

AMERICAN NUCLEAR CORPORATION

CORRECTIVE ACTION PROGRAM

1993 ANNUAL REPORT

February 1, 1994

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CORRECTIVE ACTION PROGRAM - 1993 ANNUAL REPORT

American Nuclear Corporation (ANC) has prepared the following annual report for the groundwater corrective action program pertaining to Tailings Pond No. 1 (TP-1) as required by License Condition No. 29, C. of SUA No. 667.

The groundwater corrective action program consists of pumping well R-4 from May 1 through October 31 of each year with the collected water discharged to a nonponding evaporation system located on the surface of TP-1. The evaporation system consists of six (6) Beta Fog nozzles, sized for the flow rate of well R-4, that produce a fine mist. The quantity of nozzles used in the system are adjusted to compensate for well R-4 flow rate fluctuations in order to maintain continuous operation of the system without cycling. The system is inspected routinely for proper operation.

The system was placed back in operation on May 3, 1993 and was in continuous operation through September 13th when freezing conditions dictated the system's shutdown. The system was restarted on September 27th, when weather conditions moderated and continued in operation until October 28th when freezing conditions returned to the site. The system initially recovered 5 gallons of water per minute. After four days the recovery rate dropped to 1.9 gallons per minute. At the end of May the recovery rate was 1.6 gallons per minute. By mid-June the recovery rate stabilized at 1.2 gallons per minute and maintained that rate for the remainder of the 1993 season. A total of 305,000 gallons of water was recovered and evaporated during the 1993 season.

The total estimated quantity of water recovered from the recovery system to date is 121,561,000 gallons. Figure 1 shows the yearly average recovery rates in gallons per minute.

The MW wells were not sampled during 1993 as ANC believes it has compiled sufficient data on these wells at this time. We anticipate sampling the wells again prior to terminating the groundwater corrective action program.

The historical and recent data generated through monitoring continues to demonstrate that no present hydraulic connection exists between the affected area of the upper Wind River formation and local surface water. No groundwater wells used for domestic or livestock purposes exist now or are likely to be installed in the upper Wind River formation in the future due to the poor recovery rates (recharge), unacceptable water quality, area demographics, and the depth, water quality, and water resource of the lower Wind River formation (i.e. availability of an alternate water resource). Pumping well R-4 as an approved corrective action, elimination of the source of contaminants, and review of the reclamation plan have all contributed to the ALARA (as low as reasonably is achievable) demonstration.

Figure 1

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Recovery Well R - 4 Pumping Volumes ~ Yearly Average Pumping Rate

Year	Gallons Per Minute
1983	15
1984	13
1985	10
1986	8
1987	6
1988	4
1989	3
1990	2
1991	1.8
1992	1.6
1993	1.3

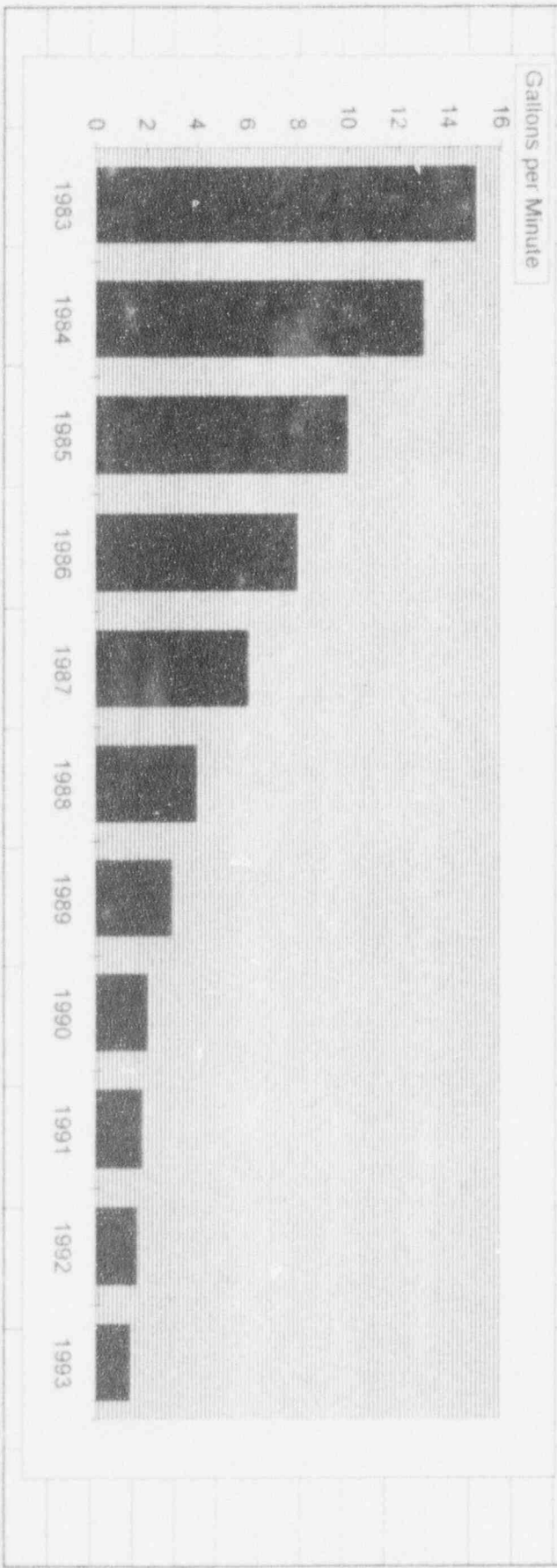
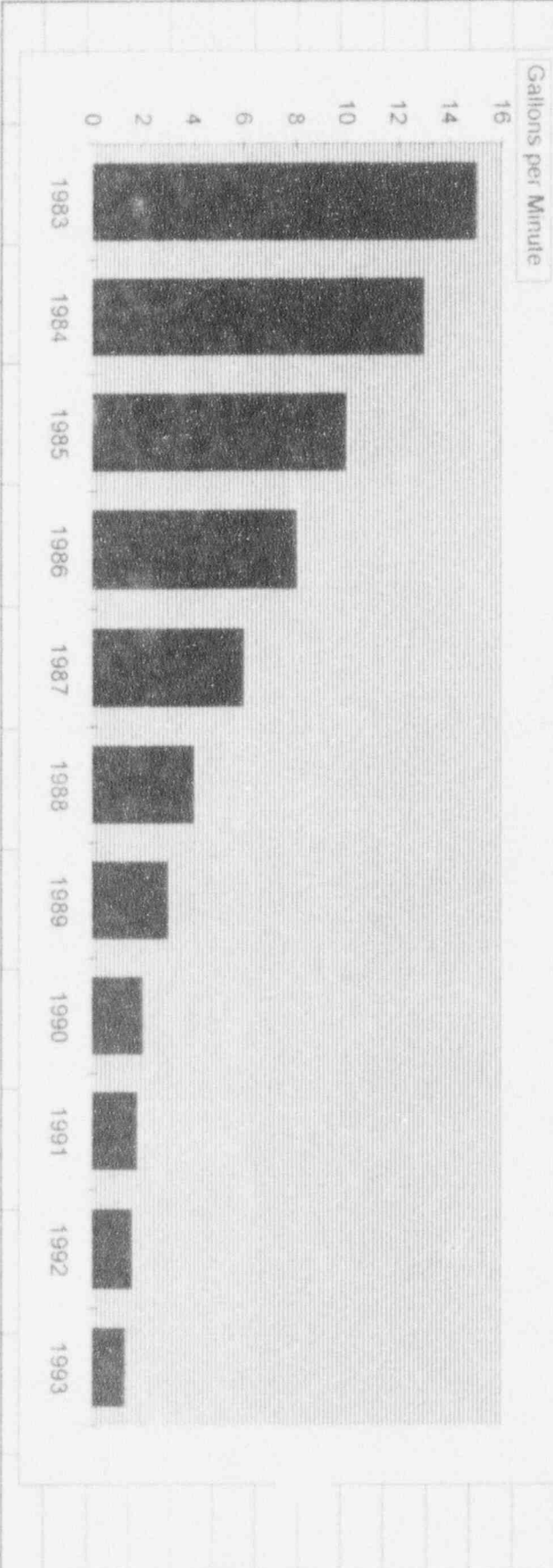


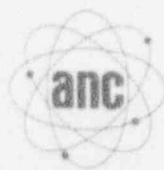
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