09	25-Sep-97				501	2160	2160		501	501	584
1997	9	1997.09	26-Sep-97				509	2070	2070		509	509	579
1997	9	1997.09	27-Sep-97				524	2100	2100		524	524	576
1997	9	1997.09	28-Sep-97				527	2170	2170		527	527	574
1997	9	1997.09	29-Sep-97				515	2220	2220		515	515	571
1997	9	1997.09	30-Sep-97				529	2120	2120		529	529	568
1997	10	1997.10	1-Oct-97				540	2040	2040		540	540	565
1997	10	1997.10	2-Oct-97				553	2040	2040		553	553	562
1997	10	1997.10	3-Oct-97				568	2140	2140		568	568	560
1997	10	1997.10	4-Oct-97				531	2230	2230		531	531	556
1997	10	1997.10	5-Oct-97				526	2340	2340		526	526	552
1997	10	1997.10	6-Oct-97				525	2480	2480		525	525	549
1997	10	1997.10	7-Oct-97				501	2450	2450		501	501	546
1997	10	1997.10	8-Oct-97				488	2520	2520		488	488	542
1997	10	1997.10	9-Oct-97				426	2770	2770		426	426	537
1997	10	1997.10	10-Oct-97				405	2930	2930		405	405	530
1997	10	1997.10	11-Oct-97				358	3370	3370		358	358	522
1997	10	1997.10	12-Oct-97				334	3500	3500		334	334	514
1997	10	1997.10	13-Oct-97				355	3350	3350		355	355	507
1997	10	1997.10	14-Oct-97				374	3250	3250		374	374	500

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1997	10	1997.10	15-Oct-97				370	3140	3140		370	370	492
1997	10	1997.10	16-Oct-97				351	3200	3200		351	351	485
1997	10	1997.10	17-Oct-97				367	3320	3320		367	367	480
1997	10	1997.10	18-Oct-97				408	3310	3310		408	408	475
1997	10	1997.10	19-Oct-97				446	3150	3150		446	446	471
1997	10	1997.10	20-Oct-97				460	3140	3140		460	460	469
1997	10	1997.10	21-Oct-97				461	3040	3040		461	461	467
1997	10	1997.10	22-Oct-97				474	2920	2920		474	474	466
1997	10	1997.10	23-Oct-97				513	2780	2780		513	513	465
1997	10	1997.10	24-Oct-97				510	2590	2590		510	510	465
1997	10	1997.10	25-Oct-97				505	2480	2480		505	505	465
1997	10	1997.10	26-Oct-97				568	2360	2360		568	568	467
1997	10	1997.10	27-Oct-97				588	2320	2320		588	588	469
1997	10	1997.10	28-Oct-97				571	2250	2250		571	571	471
1997	10	1997.10	29-Oct-97				571	2190	2190		571	571	473
1997	10	1997.10	30-Oct-97				583	2160	2160		583	583	474
1997	10	1997.10	31-Oct-97				582	2120	2120		582	582	476
1997	11	1997.11	1-Nov-97				564	2110	2110		564	564	476
1997	11	1997.11	2-Nov-97				576	2050	2050		576	576	476
1997	11	1997.11	3-Nov-97				489	2020	2020		489	489	475
1997	11	1997.11	4-Nov-97				571	2050	2050		571	571	476
1997	11	1997.11	5-Nov-97				630	2060	2060		630	630	480
1997	11	1997.11	6-Nov-97				652	2010	2010		652	652	485
1997	11	1997.11	7-Nov-97				676	1960	1960		676	676	491
1997	11	1997.11	8-Nov-97				677	1960	1960		677	677	500
1997	11	1997.11	9-Nov-97				697	1970	1970		697	697	509
1997	11	1997.11	10-Nov-97				698	2000	2000		698	698	521
1997	11	1997.11	11-Nov-97				683	2030	2030		683	683	532
1997	11	1997.11	12-Nov-97				684	2030	2030		684	684	543
1997	11	1997.11	13-Nov-97				682	2010	2010		682	682	554
1997	11	1997.11	14-Nov-97					2020	2020		690	690	564
1997	11	1997.11	15-Nov-97					1990	1990		690	690	576
1997	11	1997.11	16-Nov-97				708	2020	2020		708	708	587
1997	11	1997.11	17-Nov-97				709	2000	2000		709	709	597
1997	11	1997.11	18-Nov-97				708	2000	2000		708	708	606
1997	11	1997.11	19-Nov-97				692	1990	1990		692	692	613
1997	11	1997.11	20-Nov-97				708	1970	1970		708	708	622
1997	11	1997.11	21-Nov-97				720	1950	1950		720	720	630
1997	11	1997.11	22-Nov-97				732	1900	1900		732	732	637
1997	11	1997.11	23-Nov-97				752	1870	1870		752	752	645
1997	11	1997.11	24-Nov-97				782	1840	1840		782	782	654
1997	11	1997.11	25-Nov-97				781	1830	1830		781	781	662
1997	11	1997.11	26-Nov-97				776	1910	1910		776	776	668
1997	11	1997.11	27-Nov-97				740	2010	2010		740	740	673
1997	11	1997.11	28-Nov-97				769	1960	1960		769	769	680
1997	11	1997.11	29-Nov-97				793	1920	1920		793	793	687
1997	11	1997.11	30-Nov-97				775	1980	1980		775	775	693
1997	12	1997.12	1-Dec-97				756	2060	2060		756	756	700
1997	12	1997.12	2-Dec-97				772	2010	2010		772	772	706
1997	12	1997.12	3-Dec-97				786	2030	2030		786	786	716
1997	12	1997.12	4-Dec-97				809	2100	2100		809	809	724
1997	12	1997.12	5-Dec-97				781	2210	2210		781	781	729
1997	12	1997.12	6-Dec-97				712	2350	2350		712	712	731
1997	12	1997.12	7-Dec-97				722	2330	2330		722	722	733
1997	12	1997.12	8-Dec-97				737	2390	2390		737	737	735
1997	12	1997.12	9-Dec-97				723	2510	2510		723	723	736
1997	12	1997.12	10-Dec-97				749	2520	2520		749	749	737
1997	12	1997.12	11-Dec-97				772	2470	2470		772	772	740
1997	12	1997.12	12-Dec-97				791	2370	2370		791	791	744
1997	12	1997.12	13-Dec-97				796	2320	2320		796	796	748
1997	12	1997.12	14-Dec-97				817	2260	2260		817	817	752
1997	12	1997.12	15-Dec-97				828	2230	2230		828	828	757
1997	12	1997.12	16-Dec-97				836	2150	2150		836	836	761
1997	12	1997.12	17-Dec-97				863	2140	2140		863	863	766
1997	12	1997.12	18-Dec-97				877	2120	2120		877	877	772
1997	12	1997.12	19-Dec-97				884	2090	2090		884	884	778
1997	12	1997.12	20-Dec-97				896	2040	2040		896	896	784
1997	12	1997.12	21-Dec-97				906	2000	2000		906	906	790
1997	12	1997.12	22-Dec-97				909	1960	1960		909	909	796
1997	12	1997.12	23-Dec-97				912	1970	1970		912	912	802
1997	12	1997.12	24-Dec-97				896	1940	1940		896	896	805
1997	12	1997.12	25-Dec-97				893	1910	1910		893	893	809
1997	12	1997.12	26-Dec-97				907	1900	1900		907	907	814
1997	12	1997.12	27-Dec-97				909	1890	1890		909	909	819
1997	12	1997.12	28-Dec-97				888	1860	1860		888	888	823
1997	12	1997.12	29-Dec-97				893	1840	1840		893	893	827

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1997	12	1997.12	30-Dec-97				889	1820	1820		889	889	830
1997	12	1997.12	31-Dec-97				873	1820	1820		873	873	834
1998	1	1998.01	1-Jan-98				868	1810	1810		868	868	837
1998	1	1998.01	2-Jan-98				863	1820	1820		863	863	840
1998	1	1998.01	3-Jan-98				854	1850	1850		854	854	841
1998	1	1998.01	4-Jan-98				842	1880	1880		842	842	844
1998	1	1998.01	5-Jan-98				794	1970	1970		794	794	846
1998	1	1998.01	6-Jan-98				774	2130	2130		774	774	848
1998	1	1998.01	7-Jan-98				774	2120	2120		774	774	849
1998	1	1998.01	8-Jan-98				834	2020	2020		834	834	853
1998	1	1998.01	9-Jan-98				817	1960	1960		817	817	855
1998	1	1998.01	10-Jan-98				840	2030	2030		840	840	857
1998	1	1998.01	11-Jan-98				775	2200	2200		775	775	857
1998	1	1998.01	12-Jan-98				735	2630	2630		735	735	855
1998	1	1998.01	13-Jan-98				665	4160	4160		665	665	850
1998	1	1998.01	14-Jan-98					6750	6750		0	0	822
1998	1	1998.01	15-Jan-98					5770	5770		0	0	794
1998	1	1998.01	16-Jan-98				264	7140	7140		264	264	774
1998	1	1998.01	17-Jan-98				209	10600	10600		209	209	752
1998	1	1998.01	18-Jan-98				159	10700	10700		159	159	728
1998	1	1998.01	19-Jan-98				133	10600	10600		133	133	703
1998	1	1998.01	20-Jan-98				140	11400	11400		140	140	677
1998	1	1998.01	21-Jan-98				165	11400	11400		165	165	652
1998	1	1998.01	22-Jan-98				167	10900	10900		167	167	627
1998	1	1998.01	23-Jan-98				178	10300	10300		178	178	603
1998	1	1998.01	24-Jan-98				189	9550	9550		189	189	580
1998	1	1998.01	25-Jan-98					8820	8820		200	200	556
1998	1	1998.01	26-Jan-98				230	7690	7690		230	230	534
1998	1	1998.01	27-Jan-98				269	6990	6990		269	269	513
1998	1	1998.01	28-Jan-98				291	6790	6790		291	291	493
1998	1	1998.01	29-Jan-98				292	6760	6760		292	292	473
1998	1	1998.01	30-Jan-98				277	7170	7170		277	277	453
1998	1	1998.01	31-Jan-98				243	8870	8870		243	243	432
1998	2	1998.02	1-Feb-98				171	10000	10000		171	171	409
1998	2	1998.02	2-Feb-98				153	11100	11100		153	153	386
1998	2	1998.02	3-Feb-98				183	13300	13300		183	183	364
1998	2	1998.02	4-Feb-98				148	17200	17200		148	148	343
1998	2	1998.02	5-Feb-98				140	19900	19900		140	140	321
1998	2	1998.02	6-Feb-98				158	21100	21100		158	158	301
1998	2	1998.02	7-Feb-98				170	22700	22700		170	170	279
1998	2	1998.02	8-Feb-98				191	26300	26300		191	191	258
1998	2	1998.02	9-Feb-98				195	30100	30100		195	195	236
1998	2	1998.02	10-Feb-98				208	32400	32400		208	208	217
1998	2	1998.02	11-Feb-98				260	33500	33500		260	260	202
1998	2	1998.02	12-Feb-98				273	34300	34300		273	273	189
1998	2	1998.02	13-Feb-98				392	35000	35000		392	392	202
1998	2	1998.02	14-Feb-98				329	34500	34500		329	329	213
1998	2	1998.02	15-Feb-98				335	34000	34000		335	335	215
1998	2	1998.02	16-Feb-98				339	33500	33500		339	339	219
1998	2	1998.02	17-Feb-98				352	32800	32800		352	352	226
1998	2	1998.02	18-Feb-98					32200	32200		300	300	231
1998	2	1998.02	19-Feb-98					32300	32300		300	300	237
1998	2	1998.02	20-Feb-98					32300	32300		300	300	241
1998	2	1998.02	21-Feb-98					31800	31800		300	300	246
1998	2	1998.02	22-Feb-98					31600	31600		300	300	250
1998	2	1998.02	23-Feb-98					31200	31200		300	300	253
1998	2	1998.02	24-Feb-98					30800	30800		300	300	257
1998	2	1998.02	25-Feb-98				270	30500	30500		270	270	258
1998	2	1998.02	26-Feb-98				261	31000	31000		261	261	258
1998	2	1998.02	27-Feb-98				268	30900	30900		268	268	257
1998	2	1998.02	28-Feb-98				260	31100	31100		260	260	256
1998	3	1998.03	1-Mar-98				262	30600	30600		262	262	255
1998	3	1998.03	2-Mar-98				271	29200	29200		271	271	256
1998	3	1998.03	3-Mar-98				283	27700	27700		283	283	260
1998	3	1998.03	4-Mar-98				289	26300	26300		289	289	265
1998	3	1998.03	5-Mar-98				291	24800	24800		291	291	268
1998	3	1998.03	6-Mar-98				298	23500	23500		298	298	273
1998	3	1998.03	7-Mar-98				299	22600	22600		299	299	278
1998	3	1998.03	8-Mar-98				324	21300	21300		324	324	284
1998	3	1998.03	9-Mar-98				334	20400	20400		334	334	289
1998	3	1998.03	10-Mar-98				327	20000	20000		327	327	294
1998	3	1998.03	11-Mar-98				334	19500	19500		334	334	299
1998	3	1998.03	12-Mar-98				321	19000	19000		321	321	302
1998	3	1998.03	13-Mar-98				320	18600	18600		320	320	304
1998	3	1998.03	14-Mar-98				320	18100	18100		320	320	306
1998	3	1998.03	15-Mar-98				324	17500	17500		324	324	304

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1998	3	1998.03	16-Mar-98				333	16900	16900		333	333	304
1998	3	1998.03	17-Mar-98				338	16300	16300		338	338	304
1998	3	1998.03	18-Mar-98				346	15500	15500		346	346	304
1998	3	1998.03	19-Mar-98				363	14400	14400		363	363	305
1998	3	1998.03	20-Mar-98				364	14000	14000		364	364	307
1998	3	1998.03	21-Mar-98				339	14600	14600		339	339	308
1998	3	1998.03	22-Mar-98				341	14700	14700		341	341	309
1998	3	1998.03	23-Mar-98				343	14400	14400		343	343	311
1998	3	1998.03	24-Mar-98				332	14100	14100		332	332	312
1998	3	1998.03	25-Mar-98				323	14000	14000		323	323	313
1998	3	1998.03	26-Mar-98				287	15000	15000		287	287	312
1998	3	1998.03	27-Mar-98				241	16100	16100		241	241	311
1998	3	1998.03	28-Mar-98				246	17100	17100		246	246	311
1998	3	1998.03	29-Mar-98				227	19200	19200		227	227	309
1998	3	1998.03	30-Mar-98				211	21800	21800		211	211	308
1998	3	1998.03	31-Mar-98				211	22700	22700		211	211	306
1998	4	1998.04	1-Apr-98				220	22500	22500		220	220	304
1998	4	1998.04	2-Apr-98				231	21900	21900		231	231	303
1998	4	1998.04	3-Apr-98				242	21400	21400		242	242	301
1998	4	1998.04	4-Apr-98				242	21200	21200		242	242	299
1998	4	1998.04	5-Apr-98				242	21300	21300		242	242	298
1998	4	1998.04	6-Apr-98				234	21200	21200		234	234	295
1998	4	1998.04	7-Apr-98				235	21100	21100		235	235	292
1998	4	1998.04	8-Apr-98				232	21500	21500		232	232	289
1998	4	1998.04	9-Apr-98				232	22200	22200		232	232	286
1998	4	1998.04	10-Apr-98				223	22700	22700		223	223	282
1998	4	1998.04	11-Apr-98				221	22800	22800		221	221	279
1998	4	1998.04	12-Apr-98				214	22900	22900		214	214	275
1998	4	1998.04	13-Apr-98				196	23600	23600		196	196	271
1998	4	1998.04	14-Apr-98				183	24400	24400		183	183	266
1998	4	1998.04	15-Apr-98				187	24900	24900		187	187	262
1998	4	1998.04	16-Apr-98				189	24900	24900		189	189	257
1998	4	1998.04	17-Apr-98				189	25000	25000		189	189	251
1998	4	1998.04	18-Apr-98				189	24800	24800		189	189	246
1998	4	1998.04	19-Apr-98				195	24300	24300		195	195	240
1998	4	1998.04	20-Apr-98				190	23800	23800		190	190	235
1998	4	1998.04	21-Apr-98				185	23000	23000		185	185	230
1998	4	1998.04	22-Apr-98				196	21500	21500		196	196	225
1998	4	1998.04	23-Apr-98				190	20400	20400		190	190	220
1998	4	1998.04	24-Apr-98				187	20100	20100		187	187	216
1998	4	1998.04	25-Apr-98				185	19700	19700		185	185	212
1998	4	1998.04	26-Apr-98				186	19600	19600		186	186	210
1998	4	1998.04	27-Apr-98				179	19300	19300		179	179	208
1998	4	1998.04	28-Apr-98				180	19000	19000		180	180	207
1998	4	1998.04	29-Apr-98				178	18700	18700		178	178	205
1998	4	1998.04	30-Apr-98				174	18400	18400		174	174	204
1998	5	1998.05	1-May-98				169	18100	18100		169	169	203
1998	5	1998.05	2-May-98				165	17900	17900		165	165	200
1998	5	1998.05	3-May-98				168	17700	17700		168	168	198
1998	5	1998.05	4-May-98				172	17200	17200		172	172	196
1998	5	1998.05	5-May-98				182	16600	16600		182	182	194
1998	5	1998.05	6-May-98				182	16300	16300		182	182	192
1998	5	1998.05	7-May-98				180	16300	16300		180	180	190
1998	5	1998.05	8-May-98				187	16400	16400		187	187	188
1998	5	1998.05	9-May-98				189	16500	16500		189	189	187
1998	5	1998.05	10-May-98				189	16600	16600		189	189	186
1998	5	1998.05	11-May-98				176	16500	16500		176	176	184
1998	5	1998.05	12-May-98				154	16600	16600		154	154	182
1998	5	1998.05	13-May-98				145	17500	17500		145	145	181
1998	5	1998.05	14-May-98				159	17800	17800		159	159	180
1998	5	1998.05	15-May-98				177	17800	17800		177	177	180
1998	5	1998.05	16-May-98				190	18000	18000		190	190	180
1998	5	1998.05	17-May-98				199	18200	18200		199	199	180
1998	5	1998.05	18-May-98				188	18400	18400		188	188	180
1998	5	1998.05	19-May-98				174	19000	19000		174	174	179
1998	5	1998.05	20-May-98				167	19400	19400		167	167	178
1998	5	1998.05	21-May-98				160	19600	19600		160	160	178
1998	5	1998.05	22-May-98				154	19600	19600		154	154	176
1998	5	1998.05	23-May-98				154	19500	19500		154	154	175
1998	5	1998.05	24-May-98				154	19400	19400		154	154	174
1998	5	1998.05	25-May-98				151	19100	19100		151	151	173
1998	5	1998.05	26-May-98				147	18600	18600		147	147	171
1998	5	1998.05	27-May-98				144	18300	18300		144	144	170
1998	5	1998.05	28-May-98				136	18100	18100		136	136	169
1998	5	1998.05	29-May-98				137	18500	18500		137	137	167
1998	5	1998.05	30-May-98				144	18500	18500		144	144	166

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
1998	5	1998.05	31-May-98				146	18400	18400		146	146	166
1998	6	1998.06	1-Jun-98				151	18400	18400		151	151	165
1998	6	1998.06	2-Jun-98				146	18300	18300		146	146	164
1998	6	1998.06	3-Jun-98				141	18000	18000		141	141	163
1998	6	1998.06	4-Jun-98				140	17600	17600		140	140	162
1998	6	1998.06	5-Jun-98				138	17300	17300		138	138	161
1998	6	1998.06	6-Jun-98				140	16800	16800		140	140	159
1998	6	1998.06	7-Jun-98				137	16600	16600		137	137	158
1998	6	1998.06	8-Jun-98				134	16500	16500		134	134	156
1998	6	1998.06	9-Jun-98				133	16100	16100		133	133	154
1998	6	1998.06	10-Jun-98				137	15900	15900		137	137	153
1998	6	1998.06	11-Jun-98				144	16000	16000		144	144	152
1998	6	1998.06	12-Jun-98				140	16300	16300		140	140	152
1998	6	1998.06	13-Jun-98				142	16500	16500		142	142	152
1998	6	1998.06	14-Jun-98				140	16500	16500		140	140	150
1998	6	1998.06	15-Jun-98				133	16600	16600		133	133	148
1998	6	1998.06	16-Jun-98				121	16700	16700		121	121	146
1998	6	1998.06	17-Jun-98				112	17400	17400		112	112	143
1998	6	1998.06	18-Jun-98				108	18000	18000		108	108	141
1998	6	1998.06	19-Jun-98				109	18500	18500		109	109	139
1998	6	1998.06	20-Jun-98				103	18700	18700		103	103	137
1998	6	1998.06	21-Jun-98				102	18800	18800		102	102	135
1998	6	1998.06	22-Jun-98				103	18900	18900		103	103	134
1998	6	1998.06	23-Jun-98				96	19200	19200		96	96	132
1998	6	1998.06	24-Jun-98				98	19500	19500		98	98	130
1998	6	1998.06	25-Jun-98				96	19500	19500		96	96	128
1998	6	1998.06	26-Jun-98				92	19500	19500		92	92	127
1998	6	1998.06	27-Jun-98				98	19100	19100		98	98	125
1998	6	1998.06	28-Jun-98				97	18800	18800		97	97	124
1998	6	1998.06	29-Jun-98				101	18600	18600		101	101	123
1998	6	1998.06	30-Jun-98				97	18200	18200		97	97	121
1998	7	1998.07	1-Jul-98				97	17900	17900		97	97	119
1998	7	1998.07	2-Jul-98				107	16800	16800		107	107	118
1998	7	1998.07	3-Jul-98				113	15700	15700		113	113	117
1998	7	1998.07	4-Jul-98				122	15000	15000		122	122	116
1998	7	1998.07	5-Jul-98				126	14500	14500		126	126	116
1998	7	1998.07	6-Jul-98				125	14600	14600		125	125	115
1998	7	1998.07	7-Jul-98				118	14900	14900		118	118	115
1998	7	1998.07	8-Jul-98				113	14900	14900		113	113	114
1998	7	1998.07	9-Jul-98				111	15300	15300		111	111	113
1998	7	1998.07	10-Jul-98				107	15500	15500		107	107	112
1998	7	1998.07	11-Jul-98				98	16500	16500		98	98	111
1998	7	1998.07	12-Jul-98				92	17500	17500		92	92	109
1998	7	1998.07	13-Jul-98				97	17900	17900		97	97	108
1998	7	1998.07	14-Jul-98				102	17500	17500		102	102	106
1998	7	1998.07	15-Jul-98				112	16100	16100		112	112	106
1998	7	1998.07	16-Jul-98				115	15200	15200		115	115	106
1998	7	1998.07	17-Jul-98				125	14700	14700		125	125	106
1998	7	1998.07	18-Jul-98				136	13400	13400		136	136	107
1998	7	1998.07	19-Jul-98				153	12400	12400		153	153	108
1998	7	1998.07	20-Jul-98				159	11700	11700		159	159	110
1998	7	1998.07	21-Jul-98				157	11400	11400		157	157	112
1998	7	1998.07	22-Jul-98				167	10800	10800		167	167	114
1998	7	1998.07	23-Jul-98				180	10500	10500		180	180	117
1998	7	1998.07	24-Jul-98				187	10200	10200		187	187	120
1998	7	1998.07	25-Jul-98				197	9860	9860		197	197	123
1998	7	1998.07	26-Jul-98				223	9060	9060		223	223	128
1998	7	1998.07	27-Jul-98				253	8450	8450		253	253	133
1998	7	1998.07	28-Jul-98				250	8170	8170		250	250	138
1998	7	1998.07	29-Jul-98				242	8030	8030		242	242	143
1998	7	1998.07	30-Jul-98				257	7460	7460		257	257	148
1998	7	1998.07	31-Jul-98				278	7050	7050		278	278	154
1998	8	1998.08	1-Aug-98				299	6750	6750		299	299	160
1998	8	1998.08	2-Aug-98				296	6570	6570		296	296	167
1998	8	1998.08	3-Aug-98				299	6410	6410		299	299	172
1998	8	1998.08	4-Aug-98				295	6310	6310		295	295	178
1998	8	1998.08	5-Aug-98				281	6290	6290		281	281	183
1998	8	1998.08	6-Aug-98				283	6190	6190		283	283	189
1998	8	1998.08	7-Aug-98				297	5910	5910		297	297	195
1998	8	1998.08	8-Aug-98				284	5840	5840		284	284	201
1998	8	1998.08	9-Aug-98				298	5830	5830		298	298	207
1998	8	1998.08	10-Aug-98				317	5760	5760		317	317	214
1998	8	1998.08	11-Aug-98				334	5560	5560		334	334	222
1998	8	1998.08	12-Aug-98				340	5390	5390		340	340	231
1998	8	1998.08	13-Aug-98				340	5230	5230		340	340	238
1998	8	1998.08	14-Aug-98				343	5280	5280		343	343	246

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1998	8	1998.08	15-Aug-98				297	5530	5530		297	297	252
1998	8	1998.08	16-Aug-98				322	5230	5230		322	322	259
1998	8	1998.08	17-Aug-98				333	5090	5090		333	333	265
1998	8	1998.08	18-Aug-98				322	5010	5010		322	322	271
1998	8	1998.08	19-Aug-98				322	4790	4790		322	322	276
1998	8	1998.08	20-Aug-98				373	4840	4840		373	373	284
1998	8	1998.08	21-Aug-98				362	4970	4970		362	362	290
1998	8	1998.08	22-Aug-98				331	5010	5010		331	331	295
1998	8	1998.08	23-Aug-98				320	5060	5060		320	320	300
1998	8	1998.08	24-Aug-98				312	5130	5130		312	312	303
1998	8	1998.08	25-Aug-98				312	5090	5090		312	312	306
1998	8	1998.08	26-Aug-98				309	4890	4890		309	309	308
1998	8	1998.08	27-Aug-98				300	4810	4810		300	300	310
1998	8	1998.08	28-Aug-98				300	4910	4910		300	300	312
1998	8	1998.08	29-Aug-98				288	4990	4990		288	288	313
1998	8	1998.08	30-Aug-98				284	5010	5010		284	284	313
1998	8	1998.08	31-Aug-98				292	5020	5020		292	292	313
1998	9	1998.09	1-Sep-98				297	4840	4840		297	297	313
1998	9	1998.09	2-Sep-98				296	4740	4740		296	296	313
1998	9	1998.09	3-Sep-98				292	4740	4740		292	292	313
1998	9	1998.09	4-Sep-98				287	4740	4740		287	287	313
1998	9	1998.09	5-Sep-98				280	5000	5000		280	280	313
1998	9	1998.09	6-Sep-98				252	5400	5400		252	252	311
1998	9	1998.09	7-Sep-98				230	5640	5640		230	230	310
1998	9	1998.09	8-Sep-98				229	5770	5770		229	229	307
1998	9	1998.09	9-Sep-98				233	5750	5750		233	233	304
1998	9	1998.09	10-Sep-98				230	5730	5730		230	230	301
1998	9	1998.09	11-Sep-98				263	5310	5310		263	263	298
1998	9	1998.09	12-Sep-98				267	5210	5210		267	267	296
1998	9	1998.09	13-Sep-98				248	5680	5680		248	248	293
1998	9	1998.09	14-Sep-98				204	6450	6450		204	204	290
1998	9	1998.09	15-Sep-98				177	7120	7120		177	177	285
1998	9	1998.09	16-Sep-98				184	7110	7110		184	184	280
1998	9	1998.09	17-Sep-98				207	6220	6220		207	207	276
1998	9	1998.09	18-Sep-98				239	5830	5830		239	239	273
1998	9	1998.09	19-Sep-98				236	5690	5690		236	236	269
1998	9	1998.09	20-Sep-98				236	5810	5810		236	236	265
1998	9	1998.09	21-Sep-98				223	5920	5920		223	223	261
1998	9	1998.09	22-Sep-98				223	5860	5860		223	223	258
1998	9	1998.09	23-Sep-98				232	5860	5860		232	232	255
1998	9	1998.09	24-Sep-98				239	5860	5860		239	239	253
1998	9	1998.09	25-Sep-98				234	5860	5860		234	234	250
1998	9	1998.09	26-Sep-98				238	5880	5880		238	238	248
1998	9	1998.09	27-Sep-98				238	6020	6020		238	238	246
1998	9	1998.09	28-Sep-98				222	6170	6170		222	222	244
1998	9	1998.09	29-Sep-98				219	6150	6150		219	219	242
1998	9	1998.09	30-Sep-98				213	6390	6390		213	213	239
1998	10	1998.10	1-Oct-98				203	6700	6710		203	203	236
1998	10	1998.10	2-Oct-98				197	6810	6850		197	197	233
1998	10	1998.10	3-Oct-98				209	6740	6790		209	209	230
1998	10	1998.10	4-Oct-98				211	6510	6530		211	211	227
1998	10	1998.10	5-Oct-98				201	6450	6460		201	201	225
1998	10	1998.10	6-Oct-98				206	6380	6410		206	206	223
1998	10	1998.10	7-Oct-98				213	6330	6360		213	213	222
1998	10	1998.10	8-Oct-98				213	6400	6460		213	213	222
1998	10	1998.10	9-Oct-98				201	6720	6870		201	201	221
1998	10	1998.10	10-Oct-98				203	6770	6950		203	203	220
1998	10	1998.10	11-Oct-98				204	6780	6970		204	204	218
1998	10	1998.10	12-Oct-98				203	6980	7230		203	203	216
1998	10	1998.10	13-Oct-98				201	7040	7330		201	201	214
1998	10	1998.10	14-Oct-98				210	6840	7100		210	210	215
1998	10	1998.10	15-Oct-98				213	6730	6990		213	213	216
1998	10	1998.10	16-Oct-98				217	6630	6880		217	217	217
1998	10	1998.10	17-Oct-98				219	6440	6670		219	219	217
1998	10	1998.10	18-Oct-98				236	6140	6300		236	236	217
1998	10	1998.10	19-Oct-98				278	5740	5830		278	278	219
1998	10	1998.10	20-Oct-98				312	5370	5400		312	312	221
1998	10	1998.10	21-Oct-98				334	5090	5080		334	334	225
1998	10	1998.10	22-Oct-98				376	4840	4800		376	376	230
1998	10	1998.10	23-Oct-98				380	4780	4740		380	380	235
1998	10	1998.10	24-Oct-98				391	4870	4870		391	391	240
1998	10	1998.10	25-Oct-98				346	5320	5430		346	346	244
1998	10	1998.10	26-Oct-98				335	5350	5480		335	335	247
1998	10	1998.10	27-Oct-98				326	5210	5320		326	326	250
1998	10	1998.10	28-Oct-98				327	5330	5480		327	327	253
1998	10	1998.10	29-Oct-98				314	5470	5660		314	314	256

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1998	10	1998.10	30-Oct-98				316	5360	5550		316	316	260
1998	10	1998.10	31-Oct-98				318	5090	5250		318	318	264
1998	11	1998.11	1-Nov-98				368	4500	4540		368	368	269
1998	11	1998.11	2-Nov-98				384	4300	4310		384	384	275
1998	11	1998.11	3-Nov-98				368	4280	4310		368	368	280
1998	11	1998.11	4-Nov-98				363	4260	4300		363	363	286
1998	11	1998.11	5-Nov-98				371	4130	4160		371	371	291
1998	11	1998.11	6-Nov-98				394	3990	4000		394	394	297
1998	11	1998.11	7-Nov-98				392	3910	3920		392	392	303
1998	11	1998.11	8-Nov-98				428	3750	3740		428	428	311
1998	11	1998.11	9-Nov-98				490	3520	3470		490	490	320
1998	11	1998.11	10-Nov-98				506	3390	3330		506	506	331
1998	11	1998.11	11-Nov-98				520	3340	3270		520	520	341
1998	11	1998.11	12-Nov-98				533	3260	3180		533	533	352
1998	11	1998.11	13-Nov-98				563	3170	3070		563	563	364
1998	11	1998.11	14-Nov-98				576	3100	2990		576	576	376
1998	11	1998.11	15-Nov-98				580	3050	2930		580	580	388
1998	11	1998.11	16-Nov-98				591	3010	2880		591	591	401
1998	11	1998.11	17-Nov-98				597	2960	2840		597	597	413
1998	11	1998.11	18-Nov-98				596	2960	2840		596	596	423
1998	11	1998.11	19-Nov-98				584	2970	2840		584	584	432
1998	11	1998.11	20-Nov-98				580	2970	2850		580	580	440
1998	11	1998.11	21-Nov-98				567	2960	2840		567	567	447
1998	11	1998.11	22-Nov-98				588	3020	2890		588	588	454
1998	11	1998.11	23-Nov-98				585	3030	2910		585	585	460
1998	11	1998.11	24-Nov-98				577	3020	2900		577	577	468
1998	11	1998.11	25-Nov-98				561	3020	2900		561	561	475
1998	11	1998.11	26-Nov-98				503	2990	2870		503	503	481
1998	11	1998.11	27-Nov-98				180	2990	2870		180	180	476
1998	11	1998.11	28-Nov-98				154	3040	2920		154	154	471
1998	11	1998.11	29-Nov-98				108	3030	2910		108	108	464
1998	11	1998.11	30-Nov-98				98	3040	2910		98	98	457
1998	12	1998.12	1-Dec-98				132	3140	3030		132	132	449
1998	12	1998.12	2-Dec-98				584	3240	3150		584	584	456
1998	12	1998.12	3-Dec-98				499	3200	3100		499	499	460
1998	12	1998.12	4-Dec-98				506	3310	3240		506	506	465
1998	12	1998.12	5-Dec-98				449	3700	3700		449	449	467
1998	12	1998.12	6-Dec-98				351	4020	4100		351	351	466
1998	12	1998.12	7-Dec-98				319	4190	4300		319	319	464
1998	12	1998.12	8-Dec-98				297	4370	4520		297	297	459
1998	12	1998.12	9-Dec-98				295	4370	4520		295	295	453
1998	12	1998.12	10-Dec-98				290	4440	4620		290	290	445
1998	12	1998.12	11-Dec-98				276	4710	4940		276	276	437
1998	12	1998.12	12-Dec-98				250	4950	5230		250	250	428
1998	12	1998.12	13-Dec-98				259	4970	5260		259	259	418
1998	12	1998.12	14-Dec-98				279	4900	5160		279	279	408
1998	12	1998.12	15-Dec-98				293	4840	5100		293	293	398
1998	12	1998.12	16-Dec-98				278	4860	5120		278	278	388
1998	12	1998.12	17-Dec-98				276	4950	5230		276	276	377
1998	12	1998.12	18-Dec-98				279	4890	5160		279	279	367
1998	12	1998.12	19-Dec-98				296	4690	4900		296	296	357
1998	12	1998.12	20-Dec-98				344	4460	4620		344	344	349
1998	12	1998.12	21-Dec-98				336	4480	4640		336	336	341
1998	12	1998.12	22-Dec-98				274	4850	5100		274	274	331
1998	12	1998.12	23-Dec-98				275	0	5050		275	275	321
1998	12	1998.12	24-Dec-98				306	0	4840		306	306	312
1998	12	1998.12	25-Dec-98				370	0	4050		370	370	305
1998	12	1998.12	26-Dec-98				411	0	3780		411	411	302
1998	12	1998.12	27-Dec-98				421	0	3680		421	421	310
1998	12	1998.12	28-Dec-98				449	0	3580		449	449	320
1998	12	1998.12	29-Dec-98				464	0	3550		464	464	332
1998	12	1998.12	30-Dec-98				464	0	3520		464	464	344
1998	12	1998.12	31-Dec-98				484	0	3470		484	484	356
1999	1	1999.01	1-Jan-99						3480		483	483	352
1999	1	1999.01	2-Jan-99						3440		463	463	351
1999	1	1999.01	3-Jan-99						3390		488	488	351
1999	1	1999.01	4-Jan-99						3370		483	483	352
1999	1	1999.01	5-Jan-99						3340		478	478	356
1999	1	1999.01	6-Jan-99						3280		483	483	361
1999	1	1999.01	7-Jan-99						3130		505	505	368
1999	1	1999.01	8-Jan-99						2930		550	550	377
1999	1	1999.01	9-Jan-99						2760		585	585	387
1999	1	1999.01	10-Jan-99						2730		579	579	397
1999	1	1999.01	11-Jan-99						2750		581	581	408
1999	1	1999.01	12-Jan-99						2750		577	577	418
1999	1	1999.01	13-Jan-99						2730		577	577	428

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
1999	1	1999.01	14-Jan-99						2730		583	583	438
1999	1	1999.01	15-Jan-99						2740		584	584	448
1999	1	1999.01	16-Jan-99						2790		579	579	458
1999	1	1999.01	17-Jan-99						3030		534	534	467
1999	1	1999.01	18-Jan-99						3150		520	520	474
1999	1	1999.01	19-Jan-99						3370		514	514	480
1999	1	1999.01	20-Jan-99						3610		499	499	485
1999	1	1999.01	21-Jan-99						4380		452	452	491
1999	1	1999.01	22-Jan-99						4950		395	395	495
1999	1	1999.01	23-Jan-99						6260		338	338	496
1999	1	1999.01	24-Jan-99						7800		257	257	493
1999	1	1999.01	25-Jan-99						8940		191	191	485
1999	1	1999.01	26-Jan-99						8960		183	183	477
1999	1	1999.01	27-Jan-99						9080		191	191	469
1999	1	1999.01	28-Jan-99						9220		183	183	459
1999	1	1999.01	29-Jan-99						8930		207	207	451
1999	1	1999.01	30-Jan-99						8450		220	220	442
1999	1	1999.01	31-Jan-99						8170		233	233	434
1999	2	1999.02	1-Feb-99						7590		249	249	427
1999	2	1999.02	2-Feb-99						7050		286	286	420
1999	2	1999.02	3-Feb-99						6430		320	320	414
1999	2	1999.02	4-Feb-99						6350		321	321	409
1999	2	1999.02	5-Feb-99						6700		302	302	403
1999	2	1999.02	6-Feb-99						6890		290	290	396
1999	2	1999.02	7-Feb-99						6770		312	312	388
1999	2	1999.02	8-Feb-99						6780		315	315	379
1999	2	1999.02	9-Feb-99						7840		283	283	369
1999	2	1999.02	10-Feb-99						10100		252	252	358
1999	2	1999.02	11-Feb-99						11900		188	188	345
1999	2	1999.02	12-Feb-99						13300		131	131	330
1999	2	1999.02	13-Feb-99						15100		128	128	315
1999	2	1999.02	14-Feb-99						16000		148	148	301
1999	2	1999.02	15-Feb-99						15900		158	158	287
1999	2	1999.02	16-Feb-99						15400		162	162	274
1999	2	1999.02	17-Feb-99						14900		168	168	263
1999	2	1999.02	18-Feb-99						13800		180	180	251
1999	2	1999.02	19-Feb-99						14000		172	172	241
1999	2	1999.02	20-Feb-99						14100		163	163	231
1999	2	1999.02	21-Feb-99						14300		166	166	223
1999	2	1999.02	22-Feb-99						15000		165	165	217
1999	2	1999.02	23-Feb-99						15600		158	158	214
1999	2	1999.02	24-Feb-99						15000		171	171	214
1999	2	1999.02	25-Feb-99						13800		207	207	214
1999	2	1999.02	26-Feb-99						12800		222	222	215
1999	2	1999.02	27-Feb-99						12200		229	229	217
1999	2	1999.02	28-Feb-99						11900		234	234	218
1999	3	1999.03	1-Mar-99						11600		235	235	218
1999	3	1999.03	2-Mar-99						11100		250	250	219
1999	3	1999.03	3-Mar-99						10700		264	264	219
1999	3	1999.03	4-Mar-99						10300		273	273	219
1999	3	1999.03	5-Mar-99						9970		296	296	218
1999	3	1999.03	6-Mar-99						9650		296	296	217
1999	3	1999.03	7-Mar-99						9170		315	315	218
1999	3	1999.03	8-Mar-99						8640		336	336	219
1999	3	1999.03	9-Mar-99						8480		330	330	220
1999	3	1999.03	10-Mar-99						8640		311	311	220
1999	3	1999.03	11-Mar-99						8920		290	290	220
1999	3	1999.03	12-Mar-99						9200		293	293	221
1999	3	1999.03	13-Mar-99						9340		277	277	224
1999	3	1999.03	14-Mar-99						9060		285	285	229
1999	3	1999.03	15-Mar-99						8830		297	297	235
1999	3	1999.03	16-Mar-99						8540		315	315	241
1999	3	1999.03	17-Mar-99						8190		332	332	246
1999	3	1999.03	18-Mar-99						7950		347	347	253
1999	3	1999.03	19-Mar-99						7790		339	339	258
1999	3	1999.03	20-Mar-99						7730		354	354	264
1999	3	1999.03	21-Mar-99						7790		362	362	270
1999	3	1999.03	22-Mar-99						7560		375	375	277
1999	3	1999.03	23-Mar-99						7300		378	378	285
1999	3	1999.03	24-Mar-99						7070		401	401	292
1999	3	1999.03	25-Mar-99						6830		425	425	301
1999	3	1999.03	26-Mar-99						6580		493	493	312
1999	3	1999.03	27-Mar-99						6470		485	485	321
1999	3	1999.03	28-Mar-99						6440		487	487	330
1999	3	1999.03	29-Mar-99						6340		478	478	338
1999	3	1999.03	30-Mar-99						6120		491	491	347

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1999	3	1999.03	31-Mar-99						5980		487	487	355
1999	4	1999.04	1-Apr-99						5770		492	492	363
1999	4	1999.04	2-Apr-99						5560		503	503	371
1999	4	1999.04	3-Apr-99						5280		529	529	380
1999	4	1999.04	4-Apr-99						5210		0	0	370
1999	4	1999.04	5-Apr-99						5130		528	528	378
1999	4	1999.04	6-Apr-99						5150		526	526	385
1999	4	1999.04	7-Apr-99						5400		494	494	390
1999	4	1999.04	8-Apr-99						5800		427	427	393
1999	4	1999.04	9-Apr-99						6040		403	403	396
1999	4	1999.04	10-Apr-99						6230		386	386	400
1999	4	1999.04	11-Apr-99						6700		354	354	402
1999	4	1999.04	12-Apr-99						6920		301	301	402
1999	4	1999.04	13-Apr-99						6990		309	309	403
1999	4	1999.04	14-Apr-99						6840		312	312	404
1999	4	1999.04	15-Apr-99						6640		304	304	403
1999	4	1999.04	16-Apr-99						6640		308	308	403
1999	4	1999.04	17-Apr-99						6630		315	315	402
1999	4	1999.04	18-Apr-99						6780		297	297	400
1999	4	1999.04	19-Apr-99						6930		285	285	398
1999	4	1999.04	20-Apr-99						6880		277	277	395
1999	4	1999.04	21-Apr-99						6790		274	274	392
1999	4	1999.04	22-Apr-99						6810		269	269	388
1999	4	1999.04	23-Apr-99						6940		264	264	383
1999	4	1999.04	24-Apr-99						7120		229	229	377
1999	4	1999.04	25-Apr-99						7110		233	233	368
1999	4	1999.04	26-Apr-99						6930		243	243	360
1999	4	1999.04	27-Apr-99						6790		244	244	352
1999	4	1999.04	28-Apr-99						6730		253	253	345
1999	4	1999.04	29-Apr-99						7090		242	242	336
1999	4	1999.04	30-Apr-99						7280		234	234	328
1999	5	1999.05	1-May-99						7130		247	247	320
1999	5	1999.05	2-May-99						6930		266	266	312
1999	5	1999.05	3-May-99						7250		239	239	302
1999	5	1999.05	4-May-99						7340		225	225	310
1999	5	1999.05	5-May-99						7290		222	222	299
1999	5	1999.05	6-May-99						7200		228	228	289
1999	5	1999.05	7-May-99						7060		229	229	281
1999	5	1999.05	8-May-99						6920		235	235	274
1999	5	1999.05	9-May-99						7170		235	235	269
1999	5	1999.05	10-May-99						7200		235	235	264
1999	5	1999.05	11-May-99						7030		235	235	260
1999	5	1999.05	12-May-99						6810		243	243	258
1999	5	1999.05	13-May-99						6950		247	247	256
1999	5	1999.05	14-May-99						7260		223	223	253
1999	5	1999.05	15-May-99						7330		218	218	250
1999	5	1999.05	16-May-99						7070		220	220	247
1999	5	1999.05	17-May-99						5980		288	288	246
1999	5	1999.05	18-May-99						4750		404	404	250
1999	5	1999.05	19-May-99						4110		465	465	256
1999	5	1999.05	20-May-99						3900		480	480	262
1999	5	1999.05	21-May-99						3860		485	485	269
1999	5	1999.05	22-May-99						3780		461	461	276
1999	5	1999.05	23-May-99						3740		456	456	282
1999	5	1999.05	24-May-99						3720		455	455	290
1999	5	1999.05	25-May-99						3640		492	492	298
1999	5	1999.05	26-May-99						3630		453	453	305
1999	5	1999.05	27-May-99						3550		445	445	312
1999	5	1999.05	28-May-99						3570		431	431	318
1999	5	1999.05	29-May-99						3450		430	430	324
1999	5	1999.05	30-May-99						3210		480	480	332
1999	5	1999.05	31-May-99						3260		477	477	340
1999	6	1999.06	1-Jun-99						3060		479	479	347
1999	6	1999.06	2-Jun-99						3050		491	491	356
1999	6	1999.06	3-Jun-99						3140		464	464	364
1999	6	1999.06	4-Jun-99						3160		462	462	372
1999	6	1999.06	5-Jun-99						3190		478	478	380
1999	6	1999.06	6-Jun-99						3190		463	463	388
1999	6	1999.06	7-Jun-99						3190		462	462	395
1999	6	1999.06	8-Jun-99						3170		482	482	403
1999	6	1999.06	9-Jun-99						3190		466	466	411
1999	6	1999.06	10-Jun-99						3190		457	457	419
1999	6	1999.06	11-Jun-99						3110		470	470	426
1999	6	1999.06	12-Jun-99						3070		456	456	433
1999	6	1999.06	13-Jun-99						3120		440	440	440
1999	6	1999.06	14-Jun-99						3190		475	475	449

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1999	6	1999.06	15-Jun-99						3140		489	489	458
1999	6	1999.06	16-Jun-99						3130		461	461	464
1999	6	1999.06	17-Jun-99						3090		443	443	465
1999	6	1999.06	18-Jun-99						3100		421	421	463
1999	6	1999.06	19-Jun-99						3000		447	447	462
1999	6	1999.06	20-Jun-99						3100		468	468	462
1999	6	1999.06	21-Jun-99						3230		456	456	462
1999	6	1999.06	22-Jun-99						3090		493	493	463
1999	6	1999.06	23-Jun-99						3040		450	450	463
1999	6	1999.06	24-Jun-99						2940		483	483	462
1999	6	1999.06	25-Jun-99						2720		519	519	465
1999	6	1999.06	26-Jun-99						2610		530	530	467
1999	6	1999.06	27-Jun-99						2640		475	475	469
1999	6	1999.06	28-Jun-99						2720		490	490	471
1999	6	1999.06	29-Jun-99						2510		526	526	472
1999	6	1999.06	30-Jun-99						2390		548	548	475
1999	7	1999.07	1-Jul-99						2310		532	532	477
1999	7	1999.07	2-Jul-99						2170		556	556	479
1999	7	1999.07	3-Jul-99						2160		563	563	482
1999	7	1999.07	4-Jul-99						2430		541	541	485
1999	7	1999.07	5-Jul-99						2550		485	485	485
1999	7	1999.07	6-Jul-99						2390		522	522	487
1999	7	1999.07	7-Jul-99						2300		515	515	489
1999	7	1999.07	8-Jul-99						2200		532	532	490
1999	7	1999.07	9-Jul-99						2080		586	586	494
1999	7	1999.07	10-Jul-99						2190		599	599	499
1999	7	1999.07	11-Jul-99						2100		556	556	502
1999	7	1999.07	12-Jul-99						2210		542	542	505
1999	7	1999.07	13-Jul-99						2010		569	569	509
1999	7	1999.07	14-Jul-99						1940		578	578	513
1999	7	1999.07	15-Jul-99						1880		582	582	516
1999	7	1999.07	16-Jul-99						1860		615	615	521
1999	7	1999.07	17-Jul-99						2010		561	561	525
1999	7	1999.07	18-Jul-99						2040		537	537	529
1999	7	1999.07	19-Jul-99						2100		520	520	531
1999	7	1999.07	20-Jul-99						1990		521	521	533
1999	7	1999.07	21-Jul-99						2020		541	541	536
1999	7	1999.07	22-Jul-99						2060		523	523	537
1999	7	1999.07	23-Jul-99						1960		515	515	539
1999	7	1999.07	24-Jul-99						1900		524	524	540
1999	7	1999.07	25-Jul-99						1980		560	560	541
1999	7	1999.07	26-Jul-99						2070		540	540	542
1999	7	1999.07	27-Jul-99						1970		561	561	545
1999	7	1999.07	28-Jul-99						2010		565	565	547
1999	7	1999.07	29-Jul-99						2000		517	517	547
1999	7	1999.07	30-Jul-99						1980		493	493	545
1999	7	1999.07	31-Jul-99						2040		504	504	544
1999	8	1999.08	1-Aug-99						2180		488	488	542
1999	8	1999.08	2-Aug-99						2150		487	487	539
1999	8	1999.08	3-Aug-99						2080		487	487	538
1999	8	1999.08	4-Aug-99						2040		499	499	538
1999	8	1999.08	5-Aug-99						1940		517	517	538
1999	8	1999.08	6-Aug-99						1900		509	509	538
1999	8	1999.08	7-Aug-99						1960		463	463	535
1999	8	1999.08	8-Aug-99						2100		464	464	531
1999	8	1999.08	9-Aug-99						2120		451	451	526
1999	8	1999.08	10-Aug-99						1970		476	476	524
1999	8	1999.08	11-Aug-99						1980		472	472	521
1999	8	1999.08	12-Aug-99						1930		454	454	517
1999	8	1999.08	13-Aug-99						1930		463	463	514
1999	8	1999.08	14-Aug-99						1940		437	437	509
1999	8	1999.08	15-Aug-99						2020		435	435	503
1999	8	1999.08	16-Aug-99						2020		440	440	499
1999	8	1999.08	17-Aug-99						1880		457	457	496
1999	8	1999.08	18-Aug-99						1850		501	501	495
1999	8	1999.08	19-Aug-99						1900		567	567	497
1999	8	1999.08	20-Aug-99						1840		574	574	498
1999	8	1999.08	21-Aug-99						1790		599	599	501
1999	8	1999.08	22-Aug-99						1940		609	609	504
1999	8	1999.08	23-Aug-99						2030		587	587	506
1999	8	1999.08	24-Aug-99						1940		592	592	507
1999	8	1999.08	25-Aug-99						1890		587	587	509
1999	8	1999.08	26-Aug-99						1880		587	587	509
1999	8	1999.08	27-Aug-99						1850		583	583	510
1999	8	1999.08	28-Aug-99						1930		596	596	513
1999	8	1999.08	29-Aug-99						2040		613	613	517

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1999	8	1999.08	30-Aug-99						2090		591	591	520
1999	8	1999.08	31-Aug-99						1930		591	591	523
1999	9	1999.09	1-Sep-99						1880		603	603	527
1999	9	1999.09	2-Sep-99						1930		596	596	530
1999	9	1999.09	3-Sep-99						1920		583	583	533
1999	9	1999.09	4-Sep-99						1960		578	578	535
1999	9	1999.09	5-Sep-99						2010		580	580	538
1999	9	1999.09	6-Sep-99						2030		561	561	541
1999	9	1999.09	7-Sep-99						1940		591	591	545
1999	9	1999.09	8-Sep-99						1790		598	598	550
1999	9	1999.09	9-Sep-99						1790		609	609	554
1999	9	1999.09	10-Sep-99						1860		614	614	559
1999	9	1999.09	11-Sep-99						1910		607	607	564
1999	9	1999.09	12-Sep-99						2120		568	568	568
1999	9	1999.09	13-Sep-99						2240		561	561	572
1999	9	1999.09	14-Sep-99						2140		556	556	576
1999	9	1999.09	15-Sep-99						2060		558	558	580
1999	9	1999.09	16-Sep-99						2040		557	557	583
1999	9	1999.09	17-Sep-99						2000		576	576	586
1999	9	1999.09	18-Sep-99						2060		613	613	587
1999	9	1999.09	19-Sep-99						2200		604	604	588
1999	9	1999.09	20-Sep-99						2270		559	559	587
1999	9	1999.09	21-Sep-99						2170		553	553	585
1999	9	1999.09	22-Sep-99						2110		565	565	584
1999	9	1999.09	23-Sep-99						2060		574	574	584
1999	9	1999.09	24-Sep-99						2020		572	572	583
1999	9	1999.09	25-Sep-99						2010		617	617	584
1999	9	1999.09	26-Sep-99						2060		613	613	585
1999	9	1999.09	27-Sep-99						2220		627	627	586
1999	9	1999.09	28-Sep-99						2180		570	570	585
1999	9	1999.09	29-Sep-99						2040		555	555	584
1999	9	1999.09	30-Sep-99						2100		561	561	583
1999	10	1999.10	1-Oct-99						2220		544	544	581
1999	10	1999.10	2-Oct-99						2410		499	499	577
1999	10	1999.10	3-Oct-99						2390		486	486	574
1999	10	1999.10	4-Oct-99						2490		496	496	571
1999	10	1999.10	5-Oct-99						2550		484	484	568
1999	10	1999.10	6-Oct-99						2490		498	498	566
1999	10	1999.10	7-Oct-99						2490		510	510	563
1999	10	1999.10	8-Oct-99						2450		512	512	561
1999	10	1999.10	9-Oct-99						2520		524	524	558
1999	10	1999.10	10-Oct-99						2580		504	504	554
1999	10	1999.10	11-Oct-99						2640		500	500	551
1999	10	1999.10	12-Oct-99						2630		471	471	547
1999	10	1999.10	13-Oct-99						2510		480	480	545
1999	10	1999.10	14-Oct-99						2480		526	526	544
1999	10	1999.10	15-Oct-99						2500		525	525	543
1999	10	1999.10	16-Oct-99						2530		523	523	541
1999	10	1999.10	17-Oct-99						2560		510	510	539
1999	10	1999.10	18-Oct-99						2720		473	473	535
1999	10	1999.10	19-Oct-99						2690		421	421	528
1999	10	1999.10	20-Oct-99						2610		430	430	524
1999	10	1999.10	21-Oct-99						2600		433	433	520
1999	10	1999.10	22-Oct-99						2650		434	434	516
1999	10	1999.10	23-Oct-99						2650		414	414	510
1999	10	1999.10	24-Oct-99						2580		469	469	507
1999	10	1999.10	25-Oct-99						2530		485	485	503
1999	10	1999.10	26-Oct-99						2510		503	503	499
1999	10	1999.10	27-Oct-99						2490		514	514	495
1999	10	1999.10	28-Oct-99						2500		541	541	494
1999	10	1999.10	29-Oct-99						2540		529	529	493
1999	10	1999.10	30-Oct-99						2500		541	541	493
1999	10	1999.10	31-Oct-99						2480		546	546	493
1999	11	1999.11	1-Nov-99						2550		534	534	494
1999	11	1999.11	2-Nov-99						2450		558	558	496
1999	11	1999.11	3-Nov-99						2430		588	588	499
1999	11	1999.11	4-Nov-99						2460		577	577	502
1999	11	1999.11	5-Nov-99						2580		551	551	504
1999	11	1999.11	6-Nov-99						2600		529	529	505
1999	11	1999.11	7-Nov-99						2440		572	572	507
1999	11	1999.11	8-Nov-99						2340		628	628	510
1999	11	1999.11	9-Nov-99						2290		640	640	515
1999	11	1999.11	10-Nov-99						2210		644	644	520
1999	11	1999.11	11-Nov-99						2170		666	666	526
1999	11	1999.11	12-Nov-99						2170		648	648	532
1999	11	1999.11	13-Nov-99						2190		640	640	536

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			Mean uS/cm	Max uS/cm	Min uS/cm								
1999	11	1999.11	14-Nov-99						2160		655	655	540
1999	11	1999.11	15-Nov-99						2120		669	669	545
1999	11	1999.11	16-Nov-99						2160		663	663	550
1999	11	1999.11	17-Nov-99						2120		665	665	556
1999	11	1999.11	18-Nov-99						2070		708	708	566
1999	11	1999.11	19-Nov-99						2040		739	739	576
1999	11	1999.11	20-Nov-99						2020		730	730	586
1999	11	1999.11	21-Nov-99						2010		747	747	596
1999	11	1999.11	22-Nov-99						1990		747	747	608
1999	11	1999.11	23-Nov-99						1970		758	758	617
1999	11	1999.11	24-Nov-99						1920		752	752	626
1999	11	1999.11	25-Nov-99						1910		757	757	635
1999	11	1999.11	26-Nov-99						1890		770	770	643
1999	11	1999.11	27-Nov-99						1860		761	761	650
1999	11	1999.11	28-Nov-99						1860		748	748	658
1999	11	1999.11	29-Nov-99						1870		756	756	665
1999	11	1999.11	30-Nov-99						1890		758	758	672
1999	12	1999.12	1-Dec-99						1920		741	741	679
1999	12	1999.12	2-Dec-99						1880		735	735	685
1999	12	1999.12	3-Dec-99						1850		736	736	690
1999	12	1999.12	4-Dec-99						1820		743	743	695
1999	12	1999.12	5-Dec-99						1810		730	730	701
1999	12	1999.12	6-Dec-99						1810		736	736	708
1999	12	1999.12	7-Dec-99						1780		738	738	714
1999	12	1999.12	8-Dec-99						1760		745	745	718
1999	12	1999.12	9-Dec-99						1750		748	748	721
1999	12	1999.12	10-Dec-99						1750		745	745	724
1999	12	1999.12	11-Dec-99						1760		734	734	727
1999	12	1999.12	12-Dec-99						1740		744	744	730
1999	12	1999.12	13-Dec-99						1700		761	761	734
1999	12	1999.12	14-Dec-99						1670		763	763	738
1999	12	1999.12	15-Dec-99						1650		754	754	740
1999	12	1999.12	16-Dec-99						1670		742	742	743
1999	12	1999.12	17-Dec-99						1690		721	721	745
1999	12	1999.12	18-Dec-99						1690		720	720	745
1999	12	1999.12	19-Dec-99						1700		721	721	745
1999	12	1999.12	20-Dec-99						1650		754	754	746
1999	12	1999.12	21-Dec-99						1620		784	784	747
1999	12	1999.12	22-Dec-99						1600		765	765	747
1999	12	1999.12	23-Dec-99						1560		762	762	747
1999	12	1999.12	24-Dec-99						1570		764	764	748
1999	12	1999.12	25-Dec-99						1570		782	782	749
1999	12	1999.12	26-Dec-99						1590		805	805	750
1999	12	1999.12	27-Dec-99						1580		815	815	752
1999	12	1999.12	28-Dec-99						1550		807	807	754
1999	12	1999.12	29-Dec-99						1530		803	803	755
1999	12	1999.12	30-Dec-99						1530		807	807	757
1999	12	1999.12	31-Dec-99						1590		829	829	760
2000	1	2000.01	1-Jan-00						1610		842	842	763
2000	1	2000.01	2-Jan-00						1620		846	846	767
2000	1	2000.01	3-Jan-00						1630		840	840	770
2000	1	2000.01	4-Jan-00						1610		824	824	773
2000	1	2000.01	5-Jan-00						1600		834	834	777
2000	1	2000.01	6-Jan-00						1610		837	837	780
2000	1	2000.01	7-Jan-00						1590		835	835	783
2000	1	2000.01	8-Jan-00						1570		834	834	786
2000	1	2000.01	9-Jan-00						1590		838	838	789
2000	1	2000.01	10-Jan-00						1610		841	841	792
2000	1	2000.01	11-Jan-00						1610		849	849	796
2000	1	2000.01	12-Jan-00						1720		807	807	798
2000	1	2000.01	13-Jan-00						1740		812	812	799
2000	1	2000.01	14-Jan-00						1720		820	820	801
2000	1	2000.01	15-Jan-00						1800		799	799	803
2000	1	2000.01	16-Jan-00						1830		774	774	805
2000	1	2000.01	17-Jan-00						1880		769	769	807
2000	1	2000.01	18-Jan-00						1980		747	747	808
2000	1	2000.01	19-Jan-00						2120		700	700	806
2000	1	2000.01	20-Jan-00						2080		735	735	804
2000	1	2000.01	21-Jan-00						2100		749	749	804
2000	1	2000.01	22-Jan-00						2150		749	749	803
2000	1	2000.01	23-Jan-00						2260		757	757	803
2000	1	2000.01	24-Jan-00						2600		690	690	800
2000	1	2000.01	25-Jan-00						3150		611	611	793
2000	1	2000.01	26-Jan-00						3620		575	575	785
2000	1	2000.01	27-Jan-00						3700		602	602	779
2000	1	2000.01	28-Jan-00						3230		683	683	775

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
2000	1	2000.01	29-Jan-00						3190		653	653	769
2000	1	2000.01	30-Jan-00						2920		714	714	766
2000	1	2000.01	31-Jan-00						2780		766	766	763
2000	2	2000.02	1-Feb-00						2760		804	804	762
2000	2	2000.02	2-Feb-00						2700		820	820	761
2000	2	2000.02	3-Feb-00						2510		862	862	762
2000	2	2000.02	4-Feb-00						2410		908	908	765
2000	2	2000.02	5-Feb-00						2330		957	957	769
2000	2	2000.02	6-Feb-00						2310		984	984	774
2000	2	2000.02	7-Feb-00						2270		997	997	779
2000	2	2000.02	8-Feb-00						2200		991	991	784
2000	2	2000.02	9-Feb-00						2150		1038	1038	791
2000	2	2000.02	10-Feb-00						2140		1062	1062	798
2000	2	2000.02	11-Feb-00						2140		1036	1036	805
2000	2	2000.02	12-Feb-00						2340		970	970	811
2000	2	2000.02	13-Feb-00						3490		729	729	808
2000	2	2000.02	14-Feb-00						5230		546	546	799
2000	2	2000.02	15-Feb-00						8120		295	295	783
2000	2	2000.02	16-Feb-00						8710		245	245	766
2000	2	2000.02	17-Feb-00						9490		216	216	748
2000	2	2000.02	18-Feb-00						11700		204	204	732
2000	2	2000.02	19-Feb-00						12300		229	229	715
2000	2	2000.02	20-Feb-00						12400		244	244	698
2000	2	2000.02	21-Feb-00						12400		259	259	682
2000	2	2000.02	22-Feb-00						12200		266	266	665
2000	2	2000.02	23-Feb-00						12600		252	252	651
2000	2	2000.02	24-Feb-00						13500		250	250	639
2000	2	2000.02	25-Feb-00						13800		251	251	628
2000	2	2000.02	26-Feb-00						13300		236	236	616
2000	2	2000.02	27-Feb-00						13200		243	243	601
2000	2	2000.02	28-Feb-00						13600		270	270	588
2000	2	2000.02	29-Feb-00						14900		250	250	573
2000	3	2000.03	1-Mar-00						14600		250	250	555
2000	3	2000.03	2-Mar-00						14800		206	206	536
2000	3	2000.03	3-Mar-00						14700		226	226	516
2000	3	2000.03	4-Mar-00						14600		252	252	495
2000	3	2000.03	5-Mar-00						15300		252	252	474
2000	3	2000.03	6-Mar-00						16100		250	250	450
2000	3	2000.03	7-Mar-00						16700		201	201	424
2000	3	2000.03	8-Mar-00						16500		156	156	396
2000	3	2000.03	9-Mar-00						16400		151	151	368
2000	3	2000.03	10-Mar-00						16500		161	161	339
2000	3	2000.03	11-Mar-00						16200		159	159	309
2000	3	2000.03	12-Mar-00						15800		155	155	279
2000	3	2000.03	13-Mar-00						15500		164	164	252
2000	3	2000.03	14-Mar-00						14900		178	178	234
2000	3	2000.03	15-Mar-00						14100		182	182	222
2000	3	2000.03	16-Mar-00						13400		185	185	218
2000	3	2000.03	17-Mar-00						13000		188	188	216
2000	3	2000.03	18-Mar-00						12500		200	200	216
2000	3	2000.03	19-Mar-00						11100		222	222	216
2000	3	2000.03	20-Mar-00						11200		204	204	215
2000	3	2000.03	21-Mar-00						10700		209	209	214
2000	3	2000.03	22-Mar-00						9150		241	241	214
2000	3	2000.03	23-Mar-00						8330		256	256	213
2000	3	2000.03	24-Mar-00						7870		269	269	214
2000	3	2000.03	25-Mar-00						7530		281	281	215
2000	3	2000.03	26-Mar-00						7280		290	290	216
2000	3	2000.03	27-Mar-00						6840		287	287	218
2000	3	2000.03	28-Mar-00						6370		300	300	220
2000	3	2000.03	29-Mar-00						5950		312	312	221
2000	3	2000.03	30-Mar-00						5690		319	319	224
2000	3	2000.03	31-Mar-00						5420		320	320	226
2000	4	2000.04	1-Apr-00						5190		313	313	229
2000	4	2000.04	2-Apr-00						4690		335	335	233
2000	4	2000.04	3-Apr-00						4290		363	363	237
2000	4	2000.04	4-Apr-00						4020		408	408	242
2000	4	2000.04	5-Apr-00						3770		417	417	248
2000	4	2000.04	6-Apr-00						3550		439	439	255
2000	4	2000.04	7-Apr-00						3400		448	448	265
2000	4	2000.04	8-Apr-00						3390		462	462	276
2000	4	2000.04	9-Apr-00						3310		439	439	285
2000	4	2000.04	10-Apr-00						3090		456	456	295
2000	4	2000.04	11-Apr-00						2990		472	472	305
2000	4	2000.04	12-Apr-00						3030		465	465	315
2000	4	2000.04	13-Apr-00						3120		448	448	324

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
2000	4	2000.04	14-Apr-00						4360		331	331	329
2000	4	2000.04	15-Apr-00						5660		222	222	331
2000	4	2000.04	16-Apr-00						5900		239	239	332
2000	4	2000.04	17-Apr-00						6310		253	253	334
2000	4	2000.04	18-Apr-00						7070		250	250	335
2000	4	2000.04	19-Apr-00						6920		259	259	337
2000	4	2000.04	20-Apr-00						6200		303	303	340
2000	4	2000.04	21-Apr-00						6230		289	289	342
2000	4	2000.04	22-Apr-00						6290		270	270	342
2000	4	2000.04	23-Apr-00						6310		272	272	342
2000	4	2000.04	24-Apr-00						6320		266	266	342
2000	4	2000.04	25-Apr-00						6120		266	266	341
2000	4	2000.04	26-Apr-00						5940		261	261	340
2000	4	2000.04	27-Apr-00						5810		256	256	338
2000	4	2000.04	28-Apr-00						5600		259	259	337
2000	4	2000.04	29-Apr-00						5730		254	254	335
2000	4	2000.04	30-Apr-00						5770		257	257	332
2000	5	2000.05	1-May-00						5740		265	265	331
2000	5	2000.05	2-May-00						5630		270	270	329
2000	5	2000.05	3-May-00						5480		286	286	326
2000	5	2000.05	4-May-00						5410		310	310	323
2000	5	2000.05	5-May-00						5620		312	312	319
2000	5	2000.05	6-May-00						5580		307	307	315
2000	5	2000.05	7-May-00						5700		306	306	310
2000	5	2000.05	8-May-00						6050		303	303	305
2000	5	2000.05	9-May-00						6000		296	296	300
2000	5	2000.05	10-May-00						5870		289	289	295
2000	5	2000.05	11-May-00						5860		289	289	288
2000	5	2000.05	12-May-00						5770		299	299	283
2000	5	2000.05	13-May-00						5640		296	296	278
2000	5	2000.05	14-May-00						5580		293	293	277
2000	5	2000.05	15-May-00						5190		304	304	279
2000	5	2000.05	16-May-00						4830		361	361	283
2000	5	2000.05	17-May-00						4560		388	388	288
2000	5	2000.05	18-May-00						4260		408	408	293
2000	5	2000.05	19-May-00						4030		436	436	299
2000	5	2000.05	20-May-00						4000		434	434	303
2000	5	2000.05	21-May-00						4200		415	415	308
2000	5	2000.05	22-May-00						4170		393	393	312
2000	5	2000.05	23-May-00						4030		408	408	316
2000	5	2000.05	24-May-00						4090		392	392	320
2000	5	2000.05	25-May-00						4010		386	386	324
2000	5	2000.05	26-May-00						4000		381	381	328
2000	5	2000.05	27-May-00						3840		390	390	333
2000	5	2000.05	28-May-00						3740		421	421	338
2000	5	2000.05	29-May-00						3560		422	422	344
2000	5	2000.05	30-May-00						3430		435	435	350
2000	5	2000.05	31-May-00						3350		432	432	355
2000	6	2000.06	1-Jun-00						3300		440	440	361
2000	6	2000.06	2-Jun-00						3250		445	445	366
2000	6	2000.06	3-Jun-00						3310		435	435	371
2000	6	2000.06	4-Jun-00						3410		405	405	374
2000	6	2000.06	5-Jun-00						3400		400	400	377
2000	6	2000.06	6-Jun-00						3290		413	413	380
2000	6	2000.06	7-Jun-00						3150		450	450	385
2000	6	2000.06	8-Jun-00						3210		454	454	390
2000	6	2000.06	9-Jun-00						3360		415	415	395
2000	6	2000.06	10-Jun-00						3360		417	417	399
2000	6	2000.06	11-Jun-00						3520		412	412	403
2000	6	2000.06	12-Jun-00						3610		390	390	406
2000	6	2000.06	13-Jun-00						3470		397	397	409
2000	6	2000.06	14-Jun-00						3290		408	408	413
2000	6	2000.06	15-Jun-00						3090		462	462	416
2000	6	2000.06	16-Jun-00						2800		531	531	421
2000	6	2000.06	17-Jun-00						2590		562	562	426
2000	6	2000.06	18-Jun-00						2560		587	587	431
2000	6	2000.06	19-Jun-00						2540		597	597	437
2000	6	2000.06	20-Jun-00						2410		637	637	444
2000	6	2000.06	21-Jun-00						2260		631	631	452
2000	6	2000.06	22-Jun-00						2110		664	664	460
2000	6	2000.06	23-Jun-00						2010		715	715	471
2000	6	2000.06	24-Jun-00						2030		676	676	481
2000	6	2000.06	25-Jun-00						2110		694	694	491
2000	6	2000.06	26-Jun-00						2080		694	694	501
2000	6	2000.06	27-Jun-00						2060		714	714	511
2000	6	2000.06	28-Jun-00						1930		667	667	519

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			Mean uS/cm	Max uS/cm	Min uS/cm								
2000	6	2000.06	29-Jun-00						1840		674	674	527
2000	6	2000.06	30-Jun-00						1820		734	734	537
2000	7	2000.07	1-Jul-00						1850		703	703	546
2000	7	2000.07	2-Jul-00						1840		680	680	554
2000	7	2000.07	3-Jul-00						1950		690	690	562
2000	7	2000.07	4-Jul-00						1880		704	704	572
2000	7	2000.07	5-Jul-00						1900		635	635	580
2000	7	2000.07	6-Jul-00						1860		625	625	587
2000	7	2000.07	7-Jul-00						1890		614	614	593
2000	7	2000.07	8-Jul-00						1900		589	589	597
2000	7	2000.07	9-Jul-00						1950		603	603	604
2000	7	2000.07	10-Jul-00						1920		645	645	611
2000	7	2000.07	11-Jul-00						1830		643	643	619
2000	7	2000.07	12-Jul-00						1840		645	645	627
2000	7	2000.07	13-Jul-00						1860		600	600	634
2000	7	2000.07	14-Jul-00						1910		576	576	640
2000	7	2000.07	15-Jul-00						1940		567	567	643
2000	7	2000.07	16-Jul-00						1980		555	555	644
2000	7	2000.07	17-Jul-00						1960		572	572	644
2000	7	2000.07	18-Jul-00						1880		599	599	645
2000	7	2000.07	19-Jul-00						1850		584	584	644
2000	7	2000.07	20-Jul-00						1760		601	601	643
2000	7	2000.07	21-Jul-00						1760		632	632	643
2000	7	2000.07	22-Jul-00						1900		563	563	640
2000	7	2000.07	23-Jul-00						1970		525	525	633
2000	7	2000.07	24-Jul-00						2000		498	498	628
2000	7	2000.07	25-Jul-00						1910		532	532	622
2000	7	2000.07	26-Jul-00						1850		531	531	617
2000	7	2000.07	27-Jul-00						1910		554	554	611
2000	7	2000.07	28-Jul-00						1900		538	538	607
2000	7	2000.07	29-Jul-00						1900		522	522	602
2000	7	2000.07	30-Jul-00						1960		539	539	595
2000	7	2000.07	31-Jul-00						2040		539	539	590
2000	8	2000.08	1-Aug-00						1970		534	534	585
2000	8	2000.08	2-Aug-00						1920		513	513	579
2000	8	2000.08	3-Aug-00						1910		518	518	573
2000	8	2000.08	4-Aug-00						1880		532	532	570
2000	8	2000.08	5-Aug-00						1970		514	514	566
2000	8	2000.08	6-Aug-00						2050		519	519	563
2000	8	2000.08	7-Aug-00						2040		534	534	561
2000	8	2000.08	8-Aug-00						1800		588	588	560
2000	8	2000.08	9-Aug-00						1760		603	603	559
2000	8	2000.08	10-Aug-00						1730		590	590	557
2000	8	2000.08	11-Aug-00						1740		570	570	555
2000	8	2000.08	12-Aug-00						1750		615	615	555
2000	8	2000.08	13-Aug-00						1840		585	585	556
2000	8	2000.08	14-Aug-00						1820		612	612	557
2000	8	2000.08	15-Aug-00						1710		608	608	559
2000	8	2000.08	16-Aug-00						1630		640	640	561
2000	8	2000.08	17-Aug-00						1760		598	598	561
2000	8	2000.08	18-Aug-00						1970		500	500	558
2000	8	2000.08	19-Aug-00						2180		449	449	553
2000	8	2000.08	20-Aug-00						2390		409	409	546
2000	8	2000.08	21-Aug-00						2550		425	425	541
2000	8	2000.08	22-Aug-00						2580		425	425	538
2000	8	2000.08	23-Aug-00						2610		406	406	535
2000	8	2000.08	24-Aug-00						2750		351	351	529
2000	8	2000.08	25-Aug-00						2810		357	357	523
2000	8	2000.08	26-Aug-00						2860		359	359	516
2000	8	2000.08	27-Aug-00						2990		375	375	511
2000	8	2000.08	28-Aug-00						2860		383	383	506
2000	8	2000.08	29-Aug-00						2550		415	415	502
2000	8	2000.08	30-Aug-00						2490		433	433	499
2000	8	2000.08	31-Aug-00						2420		435	435	495
2000	9	2000.09	1-Sep-00						2320		489	489	495
2000	9	2000.09	2-Sep-00						2430		514	514	494
2000	9	2000.09	3-Sep-00						2530		489	489	493
2000	9	2000.09	4-Sep-00						2550		495	495	492
2000	9	2000.09	5-Sep-00						2410		496	496	492
2000	9	2000.09	6-Sep-00						2330		498	498	490
2000	9	2000.09	7-Sep-00						2240		492	492	487
2000	9	2000.09	8-Sep-00						2160		490	490	483
2000	9	2000.09	9-Sep-00						2210		490	490	480
2000	9	2000.09	10-Sep-00						2300		490	490	477
2000	9	2000.09	11-Sep-00						2340		490	490	473
2000	9	2000.09	12-Sep-00						2290		490	490	470

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			Mean uS/cm	Max uS/cm	Min uS/cm								
2000	9	2000.09	13-Sep-00						2250		504	504	467
2000	9	2000.09	14-Sep-00						2240		474	474	462
2000	9	2000.09	15-Sep-00						2410		438	438	455
2000	9	2000.09	16-Sep-00						2940		294	294	445
2000	9	2000.09	17-Sep-00						2450		390	390	442
2000	9	2000.09	18-Sep-00						2250		480	480	443
2000	9	2000.09	19-Sep-00						2130		532	532	447
2000	9	2000.09	20-Sep-00						2290		459	459	448
2000	9	2000.09	21-Sep-00						2420		387	387	447
2000	9	2000.09	22-Sep-00						2350		412	412	447
2000	9	2000.09	23-Sep-00						2460		418	418	449
2000	9	2000.09	24-Sep-00						2530		395	395	450
2000	9	2000.09	25-Sep-00						2520		404	404	452
2000	9	2000.09	26-Sep-00						2370		447	447	454
2000	9	2000.09	27-Sep-00						2200		452	452	456
2000	9	2000.09	28-Sep-00						2050		536	536	460
2000	9	2000.09	29-Sep-00						1970		538	538	464
2000	9	2000.09	30-Sep-00						1960		540	540	467
2000	10	2000.10	1-Oct-00						2020		519	519	468
2000	10	2000.10	2-Oct-00						2040		533	533	469
2000	10	2000.10	3-Oct-00						1970		554	554	471
2000	10	2000.10	4-Oct-00						2080		498	498	471
2000	10	2000.10	5-Oct-00						2250		429	429	469
2000	10	2000.10	6-Oct-00						2270		441	441	467
2000	10	2000.10	7-Oct-00						2350		425	425	465
2000	10	2000.10	8-Oct-00						2450		438	438	463
2000	10	2000.10	9-Oct-00						2450		437	437	461
2000	10	2000.10	10-Oct-00						2500		454	454	460
2000	10	2000.10	11-Oct-00						2630		421	421	458
2000	10	2000.10	12-Oct-00						2770		384	384	454
2000	10	2000.10	13-Oct-00						2640		420	420	452
2000	10	2000.10	14-Oct-00						2570		458	458	451
2000	10	2000.10	15-Oct-00						2620		442	442	451
2000	10	2000.10	16-Oct-00						2570		470	470	457
2000	10	2000.10	17-Oct-00						2520		538	538	462
2000	10	2000.10	18-Oct-00						2730		470	470	462
2000	10	2000.10	19-Oct-00						3020		349	349	456
2000	10	2000.10	20-Oct-00						3350		311	311	451
2000	10	2000.10	21-Oct-00						3390		300	300	448
2000	10	2000.10	22-Oct-00						3300		320	320	445
2000	10	2000.10	23-Oct-00						3290		336	336	442
2000	10	2000.10	24-Oct-00						3410		314	314	439
2000	10	2000.10	25-Oct-00						3340		299	299	436
2000	10	2000.10	26-Oct-00						3390		308	308	431
2000	10	2000.10	27-Oct-00						3870		283	283	426
2000	10	2000.10	28-Oct-00						3800		290	290	417
2000	10	2000.10	29-Oct-00						3450		324	324	410
2000	10	2000.10	30-Oct-00						3290		388	388	405
2000	10	2000.10	31-Oct-00						3280		408	408	401
2000	11	2000.11	1-Nov-00						3140		441	441	398
2000	11	2000.11	2-Nov-00						3040		447	447	395
2000	11	2000.11	3-Nov-00						3090		416	416	392
2000	11	2000.11	4-Nov-00						2870		465	465	393
2000	11	2000.11	5-Nov-00						2740		505	505	395
2000	11	2000.11	6-Nov-00						2660		544	544	399
2000	11	2000.11	7-Nov-00						2590		562	562	403
2000	11	2000.11	8-Nov-00						2550		571	571	408
2000	11	2000.11	9-Nov-00						2540		561	561	412
2000	11	2000.11	10-Nov-00						2510		572	572	417
2000	11	2000.11	11-Nov-00						2460		581	581	423
2000	11	2000.11	12-Nov-00						2430		593	593	429
2000	11	2000.11	13-Nov-00						2420		595	595	433
2000	11	2000.11	14-Nov-00						2470		607	607	439
2000	11	2000.11	15-Nov-00						2460		606	606	443
2000	11	2000.11	16-Nov-00						2440		608	608	446
2000	11	2000.11	17-Nov-00						2420		607	607	450
2000	11	2000.11	18-Nov-00						2390		605	605	459
2000	11	2000.11	19-Nov-00						2360		605	605	469
2000	11	2000.11	20-Nov-00						2350		610	610	479
2000	11	2000.11	21-Nov-00						2360		604	604	489
2000	11	2000.11	22-Nov-00						2390		585	585	497
2000	11	2000.11	23-Nov-00						2380		587	587	506
2000	11	2000.11	24-Nov-00						2370		594	594	516
2000	11	2000.11	25-Nov-00						2370		602	602	526
2000	11	2000.11	26-Nov-00						2360		590	590	536
2000	11	2000.11	27-Nov-00						2390		596	596	546

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			Mean uS/cm	Max uS/cm	Min uS/cm								
2000	11	2000.11	28-Nov-00						2410		604	604	555
2000	11	2000.11	29-Nov-00						2400		609	609	563
2000	11	2000.11	30-Nov-00						2410		604	604	569
2000	12	2000.12	1-Dec-00						2400		610	610	575
2000	12	2000.12	2-Dec-00						2390		621	621	581
2000	12	2000.12	3-Dec-00						2370		627	627	588
2000	12	2000.12	4-Dec-00						2360		654	654	594
2000	12	2000.12	5-Dec-00						2330		680	680	600
2000	12	2000.12	6-Dec-00						2280		673	673	604
2000	12	2000.12	7-Dec-00						2310		671	671	608
2000	12	2000.12	8-Dec-00						2290		672	672	611
2000	12	2000.12	9-Dec-00						2290		683	683	615
2000	12	2000.12	10-Dec-00						2280		683	683	619
2000	12	2000.12	11-Dec-00						2260		691	691	623
2000	12	2000.12	12-Dec-00						2230		693	693	626
2000	12	2000.12	13-Dec-00						2240		695	695	629
2000	12	2000.12	14-Dec-00						2230		690	690	632
2000	12	2000.12	15-Dec-00						2230		675	675	634
2000	12	2000.12	16-Dec-00						2230		681	681	637
2000	12	2000.12	17-Dec-00						2200		693	693	640
2000	12	2000.12	18-Dec-00						2190		703	703	643
2000	12	2000.12	19-Dec-00						2180		698	698	646
2000	12	2000.12	20-Dec-00						2180		699	699	649
2000	12	2000.12	21-Dec-00						2210		700	700	652
2000	12	2000.12	22-Dec-00						2230		692	692	656
2000	12	2000.12	23-Dec-00						2210		688	688	659
2000	12	2000.12	24-Dec-00						2190		698	698	663
2000	12	2000.12	25-Dec-00						2170		711	711	666
2000	12	2000.12	26-Dec-00						2170		715	715	670
2000	12	2000.12	27-Dec-00						2180		706	706	674
2000	12	2000.12	28-Dec-00						2170		700	700	677
2000	12	2000.12	29-Dec-00						2150		699	699	680
2000	12	2000.12	30-Dec-00						2130		712	712	684
2000	12	2000.12	31-Dec-00						2100		723	723	688
2001	1	2001.01	1-Jan-01						2090		720	720	691
2001	1	2001.01	2-Jan-01						2070		720	720	694
2001	1	2001.01	3-Jan-01						2040		723	723	696
2001	1	2001.01	4-Jan-01						2020		782	782	700
2001	1	2001.01	5-Jan-01						2020		785	785	703
2001	1	2001.01	6-Jan-01						2000		794	794	707
2001	1	2001.01	7-Jan-01						2010		813	813	712
2001	1	2001.01	8-Jan-01						2100		795	795	716
2001	1	2001.01	9-Jan-01						2280		741	741	718
2001	1	2001.01	10-Jan-01						2300		749	749	720
2001	1	2001.01	11-Jan-01						2580		705	705	720
2001	1	2001.01	12-Jan-01						2830		629	629	718
2001	1	2001.01	13-Jan-01						2980		621	621	716
2001	1	2001.01	14-Jan-01						3050		618	618	714
2001	1	2001.01	15-Jan-01						3030		641	641	712
2001	1	2001.01	16-Jan-01						2940		655	655	711
2001	1	2001.01	17-Jan-01						2710		710	710	711
2001	1	2001.01	18-Jan-01						2550		772	772	714
2001	1	2001.01	19-Jan-01						2490		789	789	717
2001	1	2001.01	20-Jan-01						2420		807	807	720
2001	1	2001.01	21-Jan-01						2380		802	802	724
2001	1	2001.01	22-Jan-01						2300		815	815	728
2001	1	2001.01	23-Jan-01						2260		858	858	734
2001	1	2001.01	24-Jan-01						2260		868	868	739
2001	1	2001.01	25-Jan-01						2280		861	861	744
2001	1	2001.01	26-Jan-01						2440		826	826	748
2001	1	2001.01	27-Jan-01						2680		772	772	750
2001	1	2001.01	28-Jan-01						2810		732	732	751
2001	1	2001.01	29-Jan-01						2720		717	717	751
2001	1	2001.01	30-Jan-01						2580		724	724	751
2001	1	2001.01	31-Jan-01						2470		770	770	753
2001	2	2001.02	1-Feb-01						2380		828	828	757
2001	2	2001.02	2-Feb-01						2310		830	830	760
2001	2	2001.02	3-Feb-01						2240		856	856	763
2001	2	2001.02	4-Feb-01						2180		885	885	766
2001	2	2001.02	5-Feb-01						2160		913	913	770
2001	2	2001.02	6-Feb-01						2150		914	914	773
2001	2	2001.02	7-Feb-01						2130		913	913	777
2001	2	2001.02	8-Feb-01						2100		907	907	783
2001	2	2001.02	9-Feb-01						2090		942	942	789
2001	2	2001.02	10-Feb-01						2110		925	925	797
2001	2	2001.02	11-Feb-01						2250		876	876	805

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			Mean uS/cm	Max uS/cm	Min uS/cm								
2001	2	2001.02	12-Feb-01						2470		781	781	810
2001	2	2001.02	13-Feb-01						2750		702	702	813
2001	2	2001.02	14-Feb-01						2900		670	670	814
2001	2	2001.02	15-Feb-01						2900		666	666	814
2001	2	2001.02	16-Feb-01						2980		657	657	813
2001	2	2001.02	17-Feb-01						2920		651	651	809
2001	2	2001.02	18-Feb-01						2820		663	663	804
2001	2	2001.02	19-Feb-01						2780		690	690	800
2001	2	2001.02	20-Feb-01						2760		690	690	797
2001	2	2001.02	21-Feb-01						2700		721	721	794
2001	2	2001.02	22-Feb-01						3090		620	620	786
2001	2	2001.02	23-Feb-01						3850		512	512	774
2001	2	2001.02	24-Feb-01						4960		414	414	759
2001	2	2001.02	25-Feb-01						5480		419	419	745
2001	2	2001.02	26-Feb-01						5980		416	416	733
2001	2	2001.02	27-Feb-01						5750		432	432	723
2001	2	2001.02	28-Feb-01						5390		456	456	715
2001	3	2001.03	1-Mar-01						4940		499	499	707
2001	3	2001.03	2-Mar-01						4330		569	569	701
2001	3	2001.03	3-Mar-01						3790		634	634	694
2001	3	2001.03	4-Mar-01						3500		653	653	688
2001	3	2001.03	5-Mar-01						3950		659	659	682
2001	3	2001.03	6-Mar-01						5320		562	562	671
2001	3	2001.03	7-Mar-01						5900		508	508	657
2001	3	2001.03	8-Mar-01						5520		480	480	643
2001	3	2001.03	9-Mar-01						5660		466	466	628
2001	3	2001.03	10-Mar-01						5630		550	550	616
2001	3	2001.03	11-Mar-01						5060		656	656	607
2001	3	2001.03	12-Mar-01						4370		758	758	601
2001	3	2001.03	13-Mar-01						3900		813	813	599
2001	3	2001.03	14-Mar-01						3530		865	865	602
2001	3	2001.03	15-Mar-01						3140		951	951	610
2001	3	2001.03	16-Mar-01						2920		1011	1011	621
2001	3	2001.03	17-Mar-01						2780		1053	1053	634
2001	3	2001.03	18-Mar-01						2630		1094	1094	649
2001	3	2001.03	19-Mar-01						2550		1113	1113	664
2001	3	2001.03	20-Mar-01						2480		1085	1085	678
2001	3	2001.03	21-Mar-01						2450		1032	1032	690
2001	3	2001.03	22-Mar-01						2320		1063	1063	702
2001	3	2001.03	23-Mar-01						2280		1085	1085	714
2001	3	2001.03	24-Mar-01						2220		1065	1065	729
2001	3	2001.03	25-Mar-01						2250		1019	1019	746
2001	3	2001.03	26-Mar-01						2210		982	982	765
2001	3	2001.03	27-Mar-01						2160		977	977	784
2001	3	2001.03	28-Mar-01						2140		924	924	800
2001	3	2001.03	29-Mar-01						2140		910	910	816
2001	3	2001.03	30-Mar-01						2150		909	909	832
2001	3	2001.03	31-Mar-01						2120		902	902	845
2001	4	2001.04	1-Apr-01						2070		935	935	857
2001	4	2001.04	2-Apr-01						2170		907	907	866
2001	4	2001.04	3-Apr-01						2160		870	870	873
2001	4	2001.04	4-Apr-01						2040		852	852	880
2001	4	2001.04	5-Apr-01						1980		821	821	889
2001	4	2001.04	6-Apr-01						2080		787	787	898
2001	4	2001.04	7-Apr-01						2330		717	717	906
2001	4	2001.04	8-Apr-01						2610		661	661	912
2001	4	2001.04	9-Apr-01						2650		658	658	916
2001	4	2001.04	10-Apr-01						2580		669	669	916
2001	4	2001.04	11-Apr-01						2480		670	670	913
2001	4	2001.04	12-Apr-01						2430		650	650	908
2001	4	2001.04	13-Apr-01						2430		639	639	900
2001	4	2001.04	14-Apr-01						2420		635	635	890
2001	4	2001.04	15-Apr-01						2420		646	646	878
2001	4	2001.04	16-Apr-01						2490		648	648	864
2001	4	2001.04	17-Apr-01						2280		666	666	850
2001	4	2001.04	18-Apr-01						2130		680	680	835
2001	4	2001.04	19-Apr-01						2200		688	688	822
2001	4	2001.04	20-Apr-01						3450		432	432	802
2001	4	2001.04	21-Apr-01						4410		374	374	779
2001	4	2001.04	22-Apr-01						4530		344	344	755
2001	4	2001.04	23-Apr-01						4440		325	325	730
2001	4	2001.04	24-Apr-01						4420		339	339	707
2001	4	2001.04	25-Apr-01						4310		318	318	685
2001	4	2001.04	26-Apr-01						4100		324	324	663
2001	4	2001.04	27-Apr-01						4130		315	315	643
2001	4	2001.04	28-Apr-01						4200		303	303	623

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			Mean uS/cm	Max uS/cm	Min uS/cm								
2001	4	2001.04	29-Apr-01						4210		303	303	603
2001	4	2001.04	30-Apr-01						4090		313	313	583
2001	5	2001.05	1-May-01						4160		308	308	562
2001	5	2001.05	2-May-01						4180		281	281	541
2001	5	2001.05	3-May-01						4230		279	279	522
2001	5	2001.05	4-May-01						4110		278	278	502
2001	5	2001.05	5-May-01						4050		276	276	484
2001	5	2001.05	6-May-01						4110		288	288	468
2001	5	2001.05	7-May-01						4110		298	298	454
2001	5	2001.05	8-May-01						4160		306	306	442
2001	5	2001.05	9-May-01						4130		296	296	430
2001	5	2001.05	10-May-01						4010		289	289	417
2001	5	2001.05	11-May-01						4170		272	272	404
2001	5	2001.05	12-May-01						4190		249	249	390
2001	5	2001.05	13-May-01						4320		246	246	377
2001	5	2001.05	14-May-01						4520		267	267	365
2001	5	2001.05	15-May-01						4460		267	267	352
2001	5	2001.05	16-May-01						4510		282	282	340
2001	5	2001.05	17-May-01						4500		272	272	327
2001	5	2001.05	18-May-01						4560		272	272	313
2001	5	2001.05	19-May-01						4310		290	290	300
2001	5	2001.05	20-May-01						3870		319	319	296
2001	5	2001.05	21-May-01						3320		426	426	298
2001	5	2001.05	22-May-01						2740		500	500	303
2001	5	2001.05	23-May-01						2360		552	552	311
2001	5	2001.05	24-May-01						2140		609	609	320
2001	5	2001.05	25-May-01						2050		647	647	331
2001	5	2001.05	26-May-01						2010		664	664	342
2001	5	2001.05	27-May-01						2010		623	623	353
2001	5	2001.05	28-May-01						2070		606	606	363
2001	5	2001.05	29-May-01						2100		579	579	372
2001	5	2001.05	30-May-01						1980		568	568	380
2001	5	2001.05	31-May-01						1910		589	589	390
2001	6	2001.06	1-Jun-01						1920		577	577	400
2001	6	2001.06	2-Jun-01						1830		604	604	410
2001	6	2001.06	3-Jun-01						1780		620	620	422
2001	6	2001.06	4-Jun-01						1810		628	628	434
2001	6	2001.06	5-Jun-01						1780		626	626	445
2001	6	2001.06	6-Jun-01						1710		633	633	456
2001	6	2001.06	7-Jun-01						1660		642	642	467
2001	6	2001.06	8-Jun-01						1580		636	636	478
2001	6	2001.06	9-Jun-01						1570		660	660	491
2001	6	2001.06	10-Jun-01						1580		643	643	503
2001	6	2001.06	11-Jun-01						1550		675	675	517
2001	6	2001.06	12-Jun-01						1540		671	671	532
2001	6	2001.06	13-Jun-01						1530		656	656	545
2001	6	2001.06	14-Jun-01						1510		691	691	559
2001	6	2001.06	15-Jun-01						1470		675	675	572
2001	6	2001.06	16-Jun-01						1500		622	622	583
2001	6	2001.06	17-Jun-01						1540		573	573	593
2001	6	2001.06	18-Jun-01						1520		606	606	604
2001	6	2001.06	19-Jun-01						1390		660	660	615
2001	6	2001.06	20-Jun-01						1320		681	681	624
2001	6	2001.06	21-Jun-01						1340		706	706	631
2001	6	2001.06	22-Jun-01						1340		708	708	636
2001	6	2001.06	23-Jun-01						1310		660	660	638
2001	6	2001.06	24-Jun-01						1400		661	661	638
2001	6	2001.06	25-Jun-01						1520		637	637	637
2001	6	2001.06	26-Jun-01						1520		598	598	636
2001	6	2001.06	27-Jun-01						1480		587	587	636
2001	6	2001.06	28-Jun-01						1470		599	599	636
2001	6	2001.06	29-Jun-01						1510		618	618	638
2001	6	2001.06	30-Jun-01						1490		620	620	639
2001	7	2001.07	1-Jul-01						1490		573	573	639
2001	7	2001.07	2-Jul-01						1440		616	616	639
2001	7	2001.07	3-Jul-01						1390		656	656	641
2001	7	2001.07	4-Jul-01						1350		658	658	642
2001	7	2001.07	5-Jul-01						1400		630	630	642
2001	7	2001.07	6-Jul-01						1400		619	619	641
2001	7	2001.07	7-Jul-01						1360		645	645	641
2001	7	2001.07	8-Jul-01						1410		650	650	642
2001	7	2001.07	9-Jul-01						1450		637	637	641
2001	7	2001.07	10-Jul-01						1440		614	614	640
2001	7	2001.07	11-Jul-01						1350		624	624	638
2001	7	2001.07	12-Jul-01						1290		618	618	637
2001	7	2001.07	13-Jul-01						1370		648	648	636

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
2001	7	2001.07	14-Jul-01						1400		643	643	635
2001	7	2001.07	15-Jul-01						1480		619	619	633
2001	7	2001.07	16-Jul-01						1600		583	583	632
2001	7	2001.07	17-Jul-01						1550		580	580	632
2001	7	2001.07	18-Jul-01						1460		587	587	631
2001	7	2001.07	19-Jul-01						1360		626	626	630
2001	7	2001.07	20-Jul-01						1370		645	645	629
2001	7	2001.07	21-Jul-01						1350		630	630	626
2001	7	2001.07	22-Jul-01						1410		612	612	623
2001	7	2001.07	23-Jul-01						1470		643	643	623
2001	7	2001.07	24-Jul-01						1370		693	693	624
2001	7	2001.07	25-Jul-01						1300		637	637	624
2001	7	2001.07	26-Jul-01						1350		627	627	625
2001	7	2001.07	27-Jul-01						1330		621	621	626
2001	7	2001.07	28-Jul-01						1300		616	616	626
2001	7	2001.07	29-Jul-01						1360		622	622	626
2001	7	2001.07	30-Jul-01						1440		607	607	626
2001	7	2001.07	31-Jul-01						1360		645	645	628
2001	8	2001.08	1-Aug-01						1340		643	643	629
2001	8	2001.08	2-Aug-01						1220		660	660	629
2001	8	2001.08	3-Aug-01						1240		678	678	630
2001	8	2001.08	4-Aug-01						1260		661	661	631
2001	8	2001.08	5-Aug-01						1310		639	639	632
2001	8	2001.08	6-Aug-01						1390		634	634	631
2001	8	2001.08	7-Aug-01						1350		634	634	631
2001	8	2001.08	8-Aug-01						1260		645	645	631
2001	8	2001.08	9-Aug-01						1180		650	650	632
2001	8	2001.08	10-Aug-01						1150		660	660	634
2001	8	2001.08	11-Aug-01						1220		615	615	633
2001	8	2001.08	12-Aug-01						1290		605	605	632
2001	8	2001.08	13-Aug-01						1340		601	601	631
2001	8	2001.08	14-Aug-01						1290		605	605	630
2001	8	2001.08	15-Aug-01						1290		627	627	632
2001	8	2001.08	16-Aug-01						1280		639	639	634
2001	8	2001.08	17-Aug-01						1260		649	649	636
2001	8	2001.08	18-Aug-01						1330		674	674	637
2001	8	2001.08	19-Aug-01						1450		679	679	638
2001	8	2001.08	20-Aug-01						1470		654	654	639
2001	8	2001.08	21-Aug-01						1390		667	667	641
2001	8	2001.08	22-Aug-01						1340		650	650	641
2001	8	2001.08	23-Aug-01						1370		658	658	640
2001	8	2001.08	24-Aug-01						1340		684	684	642
2001	8	2001.08	25-Aug-01						1360		669	669	643
2001	8	2001.08	26-Aug-01						1480		628	628	643
2001	8	2001.08	27-Aug-01						1530		641	641	644
2001	8	2001.08	28-Aug-01						1470		673	673	646
2001	8	2001.08	29-Aug-01						1410		668	668	648
2001	8	2001.08	30-Aug-01						1330		679	679	649
2001	8	2001.08	31-Aug-01						1280		708	708	651
2001	9	2001.09	1-Sep-01						1230		695	695	652
2001	9	2001.09	2-Sep-01						1360		708	708	653
2001	9	2001.09	3-Sep-01						1570		694	694	654
2001	9	2001.09	4-Sep-01						1450		659	659	655
2001	9	2001.09	5-Sep-01						1280		697	697	657
2001	9	2001.09	6-Sep-01						1240		664	664	658
2001	9	2001.09	7-Sep-01						1330		641	641	658
2001	9	2001.09	8-Sep-01						1370		641	641	658
2001	9	2001.09	9-Sep-01						1430		597	597	656
2001	9	2001.09	10-Sep-01						1450		610	610	655
2001	9	2001.09	11-Sep-01						1390		612	612	656
2001	9	2001.09	12-Sep-01						1330		620	620	656
2001	9	2001.09	13-Sep-01						1270		654	654	658
2001	9	2001.09	14-Sep-01						1280		641	641	658
2001	9	2001.09	15-Sep-01						1350		615	615	658
2001	9	2001.09	16-Sep-01						1390		583	583	655
2001	9	2001.09	17-Sep-01						1400		587	587	653
2001	9	2001.09	18-Sep-01						1400		574	574	649
2001	9	2001.09	19-Sep-01						1330		558	558	646
2001	9	2001.09	20-Sep-01						1310		569	569	643
2001	9	2001.09	21-Sep-01						1370		554	554	639
2001	9	2001.09	22-Sep-01						1350		561	561	636
2001	9	2001.09	23-Sep-01						1370		550	550	632
2001	9	2001.09	24-Sep-01						1430		580	580	629
2001	9	2001.09	25-Sep-01						1420		574	574	627
2001	9	2001.09	26-Sep-01						1420		579	579	625
2001	9	2001.09	27-Sep-01						1400		600	600	622

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
2001	9	2001.09	28-Sep-01						1410		589	589	620
2001	9	2001.09	29-Sep-01						1450		555	555	616
2001	9	2001.09	30-Sep-01						1500		549	549	610
2001	10	2001.10	1-Oct-01						1510		550	550	606
2001	10	2001.10	2-Oct-01						1420		576	576	601
2001	10	2001.10	3-Oct-01						1330		595	595	598
2001	10	2001.10	4-Oct-01						1300		619	619	596
2001	10	2001.10	5-Oct-01						1340		627	627	594
2001	10	2001.10	6-Oct-01						1410		608	608	592
2001	10	2001.10	7-Oct-01						1540		579	579	590
2001	10	2001.10	8-Oct-01						1640		552	552	587
2001	10	2001.10	9-Oct-01						1580		581	581	587
2001	10	2001.10	10-Oct-01						1570		573	573	585
2001	10	2001.10	11-Oct-01						1520		613	613	586
2001	10	2001.10	12-Oct-01						1480		606	606	585
2001	10	2001.10	13-Oct-01						1500		598	598	583
2001	10	2001.10	14-Oct-01						1550		596	596	582
2001	10	2001.10	15-Oct-01						1540		634	634	582
2001	10	2001.10	16-Oct-01						1510		659	659	585
2001	10	2001.10	17-Oct-01						1510		622	622	586
2001	10	2001.10	18-Oct-01						1580		623	623	588
2001	10	2001.10	19-Oct-01						1710		610	610	589
2001	10	2001.10	20-Oct-01						1840		491	491	587
2001	10	2001.10	21-Oct-01						2150		428	428	583
2001	10	2001.10	22-Oct-01						2780		352	352	576
2001	10	2001.10	23-Oct-01						2840		344	344	569
2001	10	2001.10	24-Oct-01						2900		351	351	561
2001	10	2001.10	25-Oct-01						3010		338	338	553
2001	10	2001.10	26-Oct-01						3180		327	327	545
2001	10	2001.10	27-Oct-01						3150		327	327	536
2001	10	2001.10	28-Oct-01						3260		321	321	527
2001	10	2001.10	29-Oct-01						3110		341	341	520
2001	10	2001.10	30-Oct-01						2800		401	401	515
2001	10	2001.10	31-Oct-01						2520		426	426	511
2001	11	2001.11	1-Nov-01						2420		439	439	506
2001	11	2001.11	2-Nov-01						2430		451	451	501
2001	11	2001.11	3-Nov-01						2340		477	477	497
2001	11	2001.11	4-Nov-01						2210		528	528	493
2001	11	2001.11	5-Nov-01						2150		531	531	491
2001	11	2001.11	6-Nov-01						2100		553	553	490
2001	11	2001.11	7-Nov-01						2050		576	576	491
2001	11	2001.11	8-Nov-01						2020		590	590	491
2001	11	2001.11	9-Nov-01						2020		594	594	492
2001	11	2001.11	10-Nov-01						2020		588	588	491
2001	11	2001.11	11-Nov-01						2100		599	599	491
2001	11	2001.11	12-Nov-01						2160		598	598	491
2001	11	2001.11	13-Nov-01						2210		590	590	490
2001	11	2001.11	14-Nov-01						2180		606	606	489
2001	11	2001.11	15-Nov-01						2170		625	625	488
2001	11	2001.11	16-Nov-01						2170		633	633	489
2001	11	2001.11	17-Nov-01						2180		642	642	489
2001	11	2001.11	18-Nov-01						2140		658	658	491
2001	11	2001.11	19-Nov-01						2120		689	689	497
2001	11	2001.11	20-Nov-01						2070		699	699	506
2001	11	2001.11	21-Nov-01						2030		714	714	519
2001	11	2001.11	22-Nov-01						1990		714	714	531
2001	11	2001.11	23-Nov-01						1950		707	707	543
2001	11	2001.11	24-Nov-01						1930		721	721	556
2001	11	2001.11	25-Nov-01						1990		704	704	568
2001	11	2001.11	26-Nov-01						1940		711	711	581
2001	11	2001.11	27-Nov-01						1930		707	707	594
2001	11	2001.11	28-Nov-01						1920		729	729	607
2001	11	2001.11	29-Nov-01						1960		726	726	618
2001	11	2001.11	30-Nov-01						1980		704	704	627
2001	12	2001.12	1-Dec-01						1930		741	741	637
2001	12	2001.12	2-Dec-01						1970		731	731	646
2001	12	2001.12	3-Dec-01						2090		677	677	653
2001	12	2001.12	4-Dec-01						2060		699	699	659
2001	12	2001.12	5-Dec-01						2050		738	738	665
2001	12	2001.12	6-Dec-01						2070		717	717	671
2001	12	2001.12	7-Dec-01						2100		718	718	676
2001	12	2001.12	8-Dec-01						2090		722	722	680
2001	12	2001.12	9-Dec-01						2050		708	708	684
2001	12	2001.12	10-Dec-01						1980		731	731	689
2001	12	2001.12	11-Dec-01						1950		746	746	694
2001	12	2001.12	12-Dec-01						1930		762	762	699

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
2001	12	2001.12	13-Dec-01						1910		774	774	705
2001	12	2001.12	14-Dec-01						1870		761	761	710
2001	12	2001.12	15-Dec-01						1860		754	754	715
2001	12	2001.12	16-Dec-01						1800		815	815	721
2001	12	2001.12	17-Dec-01						1750		829	829	727
2001	12	2001.12	18-Dec-01						1750		797	797	732
2001	12	2001.12	19-Dec-01						1730		833	833	736
2001	12	2001.12	20-Dec-01						1740		835	835	741
2001	12	2001.12	21-Dec-01						1870		775	775	743
2001	12	2001.12	22-Dec-01						1950		752	752	744
2001	12	2001.12	23-Dec-01						2020		731	731	745
2001	12	2001.12	24-Dec-01						1940		748	748	746
2001	12	2001.12	25-Dec-01						1880		765	765	748
2001	12	2001.12	26-Dec-01						1830		767	767	750
2001	12	2001.12	27-Dec-01						1790		816	816	753
2001	12	2001.12	28-Dec-01						1800		804	804	756
2001	12	2001.12	29-Dec-01						2080		729	729	756
2001	12	2001.12	30-Dec-01						3190		562	562	751
2001	12	2001.12	31-Dec-01						4940		396	396	740
2002	1	2002.01	1-Jan-02						4590		362	362	727
2002	1	2002.01	2-Jan-02						4350		327	327	716
2002	1	2002.01	3-Jan-02						4270		355	355	704
2002	1	2002.01	4-Jan-02						5960		325	325	691
2002	1	2002.01	5-Jan-02						5070		379	379	679
2002	1	2002.01	6-Jan-02						4220		377	377	668
2002	1	2002.01	7-Jan-02						3880		462	462	659
2002	1	2002.01	8-Jan-02						3370		572	572	655
2002	1	2002.01	9-Jan-02						2970		636	636	652
2002	1	2002.01	10-Jan-02						2750		676	676	649
2002	1	2002.01	11-Jan-02						2590		715	715	648
2002	1	2002.01	12-Jan-02						2460		738	738	646
2002	1	2002.01	13-Jan-02						2340		773	773	647
2002	1	2002.01	14-Jan-02						2240		801	801	648
2002	1	2002.01	15-Jan-02						2160		820	820	649
2002	1	2002.01	16-Jan-02						2090		829	829	649
2002	1	2002.01	17-Jan-02						2020		855	855	651
2002	1	2002.01	18-Jan-02						1960		862	862	651
2002	1	2002.01	19-Jan-02						1910		896	896	654
2002	1	2002.01	20-Jan-02						1870		907	907	658
2002	1	2002.01	21-Jan-02						1830		938	938	664
2002	1	2002.01	22-Jan-02						1810		916	916	670
2002	1	2002.01	23-Jan-02						1800		918	918	676
2002	1	2002.01	24-Jan-02						1770		948	948	682
2002	1	2002.01	25-Jan-02						1760		924	924	687
2002	1	2002.01	26-Jan-02						1740		948	948	692
2002	1	2002.01	27-Jan-02						1740		895	895	695
2002	1	2002.01	28-Jan-02						1730		913	913	701
2002	1	2002.01	29-Jan-02						1730		883	883	712
2002	1	2002.01	30-Jan-02						1770		871	871	727
2002	1	2002.01	31-Jan-02						1760		925	925	746
2002	2	2002.02	1-Feb-02						1750		882	882	765
2002	2	2002.02	2-Feb-02						1740		902	902	783
2002	2	2002.02	3-Feb-02						1720		896	896	802
2002	2	2002.02	4-Feb-02						1700		922	922	820
2002	2	2002.02	5-Feb-02						1730		924	924	838
2002	2	2002.02	6-Feb-02						1790		887	887	852
2002	2	2002.02	7-Feb-02						1900		868	868	862
2002	2	2002.02	8-Feb-02						1940		816	816	868
2002	2	2002.02	9-Feb-02						1920		832	832	873
2002	2	2002.02	10-Feb-02						1920		850	850	878
2002	2	2002.02	11-Feb-02						1940		872	872	882
2002	2	2002.02	12-Feb-02						1950		875	875	886
2002	2	2002.02	13-Feb-02						1940		874	874	888
2002	2	2002.02	14-Feb-02						1900		876	876	890
2002	2	2002.02	15-Feb-02						1880		888	888	892
2002	2	2002.02	16-Feb-02						1880		917	917	894
2002	2	2002.02	17-Feb-02						1900		912	912	896
2002	2	2002.02	18-Feb-02						1940		876	876	895
2002	2	2002.02	19-Feb-02						1940		883	883	894
2002	2	2002.02	20-Feb-02						1960		885	885	893
2002	2	2002.02	21-Feb-02						2020		860	860	891
2002	2	2002.02	22-Feb-02						2020		839	839	888
2002	2	2002.02	23-Feb-02						2000		869	869	885
2002	2	2002.02	24-Feb-02						1980		898	898	885
2002	2	2002.02	25-Feb-02						1970		927	927	884
2002	2	2002.02	26-Feb-02						1970		932	932	885

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
2002	2	2002.02	27-Feb-02						1930		945	945	886
2002	2	2002.02	28-Feb-02						1900		963	963	889
2002	3	2002.03	1-Mar-02						1870		969	969	892
2002	3	2002.03	2-Mar-02						1890		981	981	894
2002	3	2002.03	3-Mar-02						1910		973	973	897
2002	3	2002.03	4-Mar-02						1960		969	969	899
2002	3	2002.03	5-Mar-02						1960		988	988	902
2002	3	2002.03	6-Mar-02						2030		988	988	905
2002	3	2002.03	7-Mar-02						2120		978	978	906
2002	3	2002.03	8-Mar-02						2160		939	939	908
2002	3	2002.03	9-Mar-02						2170		944	944	911
2002	3	2002.03	10-Mar-02						2290		894	894	913
2002	3	2002.03	11-Mar-02						2390		857	857	914
2002	3	2002.03	12-Mar-02						2330		886	886	915
2002	3	2002.03	13-Mar-02						2290		863	863	915
2002	3	2002.03	14-Mar-02						2160		919	919	916
2002	3	2002.03	15-Mar-02						2110		929	929	918
2002	3	2002.03	16-Mar-02						2080		946	946	921
2002	3	2002.03	17-Mar-02						2150		918	918	922
2002	3	2002.03	18-Mar-02						2260		847	847	919
2002	3	2002.03	19-Mar-02						2140		887	887	918
2002	3	2002.03	20-Mar-02						2110		907	907	919
2002	3	2002.03	21-Mar-02						2190		868	868	919
2002	3	2002.03	22-Mar-02						2170		891	891	919
2002	3	2002.03	23-Mar-02						2250		873	873	920
2002	3	2002.03	24-Mar-02						2400		871	871	921
2002	3	2002.03	25-Mar-02						2360		873	873	921
2002	3	2002.03	26-Mar-02						2270		899	899	921
2002	3	2002.03	27-Mar-02						2120		884	884	919
2002	3	2002.03	28-Mar-02						2020		921	921	919
2002	3	2002.03	29-Mar-02						1990		914	914	918
2002	3	2002.03	30-Mar-02						1960		938	938	917
2002	3	2002.03	31-Mar-02						2030		906	906	915
2002	4	2002.04	1-Apr-02						1990		930	930	913
2002	4	2002.04	2-Apr-02						1810		892	892	911
2002	4	2002.04	3-Apr-02						1710		926	926	909
2002	4	2002.04	4-Apr-02						1660		902	902	906
2002	4	2002.04	5-Apr-02						1670		844	844	902
2002	4	2002.04	6-Apr-02						1710		825	825	896
2002	4	2002.04	7-Apr-02						1810		787	787	891
2002	4	2002.04	8-Apr-02						1930		762	762	885
2002	4	2002.04	9-Apr-02						1820		739	739	880
2002	4	2002.04	10-Apr-02						1800		709	709	875
2002	4	2002.04	11-Apr-02						1750		688	688	869
2002	4	2002.04	12-Apr-02						1750		658	658	862
2002	4	2002.04	13-Apr-02						1790		629	629	852
2002	4	2002.04	14-Apr-02						2200		489	489	837
2002	4	2002.04	15-Apr-02						2840		371	371	818
2002	4	2002.04	16-Apr-02						2960		353	353	799
2002	4	2002.04	17-Apr-02						2990		326	326	782
2002	4	2002.04	18-Apr-02						3130		312	312	763
2002	4	2002.04	19-Apr-02						3200		302	302	743
2002	4	2002.04	20-Apr-02						3310		305	305	724
2002	4	2002.04	21-Apr-02						3370		302	302	704
2002	4	2002.04	22-Apr-02						3430		306	306	685
2002	4	2002.04	23-Apr-02						3250		301	301	666
2002	4	2002.04	24-Apr-02						3220		288	288	647
2002	4	2002.04	25-Apr-02						3310		285	285	626
2002	4	2002.04	26-Apr-02						3410		287	287	607
2002	4	2002.04	27-Apr-02						3450		285	285	585
2002	4	2002.04	28-Apr-02						3500		279	279	564
2002	4	2002.04	29-Apr-02						3610		273	273	542
2002	4	2002.04	30-Apr-02						3570		266	266	521
2002	5	2002.05	1-May-02						3390		274	274	499
2002	5	2002.05	2-May-02						3310		289	289	479
2002	5	2002.05	3-May-02						3360		283	283	457
2002	5	2002.05	4-May-02						3390		275	275	436
2002	5	2002.05	5-May-02						3430		278	278	418
2002	5	2002.05	6-May-02						3500		303	303	400
2002	5	2002.05	7-May-02						3460		299	299	384
2002	5	2002.05	8-May-02						3360		301	301	369
2002	5	2002.05	9-May-02						3240		288	288	353
2002	5	2002.05	10-May-02						3170		301	301	340
2002	5	2002.05	11-May-02						3290		308	308	327
2002	5	2002.05	12-May-02						3360		309	309	316
2002	5	2002.05	13-May-02						3400		304	304	305

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			Mean uS/cm	Max uS/cm	Min uS/cm								
2002	5	2002.05	14-May-02						3210		312	312	299
2002	5	2002.05	15-May-02						2930		333	333	298
2002	5	2002.05	16-May-02						2680		371	371	298
2002	5	2002.05	17-May-02						2450		398	398	301
2002	5	2002.05	18-May-02						2360		443	443	305
2002	5	2002.05	19-May-02						2310		439	439	310
2002	5	2002.05	20-May-02						2340		424	424	313
2002	5	2002.05	21-May-02						2380		437	437	318
2002	5	2002.05	22-May-02						2310		423	423	322
2002	5	2002.05	23-May-02						2140		446	446	327
2002	5	2002.05	24-May-02						2120		441	441	332
2002	5	2002.05	25-May-02						2030		439	439	337
2002	5	2002.05	26-May-02						2100		468	468	343
2002	5	2002.05	27-May-02						2180		488	488	350
2002	5	2002.05	28-May-02						2080		484	484	357
2002	5	2002.05	29-May-02						1950		504	504	364
2002	5	2002.05	30-May-02						1910		528	528	373
2002	5	2002.05	31-May-02						1760		578	578	383
2002	6	2002.06	1-Jun-02						1690		615	615	394
2002	6	2002.06	2-Jun-02						1730		614	614	405
2002	6	2002.06	3-Jun-02						1760		627	627	417
2002	6	2002.06	4-Jun-02						1660		650	650	429
2002	6	2002.06	5-Jun-02						1530		697	697	442
2002	6	2002.06	6-Jun-02						1460		672	672	455
2002	6	2002.06	7-Jun-02						1430		664	664	467
2002	6	2002.06	8-Jun-02						1380		671	671	480
2002	6	2002.06	9-Jun-02						1420		650	650	491
2002	6	2002.06	10-Jun-02						1470		629	629	502
2002	6	2002.06	11-Jun-02						1360		681	681	514
2002	6	2002.06	12-Jun-02						1290		732	732	529
2002	6	2002.06	13-Jun-02						1280		718	718	542
2002	6	2002.06	14-Jun-02						1260		732	732	555
2002	6	2002.06	15-Jun-02						1360		684	684	566
2002	6	2002.06	16-Jun-02						1430		631	631	574
2002	6	2002.06	17-Jun-02						1420		664	664	581
2002	6	2002.06	18-Jun-02						1340		693	693	589
2002	6	2002.06	19-Jun-02						1270		728	728	600
2002	6	2002.06	20-Jun-02						1260		743	743	610
2002	6	2002.06	21-Jun-02						1290		739	739	620
2002	6	2002.06	22-Jun-02						1290		741	741	630
2002	6	2002.06	23-Jun-02						1370		686	686	638
2002	6	2002.06	24-Jun-02						1420		665	665	646
2002	6	2002.06	25-Jun-02						1360		683	683	653
2002	6	2002.06	26-Jun-02						1280		712	712	661
2002	6	2002.06	27-Jun-02						1310		701	701	668
2002	6	2002.06	28-Jun-02						1310		686	686	674
2002	6	2002.06	29-Jun-02						1350		666	666	678
2002	6	2002.06	30-Jun-02						1430		608	608	679
2002	7	2002.07	1-Jul-02						1370		652	652	681
2002	7	2002.07	2-Jul-02						1330		655	655	682
2002	7	2002.07	3-Jul-02						1230		666	666	683
2002	7	2002.07	4-Jul-02						1180		660	660	684
2002	7	2002.07	5-Jul-02						1260		676	676	683
2002	7	2002.07	6-Jul-02						1260		662	662	683
2002	7	2002.07	7-Jul-02						1320		650	650	682
2002	7	2002.07	8-Jul-02						1420		613	613	680
2002	7	2002.07	9-Jul-02						1310		600	600	679
2002	7	2002.07	10-Jul-02						1250		614	614	678
2002	7	2002.07	11-Jul-02						1220		625	625	676
2002	7	2002.07	12-Jul-02						1230		589	589	671
2002	7	2002.07	13-Jul-02						1240		571	571	667
2002	7	2002.07	14-Jul-02						1230		555	555	661
2002	7	2002.07	15-Jul-02						1260		567	567	657
2002	7	2002.07	16-Jul-02						1210		541	541	654
2002	7	2002.07	17-Jul-02						1190		534	534	649
2002	7	2002.07	18-Jul-02						1150		531	531	644
2002	7	2002.07	19-Jul-02						1190		562	562	638
2002	7	2002.07	20-Jul-02						1150		565	565	633
2002	7	2002.07	21-Jul-02						1180		579	579	627
2002	7	2002.07	22-Jul-02						1230		513	513	620
2002	7	2002.07	23-Jul-02						1190		482	482	613
2002	7	2002.07	24-Jul-02						1130		541	541	609
2002	7	2002.07	25-Jul-02						1150		563	563	605
2002	7	2002.07	26-Jul-02						1180		524	524	598
2002	7	2002.07	27-Jul-02						1150		511	511	592
2002	7	2002.07	28-Jul-02						1270		487	487	585

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			Mean uS/cm	Max uS/cm	Min uS/cm								
2002	7	2002.07	29-Jul-02						1280		529	529	581
2002	7	2002.07	30-Jul-02						1150		605	605	581
2002	7	2002.07	31-Jul-02						1140		618	618	580
2002	8	2002.08	1-Aug-02						1140		588	588	577
2002	8	2002.08	2-Aug-02						1160		565	565	574
2002	8	2002.08	3-Aug-02						1180		596	596	572
2002	8	2002.08	4-Aug-02						1140		641	641	571
2002	8	2002.08	5-Aug-02						1210		645	645	570
2002	8	2002.08	6-Aug-02						1140		670	670	571
2002	8	2002.08	7-Aug-02						1050		691	691	573
2002	8	2002.08	8-Aug-02						1010		744	744	578
2002	8	2002.08	9-Aug-02						1040		694	694	581
2002	8	2002.08	10-Aug-02						1050		688	688	583
2002	8	2002.08	11-Aug-02						1090		659	659	585
2002	8	2002.08	12-Aug-02						1150		629	629	587
2002	8	2002.08	13-Aug-02						1090		609	609	589
2002	8	2002.08	14-Aug-02						1020		601	601	590
2002	8	2002.08	15-Aug-02						1050		626	626	593
2002	8	2002.08	16-Aug-02						1060		676	676	598
2002	8	2002.08	17-Aug-02						1060		659	659	602
2002	8	2002.08	18-Aug-02						1180		610	610	604
2002	8	2002.08	19-Aug-02						1230		582	582	604
2002	8	2002.08	20-Aug-02						1130		615	615	605
2002	8	2002.08	21-Aug-02						1100		622	622	609
2002	8	2002.08	22-Aug-02						1060		655	655	615
2002	8	2002.08	23-Aug-02						1070		661	661	619
2002	8	2002.08	24-Aug-02						1090		635	635	621
2002	8	2002.08	25-Aug-02						1250		620	620	624
2002	8	2002.08	26-Aug-02						1270		586	586	627
2002	8	2002.08	27-Aug-02						1180		651	651	632
2002	8	2002.08	28-Aug-02						1150		616	616	635
2002	8	2002.08	29-Aug-02						1080		635	635	636
2002	8	2002.08	30-Aug-02						1080		607	607	636
2002	8	2002.08	31-Aug-02						1100		613	613	637
2002	9	2002.09	1-Sep-02						1180		573	573	637
2002	9	2002.09	2-Sep-02						1220		575	575	636
2002	9	2002.09	3-Sep-02						1160		617	617	635
2002	9	2002.09	4-Sep-02						1020		634	634	635
2002	9	2002.09	5-Sep-02						991		630	630	634
2002	9	2002.09	6-Sep-02						1040		588	588	630
2002	9	2002.09	7-Sep-02						1070		599	599	626
2002	9	2002.09	8-Sep-02						1140		570	570	621
2002	9	2002.09	9-Sep-02						1170		600	600	618
2002	9	2002.09	10-Sep-02						1120		620	620	617
2002	9	2002.09	11-Sep-02						1090		646	646	618
2002	9	2002.09	12-Sep-02						1130		636	636	619
2002	9	2002.09	13-Sep-02						1150		634	634	620
2002	9	2002.09	14-Sep-02						1160		655	655	621
2002	9	2002.09	15-Sep-02						1240		656	656	620
2002	9	2002.09	16-Sep-02						1340		578	578	617
2002	9	2002.09	17-Sep-02						1230		604	604	617
2002	9	2002.09	18-Sep-02						1170		607	607	618
2002	9	2002.09	19-Sep-02						1130		663	663	620
2002	9	2002.09	20-Sep-02						1190		662	662	621
2002	9	2002.09	21-Sep-02						1180		676	676	622
2002	9	2002.09	22-Sep-02						1260		646	646	621
2002	9	2002.09	23-Sep-02						1270		666	666	622
2002	9	2002.09	24-Sep-02						1230		652	652	623
2002	9	2002.09	25-Sep-02						1200		627	627	625
2002	9	2002.09	26-Sep-02						1220		600	600	623
2002	9	2002.09	27-Sep-02						1190		634	634	623
2002	9	2002.09	28-Sep-02						1180		642	642	624
2002	9	2002.09	29-Sep-02						1240		603	603	624
2002	9	2002.09	30-Sep-02						1340		600	600	623
2002	10	2002.10	1-Oct-02						1330	1221	596	596	624
2002	10	2002.10	2-Oct-02						1250	1151	590	590	624
2002	10	2002.10	3-Oct-02						1250	1155	580	580	623
2002	10	2002.10	4-Oct-02						1320	1224	584	584	621
2002	10	2002.10	5-Oct-02						1340	1241	616	616	621
2002	10	2002.10	6-Oct-02						1310	1213	639	639	623
2002	10	2002.10	7-Oct-02						1310	1215	626	626	624
2002	10	2002.10	8-Oct-02						1280	1172	655	655	626
2002	10	2002.10	9-Oct-02						1290	1177	635	635	628
2002	10	2002.10	10-Oct-02						1250	1138	591	591	627
2002	10	2002.10	11-Oct-02						1250	1137	588	588	625
2002	10	2002.10	12-Oct-02						1320	1204	568	568	622

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			Mean uS/cm	Max uS/cm	Min uS/cm								
2002	10	2002.10	13-Oct-02						1430	1306	580	580	621
2002	10	2002.10	14-Oct-02						1480	1348	612	612	619
2002	10	2002.10	15-Oct-02						1440	1320	622	622	618
2002	10	2002.10	16-Oct-02						1420	1307	617	617	619
2002	10	2002.10	17-Oct-02						1350	1236	656	656	621
2002	10	2002.10	18-Oct-02						1570	1444	636	636	622
2002	10	2002.10	19-Oct-02						1840	1692	470	470	616
2002	10	2002.10	20-Oct-02						1990	1829	406	406	607
2002	10	2002.10	21-Oct-02						2060	1886	395	395	598
2002	10	2002.10	22-Oct-02						2050	1879	401	401	590
2002	10	2002.10	23-Oct-02						2250	2063	373	373	580
2002	10	2002.10	24-Oct-02						2410	2205	354	354	570
2002	10	2002.10	25-Oct-02						2560	2345	348	348	561
2002	10	2002.10	26-Oct-02						2590	2367	355	355	552
2002	10	2002.10	27-Oct-02						2510	2289	375	375	544
2002	10	2002.10	28-Oct-02						2330	2126	431	431	537
2002	10	2002.10	29-Oct-02						2190	2003	482	482	533
2002	10	2002.10	30-Oct-02						2010	1846	539	539	531
2002	10	2002.10	31-Oct-02						1870	1713	561	561	530
2002	11	2002.11	1-Nov-02						1790	1643	590	590	530
2002	11	2002.11	2-Nov-02						1720	1578	590	590	530
2002	11	2002.11	3-Nov-02						1720	1579	590	590	530
2002	11	2002.11	4-Nov-02						1680	1549	623	623	530
2002	11	2002.11	5-Nov-02						1700	1560	634	634	530
2002	11	2002.11	6-Nov-02						1700	1554	668	668	532
2002	11	2002.11	7-Nov-02						1740	1586	682	682	532
2002	11	2002.11	8-Nov-02						1860	1711	676	676	534
2002	11	2002.11	9-Nov-02						2150	2000	601	601	534
2002	11	2002.11	10-Nov-02						2060	1944	612	612	535
2002	11	2002.11	11-Nov-02						1990	1887	607	607	536
2002	11	2002.11	12-Nov-02						1940	1844	653	653	539
2002	11	2002.11	13-Nov-02						1880	1792	704	704	542
2002	11	2002.11	14-Nov-02						1830	1746	730	730	545
2002	11	2002.11	15-Nov-02						1810	1722	744	744	550
2002	11	2002.11	16-Nov-02						1760	1679	744	744	552
2002	11	2002.11	17-Nov-02						1720	1646	756	756	556
2002	11	2002.11	18-Nov-02						1700	1621	775	775	567
2002	11	2002.11	19-Nov-02						1670	1595	772	772	579
2002	11	2002.11	20-Nov-02						1650	1579	790	790	592
2002	11	2002.11	21-Nov-02						1650	1573	785	785	605
2002	11	2002.11	22-Nov-02						1630	1561	795	795	619
2002	11	2002.11	23-Nov-02						1590	1521	797	797	634
2002	11	2002.11	24-Nov-02						1560	1498	805	805	649
2002	11	2002.11	25-Nov-02						1550	1487	794	794	664
2002	11	2002.11	26-Nov-02						1520	1457	809	809	678
2002	11	2002.11	27-Nov-02						1490	1428	836	836	691
2002	11	2002.11	28-Nov-02						1460	1416	833	833	703
2002	11	2002.11	29-Nov-02						1460	1411	839	839	713
2002	11	2002.11	30-Nov-02						1460	1409	822	822	722
2002	12	2002.12	1-Dec-02						1460	1402	817	817	729
2002	12	2002.12	2-Dec-02						1450	1397	830	830	737
2002	12	2002.12	3-Dec-02						1440	1391	861	861	746
2002	12	2002.12	4-Dec-02						1440	1385	854	854	754
2002	12	2002.12	5-Dec-02						1440	1382	867	867	762
2002	12	2002.12	6-Dec-02						1460	1401	844	844	768
2002	12	2002.12	7-Dec-02						1460	1401	826	826	773
2002	12	2002.12	8-Dec-02						1450	1393	859	859	779
2002	12	2002.12	9-Dec-02						1470	1410	854	854	787
2002	12	2002.12	10-Dec-02						1480	1420	838	838	795
2002	12	2002.12	11-Dec-02						1480	1422	840	840	802
2002	12	2002.12	12-Dec-02						1460	1458	857	857	809
2002	12	2002.12	13-Dec-02						1480	1502	877	877	815
2002	12	2002.12	14-Dec-02						1600	1612	842	842	819
2002	12	2002.12	15-Dec-02						1680	1693	819	819	821
2002	12	2002.12	16-Dec-02						1740	1760	805	805	823
2002	12	2002.12	17-Dec-02						2090	2117	722	722	822
2002	12	2002.12	18-Dec-02						2500	2508	594	594	816
2002	12	2002.12	19-Dec-02						2470	2451	625	625	811
2002	12	2002.12	20-Dec-02						2690	2662	665	665	807
2002	12	2002.12	21-Dec-02						2940	2883	584	584	800
2002	12	2002.12	22-Dec-02						3010	2946	594	594	794
2002	12	2002.12	23-Dec-02						2880	2810	621	621	788
2002	12	2002.12	24-Dec-02						2740	2675	655	655	783
2002	12	2002.12	25-Dec-02						2610	2549	706	706	780
2002	12	2002.12	26-Dec-02						2460	2405	773	773	779
2002	12	2002.12	27-Dec-02						2340	2287	822	822	778

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			Mean uS/cm	Max uS/cm	Min uS/cm								
2002	12	2002.12	28-Dec-02						2250	2208	844	844	779
2002	12	2002.12	29-Dec-02						2220	2170	859	859	779
2002	12	2002.12	30-Dec-02						2220	2171	873	873	781
2002	12	2002.12	31-Dec-02						2230	2185	875	875	783
2003	1	2003.01	1-Jan-03						2260	2218	867	867	784
2003	1	2003.01	2-Jan-03						2320	2249	843	843	783
2003	1	2003.01	3-Jan-03						2280	2207	828	828	783
2003	1	2003.01	4-Jan-03						2200	2125	845	845	782
2003	1	2003.01	5-Jan-03						2140	2074	865	865	783
2003	1	2003.01	6-Jan-03						2080	2020	909	909	785
2003	1	2003.01	7-Jan-03						1990	1988	955	955	789
2003	1	2003.01	8-Jan-03						1910	1920	1018	1018	794
2003	1	2003.01	9-Jan-03						1830	1848	1045	1045	801
2003	1	2003.01	10-Jan-03						1810	1828	1060	1060	808
2003	1	2003.01	11-Jan-03						1840	1856	1031	1031	814
2003	1	2003.01	12-Jan-03						1890	1918	1011	1011	819
2003	1	2003.01	13-Jan-03						2040	2063	947	947	822
2003	1	2003.01	14-Jan-03						2040	2065	860	860	823
2003	1	2003.01	15-Jan-03						2020	2045	822	822	824
2003	1	2003.01	16-Jan-03						1950	1980	887	887	829
2003	1	2003.01	17-Jan-03						1910	1942	936	936	841
2003	1	2003.01	18-Jan-03						1860	1890	943	943	851
2003	1	2003.01	19-Jan-03						1810	1850	974	974	862
2003	1	2003.01	20-Jan-03						1780	1821	987	987	875
2003	1	2003.01	21-Jan-03						1740	1781	1010	1010	889
2003	1	2003.01	22-Jan-03						1710	1751	1044	1044	903
2003	1	2003.01	23-Jan-03						1690	1737	1028	1028	916
2003	1	2003.01	24-Jan-03						1680	1728	1030	1030	926
2003	1	2003.01	25-Jan-03						1670	1719	1039	1039	935
2003	1	2003.01	26-Jan-03						1660	1715	1038	1038	942
2003	1	2003.01	27-Jan-03						1660	1712	1047	1047	949
2003	1	2003.01	28-Jan-03						1700	1753	1023	1023	955
2003	1	2003.01	29-Jan-03						1970	2035	895	895	955
2003	1	2003.01	30-Jan-03						2020	2090	881	881	956
2003	1	2003.01	31-Jan-03						1840	1900	970	970	959
2003	2	2003.02	1-Feb-03						1740	1809	989	989	964
2003	2	2003.02	2-Feb-03						1750	1822	979	979	969
2003	2	2003.02	3-Feb-03						1770	1842	973	973	973
2003	2	2003.02	4-Feb-03						1770	1840	987	987	977
2003	2	2003.02	5-Feb-03						1780	1849	981	981	980
2003	2	2003.02	6-Feb-03						1800	1858	973	973	980
2003	2	2003.02	7-Feb-03						1810	1871	943	943	978
2003	2	2003.02	8-Feb-03						1820	1888	937	937	974
2003	2	2003.02	9-Feb-03						1820	1887	959	959	971
2003	2	2003.02	10-Feb-03						1820	1888	963	963	969
2003	2	2003.02	11-Feb-03						1820	1888	977	977	967
2003	2	2003.02	12-Feb-03						1830	1897	976	976	968
2003	2	2003.02	13-Feb-03						1880	1955	964	964	972
2003	2	2003.02	14-Feb-03						1870	1939	924	924	975
2003	2	2003.02	15-Feb-03						1850	1923	953	953	977
2003	2	2003.02	16-Feb-03						1880	1948	957	957	978
2003	2	2003.02	17-Feb-03						1910	1972	929	929	978
2003	2	2003.02	18-Feb-03						1900	1925	932	932	976
2003	2	2003.02	19-Feb-03						1920	1919	933	933	974
2003	2	2003.02	20-Feb-03						1940	1941	908	908	971
2003	2	2003.02	21-Feb-03						1970	1965	912	912	967
2003	2	2003.02	22-Feb-03						1960	1964	900	900	962
2003	2	2003.02	23-Feb-03						1940	1941	927	927	959
2003	2	2003.02	24-Feb-03						1950	1953	953	953	956
2003	2	2003.02	25-Feb-03						2000	2001	912	912	952
2003	2	2003.02	26-Feb-03						2030	2030	922	922	948
2003	2	2003.02	27-Feb-03						2050	2045	930	930	945
2003	2	2003.02	28-Feb-03						2030	2029	948	948	946
2003	3	2003.03	1-Mar-03						2020	2019	973	973	949
2003	3	2003.03	2-Mar-03						2050	2048	981	981	950
2003	3	2003.03	3-Mar-03						2120	2119	942	942	948
2003	3	2003.03	4-Mar-03						2130	2130	941	941	947
2003	3	2003.03	5-Mar-03						2050	2053	991	991	948
2003	3	2003.03	6-Mar-03						2070	2067	1001	1001	948
2003	3	2003.03	7-Mar-03						2130	2134	1008	1008	949
2003	3	2003.03	8-Mar-03						2210	2212	1007	1007	950
2003	3	2003.03	9-Mar-03						2240	2244	1007	1007	952
2003	3	2003.03	10-Mar-03						2260	2256	971	971	953
2003	3	2003.03	11-Mar-03						2200	2198	969	969	954
2003	3	2003.03	12-Mar-03						2200	2199	972	972	954
2003	3	2003.03	13-Mar-03						2280	2276	962	962	954

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
2003	3	2003.03	14-Mar-03						2270	2272	1003	1003	954
2003	3	2003.03	15-Mar-03						2470	2481	929	929	953
2003	3	2003.03	16-Mar-03						2620	2614	895	895	952
2003	3	2003.03	17-Mar-03						2540	2536	934	934	952
2003	3	2003.03	18-Mar-03						2500	2497	910	910	950
2003	3	2003.03	19-Mar-03						2420	2407	964	964	951
2003	3	2003.03	20-Mar-03						2320	2311	986	986	953
2003	3	2003.03	21-Mar-03						2230	2222	1030	1030	956
2003	3	2003.03	22-Mar-03						2180	2160	1039	1039	961
2003	3	2003.03	23-Mar-03						2200	2193	991	991	963
2003	3	2003.03	24-Mar-03						2180	2175	966	966	965
2003	3	2003.03	25-Mar-03						2100	2090	989	989	968
2003	3	2003.03	26-Mar-03						2060	2051	974	974	968
2003	3	2003.03	27-Mar-03						2010	1998	926	926	969
2003	3	2003.03	28-Mar-03						1980	1976	900	900	968
2003	3	2003.03	29-Mar-03						1980	1970	913	913	967
2003	3	2003.03	30-Mar-03						1970	1961	930	930	967
2003	3	2003.03	31-Mar-03						2000	1987	932	932	965
2003	4	2003.04	1-Apr-03						1950	1939	903	903	963
2003	4	2003.04	2-Apr-03						2010	2004	853	853	960
2003	4	2003.04	3-Apr-03						2050	2047	832	832	956
2003	4	2003.04	4-Apr-03						2030	2020	848	848	951
2003	4	2003.04	5-Apr-03						2080	2071	831	831	946
2003	4	2003.04	6-Apr-03						2010	2015	834	834	940
2003	4	2003.04	7-Apr-03						2050	2050	863	863	935
2003	4	2003.04	8-Apr-03						1970	1970	877	877	931
2003	4	2003.04	9-Apr-03						1920	1919	843	843	927
2003	4	2003.04	10-Apr-03						1850	1850	817	817	922
2003	4	2003.04	11-Apr-03						1880	1874	807	807	916
2003	4	2003.04	12-Apr-03						1970	1950	802	802	911
2003	4	2003.04	13-Apr-03						2260	2216	752	752	902
2003	4	2003.04	14-Apr-03						2600	2532	631	631	892
2003	4	2003.04	15-Apr-03						2840	2734	481	481	879
2003	4	2003.04	16-Apr-03						3000	2875	417	417	861
2003	4	2003.04	17-Apr-03						3090	3005	414	414	845
2003	4	2003.04	18-Apr-03						3160	3177	416	416	827
2003	4	2003.04	19-Apr-03						3180	3204	424	424	808
2003	4	2003.04	20-Apr-03						3350	3371	412	412	787
2003	4	2003.04	21-Apr-03						3470	3499	384	384	765
2003	4	2003.04	22-Apr-03						3390	3416	372	372	745
2003	4	2003.04	23-Apr-03						3300	3307	370	370	725
2003	4	2003.04	24-Apr-03						3050	3040	405	405	705
2003	4	2003.04	25-Apr-03						3070	3070	403	403	686
2003	4	2003.04	26-Apr-03						3200	3200	407	407	669
2003	4	2003.04	27-Apr-03						3240	3244	407	407	653
2003	4	2003.04	28-Apr-03						3320	3328	410	410	636
2003	4	2003.04	29-Apr-03						3420	3418	405	405	618
2003	4	2003.04	30-Apr-03						3320	3319	403	403	601
2003	5	2003.05	1-May-03						3280	3277	399	399	584
2003	5	2003.05	2-May-03						3260	3263	396	396	569
2003	5	2003.05	3-May-03						3330	3331	391	391	554
2003	5	2003.05	4-May-03						3490	3498	385	385	539
2003	5	2003.05	5-May-03						3460	3458	380	380	524
2003	5	2003.05	6-May-03						3320	3318	370	370	508
2003	5	2003.05	7-May-03						3210	3213	368	368	492
2003	5	2003.05	8-May-03						3240	3251	377	377	475
2003	5	2003.05	9-May-03						3290	3295	371	371	459
2003	5	2003.05	10-May-03						3270	3285	384	384	445
2003	5	2003.05	11-May-03						3370	3392	377	377	430
2003	5	2003.05	12-May-03						3360	3392	361	361	416
2003	5	2003.05	13-May-03						3190	3227	366	366	403
2003	5	2003.05	14-May-03						2830	2875	419	419	396
2003	5	2003.05	15-May-03						2600	2653	463	463	395
2003	5	2003.05	16-May-03						2430	2488	514	514	398
2003	5	2003.05	17-May-03						2270	2333	554	554	403
2003	5	2003.05	18-May-03						2210	2289	572	572	408
2003	5	2003.05	19-May-03						2290	2364	530	530	412
2003	5	2003.05	20-May-03						2160	2239	586	586	418
2003	5	2003.05	21-May-03						2020	2111	605	605	425
2003	5	2003.05	22-May-03						2010	2121	587	587	432
2003	5	2003.05	23-May-03						1960	2070	542	542	438
2003	5	2003.05	24-May-03						1940	2059	531	531	442
2003	5	2003.05	25-May-03						1950	2082	516	516	446
2003	5	2003.05	26-May-03						2020	2151	541	541	450
2003	5	2003.05	27-May-03						1900	2046	545	545	455
2003	5	2003.05	28-May-03						1810	1952	532	532	459

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			Mean uS/cm	Max uS/cm	Min uS/cm								
2003	5	2003.05	29-May-03						1890	2046	492	492	462
2003	5	2003.05	30-May-03						2000	2162	441	441	463
2003	5	2003.05	31-May-03						2020	2188	428	428	464
2003	6	2003.06	1-Jun-03						2000	2176	451	451	466
2003	6	2003.06	2-Jun-03						1980	2166	508	508	470
2003	6	2003.06	3-Jun-03						1920	2104	523	523	474
2003	6	2003.06	4-Jun-03						1840	2031	498	498	478
2003	6	2003.06	5-Jun-03						1870	2070	498	498	483
2003	6	2003.06	6-Jun-03						1920	2120	482	482	486
2003	6	2003.06	7-Jun-03						2070	2268	437	437	488
2003	6	2003.06	8-Jun-03						2150	2350	446	446	491
2003	6	2003.06	9-Jun-03						2200	2402	432	432	493
2003	6	2003.06	10-Jun-03						2130	2334	434	434	494
2003	6	2003.06	11-Jun-03						2080	2271	431	431	497
2003	6	2003.06	12-Jun-03						1990	2186	445	445	499
2003	6	2003.06	13-Jun-03						1980	2177	416	416	499
2003	6	2003.06	14-Jun-03						2010	2207	405	405	497
2003	6	2003.06	15-Jun-03						2150	2348	382	382	493
2003	6	2003.06	16-Jun-03						2200	2395	421	421	489
2003	6	2003.06	17-Jun-03						2150	2351	441	441	484
2003	6	2003.06	18-Jun-03						2120	2313	461	461	482
2003	6	2003.06	19-Jun-03						2030	2220	446	446	477
2003	6	2003.06	20-Jun-03						1970	2166	466	466	473
2003	6	2003.06	21-Jun-03						1960	2159	459	459	468
2003	6	2003.06	22-Jun-03						2000	2202	454	454	465
2003	6	2003.06	23-Jun-03						2020	2216	444	444	463
2003	6	2003.06	24-Jun-03						2020	2213	431	431	460
2003	6	2003.06	25-Jun-03						1990	2189	435	435	456
2003	6	2003.06	26-Jun-03						1980	2183	450	450	453
2003	6	2003.06	27-Jun-03						2040	2232	434	434	450
2003	6	2003.06	28-Jun-03						2050	2244	431	431	448
2003	6	2003.06	29-Jun-03						2090	2295	430	430	447
2003	6	2003.06	30-Jun-03						2100	2295	437	437	448
2003	7	2003.07	1-Jul-03						2090	2281	437	437	447
2003	7	2003.07	2-Jul-03						1780	1971	504	504	447
2003	7	2003.07	3-Jul-03						1500	1685	578	578	449
2003	7	2003.07	4-Jul-03						1450	1635	580	580	452
2003	7	2003.07	5-Jul-03						1480	1670	594	594	455
2003	7	2003.07	6-Jul-03						1500	1690	553	553	457
2003	7	2003.07	7-Jul-03						1530	1721	583	583	462
2003	7	2003.07	8-Jul-03						1440	1617	633	633	468
2003	7	2003.07	9-Jul-03						1340	1506	618	618	474
2003	7	2003.07	10-Jul-03						1270	1423	664	664	482
2003	7	2003.07	11-Jul-03						1210	1363	681	681	490
2003	7	2003.07	12-Jul-03						1240	1400	683	683	498
2003	7	2003.07	13-Jul-03						1270	1434	608	608	505
2003	7	2003.07	14-Jul-03						1270	1424	546	546	509
2003	7	2003.07	15-Jul-03						1180	1330	678	678	519
2003	7	2003.07	16-Jul-03						1160	1305	558	558	524
2003	7	2003.07	17-Jul-03						1180	1325	621	621	530
2003	7	2003.07	18-Jul-03						1190	1343	600	600	535
2003	7	2003.07	19-Jul-03						1250	1412	602	602	540
2003	7	2003.07	20-Jul-03						1210	1366	587	587	544
2003	7	2003.07	21-Jul-03						1210	1352	562	562	547
2003	7	2003.07	22-Jul-03						1190	1333	565	565	551
2003	7	2003.07	23-Jul-03						1130	1273	584	584	556
2003	7	2003.07	24-Jul-03						1160	1305	584	584	561
2003	7	2003.07	25-Jul-03						1190	1330	561	561	565
2003	7	2003.07	26-Jul-03						1170	1318	601	601	570
2003	7	2003.07	27-Jul-03						1290	1445	545	545	574
2003	7	2003.07	28-Jul-03						1290	1444	573	573	578
2003	7	2003.07	29-Jul-03						1310	1466	558	558	583
2003	7	2003.07	30-Jul-03						1250	1396	586	586	588
2003	7	2003.07	31-Jul-03						1210	1360	596	596	593
2003	8	2003.08	1-Aug-03						1240	1397	628	628	597
2003	8	2003.08	2-Aug-03						1270	1423	628	628	599
2003	8	2003.08	3-Aug-03						1410	1580	599	599	599
2003	8	2003.08	4-Aug-03						1480	1655	603	603	600
2003	8	2003.08	5-Aug-03						1430	1592	562	562	600
2003	8	2003.08	6-Aug-03						1350	1507	560	560	599
2003	8	2003.08	7-Aug-03						1270	1426	578	578	597
2003	8	2003.08	8-Aug-03						1300	1456	564	564	596
2003	8	2003.08	9-Aug-03						1290	1447	607	607	594
2003	8	2003.08	10-Aug-03						1330	1492	639	639	592
2003	8	2003.08	11-Aug-03						1360	1522	595	595	589
2003	8	2003.08	12-Aug-03						1310	1463	615	615	590

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			Mean uS/cm	Max uS/cm	Min uS/cm								
2003	8	2003.08	13-Aug-03						1220	1371	649	649	593
2003	8	2003.08	14-Aug-03						1190	1330	688	688	593
2003	8	2003.08	15-Aug-03						1130	1265	657	657	597
2003	8	2003.08	16-Aug-03						1140	1273	679	679	599
2003	8	2003.08	17-Aug-03						1230	1377	672	672	601
2003	8	2003.08	18-Aug-03						1310	1461	627	627	602
2003	8	2003.08	19-Aug-03						1220	1356	666	666	604
2003	8	2003.08	20-Aug-03						1160	1300	674	674	608
2003	8	2003.08	21-Aug-03						1140	1276	652	652	611
2003	8	2003.08	22-Aug-03						1210	1348	646	646	613
2003	8	2003.08	23-Aug-03						1280	1435	635	635	615
2003	8	2003.08	24-Aug-03						1390	1554	637	637	617
2003	8	2003.08	25-Aug-03						1440	1606	640	640	619
2003	8	2003.08	26-Aug-03						1340	1492	692	692	624
2003	8	2003.08	27-Aug-03						1260	1401	674	674	627
2003	8	2003.08	28-Aug-03						1220	1355	648	648	630
2003	8	2003.08	29-Aug-03						1260	1396	603	603	630
2003	8	2003.08	30-Aug-03						1240	1375	647	647	632
2003	8	2003.08	31-Aug-03						1280	1424	615	615	632
2003	9	2003.09	1-Sep-03						1330	1480	634	634	632
2003	9	2003.09	2-Sep-03						1310	1449	637	637	633
2003	9	2003.09	3-Sep-03						1230	1363	640	640	634
2003	9	2003.09	4-Sep-03			662			1190	1318	662	662	638
2003	9	2003.09	5-Sep-03			667			1180	1310	667	667	641
2003	9	2003.09	6-Sep-03			686			1240	1365	686	686	645
2003	9	2003.09	7-Sep-03			671			1330	1472	671	671	648
2003	9	2003.09	8-Sep-03			624			1400	1535	624	624	649
2003	9	2003.09	9-Sep-03			718			1310	1437	718	718	652
2003	9	2003.09	10-Sep-03			692			1230	1346	692	692	655
2003	9	2003.09	11-Sep-03			682			1260	1384	682	682	657
2003	9	2003.09	12-Sep-03			662			1260	1373	662	662	658
2003	9	2003.09	13-Sep-03			620			1280	1398	620	620	655
2003	9	2003.09	14-Sep-03			585			1310	1440	585	585	653
2003	9	2003.09	15-Sep-03			602			1450	1580	602	602	650
2003	9	2003.09	16-Sep-03			575			1380	1493	575	575	647
2003	9	2003.09	17-Sep-03			577			1250	1355	577	577	645
2003	9	2003.09	18-Sep-03			602			1220	1328	602	602	643
2003	9	2003.09	19-Sep-03			613			1270	1368	613	613	641
2003	9	2003.09	20-Sep-03			627			1250	1351	627	627	640
2003	9	2003.09	21-Sep-03			604			1330	1437	604	604	639
2003	9	2003.09	22-Sep-03			625			1330	1432	625	625	639
2003	9	2003.09	23-Sep-03			622			1280	1286	622	622	638
2003	9	2003.09	24-Sep-03			589			1300	1246	589	589	637
2003	9	2003.09	25-Sep-03			599			1290	1233	599	599	633
2003	9	2003.09	26-Sep-03			589			1360	1300	589	589	631
2003	9	2003.09	27-Sep-03			582			1420	1350	582	582	628
2003	9	2003.09	28-Sep-03			610			1390	1321	610	610	629
2003	9	2003.09	29-Sep-03			615			1450	1375	615	615	628
2003	9	2003.09	30-Sep-03			609			1420	1349	609	609	627
2003	10	2003.10	1-Oct-03			596			1360	1283	596	596	626
2003	10	2003.10	2-Oct-03			598			1370	1295	598	598	625
2003	10	2003.10	3-Oct-03			589			1430	1352	589	589	623
2003	10	2003.10	4-Oct-03			580			1500	1411	580	580	620
2003	10	2003.10	5-Oct-03			550			1580	1489	550	550	616
2003	10	2003.10	6-Oct-03			564			1610	1507	564	564	612
2003	10	2003.10	7-Oct-03			523			1710	1609	524	524	607
2003	10	2003.10	8-Oct-03			508			1780	1666	508	508	604
2003	10	2003.10	9-Oct-03			524			1730	1617	524	524	597
2003	10	2003.10	10-Oct-03			535			1730	1612	535	535	592
2003	10	2003.10	11-Oct-03			568			1650	1540	568	568	588
2003	10	2003.10	12-Oct-03			565			1660	1560	565	565	585
2003	10	2003.10	13-Oct-03			543			1680	1573	543	543	582
2003	10	2003.10	14-Oct-03			572			1680	1575	572	572	582
2003	10	2003.10	15-Oct-03			567			1710	1605	567	567	581
2003	10	2003.10	16-Oct-03			568			1650	1537	568	568	580
2003	10	2003.10	17-Oct-03			604			1630	1530	604	604	581
2003	10	2003.10	18-Oct-03			485			2000	1896	485	485	577
2003	10	2003.10	19-Oct-03			439			2140	2030	439	439	572
2003	10	2003.10	20-Oct-03			317			2200	2126	317	317	561
2003	10	2003.10	21-Oct-03			193			2320	2315	193	193	548
2003	10	2003.10	22-Oct-03			197			2700	2675	197	197	533
2003	10	2003.10	23-Oct-03			330			2750	2725	330	330	524
2003	10	2003.10	24-Oct-03			351			2720	2689	351	351	516
2003	10	2003.10	25-Oct-03			321			2830	2804	321	321	506
2003	10	2003.10	26-Oct-03			323			2830	2798	323	323	498
2003	10	2003.10	27-Oct-03			374			2640	2610	374	374	491

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			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
2003	10	2003.10	28-Oct-03			422			2440	2419	422	422	484
2003	10	2003.10	29-Oct-03			455			2360	2346	455	455	479
2003	10	2003.10	30-Oct-03			452			2360	2350	452	452	474
2003	10	2003.10	31-Oct-03			499			2220	2207	499	499	471
2003	11	2003.11	1-Nov-03			554			2040	2038	554	554	469
2003	11	2003.11	2-Nov-03			607			1910	1914	607	607	470
2003	11	2003.11	3-Nov-03			619			1840	1838	619	619	471
2003	11	2003.11	4-Nov-03			604			1820	1809	604	604	473
2003	11	2003.11	5-Nov-03			618			1770	1760	618	618	475
2003	11	2003.11	6-Nov-03			641			1770	1765	641	641	479
2003	11	2003.11	7-Nov-03			623			1810	1810	623	623	482
2003	11	2003.11	8-Nov-03			651			1790	1796	651	651	487
2003	11	2003.11	9-Nov-03			633			1890	1902	633	633	490
2003	11	2003.11	10-Nov-03			603			1880	1896	603	603	491
2003	11	2003.11	11-Nov-03			631			1810	1831	631	631	493
2003	11	2003.11	12-Nov-03			655			1770	1797	655	655	497
2003	11	2003.11	13-Nov-03			700			1670	1701	700	700	501
2003	11	2003.11	14-Nov-03			726			1590	1626	726	726	507
2003	11	2003.11	15-Nov-03			730			1570	1611	730	730	512
2003	11	2003.11	16-Nov-03			701			1570	1610	701	701	515
2003	11	2003.11	17-Nov-03			708			1560	1609	708	708	523
2003	11	2003.11	18-Nov-03			731			1530	1592	731	731	532
2003	11	2003.11	19-Nov-03			727			1520	1598	727	727	546
2003	11	2003.11	20-Nov-03			713			1530	1608	713	713	563
2003	11	2003.11	21-Nov-03			689			1510	1586	689	689	580
2003	11	2003.11	22-Nov-03			679			1500	1576	679	679	591
2003	11	2003.11	23-Nov-03			726			1510	1604	726	726	604
2003	11	2003.11	24-Nov-03			703			1530	1619	702	702	617
2003	11	2003.11	25-Nov-03			688			1480	1576	688	688	629
2003	11	2003.11	26-Nov-03			726			1470	1559	726	726	640
2003	11	2003.11	27-Nov-03			767			1460	1552	767	767	652
2003	11	2003.11	28-Nov-03			726			1450	1553	726	726	661
2003	11	2003.11	29-Nov-03			721			1430	1541	721	721	670
2003	11	2003.11	30-Nov-03			765			1430	1550	765	765	679
2003	12	2003.12	1-Dec-03			780			1420	1537	780	780	686
2003	12	2003.12	2-Dec-03			740			1410	1524	740	740	691
2003	12	2003.12	3-Dec-03			739			1400	1511	739	739	695
2003	12	2003.12	4-Dec-03			810			1400	1470	810	810	702
2003	12	2003.12	5-Dec-03			817			1400	1401	817	817	708
2003	12	2003.12	6-Dec-03			830			1420	1430	830	830	715
2003	12	2003.12	7-Dec-03			737			1430	1430	737	737	718
2003	12	2003.12	8-Dec-03			736			1440	1445	736	736	721
2003	12	2003.12	9-Dec-03			838			1410	1413	838	838	728
2003	12	2003.12	10-Dec-03			828			1410	1418	828	828	736
2003	12	2003.12	11-Dec-03			738			1480	1487	738	738	739
2003	12	2003.12	12-Dec-03			808			1500	1494	808	808	744
2003	12	2003.12	13-Dec-03			840			1480	1480	840	840	749
2003	12	2003.12	14-Dec-03			758			1470	1473	758	758	750
2003	12	2003.12	15-Dec-03			740			1480	1485	740	740	750
2003	12	2003.12	16-Dec-03			757			1460	1464	757	757	752
2003	12	2003.12	17-Dec-03			782			1440	1447	782	782	755
2003	12	2003.12	18-Dec-03			764			1440	1438	764	764	756
2003	12	2003.12	19-Dec-03			782			1440	1438	782	782	758
2003	12	2003.12	20-Dec-03			767			1500	1503	767	767	759
2003	12	2003.12	21-Dec-03			713			1520	1515	713	713	760
2003	12	2003.12	22-Dec-03			800			1500	1505	797	797	764
2003	12	2003.12	23-Dec-03			806			1510	1510	804	804	767
2003	12	2003.12	24-Dec-03			818			1510	1515	818	818	771
2003	12	2003.12	25-Dec-03			736			1580	1577	736	736	772
2003	12	2003.12	26-Dec-03			722			1650	1648	722	722	772
2003	12	2003.12	27-Dec-03			711			1680	1680	711	711	770
2003	12	2003.12	28-Dec-03			754			1650	1644	754	754	771
2003	12	2003.12	29-Dec-03			822			1650	1640	822	822	774
2003	12	2003.12	30-Dec-03			757			1740	1733	757	757	774
2003	12	2003.12	31-Dec-03			753			1760	1752	753	753	773
2004	1	2004.01	1-Jan-04			791			1790	1784	791	791	775
2004	1	2004.01	2-Jan-04			715			2050	2008	716	716	774
2004	1	2004.01	3-Jan-04			649			2420	2322	649	649	769
2004	1	2004.01	4-Jan-04			680			2380	2252	680	680	764
2004	1	2004.01	5-Jan-04			701			2240	2115	701	701	760
2004	1	2004.01	6-Jan-04			731			2150	2028	731	731	760
2004	1	2004.01	7-Jan-04			758			2060	1942	758	758	761
2004	1	2004.01	8-Jan-04			780			1970	1854	779	779	759
2004	1	2004.01	9-Jan-04			803			1920	1801	803	803	758
2004	1	2004.01	10-Jan-04			806			1890	1776	806	806	760
2004	1	2004.01	11-Jan-04			817			1850	1730	817	817	760

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
2004	1	2004.01	12-Jan-04			833			1800	1683	833	833	760
2004	1	2004.01	13-Jan-04			842			1760	1652	843	843	763
2004	1	2004.01	14-Jan-04			829			1730	1616	829	829	766
2004	1	2004.01	15-Jan-04			871			1700	1588	871	871	770
2004	1	2004.01	16-Jan-04			889			1670	1558	889	889	773
2004	1	2004.01	17-Jan-04			891			1650	1542	891	891	777
2004	1	2004.01	18-Jan-04			868			1650	1532	868	868	780
2004	1	2004.01	19-Jan-04			845			1640	1524	845	845	783
2004	1	2004.01	20-Jan-04			857			1630	1515	857	857	788
2004	1	2004.01	21-Jan-04			857			1610	1500	857	857	790
2004	1	2004.01	22-Jan-04			861			1600	1488	861	861	792
2004	1	2004.01	23-Jan-04			841			1580	1480	841	841	792
2004	1	2004.01	24-Jan-04			857			1590	1485	857	857	796
2004	1	2004.01	25-Jan-04			852			1600	1485	851	851	801
2004	1	2004.01	26-Jan-04			896			1590	1481	896	896	807
2004	1	2004.01	27-Jan-04			912			1600	1489	912	912	812
2004	1	2004.01	28-Jan-04			826			1620	1506	826	826	812
2004	1	2004.01	29-Jan-04			852			1620	1505	852	852	815
2004	1	2004.01	30-Jan-04			890			1600	1490	890	890	820
2004	1	2004.01	31-Jan-04			854			1590	1484	854	854	822
2004	2	2004.02	1-Feb-04			910			1580	1475	910	910	829
2004	2	2004.02	2-Feb-04			925			1590	1480	925	925	838
2004	2	2004.02	3-Feb-04			869			1680	1571	869	869	844
2004	2	2004.02	4-Feb-04			833			1690	1584	833	833	848
2004	2	2004.02	5-Feb-04			843			1740	1632	843	843	852
2004	2	2004.02	6-Feb-04			808			1830	1712	808	808	854
2004	2	2004.02	7-Feb-04			794			1810	1697	794	794	854
2004	2	2004.02	8-Feb-04			845			1780	1667	845	845	856
2004	2	2004.02	9-Feb-04			863			1760	1650	863	863	858
2004	2	2004.02	10-Feb-04			848			1770	1662	848	848	859
2004	2	2004.02	11-Feb-04			857			1740	1650	857	857	860
2004	2	2004.02	12-Feb-04			872			1730	1651	872	872	860
2004	2	2004.02	13-Feb-04			884			1750	1668	884	884	862
2004	2	2004.02	14-Feb-04			839			1790	1708	839	839	861
2004	2	2004.02	15-Feb-04			881			1800	1710	881	881	861
2004	2	2004.02	16-Feb-04			902			1840	1757	902	902	861
2004	2	2004.02	17-Feb-04			866			1890	1813	866	866	861
2004	2	2004.02	18-Feb-04			850			1920	1854	851	851	861
2004	2	2004.02	19-Feb-04			801			2100	2045	801	801	860
2004	2	2004.02	20-Feb-04			663			2600	2554	663	663	853
2004	2	2004.02	21-Feb-04			722			2550	2497	722	722	849
2004	2	2004.02	22-Feb-04			765			2550	2508	765	765	846
2004	2	2004.02	23-Feb-04			771			2540	2497	771	771	843
2004	2	2004.02	24-Feb-04			831			2480	2430	831	831	842
2004	2	2004.02	25-Feb-04			888			2420	2387	888	888	842
2004	2	2004.02	26-Feb-04			830			2810	2791	830	830	839
2004	2	2004.02	27-Feb-04			630			3910	3909	630	630	833
2004	2	2004.02	28-Feb-04			588			4220	4157	588	588	824
2004	2	2004.02	29-Feb-04			600			3970	3908	600	600	814
2004	3	2004.03	1-Mar-04			528			3920	3858	528	528	804
2004	3	2004.03	2-Mar-04			637			3850	3790	637	637	794
2004	3	2004.03	3-Mar-04			754			3640	3543	756	756	789
2004	3	2004.03	4-Mar-04			802			3430	3303	802	802	787
2004	3	2004.03	5-Mar-04			792			3360	3245	792	792	785
2004	3	2004.03	6-Mar-04			806			3330	3210	806	806	784
2004	3	2004.03	7-Mar-04			802			3250	3130	802	802	784
2004	3	2004.03	8-Mar-04			785			3400	3282	785	785	784
2004	3	2004.03	9-Mar-04			768			3410	3286	768	768	781
2004	3	2004.03	10-Mar-04			749			3310	3189	749	749	777
2004	3	2004.03	11-Mar-04			732			3290	3166	732	732	773
2004	3	2004.03	12-Mar-04			726			3450	3323	726	726	769
2004	3	2004.03	13-Mar-04			639			3480	3350	639	639	761
2004	3	2004.03	14-Mar-04			707			3370	3241	707	707	755
2004	3	2004.03	15-Mar-04			705			3370	3234	705	705	751
2004	3	2004.03	16-Mar-04			706			3250	3115	706	706	745
2004	3	2004.03	17-Mar-04			769			3050	2922	769	769	741
2004	3	2004.03	18-Mar-04			680			3440	3331	680	680	734
2004	3	2004.03	19-Mar-04			530			4280	4169	530	530	724
2004	3	2004.03	20-Mar-04			514			4500	4375	514	514	714
2004	3	2004.03	21-Mar-04			545			4420	4280	545	545	710
2004	3	2004.03	22-Mar-04			605			3980	3853	605	605	706
2004	3	2004.03	23-Mar-04			642			3530	3408	642	642	702
2004	3	2004.03	24-Mar-04			675			3130	3100	675	675	699
2004	3	2004.03	25-Mar-04			718			2860	2853	718	718	695
2004	3	2004.03	26-Mar-04			748			2730	2737	748	748	690
2004	3	2004.03	27-Mar-04			756			2770	2780	756	756	688

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
2004	3	2004.03	28-Mar-04			749			2740	2747	749	749	692
2004	3	2004.03	29-Mar-04			727			2710	2712	727	727	697
2004	3	2004.03	30-Mar-04			730			2560	2566	730	730	701
2004	3	2004.03	31-Mar-04			743			2370	2386	743	743	708
2004	4	2004.04	1-Apr-04			736			2290	2306	736	736	711
2004	4	2004.04	2-Apr-04			601			2680	2694	599	599	706
2004	4	2004.04	3-Apr-04			522			2890	2903	522	522	697
2004	4	2004.04	4-Apr-04			498			2890	2915	498	498	687
2004	4	2004.04	5-Apr-04			499			2850	2877	499	499	677
2004	4	2004.04	6-Apr-04			538			2700	2710	538	538	668
2004	4	2004.04	7-Apr-04			588			2380	2371	588	588	661
2004	4	2004.04	8-Apr-04			628			2180	2185	628	628	657
2004	4	2004.04	9-Apr-04			647			2110	2113	647	647	653
2004	4	2004.04	10-Apr-04			614			2050	2062	614	614	649
2004	4	2004.04	11-Apr-04			611			2070	2094	611	611	646
2004	4	2004.04	12-Apr-04			587			2140	2154	587	587	644
2004	4	2004.04	13-Apr-04			568			2050	2076	568	568	639
2004	4	2004.04	14-Apr-04			537			2040	2057	537	537	634
2004	4	2004.04	15-Apr-04			434			2370	2381	434	434	625
2004	4	2004.04	16-Apr-04			366			2620	2626	366	366	611
2004	4	2004.04	17-Apr-04			370			2710	2714	370	370	601
2004	4	2004.04	18-Apr-04			351			2930	2936	351	351	595
2004	4	2004.04	19-Apr-04			351			3100	3102	351	351	589
2004	4	2004.04	20-Apr-04			353			3090	3096	353	353	583
2004	4	2004.04	21-Apr-04			339			3100	3097	339	339	574
2004	4	2004.04	22-Apr-04			339			3170	3170	339	339	564
2004	4	2004.04	23-Apr-04			341			3170	3172	341	341	553
2004	4	2004.04	24-Apr-04			349			3150	3149	349	349	541
2004	4	2004.04	25-Apr-04			380			3240	3241	380	380	528
2004	4	2004.04	26-Apr-04			396			3340	3339	396	396	516
2004	4	2004.04	27-Apr-04			368			3320	3317	368	368	504
2004	4	2004.04	28-Apr-04			347			3310	3314	347	347	491
2004	4	2004.04	29-Apr-04			331			3280	3275	331	331	478
2004	4	2004.04	30-Apr-04			336			3300	3296	336	336	464
2004	5	2004.05	1-May-04			331			3250	3249	331	331	451
2004	5	2004.05	2-May-04			351			3250	3255	351	351	442
2004	5	2004.05	3-May-04			342			3350	3352	342	342	436
2004	5	2004.05	4-May-04			325			3340	3340	325	325	431
2004	5	2004.05	5-May-04			305			3370	3366	305	305	424
2004	5	2004.05	6-May-04			307			3260	3264	307	307	416
2004	5	2004.05	7-May-04			317			3210	3210	317	317	407
2004	5	2004.05	8-May-04			318			3180	3179	318	318	397
2004	5	2004.05	9-May-04			309			3280	3285	309	309	386
2004	5	2004.05	10-May-04			301			3380	3382	301	301	375
2004	5	2004.05	11-May-04			294			3320	3321	294	294	365
2004	5	2004.05	12-May-04			294			3240	3242	294	294	355
2004	5	2004.05	13-May-04			303			3210	3216	303	303	346
2004	5	2004.05	14-May-04			324			3060	3079	324	324	339
2004	5	2004.05	15-May-04			351			2900	2909	351	351	336
2004	5	2004.05	16-May-04			362			2860	2873	362	362	336
2004	5	2004.05	17-May-04			379			2900	2919	379	379	336
2004	5	2004.05	18-May-04			412			2820	2835	412	412	339
2004	5	2004.05	19-May-04			421			2660	2682	421	421	341
2004	5	2004.05	20-May-04			454			2480	2516	453	453	344
2004	5	2004.05	21-May-04			505			2290	2331	502	502	350
2004	5	2004.05	22-May-04			544			2070	2120	543	543	356
2004	5	2004.05	23-May-04			594			1950	2001	591	591	365
2004	5	2004.05	24-May-04			626			1870	1936	626	626	374
2004	5	2004.05	25-May-04			644			1750	1822	643	643	383
2004	5	2004.05	26-May-04			669			1640	1740	667	667	392
2004	5	2004.05	27-May-04			686			1590	1702	687	687	402
2004	5	2004.05	28-May-04			657			1600	1720	658	658	413
2004	5	2004.05	29-May-04			597			1600	1722	598	598	422
2004	5	2004.05	30-May-04			615			1660	1792	614	614	431
2004	5	2004.05	31-May-04			655			1710	1840	653	653	442
2004	6	2004.06	1-Jun-04			642			1640	1772	642	642	451
2004	6	2004.06	2-Jun-04			677			1510	1647	677	677	463
2004	6	2004.06	3-Jun-04			694			1410	1551	694	694	475
2004	6	2004.06	4-Jun-04			560			1310	1452	742	742	489
2004	6	2004.06	5-Jun-04			714			1240	1392	715	715	503
2004	6	2004.06	6-Jun-04			714			1290	1444	714	714	516
2004	6	2004.06	7-Jun-04			710			1300	1463	710	710	529
2004	6	2004.06	8-Jun-04			724			1240	1374	724	724	543
2004	6	2004.06	9-Jun-04			734			1240	1345	734	734	558
2004	6	2004.06	10-Jun-04			732			1180	1282	732	732	572
2004	6	2004.06	11-Jun-04			746			1110	1212	746	746	587

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
2004	6	2004.06	12-Jun-04			783			1110	1210	783	783	603
2004	6	2004.06	13-Jun-04			665			1180	1285	665	665	615
2004	6	2004.06	14-Jun-04			687			1220	1322	687	687	626
2004	6	2004.06	15-Jun-04			659			1260	1340	659	659	636
2004	6	2004.06	16-Jun-04			595			1260	1262	595	595	643
2004	6	2004.06	17-Jun-04			622			1210	1204	622	622	650
2004	6	2004.06	18-Jun-04			588			1240	1245	588	588	655
2004	6	2004.06	19-Jun-04			551			1370	1375	551	551	659
2004	6	2004.06	20-Jun-04			516			1650	1654	516	516	659
2004	6	2004.06	21-Jun-04			477			1750	1754	477	477	657
2004	6	2004.06	22-Jun-04			460			1720	1715	460	460	653
2004	6	2004.06	23-Jun-04			479			1660	1664	479	479	648
2004	6	2004.06	24-Jun-04			482			1670	1674	476	476	642
2004	6	2004.06	25-Jun-04			485			1610	1610	485	485	636
2004	6	2004.06	26-Jun-04			478			1540	1545	478	478	629
2004	6	2004.06	27-Jun-04			487			1600	1608	487	487	623
2004	6	2004.06	28-Jun-04			540			1650	1643	540	540	622
2004	6	2004.06	29-Jun-04			504			1530	1529	504	504	618
2004	6	2004.06	30-Jun-04			494			1410	1410	494	494	613
2004	7	2004.07	1-Jul-04			510			1310	1313	510	510	608
2004	7	2004.07	2-Jul-04			535			1280	1279	535	535	603
2004	7	2004.07	3-Jul-04			551			1270	1267	551	551	599
2004	7	2004.07	4-Jul-04			583			1290	1289	583	583	593
2004	7	2004.07	5-Jul-04			623			1330	1325	623	623	590
2004	7	2004.07	6-Jul-04			574			1240	1236	574	574	586
2004	7	2004.07	7-Jul-04			546			1200	1195	546	546	580
2004	7	2004.07	8-Jul-04			583			1130	1134	583	583	575
2004	7	2004.07	9-Jul-04			604			1090	1091	604	604	571
2004	7	2004.07	10-Jul-04			604			1110	1111	604	604	567
2004	7	2004.07	11-Jul-04			564			1180	1183	564	564	561
2004	7	2004.07	12-Jul-04			609			1180	1178	609	609	555
2004	7	2004.07	13-Jul-04			667			1100	1100	667	667	555
2004	7	2004.07	14-Jul-04			710			1080	1084	710	710	556
2004	7	2004.07	15-Jul-04			681			1070	1070	681	681	557
2004	7	2004.07	16-Jul-04			682			1020	1022	682	682	559
2004	7	2004.07	17-Jul-04			714			1070	1065	714	714	563
2004	7	2004.07	18-Jul-04			713			1150	1119	679	679	566
2004	7	2004.07	19-Jul-04			604			1260	1270	604	604	567
2004	7	2004.07	20-Jul-04			621			1260	1257	621	621	571
2004	7	2004.07	21-Jul-04			595			1220	1215	595	595	575
2004	7	2004.07	22-Jul-04			573			1180	1182	573	573	579
2004	7	2004.07	23-Jul-04			615			1150	1151	615	615	583
2004	7	2004.07	24-Jul-04			670			1090	1091	670	670	590
2004	7	2004.07	25-Jul-04			693			1110	1115	693	693	596
2004	7	2004.07	26-Jul-04			684			1140	1148	684	684	603
2004	7	2004.07	27-Jul-04			654			1010	1009	654	654	609
2004	7	2004.07	28-Jul-04			665			969	973	665	665	613
2004	7	2004.07	29-Jul-04			649			976	982	649	649	618
2004	7	2004.07	30-Jul-04			647			1010	1016	647	647	623
2004	7	2004.07	31-Jul-04			673			1070	1071	672	672	628
2004	8	2004.08	1-Aug-04			631			1090	1100	631	631	632
2004	8	2004.08	2-Aug-04			635			1130	1140	635	635	634
2004	8	2004.08	3-Aug-04			635			1070	1076	635	635	636
2004	8	2004.08	4-Aug-04			652			1080	1090	652	652	637
2004	8	2004.08	5-Aug-04			663			1080	1090	663	663	640
2004	8	2004.08	6-Aug-04			650			1090	1092	650	650	644
2004	8	2004.08	7-Aug-04			675			1080	1082	675	675	647
2004	8	2004.08	8-Aug-04			682			1110	1117	682	682	649
2004	8	2004.08	9-Aug-04			702			1100	1109	702	702	652
2004	8	2004.08	10-Aug-04			691			1020	1037	691	691	657
2004	8	2004.08	11-Aug-04			674			1000	1021	674	674	659
2004	8	2004.08	12-Aug-04			722			923	950	722	722	661
2004	8	2004.08	13-Aug-04			693			920	956	693	693	660
2004	8	2004.08	14-Aug-04			683			971	1015	683	683	660
2004	8	2004.08	15-Aug-04			636			1100	1130	636	636	659
2004	8	2004.08	16-Aug-04			640			1170	1187	640	640	656
2004	8	2004.08	17-Aug-04			640			1110	1113	640	640	655
2004	8	2004.08	18-Aug-04			672			1090	1096	672	672	657
2004	8	2004.08	19-Aug-04			709			1050	1054	709	709	660
2004	8	2004.08	20-Aug-04			661			1010	1013	689	689	663
2004	8	2004.08	21-Aug-04			719			1060	1069	719	719	668
2004	8	2004.08	22-Aug-04			596			1200	1207	596	596	667
2004	8	2004.08	23-Aug-04			557			1320	1325	557	557	664
2004	8	2004.08	24-Aug-04			584			1300	1301	584	584	660
2004	8	2004.08	25-Aug-04			572			1260	1263	597	597	657
2004	8	2004.08	26-Aug-04			621			1240	1247	621	621	656

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
2004	8	2004.08	27-Aug-04			664			1180	1186	664	664	656
2004	8	2004.08	28-Aug-04			691			1210	1221	691	691	657
2004	8	2004.08	29-Aug-04			673			1270	1274	673	673	658
2004	8	2004.08	30-Aug-04			684			1350	1397	684	684	659
2004	8	2004.08	31-Aug-04			600			1300	1278	627	627	659
2004	9	2004.09	1-Sep-04			632			1200	1206	632	632	658
2004	9	2004.09	2-Sep-04			640			1080	1088	640	640	659
2004	9	2004.09	3-Sep-04			690			1010	1017	690	690	660
2004	9	2004.09	4-Sep-04			703			1070	1062	703	703	661
2004	9	2004.09	5-Sep-04			726			1150	1137	726	726	664
2004	9	2004.09	6-Sep-04			725			1200	1175	726	726	665
2004	9	2004.09	7-Sep-04			705			1160	1126	705	705	666
2004	9	2004.09	8-Sep-04			689			1130	1116	689	689	666
2004	9	2004.09	9-Sep-04			656			1110	1101	656	656	665
2004	9	2004.09	10-Sep-04			634			1070	1064	634	634	663
2004	9	2004.09	11-Sep-04			667			1050	1048	667	667	661
2004	9	2004.09	12-Sep-04			666			1090	1090	666	666	661
2004	9	2004.09	13-Sep-04			646			1120	1115	646	646	659
2004	9	2004.09	14-Sep-04			646			1100	1098	646	646	660
2004	9	2004.09	15-Sep-04			646			1120	1123	647	647	660
2004	9	2004.09	16-Sep-04			666			1080	1081	666	666	661
2004	9	2004.09	17-Sep-04			741			1020	1026	741	741	663
2004	9	2004.09	18-Sep-04			727			1050	1061	727	727	664
2004	9	2004.09	19-Sep-04			731			1110	1120	731	731	665
2004	9	2004.09	20-Sep-04			675			1250	1262	675	675	664
2004	9	2004.09	21-Sep-04			637			1330	1344	637	637	665
2004	9	2004.09	22-Sep-04			657			1230	1247	657	657	668
2004	9	2004.09	23-Sep-04			700			1170	1190	700	700	672
2004	9	2004.09	24-Sep-04			696			1120	1132	696	696	675
2004	9	2004.09	25-Sep-04			717			1100	1118	717	717	679
2004	9	2004.09	26-Sep-04			717			1120	1141	717	717	680
2004	9	2004.09	27-Sep-04			736			1120	1135	736	736	682
2004	9	2004.09	28-Sep-04			743			1100	1119	743	743	684
2004	9	2004.09	29-Sep-04			731			1080	1104	731	731	686
2004	9	2004.09	30-Sep-04			740			1080	1107	740	740	690
2004	10	2004.10	1-Oct-04			717			1070	1057	717	717	692
2004	10	2004.10	2-Oct-04			739			1080	1055	739	739	696
2004	10	2004.10	3-Oct-04			690			1240	1213	690	690	696
2004	10	2004.10	4-Oct-04			637			1260	1234	637	637	694
2004	10	2004.10	5-Oct-04			638			1240	1212	638	638	691
2004	10	2004.10	6-Oct-04			615			1230	1206	615	615	687
2004	10	2004.10	7-Oct-04			649			1220	1198	649	649	685
2004	10	2004.10	8-Oct-04			633			1240	1214	633	633	683
2004	10	2004.10	9-Oct-04			608			1280	1254	608	608	682
2004	10	2004.10	10-Oct-04			580			1360	1339	567	567	679
2004	10	2004.10	11-Oct-04			574			1380	1364	574	574	676
2004	10	2004.10	12-Oct-04			601			1280	1261	601	601	674
2004	10	2004.10	13-Oct-04			616			1240	1222	616	616	673
2004	10	2004.10	14-Oct-04			644			1220	1202	644	644	673
2004	10	2004.10	15-Oct-04			590			1310	1296	590	590	671
2004	10	2004.10	16-Oct-04			561			1390	1376	561	561	668
2004	10	2004.10	17-Oct-04			567			1410	1394	567	567	662
2004	10	2004.10	18-Oct-04			560			1420	1418	560	560	656
2004	10	2004.10	19-Oct-04			530			1520	1525	529	529	649
2004	10	2004.10	20-Oct-04			438			1850	1884	438	438	642
2004	10	2004.10	21-Oct-04			342			2130	2173	342	342	632
2004	10	2004.10	22-Oct-04			301			2310	2360	301	301	620
2004	10	2004.10	23-Oct-04			317			2480	2543	317	317	607
2004	10	2004.10	24-Oct-04			331			2570	2643	331	331	595
2004	10	2004.10	25-Oct-04			366			2590	2668	366	366	583
2004	10	2004.10	26-Oct-04			367			2590	2671	367	367	572
2004	10	2004.10	27-Oct-04			345			2840	2936	345	345	559
2004	10	2004.10	28-Oct-04			337			2930	3034	337	337	545
2004	10	2004.10	29-Oct-04			357			2770	2857	357	357	533
2004	10	2004.10	30-Oct-04			404			2550	2620	404	404	521
2004	10	2004.10	31-Oct-04			484			2340	2388	484	484	514
2004	11	2004.11	1-Nov-04			568			2060	2103	568	568	508
2004	11	2004.11	2-Nov-04			584			1940	1977	584	584	504
2004	11	2004.11	3-Nov-04			625			1820	1846	625	625	504
2004	11	2004.11	4-Nov-04			648			1770	1772	648	648	504
2004	11	2004.11	5-Nov-04			679			1690	1678	677	677	506
2004	11	2004.11	6-Nov-04			717			1640	1630	717	717	509
2004	11	2004.11	7-Nov-04			722			1610	1599	722	722	512
2004	11	2004.11	8-Nov-04			738			1600	1587	738	738	516
2004	11	2004.11	9-Nov-04			729			1620	1604	729	729	521
2004	11	2004.11	10-Nov-04			743			1620	1605	744	744	527

YEAR	MO	Date	Vernalis Water Quality			CDEC	IEP	IEP	USGS	CDEC	USBR	Plotting	Plotting
			Mean uS/cm	Max uS/cm	Min uS/cm	Vern WQ uS/cm	Vern WQ uS/cm	Vernalis CFS	Vernalis CFS	Vernalis CFS	Vernalis uS/cm	Vernalis uS/cm	30-day Running
2004	11	2004.11	11-Nov-04			749			1630	1613	749	749	532
2004	11	2004.11	12-Nov-04			732			1650	1636	732	732	536
2004	11	2004.11	13-Nov-04			738			1650	1632	738	738	539
2004	11	2004.11	14-Nov-04			756			1610	1602	756	756	544
2004	11	2004.11	15-Nov-04			737			1630	1621	737	737	550
2004	11	2004.11	16-Nov-04			726			1640	1632	726	726	556
2004	11	2004.11	17-Nov-04			721			1620	1605	721	721	561
2004	11	2004.11	18-Nov-04			723			1610	1590	723	723	567
2004	11	2004.11	19-Nov-04			721			1600	1587	721	721	577
2004	11	2004.11	20-Nov-04			717			1620	1605	717	717	589
2004	11	2004.11	21-Nov-04			717			1610	1600	717	717	603
2004	11	2004.11	22-Nov-04			753			1580	1572	750	750	618
2004	11	2004.11	23-Nov-04			755			1560	1546	755	755	632
2004	11	2004.11	24-Nov-04			776			1550	1535	776	776	645
2004	11	2004.11	25-Nov-04			766			1540	1526	766	766	659
2004	11	2004.11	26-Nov-04			752			1540	1525	752	752	672
2004	11	2004.11	27-Nov-04			771			1520	1498	771	771	687
2004	11	2004.11	28-Nov-04			764			1490	1472	764	764	700
2004	11	2004.11	29-Nov-04			787			1470	1455	787	787	713
2004	11	2004.11	30-Nov-04			786			1460	1435	786	786	723
2004	12	2004.12	1-Dec-04			802			1440	1414	802	802	731
2004	12	2004.12	2-Dec-04			804			1450	1428	804	804	738
2004	12	2004.12	3-Dec-04			889			1450	1421	841	841	746
2004	12	2004.12	4-Dec-04			911			1450	1425	911	911	754
2004	12	2004.12	5-Dec-04			864			1460	1442	864	864	761
2004	12	2004.12	6-Dec-04			879			1460	1441	879	879	766
2004	12	2004.12	7-Dec-04			903			1470	1447	903	903	772
2004	12	2004.12	8-Dec-04			885			1520	1500	885	885	777
2004	12	2004.12	9-Dec-04			831			1570	1669	831	831	780
2004	12	2004.12	10-Dec-04			847			1550	1535	847	847	784
2004	12	2004.12	11-Dec-04			862			1600	1583	862	862	787
2004	12	2004.12	12-Dec-04			806			1640	1628	806	806	790
2004	12	2004.12	13-Dec-04			771			1670	1660	771	771	791
2004	12	2004.12	14-Dec-04			695			1700	1694	695	695	789
2004	12	2004.12	15-Dec-04			741			1690	1687	741	741	789
2004	12	2004.12	16-Dec-04			778			1680	1665	778	778	791
2004	12	2004.12	17-Dec-04			792			1640	1630	792	792	793
2004	12	2004.12	18-Dec-04			841			1610	1598	841	841	797
2004	12	2004.12	19-Dec-04			851			1590	1572	851	851	802
2004	12	2004.12	20-Dec-04			864			1580	1560	864	864	806
2004	12	2004.12	21-Dec-04			871			1540	1530	871	871	812
2004	12	2004.12	22-Dec-04			904			1520	1507	904	904	817
2004	12	2004.12	23-Dec-04			916			1500	1484	916	916	822
2004	12	2004.12	24-Dec-04			937			1500	1480	937	937	827
2004	12	2004.12	25-Dec-04			940			1470	1454	940	940	833
2004	12	2004.12	26-Dec-04			957			1470	1446	957	957	840
2004	12	2004.12	27-Dec-04			961			1460	1440	961	961	846
2004	12	2004.12	28-Dec-04			917			1580	1564	917	917	851
2004	12	2004.12	29-Dec-04			842			1710	1705	842	842	853
2004	12	2004.12	30-Dec-04			865			1760	1759	865	865	856
2004	12	2004.12	31-Dec-04			748			2190	2224	748	748	854
2005	1	2005.01	1-Jan-05			573			3120	3235	573	573	846
2005	1	2005.01	2-Jan-05			402			4240	4402	402	402	832
2005	1	2005.01	3-Jan-05			375			4180	4328	375	375	814
2005	1	2005.01	4-Jan-05			377			4320	4488	377	377	798
2005	1	2005.01	5-Jan-05			401			5050	5192	401	401	782
2005	1	2005.01	6-Jan-05			403			4660	4815	403	403	765
2005	1	2005.01	7-Jan-05			424			4380	4542	424	424	750
2005	1	2005.01	8-Jan-05			508			4250	4401	508	508	739
2005	1	2005.01	9-Jan-05			541			4490	4653	541	541	729
2005	1	2005.01	10-Jan-05			459			5390	5523	459	459	715
2005	1	2005.01	11-Jan-05			291			6950	6971	291	291	698
2005	1	2005.01	12-Jan-05			247			7970	7928	247	247	681
2005	1	2005.01	13-Jan-05			287			8680	8541	287	287	667
2005	1	2005.01	14-Jan-05			354			7820	7743	352	352	654
2005	1	2005.01	15-Jan-05			367			7440	7410	367	367	640
2005	1	2005.01	16-Jan-05			401			7060	7046	399	399	627
2005	1	2005.01	17-Jan-05			475			6370	6414	471	471	615
2005	1	2005.01	18-Jan-05			532			5650	5734	532	532	604
2005	1	2005.01	19-Jan-05			573			5030	5158	573	573	595
2005	1	2005.01	20-Jan-05			601			4540	4698	601	601	586
2005	1	2005.01	21-Jan-05			633			4150	4288	633	633	577
2005	1	2005.01	22-Jan-05			652			3830	3954	652	652	568
2005	1	2005.01	23-Jan-05			675			3600	3712	675	675	559
2005	1	2005.01	24-Jan-05			723			3360	3462	723	723	552
2005	1	2005.01	25-Jan-05			795			3080	3155	795	795	546

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
2005	1	2005.01	26-Jan-05			847			2860	2925	847	847	543
2005	1	2005.01	27-Jan-05			862			2770	2828	862	862	541
2005	1	2005.01	28-Jan-05			816			3140	3245	816	816	540
2005	1	2005.01	29-Jan-05			676			3960	4134	676	676	534
2005	1	2005.01	30-Jan-05			424			5410	5546	424	424	523
2005	1	2005.01	31-Jan-05			475			4710	4875	475	475	520
2005	2	2005.02	1-Feb-05			582			4180	4344	582	582	526
2005	2	2005.02	2-Feb-05			695			3970	4121	695	695	536
2005	2	2005.02	3-Feb-05			733			3820	3959	733	733	548
2005	2	2005.02	4-Feb-05			714			3760	3905	714	714	559
2005	2	2005.02	5-Feb-05			678			3830	3980	678	678	568
2005	2	2005.02	6-Feb-05			683			3760	3896	683	683	576
2005	2	2005.02	7-Feb-05			688			3680	3816	688	688	582
2005	2	2005.02	8-Feb-05			698			3620	3737	698	698	588
2005	2	2005.02	9-Feb-05			705			3540	3646	705	705	596
2005	2	2005.02	10-Feb-05			716			3470	3574	716	716	610
2005	2	2005.02	11-Feb-05			720			3430	3540	720	720	626
2005	2	2005.02	12-Feb-05			718			3360	3463	718	718	640
2005	2	2005.02	13-Feb-05			740			3320	3420	740	740	653
2005	2	2005.02	14-Feb-05			732			3270	3370	732	732	665
2005	2	2005.02	15-Feb-05			704			3330	3443	704	704	675
2005	2	2005.02	16-Feb-05			666			3940	4105	666	666	682
2005	2	2005.02	17-Feb-05			571			5140	5303	571	571	683
2005	2	2005.02	18-Feb-05			526			5870	5981	526	526	682
2005	2	2005.02	19-Feb-05			428			6490	6565	428	428	676
2005	2	2005.02	20-Feb-05			438			7380	7402	438	438	669
2005	2	2005.02	21-Feb-05			415			8640	8571	415	415	661
2005	2	2005.02	22-Feb-05			433			9020	8889	433	433	653
2005	2	2005.02	23-Feb-05			490			8530	8431	490	490	646
2005	2	2005.02	24-Feb-05			487			8600	8520	487	487	635
2005	2	2005.02	25-Feb-05			503			8370	8295	503	503	624
2005	2	2005.02	26-Feb-05			544			7770	7743	544	544	613
2005	2	2005.02	27-Feb-05			566			7340	7335	566	566	605
2005	2	2005.02	28-Feb-05			575			7060	7097	575	575	602
2005	3	2005.03	1-Mar-05						7150		562	562	606
2005	3	2005.03	2-Mar-05						7500		530	530	608
2005	3	2005.03	3-Mar-05						7470		487	487	605
2005	3	2005.03	4-Mar-05						7590		465	465	597
2005	3	2005.03	5-Mar-05						7640		488	488	589
2005	3	2005.03	6-Mar-05						7420		517	517	582
2005	3	2005.03	7-Mar-05						7060		538	538	578
2005	3	2005.03	8-Mar-05						6880		530	530	573
2005	3	2005.03	9-Mar-05						6910		515	515	567
2005	3	2005.03	10-Mar-05						6780		511	511	561
2005	3	2005.03	11-Mar-05						6660		529	529	555
2005	3	2005.03	12-Mar-05						6570		532	532	549
2005	3	2005.03	13-Mar-05						6430		536	536	543
2005	3	2005.03	14-Mar-05						6290		530	530	536
2005	3	2005.03	15-Mar-05						6210		526	526	529
2005	3	2005.03	16-Mar-05						6140		527	527	522
2005	3	2005.03	17-Mar-05						5980		535	535	517
2005	3	2005.03	18-Mar-05						5750		565	565	513
2005	3	2005.03	19-Mar-05						5800		576	576	513
2005	3	2005.03	20-Mar-05						5830		536	536	514
2005	3	2005.03	21-Mar-05						5850		541	541	518
2005	3	2005.03	22-Mar-05						5900		547	547	521
2005	3	2005.03	23-Mar-05						6620		471	471	523
2005	3	2005.03	24-Mar-05						8450		388	388	522
2005	3	2005.03	25-Mar-05						9530		323	323	516
2005	3	2005.03	26-Mar-05						10600		258	258	508
2005	3	2005.03	27-Mar-05						12200		226	226	499
2005	3	2005.03	28-Mar-05						13200		238	238	489
2005	3	2005.03	29-Mar-05						14000		241	241	478
2005	3	2005.03	30-Mar-05						14600		249	249	467
2005	3	2005.03	31-Mar-05						15000		230	230	456
2005	4	2005.04	1-Apr-05						15100		225	225	446
2005	4	2005.04	2-Apr-05						15000		234	234	438
2005	4	2005.04	3-Apr-05						15000		231	231	430
2005	4	2005.04	4-Apr-05						15000		234	234	421
2005	4	2005.04	5-Apr-05						14700		237	237	412
2005	4	2005.04	6-Apr-05						14400		229	229	402
2005	4	2005.04	7-Apr-05						13400		242	242	392
2005	4	2005.04	8-Apr-05						12000		263	263	384
2005	4	2005.04	9-Apr-05						11500		259	259	375
2005	4	2005.04	10-Apr-05						10700		263	263	366
2005	4	2005.04	11-Apr-05						10400		263	263	357

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
2005	4	2005.04	12-Apr-05						10300		262	262	348
2005	4	2005.04	13-Apr-05						10800		249	249	339
2005	4	2005.04	14-Apr-05						9900		280	280	331
2005	4	2005.04	15-Apr-05						9320		276	276	322
2005	4	2005.04	16-Apr-05						9080		271	271	314
2005	4	2005.04	17-Apr-05						9010		270	270	304
2005	4	2005.04	18-Apr-05						8810		275	275	294
2005	4	2005.04	19-Apr-05						8750		271	271	285
2005	4	2005.04	20-Apr-05						8660		270	270	276
2005	4	2005.04	21-Apr-05						8380		279	279	267
2005	4	2005.04	22-Apr-05						8010		279	279	261
2005	4	2005.04	23-Apr-05						7730		279	279	257
2005	4	2005.04	24-Apr-05						7490		286	286	256
2005	4	2005.04	25-Apr-05						7190		285	285	257
2005	4	2005.04	26-Apr-05						6750		286	286	259
2005	4	2005.04	27-Apr-05						6490		286	286	260
2005	4	2005.04	28-Apr-05						6720		269	269	261
2005	4	2005.04	29-Apr-05						6960		263	263	262
2005	4	2005.04	30-Apr-05						7040		261	261	263
2005	5	2005.05	1-May-05						7520		250	250	263
2005	5	2005.05	2-May-05						7970		233	233	263
2005	5	2005.05	3-May-05						8120		223	223	263
2005	5	2005.05	4-May-05						7860		230	230	263
2005	5	2005.05	5-May-05						7670		247	247	263
2005	5	2005.05	6-May-05						7910		243	243	264
2005	5	2005.05	7-May-05						8190		225	225	263
2005	5	2005.05	8-May-05						8410		211	211	261
2005	5	2005.05	9-May-05						8630		212	212	260
2005	5	2005.05	10-May-05						8870		196	196	258
2005	5	2005.05	11-May-05						8930		197	197	255
2005	5	2005.05	12-May-05						8880		190	190	253
2005	5	2005.05	13-May-05						8940		182	182	251
2005	5	2005.05	14-May-05						9040		183	183	248
2005	5	2005.05	15-May-05						9070		189	189	245
2005	5	2005.05	16-May-05						8930		185	185	242
2005	5	2005.05	17-May-05						8780		187	187	239
2005	5	2005.05	18-May-05						8770		181	181	236
2005	5	2005.05	19-May-05						9200		137	137	231
2005	5	2005.05	20-May-05						10200		116	116	226
2005	5	2005.05	21-May-05						11400		107	107	221
2005	5	2005.05	22-May-05						12200		110	110	215
2005	5	2005.05	23-May-05						12800		129	129	210
2005	5	2005.05	24-May-05						13100		115	115	204
2005	5	2005.05	25-May-05						13500		93	93	198
2005	5	2005.05	26-May-05						13800		92	92	191
2005	5	2005.05	27-May-05						13800		102	102	185
2005	5	2005.05	28-May-05						14200		106	106	180
2005	5	2005.05	29-May-05						14600		101	101	174
2005	5	2005.05	30-May-05						15200		99	99	169
2005	5	2005.05	31-May-05						15600		100	100	164
2005	6	2005.06	1-Jun-05						15600		100	100	160
2005	6	2005.06	2-Jun-05						15700		103	103	156
2005	6	2005.06	3-Jun-05						15800		106	106	151
2005	6	2005.06	4-Jun-05						15900		110	110	147
2005	6	2005.06	5-Jun-05						16000		111	111	143
2005	6	2005.06	6-Jun-05						15900		113	113	139
2005	6	2005.06	7-Jun-05						15300		116	116	136
2005	6	2005.06	8-Jun-05						14500		124	124	133
2005	6	2005.06	9-Jun-05						13700		133	133	131
2005	6	2005.06	10-Jun-05						12700		140	140	129
2005	6	2005.06	11-Jun-05						11600		145	145	127
2005	6	2005.06	12-Jun-05						10900		168	168	127
2005	6	2005.06	13-Jun-05						10400		174	174	126
2005	6	2005.06	14-Jun-05						10000		172	172	126
2005	6	2005.06	15-Jun-05						9560		179	179	126
2005	6	2005.06	16-Jun-05						8780		207	207	126
2005	6	2005.06	17-Jun-05						8130		221	221	128
2005	6	2005.06	18-Jun-05						7840		231	231	131
2005	6	2005.06	19-Jun-05						7680		246	246	135
2005	6	2005.06	20-Jun-05						7520		258	258	140
2005	6	2005.06	21-Jun-05						7110		275	275	146
2005	6	2005.06	22-Jun-05						6930		284	284	151
2005	6	2005.06	23-Jun-05						7010		261	261	156
2005	6	2005.06	24-Jun-05						6840		234	234	160
2005	6	2005.06	25-Jun-05						6520		269	269	166
2005	6	2005.06	26-Jun-05						6300		298	298	173

YEAR	MO	Date	Vernalis Water Quality			CDEC Vern WQ uS/cm	IEP Vern WQ uS/cm	IEP Vernalis CFS	USGS Vernalis CFS	CDEC Vernalis CFS	USBR Vernalis uS/cm	Plotting Vernalis uS/cm	Plotting 30-day Running
			Mean uS/cm	Max uS/cm	Min uS/cm								
2005	6	2005.06	27-Jun-05						6070		317	317	180
2005	6	2005.06	28-Jun-05						5910		338	338	188
2005	6	2005.06	29-Jun-05						5990		296	296	194
2005	6	2005.06	30-Jun-05						6020		246	246	199
2005	7	2005.07	1-Jul-05						5530		269	269	205
2005	7	2005.07	2-Jul-05						5500		276	276	211
2005	7	2005.07	3-Jul-05						5850		235	235	215
2005	7	2005.07	4-Jul-05						6840		208	208	218
2005	7	2005.07	5-Jul-05						6730		213	213	222
2005	7	2005.07	6-Jul-05						6510		227	227	225
2005	7	2005.07	7-Jul-05						5870		266	266	230
2005	7	2005.07	8-Jul-05						5390		288	288	236
2005	7	2005.07	9-Jul-05						5440		291	291	241
2005	7	2005.07	10-Jul-05						5290		301	301	246
2005	7	2005.07	11-Jul-05						4920		311	311	252
2005	7	2005.07	12-Jul-05						4540		352	352	258
2005	7	2005.07	13-Jul-05						4140		380	380	265
2005	7	2005.07	14-Jul-05						3850		406	406	273
2005	7	2005.07	15-Jul-05						3740		396	396	280
2005	7	2005.07	16-Jul-05						3520		410	410	287
2005	7	2005.07	17-Jul-05						3340		434	434	294
2005	7	2005.07	18-Jul-05						3370		443	443	301
2005	7	2005.07	19-Jul-05						3220		437	437	307
2005	7	2005.07	20-Jul-05						3190		428	428	313
2005	7	2005.07	21-Jul-05						3200		429	429	318
2005	7	2005.07	22-Jul-05						3090		461	461	324
2005	7	2005.07	23-Jul-05						3090		485	485	331
2005	7	2005.07	24-Jul-05						3120		469	469	339
2005	7	2005.07	25-Jul-05						3060		473	473	346
2005	7	2005.07	26-Jul-05						2900		475	475	352
2005	7	2005.07	27-Jul-05						2770		494	494	358
2005	7	2005.07	28-Jul-05						2750		504	504	363
2005	7	2005.07	29-Jul-05						2720		498	498	370
2005	7	2005.07	30-Jul-05						2720		490	490	378
2005	7	2005.07	31-Jul-05						2770		485	485	386
2005	8	2005.08	1-Aug-05						2880		495.04	495.04	393
2005	8	2005.08	2-Aug-05						2780		468.25	468.25	401
2005	8	2005.08	3-Aug-05						2660		460.54	460.54	409
2005	8	2005.08	4-Aug-05						2560		473.21	473.21	418
2005	8	2005.08	5-Aug-05						2590		466.58	466.58	426
2005	8	2005.08	6-Aug-05						2680		468.38	468.38	432
2005	8	2005.08	7-Aug-05						2780		441.67	441.67	438
2005	8	2005.08	8-Aug-05						2810		432.42	432.42	442
2005	8	2005.08	9-Aug-05						2700		450.7	450.7	447
2005	8	2005.08	10-Aug-05						2640		474.75	474.75	453
2005	8	2005.08	11-Aug-05						2590		488.08	488.08	457
2005	8	2005.08	12-Aug-05						2590		486.65	486.65	461
2005	8	2005.08	13-Aug-05						2600		498.42	498.42	464
2005	8	2005.08	14-Aug-05						2650		490.71	490.71	467
2005	8	2005.08	15-Aug-05						2660		498.33	498.33	470
2005	8	2005.08	16-Aug-05						2660		475.13	475.13	471
2005	8	2005.08	17-Aug-05						2700		467.5	467.5	472
2005	8	2005.08	18-Aug-05						2670		472.75	472.75	473
2005	8	2005.08	19-Aug-05						2730		447.71	447.71	474
2005	8	2005.08	20-Aug-05						2940		417.5	417.5	474
2005	8	2005.08	21-Aug-05						3000		408.54	408.54	472
2005	8	2005.08	22-Aug-05						2960		414.35	414.35	470
2005	8	2005.08	23-Aug-05						2700		427.3	427.3	468
2005	8	2005.08	24-Aug-05						2530		469.88	469.88	468
2005	8	2005.08	25-Aug-05						2500		478.17	478.17	468
2005	8	2005.08	26-Aug-05						2460		478.17	478.17	468
2005	8	2005.08	27-Aug-05						2410		483.1	483.1	467
2005	8	2005.08	28-Aug-05						2480		461.71	461.71	466
2005	8	2005.08	29-Aug-05						2300		523.45	523.45	467
2005	8	2005.08	30-Aug-05						2070		591.71	591.71	470
2005	8	2005.08	31-Aug-05						1990		631.04	631.04	475
2005	9	2005.09	1-Sep-05										
2005	9	2005.09	2-Sep-05										
2005	9	2005.09	3-Sep-05										
2005	9	2005.09	4-Sep-05										
2005	9	2005.09	5-Sep-05										
2005	9	2005.09	6-Sep-05										
2005	9	2005.09	7-Sep-05										
2005	9	2005.09	8-Sep-05										
2005	9	2005.09	9-Sep-05										

Petition to De-List the Lower San Joaquin River

For

Impairment by Salt and Boron

EXHIBIT B

SDWA Bay-Delta Exh-09A

Issue 10: Southern Delta Electrical Conductivity

Submitted By:

SAN JOAQUIN RIVER GROUP AUTHORITY

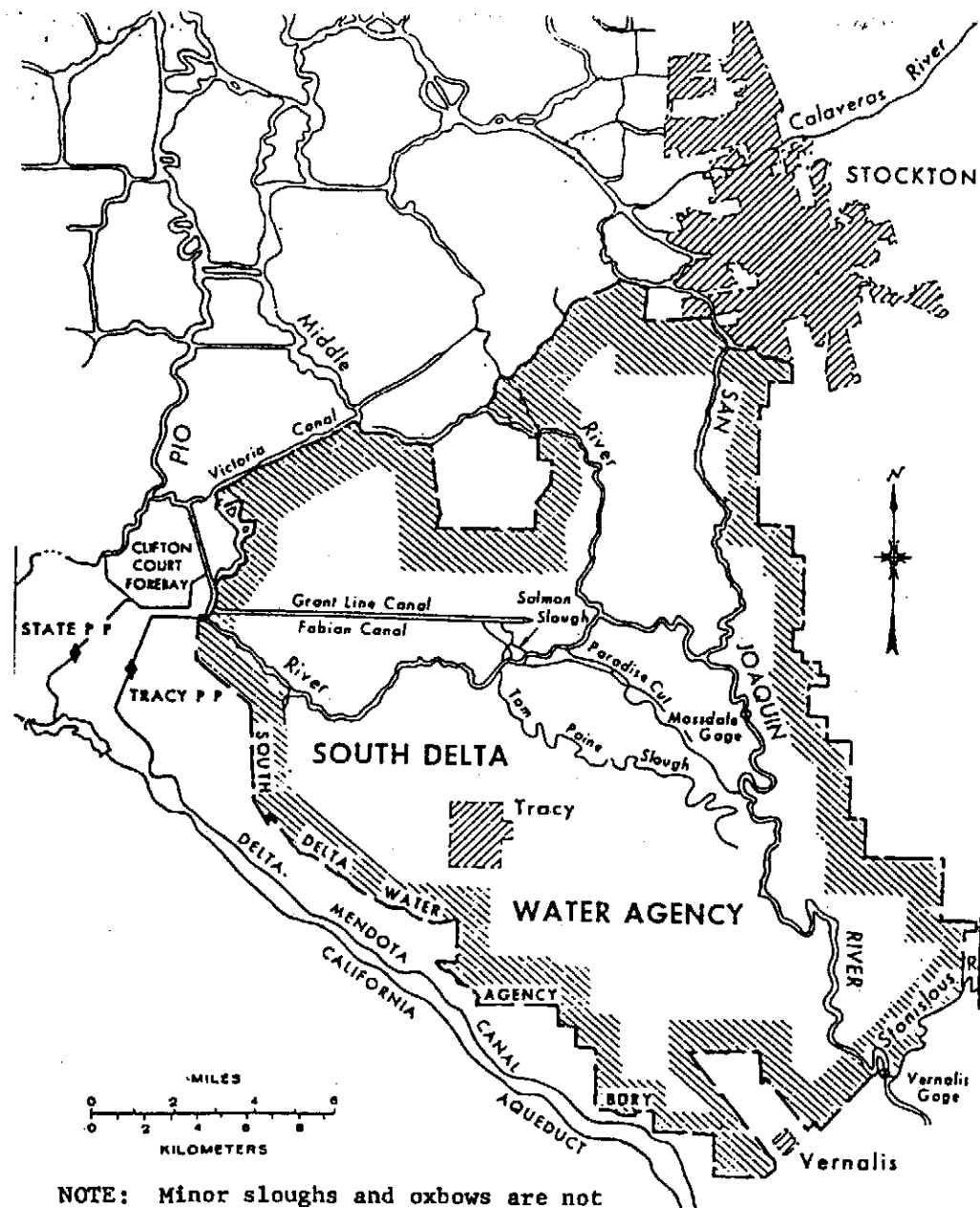
SDWRA-OPH-07A
09

STATE WATER RESOURCES CONTROL BOARD PERIODIC REVIEW OF THE 1995 WATER QUALITY CONTROL PLAN

Issue 10: Southern Delta Electrical Conductivity

South Delta Water Agency
March 2005

The map illustrates the Sacramento-San Joaquin River Delta, a complex network of waterways and land tracts. The Sacramento River flows from the north, while the San Joaquin River flows from the east. The Delta is characterized by numerous islands and tracts, many of which are labeled. Key locations include Antioch, Pittsburg, Stockton, and Tracy. The map also shows major highways like SR 99 and SR 99A, and the Delta-Mendota Canal. The map is a detailed representation of the Delta's geography, showing the intricate patterns of the river and the distribution of land.



NOTE: Minor sloughs and oxbows are not shown on this Figure.

SOUTH DELTA WATER AGENCY
FIGURE II.1

SOUTH DELTA WATER AGENCY is a political subdivision of the State of California, created and existing by virtue of Chapter 1089 of the statutes of 1973 of the State of California, as amended, known as the South Delta Water Agency Act. The entire area within the SDWA is located within the Sacramento-San Joaquin Delta as defined in California Water Code § 12220 and is generally referred to as the southern Delta. The boundaries of SDWA are described in section 9.1 of the Act, and includes approximately 148,000 acres.

The acreage is primarily devoted to agriculture and is dependent on the in-channel water supply in the southern Delta for irrigation water and other beneficial uses. The Stanislaus River forms a portion of the southern boundary of the SDWA to the point where that river flows into the San Joaquin River. The water rights pertaining to said lands are principally riparian in nature, and in some instances covered by pre-1914 appropriations or filings for appropriations pursuant to the Water Commission Act of 1913 (and permits and licenses issued pursuant thereto). The SDWA has as its general purpose to protect the water supply of the lands within the agency against intrusion of ocean salinity and to assure the lands a dependable supply of water of suitable quality sufficient to meet present and future needs.

App. § 116-4.1

SOUTH DELTA WATER AGENCY

Section

116-4.5. Water rights.

§ 116-4.1. General purposes of agency

Sec. 4.1. The general purposes of the agency shall be to negotiate, enter into, execute, amend, administer, perform, and enforce one or more agreements with the United States and with the State of California, or with either, which have for their general purposes the following:

(a) To protect the water supply of the lands within the agency against intrusion of ocean salinity; and

(b) To assure the lands within the agency a dependable supply of water of suitable quality sufficient to meet present and future needs.

The agency may also undertake activities to advise and assist landowners and local districts within the agency in reclamation and flood control matters.

(Stats.1973, c. 1089, p. 2211, § 4.1. Amended by Stats.1987, c. 667, § 3.)

Historical and Statutory Notes

Derivation: Stats.1968, c. 419, p. 863, § 4.1.

§ 116-4.2. Powers of agency

Sec. 4.2. The agency shall also have the following powers:

- (a) To have perpetual succession.**
- (b) To sue and be sued, except as otherwise provided herein or by law, in all actions and proceedings in all courts and tribunals of competent jurisdiction.**
- (h) To act jointly with or cooperate with the United States and with the State of California to the end that the purposes and activities of the agency may be fully and economically performed.**
- (i) To make and execute contracts and other instruments necessary or convenient to the exercise of its powers.**
- (j) To carry on technical and other investigations of all kinds necessary or convenient for the accomplishment of the purposes or powers of the agency.**
- (k) To do any and every lawful act necessary in order that a sufficient in-channel water supply may be available for any present or future beneficial use or uses of the lands within the agency.**

(Stats.1973, c. 1089, p. 2211, § 4.2. Amended by Stats.1987, c. 667, § 4.)

§ 116-4.3. Incidental powers

Sec. 4.3. The agency shall have all powers necessary or convenient to carry out the purposes of this act, including powers granted by this act and any other provision of law.

(Stats.1973, c. 1089, p. 2212, § 4.3.)

Historical and Statutory Notes

Derivation: Stats.1968, c. 419, p. 864, § 4.3.

§ 116-4.5. Water rights

Sec. 4.5. The agency shall have no authority or power to affect, bind, prejudice, impair, restrict, or limit water rights within the agency.

(Added by Stats.1987, c. 667, § 5.)

What are the Water Quality
Objectives for Agricultural
Beneficial Uses in the South
Delta?

1995 Water Quality Control Plan

Water Quality Objectives for Agricultural Beneficial Uses

Excerpt From Table 2

SOUTHERN DELTA

San Joaquin River at Airport Way Bridge, Vernalis	C-10 (RSAN112)	Electrical Con- ductivity (EC)	Maximum 30-day running average of mean daily EC (mmhos/cm)	All	Apr-Aug Sep-Mar	0.7 1.0
-and- San Joaquin River at Brandt Bridge site	C-6 (RSAN073)				-or-	
-and- Old River near Middle River [5]	C-8 (ROLD89)					
-and- Old River at Tracy Road Bridge [5]	P-12 (ROLD59)					
If a three-party contract has been implemented among the DWR, USBR, and SDWA, that contract will be reviewed prior to implementation of the above and, after also considering the needs of other beneficial uses, revisions will be made to the objectives and compliance/monitoring locations noted, as appropriate.						

EXPORT AREA

West Canal at mouth of Clifton Court Forebay	C-9 (CHWST0)	Electrical Con- ductivity (EC)	Maximum monthly average of mean daily EC (mmhos/cm)	All	Oct-Sep	1.0
-and- Delta-Mendota Canal at Tracy Pumping Plant	DMC-1 (CHDMC004)					

[1] River Kilometer Index station number.

[2] Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period. If the objective is not met on the last day of the averaging period, all days in the averaging period are considered out of compliance.

[3] The Sacramento Valley 40-30-30 water year hydrologic classification index (see page 23) applies for determinations of water year type.

[4] When no date is shown, EC limit continues from April 1.

[5] The EC objectives shall be implemented at this location by December 31, 1997.

4. Southern Delta agricultural salinity objectives. Elevated salinity in the southern Delta is caused by low flows, salts imported in irrigation water by the State and federal water projects, and discharges of land-derived salts, primarily from agricultural drainage. Implementation of the objectives will be accomplished through the release of adequate flows to the San Joaquin River and control of saline agricultural drainage to the San Joaquin River and its tributaries. Implementation of the agricultural salinity objectives for the two Old River sites shall be phased in so that compliance with the objectives is achieved by December 31, 1997.

Revised Water Right Decision 1641

Water Quality Objectives for Agricultural Beneficial Uses

Excerpt From Table 2

SOUTHERN DELTA

San Joaquin River at Airport Way Bridge, Vernalis	C-10 (RSAN112)	Electrical Con- ductivity (EC)	Maximum 30-day running average of mean daily EC (mmhos/cm)	All	Apr-Aug Sep-Mar	0.7 1.0
-and- San Joaquin River at Brandt Bridge aka[5]	C-6 (RSAN073)					
-and- Old River near Middle River [5]	C-8 (ROLD60)					
-and- Old River at Tracy Road Bridge [5]	P-12 (ROLD60)					

EXPORT AREA

West Canal at mouth of Clifton Court Forebay	C-9 (CHWST0)	Electrical Con- ductivity (EC)	Maximum monthly average of mean daily EC (mmhos/cm)	All	Oct-Sep	1.0
-and- Delta-Mendota Canal at Tracy Pumping Plant	DMC-1 (CHDMC004)					

[1] River Kilometer Index station number.

[2] Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period. The averaging period commences with the first day of the time period for the applicable objective. If the objective is not met on the last day of the averaging period, all days in the averaging period are considered out of compliance.

[3] The Sacramento Valley 40-30-30 water year hydrologic classification index (see Figure 1) applies for determinations of water year type.

[4] When no date is shown, EC limits continue from April 1.

[5] The 0.7 EC objective becomes effective on April 1, 2005. The DWR and the USBR shall meet 1.0 EC at these stations year round until April 1, 2005. The 0.7 EC objective is replaced by the 1.0 EC objective from April through August after April 1, 2005 if permanent barriers are constructed, or equivalent measures are implemented, in the southern Delta and an operations plan that reasonably protects southern Delta agriculture is prepared by the DWR and the USBR and approved by the Executive Director of the SWRCB. The SWRCB will review the salinity objectives for the southern Delta in the next review of the Bay-Delta objectives following construction of the barriers.

HOW WERE WATER QUALITY OBJECTIVES FOR BENEFICIAL USES DETERMINED

Crop tolerances

Different crops tolerate different soil concentrations in the water

Salinity accumulation in soil

Plants take up water, salt remains in soil

Soil permeability

At what rate will water move through a particular soil type

Leaching requirements

1989 - 1991

Southern Delta Agriculture Work Group

Western/Interior Delta Agriculture Work Group

Hydrodynamics and Salinity Work Group

Hearings, Testimony, Cross-Examination, etc.

Southern Delta Agriculture work group

August 16, 1989

Name	Affiliation	Address	Telephone
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Gordon Lyford	USBR	2800 Cottage Way Sac	978-5062
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Gordon Enas	DWR	1416 9th ST	916-323-8882
TERRY SNYDER	SURCB	901 P ST. SACTO	324-5620
Fred Bachmann	DWR-Delta	1416-9th St.	324-4751
Bob Suits	DWR	1416-9th St.	322-7169
Jim Snow	DWR-ORM	"	324 6164
Miguel De Anda	DWR-PLANNING	"	445-4463
Phil Wendt	"	"	323-8871
Elaine Merritt	DWR-ORM	"	322-0485
Craig Trombly	DWR-Delta	"	445-8867
DEREK HILTS	USBR	2800 COTTAGE WAY SAC	(916) 978-5124
Keth Bialy	Kimble, Moskowitz, et al	770 L Street, Suite 1200	444-8920
Alex Hildebrand	SDWA	23443 S. Hays, Manteca 95336	209 823 4166
JAVE WHITRIDGE	SDWA	311 E MAIN ST SBY	209 948-5551
G. T. ORLUB	SDWA	UCD, Civil Engrg	752-1424
Larry Dale	UCB/SURCB	2070 Aldison Berkeley CA	(415) 644-4422
TED ROEFS	USBR	2800 Cottage Way Sac CA 95824	916-978-4013
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United States
Department of
Agriculture

Science and
Education
Administration

Agricultural Research
Western Region

U.S. Salinity Laboratory
4500 Glenwood Drive
Riverside, CA 92501

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Jan. 4, 1982

TO: Parties Interested in the Irrigation Water Quality in the South Delta

Enclosed please find a copy of the final report of the committee formed to evaluate the irrigation water quality requirements for agriculture in the South Delta. Following the preliminary report sent to you on November 3, 1981, we received comments and desires for additional information from the South Delta Water Agency and the Bureau of Reclamation. The committee has attempted to take these comments and requests into consideration in preparing this final report.

The committee assumes that its task is now complete and stands adjourned.

Sincerely,

GLENN J. HOFFMAN
Committee Member

Enclosure

SDWA Exhibit No. 103

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WATER QUALITY CONSIDERATIONS FOR THE
SOUTH DELTA WATER AGENCY

G. J. Hoffman, T. Prichard, and J. Meyer

A mixture of soluble salts is present in all soils. If the concentration of these salts becomes excessive, crop yields will be reduced because of the decrease in osmotic potential of the soil water. To prevent harmful accumulation of salts, the soil profile must be leached periodically with an amount of water in excess of that used by evapotranspiration. Thus, where salinity is a hazard, the concept of efficient water use must be expanded to include an increment of water to meet the leaching requirement (L_r), defined as the minimum fraction of the total amount of applied water that must pass through the soil root zone to prevent a reduction in crop yield from an excess accumulation of salts. Leaching occurs whenever irrigation and rainfall exceed evapotranspiration.

Two quantities establish the leaching requirement: the salt concentration of the applied water and the salt tolerance of the crop. The average salt concentration of the applied water (\bar{C}) can be estimated from the mean salt concentration of the irrigation water (C_I) and the amount of rainfall (D_R) and irrigation (D_I) applied. Mathematically,

$$\bar{C} = \frac{C_I D_R}{D_I + D_R}$$

because rainfall has an insignificant salt concentration. The amount of water required by the major crops in South Delta, as estimated by both the Bureau of Reclamation and the Extension Service, is summarized in Table 1. Estimates of both evapotranspiration and the total amount of water that must be applied for

Map Symbol

Soil Series

Slow (40%) - less than 0.2 inches per hour

AD	Finrod clay loam
AO	Archerdale very fine sandy loam, overwash
AR	Archerdale clay loam
CL	Stockton clay
CP	Capay clay, 0 to 2 percent slopes
CPB	Capay clay, 2 to 5 percent slopes
CS	Capay clay, saline alkali
CW	Capay clay, wet
EC	Peltier mucky clay loam, drained
ES	Peltier mucky clay loam, organic substratum
PD	Pescadero clay loam, drained
RM	Rincon clay loam
RW	Rincon clay loam, wet
TC	Colusa variant clay loam, drained
WA	Willows clay, drained
XD	Hollenbeck silty clay

Moderately slow (34%) - 0.2 to 0.6 inches per hour

BC	Blanco clay loam, drained
BR	Brentwood clay loam
BZ	Bronzan sandy clay loam, drained
CD	Eightmile variant clay loam
CH	Bronzan clay loam, drained
CI	Bronzan clay loam
EA	Egbert mucky clay loam, partially drained
EB	Egbert silty clay loam, partially drained
EF	Egbert silty clay loam, sandy substratum
KI	Kingile muck, drained
KL	Kingile-Ryde complex
LR	Los Robles gravelly clay loam
LS	Los Robles clay loam
ME	Merritt silty clay loam, partially drained
MF	Merritt silty clay loam, flooded
OD	Chualar variant coarse sandy loam
RH	Ryde clay loam, drained
RS	Ryde clay loam, organic substratum
SI	Shinkee muck, drained
VJ	Veritas silty clay loam, overwash
VL	Veritas sandy loam, saline-alkali
VM	Veritas variant sandy loam
VR	Vernalis clay loam
VW	Vernalis clay loam, wet
VY	Vina loam
VZ	Valdes silt loam, drained
WB	Webble muck, drained

Map Symbol

Soil Series

Moderate (17%) - 0.6 to 2.0 inches per hour

FC	Fluvaquents
CC	Grangeville clay loam, drained
MN	Manteca sandy loam
RF	Ryde clay loam, sandy substratum
RI	Ryde-Peltier complex
SC	Timor loamy sand
SH	Shima muck, drained
XV	Galt clay

Moderately rapid (6%) - 2.0 to 6.0 inches per hour

CB	Columbin fine sandy loam
CC	Columbia fine sandy loam, clayey substratum
CE	Columbia fine sandy loam, channelled
CF	Columbia fine sandy loam, flooded
CJ	Eightmile loam
CO	Eightmile fine sandy loam, overwash
CT	Cortina gravelly loam
DN	Escalon sandy loam
DV	Devries sandy loam, drained
GV	Grangeville fine sandy loam, drained
GS	Grangeville fine sandy loam, flooded
HA	Moncut fine sandy loam
HG	Escalon sandy loam
HL	Moncut gravelly sandy loam
RK	Reiff loam
VF, VG	Veritas fine sandy loam, very deep
VH	Veritas sandy loam
VK	Devries variant sandy loam

Rapid (3%) - greater than 6.0 inches per hour

DB	Dello sandy loam, clay substratum
DC	Dello loamy sand, drained
DD	Dello clay loam, overwash
DE	Dello loamy sand, moderately wet
DF	Dello sand, flooded
DH	Delhi loamy coarse sand
RC	Rindge mucky silt loam, overwash
RN	Rindge muck, drained
TG	Tujunga gravelly loamy coarse sand
TS	Tinnin loamy coarse sand, drained
IT	Tinnin loamy coarse sand, loamy substratum
TW	Nisgani loamy coarse sand, partially drained
VC	Venice mucky silt loam, overwash
VE	Venice muck, drained

Table 3. Leaching fractions achieved for various soil types in the South Delta (Meyer, unpublished report, 1976).

SCS Soil Per- meability Class	Crop	No. of Sites Samples	Leaching Fraction	
			Values	Mean
in/hr				
0 to 0.2	Alfalfa	2	0.03-0.05; <0.05	0.04
0.2 to 0.6	Alfalfa	2	0.15; 0.15	0.13
	Sugar Beet	1	0.10	
0.6 to 2.0	Walnut	1	0.15	0.18
	Corn	1	0.15	
	Alfalfa	1	0.25	
2.0 to 6.0	Tomato-Cabbage	1	0.25	0.25
	Tomato	1	0.25	
>6.0	-	0	-	-
			Overall Mean	= 0.15
			Standard Deviation	= 0.08

Table 5. Salt concentration of irrigation water, reported as mg/l of total dissolved salts that results in various reductions in crop yield as a function of leaching fraction and rainfall.

Leaching Fraction	No Rainfall				Normal Effective Rainfall			
	Relative Crop Yield				Relative Crop Yield			
	100%	90%	80%	70%	100%	90%	80%	70%
<u>ALFALFA</u>								
0.07	480	830	1170	1500	570	980	1380	1770
0.15	1060	1730	2430	3120	1250	2040	2870	3680
0.23	1880	3150			2220	3720		
<u>TOMATO</u>								
0.07	590	860	1110	1360	650	950	1230	1510
0.15	1290	1800	2320	2840	1430	2000	2580	3150
0.23	2310	3280			2560	3640		
<u>WHEAT</u>								
0.07	1430	1810			2800	3550		
0.15	3070	3790			6020	7430		
0.23								
<u>BEAN</u>								
0.07	250	380	510	640	280	430	570	720
0.15	520	790	1060	1330	580	880	1190	1490
0.23	940	1430	1910	2410	1050	1600	2140	2700
<u>CORN</u>								
0.07	420	630	830	1040	430	650	850	1070
0.15	880	1300	1730	2150	910	1340	1780	2210
0.23	1590	2360	3150		1640	2430	3240	
<u>SUGAR BEET</u>								
0.07	1660	2120			1990	2540		
0.15	3580				4300			
0.23								
<u>FRUIT AND NUTS</u>								
0.07	360	500	620	740	440	600	750	900
0.15	780	1040	1290	1550	940	1260	1560	1880
0.23	1400	1870	2340	2800	1690	2260	2830	3390
<u>GRAPE</u>								
0.07	360	630	880	1140	420	740	1030	1330
0.15	780	1310	1840	2370	910	1530	2150	2770
0.23	1400	2370	3340		1640	2770	3910	

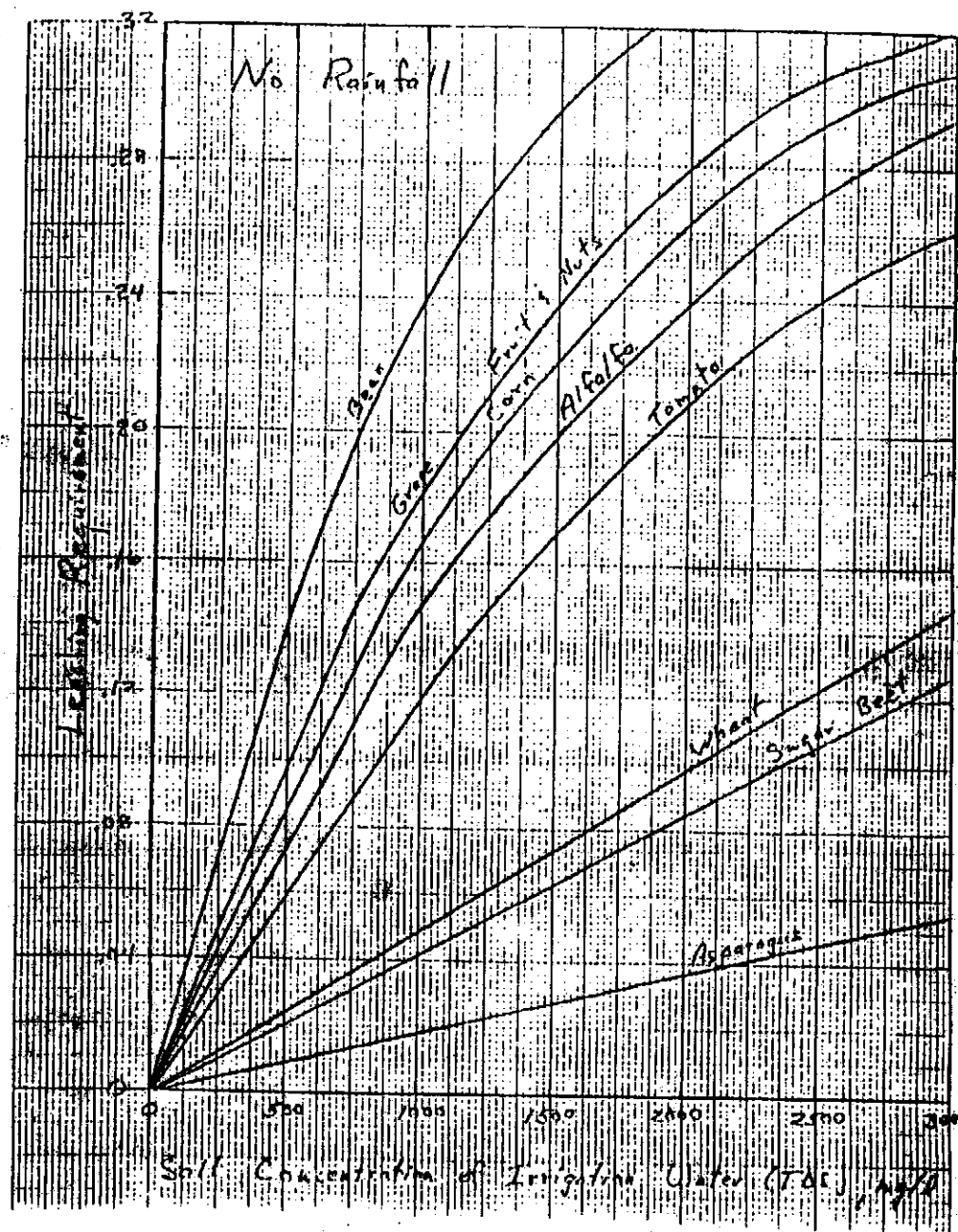


Fig. 1. Leaching requirement of the prominent crops in the South Delta as a function of the salinity of the irrigation water without rainfall.

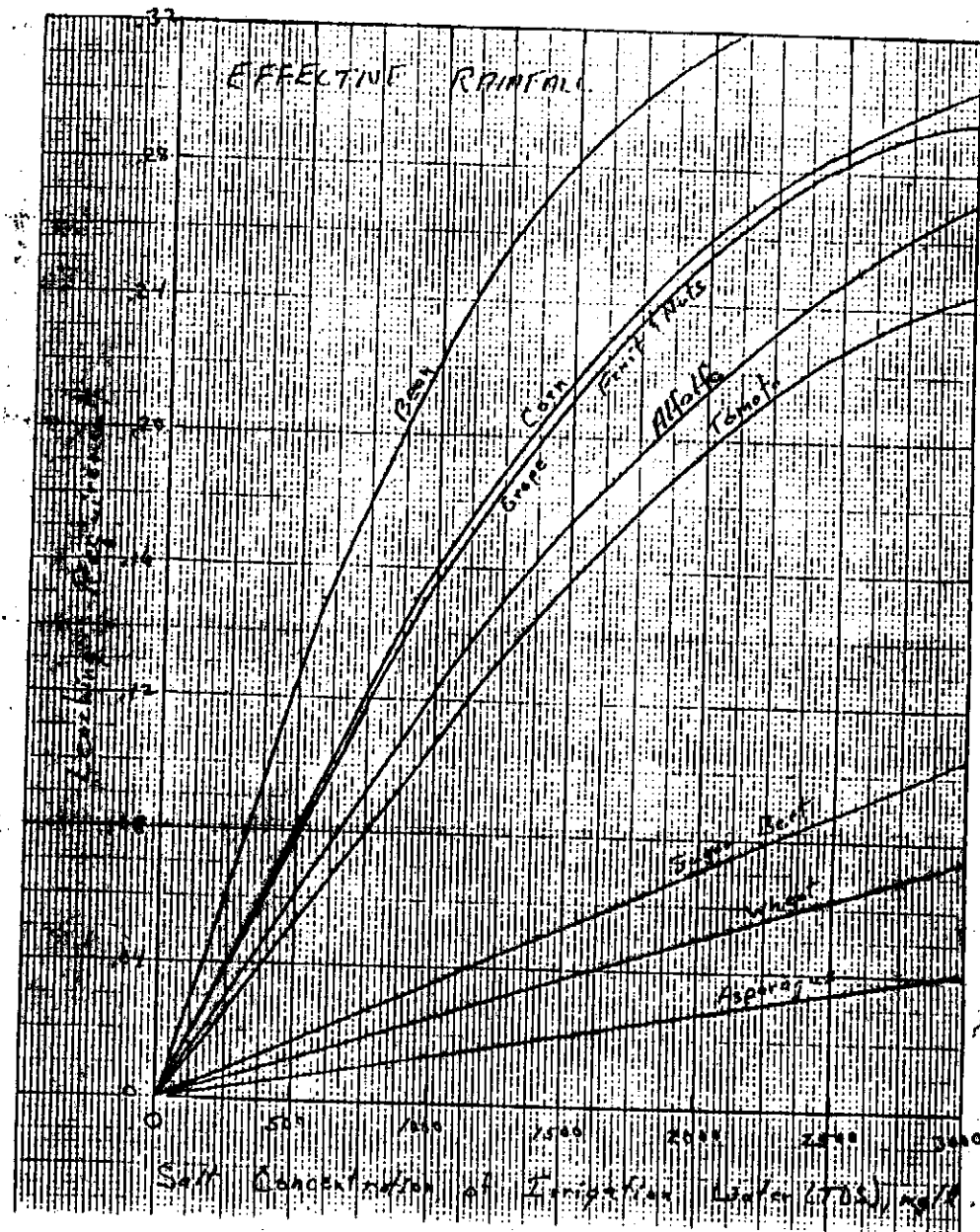


Fig. 2. Leaching requirement of the prominent crops in the South Delta as a function of the salinity of the irrigation water with effective normal rainfall.

OUTLINE OF TESTIMONY OF ALEXANDER HILDEBRAND
ON SOUTH DELTA AGRICULTURE

QUALIFICATIONS

My qualifications as an expert witness are set forth in SDWA Exhibit No. 1.

INTRODUCTION

Dr. Orlob has testified regarding the degradation of the South Delta's in-channel water supply that is caused by upstream development and by the operation of the export pumps.

My testimony will address the in-channel water supply needed for full crop yields, and the extent to which crop yields and crop versatility have been degraded by the degradation in the water supply which Dr. Orlob identified. I will then discuss proposals regarding water supply objectives for the South Delta.

You are already aware from evidence submitted of the effects of salts on plant performance by both osmotic and toxic ion effects, and also of the fact that there are threshold levels of soil-water salinity above which the growth of different varieties of established plants is reduced. You are also aware that the relationship between the soil-water salinity in the root zone of each plant and the salinity of irrigation water applied to that plant is a function of both the applied water salinity and the achieved leaching fraction.

There is little controversy over the maximum soil-water salinity which will permit a full yield of each variety of established crop plant, except that the figures should be

type. There were 51 measurement sites in ten fields. From SDWA Exhibit No. 104, a rough estimate of the variation in leach fraction over a typical field may be derived.

The San Joaquin County Agricultural Commissioner supplied crop acreages, crop yields, and on-farm unit crop values for each of the major crops grown in the South Delta in 1981. This material is submitted as SDWA Exhibit No. 108.

I will expand on the relevance of some of this data before we proceed to the use of this information to estimate crop yield losses versus South Delta in-channel water quality.

PERCOLATION TIME LIMITATIONS

The reason why soils with low permeability require better water for full crop yield can be illustrated by considering the crop alfalfa, which has been the crop with the largest acreage and thesecond largest value in the South Delta. It is grown largely in support of the County's large dairy industry.

Table 1 in the Consultants' Report, (SDWA Exhibit No. 103), shows that alfalfa consumptively uses about 41 inches of applied water depth per year. Page 8 of that Exhibit shows that 40% of the South Delta's soils have percolation rates of less than 0.2 inches of water per hour. Furthermore, the operations of mowing, baling, and bale hauling compact the near surface soil and further reduce percolation rates. With 0.15 inches per hour of water percolation, the time required to percolate 41 inches of water is 273 hours even with a uniform distribution of applied water (i.e. $41 \text{ inches} \div .15 \text{ inches per hour} = 273 \text{ hrs.}$).

No salt flushing can take place unless that time is exceeded.

With six hay harvests per year, the time required to mow, cure, and bale the hay makes it very difficult to get more than two irrigations per cutting, or twelve irrigations during the crop season. More than one extra irrigation in the fall is risky on tight soils because of the possibility of an early rain after a late fall irrigation which could drown or water damage the crop. On the other hand, if the winter turns out to be dry, most of the 41 inches has to be percolated by irrigation. This then requires about 21 hours of soaking time per irrigation in a dry year with no effective rainfall (273 hours ÷ 13 irrigations) or 17 hours in a normal year (with 8.4" effective rainfall- per SDWA Exhibit No. 103, Table 1) before any leaching takes place. This soaking time is long enough to cause serious water damage to the alfalfa plants on a tight soil. This is why the 0.04 leach fraction shown on Table 3 of the Report is a plausible leach fraction for alfalfa on the tight soils. Figures 1 and 2 of the Report show that alfalfa crop loss occurs in this case with water salinities over 275 or 325 mg/L TDS depending on rainfall. Table 5 shows a 480 ppm TDS requirement for full yield with a .07 leach fraction in a dry year.

My own measurements with tensiometers in one of my fields demonstrated that it was difficult to get any leach fraction in the low permeability areas when growing alfalfa.

It is somewhat more feasible to get a larger leach fraction with an annual crop having a shallower root system and

CROP	AVERAGE SDMA ACREAGE 1971-75	YIELD BASIS (% OF POTENTIAL)	IRRIGATION WATER QUALITY REQUIRED ¹					REMARKS
			Requirement per U.C. Exhibit 2 (Uniform soil and "as needed" irrigation frequency)		Requirement with allowance for soil variability		Requirement with variable soil and with a 4 day delay in alternate irrigations from "as needed" schedule	
			Field-average, Leach Ratio (% of applied water)	Irrigation Water Quality Needed	Corresponding minimum LR for 90% of Typical Field ³	Irrigation Water Quality Needed		
COLUMN A	B	C	D	E	F	G	H	
		%	%	EC (TDS)	%	EC (TDS)	(TDS)	
Alfalfa	27,900	100	10	1.0 (640)	7.4	0.7 (450)	Better than 450	
		100	10 (annual average with zero June July, Aug. and 2 irrigations/ mon.)	Better than 1.0 (640)	7.4	Better than 0.7 (450)	Better than 450	
		90	5	1.0 (640)	3.8	0.64 (410)	Better than 410	
		90	5 (see note above)	Better than 1.0 (640)	3.8	Better than 0.64 (410)	Better than 410	
Tomatoes	17,200	100	15	1.7 (1080)	11.	1.5 (960)	Better than 900	
		90	6	1.0 (640)	4.4	0.75 (480)	Better than 450	
Sugar Beets	12,800	100	15	4.7	11.			
Beans	9,400	100	16	0.7 (450)	12.	0.62 (400)	Better than 400	Similar for carrots and strawberries
		90	10	0.7 (450)	7.4	0.63 (400)		Similar for potatoes
Corn	7,700	100	15	1.1 (700)	11.	1.0 (640)	Better than 600	
		90	8	.85 (550)	6.	0.7 (450)	Better than 450	
Grapes		100	15	1.0 (640)	11.			
		90	6	0.7 (450)	4.4	0.75 (480) 0.55 (350)		
lnuts, peaches, apricots,	5,200	100	13	1.0 (640)	9.5	0.75 (480)		
		90	6.5	0.7 (450)	4.8	0.55 (350)		Similar for pears
Lettuce and onions		100	15	0.85 (540)	11.	0.75 (480)	Better than 480	
Seedlings Tomatoes Sugar Beets Onions Lettuce 4	31,000	Good Survival and vigorous growth						

The difficulty of achieving good survival increases as water quality becomes poorer than 350 TDS and as necessary planting dates involve higher temperatures, winds, and low humidity. Depends also on facility with given soil of shaping and maintaining accurate seed bed shapes.

1. All cases assume best common irrigation practices with flood and furrow irrigation, and reasonable provision of drain ditches and drainage pumps. All cases assume no long range salinity build up.
2. Average leach ratio, Col. D, determines input to groundwater. Removal of groundwater becomes more difficult when permissible groundwater levels must be below deep root zones and when elevations are near sea level.
3. U.C. Southern Delta Salinity Survey data is assumed to be representative and is used to determine a leach ratio in Col. F which will be achieved or exceeded in 90% of a typical field which has the average leach ratio in Col. D. This Col. F leach ratio determines the crop yield for 90% of the field with full yield water quality.
4. Seedlings germinated with best established methods on raised row beds by furrow irrigation and planted at appropriate dates for crop.
5. Assumes adequate leach by irrigation, i.e., does not assume rain leach.

Abbreviations EC, TDS, LR are those used in U.C. Exhibit 2.
* See: Exhibit U.C. 7

IMPACT OF SAN JOAQUIN RIVER QUALITY
ON CROP YIELDS IN THE SOUTH DELTA

G. T. Orlob

INTRODUCTION

The agricultural productivity of lands within the South Delta Water Agency is dependent upon both the quantity of water that enters the Delta at Vernalis and its quality. It is also determined in part by the nature of soils, i.e. their permeabilities and leaching requirements to avoid excessive accumulation of salinity during the growing season. In general, fine textured soils such as those that comprise the major part of South Delta lands have lower permeabilities, and thus require higher quality of applied water to assure optimal crop growth without loss of yield.

To demonstrate the nature and dependence of agricultural productivity in the South Delta on San Joaquin River quality, it is necessary to consider the following factors:

1. Soil characteristics, i.e. permeabilities and field leaching fractions, and variability of these over the lands of the South Delta,
2. Crop yields in relation to water quality, soil characteristics, and crop type,
3. Quality of water available in South Delta channels during the growing season, and
4. Cropping pattern and crop value for the South Delta.

Table 5. Estimated Loss of Crop Revenue Due to Water Quality Degradation,
Case Study: 1976 and 1976 With New Melones Operation

Crop	Area ¹ acres	Unit Value ² \$/acre	Mkt.Value 10 ⁶ \$	Loss of Crop Revenue, 10 ⁶ \$			
				Actual 1976		1976 w/N.Melones	
				$\Delta Y/100$	ΔC	$\Delta Y/100$	ΔC
					\$		\$
Beans	9,840	656	6.46	0.406	2.62	0.331	2.14
Corn	11,070	563	6.23	0.201	1.25	0.105	0.65
Alfalfa	31,980	732	23.41	0.102	2.81	0.051	1.19
Tomatoes	17,220	2110	36.33	0.111	4.03	0.052	1.89
Fruit & Nuts	6,150	2154	13.25	0.359	4.76	0.199	2.64
Grapes	1,000	1358	1.36	0.169	0.23	0.093	0.13
TOTALS	72,260 ³		87.04		15.70		8.64

¹ 1971-75 average

² 1980 San Joaquin County Agriculture Department

³ Does not include 50,740 acres of salt tolerant crops

What needs to be examined in order to change existing water quality objectives?

Statutes, regulations, and policies

What is necessary to protect agricultural beneficial uses?

South Delta crops

South Delta soils

Do current standards provide protection?

Reasonable use of water

Impacts resulting from any change

Statutes, regulations,
and policies

FEDERAL ANTIDEGRADATION POLICY

(A) The State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to this subpart. The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following:

“(1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.”

...

“(3) Where high quality waters constitute an outstanding National resource, such as water of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.”
(40, C.F.R. § 131.12.)

STATE WATER RESOURCES CONTROL BOARD

RESOLUTION NO. 68-16

**STATEMENT OF POLICY WITH RESPECT TO
MAINTAINING HIGH QUALITY OF WATERS IN CALIFORNIA**

...

NOW, THEREFORE, BE IT RESOLVED:

1. Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.

...

Section 12232. Duty of state agencies not to cause degradation of quality of water

The State Water Resources Control Board, the State Department of Water Resources, the California Water Commission, and any other agency of the state having jurisdiction, shall do nothing, in connection with their responsibilities, to cause further significant degradation of the quality of water in that portion of the San Joaquin River between the point specified in Section 12230. (*Added by Stats.1961, c. 1454, p. 3300, § 1. Amended by Stats.1967, c. 284, p. 1448, § 136.5, operative Dec. 1, 1967.*)

California Water Code Section 13241

§ 13241. Water quality objectives; beneficial uses; prevention of nuisances

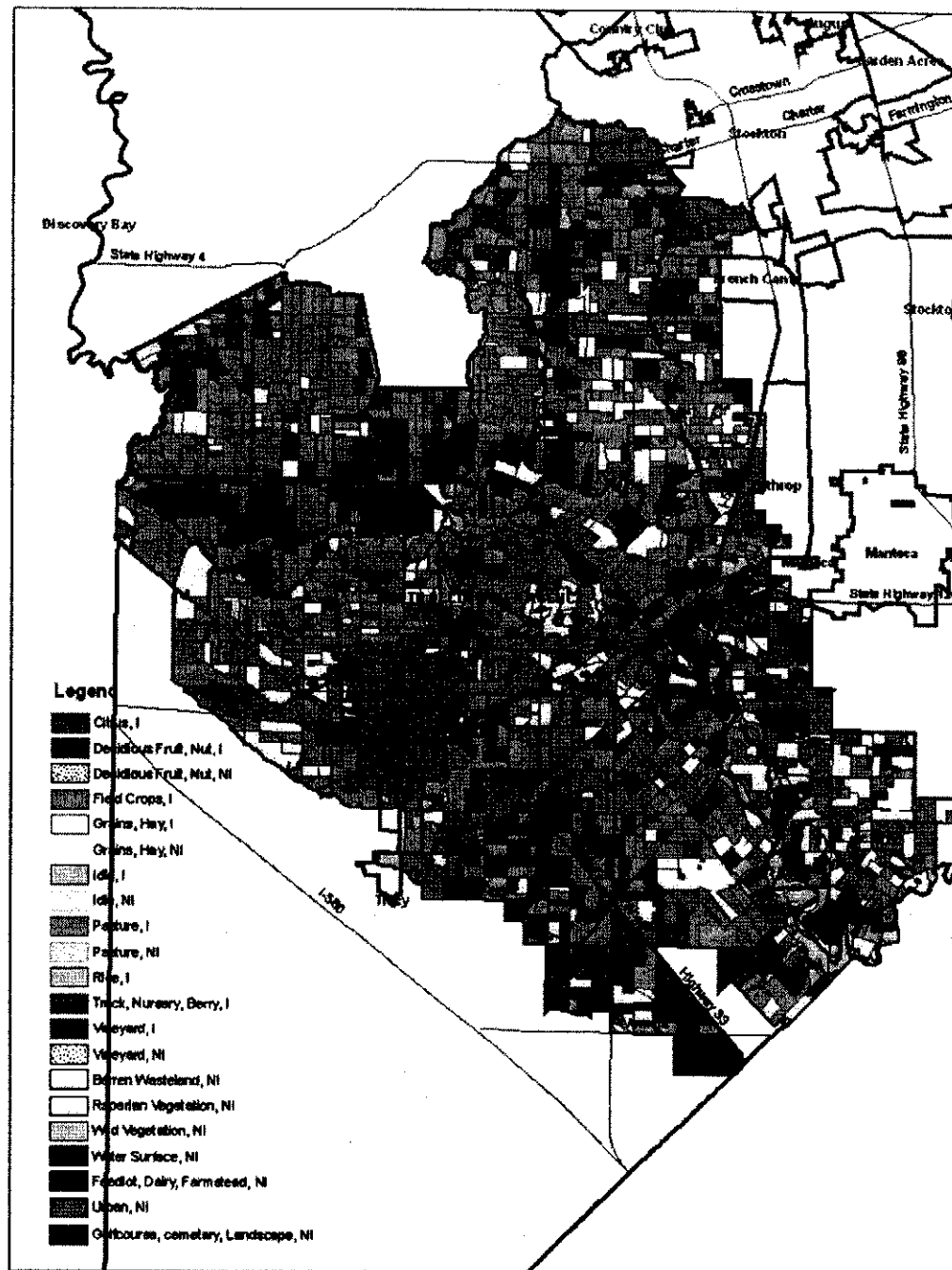
Each regional board shall establish such water quality objectives in water quality control plans as in its judgment will ensure the reasonable protection of beneficial uses and the prevention of nuisance; however, it is recognized that it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses. Factors to be considered by a regional board in establishing water quality objectives shall include, but not necessarily be limited to, all of the following:

- (a) Past, present, and probable future beneficial uses of water.
- (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
- (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
- (d) Economic considerations.
- (e) The need for developing housing within the region.
- (f) The need to develop and use recycled water.

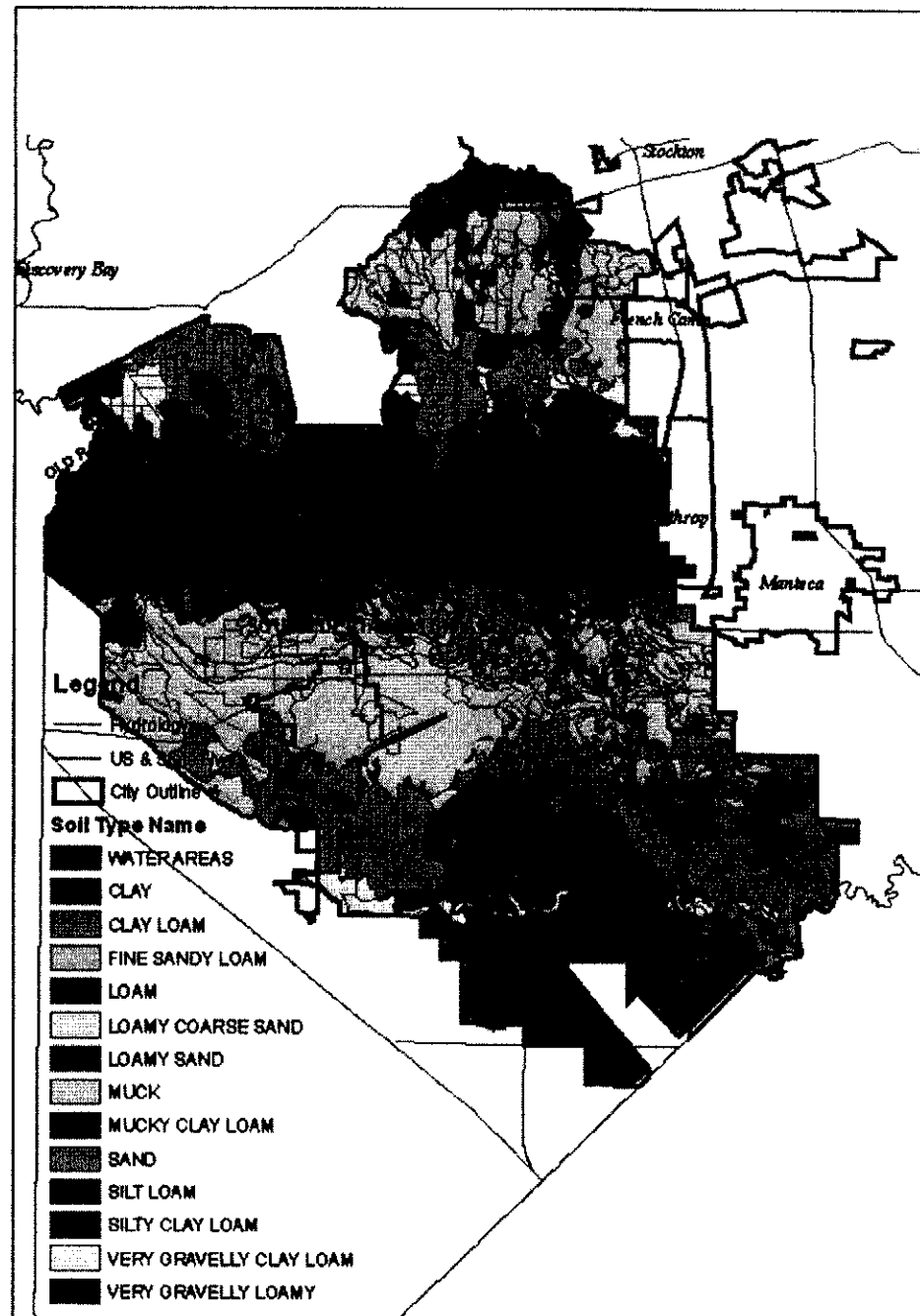
(Added by Stats.1969, c. 482, p. 1061, § 18, operative Jan. 1, 1970. Amended by Stats.1979, c. 947, p. 3272, § 8; Stats.1991, c. 187 (A.B.673), § 2.)

What is necessary
to protect
Agricultural
beneficial uses?

South Delta crops



South Delta soils



SDWA SOIL TYPE SPREADSHEET

USDA SOIL CLASSIFICATION NO.	SOIL TYPE NAME	PERK RATE (in./hr)
118	Capay clay	0.1
119	Capay clay	0.1
120	Capay clay, saline-sodic	0.1
121	Capay clay, wet	0.1
122	Capay-Urban land complex	0.1
180	Jacktone clay	0.1
181	Jacktone-Urban land complex	0.1
274	Willows clay, partially drained	0.1
153	Egbert silty clay loam, partially drained	0.3
154	Egbert silty clay loam, sandy substratum, partially drained	0.3
197	Merrit silty clay loam, partially drained	0.3
198	Merrit silty clay loam, partially drained	0.3
231	Ryde silty clay loam, organic substratum	0.3
267	Veritas silty clay loam	0.3
110	Boggiano clay loam	0.5
148	Delto clay loam, drained	0.5
152	Egbert mucky clay loam, partially drained	0.5
156	El Solto clay loam	0.5
158	Finrod clay loam	0.5
167	Grangeville clay loam, partially drained	0.5
169	Guard clay loam, drained	0.5
211	Pescadero clay loam, partially drained	0.5
230	Ryde clay loam, partially drained	0.5
232	Ryde clay loam, sandy substratum, partially drained	0.5
243	Scribner clay loam, partially drained	0.5
244	Scribner clay loam, sandy substratum, partially drained	0.5
252	Stomar clay loam	0.5
253	Stomar clay loam	0.5
258	Trahern clay loam, partially drained	0.5
268	Vernalis clay loam	0.5
269	Vernalis clay loam, wet	0.5
281	Zacharias clay loam	0.5
282	Zacharias gravelly clay loam	0.5
281	Valdez silt loam, organic substratum, partially drained	0.7
204	Peltier mucky clay loam, partially drained	1
233	Ryde-Peltier complex, partially drained	1
108	Arents, saline-sodic	1.5
130	Columbia fine sandy loam, drained	1.5
131	Columbia fine sandy loam, partially drained	1.5
132	Columbia fine sandy loam, channelled, partially drained	1.5
133	Columbia fine sandy loam, clayey substratum, partially drained	1.5
134	Cometa sandy loam	1.5
137	Cortina gravelly sandy loam	1.5
147	Delto sandy loam, clayey substratum, drained	1.5
157	Exeter sandy loam	1.5
166	Grangeville fine sandy loam, partially drained	1.5
175	Honcut sandy loam	1.5
189	Kingdon fine sandy loam	1.5
193	Madera sandy loam	1.5
196	Manteca fine sandy loam	1.5
199	Montpellier sandy loam	1.5
201	Nord loam	1.5
223	Reiff loam	1.5
265	Veritas sandy loam, partially drained	1.5
266	Veritas fine sandy loam	1.5
109	Bisogni loamy coarse sand, partially drained	3
142	Delhi loamy sand	3
145	Delto loamy sand	3

146	Dello loamy sand, partially drained	3
254	Timor loamy sand	3
255	Tinnin loamy coarse sand	3
259	Tujunga loamy sand	3
144	Dello sand, partially drained	4
190	Kingile muck, partially drained	4
191	Kingile-Ryde complex, partially drained	4
224	Rindge mucky silt loam, partially drained	4
225	Rindge muck, partially drained	4
159	Fluvaquents	.5 (variable)
163	Gonzaga-Franciscan complex	.5 (variable)
214	Pits, gravel	>4
186	Kaseberg loam	1 to 3 (hardpan @ 10" typ.)
288		

Do current standards Provide protection?

Testimony presented in 2003 hearing Regarding
Petition for Long-Term Permit Change by Merced
Irrigation District, et al.

TESTIMONY OF WILLIAM SALMON

My name is William Salmon. I reside at 7615 West Undine Road, Stockton, California. Up through 2002 I was the manager of ABF Services, Inc ("ABF") and am now a consultant to that company. I also own and lease other property in the South Delta which I farm separately.

One of the parcels I farm separately is located on the west side of Union Island as specified on SDWA 2 attached hereto. It is approximately 457 acres and is owned by Mr. Robert E. Thorsen. This property is irrigated by diversions on Old River. As the land is below the water level, we have traditionally used syphons to divert the water. SDWA is separately providing title documents which I am informed indicated this property is riparian to Old River.

Since approximately 1999, the summer water levels along Old River adjacent to the Thorsen Ranch have been lower than they have been in the past. At low tide during these years, I have been unable to operate the syphons when needed which forced me to rely more heavily on the high tides. This in and of itself interferes with my need to irrigate the crops when necessary. My observations during these times confirm that the high tides were no longer sufficient for this purpose, and my farming operations were adversely affected. Although there is a certain amount of flexibility in irrigation, we were unable to divert sufficient water when needed, and crop yields were incrementally decreased.

In 2002, the problem again presented itself and appeared to be worse then before. With the help of the South Delta Water Agency, DWR and USBR were brought into the process. After various investigations and negotiations, DWR hired a contractor to install temporary pumps for me and my neighbor who is experiencing the same problem. The cost to DWR was/is tens of thousands of dollars. Although we had certain minor problems, the pumps were adequate to allow me to irrigate when needed. The pumps were removed this past year in October.

I am informed that DWR will again offer to install the temporary pumps this year. If not, I will be unable to irrigate the Thorsen Ranch when needed during peak summer months which will decrease crop yields. This conclusion is based upon the fact that the year appears to be another dry one and that the CVP and SWP will again seek to increase summer time pumping.

The Thorsen Ranch is downstream of the three tidal barriers and does not receive any benefit from their installation and operation. I am informed that those barriers actually result in an additional decrease in water levels in my area. In this area the low tide is lowered by the federal pumps which divert 24 hours per day. The state project takes water into Clifton Court Forebay at times other than the low tide. However, when Clifton Court Forebay is filled, the water levels around my diversions drop significantly.

Any further increase in export pumping by the state and federal projects would most likely further lower the water levels on Old River near the Thorsen Ranch. My protection from this is DWR's voluntary help in providing temporary pumps. There is no written or verbal agreement with DWR or any other agency to provide these temporary pumps to me.

As manager of ABF, I farmed a piece of property at the east end of Grant Line Canal as indicated on SDWA 3 attached here. SDWA is separately providing title documents which I am informed indicate this property is riparian to both Grant Line Canal and Middle River. The crops on this property have included walnuts, grapes, beans, alfalfa, tomatoes and other row crops.

In the last few years, I have noticed an increasing and substantial damage to the crops resulting from salinity. This problem has been verified by representatives of the Ag Extension Service and by a laboratory analysis done by my fertilizer representative at John Taylor Fertilizer. SDWA 17 is a copy of the tissue analysis of the walnuts. It indicates acute chloride toxicity.

SDWA 18 and SDWA 19 are certain water quality sampling data from DWR for Middle River and Grant Line Canal, the two places from which I diverted water for this property. The Middle River data for 2002 shows EC levels in the 700 and 800 range for most of the year, especially in summer. The Grant Line Canal data (measured at Doughty Cut) shows EC in August was generally above 800 and sometimes 900. For the summer months in general, the level was most always above 700, though of course there were fluctuations. The EC objective at Vernalis for agriculture during the summer months is 700.

I have also attached some pictures as SDWA 20 which show some of the salt damage to the crops. Copies are difficult to view, but they do show the burned margins of the leaves and arrested growth associated with the salt damage.

The data for the damages in 2002 are as follows. The 105 acres of walnuts had a decrease in yield from 254,580 tons in 1999 to 105,380 in 2002 for the Payne variety and 85,420 tons in 1999 to 33,440 tons for the Westside variety. There was obvious leaf burn and stunted growth on the walnuts for the salts. Although the orchard would have to have been removed eventually due to a virus, it still should have had many more years of production left. However, I had to remove the orchard in 2002 because of the decrease in yield at a cost of \$450 - \$550 per acre which included tree removal, root removal and associated labor.

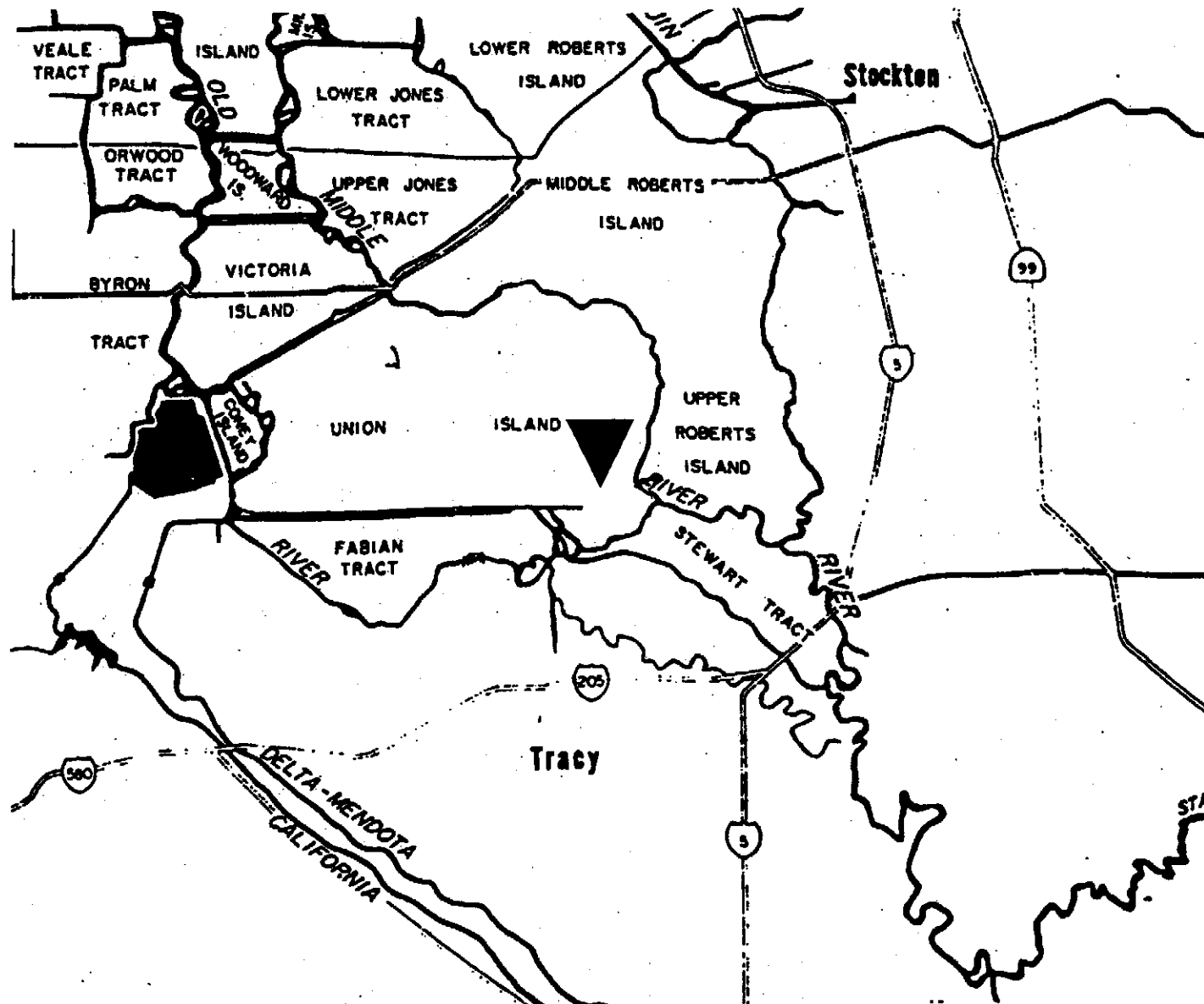
The grapes are 47 acres of the Chardonnay variety. The sugar levels necessary to allow harvest for the contract I have were never reached, the grapes actually began to turn into raisins and the vines to defoliate. Although I did harvest some of them for juice, basically the entire crop was lost.

Beans were planted on 68 acres. The stunted growth of the plants was very obvious and the crop yield was one-half of other fields using the same seed and cultural practices. This acreage yielded 10 sacks per acre while the others were 20.

To address this problem over the years I have applied soil amendments such as gypsum and have flooded the fields in winter to attempt to flush out the salts. However, the soil ph in combination with the salty water binds the chlorides and prevents leaching. The walnuts and grapes acreage are installed with tile drainage, but even that aid to drainage was inadequate.

Any actions which will increase salinity flowing into the South Delta will simply incrementally increase the harm which the ABF farming operation is subjected to each year.

Salmon Property Discussed in Testimony ▼



TESTIMONY OF KURT SHARP
STATE WATER RESOURCES CENTRAL BOARD
PETITION FOR LONG - TERM TRANSFER INVOLVING
CHANGE IN PLACE AND PURPOSE OF USE OF
MERCED IRRIGATION DISTRICT, MODESTO IRRIGATION DISTRICT
AND TURLOCK IRRIGATION DISTRICT

I am one of the managers of R.C. Farms, Inc.

R.C. Farms, Inc. is the owner of land riparian to the San Joaquin River on Lower Roberts Island downstream of the confluence with Old River and upstream from the confluence with Middle River. Said land is within the Central Delta Water Agency. Attached hereto as Exhibit A is a map showing the land. CDWA Exhibit 6 is a chain of title prepared for said land. The land currently abuts the San Joaquin River and it is my understanding of the documents in the chain of title that the land has never been separated from the San Joaquin River.

As an owner of said riparian lands, R.C. Farms, Inc. is entitled to divert waters from the San Joaquin River for reasonable beneficial uses upon those lands. R.C. Farms, Inc. and its predecessors in interest have so used said waters for irrigation at various times of the year and in various quantities for a period extending back to the late 1800's.

The months of special concern for R.C. Farms, Inc. on the San Joaquin River are April through August, the peak irrigation months, and water quality is of great concern to R.C. Farms, Inc. because it impacts the crops that R.C. Farms, Inc. grows.

Salt in the irrigation water adds to the salt in the soil and soil water. When the concentration of salts in the root zone of growing plants reaches a high enough level the plants

suffer and in some cases die. Because of different soil and drainage conditions in the fields the salt problem varies. Some of the fields have areas which are already high in salts. Adding additional salt will increase the salt accumulation in the soil and damage the crops. There is also a problem at the time of seed germination if there is too much salt. The adverse effects of the salt on the crops is visually apparent.

Attached hereto as Exhibit B are the results of a February 7, 2003 soil sampling on the subject R.C. Farms, Inc. land. Sample #3 which was taken from the field in the northwest portion of the land shows a high level of sodium.

Except for approximately 28 acres in the northwest corner of the property the fields are presently planted to asparagus which is about 8 years old and will be likely plowed out within three (3) years. Current plans are to plant the fields into field corn or wheat following the removal of the asparagus.

I have been involved in farming the subject lands for over ten (10) years and the salt damage areas are getting worse. Because the surface of the land is substantially below the water level in the San Joaquin River which abuts the property the fields are constantly receiving water which "seeps" from the river. We attempt to hold the water table below the ground surface by way of drainage ditches from which the excess water flows into the Reclamation District 684 canals and then is pumped back into the Delta.

With the asparagus we apply water from the San Joaquin River by annually flooding the fields in November and December. This is the customary practice which I believe is intended to facilitate the leaching or driving down of the salts. When the fields are planted to field corn water is applied to the portions of the fields farthest away from the river starting in June or July and continuing on about ten day intervals into late August or September and then the fields are

flooded in November and December. The portions of the fields near the river receive sufficient subirrigation from seepage. These portions of the fields are also flooded in November and December.

The customary practices are no longer sufficient to control the salt buildup in the problem areas of the fields. Artificial leaching such as is customary for potatoes is costly and economically infeasible for the crops which we grow.

R.C. Farms, Inc. has farmed said land for over twenty (20) years. The water quality at Vernalis affects the quality of the water in San Joaquin River abutting said lands. The water from the San Joaquin River seeps into and is also applied to the lands of R.C. Farms, Inc. Typically higher salinity in the San Joaquin River at Vernalis means higher salinity in the R.C. Farms, Inc. irrigation water.

As salinity in the seepage and applied irrigation water increases, the salinity in the soil water increases thereby adversely impacting the crop production.





24730 Avenue 13 Modesto, CA 95637 Phone: 530-651-4386 FAX: 530-651-4135 email: pal@mail.agdecision.net



Precision Agri Lab

SOIL ANALYSIS REPORT

CONRAD SILVA

BRANCH NAME WALNUT GROVE-W

TEST ID # DATE SAMPLED: 2/7/03

FIELDMAN DON JOHNSON

2456

DATE SUBMITTED: 2/11/03

CROP ASPARAGUS

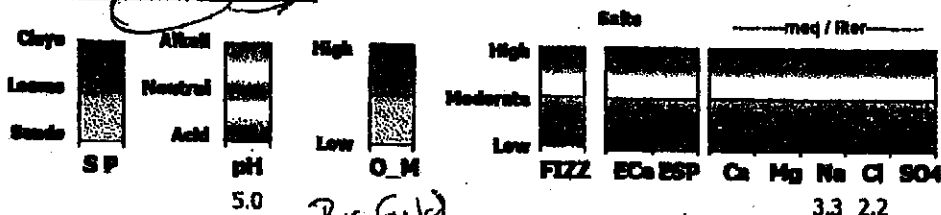
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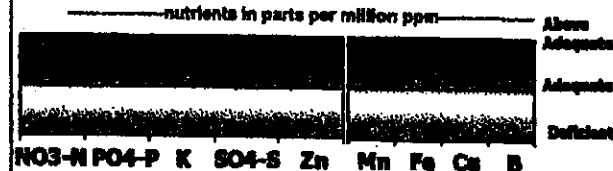
DATE REPORTED: 2/17/03

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1 RC-1

Physical And Chemical Properties

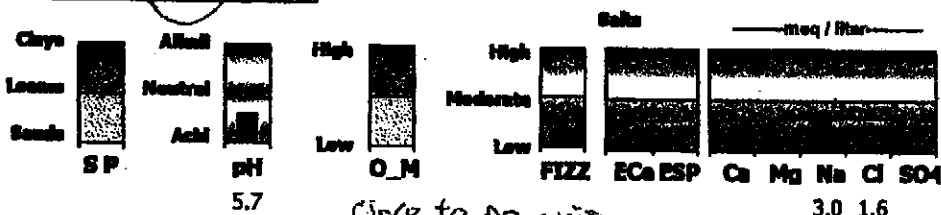


Soil Nutrition

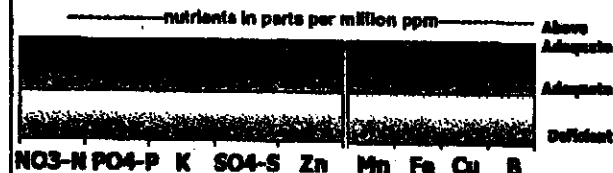


ID# DESCRIPTION
2 RC-2

Physical And Chemical Properties

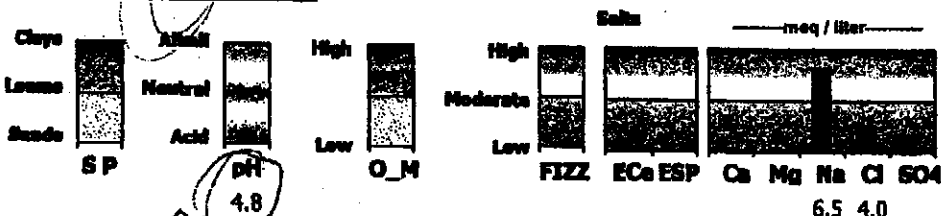


Soil Nutrition

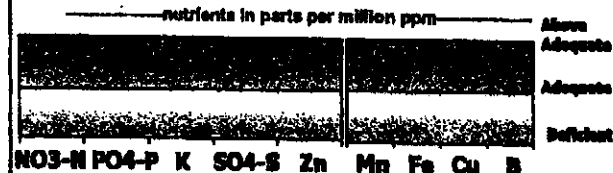


ID# DESCRIPTION
3 RC-3

Physical And Chemical Properties



Soil Nutrition



APPROVED: _____



24730 Avenue 13 Modesto, CA 95357 Phone: 530-661-6386 FAX: 530-661-6135 email: pal@mail.agdecision.net



Precision Agri Lab

SOIL ANALYSIS REPORT

CONRAD SILVA

BRANCH NAME WALNUT GROVE-W TEST ID #

DATE SAMPLED: 2/7/03

FIELDMAN DON JOHNSON

2456

DATE SUBMITTED: 2/11/03

CROP ASPARAGUS

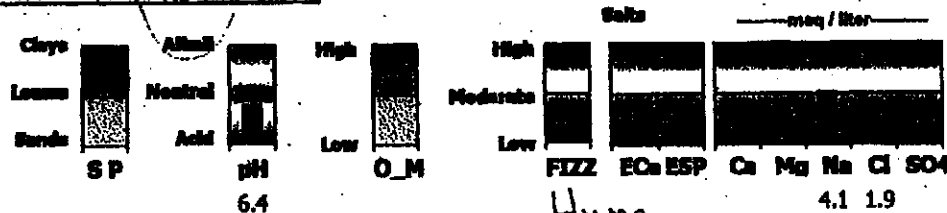
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232078

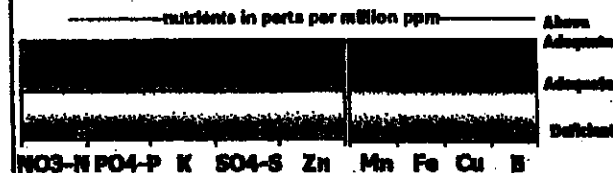
DATE REPORTED: 2/17/03

Soil Description
R-4

Physical And Chemical Properties

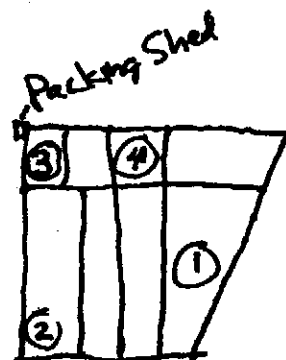


Soil Nutrition



ALL Ph Low

Salts are high
14 Asp went to
Packing Shed



Reasonable use of water



DESIGN MEMORANDUM NO. 5

JUNE 1965

NEW MELONES PROJECT

Stanislaus River, California

WATER QUALITY CONTROL

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

9. Beneficiaries. - The Public Health Service report indicates the beneficiaries of water quality control operation would be widespread. The following is quoted from the report.

Benefits resulting from providing water for water quality control in the New Melones Project will be widespread. They will accrue to hundreds of thousands of people utilizing, for a wide variety of purposes, the reach of the Stanislaus River from the proposed damsite to its mouth and the reach of the San Joaquin River from Vernalis to its mouth, a total stream distance of 148 miles. The estimated irrigation diversions from the San Joaquin River in the year 2025 of 1,000,000 acre-feet is equivalent to a full supply of irrigation water for about 330,000 acres. Recreational and sport fishery use of the Sacramento-San Joaquin Delta is currently estimated at 2,780,000 recreation days annually and is projected to reach 13,878,000 recreation days annually by the year 2020. Over half of this recreational use may be attributable to the San Joaquin River portion of the Delta. Although it is impossible to identify benefits accruing to any single individual, such benefits are likely to be very small. The reaches of the streams affected provide outdoor recreation for visitors residing in other areas of California and in other states of the Nation as well as local residents. Agricultural and industrial commodities produced in the area are distributed throughout the Nation.

R. 29 Sep 65

California Water Code Section 12202

§ 12202. Salinity control and adequate water supply; substitute water supply; delivery

Among the functions to be provided by the State Water Resources Development System, in coordination with the activities of the United States in providing salinity control for the Delta through operation of the Federal Central Valley Project, shall be the provision of salinity control and an adequate water supply for the users of water in the Sacramento-San Joaquin Delta. If it is determined to be in the public interest to provide a substitute water supply to the users in said Delta in lieu of that which would be provided as a result of salinity control no added financial burden shall be placed upon said Delta water users solely by virtue of such substitution. Delivery of said substitute water supply shall be subject to the provisions of Section 10505 and Sections 11460 to 11463, inclusive, of this code. *(Added by Stats.1959, c. 1766, p. 4247, § 1.)*

California Water Code Sections 12204 & 12205

§ 12204. Exportation of water from delta

In determining the availability of water for export from the Sacramento-San Joaquin Delta no water shall be exported which is necessary to meet the requirements of Sections 12202 and 12203 of this chapter. (*Added by Stats.1959, c. 1766, p. 4249, § 1.*)

§ 12205. Storage of water; integration of operation and management of release of water

It is the policy of the State that the operation and management of releases from storage into the Sacramento-San Joaquin Delta of water for use outside the area in which such water originates shall be integrated to the maximum extent possible in order to permit the fulfillment of the objectives of this part. (*Added by Stats.1959, c. 1766, p. 4249, § 1.*)

California Water Code Section 11207

§ 11207. Primary purposes

Shasta Dam shall be constructed and used primarily for the following purposes:

(a) Improvement of navigation on the Sacramento River to Red Bluff.

(b) Increasing flood protection in the Sacramento Valley.

(c) Salinity control in the Sacramento-San Joaquin Delta.

(d) Storage and stabilization of the water supply of the Sacramento River for irrigation and domestic use. (*Added by Stats.1943, c. 370, p. 1896.*)

Is it reasonable to meet the 0.7 EC Objective in the South Delta?

SWRCB has already determined what is necessary to protect agricultural beneficial uses.

0.7 EC Objective developed 14 years ago

Implementation delayed repeatedly

Meeting salinity standards with the use of stored water required by statute

Methods to meet Southern Delta salinity objectives:

Control drainage, dilute upstream flows, use Friant,
use San Luis Reservoir, recirculation, exchanges,
purchases, barriers, New Melones releases or
combinations of the above.

**What have DWR and USBR done to help them meet
the more restrictive three interior South Delta standards?**

Control drainage?	NO.
Dilute upstream flows?	NO.
Use Friant?	NO.
Use San Luis?	NO.
Recirculation?	NO.
Exchanges?	NO.
Purchases?	NO.
Barriers?	KIND OF.
New Melones?	YES.

CAN IT BE AN UNREASONABLE USE OF
WATER TO PROTECT SOUTHERN DELTA
AGRICULTURAL BENEFICIAL USERS BEFORE
WE KNOW HOW THE OBJECTIVES WILL BE
MET OR HOW MUCH WATER WILL BE USED?

No, it cannot.

...

Impacts resulting from any change

**Relaxation of Vernalis Standard would likely
result in decreased releases from New Melones.**

Decreased releases results in decreased Delta inflow.

Decrease Delta inflow transfers Delta outflow obligations to others.

Decreased San Joaquin River flow transfers water quality and
consumptive use obligations to others.

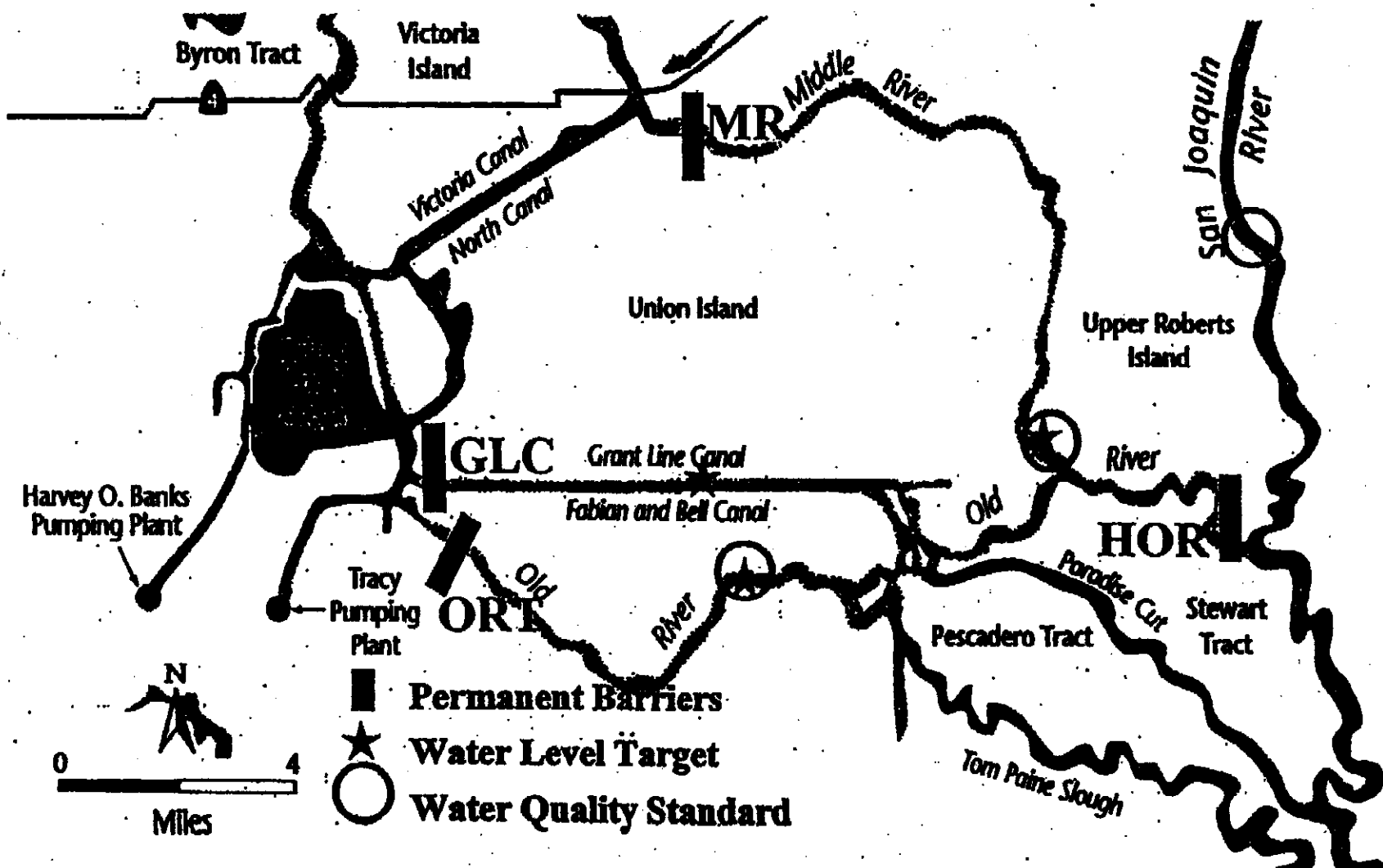
Delta is a tidal pool and therefore there is always water in the channel.

Obligation for salinity control set by statutes.

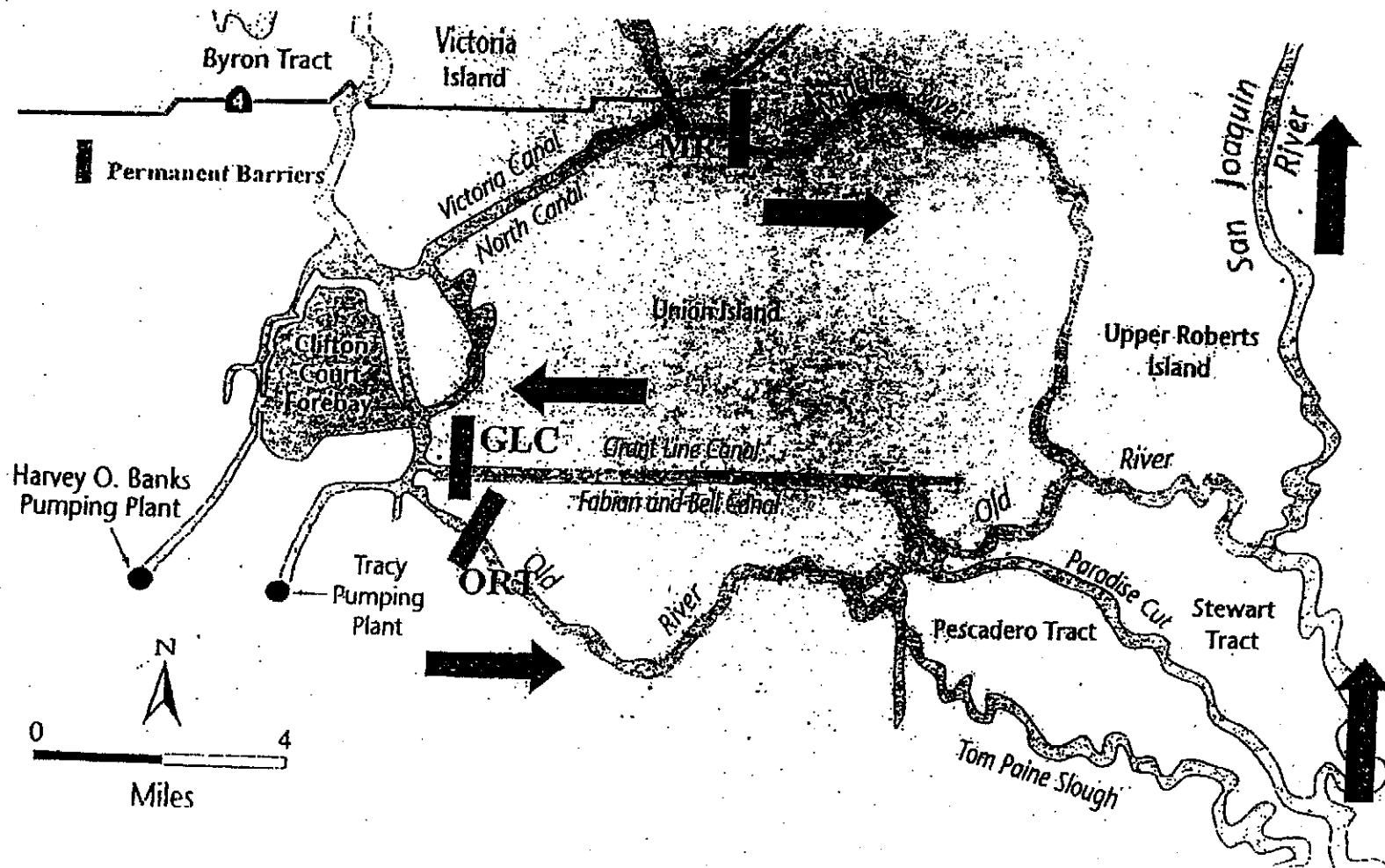
Decreased Vernalis quality worsens export quality, CCWD quality, etc.

Changing the three interior South Delta Objectives negates over 30 years of scientific investigation, critical thought, and consensus, rewards 30 years of inactivity by the USBR, and dooms South and Central Delta agricultural diverters to perpetually suffer the adverse impacts caused by upstream diversions and exports.

Update on South Delta Improvement Program (“SDIP”)

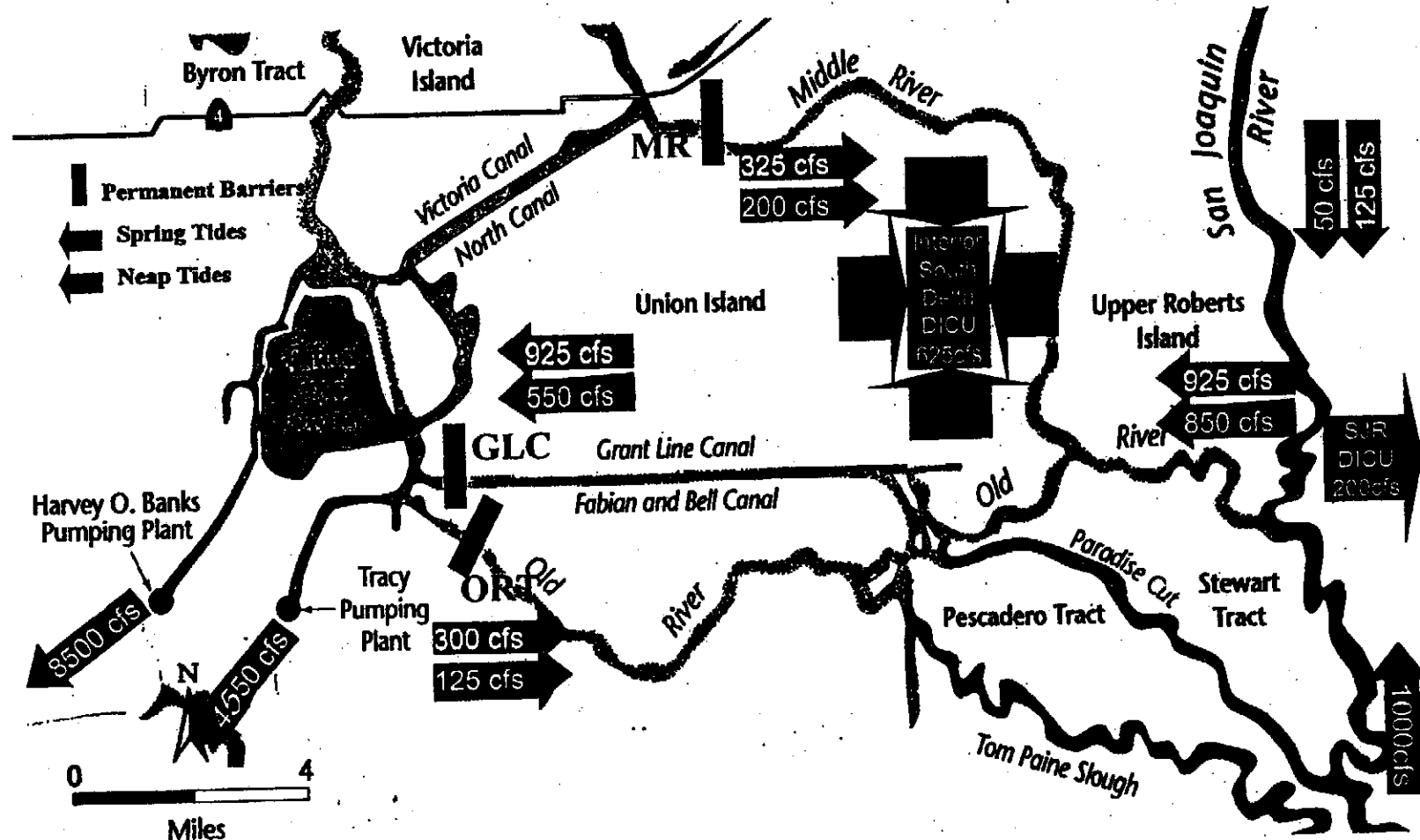


DWR'S CURRENTLY PROPOSED SDIP



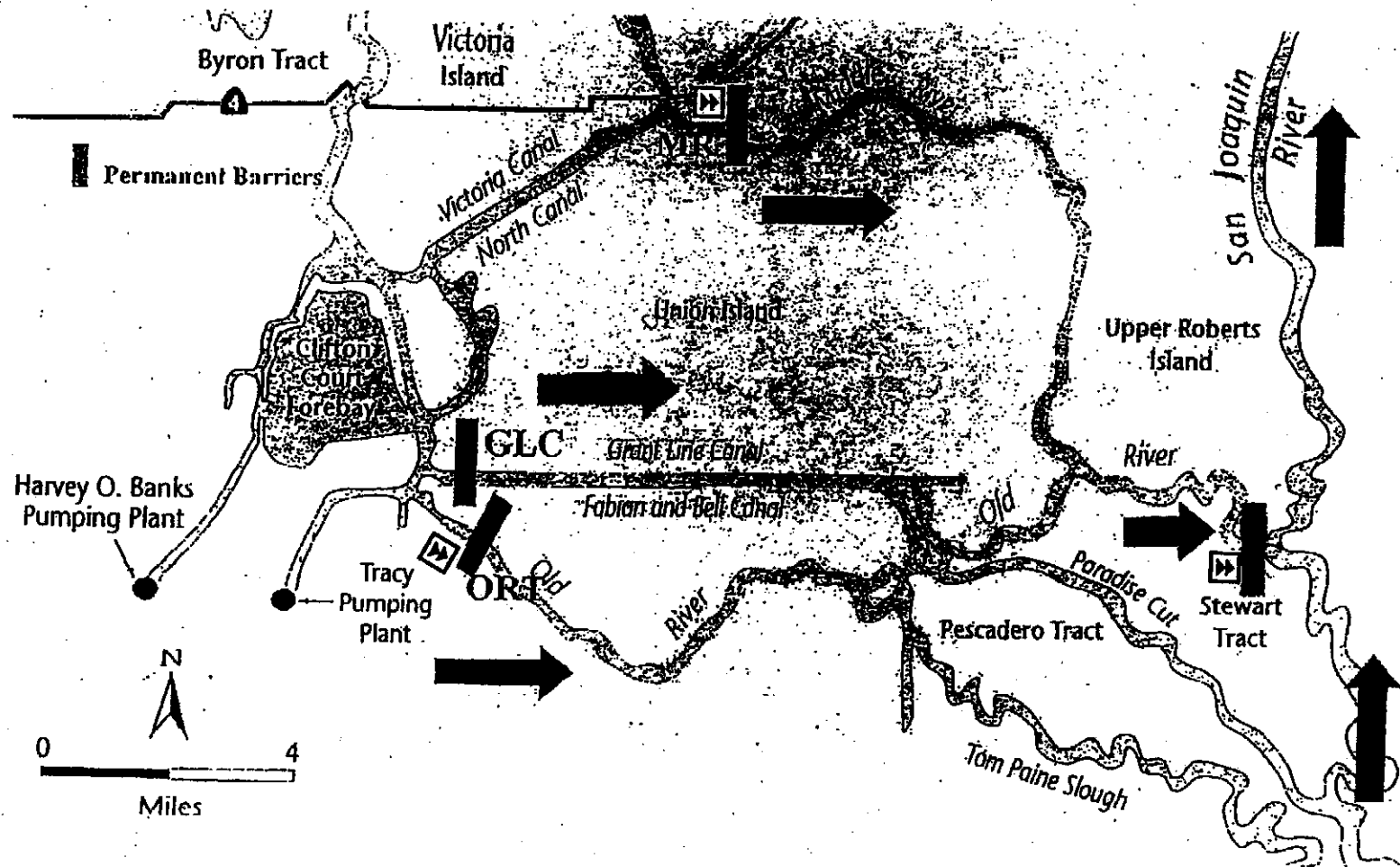
Net Flows – SJR 1000 cfs

SWP Priority 3 Ops



July 1985

Hildebrand Proposal for SDIP



--- Low-Lift Fish-Friendly Pumps

South Delta Water Agency recommends

Maintain 0.7/1.0 EC Objectives

Extend 0.7 EC standard to include March and September

Add additional compliance locations based upon
flow patterns resulting from final SDIP

Accompanying this presentation is testimony of Alexander Hildebrand on behalf of the South Delta Water Agency. Mr. Hildebrand's testimony further explains the issues involved in determining the appropriate water quality standards necessary to protect agricultural beneficial uses.

Also accompanying this presentation is the March 10, 2005, letter from Mr. Terry L. Prichard, Certified Consulting Professional Agronomist and Soil Scientist regarding recent developments affecting the determination of water quality objectives .

Petition to De-List the Lower San Joaquin River

For

Impairment by Salt and Boron

EXHIBIT C

Compiled Crop Data

Submitted By:

SAN JOAQUIN RIVER GROUP AUTHORITY

COMPILED CROP DATA

Table 1: Southern Delta annual rainfall measured at Tracy-Carbona station.¹

Year	Precipitation (Inches)	Year	Precipitation (Inches)	Year	Precipitation (Inches)
1970	12.75	1982	17.39	1993	15.84
1971	5.93	1983	21.14	1994	7.16
1972	4.79	1984	3.35	1995	4.92
1973	14.68	1985	3.50	1996	7.54
1974	8.17	1986	10.0	1997	2.45
1975	8.97	1987	5.38	1998	13.87
1976	7.32	1988	5.25	1999	8.49
1977	10.97	1989	6.65	2000	12.48
1978	NA ²	1990	7.26	2001	11.86
1979	11.72	1991	3.72	2002	4.58
1980	8.45	1992	11.32	2003	5.69
1981	11.21				

¹ Data obtained from the Western Regional Climate Center. The historical average precipitation at the Tracy-Carbona station is 9.94 inches.

² Precipitation data for 1978 was not available.

Table 2: Seasonal electrical conductivity data measured at Vernalis.³

Year	EC (dS/m) ⁴	EC High ⁵	EC Low ⁶	Year	EC (dS/m)	EC High	EC Low
1970	0.68	0.98	0.25	1987	0.72	0.87	0.53
1971	0.72	0.94	0.32	1988	0.74	0.95	0.58
1972	1.01	1.22	0.71	1989	0.75	0.92	0.63
1973	0.68	0.97	0.24	1990	0.75	1.07	0.55
1974	0.53	0.93	0.21	1991	0.86	1.63	0.37
1975	0.57	0.85	0.19	1992	0.78	1.05	0.37
1976	0.99	1.23	0.65	1993	0.64	0.89	0.33
1977	1.49	1.84	1.03	1994	0.74	1.01	0.31
1978	0.41	0.90	0.11	1995	0.26	0.66	0.12
1979	0.68	0.96	0.25	1996	0.49	0.77	0.10
1980	0.71	0.83	0.13	1997	0.56	0.77	0.30
1981	0.73	1.17	0.46	1998	0.19	0.37	0.09
1982	0.28	0.48	0.12	1999	0.45	0.62	0.22
1983	0.19	0.38	0.11	2000	0.46	0.73	0.22
1984	0.63	0.80	0.39	2001	0.58	0.94	0.25
1985	0.62	0.97	0.41	2002	0.56	0.93	0.27
1986	0.38	0.68	0.18	2003	0.55	0.90	0.36

³ All seasonal EC statistics were calculated based on data provided by Daniel Steiner in Appendix C.

⁴ Seasonal average of the daily mean electrical conductivity measured at Vernalis from April 1 through August 31 of each year. The seasonal average was calculated from the daily average EC data provided by Daniel Steiner in Appendix C.

⁵ Highest recorded daily average EC at Vernalis from April 1 through August 31 that year.

⁶ Lowest recorded daily average EC at Vernalis from April 1 through August 31 that year.

Table 3: San Joaquin County dry bean⁷ statistics, 1970-2003.

Year	Harvested (Acres)	Yield (Tons/Acre)	Production (Tons)	\$/ton	Total \$	\$/Acre
1970	16,120	0.88	14,178	233	3,307,100	205
1971	17,834	0.88	15,760	270	4,251,000	238
1972	18,530	1.05	19,405	327	6,345,000	342
1973	17,275	1.16	19,987	553	11,030,400	640
1974	17,875	1.18	21,115	423	8,938,000	500
1975	23,504	1.18	25,250	461	11,642,000	542
1976	21,751	0.91	19,814	413	8,187,000	376
1977	22,200	0.89	19,800	535	10,602,000	476
1978	29,200	0.85	24,800	478	11,859,000	406
1979	27,600	0.97	26,900	502	13,504,000	487
1980	27,803	1.07	29,628	613	18,149,000	656
1981	28,239	1.04	29,425	623	18,334,000	648
1982	36,105	0.80	28,800	405	11,638,400	324
1983	23,000	0.85	19,450	672	13,078,100	571
1984	23,700	0.91	21,700	639	13,838,000	581
1985	28,900	1.15	33,300	489	16,289,000	562
1986	19,200	1.05	20,100	626	12,590,000	657
1987	20,600	1.06	21,800	557	12,144,000	590
1988	24,300	1.07	26,100	729	19,013,000	780
1989	26,600	1.04	27,700	739	20,466,000	769
1990	25,900	1.50	38,900	547	21,290,000	821
1991	20,600	1.15	23,600	588	13,877,000	676
1992	20,900	1.09	22,800	565	12,885,000	616
1993	24,500	1.13	27,600	692	19,101,000	782
1994	16,200	1.20	23,000	663	15,254,000	796
1995	24,100	1.15	27,600	698	19,269,000	803
1996	22,800	1.08	24,600	820	20,181,000	886
1997	24,200	1.14	27,700	717	19,874,000	817
1998	22,300	0.80	17,900	672	12,032,000	538
1999	19,600	1.15	22,600	565	12,765,000	650
2000	21,700	1.09	23,600	527	12,431,000	574
2001	15,200	1.05	16,000	617	9,875,000	648
2002	10,600	1.08	11,400	693	7,895,000	748
2003	9,400	1.09	10,200	640	6,526,000	698

⁷ Dry beans include Blackeye, Pinto, and Lima varieties.

Table 4: San Joaquin County alfalfa statistics, 1970-2003.

Year	Harvested (Acres)	Yield (Tons/Acre)	Production (Tons)	\$/ton	Total \$	\$/Acre
1970	61,800	6.33	391,200	30	11,736,000	190
1971	67,200	6.70	450,200	32	14,519,000	216
1972	68,300	6.63	452,800	34	15,576,000	228
1973	65,300	7.00	457,100	52	23,769,000	364
1974	60,000	6.66	399,600	67	26,853,000	448
1975	55,000	6.54	359,700	65	23,273,000	423
1976	53,000	7.32	387,960	80	30,897,000	583
1977	53,600	7.47	400,000	68	27,000,000	504
1978	50,400	6.77	341,000	60	20,392,000	405
1979	65,200	6.86	447,000	87	38,978,000	598
1980	48,000	6.48	311,000	113	35,150,000	732
1981	43,470	6.83	297,000	84	24,875,000	572
1982	44,900	6.93	311,000	100	31,035,000	692
1983	40,900	6.74	276,000	111	30,519,000	748
1984	47,200	6.95	328,000	84	27,726,000	584
1985	59,600	7.31	436,000	88	38,326,000	643
1986	56,500	6.46	365,000	84	30,675,000	543
1987	54,800	6.79	372,000	80	29,749,000	543
1988	65,400	7.14	467,000	89	41,505,000	635
1989	64,800	6.90	447,000	100	44,593,000	689
1990	63,100	6.78	428,000	105	44,757,000	712
1991	64,500	7.30	471,000	91	42,760,000	664
1992	63,500	8.33	529,000	89	46,941,000	741
1993	64,000	7.00	448,000	117	52,416,000	819
1994	70,300	7.25	510,000	113	57,604,000	819
1995	59,830	7.25	397,200	114	49,372,000	827
1996	64,890	6.81	441,900	116	51,049,000	790
1997	61,200	6.98	427,000	128	54,661,000	893
1998	63,800	6.10	388,900	120	46,672,000	732
1999	64,200	6.32	405,600	102	41,372,000	645
2000	57,600	6.22	358,000	105	37,587,000	653
2001	59,900	7.20	431,400	125	54,012,000	900
2002	67,810	7.00	474,670	120	56,960,000	840
2003	63,476	7.11	451,314	100	45,303,000	711

Table 5: San Joaquin County corn grain statistics, 1970-2003.

Year	Harvested (Acres)	Yield (Tons/Acre)	Production (Tons)	\$/ton	Total \$	\$/Acre
1970	33,000	3.14	103,600	52	5,387,000	163
1971	52,500	3.25	170,600	53	9,042,000	172
1972	41,800	3.15	131,700	58	7,652,000	183
1973	47,000	3.6	170,000	93	15,725,000	333
1974	51,100	3.40	173,700	121	20,974,000	411
1975	67,000	3.59	240,500	109	26,128,000	390
1976	75,540	3.51	265,145	101	26,780,000	355
1977	70,100	3.95	277,000	83	23,046,000	329
1978	79,000	3.85	304,000	95	28,771,000	364
1979	85,700	4.03	345,000	105	36,225,000	423
1980	66,816	4.40	294,000	128	37,723,000	563
1981	70,000	3.89	272,000	122	33,238,000	475
1982	71,500	4.50	322,000	103	33,208,000	464
1983	40,100	3.92	157,000	139	22,500,000	545
1984	78,000	4.47	349,000	117	40,841,000	523
1985	72,300	4.70	340,000	104	35,235,000	489
1986	61,000	4.62	282,000	80	22,497,000	370
1987	51,700	4.70	243,000	84	20,424,000	395
1988	44,600	4.46	199,000	116	23,150,000	517
1989	54,800	4.64	254,000	107	27,211,000	496
1990	42,800	4.32	185,000	108	19,992,000	467
1991	35,100	4.67	164,000	106	17,371,000	495
1992	43,200	5.07	219,000	103	22,585,000	522
1993	56,200	5.04	283,000	117	33,074,000	590
1994	67,680	5.20	352,000	105	36,953,000	546
1995	40,430	4.97	200,900	121	24,217,000	601
1996	57,270	4.48	256,500	119	30,642,000	533
1997	68,000	5.14	349,300	123	42,832,000	632
1998	28,996	4.50	130,480	100	13,048,000	450
1999	54,500	4.95	269,900	83	22,403,000	411
2000	56,500	5.13	289,800	88	25,359,000	451
2001	57,800	4.76	275,000	92	25,409,000	438
2002	47,600	5.20	247,600	102	25,254,000	530
2003	46,700	4.63	216,000	95	20,619,000	440

Table 6: San Joaquin County corn silage statistics, 1970-2003.

Year	Harvested (Acres)	Yield (Tons/Acre)	Production (Tons)	\$/ton	Total \$	\$/Acre
1970	15,200	22.75	345,800	7	2,507,000	165
1971	17,900	20.50	367,000	7	2,661,000	149
1972	18,200	25.00	455,000	8	3,572,000	196
1973	19,900	23.70	471,600	13	5,895,000	296
1974	20,000	24.30	486,000	16	7,873,000	394
1975	22,700	22.11	502,000	12	6,054,000	267
1976	26,780	23.50	629,330	12	7,552,000	282
1977	26,600	21.40	569,000	10	5,861,000	220
1978	22,500	20.94	471,000	12	5,652,000	251
1979	23,200	24.87	577,000	16	9,232,000	398
1980	28,747	24.14	694,000	18	12,835,000	435
1981	24,300	23.90	581,000	19	11,022,000	454
1982	24,100	24.20	584,000	16	9,541,000	387
1983	23,000	25.10	579,000	18	10,492,000	452
1984	21,500	24.51	527,000	16	8,565,000	392
1985	20,000	27.30	545,000	16	8,737,000	437
1986	24,200	26.30	637,000	17	10,541,000	447
1987	21,200	26.60	563,000	15	8,681,000	399
1988	22,200	22.90	509,000	20	10,286,000	458
1989	22,200	24.50	543,000	19	10,329,000	466
1990	20,000	23.70	474,000	22	10,388,000	521
1991	21,500	26.90	579,000	18	10,510,000	484
1992	24,200	25.10	608,000	16	9,942,000	402
1993	25,400	26.10	663,000	17	11,142,000	444
1994	27,008	29.00	783,000	18	14,302,000	522
1995	41,350	27.73	1,146,600	20	22,771,000	555
1996	23,120	27.55	636,800	21	13,182,000	579
1997	32,400	27.18	913,700	20	18,000,000	544
1998	31,300	28.17	880,400	20	17,441,000	563
1999	32,900	28.15	925,500	18	16,206,000	507
2000	33,600	28.89	971,000	18	17,944,000	520
2001	37,600	29.87	1,122,500	21	23,449,000	627
2002	39,700	30.00	1,191,700	22	26,217,000	660
2003	40,100	28.35	1,136,800	20	22,828,000	567

Table 7: Southern Delta crops, 1996.⁸

LAND USE TYPE	Total	Surface	Mixed	Ground	Unknown/Other	Non-Irrigated
CITRUS (Eucalyptus)	49	38	11	0	0	0
DECIDUOUS FRUITS & NUTS						
Almonds	4,565	2,454	553	1,539	19	0
Apples	126	126	0	0	0	0
Apricots	7,011	1,680	162	131	110	0
Cherries	393	239	111	44	0	0
Fallow	38	38	0	0	0	0
Miscellaneous	89	50	0	39	0	0
Peaches & Nectarines	100	100	0	0	0	0
Pistachios	30	30	0	0	0	0
Plums	68	68	0	0	0	0
Unknown	210	172	2	26	9	0
Walnuts	4,518	3,942	250	313	13	0
FIELD CROPS						0
Beans (Dry)	10,541	7,946	339	2,256	0	0
Corn (Field & Sweet)	18,926	17,431	584	866	45	0
Fallow	7	7	0	0	0	0
Grain Sorghum	8	0	8	0	0	0
Miscellaneous	0	0	0	0	0	0
Safflower	12,188	11,173	59	951	5	0
Sudan	575	505	0	69	0	0
Sugar Beets	2,338	2,304	0	34	0	0
Sunflowers	141	141	0	0	0	0
Unknown	719	474	209	36	0	0
GRAIN & HAY CROPS						
Fallow	58	12	0	0	46	0
Miscellaneous	309	309	0	0	0	0
Oats	0	0	0	0	0	0
Unknown	22,688	17,781	868	3,058	29	952
IDLE						
Cropped in last 3 years	674	578	0	14	82	0
Fallow	0	0	0	0	0	0
PASTURE						
Alfalfa	35,607	30,962	1,182	3,464	0	0
Clover	0	0	0	0	0	0
Fallow	0	0	0	0	0	0
Mixed	2,655	1,948	458	237	13	0
Native	73	54	8	0	11	0
Turf Farms	580	580	0	0	0	0
Unknown	0	121	0	17	0	0

⁸ Statistics obtained from San Joaquin County Land use surveys conducted by the Department of Water Resources in 1996.

Table 7: Southern Delta crops, 1996 (continued).

LAND USE TYPE	Total	Surface	Mixed	Ground	Unknown/Other	Non-Irrigated
TRUCK, NURSERY, & BERRY						
Asparagus	12,661	12,460	201	0	0	0
Beans (Green)	167	126	41	0	0	0
Cabbage	14	12	0	0	2	0
Carrots	273	231	0	42	0	0
Cole Crops	21	21	0	0	0	0
Fallow	0	0	0	0	0	0
Flowers & Nursery	0	0	0	0	0	0
Melons, Squash, & Cucumbers	6,287	4,933	298	1,057	0	0
Miscellaneous	154	77	29	48	0	0
Mixed	415	48	0	367	0	0
Onions & Garlic	585	300	0	51	234	0
Peppers	50	50	0	0	0	0
Potatoes	324	324	0	0	0	0
Strawberries	63	8	0	56	0	0
Tomatoes	17,263	15,236	373	1,653	0	0
Unknown	236	134	0	77	24	0
VINEYARDS						
Fallow	0	0	0	0	0	0
Unknown	1,902	1,811	43	48	0	0
SEMIAGRICULTURAL & INCIDENTAL						
Dairies	641	0	0	0	0	641
Farmsteads	1,321	0	0	0	0	1,321
Lawn Areas	0	0	0	0	0	0
Livestock Feed Lots	132	0	0	0	0	132
Poultry Farms	64	0	0	0	0	64
TOTAL	167,858	137,036	5,789	16,491	643	3,109

Table 8: Southern Delta crops, 1988.⁹

LAND USE TYPE	Total	Surface	Mixed	Ground	Unknown/Other	Non-Irrigated
CITRUS (Eucalyptus)	12	12	0	0	0	0
DECIDUOUS FRUITS & NUTS						
Almonds	5,537	3,578	458	1,501	0	0
Apples	14	14	0	0	0	0
Apricots	2,464	2,366	0	98	0	0
Cherries	67	34	0	33	0	0
Fallow	0	0	0	0	0	0
Miscellaneous	38	30	0	8	0	0
Peaches & Nectarines	0	0	0	0	0	0
Pistachios	42	42	0	0	0	0
Plums	0	0	0	0	0	0
Unknown	651	424	75	135	0	17
Walnuts	5,017	4,448	70	489	0	10
FIELD CROPS						
Beans (Dry)	10,293	7,148	96	3,049	0	0
Corn (Field & Sweet)	24,277	15,389	7,700	773	415	0
Fallow	0	0	0	0	0	0
Grain Sorghum	150	150	0	0	0	0
Miscellaneous	16	16	0	0	0	0
Safflower	7,616	7,405	0	211	0	0
Sudan	281	223	5	53	0	0
Sugar Beets	16,022	14,231	370	1,421	0	0
Sunflowers	783	783	0	0	0	0
Unknown	2,162	1,474	189	421	0	78
GRAIN & HAY CROPS						
Fallow	2,415	861	66	250	0	1,238
Miscellaneous	16	16	0	0	0	0
Oats	78	0	0	0	0	78
Unknown	14,901	12,665	287	1,788	0	161
IDLE						
Cropped in last 3 years	5,146	2,517	692	1,285	0	651
Fallow	33	0	33	0		0
PASTURE						
Alfalfa	39,547	33,928	855	4,764	0	0
Clover	32	32	0	0	0	0
Fallow	294	222	53	19	0	0
Mixed	2,563	1,560	771	232	0	0
Native	128	109	12	7	0	0
Turf Farms	314	314	0	0	0	0
Unknown	0	0	0	0	0	0

⁹ Statistics obtained from San Joaquin County Land use surveys conducted by the Department of Water Resources in 1988.

Table 8: Southern Delta crops, 1988 (continued).

LAND USE TYPE	Total	Surface	Mixed	Ground	Unknown/Other	Non-Irrigated
TRUCK, NURSERY, & BERRY						
Asparagus	16,202	15,977	61	164	0	0
Beans (Green)	0	0	0	0	0	0
Cabbage	0	0	0	0	0	0
Carrots	0	0	0	0	0	0
Cole Crops	0	0	0	0	0	0
Fallow	725	639	13	73	0	0
Flowers & Nursery	37	12	0	25	0	0
Melons, Squash, & Cucumbers	2,540	1,902	435	203	0	0
Miscellaneous	731	66	93	572	0	0
Mixed	8	8	0	0	0	0
Onions & Garlic	366	291	1	74	0	0
Peppers	96	81	0	15	0	0
Potatoes	103	95	0	8	0	0
Strawberries	0	0	0	0	0	0
Tomatoes	18,463	16,151	163	2,149	0	0
Unknown	0	0	0	0	0	0
VINEYARDS						
Fallow	68	68	0	0	0	0
Unknown	318	140	83	95	0	0
SEMIAGRICULTURAL & INCIDENTAL						
Dairies	399	0	0	0	0	399
Farmsteads	1,129	0	0	0	0	1,129
Lawn Areas	388	277	0	111	0	0
Livestock Feed Lots	123	0	0	0	0	123
Poultry Farms	8	0	0	0	0	8
TOTAL	182,612	145,697	12,581	20,027	415	3,892

Petition to De-List the Lower San Joaquin River

For

Impairment by Salt and Boron

EXHIBIT D

Presentation of William R. Johnston, P.E.

Submitted By:

SAN JOAQUIN RIVER GROUP AUTHORITY

Presentation of William R. Johnston, P. E.¹
Concerning Southern Delta Electrical Conductivity
Water Quality Objectives

Introduction

The staff of the California State Water Resources Control Board has concluded, based on recommendations by stakeholders, that the Southern Delta Electrical Conductivity (EC) Objectives established to protect the agricultural crops irrigated with San Joaquin River water diverted from the Southern Delta, should be reevaluated. This presentation will summarize 1) the evolution of the existing Southern Delta EC Objectives, 2) research and crop changes that have taken place since the existing objectives were established and 3) recommend whether or not changes should be made to the existing objectives, based on updated research and current cropping patterns. “The SWRCB based the southern Delta EC objectives on the calculated maximum salinity of applied water which sustains 100% yields of two important salt sensitive crops grown in the southern Delta (beans and alfalfa) in conditions typical of the southern Delta (surface irrigation of mineral soils) per the University of California Guidelines and Irrigation Paper 29 of the Food and Agricultural Organization of the United Nations”.

Water Quality Concerns for Southern Delta Agricultural Crops

There has been concern about the quality of Delta water for the irrigation of agricultural crops, since before the development of either the U. S. Bureau of Reclamation’s Central Valley Project (CVP) in 1944, or the California State Water Project (SWP) in 1968. In 1959, D-935 was adopted to authorize the CVP to store and divert water from the San Joaquin River at Friant Dam. In 1961, D-990 was adopted to authorize the CVP to store and divert water for most of the then authorized CVP service area. In 1967, D-1275 and D-1291 were adopted to authorize the California Department of Water Resources (DWR) to store and divert water from the Feather River and the Delta. These water right decisions also required the two projects to control the salinity level of the water in the Delta to certain levels. As early as 1974, Warren Schoonover, recognized that it is inefficient to provide Delta agricultural water users high quality water through releases from upstream reservoirs (Schoonover, 1974). Mr. Schoonover recommended to the California Department of Water Resources that in order to put the available resources to the most reasonable and beneficial uses, that Delta water users contract with the CVP or SWP and obtain a land delivered water supply.

Prior to the construction of the CVP and the SWP, the concern about Delta water quality related to salinity intrusion from the Pacific Ocean through the San Francisco Bay and Estuary. During dry years, such as 1931, water with a salinity level of 1000 parts Chloride (estimated EC = 1.56 mmhos/cm), extended into the Southern Delta as far as the Grant Line Canal and Upper Roberts Island (DWR, 1995). This would have been the concentration of irrigation water Delta water users would have had available during years

¹ Prepared by William R. Johnston, P. E. (Agricultural Engineer), consultant to San Joaquin River Group Authority, for the California State Water Resources Control Board Periodic Review of the 1995 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary Workshop, 2005.

such as 1977 and 1992 if the CVP, SWP and other upstream projects had not been releasing stored water.

Testimony Regarding Delta Agriculture (SWRCB D-1485 Exhibits)

As with prior Bay-Delta proceedings, one of the more controversial issues confronting the SWRCB during the D-1485 hearings was the issue of “What appropriate salinity level should be required to protect the beneficial use of water for the irrigation of agricultural crops in the Delta?” The focus was on the principal crops being grown at that time, corn, beans, and alfalfa, the types of soils, mineral and peat, and the methods of irrigation, surface and subsurface. Considerable attention was paid to corn and beans as the most salt sensitive crops being grown and the practices being followed in the irrigation of corn on Delta peat soils. The University of California Agricultural Extension Service experts on Delta agricultural and water matters testified regarding these issues (Meyer, et al, 1973, 1974 1975, and 1976) (Ayers and Branson, 1975) (SWRCB, UC Exhibits, 1976).

The UC Experts explained that the application of irrigation water, of any quality, adds salt to the soil being irrigated; that the plants use the soil water leaving behind the salt; and that eventually this salt must be leached from the crop root zone to maintain maximum crop yields, regardless of the quality of water used to irrigate the crops. It was pointed out that if a shallow table is present, it is most important to have adequate leaching and good on-farm water management practices to avoid salt accumulation in the crop root zone.

Mr. Ayers explained the procedures developed by the United States Department of Agriculture Salinity Laboratory and the University of California to determine the salt tolerance of various agricultural crops (Ayers & Branson, 1975).

Mr. Carlton discussed the irrigation of peat soils, which generally lie below sea level. It was explained that the peat soils are difficult to leach because these soils are found on Delta islands surrounded by water that is higher than the surface of the soil. This water, surrounding the islands, consists of river water, poor quality drainage water from the irrigated lands and diluted ocean water. The area is also impacted by the tidal fluctuations from the Pacific Ocean. In addition, the level of the peat soils was dropping at that time about one to two inches per year, making it more difficult over time to leach these soils and to maintain water tables below the crop root zone.

Mr. Kegal confirmed that peat soils are difficult to farm under ideal conditions. He explained the irrigation and leaching processes practiced in the Delta peat soils. Mr. Kegal also explained that the irrigation of higher (in elevation) mineral soils of the Southern Delta were also difficult to irrigate as most have poor water infiltration rates. Mr. Kegal further explained that the leaching process that removes salt from the irrigated land contributes directly to reducing Delta water quality because as the drainage water is removed by pumping from the islands and it adds salt directly to the Delta water supply.

Mr. Meyer reviewed the Corn Studies that were conducted to gather data that would be helpful to the State Board in establishing agricultural water quality objectives for the Southern and Central Delta. Mr. Meyer reported that the UC studies showed that the soils, crops, farming practices, and water management practices were highly variable throughout the Delta. He concluded that of the salts that needed to be leached from the soils to maintain crop yields, 80% came from applied water and 20% from the decomposing peat. He also reported that leaching could not be done with sub-irrigation practices applied on the peat soils, and that leaching had to be accomplished during the winter season by flooding or from winter rain.

In regard to the mineral soils, Mr. Meyer stated that the natural leaching fraction ranged from 5% to 50%. He said the salt tolerance tables (Ayers and Westcot, 1976) would be applicable where the leaching fraction is 15% to 16%, which can be achieved normally with the over application of water in normal irrigations and with winter precipitation. The South Delta Salinity Study, Meyer, et al. (1976), (Exhibit UC-7) shows that in the study of nine mineral soil locations in the Southern Delta during the hydrological dry year of 1976, the highest soil salinities and lowest apparent leaching fractions occurred at locations where the irrigation water supply from Middle River was the highest quality (0.7 mmhos/cm) during that year. Good leaching and low salt accumulations were accomplished in all locations where the irrigation water supply averaged 1.1 mmhos/cm. In general, there was no increase in soil salinity. This report indicated that the main factors controlling salt accumulation in the test plots studied in 1976 are management and soil properties as well as the quality of the irrigation water. The authors concluded that the wide variability of soils contributed more to the variability in the salt accumulation than did the variability in the water quality. These results were obtained even though historical data show that the 1976 water year was classified dry and the salinity of the San Joaquin River water at Vernalis exceeded 1.0 mmhos/cm from about the end of April through July (Steiner, 2004).

Despite the above findings, the authors concluded the report with the following statement that appears to conflict with the reported data.

“This study has shown that salinity is a problem now in the South Delta. Given the wide variety of soils in the South Delta, good yields and diversity of crops appear to be related to water quality and levels of farm management.”

Granted, water quality will impact crop yield, but all of the studies show that soil type, groundwater quality, depth to groundwater, and farm management have far more to do with potential crop yield than the quality of water used to irrigate the Delta crops, especially within the range of salinity levels being considered in these proceedings.

Discussion at December 6, 1976 Hearing

Following the testimony of the UC Experts at the Board Hearing on December 6, 1976, the Board members seemed to be most concerned with protecting the Delta crops grown on the difficult to manage peat soils. One of the important questions asked of the UC Experts was,

“If the water quality guidelines as presented in exhibit UC-1 and UC-2 need to be modified for use of subsurface irrigation as stated on page 8, line 26 and 27 of the UC-2 exhibit (FAO-29), can you suggest a way to modify?”

Mr. Ayers developed a four page answer to that question that basically stated that to achieve a 100% yield with surface irrigation of corn on mineral soils, with a 16% leaching fraction, water with a salinity of 1.13 mmhos/cm (about 723 mg/l) would be needed (Ayers, 1976, UC-8). Mr. Ayers then, in answer to the question posed by the Board, calculated the quality of irrigation water for the subsurface irrigation of peat soils, with leaching and water management as found at the study site. Mr. Ayers concluded that the range of water quality needed for 100% yield would be from 0.34 to 0.68 mmhos/cm (218 to 435 mg/l).

The establishment of the Vernalis Water Quality Objective at 0.7 mmhos/cm (448 mg/l) appears to have been established to lean heavily toward the quality required for the subsurface irrigation of peat soils. This was not much of a concession since, using the tables in (Ayers and Westcot, 1976 or Ayers and Westcot, 1985) to estimate the yield of corn, an irrigation water with salinity levels between 0.42 and 0.85 mmhos/cm (269 and 544 mg/l) will produce a 95% yield.

The Board rejected a proposal by Mr. Alex Hildebrand on behalf of the South Delta Water Agency, that the objective should be established with a 3-day average of 500 ppm TDS, a 30 day average of 450 ppm TDS and an annual average of 400 ppm TDS.

Subsequent Evaluations of Salt Tolerance of Corn

Subsequent to the adoption of D-1485 by the SWRCB, Hoffman, et al. (1983) reported the results of a three year field experiment to establish the salt tolerance of corn in the Sacramento-San Joaquin Delta of California, Maas, et al. (1983) reported on a greenhouse experiment to evaluate the sensitivity of corn to salt at various growth stages, and Hoffman, et al. (1986) evaluated the use of irrigation waters of various salinities in corn growth in the Sacramento-San Joaquin Delta. Hoffman, et al. (1986) reported that

“Corn production on the organic soils of the Sacramento-San Joaquin Delta of California was affected by the salinity of the irrigation water and the adequacy of salt leaching. Full production was achieved on soils that were saline the previous year, provided the electrical conductivity of the irrigation water (EC_i) applied by

sprinkling was less than 2 dS/m and leaching was adequate from either winter rainfall or irrigation to reduce soil salinity (EC_{sw}) below the salt tolerance threshold for corn (3.7 dS/m). For subirrigation, an EC_i up to up 1.5 dS/m did not decrease yield for leaching had reduced EC_{sw} below the threshold. If leaching was not adequate, even nonsaline water did not permit full production. In agreement with previous results obtained in a greenhouse, surface irrigation with water of an electrical conductivity of up to 6 dS/m after mid-season (end of July) did not reduce yield below that of treatments where salinity of the irrigation water was not increased at mid-season. Results also reconfirm the salt tolerance relationship established in the previous three years of the field trial. The earlier conclusion that the irrigation method (Sprinkler or subirrigation) does not influence the salt tolerance relationship was also confirmed.”

In addition, Pritchard, et al, (1983), concluded,

“At the soil water salinity threshold for corn grain (3.7 dS/m), the average ratio is 1.7 which results in a maximum value of 2.2 dS/m for EC_i without yield loss under normal conditions. With subirrigation and below normal rainfall, as in 1981, the maximum value of EC_i would be 0.8 dS/m”.

Finally, researchers from the University of California, Department of Land, Air and Water Resources (Isidoro-Ramirez, Berenguer-Merelo, and Grattan, 2004) developed criteria for evaluating the required irrigation water quality (EC_i) necessary to protect agricultural beneficial uses when taking into account annual precipitation. This study evaluated beans as the agricultural crop most sensitive to soil and water salinity. This new UC model study builds upon the principles and assumptions described by Ayers and Westcot, except that the prior analyses have not taken into consideration any leaching that results from precipitation. The UC Davis model determined how the EC of a given irrigation water supply affects crop production, in this case beans, on Yolo silt loam soil in Yolo County, where annual precipitation averages about 17.3 inches per year. Most of the mineral soils in the Delta, being irrigated with San Joaquin River water, where beans and corn are grown, are similar in texture to the soil modeled and the annual precipitation is about 13.8 inches per year (Stockton). I have personally observed that in San Joaquin Valley soils without a shallow saline water table, when the annual precipitation is 10 to 12 inches, sufficient natural leaching takes place to prevent salt buildup in the crop root zone.

These researchers concluded that

“When an EC_w of 1.1 dS/m is considered over the 53-year rainfall series, the model predicts that the seasonal mean EC_e is 0.94

dS/m. In 80% of the years, the mean seasonal EC_e is less than 1.0 dS/m, the yield threshold for salt-sensitive bean. For 50 of the 53 years, the seasonal mean EC_e for individual years is 1.05 or lower, which would result in a predicted yield reduction of 1% or less. However, this predicted reduction in yield potential is less than the error associated with the yield threshold value itself.

“Over the entire 53-year period of record, yield reduction for beans is predicted to be noticeably reduced during only 3 years when applying irrigation water with an EC of 1.1 dS/m. All three years occurred during the period of drought in the 1970s. These three outliers translate into reductions in the potential yield of 2, 4 and 6%. Again, however, these predicted values are within the statistical uncertainty of the salinity threshold value itself. Moreover, such losses, if real, could be avoided by winter leaching.

“Given these results, and taking into account all the other factors that potentially impact crop yield (e.g., weather, water stress and biotic stresses) and the conservative nature of all inputs into the model, the use of 1.1 dS/m as the threshold EC value for irrigation water is considered protective for beans, and thus all other agricultural uses of the water in the Davis area.”

Southern Delta Service Area

One important factor in establishing the water quality objective for any beneficial use is the reasonableness in efficiently achieving the objective. I have reviewed soil types, land use, farming patterns, cropping patterns, and parcel relationships in the Southern Delta Service Area. Maps of the Vernalis, Tracy, Lathrop, Union Island, Stockton West, and Holt Quad Sheets, respectively, (See San Joaquin River Group Authority Maps) show the area of the Southern Delta irrigated with surface water and groundwater in 1996. The maps of the same Quad Sheets show the 1996 areas planted to beans, and to corn. These data have been compiled from DWR land use and crop reports. All of the irrigated soils in the Southern Delta where beans are planted are mineral soils (McElhiney, 1992). In addition, none of these soils where beans are grown are subirrigated. All are irrigated with a variety of surface irrigation methods.

Studies were conducted regarding the economics of leaching and reclamation of organic soils in the Delta (Pritchard et al, 1985; Pritchard, et al, 1992). However, the fact that organic soils may be more difficult and costly to maintain a salt balance in the crop root zone is irrelevant in regard to the questions raised by the SWRCB for this matter. The studies have shown that the economics of maintaining a favorable salt balance is related more to the specific soil and climatic conditions than to the quality of applied irrigation water. This is particularly so in the Delta where the surface of organic soils is oxidizing and the elevation of the soil surface on the Delta islands is sinking. This causes

increasing static head on the subsurface groundwater and over time, it causes additional salt up into the crop root zone. As this happens, it becomes more and more difficult to maintain salt balance or reclaim these organic soils, regardless of the quality of the applied water. It is also clear that the more the Delta soils are leached, more salt will be returned to the Delta channels which further degrades the Delta water supply

Current Workshops

The SWRCB has asked, as part of the 2004-2005 Periodic Review, whether or not the SWRCB should amend the 0.7 mmhos/cm and 1.0 mmhos/cm Southern Delta Electrical Conductivity (EC) Objectives in the Water Quality Objectives for Agricultural Beneficial Uses to be reflective of salinity tolerances of crops currently grown in the Southern Delta? (SWRCB, Sept. 30, 2004).

Proposed Vernalis Water Quality Objectives

I believe that the research conducted since the 0.7mmhos/cm water quality objective was adopted by the SWRCB show that the 0.7mmhos/cm is not justified as reasonable, beneficial or necessary to insure the viability of the crops grown in the Southern Delta service area on mineral soils in 2005. It is therefore recommended that the Vernalis agricultural salinity objective be changed to 1.1 dS/m for the entire year, as shown in "Table 2 (PROPOSED)". This recommendation takes into consideration crop type, soils, irrigation methods, and available annual precipitation. This water quality objective will provide water of sufficient quality to allow 100 % yield for all crops grown in the Southern Delta, including beans, the most salt sensitive crop currently grown in this area, assuming normal precipitation and all other reasonable farming practices are followed (Grattan, 2002 and Isidoro-Ramirez, et al., 2004)

Table 2 (PROPOSED)
Water Quality Objectives for Agricultural Beneficial Uses

COMPLIANCE LOCATION	PARAMETER		DESCRIPTION (UNIT) [2]	WATER YEAR TYPE [3]	TIME PERIOD	VALUE
	INTERAGENCY STATION NUMBER (RK1 [1])					
<i>San Joaquin River at Airport Way Bridge, Vernalis -and-</i>	<i>C-10 (RSAN112)</i>	<i>EC</i>	<i>Maximum 30-day running average of mean daily EC (dS/m)</i>	<i>All</i>	<i>1Jan-31Dec</i>	<i>1.1</i>
<i>San Joaquin River a Brandt Bridge site -and- Old River near Middle River -and- Old River at Tracy Road Bridge</i>	<i>C-6 (RSAN073) C-8 (ROLD69) P-12 (ROLD59)</i>		-or- <i>If a three-part contract has been implemented among the DWR, USBR, and SDWA, that contract will be reviewed prior to implementation of the above and, after also considering the needs of other beneficial uses, revisions will be made to the objectives and compliance/monitoring locations note, as appropriate.</i>			

[3] Use San Joaquin Valley 60-20-20 water year hydrologic classification index (see page ??) to determine water year type.

The Board also asks if there is any reason to change the methodology for determining compliance with the Southern Delta EC Objectives to ensure the protection of agricultural beneficial uses? The methodology for determining compliance needs to be modified to apply the San Joaquin Valley 60-20-20 water year hydrologic classification index, rather than the 40-30-30 Sacramento River index, to determine each water year type for the San Joaquin River Basin.

Conclusions

- Based on observations of excellent production of agricultural crops through significantly different years with varying water quality, with varying water conditions and water supplies of different quality, that have occurred since 1976, the salinity problems impacting crop yields in the Southern Delta are no better or worse in 2004 than they were in 1976. (San Joaquin County Agricultural Commissioner Reports. 1988-2003).
- Even under the best circumstances, it is difficult to manage poor soils with a shallow water table. Poor soils, shallow water tables and other factors (eg. unattended crop pests, adverse weather conditions, poor fertilization practices, inadequate weed control, deficit irrigation) all contribute to farming problems and ultimate crop yield far more than the quality of the water supply within the salinity ranges under consideration in this discussion.
- A Vernalis water quality objective of EC equal to 1.1 dS/m (mmhos/cm) is sufficient to protect all agricultural crops grown in the southern Delta service area.
- The proposed water quality objectives are adequate to provide 100% yield of the agricultural crops irrigated with San Joaquin River water in the Southern Delta service area with good water management. Proper irrigation and annual precipitation provide adequate leaching of the irrigated soils (Grattan, 2002, Isadoro-Ramirez, et al, 2004).

Recommendation

It is recommended that during all times the Vernalis EC objective should be set at 1.1 dS/m which is sufficient to protect the beneficial use for irrigation of all crops grown in the area where San Joaquin River water is used at or down stream of the location of the Vernalis monitoring point.

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Petition to De-List the Lower San Joaquin River

For

Impairment by Salt and Boron

EXHIBIT E

Presentation of Daniel Steiner

Submitted By:

SAN JOAQUIN RIVER GROUP AUTHORITY

Presentation of Daniel B. Steiner¹
Concerning San Joaquin River Hydrology
And
Alternative Flow and Quality Objectives at Vernalis

I am one of the principal developers of the revised CALSIM II model, specifically the aspects of the model that depict the San Joaquin River Basin. As such I am familiar with the model's construction, underlying hydrologic data base, assumptions for operations, and results.

My presentation will describe the current hydrologic setting of the San Joaquin River as depicted by the CALSIM II model. Subsequently I will describe how that setting changes if the water quality and flow objectives at Vernalis are modified. I am also providing hydrologic data concerning the estimation of unimpaired flow within the San Joaquin River Basin, recorded flow at Vernalis, and State Water Project and Central Valley Project diversions from the Delta.

¹ Prepared by Daniel B. Steiner, consultant to San Joaquin River Group Authority, for the California State Water Resources Control Board Periodic Review of the 1995 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary Workshop, March, 2005.

Existing Hydrologic Setting and CALSIM II

The San Joaquin River watershed is depicted in CALSIM II. CALSIM II is an application of computer software representing the State Water Project (SWP) and Central Valley Project (CVP). CALSIM II was jointly developed by the Department of Water Resources (DWR) and the U.S. Bureau of Reclamation (Reclamation), and simulates a significant portion of the water resources infrastructure of the Central Valley and Delta regions.

In modeling terms, the San Joaquin River generally enters the Delta at a modeling node depicted as “Vernalis”. Geographically this location is located downstream of the confluence of the Stanislaus River with the San Joaquin River. The location is a compliance point for water quality and flow objectives contained in SWRCB Decision 1641. Long-term flow and quality records exist for this site.

Reclamation attempts to provide compliance to the quality and flow objectives at Vernalis through its operation of the New Melones Project located on the Stanislaus River. During certain periods of the year, participants of the San Joaquin River Group Authority assist Reclamation with compliance of flow objectives through aspects of the SJRA.

Hydrologic conditions at Vernalis are mostly the result of the mix of flow and quality of the San Joaquin River “upstream” of the Stanislaus River and the flow and quality of the Stanislaus River. At times, Reclamation reacts to the upstream condition with its operation of the New Melones Project. The upstream condition of the San Joaquin River is depicted in CALSIM II at a modeling node referred to as “Maze”, and reflects a geographical location between the confluences of the Tuolumne River and Stanislaus River with the San Joaquin River. This location has records for flow and quality, most recently daily records for flow and periodic grab sample data for quality.

Understanding the hydrologic condition at Vernalis requires an appreciation of the upstream condition of the San Joaquin River and the operation of the Stanislaus River. The depiction of the San Joaquin River above Vernalis by CALSIM II has recently been revised through several efforts funded by Reclamation and other entities. This effort is documented by several documents under development by Reclamation.

Stream reaches, reservoirs, diversions, accretions, depletions and return flows are linked together as a network of interconnected nodes within CALSIM II. The interconnections between nodes depict the physical relationship/process that occurs between the nodes, if any. For instance, if a diversion occurs between two nodes that define a stream reach, the flow entering the reach at the upstream node will be reduced by the diversion and thus define the flow leaving the reach. As a second example of node linkage, a portion of that diversion may re-enter a reach of the same stream downstream of the diversion, or possibly enter a reach of stream on another tributary. Figure 1 illustrates the linkage of nodes within CALSIM II for the San Joaquin River Basin.

CALSIM II depicts water quality in the San Joaquin River by calculating a conservation of flow and quality (mass) within the river. Elements of flow modeled in CALSIM II are assigned an associated water quality, expressed in uS/cm (EC). As flow enters or exits the stream network, so does water quality loading. The several components of flow that occur at a modeled location in the network are mathematically blended to derive a composite flow and quality at that location. Figure 2 illustrates a general schematic of the flow and quality elements that are included in the CALSIM II depiction of the San Joaquin River.

Figure 1
Schematic of CALSIM II Depiction of San Joaquin River

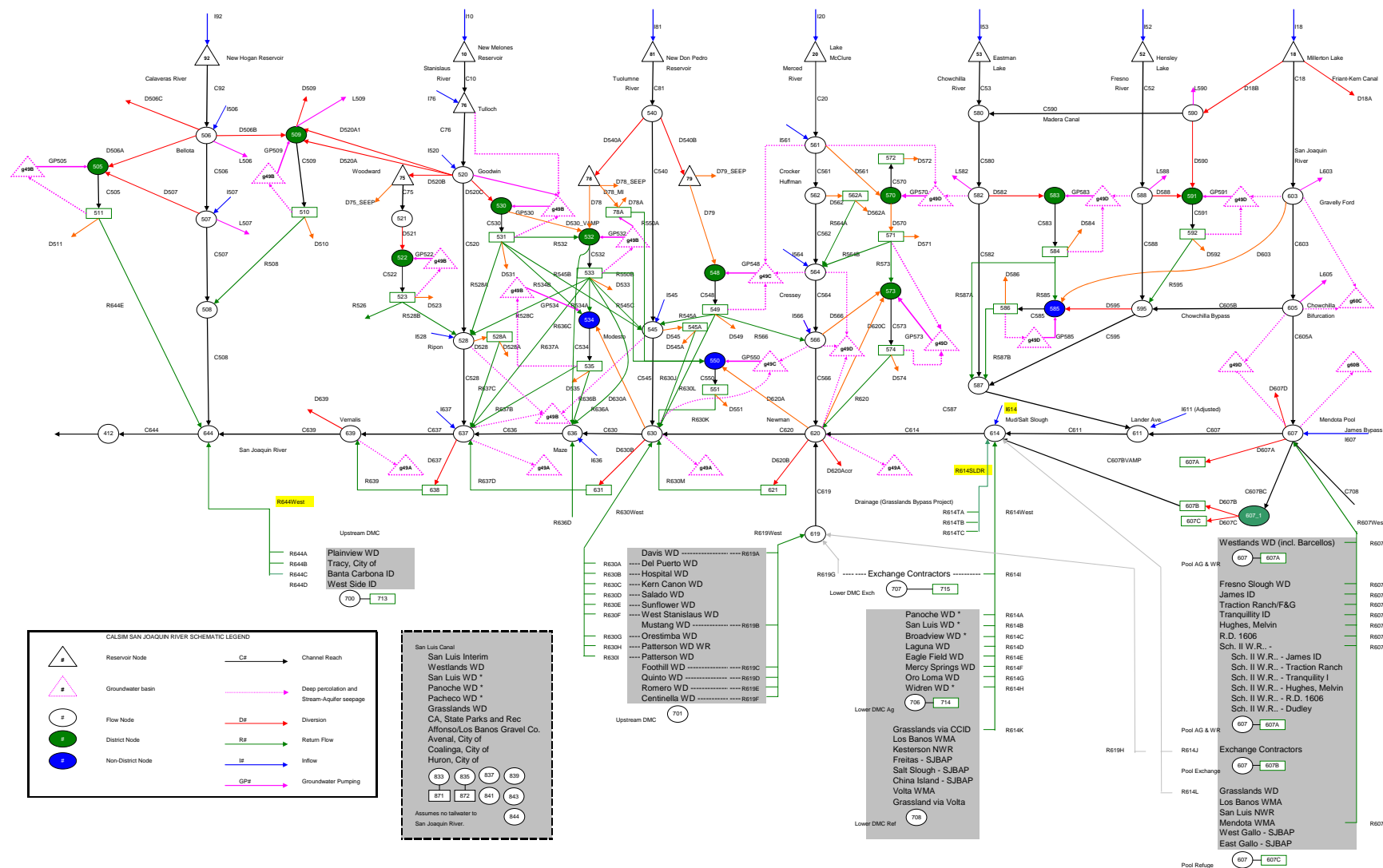
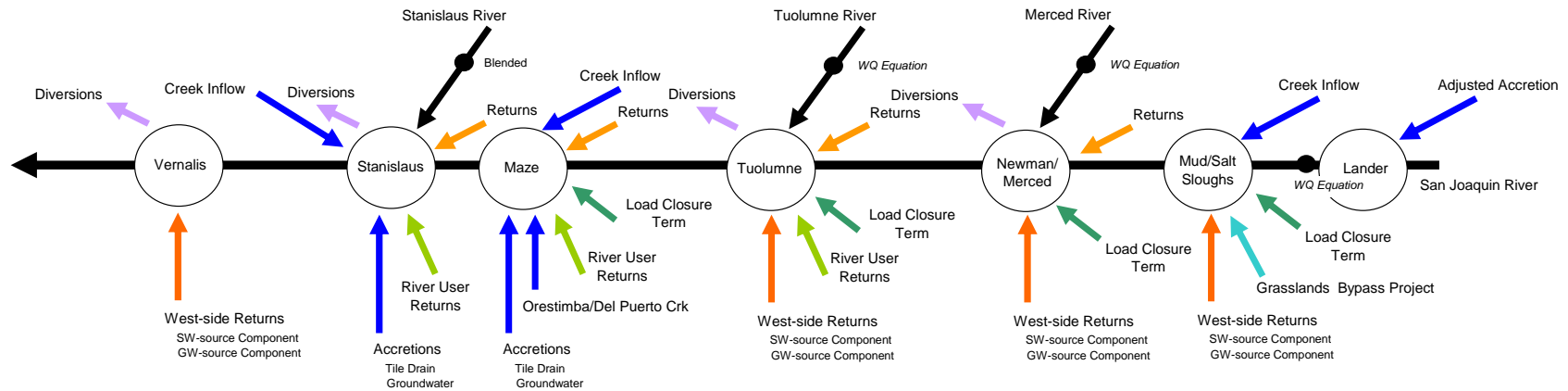


Figure 2
General Schematic of CALSIM II Depiction of San Joaquin River Flow and Quality Elements



CALSIM II currently simulates a sequential monthly operation of water project operations spanning a hydrologic period from October 1921 through September 1994 (73 water years). The simulation assumes the recurrence of historical runoff that occurred during this period, with the “current level” of water system infrastructure and water demands layered upon that hydrology as if this infrastructure and demand existed during that entire sequence of years. During this period sequences of flood and drought occur, including the droughts of 1976-77 and the prolonged 1987 through 1992 drought.

Upstream Hydrologic Condition at Maze

The hydrologic condition at Maze is affected by many aspects of hydrology and the operation of water systems. To a large extent, the runoff within the San Joaquin River Basin is controlled or affected by water systems. Major tributary water systems that affect San Joaquin River flow and quality at Maze and are modeled by CALSIM II include:

- The San Joaquin River upstream of the Mendota Pool (Friant)
- Fresno River (Hidden)
- Chowchilla River (Buchanan)
- Merced River (New Exchequer)
- Tuolumne River (New Don Pedro)
- Fresno Slough (Kings River overflow)

In addition to the operation of the major tributaries, CALSIM II depicts the occurrence of diversions, accretions and depletions, and return flows below the control of the major water systems and along the mainstem of the San Joaquin River. Contributors to the flow and quality at Maze include the major tributaries listed above, return flows/operational spills from those systems, return flows/operational spills from Westside operations, diversions and returns from riparian and appropriative diverters, and accretions from groundwater and minor streams.

The existing flow and quality of the San Joaquin River at Maze is exemplified by Figure 3A through Figure 3D. These graphs depict the simulated sequential average monthly flow and

Figure 3A

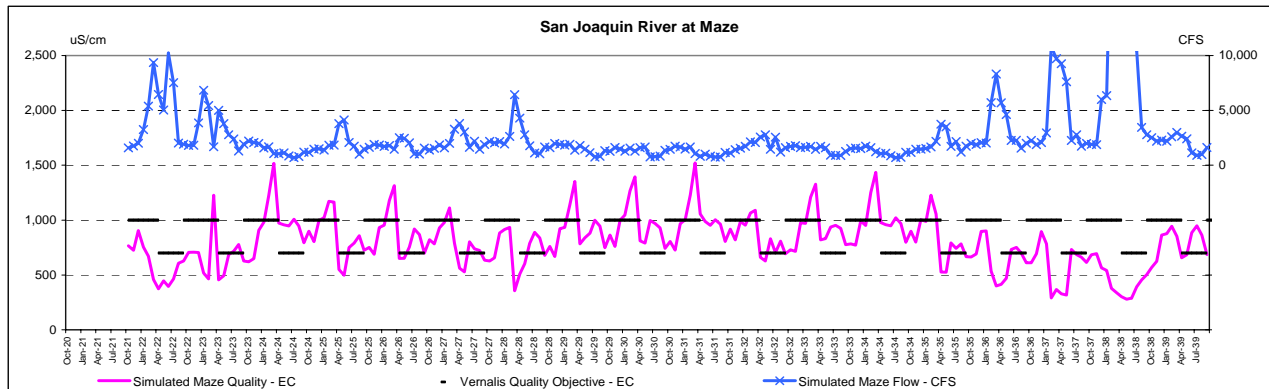


Figure 3B

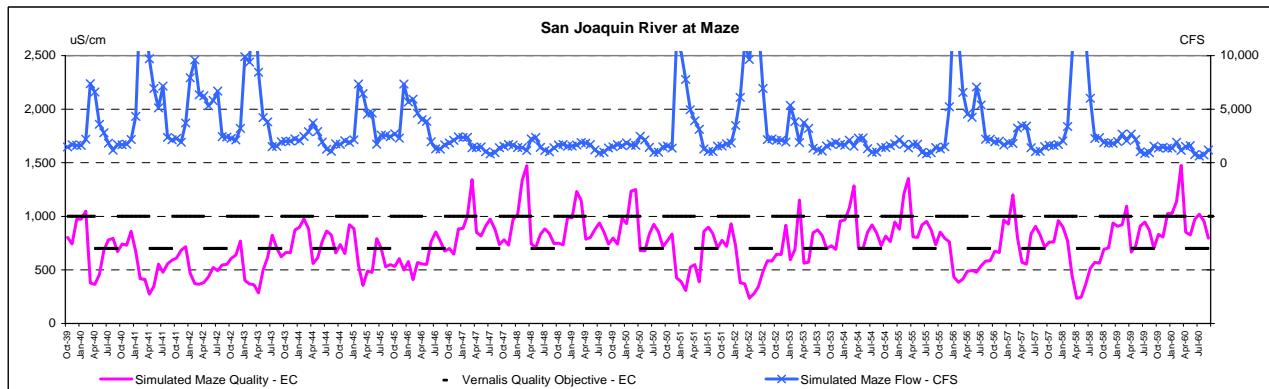


Figure 3C

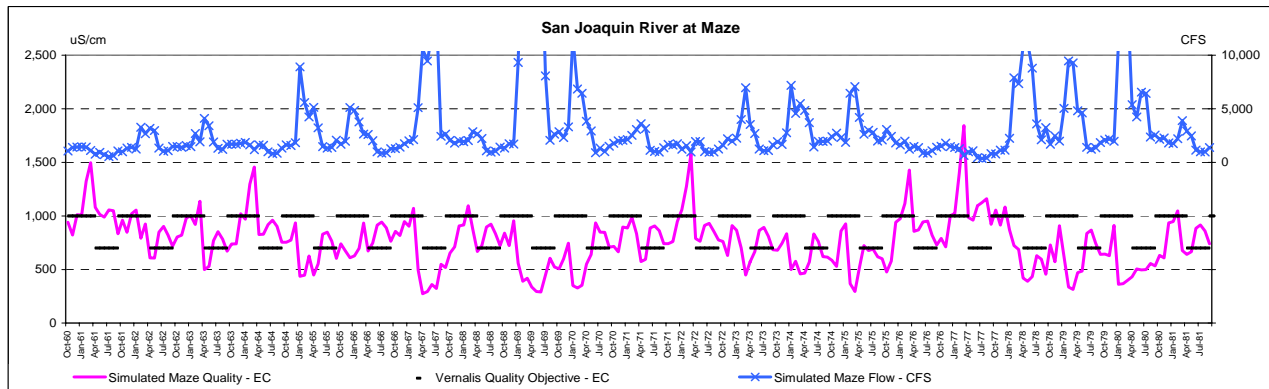
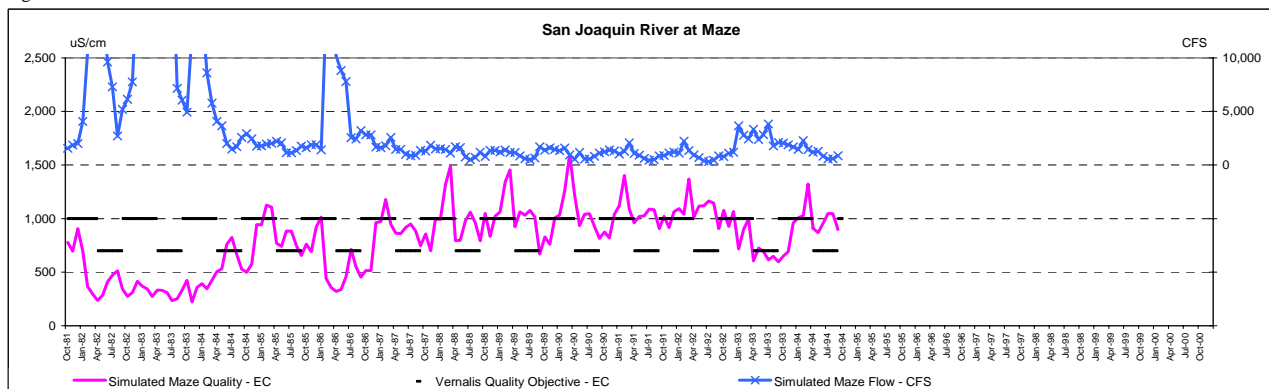


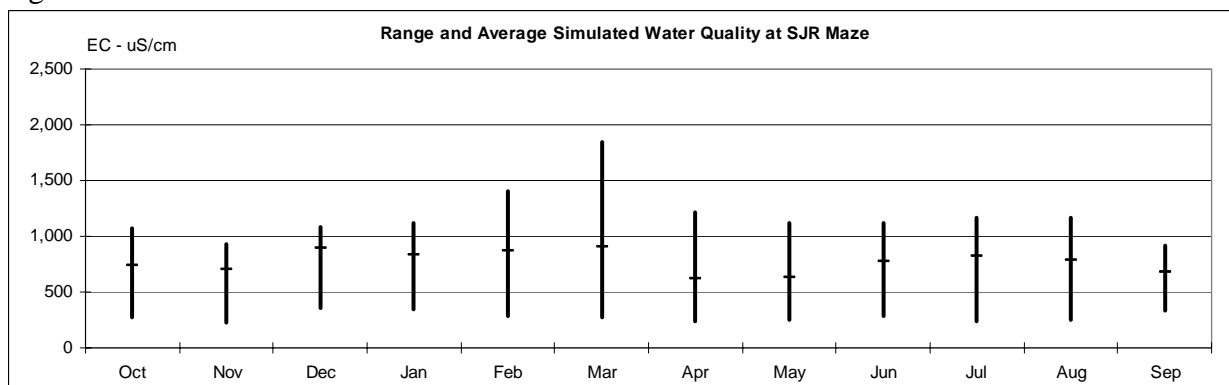
Figure 3D



and quality of the San Joaquin River at Maze as estimated by CALSIM II. Figure 3A depicts the results for water years 1922-40. Figure 3B depicts the results for water years 1941-1960. Figure 3C depicts the results for water years 1961-80, and Figure 3D illustrates the results for water years 1980-94. The seasonal downstream seasonal water quality objective at Vernalis is also shown in the graphs.

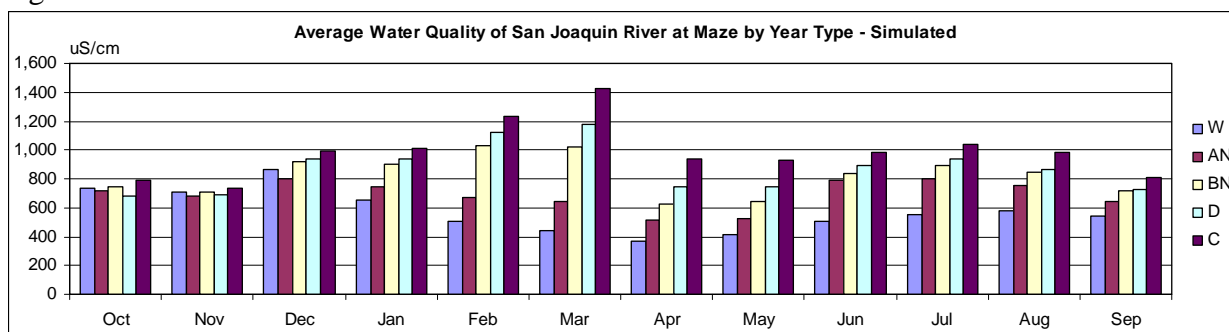
The trend of water quality at Maze is illustrated in Figure 4. Shown in Figure 4 is the range (indicated by a vertical line) in water quality that occurs within a month over the 73 years of simulated operations. Also shown is the average water quality that is simulated for a month (indicated by a bar).

Figure 4



The simulated water quality at Maze also trends by water year type, better water quality occurring during wetter years. Figure 5 illustrates the average water quality simulated at Maze by water year type (San Joaquin River Basin Index, e.g., 60-20-20).

Figure 5



Hydrologic Conditions at Vernalis

Hydrologic conditions at Vernalis are primarily affected by the flow and quality of the San Joaquin River at Maze and the flow of water from the Stanislaus River. The Stanislaus River is assumed to operate according to the 1997 New Melones Interim Plan of Operations (IPO). The IPO allocates supply to four purposes: fisheries, water quality, X2 requirement support, and water supply for Stanislaus River CVP contractors. Reclamation provides water to Oakdale Irrigation District (OID) and South San Joaquin Irrigation District (SSJID) according to a separate agreement with these agencies.

The amount of water allocated to each purpose (other than to OID/SSJID) in the IPO depends on end-of-February storage plus March-September forecasted inflow, as shown below in Table 1. CALSIM II makes releases to the Stanislaus River below Goodwin Dam in the following order:

1. Releases for the fishery according to an assumed pattern associated with the allocated volume.
2. Releases up to the amount needed above the fishery release to meet the Vernalis water quality requirement, these accumulated releases cannot exceed the annual Vernalis water quality allocation.
3. Releases for dissolved oxygen (DO) at Ripon (surrogated as a flow requirement at Goodwin), with no volume limitation except the flow requirement itself.
4. Releases for the Vernalis D-1641 Bay-Delta flow requirement. The IPO assumed that the Vernalis flow requirement release occurred as the second step; however, for modeling simplicity the release is modeled last. Results are rarely affected by the shift in order.

Table 1: New Melones Interim Plan of Operation Allocations (1,000 acre-feet)

New Melones Storage Plus Inflow		Fishery		Vernalis Water Quality		Bay-Delta		CVP Contractors*	
From	To	From	To	From	To	From	To	From	To
0	1,400	0	98	0	70	0	0	0	0
1,400	2,000	98	125	70	80	0	0	0	0
2,000	2,500	125	345	80	175	0	0	0	59
2,500	3,000	345	467	175	250	75	75	90	90
3,000	6,000	467	467	250	250	75	75	90	90

* CVP Contractors: Stockton East Water District and Central San Joaquin Water Conservation District

The details of Stanislaus River modeling assumptions are provided in Attachment A of this paper. At times when not incidentally met by flows from the mainstem and non-Vernalis water quality or flow releases from Goodwin, CALSIM II will specifically make releases at Goodwin for the purpose of meeting water quality or flow objectives at Vernalis. The current water quality objective at Vernalis is a running 30-day average of 700 uS/cm for April 1 through August 31, and 1000 uS/cm for September 1 through March 31. The February through June flow objective at Vernalis is described in Table 2. Not included in Table 2 are the flow objectives during the 31-day VAMP test flow period that occurs during the April-May period.

Table 2: February through June Vernalis Flow Objective

San Joaquin Basin Index	X2 Required At or West of Chippis	X2 Required East of Chippis
Wet	3420	2130
Above Normal	3420	2130
Below Normal	2280	1420
Dry	2280	1420
Critical	1140	710

The results of the CALSIM II simulation of the upstream San Joaquin River operation in combination with the Stanislaus River operation, which is at times reactive to the upstream San Joaquin River operation, is shown in Figure 6A through Figure 6D. Illustrated are the simulated sequential average monthly flow and quality of the San Joaquin River at Vernalis for the 73-year study period. Also shown for contrast are the water quality at Maze and the Vernalis water quality objective.

The average monthly flow at Vernalis by year type (San Joaquin River Basin Index), as simulated by CALSIM II, is illustrated in Figure 7. Figure 8 illustrates the average monthly water quality at Vernalis by year type.

Under current conditions including the assumed operation of the IPO for the New Melones Project, the flow and quality at Vernalis as modeled by CALSIM II are at times in a state of non-compliance with objectives. This simulated non-compliance is illustrated in the

Figure 6A

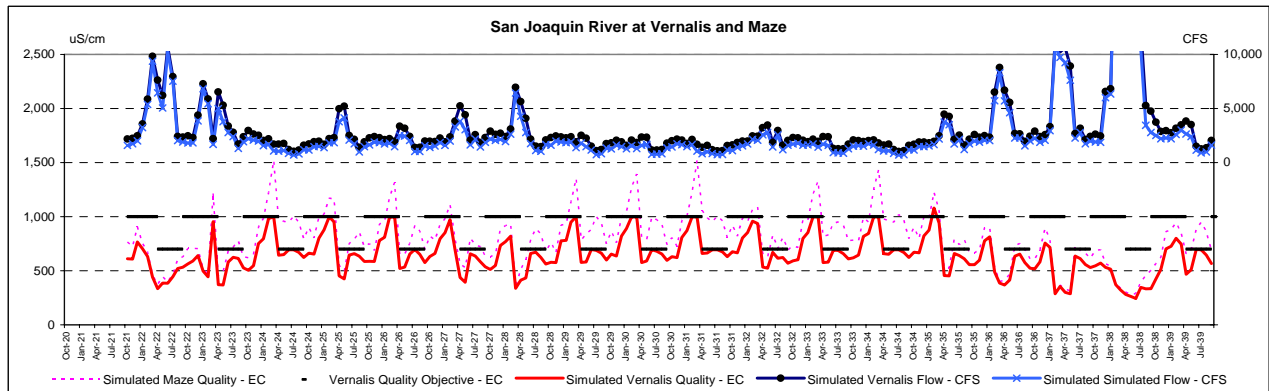


Figure 6B

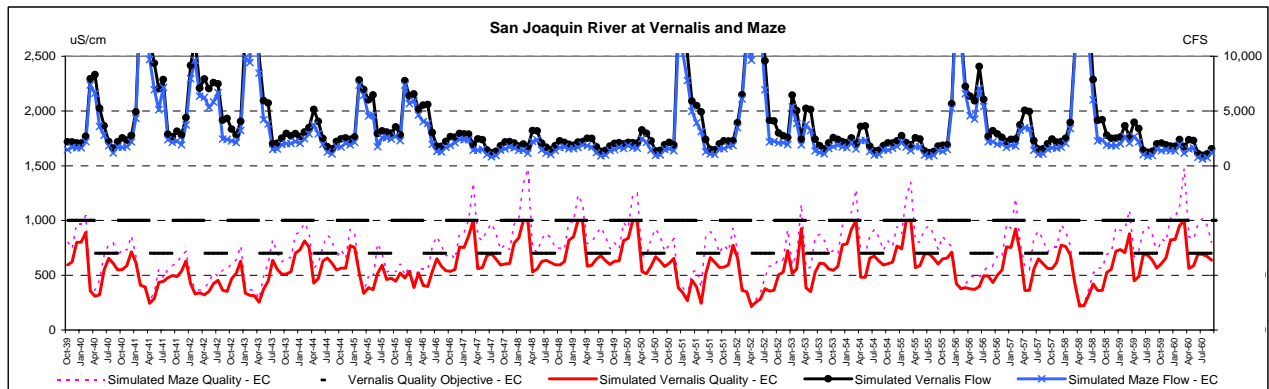


Figure 6C

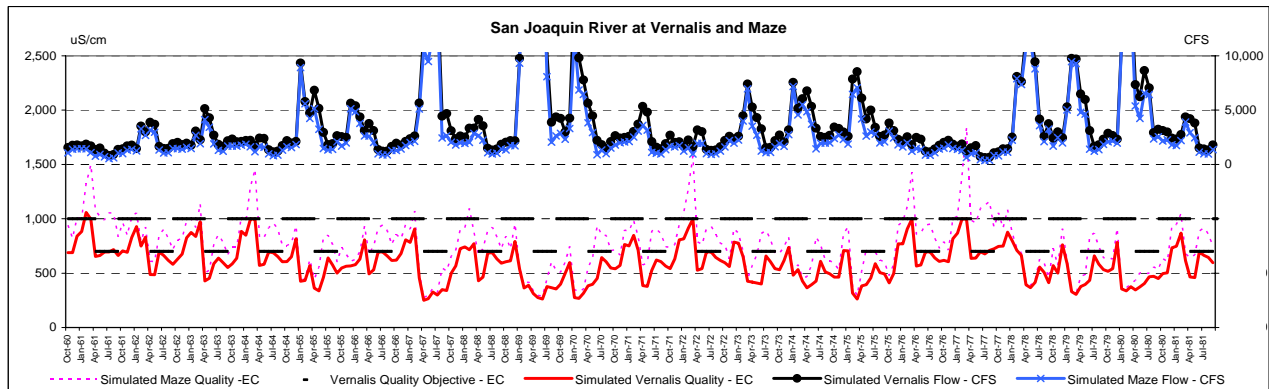


Figure 6D

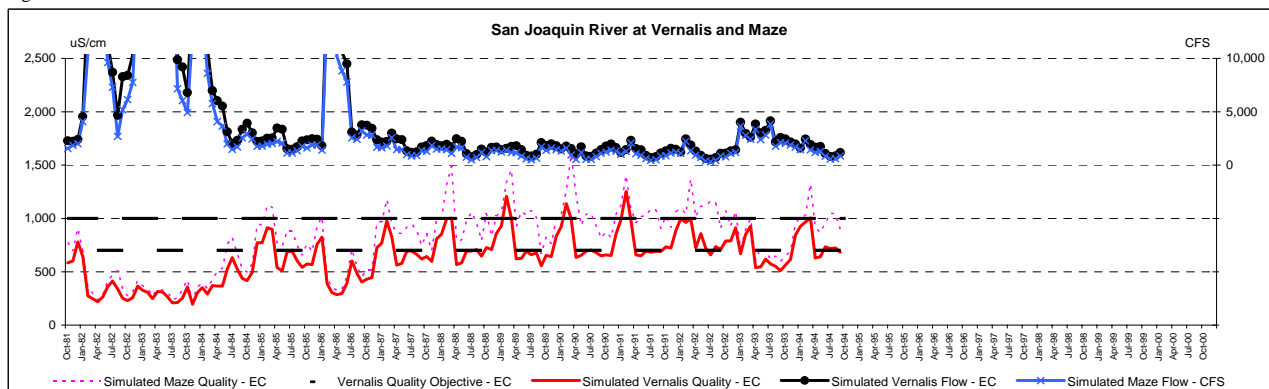


Figure 7

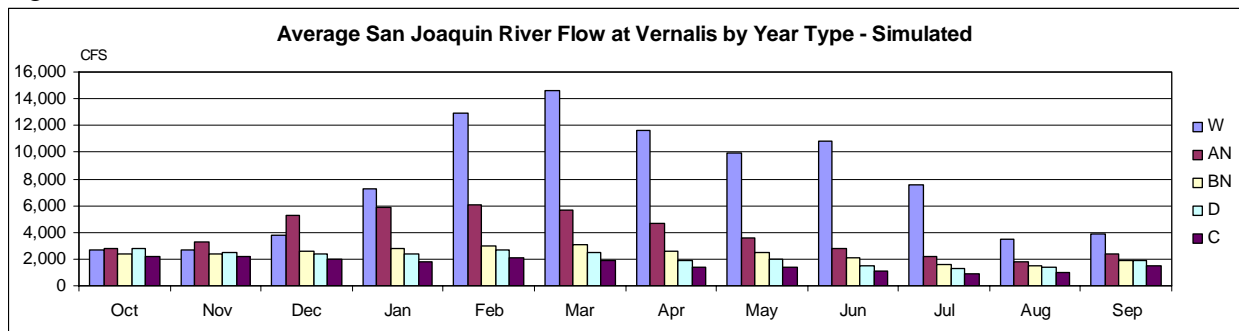


Figure 8

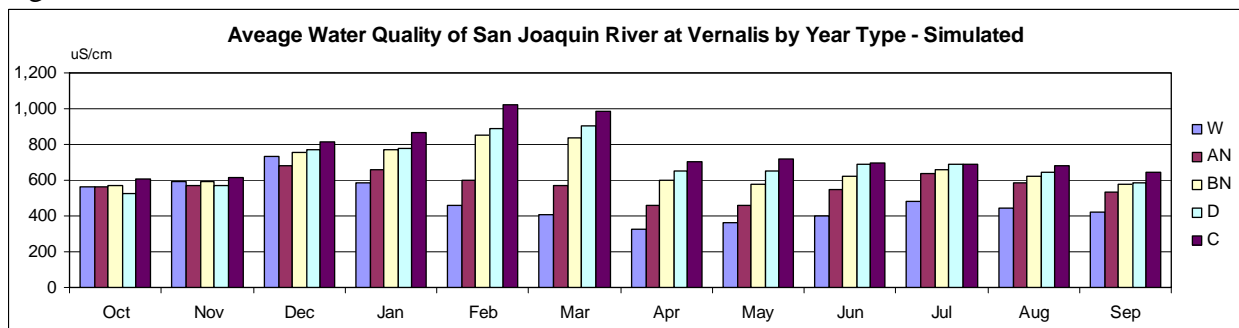


Figure 6 series when the Vernalis water quality line exceeds the line illustrating the objective.

The instances when CALSIM II modeling shows water quality objective exceedences to occur are shown in Table 3. Table 3 shows that during 9 years of the 73 years of simulation at least one month of non-compliance would occur. The simulation shows a total of 15 periods of non-compliance. Table 3 also shows the storage that exists at New Melones Reservoir during these periods of non-compliance, and also the estimated amount of additional release from the Stanislaus River that would be required to achieve water quality compliance at Vernalis. The modeling results show that while water exists in New Melones to make additional releases for water quality compliance, the assumed IPO limit upon water quality allocations does not allow an additional release.

Table 4 summarized the estimated required release of New Melones water for compliance to the existing water quality objective at Vernalis. This estimate assumes the ordered-structure of releases (water quality releases subsequent to releases for the fishery) described for the IPO.

Table 3: Vernalis Water Quality Objective Compliance and Other Information – Current Conditions

Average Monthly Water Quality at Vernalis - Simulated (uS/cm)												
WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1935	C	C	C	C	1080	C	C	C	C	C	C	C
1961	C	C	C	C	1058	C	C	C	C	C	717	C
1977	C	C	C	C	C	C	C	C	C	C	710	C
1988	C	C	C	C	C	C	C	C	C	C	708	C
1989	C	C	C	C	1207	C	C	C	C	C	C	C
1990	C	C	C	C	1139	C	C	C	C	C	C	C
1991	C	C	C	C	1253	C	C	C	C	C	C	C
1992	C	C	C	C	C	C	749	1011	723	C	737	C
1994	C	C	C	C	C	C	C	C	735	718	725	C
Notes: "C" means water quality was within compliance for month. Exceedence during April or May is during non-pulse flow period.												
Water Quality Objective - uS/cm												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	1000	1000	1000	1000	1000	1000	700	700	700	700	700	1000
Estimated Additional New Melones Release Needed to Provided Water Quality Compliance - 1,000 acre-feet												
WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1935					10							
1961					7						2	
1977											1	
1988											1	
1989					20							
1990					15							
1991					22							
1992							6	21	1		3	
1994									4	1	2	
End of Month New Melones Storage - 1,000 acre-feet												
WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1935	584	580	583	616	640	690	820	1012	1127	1074	1001	958
1961	1201	1216	1231	1239	1243	1224	1186	1132	1079	1023	966	934
1977	1448	1444	1436	1428	1400	1339	1273	1209	1181	1124	1069	1047
1988	1443	1424	1410	1414	1404	1361	1298	1222	1182	1145	1109	1081
1989	1045	1029	1022	1020	1029	1079	1047	1002	984	932	882	886
1990	906	908	923	936	952	920	856	786	733	676	633	609
1991	598	580	589	587	584	626	594	558	521	461	404	385
1992	382	371	386	400	450	467	441	361	308	252	194	166
1994	716	738	772	802	825	775	723	675	619	552	490	455

Table 4: Estimated New Melones Release Requirements for Water Quality Compliance

Average Vernalis Required Water Quality Release within Year Type - 1,000 AF												
Current Conditions												
SJRBI	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
W	0	0	0	0	0	0	0	0	0	0	0	0
AN	0	0	0	0	1	0	0	0	1	0	0	0
BN	0	0	0	0	3	2	2	1	1	3	1	0
D	0	0	0	0	2	7	3	2	4	7	3	0
C	0	0	0	0	8	18	7	7	13	11	5	0
All	0	0	0	0	3	5	2	2	4	4	2	0

An average of about 70,000 acre-feet of water quality releases are needed during critical years to fully comply with the existing water quality objective at Vernalis. This amount of water is in addition to water released under the IPO for fishery purposes.

Simulated compliance with the Vernalis flow objective (February through June, excluding the VAMP pulse flow period) is shown in Table 5. Shown in Table 5 is the estimated Vernalis non-pulse flow objective for the February through June period. The flow objective is

based on a combination of the San Joaquin River Base Index and the required position of X2 (see Table 2). The second set of columns in Table 5 show the calculation of flow that is above or below the objective. Positive values indicate compliance with the objective, while highlighted negative flows indicate non-compliance with the objective. Also shown in Table 5 is the New Melones Index for each year (March through following year February basis). During years when the index is less than 2,500 TAF (non-highlighted index values) the assumed operation of the IPO does not allow releases for the Vernalis flow objective. Boxed values shown in the table represent periods when Goodwin is modeled to be releasing at least 1,500 cfs, an assumed limit of release unless flood control requires greater releases. There can be instances when the index allows releases for the Vernalis flow objective but the required release is not made because Goodwin is releasing at its assumed maximum rate. Non-compliance can occur during any San Joaquin River Index year type, most often during Above Normal, Below Normal and Dry years.

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Table 5: Vernalis Flow Objective Compliance and Other Information – Current Conditions

Water Year	Vernalis Flow Objective - cfs					Above/Below Flow Objective - cfs					NM Index - TAF
	Feb	Mar	Apr	May	Jun	Feb	Mar	Apr	May	Jun	
1922	3420	3420	3334	3420	3420	2448	6409	3649	1508	7258	2269
1923	3420	3254	2689	3378	2818	2474	-1033	3316	364	569	2494
1924	784	1043	710	710	710	1415	657	676	840	507	1836
1925	2034	2280	2165	2280	1907	189	27	510	1264	594	2233
1926	1666	2280	1993	2280	1420	550	-295	122	-306	1007	1965
1927	3420	3420	3420	3420	3205	-1053	412	1280	-202	-1126	2403
1928	2250	2280	2280	2280	1535	855	4681	1850	354	637	2388
1929	802	1001	810	710	724	1583	918	930	663	787	1888
1930	1140	1140	1126	932	710	945	723	270	615	445	1747
1931	848	738	782	710	710	1286	947	511	758	488	1373
1932	3376	3420	3377	2921	3162	-915	-978	-1534	-376	-1299	1807
1933	1635	1448	2079	1448	1449	530	511	-588	193	-142	1556
1934	1140	1140	1040	710	710	966	661	158	717	505	1244
1935	3420	3420	3248	3420	3334	-1457	-943	-188	-493	-1196	1580
1936	3376	3420	3377	3420	2861	3135	5368	2844	780	-181	2154
1937	2360	3420	3420	3420	3377	8889	6811	6761	4408	-698	2374
1938	3420	3420	3420	3420	3420	21045	28440	13777	18446	17899	3476
1939	1696	1503	2079	1420	1420	1485	1976	-346	726	82	2331
1940	3376	3420	3420	3420	2947	-694	4531	4841	197	710	2698
1941	3420	3420	3420	3420	3420	12406	11281	8212	5374	3610	2879
1942	3420	3420	3291	3420	3334	8196	3662	4639	3622	4254	3100
1943	3420	3420	3420	3420	2732	8380	17982	6598	1534	2984	3090
1944	1687	2280	2108	1448	1707	1389	1202	913	1063	777	2368
1945	3420	3420	3248	3045	2947	4408	3554	1620	2632	0	2649
1946	3420	3420	3291	3378	2861	3133	1725	590	992	162	2728
1947	1604	2280	2251	1503	1420	1289	-331	-657	97	29	2206
1948	2250	1475	1850	2280	2194	-267	269	-35	-280	-135	2121
1949	1574	1642	2280	2225	1735	570	560	-578	-403	-3	1937
1950	2280	2280	2251	2280	1936	-187	-211	-342	-730	324	2112
1951	3420	3420	3377	3045	2388	6722	2490	374	-142	0	2695
1952	3376	3420	3420	3420	3420	3101	8427	7785	11215	13961	3399
1953	2280	2280	2165	2225	1735	2747	132	1072	1171	679	2695
1954	2280	2280	2280	2280	1649	254	-267	293	582	137	2427
1955	2280	1697	1621	1448	1649	-159	223	199	276	-287	2051
1956	3376	3420	3420	3378	3377	8889	3809	2190	1526	5677	3034
1957	1696	2280	2280	1614	1993	745	1446	588	1415	283	2649
1958	3420	3420	3420	3420	3420	535	7141	14757	9134	11115	3160
1959	2280	2280	2137	1531	1420	1371	368	-134	548	-19	2374
1960	918	1140	1140	863	724	1461	607	284	606	396	1952
1961	864	1140	1054	724	710	1000	565	173	661	343	1562
1962	1696	2280	2223	2280	1592	1833	728	-401	-449	73	1670
1963	3420	3420	3248	3420	3377	-350	-1143	-210	-1016	-673	2095
1964	2250	1781	1535	1448	1449	-36	0	-8	198	-96	1916
1965	3420	3420	3162	3420	2947	2374	1321	3470	0	0	2735
1966	2280	2280	2251	2225	1449	2106	838	-682	-584	-81	2293
1967	3420	3420	3420	3420	3420	-802	2228	8823	7183	10555	3168
1968	2250	2280	2251	1475	1420	1088	1056	119	753	64	2413
1969	3420	3420	3420	3420	3420	24180	19398	16830	19245	23018	3474
1970	3420	3420	3420	2130	2216	6389	4362	655	816	0	2720
1971	2280	2280	2280	2252	2108	749	1436	1178	819	0	2606
1972	2250	2280	2280	1725	1477	0	-650	-571	-42	-94	2232
1973	3420	3420	3420	3295	3334	1067	3987	1380	-432	-52	2556
1974	3420	3420	3420	3420	3334	1741	2614	3078	381	0	2947
1975	3420	3420	3420	3129	3420	4442	5117	1704	-501	1579	2927
1976	799	793	839	710	710	1749	1040	845	798	515	2195
1977	771	724	710	710	710	1103	536	273	770	9	1580
1978	3420	3420	3420	3420	3334	4678	4207	7001	7500	6124	2247
1979	3420	3420	3420	2837	3291	6348	6276	2475	2200	-172	2525
1980	3376	3420	3420	3295	2861	19696	12921	3923	2222	5780	3005
1981	2280	2280	2251	1559	1420	461	2104	255	865	89	2381
1982	3420	3420	3420	3420	3420	12321	11649	21674	13138	7998	3419
1983	3420	3420	3420	3420	3420	34344	46138	20464	20532	24128	3965
1984	3376	3420	3420	2588	2775	7556	3564	1509	1584	361	2765
1985	1727	2197	1879	2003	1420	798	348	472	320	120	2352
1986	3420	3420	3420	3337	2732	13315	24332	8747	6740	6772	3149
1987	848	1140	1126	710	710	1359	1846	495	908	642	2179
1988	1125	890	796	710	710	833	817	864	634	371	1707
1989	864	863	1140	1126	710	706	888	343	45	211	1595
1990	1140	807	1025	710	710	640	755	-144	850	154	1262
1991	741	724	1126	710	710	704	1590	271	550	208	985
1992	784	1140	1068	738	710	1679	745	166	-59	-82	741
1993	3420	3420	3420	3420	3377	-449	-810	-241	-1726	-125	1352
1994	833	1112	896	710	710	1609	829	409	801	377	1096

Notes: Boxed cells indicate Goodwin release of 1,500 cfs or more. New Melones Index: Sum of end-of-February storage plus projected M-S inflow.

Table 6 summarizes the instances of non-compliance, grouping the information by San Joaquin River Basin Index year type. Indicated in the table are the number of years within each year type that non-compliance is simulated to occur during at least one month during those years, and the range of the annual amount of release that would be required to comply with the flow objective. The frequency and range of simulated non-compliance for each month is also shown in Table 6.

Table 6: Range of Vernalis Flow Objective Non-compliance - Simulated

Wet					
Non-compliance in at least 1 month 4/20 years.					
Annual Range: 15-142 TAF					
	Feb	Mar	Apr	May	Jun
Non-compliance months	2/20	1/20	1/20	2/20	2/20
Range of Non-compliance - TAF	25-45	50	7	15-53	7-42
Above Normal					
Non-compliance in at least 1 month 10/14 years.					
Annual Range: 4-245 TAF					
	Feb	Mar	Apr	May	Jun
Non-compliance months	5/14	4/14	3/14	6/14	7/14
Range of Non-compliance - TAF	19-81	58-70	6-46	4-31	3-77
Below Normal					
Non-compliance in at least 1 month 6/12 years.					
Annual Range: 16-56 TAF					
	Feb	Mar	Apr	May	Jun
Non-compliance months	2/12	2/12	5/12	5/12	3/12
Range of Non-compliance - TAF	10-15	13-16	1-20	9-22	1-8
Dry					
Non-compliance in at least 1 month 8/11 years.					
Annual Range: 5-64 TAF					
	Feb	Mar	Apr	May	Jun
Non-compliance months	2/11	2/11	5/11	5/11	5/11
Range of Non-compliance - TAF	2-9	18-40	4-20	1-9	1-17
Critical					
Non-compliance in at least 1 month 2/16 years.					
Annual Range: 4-7 TAF					
	Feb	Mar	Apr	May	Jun
Non-compliance months	0/16	0/16	1/16	1/16	1/16
Range of Non-compliance - TAF	0	0	4	2	5
Values shown for April/May represent non-compliance during non-pulse flow period.					

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Comparison to Previous Simulations of San Joaquin River Conditions

The above described flow and water quality depiction of the San Joaquin River differs from that previously used in SWRCB proceedings, and the differences are the direct result of approximately three years of refinement and enhancement of the model(s) used to simulate the hydrology and operations of the San Joaquin River Basin. The version of CALSIM II that is used to develop the information presented herein incorporates several advancements to earlier modeling efforts, specifically regarding the San Joaquin River Basin. These advancements include:

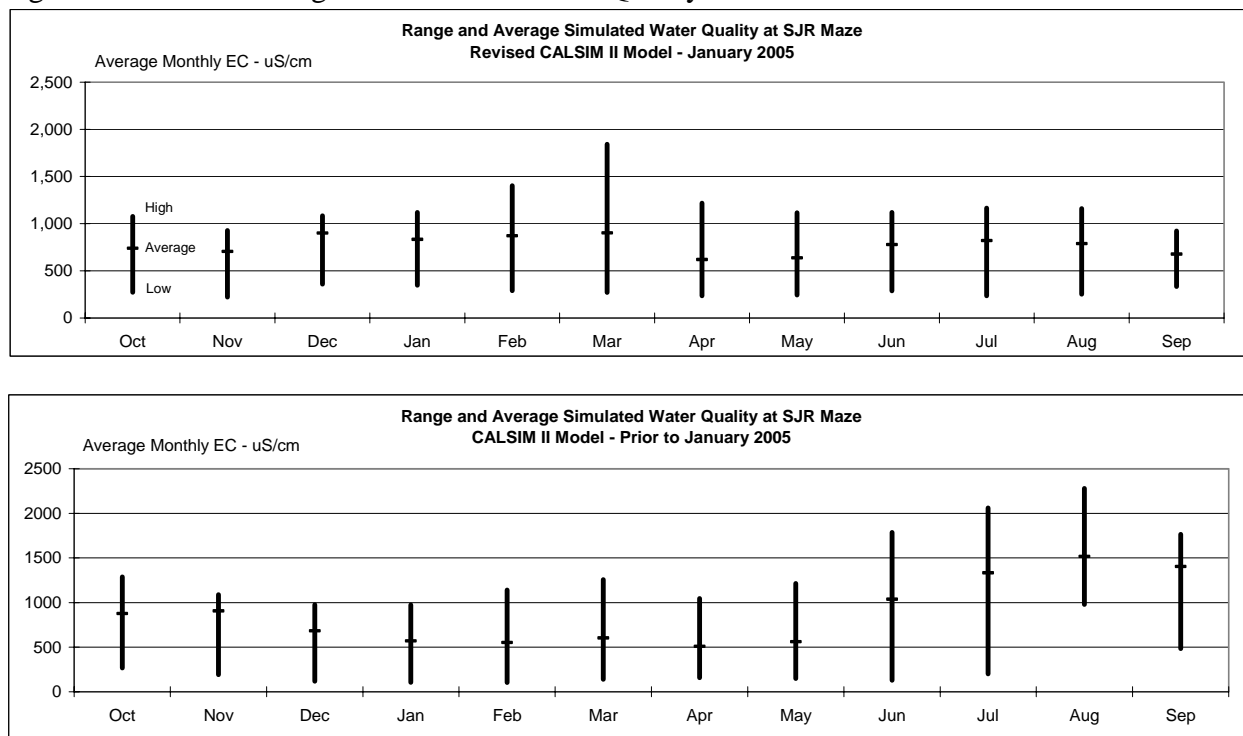
- Re-definition of San Joaquin River Basin hydrology
- Land-use based water demands for Eastside system operations
- Re-definition of Eastside system operations/interdependencies
- Re-mapping of Westside and Eastside return flows
- Development of a disaggregated water quality calculation

The current, under-review version of CALSIM II significantly changes the simulated depiction of water quality associated with San Joaquin River flow occurring from upstream of the Stanislaus River confluence. Previous models of the San Joaquin River incorporated equations relating flow and quality at Maze. The fundamental relationship between flow and quality at Maze (referred to as the Kratzer Formula) relied upon observed data for the 1981 through 1985 hydrologic period. A modification was made to the relationship in the mid-1990s in an attempt to disaggregate Westside return flows from the relationship (referred to as the Modified Kratzer Formula). Versions of SANJASM and STANMOD (predecessor models to elements now incorporated into CALSIM II, and used for previous testimony) relied upon the Modified Kratzer Formula.

As described above, the revised version of CALSIM II depicts water quality in the San Joaquin River by calculating a conservation of flow and quality (mass) within the river assigning an associated water quality with each element of flow. The use of regression equations to

describe the quality associated with flow has been greatly reduced. The change in water quality simulated by the models that has occurred is illustrated in Figure 9.

Figure 9: General Change in Simulated Water Quality at Maze



The revised version of CALSIM II incorporates a salinity “calibration” that relies upon recent, observed flow and quality data for the San Joaquin River, its tributaries, and numerous significant monitored inflows. The results of the revised version of CALSIM II reflect water quality conditions that are currently being experienced in the basin, and which have been affecting the operation of New Melones Reservoir. Recent operational experience for the New Melones Project has required water quality dilution flows in the spring-time and summer. The previous version of CALSIM II and SANJASM did not simulate the spring-time salinity condition. For the summer-time, the previous version of CALSIM II and SANJASM over-estimated salinity, well in excess of observed data.

As a second comparison of depicted water quality and flow by the models, Figure 10 illustrates the recorded and simulated conditions at Maze for the 1986 through 1992 period.

Figure 10: Recorded and Simulated Flow and Quality at Maze

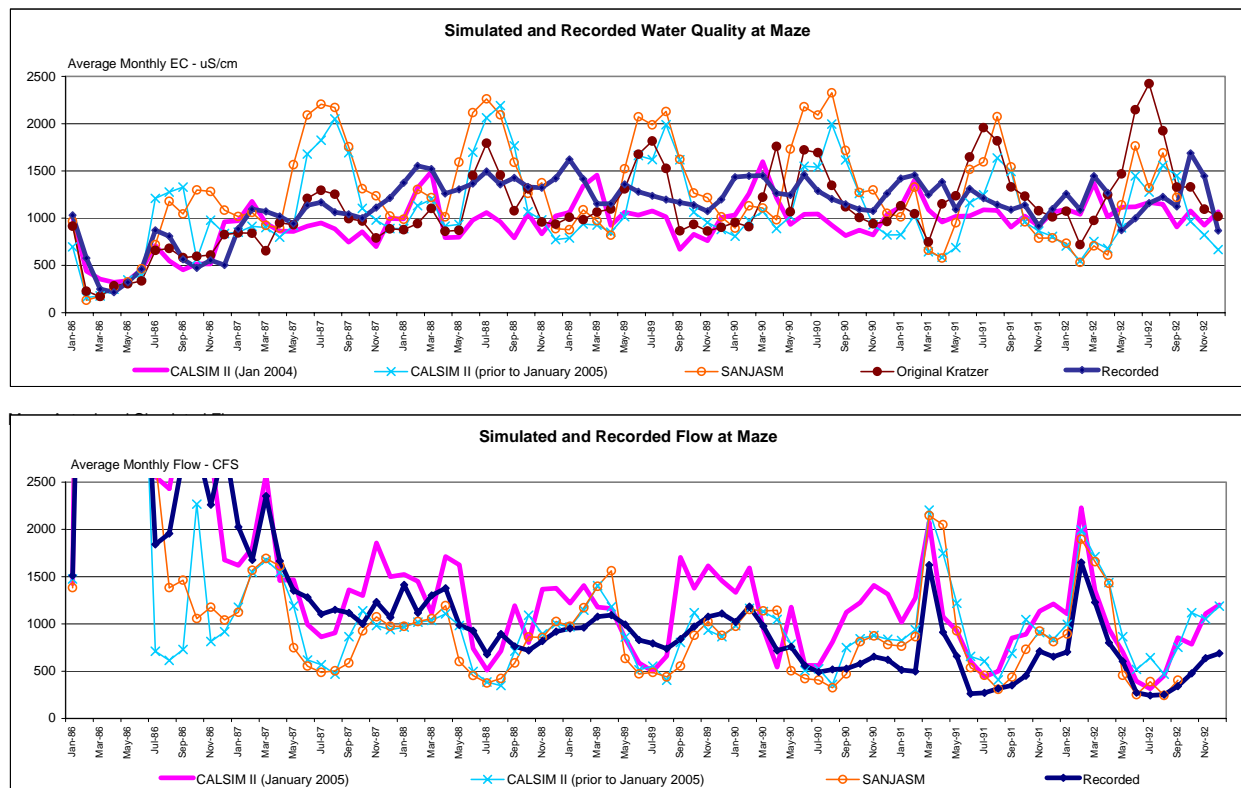


Figure 10 illustrates how the previous version of CALSIM II and SANJASM simulated water quality to be extremely high during the summer-time, much higher than was even recorded for the period. Even the original Kratzer Formula shows a high simulated water quality during the later part of the drought, when flows are simulated to be low. This type of overestimation of salinity at Maze contributed to an overestimation of the simulated water quality release needs from New Melones Reservoir, which has been prevalent in prior presentations. There is still a need for water quality releases; however, the severity of the need was exaggerated in past modeling efforts.

The revised CALSIM II results illustrate that the river is simulated to be different than those conditions actually experienced, in this illustration during the recurrence of the 1987 through 1992 period. A difference between simulated operations and historical recorded operations will typically occur due to the inability to capture anomalies between “real-time” actual operations

and systematic operations and hydrology that are incorporated into the model. However, in this case of San Joaquin River water quality and flow, the modeled difference is also the result of changes to the operations within the basin that have occurred since the early 1990s. These changes include:

- Increased water use and system efficiency actions
- Increased instream flow requirements in the Tuolumne River
- Drainage management programs by Westside irrigation districts
- Alternative water operations of Refuge areas

Each of these items, and likely others, has changed the hydrology of the San Joaquin River from those conditions that existed in the past. As described above, the revised CALSIM II model has been refined and “calibrated” against recent recorded data. When the systematic operational assumptions that represent current operations are combined with the recent water quality attributes that are associated with flows entering the river system, it is anticipated that the river will be different than previously experienced.

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Alternative Water Quality and Flow Objectives

Alternative Vernalis Water Quality Objective

The alternative Vernalis water quality objective consists of providing 1,000 uS/cm during the entire year, instead of providing 700 uS/cm during April through August and 1,000 uS/cm during the remainder of the year.

The analysis was structured to develop a reasonable “bookend” of the flow and quality effects that may occur at Vernalis if the water quality objective is modified. A series of studies were made, each with the modified water quality objective. The difference between the studies was the assumption for other release objectives of the New Melones operation. In these studies all allocations of the IPO as modeled by CALSIM II remain the same except for the required release made for Stanislaus River dissolved oxygen objectives. As described before, the assumed operation of the IPO “layers” one component of flow upon another, e.g., the fishery release is assumed to provide the first water in the river. Then, if necessary to meet the water quality objective at Vernalis, supplemental releases are made. Currently, salinity objectives at Vernalis and Stanislaus River dissolved oxygen objectives during the summer require approximately the same level of release from New Melones. Therefore, a change to the Vernalis water quality objective at Vernalis during June through August did not result in a large, regular change in release from New Melones since the water quality release was replaced with a release for dissolved oxygen objectives. Thus, this scenario did not greatly change the summer-time flow or quality at Vernalis.

In order to identify greater potential flow and quality changes that may occur due to the assumed change in Vernalis water quality objectives, an assumed modification of the Stanislaus River dissolved oxygen objective was implemented in the studies. The total removal of the dissolved oxygen objective in combination with the modified Vernalis water quality objective

would at times result in a “near-zero” release during the summer during a dry series of years. This outcome is the result of the structure of the IPO and the assumptions used to model the monthly distribution of Stanislaus River release allocations. Instead of this modeled outcome, an alternative surrogate for a minimum release at Goodwin was implemented in the model. A minimum of 100 cfs release from Goodwin was assumed required during the summer.

In terms of resulting flow at Vernalis, results of this scenario that modifies the Vernalis water quality objective in combination with a reduction in Stanislaus River release objectives is shown in Table 7. The results are provided by water year annually ranked by the San Joaquin River Basin Index (SJRBI), wettest to driest year. Table 8 illustrates the difference in flow that occurs between the alternative scenario and the “current condition” scenario. Reductions in flow at Vernalis due to the alternative scenario are shown as negative values. Increases in flow at Vernalis are shown as positive values. Generally when reductions in flow occur in the summer due to less releases being required to meet the alternative Vernalis water quality objective, a reduction of up to approximately 170 cfs may occur. Flow reductions may also occur during the non-pulse periods of April and May.

Additions to flows at Vernalis occur during the non-summer months. The increases in flows occur due to the reaction of the IPO to an increase in carry-over storage in New Melones Reservoir (higher allocations) and occasional increased spills. The simulated New Melones Reservoir storage for the alternative scenario is shown in Table 9.

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Table 7

Average Monthly Flow at Vernalis with Modified Vernalis Water Quality Objective - CFS													SJRBI
WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	MAF
1983	8414	10325	20934	27393	37764	49558	23884	23952	27548	25925	9885	9207	7.22 W
1969	2052	2180	2170	9769	27640	22818	20250	22665	26438	10200	3891	4379	6.09 W
1938	2668	2481	6598	6862	24465	32050	17197	21866	21319	12293	5273	4763	5.89 W
1982	2278	2238	2400	4550	15816	15069	25094	16558	11418	8705	4677	8283	5.45 W
1967	1942	1810	2146	2401	2642	5648	12243	11079	13975	17348	4438	4690	5.25 W
1952	2268	2247	2276	3910	6477	11847	11205	14858	17381	9583	4140	4087	5.17 W
1958	2432	2151	2194	2501	3955	10561	18177	12554	14535	7863	4143	4213	4.77 W
1980	2878	2664	2332	11528	23814	16341	7343	6235	8641	7038	2934	3238	4.73 W
1978	1222	1438	1445	2518	8099	7670	11928	12305	9451	4130	2530	3729	4.58 W
1922	2178	2240	2481	3574	5868	9829	7623	6216	10656	7893	2361	2308	4.54 W
1956	1861	1896	5655	15919	12333	7229	6346	5918	9054	6052	2694	3978	4.46 W
1942	3149	2802	4393	9240	11616	7082	7930	7042	7588	7477	4159	4317	4.44 W
1941	2532	2333	2751	4919	15827	14702	11632	9356	7049	7861	2866	2654	4.43 W
1986	2375	2475	2416	1820	16887	27752	12167	10577	9504	3097	2825	3771	4.31 W
1993	1215	1354	1458	4016	2986	2620	3862	2899	3181	3988	1989	2447	4.20 W
1943	3350	2826	4061	12416	11800	21402	10018	5944	5716	2023	2053	2523	4.03 W
1937	2984	2470	2633	3419	11309	10260	10828	9164	3377	3180	2136	2447	3.90 W
1974	2728	2093	3178	7565	5165	6046	6766	5342	3363	2573	2492	2675	3.90 W
1975	3783	3316	2998	2584	7862	8537	6119	4197	4999	3418	2583	2721	3.85 W
1965	2195	1977	2121	9415	5803	4767	6850	5159	2947	1834	1927	2642	3.81 W
1936	2602	2341	2488	2340	6618	8877	7113	5823	2700	2645	2101	2448	3.74 AN
1984	6794	15925	24677	16894	10931	6984	6034	5535	3136	2033	2325	3352	3.69 AN
1979	2478	3046	2504	5334	9809	9702	6520	6018	3119	1671	1826	2333	3.67 AN
1945	2450	2537	2397	2624	7828	6975	6003	6472	2947	3185	3080	2980	3.59 AN
1963	2043	1831	1948	1767	3074	2326	5154	4632	2655	1752	1588	2096	3.57 AN
1927	1983	1938	2272	1910	2367	3841	5374	4493	2139	2571	1853	2337	3.56 AN
1935	1711	1937	1930	1837	2142	2485	4470	4265	2016	2386	1452	2031	3.56 AN
1923	2473	2327	4390	7288	5894	3254	6547	5326	3408	2802	1708	2383	3.55 AN
1973	2204	2591	2366	2593	4487	7410	5299	4308	3282	1546	1579	2187	3.50 AN
1932	1647	1869	2010	2010	2466	2447	3234	3468	1741	2809	1438	1902	3.41 AN
1940	2179	2162	2077	2069	2681	7952	8321	5255	3668	2217	1589	2184	3.36 AN
1946	3544	2822	7764	6381	6554	5146	5539	5587	3029	1772	1759	2210	3.30 AN
1970	4238	2979	4260	16550	9809	7782	5630	4472	2216	1824	1492	2097	3.18 AN
1951	2163	1849	14310	12537	10142	5910	5484	4907	2388	1485	1456	1991	3.14 AN
1962	1440	1708	1785	1466	3529	3012	3854	3699	1540	1311	1324	1768	3.07 BN
1953	2994	2745	2570	6437	5027	2412	5239	5136	2414	1833	1546	2080	3.03 BN
1957	2906	2584	2196	2394	2441	3726	5066	4946	2276	1506	1537	2002	3.01 BN
1925	1722	1928	1973	1685	2223	2294	4286	4975	2435	2038	1297	1821	2.93 BN
1971	2644	2430	2500	2599	3029	3716	5342	4816	2108	1598	1442	1914	2.89 BN
1950	2035	2094	1988	2129	2093	2073	3869	3563	2208	1271	1293	1844	2.85 BN
1944	2934	2728	2924	2660	3076	3482	5135	4044	2484	1697	1496	2213	2.76 BN
1954	2572	2394	2193	2121	2534	2013	3574	3631	1786	1350	1395	1830	2.72 BN
1948	2161	2207	2073	1794	1983	1744	3086	3123	1966	1556	1338	1723	2.70 BN
1928	2918	2614	2726	2423	3114	6964	5698	4144	2180	1506	1438	2104	2.63 BN
1949	2274	2161	1961	1872	2143	2202	2364	2384	1611	1136	1228	1657	2.53 BN
1966	2572	2524	5653	5429	4412	3142	4020	3362	1383	1203	1218	1667	2.51 BN
1933	2323	2294	2075	1940	2165	1959	2309	2304	1185	1116	1116	1567	2.44 D
1981	3114	2989	2433	2347	2741	4384	4204	3811	1507	1387	1313	1792	2.44 D
1985	3934	3026	2217	2260	2526	2545	3470	3352	1540	1401	1687	2244	2.40 D
1926	2283	2434	2343	2107	2208	1985	3359	3172	2317	1243	1255	1866	2.30 D
1955	2084	2066	2276	2747	2121	1921	2451	2312	1237	1009	1119	1657	2.30 D
1959	2790	2511	2519	2617	3651	2648	3967	3403	1401	1188	1294	1983	2.21 D
1968	3107	2373	2604	2511	3338	3336	4140	3563	1484	1297	1406	1849	2.21 D
1939	3734	2891	2958	2772	3181	3479	3841	3523	1491	1208	1316	2015	2.20 D
1964	2375	2105	2132	2252	2214	1781	2329	2301	1225	1003	1064	1591	2.19 D
1947	2654	2606	2940	2913	2894	1949	2360	2306	1391	1070	1214	1744	2.18 D
1972	2695	2029	2091	1694	2250	1630	3069	2951	1316	1197	1257	1566	2.16 D
1994	2469	2184	1976	1607	2452	1941	1530	1678	941	652	704	1035	2.05 C
1930	1823	2072	1910	1586	2085	1863	2317	2307	1006	990	1053	1650	2.02 C
1929	2324	2464	2373	2299	2389	1920	2433	2203	1389	938	1037	1617	2.00 C
1989	1235	1665	1693	1434	1933	1750	1710	1330	792	681	858	1979	1.96 C
1991	1782	1983	1661	1178	1852	2325	1397	1300	721	539	629	1006	1.96 C
1987	3744	3451	2390	2155	2207	2986	2357	2282	1209	1045	1125	1594	1.86 C
1960	2057	1906	1794	1773	2379	1747	2262	2210	966	768	903	1399	1.85 C
1976	3813	3128	2313	2154	2548	1834	2399	2240	1094	1023	1309	1670	1.57 C
1992	1334	1584	1511	1242	2474	1885	1202	963	504	386	539	971	1.56 C
1990	1843	1992	1813	1528	2057	1563	1009	1624	669	661	950	1307	1.51 C
1988	1834	2249	1912	1822	1958	1707	2359	2152	867	597	811	1367	1.48 C
1934	2110	2025	1950	2046	2106	1801	1557	1622	1076	864	938	1450	1.44 C
1924	2967	2649	2533	2050	2201	1699	1651	1686	1073	874	993	1456	1.42 C
1961	1551	1763	1801	1718	1985	1705	1271	1395	863	643	745	1248	1.38 C
1931	2010	2171	2076	1769	2135	1685	1341	1511	1051	909	948	1429	1.20 C
1977	2037	2221	1867	1680	1875	1260	1442	1604	548	456	486	925	0.84 C

Table 8

Change in Average Monthly Vernalis Flow - CFS															Negative values indicate reduction in flow due to alternative		SJRBI
WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep					MAF
1983	0	0	0	0	0	0	0	0	0	0	0	0	0	0			7.22 W
1969	0	0	0	0	40	0	0	0	0	0	0	0	0	0			6.09 W
1938	37	28	28	28	1	190	0	0	0	0	0	0	0	0			5.89 W
1982	0	0	0	0	75	0	0	0	0	0	0	0	0	0			5.45 W
1967	0	24	24	24	24	0	0	0	0	1131	0	0	0	0			5.25 W
1952	0	0	0	-1	0	0	0	0	0	0	0	0	0	0			5.17 W
1958	0	0	0	0	0	0	0	0	0	0	0	0	0	0			4.77 W
1980	13	6	6	6	743	0	0	0	0	0	0	0	0	0			4.73 W
1978	48	4	4	2	2	42	122	128	-7	-48	-52	-25	4.58 W				
1922	0	0	0	0	0	0	0	0	-22	-63	-67	-40	4.54 W				
1956	0	0	0	0	69	0	0	0	0	0	0	788	4.46 W				
1942	0	1	1	77	0	0	0	0	0	0	0	0	4.44 W				
1941	2	1	1	1	1	1	0	0	19	0	0	0	4.43 W				
1986	0	0	0	0	152	0	0	0	0	0	0	0	4.31 W				
1993	98	25	25	0	15	10	5	-121	-71	-163	-167	-140	4.20 W				
1943	0	0	0	0	0	0	0	0	0	0	0	0	4.03 W				
1937	81	63	63	90	61	28	209	231	698	5	2	28	3.90 W				
1974	7	3	3	3	3	12	0	0	29	0	0	2	3.90 W				
1975	347	5	5	-10	0	0	0	0	0	0	0	0	3.85 W				
1965	7	4	4	71	9	26	22	6	0	4	4	4	3.81 W				
1936	6	3	3	9	107	90	429	268	20	-22	142	1	3.74 AN				
1984	0	0	0	0	0	0	0	0	0	0	0	0	3.69 AN				
1979	56	36	36	41	41	6	35	39	0	6	6	6	3.67 AN				
1945	0	0	0	0	0	1	3	4	0	1	1	1	3.59 AN				
1963	3	2	2	4	4	49	9	331	-49	-91	-94	-67	3.57 AN				
1927	0	0	0	0	0	8	140	74	60	-9	-12	12	3.56 AN				
1935	14	40	40	16	180	9	2	-122	-164	-167	-140	3.56 AN					
1923	0	0	0	0	0	1033	11	12	22	2	1	2	3.55 AN				
1973	0	0	0	0	0	3	19	0	0	3	3	3	3.50 AN				
1932	4	6	6	5	5	5	1	1	-122	-164	-167	-141	3.41 AN				
1940	0	0	0	0	0	1	6	6	11	1	1	1	3.36 AN				
1946	1	1	1	1	1	1	3	3	6	1	1	0	3.30 AN				
1970	0	0	0	0	0	0	0	0	0	0	0	0	3.18 AN				
1951	29	-46	1136	-113	0	0	0	0	0	0	0	0	3.14 AN				
1962	1	1	1	2	0	4	-36	1	-126	-162	-166	-140	3.07 BN				
1953	0	0	0	0	0	0	0	0	0	0	0	0	3.03 BN				
1957	0	0	0	0	0	0	0	0	0	0	0	0	3.01 BN				
1925	-2	-1	-1	-3	0	-14	-691	-241	-66	-108	-111	-84	2.93 BN				
1971	0	0	0	0	0	0	0	0	0	0	0	0	2.89 BN				
1950	2	3	3	2	0	4	605	610	-52	-94	-97	-71	2.85 BN				
1944	0	0	0	0	0	0	0	0	0	-34	-37	-11	2.76 BN				
1954	0	0	0	0	0	0	0	0	0	-12	-16	0	2.72 BN				
1948	1	0	0	1	0	0	-130	-62	-93	-135	-138	-111	2.70 BN				
1928	10	8	8	8	8	4	45	49	8	-18	-22	5	2.63 BN				
1949	9	20	20	12	0	0	-137	-104	-122	-163	-167	-140	2.53 BN				
1966	8	26	26	26	26	24	256	247	16	-17	-19	7	2.51 BN				
1933	4	10	10	5	0	0	-94	-86	-122	-163	-167	-140	2.44 D				
1981	0	0	0	0	0	0	0	0	-1	-29	-32	-6	2.44 D				
1985	0	0	0	0	0	0	0	0	0	-79	-43	-17	2.40 D				
1926	-10	36	36	-14	-8	0	2	4	-110	-155	-156	-135	2.30 D				
1955	0	0	0	0	0	0	-105	-127	-125	-180	-167	-140	2.30 D				
1959	0	0	0	0	0	0	0	0	0	-32	-35	-9	2.21 D				
1968	0	0	0	0	0	0	0	0	0	-17	-20	0	2.21 D				
1939	0	0	0	0	0	0	0	0	-12	-49	-52	-25	2.20 D				
1964	35	20	20	49	0	0	-90	-92	-128	-162	-166	-140	2.19 D				
1947	1	1	1	1	0	0	-90	-68	-58	-103	-103	-77	2.18 D				
1972	0	0	0	0	0	0	-99	-65	-67	-86	-89	-63	2.16 D				
1994	8	10	10	10	10	0	-145	-74	-146	-163	-166	-140	2.05 C				
1930	0	0	0	0	0	0	-41	-35	-149	-163	-167	-140	2.02 C				
1929	0	4	4	4	4	0	-86	-48	-122	-164	-167	-140	2.00 C				
1989	11	1	1	2	363	0	-101	-127	-129	-164	-167	-140	1.96 C				
1991	8	15	15	9	407	11	-162	-145	-197	-163	-167	-140	1.96 C				
1987	0	0	0	0	0	0	-106	-102	-144	-146	-121	-95	1.86 C				
1960	0	0	0	0	0	0	-110	-91	-155	-163	-167	-140	1.85 C				
1976	0	0	0	0	0	0	-93	-87	-132	-145	-111	-85	1.57 C				
1992	10	18	18	11	11	0	-114	45	-123	-165	-168	-141	1.56 C				
1990	2	1	1	3	277	0	-67	-95	-195	-163	-167	-140	1.51 C				
1988	0	0	0	0	0	0	-121	-83	-214	-185	-167	-141	1.48 C				
1934	5	3	3	6	0	0	-69	-82	-139	-168	-167	-140	1.44 C				
1924	4	2	2	2	2	0	-63	-82	-144	-166	-167	-140	1.42 C				
1961	0	0	0	0	122	0	-94	-111	-190	-191	-170	-142	1.38 C				
1931	2	1	1	2	0	0	-73	-75	-148	-182	-167	-140	1.20 C				
1977	0	0	0	0	0	0	-84	-127	-170	-163	-167	-140	0.84 C				

Table 9

New Melones Reservoir Storage with Modified Vernalis Water Quality Objective - 1,000 acre-feet												
WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	981	985	1010	1041	1149	1223	1218	1436	1693	1658	1581	1533
1923	1506	1516	1578	1638	1685	1621	1633	1722	1732	1669	1573	1537
1924	1521	1507	1514	1524	1526	1473	1411	1337	1291	1256	1214	1210
1925	1198	1199	1207	1222	1358	1433	1461	1603	1659	1624	1546	1510
1926	1481	1467	1464	1466	1529	1534	1561	1513	1459	1392	1327	1300
1927	1281	1293	1341	1386	1525	1587	1634	1712	1798	1728	1644	1607
1928	1607	1630	1642	1651	1691	1851	1820	1853	1795	1697	1603	1560
1929	1531	1532	1534	1535	1544	1518	1484	1439	1418	1365	1312	1289
1930	1266	1251	1255	1276	1298	1338	1321	1276	1296	1242	1183	1155
1931	1146	1157	1162	1175	1179	1153	1107	1045	1008	968	919	900
1932	864	863	907	939	1048	1081	1086	1252	1399	1384	1329	1295
1933	1272	1257	1266	1276	1279	1263	1217	1188	1221	1168	1109	1081
1934	1070	1066	1081	1104	1128	1139	1089	1021	981	934	881	857
1935	824	817	817	849	864	913	1042	1229	1350	1306	1242	1207
1936	1201	1205	1214	1288	1464	1532	1598	1723	1793	1725	1640	1598
1937	1573	1555	1557	1571	1665	1759	1747	1869	1857	1764	1670	1617
1938	1584	1578	1651	1719	1902	2030	2160	2420	2420	2300	2130	2000
1939	1955	1933	1929	1937	1944	1962	1892	1785	1721	1646	1570	1543
1940	1509	1486	1487	1583	1714	1873	1941	2051	2030	1930	1837	1787
1941	1751	1734	1761	1806	1885	1985	1996	2139	2167	2108	2015	1957
1942	1925	1906	1938	1970	1970	2020	2095	2240	2348	2300	2130	2000
1943	1955	1965	1964	1970	1970	2030	2142	2190	2169	2084	1994	1937
1944	1899	1879	1869	1866	1874	1893	1819	1769	1759	1685	1601	1559
1945	1549	1579	1600	1632	1757	1833	1803	1869	1915	1846	1752	1707
1946	1702	1721	1795	1852	1902	1945	1962	2040	1996	1901	1807	1764
1947	1739	1746	1758	1766	1780	1756	1691	1629	1595	1536	1477	1451
1948	1455	1449	1445	1447	1435	1429	1417	1453	1570	1519	1453	1422
1949	1412	1404	1410	1416	1417	1443	1420	1464	1473	1422	1369	1344
1950	1312	1289	1290	1339	1393	1440	1430	1536	1613	1556	1490	1472
1951	1466	1736	1970	1970	1970	2030	2014	2009	1943	1847	1754	1703
1952	1674	1679	1723	1856	1939	2030	2095	2401	2420	2300	2130	2000
1953	1947	1941	1950	1970	1970	1979	1926	1857	1917	1869	1784	1738
1954	1706	1700	1704	1712	1728	1767	1744	1798	1769	1696	1621	1577
1955	1540	1539	1545	1571	1584	1577	1559	1517	1532	1471	1406	1370
1956	1344	1348	1593	1852	1970	2030	2039	2184	2256	2200	2108	2000
1957	1955	1939	1940	1948	1970	2003	1899	1906	1937	1849	1765	1716
1958	1678	1670	1668	1710	1783	1929	2078	2381	2420	2300	2130	2000
1959	1955	1938	1934	1950	1970	1983	1896	1764	1707	1635	1560	1556
1960	1525	1511	1511	1512	1549	1547	1514	1464	1438	1385	1334	1299
1961	1255	1270	1284	1293	1290	1271	1238	1191	1149	1103	1057	1033
1962	1000	999	1000	1008	1089	1123	1141	1185	1257	1223	1161	1125
1963	1109	1111	1127	1181	1312	1361	1373	1561	1658	1608	1534	1510
1964	1509	1535	1550	1580	1591	1562	1515	1461	1455	1400	1345	1310
1965	1301	1317	1528	1733	1838	1883	1941	2011	2041	1993	1920	1876
1966	1830	1853	1875	1903	1928	1944	1876	1848	1778	1694	1615	1566
1967	1525	1530	1604	1701	1762	1862	1934	2140	2392	2300	2130	2000
1968	1955	1951	1948	1959	1970	2011	1926	1842	1787	1704	1622	1573
1969	1557	1577	1582	1879	1970	2030	2184	2420	2420	2300	2130	2000
1970	1955	1955	1964	1970	1970	2030	1969	1966	1951	1851	1751	1709
1971	1678	1700	1758	1809	1847	1884	1829	1823	1862	1793	1701	1658
1972	1623	1630	1669	1700	1704	1702	1622	1634	1603	1541	1477	1456
1973	1446	1453	1479	1589	1732	1839	1810	1897	1850	1749	1650	1607
1974	1608	1650	1717	1824	1897	2030	2117	2237	2232	2156	2054	1998
1975	1955	1953	1964	1970	1970	2030	1995	2017	2114	2046	1964	1917
1976	1909	1912	1923	1924	1925	1865	1785	1689	1623	1573	1528	1499
1977	1487	1483	1475	1467	1439	1378	1317	1261	1242	1196	1150	1136
1978	1089	1073	1084	1162	1249	1385	1473	1589	1704	1685	1608	1603
1979	1564	1568	1577	1639	1752	1868	1841	1940	1843	1738	1640	1598
1980	1589	1598	1602	1898	1970	2030	2058	2109	2147	2124	2032	1982
1981	1955	1933	1936	1970	1970	2006	1947	1841	1757	1672	1597	1573
1982	1563	1617	1744	1945	1970	2030	2220	2357	2398	2300	2130	2000
1983	1970	1970	1970	1970	1970	2030	2094	2249	2420	2300	2130	2000
1984	1955	1970	1970	1970	1970	2030	1963	1967	1940	1869	1798	1769
1985	1769	1799	1828	1836	1867	1894	1848	1773	1707	1628	1555	1525
1986	1517	1519	1527	1602	1970	2030	2069	2101	2099	2001	1918	1891
1987	1873	1862	1863	1852	1852	1876	1802	1683	1618	1570	1527	1510
1988	1486	1466	1453	1457	1447	1404	1347	1275	1249	1222	1196	1177
1989	1139	1123	1116	1114	1102	1153	1127	1089	1078	1036	996	1008
1990	1027	1029	1044	1057	1058	1025	965	900	858	810	777	761
1991	749	730	738	736	710	751	728	701	675	623	576	565
1992	560	548	562	575	625	642	621	538	491	444	395	374
1993	339	331	346	495	599	753	801	930	1039	1015	962	939
1994	944	966	999	1028	1051	1000	954	910	862	803	750	722

The average flow and change in flow at Vernalis, by SJRBI year type, for the alternative Vernalis water quality objective scenario is shown in Table 10. The values shown for April and May are for the non-pulse period of those months.

Table 10

Average Vernalis Flow (non-pulse) within Year Type - cfs							Alternative Water Quality Objective Scenario					
SJRBI	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
W	2726	2666	3831	7315	12991	14586	11624	9986	10908	7622	3499	3954
AN	2750	3297	5384	5865	6119	5791	4739	3675	2746	2192	1803	2324
BN	2431	2343	2545	2750	2993	3064	2554	2513	2033	1500	1379	1885
D	2826	2484	2417	2378	2690	2510	1837	1875	1463	1192	1276	1807
C	2183	2219	1973	1752	2192	1854	1150	1220	923	752	877	1382
All	2578	2609	3297	4323	6111	6395	5042	4404	4272	3100	1916	2414
Change in Vernalis Flows within Year Type - cfs							Alternative Water Quality Objective Scenario					
SJRBI	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
W	32	8	8	15	61	15	35	21	32	43	-14	31
AN	8	3	87	-3	24	86	72	59	-12	-31	-20	-23
BN	2	5	5	4	3	2	-12	23	-36	-62	-64	-45
D	3	6	6	4	-1	0	-93	-76	-57	-96	-94	-68
C	3	3	3	3	75	1	-220	-177	-156	-166	-161	-134
All	12	5	21	5	38	21	-41	-29	-42	-55	-68	-43

Water quality at Vernalis will also change due to an alternative water quality objective. Releases from New Melones Reservoir for dilution purposes will be directly affected by an alternative objective at Vernalis, reduced in most instances during the spring and summer. Table 11 shows the average water quality at Vernalis, by SJRBI year type, for the alternative Vernalis water quality objective scenario. The April and May values are for the non-pulse flow periods of those months. A positive value indicates a reduction in water quality.

Table 11

Average Vernalis Water Quality (non-pulse) within Year Type - uS/cm							Alternative Water Quality Objective Scenario					
SJRBI	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
W	555	588	729	584	459	410	325	367	393	479	447	417
AN	560	569	678	655	592	547	458	453	555	647	594	539
BN	571	589	757	768	854	835	609	572	632	681	648	592
D	528	568	766	776	888	900	693	679	711	737	684	607
C	607	615	813	868	980	988	819	800	801	811	790	696
All	566	587	748	719	728	707	561	559	601	656	619	559
Change in Vernalis Water Quality within Year Type - uS/cm							Alternative Water Quality Objective Scenario					
SJRBI	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
W	-7	-2	-2	-1	-1	-1	-1	4	-5	1	3	-2
AN	-2	0	-4	-1	-7	-22	-4	-5	4	7	9	5
BN	0	-1	-1	-1	0	0	12	-4	11	24	25	13
D	-1	-1	-2	-1	0	0	39	30	24	47	41	20
C	-1	-1	-2	-2	-42	0	118	83	101	122	105	55
All	-3	-1	-2	-1	-11	-4	33	22	27	39	36	18

Table 12 shows the simulated water quality at Vernalis for the alternative Vernalis water quality objective scenario. Results are provided by water year annually ranked by the San Joaquin River Basin Index (SJ RBI), wettest to driest year. Table 13 illustrates the difference in water quality that occurs between the alternative scenario and the “current condition” scenario. Instances of non-compliance to the alternative Vernalis water quality objective are eliminated.

Alternative Vernalis Flow Objective

The results of the alternative Vernalis water quality objective scenario were used to evaluate the viability of an alternative flow objective during the non-pulse periods of February through June. The alternative Vernalis flow objective consists of a two-component determination based on the state of the New Melones Index and the state of the SJ RBI. The adjacent table illustrates the parameters of the

determination. The flow objective applicable to each month during February through June is established by first determining which column of flow objectives applies for

SJ RBI	Vernalis Flow Objective	
	When NM Index < 2,500 TAF	When NM Index > 2,500 TAF
1 - W	2000 cfs	2500 cfs
2 - AN	2000 cfs	2500 cfs
3 - BN	1250 cfs	1750 cfs
4 - D	1250 cfs	1750 cfs
5 - C	700 cfs	1000 cfs

the month, either the high flow column when the New Melones Index is greater than 2,500 TAF, or the low flow column when the New Melones Index is 2,500 TAF or less. The flow objective is established by the SJ RBI.

Table 14 shows the results for the determination of the alternative Vernalis flow objective post-processing the results of the alternative Vernalis water quality objective scenario. The table illustrates the shortages in compliance with the alternative objective. These shortages (less than 33 TAF in a month) could be remedied by supplemental releases from New Melones Reservoir.

Table 12

Average Monthly Quality at Vernalis with Modified Vernalis Water Quality Objective - uS/cm														SJRBI
WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	MAF	
1983	230	257	367	326	309	248	315	311	265	210	211	254	7.22 W	
1969	605	614	791	536	364	388	313	276	261	378	367	355	6.09 W	
1938	539	567	528	513	372	322	281	262	245	347	333	334	5.89 W	
1982	584	603	781	643	272	247	220	265	362	413	339	252	5.45 W	
1967	621	672	798	777	900	456	249	265	326	284	348	340	5.25 W	
1952	575	595	775	659	360	351	217	254	282	379	355	363	5.17 W	
1958	561	615	776	763	688	428	219	224	315	421	361	362	4.77 W	
1980	514	541	781	354	328	376	347	373	404	468	471	451	4.73 W	
1978	720	747	877	798	710	661	390	363	414	563	516	415	4.58 W	
1922	610	608	766	704	631	441	334	386	385	448	533	540	4.54 W	
1956	650	657	711	423	376	387	376	371	398	495	493	367	4.46 W	
1942	488	537	632	419	330	339	321	353	425	455	364	353	4.44 W	
1941	552	588	714	614	409	394	244	287	436	445	479	499	4.43 W	
1986	573	568	757	825	388	304	286	298	392	603	483	404	4.31 W	
1993	733	777	899	669	849	925	538	595	631	594	587	533	4.20 W	
1943	468	519	630	337	317	315	254	374	448	637	555	511	4.03 W	
1937	505	570	739	700	286	355	295	280	525	612	558	523	3.90 W	
1974	530	616	736	481	533	425	365	394	424	610	514	494	3.90 W	
1975	429	462	707	708	316	262	383	395	457	588	505	493	3.85 W	
1965	606	650	815	423	433	567	360	336	461	639	575	500	3.81 W	
1936	555	596	775	812	481	382	352	390	631	657	558	524	3.74 AN	
1984	357	195	305	351	291	371	367	367	526	633	524	438	3.69 AN	
1979	557	496	751	585	328	303	375	394	434	657	581	532	3.67 AN	
1945	565	566	771	755	521	335	387	369	515	591	462	473	3.59 AN	
1963	628	675	824	873	836	954	426	441	596	665	625	566	3.57 AN	
1927	632	660	795	851	972	691	425	386	641	639	587	535	3.56 AN	
1935	668	653	807	868	997	937	455	448	694	677	667	588	3.56 AN	
1923	563	591	640	497	443	680	372	367	579	625	613	527	3.55 AN	
1973	596	561	787	777	650	425	417	409	401	656	603	541	3.50 AN	
1932	674	664	802	851	956	935	533	527	709	646	680	604	3.41 AN	
1940	595	621	800	802	892	357	309	322	546	654	610	549	3.36 AN	
1946	446	520	476	536	389	521	405	397	534	651	582	543	3.30 AN	
1970	399	500	598	274	268	313	385	398	451	643	604	547	3.18 AN	
1951	603	670	362	342	267	457	393	245	511	663	618	571	3.14 AN	
1962	705	690	829	927	749	831	500	484	743	728	681	619	3.07 BN	
1953	506	527	725	516	559	926	385	351	527	611	605	557	3.03 BN	
1957	503	547	759	755	923	710	360	363	560	650	606	563	3.01 BN	
1925	663	654	803	880	998	957	468	433	659	687	678	608	2.93 BN	
1971	539	571	764	751	847	711	386	378	524	622	607	566	2.89 BN	
1950	629	632	817	836	998	997	531	488	596	708	668	597	2.85 BN	
1944	513	533	703	733	814	756	428	469	632	668	624	550	2.76 BN	
1954	547	579	778	787	920	998	482	482	658	680	636	594	2.72 BN	
1948	603	608	796	841	999	1000	577	580	650	681	667	627	2.70 BN	
1928	511	548	732	767	817	338	409	425	658	679	630	560	2.63 BN	
1949	593	620	813	848	999	999	639	627	688	756	702	642	2.53 BN	
1966	546	559	565	577	626	801	421	463	689	703	666	614	2.51 BN	
1933	591	599	796	852	998	999	616	616	747	767	737	654	2.44 D	
1981	495	503	734	747	868	615	466	458	696	675	657	597	2.44 D	
1985	418	495	774	773	913	898	539	508	688	728	615	544	2.40 D	
1926	589	578	770	813	998	998	520	535	683	773	722	611	2.30 D	
1955	606	620	766	742	998	999	609	639	752	793	734	643	2.30 D	
1959	526	556	720	734	707	879	449	489	689	698	651	569	2.21 D	
1968	501	568	726	743	715	772	429	464	684	697	639	590	2.21 D	
1939	425	513	703	727	801	748	467	509	700	716	666	572	2.20 D	
1964	578	631	878	833	998	999	611	617	755	775	733	648	2.19 D	
1947	536	552	758	755	857	999	596	597	703	748	690	615	2.18 D	
1972	542	632	806	815	915	998	565	565	725	732	681	637	2.16 D	
1994	561	614	840	920	963	1006	710	681	828	854	857	759	2.05 C	
1930	653	637	820	890	998	999	594	601	777	768	737	637	2.02 C	
1929	579	574	775	781	949	999	609	603	746	780	747	642	2.00 C	
1989	723	707	859	928	997	1001	673	710	783	779	782	589	1.96 C	
1991	657	649	848	985	998	979	761	745	844	831	829	771	1.96 C	
1987	431	446	726	769	977	831	607	621	763	772	719	650	1.86 C	
1960	609	659	823	827	954	999	616	626	784	799	769	692	1.85 C	
1976	411	496	769	769	906	998	603	612	763	772	684	633	1.57 C	
1992	729	715	878	989	959	999	811	826	854	846	905	794	1.56 C	
1990	653	642	832	921	998	999	698	699	853	832	774	709	1.51 C	
1988	644	597	810	854	998	1004	616	623	833	853	822	702	1.48 C	
1934	618	645	816	842	998	999	692	695	767	797	762	672	1.44 C	
1924	505	547	750	794	982	999	676	688	770	796	759	673	1.42 C	
1961	690	689	840	883	999	999	708	717	815	844	840	724	1.38 C	
1931	629	620	807	871	999	999	701	699	774	802	766	681	1.20 C	
1977	619	604	818	868	999	999	694	699	862	850	890	815	0.84 C	

Table 13

Change in Average Monthly Vernalis Quality - uS/cm															Positive values indicate reduction in water quality due to alternative		SJRBI
WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep					MAF
1983	0	0	0	0	0	0	0	0	0	0	0	0	0	0			7.22 W
1969	0	0	0	0	0	0	0	0	0	0	0	0	0	0			6.09 W
1938	-6	-5	-2	-2	0	-1	0	0	0	0	0	0	0	0			5.89 W
1982	0	0	0	0	-1	0	0	0	0	0	0	0	0	0			5.45 W
1967	0	-8	-8	-7	-7	0	0	0	0	-14	0	0	0	0			5.25 W
1952	0	0	0	0	0	0	0	0	0	0	0	0	0	0			5.17 W
1958	0	0	0	0	0	0	0	0	0	0	0	0	0	0			4.77 W
1980	-2	-1	-2	0	-8	0	0	0	0	0	0	0	0	0			4.73 W
1978	-26	-2	-2	0	0	-3	-4	-3	0	5	8	2	4.58 W				
1922	0	0	0	0	0	0	0	0	1	3	12	8	4.54 W				
1956	0	0	0	0	-2	0	0	0	0	0	0	-68	4.46 W				
1942	0	0	0	-3	0	0	0	0	0	0	0	0	4.44 W				
1941	0	0	0	0	0	0	0	0	-1	0	0	0	4.43 W				
1986	0	0	0	0	-3	0	0	0	0	0	0	0	4.31 W				
1993	-56	-13	-14	0	-4	-3	-1	48	11	19	37	24	4.20 W				
1943	0	0	0	0	0	0	0	0	0	0	0	0	4.03 W				
1937	-12	-13	-16	-17	-1	-1	-4	-6	-111	-1	0	-5	3.90 W				
1974	-1	-1	-1	0	0	-1	0	0	-3	0	0	0	3.90 W				
1975	-34	-1	-1	2	0	0	0	0	0	0	0	0	3.85 W				
1965	-2	-1	-1	-3	-1	-3	-1	-1	0	-1	-1	-1	3.81 W				
1936	-1	-1	-1	-3	-7	-3	-17	-24	-4	4	-16	0	3.74 AN				
1984	0	0	0	0	0	0	0	0	0	0	0	0	3.69 AN				
1979	-11	-5	-10	-4	-1	0	-2	-3	0	-2	-2	-1	3.67 AN				
1945	0	0	0	0	0	0	0	0	0	0	0	0	3.59 AN				
1963	-1	0	-1	-2	-1	-19	-2	-12	9	27	28	14	3.57 AN				
1927	0	0	0	0	0	-1	-13	-8	-15	2	3	-2	3.56 AN				
1935	-5	-12	-15	-7	-83	-3	0	-4	33	36	56	31	3.56 AN				
1923	0	0	0	0	0	-274	-1	-1	-3	0	0	0	3.55 AN				
1973	0	0	0	0	0	0	-1	-1	0	-1	-1	-1	3.50 AN				
1932	-1	-2	-2	-2	-2	-2	-1	3	38	29	57	34	3.41 AN				
1940	0	0	0	0	0	0	0	0	-1	0	0	0	3.36 AN				
1946	0	0	0	0	0	0	0	0	-1	0	0	0	3.30 AN				
1970	0	0	0	0	0	0	0	0	0	0	0	0	3.18 AN				
1951	-7	14	-24	2	0	0	0	0	0	0	0	0	3.14 AN				
1962	-1	0	0	-1	0	-1	12	-1	47	65	62	38	3.07 BN				
1953	0	0	0	0	0	0	0	0	0	0	0	0	3.03 BN				
1957	0	0	0	0	0	0	0	0	0	0	0	0	3.01 BN				
1925	1	0	0	2	0	5	16	8	14	28	44	22	2.93 BN				
1971	0	0	0	0	0	0	0	0	0	0	0	0	2.89 BN				
1950	0	-1	-1	-1	0	-2	-3	-26	11	39	38	18	2.85 BN				
1944	0	0	0	0	0	0	0	0	0	11	12	2	2.76 BN				
1954	0	0	0	0	0	0	0	0	0	5	6	0	2.72 BN				
1948	0	0	0	0	0	0	47	23	24	44	51	32	2.70 BN				
1928	-1	-1	-2	-2	-2	0	-4	-8	-2	7	8	-1	2.63 BN				
1949	-2	-5	-7	-5	0	0	57	37	40	77	68	42	2.53 BN				
1966	-1	-5	-2	-2	-3	-5	-72	-69	-6	8	8	-2	2.51 BN				
1933	-1	-2	-4	-2	0	0	41	35	57	79	78	45	2.44 D				
1981	0	0	0	0	0	0	0	0	1	11	13	2	2.44 D				
1985	0	0	0	0	0	0	0	0	0	32	12	3	2.40 D				
1926	2	-7	-11	5	3	0	0	1	27	77	71	35	2.30 D				
1955	0	0	0	0	0	0	39	50	57	98	78	42	2.30 D				
1959	0	0	0	0	0	0	0	0	0	14	14	2	2.21 D				
1968	0	0	0	0	0	0	0	0	0	7	7	0	2.21 D				
1939	0	0	0	0	0	0	0	0	4	22	20	6	2.20 D				
1964	-7	-5	-7	-17	0	0	39	37	60	87	80	44	2.19 D				
1947	0	0	0	0	0	0	37	26	23	53	44	22	2.18 D				
1972	0	0	0	0	0	0	39	24	29	39	36	20	2.16 D				
1994	-2	-2	-4	-5	-4	0	79	42	93	135	132	76	2.05 C				
1930	0	0	0	0	0	0	18	11	83	87	82	42	2.02 C				
1929	0	-1	-1	-1	-1	0	32	21	50	92	84	43	2.00 C				
1989	-6	0	0	-1	-210	0	51	83	89	118	103	32	1.96 C				
1991	-3	-4	-7	-7	-256	-4	101	93	148	148	137	79	1.96 C				
1987	0	0	0	0	0	0	45	41	67	76	57	30	1.86 C				
1960	0	0	0	0	0	0	54	40	89	111	96	53	1.85 C				
1976	0	0	0	0	0	0	37	37	68	77	44	26	1.57 C				
1992	-5	-7	-9	-8	-4	0	86	-32	131	186	168	85	1.56 C				
1990	-1	0	0	-2	-141	0	63	44	157	129	93	58	1.51 C				
1988	0	0	0	0	0	0	50	41	137	158	114	55	1.48 C				
1934	-1	-1	-1	-2	0	0	33	43	72	103	92	50	1.44 C				
1924	-1	0	-1	-1	-1	0	33	39	75	102	88	50	1.42 C				
1961	0	0	0	0	-59	0	55	55	119	149	123	62	1.38 C				
1931	0	0	0	-1	0	0	41	36	79	108	93	51	1.20 C				
1977	0	0	0	0	0	0	59	61	166	173	180	91	0.84 C				

Table 14

Alternative Vernalis Flow Objective Using New Melones Index and SJRBI												
WY	Flow Objective - cfs					NM Index	SJRBI 602020	Flow Above/Below Objective - cfs				
	Mar	Apr	May	Jun	Follow Feb			Mar	Apr	May	Jun	Follow Feb
1922	2000	2000	2000	2000	2000	2269	1	7829	4983	2928	8656	3894
1923	2500	2500	2500	2500	2500	2506	2	754	3528	1267	908	-299
1924	700	700	700	700	700	1750	5	999	552	692	373	1523
1925	1250	1250	1250	1250	1250	2197	3	1044	1420	2289	1185	958
1926	1250	1250	1250	1250	1250	1970	4	735	870	733	1067	1117
1927	2000	2000	2000	2000	2000	2443	2	1841	3001	1361	139	1114
1928	1250	1250	1250	1250	1250	2408	3	5714	2975	1479	930	1139
1929	700	700	700	700	700	1901	5	1220	856	579	689	1385
1930	700	700	700	700	700	1802	5	1163	607	779	306	1435
1931	700	700	700	700	700	1468	5	985	402	594	351	1766
1932	2000	2000	2000	2000	2000	1944	2	447	-156	547	-259	165
1933	1250	1250	1250	1250	1250	1721	4	709	40	222	-65	856
1934	700	700	700	700	700	1446	5	1101	350	568	376	1442
1935	2000	2000	2000	2000	2000	1804	2	485	1064	930	16	4618
1936	2000	2000	2000	2000	2000	2400	2	6877	4741	2719	700	9309
1937	2500	2500	2500	2500	2500	2511	1	7760	8128	5775	877	21965
1938	2500	2500	2500	2500	2500	3488	1	29550	14697	19366	18819	681
1939	1250	1250	1250	1250	1250	2331	4	2229	484	896	241	1431
1940	2500	2500	2500	2500	2500	2706	2	5452	5773	1129	1168	13327
1941	2500	2500	2500	2500	2500	2885	1	12202	9132	6294	4549	9116
1942	2500	2500	2500	2500	2500	3100	1	4582	5430	4542	5088	9300
1943	2500	2500	2500	2500	2500	3090	1	18902	7518	2454	3216	576
1944	1250	1250	1250	1250	1250	2368	3	2232	1771	1261	1234	6578
1945	2500	2500	2500	2500	2500	2654	2	4475	2375	3184	447	4054
1946	2500	2500	2500	2500	2500	2733	2	2646	1387	1877	529	394
1947	1250	1250	1250	1250	1250	2209	4	699	151	218	141	733
1948	1250	1250	1250	1250	1250	2152	3	494	279	637	716	893
1949	1250	1250	1250	1250	1250	1997	3	952	159	368	361	843
1950	1250	1250	1250	1250	1250	2219	3	823	537	316	958	8892
1951	2500	2500	2500	2500	2500	2695	2	3410	1251	404	-112	3977
1952	2500	2500	2500	2500	2500	3399	1	9347	8705	12135	14881	2527
1953	1750	1750	1750	1750	1750	2695	3	662	1487	1645	664	784
1954	1250	1250	1250	1250	1250	2427	3	763	1323	1612	536	871
1955	1250	1250	1250	1250	1250	2053	4	671	344	229	-13	11083
1956	2500	2500	2500	2500	2500	3082	1	4729	3110	2404	6554	-59
1957	1750	1750	1750	1750	1750	2649	3	1976	1118	1279	526	2205
1958	2500	2500	2500	2500	2500	3160	1	8061	15677	10054	12035	1151
1959	1250	1250	1250	1250	1250	2374	4	1398	753	829	151	1129
1960	700	700	700	700	700	1957	5	1047	489	593	266	1285
1961	700	700	700	700	700	1609	5	1005	310	458	163	2829
1962	1250	1250	1250	1250	1250	1768	3	1762	494	583	290	1824
1963	2000	2000	2000	2000	2000	2225	2	326	1057	423	655	214
1964	1250	1250	1250	1250	1250	2015	4	531	84	218	-25	4553
1965	2500	2500	2500	2500	2500	2871	1	2267	4178	949	447	1912
1966	1250	1250	1250	1250	1250	2415	3	1892	867	869	133	1392
1967	2500	2500	2500	2500	2500	3238	1	3148	9743	8103	11475	838
1968	1250	1250	1250	1250	1250	2413	4	2086	1120	979	234	26390
1969	2500	2500	2500	2500	2500	3474	1	20318	17750	20165	23938	7309
1970	2500	2500	2500	2500	2500	2720	2	5282	1575	446	-284	529
1971	1750	1750	1750	1750	1750	2606	3	1966	1708	1322	358	500
1972	1250	1250	1250	1250	1250	2232	4	380	247	307	66	3237
1973	2500	2500	2500	2500	2500	2584	2	4910	2341	383	782	2665
1974	2500	2500	2500	2500	2500	2972	1	3546	3998	1301	863	5362
1975	2500	2500	2500	2500	2500	2927	1	6037	2624	128	2499	48
1976	700	700	700	700	700	2195	5	1134	784	640	394	1175
1977	700	700	700	700	700	1619	5	560	104	533	-152	7399
1978	2000	2000	2000	2000	2000	2332	1	5670	8606	9105	7451	7809
1979	2500	2500	2500	2500	2500	2577	2	7202	3471	2613	619	21314
1980	2500	2500	2500	2500	2500	3005	1	13841	4843	3017	6141	241
1981	1250	1250	1250	1250	1250	2381	4	3134	1257	1174	257	14566
1982	2500	2500	2500	2500	2500	3419	1	12569	22594	14058	8918	35264
1983	2500	2500	2500	2500	2500	3965	1	47058	21384	21452	25048	8431
1984	2500	2500	2500	2500	2500	2765	2	4484	2429	1672	636	26
1985	1250	1250	1250	1250	1250	2352	4	1295	1101	1073	290	15637
1986	2500	2500	2500	2500	2500	3149	1	25252	9667	7577	7004	-293
1987	700	700	700	700	700	2179	5	2286	694	721	509	1258
1988	700	700	700	700	700	1749	5	1007	700	483	167	1233
1989	700	700	700	700	700	1668	5	1050	540	204	92	1357
1990	700	700	700	700	700	1368	5	863	-5	640	-31	1152
1991	700	700	700	700	700	1111	5	1625	298	238	21	1774
1992	700	700	700	700	700	916	5	1185	221	8	-196	2286
1993	2000	2000	2000	2000	2000	1549	1	620	1191	-542	1181	452
1994	700	700	700	700	700	1322	5	1241	294	592	241	

Unimpaired and Measured Flow Data for the San Joaquin River Basin and State Water Project and Central Valley Project Diversions

The Department of Water Resources periodically estimates and publishes unimpaired flows for Central for Central Valley subbasins and the Sacramento-San Joaquin Delta. The latest published edition of these estimates appear in *California Central Valley Unimpaired Flow Data (October 1920 through September 1992), Third Edition*, Department of Water Resources, August 1994. These data were revised by Errata from DWR dated September 15, 1994, and extended through September 1993 during 1995. DWR is currently planning to further extend the data. In its 1994 report, DWR describes unimpaired flow to be:

“... runoff that would have occurred had water flow remained unaltered in rivers and streams instead of stored in reservoirs, imported, exported, or diverted. The data are a measure of the total water supply available for all uses after removing the impacts of most upstream alterations as they occurred over the years. Alterations such as channel improvements, levees, and flood bypasses are assumed to exist.”

Table 15 presents a calculation of unimpaired flow by water year for the San Joaquin River at Vernalis which is the sum of several computational locations:

- UF 16 – Stanislaus River at Melones Reservoir
- UF 17 – San Joaquin River Floor
- UF 18 – Tuolumne River at Don Pedro Reservoir
- UF 19 – Merced River at Exchequer Reservoir
- UF 20 – Chowchilla River at Buchanan Reservoir
- UF 21 – Fresno River near Dalton
- UF 22 – San Joaquin River at Millerton Reservoir
- UF 23 – Tulare Lake Basin Outflow

The computation of each of these components of flow for the period 1921 through 1993 is described in the DWR report. The record was extended by me through water year 2004 by extraction of data from the California Data Exchange Center (CDEC). UF 17 data were extended by a procedure similarly used by DWR. Also indicated in Table 15 is the San Joaquin River Basin Index for each year. Table 16 presents the same data arranged by calendar year, rank-ordered by San Joaquin River Basin Index, from the wettest year to the driest year.

Table 15

Estimated Unimpaired Flow: San Joaquin River above Vernalis
Estimated Unimpaired Flow in CFS

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	60-20-20	
													MAF	Type
1921	1,561	2,571	3,447	9,382	8,775	11,935	13,849	22,748	23,748	5,528	1,041	521	3.23	AN
1922	390	437	4,016	4,569	14,000	10,667	14,000	40,504	42,605	10,602	2,098	739	4.54	W
1923	585	1,647	7,236	6,683	5,477	6,016	16,000	29,203	16,303	8,049	1,659	1,160	3.55	AN
1924	1,350	824	813	1,073	2,018	1,967	6,319	8,943	1,277	618	179	118	1.42	C
1925	585	2,118	2,244	2,081	11,568	8,000	17,849	26,049	16,689	5,837	1,659	487	2.93	BN
1926	829	857	1,382	1,057	5,820	6,065	20,655	16,455	5,462	1,285	358	218	2.30	D
1927	293	3,714	3,593	3,463	15,099	9,659	19,277	27,073	25,311	7,480	1,577	639	3.56	AN
1928	894	4,487	2,325	2,667	4,757	15,837	14,303	20,748	7,798	1,626	455	202	2.63	BN
1929	211	504	894	1,041	2,198	4,439	7,429	17,642	10,639	2,488	488	134	2.00	C
1930	179	218	894	1,870	3,568	7,041	12,101	12,959	13,059	2,520	569	269	2.02	C
1931	504	857	537	1,154	2,036	2,829	7,092	9,220	2,588	585	244	151	1.20	C
1932	195	387	6,650	4,943	16,414	9,285	14,218	27,886	27,630	9,203	1,854	605	3.41	AN
1933	488	319	650	1,545	1,928	4,293	9,042	12,813	20,622	4,016	878	454	2.44	D
1934	195	487	2,146	2,813	4,595	7,106	9,244	6,846	4,034	911	358	303	1.44	C
1935	537	1,882	2,293	6,293	6,108	8,000	26,336	28,959	26,353	5,707	1,480	487	3.56	AN
1936	602	891	894	4,211	24,000	11,366	22,252	28,130	18,655	6,114	1,333	370	3.74	AN
1937	423	555	1,675	2,163	22,216	13,772	18,034	37,528	22,454	5,496	1,138	353	3.90	W
1938	455	790	15,220	6,065	24,396	34,976	27,361	44,992	45,664	16,764	4,000	1,479	5.89	W
1939	2,016	2,101	1,724	2,081	3,243	6,992	14,773	10,488	4,403	1,350	569	689	2.20	D
1940	1,870	807	878	12,374	15,604	17,984	18,672	30,894	17,328	3,366	748	218	3.36	AN
1941	504	689	7,203	7,528	17,189	17,317	18,050	38,943	31,765	12,569	2,537	723	4.43	W
1942	764	1,697	8,163	9,659	9,892	9,008	19,193	27,220	34,353	12,455	2,179	588	4.44	W
1943	472	3,664	4,033	13,837	10,937	24,098	23,378	27,431	17,950	7,187	1,724	487	4.03	W
1944	569	840	1,089	1,984	4,631	7,593	8,555	22,829	13,782	5,106	992	336	2.76	BN
1945	488	4,185	3,642	2,813	20,396	10,959	16,739	26,585	24,975	8,797	1,951	622	3.59	AN
1946	2,634	4,605	10,244	6,098	4,018	8,455	19,126	25,301	13,513	3,951	992	454	3.30	AN
1947	1,203	3,731	4,423	2,423	4,541	6,634	10,353	17,252	6,235	1,447	358	286	2.18	D
1948	1,415	1,109	797	1,610	1,622	3,821	11,529	22,667	21,479	4,667	748	336	2.70	BN
1949	407	555	959	1,073	2,162	6,455	15,261	22,325	12,437	2,130	650	353	2.53	BN
1950	325	723	748	3,593	7,261	6,244	17,832	23,285	15,210	3,512	650	319	2.85	BN
1951	911	25,798	27,122	8,927	8,703	8,894	13,160	17,886	12,706	3,837	894	286	3.14	AN
1952	569	1,311	6,114	13,642	8,847	15,691	25,345	46,439	34,891	15,057	3,561	1,143	5.17	W
1953	618	891	2,846	6,959	3,532	5,041	13,681	12,976	19,025	7,854	1,106	420	3.03	BN
1954	423	857	1,073	2,049	5,135	10,260	18,370	22,569	9,597	2,618	472	235	2.72	BN
1955	276	824	2,114	3,236	3,261	4,260	7,597	18,699	15,630	2,878	618	218	2.30	D
1956	260	672	35,902	22,585	11,153	10,114	16,084	30,585	29,866	12,455	2,780	1,092	4.46	W
1957	1,073	1,294	1,187	1,610	5,586	7,333	9,294	19,772	20,471	4,081	927	420	3.01	BN
1958	732	1,042	2,244	3,041	10,180	15,756	27,714	43,398	32,403	11,854	3,577	1,261	4.77	W
1959	650	672	569	2,976	6,649	6,309	11,798	10,959	6,924	1,333	358	2,017	2.21	D
1960	569	454	537	1,154	5,856	6,764	12,084	13,967	7,513	1,252	390	235	1.85	C
1961	244	1,008	1,577	992	2,234	3,317	8,202	9,919	5,916	927	732	319	1.38	C
1962	309	555	1,122	3,089	14,577	7,285	21,109	19,951	23,008	6,976	1,350	471	3.07	BN
1963	878	538	1,089	5,171	17,820	6,163	14,134	28,163	23,513	9,431	2,114	941	3.57	AN
1964	1,008	4,571	2,293	2,537	2,559	3,577	8,571	14,878	10,353	2,228	748	403	2.19	D
1965	455	2,387	23,008	16,325	8,180	7,642	18,336	23,984	24,336	11,252	4,927	1,328	3.81	W
1966	634	6,370	4,455	4,244	4,162	7,447	16,000	17,480	5,429	1,545	683	420	2.51	BN
1967	455	2,303	12,049	7,008	7,045	16,699	21,630	40,065	44,891	26,276	5,106	1,950	5.25	W
1968	878	874	1,659	2,195	6,685	5,919	9,798	13,154	6,622	1,398	699	387	2.21	D
1969	618	3,076	3,935	33,398	26,288	21,447	33,244	57,935	44,756	19,187	4,146	1,210	6.09	W
1970	1,837	1,933	4,504	19,122	7,802	10,862	9,076	20,667	15,429	4,309	1,285	538	3.18	AN
1971	455	3,176	5,821	5,724	5,243	7,203	10,924	17,545	19,832	5,821	1,398	622	2.89	BN
1972	407	1,597	3,870	2,846	3,964	9,138	8,269	16,569	10,185	1,724	488	1,176	2.16	D
1973	797	1,748	3,496	7,236	13,351	11,301	15,261	35,512	20,824	4,000	1,350	504	3.50	AN
1974	911	7,143	6,585	10,211	4,649	14,163	18,101	30,846	23,378	6,374	2,016	706	3.90	W
1975	748	857	1,854	2,488	8,775	12,130	10,218	30,569	31,042	7,398	1,642	992	3.85	W
1976	2,862	2,353	1,561	943	2,234	3,561	5,261	9,382	2,303	1,008	959	1,042	1.57	C
1977	634	454	276	537	811	1,057	3,429	4,325	5,025	650	260	168	0.84	C
1978	146	454	4,276	11,593	16,252	22,455	26,992	38,130	38,101	16,992	4,488	5,092	4.58	W
1979	1,268	1,496	1,642	8,065	10,288	13,870	15,143	32,374	16,185	4,098	1,382	639	3.67	AN
1980	1,203	1,815	2,309	27,512	25,982	18,276	18,975	28,146	29,613	17,398	3,724	1,412	4.73	W
1981	894	706	1,333	2,732	3,622	6,179	12,672	15,886	8,168	1,561	748	555	2.44	D
1982	1,041	6,739	8,943	12,878	22,505	19,772	43,227	41,220	29,328	15,496	4,748	5,815	5.45	W
1983	6,927	11,378	18,699	21,333	30,000	42,016	24,571	44,179	63,731	34,976	11,886	4,387	7.22	W
1984	4,276	16,487	20,390	12,569	8,685	10,325	12,000	26,016	14,521	5,610	1,756	739	3.69	AN
1985	1,268	3,697	2,423	2,179	4,108	6,179	15,563	16,211	7,059	1,545	699	756	2.40	D
1986	1,106	2,484	4,049	6,146	41,640	31,951	23,261	31,561	27,613	7,772	2,260	1,361	4.31	W
1987	1,024	504	732	846	2,468	4,667	9,563	10,146	4,067	976	553	286	1.86	C
1988	569	1,277	1,691	3,138	3,045	5,041	8,387	10,195	5,664	1,707	683	319	1.48	C
1989	341	773	1,220	1,512	2,847	11,691	15,916	13,951	8,790	1,756	553	605	1.96	C
1990	1,772	1,277	1,008	1,756	2,486	5,902	10,840	8,504	5,412	1,821	407	185	1.51	C
1991	228	286	293	374	432	8,748	8,555	16,049	14,672	3,756	862	471	1.96	C
1992	732	1,160	943											

Table 16

Estimated Unimpaired Flow: San Joaquin River above Vernalis

Estimated Unimpaired Flow in CFS

Sorted by 60-20-20

Calendar													60-20-20	
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	MAF	Type
1983	21,333	30,000	42,016	24,571	44,179	63,731	34,976	11,886	4,387	4,276	16,487	20,390	7.22	W
1969	33,398	26,288	21,447	33,244	57,935	44,756	19,187	4,146	1,210	1,837	1,933	4,504	6.09	W
1995	18,460	9,901	35,050	24,326	39,946	45,693	33,897	8,339	2,084	936	663	3,291	5.95	W
1938	6,065	24,396	34,976	27,361	44,992	45,664	16,764	4,000	1,479	2,016	2,101	1,724	5.89	W
1998	10,342	24,297	19,461	24,353	30,420	51,091	31,557	5,462	2,796	1,419	2,349	3,083	5.65	W
1982	12,878	22,505	19,772	43,227	41,220	29,328	15,496	4,748	5,815	6,927	11,378	18,699	5.45	W
1967	7,008	7,045	16,699	21,630	40,065	44,891	26,276	5,106	1,950	878	874	1,659	5.25	W
1952	13,642	8,847	15,691	25,345	46,439	34,891	15,057	3,561	1,143	618	891	2,846	5.17	W
1958	3,041	10,180	15,756	27,714	43,398	32,403	11,854	3,577	1,261	650	672	569	4.77	W
1980	27,512	25,982	18,276	18,975	28,146	29,613	17,398	3,724	1,412	894	706	1,333	4.73	W
1978	11,593	16,252	22,455	26,992	38,130	38,101	16,992	4,488	5,092	1,268	1,496	1,642	4.58	W
1922	4,569	14,000	10,667	14,000	40,504	42,605	10,602	2,098	739	585	1,647	7,236	4.54	W
1956	22,585	11,153	10,114	16,084	30,585	29,866	12,455	2,780	1,092	1,073	1,294	1,187	4.46	W
1942	9,659	9,892	9,008	19,193	27,220	34,353	12,455	2,179	588	472	3,664	4,033	4.44	W
1941	7,528	17,189	17,317	18,050	38,943	31,765	12,569	2,537	723	764	1,697	8,163	4.43	W
1986	6,146	41,640	31,951	23,261	31,561	27,613	7,772	2,260	1,361	1,024	504	732	4.31	W
1993	17,106	10,685	17,057	19,227	36,049	27,899	11,707	3,106	1,395	934	676	1,016	4.20	W
1997	61,562	14,578	12,539	15,901	25,922	14,138	3,874	1,909	899	686	1,143	1,790	4.13	W
1996	6,020	20,758	15,859	19,340	31,572	19,136	6,659	1,641	620	560	5,752	21,990	4.12	W
1943	13,837	10,937	24,098	23,378	27,431	17,950	7,187	1,724	487	569	840	1,089	4.03	W
1937	2,163	22,216	13,772	18,034	37,528	22,454	5,496	1,138	353	455	790	15,220	3.90	W
1974	10,211	4,649	14,163	18,101	30,846	23,378	6,374	2,016	706	748	857	1,854	3.90	W
1975	2,488	8,775	12,130	10,218	30,569	31,042	7,398	1,642	992	2,862	2,353	1,561	3.85	W
1965	16,325	8,180	7,642	18,336	23,984	24,336	11,252	4,927	1,328	634	6,370	4,455	3.81	W
1936	4,211	24,000	11,366	22,252	28,130	18,655	6,114	1,333	370	423	555	1,675	3.74	AN
1984	12,569	8,685	10,325	12,000	26,016	14,521	5,610	1,756	739	1,268	3,697	2,423	3.69	AN
1979	8,065	10,288	13,870	15,143	32,374	16,185	4,098	1,382	639	1,203	1,815	2,309	3.67	AN
1945	2,813	20,396	10,959	16,739	26,585	24,975	8,797	1,951	622	2,634	4,605	10,244	3.59	AN
1999	6,013	12,832	7,818	13,029	27,242	19,262	4,855	1,553	1,065	603	976	655	3.59	AN
1963	5,171	17,820	6,163	14,134	28,163	23,513	9,431	2,114	941	1,008	4,571	2,293	3.57	AN
1927	3,463	15,099	9,659	19,277	27,073	25,311	7,480	1,577	639	894	4,487	2,325	3.56	AN
1935	6,293	6,108	8,000	26,336	28,959	26,353	5,707	1,480	487	602	891	894	3.56	AN
1923	6,683	5,477	6,016	16,000	29,203	16,303	8,049	1,659	1,160	1,350	824	813	3.55	AN
1973	7,236	13,351	11,301	15,261	35,512	20,824	4,000	1,350	504	911	7,143	6,585	3.50	AN
1932	4,943	16,414	9,285	14,218	27,886	27,630	9,203	1,854	605	488	319	650	3.41	AN
2000	6,101	17,117	12,764	17,279	26,773	15,692	3,436	1,491	844	914	911	989	3.38	AN
1940	12,374	15,604	17,984	18,672	30,894	17,328	3,366	748	218	504	689	7,203	3.36	AN
1946	6,098	4,018	8,455	19,126	25,301	13,513	3,951	992	454	1,203	3,731	4,423	3.30	AN
1921	9,382	8,775	11,935	13,849	22,748	23,748	5,528	1,041	521	390	437	4,016	3.23	AN
1970	19,122	7,802	10,862	9,076	20,667	15,429	4,309	1,285	538	455	3,176	5,821	3.18	AN
1951	8,927	8,703	8,894	13,160	17,886	12,706	3,837	894	286	569	1,311	6,114	3.14	AN
1962	3,089	14,577	7,285	21,109	19,951	23,008	6,976	1,350	471	878	538	1,089	3.07	BN
1953	6,959	3,532	5,041	13,681	12,976	19,025	7,854	1,106	420	423	857	1,073	3.03	BN
1957	1,610	5,586	7,333	9,294	19,772	20,471	4,081	927	420	732	1,042	2,244	3.01	BN
1925	2,081	11,568	8,000	17,849	26,049	16,689	5,837	1,659	487	829	857	1,382	2.93	BN
1971	5,724	5,243	7,203	10,924	17,545	19,832	5,821	1,398	622	407	1,597	3,870	2.89	BN
1950	3,593	7,261	6,244	17,832	23,285	15,210	3,512	650	319	911	25,798	27,122	2.85	BN
2003	4,160	3,956	6,416	10,996	25,160	18,775	3,235	1,458	625	304	673	3,256	2.82	BN
1944	1,984	4,631	7,593	8,555	22,829	13,782	5,106	992	336	488	4,185	3,642	2.76	BN
1954	2,049	5,135	10,260	18,370	22,569	9,597	2,618	472	235	276	824	2,114	2.72	BN
1948	1,610	1,622	3,821	11,529	22,667	21,479	4,667	748	336	407	555	959	2.70	BN
1928	2,667	4,757	15,837	14,303	20,748	7,798	1,626	455	202	211	504	894	2.63	BN
1949	1,073	2,162	6,455	15,261	22,325	12,437	2,130	650	353	325	723	748	2.53	BN
1966	4,244	4,162	7,447	16,000	17,480	5,429	1,545	683	420	455	2,303	12,049	2.51	BN
1933	1,545	1,928	4,293	9,042	12,813	20,622	4,016	878	454	195	487	2,146	2.44	D
1981	2,732	3,622	6,179	12,672	15,886	8,168	1,561	748	555	1,041	6,739	8,943	2.44	D
1985	2,179	4,108	6,179	15,563	16,211	7,059	1,545	699	756	1,106	2,487	4,049	2.40	D
2002	4,756	4,151	6,662	15,406	17,845	10,623	1,779	484	289	191	3,261	3,297	2.34	D
1926	1,057	5,820	6,065	20,655	16,455	5,462	1,285	358	218	293	3,714	3,593	2.30	D
1955	3,236	3,261	4,260	7,597	18,699	15,630	2,878	618	218	260	672	35,902	2.30	D
1959	2,976	6,649	6,309	11,798	10,959	6,924	1,333	358	2,017	569	454	537	2.21	D
1968	2,195	6,685	5,919	9,798	13,154	6,622	1,398	699	387	618	3,076	3,935	2.21	D
2004	3,229	5,981	12,048	13,528	14,527	7,336	1,950	637	319				2.21	D
1939	2,081	3,243	6,992	14,773	10,488	4,403	1,350	569	689	1,870	807	878	2.20	D
2001	1,598	3,248	8,439	11,258	20,697	3,891	1,233	339	300	340	1,603	4,366	2.20	D
1964	2,537	2,559	3,577	8,571	14,878	10,353	2,228	748	403	455	2,387	23,008	2.19	D
1947	2,423	4,541	6,634	10,353	17,252	6,235	1,447	358	286	1,415	1,109	797	2.18	D
1972	2,846	3,964	9,138	8,269	16,569	10,185	1,724	488	1,176	797	1,748	3,496	2.16	D
1994	1,166	2,837	4,686	9,112	13,315	6,189	1,377	795	484	1,208	2,612	2,572	2.05	C
1930	1,870	3,568	7,041	12,101	12,959	13,059	2,520	569	269	504	857	537	2.02	C
1929	1,041	2,198	4,439	7,429	17,642	10,639	2,488	488						

A record of flow at Vernalis has been maintained by USGS for many years. Table 17 presents the record from USGS records by water year. The most recent record of flow is extracted from the Reclamation record that calculates the daily Delta Outflow Index.

Table 18 presents State Water Project and Central Valley Project diversion data. The State Water Project diversion values reflect data extracted for the DAYFLOW variable “SWP”, with the values for water years after 2002 representing diversions to Clifton Court Forebay. The Central Valley Project diversion values reflect data extracted for the DAYFLOW variable “CVP, with the values for water year after 2002 representing the U.S. Bureau of Reclamation record for Tracy Pumping Plant diversions. Table 19 presents the same data as the summation of the two diversions, expressed in average monthly flow (cfs).

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Table 17

Flow at Vernalis
(Values in Average Monthly CFS)

WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	60-20-20	
													MAF	Type
1924	2591	1316	1573	1478	1450	1035	1476	1275	575	420	420	417	1.42	C
1925													2.93	BN
1926													2.30	D
1927													3.56	AN
1928													2.63	BN
1929													2.00	C
1930	1407	1234	1285	1799	1702	2453	2581	2214	2754	1237	919	1433	2.02	C
1931	1668	1644	1913	1546	1603	880	389	444	392	233	228	320	1.20	C
1932	477	643	1251	3340	11158	4886	4814	11591	15101	5792	1164	1067	3.41	AN
1933	1671	1897	1869	2007	3007	1737	1147	1383	5309	1113	666	1150	2.44	D
1934	1533	1528	2408	2745	2241	1695	702	639	627	395	383	501	1.44	C
1935	849	1291	1606	3637	3537	4074	14759	16381	15778	2698	994	1350	3.56	AN
1936	2033	1939	2535	3304	12857	14168	13023	16781	11120	3047	1121	1281	3.74	AN
1937	1889	1960	2855	3290	12403	13207	14465	20048	15559	3260	1129	1396	3.90	W
1938	1898	1979	5307	6198	23440	34148	22412	28340	36653	14607	3359	2225	5.89	W
1939	2665	3799	3700	4090	4174	2026	2467	2035	991	756	715	1034	2.20	D
1940	1484	1436	1586	4130	8895	14945	16908	14297	10851	1994	1186	1688	3.36	AN
1941	1603	1715	3011	7133	13115	21164	17088	21280	22305	9141	2094	1686	4.43	W
1942	2198	2330	4775	8430	12738	8674	13415	16529	22242	7775	1684	1916	4.44	W
1943	2236	2333	4365	5646	13078	23118	18062	14970	11654	2208	1542	1689	4.03	W
1944	2108	1952	2387	2689	2966	4792	2300	3826	3384	1245	1091	1199	2.76	BN
1945	1648	2473	3787	3863	10889	9214	8988	13913	11324	3880	1779	2031	3.59	AN
1946	2758	3484	5732	9509	5959	3733	6015	13056	5784	1465	1224	1483	3.30	AN
1947	1814	2616	3616	2782	2409	2259	1488	2045	943	527	569	1074	2.18	D
1948	1314	1773	1695	1384	857	599	1393	5000	8606	1328	725	1088	2.70	BN
1949	1548	1492	1486	1740	1416	3468	2058	3529	2003	562	602	715	2.53	BN
1950	1267	1582	1571	1998	3545	2205	5367	5011	5014	687	621	946	2.85	BN
1951	1324	8103	25124	10278	10820	7768	2653	6523	3338	870	759	1035	3.14	AN
1952	1784	1763	3135	8850	11926	13745	20198	27634	23342	3497	1355	1620	5.17	W
1953	1865	2176	3663	5946	3676	1162	1520	3059	4915	1604	747	1093	3.03	BN
1954	1629	1662	1762	1656	2360	4458	5059	6715	1286	542	546	754	2.72	BN
1955	1042	1386	1814	2965	2453	1561	917	1150	1496	416	431	610	2.30	D
1956	799	1071	10903	27040	17909	7485	6262	13973	12252	3482	1902	1885	4.46	W
1957	1998	2212	2505	1921	1764	3054	1326	2581	3760	875	753	1149	3.01	BN
1958	2055	2249	2493	2420	5438	12092	27922	22415	15618	4091	1535	2243	4.77	W
1959	2835	3633	2954	2331	3270	2068	812	791	533	312	402	786	2.21	D
1960	876	1051	1183	1395	1785	595	517	618	293	222	267	385	1.85	C
1961	712	1013	1287	1338	1119	444	200	380	207	104	151	321	1.38	C
1962	410	593	711	804	5782	5931	2085	2620	3497	856	694	993	3.07	BN
1963	1453	1643	2434	1754	8191	2607	8616	9337	6664	1821	1095	1515	3.57	AN
1964	2677	3022	3532	2871	1759	929	764	703	650	383	440	900	2.19	D
1965	1411	2356	6036	14381	7933	5325	9860	5295	5651	1973	1220	1678	3.81	W
1966	2944	3644	6232	5267	4094	1914	982	863	570	440	500	725	2.51	BN
1967	1101	1330	4375	3207	6368	6535	14496	20361	20002	10448	2020	2029	5.25	W
1968	2725	3473	3634	2940	2712	3093	1436	891	592	503	768	938	2.21	D
1969	1384	1604	2532	13812	32576	30868	22119	24608	27889	5802	2324	3255	6.09	W
1970	4461	4628	4011	11114	9197	7178	1673	2393	2704	1330	1044	1319	3.18	AN
1971	1466	1655	5043	5203	4394	2589	1961	1832	2322	1066	892	1097	2.89	BN
1972	2252	1646	2398	3116	2800	1379	1037	744	587	481	543	1563	2.16	D
1973	1991	2217	2501	4058	7994	7610	4204	2936	2576	1082	1067	1471	3.50	AN
1974	2546	2281	3586	7780	5097	4816	5850	4106	3860	1636	1615	2846	3.90	W
1975	3496	3891	4161	3766	6216	5683	3957	3971	5708	1718	1680	2653	3.85	W
1976	4542	3906	3744	3326	2192	1822	1293	939	798	671	1055	1067	1.57	C
1977	1273	1136	965	1091	789	524	212	400	118	93	124	179	0.84	C
1978	246	430	506	2275	7324	11473	20032	19116	7070	1907	1418	2731	4.58	W
1979	3327	3498	2812	5232	7143	8650	3507	2523	2254	1333	1451	1841	3.67	AN
1980	2790	2312	2486	13067	19460	25292	10250	9910	5306	3383	1969	3802	4.73	W
1981	4071	3278	2949	3250	2881	3121	2533	1966	1499	1265	1269	1181	2.44	D
1982	1386	1564	1852	3888	6650	10060	22965	18650	7585	6162	4016	6130	5.45	W
1983	8178	6975	16490	19064	31625	40028	36450	31765	26086	19224	9033	11311	7.22	W
1984	13314	10676	19122	25627	11228	7500	4285	3239	2297	1904	2179	2918	3.69	AN
1985	3813	2823	4770	4064	3244	2736	2467	2132	1748	2557	2600	1925	2.40	D
1986	2072	1929	2205	2059	8750	25031	19592	8762	6234	2893	3183	4181	4.31	W
1987	3741	2809	3705	2305	2138	3414	2867	2177	1990	1632	1626	1597	1.86	C
1988	1369	1548	1278	1482	1440	2240	2146	1781	1711	1357	1557	1452	1.48	C
1989	1126	1274	1372	1255	1235	2023	1915	1949	1583	1284	1169	1353	1.96	C
1990	1402	1403	1380	1242	1366	1759	1309	1280	1116	1010	1033	876	1.51	C
1991	993	1115	918	816	758	1779	1168	1049	568	594	537	574	1.96	C
1992	788	1084	895	959	2167	1469	1418	891	481	447	483	635	1.56	C
1993	849	956	981	4119	3037	2702	3421	3609	2341	1509	1998	2771	4.20	W
1994	3040	1759	1628	1773	1989	2205	1863	1972	1109	1135	867	869	2.05	C
1995	1369	1288	1295	4598	6564	14609	19935	22183	14013	9879	3924	4735	5.95	W
1996	5691	2429	2250	2430	11891	15068	7501	8420	3739	2209	2033	2164	4.12	W
1997	2690	2715	12190	30371	35080	13032	4728	4784	2647	1756	1875	2069	4.13	W
1998	2705	1981	2116	6024	28140	19348	21939	17944	17761	13190	5441	5758	5.65	W
1999	6152	3290	4330	4729	11704	8330	6437	5550	3016	2094	1969	2037	3.59	AN
2000	2531	2158	1688	2136	7564	12096	5013	4813	2772	1898	2171	2330	3.38	AN
2001	2806	2413	2212	2457	3194	3559	3004	3642	1599	1401	1338	1374	2.20	D
2002	1886	2064	2100	2696	1896	2128	2599	2794	1424	1273	1150	1161	2.34	D
2003	1563	1619	1950	1930	1922	2188	2656	2691	2230	1481	1431	1383	2.82	BN
2004	1927	1694	1516	1684	2202	3273	2759	2683	1466	1146	1136	1125	2.21	D

Table 18

State Water Project Diversions														
DAYFLOW Variable SWP - 1,000 acre-feet														
WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total	
1956	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1957	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1958	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1959	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1960	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1961	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1962	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1963	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1964	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1965	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1966	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1967	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1968	8	5	10	27	3	71	88	79	17	13	47	108	476	
1969	142	157	158	172	92	70	75	60	29	32	34	11	1,032	
1970	17	37	45	40	21	27	52	17	34	35	51	39	416	
1971	26	88	113	112	42	51	60	45	68	102	123	51	881	
1972	52	34	24	33	26	160	156	125	97	36	135	168	1,046	
1973	180	207	211	82	27	38	47	103	150	165	180	104	1,494	
1974	151	106	109	44	111	117	90	158	262	361	283	91	1,885	
1975	62	111	171	167	135	137	118	93	12	16	254	233	1,510	
1976	238	245	238	254	175	228	26	42	18	19	130	209	1,822	
1977	84	94	68	205	106	97	14	72	17	20	15	9	801	
1978	8	51	224	365	343	108	35	59	201	212	247	211	2,063	
1979	127	135	169	81	90	143	157	184	179	282	347	278	2,172	
1980	224	282	360	387	188	71	87	95	178	130	276	238	2,516	
1981	184	147	181	253	196	175	250	57	16	144	302	189	2,094	
1982	225	188	266	211	311	384	363	177	46	59	219	183	2,632	
1983	185	154	323	377	348	83	7	24	108	70	168	40	1,887	
1984	21	45	26	20	113	157	215	165	178	279	299	131	1,650	
1985	115	238	273	116	200	278	197	184	196	283	338	266	2,683	
1986	220	207	363	307	112	45	120	184	178	240	331	375	2,681	
1987	208	181	188	132	151	190	153	123	119	265	305	272	2,288	
1988	104	82	298	383	333	259	255	184	167	200	245	197	2,707	
1989	114	140	178	361	220	371	375	184	120	279	391	365	3,097	
1990	374	361	382	389	351	389	309	21	18	150	208	147	3,099	
1991	139	130	166	180	98	364	270	79	52	45	126	132	1,779	
1992	208	64	79	185	203	386	71	43	56	23	91	165	1,574	
1993	43	67	170	465	284	120	161	105	121	257	382	381	2,555	
1994	396	154	385	213	106	115	20	43	19	104	210	215	1,980	
1995	170	212	240	458	257	31	8	77	199	364	290	169	2,476	
1996	181	79	0	348	171	174	106	157	296	371	380	345	2,608	
1997	336	349	211	45	90	162	106	79	153	322	268	339	2,462	
1998	266	293	420	197	7	14	2	43	129	213	264	266	2,115	
1999	295	129	128	85	52	183	186	99	59	376	409	409	2,411	
2000	304	311	234	396	422	344	189	98	252	359	377	388	3,672	
2001	307	322	292	241	261	361	98	34	9	217	249	213	2,603	
2002	60	192	377	397	275	239	125	38	128	383	414	246	2,873	
2003	108	187	256	355	355	382	153	61	355	412	431	404	3,458	
2004	176	227	263	419	368	423	127	46	101	389	408	298	3,245	

Central Valley Project Diversions														
DAYFLOW Variable CVP - 1,000 acre-feet														
WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total	
1956	69	21	8	0	9	25	39	22	64	195	179	93	726	
1957	40	4	3	2	56	108	136	131	189	213	188	112	1,181	
1958	64	26	6	1	3	15	6	33	41	174	188	106	663	
1959	71	29	6	15	32	121	159	157	203	236	202	109	1,341	
1960	74	35	11	11	33	136	151	159	218	241	209	111	1,390	
1961	89	30	-	15	42	123	168	167	228	275	231	120	1,489	
1962	81	35	12	21	11	53	160	177	218	251	219	119	1,357	
1963	83	44	0	28	42	109	70	167	204	249	227	120	1,344	
1964	123	29	7	32	88	129	175	190	216	273	250	136	1,647	
1965	132	39	-	10	83	132	68	190	213	259	229	116	1,472	
1966	105	35	-	4	48	149	179	199	232	270	251	128	1,599	
1967	109	55	26	45	38	119	68	112	122	158	256	149	1,258	
1968	98	57	26	39	99	202	224	256	250	291	240	214	1,997	
1969	233	137	68	177	167	136	112	134	112	166	268	134	1,844	
1970	100	22	-	25	82	108	217	219	252	273	219	136	1,653	
1971	126	28	0	1	128	234	199	222	264	281	269	165	1,918	
1972	176	138	119	64	187	240	210	250	198	260	270	234	2,346	
1973	207	-	0	90	35	39	147	275	273	285	276	226	1,855	
1974	205	178	95	76	193	261	153	269	262	277	278	198	2,444	
1975	212	-	1	165	233	231	251	243	238	284	276	216	2,349	
1976	222	228	239	249	264	281	262	279	222	213	281	270	3,008	
1977	195	150	96	223	125	125	60	102	18	22	67	98	1,281	
1978	30	97	133	238	226	245	163	127	246	277	256	225	2,264	
1979	182	191	195	166	68	122	189	184	178	280	280	261	2,296	
1980	240	61	-	-	158	199	228	179	170	281	279	209	2,006	
1981	219	229	233	251	203	119	219	193	206	268	253	197	2,590	
1982	130	85	48	111	210	254	205	183	175	179	267	123	1,971	
1983	138	199	193	238	219	242	218	174	177	244	262	199	2,502	
1984	128	57	99	84	219	263	236	184	178	288	269	186	2,190	
1985	222	232	243	237	224	243	232	184	178	281	269	244	2,790	
1986	241	221	238	239	219	150	166	184	178	274	270	239	2,618	
1987	246	220	247	246	224	146	258	184	178	273	281	255	2,758	
1988	246	234	248	250	236	251	243	183	178	275	279	273	2,895	
1989	218	214	256	257	228	253	237	184	178	291	289	263	2,870	
1990	259	248	253	254	227	253	253	170	178	225	186	190	2,697	
1991	68	94	140	116	145	229	172	79	53	100	102	110	1,408	
1992	106	120	114	197	142	252	102	52	47	55	61	95	1,342	
1993	59	76	75	246	224	251	171	94	118	265	268	261	2,108	
1994	265	252	255	140	215	139	93	69	79	154	150	211	2,023	
1995	152	148	217	255	234	146	198	184	242	274	270	261	2,581	
1996	266	251	263	263	206	45	143	128	263	274	269	256	2,626	
1997	258	245	251	124	31	267	162	107	264	270	272	257	2,510	
1998	263	250	251	243	164	127	86	143	170	250	269	259	2,474	
1999	256	127	2	183	240	253	102	105	199	272	270	255	2,262	
2000	261	250	156	197	236	208	131	78	181	266	270	253	2,487	
2001	259	242	240	168	195	116	130	53	178	254	254	243	2,332	
2002	223	223	226	255	200	257	128	53	151	268	267	255	2,505	
2003	251	218	205	262	237	267	113	90	262	258	264	253	2,680	
2004	264	257	255	268	228	254	216	59	116	269	272	261	2,718	

Table 19

State Water Project and Central Valley Project Combined Diversions - Average Monthly CFS

WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1956	1,123	350	138	6	165	413	650	362	1,083	3,168	2,914	1,566
1957	657	66	56	31	1,004	1,756	2,288	2,122	3,174	3,471	3,049	1,875
1958	1,035	440	98	15	55	250	104	530	684	2,832	3,063	1,779
1959	1,149	496	96	250	584	1,962	2,667	2,545	3,418	3,841	3,289	1,833
1960	1,203	594	175	184	596	2,206	2,532	2,589	3,665	3,926	3,394	1,873
1961	1,449	503	-	245	760	2,004	2,818	2,711	3,834	4,465	3,761	2,025
1962	1,320	581	191	343	201	857	2,688	2,873	3,669	4,080	3,560	2,006
1963	1,347	746	6	454	763	1,769	1,172	2,708	3,429	4,054	3,698	2,014
1964	1,995	483	109	524	1,582	2,100	2,947	3,090	3,637	4,433	4,059	2,283
1965	2,145	655	-	170	1,501	2,149	1,136	3,090	3,579	4,219	3,725	1,943
1966	1,699	587	-	60	858	2,418	3,006	3,243	3,895	4,397	4,082	2,156
1967	1,776	924	424	735	685	1,938	1,147	1,827	2,055	2,566	4,157	2,506
1968	1,723	1,040	595	1,077	1,832	4,434	5,250	5,451	4,485	4,943	4,673	5,418
1969	6,098	4,929	3,677	5,687	4,650	3,349	3,139	3,161	2,381	3,228	4,921	2,421
1970	1,902	994	727	1,067	1,867	2,192	4,525	3,845	4,801	5,015	4,393	2,929
1971	2,468	1,952	1,851	1,841	3,076	4,630	4,351	4,337	5,588	6,214	6,377	3,632
1972	3,708	2,898	2,329	1,568	3,834	6,506	6,150	6,090	4,952	4,811	6,587	6,760
1973	6,290	3,483	3,437	2,811	1,114	1,264	3,256	6,156	7,105	7,322	7,418	5,549
1974	5,799	4,773	3,324	1,958	5,470	6,134	4,081	6,955	8,807	10,373	9,126	4,851
1975	4,450	1,865	2,787	5,400	6,630	5,987	6,189	5,468	4,203	4,880	8,612	7,561
1976	7,467	7,953	7,752	8,182	7,906	8,264	4,838	5,216	4,034	3,773	6,683	8,055
1977	4,532	4,092	2,671	6,965	4,164	3,598	1,241	2,822	598	685	1,345	1,795
1978	615	2,500	5,806	9,811	10,254	5,735	3,323	3,018	7,509	7,952	8,179	7,321
1979	5,015	5,478	5,923	4,012	2,855	4,318	5,820	5,990	5,988	9,141	10,192	9,049
1980	7,550	5,767	5,858	6,293	6,247	4,386	5,301	4,464	5,859	6,687	9,022	7,505
1981	6,558	6,325	6,733	8,189	7,190	4,782	7,889	4,061	3,723	6,695	9,023	6,488
1982	5,767	4,594	5,112	5,229	9,402	10,360	9,560	5,863	3,701	3,878	7,915	5,137
1983	5,248	5,932	8,384	9,989	10,225	5,278	3,785	3,209	4,794	5,116	6,993	4,017
1984	2,418	1,706	2,026	1,704	5,990	6,843	7,570	5,669	5,981	9,219	9,233	5,325
1985	5,482	7,898	8,396	5,738	7,637	8,469	7,208	5,983	6,286	9,171	9,876	8,561
1986	7,498	7,190	9,776	8,865	5,966	3,161	4,794	5,996	5,992	8,349	9,760	10,310
1987	7,381	6,732	7,069	6,155	6,758	5,463	6,916	4,995	4,998	8,745	9,528	8,860
1988	5,690	5,302	8,882	10,293	10,243	8,292	8,372	5,969	5,799	7,729	8,508	7,900
1989	5,405	5,950	7,056	10,056	8,059	10,138	10,292	5,992	5,013	9,274	11,054	10,560
1990	10,302	10,235	10,324	10,455	10,419	10,430	9,446	3,114	3,295	6,091	6,420	5,670
1991	3,364	3,766	4,974	4,810	4,372	9,638	7,418	2,557	1,763	2,362	3,709	4,068
1992	5,116	3,084	3,133	6,209	6,209	10,369	2,908	1,545	1,733	1,273	2,471	4,364
1993	1,661	2,400	3,985	11,564	9,141	6,025	5,587	3,237	4,015	8,483	10,571	10,783
1994	10,753	6,825	10,411	5,734	5,791	4,139	1,892	1,826	1,651	4,202	5,848	7,149
1995	5,239	6,045	7,443	11,594	8,855	2,875	3,460	4,238	7,414	10,389	9,097	7,230
1996	7,280	5,551	4,277	9,936	6,808	3,570	4,173	4,623	9,382	10,472	10,557	10,093
1997	9,662	9,982	7,517	2,757	2,185	6,984	4,495	3,026	7,017	9,637	8,787	10,028
1998	8,604	9,133	10,899	7,148	3,089	2,294	1,478	3,022	5,030	7,529	8,666	8,832
1999	8,955	4,313	2,115	4,366	5,260	7,080	4,831	3,317	4,333	10,542	11,047	11,147
2000	9,183	9,419	6,347	9,643	11,856	8,967	5,386	2,851	7,280	10,159	10,513	10,769
2001	9,194	9,477	8,662	6,662	8,222	7,749	3,833	1,407	3,148	7,658	8,171	7,656
2002	4,604	6,986	9,799	10,599	8,553	8,073	4,249	1,481	4,682	10,575	11,067	8,410
2003	5,834	6,805	7,491	10,024	10,658	10,561	4,474	2,446	10,371	10,896	11,301	11,042
2004	7,150	8,138	8,411	11,158	10,733	11,008	5,773	1,711	3,647	10,694	11,059	9,392

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Attachment A

Stanislaus River Basin Assumptions / Operating Criteria

The assumptions used to model the Stanislaus in the preliminary CALSIM II test simulation are outlined in detail below.

- **1997 New Melones Interim Plan of Operations:**

The New Melones Interim Plan of Operations (IPO) allocates supply to four purposes: fisheries, water quality, X2 requirement support, and water supply for CVP contractors (i.e., SEWD and CSJWCD). Reclamation provides water to Oakdale Irrigation District (OID) and South San Joaquin Irrigation District (SSJID) according to a separate agreement with these agencies.

The amount of water allocated to each purpose (other than to OID/SSJID) in the IPO depends on end-of-February storage plus March-September forecasted inflow, as shown below in Table 2. CALSIM makes releases to the Stanislaus River below Goodwin Dam in the following order:

1. Releases for the fishery according to an assumed pattern associated with the allocated volume.
2. Releases up to the amount needed above the fishery release to meet the Vernalis water quality requirement, these accumulated releases cannot exceed the annual Vernalis water quality allocation.
3. Releases for DO at Ripon (surrogated as a flow requirement at Goodwin), with no volume limitation except the flow requirement itself.
4. Releases for the Vernalis D-1641 Bay-Delta flow requirement. The IPO assumed that the Vernalis flow requirement release occurred as the second step; however, for modeling simplicity the release is modeled last. Results are rarely affected by the shift in order.

Table 2: New Melones Interim Plan of Operation Allocations (1,000 AF)

New Melones Storage Plus Inflow		Fishery		Vernalis Water Quality		Bay-Delta		CVP Contractors*	
From	To	From	To	From	To	From	To	From	To
0	1,400	0	98	0	70	0	0	0	0
1,400	2,000	98	125	70	80	0	0	0	0
2,000	2,500	125	345	80	175	0	0	0	59
2,500	3,000	345	467	175	250	75	75	90	90
3,000	6,000	467	467	250	250	75	75	90	90

* CVP Contractors: Stockton East Water District and Central San Joaquin Water Conservation District

Deliveries to the OID and SSJID are limited by the following equation:

Oakdale ID/South San Joaquin ID Maximum Diversion

- Annual volume equals 600 TAF unless water year inflow is less than 600 TAF.
- When less than 600 TAF the following formula is applied:

$$\text{Entitlement} = \text{Inflow} + (600 - \text{Inflow}) / 3$$

Each district is entitled to one-half of the water available.

- **Fishery Releases - 1987 Reclamation, DFG Agreement, and U.S. Fish and Wildlife Service discretionary use of CVPIA 3406(b)(2)**

Depending on the fishery allocation (0 - 467 TAF/yr) under the New Melones IPO, the fishery release volume at Goodwin Dam is assumed to be managed under the base and pulse flow schedules shown below. Values are interpolated between the seven discrete schedules. Fishery releases are based on a 1987 agreement between Reclamation and the California Department of Fish and Game and U.S. Fish and Wildlife Service discretionary use of the CVPIA 3406(b)(2) account to support release goals established by the Anadromous Fish Restoration Program (AFRP). Table 3 depicts the volumes and patterns used in CALSIM for the interpolation. These values are consistent with the modeling used during the finalization of the IPO.

Table 3: Stanislaus River Base and Pulse Flow Schedules

Annual Fishery Allocation (TAF)	0	98.4	243.3	253.8	310.3	410.2	466.8
Base Flow Schedules (cfs)							
January	0	125	250	275	300	350	400
February	0	125	250	275	300	350	400
March	0	125	250	275	300	350	400
April	0	250	300	300	900	1500	1500
May	0	250	300	300	900	1500	1500
June	0	0	200	200	250	800	1500
July	0	0	200	200	250	300	300
August	0	0	200	200	250	300	300
September	0	0	200	200	250	300	300
October	0	110	200	250	250	350	350
November	0	200	250	275	300	350	400
December	0	200	250	275	300	350	400
Pulse Flow Schedules (cfs)							
Apr 15 – May 16	0	500	1500	1500	1500	1500	1500

- **SWRCB D-1422 - Stanislaus River Dissolved Oxygen**

CALSIM II does not have the ability to predict or adjust operations for dissolved oxygen in the Stanislaus River. D-1422 requires that water be released from New Melones to maintain the dissolved oxygen concentration in the Stanislaus River at a value of at least 7 mg/l as measured near Ripon. As a surrogate, specific release volumes are required from Goodwin Dam to meet this criterion. The surrogate volumes are shown in Table 4 below.

Table 4: Surrogate Dissolved Oxygen Release Volumes (1,000 AF)

Month	Release Volume
June	13.2
July	16.2
August	16.4
September	14.3

- **SWRCB D-1641 – Vernalis Water Quality**

The salinity objective near Vernalis was originally defined in SWRCB D-1422. SWRCB D-1641 provisions have revised this requirement. CALSIM II calculates the salinity concentration at Vernalis by evaluating the blended flows and their associated assumed salinity concentrations that reach Vernalis. D-1641 requires salinity near Vernalis to be less than 0.7 electrical conductivity (EC) for April – August and less than 1.0 EC September – March. Releases are made from New Melones, as required, up to the allocation provided by the New Melones IPO, to meet this criterion.

- **SWRCB D-1641 – Bay-Delta Flow (X2 Requirement Support)**

D-1641 also requires the flow at Vernalis to be maintained during the February through June period to support the 2 ppt isohaline (X2 position) in the Delta, as shown in Table 5. The objectives of the Vernalis Adaptive Management Plan (VAMP – see below) become the flow objective during the period April 15 through May 16. Releases are made from New Melones, as required, but are limited by the Bay-Delta allocation determined by the New Melones IPO.

Table 5: Bay-Delta Vernalis Flow Objectives (average monthly cfs)

San Joaquin Basin Index	X2 Required At or West of Chipps	X2 Required East of Chipps
Wet	3420	2130
Above Normal	3420	2130
Below Normal	2280	1420
Dry	2280	1420
Critical	1140	710

- **South San Joaquin Irrigation District Water Commitments**

In addition to district-area water demands, South San Joaquin Irrigation District (SSJID) demands incorporate deliveries to the South County Project (scheduled to begin operation during 2005), commitments to the San Joaquin River Agreement (VAMP) and water sales to the Stockton East Water District (SEWD). The South County Project is modeled as a 25,000 acre-feet delivery, equally distributed during the year. SSJID's commitment to the SJRA is determined dynamically each year and can range up to 11,000 acre-feet. The sale to SEWD is modeled as one-half of a 30,000 acre-feet transfer by SSJID/OID, annually dependent upon water year inflow to New Melones (Table 6).

Table 6: Total SSJID/OID Transfer to SEWD (1,000 AF)

New Melones Inflow	Total Transfer Volume
0	8
450	12.5
500	30

- **Oakdale Irrigation District Water Commitments**

In addition to district-area water demands, Oakdale Irrigation District (OID) demands incorporate commitments to the San Joaquin River Agreement (SJRA) and water sales to SEWD. OID's commitments to the SJRA include up to 11,000 acre-feet per year towards VAMP, 15,000 acre-feet of water towards fall (October) river releases, and any portion of the VAMP water not used during the VAMP pulse flow period also for fall releases (equally during November and December). OID's sale to SEWD mirrors the sale by SSJID.

VAMP releases by SSJID/OID are made to the Stanislaus River on top of IPO releases whenever there is capacity available below a limit of 1,500 cfs at Goodwin. If the VAMP release is limited, the increment of release not made at Goodwin is made from the Tuolumne River. An accounting is made of such a release, and subsequently water is transferred from SSJID/OID to the Modesto Irrigation District at a rate not to exceed 50 cfs (assumed conveyance limitation).

- **IPO Deliveries to SEWD and CSJWCD**

Up to 90,000 acre-feet of water is modeled as a diversion from Goodwin to SEWD and CSJWCD.

Table 7: Assumed Division of IPO Allocation to SEWD and CSJWCD (1,000 AF)

New Melones Storage Plus Inflow		SEWD plus CSJWCD	
From	To	From	To
0	1,400	0	0
1,400	2,000	0	0
2,000	2,500	0	59
2,500	3,000	90	90
3,000	6,000	90	90

- **New Melones Flood Control and Drawdown Target Storage**

New Melones storage is limited to the USCOE flood control envelope for rainfloods as shown below in Table 8.

Table 8: End-of-Month Storage for Flood Control (1,000 AF)

Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1,970	1,970	1,970	1,970	1,970	2,030	2,220	2,420	2,420	2,420	2,420	2,270

Results indicate that unless otherwise modified New Melones storage would on occasion be above the September flood control envelope and thus CALSIM would produce a "spill" during the fall. Normal operations would include foresight of this event and likely distribute such a release earlier during the year. Iterative analysis to smooth this release during the

summer demonstrated that target storages of 2,300 TAF July, 2,130 TAF August, and 2,000 TAF September would accomplish an objective of not producing fall-time “spills” of water to reach flood control objectives.

Goodwin releases are limited to not exceed 1,500 cfs unless required to maintain the flood control target storages.

Petition to De-List the Lower San Joaquin River

For

Impairment by Salt and Boron

EXHIBIT F

Presentation of Dr. Jim Brownell, PhD

Submitted By:

SAN JOAQUIN RIVER GROUP AUTHORITY

Presentation of James R. Brownell, Ph. D¹.

The Vernalis Agricultural Water Quality Objective is based on the quality of water sufficient to maintain a 100% yield of agriculture crops irrigated with water diverted from the San Joaquin River in the Southern Delta. The major crops, at the time that the objectives were set, were alfalfa, dry beans and corn. The crop tolerance to irrigation water salinity has been published in several sources, Maas and Hoffman (1977), Ayers and Westcot (1985) and most recently by Grattan (2002)

Review of terms:

Salinity refers to the total dissolved ionic solids in water.

Salinity has been reported in a number of units:

Total Dissolved Solids (tds) as either parts per thousand (ppt), parts per million (ppm) or milligrams per kilogram (mg/Kg), ppm and mg/Kg are numerically equal.

Electrical Conductivity (EC). Since salts are charged particles their concentration can be estimated by the electrical conductivity of the solution. Earlier salinity measurements were reported as millimhos per centimeter (mmhos/cm), with the International Standardization of Nomenclature (ISN) the EC values are now reported as deciSiemens per meter (dS/m), units selected to be numerically equal to the earlier mmhos/cm. Total dissolved solids (tds) are estimated from EC in dS/m by; $EC_w \times 700 = \text{total dissolved solids, in ppm or mg/Kg}$.

EC values are often subscripted to indicate the source of the water evaluated:

EC_w is the electrical conductivity of a water source; EC_{iw} as an example, for irrigation water.

EC_e is the electrical conductivity of the saturation extract of a soil.

Review of Field Work

San Joaquin River salinity objectives were based on the salinity model and studies presented by Ayers and Westcot, based on earlier work at the USDA Salinity Laboratory in Riverside California, Maas and Hoffman (1977). This work on establishing crop salinity relationships was done in large pots, under controlled conditions and did not take into consideration leaching that occurs with natural rainfall. Early salinity work resulted in a salinity threshold for irrigation water (EC_{iw}) of 1.3 dS/m for alfalfa, 0.7 dS/m for beans and 1.1 dS/m for corn. The threshold is the maximum salinity that will maintain 100% yield potential. Scientifically there is uncertainty in any value resulting from experimentation and it is now known these salinity objectives are too conservative. The 100% yield potential, itself, is suspect, since plant nutritionists have observed that given

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variability of field conditions, due to factors such as weather, seeds, and all the other factors that can affect yield, a 10% yield loss, absent specific plant symptoms, cannot be observed (Uhlrich, 1959 and Epstein, 2004).

A number of field experiments on the impact of irrigation water salinity on corn production in the South Delta, reported by Hoffman, et al (1983), found that an EC_{iw} of 1.3 dS/m was sufficient to maintain maximum yield potential.

Plant – Soil – Water Relationships

The conductivity of irrigation water (EC_{iw}) is an easily measured value and can be used to compare the impact of different irrigation water supplies on crop production. However, the crop actually responds to the average salinity of the soil water, often measured as the salinity of the saturated extract (EC_e) in the crop root zone. The average EC_e can be estimated from the EC_{iw} using the following assumptions:

1. Water is extracted from the root zone in a 40-30-20-10 % pattern from succeeding quarters of the root zone, that is 40 % of the water used by the plant is extracted from the top fourth of its active root zone, 30 % from the second, etc.
2. Soil salinity can be predicted from water salinity ($EC_e = 1.5 EC_{iw}$), with an EC_{iw} of 0.7 dS/m EC_{iw} than a crop threshold of 1.1 EC_e is predicted.
3. 50 % of the soil water is utilized between irrigations, typical of furrow or sprinkler irrigation scheduling.
4. The irrigation water is the only source of salinity, i.e. no major additions of soil amendments.
5. There is no significant rainfall.

Tables 1 through 5 contain examples showing the predicted EC_e resulting from different irrigation scenarios, assigned by quarters of the active root zone. These tables show the predicted salinity of the soil water (EC_e in dS/m) available to the crop roots just prior to the next crop irrigation. In Tables 1-5, the column labeled “Event” shows the irrigation event, the column labeled “Effective rooting depth” shows the effective crop rooting depth in inches at the time of the irrigation event, the column labeled “Depth” shows the depth of applied water in inches, the column labeled “Total water” shows the accumulated water applied in inches, the column labeled “ EC_w weighted ave.” shows the weighted average irrigation water salinity, based on the plant absorbing 40% of its water from the top quarter of the root zone, 30% from the second quarter of the root zone, 20% from the third quarter of the root zone, and 10% from the bottom quarter of the root zone, the column labeled “Leaching” shows the leaching percentage that is assumed to take place during that water application, the column labeled “Total irrigation water” shows the accumulated irrigation water application in inches, and the column labeled “Cumulative leaching” shows the cumulative leaching percentage for the applied water and crop water use. Finally, the columns labeled “1st”, “2nd”, “3rd”, “4th” and “Average”, represent the quarter segments of the active crop root zone at the end of that irrigation application and the predicted soil salinity (EC_e) in dS/m that the crop roots experience just prior to the next irrigation. Each quarter, or thickness, of the active root

zone, at the time of the first crop irrigation, is one fourth of twelve inches or three inches. During the winter "Rain" and "Pre-irrigation" events, the plant has yet to grow roots and there is no active root zone. As the crop matures the root zone expands to 36 inches and each quarter of the active crop root zone is then nine inches.

The leaching percentages change over time (see columns labeled "Leaching"). A normal winter rain fills the soil profile to the three foot depth with about twice as much rain occurring than is needed to rewet the soil profile based on an average annual rainfall of 12 inches. The pre-irrigation is assumed to refill the soil profile to the extent the soil has dried from evaporation or from the use of soil water by non-crop plants. Irrigation efficiencies improve over the irrigation season as the crop uses more of the soil water between irrigations. Assumed water applications are conservative for a well designed and operated furrow irrigation system. The cumulative leaching percentage (see columns labeled "Cumulative leaching") is a simple average of all leaching that has occurred to date.

Table 1 shows the soil salinity levels for a three foot root zone using irrigation water with an EC_w of 0.7 dS/m and no rainfall. The predicted soil salinity (EC_e) indicates the condition produced by this widely accepted model for estimating 100 % yield potential. This provides a baseline for comparison of irrigation water quality and quantity. In this estimation, irrigation water application was at the 22-inch annual bean water requirement with a 15% leaching factor and irrigation water salinity of 0.7 dS/m. of irrigated crops. The Ayers & Westcot model results in an average EC_e of 2.6 dS/m in the root zone at harvest. The average EC_e 2.6 dS/m is that estimated for 100% yield of beans by Ayers and Westcot with a 15 % leaching factor and no rainfall.

Table 1. Ayers & Westcot model without rainfall and irrigation water salinity (EC_w) of 0.7 dS/m

								EC_e predicted (dS/m) by quarters of the root				
Event	Effective rooting depth (in.)	Depth (in)	Total water (in.)	EC_w weighted ave. (dS/m)	Leaching (%)	Total irrigation water (in.)	Cumulative leaching (%)	1 st	2 nd	3 rd	4 th	Ave.
Irrigation water only		NA	22	0.7	15	22	15	1.1	1.7	3.0	4.7	2.6

Table 2 adds 12 inches of rainfall with the 0.7 dS/m irrigation water. The predicted soil salinity (EC_e) indicates the results likely to be produced with normal field conditions and reasonable irrigation practices. With no crop roots, water is lost only by evaporation until the first crop irrigation. Therefore soil salinities are uniform through out the soil profile. Considering an annual rainfall of 12 inches and the interaction of rain and irrigation water in the soil profile, crop-rooting depth, crop water use and leaching fractions shown in Table 2, the average salinity is much lower than the Ayers and Westcot model without rainfall (see Table 1).

Table 2. Ayers & Westcot model with a 22-inch water application, 12 inches of rainfall, and irrigation water salinity (EC_w) of 0.7 dS/m

								EC_e predicted (dS/m) by quarters of the root				
Event	Effective rooting depth (in.)	Depth (in.)	Total water (in.)	EC_w weighted ave. (dS/m)	Leaching (%)	Total irrigation water (in.)	Cumulative leaching (%)	1 st	2 nd	3 rd	4 th	Ave.
Rain	0	12	12	0.09	50	0	NA	0.1	0.1	0.1	0.1	0.1
Pre-irrigation	0	6	18	0.29	40	6	45	0.4	0.5	0.5	0.5	0.5
Crop irrigation 1	12	4	22	0.37	40	10	43	0.5	0.6	0.8	0.9	0.7
Crop irrigation 2	24	4	26	0.42	20	14	33	0.6	0.8	1.1	1.3	0.9
Crop irrigation 3	36	4	30	0.46	10	18	28	0.6	0.9	1.3	1.6	1.1
Crop irrigation 4	36	4	34	0.48	10	22	24	0.7	1.0	1.5	2.0	1.3

Table 3 presents the prediction of the Ayers and Westcot model, with a 22 inch water application, 12 inches of rainfall, and irrigation water of salinity 1.1 dS/m. The predicted soil salinity (EC_e) indicates the results likely to be produced with normal field conditions and reasonable irrigation practices with water of a higher EC than the current objective. At the end of the growing season the average EC_e is less than that predicted by the Ayers and Westcot model that does not include rainfall (see Table 1), and well within the salinity tolerance of beans for 100% crop yield.

Table 3. Ayers & Westcot model with a 22-inch water application, 12 inches of rainfall, and irrigation water salinity (EC_w) of 1.1 dS/m

								EC_e predicted (dS/m) by quarters of the root				
Event	Effective rooting depth (in.)	Depth (in.)	Total water (in.)	EC_w weighted ave. (dS/m)	Leaching (%)	Total irrigation water (in.)	Cumulative leaching (%)	1 st	2 nd	3 rd	4 th	Ave.
Rain	0	12	12	0.09	50	0	NA	0.1	0.1	0.1	0.1	0.1
Pre-irrigation	0	6	18	0.43	40	6	45	0.6	0.6	0.6	0.6	0.6
Crop irrigation 1	12	4	22	0.55	40	10	43	0.7	0.9	1.1	1.3	1.0
Crop irrigation 2	24	4	26	0.63	20	14	33	0.9	1.2	1.6	1.9	1.4
Crop irrigation 3	36	4	30	0.70	10	18	28	1.0	1.4	2.0	2.5	1.7
Crop irrigation 4	36	4	34	0.74	10	22	26	1.1	1.6	2.3	3.1	2.0

Table 4 presents the prediction of the Ayers and Westcot model, with a 22 inch water application, 12 inches of rainfall, and irrigation water salinity of 1.5 dS/m. The predicted soil salinity (EC_e) indicates the condition likely to be produced in this area with real field conditions, and careful irrigation with more saline water than the current objective. At the end of the growing season the average EC_e is about the same as that predicted by the original model that does not include rainfall.

Table 4. Ayers & Westcot model with a 22-inch water application, 12 inches of rainfall, and irrigation water salinity (EC_w) of 1.5 dS/m

								EC_e predicted (dS/m) by quarters of the root				
Event	Effective rooting depth (in.)	Depth (in.)	Total water (in.)	EC_w weighted ave. (dS/m)	Leaching (%)	Total irrigation water (in.)	Cumulative leaching (%)	1 st	2 nd	3 rd	4 th	Ave.
Rain	0	12	12	0.09	50	0	NA	0.1	0.1	0.1	0.1	0.1
Pre-irrigation	0	6	18	0.56	40	6	45	0.7	0.7	0.7	0.7	0.7
Crop irrigation 1	12	4	22	0.73	40	10	43	0.9	1.2	1.5	1.7	1.3
Crop irrigation 2	24	4	26	0.85	20	14	33	1.2	1.6	2.1	2.6	1.9
Crop irrigation 3	36	4	30	0.94	10	18	28	1.3	1.9	2.7	3.4	2.3
Crop irrigation 4	36	4	34	1.00	10	22	27	1.4	2.0	2.9	3.7	2.5

Table 5 presents the prediction of the Ayers and Westcot model, with a 40-inch water application, no rainfall, and an irrigation water salinity of 1.1 dS/m. The predicted soil salinity (EC_e) indicates the condition likely to be produced in this area with the irrigation practice reported by Banta Carbona Irrigation District, with irrigation water that has the higher salinity objective recommended in this presentation. With the addition of rainfall the actual soil salinities would be expected to be less than 1.0 trough-out the profile.

Table 5. Ayers & Westcot model a 40-inch water application, no rainfall, and an irrigation water salinity (EC_w) of 1.1 dS/m.

								EC_e predicted (dS/m) by quarters of the root				
Event	Effective rooting depth (in.)	Depth (in.)	Total water (in.)	EC_w weighted ave. (dS/m)	Leaching (%)	Total irrigation water (in.)	Cumulative leaching (%)	1 st	2 nd	3 rd	4 th	Ave.
Irrigation water only		NA	40	1.1	74	22	15	1.2	1.3	1.4	1.5	1.4

In Tables 1 through 5, the lowest soil salinity occurs at the time of crop establishment, when the crop is most sensitive to salinity.

The 22-inch irrigation requirement was the amount estimated by the UC Extension (1999) for dry bean production. A calculated evapotranspiration requirement from CIMIS data for Tracy, 23 inches for dry bean production, generally agrees with this UC estimate. The water application reported by Banta Carbona Irrigation District of about 40 inches in 2004 would produce leaching percentages of nearly 75% and salinity throughout the profile of less than 1.0 dS/m without accounting for rainfall. Using this model with the assumptions listed, EC_{iw} for rain water at 0.09 dS/m, estimated leaching percentages, and allowing for the impact of rainwater, I have estimated that the use of irrigation water with an EC_{iw} of 1.5 dS/m would produce the same results in the soil profile at harvest as the Ayers and Westcot model predicts with no allowance for rainfall.

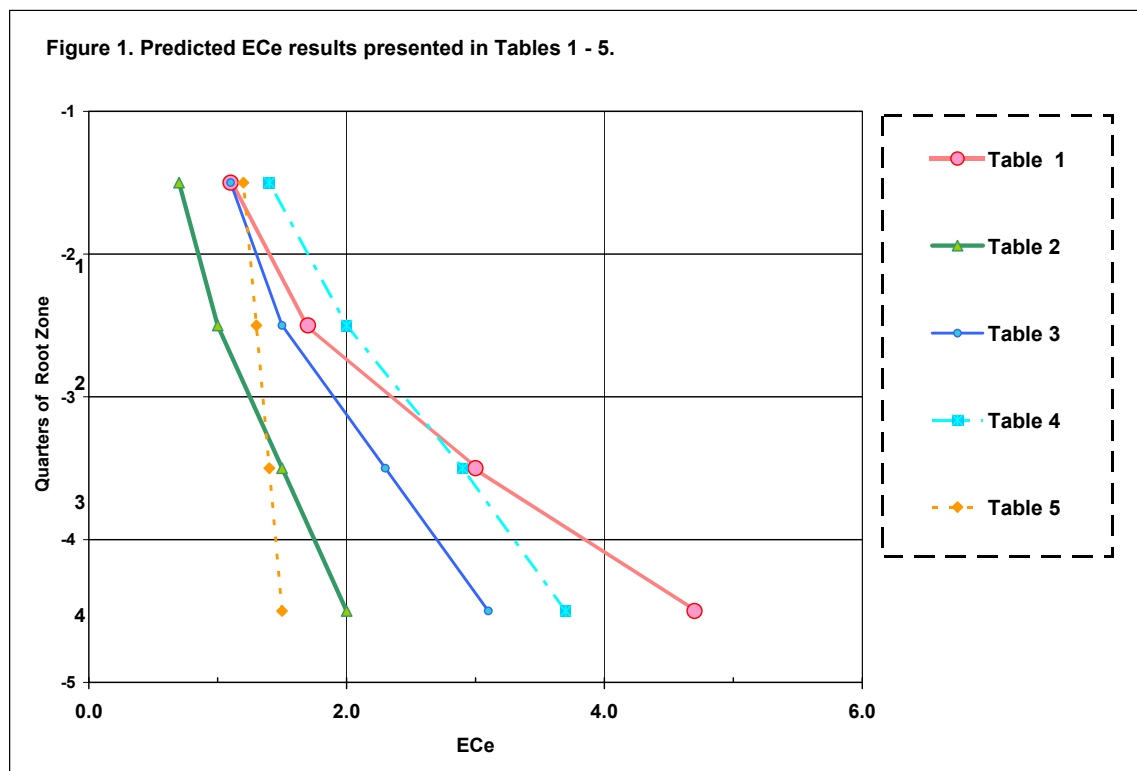


Figure 1 compares the predicted EC_e for the results presented in Tables 1 through 5 after the final crop irrigation. The differences in predicted salinity levels represented by the different lines on Figure 1 represent different soil salinity levels resulting from the application of different amounts and qualities of irrigation water, with and without rainfall. In Table 1, which depicts the conditions Ayers and Westcot demonstrated are sufficient for a 100% yield of beans, the bottom half of the root zone exceeds 2.6 dS/m, and even get as high as 4.7 in the bottom quarter of the root zone. In Table 2, the EC_e reaches 2.0 dS/m in the bottom quarter of the root zone. In Table 3, EC_e reaches 3.1 dS/m in the bottom quarter of the root zone. It should be noted that, in all cases the exceedance of 2.6 dS/m occurs after either the third or fourth irrigation, which should have no impact on crop yield. In both Tables 2 and 3, the salinity level throughout the root zone is lower than that in Table 1. Therefore, the scenarios in Tables 2 and 3 would have little or no impact on crop yield. In Table 4, the bottom half of the root zone exceeds 2.6 dS/m, but since the overall average salinity is still lower than that depicted in Table 1, there would still probably be little or no impact on crop yield.

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drying after the rainy season, and since no crop roots were present, only evaporative loss occurred. The 6-inch water application would then result in half of the applied water leaching through the soil profile. Pre-irrigation is required since beans have not been normally established with rain wetted fields in San Joaquin County. This is possibly due to low soil temperatures in May or early June, and by that time the soil has warmed sufficiently, it has dried enough to require pre-irrigation (Silveira, 2005). The high leaching factor for the first crop irrigation results from the shallow rooting depth and limited water extraction, to that date, and the fixed amount of water applied by irrigation is a function of the assumed application method. The effective rooting depth increases to a 36 inch maximum with time and with crop growth, as estimated from Knott's Handbook (Lorenz, and Maynard, 1980) for beans on soils of this area.

This simple addition of rainfall to the Ayers & Westcot model indicates that the 0.7 dS/m is over protective to achieve 100% yields for crops irrigated with San Joaquin River water.

Recent work

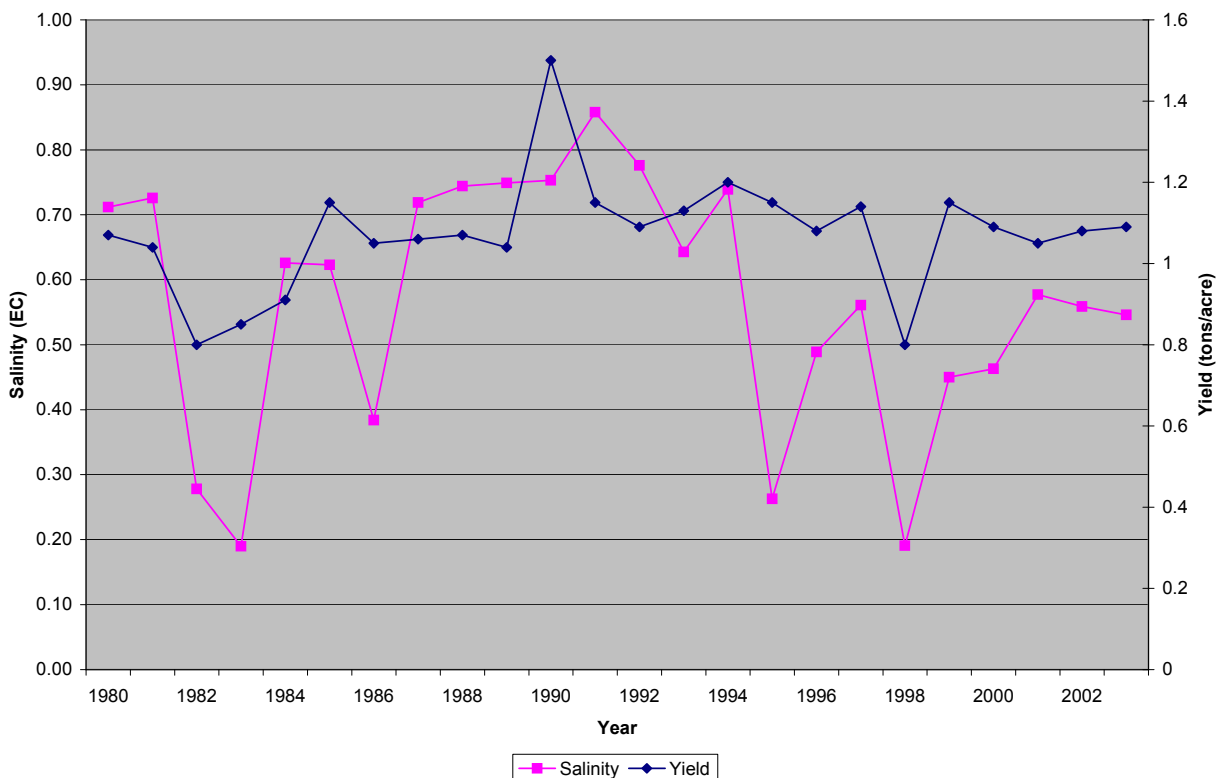
Isidoro-Ramirez, Berenguer-Merelo, and Grattan (2004) recently developed a much more sophisticated and improved model to develop a site-specific criteria for electrical conductivity of irrigation water to protect the agricultural beneficial uses for the Davis, California area. This model was developed specifically for dry bean production sustainability, since beans are the most salt sensitive crop grown in the area. The model was "developed to determine how the electrical conductivity of a given irrigation water supply affects crop production while taking annual rainfall into account." The model was based on Ayers and Westcot, with the root zone divided into four layers.

Water use by the crop to satisfy evapotranspiration demand was partitioned in the classic 40%-30%-20%-10% extraction pattern. Mass transfer of water and salt between soil layers and all water input, both rain and irrigation, was into the top layer. Movement between layers was calculated from known hydraulic conductivity properties of the soil. These values were all calculated daily. The average soil salinity (EC_e) was compared to the crop threshold value from Ayers and Westcot for 100% yield potential. They concluded that when "taking all other factors that potentially impact crop yield (e. g. climate, water stress and biotic stresses) and the conservative nature of all inputs into the model, the use of 1.1 dS/m as the threshold EC value for irrigation water is considered protective for beans, and thus for all other agricultural uses..."

San Joaquin County Dry Bean Culture

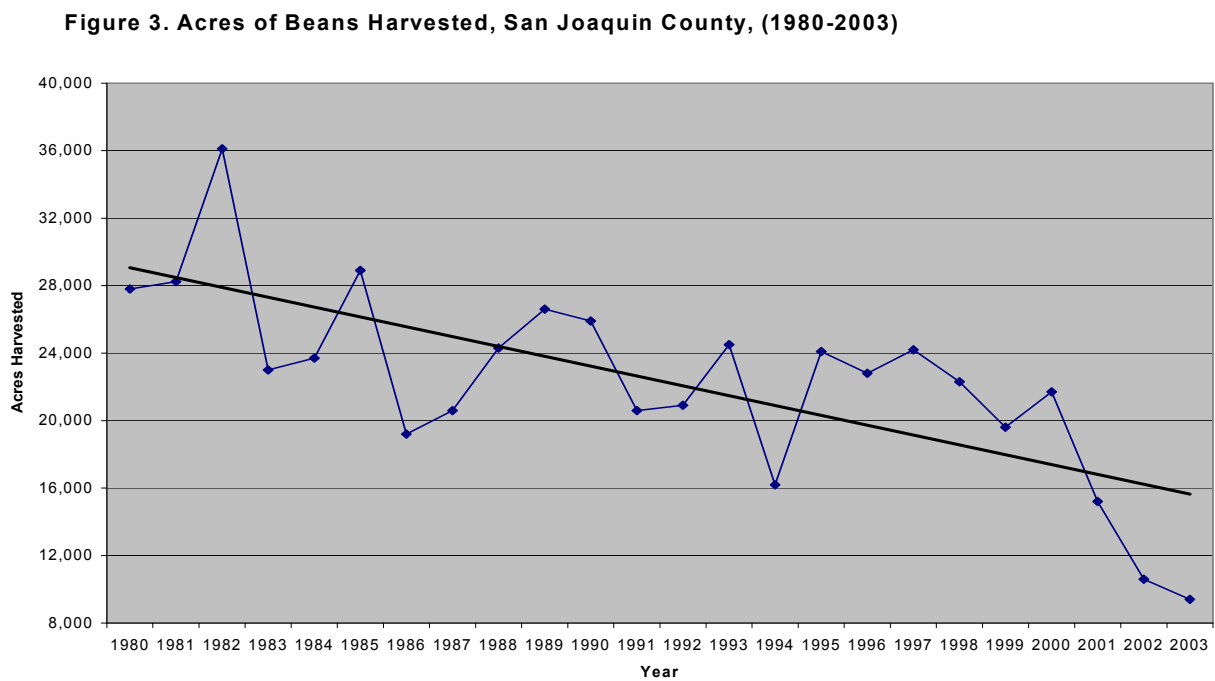
Little, if any, relationship between salinity of the San Joaquin River water, measured at Vernalis and San Joaquin County average dry bean yields is evident. Figure 2 shows San Joaquin County average dry bean yields and average crop season salinity of the San

Figure 2. San Joaquin County annual average dry bean yield vs. Crop Season Average Salinity (dS/m) at Vernalis.



Joaquin River at Vernalis. These data indicate that some other factor – the timing of rains, cold temperature at critical times, other farm management decisions such as pest control or fertilization had a greater influence of bean yields than salinity of the River annual salinity of the San Joaquin River at Vernalis. Department of Water Resources crop reports show that all beans grown in San Joaquin County are grown on mineral soil. They are not grown on the organic soils with sub-irrigation.

Figure 3 shows that, on the average, dry bean acreages have been decreasing since 1982 in San Joaquin County.



This decrease appears to be a result of factors other than any environmental condition, i.e. salinity or water quality.

Conclusion

The Vernalis Water Quality Objective was based on the model and studies presented by Ayers and Westcot, based on the earlier work at the USDA Salinity Laboratory in Riverside California. That work establishing crop yield - salinity relationships was done in large pots with controlled conditions and did not take into consideration leaching by natural rainfall. The climatic conditions in San Joaquin County indicate that rainfall is significant in regard to salinity management in the production of agricultural crops.

There is no agricultural reason that supports the 0.7 dS/m objective for the Vernalis Agricultural Water Quality Objective. I recommend a new standard of 1.1 dS/m based on the more recent work of Hoffman, Grattan and his co-workers, and my self.

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Petition to De-List the Lower San Joaquin River

For

Impairment by Salt and Boron

EXHIBIT G

**Presentation of
Dr. John Hagen, PhD
And
Dr. Bert Mason, PhD**

Submitted By:

SAN JOAQUIN RIVER GROUP AUTHORITY

Presentation of James R. Brownell, Ph. D¹.

The Vernalis Agricultural Water Quality Objective is based on the quality of water sufficient to maintain a 100% yield of agriculture crops irrigated with water diverted from the San Joaquin River in the Southern Delta. The major crops, at the time that the objectives were set, were alfalfa, dry beans and corn. The crop tolerance to irrigation water salinity has been published in several sources, Maas and Hoffman (1977), Ayers and Westcot (1985) and most recently by Grattan (2002)

Review of terms:

Salinity refers to the total dissolved ionic solids in water.

Salinity has been reported in a number of units:

Total Dissolved Solids (tds) as either parts per thousand (ppt), parts per million (ppm) or milligrams per kilogram (mg/Kg), ppm and mg/Kg are numerically equal.

Electrical Conductivity (EC). Since salts are charged particles their concentration can be estimated by the electrical conductivity of the solution. Earlier salinity measurements were reported as millimhos per centimeter (mmhos/cm), with the International Standardization of Nomenclature (ISN) the EC values are now reported as deciSiemens per meter (dS/m), units selected to be numerically equal to the earlier mmhos/cm. Total dissolved solids (tds) are estimated from EC in dS/m by; $EC_w \times 700 = \text{total dissolved solids, in ppm or mg/Kg}$.

EC values are often subscripted to indicate the source of the water evaluated:

EC_w is the electrical conductivity of a water source; EC_{iw} as an example, for irrigation water.

EC_e is the electrical conductivity of the saturation extract of a soil.

Review of Field Work

San Joaquin River salinity objectives were based on the salinity model and studies presented by Ayers and Westcot, based on earlier work at the USDA Salinity Laboratory in Riverside California, Maas and Hoffman (1977). This work on establishing crop salinity relationships was done in large pots, under controlled conditions and did not take into consideration leaching that occurs with natural rainfall. Early salinity work resulted in a salinity threshold for irrigation water (EC_{iw}) of 1.3 dS/m for alfalfa, 0.7 dS/m for beans and 1.1 dS/m for corn. The threshold is the maximum salinity that will maintain 100% yield potential. Scientifically there is uncertainty in any value resulting from experimentation and it is now known these salinity objectives are too conservative. The 100% yield potential, itself, is suspect, since plant nutritionists have observed that given

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variability of field conditions, due to factors such as weather, seeds, and all the other factors that can affect yield, a 10% yield loss, absent specific plant symptoms, cannot be observed (Uhlrich, 1959 and Epstein, 2004).

A number of field experiments on the impact of irrigation water salinity on corn production in the South Delta, reported by Hoffman, et al (1983), found that an EC_{iw} of 1.3 dS/m was sufficient to maintain maximum yield potential.

Plant – Soil – Water Relationships

The conductivity of irrigation water (EC_{iw}) is an easily measured value and can be used to compare the impact of different irrigation water supplies on crop production. However, the crop actually responds to the average salinity of the soil water, often measured as the salinity of the saturated extract (EC_e) in the crop root zone. The average EC_e can be estimated from the EC_{iw} using the following assumptions:

1. Water is extracted from the root zone in a 40-30-20-10 % pattern from succeeding quarters of the root zone, that is 40 % of the water used by the plant is extracted from the top fourth of its active root zone, 30 % from the second, etc.
2. Soil salinity can be predicted from water salinity ($EC_e = 1.5 EC_{iw}$), with an EC_{iw} of 0.7 dS/m EC_{iw} than a crop threshold of 1.1 EC_e is predicted.
3. 50 % of the soil water is utilized between irrigations, typical of furrow or sprinkler irrigation scheduling.
4. The irrigation water is the only source of salinity, i.e. no major additions of soil amendments.
5. There is no significant rainfall.

Tables 1 through 5 contain examples showing the predicted EC_e resulting from different irrigation scenarios, assigned by quarters of the active root zone. These tables show the predicted salinity of the soil water (EC_e in dS/m) available to the crop roots just prior to the next crop irrigation. In Tables 1-5, the column labeled “Event” shows the irrigation event, the column labeled “Effective rooting depth” shows the effective crop rooting depth in inches at the time of the irrigation event, the column labeled “Depth” shows the depth of applied water in inches, the column labeled “Total water” shows the accumulated water applied in inches, the column labeled “ EC_w weighted ave.” shows the weighted average irrigation water salinity, based on the plant absorbing 40% of its water from the top quarter of the root zone, 30% from the second quarter of the root zone, 20% from the third quarter of the root zone, and 10% from the bottom quarter of the root zone, the column labeled “Leaching” shows the leaching percentage that is assumed to take place during that water application, the column labeled “Total irrigation water” shows the accumulated irrigation water application in inches, and the column labeled “Cumulative leaching” shows the cumulative leaching percentage for the applied water and crop water use. Finally, the columns labeled “1st”, “2nd”, “3rd”, “4th” and “Average”, represent the quarter segments of the active crop root zone at the end of that irrigation application and the predicted soil salinity (EC_e) in dS/m that the crop roots experience just prior to the next irrigation. Each quarter, or thickness, of the active root

zone, at the time of the first crop irrigation, is one fourth of twelve inches or three inches. During the winter "Rain" and "Pre-irrigation" events, the plant has yet to grow roots and there is no active root zone. As the crop matures the root zone expands to 36 inches and each quarter of the active crop root zone is then nine inches.

The leaching percentages change over time (see columns labeled "Leaching"). A normal winter rain fills the soil profile to the three foot depth with about twice as much rain occurring than is needed to rewet the soil profile based on an average annual rainfall of 12 inches. The pre-irrigation is assumed to refill the soil profile to the extent the soil has dried from evaporation or from the use of soil water by non-crop plants. Irrigation efficiencies improve over the irrigation season as the crop uses more of the soil water between irrigations. Assumed water applications are conservative for a well designed and operated furrow irrigation system. The cumulative leaching percentage (see columns labeled "Cumulative leaching") is a simple average of all leaching that has occurred to date.

Table 1 shows the soil salinity levels for a three foot root zone using irrigation water with an EC_w of 0.7 dS/m and no rainfall. The predicted soil salinity (EC_e) indicates the condition produced by this widely accepted model for estimating 100 % yield potential. This provides a baseline for comparison of irrigation water quality and quantity. In this estimation, irrigation water application was at the 22-inch annual bean water requirement with a 15% leaching factor and irrigation water salinity of 0.7 dS/m. of irrigated crops. The Ayers & Westcot model results in an average EC_e of 2.6 dS/m in the root zone at harvest. The average EC_e 2.6 dS/m is that estimated for 100% yield of beans by Ayers and Westcot with a 15 % leaching factor and no rainfall.

Table 1. Ayers & Westcot model without rainfall and irrigation water salinity (EC_w) of 0.7 dS/m

								EC_e predicted (dS/m) by quarters of the root				
Event	Effective rooting depth (in.)	Depth (in)	Total water (in.)	EC_w weighted ave. (dS/m)	Leaching (%)	Total irrigation water (in.)	Cumulative leaching (%)	1 st	2 nd	3 rd	4 th	Ave.
Irrigation water only		NA	22	0.7	15	22	15	1.1	1.7	3.0	4.7	2.6

Table 2 adds 12 inches of rainfall with the 0.7 dS/m irrigation water. The predicted soil salinity (EC_e) indicates the results likely to be produced with normal field conditions and reasonable irrigation practices. With no crop roots, water is lost only by evaporation until the first crop irrigation. Therefore soil salinities are uniform through out the soil profile. Considering an annual rainfall of 12 inches and the interaction of rain and irrigation water in the soil profile, crop-rooting depth, crop water use and leaching fractions shown in Table 2, the average salinity is much lower than the Ayers and Westcot model without rainfall (see Table 1).

Table 2. Ayers & Westcot model with a 22-inch water application, 12 inches of rainfall, and irrigation water salinity (EC_w) of 0.7 dS/m

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Rain	0	12	12	0.09	50	0	NA	0.1	0.1	0.1	0.1	0.1
Pre-irrigation	0	6	18	0.29	40	6	45	0.4	0.5	0.5	0.5	0.5
Crop irrigation 1	12	4	22	0.37	40	10	43	0.5	0.6	0.8	0.9	0.7
Crop irrigation 2	24	4	26	0.42	20	14	33	0.6	0.8	1.1	1.3	0.9
Crop irrigation 3	36	4	30	0.46	10	18	28	0.6	0.9	1.3	1.6	1.1
Crop irrigation 4	36	4	34	0.48	10	22	24	0.7	1.0	1.5	2.0	1.3

Table 3 presents the prediction of the Ayers and Westcot model, with a 22 inch water application, 12 inches of rainfall, and irrigation water of salinity 1.1 dS/m. The predicted soil salinity (EC_e) indicates the results likely to be produced with normal field conditions and reasonable irrigation practices with water of a higher EC than the current objective. At the end of the growing season the average EC_e is less than that predicted by the Ayers and Westcot model that does not include rainfall (see Table 1), and well within the salinity tolerance of beans for 100% crop yield.

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Pre-irrigation	0	6	18	0.43	40	6	45	0.6	0.6	0.6	0.6	0.6
Crop irrigation 1	12	4	22	0.55	40	10	43	0.7	0.9	1.1	1.3	1.0
Crop irrigation 2	24	4	26	0.63	20	14	33	0.9	1.2	1.6	1.9	1.4
Crop irrigation 3	36	4	30	0.70	10	18	28	1.0	1.4	2.0	2.5	1.7
Crop irrigation 4	36	4	34	0.74	10	22	26	1.1	1.6	2.3	3.1	2.0

Table 4 presents the prediction of the Ayers and Westcot model, with a 22 inch water application, 12 inches of rainfall, and irrigation water salinity of 1.5 dS/m. The predicted soil salinity (EC_e) indicates the condition likely to be produced in this area with real field conditions, and careful irrigation with more saline water than the current objective. At the end of the growing season the average EC_e is about the same as that predicted by the original model that does not include rainfall.

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Rain	0	12	12	0.09	50	0	NA	0.1	0.1	0.1	0.1	0.1
Pre-irrigation	0	6	18	0.56	40	6	45	0.7	0.7	0.7	0.7	0.7
Crop irrigation 1	12	4	22	0.73	40	10	43	0.9	1.2	1.5	1.7	1.3
Crop irrigation 2	24	4	26	0.85	20	14	33	1.2	1.6	2.1	2.6	1.9
Crop irrigation 3	36	4	30	0.94	10	18	28	1.3	1.9	2.7	3.4	2.3
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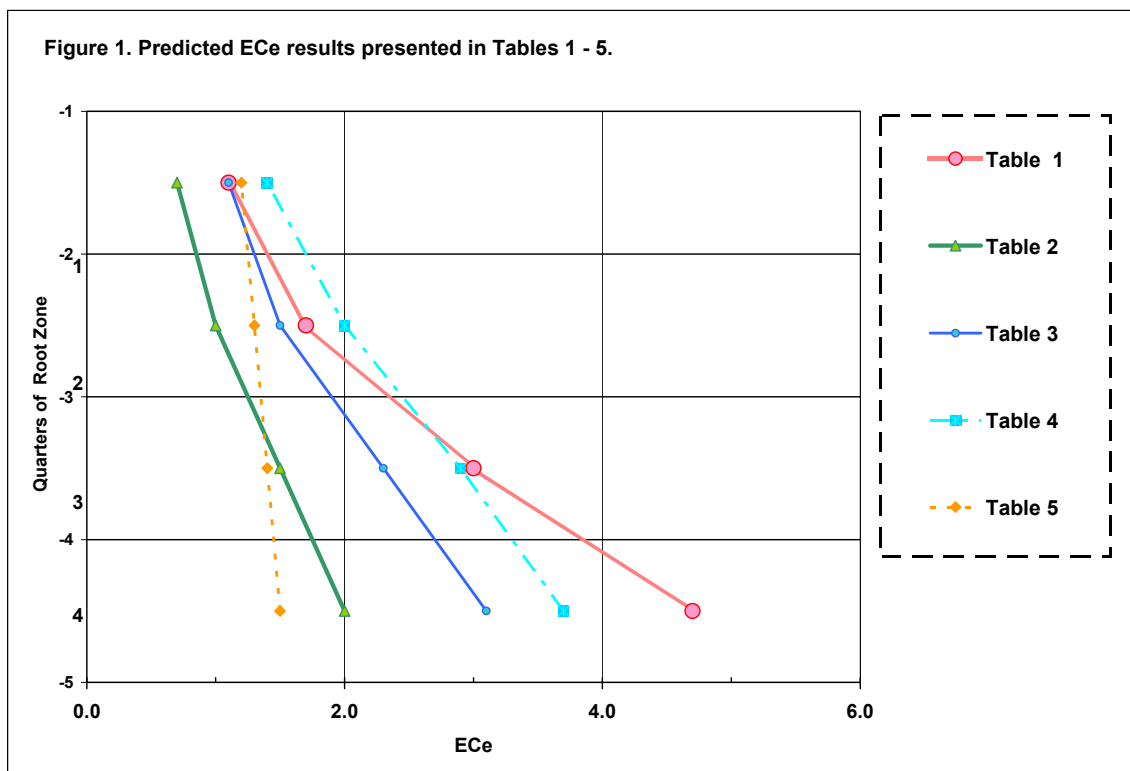


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Recent work

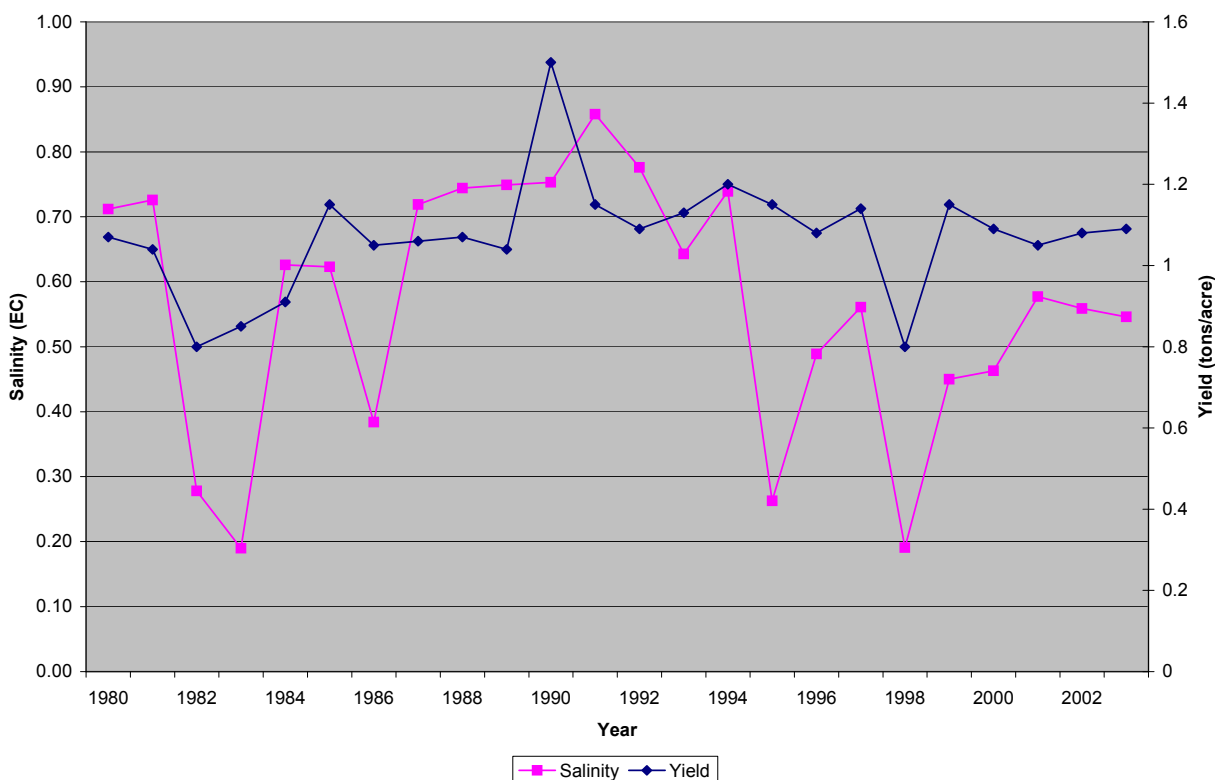
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San Joaquin County Dry Bean Culture

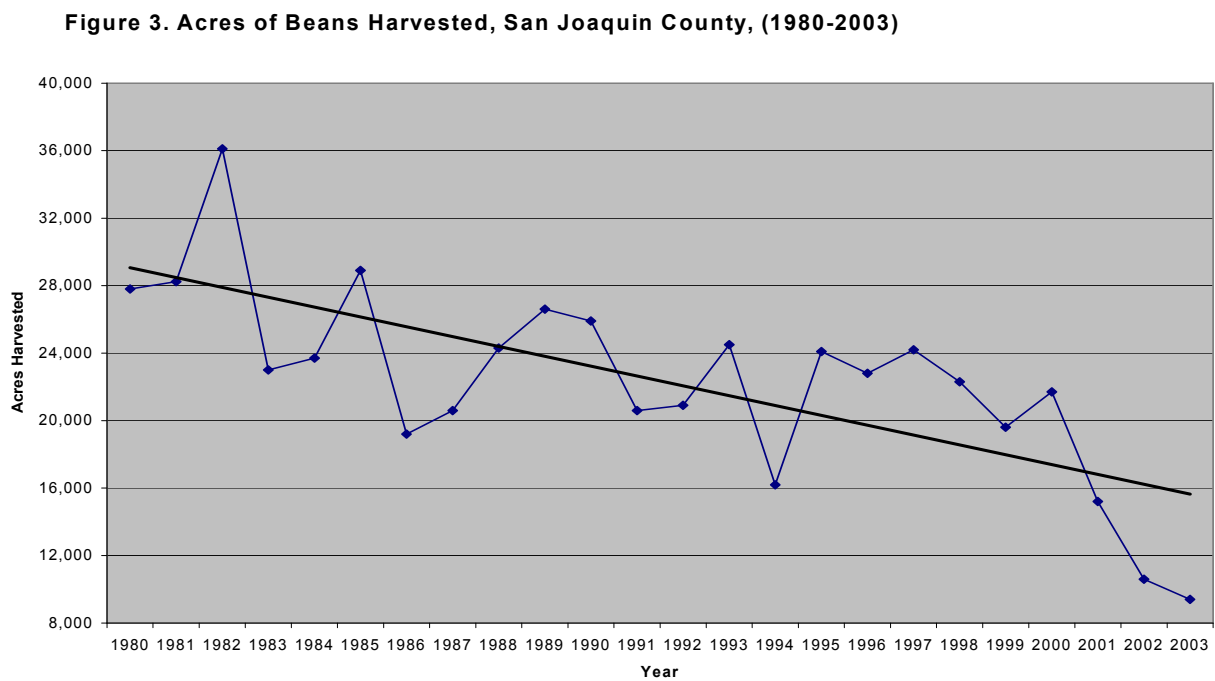
Little, if any, relationship between salinity of the San Joaquin River water, measured at Vernalis and San Joaquin County average dry bean yields is evident. Figure 2 shows San Joaquin County average dry bean yields and average crop season salinity of the San

Figure 2. San Joaquin County annual average dry bean yield vs. Crop Season Average Salinity (dS/m) at Vernalis.



Joaquin River at Vernalis. These data indicate that some other factor – the timing of rains, cold temperature at critical times, other farm management decisions such as pest control or fertilization had a greater influence of bean yields than salinity of the River annual salinity of the San Joaquin River at Vernalis. Department of Water Resources crop reports show that all beans grown in San Joaquin County are grown on mineral soil. They are not grown on the organic soils with sub-irrigation.

Figure 3 shows that, on the average, dry bean acreages have been decreasing since 1982 in San Joaquin County.



This decrease appears to be a result of factors other than any environmental condition, i.e. salinity or water quality.

Conclusion

The Vernalis Water Quality Objective was based on the model and studies presented by Ayers and Westcot, based on the earlier work at the USDA Salinity Laboratory in Riverside California. That work establishing crop yield - salinity relationships was done in large pots with controlled conditions and did not take into consideration leaching by natural rainfall. The climatic conditions in San Joaquin County indicate that rainfall is significant in regard to salinity management in the production of agricultural crops.

There is no agricultural reason that supports the 0.7 dS/m objective for the Vernalis Agricultural Water Quality Objective. I recommend a new standard of 1.1 dS/m based on the more recent work of Hoffman, Grattan and his co-workers, and my self.

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Petition to De-List the Lower San Joaquin River

For

Impairment by Salt and Boron

EXHIBIT H

Terminology and Maps

Submitted By:

SAN JOAQUIN RIVER GROUP AUTHORITY

TERMINOLOGY & MAPS

In order to properly understand and focus on the issues, one must first define some basic terms. The article Irrigation Water Salinity and Crop Production, by Stephen R. Grattan (SJRG Exh-02) provides an excellent, general, simple discussion of basic concepts relating to electrical conductivity, irrigation, and crop yields.

Irrigation water salinity (EC_w) is the electrical conductivity (“EC”) of irrigation water.¹ (See Appendix L, p2.)

Irrigation soil salinity (EC_e) is the EC of the soil water. (Id.)

Infiltration is the downward entry of water into the immediate soil surface. (United States Department of Agriculture, San Joaquin County Soil Survey (1992), p260.) The *infiltration rate* is the rate at which water penetrates the surface of the soil. (Id.) *Percolation*, by comparison, is the rate of movement of water through soil layers. (San Joaquin County Soil Survey, p261.) Infiltration rate is usually expressed as inches or millimeters of water per hour. (Id., p260.) An infiltration rate of 3 mm/hour is considered very slow, while an infiltration rate of 12 mm/hour or more is considered high. (R.S. Ayers and D. W. Westcot, Water Quality For Agriculture §3.1 (Food and Agriculture Organization of the United Nations, Irrigation and Drainage Paper, 29 Rev. 1 1985).) Infiltration rate can be affected by water quality, in addition to chemical and physical characteristics of the soil, such as soil texture and type of clay minerals. (Id.) The rate at which water enters soil under irrigation, the *intake rate*, decreases with application time and varies depending on the amount of water applied. (United States Department of Agriculture, San Joaquin County Soil Survey (1992), p260.)

¹ Dr. Brownell used EC_{iw} to represent the EC of irrigation water.

Permeability is the rate at which water moves through soil. (San Joaquin County Soil Survey, p261.) Permeability is expressed as the number of inches per hour that water moves through the soil profile. (Id.) Soil with a permeability rate of at least 0.06 inches per hour is considered “prime farmland.” (San Joaquin County Soil Survey, p268.) If a crop needs to uptake water at a rate faster than the water can move through the soil to the plant, then the soil is probably less than optimal for that crop. Terms describing permeability rates are described in Table 1.

Table 1: Terms describing permeability (San Joaquin County Soil Survey, p261.)

Descriptive Terms	Rate of Movement (inches/hour)
Very Slow	Less than 0.06
Slow	0.06 to 0.2
Moderately Slow	0.2 to 0.6
Moderate	0.6 to 2.0
Moderately Rapid	2.0 to 6.0
Rapid	6.0 to 20
Very Rapid	More than 20

Leaching is the process of applying more water to the field than the soil in the crop root zone can hold. Excess water that moves through the soil drains below the crop root zone and carries salts with it. (SJRG Exh-02, p2.) As more water is applied in excess of the crop water requirement, more salts will be removed from the root zone. (Id.) This is the case regardless of the quality of the applied irrigation water, because all irrigation water contains some salt. (Id.) In arid and semi-arid areas, such as the Central Valley of California, leaching is an absolute requirement, even with irrigation water of the best quality. (Ayers and Westcot, Water Quality For Agriculture §2.4.) Leaching must be practiced to avoid salt accumulations that could ultimately affect production. (Id.)

Leaching fraction is the fraction, or percent, of water that actually drains below the crop root zone. (Id.) For example, if four inches of water are applied, the soil holds three inches of water, and one inch drains below the root zone, the leaching fraction is 25%. If six inches are applied and the soil again holds three inches of water, then the leaching fraction is 50%. The leaching fraction is therefore something that can be controlled with good water management practices. Farmers can normally achieve leaching fractions of 15% to 16% with the management of normal irrigation applications in conjunction with winter precipitation. (SJRG Exh-08, p3.)

The salinity tolerance of plants is actually related to the average soil EC, and only indirectly related to the EC of the irrigation water. (Presentation of James R. Brownell, submitted as SJRG Exh-06, p2.) The *salinity threshold* is the maximum average soil EC_e a crop can tolerate in the root zone without a decrease in crop yield. (SJRG Exh-02, p2.) For many tree and vine crops, salt tolerance is measured by growth, rather than yield. (Id., p4.) Different crops have different salinity thresholds and decline in yield or growth at different rates. (Id.) Table 2 shows estimated yields of major Delta crops with long-term use of irrigation water and soils of different salinities. (Id., p5-6.)

Table 2: Estimated salinity thresholds of major crops grown in the southern Delta for a given irrigation water salinity (EC_w). (Ayers and Westcot, Water Quality For Agriculture §2.4.3.)

Yield Potential at Given Salinity Tolerances (dS/m)								
Crop	100%		90%		75%		50%	
	EC _e	EC _w	EC _e	EC _w	EC _e	EC _w	EC _e	EC _w
Beans, Dry	1.0	0.7	1.5	1.0	2.3	1.5	3.6	2.4
Corn	1.7	1.1	2.5	1.7	3.8	2.5	5.9	3.9
Alfalfa	2.0	1.3	3.4	2.2	5.4	3.6	8.8	5.9
Tomato	2.5	1.7	3.5	2.3	5.0	3.4	7.6	5.0

The Legal Delta is defined by Water Code §12220. However, the SJRGA focused its analysis on the “south Delta” (sometimes also referred to as the “southern Delta”),

which is defined as the Tracy, Union Island, Holt, Vernalis, Lathrop, and Stockton West United States Geological Survey quadrangles. (see Figures 2 through 7.) The proper arrangement of these maps is shown in Figure 1.

Figure 1: Arrangement of Southern Delta Topographic Maps

Holt	Stockton West
Union Island	Lathrop
Tracy	Vernalis

Southern Delta irrigation, water, and reclamation districts are depicted in Figures 8 through 11.

Topographic maps from the San Joaquin County Soil Survey representing the south Delta are depicted in Figures 12 through 17, with organic soils shaded orange.

Topographic maps with the specific locations where beans are grown are shown in Figures 18 and 19.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

HOLT QUADRANGLE
CALIFORNIA-SAN JOAQUIN CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

Produced by the United States Geological Survey in
cooperation with California Department of Water
Resources
Control by USGS and NOS/NOAA
Compiled from aerial photographs taken 1974. Topography by
aerial surveys 1976. May reflect 1979.
General hydrographic data compiled from NOS/NOAA Chart 1885 (1976).
This information is not intended for navigational purposes.
North American Datum of 1983 (NAD 83). Projection and
1000-foot base. California Coordinate System, zone 3
(United States National Grid).
Blue 1000-foot Universal Transverse Mercator 1983, zone 10
North American Datum of 1983 (NAD 83) is shown by dashed
lines. The scale of the data between 1000' and 1000' is
for 7.5-minute increments are obtained from National Geographic
Survey (NAGS) software.

There may be private showings within the boundaries of the
National or State reservations shown on this map.
Photocopied from 1987 source, no major culture
or change changes observed. Boundaries and names
verified 1984.

SCALE 1:24,000

CONTOUR INTERVAL: 5 FEET
NATURAL ELEVATION: 1000 FEET
DEPTH CURVES AND SOUNDINGS IN FEET—LOWEST LOW WATER
SOUNDINGS SHOWN EXCEPT THE DEPTH OF 1000 FEET
THE MEAN RANGE OF TIDE IS APPROXIMATELY 5 FEET

FOR SALE BY U.S. GEOLOGICAL SURVEY
DENVER, COLORADO 80215 OR RESTON, VIRGINIA 20192
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION
Primary highway: light gray road, hard or
improved surface
Secondary highway: light gray road, hard or
improved surface
Unimproved road: light gray road, hard or
improved surface
Interstate Route: light gray road, hard or
improved surface
State Route: light gray road, hard or
improved surface

HOLT, CALIF.
3713144 17 024
1983
NORTH BOUNDARY 1984
DATA 1750 37 50-0885 1984

Figure 3: Union Island quadrangle, all of which is within the Legal Delta.

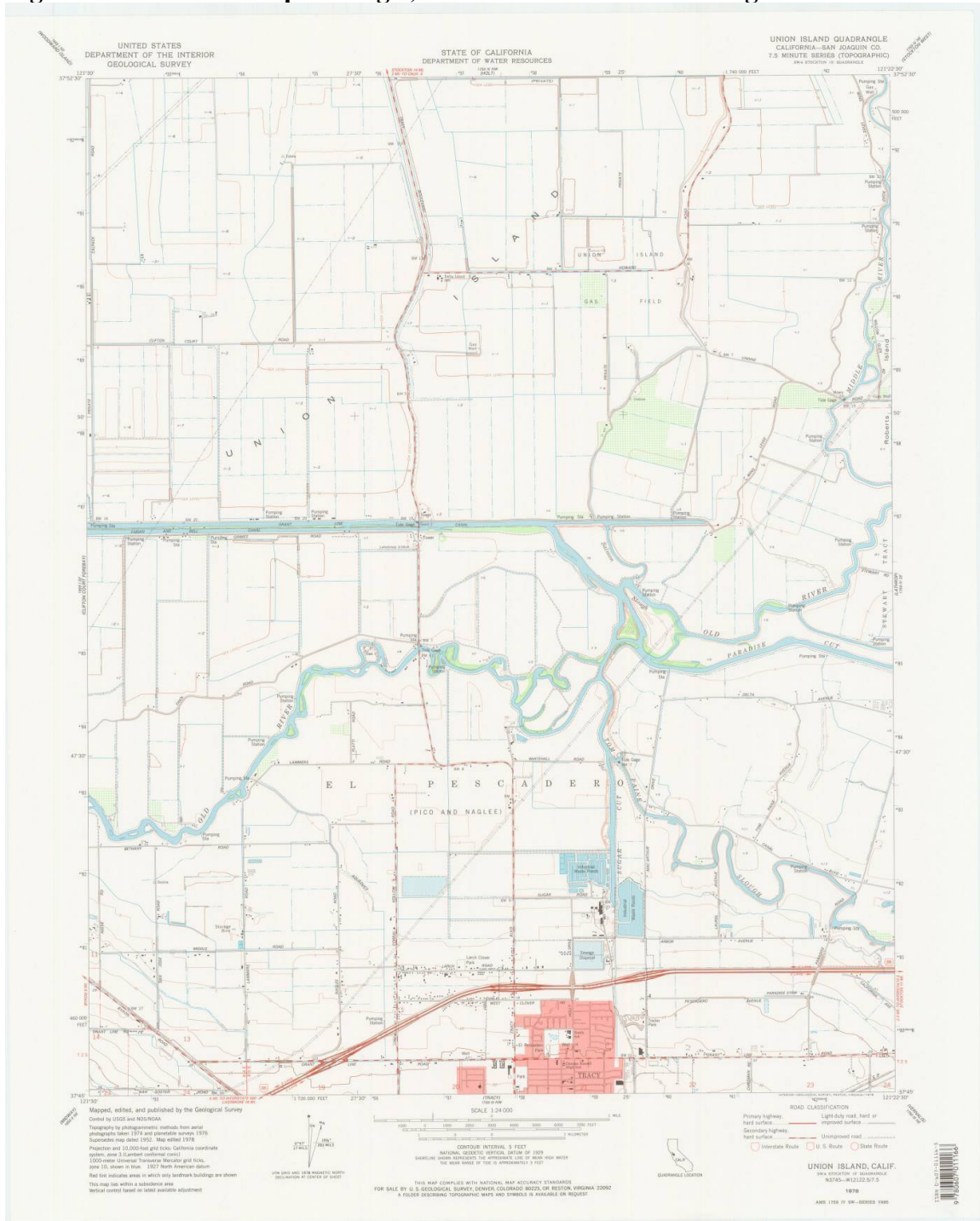


Figure 4: Tracy quadrangle showing Legal Delta boundary.

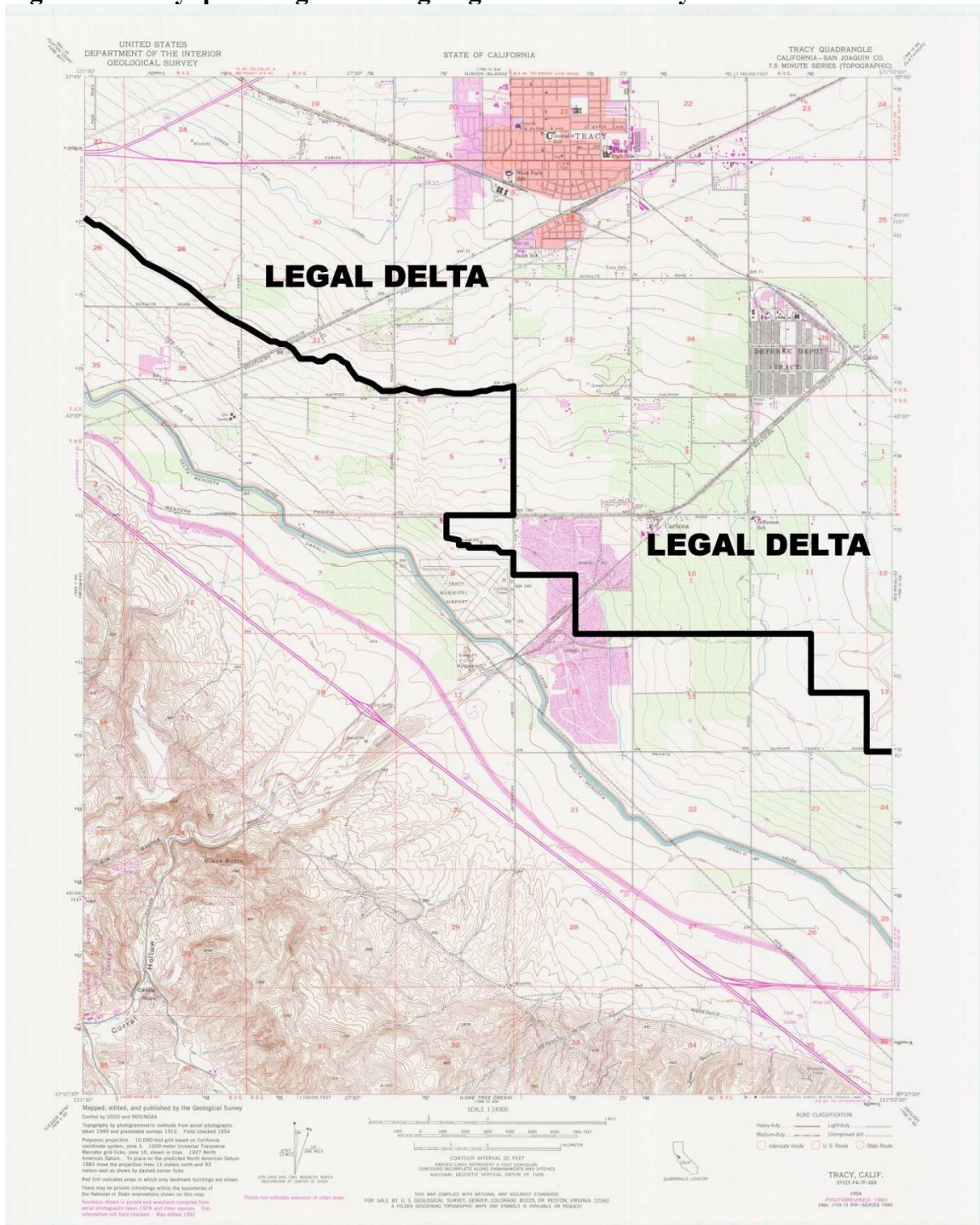
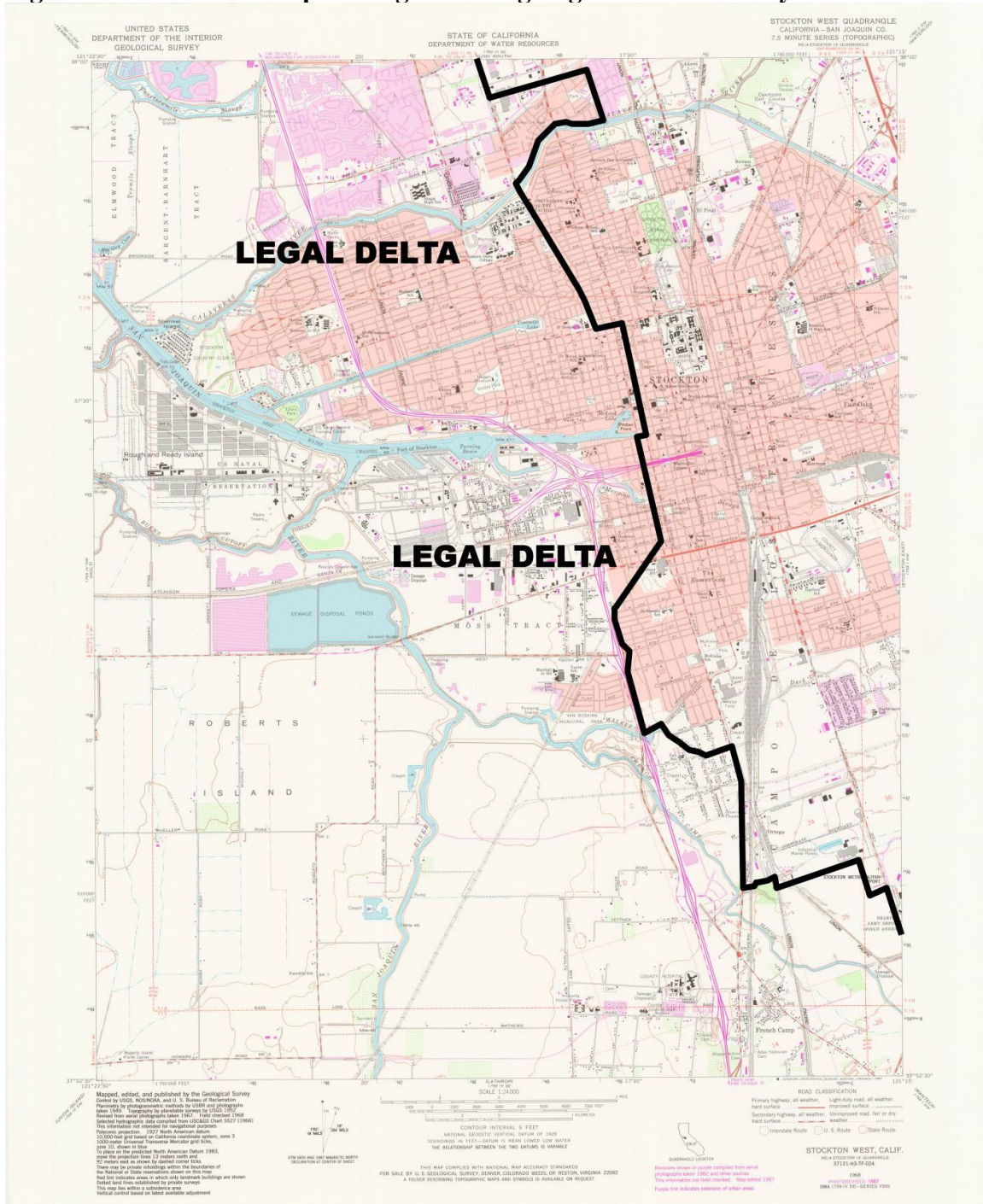
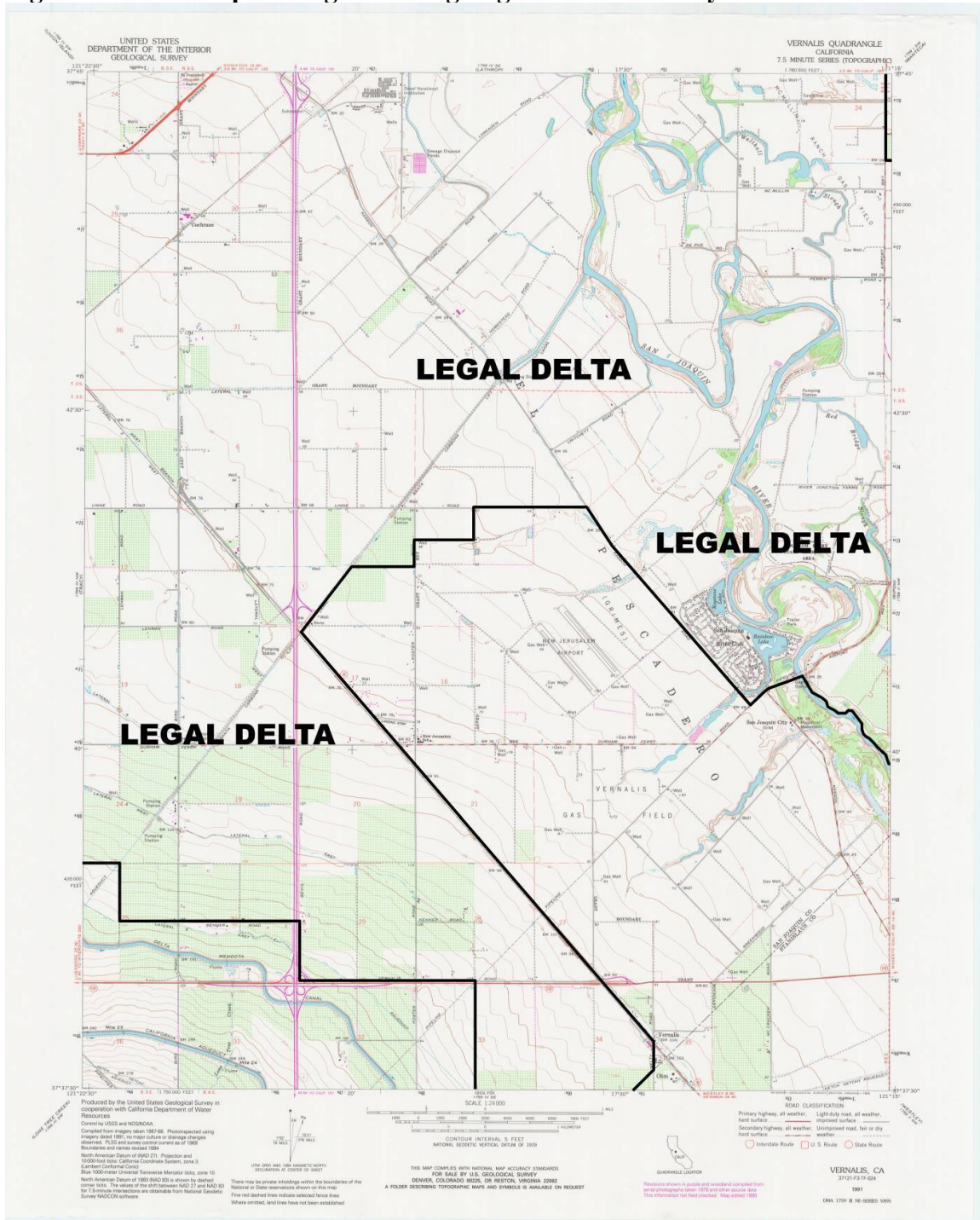


Figure 5: Stockton West quadrangle showing Legal Delta boundary.



[illegible]

Figure 7: Vernalis quadrangle showing Legal Delta boundary.



DEPARTMENT OF WATER RESOURCES
LAND USE SURVEY (1996)

HOLT QUADRANGLE
 CALIFORNIA-SAN JOAQUIN CO.
 7.5 MINUTE SERIES (TOPOGRAPHIC)

IRRIGATION DIVERSION

DELTA FARMS RD

LOWER JONES RD

UPPER JONES RD

RINDGE RD

SAJOQUIN RIVER

HONKER LAKE

UNION ISLAND

DEEXLER TRACT

WRIGHT TRACT

ELMWOOD TRACT

POCKET

SCALE 1:24,000

ROAD CLASSIFICATION

Primary highway
 hard surface
 Secondary highway
 hard surface
 Light duty road, hard or
 improved surface
 Unimproved road
 Interstate Route
 U.S. Route
 State Route

**Produced by the United States Geological Survey in
 cooperation with California Department of Water
 Resources**

Control by USGS and NOAA
 Contours from aerial photograph taken 1976. Topography by
 aerial photo survey 1976. Map revised 1979.
 Generalized hydrography from aerial photo 1976. Contour interval
 100 feet. This information is not intended for navigational purposes.
 North American Datum of 1983 used. UTM projection and
 100,000-foot scale. California Coordinate System, zone 10.
 Spheroid: Clarke 1866.

Blue 100-meter Universal Transverse Mercator (UTM) zone 10
 North American Datum of 1983 (NAD 83) is shown by dashed
 corner ticks. The values of the ticks between NAD 83 and NAD 27
 for 7.5 minute quadrangles are tabulated from National Geospatial
 Survey NADCON software.

There may be private inholdings within the boundaries of the
 National or State reservations shown on this map.
 Photocopied from 1987 edition, no major culture
 or drainage changes observed. Boundaries and names
 verified 1994.

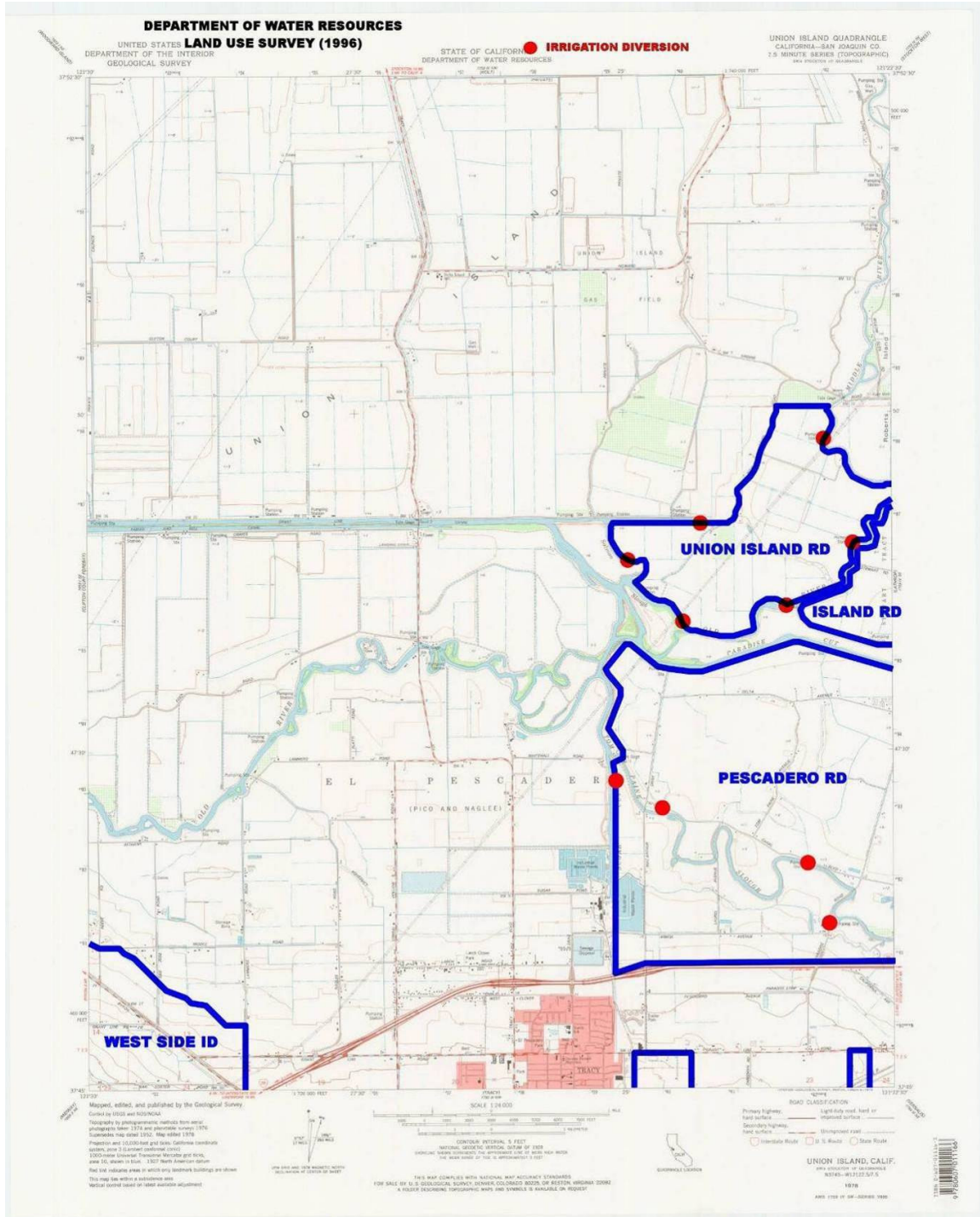
THIS MAP COMPLETES WITH NATIONAL MAP ACQUISITION PROGRAM
 FOR SALE BY U.S. GEOLOGICAL SURVEY
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A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

HOLT, CA
 37121-04-10-024

1979
 MINOR REVISION 1994
 DWS 1709-A 100-02402 1995

Figure 9: Union Island quadrangle with Delta irrigation, water, and reclamation districts.



USGS U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

IRRIGATION DIVERSION

LATHROP QUADRANGLE
CALIFORNIA SAN JOAQUIN CO.
7.5-MINUTE SERIES (TOPOGRAPHIC)

ISLAND RD

PESCADERO RD

SCALE 1:24,000

CONTOUR INTERVAL: 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1985
TO CORRELATE WITH THE DATUM OF 1985 (NAD 83)

THIS MAP COMBINES WITH NATIONAL MAP ACCURACY STANDARDS
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FOR MORE INFORMATION, CONTACT: DENVER AND FORT COCKE, DENVER, COLORADO

LATHROP, CA
1996

Figure 11: Tracy and Vernalis quadrangles with Delta irrigation, water, and reclamation districts.

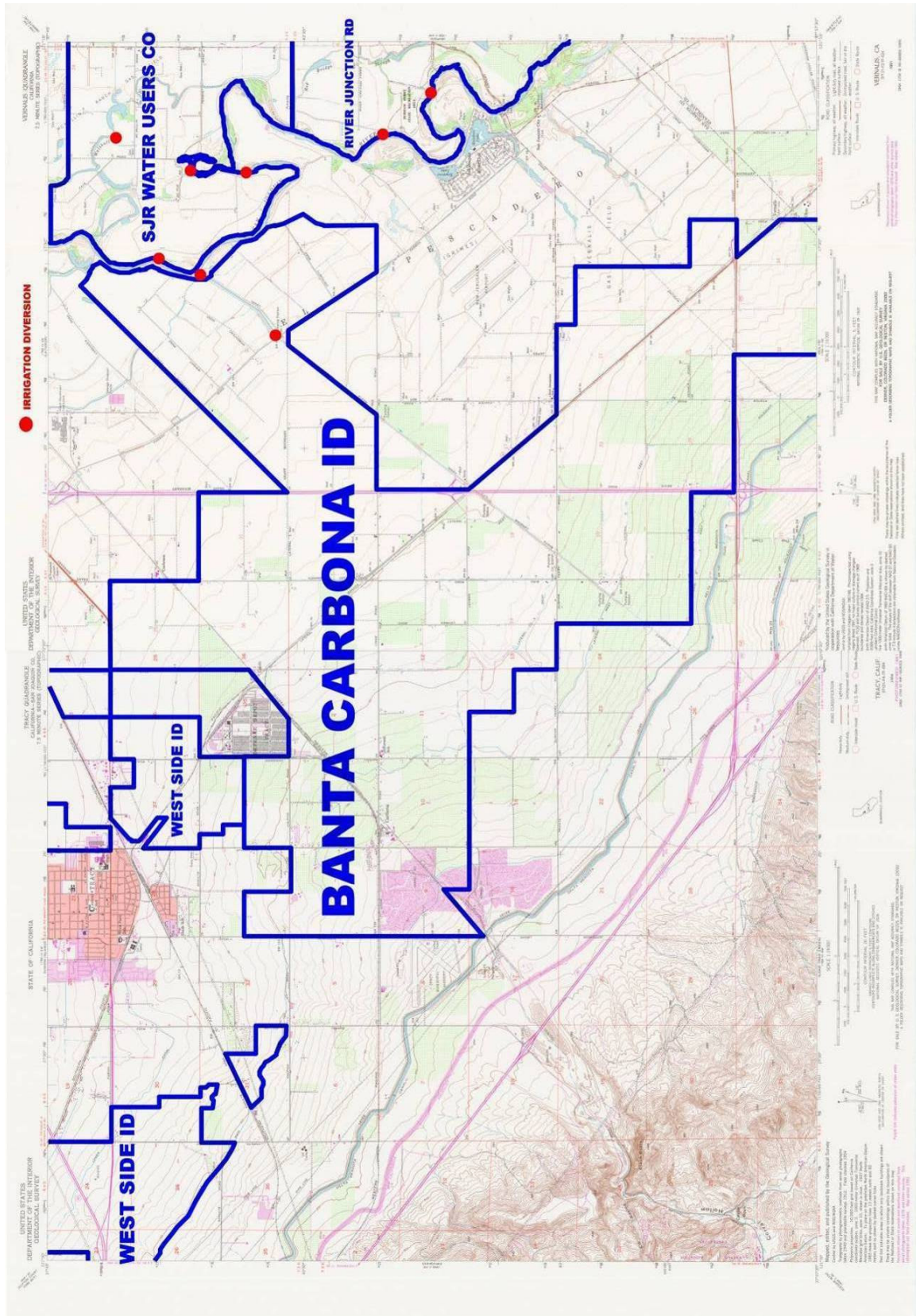


Figure 12: Holt quadrangle from the San Joaquin County Soil Survey, with organic soils shaded orange.



U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SHEET NUMBER 18
SAN JOAQUIN COUNTY, CALIFORNIA
(STOCKTON WEST QUADRANGLE)

LEGAL DELTA

LEGAL DELTA

STOCKTON

NEW WAGE DISPOSAL PUMPS

SCALE 1:24,000

SAN JOAQUIN COUNTY, CALIFORNIA NO. 18

SHEET NO. 18 OF 37

Figure 16: Lathrop quadrangle from the San Joaquin County Soil Survey, with organic soils shaded orange.

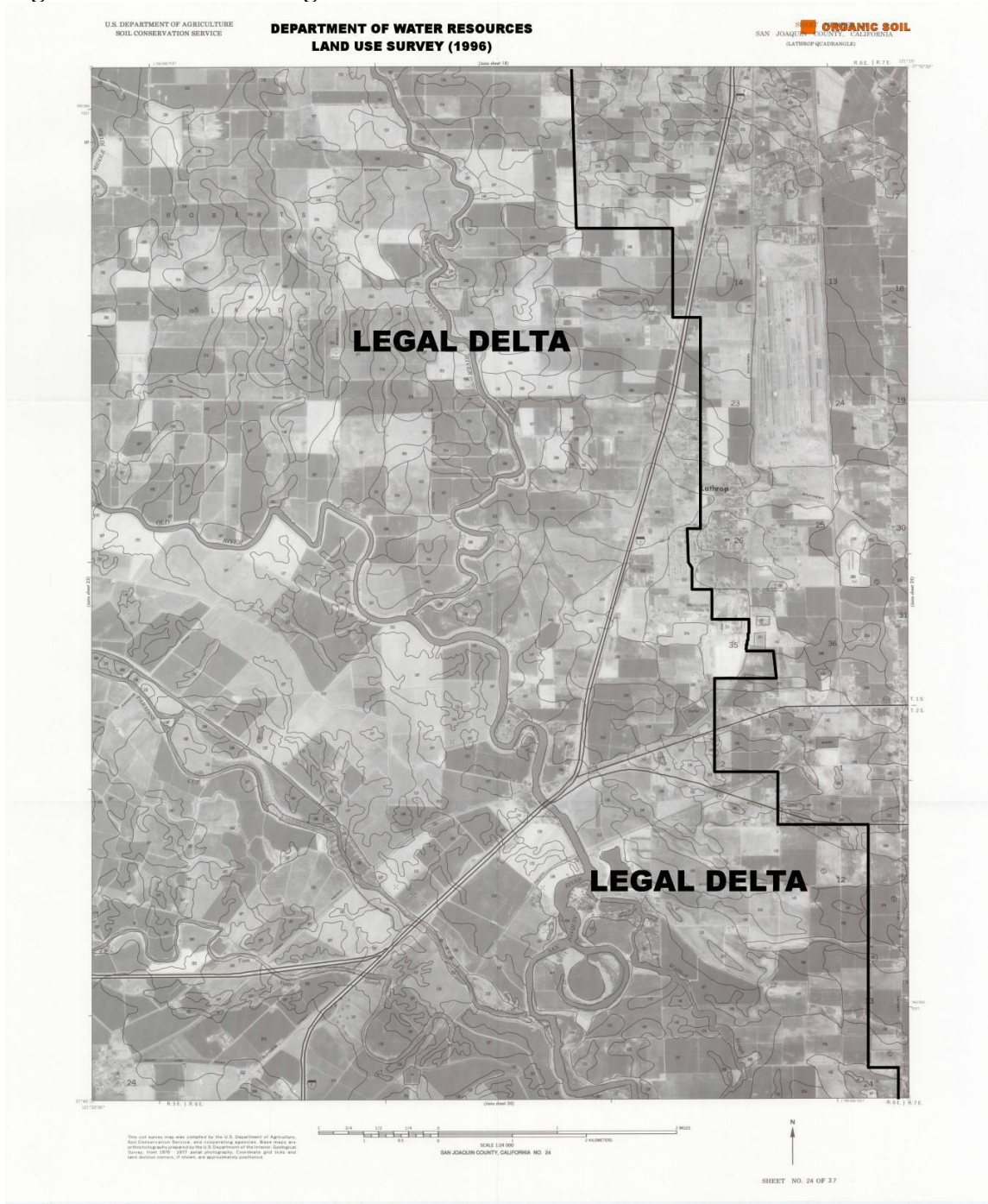


Figure 17: Vernalis quadrangle from the San Joaquin County Soil Survey, with organic soils shaded orange.



Figure 18: Lathrop quadrangle, with reclamation districts, irrigation diversions, and beans.

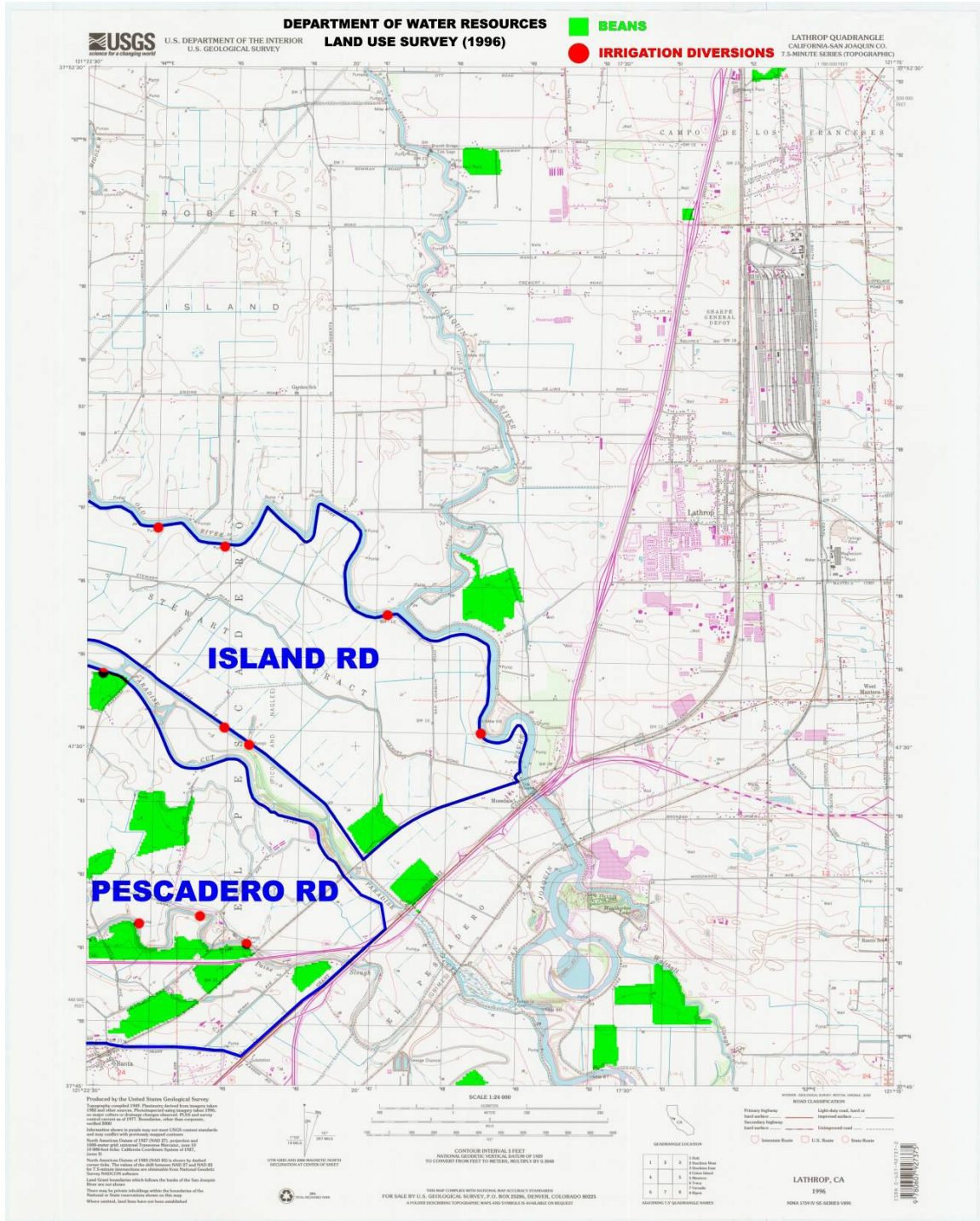
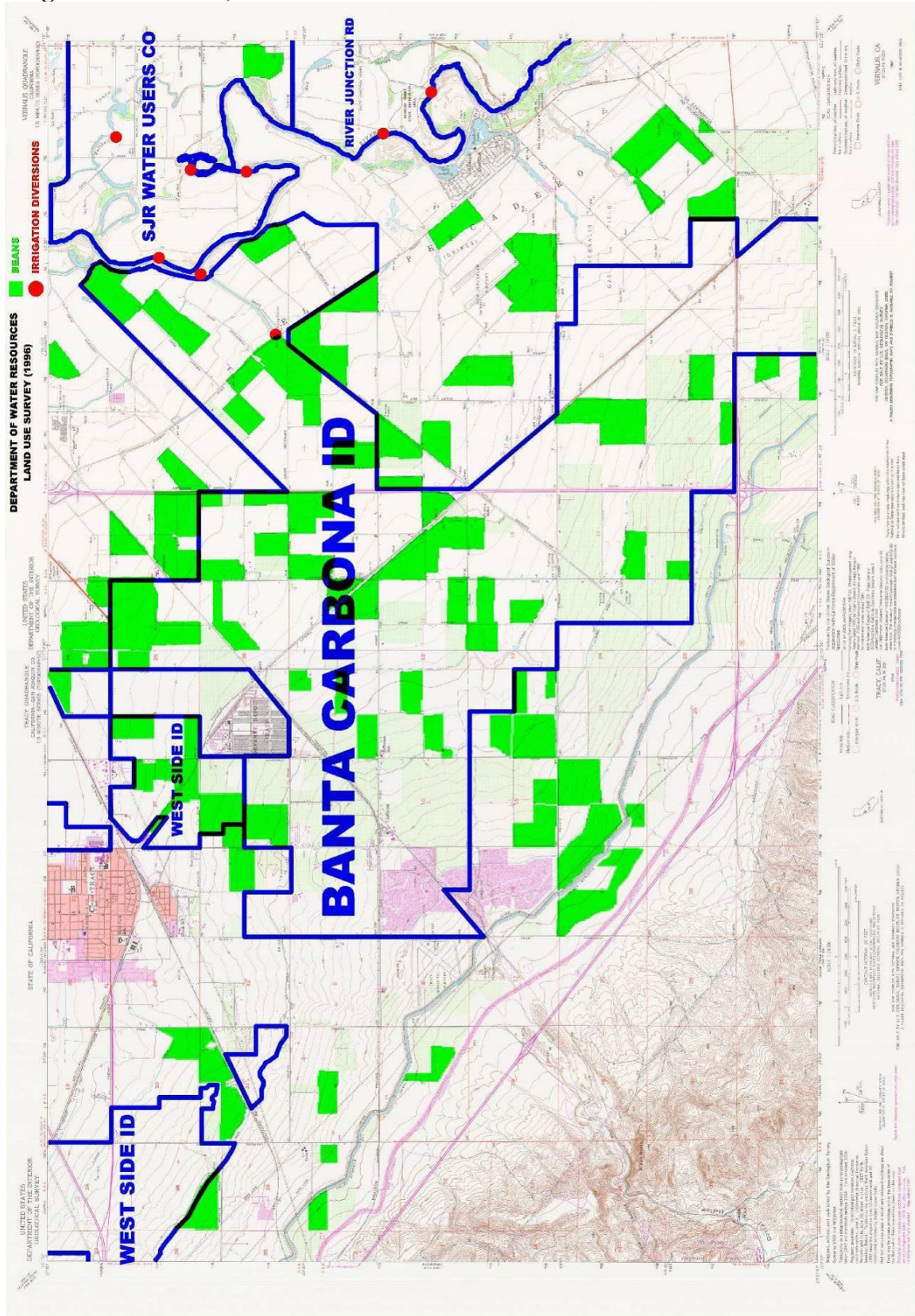


Figure 19: Combined Tracy and Vernalis quadrangles, with irrigation districts, irrigation diversions, and beans.



Petition to De-List the Lower San Joaquin River

For

Impairment by Salt and Boron

EXHIBIT I

Flow Science Executive Summary

Submitted By:

SAN JOAQUIN RIVER GROUP AUTHORITY

Evaluation of Revised Salinity Standard at Vernalis

Introduction

Flow Science Incorporated (Flow Science) has been retained by the San Joaquin River Group Authority to evaluate the potential effects of modifying the current salinity standards for the San Joaquin River (SJR) at Vernalis. Presently, the SJR salinity standard at Vernalis, which bears the name “Case 1” for this study, is 0.7 mS/cm (414 mg/L)¹ in April-August, and 1.0 mS/cm (589 mg/L) the remainder of the year. The proposed new standard, called “Case 9” herein, is a salinity of 1.0 mS/cm (589 mg/L) year-round at Vernalis.

Overview

Flow Science utilized the Fischer Delta Model (FDM)² to simulate hydrodynamics and salinity within the Delta for this project. The FDM consists of two linked models, a hydrodynamic model (DELFLO) and a water quality model (DELSAL). The hydrodynamic model utilizes the fixed grid method of characteristics to simulate the hydrodynamics of the Delta. The water quality model, DELSAL, uses the Lagrangian method, in which the motions of parcels of water are followed through the Delta. The Lagrangian method- which avoids numerical dispersion- uses no grid points, but the computational effort required is equivalent to the use of approximately 2,500 grid points in a finite element numerical model.

The model extends from the downstream boundary in Carquinez Strait, upstream to Sacramento on the Sacramento River, and to Vernalis on the San Joaquin River. It also includes all tidally-influenced sloughs and accounts for inflows from all major tributaries, state and federal project exports, riparian diversions, channel depletions, and agricultural returns. The FDM has been successfully applied to the transport of total dissolved solids (TDS) and other neutrally buoyant tracers in the Sacramento-San Joaquin Delta for over twenty years. The model has undergone continuous improvement over the years.

Two water years were selected for modeling in this study, 1964 and 1988. Water year 1964 was a dry year in both the Sacramento and San Joaquin River basins, while 1988 was a critically dry year in both basins³. These years were selected by Dan Steiner as

1 Conversions between electrical conductivity (EC) and total dissolved salts (TDS) based upon historical data from the memorandum “Salinity Unit Conversion Equations”, California Department of Water Resources, 1986. Data from the station in the memo nearest the site of interest was used.

2 The model is operated by Flow Science Incorporated for Hugo B. Fischer, Inc.

3 A dry water year is defined as having a water year index below 6.5 million acre-feet (Sacramento Valley) or below 2.5 million acre-feet (San Joaquin Valley). A critically dry water year is defined as having a water year index below 5.4 million acre-feet (Sacramento Valley) or below 2.1 million acre-feet (San Joaquin Valley) according to California Department of Water Resources criteria. 1964 was a dry year in both basins, while 1988 was a critically dry water year in both basins. See DWR’s Chronological Sacramento and San Joaquin Valley Water year Hydrologic Classification Indices, available at cdec.water.ca.gov/cgi-progs/ioidir/WSIHIST.

Presentation by Flow Science Inc.
Susan Paulsen, Ph.D., P.E., and Alex Anderson, E.I.T.

representative of a range of hydrologic conditions in which the proposed SJR salinity changes are likely to have the largest effect.

Eight different scenarios were modeled for this study. The eight scenarios stem from two basic configurations: a baseline case, called “Case 1”, and the new SJR salinity standard case, called “Case 9”. These two cases are then modified in various ways to reflect possible or anticipated changes in the Delta. These changes include 1) implementation of the South Delta Improvement Plan (SDIP)⁴, 2) a modified operation schedule for the Head of Old River Barrier (HORB), and 3) a combination of alternatives 1 and 2. Each of these eight scenarios was modeled for both water years 1964 and 1988. The table below shows all the scenario names and the differences between them.

Table 1: Summary of Modeled Scenarios

	Modified HORB Schedule^a	SDIP Operations^b
Case 1 (Baseline)		
Case 9 (New Salinity Standard)		
Case 1-HORB	X	
Case 9-HORB	X	
Case 1-SDIP		X
Case 9-SDIP		X
Case 1-SDIP-HORB	X	X
Case 9-SDIP-HORB	X	X

a. Standard HORB schedule is as follows: In place Apr. 16-May 15 and Oct. 1-Nov. 30. Modified HORB schedule is: In place Apr. 16-May 15 and Oct. 1- Oct. 31.

b. SDIP operations include changes in export rates from the Banks and Tracy Pumping Plants and changes in flow rates to the Sacramento and Mokelumne Rivers.

Input data for the model were obtained from several sources. Dan Steiner provided river and export flow rates, as well as San Joaquin River electrical conductivity (electrical conductivity was converted to TDS for model use, see footnote 1). Salinity for other rivers was assumed by Flow Science based on previous experience⁵. Gates and barriers were modeled according to current barrier operations based on information obtained from DWR⁶. The table below summarizes the barrier operation schedules for the HORB, the Old River Barrier at Tracy (ORB), the Middle River Barrier (MRB), and the Grant Line Canal Barrier (GLCB). The table shows the dates that the barriers were in place.

4 SDIP CALSIM simulations performed by DWR are preliminary and may change at a later date.

5 Flow Science assumed salinity as follows: Sacramento River and Yolo Bypass: 100 mg/L; Calaveras River and Mokelumne River: 72 mg/L.

6 Emails from Andy Chu, Senior Water Resources Engineer, California Department of Water Resources, 1/13/05; Mark Holderman, Chief-Temporary Barriers Project, California Department of Water Resources, 1/27/05.

Table 2: Barrier Operations for Modeled Scenarios

	Standard, SDIP scenarios	HORB, SDIP-HORB scenarios
HORB^a	Apr. 16-May 15; Notched Oct. 1-Nov. 30	Apr. 16-May 15; Notched Oct. 1-Oct. 31
ORB^b	Apr. 16-Sep. 15; Notched Sep. 16-Nov. 30;	Apr. 16-Sep. 15; Notched Sep. 16-Nov. 30;
MRB^c	Same as ORB	Same as ORB
GLCB^d	Same as ORB	Same as ORB

a. HORB was simulated as spanning the full channel width at elevation 10 feet (all elevations reference NGVD29). The fall notch is 32 feet wide at elevation 0.0 feet.

b. ORB was simulated as spanning the full channel width at elevation 4 feet. The fall notch is 10 feet wide at elevation 0.5 feet.

c. MRB was simulated as spanning the full channel width at elevation 3 feet. The fall notch is 10 feet wide at elevation 0.3 feet.

d. GLCB was simulated as spanning the full channel width at elevation 3.5 feet. The fall notch is 10 feet wide at elevation 0.5 feet.

Before presenting the results, it is necessary to understand the assumptions that are built into the results. Flow Science made the following assumptions for modeling purposes:

- No culverts were placed in the three agricultural barriers (ORB, MRB, and GLCB), though “notches” were cut according to DWR specifications in the fall, as shown in Table 2.
- Clifton Court Forebay gates were assumed to be open all of WY64 because CCFB did not exist in WY64. Historical CCFB gate operations were used for WY88.
- The Delta Cross Channel Barrier (DXC) was simulated as open from the first of each month until the month’s “open days” quota is spent, where the number of open days were specified by the CALSIM modeling. This is in accordance with DWR’s modeling practices⁷.
- All CCWD diversions are assumed to be through Rock Slough Pumping Plant #1 (i.e. no Old River diversions).
- Monthly data from CALSIM were transformed to daily data by assigning each day its corresponding month’s average value (i.e. flow/salinity were not “smoothed” between months).
- Note that diversions, exports, and river flow rates employed are not actual WY64 and WY88 historical flows, but those specified in CALSIM runs provided by Dan Steiner.

⁷ Telephone conversation with Andy Chu, Senior Water Resources Engineer, California Department of Water Resources, 1/18/05.

Results

The proposed changes to the SJR salinity standard at Vernalis will have a small impact on salinity in the Delta under the conditions modeled. As shown in Figure 1, the salinity in Clifton Court Forebay will change by less than 10 mg/L (0.02 mS/cm) for nine months of water year 1964, and the largest salinity change for Clifton Court is 28 mg/L (0.06 mS/cm), occurring in the month of August. The increase of 28 mg/L (0.06 mS/cm) in August represents an increase in salinity of approximately 7%, from 380 mg/L (0.67 mS/cm) to 408 mg/L (0.73 mS/cm), as shown in Figure 2. Other areas of the Delta mirror this trend. In Rock Slough, for example, the greatest increase in salinity is 38 mg/L (0.07 mS/cm), once again observed in the month of August. This salinity increase, from 499 mg/L (0.91 mS/cm) to 537 mg/L (0.98 mS/cm), represents an increase of 8% (see Figures 5 and 6).

Flow Science also monitored major export locations to determine where SJR water leaves the Delta. Results are shown in Figures 12 and 13. For Cases 1 and 9 in water year 1964, approximately 34% of the water that flowed down the SJR past Vernalis exited the Delta through the Tracy Pumping Plant, while another approximately 44% of the SJR water exits the Delta through the State Delta Pumping Plant. Approximately 1 percent of SJR left the Delta through Rock Slough Pumping Plant #1. The remaining SJR water, approximately 21%, represents in-Delta consumptive use, evaporation, net Delta outflow, and water which remains in the Delta beyond the study period. In water year 1988 Cases 1 and 9, SJR water fate was as follows (percentages are approximate): 39% Tracy Pumping Plant, 23% State Delta Pumping Plant, 1% Rock Slough Pumping Plant #1, and 37% remainder.

In addition to examining salinity values and sources of water, Flow Science has examined how the three agricultural barriers (Middle River Barrier, Grant Line Canal Barrier, and Old River Barrier at Tracy) as well as the Head of Old River Barrier influence flow patterns in the Delta. Figures 14 and 15 show the “flow split” at this location, i.e., the percentage of SJR water that flows down Old River and the percentage of SJR water flowing toward the ship channel, along with barrier operations. Figure 6 represents a model scenario with standard HORB operations, while Figure 7 shows the flow split when the HORB is in place only 4/16-5/15 and 10/1-10/31. The figures clearly show that the flow split is strongly dependent on the barrier operations. While all barriers are in place, nearly all of the SJR water flows north. When the barriers are removed, approximately 50% of the SJR water flows down Old River into the southwest Delta region. Figure 14 shows that even when the HORB is open, if the agricultural barriers remain in place and are configured as simulated here, very little water will flow down Old River.

Figure 1: Average change in salinity in Clifton Court due to change in SJR salinity at Vernalis, WY64

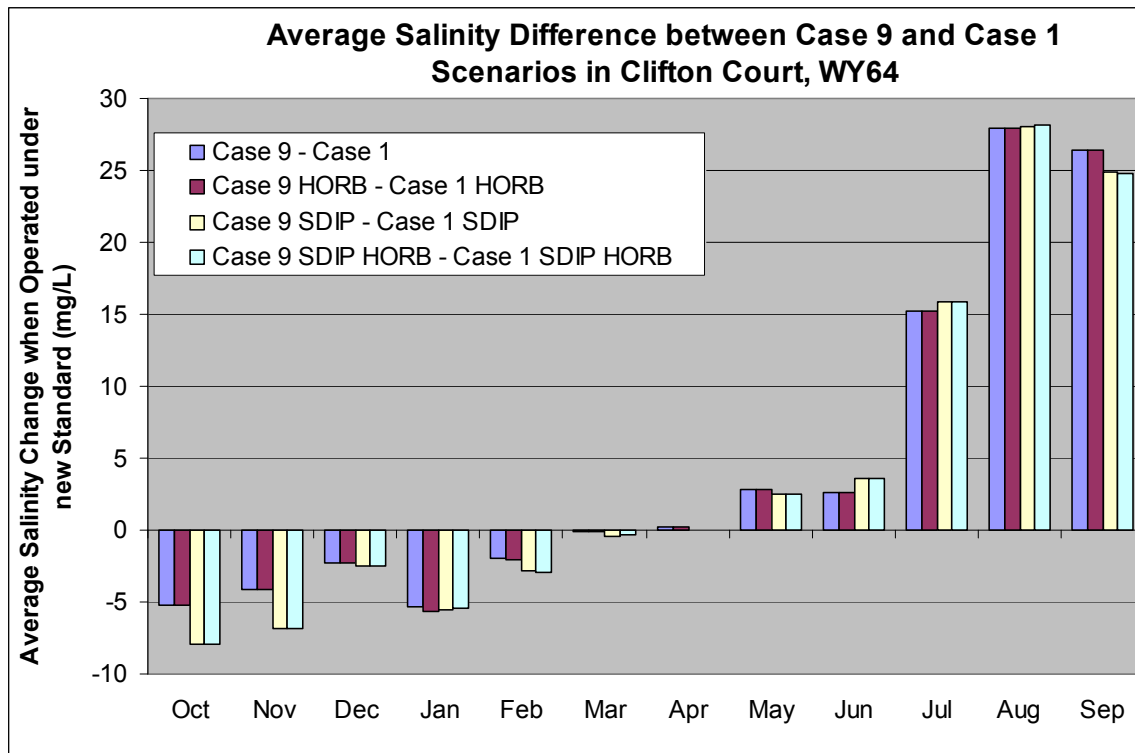


Figure 2: Average percent change in salinity in Clifton Court due to change in SJR salinity at Vernalis, WY64

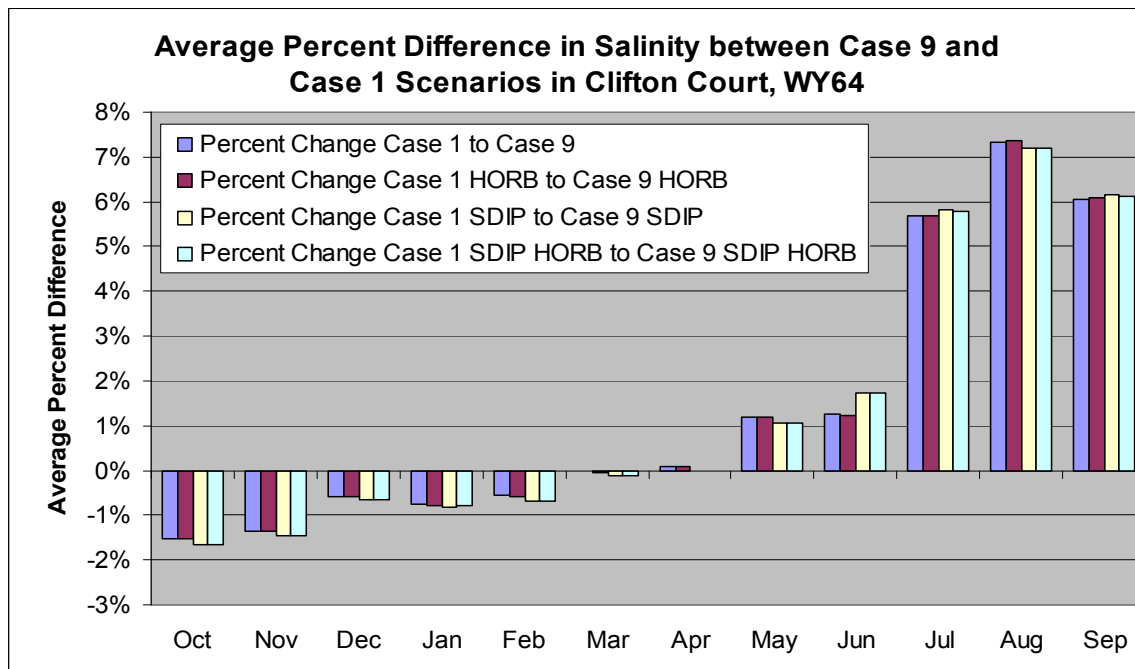


Figure 3: Average change in salinity in Clifton Court due to change in SJR salinity at Vernalis, WY88

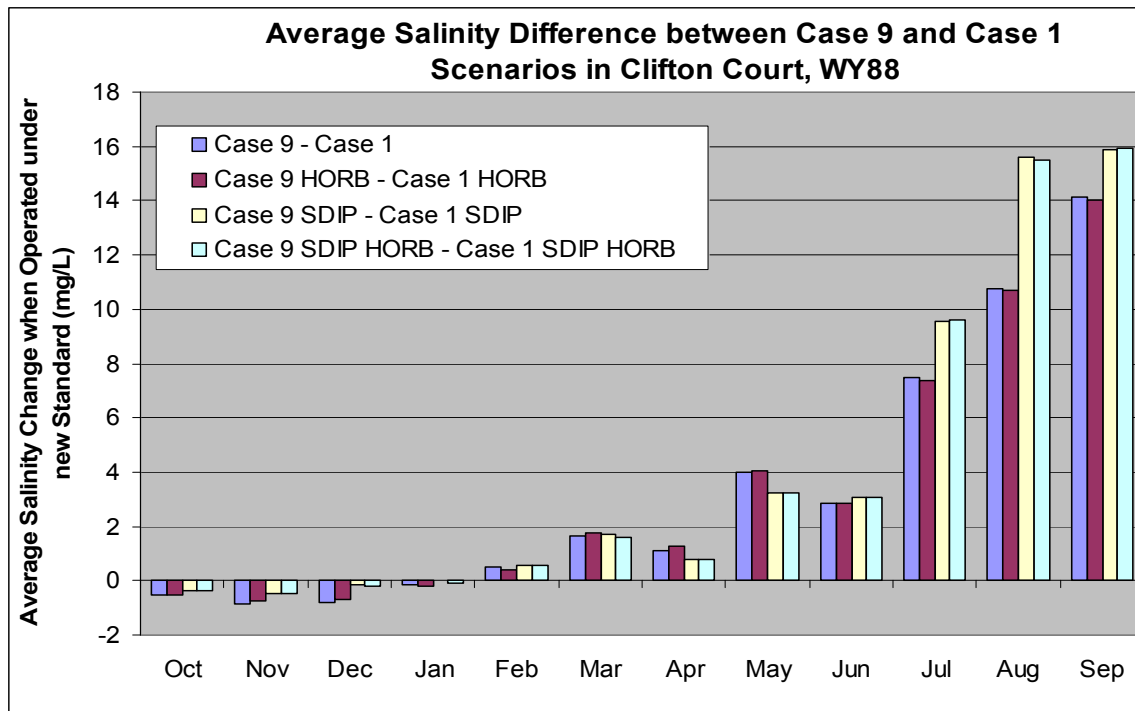


Figure 4: Average percent change in salinity in Clifton Court due to change in SJR salinity at Vernalis, WY88

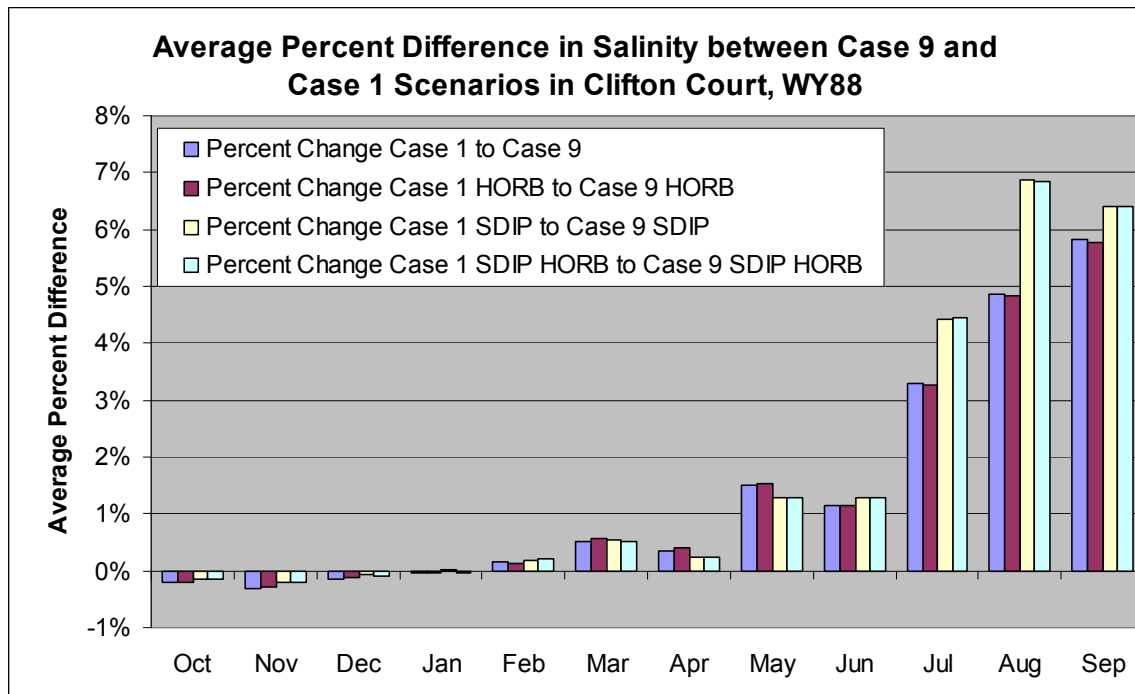


Figure 5: Average change in salinity in Rock Slough due to change in SJR salinity at Vernalis, WY64

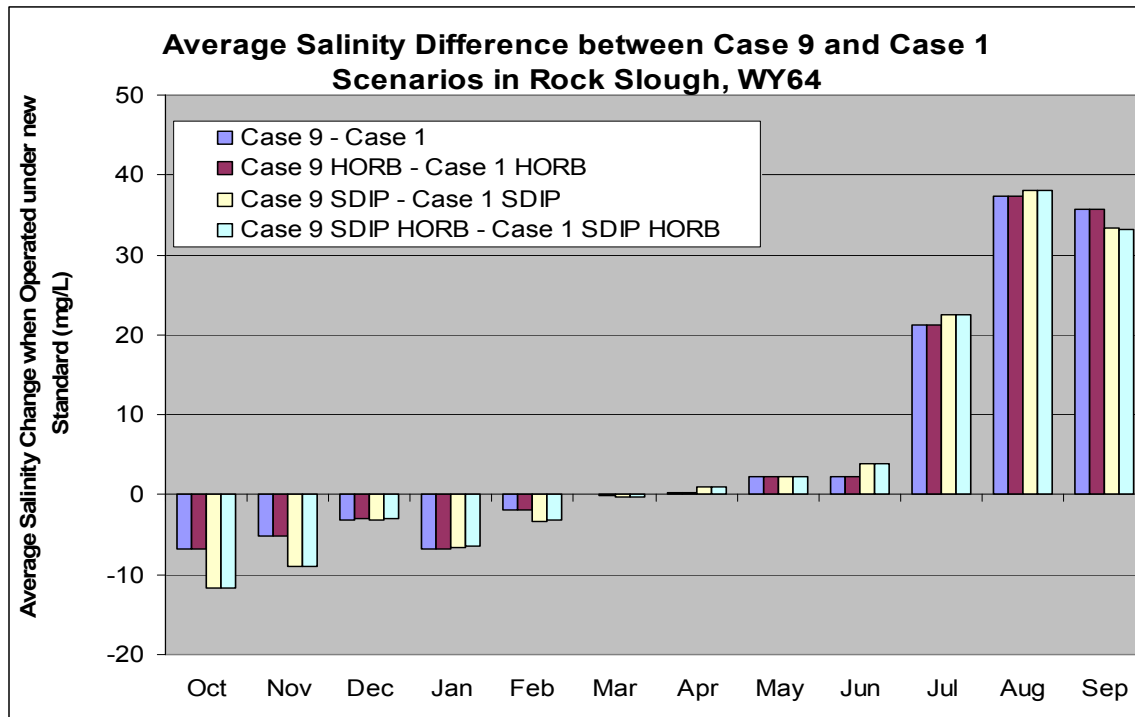


Figure 6: Average percent change in salinity in Rock Slough due to change in SJR salinity at Vernalis, WY64

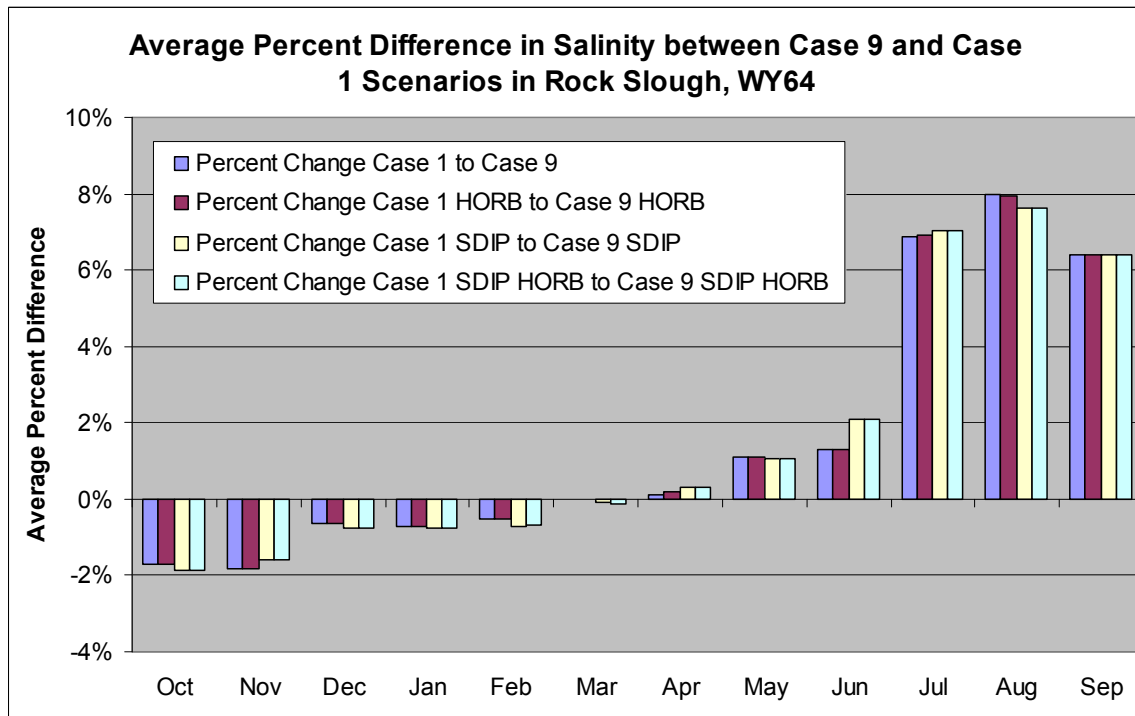


Figure 7: Average change in salinity in Rock Slough due to change in SJR salinity at Vernalis, WY88

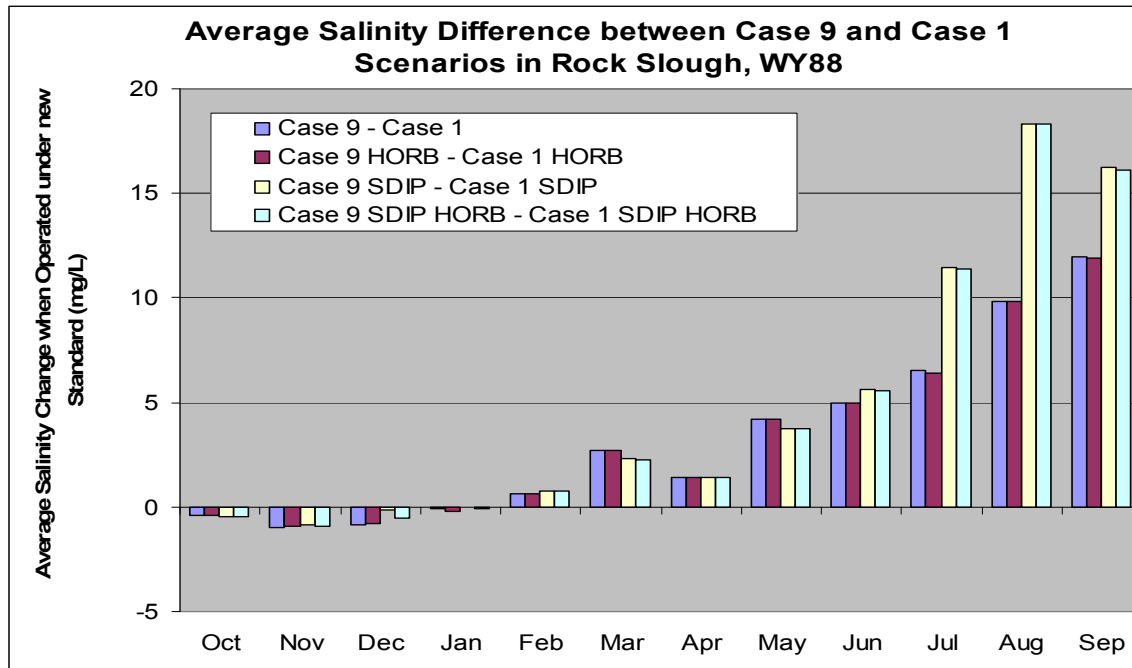


Figure 8: Average percent change in salinity in Rock Slough due to change in SJR salinity at Vernalis, WY88

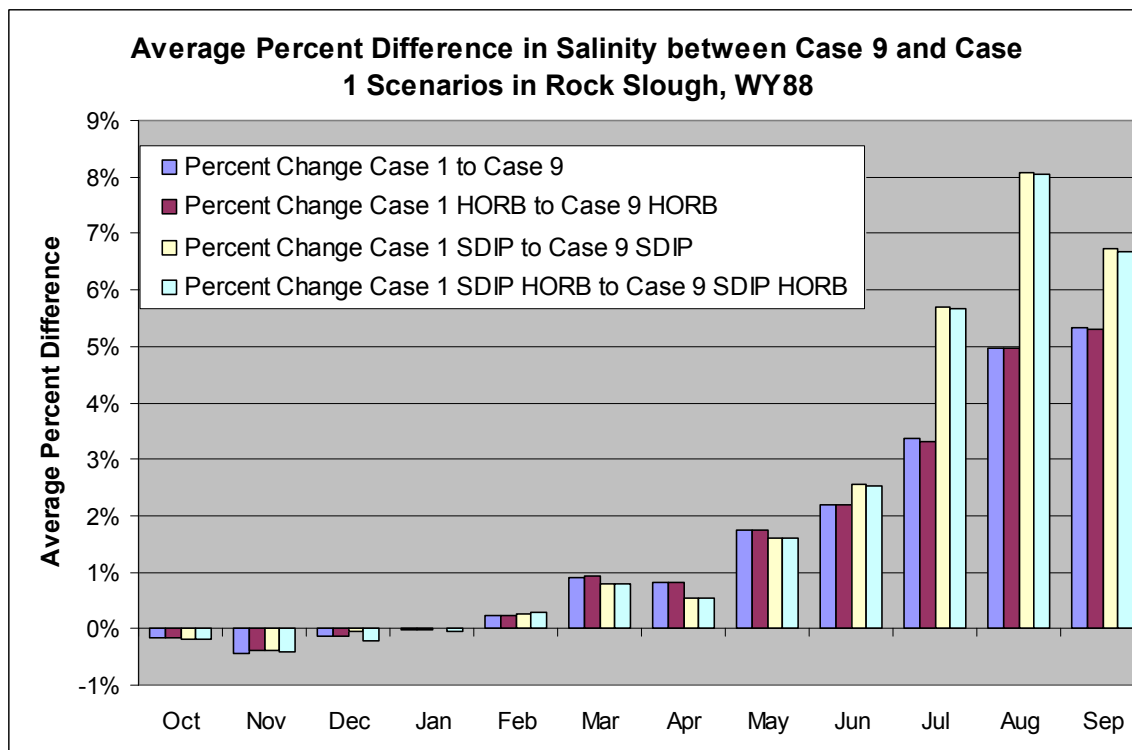


Figure 9: Salinity at Vernalis, Case 1 scenarios and Case 9 scenarios, WY64

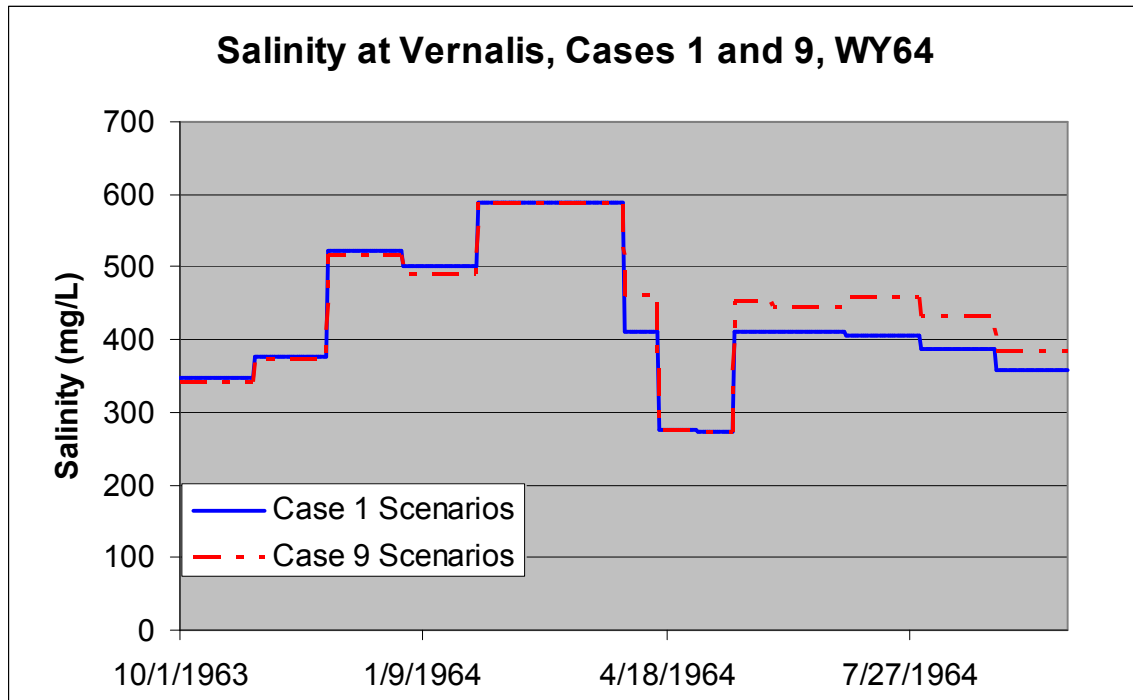


Figure 10: Salinity at Vernalis, Case 1 scenarios and Case 9 scenarios, WY88

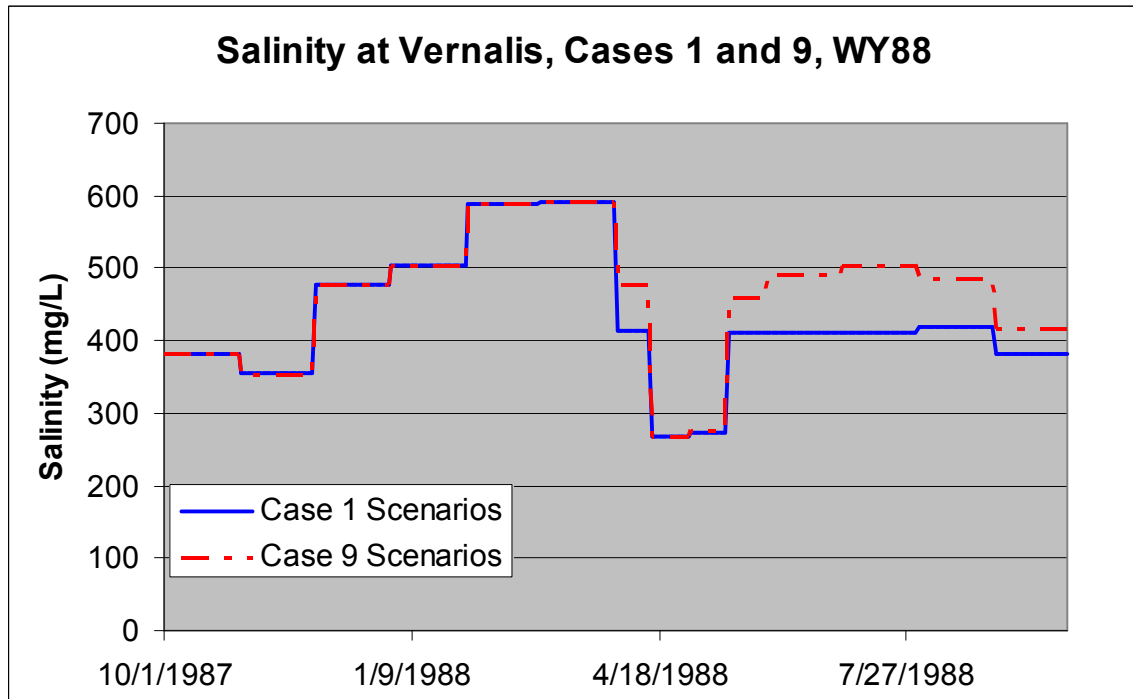


Figure 11: Salinity in Clifton Court Forebay, Case 1 and Case 9, WY64

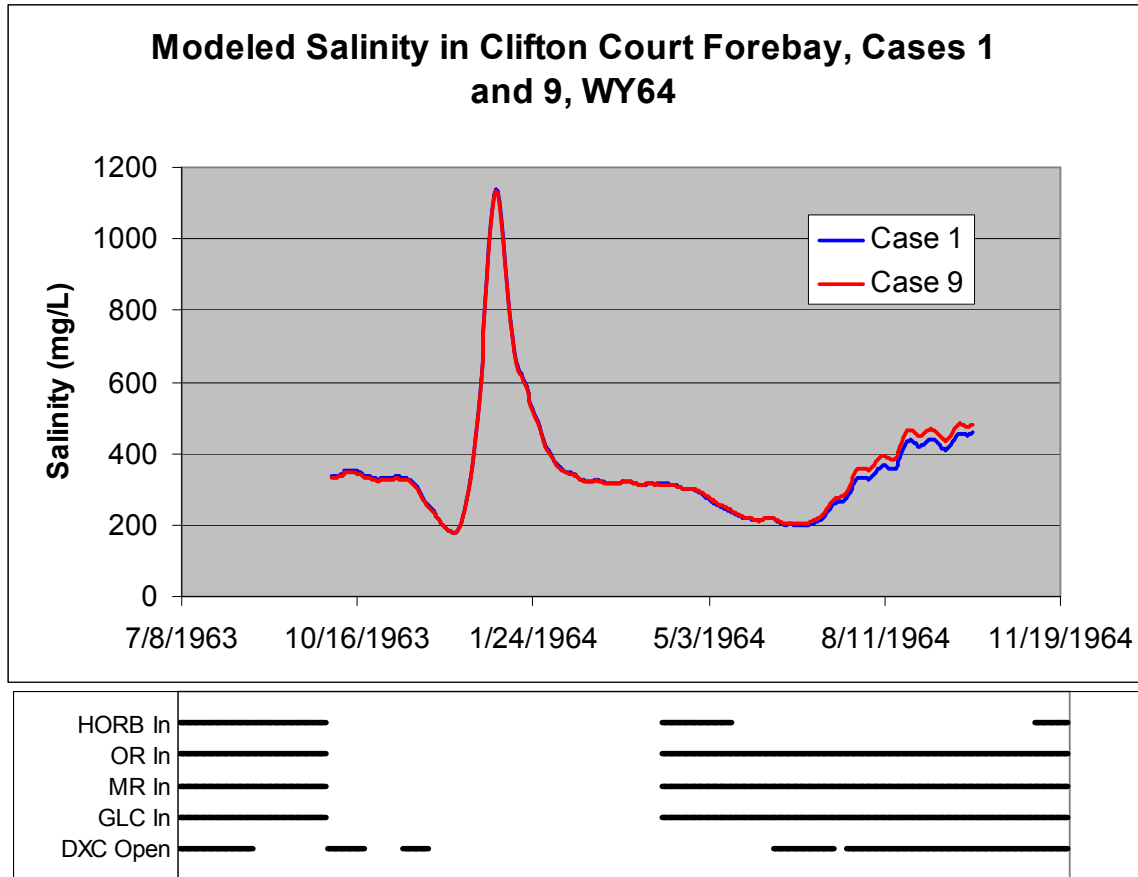


Figure 12: Fate of San Joaquin River water during water year 1964

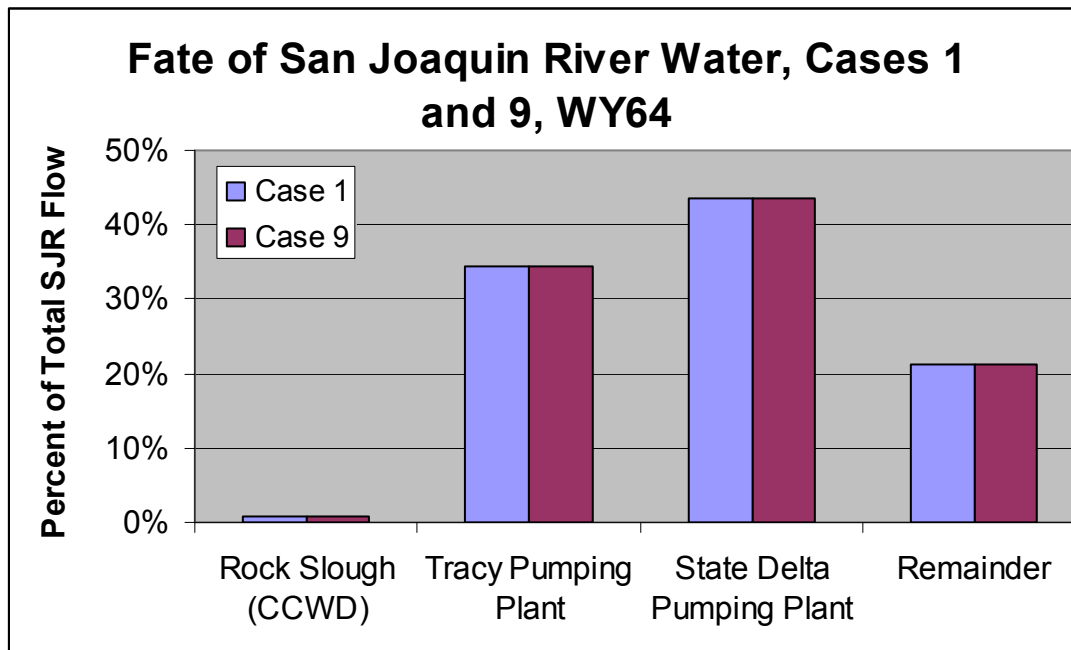


Figure 13: Fate of San Joaquin River water during water year 1988

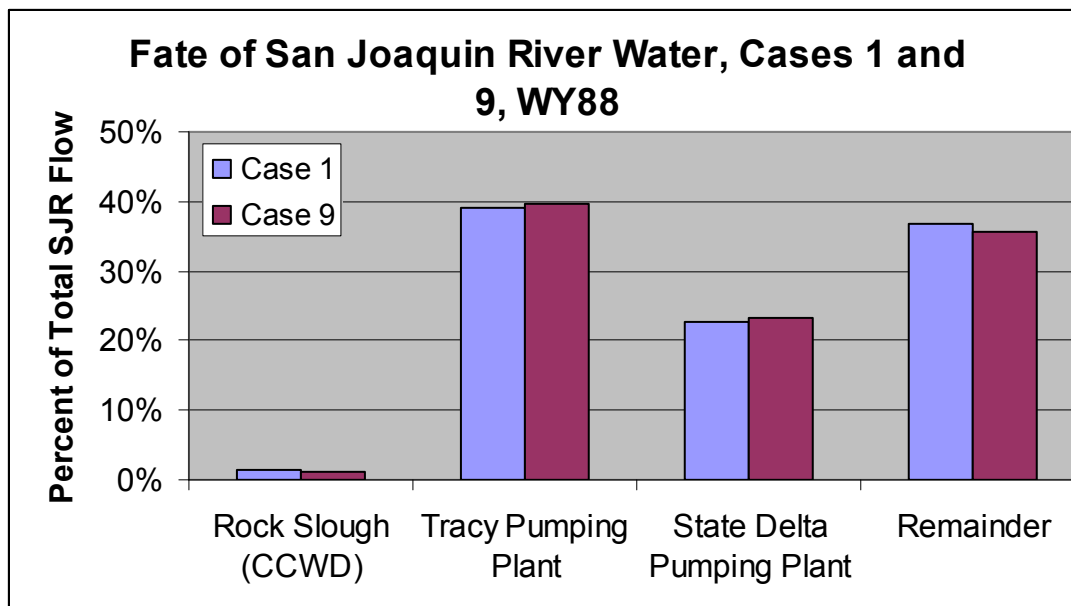


Figure 14: Flow split at confluence of Old and San Joaquin Rivers with standard HORB schedule

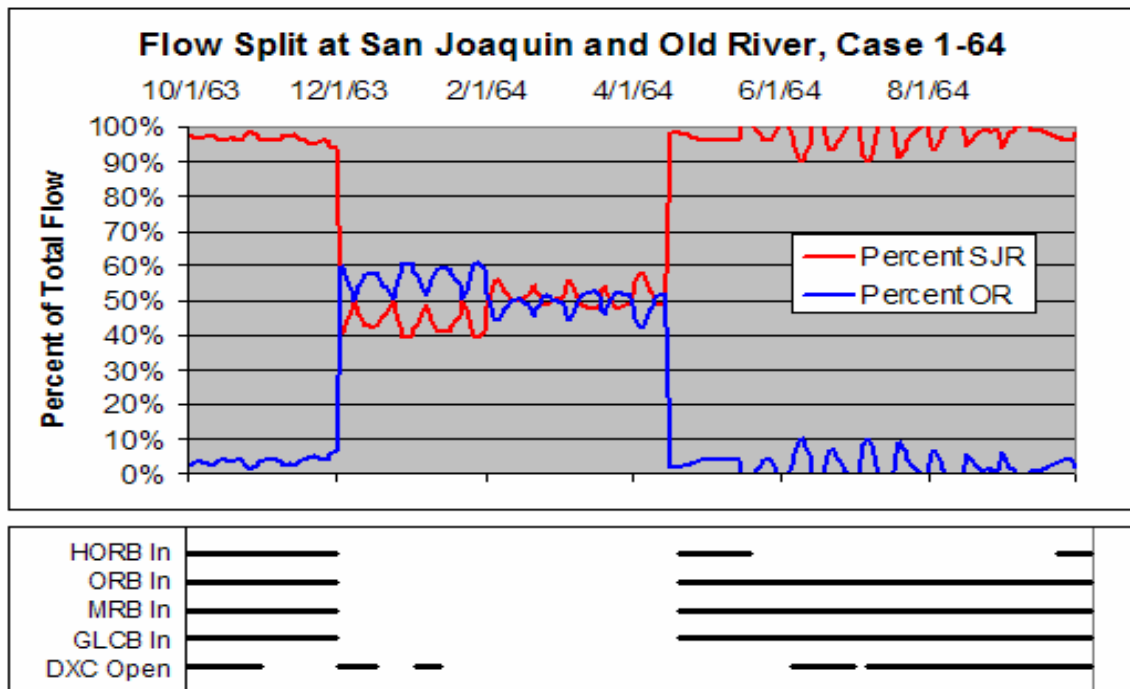
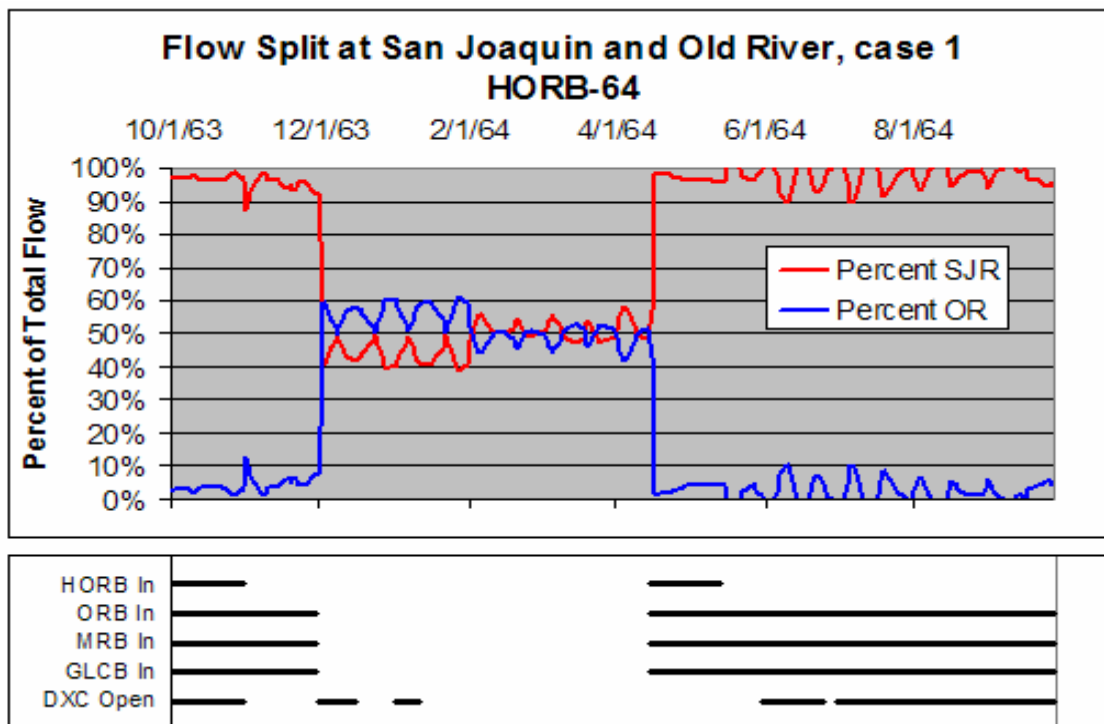


Figure 15: Flow split at confluence of Old and San Joaquin Rivers with modified HORB schedule



Petition to De-List the Lower San Joaquin River
For
Impairment by Salt and Boron

EXHIBIT J

Stephen R. Grattan
**“An Approach to Develop Site-Specific Criteria
for Electrical Conductivity” (2004)**

Submitted By:

SAN JOAQUIN RIVER GROUP AUTHORITY

An Approach to Develop Site-Specific Criteria for Electrical Conductivity to Protect Agricultural Beneficial Uses that Accounts for Rainfall

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July 2004

Executive Summary

A model has been developed to determine how the electrical conductivity of a given irrigation water supply affects crop production while taking annual rainfall into account. The model builds upon the principles and assumptions described by Ayers and Westcot (1985) and relates the electrical conductivity of the irrigation water (EC_w) to the seasonal average rootzone salinity, expressed as the electrical conductivity of the saturated paste (EC_e). The model considers the timing and quantity of applied irrigation water, the quantity and distribution of rainfall, and realistic assumptions related to soil water principles based on soil type.

The program can be used to either quantify the extent by which an irrigation water supply with a given EC would decrease the yield potential for a given crop under site-specific conditions or to determine the maximum EC of an irrigation water supply, that if used as the sole source of irrigation water over the long term, is fully protective of crop production. Moreover, the program could also be used to determine what additional agricultural practices might be necessary to restore full yield potential (e.g., applying additional irrigation to increase leaching). The sort of information that this program produces is not only valuable to policy and decision makers but to irrigation managers as

well. This model can be used to develop site-specific results when information regarding rainfall history, crop and soil type and irrigation water quality is available.

This model was used to evaluate site-specific conditions for the Davis region based on consistently conservative assumptions. The specific goal of this work was to help the Regional Board and UC Davis determine an EC threshold value for Putah Creek (EC_w) that protects downstream agricultural uses of the water. Beans were chosen for this analysis since this crop is potentially grown in the area downstream of the UC Davis wastewater treatment plant outfall and beans are salt-sensitive, having one of the lowest soil salinity thresholds (i.e., EC_e = 1.0 dS/m or 1,000 µmhos/cm). Protecting beans would, in turn, protect all other crops commonly grown in the Davis area.

Three scenarios were considered. The first scenario considered no rainfall while the others considered actual daily rainfall data over either a 5-year period or the entire 53-year period of historical rainfall records. The purpose of the first scenario was to compare our model with the relationship described by Ayers and Westcot (1985) by assuming no rainfall. In the absence of rainfall, our model predicts that irrigation water with an EC_w of 0.7 dS/m (700 µmhos/cm) will result in an average seasonal rootzone salinity (EC_e) of 0.95 dS/m. This result agrees very well with Ayers and Westcot (1985) estimate that such a water will produce an EC_e of 1.0 dS/m, providing confidence that rainfall can now be added as an additional input into the model for the subsequent scenarios.

The second scenario introduced rainfall as an additional input while keeping all other factors and assumptions the same as in Scenario 1. The first part of this scenario used a 5-year period (1953-1957) representing a relatively dry period. The second part of this scenario used a 5-year period (1963-1967) representing a period of average rainfall. Simulation results indicate that the seasonal average rootzone salinity (EC_e) over the 5-year period is about 1.0 dS/m when the EC of the irrigation water is 1.2 dS/m (compared to the 0.7 dS/m in the no-rainfall scenario). Interestingly, the wetter 5-year period resulted in mean seasonal EC_e values equal to the dryer 5-year period, suggesting that rainfall distribution also plays a large role in determining the seasonal EC_e.

A third scenario was examined to build upon the results obtained from the second scenario and evaluate how a given irrigation water affects crop yield over the long term. In this scenario, the entire 53-year record of historical daily rainfall was taken into account to determine the effect of irrigation waters with different EC_w values on seasonal average EC_e . With an EC_w of 1.2 dS/m, the seasonal mean EC_e for the 53-year period is 1.02 dS/m, while the range in seasonal EC_e for individual years varied between 0.88 to 1.42 dS/m. A statistical analysis of the data indicated that there were no significant trends for an accumulation of EC in the soil over the years.

When an EC_w of 1.1 dS/m is considered over the 53-year rainfall series, the model predicts that the seasonal mean EC_e is 0.94 dS/m. In 80% of the years, the mean seasonal EC_e is less than 1.0 dS/m, the yield threshold for salt-sensitive bean. For 50 of the 53 years, the seasonal mean EC_e for individual years is 1.05 or lower, which would result in a predicted yield reduction of 1% or less. However, this predicted reduction in yield potential is less than the error associated with the yield threshold value itself.

Over the entire 53-year period of record, yield reduction for beans is predicted to be noticeably reduced during only 3 years when applying irrigation water with an EC of 1.1 dS/m. All three years occurred during a period of drought in the 1970s. These three outliers translate into reductions in the potential yield of 2, 4 and 6%. Again, however, these predicted values are within the statistical uncertainty of the salinity threshold value itself. Moreover, such losses, if real, could be avoided by winter leaching.

Given these results, and taking into account all the other factors that potentially impact crop yield (e.g., weather, water stress, and biotic stresses) and the conservative nature of all inputs into the model, the use of 1.1 dS/m as the threshold EC value for irrigation water is considered protective for beans, and thus all other agricultural uses of the water in the Davis area.

Introduction

A model has been developed to determine the maximum electrical conductivity of an irrigation water supply (EC_w) that is fully protective of crop production while accounting for annual rainfall and other site-specific conditions. The EC_w is an indicator of the salinity hazard of the irrigation water and increases in direct proportion to its salt concentration (i.e., total dissolved solids, TDS). The program can be used to either quantify the extent by which an irrigation water supply with a given EC_w would decrease the yield potential for a given crop under site-specific conditions or to determine the maximum EC_w of an irrigation water supply, that if used as the sole source of irrigation water over the long term, can be fully protective of crop production. Moreover, the program could also be used to determine what additional agricultural practices might be necessary to restore full yield potential (e.g., applying additional irrigation to increase leaching). The sort of information that this program produces is not only valuable to policy and decision makers but to irrigation managers as well. This model can be applied to other conditions in California provided site-specific information regarding rainfall history, crop and soil type and irrigation water quality are available.

Overall Description of the Salt and Water Balance Model

Our primary goal was to develop a model that will allow a decision maker or irrigation manager to relate the electrical conductivity of the irrigation water (EC_w) to the seasonal average rootzone salinity (EC_e), taking into account the timing and quantity of applied irrigation water, the quantity and distribution of daily rainfall and soil water properties based on solid scientific principles. It is the EC_e that has been used as the standard by which crop yield and salt tolerance has been defined (Maas and Hoffman, 1977; Ayers and Westcot, 1985; Maas and Grattan, 1999). We have chosen bean as the crop to protect since it is potentially grown in the area downstream of the UC Davis wastewater treatment plant outfall and is salt-sensitive, having one of the lowest soil salinity thresholds of 1.0 dS/m (1,000 μ mhos/cm) (Maas and Grattan, 1999). That is, the yield potential is not reduced provided the average rootzone salinity over the season does not exceed 1.0 dS/m. This model takes into account many site-specific factors such as

crop type, rootzone depth, crop evapotranspiration and soil texture which defines the limits for the available soil water content, soil water potential and soil-water movement characteristics.

In the process of developing the model, we built upon the assumptions used and described by Ayers and Westcot (1985). Therefore, the rooting depth of the crop (RD) is divided into 4 equal quarter-layers. A daily mass balance (water and salt) is performed for each layer. The inputs for the first layer are the applied irrigation (I) and rainfall (P), and the outputs are the drainage (D, from layer 1 to layer 2) or saturated flow, and the evapotranspiration (ET) from the layer. For the underlying layers, the only input is the drainage from the overlying layer and the outputs are the drainage to the underlying layer and ET from that layer. For the fourth and deepest layer, the drainage represents the total drainage from the crop rootzone. Additionally, unsaturated flow (U) is considered between layers, calculated in daily steps whenever there is no saturated flow. It is related to the difference in the water content (more precisely the soil matric potential) between the layers and can be either an input or an output to a given layer, depending upon the soil-water-potential gradient.

Each soil layer is assigned a wilting point (WP), field capacity (FC) and total available water ($TAW = FC - WP$) according to the soil characteristics for the soil texture chosen. Each layer has a maximum storage capacity of TAW.

The evapotranspiration of the crop (ET_c) is calculated in each layer using appropriate crop coefficient (K_c) values and historical reference evapotranspiration (ET_o) data provided by Goldhamer and Snyder (1989), as well as taking into account the soil water content. The achievable ET_c is calculated as $ET_c = K_c ET_o$. Between cropping seasons (September through April) all ET (or evaporation (E) since there is no crop) is assumed to take place from the upper layer and bare surface E is assumed to be relatively constant at 0.6 mm/day (Department of Water Resources, 1989). Similar to the assumptions by Ayers and Westcot (1985), during the crop growing season the extraction pattern for each quarter-layer is 40%-30%-20%-10% from each descending layer when complete growth development is achieved (i.e., when maximum ET_c is achieved).

There are two crop-dependent parameters: the effective rooting depth (RD) and the ratio of readily available soil moisture to TAW ($p = \text{RAW}/\text{TAW}$) (Allen et al., 1998). The importance of this parameter is that not all of the TAW is equally available and that crops extract soil water more readily near the FC limit than that near the WP limit.

We found it important to include a root-water extraction (i.e., soil water depletion) function to make the model more realistic and to prevent the soil water content dropping below the WP. If the “previous” water content (L , explained below) of a layer is higher than $\text{WP} + (1-p) \text{TAW}$, the ET for that layer is taken as ETc . But if $L < \text{WP} + (1-p) \text{TAW}$, the lesser of ETc or $\frac{(1-p) \cdot \text{TAW}}{k}$ is taken as ET. The parameter k is a water depletion exponent ($k > 1$) that usually takes values of 2 to 30 and defines how quickly the water is depleted from the layer under crop water-stress conditions (the higher k , the lower the rate water is depleted). In any case, it is stated that if $\text{ETc} > \text{W} - \text{WP}$, then $\text{ET} = \frac{(1-p) \cdot \text{TAW}}{k}$. This caution should apply in cases when TAW of the layer is very low in relation to ETc (e.g., soils with very low TAW). The water content of every layer is always kept above the WP in this way, simulating root water extraction behavior. In addition, the frequency of irrigations can be increased to avoid using the water-stress function at all.

Some initial conditions are arbitrarily specified for each layer: an initial soil water content (W_0) and an initial salinity (EC_0). For short-term simulations, we have consistently adjusted the initial conditions close to those obtained at the end of the simulation so that the results obtained resemble steady state conditions. Next, a “previous” water content is calculated as $L_1 = W_0 + I_1 + P_1 - \text{ET}_1$ for the upper layer or $L_1 = W_0 + D_1 - \text{ET}_1$ where D_1 is the saturated flow from the overlying layer for the others. If this is higher than FC, the difference $L_1 - \text{FC}$ is assigned to excess Ex_1 . This excess is distributed that day and over the next two days as drainage from the layer in the sequential daily proportions of 60%, 30% and 10% and forms the drainage from the layer (D). The fraction of the excess remaining in the soil after drainage is called the distributed excess (EXd). For an excess EX_1 in day 1, the distributed excess and drainage in the following days are given by:

$$\begin{aligned}
EXd_1 &= 0.4 \cdot (EX_1) & D_1 &= 0.6 \cdot (EX_1) \\
EXd_2 &= 0.1 \cdot (EX_1) & D_2 &= 0.3 \cdot (EX_1) \\
EXd_3 &= 0 & D_3 &= 0.1 \cdot (EX_1)
\end{aligned}$$

If there is excess water produced the days that follow, it is assigned to EXd and D in the same fashion, such that EXd and D depend on the excess generated in the 2 or 3 previous days. Every layer gets rid of any excess water above FC reaching FC two days after the excess was produced. The excess water then percolates through the whole profile in nine days after the last excess took place with 95% of the excess being drained in the first five days. The actual water content of a layer is calculated as $W_1 = W_0 + EXd_1$.

The unsaturated flow (U) between layers allows for the redistribution of water from wetter to dryer layers so that the ET pattern for the layers can come closer to the 40%-30%-20%-10% root-water extraction pattern even when one layer (usually the upper) becomes water limiting [$W < WP + (1-p) TAW$]. Other features needed to establish the unsaturated flow are assigned to each layer from measured soil properties or are induced from its texture: the exponent (b) of the water potential relationship ($\psi = \psi_s \cdot (\theta/\theta_s)^{-b}$), the saturated water content (θ_s), the “saturated water potential” (ψ_s) and the saturated hydraulic conductivity (K_s) (Clapp and Hornberger, 1978). The flow between layers 1 and 2 is determined as $U_{1to2} = -K(\theta) \cdot \left(\frac{\psi_2 - \psi_1}{RD/4} - 1 \right)$ where $K(\theta)$ is the unsaturated hydraulic conductivity established between layers 1 and 2 as $K(\theta) = K_s \cdot (\theta/\theta_s)^{2b+3}$. For the determination of $K(\theta)$, the water content θ is taken as the harmonic mean of the water content of the layers between which the flow is established.

This water balance yields the daily water content of each layer [$W_i^{(x)}$]. It can be checked by comparing the increase in water content in the whole profile for the year (or growing season) [the sum of $W_{365}^{(x)} - W_0^{(x)}$ for $x = 1, 2, 3$ and 4] with the sum of inputs and outputs to the soil profile along the year [$P + I - D^{(4)} - (ET^{(1)} + ET^{(2)} + ET^{(3)} + ET^{(4)})$], where P and I represent the annual precipitation and irrigation amounts].

The salt balance is performed with the flows between layers and their assigned soil water electrical conductivities (EC_{sw} in dS/m). The EC of precipitation (NADP, 2004) and irrigation are variables but are given constant values EC_p and EC_i. The salt balance for the first layer ^[1] for day 1 results:

$$(W_1 + D_1) \cdot EC_1 = W_0 \cdot EC_0 + P_1 \cdot EC_p + I_1 \cdot EC_i - U_1 \cdot EC^*$$

where $EC^* = EC_1^{(1)}$ if $U_1 > 0$ and $EC^* = EC_0^{(2)}$ if $U_1 < 0$. Evapoconcentration is accounted for as it is removed from W_0 to get W_1 .

The salt balance can also be checked by comparing the increase in salts (EC^*W) in the soil from day 0 to day 365 by summing all the salt inputs and outputs during the year. The net salt accumulation or removal from the profile is also obtained. A long-term (more than one year) simulation can be run to determine if there will be a tendency towards long-term salinization or whether a stable or quasi-steady state value will be achieved.

The mean EC of the soil profile is obtained from the EC in each layer ($EC_{sw}^{(x)}$) either as the arithmetic mean or as a weighted mean (weighted based on the crop water use from each layer: $ET^{(x)}/ET$). The EC of the saturation extract (EC_e) is calculated from the EC of soil water (EC_{sw}) through $EC_e = (\theta/\theta_s) \cdot EC_{sw}$ and the results are compared with the crop's threshold for 100% yield (Ayers and Westcot, 1985; Maas and Grattan, 1999; Maas and Hoffman, 1977). These means taken over the growing season will determine whether crop yield will be adversely affected under the simulation conditions or not. The mean and daily maximum EC of the profile (both weighted and arithmetic mean of the 4 layers) for the whole year and for the growing season are presented.

Accounting for Rainfall and Irrigation Schedules

Among the entries to the model are the daily values of precipitation (rainfall) and irrigation. The main goal of this work is to establish how precipitation will affect crop yields when using irrigation water of a given constant quality (i.e., EC_w). The historical rainfall record over the past 53 years for the Davis area was taken from the National Climate Data Center (2004) and was numerically sorted from the minimum (driest year)

to the maximum (wettest year). If the rainfall of the m^{th} year in the ordered row is P_m , the probability that rainfall is lower than P_m is given by the order number (m) of a year divided by the total number of years (n) plus 1 [$\text{Prob}(P \leq P_m) = m/(n+1)$]. The actual rainfall distribution of the m^{th} can be used to determine the results of the simulation with a P_m probability in the conditions of the location. In order to get a more accurate estimate for a given probability value (say 20%) several years with P_m around 20% may be used and the mean results taken as the 20% probability is the outcome from performing such an irrigation schedule under such weather conditions.

An irrigation schedule can also be specified in several ways. First, we can define a leaching fraction (LF) and make $I = ET_c/(1-LF)$ where I is the depth of applied (infiltrated) water. Furthermore “ I ” may be distributed in a given number of daily irrigations similar to actual farmers’ irrigation practices or “ I ” may be applied at a frequency to prevent water stress. Any given schedule can be shifted a few days before or after so as to find which actual dates provide a better water schedule for the crop (such that actual ET is the closer to the achievable ET_c).

Therefore, this model allows numerous irrigation schedules to be tested under a range of actual rainfall situations that could take place with a given probability. The results indicate whether soil salinity gets high enough to reduce yields of a particular crop under the given rainfall patterns and irrigation practices or whether there is a net salinization of the soil profile over time such that salinity will eventually affect crop yields. When this occurs, the EC of the irrigation water must be decreased until such favorable soil salinity conditions (i.e., the EC_e threshold, the maximum seasonal rootzone salinity of a particular crop above which yields decline) are achieved.

Also, the simulation can be applied to multi-year historical rainfall series. If irrigation water quality were to remain constant over this same period, the resulting simulated series of EC_e thresholds for various crops can be used to establish the probability of obtaining below/above the threshold values of EC_e . The result is the distribution function of seasonal average rootzone salinity (EC_e) for the entire period. This model can be used in other locations within the state given information on crop types, soil types and regional climatical data including historical rainfall records.

Results and Discussion

The water and salt balance model has been applied under several different rainfall scenarios in order to predict the evolution of soil salinity in the crop rootzone and its potential adverse effects on yield as irrigation water with a higher salinity is introduced. The analyzed scenarios were developed for the Davis region based on direction given to UC Davis by the Central Valley Regional Water Quality Control Board. In all scenarios, the parameters and assumptions required by the model were kept constant. The parameters derived from the soil and crop characteristics have been chosen from actual soil and crop data. The soil evaluated is the *Yolo silt loam* series (SCS, 2004) which represents the dominant soil type in the study area. The crop evaluated was dry bean because it is grown in the area and represents one of the most salt-sensitive crops to salinity. Therefore, protecting dry bean from salinization will also protect all other crops that either have equal sensitivity or more tolerance to salinity.

The main features of the *Yolo silt loam* series important for our model are the total available water (TAW), saturated hydraulic conductivity (K_s) and the porosity or saturated soil-water content (θ_s). These are taken as $TAW = 0.19 \text{ cm}^3/\text{cm}^3$, $K_s = 86.4 \text{ cm/day}$ and $\theta_s = 0.51 \text{ cm}^3/\text{cm}^3$ from the available soil data. Field capacity ($FC = 0.35 \text{ cm}^3/\text{cm}^3$) and wilting point ($WP = 0.17 \text{ cm}^3/\text{cm}^3$) are inferred from TAW and the exponent b and the ψ_s coefficient are determined from FC and WP ($b = 5.2$ and $\psi_s = 40.4 \text{ cm}$). The soil water depletion constant is taken as $k = 12$, to account for the difficulty for the crop to extract water from such a fine-textured soil.

The root depth (RD) for dry beans was assumed to be 60 cm (Hanson et al., 1999) and the ratio of water depletion to TAW under which the crop is water stressed is taken as $p = 0.45$ from available information (Allen et al., 1998). Irrigation practices are reproduced from the usual local practices for dry bean (Long et al., 1999): a pre-sowing irrigation and four in-season irrigations are applied. The dates of application are arranged each year to obtain the maximum possible water use by the crop. The leaching requirement is assigned at 15 % (0.15) such that the irrigation application amount is 1.15 times the seasonal ETc. In all cases, the initial soil water contents and soil EC are

adjusted so that the water contents in the beginning and the end of the season are similar and that there is no significant salt leaching or accumulation in the profile. The results therefore resemble a stable condition, which is particularly important for short (one year) simulations.

The scenarios considered are:

- (1) Irrigation water with $EC_w = 0.7$ dS/m (700 $\mu\text{mhos/cm}$); No rainfall and therefore no ET from non-cropped fields except during the irrigation season; this is the situation considered by Ayers and Westcot (1985);
- (2) Calculate maximum EC_w to maintain mean $EC_e \leq 1$ with assumed annual rainfall; Two five-year series were analyzed representing a dry and average rainfall series: the 20th and 50th percentile of the 53-year precipitation series (i.e., those years representing a probability of 80% or 50% that the 5-year precipitation series will be higher than the one presented here);
- (3) Irrigation water with an $EC_w = 1.2$ dS/m and 1.1 dC/m over the entire 53-year series of available rainfall data.

Scenario 1. Irrigation water with $EC_w = 0.7$ dS/m (700 $\mu\text{mhos/cm}$): No rainfall and therefore no ET before and after the irrigation season.

This first simulation is particularly important since it compares our model with the assumptions and approach described by Ayers and Westcot (1985). Under Ayers and Westcot (1985), rainfall is not considered, the rootzone is divided into four equal quarters where the rootzone water extraction pattern is 40%-30%-20%-10% in descending quarters and a leaching fraction of 15-20% below the fourth layer is assumed. Using these assumptions, Ayers and Westcot (1985) predict that an irrigation water of 0.7 dS/m (700 $\mu\text{mhos/cm}$) will produce an average rootzone salinity (EC_e) of 1.0 dS/m, a soil salinity that will not limit productivity of any crop, regardless of salt sensitivity.

We developed our model to adopt and build upon the assumptions of Ayers and Westcot (1985). Below are results that describe soil water content, irrigation and drainage volumes, and ECe values for the different layers (i.e., rootzone quarters) in relation to time of year both within and outside of the growing season.

In this first scenario, the only change that takes place out of the irrigation season is the redistribution of water within the soil profile (between the soil layers) as no rainfall or drainage is taking place (Fig. 1.1). Whenever the water content in a layer exceeds field capacity, there is a saturated flow to the underlying layer. When the water content in the fourth layer exceeds field capacity, drainage takes place out of the rootzone, and with it the leaching of salts. The simulations show that drainage takes place after each of the 5 irrigation events of the year (Fig 1.2). After the season (August 15), the water redistributes in the soil towards equal soil-water potential in the layers (Fig. 1.1) since no rainfall is considered.

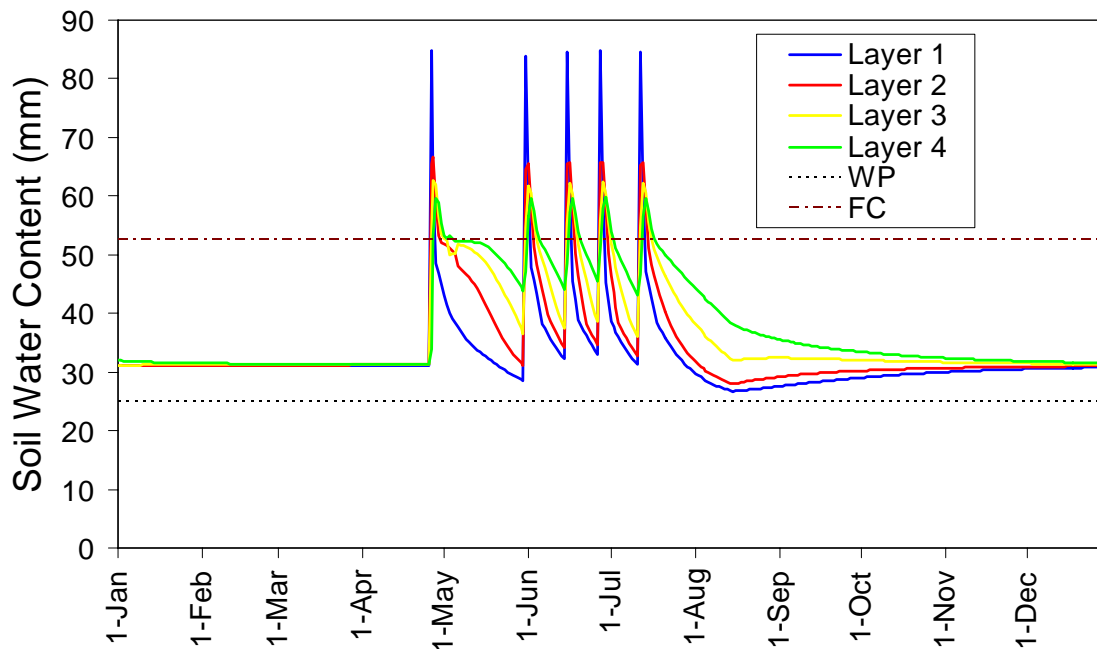


Figure 1.1. Simulated soil water content (in mm) of the four soil layers over the year in relation to the mean field capacity (FC) and wilting point (WP) of the four layers.

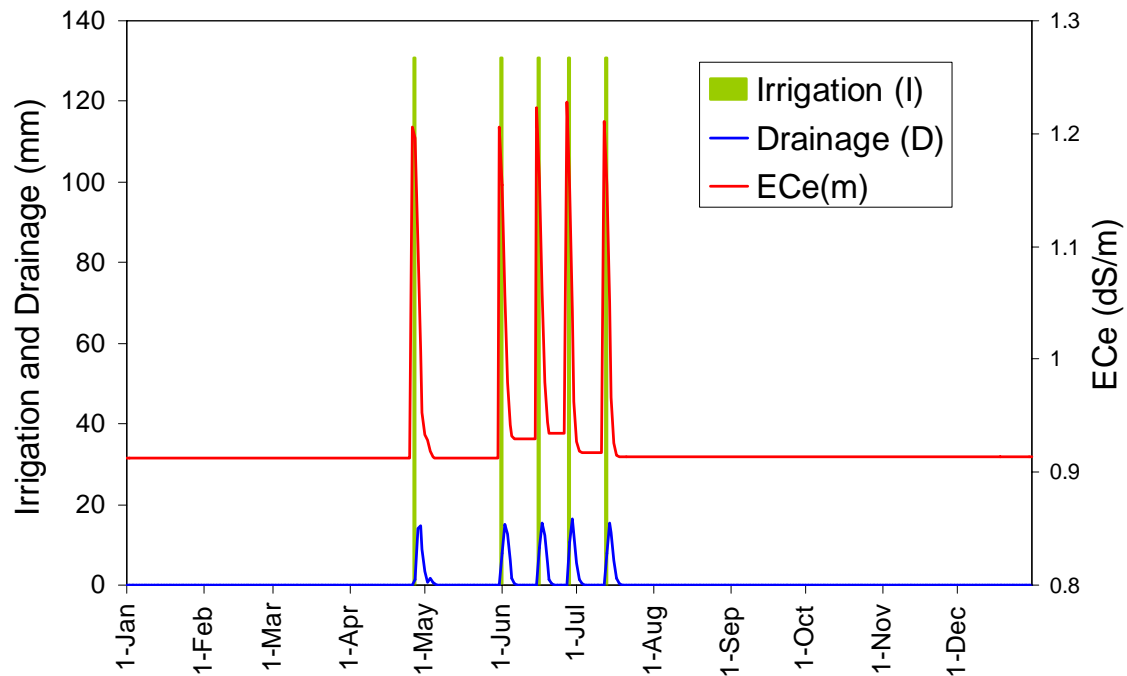


Figure 1.2. Irrigation volumes applied and drainage (in mm) and mean EC of the saturation extract obtained by simulation in the absence of rainfall.

It is also important to note that the soil water content in each of the four layers varies depending upon whether they are examined before or just after an irrigation event. Immediately after each irrigation the water content in the top layer (layer 1) is higher than that in layer 2 and so on. During most of the time between irrigations, the water content is least in the top layer and is progressively wetter with each descending layer which reflects the root-water extraction pattern being highest in the top layer and decreases with depth.

There are no salt inputs (no rainfall) or outputs (leaching) previous to the first irrigation. When the first irrigation takes place (April 26), the mean salinity of the saturation extract in the profile (EC_e) increases as a result of the salt input (Fig. 1.2), but it decreases the following days as drainage takes place. In this scenario, as the initial and final water contents are made equal and there are no salt outputs or inputs outside of the irrigation period, all the salts introduced by irrigation are leached at the end of the season.

In the other scenarios that follow, there is an actual increase in soil salinity over the season which has to be leached by the winter rains.

The ECe remains below 1 dS/m (the threshold limit beyond which yields decline) during the non-irrigation season yet shows an increase-decrease pattern after each irrigation event during the irrigation season. Leaching is effective enough to reduce salinity below the 1 dS/m after each event (Fig. 1.3), but that is not the case necessarily in the simulation of actual years.

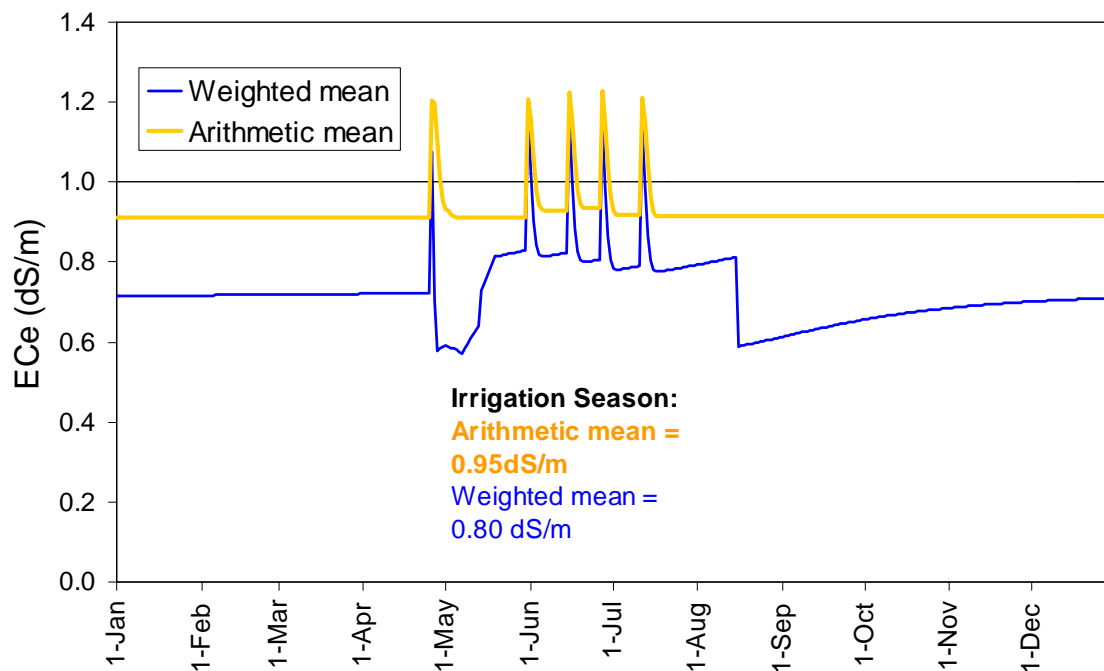


Figure 1.3. Simulated mean EC of the saturation extract of the four soil layers (ECe) at various times over entire year.

The mean ECe obtained in this scenario was 0.95 dS/m for the irrigation season (May 1 – August 15) (Figure 1.3). Therefore, our simulation is essentially the same as that calculated by Ayers and Westcot (1985). That is, irrigation water with an ECw of 0.7 dS/m will result in a seasonal ECe of 1.0 dS/m (0.95 dS/m). In this scenario as well as each that follows, the annual ECe is slightly lower than the seasonal ECe due to the salt leaching by rains before the season begins and accumulation of salts by irrigation during the season.

The mean ECe of the soil profile weighed by each layer's contribution to total ET is also lower than the arithmetic mean for the irrigation season (i.e., ECe = 0.80 dS/m) and for the entire year (i.e., ECe = 0.72 dS/m). Although the model calculates both the weighted mean and arithmetic mean, we have consistently used the arithmetic mean (i.e., the higher value) to characterize salinity following Ayers and Westcot (1985). The arithmetic mean is more appropriate to characterize soil salinity for infrequently furrow-irrigated crops such as bean, while the weighted mean is more appropriate for characterizing crop response to high-frequency, drip irrigated crops (Pratt and Suarez, 1990).

Scenario 2. Calculate maximum ECw to maintain mean ECe ≤ 1 with assumed annual rainfall.

The second scenario was used to calculate the maximum ECw allowable to maintain a mean ECe ≤ 1 over the growing season after taking rainfall into account. Two different 5-year rainfall series were analyzed. The first 5-year rainfall series represents an average rainfall period and the second 5-year series represents a dry period where there is an 80% or more probability that any randomly selected 5-year period has a higher annual rainfall record.

The 5-year series of 1953 to 1957 ($P = 18.4\%$) was taken for the 80% probability rainfall. That is, in at least 80% of 5-year periods, rainfall (and therefore leaching) will be higher than that selected here in this series. The same is applicable to the series 1963 to 1967 ($P = 49.0\%$) with a 50% probability (i.e., an average rainfall period). These series represent the given quantities of the annual precipitation (January 1 to December 31) but it has been shown that the precipitation of the hydrologic year (October of the previous year to October of the current year) has a closer relationship with ECe.

After several trial ECw values, an ECw of 1.2 dS/m was found to satisfy the objective of maintaining a mean seasonal ECe = 1 over the 5-year period (Figure 2.1). The seasonal mean ECe for the 80% (dry) series was 1.03 dS/m and the mean ECe of the average rainfall series was 1.02 dS/m. As for the individual years, all years but one resulted in an ECe < 1.03 dS/m in the 1953-57 series, with the maximum ECe being 1.09

dS/m. In the 1963-67 series, three years had an $EC_e < 1.00$ dS/m while the other two had higher EC_e values (1.13 dS/m and 1.14 dS/m). This shows that though the EC_e is quite low expressed as a mean for the 5-year series (at either the $P > 80\%$ or the $P > 50\%$ level) there can be individual years with higher seasonal salinity, even during the more rainy $P > 50\%$ series. While this simulation indicates that rainfall will reduce the mean seasonal EC_e , it suggests that annual rainfall distribution is at least equally if not more important than the annual rainfall amount in regards to its impact on EC_e . This finding was further studied in Scenario 3.

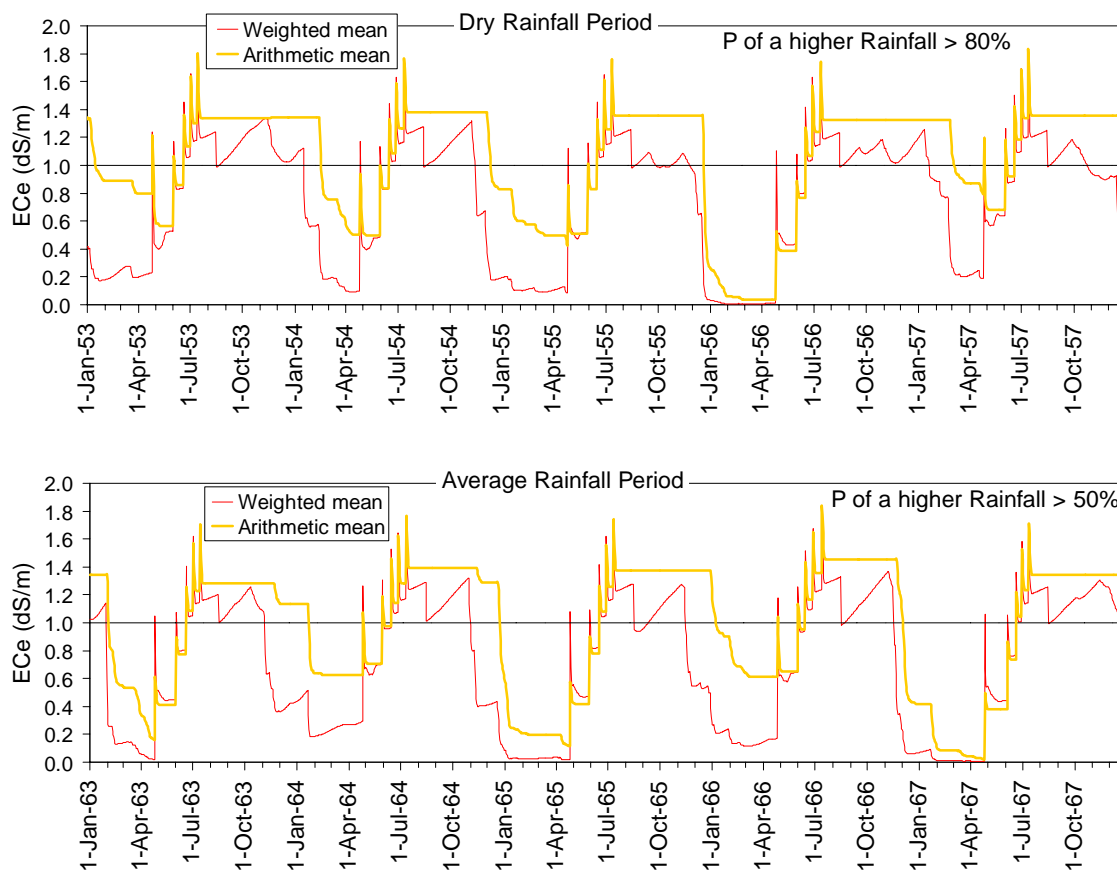


Figure 2.1. Mean simulated rootzone-salinity (EC_e) in relation to the 5-year run using a probability of at least 80% (a) or at least 50% (b) of having a higher precipitation. The weighted mean is obtained by weighing each layer's EC_e by the layer's contribution to total ET.

For all of the years analyzed in Scenario 2, the highest seasonal average rootzone ECe was 1.14 dS/m. The potential impacts of this worst-case year were further quantified to put the results in perspective. For beans, the expected yield reductions by salinity that results in seasonal average rootzone ECe value of 1.14, considering a yield reduction slope of 19 % per unit increase in ECe above the threshold of 1.0 dS/m (Maas and Grattan, 1999), is 3%. This slight reduction in yield potential is less than the error associated with the yield threshold value itself. As previously noted, all of the other crops commonly grown in the Davis region are less salt-sensitive than beans. Thus, the model results indicate that an ECw of 1.2 dS/m would be protective for all crops under both the average and dry rainfall periods analyzed.

There is a consistent increase in rootzone salinity as the irrigation season progresses in all the years simulated (Fig. 2.1). The feature that determines whether the mean salinity (ECe) will increase above 1.0 dS/m or not, is the starting point for that increase (i.e., the ECe at the beginning of the season) which depends on the leaching (i.e., the amount of rainfall the preceding winter). The ECe at the end of each season is very consistent at about 1.3-1.4 dS/m, but in very rainy winters it may drop as low as 0.03 dS/m (1966-67 winter) whereas in dry winters it may drop to only 0.80 dS/m (1956-57 winter).

The results from these short-term simulations (5 years) may be somewhat affected by the imposed condition of stability: that the salinity at the beginning of the period matches the salinity at the end. For example, if there is little drainage between September and December the fifth year of the simulated record, the resulting salinity will be high. Therefore the soil salinity of first year will then be adjusted upward to reflect this final salinity level and the simulation is run again. In light of short-term variations in soil salinity, a third scenario is introduced in which the entire 53-year rainfall series is taken into account. Therefore results from this simulation are more suitable as individual years are less likely to be affected by the stable condition imposed under the previous simulation.

Scenario 3. Evaluation of the entire 53-year rainfall series using EC_w values of 1.2 dS/m and 1.1 dS/m to evaluate long-term impacts.

Simulations that consider irrigation waters with variable salinities (EC_w) under the entire 53-year series of meteorological data provide the best insight into the changes in soil salinity over this long-term duration. If an irrigation water with an EC_w of 1.2 dS/m is used as the sole source of irrigation water and the simulation is run for the 53 years with available historical rainfall data (1951 to 2003), the mean seasonal EC_e ranges from 0.88 dS/m to 1.42 dS/m with a mean value of 1.02 dS/m (Figure 3.1). However, 50 of the 53 years (about 94% of the years), the seasonal EC_e is maintained below 1.2 dS/m; a seasonal average root zone salinity that translates into a yield potential of over 95% (Maas and Grattan, 1999).

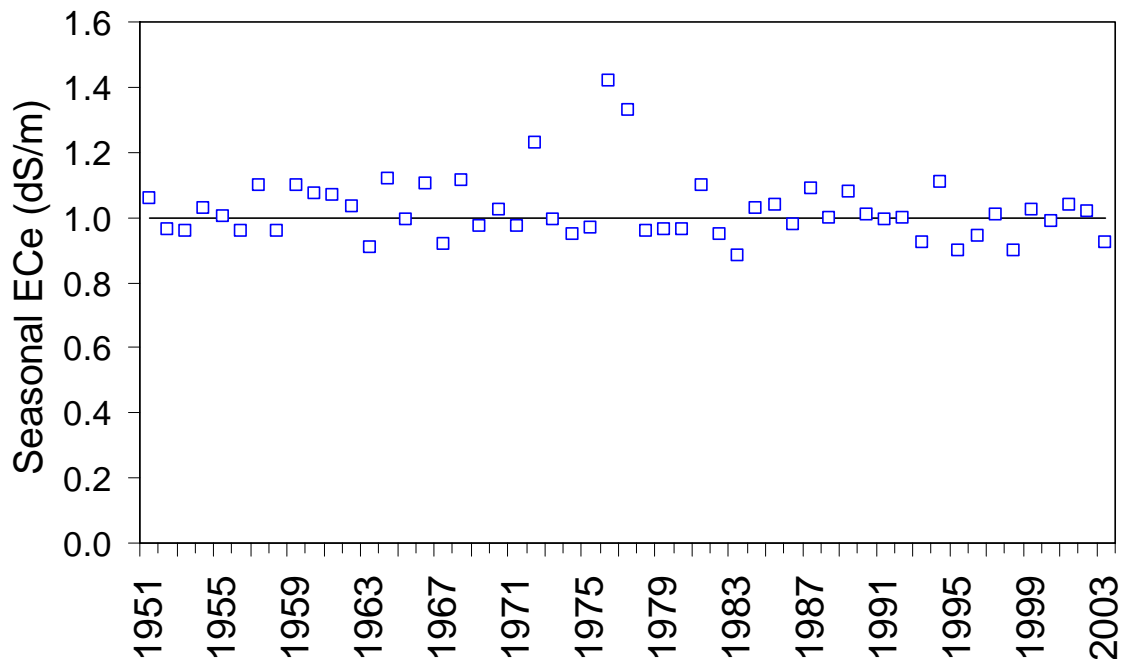


Figure 3.1. Trend of the mean EC_e of the irrigation season obtained by simulation for the study period using irrigation water with an EC_w of 1.2 dS/m.

The possibility that the EC_e increases or decreases along the 53-year history due to the cumulative effect of leaching from rain water was considered. Fig. 3.1 shows that there is a slight apparent decrease in EC_e with time. However, after running the Mann

Kendall procedure (Gilbert, 1983), it was concluded that irrigation with an EC_w of 1.2 dS/m will not lead to a progressive increase or reduction in soil salinity under the analyzed precipitation patterns.

To evaluate the sensitivity of the results to changes in EC_w , the model was run again with an EC_w of 1.1 dS/m over the same 53-year rainfall record (see Fig 3.2). As expected, the resulting E_{ce} values were less than those found using an EC_w of 1.2 dS/m. The long-term seasonal mean E_{ce} was reduced from 1.02 to 0.94 dS/m. Moreover, the seasonal mean E_{ce} for individual years is less than 1.0 dS/m for 80% of the years compared to 50% using an EC_w of 1.2 dS/m.

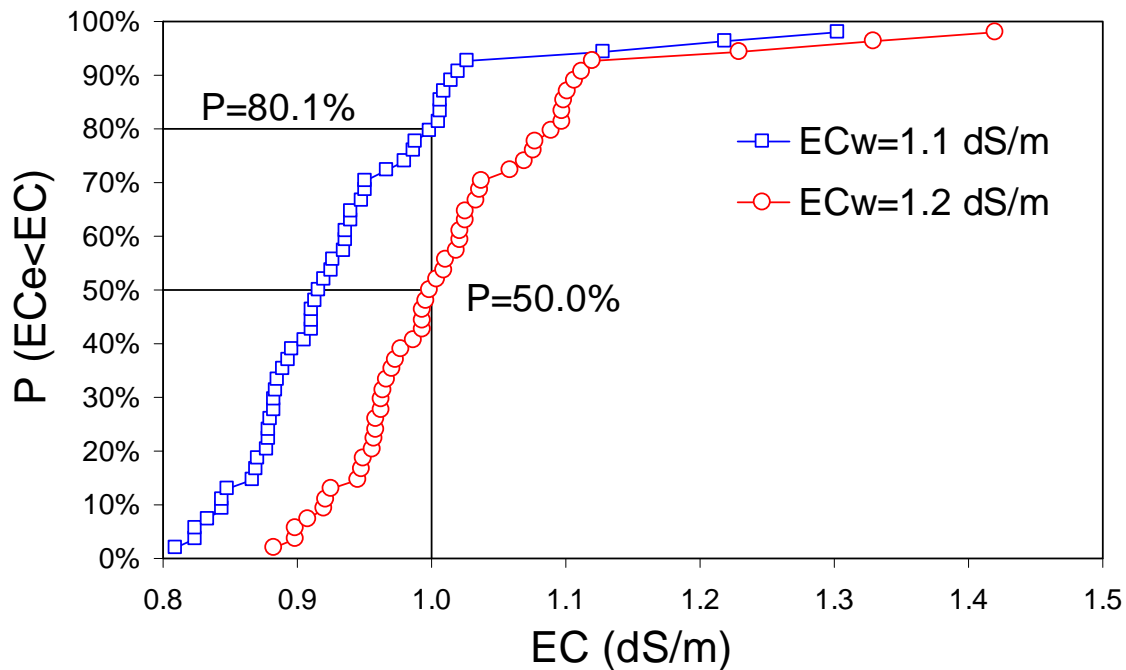


Figure 3.2. Sample probability distribution function of the mean seasonal E_{ce} obtained after the simulation of the 53 year series assuming an EC_w of 1.1 dS/m and 1.2 dS/m.

The frequency distribution of the E_{ce} obtained by simulation is skewed to the left, meaning that there are far more values to the left of the mean than to the right, with both EC_w of 1.2 dS/m (Fig 3.3 (a)) and 1.1 dS/m (Fig. 3.3 (b)). For both EC_w cases, only a few years (7 for $EC_w = 1.2$ dS/m and 3 for $EC_w = 1.1$ dS/m) would present an appreciable yield loss ($> 2\%$).

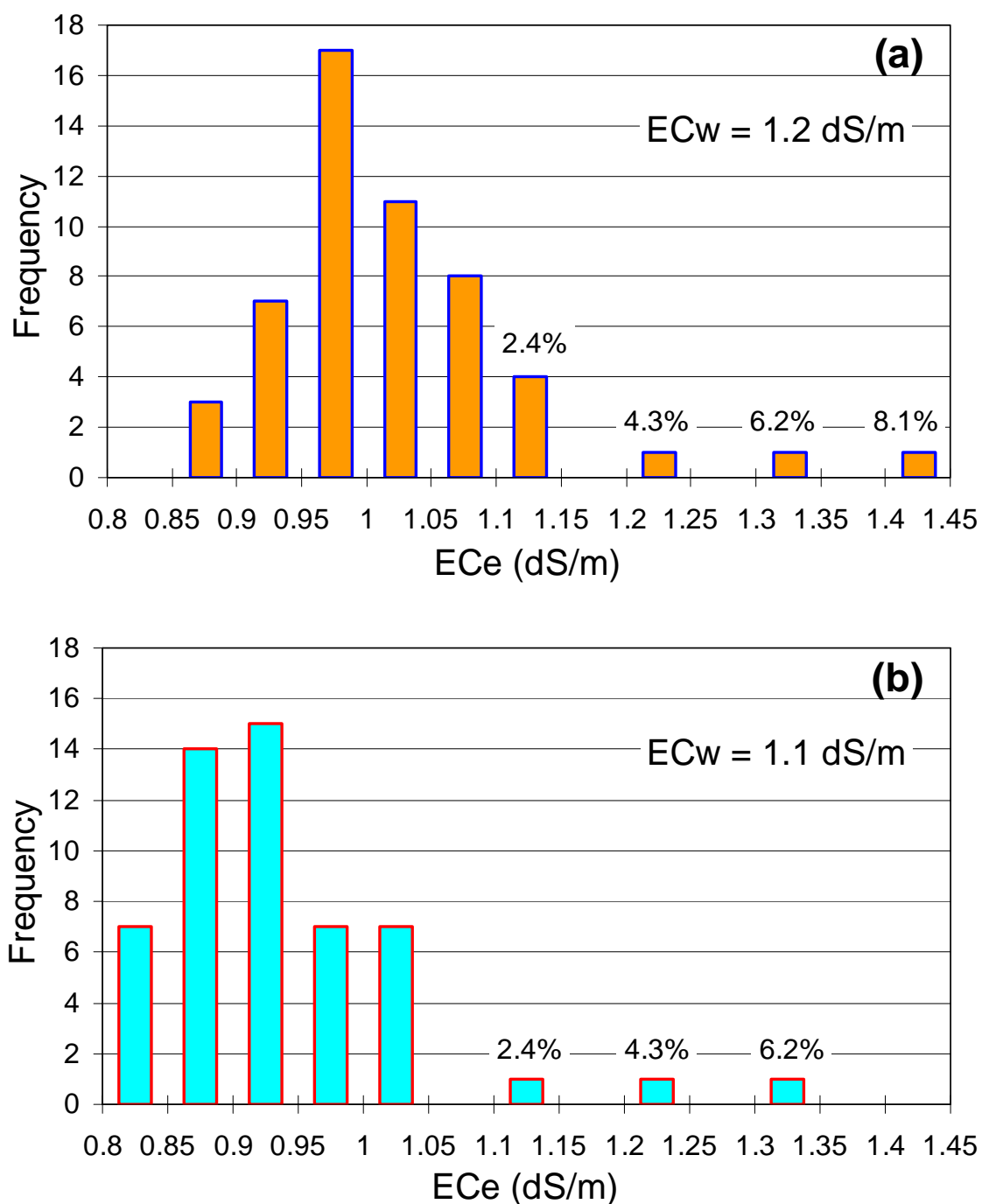


Figure 3.3. Frequency distribution of the seasonal mean EC_e obtained by the simulation of the 53 year series assuming the EC_w is 1.2 dS/m (a) and EC_w is 1.1 dS/m (b). The numbers on top of the bars indicate the predicted yield reduction for that EC_e , for yield reductions higher than 2%.

There were only three years where the seasonal mean EC_e exceeded 1.1 dS/m when the simulation was run for the 53-year period with EC_w of 1.1 dS/m. All three years occurred during the drought period in the 1970s. These three outliers translate into reductions in the potential yield of 2, 4 and 6% (Fig. 3.3b). These predicted values are within the statistical uncertainty of the salinity threshold value itself. Moreover, such losses, if real, could be avoided by winter leaching.

Given these results, and taking into account all the other factors that potentially impact crop yield (e.g., climate, water stress, and biotic stresses) and the conservative nature of all inputs into the model, the use of 1.1 dS/m as the threshold EC value for irrigation water is considered protective for beans, and thus all other agricultural uses of the water in the Davis area.

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Petition to De-List the Lower San Joaquin River

For

Impairment by Salt and Boron

EXHIBIT K

Stephen R. Grattan

**“Irrigation Water Salinity and Crop Production”
(2002)**

Submitted By:

SAN JOAQUIN RIVER GROUP AUTHORITY



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This REFERENCE SHEET is part of the **Farm Water Quality Planning (FWQP)** series, developed for a short course that provides training for growers of irrigated crops who are interested in implementing water quality protection practices. The short course teaches the basic concepts of watersheds, nonpoint source pollution (NPS), self-assessment techniques, and evaluation techniques. Management goals and practices are presented for a variety of cropping systems.



Irrigation Water Salinity and Crop Production

STEPHEN R. GRATTAN, Plant-Water Relations Specialist, University of California, Davis

Irrigation water quality can have a profound impact on crop production. All irrigation water contains dissolved mineral salts, but the concentration and composition of the dissolved salts vary depending on the source of the irrigation water. For example, snow melt or water supplies from the Sierra Nevada contain very small amounts of salt whereas groundwater or wastewater typically has higher salt levels. Too much salt can reduce or even prohibit crop production while too little salt can reduce water infiltration, which indirectly affects the crop. An understanding of the quality of water used for irrigation and its potential negative impacts on crop growth is essential to avoid problems and to optimize production. For more information on any of the issues found in this publication, please contact your local University of California Cooperative Extension office.

DISSOLVED SALTS

Dissolved salts in irrigation water form ions. The most common salts in irrigation water are table salt (sodium chloride, NaCl), gypsum (calcium sulfate, CaSO_4), Epsom salts (magnesium sulfate, MgSO_4), and baking soda (sodium bicarbonate, NaHCO_3). Salts dissolve in water and form positive ions (cations) and negative ions (anions). The most common cations are calcium (Ca^{2+}), magnesium (Mg^{2+}), and sodium (Na^+) while the most common anions are chloride (Cl^-), sulfate (SO_4^{2-}), and bicarbonate (HCO_3^-). The ratios of these ions, however, vary from one water supply to another. Potassium (K^+), carbonate (CO_3^{2-}), and nitrate (NO_3^-) also exist in water supplies, but concentrations of these constituents are comparatively low. In addition, some irrigation waters, particularly from groundwater sources, contain boron at levels that may be detrimental to certain crops.

It should be noted that substantial salinization potential is realized through natural weathering and dissolution of soil parent materials, and these salt contributions will attenuate or augment irrigation water ionic constituents.

CHARACTERIZING SALINITY

There are two common water quality assessments that characterize the salinity of irrigation water. The salinity of irrigation water is sometimes reported as the total salt concentration or total dissolved solids (TDS). The units of TDS are usually expressed in milligrams of salt per liter (mg/L) of water. This term is still used by commercial analytical laboratories and represents the total number of milligrams of salt that would remain after 1 liter of water is evaporated to dryness. TDS is also often reported as parts per million (ppm) and is the same numerically as mg/L. The higher the TDS, the higher the salinity of the water.

The other measurement that is documented in water quality reports from commercial labs is specific conductance, also called electrical conductivity (EC). EC is a much more useful measurement than TDS because it can be made instantaneously and easily by irrigators or farm managers in the field. Salts that are dissolved in water

conduct electricity, and, therefore, the salt content in the water is directly related to the EC. The EC can be reported based on the irrigation water source (EC_w) or on the saturated soil extract (EC_e). Units of EC reported by labs are usually in millimhos per centimeter (mmhos/cm) or decisiemens per meter (dS/m). One mmho/cm = 1 dS/m. EC is also reported in micromhos per centimeter (μmhos/cm). 1 μmho = 1/1000 mmho.

Often conversions between EC_w and TDS are made, but caution is advised because conversion factors depend both on the salinity level and composition of the water. For example:

$$\text{TDS (mg/L)} = 640 \times \text{EC}_w \text{ (dS/m)} \text{ when } \text{EC}_w < 5 \text{ dS/m}$$

$$\text{TDS (mg/L)} = 800 \times \text{EC}_w \text{ (dS/m)} \text{ when } \text{EC}_w > 5 \text{ dS/m}$$

Sulfate salts do not conduct electricity in the same way as other types of salts. Therefore, if water contains large quantities of sulfate salts, the conversion factors are invalid and must be adjusted upward.

IRRIGATION WATER SALINITY, SOIL SALINITY, AND LEACHING

Many irrigation water supplies contain a substantial amount of salt. For example, a water source with an EC of 1.0 mmho/cm, a quality suitable for irrigation of most crops, contains nearly 1 ton of salt in every acre-foot of water applied. Irrigation can contribute a substantial amount of salt to a field over the season.

Salts accumulate in the rootzone by two processes: the upward movement of a shallow saline-water table and salts left in the soil due to insufficient leaching. To control salinity from high saline water tables, drains must be installed in the field. To battle against salts that accumulate in the rootzone from the irrigation water, the soil must be adequately leached.

Leaching is the process of applying more water to the field than can be held by the soil in the crop rootzone such that the excess water drains below the root system, carrying salts with it. The more water that is applied in excess of the crop water requirement, the less salinity there is left in the rootzone despite the fact that more salt has actually been added to the field. The term *leaching fraction* (LF) is used to relate the fraction or percent of water applied to the field that actually drains below the rootzone. For example, if 1 acre-foot of water is applied to 1 acre of land, and 0.1 acre-foot drains below the rootzone, the leaching fraction is 1/10 (10 percent).

Below are some useful relationships between the salinity in irrigation water (electrical conductivity of irrigation water, EC_w) and the average rootzone salinity (EC_e). These relationships were developed by Ayers and Westcot (1985) and assume steady state conditions. EC_e is the electrical conductivity of the saturated soil paste (soil samples are saturated with distilled water, the soil water is then extracted, and the EC is measured on the extracted water). These relationships predict what will happen over the long term if the leaching fractions indicated are achieved and assuming that the EC_e in the rootzone increases with depth (which would be evidence of leaching).

$$\text{LF 10\% leads to } \text{EC}_w \times 2.1 = \text{EC}_e$$

$$\text{LF 15-20\% leads to } \text{EC}_w \times 1.5 = \text{EC}_e$$

$$\text{LF 30\% leads to } \text{EC}_w = \text{EC}_e$$

ESTIMATING YIELD POTENTIAL

How could you use these relationships to estimate the yield potential? Maas and Grattan (1999) provide an extensive list of salinity coefficients for a number of horticultural and agronomic crops. These coefficients consist of a *threshold* and *slope*. The salinity threshold (*a*) is the maximum average soil salinity (ECe) the crop can tolerate in the rootzone without a decline in yield. The slope coefficient (*b*) is the percent loss in relative yield the crop will experience for every unit increase in ECe above the threshold. Using these coefficients, the yield potential (% Yield) can be estimated from the following expression:

$$\% \text{ Yield} = 100 - b (\text{ECe} - a)$$

Tables 1 and 2 provide water quality guidelines for the most commonly grown crops in California. Table 1 assumes that the soil is well drained and that an LF of 15 to 20 percent is achieved. It is based on the formulas above and provides guidelines for trees and vines. Table 2 provides the same type of guidelines for vegetable and row crops. These tables provide the salinity level in the irrigation water (ECw) that, if used continuously to achieve an LF of 15 to 20 percent, would result in yield potentials of 100, 90, 75, and 50 percent. The ECw values at 100% yield represent the poorest quality water that, if used continuously, will produce ECe levels equal to the salinity thresholds. For example, lettuce has the following salinity coefficients:

$$a = 1.3 \text{ dS/m}$$

and

$$b = 13 \text{ when expressed as ECe}$$

If the average rootzone ECe throughout the season was 3.2 dS/m, then the yield potential is 75 percent. If the average rootzone salinity value of 3.2 is then converted to irrigation water salinity assuming an LF of 15 to 20 percent, ECw is 2.1 dS/m. The guidelines also assume that all other factors such as fertility, irrigation scheduling, and pest control are managed to optimize crop performance.

It is important to note that most of the experiments that were used to generate these guidelines were conducted in the interior regions of California where the climate is hot and dry during the summer. Crops grown in the coastal regions where the climate is milder will likely tolerate greater salinities than indicated above. Furthermore, much of the groundwater used for irrigation in coastal areas of California contains high levels of dissolved gypsum, which elevates the salinity of the water. However, crops irrigated with this water do not suffer the same detrimental effects as Cl-dominated waters with an equal EC.

In fields where salinity has increased in the rootzone to damaging levels, *reclamation leaching* is recommended. A common rule of thumb is that the salinity in the top 1 foot of the rootzone can be reduced 80 to 90 percent by intermittently applying 1 acre-foot of water per acre of land.

Table 1. Estimated yield of tree and vine crops with long-term use of irrigation water with different levels of soil salinity (potential yields are based on a 15 to 20 percent leaching fraction and do not account for the effects of specific elements)

Tree and vine crops	ECw (mmhos/cm)				Rating ²
	Yield potential ¹				
	100%	90%	75%	50%	
Almond	1.0	1.4	1.9	2.8	S
Apple	—	—	—	—	S
Apricot ³	1.1	1.3	1.8	2.5	S
Avocado ³	—	—	—	—	S
Blackberry	1.0	1.3	1.5	2.5	S
Boysenberry	1.0	1.3	1.8	2.5	S
Cherry	—	—	—	—	S
Date Palm	2.7	4.5	7.3	12.0	T
Fig ³	—	—	—	—	MT
Grape ³	1.0	1.7	2.7	4.5	MS
Grapefruit	1.2	1.6	2.2	3.3	S
Lemon	1.0	1.5	2.3	3.6	S
Lime	—	—	—	—	S
Olive	—	—	—	—	MT
Orange	1.1	1.6	2.2	3.2	S
Peach	1.1	1.5	1.9	2.7	S
Pear	—	—	—	—	S
Pecan	—	—	—	—	MS
Persimmon	—	—	—	—	S
Pistachio	—	—	—	—	MS–MT
Plum	1.0	1.4	1.9	2.9	S
Pomegranate ³	—	—	—	—	MS
Walnut ³	—	—	—	—	S

— Data not available.

¹ Based on data from Maas and Grattan 1999.

² Tolerance to soil salinity is rated as sensitive (S), moderately sensitive (MS), moderately tolerant (MT), and tolerant (T).

³ Tolerance is based on growth or injury rather than yield.

Table 2. Estimated yield of vegetable and row crops with long-term use of irrigation water of different qualities (potential yields are based on a 15 to 20 percent leaching fraction and do not account for the effects of specific elements)

Vegetable and row crops	ECw (mmhos/cm)				Rating ²	
	Yield potential ¹				Salt	Boron
	100%	90%	75%	50%		
Asparagus	2.7	6.1	11.1	19.4	T	VT
Bean	0.7	1.0	1.5	2.4	S	S
Beet, red	2.7	3.4	4.5	6.4	MT	T
Broccoli	1.9	2.6	3.7	5.5	MS	MS
Cabbage	1.2	1.9	2.9	4.6	M	MT
Carrot	0.7	1.1	1.9	3.0	S	MS
Cauliflower	1.9	2.6	3.7	5.5	MS	MT
Celery	1.2	2.3	3.9	6.6	MS	VT
Corn, sweet	1.1	1.7	2.5	3.9	MS	VT
Cucumber	1.7	2.2	2.9	4.2	MS	MS
Eggplant	0.7	1.7	3.1	5.6	MS	—
Lettuce	0.9	1.4	2.1	3.4	MS	MS
Onion	0.8	1.2	1.8	2.9	S	S
Pepper	1.0	1.5	2.2	3.4	MS	MS
Potato	1.1	1.7	2.5	3.9	MS	MS
Radish	0.8	1.3	2.1	3.4	MS	—
Spinach	1.3	2.2	3.5	5.7	MS	—
Squash, scallop	2.1	2.6	3.2	4.2	MS	MT
Squash, zucchini	3.1	3.8	4.9	6.7	MT	MT
Strawberry	0.7	0.9	1.2	1.7	S	S
Sweet potato	1.0	1.6	2.5	4.0	MS	—
Tomato	1.7	2.3	3.4	5.0	MS	T
Turnip	0.6	1.3	2.5	4.3	MS	MT

— Data not available.

¹ Based on data from Maas and Grattan 1999.² Sensitive (S), moderately sensitive (MS), moderately tolerant (MT), tolerant (T), and very tolerant (VT).

CROP TOXICITY TO SPECIFIC ELEMENTS

In addition to salinity, some crops are injured by certain elements, notably sodium (Na^+), chloride (Cl^-), and boron (B). With drip and furrow irrigation, chloride and sodium injury do not generally occur in vegetable and row crops unless salinity in irrigation water is severe. Leaf injury can occur in strawberries, however, particularly under hot, dry conditions. Under sprinkler irrigation, injury may occur to wetted leaves of susceptible plants such as pepper, potatoes, and tomato if the EC_w exceeds 1.5 mmhos/cm.

Some vegetable and row crops are sensitive to boron. Generally, leaf injury must be severe to cause reduced yields and crop quality. Long-term use of irrigation water containing more than 0.5 ppm boron can reduce the yields of bean, onion, garlic, and strawberry; 0.7 ppm can reduce the yields of broccoli, carrot, potato, and lettuce; and concentrations greater than 2 ppm can reduce yields of cabbage and cauliflower.

Under cool, moist climatic conditions, greater levels of boron can be tolerated, and for short-term use, boron levels given here can be doubled. In addition, soil properties influence the time it takes for injury to occur. The finer the soil texture, the longer it will take for injury to occur.

Unlike most annual crops, tree and vine crops are generally sensitive to boron, chloride, and sodium toxicity. Tolerances vary among varieties and rootstocks. Tolerant varieties and rootstocks resist the uptake and accumulation of toxic ions in the stem and leaf tissue. Continued use of irrigation water with boron concentrations in excess of 0.75 ppm can reduce the yields of grapes and many deciduous tree and fruit crops. This represents a threshold concentration and does not imply that irrigation water with boron at or slightly above this level cannot be used successfully.

Chloride moves readily with the soil water and is taken up by the roots. It is then transported to the stems and leaves. Sensitive berries and avocado rootstocks can tolerate only up to 120 ppm of chloride, while grapes can tolerate up to 700 ppm or more.

The ability of a tree to tolerate sodium varies considerably. Sodium injury on avocado, citrus, and stone-fruit trees has been reported at concentrations as low as 115 ppm. Initially, sodium is retained in the roots and lower trunk, but after 3 to 4 years the conversion of sapwood to heartwood apparently releases the accumulated sodium, which then moves to the leaves causing leaf burn.

INFILTRATION OF IRRIGATION WATER

There are two water quality parameters to consider when assessing irrigation water quality for potential water infiltration problems. These are the EC_w and the sodium adsorption ratio (SAR). The SAR is an indicator of the amount of sodium in the water relative to calcium and magnesium. The higher the ratio of sodium to calcium plus magnesium, the higher the SAR. Both a low salt content (low EC_w) and high SAR can mean there is a high potential for permeability or water infiltration problems.

A low EC_w or high SAR can act separately or collectively to disperse soil aggregates, which in turn reduces the number of large pores in the soil. These large pores are responsible for aeration and drainage. A negative effect from the breakdown of soil aggregates is soil sealing and crust formation. Below is a table that can be used to assess the likelihood of potential water infiltration problems based on both EC_w and SAR.

Table 3 indicates that water infiltration problems are likely if the EC_w is less than 0.3 mmho/cm regardless of the SAR. For example, if the EC_w falls below 0.3 mmho/cm, infiltration rates can drop to less than 0.1 inch per hour. An infiltration rate of 0.1 inch per hour would require 30 hours for a full irrigation of 3 inches to infiltrate the soil. Therefore, pure water or very high-quality water such as that in the Friant-Kern Canal (EC_w 0.05 and SAR 0.6) will cause infiltration problems even when applied on soils with high sand content.

The good news is that infiltration problems due to low salt content or high SAR can easily be improved by the addition of gypsum to either the irrigation water or soil. When the irrigation water comes into contact with gypsum, it dissolves into Ca²⁺ and SO₄²⁻ ions that slightly increase the salinity of the water while simultaneously reducing the SAR. The Ca²⁺ cations are then free to displace Na⁺ cations adsorbed onto the negatively charged clay particles, thereby enhancing flocculation, improving soil structure, and increasing the water infiltration rate.

Estimating the amount of gypsum to be applied to the irrigation water can be achieved by calculating how much CaSO₄ is needed to increase the EC or decrease the SAR. For example, Friant-Kern Canal water has an average EC_w of only 0.05 mmho/cm and SAR of 0.6. By adding 6 meq/L Ca²⁺ (equivalent to 1,400 lb pure gypsum per acre-ft), the EC_w will increase to 0.65 and SAR will drop to 0.2. According to table 3, this will substantially improve the quality of this water in terms of reducing its permeability hazard.

Determining how much gypsum to add to the soil is a bit more complicated than determining how much to add to the irrigation water. The amount to apply depends on the soil, how much sodium is adsorbed onto the clay surfaces, how much Ca²⁺ is needed to replace the adsorbed Na⁺, and to what depth you intend to reclaim the soil. Usually, no more than 1 to 2 tons of gypsum per acre should be applied at any one time. Lighter, more frequent applications of gypsum tend to be more effective than a single heavy application.

Table 3. Combined effect of electrical conductivity (EC_w) of irrigation water and sodium adsorption ratio (SAR) on the likelihood of water infiltration (permeability) problems

Sodium adsorption ratio (SAR) of irrigation or soil	Water infiltration problem	
	Unlikely when EC _w (dS/m) is more than	Likely when EC _w (dS/m) is less than
0–3	0.6	0.3
3–6	1.0	0.4
6–12	2.0	0.5
12–20	3.0	1.0
20–40	5.0	2.0

Source: Ayers and Westcot 1985.

OTHER WATER QUALITY CONSTITUENTS

Irrigation water supplies, particularly those from wells, can contain other constituents that may affect water quality. Of particular concern are nitrate (NO_3^-) and bicarbonate (HCO_3^-).

Nitrates are often measured as $\text{NO}_3\text{-N}$, which refers to the nitrogen concentration in the water that is in the nitrate form. From a public health perspective, there are concerns when excessive levels of nitrates are found in domestic wells. The public drinking water standard is set at 10 mg/L (or ppm) $\text{NO}_3\text{-N}$. From an irrigation perspective, NO_3^- in the groundwater can be viewed as a resource. For example, 27 pounds of nitrogen is applied to a field with each acre-foot of water if the water supply contains 10 ppm $\text{NO}_3\text{-N}$ (45 ppm when expressed as NO_3^-). It is important that the grower with water of such quality reduces the nitrogen application rates in the field accordingly to accommodate this extra input of nitrogen. Should this be ignored, there may be problems associated with excessive vegetative growth and contamination of the groundwater.

Excessive amounts of bicarbonate can also be problematic. In fields that are irrigated with low-pressure systems, such as drip or mini-sprinklers, calcite or scale can build up near the orifice of the sprinkler or emitter, which can reduce the water discharge. This type of problem can be corrected by injecting acid-forming materials (such as sulfuric acid) in the irrigation water. In addition, bicarbonate could increase the SAR of the soil water by precipitating calcium and magnesium. This can be corrected by frequent gypsum applications to the soil surface.

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Petition to De-List the Lower San Joaquin River

For

Impairment by Salt and Boron

EXHIBIT L

Flow Science Tracer Report

For

Water Years 1964 and 1988

Submitted By:

SAN JOAQUIN RIVER GROUP AUTHORITY

Flow Science Incorporated

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**Evaluation of the fate of San Joaquin River flow
Water Years 1964 and 1988**

Prepared
for

San Joaquin River Group Authority

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FSI 048007
June 2, 2005

Introduction

Flow Science Incorporated (Flow Science) has been retained by the San Joaquin River Group Authority to evaluate the potential effects of modifying the current salinity standards for the San Joaquin River (SJR) at Vernalis. Flow Science used the Fischer Delta Model (FDM) to simulate the effects of changes in the salinity standard on the ultimate fate of San Joaquin River water entering the Delta between February 1 and April 15. Simulations were performed for a dry water year and for a critically dry water year, when impacts of a change in salinity standards are expected to be most significant.

Presently, the SJR salinity standard at Vernalis, which bears the name “Case 1” for this study, is 0.7 mS/cm (414 mg/L)¹ in April-August, and 1.0 mS/cm (589 mg/L) the remainder of the year. The proposed new standard, called “Case 9” herein, is a salinity of 1.0 mS/cm (589 mg/L) year-round at Vernalis. This document presents modeling results of Sacramento-San Joaquin Delta simulations in which the fate of San Joaquin River water entering the Delta between February 1 and April 15 of each model year was tracked as flows propagated through the Delta.

Model Overview

Flow Science utilized the Fischer Delta Model (FDM)² to simulate hydrodynamics and the fate of an added tracer within the Delta for this project. The Fischer Delta Model (FDM)³ consists of two linked models: a hydrodynamic model and a water quality model. The hydrodynamic model (DELFLO) utilizes the fixed grid method of characteristics to simulate the hydrodynamics of the Delta. The water quality model (DELSAL) uses the Lagrangian method, in which the motions of parcels of water are followed through the Delta. The Lagrangian method uses no grid points, but the computational effort required is equivalent to the use of approximately 2,500 grid points in a finite element numerical model.

The model extends from the downstream boundary in Carquinez Strait, upstream to Sacramento on the Sacramento River, and to Vernalis on the San Joaquin River. It also includes all tidally influenced sloughs and accounts for inflows from all major tributaries, state and federal project exports, riparian diversions, channel depletion, and agricultural returns.

These models describe hydrodynamics and changes in water quality in the Delta as affected by changes in geometry, hydrology, and Delta operations. Changes in hydrology include changes in river flows and diversions and exports within and to the south of the Delta. The models are also designed to allow prediction of the effect of levee breaks, channel gate operations, changes in

¹ Conversions between electrical conductivity (EC) and total dissolved solids (TDS) are based upon historical data from the memorandum “Salinity Unit Conversion Equations”, California Department of Water Resources, 1986. Data from the station in the memo nearest the site of interest was used.

² The model is operated by Flow Science Incorporated for Hugo B. Fischer, Inc.

³ The model is operated by Flow Science Incorporated for Hugo B. Fischer, Inc.

agricultural discharges, and changes in municipal discharges and withdrawals. The model is capable of simulating a partial year, a full year, or multiple years of hydrology.

DELFLO was initially calibrated by comparing model output at 40 stations to observations in the field and to the physical hydraulic model operated by the U. S. Army Corps of Engineers at Sausalito, California. Two conditions were studied: the tide of August 27-28, 1968, with a net Delta outflow of 2,500 cfs, and the tide of September 14-15, 1968, with a net Delta outflow of 17,200 cfs. The values of Manning's "n" for each channel were varied until a satisfactory agreement was obtained between the numerical model and physical model water surface elevations. In most cases, the field and physical model elevations agree within 0.2-foot water surface elevation. DELFLO has also been recalibrated and verified using both extensive flow and stage measurements made by the USGS within the Delta in 1988 and in 1996-1999.

DELSAL, the water quality model, has been calibrated by comparing model output for salinity to field data and verified using measured elemental tracer concentrations in the Delta. The Lagrangian method adopted in the model eliminates numerical dispersion, which is inherent in finite difference and finite element models and is difficult to reconcile with actual dispersion processes in the Delta. The model was designed to simulate salinity changes in the Delta, as affected by physical and hydrologic changes in the Delta, but it can also be used to determine the movement and dispersion of pollutants (or any mass conserving, neutrally buoyant particles) released from point sources. The FDM has also been verified by comparing FDM-computed "source fractions" (computations of the source of water located at specific interior Delta locations) to measured source fractions. Measured source fractions were determined using elemental concentrations measured at specific points in the Delta over a one-year period beginning in March 1996.

The FDM has been successfully applied to the transport of total dissolved solids (TDS) and other neutral buoyant tracers in the Sacramento-San Joaquin Delta for over twenty years. The model has undergone continuous improvement over the years.

Study Design

Water years 1964 and 1988 were modeled in this study. Water year 1964 was a dry year in both the Sacramento and San Joaquin River basins, while 1988 was a critically dry year in both basins⁴. These years were selected as representative of hydrologic conditions in which the proposed SJR salinity changes are likely to have the largest effect.

4 A dry water year is defined as having a water year index below 6.5 million acre-feet (Sacramento Valley) or below 2.5 million acre-feet (San Joaquin Valley). A critically dry water year is defined as having a water year index below 5.4 million acre-feet (Sacramento Valley) or below 2.1 million acre-feet (San Joaquin Valley) according to California Department of Water Resources criteria. 1964 was a dry year in both basins, while 1988 was a critically dry water year in both basins. See DWR's Chronological Sacramento and San Joaquin Valley Water year Hydrologic Classification Indices, available at cdec.water.ca.gov/cgi-progs/iodir/WSIHIST.

Four different scenarios were modeled for this study. The four scenarios stem from two basic configurations: a baseline case, called “Case 1”, and the new SJR salinity standard case, called “Case 9”. Each of these two cases was then modified to reflect implementation of the South Delta Improvement Plan (SDIP)⁵. The resulting four scenarios (Case1, Case9, Case1-SDIP, and Case9-SDIP) were modeled for both water years 1964 and 1988.

Flow Science’s previous modeling for the San Joaquin River Group Authority included yet another alteration of the “Case 1” and “Case 9” scenarios-simulation of a modified Head of Old River Barrier (HORB) schedule (Flow Science, February 2005). The modified HORB schedule is the same as the standard HORB schedule during the spring barrier installation; the only difference in barrier configuration and operations occurs in November. Since the purpose of the current modeling is to track San Joaquin River flows entering the Delta between February 1 and April 15, the modified HORB scenarios were not simulated in this study.

Input data for the model were obtained from several sources. Dan Steiner provided river and export flow rates based on CALSIM II simulations of these water years. The tracer concentrations in all rivers was set to zero, except San Joaquin River flows entering the Delta from February 1 to April 15 were simulated as having a “tracer” concentration of 1,000,000 ppm. Gates and barriers were modeled according to current barrier operations based on information obtained from DWR⁶. Table 1 below summarizes the barrier operation schedules for both 1964 and 1988 for the HORB, the Old River Barrier at Tracy (ORB), the Middle River Barrier (MRB), and the Grant Line Canal Barrier (GLCB). The table shows the dates that the barriers were in place.

Table 1: Barrier Operations for Modeled Scenarios, water years 1964 and 1988

	All scenarios
HORB^a	Apr. 16-May 15, Sep. 16-Sep. 30
ORB^b	Apr. 16-Sep. 30
MRB^c	Same as ORB
GLCB^d	Same as ORB

a. HORB was simulated as spanning the full channel width at elevation 10 feet (all elevations reference NGVD29).

b. ORB was simulated as spanning the full channel width at elevation 4 feet.

c. MRB was simulated as spanning the full channel width at elevation 3 feet.

d. GLCB was simulated as spanning the full channel width at elevation 3.5 feet.

5 SDIP CALSIM II simulations performed by DWR are preliminary and may change at a later date. Currently, the SDIP simulations include changes in export pumping rates from the Banks and Tracy Pumping Plants and changes in flow rates to the Sacramento and Mokelumne Rivers.

6 Emails from Andy Chu, Senior Water Resources Engineer, California Department of Water Resources, 1/13/05; Mark Holderman, Chief-Temporary Barriers Project, California Department of Water Resources, 1/27/05.

Several additional assumptions were made, as follows:

- No culverts or notches were placed in the barriers (HORB, ORB, MRB, and GLCB).
- Clifton Court Forebay gates were assumed to be open all of WY64 because CCFB did not exist in WY64. Historical CCFB gate operations were used for WY88.
- The Delta Cross Channel Barrier (DXC) was simulated as open from the first of each month until the month's "open days" quota is spent, where the number of open days were specified by the CALSIM II modeling. This is in accordance with DWR's modeling practices⁷.
- All CCWD diversions are assumed to be through Rock Slough Pumping Plant #1 (i.e., no Old River diversions).
- Monthly data from CALSIM II were transformed to daily data by assigning each day its corresponding month's average value (i.e., flow was a constant value for each day in a given month).
- Diversions, exports, and river flow rates used as model input are not actual WY64 and WY88 historical flows, but those specified in CALSIM II runs provided by Dan Steiner.

Results

Results showing the fate of San Joaquin River water entering the Delta between February 1 and April 15 are shown in Table 2. Additionally, the results are shown in graphical format in Figures 1-4.

⁷ Telephone conversation with Andy Chu, Senior Water Resources Engineer, California Department of Water Resources, 1/18/05.

Table 2: Fate of San Joaquin River water entering the Delta between February 1 and April 15

	Exported: Central Valley Project	Diverted: Contra Costa Canal	Exported: State Water Project	Delta Outflow
Case1-64	64.2%	0.5%	28.4%	0.2%
Case9-64	64.7%	0.5%	27.9%	0.2%
Case1SDIP-64	63.3%	0.7%	33.9%	0.2%
Case9SDIP-64	63.5%	0.7%	34.1%	0.2%
Case1-88	57.1%	0.7%	27.6%	0.2%
Case9-88	57.5%	0.7%	27.4%	0.2%
Case1SDIP-88	56.9%	0.9%	25.6%	0.3%
Case9SDIP-88	57.4%	0.9%	25.3%	0.2%

Figure 1: Percent of San Joaquin River water exported for the Central Valley Project

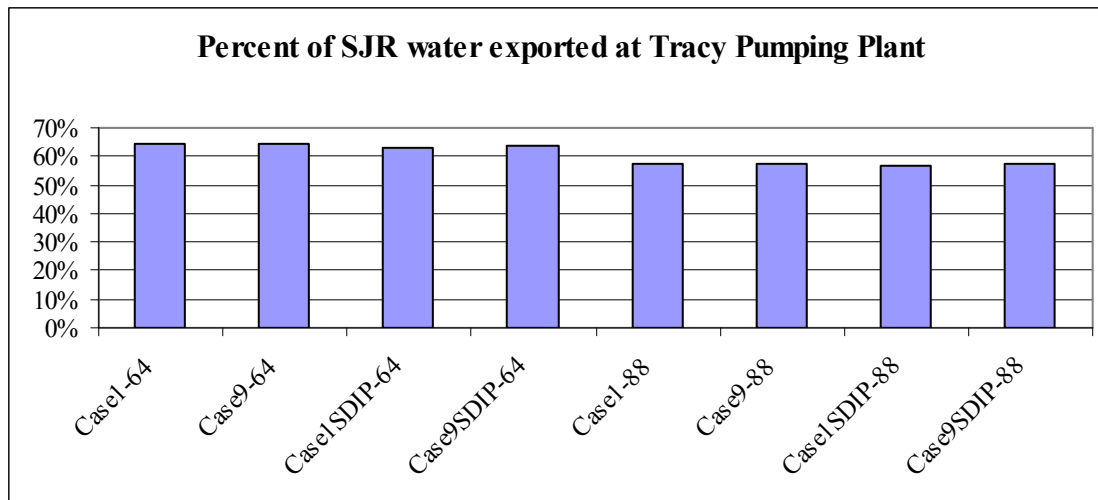


Figure 2: Percent of San Joaquin River water diverted at the Contra Costa Canal

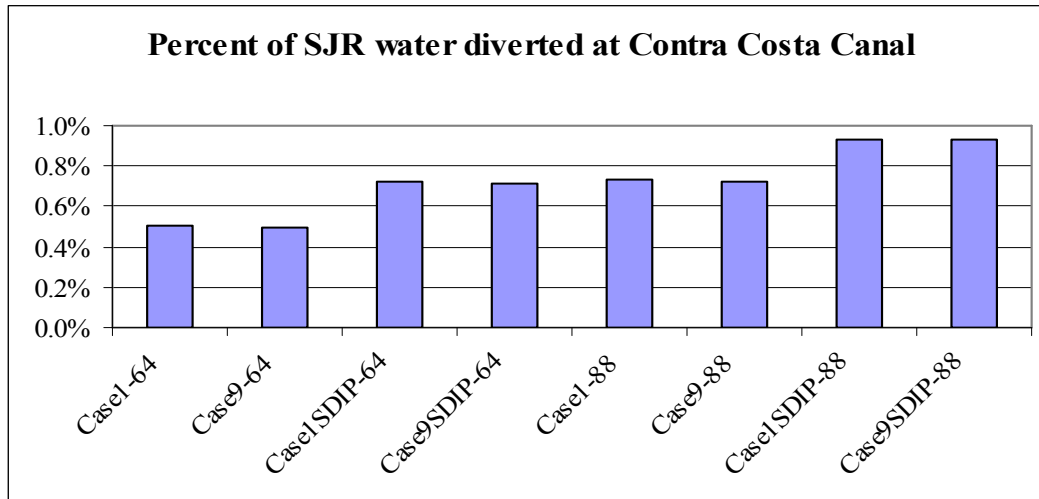


Figure 3: Percent of San Joaquin River water exported for the State Water Project

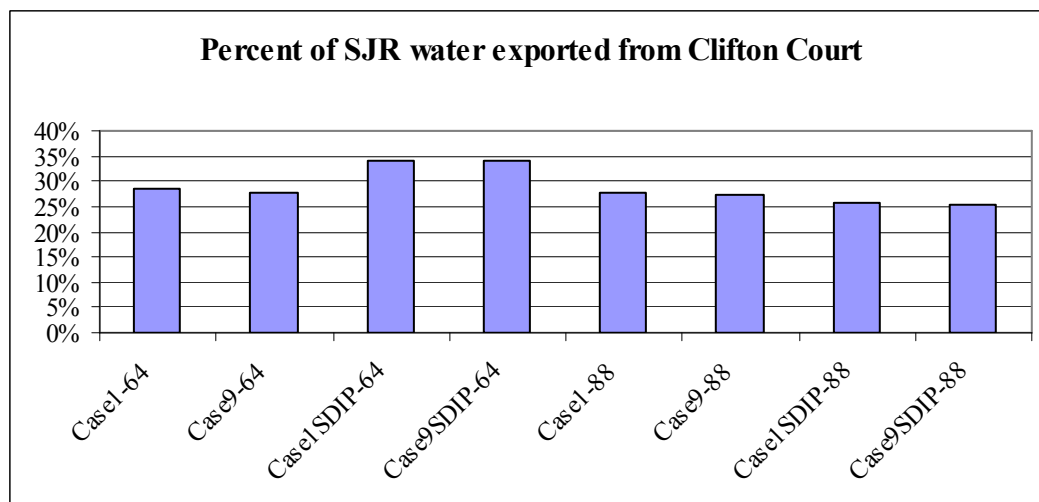
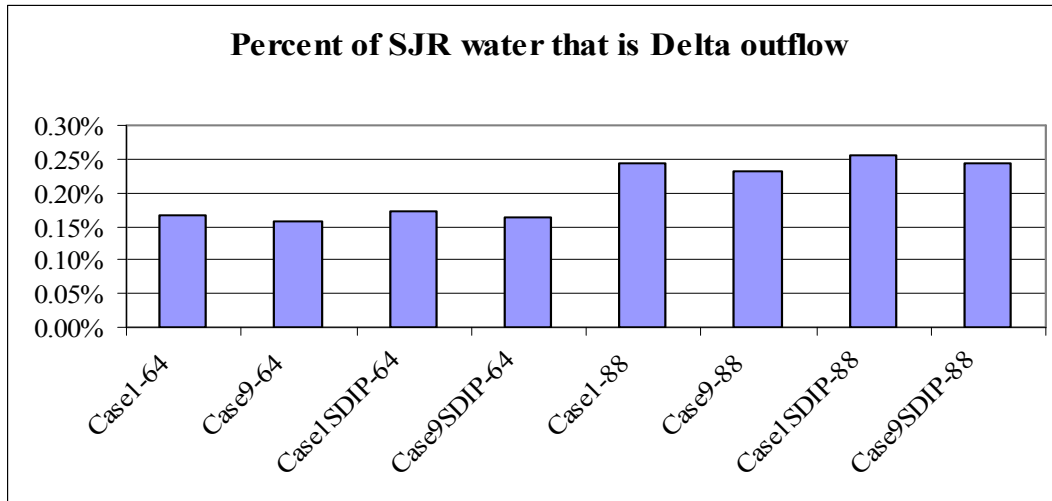


Figure 4: Percent of San Joaquin River water that flows out of the Delta at Martinez



The sum of the exports, diversions and Delta outflow is ~93-98% for all 1964 scenarios, and ~83-86% for all 1988 scenarios. This indicates that ~2-17% of the San Joaquin River water that entered the Delta between February 1 and April 15 remained in the Delta September 30, the end of the modeling period, was pumped out for agricultural use, or was diluted by other flows to concentrations below the level that can be resolved by the model.

Petition to De-List the Lower San Joaquin River

For

Impairment by Salt and Boron

EXHIBIT M

Flow Science Tracer Report

For

Water Years 2000 and 2001

Submitted By:

SAN JOAQUIN RIVER GROUP AUTHORITY

Flow Science Incorporated

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**FISCHER DELTA MODEL STUDY
FATE OF A CONSERVATIVE TRACER DURING
WATER YEARS 2000-2001**

Prepared
for

San Joaquin River Group Authority

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June 2, 2005

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INTRODUCTION

Flow Science Incorporated (Flow Science) has been retained to model the Sacramento-San Joaquin River Delta during water years 2000 and 2001. The objective of this study is to determine the fate of a neutrally buoyant, conservative tracer¹ released in the San Joaquin River near Mossdale Landing. Modeled tracer release dates correspond to fish release dates, and were simulated as 24-hour tracer releases occurring on April 17, 18, and 28, 2000, and on April 30 and May 1, 7, and 8, 2001. Simulations were conducted using the historical, measured tide at the downstream model boundary and using historical inflows, exports, and diversions. A second set of simulations was conducted using the same input data but shifting the tides forward by one week, in essence trading spring and neap tides, to determine if the fate of releases is tied to tidal conditions.

FISCHER DELTA MODEL

The Fischer Delta Model (FDM)² consists of two linked models: a hydrodynamic model and a water quality model. The hydrodynamic model (DELFO) utilizes the fixed grid method of characteristics to simulate the hydrodynamics of the Delta. The water quality model (DELSAL) uses the Lagrangian method, in which the motions of parcels of water are followed through the Delta. The Lagrangian method uses no grid points, but the computational effort required is equivalent to the use of approximately 2,500 grid points in a finite element numerical model.

The model extends from the downstream boundary in Carquinez Strait, upstream to Sacramento on the Sacramento River, and to Vernalis on the San Joaquin River. It also includes all tidally influenced sloughs and accounts for inflows from all major tributaries, state and federal project exports, riparian diversions, channel depletion, and agricultural returns.

These models describe hydrodynamics and changes in water quality in the Delta as affected by changes in geometry, hydrology, and Delta operations. Changes in hydrology include changes in river flows and diversions and exports within and to the south of the Delta. The models are also designed to allow prediction of the effect of levee breaks, channel gate operations, changes in agricultural discharges, and changes in municipal discharges and withdrawals. The model is capable of simulating a partial year, a full year, or multiple years of hydrology.

DELFO was initially calibrated by comparing model output at 40 stations to observations in the field and to the physical hydraulic model operated by the U. S. Army Corps of Engineers at Sausalito, California. Two conditions were studied: the tide of August 27-28, 1968, with a net Delta

¹ A conservative tracer is a tracer that does not experience decay. The total mass of tracer does not increase or decrease within the Delta.

² The model is operated by Flow Science Incorporated for Hugo B. Fischer, Inc.

outflow of 2,500 cfs, and the tide of September 14-15, 1968, with a net Delta outflow of 17,200 cfs. The values of Manning's "n" for each channel were varied until a satisfactory agreement was obtained between the numerical model and physical model water surface elevations. In most cases, the field and physical model elevations agree within 0.2-foot water surface elevation. DELFLO has also been recalibrated and verified using both extensive flow and stage measurements made by the USGS within the Delta in 1988 and in 1996-1999.

DELSAL, the water quality model, has been calibrated by comparing model output for salinity to field data and verified using measured elemental tracer concentrations in the Delta. The Lagrangian method adopted in the model eliminates numerical dispersion, which is inherent in finite difference and finite element models and is difficult to reconcile with actual dispersion processes in the Delta. The model was designed to simulate salinity changes in the Delta, as affected by physical and hydrologic changes in the Delta, but it can also be used to determine the movement and dispersion of pollutants (or any mass conserving, neutrally buoyant particles) released from point sources. The FDM has also been verified by comparing FDM-computed "source fractions" (computations of the source of water located at specific interior Delta locations) to measured source fractions. Measured source fractions were determined using elemental concentrations measured at specific points in the Delta over a one-year period beginning in March 1996.

The FDM has been successfully applied to the transport of total dissolved solids (TDS) and other neutral buoyant tracers in the Sacramento-San Joaquin Delta for over twenty years. The model has undergone continuous improvement over the years.

Modeled Scenarios

Two scenarios were modeled for this study. The first scenario was a historical simulation. Historical simulations, as the name implies, involve modeling of systems based on historical data. The second modeled scenario was similar to the historical simulation, except that the tidal boundary condition was shifted one week forward in time. In other words, a high tide that historically occurred on April 15 would be modeled as occurring on April 22, with the entire record of measured tides shifted accordingly. Modeling these two scenarios, the historical scenario and the shifted-tide scenario, allows exploration of the effects of the spring-neap tidal cycle on the fate of a tracer.

Input Data

The numerical model uses a network of 163 channels and 125 nodes for the Sacramento-San Joaquin Delta. In addition to the basic channel geometry data and some model control parameters for the Fischer Delta Model (FDM), this study required the following data:

- (a) hourly tidal elevation at the downstream boundary of the model;
- (b) daily inflow data (flow rate and salinity) for Sacramento River, Yolo Bypass, San Joaquin

River, Mokelumne River, and Calaveras River at the upstream boundaries of the model;

- (c) daily export or diversion rates at Tracy Pumping Plant, Banks Pumping Plant, Contra Costa Canal, Los Vaqueros Intake, and North Bay Aqueduct; and
- (d) gate operation schedules at the Delta Cross Channel, the south Delta barriers, and Clifton Court Forebay.

Historical hydrodynamic data were downloaded from publicly available sources on the internet³. Initial tracer concentrations within the Delta and for inflows at all model boundaries, including rivers and the downstream boundary at Martinez, were set to zero. A tracer was injected at a flow rate of 10 ft³/sec and a concentration of 1,000,000 mg/L south of Mossdale Landing for 24 hours on each day that fish were released. Each day's injected tracer was tracked separately as it moved through the Delta.

Gates and barriers in the Delta were modeled according to historical record. These operations are summarized below in Table 1.

Table 1: Water Year 2000 and 2001 South Delta barrier operation schedules

		Head of Old River Barrier	Grant Line Canal Barrier	Middle River Barrier	Old River Barrier near Tracy
Water year 2000	Barrier Installation	4/5/2000-4/15/2000	5/19/2000-5/31/2000	4/4/2000-4/5/2000	4/4/2000-4/15/2000
	Barrier In Place and Fully Operational	4/16/2000-5/18/2000	6/1/2000-9/30/2000	4/6/2000-9/30/2000	4/16/2000-9/30/2000
	Barrier Removal	5/19/2000-6/1/2000	Remained in place through remainder of study	Remained in place through remainder of study	Remained in place through remainder of study
Water year 2001	Barrier Installation	4/17/2001-4/25/2001	5/2/2001-5/5/2001	4/20/2001-4/22/2001	4/23/2001-4/25/2001
	Barrier In Place and Fully Operational	4/26/2001-5/22/2001	5/6/2001-9/30/2001	4/23/2001-9/30/2001	4/26/2001-9/30/2001
	Barrier Removal	5/23/2001-5/28/2001	Remained in place through remainder of study	Remained in place through remainder of study	Remained in place through remainder of study

Note: Culverts were installed and removed along with each barrier.

HORB: Six culverts, each two feet in diameter, bottom elevation -3.22 ft (NGVD29), allow flow in both directions.

³ Tide and river flow rate data were downloaded from: www.iep.ca.gov. South Delta barrier operations are available at: http://sdelta.water.ca.gov/web_pg/tempmesr.html. Delta Cross Channel barrier operations are available at: <http://www.usbr.gov/mp/cvo/>.

GLCB: Six culverts, each two feet in diameter, bottom elevation -0.72 ft (NGVD29), allow flow in landward direction only.

MRB: Six culverts, each two feet in diameter, bottom elevation -3.22 ft (NGVD29), allow flow in landward direction only.

ORB: Nine culverts, each two feet in diameter, bottom elevation 0.28 ft (NGVD29), allow flow in landward direction only.

PRESENTATION OF RESULTS

Results for the releases that occurred during historical tide simulations of water years 2000 and 2001 are presented in graphical format in Appendices A and C, and in Table 2. Results for releases that occurred during shifted-tide simulations of water years 2000 and 2001 are presented in Appendices B and D, and in Table 3. Results are presented for the locations shown in Figure 1. Figures 2 through 5 show tides at Martinez during April and May of each water year, with tracer release dates indicated in red. Figures 6 and 7 show State Water and Central Valley Projects flow rates for water years 2000 and 2001.

Figure 1: Locations of model output stations

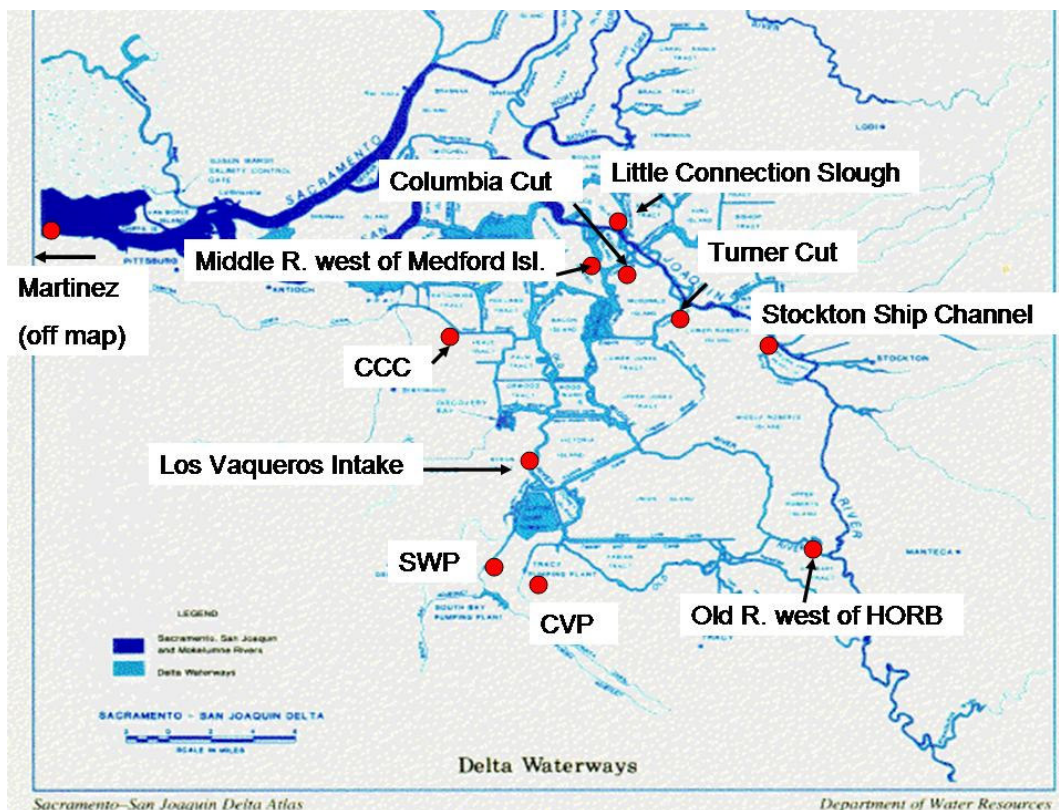


Figure 2: Tide at Martinez April 1- May 30, 2000, with tracer release dates shown in red

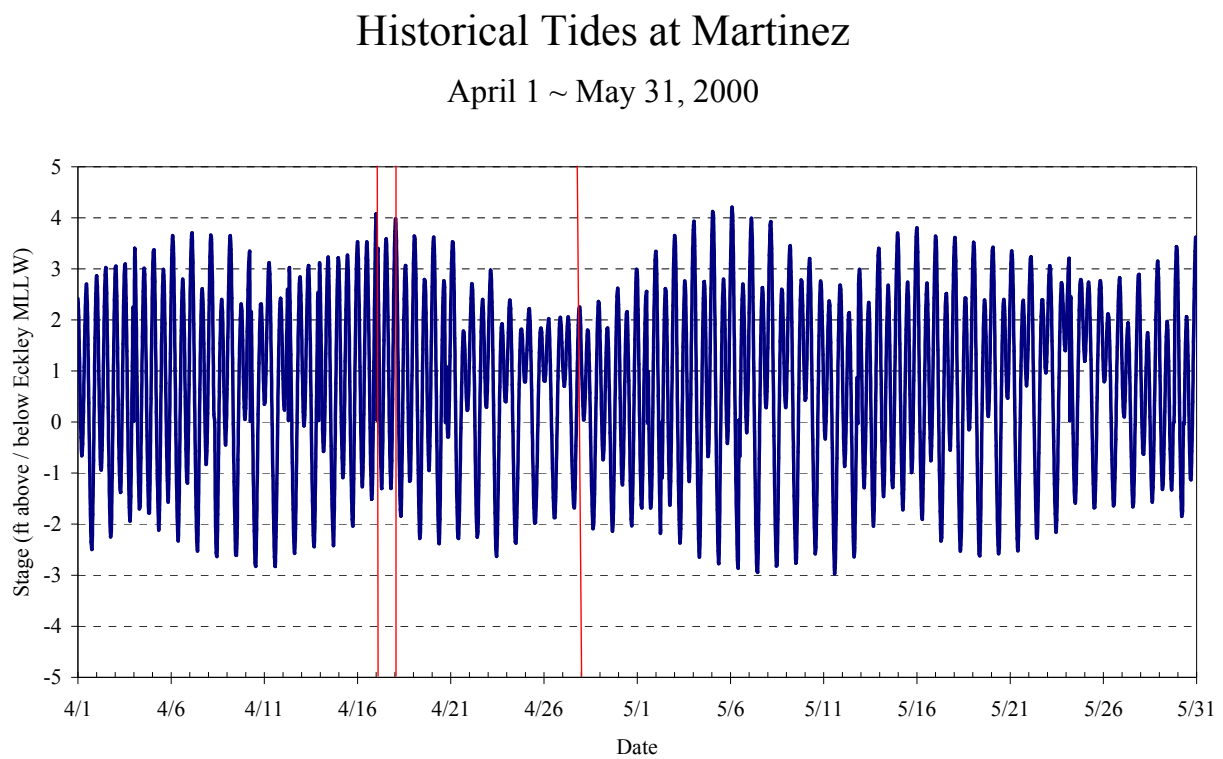


Figure 3: Tide at Martinez April 1- May 30, 2001, with tracer release dates shown in red

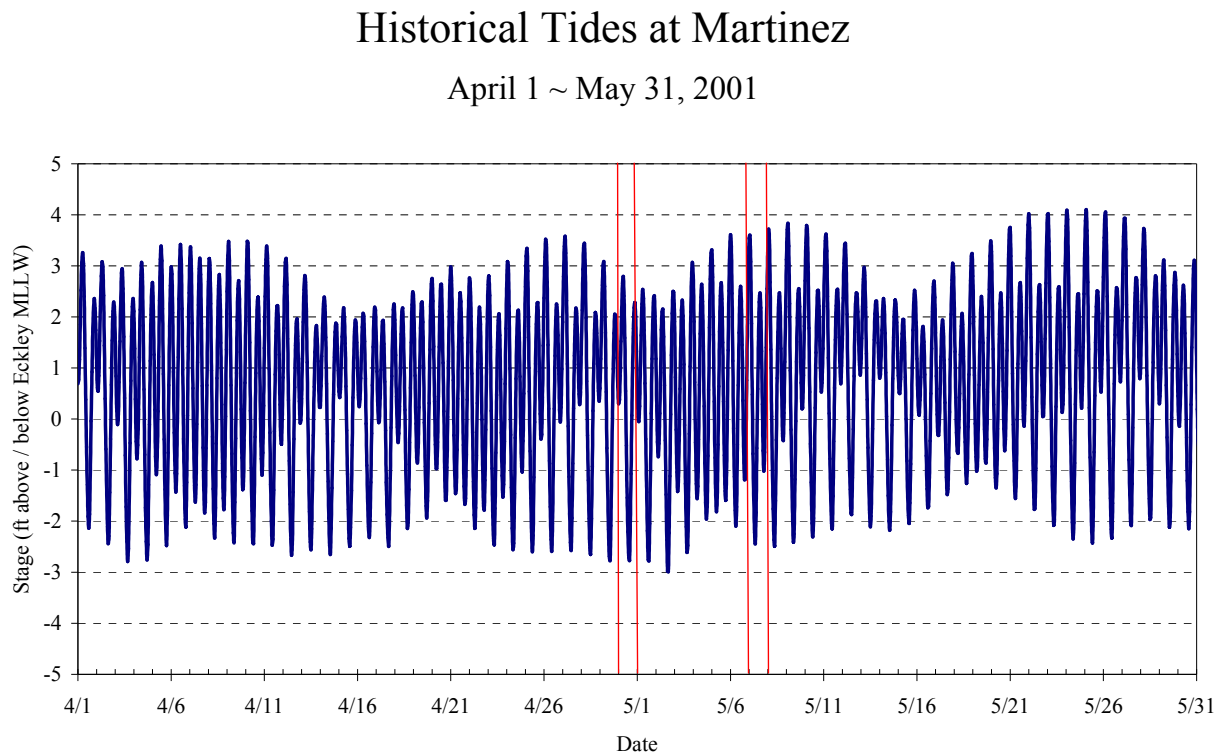


Figure 4: Shifted Tide at Martinez, April 1-May 30 2000, with tracer release dates shown in red

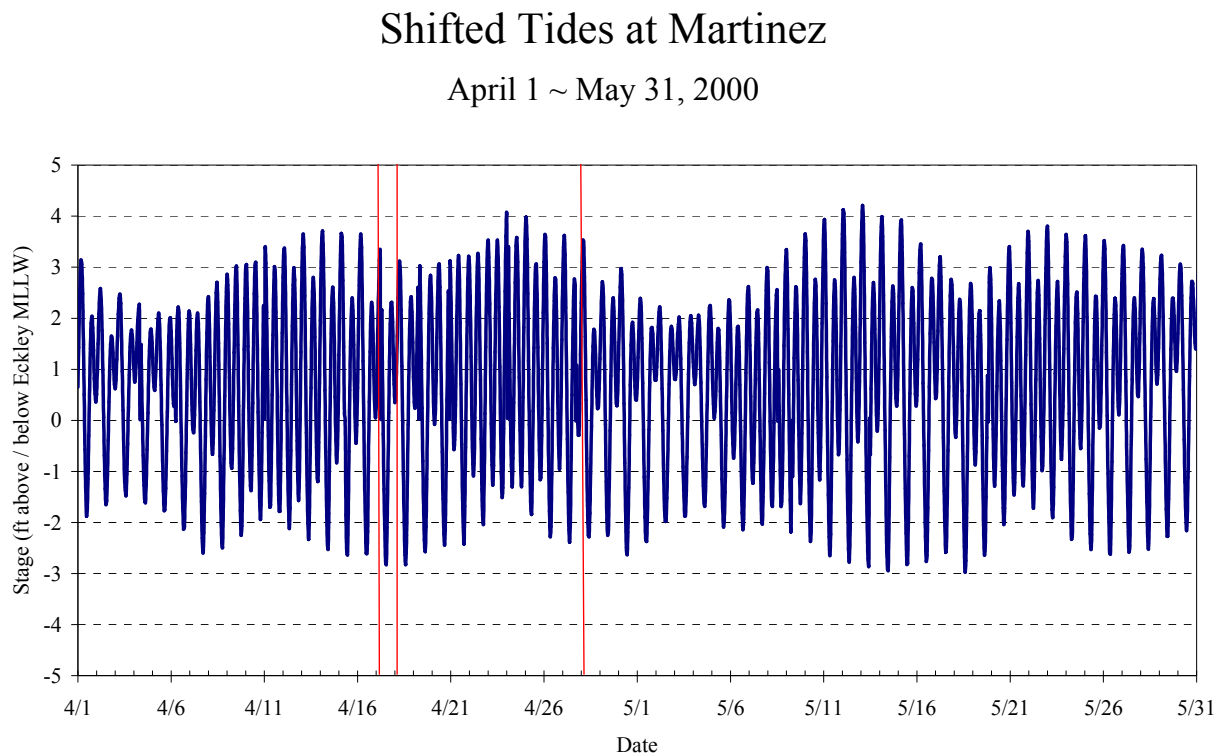


Figure 5: Shifted Tide at Martinez, April 1-May 30 2001, with tracer release dates shown in red

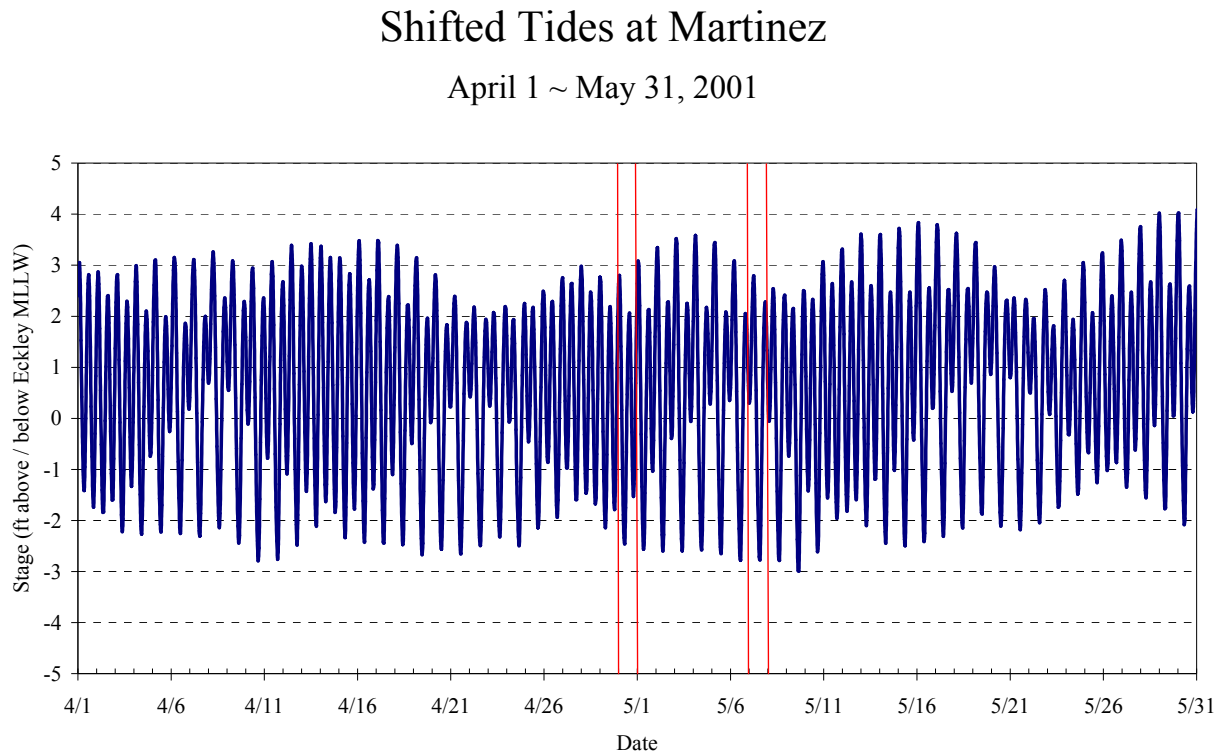


Figure 6: State Water and Central Valley Projects flow rates, water year 2000

Export Flow Rates at Central Valley and State Water Projects Water Year 2000

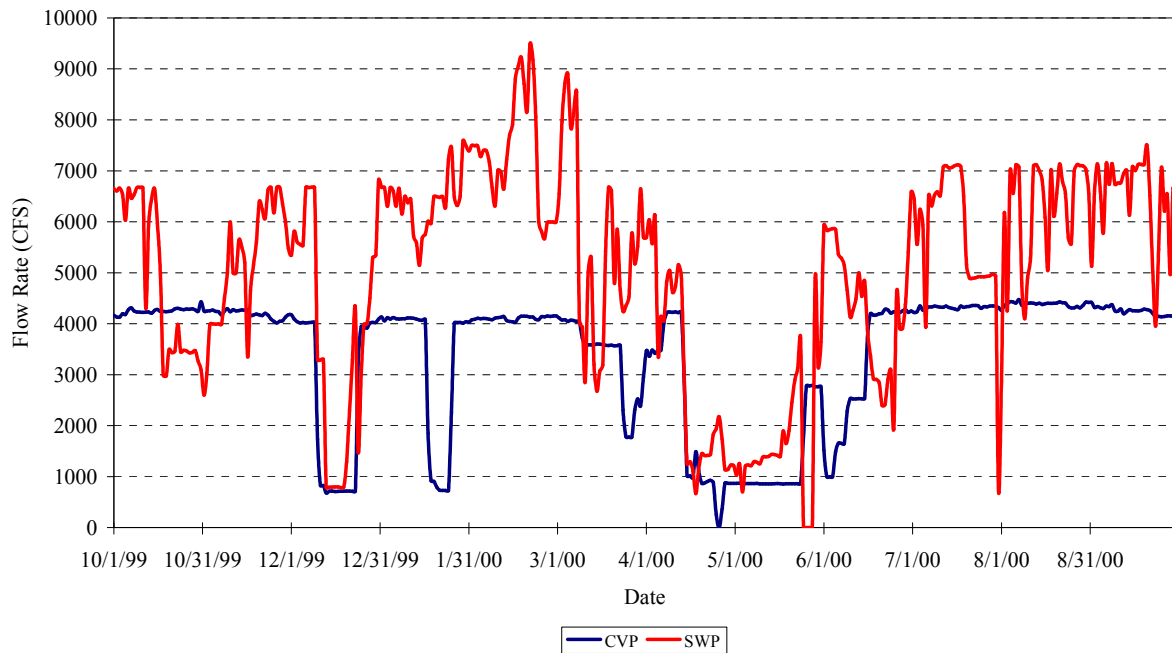


Figure 7: State Water and Central Valley Projects flow rates, water year 2001

Export Flow Rates at Central Valley and State Water Projects Water Year 2001

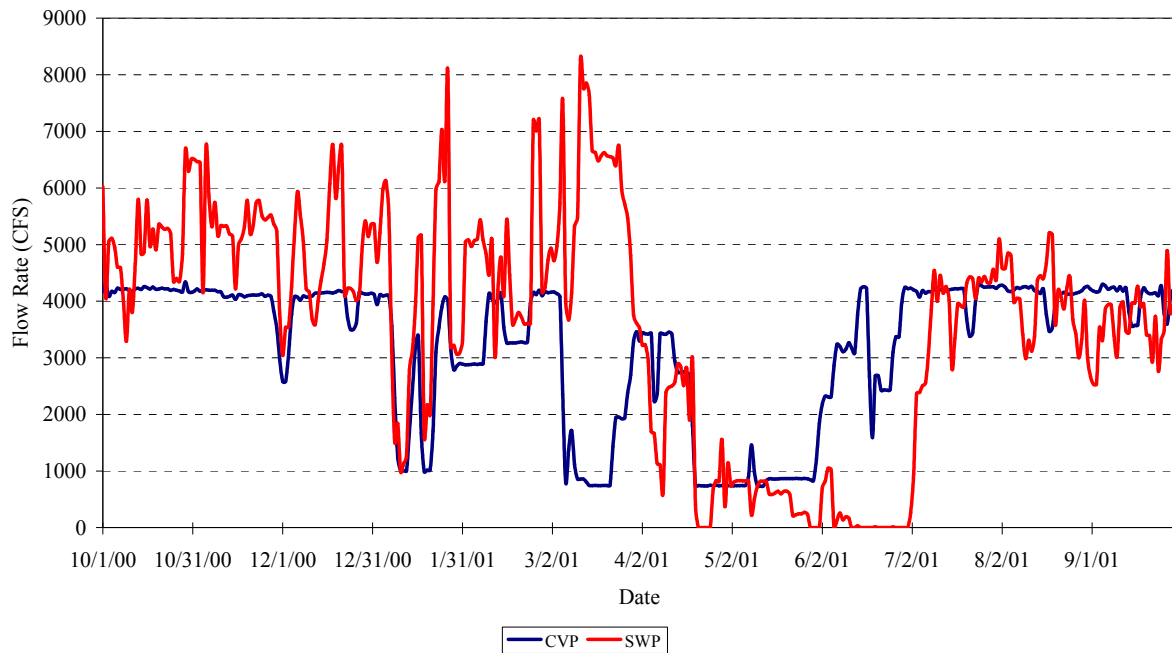


Table 2: Percent of Total Tracer that is exported from or flows past various locations, Historical Water Years 2000 and 2001

	Release Date	Exported: Central Valley Project	Exported: State Water Project	Diverted: Los Vaqueros Intake	Diverted: Contra Costa Canal	Old R. west of HORB [Flow to NW]	Stockton Ship Channel [Flow toward Bay]	Turner Cut [Flow to SW]	Columbia Cut [Flow to SW]	Little Connection Slough [Flow to NW]	Middle R. west of Medford Island [Positive flow NW]	Martinez [Flow west]
WY 2000	4/17/00	8.7	15.0	0.8	0.2	5.1	89.5	13.0	22.3	11.1	0.2	48.7
	4/18/00	9.2	15.6	0.8	0.2	5.0	90.4	12.8	22.0	12.7	0.4	47.4
	4/28/00	13.3	22.4	0.7	0.3	6.5	84.3	18.4	28.3	9.2	4.7	33.9
WY 2001	4/30/01	28.6	9.4	1.6	0.9	8.7	89.5	20.7	33.9	10.3	2.2	22.4
	5/1/01	29.4	9.3	1.7	0.9	8.6	89.6	22.5	31.0	11.7	1.4	21.8
	5/7/01	28.7	7.6	3.0	1.4	9.1	90.5	21.1	28.8	11.4	-0.2	19.2
	5/8/01	29.5	7.4	3.0	1.4	9.0	90.9	20.1	28.6	10.0	-1.0	18.9

Table 3: Percent of Total Tracer that is exported from or flows by various locations, Shifted Tide, Water Years 2000 and 2001

	Release Date	Exported: Central Valley Project	Exported: State Water Project	Diverted: Los Vaqueros Intake	Diverted: Contra Costa Canal	Old R. west of HORB [Flow to NW]	Stockton Ship Channel [Flow to NW]	Turner Cut [Flow to SW]	Columbia Cut [Flow to SW]	Little Connection Slough [Flow to NW]	Middle R. west of Medford Island [Positive flow to NW]	Martinez [Flow west]
WY00	4/17/00	9.1	15.4	0.8	0.2	5.3	88.2	11.3	24.2	9.1	2.4	48.0
	4/18/00	9.9	16.6	0.9	0.2	5.2	90.0	13.3	25.3	10.1	3.2	45.7
	4/28/00	12.5	21.4	0.6	0.3	6.3	84.9	14.2	26.3	10.3	3.3	36.5
WY01	4/30/01	27.9	9.4	1.6	0.9	9.2	90.8	20.7	28.1	11.5	1.4	23.2
	5/1/01	28.3	9.1	1.7	0.9	9.4	90.3	19.8	28.7	10.5	0.9	23.3
	5/7/01	29.8	7.8	3.3	1.4	8.3	90.4	21.7	33.3	11.4	0.8	19.0
	5/8/01	30.7	7.6	3.3	1.4	8.3	89.9	23.0	30.9	11.8	-0.4	18.2

It is evident from Tables 2 and 3 that the period of the tidal cycle in which the tracer is released does not have a substantial impact on the fraction of tracer (or San Joaquin River flow) that is ultimately exported. For all seven tracer release dates, the percent of tracer ultimately exported/diverted in the South Delta varied only ~1% between historical tides and shifted-tide scenarios. Differences between the scenarios were up to ~6% in other portions of the Delta.

The sum of exports, diversions, and Delta outflow at Martinez ranged from ~60-73% for the scenarios, indicating that ~27-40% of the San Joaquin River water that entered the Delta on the various fish release days remained in the Delta September 30, the end of the modeling period, was pumped out for agricultural use, or was diluted by other flows to concentrations below the level that can be resolved by the model.

Appendix A-Historical Tides, Water Year 2000

Normalized Tracer Concentrations in Clifton Court

Model Period: April ~ September 2000

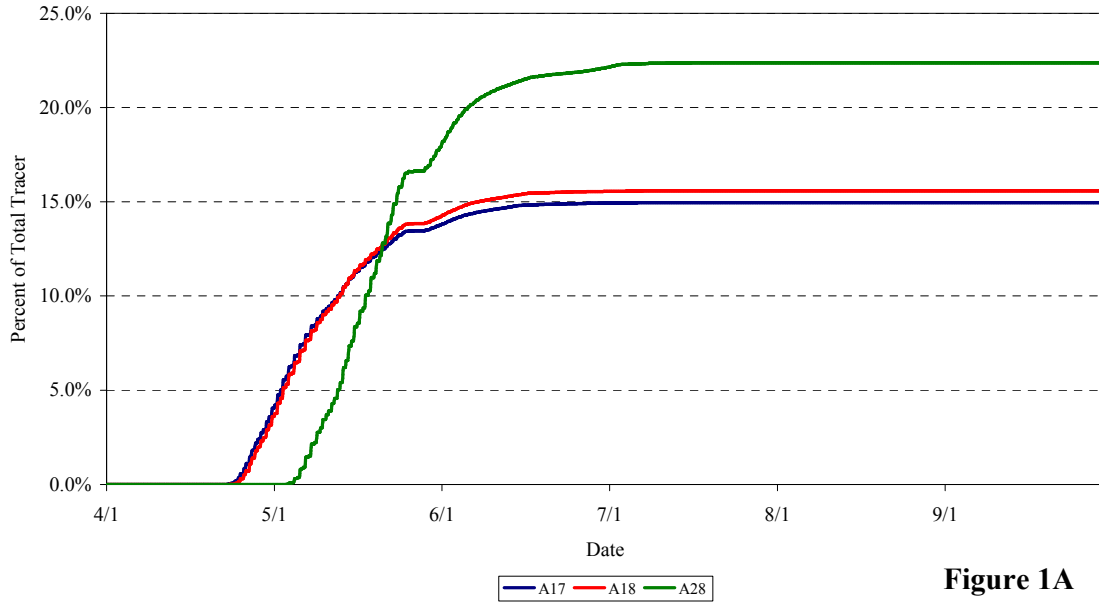


Figure 1A

Normalized Tracer Concentrations at Tracy Pumping Station

Model Period: April ~ September 2000

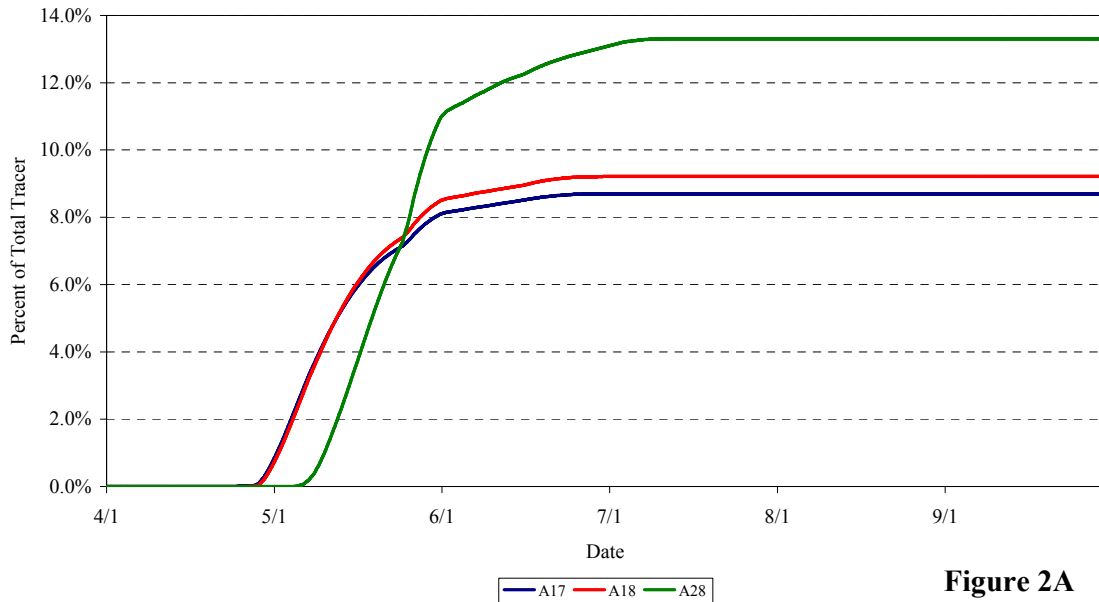


Figure 2A

Normalized Tracer Concentrations at Los Vaqueros Intake

Model Period: April ~ September 2000

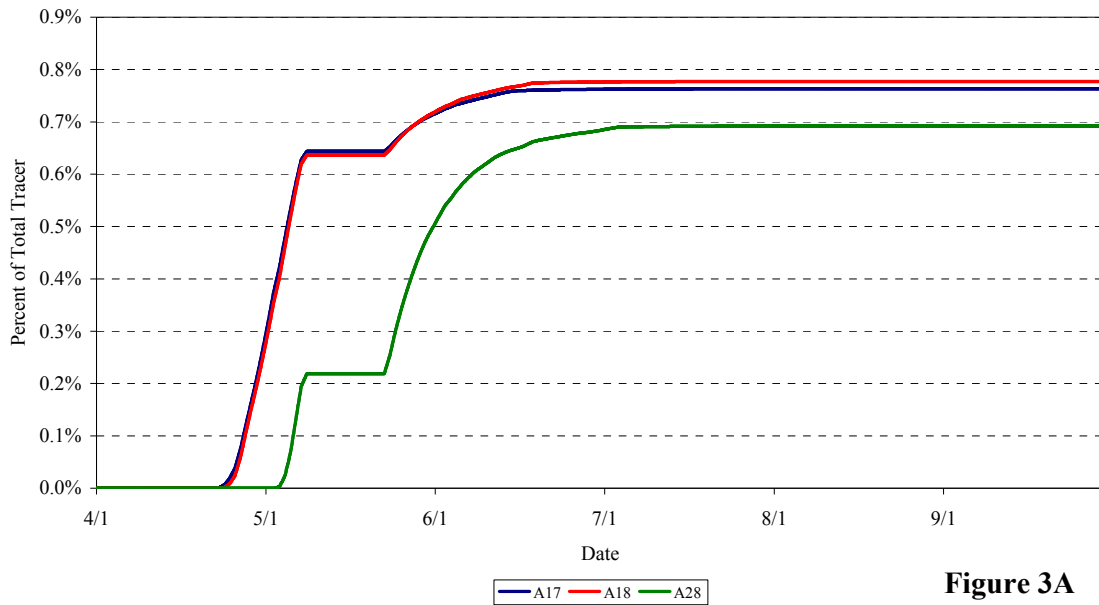


Figure 3A

Normalized Tracer Concentrations at Contra Costa Canal Intake

Model Period: April ~ September 2000

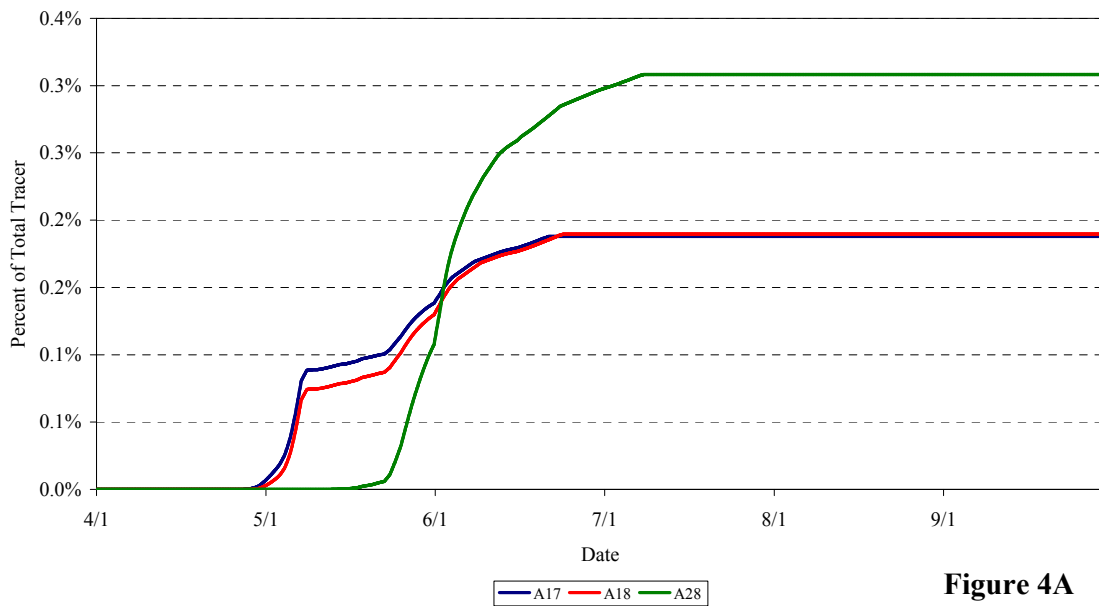


Figure 4A

Normalized Tracer Concentrations in Turner Cut

Model Period: April ~ September 2000

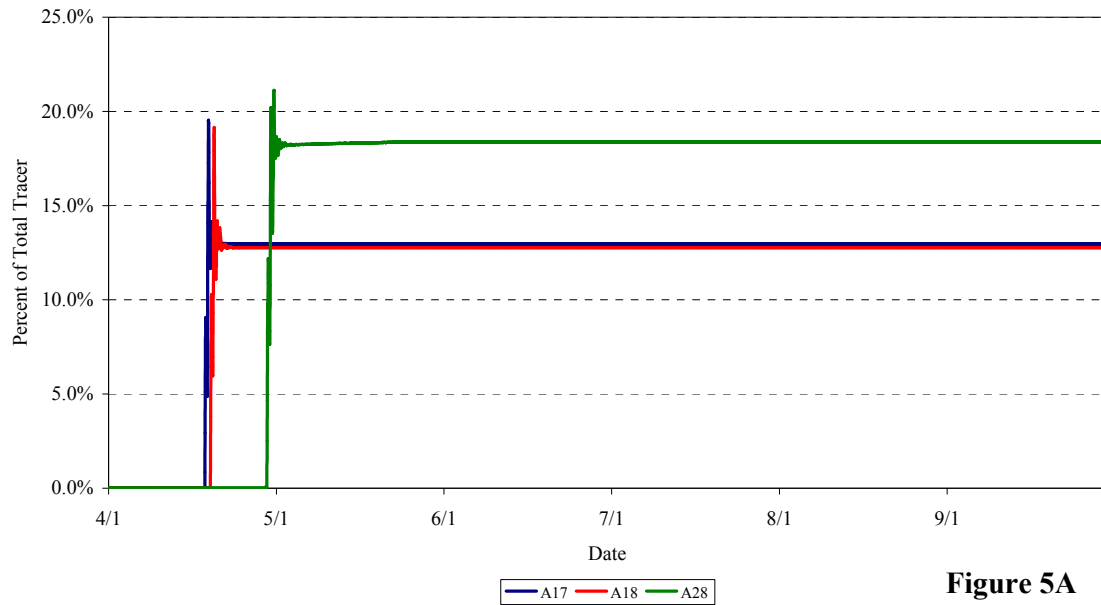


Figure 5A

Normalized Tracer Concentrations in Columbia Cut

Model Period: April ~ September 2000

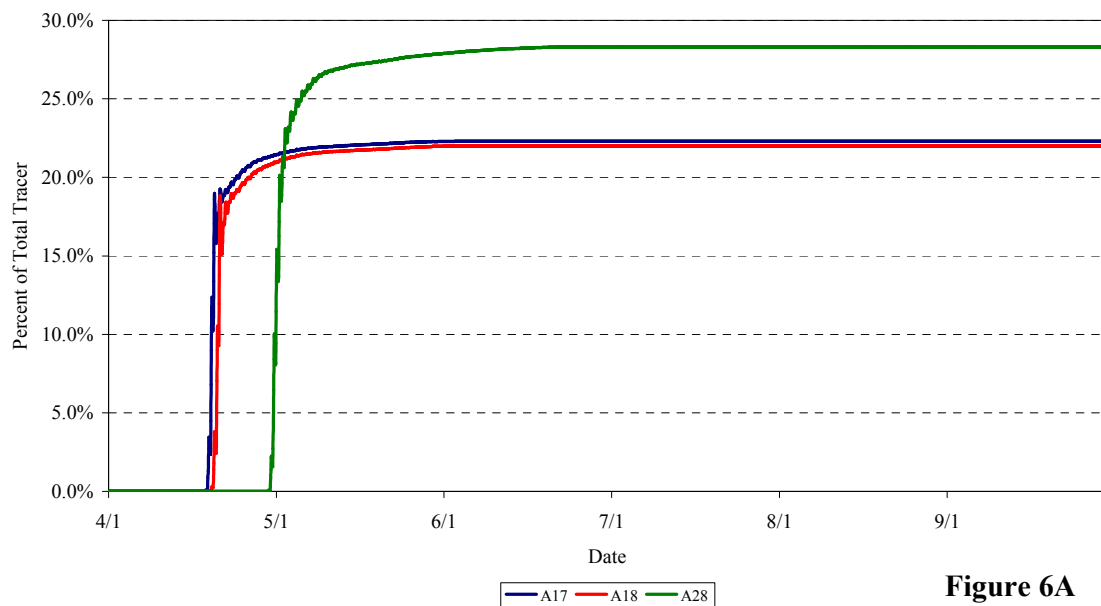


Figure 6A

Normalized Tracer Concentrations in Stockton Ship Channel

Model Period: April ~ September 2000

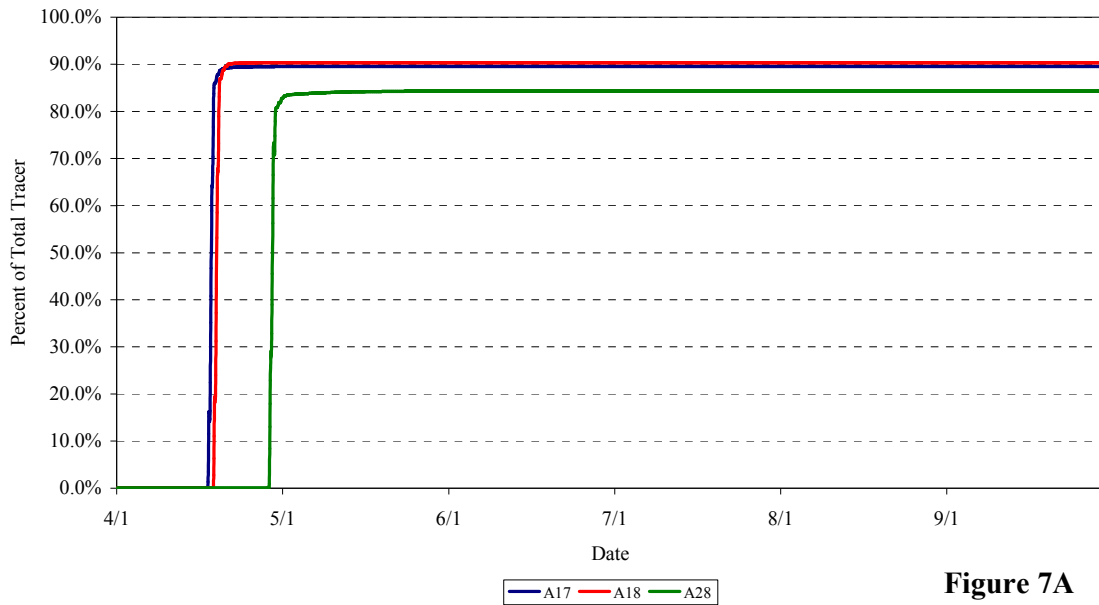


Figure 7A

Normalized Tracer Concentrations in Old River West of HORB

Model Period: April ~ September 2000

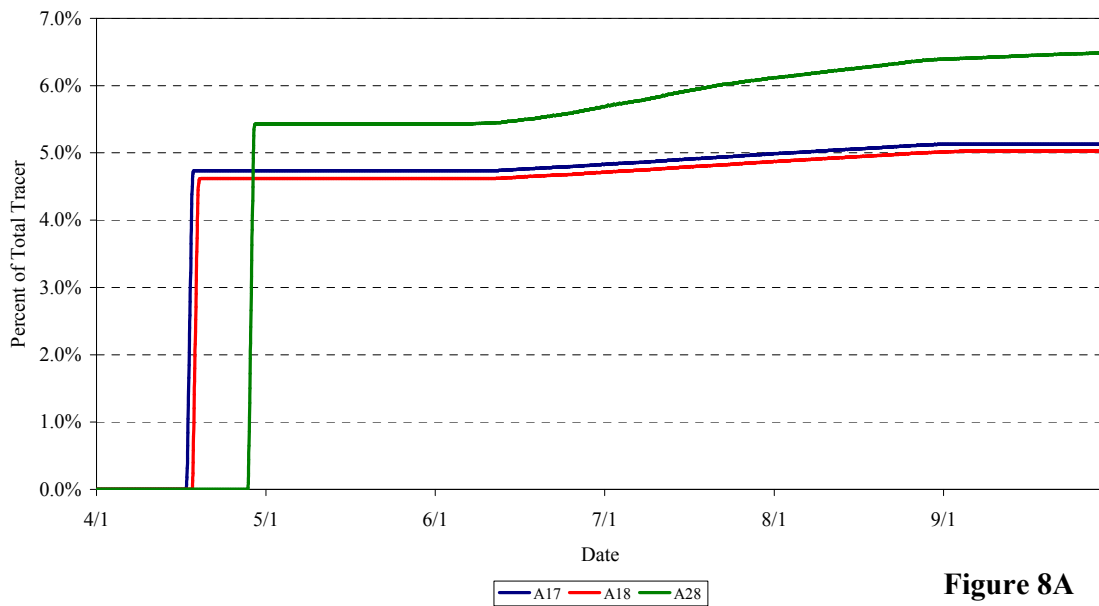


Figure 8A

Normalized Tracer Concentrations in Middle River W. of Medford Is

Model Period: April ~ September 2000

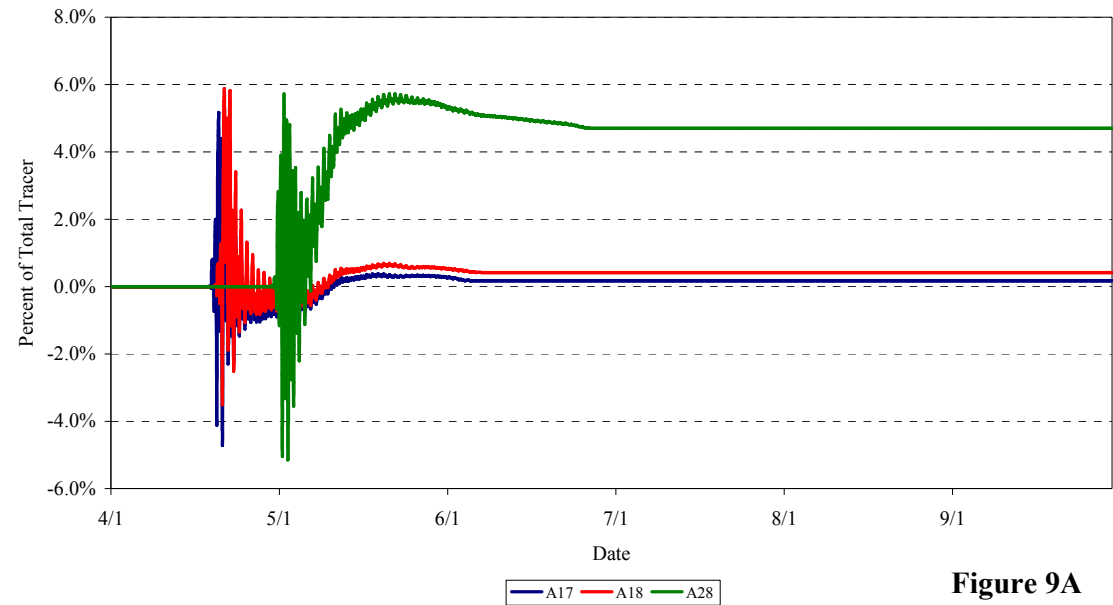


Figure 9A

Normalized Tracer Concentrations in Little Connection Slough

Model Period: April ~ September 2000

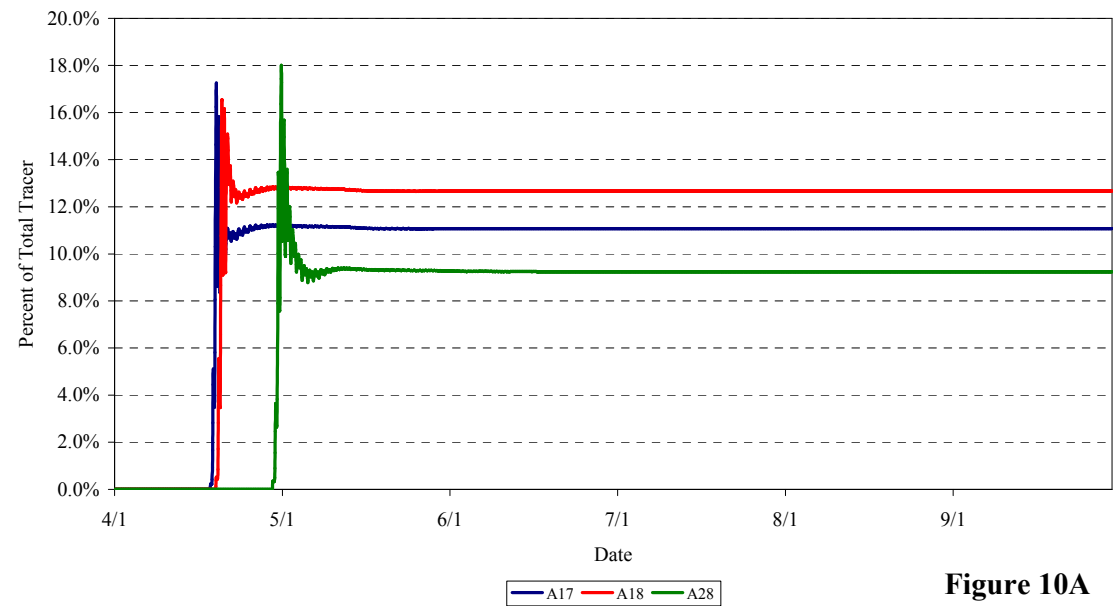


Figure 10A

Normalized Tracer Concentrations in Martinez

Model Period: April ~ September 2000

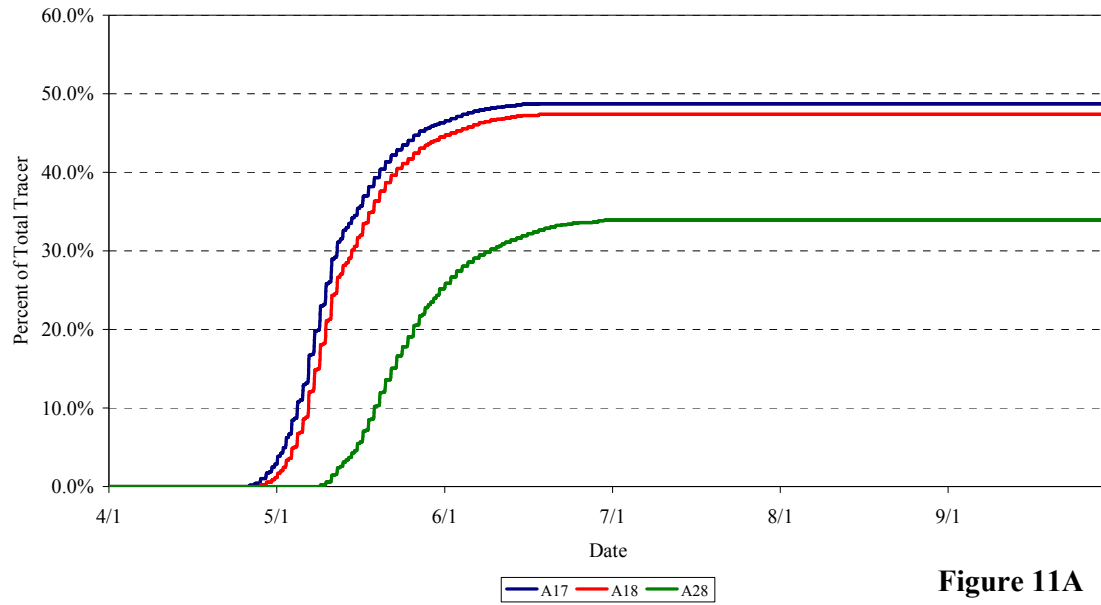


Figure 11A

Appendix B-Shifted Tides, Water Year 2000

Normalized Tracer Concentrations in Clifton Court

Model Period: April ~ September 2000

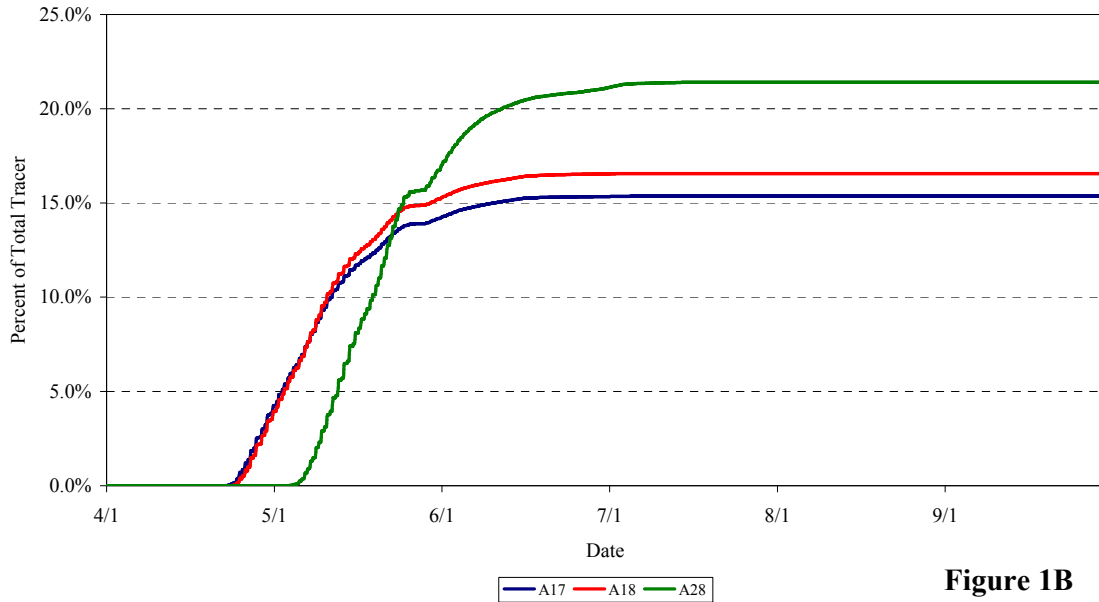


Figure 1B

Normalized Tracer Concentrations at Tracy Pumping Station

Model Period: April ~ September 2000

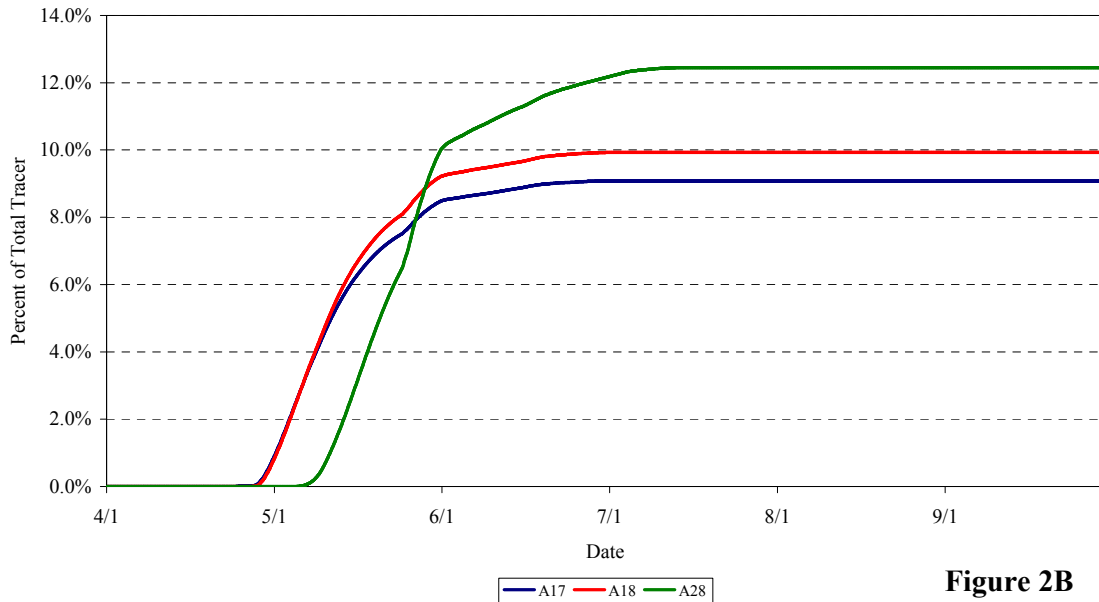


Figure 2B

Normalized Tracer Concentrations at Los Vaqueros Intake

Model Period: April ~ September 2000

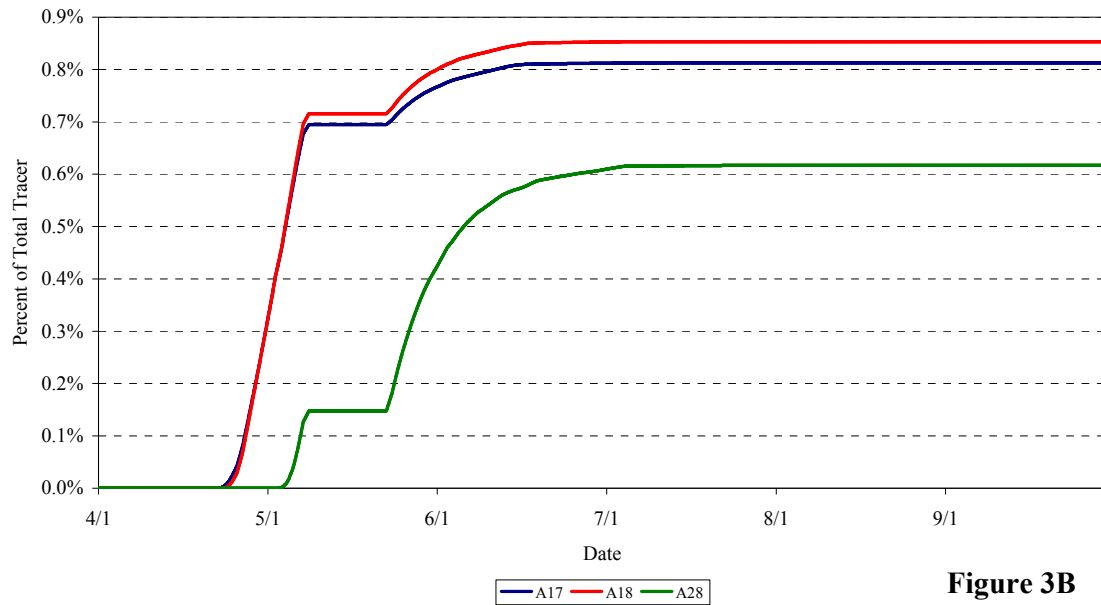


Figure 3B

Normalized Tracer Concentrations at Contra Costa Canal Intake

Model Period: April ~ September 2000

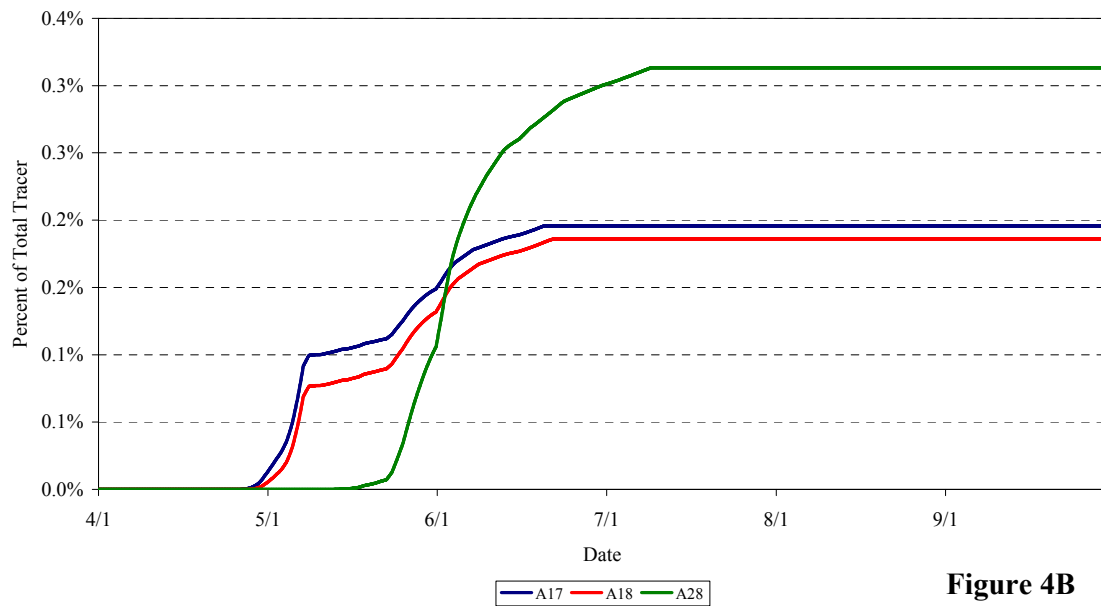


Figure 4B

Normalized Tracer Concentrations in Turner Cut

Model Period: April ~ September 2000

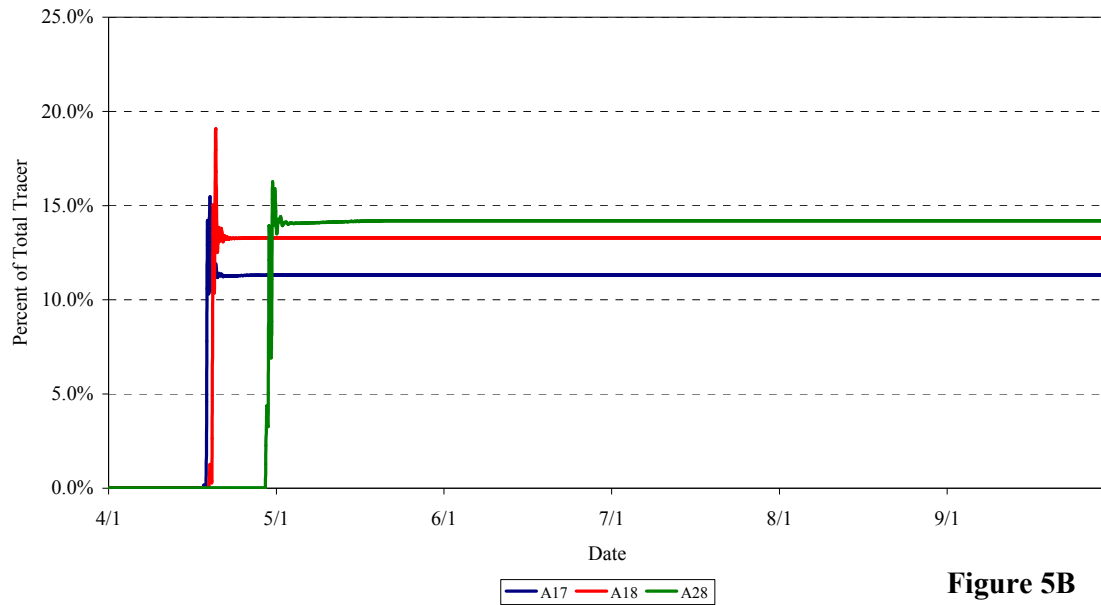


Figure 5B

Normalized Tracer Concentrations in Columbia Cut

Model Period: April ~ September 2000

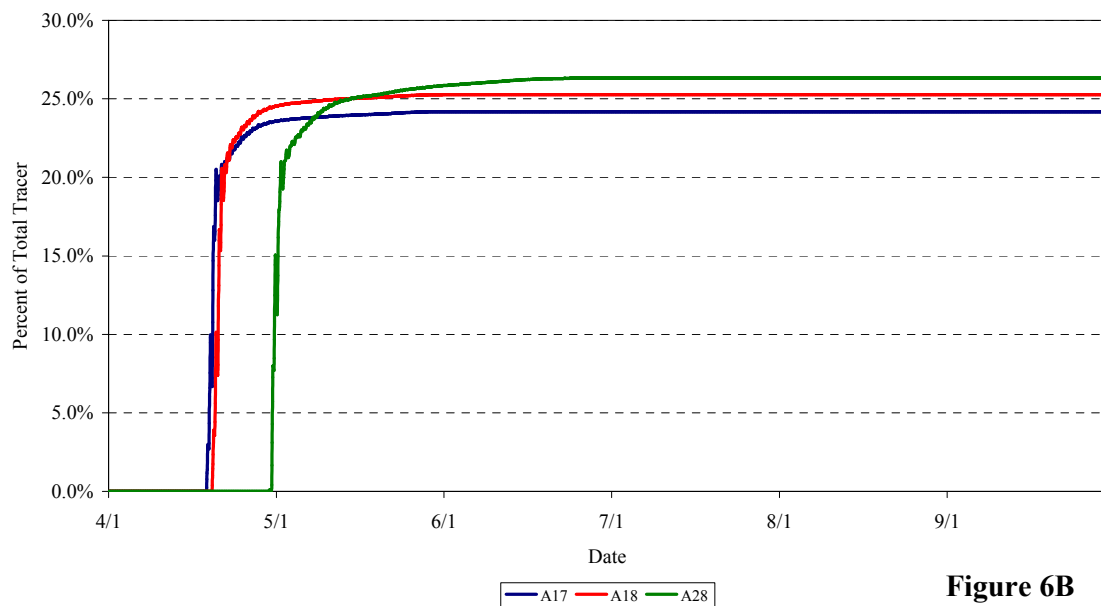


Figure 6B

Normalized Tracer Concentrations in Stockton Ship Channel

Model Period: April ~ September 2000

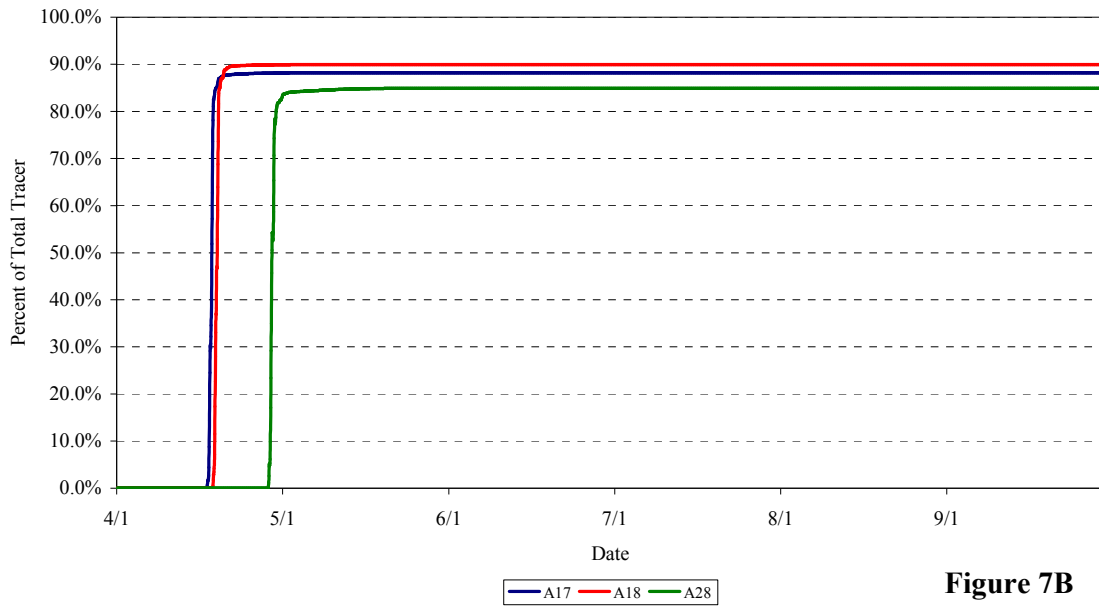


Figure 7B

Normalized Tracer Concentrations in Old River West of HORB

Model Period: April ~ September 2000

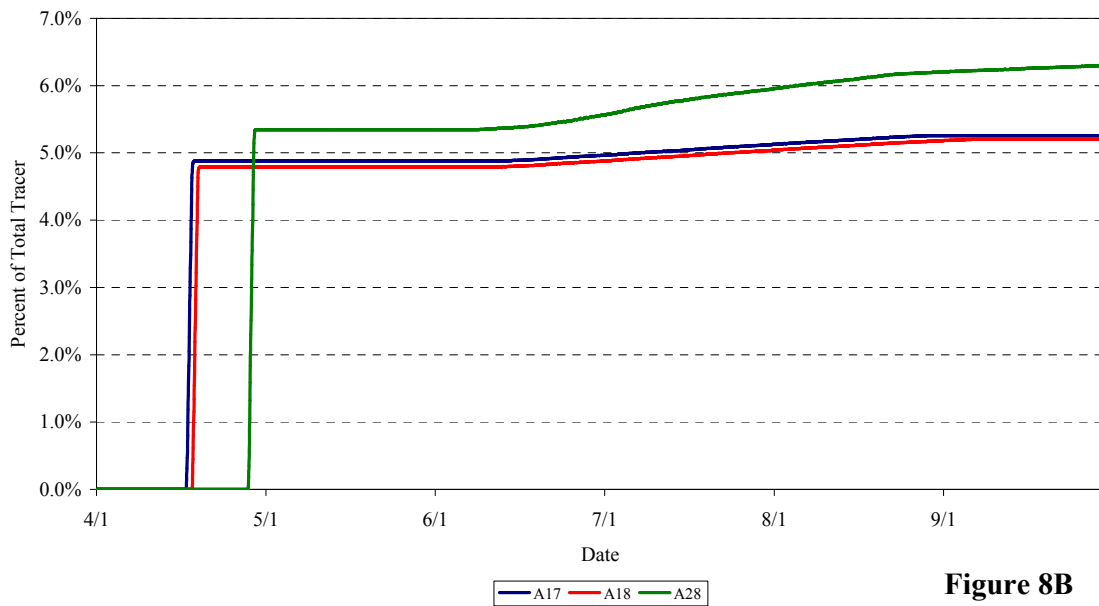


Figure 8B

Normalized Tracer Concentrations in Middle River W. of Medford Is

Model Period: April ~ September 2000

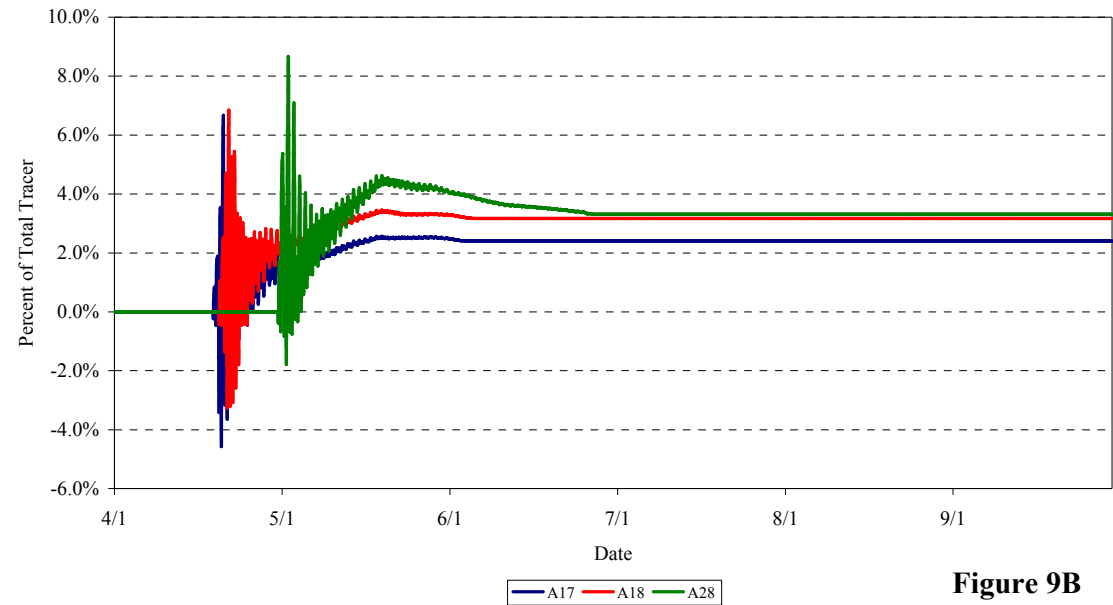


Figure 9B

Normalized Tracer Concentrations in Little Connection Slough

Model Period: April ~ September 2000

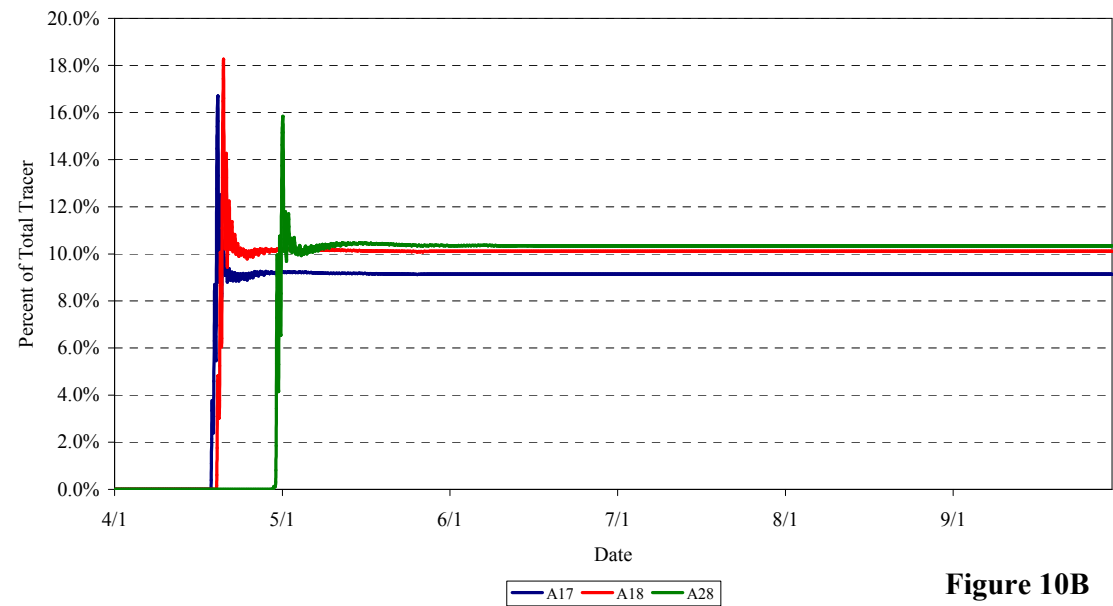


Figure 10B

Normalized Tracer Concentrations in Martinez

Model Period: April ~ September 2000

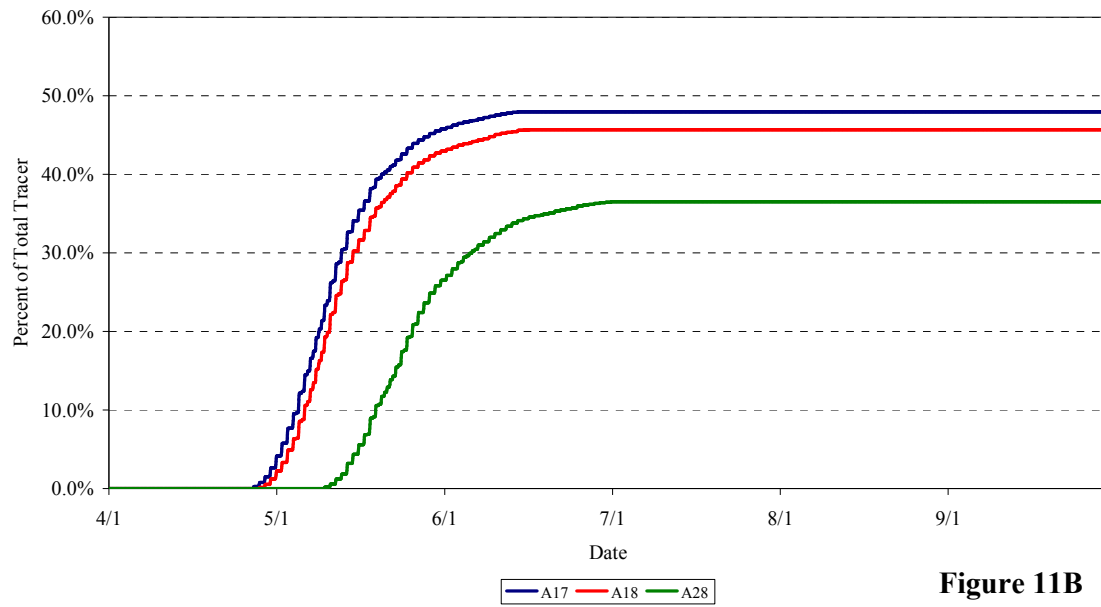


Figure 11B

Appendix C-Historical Tides, Water Year 2001

Normalized Tracer Concentrations in Clifton Court

Model Period: April ~ September 2001

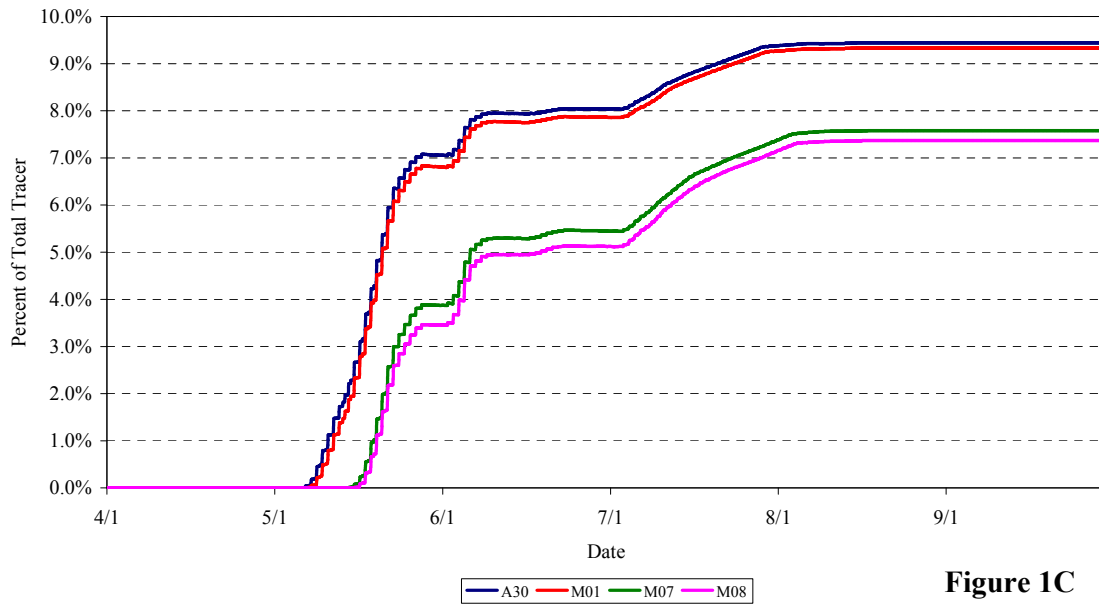


Figure 1C

Normalized Tracer Concentrations at Tracy Pumping Station

Model Period: April ~ September 2001

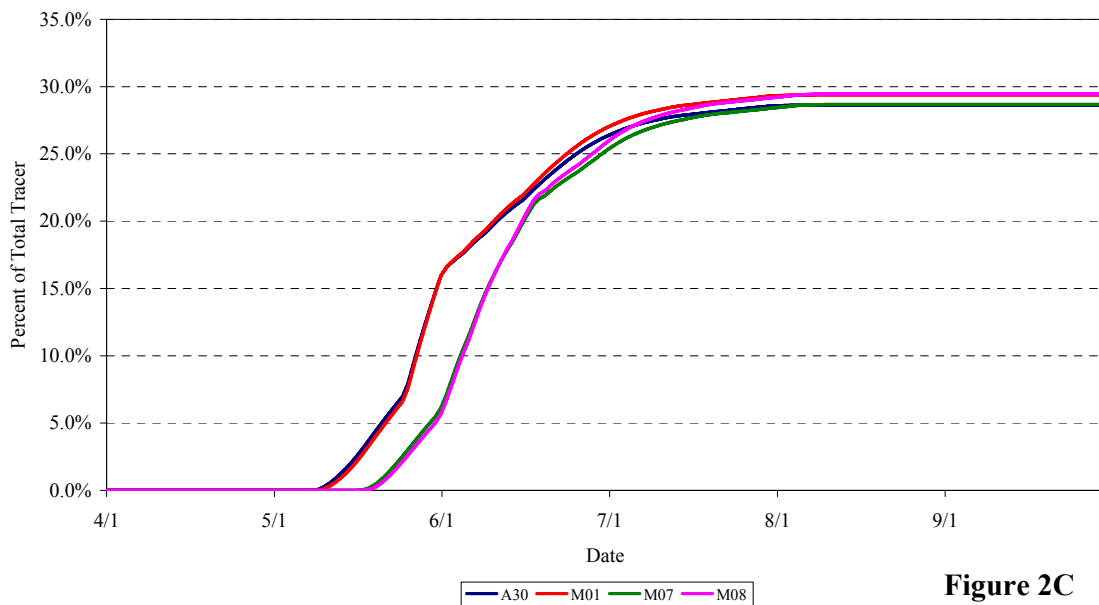


Figure 2C

Normalized Tracer Concentrations at Los Vaqueros Intake

Model Period: April ~ September 2001

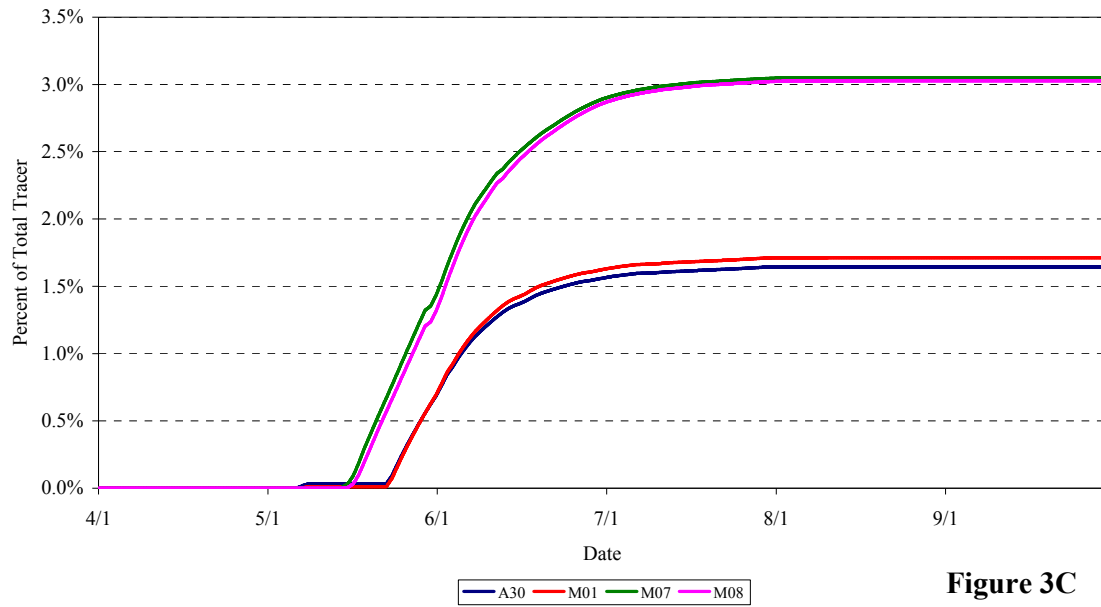


Figure 3C

Normalized Tracer Concentrations at Contra Costa Canal Intake

Model Period: April ~ September 2001

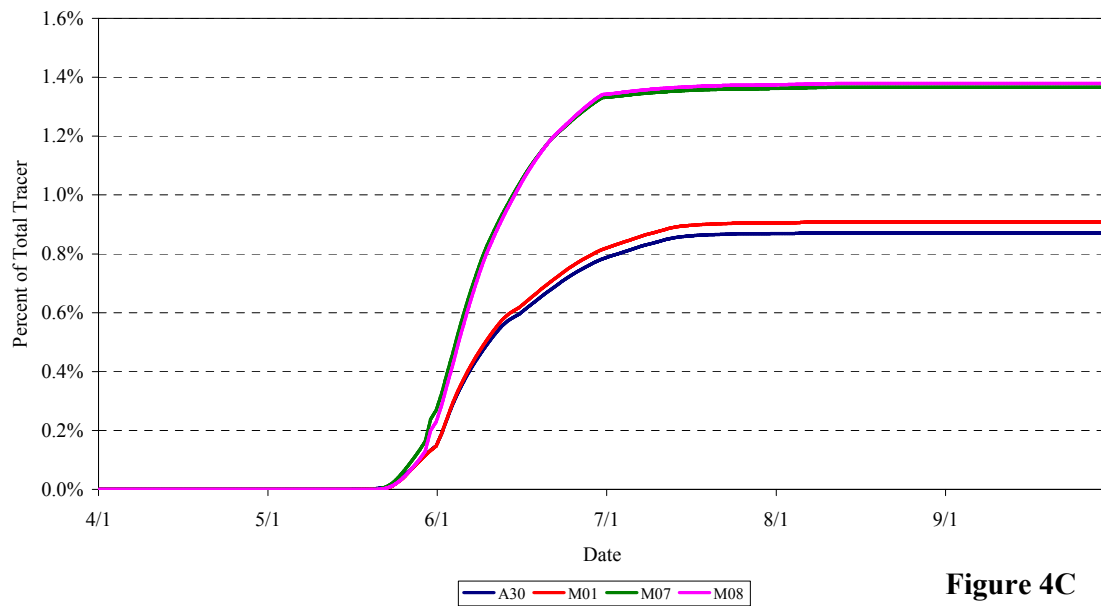


Figure 4C

Normalized Tracer Concentrations in Turner Cut

Model Period: April ~ September 2001

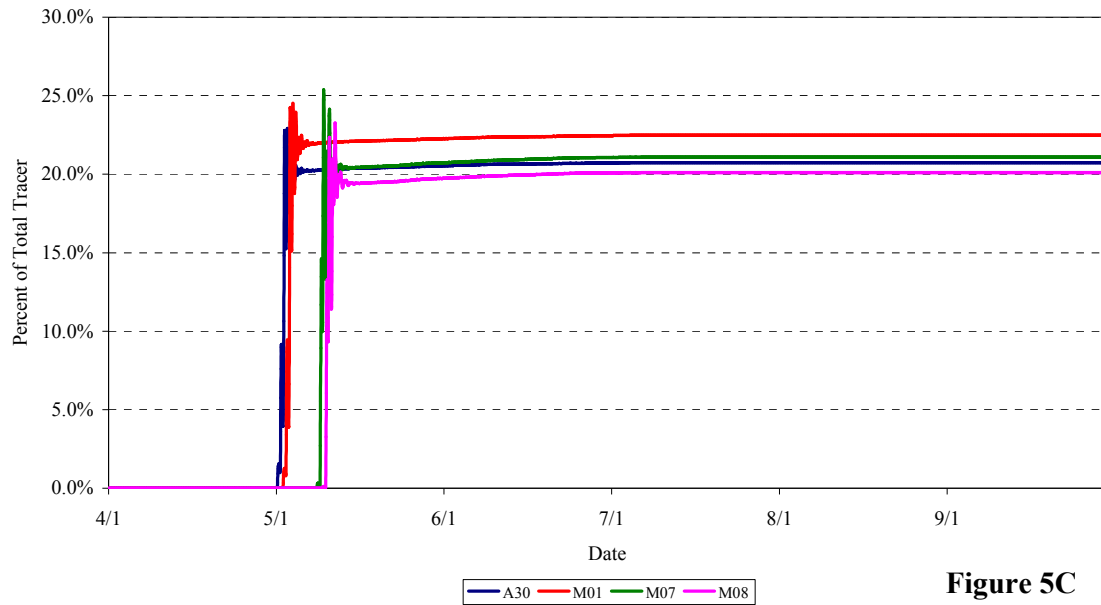


Figure 5C

Normalized Tracer Concentrations in Columbia Cut

Model Period: April ~ September 2001

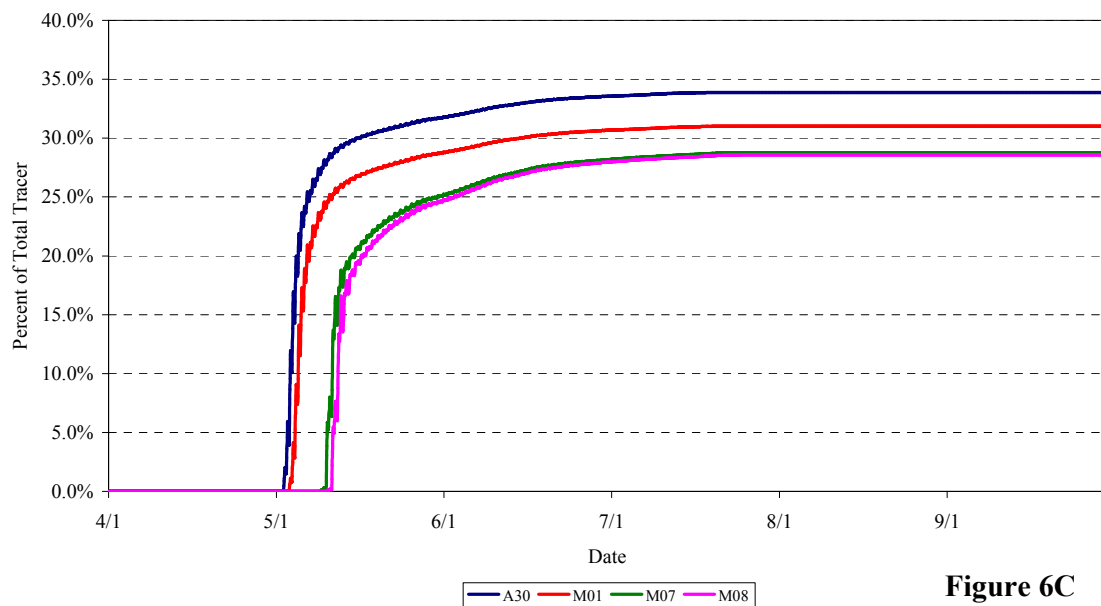


Figure 6C

Normalized Tracer Concentrations in Stockton Ship Channel

Model Period: April ~ September 2001

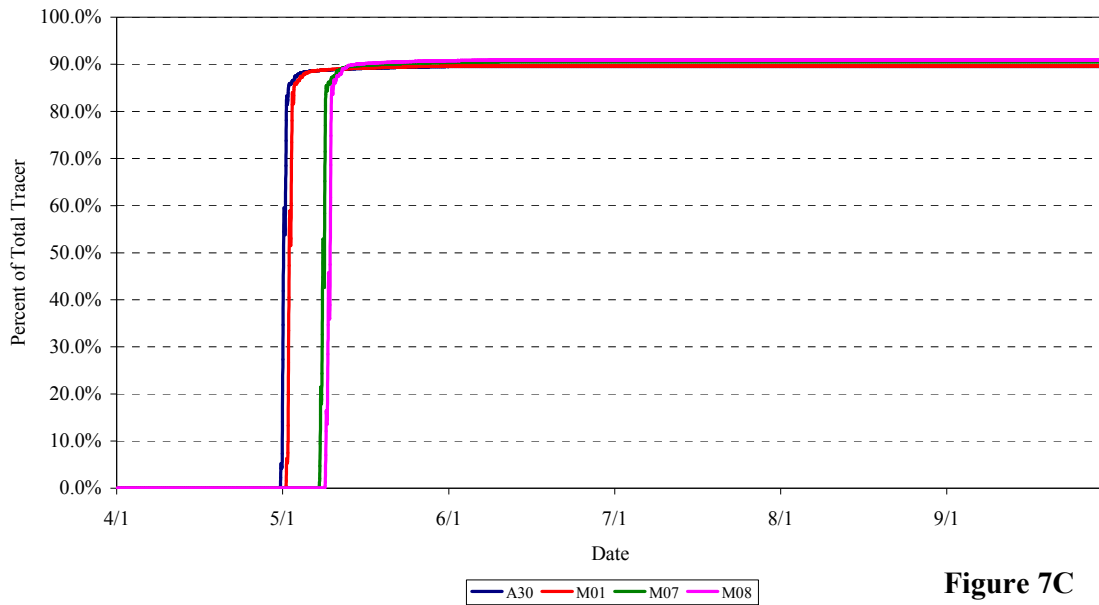


Figure 7C

Normalized Tracer Concentrations in Old River West of HORB

Model Period: April ~ September 2001

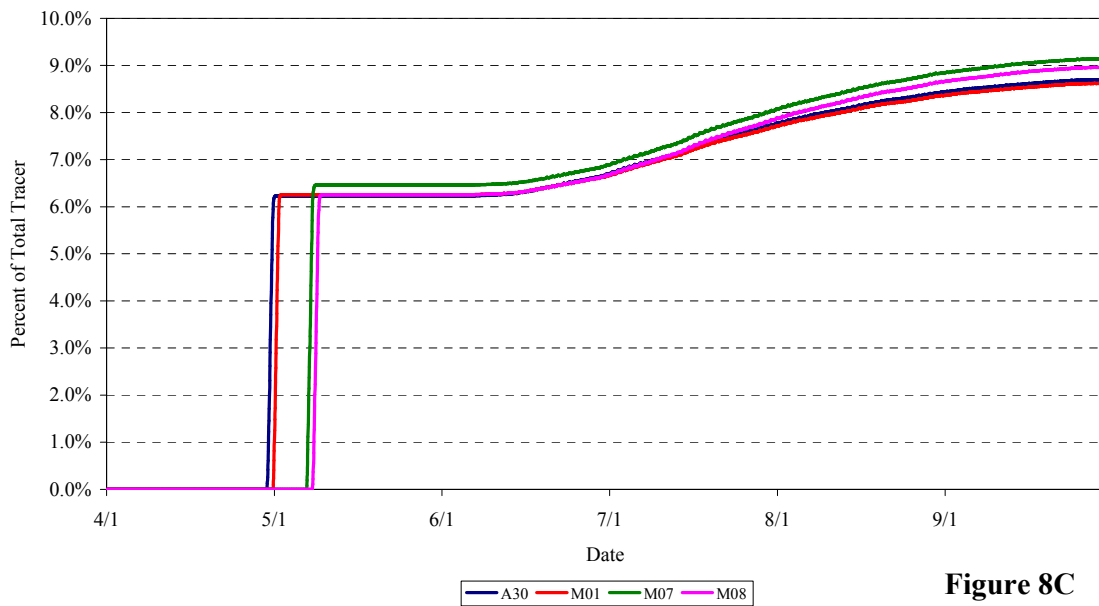


Figure 8C

Normalized Tracer Concentrations in Middle River W. of Medford Is

Model Period: April ~ September 2001

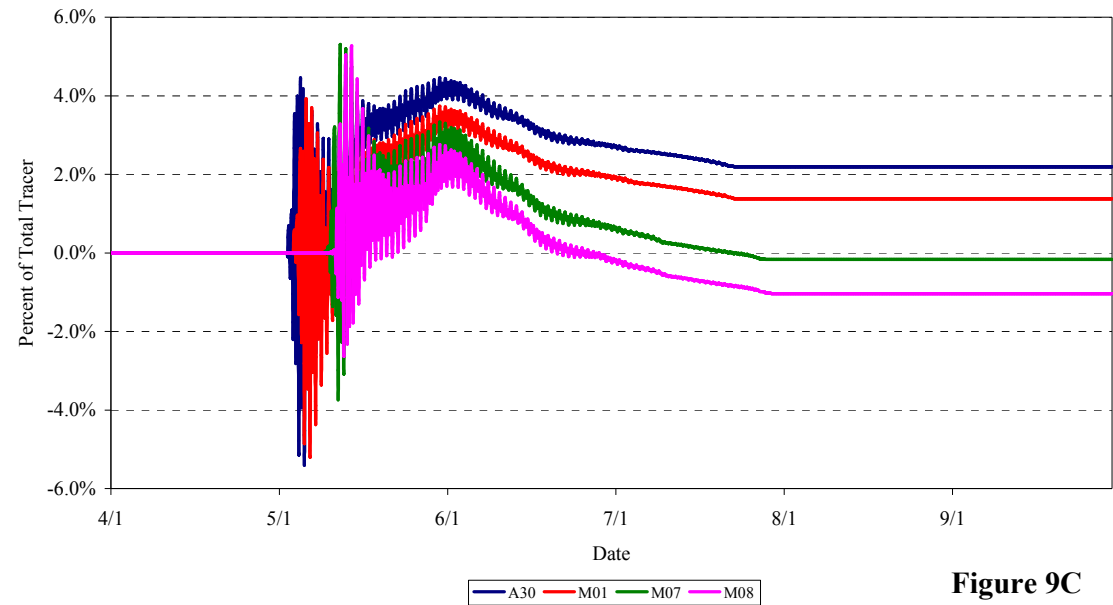


Figure 9C

Normalized Tracer Concentrations in Little Connection Slough

Model Period: April ~ September 2001

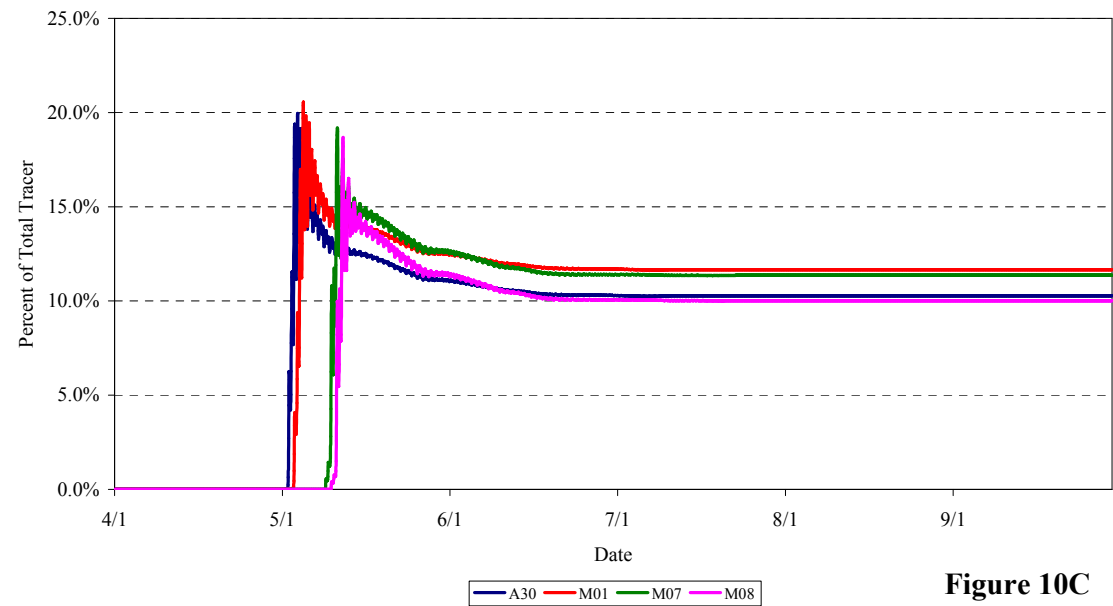


Figure 10C

Normalized Tracer Concentrations in Martinez

Model Period: April ~ September 2001

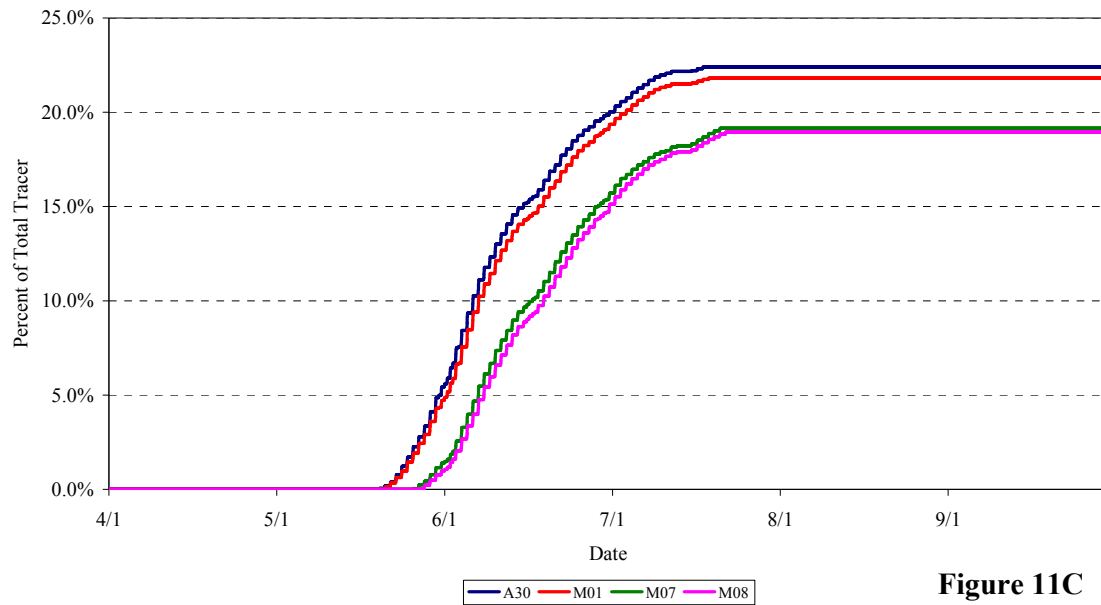


Figure 11C

Appendix D-Shifted Tides, Water Year 2001

Normalized Tracer Concentrations in Clifton Court

Model Period: April ~ September 2001

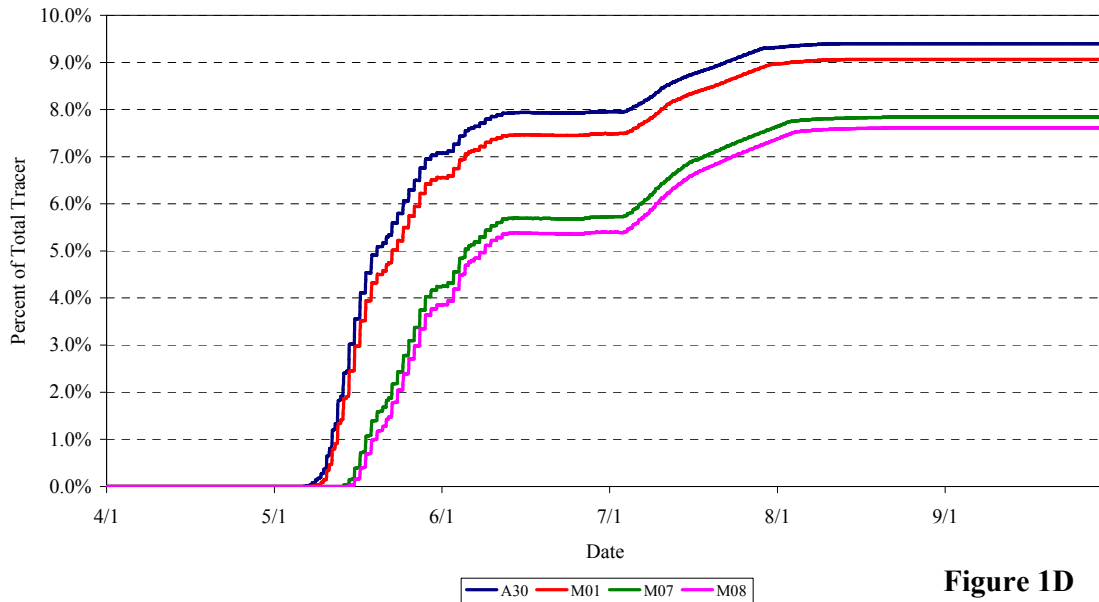


Figure 1D

Normalized Tracer Concentrations at Tracy Pumping Station

Model Period: April ~ September 2001

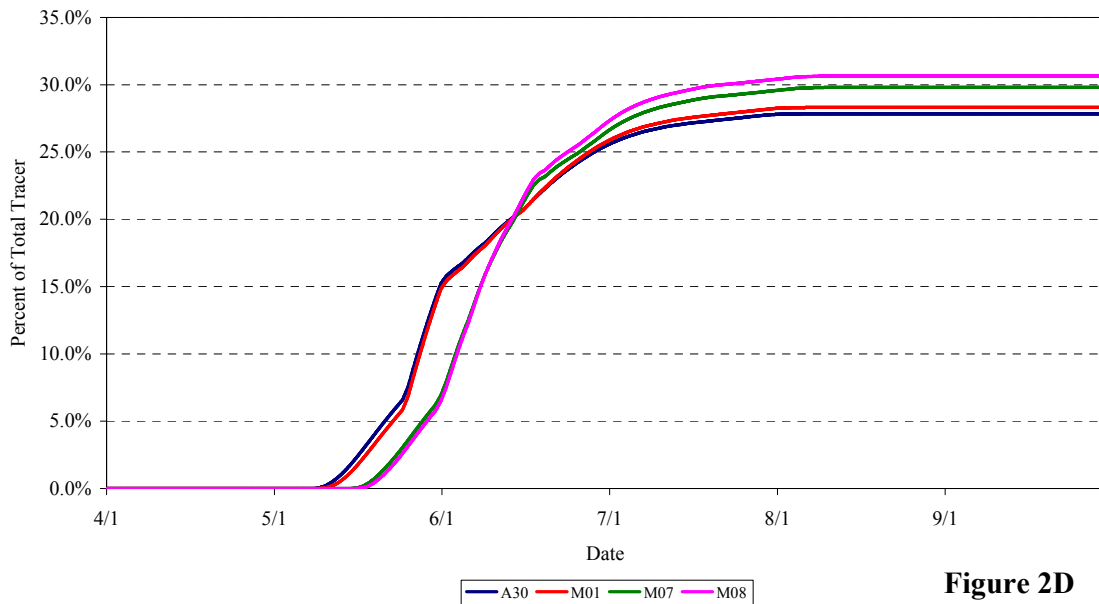


Figure 2D

Normalized Tracer Concentrations at Los Vaqueros Intake

Model Period: April ~ September 2001

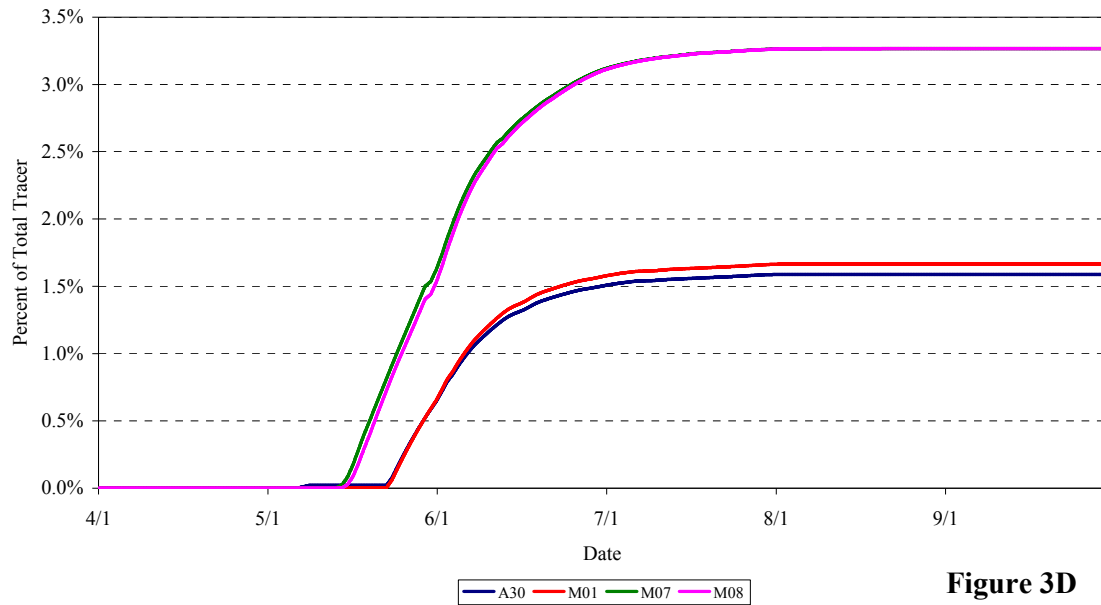


Figure 3D

Normalized Tracer Concentrations at Contra Costa Canal Intake

Model Period: April ~ September 2001

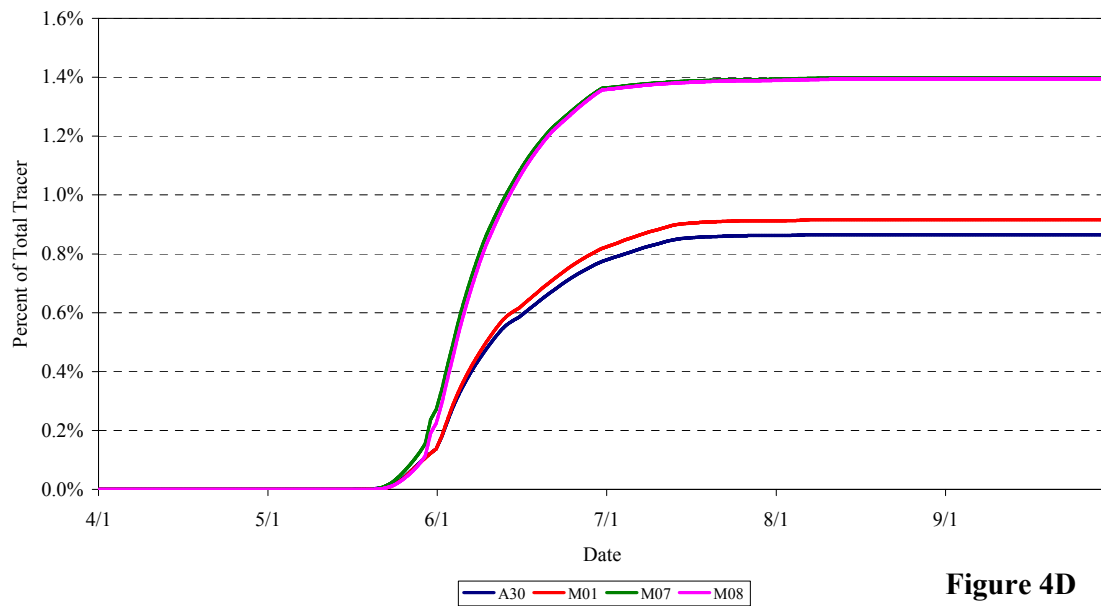


Figure 4D

Normalized Tracer Concentrations in Turner Cut

Model Period: April ~ September 2001

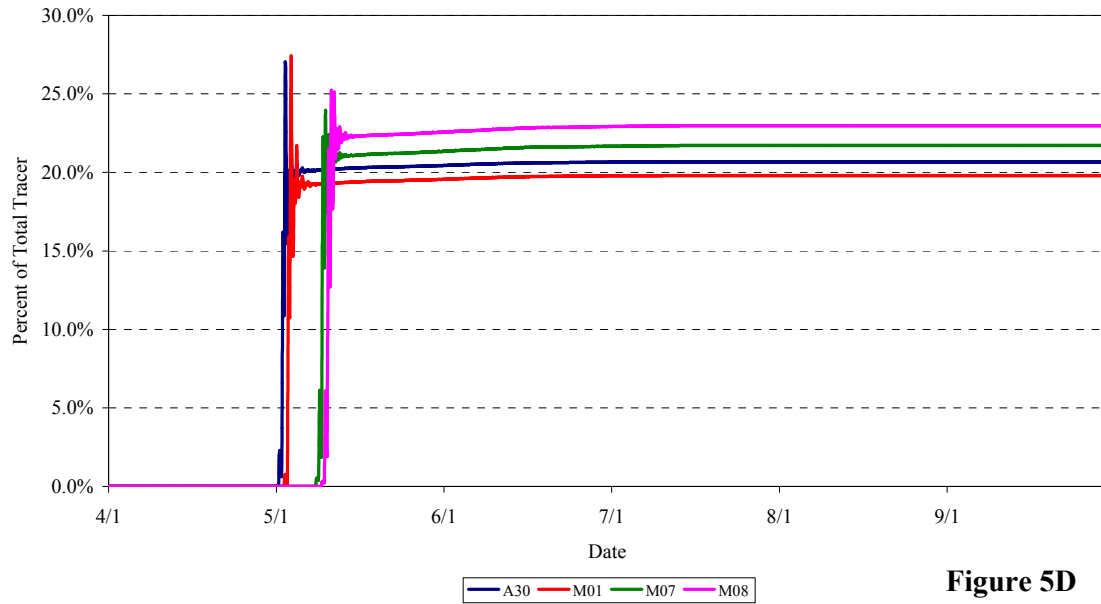


Figure 5D

Normalized Tracer Concentrations in Columbia Cut

Model Period: April ~ September 2001

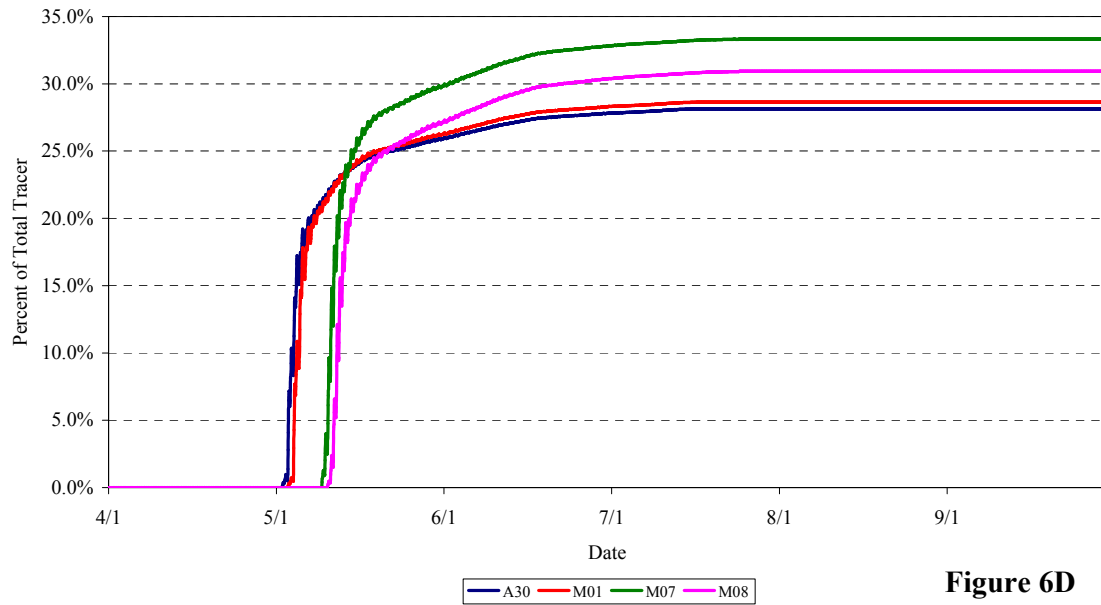


Figure 6D

Normalized Tracer Concentrations in Stockton Ship Channel

Model Period: April ~ September 2001

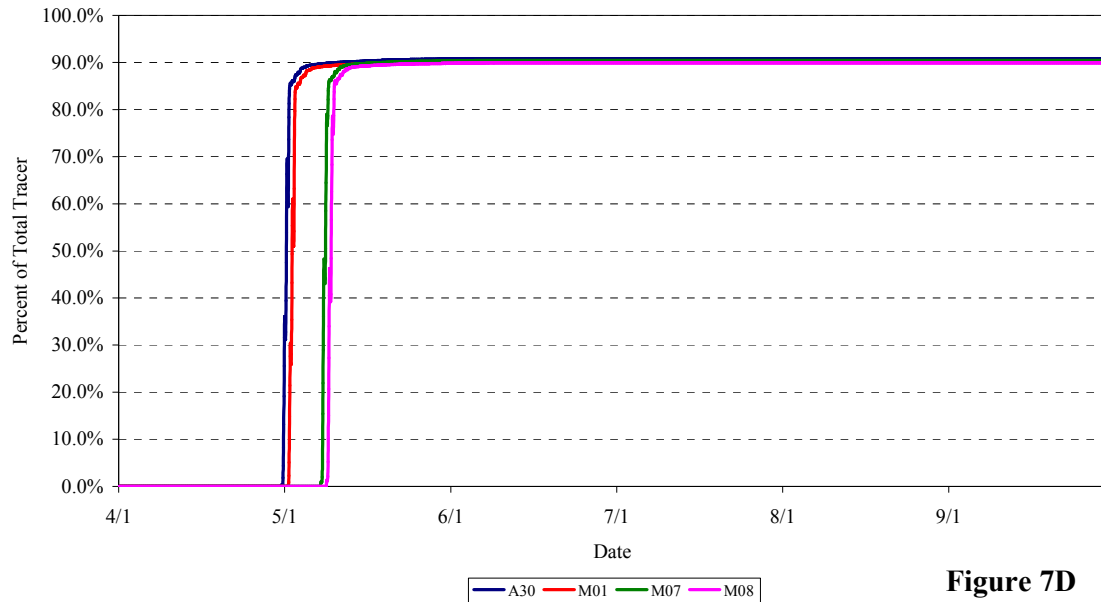


Figure 7D

Normalized Tracer Concentrations in Old River West of HORB

Model Period: April ~ September 2001

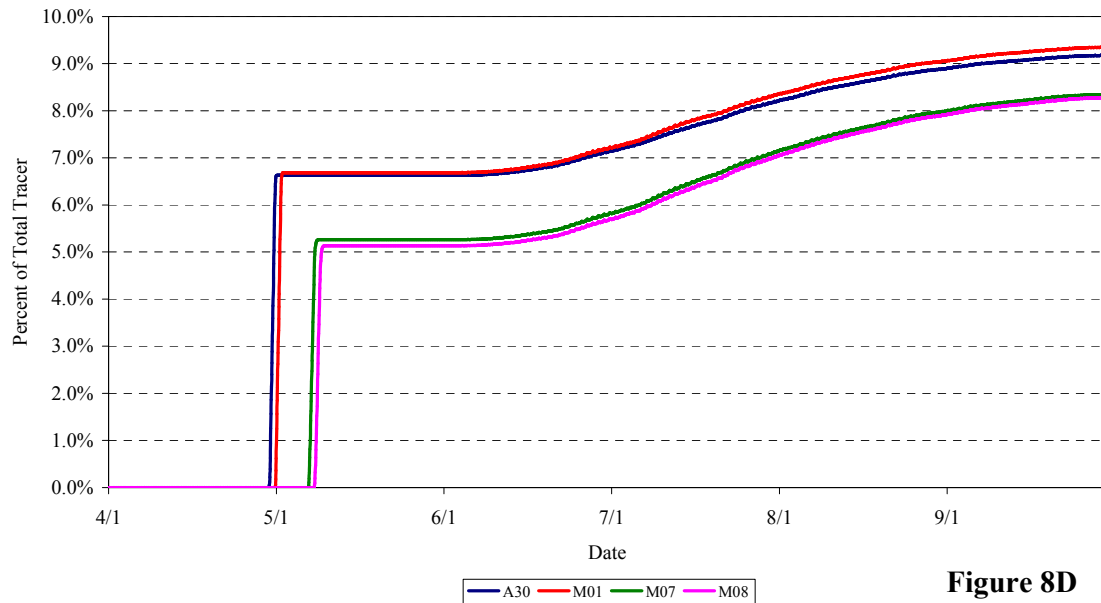


Figure 8D

Normalized Tracer Concentrations in Middle River W. of Medford Is
Model Period: April ~ September 2001

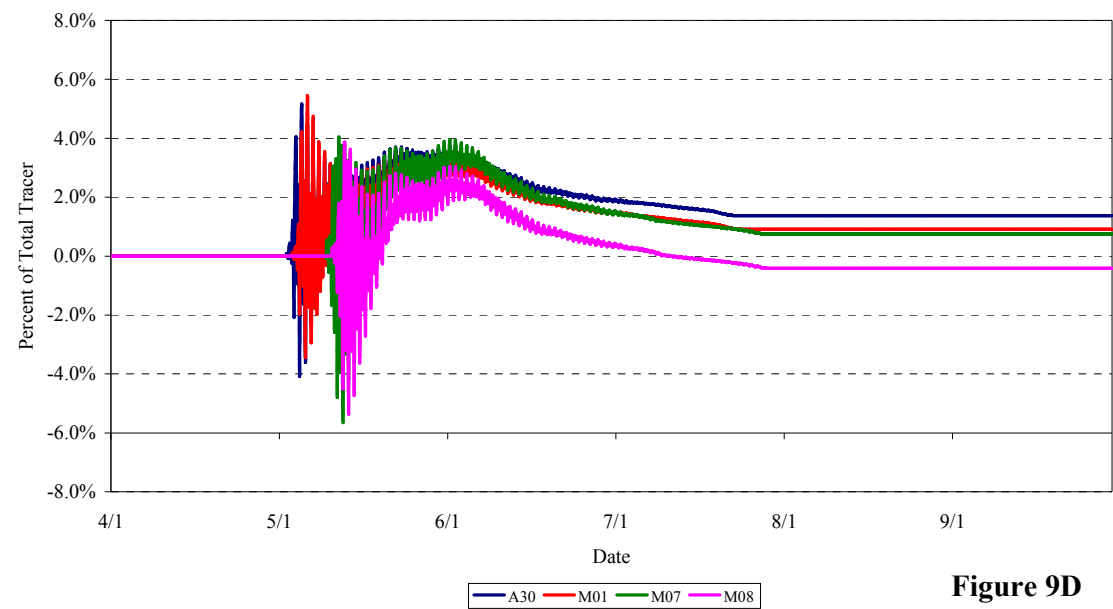


Figure 9D

Normalized Tracer Concentrations in Little Connection Slough
Model Period: April ~ September 2001

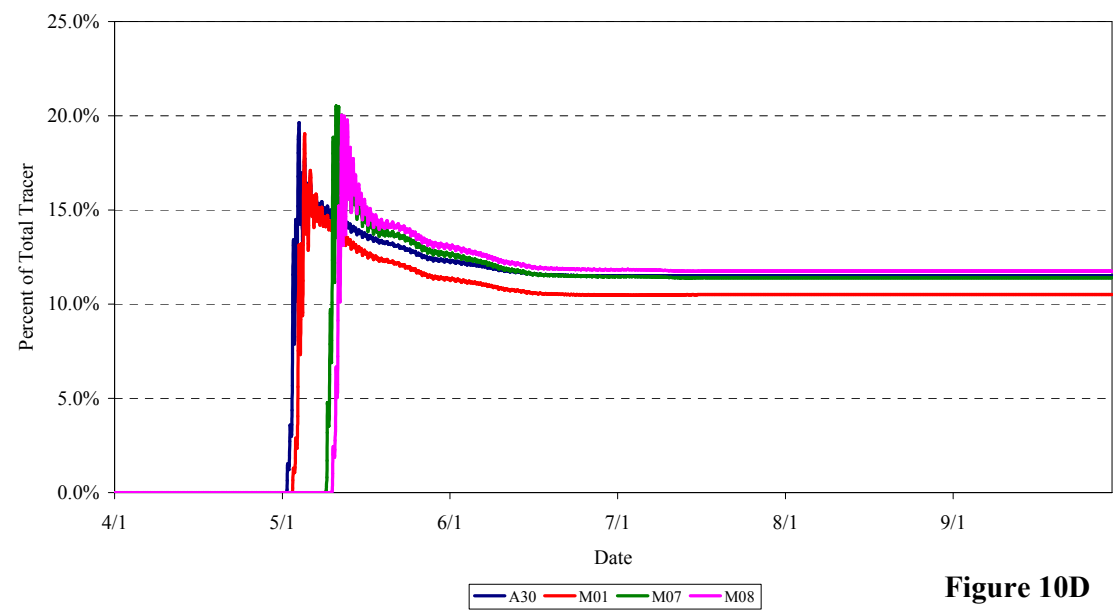


Figure 10D

Normalized Tracer Concentrations in Martinez

Model Period: April ~ September 2001

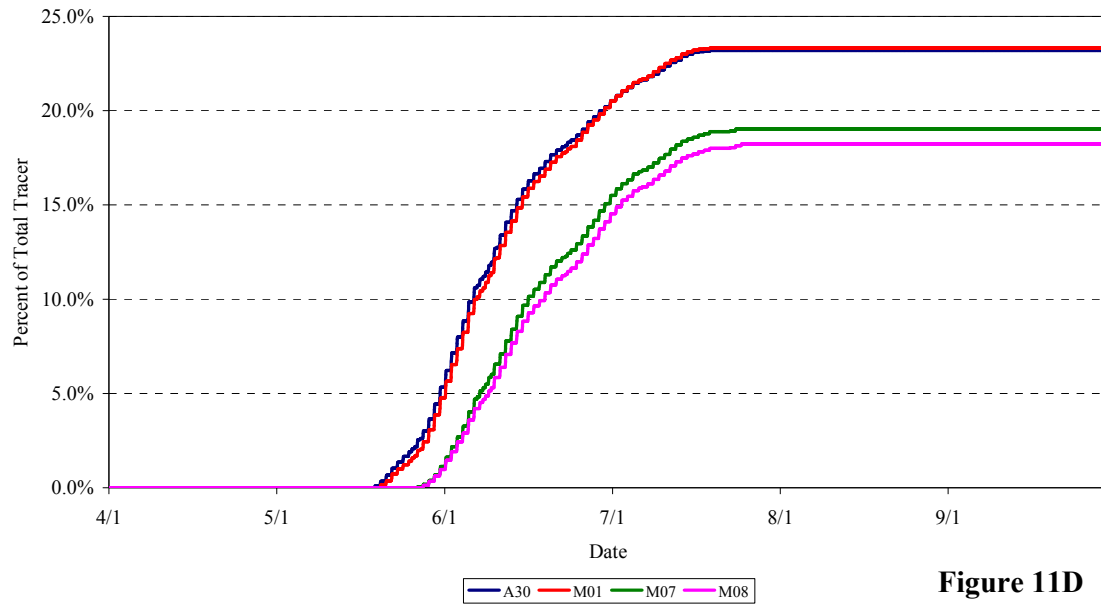


Figure 11D

Petition to De-List the Lower San Joaquin River

For

Impairment by Salt and Boron

EXHIBIT N

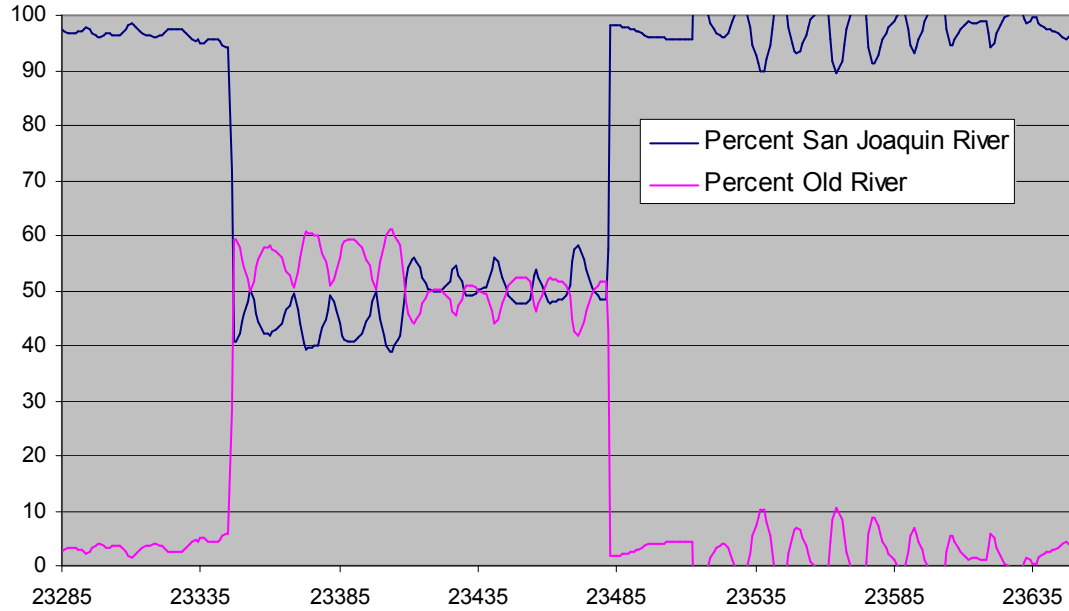
Flow Science Graphs

Submitted By:

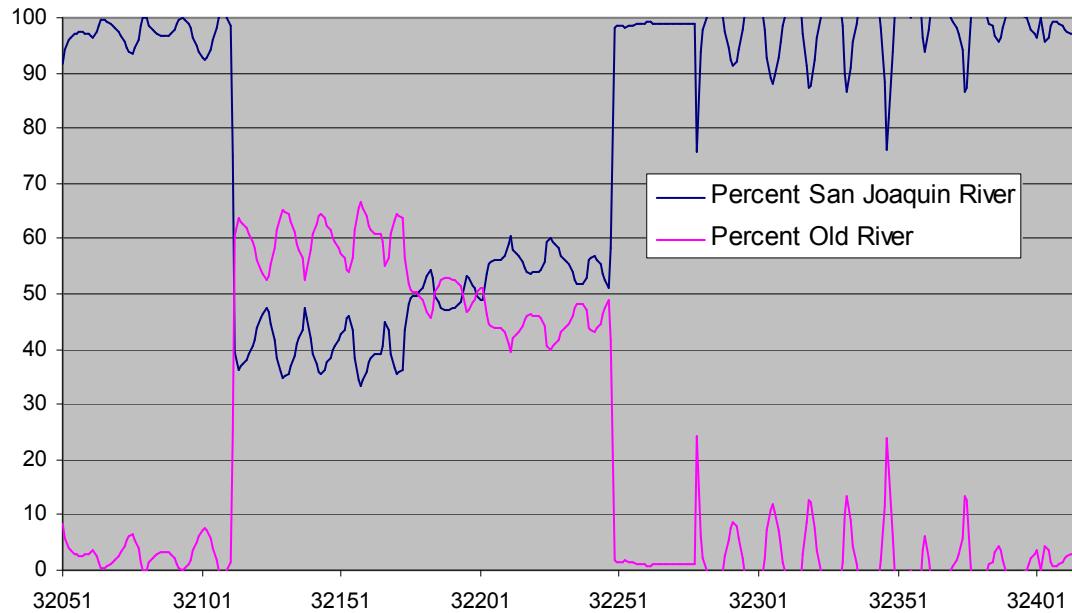
SAN JOAQUIN RIVER GROUP AUTHORITY

FISCHER DELTA MODEL SIMULATED FLOW SPLIT PERCENTAGES

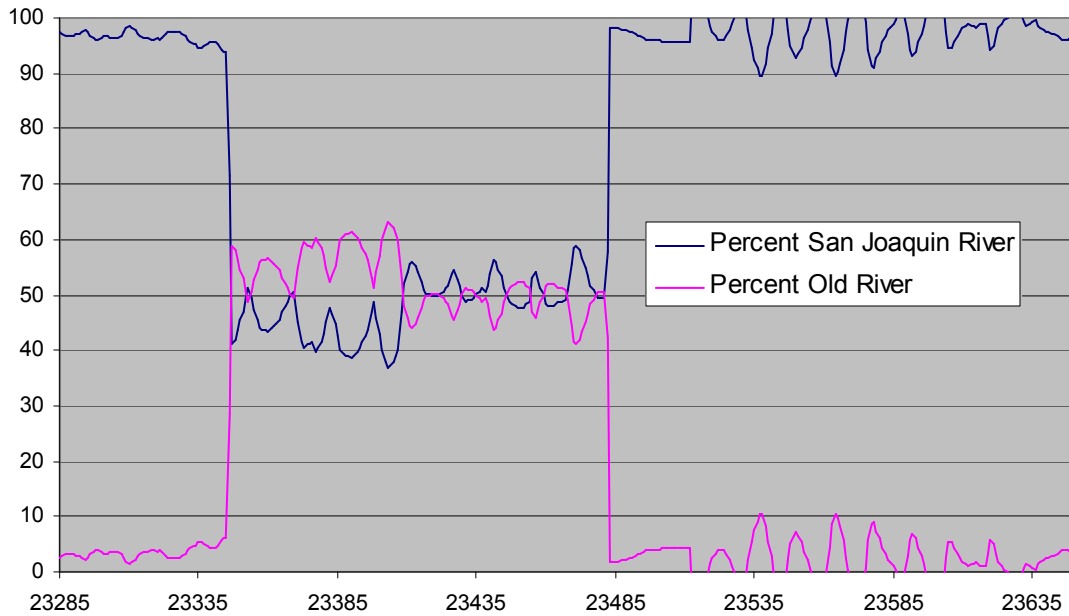
**Flow Split Percentages: Old River and San Joaquin River,
Case 1, Water Year 1964**



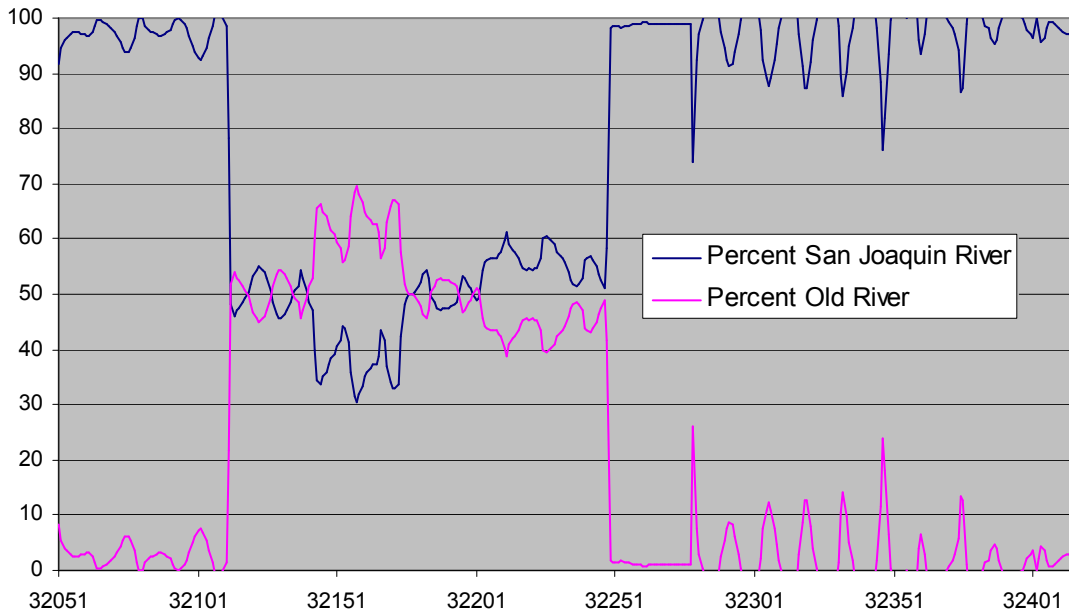
**Flow Split Percentages: Old River and San Joaquin River,
Case 1, Water Year 1988**



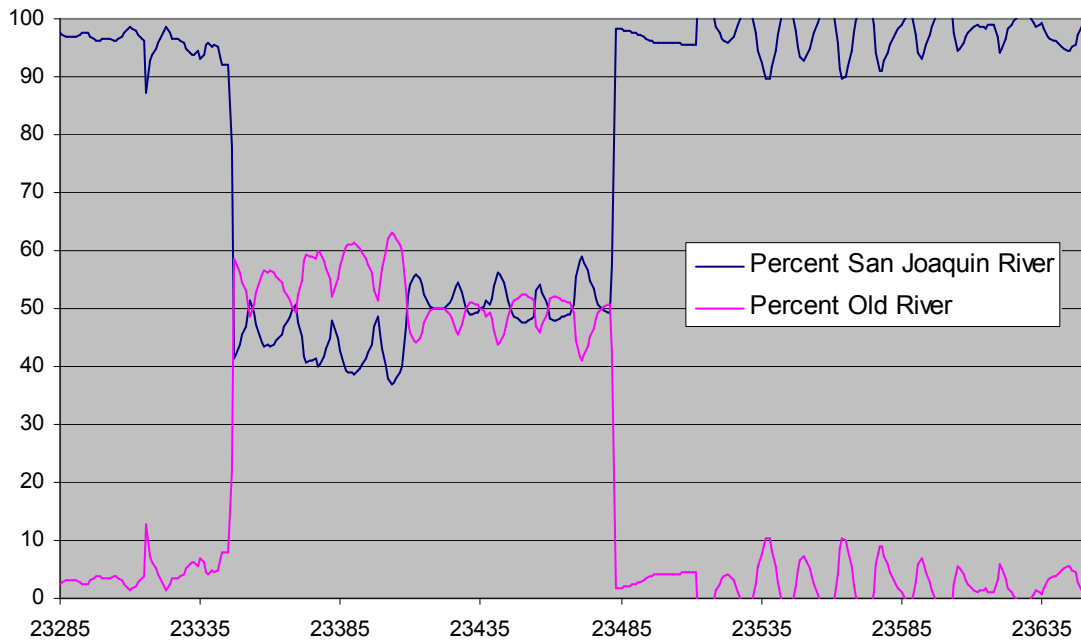
**Flow Split Percentages: Old River and San Joaquin River,
Case 1 SDIP, Water Year 1964**



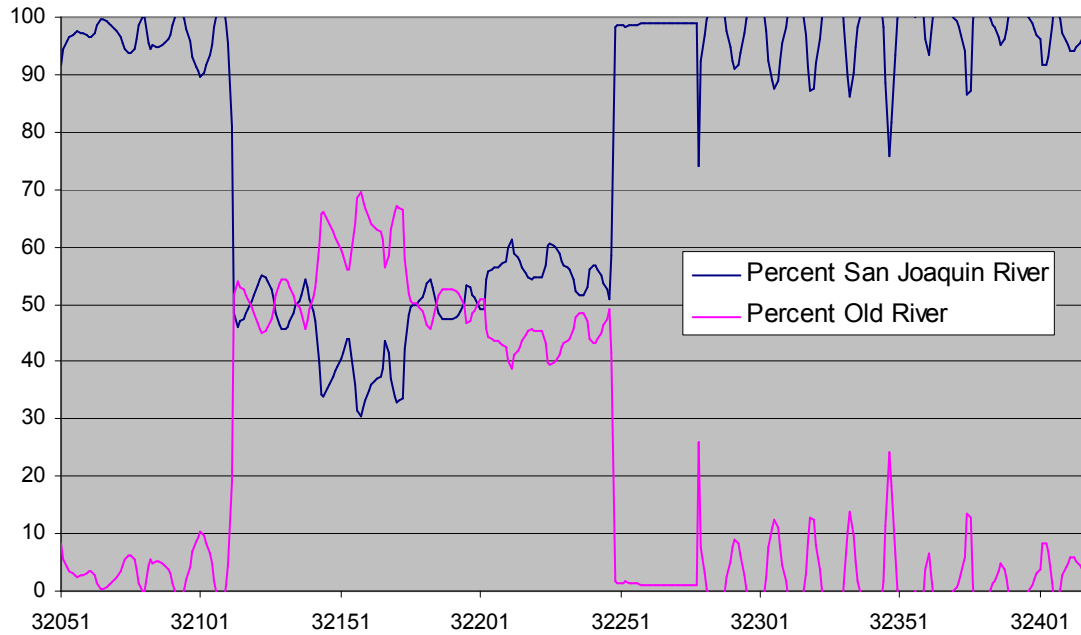
**Flow Split Percentages: Old River and San Joaquin River,
Case 1 SDIP, Water Year 1988**



**Flow Split Percentages: Old River and San Joaquin River,
Case 1 SDIP HORB, Water Year 1964**



**Flow Split Percentages: Old River and San Joaquin River,
Case 1 SDIP HORB, Water Year 1988**



Petition to De-List the Lower San Joaquin River

For

Impairment by Salt and Boron

EXHIBIT O

SDWA Bay-Delta Exhibit-07

**Statement, Outline of Testimony of Alexander
Hildebrand on Southern Delta Agriculture**

Submitted By:

SAN JOAQUIN RIVER GROUP AUTHORITY

OUTLINE OF TESTIMONY OF ALEXANDER HILDEBRAND
ON SOUTH DELTA AGRICULTURE

QUALIFICATIONS

My qualifications as an expert witness are set forth in SDWA Exhibit No. 1.

INTRODUCTION

Dr. Orlob has testified regarding the degradation of the South Delta's in-channel water supply that is caused by upstream development and by the operation of the export pumps.

My testimony will address the in-channel water supply needed for full crop yields, and the extent to which crop yields and crop versatility have been degraded by the degradation in the water supply which Dr. Orlob identified. I will then discuss proposals regarding water supply objectives for the South Delta.

You are already aware from evidence submitted of the effects of salts on plant performance by both osmotic and toxic ion effects, and also of the fact that there are threshold levels of soil-water salinity above which the growth of different varieties of established plants is reduced. You are also aware that the relationship between the soil-water salinity in the root zone of each plant and the salinity of irrigation water applied to that plant is a function of both the applied water salinity and the achieved leaching fraction.

There is little controversy over the maximum soil-water salinity which will permit a full yield of each variety of established crop plant, except that the figures should be

given as within a probability range rather than as fixed numbers. However, substantial uncertainties and limitations arise when one addresses the effect of salinity on germination and the survival and vigor of plant seedlings. There are also wide differences in different situations in the physical and economic feasibility of controlling the relationship between the applied water salinity and the soil-water salinity throughout commercial fields. Soils that are difficult for water to penetrate rapidly, or that vary from spot to spot within a field can cause non-uniform or inadequate soil leaching. Mr. Terry Prichard (see also FAO Report, SDWA Exhibit No. 105, page 4 and elsewhere) has discussed the importance of adequate leaching of salts; the limitations on commercially practicable leaching in some situations; and consequent limitations on the maximum applied water salinity which is compatible with adequate control of soil-water salinity. I shall discuss the nature and scope of these limitations as they occur in the South Delta. (Refer also to Preface of FAO report, SDWA Exhibit No. 105, 3rd paragraph; and page 6, 1st paragraph; and page 7, 2nd paragraph).

INFORMATION SPECIFIC TO SOUTH DELTA SOILS AND CROPS

First, let us examine the source and nature of the technical information which is needed in order to make a valid application in the South Delta of generalized data on applied water quality versus crop yield. You have heard a lot about peat soils, but ours are mineral soils. Some are

below sea level, but most are above summer mean levels.

In 1981 the SDWA, the Bureau, and the DWR jointly requested that a panel of three well-known soil and water consultants provide the best available information on the maximum salinity of soil-moisture that would permit full yields of various crop plants. (See SDWA Exhibit No. 103, Table 2). They were also asked (1) to indicate the loss of crop yield that would occur as a result of incrementally higher soil-water salinities with each crop variety; and further, (2) to indicate the irrigation water salinity required to provide a given soil-water salinity as a function of leach fraction; and, also, (3) to provide information on the soil varieties, the soil variability, and the soil permeabilities (i.e., percolative capacities) of South Delta soils, together with available data on measured leach ratios in commercial practice. The Report of these consultants is dated December 22, 1981, and is submitted as SDWA Exhibit No. 103. Table 5 and Figures 1 and 2 of the Report, show crop yield as a function of irrigation water salinity and leach fraction for each of eight different crops, all of which are grown in the South Delta. The consultants also cited, by reference (on page 4 and Table 3 of the Report) another study which measured actual leach fractions determined by field measurements of commercial practice in the South Delta, including the variations in leach fractions for different sites in each field. This study is submitted as SDWA Exhibit No. 104.

They further cited a similar study in the Imperial Valley which they felt added credence to the values in the South Delta study. (Page 4 and Table 4 in SDWA Exhibit No. 103). SDWA Exhibit No. 104 also references Irrigation and Drainage Paper #29, Food and Agriculture Organization, United Nations, 1976. That reference also contains salinity tolerance data and soil-water versus applied water salinity relationships. The 1985 revision of that Paper is presented as SDWA Exhibit No. 105.

The soil types and permeabilities of South Delta soils are shown on the soil map that was submitted by the consultants along with the Consultants' Report and which was derived from a Soil Conservation Service survey (SDWA Exhibit No. 106). SDWA Exhibit No. 107 illustrates the variability of soils in a portion of SDWA as shown on that soil map. Note that there is a 100 fold variation in permeability, much of which can occur in a single field.

Typical ranges of leach fraction within commercial fields are shown in the South Delta Salinity Status Study (SDWA Exhibit No. 104), which was referenced in the Consultants' Report (SDWA Exhibit No. 103) and summarized on Table 3 of that Report. These leach fractions can be correlated with the soil types and permeabilities at the test fields as shown on the consultants' map. This correlation indicates the South Delta acreage for which the soils at each test field are approximately representative and the achievable leach fraction for that soil

type. There were 51 measurement sites in ten fields. From SDWA Exhibit No. 104, a rough estimate of the variation in leach fraction over a typical field may be derived.

The San Joaquin County Agricultural Commissioner supplied crop acreages, crop yields, and on-farm unit crop values for each of the major crops grown in the South Delta in 1981. This material is submitted as SDWA Exhibit No. 108.

I will expand on the relevance of some of this data before we proceed to the use of this information to estimate crop yield losses versus South Delta in-channel water quality.

PERCOLATION TIME LIMITATIONS

The reason why soils with low permeability require better water for full crop yield can be illustrated by considering the crop alfalfa, which has been the crop with the largest acreage and the second largest value in the South Delta. It is grown largely in support of the County's large dairy industry.

Table 1 in the Consultants' Report, (SDWA Exhibit No. 103), shows that alfalfa consumptively uses about 41 inches of applied water depth per year. Page 8 of that Exhibit shows that 40% of the South Delta's soils have percolation rates of less than 0.2 inches of water per hour. Furthermore, the operations of mowing, baling, and bale hauling compact the near surface soil and further reduce percolation rates. With 0.15 inches per hour of water percolation, the time required to percolate 41 inches of water is 273 hours even with a uniform distribution of applied water (i.e. $41 \text{ inches} \div .15 \text{ inches per hour} = 273 \text{ hrs.}$).

No salt flushing can take place unless that time is exceeded.

With six hay harvests per year, the time required to mow, cure, and bale the hay makes it very difficult to get more than two irrigations per cutting, or twelve irrigations during the crop season. More than one extra irrigation in the fall is risky on tight soils because of the possibility of an early rain after a late fall irrigation which could drown or water damage the crop. On the other hand, if the winter turns out to be dry, most of the 41 inches has to be percolated by irrigation. This then requires about 21 hours of soaking time per irrigation in a dry year with no effective rainfall ($273 \text{ hours} \div 13 \text{ irrigations}$) or 17 hours in a normal year (with 8.4" effective rainfall- per SDWA Exhibit No. 103, Table 1) before any leaching takes place. This soaking time is long enough to cause serious water damage to the alfalfa plants on a tight soil. This is why the 0.04 leach fraction shown on Table 3 of the Report is a plausible leach fraction for alfalfa on the tight soils. Figures 1 and 2 of the Report show that alfalfa crop loss occurs in this case with water salinities over 275 or 325 mg/L TDS depending on rainfall. Table 5 shows a 480 ppm TDS requirement for full yield with a .07 leach fraction in a dry year.

My own measurements with tensiometers in one of my fields demonstrated that it was difficult to get any leach fraction in the low permeability areas when growing alfalfa.

It is somewhat more feasible to get a larger leach fraction with an annual crop having a shallower root system and

less surface soil compaction and an opportunity for leaching between crops. However, a 0.11 leach fraction is needed for full yield with beans with a 400 mg/L TDS water supply, as shown in Figure 1 in SDWA Exhibit No. 103. Even on those soils where a 0.15 leach fraction can be obtained, the irrigation water quality requirement for beans is 520 TDS in a dry year or 580 TDS in a year with "normal effective rainfall" (Table 5 of SDWA Exhibit No. 103).

A table on page 17 of the March-April 1987 issue of "California Agriculture", (SDWA Exhibit No. 109) indicates that salinities of less than 450 mg/L TDS are needed for unrestricted use, but even this is qualified (page 16) for tight soils. The FAO report (SDWA Exhibit No. 105, p. 8, Table 1) also lists a requirement of less than 450 mg/L TDS for unrestricted use, but this assumes a 15% leach, and clay-loam permeability or better and good drainage capability (page 9).

IRRIGATION MANAGEMENT AND SOIL VARIABILITY

South Delta farmers have compelling incentives to achieve leach fractions that are adequate for full crop yields, as is the case with farmers elsewhere, and they do not have the disincentive of high water costs. It is, therefore, reasonable to conclude that when South Delta farmers have leach fractions that are inadequate for the poor quality of available water, that inadequacy is typically due to the problems discussed above which limit soaking time on tight soils. Ponding for winter leach is not feasible where the land is not flat or where the water drains through permeable areas without leaching areas with very

low permeability.

There are several reasons why no general assessment of farm management can be made in the South Delta on the basis of either excess or inadequate water application. Many South Delta fields have highly variable permeability (see SDWA Exhibit No. 107). The more permeable portions of a field, therefore, often have to be over-irrigated in order to strive for an adequate leach fraction in less permeable areas. Where permeability is variable, this leads to high average leach fractions. Furthermore, in dry and below normal years there is now no way to know how saline the channel water will get as the irrigation season progresses because there are no enforced water quality standards sufficient to protect most southern Delta areas. It is, therefore, prudent to irrigate heavily, where crop limitations permit, in order to keep soil salinity low early in the season. The fields with high permeability are typically located where excess subsurface drainage seeps back into the channel from which it was diverted, and can, therefore, be recaptured at little cost. Furthermore, excess drainage from South Delta soil does not significantly affect channel salt loads. There is, consequently, much less incentive to avoid excess field-average drainage as contrasted to other farm regions where water costs are high, and where drainage causes increased salt loads in the river or groundwater, or where seepage may be lost from the water supply system.

However, excess drainage does involve increased pumping costs and leads to high water tables in some locations. Where a high field-average leach is needed to achieve an adequate leach in tight areas, the overall excess drainage can become substantial, whereas in more uniformly tight fields there is insufficient drainage. Any increase in channel water salinity necessitates increased leaching. (SDWA Exhibit No. 105, page 4, paragraph 1)

The use of sprinklers, where feasible, can partially offset the in-field water distribution problem. However, the irregular shapes of fields along the channels do not lend themselves to self-propelled sprinklers, and even at best, sprinklers involve substantial energy, capital, and labor costs which should not be imposed on South Delta farmers so that upstream users can benefit by degrading the water supply. No significant saving in consumptive water use would result from the use of more expensive water application systems.

With appropriate allowance for the nature of our constraints, irrigation management in the Southern Delta compares favorably to other areas in California. Cropping patterns require cultural operations which do not provide an adequate opportunity on South Delta soils to attain the leach fractions required to prevent yield reductions when high quality water is not available. A major factor limiting production on these types of slowly permeable soils is the inability to prevent disease organisms from reducing crop plant survival when irrigation water is kept

on the ground long enough to obtain large leach fractions. High quality water minimizes this problem.

CROP VERSATILITY

An important economic asset for an agricultural region is the capability of growing many varieties of crops and of changing crops to meet changing market demands. The South Delta has this capability when it can count on good quality water.

For example, large acreages of many varieties of dry beans were once grown in the South Delta. However, beans are very salt sensitive. As the water quality became unreliable and the demand for corn grew, most of this bean acreage converted to corn. Now, corn is in oversupply and other crops, including beans, should displace corn. In my own case, I am growing beans this year on land that was in corn last year. This is made possible by the interim USBR-SDWA agreement on San Joaquin River flow and quality maintenance for 1987. Some of my neighbors are growing onions, which are also very salt sensitive.

Our assessment of crop loss due to increases in salinity does not attempt to quantify and include the financial impact of lost crop versatility, but that loss is serious.

SEEDLING SURVIVAL

Another important loss which we have been unable to quantify is the loss in seedling survival and seedling vigor caused by increased salinity. A critical stage of crop growth

is the seedling stage. Seedlings are generally more salt sensitive than established plants. Even some salt tolerant plants like barley have salt sensitive seedlings (See U. C. "California Agriculture", October 1984, page 9). (SDWA Exhibit No. 110)

The seedling root zone is very shallow. It is, therefore, fairly well leached by rain in a normal winter, but this is not the case in a dry year. Furthermore, the seedling zone tends to dry out after the seed is planted. As it dries, the soil-water salinity increases. (See also FAO report, SDWA Exhibit No. 105, page 43, paragraph 4; and page 44). Our mineral soils cannot retain the high volumes of soil-water that are retained by peat soils. If moisture is restored with sprinklers, crusting occurs. If it is restored from furrow irrigation there is, at best, some concentration of salt from the applied water. Either method also increases costs and can cause seedling damage from excess moisture. These are problems that occur and increase with higher salinity of applied water.

High salinity can also retard seed germination and, thereby, give more time for loss of moisture by evaporation from the soil. If the loss is too great, it can stop the germination. Slow germination also gives more time for salt tolerant weed growth to crowd the seedlings and deprive them of moisture and nutrients; and more time for pest problems, such as cut worms on corn seedlings. (Refer also to FAO Report, SDWA Exhibit No. 105, page 39, last paragraph).

The "Report on the Salt Tolerance of Corn in the Delta" by the U.S. Salinity Laboratory, et al, was based on peat lands. It, therefore, has limited applicability in the South Delta. It did, however, include germination and seedling tests which illustrate the fact that germination can be delayed by high salinity and that the seedlings are substantially more salt sensitive than established plants.

In dry years the problem of seedling survival and vigor has sometimes been substantial in the South Delta. Three slides of 1976 photographs show examples of this damage. (SDWA Exhibits No. 111, 112, 113)

WATER LEVELS AND PUMP DRAFT

A third loss which is difficult to quantify is the loss which has occurred in some channels because of inadequate water depth for pump draft. Dr. Orlob has discussed the physical extent of this problem as it is caused by export pump drawdown. The impact on agricultural operations includes increased costs for pump maintenance, energy, and labor, and more important, the crop losses due to inability to irrigate in a timely fashion. The drawdown affects Old and Middle River channels in the South Delta. It also affects the adequacy of pump draft in the San Joaquin channel between Vernalis and Paradise Cut when it is combined with very low San Joaquin River flows at Vernalis. These pump draft problems are expected to be reduced this year by the terms of the interim agreements among SDWA, USBR, and DWR. However, the permanent corrective measures which we will outline are essential.

CROP LOSSES BY SALINITY IMPACTS ON ESTABLISHED CROP PLANTS

We will now proceed with Dr. Orlob's presentation of the calculation of crop yield losses as a function of the salinity of applied water on established crop plants in the South Delta. I remind you that these calculated losses do not include the other serious losses previously discussed which are difficult to quantify.

The methodology for this calculation of crop yield loss is provided by the expert consultants' and the FAO reports which we have cited. The data comes from the data sources I have cited and from the in-channel water salinity information previously presented by Dr. Orlob. We are not introducing any new concepts. We are merely applying accepted principles to a specific situation which differs from the more ideal situations covered by familiar tables of the tolerance of crops to applied water quality. In other words, we are accounting for the caveats usually mentioned in fine print under such tables and which are discussed in the FAO report, SDWA Exhibit No. 105, particularly the qualifications on page 9 which apply to the Table 1 Guidelines.

After Dr. Orlob's presentation, (SDWA Exhibit No. 114), I will discuss our conclusions on reasonable levels of protection for agricultural uses in the South Delta, and on the objectives and monitoring which will be needed.

WATER QUALITY NEEDS AND OBJECTIVES

It is evident from our previous testimony that optimum crop yields in the South Delta would require at least:

- a) Adequate pump draft in all channels at all times, and
- b) 400 ppm TDS or better throughout all channels at all times, or a 400 ppm TDS seasonal average with somewhat better quality through June and somewhat poorer quality after July.

Dr. Orlob's testimony has shown that prior to upstream development and export pumping there was adequate pump draft at all times in all SDWA channels. This would still be the case if upstream development were now eliminated except for rare late season occasions when the flow at Vernalis might be inadequate for pump draft at some points between Vernalis and Paradise Cut. However, the occasional inadequacy in that reach would even in that event not then occur if the reduced flows, previously caused by upstream development, had not permitted a large accumulation of silt since the 1930's. This siltation has raised the bottom of the channel substantially and it is now above low tide level (SDWA No. 4, 2nd page of Fig. VII-1).

Dr. Orlob has also shown that prior to upstream development, water quality throughout SDWA channels was always fully adequate to meet water quality needs. Water quality during the early irrigation season was always so good that even an occasional increase in late summer salinity was

not serious (except in a few channels that experienced Bay water intrusion in September of 1931). This was because the residual soil-water salinity in mid-summer was sufficiently low after using high quality early season water so that it could tolerate some salt buildup when more saline late summer water was applied. Furthermore, crop plants in late summer were then at their least salt sensitive stage of growth. The FAO report, SDWA 105, page 25, discusses the importance of good water quality early in the irrigation season.

Adequate pump draft is essential. It can be maintained by adequate flow maintenance at Vernalis combined with either adequate export pumping restraint during extreme tides, or by channel water level control devices such as those under study by SDWA, USBR, and DWR.

It is not feasible to maintain a uniform water quality throughout South Delta channels, and it would be impractical to restore the very high quality of San Joaquin River water that existed most of the time in the absence of upstream development. However, the South Delta must be protected from the substantially increased river salt load caused by upstream development. This protection can only be accomplished by providing a net daily unidirectional flushing flow within SDWA through each reach of: Old River, Grant Line Canal, Middle River, and the two reaches of the San Joaquin River (Vernalis to Old River and Old River to Stockton).

The net daily flushing flow would eliminate stagnation in South Delta channel reaches and should be sufficient in quantity to avoid any significant accumulation of the increased incoming river salt load in any South Delta channel reach.

There is very little chance that the increase in river salt load during low flows can be eliminated, and certainly not in the near future. Furthermore, a development such as the Mid-Valley Canal would further increase the salt load due to importation of salt to the east side of the watershed. The Vernalis flow must, therefore, be adequate to supply the net agricultural diversions and other channel depletions from all those channels which receive Vernalis flow, plus enough net flushing flow to maintain adequate quality throughout those channels. The Vernalis flow that is required can be reduced by using seasonally functional tide-gated barriers in Middle and Old Rivers. The design of these barriers, in conjunction with control of the Clifton Court intake schedule, should be such as to provide an adequate net daily unidirectional reverse or upstream flow by tidal cycling of Central Delta water into those two channels.

The other internal channels which would still be fed from Vernalis would rarely have water of as good quality as would be the case in the absence of upstream development. They should, therefore, be protected from salinity higher

than we now propose and which might otherwise occur on rare occasions, i.e., the range of fluctuation in water quality in internal channels can be narrowed somewhat and the mean seasonal salinity thereby adequately protected.

It should be noted that extra Vernalis flows can be provided by New Melones Reservoir releases with no loss of CVP project yield, particularly if New Melones is operated to serve eastern San Joaquin County on a conjunctive use basis. Increased releases from New Melones to Vernalis over those previously committed would only be required in about 25 to 30% of the water years unless there are further increases in salt load or in upstream diversions. At those times when flow restoration is needed at Vernalis, the deliveries to eastern San Joaquin County could be substantially reduced while some users returned to wells or to water stored locally from extra New Melones deliveries. These deliveries to storage could be made available, in large part, by increased direct diversions in wetter years. Similar releases from other upstream projects or limitations in upstream diversion schedules should also be considered.

The proposed level of water quality and water level protection could be required and monitored at designated internal channel points. Or, subsequently, if Middle and Old River flow and level control barriers were installed, the standards could stipulate minimum water levels and an adequate salinity control at Vernalis and at each other

point of water inflow, and a corresponding minimum inflow quantity at each point of inflow such that the level of protection of internal channels would be shown by model analyses to be the same as with the un-barriered requirements. This subsequent method can not be defined in detail until the location and design of flow and level control barriers is determined and a Clifton Court intake schedule established.

Monitoring points and control standards are proposed in SDWA Exhibit No. 115 for the case with no flow and level control facilities. SDWA Exhibit No. 116 illustrates the approach to possible monitoring and control standards with barriers in Middle and Old Rivers at specified locations and with specified functional designs.

Petition to De-List the Lower San Joaquin River

For

Impairment by Salt and Boron

EXHIBIT P

SJRGGA Letter to Mr. Ron Milligan

Submitted By:

SAN JOAQUIN RIVER GROUP AUTHORITY



O'Laughlin & Paris LLP

Attorneys at Law

August 25, 2005

Ron Milligan
United States Bureau of Reclamation
Central California Area Office Bureau of Reclamation
7794 Folsom Dam Road
Folsom, CA 95630

Re: Water releases from New Melones to meet the EC objective

Dear Mr. Milligan:

In the San Joaquin River Water Quality management Group planning process we were able to explore a myriad of computer model runs looking at alternatives and assumptions. One of the questions that came up during our discussion of the modeling runs was "How closely does the portrayed operations of CALSIM II track with real releases from New Melones? In particular, the water quality releases." We investigated the question.

Overall the CALSIM II model does a good job of tracking total, overall depletions from New Melones. However, the magnitude of the releases for the fishery, water to the two districts and DO releases dwarf the sometimes small amount of water "modeled" for water quality releases, and when looking specifically at the water quality release component alone the results at times appear to be significantly different.

Setting aside the differences between the accounting within the allocation procedures of the IPO and the subsequent accounting of releases for b(2) purposes, upon dissection of the CALSIM II runs we concluded that there typically are differences between modeled releases for water quality and the actual releases from New Melones, primarily because CALSIM II runs on perfect knowledge in meeting exactly the EC objective at Vernalis. We compared the amount of water "modeled" to meet the EC objective at Vernalis to the USBR's actual operations, and found that in some years and in some months there were substantial differences between CALSIM II and actual releases. The difference was explained to be the difference in water quality that occurred at Vernalis. While the modeling exactly met the EC objective at Vernalis, the USBR was releasing water in excess of that necessary to meet the EC objective at Vernalis. In some instances the additional volume of water released created an EC cushion of .04 - .07 at Vernalis. In the examples we evaluated, this cushion was created with an unnecessary additional release that amounted to about 9,000 to 10,000 acre-feet in a month.

This circumstance points to potential water savings that can be made at New Melones, immediately.

Peggy Manza in her testimony in the matter of SEWD v. USA, confirmed our analysis. In a series of questions regarding water releases for water quality, Ms. Manza stated:

Q. Have you operated to the point where you were exceeding the standard, making the river -- trying to use the proper terminology -- diluting the river more than you are required to by the standard?

A. It would be virtually to hit .7 EC every day for 30 days for five months. So yes, there certainly are period when the 30 day running average at Vernalis is better than .7 EC.

Q. As a general rule, if I looked at the 30 day running average data which I don't have in front of me, but would I find that more than half the time you were exceeding the standard?

A. Exceeding as in not violating but doing better than.

Q. Doing better than the standard excuse me?

A. I don't know if it would be half the time, but clearly there's certainly there's large amounts of time when we're doing better than the standard some by a small amount some by a large amount.

Q. What is the safety margin that you like to have?

A. I don't know point 5 EC maybe plus or minus.

We are unclear as to why the USBR is operating a water short project, New Melones, by releasing water in excess of what is required. The 30-day running average was established by the SWRCB to provide the necessary operating cushion. The SWRCB EC objective clearly contemplates the .7 can be exceeded on any given day. In fact EC could be .8 for 15 days and .6 for 15 days and the EC standard would be met. An exceedance of the .7 is not a violation of the EC objective.

If the SWRCB has already established a buffer then why does the USBR appear to establish another redundant buffer? It doesn't seem to make sense. Providing such a buffer over a sequence of several months could result in the USBR releasing 20,000 - 40,000 acre-feet in excess of what the EC objective at Vernalis requires.

We understand the Bureau's desire to not run at .7 everyday, given the uncertainties of day-to-day San Joaquin River water quality and flow conditions, however there is no reason for the USBR to be operating much below .685.


We also understand this situation is not applicable when the USBR is releasing water from DO. DO releases may make water quality better at Vernalis than is required, but that is a byproduct of operating to meet the DO objective.

We would suggest the USBR review its operating criteria for New Melones to meet the EC objective at Vernalis. Any water released in excess of that required to meet the EC objective, would appear to be an unauthorized project purpose and a waste of public resources. If the USBR wishes to implement HR 2828 in an expeditious fashion, without spending huge amounts of money, then it would do well to review the internal policy and rationale behind its apparent conservative operation in meeting the EC objective at Vernalis.

Very truly yours,

O'LAUGHLIN & PARIS LLP

By:


Tim O'Laughlin

TO/kl

Cc: Feinstein
Pombo
Machado
Rogers
Fry
Finnegan
Cantu
Baggett
Kiteck
Kapahi

Petition to De-List the Lower San Joaquin River

For

Impairment by Salt and Boron

EXHIBIT Q

SJRGGA Letter to Ms. Elizabeth Kiteck

Submitted By:

SAN JOAQUIN RIVER GROUP AUTHORITY



O'Laughlin & Paris LLP

Attorneys at Law

September 12, 2005

Elizabeth Kiteck
United States Bureau of Reclamation
3310 El Camino Avenue
Sacramento, CA 95821

Re: New Melones Operations

Dear Ms. Kiteck:

This letter is to follow up on our previous letter of August 25, 2005 regarding New Melones Operations. In our previous letter we pointed out the USBR was releasing too much water to maintain salinity at Vernalis during the 0.7 dS/m time period. Upon further analysis of the revised CALSIM II results, we noticed another USBR operation that consistently results in the release of excess water to meet salinity.

The 1995 Water Quality Control Plan set the EC standard for Vernalis. D-1641 put the requirement of meeting the EC requirement on the CVP permits. The USBR has decided to meet the EC standard at Vernalis solely using water from New Melones. The purpose of this letter is not to question the propriety of that decision. The purpose of this memo is to question the way the USBR has implemented such a decision resulting in impacts to other beneficial uses of water from New Melones.

The standard for EC at Vernalis in April is 0.7 dS/m. The standard changes from a 30-day running average of 1.0 dS/m in March to a 30-day running average of 0.7 dS/m in April. Footnote 2 to Table 2 of the 1995 WQCP states:

"Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period."

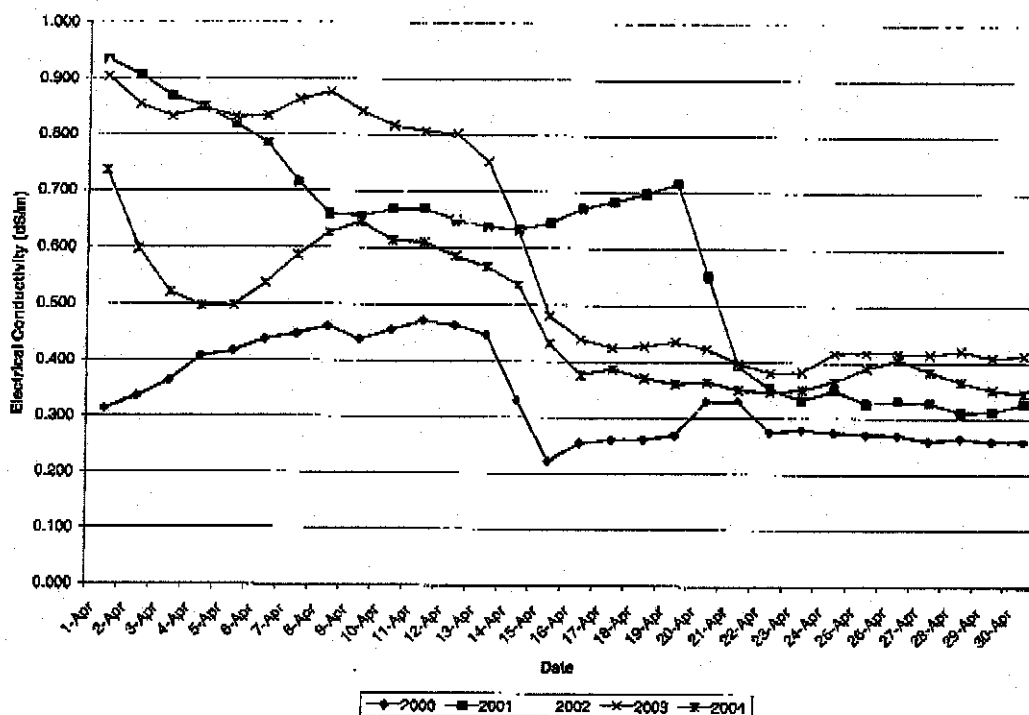
Thus for the 0.7 dS/m objective that begins on April 1 the compliance period does not begin until April 30 of any year.

We have noticed for the years 2001, 2002, and 2003 the USBR released significant amounts of water to meet the Vernalis salinity objective.

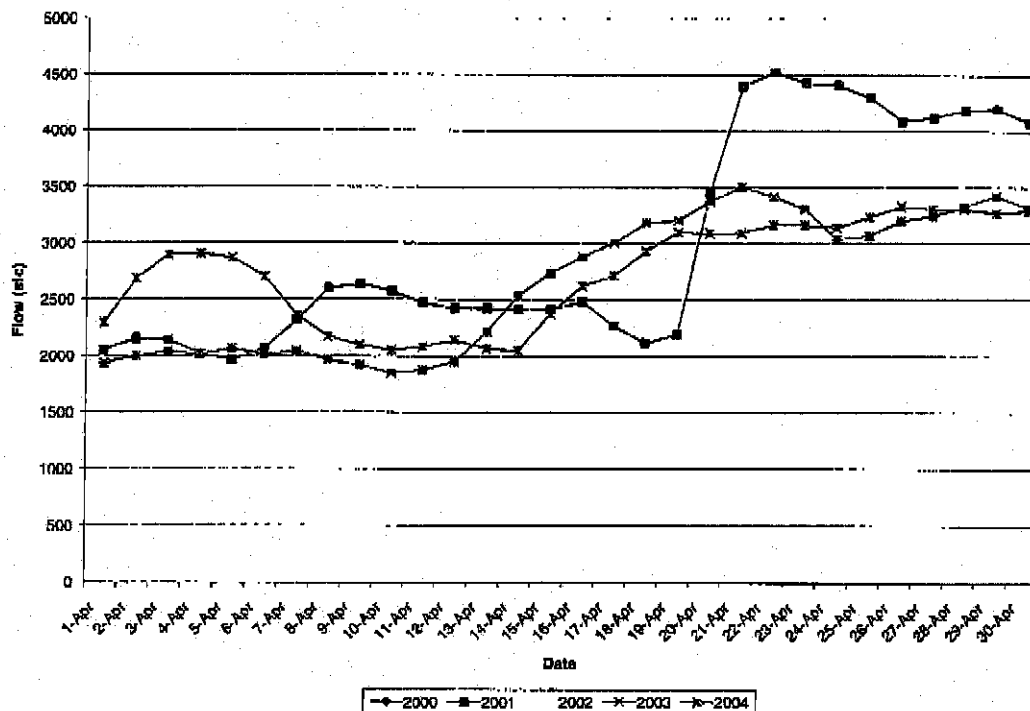
Table 1: Annual Vernalis Water Quality Releases

Date	Mean Monthly EC (dS/m)	Flow (cfs)	Water Quality Releases (TAF)
April 2000	0.338	5,013	0
April 2001	0.594	3,004	17.9
April 2002	0.526	2,599	21.7
April 2003	0.607	2,656	31.5
April 2004	0.472	2,759	0
Total Vernalis Water Quality Releases (TAF)			71.1

We then looked to see what EC was running during the April 1 – April 15 time period. We noticed a consistent pattern. EC coming from March was usually above the 0.7 dS/m requirement for April.

Figure 1: Electrical Conductivity at Vernalis (April 1-April 30)

It appears the USBR released the significant quantities of water set forth in Table 1 to try to get EC at Vernalis below 0.7 dS/m prior to April 15.

Figure 2: Daily Vernalis Flows for Electrical Conductivity (April 1-April 30)

We do not understand why the USBR would be releasing such large quantities of water to meet EC prior to April 15 when there is no requirement to do so. The 1995 WQCP objective could hypothetically have EC at 1.0 dS/m for April 1 – April 15 and 0.4 dS/m April 16 – April 30 and still meet the objective.

The USBR knows the VAMP flows will be implemented for a 30 day pulse flow starting on April 15 of each year. The USBR knows the VAMP flows dilute the salt loading in the SJR and cause the water to have a lower EC. The VAMP flows, even at 3,200 cfs, seem to have an EC at Vernalis of 0.4 dS/m and or below.

So if the USBR knows the VAMP flows will have an EC of 0.4 dS/m when EC's are 0.8 or 0.9 dS/m? Even at those numbers the thirty date running average, measured on April 30, would be below 0.7 dS/m.

Conclusion


We have conservatively estimated that for the years 2001, 2002, and 2003 the releases of water from New Melones to correctly meet the EC requirement at Vernalis from this one action would have saved 9,000 to 10,000 acre-feet per month. In combination with the USBR's extremely conservative operation pointed out in our last memo, the total would be 533, 647, and 944 thousand acre-feet. This would mean the USBR would have had almost 40,000 acre-feet to put to reasonable and beneficial uses.

We strongly suggest that as part of your HR 2828 study and implementation that the operations we have pointed out cease.

Very truly yours,

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