

COSO MONITORING PROGRAM JANUARY 1984 THROUGH SEPTEMBER

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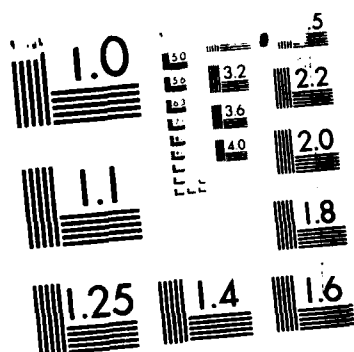
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Coso Monitoring Program

January 1984 Through September 1985

by
S. C. Bjornstad
and
E. M. Edwards
Public Works Department

JANUARY 1986

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NAVAL WEAPONS CENTER
CHINA LAKE, CA 93555-6001



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FOREWORD

This report presents the status of the Coso monitoring program conducted for the period January 1984 through September 1985 by the Naval Weapons Center (NWC), China Lake, Calif. The investigation, funded under the NWC Coso Geothermal Development Program, is being conducted to provide baseline information on hydrology and surface geothermal activity in the Coso Hot Springs area.

This report was reviewed for technical accuracy by A. M. Katzenstein.

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19 ABSTRACT (Continue on reverse if necessary and identify by block number)					
(U) The Coso monitoring program is a continuing effort in support of the development of the Navy's geothermal resources within the Coso Known Geothermal Resource Area (KGRA). Data are presented on the monitoring of steam flow rates and temperatures, water levels in ponds and wells, water chemistry, temperature logs of shallow wells, and rainfall in the Coso Hot Springs Resort area. A weekly photographic essay of the mud pots and pools shows the variation of surface water levels throughout the year.					
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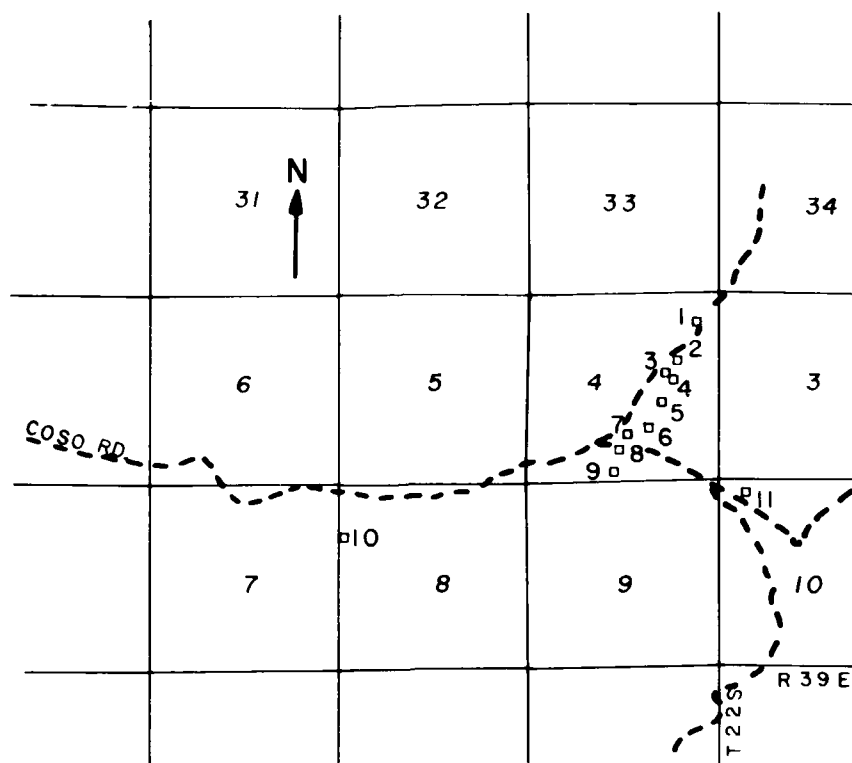
INTRODUCTION

The project to monitor and gather baseline data on the surface and near-surface geothermal activity at Coso Hot Springs and Devils Kitchen, the major thermal sites within the historic and cultural properties of the Coso Known Geothermal Resource Area (Coso KGRA), was initiated in 1978 in response to the Naval Weapons Center (NWC) concerns over possible adverse effects on this geothermal activity by the development of the Navy's geothermal resource within this KGRA (Reference 1).

This report presents the results for the period of January 1984 through September 1985 of the continuing baseline data collection program (References 2 and 3). As in past years, nearly all of the weekly data were collected by E. M. Edwards, and data on the spring at Devils Kitchen was provided by J. Whelan. The process of data posting and reduction of the temperature and steam flow data was greatly simplified for this reporting period by the development by Chris Hoskins of two computer programs for the Geothermal Division's Hewlett-Packard system. These programs allow for both direct data entry from the Barton recording charts and subsequent simplified processing of that data. Use of these programs has enabled us to considerably reduce the effort needed to accomplish the most tedious part of the entire monitoring program.

Figure 1 is a map of the Coso Hot Springs area and shows the various monitoring sites referred to in this report. The letters that follow the site descriptions on the map indicate the monitoring functions: (a) continuous steam flow, (b) periodic steam flow, (c) continuous water level, (d) periodic water level, (e) continuous temperature, (f) periodic temperature, (g) photographic investigation of water level, and (h) water chemistry.

In this report the individual sites will be described only if they entered development since the last report (Reference 3) or if there has been a significant change to the site. A major improvement was made at each of the flow and temperature monitoring sites, in that battery-operated 7-day electric clocks were installed on all of the Barton recorders to replace the old wind-up style clocks. This eliminated one of the biggest sources of problems: clocks that run down at inopportune times, freeze, or otherwise render themselves inoperable. Another change made at each site was to replace the clip that held the chart to the recorder with a knurled nut, which holds the chart much more firmly, preventing the chart from becoming stuck and enabling it to turn with the clock.



1. Schober's Resort.....a, b, c
2. Eight-Inch Steam Well.....a, b
3. Coso Well 1.....c, f, h
4. Coso Corrosion Array.....a
5. Coso Mud Pots.....d, g
6. South Pool.....c, f, g
7. Well 4E-1.....d, f, h
8. Well 4P-1.....c, f, h
9. Two-Inch Steam Well.....a, c
10. Devils Kitchen Corrosion Array.....a
11. Coso Well 2.....d, f, h

FIGURE 1. Map of Coso Hot Springs Area Showing Monitoring Site Locations.
Adapted from U.S.G.S. Haiwee Reservoir Quadrangle, 1951, 1:48,000.

STEAM FLOW AND STEAM TEMPERATURE MONITORING

Steam flow and temperature are measured at several sites in the Coso Hot Springs area. Except for the monitoring station at the corrosion array within Devils Kitchen, all of the sites are located along the Airport Lake-Coso Hot Springs fault. The conversion factors for the data gathered at each site are as follows: Devils Kitchen, 40.23; Coso Corrosion Array, 1984, 120.0; Coso Corrosion Array, 1985, 82.99; Two-Inch Steam Well, 15.7; Eight-Inch Steam Well, 20.56; Schober's Resort, 0.5265.

DEVILS KITCHEN CORROSION ARRAY

A number of changes have occurred at this site since the last reporting period.

1. The corrosion array was removed in 1984. This was done strictly as a cleanup measure as it was no longer needed and was becoming an eyesore. The array was downstream of the steam flow recorder, and its absence had no effect on the monitoring station.

2. A spring surfaced in Devils Kitchen on 24 October 1984, located several yards uphill of the steam collector at the steam flow monitoring site. On 28 August the spring had a temperature of 193°F, a field pH of 1.75, and a flow rate of 1.3 liters/minute (496 gal/day). A water sample was collected and the analysis is given in Table 1.

In the Coso system, geothermal waters boil at depth and the vapor phase, which becomes enriched in CO_2 , H_2S , and other gases, migrates independently toward the surface. As the steam rises, it mixes with and heats near-surface cold groundwater. In this environment, the oxidation of H_2S produces the low-chloride, low-pH, acid-sulfate waters seen in this spring. These acid-sulfate waters cause a tremendous alteration of the rock through which it passes, as evidenced by an X-ray diffraction analysis of some fine-grained grey material in the stream bed, which showed the material to be alunite, an argillic clay.

3. The water flowing from the new spring precipitated a major break in the collection of data at this, our most reliable, site. The collector at this site originally consisted of an open-bottom 55-gallon barrel buried in steaming ground and covered with a cement cap. The barrel has long since corroded away, leaving the barrel-shaped cavity apparently intact. When water from the spring seeped, then flowed, into the collector cavity, the additional steam produced blew out the downhill side of the collector, resulting in a large drop in steam flow to the meter.

TABLE 1. Analysis of Spring Water at Devils Kitchen.

Measurements are in parts per million.

Constituent	Concentration	Constituent	Concentration
Calcium	78.0	Potassium	45.0
Sodium	60.0	Carbonate	0.0
Hydroxide	0.0	Chloride	<1.8
Bicarbonate	0.0	Nitrate	<0.4
Sulfate	1200.0	Total iron	71.0
Fluoride	0.3	Arsenic	0.02
Manganese	2.0	Zinc	1.9
Copper	0.04	Mercury	0.0005
Total dissolved solids	1816.0	Bromide	<0.1
Phosphate	<0.1	Ammonium	18.6
Lithium	0.12	Silica	350.0
Nitrate	<0.01	Boron	3.8
Aluminum	8.6	Electrical conductivity, k $\times 10^6$	4200.00
Magnesium	39.0	pH value	2.2

The stream was diverted and the collector rehabilitated and put back in full operation by November 1984. The collection chamber itself is identical to the original, but the cement cap is larger and more resistant to undermining and blow-out.

Condensate has been a problem in the rebuilt system because the water flow from the spring has continued to soak into the ground around the collector. This has resulted in increased steam production and a wetter steam, which results in increased condensate at the monitoring site.

Daily steam flows at Devils Kitchen for the reporting period are given in Appendix Table A-1. These data are shown graphically in Figure 2. Yearly mean data and standard deviations for the high and low daily steam flows at Devils Kitchen are given in Table 2.

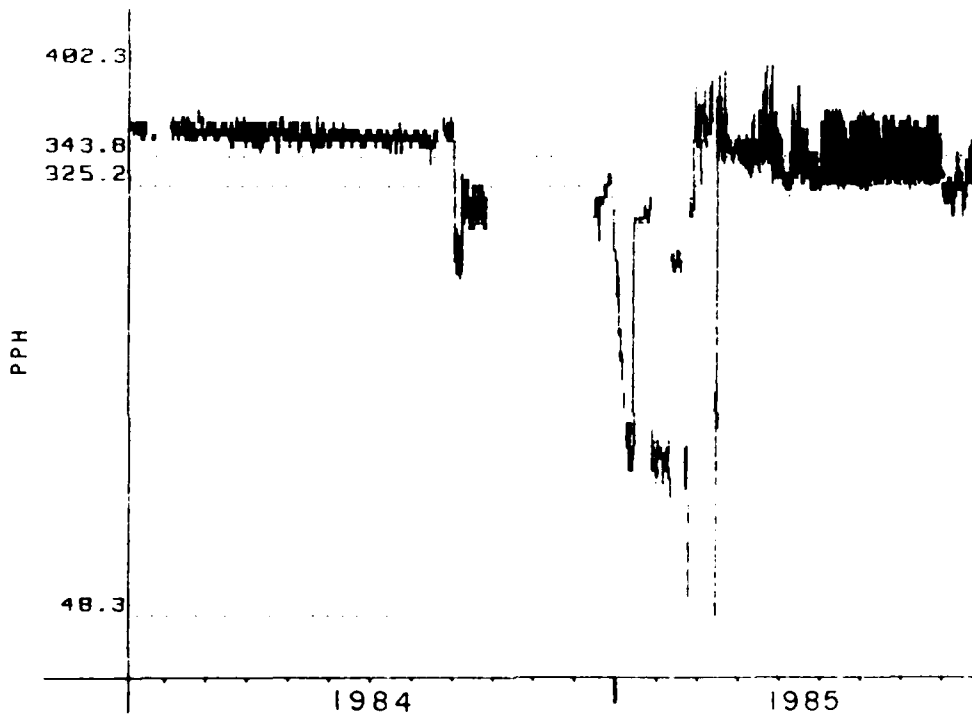


FIGURE 2. Devils Kitchen Steam Flow.

TABLE 2. Devils Kitchen Corrosion Array Statistical Flow Data, Pounds per Hour (pph).

Year	Mean, high daily flow	Standard deviation, high daily flow	Mean, low daily flow	Standard deviation, low daily flow
1984	354.8	17.4	345.8	21.2
1985 ^a	332.8	63.7	304.9	62.0

^aJanuary through September.

COSO RESORT CORROSION ARRAY

Daily steam flows at the Coso Resort Corrosion Array for the reporting period are given in Appendix Table A-2. These data are shown graphically in Figure 3. Yearly mean data and standard deviations for the high and low daily steam flows at this site are given in Table 3.

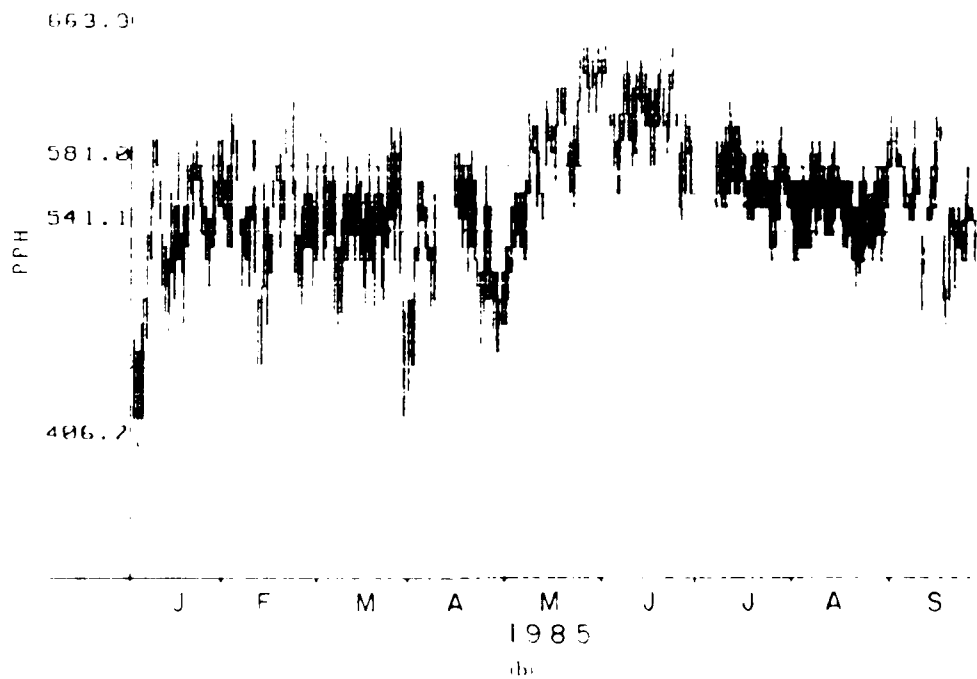
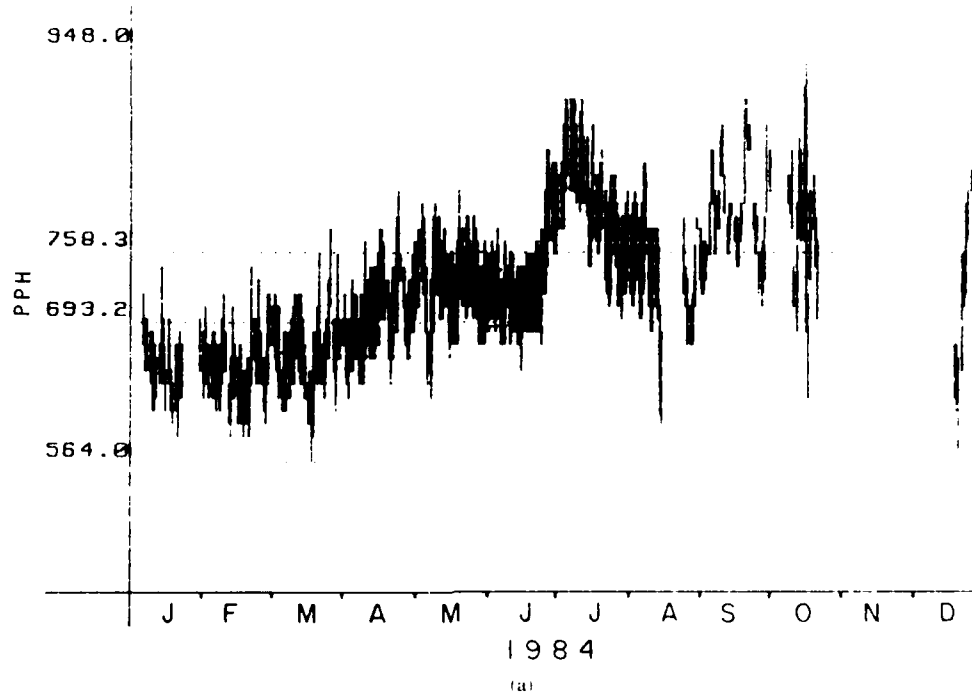


FIGURE 3. Coso Resort Corrosion Array Steam Flow (a) 1984, (b) 1985.

TABLE 3. Coso Resort Corrosion Array Statistical Flow Data, Pounds per Hour (pph).

Year	Mean, high daily flow	Standard deviation, high daily flow	Mean, low daily flow	Standard deviation, low daily flow
1984	758.3	65.6	693.2	62.5
1985 ^a	581.0	36.5	541.1	44.0

^aJanuary through September.**TWO-INCH STEAM WELL**

Appendix Tables A-3 and B-1 give the daily steam flow and temperature data, respectively, for the Two-Inch Steam Well. These data are shown graphically in Figures 4 and 5. Yearly mean data and standard deviations are given for the high and low daily steam flows (Table 4), and for the high and low daily steam temperatures (Table 5).

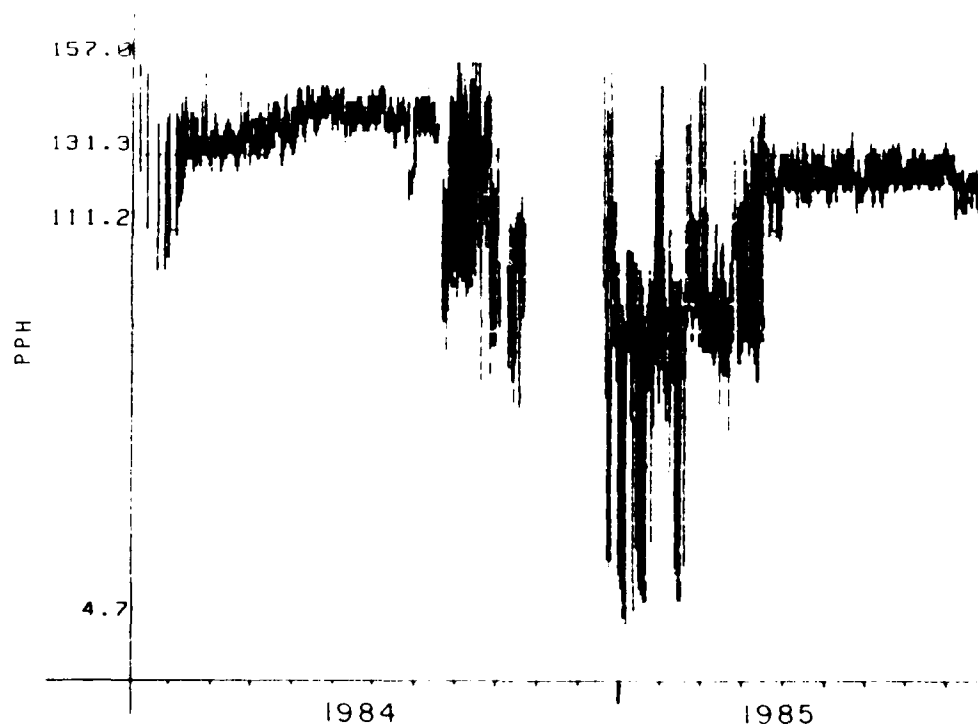


FIGURE 4. Two-Inch Steam Well Steam Flow.

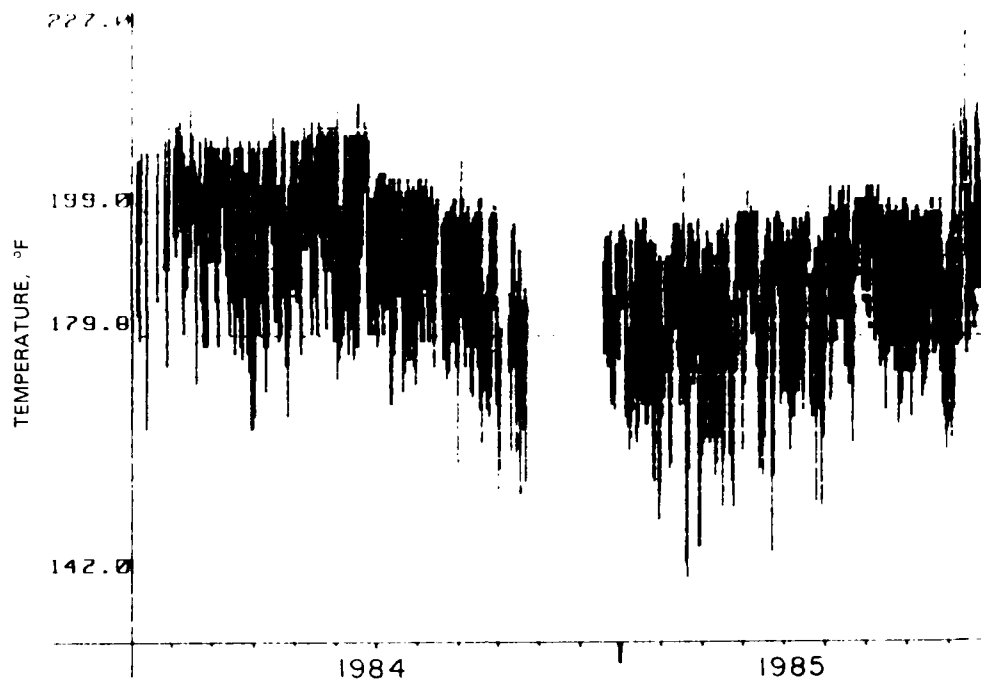


FIGURE 5. Two-Inch Steam Well Steam Temperature.

TABLE 4. Two-Inch Steam Well Statistical Flow Data,
Pounds per Hour (pph).

Year	Mean, high daily flow	Standard deviation, high daily flow	Mean, low daily flow	Standard deviation, low daily flow
1984	140.3	12.1	122.0	24.3
1985 ^a	122.1	15.9	100.1	33.0

^aJanuary through September.TABLE 5. Two-Inch Steam Well Statistical
Temperature Data, °F.

Year	Mean, high daily temp.	Standard deviation, high daily temp.	Mean, low daily temp.	Standard deviation, low daily temp.
1984	202.7	8.1	183.5	10.4
1985 ^a	195.2	7.3	176.1	11.5

^aJanuary through September.

EIGHT-INCH "STOVE-PIPE" WELL

Daily steam flows at the Eight-Inch Well are given in Appendix Table A-4 and are shown graphically in Figure 6. Yearly mean data and standard deviations for the high and low daily steam flows at the Eight-Inch Well are given in Table 6.

This site has continued to produce erratic data, which we feel are an indication of condensation blockage of the narrow hoses that connect the flow meter to the wellhead. In

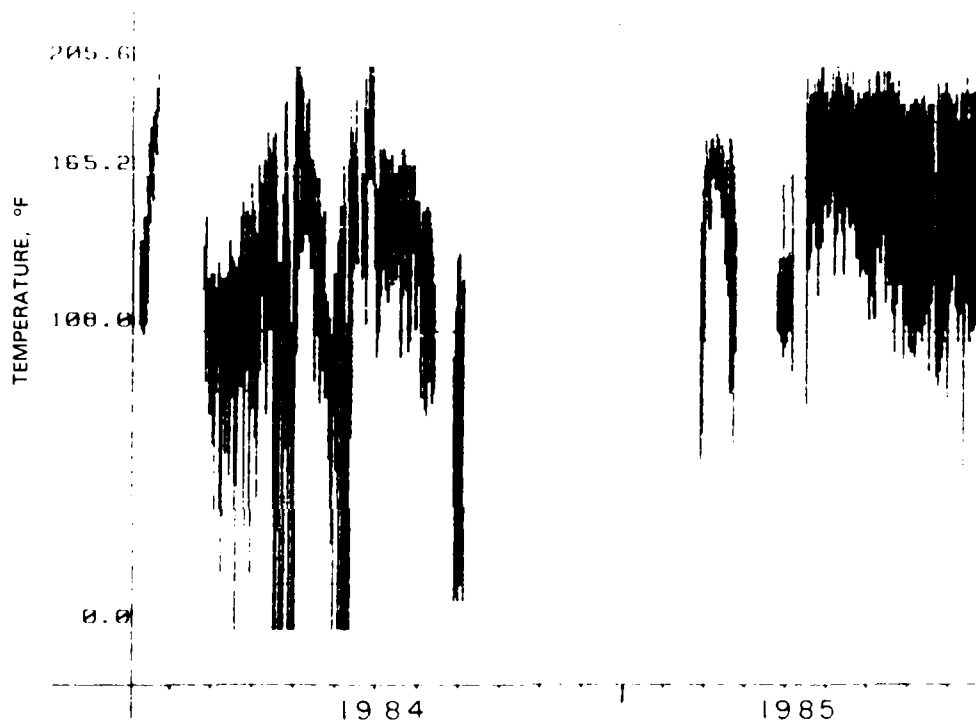


FIGURE 6. Eight-Inch Steam Well Steam Flow.

TABLE 6. Eight-Inch Well Statistical Steam Flow Data,
Pounds per Hour (pph).

Year	Mean, high daily flow	Standard deviation, high daily flow	Mean, low daily flow	Standard deviation, low daily flow
1984	147.3	38.0	91.5	50.7
1985 ^a	185.7	18.0	127.0	24.1

^aJanuary through September.

March 1985 the hoses were replaced with larger, 1/2-inch diameter hoses. The data showed immediate improvement, but condensation was still a problem. A condensing reservoir was added to the system in April 1985, which resulted in the best data ever gathered from this site (Figure 6). We believe that the site may be further improved by a reworking of the wellhead and removal of the "smokestack" outlet. The installation of a 90-degree pipe at the steam site at Schober's Resort resulted in much more consistent data from that site, and we believe the same configuration may be of benefit at the Eight-Inch Steam Well.

SCHOBERS RESORT

Appendix Tables A-5, B-2, and B-3 give the daily steam flow, steam temperature, and ambient temperature data, respectively, for the Schober's Resort site. The steam flow and temperature data are shown graphically in Figures 7 and 8. Yearly mean data and standard deviations are given for the high and low daily steam flows (Table 7), and for the high and low daily steam temperatures (Table 8). Fluctuation and range in the daily ambient temperature in the Coso Hot Springs area is shown graphically as the ambient temperature at Schober's Resort in Figure 9.

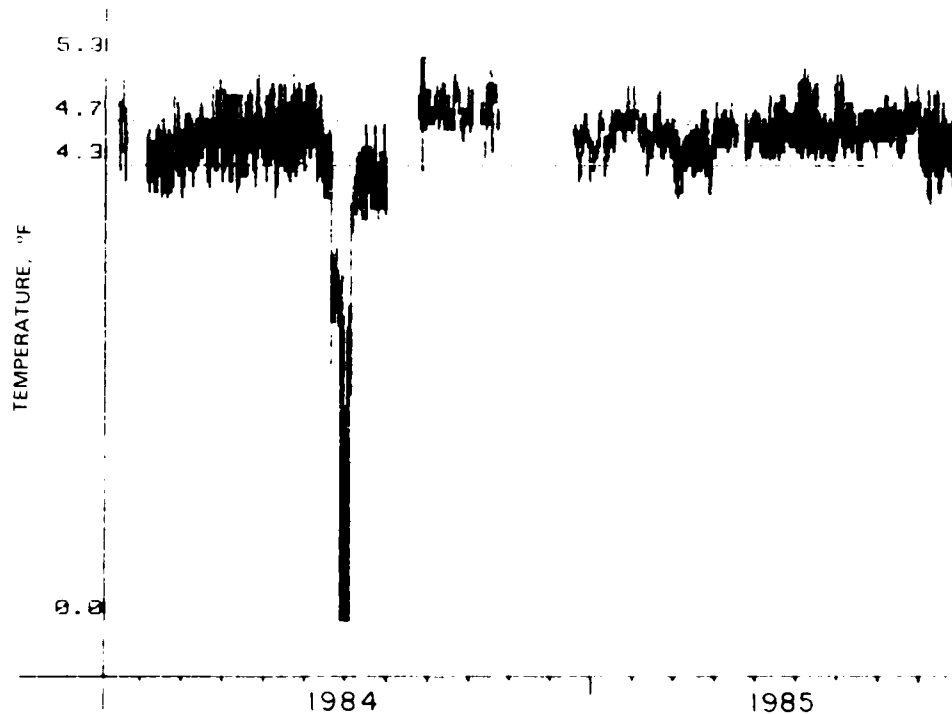


FIGURE 7 Schober's Resort Steam Flow

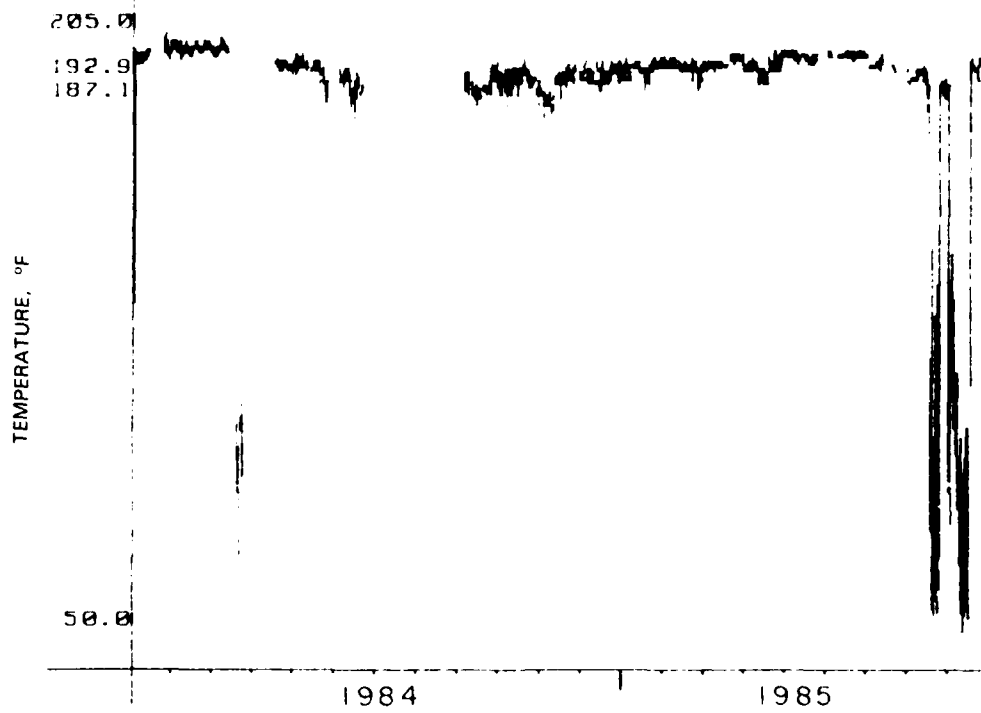


FIGURE 8. Schober's Resort Steam Temperature.

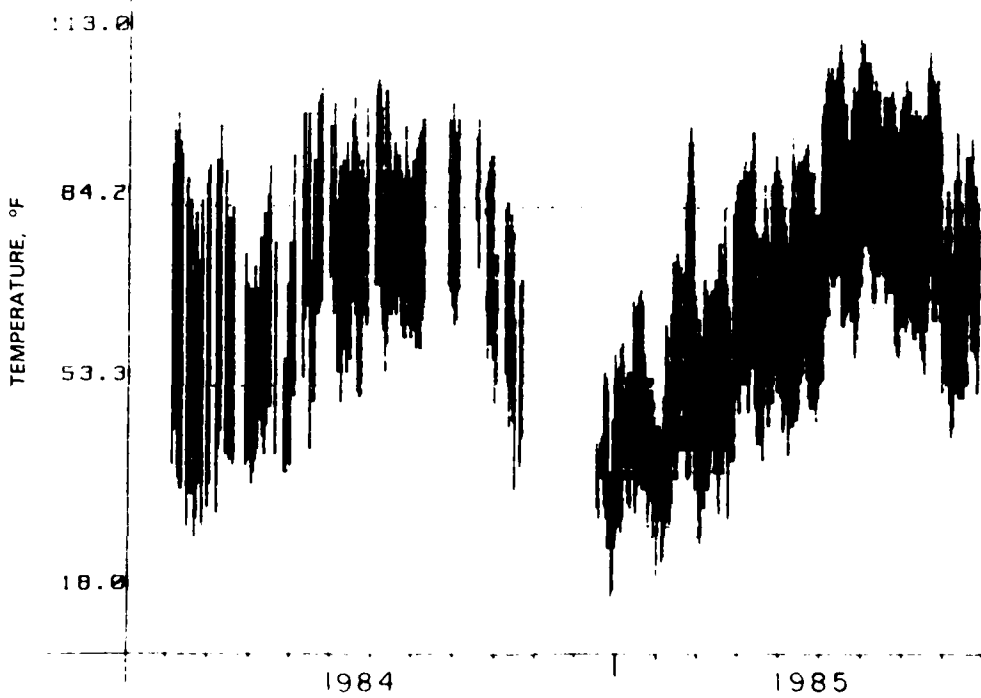


FIGURE 9. Schober's Resort Ambient Temperature.

TABLE 7. Schober's Resort Statistical Flow Data,
Pounds per Hour (pph).

Year	Mean, high daily flow	Standard deviation, high daily flow	Mean, low daily flow	Standard deviation, low daily flow
1984	4.6	0.5	4.1	0.8
1985 ^a	4.7	0.2	4.4	0.2

^aJanuary through September.TABLE 8. Schober's Resort Statistical
Steam Temperature Data, °F.

Year	Mean, high daily temp.	Standard deviation, high daily temp.	Mean, low daily temp.	Standard deviation, low daily temp.
1984	130.0	69.8	115.0	82.5
1985 ^a	192.5	19.4	186.0	32.0

^aJanuary through September.

COSO MUD POT PHOTOGRAPHIC INVESTIGATION

A weekly photographic investigation was initiated in January 1978 to document the fluctuation in fluid levels in several of the more prominent mud pots at Coso. This project will continue into the production and power-generation stages of the geothermal development.

Figures 10 through 30 illustrate the seasonal variations in the fluid levels of four of the Coso mud pots and pools. The largest pool is the south pool, which is located inside a circular excavation along the Airport Lake-Coso Hot Springs fault scarp, approximately 1000 feet south of the main resort area. The other three mud pots included in the photographic series are located in the fenced compound adjacent to and south of the main Coso Resort building. A complete weekly photographic series is maintained by the Geothermal Utilization Division, NWC.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 10. Coso Mud Pots, 4 January 1984.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 11. Coso Mud Pots, 6 February 1984.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 12. Coso Mud Pots, 5 March 1984.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 13. Coso Mud Pots, 2 April 1984.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 14. Coso Mud Pots, 7 May 1984.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 15. Coso Mud Pots, 4 June 1984.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 16. Coso Mud Pots, 3 July 1984.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 17. Goso Mud Pots, 20 August 1984.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 18. Coso Mud Pots, 4 September 1984.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 19. Coso Mud Pots, 1 October 1984.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POTS.



(C) RED AND GRAY POOL.

FIGURE 20. Coso Mud Pots, 5 November 1984.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 21. Coso Mud Pots, 10 December 1984.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 22. Coso Mud Pots, 8 January 1985.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 23. Coso Mud Pots, 5 February 1985.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(C) RED AND GRAY POOL.

FIGURE 24. Coso Mud Pots, 5 March 1985.



(B) GRAY MUD POTS



(D) BROWN MUD POTS



(A) SOUTH POOL



(C) RED AND GRAY POOL

FIGURE 25. Coso Mud Pots, 1 April 1985.



(A) SOUTH POOL.



(B) GRAY MUD POTS.



(C) RED AND GRAY POOL.



(D) BROWN MUD POTS.

FIGURE 26. Coso Mud Pots, 13 May 1985.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 27. Coso Mud Pots, 3 June 1985.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 28. Coso Mud Pots, 1 July 1985.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 29. Coso Mud Pots, 5 August 1985.



(B) GRAY MUD POTS.



(D) BROWN MUD POTS.



(A) SOUTH POOL.



(C) RED AND GRAY POOL.

FIGURE 30. Coso Mud Pots, 3 September 1985.

WATER LEVEL MONITORING

Water levels are monitored in three wells and three pools in the Coso Hot Springs area. Three sites, Coso Wells 1 and 4P-1 and the south pool, have float-activated, continuous water-level recorders, whereas the other sites are measured intermittently and manually.

WATER WELLS

Figures 31 and 32 are plots of the water level data from Coso Wells 1 and 4P-1 in 1984 and 1985, respectively. The continuous data from Coso Well 1 continue to be erratic; the readings must be verified by weekly manual measurements.

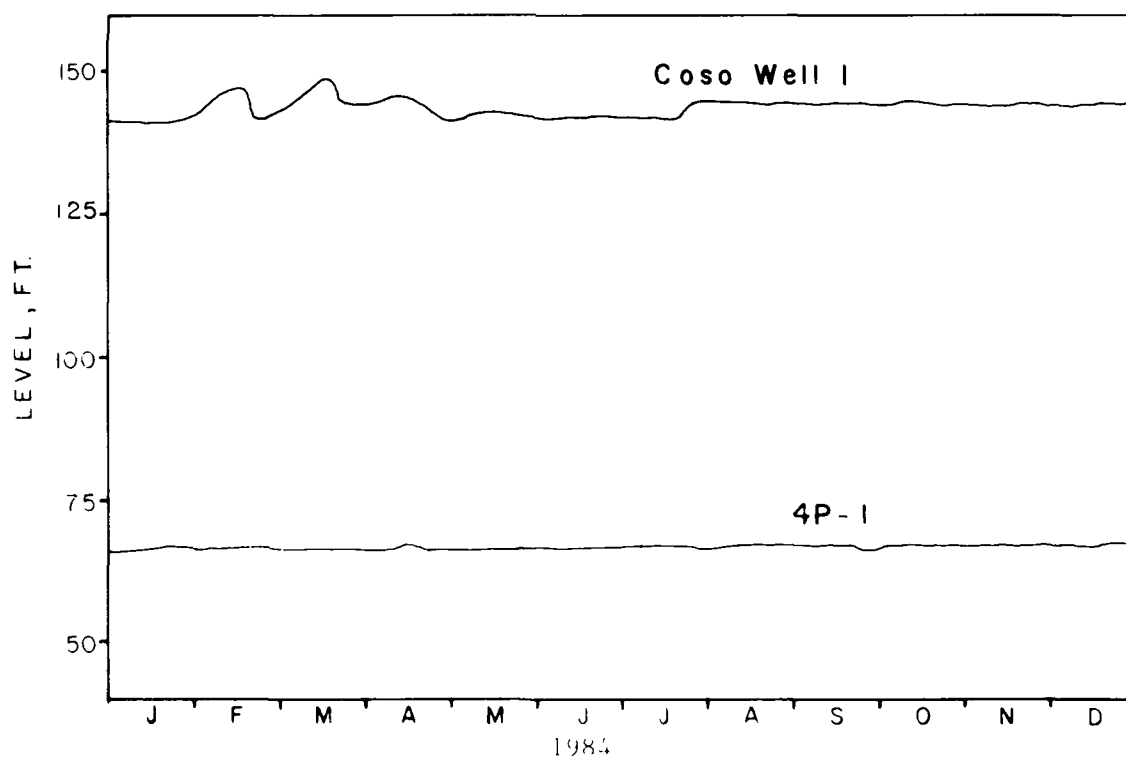


FIGURE 31. Water Levels of Coso Observation Wells, Coso Well 1 and 4P-1, 1984.

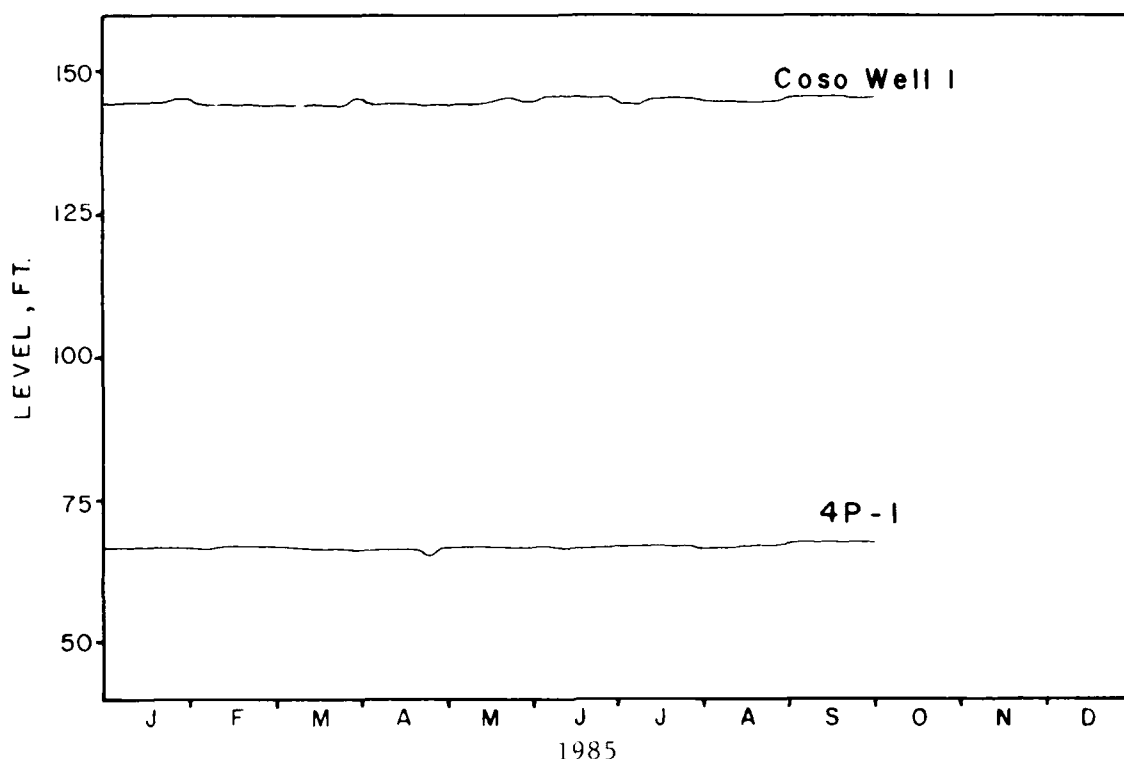


FIGURE 32. Water Levels of Coso Observation Wells, Coso Well 1 and 4P-1, Through September 1985.

A third well, Coso Well 2, is a water supply well, drilled and used by California Energy Corp. during geothermal exploration and development in the Coso KGRA. Table 9 lists the manual water-level readings for Coso Well 2.

POND LEVELS

Fluid level monitoring of the mud pots and pools was initiated in the last quarter of 1979 and includes two of the sites in the weekly photographic series. These are the red and grey pool and the south pool. A third site is a rocked-in cistern 30 feet south of the red and grey pool. The cistern filled with sand during a heavy rain in August 1984 and now has measurable water only when levels are very high.

In previous years the pond levels have been referenced to a cement slab (the top of the cistern) in the resort area and were, therefore, only relative measurements. In March 1985 the levels were resurveyed and referenced to USGS benchmark 3635_1905_13B, in the Coso area. Tables 10 and 11, giving the elevation data for the Coso pools for 1984 and part of 1985, reflect this change.

It should be noted that in the last report (Reference 3) we suspected that the trend of higher mean water level and less variation throughout each year at the south pool would reverse itself in 1984 because of the evaporation rate, high ambient temperature, and lack of rainfall. The suspicion was definitely borne out as can be seen in Table 12, even though the effects were mitigated somewhat by the substantial rain and snowfalls in the last quarter of 1984.

TABLE 9. Water Level Readings for Coso Well No. 2.

1984		1985	
Date	Level, ft	Date	Level, ft
1-23	123.5		
2-6	123.5		
2-15	123.5	2-25	129.0
3-5	123.5		
3-12	123.5		
3-19	123.5		
3-26	123.5		
4-2	123.5		
4-30	123.5		
5-7	123.5		
6-4	124.0		
6-11	124.0	6-10	125.0
6-18	123.7		
6-25	124.0	6-25	127.0
7-3	123.5	7-1	126.0
7-9	123.5	7-8	127.0
7-16	124.0	7-16	125.9
7-23	124.0	7-22	125.6
7-30	128.7	7-30	124.5
8-6	128.7		
8-13	128.7		
8-20	129.8		
8-27	129.8		
9-4	129.7		

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TABLE 10. Elevation Data on Coso Pools, 1984.

Ellipses (...) indicate no data.

Date	Ambient temperature, °F	Pool designation	Elevation, ft	Change in elevation since 1 Jan 84, in.
1-4	68	1 South pool	3613.71	0.00
		2 Red/grey	3605.59	0.00
		3 Cistern	3605.56	0.00
1-9	68	1	3613.73	+0.25
		2	3605.59	0.00
		3	3605.54	-0.25
1-17	50	1	3613.75	+0.50
		2	3605.59	0.00
		3	3605.64	+1.00
1-23	68	1	3613.71	0.00
		2	3605.59	0.00
		3	3605.60	+0.50
1-30	66	1	3613.67	-0.50
		2	3605.57	-0.25
		3	3605.39	-2.00
2-6	56	1	3613.65	-0.75
		2	3605.59	0.00
		3	3605.39	-
2-15	57	1	3613.63	-1.00
		2	3605.59	0.00
		3	Dry	-
2-21	59	1	3613.55	-2.00
		2	3605.59	0.00
		3	Dry	-
2-27	58	1	3613.50	-2.50
		2	3605.59	0.00
		3	Dry	-
3-5	54	1	3613.50	-2.50
		2	3605.55	-0.50
		3	Dry	-
3-12	68	1	3613.38	-4.00
		2	3605.51	-1.00
		3	Dry	-

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TABLE 10. (Contd.)

Date	Ambient temperature, F	Pool designation	Elevation, ft	Change in elevation since 1 Jan 84, in.
3-19	74	1	3613.29	-5.00
		2	3605.51	-1.00
		3	Dry	...
3-26	72	1	3613.25	-5.50
		2	3605.46	-1.50
		3	Dry	...
4-2	62	1	3613.17	-6.50
		2	3605.55	-0.50
		3	Dry	...
4-9	72	1	3612.98	-8.75
		2	3605.55	-0.50
		3	Dry	...
4-16	66	1	3612.88	-10.00
		2	3605.38	-2.50
		3	Dry	...
4-23	76	1	3612.79	-11.00
		2	3605.46	-1.50
		3	Dry	...
4-30	66	1	3612.79	-11.00
		2	3605.53	-0.75
		3	Dry	...
5-7	66	1	3612.69	-12.25
		2	3605.42	-2.00
		3	Dry	...
5-14	68	1	3612.48	-14.75
		2	3605.19	-4.75
		3	Dry	...
5-21	88	1	3612.36	-16.25
		2	3605.17	-5.00
		3	Dry	...
5-28	88	1	3612.09	-19.50
		2	3605.09	...
		3	Dry	...

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TABLE 10. (Contd.)

Date	Ambient temperature, °F	Pool designation	Elevation, ft	Change in elevation since 1 Jan 84, in.
6-4	76	1	3611.88	-22.00
		2	Dry	...
		3	Dry	...
6-11	82	1	3612.09	-19.50
		2	3605.21	-4.50
		3	Dry	...
6-18	88	1	3611.67	-24.50
		2	3605.26	-4.00
		3	Dry	...
6-25	90	1	3611.50	-26.50
		2	3605.21	-4.50
		3	Dry	...
7-3	96	1	3611.17	-30.50
		2	3605.09	-6.00
		3	Dry	...
7-9	87	1	3610.88	-34.00
		2	Dry	...
		3	Dry	...
7-16	88	1	3610.59	-37.50
		2	3605.42	-2.00
		3	3605.41	-1.75
7-23	83	1	3609.96	-45.00
		2	3605.34	-3.00
		3	Dry	...
7-30	82	1	3609.92	-45.50
		2	Dry	...
		3	Dry	...
8-6	82	1	3609.84	-46.50
		2	Dry	...
		3	Dry	...
8-13	95	1	3610.50	-38.50
		2	Dry	...
		3	Dry	...

TABLE 10. (Contd.)

Date	Ambient temperature, °F	Pool designation	Elevation, ft	Change in elevation since 1 Jan 84, in.
8-20	92	1	3612.92	-9.50
		2	3605.38	-2.50
		3	Full of sand	...
8-27	87	1	3612.92	-9.50
		2	3605.30	-3.50
9-4	93	1	3612.71	-12.00
		2	3605.13	-5.50
9-10	90	1	3612.59	-13.50
		2	3605.13	-5.50
9-17	84	1	3612.46	-15.00
		2	3605.38	-2.50
9-24	78	1	3612.42	-15.50
		2	3605.42	-2.00
10-1	74	1	3612.46	-15.00
		2	3605.63	+0.50
10-8	84	1	3612.65	-12.75
		2	3605.55	-0.50
10-15	62	1	3612.73	-11.75
		2	3605.59	0.00
10-22	60	1	3612.73	-11.75
		2	3605.63	+0.50
10-29	68	1	3612.75	-11.50
		2	3605.63	+0.50
11-5	73	1	3612.84	-10.50
		2	3605.63	+0.50
11-12	60	1	3612.96	-9.00
		2	3605.59	0.00
11-17	60	1	3613.00	-8.50
		2	3605.61	+0.25
11-26	52	1	3613.42	-3.50
		2	3605.63	+0.50

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TABLE 10. (Contd.)

Date	Ambient temperature, °F	Pool designation	Elevation, ft	Change in elevation since 1 Jan 84, in.
12-3	44	1	3613.59	-1.50
		2	3605.63	+0.50
12-10	48	1	3613.88	+2.00
		2	3605.63	+0.50
12-17	38	1	3614.13	+5.00
		2	3605.63	+0.50
12-24	40	1	3614.29	+7.00
		2	3605.63	+0.50
12-31	52	1	3614.52	+9.75
		2	3605.63	+0.50

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TABLE 11. Elevation Data of Coso Pools, January through September 1985.

Ellipses (...) indicate no data.

Date	Ambient temperature, °F	Pool designation	Elevation, ft	Change in elevation since 8 Jan 85, in.
1-8	53	1 South pool	3614.46	0.00
		2 Red grey	3605.63	0.00
1-15	64	1	3614.34	-1.50
		2	3605.59	-0.50
1-21	59	1	3614.38	-1.00
		2	3605.61	-0.25
1-28	53	1	3614.40	-0.75
		2	3605.63	0.00
2-5	47	1	3614.42	-0.50
		2	3605.63	0.00
2-11	43	1	3614.42	-0.50
		2	3605.63	0.00
2-18	66	1	3614.42	-0.50
		2	3605.63	0.00
2-25	68	1	3614.34	-1.50
		2	3605.63	0.00
3-5	55	1	3614.29	-2.00
		2	3605.67	+0.50
3-12	58	1	3614.21	-3.00
		2	3605.63	0.00
3-18	46	1	3614.38	-1.00
		2	...	...
3-25	60	1	3614.17	-3.50
		2	3605.61	-0.25
4-1	80	1	3614.00	-5.50
		2	3605.59	-0.50

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TABLE 11. (Contd.)

Date	Ambient temperature, °F	Pool designation	Elevation, ft	Change in elevation since 8 Jan 85, in.
4-8	82	1	3613.84	-7.50
		2	3605.51	-4.50
4-15	84	1	3613.61	-10.25
		2	3605.42	-1.00
4-22	68	1	3613.52	-11.25
		2	3605.55	-1.00
4-29	76	1	3613.17	-15.5
		2	3605.55	-1.00
5-6	...	1	3613.21	-15.00
		2	...	...
5-13	88	1	3617.04	-17.00
		2	3605.47	-2.00
5-20	78	1	3612.90	-18.75
		2	3605.40	-2.75
5-28	88	1	3612.67	-21.50
		2	3605.32	-3.75
6-3	70	1	3612.56	-22.75
		2	3605.38	-3.00
6-10	100	1	3612.29	-26.00
		2	<3605.13	...
6-17	...	1	3612.02	-29.25
		2	Dry	...
6-25	85	1	3611.59	-34.5
		2	Dry	...
7-1	94	1	3611.42	-36.5
		2	Dry	...
7-8	98	1	3611.11	-40.25
		2	Dry	...

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TABLE 11. (Contd.)

Date	Ambient temperature, °F	Pool designation	Elevation, ft	Change in elevation since 8 Jan 85, in.
7-16	98	1	3611.77	-32.25
		2	Dry	...
7-22	92	1	3611.61	-34.25
		2	Dry	...
7-29	96	1	3611.36	-37.25
		2	Dry	...
8-5	96	1	3611.11	-40.25
		2	Dry	...
8-11	90	1	3610.88	-43.00
		2	3605.15	-5.75
8-19	86	1	3610.67	-45.50
		2	3605.17	-5.50
8-26	108	1	3610.54	-47.00
		2	3605.13	-6.00
9-3	74	1	3611.13	-40.00
		2	3605.22	-5.00
9-9	71	1	3611.38	-37.00
		2	3605.38	-3.00
9-16	70	1	3611.06	-40.75
		2	3605.38	-3.00
9-24	89	1	3611.90	-30.75
		2	3605.46	-2.00
9-30	72	1	3612.06	-28.75
		2	3605.48	-1.75

TABLE 12. Summary of Water Level, in Feet, at South Pool,
January 1980 through September 1985.

Water level referenced to the top of the cistern.

Year	High	Low	Mean	Standard deviation
1980 ^a	96.3	91.3	93.8	1.8
1981 ^a	95.7	90.9	93.4	1.4
1982 ^a	95.8	92.7	94.5	1.0
1983 ^a	97.4	93.9	95.5	1.1
1984	96.0	91.4	94.2	1.1
1985 ^b	96.0	92.1	94.3	1.4

^aSource: Naval Weapons Center, *Coso Monitoring Program, January 1981 Through December 1983*, by Steven C. Bjornstad and C. R. Rodgers. China Lake, Calif., NWC, September 1984. 208 pp. (NWC TP 6558, publication UNCLASSIFIED.)

^bJanuary through September.

EVAPORATION STUDY

An evaporation study at the south pool was conducted during this reporting period to establish the water evaporation rate (along with the seasonal variations in that rate) at the pool, so that this information could be used as an indication of the evaporation rate over the entire hot springs area. The evaporation rate, when compared to the anticipated recharge rate for the area, may indicate whether or not recharge is a factor of primary importance in the maintenance of the surface water levels. If it is not, then the water level is probably primarily a function of ambient temperature and humidity, that is, condensation and evaporation. (The recharge rate is based on the rainfall and the percentage of the rainfall that is thought to actually reach the water table.)

The study consisted of: (1) surveying the pond outline with a brunton and tape, and (2) surveying the temperature of the pond about a foot below the surface. We used the portable temperature-logging gear normally used for observation-well logging in order to find a mean temperature site and the hot spots in the pond. A stainless steel evaporation pan was then floated over the mean temperature site for at least 1 week. During this time the water level in the pan was monitored and recorded and water was added as needed.

The evaporation pan used is 24 inches in diameter with a 12-inch-high wall, and a 6-inch-deep cone on the bottom with about a 2-pound layer of lead for stability. A row of pins are welded to the entire height of the inner wall of the pan at 1/4-inch intervals so that the water level in the pan can be read directly.

Three evaporation tests were run. The pond outline was surveyed each time, although the temperature grid was only run twice to confirm the location of the mean temperature site.

Figures 33 and 34 show the results of the pond surveys done in April and August 1984, respectively. Figure 35 is an overlay of each of the outline surveys. Table 13 gives the data collected during each test.

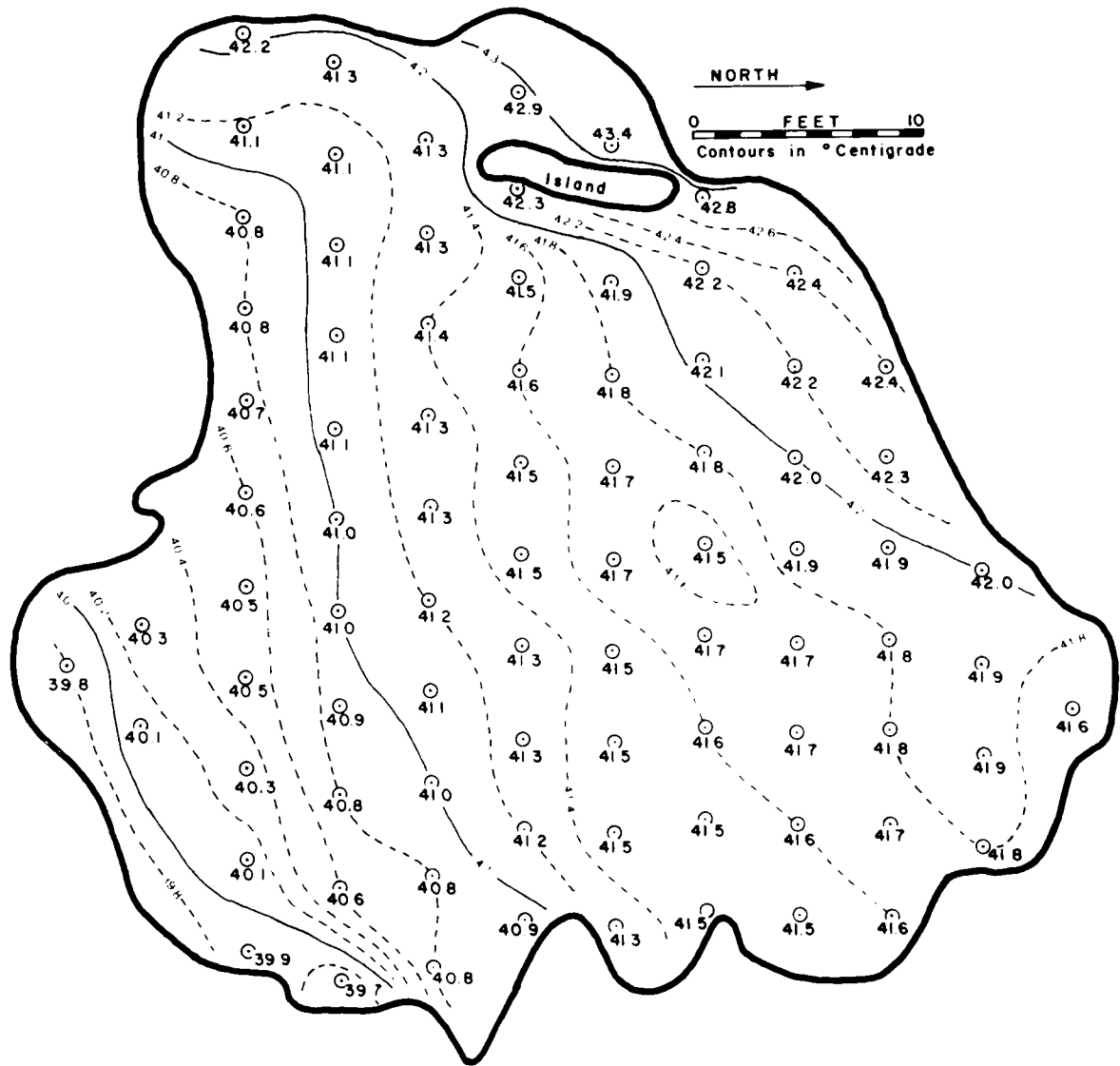


FIGURE 33 South Pool Survey, April 1984

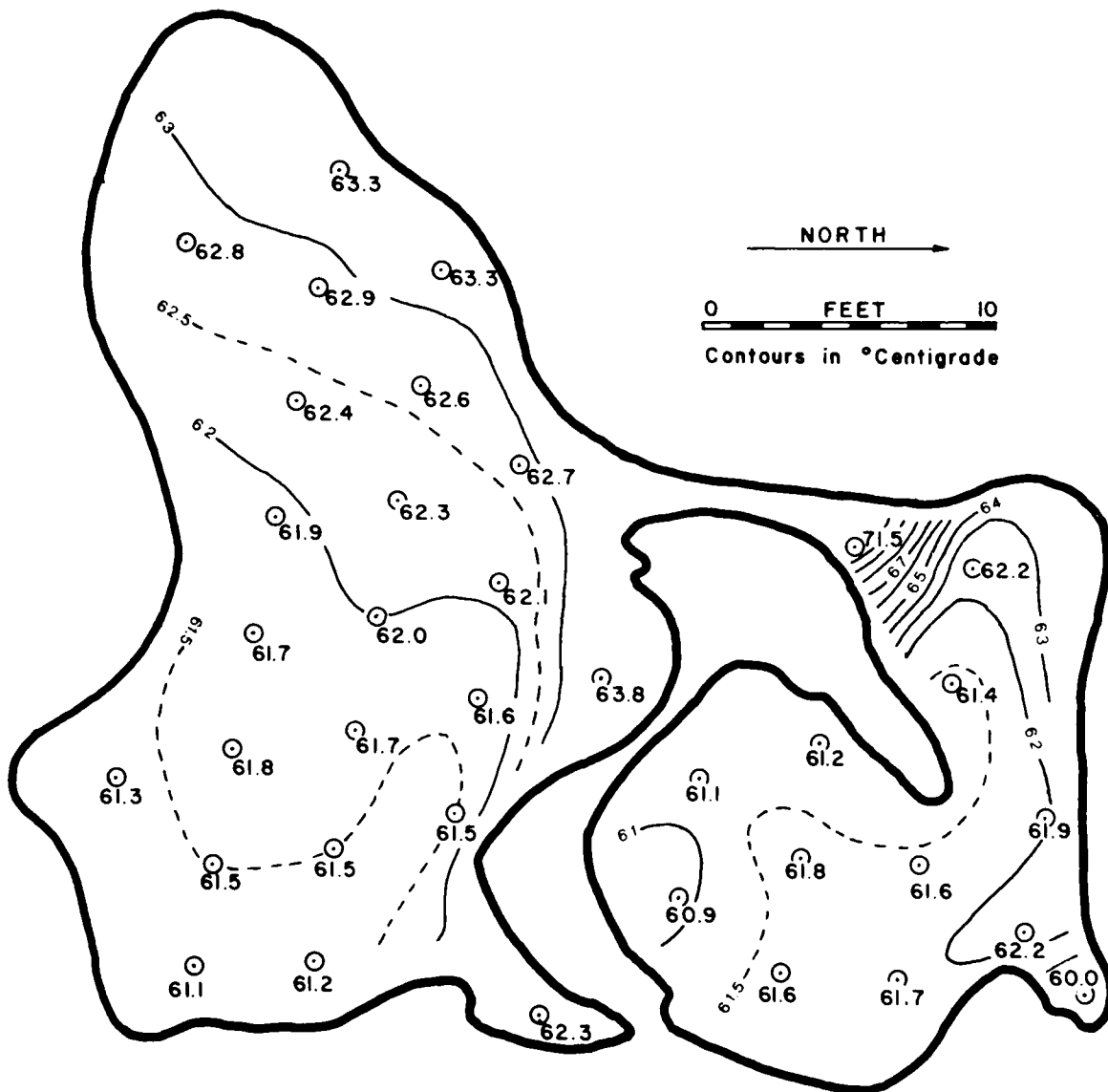


FIGURE 34. South Pool Survey, August 1984.

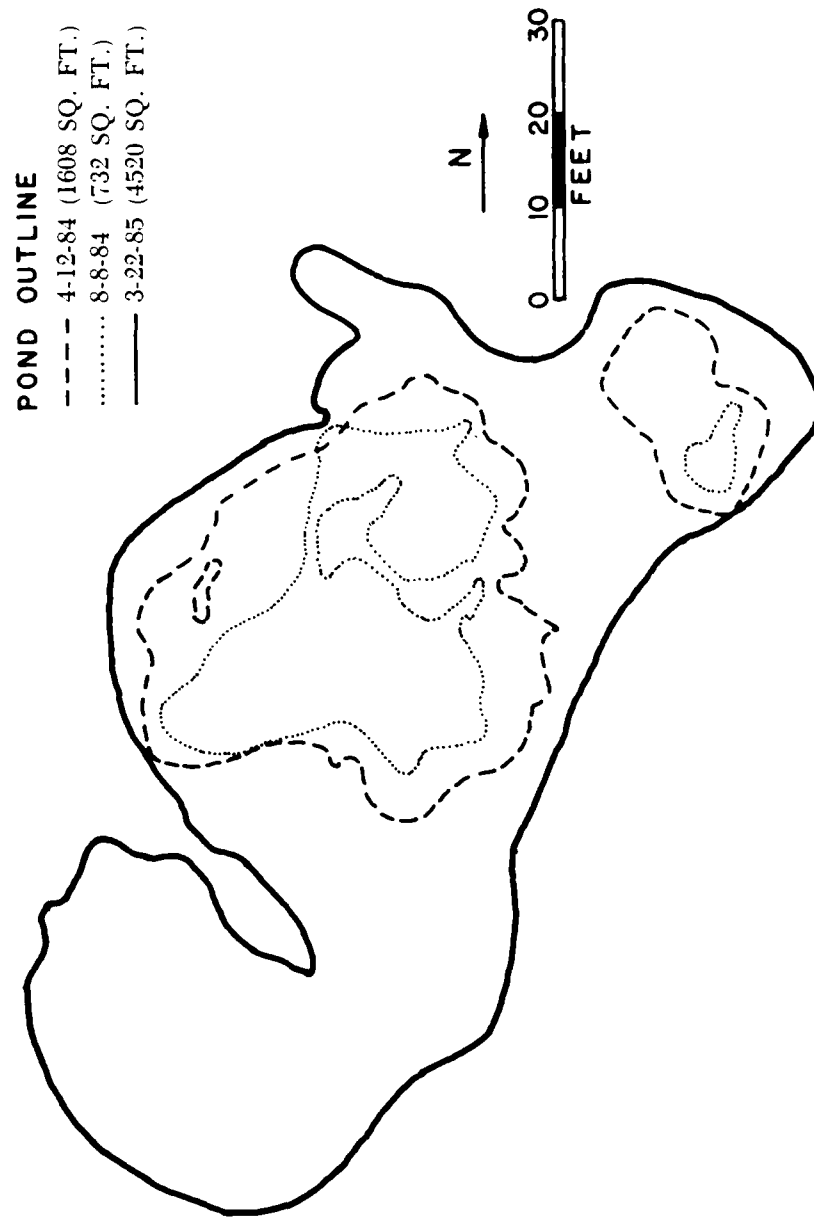


FIGURE 35. Combined South Pool Surveys, 1984-1985.

TABLE 13. South Pool Evaporation Study Data, Three Tests.

Date/time	Interval, hrs.	High/low ambient temp., °F	Pond temp., °F	Evaporation, in.	Rate, ^a (in./hr)
Test 1 - Small Pond and Large Pond					
Small pond					
5-10-84 1000	...	100.65	124.7	Begin test	
5-11 /1009	24.15			2.80	0.090
5-14 /0915	71.08			8.10	0.089
5-16 /1450	53.58			7.50	0.109
5-18 /1320	46.50			6.80	0.114
5-20 /1205	46.75			7.25	0.121
5-21 /1005	22.00	100.68		3.40	0.121
Average rate	...	...	...	...	0.108
Large pond					
5-10-84 1045	...	100.65	106.7	Begin test	
5-11 /1005	23.33			1.50	0.050
5-14 /0940	71.75			5.10	0.055
5-16 /1450	53.17			3.30	0.048
5-18 /1325	46.58			3.20	0.054
5-20 /1205	46.67			3.30	0.055
5-21 /1005	22.00	100.68		1.60	0.057
Average rate	...	...	...	...	0.053
Combined average rate	...	...	...	...	0.061
Test 2 - Large Pond Only					
8-08-84 1340	...	99.67	143.2	Begin test	
8-10 /0910	43.50			8.00	0.144
8-12 /1630	55.33			9.00	0.127
8-13 /1330	21.00			5.25	0.195
8-16 /1415	72.75	91.72		6.00 ^b	0.093
Average rate	...	...	...	...	0.140
Test 3 - Large Pond Only					
4-01-85 1030	...	86.61	97.7	Begin test	
4-03 /1200	49.50			2.55 in. (5 gal)	0.041
4-05 /1700	53.00			2.55 in. (5 gal)	0.037
4-08 /1040	65.67			2.55 in. (5 gal)	0.030
4-11 /1120	72.67			2.55 in. (5 gal)	0.027
4-15 /1030	95.17	88.60		3.06 in. (6 gal)	0.025
Average rate	...	...	...	...	0.031

^aRate = evaporation / time x 0.78 (correction factor for a floating evaporation pan vs. the pond, and clean vs. dirty, slightly saline water) (Reference 4).

^bRainfall in the Coso Basin from 8-13 to 8-16 averaged 2.67 inches. This amount of rainfall is assumed to have fallen into the evaporation pan, and is therefore added to the total evaporation for 8-16-85 to get the rate listed.

RAINFALL AT COSO RESORT AND ROSE VALLEY

Rainfall in the Coso Hot Springs subbasin is monitored at five sites as shown in Figure 36. Instrumentation at each site includes both battery-operated digital readout gauges and manually read funnel gauges.

Data collected from the Coso stations are presented in Tables 14 and 15. Daily averages and cumulative totals for rainfall in Rose Valley to the west are given in Tables 16 and 17.

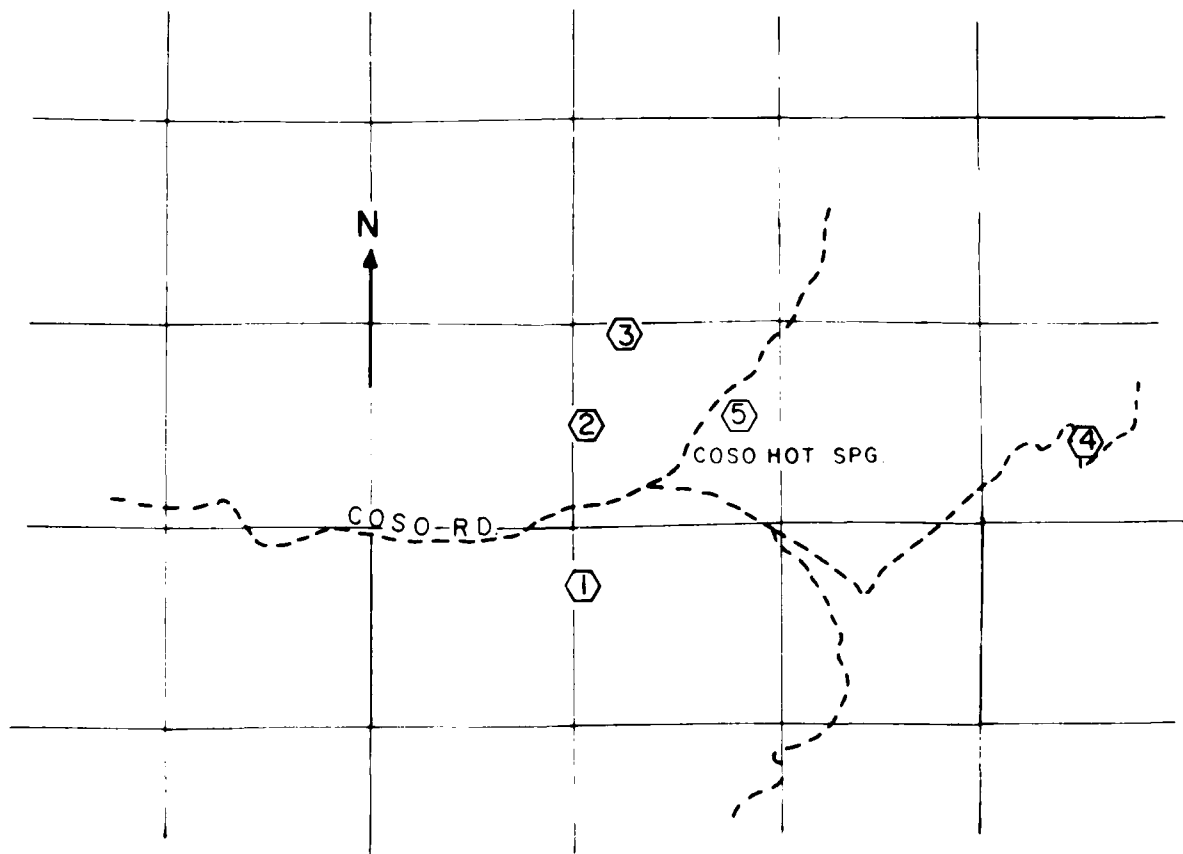


FIGURE 36. Rainfall Monitoring Station Locations.

TABLE 14. Inches of Rainfall Recorded at Coso Monitoring Stations, 1984.

Ellipses (...) indicate no data.

Date	Station 1		Station 2		Station 3		Station 4		Station 5	
	Funnel	Tipping bucket	Funnel	Tipping bucket	Funnel	Tipping bucket	Funnel	Tipping bucket	Funnel	Tipping bucket
2-15	...	...	...	...	...	...	...	...	0.01	0.01
3-14	0.07	0.15	0.04	0.05	0.07	0.07	...	...	0.04	0.01
6-4	...	...	...	...	...	...	...	...	0.01	0.01
7-3	...	...	...	...	...	...	...	...	0.02	0.02
7-16	0.50	0.19	0.80	0.47	0.54	0.05	...	...	0.49	0.01
7-19	0.00	0.00	0.00	0.00	0.14	0.16	0.55	...	...	...
7-24	0.03	0.03	0.01	0.01	0.03	0.04	0.11	...	0.03	0.03
7-31	0.02	0.02	0.05	...	0.02	0.02	0.01	0.00	0.01	0.10
8-16	2.50	0.01	2.06	1.31	2.48	1.90	3.70	...	2.60	2.38
9-17	0.26	0.32	0.30	0.24	0.36	0.27	0.20	...	0.25	0.15
10-1	0.28	0.40	0.43	0.08	0.48	0.62	0.24	...	0.42	0.30
10-8	...	...	...	...	...	...	...	...	0.02	0.02
11-12	0.08	0.22	0.05	0.15	0.10	0.21	0.08	0.00	0.10	0.10
11-23	0.62	1.07	0.52	0.60	0.64	0.94	0.74	0.00	0.88	0.00
12-3	...	...	...	...	...	...	...	...	0.05	0.05
12-10	...	...	...	...	...	...	...	...	0.20	0.20
12-17	...	...	...	...	...	...	...	...	0.25	...
12-24	...	...	...	...	...	...	...	...	0.89	...
12-31	...	...	...	...	...	...	...	...	0.02	0.02
TOTAL	4.36	2.41	4.26	2.91	4.86	4.28	5.73	0.00	6.32	3.39

TABLE 15. Inches of Rainfall Recorded at Coso Monitoring Stations, January through September 1985.

Ellipses (...) indicate no data.

Date	Station 1		Station 2		Station 3		Station 4		Station 5	
	Funnel	Tipping bucket	Funnel	Tipping bucket	Funnel	Tipping bucket	Funnel	Tipping bucket	Funnel	Tipping bucket
1-6	...	...	...	...	...	...	...	...	0.15	...
1-7	...	...	...	...	...	...	...	...	0.02	0.17
1-8	...	...	...	...	...	...	...	...	0.24	...
1-21	...	...	...	...	...	...	...	...	0.02	0.02
2-2	...	...	...	...	...	...	...	...	0.04	0.21
2-11	...	...	...	...	...	...	...	...	0.02	0.02
3-1 ^a	...	...	...	...	...	...	...	...	0.01	0.01
6-3	...	...	...	...	...	...	...	...	0.04	0.25
9-18	...	...	...	...	...	...	...	...	0.16	0.41
9-19	...	...	...	...	...	...	...	...	0.02	0.02
9-25	0.17	0.48	0.13	0.03	0.24	0.14	...	...	...	...
TOTAL	0.17	0.48	0.13	0.03	0.24	0.14	...	...	0.72	1.11

^aData lost.

TABLE 16. Rose Valley Cumulative Rainfall, 1984.

Ellipses (...) indicate no data.

Date	Daily, in.	Cumulative, in.	Date	Daily, in.	Cumulative, in.
2-14	Trace	Trace	8-26	0.07	5.16
2-17	Trace	Trace	9-12	0.02	5.18
3-18	0.11	0.11	9-16	0.07	5.25
4-7	Trace	...	9-17	Trace	...
5-30	0.03	0.14	9-20	0.02	5.27
6-19	0.02	0.16	10-3	0.08	5.35
7-3	0.20	0.36	10-17	0.09	5.44
7-4	0.02	0.38	11-7	0.11	5.55
7-15	0.62	1.00	11-12	0.08	5.63
7-16	0.72	1.72	11-20	Trace	...
7-17	0.07	1.79	11-21	1.10	6.73
7-19	Trace	...	11-22	0.10	6.83
7-20	0.12	1.91	11-25	0.37	7.20
7-21	0.19	2.10	11-28	0.06	7.26
7-22	0.07	2.17	12-3	0.01	7.27
7-23	0.18	2.35	12-4	0.07	7.34
7-24	0.03	2.61	12-5	Trace	...
7-28	0.23	2.61	12-6	0.02	7.36
7-29	0.45	3.06	12-8	0.18	7.54
7-30	Trace	...	12-9	0.01	7.55
7-31	0.11	3.17	12-11	0.08	7.63
8-15	0.91	4.08	12-12	0.01	7.64
8-16	0.54	4.62	12-16	0.09	7.73
8-22	0.45	5.07	12-27	0.11	7.84
8-23	0.02	5.09			

TABLE 17. Rose Valley Cumulative Rainfall,
January Through September 1985.

Ellipses (...) indicate no data.

Date	Daily, in.	Cumulative, in.	Date	Daily, in.	Cumulative, in.
1-7	0.09	0.09	7-20	0.20	1.66
1-8	0.06	0.15	9-4	0.02	1.68
1-10	0.03	0.18	9-5	0.04	1.72
1-27	Trace	...	9-19	0.05	1.77
2-2	Trace, snow	...			
2-3	0.50, snow	0.33			
3-27	0.52	0.85			
3-28	0.05	0.90			
6-3	0.02	0.92			
7-19	0.54	1.46			

WATER ANALYSIS OF COSO RESORT AREA WELLS

Water sampling of the four Coso observation wells (Coso Well 1, 4P-1, 4K-1, and Coso Well 2) that are being monitored for chemical composition was conducted on 5 April 1984. Table 18 shows the chemical analysis for each well; the analyses were performed by BC Laboratories, Inc., Bakersfield, Calif.

TEMPERATURE LOGS OF COSO RESORT AREA WELLS

Temperature logs of Coso Well 1, 4P-1, and 4K-1 are shown in Figure 37. The logs were obtained on 6 April 1984 using Geothermal Utilization Division equipment manufactured by Enviro-Labs, Inc., Glendale, Calif.

TABLE 18. Water Analyses, Coso Observation Wells.

Measurements are in parts per million.

Constituent	Coso Well 1	Well 4P-1	Well 4K-1	Coso Well 2
Calcium	45.0	3.2	7.1	28.0
Magnesium	4.6	0.55	0.15	0.01
Sodium	1490.0	26.0	3.4	3100.0
Potassium	125.0	12.0	6.9	400.0
Hydroxide	0.0	0.0	0.0	0.0
Carbonate	0.0	0.0	0.0	32.4
Bicarbonate	218.0	74.5	15.6	140.0
Chloride	2372.0	1.8	15.6	5062.0
Sulfate	60.0	24.0	98.0	135.0
Nitrate	1.8	<0.4	<0.4	2.2
Fluoride	3.5	0.48	0.54	5.6
Iron	0.26	0.24	2.0	0.12
Manganese	1.1	0.02	0.10	0.03
Arsenic	2.5	<0.01	<0.01	<0.01
Copper	0.01	<0.01	<0.01	<0.01
Zinc	0.07	<0.01	0.03	0.15
Total dissolved solids	4490.0	286.0	239.0	9176.0
Mercury	0.0260	0.0002	<0.0002	<0.0002
Nitrite	<0.01	<0.01	<0.01	<0.01
Lithium	10.5	0.01	<0.01	25.0
Silica	110.0	14.0	70.0	200.0
Aluminum	<0.1	<0.1	<0.1	<0.1
Boron	56.0	0.05	0.14	70.0
Phosphate	2.9	0.4	<0.1	1.0
Bromide	4.5	<0.1	<0.1	1.0
Ammonium	<0.2	2.4	3.2	0.3
Electrical conductivity, $K \times 10^6$	8000.0	194.0	270.0	16000.0
pH value	7.8	7.7	6.3	8.2

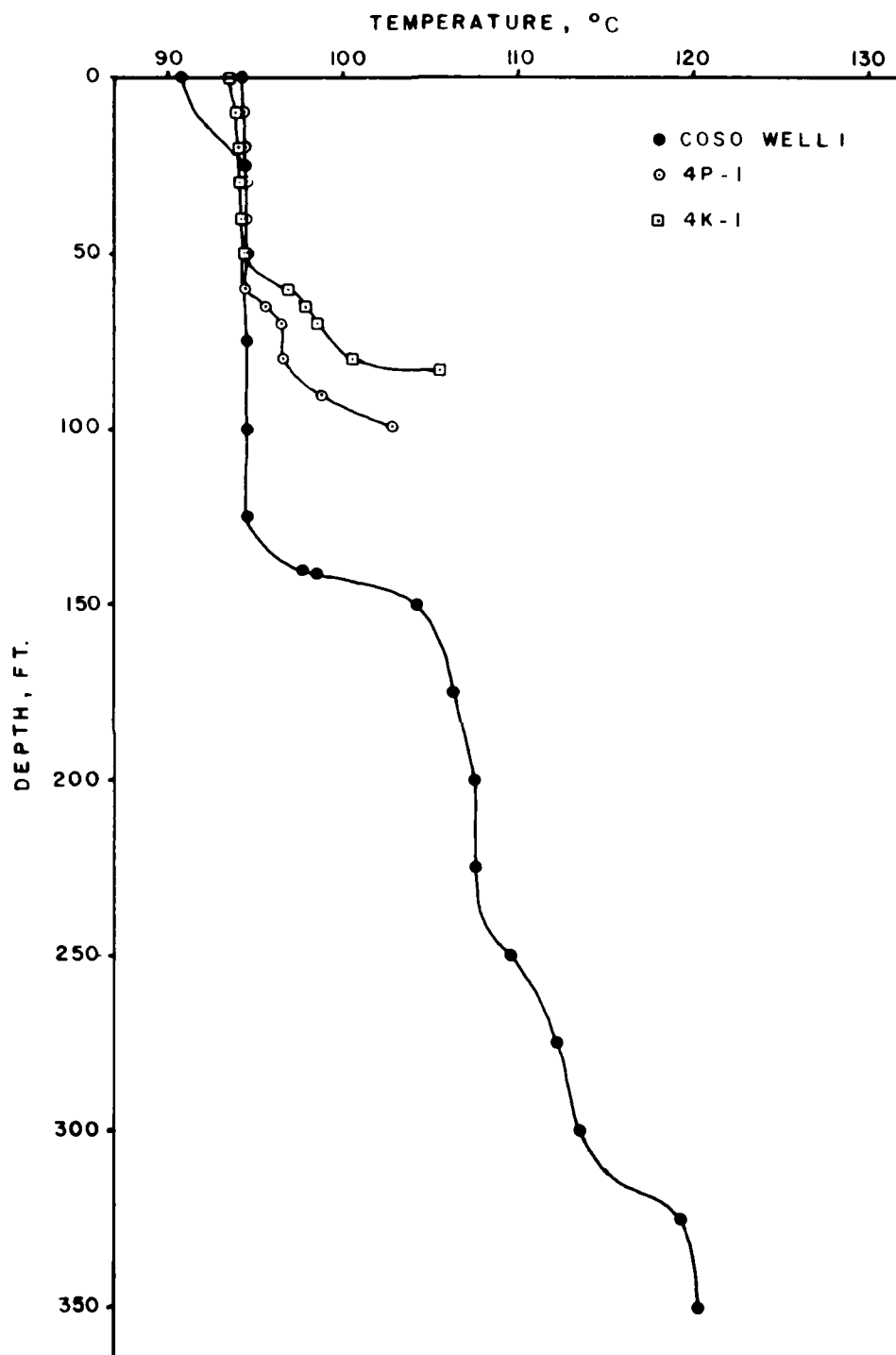


FIGURE 37. Temperature Log Versus Depth, Coso Observation Wells.

SUMMARY

Generally, we believe that the monitoring program is continuing well with relatively few problems. The situation at Devils Kitchen was one of mixed blessings. Although the steam monitoring site was down for a period of time because of the water damage, the development of the new spring has given us some new, valuable information.

Most of the other steam monitoring sites are giving us good information. The quality of data from the Eight-Inch Well site has improved substantially and could probably be further improved with the piping change we have outlined.

The evaporation rate at the south pool, when compared to the anticipated recharge rate for the area, many indicate whether or not recharge is a factor of primary importance in the maintenance of the surface water levels.

REFERENCES

1. Naval Weapons Center. *Coso Monitoring Program, 1978—December 1979*, by C. R. Rodgers, J. R. Neffew, K. J. Danti, and E. M. Edwards. China Lake, Calif., NWC, July 1980. 74 pp. (NWC TP 6195, publication UNCLASSIFIED.)
2. ———. *Coso Monitoring Program, January Through December 1980*, by C. R. Rodgers, E. M. Edwards, and D. L. Bowles. China Lake, Calif., NWC, December 1981, 112 pp. (NWC TP 6314, publication UNCLASSIFIED.)
3. ———. *Coso Monitoring Program, January 1981 Through December 1983*, by S. C. Bjornstad and C. R. Rodgers. China Lake, Calif., NWC, September 1984. 207 pp. (NWC TP 6558, publication UNCLASSIFIED.)
4. *Hydrology*, Oscar E. Meinzer, ed. New York, Dover Publications, Inc., 1942. Pp. 65 and 76.

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Appendix A
DAILY STEAM FLOW DATA

TABLE A-1. Devils Kitchen Site Steam Flow Data, Unfactored.

The conversion factor for this table is 40.23.

Ellipses (...) indicate no data.

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
1-1	91	90	2-1	92	90
1-2	91	90	2-2	90	88
1-3	90	89	2-3	91	89
1-4	...	...	2-4	91	89
1-5	91	90	2-5	91	89
1-6	91	89	2-6	90	88
1-7	91	89	2-7	90	89
1-8	90	89	2-8	91	90
1-9	89	88	2-9	92	90
1-10	91	89	2-10	92	89
1-11	89	88	2-11	90	88
1-12	91	89	2-12	90	89
1-13	...	...	2-13	92	89
1-14	...	...	2-14	91	88
1-15	...	...	2-15	90	88
1-16	...	...	2-16	91	89
1-17	89	88	2-17	89	88
1-18	89	88	2-18	90	88
1-19	...	...	2-19	89	88
1-20	...	...	2-20	90	89
1-21	...	...	2-21	93	91
1-22	...	...	2-22	90	89
1-23	...	...	2-23	91	89
1-24	...	...	2-24	92	90
1-25	...	...	2-25	90	88
1-26	...	...	2-26	89	88
1-27	...	...	2-27	90	89
1-28	...	...	2-28	91	90
1-29	...	...	2-29	91	89
1-30	...	...			
1-31	91	90	3-1	90	89

TABLE A-1. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
3-2	91	90	4-6	91	87
3-3	91	89	4-7	88	86
3-4	91	88	4-8	91	89
3-5	90	88	4-9	89	87
3-6	90	89	4-10	91	90
3-7	90	88	4-11	90	88
3-8	90	89	4-12	90	88
3-9	90	89	4-13	89	88
3-10	91	89	4-14	91	89
3-11	91	89	4-15	91	89
3-12	91	89	4-16	91	89
3-13	91	89	4-17	91	89
3-14	90	89	4-18	91	89
3-15	90	88	4-19	90	88
3-16	90	88	4-20	89	86
3-17	91	87	4-21	89	86
3-18	89	87	4-22	90	88
3-19	90	89	4-23	92	89
3-20	91	89	4-24	92	90
3-21	92	88	4-25	90	88
3-22	89	88	4-26	90	89
3-23	90	88	4-27	89	88
3-24	91	89	4-28	90	88
3-25	91	89	4-29	90	87
3-26	92	88	4-30	91	88
3-27	89	87	5-1	90	89
3-28	90	88	5-2	90	89
3-29	91	88	5-3	91	88
3-30	89	88	5-4	91	89
3-31	91	89	5-5	91	88
4-1	90	88	5-6	89	87
4-2	88	87	5-7	88	86
4-3	89	87	5-8	89	87
4-4	91	89	5-9	91	89
4-5	91	89	5-10	91	89

TABLE A-1. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
5-11	90	88	6-16	89	88
5-12	90	88	6-17	90	88
5-13	90	88	6-18	89	88
5-14	91	89	6-19	90	88
5-15	90	88	6-20	90	88
5-16	89	87	6-21	89	88
5-17	89	87	6-22	89	88
5-18	89	86	6-23	88	87
5-19	89	87	6-24	88	87
5-20	92	89	6-25	89	87
5-21	90	88	6-26	90	88
5-22	89	87	6-27	90	88
5-23	90	88	6-28	89	88
5-24	91	89	6-29	90	88
5-25	89	87	6-30	89	88
5-26	90	88	7-1	89	88
5-27	89	88	7-2	89	88
5-28	89	87	7-3	89	87
5-29	89	87	7-4	88	88
5-30	90	87	7-5	90	88
5-31	90	89	7-6	90	88
6-1	90	88	7-7	90	88
6-2	91	88	7-8	90	88
6-3	90	88	7-9	89	87
6-4	90	89	7-10	89	87
6-5	89	88	7-11	90	87
6-6	90	88	7-12	90	88
6-7	89	87	7-13	89	87
6-8	89	87	7-14	88	86
6-9	91	88	7-15	88	86
6-10	90	88	7-16	89	88
6-11	90	88	7-17	90	89
6-12	90	88	7-18	89	86
6-13	89	88	7-19	89	88
6-14	90	88	7-20	90	88
6-15	88	87			

TABLE A-1. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
7-21	91	89	8-26	91	88
7-22	89	87	8-27	91	88
7-23	88	86	8-28	91	88
7-24	89	88	8-29	92	88
7-25	90	88	8-30	91	88
			8-31	88	73
7-26	90	88			
7-27	89	88	9-1	75	69
7-28	89	88	9-2	74	67
7-29	89	87	9-3	73	67
7-30	89	88	9-4	73	68
7-31	89	88	9-5	73	66
8-1	90	88	9-6	83	67
8-2	89	88	9-7	81	75
8-3	90	88	9-8	81	75
8-4	90	89	9-9	82	76
8-5	89	88	9-10	82	77
8-6	89	87	9-11	79	75
8-7	89	87	9-12	79	74
8-8	90	88	9-13	79	75
8-9	90	88	9-14	81	74
8-10	89	87	9-15	78	75
8-11	89	87	9-16	81	75
8-12	89	87	9-17	78	75
8-13	89	87	9-18	81	75
8-14	88	84	9-19	80	76
8-15	88	87	9-20	81	76
8-16	90	87	9-21	81	75
8-17	89	89	9-22	80	74
8-18	90	88	9-23	79	75
8-19	88	88	9-24	79	74
8-20	...	...	9-25		
			through		
8-21	...	...	12-13		
8-22	...	...			
8-23	...	...	12-14	76	76
8-24	92	90	12-15	78	76
8-25	90	89	12-16	79	76

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TABLE A-1. (Contd.)

1984			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
12-17	79	78	1-21	76	76
12-18	77	72	1-22	78	76
12-19	79	77	1-23	76	76
12-20	79	78	1-24	77	76
12-21	79	78	1-25	77	75
12-22	81	79	1-26	79	77
12-23	81	81	1-27	38	35
12-24	81	79	1-28	42	38
12-25	82	81	1-29	40	35
12-26	83	81	1-30	38	33
12-27	83	81	1-31	39	34
12-28	79	79	2-1	40	34
12-29	77	73	2-2	39	37
12-30	75	71	2-3	39	37
12-31	71	69	2-4	36	33
1985			2-5	38	36
1-1	69	63	2-6	38	36
1-2	66	60	2-7	38	35
1-3	62	57	2-8	39	37
1-4	58	53	2-9	40	34
1-5	54	50	2-10	34	31
1-6	52	49	2-11	70	69
1-7	48	45	2-12	70	69
1-8	43	39	2-13	70	67
1-9	43	36	2-14	69	67
1-10	41	35	2-15	71	69
1-11	43	35	2-16	71	68
1-12	39	35	2-17	71	68
1-13	44	37	2-18	69	67
1-14	75	37	2-19	70	70
1-15	76	75	2-20	...	...
1-16	74	74	2-21	39	32
1-17	74	74	2-22	41	32
1-18	76	75	2-23	...	...
1-19	76	75	2-24	32	15
1-20	76	75	2-25	78	76

TABLE A-1. (Contd.)

1985			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
2-26	79	77	4-1	88	86
2-27	78	76	4-2	88	86
2-28	88	77	4-3	89	86
			4-4	87	85
3-1	96	89	4-5	87	84
3-2	98	89			
3-3	92	87	4-6	88	84
3-4	94	88	4-7	88	84
3-5	90	81	4-8	87	85
			4-9	89	85
3-6	93	89	4-10	88	84
3-7	94	91			
3-8	96	92	4-11	86	83
3-9	97	88	4-12	88	82
3-10	92	87	4-13	91	83
			4-14	93	84
3-11	...	...	4-15	89	84
3-12	97	89			
3-13	97	91	4-16	88	84
3-14	98	91	4-17	87	84
3-15	...	...	4-18	90	83
			4-19	93	84
3-16	...	...	4-20	89	85
3-17	48	12			
3-18	95	42	4-21	93	84
3-19	98	95	4-22	96	84
3-20	99	85	4-23	99	85
			4-24	100	88
3-21	95	87	4-25	92	88
3-22	92	85			
3-23	89	84	4-26	90	84
3-24	100	85	4-27	97	85
3-25	93	88	4-28	100	87
			4-29	89	81
3-26	89	86	4-30	92	82
3-27	88	87			
3-28	87	86	5-1	93	82
3-29	86	85	5-2	90	82
3-30	86	85	5-3	90	82
3-31	87	84	5-4	89	82
			5-5	88	82

TABLE A-1. (Contd.)

1985			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
5-6	85	81	6-11	92	81
5-7	84	81	6-12	92	81
5-8	82	80	6-13	93	81
5-9	83	81	6-14	92	81
5-10	82	80	6-15	92	82
5-11	83	79	6-16	93	82
5-12	86	80	6-17	92	80
5-13	89	81	6-18	93	81
5-14	94	83	6-19	92	81
5-15	93	83	6-20	89	81
5-16	90	82	6-21	91	80
5-17	94	83	6-22	90	81
5-18	97	85	6-23	90	82
5-19	98	85	6-24	88	82
5-20	90	82	6-25	88	81
5-21	88	81	6-26	90	81
5-22	90	81	6-27	91	81
5-23	89	82	6-28	91	81
5-24	90	82	6-29	84	81
5-25	89	82	6-30	91	81
5-26	86	82	7-1	91	81
5-27	85	80	7-2	92	81
5-28	86	80	7-3	93	81
5-29	84	81	7-4	93	80
5-30	83	80	7-5	90	80
5-31	85	81	7-6	93	81
6-1	86	80	7-7	92	81
6-2	85	82	7-8	92	80
6-3	84	80	7-9	89	80
6-4	91	82	7-10	92	81
6-5	91	82	7-11	92	81
6-6	91	81	7-12	92	82
6-7	93	81	7-13	93	82
6-8	93	82	7-14	91	81
6-9	93	82	7-15	91	81
6-10	93	81			

TABLE A-1. (Contd.)

1985			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
7-16	91	81	8-21	89	81
7-17	91	81	8-22	90	81
7-18	88	81	8-23	92	81
7-19	86	81	8-24	92	81
7-20	88	81	8-25	92	82
7-21	89	82	8-26	91	81
7-22	92	82	8-27	91	81
7-23	92	82	8-28	92	82
7-24	91	81	8-29	91	82
7-25	91	81	8-30	92	81
7-26	91	81	8-31	92	82
7-27	92	82	9-1	88	82
7-28	92	82	9-2	89	82
7-29	90	82	9-3	83	82
7-30	90	81	9-4	81	79
7-31	89	81	9-5	81	78
8-1	89	81	9-6	81	78
8-2	90	81	9-7	81	78
8-3	91	82	9-8	82	79
8-4	91	82	9-9	82	79
8-5	91	81	9-10	81	77
8-6	91	81	9-11	80	76
8-7	91	81	9-12	81	76
8-8	92	81	9-13	83	79
8-9	91	80	9-14	86	81
8-10	92	82	9-15	85	80
8-11	89	82	9-16	85	80
8-12	90	81	9-17	83	80
8-13	90	82	9-18	80	76
8-14	91	82	9-19	81	76
8-15	91	82	9-20	81	77
8-16	90	82	9-21	84	79
8-17	88	81	9-22	85	81
8-18	90	82	9-23	82	81
8-19	89	82	9-24	87	82
8-20	90	82	9-25	88	81

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TABLE A-1. (Contd.)

1985			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
9-26	88	81	9-29	86	83
9-27	86	81	9-30	83	83
9-28	87	82			

TABLE A-2. Coso Corrosion Array Site
Steam Flow Data, Unfactored.

The conversion factor for the 1984 data is 120.00; for 1985, 82.99.
Ellipses (...) indicate no data.

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
1-1	...	...	2-1	59	53
1-2	...	...	2-2	56	53
1-3	...	...	2-3	56	52
1-4	...	...	2-4	57	52
1-5	60	56	2-5	57	52
1-6	58	54	2-6	56	51
1-7	58	54	2-7	56	51
1-8	57	53	2-8	58	53
1-9	57	51	2-9	60	54
1-10	56	51	2-10	57	54
1-11	55	52	2-11	53	50
1-12	56	53	2-12	55	49
1-13	62	56	2-13	59	52
1-14	58	53	2-14	56	52
1-15	54	51	2-15	55	50
1-16	58	53	2-16	56	52
1-17	54	51	2-17	54	50
1-18	53	50	2-18	54	49
1-19	56	51	2-19	55	50
1-20	53	49	2-20	55	49
1-21	57	52	2-21	62	53
1-22	56	52	2-22	58	55
1-23	...	...	2-23	58	53
1-24	...	...	2-24	61	55
1-25	...	...	2-25	57	53
1-26	...	...	2-26	55	51
1-27	...	...	2-27	55	50
1-28	...	...	2-28	60	53
1-29	...	...	2-29	60	56
1-30	58	54			
1-31	57	52			

TABLE A-2. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
3-1	59	56	4-6	60	55
3-2	60	55	4-7	58	53
3-3	59	54	4-8	60	56
3-4	59	52	4-9	58	53
3-5	54	51	4-10	64	55
3-6	57	51	4-11	61	56
3-7	57	51	4-12	62	55
3-8	57	52	4-13	61	56
3-9	58	54	4-14	62	55
3-10	59	53	4-15	63	56
3-11	60	55	4-16	65	58
3-12	60	54	4-17	65	60
3-13	60	53	4-18	64	58
3-14	58	54	4-19	61	59
3-15	56	52	4-20	59	55
3-16	53	50	4-21	60	53
3-17	54	50	4-22	62	55
3-18	53	47	4-23	66	57
3-19	57	49	4-24	68	62
3-20	59	53	4-25	63	61
3-21	63	56	4-26	62	59
3-22	56	53	4-27	59	56
3-23	57	52	4-28	60	55
3-24	58	55	4-29	61	55
3-25	61	55	4-30	63	57
3-26	65	59	5-1	64	58
3-27	58	54	5-2	64	59
3-28	58	51	5-3	65	59
3-29	63	58	5-4	67	61
3-30	58	55	5-5	66	60
3-31	58	56	5-6	62	57
4-1	60	56	5-7	57	53
4-2	57	53	5-8	61	52
4-3	58	52	5-9	66	57
4-4	61	54	5-10	67	60
4-5	60	56			

TABLE A-2. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
5-11	66	60	6-16	62	54
5-12	64	58	6-17	62	57
5-13	63	58	6-18	63	57
5-14	65	59	6-19	63	57
5-15	63	59	6-20	63	57
5-16	62	55	6-21	63	57
5-17	63	56	6-22	64	57
5-18	62	56	6-23	64	57
5-19	64	56	6-24	60	57
5-20	68	60	6-25	65	56
5-21	64	61	6-26	68	60
5-22	65	59	6-27	71	62
5-23	66	58	6-28	71	64
5-24	66	60	6-29	70	64
5-25	64	59	6-30	70	63
5-26	66	58	7-1	70	63
5-27	65	59	7-2	69	65
5-28	64	58	7-3	70	65
5-29	62	56	7-4	73	65
5-30	62	56	7-5	75	68
5-31	64	56	7-6	75	69
6-1	63	57	7-7	75	68
6-2	63	57	7-8	75	68
6-3	64	58	7-9	75	68
6-4	63	58	7-10	73	67
6-5	63	57	7-11	74	66
6-6	65	58	7-12	75	68
6-7	61	56	7-13	72	67
6-8	61	56	7-14	72	66
6-9	64	56	7-15	68	62
6-10	62	59	7-16	68	62
6-11	63	56	7-17	73	64
6-12	63	57	7-18	69	64
6-13	61	57	7-19	69	63
6-14	62	56	7-20	70	64
6-15	58	56			

TABLE A-2. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
7-21	71	65	8-26	62	59
7-22	68	61	8-27	61	56
7-23	65	60	8-28	59	56
7-24	67	59	8-29	60	56
7-25	69	60	8-30	64	59
			8-31	66	65
7-26	69	63			
7-27	67	62	9-1	65	61
7-28	66	59	9-2	62	60
7-29	66	58	9-3	64	60
7-30	66	61	9-4	64	61
7-31	67	60	9-5	67	63
8-1	68	61	9-6	71	67
8-2	66	60	9-7	71	67
8-3	67	59	9-8	68	63
8-4	68	60	9-9	68	65
8-5	67	61	9-10	72	69
8-6	66	58	9-11	73	69
8-7	67	58	9-12	69	66
8-8	70	60	9-13	66	63
8-9	70	63	9-14	67	64
8-10	65	59	9-15	67	66
8-11	64	57	9-16	66	64
8-12	65	57	9-17	66	62
8-13	65	59	9-18	65	62
8-14	64	58	9-19	67	64
8-15	59	51	9-20	75	67
8-16	57	50	9-21	75	72
8-17	...	...	9-22	73	71
8-18	...	...	9-23	73	71
8-19	...	...	9-24	67	65
8-20	...	...	9-25	67	63
8-21	..	...	9-26	66	64
8-22	...	...	9-27	63	60
8-23	...	...	9-28	64	59
8-24	...	...	9-29	66	61
8-25	66	60	9-30	73	66

TABLE A-2. (Contd.)

1984			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
10-1	71	68	1-1	57	51
10-2	66	66	1-2	56	49
10-3	...	...	1-3	58	51
10-4	...	...	1-4	60	51
10-5	...	...	1-5	65	57
10-6	...	...	1-6	68	63
10-7	...	...	1-7	72	67
10-8	...	...	1-8	72	70
10-9	69	67	1-9	69	66
10-10	69	66	1-10	65	61
10-11	71	65	1-11	64	59
10-12	62	59	1-12	63	57
10-13	67	57	1-13	68	62
10-14	72	67	1-14	67	60
10-15	71	64	1-15	71	63
10-16	76	64	1-16	65	62
10-17	79	57	1-17	67	58
10-18	60	52	1-18	70	64
10-19	68	61	1-19	70	68
10-20	69	65	1-20	71	66
10-21	66	62	1-21	72	69
10-22	64	58	1-22	70	67
10-23	...	...	1-23	69	65
through			1-24	67	63
12-19	...	...	1-25	66	61
12-20	56	52	1-26	71	64
12-21	56	51	1-27	69	65
12-22	55	48	1-28	72	67
12-23	63	54	1-29	72	67
12-24	63	59	1-30	69	66
12-25	67	60	1-31	70	64
12-26	68	64	2-1	74	64
12-27	70	68	2-2	73	71
12-28	66	64	2-3	72	69
12-29	58	52	2-4	66	65
12-30	61	53	2-5	66	61
12-31	61	55			

TABLE A-2. (Contd.)

1985			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
2-6	67	63	3-11	71	63
2-7	67	61	3-12	68	65
2-8	72	66	3-13	68	63
2-9	72	62	3-14	70	65
2-10	60	55	3-15	69	63
2-11	61	52	3-16	66	61
2-12	69	61	3-17	68	59
2-13	67	58	3-18	71	63
2-14	65	62	3-19	67	62
2-15	69	67	3-20	68	59
2-16	70	69	3-21	70	65
2-17	71	64	3-22	68	61
2-18	69	66	3-23	67	60
2-19	77	71	3-24	71	64
2-20	79	77	3-25	73	66
2-21	75	68	3-26	72	63
2-22	69	62	3-27	71	67
2-23	65	61	3-28	73	62
2-24	67	57	3-29	60	51
2-25	68	64	3-30	59	49
2-26	71	64	3-31	60	53
2-27	68	64	4-1	60	55
2-28	67	61	4-2	64	55
3-1	70	63	4-3	69	63
3-2	78	72	4-4	69	66
3-3	70	63	4-5	67	64
3-4	72	64	4-6	65	63
3-5	69	65	4-7	64	59
3-6	70	65	4-8	68	60
3-7	69	59	4-9	...	...
3-8	64	58	4-10	...	...
3-9	66	59	4-11	...	...
3-10	68	63	4-12	...	...

TABLE A-2. (Contd.)

1985			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
4-13	...	...	5-16	73	71
4-14	...	...	5-17	73	69
4-15	71	67	5-18	76	73
4-16	71	66	5-19	76	74
4-17	70	64	5-20	76	73
4-18	69	66	5-21	71	70
4-19	70	62	5-22	72	68
4-20	72	64	5-23	73	67
4-21	69	63	5-24	75	70
4-22	63	61	5-25	78	75
4-23	62	55	5-26	79	77
4-24	67	59	5-27	79	76
4-25	70	60	5-28	77	74
4-26	67	60	5-29	78	76
4-27	62	57	5-30	77	74
4-28	62	56	5-31	79	77
4-29	60	56	6-1	78	76
4-30	62	58	6-2	80	77
5-1	64	58	6-3	76	76
5-2	64	60	6-4	74	73
5-3	67	62	6-5	74	70
5-4	68	64	6-6	72	68
5-5	68	65	6-7	74	68
5-6	68	64	6-8	77	72
5-7	68	63	6-9	78	74
5-8	69	63	6-10	77	72
5-9	74	68	6-11	76	70
5-10	73	71	6-12	77	71
5-11	73	67	6-13	78	75
5-12	71	68	6-14	78	74
5-13	68	66	6-15	77	73
5-14	75	70	6-16	76	73
5-15	74	72	6-17	75	70

TABLE A-2. (Contd.)

1985			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
6-18	76	70	7-21	72	67
6-19	77	73	7-22	71	67
6-20	79	76	7-23	72	67
6-21	76	73	7-24	71	67
6-22	74	71	7-25	69	64
6-23	77	72	7-26	69	63
6-24	79	76	7-27	70	64
6-25	74	73	7-28	72	66
6-26	71	67	7-29	73	69
6-27	72	66	7-30	71	68
6-28	74	68	7-31	70	67
6-29	73	71	8-1	69	66
6-30	72	68	8-2	69	63
7-1	68	68	8-3	69	63
7-2	...	...	8-4	69	64
7-3	...	...	8-5	70	64
7-4	...	...	8-6	69	64
7-5	...	...	8-7	71	64
7-6	...	...	8-8	72	67
7-7	...	...	8-9	71	65
7-8	72	67	8-10	72	66
7-9	71	68	9-11	70	67
7-10	72	67	8-12	69	65
7-11	73	67	8-13	70	65
7-12	75	68	8-14	71	65
7-13	74	69	8-15	72	66
7-14	73	68	8-16	70	67
7-15	73	68	8-17	69	66
7-16	72	69	8-18	69	64
7-17	71	67	8-19	69	64
7-18	69	66	8-20	69	65
7-19	70	66	8-21	67	63
7-20	71	66	8-22	67	61

TABLE A-2. (Contd.)

1985			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
8-23	69	62	9-11	70	68
8-24	70	63	9-12	65	59
8-25	69	64	9-13	64	62
8-26	68	64	9-14	67	66
8-27	68	63	9-15	70	66
8-28	69	64	9-16	72	67
8-29	70	65	9-17	74	69
8-30	70	63	9-18	73	72
8-31	70	65	9-19	65	60
			9-20	61	58
9-1	72	67			
9-2	74	70	9-21	67	60
9-3	72	72	9-22	67	65
9-4	73	70	9-23	66	61
9-5	71	70	9-24	67	64
			9-25	66	63
9-6	70	67			
9-7	69	67	9-26	68	63
9-8	68	66	9-27	70	66
9-9	71	66	9-28	67	66
9-10	74	67	9-29	66	63
			9-30	65	65

TABLE A-3. Two-Inch Well Steam Flow Data, Unfactored.

The conversion factor for this table is 15.7.

Ellipses (...) indicate no data.

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
1-1	...	...	2-1	91	70
1-2	...	...	2-2	85	78
1-3	...	...	2-3	90	75
1-4	...	...	2-4	89	76
1-5	100	81	2-5	91	77
1-6	...	...	2-6	93	77
1-7	...	...	2-7	91	80
1-8	...	...	2-8	90	82
1-9	...	...	2-9	94	83
1-10	98	71	2-10	91	83
1-11	...	...	2-11	85	83
1-12	...	...	2-12	90	83
1-13	...	...	2-13	91	84
1-14	...	...	2-14	91	81
1-15	...	...	2-15	88	82
1-16	...	...	2-16	90	84
1-17	...	...	2-17	85	82
1-18	89	64	2-18	87	83
1-19	...	...	2-19	85	83
1-20	...	...	2-20	86	82
1-21	...	...	2-21	93	84
1-22	...	...	2-22	88	84
1-23	...	...	2-23	87	84
1-24	86	64	2-24	98	84
1-25	90	78	2-25	86	83
1-26	84	73	2-26	85	82
1-27	91	66	2-27	84	81
1-28	...	...	2-28	88	83
1-29	...	...	2-29	88	84
1-30	...	...			
1-31	...	...			

TABLE A-3. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
3-1	88	83	4-6	90	85
3-2	91	84	4-7	89	83
3-3	89	84	4-8	90	84
3-4	87	84	4-9	88	83
3-5	85	81	4-10	93	84
3-6	87	83	4-11	91	85
3-7	87	82	4-12	91	85
3-8	88	83	4-13	91	85
3-9	88	83	4-14	93	85
3-10	89	83	4-15	92	86
3-11	90	84	4-16	93	88
3-12	89	85	4-17	93	88
3-13	89	84	4-18	92	87
3-14	88	84	4-19	90	87
3-15	88	84	4-20	87	82
3-16	87	82	4-21	88	82
3-17	86	82	4-22	90	84
3-18	87	81	4-23	94	85
3-19	88	82	4-24	96	89
3-20	91	84	4-25	90	87
3-21	96	87	4-26	91	86
3-22	89	85	4-27	87	85
3-23	88	83	4-28	92	84
3-24	91	85	4-29	90	84
3-25	91	86	4-30	92	85
3-26	93	86	5-1	92	86
3-27	88	83	5-2	93	87
3-28	89	82	5-3	95	87
3-29	90	84	5-4	96	90
3-30	87	84	5-5	95	89
3-31	89	84	5-6	93	88
4-1	90	84	5-7	90	87
4-2	88	83	5-8	92	86
4-3	89	83	5-9	96	89
4-4	91	84	5-10	96	91
4-5	91	85			

TABLE A-3. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
5-11	95	91	6-16	93	88
5-12	94	90	6-17	94	89
5-13	94	90	6-18	94	90
5-14	95	91	6-19	94	89
5-15	93	88	6-20	93	89
5-16	92	87	6-21	92	88
5-17	94	88	6-22	92	88
5-18	92	88	6-23	92	88
5-19	93	89	6-24	90	88
5-20	97	90	6-25	95	88
5-21	96	93	6-26	94	89
5-22	93	91	6-27	94	89
5-23	95	90	6-28	95	90
5-24	97	91	6-29	94	89
5-25	94	90	6-30	94	89
5-26	95	91	7-1	93	88
5-27	94	91	7-2	94	89
5-28	93	90	7-3	93	89
5-29	93	88	7-4	95	89
5-30	94	89	7-5	96	91
5-31	95	89	7-6	96	91
6-1	93	90	7-7	95	89
6-2	95	88	7-8	93	88
6-3	94	90	7-9	91	88
6-4	95	90	7-10	92	87
6-5	93	89	7-11	93	88
6-6	96	90	7-12	94	89
6-7	91	86	7-13	92	89
6-8	92	87	7-14	91	85
6-9	93	87	7-15	89	85
6-10	92	89	7-16	90	85
6-11	93	87	7-17	94	88
6-12	93	88	7-18	92	88
6-13	92	88	7-19	92	88
6-14	93	88	7-20	93	89
6-15	91	88			

TABLE A-3. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
7-21	94	90	8-26	95	62
7-22	92	86	8-27	89	61
7-23	89	86	8-28	94	61
7-24	91	86	8-29	93	61
7-25	93	87	8-30	93	64
7-26	82	76	8-31	100	60
7-27	81	77	9-1	98	59
7-28	82	77	9-2	100	64
7-29	82	80	9-3	98	63
7-30	92	81	9-4	98	77
7-31	94	82	9-5	94	62
8-1	94	89	9-6	97	64
8-2	92	88	9-7	93	59
8-3	93	87	9-8	91	66
8-4	94	89	9-9	89	60
8-5	94	89	9-10	97	61
8-6	92	88	9-11	75	62
8-7	92	87	9-12	100	61
8-8	94	88	9-13	97	64
8-9	96	90	9-14	99	64
8-10	92	89	9-15	100	63
8-11	92	87	9-16	95	78
8-12	93	88	9-17	100	68
8-13	93	88	9-18	87	43
8-14	93	86	9-19	86	51
8-15	88	86	9-20	87	75
8-16	89	86	9-21	93	72
8-17	...	...	9-22	90	68
8-18	...	...	9-23	94	78
8-19	...	...	9-24	95	82
8-20	77	67	9-25	94	75
8-21	80	55	9-26	87	46
8-22	78	55	9-27	76	51
8-23	77	52	9-28	77	51
8-24	70	50	9-29	71	51
8-25	87	57	9-30	78	61

TABLE A-3. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
10-1	85	65	12-30	65	45
10-2	65	54	12-31	65	11
10-3	...	...	1985		
10-4	...	...	1-1	51	9
10-5	...	...	1-2	58	4
10-6	...	...	1-3	54	6
10-7	...	...	1-4	55	4
10-8	...	...	1-5	52	3
10-9	65	47	1-6	55	24
10-10	69	50	1-7	68	50
10-11	72	54	1-8	68	54
10-12	71	44	1-9	63	45
10-13	68	41	1-10	67	38
10-14	73	49	1-11	67	5
10-15	70	55	1-12	65	47
10-16	74	64	1-13	52	27
10-17	72	39	1-14	65	16
10-18	73	56	1-15	57	9
10-19	77	59	1-16	64	25
10-20	73	56	1-17	58	8
10-21	72	61	1-18	61	6
10-22	70	58	1-19	56	5
10-23	...	...	1-20	53	6
through	...	...	1-21	52	33
12-19	...	...	1-22	58	43
12-20	100	61	1-23	64	45
12-21	62	42	1-24	59	17
12-22	91	25	1-25	60	35
12-23	88	14	1-26	62	37
12-24	51	12	1-27	82	48
12-25	100	14	1-28	84	50
12-26	100	36	1-29	83	50
12-27	69	62	1-30	82	41
12-28	76	51	1-31	80	50
12-29	64	53			

TABLE A-3. (Contd.)

1985			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
2-1	96	50	3-11	60	49
2-2	99	47	3-12	65	50
2-3	68	43	3-13	62	48
2-4	59	38	3-14	72	49
2-5	...	...	3-15	63	52
2-6	...	...	3-16	57	41
2-7	61	25	3-17	54	40
2-8	71	36	3-18	68	50
2-9	65	46	3-19	69	47
2-10	62	44	3-20	56	46
2-11	60	33	3-21	62	50
2-12	55	11	3-22	58	46
2-13	62	6	3-23	53	36
2-14	62	6	3-24	59	44
2-15	64	6	3-25	65	50
2-16	64	14	3-26	74	52
2-17	...	...	3-27	83	76
2-18	...	...	3-28	80	73
2-19	60	13	3-29	72	66
2-20	89	54	3-30	75	48
2-21	89	86	3-31	71	52
2-22	97	59	4-1	76	48
2-23	76	60	4-2	76	50
2-24	74	52	4-3	79	52
2-25	73	62	4-4	85	57
2-26	73	59	4-5	83	55
2-27	72	56	4-6	79	52
2-28	71	61	4-7	63	51
3-1	71	51	4-8	62	49
3-2	95	55	4-9	87	54
3-3	100	79	4-10	93	53
3-4	75	50	4-11	88	51
3-5	72	50	4-12	84	48
3-6	100	62	4-13	84	45
3-7	74	50	4-14	73	44
3-8	59	50	4-15	88	46
3-9	60	52	4-16	91	61
3-10	60	50	4-17	90	52

TABLE A-3. (Contd.)

1985			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
4-18	90	77	5-21	80	76
4-19	91	77	5-22	82	75
4-20	86	84	5-23	82	76
4-21	85	79	5-24	83	77
4-22	83	76	5-25	85	80
4-23	80	70	5-26	84	81
4-24	84	71	5-27	83	78
4-25	86	80	5-28	83	77
4-26	80	79	5-29	84	79
4-27	80	76	5-30	83	78
4-28	79	70	5-31	83	80
4-29	78	73	6-1	82	78
4-30	82	70	6-2	86	80
5-1	84	69	6-3	82	78
5-2	82	75	6-4	82	76
5-3	84	78	6-5	81	76
5-4	84	79	6-6	80	75
5-5	84	78	6-7	82	76
5-6	83	79	6-8	84	77
5-7	82	77	6-9	85	79
5-8	81	77	6-10	83	78
5-9	85	78	6-11	81	76
5-10	85	79	6-12	82	76
5-11	83	78	6-13	85	79
5-12	82	77	6-14	84	79
5-13	81	75	6-15	84	79
5-14	87	79	6-16	84	79
5-15	83	79	6-17	81	77
5-16	79	77	6-18	84	77
5-17	82	76	6-19	85	79
5-18	86	79	6-20	83	80
5-19	86	81	6-21	82	78
5-20	84	78	6-22	80	77

TABLE A-3. (Contd.)

1985			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
6-23	85	78	7-26	85	77
6-24	88	81	7-27	84	78
6-25	81	79	7-28	86	79
6-26	79	74	7-29	84	81
6-27	79	75	7-30	83	80
			7-31	82	79
6-28	83	76			
6-29	80	77	8-1	81	77
6-30	80	76	8-2	80	77
			8-3	82	78
7-1	80	76	8-4	83	79
7-2	80	77	8-5	82	78
7-3	83	76			
7-4	82	77	8-6	83	79
7-5	84	78	8-7	83	78
			8-8	85	80
7-6	84	79	8-9	82	79
7-7	84	77	8-10	85	80
7-8	86	77			
7-9	83	75	8-11	83	80
7-10	83	76	8-12	83	78
			8-13	83	79
7-11	85	76	8-14	84	79
7-12	83	78	8-15	85	80
7-13	84	78			
7-14	83	78	8-16	84	81
7-15	83	76	8-17	83	79
			8-18	82	79
7-16	82	75	8-19	83	79
7-17	85	78	8-20	83	79
7-18	81	77			
7-19	80	77	8-21	81	78
7-20	84	77	8-22	81	78
			8-23	83	78
7-21	85	79	8-24	83	79
7-22	83	79	8-25	84	80
7-23	84	79			
7-24	86	80	8-26	83	79
7-25	83	78	8-27	83	78

TABLE A-3. (Contd.)

1985			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
8-28	84	79	9-16	78	75
8-29	83	79	9-17	79	74
8-30	83	79	9-18	78	77
8-31	84	80	9-19	80	76
9-1	85	81	9-21	81	77
9-2	87	83	9-22	79	75
9-3	85	83	9-23	81	77
9-4	82	80	9-24	81	77
9-5	82	79	9-25	82	75
9-6	83	80	9-26	80	75
9-7	81	78	9-27	79	74
9-8	84	79	9-28	79	74
9-9	82	73	9-29	81	75
9-10	78	73	9-30	80	76
9-11	80	75			
9-12	81	79			
9-13	81	75			
9-14	82	74			
9-15	79	74			

TABLE A-4. Eight-Inch Well Steam Flow Data, Unfactored.

The conversion factor for this table is 20.56.

Ellipses (...) indicate no data.

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
1-1	...	...	3-1	60	21
1-2	...	...	3-2	58	21
1-3	...	...	3-3	60	42
1-4	...	...	3-4	65	48
1-5	69	54	3-5	62	19
1-6	69	53	3-6	50	10
1-7	69	52	3-7	60	20
1-8	73	60	3-8	62	38
1-9	73	54	3-9	62	35
1-10	75	58	3-10	61	31
1-11	80	68	3-11	63	41
1-12	86	72	3-12	62	26
1-13	89	77	3-13	69	32
1-14	91	78	3-14	66	41
1-15	91	76	3-15	65	54
1-16	92	85	3-16	64	46
1-17	96	84	3-17	58	0
1-18	100	93	3-18	57	25
1-19	100	92	3-19	66	49
1-20	...	...	3-20	71	43
through					
2-21	...	...	3-21	73	53
			3-22	76	44
2-22	68	60	3-23	61	18
2-23	73	59	3-24	66	25
2-24	73	44	3-25	74	46
2-25	62	53			
2-26	61	38	3-26	73	62
			3-27	69	40
2-27	63	43	3-28	58	10
2-28	63	38	3-29	79	39
2-29	63	33	3-30	74	58
			3-31	70	36

TABLE A-4. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
4-1	59	34	5-6	96	75
4-2	65	23	5-7	95	80
4-3	70	46	5-8	88	70
4-4	82	56	5-9	93	73
4-5	79	59	5-10	94	71
4-6	77	68	5-11	94	69
4-7	75	47	5-12	83	64
4-8	83	63	5-13	75	65
4-9	74	38	5-14	83	74
4-10	88	54	5-15	81	44
4-11	88	60	5-16	64	52
4-12	85	53	5-17	80	53
4-13	84	56	5-18	80	59
4-14	87	30	5-19	73	40
4-15	85	0	5-20	72	55
4-16	88	0	5-21	73	67
4-17	58	18	5-22	74	46
4-18	65	0	5-23	59	41
4-19	60	0	5-24	58	42
4-20	10	0	5-25	57	46
4-21	47	0	5-26	55	30
4-22	77	20	5-27	50	15
4-23	93	32	5-28	43	0
4-24	96	48	5-29	52	25
4-25	69	0	5-30	63	38
4-26	1	0	5-31	59	28
4-27	0	0	6-1	63	42
4-28	54	0	6-2	69	0
4-29	69	0	6-3	75	48
4-30	82	20	6-4	62	38
5-1	100	49	6-5	57	0
5-2	100	64	6-6	82	0
5-3	100	77	6-7	42	0
5-4	100	82	6-8	48	0
5-5	98	67	6-9	54	0
			6-10	83	0

TABLE A-4. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
6-11	83	34	7-16	74	65
6-12	93	65	7-17	82	66
6-13	88	64	7-18	72	48
6-14	86	66	7-19	73	59
6-15	85	73	7-20	85	59
6-16	94	65	7-21	85	68
6-17	...	...	7-22	82	64
6-18	...	...	7-23	75	60
6-19	81	62	7-24	73	49
6-20	81	65	7-25	82	51
6-21	79	64	7-26	78	63
6-22	78	59	7-27	77	69
6-23	98	54	7-28	82	67
6-24	92	82	7-29	72	63
6-25	100	80	7-30	72	53
6-26	100	86	7-31	76	66
6-27	100	94	8-1	72	61
6-28	100	79	8-2	65	50
6-29	79	64	8-3	69	41
6-30	69	55	8-4	74	54
7-1	73	48	8-5	74	50
7-2	78	53	8-6	60	39
7-3	78	61	8-7	75	37
7-4	85	59	8-8	74	44
7-5	82	64	8-9	72	50
7-6	85	66	8-10	64	50
7-7	82	62	8-11	67	40
7-8	83	60	8-12	61	42
7-9	83	58	8-13	...	...
7-10	78	63	8-14	...	...
7-11	79	61	8-15	...	...
7-12	84	71	8-16	...	...
7-13	80	69	8-17	...	...
7-14	81	63	8-18	...	...
7-15	78	62	8-19	...	...
			8-20	8	8

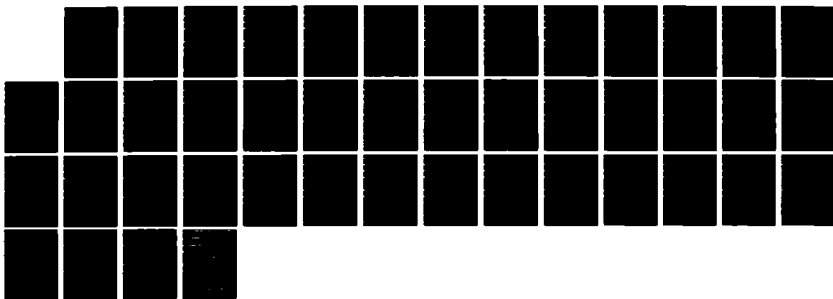
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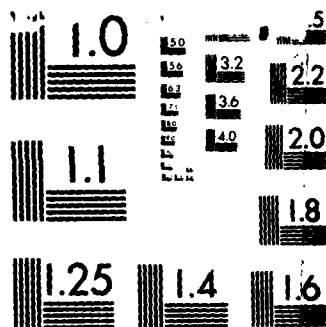
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TABLE A-4. (Contd.)

1984			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
8-21	4	4	3-16	83	74
8-22	5	5	3-17	84	73
8-23	7	7	3-18	86	76
8-24	...	...	3-19	76	66
8-25	...	...	3-20	80	65
8-26	...	...	3-21	83	62
8-27	36	6	3-22	77	59
8-28	48	5	3-23	77	59
8-29	57	6	3-24	87	42
8-30	66	5	3-25	87	42
8-31	67	8	3-26	82	32
9-1	50	9	3-27	72	49
9-2	53	8	3-28	...	...
9-3	62	7	through	...	...
9-4	60	5	4-28	...	...
9-5	...	...	4-29	63	53
through	...	...	4-30	66	52
12-31	...	...			
1985			5-1	63	51
1-1	...	...	5-2	62	48
through	...	...	5-3	79	51
2-28	...	...	5-4	65	50
3-1	72	30	5-5	66	51
3-2	72	30	5-6	65	52
3-3	78	35	5-7	67	52
3-4	82	51	5-8	65	53
3-5	87	77	5-9	62	52
3-6	85	78	5-10	81	46
3-7	83	71	5-11	...	...
3-8	79	71	5-12	...	...
3-9	85	76	5-13	...	...
3-10	87	80	5-14	...	...
3-11	89	81	5-15	...	...
3-12	85	79	5-16	...	...
3-13	85	78	5-17	...	...
3-14	88	79	5-18	...	...
3-15	87	78	5-19	...	...
			5-20	100	54

TABLE A-4. (Contd.)

1985			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
5-21	99	40	6-26	91	66
5-22	93	64	6-27	93	67
5-23	95	67	6-28	96	71
5-24	91	72	6-29	94	72
5-25	95	75	6-30	92	62
5-26	97	73	7-1	93	64
5-27	95	68	7-2	95	67
5-28	98	59	7-3	96	66
5-29	96	81	7-4	96	63
5-30	97	68	7-5	96	67
5-31	100	72	7-6	98	55
6-1	97	69	7-7	94	68
6-2	100	77	7-8	93	60
6-3	95	76	7-9	95	59
6-4	96	73	7-10	93	64
6-5	96	80	7-11	94	55
6-6	91	74	7-12	99	70
6-7	94	76	7-13	99	68
6-8	99	87	7-14	95	68
6-9	97	80	7-15	96	65
6-10	94	62	7-16	94	73
6-11	94	70	7-17	99	70
6-12	98	74	7-18	92	58
6-13	100	75	7-19	92	63
6-14	98	74	7-20	99	64
6-15	95	73	7-21	99	65
6-16	97	71	7-22	90	61
6-17	93	63	7-23	97	62
6-18	97	78	7-24	97	56
6-19	97	83	7-25	93	56
6-20	99	75	7-26	95	49
6-21	96	72	7-27	95	57
6-22	93	72	7-28	98	61
6-23	96	76	7-29	87	64
6-24	100	75	7-30	92	61
6-25	92	71	7-31	93	62

TABLE A-4. (Contd.)

1985			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
8-1	91	58	9-6	94	60
8-2	93	47	9-7	92	63
8-3	89	54	9-8	90	75
8-4	92	54	9-9	93	74
8-5	84	56	9-10	95	67
8-6	91	50	9-11	92	57
8-7	93	49	9-12	88	51
8-8	93	58	9-13	90	56
8-9	90	48	9-14	96	57
8-10	94	72	9-15	96	59
8-11	94	53	9-16	93	27
8-12	93	55	9-17	95	67
8-13	93	53	9-18	98	72
8-14	92	55	9-19	87	58
8-15	94	51	9-20	88	51
8-16	95	54	9-21	94	60
8-17	91	55	9-22	95	57
8-18	92	56	9-23	93	52
8-19	89	57	9-24	96	54
8-20	91	57	9-25	95	56
8-21	93	46	9-26	93	55
8-22	92	58	9-27	98	56
8-23	93	73	9-28	95	60
8-24	93	61	9-29	92	63
8-25	90	90	9-30	74	74
8-26	81	45			
8-27	97	47			
8-28	91	43			
8-29	92	46			
8-30	92	48			
8-31	95	53			
9-1	95	51			
9-2	97	61			
9-3	97	60			
9-4	96	41			
9-5	95	58			

TABLE A-5. Schober's Resort Steam Flow Data, Unfactored.

The conversion factor for this table is 0.5265.

Ellipses (...) indicate no data.

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
1-1	...	...	2-1	87	80
1-2	...	...	2-2	81	76
1-3	...	...	2-3	85	78
1-4	...	...	2-4	85	78
1-5	...	...	2-5	85	77
1-6	...	...	2-6	83	76
1-7	...	...	2-7	87	76
1-8	...	...	2-8	85	79
1-9	...	...	2-9	88	82
1-10	92	81	2-10	87	79
1-11	90	80	2-11	83	75
1-12	92	83	2-12	83	76
1-13	96	89	2-13	89	81
1-14	89	81	2-14	86	76
1-15	91	78	2-15	85	75
1-16	...	...	2-16	87	80
1-17	...	...	2-17	82	76
1-18	...	...	2-18	84	76
1-19	...	...	2-19	82	77
1-20	...	...	2-20	85	77
1-21	...	...	2-21	93	85
1-22	...	...	2-22	87	80
1-23	...	...	2-23	87	79
1-24	...	...	2-24	92	83
1-25	...	...	2-25	87	80
1-26	...	...	2-26	82	75
1-27	...	...	2-27	87	77
1-28	...	...	2-28	87	82
1-29	...	...	2-29	90	82
1-30	...	...			
1-31	86	78			

TABLE A-5. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
3-1	89	81	4-6	92	83
3-2	89	82	4-7	87	76
3-3	90	80	4-8	93	84
3-4	89	82	4-9	87	77
3-5	88	77	4-10	93	85
3-6	88	81	4-11	90	79
3-7	87	80	4-12	89	80
3-8	89	81	4-13	88	79
3-9	88	81	4-14	90	79
3-10	89	82	4-15	92	81
3-11	91	83	4-16	93	83
3-12	91	86	4-17	94	86
3-13	92	82	4-18	93	83
3-14	89	84	4-19	90	84
3-15	89	84	4-20	85	80
3-16	89	78	4-21	87	77
3-17	89	80	4-22	90	79
3-18	87	77	4-23	96	82
3-19	89	81	4-24	97	87
3-20	93	83	4-25	91	84
3-21	96	85	4-26	91	85
3-22	88	80	4-27	86	82
3-23	89	80	4-28	89	81
3-24	94	85	4-29	90	78
3-25	93	84	4-30	93	81
3-26	96	84	5-1	92	82
3-27	86	78	5-2	90	83
3-28	89	78	5-3	94	81
3-29	94	80	5-4	96	85
3-30	88	81	5-5	95	82
3-31	93	85	5-6	89	79
4-1	89	83	5-7	85	75
4-2	86	78	5-8	91	77
4-3	88	78	5-9	95	83
4-4	93	82	5-10	95	84
4-5	93	84			

TABLE A-5. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
5-11	92	81	6-16	85	75
5-12	92	81	6-17	87	75
5-13	93	80	6-18	83	42
5-14	95	87	6-19	64	55
5-15	92	85	6-20	65	53
5-16	90	79	6-21	64	53
5-17	92	82	6-22	66	55
5-18	90	78	6-23	64	56
5-19	93	80	6-24	62	52
5-20	97	84	6-25	60	0
5-21	93	84	6-26	61	0
5-22	91	79	6-27	58	0
5-23	94	81	6-28	54	0
5-24	96	85	6-29	38	0
5-25	92	82	6-30	38	0
5-26	94	82	7-1	52	0
5-27	91	82	7-2	56	0
5-28	90	80	7-3	61	40
5-29	92	80	7-4	74	60
5-30	95	84	7-5	77	69
5-31	94	84	7-6	79	72
6-1	92	82	7-7	82	72
6-2	95	83	7-8	82	73
6-3	95	84	7-9	83	76
6-4	96	88	7-10	82	73
6-5	92	84	7-11	81	71
6-6	94	86	7-12	84	72
6-7	90	78	7-13	83	75
6-8	91	79	7-14	88	71
6-9	90	81	7-15	79	71
6-10	93	85	7-16	81	76
6-11	88	81	7-17	84	77
6-12	87	78	7-18	80	73
6-13	84	75	7-19	82	73
6-14	86	76	7-20	83	75
6-15	84	75			

TABLE A-5. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
7-21	88	73	8-26	100	80
7-22	81	75	8-27	100	87
7-23	79	73	8-28	100	87
7-24	81	71	8-29	94	87
7-25	83	73	8-30	94	90
7-26	83	74	8-31	94	90
7-27	82	75	9-1	91	88
7-28	88	73	9-2	90	88
7-29	82	72	9-3	91	88
7-30	79	75	9-4	91	88
7-31	...	...	9-5	93	89
8-1	...	...	9-6	96	91
8-2	...	...	9-7	92	89
8-3	...	...	9-8	91	87
8-4	...	...	9-9	94	89
8-5	...	...	9-10	96	93
8-6	...	...	9-11	95	89
8-7	...	...	9-12	90	87
8-8	...	...	9-13	90	87
8-9	...	...	9-14	93	88
8-10	...	...	9-15	91	87
8-11	...	...	9-16	91	88
8-12	...	...	9-17	90	87
8-13	...	...	9-18	91	87
8-14	...	...	9-19	93	88
8-15	...	...	9-20	97	92
8-16	...	...	9-21	96	93
8-17	...	...	9-22	93	91
8-18	...	...	9-23	94	90
8-19	...	...	9-24	89	87
8-20	...	...	9-25	91	85
8-21	...	...	9-26	91	88
8-22	...	...	9-27	90	86
8-23	93	90	9-28	91	88
8-24	93	89	9-29	93	89
8-25	100	87	9-30	96	91

TABLE A-5. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
10-1	92	86	12-27	90	87
10-2	94	88	12-28	87	84
10-3	...	...	12-29	82	78
10-4	...	...	12-30	86	83
10-5	...	...	12-31	85	84
10-6	...	...	1985		
10-7	...	...	1-1	83	80
10-8	...	...	1-2	84	81
10-9	92	88	1-3	84	81
10-10	92	89	1-4	85	82
10-11	91	88	1-5	89	84
10-12	85	82	1-6	90	86
10-13	95	87	1-7	91	88
10-14	97	91	1-8	89	87
10-15	92	91	1-9	86	83
10-16	98	88	1-10	82	79
10-17	97	91	1-11	84	81
10-18	90	83	1-12	86	81
10-19	95	92	1-13	88	84
10-20	95	92	1-14	87	84
10-21	91	88	1-15	91	86
10-22	91	87	1-16	86	83
10-23	...	...	1-17	89	84
through			1-18	91	88
12-16	...	...	1-19	91	87
12-17	87	86	1-20	92	88
12-18	88	85	1-21	91	88
12-19	88	84	1-22	90	87
12-20	87	82	1-23	90	86
12-21	82	78	1-24	89	86
12-22	83	79	1-25	88	85
12-23	88	84	1-26	92	89
12-24	85	83	1-27	90	87
12-25	89	85	1-28	95	89
12-26	90	87			

TABLE A-5. (Contd.)

1985			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
1-29	91	87	3-6	86	75
1-30	90	86	3-7	83	79
1-31	92	88	3-8	82	76
2-1	95	87	3-9	84	77
2-2	91	90	3-10	85	81
2-3	91	89	3-11	86	80
2-4	89	85	3-12	88	88
2-5	88	85	3-13	86	81
2-6	86	84	3-14	86	81
2-7	87	83	3-15	87	83
2-8	90	86	3-16	86	83
2-9	90	86	3-17	85	79
2-10	81	79	3-18	87	79
2-11	85	81	3-19	87	83
2-12	87	83	3-20	88	80
2-13	84	82	3-21	87	84
2-14	85	82	3-22	85	80
2-15	90	85	3-23	87	81
2-16	90	88	3-24	92	84
2-17	88	86	3-25	91	87
2-18	87	84	3-26	91	79
2-19	93	89	3-27	89	85
2-20	94	85	3-28	89	81
2-21	88	82	3-29	81	76
2-22	87	83	3-30	82	76
2-23	84	81	3-31	84	79
2-24	88	83	4-1	86	82
2-25	88	86	4-2	89	82
2-26	89	85	4-3	92	87
2-27	88	84	4-4	90	85
2-28	85	82	4-5	89	84
3-1	87	82	4-6	88	85
3-2	89	83	4-7	88	84
3-3	83	78	4-8	90	85
3-4	87	76	4-9	91	86
3-5	86	77	4-10	91	86

TABLE A-5. (Contd.)

1985			1985		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
4-11	88	84	5-16	85	82
4-12	87	83	5-17	89	83
4-13	89	84	5-18	92	85
4-14	92	87	5-19	90	86
4-15	91	88	5-20	92	84
4-16	89	86	5-21	88	81
4-17	88	84	5-22	93	83
4-18	88	85	5-23	93	83
4-19	...	...	5-24	93	85
4-20	...	...	5-25	92	86
4-21	...	...	5-26	91	87
4-22	...	...	5-27	90	85
4-23	...	...	5-28	90	84
4-24	...	...	5-29	90	86
4-25	90	81	5-30	89	84
4-26	87	82	5-31	90	86
4-27	86	82	6-1	90	84
4-28	88	82	6-2	92	87
4-29	87	83	6-3	87	83
4-30	89	84	6-4	96	83
5-1	90	86	6-5	97	84
5-2	89	85	6-6	96	82
5-3	91	86	6-7	96	82
5-4	90	85	6-8	98	84
5-5	90	86	6-9	98	85
5-6	88	84	6-10	96	84
5-7	86	83	6-11	95	82
5-8	86	82	6-12	97	83
5-9	89	83	6-13	96	84
5-10	88	84	6-14	93	83
5-11	88	82	6-15	92	83
5-12	87	84	6-16	94	83
5-13	86	81	6-17	95	81
5-14	93	84	6-18	96	84
5-15	89	84	6-19	90	84
			6-20	88	84

TABLE A-5. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
6-21	87	82	7-26	90	85
6-22	86	82	7-27	91	86
6-23	89	83	7-28	91	87
6-24	90	86	7-29	93	93
6-25	86	83	7-30	91	85
6-26	87	81	7-31	89	84
6-27	88	82	8-1	90	83
6-28	89	83	8-2	89	82
6-29	88	85	8-3	91	85
6-30	88	81	8-4	91	85
7-1	87	81	8-5	88	85
7-2	95	83	8-6	91	85
7-3	97	85	8-7	91	85
7-4	96	85	8-8	93	87
7-5	93	86	8-9	89	85
7-6	97	86	8-10	93	86
7-7	91	84	8-11	91	86
7-8	96	84	8-12	91	84
7-9	89	82	8-13	90	84
7-10	92	84	8-14	91	85
7-11	91	84	8-15	92	86
7-12	91	84	8-16	91	87
7-13	92	84	8-17	90	86
7-14	89	83	8-18	90	83
7-15	91	85	8-19	91	82
7-16	90	87	8-20	90	82
7-17	87	85	8-21	89	82
7-18	85	81	8-22	90	83
7-19	87	84	8-23	91	85
7-20	90	81	8-24	95	87
7-21	87	85	8-25	94	87
7-22	90	81	8-26	91	86
7-23	90	85	8-27	91	86
7-24	91	87	8-28	92	86
7-25	91	86	8-29	92	86
			8-30	91	87
			8-31	92	87

TABLE A-5. (Contd.)

1984			1984		
Date	Graph units		Date	Graph units	
	High	Low		High	Low
9-1	92	88	9-16	92	79
9-2	95	88	9-17	90	81
9-3	92	84	9-18	88	79
9-4	88	82	9-19	85	76
9-5	89	81	9-20	88	76
9-6	89	80	9-21	92	79
9-7	88	79	9-22	90	81
9-8	91	81	9-23	89	81
9-9	90	80	9-24	85	84
9-10	91	75	9-25	86	80
9-11	94	78	9-26	88	80
9-12	90	74	9-27	88	82
9-13	90	80	9-28	87	79
9-14	93	81	9-29	86	77
9-15	93	81	9-30	83	76

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Appendix B

Daily Steam Well Temperature Data

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TABLE B-1. Two-Inch Well Temperature, °F

Ellipses (...) indicate no data.

1984			1984		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
1-1	...	...	2-1	210	193
1-2	...	...	2-2	212	192
1-3	...	...	2-3	212	195
1-4	207	183	2-4	213	201
1-5	207	179	2-5	211	196
1-6	208	194	2-6	208	197
1-7	...	...	2-7	208	180
1-8	...	...	2-8	205	200
1-9	...	...	2-9	205	186
1-10	208	165	2-10	206	187
1-11	...	...	2-11	205	197
1-12	...	...	2-12	210	201
1-13	...	...	2-13	215	192
1-14	...	...	2-14	211	197
1-15	...	...	2-15	207	199
1-16	...	...	2-16	197	180
1-17	...	...	2-17	205	172
1-18	208	185	2-18	204	197
1-19	...	...	2-19	206	194
1-20	...	...	2-20	210	200
1-21	...	...	2-21	203	185
1-22	...	...	2-22	200	178
1-23	...	...	2-23	207	192
1-24	210	190	2-24	211	178
1-25	200	175	2-25	204	178
1-26	195	185	2-26	209	199
1-27	212	190	2-27	210	197
1-28	...	...	2-28	208	191
1-29	...	...	2-29	209	191
1-30	...	...	3-1	209	193
1-31	209	195	3-2	205	195
			3-3	205	185
			3-4	209	178
			3-5	206	191

TABLE B-1. (Contd.)

1984			1984		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
3-6	207	200	4-11	208	182
3-7	207	200	4-12	210	198
3-8	209	203	4-13	210	197
3-9	206	197	4-14	212	200
3-10	205	193	4-15	214	194
3-11	211	189	4-16	211	182
3-12	206	194	4-17	202	186
3-13	208	180	4-18	203	179
3-14	203	185	4-19	193	179
3-15	206	189	4-20	202	180
3-16	209	185	4-21	208	186
3-17	204	177	4-22	212	195
3-18	206	202	4-23	212	190
3-19	209	183	4-24	200	175
3-20	210	191	4-25	195	170
3-21	202	178	4-26	198	167
3-22	209	176	4-27	203	181
3-23	205	194	4-28	210	187
3-24	204	186	4-29	210	197
3-25	205	190	4-30	210	187
3-26	202	177	5-1	209	196
3-27	207	174	5-2	209	195
3-28	210	192	5-3	210	185
3-29	197	165	5-4	203	186
3-30	209	165	5-5	207	177
3-31	197	167	5-6	210	193
4-1	203	179	5-7	209	195
4-2	208	200	5-8	212	206
4-3	210	198	5-9	210	193
4-4	209	180	5-10	206	195
4-5	202	186	5-11	211	194
4-6	203	185	5-12	211	197
4-7	209	190	5-13	213	192
4-8	205	178	5-14	201	180
4-9	209	171	5-15	202	186
4-10	201	178			

TABLE B-1. (Contd.)

1984			1984		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
5-16	209	191	6-21	211	194
5-17	211	180	6-22	212	202
5-18	211	203	6-23	213	204
5-19	213	198	6-24	212	202
5-20	212	195	6-25	210	180
5-21	207	192	6-26	201	190
5-22	212	200	6-27	201	180
5-23	211	190	6-28	201	180
5-24	210	183	6-29	200	186
5-25	210	181	6-30	202	180
5-26	212	198	7-1	201	187
5-27	212	190	7-2	204	178
5-28	212	190	7-3	204	185
5-29	212	191	7-4	205	188
5-30	210	179	7-5	205	185
5-31	212	194	7-6	205	180
6-1	210	173	7-7	205	184
6-2	215	187	7-8	200	184
6-3	200	176	7-9	203	184
6-4	200	178	7-10	203	192
6-5	199	179	7-11	204	184
6-6	197	180	7-12	202	169
6-7	211	195	7-13	202	169
6-8	211	192	7-14	202	177
6-9	211	184	7-15	204	190
6-10	203	177	7-16	202	181
6-11	211	187	7-17	201	187
6-12	201	181	7-18	204	192
6-13	209	185	7-19	203	186
6-14	211	176	7-20	202	186
6-15	211	179	7-21	193	171
6-16	210	188	7-22	200	174
6-17	216	178	7-23	201	192
6-18	217	185	7-24	202	196
6-19	211	192	7-25	204	188
6-20	211	192			

TABLE B-1. (Contd.)

1984			1984		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
7-26	203	176	9-1	198	160
7-27	202	176	9-2	195	184
7-28	202	180	9-3	207	186
7-29	203	193	9-4	196	183
7-30	202	175	9-5	201	181
7-31	201	172			
			9-6	189	175
8-1	202	182	9-7	189	178
8-2	203	183	9-8	199	183
8-3	204	186	9-9	200	181
8-4	204	179	9-10	186	171
8-5	203	179			
			9-11	183	170
8-6	203	190	9-12	197	175
8-7	203	195	9-13	198	181
8-8	204	187	9-14	199	181
8-9	200	179	9-15	193	178
8-10	201	181			
			9-16	199	175
8-11	200	186	9-17	201	168
8-12	202	184	9-18	196	165
8-13	203	182	9-19	201	163
8-14	200	175	9-20	188	171
8-15	200	186			
			9-21	185	173
8-16	201	194	9-22	185	171
8-17	...	...	9-23	184	168
8-18	...	...	9-24	189	167
8-19	...	...	9-25	198	170
8-20	196	183			
			9-26	197	183
8-21	197	176	9-27	199	187
8-22	198	178	9-28	200	184
8-23	199	179	9-29	200	177
8-24	198	173	9-30	185	169
8-25	199	174			
			10-1	180	156
8-26	199	190	10-2	181	159
8-27	200	191	10-3	...	...
8-28	200	179	10-4	...	...
8-29	201	192	10-5	...	...
8-30	201	175			
8-31	189	163			

TABLE B-1. (Contd.)

1984			1985		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
10-6	...	...	1-1	196	187
10-7	...	...	1-2	196	188
10-8	...	...	1-3	196	184
10-9	183	174	1-4	197	188
10-10	186	168	1-5	194	180
10-11	179	162	1-6	195	167
10-12	196	175	1-7	181	165
10-13	197	180	1-8	179	162
10-14	184	161	1-9	195	164
10-15	181	161	1-10	191	174
10-16	188	168	1-11	188	168
10-17	177	155	1-12	182	172
10-18	193	185	1-13	196	163
10-19	185	169	1-14	198	186
10-20	181	165	1-15	197	165
10-21	178	157	1-16	194	189
10-22	187	163	1-17	196	186
10-23	...	...	1-18	196	169
through			1-19	198	172
12-19	...	...	1-20	198	177
12-20	191	177	1-21	185	166
12-21	195	181	1-22	183	166
12-22	195	184	1-23	194	169
12-23	194	175	1-24	193	181
12-24	195	175	1-25	195	185
12-25	196	172	1-26	190	157
12-26	183	169	1-27	194	173
12-27	181	169	1-28	183	157
12-28	186	168	1-29	191	168
12-29	194	187	1-30	186	151
12-30	193	187	1-31	191	159
12-31	191	176			

TABLE B-1. (Contd.)

1985			1985		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
2-1	192	156	3-6	189	163
2-2	178	167	3-7	192	164
2-3	181	170	3-8	195	187
2-4	191	174	3-9	196	186
2-5	190	175	3-10	194	163
2-6	192	174	3-11	194	179
2-7	192	176	3-12	192	164
2-8	182	159	3-13	191	172
2-9	190	160	3-14	182	158
2-10	194	186	3-15	192	160
2-11	195	185	3-16	196	186
2-12	197	181	3-17	192	181
2-13	196	185	3-18	183	164
2-14	197	175	3-19	191	153
2-15	195	169	3-20	197	173
2-16	196	170	3-21	181	161
2-17	...	...	3-22	195	175
2-18	...	...	3-23	198	187
2-19	205	169	3-24	196	175
2-20	179	144	3-25	185	161
2-21	190	142	3-26	175	157
2-22	190	159	3-27	172	155
2-23	197	175	3-28	179	153
2-24	197	187	3-29	188	174
2-25	193	176	3-30	197	177
2-26	196	172	3-31	195	183
2-27	194	174	4-1	199	188
2-28	194	177	4-2	199	188
3-1	198	178	4-3	190	180
3-2	175	147	4-4	188	162
3-3	189	147	4-5	199	172
3-4	183	161			
3-5	193	170			

TABLE B-1. (Contd.)

1985			1985		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
4-6	199	186	5-11	192	171
4-7	199	190	5-12	198	167
4-8	202	191	5-13	196	185
4-9	198	187	5-14	198	180
4-10	200	180	5-15	196	171
4-11	195	181	5-16	195	173
4-12	197	186	5-17	197	182
4-13	199	183	5-18	198	173
4-14	199	175	5-19	187	168
4-15	188	176	5-20	196	181
4-16	184	159	5-21	197	183
4-17	178	160	5-22	199	192
4-18	185	158	5-23	200	191
4-19	191	175	5-24	186	169
4-20	184	164	5-25	189	173
4-21	184	173	5-26	188	167
4-22	195	177	5-27	190	176
4-23	198	189	5-28	191	158
4-24	197	188	5-29	193	154
4-25	179	146	5-30	187	169
4-26	188	146	5-31	183	168
4-27	194	158	6-1	195	170
4-28	198	188	6-2	188	153
4-29	196	188	6-3	194	164
4-30	199	191	6-4	198	180
5-1	199	186	6-5	195	178
5-2	197	169	6-6	198	192
5-3	193	176	6-7	198	189
5-4	197	171	6-8	201	182
5-5	188	178	6-9	203	169
5-6	194	177	6-10	200	183
5-7	194	171	6-11	200	187
5-8	196	169	6-12	199	179
5-9	194	162	6-13	190	182
5-10	193	165	6-14	199	182
			6-15	201	185

TABLE B-1. (Contd.)

1985			1985		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
6-16	202	184	7-21	200	182
6-17	201	182	7-22	200	177
6-18	203	192	7-23	201	178
6-19	200	184	7-24	196	180
6-20	189	175	7-25	199	184
6-21	200	180	7-26	198	178
6-22	200	192	7-27	199	174
6-23	203	172	7-28	200	176
6-24	188	172	7-29	182	166
6-25	193	163	7-30	188	174
6-26	197	194	7-31	199	169
6-27	199	189	8-1	195	169
6-28	201	192	8-2	199	187
6-29	199	189	8-3	201	182
6-30	200	190	8-4	201	174
7-1	201	195	8-5	199	180
7-2	200	194	8-6	200	182
7-3	201	193	8-7	196	174
7-4	200	185	8-8	197	167
7-5	201	192	8-9	195	174
7-6	203	183	8-10	199	179
7-7	201	188	8-11	199	177
7-8	199	181	8-12	200	181
7-9	204	196	8-13	198	179
7-10	203	192	8-14	198	183
7-11	199	192	8-15	190	176
7-12	198	179	8-16	188	177
7-13	201	180	8-17	198	170
7-14	203	182	8-18	197	172
7-15	201	182	8-19	199	173
7-16	195	175	8-20	199	177
7-17	200	178	8-21	196	183
7-18	196	176	8-22	198	189
7-19	198	182	8-23	198	189
7-20	198	168	8-24	201	186
			8-25	201	177

TABLE B-1. (Contd.)

1985			1985		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
8-26	198	178	9-16	208	207
8-27	199	182	9-17	227	202
8-28	191	179	9-18	213	192
8-29	199	181	9-19	187	177
8-30	199	174	9-20	191	179
8-31	201	174			
			9-21	209	184
9-1	192	169	9-22	201	195
9-2	185	167	9-23	193	184
9-3	184	182	9-24	200	181
9-4	189	162	9-25	208	193
9-5	194	165			
			9-26	214	194
9-6	195	170	9-27	216	198
9-7	194	171	9-28	213	199
9-8	197	164	9-29	203	187
9-9	213	168	9-30	190	190
9-10	210	201			
9-11	211	183			
9-12	186	178			
9-13	198	179			
9-14	213	187			
9-15	215	197			

TABLE B-2. Schober's Resort Steam Temperature, °F.

Ellipses (...) indicate no data.

1984			1984		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
1-1	...	...	3-1	132	130
through			3-2	133	131
1-31	...	...	3-3	133	130
			3-4	132	128
2-1	132	130	3-5	132	129
2-2	133	130			
2-3	134	131	3-6	132	129
2-4	134	132	3-7	132	130
2-5	134	132	3-8	132	130
			3-9	132	130
2-6	134	130	3-10	133	130
2-7	130	128			
2-8	131	129	3-11	132	130
2-9	132	125	3-12	131	130
2-10	132	123	3-13	131	128
			3-14	131	128
2-11	132	129	3-15	131	129
2-12	133	129			
2-13	133	129	3-16	131	129
2-14	134	126	3-17	131	128
2-15	132	129	3-18	132	127
			3-19	131	121
2-16	130	128	3-20	131	121
2-17	132	128			
2-18	132	130	3-21	125	0
2-19	132	130	3-22	81	0
2-20	133	130	3-23	31	0
			3-24	44	0
2-21	132	128	3-25	25	0
2-22	132	128			
2-23	132	130	3-26	22	0
2-24	132	130	3-27	127	0
2-25	131	130	3-28	130	114
			3-29	127	37
2-26	132	130	3-30	124	22
2-27	133	130	3-31	125	36
2-28	133	130			
2-29	132	130			

TABLE B-2. (Contd.)

1984			1984		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
4-1	125	88	5-6	27	0
4-2	124	77	5-7	34	0
4-3	120	83	5-8	30	0
4-4	125	56	5-9	39	0
4-5	123	80	5-10	40	0
4-6	120	57	5-11	37	0
4-7	88	20	5-12	40	0
4-8	64	0	5-13	36	0
4-9	55	0	5-14	27	0
4-10	20	0	5-15	17	0
4-11	14	0	5-16	21	0
4-12	21	0	5-17	30	0
4-13	24	0	5-18	37	0
4-14	25	0	5-19	40	0
4-15	28	0	5-20	42	0
4-16	21	0	5-21	43	0
4-17	14	0	5-22	43	0
4-18	17	0	5-23	42	2
4-19	0	0	5-24	45	0
4-20	0	0	5-25	40	0
4-21	12	0	5-26	47	0
4-22	29	0	5-27	53	8
4-23	25	0	5-28	48	8
4-24	23	0	5-29	43	0
4-25	0	0	5-30	41	0
4-26	0	0	5-31	42	0
4-27	0	0	6-1	42	0
4-28	11	0	6-2	37	0
4-29	15	0	6-3	40	0
4-30	15	0	6-4	24	0
5-1	18	0	6-5	23	0
5-2	23	0	6-6	23	0
5-3	30	0	6-7	25	0
5-4	34	0	6-8	29	0
5-5	28	0	6-9	26	0
			6-10	32	0

TABLE B-2. (Contd.)

1984			1984		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
6-11	136	0	7-16	203	200
6-12	135	133	7-17	202	200
6-13	134	133	7-18	200	199
6-14	135	133	7-19	202	199
6-15	135	133	7-20	202	201
6-16	135	134	7-21	203	202
6-17	137	134	7-22	203	201
6-18	201	135	7-23	202	200
6-19	200	197	7-24	201	200
6-20	200	197	7-25	202	200
6-21	200	197	7-26	203	201
6-22	200	197	7-27	203	201
6-23	200	198	7-28	203	202
6-24	201	198	7-29	203	201
6-25	201	199	7-30	202	200
6-26	201	200	7-31	202	199
6-27	...	...	8-1	201	199
6-28	...	...	8-2	202	199
6-29	...	...	8-3	202	200
6-30	...	...	8-4	204	201
7-1	...	...	8-5	204	201
7-2	...	...	8-6	203	201
7-3	...	...	8-7	202	200
7-4	204	200	8-8	202	200
7-5	205	200	8-9	...	...
7-6	203	199	8-10	...	...
7-7	201	198	8-11	...	...
7-8	203	200	8-12	...	...
7-9	203	201	8-13	104	86
7-10	203	201	8-14	98	70
7-11	203	200	8-15	106	102
7-12	202	200	8-16	109	93
7-13	203	198	8-17	107	90
7-14	202	199	8-18	...	...
7-15	202	200	8-19	...	...
			8-20	...	...

TABLE B-2. (Contd.)

1984			1984		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
8-21	...	...	9-26	198	195
8-22	...	...	9-27	198	195
8-23	...	...	9-28	198	192
8-24	...	...	9-29	195	194
8-25	...	...	9-30	196	192
8-26	...	...	10-1	192	187
8-27	...	...	10-2	193	187
8-28	...	...	10-3	...	...
8-29	...	...	10-4	...	...
8-30	...	...	10-5	...	...
8-31	...	...	10-6	...	...
9-1	...	...	10-7	...	...
9-2	...	...	10-8	...	...
9-3	...	...	10-9	196	192
9-4	198	197	10-10	194	193
9-5	199	196	10-11	195	191
9-6	198	195	10-12	196	193
9-7	198	195	10-13	196	194
9-8	198	195	10-14	196	189
9-9	198	198	10-15	190	185
9-10	198	196	10-16	191	187
9-11	196	195	10-17	193	180
9-12	197	196	10-18	193	188
9-13	196	194	10-19	195	192
9-14	198	196	10-20	194	191
9-15	200	194	10-21	190	189
9-16	200	195	10-22	192	190
9-17	199	196	10-23	...	...
9-18	199	196	through	...	...
9-19	200	196	12-16	...	...
9-20	197	196	12-17	195	190
9-21	198	195	12-18	195	190
9-22	196	196	12-19	195	189
9-23	195	195	12-20	192	192
9-24	196	195	12-21	193	190
9-25	198	196			

TABLE B-2. (Contd.)

1984			1985		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
12-22	191	189	1-26	191	189
12-23	191	188	1-27	193	186
12-24	192	186	1-28	191	189
12-25	191	186	1-29	190	189
12-26	191	188	1-30	190	183
			1-31	189	186
12-27	189	188	2-1	189	186
12-28	192	190	2-2	190	186
12-29	192	190	2-3	188	184
12-30	191	189	2-4	189	185
12-31	193	190	2-5	194	192
1985			2-6	194	192
1-1	196	189	2-7	195	193
1-2	197	193	2-8	193	187
1-3	197	193	2-9	195	192
1-4	197	193	2-10	192	192
1-5	198	191	2-11	196	191
1-6	195	189	2-12	197	194
1-7	195	189	2-13	197	193
1-8	194	192	2-14	195	193
1-9	196	190	2-15	196	192
1-10	194	186	2-16	197	195
1-11	196	191	2-17	194	194
1-12	194	189	2-18	195	195
1-13	196	191	2-19	194	193
1-14	198	194	2-20	195	193
1-15	196	192	2-21	197	194
1-16	196	188	2-22	198	197
1-17	196	192	2-23	194	193
1-18	196	192	2-24	196	192
1-19	197	194	2-25	196	193
1-20	199	194	2-26	195	192
1-21	196	193	2-27	195	194
1-22	195	191	2-28	193	192
1-23	194	191	3-1	198	195
1-24	193	192	3-2	193	190
1-25	195	193			

TABLE B-2. (Contd.)

1985			1985		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
3-3	196	190	4-6	199	196
3-4	198	194	4-7	200	196
3-5	195	192	4-8	198	196
3-6	195	193	4-9	198	196
3-7	195	192	4-10	199	196
3-8	196	193	4-11	198	196
3-9	198	195	4-12	199	196
3-10	197	195	4-13	199	196
3-11	197	194	4-14	198	198
3-12	197	194	4-15	198	195
3-13	198	192	4-16	197	195
3-14	198	194	4-17	197	195
3-15	196	193	4-18	198	195
3-16	197	193	4-19	197	194
3-17	199	195	4-20	197	195
3-18	197	193	4-21	197	196
3-19	195	193	4-22	199	193
3-20	197	196	4-23	198	196
3-21	197	196	4-24	198	195
3-22	198	196	4-25	196	190
3-23	197	196	4-26	196	191
3-24	198	194	4-26	...	...
3-25	195	194	4-27	197	193
3-26	196	194	4-28	198	195
3-27	195	190	4-29	198	195
3-28	196	194	4-30	197	195
3-29	195	192	5-1	198	196
3-30	197	195	5-2	198	196
3-31	198	195	5-3	198	196
4-1	199	197	5-4	197	195
4-2	199	196	5-5	198	197
4-3	198	196	5-6	198	196
4-4	198	196	5-7	198	196
4-5	199	196	5-8	198	196
			5-9	197	197
			5-10	197	196

TABLE B-2. (Contd.)

1985			1985		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
5-11	197	197	6-16	201	199
5-12	197	197	6-17	201	198
5-13	200	198	6-18	201	198
5-14	200	198	6-19	200	197
5-15	200	197	6-20	199	198
5-16	200	198	6-21	200	199
5-17	200	199	6-22	200	200
5-18	200	198	6-23	200	198
5-19	199	198	6-24	200	199
5-20	200	195	6-25	199	197
5-21	197	195	6-26	199	197
5-22	197	195	6-27	200	197
5-23	198	195	6-28	199	198
5-24	197	195	6-29	200	197
5-25	199	195	6-30	200	198
5-26	198	196	7-1	200	200
5-27	198	195	7-2	200	200
5-28	196	192	7-3	200	200
5-29	195	192	7-4	200	200
5-30	196	193	7-5	200	200
5-31	196	192	7-6	202	201
6-1	195	193	7-7	201	199
6-2	195	192	7-8	201	199
6-3	200	195	7-9	199	199
6-4	198	195	7-10	198	198
6-5	197	195	7-11	198	198
6-6	201	195	7-12	200	199
6-7	201	195	7-13	199	199
6-8	199	195	7-14	200	199
6-9	200	195	7-15	200	199
6-10	202	197	7-16	201	200
6-11	201	199	7-17	202	199
6-12	202	200	7-18	201	199
6-13	201	199	7-19	201	200
6-14	201	200	7-20	202	198
6-15	202	199			

TABLE B-2. (Contd.)

1985			1985		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
7-21	201	198	8-26	196	194
7-22	200	199	8-27	196	194
7-23	201	199	8-28	197	193
7-24	201	199	8-29	196	192
7-25	202	199	8-30	192	191
			8-31	195	185
7-26	203	200			
7-27	200	199	9-1	192	179
7-28	200	199	9-2	121	76
7-29	197	196	9-3	151	56
7-30	197	196	9-4	100	53
7-31	197	196	9-5	132	58
8-1	197	196	9-6	140	55
8-2	198	197	9-7	192	61
8-3	198	196	9-8	193	191
8-4	199	195	9-9	191	189
8-5	200	197	9-10	194	188
8-6	198	198	9-11	191	187
8-7	199	199	9-12	192	86
8-8	197	197	9-13	141	78
8-9	199	199	9-14	148	110
8-10	197	197	9-15	136	102
8-11	197	196	9-16	117	95
8-12	196	194	9-17	117	82
8-13	195	195	9-18	95	67
8-14	196	196	9-19	100	55
8-15	193	193	9-20	91	50
8-16	194	194	9-21	95	54
8-17	197	197	9-22	103	56
8-18	193	193	9-23	103	52
8-19	196	195	9-24	198	114
8-20	193	192	9-25	199	196
8-21	194	193	9-26	197	194
8-22	194	193	9-27	196	195
8-23	195	195	9-28	197	193
8-24	196	193	9-29	199	197
8-25	196	194	9-30	199	198

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TABLE B-3. Schober's Resort Ambient Temperature, °F.

Ellipses (...) indicate no data.

1984			1984		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
1-1 through 1-31	...	...	3-1	...	...
			3-2	...	...
			3-3	...	...
			3-4	...	...
2-1	91	40	3-5	...	...
2-2	78	46			
2-3	97	46	3-6	92	32
2-4	96	48	3-7	90	43
2-5	100	40	3-8	98	46
			3-9	...	...
2-6	100	38	3-10	...	...
2-7	95	36			
2-8	93	36	3-11	...	...
2-9	76	48	3-12	...	...
2-10	...	...	3-13	90	42
			3-14	77	50
2-11	...	...	3-15	82	41
2-12	89	30			
2-13	80	38	3-16	...	...
2-14	75	40	3-17	82	53
2-15	85	35	3-18	84	40
			3-19	...	...
2-16	...	...	3-20	...	...
2-17	70	42			
2-18	80	28	3-21	...	...
2-19	80	41	3-22	...	...
2-20	83	31	3-23	...	...
			3-24	...	...
2-21	75	37	3-25	...	...
2-22	72	42			
2-23	85	30	3-26	...	...
2-24	84	36	3-27	76	47
2-25	...	...	3-28	73	40
			3-29	71	41
2-26	...	...	3-30	70	43
2-27	...	...	3-31	61	38
2-28	90	33			
2-29	91	37			

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TABLE B-3. (Contd.)

1984			1984		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
4-1	68	37	5-6	...	...
4-2	70	39	5-7	...	...
4-3	73	41	5-8	...	...
4-4	74	44	5-9	100	55
4-5	70	43	5-10	...	...
4-6	70	51	5-11	100	65
4-7	79	48	5-12	...	...
4-8	79	48	5-13	100	67
4-9	71	45	5-14	...	...
4-10	83	42	5-15	75	43
4-11	76	46	5-16	...	...
4-12	81	47	5-17	92	51
4-13	86	53	5-18	...	...
4-14	91	50	5-19	...	...
4-15	91	52	5-20	102	66
4-16	...	...	5-21	100	68
4-17	...	...	5-22	103	67
4-18	78	42	5-23	105	68
4-19	64	45	5-24	...	...
4-20	...	...	5-25	...	...
4-21	...	...	5-26	...	...
4-22	...	...	5-27	...	...
4-23	...	...	5-28	...	...
4-24	...	...	5-29	...	...
4-25	53	42	5-30	98	72
4-26	58	39	5-31	...	...
4-27	53	39	6-1	...	...
4-28	71	45	6-2	102	66
4-29	77	40	6-3	...	...
4-30	78	50	6-4	...	...
5-1	...	...	6-5	85	56
5-2	...	...	6-6	91	61
5-3	93	52	6-7	83	51
5-4	...	...	6-8	88	60
5-5	...	...	6-9	92	61
			6-10	90	61

TABLE B-3. (Contd.)

1984			1984		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
6-11	94	56	7-16	90	74
6-12	95	60	7-17	95	67
6-13	89	59	7-18	86	69
6-14	90	58	7-19	90	66
6-15	89	69	7-20	93	69
6-16	99	68	7-21	90	71
6-17	103	72	7-22	85	64
6-18	96	66	7-23	80	64
6-19	93	56	7-24	89	62
6-20	91	53	7-25	97	62
6-21	88	52	7-26	98	67
6-22	92	52	7-27	91	71
6-23	...	...	7-28	85	64
6-24	89	66	7-29	89	62
6-25	...	...	7-30	89	69
6-26	101	64	7-31	92	67
6-27	...	...	8-1	92	63
6-28	...	...	8-2	92	60
6-29	...	...	8-3	94	60
6-30	...	...	8-4	96	63
7-1	...	...	8-5	96	60
7-2	...	...	8-6	97	61
7-3	...	...	8-7	99	65
7-4	105	71	8-8	99	67
7-5	106	72	8-9	...	...
7-6	105	71	8-10	...	...
7-7	101	68	8-11	...	...
7-8	100	67	8-12	...	...
7-9	85	63	8-13	...	...
7-10	104	56	8-14	...	...
7-11	99	61	8-15	...	...
7-12	104	67	8-16	...	...
7-13	97	80	8-17	...	...
7-14	79	67	8-18	...	...
7-15	89	66	8-19	...	...
			8-20	...	...

TABLE B-3 (Contd.)

1984			1984		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
8-21	...	...	9-26	90	58
8-22	...	...	9-27	92	62
8-23	...	...	9-28	93	61
8-24	...	...	9-29	93	59
8-25	...	...	9-30	90	58
8-26	...	...	10-1	71	51
8-27	95	79	10-2	76	54
8-28	99	71	10-3	...	...
8-29	84	70	10-4	...	...
8-30	102	67	10-5	...	...
8-31	97	64	10-6	...	...
9-1	94	71	10-7	...	...
9-2	96	65	10-8	...	...
9-3	99	70	10-9	84	56
9-4	...	...	10-10	85	54
9-5	...	...	10-11	77	56
9-6	...	...	10-12	73	47
9-7	...	...	10-13	83	53
9-8	...	...	10-14	80	65
9-9	...	...	10-15	65	48
9-10	...	...	10-16	65	36
9-11	...	...	10-17	...	...
9-12	...	...	10-18	...	...
9-13	...	...	10-19	...	...
9-14	...	...	10-20	71	40
9-15	...	...	10-21	72	45
9-16	...	...	10-22	67	46
9-17	96	82	10-23	...	...
9-18	99	74	through		
9-19	...	...	12-16	...	...
9-20	...	...	12-17	44	33
9-21	...	...	12-18	36	32
9-22	...	...	12-19	40	31
9-23	...	...	12-20	44	39
9-24	84	83	12-21	45	38
9-25	87	63			

TABLE B-3. (Contd.)

1984			1985		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
12-22	53	36	1-21	64	36
12-23	56	35	1-22	59	40
12-24	55	31	1-23	55	36
12-25	53	26	1-24	55	30
12-26	46	31	1-25	54	30
12-27	37	26	1-26	...	...
12-28	39	18	1-27	...	...
12-29	41	19	1-28	55	35
12-30	48	20	1-29	51	28
12-31	59	26	1-30	47	32
1985			1-31	43	25
1-1	52	30	2-1	39	21
1-2	57	31	2-2	47	33
1-3	55	36	2-3	41	31
1-4	60	29	2-4	45	24
1-5	61	31	2-5	46	30
1-6	60	45	2-6	52	25
1-7	45	40	2-7	54	30
1-8	55	38	2-8	64	43
1-9	54	34	2-9	62	37
1-10	56	39	2-10	56	30
1-11	56	33	2-11	58	37
1-12	54	40	2-12	66	34
1-13	68	42	2-13	75	42
1-14	64	38	2-14	72	38
1-15	64	32	2-15	76	38
1-16	67	40	2-16	77	41
1-17	66	35	2-17	74	49
1-18	69	37	2-18	74	53
1-19	70	38	2-19	72	43
1-20	68	38	2-20	55	51

TABLE B-3. (Contd.)

1985			1985		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
2-21	73	43	3-26	67	31
2-22	80	49	3-27	63	50
2-23	85	52	3-28	59	52
2-24	95	38	3-29	58	41
2-25	98	39	3-30	69	41
			3-31	83	56
2-26	92	43			
2-27	95	44	4-1	85	58
2-28	88	49	4-2	88	52
			4-3	89	49
3-1	69	42	4-4	89	62
3-2	53	36	4-5	88	60
3-3	58	37			
3-4	65	28	4-6	91	54
3-5	55	33	4-7	92	56
			4-8	90	54
3-6	54	27	4-9	90	54
3-7	62	33	4-10	90	49
3-8	61	33			
3-9	72	37	4-11	89	49
3-10	70	48	4-12	92	57
			4-13	97	61
3-11	62	36	4-14	97	57
3-12	66	44	4-15	89	65
3-13	69	39			
3-14	70	49	4-16	80	50
3-15	67	55	4-17	71	44
			4-18	79	45
3-16	68	50	4-19	79	45
3-17	72	39	4-20	69	44
3-18	71	41			
3-19	69	32	4-21	73	41
3-20	78	50	4-22	80	46
			4-23	88	51
3-21	78	47	4-24	84	58
3-22	71	39	4-25	72	49
3-23	76	43			
3-24	84	46	4-26	72	47
3-25	71	46	4-27	78	54

TABLE B-3. (Contd.)

1985			1985		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
4-29	88	69	6-6	102	64
4-30	90	56	6-7	106	67
			6-8	108	66
5-1	93	56	6-9	107	67
5-2	91	59	6-10	107	78
5-3	91	53			
5-4	89	53	6-11	107	77
5-5	88	52	6-12	108	72
			6-13	106	71
5-6	84	51	6-14	106	72
5-7	84	46	6-15	107	72
5-8	81	49			
5-9	78	59	6-16	108	72
5-10	75	49	6-17	111	73
			6-18	112	79
5-11	75	42	6-19	109	73
5-12	84	52	6-20	101	64
5-13	91	61			
5-14	96	47	6-21	102	64
5-15	91	56	6-22	101	66
			6-23	102	66
5-16	83	48	6-24	96	67
5-17	86	49	6-25	95	71
5-18	92	50			
5-19	91	54	6-26	96	65
5-20	90	56	6-27	101	66
			6-28	105	66
5-21	92	65	6-29	96	66
5-22	93	62	6-30	102	58
5-23	94	59			
5-24	95	62	7-1	104	62
5-25	93	55	7-2	108	69
			7-3	111	71
5-26	90	52	7-4	113	76
5-27	89	50	7-5	112	76
5-28	90	50			
5-29	87	55	7-6	112	81
5-30	80	50	7-7	110	78
5-31	83	49	7-8	110	79
			7-9	109	80
6-1	83	48	7-10	101	81
6-2	81	52			
6-3	83	54	7-11	109	77
6-4	95	55	7-12	107	74
6-5	100	65	7-13	104	67

TABLE B-3. (Contd.)

1985			1985		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
7-14	106	68	8-16	100	66
7-15	106	70	8-17	95	67
7-16	104	76	8-18	98	60
7-17	104	72	8-19	99	58
7-18	98	79	8-20	100	56
7-19	92	74	8-21	98	57
7-20	96	79	8-22	99	63
7-21	97	72	8-23	104	67
7-22	103	72	8-24	108	72
7-23	103	68	8-25	111	74
7-24	102	72	8-26	107	73
7-25	103	74	8-27	105	65
7-26	102	70	8-28	105	65
7-27	104	75	8-29	105	65
7-28	102	70	8-30	105	70
7-29	98	70	8-31	106	69
7-30	96	61	9-1	102	68
7-31	97	59	9-2	97	65
8-1	96	59	9-3	78	53
8-2	96	58	9-4	73	59
8-3	101	64	9-5	77	59
8-4	103	64	9-6	81	54
8-5	103	65	9-7	86	55
8-6	103	65	9-8	87	59
8-7	106	63	9-9	84	51
8-8	104	66	9-10	76	45
8-9	101	67	9-11	76	49
8-10	104	66	9-12	73	47
8-11	100	65	9-13	89	53
8-12	99	64	9-14	97	57
8-13	100	62	9-15	96	56
8-14	101	62	9-16	89	52
8-15	100	63	9-17	85	57

TABLE B-3. (Contd.)

1985			1985		
Date	Temperature, °F		Date	Temperature, °F	
	High	Low		High	Low
9-18	66	57	9-28	88	58
9-19	72	52	9-29	85	56
9-20	81	55	9-30	81	53
9-21	87	54			
9-22	93	57			
9-23	93	68			
9-24	93	89			
9-25	96	65			
9-26	91	60			
9-27	85	61			

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