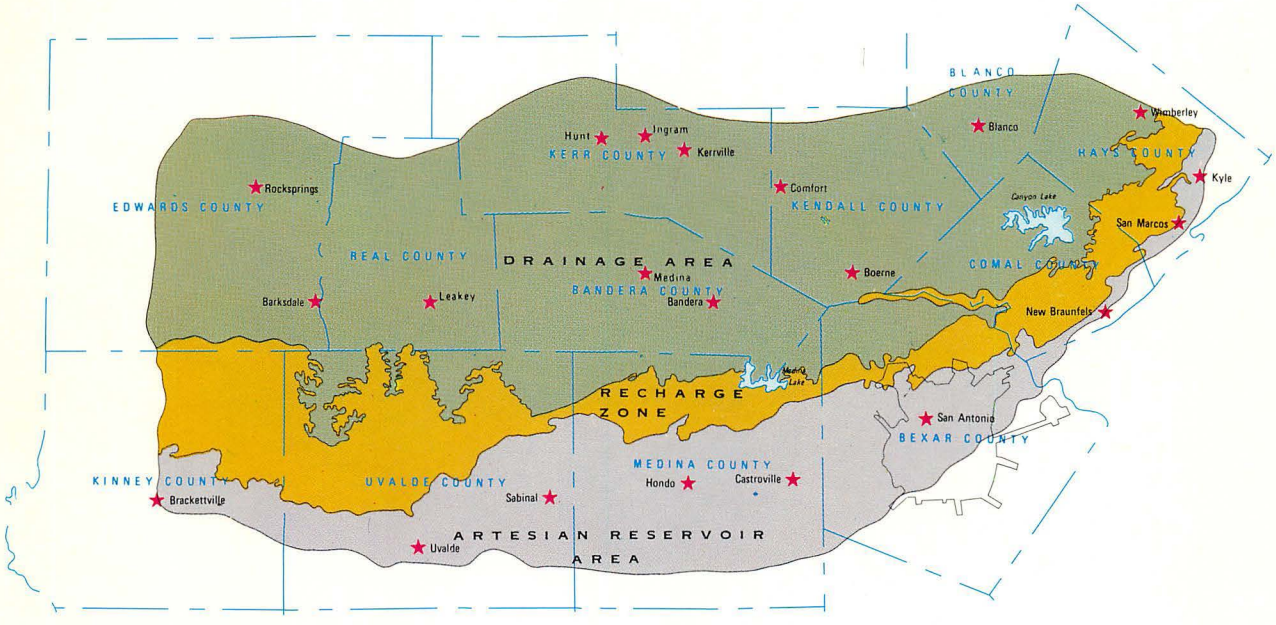
EVAPOTRANSPIRATION

A METHOD OF DISPOSING OF SEPTIC TANK EFFLUENT



EDWARDS UNDERGROUND WATER DISTRICT

SAN ANTONIO, TEXAS

PREPARED BY

RABA AND ASSOCIATES, INC

ENGINEERS • GEOLOGISTS • SCIENTISTS

Report No. G 75-185

E V A P O T R A N S P I R A T I O N

A METHOD OF DISPOSING OF SEPTIC TANK EFFLUENT

Prepared for the

EDWARDS UNDERGROUND WATER DISTRICT

SAN ANTONIO, TEXAS

by

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ABSTRACT

The Edwards Aquifer, an extensive formation of limestone and dolomite extending over a vast portion of central Texas, is the sole source of water for over 1,000,000 people. Its Recharge Zone, encompassing all or parts of some nine counties, is particularly vulnerable to contamination if population growth and property development continues to the north of the metropolitan areas which are on or adjacent to the zone.

While the septic tank-soil absorption system is a valuable and popular method of disposing of domestic household sewage, this and other traditional methods of sewage disposal are not suitable in this instance because of the geology of the Recharge Zone and very thin soil cover.

After an extensive search of the literature, RABA AND ASSOCIATES, CONSULTING ENGINEERS, INC., petitioned the Edwards Underground Water District for its support and funding to develop design criteria for the construction and installation of a viable alternative to the traditional methods of septic tank effluent disposal. This alternative was the evapotranspiration process.

Beginning in July, 1975, and extending over a period of two years, a multi-discipline team of researchers investigated and obtained design parameters at an experimental site located in north Bexar County, Texas, an area which is a part of the Recharge Zone. While it was known that investigations had been made of evapotranspiration by others, the majority of this prior research was directed toward studying water loss via this process but with an eye to conserving water. This project was designed to study the opposite view. Here, by encouraging water loss from a set of test tanks, insight was gained into means of utilizing this loss to remove fluid wastes deposited in the system from a septic tank.

The principle conclusion drawn from this study is that evapotranspiration is a viable alternative to traditional methods of sewage disposal in areas of very low permeability or areas with extremely high permeability in which underground aquifers may be endangered. The design criteria sought have been established although more study is needed to refine and improve certain aspects of the procedure. As a result of the present work, it is now possible to determine with reasonable accuracy the surface area needed to permit the installation and proper functioning of an evapotranspiration system.

ACKNOWLEDGEMENTS

This research was sponsored by The Edwards Underground Water District, Colonel McDonald D. Weinert, P.E., General Manager. Neither Colonel Weinert nor anyone connected with the Edwards Underground Water District made any effort to influence the opinions and recommendations expressed in this study. We are greatly in debt to Colonel Weinert and Robert B. Matthews, P.E., Assistant Manager and the Board of Directors: William H. Spice, Jr., Henry Van De Walle, James J. Falbo, Alvin B. Welsch, Oliver O. Haas, Carroll U. Hoffman, D.B. Denney, Jr., Robert Knispel, S.R. Gregg, Harland R. Wolff, Gilbert R. Haby, Bruce T. Foster, Louis E. Capt, J. Ray Carnes and Leslie Pepper for their farsightedness in funding this project which will not only be applicable locally but will be of use in several areas nationwide.

In addition, many individuals, educators and state agencies, too numerous to mention separately, took the time and effort away from their normal duties to gather and supply the data required in this report.

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INTRODUCTION

Historical Perspective

A measure of the level of civilization attained by man is directly related to the way in which he disposes of his waste products. Since the first groupings of people into clans, then hamlets, villages, and cities, to the megalopolis of today, the generation and disposal of human waste has been a problem. As communities became larger and more densely populated, the problem grew until today it has assumed serious proportions.

Early in history, the vastness of unpopulated areas, the magnitude of receiving streams, and the relatively small amounts of wastes generated as compared to today's, all contributed to disposal of wastes with comparative ease. The disposal of one of these wastes - human sewage - is of concern to this paper.

Man has apparently always sought to remove fecal wastes from the immediate vicinity of his dwelling place. From the simple deposition of these materials upon the ground to their disposal in streams, this concept has prevailed. The relationship between disease and human waste was suspected long before it was proven, for history reveals that the Roman legions segregated streams adjacent to camp sites, drinking water from upstream, and depositing wastes below the camp on the downstream side. The fact that many diseases are waterborne was eventually established and today the protection of water supplies from fecal contamination is of paramount importance.

Contemporary Sewage Disposal Methods

The development of disposal methods for human fecal products from

the privy to the cesspool, lime pit, and septic tank is a story in itself. The evolution of the modern water carriage system with indoor plumbing and the vastly sophisticated treatment facilities is a tribute to modern engineering. The systems of today offer many advantages. They can handle all manner of wastes - domestic, commercial, chemical, industrial, and municipal. These wastes can be treated in volumes unheard of in years past, and the effluent from such plants may be returned to receiving streams with a quality index that is frequently better than that of the waters in the stream itself. Further, the system of piping will transport these wastes safely from the collection points to the treatment facility. The efficiency and safety of modern water carriage sewage facilities are not questioned; they serve as the best method of sewage disposal available today.

But not all dwellings are located in an urban setting where such systems are available. In rural and suburban areas, alternative methods must be employed. To this end, chemical toilets, storage tanks which are pumped periodically, or septic tank-soil absorption systems are used. Of these, the most common is the septic tank system. The others are frequently impractical, economically unsound, or quite simply not feasible in most situations.

The Septic Tank System

These systems have been successfully employed for years when properly installed and maintained. Conventional plumbing is installed in the home, and all wastes are carried by water to a holding structure, the septic tank. In this container, solid wastes are retained and begin to degrade biologically and chemically. The fluids - effluent - are distributed from the tank by

way of perforated pipes or by tiles into trenches called laterals which have a gravel base. When the trenches are filled with earth above the gravel to the ground level, the entire system is hidden from view. The fluids placed in the laterals filter downward through the gravel and are absorbed into the soil.

When the receiving soil has a high percolation rate, i.e., accepts large quantities of water over a short period of time, and when the underground water table is deep, these soil absorption systems work quite well indeed. They effectively dispose of the fluid wastes, the septic tank accommodates a remarkable reduction in the volume of the solids, and maintenance is minimized. Unfortunately, however, the conditions described above are not to be found in every locality.

The Water Supply and Geology of the Edwards Underground Water District

The Edwards Underground reservoir is the only source of water of any significance for the communities, farmers, ranchers, and industries located within the District. This vast limestone formation holds a tremendous volume of water of a quality and purity which is hard to match and this water is used for domestic and industrial needs, for stock watering and irrigation, as well as for a myriad of other uses. (See typical analysis, page 51).

The City of San Antonio, Texas, is the largest metropolitan user in the District. Published reports in the San Antonio Express (September 2, 1977) show that 5.45 billion gallons were pumped by the City Water Board during the month of August alone. If one uses San Antonio as a focal point, it will be seen that the underground portion of the Edwards extends roughly East and West from the city in a wide band, terminating with springs in

New Braunfels, Texas, (Comal Springs) to the East and Bracketville, Texas, (Los Moros Springs) to the West and beyond almost to the border with Mexico. The formation outcrops or surfaces to the North of this line, and it is in this area that rainfall is able to penetrate into the reservoir and replenish the water drawn from it. In all, the counties of Kenny, Uvalde, Medina, Bexar, Kendall, Comal and Hays are involved in some way with the Edwards.

It is well known that the Edwards consists of limestone and dolomite possessing open joints and fissures with extensive solution channel development permitting the rapid unfiltered recharge of the aquifer. The Recharge Zone for the Edwards crosses a seven county area in the Texas Hill Country. The aquifer provides, as shown, a high quality, inexpensive water source for over 1,000,000 people, and the preservation of this quality is of paramount importance to the Edwards Underground Water District, a political entity created for this purpose and the sponsor of this project.

With the preceeding as a background, it becomes apparent that protecting the quality of the local water supply is of concern to many people in the area. In the next section, attention will be directed to the immediate problem and how alternative methods of disposing of fecal wastes in the Recharge Zone were addressed.

THE PROBLEM AND RESEARCH PROPOSAL

Traditionally, individual septic tank and drain field installations are used as an economical alternative to sewage collection in suburban, rural, resort, and retirement areas. However, when these homes are located in areas where the local geology is not conducive to such conventional

systems, it has often been necessary to rely upon costly individual treatment packages or storage and transportation of the effluent to a suitable disposal point. Because of the prohibitive costs of such alternatives, conventional septic tank and drainfield systems have often been constructed in unsuitable areas despite the obvious threat to the quality of underground water sources.

To the north of the City of San Antonio, in the area previously described as part of the Recharge Zone, continuous and expanding property development has been going on for some years. The potential for possible contamination of the aquifer is particularly great here because of the population density. The growth pattern of the city has been consistently projected to be in this direction, and this is not really surprising. The move from the urban to the suburban environment has been a phenomena widely documented across the country. In this part of the country, the gently rolling Hill Country with large oaks, rivers, streams, and springs, has been immensely attractive to developers as well as homeowners. The presence of lakes capable of accommodating boating, fishing, camping, and the construction of summer cottages or permanent homes has resulted in the development of acreage trailer parks, camp grounds, and vacation properties. Along with this influx of people has come an attendant problem with the disposal of wastes. It is this area that constitues a large part of the Recharge Zone.

Governmental regulations, laws, the exercise of judicious controls by such organizations as the Edwards Underground Water District, and litigation have all contributed toward helping to alleviate potential sources of contamination, but the basic problem remains - where there

are people there will be wastes generated and some of these wastes will be disposed of by conventional septic tank systems to the possible detriment of the water supply.

In many cases a functional alternative to these methods, and one that should prove to be both economical and practical, is the utilization of the concept of evapotranspiration to remove waste waters from the subsurface drainfield. This could be accomplished by the development of modified septic tank drainfields wherein little or no reliance would be placed on absorption into the soil - a prime characteristic of evapo-transpiration systems.

Raba and Associates became interested in this problem during 1974 as a result of research pertaining to the siting and construction of sanitary landfills. There are problems common to both soil absorption waste disposal systems and the landfill. A primary area of concern with solid waste disposal site construction is to assure that leachates from decomposing or deposited refuse do not seep down into underlying water bearing strata. By the same token, a problem with standard septic tank systems in certain critical areas, due to the fact that soil absorption of fluid wastes is a key element in such systems, is the potential threat of aquifer contamination.

The resulting study revealed that some pioneer work by Dr. Alfred P. Bernhart of the University of Toronto had been published in 1973. (1) To our knowledge, little or no research had been done to produce workable design data and procedures for evapotranspiration systems in the United States, yet such data is sorely needed. To support this supposition, library research failed to reveal definitive work of this type. On the

assumption that the problem was not unique to this part of the United States and that other agencies might be so engaged, a questionnaire (page 8) was eventually developed and directed to the appropriate agency in each of the 50 states, the Canal Zone, Guam, Puerto Rico, and the Virgin Islands. Forty-two replies were received which was an excellent return. Of those responding, 35 stated that the possibility of contamination of water-bearing strata by traditional fluid disposal techniques was a problem in their state. Yet, only 18 stated that study was going forward to address the problem, and none had made significant progress or had done work relating to evapotranspiration.

As these findings were recognized, Raba and Associates developed a proposal for presentation to the Edwards Underground Water District requesting funds to proceed in cooperation with the District to study this technique. It was known that the problem existed in this area and it became apparent that it existed elsewhere as well. Any work done here would benefit not only the local area but could, apparently, benefit others also.

It was our feeling that this project would be relevant to the stated goals of the District. Two elements of the program that were particularly relevant were development and demonstration of improved home treatment techniques and systems, and examination of an economically feasible alternative to existing septic tank systems. The general purpose of this research was to develop design criteria and procedures for septic tank drainfields using the concept of evapotranspiration for sewage effluent disposal. The specific objectives are listed on the following page.

EVAPOTRANSPIRATION PROJECT

RABA AND ASSOCIATES
CONSULTING ENGINEERS, INC.
10526 Gulfdale
San Antonio, Texas 78216

		Yes	No
1.	Is the possibility of contamination of water-bearing strata by traditional fluid disposal techniques from septic tank-soil absorption fields considered to be a problem in your state?	_____	_____
2.	If the answer to No. 1 is "yes", do you have a prescribed method of disposing of such wastes?	_____	_____
	a. Are published specifications for such methods available?	_____	_____
	b. Are published regulations, laws, or directives pertaining to such methods available?	_____	_____

3. If the answer to No. 1 is "yes", which of the following is normally used in rural-suburban installations?

   a. Septic tank-soil absorption fields _____
   b. Septic tank with pumping _____
   c. Chemical treatment _____
   d. Septic tank-evapotranspiration system _____
   e. Other-please specify _____

		Yes	No
4.	If underground water contamination is a problem as described, have you, or are you, studying this problem?	_____	_____
	a. Are results of your studies available?	_____	_____
	b. Are pilot projects underway or contemplated?	_____	_____
	c. Do you foresee regulatory action resulting from your studies?	_____	_____

5. Please give us the name of the person or division we could contact for further information.
   Name and Title _____
   Address _____
   _____
   _____
   Zip Area Code Tele.

Person responding to this questionnaire:
Name & Title _____
Address _____
_____

(1) To establish specific design criteria and procedures for immediate use in the area comprising the Edwards Recharge Zone.

(2) To develop generalized design criteria and procedures to be used by design professionals, licensing agencies, and governmental bodies throughout the State and nation.

To accomplish these objectives, the resources of Raba and Associates Consulting Engineers would be utilized. Team members would include registered professional engineers specializing in soil and rock mechanics, geologists, biologists, and registered sanitarians, most with graduate degrees and each having several years of experience in their field. Comments on the data and design procedures developed in the study were to be solicited from various health, environmental, and government agencies concerned with the problem.

The Edwards Underground Water District accepted the proposal and granted funds for the project.

A NOTE ON THE LITERATURE SEARCH

It has been mentioned that the major work pertaining to this project is Bernhart's Treatment and Disposal of Waste Water from Homes by Soil Infiltration and Evapo-transpiration. (1) To our knowledge, this is the definitive publication pertaining to the project at hand. There are other articles, of course, but their approach is to study evapotranspiration in other contexts.

One major area of study deals with water loss as it affects crops and their successful propagation. Hanks, et al, (14) relate evapo-transpiration to various crops in the Great Plains, while Hasemi, et al, (16) dealt with the effects of evapotranspiration on citrus crops in Florida. Further crop studies were done by Fritschen (9), Lemon, et al (18),

and Doss, et al (5). Here the emphasis was upon determining water loss due to evapotranspiration by various means with an eye to conserving water where water is either at a premium or is markedly related to successful crop development. Other studies in this area have been conducted by Ekern (8), Eagleman and Decker (7), Gardner and Neiman (10), Hart (15), Nunn (22), Hanan and Huffsmith (12), Williamson and Carreker (30), Criddle (3), Tovey, et al (26), Stewart, et al (24), Loustalot (20), Mielke and Peck (21), Doss and Taylor (6), van Bavel, et al (28), Glover and Forsgate (11) and Wilson (31).

Other research has sought methods of studying evapotranspiration to relate it to weather phenomena. Koberg (17) has developed a study relating evaporation, longwave radiation from the atmosphere and reflected solar radiation from water surfaces. A study pertaining to evapotranspiration as it relates to wind was accomplished by Skidmore, et al. (23) Prior research by Tanner and Lemon (25) has indicated a relationship between radiant energy and evapotranspiration, as has works by Bliss (2), and Lister (19). Valenzuela (27) has reported on climatic conditions and how they effect evapotranspiration via a mathematical model.

Several things become apparent from these studies:

(1) Evapotranspiration is of interest and concern to agronomists, engineers, agriculturists, and mathematicians.

(2) Most research, indeed almost all, has centered about studying evapotranspiration in an effort to counteract the water loss involved.

(3) Many efforts have been made to develop a model by which evapotranspiration can be easily and accurately predicted, estimated, or measured by reducing the number of variables.

(4) Very little work has been done to study the deliberate encouragement of water loss via evapotranspiration.

(5) And finally, the most important variable recurring in the literature appears to be solar radiation.

All of this indicates two things to the writers. First, that an attempt to relate the various factors affecting evapotranspiration to deliberate and planned design criteria to encourage water loss under the circumstances pertaining here is not without merit. And second, the most important variable recurring in the literature, insofar as climatological data are concerned, appears to be solar radiation. The latter is developed in a later section.

EVAPORATION AND TRANSPIRATION

As a result of research previously cited and the attention devoted to the continuing importance of the potential for contaminating the Edwards aquifer if conventional septic tank systems were installed in the Recharge Zone, a plan emerged to study this problem. There were two basic ideas:

(1) If desirable land was available, as in the Texas Hill Country, developers would make these properties available to the buyer. Because of their desirability, the owners would live upon the land in dwellings ranging from mobile homes to permanent housing, and for periods of time extending from a few days or weeks of vacation, weekends, on to full time occupancy. In each case, human wastes would be generated which would require disposal.

(2) If such wastes were accumulated, the most probable method of disposal would be a soil absorption system, the effluent being a potential hazard to the aquifer. If, therefore, wastes were to be generated and have to be disposed of, isn't there an alternative to the contaminating method? And further, if downward percolation of fluid contaminants is to be avoided, might not it be possible to seal off this downward flow and direct the disposal of fluid wastes upward?

It was felt that the latter hypothesis was worth investigating for the soils and geological phenomena of this area. It was also recognized

that while the open, fissured nature of the Recharge Zone would permit the rapid downward flow of sewage, there are many areas in Texas and throughout the nation where soil conditions were such that their low permeability would prohibit such movement and therefore preclude the use of conventional lateral systems. The method or phenomenon chosen for study was, and is, referred to as evapotranspiration.

The process of evapotranspiration is well-known to biologists, particularly botanists. Everyone is familiar with evaporation. The dictionary defines evaporate as a mechanism "to pass off in vapor, as a fluid; to escape as vapor or in the manner of vapor." The "drying out" of streets following a rain is the result of evaporation. The water molecule, reduced to its elements of hydrogen and oxygen, can escape into the atmosphere. Much of the water loss resulting from the drying out of lawns and gardens is a result of this mechanism. Indeed, evaporation is a key element in the Hydrologic Cycle wherein water vapor enters the atmosphere in vapor form, condenses into visible clouds, and falls again to earth eventually as some form of precipitation - rain, ice, snow, and so on. From this point, the entire cycle begins again.

Significant amounts of water can be lost in this manner from large open bodies of water. In recent years, extensive studies have been undertaken to find ways to reduce evaporation loss from fresh water lakes. When one realizes that thousands of gallons of water can be lost in this manner, the phenomenon becomes significant. Water loss in this fashion was encouraged in this project.

Transpiration, on the other hand, is less understood by the layman. Everyone knows that plants must have water to survive. This water is

needed inside the plant. It serves as a transport mechanism for nutrients within the plant tissues and is necessary for the many chemical reactions carried out within the plant cells. A discussion of the biologic phenomena necessary to plant metabolism is not pertinent to this paper. In simple terms, essentially what happens as pertains here is as follows.

Assume that one water molecule of the millions in the soil could be followed within a plant. This molecule contains soil nutrients in solution, these substances being needed by the plant to survive. There are mechanisms by which this molecule can carry its nutrients into the plant through the roots, but there must be room within the root tissues to accommodate it. Assuming that there is such room, the molecule enters the root, moves through the plant through the stem, and eventually is received by the leaf. Here the chemical burden is released and, as a result of complex chemical activity, the water is discharged to the atmosphere as a vapor. This evaporation of water from plants is called transpiration. It can have a marked effect upon the rate of water absorption by the roots. A high rate of transpiration will increase the water intake of roots. As water evaporates from the leaves, a water deficit is created in the leaf tissue. A pull is created extending all the way down the plant to the roots. In short, and in very simplistic terms, as a water molecule enters the atmosphere from the leaves, the one adjacent to it moves up to take its place, the next one also moves up, and so on until a new molecule enters the roots of the plant from the soil. The higher the rate of transpiration, the greater the rate of movement. Plants wilt on hot days partly because the transpiration rate is higher than the intake of water, the conducting tissues shrink to

move what water there is through more constricted vessels, and the flacid tissues cause the soft stems and leaves to droop. Watering these plants not only serves to supply a greater amount of water to the roots but also raises the amount of water in the air adjacent to plant surfaces, thus permitting water uptake to more closely approximate water loss and the plant "perks up."

It was these two phenomena, (a) water loss by evaporation through the soil surface and (b) water loss through the leaves (transpiration), that are to be studied in this project. It is felt that significant amounts of water can be "pumped" by the plants from the sealed laterals. If this is indeed true, the removal of effluent can be accomplished without the attendant hazards of downward percolation. Since atmospheric conditions have an effect upon the rate of transpiration, a weather recording station was established as will be discussed later. It is felt that it would be necessary to measure some of the key factors involved - wind movement, rainfall, and temperature, for example. To compare evapotranspirative loss to the loss from a water surface, pan evaporation was also included.

With the cooperation of the Edwards Underground Water District and other agencies, these factors were studied for more than a calendar year. The details of that study follow.

RELATIONSHIPS BETWEEN ENVIRONMENTAL/CLIMATOLOGICAL FACTORS IN THE CURRENT STUDY

The biology of plant transpiration is affected by temperature, wind, humidity, and solar radiation. Humidity, according to the Handbook of

Chemistry and Physics, (13) is:

> ". . . the ratio of the quantity of water vapor present in the atmosphere to the quantity which would saturate at the existing temperature. It is also the ratio of the pressure of water vapor present to the pressure of saturated water vapor at the same temperature."

In the present instance, this means that if transpiration is to occur, that is, if we are to add water vapor to the atmosphere, the air must have a low moisture content. This does not necessarily mean that a low humidity must be present. Generally, instead, it means that the air in actual contact with the stomata (openings) of the plant leaves be of relative low humidity. If the air is still, for example, air adjacent to the leaves will be saturated with water vapor, have a high humidity, and no further water loss will be experienced. If, on the other hand, a breeze is moving the adjacent saturated air away, transpiration will increase and water loss will be higher. In an ideal situation, the humidity of the air would be low and capable therefore of accepting water vapor, would accept this moisture, and be wafted away to be replaced by more low humidity air.

The wind plays an important role in this regard and increases the transpiration rate to a point. When this rate has reached maximum as determined by the metabolism of the plant, further wind movement is of no value and can even retard the process. Plants can lose too much water or dehydrate. Nature has provided that when the transpiration rate is depleting excessively the water content of the plant tissues, the stomata will close.

Maintaining or utilizing the optimum transpiration effort of the plant is of great importance to this study. The purpose, after all, is

to use this mechanism to remove water from the sealed beds. As much as 98 per cent of the water absorbed through the plant root system may escape from the plant by transpiration. (29) This phenomena of reduced transpiration with high winds and carpet grass is illustrated in Figure 1.

Temperature is also an important factor in transpiration. The temperatures recorded in this study are essentially due to solar radiation. It will be shown that solar radiation on a clear day is a controlling factor. This study has confirmed that, from month to month, solar radiation plays a significant role in evapotranspiration.

The ground cover chosen for this study took into consideration some of the optimum plant characteristics to enhance transpiration. Carpet grass is a case in point. Aside from its popularity for lawns, it also presents anatomical characteristics which are advantageous. Transpiration is enhanced when the plant has a large surface area available on the leaves. This area is important because the greater the area, the larger the number of stomata. Since the stomata are the orfices through which water vapor escapes the leaf, more loss can be anticipated as the factors of wind, temperature, and radiation operate.

In summation, humidity, wind, and temperatures derived from solar radiation play key roles in the transpiration process. Each may affect the stomata of the plants by either encouraging water loss or by restricting it as the stomata open and close in response to these factors. Each of these climatological or environmental factors can also affect true evaporation from open water surfaces, in this case, pan evaporation. It is appropriate, therefore, to assume that there is a correlation between pan evaporation and transpiration. The development of this concept is the subject of a later section.

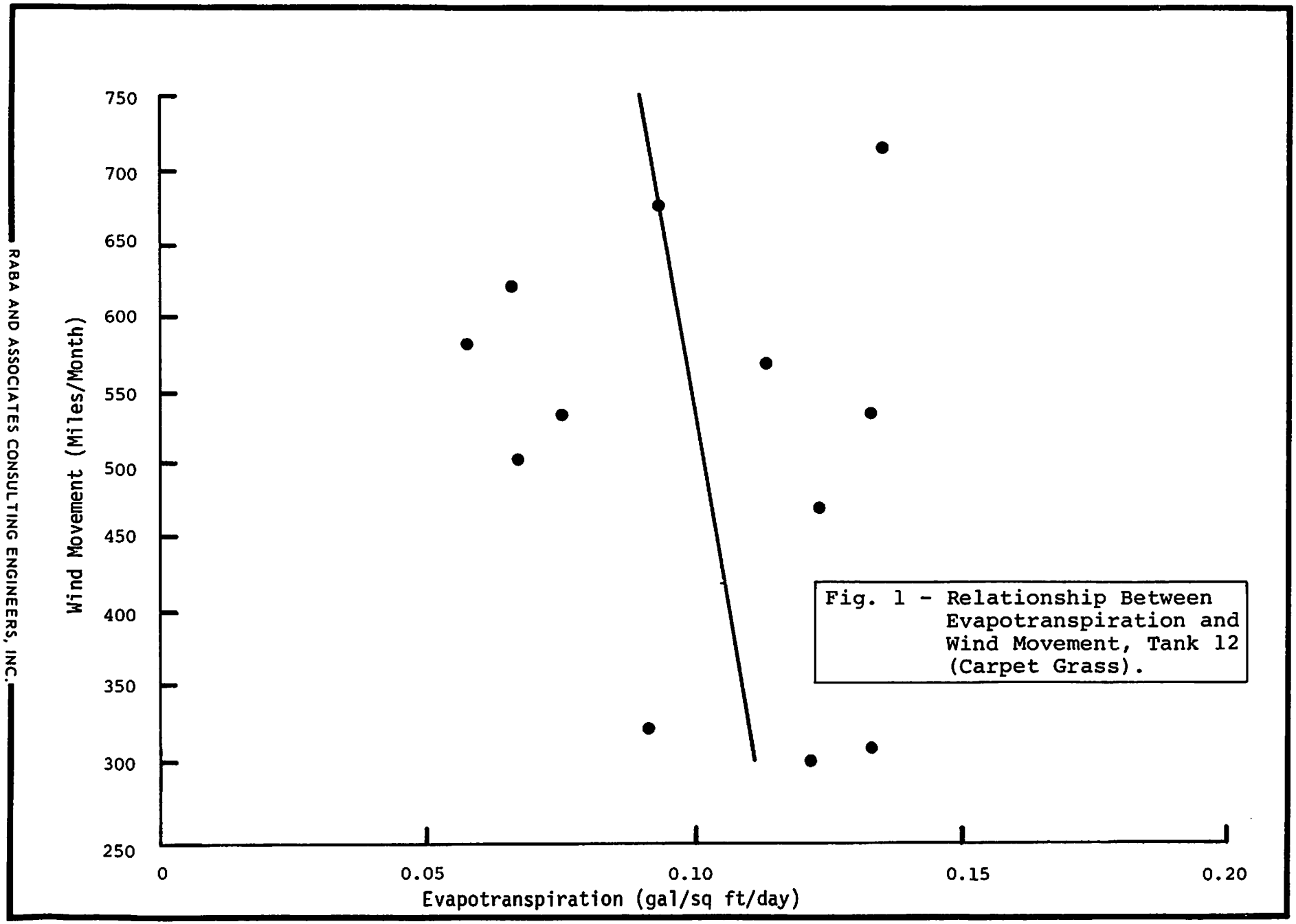
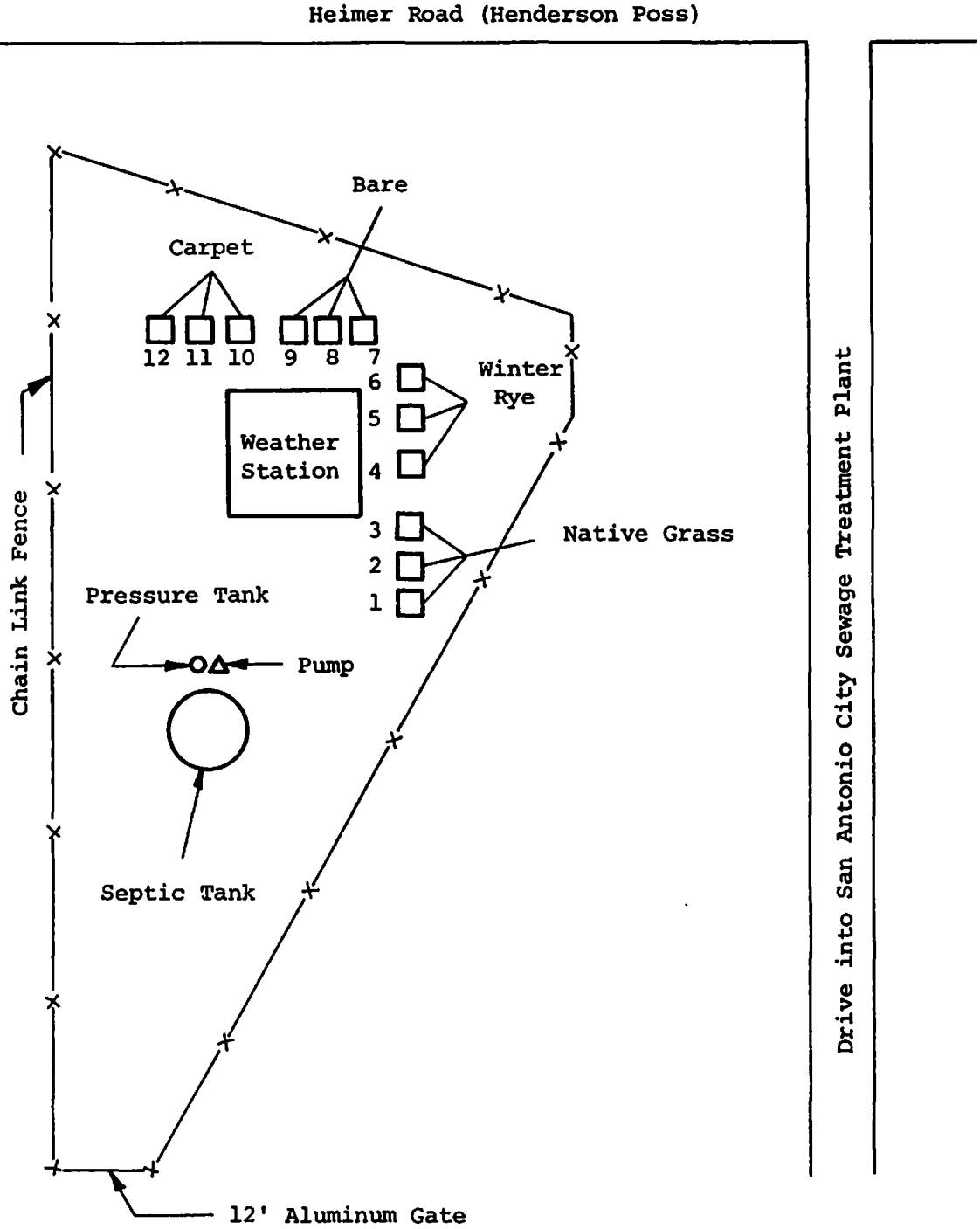


Fig. 1 - Relationship Between Evapotranspiration and Wind Movement, Tank 12 (Carpet Grass).

CONSTRUCTION OF THE EVAPOTRANSPIRATION EXPERIMENTAL SITE

Construction and preparation of the research site began in July of 1975 and was completed in the late Fall of the same year. (See Figure 2) In cooperation with the Bexar Metropolitan Health District and the City of San Antonio, a site was obtained adjacent to a city package sewage treatment plant on Henderson Pass (Old Heimer Road) in the San Pedro Hills area. This plant services the residential areas adjacent to it and the materials processed are typical domestic wastes, essentially the same as would be expected from any residence using a septic tank system. This treatment plant provided all the raw sewage used during the project. Raw sewage from the package treatment plant was drawn by a pump from the influent well adjacent to the bar screen, and pumped to the project septic tank. The rationale here was that the raw sewage obtained from the plant would simulate the usual generation of domestic waste in a home disposing of such waste by a soil absorption system. In such a home, wastes from baths, the kitchen, washer, commodes, and showers would all be collected within the home and deposited in a septic tank. From here, the tank effluent, devoid of solid materials, would be distributed via the laterals for absorption into the soil from the bottom of the trench. The arrangements utilized in this study duplicated this process up to and including the distribution lines to the laterals. The principle difference, of course, was that instead of going to a trench, the effluent was deposited in sealed tanks.

The septic tank installed at the test site was a 1000 gallon tank. The top of the tank was placed approximately four feet above the surrounding surface ground. The maximum effluent level was 8 to 12 inches below the



NOTE: Not to Scale

Fig. 2 - Evapotranspiration Research Site Plan
San Pedro Hills Sewage Treatment Plant

top of the septic tank. Excess sewage, not used in testing, was returned to the treatment plant via a gravity overflow system of piping. Venting of the septic tank was utilized to assist in the gravity flow of sewage.

In a cleared area, twelve tanks, three for each of the selected ground covers, were constructed as shown in Figures 3 thru 5. The test tanks used during the experimentation period were made of 3/8-inch steel and were 6-ft long, 30-in. wide, and 24-in. deep. Before installation the tanks were welded along the joints, then tested for leaks by filling with water. To further insure water tightness, the tanks were painted with a non-corrosive epoxy paint of a type similar to that used on the inside of elevated water storage tanks. The tanks were then covered on the inside with a plastic liner to prevent interaction of the epoxy paint and and liner to provide an even greater safeguard against tank corrosion. The twelve tanks were then installed by burying to grade level. Once installed, the test tanks were prepared to simulate an evapotranspiration bed.

A 1-in. diameter effluent feeder line was attached to a 34-in. long by 4-in. diameter perforated drain pipe. The distribution pipe was installed along the length of the test tank near the center to ensure equal distribution of effluent throughout the tank.

A piezometer, 4-in. in diameter and about 30 to 36-in. long was installed to measure the standing gravity water level. A removable cap was installed on the piezometer tube to prevent rainfall and other unwanted pollution from entering the tank.

Three sand wicks, 8-in. long and 4-in. in diameter, of PVC pipe, were installed at about 12-in. centers beginning with one approximately

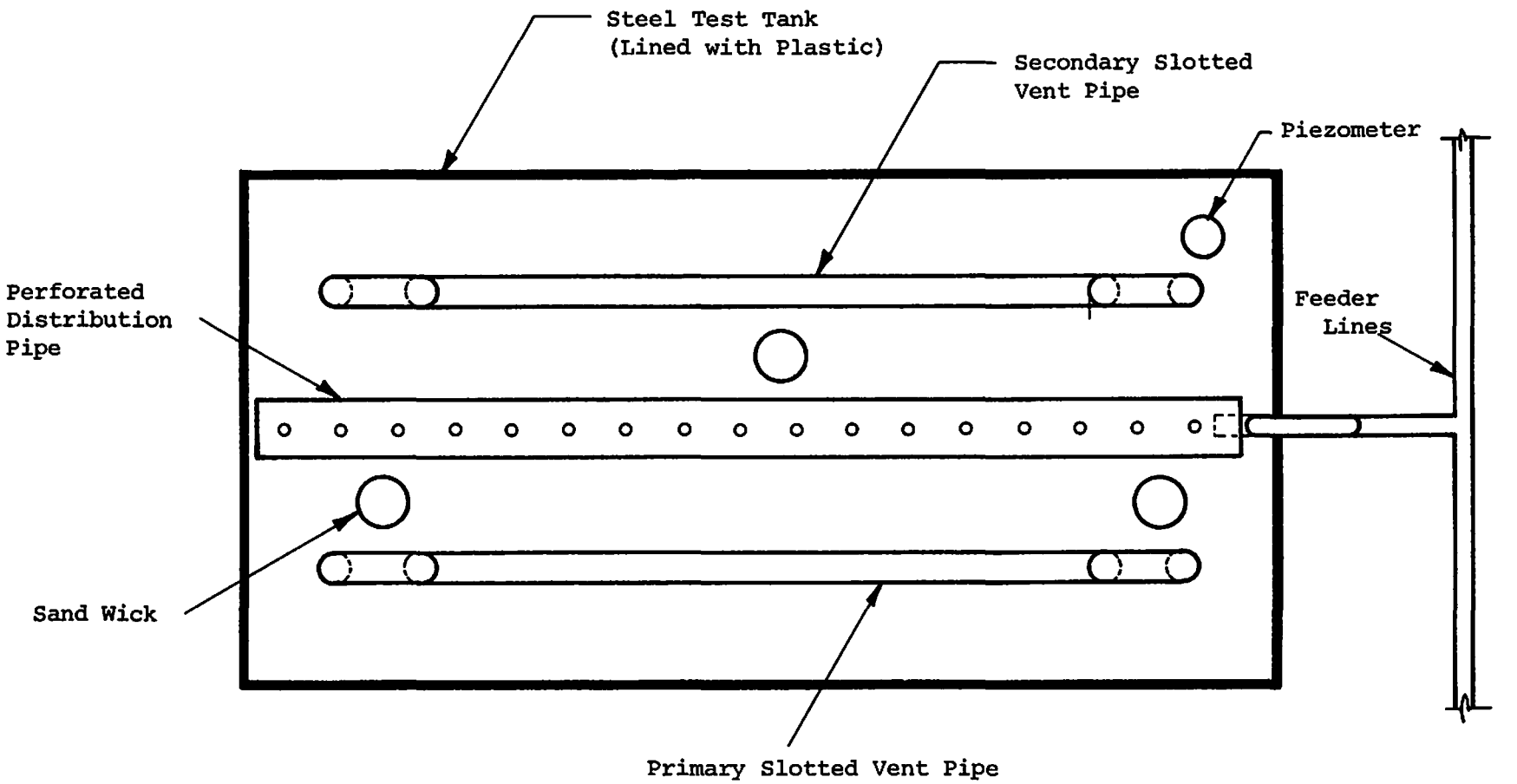


Fig. 3 - Top View of Test Tanks

Scale: 1" = 12"

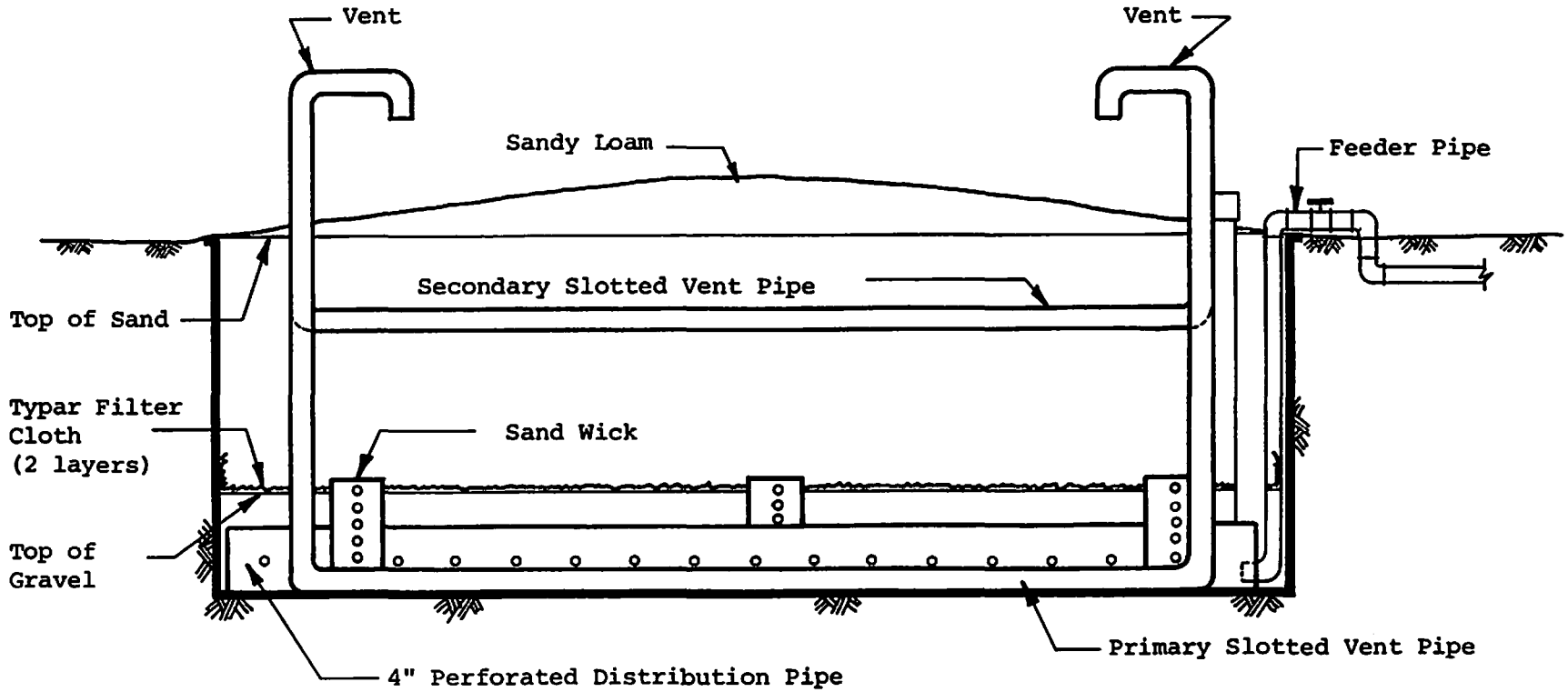
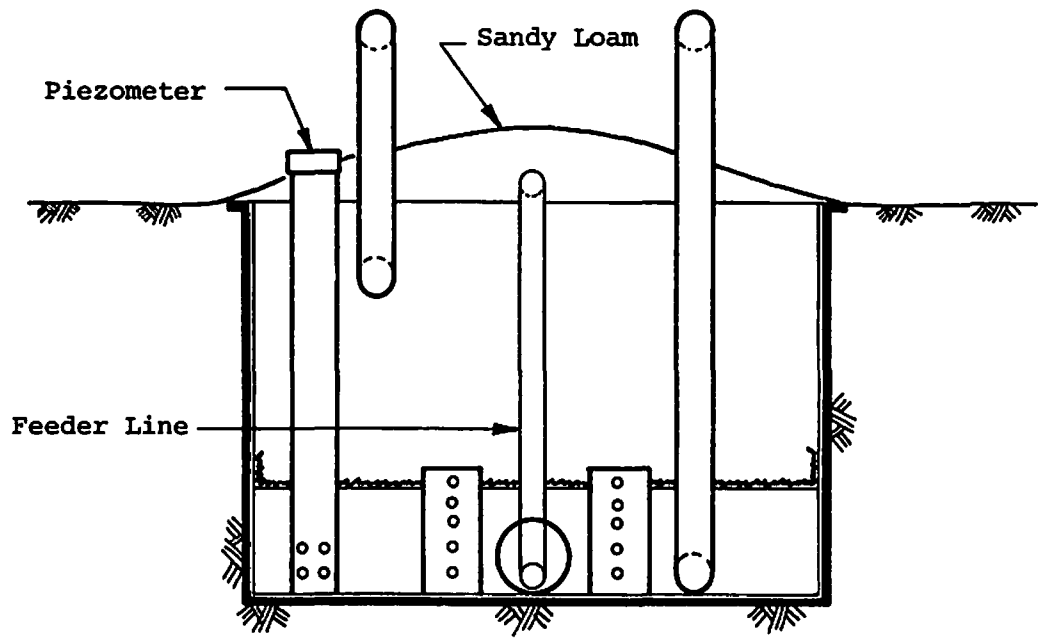


Fig. 4 - Side View of Typical Test Tank

Scale: 1" = 12"



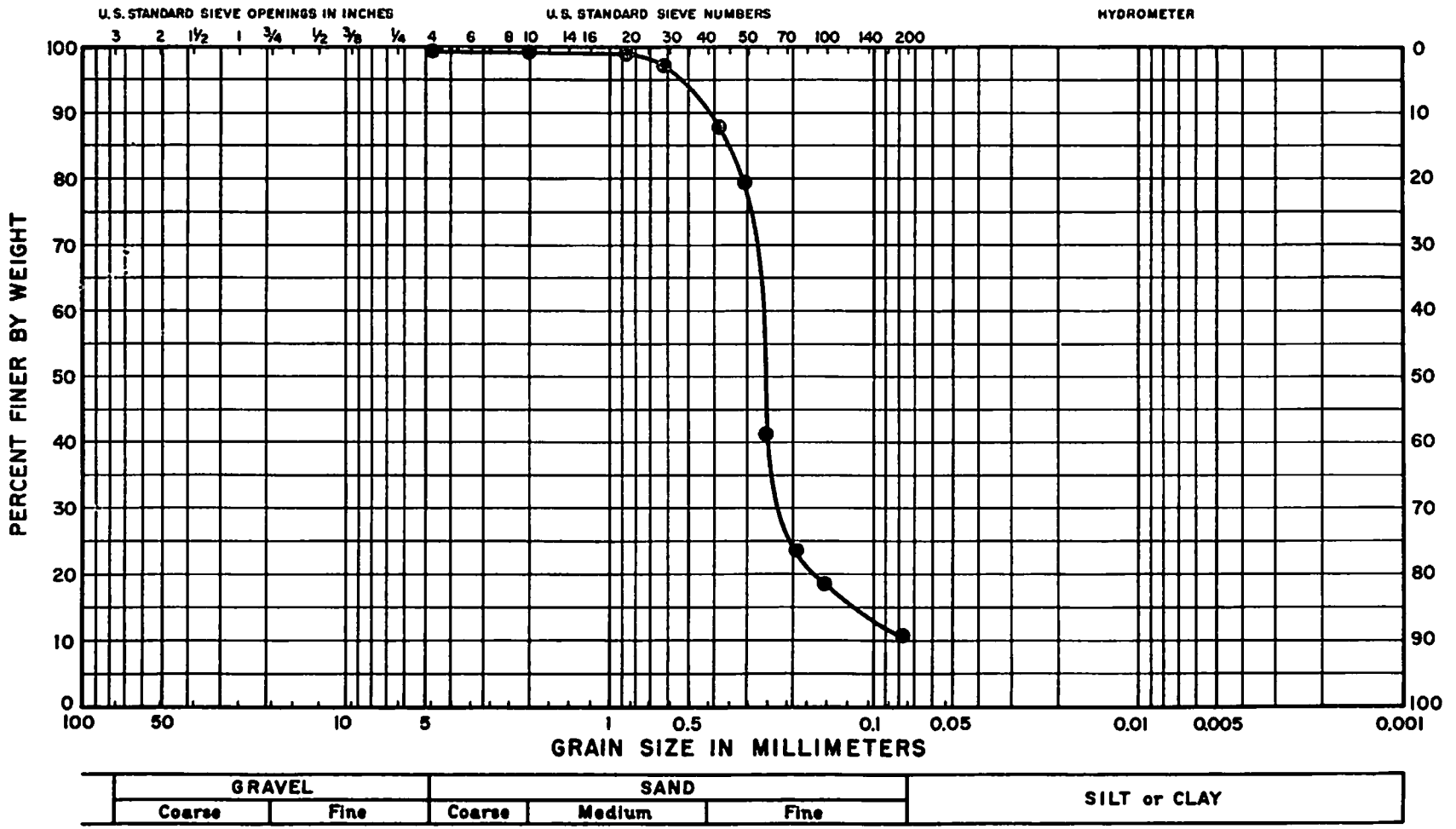
Note - Scale: 1" = 12"

Fig. 5 - End View of Typical Test Tank

6-in. from the 24-in. wall. The center sand wick was installed opposite the other two sand wicks and on the piezometer side of the distribution pipe. The sand wicks were perforated, wrapped with Typar filter cloth and filled with pit run sand. Results of a sieve analysis and capillary head test are presented on Figure 6 for the pit run sand used in the evapotranspiration beds.

A primary 2-in. venting pipe was slotted, wrapped with the Typar filter cloth and placed within the gravel reservoir area to help induce aerobic conditions. The piezometer, sand wicks, distribution pipe and primary ventilation pipe were placed on the bottom of the test tanks and then overlain with a 6-in. layer of river gravel. The sand wicks protruded about 2-in. above the gravel layer. An overlapping layer of Typar filter cloth was then installed to prevent the overlying 24-in. of sand from filling the voids in the gravel. A second ventilation pipe wrapped in Typar, was installed 6-in. below grade in the sand to allow for aerobic conditions. Sand was then originally mounded 2 to 4-in. above grade, inundated, allowed to settle and then releveled. A sandy loam was placed on top of the sand to a depth of about 3-in. The feeder system was installed with individual valves for each of the twelve tanks. However, effluent was added to the test tanks via the piezometer tubes because a maintenance free flow meter system could not be found to the accuracy required.

The effluent levels in the test tanks were established, at six, twelve, and eighteen inches above the base of the tank for each ground cover. These levels were later changed to seven, ten and one half, and fourteen inches because the very high evapotranspiration rate of the



Material: Tan Sand

Saturated Capillary Head: 36 cm

Fig. 6 - Grain Size Analysis

18-in. tanks made it impossible to maintain the desired effluent level.

As previously discussed, weather was felt to be a factor in the operation of the test system. To this end, and to obtain on-site meteorological data, a standard weather substation was installed adjacent to the test tanks. The station was equipped to permit observations dealing with maximum and minimum air temperatures, pan evaporation, maximum and minimum water temperature in the pan, wet and dry bulb temperatures, rainfall, and wind passage in miles per day. Much of the equipment was housed in a standard instrument shelter; all equipment was of the type used by the U.S. Weather Service and all observations were recorded on W.S. Form E-22, Record of Evaporation and Climatological Observations. (Figure 7) Originally the weather station area was unfenced, but it quickly became apparent that deer found the evaporation pan to be an excellent source of drinking water, hence an 8-ft fence was erected around the instrument area.

As previously discussed, each set of three tanks was prepared for a specific cover. The first set, Test Tanks No.'s 1 thru 3, was allowed to recover with natural vegetation. The second set, Test Tanks No.'s 4 thru 6, was initially planted with winter rye followed by coastal bermuda; the third set, Test Tanks No.'s 7 thru 9, was kept free of growth in order to serve as a control; and the fourth set, Test Tanks No.'s 10 thru 12 was planted with carpet grass of the St. Augustine variety commonly available at many local nurseries. Some difficulty was experienced with aiding the plants in their initial growth period at the onset and prior to interaction between the plants and the effluent placed in the tanks because no other source of water was available at the site. Rains

Station HEIMER RD. EXP. County BEXAR State TX Month DEC., 1976

Time of Complete Observation (local time) 7 a.m. Standard time in use C.S.T.

Day	Air Temperature °F: 24 Hrs. Ending at Obsn. Max.	Min.	At Observation: Dry-bulb	Wet-bulb	Dew Point	Supplemental Readings at __: Dry-bulb	Wet-bulb	Dew Point	Water Temp. °F: 24 Hours Ending at Obsn. Max.	Min.	Precipitation: Time of beginning	Time of ending	Time of beginning	Time of ending	24 Hr. Amounts: Rain, Melted snow, etc. (In. & hundredths)	Snow, Ice Pellets, Hail (In. & tenths)	At obsn.	Wind: Anemometer Dial Reading (Miles) (8132)	24 Hr. Movement	Evaporation: Gage Reading or Amount Added +	Reading When Tank Filled or Amount Removed −	Amount of Evaporation (ICE)	Additional Data — Remarks			
1	56	15	Frozen				23		Frez.						0			8143	11	Frozen		–	CLR	CLD	CLM	FROST
2	63	21	37	35			37		55	32					0			8159	16	2.28		–	"	"	BRZ	
3	63	24	32	27			26		Froz.						0			8173	14	2.31	2.27	.08	"	"	CLM	
4	67	24	40	35			40		"						0			8186	27	2.24	+.36	.16	"	"	"	
5	71	38	54	54			54		62	32					0.36	Rain	Rn	8203	17	2.44	+.77	0	CLDY	COOL	BRZ	
6	64	58	62	61			62		62	55					0.77	"		8224	21	3.23		–	"	MLD	CLM	FOG
7	63	25	Frozen				28		Froz.						0			8235	11	Frozen		–	CLR	COLD	CLM	
8	42	24	28	27			27		"						0			8278	43	3.06		08	"	"	WDY	FROST
9	65	25	35	34			35		62	32					0			8290	12	2.98		08	PC	"	CLM	
10	67	35	54	58			58		58	38					0			8321	31	2.90	+.12	0	CLDY	MLD	BRZ	FOG
11	66	38	41	40			40		63	46					0.12	Rain		8347	26	3.19	+.11	0	"	"	CLM	
12	50	39	50	48			50		48	45					0.11	"	Rn	8368	21	3.43	+.11	0	"	COOL	BRZ	
13	53	45	45	44			45		52	45					0.11	"		8382	14	++	+.12	0	PC	"	WDY	
14	55	32	42	32			42		Froz.						0.12	"		8395	13	++		0	CLDY	COLD	BRZ	
15	56	33	42	40			42		52	40					0			8409	14	2.73		.08	CLR	"	CLM	
16	61	40	48	46			48		55	41					0			8420	11	2.65		.03	PC	"	BRZ	
17	68	41	43	42			43		61	45					0			8428	8	2.62		.03	CLDY	COOL	CLM	
18	65	42	44	43			44		61	46					0			8430	2	2.59	+.12	0	"	"	"	
19	63	40	62	61			62		60	46					0.12	Rain		8438	8	2.77	+.02	.06	CLDY	MLD	"	
20	65	43	44	39			44		63	47					0.02	"		8453	15	2.73		–	PC	CLD	WDY	
21	53	26	Frozen				27		Froz.						0			8466	13	Frozen		–	"	"	"	
22	54	24	38	34			38		57	30					0			8496	30	2.60		.03	CLDY	"	CLM	
23	52	33	45	41			45		46	35					0			8499	3	2.57		.06	PC	"	WDY	
24	63	29	32	31			32		55	35					0			8513	14	2.51	+.12	.07	"	"	CLM	
25	67	26	Frozen				30		Froz.						0.12	Rain		8520	7	2.56		.01	"	"	WDY	
26	69	27	59	46			59		60	37					0			8541	21	2.56		.06	CLR	COOL	BRZ	
27	67	30	42	36			42		55	37					0			8551	10	2.49		.07	PC	COLD	"	
28	68	35	61	48			61		56	37					0			8577	26	2.42		.11	"	COOL	WDY	
29	73	27	34	31			34		60	35					0			8596	19	2.31		.05	"	COLD	CLM	
30	65	33	46	43			46		53	36					0			8608	12	2.26		–	CLDY	COOL	"	
31	58	25	Frozen				27		Froz.						0			8615	7	Frozen		.03	"	COLD	"	SLEET
Sum															1.85				497			1.04				
Avg.	62	32	45	42			42		57	39				[illegible]	0.77					Adjusted total						

Observer BENEDICT Station HEIMER RD Month DEC., 1976

WB FORM E-33

Fig. 7 - Typical Record of Evaporation and Climatological Observations

assisted with this process, however, and the plants quickly became established and flourished. The entire project area was mowed and trimmed periodically.

At this point the test tanks had been installed, the septic tank was in place and receiving raw sewage, the weather data was ready for recording, and the chosen vegetation was planted and in place. In November of 1975, the accumulation of data began and the last recordings were taken in April of 1977. Although the original plan had been to accumulate data for one year, through all four seasons, the evapotranspiration readings became stable and meaningful in April of 1976, hence the project, and the data herein, cover the period from April, 1976 through April, 1977. The weather data substation was operative since November of 1975.

TEST PROCEDURES

Team members made twice daily visits to the experimentation site, once in the morning and once in the late afternoon. Piezometer readings were made of the standing gravity level water with a 3-ft brass rule, graduated in eighths of an inch, attached to a four foot wooden handle. In the morning, weather data was taken at 7:00 AM at the on site weather substation. During the evening, if water levels in the test tanks were below an inch of the predesignated height, wastewater was added. Since the feeder lines to the distribution pipe were not metered, it was decided to add water to the test tanks via the piezometer. Water was added using a two liter container only after the evening reading. (See typical data sheet Figure 8) Routine maintenance of the site was conducted throughout the period of the tests and included instrument cleanings, replacement of water lost from the evaporation pan, weeding of the

EVAPOTRANSPIRATION DATA SHEET

DATE: 6/28/76

INITIALS: BL

TIME: INITIAL 4:50

FINAL 6:00

RABA & ASSOCIATES CONSULTING ENGINEERS INC.
GEOTECHNICAL AND MATERIALS TESTING ENGINEERS
[512] 342-4216
[illegible]
P. O. BOX [illegible]
SAN ANTONIO, TEXAS [illegible]

Tank No.	Initial Reading	Water Added	Final Reading	Comments
1	8 5/8	0		
2	9 1/2	0		
3	7 1/8	16		
4	12 1/8	0		
5	11 1/4	0		
6	12	0		
7	10 1/8	0		
8	9 7/8	0		
9	11 7/8	0		
10	6 1/4	0		
11	8 1/2	12		
12	6 1/4	20		

	Yes	No
Are all of the gates locked?	✓	
Does the grass need watering?		✓
Do you need more clean water?		✓
Does the evaporation tank need cleaning?		✓
Is everything working properly? (If no - explain)	✓	
Does evaporation tank need more water?		✓

If yes:: Initial reading _____ Time _____
Final reading _____ Time _____

Fig. 8 - Typical Evapotranspiration Data Sheet

control plot, and grass cutting.

SOLAR RADIATION AND PAN EVAPORATION

To continue the effort to equate observable climatological data to evapotranspiration, the relationship between solar radiation and pan evaporation was investigated; it has been established that pan evaporation data is readily obtainable for a given area. (See Figure 9) (4) It has also been noted that solar radiation seems to be the most important variable emerging from the literature search. Since it would seem to control evaporation, it might well be that it is a key, perhaps the key, to prediction of evapotranspiration. Many of the papers reviewed express solar radiation in terms of other climatological data, while others appear to go into extensive detail by developing methods of defining solar radiation using fairly complex physical and mathematical development. Unless one has the background in mathematics and the laboratory facilities, including special instrumentation, efforts to proceed in this direction become difficult. This fact is significant, because the writers feel that in order for the procedures developed by this study to be successfully used, they must be as simple as possible. Thus, the development of a simplified formula which capitalizes on this rigorous background would seem to be in order. What follows is inspired by and adapted from the work of Koberg (17) on solar radiation for the U.S. Geological Survey.

Background on Koberg's Method

Most long-wave radiation from the atmosphere has wavelengths between 4 and 120 microns (1 micron = 10^{-6} meter). Water vapor, which is the principle absorber of radiation in the atmosphere, has absorbtion ranges throughout this range. Most radiation from the atmosphere must then

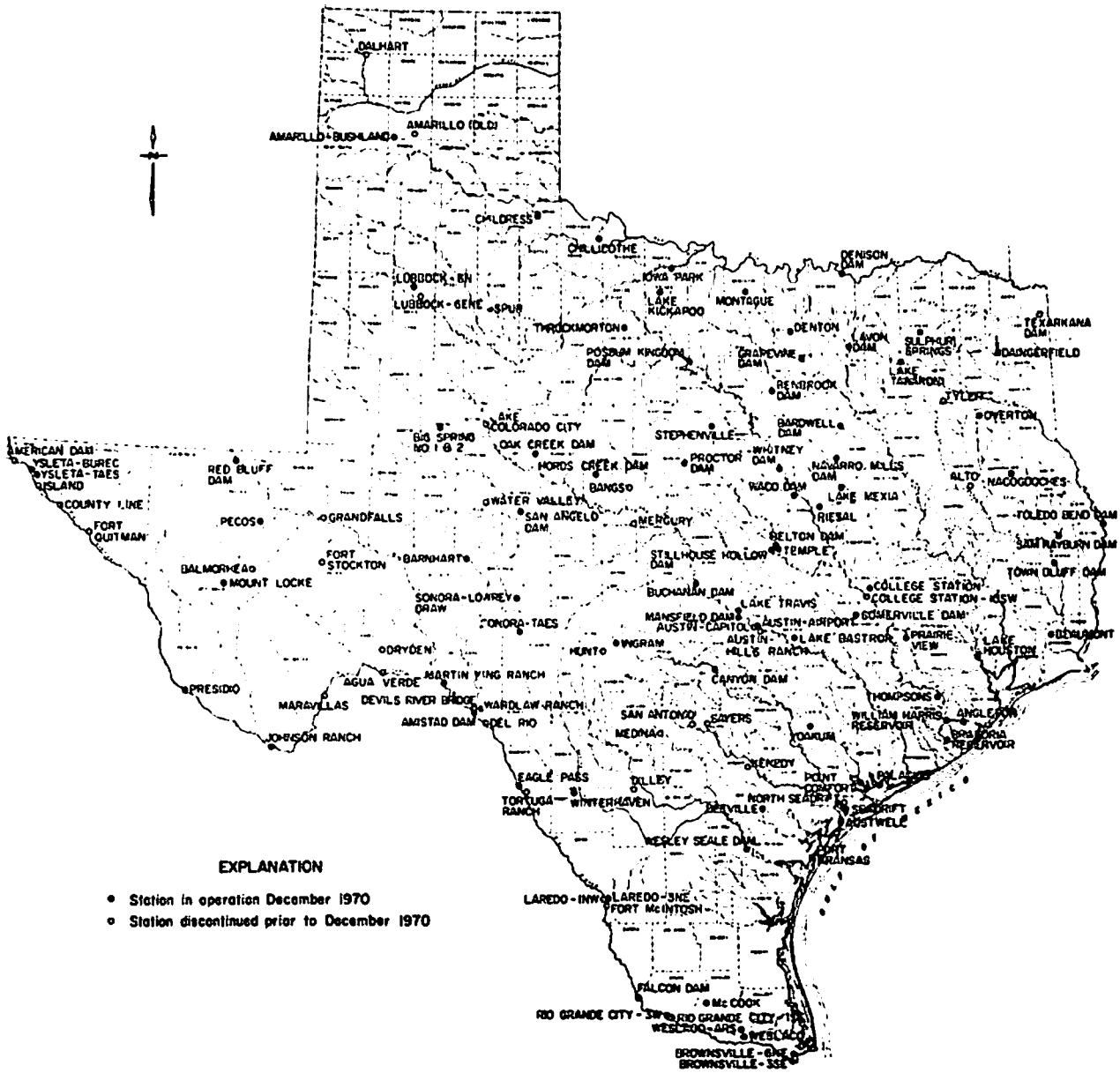


Fig. 9 - Location of Evaporation Stations in Texas (4)

come from water vapor because, according to Kirchoff's law, they emit radiation as strongly as they absorb. The simplest method to determine long-wave radiation received at the surface is to treat the atmosphere as a gray body and choose a suitable emissivity. One method is expressed by:

$$\frac{Q}{\sigma T^4} = c + d\sqrt{e_a} = \text{emissivity} \qquad (1)$$

where:

Q = the radiation received, in cal/cm^2/day,

σ = the Stefan-Boltzmann constant, 11.7118 X 10^{-8} cal/cm^2/Day/(^oK)^4

T = the air temperature in Kelvin,

c = constant,

d = constant,

e_a = vapor pressure of the air in millibars.

In the course of Koberg's study, it was noted that correlation was better if "c" varied with air temperature and cloud cover. It is easy to compute the clear-sky radiation for any latitude, and in any heat-budget study, measurements of solar radiation are generally made by some type of instrument or are available from a nearby U.S. Weather Service office.

A family of curves shown in Figure 10 was drawn using the air temperature as the abscissa and the value of "c" as the ordinate.

The average percentage difference, for all periods between computed and measured amounts of radiation without regard to sign, varied from 2.0 to 11.7 per cent. This agreement would probably indicate that the variability of the moisture content of the upper atmosphere and cloud

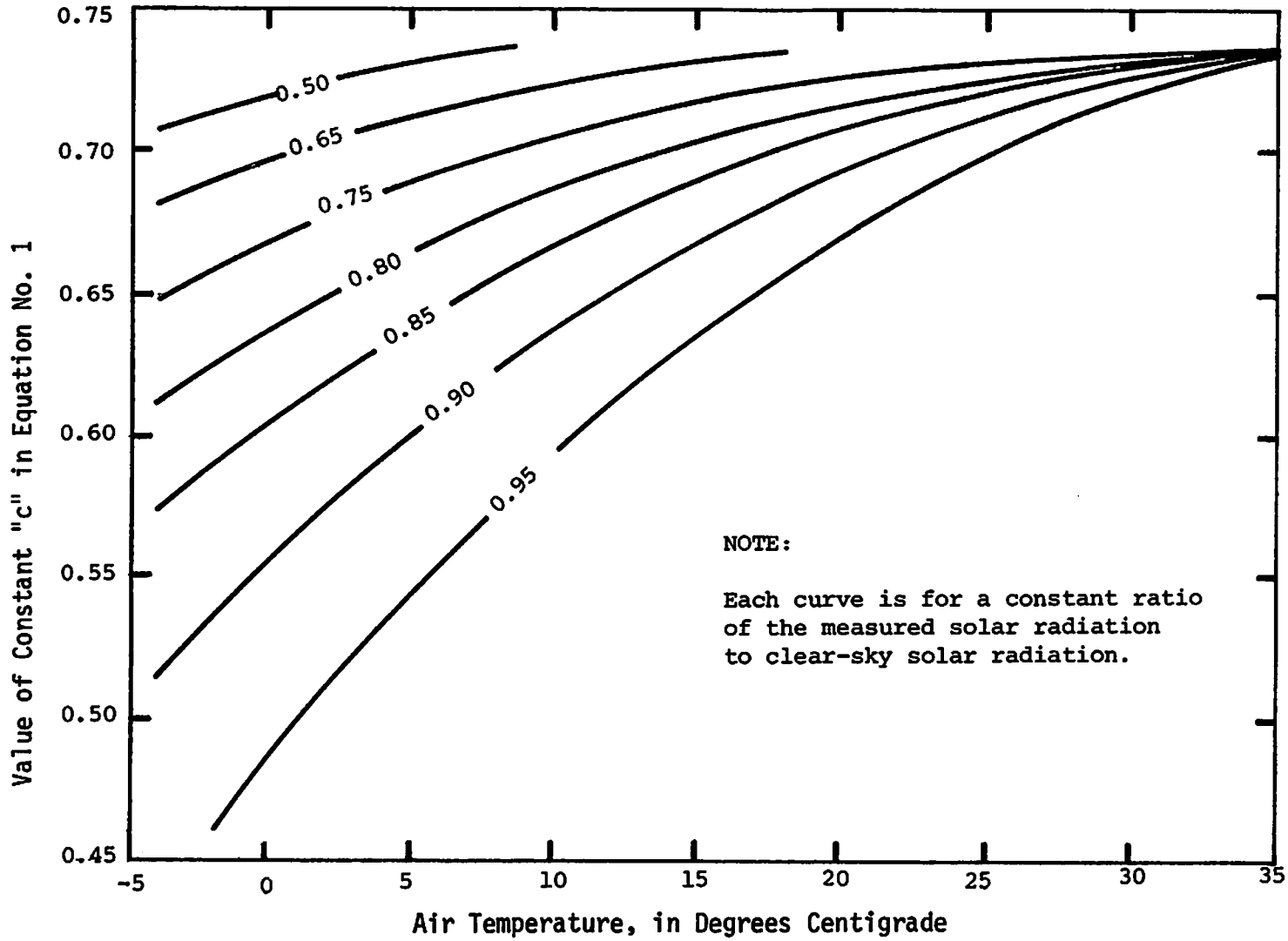


Fig. 10 - Family of Curves for Determining the Value of the "c" Constant in Brunt's Equation for Atmospheric Infrared Radiation. (17)

cover are less important for long periods than for short periods.

Equation No. 1 can be used to determine the long-wave radiation received at an area if surface measurements are made of air temperature, humidity, and solar radiation. The equation is based on data obtained where fog or precipitation seldom occur.

Raba Method of Finding Solar Radiation

The use the Equation No. 1 require selecting certain constants and variables from the graphs presented. Possibly another method that is just as accurate as this technique is the method developed during this research.

In this latter method, the emissivity is established for each month of a constructed year. Once the average monthly emissivity is calculated and the average ambient air temperature is measured, calculation for the average solar radiation can be simply accomplished with accuracy. The average monthly emissivity may be calculated from local climatological data issued by the U.S. Weather Service provided they contain a record of measured solar radiation per month and the average monthly temperatures over a period of at least 10 years.

Therefore, for the equation:

$$\frac{Q}{\sigma T^4} = \text{emissivity} \qquad (2)$$

the only unknown variable is the monthly emissivity. Thus, we can construct a typical average year, finding the average emissivity for each month. Once we establish the average emissivity for each month of a constructed year, we need only measure the average ambient air temperature for each month; then Equation No. 2 for solar radiation may be solved.

Applying this technique to the historical weather data for San Antonio, Texas, we were able to predict the solar radiation for any given year from the ambient air temperature with about 8 per cent accuracy.

It has also been noted that pan evaporation is a function of the average solar radiation. Through further mathematical development, one can estimate, with reasonable accuracy, pan evaporation as a function of solar radiation. Thus, knowing the monthly ambient air temperature and emissivity, one can calculate the monthly solar radiation for each month and then the average pan evaporation. A typical development of these procedures for the San Antonio area is presented in Appendix A.

TANK CALIBRATON

It should be noted that there is a difference between measuring water loss from a water filled pan and measuring water loss from the media filled test tanks. Reading from the tanks must be referred back to the standardized Weather Service evaporation pan before direct comparisons may be attempted. The conclusion, therefore, is that the loss of 1-in. of water from the pan is not directly equivalent to a 1-in. loss in the test tanks. It is easy to measure pan evaporation but much more difficult to measure tank evaporation. It was considered expedient therefore to relate the two so that with knowledge of pan evaporation - easily measured or obtained - one could predict tank loss via evapotranspiration.

In order to calibrate the tanks, a graph of effluent added versus the resulting change in effluent level was prepared using data from all of the test tanks, Figure 11. From the average line drawn through the data, it is apparent that 20 liters of effluent will raise the effluent

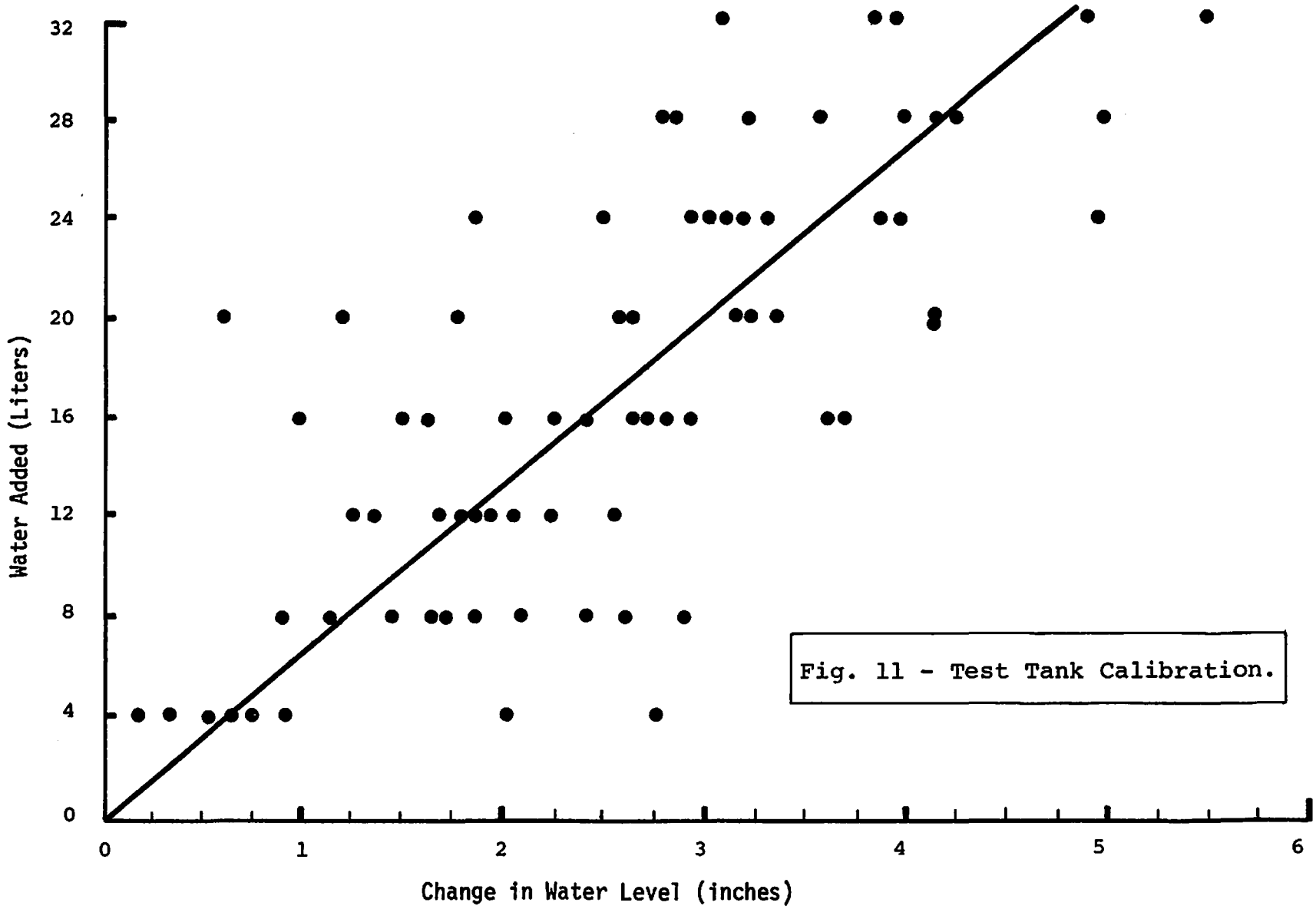


Fig. 11 - Test Tank Calibration.

level approximately 3-in. However, if 20 liters of water is spread over 18 sq ft, the area of the test tanks, it would cover the area with 0.471-in. of water. Thus, 0.471-in. of pan evaporation represents the same evaporation as 3-in. of evapotranspiration from the test tanks:

1 inch of pan evaporation = 6.37 inches of evapotranspiration

1 inch of pan evaporation = 0.6234 gallons per sq ft

and 1 inch of evapotranspiration = 0.0979 gallons per sq ft

The above relationships were used to convert all of the measured evapotranspiration readings to units comparable to the units of pan evaporation to allow a direct comparison.

RESULTS

The data obtained daily during the conduct of this study are tabulated in Appendix B. These data are summarized in Figures 12, 13, 14 and 15 which show the average monthly evapotranspiration for each grass cover throughout the year of the study. Reference to Figures 12 through 15 illustrate the same grass cover was placed on a set of three adjacent tanks. We attempted to maintain an effluent level of 7-in. in one tank, 10.5-in. in another, and 14-in. in the third. This would indicate how the same cover would respond to different effluent levels. Thus, Test Tanks No.'s 1, 4, 7 and 10 were maintained with approximately 7-in. of effluent; Test Tanks No.'s 2, 5, 8, and 11 at the 10.5-in. level; and finally Test Tanks No.'s 3, 6, 9, and 12 at the 14-in. effluent level. It should be noted that Tanks No.'s 7, 8, and 9 had no cover and were used as controls.

Closer inspection of the graphs reveals that generally the more effluent in the tank, the higher the rate of evapotranspiration.

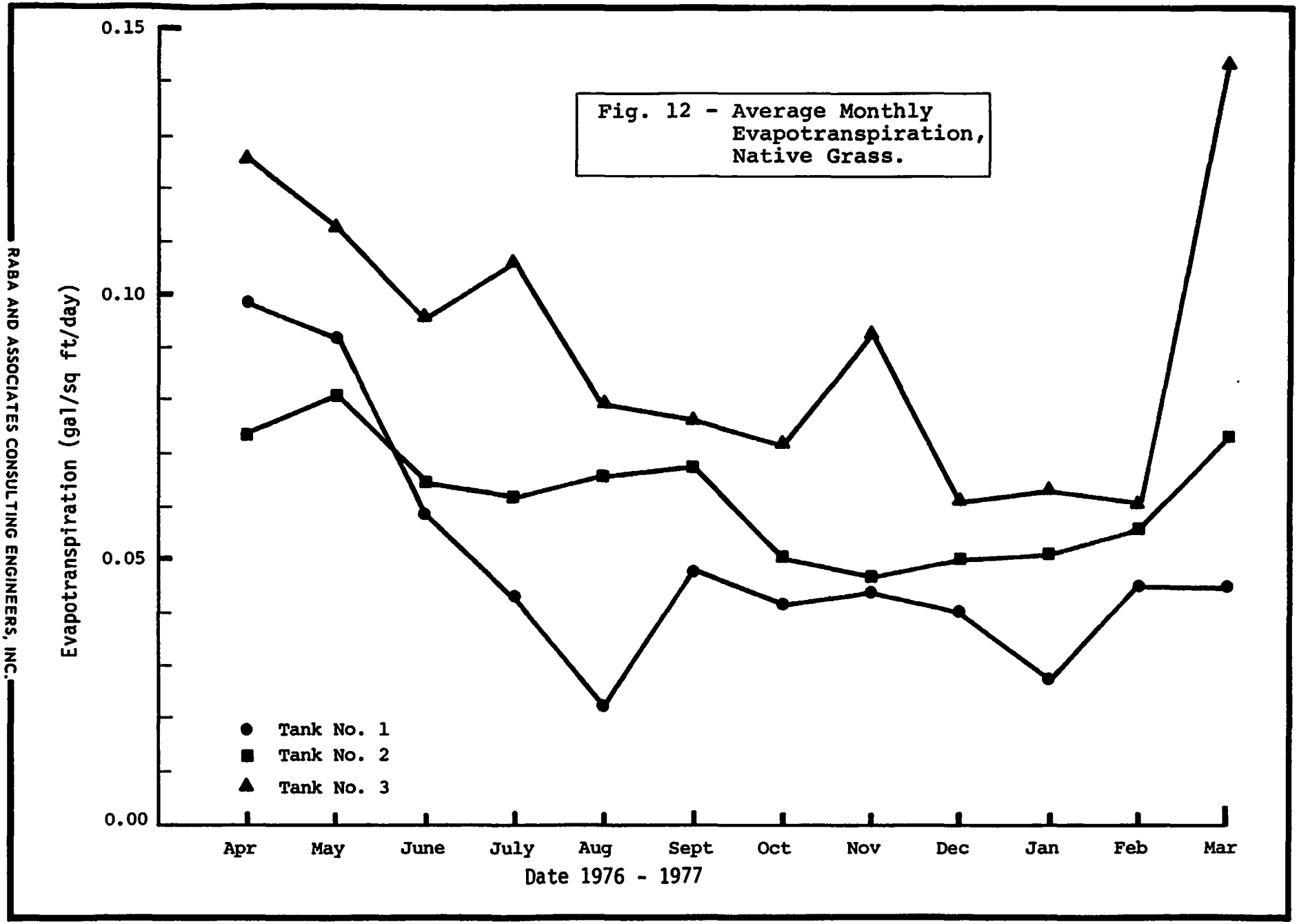


Fig. 12 - Average Monthly Evapotranspiration, Native Grass.
Evapotranspiration (gal/sq ft/day)
0.15
0.10
0.05
0.00
Tank No. 1
Tank No. 2
Tank No. 3
Apr
May
June
July
Aug
Sept
Oct
Nov
Dec
Jan
Feb
Mar
Date 1976 - 1977

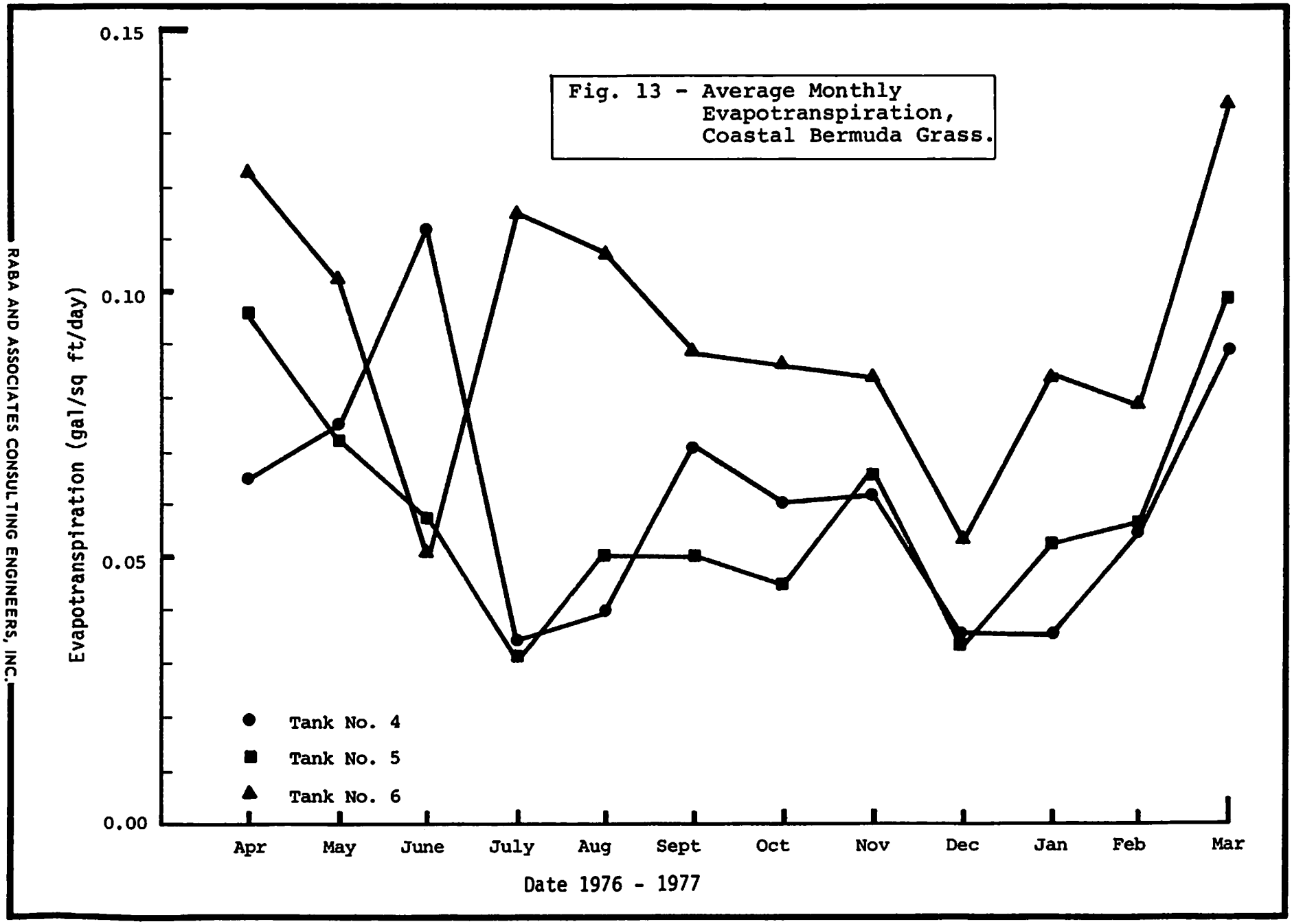


Fig. 13 - Average Monthly Evapotranspiration, Coastal Bermuda Grass.
0.15
0.10
0.05
0.00
Evapotranspiration (gal/sq ft/day)
Tank No. 4
Tank No. 5
Tank No. 6
Apr
May
June
July
Aug
Sept
Oct
Nov
Dec
Jan
Feb
Mar
Date 1976 - 1977

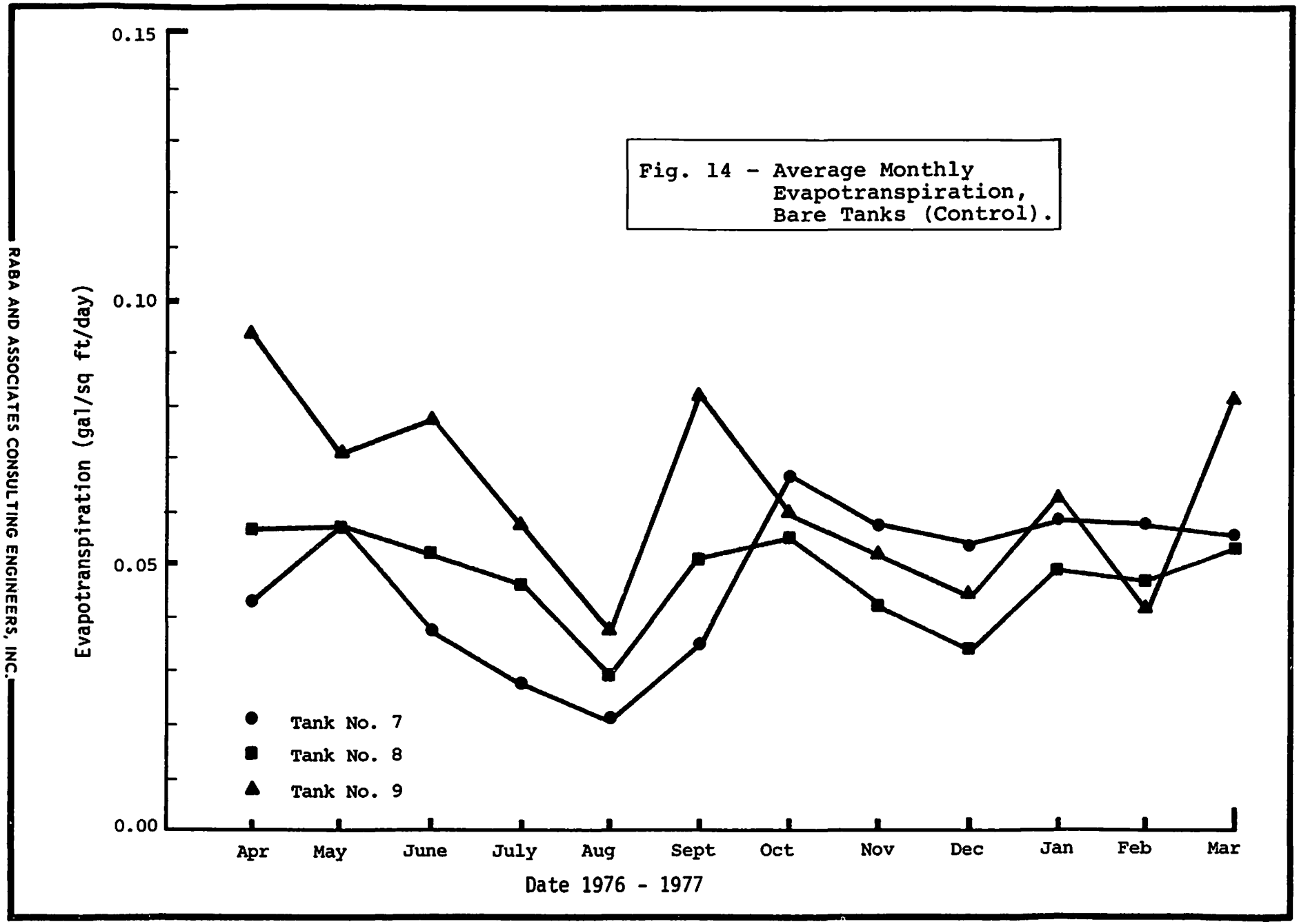
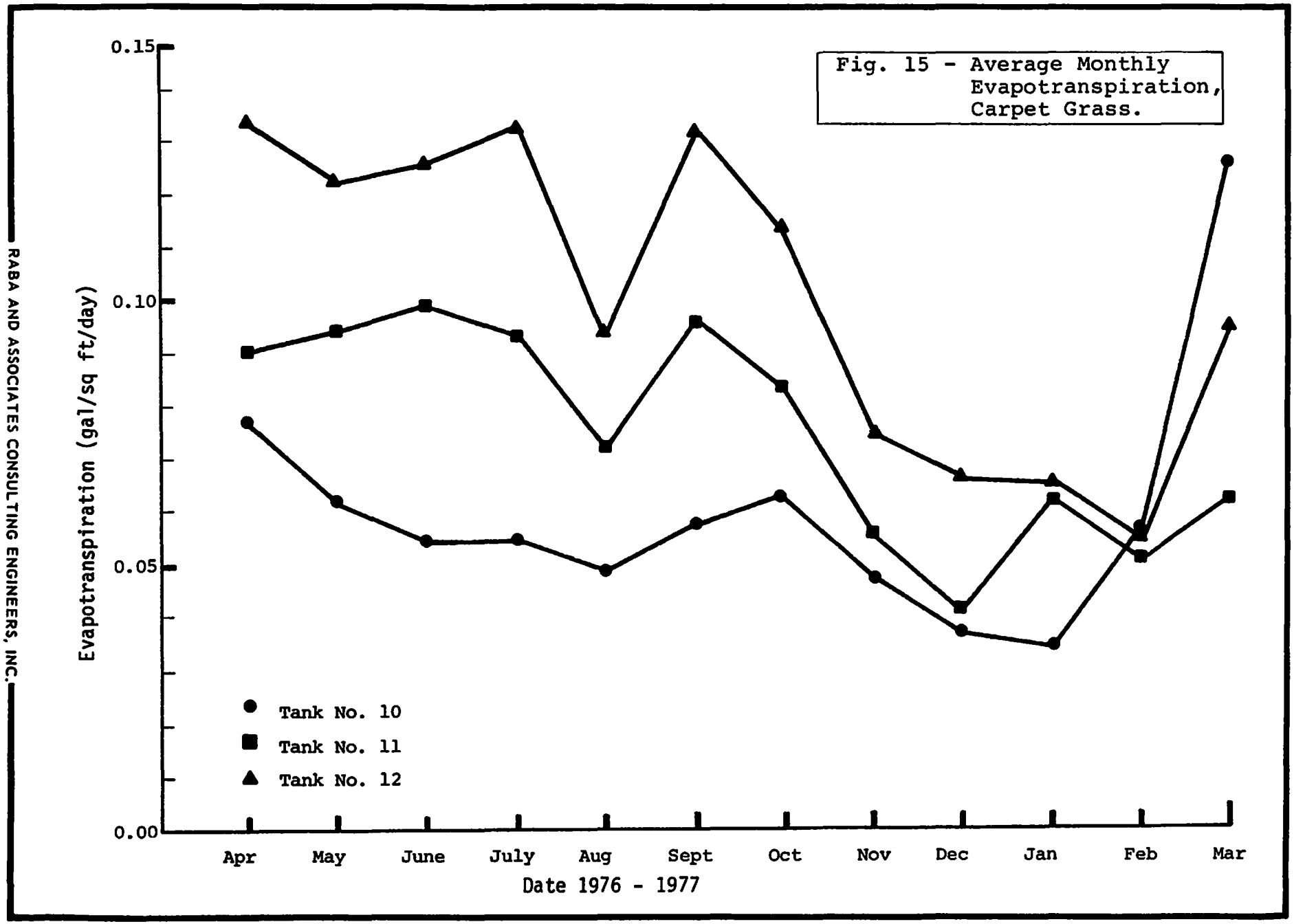


Fig. 14 - Average Monthly Evapotranspiration, Bare Tanks (Control).



Conversely, as the amount of effluent in the tank decreases, so does the rate of evapotranspiration. It will also be noted that during the winter months all of the graphs dip indicating a decrease in evapotranspiration regardless of effluent level. This is attributed to the dormancy of the grasses, but it should be noted that comparison of the covered tanks with the bare tanks indicates that the dormant covers do not significantly retard naturally occurring evaporation. The data for March, 1977, indicates that the grasses are recovering and becoming active again. At the time of this writing (July, 1977), an on-site inspection reveals that the grasses are fully functional.

DISCUSSION OF RESULTS

There is a need at this point to develop the relationship between pan evaporation and evapotranspiration. In earlier discussion it was shown that pan evaporation is affected by most of the weather variables, thus if evapotranspiration can be shown to be a function of pan evaporation, the evapotranspiration calculations will encompass many of these variables already considered. Two variables, however, not previously considered in pan evaporation calculations that are of considerable importance to evapotranspiration calculation are (1) the depth of the effluent below the surface of the bed; and (2) the kind of surface cover used on the bed. It becomes apparent, therefore, that evapotranspiration is a function of weather (pan evaporation), depth of the effluent in the bed below grade, and vegetative cover or lack thereof.

Depth of Effluent

An attempt was made to compare the height of the effluent or depth of the effluent below the surface, with the rate of evapotranspiration. This

was done for all four ground covers but it was found that the most significant were the bare tanks where one variable, the vegetative cover, was not a factor.

The effluent levels were sectioned into 8 groups, each group representing a span of 2-in. beginning with 24 to 26-in. and ending with 10 to 12-in. below the ground surface. The change in effluent levels for each interval was compiled for each month of the test period. The distribution of the data, when compiled in this form, yielded a histogram which showed that the majority of readings were made of the effluent level 14 to 20-in. below the ground surface. A graph of effluent level below grade vs. evapotranspiration in gals/ft^2/day was plotted which resulted in a curve of positive slope which increased rapidly as the effluent level approached the surface. A typical graph for April, 1976, is shown in Figure 16. The conclusion, therefore, is that as the effluent level approaches the surface of the bed, the evapotranspiration rate increases.

Pan Evaporation

Pan evaporation in gals/ft^2/day vs. evapotranspiration in gals/ft^2/day was plotted for the same 12 month period using a constant effluent height, i.e., the same ranges of effluent heights discussed earlier, Figure 17. This graph is a composite of heights from 22 to 24-in. below grade to 10 to 12-in. below; the curve trended toward a parabola. The data led to the expectation that all of the curves would plot so as to be convex in the positive x-axis. Just the opposite was found, however, for curves with constant heights of 14 to 16-in. below grade; they were as expected in depths from 10 to 16-in. Thus, there are two cases to

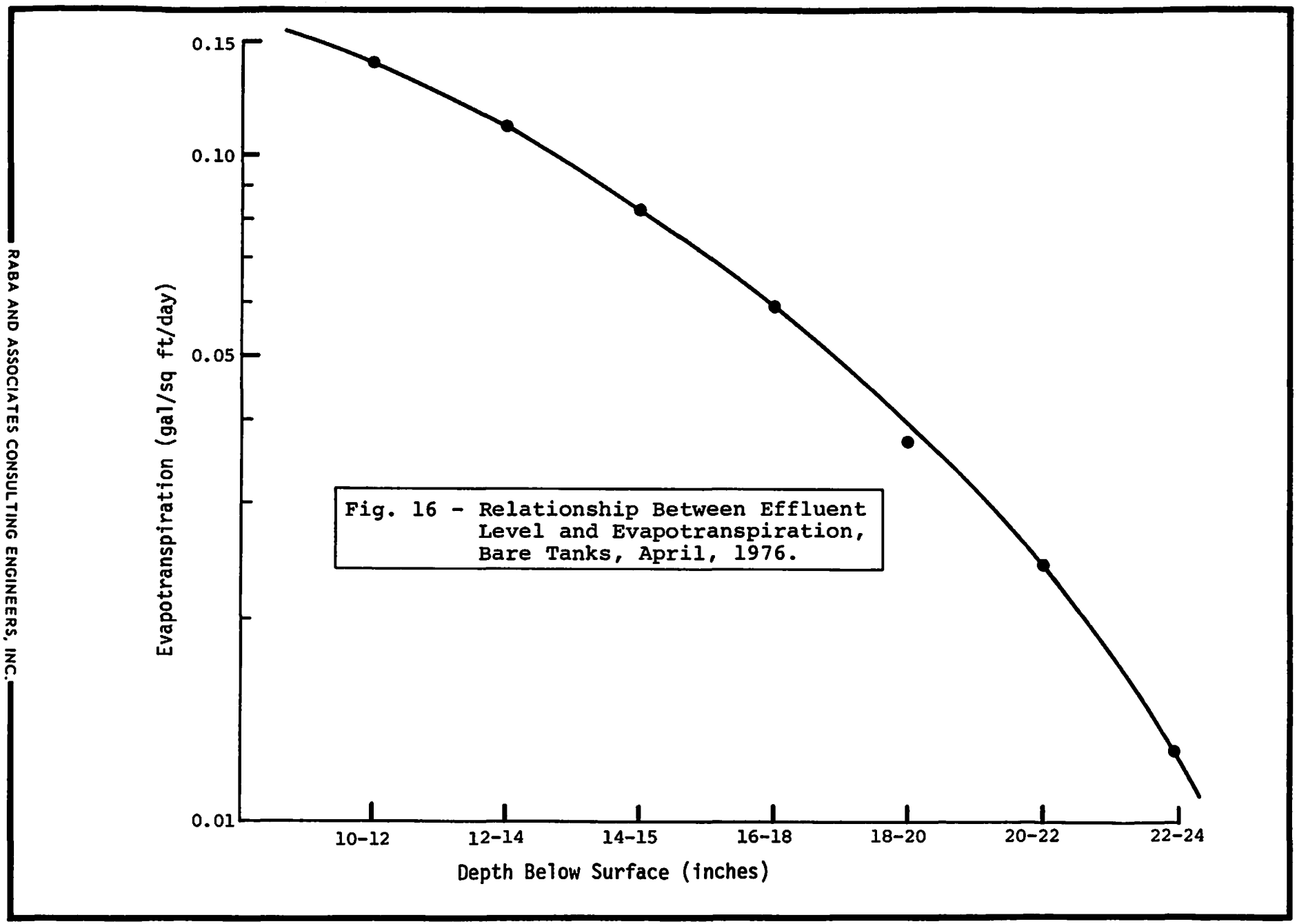


Fig. 16 - Relationship Between Effluent Level and Evapotranspiration, Bare Tanks, April, 1976.

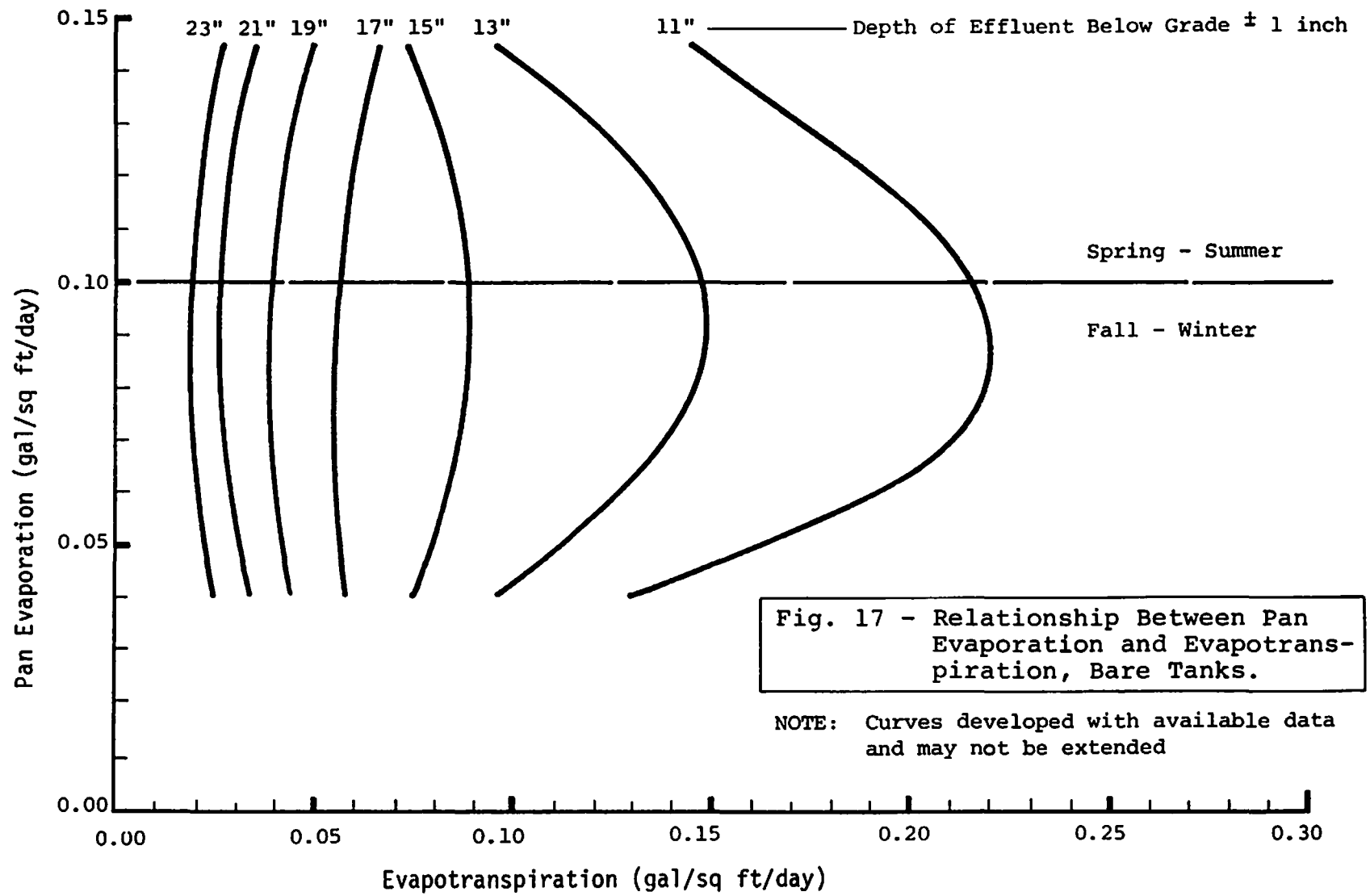


Fig. 17 - Relationship Between Pan Evaporation and Evapotranspiration, Bare Tanks.

NOTE: Curves developed with available data and may not be extended

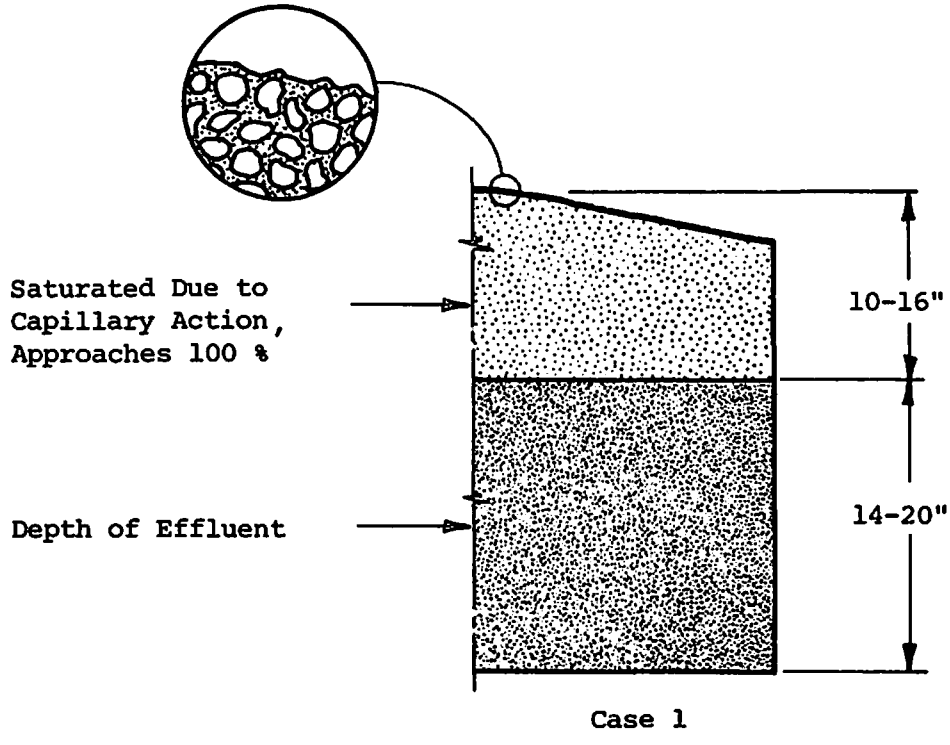
discuss. (See Figure 18).

In the case where the effluent level is 10 to 16-in. below grade, there appears to be an effluent level where the saturation of the surface approaches 100 per cent, perhaps because one of the main methods of transporting effluent to the surface is through capillary action. In such a case, the voids at the surface and near the surface are filled with water. During low pan evaporation the moisture at the surface is completely evaporated and replacement of the moisture lost is rapid. On the other hand, at a pan evaporation rate that is relatively high, a condition most likely to occur during periods of low humidity, warm temperatures, and good breezes (the spring and summer months), the evapotranspiration of the tank is so rapid that drying of the surface may occur and recovery of the water lost is slowed or even stopped. Thus, as pan evaporation increases, the evapotranspiration will decrease.

In the second case (16 to 24-in. depths) the saturation of the surface is not approaching 100 per cent. Here the surface soil is again moist, and the moisture loss is rapid when pan evaporation is high, thus as pan evaporation increases the bed surface will dry but the weather conditions affect the soil to a greater depth which allows evapotranspiration to continue. When pan is low, evapotranspiration will increase for there will be a slow but steady capillary flow of water to the surface.

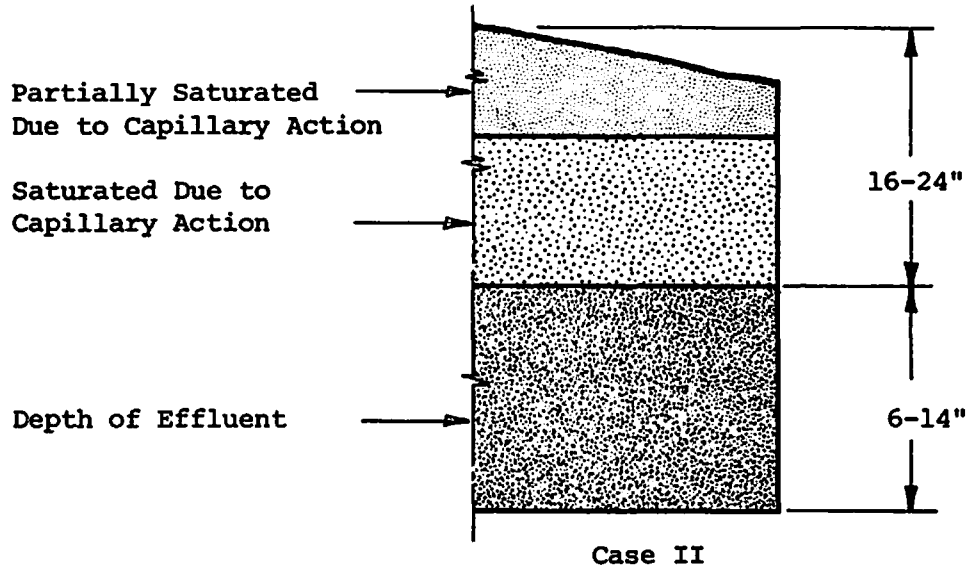
Vegetative Cover

The third factor studied was the influence of surface cover on the rate of evapotranspiration. These covers were native grasses, coastal bermuda, and carpet grass. A graph of pan evaporation and percentage increase in evapotranspiration was needed to account for the effect of



Case 1

Ground Surface Saturated Due to Capillary Action



Case II

Ground Surface Not Saturated Due to Capillary Action

Fig. 18 - Cross Sections Through Typical Tanks at High and Low Effluent Levels.

surface growth in effluent level calculations.

First, the per cent increase or decrease in evapotranspiration as compared to the bare tanks was calculated and plotted as level vs. per cent increase. The result was an average percentage increase in evapotranspiration of bare tanks for a given pan evaporation and surface cover which appeared as a straight line. Figure 19 illustrates that when the effluent level is plotted against the per cent increase or decrease of the bare tanks for each month of the study, the line is essentially a constant. Then the constant per cent increase observed for each month was plotted against the average pan evaporation for that month and related to the three covers studied; the result is as shown in Figure 20.

With the above factors accounted for, several further observations are in order.

Site Location and Construction

For a project of this type, the location of the experimental site adjacent to a package sewage treatment plant was ideal. The sewage obtained was typical of average household effluents. A typical chemical analysis of the effluent is presented in Table 1. For comparison purposes, a typical drinking water analysis from the Edwards reservoir is also presented.

The contractor was experienced in septic tank-drain field installations and no unforeseen problems were encountered in construction of the test site. The steel tanks were fabricated to specifications, and typical PVC pipe, fittings, and connections identical to those used in standard soil absorption systems were used.

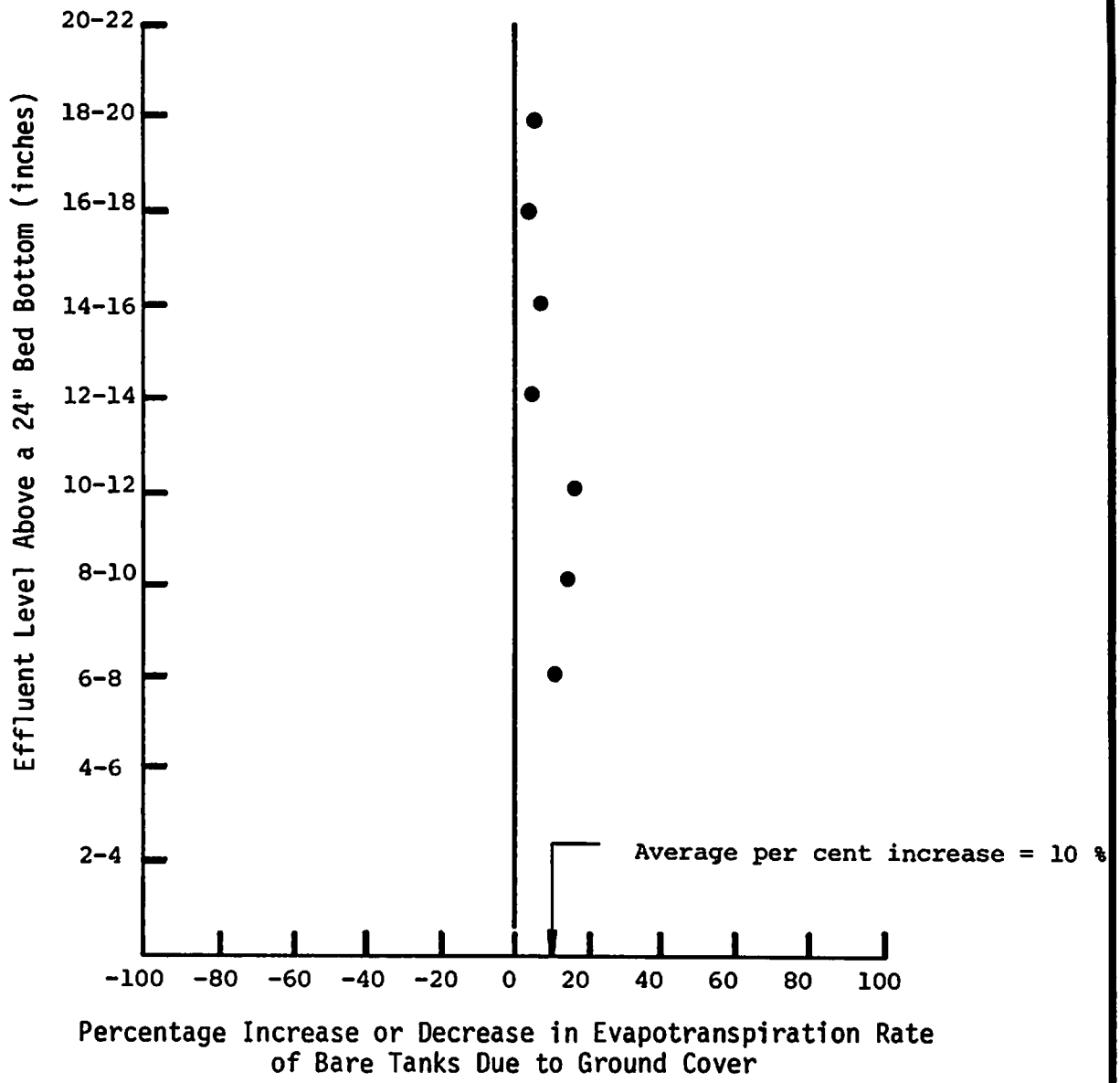


Fig. 19 - Relationship Between Effluent Level and Per cent Change in Evapotranspiration Rate Compared to Bare Tank, Coastal Bermuda, April, 1976

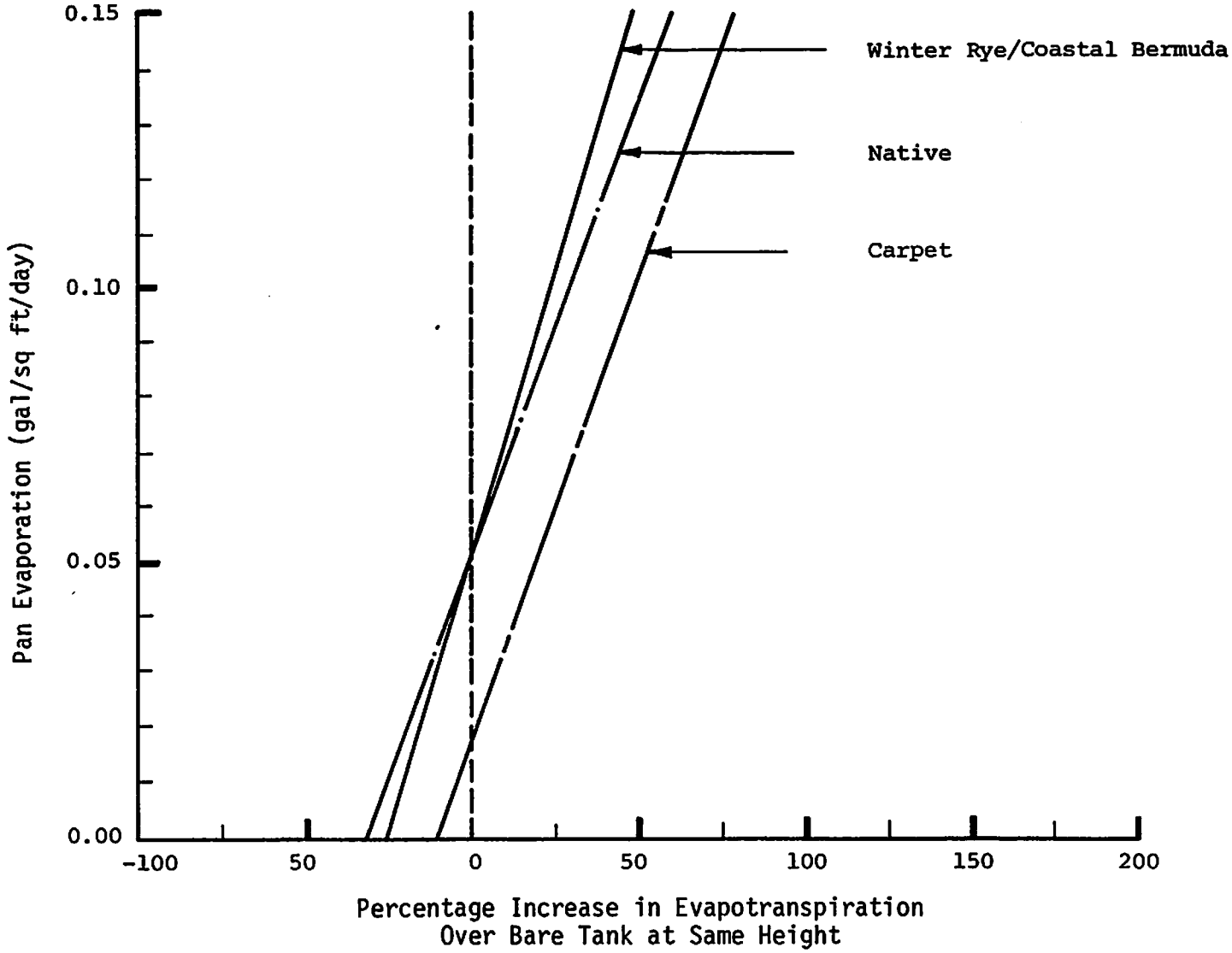


Fig. 20 - Influence of Grass Cover on Evapotranspiration

TABLE 1

TYPICAL CHEMICAL ANALYSES OF TEST EFFLUENT AND EDWARDS AQUIFER

Reading in ppm

	Raw Sewage at Test Site	Edwards Aquifer
Calcium	105	74
Magnesium	30	15
Chlorides	170	15
Sulfate	120	25
Carbonate	0	0
Bicarbonate	610	259
Total Alkalinity	500	213
Total hardness	385	248
Total solids	940	405
C.O.D.	80	---

Weather

Weather data were significant in that they provided the bases for the climatological data relating to evaporation and transpiration. Further, they provided information from which relationships could be developed between them and water loss from the tanks. It is felt that given certain of these data, relationships have been developed which will permit predictions of water loss from evapotranspiration systems. One does not have to establish a weather station to obtain these data; the U.S. Weather Service can provide summaries for most geographic areas in the country and from these, working averages may be obtained. Further, the readings taken at the site regarding temperatures, wind movement, rainfall, and pan evaporation, tabulated in Appendix C, were so similar to official Weather Service readings that they support the use of summary compilations from the Weather Service. The graphs following illustrate this statement. Figure 21 tabulates and summarizes the data gathered at the test site. Figure 22 compares precipitation as measured at the site with that officially recorded by the Weather Service; Figures 23 and 24 compare the average maximum and minimum temperatures; and Figure 25 relates the comparative data for pan evaporation. It might be noted that during the experimental period, San Antonio experienced an abnormally wet year with a total rainfall of 54.72 inches; the norm for San Antonio is 27.84 inches. Further, and later in this paper, reference will be made to the average pan evaporation for the area. It was observed that the average evaporation of this type was found to be lower as measured at the evapotranspiration site than the average reported for San Antonio by the Texas Water Development Board. (4)

Fig. 21 - Weather Data During
Experimentation Period
(April, 1976 - March, 1977)

Month 1976	Air Temperature (^{o}F) Avg Min	Avg Max	Precipitation (inches)	Wind (miles)	*Pan Evaporation AET (Gal/sq ft/day)	ASA
April	56	79	7.83	717	.062	.070
May	56	81	8.16	279	.070	.078
June	67	92	2.54	469	.074	.101
July	70	88	8.09	536	.086	.113
August	67	92	3.29	321	.089	.113
September	66	90	4.78	306	.075	.085
October	46	74	9.95	569	.054	.062
November	40	64	2.75	536	.029	.043
December	25	58	1.85	497	.026	.031
1977						
January	31	58	2.79	622	.036	.031
February	35	68	1.41	597	.032	.039
March	46	76	1.28	676	.070	.054

*AET is data recorded at the E.T. site.
ASA is data recorded over 40 years at San Antonio Weather Bureau.

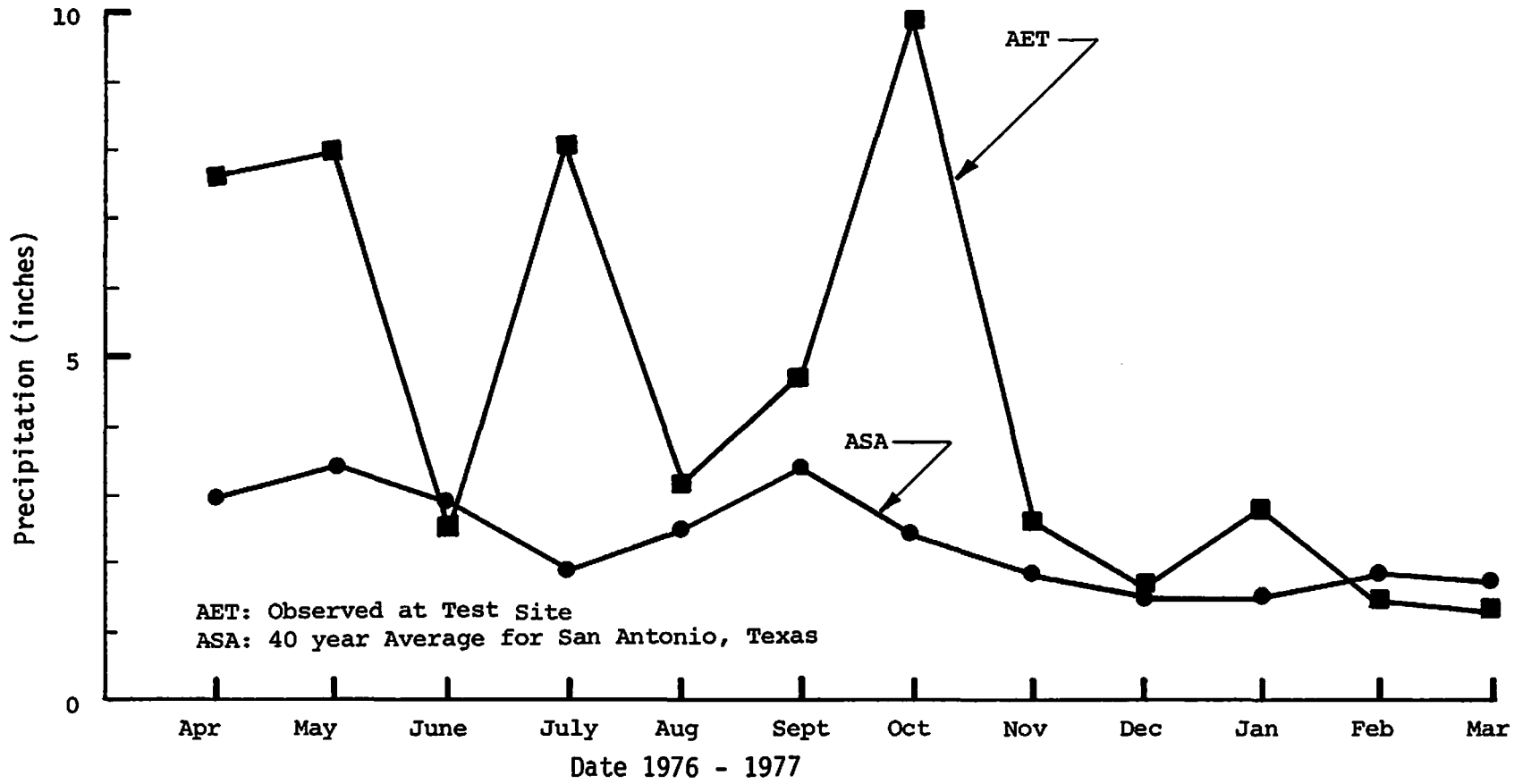


Fig. 22 - Comparison of Observed and Mean Precipitation, Test Site and San Antonio, Respectively.

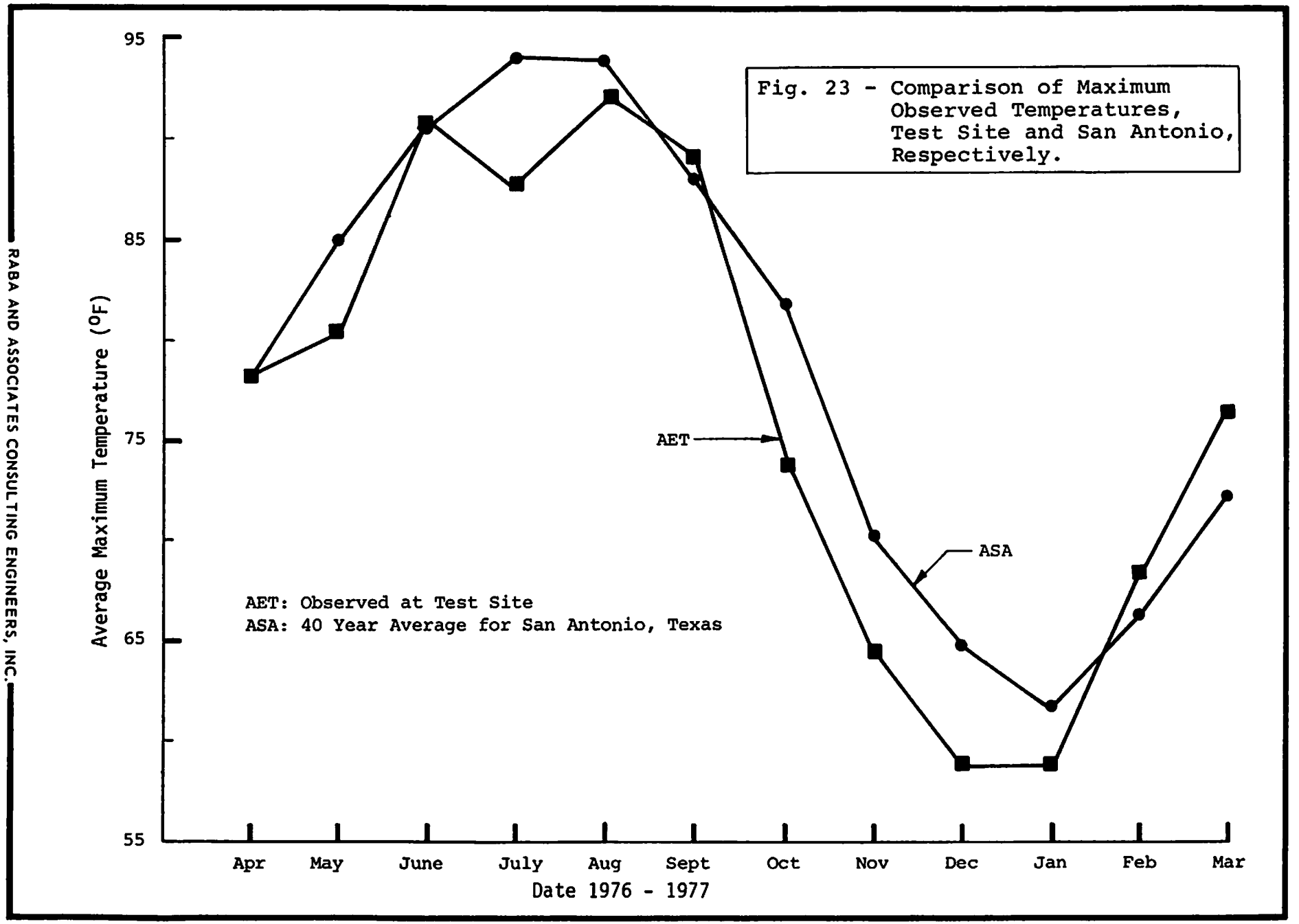


Fig. 23 - Comparison of Maximum Observed Temperatures, Test Site and San Antonio, Respectively.

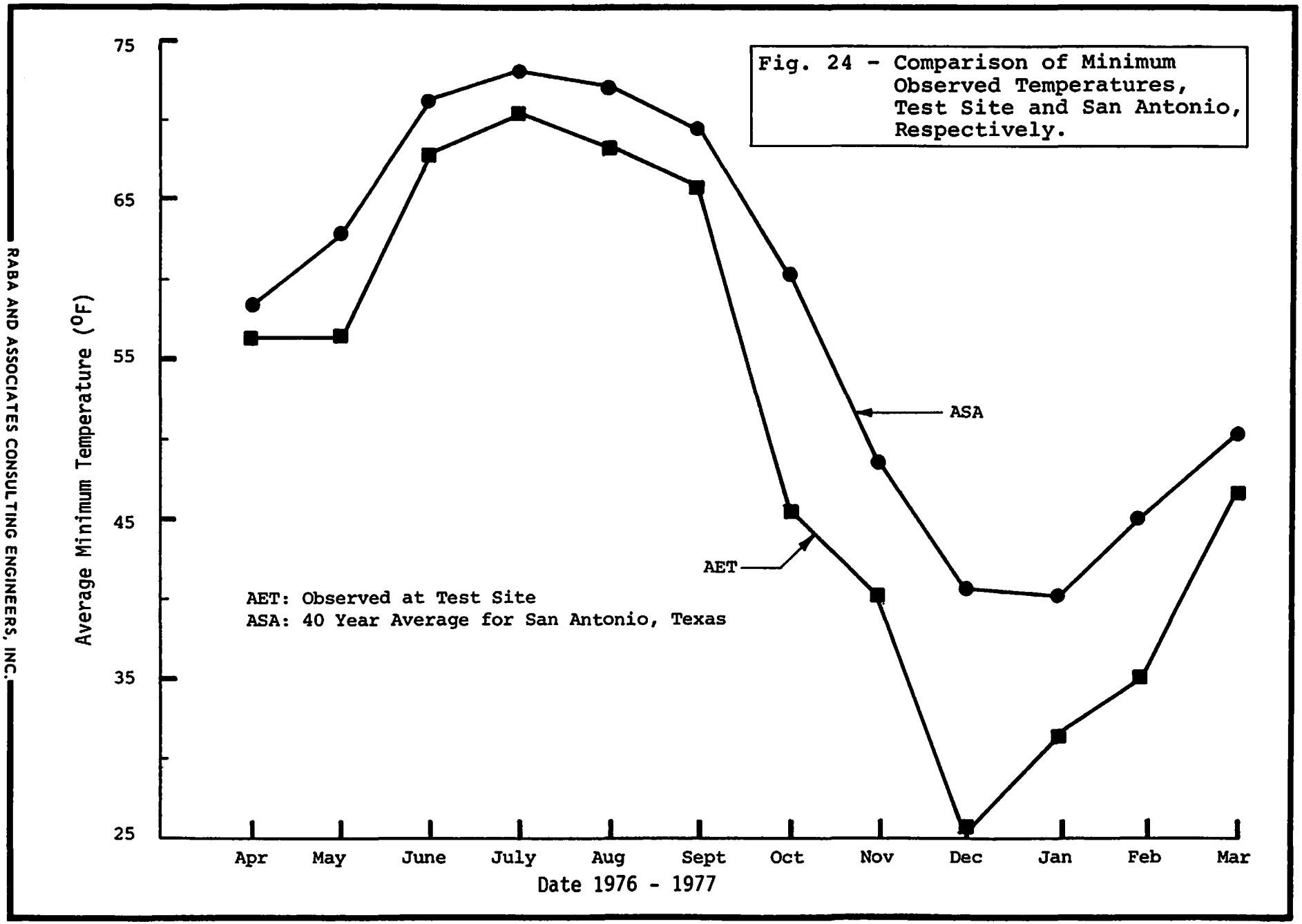
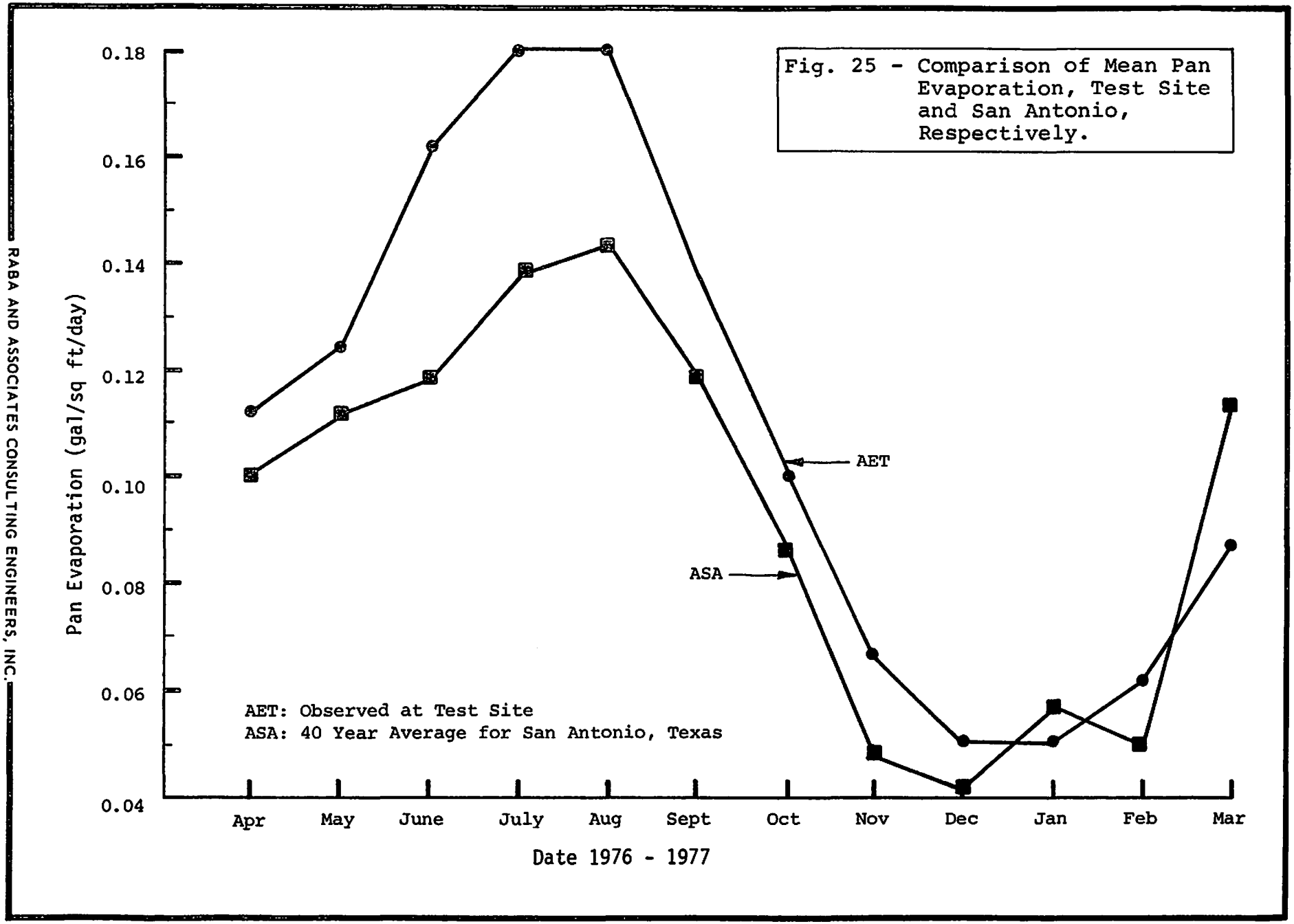


Fig. 24 - Comparison of Minimum Observed Temperatures, Test Site and San Antonio, Respectively.



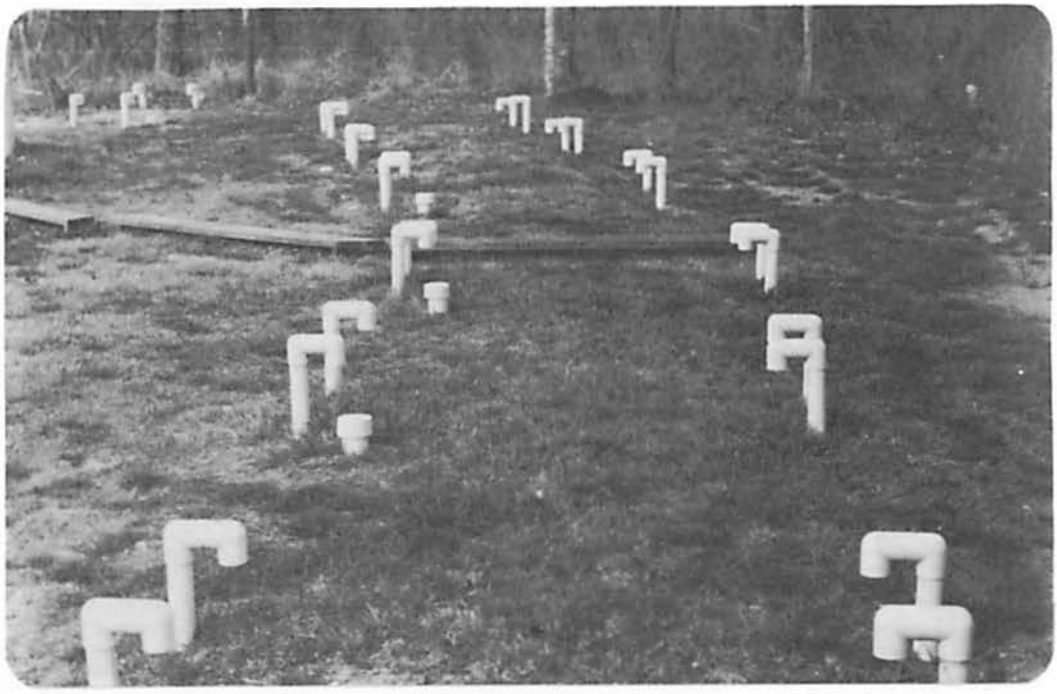
Plant Cover

This study showed that the plants used could apparently adapt to the environment to which they were exposed. Figure 26 illustrates this quite well during the spring of 1977. Although, the test period covered only one year, careful physical examination of the surface manifestations of the plants as well as their root systems indicated no signs of either chemical or physical harm.

The carpet grass, planted in squares initially, established itself quickly and exhibited luxurious growth throughout the test period. The typical root system of this grass will extend only a few inches below the ground under normal conditions. On the test plots, these roots had actively sought the water source and extended as deep as 24-in. into the ground. (See Figure 27) This provided a direct physical connection between the water-absorbing roots and the transpiring leaves. The roots were in extensive masses, were full and solid, and as stated, exceptionally long. (See Figure 28) The leaves or blades of grass were dark green and dense. The combination of root masses and blade density produced a stable surface area for walking or cutting.

The winter rye adapted quickly and was gradually replaced by coastal bermuda. This area, while not as dense as the carpet, was obviously healthy and vigorous. It also developed an extensive root systems.

The tanks left to recover vegetation by natural selection were also found to grow vigorously. Indeed, if rain supplemented the water feeding from below, the growth would quickly become dense and extensive. Johnson grass grew particularly rapidly and had exceeded a height of four feet prior to the initial cutting. Root systems were extensive and deep.

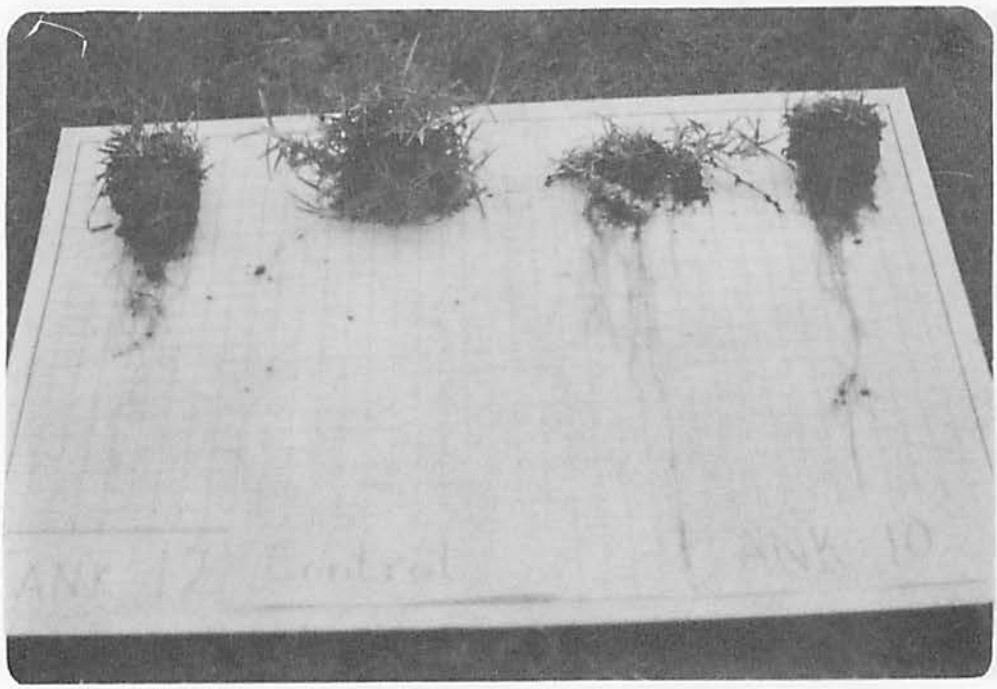


ABOVE: Tanks 1-6, Bottom to Top, During Jan-Feb, 1977. Note Bareness of Tanks.

BELOW: Tanks 1-6, Bottom to Top During April, 1977. Note Both Height and Density of Surface Cover on Each Tank.

Fig. 26 - Comparative Plant Growth, Winter/Spring, 1977.

Plug Taken from Tank 10 Showing Extent of
Root Penetration by Carpet Grass.



Root Development of Carpet Grass rrom Tanks 10 and 12 Compared
to a Control Sample Obtained Adjacent to the Tanks.

Fig. 27 - Carpet Grass Root Development

Fig. 28 - Two Views of Carpet Grass Root Development in Tank No. 10.

Those tanks deliberately left bare of surface cover would occasionally show signs of dampness at the surface. They were weeded regularly to prevent their overgrowth. Sunflowers would flourish if permitted.

In no case, on any tank or with any cover, was ponding a problem, nor did rainfall ever flood the tanks to overflowing. All the covered tanks provided a surface firm enough to walk over and to cut with lawnmowers. In summary, the only problem encountered was that the ground covers required cutting more often than usual and this without the benefit of any watering whatsoever except for periodic rainfall.

DESIGN OF AN EVAPOTRANSPIRATION SYSTEM FOR THE DISPOSAL OF LIQUID WASTES

As a result of studies made during this project, a method for the design of an evapotranspiration system for the on-site disposal of liquid waste has been developed. This method is predictated upon literature research, logical mathematical development of weather-evapotranspiration relationships, and observational explanations for some unexpected phenomena. Though this method has a rigorous foundation, it still remains reasonably uncomplicated in procedure and is only as accurate as the information used. Obviously, inaccurate weather data or effluent loading inputs will yield inaccurate design criteria for the evapotranspiration beds. Therefore, extreme care should be taken to utilize only the most accurate design input data. With this in mind, the design calculations should follow the following procedure:

Pre-Calculation Requirements

(A) Choose a reasonable area and depth for the evapotranspiration beds according to lot size, anticipated effluent loading, or other considerations. The final area is calculated using a successive approximation technique.

(B) Obtain the pan evaporation records from the recording station closest to the site for a period of at least ten years. From these records obtain the minimum monthly pan evaporation rate for each month. Sources of these data include the United States Geological Survey, the United States Weather Service, the Soil Conservation Service, Report 192 of the Texas Water Development Board and the United States Department of Agriculture. A typical example for San Antonio is taken from Report 192 and is shown as Figure 29; the minimum monthly averages are circled: 5.81-in. for June of 1919, for example. (4)

(C) The final area must be selected so as not to allow the effluent level to rise to within 10-in. below grade. This will assure a moist, but not soggy, ground surface.

Effluent Level Calculations

Step 1 Paragraph B, above describes the minimum monthly pan evaporation; what is needed is the minimum daily pan evaporation in gallons per sq ft per day, therefore divide each monthly rate by the number of days in that month. For example, the minimum monthly average for June, 1919, was 5.81-in., therefore 5.81 ÷ 30 = 0.194-in. per day. Convert this to gallons per square foot per day by multiplying by 0.6234, resulting here in 0.121 gallons per square foot per day.

Step 2 Find ET_{rate}, that is, the rate of evapotranspiration for a bare tank at the given effluent level. This rate is found by knowing the minimum average daily pan evaporation for the month in question (see above) and then finding the ET_{rate} from Figure 17 given the effluent level. Assume a 6-in. level for the first month. The evapotranspiration rate may be increased to account for the type of vegetation cover by entering Figure 20 with the minimum daily pan evaporation and obtaining the per cent increases in the evapotranspiration of the covered system over the bare system. However, due to the limited number of vegetation covers studied and the limited time period of study, we recommend that the evapotranspiration system be designed on the basis of the evapotranspiration from a bare system and allow the benefit of vegetation to serve as a factor of safety.

Step 3 Calculate Q_{ET}, total evapotranspiration from the following equation:

$$Q_{ET} = \{(ET_{rate})\} \{\text{Number of days in month}\} \{\text{Area of bed}\}$$

San Antonio

Equipment type: Bureau of Plant Industry 6-ft diameter pan.

YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	ADJ. ANNUAL
1914	2.72 31	2.35 28	3.93 31	4.89 30	4.37 31	7.55 30	9.80 31	7.72 31	8.03 30	4.40 31	2.65 30	2.09 31	60.50
1915	2.26 31	2.81 28	3.37 31	3.36 30	6.00 31	8.99 30	11.33 31	8.47 31	5.29 30	5.46 31	4.07 30	2.51 31	63.92
1916	2.36 31	3.79 29	7.21 31	6.64 30	7.32 31	9.92 30	7.21 31	7.69 31	6.26 30	5.00 31	3.44 30	2.82 31	69.66
1917	2.61 31	3.99 28	5.60 31	7.68 30	7.56 31	9.88 30	9.89 31	9.81 31	6.93 30	6.17 31	3.63 30	2.92 31	76.67
1918	3.41 31	2.54 28	5.83 31	5.76 30	6.94 31	8.16 30	10.36 31	10.03 31	7.88 30	4.57 31	2.47 30	1.89 31	69.84
1919	1.79 31	2.48 28	3.04 31	5.50 30	5.52 31	5.81 30	5.64 31	7.06 31	5.16 30	3.73 31	2.77 30	2.06 31	50.56
1920	1.31 31	2.56 29	4.37 31	7.23 30	6.25 31	6.05 30	7.14 31	7.03 31	7.18 30	5.21 31	2.80 30	2.99 31	60.12
1921	2.46 31	3.36 28	3.78 31	4.58 30	6.51 31	7.56 30	9.29 31	10.50 31	6.16 30	5.37 31	3.60 30	3.57 31	66.74
1922	2.82 31	3.30 28	4.59 31	4.34 30	5.39 31	5.95 30	10.01 31	9.94 31	7.56 30	6.17 31	2.77 30	2.99 31	65.83
1923	3.25 31	1.62 28	4.52 31	3.91 30	7.52 31	9.36 30	8.96 31	8.90 31	5.45 30	4.84 31	2.24 30	1.79 31	62.36
1924	2.07 31	2.78 29	3.73 31	4.96 30	5.48 31	7.45 30	8.80 31	9.97 31	7.39 30	5.21 31	4.82 30	2.56 31	65.22
1925	2.69 31	4.43 28	6.12 31	8.06 30	8.38 31	10.16 30	11.27 31	9.98 31	6.07 30	4.88 31	2.55 30	2.31 31	76.90
1926	1.71 31	3.80 28	3.54 31	3.54 30	5.59 31	7.19 30	7.22 31	8.82 31	7.31 30	6.00 31	4.19 30	2.19 31	61.10
1927	2.04 31	2.50 28	3.80 31	5.97 30	7.99 31	6.13 30	7.82 31	10.85 31	7.37 30	5.21 31	4.47 30	2.37 31	66.52
1928	2.91 31	2.57 29	4.93 31	6.05 30	6.10 31	7.49 30	9.99 31	9.98 31	4.76 30	4.96 31	2.50 30	2.08 31	64.32
1929	2.22 31	2.71 28	3.84 31	4.65 30	6.01 31	7.09 30	6.71 31	8.78 31	6.83 30	4.43 31	2.64 30	2.54 31	58.45
1930	1.66 31	2.72 28	3.69 31	5.56 30	4.86 31	6.76 30	8.84 31	9.82 31	7.96 30	3.95 31	2.52 30	2.19 31	60.53
DAILY AVG.	.08	.10	.14	.18	.20	.26	.29	.29	.22	.16	.11	.08	

Notes: Good exposure.

Fig. 29 - Pan Evaporation Data for San Antonio (4).

where:

Q_{ET} = Total Quantity of Effluent Evapotranspired By the System

ET_{rate} = rate of Evapotranspiration from Step 2

Step 4 Calculate Q_{inflow}, the total effluent input to the system in gallons/month.

Q_{inflow} = (Gallons/day loading) (No. days in the month)

Step 5 Calculate Δ system, the effluent in gallons not evapotranspired by the system.

$$\Delta \text{ system} + Q_{inflow} - Q_{ET} + \Delta \text{ system of previous month}$$

Step 6 Calculate E_L, the effluent level in inches below the surface.

$$E_L = D - \frac{1.608\ P\ \Delta system}{A}$$

where:
- E_L = effluent level below grade (inches)
- D = total depth of evapobed (inches)
- Δ system = calculated in Step 5
- A = area of evapobed in square feet
- P = $\frac{100\ \%}{\text{Porosity of the capillary media in percent}}$

The effluent level cannot be less than 0 or greater than D. If a negative effluent level is calculated, the system has failed. If an effluent depth greater than D is calculated, use the depth of tank, D.

Step 7 Make calculations on the worksheet (Figure 30) and plot E_L (effluent level below the surface) versus the month of occurrence. (Figure 31) An example design for the San Antonio area is provided on Figures 32 thru 34.

An effort has been made herein to relate the several factors discussed to the concept of evapotranspiration as a means of disposing of domestic wastes. A prime objective from the outset of the project was to develop a relatively simple method of answering the question: "If evapotranspiration is to be used in selected areas to dispose of fluid wastes, how much

EFFLUENT LEVEL CALCULATIONS

Month	No. Days	Pan Evaporation gal/sq ft/day	ET_{rate} gal/sq ft/day	Q_{ET} Total Consumption gal/mo.	Q_{inflow} gal/mo.	Δ System Gallons	E_L Inches
July	31						
August	31						
September	30						
October	31						
November	30						
December	31						
January	31						
February	29						
March	31						
April	30						
May	31						
June	30						
July	31						

Estimations:

Area =

Porosity, P=

Loading =

Comments

Fig. 30 - Sample Work Sheet for Effluent Level Calculations.

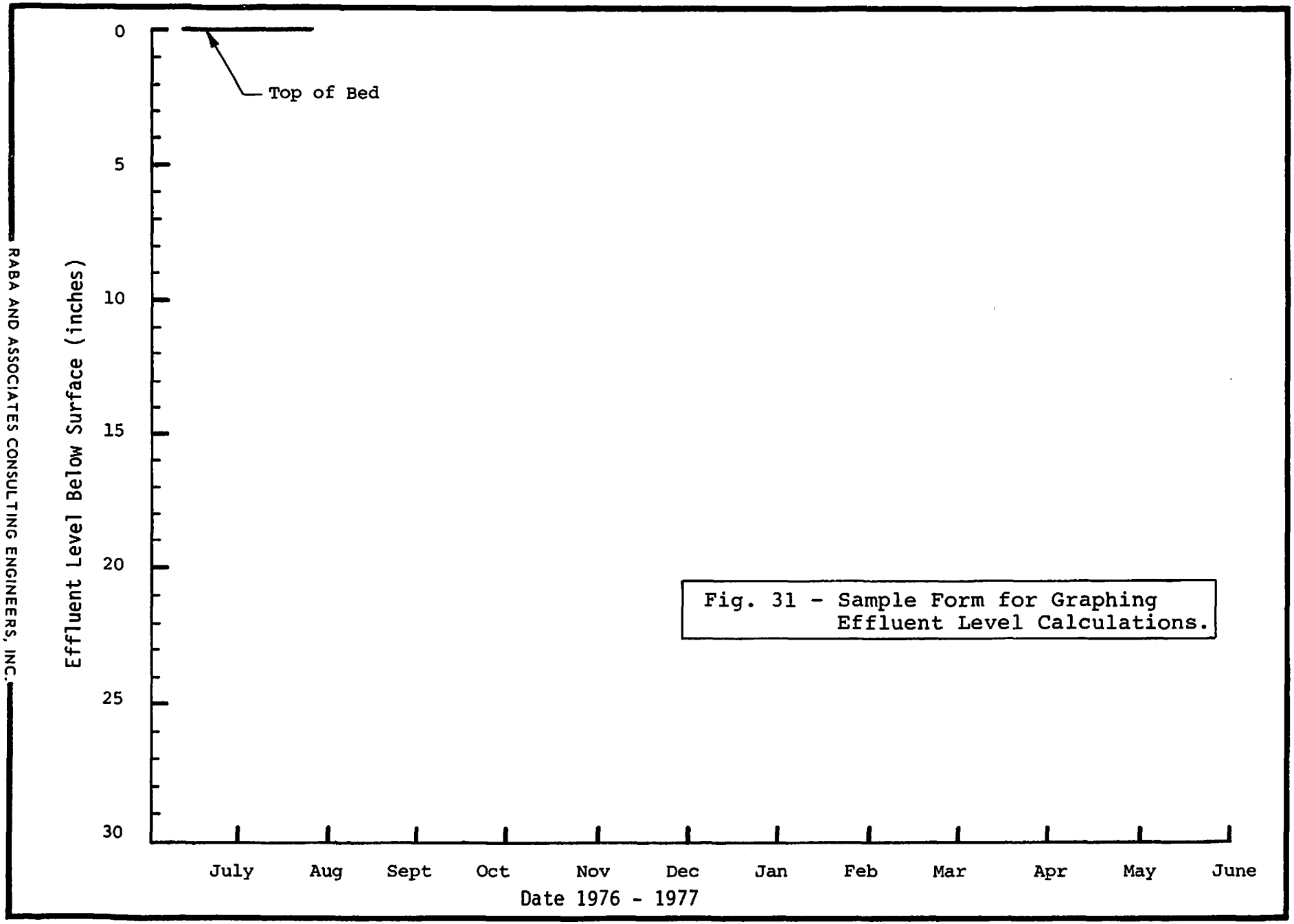


Fig. 31 - Sample Form for Graphing Effluent Level Calculations.

RABA AND ASSOCIATES CONSULTING ENGINEERS, INC.

EFFLUENT LEVEL CALCULATIONS

Month	No. Days	Pan Evaporation gal/sq ft/day	ET_{rate} gal/sq ft/day	Q_{ET} Total Consumption gal/mo.	Q_{inflow} gal/mo.	Δ System Gallons	E_L Inches
July	31	.113	.022	3499	12400	8901	24.8
August	31	.141	.024	4090	12400	17211	19.95
September	30	.100	.038	6267	12000	22944	16.60
October	31	.075	.055	9372	12400	25972	14.83
November	30	.047	.077	12698	12000	25274	15.24
December	31	.036	.072	12269	12400	25405	15.16
January	31	.026	.068	11587	12400	26218	14.69
February	29	.035	.090	14347	11600	23471	16.29
March	31	.061	.082	13973	12400	21898	17.21
April	30	.070	.055	9070	12000	24828	15.50
May	31	.088	.088	14996	12400	22232	17.02
June	30	.121	.083	13688	12000	20544	18.00
July	31	.113	.040	6816	12400	26128	14.74

Estimations:

Area = 5500

Porosity, P= 50%

Loading = 400GPD

Comments

BARE TANK
30" DEPTH
YEAR 1

Fig. 32 - Sample Work Sheet for Effluent Level Calculations.

EFFLUENT LEVEL CALCULATIONS

Month	No. Days	Pan Evaporation gal/sq ft/day	ET_{rate} gal/sq ft/day	Q_{ET} Total Consumption gal/mo.	Q_{inflow} gal/mo.	Δ System Gallons	E_L Inches
July	31	.113	.040	6816	12400	26128	14.74
August	31	.141	.073	12440	12400	26088	14.76
September	30	.100	.088	14512	12000	23576	16.23
October	31	.075	.055	9373	12400	26603	14.46
November	30	.047	.077	12698	12000	25905	14.87
December	31	.036	.073	12440	12400	25865	14.89
January	31	.026	.068	11588	12400	26677	14.42
February	29	.035	.072	11478	11600	26799	14.35
March	31	.061	.081	13803	12400	25396	15.17
April	30	.070	.084	13852	12000	23944	16.02
May	31	.088	.055	9372	12400	26972	14.25
June	30	.121	.083	13688	12000	25284	15.24
July	31	.113	.085	14485	12400	23199	16.46

Estimations:

Area = 5500

Porosity, P= 50%

Loading = 400 GPD

Comments

BARE TANK
30" DEPTH
YEAR 2

Fig. 33 - Sample Work Sheet for Effluent Level Calculations.

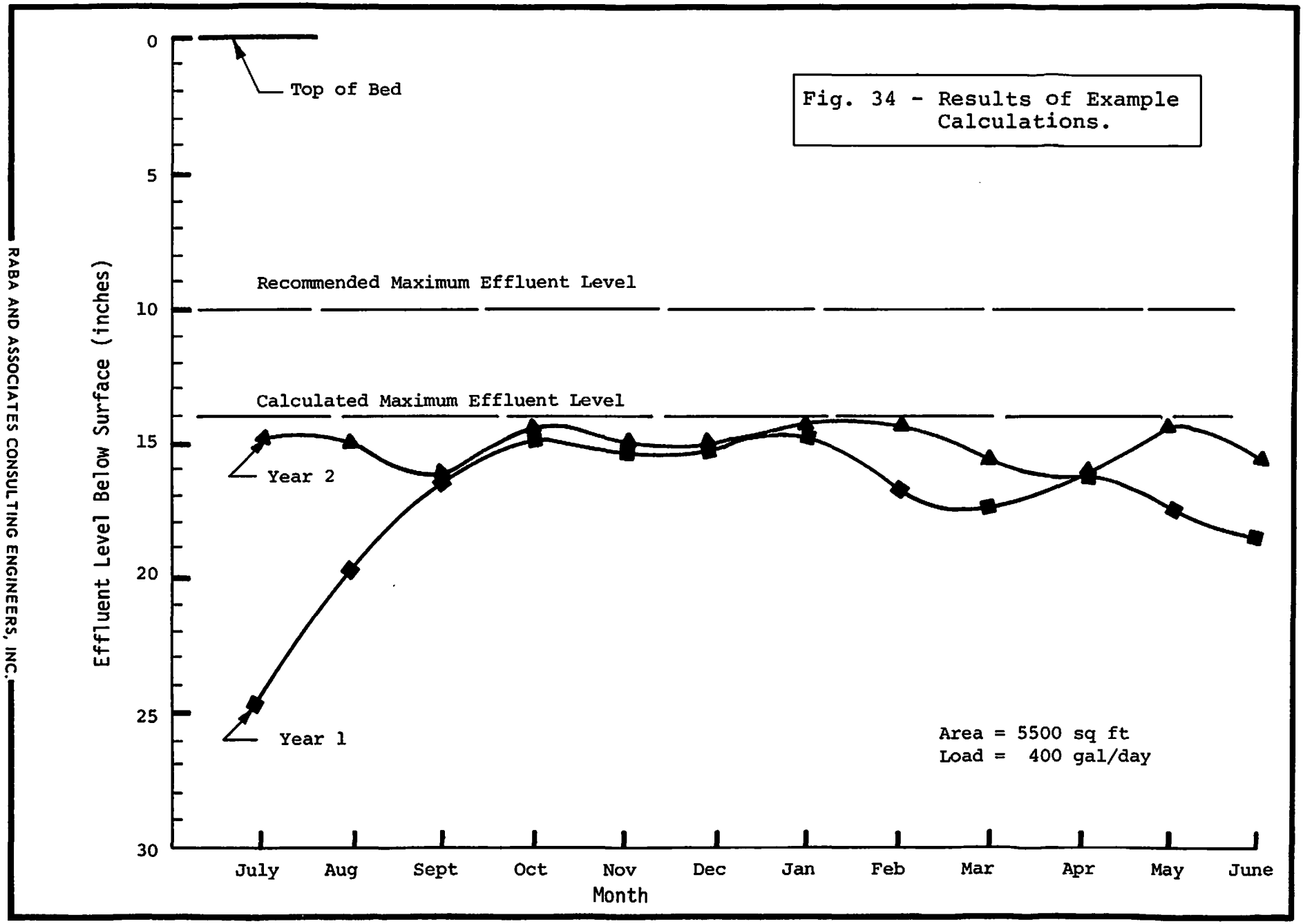


Fig. 34 - Results of Example Calculations.

area, or what portion of the property being considered, will be needed to construct the system bed?" From our suggested design procedure, it can be seen that the two variables controlling the size of the evapotranspiration bed are: (1) the anticipated effluent loading, and (2) the minimum daily pan evaporation for the locale of the proposed construction. Thus, for a given locale, there must exist a unique relationship between anticipated effluent loading and the required evapotranspiration area.

To further investigate this relationship, a series of design calculations for the San Antonio, Texas area were performed following the procedures outlined earlier. In these calculations the area of the evapotranspiration bed was the same and the effluent loading was varied. For each trial, beta, β, was calculated by dividing the area of the evapotranspiration bed by the effluent loading rate. The results of our calculations are presented in Figure 35, which shows the minimum effluent depth below grade for each trial plotted versus the corresponding beta.

Thus, if one knows the load to be expected in gallons per day and the minimum depth to the effluent level which is to be maintained in the evapotranspiration bed, the bed area may be determined. For example, suppose that one desires to maintain an effluent level of 10-in. below grade with a design load of 400 gallons per day. Using Figure 35 for the San Antonio, Texas locale, Beta, β, is 14 sq ft/gallon/day. Therefore, the area needed to meet the stated requirements is 14 sq ft/gal/day X 400 gpd or 5600 sq ft. In this illustration, the 10-in. minimum effluent level was chosen to prevent excessive wetting or softening of the ground surface.

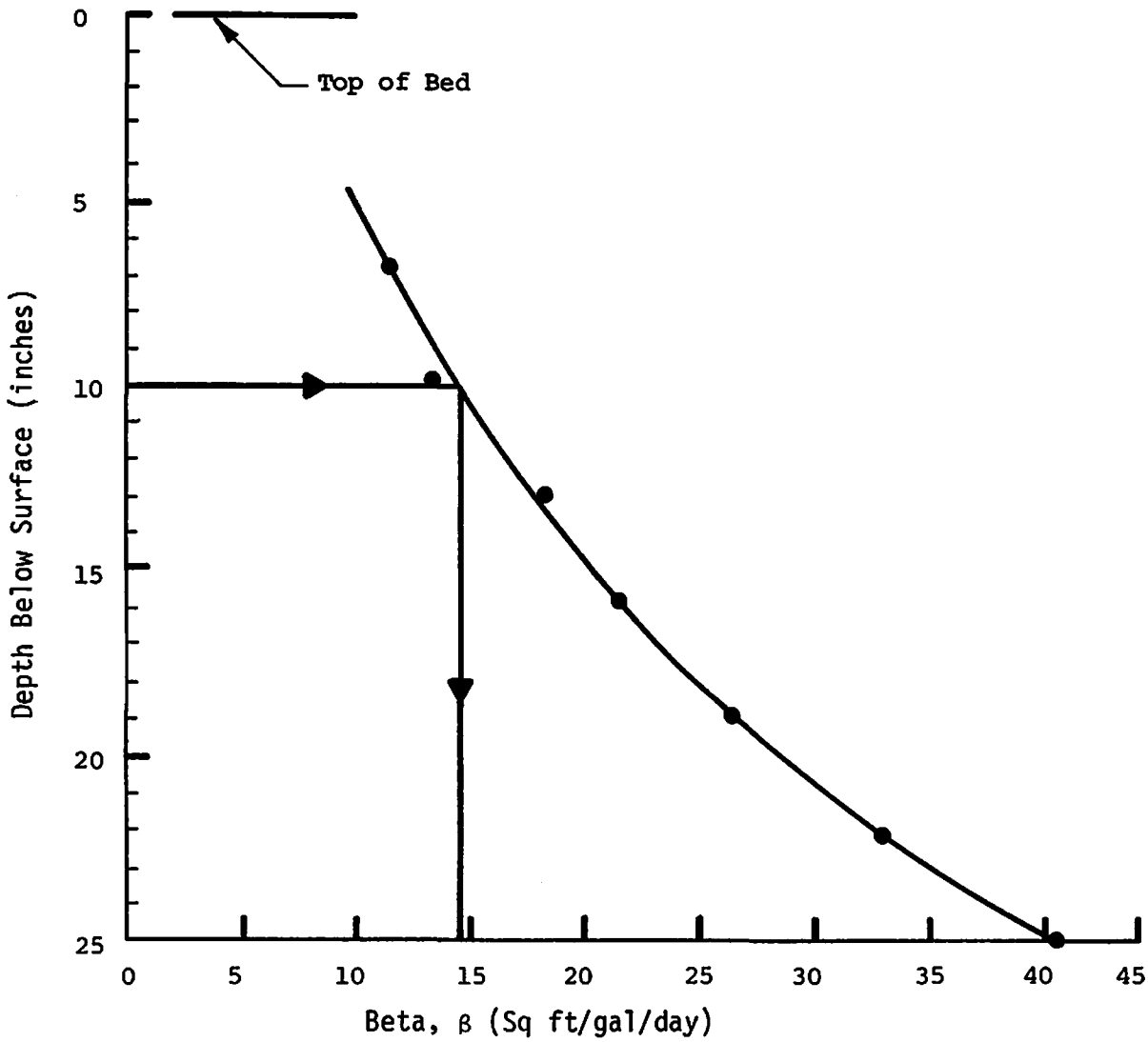


Fig. 35 - Beta Calculations
for San Antonio.

Thus, it has been shown that there is a unique relationship between the rate of effluent loading and the required evapotranspiration bed area for a given locale. The relationship presented in Figure 35 for the San Antonio, Texas, area may also be developed for various geographic locations, if the pan evaporation rates are known. These data are available for most area locations from the United States Geological Survey, the United States Weather Service, the Soil Conservation Service, and other agencies. The load determination is readily obtained from guidelines available from existing state or local septic tank regulations and is usually based on the number of bedrooms in the home with consideration being given to certain water utilzing appliances such as dishwashers, washing machines, disposals, and so on.

The use of complex mathematical computations, access to elaborate laboratory facilities, and extensive observations of weather data over an extended period of time is felt to be beyond the scope or inclination of most persons normally engaged in private waste disposal system design and installation. It is felt that the use of the relationship illustrated in Figure 35 is more useful to these same persons.

TENTATIVE TANK CONFIGURATION AND CONSTRUCTION PROCEDURES

The following data have been developed from the research performed during this project. Prior to this work, there did not exist, to our knowledge, firm guidelines for the design and construction of evapotranspiration systems. In the case of more traditional systems there are such guidelines. The septic tank drain field, for example, which is analogous to the evapotranspiration bed, can be reliably sized using

a standard percolation test. The recommendations, therefore, for construction of evapotranspiration systems in formations which warrant their use are:

(1) The length and width of the excavation for the evapotranspiration bed should be as determined from the preceding area calculations. The excavation should be at least 24-in. deep and the bottom of the bed must be level.

(2) An impervious liner must be provided along the bottom and sides of all beds constructed in porous formations. All seams in the membrane material should be leak-proof and sealed together following the manufacturer's recommended procedures. After installation and sealing, the liner should be flooded, allowed to stand for 24 hours, and examined for leaks. Although this paper addresses itself to formations which are essentially porous and would therefore require a liner, it would follow that the system is also adaptable to impervious soils which provide, in effect, their own liner.

(3) Care should be taken to prevent damage to the impervious membrane during the construction process. A 2-in. thick sand cushion may be necessary in the bottom of the bed to provide a smooth surface for the membrane. Forms may be required along the sides of the excavation and may consist of either plywood, asphalt impregnated fiber board or other suitable materials. All voids between the form material and excavation banks should be filled with sand after the beds are partially backfilled.

(4) The impervious membrane should be covered with a sand cushion at least 2-in. thick to prevent puncturing the membrane during the placement of the distribution pipes and gravel reservoir.

(5) Perforated distribution pies, 4-in. in diameter, should be placed as specified in the Approved Permit. Care should be taken to prevent pipe glues or solvents from coming in contact with and dissolving the impermeable membrane.

(6) A 6-in. thick gravel reservoir should be placed on top of the sand cushion, covering the distribution pipes. The gravel reservoir may consist of river gravel or crushed limestone and should preferably be sized between 1.5 to 2.5-in.

(7) Two overlapping layers of filter cloth should be placed on top of the gravel reservoir to prevent infiltration of the capillary sand. The filter cloth should extend up the sides of the excavation to the finished grade to prevent the sand from migrating between the sides of the excavation and the filter cloth. Typar type or equivalent filter cloth should be used.

(8) A capillary sand layer should be placed on top of the filter cloth and should extend up to the ground surface. A minimum sand layer of 18-in. should be used. The sand should be densified during placement to a relative density of 75 per cent.

(9) A minimum thickness of 4-in. of sandy loam topsoil should be placed on top of the bed and sloped for positive drainage. A minimum slope of 1/4-in. per foot is required from the center of the bed out toward its edges.

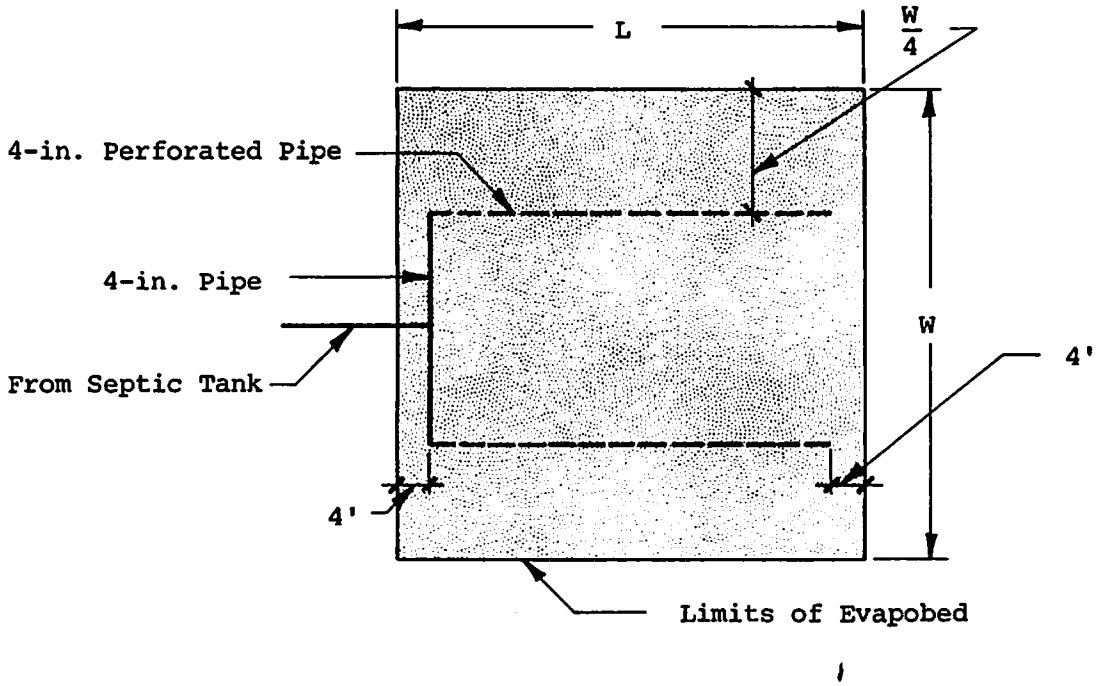
(10) Vegetation should be planted on the bed to prevent erosion of the topsoil. It is recommended that planting be undertaken by the owner at the time of occupancy in order that the plants will be adequately maintained.

(11) A grease trap should be included in the design of the evapotranspiration project to preclude the possibility of grease and oils clogging the fine pores of the capillary media.

(12) The grease trap, septic tank and evapotranspiration bed should be located down slope from the swelling. Further, they should be located a reasonable distance from the dwelling, adjacent property, water wells, etc. All state and local regulations which may be applicable should be observed.

A typical bed in plan view is shown in Figure 36. Both this figure and Figure 37, a typical cross section describe the sand, gravel, and soil media, the placement of feeder and distribution lines, the location of the liner, and the slope to be maintained at the surface.

In constructing such systems, allowance may be made for landscaping over the bed. Low growing evergreen vegetation indiginous to the area and which have shallow root systems are acceptable. Trees should not be planted directly on the bed. Allowances should be made for stabilization



(1) Evapobed is 24-in. deep with a Level Bottom and Covered with a Minimum of 4-in. Sandy Loam Top Soil.

(2) Top of Evapobed is Crowned for Positive Drainage with Minimum 2 Per cent Slope.

(3) Recommended Bottom Area for Evapobed as calculated in previous section.

Fig. 36 - Plan View of
Typical Evapotranspiration Bed

(Not to Scale)

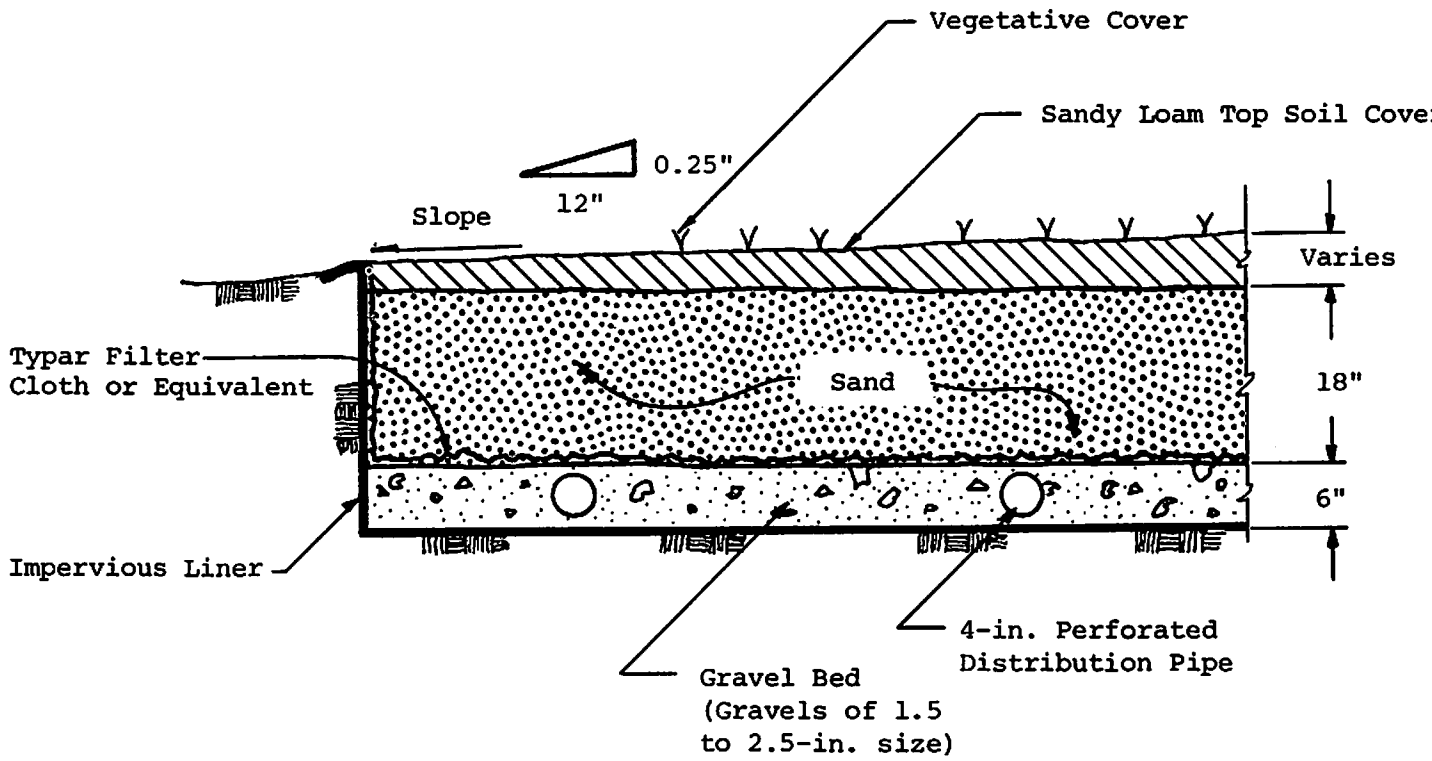


Fig. 37 - Typical Evapobed Section

(Not to Scale)

of the media in the bed and the overlying soil, the establishment of the ground cover, and so on. In summary, when properly installed, the bed may be treated in the same manner as a lawn or landscaped area. When properly designed and constructed, the evapotranspiration system should prove to be as effective as traditional systems in disposing of wastes yet without the inherent danger of polluting underground water supplies.

CONCLUSIONS

The following conclusions may be drawn from the preceeding report. It is felt that these conclusions, which are based on observed and experimental data gathered over a significant period of time, are valid. They are:

(1) Evapotranspiration systems are a viable means of disposing of domestic septic tank effluents in geological formations that cannot host conventional septic tank fields.

(2) No special or unusual equipment is required that might prevent local contractors from installing evapotranspiration systems.

(3) the rate of evapotranspiration is strongly influenced by weather, particularly in terms of pan evaporation, depth of effluent level below grade, and the vegetative cover used on the bed.

(4) With proper drainage, precipitation is not a problem with reference to flooding the system.

(5) Evapotranspiration beds support indiginous plant growth.

(6) No detrimental effects on the plants were noted during the period of the study.

(7) Of the plants used in the study, carpet grass responded most favorably.

(8) All plants used in the study became dormant in the winter, therefore consideration must be given to plants which are evergreen.

(9) Root systems for the plants studied were more extensive and penetrated more deeply than would be expected in other settings.

(10) Except during periods of dormancy, the plants increased water loss from the system as anticipated.

(11) No discernable odor was detected even, upon excavation after one year, at the bottom of the bed.

(12) The bed surface, with effluent levels maintained 10-in. below grade, were firm and supportive of pedestrian traffic.

(13) The Typar filter membrane used to separate sand from gravel in the tanks was adequate.

(14) Sand wicks installed to facilitate capillary movement of effluent from gravel to sand were effective.

(15) More surface area will be required to facilitate installation of an evapotranspiration system than a soil absorption system.

SUGGESTED FURTHER RESEARCH

Although the current project met its objectives and resulted in the development of design criteria as anticipated, it also developed new questions that must be answered by further study and research. More information needs to be known about the vegetative cover used on the beds. Only grasses were used in this study, but transpiration from them was either absent or greatly reduced during their dormant period. A study of appropriate low-growing evergreen plants and shrubs must be made. It is not impossible that shallow rooted garden vegetables which bear fruit above ground could be used; at least they warrant study.

The impervious liner used to hold the effluent is a major factor requiring further investigation. Such things as life expectancy, stability upon prolonged contact with the effluent, ease of installation, availability and cost, and resistance to weathering and tearing must be evaluated at a

minimum. Just what the liner should be composed of needs investigation - should it be concrete, metal, fiberglass, plastic?

A third and final area for study involves the evapotranspiration rate when the effluent level is closer to the surface than 10-in. In this study, the level was maintained at 10-in. and was effective. How much closer can it be allowed to approach the surface without detracting from the functionability of the ground.

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APPENDIX A

CALCULATING SOLAR RADIATION

AND

CALCULATING PAN EVAPORATION

Introduction

Because solar radiation has been found to play an important role in the transpiration process and the evaporation process, it cannot be ignored in our study of the evapotranspiration process. However, solar radiation cannot be easily measured without the proper instrumentation. It is our intention to show that solar radiation can be calculated from the average ambient air temperature. It is also our intention to show that pan evaporation is related to solar radiation. If this can be accomplished, then pan evaporation can be estimated from the average ambient air temperature.

Emissivity

We must define emissivity as the ratio of measured solar radiation to clear sky radiation. That is, when we have a clear sky and therefore nothing to obstruct the radiation to the earth, then at a given air temperature we will have a given amount of solar radiation. Thus, the emissivity is equal to 1 since measured and clear sky radiation are equal. The infrared radiation from a black body at temperatures between $0^{o}C$ and $39^{o}C$ is given in Table A-1. The ratio of measured solar to clear sky solar radiation is not usually 1, due to cloud cover and other atmospheric disturbances.

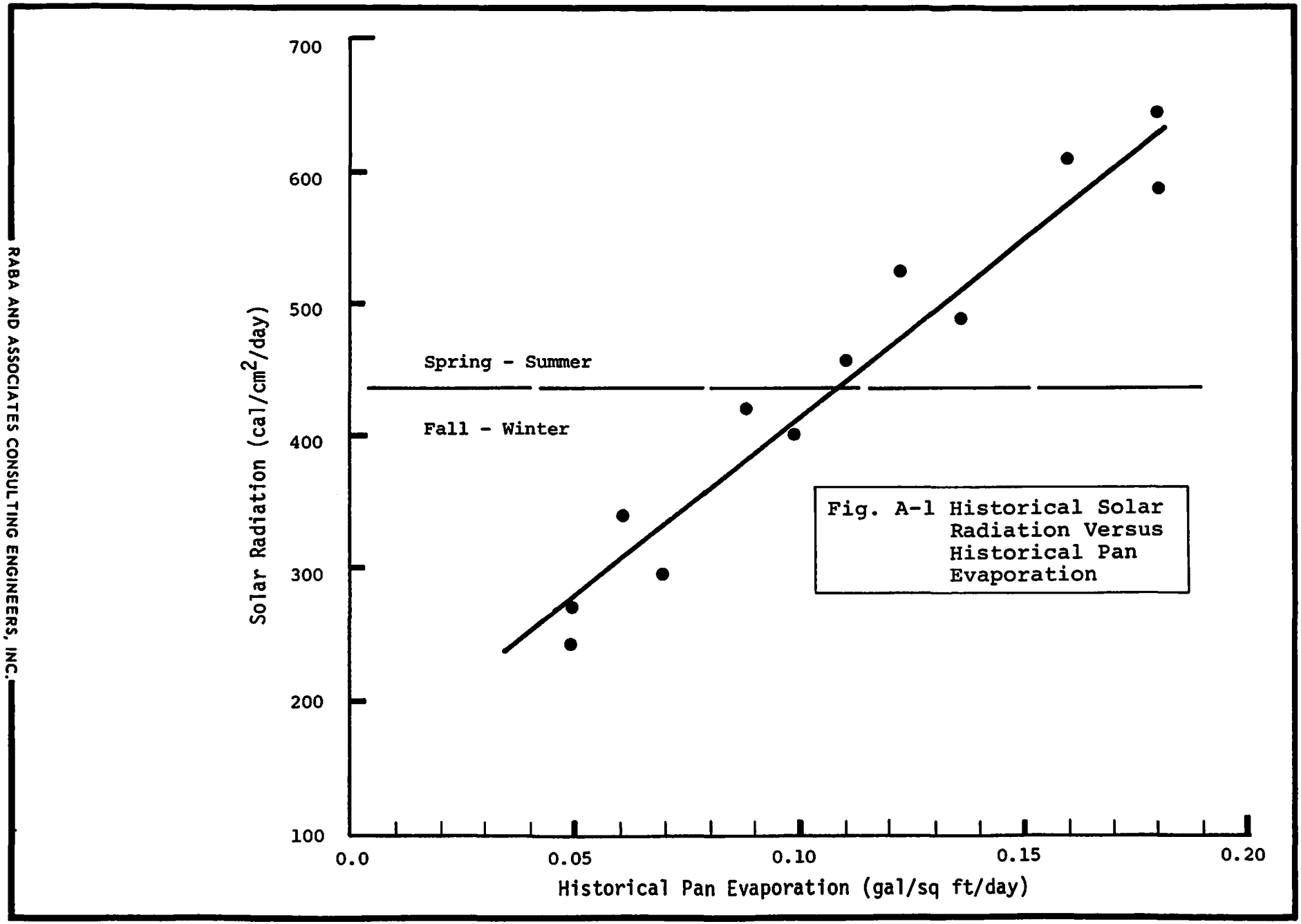

Fig. A-1 Historical Solar Radiation Versus Historical Pan Evaporation

Table A-1

Infrared Radiation from a Black Body at Temperatures Between 0°C and 39°C ε = 1.0

Temperature	Infrared Radiation (Cal/cm^2/Day)	Temperature	Infrared Radiation
0	651	20	863
1	660	21	875
2	670	22	887
3	679	23	899
4	689	24	911
5	699	25	924
6	709	26	936
7	720	27	948
8	730	28	961
9	740	29	974
10	751	30	987
11	762	31	1000
12	772	32	1013
13	783	33	1027
14	795	34	1040
15	806	35	1054
16	817	36	1068
17	828	37	1082
18	839	38	1096
19	851	39	1109

Thus, we must establish this emissivity for the San Antonio area.

To establish the emissivity constant for the San Antonio area, the measured monthly average solar radiation, Q_a, and the measured monthly average ambient air temperature, T, was obtained from the U.S. Weather Service for 1931 through 1970. The emissivity, ε, was then calculated from the equation:

$$\varepsilon = \frac{Q_a}{\sigma T^4} \qquad \text{A-1}$$

where:

Q_a = Measured Solar Radiation 1931-1970 in Cal/cm^2/day or Langley

σ = Stefan - Boltzman Constant
11.7118×10^{-8} cal/cm^2/Day/($^\circ$K)^4

T = Ambient Air Temperature in Kelvin for 1931-1970

From Equation No. A-1 we see that measured solar radiation is found by the following equation:

$$Q_a = \varepsilon \sigma T_K^4 \qquad \text{A-2}$$

Since the value of emissivity varies very little from year to year, let us assume that it is a constant for a typical month of a typical year. This will allow us to establish the clear-sky infrared radiation at the average ambient temperature measured during 1931 thru 1970.

To establish the average emissivity for San Antonio for a constructed year, we simply divide the average radiation received in San Antonio (1931-1970) by the amount of clear-sky radiation we calculated for the average ambient air temperature during this same period. This will yield the average emissivity "constant" for San Antonio during a typical month of a typical year. These values are tabulated in Table A-2.

Table A-2

Emissivity, ε, for San Antonio

Month	Emissivity, ε
January	.349
February	.428
March	.429
April	.503
May	.562
June	.617
July	.638
August	.585
September	.508
October	.444
November	.359
December	.297

These values are actually the decimal percentage of clear-sky raidation received in San Antonio.

Now, that these emissivity "constants" have been established for the San Antonio area, it is possible to calculate the average solar radiation received for any given year as long as the monthly average ambient air temperature is known. Calculations of this nature are shown and a comparison made to actual measured radiation for the year 1970 in San Antonio, in Table A-3.

Table A-3

Calculation of Solar Radiation 1970

Month	Avg. Temp. T (^oF)	Avg. Temp T (^oK)	σT_K^4 $\varepsilon = 1$	Emissivity San Antonio	Calc. Solar Radiation cal/cm^2/day	Actual Solar Radiation cal/cm^2/day
Jan.	45.6	280.56	726	.349	253	233
Feb.	54.8	285.67	780	.428	334	298
March	56.8	286.78	792	.494	391	387
April	70.2	294.22	878	.503	442	497
May	72.9	295.72	896	.562	504	515
June	80.7	300.06	449	.617	586	563
July	84.0	301.89	973	.638	621	588
Aug.	85.7	302.83	986	.585	577	556
Sept.	81.1	300.28	952	.508	483	429
Oct.	67.7	292.83	861	.444	382	375
Nov.	58.0	287.44	797	.357	287	358
Dec.	60.1	288.61	813	.297	241	212

Avg. Percentage Diff. = +7.73 %

Koberg (17) in his paper on solar radiation had an average percentage difference of 2.0 to 11.7 per cent. Our average percentage difference falls well within this range.

A least squares fit for a straight line was performed on our calculated solar radiation as a function of our measured solar radiation and the following formula was derived:

$$Q_a = (.92927)\ (Q_c) + 15.06 \qquad \text{(A-3)}$$

and since we know that

$$Q_c = \varepsilon\ \sigma\ T_K^4$$

we can reduce Equation A-3 to

$$Q_a = .92927 (\varepsilon \sigma T_K^4) + 15.06 \qquad \text{(A-4)}$$

with a correlation coefficient of .97198 and where:

Q_a = Measured Radiation per month in cal/cm^2/day for month in question

ε = emissivity "constant" for the month in question

σ = Stefan-Boltzman constant 11.7118 X 10^{-8} cal/cm^{-2}/day/(^oK)^4

T_K = Ambient Air Temperature degrees Kelvin for month in question

Hence, once the emissivity "constant" has been established for each month of a typical year based on at least 10 years of data, one need only know the average ambient air temperature of a given month to calculate the solar radiation received during that month. It should be noted that this temperature is expressed in degrees Kelvin.

SOLAR RADIATION TO PAN EVAPORATION

The Earth's orbit around the Sun is an ellipse, its distance from the Sun varying by about three per cent. However, the changing distance of the Earth from the Sun is not the cause of the seasons. The seasons result because the plane in which the Earth revolves is not coincident with the plane of the Earth's equator. The planes of the equator and the ecliptic are inclined to each other by about 23.5 degrees. This angle is called the obliquity of the ecliptic. The result of the obliquity of the ecliptic is that the northern hemisphere is inclined toward the sun during the summer month of June and away from it during the winter month of December.

A graph of Solar Radiation and Pan Evaporation for San Antonio, Texas, is presented in Figure A-1 showing the effects of the seasons on both of these variables. As can be seen they are each affected similarly.

Pan evaporation was measured in inches per day; however, for the purposes of this study it has been converted to gal/sq ft/day.

The pan evaporation data used to find the correlation to radiation was obtained from Report No. 192 of the Texas Water Development Board as measured during 1914 thru 1930 in San Antonio.

A least squares fit for a straight line was performed on historical pan evaporation and historical solar radiation yielding the following equation:

$$Pan = .000228\ (Solar) - .0251 \qquad (A\text{-}5)$$

where

Pan = pan evaporation in gal/sq ft/day

Solar= solar radiation in $cal/cm^2/day$

We know that from Equation No. A-4:

$$Solar = .92927\ (\sigma\ \varepsilon\ T_K^4) + 15.062$$

so substituting this expression for solar into Equation No. A-5 we derive:

$$Pan = .000228\ (.92927(\sigma\ \varepsilon\ T_K^4)+15.062) - .0251$$

$$= .000212\ (\sigma\ \varepsilon\ T_K^4) - .0217 \qquad (A\text{-}6)$$

Now, in Equation No. A-6, $\sigma = 11.7118 \times 10^{-8}\ cal/cm^2/Day/(^oK)^4$ and is constant so if we factor this out the equation becomes:

$$Pan = 2.48 \times 10^{-11}\ (\varepsilon\ T_K^4) - .0217 \qquad (A\text{-}7)$$

In Equation No. A-7, the emissivity, ε, is found by an earlier method for each month and T_K is the average ambient air temperature measured in degrees Kelvin over at least 10 years of data. Since Kelvin is not a common engineering measurement and we wish to make our final equation as easy to use as possible, if we convert our temperature, T_K, to degree fahrenheit, Equation No. A-7 then becomes:

$$Pan = 2.48 \times 10^{-11} (\epsilon) (.556T + 255.22)^4 - .0217 \qquad (A\text{-}8)$$

where

Pan = pan evaporation in gal/sq ft/day

T = average ambient air temperature in degrees Fahrenheit over at least 10 years of data

Hence, from Equation No. A-8 we have a means of calculating pan evaporation in gal/sq ft/day from the average ambient air temperature in Fahrenheit degrees. Using this equation will enable one to enter Figure No. 17 and find the amount of expected evapotranspiration for this value of pan evaporation.

A P P E N D I X B

EVAPOTRANSPIRATION OBSERVATIONS

**** APRIL 1, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 706 HRS. DEPTH TO WATER	24.12	19.00	18.37	24.50	21.00	17.75	23.62	20.25	17.50	24.00	19.62	18.25
TIME 1620 HRS. DEPTH TO WATER	24.25	19.00	19.00	24.87	22.75	19.37	23.75	20.37	17.75	24.25	21.00	20.00
WATER ADDED	24.00	0.00	28.00	28.00	28.00	28.00	24.00	24.00	28.00	24.00	24.00	28.00

**** APRIL 2,1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 711 HRS. DEPTH TO WATER	21.37	19.37	15.37	23.62	18.50	15.50	20.75	17.25	14.37	22.87	17.00	16.00
TIME 1610 HRS. DEPTH TO WATER	21.37	19.50	16.50	23.87	20.50	17.37	20.87	17.62	15.25	23.37	18.62	18.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** APRIL 3, 1976****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 730 HRS. DEPTH TO WATER	22.75	18.75	16.37	23.75	20.37	16.37	20.12	17.12	14.62	23.75	18.37	16.75
TIME 1705 HRS. DEPTH TO WATER	22.75	18.37	16.25	23.87	20.50	16.50	20.37	17.25	15.00	23.75	18.62	17.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00

**** APRIL 4, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 900 HRS. DEPTH TO WATER	16.50	14.37	12.87	21.00	15.62	12.00	17.75	14.25	12.00	19.62	13.12	13.50
TIME 1700 HRS. DEPTH TO WATER	17.75	15.50	15.50	21.00	17.00	14.75	18.00	16.00	13.75	20.00	14.87	15.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** APRIL 5, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 707 HRS. DEPTH TO WATER	13.75	13.00	12.50	18.50	14.00	12.50	15.50	14.00	12.37	16.62	13.00	13.25
TIME 1620 HRS. DEPTH TO WATER	13.87	13.25	13.25	17.50	14.75	13.25	15.75	14.12	12.00	16.00	13.75	14.62
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** APRIL 6, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 709 HRS. DEPTH TO WATER	15.87	15.00	15.12	18.37	16.25	15.87	16.50	15.75	14.50	16.62	16.00	18.00
TIME 1600 HRS. DEPTH TO WATER	17.75	16.12	17.00	19.25	17.37	16.50	16.75	17.00	15.50	17.87	16.75	18.37
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.00

**** APRIL 7, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 710 HRS. DEPTH TO WATER	17.75	16.12	16.75	19.12	17.25	16.37	16.50	16.87	15.37	17.50	16.62	17.00
TIME 1620 HRS. DEPTH TO WATER	20.25	16.75	18.00	20.00	18.50	18.00	18.12	18.00	16.50	19.00	18.00	18.00
WATER ADDED	0.00	0.00	24.00	0.00	0.00	24.00	0.00	0.00	0.00	0.00	0.00	24.00

**** APRIL 8, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
TIME 1400 HRS. DEPTH TO WATER	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** APRIL 9, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 706 HRS.												
DEPTH TO WATER	20.62	17.87	17.50	20.50	19.00	16.75	18.50	18.25	17.37	18.50	17.75	16.50
TIME 1400 HRS.												
DEPTH TO WATER	21.00	18.00	19.62	21.00	19.50	19.00	18.50	18.50	17.87	19.37	18.75	20.00
WATER ADDED	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00

**** APRIL 10,1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 756 HRS.												
DEPTH TO WATER	21.50	18.50	18.75	21.75	20.00	18.00	19.25	19.00	17.37	20.00	19.25	19.00
TIME 1641 HRS.												
DEPTH TO WATER	22.25	18.75	19.87	22.00	20.50	18.75	19.50	19.00	19.00	20.75	19.37	20.00
WATER ADDED	0.00	0.00	24.00	0.00	20.00	24.00	0.00	0.00	24.00	0.00	0.00	24.00

**** APRIL 11,1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 913 HRS.												
DEPTH TO WATER	22.37	19.00	17.37	22.12	19.37	17.62	19.87	19.50	17.00	21.00	19.62	17.75
TIME 1703 HRS.												
DEPTH TO WATER	22.75	19.62	18.25	22.75	19.75	18.00	20.00	19.62	18.00	21.12	19.87	18.00
WATER ADDED	0.00	12.00	24.00	0.00	12.00	24.00	12.00	12.00	0.00	0.00	12.00	24.00

**** APRIL 12,1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 710 HRS.												
DEPTH TO WATER	23.00	19.37	17.00	22.87	19.50	17.00	19.62	19.50	18.37	21.12	19.12	17.25
TIME 1540 HRS.												
DEPTH TO WATER	23.00	19.50	17.87	23.50	20.25	18.00	20.25	20.00	19.25	21.75	20.25	18.50
WATER ADDED	8.00	8.00	32.00	28.00	28.00	32.00	8.00	20.00	32.00	8.00	20.00	32.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** APRIL 13, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 707 HRS. DEPTH TO WATER	21.00	18.00	16.50	19.50	17.37	16.37	18.12	17.25	15.50	19.87	17.50	17.00
TIME 1840 HRS. DEPTH TO WATER	21.25	18.50	17.00	19.87	17.87	16.75	18.87	18.00	16.37	20.25	18.00	17.37
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** APRIL 14,1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 707 HRS. DEPTH TO WATER	21.00	18.37	16.75	19.62	17.50	16.75	18.62	17.87	16.25	20.12	17.75	17.12
TIME 1615 HRS. DEPTH TO WATER	22.50	19.00	18.25	20.50	18.87	18.00	18.30	18.00	16.87	20.62	18.62	18.87
WATER ADDED	12.00	0.00	24.00	0.00	0.00	24.00	0.00	0.00	24.00	0.00	0.00	24.00

**** APRIL 15, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 709 HRS. DEPTH TO WATER	21.00	19.62	14.25	20.87	18.87	14.00	19.50	18.37	13.62	21.00	19.00	15.50
TIME 1550 HRS. DEPTH TO WATER	21.12	19.50	15.50	20.87	19.00	14.87	19.50	18.50	14.12	21.00	19.25	16.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** APRIL 16, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	15.00	15.62	14.37	15.87	15.25	13.62	16.37	15.75	13.25	15.50	14.00	15.00
TIME 1810 HRS. DEPTH TO WATER	16.25	16.00	15.87	16.50	16.12	15.00	16.75	16.00	14.12	16.25	15.00	16.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** APRIL 17, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 913 HRS. DEPTH TO WATER	16.75	16.50	15.87	17.50	16.75	15.50	17.62	17.00	14.75	17.00	16.50	18.00
TIME 1820 HRS. DEPTH TO WATER	17.12	17.00	16.37	17.12	17.00	16.62	18.00	17.62	15.50	17.87	16.87	19.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00

**** APRIL 18, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS. DEPTH TO WATER	11.75	11.75	12.00	12.75	12.00	12.25	14.00	13.12	12.00	13.00	12.37	12.62
TIME 1712 HRS. DEPTH TO WATER	13.25	13.00	14.00	14.00	13.75	13.50	14.25	14.50	12.75	14.37	14.50	14.37
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** APRIL 19, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 701 HRS. DEPTH TO WATER	13.50	13.37	14.62	14.25	14.00	13.62	14.37	14.50	13.00	14.62	14.87	14.75
TIME 1630 HRS. DEPTH TO WATER	15.00	14.50	15.75	16.00	16.12	14.37	15.00	15.62	13.62	16.25	16.00	16.37
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** APRIL 20, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 650 HRS. DEPTH TO WATER	13.00	12.75	13.12	13.00	13.50	12.00	14.00	14.25	12.50	12.87	12.75	13.00
TIME 1620 HRS. DEPTH TO WATER	16.25	15.75	15.87	17.37	17.00	16.25	15.50	16.37	15.00	16.75	16.37	16.87
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** APRIL 21, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 706 HRS. DEPTH TO WATER	17.25	16.50	18.50	17.37	17.50	17.00	16.62	17.62	16.50	18.00	17.50	18.75
TIME 1600 HRS. DEPTH TO WATER	19.00	17.50	19.25	19.00	18.50	18.50	17.25	18.00	17.50	18.37	18.00	19.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** APRIL 22, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 709 HRS. DEPTH TO WATER	20.62	17.75	19.75	19.00	18.75	18.62	17.75	18.50	18.00	18.87	18.75	19.62
TIME 1415 HRS. DEPTH TO WATER	20.75	18.00	20.00	19.12	18.87	19.00	18.12	18.62	18.00	19.00	18.87	20.50
WATER ADDED	0.00	0.00	28.00	0.00	0.00	28.00	0.00	0.00	28.00	0.00	0.00	28.00

**** APRIL 23, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 710 HRS. DEPTH TO WATER	21.25	18.25	16.25	19.62	19.12	15.75	18.25	19.00	14.50	19.00	19.00	16.25
TIME 1830 HRS. DEPTH TO WATER	21.75	18.62	17.37	19.87	19.75	16.62	19.00	19.62	15.62	19.25	19.25	17.37
WATER ADDED	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00

**** APRIL 24,1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 707 HRS. DEPTH TO WATER	21.87	18.62	16.00	20.00	19.62	17.00	19.00	19.37	16.00	19.25	19.25	16.25
TIME 1715 HRS. DEPTH TO WATER	22.00	18.75	17.00	20.62	19.75	18.00	19.00	19.50	16.62	19.37	19.50	18.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00	20.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** APRIL 25, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 918 HRS. DEPTH TO WATER	22.50	18.87	18.75	20.75	20.00	17.25	19.00	19.75	17.00	19.37	20.00	17.50
TIME 1820 HRS. DEPTH TO WATER	22.75	19.50	19.75	21.50	21.00	19.75	19.12	19.62	17.87	20.50	21.00	20.00
WATER ADDED	12.00	12.00	28.00	0.00	24.00	28.00	0.00	12.00	28.00	0.00	20.00	28.00

**** APRIL 26, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 705 HRS. DEPTH TO WATER	20.50	17.50	15.00	21.50	17.25	14.25	19.75	18.75	14.00	20.50	17.25	16.37
TIME 1750 HRS. DEPTH TO WATER	22.00	18.62	17.00	22.12	19.00	17.50	20.00	19.25	16.00	20.75	18.50	18.12
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** APRIL 27, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 708 HRS. DEPTH TO WATER	22.50	19.00	18.00	22.50	19.50	18.50	20.25	19.50	16.50	20.87	19.00	18.50
TIME 1555 HRS. DEPTH TO WATER	22.75	19.50	19.00	22.75	20.00	19.00	20.00	19.75	17.00	21.00	19.87	19.00
WATER ADDED	8.00	16.00	28.00	8.00	20.00	28.00	0.00	16.00	24.00	0.00	16.00	28.00

**** APRIL 28, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 712 HRS. DEPTH TO WATER	21.25	17.50	14.75	21.50	17.25	14.50	20.25	17.75	14.00	21.25	17.00	15.25
TIME 1605 HRS. DEPTH TO WATER	22.00	17.50	16.50	22.50	17.87	16.00	20.75	18.00	14.50	21.25	17.75	16.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** APRIL 29, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 713 HRS.												
DEPTH TO WATER	13.12	13.00	13.25	14.00	14.75	12.87	14.50	13.87	12.00	13.50	14.00	13.37
TIME 1605 HRS.												
DEPTH TO WATER	14.00	14.00	15.25	15.00	16.00	15.00	15.00	15.00	13.75	14.62	15.00	15.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** APRIL 30, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 705 HRS.												
DEPTH TO WATER	16.50	16.00	17.00	17.00	16.62	15.87	16.50	16.75	15.00	16.37	16.50	17.50
TIME 1420 HRS.												
DEPTH TO WATER	18.00	16.62	18.00	17.50	17.50	16.75	16.87	17.00	15.75	17.25	17.00	18.00
WATER ADDED	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00

**** MAY 1, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 806 HRS.												
DEPTH TO WATER	19.25	16.87	16.00	18.12	17.87	17.37	17.25	17.25	16.37	17.62	17.50	16.87
TIME 1955 HRS.												
DEPTH TO WATER	21.50	18.00	20.00	19.25	19.00	19.00	18.25	18.00	17.62	18.50	18.62	20.00
WATER ADDED	0.00	0.00	28.00	0.00	0.00	28.00	0.00	0.00	28.00	0.00	0.00	28.00

**** MAY 2, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 918 HRS.												
DEPTH TO WATER	21.87	18.25	16.00	19.50	19.37	15.87	18.50	18.37	15.50	18.87	19.00	16.00
TIME 1801 HRS.												
DEPTH TO WATER	22.50	18.75	16.87	20.75	20.25	16.50	19.50	19.12	16.00	19.50	20.00	17.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** MAY 3, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 714 HRS. DEPTH TO WATER	22.87	19.00	17.75	21.12	20.62	17.37	19.62	19.50	17.00	19.75	20.00	17.50
TIME 1530 HRS. DEPTH TO WATER	23.50	20.00	20.00	21.75	21.00	19.00	19.62	19.75	18.50	20.25	21.00	19.00
WATER ADDED	12.00	16.00	28.00	0.00	20.00	28.00	0.00	12.00	28.00	0.00	20.00	28.00

**** MAY 4, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 705 HRS. DEPTH TO WATER	21.25	18.00	17.50	17.00	18.50	18.00	20.50	18.50	15.37	20.62	18.00	17.50
TIME 1545 HRS. DEPTH TO WATER	22.50	18.50	18.00	17.00	19.75	19.00	20.25	18.50	16.50	21.00	19.00	18.75
WATER ADDED	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00

**** MAY 5, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 705 HRS. DEPTH TO WATER	19.00	17.50	13.75	15.62	16.00	16.00	18.25	17.37	14.00	17.50	16.25	13.50
TIME 1610 HRS. DEPTH TO WATER	17.12	14.62	13.50	14.50	15.50	13.50	17.00	15.50	12.50	16.25	14.50	13.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MAY 6, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 709 HRS. DEPTH TO WATER	18.00	15.00	14.37	16.12	15.87	14.25	17.25	16.00	13.50	16.87	15.50	14.00
TIME 1615 HRS. DEPTH TO WATER	19.62	16.75	16.00	18.50	18.00	17.00	17.50	17.00	15.62	18.00	17.12	15.87
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** MAY 7, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 706 HRS. DEPTH TO WATER	14.00	14.12	13.25	16.00	15.87	14.00	13.75	13.37	12.00	15.00	15.00	13.62
TIME 1955 HRS. DEPTH TO WATER	14.75	15.00	15.50	16.62	17.12	15.50	14.50	14.75	13.75	16.50	17.50	15.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MAY 8, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 805 HRS. DEPTH TO WATER	15.62	15.50	16.75	16.87	17.37	15.87	15.00	15.12	14.00	16.87	17.62	15.25
TIME 1540 HRS. DEPTH TO WATER	15.87	16.00	16.87	17.12	17.50	16.12	15.62	15.62	14.25	17.37	17.75	15.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MAY 9, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 850 HRS. DEPTH TO WATER	17.12	16.25	16.87	17.62	17.75	16.25	16.00	16.25	14.50	18.00	17.87	15.62
TIME 1915 HRS. DEPTH TO WATER	17.50	16.50	17.00	18.00	18.00	16.50	17.00	16.50	15.00	17.50	18.00	16.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MAY 10, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 703 HRS. DEPTH TO WATER	17.00	15.87	15.75	17.50	17.37	17.62	16.12	16.00	15.12	17.50	17.37	16.00
TIME 1715 HRS. DEPTH TO WATER	17.50	16.50	17.00	18.00	18.00	18.00	17.00	16.75	15.75	17.75	18.00	18.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** MAY 11, 1976 ****

NO DATA RECORDED

**** MAY 12, 1976 ****

NO DATA RECORDED

**** MAY 13, 1976 ****

NO DATA RECORDED

**** MAY 14, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
TIME 1715 HRS. DEPTH TO WATER	20.50	18.50	18.75	19.75	19.75	19.00	17.50	18.00	17.75	19.00	19.12	19.12
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** MAY 15, 1976 ****

NO DATA RECORDED

**** MAY 16, 1976 ****

NO DATA RECORDED

**** MAY 17, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 715 HRS. DEPTH TO WATER	23.50	21.00	22.50	22.62	22.50	22.62	19.37	19.87	20.00	21.50	21.50	24.00
TIME 1545 HRS. DEPTH TO WATER	24.50	22.00	23.00	23.50	22.87	23.12	19.50	20.00	19.87	22.12	23.00	24.00
WATER ADDED	12.00	16.00	28.00	0.00	20.00	28.00	0.00	12.00	28.00	0.00	24.00	32.00

**** MAY 18, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 715 HRS. DEPTH TO WATER	22.62	19.12	20.00	23.62	20.12	20.12	19.50	18.00	15.75	22.25	18.87	18.50
TIME 1645 HRS. DEPTH TO WATER	24.00	20.50	21.12	24.12	21.50	21.50	19.25	18.00	15.87	23.00	20.50	20.00
WATER ADDED	16.00	16.00	28.00	16.00	16.00	28.00	0.00	0.00	0.00	0.00	20.00	24.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** MAY 19, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 715 HRS.												
DEPTH TO WATER	21.00	17.75	17.87	22.87	19.87	17.87	19.87	18.75	16.12	23.12	17.75	16.87
TIME 1730 HRS.												
DEPTH TO WATER	22.75	18.75	19.00	23.00	20.50	19.50	20.00	18.75	16.50	23.12	18.75	18.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MAY 20, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 730 HRS.												
DEPTH TO WATER	22.87	19.87	19.37	23.50	20.75	19.50	20.50	19.50	17.62	23.25	19.12	18.87
TIME 1730 HRS.												
DEPTH TO WATER	20.50	16.75	15.62	22.00	18.75	16.00	17.37	16.62	14.12	21.62	15.87	15.12
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MAY 21, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	20.50	17.25	17.00	22.00	19.12	17.25	17.50	17.25	15.50	20.50	17.00	16.62
TIME 1630 HRS.												
DEPTH TO WATER	21.50	18.12	18.75	23.00	19.62	18.62	17.87	17.62	16.00	21.00	18.00	18.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MAY 22, 1976 ****

NO DATA RECORDED

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** MAY 23, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 930 HRS. DEPTH TO WATER	23.62	20.50	21.00	23.87	21.75	21.12	18.00	18.25	18.25	23.00	20.50	21.00
TIME 1700 HRS. DEPTH TO WATER	23.87	20.87	22.00	24.12	23.12	22.00	18.87	18.87	18.12	23.37	21.00	21.87
WATER ADDED	12.00	12.00	28.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MAY 24, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS. DEPTH TO WATER	22.87	19.00	18.75	24.00	22.62	21.00	19.62	19.37	18.75	23.75	21.62	22.00
TIME 1630 HRS. DEPTH TO WATER	23.00	19.62	19.50	24.50	22.87	22.12	19.25	19.50	18.87	23.62	22.50	22.62
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MAY 25, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 900 HRS. DEPTH TO WATER	23.37	20.12	19.87	24.37	23.00	22.37	19.87	19.50	19.00	23.87	22.37	22.75
TIME 1630 HRS. DEPTH TO WATER	23.87	20.87	20.87	24.50	23.37	23.00	19.50	19.75	19.25	23.87	22.50	23.87
WATER ADDED	20.00	20.00	28.00	20.00	20.00	28.00	0.00	12.00	24.00	12.00	20.00	28.00

**** MAY 26, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 715 HRS. DEPTH TO WATER	14.00	13.50	14.25	15.25	15.75	14.75	15.25	14.12	13.37	15.62	15.62	15.87
TIME 1630 HRS. DEPTH TO WATER	17.00	16.12	16.75	17.87	16.87	16.25	16.12	15.87	15.00	17.00	17.37	17.87
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** MAY 27, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 930 HRS. DEPTH TO WATER	19.12	17.12	18.25	18.50	18.25	17.62	17.50	17.37	16.75	18.50	18.25	19.12
TIME 1615 HRS. DEPTH TO WATER	20.12	17.75	19.50	19.25	18.75	18.37	17.62	17.62	17.00	19.00	19.00	20.12
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MAY 28, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 715 HRS. DEPTH TO WATER	21.00	18.50	20.00	19.62	19.25	19.00	18.37	18.37	18.00	19.25	19.25	20.75
TIME 1545 HRS. DEPTH TO WATER	21.50	19.00	20.75	20.37	19.62	19.87	18.50	18.37	17.87	20.00	20.00	20.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MAY 29, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 900 HRS. DEPTH TO WATER	22.12	19.37	21.50	20.75	20.00	20.50	18.87	19.00	18.62	20.25	20.37	21.75
TIME 1700 HRS. DEPTH TO WATER	22.75	19.87	22.50	21.37	20.87	21.50	18.75	18.75	18.75	20.87	21.25	22.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MAY 30, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 945 HRS. DEPTH TO WATER	23.00	20.50	22.87	21.50	20.87	21.87	19.12	19.37	19.62	21.00	21.50	22.87
TIME 1700 HRS. DEPTH TO WATER	23.50	20.75	23.00	21.75	21.00	22.00	19.12	19.25	19.50	21.12	21.75	23.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** MAY 31, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 730 HRS. DEPTH TO WATER	23.75	20.87	23.75	22.00	21.25	22.75	19.50	19.62	20.00	21.50	22.00	23.12
TIME 1600 HRS. DEPTH TO WATER	23.87	21.37	23.75	22.25	21.62	22.50	19.37	19.75	20.12	21.87	22.00	23.50
WATER ADDED	12.00	20.00	28.00	0.00	20.00	28.00	0.00	0.00	20.00	0.00	8.00	12.00

**** JUNE 1, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	20.50	16.62	18.50	20.00	16.75	16.75	18.87	18.62	15.50	19.62	18.75	20.50
TIME 1600 HRS. DEPTH TO WATER	21.00	17.50	19.00	20.12	17.50	17.12	18.87	17.75	16.12	20.00	18.75	20.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JUNE 2, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	22.00	18.25	20.12	20.62	18.37	18.37	19.50	19.75	17.50	20.50	19.50	21.87
TIME 1615 HRS. DEPTH TO WATER	22.25	18.75	21.25	21.25	18.75	19.00	19.50	19.62	17.75	21.37	20.62	22.62
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JUNE 3, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	22.87	19.50	22.00	21.62	19.37	19.75	19.87	20.50	18.50	22.00	21.25	23.00
TIME 1530 HRS. DEPTH TO WATER	23.25	19.87	22.87	22.12	19.87	20.50	19.75	20.25	18.75	22.50	22.12	23.00
WATER ADDED	0.00	0.00	28.00	0.00	0.00	28.00	0.00	0.00	24.00	0.00	24.00	24.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JUNE 4, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	23.75	20.75	19.00	22.75	20.62	15.87	20.25	20.75	15.75	23.00	19.00	20.75
TIME 1530 HRS. DEPTH TO WATER	24.00	20.25	20.00	22.37	20.50	15.87	20.00	20.75	16.25	23.00	19.62	21.00
WATER ADDED	12.00	12.00	20.00	0.00	12.00	0.00	0.00	12.00	0.00	0.00	0.00	24.00

**** JUNE 5, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 842 HRS. DEPTH TO WATER	21.87	19.00	14.87	22.50	19.00	17.37	20.00	18.50	17.12	23.00	19.75	17.87
TIME 1953 HRS. DEPTH TO WATER	22.50	19.50	17.00	22.75	19.50	17.50	20.00	19.00	17.50	23.00	19.75	18.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JUNE 6, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 902 HRS. DEPTH TO WATER	22.75	19.75	18.87	23.00	19.75	18.87	20.25	19.37	19.00	23.12	20.25	19.75
TIME 1809 HRS. DEPTH TO WATER	23.00	20.12	20.12	23.12	20.50	21.00	20.87	20.00	21.62	23.50	20.87	23.00
WATER ADDED	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00

**** JUNE 7, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 900 HRS. DEPTH TO WATER	23.50	21.00	20.25	23.25	20.37	19.50	20.87	20.50	19.37	23.75	22.62	21.75
TIME 1615 HRS. DEPTH TO WATER	23.37	21.00	20.37	23.37	20.87	19.50	20.87	20.62	19.37	24.00	22.87	22.12
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JUNE 8, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	23.62	21.62	20.87	23.37	20.87	19.87	20.87	20.87	20.00	24.12	23.12	22.50
TIME 1615 HRS.												
DEPTH TO WATER	23.62	21.75	21.00	23.25	20.87	20.00	20.87	20.75	19.62	24.00	23.37	23.00
WATER ADDED	12.00	20.00	28.00	0.00	12.00	20.00	0.00	12.00	20.00	12.00	0.00	12.00

**** JUNE 9, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 845 HRS.												
DEPTH TO WATER	21.75	18.75	17.12	23.12	19.00	16.50	21.37	19.00	17.37	23.50	23.50	21.50
TIME 1530 HRS.												
DEPTH TO WATER	21.75	19.00	18.00	23.25	19.00	16.62	21.12	19.12	17.37	23.87	23.75	22.87
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.00	24.00	28.00

**** JUNE 10, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS.												
DEPTH TO WATER	22.50	19.87	19.12	23.75	19.62	18.00	21.50	19.87	18.75	23.37	21.00	20.00
TIME 25 HRS.												
DEPTH TO WATER	-1615.00	22.50	20.12	19.75	21.75	19.75	18.00	21.37	19.87	18.37	23.62	22.12
WATER ADDED	8.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JUNE 11, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	23.00	20.62	20.25	23.75	20.00	18.75	21.50	20.25	19.75	23.75	22.50	21.87
TIME 1530 HRS.												
DEPTH TO WATER	23.00	21.00	20.75	23.75	20.12	18.75	21.37	20.25	19.25	24.00	23.37	22.12
WATER ADDED	0.00	20.00	24.00	12.00	12.00	20.00	0.00	12.00	20.00	12.00	24.00	28.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JUNE 12, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 700 HRS.												
DEPTH TO WATER	23.12	18.00	17.75	21.00	17.87	15.12	21.50	18.50	16.62	23.37	20.25	19.37
TIME 1600 HRS.												
DEPTH TO WATER	23.50	18.37	18.00	21.25	18.12	15.37	21.62	18.75	17.00	23.62	20.50	19.62
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JUNE 13, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 913 HRS.												
DEPTH TO WATER	23.62	19.00	18.62	21.50	18.75	15.87	21.75	19.00	17.25	23.50	21.00	20.12
TIME 1610 HRS.												
DEPTH TO WATER	23.62	19.50	19.50	22.00	19.25	16.75	21.87	19.62	18.00	24.00	22.25	22.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JUNE 14, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	24.00	20.25	20.50	22.50	19.50	17.62	22.12	20.12	19.00	24.00	22.62	20.00
TIME 1615 HRS.												
DEPTH TO WATER	24.00	20.37	21.00	22.50	19.50	17.75	22.12	20.25	19.12	24.50	23.50	23.00
WATER ADDED	16.00	16.00	24.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	28.00	28.00

**** JUNE 15, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	21.00	17.87	17.50	22.62	20.12	14.00	22.50	20.62	19.50	24.50	19.25	19.12
TIME 1615 HRS.												
DEPTH TO WATER	21.50	18.62	18.62	23.37	21.00	14.12	23.62	21.00	20.12	24.62	20.50	20.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	12.00	20.00	20.00	20.00	0.00	20.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JUNE 16, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	14.87	14.62	14.50	14.87	15.25	14.87	16.75	14.62	13.25	16.75	15.62	16.50
TIME 1600 HRS. DEPTH TO WATER	17.75	17.12	16.87	15.75	16.00	15.25	17.00	16.12	14.12	17.75	17.12	17.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JUNE 17, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	18.75	17.75	17.87	17.25	17.50	16.50	18.12	17.62	16.37	19.00	18.00	18.87
TIME 1615 HRS. DEPTH TO WATER	19.00	17.87	18.62	17.25	17.50	16.50	18.62	18.12	17.12	19.75	19.00	20.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JUNE 18, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	19.62	17.75	18.00	17.50	17.87	16.87	19.00	18.25	17.00	20.12	19.00	20.12
TIME 1610 HRS. DEPTH TO WATER	19.87	18.50	19.50	17.50	17.75	17.00	19.12	18.50	19.01	20.75	20.00	21.00
WATER ADDED	0.00	0.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.00	16.00

**** JUNE 19, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 850 HRS. DEPTH TO WATER	20.12	18.87	18.00	17.87	18.25	17.25	19.50	18.75	17.87	20.87	18.00	18.50
TIME 2020 HRS. DEPTH TO WATER	20.87	19.37	19.00	18.37	18.50	17.62	19.87	19.25	18.87	21.75	19.12	19.37
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JUNE 20, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 855 HRS. DEPTH TO WATER	21.00	19.75	19.75	18.37	18.62	17.75	20.00	19.50	19.37	22.12	19.87	20.25
TIME 1950 HRS. DEPTH TO WATER	21.50	20.50	20.75	18.50	18.87	18.00	20.25	20.00	20.25	22.75	20.50	22.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JUNE 21, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	22.50	21.50	21.25	19.62	19.50	19.50	20.87	20.75	20.75	23.00	21.00	22.50
TIME 1700 HRS. DEPTH TO WATER	21.75	21.75	21.87	19.12	19.37	19.37	20.50	20.50	23.00	22.12	22.50	30.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.00	20.00	28.00

**** JUNE 22, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	22.62	22.50	22.37	19.75	19.75	20.25	21.00	21.00	21.00	22.50	19.25	19.62
TIME 1830 HRS. DEPTH TO WATER	22.62	22.50	22.87	19.75	19.75	19.87	20.75	20.87	20.87	22.00	20.50	20.87
WATER ADDED	0.00	12.00	20.00	0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00	12.00

**** JUNE 23, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	23.00	20.50	19.37	20.12	20.25	20.87	21.12	21.75	19.00	23.37	21.00	19.00
TIME 1645 HRS. DEPTH TO WATER	23.00	21.00	20.75	20.00	20.25	20.87	21.12	21.75	19.50	23.75	22.50	21.12
WATER ADDED	0.00	0.00	0.00	0.00	0.00	16.00	0.00	0.00	0.00	0.00	0.00	20.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JUNE 24, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 820 HRS.												
DEPTH TO WATER	23.25	22.00	21.62	20.50	20.75	17.75	21.37	21.87	20.12	23.75	22.75	18.25
TIME 1615 HRS.												
DEPTH TO WATER	23.50	22.12	22.62	20.00	20.75	18.00	21.00	21.87	19.75	23.87	23.50	20.12
WATER ADDED	0.00	20.00	28.00	0.00	0.00	12.00	0.00	12.00	28.00	0.00	28.00	28.00

**** JUNE 25, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 820 HRS.												
DEPTH TO WATER	23.75	18.00	15.62	19.00	20.75	13.62	22.50	18.25	14.25	24.00	19.00	26.00
TIME 1550 HRS.												
DEPTH TO WATER	19.62	16.87	14.75	15.37	16.25	12.75	19.00	16.37	13.25	23.37	16.37	14.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JUNE 26, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 902 HRS.												
DEPTH TO WATER	18.50	17.00	15.87	15.00	15.00	17.00	14.12	17.87	17.00	24.00	22.75	16.37
TIME 13 HRS.												
DEPTH TO WATER	-1570.00	19.00	17.25	16.75	15.50	16.50	14.50	18.50	17.50	14.75	23.00	17.00
WATER ADDED	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JUNE 27, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 935 HRS.												
DEPTH TO WATER	19.50	18.00	17.50	15.87	17.00	15.37	18.75	18.00	15.62	23.12	18.00	19.37
TIME 2030 HRS.												
DEPTH TO WATER	20.50	19.00	19.25	16.37	18.00	16.87	19.25	19.00	17.25	23.50	20.37	20.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JUNE 28, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 820 HRS. DEPTH TO WATER	21.37	20.00	20.12	17.87	18.87	17.75	19.87	20.12	18.00	22.00	20.62	20.87
TIME 1650 HRS. DEPTH TO WATER	21.37	20.50	20.87	17.87	18.75	18.00	19.87	20.12	18.12	23.75	21.50	21.75
WATER ADDED	0.00	0.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.00	20.00

**** JUNE 29, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS. DEPTH TO WATER	22.37	21.25	18.25	18.75	19.73	18.87	20.12	20.87	18.87	24.00	19.50	18.25
TIME 1630 HRS. DEPTH TO WATER	22.00	21.50	18.87	18.25	19.87	19.00	20.25	21.00	19.00	24.75	21.00	20.25
WATER ADDED	0.00	12.00	24.00	0.00	0.00	12.00	0.00	0.00	12.00	12.00	0.00	24.00

**** JUNE 30, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 820 HRS. DEPTH TO WATER	23.00	20.00	15.87	19.75	20.62	16.50	20.87	21.50	17.37	23.87	21.50	17.00
TIME 1615 HRS. DEPTH TO WATER	23.00	20.50	17.50	19.00	20.50	16.75	20.75	21.50	17.50	24.00	22.75	19.25
WATER ADDED	*****	7.00	9.50	12.50	11.00	91.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JULY 1, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 820 HRS. DEPTH TO WATER	23.62	21.25	19.00	20.25	21.37	18.00	21.00	22.25	18.50	24.37	20.37	20.00
TIME 1545 HRS. DEPTH TO WATER	23.75	21.75	20.00	20.12	21.00	18.25	21.12	22.37	18.50	24.50	21.87	21.37
WATER ADDED	0.00	12.00	20.00	0.00	0.00	12.00	0.00	28.00	12.00	8.00	12.00	24.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JULY 2, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 615 HRS. DEPTH TO WATER	24.00	20.00	16.87	20.75	21.75	16.25	21.50	18.75	17.00	24.75	20.25	17.87
TIME 1545 HRS. DEPTH TO WATER	24.00	20.50	16.50	20.50	21.62	16.50	21.50	18.75	17.25	24.50	21.50	19.62
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.00

**** JULY 3, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 950 HRS. DEPTH TO WATER	24.00	21.50	19.75	21.00	22.00	17.75	21.87	19.37	18.37	24.87	21.00	17.25
TIME 1525 HRS. DEPTH TO WATER	21.00	21.62	20.50	20.50	22.00	17.75	21.87	19.62	18.50	24.87	22.00	18.25
WATER ADDED	0.00	12.00	20.00	0.00	12.00	0.00	0.00	0.00	12.00	8.00	12.00	12.00

**** JULY 4, 1976 ****

NO DATA RECORDED

**** JULY 5, 1976 ****

NO DATA RECORDED

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JULY 6, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	17.75	16.50	16.50	14.50	16.25	15.00	17.62	16.87	14.62	20.50	16.75	17.50
TIME 1615 HRS. DEPTH TO WATER	16.00	17.00	17.00	14.37	16.25	15.25	16.62	17.50	15.37	20.87	18.00	18.62
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JULY 7, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS. DEPTH TO WATER	16.00	15.62	16.50	17.00	16.87	15.75	16.75	16.37	13.87	16.37	16.62	17.37
TIME 1605 HRS. DEPTH TO WATER	17.00	16.50	17.50	16.75	16.87	15.50	17.00	17.37	15.25	17.62	17.87	18.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JULY 8, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 1110 HRS. DEPTH TO WATER	14.00	14.00	14.00	13.75	14.62	13.00	16.25	15.25	13.37	15.37	15.50	16.25
TIME 1445 HRS. DEPTH TO WATER	13.00	13.50	13.00	12.50	14.00	12.00	15.25	14.25	12.00	14.25	15.00	13.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JULY 9, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 900 HRS. DEPTH TO WATER	13.25	13.75	13.50	13.25	14.00	12.50	15.00	14.00	12.50	14.00	14.00	14.87
TIME 1605 HRS. DEPTH TO WATER	11.75	12.12	12.00	11.75	12.25	10.62	13.75	13.00	10.87	12.25	12.50	12.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JULY 10, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	11.87	12.00	11.87	12.12	13.00	11.37	13.25	13.25	11.75	12.12	12.62	13.37
TIME 2000 HRS. DEPTH TO WATER	12.50	12.25	12.25	12.50	13.25	11.50	13.50	13.50	12.00	12.50	13.00	13.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JULY 11, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 910 HRS. DEPTH TO WATER	13.37	13.50	13.12	13.25	14.37	12.25	14.12	14.12	12.62	13.25	14.12	14.62
TIME 2015 HRS. DEPTH TO WATER	14.50	14.50	15.12	14.12	15.25	13.75	14.75	15.37	13.25	14.75	15.25	16.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JULY 12, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS. DEPTH TO WATER	16.12	16.50	20.00	15.87	16.75	15.25	16.25	16.62	14.75	16.50	17.00	17.62
TIME 1530 HRS. DEPTH TO WATER	14.25	14.62	14.75	13.75	14.50	12.75	15.87	16.00	14.37	14.87	15.50	15.87
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JULY 13, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	17.00	16.75	17.37	15.75	17.00	15.62	17.12	17.25	16.00	16.87	17.50	18.00
TIME 1620 HRS. DEPTH TO WATER	10.00	12.87	12.00	10.75	11.00	11.25	15.37	15.50	12.62	12.62	13.50	13.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JULY 14, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 820 HRS.												
DEPTH TO WATER	14.50	15.62	15.25	14.25	15.50	12.37	15.62	15.37	13.00	15.37	15.75	14.00
TIME 1645 HRS.												
DEPTH TO WATER	12.50	13.25	15.00	11.00	12.37	6.12	13.50	13.00	10.62	12.50	13.12	12.62
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JULY 15, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS.												
DEPTH TO WATER	15.00	16.00	15.50	14.37	15.50	7.12	15.37	15.50	14.00	15.00	15.50	15.75
TIME 1515 HRS.												
DEPTH TO WATER	14.87	14.00	15.00	13.75	15.50	7.62	15.75	16.00	13.75	16.25	16.75	17.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JULY 16, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS.												
DEPTH TO WATER	16.75	17.12	16.50	16.00	16.50	10.50	16.12	16.75	16.50	16.50	17.25	17.62
TIME 1645 HRS.												
DEPTH TO WATER	13.50	14.50	13.50	12.75	13.62	11.50	15.25	16.50	15.00	14.50	14.87	15.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JULY 17, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 920 HRS.												
DEPTH TO WATER	17.87	17.12	17.87	16.87	17.12	14.62	17.75	17.62	17.25	17.12	18.00	18.50
TIME 810 HRS.												
DEPTH TO WATER	18.12	17.50	18.25	17.25	17.50	15.00	18.00	18.00	17.50	17.75	18.50	19.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JULY 18, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 850 HRS. DEPTH TO WATER	19.37	18.00	19.50	17.87	17.87	15.75	18.25	18.37	18.50	18.50	18.87	20.37
TIME 1916 HRS. DEPTH TO WATER	20.75	19.00	21.50	18.12	18.25	17.00	18.50	19.00	20.00	19.25	19.50	22.00
WATER ADDED	0.00	0.00	20.00	0.00	0.00	16.00	0.00	0.00	16.00	0.00	0.00	24.00

**** JULY 19, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS. DEPTH TO WATER	20.87	19.50	20.62	18.87	19.00	15.50	19.00	19.62	19.75	19.37	19.75	21.00
TIME 1640 HRS. DEPTH TO WATER	20.87	19.87	21.00	19.00	19.12	16.50	19.00	19.87	20.00	20.37	20.62	22.00
WATER ADDED	0.00	0.00	24.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	28.00

**** JULY 20, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 810 HRS. DEPTH TO WATER	21.75	11.50	17.00	19.50	19.50	17.00	19.87	20.50	17.50	20.50	21.00	18.00
TIME 1710 HRS. DEPTH TO WATER	21.75	12.37	18.00	19.50	19.62	16.87	19.62	20.50	17.75	21.00	21.50	18.87
WATER ADDED	0.00	0.00	12.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	16.00	20.00

**** JULY 21, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS. DEPTH TO WATER	22.25	11.75	15.87	20.00	20.00	17.87	20.00	20.87	15.00	21.00	18.50	16.12
TIME 1620 HRS. DEPTH TO WATER	22.12	12.50	16.50	19.75	20.00	18.00	20.00	21.00	16.00	21.07	19.37	17.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JULY 22, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 945 HRS.												
DEPTH TO WATER	22.50	15.50	17.50	20.00	20.37	18.75	20.50	21.50	16.87	21.37	20.00	18.50
TIME 1730 HRS.												
DEPTH TO WATER	22.50	16.00	19.00	20.50	20.25	19.00	20.37	21.50	17.50	22.12	21.00	20.00
WATER ADDED	0.00	0.00	12.00	0.00	0.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JULY 23, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 820 HRS.												
DEPTH TO WATER	23.00	14.50	16.50	20.50	20.87	17.87	20.75	22.00	18.37	22.50	21.50	20.50
TIME 1630 HRS.												
DEPTH TO WATER	22.87	15.25	18.00	20.62	20.75	18.50	20.75	22.00	18.50	22.50	22.37	21.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JULY 24, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 930 HRS.												
DEPTH TO WATER	23.25	17.37	19.00	21.00	21.00	19.12	20.87	22.25	19.00	22.87	22.50	21.00
TIME 2010 HRS.												
DEPTH TO WATER	23.50	18.00	20.50	21.25	21.25	20.00	21.25	22.50	20.00	23.00	23.00	22.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JULY 25, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 1000 HRS.												
DEPTH TO WATER	23.62	18.37	21.00	21.50	21.50	20.37	21.25	22.75	20.50	23.25	23.00	23.00
TIME 1940 HRS.												
DEPTH TO WATER	23.75	19.00	21.50	21.75	22.00	21.00	21.25	23.00	20.75	23.75	23.25	23.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JULY 26, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS.												
DEPTH TO WATER	24.00	19.75	22.00	23.00	22.75	22.00	21.75	22.75	21.00	23.62	23.75	23.75
TIME 1545 HRS.												
DEPTH TO WATER	24.12	20.00	22.37	22.62	22.50	22.00	21.87	22.87	21.00	23.87	23.75	23.75
WATER ADDED	12.00	0.00	28.00	0.00	24.00	28.00	0.00	24.00	24.00	0.00	32.00	32.00

**** JULY 27, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 805 HRS.												
DEPTH TO WATER	22.62	12.00	17.62	23.00	18.50	17.50	22.25	19.50	18.00	24.00	19.87	19.87
TIME 1530 HRS.												
DEPTH TO WATER	23.00	12.00	19.00	23.00	18.75	18.00	22.25	20.00	18.00	24.00	21.00	21.50
WATER ADDED	0.00	0.00	12.00	0.00	0.00	12.00	0.00	0.00	12.00	0.00	12.00	28.00

**** JULY 28, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 805 HRS.												
DEPTH TO WATER	23.50	12.00	17.80	23.75	19.62	16.37	23.00	20.50	17.00	24.37	19.25	17.50
TIME 1700 HRS.												
DEPTH TO WATER	23.75	13.00	19.25	23.62	19.87	17.62	22.50	20.75	17.62	24.50	21.25	19.87
WATER ADDED	12.00	0.00	24.00	12.00	0.00	20.00	0.00	12.00	20.00	12.00	20.00	28.00

**** JULY 29, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 810 HRS.												
DEPTH TO WATER	22.00	11.50	15.62	22.00	20.50	14.87	23.00	18.87	15.50	24.00	18.50	16.50
TIME 1545 HRS.												
DEPTH TO WATER	22.37	12.50	17.50	22.50	20.62	16.37	23.00	19.37	16.87	24.37	20.00	18.87
WATER ADDED	0.00	0.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00	12.00	0.00	20.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JULY 30, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 810 HRS.												
DEPTH TO WATER	23.12	12.00	16.12	23.37	21.25	17.62	23.50	20.00	17.87	23.75	20.75	16.50
TIME 1600 HRS.												
DEPTH TO WATER	23.37	13.00	17.87	23.50	21.37	18.00	23.25	20.37	18.00	24.00	21.75	18.50
WATER ADDED	0.00	0.00	12.00	0.00	12.00	12.00	0.00	0.00	12.00	0.00	12.00	12.00

**** JULY 31, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 920 HRS.												
DEPTH TO WATER	23.75	12.87	17.75	23.50	19.37	17.00	23.25	20.87	16.75	24.00	21.00	18.00
TIME 1955 HRS.												
DEPTH TO WATER	24.00	13.25	18.50	23.50	20.00	18.00	23.50	21.25	17.50	24.25	21.50	20.00
WATER ADDED	0.00	0.00	12.00	0.00	0.00	12.00	0.00	12.00	12.00	0.00	12.00	12.00

**** AUGUST 1, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 930 HRS.												
DEPTH TO WATER	24.00	14.25	18.00	23.50	19.25	17.50	23.50	20.75	17.00	24.37	21.00	19.50
TIME 1935 HRS.												
DEPTH TO WATER	24.25	17.00	20.50	23.50	21.00	19.50	23.50	21.50	18.50	24.62	22.75	22.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** AUGUST 2, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 805 HRS.												
DEPTH TO WATER	24.37	17.50	21.00	24.37	22.00	20.50	23.75	22.25	19.75	25.00	23.12	22.25
TIME 1600 HRS.												
DEPTH TO WATER	24.50	18.62	22.00	24.50	22.37	21.00	23.75	22.50	20.00	23.62	23.75	23.00
WATER ADDED	0.00	0.00	0.00	12.00	24.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** AUGUST 3, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 810 HRS. DEPTH TO WATER	24.62	18.00	22.50	24.12	18.75	19.00	24.25	22.87	20.87	25.00	24.00	23.50
TIME 1600 HRS. DEPTH TO WATER	24.75	19.00	23.12	24.50	19.50	20.00	24.00	22.87	21.00	25.62	24.00	23.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** AUGUST 4, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	24.87	19.62	23.87	24.50	20.25	21.00	24.37	23.25	21.75	25.62	24.50	24.00
TIME 1630 HRS. DEPTH TO WATER	25.00	19.87	24.00	24.75	20.75	21.87	24.50	23.50	21.75	26.00	24.50	24.37
WATER ADDED	12.00	0.00	24.00	12.00	12.00	24.00	12.00	24.00	24.00	20.00	20.00	0.00

**** AUGUST 5, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS. DEPTH TO WATER	24.37	20.25	21.50	24.37	18.75	17.75	24.00	20.50	18.87	25.25	23.50	24.50
TIME 1515 HRS. DEPTH TO WATER	24.50	20.75	22.75	24.37	19.50	18.87	24.00	20.87	19.00	25.50	24.00	24.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00

**** AUGUST 6, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS. DEPTH TO WATER	24.50	21.50	23.50	24.75	20.50	20.50	24.37	21.75	20.64	25.75	24.50	24.75
TIME 1515 HRS. DEPTH TO WATER	24.75	22.37	24.00	24.75	21.25	21.25	24.50	22.12	20.25	25.87	24.75	25.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** AUGUST 7, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 900 HRS. DEPTH TO WATER	24.87	22.75	23.87	24.87	22.00	22.25	24.37	22.00	21.25	26.00	24.75	24.87
TIME 1950 HRS. DEPTH TO WATER	25.00	23.00	24.00	25.00	22.25	22.50	22.00	22.25	21.50	26.25	25.00	25.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** AUGUST 8, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 755 HRS. DEPTH TO WATER	25.00	23.25	24.12	25.00	22.62	22.50	24.50	22.37	21.75	26.25	25.00	25.50
TIME 1600 HRS. DEPTH TO WATER	25.12	23.12	24.25	25.00	22.37	22.75	24.50	22.50	21.87	26.37	25.12	25.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** AUGUST 9, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS. DEPTH TO WATER	25.25	23.75	24.12	25.50	23.25	23.87	25.00	23.12	22.75	27.00	26.12	26.00
TIME 1615 HRS. DEPTH TO WATER	25.50	23.75	25.00	25.75	23.25	23.75	25.00	23.25	22.62	27.00	26.00	26.37
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** AUGUST 10, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS. DEPTH TO WATER	25.50	24.25	25.00	25.75	23.62	24.12	25.00	23.50	23.25	27.25	26.50	26.50
TIME 1600 HRS. DEPTH TO WATER	25.37	24.00	25.00	25.75	23.75	24.37	25.37	23.50	23.25	27.50	26.50	24.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** AUGUST 11, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 920 HRS.												
DEPTH TO WATER	25.75	24.50	25.37	24.00	23.87	24.50	25.37	23.75	23.50	27.62	26.75	27.00
TIME 1545 HRS.												
DEPTH TO WATER	25.75	24.75	25.50	24.37	24.00	24.75	25.37	24.00	23.62	27.87	26.87	27.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** AUGUST 12, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS.												
DEPTH TO WATER	26.00	24.75	25.75	24.12	24.12	25.00	25.37	24.00	23.75	28.00	27.37	27.37
TIME 1615 HRS.												
DEPTH TO WATER	26.00	25.00	25.75	24.37	24.25	25.00	25.37	24.00	23.87	28.12	27.37	27.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** AUGUST 13, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 810 HRS.												
DEPTH TO WATER	26.00	25.00	26.00	24.37	24.37	25.50	25.50	24.37	24.00	28.12	27.62	27.62
TIME 1630 HRS.												
DEPTH TO WATER	26.12	25.25	26.12	24.37	24.62	25.50	25.50	24.25	24.00	28.50	27.87	27.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** AUGUST 14, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	26.00	25.50	26.00	24.25	24.87	25.50	25.25	24.25	24.12	29.25	28.00	29.87
TIME 1730 HRS.												
DEPTH TO WATER	26.12	25.62	26.25	24.37	25.00	25.62	25.50	24.50	24.25	29.37	28.12	30.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** AUGUST 15, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 930 HRS.												
DEPTH TO WATER	26.25	25.75	26.25	26.50	25.00	25.75	25.50	24.50	24.25	29.37	28.50	30.00
TIME 1855 HRS.												
DEPTH TO WATER	26.50	25.75	26.50	26.75	25.12	26.00	25.75	24.50	24.50	29.50	28.62	30.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** AUGUST 16, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 810 HRS.												
DEPTH TO WATER	26.50	26.00	26.75	26.75	25.25	26.50	25.75	24.62	24.50	29.50	28.87	30.00
TIME 910 HRS.												
DEPTH TO WATER	26.62	26.12	27.00	26.87	26.01	26.75	25.87	24.75	24.50	30.00	29.00	30.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** AUGUST 17, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 910 HRS.												
DEPTH TO WATER	26.62	26.12	27.00	27.00	25.37	26.87	25.87	24.87	24.62	30.00	29.62	30.00
TIME 1450 HRS.												
DEPTH TO WATER	26.62	26.25	27.61	27.12	25.50	27.12	26.00	24.87	24.75	30.00	29.50	30.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** AUGUST 18, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 910 HRS.												
DEPTH TO WATER	26.87	26.50	27.12	27.12	25.50	27.50	26.12	25.00	24.87	30.00	29.75	30.00
TIME 1430 HRS.												
DEPTH TO WATER	26.62	26.50	27.12	27.12	25.37	27.37	26.00	24.62	24.25	30.00	30.00	30.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** AUGUST 19, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS.												
DEPTH TO WATER	25.37	25.00	25.87	24.75	24.12	24.50	25.25	23.62	22.12	29.50	28.75	30.00
TIME 1410 HRS.												
DEPTH TO WATER	25.50	25.25	24.00	26.62	24.37	24.50	25.37	23.62	22.25	29.25	28.50	30.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** AUGUST 20, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 1015 HRS.												
DEPTH TO WATER	25.75	25.37	26.25	26.75	24.50	24.75	25.50	23.75	22.75	30.00	28.75	30.00
TIME 1515 HRS.												
DEPTH TO WATER	25.62	25.25	26.25	24.87	24.62	24.75	25.50	24.00	23.12	29.50	29.00	30.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** AUGUST 21, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS.												
DEPTH TO WATER	24.00	25.75	24.12	24.87	24.87	24.75	25.50	24.00	23.50	30.00	29.12	30.00
TIME 1400 HRS.												
DEPTH TO WATER	24.00	25.75	24.25	27.00	24.87	24.87	25.50	24.00	23.50	30.00	29.25	30.00
WATER ADDED	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00

**** AUGUST 22, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS.												
DEPTH TO WATER	22.87	22.25	23.00	23.37	21.12	23.00	20.87	21.00	20.87	28.50	25.00	23.50
TIME 1425 HRS.												
DEPTH TO WATER	23.50	22.75	23.50	24.00	21.75	23.87	21.25	21.62	21.25	15.75	26.75	25.00
WATER ADDED	32.00	32.00	32.00	32.00	32.00	32.00	0.00	32.00	32.00	0.00	32.00	32.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** AUGUST 23, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 842 HRS.												
DEPTH TO WATER	20.47	19.50	18.37	19.75	17.25	18.50	21.75	17.50	17.75	12.87	22.00	22.75
TIME 2043 HRS.												
DEPTH TO WATER	21.75	20.00	20.50	21.75	19.00	20.87	22.37	16.25	18.37	17.37	23.62	23.50
WATER ADDED	0.00	16.00	24.00	0.00	0.00	32.00	0.00	0.00	24.00	0.00	32.00	40.00

**** AUGUST 24, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 845 HRS.												
DEPTH TO WATER	22.62	17.75	16.00	22.12	19.25	16.00	22.25	17.75	15.62	17.87	19.75	20.50
TIME 1900 HRS.												
DEPTH TO WATER	23.12	19.62	19.00	23.25	20.37	19.25	22.62	18.50	16.75	19.50	22.12	23.12
WATER ADDED	0.00	0.00	16.00	0.00	0.00	16.00	0.00	0.00	0.00	0.00	16.00	28.00

**** AUGUST 25, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 925 HRS.												
DEPTH TO WATER	23.50	20.00	15.75	23.50	20.37	16.25	22.87	19.50	18.00	19.25	19.50	19.50
TIME 1510 HRS.												
DEPTH TO WATER	23.75	21.00	17.75	23.75	21.00	18.87	23.00	19.50	18.25	20.00	21.50	21.50
WATER ADDED	0.00	0.00	12.00	0.00	0.00	20.00	0.00	0.00	16.00	0.00	16.00	24.00

**** AUGUST 26, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 810 HRS.												
DEPTH TO WATER	24.00	21.50	16.37	24.00	21.50	15.75	23.25	20.25	15.87	20.25	18.75	18.62
TIME 1700 HRS.												
DEPTH TO WATER	24.00	22.25	18.87	24.50	22.50	18.75	23.25	20.37	17.00	21.12	21.00	21.00
WATER ADDED	0.00	20.00	20.00	12.00	20.00	24.00	0.00	0.00	0.00	0.00	0.00	24.00

** DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** AUGUST 27, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 810 HRS.												
DEPTH TO WATER	24.25	19.00	14.62	23.75	18.25	15.00	23.50	20.87	18.25	21.25	21.50	17.37
TIME 1730 HRS.												
DEPTH TO WATER	24.37	21.00	18.00	24.37	20.25	18.50	23.62	21.00	18.50	22.37	23.00	20.50
WATER ADDED	12.00	0.00	12.00	12.00	0.00	12.00	0.00	0.00	12.00	0.00	24.00	24.00

**** AUGUST 28, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 906 HRS.												
DEPTH TO WATER	23.75	22.62	19.00	23.75	21.12	20.00	23.50	21.12	17.50	23.00	21.00	19.20
TIME 2000 HRS.												
DEPTH TO WATER	24.00	22.75	19.25	24.00	22.00	20.07	23.87	21.50	18.00	23.25	21.50	20.00
WATER ADDED	0.00	16.00	16.00	0.00	16.00	16.00	0.00	16.00	16.00	12.00	16.00	16.00

**** AUGUST 29, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 917 HRS.												
DEPTH TO WATER	24.00	21.50	16.75	23.87	20.75	18.00	23.87	20.50	16.12	21.87	20.37	18.00
TIME 1645 HRS.												
DEPTH TO WATER	24.25	21.87	17.00	23.87	21.00	18.50	23.87	21.00	16.50	22.00	20.75	18.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** AUGUST 30, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS.												
DEPTH TO WATER	24.37	22.25	18.50	24.50	21.62	20.62	24.00	21.87	17.87	22.50	21.25	19.50
TIME 1630 HRS.												
DEPTH TO WATER	7.00	8.00	8.00	10.00	7.50	9.00	18.00	17.00	8.00	7.50	9.00	8.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** AUGUST 31, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 1000 HRS.												
DEPTH TO WATER	16.37	16.25	17.00	16.12	15.75	15.12	19.75	17.75	15.12	16.50	16.87	17.12
TIME 1600 HRS.												
DEPTH TO WATER	17.12	17.62	18.00	18.25	17.25	17.00	19.75	18.22	15.87	17.75	18.00	18.25
WATER ADDED	0.00	0.00	8.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	4.00

**** SEPTEMBER 1, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 845 HRS.												
DEPTH TO WATER	19.12	18.25	17.75	18.75	17.62	17.00	20.62	19.25	17.12	17.87	18.50	18.00
TIME 1630 HRS.												
DEPTH TO WATER	19.75	18.87	16.00	19.87	18.25	16.50	20.87	19.87	16.00	18.62	19.12	16.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** SEPTEMBER 2, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	18.25	17.25	15.50	19.00	16.62	15.62	21.00	19.62	15.50	17.62	18.00	16.62
TIME 1530 HRS.												
DEPTH TO WATER	11.12	12.25	12.87	12.00	11.25	11.50	17.75	18.00	12.50	11.87	12.12	12.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** SEPTEMBER 3, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS.												
DEPTH TO WATER	16.25	16.37	16.62	16.12	16.25	15.25	19.00	18.50	15.12	16.25	16.75	16.75
TIME 1545 HRS.												
DEPTH TO WATER	17.00	17.50	18.00	18.00	17.25	17.00	19.25	18.75	16.50	17.25	19.00	18.50
WATER ADDED	0.00	0.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** SEPTEMBER 4, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 902 HRS. DEPTH TO WATER	19.87	19.00	19.12	19.50	18.62	19.00	20.35	20.00	18.00	18.62	19.50	18.37
TIME 2000 HRS. DEPTH TO WATER	20.25	19.25	19.50	19.75	19.00	19.50	20.75	20.25	18.50	19.00	19.87	18.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** SEPTEMBER 5, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 816 HRS. DEPTH TO WATER	20.75	19.62	19.87	20.64	19.25	20.25	20.75	20.37	19.00	19.75	20.00	19.25
TIME 2100 HRS. DEPTH TO WATER	21.50	20.25	20.25	21.00	20.00	21.25	21.50	21.00	19.75	20.00	20.50	20.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** SEPTEMBER 6, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 918 HRS. DEPTH TO WATER	22.00	20.62	20.37	21.25	20.25	22.00	21.25	21.37	20.12	20.12	20.87	20.75
TIME 2125 HRS. DEPTH TO WATER	22.50	21.37	21.00	21.75	21.00	23.00	22.00	21.87	20.87	20.87	21.37	23.01
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** SEPTEMBER 7, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 801 HRS. DEPTH TO WATER	22.75	21.87	22.00	22.50	21.37	22.00	22.50	21.50	21.25	21.25	21.50	22.00
TIME 1700 HRS. DEPTH TO WATER	23.25	19.00	16.50	23.00	19.00	17.50	22.87	19.87	16.00	21.25	19.50	17.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** SEPTEMBER 8, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 1000 HRS. DEPTH TO WATER	23.50	20.25	18.75	23.87	20.00	20.50	23.12	20.87	18.00	22.00	20.37	18.50
TIME 1530 HRS. DEPTH TO WATER	23.50	21.00	19.75	23.75	20.62	21.50	22.00	21.00	18.00	22.25	21.00	19.50
WATER ADDED	0.00	12.00	32.00	4.00	8.00	32.00	0.00	8.00	16.00	0.00	12.00	32.00

**** SEPTEMBER 9, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	23.75	19.00	16.00	23.00	19.75	18.12	23.50	20.12	16.25	22.75	19.12	16.12
TIME 1750 HRS. DEPTH TO WATER	24.00	19.62	17.00	24.00	20.00	18.00	23.50	20.50	17.00	23.12	20.62	18.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	16.00	0.00	0.00	0.00	0.00	0.00	16.00

**** SEPTEMBER 10, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	24.00	20.25	18.12	24.00	20.50	16.25	23.50	20.75	18.00	23.00	21.00	16.50
TIME 1515 HRS. DEPTH TO WATER	24.50	20.87	18.87	24.00	20.75	17.00	23.50	21.50	18.50	24.00	22.00	18.12
WATER ADDED	8.00	0.00	16.00	0.00	0.00	0.00	0.00	8.00	16.00	0.00	16.00	16.00

**** SEPTEMBER 11, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 911 HRS. DEPTH TO WATER	24.12	21.50	17.37	24.12	21.37	18.50	23.62	20.37	17.25	23.50	20.75	18.12
TIME 0 HRS. DEPTH TO WATER	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** SEPTEMBER 12, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 836 HRS. DEPTH TO WATER	24.37	22.00	18.12	24.37	21.87	19.22	23.75	21.00	17.87	23.87	21.50	19.00
TIME 1620 HRS. DEPTH TO WATER	24.50	22.50	19.00	24.62	22.25	19.75	24.00	21.50	18.50	24.25	22.25	20.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** SEPTEMBER 13, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	24.75	23.00	20.00	24.62	22.75	20.62	24.00	21.62	19.50	24.50	22.50	21.00
TIME 1630 HRS. DEPTH TO WATER	25.00	23.00	20.00	24.62	22.50	21.00	24.00	22.00	19.75	24.50	23.00	21.50
WATER ADDED	20.00	28.00	32.00	20.00	28.00	32.00	20.00	20.00	32.00	20.00	28.00	32.00

**** SEPTEMBER 14, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	23.75	19.00	15.50	23.62	18.25	15.12	21.00	19.50	15.25	23.00	18.50	16.00
TIME 1530 HRS. DEPTH TO WATER	23.75	19.75	16.50	24.00	18.75	16.87	21.25	19.75	16.12	23.87	20.12	18.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.00

**** SEPTEMBER 15, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	24.25	19.75	17.62	24.00	19.37	17.62	22.00	20.00	17.00	24.00	20.62	16.25
TIME 1630 HRS. DEPTH TO WATER	24.50	20.25	18.00	24.00	19.50	18.50	22.00	20.50	19.25	24.00	21.87	18.00
WATER ADDED	8.00	0.00	16.00	0.00	0.00	16.00	0.00	0.00	12.00	0.00	16.00	16.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** SEPTEMBER 16, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS. DEPTH TO WATER	24.00	21.00	16.25	24.50	20.00	15.62	22.50	20.87	16.00	24.00	18.62	16.00
TIME 1600 HRS. DEPTH TO WATER	24.50	21.50	17.00	24.12	20.00	17.00	22.50	21.12	17.00	24.12	20.12	18.00
WATER ADDED	12.00	16.00	8.00	12.00	0.00	8.00	0.00	16.00	8.00	16.00	8.00	20.00

**** SEPTEMBER 17, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	23.87	19.12	16.12	23.75	20.75	15.87	22.75	19.00	16.12	23.62	18.75	15.72
TIME 1600 HRS. DEPTH TO WATER	23.87	19.75	17.00	23.75	20.62	17.50	23.00	19.37	16.25	23.75	20.50	18.00
WATER ADDED	0.00	0.00	0.00	0.00	12.00	16.00	0.00	0.00	0.00	0.00	0.00	16.00

**** SEPTEMBER 18, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 850 HRS. DEPTH TO WATER	24.25	20.50	19.00	24.00	19.37	15.62	22.50	19.87	17.75	24.00	21.25	17.00
TIME 1730 HRS. DEPTH TO WATER	24.50	21.00	19.50	24.25	19.50	16.00	23.12	20.00	18.41	24.25	22.00	17.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** SEPTEMBER 19, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	23.87	17.50	14.25	23.62	16.50	12.75	22.87	18.00	14.37	23.75	19.00	14.37
TIME 1700 HRS. DEPTH TO WATER	24.00	18.00	15.00	23.75	17.00	13.00	23.00	18.25	15.00	24.00	19.50	15.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** SEPTEMBER 20,1976

NO DATA RECORDED

**** SEPTEMBER 21, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS.												
DEPTH TO WATER	18.50	16.00	15.50	18.62	15.75	14.50	18.62	16.37	14.12	20.50	16.50	16.00
TIME 1545 HRS.												
DEPTH TO WATER	19.50	18.01	17.12	19.25	16.87	16.50	19.00	17.75	16.12	21.25	17.87	18.12
WATER ADDED	0.00	0.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00

**** SEPTEMBER 22, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS.												
DEPTH TO WATER	21.41	18.62	16.12	20.12	18.25	17.75	20.12	19.12	17.75	22.00	19.00	16.50
TIME 1530 HRS.												
DEPTH TO WATER	21.41	18.87	16.50	20.50	18.00	17.50	20.25	12.00	17.25	22.00	19.62	18.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	12.00	0.00	0.00	12.00	0.00	0.00	16.00

**** SEPTEMBER 23, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS.												
DEPTH TO WATER	22.50	19.62	16.50	21.62	19.00	16.25	21.00	15.37	16.87	23.00	20.50	16.75
TIME 1715 HRS.												
DEPTH TO WATER	22.12	19.87	17.25	22.00	19.37	17.50	21.25	16.37	17.50	23.00	21.50	18.50
WATER ADDED	0.00	0.00	8.00	0.00	0.00	8.00	0.00	0.00	8.00	0.00	16.00	16.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** SEPTEMBER 24, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	23.25	20.37	16.62	22.50	19.75	16.00	21.75	17.50	16.75	23.62	18.00	16.12
TIME 1515 HRS. DEPTH TO WATER	23.25	20.25	17.75	22.50	20.00	16.70	21.87	17.75	17.37	23.25	19.25	17.75
WATER ADDED	0.00	0.00	12.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	12.00	0.00

**** SEPTEMBER 25, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	23.75	19.75	17.50	23.00	20.25	19.12	21.87	18.62	17.50	23.62	21.12	18.50
TIME 1930 HRS. DEPTH TO WATER	23.87	20.00	17.75	23.12	20.50	19.50	22.00	19.00	17.75	23.75	21.25	19.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** SEPTEMBER 26, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 902 HRS. DEPTH TO WATER	23.87	20.50	18.12	21.00	20.62	19.87	22.12	19.25	18.00	23.87	21.50	19.25
TIME 1559 HRS. DEPTH TO WATER	24.00	21.87	19.00	23.75	21.00	20.75	22.25	19.62	18.75	24.12	22.00	20.00
WATER ADDED	0.00	24.00	32.00	0.00	24.00	32.00	0.00	0.00	32.00	0.00	24.00	32.00

**** SEPTEMBER 27, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	15.75	17.00	16.50	16.00	16.50	15.50	18.00	16.25	15.00	18.00	16.00	16.00
TIME 1530 HRS. DEPTH TO WATER	16.75	17.50	17.25	16.87	16.75	16.25	18.12	17.25	15.87	18.87	17.37	17.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** SEPTEMBER 28, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS. DEPTH TO WATER	14.12	13.62	14.00	13.37	14.00	13.25	15.50	14.50	12.62	12.50	13.37	13.50
TIME 1545 HRS. DEPTH TO WATER	15.87	16.00	15.25	15.25	15.50	14.37	16.50	15.50	14.00	14.87	15.12	15.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** SEPTEMBER 29, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	18.43	18.00	17.75	17.37	17.25	16.12	18.25	17.75	16.50	17.00	16.75	17.00
TIME 1730 HRS. DEPTH TO WATER	19.00	18.00	18.50	18.00	17.50	17.00	17.00	16.50	16.62	17.00	18.00	18.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** SEPTEMBER 30, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	20.00	19.12	19.50	18.62	18.37	18.00	19.50	18.25	17.75	18.00	18.12	19.50
TIME 1600 HRS. DEPTH TO WATER	20.00	19.00	20.00	18.87	18.50	18.50	19.50	19.00	18.00	18.75	19.00	19.75
WATER ADDED	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00

**** OCTOBER 1, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	21.12	19.62	16.50	19.37	18.50	15.50	20.37	20.12	15.50	19.00	19.00	16.87
TIME 1600 HRS. DEPTH TO WATER	21.25	19.50	17.50	19.50	18.62	16.50	20.25	20.00	16.62	20.00	20.00	18.50
WATER ADDED	0.00	0.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** OCTOBER 2, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 928 HRS. DEPTH TO WATER	21.62	20.50	17.00	20.00	19.25	18.50	20.87	20.62	18.00	20.37	20.50	17.50
TIME 1910 HRS. DEPTH TO WATER	21.75	20.75	17.25	20.12	19.50	18.75	21.00	20.75	18.25	20.50	20.75	18.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** OCTOBER 3, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 615 HRS. DEPTH TO WATER	22.00	20.87	17.75	20.25	19.75	19.25	21.12	20.87	18.50	20.62	20.75	18.50
TIME 1617 HRS. DEPTH TO WATER	22.25	21.00	18.75	20.75	20.00	20.00	14.37	21.00	19.00	20.75	21.00	19.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** OCTOBER 4, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	22.75	21.75	19.75	20.87	20.50	20.50	16.50	22.00	19.50	21.00	21.50	20.00
TIME 1600 HRS. DEPTH TO WATER	22.50	21.87	19.75	20.75	20.25	21.00	16.50	21.50	19.75	20.12	21.50	20.87
WATER ADDED	0.00	16.00	20.00	0.00	16.00	16.00	0.00	16.00	16.00	0.00	16.00	16.00

**** OCTOBER 5, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	16.12	16.50	16.12	15.50	16.00	16.00	16.00	16.00	14.00	14.87	16.00	15.25
TIME 1745 HRS. DEPTH TO WATER	17.37	17.00	17.00	16.87	16.75	16.12	16.75	16.87	16.00	17.00	17.37	17.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** OCTOBER 6, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	19.25	18.25	18.62	16.00	17.87	17.37	17.87	18.00	17.37	17.62	18.12	18.87
TIME 1600 HRS. DEPTH TO WATER	19.62	18.87	19.50	18.62	18.25	18.25	18.25	19.00	17.75	18.25	19.00	19.25
WATER ADDED	0.00	0.00	20.00	0.00	0.00	16.00	0.00	0.00	16.00	0.00	0.00	20.00

**** OCTOBER 7, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS. DEPTH TO WATER	20.87	19.00	16.25	19.12	18.87	15.62	19.00	19.50	15.00	18.00	19.37	17.00
TIME 1630 HRS. DEPTH TO WATER	21.00	19.50	16.75	19.00	18.62	16.50	19.00	19.75	16.50	18.37	19.75	17.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** OCTOBER 8, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	20.12	18.62	16.87	17.00	18.00	16.37	18.75	19.62	16.37	17.75	19.20	17.50
TIME 1445 HRS. DEPTH TO WATER	20.00	19.25	17.50	18.75	18.50	17.37	18.87	20.00	17.00	18.50	20.00	18.62
WATER ADDED	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00	28.00

**** OCTOBER 9, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 813 HRS. DEPTH TO WATER	21.37	20.00	16.50	19.75	19.12	15.50	20.00	20.62	18.00	19.12	20.12	17.37
TIME 1905 HRS. DEPTH TO WATER	21.62	20.37	17.00	20.00	19.62	16.25	19.62	21.00	18.50	19.25	20.50	18.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** OCTOBER 10, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 900 HRS. DEPTH TO WATER	21.75	20.50	17.75	20.37	20.00	17.00	19.75	21.00	18.87	19.75	20.87	18.62
TIME 1938 HRS. DEPTH TO WATER	22.00	21.00	19.00	20.75	20.62	18.00	20.25	21.00	19.50	20.25	21.75	19.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** OCTOBER 11, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	22.62	21.50	20.00	21.00	21.25	18.50	20.50	22.00	20.25	20.50	22.00	20.00
TIME 1645 HRS. DEPTH TO WATER	22.75	21.87	20.50	21.00	21.25	19.50	20.50	20.75	20.37	20.75	22.50	20.87
WATER ADDED	0.00	16.00	24.00	0.00	12.00	24.00	0.00	16.00	24.00	0.00	24.00	24.00

**** OCTOBER 12, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 820 HRS. DEPTH TO WATER	23.00	19.00	16.37	21.75	19.00	14.50	21.00	20.12	17.12	21.00	18.50	17.00
TIME 1615 HRS. DEPTH TO WATER	23.25	19.50	16.87	21.87	19.62	16.12	21.12	20.12	17.37	21.37	19.50	18.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.00	0.00	0.00	16.00

**** OCTOBER 13, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	23.25	20.00	18.25	22.00	20.12	17.25	21.50	20.75	15.75	21.50	20.50	16.50
TIME 1615 HRS. DEPTH TO WATER	23.37	19.87	18.87	22.00	20.50	17.87	21.25	20.87	16.37	21.87	20.75	17.50
WATER ADDED	0.00	0.00	20.00	0.00	8.00	16.00	0.00	12.00	0.00	0.00	8.00	12.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** OCTOBER 14, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	23.62	20.75	15.62	22.50	19.25	15.00	21.62	19.37	17.37	22.00	19.00	16.50
TIME 1530 HRS. DEPTH TO WATER	23.75	21.12	16.37	22.50	19.50	16.12	21.50	19.50	17.50	22.50	19.75	17.75
WATER ADDED	8.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00	12.00	0.00	0.00	16.00

**** OCTOBER 15, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 745 HRS. DEPTH TO WATER	22.00	18.25	16.62	22.50	19.50	16.00	21.62	20.00	15.00	22.50	20.37	15.62
TIME 1600 HRS. DEPTH TO WATER	10.62	11.00	10.12	10.50	12.00	11.50	15.00	14.00	9.37	9.50	10.50	11.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** OCTOBER 16, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 816 HRS. DEPTH TO WATER	16.50	16.00	15.37	16.00	15.80	14.75	15.50	15.37	14.50	14.87	15.50	15.50
TIME 1650 HRS. DEPTH TO WATER	17.25	17.00	16.25	17.00	17.00	16.00	16.25	16.50	15.25	16.00	17.00	17.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** OCTOBER 17, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 917 HRS. DEPTH TO WATER	18.00	17.50	17.00	17.37	17.25	16.75	17.00	17.41	16.25	16.50	17.50	18.00
TIME 1810 HRS. DEPTH TO WATER	19.25	18.50	18.00	18.50	18.00	18.00	18.00	18.00	17.50	17.50	18.40	19.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** OCTOBER 18, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	20.25	19.25	19.00	19.12	18.62	18.50	18.75	18.75	18.37	18.00	19.00	19.25
TIME 1630 HRS. DEPTH TO WATER	20.37	19.50	20.00	19.25	18.87	19.25	18.87	19.00	18.75	18.50	19.50	21.00
WATER ADDED	5.00	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00

**** OCTOBER 19, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	21.00	19.75	15.50	19.50	19.37	15.50	19.37	19.00	14.50	18.50	19.75	16.00
TIME 1530 HRS. DEPTH TO WATER	12.62	13.00	13.25	12.00	12.25	12.20	15.50	14.37	11.75	11.00	12.50	11.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** OCTOBER 20, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	16.75	16.50	17.00	16.00	16.50	15.50	16.50	16.75	15.50	15.62	16.62	17.25
TIME 1545 HRS. DEPTH TO WATER	17.37	17.50	17.00	17.00	17.12	16.25	17.50	17.37	16.37	16.50	17.50	18.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** OCTOBER 21, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	19.00	18.12	18.12	18.00	17.87	17.50	18.12	18.50	16.87	17.00	17.00	18.00
TIME 1600 HRS. DEPTH TO WATER	19.00	18.62	19.00	18.37	18.12	17.87	18.62	18.62	17.62	17.75	18.87	19.00
WATER ADDED	0.00	0.00	20.00	0.00	0.00	16.00	0.00	0.00	16.00	0.00	0.00	20.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** OCTOBER 22, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 900 HRS. DEPTH TO WATER	19.87	19.12	15.37	18.75	18.62	14.87	19.25	19.25	15.00	18.00	19.00	15.87
TIME 1530 HRS. DEPTH TO WATER	19.62	19.25	15.62	18.50	18.50	15.62	19.12	18.62	15.12	19.00	19.00	16.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** OCTOBER 23, 1976 ****

NO DATA RECORDED

**** OCTOBER 24, 1976 ****

NO DATA RECORDED

**** OCTOBER 25, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	16.12	16.00	15.88	15.50	16.00	14.25	16.50	16.00	14.00	15.00	15.75	15.87
TIME 1545 HRS. DEPTH TO WATER	17.25	17.62	16.87	16.75	16.62	15.75	18.12	16.62	15.50	16.00	17.00	17.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** OCTOBER 26, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS.												
DEPTH TO WATER	18.87	18.37	18.50	18.00	17.87	18.00	18.12	18.00	17.12	17.00	18.00	18.12
TIME 1530 HRS.												
DEPTH TO WATER	19.00	18.50	18.50	18.00	18.00	17.50	18.12	18.00	16.87	17.25	18.00	17.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** OCTOBER 27, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 900 HRS.												
DEPTH TO WATER	19.87	18.62	15.37	18.00	17.50	15.00	18.75	18.50	17.50	17.50	18.75	18.50
TIME 1545 HRS.												
DEPTH TO WATER	18.00	17.75	14.00	16.87	17.50	13.00	18.85	17.62	16.62	17.12	18.50	18.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** OCTOBER 28, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 900 HRS.												
DEPTH TO WATER	16.50	17.50	16.50	16.00	14.00	14.50	17.50	6.50	15.50	16.00	17.87	17.00
TIME 1600 HRS.												
DEPTH TO WATER	11.87	12.75	8.87	11.00	11.75	9.00	13.00	13.50	12.00	11.50	12.50	11.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** OCTOBER 29, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS.												
DEPTH TO WATER	7.50	9.00	8.00	8.00	9.00	8.50	12.00	11.00	8.00	9.00	11.00	11.50
TIME 1545 HRS.												
DEPTH TO WATER	14.00	15.00	14.50	14.50	15.00	13.50	15.00	14.62	13.12	14.00	14.50	15.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** OCTOBER 30, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 850 HRS. DEPTH TO WATER	17.62	17.50	17.00	17.12	16.50	16.62	16.62	16.37	15.87	16.50	17.00	17.75
TIME 1900 HRS. DEPTH TO WATER	17.50	17.75	17.50	17.25	16.75	17.25	16.75	16.62	16.50	16.75	17.25	18.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** OCTOBER 31, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 910 HRS. DEPTH TO WATER	17.75	18.00	18.00	17.50	17.00	17.75	17.00	16.87	17.00	17.00	17.50	19.00
TIME 1800 HRS. DEPTH TO WATER	18.00	18.25	19.00	17.62	17.00	18.75	17.12	17.12	17.12	17.25	17.75	19.87
WATER ADDED	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00

**** NOVEMBER 1, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	20.12	19.25	19.50	19.00	18.87	19.00	18.50	18.50	18.00	18.00	19.00	19.50
TIME 1545 HRS. DEPTH TO WATER	20.12	19.50	20.00	19.12	19.00	19.12	18.62	18.75	18.25	18.62	19.50	20.00
WATER ADDED	0.00	0.00	24.00	0.00	0.00	24.00	0.00	0.00	20.00	0.00	0.00	24.00

**** NOVEMBER 2, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	20.87	19.87	15.50	19.75	19.37	15.00	25.00	19.25	19.50	15.12	19.00	19.50
TIME 1600 HRS. DEPTH TO WATER	21.00	20.12	16.12	19.50	19.12	15.75	19.12	19.50	15.50	19.12	20.00	17.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** NOVEMBER 3, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	21.37	20.12	17.50	20.00	19.87	16.87	19.75	20.00	17.12	19.50	20.00	18.00
TIME 1700 HRS. DEPTH TO WATER	21.50	20.75	18.25	20.12	20.00	17.50	19.50	20.00	17.25	19.87	20.75	18.62
WATER ADDED	0.00	8.00	16.00	0.00	4.00	12.00	0.00	4.00	12.00	0.00	12.00	16.00

**** NOVEMBER 4, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	22.37	18.50	15.12	20.50	19.25	14.37	20.25	19.25	15.25	20.00	18.00	16.50
TIME 1700 HRS. DEPTH TO WATER	22.00	19.50	16.50	20.75	20.00	16.50	20.25	20.00	16.75	20.25	18.75	17.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** NOVEMBER 5, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	22.50	20.25	18.00	20.75	20.50	17.62	20.50	20.25	17.25	20.37	19.50	18.00
TIME 1630 HRS. DEPTH TO WATER	22.50	20.50	18.37	21.00	20.00	18.50	20.62	20.62	18.00	20.62	20.50	18.87
WATER ADDED	0.00	4.00	16.00	0.00	0.00	16.00	0.00	8.00	16.00	0.00	8.00	28.00

**** NOVEMBER 6, 1976 ****

NO DATA RECORDED

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** NOVEMBER 7, 1976 ****

NO DATA RECORDED

**** NOVEMBER 8, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	23.37	21.50	19.00	22.25	22.00	18.50	21.62	21.00	18.25	21.50	20.75	19.50
TIME 1530 HRS. DEPTH TO WATER	23.37	21.50	19.62	22.00	22.00	19.00	21.00	21.12	18.50	21.71	20.01	19.62
WATER ADDED	4.00	12.00	16.00	0.00	16.00	16.00	0.00	12.00	16.00	0.00	12.00	16.00

**** NOVEMBER 9, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	22.50	19.00	15.37	22.50	18.87	14.87	22.00	19.00	15.00	21.50	18.50	16.87
TIME 0 HRS. DEPTH TO WATER	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** NOVEMBER 10, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	23.25	19.87	17.62	22.75	19.50	17.00	22.12	19.62	17.00	22.25	19.50	18.62
TIME 1545 HRS. DEPTH TO WATER	23.00	20.00	17.75	22.75	19.62	17.37	21.87	20.00	17.12	22.50	20.00	19.00
WATER ADDED	0.00	4.00	12.00	0.00	0.00	8.00	0.00	4.00	8.00	0.00	4.00	12.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** NOVEMBER 11, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 900 HRS. DEPTH TO WATER	23.50	18.87	15.25	23.00	19.87	15.00	22.50	19.50	15.75	22.50	19.00	16.75
TIME 1610 HRS. DEPTH TO WATER	19.25	23.50	15.87	22.62	20.00	16.37	22.00	19.50	16.75	22.12	19.50	16.87
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** NOVEMBER 12, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	23.87	20.50	18.00	23.00	20.50	17.75	22.50	20.50	18.50	22.75	20.50	19.00
TIME 1530 HRS. DEPTH TO WATER	23.75	20.00	16.25	23.25	20.50	16.75	22.00	20.37	16.62	22.75	20.62	19.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** NOVEMBER 13, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 843 HRS. DEPTH TO WATER	17.00	15.87	13.50	17.00	15.37	12.37	17.50	16.50	11.00	16.75	14.87	13.87
TIME 1730 HRS. DEPTH TO WATER	18.00	16.50	14.75	17.75	16.25	13.25	18.50	17.25	14.25	17.50	16.00	15.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** NOVEMBER 14, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 759 HRS. DEPTH TO WATER	18.00	16.62	14.87	17.75	16.37	13.50	18.62	17.37	14.50	17.50	16.12	15.12
TIME 1718 HRS. DEPTH TO WATER	18.12	16.75	15.37	18.00	16.37	13.87	18.87	17.87	14.87	17.75	16.50	15.87
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** NOVEMBER 15, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	20.00	19.00	18.62	19.25	18.50	17.50	19.75	19.00	17.75	18.50	18.25	18.00
TIME 1645 HRS. DEPTH TO WATER	20.00	19.12	18.50	19.25	18.50	17.62	19.75	19.00	17.62	18.50	18.50	19.00
WATER ADDED	0.00	0.00	12.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00	12.00

**** NOVEMBER 16, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	20.00	19.25	15.12	19.75	18.87	15.50	19.75	19.50	16.00	18.50	18.87	17.12
TIME 0 HRS. DEPTH TO WATER	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** NOVEMBER 17, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	15.25	15.25	12.75	15.50	14.87	12.25	18.00	16.37	13.00	16.00	15.25	13.00
TIME 1530 HRS. DEPTH TO WATER	16.00	16.12	14.00	15.75	15.50	13.00	17.75	16.62	13.25	16.25	15.62	14.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** NOVEMBER 18, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 945 HRS. DEPTH TO WATER	17.50	17.12	15.50	17.25	16.62	14.75	18.50	17.50	15.25	17.00	17.25	17.00
TIME 1615 HRS. DEPTH TO WATER	16.50	16.50	15.62	17.00	16.62	15.12	18.50	17.50	14.87	17.00	17.00	16.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** NOVEMBER 19, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	10.87	13.00	10.62	10.25	10.75	9.62	12.00	13.25	11.00	11.00	12.00	11.00
TIME 1545 HRS. DEPTH TO WATER	13.50	14.25	14.50	13.37	13.50	13.00	15.00	14.75	13.37	12.50	13.62	13.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** NOVEMBER 20, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 918 HRS. DEPTH TO WATER	16.12	17.62	17.12	17.37	16.87	16.00	17.62	17.00	15.87	16.75	17.00	16.50
TIME 1750 HRS. DEPTH TO WATER	16.37	17.87	17.75	17.75	17.25	16.50	17.87	17.50	16.62	17.12	17.50	17.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** NOVEMBER 21, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 915 HRS. DEPTH TO WATER	18.62	18.12	18.00	17.87	17.50	16.75	18.00	17.75	16.75	17.37	17.75	17.62
TIME 1830 HRS. DEPTH TO WATER	18.75	18.37	19.50	18.00	17.75	17.00	18.75	18.00	17.00	17.50	18.00	18.50
WATER ADDED	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00

**** NOVEMBER 22, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	20.00	19.12	19.75	18.75	18.25	17.75	19.00	18.75	18.12	18.00	18.50	19.00
TIME 1545 HRS. DEPTH TO WATER	20.00	19.25	19.62	18.75	18.62	18.37	19.12	19.00	18.25	19.00	19.00	19.50
WATER ADDED	0.00	0.00	16.00	0.00	0.00	12.00	0.00	0.00	12.00	0.00	0.00	16.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** NOVEMBER 23, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 820 HRS. DEPTH TO WATER	20.75	19.50	15.62	19.25	18.75	15.25	19.50	19.35	16.00	18.50	19.50	16.50
TIME 1600 HRS. DEPTH TO WATER	20.62	19.62	16.12	19.12	19.50	15.87	19.50	19.50	16.37	18.50	20.00	17.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** NOVEMBER 24, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	20.75	19.87	16.75	19.37	19.25	16.50	20.00	19.50	16.75	18.87	19.62	17.50
TIME 1600 HRS. DEPTH TO WATER	20.62	19.75	17.25	19.25	19.00	16.87	19.50	19.50	17.00	18.75	19.75	18.25
WATER ADDED	0.00	0.00	8.00	0.00	0.00	4.00	0.00	0.00	4.00	0.00	0.00	8.00

**** NOVEMBER 25, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	15.00	15.75	11.37	14.00	15.12	12.37	17.00	16.37	12.37	25.00	16.87	12.37
TIME 1700 HRS. DEPTH TO WATER	14.50	15.00	10.50	13.50	14.50	11.25	16.50	16.00	11.75	14.50	16.25	11.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** NOVEMBER 26, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 902 HRS. DEPTH TO WATER	15.00	15.87	11.62	14.00	15.50	12.37	17.00	16.75	12.37	15.00	17.00	12.87
TIME 1718 HRS. DEPTH TO WATER	16.00	17.00	13.62	15.12	16.87	14.50	17.75	17.50	14.12	16.00	17.75	14.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** NOVEMBER 27, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 856 HRS. DEPTH TO WATER	17.12	17.12	14.87	16.25	17.00	15.12	17.87	17.75	15.25	17.25	17.75	15.37
TIME 1830 HRS. DEPTH TO WATER	18.50	18.00	17.00	17.75	17.50	16.50	18.00	18.00	16.50	17.00	18.00	17.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** NOVEMBER 28, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	17.25	17.12	16.00	16.12	16.75	15.75	17.87	17.37	15.75	16.12	17.62	16.75
TIME 1600 HRS. DEPTH TO WATER	17.25	17.25	16.25	16.25	16.75	16.00	18.00	28.50	16.00	16.25	17.75	17.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** NOVEMBER 29, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	19.50	18.75	18.75	18.25	18.37	17.00	18.50	19.00	18.50	17.37	18.50	18.75
TIME 1545 HRS. DEPTH TO WATER	19.37	19.00	19.00	18.25	18.12	17.62	19.00	18.87	17.75	17.25	18.50	19.50
WATER ADDED	0.00	0.00	12.00	0.00	0.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00

**** NOVEMBER 30, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	20.62	20.12	16.75	19.25	19.00	15.75	19.50	29.00	19.00	18.25	19.75	20.00
TIME 1630 HRS. DEPTH TO WATER	19.87	19.50	16.50	18.50	18.50	15.75	19.12	19.00	18.00	18.37	19.50	19.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** DECEMBER 1, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	21.00	20.12	28.12	19.87	19.37	17.41	20.00	20.00	19.50	18.50	19.75	19.75
TIME 1600 HRS. DEPTH TO WATER	20.50	20.00	17.62	19.00	19.50	17.00	20.00	20.00	19.00	19.00	20.00	20.50
WATER ADDED	0.00	0.00	4.00	0.00	0.00	4.00	0.00	0.00	12.00	0.00	0.00	16.00

**** DECEMBER 2, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	21.37	20.50	17.50	19.50	19.50	16.37	20.37	20.25	16.50	19.00	20.00	16.62
TIME 1600 HRS. DEPTH TO WATER	20.87	20.50	17.75	19.50	19.62	17.12	20.00	20.00	16.75	19.00	20.12	17.50
WATER ADDED	0.00	4.00	8.00	0.00	0.00	4.00	0.00	4.00	4.00	0.00	4.00	8.00

**** DECEMBER 3, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	22.50	19.75	16.12	20.00	19.75	16.75	20.62	20.00	16.25	19.50	19.62	16.25
TIME 1545 HRS. DEPTH TO WATER	21.12	19.75	16.25	19.50	20.00	16.75	20.50	19.87	16.37	19.50	19.62	16.12
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** DECEMBER 4, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 850 HRS. DEPTH TO WATER	20.25	17.50	14.50	19.62	16.50	15.00	19.75	17.25	14.37	18.50	17.00	14.87
TIME 1730 HRS. DEPTH TO WATER	20.50	17.75	15.00	19.87	17.00	15.50	20.00	17.87	14.87	19.00	17.77	15.87
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** DECEMBER 5, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 911 HRS. DEPTH TO WATER	13.50	13.75	9.00	11.50	13.25	9.87	16.50	15.00	11.75	13.50	14.87	10.50
TIME 1630 HRS. DEPTH TO WATER	13.00	13.00	7.75	11.00	12.75	8.00	16.00	10.00	10.00	12.75	14.00	9.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** DECEMBER 6, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	13.50	14.62	15.00	13.50	13.62	13.00	13.50	15.00	13.25	12.37	14.00	14.25
TIME 1530 HRS. DEPTH TO WATER	14.50	15.50	14.25	14.50	15.00	13.37	15.50	15.25	14.00	13.50	14.25	15.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** DECEMBER 7, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 1145 HRS. DEPTH TO WATER	17.50	18.00	17.37	16.87	17.00	16.21	17.37	17.50	16.50	16.25	16.75	17.00
TIME 1700 HRS. DEPTH TO WATER	17.75	18.00	17.37	16.62	17.00	16.12	18.00	17.75	16.50	16.37	17.00	17.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00

**** DECEMBER 8, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	19.00	18.50	15.75	18.00	17.50	17.12	17.25	18.50	17.50	17.00	18.00	17.00
TIME 1600 HRS. DEPTH TO WATER	18.87	18.64	16.50	17.62	17.50	17.00	18.50	18.50	17.50	17.12	18.00	17.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** DECEMBER 9, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	19.62	19.00	18.00	18.62	18.00	18.00	19.00	19.00	18.25	17.75	18.50	18.37
TIME 1630 HRS. DEPTH TO WATER	19.37	19.00	17.62	17.75	18.12	17.50	18.50	18.75	17.62	17.50	18.50	18.20
WATER ADDED	0.00	0.00	8.00	0.00	0.00	8.00	0.00	0.00	8.00	0.00	0.00	12.00

**** DECEMBER 10, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	20.25	19.25	15.50	18.50	18.25	15.50	19.00	19.00	16.00	17.87	18.50	15.87
TIME 1500 HRS. DEPTH TO WATER	19.50	19.00	15.50	17.75	18.00	15.37	19.00	18.75	15.37	17.62	18.50	16.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** DECEMBER 11, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 826 HRS. DEPTH TO WATER	15.00	16.50	15.00	14.37	15.50	13.87	17.00	17.37	14.00	14.87	16.00	15.87
TIME 1800 HRS. DEPTH TO WATER	14.37	15.75	14.12	13.87	14.75	13.00	16.25	16.87	13.37	14.25	15.50	15.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** DECEMBER 12, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 926 HRS. DEPTH TO WATER	13.87	15.00	13.50	13.37	14.12	12.50	15.75	16.25	12.75	13.87	15.00	14.25
TIME 1700 HRS. DEPTH TO WATER	13.50	14.50	13.00	13.00	13.75	12.00	15.25	15.87	15.25	13.50	14.75	13.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** DECEMBER 13, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 930 HRS.												
DEPTH TO WATER	14.37	15.50	14.62	14.37	15.00	12.62	14.37	15.50	13.75	13.50	14.50	14.50
TIME 1600 HRS.												
DEPTH TO WATER	14.00	15.50	14.50	14.25	14.50	13.62	14.50	15.75	14.00	14.25	14.50	15.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** DECEMBER 14, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	14.25	15.50	14.00	14.37	14.50	13.50	14.37	15.25	13.62	13.50	14.12	15.00
TIME 1600 HRS.												
DEPTH TO WATER	14.62	15.50	15.00	14.75	14.75	14.00	16.00	15.50	13.75	14.00	15.25	15.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** DECEMBER 15, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS.												
DEPTH TO WATER	17.12	16.50	16.62	16.12	16.25	15.25	16.12	17.00	15.50	15.25	16.37	17.00
TIME 0 HRS.												
DEPTH TO WATER	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** DECEMBER 16, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 945 HRS.												
DEPTH TO WATER	18.37	18.00	18.37	17.50	17.87	16.50	18.00	18.12	16.87	16.87	17.75	18.00
TIME 1600 HRS.												
DEPTH TO WATER	18.25	17.87	18.12	17.50	17.87	16.62	18.00	17.87	16.87	16.87	17.75	18.00
WATER ADDED	0.00	0.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** DECEMBER 17, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	19.12	18.87	15.50	18.22	18.12	17.50	18.50	18.50	17.75	17.75	17.25	15.50
TIME 1600 HRS. DEPTH TO WATER	19.12	18.87	14.25	17.75	18.00	17.50	18.50	18.50	17.25	18.00	16.25	16.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	8.00	0.00	0.00	0.00

**** DECEMBER 18, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 842 HRS. DEPTH TO WATER	18.75	19.37	15.87	17.87	18.50	14.75	19.00	18.62	15.87	17.62	19.50	16.87
TIME 1730 HRS. DEPTH TO WATER	18.75	19.00	15.50	17.62	18.00	14.00	18.75	28.25	15.50	17.25	19.00	16.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** DECEMBER 19, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 902 HRS. DEPTH TO WATER	18.00	18.37	14.88	17.12	17.50	13.37	18.37	17.87	15.00	17.00	18.25	15.87
TIME 1530 HRS. DEPTH TO WATER	17.75	18.00	14.50	16.75	17.12	13.00	17.50	17.37	14.50	16.37	17.50	15.12
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** DECEMBER 20, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	18.25	18.12	17.00	17.25	17.50	15.50	17.00	18.00	15.75	17.00	17.50	17.00
TIME 400 HRS. DEPTH TO WATER	18.87	19.00	17.50	17.75	18.00	16.37	18.00	18.25	16.50	17.00	18.00	17.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** DECEMBER 21, 1976 ****

NO DATA RECORDED

**** DECEMBER 22, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 930 HRS. DEPTH TO WATER	20.62	20.25	18.00	19.25	19.25	18.00	20.00	19.50	18.12	18.37	19.50	18.00
TIME 1400 HRS. DEPTH TO WATER	20.50	20.12	18.00	19.00	19.37	18.00	19.50	19.50	18.50	18.50	19.62	18.00
WATER ADDED	0.00	0.00	8.00	0.00	0.00	8.00	0.00	0.00	8.00	0.00	0.00	8.00

**** DECEMBER 23, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	21.25	20.50	16.00	19.50	19.50	16.00	19.25	20.12	17.00	18.62	20.00	16.50
TIME 1400 HRS. DEPTH TO WATER	20.62	20.50	16.25	19.12	17.50	16.37	19.62	19.62	16.75	18.75	20.00	17.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** DECEMBER 24, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 930 HRS. DEPTH TO WATER	20.75	20.12	16.87	19.25	19.37	17.00	19.75	19.50	17.00	15.00	18.37	19.50
TIME 1630 HRS. DEPTH TO WATER	21.00	20.50	17.50	19.50	19.75	17.50	20.00	20.00	17.50	18.75	20.00	18.50
WATER ADDED	0.00	0.00	12.00	0.00	0.00	12.00	0.00	0.00	12.00	0.00	0.00	16.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** DECEMBER 25, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 1000 HRS. DEPTH TO WATER	21.12	20.75	16.87	19.75	20.00	17.00	20.25	20.37	16.87	19.00	20.37	17.12
TIME 1800 HRS. DEPTH TO WATER	21.50	21.00	17.50	20.00	20.37	17.87	20.50	20.75	17.37	19.25	20.62	17.87
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** DECEMBER 26, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 630 HRS. DEPTH TO WATER	20.12	20.00	17.37	18.75	19.25	17.43	19.75	19.50	17.00	18.25	20.00	17.50
TIME 1830 HRS. DEPTH TO WATER	20.37	20.25	18.50	19.00	19.50	17.75	20.00	20.00	18.00	18.50	20.25	19.00
WATER ADDED	0.00	0.00	12.00	0.00	0.00	12.00	0.00	0.00	12.00	0.00	0.00	16.00

**** DECEMBER 27, 1976

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 1000 HRS. DEPTH TO WATER	21.12	20.75	16.87	19.75	20.00	17.00	20.75	20.37	16.12	19.00	20.62	17.12
TIME 1500 HRS. DEPTH TO WATER	21.62	21.50	20.12	20.00	20.25	19.25	20.62	21.00	19.25	19.00	21.00	20.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** DECEMBER 28, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	21.37	20.87	19.37	19.75	20.12	18.62	20.50	20.50	18.75	19.00	20.50	19.50
TIME 1500 HRS. DEPTH TO WATER	21.62	21.50	20.12	20.00	20.25	19.25	20.62	21.00	19.25	19.00	21.00	20.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** DECEMBER 29, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	22.62	22.00	20.75	21.00	18.50	16.00	21.50	19.50	20.00	19.75	20.50	21.00
TIME 1530 HRS. DEPTH TO WATER	22.00	21.75	20.50	20.37	18.87	16.25	20.75	19.75	19.50	19.62	21.00	21.00
WATER ADDED	0.00	8.00	12.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	16.00

**** DECEMBER 30, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 815 HRS. DEPTH TO WATER	22.75	19.62	16.50	20.50	19.00	16.75	21.00	20.00	17.75	19.62	19.00	16.75
TIME 1600 HRS. DEPTH TO WATER	22.25	19.50	16.50	20.37	19.50	16.87	21.00	20.00	17.75	20.00	19.50	17.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** DECEMBER 31, 1976 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 903 HRS. DEPTH TO WATER	22.50	20.50	18.00	20.62	20.12	18.00	21.25	20.50	18.62	20.00	20.12	17.87
TIME 1730 HRS. DEPTH TO WATER	22.75	20.75	19.00	20.75	20.50	18.50	21.50	20.75	19.00	20.25	20.50	18.50
WATER ADDED	0.00	12.00	20.00	0.00	0.00	20.00	0.00	12.00	20.00	0.00	0.00	20.00

**** JANUARY 1, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 1000 HRS. DEPTH TO WATER	22.87	19.50	16.37	21.00	20.87	16.00	21.75	19.62	16.25	20.62	20.75	15.87
TIME 1740 HRS. DEPTH TO WATER	23.00	19.87	17.00	21.37	20.87	16.75	22.00	19.75	17.00	20.87	20.75	16.37
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JANUARY 2, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 907 HRS.												
DEPTH TO WATER	18.62	17.25	13.25	17.00	16.78	14.12	19.00	18.00	15.25	16.75	17.25	14.50
TIME 1545 HRS.												
DEPTH TO WATER	18.75	17.37	14.00	17.00	17.00	14.50	19.25	18.25	15.50	16.50	17.50	14.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JANUARY 3, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	19.37	17.87	15.50	17.50	17.25	15.50	19.00	19.00	17.50	17.25	17.62	15.50
TIME 1530 HRS.												
DEPTH TO WATER	19.37	17.87	15.75	17.50	17.25	15.50	19.00	18.75	16.50	16.75	17.25	16.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JANUARY 4, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	19.50	18.12	16.50	17.62	17.50	16.00	19.50	19.00	16.62	17.50	18.50	16.62
TIME 1530 HRS.												
DEPTH TO WATER	19.25	18.00	16.50	17.50	16.00	19.00	18.87	16.87	17.25	18.00	17.00	16.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JANUARY 5, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	20.00	18.75	18.12	18.25	18.00	16.75	19.62	19.50	17.50	17.50	18.25	18.00
TIME 1600 HRS.												
DEPTH TO WATER	19.87	18.75	18.25	18.50	18.50	17.37	19.62	19.62	17.75	17.75	19.00	18.00
WATER ADDED	0.00	0.00	8.00	0.00	0.00	8.00	0.00	0.00	8.00	0.00	0.00	8.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JANUARY 6, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	18.62	17.25	13.25	16.50	17.00	13.00	19.12	18.50	14.62	17.00	17.75	15.00
TIME 1545 HRS. DEPTH TO WATER	18.50	17.37	14.25	16.50	17.50	13.75	18.67	18.50	14.87	16.62	17.62	18.37
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JANUARY 7, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	19.00	18.00	15.75	17.50	17.25	15.00	19.25	19.00	16.00	16.62	18.00	16.00
TIME 1600 HRS. DEPTH TO WATER	18.87	18.00	16.25	17.00	17.50	15.00	19.00	18.75	16.00	17.00	18.00	17.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JANUARY 8, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 902 HRS. DEPTH TO WATER	18.87	17.75	15.87	17.37	17.50	15.37	18.75	18.75	16.25	17.00	17.62	16.25
TIME 1750 HRS. DEPTH TO WATER	19.00	18.12	16.25	17.50	17.75	15.75	19.00	19.12	16.75	17.25	18.00	16.87
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JANUARY 9, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 840 HRS. DEPTH TO WATER	17.50	16.75	14.87	16.37	28.25	14.12	18.00	17.62	15.00	15.75	16.75	15.50
TIME 1600 HRS. DEPTH TO WATER	18.00	17.37	15.75	16.75	16.75	15.00	18.50	18.25	15.75	16.37	17.25	16.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JANUARY 10, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	19.88	18.87	18.50	17.87	18.00	16.87	18.50	19.50	17.87	17.00	18.00	17.75
TIME 1530 HRS. DEPTH TO WATER	19.50	18.75	18.00	18.00	18.00	16.87	19.50	19.50	17.50	17.12	18.00	18.00
WATER ADDED	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	8.00

**** JANUARY 11, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	20.75	19.37	16.00	18.50	19.00	17.00	19.00	20.37	16.25	17.00	18.50	16.25
TIME 1530 HRS. DEPTH TO WATER	20.37	19.25	15.75	18.25	18.50	17.50	20.00	20.00	16.00	17.25	18.00	16.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JANUARY 12, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	18.00	17.75	12.62	15.50	17.00	15.00	19.00	19.00	14.00	17.00	16.50	15.00
TIME 1430 HRS. DEPTH TO WATER	15.00	15.50	11.50	13.75	15.00	12.50	18.00	17.00	13.00	14.50	16.00	12.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JANUARY 13, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	11.00	12.50	8.00	9.00	10.00	8.00	13.00	14.00	9.50	10.00	12.00	10.00
TIME 1530 HRS. DEPTH TO WATER	11.00	12.50	11.50	10.00	11.50	9.50	14.00	13.62	11.75	10.12	12.00	11.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JANUARY 14, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 900 HRS. DEPTH TO WATER	11.00	15.00	15.25	14.00	14.50	13.25	15.00	16.00	14.00	13.25	14.50	15.00
TIME 1530 HRS. DEPTH TO WATER	15.37	16.00	15.37	14.37	14.75	13.37	15.25	15.62	14.62	13.50	15.00	15.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JANUARY 15, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 854 HRS. DEPTH TO WATER	17.37	17.12	15.75	16.62	16.25	15.00	17.25	16.37	15.00	15.62	16.25	15.12
TIME 1700 HRS. DEPTH TO WATER	17.50	17.37	16.12	16.75	16.50	15.37	17.50	16.75	15.62	15.87	16.37	15.62
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JANUARY 16, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	17.75	17.62	16.50	17.00	16.75	15.75	17.75	17.12	16.12	16.25	17.00	16.12
TIME 1630 HRS. DEPTH TO WATER	18.00	18.00	16.87	17.25	17.12	17.25	18.00	17.50	16.75	16.75	17.50	16.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JANUARY 17, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	19.25	18.50	19.00	18.00	18.12	17.50	18.50	18.62	18.00	17.00	18.00	18.50
TIME 1645 HRS. DEPTH TO WATER	19.00	18.62	19.00	18.00	18.00	17.00	18.50	18.50	18.00	17.00	18.00	18.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JANUARY 18, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	20.00	19.00	20.00	18.62	18.50	17.75	19.00	19.12	18.50	17.75	19.00	18.50
TIME 1530 HRS. DEPTH TO WATER	19.75	19.00	19.62	18.25	18.37	18.00	18.75	19.50	18.62	18.00	19.00	19.00
WATER ADDED	0.00	0.00	12.00	0.00	0.00	8.00	0.00	0.00	8.00	0.00	0.00	12.00

**** JANUARY 19, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	20.87	20.00	16.25	19.50	19.00	16.12	19.50	19.50	17.25	18.00	20.00	17.00
TIME 1530 HRS. DEPTH TO WATER	20.00	19.50	16.12	18.37	9.00	15.87	19.25	19.50	17.00	17.75	19.25	17.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JANUARY 20, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	21.12	20.37	17.87	19.12	19.50	17.25	20.00	19.87	18.75	18.25	19.25	18.00
TIME 15300 HRS. DEPTH TO WATER	20.25	19.87	17.62	18.75	19.00	17.00	19.50	19.50	18.00	18.25	18.00	18.00
WATER ADDED	0.00	7.00	8.00	0.00	0.00	8.00	0.00	0.00	8.00	0.00	0.00	8.00

**** JANUARY 21, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	21.25	19.25	15.75	19.25	19.50	15.00	20.00	19.50	16.62	18.50	19.62	16.75
TIME 1600 HRS. DEPTH TO WATER	20.75	19.00	15.37	19.00	19.37	15.00	19.62	19.75	16.25	18.50	20.00	16.87
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JANUARY 22, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 930 HRS.												
DEPTH TO WATER	14.00	15.50	14.62	14.25	14.25	13.75	14.14	15.25	14.62	13.87	14.37	15.00
TIME 1750 HRS.												
DEPTH TO WATER	13.00	14.75	13.12	13.87	13.75	13.00	13.75	14.75	14.00	13.12	13.50	14.37
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JANUARY 23, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	12.50	14.12	13.00	13.25	13.25	12.12	13.12	14.25	13.50	12.50	13.37	13.75
TIME 1600 HRS.												
DEPTH TO WATER	12.75	14.50	13.50	13.50	13.50	12.75	13.50	14.50	13.75	12.75	14.00	14.12
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JANUARY 24, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	15.25	16.00	15.75	15.50	15.62	14.75	16.25	16.50	15.50	14.62	15.00	16.00
TIME 1525 HRS.												
DEPTH TO WATER	15.50	17.00	16.37	15.87	16.25	15.25	16.75	17.00	16.00	15.12	16.37	16.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JANUARY 25, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 807 HRS.												
DEPTH TO WATER	18.00	18.12	17.75	-3.00	17.50	16.25	17.50	18.00	17.00	16.64	17.00	17.37
TIME 1700 HRS.												
DEPTH TO WATER	17.50	17.87	17.62	16.87	17.00	16.12	17.50	17.50	16.62	16.25	17.50	16.75
WATER ADDED	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JANUARY 26, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	18.50	18.62	15.75	17.50	17.50	16.75	18.00	18.50	17.50	16.25	17.50	18.00
TIME 1530 HRS. DEPTH TO WATER	18.00	18.25	16.12	17.25	17.25	16.75	17.75	16.75	17.75	17.50	18.00	18.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	8.00	0.00	0.00	8.00

**** JANUARY 27, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	19.25	17.75	18.12	18.00	16.25	18.50	18.50	16.25	16.75	18.50	16.50	16.50
TIME 1600 HRS. DEPTH TO WATER	18.87	18.75	17.50	17.75	17.75	16.25	18.25	18.25	16.00	16.75	18.12	17.00
WATER ADDED	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00

**** JANUARY 28, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	20.25	19.50	16.50	18.25	19.00	17.50	18.87	19.50	17.50	17.50	18.50	17.50
TIME 1530 HRS. DEPTH TO WATER	20.62	19.00	17.00	18.50	19.00	18.00	18.75	18.75	17.37	17.70	18.75	18.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	8.00	0.00	0.00	8.00

**** JANUARY 29, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 850 HRS. DEPTH TO WATER	21.75	19.00	16.87	22.50	19.25	17.25	20.87	19.00	17.50	21.50	19.87	17.12
TIME 1430 HRS. DEPTH TO WATER	22.00	19.25	17.25	22.75	19.75	18.00	21.45	19.37	19.00	21.75	21.01	18.00
WATER ADDED	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** JANUARY 30, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 600 HRS. DEPTH TO WATER	19.50	18.50	14.00	21.00	18.50	13.50	20.00	17.87	14.62	19.87	18.75	13.50
TIME 2250 HRS. DEPTH TO WATER	18.00	17.37	13.00	19.87	16.75	12.87	18.87	16.75	13.25	18.75	17.00	12.87
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** JANUARY 31, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 841 HRS. DEPTH TO WATER	13.75	15.00	14.75	14.25	14.50	12.37	13.75	14.00	13.62	13.00	15.00	14.00
TIME 1645 HRS. DEPTH TO WATER	14.50	16.25	15.25	14.75	15.00	13.75	15.87	15.75	14.37	13.62	15.50	15.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** FEBUARY 1, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	17.00	17.12	16.25	15.75	16.00	15.25	16.00	17.00	16.00	15.00	16.50	16.50
TIME 1630 HRS. DEPTH TO WATER	16.37	17.62	16.37	16.00	16.62	15.62	18.00	17.50	16.25	17.00	16.37	16.37
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** FEBUARY 2, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 845 HRS. DEPTH TO WATER	14.50	13.62	13.00	14.00	15.00	14.00	14.00	13.50	13.00	13.00	14.25	14.00
TIME 1600 HRS. DEPTH TO WATER	13.00	12.00	11.00	13.00	14.00	12.00	13.00	13.00	13.00	12.00	13.00	14.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** FEBUARY 3, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 900 HRS. DEPTH TO WATER	13.75	15.25	14.50	15.00	7.12	13.00	15.00	15.00	14.00	13.50	14.50	14.50
TIME 1530 HRS. DEPTH TO WATER	14.12	16.00	15.00	14.50	13.87	13.50	15.00	15.50	14.12	13.75	15.50	14.67
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** FEBUARY 4, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	16.75	17.50	17.22	16.50	16.37	15.62	16.50	17.75	16.62	15.75	16.75	16.87
TIME 1530 HRS. DEPTH TO WATER	16.87	17.37	16.50	16.25	16.25	16.62	17.50	16.50	15.75	17.00	17.00	17.00
WATER ADDED	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** FEBUARY 5, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS. DEPTH TO WATER	18.87	18.25	16.12	17.75	16.75	15.87	18.00	18.12	16.12	16.37	17.75	16.50
TIME 1820 HRS. DEPTH TO WATER	19.00	18.87	16.50	17.87	17.00	16.25	18.25	18.50	16.50	16.50	18.00	16.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** FEBUARY 6, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 856 HRS. DEPTH TO WATER	19.12	18.75	16.75	18.00	17.12	16.50	18.37	18.75	16.75	16.87	18.25	16.87
TIME 1850 HRS. DEPTH TO WATER	19.25	19.00	17.00	18.12	17.50	16.67	18.62	19.00	17.00	17.12	18.50	17.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** FEBUARY 7, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 900 HRS.												
DEPTH TO WATER	20.37	19.62	19.75	18.87	18.50	18.62	19.62	19.50	19.45	17.75	18.50	18.75
TIME 1530 HRS.												
DEPTH TO WATER	20.25	19.50	19.62	18.75	18.50	18.50	19.62	19.50	18.75	17.50	18.50	19.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** FEBUARY 8, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	15.50	16.25	14.25	14.50	14.62	13.75	15.00	16.62	15.50	14.25	16.00	15.50
TIME 1515 HRS.												
DEPTH TO WATER	15.84	16.25	16.00	15.12	15.25	14.07	16.00	16.75	15.62	14.50	15.62	15.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** FEBUARY 9, 1977 ****

NO DATA RECORDED

**** FEBUARY 10, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	15.12	16.25	12.37	14.50	15.00	14.00	15.00	16.50	14.25	14.50	16.00	16.50
TIME 1530 HRS.												
DEPTH TO WATER	14.62	15.75	12.00	14.00	13.87	13.12	14.12	15.75	13.62	13.87	14.50	15.12
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** FEBUARY 11, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	11.00	12.50	8.62	9.50	11.50	9.00	14.00	13.50	11.00	11.50	12.00	11.50
TIME 1530 HRS. DEPTH TO WATER	12.50	13.75	13.00	12.62	13.50	11.75	13.62	14.50	13.12	11.75	13.00	12.37
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** FEBUARY 12, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 920 HRS. DEPTH TO WATER	17.62	17.12	15.75	16.87	16.37	16.25	17.50	17.37	16.12	17.00	16.12	15.75
TIME 1745 HRS. DEPTH TO WATER	17.67	17.37	16.00	17.00	16.62	16.50	17.62	17.62	16.50	17.25	16.37	16.12
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** FEBUARY 13, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	17.87	17.50	16.25	17.12	16.75	16.62	17.62	17.75	16.62	17.37	16.50	16.25
TIME 800 HRS. DEPTH TO WATER	18.00	17.75	16.75	17.25	17.00	16.50	17.75	18.00	16.87	17.50	16.75	16.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** FEBUARY 14, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	19.25	19.00	19.12	18.12	18.25	17.12	18.50	18.50	18.00	16.50	17.50	17.50
TIME 1600 HRS. DEPTH TO WATER	18.62	18.75	19.00	18.00	18.00	17.25	18.50	18.50	17.50	16.62	17.00	18.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** FEBUARY 15, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	20.50	19.50	20.50	18.87	19.00	18.12	19.25	19.50	18.87	17.25	18.50	18.50
TIME 1300 HRS.												
DEPTH TO WATER	20.50	19.50	20.62	10.00	19.00	19.00	19.50	19.50	19.00	17.50	18.37	18.50
WATER ADDED	0.00	0.00	12.00	0.00	0.00	8.00	0.00	0.00	8.00	0.00	0.00	8.00

**** FEBUARY 16, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 851 HRS.												
DEPTH TO WATER	21.25	20.25	17.62	19.50	19.62	16.87	18.00	19.00	17.25	17.50	18.00	17.62
TIME 1523 HRS.												
DEPTH TO WATER	21.00	20.25	18.00	19.50	19.50	17.25	20.00	19.87	17.75	18.00	18.50	17.50
WATER ADDED	0.00	0.00	8.00	0.00	0.00	8.00	0.00	0.00	8.00	0.00	0.00	8.00

**** FEBUARY 17, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	22.00	20.75	16.50	20.25	20.00	15.75	20.00	20.00	16.75	17.00	18.00	13.00
TIME 1715 HRS.												
DEPTH TO WATER	21.75	20.75	16.79	19.75	19.75	16.37	20.50	20.50	16.75	18.00	19.50	16.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** FEBUARY 18, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 842 HRS.												
DEPTH TO WATER	22.37	21.00	18.75	20.50	20.50	17.50	19.50	20.50	17.50	18.50	19.00	17.37
TIME 0 HRS.												
DEPTH TO WATER	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** FEBUARY 19, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS.												
DEPTH TO WATER	22.37	21.37	20.75	21.00	20.62	18.37	20.87	20.12	18.25	18.25	19.62	17.37
TIME 1540 HRS.												
DEPTH TO WATER	22.62	21.75	21.12	21.25	19.00	21.12	20.62	18.87	18.62	20.12	18.00	18.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** FEBUARY 20, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	22.75	22.12	21.50	21.37	21.50	19.37	21.25	20.87	19.25	18.75	20.50	18.50
TIME 1835 HRS.												
DEPTH TO WATER	23.00	22.50	22.00	21.75	21.75	20.00	21.50	21.50	19.25	19.00	20.75	19.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** FEBUARY 21, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 800 HRS.												
DEPTH TO WATER	23.62	22.62	22.00	21.75	22.50	20.50	22.12	22.00	20.50	19.25	20.75	20.00
TIME 1715 HRS.												
DEPTH TO WATER	23.25	22.50	22.00	22.00	22.37	20.62	22.12	22.12	20.00	19.50	20.75	20.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** FEBUARY 22, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS.												
DEPTH TO WATER	23.50	22.75	21.87	22.00	23.00	20.75	21.75	22.25	20.75	19.50	21.00	20.00
TIME 1527 HRS.												
DEPTH TO WATER	23.62	22.62	22.12	22.12	22.37	20.75	22.00	22.00	20.12	19.37	20.37	20.50
WATER ADDED	0.00	12.00	16.00	0.00	12.00	16.00	0.00	12.00	16.00	0.00	8.00	16.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** FEBUARY 23, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	23.75	20.12	17.50	21.00	19.50	16.25	20.00	20.00	16.75	19.00	19.00	17.00
TIME 1530 HRS. DEPTH TO WATER	23.62	21.00	19.50	22.50	20.37	17.25	20.50	19.75	17.50	19.37	19.25	17.50
WATER ADDED	0.00	8.00	12.00	0.00	0.00	12.00	0.00	0.00	12.00	0.00	0.00	12.00

**** FEBUARY 24, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	24.00	19.70	16.87	23.00	22.00	15.50	21.00	20.00	16.37	20.50	19.50	16.25
TIME 1514 HRS. DEPTH TO WATER	24.12	20.37	18.12	23.25	22.12	16.50	21.00	21.00	16.75	19.00	20.62	16.87
WATER ADDED	0.00	8.00	16.00	0.00	16.00	0.00	0.00	12.00	0.00	0.00	12.00	8.00

**** FEBUARY 25, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 930 HRS. DEPTH TO WATER	22.00	18.50	15.25	23.50	19.00	17.25	22.00	19.37	15.75	19.50	17.00	15.87
TIME 1600 HRS. DEPTH TO WATER	24.50	18.87	16.12	23.62	19.62	18.00	23.00	18.25	15.87	21.00	17.12	16.25
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** FEBUARY 26, 1977 ****

NO DATA RECORDED

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** FEBUARY 27, 1977 ****

NO DATA RECORDED

**** FEBUARY 28, 1977 ****

NO DATA RECORDED

**** MARCH 1, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 930 HRS.												
DEPTH TO WATER	23.37	17.62	18.87	23.62	20.00	19.50	23.00	19.62	18.00	20.00	20.00	18.50
TIME 1600 HRS.												
DEPTH TO WATER	23.50	18.00	19.41	24.00	20.25	19.75	23.25	20.00	18.25	20.00	20.25	18.75
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MARCH 2, 1977 ****

NO DATA RECORDED

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** MARCH 3, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 852 HRS.												
DEPTH TO WATER	23.87	16.87	13.12	21.00	18.00	14.50	22.00	16.00	13.50	21.00	21.00	16.00
TIME 1530 HRS.												
DEPTH TO WATER	20.50	13.37	9.75	22.50	15.50	12.50	22.00	17.50	11.50	19.00	19.00	12.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MARCH 4, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 845 HRS.												
DEPTH TO WATER	19.50	15.75	16.00	21.00	16.50	14.00	20.50	16.50	15.00	18.00	17.50	15.50
TIME 1700 HRS.												
DEPTH TO WATER	20.12	17.00	16.50	21.00	17.25	15.00	20.00	18.00	16.00	18.00	17.50	16.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MARCH 5, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 748 HRS.												
DEPTH TO WATER	21.62	18.25	17.75	22.62	18.62	18.75	21.12	19.12	18.00	18.25	18.00	18.00
TIME 1730 HRS.												
DEPTH TO WATER	21.87	18.75	19.00	22.75	19.12	19.50	21.37	19.50	19.00	18.62	18.50	19.00
WATER ADDED	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00

**** MARCH 6, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 903 HRS.												
DEPTH TO WATER	22.25	19.12	17.50	23.12	20.00	18.00	21.75	20.00	17.50	19.00	19.00	17.12
TIME 1705 HRS.												
DEPTH TO WATER	22.50	19.50	19.50	23.50	21.00	19.25	22.00	20.75	19.00	19.25	19.50	19.00
WATER ADDED	0.00	0.00	32.00	0.00	20.00	32.00	0.00	20.00	32.00	0.00	0.00	32.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** MARCH 7, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	21.00	20.25	15.50	23.00	17.50	15.00	24.00	19.00	16.50	20.50	19.00	16.00
TIME 1530 HRS. DEPTH TO WATER	23.37	20.50	16.50	23.62	19.00	16.62	22.87	18.75	17.00	20.00	20.00	16.50
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MARCH 8, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 1013 HRS. DEPTH TO WATER	23.75	21.25	18.25	23.62	20.00	18.50	23.00	19.62	18.50	21.00	21.00	17.62
TIME 1515 HRS. DEPTH TO WATER	23.75	21.50	19.00	24.00	20.25	18.50	23.00	19.75	18.12	21.00	20.50	18.25
WATER ADDED	0.00	12.00	16.00	0.00	0.00	16.00	0.00	0.00	16.00	0.00	0.00	16.00

**** MARCH 9, 1977 ****

NO DATA RECORDED

**** MARCH 10, 1977 ****

NO DATA RECORDED

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** MARCH 11, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	24.25	19.50	15.62	24.50	21.00	14.50	23.50	21.12	17.50	21.12	21.12	15.75
TIME 1600 HRS. DEPTH TO WATER	24.50	20.75	18.50	24.62	22.50	16.62	23.75	21.50	18.75	21.00	21.62	16.62
WATER ADDED	4.00	4.00	12.00	4.00	12.00	0.00	0.00	12.00	12.00	0.00	12.00	0.00

**** MARCH 12, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	24.25	21.00	17.87	24.00	20.75	18.37	23.00	19.37	16.87	21.75	19.37	17.37
TIME 1656 HRS. DEPTH TO WATER	24.50	21.50	18.50	24.25	21.37	19.50	23.62	19.87	17.37	22.00	19.75	18.50
WATER ADDED	12.00	16.00	20.00	12.00	16.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00

**** MARCH 13, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 750 HRS. DEPTH TO WATER	23.00	20.25	17.00	23.25	20.00	18.00	23.62	20.12	16.00	22.25	20.12	17.00
TIME 1530 HRS. DEPTH TO WATER	23.50	20.50	18.00	23.75	20.75	18.50	23.50	20.50	17.25	22.50	20.75	17.87
WATER ADDED	16.00	28.00	32.00	16.00	28.00	32.00	16.00	28.00	32.00	16.00	28.00	32.00

**** MARCH 14, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	23.00	18.50	16.50	21.00	19.50	17.50	22.00	18.50	16.62	21.00	17.50	17.00
TIME 1545 HRS. DEPTH TO WATER	22.75	18.75	17.50	23.75	20.25	18.00	21.75	18.50	16.87	20.50	17.75	17.50
WATER ADDED	0.00	0.00	12.00	0.00	0.00	12.00	0.00	0.00	0.00	0.00	0.00	12.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** MARCH 15, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	23.50	19.37	15.12	22.50	20.75	15.37	23.00	19.50	17.50	22.00	18.50	15.50
TIME 1600 HRS. DEPTH TO WATER	23.75	19.87	16.87	24.00	21.62	17.00	22.12	19.37	17.50	23.00	18.87	17.00
WATER ADDED	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00

**** MARCH 16, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	24.00	20.50	18.50	24.00	20.50	18.50	23.50	20.12	17.37	20.50	19.50	18.00
TIME 1545 HRS. DEPTH TO WATER	24.25	21.25	20.00	24.50	21.62	19.62	23.00	20.25	17.37	23.00	19.87	18.87
WATER ADDED	8.00	12.00	16.00	8.00	12.00	16.00	0.00	0.00	16.00	0.00	0.00	16.00

**** MARCH 17, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 930 HRS. DEPTH TO WATER	23.50	18.87	15.50	22.00	19.25	15.50	23.00	20.50	14.87	23.00	20.00	15.62
TIME 1600 HRS. DEPTH TO WATER	24.00	20.50	18.50	24.00	22.00	17.50	23.00	20.50	17.00	21.00	20.00	17.62
WATER ADDED	0.00	4.00	12.00	0.00	4.00	12.00	0.00	0.00	0.00	0.00	0.00	12.00

**** MARCH 18, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	24.00	20.50	18.75	22.00	21.25	18.12	23.00	21.50	17.25	23.00	21.00	18.00
TIME 0 HRS. DEPTH TO WATER	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** MARCH 19, 1977 ****

NO DATA RECORDED

**** MARCH 20, 1977 ****

NO DATA RECORDED

**** MARCH 21, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 836 HRS.												
DEPTH TO WATER	25.25	23.62	23.50	25.25	24.00	23.25	23.75	23.00	20.75	23.75	22.62	21.50
TIME 1615 HRS.												
DEPTH TO WATER	25.50	23.75	23.62	25.25	24.85	24.00	23.87	22.87	21.00	23.75	23.00	22.00
WATER ADDED	8.00	16.00	16.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MARCH 22, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 845 HRS.												
DEPTH TO WATER	25.25	22.62	22.00	25.00	23.75	23.50	24.00	23.00	21.50	24.00	23.00	22.25
TIME 1600 HRS.												
DEPTH TO WATER	25.25	23.25	23.25	25.25	24.25	23.50	24.00	23.50	21.50	24.00	23.00	22.00
WATER ADDED	8.00	20.00	20.00	8.00	20.00	20.00	0.00	20.00	20.00	0.00	20.00	20.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

****** MARCH 23, 1977 ******

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 845 HRS. DEPTH TO WATER	25.00	20.50	20.12	25.00	23.00	22.00	24.00	21.00	19.00	23.75	20.00	18.62
TIME 1600 HRS. DEPTH TO WATER	25.00	21.25	21.25	25.00	23.50	23.00	24.00	21.12	19.25	23.50	20.50	19.50
WATER ADDED	8.00	16.00	16.00	8.00	16.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00

****** MARCH 24, 1977 ******

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 845 HRS. DEPTH TO WATER	24.62	18.00	16.50	24.00	20.50	17.00	22.00	21.00	19.00	20.50	19.00	18.00
TIME 1530 HRS. DEPTH TO WATER	24.87	17.50	16.00	25.00	22.00	19.00	24.00	21.00	18.00	24.00	21.00	19.50
WATER ADDED	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

****** MARCH 25, 1977 ******

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 845 HRS. DEPTH TO WATER	24.50	18.00	17.62	24.75	22.37	20.00	24.00	22.00	18.50	24.25	21.50	19.75
TIME 1600 HRS. DEPTH TO WATER	24.50	18.25	17.50	25.00	22.50	20.00	24.50	21.00	19.00	23.75	21.00	20.00
WATER ADDED	8.00	0.00	16.00	0.00	8.00	16.00	8.00	8.00	16.00	0.00	8.00	16.00

****** MARCH 26, 1977 ******

NO DATA RECORDED

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** MARCH 27, 1977 ****

NO DATA RECORDED

**** MARCH 28, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	20.75	15.75	15.25	20.00	18.00	13.50	20.00	17.00	14.50	21.00	15.75	14.75
TIME 1630 HRS. DEPTH TO WATER	21.75	17.50	18.00	23.50	19.00	16.50	21.00	17.50	15.62	23.00	16.50	16.37
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**** MARCH 29, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 830 HRS. DEPTH TO WATER	22.75	18.62	19.00	23.75	20.50	18.00	22.00	19.00	17.50	23.00	17.50	17.50
TIME 1530 HRS. DEPTH TO WATER	23.00	19.50	21.00	24.00	22.00	19.50	20.00	29.50	17.00	22.50	18.00	18.25
WATER ADDED	0.00	0.00	20.00	0.00	16.00	20.00	0.00	0.00	0.00	0.00	0.00	20.00

**** MARCH 30, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 835 HRS. DEPTH TO WATER	23.50	20.12	16.00	24.00	19.00	16.12	23.00	20.00	18.50	23.50	19.00	16.25
TIME 1630 HRS. DEPTH TO WATER	23.87	21.75	19.75	24.50	21.50	19.25	22.00	20.00	19.00	23.00	20.25	17.87
WATER ADDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

**** MARCH 31, 1977 ****

TANK NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
TIME 845 HRS.												
DEPTH TO WATER	24.12	21.00	21.00	24.25	22.50	20.00	23.00	21.00	19.50	23.00	20.25	18.50
TIME 1530 HRS.												
DEPTH TO WATER	24.25	22.50	21.50	24.00	22.50	21.00	23.00	21.00	19.50	21.50	20.50	19.00
WATER ADDED	0.00	16.00	20.00	0.00	16.00	20.00	0.00	0.00	20.00	0.00	0.00	20.00

NOTE.... DEPTH TO WATER IS IN INCHES AND WATER ADDED IS IN LITERS.

APPENDIX C

WEATHER OBSERVATIONS

EXPERIMENTAL SITE WEATHER STATION DATA December 1975

DATE	Air Temperature Last 24 hr Period (°F)				Water Temperature Last 24 hr Period (°F)		Precipitation Last 24 hr Period		Wind Anemometer		Evaporation			Additional Data
			At Observation, °F											
	Max.	Min.	Dry Bulb	Wet Bulb	Max.	Min.	Amount (in.)	Type	Dial Reading	24 hour Movement (mile)	Gage Reading (in.)	Water Added (in.)	Amount of Evapo. (in.)	
1	65	21	36	32	61	30	0	Ice	580	37	1.32		- .17	clr
2	60	22	32	27	55	32	0	Ice	595	15	1.34	+ .02		clr
3	72	25	34	33	61	24	0		606	11	1.23		- .11	fog
4	75	34	63	62	66	36	T		631	25	1.21		- .02	cldy
5	77	43	68	67	72	65	0		682	51	1.23	+ .02		pc
6	80	55	50	50	76	59	0		720	38	1.29	+ .02		pc
7	69	21	41	37	68	34	0		744	27	1.08		- .21	clr
8	69	27	34	33	63	35	0		761	12	.04		-1.04	clr
9	69	31	38	37	62	34	0		769	8	.01		- .03	pc
10	71	33	34	33	63	39	0		779	10	2.63	+2.62		clr
11	75	33	53	51	62	39	0		797	18	2.51		- .12	cldy
12	78	45	56	55	56	44	0		822	25	2.42		- .09	cldy
13	77	54	64	63	71	55	0		868	46	2.41		- .01	cldy
14	77	63	67	65	76	66	7		942	74	2.35		- .06	cldy
15	77	66	68	67	72	63	0		1000	58	2.21		- .14	cldy
16	78	45	42	41	72	41	0.13	Rain	1038	38	2.27		- .08	cldy
17	56	36	34	38	52	34	T	Rain	1045	7	2.24	+ .03		pc
18	64	30	32	31	57	36	0	Ice	1045	50	2.13		- .11	cldy
19	42	28	32	30	42	31	0	Ice	1115	20	2.04		- .09	cldy
20	46	26	21	27	42	30	0	Ice	1132	17	2.07		- .03	clr
21	64	26	37	28	56	30	0		1145	13	2.06	+ .01		clr
22	63	35	44	40	43	33	0		1159	14	1.96		- .10	cldy
23	60	25	40	37	53	32	0		1169	10	1.90		- .06	clr
24	56	40	48	47	51	45	0.50	Lt Rain	1104	25	2.41	+ .51		cldy
25	52	41	44	40	51	40	0.66		1242	48	2.99	+ .58		pc
26	60	24	35	32	54	29	0		1274	32	2.92		- .07	clr
27	66	24	34	32	55	33	0		1287	13	2.86		- .06	clr
28	70	33	46	45	60	34	0		1307	20	2.74		- .12	fog
29	73	23	45	42	60	40	0		1355	48	2.71		- .03	clr
30	56	27	37	33	55	31	0		1382	27	2.65		- .06	clr
31	62	24	34	32	60	30	0		1394	12	2.59		- .06	clr
Av.	66	34				Greatest	0.66		Total	849		Total	2.87	

EXPERIMENTAL SITE WEATHER STATION DATA January 1976

DATE	Air Temperature Last 24 hr Period (°F)				Water Temperature Last 24 hr Period (°F)		Precipitation Last 24 hr Period		Wind Anemometer		Evaporation			Additional Data
	Max.	Min.	At Observation, °F Dry Bulb	At Observation, °F Wet Bulb	Max.	Min.	Amount (in.)	Type	Dial Reading	24 hour Movement (mile)	Gage Reading (in.)	Water Added (in.)	Amount of Evapo. (in.)	
1	72	25	*		58	32	0		1420	26	2.52		-.07	cldy
2	76	52	*		58	50	0		1437	17	2.46		-.06	cldy
3	54	36	*		58	32	0		1446	59	2.32		-.14	pc
4	53	22	*		50	30	0	Ice	1527	31	2.30		-.02	pc
5	51	26	*		45	30	0		1549	22	2.19		-.11	cldy
6	49	41	*		44	36	0	Dzl	1564	15	2.16		-.03	cldy
7	65	36	*		59	43	0		1587	23	2.10		-.06	clr
8	46	15	*		45	30	0	Ice	1644	57	1.41		-.14	clr
9	49	13	*		Ice		0	Ice	1649	15	***			clr
10	59	14	51	48	+		0		1685	26	1.88			cldy
11	70	43	45	44	+		0		1720	35	1.84		-.04	pc
12	69	29	31	30	+		0		1739	19	1.72		-.12	clr
13	72	29	64	62	+		0		1762	23	1.67		-.05	cldy
14	81	45	45	41	+		0		1803	41	1.55		-.12	pc
15	64	28	32	30	+		0		1833	30	1.44		-.11	clr
16	66	28	40	38	+		0		1851	18	1.37		-.07	clr
17	74	27	36	32	+		0		1880	29	1.25		-.12	clr
18	71	30	55	43	+		0		1847	17	1.15		-.10	clr
19	73	43	42	41	+		0		1940	43	1.05	+.64	-.10	clr
20	73	48	41	41	+		0.64	Lt Rain	1989	49	1.60	+.10	-.01	cldy
21	58	28	32	29	+		0.10	Lt Rain	2009	20	1.65		-.05	clr
22	70	25	32	26	+		0		2018	9	1.57		-.08	clr
23	72	25	38	37	+		0		2029	11	1.50	+.05	-.07	clr
24	74	38	52	50	+		0		2046	17	1.44		-.01	pc
25	67	41	43	43	+		0.05	Ice	2053	7	1.44		-.05	clr
26	75	35	35	32	+		0	Ice	2106	53	1.27		-.22	pc
27	50	20	25	23	+		0	Ice	2115	9	1.20		-.07	clr
28	57	17	32	19	+		0		2151	36	1.20		-.00	clr
29	63	15	32	28	+		0		2168	17	1.18		-.02	clr
30	72	27	32	31	+		0		2177	9	1.12		-.06	pc
31	74	30	53	48	+		0		2196	19	0.03		1.04	pc
Av.	65	30				Greatest	0.64			Total 802			Total 3.24	

EXPERIMENTAL SITE WEATHER STATION DATA February 1976

DATE	Air Temperature Last 24 hr Period (°F)				Water Temperature Last 24 hr Period (°F)		Precipitation Last 24 hr Period		Wind Anemometer		Evaporation			
	Max.	Min.	At Observation, °F Dry Bulb	At Observation, °F Wet Bulb	Max.	Min.	Amount (in.)	Type	Dial Reading	24 hour Movement (mile)	Gage Reading (in.)	Water Added (in.)	Amount of Evapo. (in.)	Additional Data
1	62	36	52	41	+		0		2249	53	0.02		-.01	clr
2	75	27	32	28	+		0		2270	21	0.00	+3.51	-.02	clr
3	81	25	31	30	+		0		2287	17	3.48		-.03	clr
4	82	28	61	54	+		0		2319	32	3.31		-.17	clr
5	78	60	64	64	+		0.01	Rain	2370	51	3.22		-.09	cldy
6	60	40	40	39	+		0.03	Rain	2408	38	3.14		-.08	cldy
7	43	35	38	33	+		0		2461	53	3.05		-.09	cldy
8	58	30	40	35	+		0		2475	14	3.00		-.05	clr
9	75	35	36	35	+		0		2990	15	2.91		-.09	clr
10	77	35	63	61	+		0		2521	31	2.81		-.10	clr
11	82	57	62	61	+		0		2549	28	2.70		-.11	cldy
12	82	58	63	61	+		0		2569	20	2.59	+0.06	-.11	cldy
13	74	58	60	59	+		0		2617	48	2.45	**	-.20	cldy
14	80	60	64	62	+		0		2677	60	2.32		-.13	pc
15	81	63	67	65	+		0		2744	67	2.19		-.13	cldy
16	80	66	67	65	75	60	0	Dzl	2804	65	2.06		-.13	cldy
17	79	64	65	64	74	65	0		2837	28	2.02		-.04	pc
18	86	50	55	44	74	65	T		2877	90	1.83		-.19	clr
19	80	35	38	35	78	51	0		2894	15	1.65		-.38	clr
20	84	37	65	64	75	45	0		2934	42	1.53	+0.16	-.12	cldy
21	79	48	54	43	76	56	0.16		2988	54	1.57		-.12	clr
22	64	25	40	32	72	51	0	Shrws	3027	39	1.37		-.20	clr
23	64	22	32	22	64	32	0	Rain	3050	23	1.24		-.13	clr
24	75	22	32	27	Ice	Ice	0		3065	15	1.11		-.13	clr
25	75	36	39	39	68	31	0		3104	44	1.00		-.11	clr
26	68	48	39	39	65	33	0	Rain	3126	17	2.07	+3.08	-.03	cldy
27	74	47	51	49	63	44	0		3141	15	2.45		-.20	cldy
28	78	50	61	58	78	44	0		3174	33	2.80		-.15	cldy
29	80	60	64	61	76	55	0		3243	69	2.60		-.20	cldy
30														
31														

Av. 75 43 Greatest 0.16 Total 1097 Total 4.24

EXPERIMENTAL SITE WEATHER STATION DATA March 1976

DATE	Air Temperature Last 24 hr Period (°F)				Water Temperature Last 24 hr Period (°F)		Precipitation Last 24 hr Period		Wind Anemometer		Evaporation			Additional Data
	Max.	Min.	At Observation, °F Dry Bulb	At Observation, °F Wet Bulb	Max.	Min.	Amount (in,)	Type	Dial Reading	24 hour Movement (mile)	Gage Reading (in.)	Water Added (in.)	Amount of Evapo. (in.)	
1	84	63	66	64	75	60	0		3208	65	2.54		-.01	cldy
2														
3	86	65	67	65	83	76	0		3428		2.03		-.55	cldy
4	86	65	69	65	79	65	0		3224	96	1.80		-.23	pc
5	89	58	62	47	81	52	0.05	Rain	3584	60	1.35		-.15	cldy
6	65	46	46	44	46	56	0		3650	66	1.47	+.53	-.71	cldy
7	51	45	51	50	50	47	0.53	"	3686	36	2.00	+.19	-.72	cldy
8	59	50	59	59	57	51	0.19	"	3702	16	2.14	**	-.14	cldy
9	76	38	37	37	75	48	T	"	3734	30	2.03	**	-.67	pc
10	71	37	41	40	72	47	0		3745	13	2.63		-.60	pc
11	72	40	61	60	70	51	0		3777	32	2.53	+.02	-.28	cldy
12	73	60	65	64	68	59	0.02	"	3818	40	2.54		-.01	cldy
13	83	45	46	39	83	45	0		3903	61	2.20	+.28	-.28	cldy
14	49	39	51	46	47	44	0.28	"	3417	25	2.45		-.25	cldy
15	58	44	51	50	56	46	0		3454	14	2.42		-.03	clr
16	70	43	44	40	73	47	0		3984	37	2.29		-.13	clr
17	60	30	31	30	70	40	0		4016	30	2.11		-.18	clr
18	77	21	50	48	68	40	0		4072	32	1.94		-.17	cldy
19	81	46	65	63	76	50	0		4124	55	1.79		-.15	cldy
20	88	64	69	67	80	63	0		4154	53	1.65		-.14	pc
21	96	51	60	45	84	48	0		4116	30	1.44	+.09	-.12	cldy
22	71	49	51	50	61	47	0.04	"	4184	14	1.35		-.09	cldy
23	75	44	52	51	75	50	0		4221	16	1.20	+.23	-.72	cldy
24	75	50	59	59	72	53	0.23	"	4224	27	2.02	+.03	-.85	cldy
25	82	56	68	67	80	55	0.03	"	4278	23	1.98		-.07	clr
26	84	67	68	67	81	66	T	"	4309	34	1.88		-.10	pc
27	87	43	44	43	85	50	0.03	"	4333	31	1.74		-.14	cldy
28	75	43	62	59	75	50	0		4359	24	1.55		-.19	clr
29	72	60	70	68	71	59	0		4390	26	1.50		-.05	clr
30	74	52	54	47	90	55	T	"	4421	31	1.22		-.28	clr
31	65	35	37	37	65	43	0		4421	31	1.18		-.04	clr

Av. 75 49 Greatest .53 Total 1168 Total 7.90

** Tank Cleaned
Water Added

EXPERIMENTAL SITE WEATHER STATION DATA April 1976

DATE	Air Temperature Last 24 hr Period (°F)				Water Temperature Last 24 hr Period (°F)		Precipitation Last 24 hr Period		Wind Anemometer		Evaporation			Additional Data
	Max.	Min.	At Observation, °F Dry Bulb	At Observation, °F Wet Bulb	Max.	Min.	Amount (in.)	Type	Dial Reading	24 hour Movement (mile)	Gage Reading (in.)	Water Added (in.)	Amount of Evapo. (in.)	
1	79	36	38	37	79	44	0		4436	22	1.07		-.11	clr
2	84	38	47	46	83	45	0		4458	40	1.04	+0.19	-.03	pc
3	72	46	65	63	80	50	0.19	Rain	4498	22	1.09	+1.01	-.14	cldy
4	81	59	69	66	81	62	1.01	Rain	4520	19	1.54	+0.69	-.56	cldy
5	77	59	60	60	77	61	0.69	Rain	4539	9	2.15	+0.16	-.08	cldy
6	64	53	56	55	66	59	0.16	Rain	4548	12	2.32	+0.07	+.01	cldy
7	75	55	58	58	76	58	0.07	Rain	4560	25	2.31	0.04	-.08	cldy
8	80	49	54	53	84	55	0.24	Rain	4585	10	2.33	**	-.22	clr
9	80	52	56	55	81	64	0		4595	15	2.89		-.05	clr
10	79	55	63	62	80	61	0		5610	14	2.75		-.14	clr
11	74	61	72	71	73	65	0		4624	16	2.67		-.08	pc
12	93	62	67	65	84	72	0		4640	27	2.51		-.16	cldy
13	78	62	67	65	77	67	0		4667	32	2.43		-.08	pc
14	78	66	68	67	77	66	T		4699	32	2.37		-.06	cldy
15	76	67	68	67	74	56	0		4731	52	2.32	+1.02	-.05	cldy
16	74	52	56	55	70	57	1.02	Rain	4783	47	3.16	+0.02	-.18	pc
17	78	56	75	74	74	55	0.02	Rain	4830	39	3.16	+1.73	-.02	cldy
18	84	49	58	56	81	57	1.73	Rain	4869	12	2.04	+0.20	-2.85	cldy
19	69	57	69	67	67	60	0.20	Rain	4881	26	2.10	+0.36	-.14	cldy
20	73	54	58	56	71	59	0.36	Rain	4907	34	2.43		-.03	clr
21	84	59	51	50	85	59	0		4922	16	2.20		-.23	clr
22	82	50	67	66	87	67	0		4942	30	2.02		-.18	pc
23	81	66	72	69	81	69	0		4971	23	1.90	+0.01	-.12	cldy
24	76	60	75	71	77	60	0.01	Rain	4994	16	1.86	+0.10	-.05	cldy
25	88	50	63	57	90	59	0.10	Rain	5922	8	1.84		-.12	pc
26	83	49	54	56	90	59	0		5010	27	1.62		-.22	cldy
27	83	52	67	66	85	66	0		5037	29	1.43		-.09	cldy
28	74	66	68	67	76	62	0		5014	24	1.34	+2.03	-.09	cldy
29	83	61	61	60	85	55	2.02	Rain	5090	22	3.72		-.15	cldy
30	73	60	60	58	75	55	0		5112	14	3.12		-.10	cldy
31														

Av. 79 56 Greatest 2.03 Total 717 Total 3.56

** Tank Cleaned

EXPERIMENTAL SITE WEATHER STATION DATA May 1976

DATE	Air Temperature Last 24 hr Period (°F)				Water Temperature Last 24 hr Period (°F)		Precipitation Last 24 hr Period		Wind Anemometer		Evaporation			Additional Data
			At Observation, °F											
	Max.	Min.	Dry Bulb	Wet Bulb	Max.	Min.	Amount (in.)	Type	Dial Reading	24 hour Movement (mile)	Gage Reading (in.)	Water Added (in.)	Amount of Evapo. (in.)	
1	78	53	59	56	83	60	0		5126	14	2.96		-.80	pc
2	76	42	57	53	80	55	0		5140	9	2.81		-.15	clr
3	81	45	47	46	87	55	0		5144	10	2.62		-.19	clr
4	72	46	48	48	88	58	0		5159	22	2.44	+.51	-.21	pc
5	70	45	63	62	82	58	0.51	Raim	5181	19	3.10	+.22	-.15	cldy
6	78	61	69	68	77	63	0.22	Rain	5200	16	3.27	3.55	-.05	cldy
7	84	60	62	62	88	62	3.55	Rain	5216	29	0	-2.46	-6.82	R
8	74	60	61	59	81	45	0.60	Rain	5245	8	0		-.69	cldy
9	72	59	64	62	75	63	0		5253	1	2.40	+.18	+2.40	cldy
10	67	62	64	63	68	64	0.18	Rain	5254	2	2.57		-.01	cldy
11	81	60	64	63	80	53	T	Rain	5256	2	2.55		-.02	cldy
12	86	62	67	65	80	66	0		5258	13	2.47	+.7	-.08	cldy
13	82	60	60	60	87	67	0.70	Rain	5271	6	2.99	+.03	-.18	pc
14	78	51	55	53	83	60	0.03	Rain	5277	9	2.91		-.11	clr
15	79	49	71	60	86	60	0		5286	1	2.71		-.20	clr
16	93	59	72	63	91	77	0		5287	2	2.55		-.16	pc
17	87	59	68	58	94	65	0		5289	1	2.36		-.19	pc
18	82	50	51	50	86	60	0		5290	8	2.14		-.22	pc
19	81	50	65	61	85	60	0		5298	11	2.99	+.02	-.15	cldy
20	80	60	65	64	80	63	0.02	Rain	5304	6	1.91	+.38	-.10	pc
21	73	59	63	62	75	65	0.38	Rain	5315	5	2.22		-.07	pc
22	34	62	69	27	82	64	0		5320	7	2.10		-.12	pc
23	86	59	71	67	91	67	0		5327	13	1.92		-.08	pc
24	87	55	72	71	94	29	0		5340	3	1.70		-.22	cldy
25	89	69	72	70	92	72	0		5343	12	1.10	+1.85	-.10	cldy
26	37	65	67	67	92	70	1.85	Rain	5355	4	3.16	+.03	-.29	cldy
27	37	58	61	59	91	61	0.03	Rain	5359	13	3.04		-.15	clr
28	80	56	52	51	89	63	0		5372	3	2.85		-.19	clr
29	86	50	60	59	94	63	0		5375	15	2.63		-.23	clr
30	84	58	75	72	95	67	0		5340	4	2.40		-.23	cldy
31	27	74	76	75	35	74	0		5344	11	2.33		-.07	cldy

Av. 81 56 Greatest 3.55 Total 279 Total 5.41

EXPERIMENTAL SITE WEATHER STATION DATA June 1976

DATE	Air Temperature Last 24 hr Period (°F)				Water Temperature Last 24 hr Period (°F)		Precipitation Last 24 hr Period		Wind Anemometer		Evaporation			Additional Data
	Max.	Min.	At Observation, °F Dry Bulb	At Observation, °F Wet Bulb	Max.	Min.	Amount (in.)	Type	Dial Reading	24 hour Movement (mile)	Gage Reading (in.)	Water Added (in.)	Amount of Evapo. (in.)	
1	90	62	66	65	95	69	.031	Rain	5405	11	2.45		-.02	cldy
2	81	60	62	61	81	67	0		5406	1	2.38		-.07	pc
3	88	60	62	61	95	67	T	Rain	5407	1	2.24		-.14	pc
4	90	60	64	63	95	68	0		5408	1	2.03		-.24	pc
5	90	61	76	71	95	69	0		5411	3	1.84		-.19	pc
6	90	59	80	72	94	66	0		5417	6	1.64		-.20	clr
7	90	64	69	68	95	69	0		5427	10	1.42		-.22	pc
8	87	62	65	64	88	68	0		5436	9	1.30		-.12	clr
9	89	63	71	68	94	68	0		5448	12	1.19		-.11	pc
10	90	61	72	68	45	66	0		5460	12	0.05		-.14	pc
11	91	72	73	72	45	64	0		5477	17	**	+2.52	-.13	cldy
12	95	72	79	74	93	73	0		5510	33	2.39		-.13	cldy
13	92	73	78	72	88	72	0		5538	28	2.19		-.20	pc
14	91	69	60	70	42	71	0		5561	23	1.85		-.34	cldy
15	93	69	75	73	97	71	0		5586	25	1.56		-.29	cldy
16	95	70	72	72	96	74	1.65	Rain	5596	10	2.92		-.29	cldy
17	93	71	75	74	97	74	0		5606	10	2.71		-.21	pc
18	94	73	75	74	95	76	0.08	Rain	5625	14	2.58		-.13	cldy
19	93	73	78	75	95	76	0		5644	19	2.36		-.22	cldy
20	91	67	73	68	92	69	0		5655	11	2.14		-.22	pc
21	91	56	58	57	94	65	0		5664	9	1.89		-.25	clr
22	94	55	74	71	90	66	0		5686	22	1.63		-.26	pc
23	95	72	76	72	92	73	0		5726	40	1.40		-.23	pc
24	94	75	76	73	93	73	0		5776	50	1.12		-.28	pc
25	95	73	74	74	93	71	0		5805	29	0.98		-.14	cldy
26	96	68	79	75	96	69	0.74	Rain	5812	7	1.46		-.26	pc
27	91	73	84	76	95	75	0.04	Rain	5828	16	1.35		-.15	pc
28	94	71	73	72	100	75	0		5840	12	1.18		-.17	pc
29	94	68	69	68	99	72	0		5850	10	0.07	+2.24	-.23	pc
30	96	66	67	65	100	71	0		5863	13	2.08			clr
31														

Av. 92 67 Greatest 1.65 Total 469 Total 5.55

** Tank Cleaned Water Added

EXPERIMENTAL SITE WEATHER STATION DATA July 1976

DATE	Air Temperature Last 24 hr Period (°F)				Water Temperature Last 24 hr Period (°F)		Precipitation Last 24 hr Period		Wind Anemometer		Evaporation			Additional Data
			At Observation, °F											
	Max.	Min.	Dry Bulb	Wet Bulb	Max.	Min.	Amount (in.)	Type	Dial Reading	24 hour Movement (mile)	Gage Reading (in.)	Water Added (in.)	Amount of Evapo. (in.)	
1	95	66	69	68	94	72	0		5881	32	1.83	+.42	-.25	pc
2	94	69	75	72	97	73	0.42	Rain	5913	36	2.16		-.09	cldy
3	96	73	76	74	90	72	0		5949	32	1.92		-.24	cldy
4	95	75	78	74	90	74	0		5981	8	1.69	+1.10	-.23	cldy
5	86	70	71	70	88	72	1.10	Rain	5989	7	2.70	+ .33	-.09	cldy
6	87	68	71	70	90	72	0.33	Rain	5996	9	2.43		-.10	cldy
7	88	65	68	67	91	70	1.66	Rain	6005	9	2.72	+ .14	-.21	pc
8	79	66	70	71	91	70	0.14	Rain	6014	21			0	cldy
9	77	71	71	70	80	71	1.03	Rain	6035	6			0	cldy
10	78	70	71	70	79	70	1.01	Rain	6041	9	2.73		-.36	cldy
11	80	69	77	75	80	71	0.83	Rain	6050	20	3.37		-.06	cldy
12	84	72	73	72	85	75	0		6070	8	3.31		-.10	cldy
13	82	72	73	72	84	74	0		6078	10	3.21		-.28	cldy
14	84	70	71	70	73	76	0.75	Rain	6088	19	2.43			cldy
15	73	69	73	72	75	71	0.43	Rain	6107	27				cldy
16	88	72	74	73	88	72	0.15	Rain	6134	10	2.87		-.84	cldy
17	88	72	77	74	88	75	0.24	Rain	6144	22	3.03		-.23	pc
18	91	74	70	74	94	75	0		6166	20	2.80		-.22	pc
19	90	70	72	70	90	74	0		6186	24	2.58		-.22	pc
20	90	71	72	70	90	72	0		6210	19	2.36		-.21	pc
21	91	68	70	69	89	72	0		6229	12	2.15		-.09	pc
22	85	68	73	72	83	73	0		6241	21	2.06		-.22	pc
23	91	71	74	73	89	72	0		6262	14	1.84		-.14	cldy
24	91	65	78	73	92	70	0		6276	9	1.65		-.22	cldy
25	93	71	78	72	92	71	0		6285	8	1.43		-.22	pc
26	92	66	73	70	91	70	0		6293	14	1.21	+2.64		pc
27	92	68	77	73	95	76	0		6307	22	2.48		-.26	pc
28	93	72	74	72	92	73	0		6329	30	2.24		-.29	pc
29	94	73	77	72	92	73	0		6357	27	1.95		-.26	pc
30	94	74	78	73	92	74	0		6386	21	1.60		-.22	pc
31	94	73	80	75	90	73	0		6407	10	1.47		-.18	cldy

Av. 88 70 Greatest 1.66 Total 536 Total 5.78

EXPERIMENTAL SITE WEATHER STATION DATA August 1976

DATE	Air Temperature Last 24 hr Period (°F)				Water Temperature Last 24 hr Period (°F)		Precipitation Last 24 hr Period		Wind Anemometer		Evaporation			Additional Data
			At Observation, °F											
	Max.	Min.	Dry Bulb	Wet Bulb	Max.	Min.	Amount (in.)	Type	Dial Reading	24 hour Movement (mile)	Gage Reading (in.)	Water Added (in.)	Amount of Evapo. (in.)	
1	95	68	77	73	90	71	0		6417	8	1.29		- .23	cldy
2	96	67	68	67	95	72	0		6427	10	1.06		- .05	clr
3	99	67	74	72	95	70	0		6435	8	0.01			cldy
4	94	66	67	66	99	74	0		6447	12		+ 2.10		pc
5	95	66	67	65	93	72	0		6455	8	1.90		- .20	pc
6	98	65	70	69	95	72	0		6469	14	1.66		- .24	pc
7	96	67	70	69	96	71	0		6483	14	1.49		- .17	clr
8	100	65	87	76	97	70	0		6491	8	1.13		- .36	clr
9	100	68	60	68	96	72	0		6501	10	0.06			clr
10	102	67	60	68	100	69	0		6511	10		+ 2.90	- .38	pc
11	101	68	70	68	94	74	0		6525	14	2.52		- .25	pc
12	95	65	71	64	90	73	0		6537	12	2.27		- .25	cldy
13	96	68	60	68	90	72	0		6548	11	2.02		- .26	pc
14	98	68	72	70	90	73	0		6568	20	1.76		- .27	pc
15	97	68	70	69	94	72	0		6591	23	1.49		- .14	pc
16	98	70	72	71	94	74	0.10	Rain	6602	11	1.35		- .18	pc
17	97	70	72	71	92	72	0		6612	10	1.17		- .16	pc
18	94	70	73	72	90	73	0		6619	7	1.01	+ 2.14	- .58	pc
19	93	67	71	71	90	71	0.43	Rain	6624	5	2.57		- .16	cldy
20	93	67	69	68	90	70	0		6635	11	2.41		- .24	cldy
21	92	62	73	72	91	75	0		6644	9	2.17		- .22	clr
22	92	64	70	69	93	69	0		6652	8	1.95		- .17	clr
23	93	65	66	65	92	70	0		6659	7	1.78		- .23	clr
24	94	64	65	64	93	67	0		6668	9	1.55		- .21	clr
25	95	67	67	66	92	67	0		6679	10	1.34		- .19	cldy
26	94	66	67	66	95	70	0		6689	12	1.15		- .12	pc
27	95	66	60	68	95	60	0		6701	15	0.03			clr
28	96	65	71	70	98	70	0		6716	11	**			cldy
29	99	67	74	72	82	70	0.24	Rain	6727	5	**			cldy
30	85	67	79	77	85	70	0.02	Rain	6732	4	**			pc
31	91	65	69	68	85	68	2.00	Rain	6236	5	2.78			cldy

Av. 92 67 Greatest 2.00 Total 321 Total 5.26

** Too Low for Reading

EXPERIMENTAL SITE WEATHER STATION DATA September 1976

DATE	Air Temperature Last 24 hr Period (°F)				Water Temperature Last 24 hr Period (°F)		Precipitation Last 24 hr Period		Wind Anemometer		Evaporation			Additional Data
	Max.	Min.	At Observation, °F Dry Bulb	At Observation, °F Wet Bulb	Max.	Min.	Amount (in.)	Type	Dial Reading	24 hour Movement (mile)	Gage Reading (in.)	Water Added (in.)	Amount of Evapo. (in.)	
1	91	68	75	74	72	70	0		6742	8	2.67		-.18	cldy
2	92	73	75	74	91	75	0.13	Rain	6750	1	2.62		-.77	cldy
3	92	72	76	75	91	73	0.77	Rain	6751	11	2.80		*	cldy
4	93	71	77	74	95	75	0		6772	5	3.14		-.22	pc
5	94	68	80	75	96	74	0		6767	6	2.92		-.08	clr
6	95	69	78	75	96	75	0		6773	5	2.74		-.18	pc
7	93	68	71	70	93	75	0		6778	5	2.55	+.63	-.19	cldy
8	93	69	71	70	90	67	0		6783	5	2.42		-.13	pc
9	93	65	67	66	92	71	0		6788	16	2.23		-.19	clr
10	92	62	65	64	88	69	0		6804	19	2.31		*	cldy
11	94	59	64	61	70	66	0		6823	11	2.40		*	pc
12	91	63	77	73	88	73	0		6834	13	2.21		-.19	cldy
13	93	72	74	72	87	73	0		6847	14	2.03		-.18	cldy
14	88	66	68	67	87	70	0		6861	11	2.49		*	clr
15	95	68	60	68	88	68	0.05	Rain	6872	12	2.36		-.18	pc
16	93	64	68	67	87	72	0		6884	11	2.18	+.66	-.18	clr
17	92	66	70	68	90	70	0		6895	10	2.77		*	cldy
18	91	66	74	71	90	68	0		6905	13	2.54		-.23	pc
19	90	71	73	73	86	72	0.15	Rain	6918	8	2.55		-.14	cldy
20	86	71	72	71	84	72	0.55	Rain	6926	11	3.05		-.05	cldy
21	83	65	66	68	83	68	0.55	Rain	6937	16	3.52		-.08	clr
22	86	50	52	51	85	62	0		6953	8	3.28		-.24	clr
23	86	49	56	55	87	60	0		6961	8	3.12		-.16	clr
24	89	53	61	60	88	59	0		6969	8	2.96		-.16	clr
25	90	59	71	69	87	65	0		6977	16	2.77		-.19	pc
26	91	69	84	82	90	69	0		6443	13	2.60		-.17	pc
27	93	65	66	65	92	69	1.43	Rain	7006	12	4.73	+.73	-.00	pc
28	89	64	65	64	92	69	1.15	Rain	7018	15	*		-.25	pc
29	77	58	60	59	80	58	0		7033	7	2.30		*	cldy
30	81	52	54	53	81	60	0		7040	8	2.84		-.09	pc
31														
Av.	90	66				Greatest	1.43			Total 306			Total 4.43	

* Tank overflow

EXPERIMENTAL SITE WEATHER STATION DATA October 1976

DATE	Air Temperature Last 24 hr Period (°F)				Water Temperature Last 24 hr Period (°F)		Precipitation Last 24 hr Period		Wind Anemometer		Evaporation			Additional Data
			At Observation, °F											
	Max.	Min.	Dry Bulb	Wet Bulb	Max.	Min.	Amount (in.)	Type	Dial Reading	24 hour Movement (mile)	Gage Reading (in.)	Water Added (in.)	Amount of Evapo. (in.)	
1	85	51	54	53	83	50	0		7048	9	2.75		-.13	clr
2	87	61	58	57	84	61	0		7057	12	2.62		-.14	pc
3	85	55	78	70	82	63	0		7069	12	2.48		-.12	pc
4	85	62	63	62	82	68	0		7081	29	2.36		-.70	clr
5	87	59	60	59	81	72	1.65	Rain	7110	23	3.31	**	-.49	pc
6	80	45	47	46	82	60	0		7133	22	2.82		-.12	clr
7	78	43	45	44	77	50	0		7151	24	2.70		-.16	clr
8	77	42	43	41	75	46	0.12	Rain	7175	26	2.66		-.12	clr
9	70	35	70	58	68	45	0		7201	11	2.54		-.12	clr
10	77	40	75	62	61	50	0		7212	6	2.42		-.15	clr
11	86	44	45	44	81	55	0		7218	13	2.27			clr
12	84	43	49	48	82	54	0		7231	12	2.86		-.11	pc
13	81	56	57	56	78	57	0		7243	12	2.75		-.11	pc
14	84	52	54	52	79	59	0		7255	8	2.69		-.11	clr
15	83	51	63	62	80	60	0.04	Rain	7263	23	2.57			cldy
16	68	55	57	54	68	58	2.57	Rain	7280	36		+ 3.30	-.89	pc
17	74	52	64	56	72	54	0		7316	10	2.41		-.11	pc
18	74	42	43	42	78	52	0		7326	18	2.30		-.10	clr
19	75	42	62	60	74	52	0.01	Rain	7344	21	2.21		-.10	cldy
20	62	31	33	32	62	42	0.95	Rain	7365	13	3.06		-.04	clr
21	68	31	36	35	65	40	0		7378	13	2.97	+.09	-.07	clr
22	67	34	55	53	65	45	0		7391	24	2.90	+ 2.20	-.02	cldy
23	70	52	68	66	65	53	0.09	Rain	7415	11	2.97			cldy
24	71	63	65	64	69	56	1.80	Rain	7426	8	**			cldy
25	65	54	57	56	70	54	0.15	Rain	7434	15	2.39			cldy
26	75	43	50	49	74	52	0		7449	24	2.17		-.22	cldy
27	64	46	56	55	58	51	T		7473	49	2.13		-.04	cldy
28	59	45	45	45	57	40	0.18	Rain	7522	8	2.28		-.03	cldy
29	57	40	42	51	55	40	1.00	Rain	7530	48	**			cldy
30	56	31	35	34	58	40	1.39	Rain	7578	18	**	+ 2.91		clr
31	79	33	59	53	68	40	0		7546	11	2.84		-.07	pc
Av.	74	46				Greatest	2.57		Total	569			Total	3.36

** Pan Overflow

EXPERIMENTAL SITE WEATHER STATION DATA November 1976

DATE	Air Temperature Last 24 hr Period (°F)				Water Temperature Last 24 hr Period (°F)		Precipitation Last 24 hr Period		Wind Anemometer		Evaporation			Additional Data
			At Observation, °F											
	Max.	Min.	Dry Bulb	Wet Bulb	Max.	Min.	Amount (in.)	Type	Dial Reading	24 hour Movement (mile)	Gage Reading (in.)	Water Added (in.)	Amount of Evapo. (in.)	
1	72	40	45	44	70	50	0		7607	9	2.72		-.12	pc
2	71	37	39	38	70	47	0		7616	8	2.63		-.09	clr
3	75	38	40	39	68	48	0		7624	10	2.55		-.08	clr
4	79	38	45	44	73	49	0		7634	10	2.48		-.07	clr
5	75	39	40	38	69	49	0		7644	13	2.38		-.10	clr
6	71	39	56	54	66	48	0		7647	14	2.27		-.11	fog
7	76	45	68	61	70	52	0		7671	14	2.22		-.05	clr
8	76	43	45	40	72	52	0		7685	13	2.10		-.12	pc
9	71	43	56	55	65	48	0		7698	14	2.04		-.06	cldy
10	74	50	55	54	69	54	0		7712	13	1.95		-.09	fog
11	79	63	64	63	68	57	0		7725	43	1.90		-.05	cldy
12	78	41	42	40	75	55	0		7768	47	1.74	+.66	-.16	cldy
13	44	32	35	34	46	34	0.66	Rain	7815	22	2.42			cldy
14	37	33	37	34	39	33	0		7837	11	2.41		-.01	pc
15	55	26	32	28	52	32	0		7848	28	2.36		-.05	clr
16	50	36	38	36	54	48	0		7876	21	2.33	+.45	-.03	cldy
17	43	37	38	37	42	38	0.45	Rain	7897	11	2.73		-.05	cldy
18	55	38	48	46	50	38	0		7908	6	2.73	+.85	-.04	cldy
19	57	47	51	49	53	47	0.85	Rain	7914	5	3.54	+.08	-.22	cldy
20	58	47	47	46	57	50	0.08	Rain	7919	12	3.40		-.06	pc
21	82	45	56	49	72	51	0		7931	21	3.33		-.07	clr
22	66	43	44	40	62	47	0		7452	18	3.24		-.09	pc
23	61	40	48	45	58	46	0		7470	7	3.11		-.13	cldy
24	57	47	53	52	53	48	0		7477	19	3.11	+.03	-.01	pc
25	62	52	61	61	60	51	0.03		7446	31	3.13	+.68		cldy
26	70	61	70	66	68	58	0.68		8027	15	2.56			clr
27	77	45	46	44	74	50	0		8042	56	2.46		-.10	pc
28	49	25	32	31	Ice	Ice	T	Sleet	8048	12	Ice			cldy
29	45	19	Ice		Ice	Ice	0		8110	22	Ice			clr
30	50	15	Ice		Ice	Ice	0		8132	11	Ice			clr
31														

Av. 64 40 Greatest 0.85 Total 536 Total 1.82

EXPERIMENTAL SITE WEATHER STATION DATA December 1976

DATE	Air Temperature Last 24 hr Period (°F)				Water Temperature Last 24 hr Period (°F)		Precipitation Last 24 hr Period		Wind Anemometer		Evaporation			Additional Data
			At Observation, °F											
	Max.	Min.	Dry Bulb	Wet Bulb	Max.	Min.	Amount (in.)	Type	Dial Reading	24 hour Movement (mile)	Gage Reading (in.)	Water Added (in.)	Amount of Evapo. (in.)	
1	56	15	Frozen	Frozen	Frozen	Frozen	0		8143	11	Frozen	Frozen		clr
2	63	21	37	35	55	32	0		8159	16	2.38			clr
3	63	24	32	27	Frozen	Frozen	0		8173	14	2.31	+2.27	-.03	clr
4	67	24	40	35	Frozen	Frozen	0		8186	27	2.24	+ .36	-.16	clr
5	71	38	59	59	62	32	0.36	Rain	8203	17	2.44	+ .77	0	cldy
6	64	58	62	61	62	55	0.77	Rain	8224	21	3.23			cldy
7	63	25	Frozen	Frozen	Frozen	Frozen	0		8235	11	Frozen	Frozen	-.08	clr
8	62	24	28	27	Frozen	Frozen	0		8278	43	3.06		-.08	clr
9	65	25	35	34	62	32	0		8290	12	2.98		0	pc
10	67	35	54	58	58	38	0		8321	31	2.90	+ .12	0	cldy
11	66	38	41	40	63	46	0.12	Rain	8347	26	3.19	+ .11	0	cldy
12	50	39	50	48	48	45	0.11	Rain	8368	21	3.43	+ .11	0	cldy
13	53	45	45	44	52	45	0.11	Rain	8382	14	**	+ .12	0	pc
14	55	32	42	32	Frozen	Frozen	0.12	Rain	8395	13	**		-.08	cldy
15	56	33	42	40	52	40	0		8409	14	2.73		-.03	clr
16	61	40	48	46	55	41	0		8420	11	2.65		-.03	pc
17	68	41	43	42	61	45	0		8428	8	2.62		0	cldy
18	65	42	44	43	61	46	0		8430	2	2.59	+ .12	-.06	cldy
19	63	40	62	61	60	46	0.12	Rain	8438	8	2.77	+ .01		cldy
20	65	43	44	39	63	47	0.02	Rain	8453	15	2.73			pc
21	53	26	Frozen	Frozen	Frozen	Frozen	0		8466	13	Frozen	Frozen	-.03	pc
22	54	24	38	34	54	30	0		8496	30	2.60		-.06	cldy
23	52	33	45	41	46	35	0		8499	3	2.57		-.07	pc
24	63	29	32	31	55	35	0		8513	14	2.51	+ .12	-.01	pc
25	67	26	Frozen	Frozen	Frozen	Frozen	0.12	Rain	8520	7	2.56		-.06	pc
26	69	27	59	46	60	37	0		8541	21	2.55		-.07	clr
27	67	30	42	36	55	37	0		8551	10	2.49		-.11	pc
28	68	35	61	48	56	37	0		8577	26	2.42		-.05	pc
29	73	27	34	31	60	35	0		8596	19	2.31			pc
30	65	33	46	43	53	36	0		8608	12	2.26		-.03	cldy
31	58	25	Frozen	Frozen	Frozen	Frozen	0		8615	7	Frozen	Frozen		cldy
Av.	62	32			Greatest		0.77		Total	497		Total	1.04	

** Pan Overflow

EXPERIMENTAL SITE WEATHER STATION DATA January 1977

DATE	Air Temperature Last 24 hr Period (°F)				Water Temperature Last 24 hr Period (°F)		Precipitation Last 24 hr Period		Wind Anemometer		Evaporation			Additional Data
	Max.	Min.	At Observation, °F Dry Bulb	At Observation, °F Wet Bulb	Max.	Min.	Amount (in.)	Type	Dial Reading	24 hour Movement (mile)	Gage Reading (in.)	Water Added (in.)	Amount of Evapo. (in.)	
1	72	23	35	32	Frozen	Frozen	0		8685	70	2.19		-.07	cldy
2	40	33	35	34	Frozen	Frozen	0		8701	16	2.30		0	cldy
3	37	30	37	35	40	28	0.35	Fr. Rain	8715	14	2.44	+.03	-.18	cldy
4	50	35	45	44	48	36	0.30	Rain	8733	18	2.47		0	cldy
5	68	37	42	40	59	38	0		8742	9	2.45	+.13	0	clr
6	45	37	38	37	45	38	0.13	Rain	8777	35	2.46		-.12	cldy
7	60	33	33	32	54	38	0		8788	11	2.51		0	pc
8	59	27	33	32	40	35	0		8745	7	2.53	+.12	0	pc
9	60	28	34	32	35	33	0.12	Rain	8832	37	2.55		-.10	clr
10	55	18	Frozen	Frozen	Frozen	Frozen	0		8871	39	Frozen			clr
11	40	25	Frozen	Frozen	Frozen	Frozen	0		8891	20	Frozen	+.12		cldy
12	45	11	39	38	49	30	0.12	Rain	8906	15	2.62	+.67		cldy
13	46	38	46	45	44	36	0.67	Rain	8931	25	3.25	+.13	-.09	cldy
14	55	42	43	42	52	42	0.13	Rain	8932	1	3.48		-.10	pc
15	60	38	40	39	55	44	0		8955	23	3.45		-.03	clr
16	63	27	37	34	58	34	0		8975	20	3.38		-.07	cldy
17	55	26	35	33	55	35	0		8982	7	3.34		-.04	cldy
18	49	25	41	37	46	28	0		9014	32	3.31		-.03	pc
19	50	23	35	34	43	26	0		9031	17	3.25		-.06	pc
20	52	18	Frozen	Frozen	Frozen	Frozen	0		9060	29	3.16		-.09	clr
21	54	23	Frozen	Frozen	Frozen	Frozen	0		9072	12	Frozen	+.27		clr
22	64	22	53	52	57	31	0.27	Rain	9083	11	3.33	+.76		cldy
23	58	51	54	56	56	51	0.76	Rain	9099	16	2.61			cldy
24	47	40	36	35	55	50	0		9112	13	2.48			clr
25	65	35	37	35	52	48	0		9121	9	2.23		-.13	pc
26	68	30	47	45	63	38	0		9133	15	2.14		-.25	pc
27	69	38	39	38	65	43	0		9148	20	2.10		-.09	clr
28	80	36	40	39	72	42	0		9168	16	1.47		-.04	clr
29	76	18	41	40	73	41	0		9184	16	1.78	+.21	-.13	clr
30	74	19	37	36	56	33	0.21	Rain	9244	33	**		-.12	cldy
31	62	41	40	34	47	42	0		9277	16	**			cldy
Av.	58	31				Greatest	0.76			Total	622		Total	1.64

** Tank Cleaned

EXPERIMENTAL SITE WEATHER STATION DATA February 1977

DATE	Air Temperature Last 24 hr Period (°F)				Water Temperature Last 24 hr Period (°F)		Precipitation Last 24 hr Period		Wind Anemometer		Evaporation			Additional Data
	Max.	Min.	At Observation, °F Dry Bulb	At Observation, °F Wet Bulb	Max.	Min.	Amount (in,)	Type	Dial Reading	24 hour Movement (mile)	Gage Reading (in.)	Water Added (in.)	Amount of Evapo. (in.)	
1	53	32	41	39	42	33	T	Rain	9293	12	**			cldy
2	49	42	42	40	44	41	0.17	Rain	9298	5	**			cldy
3	50	38	50	49	50	42	0.27	Rain	9307	9	1.49			pc
4	65	27	28	27	62	35	0		9326	14	1.43		-.06	clr
5	68	28	43	40	52	33	0		9342	16	1.22		-.21	clr
6	64	28	47	37	60	33	0		9357	15	1.13		-.09	pc
7	62	46	46	41	55	42	0		9371	14	1.06	+.2	-.04	cldy
8	59	40	40	40	57	40	0.20	Rain	9380	9	1.22		-.04	cldy
9	59	34	35	34	58	40	0		9386	6	1.18	+.31	-.19	clr
10	62	39	40	39	60	44	0.31	Rain	9394	13	1.30	+.66	0	cldy
11	75	32	68	58	75	43	0.66	Rain	9451	57	1.96		-.03	clr
12	70	30	50	43	68	42	0		9460	9	1.43		-.04	clr
13	71	33	33	32	66	43	0		9463	3	1.89		-.02	clr
14	73	32	34	33	65	42	0		9470	7	1.87		-.03	clr
15	75	32	45	41	65	40	0		9504	34	1.84		-.04	cldy
16	66	30	31	30	63	39	0		9522	18	1.80		-.04	clr
17	76	37	38	35	70	43	0		9531	9	1.76		-.01	clr
18	68	25	33	32	60	32	0		9544	13	1.75		-.02	clr
19	78	33	47	45	74	40	0		9557	13	1.73		-.17	clr
20	80	31	53	52	72	43	0		9576	14	1.56		-.11	fog
21	60	56	57	48	60	42	0		9602	26	1.45		-.17	clr
22	74	35	61	60	65	43	0		9651	49	1.28		-.08	cldy
23	77	43	59	57	75	41	0		9713	62	1.20		-.08	dust
24	77	33	38	35	68	40	0		9275	44	1.12		-.02	clr
25	85	37	42	41	68	38	0		9780	23	1.10		-.12	pc
26	84	49	53	47	75	46	0		9817	37	1.98		-.11	cldy
27	67	26	44	39	50	32	0		9854	37	.87		-.22	clr
28	69	30	30	29	64	35	0		9813	19	**			clr
29														
30														
31														

Av. 68 35 Greatest 0.66 Total 597 Total 1.94

** Too Low to Read

EXPERIMENTAL SITE WEATHER STATION DATA March 1977

DATE	Air Temperature Last 24 hr Period (°F)				Water Temperature Last 24 hr Period (°F)		Precipitation Last 24 hr Period		Wind Anemometer		Evaporation			Additional Data
	Max.	Min.	At Observation, °F Dry Bulb	At Observation, °F Wet Bulb	Max.	Min.	Amount (in,)	Type	Dial Reading	24 hour Movement (mile)	Gage Reading (in.)	Water Added (in.)	Amount of Evapo. (in.)	
1	69	32	33	31	58	35	0		9881	8	2.00		-.04	clr
2	75	57	58	57	71	60	T		9901	20	1.96		-.03	cldy
3	65	41	65	63	60	43	T	Hail	9987	86	1.93	+.42	-.50	cldy
4	75	24	31	30	71	35	0.42	Rain	16	29	1.85		-.08	pc
5	63	42	43	40	59	45	0		73	57	1.63		-.22	clr
6	67	29	50	45	68	33	0		80	7	1.57		-.06	pc
7	71	30	32	29	69	33	0		96	16	1.42		-.15	clr
8	73	28	41	36	64	38	0		112	16	1.30		-.12	clr
9	72	36	49	46	68	42	0		128	26	1.16		-.14	pc
10	79	56	57	56	60	60	0		171	33	.88		-.28	pc
11	77	47	60	54	68	45	0		22	51	.09		-.79	pc
12	75	43	50	44	70	45	0		252	30	.02		-.07	dust
13	81	39	39	38	74	40	0		245	43	*			clr
14	81	35	58	56	77	43	0		299	44	*			cldy
15	85	65	65	63	75	61	T		301	2	*			cldy
16	79	60	60	58	77	58	0		326	25	*			cldy
17	83	67	67	66	81	65	T		352	26	*			cldy
18	87	54	55	50	86	54	0		378	26	*			clr
19	84	49	70	62	82	50	0		390	12	*			clr
20	74	49	54	53	81	45	0		406	16	*			clr
21	83	43	60	60	84	43	0		423	17	*			cldy
22	78	36	38	37	74	33	0		429	6	*			clr
23	67	47	48	46	72	38	0		431	2	*			cley
24	71	35	62	60	72	43	0.14	Rain	454	23	2.83	+.14		cldy
25	71	57	57	56	70	47	T		462	8	2.92		-.05	cldy
26	72	66	66	64	60	52	0		481	19	2.71		-.21	cldy
27	74	50	71	60	71	48	T	Rain	497	196	3.27	+.72	-.66	cldy
28	74	43	49	48	73	52	0.72	Rain	504	7	3.33		-.32	cldy
29	84	52	55	54	76	51	0		517	13	3.01		-.05	cldy
30	81	62	62	61	76	60	0		530	13	2.96		-.23	cldy
31	85	62	62	58	86	52	0		549	19	2.73		-.05	pc
Av.	76	46				Greatest	0.72		Total	676			Total 4.05	

* Too Low to Read